FEASIBILITY STUDY – BA 404

ENGINEERING DEPARTMENT
CITY OF EDINA

FRANCE AVENUE INTERSECTION ENHANCEMENTS
76th Street, 70th Street and 66th Street
Federal Transportation Enhancement Project – S.P. 120-020-37
July 06, 2012

1. LOCATION

The intersection improvements are located along France Avenue at 76th Street, 70th Street and 66th Street as shown in **Figure 1** below.

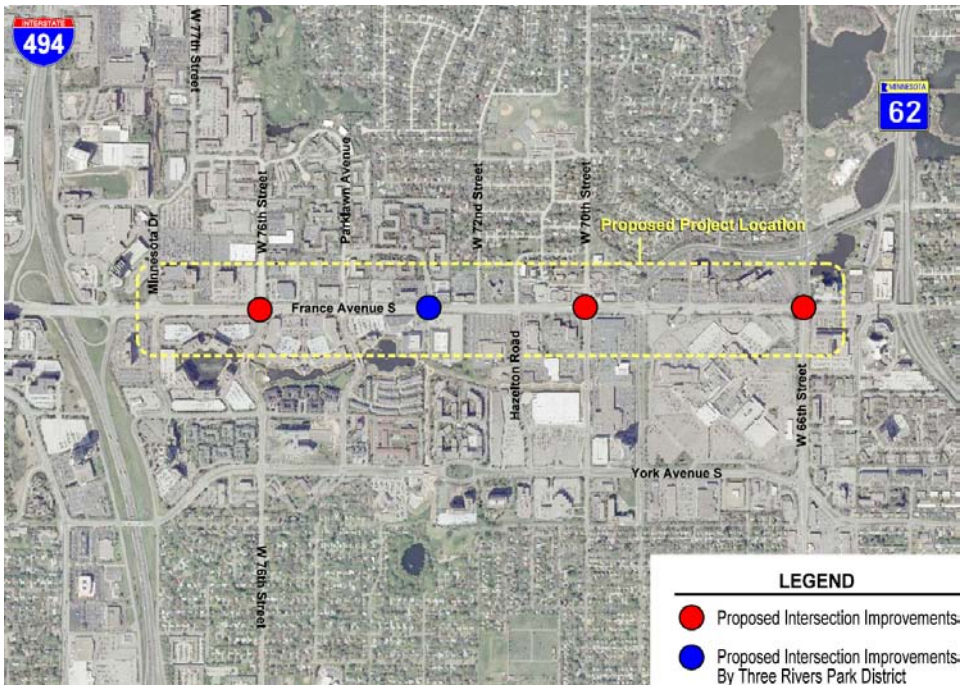


Figure 1. Project Location Map

2. INITIATION & ISSUES

Background / History

The City of Edina was successful in 2007 in securing Federal Transportation Enhancement funding for the 72nd Street Pedestrian Bridge over France Avenue. As a result of several studies, change in policy direction and new leadership at the City the concept of a bridge over France Avenue was deemed no longer practical. The City then requested and was granted a Scope Change and a one year Sunset Date extension from the Metropolitan Council for the project.

The re-scoped project will accomplish the same goals, safely and efficiently, for less overall cost, in partnership with the other agencies and with greater community support. The vision for the re-scoped project stems from the County's "France Avenue Corridor Study" completed in 2009.

Intersection enhancements such as; median refuge island, accessible pedestrian signals, pedestrian warning signs, enhanced pedestrian corner treatments, etc, will be provided at three primary intersections.

66th Street: This proposed crossing would provide access to; medical buildings, Southdale Mall, Aquatic Center, Rosland Park, TLC Bike Boulevard, and access to transit.

70th Street**:** This proposed crossing would continue the complete street project recently constructed west of France Avenue. It would serve primarily single family neighborhood, The Galleria, Target, Promenade, Southdale Library, Hennepin County Government Center, and access to transit.

76th Street**:** This proposed crossing would serve primarily multi-family housing and connect to Centennial Lakes Park, Promenade, Three Rivers Park District Nine mile trail in Richfield, Edinborough Park, medical facilities, and access to transit.

Three Rivers Park District (TRPD) is also planning improvements to Gallagher Drive. Although this intersection will be improved by TRPD the proposed crossing will serve the future planned regional trail, Promenade, multi-family housing, and access to transit.

In addition to the intersection enhancements the proposed project will provide missing sidewalk connections insuring that all areas on both sides of France Avenue have an opportunity to access one of the planned crossing locations.

The City has worked with several agencies during the preliminary studies, concept development and the proposed re-scoping of the project since the original TE application was submitted and approved. These agencies have included:

- Hennepin County Community Works
- Hennepin County Transportation
- Three Rivers Park District
- Transit for Livable Communities
- Metro Transit
- Minnesota Department of Transportation

Project Goals / Objectives / Direction

The proposed improvements are anticipated to provide a catalyst for France Avenue that will:

- Encourage pedestrians to use enhanced intersections by creating inviting passages from surrounding areas, development along France Avenue, and buildings at the enhanced intersections.

- Create inviting and comfortable parallel corridors leading to enhanced intersections with patterns and details that reflect the France Avenue corridor.

- Orient buildings with primary entrances at corners to encourage pedestrian activity.
- Discourage crossings at locations other than enhanced intersections.
- Create inviting and safe waiting spaces at enhanced intersections.
- Ensure safe and comfortable space is available at medians in the event a pedestrian cannot cross the entire street.
- Establish continuity in design among enhanced intersections.
- Create, to the degree possible, designs oriented to pedestrians within the street crossing zones that are related to, but still distinct from, the waiting spaces.
- Improve transit accessibility

City of Edina 2008 Comprehensive Plan

The proposed project is consistant with the direction outlined in the City's 2008 Comprehensive Plan.

Land Use and Community Design

Chapter 4 of the plan addresses the relationship between Land Use and the function of roadway corridors. As shown below in **Figure 2** Fance Avenue is identified as a primary thoroughfare where as 66th Street, 70th Street and 76th Street are residential and/or business thoroughfare's. The Comprehensive Plan outlines that the residential and business thoroghfares should provide for non motorized connections.

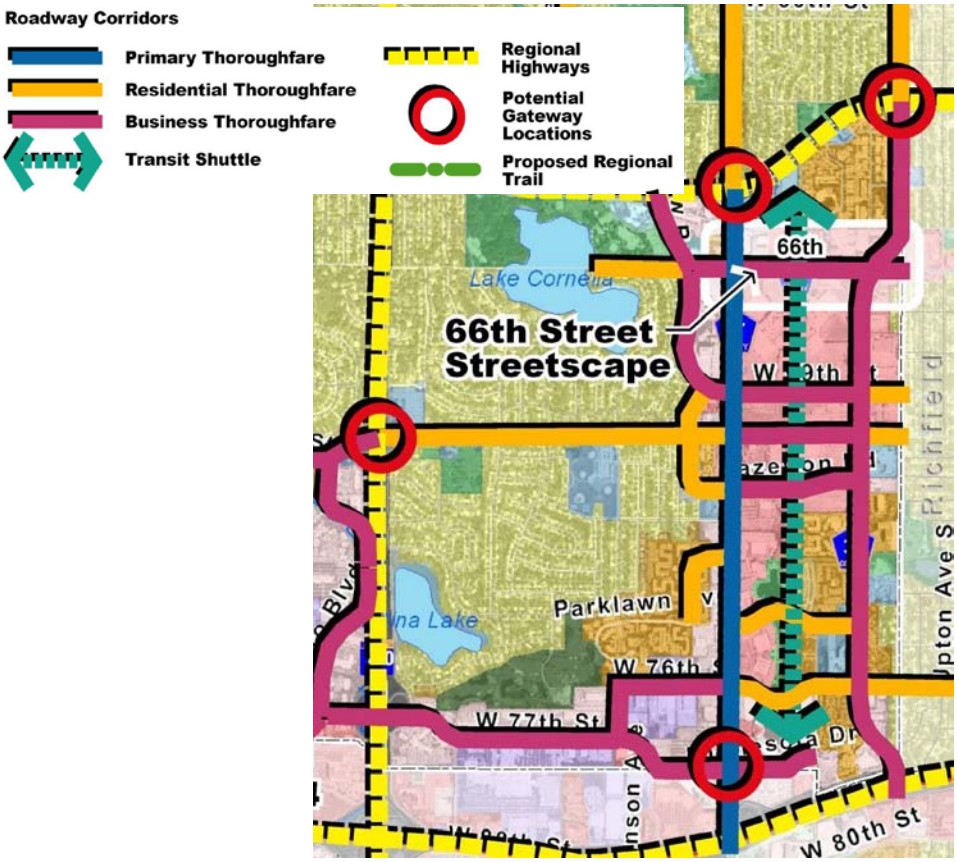


Figure 2. Community Design Roadway Corridors

Sidewalk / Bicycle Facilities

Chapter 7 of the plan addresses locations of proposed sidewalk and bicycle facilities and funding options within the City. Figures 7.10, Sidewalk Facilities and 7.11, Bicycle Facilities from the Comprehensive Plan are included in **Appendix**. Both indicate a need for additional facilities along France Avenue and the primary cross streets. **Figure 3**, below shows the relationship and need to provide improved safe and efficient connections between the residential land uses west of France and the commercial land uses east of France Avenue.

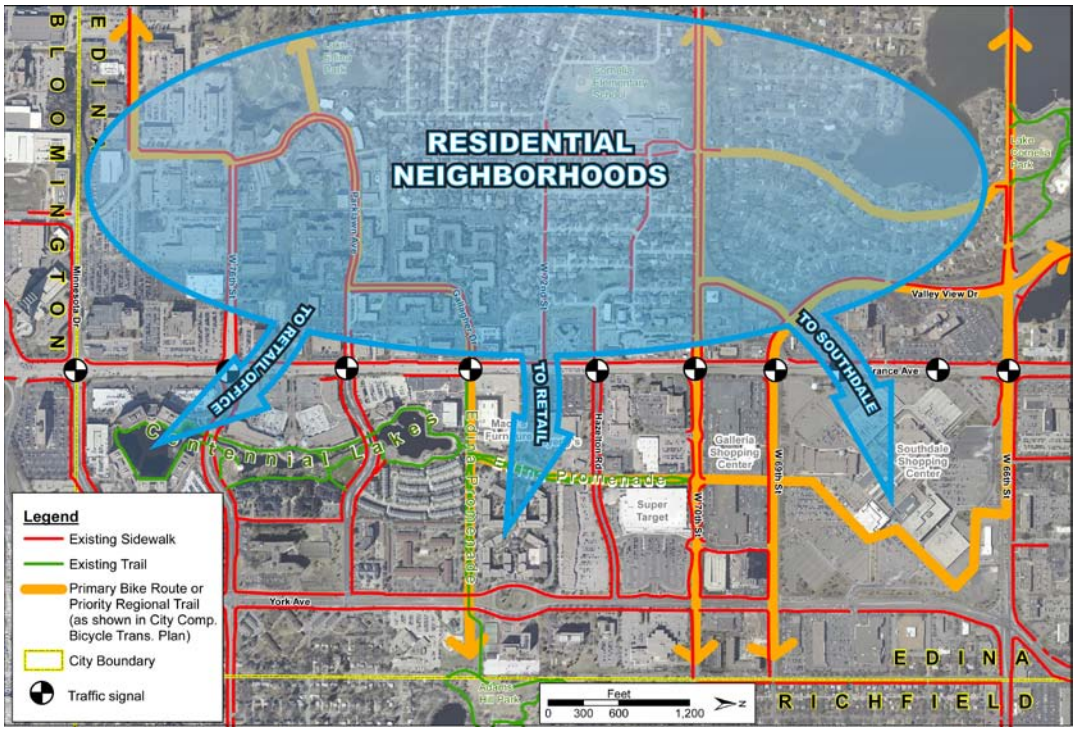


Figure 3. Existing Pedestrian / Bike Network

Stakeholder Meeting Input

In order to insure that all interests in the area were addressed a Stakeholders group was established. The Stakeholders included:

Edina Transportation Commission
Edina Planning Commission
Hennepin County Public Works
Hennepin County Housing, Community Works and Transit
MnDOT
Three Rivers Park District
Metro Transit
Bike Edina Task Force
Transit for Livable Communities
Local Businesses
Local Residents

This group has had two meetings. The first was held at the City of Edina Public Works Facility on 5/31/2012 at 7:00 PM. There were approximately 18 people in attendance, including city staff, project consultant team members, and representatives from various agencies and organizations, including the Edina Transportation Commission, Bike Edina Task Force, do.town, Hennepin County, Three Rivers Park District, and the City of Bloomington. A presentation was given by the project consultant team, and discussion was encouraged. Several major themes emerged from the discussion. All stakeholders agreed that the existing France Avenue design could be improved for cyclists and pedestrians. Stakeholders proposed several ideas and themes for improvement, including the need for France Avenue to be a Gateway to Edina, a need to improve transit access, a need to improve conditions for corridor residents, the importance of encouraging vibrant street life, and the importance of improving pedestrian and cyclist safety. Several specific strategies were discussed, including a “Dutch style” bicycle and pedestrian intersection design strategy, the importance of vertical elements in the design, and the importance of providing varying textures and colors to provide visual cues. The meeting was concluded with direction to staff and the consultant team to further develop and evaluate several concepts.

The second stakeholders meeting was held at the City of Edina Public Works Facility on 6/26/2012 at 7:00 PM. There were approximately 21 people in attendance, including city staff, project consultant team members, and representatives from various agencies and organizations, including the Edina Transportation Commission, Edina Planning Commission, Edina City Council, Hennepin County, Three Rivers Park District, the City of Bloomington, and several persons active in the local business community. A presentation was given by the project consultant team, and discussion was encouraged. The consultant team presented three conceptual alternatives for the identified intersections and requested feedback from the stakeholders. The three options included two variants of the “Dutch style” intersection design and one option with traditional bike lanes. The stakeholders discussed the strengths and weaknesses of each option, and the group agreed that Option 1 was the preferred option because it provided the greatest degree of separation between motorists, cyclists, and pedestrians. Further discussion reinforced the need for strong vertical elements in the design to ensure a top-quality experience for pedestrians as well as cyclists. The meeting was concluded with direction to staff and the consultant team to focus on Option 1, while enhancing the design with additional vertical elements.

Minutes from each meeting is included in the **Apendix**.

Comments have been received from Met Council on the proposed design. Responses to those comments are included in the **Appendix**.

3. EXISTING CONDITIONS

France Ave Corridor

France Avenue is a north / south Hennepin County Road (CSAH 17), “A” Minor Arterial roadway. In general, in the area south between TH 62 (Crosstown) an I-494, it is a 6 lane (3 lanes in each direction) roadway with left and right turn lanes at the primary intersections. A 40 mph speed is posted on the roadway.

Sidewalks

Sidewalks are currently provided on the west side of France Avenue the entire length from 66th Street to 76th Street. The width is approximately 6', for most of the sidewalks, with no boulevard. The only exception is near 66th Street where the sidewalk is 5' with a 5' boulevard. On the east side a 5' sidewalk is provided from 76th Street to Parklawn Avenue (on private property) with a boulevard that varies in width. Mid-block between Parklawn and Gallagher (430' N. of Parklawn) a 6' sidewalk is provided. A 5' sidewalk is also provided on the east side from 175' south of 66th Street to the north.

Transit

Transit service is provided along France Avenue with 5 primary routes each is discussed below and summarized in **Table 1.** The location of the existing transit stops are shown in **Figures 4a – 4c**.

Route 6 provides local bus service throughout the Edina Southdale Area and parts of Minneapolis. The route provides local stops along France Avenue between Minnesota Drive and Hazleton Road before accessing the Southdale Transit Center.

Route 578 provides express bus service throughout several Edina neighborhoods including the Southdale area with downtown Minneapolis. This route travels along France Avenue between 69th and 70th Street before accessing the Southdale Transit Center and downtown Minneapolis via TH-62 and I-35W.

Route 579 provides express bus service between the Southdale Transit Center and the University of Minnesota. The route uses 66th Street, 69th Street, France Avenue, and York Avenue to access the Southdale Transit Center before usint TH-62 and I-35W to access the University.

Route 587 provides express bus service between the Edina Southdale area and downtown Minneapolis. This route travels along France Avenue between 69th Street and Gallagher Drive. It also serves Valley View Drive and Normandale Road before accessing downtown Minneapolis via TH-100 and I-394.

Route 684 provides express bus service between Eden Prairie, the Southdale Transit Center, and downtown Minneapolis. The route passes through Edina on TH-62, and using Valley View Drive, 66th Street and 69th Street, and York Avenue to access the Southdale Transit Center before continuing to downtown Minneapolis. Operated by Southwest Transit.

Route	Project Area Service	Destinations	Frequency Headway				
			Rush Hour	Midday	Evening	Saturday	Sunday/Holiday
6	76th Street, as well as France Avenue between Minnesota Drive and Hazleton Road	U of M Dinkytown SE Minneapolis Downtown Minneapolis Hennepin Avenue S Uptown Transit Station France Avenue S Xerxes Avenue S Southdale Transit Center Edina Industrial Park	4-10	10-15	15	15	15
578 Express	66th Street, 69th Street, as well as France Avenue between 69th Street and 70th Street	70th Street Tracy Avenue Benton Avenue 77th Street Bush Lake Road Highwood Drive France Avenue Southdale Transit Center York Avenue Downtown Minneapolis	30	--	--	--	--
579 Express	66th Street, 69th Street, as well as France Avenue between 66th Street and 69th Street	Southdale Transit Center U of M	60	--	--	--	--
587 Express	69th Street, as well as France Avenue between 69th Street and Gallagher Drive	France Avenue Valley View Road Normandale Road Downtown Minneapolis	30-40	--	30-40	--	--
684 Express	66th Street, 69th Street	Eden Prairie (various) Southdale Transit Center Downtown Minneapolis	30	--	--	--	--

Table 1. Existing Transit Route Summary

Figure 4a. France Ave Existing Transit Stop Locations

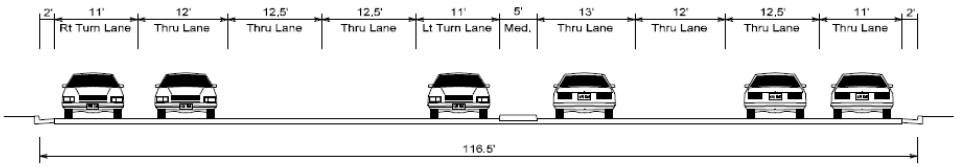
Figure 4b. France Ave Existing Transit Stop Locations

Figure 4c. France Ave Existing Transit Stop Locations

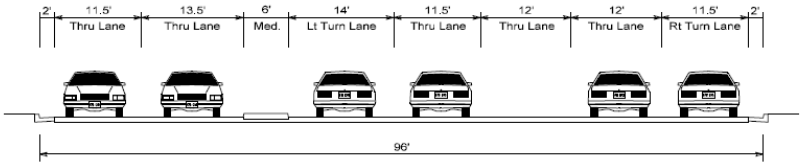
France Ave at 76th Street

76th Street is a east / west city street providing access between the commercial / residential areas east and west of France Avenue. It was identified in the City's Comprehensive plan as a component of the east / west reliever roadway to I-494. 76th Street is classified as a "A" Minor Arterical with a posted speed of 30 mph. **Figure 5** below shows the existing roadway typical sections at France Avenue and 76th Street.

France Avenue and 76th Street Intersection



Existing France Avenue Section
(North Leg of Intersection)



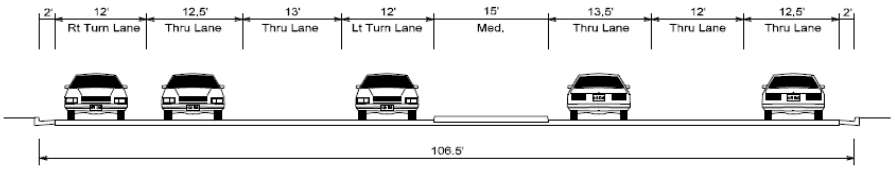
Existing 76th Street Section
(West Leg of Intersection)

Figure 5. France Ave at 76th Street Typical Sections

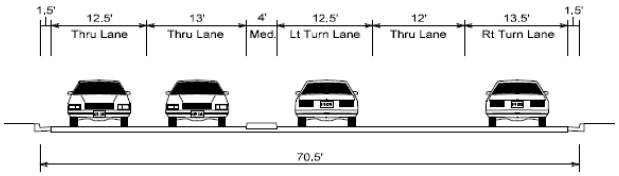
France Ave at 70th Street

70th Street is a east / west city street providing access between the residential areas west of France Avenue and the commercial areas to the east of France Avenue. In 2010 70th Street was reconstructed east of France Avenue to include three single lane roundabouts. West of France Avenue, 70th Street was reconstructed in 2011 as a "complete street" including a single lane in each direction, bike lanes, parking lanes, a roundabout and a traffic signal system to help control speed. 70th Street is classified as a Collector Roadway in the City's Comprehensive Plan a posted speed of 30 mph east of France Avenue and 25 mph west of France Avenue. **Figure 6** below shows the existing roadway typical sections at France Avenue and 70th Street.

France Avenue and 70th Street Intersection



Existing France Avenue Section
(North Leg of Intersection)



Existing 70th Street Section
(EAST Leg of Intersection)

Figure 6. France Ave at 70th Street Typical Sections

France Ave at 66th Street

66th Street is a east / west city street west of France Avenue and a Hennepin County Road (CSAH) east of France Avenue. This roadway provides access between the residential areas west of France Avenue and the Commerical areas to the east of France Avenue primarily Southdale Center. 66th Street is classified as a "A" Minor Arterical with a posted speed of 30 mph. **Figure 7** below shows the existing roadway typical sections at France Avenue and 66th Street.

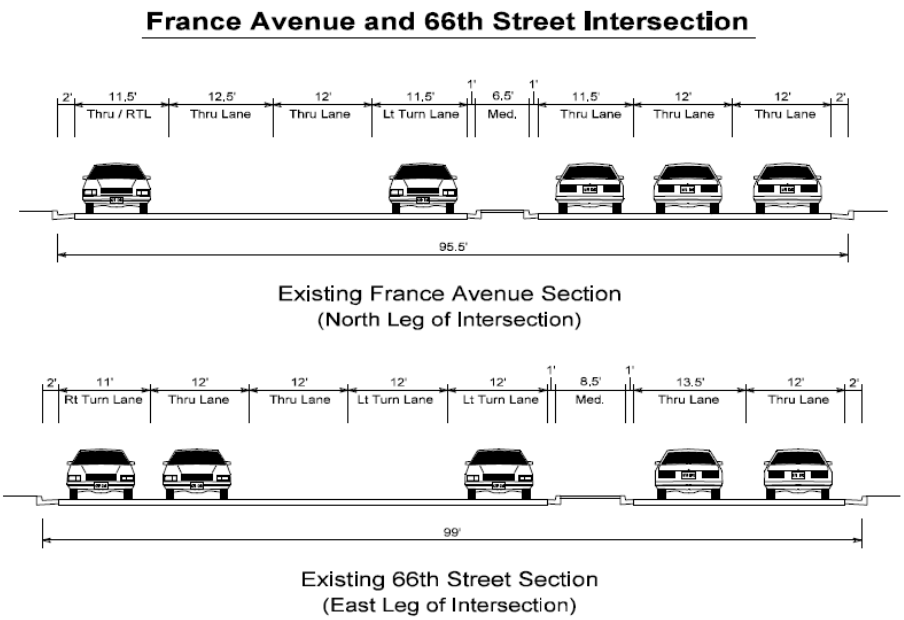


Figure 7. France Ave at 66th Street Typical Sections

4. CORRIDOR ANALYSIS

Traffic Analysis

Traffic volume data was colleted for France Avenue and the adjacent side streets in comparing the past two counting years (2009 and 2011) traffic has actually decreased slightly on France Avenue below is a summary of the traffic volume data used in for the analysis.

France Avenue
2009 Count – 26,000 vpd to 28,500 vpd
2011 Count – 24,300 vpd to 27,800 vpd

76th Street
2009 Count – 8,000 vpd to 9,100 vpd

70th Street
2009 Count – 9,300 vpd to 10,600 vpd

66th Street
2009 Count – 10,000 vpd to 16,100 vpd

Traffic operations were evaluated for the France Avenue Corridor in order to evaluate lane configuration alternatives using 2009 traffic volume data.This section describes the methodology used to assess the operations and provides a summary of traffic operations.

Analysis Methodology

The traffic operations analysis is derived from established methodologies documented the *Highway Capacity Manual 2000* (HCM). The HCM provides a series of analysis techniques that are used to evaluate traffic operations.

Intersections are given a Level of Service (LOS) grade from “A” to “F” to describe the average amount of control delay per vehicle as defined in the HCM. The LOS is primarily a function of peak traffic hour turning movement volumes, intersection lane configuration, and the traffic controls at the intersection. LOS A is the best traffic operating condition, and drivers experience minimal delay at an intersection operating at that level. LOS E represents the condition where the intersection is at capacity, and some drivers may have to wait through more than one green phase to make it through an intersection controlled by traffic signals. LOS F represents a condition where there is more traffic than can be handled by the intersection, and many vehicle operators may have to wait through more than one green phase to make it through the intersection. At a stop sign-controlled intersection, LOS F would be characterized by exceptionally long vehicle queues on each approach at an all-way stop, or long queues and/or great difficulty in finding an acceptable gap for drivers on the minor legs at a through-street intersection.

The LOS ranges for both signalized and un-signalized intersections are shown in **Table 2**. The threshold LOS values for un-signalized intersections are slightly less than for signalized intersections. This variance was instituted because drivers’ expectations at intersections differ with the type of traffic control. A given LOS can be altered by increasing (or decreasing) the number of lanes, changing traffic control arrangements, adjusting the timing at signalized intersections, or other lesser geometric improvements. LOS also changes as traffic volumes increase or decrease.

	Control Delay (Seconds)	
	Signalized	**Un-Signalized**
A	≤ 10	≤ 10
B	10 – 20	10 – 15
C	20 – 35	15 – 25
D	35 – 55	25 – 35
E	55 – 80	35 – 50
F	> 80	> 50

Source: HCM

Table 2 - Intersection Level of Service Ranges

LOS, as described above, can also be determined for the individual legs (sometimes referred to as "approaches") or lanes (turn lanes in particular) of an intersection. It should be noted that a LOS E or F might be acceptable or justified in those cases where a leg(s) or lane(s) has a very low traffic volume as compared to the volume on the other legs. For example, improving LOS on such low-volume legs by converting a two-way stop condition to an all-way stop, or adjusting timing at a signalized intersection, could result in a significant penalty for the many drivers on the major road while benefiting the few on the minor road. Also, geometric improvements on minor legs, such as additional lanes or longer turn lanes, could have limited positive effects and might be prohibitive in terms of benefit to cost.

Although LOS A represents the best possible level of traffic flow, the cost to construct roadways and intersection to such a high standard often exceeds the benefit to the user. Funding availability might also lead to acceptance of intersection or roadway designs with a lower LOS. LOS D is generally accepted as the lowest acceptable level in urban areas. LOS C is often considered to be the desirable minimum level for rural areas. LOS D or E may be acceptable for limited durations or distances, or for very low-volume legs of some intersections.

The LOS analysis was performed using Synchro/SimTraffic:

> Synchro, a software package that implements Highway Capacity Manual (HCM) methodologies, was used to build each signalized intersection and provide an input database for turning-movement volumes, lane geometrics, and signal design and timing characteristics. In addition, Synchro was used to optimize signal timing parameters for future conditions. Output from Synchro is transferred to SimTraffic, the traffic simulation model.
>
> SimTraffic is a micro-simulation computer modeling software that simulates each individual vehicle's characteristics and driver behavior in response to traffic volumes, intersection configuration, and signal operations. The model simulates drivers' behaviors and responses to surrounding traffic flow as well as different vehicle types and speeds. It outputs estimated vehicle delay and queue lengths at each intersection being analyzed.

Corridor Analysis

The traffic operations analysis was completed for several lane configuration alternatives along France Avenue. The PM peak hour traffic conditions from 2009 was used for the analysis. Each alternative including the results of the analysis is discussed below. A summary summary table of each analysis alternative is included in the **Appendix**.

1. Existing Lane Configuration – This analysis provided the base line condition that was used to compare the results of the other lane configuration alternatives. The results of the existing analysis found that several movements are at Level of Service (LOS) E or F. In addition some of the existing max vehicle queues exceed the available turn lane storage.

2. Removing Free Right Turn Lanes – By removing the free right turn lanes it was found that there was very little impact to the overall operations and that there would be a minimual increase in vehicle delays.

3. Removing One Through Lane on France Avenue – Removing one of the through lanes increased the number of intersection movements that are at LOS E or F. Average vehicle delays increased by 10 to 20 sec per vechile at the intersections.

4. Removing Additional Left Turn Lanes – This alternative removed one left turn lane at locations were there were dual left turn lanes. The results of the analysis found that at every location were the lane was removed the left turn queues exceed the available storage. In addition, the overall intersection average intersection delays increased by an additional 5 to 10 secs per vehicle.

One concern that was raised by the Hennepin County was the use of the average PM peak hour as the analysis period. The concern is that even though we don't typically design for a holiday peak, this area of France Avenue with Southdale and the other retail uses, tend to have a more extended holiday timeframe and that the level of traffic on France Avenue is actually higher on an average.

Based on the traffic operations analysis results it was determined that the final concepts would be developed based on only eliminating the free right turn lanes and no other lane reductions.

Crash Analysis

A crash investigation of the past 5 years (2007 – 2011) was completed for the corridor. The results indicate that there were 258 crashes in the corridor from 66th Street to 76th Street with 95 of those crashes at the intersections proposed to be improved with this project. The results also conclude that the overall crash rate and severity rate in the corridor is below the state wide average for the same type of roadways. The investigation found that there were 4 pedestrian or bicycle crashes in the corridor. Three of the four were with vehicles turning right failing to yield to bicycles. These crashes are listed below.

66th Street – Northbound right-turn vehicle failed to yield to bike (2011)
69th Street – Southbound right turn vehicles struck bike (2011)
69th Street – Northbound through vehicle struck pedestrian (2011)
Gallagher Drive – Westbound right turn vehicle failed to yield to bike (2011)

A table showing the results of the intersection analysis is included in the **Appendix**.

5. IMPROVEMENT OPTIONS

Urban Design Context

Any improvements to selected intersections along France Avenue must be made in the context of the city's other plans for the corridor, including its comprehensive plans, transportation plans, and plans for economic development. In general these plans have suggested a gradual transformation of France Avenue from a vehicular-oriented street to one that offers a "complete street" experience for not only people in motorized vehicles but also to pedestrians, bicyclists, and transit users. Such a reorientation will affect not only the design of France Avenue and the streets that intersect it, but also the private domain, the private property adjacent to France Avenue. The city, county, and the owners of private property will need to work together to achieve this goal.

The concept is to fully connect the public domain of the street with the private domain of buildings. This will create a realm for social interaction, a place that provides an opportunity for people to meet, purposefully or serendipitously, congregate, or simply move between locations. To achieve this goal, several distinct features will be added to France Avenue including new and additional corridor, pedestrian, bicycle, intersection, and transit elements, as discussed below.

A generalized concept of one of the proposed intersections illustrating a significant increase in trees providing an overstory canopy along streets, sidewalks, and in the median. Although it would be preferred to have new structures abut the street, particularly at corners, some existing buildings will remain removed from the street, requiring that sidewalks be extended from the street to those more distant structures. A novel approach to moving bicyclists through the intersection is created by superimposing what is essentially a roundabout for bicycles over a standard vehicular intersection. Note that existing free-right turning movements have been eliminated and the median enhanced to improve pedestrian safety and comfort.

Corridor Elements

It is the stated goal of the City of Edina to transform France Avenue between TH 62 Crosstown and I-495 into an attractive and distinct corridor with its own distinguishing identity that not only differentiates it from other corridors but also from other segments of France Avenue. To do this, the primary change will be the relationship between buildings and the street. In general, buildings will move closer to the street. At intersections, buildings will be adjacent to both France Avenue and the intersecting street. In locations where streets and existing buildings will remain distant, connecting plazas and generous sidewalks will encourage better pedestrian connectivity. Eventually intervening parking lots will be eliminated or at least become less common; a landscaped buffer will separate the street from pedestrians; doorways to buildings will open to intersections or sidewalks parallel to the street. Gateway monuments would demarcate the

entrances to this segment of France Avenue, announcing its distinct identify as a uniquely designed and managed destination. Similar, although less pronounced identifying markers would occur where cross streets intersect France Avenue.

The cross section of the corridor would also change. Lane width would be reduced to 11 feet with opposing traffic separated by a substantial planted median of 10 or more feet. Bicycles would be accommodated on France Avenue with a 5 foot bike lane in each direction. A 16-foot buffer, which includes a planter, bikeway and planted boulevard would separate France Avenue from the sidewalk. The sidewalk would be a least seven feet running parallel to the street. Adjacent to buildings, the walk may actually be wider to accommodate outdoor civic or commercial activities. The median would be slightly bermed to reduce headlight glare and planted with, as appropriate, flowers, shrubs, and trees. The landscaped boulevard would be swaled to accommodate storm water runoff and appropriate plantings.

Street and pedestrian lighting will be installed along the roadways and sidewalks. The lighting will be standardized yet unique to the corridor. Lighting of buildings, signs, and places of outdoor gathering will be coordinated to establish an overarching architectural identity for the corridor.

Wayfinding for motorists, pedestrians, and bicyclists will need to be installed to facilitate active-transportation. For motorists, this may include active messages, particularly for events, seasonal information, and directions to and the availability of parking facilities. For bicyclists, it may be providing direction to major nearby destinations and for pedestrians, kiosk bulletin boards providing room for announcements of public events.

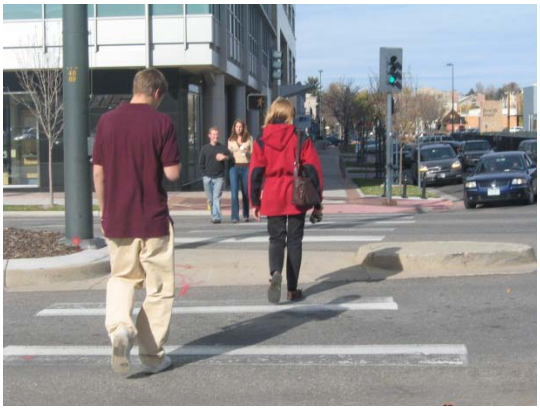
Distinctive gateway monuments not only define the entrances to a corridor but presage the character of the whole district, inviting participation and providing an identity to an iconic street in a vibrant community. Such monuments can be destinations themselves, provide community and historical information, and must be attractive throughout the day and year.

Pedestrian Elements

The primary attribute of the pedestrian realm will be the sidewalk itself. The walk will be concrete with a scoring pattern unique to the corridor. The preference will be to have buildings abut the sidewalk. It will be a standard seven foot width with an additional 18-inch shy distance next to buildings to allow for façade projections and fenestrations. The walk may be widened to accommodate future commercial uses, such as restaurant patios and sidewalk cafes, or even developed into small plazas or pocket parks in coordination with future private development. The concept is to create opportunities for people to interact. Additional pedestrian amenities, such as benches, tables, arbors, or drinking fountains may be included.

The buffer between the sidewalk and the street is critical in developing the pedestrian realm. The buffer will provide an area for trees, shrubs, and flowers. Where space is available, a 16 foot buffer planted with large trees in double staggered rows would be preferred. In locations where there is insufficient space for a wide buffer, planter boxes filled with shrubs and flowers will provide separation between moving traffic and strolling people.

The scale of the plantings will be massive or perfuse to visually complement the width of the street and the height of adjacent buildings. In particular large distinctive street trees, primarily deciduous, will enclose the sidewalk and street while providing a pedestrian scale space and detailing beneath the canopy, creating a safe enclosure for people moving through the corridor on foot. Shrubs and flowers will provide interesting details to pedestrians.



By working with private developers, the pedestrian realm can become a place for social interaction. Providing amenities that make it comfortable for people to walk and congregate is essential. Explicitely marking where pedestrians are located and providing a wayfinding system increases pedestrian safety and encourages people to walk.

Bike Elements

Bicycles will be accommodated along France Avenue with two dedicated lanes on the street moving in the same direction as motorized traffic. The preferred width is five feet. At intersections, a specially adopted layout, essentially a roundabout for moving bicyclists safely through traffic will be accommodated. Left turns will be accommodated through the roundabout rather than crossing traffic over to a left turn lane. Bike lanes will be separated from lanes for motorized traffic by a wide curb. At intersections, bike lanes will be color-coded.

Accommodating bicycle parking will be critical in the corridor. Parking by building entrances, outdoor public gathering spots, and at transit nodes will need to be coordinated with private development. In addition, “on-street” bicycle rental vending may become an option in the area and will need to be accommodated off of France Avenue and other intersecting streets. It will be critical that the location of bicycle lanes, parking, and rental not interfere with pedestrian movement. Coordination with developers may be required.

Edina has designated Frnace Avenue as a bike route. Although, given various alternatives, it will probably be primarily used by more experienced, it must be designed in a way that will provide safety for all users. The introduction of the bicycle roundabout superimposed over a standard intersection and improved signal detection methods will improve markedly safety at a location where most vehicular-bicycle accidents occur.

Transit Elements

Coordination with transit providers will be essential for transforming France Avenue into a complete street. Linking the sidewalk's pedestrian system with the streets' transit system will require site-specific coordination. Providing a corridor-specific transit shelter at all transit stops will encourage use of the transit system. Coordinating vending machines for newspapers or at a minimum defining their locations will benefit the appearance of the corridor. The placement of transit shelters must not interfere with pedestrian or bicycle movement.

The location and design of transit shelters can provide an iconic element for the corridor. A seamless transition from transit to bicycling and walking is critical for establishing a complete street.

Transit Coordination

The project design team met with Kristin Thompson, Brad Smith and Cindy Harper of Metro Transit. We discussed the project and shared the proposed improvements. The members of Metro Transit were supportive of the proposed improvements including removing cyclists from the travel portion of the roadway, and did not foresee any issues with the existing bus routes and stops, and agreed that the improvements would be a major upgrade for Metro Transit.

We discussed the desire to possibly add bus shelters. They are going to provide details on their standard bus shelters and the standard concrete pad. They informed the design team that bus shelters are added only if there are 25 boardings at the bus stop. If the ridership numbers were not up to the set amount, they would not maintain or construct the shelter. However, the City could put up a shelter of their choosing at the City's cost.

It was not anticipated that any of the bus stop locations or routes would change in the future. Given the current northbound condition near Hazelton and 72nd Street, where the bus stop is at a location without a sidewalk, they would consider relocating these to a location that has more room. It is proposed to add a sidewalk in this location, but a problem with snow removal still exists given the proximity to the existing retaining wall. One option to provide additional space for the bus stop would be removing the dedicated right turn lane. They do not like to place bus stops adjacent to right turn lanes given the difficulty of entering back into traffic.

Intersection Elements

Bikeway crossings will be a distinct colored-concrete to differentiate them from the roadway. A traditional zebra-striping crosswalk with stop bars will provide the best safety measures for pedestrians. A wide median, at least 10 feet, will create a pedestrian refuge. The median should extend beyond the crosswalk into the intersection to provide an additional buffer for stranded pedestrians. Universal accessibility standards will be applied to curb cut locations and design.

Traffic Signal Elements

The appearance of traffic signals, poles, and masts will be coordinated with lighting fixtures and standards. American with Disabilities Act (ADA) standards will be applied to all traffic signal elements. Video, pressure plate, or other detection methods will be used to identify if a pedestrian or bicyclist is approaching or in a crossing and the cycle times adjusted to allow sufficient time for crossing and turning movements. Turning movements for cars will be delayed if the presence of a pedestrian or bicyclist is detected. A manual override system will be provided for both pedestrians and bicyclists.

The design of the functional aspects of intersection and traffic signal elements will reinforce the aesthetic and urban design characteristics of the corridor by providing safety and comfort to pedestrians and bicyclists.

6. PROPOSED IMPROVEMENT ALTERNATIVES

Three primary intersection options were prepared and evaluated. Taking into consideration the design elements discussed in the previous section. Each option is discussed below with their advantages and disadvantages,

Intersection Option 1 - Seperated Bike/Pedestian Lanes with Blvd

This option provides a oneway off-road bike lane separated by a boulevard and a elevated pedestrian sidewalk also separated from the bike lane. At the intersections the bikes would be separated in there own crossing using a modification of the “Dutch” design. **Figures 8a – 8c** shows Option 1 at each intersection.

Advantages:

- Aesthetically pleasing
- Provides buffer to pedestrians and bikes
- Easily continued concept along corridor
- Biscuits allow for better sight distance for bikes and vehicles
- Widened Median allows for refuge island for pedestrians
- Increased buffer in corners for pedestrians
- Biscuits allow for signal pole placement
- Decreased distance for pedestrians and bikes to cross
- Safer crossing for pedestrian and bicyclists.

Disadvantages

- Requires increased R/W, especially in corners
- Pedestrians need to wait further back behind bike lane
- Additional maintenance for snow removal

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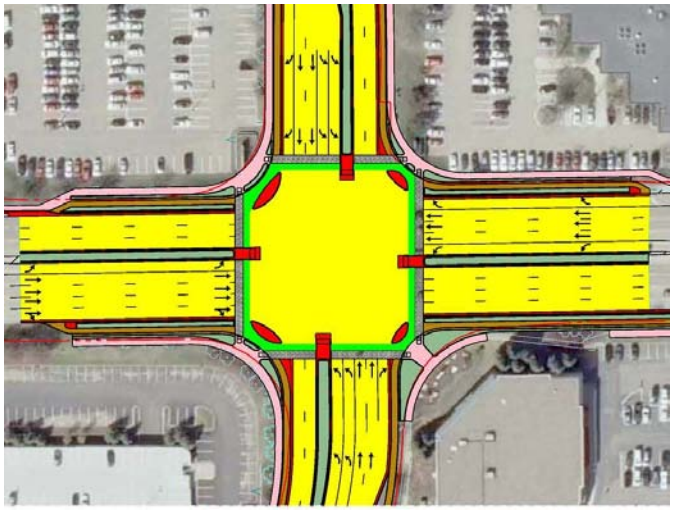


Figure 8a. France Ave at 76th Street Option 1

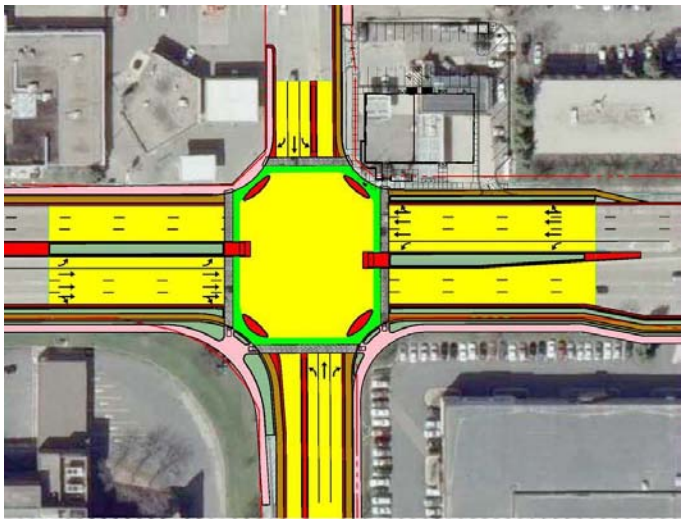


Figure 8b. France Ave at 70th Street Option 1

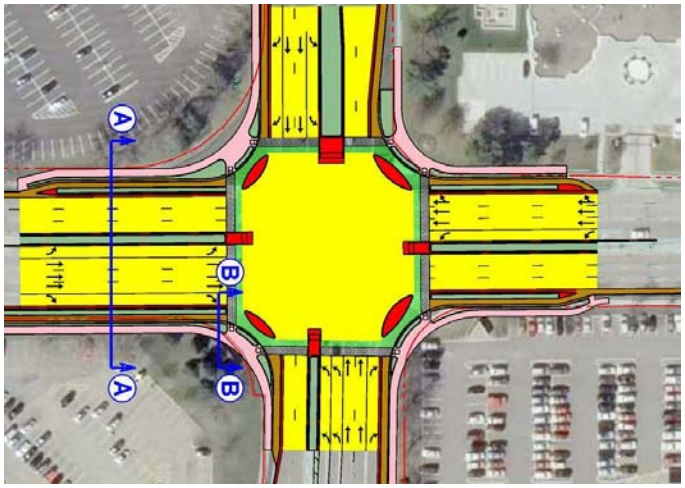


Figure 8c. France Ave at 66th Street Option 1

Intersection Option 2 – Seperated Bike/Pedestrian Lanes with no Blvd

This option provides a off-road bike lane with no boulevard and a elevated pedestrian sidewalk separated from the bike lane. At the intersections the bikes would be separated in there own crossing using a modification of the "Dutch" design. **Figures 9a – 9c** shows Option 2 at each intersection.

Advantages

- Provides buffer for pedestrians and bikes
- Biscuits allow for better sight distance for bikes and vehicles
- Wider median allows for refuge island for pedestrians
- Increased buffer at corners for pedestrians
- Biscuits allow for signal pole placement
- Decreased distance for pedestrians and bikes to cross
- Not as much R/W required as Option 1

Disadvantages

- Requires more R/W than Option 3
- Pedestrians need to wait further back behind bike lane
- Additional maintenance for snow removal
- Barrier curbs are susceptible to damage from vehicles and snow plows

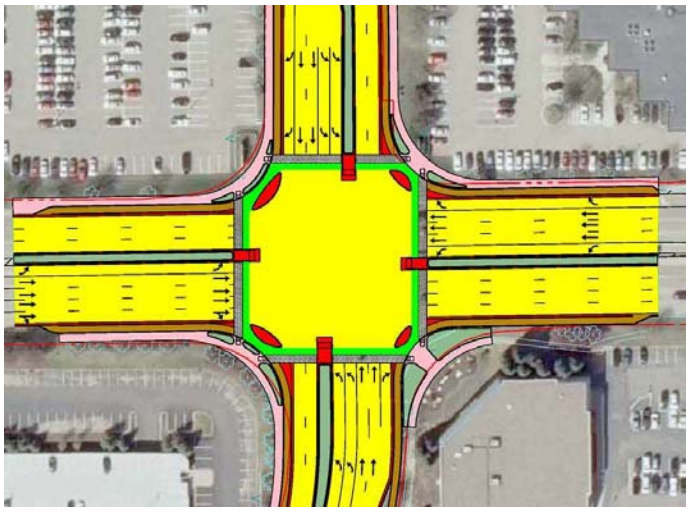


Figure 9a. France Ave at 76th Street Option 2

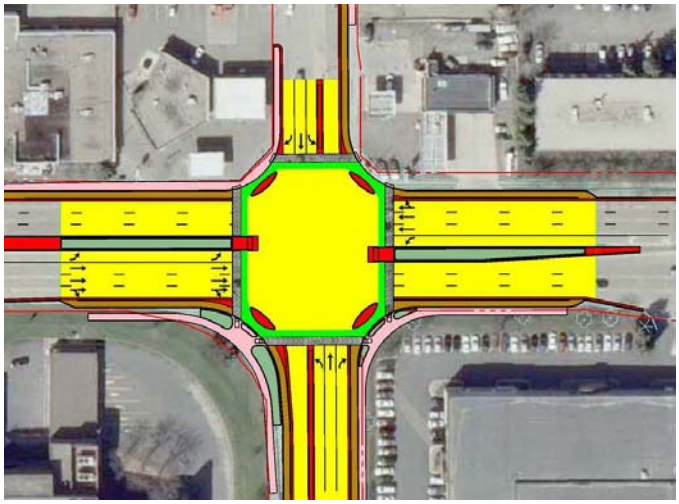


Figure 9b. France Ave at 70th Street Option 2

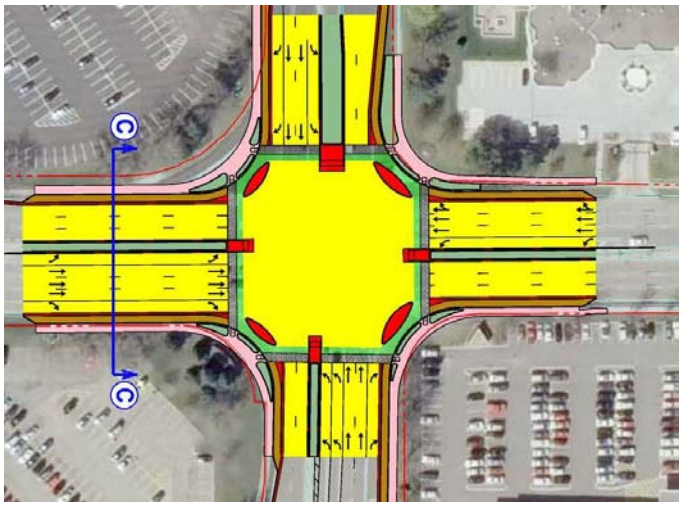


Figure 9c. France Ave at 66th Street Option 2

Intersection Option 3 – On Road Bike Lane with Sidewalk

This option provides a standard on-road bike lane. A pedestrian sidewalk is provided with a boulevard between the roadway and sidewalk. At the intersections the bikes and pedestrians would be in the same crosswalk facility. **Figures 10a – 10c** shows Option 3 at each intersection.

Advantages:

- Would require minimal to no additional R/W
- Is the accepted way to handle bike lanes at intersections
- Widen median allows for refuge island for pedestrians

Disadvantages

- Increases the width to cross for pedestrians
- Chance for right hook crash on thru-right vehicle movements and weaving crashes for designated right turn movements
- Is not aesthetically pleasing

Most cyclists would not feel comfortable riding along France Ave with 3+ lanes in and speeds in excess of 40 mph
Provides no buffer for pedestrians
Would require widening along entire France corridor for future expansion

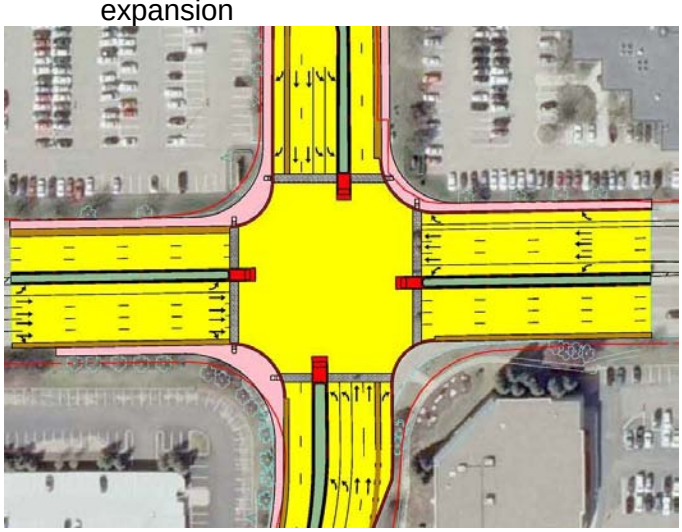


Figure 10a. France Ave at 76th Street Option 3

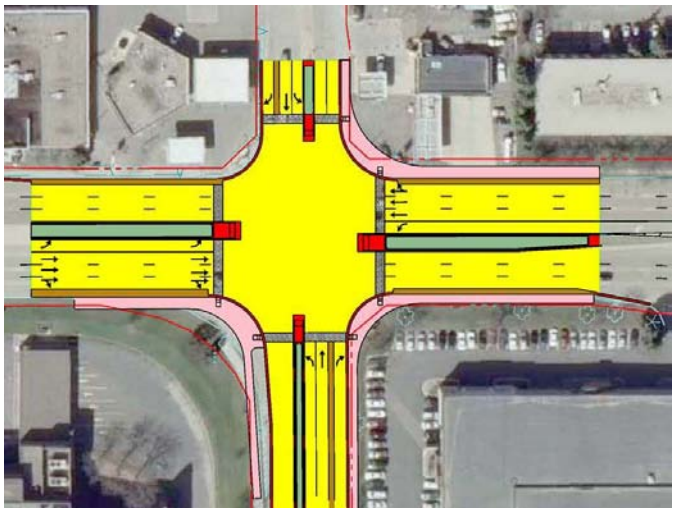


Figure 10b. France Ave at 70th Street Option 3

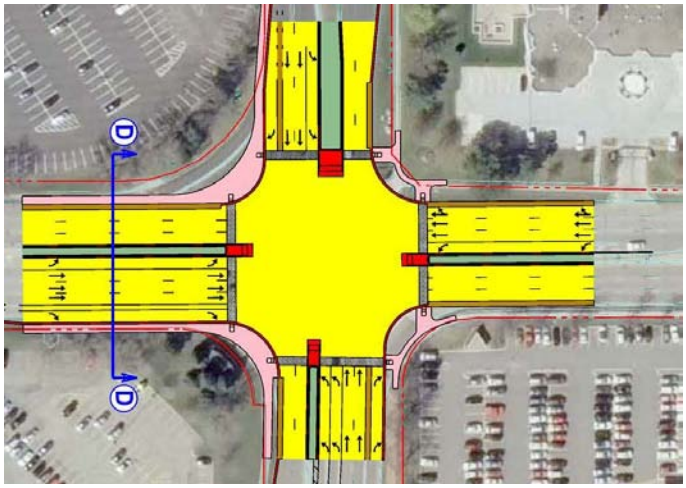


Figure 10c. France Ave at 66th Street Option 3

Other Intersection Design Options Considered

Other intersection design options were also considered but were determine to be not feasible because they would physically fit the France Avenue situation or would create a significant impact to adjacent property. These options included:

- Continuous flow intersection
- Michigan left turns
- Grade separated cross street

Corridor / Sidewalk Connection Options

Three sidewalk connection options were considered for completing the gaps in the sidewalks on the east side of France Avenue including:

- Continuing the preferred alternative the entire length.
- Continuing the preferred alternative the entire length except at loctions were there were impacts to property other than just right of way.
- Making only sidewalk connections without any significant right of way impacts.

7. RECOMMENDED IMPROVEMENTS

Option 1, separated pedestrian/bike lanes with boulevards is the recommended option bassed on feedback from the Stakeholders group. **Figures 11a – 11c** shows the recommended improvements for the entire corridor. The figures also show the other intersections where similar designs could be implemented in the future. Extension of the bike lanes along with filling in the missing sidewalk segments is also planned. The exception to this would be located between 72nd Street and Hazelton Road where only the sidewalk will be installed due to the existing retaining wall.

Figure 11a. France Ave Preferred Alternative

Figure 11b. France Ave Preferred Alternative

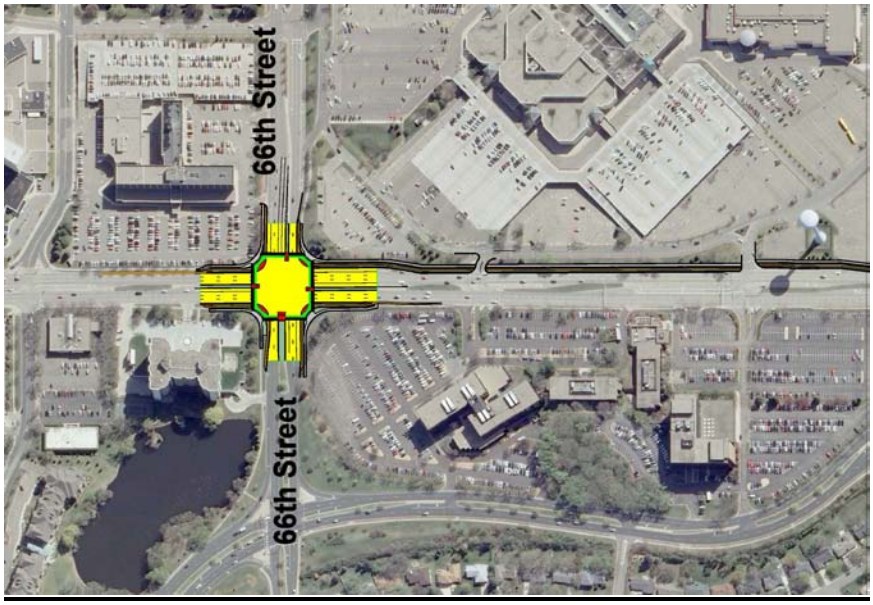


Figure 11c. France Ave Preferred Alternative

The proposed typical section is shown in **Figure 12** and includes the following:

- Reducing the vehicle lanes to the minimum State Aid requirements
- Widening the center median to a 10' width
- A 6' landscaped boulevard
- A 5' oneway bike lane with a 2' clear zone
- A 3' evaluated planter between he bike lane and sidewalk
- A 7' sidewalk

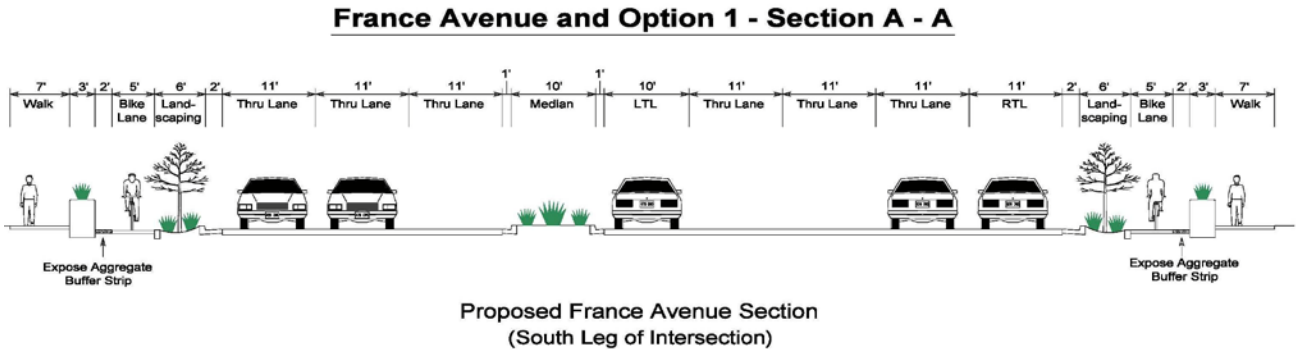


Figure 12. France Ave Preferred Alternative Typical Section

A detail of a typical intersection corner showing the location of the interaction of the pedestrian and bike lanes, the loction of the ADA ramps and location of areas where additional landscaping could occur is shown in **Figure 13**.

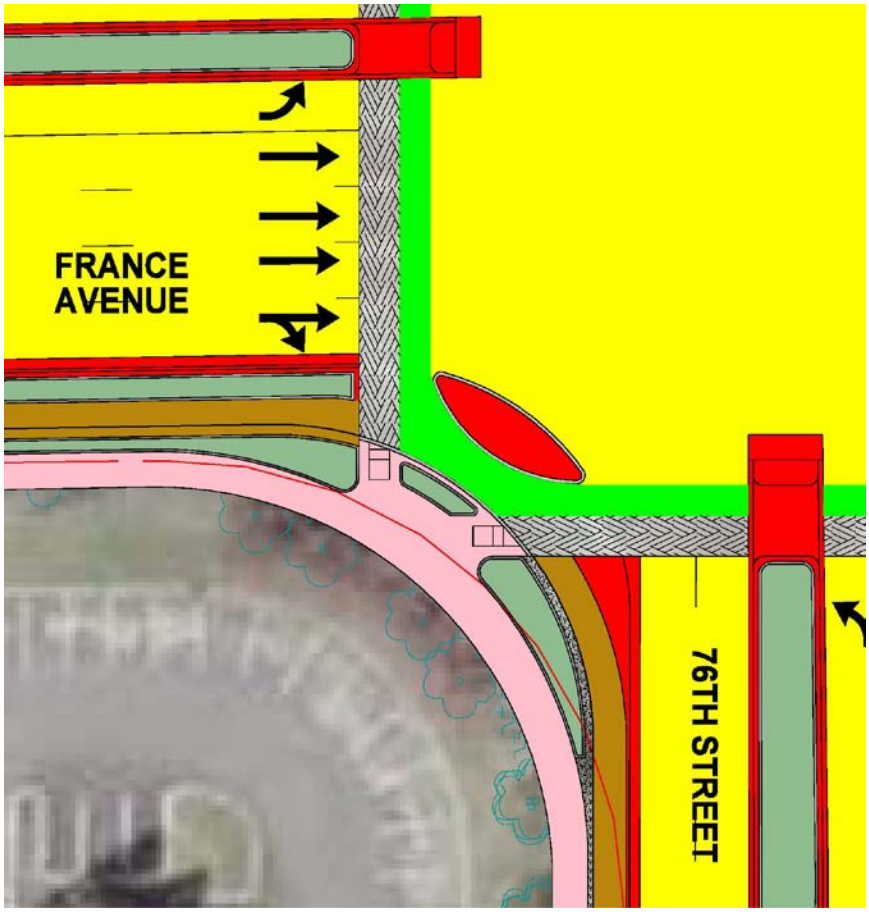


Figure 13. France Ave Preferred Alternative Intersection Detail

The details of how the bike lane would enter and exit from France Avenue is shown in **Figure 14**

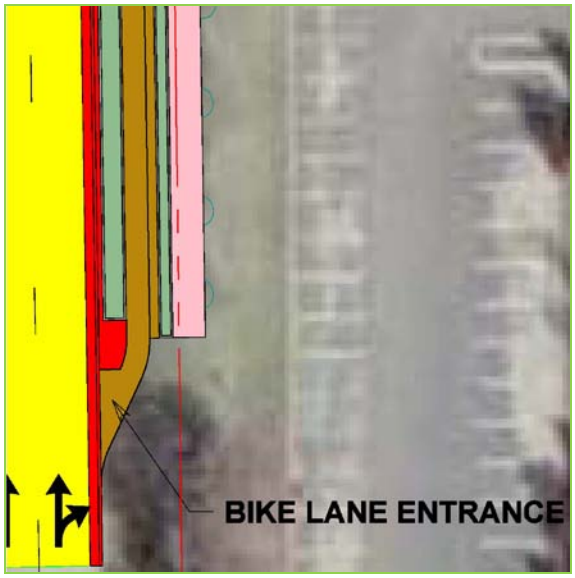


Figure 14. France Ave Preferred Alternative Entry/Exit Detail

The detail of how a transit stop would be accessed across the bike lane is shown in **Figure 15**.

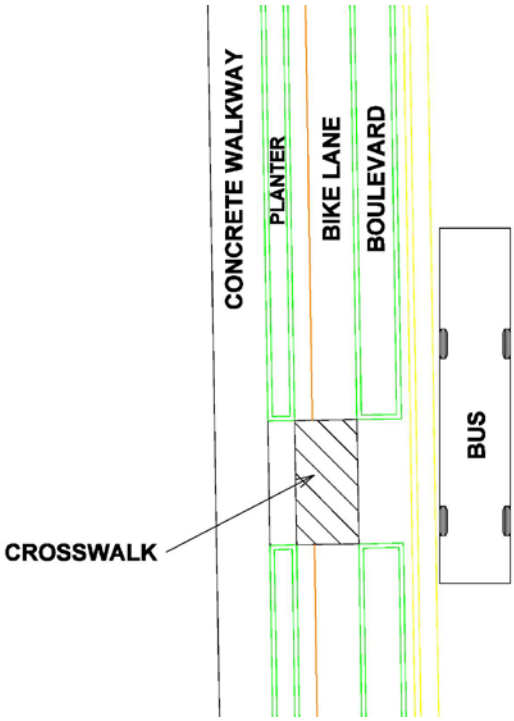


Figure 15. France Ave Preferred Alternative Transit Stop Detail

8. RIGHT-OF-WAY & EASEMENTS

Based on the preferred alternative right of way and tempory construction easments will be required.

76th Street:
Perm R/W = 18,000 sf
T/E = 15,000 sf

70th Street:
Perm R/W = 8900 sf
T/E = 7300 sf

66th Street
Perm R/W = 8500 sf
T/E = 7600 sf

Sidewalk Connection Areas
Perm R/W = 11,600 sf
T/E = 5100 sf

Total Preferred Alternative
Perm R/W = 47,000 sf
T/E = 35,000 sf

9. PROJECT COSTS

76th : Construction = $968,000, R/W = $990,000
70th: Construction = $912,000, R/W = $480,000
66th: Construction = $937,000, R/W = $490,000
Total Intersection Cost = $2,817,000, R/W = $1,960,000
Sidewalk Connection Const Cost = $1,831,000, R/W = $2,523,000
Total Construction = $4,648,000, Total R/W = $4,483,000

If the preferred alternative would be construted the entire length including adjacent to Byerlys and Macys the total cost would increase to $10,308,000.

If only the Sidewalk connections were made and with no R/W needed outside the intersections the total project cost would decrease to $5,027,000.

10. FUNDING

Funding for the project is currently allocated using the following funding sources.

$1.0 million in Federal TE funding
$1.0 million in matching Southdale Area TIF funding

The remaining funding can be provided using additional Southdale Area TIF funding, State Aid funding or other local funding sources.

11. FEASIBILTY

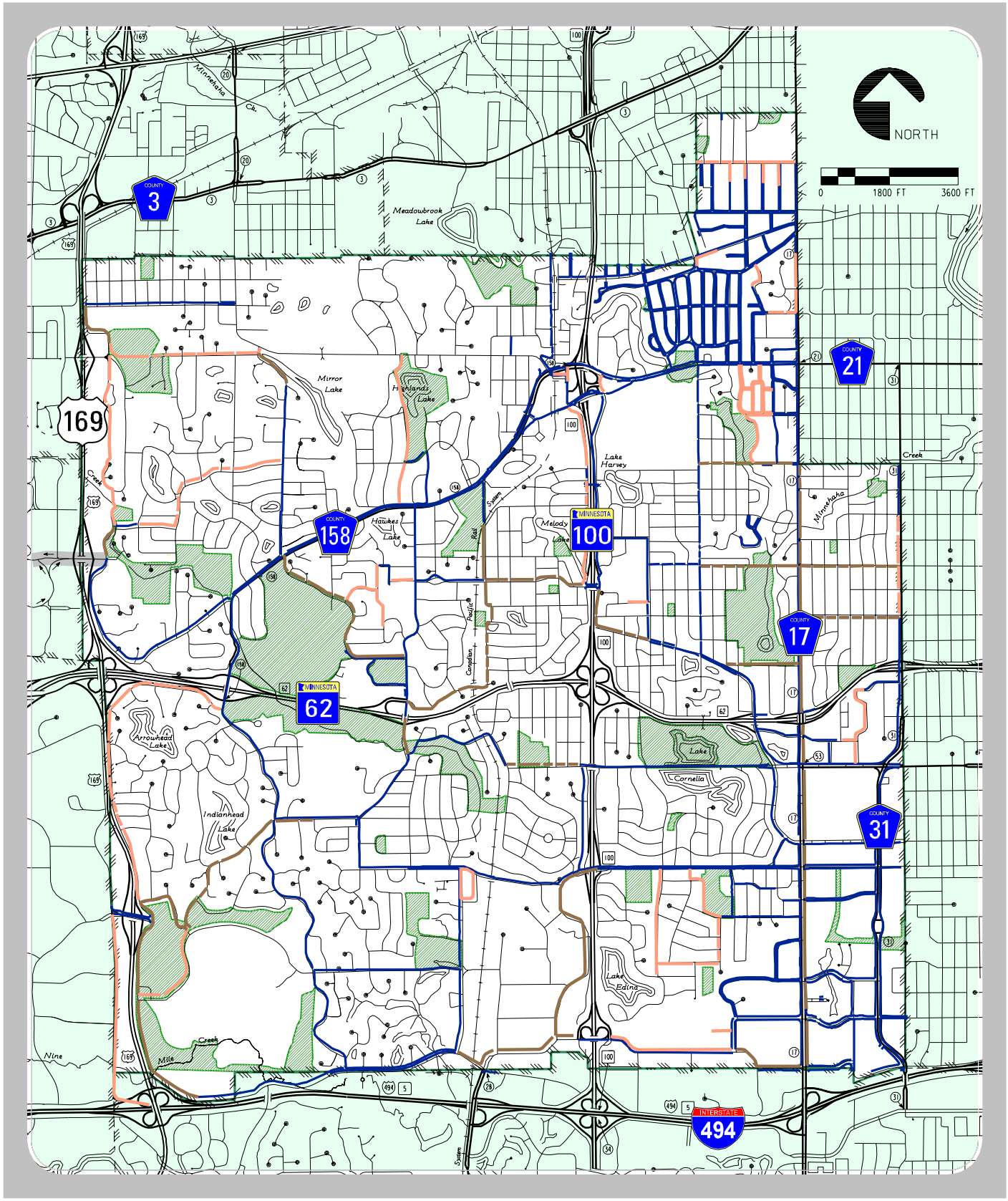
12. PROJECT SCHEDULE

The project is on a very aggressive schedule to meet the sunset extension date of March 31st, 2013.The following general schedule is anticipated. A detail schedule is included in the **Appendix.**

Upcoming Meetings	
Edina Transportation Commission	July 9th, 2012
Edina City Council	July 17th, 2012
MnDOT Federal Project Process	
Project Development	April – December 2012
Project Memorandum	October 2012
Right of Way	December 2012
Detail Design	August 2012 – March 2013
Final Approval (City, County, MnDOT)	March 2013
Begin Construction	Summer 2013

Appendix:

Edina Comprehensive Plan Figure 7-10 Sidewalk Facilities
Edina Comprehensive Plan Figure 7-11 Bike Facilitiies
Stakeholders Meeting #1 minutes
Stakeholders Meeting #2 minutes
Met Council comment Summary
Level of Service summary Tables
Crash investigation Summary Table
Estimated Cost Summary
Detail Project Schedule



LEGEND:

- Existing Sidewalk
- Proposed School / Business Sidewalk
- Proposed State-Aid Sidewalk

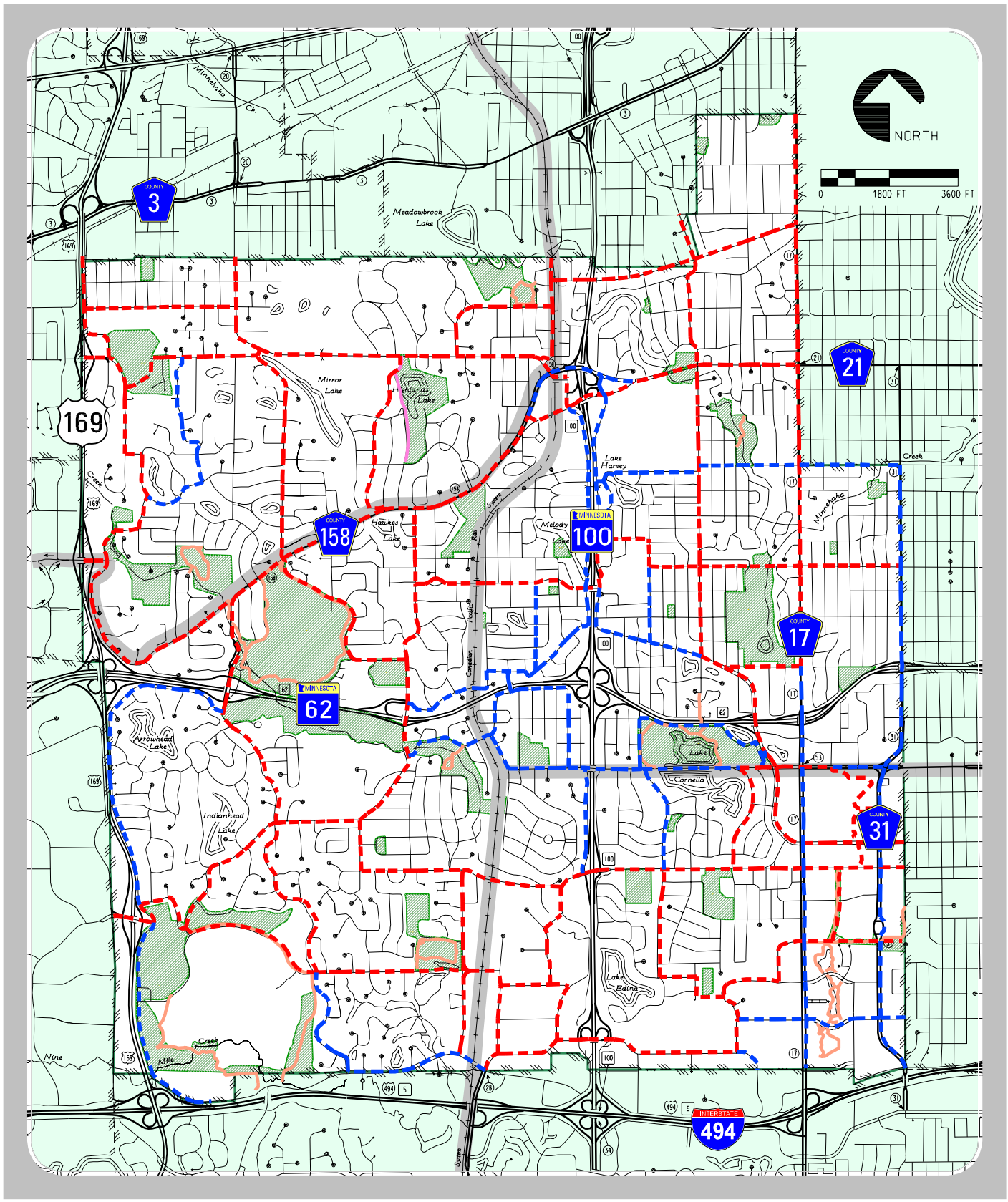
Note: Park Pathways are included on Figure 7.11

City of Edina
2008 Comprehensive Plan Update

Sidewalk Facilities

Figure 7.10

Date Printed: 10/22/2008
WSB Filename: K:\01686-03\Cad\Plan\fig-7-10.dgn



LEGEND:

- Existing Park Pathway
- Existing Hennepin County Corridors
- Proposed Park Pathway

From the 2007 Edina Comprehensive Bicycle Transportation Plan

- Primary Route
- Secondary Route

City of Edina
2008 Comprehensive Plan Update

Bicycle Facilities

Figure 7.11

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France Avenue Pedestrian Improvements

S.P. 120-020-037

Stakeholder Meeting #1
Meeting Minutes

5/31/2012
City of Edina Public Works Building

In attendance:

Surya Iyer .....Edina Transportation Commission
Tom LaForce.....Edina Transportation Commission
Katherine Bass.....Edina Transportation Commission
Jennifer Janovy.....Edina Transportation Commission
Marty Mathis .....Bike Edina Task Force
Alice Hulbert .....Bike Edina Task Force
Sara Maaske .....do.town
Karen Nikolai ..... Hennepin County
Cary Teague..... City of Edina
Gene Persha ..... Edina Resident
Tom Johnson ..... Hennepin County
Jonathan Vlaming.....Three Rivers Park District
Robyn Anderson..... City of Bloomington
Reuben Collins ..... WSB & Associates
Chuck Rickart..... WSB & Associates
Andrew Plowman..... WSB & Associates
Craig Churchward..... LHB
Wayne Houle..... City of Edina

Meeting Start Time 7:00 PM

I. INTRODUCTIONS

Houle led group introductions.

II. PRESENTATION

Houle Provided Background information, History, and Project Foundation

Discussion:
Mathis noted that Bike Edina Task Force should be included in the list of project stakeholders.

Churchward presented information about project goals, objectives and direction.

Rickart presented information about traffic volumes, crash data, and background data.

Discussion:

LaForce asked a question about where the traffic volumes were collected. Rickart noted that County has specific locations where they place counters on regular intervals.

Bass asked if the lower crash rates observed at the intersections was a reflection of people not wanting to cross France Avenue. Rickart clarified that the data represented vehicle crash rates and that we do not have good data regarding the number of bikes or pedestrians traveling along the corridor.

Rickart presented information regarding the roadway typical sections.

Churchward presented information about urban design elements such as parking, corner radius, bollards, ped ramps, landscaping, medians, etc. He mentioned the important distinction between horizontal and vertical elements.

Discussion:

Mathis commented about the poor visibility of salmon colored crosswalks and the higher visibility associated with zebra stripe crosswalks.

Johnson noted that Hennepin County re-stripes most roadways annually, but that often the County asks Cities to maintain crosswalks.

Churchward presented information about the impact of sidewalk width on pedestrian comfort, potential crosswalk improvements, and the impact of design elements on placemaking. He mentioned the importance of details such as pedestrian scale lighting, natural foliage and creating barriers between motorists and pedestrians.

VIDEO: Dutch Bike Lane Corner Enhancements

Churchward invited meeting attendees to share ideas.

Discussion:

LaForce asked what the speed limit was and if we know what typical speeds are. Johnson responded that the speed limit is 40 mph, and noted that the frequent signals along the corridor may keep drivers from reaching higher top speeds. Others indicated that they felt speeds were often higher than 40 mph.

Hulbert mentioned the need for gateways at either end of the corridor and a need to limit sight lines along the corridor to encourage drivers to slow down.

Persha commented about the poor state of the bus stops at Gallagher. There are poor pedestrian connections to the stops. Peds often get splashed by water from

puddles in the road as they wait for buses. The shelters are in poor condition and unsightly. He noted that smaller street widths would really enhance the corridor.

Bass commented that it is important to remember and convey the message that people live on France Avenue. It is an existing neighborhood. More residential development is anticipated. It's not just a commercial corridor. She mentioned that SWLRT will skip Edina and that other communities will benefit from the investment. Edina needs to work hard to give people a reason to continue coming to Edina if it is to compete.

Churchward commented on the need to create street life, the need to provide for a pedestrian "experience", the need to create the ability for people to "park once"

Janovy asked what the available space was for sidewalks along the corridor, and how we will deal with grade issues along the east side of the corridor. Teague responded that the existing ROW varies along the corridor, and that opportunities to develop sidewalks and obtain ROW occur as parcels redevelop.

Bass asked if the city has any ordinances or codes that require buildings to architecturally engage the street. Teague responded that the city has some tools they can use to persuade developers, but the tools are not very strong and the city can not require it at this time.

Vlaming mentioned a need to understand where motorists are coming from and going, and thought that many of them are trying to avoid TH-100. He noted that 50th & France works well because it is a small geographic area. France Avenue is a much longer corridor, so he recommended that this study focus heavily on developing "nodes". The existing landscape is dominated by parking lots, but it has great potential. He noted that Three Rivers Park District has a very strong interest in enhancing the Gallagher Drive intersection and hoped there would be a way to include it in the study.

Persha noted that France Avenue is an unpleasant pedestrian environment and that strolling along the corridor is not a realistic objective. We should focus on moving people across France rather than along France. He reiterated a need for gateways and for a "naming" strategy for the area.

Vlaming noted that Bloomington has had success naming areas (such as South Loop)

Hulbert noted that 50th & France has been a successful commercial node because a conscious decision was made to narrow the roadways to create a pleasant pedestrian feeling.

Vlaming mentioned the need to find commercial businesses that cater to the needs of the local residents rather than meeting regional needs.

Hulbert asked if MnDOT would be open to lane width reductions. Johnson responded that the county was open to the idea, but that there are challenges relating to concrete joints that will need to be addressed.

Rickart presented information regarding design constraints, LOS expectations, design standards, funding limitations, and schedule constraints that must be considered.

Discussion:
Mathis asked how much funding was available. Houle responded that about $2 million is available for the project including the federal funding and the local match.

Persha mentioned the need to engage more citizens in the process now or else they will be reactive later. He noted a need to train drivers to be more sensitive to pedestrians, and noted that California has done a good job with this and with marking crosswalks. He has never observed a parent with children trying to cross the roadway because it is not safe.

Jenovy reiterate that the TE funding source is for specific intersection improvements. She asked about the potential for bike lanes along France Avenue. Rickart responded that they are not included in the study, but there is a need to ensure that the outcome of this study does not preclude them later. Houle pointed out that France is not on the County bike plan, but there is still potential for cyclists to use France to feed other routes.

Johnson reiterated that the grant funding will only pay for certain items and stated the importance of communicating to the public exactly what items are eligible for inclusion in the project.

Jenovy mentioned that the City may have access to additional funding sources, and mentioned the Centennial Lakes TIF district.

Rickart mentioned the importance of sticking to the project schedule, which will also limit the realistic possibilities.

Churchward agreed that this project and study should be viewed as a catalyst for many rounds of potential future improvements.

Hulbert mentioned a desire for planter boxes to create a physical separation from vehicles.

Jenovy stated the need for an “Edina Brand”.

Nikolai mentioned the importance of placemaking and the need to include land-use planning in this study process.

Meeting Concluded at 9:00 PM.

France Avenue Pedestrian Improvements

S.P. 120-020-037

Stakeholder Meeting #2
Meeting Minutes

6/26/2012
City of Edina Public Works Building

In attendance:

Ann Braden .....Edina Transportation Commission
Courtney Whited.....Edina Transportation Commission
Tom LaForce.....Edina Transportation Commission
Jennifer Janovy.....Edina Transportation Commission
Arlene Forrest .....Edina Planning Commission
Mike Fischer ..... Edina Planning Commission / LHB
Joni Bennett .....Edina City Council
Karen Nikolai ..... Hennepin County
Tom Johnson ..... Hennepin County
Amy Gurski .....Three Rivers Park District
Gene Persha ..... Edina Resident
Sherry Hastings .....Business Community
Laurie VanDalen .....Business Community
Robyn Anderson..... City of Bloomington
Reuben Collins ..... WSB & Associates
Chuck Rickart..... WSB & Associates
Andrew Plowman..... WSB & Associates
Craig Churchward..... LHB
Wayne Houle..... City of Edina
Cary Teague..... City of Edina
Steve Sletten ..... City of Edina

Meeting Start Time 7:00 PM

I. INTRODUCTIONS

Houle led group introductions.

II. PRESENTATION

Houle presented a recap of the last stakeholder meeting and presented an overview of the agenda for further discussion.

Houle played the Dutch Intersection Design video.

Rickart and Churchward presented information establishing project objectives and context.

Rickart presented information related to the design process, project expectations, and traffic operations. He presented information about the traffic analysis completed for several options, including removing free-right-turns, eliminating a lane on France Ave, and removing dual-left-turns on side streets.

Discussion:
Braden asked if the options considered were evaluated as independent options, or as incremental options.

Rickart indicated that all scenarios assumed that free-right-turns would be removed, but that the other options were considered independently.

Johnson indicated that Hennepin County has established LOS D as the standard, and that this project would be evaluated relative to that standard.

Rickart presented graphics and explanations about Option 1.

Discussion:
Nikolai asked a question about where the stop bar will be located relative to the crosswalk and the bike lane. She stressed the importance of having the stop bar located away from the crosswalk to enhance safety. Rickart responded that there would likely be 1' separation between the crosswalk and the stop line, and that the stop line is typically 2' wide for a total separation of 3'.

Anderson asked for clarification about the scope of the project and whether the proposed bike lanes were intersection treatments only or for the whole France Ave corridor. Rickart confirmed that the proposed improvements are for intersections only. Houle indicated that this project is viewed as a catalyst project setting the stage for future improvements along the corridor.

Fischer asked if we knew how much ROW we were gaining by implementing narrower lanes, and if that gain eliminated the need for substantial ROW takings. Rickart responded that we were gaining a few feet by using narrower lanes, but we are also proposing wider medians, so the proposed wider bike lanes and sidewalks will require additional ROW.

Anderson asked whether right-turn-on-red would be permitted at this location. Rickart responded that the design team is still looking at this and a decision has not been made.

Persha asked about how bus stops would be handled at these intersections. Rickart stated that there aren't any bus stops at any of the intersections that would be impacted, however, enhancements are planned for some of the bus stops along the east side of France with the construction of the sidewalk.

Churchward presented conceptual renderings of the proposed improvements and provided information about the importance of vertical elements and textures for bike/ped facilities.

Discussion:
Hastings commented that she liked the renderings, and stated that alternate textures are important for motorists as well to signal that they are entering a different type of space.

VanDalen asked for clarification about the cost of the project and the anticipated funding source. Houle Responded that the total project cost is about $2 million. $1 million will be provided by the federal government, and $1 million will come from the TIF district.

Rickart presented information about Options 2 and 3 and pointed out operations characteristics of each.

Discussion:
Hastings asked if the median was wide enough to be a safe haven for pedestrians. Rickart responded that the median was designed to be 10' wide and about 13' long, which should provide a comfortable space for pedestrians.

VanDalen commented on the time and disruption the current work Hennepin County has been doing on France Avenue and asked if this project was going to have to replace some of the work they are doing now. Houle responded that the work Hennepin County is doing is routine maintenance, and that some of these intersection improvements would replace areas they are working on now.

Sletten asked if the medians would have a different look or texture than the rest of the crosswalk area. Churchward responded that this decision has not been made yet, but that medians with different texture might enhance the feeling of safety for pedestrians.

Nikoli asked for clarification on whether the sidewalks along the east side of France were included in this project. Rickart replied that they would be included in this project.

Houle stated that maintenance of the sidewalks and trails, including snow removal, would be a city responsibility. The city already maintains the sidewalks here and has the equipment necessary to do so.

Persha commented that the two traffic signals between 66th and 69th are dangerous. There are no crosswalks, but people dart across anyway.

Anderson commented that the proposed improvements would help establish a gateway effect to help people recognize pedestrians.

Rickart presented information relating to the upcoming steps in the process, including MnDOTs functional group reviews and scheduling.

Houle invited any additional questions.

Discussion:
Whited asked if there was concern about drivers choosing to use York Avenue instead if the proposed improvements resulted in slower operating speeds. Houle responded that the City has been trying to encourage people to choose York Avenue for several years because it is viewed as being underutilized, so if this project displaces traffic, it could be a benefit.

Whited asked if the city was reaching out to existing businesses to help encourage things like providing bike racks. Teague responded that the city has ordinances in place that requires any new construction to provide a minimum number of bike parking spaces, but that there are no tools to make existing businesses provide bike parking.

Fischer commented that it was extremely important for the City to establish a firm vision for the corridor so that the City can negotiate with property owners as they want to redevelop. He commented that developers are typically very willing to provide streetscape elements when there is an established vision.

Houle stated that one outcome of the stakeholder meeting was to receive direction from the stakeholders about any preferences that stakeholders had for any of the options.

Hastings noted that she preferred Option 1 because it provided the greatest level of separation between the roadway, bike lanes, and the sidewalk. Fischer agreed that the separation between the modes is an attractive element of Option 1.

Anderson asked if there were concerns about the visibility of cyclists if a planted strip was between motorists and cyclists. Churchward responded that plantings would either be very low, or else tree trunks are only momentary disruptions.

Braden asked if this solution had been implemented anywhere else in the Metro area where it could be viewed. Houle answered that this solution is new and has not been implemented elsewhere in the Metro.

Bennett commented that it seemed like the proposed options are all trying to squeeze bike facilities along a roadway that cyclists don't often use, and questioned whether the space would be better used for pedestrians. She expressed concern that the proposed sidewalks were not wide enough or substantial enough to provide a top pedestrian experience, and questioned whether the bike facilities are a good use of funds in this location. She expressed an interest in seeing additional vertical elements to separate pedestrians from motorists, and referenced her experiences in New York and Santa Barbara. Houle responded that the design process is ongoing, and that additional vertical elements will be considered in the future.

Janovy asked if the proposed sidewalk width was known and whether there would be a boulevard. Rickart responded that the desired width is 8' and that a boulevard will be provided every place where possible.

Forrest asked if there were known bike/ped counts along France Avenue. Anderson commented that the do.town initiative will be doing bike/ped counts. Nikoli responded that planning journals have reported that once cities have implemented high-quality facilities, the bike/ped counts have increased dramatically.

Bennett reiterated her previous comment and clarified that she is very supportive of bicycle facilities. However, she noted that if accomplishing the objective of providing bike lanes along France Avenue results in suboptimal pedestrian space, she would prefer to see the bike facilities removed to better accommodate pedestrians.

Houle summarized the meeting by asking for confirmation that the consensus of the group was that Option 1 is the preferred alternative moving forward, with special attention to ensure that appropriate vertical elements are used to provide a top-tier pedestrian experience. The group confirmed his summary.

Meeting Concluded at 9:00 PM.

Reviewer	Agency	Title	Comment	Date	Response
James Andrew	Met Council	bike planning, regional solicitation/TIP management/ Funding and Programming staffer	I think these are great designs for intersections but they are very unusual for the US as you mention so it may take some education/getting used to. Are these already approved designs? Be sure to check in sooner than later with State Aid and FHWA to find out if variances will be needed.	6/27/2012	We agree that education will be a big aspect to this design. We anticipate signing and applying the right messages to all users is important. We are planning to meet with State Aid/Federal Aid folks soon to discuss the design and be sure no variances are needed and start applying for the variances if they are. We believe from a pure lane width, reaction distance, clear zone, etc. that we are meeting all state aid and federal aid requirements.
Steve Elmer	Met Council	freight planning, avid bicyclist	I hope they don't have any right-turning trucks or buses at these intersections. From what I've seen of the Dutch designs, the turning radii would need to be tightened considerably to accommodate the bike/ped pathway which would be problematic for large truck and bus right turns. Honestly, I think I'd have to see the actual designs to accurately comment .I'm sure the design engineers are cognizant of truck movements. Personally, I'm not a fan of Dutch intersections and I wouldn't support them in my neighborhood, i.e., Snelling Avenue. If the corridor isn't even on a bike route, we shouldn't be making improvements that would attract a lesser experienced group of cyclists to the corridor.	6/27/2012	The intersections are designed to accommodate WB-62 vehicles. The trucks will be able to negotiate the turn without having to use the biscuit islands.
Ann Braden	Met Council	Senior Planner	Metro Transit - If you haven't done so already, we need to get their input soon. As far as I know, John Dillery (john.dillery@metc.state.mn.us) is still the sector planner for Edina/Bloomington.I'm excited about the design options developed so far and I hope the project continues apace and doesn't encounter any fatal flaws along the way.	6/27/2012	We met with Cindy Harper, Kristin Thompson and Brad Smith of Metro Transit on Thursday, July 5th. We shared the design with them, and received positive feedback. They did not believe there would be any issues with the design from a bus stop/bus route perspective. At this point, they don't believe they will be changing any routes or bus stop locations, although depending on what alternative is chosen near the Byerly's/Macy's area, they may consider moving the bus stop to a location that is more accessible.

PM - EXISTING

Intersection			Forecast Volumes				Total Delay by Movement (Sec/Veh)			Level of Service by Movement			LOS by Approach (Sec/Veh)		LOS by Intersection (Sec/Veh)			Average & Maximum Traffic Queueing (feet)							
Control	Location	Appr															Appr	Left-Turn			Through		Right-Turn		
			L	T	R	Total	L	T	R	L	T	R	Delay	LOS	Delay	LOS		Ave Queue	Max Queue	Storage	Ave Queue	Max Queue	Ave Queue	Max Queue	Storage
Signalized	17: 66th Street & France Avenue	NB	153	806	279	1238	63	22	4	E	C	A	23	C	27	C	NB	115	227	325	96	187			
		WB	224	309	246	779	53	40	3	D	D	A	32	C			WB	86	160	325	99	185			
		SB	250	639	56	945	42	15	12	D	B	B	22	C			SB	183	302	300	81	209			
		EB	65	354	85	504	61	48	6	E	D	A	43	D			EB	59	151	200	118	218			
Signalized	37: 69th Street & France Avenue	NB	124	1021	200	1345	39	16	5	D	B	A	16	B	28	C	NB	87	181	160	75	174			
		WB	171	145	81	397	60	80	8	E	F	A	56	E			WB	128	259	250	79	209	2	56	75
		SB	115	774	54	943	62	22	5	E	C	A	25	C			SB	86	206	220	104	248			
		EB	46	274	189	509	61	57	14	E	E	B	42	D			EB	32	140	150	104	312	38	166	200
Signalized	52: 70th Street & France Avenue	NB	237	1086	125	1448	38	17	10	D	B	B	20	B	28	C	NB	154	294	500	78	185	1	18	70
		WB	122	233	91	446	34	38	28	C	D	C	35	C			WB	76	157	150	99	185			
		SB	84	963	75	1122	73	23	22	E	C	C	27	C			SB	80	152	290	117	252			
		EB	158	453	113	724	39	44	28	D	D	C	40	D			EB	108	174	150	191	307			
Signalized	62: Hazelton Road & France Avenue	NB	6	1144	232	1382	56	15	6	E	B	A	14	B	17	B	NB	8	78	180	104	213	45	105	300
		WB	154	22	219	395	47	41	14	D	D	B	28	C			WB	101	170	150	25	180	66	184	
		SB	245	1076	7	1328	60	6	4	E	A	A	16	B			SB	116	124	100	106	328			
		EB	13	26	9	48	42	43	14	D	D	B	36	D			EB				35	96			
Signalized	72: Gallager & France Avenue	NB	18	1335	21	1374	70	5	6	E	A	A	6	A	7	A	NB	16	61	265	12	114			
		WB	9	0	63	72	43	0	14	D	A	B	18	B			WB				10	69	34	75	50
		SB	23	1029	78	1130	60	4	4	E	A	A	5	A			SB	18	74	245	35	105			
		EB	78	0	55	133	54	0	6	D	A	A	34	C			EB	63	133		29	65			
Signalized	77: Parklawn & France Avenue	NB	74	1140	58	1272	55	26	4	E	C	A	27	C	28	C	NB	62	165	325	168	379	19	49	
		WB	79	43	137	259	60	41	11	E	D	B	31	C			WB	64	119	100	31	125	44	125	
		SB	89	982	22	1093	50	22	19	D	C	B	24	C			SB	75	180	410	142	281			
		EB	97	47	95	239	80	40	19	F	D	B	49	D			EB	99	221		70	180			
Signalized	82: 76th Street & France Avenue	NB	58	911	159	1128	67	26	14	E	C	B	26	C	34	C	NB	55	125	950	115	216	53	125	100
		WB	199	157	65	421	58	45	2	E	D	A	44	D			WB	83	154	200	57	127	10	122	100
		SB	102	1046	49	1197	64	26	7	E	C	A	28	C			SB	91	195	460	162	328	2	134	310
		EB	174	481	249	904	67	55	10	E	E	B	44	D			EB	80	175	200	189	342	57	272	250
Signalized	97: Minnesota Drive & France Avenue	NB	47	974	183	1204	74	26	5	E	C	A	24	C	30	C	NB	46	161	240	143	296	32	335	
		WB	295	130	53	478	63	41	8	E	D	A	50	D			WB	231	408	400	60	307	7	64	100
		SB	48	1480	31	1559	55	21	12	E	C	B	22	C			SB	47	132	150	98	344			
		EB	108	340	300	748	69	64	8	E	E	A	42	D			EB	97	196	200	144	253	8	75	240

PM - ELIMINATE CHANNELIZED RIGHT-TURN LANES

Intersection			Forecast Volumes				Total Delay by Movement (Sec/Veh)			Level of Service by Movement			LOS by Approach (Sec/Veh)		LOS by Intersection (Sec/Veh)			Average & Maximum Traffic Queueing (feet)							
Control	Location	Appr															Appr	Left-Turn			Through		Right-Turn		
			L	T	R	Total	L	T	R	L	T	R	Delay	LOS	Delay	LOS		Ave Queue	Max Queue	Storage	Ave Queue	Max Queue	Ave Queue	Max Queue	Storage
Signalized	17: 66th Street & France Avenue	NB	153	806	279	1238	63	24	27	E	C	C	29	C	31	C	NB	109	217	325	114	262			
		WB	224	309	246	779	58	41	9	E	D	A	36	D			WB	87	159	325	102	166	56	138	
		SB	250	639	56	945	43	16	14	D	B	B	23	C			SB	174	304	300	73	175			
		EB	65	354	85	504	60	47	14	E	D	B	43	D			EB	54	131	200	122	216	47	148	150
Signalized	37: 69th Street & France Avenue	NB	124	1021	200	1345	38	15	5	D	B	A	16	B	27	C	NB	88	174	160	67	147			
		WB	171	145	81	397	59	79	8	E	E	A	55	E			WB	128	247	250	74	190	4	73	75
		SB	115	774	54	943	59	22	4	E	C	A	25	C			SB	78	169	220	101	232			
		EB	46	274	189	509	55	56	15	E	E	B	41	D			EB	30	125	150	102	291	43	199	200
Signalized	52: 70th Street & France Avenue	NB	237	1086	125	1448	45	18	19	D	B	B	23	C	29	C	NB	180	324	500	79	238			
		WB	122	233	91	446	35	40	27	D	D	C	36	D			WB	75	167	150	107	202			
		SB	84	963	75	1122	75	24	20	E	C	C	28	C			SB	78	150	290	115	223			
		EB	158	453	113	724	38	42	40	D	D	D	41	D			EB	109	174	150	187	303			
Signalized	62: Hazelton Road & France Avenue	NB	6	1144	232	1382	51	16	6	D	B	A	15	B	17	B	NB	7	44	180	107	218	47	151	300
		WB	154	22	219	395	47	40	14	D	D	B	29	C			WB	108	174	150	26	246	72	170	
		SB	245	1076	7	1328	60	6	4	E	A	A	16	B			SB	115	124	100	109	339			
		EB	13	26	9	48	49	45	18	D	D	B	41	D			EB				39	97			
Signalized	72: Gallager & France Avenue	NB	18	1335	21	1374	69	5	5	E	A	A	6	A	7	A	NB	14	54	265	11	77			
		WB	9	0	63	72	58	0	13	E	A	B	19	B			WB				13	68	35	74	50
		SB	23	1029	78	1130	60	4	4	E	A	A	5	A			SB	17	69	245	34	102			
		EB	78	0	55	133	55	0	6	E	A	A	34	C			EB	61	134		27	66			
Signalized	77: Parklawn & France Avenue	NB	74	1140	58	1272	54	23	4	D	C	A	24	C	25	C	NB	56	130	325	158	358	18	48	
		WB	79	43	137	259	52	41	9	D	D	A	26	C			WB	59	122	100	26	99	39	112	
		SB	89	982	22	1093	48	20	21	D	C	C	22	C			SB	72	186	410	134	260			
		EB	97	47	95	239	71	46	20	E	D	C	46	D			EB	90	186		78	180			
Signalized	82: 76th Street & France Avenue	NB	58	911	159	1128	66	29	34	E	C	C	32	C	37	D	NB	46	106	950	124	243			
		WB	199	157	65	421	58	46	6	E	D	A	46	D			WB	82	160	200	58	132	33	94	100
		SB	102	1046	49	1197	63	27	8	E	C	A	29	C			SB	87	185	460	152	313	20	215	310
		EB	174	481	249	904	68	56	22	E	E	C	49	D			EB	71	163	200	186	357	101	270	250
Signalized	97: Minnesota Drive & France Avenue	NB	47	974	183	1204	76	27	5	E	C	A	25	C	30	C	NB	61	166	240	146	279	28	478	
		WB	295	130	53	478	59	43	8	E	D	A	48	D			WB	228	402	400	54	160	11	108	100
		SB	48	1480	31	1559	59	22	12	E	C	B	23	C			SB	47	120	150	103	222			
		EB	108	340	300	748	67	64	8	E	E	A	43	D			EB	96	208	200	150	262	17	181	240

PM - ELIMINATE ONE LANE EACH DIRECTION ON FRANCE AVE

Intersection			Forecast Volumes				Total Delay by Movement (Sec/Veh)			Level of Service by Movement			LOS by Approach (Sec/Veh)		LOS by Intersection (Sec/Veh)			Average & Maximum Traffic Queueing (feet)							
Control	Location	Appr															Appr	Left-Turn			Through		Right-Turn		
			L	T	R	Total	L	T	R	L	T	R	Delay	LOS	Delay	LOS		Ave Queue	Max Queue	Storage	Ave Queue	Max Queue	Ave Queue	Max Queue	Storage
Signalized	17: 66th Street & France Avenue	NB	153	806	279	1238	70	45	52	E	D	D	50	D	39	D	NB	135	312	325	324	520			
		WB	224	309	246	779	56	41	12	E	D	B	36	D			WB	86	158	325	104	183	76	229	
		SB	250	639	56	945	44	17	14	D	B	B	24	C			SB	183	309	300	113	217			
		EB	65	354	85	504	67	46	15	E	D	B	44	D			EB	62	163	200	118	222	45	175	150
Signalized	37: 69th Street & France Avenue	NB	124	1021	200	1345	41	22	6	D	C	A	21	C	32	C	NB	86	184	160	144	283	9	122	220
		WB	171	145	81	397	59	76	9	E	E	A	55	D			WB	131	256	250	72	167	4	93	75
		SB	115	774	54	943	68	31	5	E	C	A	34	C			SB	97	209	220	175	375	18	168	200
		EB	46	274	189	509	56	56	20	E	E	C	42	D			EB	33	131	150	90	206	58	179	200
Signalized	52: 70th Street & France Avenue	NB	237	1086	125	1448	41	27	30	D	C	C	29	C	44	D	NB	144	283	500	236	539			
		WB	122	233	91	446	34	39	30	C	D	C	36	D			WB	77	165	150	103	204			
		SB	84	963	75	1122	84	64	61	F	E	E	65	E			SB	114	314	290	414	570			
		EB	158	453	113	724	38	45	42	D	D	D	43	D			EB	106	174	150	208	319			
Signalized	62: Hazelton Road & France Avenue	NB	6	1144	232	1382	56	25	9	E	C	A	22	C	23	C	NB	5	36	180	204	357	54	169	300
		WB	154	22	219	395	47	41	18	D	D	B	31	C			WB	105	174	150	16	99	80	165	
		SB	245	1076	7	1328	61	12	11	E	B	B	21	C			SB	117	125	100	179	446			
		EB	13	26	9	48	47	50	16	D	D	B	42	D			EB				37	96			
Signalized	72: Gallager & France Avenue	NB	18	1335	21	1374	66	6	6	E	A	A	7	A	9	A	NB	19	65	265	25	118			
		WB	9	0	63	72	48	0	13	D	A	B	17	B			WB				8	51	34	74	50
		SB	23	1029	78	1130	63	6	5	E	A	A	7	A			SB	21	74	245	86	172			
		EB	78	0	55	133	52	0	8	D	A	A	34	C			EB	67	143		29	64			
Signalized	77: Parklawn & France Avenue	NB	74	1140	58	1272	60	34	4	E	C	A	34	C	33	C	NB	68	292	325	315	655	38	378	
		WB	79	43	137	259	62	38	16	E	D	B	34	C			WB	71	124	100	35	159	51	138	
		SB	89	982	22	1093	53	28	27	D	C	C	30	C			SB	72	153	410	251	428			
		EB	97	47	95	239	64	36	19	E	D	B	40	D			EB	83	161		76	168			
Signalized	82: 76th Street & France Avenue	NB	58	911	159	1128	62	35	21	E	D	C	34	C	39	D	NB	45	122	950	177	295			
		WB	199	157	65	421	60	42	5	E	D	A	45	D			WB	96	188	200	57	126	32	113	100
		SB	102	1046	49	1197	67	32	10	E	C	B	34	C			SB	93	213	460	261	494	29	332	310
		EB	174	481	249	904	69	54	29	E	D	C	50	D			EB	75	175	200	175	324	116	275	250
Signalized	97: Minnesota Drive & France Avenue	NB	47	974	183	1204	81	29	6	F	C	A	27	C	33	C	NB	55	264	240	237	411	80	480	
		WB	295	130	53	478	65	44	9	E	D	A	53	D			WB	249	400	400	58	272	9	120	100
		SB	48	1480	31	1559	54	25	17	D	C	B	26	C			SB	46	154	150	177	414			
		EB	108	340	300	748	68	64	9	E	E	A	42	D			EB	94	205	200	146	248	14	209	240

PM - ELIMINATE DUAL LEFTS (westbound at 66th, westbound and eastbound at 76th)

Intersection			Forecast Volumes				Total Delay by Movement (Sec/Veh)			Level of Service by Movement			LOS by Approach (Sec/Veh)		LOS by Intersection (Sec/Veh)			Average & Maximum Traffic Queueing (feet)							
Control	Location	Appr															Appr	Left-Turn			Through		Right-Turn		
			L	T	R	Total	L	T	R	L	T	R	Delay	LOS	Delay	LOS		Ave Queue	Max Queue	Storage	Ave Queue	Max Queue	Ave Queue	Max Queue	Storage
Signalized	17: 66th Street & France Avenue	NB	153	806	279	1238	64	26	30	E	C	C	31	C	41	D	NB	112	216	325	129	295			
		WB	224	309	246	779	188	43	9	F	D	A	76	E			WB	253	346	325	191	508	56	127	
		SB	250	639	56	945	43	17	13	D	B	B	24	C			SB	180	283	300	81	225			
		EB	65	354	85	504	60	52	16	E	D	B	47	D			EB	58	142	200	133	264	53	173	150
Signalized	37: 69th Street & France Avenue	NB	124	1021	200	1345	36	15	5	D	B	A	15	B	27	C	NB	83	163	160	68	140	2	49	220
		WB	171	145	81	397	60	74	8	E	E	A	56	E			WB	134	262	250	79	197	4	74	75
		SB	115	774	54	943	60	20	4	E	C	A	24	C			SB	80	181	220	90	206			
		EB	46	274	189	509	56	57	15	E	E	B	41	D			EB	26	113	150	98	193	41	149	200
Signalized	52: 70th Street & France Avenue	NB	237	1086	125	1448	37	18	20	D	B	C	21	C	29	C	NB	147	274	500	87	251			
		WB	122	233	91	446	34	37	29	C	D	C	35	C			WB	76	164	150	100	191			
		SB	84	963	75	1122	73	24	22	E	C	C	28	C			SB	82	178	290	121	257			
		EB	158	453	113	724	39	45	39	D	D	D	43	D			EB	106	174	150	208	310			
Signalized	62: Hazelton Road & France Avenue	NB	6	1144	232	1382	50	15	6	D	B	A	14	B	17	B	NB	6	40	180	106	202	48	145	300
		WB	154	22	219	395	48	41	13	D	D	B	28	C			WB	107	174	150	19	136	66	199	
		SB	245	1076	7	1328	61	6	3	E	A	A	16	B			SB	117	124	100	109	358			
		EB	13	26	9	48	45	48	22	D	D	C	43	D			EB				43	119			
Signalized	72: Gallager & France Avenue	NB	18	1335	21	1374	68	5	6	E	A	A	6	A	7	A	NB	18	57	265	17	119			
		WB	9	0	63	72	53	0	14	D	A	B	18	B			WB				8	44	36	74	50
		SB	23	1029	78	1130	57	4	4	E	A	A	5	A			SB	22	74	245	35	103			
		EB	78	0	55	133	52	0	6	D	A	A	32	C			EB	61	132		28	58			
Signalized	77: Parklawn & France Avenue	NB	74	1140	58	1272	52	25	4	D	C	A	26	C	27	C	NB	58	171	325	167	342	17	53	
		WB	79	43	137	259	59	44	11	E	D	B	31	C			WB	63	124	100	35	134	41	114	
		SB	89	982	22	1093	57	22	18	E	C	B	25	C			SB	77	180	410	147	272			
		EB	97	47	95	239	69	41	20	E	D	C	45	D			EB	96	191		76	181			
Signalized	82: 76th Street & France Avenue	NB	58	911	159	1128	68	32	39	E	C	D	35	D	47	D	NB	59	138	950	131	257			
		WB	199	157	65	421	188	47	6	F	D	A	108	F			WB	198	225	200	176	380	39	123	100
		SB	102	1046	49	1197	68	28	8	E	C	A	31	C			SB	94	198	460	154	343	13	112	310
		EB	174	481	249	904	103	58	22	F	E	C	57	E			EB	166	225	200	211	380	88	275	250
Signalized	97: Minnesota Drive & France Avenue	NB	47	974	183	1204	77	26	4	E	C	A	25	C	29	C	NB	49	145	240	142	252	22	387	
		WB	295	130	53	478	59	43	9	E	D	A	49	D			WB	237	403	400	49	143	12	101	100
		SB	48	1480	31	1559	55	20	10	E	C	B	21	C			SB	43	113	150	90	196			
		EB	108	340	300	748	66	66	8	E	E	A	42	D			EB	92	192	200	146	248	7	86	240

France Avenue Crash Summary - 66th Street to 76th Street (2007-2011)								
Location	Number of Crashes				Vulnerable User Crashes		Crash Rate	MnDOT Metro District Average Crash Rate
	Total	Fatalities	Injuries	Property Damage Only	Pedestrians	Cyclists		
66th Street	36	0	18	18	0	1	0.5	0.7
70th Street	31	0	8	23	0	0	0.5	0.7
76th Street	28	0	11	17	0	0	0.4	0.7
Full Corridor - 66th Street to 76th Street	258	0	97	161	1	3	2.8	5.1

OPINION OF PROBABLE COSTS FRANCE AVENUE IMPROVEMENTS (INTERSECTIONS)

WSB Project: France Avenue TE Improvements
Project Location: City of Edina
WSB Project No.: 1686-30
Date: 7/6/2012

Opinion of Probable Cost

Item Number	Description	Unit	Unit Price	PROJECT TOTAL Estimated Quantity	PROJECT TOTAL Estimated Cost	76th Estimated Quantity	76th Estimated Cost	70th Estimated Quantity	70th Estimated Cost	66th Estimated Quantity	66th Estimated Cost
2021.501	MOBILIZATION	LUMP SUM	$80,000.00	1.00	$80,000.00	0.35	$28,000.00	0.32	$25,600.00	0.33	$26,400.00
2031.501	FIELD OFFICE TYPE D	EACH	$8,000.00	1.00	$8,000.00	0.35	$2,800.00	0.32	$2,560.00	0.33	$2,640.00
2104.501	REMOVE CURB	LIN FT	$4.00	14600	$58,400.00	5000	$20,000.00	5600	$22,400.00	4000	$16,000.00
2104.505	REMOVE CONCRETE PAVEMENT	SQ YD	$5.00	6500	$32,500.00	2200	$11,000.00	2500	$12,500.00	1800	$9,000.00
2104.509	REMOVE HYDRANT	EACH	$800.00	6	$4,800.00	2	$1,600.00	2	$1,600.00	2	$1,600.00
2104.509	REMOVE DRAINAGE STRUCTURE	EACH	$150.00	12	$1,800.00	4	$600.00	4	$600.00	4	$600.00
2104.511	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	$5.00	14600	$73,000.00	5000	$25,000.00	5600	$28,000.00	4000	$20,000.00
2105.501	COMMON EXCAVATION (P)	CU YD	$12.00	5200	$62,400.00	1700	$20,400.00	1500	$18,000.00	2000	$24,000.00
2105.525	TOPSOIL BORROW (CV)	CU YD	$20.00	850	$17,000.00	400	$8,000.00	150	$3,000.00	300	$6,000.00
2211.503	AGGREGATE BASE (CV) CLASS 5 (P)	CU YD	$22.00	2100	$46,200.00	700	$15,400.00	800	$17,600.00	600	$13,200.00
2301.503	CONCRETE PAVEMENT IRREGULAR WIDTH 7.0"	SQ YD	$65.00	1,100	$71,500.00	400	$26,000.00	300	$19,500.00	400	$26,000.00
2301.511	STRUCTURAL CONCRETE	CU YD	$200.00	220	$44,000.00	80	$16,000.00	60	$12,000.00	80	$16,000.00
2360.501	TYPE SP 12.5 WEARING COURSE MIX (3,C)	TON	$64.00	1070	$68,480.00	420	$26,880.00	330	$21,120.00	320	$20,480.00
2503.541	15" RC PIPE SEWER DES 3006 CL V	LIN FT	$25.00	240	$6,000.00	80	$2,000.00	80	$2,000.00	80	$2,000.00
2503.602	CONNECT TO EXISTING STORM SEWER	EACH	$1,000.00	30	$30,000.00	10	$10,000.00	10	$10,000.00	10	$10,000.00
2504.602	HYDRANT	EACH	$4,000.00	12	$48,000.00	4	$16,000.00	4	$16,000.00	4	$16,000.00
2506.501	CONST DRAINAGE STRUCTURE TYPE CC-48	LIN FT	$350.00	180.00	$63,000.00	60	$21,000.00	60	$21,000.00	60	$21,000.00
2506.516	CASTING ASSEMBLY	EACH	$500.00	30	$15,000.00	10	$5,000.00	10	$5,000.00	10	$5,000.00
2521.501	4" CONCRETE WALK	SQ FT	$3.00	40000	$120,000.00	13000	$39,000.00	15000	$45,000.00	12000	$36,000.00
2531.501	CONCRETE CURB & GUTTER DESIGN B624	LIN FT	$12.00	12000	$144,000.00	4000	$48,000.00	4000	$48,000.00	4000	$48,000.00
2531.618	TRUNCATED DOMES	SQ FT	$40.00	420	$16,800.00	140	$5,600.00	140	$5,600.00	140	$5,600.00
2563.601	TRAFFIC CONTROL	LUMP SUM	$60,000.00	1.00	$60,000.00	0.35	$21,000.00	0.32	$19,200.00	0.33	$19,800.00
2565.616	REVISE SIGNAL SYSTEM	SYSTEM	$200,000.00	3.00	$600,000.00	1.00	$200,000.00	1	$200,000.00	1	$200,000.00
2011.601	PLANTER WALL	SQ FT	$30.00	14,000.00	$420,000.00	5000.00	$150,000.00	4000	$120,000.00	5000	$150,000.00
2571.503	ORNAMENTAL TREE 6' HT CONT	TREE	$250.00	60	$15,000.00	20	$5,000.00	20	$5,000.00	20	$5,000.00
2572.607	ENGINEERED SOIL	CU YD	$100.00	300	$30,000.00	100	$10,000.00	100	$10,000.00	100	$10,000.00
2582.618	SIGNING AND STRIPING	LUMP SUM	$10,000.00	3	$30,000.00	1	$10,000.00	1	$10,000.00	1	$10,000.00
					$2,165,880.00		**$744,280.00**		**$701,280.00**		**$720,320.00**
				30% CONTINGENCY	$652,000.00	30% CONTINGENCY	$224,000.00	30% CONTINGENCY	$211,000.00	30% CONTINGENCY	$217,000.00
	CONSTRUCTION TOTAL			**Total**	**$2,817,880.00**	**Total**	**$968,280.00**	**Total**	**$912,280.00**	**Total**	**$937,320.00**
				R/W		R/W		R/W		R/W	
				Permanent (sf)	34,884	Permanent (sf)	17,885	Permanent (sf)	8,498	Permanent (sf)	8,501
				@ $35/sf	$1,220,940.00	@ $35/sf	$625,975.00	@ $35/sf	$297,430.00	@ $35/sf	$297,535.00
				Temp	29,373	Temp	14,554	Temp	7,274	Temp	7,545
				@ $25/sf	$734,325.00	@ $25/sf	$363,850.00	@ $25/sf	$181,850.00	@ $25/sf	$188,625.00
				R/W Total	**$1,955,265.00**		**$989,825.00**		**$479,280.00**		**$486,160.00**
			Total Cost		**$4,773,145.00**		**$1,958,105.00**		**$1,391,560.00**		**$1,423,480.00**

OPINION OF PROBABLE COSTS FRANCE AVENUE IMPROVEMENTS (PREFERRED CONNECTION)

WSB Project: FRANCE AVENUE TE IMPROVEMENTS
Project Location: City of Edina
WSB Project No.: 1686-30
Date: 7/6/2012

Opinion of Probable Cost

Item Number	Description	Unit	Unit Price	PREFERRED EAST SIDE BIKE/WALK CONFIGURATION* Estimated Quantity	Estimated Cost
2011.601	VIBRATION MONITORING AND CONDITION SURVEYS	LUMP SUM	$15,000.00		
2021.501	MOBILIZATION	LUMP SUM	$50,000.00	1.00	$50,000.00
2031.501	FIELD OFFICE TYPE D	EACH	$8,000.00	1.00	$8,000.00
2104.501	REMOVE CURB	LIN FT	$4.00	4400	$17,600.00
2104.505	REMOVE CONCRETE PAVEMENT	SQ YD	$5.00	2000	$10,000.00
2104.509	REMOVE HYDRANT	EACH	$800.00	12	$9,600.00
2104.509	REMOVE DRAINAGE STRUCTURE	EACH	$150.00	22	$3,300.00
2104.511	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	$5.00	4400	$22,000.00
2105.501	COMMON EXCAVATION (P)	CU YD	$12.00	2000	$24,000.00
2105.525	TOPSOIL BORROW (CV)	CU YD	$20.00	1000	$20,000.00
2211.503	AGGREGATE BASE (CV) CLASS 5 (P)	CU YD	$22.00	1100	$24,200.00
2301.503	CONCRETE PAVEMENT IRREGULAR WIDTH 7.0"	SQ YD	$65.00		
2301.511	STRUCTURAL CONCRETE	CU YD	$200.00		
2360.501	TYPE SP 12.5 WEARING COURSE MIX (3,C)	TON	$64.00	800	$51,200.00
2503.541	15" RC PIPE SEWER DES 3006 CL V	LIN FT	$25.00	200	$5,000.00
2503.602	CONNECT TO EXISTING STORM SEWER	EACH	$1,000.00	22	$22,000.00
2504.602	HYDRANT	EACH	$4,000.00	12	$48,000.00
2506.501	CONST DRAINAGE STRUCTURE TYPE CC-48	LIN FT	$350.00	132	$46,200.00
2506.516	CASTING ASSEMBLY	EACH	$500.00	22	$11,000.00
2521.501	4" CONCRETE WALK	SQ FT	$3.00	37800	$113,400.00
2531.501	CONCRETE CURB & GUTTER DESIGN B624	LIN FT	$12.00	4400	$52,800.00
2531.618	TRUNCATED DOMES	SQ FT	$40.00	250	$10,000.00
2563.601	TRAFFIC CONTROL	LUMP SUM	$5,000.00	1.00	$5,000.00
2565.616	REVISE SIGNAL SYSTEM	SYSTEM	$200,000.00		
2011.601	PLANTER WALL	SQ FT	$30.00	26400.00	$792,000.00
2571.503	ORNAMENTAL TREE 6' HT CONT	TREE	$250.00	90	$22,500.00
2572.607	ENGINEERED SOIL	CU YD	$100.00	300	$30,000.00
2582.618	SIGNING AND STRIPING	LUMP SUM	$10,000.00	1	$10,000.00
					$1,407,800.00

* INCLUDES ONLY SIDEWALK AT BYERLY'S AND MACY'S.

30% CONTINGENCY	**$423,000.00**
Construction Total	**$1,830,800.00**
R/W	
Permanent (sf)	46,955
@$35/sf	$1,643,425.00
Temp (sf)	35,217
@$25/sf	$880,425.00
R/W Total	**$2,523,850.00**
Total Cost	**$4,354,650.00**

OPINION OF PROBABLE COSTS FRANCE AVENUE IMPROVEMENTS (ULTIMATE CONFIGURATION)

WSB Project: FRANCE AVENUE TE IMPROVEMENTS
Project Location: City of Edina
WSB Project No.: 1686-30
Date: 7/6/2012

Opinion of Probable Cost

Item Number	Description	Unit	Unit Price	ULTIMATE EAST SIDE SIDEWALK/BIKE LANE CONNECTIONS* Estimated Quantity	Estimated Cost
2021.501	MOBILIZATION	LUMP SUM	$50,000.00	1.00	$50,000.00
2031.501	FIELD OFFICE TYPE D	EACH	$8,000.00	1.00	$8,000.00
2104.501	REMOVE CURB	LIN FT	$4.00	5400	$21,600.00
2104.505	REMOVE CONCRETE PAVEMENT	SQ YD	$5.00	2200	$11,000.00
2104.509	REMOVE HYDRANT	EACH	$800.00	16	$12,800.00
2104.509	REMOVE DRAINAGE STRUCTURE	EACH	$150.00	26	$3,900.00
2104.511	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	$5.00	5400	$27,000.00
2105.501	COMMON EXCAVATION (P)	CU YD	$12.00	2500	$30,000.00
2105.525	TOPSOIL BORROW (CV)	CU YD	$20.00	1250	$25,000.00
2211.503	AGGREGATE BASE (CV) CLASS 5 (P)	CU YD	$22.00	1400	$30,800.00
2301.503	CONCRETE PAVEMENT IRREGULAR WIDTH 7.0"	SQ YD	$65.00		
2301.511	STRUCTURAL CONCRETE	CU YD	$200.00		
2360.501	TYPE SP 12.5 WEARING COURSE MIX (3,C)	TON	$64.00	1000	$64,000.00
2503.541	15" RC PIPE SEWER DES 3006 CL V	LIN FT	$25.00	250	$6,250.00
2503.602	CONNECT TO EXISTING STORM SEWER	EACH	$1,000.00	22	$22,000.00
2504.602	HYDRANT	EACH	$4,000.00	12	$48,000.00
2506.501	CONST DRAINAGE STRUCTURE TYPE CC-48	LIN FT	$350.00	150	$52,500.00
2506.516	CASTING ASSEMBLY	EACH	$500.00	24	$12,000.00
2521.501	4" CONCRETE WALK	SQ FT	$3.00	37800	$113,400.00
2531.501	CONCRETE CURB & GUTTER DESIGN B624	LIN FT	$12.00	5400	$64,800.00
2531.618	TRUNCATED DOMES	SQ FT	$40.00	250	$10,000.00
2563.601	TRAFFIC CONTROL	LUMP SUM	$5,000.00	1.00	$5,000.00
2565.616	REVISE SIGNAL SYSTEM	SYSTEM	$200,000.00		
2011.601	PLANTER WALL	SQ FT	$30.00	38400.00	$1,152,000.00
2571.503	ORNAMENTAL TREE 6' HT CONT	TREE	$250.00	100	$25,000.00
2572.607	ENGINEERED SOIL	CU YD	$100.00	350	$35,000.00
2582.618	SIGNING AND STRIPING	LUMP SUM	$10,000.00	1	$10,000.00
					$1,840,050.00

* INCLUDES FULL BUILD OUT AT BYERLY'S AND MACY'S.

30% CONTINGENCY	**$553,000.00**
Construction Total	**$2,393,050.00**
R/W	
Permanent (sf)	56,762
@$35/sf	$1,986,670.00
Temp (sf)	46,108
@$25/sf	$1,152,700.00
R/W Total	**$3,139,370.00**
Total Cost	**$5,532,420.00**

FRANCE AVENUE PEDESTRIAN CROSSING IMPROVEMENTS
S.P. 120-020-037
CITY OF EDINA, MN

SCHEDULE

Based on a typical Scope of Work and the Federal funding process guidelines, the following schedule would be anticipated:

Phase 1 – Project Development

Notice to Proceed Phase 1 ..... April 3, 2012
Data Collection / Survey ..... In Progress
Submit Agency Review Letters (MnDNR, SHPO, Etc) ..... Completed
Meeting with Hennepin County ..... May 7, 2012
Stakeholder Group Meeting #1 ..... May 31, 2012
Draft PM / Prel Design Plan to City ..... Week of June 4, 2012
City Staff Review Meeting ..... Week of June 11, 2012
Stakeholder Group Meeting #2 ..... June 26, 2012
Draft PM / Prel Design Plan to Mn/DOT and County ..... June 29, 2012
Mn/DOT / County Review ..... Up to 6 Weeks
Address Mn/DOT and County comments ..... Weeks of August 6 and August 13, 2012
Final PM / Prel Design Plan to Mn/DOT and County ..... August 17, 2012
Final Mn/DOT and County Approval of PM ..... Up to 5 Weeks
PM Approved ..... October 2012
Construction Limits Determined ..... June 29, 2012
Right of Way Plan to City and County ..... July 13, 2012
Initial Parcel Work and Landowner Notification ..... May / June / July 2012
Parcel Descriptions and Exhibits ..... July 2012
Right of Way Appraisals ..... August / September 2012
Right of Way Acquisition (Offers) ..... October 2012
Title and Possession ..... December 2012
R/W Certificate #1 ..... December 2012

Phase 2 – Detail Design / Bidding

Notice to Proceed Phase 2 ..... August 7, 2012
Draft (60%) Final Plan Submittal to City, County and Mn/DOT ..... September 28, 2012
City Staff / County / Mn/DOT Review Meetings ..... Week of October 8, 2012
Mn/DOT, County and City Review ..... Up to 8 weeks
Address Comments ..... December 2012
Final Plan Submittal to Mn/DOT / County and City ..... December 21, 2012
Final Mn/DOT Approval of Plans ..... Up to 8 Weeks
Final Approved Plans ..... March 2013
Advertising for Bids ..... April / May 2013
Bid Opening ..... May 2013

Phase 3 – Construction Administration

Notice to Proceed Phase 3 ..... June 4, 2013
Begin Construction ..... June 15, 2013
Complete Construction ..... October 2013