





# EDINA PROMENADE

Edina, Minnesota

## ***Urban Design Plan***

*Prepared for:*  
*City of Edina, Minnesota*

*Prepared by:*

**URS**

*July 2007*

# Participants

## City of Edina

### City Council Members

James Hovland, *Mayor*

Joni Bennett

Scot Housh

Linda Masica

Ann Swenson

### City Manager

Gordon Hughes

### Assistant City Manager

Heather Worthington

### City Engineer and Director of Public Works

Wayne Houle, PE

## Consultants

### URS

Arijs Pakalns, AIA, AICP,  
*Project Manager and Urban Design*

Kathryn Ryan, ASLA, RLA  
*Landscape Architecture*

Rick Nau, AICP  
*Transit Planning*

Greg Brown, PE  
*Civil Engineering*

Mark Maves, PE  
*Bridge Design*

# Contents

TABLE OF CONTENTS	Page
I. Introduction .....	1
Overview .....	1
3 Major Components .....	1
Historical Perspective .....	1
Development of the Central Spine .....	2
Report Organization .....	2
II. Transit System .....	5
Existing Transit System .....	5
Transit System Concept .....	5
Transit System Routing Options .....	5
Transit System Recommendations .....	6
III. Path System .....	13
Inventory .....	13
General Assessment .....	13
Regional Trail System .....	13
Neighborhood Access .....	14
Path System Recommendations .....	14
IV. Promenade Design .....	19
A. Inventory / Analysis .....	19
Existing Conditions.....	19
Analysis .....	19
B. Design Treatments / Theme .....	20
Design Treatments .....	20
Design Theme .....	26
Dual Path System .....	26
Dual Path Configuration .....	26

TABLE OF CONTENTS (Continued)	Page
<b>C. Promenade Framework</b> .....	<b>26</b>
Overall Framework .....	26
Recommended Path Layout .....	31
Example Illustrative Plan .....	31
<b>D. Public Art Program</b> .....	<b>31</b>
Background and Overview .....	31
Approaches to Public Art .....	31
Opportunities for Public Art .....	34
Conclusion .....	42
<b>E. Promenade Components</b> .....	<b>45</b>
Overview of Major Components .....	45
Major Components .....	45
<b>F. Pond / Stream</b> .....	<b>48</b>
Pond / Stream Concept .....	48
Pond / Stream Special Features .....	56
Storm Water Circulation Options .....	56
<b>G. York Avenue Underpass</b> .....	<b>59</b>
Existing Conditions .....	59
Design Recommendations .....	59
<b>H. France Avenue Overpasses</b> .....	<b>59</b>
Overpass Designs .....	61
Overpass Configuration Options .....	61
Overpass Conclusions .....	68
<b>I. Preliminary Cost Estimate</b> .....	<b>69</b>

LIST OF FIGURES	Page
Figure 1: 3 Primary Study Component Areas .....	3
Figure 2: Area Development History .....	4
Figure 3: Transit System – Existing Transit Routes and Transit System Examples .....	7
Figure 4: Transit System – Option A – Central Spine .....	8
Figure 5: Transit System – Option B – France / York .....	9
Figure 6: Transit System – Option C – York Avenue .....	10
Figure 7: Transit System – Option D – Combination .....	11
Figure 8: Transit System – Option E – Combination – Recommended Plan .....	12
Figure 9: Path System – Existing Conditions and Issues .....	15
Figure 10: Path System – Three Rivers Regional Trail .....	16
Figure 11: Path System – Overpass Options of France Avenue at South End .....	17
Figure 12: Path System – Recommended Path System Improvements .....	18
Figure 13: Promenade Design – Existing Conditions Photos – Group 1 .....	21
Figure 14: Promenade Design – Existing Conditions Photos – Group 2 .....	22
Figure 15: Promenade Design – General Corridor Forces and Issues .....	23
Figure 16: Promenade Design – Redevelopment Sites .....	24
Figure 17: Promenade Design – Design Treatment Options .....	25
Figure 18: Promenade Design – Centennial Lakes Design Theme .....	27
Figure 19: Promenade Design – Dual Path System .....	28
Figure 20: Promenade Design – Path Configuration Options .....	29
Figure 21: Promenade Design – Promenade Urban Design Framework .....	30
Figure 22: Promenade Design – Recommended Path Layout .....	32
Figure 23: Promenade Design – Example Illustrative Design (70 <sup>th</sup> to Hazelton) .....	33
Figure 24: Promenade Design – Examples of Outdoor Art – Group 1 .....	35
Figure 25: Promenade Design – Examples of Outdoor Art – Group 2 .....	36
Figure 26: Promenade Design – Examples of Outdoor Art – Group 3 .....	37
Figure 27: Promenade Design – Examples of Outdoor Art – Group 4 .....	38
Figure 28: Promenade Design – Examples of Outdoor Art – Group 5 .....	39
Figure 29: Promenade Design – Examples of Outdoor Art – Group 6 .....	40
Figure 30: Promenade Design – Public Art Opportunities in the Promenade Area .....	41
Figure 31: Promenade Design – Public Arts Theme .....	43
Figure 32: Promenade Design – Public Art Opportunities at Centennial Lakes .....	44

<b>LIST OF FIGURES (Continued)</b>	<b>Page</b>
------------------------------------	-------------

Figure 33: Promenade Design – Promenade Component Plan .....	46
Figure 34: Promenade Design – 1. Gateway Examples .....	47
Figure 35: Promenade Design – 2. Crossroads Feature Examples .....	49
Figure 36: Promenade Design – 3. Landscape Feature Example .....	50
Figure 37: Promenade Design – 4. Single Sculpture Examples .....	51
Figure 38: Promenade Design – 5. Sculpture Group Examples .....	52
Figure 39: Promenade Design – 6. Sculpture Fountain Examples .....	53
Figure 40: Promenade Design – Storm Water Pond / Stream – Existing Grades .....	54
Figure 41: Promenade Design – Storm Water Pond / Stream Concept .....	55
Figure 42: Promenade Design – Storm Water Pond / Stream – Key Features .....	57
Figure 43: Promenade Design – Storm Water Pond / Stream – Circulation Options .....	58
Figure 44: Promenade Design – York Avenue Underpass Design .....	60
Figure 45: Promenade Design – Overpass Examples – Group 1 .....	62
Figure 46: Promenade Design – Overpass Examples – Group 2 .....	63
Figure 47: Promenade Design – Overpass at 72 <sup>nd</sup> Street – Option 1 .....	64
Figure 48: Promenade Design – Overpass at 72 <sup>nd</sup> Street – Options 2 & 3 .....	65
Figure 49: Promenade Design – Overpass at 72 <sup>nd</sup> Street – Options 4 & 5 .....	66
Figure 50: Promenade Design – Overpass at 72 <sup>nd</sup> Street – Option 6 & 69 <sup>th</sup> Street Option ..	67

<b>LIST OF TABLES</b>	<b>Page</b>
-----------------------	-------------

Table 1: Promenade Design – North Segment – Preliminary Cost Estimate .....	70
Table 2: Promenade Design – Middle Segment – Preliminary Cost Estimate .....	71
Table 3: Promenade Design – South Segment – Preliminary Cost Estimate .....	72
Table 4: Promenade Design – Summary – Preliminary Cost Estimate .....	73

# I. Introduction

This report presents a design development plan for the Edina Promenade. The purpose of this design plan is as follows:

- Identify all the key components of the Promenade project
- Establish the design intent and character for the Promenade environment
- Set the stage for the implementation of the recommended Promenade improvements.

## Overview

The Edina Promenade, which is located in the center of the Southdale / Yorktown / Centennial Lakes area, between York Avenue on the southeast and 70<sup>th</sup> Street on the north (Figure 1), is an 80'-wide greenway that interconnects the various developments in the area.

The Promenade is a vital and key link in Edina's pathway network system, which provides internal circulation within the study area, as well as access from the adjoining neighborhoods and the regional trail system.

It presents an open space opportunity that, if properly upgraded, could greatly enhance the appearance of the corridor and improve the livability for the area's residents, employees, and visitors. As will be discussed later, it also serves as a link in the Three Rivers Regional Park District's trail system.

## 3 Major Components

The primary charge for this study was to prepare a design plan for the Edina Promenade area. However, since the Promenade is a key component of the area's infrastructure, an evaluation needed to be also made of the larger system framework which impacts the Promenade. Therefore, this study addresses three major components, which are illustrated in Figure 1. The three components are:

- A transit system for the Southdale / Centennial Lakes area, which is discussed in Chapter II,
- The area-wide pathway system, which is discussed in Chapter III, and
- The Promenade design, which is discussed in Chapter IV. The Promenade design chapter also includes the proposed new underpass at York Avenue and the proposed overpasses over France Avenue.

Although all three components are discussed in this study, the major portion of this report focuses on the design of the Promenade.

## Historical Perspective

The Promenade project has evolved over time in conjunction with the evolution of the area itself. The transition from the original open fields and gravel mining operations to today's lively, mixed-use community has

taken many years and many steps to accomplish. Figure 2 illustrates the various phases and the decades in which the Southdale / Yorktown / Centennial Lakes area was developed.

- Southdale, which was the first enclosed shopping center in the United States, was developed in the 1950s.
- The Galleria complex evolved gradually and incrementally.
- The Yorktown multi-use district was developed in the 1970s.
- Edinborough, which includes an indoor public park, was constructed in the 1980s.

The Centennial Lakes area, which includes a variety of land uses, was developed in phases in the 1990's.

#### Development of the Central Spine

A key feature of all the development planning was an extensive walkway and trail system and a central spine that was to serve as a multi-purpose path for pedestrians, bicyclists, and a tram. In the planning of all the various developments, consideration was given to incorporate space for the paths and the central spine.

The Promenade is a link in this internal path system, although it was never developed to the level that the Centennial Lakes path system was. Although the Promenade does include a bituminous trail, it lacks the finish and enhancements that characterize the rest of the area and its paths.

Currently, a number of the properties in the area are being upgraded or redeveloped to higher-density uses. In addition, there is the potential for future redevelopment of a number of the parcels along the Promenade corridor.

In order to complement the new developments and to provide the appropriate setting for the potential future redevelopment activi-

ties, this Urban Design Plan is being prepared to guide the upgrading and enhancement of the Promenade corridor.

---

#### Report Organization

The Edina Promenade Urban Design Plan is organized in four chapters:

- I. Introduction
- II. Transit System
- III. Path System
- IV. Edina Promenade

The first chapter introduces the project and provides a brief overview. Chapters II and III address the transit issues and how the Promenade fits into the overall pathway system. Chapter IV presents the design recommendations for the Promenade project area.

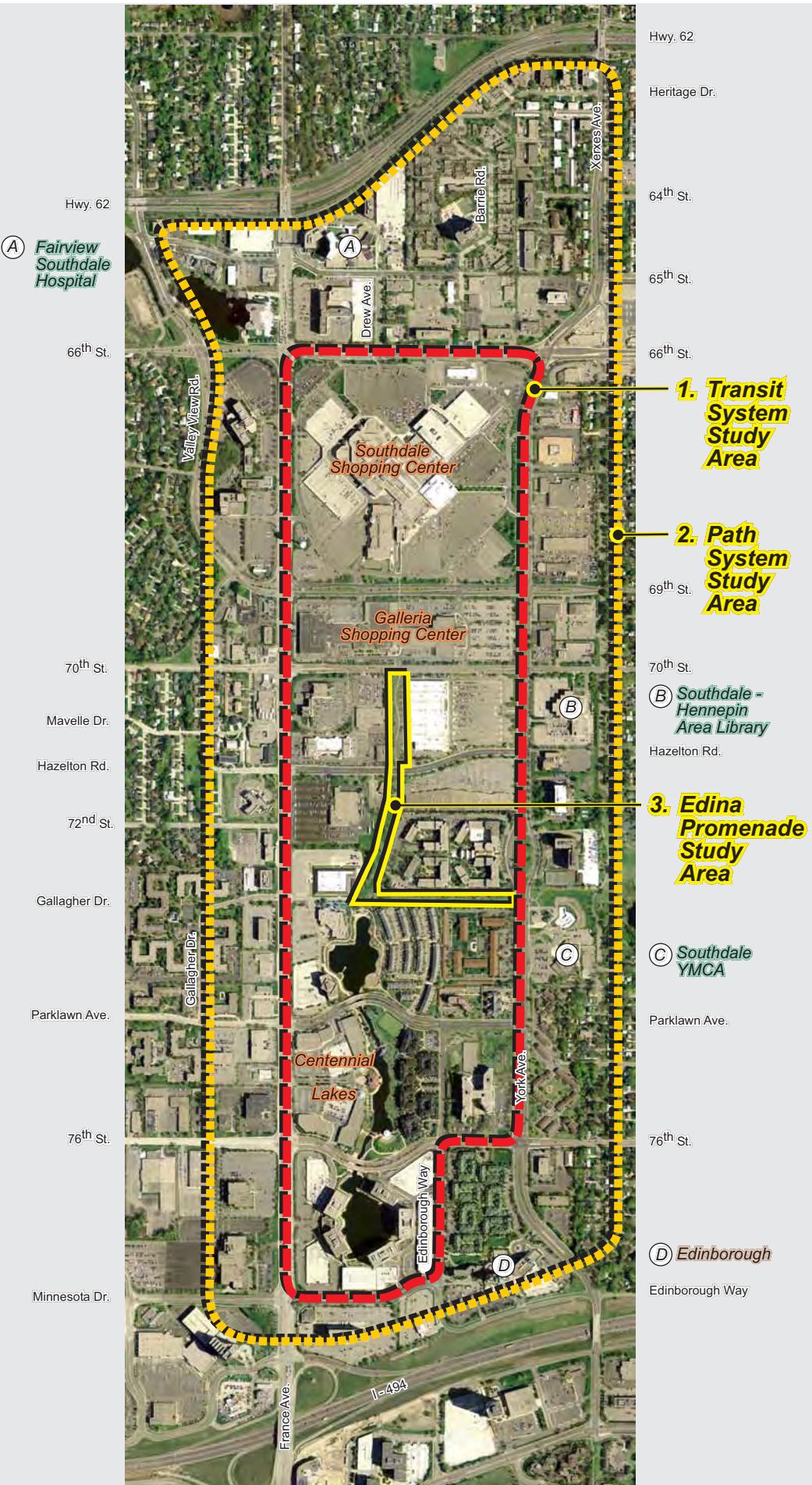
Chapter IV, besides identifying and defining the major components, which will make up most of the Promenade, also includes discussion and recommendations regarding:

- A public arts program, which is proposed to be the key feature of the Promenade project
- A special pond/stream element
- A new underpass at York Street
- Two overpasses at France Avenue

Figure 1

### 3 Primary Study Component Areas

#### Study Overview



#### Urban Design Plan

July 2007

**URS**

Figure 2

## Area Development History

### Study Overview

#### Legend

1. **Southdale - 1950s**
2. **Galleria - Incremental**
3. **Yorktown - 1970s**
4. **Edinborough - 1980s**
5. **Centennial Lakes - 1990s**

➡ Originally Planned Transit Route Alignment



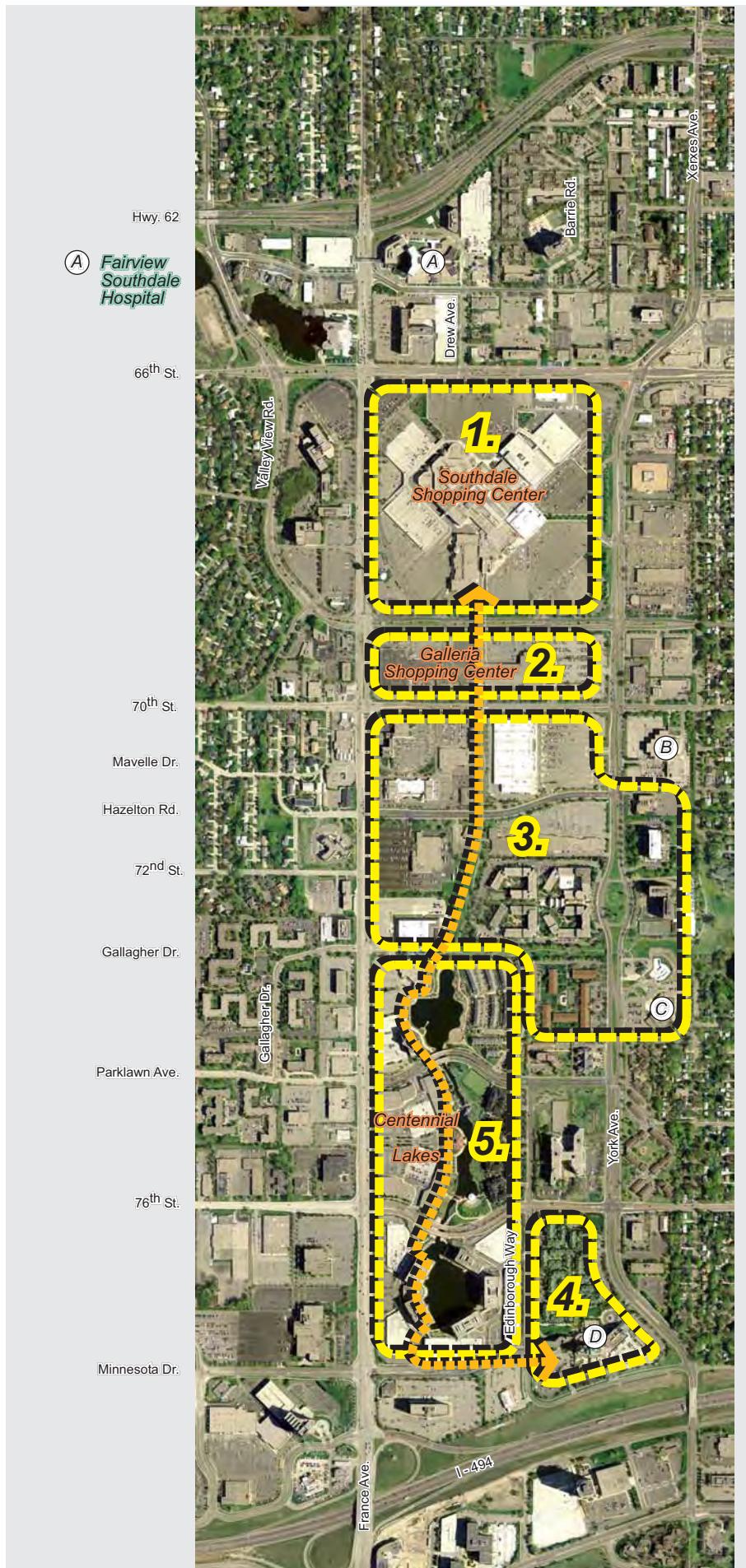
0 500 1,000 Ft.



### Urban Design Plan

July 2007

**URS**



## II. Transit System

Since the central spine, which includes the north-south segment of the Promenade, was intended originally to serve as a tram route, an assessment needs to be made whether this is still desirable and feasible. Following is a brief analysis of the transit options in this area. This evaluation is not intended to represent a full-fledged transit study, but rather a cursory, qualitative analysis of what the impacts of a transit system might be on the central spine path and, more specifically, on the Promenade segment of the central spine.

### Existing Transit System

The Southdale / Yorktown / Centennial Lakes area is being served by a number of bus routes. The top two graphics in Figure 3 provide a rough illustration of the bus routes that serve the area. The existing transit system also includes two transit hubs, a larger one at the northerly end, at the Southdale center, and a smaller one at the southerly end, along Minnesota Drive.

### Transit System Concept

The overall concept for a future transit system for this area is to create two transit hubs, one at the north end and one at the south end of the study area. The transit hubs would serve as an interface between Bus Rapid Transit (BRT) routes on the Crosstown Highway and I-494 and the local bus routes.

In addition to the local bus routes, a small bus or tram would shuttle back and forth between the two transit centers and would interlink all the developments from the Southdale hospital complex at the north end to Edinborough on the south end.

The ideal routing for a bus or tram shuttle would be to have its own exclusive right-of-way. If an exclusive right-of-way is not available, the next best choice would be streets with low traffic volumes. Running the shuttle

in congested traffic would defeat the purpose of fast and convenient transit service.

If a shuttle or tram system is developed, not all the local bus routes may be required and adjustments would need to be made to the existing bus routes.

### Transit System Routing Options

A tram or shuttle bus route for the Southdale / Yorktown / Centennial Lakes area could be accommodated in a number of ways. Figures 4 through 8 illustrate various routing options.

The original plans for the area called for incorporating the tram route into the central spine. The intent was to provide a wide path that would be able to accommodate trams, bicycles, and pedestrians. Although this was accomplished in the central portion of the Centennial Lakes development, where a 20'-wide path is provided, it did not work out in the rest of the developments where the tram would need to be routed through parking lots, or split into two one-way paths.

Also, the central path through the Centennial Lakes development has turned out to be such a wonderful pedestrian environment that introducing a surface-running tram could severely impact the pedestrian-oriented character and ambience of the Centennial Lakes Park. Therefore, other options for accommodating and routing the shuttle system need to be explored.

Following is a brief summary of the potential tram routing options. In all the options, the assumption is made that a new transit center would be developed at the south end, to be located somewhere along the I-494 frontage, and that the northerly transit center may be relocated, as required.

#### Option A: Central Spine

One option would be to construct an elevated, guided transit system. Figure 3 pro-

vides examples of various elevated guideway systems and Figure 4 illustrates the potential elevated route alignment and the ¼-mile, or 5-minute walking distance, coverage area of the transit stations.

This type of a transit system would provide relatively ideal coverage, because the stations would be centrally located for easy access from most of the higher density developments in the study area. It also would have virtually no impact on the surface pedestrian path system.

However, the elevated guideway and support structures would have a greater visual impact, the elevated system would require special, grade-separated transit stations with vertical circulation, and it would be very expensive to construct. Therefore, it was concluded that an elevated transit system would be inappropriate at this time and a surface-running option should be considered.

The rest of the options, discussed below, assume a surface-running, rubber-tired bus or tram vehicle.

#### Option B: France Ave. and York Ave.

This option would have two separate tram routes, one on France Avenue and one on York Avenue. Although a one-way loop was considered, it was rejected because, due to the great distance between the two roadways, transit users would have to take a lengthy detour to get to their destinations.

Option B would provide the broadest coverage, but it would mean doubling the transit service and the operating expenses. Also, since France Avenue is extremely congested and has limited ROW, it most likely would not be feasible to have dedicated transit lanes in this corridor.

#### Option C: York Ave.

This option would provide maximum service for the York Avenue corridor, with less than optimum service for the developments along France Avenue.

#### Option D: Combination

The ideal shuttle routing would have stations as close to the central spine as possible, have an exclusive ROW, or use streets with low traffic volumes, and would have minimum impact on the pedestrian path system.

Option D comes closest to matching all those requirements: most of the transit stops would be located close to the central spine; it would use streets with low traffic volumes; and it would impact only one path segment of the Promenade, between 70<sup>th</sup> Street and Hazelton Road.

The shuttle, starting at the south end, would run: north along Edinborough Way; east on Parklawn Ave.; north on York Ave.; west on Hazelton Rd.; north along the Promenade, on the west side of the Target property; north underneath the Galleria complex, on the existing underpass; north around the Southdale shopping center, on the internal driveways; and north along Drew Ave., to a turn-around in the hospital complex. It would return south on the same alignment.

#### Option E: Combination

Option E is a variation of option D with the only difference being that, instead of using the Promenade alignment, the shuttle would be routed along the west and north sides of the Target property, on York Avenue and 70<sup>th</sup> Street. This option would be primarily on-street running, utilizing the local roadways, and would have virtually no impacts on the path system.

---

#### Transit System Recommendation

Option E is the recommended routing for the shuttle system. It would provide relatively optimum service and it would have little impact on the pathway system.

Therefore, further planning for the Edina Promenade will proceed with the assumption that no transit facilities need to be accommodated in the Promenade corridor.



**Existing Transit Routes**



**Transit Route Summary from Greater Southdale Area Study**



**Clarian People Mover, Indianapolis**



**Detroit People Mover**



**ODU Maglev, Norfolk, VA**



**West Virginia University**



**Automated Guideway Transit (AGT) Examples**

**Figure 3**

## **Existing Transit Routes and Transit System Examples**

### **Shuttle Transit System**



**Urban Design Plan**

July 2007

**URS**

Figure 4

## Option A Central Spine

### 8 Transit Stops

#### Shuttle Transit System

##### Legend

 Potential Elevated Shuttle Route

 Potential Shuttle Stop

0 500 1,000 Ft.



**EDINA**  
PROMENADE

**Urban Design Plan**

July 2007

**URS**



Figure 5

## Option B France / York

### 11 Transit Stops

#### Shuttle Transit System

##### Legend

 Potential Shuttle Route

 Potential Shuttle Stop

0 500 1,000 Ft.



EDINA  
PROMENADE

**Urban Design Plan**

July 2007

**URS**





Figure 6

## ***Option C York Avenue***

## **8 *Transit Stops***

## *Shuttle Transit System*

## ***Legend***



0 500 1,000 Ft.  




EDINA  
PROMENADE

---

## ***Urban Design Plan***

July 2007

URS

Figure 7

## Option D Combination

### 10 Transit Stops

#### Shuttle Transit System

##### Legend

Potential Shuttle Route

Potential Shuttle Stop

0 500 1,000 Ft.



EDINA  
PROMENADE

#### Urban Design Plan

July 2007

URS



Figure 8

## Option E Combination

### 10 Transit Stops

#### Recommended Plan

#### Shuttle Transit System

##### Legend

 Potential Shuttle Route

 Potential Shuttle Stop

0 500 1,000 Ft.



EDINA  
PROMENADE

#### Urban Design Plan

July 2007

URS



### *III. Path System*

As was discussed previously in the Introduction, the Promenade is a key element of the study area's path network. It is a segment of the central spine path system and it also serves as a link in the regional trail system. In order to identify what functions the Promenade segment needs to serve and to provide guidance in the design development of the Promenade, an assessment was conducted of the overall path system in the Southdale / Yorktown / Centennial Lakes area.

#### Inventory

The Southdale / Yorktown / Centennial Lakes area has a relatively extensive walkway and path system. Figure 9 provides an inventory of the existing path system and it identifies gaps and deficiencies in the pathway network.

The primary element of the pathway network in the study area is the walkway system in the Centennial Lakes Park. Its centerpiece is the central spine segment through Centennial Lakes, from the 76<sup>th</sup> Street Bridge to the former theatre site, north of the Parklawn Ave. Bridge. This segment is generally 20' wide and can comfortably accommodate the large volume of pedestrian traffic that periodically uses this area.

This primary walkway is supplemented by a number of narrower walkways that encircle the lakes and that lead to the various activity areas in Centennial Lakes Park. In addition to the Centennial Lakes paths, the Promenade includes a bituminous walk that extends from Yorktown Park, east of York Avenue, to its terminus at 70<sup>th</sup> Street.

Besides these special dedicated paths, the rest of the walkway system consists of sidewalks in roadway rights-of-way or through private developments. The inventory map also indicates signalized intersections and intersections that have special pedestrian crossing signs or signals. It shows that the

central spine has always been planned as a primary north-south path, since it includes special pedestrian crossing controls at 69<sup>th</sup> Street, 70<sup>th</sup> Street, and Hazelton Road.

#### General Assessment

The key deficiencies in the existing path system are:

- Lack of sidewalks along a number of the roadways, such as the east side of France Avenue, the north side of 70<sup>th</sup> Street, and a few blocks along Parklawn Avenue and Edinborough Way
- Total lack of sidewalks in the residential area north of 66<sup>th</sup> Street
- Lack of safe pedestrian crossings across the extremely busy France Avenue
- Appropriate facilities for the regional trail through the study area
- Undersized and utilitarian underpass at York Avenue.

#### Regional Trail System

The Three Rivers Regional Park District trail plan, top portion of Figure 10, indicates that the Promenade is planned to be a key segment in the regional trail system.

The regional trail is planned to be routed on the east side either through Yorktown Park or along York Avenue and on the west side along 70<sup>th</sup> Street to Valley View Road. Since regional trails typically serve bicycle users, provisions would need to be made to accommodate bicycles in the Promenade corridor.

Due to the high traffic volumes on France Avenue, the optimum solution for the regional trail would be to have a grade-separated crossing at France Avenue. However, due to the many access needs along 70<sup>th</sup> Street, a grade-separated crossing at this location may

not be feasible. A far better location would be the 69<sup>th</sup> Street intersection, which does not have as many restrictions.

In regard to grade-separated crossings at France Avenue, due to the length of the crossings and due to the difficulties of making tunnels safe and comfortable, it is recommended that overpasses be used instead of underpasses. Therefore, the recommendation is to route the regional trail north along the Promenade path continuation underneath the Galleria, then west along the north side of 69<sup>th</sup> Street, and then, via an overpass, over France Avenue.

#### Neighborhood Access

For the same reasons that the regional trail should have an overpass crossing at France Avenue, a similar overpass crossing should be developed to provide access to the Centennial Lakes area for the Edina residential neighborhoods located west of France Avenue.

The key to successful overpasses at roadways where at-grade crossings are not prohibited is to make the approaches to the overpasses as comfortable and convenient as possible. Therefore, the approaches should be as straight and direct as possible and they should have as shallow an incline as possible. For this reason a maximum 5% grade, or a rise of 1' in 20', is recommended for the approaches. This means that, in order to provide the required clearance of 17'-4" over France Avenue and a 3'-8" deck structure depth, the length of the approaches would need to be approximately 420'.

The key issues for the neighborhood overpass are a convenient location and a location that would permit 420' long approach ramps. In order to be the most convenient to the residential neighborhoods, the overpass should be located somewhere between Hazelton Road and Parklawn Avenue.

Figure 11 illustrates the various location options that were considered. The two key cri-

teria for locating the overpass are sufficient distance for the approaches and minimum impact on the adjoining parcels. Approach ramps that are perpendicular to France Avenue would be far more preferable than approach ramps that are located parallel to France Avenue, since those would obstruct views of the properties from France Avenue.

Therefore, Option C, although it may require a skewed crossing, was selected as the recommended location for an overpass.

#### Path System Recommendations

Following are the key recommendations for the study area path system. Figure 12 illustrates the proposed pathway improvements, as well as the recommended transit routing and stops.

- Install the missing sidewalks along 70<sup>th</sup> Street, Parklawn Avenue, and Edinborough Way.
- Although there are no sidewalks on the east side of France Avenue, it is not recommended to install them at this time, due to the lack of pedestrian-oriented developments on the east side. In the future, if the east side is redeveloped with pedestrian-oriented developments, sidewalks should be installed. For now, provisions should be made to provide pedestrian access from the cross streets to the bus stops located on the east side of France Avenue.
- Consideration should be given to installing sidewalks in the residential area north of 69<sup>th</sup> Street.
- Upgrade and improve the underpass at York Avenue. (The York Avenue underpass is discussed in greater detail in the next chapter).
- Install two pedestrian/bicyclist overpasses at France Avenue -- one for the regional trail at 69<sup>th</sup> Street and one for residential neighborhood access at 72<sup>nd</sup> Street. (The overpasses are discussed in greater detail in the next chapter).

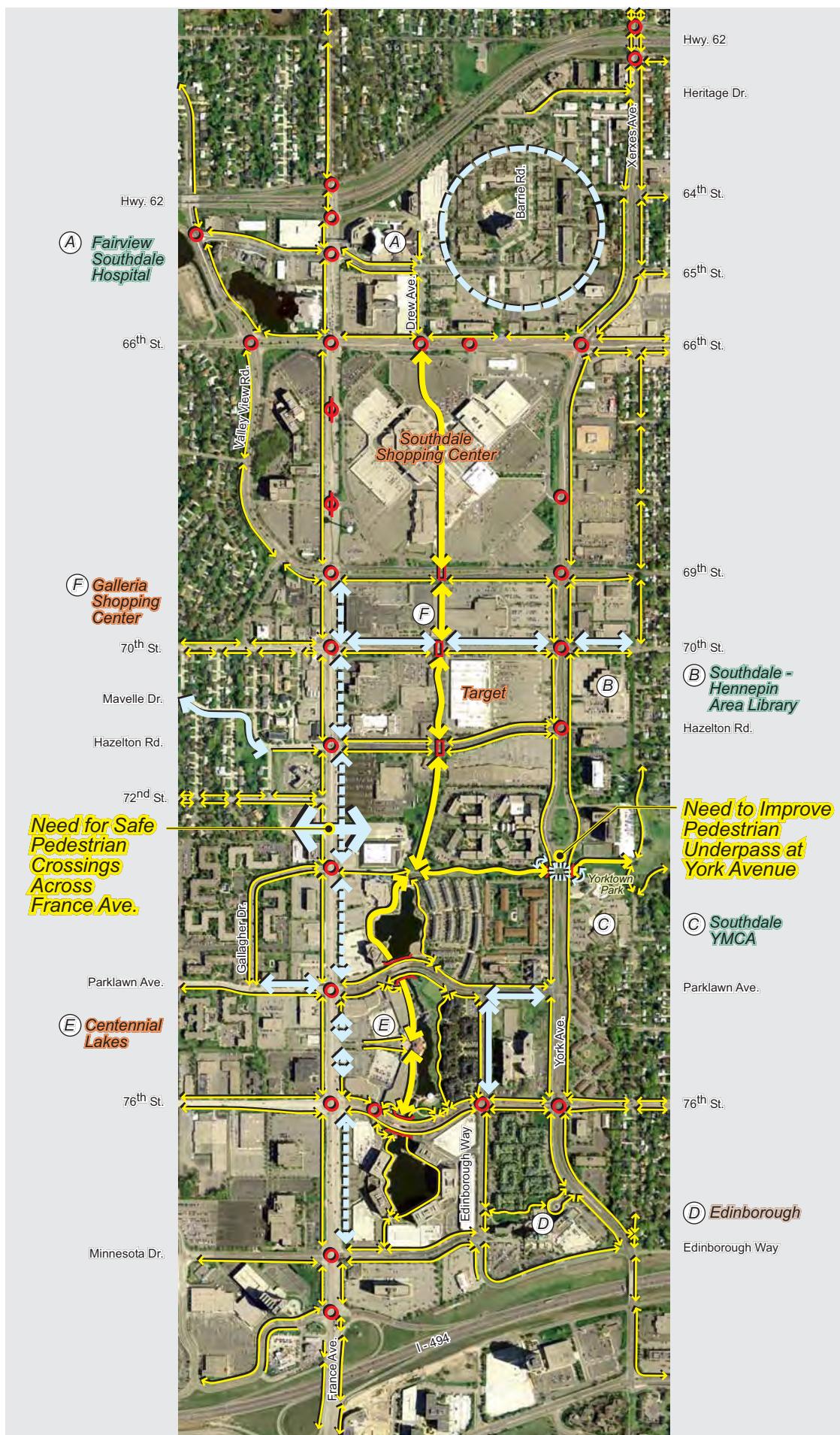


Figure 9

## ***Existing Conditions & Issues***

## *Path System*

### ***Legend***

- ←→ Existing Paths
- ↖→ Missing Paths
- ↖→ Special Path Issues
- Signalized Intersection
- No Pedestrian Crossing
- █ Special Pedestrian Crossing Controls



0 500 1,000 Ft.  



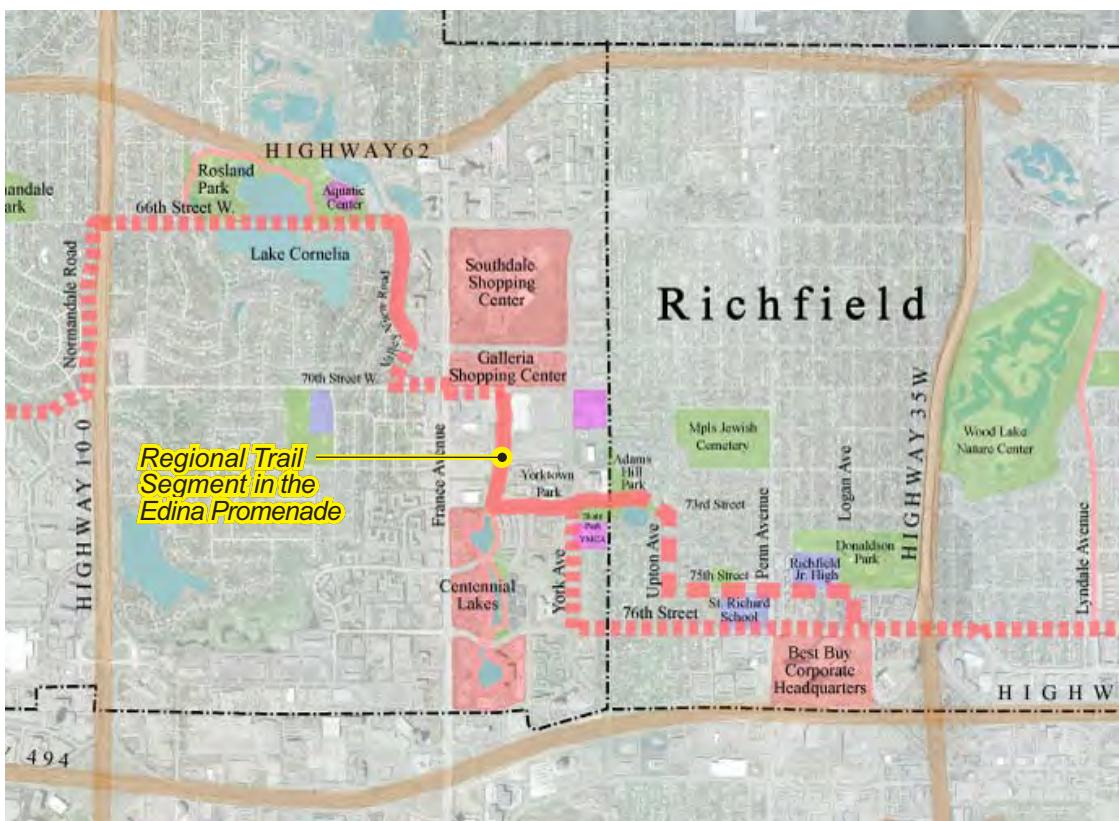

EDINA  
PROMENADE

---

## ***Urban Design Plan***

July 2007

URS



Three Rivers Regional Park District Trail Plan



Regional Trail Alignment and Connection Options

Figure 10

## Three Rivers Regional Trail

### Path System



Urban Design Plan

July 2007

URS



Figure 11

## Overpass Options of France Avenue at South End

### Path System



Urban Design Plan

July 2007

URS

Figure 12

## Recommended Path System Improvements

### Path System

#### Legend

- ↔ Existing Paths
- ↔ Missing Paths
- ↔ Special Path Issues
- Signalized Intersection
- No Pedestrian Crossing
- Special Pedestrian Crossing Controls



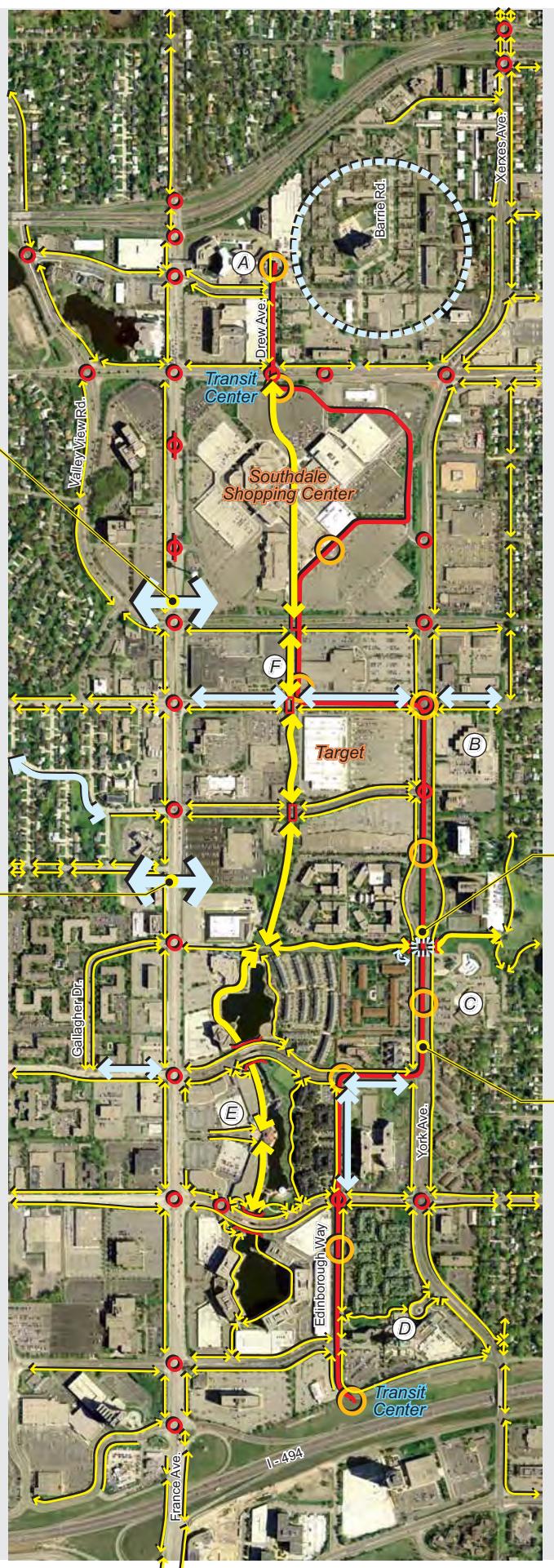
0 500 1,000 Ft.



### Urban Design Plan

July 2007

**URS**



## IV. Promenade Design

The previous chapters identified a number of key findings and recommendations that need to be incorporated into the development of the Promenade:

- The Promenade corridor would not need to include any type of transit facilities.
- The Promenade should accommodate pedestrians as well as bicyclists.
- The York Avenue underpass should be upgraded and improved.
- As a complement to the Promenade path system, two overpasses for pedestrians and bicyclists should be constructed over France Avenue.

This chapter deals with all the various aspects of the Edina Promenade design, including the specialty items listed above.

For discussion purposes, the Promenade corridor will be referred to by the following three segment names:

- North Segment, which extends from 70<sup>th</sup> Street to Hazelton Road
- Middle Segment, which is located between Hazelton Road and the bend at the north edge of Centennial Lakes
- South Segment, which is the east-west portion between the bend at Centennial Lakes and the Yorktown Park

### A. Inventory / Analysis

The Promenade is an 80'-wide, linear open space that extends west from Yorktown Park at York Avenue to the north edge of Centennial Lakes Park, then runs north across

Hazelton Road to 70<sup>th</sup> Street. Any special treatments that are recommended for the Promenade area would also apply to the path system in Yorktown Park on the east side of York Avenue.

#### Existing Conditions

The Promenade corridor has a relatively uniform cross-section and appearance. Figures 13 and 14 illustrate the existing conditions in the corridor. Currently, the primary features in the corridor are a meandering bituminous path and an occasional deciduous or evergreen tree. The only other special features are some electrical utility boxes and manholes.

One major element in the corridor that has a considerable visual as well as physical impact is the York Avenue underpass (top picture in Figure 13). Other elements that have a visual impact are the pedestrian crossings at Hazelton Road and 70<sup>th</sup> Street.

The properties surrounding the corridor are fully developed and include multi-family housing in the southerly half of the corridor and various types of low-density commercial uses along the westerly edge and in the northern half of the corridor.

The corridor is generally flat. The only exceptions are an embankment along the southerly boundary and a slight drop in grade, from north to south, in the Middle Segment of the corridor.

#### Analysis

The Promenade corridor, due to its narrow width, presents some unique challenges. Some of the key issues and forces that need

to be considered and that impact the development of the Promenade are illustrated in Figure 15.

- Narrow Corridor. The primary challenge is the narrowness and the consistent width of the 80' wide ROW of the corridor. In the North Segment, although the actual ROW is still 80', the apparent width will be 140', since the Target building will be set back 60'.
- Buildings Backing up to the Corridor. Most of the existing buildings back up to the corridor, which creates an alley effect and limits the opportunities for interaction between the Promenade and the adjoining developments. It also reduces the number of "eyes on the corridor", which negatively impacts the sense of security.
- Opportunities to Expand the ROW. Currently there are a number of areas in the Middle Segment, where the adjoining development is set back, which creates the feeling of a wider corridor.

If the adjoining parcels are redeveloped, there might be opportunities to work with the developers to obtain additional ROW, or to work with the property owners to develop additional open space next to the corridor.

- Redevelopment Activity. A number of properties in the vicinity of the Promenade are being redeveloped (Figure 16). They include the new Westin Hotel, a new parking ramp adjacent to the Galleria, the new Super Target, and the new The District development.
- Redevelopment Potential. Since some of the areas adjoining the Promenade corridor include some older, low-density developments, and since the current trends in the area are toward higher-density and mixed-use developments, the potential is quite high that some of the properties will be redeveloped.

## B. Design Treatments / Theme

The first step in preparing the design for the Promenade is to identify what type of treatments would be appropriate and what type of design theme should be used.

### Design Treatments

Figure 17 illustrates the various design treatments that were considered for the Promenade:

1. Basic, Landscaped Path. Treat the Promenade area as a basic, landscaped path with simple landscaping treatments.
2. History / Recognition Path. Use the Promenade to present and to interpret the history of Edina or to recognize its famous citizens.
3. Arts / Sculpture Path. The Promenade would be used to present various types and examples of public art.
4. Arboretum Path. Incorporate a large variety of landscaping treatments and special features, such as topiary, in the Promenade.
5. Water Feature Path. Include a number of different water features, such as special fountains along the paths of the Promenade.
6. Water Stream Path. Wind a flowing stream though the Promenade.

After evaluating all of the design treatment options it was concluded that instead of focusing on just one of these treatment options, the best and most interesting approach would be to include some of each of the treatments into the development of the Promenade, with a special emphasis on public art.

Figure 13

**Existing  
Conditions Photos  
Group 1**

**Promenade Design**



1. York Street Underpass - Looking West



2. East-West Segment West of York Street Underpass - Looking West



3. East Half of East-West Segment - Looking West



4. West Half of East-West Segment - Looking West



5. Crossroads Area - Looking West



6. North-South Segment North of Crossroads Area - Looking North



**Urban Design Plan**

July 2007

**URS**



7. North-South Segment at Home Store - Looking North



8. North-South Segment South of Hazeltine Rd. - Looking North



9. Crosswalk at Hazeltine Rd. - Looking North



10. North-South Segment North of Hazeltine Rd. - Looking North



11. North-South Segment at Brandon Square - Looking North



12. North-South Segment South of 70th St. - Looking North

Figure 14

## Existing Conditions Photos Group 2

### Promenade Design



### Urban Design Plan

July 2007

URS



July 2007

**EDINA**  
PROMENADE

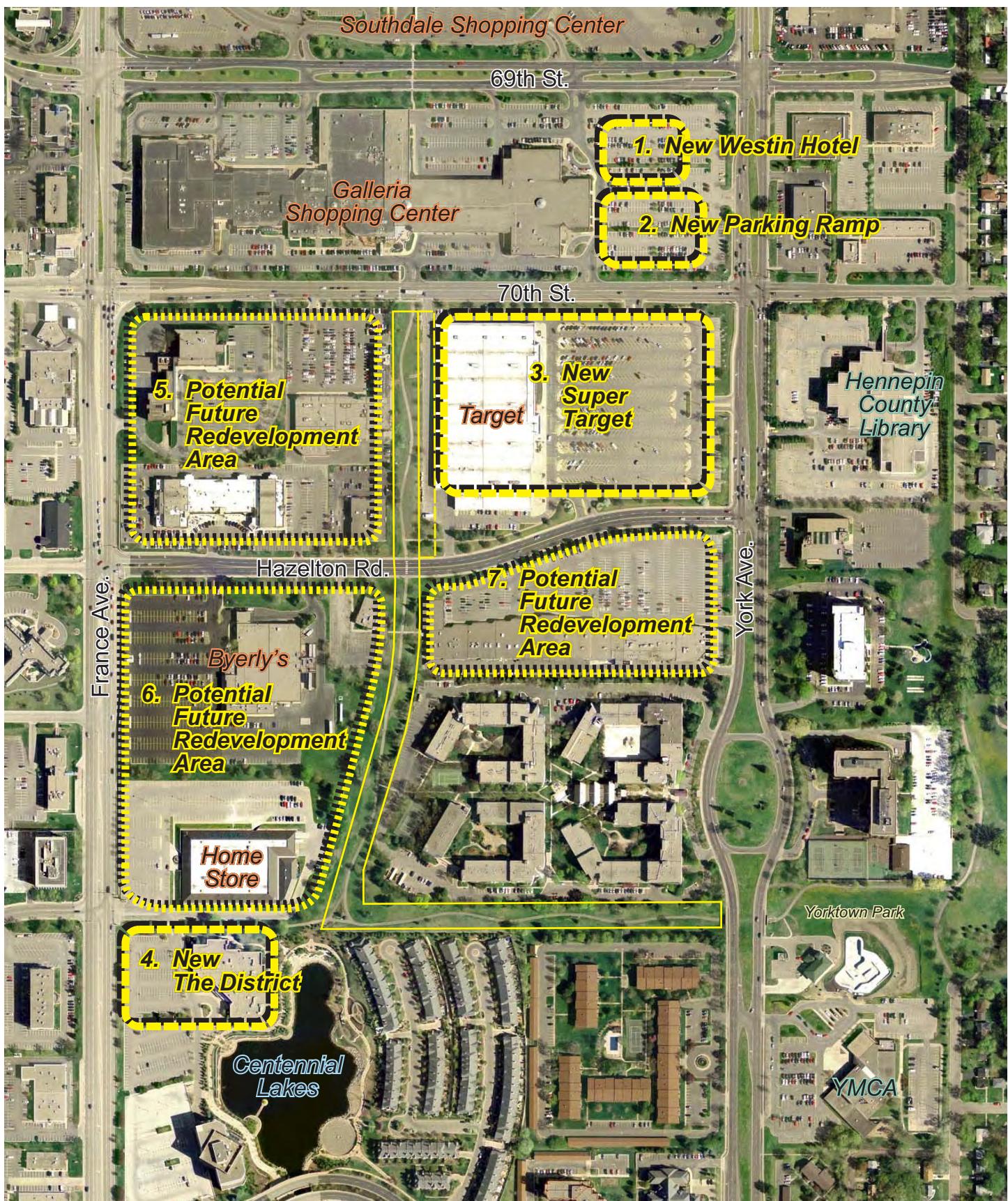
**URS**

**Urban Design Plan**



0 100 300 Feet

Figure 15  
**General Corridor Forces & Issues**  
**Promenade Design**



July 2007

**EDINA**  
PROMENADE

**URS**

**Urban Design Plan**



0 100 300 Feet

**Figure 16**  
**Redevelopment Sites**  
Promenade Design



**1. Basic Landscaped Path**



**2. History / Recognition Path**



**2. Arts / Sculpture Path**



**4. Arboretum Path**



**5. Water Feature Path**



**6. Water Stream Path**

July 2007

**EDINA**  
PROMENADE

**URS**

**Urban Design Plan**



Figure 17

**Design Treatment Options**

Promenade Design

### Design Theme

The next question that needed to be answered is what type of design theme should be used for the Promenade improvements. The options ranged from traditional, historical themes to sleek, modern themes.

One key characteristic of the Promenade is its proximity to Centennial Lakes, which has a very strong and distinct design theme. Although the Promenade is not an extension of the Centennial Lakes Park, utilizing the Centennial Lakes theme for the Promenade would extend the Centennial Lakes treatments and would provide continuity and cohesion for the whole area.

Therefore, the recommendation is to continue the basic Centennial Lakes theme throughout the Promenade but to introduce additional, new elements and treatments into the Promenade that would add variety and interest.

Figure 18 illustrates some of the key treatments and characteristics that make up the Centennial Lakes theme, such as: strong pavement patterns; intimate space definition; intense, concentrated landscaping treatments; and variation in special features.

### Dual Path System

As was discussed in Chapter III, since the Promenade will serve as a pedestrian way as well as a link in the regional trail system (top image in Figure 19), it needs to accommodate two types of users, pedestrians and bicyclists.

The two options for accommodating both would be to either construct one wide path that has space for both, or two separate paths. The second option is recommended since it would provide a clearly defined path for each type of user, it would provide more flexibility, and it would permit more phasing choices in the implementation of the improvements.

The two images at the bottom of Figure 19 provide examples of the two types of paths that are recommended for the Promenade. Each path would be 10 feet wide with the pedestrian path including decorative medallions and the bicyclist path consisting of a bituminous biking surface bordered by concrete edge bands.

### Dual Path Configuration

For accommodating the two paths, as well as spaces for plazas and special features, in the 80' wide ROW, three configuration options were considered (Figure 20):

- **Option A.** Meander the paths together to create special feature spaces on both sides of the dual path system.
- **Option B.** Meander the paths somewhat together to create special feature spaces on one side of the dual path system.
- **Option C.** Meander the paths separately along the sides to create special feature spaces between the two paths.

Option C was selected as the recommended configuration, since it has the potential to create the greatest variety and interest and also because the special feature spaces would be equally accessible from both paths.

## C. Promenade Framework

Following is a set of design guidelines for the development of the Promenade.

### Overall Framework

The key design parameters that have been established for the Edina Promenade are (Figure 21):

- Provide a convenient and comfortable path system for pedestrians and bicyclists.
- Incorporate varied and interesting spaces and special features.



July 2007

**URS**

**EDINA**  
PROMENADE  
**Urban Design Plan**



Figure 18  
**Centennial Lakes**  
**Design Theme**  
Promenade Design

**The Promenade ROW  
Needs to Accommodate  
Pedestrian Traffic and  
Bicycle Traffic on this  
Segment of the  
Regional Trail System.  
Therefore, a Dual  
Path System is  
Recommended.**



**10'-Wide Pedestrian Path**



**10'-Wide Bicycle Path**

July 2007

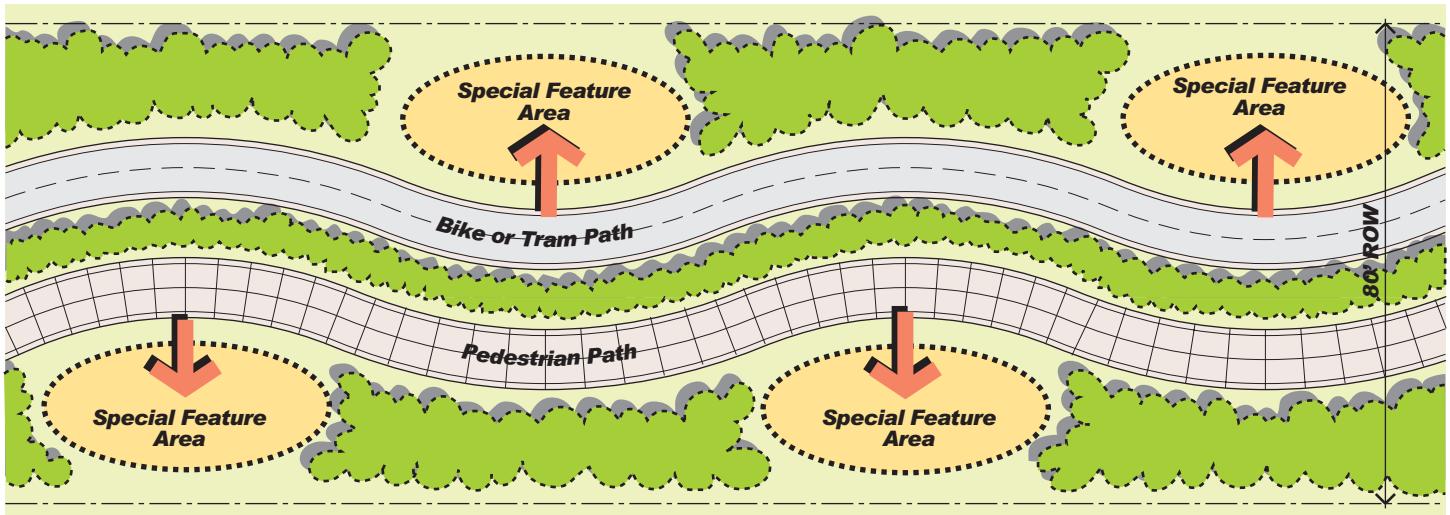
**EDINA  
PROMENADE**

**URS**

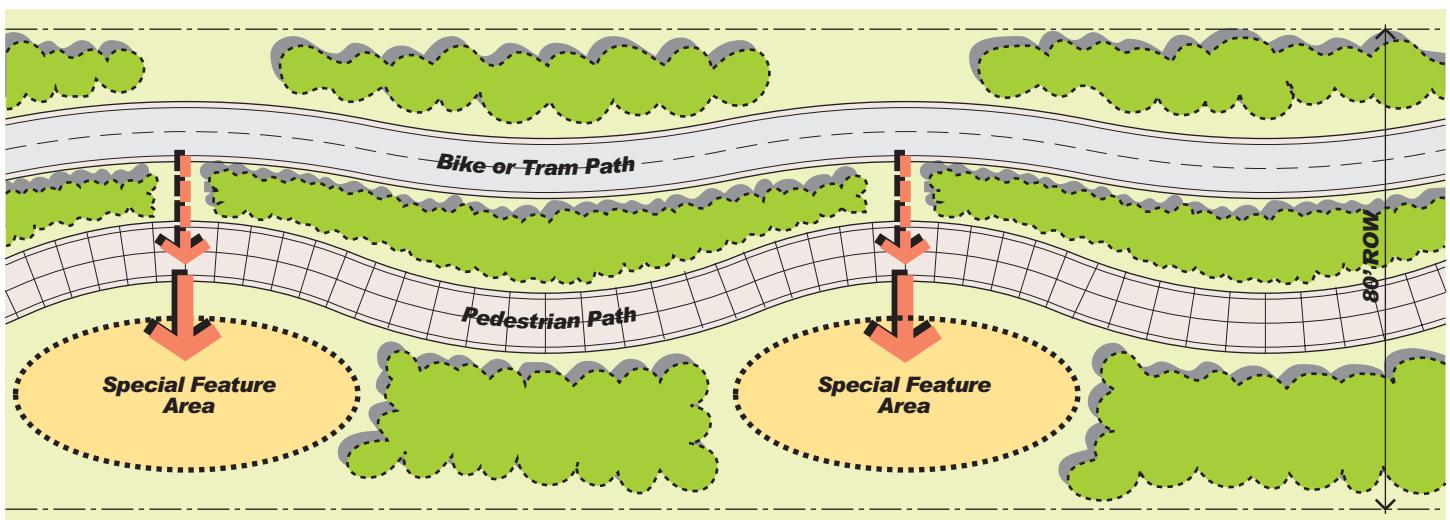
**Urban Design Plan**



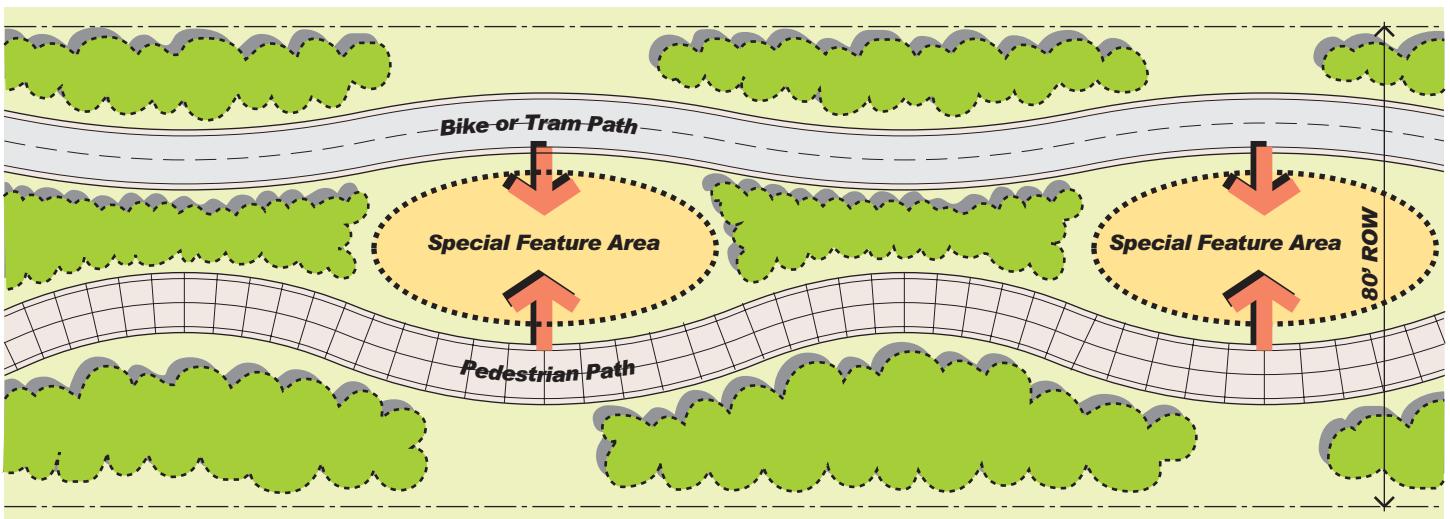
**Figure 19  
Dual Path System  
Promenade Design**



**Option A**



**Option B**



**Option C**

July 2007

**EDINA**  
PROMENADE

**URS**

**Urban Design Plan**



Figure 20  
**Path Configuration Options**  
Promenade Design

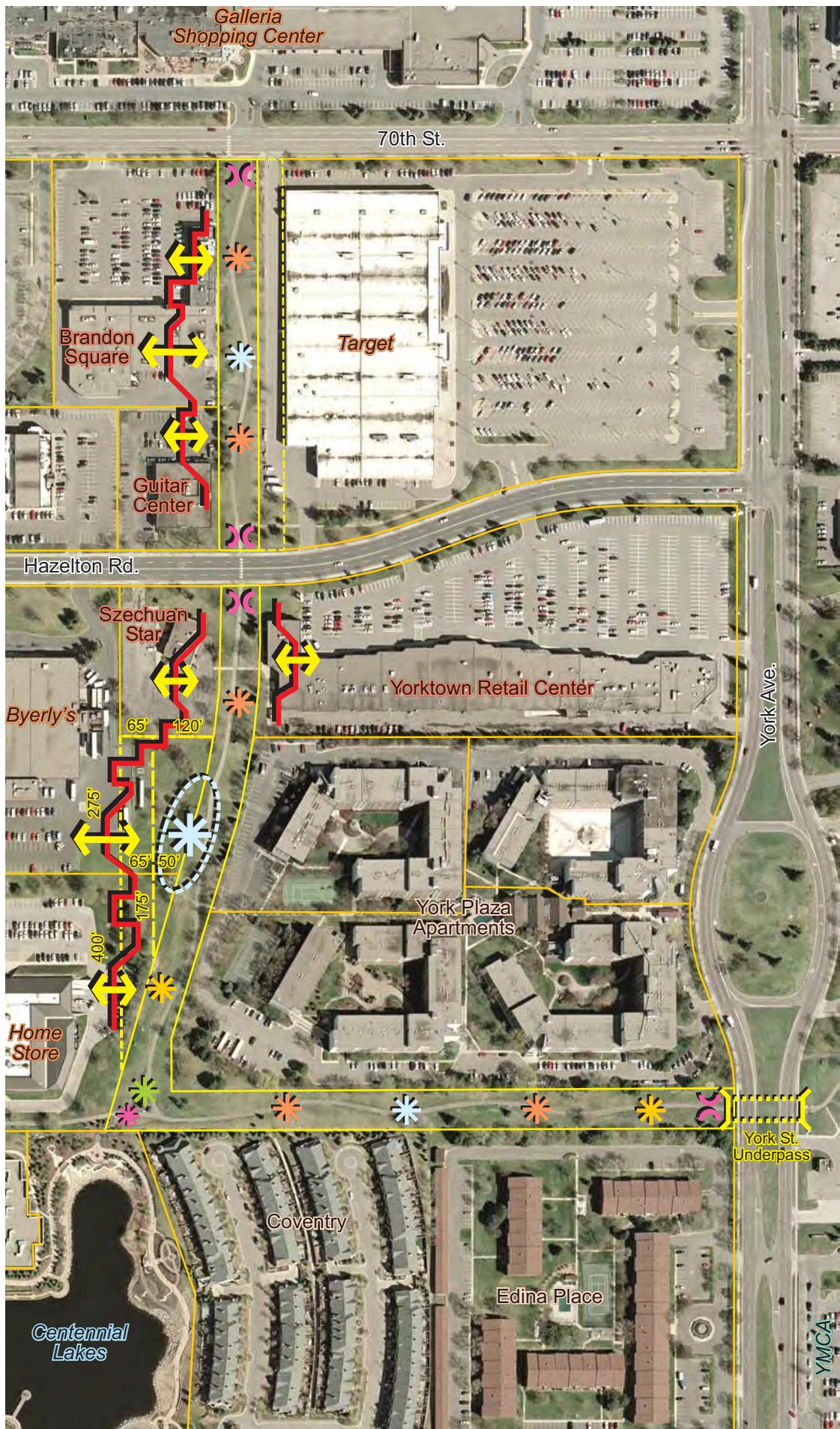


Figure 21

## Promenade Urban Design Framework

### Promenade Design

#### Legend

- Gateway**
- Special Feature**
- Water Feature -- Special Fountain**
- Water Feature -- Fountain**
- Landscaping Feature**
- Sculpture Group**
- Single Sculpture**
- Path-Oriented Development**



0 100 300 Feet



### Urban Design Plan

July 2007

**URS**

- Encourage more interaction between the adjoining developments and the Promenade, as well as more pedestrian-friendly environments in any future redevelopment projects along the Promenade.
- Introduce water features in all the segments of the Promenade to continue the water-oriented theme of Centennial Lakes Park.

A more detailed description of the special features illustrated in the plan is included in one of the following sections.

### Recommended Path Layout

Figure 22 illustrates the recommended path layout for the three segments of the Promenade corridor. Each of the segments would have at least three special spaces for special features.

### Example Illustrative Plan

A typical example plan of one of the corridor segments (North Segment) is provided in Figure 23.

The purpose of this plan is to illustrate the intent of highlighting the special feature plazas or spaces and the general pattern of clustering major landscaping treatments around the special spaces.

As is discussed in one of the following sections, it is hoped that each of the special places will be developed in a unique way and that each space will have its own distinct special features and character.

## D. Public Art Program

The key feature proposed for the Promenade is the incorporation of public art in the project. Installing and integrating public art throughout the project area would make the Promenade unique, give it a distinct character, and make it memorable.

Following is a brief overview of potential opportunities for implementing public art in the Promenade and Centennial Lakes areas.

### Background and Overview

The Promenade and Centennial Lakes areas in Edina have been developed over many years, as was discussed previously. As the various public infrastructure and private development projects evolved, a lot of thought was given to integrating enhancements and public amenities into the various projects.

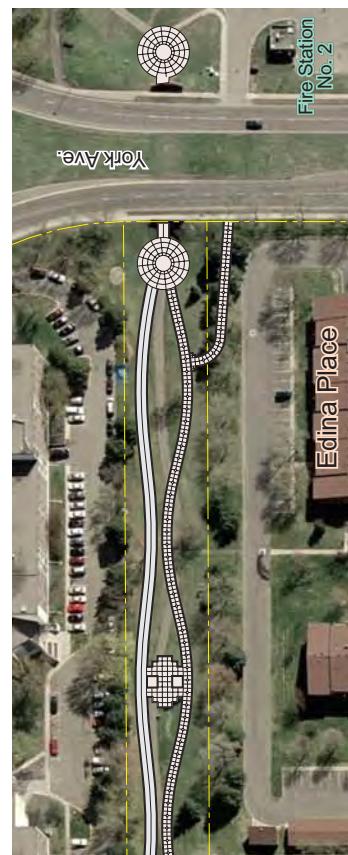
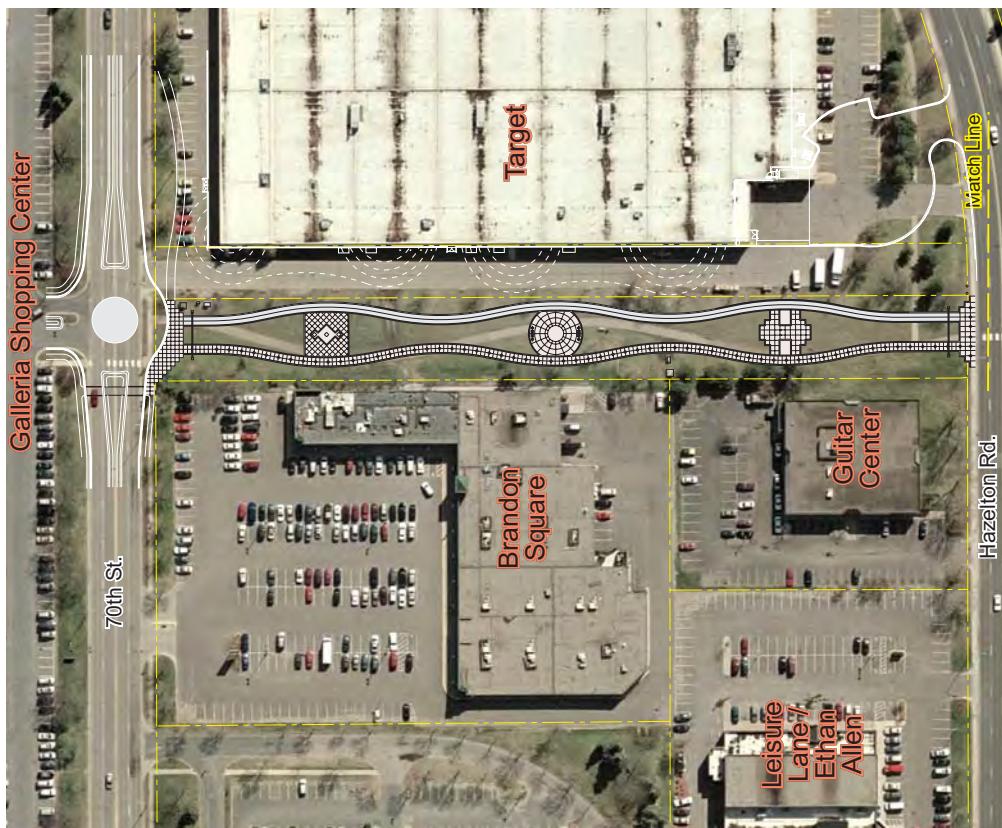
Overall, the area, especially Centennial Lakes, has been extremely successful in creating a very pedestrian-friendly, varied, and enjoyable environment that encompasses many types of activities ranging from taking a simple walk in the park to sailing model boats, playing golf on the putting greens, or watching cultural performances in the amphitheatre.

The one element that never quite coalesced, in the course of shaping the new developments and public spaces, is a public arts program. Although it was talked about and considered many times during the planning of the projects, other more pressing immediate needs always seemed to take precedence and thus the arts program languished and never came to be realized.

Now, with the start of the implementation of the Promenade path system, an opportunity has emerged to supplement and enrich the public spaces in the Promenade and Centennial Lakes areas with public art. In fact, the current concept for the Promenade is to make public art its main feature element. This opportunity also raises the possibility of 'retrofitting' Centennial Lakes Park with public art to create a more interesting and more exciting total environment.

### Approaches to Public Art

Public art has the unique capability to express or illustrate peoples' dreams, wishes,



July 2007

**EDINA**  
PROMENADE

**URS**

**Urban Design Plan**



0 50 100 150 Feet

Figure 22

### **Recommended Path Layout**

*Promenade Design*

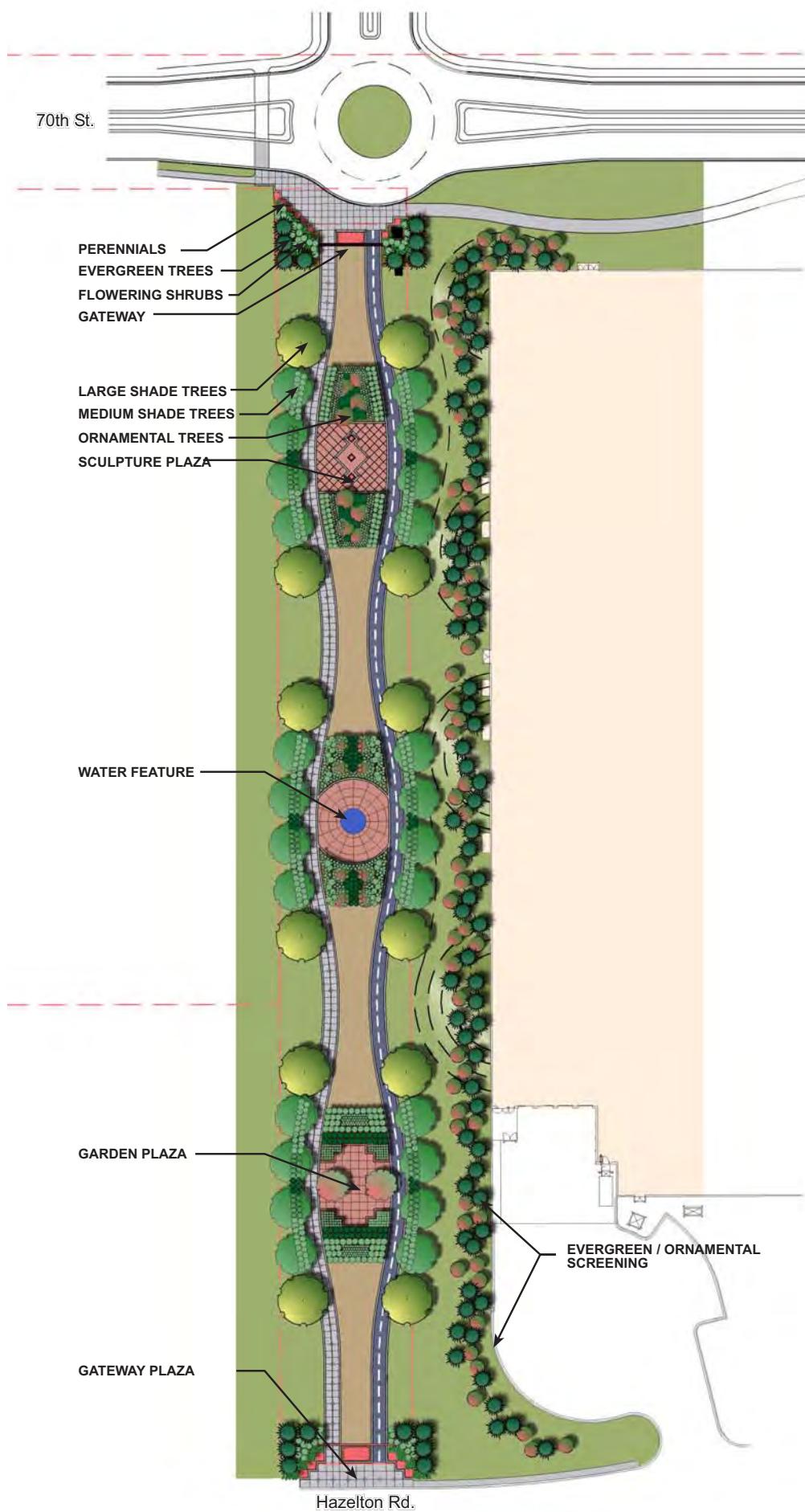


Figure 23

**Example  
Illustrative Plan  
(70th to Hazelton)**

*Promenade Design*



0 50 100 Feet



**EDINA**  
PROMENADE

**Urban Design Plan**

July 2007

**URS**

aspirations, or their unique perception of the world. Public art communicates ideas, it delights, and it sometimes surprises us. It is a way to enliven a place and to make it more memorable. Public art is a key component of most great parks and public places throughout the world and it is the one key element that is generally missing from the Promenade and Centennial Lakes areas.

Outdoor public art can be installed and implemented in a wide variety of ways. Following are some examples of how public art can be presented and experienced:

- It can be a physical object or it can be made of light, sound, water, or anything else that can be perceived by our senses.
- It can be a free-standing object or it can be integrated in structures, buildings, pavement, or the natural environment.
- It can be fixed or it can be kinetic art that moves or changes over time.
- It can be art for viewing or it can be interactive art that involves the viewer.
- It can range in size from a small sculpture of an imaginary being perched on a rock to large constructions or pavement designs that extend over a considerable distance and even sometimes envelop the viewer.
- It can be a feature that is very popular and widely admired or it can be very controversial and appreciated by only a few.

Art is something that we all respond to, in one way or another. It can arouse in us a variety of emotions and it is one of the elements that make us more aware of the conditions of our existence.

Figures 24 through 29 provide typical examples of outdoor public art types and media that might be applicable to the Promenade and Centennial Lakes areas.

### Opportunities for Public Art

As can be seen from the previous discussion, the opportunities for public art in the Promenade and Centennial Lakes areas are virtually unlimited. There is almost no place that public art could not be installed, in some way or another.

However, to provide some direction and guidance for an arts program, following are some basic recommendations regarding how the public arts program might be shaped and applied.

#### 1. Primary Opportunities for Public Art

There are a number of areas in the Promenade and Centennial Lakes where public art is either an integral part of the planned improvements, or where it might fill in an existing void.

##### a. The Promenade

The proposed Promenade linear corridor presents the greatest potential and the ideal opportunity for integrating public art into the evolving environment. Instead of installing public art 'after the fact', here is an opportunity to create environments that could be shaped by the public art process and that would fit with and complement the public art features.

The overall design concept for the Promenade, similar to the Centennial Lakes concept, is to create a string of varied, interesting spaces. Because of the linear nature of the right-of-way in the Promenade area, the design concept calls for linear meandering paths, which would encompass nodes or spaces that would feature or be built around, or built as, public art.

The current design concept for the Promenade, Figure 30, identifies 11 nodes that are designated for public art installations. In addition, it is expected that three of the nodes would include some type of water feature, such as a fountain or a water sculpture.



**Small-Scale Sculptures**



**"Joyfull" Sculptures**



**Large-Scale Sculptures**



**"Play" Sculptures**



**Street Sculptures**



**Abstract Sculptures**

July 2007

**EDINA**  
PROMENADE

**URS**

**Urban Design Plan**



Figure 24

**Examples of Outdoor  
Public Art - Group 1**

*Promenade Design*



**Sculpture in Pool**



**Theme Fountain**



**Storytelling Fountain**



**Sculptural Action Fountain**



**Relaxation Fountain**

July 2007

**EDINA**  
PROMENADE

**URS**

**Urban Design Plan**



Figure 25

**Examples of Outdoor  
Public Art - Group 2**

**Promenade Design**



**Sculpture Grouping**



**Sculpture Grouping**



**Sculpture Cluster**



**Sculpture Cluster**



**Columnar Sculptures**



July 2007

**EDINA**  
PROMENADE

**URS**

**Urban Design Plan**



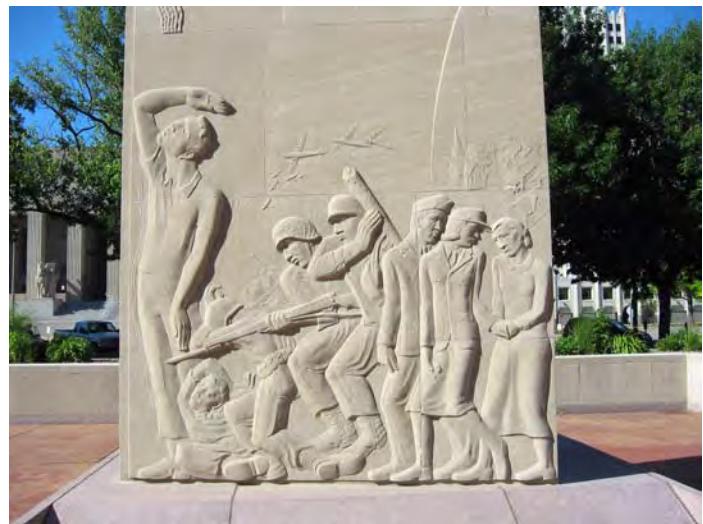
Figure 26

**Examples of Outdoor  
Public Art - Group 3**

**Promenade Design**



**Pavement Interpretive Art**



**Relief Sculpture**



**Historic Display Sculpture**



**Artistic Directory**



**Interpretive Art - Prehistoric**



**Interpretive Art - Historic**

July 2007

**EDINA  
PROMENADE**

**URS**

**Urban Design Plan**



Figure 27

**Examples of Outdoor  
Public Art - Group 4**

**Promenade Design**



**Large Wall Art**



**Small Wall Art**



**Art Screen**



**Art Border**



**Silhouette Sculpture**



**Cutout Sculpture**



**Special Effect Fountain**



**Landscaping Art**



**Railing Art on Pedestrian Bridge**



**Street Furniture Art**



**Infrastructure Art**



**Topiary Art**

July 2007

**EDINA**  
PROMENADE

**URS**

**Urban Design Plan**



Figure 29

**Examples of Outdoor  
Public Art - Group 6**

**Promenade Design**



**Proposed Promenade Plan**

July 2007

**EDINA**  
PROMENADE

**URS**

**Urban Design Plan**



Figure 30

**Public Arts Opportunities  
in the Promenade Area**  
Promenade Design

Figure 31 illustrates the concept for a typical node. The basic framework for the nodes would consist of the pedestrian and the bicycle paths, which would be the same throughout the Promenade project area, and the requirement to incorporate landscaping and landscaped or structured vertical elements that would frame each of the node areas.

The vertical elements for each of the node areas could consist of street trees, columnar landscaping material, ornamental columns, or some other type of vertical elements.

In addition, each node should also be defined by massed shrubs or grasses at each end of the node.

The paths and the framing elements would be the only fixed requirements for each of the nodes. Everything else, including the pavement materials and patterns, sculptural or other art features, seating, and urban design, streetscaping, and landscaping elements would be up to the artists to define and create. It is hoped that each node would have a unique character and design.

### b. Pedestrian Bridges

The overall plan for the Centennial Lakes/Southdale area includes two pedestrian/bicyclist bridges over France Avenue. One bridge would be located in the vicinity of 69<sup>th</sup> Street, at the southerly edge of the Southdale shopping center, and the other at 72<sup>nd</sup> Street.

The pedestrian bridges present an ideal opportunity to incorporate public art in the bridge structural design, or as a special treatment. The whole bridge structure could be treated as an art object, or bridge components, such as the railings, could include art elements or features. An examples of public art in bridge design is included in Figure 29.

### c. Centennial Lakes

In the development of the Centennial Lakes Park, a number of locations were considered for public art. However, because the arts

program was never implemented, these sites were never refined or finalized to receive or incorporate public art. In a number of cases, they are still available for locating or installing public art.

The greatest opportunities for larger public art installations are the wide walk areas under the roadway bridges, a few of the promontories that project into the lakes, and the cross-road areas where major paths intersect or come together. Figure 32 provides a rough indication of potential primary art installation locations in the Centennial Lakes Park.

The optimum way to identify these art location opportunities would be for the selected artists to conduct a walk-through of the Centennial Lakes Park area, in order to identify the sites that would best suit their art styles, art techniques, and creative needs.

### 2. Other Opportunities for Public Art

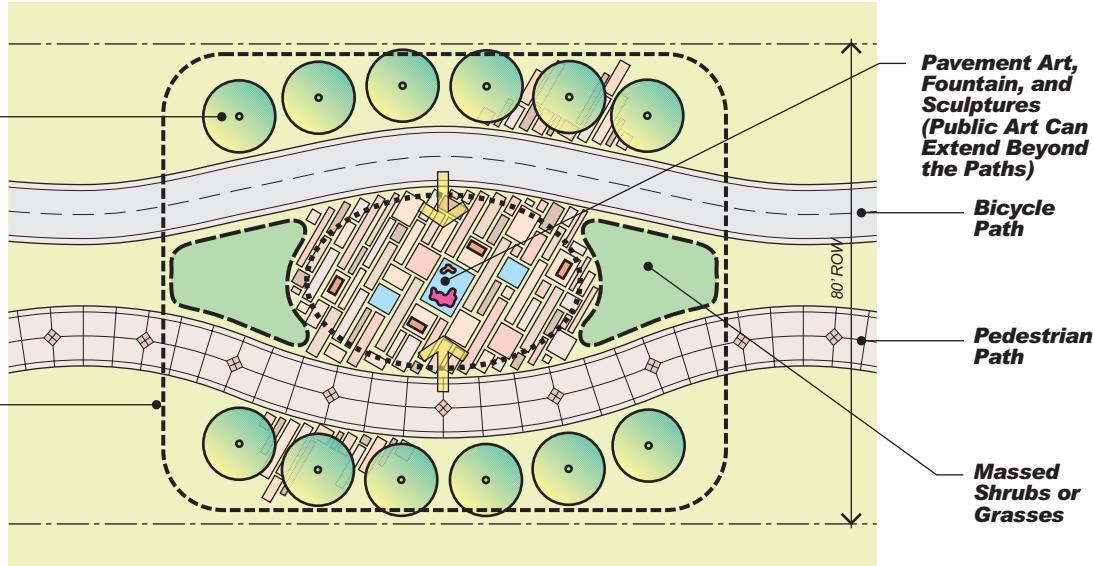
In addition to the primary opportunities, there are an innumerable number of additional areas where public art could be installed in the Centennial Lakes Park area. Along every path, open space, or structural element or wall, there is the potential to include small or large art elements or features. Following are a few example suggestions:

- Small sculptures along any of the paths or trails in the park
- Special pavement designs
- Landscaping or topiary art
- Murals or wall sculptures along the back sides of the retail buildings on either side of the Centrum
- Light art projected on the back sides of the retail buildings on either side of the Centrum or on the roadway bridge structures during the evening hours
- Floating sculptures on the lakes

### Conclusion

As can be seen from the above discussion, the opportunities for public art in the Prom-

Vertical Framing Elements (Trees or Ornamental Columns)

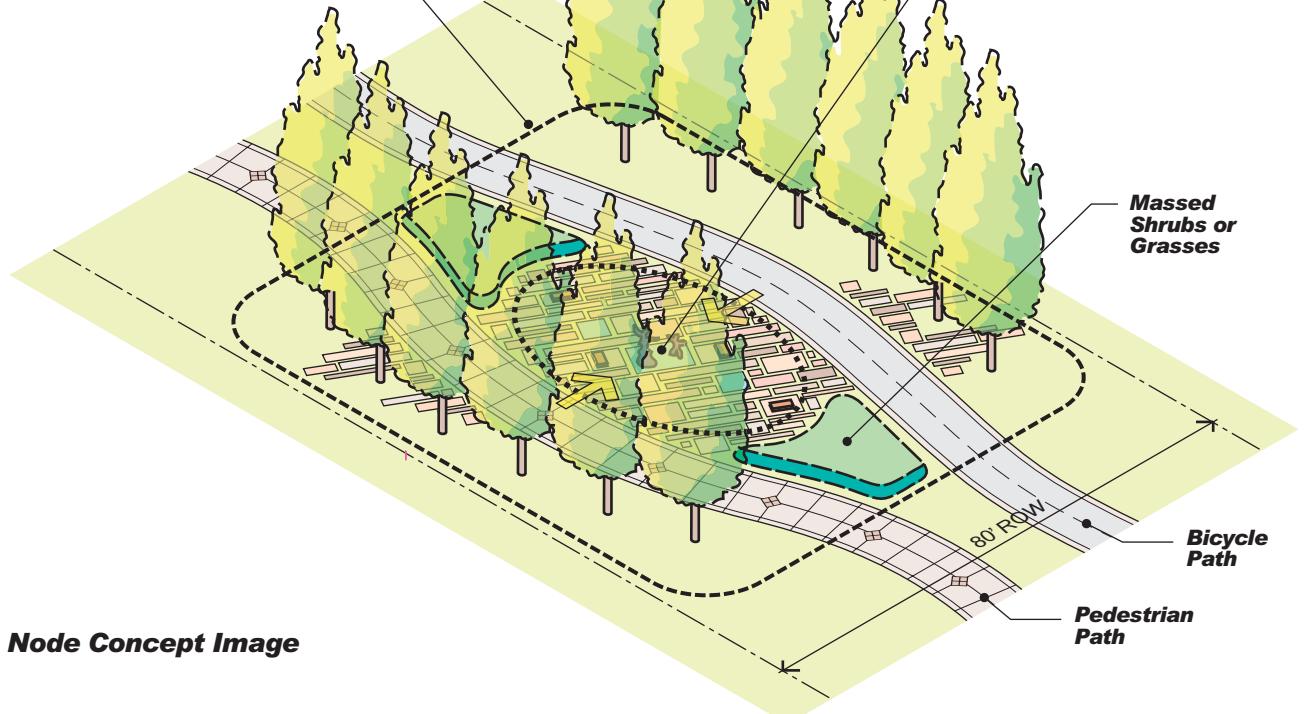


**Node Concept Plan**

Vertical Framing Elements (Trees or Ornamental Columns)

Public Art Installation Envelope

Pavement Art, Fountain, and Sculptures (Public Art Can Extend Beyond the Paths)



**Node Concept Image**

July 2007

**EDINA**  
PROMENADE

**URS**

**Urban Design Plan**



Figure 31

### **Public Arts Theme**

Promenade Design

Figure 32

## Public Arts Opportunities at Centennial Lakes

Promenade Design



 **Centennial Lakes Master Plan**  
City of Edina, Minnesota

URS  
September, 2002  
0 50 100 200 North  
N



**Urban Design Plan**

July 2007

**URS**

nade and Centennial Lakes areas are virtually unlimited.

The ideal would be to implement a highly varied arts program that represents a wide range of art media and techniques. The hope is that the public arts program will add interest, excitement, variety, and sometimes even surprise to the Promenade and the Centennial Lakes area environments and experience.

## E. Promenade Components

Section C outlined the overall framework for the Promenade. This section describes the specific components that would make up the special treatments for each of the corridor segments.

### Overview of Major Components

As outlined in Section B, Design Treatments / Theme, the recommendation is to include a variety of features in the Promenade corridor and to extend the Centennial Lakes theme to the Promenade. Figure 33 illustrates the general distribution and location of the special Promenade components, which include:

1. Gateways
2. Crossroads Feature
3. Landscaping Feature
4. Single Sculptures
5. Sculpture Groups
6. Sculpture Fountains
7. Pond / Stream and Special Fountain
8. New, Upgraded York Street Underpass
9. New France Avenue Overpasses

The distribution of the special components shown in Figure 33 is meant to provide general direction and show the overall intent of

the major component program. Actual installations may vary, depending upon the type of public art program that is implemented.

Additional elements, which would supplement the special components include:

- Light fixtures. Double, bell-shaped light fixtures, similar to the ones in Centennial Lakes Park.
- Benches. The style of the benches may vary, depending upon the type of treatments that are developed for each special area. Each special area should have at least one bench. Some of the benches may be part of the public art installation.

The fountain areas in each of the three segments should have a pair of the type of swinging benches that were installed in Centennial Lakes Park.

- Litter Receptacles. For ease of upkeep and maintenance, the same type should be used as in Centennial Lakes.
- Bicycle Loops. Each of the special spaces or feature areas should include some bike loops to permit bicyclists to park their bikes.
- Safety Equipment. Emergency call buttons and/or security cameras may be installed in some areas of the Promenade.

### Major Components

Following is a description of each of the major components for the Promenade:

1. Gateways. The gateways would serve as a welcoming feature at the entrances to the Promenade. Figure 34 provides examples of potential gateway treatments. They could be as simple as a row of banners, or they could be more complex structures that arch over or flank the entrances.



Figure 33

## Promenade Component Plan

### Promenade Design

#### Legend

- 1.** Gateway
- 2.** Crossroads Feature
- 3.** Landscaping Feature
- 4.** Single Sculpture
- 5.** Sculpture Group
- 6.** Sculpture Fountain
- 7.** Pond / Stream and Fountain
- 8.** York Ave. Underpass



0 100 300 Feet



**EDINA**  
**PROMENADE**

### Urban Design Plan

July 2007

**URS**



July 2007

**URS**

**EDINA  
PROMENADE**  
**Urban Design Plan**



Figure 34  
**1. Gateway Examples**  
Promenade Design

The four proposed gateways would be located at 70<sup>th</sup> Street, on both sides of Hazelton Road, and at York Street

2. Crossroads Feature. The 'elbow' area of the Promenade is a crossroads where the various paths meet. This location would be ideal for a crossroads feature, such as a wayfinding sign or directory, that would provide directions and identify the various features and developments in the study area.

Figure 35 provides a few examples of what a crossroads feature might look like.

3. Landscape Feature. The 'elbow' area of the Promenade should also include a major landscaping feature or 'centerpiece', such as the special landscaping treatment example from Centennial Lakes (Figure 36).
4. Single Sculpture. Four sites have been identified for the single sculpture installations. Figure 37 provides examples of various types of single sculptures. However, as was discussed in Section D, Public Art Program, there are many ways that art can be implemented and the actual installations could vary dramatically from the examples presented.
5. Sculpture Group. In order to create variety and interest, some of the art installations might be sculpture groups, such as the examples shown in Figure 38.
6. Sculpture Fountain. One of the key program elements for the Promenade is to extend the water theme from the Centennial Lakes Park throughout the Promenade area to provide continuity and additional interest.

A site has been identified in each of the three segments for a fountain. The fountains should include sculptures or sculptural elements and they also should incorporate some form of a stream or stream feature.

Figure 39 provides examples of various sculptural fountains. Some of the examples show that the fountains do not always have to be large and expansive to be interesting and enjoyable.

The other special features, Pond/Stream, new York Street Underpass, and the new France Avenue Overpasses, are discussed separately in the following sections.

#### F. Pond / Stream

As was discussed previously, the Promenade area is undergoing changes and more redevelopment may happen in the future. This may present the opportunity to expand the Promenade ROW and it may also increase the requirements for storm water storage.

##### Pond / Stream Concept

In order to create variety in the spatial quality of the Promenade corridor and to provide space for a storm water pond, opportunities should be sought out to expand the Promenade ROW. The best opportunity for this may be in the Middle Segment, adjacent to the Byerly's and Home Store properties, as is illustrated in Figure 33.

This segment of the Promenade also has the most grade change, with a drop of approximately 20 feet from Hazelton Road to Centennial Lakes (Figure 40).

This segment would present the opportunity, as redevelopment occurs, to create a unique special feature area, to provide a storm water storage pond, and to create a flowing stream.

Figure 41 represents a concept plan of this special pond / stream feature. This is strictly a preliminary concept and needs a lot more refinement regarding the size and characteristics of the storm water pond, the stream configuration, and the path alignments. For example, an additional pedestrian path may be desirable along the east side of the pond,



July 2007

**EDINA**  
PROMENADE

**URS**

**Urban Design Plan**



Figure 35

## 2. Crossroads Feature Examples

Promenade Design



**Existing  
Crossroads  
Area**



July 2007

**EDINA**  
PROMENADE

**URS**

**Urban Design Plan**



Figure 36

**3. Landscape Feature  
Example**

*Promenade Design*



July 2007

EDINA  
PROMENADE

URS

Urban Design Plan



Figure 37

#### 4. Single Sculpture Examples

Promenade Design



July 2007

**URS**

**EDINA  
PROMENADE**  
**Urban Design Plan**



Figure 38

**5. Sculpture Group Examples**

Promenade Design



July 2007

**EDINA**  
PROMENADE

**URS**

**Urban Design Plan**



Figure 39

## **6. Sculpture Fountain Examples**

*Promenade Design*

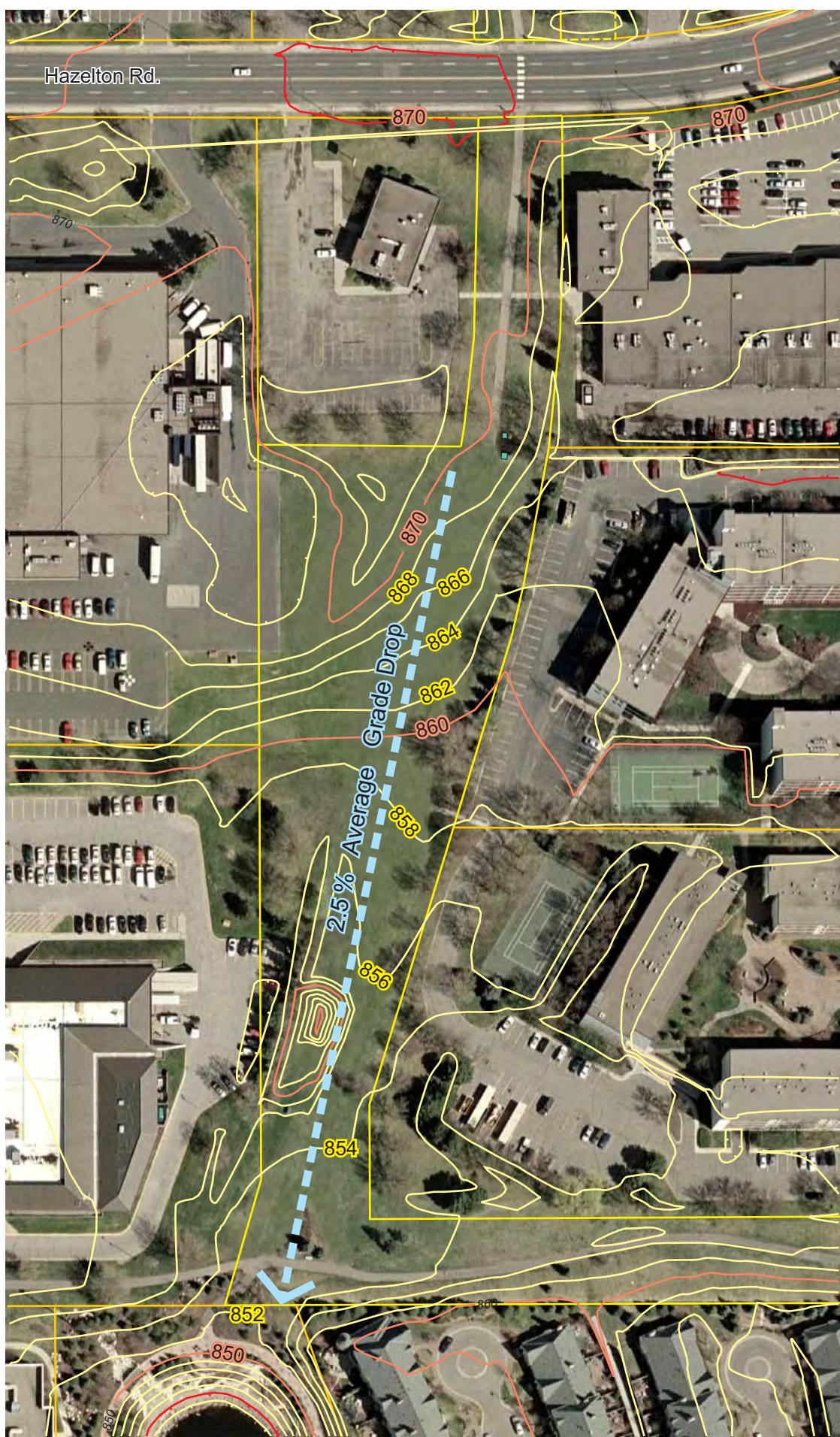


Figure 40

**Stormwater Pond / Stream Concept - Existing Grades**

*Promenade Design*



**Urban Design Plan**

July 2007

**URS**



Figure 41

## Stormwater Pond / Stream Concept

### Promenade Design



0 50 100 150 Feet



**EDINA**  
PROMENADE

**Urban Design Plan**

July 2007

**URS**

in order to provide a more direct north-south pedestrian path and to permit a walk around the pond.

---

#### Pond / Stream Special Features

In addition to the proposed paths, lawn areas, seating, and landscaping treatments, the pond / stream area would also present the opportunity to include some unique and special features (Figure 42):

1. **Projection Screen Fountain.** The fountain would include a water screen that is created by dripping water from a pipe, as well as a projection pylon from which images or movies could be projected on the screen.  
The fountain would be ringed on one side by seats for spectators. A similar projection screen fountain that uses glass blocks has been installed in the Millennium Park in Chicago.
2. **Arch Spray Fountain.** A jet fountain would be installed in one of the ponds and would spray water across a pedestrian crossing to the other pond. Besides providing aeration of the water this would also be a very attractive visual feature.
3. **Stepping Stone Crossing.** A link between the plazas on each side of the pond would be constructed of stepping stones for crossing the narrow portion of the pond. The crossing would be located underneath the arch spray fountain, which would add to the interest and excitement of using this crossing.
4. **Stream.** The flowing stream would serve as a drainage channel for the pond and would provide a water feature with moving water that was not feasible in the Centennial Lakes area. The stream would start at a weir, at the south end of the new ponds, and would flow south between rock-lined banks to Centennial Lakes.

As an added attraction, the stream would flow through one of the special plazas, which would include a moving or rotating sculpture that would utilize the water from the flowing stream for powering its movements.

A key requirement for the success of this special area would be the orientation of the new developments toward the Promenade, or at least to have a number of activity areas, such as cafes or cafeterias, as well as entrances or access ways, oriented towards the Promenade.

---

#### Storm Water Circulation Options

The flowing stream presents some unique challenges, since storm water ponds are designed to store or retain water, not have it drain out right away.

Following are four options of how the flowing stream could work (Figure 43):

**Option A: Self-Contained Stream.** The stream would be separated from the functions of the ponds and would be completely self-contained. It would have its own pumping and filtration systems and would re-circulate its own water. The storm water from the ponds would overflow in a pipe to Centennial Lakes.

**Option B: Separate Stream Linked to the Ponds.** The stream would flow out of the ponds over a weir to the 'elbow' area and would then be re-circulated back to the ponds. The storm water from the ponds would overflow in a pipe to Centennial Lakes.

**Option C: Single Stream to Centennial Lakes.** The stream would flow over a weir to Centennial Lakes and would be pumped back up to the ponds. The storm water from the ponds would also be channeled via the stream bed to Centennial Lakes.



**1.**  
**Projection Screen Fountain (Example from Millennium Park in Chicago)**



Figure 42

## Stormwater Pond / Stream Concept - Key Features

### Promenade Design



**2.**  
**Arch Spray Fountain (Example from Chicago)**



**3.**  
**Stepping Stone Crossing**



**4.**  
**Stream with Rock-Lined Banks**



**Urban Design Plan**

July 2007

**URS**

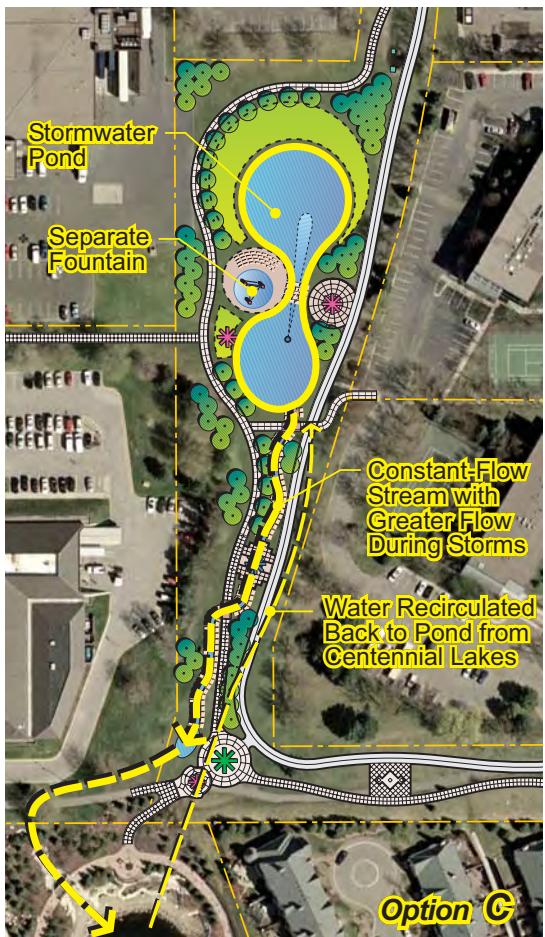
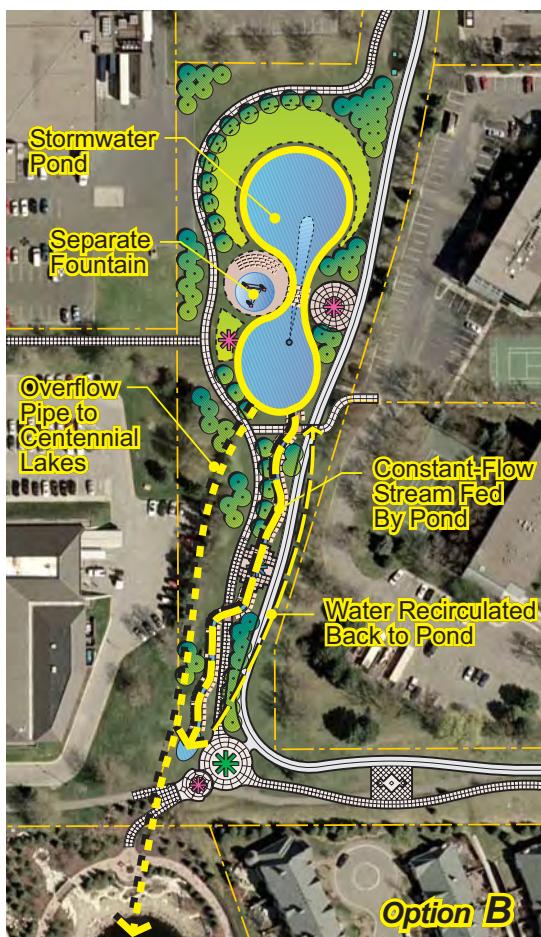
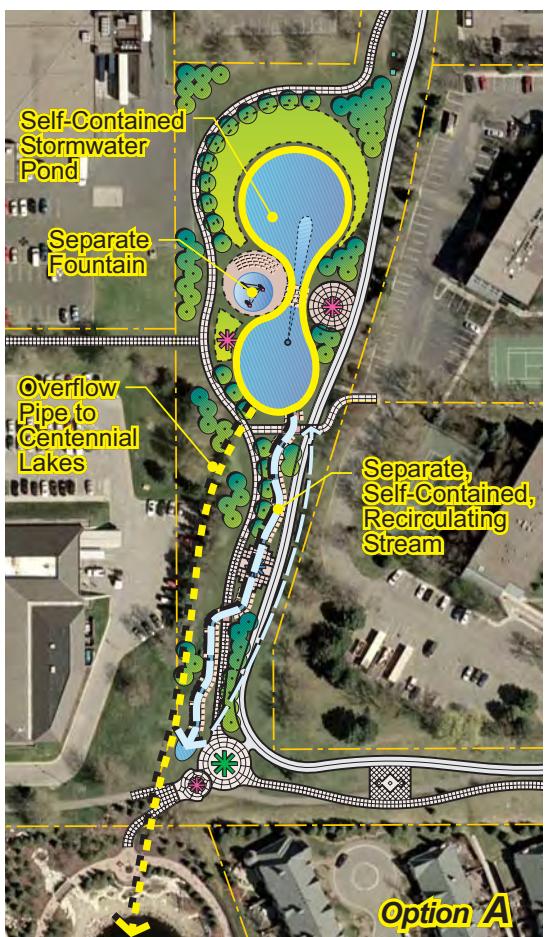


Figure 43

## Stormwater Pond / Stream Concept - Circulation Options

### Promenade Design



**Urban Design Plan**

July 2007

**URS**

Option D: Stream with Separate Pipe to Centennial Lakes . The stream would flow over a weir to Centennial Lakes and would be pumped back up to the ponds. The storm water from the ponds would overflow into a pipe to Centennial Lakes.

Before a decision can be made regarding which storm water circulation option to select, more engineering studies need to be completed.

#### G. York Avenue Underpass

The York Avenue underpass is a major feature in the Promenade area and it serves as a passage and gateway to the Promenade area from the east. Since it is also a link in the regional trail system, it needs to accommodate pedestrians as well as bicyclists.

##### Existing Conditions

The existing York Avenue underpass at Yorktown Park (top photos in Figure 44) is constructed from large concrete drainage pipes. It has a bituminous paved path, no lighting, and no other amenities.

The embankments at both ends of the underpass, have timber retaining walls and a linear floor drain is located at the east end of the underpass.

##### Design Recommendations

The primary issues with the existing York Avenue underpass are:

- Its small size – horizontally and vertically
- Lack of lighting
- Lack of design amenities and features

A number of options were considered for improving and upgrading the underpass:

1. Repair and upgrade the existing underpass

2. Reconstruct it with a larger pre-cast concrete box culvert
3. Reconstruct it as two small bridges

In order to meet the objective of serving pedestrians as well as bicyclists, to provide more natural light in the underpass, and to improve its image and appearance, the recommendation is to reconstruct it as two small bridges.

The diagram in Figure 44 illustrates the concept for the two parallel bridges. The two photos of the Centennial Lakes bridges indicate the type of design treatments that could be used for the bridges, in order to enhance the appearance of the underpass and to provide continuity with the Centennial Lakes design theme.

The new underpass would be developed to accommodate a pedestrian path and a bicycle trail and it could include special features, such as bridge lighting and public art.

#### H. France Avenue Overpasses

One of the key recommendations for the path system, as discussed in Chapter III, is to construct two pedestrian and bicyclist overpasses over France Avenue, one at 69<sup>th</sup> Street and one at 72<sup>nd</sup> Street.

It is also recommended to use a maximum 5% slope (a rise of no more than 1' in 20') for the approach ramps, which would require 420' long approaches on each side of the two bridges, in order to provide a 17'-4" clearance under the bridges and 3'-8" for the bridge deck structure. Using a 5% slope eliminates the need for special hand rails and for intermediate landings.

Using such long bridge approaches could work in these two overpass locations, since the origin and destination points are primarily areas that are located a block or more away from France Avenue.

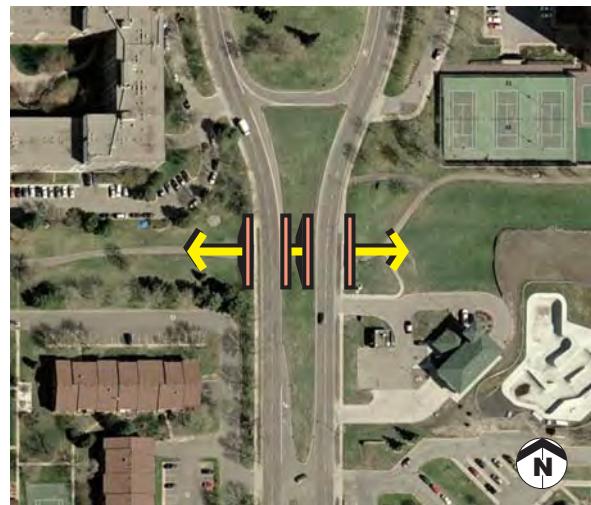
Figure 44

## York Avenue Underpass Design

Promenade Design



**Existing Underpass**



**Proposed Double-Bridge Underpass**



**Centennial Lakes Bridges Theme**



**Urban Design Plan**

July 2007

**URS**

On the east side the primary destination is the central spine and the Promenade / Centennial Lakes path system. On the west side the origin / destination points are the regional trail that extends to the west and the residential neighborhoods located to the west.

This section presents some preliminary location and configuration options for the two overpass bridges. However, more in-depth studies are required to further define the exact bridge types to be used and the approach alignments and configurations.

### Overpass Design

The overpass bridges at France Avenue could be designed in various styles utilizing a number of techniques. Figures 45 and 46 provide examples of various bridge types that might be applicable. They range from a very basic, pre-fabricated arch truss bridge to highly complex, yet dynamic cable-stay or artistically clad bridges.

The France Avenue overpasses would be located in a very prominent location in the City of Edina and, therefore, might warrant special consideration and treatment.

### Overpass Configuration Options

For the 72<sup>nd</sup> Street crossing, there are a number of ways of how the bridge and the bridge approaches could be configured. Figures 47 through 50 provide concept diagrams of how the overpasses could be aligned and configured. For the 69<sup>th</sup> Street crossing, there is essentially only one option, bottom plan in Figure 50, although there may be a number of variations of how the approaches might be aligned.

Each diagram identifies the three components required for the overpass.

- Retained Fill Segments. Typically, some of the lower segments of the bridge approaches would be constructed on fill with sloped embankments or retaining walls. These are shown in yellow.

- Structured Approach Segments. At a certain height the retained fill construction would become uneconomical and the bridge approach design would convert to a pylon supported structured section. These are shown in orange.
- Bridge Segments. The segment over the roadway would be a true bridge. These are shown in red.

The diagrams also indicate approach paths for accessing the overpasses.

All the overpasses are assumed to be approximately 10' wide, although this would need to be revisited in final design. The objective would be to provide enough room for pedestrians and bicyclists, as well as small machines for cleaning and clearing snow from the bridges. For accommodating the small machines, straight bridge approaches would be preferable over switchbacks.

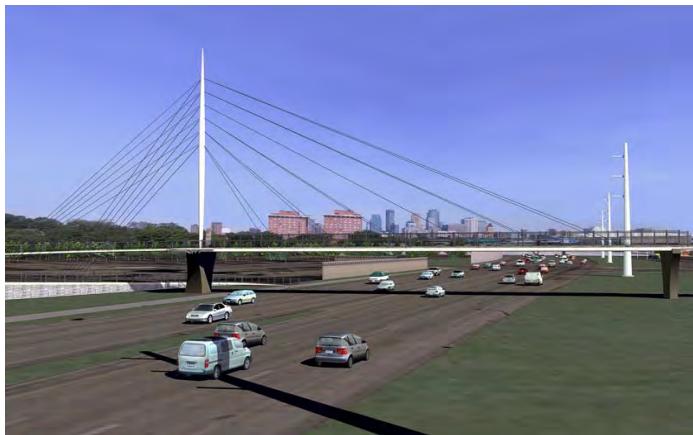
The concept plans show the bridge approaches and the bridges only. If desired, stairs could be added where needed for additional direct access to the bridges.

### 72<sup>nd</sup> Street Options

Following is a brief description of each of the six overpass options for the 72<sup>nd</sup> Street crossing. Actually, there are a number of other permutations, since some of the features in each of the options could be mixed and matched or interchanged between the options.

Unless the bridge approach on the west side can be fitted into the 72<sup>nd</sup> Street ROW, property may need to be acquired or an easement may need to be obtained from the Sunrise Assisted Living property.

In addition, property may need to be acquired, or an easement may need to be obtained on the east side from the Home Store property and, depending upon the alignment option selected, also from the Byerly's property.



**Cable-Stay Bridge - Midtown Greenway**



**Suspension Bridge - Boston**



**Arch Cable - Edina**



**Arch Cable - Denver**



**Steel Truss - Minneapolis**



**Wood Truss - St. Cloud**

July 2007

**EDINA**  
PROMENADE

**URS**

**Urban Design Plan**



Figure 45

**Overpass Examples  
Group 1**

**Overpass Concepts**



**Ornamental Truss - St. Paul**



**Arts Truss - Paris**



**Ornamented Beam - Kansas City**



**Specially Clad Beam - Chicago**



**Arch Truss - Rochester**



**Switchback Ramps - Rochester**

July 2007

**EDINA**  
PROMENADE

**URS**

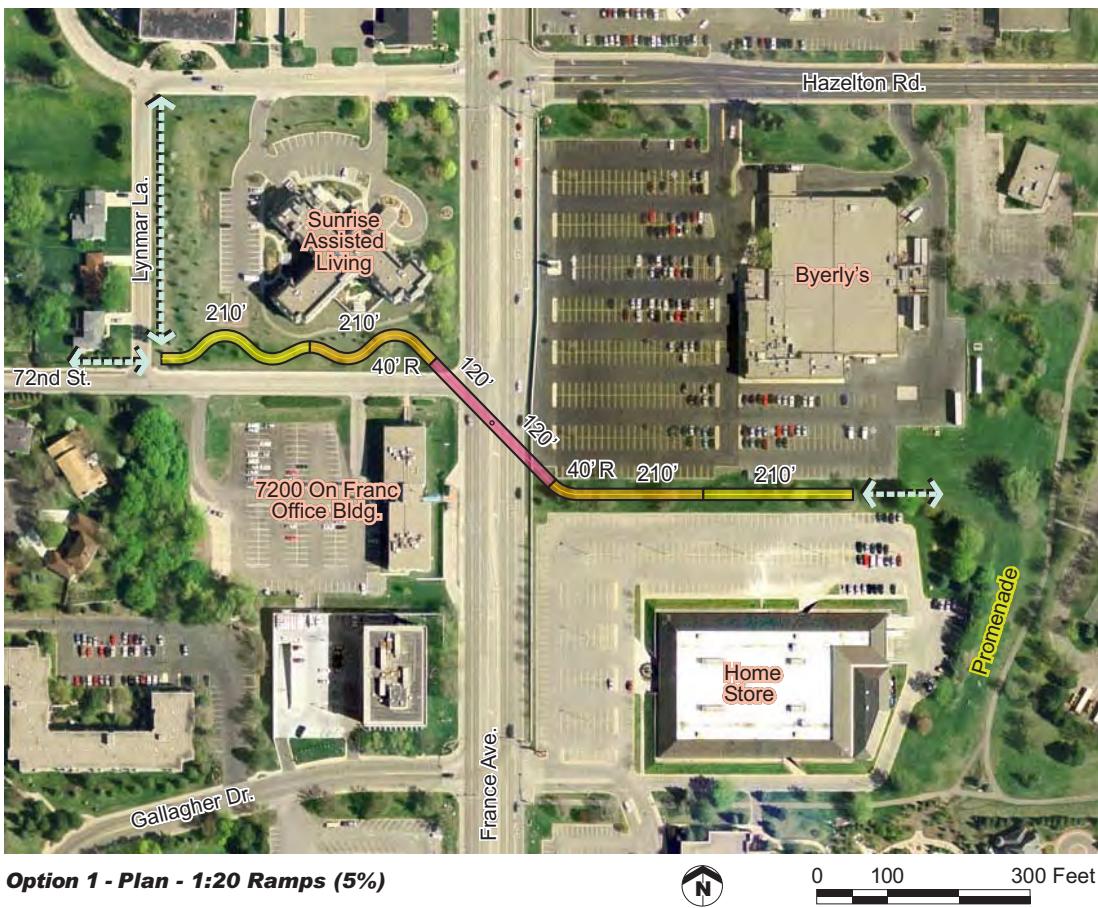
**Urban Design Plan**



Figure 46

**Overpass Examples  
Group 2**

Overpass Concepts



Option 1 - Plan - 1:20 Ramps (5%)



0

100

300 Feet



Option 1 - Image

Figure 47

## Overpass at 72ns St. Option 1

### Overpass Concepts

#### Legend

Bridge Segment (Special Bridge Structure)

Bridge Approach Segment (Pylon Supports)

Retained Fill Segment (Retaining Walls)

Access Paths



Urban Design Plan

July 2007

URS

Figure 48

## Overpass at 72ns St. Options 2 & 3

### Overpass Concepts

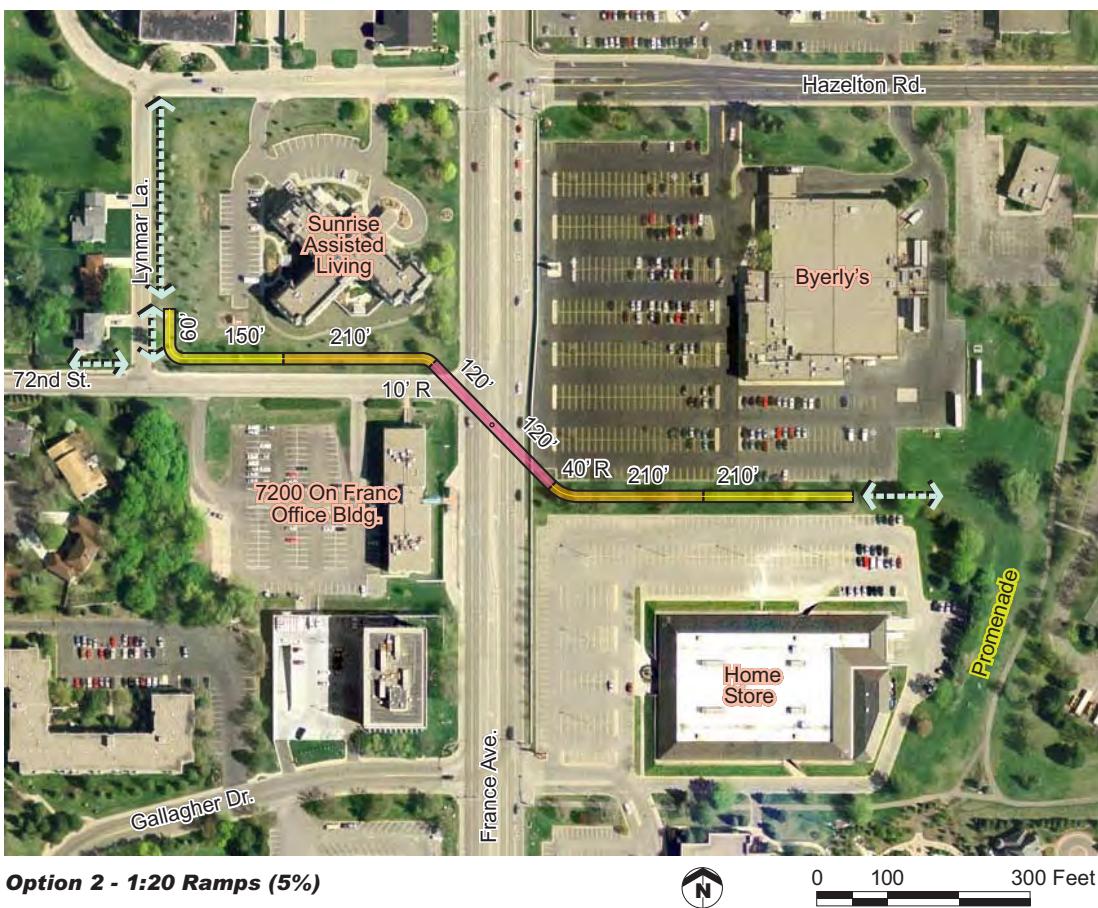
#### Legend

Bridge Segment (Special Bridge Structure)

Bridge Approach Segment (Pylon Supports)

Retained Fill Segment (Retaining Walls)

Access Paths



Option 2 - 1:20 Ramps (5%)



Option 3 - 1:20 Ramps (5%)



### Urban Design Plan

July 2007

URS

Figure 49

## Overpass at 72ns St. Options 4 & 5

### Overpass Concepts

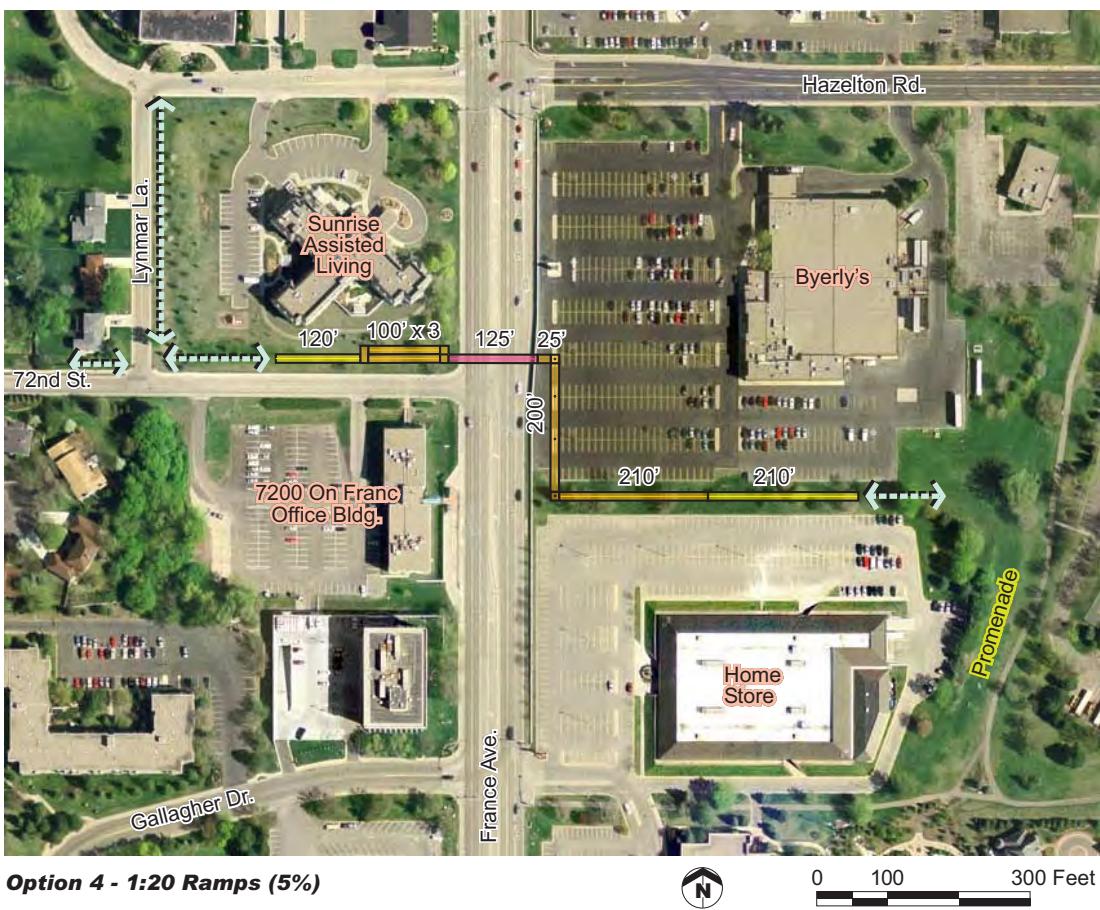
#### Legend

Bridge Segment (Special Bridge Structure)

Bridge Approach Segment (Pylon Supports)

Retained Fill Segment (Retaining Walls)

Access Paths



Urban Design Plan

July 2007

URS

Figure 50

## Overpass at 72ns St. - Option 6 & 69th St. Option

### Overpass Concepts

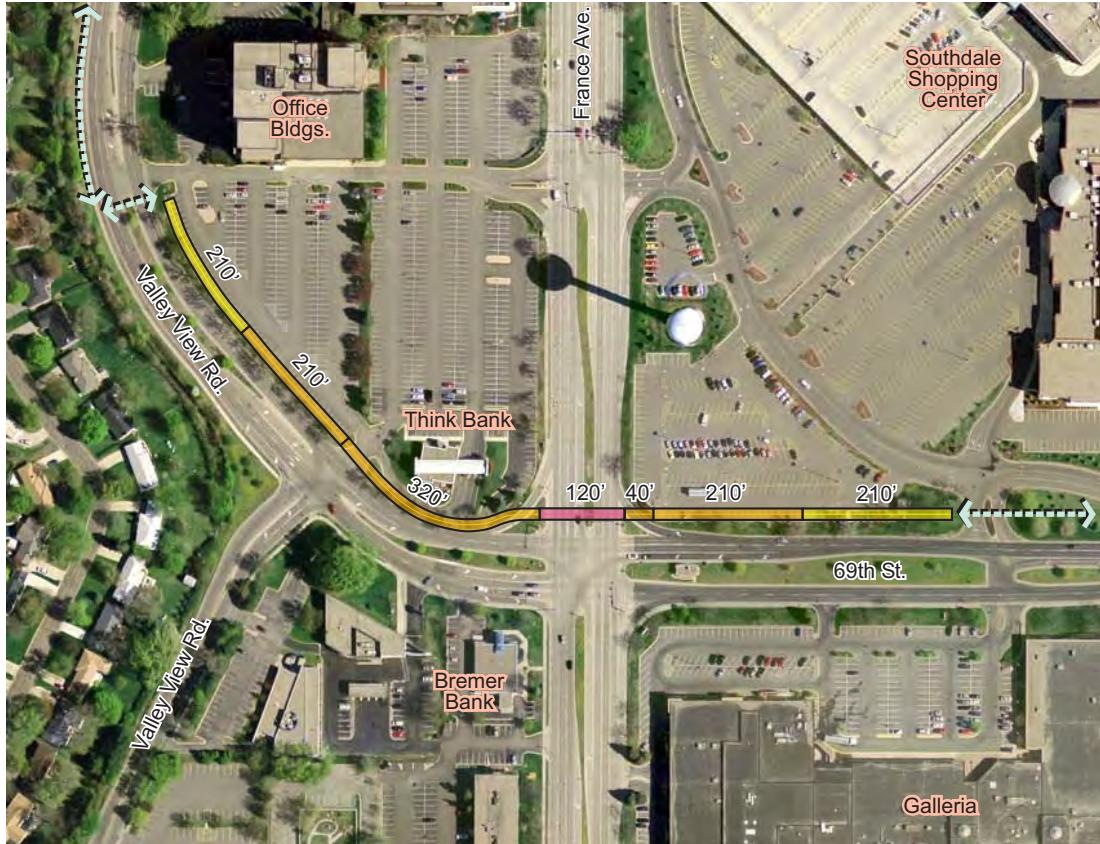
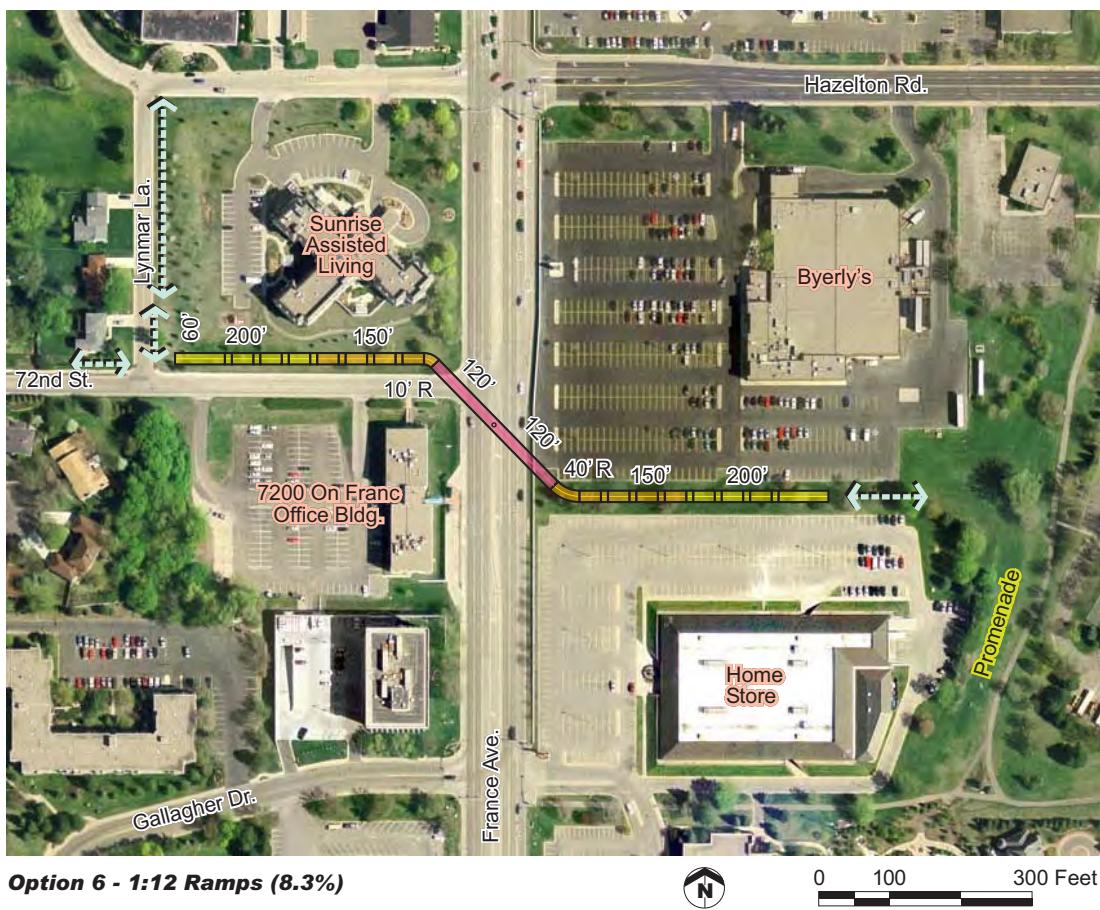
#### Legend

Bridge Segment (Special Bridge Structure)

Bridge Approach Segment (Pylon Supports)

Retained Fill Segment (Retaining Walls)

Access Paths



Urban Design Plan



July 2007

URS

Option 1. In this option (Figure 47), the bridge approach on the west side would meander or 'snake' in order to create enough distance for the 420'-long approach. This would require a greater easement from and would have a greater impact on the Sunrise Assisted Living property.

The bridge would be positioned diagonally across the intersection. In order to shorten the bridge span, it might be feasible to locate a pylon in the median of France Avenue.

Option 2. In this option (top plan in Figure 48), the bridge approach on the west side is straightened out, but it curves around the corner at Lymar Lane.

The bridge configuration would be the same as in Option 1.

Option 3. In this option (bottom plan in Figure 48), a switchback is introduced on the west side. This would require some easement from the Sunrise Assisted Living property. It would also be less desirable since the west side approach would be more difficult to clean and, since people do not like to backtrack, fewer people might be inclined to use the overpass.

The bridge configuration would be the same as in Option 1.

Option 4. In this option (top plan in Figure 49), the bridge would be aligned with the north side of 72<sup>nd</sup> Street, which would create a shorter overall bridge, but would have an impact on the southwest corner of the Byerly's property.

In Option 4, any one of the previously discussed configurations for the west side approach could be used.

Option 5. This option is similar to Option 4, except that the bridge would be aligned on pylons along the median of France Avenue. The feasibility of this option would need to be tested, due to potential undesirable impacts

on the traffic operations along France Avenue.

Option 6. This option illustrates a potential overpass configuration using steeper bridge approaches. The approaches would have a slope of 8.3%, or a rise of 1' in 12', which would require special handrails and a landing every 25'.

### 69<sup>th</sup> Street Overpass

For the 69<sup>th</sup> Street overpass the simplest option would be to locate the bridge approaches along the north side of Valley View Road on the west side and along the north side of 69<sup>th</sup> Street on the east side.

The two issues with this option are that it would require a long structured approach on the west side, in order to clear the driveway access to the office complex and the Think Bank, and it would require a special pedestrian crossing of Valley View Road, at the north end.

An option, in order to mitigate the need for the special pedestrian crossing, might be to extend the structured approach, on the west side, south across Valley View Road and to descend to grade on the southwest side of Valley View Road.

### Overpass Conclusions

At this point it is difficult to make recommendations regarding which might be the preferred overpass configurations, until further more detailed studies and evaluations are completed.

### 72<sup>nd</sup> Street Overpass

As was mentioned before, the straightest configurations would be the most preferable, however, they may have impacts on adjoining properties and on traffic operations.

The key issues that need to be addressed for the 72<sup>nd</sup> Street overpass are:

- Feasibility of fitting the west side approach in the 72<sup>nd</sup> Street ROW, or getting

- easements from the Sunrise Assisted Living property.
- Feasibility of getting easements from the Home Store, and, potentially, also from the Byerly's properties.
- Feasible of placing one or more support pylons in the median of France Avenue.

#### 69<sup>th</sup> Street Overpass

The key issues that need to be addressed for the 69<sup>th</sup> Street overpass are:

- Feasibility of fitting the approaches and bridge supports in the Valley View Road and 69<sup>th</sup> Street ROWs.
- On which side of Valley View Road should the west side approach ramps be located.

Various options exist for staging the project. The project could be implemented by segment, or it could be implemented by constructing the bicyclist path first for the full length of the project and then proceeding to implement the rest of the project.

Also, since the special feature areas call for including public art, the public art components could be implemented incrementally, depending upon the available funding and the arts program requirements.

### I. Preliminary Cost Estimate

Following is a preliminary construction cost estimate for the proposed Edina Promenade site improvements. The estimate is based on the concept design developments presented in this report. The detail in the cost estimate represents the level of refinement that has been completed to date.

The cost estimate data, presented in the four cost estimate tables, includes a cost estimate for each of the three segments, identified below, and a summary of all the costs, including the new York Avenue underpass.

Segment	Approximate Length
North Segment	700'
Middle Segment	1,000'
South Segment	1,100'

For comparison, the approximate lengths of the North Park segment in the Centennial Lakes Park is approximately 700' from the north edge of the Park to the Parklawn Avenue bridge.

Table 1  
North Segment – Preliminary Cost Estimate

	Item / Description	Unit	Unit Cost	Qty.	Total Amount
<b>A.</b>	<b>MOBILIZATION &amp; REMOVALS</b>				<b>\$ 30,000</b>
1	Mobilization	LS	\$ 20,000	1	\$ 20,000
2	Removals and Clearance	LS	\$ 10,000	1	\$ 10,000
<b>B.</b>	<b>PAVEMENT</b>				<b>\$ 127,800</b>
1	10'-Wide Concrete Pedestrian Path	LF	\$ 50	780	\$ 39,000
2	10'-Wide Bituminous Bike Trail (Incl. Edges)	LF	\$ 40	780	\$ 31,200
3	Plaza Pavement (colored and textured)	SF	\$ 8.00	7,200	\$ 57,600
<b>C.</b>	<b>SITE AMMENITIES</b>				<b>\$ 116,800</b>
1	Gateways	EA	\$ 20,000	2	\$ 40,000
2	Sculptural Fountains (Incl. Connections)	EA	\$ 60,000	1	\$ 60,000
3	Swinging Benches	EA	\$ 5,000	2	\$ 10,000
4	Benches	EA	\$ 1,200	4	\$ 4,800
5	Signs	LS	\$ 2,000	1	\$ 2,000
<b>D.</b>	<b>LIGHTING</b>				<b>\$ 108,000</b>
1	Double-Bell Ped. Lights (Incl. Wiring)	EA	\$ 9,000	12	\$ 108,000
<b>E.</b>	<b>LANDSCAPING</b>				<b>\$ 123,890</b>
1	Evergreen Trees	EA	\$ 350	16	\$ 5,600
2	Deciduous Trees	EA	\$ 500	24	\$ 12,000
3	Ornamental Trees	EA	\$ 300	18	\$ 5,400
4	Deciduous Shrubs	EA	\$ 60	750	\$ 45,000
5	Evergreen Shrub	EA	\$ 75	320	\$ 24,000
6	Perennials	EA	\$ 18	1,280	\$ 23,040
7	Sod (Including 4" Topsoil)	SY	\$ 3.00	2,950	\$ 8,850
<b>F.</b>	<b>IRRIGATION</b>				<b>\$ 45,600</b>
1	Areas inside and outside paths	SF	\$ 1.00	45,600	\$ 45,600
<b>G.</b>	<b>MISCELLANEOUS</b>				<b>\$ 3,750</b>
1	Excavation Fill (Avg. of 18" Over Site)	CY	\$ 15	250	\$ 3,750
2	Retaining Walls	FSF	\$ 60	0	\$ -
<b>H.</b>	<b>UTILITIES</b>				<b>\$ 32,500</b>
1	Drinking Fountains (Incl. Connect.)	EA	\$ 10,000	1	\$ 10,000
2	Hydrant Relocation	EA	\$ 5,000	0	\$ -
3	MH Adjustment/Rebuild (Sanitary Sewer)	EA	\$ 2,500	1	\$ 2,500
4	MH Adjustment/Rebuild (Storm Sewer)	EA	\$ 2,000	2	\$ 4,000
5	New Storm Connection CB pipe MH	EA	\$ 8,000	2	\$ 16,000
	<b>Sub-Total</b>				<b>\$ 558,340</b>
	<b>Contingency (15%)</b>				<b>\$ 83,750</b>
	<b>Total North Segment</b>				<b>\$ 642,000</b>

Table 2  
Middle Segment – Preliminary Cost Estimate

	<b>Item / Description</b>	<b>Unit</b>	<b>Unit Cost</b>	<b>Qty.</b>	<b>Total Amount</b>
<b>A.</b>	<b>MOBILIZATION &amp; REMOVALS</b>				<b>\$ 30,000</b>
1	Mobilization	LS	\$ 20,000	1	\$ 20,000
2	Removals and Clearance	LS	\$ 10,000	1	\$ 10,000
<b>B.</b>	<b>PAVEMENT</b>				<b>\$ 139,840</b>
1	10'-Wide Concrete Pedestrian Path	LF	\$ 50	1,040	\$ 52,000
2	10'-Wide Bituminous Bike Trail (Incl. Edges)	LF	\$ 40	1,040	\$ 41,600
3	Plaza Pavement (colored and textured)	SF	\$ 8.00	5,780	\$ 46,240
<b>C.</b>	<b>SITE AMMENITIES</b>				<b>\$ 96,800</b>
1	Gateways	EA	\$ 20,000	1	\$ 20,000
2	Sculptural Fountains (Incl. Connections)	EA	\$ 60,000	1	\$ 60,000
3	Swinging Benches	EA	\$ 5,000	2	\$ 10,000
4	Benches	EA	\$ 1,200	4	\$ 4,800
5	Signs	LS	\$ 2,000	1	\$ 2,000
<b>D.</b>	<b>LIGHTING</b>				<b>\$ 153,000</b>
1	Double-Bell Ped. Lights (Incl. Wiring)	EA	\$ 9,000	17	\$ 153,000
<b>E.</b>	<b>LANDSCAPING</b>				<b>\$ 113,960</b>
1	Evergreen Trees	EA	\$ 350	16	\$ 5,600
2	Deciduous Trees	EA	\$ 500	24	\$ 12,000
3	Ornamental Trees	EA	\$ 300	18	\$ 5,400
4	Deciduous Shrubs	EA	\$ 60	600	\$ 36,000
5	Evergreen Shrub	EA	\$ 75	320	\$ 24,000
6	Perennials	EA	\$ 18	1,200	\$ 20,160
7	Sod (Including 4" Topsoil)	SY	\$ 3.00	3,600	\$ 10,800
<b>F.</b>	<b>IRRIGATION</b>				<b>\$ 56,000</b>
1	Areas inside and outside paths	SF	\$ 1.00	56,000	\$ 56,000
<b>G.</b>	<b>MISCELLANEOUS</b>				<b>\$ 6,900</b>
1	Excavation Fill (Avg. of 18" Over Site)	CY	\$ 15	460	\$ 6,900
2	Retaining Walls	FSF	\$ 60	0	\$ -
<b>H.</b>	<b>UTILITIES</b>				<b>\$ 36,500</b>
1	Drinking Fountains (Incl. Connect.)	EA	\$ 10,000	1	\$ 10,000
2	Hydrant Relocation	EA	\$ 5,000	0	\$ -
3	MH Adjustment/Rebuild (Sanitary Sewer)	EA	\$ 2,500	1	\$ 2,500
4	MH Adjustment/Rebuild (Storm Sewer)	EA	\$ 2,000	4	\$ 8,000
5	New Storm Connection CB pipe MH	EA	\$ 8,000	2	\$ 16,000
<b>Sub-Total</b>					<b>\$ 633,000</b>
<b>Contingency (15%)</b>					<b>\$ 94,950</b>
<b>Total Middle Segment</b>					<b>\$ 728,000</b>

Table 3  
South Segment – Preliminary Cost Estimate

	<b>Item / Description</b>	<b>Unit</b>	<b>Unit Cost</b>	<b>Qty.</b>	<b>Total Amount</b>
<b>A.</b>	<b>MOBILIZATION &amp; REMOVALS</b>				<b>\$ 30,000</b>
1	Mobilization	LS	\$ 20,000	1	\$ 20,000
2	Removals and Clearance	LS	\$ 10,000	1	\$ 10,000
<b>B.</b>	<b>PAVEMENT</b>				<b>\$ 194,280</b>
1	10'-Wide Concrete Pedestrian Path	LF	\$ 50	1,100	\$ 55,000
2	10'-Wide Bituminous Bike Trail (Incl. Edges)	LF	\$ 40	1,100	\$ 44,000
3	Plaza Pavement (colored and textured)	SF	\$ 8.00	11,910	\$ 95,280
<b>C.</b>	<b>SITE AMMENITIES</b>				<b>\$ 96,800</b>
1	Gateways	EA	\$ 20,000	1	\$ 20,000
2	Sculptural Fountains (Incl. Connections)	EA	\$ 60,000	1	\$ 60,000
3	Swinging Benches	EA	\$ 5,000	2	\$ 10,000
4	Benches	EA	\$ 1,200	4	\$ 4,800
5	Signs	LS	\$ 2,000	1	\$ 2,000
<b>D.</b>	<b>LIGHTING</b>				<b>\$ 162,000</b>
1	Double-Bell Ped. Lights (Incl. Wiring)	EA	\$ 9,000	18	\$ 162,000
<b>E.</b>	<b>LANDSCAPING</b>				<b>\$ 117,560</b>
1	Evergreen Trees	EA	\$ 350	16	\$ 5,600
2	Deciduous Trees	EA	\$ 500	24	\$ 12,000
3	Ornamental Trees	EA	\$ 300	24	\$ 7,200
4	Deciduous Shrubs	EA	\$ 60	600	\$ 36,000
5	Evergreen Shrub	EA	\$ 75	320	\$ 24,000
6	Perennials	EA	\$ 18	1,120	\$ 20,160
7	Sod (Including 4" Topsoil)	SY	\$ 3.00	4,200	\$ 12,600
<b>F.</b>	<b>IRRIGATION</b>				<b>\$ 65,600</b>
1	Areas inside and outside paths	SF	\$ 1.00	65,600	\$ 65,600
<b>G.</b>	<b>MISCELLANEOUS</b>				<b>\$ 130,140</b>
1	Excavation Fill (Avg. of 18" Over Site)	CY	\$ 15	516	\$ 7,740
2	Retaining Walls	FSF	\$ 60	2,040	\$ 122,400
<b>H.</b>	<b>UTILITIES</b>				<b>\$ 51,500</b>
1	Drinking Fountains (Incl. Connect.)	EA	\$ 10,000	1	\$ 10,000
2	Hydrant Relocation	EA	\$ 5,000	1	\$ 5,000
3	MH Adjustment/Rebuild (Sanitary Sewer)	EA	\$ 2,500	5	\$ 12,500
4	MH Adjustment/Rebuild (Storm Sewer)	EA	\$ 2,000	4	\$ 8,000
5	New Storm Connection CB pipe MH	EA	\$ 8,000	2	\$ 16,000
<b>Sub-Total for South Section</b>					<b>\$ 847,880</b>
<b>Contingency (15%)</b>					<b>\$ 127,182</b>
<b>Total North Segment</b>					<b>\$ 975,000</b>

Table 4  
Summary – Preliminary Cost Estimate

	<b>Item</b>	<b>Total Amount</b>
A.	<b>Total for North Segment</b>	\$ 642,000
B.	<b>Total for Middle Segment</b>	\$ 728,000
C.	<b>Total for South Segment</b>	\$ 975,000
	<b>Total for Three Promenade Segments</b>	\$ 2,345,000
D.	<b>York Avenue Underpass – Twin Bridges</b>	\$ 1,289,000
	<b>Grand Total</b>	\$ 3,634,000