Appendix A

Preliminary Public Input For Street Concepts
Open House Input

Public input for Phase 3 was largely conducted in the month of November 2014. Three Open Houses were held on November 8, 13 and 19. One smaller community meeting was also held on November 18. At each event, attendees were asked for their input about roadway concepts, streetscape amenities, and redevelopment opportunities at 5 of the major intersections in the corridor. Input was provided by notes posted on boards at all meetings. At three of the meetings on Nov 13, 18 and 19, attendees were also given written paper surveys to provide feedback. The following is a summary of feedback received at the Public Open Houses:

Roadway Concepts

Open House attendees were asked to rank three roadway concepts, with 1 being the most preferred and 3 being the least preferred of the options. The three concepts below illustrate roadway options with different choices for on-street bike and parking facilities.

Concept A: Includes bike lanes on both sides of Penn Avenue (removes on-street parking)
A total of 39 people completed written surveys; 30 respondents ranked the roadway concepts in order of preference. Concept C was ranked in the top position by half of the respondents. Concept B was ranked 9 times in position #1, and Concept A was ranked #1 only 7 times. Concept A was also ranked #3 by nearly half (14) of the respondents. Results are shown in the following table:
Additional questions on the written survey help with understanding the importance placed on various features of the roadway corridor. The following supports the focus on pedestrians, bikes, and greening of the corridor on Penn Avenue. A total of 9 people responded to this question:

What's most important to you in rethinking Penn Ave?

<table>
<thead>
<tr>
<th>Feature</th>
<th>Rank #1</th>
<th>Rank #2</th>
<th>Rank #3</th>
<th>Rank #4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greening / Landscape</td>
<td>10</td>
<td>5</td>
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<td>Pedestrian Area</td>
<td>7</td>
<td>13</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>On-street Parking</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Bike Lanes</td>
<td>21</td>
<td>8</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

In questions asked about travel on Penn Avenue, answers indicate the car is the primary mode of transportation on Penn Avenue and the most used mode for accessing businesses in the corridor. Bikes came in second as a preferred mode of transportation.

The following comments were collected at the Open House meetings about each of the roadway concepts.

Comments Received:

Roadway Concept A
- Prefer this concept with safe bike lanes
- Bike facilities must be maintained for safety
- Like bike lanes if there is a striped buffer

Roadway Concept B
- Need bike lanes for the next 75 years
- Need improved crosswalks
- Make it easier for bikes to be on Penn
- Less parking on busy street to help congestion and accidents
- Don’t give up parking completely in residential areas
- Listen to people who live on Penn regarding parking
- I need more street parking, it is already difficult to find parking without restricting
- Prefer bikes off Penn
- Retain parking for businesses is high priority, also true for residents
- Removing parking will negatively impact businesses
- Parking should be concentrated at nodes

Roadway Concept C
- Must keep parking on one side
• Safety is important
• Look at N Damen Ave in Chicago
• Ensure access for EMS, fire, police vehicles
• We need traffic calming on Penn, narrow lanes slow traffic and reduce accidents (Minnehaha in St Paul 10-5-2007 and Como and Marshall in St Paul 11-5-2007)
• Adds safety to Penn and also includes parking
• Best solution for conflict, best of both worlds
• Needs to be on the online survey (2)
• Best solution to slow traffic on Penn Avenue down
• Good compromise between bikes and parking
• All concepts work, but we want to narrow curb width to gain more green
• Do bike lanes actually increase biking, has this been studied?
• Where does parking get moved to? Queen Ave is already maxed out
• Highest priority should be put on transit riders, pedestrians, greening, and lighting
• Nodes today are under-utilized, we need more development before more parking

**Streetscape Amenities**
Open House attendees were asked to provide feedback on a streetscape amenity preference survey. The visual survey provided precedent images illustrating a variety of streetscape amenities at residential and node areas along Penn Avenue. The streetscape precedent images illustrated elements reflecting standard, medium and high level of amenities, including such elements as street trees and plantings, seating, pedestrian lights, special pavers, signage and wayfinding. The following is a brief summary of the input received at the Public Open Houses:

**Amenity Preference Survey (Mid-Block/Residential):**

**Standard Level of Amenities**

![Streetscape Amenities Image]

**Community Input**
- I want trees like the ones in this picture on Penn Avenue
- Worried that I will lose my front lawn
- I like an option that blends the standard and medium level elements

**Medium Level of Amenities**

**Community Input**

- Any of these amenities are fine, just make them greener
- I like the garden in boulevard idea, just add vegetables

**High Level of Amenities**

**Community Input**

- Don’t like what is pictured in the high level amenities photo
- I like the signage/learning elements because we already have great and interesting things to highlight and share with others about in North Minneapolis
- We need more culture in these designs. We need to promote our history and culture

**Amenity Preference Survey (Nodes/Mixed-Use):**

**Standard Level Amenities**

**Community Input**
- Power station to recharge cell phones
- Provide pay phones
- I like the standard option
- Appropriate without being too expensive
- Approachable working class feel with business opportunities for local entrepreneurs
Medium Level of Amenities

Community Input
- Medium and high amenities are appropriate at the nodes
- More green
- Any of these options would be good
- Outdoor dining like this, with bike racks and neighborhood identity elements

High Level Amenities

Community Input
- Medium and high amenities are appropriate at the nodes
• Provide green space on roof tops in addition to amenities on the street
• High level amenities is appropriate but building heights should not exceed 3 stories
• I like the street trees, planters, trash, bike racks, special paving, ADA access, and bumpouts but this option also needs more mixed-use
• This option with signage and wayfinding
• I like the pavers and decorative trash cans

Redevelopment Opportunities
Open House attendees were asked to provide feedback on potential redevelopment opportunities explored for 5 key intersections along Penn Avenue, including 44th Avenue, Lowry Avenue, West Broadway, Plymouth Avenue and Glenwood Avenue. Attendees were asked to weigh in on land uses, development character and density as well as building heights. The following is a brief summary of the input received at the Public Open Houses:

44th Avenue and Penn Avenue

Land Use
• Apartments
• Townhomes
• Restaurants
Development Character
• Address parking – cars, bikes, mopeds
• Create plaza with flowers near Warren Building
• Make it a more child-friendly intersection
• Shared parking strategy
• Create places for public gardening
• This node needs more green space
• Like the idea of an iconic building at the end of Penn Ave, but parking must be resolved first
Density/Building Height
• Density is good – I prefer Option 3
• With 3 stories, more green space would be needed

Lowry Avenue and Penn Avenue

Land Use
• Apartments
• Affordable Townhomes
• Office
• Retail/Entertainment
• Restaurants
• Community Garden
• Parks and plazas
• Low cost child care
Development Character
• Locate buildings further from the street to make room for pedestrians
• Add more green space
• Strengthen connections to Cleveland Park

Density/Building Height
• The higher the buildings here the better
• No more than 3 story buildings at this node

**West Broadway and Penn Avenue**

Land Use
• Apartments
• Townhomes
• Retail/Entertainment
• Restaurants
• Office
• Community Garden
• Parks and plazas

Development Character
• Utilize historic buildings
• Improve traffic flow

Density/Building Height

**Plymouth Avenue and Penn Avenue**

Land Use
• Apartments
• Townhomes
• Retail
• Restaurants
• Office
• Community Garden
• Parks and plazas

Development Character
• Add lights and allow light control for night movies in a public plaza

**Glenwood Avenue and Penn Avenue**

Land Use
• Apartments
• Retail
• Restaurants
• Parks and plazas
Development Character

- I like the idea of mixed use at this node with first floor retail and housing above
- Like the options that show plazas and green space
- Build for mixed-income
- Some of the materials look too modern and cheap. Buildings should be built of materials that express permanence
MetroQuest Input

Street Concept A

An online survey was made available to users on October 27, 2014. To date, 157 people have provided responses using the online tool. Part of the survey specifically requested respondents rate the street concepts from 1 to 5, with 5 being the most satisfied with the concept. At the time the survey went online, Concept C was not finalized, and the tool therefore only includes ratings for Concept A and Concept B.

Concept A proposes a reconstructed roadway with wider sidewalks, green boulevards, dedicated bike lanes, and two lanes of vehicle traffic. On-street parking is removed in this concept. 97 of 157 respondents rated Concept A on a scale of 1-5 (with 5 being the most satisfied). Concept A scored an average of 3.56 in overall satisfaction of the concept. The most frequently chosen rating is 5.

Comments received about Concept A primarily support the need for some continued on-street parking on Penn Avenue. Respondents showed concern that removal of on-street parking would make it difficult for residents who live on Penn. One commenter mentioned that North Minneapolis isn’t ready for parking to be removed. Another suggested that people will pull their car over to drop people off or park on the street anyway, even if they’re not supposed to, which would impede car and bicycle traffic.

Several commenters questioned why a third option was not available here and others noted that they prefer Concept C, which was presented at community meetings and open houses in November. Reasons for this preference include the continued need for some on-street parking, but support for adding bike lanes to Penn.

The fewest comments received were in full support of Concept A. The list of comments received are included below and grouped under general response topics.

Concept A Comments

In full support of concept:

- Best
- Biking feels much much safer on busy roads, especially for people who may not otherwise feel safe biking, such as women, who bike at much lower rates than men. Sacrificing parking means focusing on transit and bike quality and moving some existing parking.

Against the removal of on-street parking:

- This would be extremely difficult for those who live on Penn and utilize parking on Penn.
- Need parking on one side at least- more on both sides where there are many multiple dwellings
- This would best serve the community through the next 100 years but North Minneapolis isn't ready to have its parking removed. I support concept #3. Removing parking on one side
- This is a very clean, safe design. It looks beautiful and it would help traffic continue at a good rate. However, you know that people are going to "park" to pick people up, text, talk to pedestrians...the transit police and/or beat cops would really have to patrol for a long time to get people to understand that "no parking means no parking."
• Removing parking availability in such a highly residential area would be problematic, no matter how pretty. Additionally, loss of space for parking also means loss of space for buses to pull in and out for riders, of which there are many.
• Add marked parking zones like done on France Avenue South north of Hwy 62!

Against the idea of adding bike lanes on Penn Avenue:
• I like biking, but it may be safer to ride on side streets and leave Penn to the cars.
• too dangerous for bikers on penn with aggressive drivers
• No more Bike Paths.
• Don't cow tow to the bike lobby group on this project.
• Penn is too busy for bike traffic. Bicyclists need to be smart about their own safety and move to Oliver and Queen and then come up a side street. Stop adding bike lanes where they are not safe and cause vehicle traffic to be impeded by having to maneuver around slow bicyclists and those that refuse to follow traffic laws.

In support of Concept C (not included in the Metroquest online survey):
• I prefer the concept that I have seen with parking on one side of the street in order to accommodate both parking and bike lanes.
• Doing this on 11/13/14. Where is Concept C? Why is this all or nothing? One side of parking would be fine. If housing has to be moved, move good homes to vacant northside land to fill in the tear downs.
• Maybe parking on one side, and bike lanes in the other one?
• Do it on one side of the street, there just isn't room for both sides.
• Except - framing this as "a choice between bikes and parking" is a false choice. Why aren't other options being presented?

Other:
• We don't need parking right at each business. People should feel safe enough to be able to walk a block or two to get to a local business.
• Turn lanes!!!!!!
Street Concept B

Concept B proposes a reconstructed roadway with wider sidewalks, green boulevards, on-street parking, and two lanes of vehicle traffic. Bike lanes are not included on Penn Avenue in this concept. 88 out of 157 respondents rated Concept B on a scale of 1-5 (with 5 being the most satisfied). Concept B scored an average of 2.73 in overall satisfaction of the concept. The most frequently chosen rating was a 1.

Despite a lower average rating and most frequent response as a Rating of 1, comments received about Concept B primarily support the concept. Respondents strongly indicate a need for continued on-street parking on Penn Avenue, especially for residents living within the corridor. Several commenters see no need for adding bike lanes and believe Penn Avenue is too dangerous for bike traffic.

Similar to comments received for Concept A, several comments were written in support of Concept C which includes both bikes and on-street parking within the reconstructed roadway.

The list of comments received on Concept B are included below and grouped under general response topics.

Concept B Comments

In full support of the concept:

- There are few bikes now and likely few in the future. Proposal is strong on all features except for dedications of little used bikeways
- i am in favor of this design over the other two
- Enough already with the Bike Paths! We need to provide safe access and parking for automobiles.
- Given the high volume of traffic on this road, it makes more sense to have more motorist room than biking room, especially if an alternate biking-friendly route could be made available.
- Families that live along Penn deserve to be able to access their homes from the front. Keep in mind, not all existing homes have accessible access from the back and the front access is relied upon. Do not ruin home values by taking away this access and parking availability. Bike lanes belong on Oliver and Queen where there is less vehicle traffic.

Against the concept:

- Super bad

In support of Concept C (not included in the Metroquest online survey):

- This does absolutely nothing to address the safety of bike riders on Penn Ave and would be a major fail on the county’s part of addressing the health and commercial needs of North Minneapolis. This would not best serve the community through the next 100 years I support concept #3. Removing parking on one side
- Can you have one side with parking and one side with a bike lane?
- Want to serve both parking and biking needs
Other:

- Lyndale Ave. S. South of Lake Street is an example of a successful street project and I would like to see Penn Ave. N. Look similar to that project when it is done.
- What bike lane?
- To maintain parking for the residents will be handy for them as individuals, but as a safe option for traffic and the neighborhood future as a whole? I think it’s a mess with parking.

Conclusion

Comparing the two average scores and most frequent ratings received via Metroquest, it appears Concept A is preferred over Concept B for street design. By this measure, the addition of bike lanes and removal of on-street parking on Penn is the more favorable approach to roadways reconstruction in the corridor. However, comments received about each of these would appear to better support Concept B, as the loss of parking is indicated to be a major sacrifice for community residents.

With the introduction of Concept C, responses received via written survey and through open house materials, show a stronger preference for this third concept. Respondents indicated strong support for the combination of dedicated bike lanes and retention of on-street parking on one side of the street as the most favorable option, providing a compromise accommodating both of the two most-used modes of transportation in the corridor – vehicles and bicycles. Support for this concept was also mentioned within the Metroquest online survey through comments received.
Neighborhood Meetings Input

The Penn Avenue Community Works project team members conducted several meetings in October and November, 2014 to present preliminary bus rapid transit planning, roadway concepts and redevelopment opportunities and solicit feedback from neighborhood organizations. Members of neighborhood organizations completed priorities surveys and provided comments on the alternatives. The following is a brief summary of the feedback received:

**Bus Rapid Transit Service/Facilities**

- Concerns about the lack of existing bus stop facilities such as shelters and seating
- Several expressed concerns about safety
- Questions and concerns regarding funding for the BRT line
- Some felt this may just be another unrealized promise for Northside residents
- Metro Transit needs to work closely with abutting residential property owners in station areas since they are likely to experience more activity than they do now due to people waiting for the bus
- Metro Transit needs to educate people on how the BRT system works – ticketing, etc.
- Some expressed concern about hide and ride at station sites

**Roadway Concepts**

- Did Penn Avenue historically have street trees on it?
- Questions and concerns regarding funding for roadway and streetscape improvements
- Don’t want to see a net loss of on-street parking along Penn Avenue. The parking on Penn is critical to residents and businesses on Penn Avenue
- Would like to see bike facilities on Penn but not at the cost of losing on-street parking
- Some concern about drive through crime on Penn Avenue
- Most people were thrilled at the idea of enhanced pedestrian sidewalks, green boulevards, street trees and better lighting on Penn Avenue
- Several expressed a desire for bike facilities on Penn Avenue or on adjacent roadways as bike boulevards
- Some areas along Osseo have significant sections of missing sidewalks
- Bike safety on Penn Avenue is a problem – some preferred the idea of having bike lanes on side streets
- Support for bike lanes on Penn Avenue for commuters, not recreational riders
- Concern about the number of cross-street stops if bikes were moved to Queen and/or Oliver
- Removal of on-street parking on either Queen or Oliver would be a big deal to the neighborhood

**Redevelopment Opportunities**

- Any redevelopment should be appropriately scaled and compatible with the existing scale and character of development
- Some concern regarding the aggressive redevelopment scenario (Option 3) at the 44th Ave node. Concerns about density and building height as well as any displacement of existing businesses
- Integrate small neighborhood serving businesses into new development at the nodes
• Redevelop vacant and underutilized sites
• 3-4 story buildings with upper story apartments and ground level retail and restaurant works at Lowry, West Broadway, Plymouth and Glenwood nodes. 2 story preferred at 44th Ave node
• Some concern over the absentee landlord condition that exists in North Minneapolis
• Consider senior housing in redevelopment scenarios
• Consider shared parking at West Broadway
• Value existing building stock (historic and/or high quality buildings)
• Add more green space to the nodes through redevelopment

**Priority Survey (What is important to you on Penn Avenue?)**

Each neighborhood organization completed a survey designed to gain a better understanding of neighborhood priorities regarding Penn Avenue. The following summarizes the results of the surveys. The top priorities are listed in order with the number of votes received for each:

<table>
<thead>
<tr>
<th>Priority</th>
<th>Votes received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business and Economic Development</td>
<td>31</td>
</tr>
<tr>
<td>Public Safety and Comfort</td>
<td>27</td>
</tr>
<tr>
<td>Green Space, Tees/Landscape</td>
<td>27</td>
</tr>
<tr>
<td>Community Character/Identity</td>
<td>22</td>
</tr>
<tr>
<td>Parking Availability</td>
<td>18</td>
</tr>
<tr>
<td>Variety of Housing Options</td>
<td>14</td>
</tr>
<tr>
<td>Transit Access and Service</td>
<td>13</td>
</tr>
<tr>
<td>Pedestrian Safety/Connectivity</td>
<td>12</td>
</tr>
<tr>
<td>Redevelopment Opportunities</td>
<td>12</td>
</tr>
<tr>
<td>Job Readiness and Access</td>
<td>10</td>
</tr>
<tr>
<td>Bicycle Safety/Connectivity</td>
<td>8</td>
</tr>
<tr>
<td>Connections to Local Amenities</td>
<td>6</td>
</tr>
</tbody>
</table>
Appendix C

Water Resources Engineering Meeting Summary
Record of Meeting

Location: City of Lakes Building
Client: Hennepin County
Date: 10/17/2014
Subject: Penn Avenue Water Resources Discussion
Attendees: Kelly Moriarity (City of Minneapolis), Paul Hudalla (City of Minneapolis), Kelly Hoffman (Hennepin County), Brian Johnson (SRF), David Filipiak (SRF), Eric Roerish (SRF)
From: Eric Roerish
Copy: Attendees, Mona Elabbady, Barry Warner

Purpose of Meeting:
The meeting was held in order to discuss the Penn Avenue North Visioning and Implementation Framework project with City Water Resources Staff and obtain their input on the corridor, water resources issues, and potential improvements.

Summary of Meeting
Brian Johnson provided an overview of the project, background, goals and objectives, and current status. A 20% (concept level design) will be finished in March 2015. Most concepts being considered would be contained between the existing curbs. Avoidance of right-of-way impacts is a top priority.

The preferred options are tending to be more lane reconfiguration, and not entailing a full roadway reconstruct. No matter the chosen options, improving water quality and/or conveyance issues where feasible must be considered.

Eric Roerish provided an overview of the preliminary water resources review that was completed in the first phase of the project, and outlined the storm water impacts and opportunities identified. In general, the corridor is fully built out and any proposed actions along the corridor will not result in an increase in impervious surface. As such, identifying existing issues and ways to improve them is the next step and requires input from City staff.

Corridor Review Summary:

1. The Penn Ave corridor contains very little trunk line storm sewer running north/south. Storm water is primarily conveyed across the corridor.

2. The corridor does drainage to several impaired water bodies.
3. There currently is no water quality treatment provided along the corridor.

4. There is one historic flooding area (Flood Area 5) that remains an issue. This is located between Lowry and 49th Avenue North.

City Input:

1. TMDLs are not an issue for projects that do not result in an increase in impervious surface and are considered rehabilitation or mill and overlay.

2. Linear projects with no increase in impervious do not trigger a 70% TSS removal, per Chapter 54. No permanent Best Management Practices (BMPs) for water quality should be required if the curb lines remain and the project is a restriping exercise. However, if it is a reconstruction project, TMDL opportunities would need to be investigated.

3. The City is frequently dealing with people that believe Green Infrastructure is the solution to all storm water issues. It is very hard to balance flood or rate mitigation with water quality goals in a single BMP. The City is continually trying to educate the lay person in regard to Green Infrastructure limitations, specifically the lack of rate control.

4. **Most important** to the City in the implementation of Effective BMPs. They need to be cost effective with low maintenance. It is important to identify what the goal is at each location, and what is possible at each location. One BMP or Green Infrastructure template for the corridor is not desired as it would most likely introduce ineffective BMPs.

5. Proposed BMPs will need to be discussed with City staff in terms of maintenance and long-term costs.

6. Flood Area 5 is the one issue along the corridor that City is concerned about. Penn floods during events equal to or greater that the 2-year.

7. There is an XP-SWMM model for this area that should be reviewed.

8. When investigating storage or rate control in the Penn corridor, a strong understanding of what other utilities reside underground is needed.

9. The XP-SWMM analysis would need to be used as part of any CB spacing design.

10. Additional storage along 35th is proposed, but not currently in the City CIP.

11. The City owns the pipes and the County owns the catch basins. The City provides maintenance for both the pipes and catch basins (County provides funds).

12. Currently there is no Green Infrastructure that the County owns and the City maintains.

13. The City has been conducting smoke testing of the system in North Minneapolis.
14. During 2014 and 2015 the City is performing sewer separation and flood mitigation along 29th Ave N. The project crosses Penn.

15. The City only looks at pipe conditions if a full reconstruction is to occur. Mill and overlay projects would not warrant a review of pipe conditions.

**Actions Needed**

<table>
<thead>
<tr>
<th>Actions Needed</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review City CIP</td>
<td>SRF</td>
</tr>
<tr>
<td>Provide XP-SWMM Model for Flood Area 5</td>
<td>City of Minneapolis</td>
</tr>
</tbody>
</table>

H:\Projects\8403\_Correspondence\Meetings\Meeting Records\141017\WR Discussion with MPLS Staff\MeetingRecord
Appendix D

Existing Roadway Cross Sections
Appendix E

Proposed Roadway Cross Sections
PROPOSED TYPICAL SECTION
OSSEO RD
PENN AVE TO 47TH AVE

R/W
VARES
VAR
VAR
6'
1'
11'
SB
VAR
BLVD
BIKE LANE
BIKE BUFFER ZONE
THRU LANE
TWO-WAY LEFT TURN LANE
THRU LANE
BIKE LANE
BIKE BUFFER ZONE
BLVD
SIDEWALK

R/W
VARES
VAR
VAR
6'
11'
11'
NSB
VAR
BLVD
BIKE LANE
BIKE BUFFER ZONE
THRU LANE
MEDIAN
THRU LANE
BIKE LANE
BIKE BUFFER ZONE
BLVD
SIDEWALK

PROPOSED TYPICAL SECTION
OSSEO RD
47TH AVE TO 49TH AVE

R/W
VARES
VAR
VAR
6'
11'
5.5'
SB
VAR
BLVD
BIKE LANE
BIKE BUFFER ZONE
THRU LANE
MEDIAN
THRU LANE
BIKE LANE
BIKE BUFFER ZONE
BLVD
SIDEWALK

Penn Avenue
Proposed Typical Sections
Minneapolis, MN
Appendix F

Queen Avenue Bike Boulevard Memorandum
Introduction

Relationship to Penn Avenue Community Works project

As various roadway configurations for the Penn Avenue Vision and Implementation Framework Plan were developed and evaluated, it was determined that the preferred roadway layout for Penn Avenue would not include a dedicated bike facility. As a result of this determination and community engagement input, a Queen Avenue Bike Boulevard Working Group consisting of Hennepin County and City of Minneapolis staff was established. The Working Group was charged with investigating the feasibility of implementing a bike boulevard focused around Queen Avenue that would extend from Osseo Road on the north to the Bassett Creek Trail, located just south of 2nd Avenue North.

The City of Minneapolis defines a Bike Boulevard as a lower-volume, lower-speed street that has been optimized for bicycle traffic. The purpose of a bicycle boulevard is to provide bicyclists, especially those who are not comfortable riding on busy streets a safer and more relaxing place to ride. While many residential streets are already favorable to most bicyclists, a bicycle boulevard goes the extra step to provide safe crossings at major streets and encourage motorists to travel at slow speeds, while reducing the frequency of stop signs.

Queen Avenue Bike Boulevard Working Group Membership

The following Working Group members collaborated with SRF to develop and evaluate alternatives, solicit community feedback, and based on this information, select the preferred route to bring back to the broader Penn Avenue Vision and Implementation Framework project stakeholders.

- Kelly Hoffman-Orth, Hennepin County
- Kelley Yemen, Hennepin County
- Kelsey Dawson Walton, Hennepin County
- Nicholas Peterson, Hennepin County
Don Pflaum, City of Minneapolis
Matthew Dyrdahl, City of Minneapolis
Simon Blenski, City of Minneapolis

Project Process and Schedule

The Working Group met four times over approximately a two month period to discuss and guide the process:

<table>
<thead>
<tr>
<th>Meeting Date</th>
<th>Meeting Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 8, 2015</td>
<td>• Developed alternatives for challenging subareas along the route&lt;br&gt;• Discussed bike boulevard route evaluation criteria</td>
</tr>
<tr>
<td>April 22, 2015</td>
<td>• Reviewed corridor inventory and analysis&lt;br&gt;• Reviewed and refined route alternatives</td>
</tr>
<tr>
<td>May 11, 2015</td>
<td>• Reviewed traffic control modification recommendations&lt;br&gt;• Discussed public engagement process and schedule&lt;br&gt;• Reviewed and refined route alternatives</td>
</tr>
<tr>
<td>June 19, 2015</td>
<td>• Confirmed a preferred route&lt;br&gt;• Discussed upcoming stakeholder engagement where the Working Group would share the preferred route recommendations</td>
</tr>
</tbody>
</table>

Corridor Inventory and Analysis

Route Evaluation Criteria

The Working Group developed the following criteria that assisted with the evaluation of route alternatives:

• Minimize impacts to on-street parking
• Minimize property impacts
• Provide a convenient and direct route
• Provide a safe route

Schedule of Intersections

An inventory was created that documented existing traffic control at each intersection along each of the initial route alternatives investigated (see Attachment A). Traffic control data was obtained from the Signs and Signals map created the City of Minneapolis, Department of Public Works, Traffic and Parking Services Division, 2011. The inventory also documented destinations that could be accessed
via that intersection. Representative destinations included parks, schools, planned Bus Rapid Transit (BRT) stops, planned Light Rail Transit (LRT) stops, and commercial nodes. City of Minneapolis staff reviewed this information and made recommended traffic controls revisions for the various route alternatives.

**Street Widths Inventory**

Existing street widths along each of the initial route alternatives were also inventoried (see Attachment B). Street width information was obtained from the Minneapolis Street Ordinance Book, January 13, 2014.

**Concept Alternatives**

Initial concepts were developed for the Queen Avenue Bike Boulevard as part of Penn Avenue Vision and Implementation Framework project in October 2014. These concepts informed and provided a basis on which Concept alternatives were developed as part of this process. Over the course of the study, four sites along the corridor were identified as challenging areas that required the development of concept alternatives for evaluation. An additional three sites were highlighted to provide additional clarity regarding how route alignment decisions would be made for that site or how the route would connect to adjacent bike facilities. The following table provides a brief overview of each location.

<table>
<thead>
<tr>
<th>Final Sites*</th>
<th>Location</th>
<th>Site Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>44th Avenue and Queen Avenue Intersection</td>
<td>Clarifies route connection to bike lanes on Osseo Road</td>
</tr>
<tr>
<td>2</td>
<td>Cleveland Park and Lucy Laney School</td>
<td>Route alternatives requiring evaluation</td>
</tr>
<tr>
<td>3</td>
<td>West Broadway Avenue</td>
<td>Route alternatives requiring evaluation</td>
</tr>
<tr>
<td>4</td>
<td>Willard Park</td>
<td>Route alternatives requiring evaluation</td>
</tr>
<tr>
<td>5</td>
<td>Queen Avenue/Russell Avenue: One-way Versus Two-way Streets</td>
<td>Route alternatives requiring evaluation</td>
</tr>
<tr>
<td>6</td>
<td>Highway 55 Crossing</td>
<td>Clarifies how decisions will be made regarding route alignment</td>
</tr>
<tr>
<td>7</td>
<td>Bassett Creek Trail Connection</td>
<td>Clarifies route connection to the Bassett Creek Trail</td>
</tr>
</tbody>
</table>

* Numbering of sites varied over the course of the study.
April 22, 2015 Draft (trace paper concepts)

Attachment C, Figures 1 – 4, depicts concepts that were discussed at the April 22, 2015 meeting. The following route alternatives were eliminated for following reasons.

<table>
<thead>
<tr>
<th>Site</th>
<th>Route Alternative Eliminated/Modified</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>C2</td>
<td>Unsure of the feasibility of the route should the school become operational again.</td>
</tr>
<tr>
<td>2</td>
<td>C5</td>
<td>Placing the route in the alley or along Penn Avenue is not desirable from a user comfort and safety perspective.</td>
</tr>
<tr>
<td>3</td>
<td>B2</td>
<td>Many risks and unknowns accompany this alternative, such as when the site will develop and whether the property owner would be willing to accommodate a trail through the parcel. Modified route to follow McNair and Broadway.</td>
</tr>
<tr>
<td>3</td>
<td>B3</td>
<td>Alternative is contingent upon obtaining a trail easement from one parcel owner and acquisition of a second parcel. Placement of trail in alley is not desirable.</td>
</tr>
<tr>
<td>3</td>
<td>B4</td>
<td>Alternative is contingent upon acquisition of a parcel. Placement of trail in alley is not desirable.</td>
</tr>
<tr>
<td>4</td>
<td>W1</td>
<td>Placing the route in the alley is not desirable from a user comfort and safety perspective.</td>
</tr>
<tr>
<td>5</td>
<td>O1, O2 &amp; O3</td>
<td>It was discussed that the route will cross Highway 55 at Penn Avenue, but the exact route alignment between Queen Avenue and Penn Avenue/Highway 55 intersection will be determined as part of the METRO Blue Line LRT Extension preliminary engineering process. Therefore, it was decided to just show a general conceptual connection to the Penn/Highway 55 intersection and to include a statement to that effect.</td>
</tr>
</tbody>
</table>
May 1, 2015 Draft

Attachment D depicts concepts that were discussed at the May 11, 2015 meeting. The following route alternatives were eliminated or modified.

<table>
<thead>
<tr>
<th>Site</th>
<th>Route Alternative Eliminated/Modified</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>Eliminated due to conflict points adjacent the school building.</td>
</tr>
<tr>
<td>3</td>
<td>1 and 2</td>
<td>Clarification of route alternatives - Existing and forecasted traffic volumes and turning movements at the Broadway/McNair/Queen intersection would allow for the elimination of a travel lane along Broadway and the creation of a protected bikeway.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Queen Avenue is one-way, northbound street. It was decided to add another site to evaluate whether Queen should be converted to a two-way street or remain a one-way street with a contra-flow bike lane.</td>
</tr>
<tr>
<td>5</td>
<td>n/a</td>
<td>In order to avoid any confusion, it was decided not show a conceptual connection to the Highway 55 crossing at Penn Avenue, but rather to just include a statement that the exact route alignment between Queen Avenue and Penn Avenue/Highway 55 intersection will be determined as part of the METRO Blue Line LRT Extension preliminary engineering process.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It was decided to supplement the route alternative graphic with information that depicts existing and proposed modifications to traffic control along the route.</td>
</tr>
</tbody>
</table>

May 16, 2015 Draft

This version (see Attachment E) was presented to community members as part of a May 16, 2015 public engagement event. Subsequent community feedback and additional analysis resulted in the following revisions.

<table>
<thead>
<tr>
<th>Site</th>
<th>Route Alternative Eliminated/Modified</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2 and 3</td>
<td>McNair Avenue could be closed between Queen Avenue and Broadway without significant impacts to traffic circulation in the area.</td>
</tr>
<tr>
<td>5</td>
<td>Added Russell Avenue</td>
<td>Due negative feedback by the community to the contra-flow bike lane concept, Russell Avenue was added as a route alternative. New alternatives consisted of converting Queen Avenue to a two-way street or having Queen Avenue/Russell Avenue as one-way pairs.</td>
</tr>
</tbody>
</table>
May 26, 2015 Draft

The May 26 draft (see Attachment F) was shared with the Penn Avenue PIC and was discussed at the July 19, 2015 Working Group meeting. The following route alternatives were eliminated or modified.

<table>
<thead>
<tr>
<th>Site</th>
<th>Route Alternative Eliminated/Modified</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>Eliminated - future parcel access remains uncertain. Potential conflicts with school and park users. The crossing of Lowry Avenue poses safety concerns.</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Show as a short-term route. Add notation that a median island will be provided on Broadway to enhance crossing safety.</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Eliminate Alternative 1 along Broadway between 24th Avenue N and McNair Avenue and along McNair Avenue. Replace with a new long-term route that passes through the parcel between the 24th Avenue/Broadway intersection and the McNair Avenue/Queen Avenue intersection.</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>Eliminated – constrained conditions on north side of Broadway due to existing bus stop and new development.</td>
</tr>
<tr>
<td>4</td>
<td>1 and 2</td>
<td>Show Alternative 1 as the short-term route. The long-term route consists of Russell Avenue for southbound travel and Alternative 2 for northbound travel.</td>
</tr>
<tr>
<td>5</td>
<td>n/a</td>
<td>Based on community feedback, eliminate the alternative of converting Queen Avenue to a two-way street. Eliminate Russell Avenue between Golden Valley Road and 17th Avenue N. Queen Avenue will be the preferred route for both northbound and southbound traffic between Golden Valley Road and 17th Avenue N. Depict traffic control along Russell Avenue between Highway 55 and 17th Avenue N. Based on City of Minneapolis evaluation, no modifications are recommended to existing traffic control along this segment.</td>
</tr>
<tr>
<td>6</td>
<td>n/a</td>
<td>Include a graphic that depicts how the Queen Avenue Bike Boulevard will connect to the existing Bassett Creek Trail near 2nd Avenue N.</td>
</tr>
</tbody>
</table>

Preferred Route (July 13, 2015 Draft)

Figure 1 depicts the preferred route for the Queen Avenue Bike Boulevard. Additional study, evaluation and modifications are anticipated to the route as the concept moves into the implementation phase. In addition to potential route revisions, implementation of the bike boulevard will require additional attention to the design of the bike boulevard itself to improve the
Queen Avenue Bicycle BoulevArd

Site 2: Hennepin County 44th Ave. and Queen Ave. intersection

Northbound and southbound routes will vary. Wayfinding will be important in this area.

Representative Bikeway Approach on a Two-Way Street

PHASE | TIME FRAME | NOTES
--- | --- | ---
1 | Short-term | Route follows Broadway
2 | Long-term | Route passes through block between 24th Avenue and McNair Avenue

Representative Bikeway Approach for W. Broadway

Bridge Break in Street Grid (Public/Civic Use) Activity Node Signalized

Penn Avenue
Vision and Implementation Framework

FIGURE 1
JULY 13, 2015 - DRAFT
Queen Avenue Bicycle Boulevard

Site 4: Willard Park Route Phasing

Routing at Willard Park

<table>
<thead>
<tr>
<th>PHASE</th>
<th>TIME FRAME</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Short-term</td>
<td>Northbound travel along Russell Avenue</td>
</tr>
<tr>
<td>2</td>
<td>Long-term</td>
<td>Northbound travel through Park</td>
</tr>
</tbody>
</table>

Existing one-way street pair option (Queen/Russell between Highway 55 and 16th Ave. N)

Bike Boulevard on One-way Street

- Bike boulevard and motor vehicle traffic travel in same direction
- Bike boulevard markings in direction of travel
- Parking on both sides

Route connection (via the Penn Avenue intersection) to be determined as part of METRO Blue Line Extension preliminary engineering. Route connection will also be coordinated with future development plans for the southwest and northwest corners of the Penn Avenue and Olsen Highway intersection, as determined by Blue Line Station Area Planning.
Queen Avenue Bicycle Boulevard

Enlargement 1: Traffic controls around Cleveland Park and Lucy Laney School

Representative Speed Hump

23RD AV TRAFFIC CONTROL OPTIONS

A Traffic circle, all-way yield
B Reverse stop signs and install pair of speed humps in 2100 block and 2000 block

23RD AV / 17TH AV INTERSECTION

<table>
<thead>
<tr>
<th>PHASE</th>
<th>TIME FRAME</th>
<th>TRAFFIC CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Short-term</td>
<td>No stop signs (no change from existing conditions)</td>
</tr>
<tr>
<td>2</td>
<td>Long-term</td>
<td>Stop signs in all directions</td>
</tr>
</tbody>
</table>

| Editing/Planned Bike Routes
|-----------------|
| Preferred route: Existing bike lanes
| Preferred route: An existing one-way street segment

| Key Items:
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bike Share</td>
</tr>
<tr>
<td>Roadblock</td>
</tr>
<tr>
<td>Pedestrian Illegibility</td>
</tr>
<tr>
<td>Board in Street Grid (Private Use)</td>
</tr>
<tr>
<td>Board in Street Grid (Public Use)</td>
</tr>
</tbody>
</table>

FIGURE 3

JULY 13, 2015 - DRAFT
safety and comfort of bicyclists, pedestrians and motorists. Representative features and amenities that could be incorporated into the bike boulevard include speed humps, traffic circles, curb extensions, medians, and traffic signals.

**Community Engagement**

The Working Group brought the Queen Avenue Bike Boulevard route alternatives forward to the following project stakeholders for review. Feedback received informed the most recent draft of the preferred route.

**Meeting: Bike ride and meeting with North Minneapolis Bicycle Advocacy Council**  
**May 16, 2015**

**Feedback:**

- Would rather have had the bike lane on Penn
- Need to prioritize bike speed and ability to commute
- Purpose of this bikeway is not to provide a recreational ride and therefore should prioritize directness and bike priority and avoid unnecessary diversions
- Site 2 – divided sentiment, wanted directness, but acknowledgment of crossing issues at Lowry
- Site 3 – south side preferred, concerns about bus stop and parking traffic to new building on north side
- Site 4 – the group preferred alternative 2, through the park and expressed concerns about Alternative 1 if and when the school reopens.
- Site 5 – there was an interest in maintaining the directness of the route and possibly turning Queen Avenue into a two-way, but the group seemed to defer to the people that lived along that section of Queen Avenue.

**Meeting: Hennepin Bicycle Advisory Committee**  
**May 18, 2015**

**Feedback:**

- Site 2 – preferred alternative 1 due to improved crossing at Russel
- Site 3 – preferred alternative 1 and would like to see 24th become a right in/right out only to reduce turning conflicts with the two-way protected bikeway
- Site 4 – preferred alternative 2, but would accept alternative 1 as a short term solution
- Site 5 – no preference, would defer to the neighborhood preference as either would work
- Site 6 – strongly supported the need for a bikeway along both north and south side of Olson Highway to allow bikes to cross at Penn Ave signal
- No comments on the traffic control

Meeting: Minneapolis Bicycle Advisory Committee – Engineering Sub-Committee
May 19, 2015

Feedback:
- To be filled in upon receipt of information from City of Minneapolis

Meeting: Minneapolis Bicycle Advisory Committee – Full Committee
May 27, 2015

Feedback:
- To be filled in upon receipt of information from City of Minneapolis

Meeting: Penn Avenue Community Conversation
Date?

Feedback:
- A lot of questions on what a bike boulevard is and how it operates
- Many questions about whether this was a “done deal” and why Hennepin County and the City of Minneapolis were looking to put a bikeway on Queen Avenue
- Concerns about parking loss
- Concerns about maintenance of the traffic circle green space – who will do it?
- Concerns about getting stuck behind slow moving people bicycling
- No opinions on any of the Sites, except Site 5 – everyone selected the two way pair (Queen/Russell) over converting Queen to a two-way street
- Some residents were excited about a bike boulevard
- Some residents were ambivalent to the bike boulevard, but liked the idea of the traffic circles
- Some residents would prefer money be spent on police and building code enforcement rather than street improvements
<table>
<thead>
<tr>
<th>Intersection</th>
<th>Alternative</th>
<th>Existing Intersection Traffic Control</th>
<th>Proposed Intersection Traffic Control</th>
<th>WayFinding</th>
<th>Notes and Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd Ave. N</td>
<td>Queen Ave. N</td>
<td>None</td>
<td>Bassett Creek Park</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inglewood Ave</td>
<td>Queen Ave. N</td>
<td>None</td>
<td>Bassett Creek Park</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glenwood Ave. N</td>
<td>Queen Ave. N</td>
<td>North-South Stop Signs</td>
<td>Theodore Wirth Park, Glenwood Commercial Node</td>
<td></td>
<td>Offset intersection</td>
</tr>
<tr>
<td>4th Ave. N</td>
<td>Queen Ave. N</td>
<td>North-South Stop Signs</td>
<td>Theodore Wirth Park</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5th Ave. N</td>
<td>Queen Ave. N</td>
<td>East-West Stop Signs</td>
<td>Theodore Wirth Park</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Olson Memh. Hwy</td>
<td>Penn Ave. N</td>
<td>O1, O2 Traffic Signal</td>
<td>Proposed BRT stop on Penn</td>
<td>TH 55</td>
<td></td>
</tr>
<tr>
<td>Olson Memh. Hwy Service Rd</td>
<td>Queen Ave. N</td>
<td>O3, O2, O3 None</td>
<td>Proposed BRT stop on Penn</td>
<td>TH 55</td>
<td></td>
</tr>
<tr>
<td>8th Ave. N</td>
<td>Queen Ave. N</td>
<td>Northbound Stop Sign</td>
<td>Minneapolis College Preparatory School</td>
<td></td>
<td>Northbound 1-way on Queen Ave. N</td>
</tr>
<tr>
<td>Oak Park Ave. N</td>
<td>Queen Ave. N</td>
<td>East-West Stop Signs</td>
<td>Minneapolis College Preparatory School</td>
<td></td>
<td>Northbound 1-way on Queen Ave. N Offset intersection</td>
</tr>
<tr>
<td>12th Ave. N</td>
<td>Queen Ave. N</td>
<td>Northbound Stop Sign</td>
<td>Minneapolis College Preparatory School</td>
<td></td>
<td>Northbound 1-way on Queen Ave. N Non orthogonal road alignment</td>
</tr>
<tr>
<td>Plymouth Ave. N</td>
<td>Queen Ave. N</td>
<td>Northbound Stop Sign</td>
<td>Theodore Wirth Park, proposed LRT stop</td>
<td></td>
<td>Northbound 1-way on Queen Ave. N</td>
</tr>
<tr>
<td>4th Ave. N</td>
<td>Queen Ave. N</td>
<td>Northbound Stop Sign</td>
<td>North Commons Park</td>
<td></td>
<td>Route east of park</td>
</tr>
<tr>
<td>17th Ave. N</td>
<td>Queen Ave. N</td>
<td>W1, W2, W3 All-Way Stop Signs</td>
<td>North Commons Park, Willard Park</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golden Valley Rd</td>
<td>Queen Ave. N</td>
<td>Northbound Stop Sign</td>
<td>Proposed LRT stop on Penn, Golden Valley Rd, Commercial Node, North Commons Park</td>
<td></td>
<td>End of Northbound 1-way on Queen Ave. N</td>
</tr>
<tr>
<td>21st Ave. N</td>
<td>Queen Ave. N</td>
<td>East-West Stop Signs</td>
<td>Broadway Commercial Node</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23rd Ave. N</td>
<td>Queen Ave. N</td>
<td>North-South Stop Signs</td>
<td>Broadway Commercial Node</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McNair Ave. N/Ferrant Pl</td>
<td>Queen Ave. N</td>
<td>B1, B2, B3 Traffic Signal</td>
<td>Proposed BRT stop on Penn, Broadway Commercial Node</td>
<td></td>
<td>Arts district east of Penn Non orthogonal road alignment</td>
</tr>
<tr>
<td>McNair Ave. N/Broadway Ave. W</td>
<td>Queen Ave. N</td>
<td>Northbound Stop Sign</td>
<td>Broadway Commercial Node</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broadway Ave. W</td>
<td>Queen Ave. N</td>
<td>S1, B2, B3, B4 Southbound Stop Sign</td>
<td>Broadway Commercial Node</td>
<td></td>
<td>Arts district east of Penn</td>
</tr>
<tr>
<td>25th Ave. N</td>
<td>Queen Ave. N</td>
<td>North-South Stop Signs</td>
<td>North of Broadway Commercial Node</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27th Ave. N</td>
<td>Queen Ave. N</td>
<td>North-South Stop Signs</td>
<td>Theodore Wirth Park</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29th Ave. N</td>
<td>Queen Ave. N</td>
<td>East-West Stop Signs</td>
<td>Theodore Wirth Park</td>
<td></td>
<td></td>
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<tr>
<td>31st Ave. N</td>
<td>Queen Ave. N</td>
<td>North-South Stop Signs</td>
<td>North Community Baptist Church</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33rd Ave. N</td>
<td>Russell Ave. N</td>
<td>C1 East-West Stop Signs</td>
<td>Victory Memorial Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34th Ave. N</td>
<td>Russell Ave. N</td>
<td>C1 East-West Stop Signs</td>
<td>Victory Memorial Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34th Ave. N</td>
<td>Penn Ave. N</td>
<td>C5 Traffic Signal</td>
<td>Victory Memorial Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34th Ave. N</td>
<td>Queen Ave. N</td>
<td>North-South Stop Signs</td>
<td>Victory Memorial Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35th Ave. N</td>
<td>Queen Ave. N</td>
<td>East-West Stop Signs</td>
<td>Victory Memorial Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36th Ave. N</td>
<td>Queen Ave. N</td>
<td>North-South Stop Signs</td>
<td>Victory Memorial Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37th Ave. N</td>
<td>Queen Ave. N</td>
<td>East-West Stop Signs</td>
<td>Victory Memorial Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersection</td>
<td>Alternative</td>
<td>Existing Intersection Traffic Control</td>
<td>Proposed Intersection Traffic Control</td>
<td>Wayfinding</td>
<td>Other Destination</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td>---------------------------------------</td>
<td>--------------------------------------</td>
<td>------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Dowling Ave. N</td>
<td>Queen Ave. N</td>
<td>North-South Stop Signs</td>
<td>Victory Memorial Drive</td>
<td>Proposed BRT stop on Penn, Folwell Park, Crystal Lake Cemetery</td>
<td></td>
</tr>
<tr>
<td>39th Ave. N</td>
<td>Queen Ave. N</td>
<td>East-West Stop Signs</td>
<td>Victory Memorial Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40th Ave. N</td>
<td>Queen Ave. N</td>
<td>North-South Stop Signs</td>
<td>Victory Memorial Drive, Noble Academy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41st Ave. N</td>
<td>Queen Ave. N</td>
<td>East-West Stop Signs</td>
<td>Victory Memorial Drive, Church (name?) at Thomas Ave.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42nd Ave. N</td>
<td>Queen Ave. N</td>
<td>North-South Stop Signs</td>
<td>Victory Memorial Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43rd Ave. N</td>
<td>Queen Ave. N</td>
<td>North-South Stop Signs</td>
<td>Victory Memorial Drive</td>
<td>Proposed BRT stop on Penn</td>
<td>United Christian Fellowship</td>
</tr>
<tr>
<td>44th Ave. N</td>
<td>Queen Ave. N</td>
<td>Northbound Stop Sign</td>
<td>Victory Memorial Drive, Faith Baptist Church</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Signs and Signals - 2011, City of Minneapolis, Department of Public Works, Traffic and Parking Services Division
<table>
<thead>
<tr>
<th>Route</th>
<th>From</th>
<th>To</th>
<th>Street Width (ft)</th>
<th>Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queen Ave. N</td>
<td>Dead end</td>
<td>Olson Hwy Frontage Rd</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Penn Ave. N</td>
<td>5th Ave. N</td>
<td>8th Ave. N</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Queen Ave. N</td>
<td>Olson Hwy Frontage Rd</td>
<td>8th Ave. N</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Queen Ave. N</td>
<td>8th Ave. N</td>
<td>Oak Park Avenue</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Queen Ave. N</td>
<td>Oak Park Avenue</td>
<td>12th Ave. N</td>
<td>29.5</td>
<td></td>
</tr>
<tr>
<td>Queen Ave. N</td>
<td>12th Ave. N</td>
<td>Plymouth Ave N</td>
<td>31.5</td>
<td></td>
</tr>
<tr>
<td>Queen Ave. N</td>
<td>Plymouth Ave. N</td>
<td>26th Ave N</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>McNair Ave. N</td>
<td>Queen Ave. N</td>
<td>Broadway</td>
<td>Not available</td>
<td>Bl, B2, 83</td>
</tr>
<tr>
<td>Ferrant Pl.</td>
<td>Sheridan Ave. N</td>
<td>McNair Ave. N</td>
<td>32</td>
<td>B4</td>
</tr>
<tr>
<td>Broadway St NE</td>
<td>26th Ave. N</td>
<td>Knox Ave. N</td>
<td>60</td>
<td>Bl, B2</td>
</tr>
<tr>
<td>Queen Ave. N</td>
<td>Lowry Ave. N</td>
<td>34th Ave. N</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Russel Ave. N</td>
<td>33rd Ave. N</td>
<td>35th Ave. N</td>
<td>30.5</td>
<td>CI</td>
</tr>
</tbody>
</table>

*Source: Minneapolis Street Widths 1/13/14*
Bicycle Route: Queen Avenue

Figure 1: Routing around Cleveland Park and Lucy Laney School

- Take advantage of median refuge with flasher at Russell Ave. and Lowry Ave.
- School bus loading zone

Figure 2: Break in the street grid at West Broadway Ave

- C1, C2, C3, C4, C5
- Queen Ave
- Russell Ave
- Cleveland Park
- Lucy Laney School
- West Broadway Ave
- B1, B2, B3, B4
**Bicycle Route: Queen Avenue**

**Figure 3: Willard Park Route Phasing**

**Figure 4: Highway 55 Crossing**
Appendix G

14th Avenue Realignment Analysis
A study was performed regarding the potential realignment of 14th Avenue. Currently this is an offset intersection just north of the Plymouth/Penn Avenue intersection. Several alternatives were analyzed, each with its own set of pros/cons (see Table 3 below). The preferred alternative (Option 2) realigns the west leg to the south, through the Northpoint parking lot and connects to the east leg of 14th Avenue. While this alternative has the most impacts to parking, it does not require any total property acquisitions. See Appendix I for a graphic depiction the 14th Avenue realignment alternatives. It has been suggested that this alternative is consistent with Northpoint’s plans for future expansion.

14th Avenue Realignment Analysis

<table>
<thead>
<tr>
<th>Option</th>
<th>Shift Both Legs of 14th to Meet in the Middle</th>
<th>Approximate Lost Parking</th>
<th>Approximate Additional Parking Area</th>
<th>Potential Net Gain or Loss of Parking</th>
<th># of Property Acquisitions</th>
<th>Additional ROW Impacts</th>
<th>Approximate Square Foot Property Impacts</th>
<th>Skewed Intersection (20 degrees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>Shift Both Legs of 14th to Meet in the Middle</td>
<td>8 spaces</td>
<td>2,360SF</td>
<td>0</td>
<td>0</td>
<td>X</td>
<td>0.571SF</td>
<td>X</td>
</tr>
<tr>
<td>Option 2</td>
<td>Shift West Leg South</td>
<td>45 spaces</td>
<td>0</td>
<td>Less</td>
<td>0</td>
<td>X</td>
<td>11,160SF</td>
<td>-</td>
</tr>
<tr>
<td>Option 3</td>
<td>Shift East Leg North</td>
<td>-</td>
<td>9,203SF</td>
<td>Gain</td>
<td>3</td>
<td>-</td>
<td>21,665SF</td>
<td>-</td>
</tr>
<tr>
<td>Option 4</td>
<td>Shift Both Legs of 14th and Minimize Impacts to Parking</td>
<td>-</td>
<td>5,330SF</td>
<td>Gain</td>
<td>1</td>
<td>X</td>
<td>8,265SF</td>
<td>X</td>
</tr>
</tbody>
</table>

In addition, the following considerations were summarized relative to the proposed intersection realignment of 14th Avenue, as follows:

- **Capacity:**
  - The traffic volumes along 14th Avenue are low as well as the number of vehicles making eastbound/westbound left-turn and through movements.

- **Traffic Operations:**
  - All of the realignment options would likely operate similarly (i.e., delays/queues should all be essentially the same) and there is not one that is significantly better that would justify consideration over costs/feasibility/parking considerations.

- **Geometry/Signal:**
  - What is functionally considered one intersection is physically two intersections separated by approximately 55-85 feet. This physical separation and the operation of the two intersections together results in periodic rear-end collisions in both directions possibly due to confusion over the signal operations.

  - Operating the intersection as one complete intersection, rather than two separate intersections, would help with this issue signal timing should be reviewed.

  - Based on traffic volumes collected in March 2013, a traffic signal is not warranted at the Penn Avenue/14th Avenue intersection.

  - Today, the signal provides safety benefits by giving priority/providing gaps to vehicles turning at the offset intersection.

  - If this intersection is realigned, a traffic signal may no longer be warranted and the type of traffic control could be changed to side-street stop control.
• Crash/Safety:
  - The resultant crash rate for this location exceeds the typical average crash rate for intersections with similar volumes and area characteristics (excluding the separated intersection issue), but does not exceed what is referred to as the critical crash rate. Exceeding the average crash rate does not automatically indicate a safety issue is present, but is used as an indicator of potential safety issues.

• Pedestrians:
  - Based on the traffic counts collected in March 2013, there are fewer than 20 pedestrians per hour crossing Penn Avenue at this intersection.
  - Route 19 currently stops at this intersection in both the northbound and southbound directions.
  - From a pedestrian standpoint Option 2 and Option 3 have the shortest pedestrian crossing distance and are not at a skew.
  - If a mid-block crossing were to be considered, crossing treatments should be considered to improve the overall safety for pedestrians and motorists. Based on existing pedestrian crossing volumes, this location is not likely to meet a HAWK signal or pedestrian signal warrant. However, striping a crosswalk and installing a rectangular rapid flashing beacon (RRFP) would improve visibility of a midblock crossing. A grade-separated pedestrian crossing could also be considered if a parking structure is built.

• Parking:
  - Parking counts collected in the summer of 2014 indicate that the nearby area has a high parking utilization during the midday peak hour (coincides with the peak parking demand of the medical facility). The parking lots for the medical facility west and east of Penn Avenue were observed to be approximately 60-70 percent occupied.
  - The surface parking lot on the SW corner is temporary and the long term goal of that parcel is redevelopment consistent with adopted policy.
  - This area does have a high parking demand relative to other nodes along Penn, and there is the potential for future development nearby that will likely increase the parking demand.
Option 4 - Penn Avenue & 14 Avenue
Shift Both Legs of 14th and Minimize Impacts to Parking Lot
Minneapolis

Figure 1
Appendix H

Parklets
Parklets are spaces captured by semi-permanent or permanent street structures for public use. These spaces usually exist on the street in a parking lane next to sidewalks. Generally parklets are funded and maintained by local businesses, private individuals, or community groups. They provide simple amenities like planting, furniture, and space for pedestrians. Parklets also encourage walking, sidewalk use, and community interactions. The purpose of this appendix is to educate people about parklet and also provide them with the know-how to design, fund, and build their own parklet. More information on Parklets can be found in the City of Minneapolis' Parklet Manual.

Locating Parklets

A parklet’s location is key to its success. Parklets should be placed near a well-established business or a community organization where there is constant activity. Where possible parklets should also be located near street intersections and bus stops to capture even more pedestrian traffic. Aside from these recommendations some restrictions to locations of a parklet include:

- Transit zones: Parklets cannot be located in a bus stop zone but may be located adjacent to a stop.
- Utilities: Parklets cannot be sited above manhole covers, storm drains, or access panels and etc…
- Driveways: Parklets should be 14’ minimum away from active driveways. In a case where a sponsor choose to locate their parklet in front of a driveway they must own the driveway in question.
- Speed Limit: to ensure safety, parklets should only be proposed for locations where the traffic speed limit is less than 30 mph.
- Slope: streets with surface slope of less than 5% are ideal for parklets. If the running slope is more than 5%, the proposed parklet will have to provide safe access for wheelchair users.

Basic Specifications

Parklets are typically wood structures that do not exceed 32’ by 6’ in size. They are typically made up of 3 main parts: the platform or base, the enclosure, and the furnishings. The platform can be a sturdy standalone base, or one that attaches to the curb directly. Decking is installed such that the platform is the same height as the sidewalk and is not further than half an inch away from the sidewalk. The enclosure is attached to the base and provides the structure with walls. At least three of the sides of the parklet should be enclosed by the enclosure and the sides of the enclosure should measure at least 36” tall. Enclosures can be as thin as 6” but thicker enclosures will be able to hold plantings. Finally, weather proof, movable furniture and planting is used to activate the space inside parklets. These furnishings can be as simple as tables and chairs, to umbrellas, or even shelves. Because parklets are meant for public use, they should be compliant with ADA. This means 1:4" ramp for any change in height over 1/2", handrails where applicable, and adequate clearance for wheelchair users to make a complete turn (60” minimum).

Material choices (Figure A.1.1)

Due to the climate in Minnesota, careful thought should be put into the material selection of parklets. Acceptable materials for parklets include: wood, concrete, steel, and stone. However, treated wood is the preferred material because wooden parklets can be taken apart easily and moved come winter. Treated wood is also very durable and have less of an environmental impact than concrete or steel. Materials like glass and plastic should be avoided as they may create slippery or unsafe
surfaces. Finally, if plantings are to be included, they should contain local drought resistant varieties of plant life.

Permit

Once a plan for a proposed parklet is established, parklet sponsors are required to obtain an encroachment permit from the city. If approved, the sponsor and the city also enter into a Memorandum of Understanding. The Memorandum is an agreement from the sponsor to the following:

- Parklet sponsor will install and remove parklets according to proposed schedule in permit
- Parklet sponsor will take care of daily maintenance (see below) to keep parklet in good shape
- Parklet sponsor must have the appropriate amount of liability insurance and worker’s compensation as requested by city

Funding

Parklets are most typically funded by a sponsor. This sponsor can be an individual, a local business, or a community group. Sponsors are responsible for the costs of acquiring permits from the city, paying for materials and constructions, and paying for the maintenance and upkeep costs of parklets. Lastly, sponsors will also have to provide a safe place to store their parklets during the winter months.

The city of Minneapolis currently owns three parklets from their parklet pilot program. If an individual or community group is interested in hosting a parklet from the city, they can apply through the parklet pilot program. If the proposal is approved the city will take care of the transport and installation of the parklet. The individual or group sponsoring the parklet will have access to it for a summer during which time they will take on the responsibilities of parklet maintenance.

Maintenance

Major seasonal upkeep for parklets involve installation and removal, tune ups and repair of parts as needed, and storage during winter months. Daily maintenance of parklets include:

- Clean up rubbish within and around the parklet
- Sweep the area in and around the parklet
- Keep edges of the parklet clear of debris
- Water plants per the recommendations
- Place furniture each morning, secure furniture at night
- Place and open umbrellas, weather permitting (wind permitted)
- Clean furniture daily or as needed
Figure A.1.1
Parklet Material
Material Choice
decking material on a parklet may be made from: wood, steel, concrete.

Planters
drought resistant, native plants to promote local biodiversity.