



**GILBERT**  
ARIZONA

# *July 2015 Consultant Report* *Five-Year* *Implementation Study*

*This document represents Kimley-Horn's findings and recommendations for Gilbert to consider regarding a five-year implementation plan for the Heritage District.*



*Prepared for Gilbert by*

**Kimley»»Horn**

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# Heritage District



# I. Five-Year Implementation Plan

**Table 1** provides the recommended five-year implementation plan for Heritage District improvements based on the recommendations from the Parking Master Plan and from the Traffic and Circulation Plan developed as addenda to the Heritage District Redevelopment Plan. This table includes the recommended improvements, their estimated total cost (construction cost plus “soft” costs like design and construction management), and the proposed implementation fiscal year.

More detail on each of the recommended improvements and their associated costs is provided in the project summary sheets that follow the table. Construction costs were based on typical unit costs for similar projects and include materials costs and contingency. Soft costs were developed assuming 5%-15% of the construction cost for design and construction management, depending on the complexity of the project.

TABLE 1: RECOMMENDED FIVE-YEAR IMPLEMENTATION PLAN FOR HERITAGE DISTRICT IMPROVEMENTS		
RECOMMENDED IMPROVEMENT	ESTIMATED TOTAL COST	IMPLEMENTATION FISCAL YEAR
Vaughn Avenue Right-Turn Lane and On-Street Parking Designation	\$10,000	2017
Bike Lanes on Elliot Road <i>(between Neely St and Gilbert Rd)</i>	\$105,000	2017
Bike Lanes on Gilbert Road <i>(between Bruce Ave and Silver Creek Rd and between Western Canal and Olive Ave)</i>	\$235,000	2017
Shared Roadway Lane Markings along Gilbert Road	\$3,000	2017
Ash Street Bikeway	\$62,000	2018
Cullumber and Elm Street Shared Use Paved Path	\$170,000	2018
Shared Use Path Canal Crossing at Northeastern District Boundary	\$225,000	2018
Parking Enforcement and Regulation Policies	\$50,000	2018
Cullumber Avenue Extension	\$675,000	2019
New Signal at Cullumber Avenue and Gilbert Road	\$400,000	2019
Fee In-Lieu Parking Study and Implementation	\$50,000	2019
Parking Management Study	\$50,000	2020
<b>Total Cost</b>	<b>\$2,035,000</b>	

The Town has a project in its Capital Improvement Plan (ST160) for Gilbert Road at-grade railroad crossing improvements to meet current federal at-grade crossing standards at an estimated cost of \$1.1 million. ST160 is currently scheduled for implementation in FY 2018. Recognizing that the improvements recommended in this implementation plan are expected to increase pedestrian, bicycle and vehicle traffic in the Heritage District, it is recommended that the Town consider advancing ST160 to FY 2017 so it can be done in advance of, or potentially in coordination with, the implementation plan's recommended improvements to better promote safety.



## Heritage District



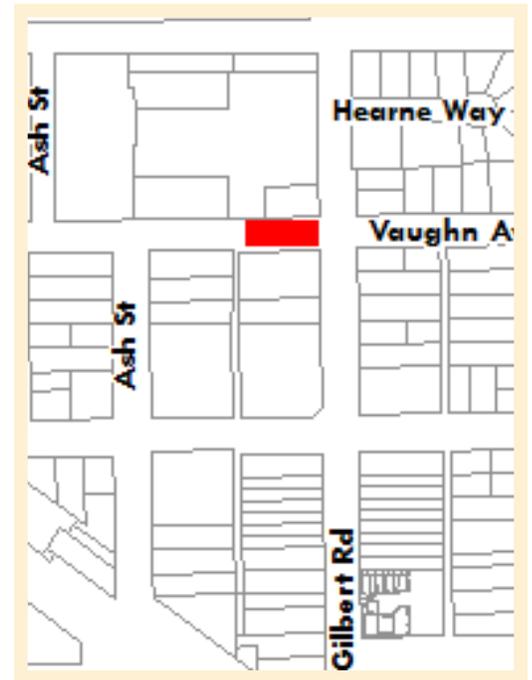
## II. Vaughn Avenue Right-Turn Lane and On-Street Parking Designation

### Project Description

It is recommended that a 10-foot-wide eastbound right-turn-only lane be installed at the intersection of Vaughn Avenue and Gilbert Road. A dedicated right-turn lane will help improve traffic flow by allowing right-turning vehicles to turn on red while vehicles traveling straight or left wait for the signal to change. The roadway is currently wide enough that the right-turn-lane can be installed using striping and pavement markings without needing to relocate the existing curbs. In addition, the Town should designate existing on-street parking spaces through signing and striping of the available spaces for both sides of the street along Vaughn Avenue and Ash Street.

### Notes

- ◆ None



EXPENSES	FISCAL YEAR					
	2017	2018	2019	2020	2021	Total
Construction	\$6,000					\$6,000
Construction Mgmt	\$1,000					\$1,000
Professional Services	\$3,000					\$3,000
<b>Total Expenses</b>	<b>\$10,000</b>					<b>\$10,000</b>



# Heritage District



# III. Bike Lanes on Elliot Road (Between Neely Street and Gilbert Road)

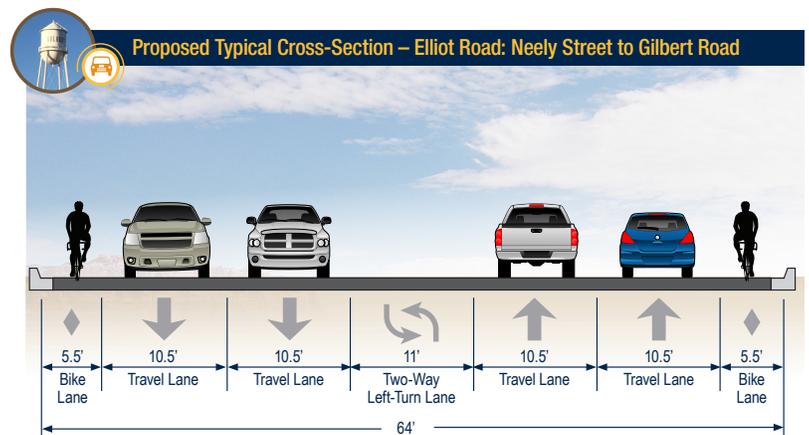
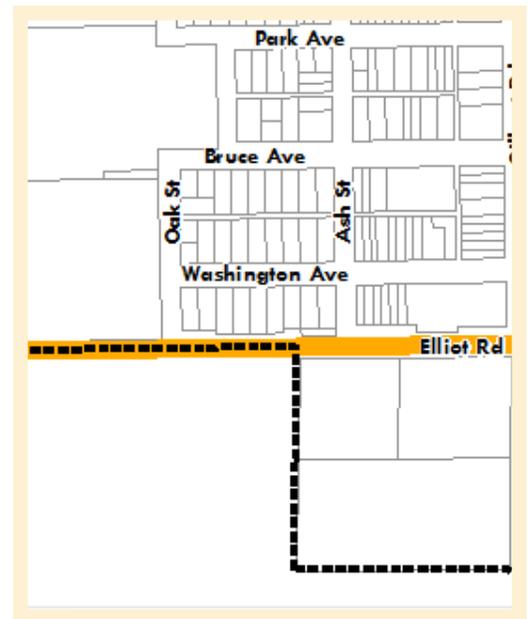
## Project Description

It is recommended that the portion of Elliot Road that does not currently have bike lanes (between Neely Street and Gilbert Road) be restriped to provide this facility and fill the existing gap in the bicycle facility network. This can be done without having to move the existing curbs.

Proposed Typical Cross Section (Figure 8 in the Traffic and Circulation Plan of the Heritage District Redevelopment Plan Update)

## Notes

- ◆ These restriping improvements would likely be a temporary improvement, as permanent improvements could be completed as part of the Elliot Road/Gilbert Road intersection improvement project, which is programmed for construction in the 2020-2024 time period



EXPENSES	FISCAL YEAR					
	2017	2018	2019	2020	2021	Total
Construction	\$86,000					\$86,000
Construction Mgmt	\$9,000					\$9,000
Professional Services	\$10,000					\$10,000
<b>Total Expenses</b>	<b>\$105,000</b>					<b>\$105,000</b>



# Heritage District



# IV. Bike Lanes on Gilbert Road (Between Bruce Avenue and Silver Creek Road and Between Western Canal and Olive Avenue)

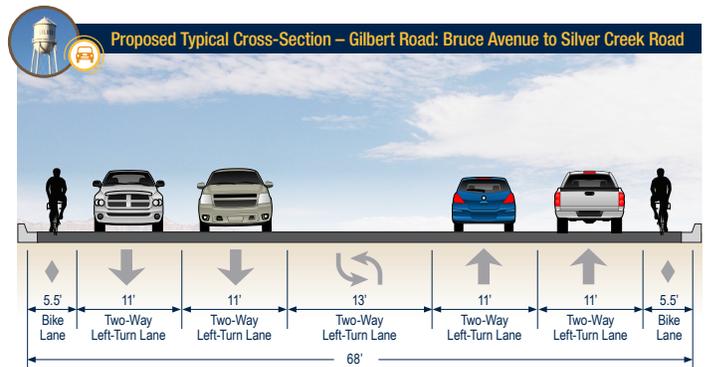
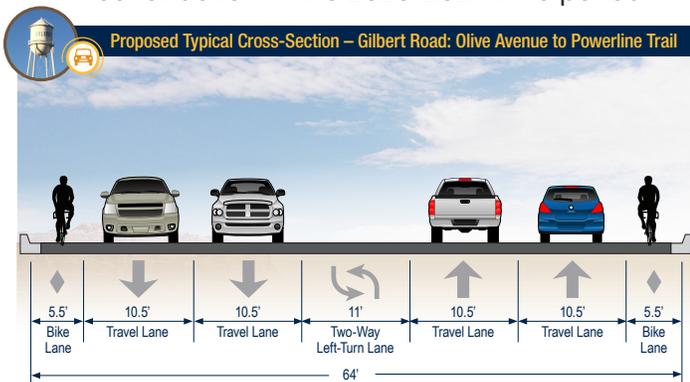
## Project Description

Restriping Gilbert Road between Bruce Ave and Silver Creek Road and between Olive Avenue and the Powerline Trail to include bike lanes is recommended. This can be done without having to move the existing curbs. It should be noted that an existing raised median exists along Gilbert Road for approximately 115 feet north of Elliot Road and 300 feet south of Elliot Road. In this area, the proposed typical section would include 10-foot travel lanes and a 5-foot bike lane to avoid impacting the median. Proposed Typical Cross Sections (Figure 9 and 10 in the Traffic and Circulation Plan of the Heritage District Redevelopment Plan Update)



## Notes

- ◆ This project should be done in conjunction with the construction of the Shared Roadway Lane Markings along Gilbert Road
- ◆ This restriping improvement would likely be a temporary improvement. A more permanent restriping with wider dimensions for the bike lane and travel lanes could potentially be completed as part of the Elliot Road/Gilbert Road intersection improvement project, which is programmed for construction in the 2020-2024 time period



EXPENSES	FISCAL YEAR					
	2017	2018	2019	2020	2021	Total
Construction	\$195,000					\$195,000
Construction Mgmt	\$20,000					\$20,000
Professional Services	\$20,000					\$20,000
<b>Total Expenses</b>	<b>\$235,000</b>					<b>\$235,000</b>



# Heritage District



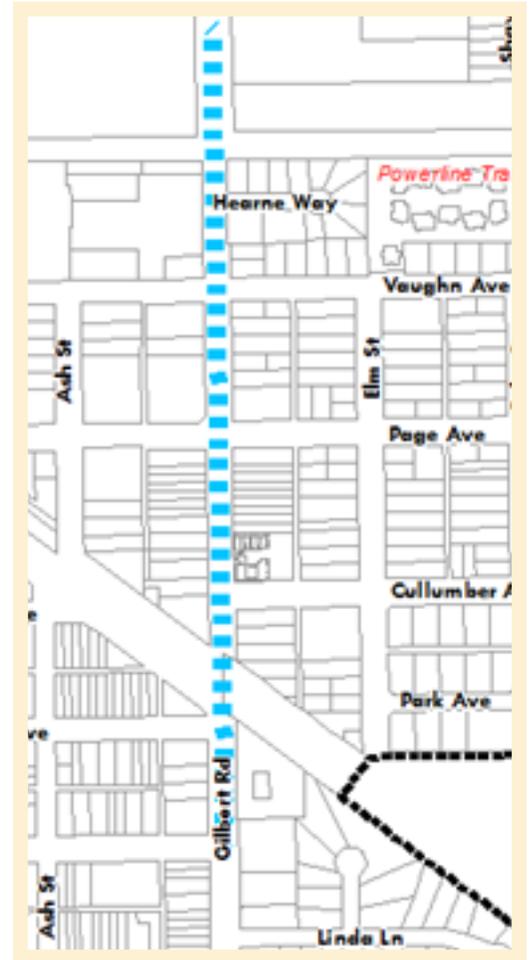
# V. Shared Roadway Lane Markings along Gilbert Road

## Project Description

This recommendation addresses the current bicycle facility gap that exists along Gilbert Road in the core of the Heritage District. The recommended shared lane markings (also known as “sharrows”) and signage do not reduce the number of travel lanes along Gilbert Road but do remind drivers that bicyclists have the legal right to utilize a travel lane, promoting safer travel for bicyclists through the District.

## Notes

- ◆ This project should be done in conjunction with the construction of the Bike Lanes on Gilbert Road between Bruce Avenue and Silver Creek Road and between Western Canal and Olive Avenue



EXPENSES	FISCAL YEAR					
	2017	2018	2019	2020	2021	Total
Construction	\$2,700					\$2,700
Construction Mgmt	\$300					\$300
<b>Total Expenses</b>	<b>\$3,000</b>					<b>\$3,000</b>



# Heritage District

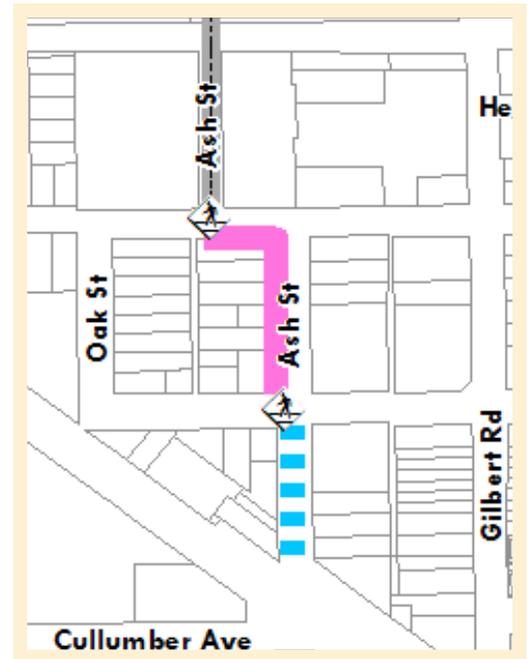


# VI. Ash Street Bikeway

## Project Description

This project develops Ash Street as a bikeway between Juniper Avenue and Gilbert Road. Implementing this recommendation would create a continuous bikeway loop on the west side of Gilbert Road through the District and would be an alternate route to Gilbert Road. Due to on-street parking and right-of-way constraints, there is not enough space to install bike lanes along all of Ash Street. The Ash Street bikeway would be comprised of the following:

- ◆ Between Juniper Avenue and Vaughn Avenue, bike lanes will be installed as part of the Extension of Ash Street project that is currently under design
- ◆ Between Vaughn Avenue and Page Avenue, a 10-foot-wide shared use paved path should be constructed on the west side of the street in place of the existing 4-foot-wide sidewalk
- ◆ Between Page Avenue and the proposed Cullumber Avenue extension, shared lane markings and signage should be installed
- ◆ Along the proposed Cullumber Avenue extension, bike lanes should be installed
- ◆ Striped ladder crosswalks should be installed at the intersections of Ash Street/Vaughn Avenue and Ash Street/Page Avenue



## Notes

- ◆ This project should be undertaken at the same time as the Cullumber and Elm Street Shared Use Paved Path to promote bicycle and pedestrian connectivity throughout the District

EXPENSES	FISCAL YEAR					
	2017	2018	2019	2020	2021	Total
Construction		\$51,000				\$51,000
Construction Mgmt		\$5,000				\$5,000
Professional Services	\$6,000					\$6,000
<b>Total Expenses</b>	<b>\$6,000</b>	<b>\$56,000</b>				<b>\$62,000</b>



# Heritage District

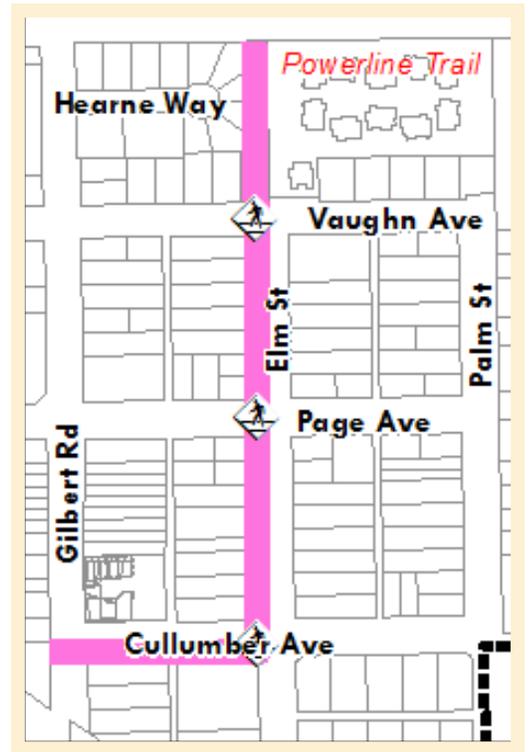


# VII. Cullumber and Elm Street Shared Use Paved Path

## Project Description

This project will help improve bicycle and pedestrian connectivity on the east side of the District and will connect to the proposed Ash Street Bikeway on the west side of Gilbert Road. This path is recommended to have the following segments:

- ◆ On Cullumber Avenue between Gilbert Road and Elm Street, a 10-foot-wide shared use paved path should be constructed on the south side of the street in place of the existing narrower sidewalk
- ◆ On Elm Street between Cullumber Avenue and Vaughn Avenue, a 10-foot-wide shared use paved path should be constructed on the west side of the street in place of the existing narrower sidewalk
- ◆ Between Vaughn Avenue and the Powerline Trail, a 10-foot-wide shared use paved path should be constructed along the eastern edge of the vacant Town-owned parcels
- ◆ Striped ladder crosswalks should be installed at the intersections of Cullumber Avenue/Elm Street, Elm Street/Page Avenue, and Elm Street/Vaughn Avenue



## Notes

- ◆ This project should be undertaken at the same time as the Ash Street Bikeway to promote bicycle and pedestrian connectivity throughout the District
- ◆ This project should be undertaken at the same time as the construction of the Shared Use Path Canal Crossing
- ◆ Construction of the path between Vaughn Ave and the Powerline Trail could be constructed as part of a development agreement if the land is proposed for development prior to the construction of the rest of the path

EXPENSES	FISCAL YEAR					
	2017	2018	2019	2020	2021	Total
Construction		\$140,000				\$140,000
Construction Mgmt		\$14,000				\$14,000
Professional Services	\$16,000					\$16,000
<b>Total Expenses</b>	<b>\$16,000</b>	<b>\$154,000</b>				<b>\$170,000</b>



# Heritage District



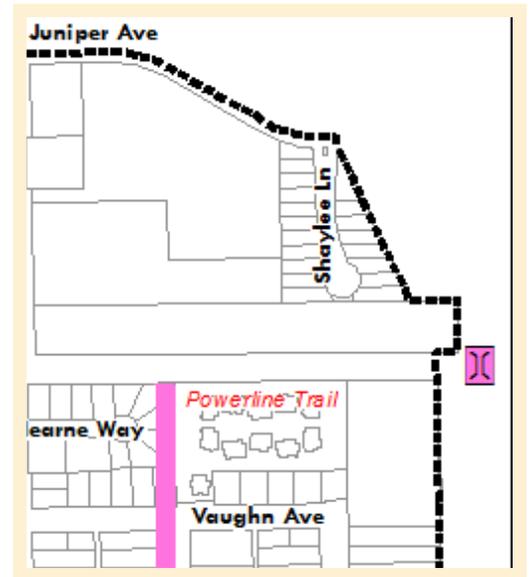
# VIII. Shared Use Path Canal Crossing at Northeastern District Boundary

## Project Description

It is recommended that a shared use path canal crossing (i.e., bridge) be constructed to connect the Powerline Trail to the Village II park on the north side of the Western Canal. This improvement will provide a travel path for bicyclists and pedestrians between the District and the neighborhood located just northeast of the District.

## Notes

- ◆ This project should be undertaken at the same time as the construction of the Cullumber and Elm Street Shared Use Paved Path project
- ◆ Coordination with SRP, including securing an easement, will be required in order to complete this project



EXPENSES	FISCAL YEAR					
	2017	2018	2019	2020	2021	Total
Construction		\$190,000				\$190,000
Construction Mgmt		\$15,000				\$15,000
Professional Services		\$20,000				\$20,000
<b>Total Expenses</b>		<b>\$225,000</b>				<b>\$225,000</b>



# Heritage District



# IX. Parking Enforcement and Regulation Policies

## Project Description

This project describes a program to help manage the existing parking that exists within the District. Recommended regulation policies include: implementing time restrictions for on-street parking, restricting overnight parking in the District, and developing and implementing a Residential Parking Permit program.

- ◆ Implement time restrictions of 3-4 hours for on-street parking. The intent is to direct shorter-term users to use the on-street facilities that are closer to desired destinations and encourage the use of off-street or further away facilities for longer-term users
- ◆ Restrict overnight parking in the District to ensure that spaces are available during daytime hours and not occupied by lingering vehicles from the previous night. Violators should receive a citation if parked for two consecutive nights
- ◆ A Residential Parking Permit (RPP) Program regulates spillover parking from the commercial area and ensures that residents have available parking spaces at their homes. These programs involve issuance of permits to residents and installation of signage to designate areas where only people with residential permits are allowed to park. Criteria for accepting permit applications would be developed and specific restrictions on parking would be determined by the town and affected residents

## Notes

- ◆ Management of the parking system should be overseen by Town enforcement officers who regulate the compliance with each of these programs
- ◆ Ongoing operation and maintenance costs for the program (such as staff time to issue permits and contribute to enforcement) could be subsidized by funds collected by a fee in-lieu program or by Town taxes

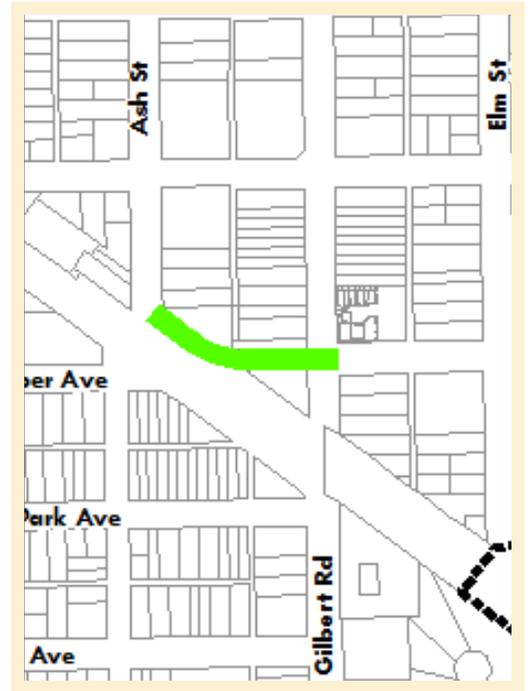
EXPENSES	FISCAL YEAR					
	2017	2018	2019	2020	2021	Total
Construction		\$40,000				\$40,000
Construction Mgmt		\$4,000				\$4,000
Professional Services		\$6,000				\$6,000
Total Expenses		\$50,000				\$50,000



# X. Cullumber Avenue Extension

## Project Description

Cullumber Avenue would be extended as a two-lane road to connect between Ash Street and Gilbert Road adjacent to the railroad. This extension will provide another access point to the District and improve roadway network continuity by including bike lanes and sidewalks in each direction. The Town owns all of the parcels along the proposed Cullumber Avenue extension with the exception of parcels that are part of the existing Norwood Furniture development.



## Notes

- ◆ This project should be done in conjunction with the construction of a new signalized intersection at Cullumber Avenue and Gilbert Road
- ◆ The implementation of this extension would require removal of one existing building

EXPENSES	FISCAL YEAR					
	2017	2018	2019	2020	2021	Total
Construction			\$310,000			\$310,000
Construction Mgmt			\$30,000			\$30,000
Land/ROW			\$300,000			\$300,000
Professional Services		\$35,000				\$35,000
<b>Total Expenses</b>		<b>\$35,000</b>	<b>\$640,000</b>			<b>\$675,000</b>



# Heritage District



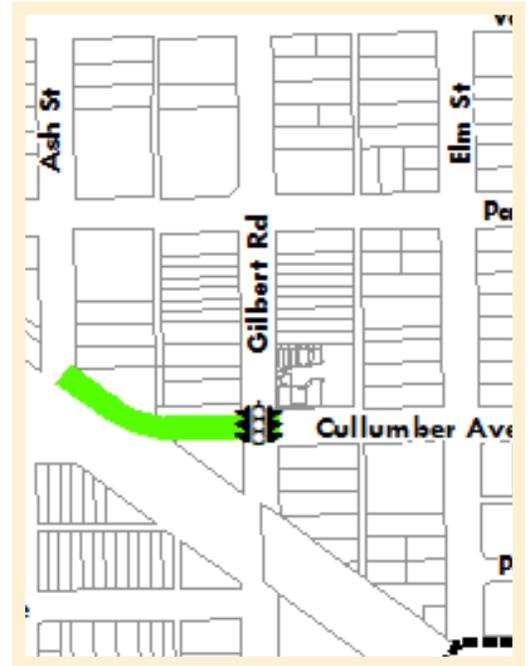
# XI. New Signal at Cullumber Avenue and Gilbert Road

## Project Description

In coordination with the West Cullumber Extension from Ash Street to Gilbert Road and the Ash Street Bikeway, it is recommended that a signalized intersection be constructed at the intersection of Cullumber Avenue and Gilbert Road to facilitate the movement of vehicles, pedestrians, and bicyclists across Gilbert Road.

## Notes

- ◆ This project should be done in conjunction with the construction of the Cullumber Avenue Extension and the Ash Street Bikeway



EXPENSES	FISCAL YEAR					
	2017	2018	2019	2020	2021	Total
Construction			\$360,000			\$360,000
Construction Mgmt			\$10,000			\$10,000
Professional Services		\$30,000				\$30,000
<b>Total Expenses</b>		<b>\$30,000</b>	<b>\$370,000</b>			<b>\$400,000</b>



# Heritage District



# XII. Fee In-Lieu Parking Study and Implementation

## Project Description

A fee in-lieu parking study is needed in order to develop and plan for the implementation of a fee in-lieu parking program in parts of the District. The following must be considered as part of the fee in-lieu program:

- ◆ A boundary of the in-lieu parking district should be determined and a parking inventory of all available public parking in the district should be conducted
- ◆ The in-lieu fee should only be assessed when there are new developments or modifications to existing uses that increase parking demands; existing development within the in-lieu parking district should not be assessed a fee for existing parking requirements.
- ◆ Owners should have the option to provide on-site parking instead of paying the in-lieu fee
- ◆ The in-lieu fee should be based on the construction and maintenance costs per parking space of newly constructed parking. A typical range for the cost of a parking space is likely to be between \$2,000 for a surface lot space and \$10,000 for a garage space

## Notes

- ◆ Right-of-way acquisition costs will need to be considered and folded in to the in-lieu fee. The cost will depend on the Town's sales tax and the historical increases over recent years, developer impact fees, and the cost to the Town of constructing parking
- ◆ Upon implementation, there will be ongoing operation and maintenance costs for the fee in-lieu program (such as staff time for processing fees). These costs should ideally be subsidized by funds collected by the program and/or by Town taxes

EXPENSES	FISCAL YEAR					
	2017	2018	2019	2020	2021	Total
Professional Services		\$25,000	\$25,000			\$50,000
<b>Total Expenses</b>		<b>\$25,000</b>	<b>\$25,000</b>			<b>\$50,000</b>



# Heritage District



# XIII. Parking Management Study

## Project Description

To implement and maintain the variety of parking programs that are recommended, a management structure for overseeing and managing the District’s parking system should be developed and implemented. This should all be considered as part of the parking management study and should include considerations of staff duties and regular enforcement and maintenance needs.

## Notes

- ◆ The study should be undertaken after preliminary discussions and implementation of more extensive and complicated parking strategies found in other projects
- ◆ In the long-term, when a parking management system becomes needed, the implementation and operation of the parking management system will require Town staff time

EXPENSES	FISCAL YEAR					
	2017	2018	2019	2020	2021	Total
Professional Services				\$50,000		\$50,000
Total Expenses				\$50,000		\$50,000





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