



JEFFERSONVILLE BIKE AND PED PLAN Jeffersonville, IN



FINAL

Prepared By



July 30, 2013



LETTER OF INTRODUCTION



Butler Fairman & Seufert, Inc. (BF&S) and Kovert Hawkins Architects (KHA) is pleased to present the Jeffersonville Bike and Pedestrian Plan to the citizens and administrators of the City of Jeffersonville, Indiana. This report is the product of a collaborative effort by city staff, BF&S and KHA design professionals, the Jeffersonville Bicycle Advisory Committee, local merchants, local bicycle clubs, and members of the community. It is intended to serve as a guide for future alternative transportation and recreational development within Jeffersonville and the city's connections to the surrounding communities.

Each bicycle facility route, pedestrian improvement, program recommendation, and policy recommendation was thoroughly researched. Decisions were based on a process that consisted of a city-wide, inventory and analysis process, design synthesis, public input, cost analysis, and development of design standards before ultimately reaching the master plan stage. The resulting recommendations are the best solutions to initiating a city-wide bicycle and pedestrian network. As the city grows and other opportunities present themselves, the Master Plan may need to be updated periodically. The plan is intended to be a "living document". However, the initial Master Plan will serve as a long lasting foundation for future alternative transportation development.

BF&S and KHA is very appreciative to have been able to assist the City of Jeffersonville in this planning effort and looks forward to the implementation of these recommendations.

Respectfully submitted on the 30th day of July 2013,

Butler, Fairman, & Seufert, Inc.

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FINAL PLAN

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Kick-off Meeting Minutes - March 18, 2013
Stakeholder Meeting Minutes - April 2-3, 2013
Public Input Meeting Minutes - April 9-11, 2013
Online Survey
Advisory Committee Meeting Minutes - April 24, 2013
Advisory Committee Meeting Minutes – May 22, 2013
Public Meeting (Draft Plan) – May 29, 2013
Advisory Committee Meeting Minutes – June 5, 2013
Advisory Committee Meeting Minutes – July 1, 2013
Public Meeting (Final Plan) – July 11, 2013
Final Plan Submittal to Plan Commission – July 30, 2013

APPENDIX B

Sidewalk Condition and Pedestrian Amenities Assessment



JEFFERSONVILLE BIKE AND PED PLAN



PROJECT BACKGROUND



NEED FOR THE PLAN

In the United States of America 30% of population currently does not drive a vehicle. This includes children, the elderly, those people that are physically unable to drive, those that are financially unable to afford the cost and maintenance of a vehicle, and an increasing population of those who chose to use alternative transportation for its health, economic, and environmental benefits.

The community of Jeffersonville, Indiana, and surrounding communities are experiencing an increased number of walkers and cyclists with opening of the Ohio River Greenway. Currently several cycling groups and experienced riders use Market Street / Utica Pike to take advantage of the scenery of the river and the countryside away from the downtown. The opening of the Big 4 Bridge ramp to Jeffersonville will only add to increased walking and biking traffic in the community. The city understands that this influx will have many positive impacts on the community, but that it needs to be ready to create a bicycle and walking culture in an effort to take advantage of these positive impacts.

In January of 2013, the City of Jeffersonville hosted a Bicycle-friendly Community Seminar facilitated by the Indiana State Department of Health (ISDH) and Bicycle Indiana. The full day seminar was attended by over fifty people representing a broad range of community stakeholders. Based upon the success of the seminar ISDH has awarded a grant for the preparation of a community wide bicycle and pedestrian master plan for the City of Jeffersonville.

The plan will help to create both a bicycle and pedestrian friendly community through a thorough analysis of existing infrastructure, programs, and policies. The plan will then make recommendations on ways to improve in these areas. Implementation of these recommendations will help to create a better quality of life for the citizens of Jeffersonville, increased economic development, an improved environmentally friendly community, and increased health.

Currently it is recommended that adults receive moderate activity at 150 minutes a week. This translates to 30 minutes a day for 5 days a week. In the state of Indiana 30% of adults fall into the obese category and 16% of teenagers are obese. This alarming fact is partly attributed to an increasingly sedentary lifestyle. In 1969 the percentage of schoolchildren walking to school was 48% and today that number is down to 13%. Getting more kids to walk or bike to school could help lower this percentage and an added benefit is that kids who walk or ride arrive ready to learn and more focused. This is also true of workers who use alternative modes of transportation.

Finally, the plan will help to bring increased awareness to biking and walking in the community through programs and policies that promote, enforce, educate, and enforce.

TARGET USERS

This plan is attended for pedestrians and bicyclists who either wish to or need to make daily trips to goods and services within their community. Some users that fall into the category of needing to make trips by foot are the elderly who can no longer drive, schoolchildren, those people that are unable to afford or maintain a car and therefore need to find alternative means to make connections.

This plan is also for casual bike riders that are not used to riding among automobile or truck traffic. These types of riders require improved infrastructure or residential streets with low traffic and speed limits to make connections within the community. These types of riders account for 60% of the bicycling population.



GOALS AND OBJECTIVES

1. Create an understanding of the true prevalence of walking and bicycling currently in Jeffersonville and increase the number of bicyclists and walkers in the community.
2. Increase the amount of people walking and bicycling for everyday transportation purposes such as commuting to work, to school and running errands.
3. Provide guidance and priorities for implementing programs, policies and infrastructure to support walking and bicycling with a broad range of funding and support.
4. To provide safe walking and biking experiences for all age groups and levels of ability.
5. Create connections to destinations within Jeffersonville as well as to surrounding communities.
6. Provide community awareness of motorists sharing the road with cyclists.
7. Create a user map of safe cycling and walking routes.
8. Structure plan to address a future application to the League of American Bicyclists.
9. Recommend those items that can easily be implemented quickly and for low cost.
10. Provide routes that make safe connections to schools.

SCOPE OF THE PLAN

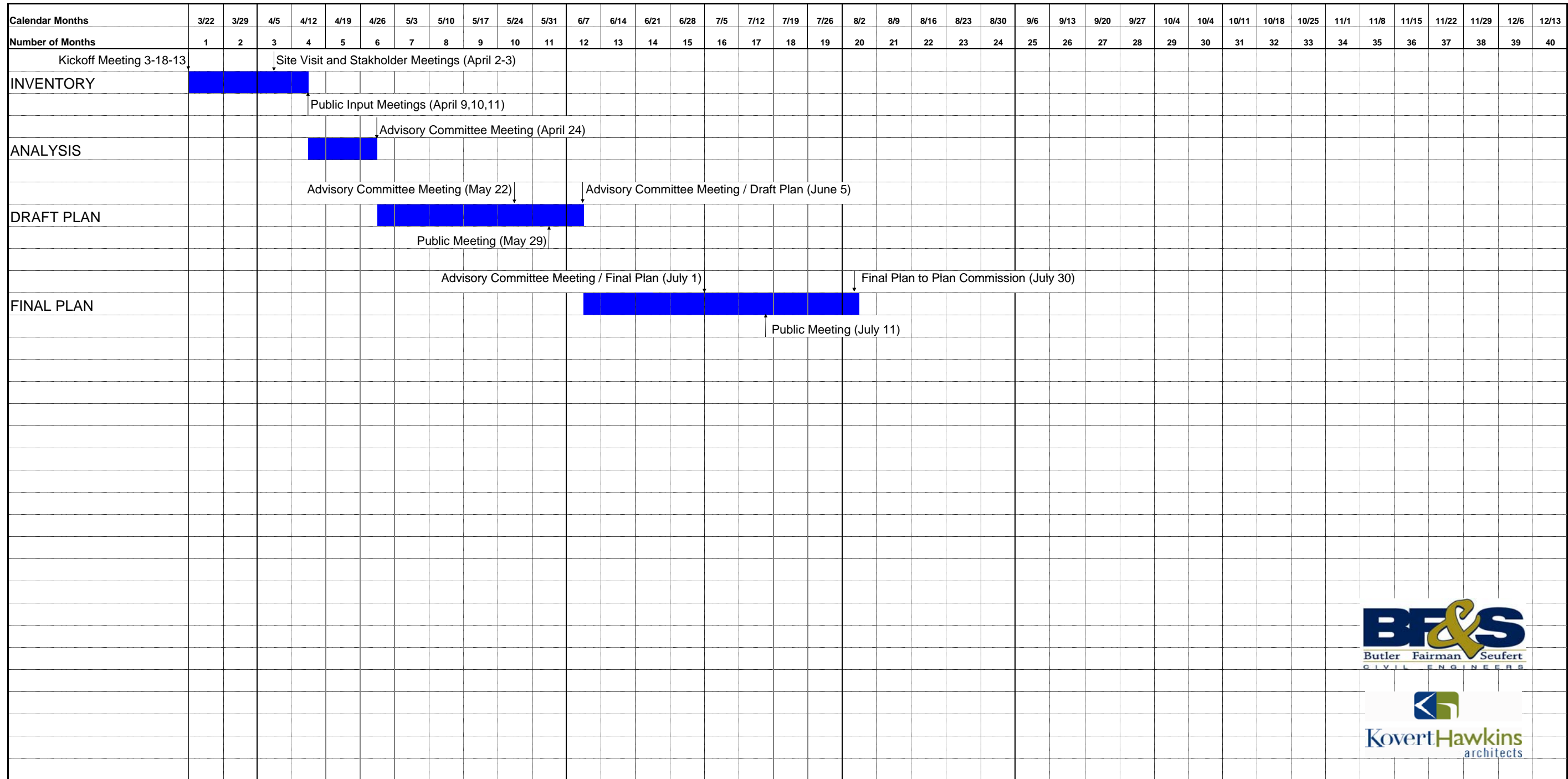
Due to the time frame of the project the plan will concentrate on 4 main corridors within the community for bicycle route improvement. Each corridor will be studied approximately 5miles from its starting point. The Spring Street / Hamburg Pike corridor will start at Riverside Drive and head north to Coopers Lane. The 10th Street Corridor will start at Spring Street and head northeast to River City Park Road. The 8th Street / Middle Road corridor will start at Spring Street and head northeast to its terminus. The Market Street / Utica Pike corridor will start at Spring Street and head northeast to Church Street.

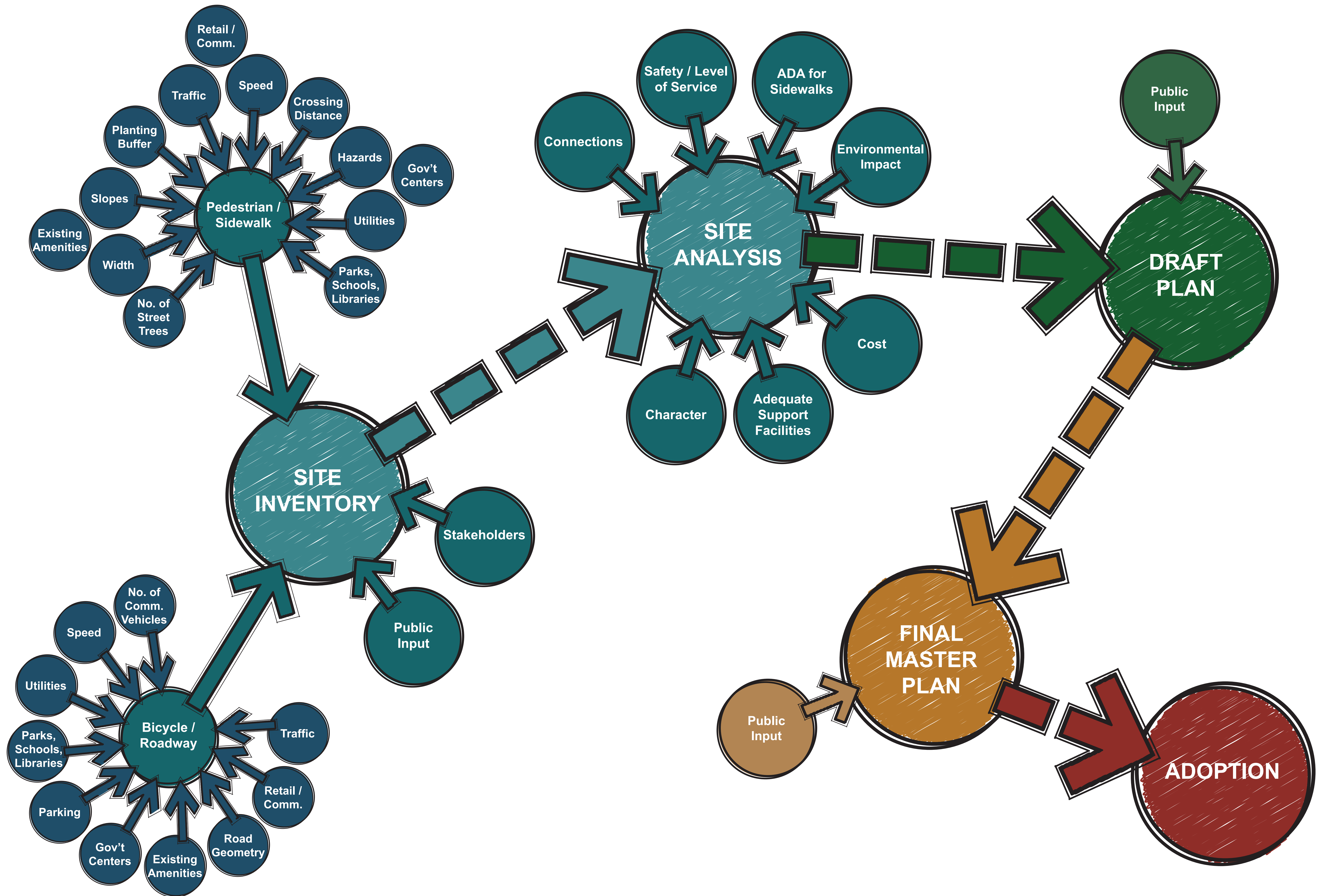
The walk ability study will concentrate on the downtown area. The area studied will be approximately be bounded by Mulberry Street to the West, Riverside Drive to the South, Meigs Avenue to the East, and 10th Street to the North.

Policies and Programs will cover the entire community.

**JEFFERSONVILLE BIKE PED PLAN
PROJECT
SCHEDULE**

5-22-13 (Revised)







JEFFERSONVILLE BIKE AND PED PLAN



PUBLIC INVOLVEMENT PROCESS



PUBLIC INVOLVEMENT PROCESS



DESCRIPTION	DATE
Project Kick-off Meeting	March 18, 2013
Government Stakeholder Meeting	April 2, 2013
Private Citizens and Organizations Stakeholder Meeting	April 2, 2013
Retail and Dining Stakeholder Meeting	April 3, 2013
Major Employers Stakeholder Meeting	April 3, 2013
Public Input Meetings (3)	April 9-11, 2013
Online Survey	April 9 - May 10, 2013
Inventory and Analysis Submittal (Advisory Committee Meeting)	April 24, 2013
Draft Plan Review (Advisory Committee Meeting)	May 22, 2013
Draft Plan Public Meeting	May 29, 2013
Draft Plan & Public Input Review (Advisory Committee Meeting)	June 5, 2013
Final Plan Review (Advisory Committee Meeting)	July 1, 2013
Final Plan Public Meeting	July 11, 2013
Final Plan Submittal to Plan Commission	July 30, 2013



SUMMARY OF MEETINGS

In an effort to get as much input from as many different members of the community as possible there were several different types of meetings provided throughout the course of the project.

There were a series of 5 advisory committee meetings held to review the major stages of the plan process. These meetings consisted of meetings with city staff and selected members of the community. See Appendix "A" for a list of the Jeffersonville Bicycle and Pedestrian Master Plan Advisory / Steering Committee and meeting minutes from each meeting.

A series of 4 stakeholder meetings were held during the inventory and analysis stage of the project. The groups were split into government stakeholders, private citizens and private organizations, local retail and dining, and major employers. See Appendix "A" for a list of the stakeholders invited and meeting minutes from each stakeholder meeting.

During the inventory and analysis phase of the project the city held 3 community / public input meetings on three different nights and in three different locations around the community to give as much opportunity for the public to express its desires and wants for the project. Each meeting encouraged the public to participate by allowing attendees to place stickers on 4 different boards designed to find out where residents would like to get to and from within the community and the bicycle and walking programs that they would be interested in. Members of the consultant team and city staff were able to interact with the public in "one-on-one" sessions. See Appendix "A" for boards and a summary of comments that were heard at the meetings.

There were two public presentations of the Jeffersonville Bicycle and Pedestrian Master Plan. The first presentation was given on May 29, 2013. This presentation was given while the plan was in a draft stage and the public was encouraged to provide feedback at the meeting or comment sheet was provided that citizens could take some time to digest the plan and send the comment sheet back by the end of the comment period. The final presentation of the plan was given on July 11, 2013. See Appendix "A" for a summary of the presentations and comments received.



ONLINE SURVEY

In an effort to give the public as many different options for input regarding the project a survey was created that could be posted on the City of Jeffersonville's website. This survey was also made available at the public input meetings. A series of 16 questions that asked such questions as approximate location of residence, location of community destination points they would like to be able to reach by bike or walking, their preferred method of alternative transportation, the current constraints to being able to reach community destination points, and their current activity level was made available over the period of a month.

See Appendix A for results of the online survey.



JEFFERSONVILLE BIKE AND PED PLAN



INVENTORY & ANALYSIS



INVENTORY & ANALYSIS

INVENTORY AND ANALYSIS: PROGRAMS

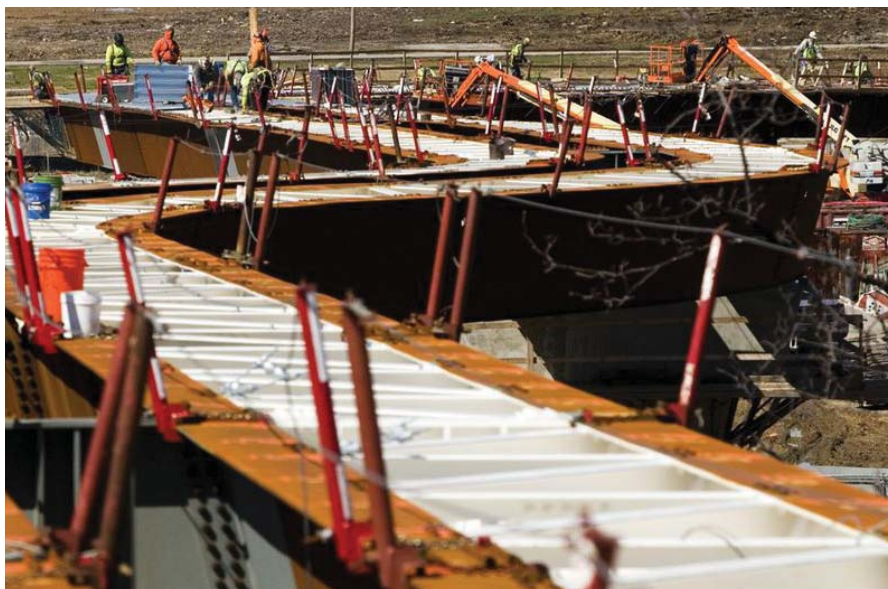
In the early twentieth century, Jeffersonville, like the rest of the world, started to redevelop its streets to accommodate the growing automobile traffic. During this time streets were widened, street cars were eliminated and inner-city neighborhoods became disconnected to meet the needs for the automobile traffic.

After World War II, a large spike in population marked the beginning of suburbia. Rural neighborhoods developed further from downtown, based around the automobile, losing amenities such as sidewalks or bikeways along the roadways. Currently, the City of Jeffersonville has started to re-invent their downtown implementing new parks, urban plazas and, specifically, the Big Four Pedestrian Bridge. This bridge will connect Louisville, KY with Jeffersonville, IN by way of an abandoned rail track spanning over the Ohio River. The bridge will be made accessible to pedestrian and bike traffic only, using two large ramps on either side of the river.

To further promote bicycling, walking and running throughout the area, using the Big Four Bridge as a catalyst, Jeffersonville will be implementing this plan to suggest bike friendly routes, bike lanes and new sidewalks throughout the City. A portion of this plan will also suggest new programs to be used for education, encouragement, enforcement, evaluation and engineering (5 E's Program developed by The League of American Bicyclists). This will be the basis behind new programs and help generate new policies for the City of Jeffersonville and be further explained in the Programs and Policy portion of the document.

As part of the inventory and analysis stage, this plan identified existing programs in place, collected recommendations from the community and identified program gaps in the current system. Three community meetings and four stakeholders meetings were held to gather information about existing bicycling and walking within Jeffersonville and what vision the City had for the future.

The next five charts analyze programs for biking, walking and running based on the 5 E's as described above. These charts will describe the state of what Jeffersonville currently has in place, needs according to stakeholders and community suggestions and analysis for future development of programs. Following the analysis of the current programs, an understanding of current policy will be examined as it relates to enforcement and implementation within the City of Jeffersonville.



Jeffersonville Big Four Bridge Ramp Under Construction



INVENTORY & ANALYSIS



Jeffersonville Bicycle and Pedestrian Comprehensive Plan: Inventory & Analysis

Education

Existing Programs	Community Suggestions	Future Development of Programs
Program: Downtown Jeffersonville walking tours offering architectural and historical information about downtown buildings.	Suggestion: Classes within the public school system to education students on bike safety and road safety.	Develop community wide Safe Routes which includes bicycle/walking safety education classes.
Program: Run for Fun, a class to learn to run using the Galloway Method on a 2 mile loop throughout downtown Jeffersonville.	Suggestion: Information to truck drivers on how to share the road and how to appropriately maneuver around bikers.	Develop adult bicycle education programs.
Program: Triple Crown of Running/ Mini Marathon Training, a 12 week training plan to finish a mini marathon.	Suggestion: Education program for motorists on sharing the road with bikers and pedestrians.	Develop education programs for motorist.
Program: Tri-It, a training program to instruct kids on the basics for completing a triathlon.	Suggestion: Mapping stations to give pedestrians and bikers knowledge of the existing and proposed walking and riding routes.	Develop education programs for truck drivers.
Program: Safety Town, a program teaching children safety rules for fires, helmet safety, street crossings and bike traffic safety.	Suggestion: Safety programs for children.	Create media to educate TARC, motorists and bicyclists on rules of the road.
	Suggestion: New rider handling classes.	Certify city employees through League of American Bicyclist to promote and educate users.
	Suggestion: Traffic skills education course for biking.	
	Suggestion: Add bicycle awareness to driver's education classes.	



INVENTORY & ANALYSIS

Jeffersonville Bicycle and Pedestrian Comprehensive Plan: Inventory & Analysis		
Encouragement		
Existing Programs	Community Suggestions	Future Development of Programs
Program: Downtown Jeffersonville Wine Walk and Shop Festival, a walk to promote the revitalization of the downtown and promote the local merchants.	Suggestion: Bike to work day.	Create bicycle and walking maps to be implemented on signage and pamphlets.
Program: Using web based media to promote existing pedestrian walking and running programs.	Suggestion: Develop additional biking and walking programs to help promote extracurricular activities.	Create City wide bicycle and walking events to help support extracurricular activities.
	Suggestion: Adding bicycling facilities to promote casual riders.	Support national bike and walking days.
	Suggestion: Public riding days for commuting to work and for fun.	Develop biking and walking groups within the community.
	Suggestion: Proper signage for those not familiar with the area and to direct people to amenities.	Connect with existing bicycling and walking facilities from other communities.
	Suggestion: Add biking festivals to promote biking; only walking ones exist through the Parks Department.	Create bicycle facilities to encourage bicycling within the City.
	Suggestion: Develop park and bike opportunities (similar to park and ride).	Create a community education and promotion department within the City.
	Suggestion: Create a Safe Routes to School program (biking and walking).	Create a more attractive environment for bicycling and walking.
	Suggestion: Develop a public bike sharing program.	Encourage employers to promote bicycling and walking to work.
	Suggestion: Implementing a bicycle advocacy group to promote biking events and programs within the City.	Use social media to promote bicycling, walking and running.



INVENTORY & ANALYSIS



Jeffersonville Bicycle and Pedestrian Comprehensive Plan: Inventory & Analysis

Enforcement

Existing Programs	Community Suggestions	Future Development of Programs
Program: Jeffersonville Police Department had some patrol on the road with bike cops. They are no longer in use.	Suggestion: Police to know how to enforce bikes and vehicles traveling on the road at the same time.	Train officers on rights of the road for bicyclists and drivers.
Program: Jeffersonville uses its Zoning Ordinance to create new sidewalks during all new site development projects.	Suggestion: Develop slower roads for bike traffic.	Create a bicycle enforcement patrol.
	Suggestion: Additional bike police to help promote and enforce bicycle activity.	Create laws to protect and support bicyclists and drivers sharing the road.
	Suggestion: Implement policy to make sure bike and pedestrian paths are implemented in new developments and on improved roads.	Require new development and road improvement projects to implement bicycle lanes as part of the design process.
	Suggestion: Motorists going to traffic school should be exposed to bike awareness training.	Encourage officer bicycle certification.
		Wayfinding system should support rules of the road.
		Implement bicycle awareness in drivers education classes.



INVENTORY & ANALYSIS

Jeffersonville Bicycle and Pedestrian Comprehensive Plan: Inventory & Analysis

Engineering

Existing Programs	Community Suggestions	Future Development of Programs
Program: Jeffersonville City Council approves Bike Route USBR #35, a national bike route for touring cyclists.	Suggestion: Bike route to access Charlestown State Park.	Create a comprehensive, connected and well maintained bicycle network.
Program: Jeffersonville to implement new sidewalks along Hamburg Pike with Road Improvements.	Suggestion: Implementation of a wayfinding system and dedicated bike lanes for the Jeffersonville roadways.	Create facilities to be incorporated throughout the City (i.e. bike parking, restrooms, wayfinding, maintenance hubs).
Program: A sidewalk master plan has been created and will be implemented in stages.	Suggestion: Adding additional bike spaces for new developments within reason. Should depend on scale and type of development.	Develop a Complete Streets ordinance to encourage bicyclists and pedestrians to be on and along the streets.
Program: A downtown arbor walk has been created and currently being implemented in stages.	Suggestion: Adding public restrooms to encourage downtown walking and riding.	Implement, according to the priorities, the comprehensive bicycle routes.
Program: Design for sidewalk to be implemented down 10th Street as part of a street widening effort.	Suggestion: Implementing additional trash cans to encourage downtown walking and riding. This will improve maintenance along routes.	Develop an ordinance to implement sidewalks and bike lanes on all new and improved roadways.
	Suggestion: Implement a maintenance program for bike and walking routes.	Connect existing subdivisions and schools with new sidewalks and bike lanes.
	Suggestion: Need of storage facilities for commuters or visitors from the Big Four Bridge.	Develop a street and sidewalk maintenance program.
	Suggestion: Utica Pike most traveled bike route and will need a dedicated bike path off the road.	Connect neighboring communities with sidewalks and bike lanes.
	Suggestion: Work with River Ridge to help implement safe bike routes though the development.	Develop strategies for mountain biking at existing open spaces.
	Suggestion: Bike routes to reach major commercial corridors and parks within Jeffersonville.	Continue to develop the Ohio River Greenway throughout Jeffersonville.
	Suggestion: Neighborhood and schools should all have pedestrian paths which connect.	Develop dedicated lanes for bicyclists.
	Suggestion: Need for more dog waste stations along pedestrian routes.	
	Suggestion: Develop new pedestrian and bicycle paths along the river for recreational use.	



INVENTORY & ANALYSIS



Jeffersonville Bicycle and Pedestrian Comprehensive Plan: Inventory & Analysis

Evaluation

Existing Programs	Community Suggestions	Future Development of Programs
Program: Implemented a new signage system to be implemented within the City.	Suggestion: Police to know how to enforce bikes and vehicles traveling on the road at the same time.	Evaluation program to give statistics on bike crashes in the community.
Program: YourGov is an existing online submittal system where citizens can alert public officials of issues within the community. Issues can be submitted about animals, sanitation, drainage, sewers, parks, sidewalks, streets and zoning.	Suggestion: Develop slower roads for bike traffic.	Implement a bicycle and pedestrian comprehensive plan into the City's Comprehensive Plan.
Program: A bicycle and pedestrian comprehensive plan to be implemented into the Jeffersonville Comprehensive Plan 2030.	Suggestion: Additional bike police to help promote and enforce bicycle activity.	Create a bicycle and pedestrian advisory committee to support program and new bicycle routes in the City.
	Suggestion: Implement policy to make sure bike and pedestrian paths are implemented in new developments and on improved roads.	Create a Department of Health and Education to develop, implement and further the bicycle and pedestrian comprehensive plan.
	Suggestion: On-line reporting method for problematic pedestrian and bicycle intersections.	Develop a bicycle and pedestrian report card to evaluate the current facilities and programs in the City.
		Secure funding to implement the bicycle and pedestrian comprehensive plan.



INVENTORY & ANALYSIS

INVENTORY AND ANALYSIS: POLICIES

Jeffersonville has adopted two documents which determine how the City will grow in the current environment and into the future. The long range plan consists of the Jeffersonville Comprehensive Plan 2030. This plan determines goals and objectives which the City would like to accomplish for transportation, utilities, land use, recreation and housing. Using the goals and objectives, broad policies guidelines were formed to enforce the vision of Jeffersonville. This Comprehensive Plan will be amended to implement the Jeffersonville Bicycle and Pedestrian Comprehensive Plan.

Currently there are goals, objectives and policy which support this plan. The following were considered when developing new policy and programs for the City of Jeffersonville:

City of Jeffersonville Comprehensive Plan

Land Use Element

Goal LU-1:

Identify land use policies which apply to emerging forms or patterns of development; physical features; existing and planned community facilities and transportation systems; and infrastructure, capital investment and economic planning initiatives. These policies will guide for the location, type and design of future land development, transportation and community facilities within the City of Jeffersonville.

Policy Recommendation

- Encourage street connections between new and existing neighborhoods.
- Provide pedestrian linkages to schools, parks, neighborhood retail areas and between neighborhoods.

Planning Districts

Goal Downtown Historic District 1:

Create a downtown with a compact, walkable core and lively and active pedestrian environment that fosters and increases the number of people walking on primary downtown sidewalks and ensures a more humane downtown environment.

Goal Primary Gateways 1:

Gateway features can delineate and announce one's arrival into a city, neighborhood or unique public space. These gateway features not only shape a visitor's first impression of the city, but can also reflect the unique features and character of Jeffersonville.

Policy Recommendation

- Accommodations could include pedestrian activated signals and possible bike lanes or shared wide outside lane for cyclists.
- Linkage to the bicycle/pedestrian paths proposed for Wheels and Heels Trail.

Public Way Element

Goal PW-1:

To provide the citizens of the City of Jeffersonville with a well-planned and coordinated system of major thoroughfares and collectors that is safe, cost effective and responsive to planned growth and development.

Policy Recommendation

- Encourage pedestrian and bicycle pathways as part of subdivision and site plan approval process.



INVENTORY & ANALYSIS



Policy Recommendation

- Develop roadway design standards for new roads that are safe, efficient, in order to minimize the adverse impacts upon the community.
- Standards should address bicycle and pedestrian facilities.

Goal PW-2.1:

Coordinate Jeffersonville's Major Thoroughfare Plan with other modes of travel, including bus transit, rail, pedestrian and bicycle, to comprehensively address mobility issues and needs within the City of Jeffersonville.

Policy Recommendation

- Develop long-term, community-wide bicycle and pedestrian recommendations in the Major Thoroughfare Plan.
- Encourage the inclusion of bicycle and pedestrian facility connections between nearby developments and community facilities or workplaces.

Policy Recommendation

- Address, in addition to road facilities, public transportation, ride-sharing programs, bicycle and pedestrian facilities in the public participation process of the Community Master Plans.

INVENTORY AND ANALYSIS: POLICIES

The City of Jeffersonville has adopted their own Zoning Ordinance which allows them to regulate new developments within the City. Currently there are few codes that pertain to the bicycle and pedestrian implementation for new developments. The following are existing codes used to create new pedestrian ways for new developments:

Jeffersonville Zoning Ordinance: Chapter 7

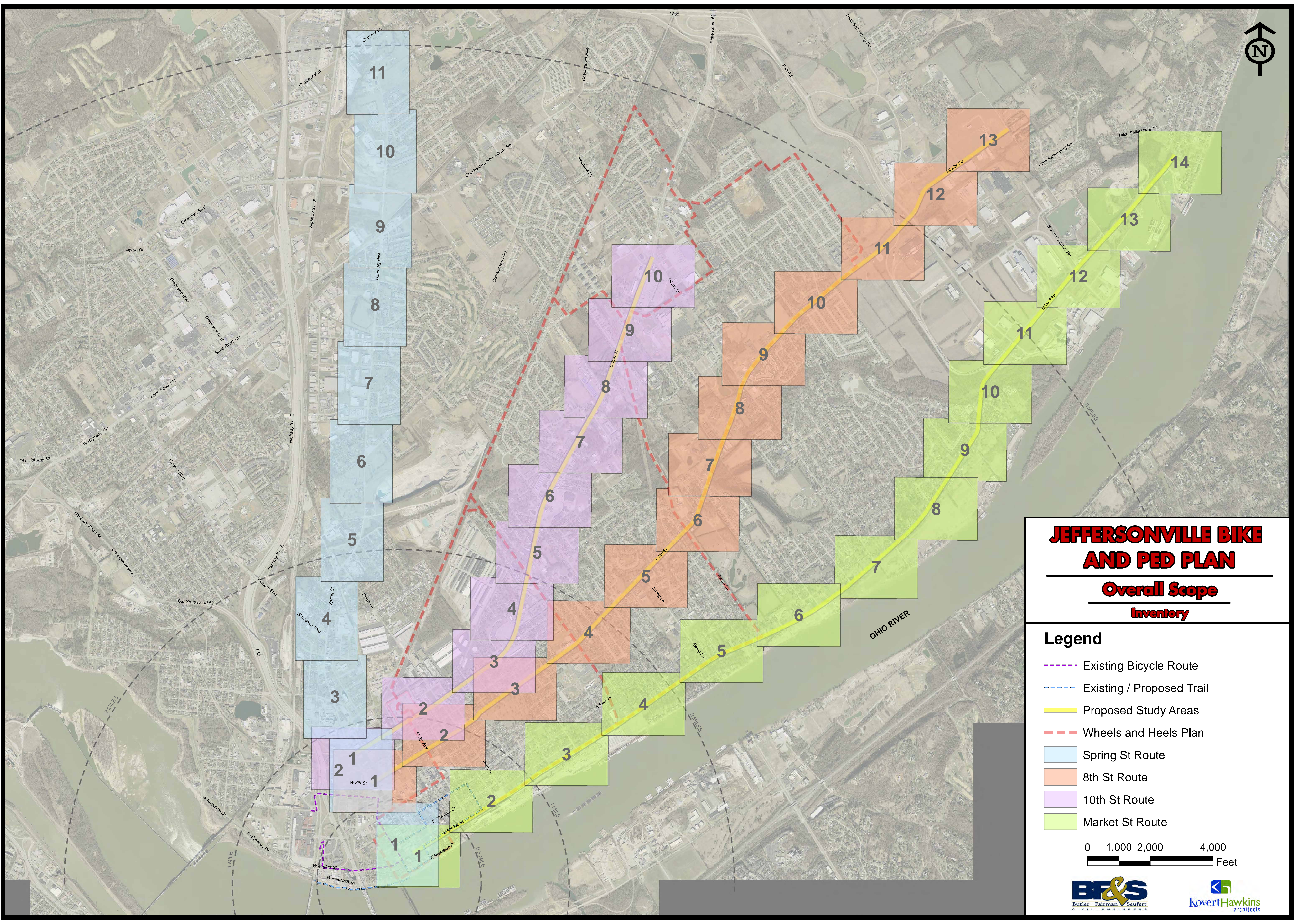
All new development must create a 6'-0" concrete walk within the Right-Of-Way. If a sidewalk cannot be supplied a waiver can be granted. If a waiver is granted, the development must pay a fee in-lieu of the sidewalk as determined by the City Engineer.

Jeffersonville Sidewalk Master Plan

A sidewalk master plan has been approved by Jeffersonville Redevelopment Commission. This plan explains new sidewalks to be implemented throughout the City. This plan will be implemented under the discretion of the City Engineer as funding becomes available.

Jeffersonville ADA Transition Plan

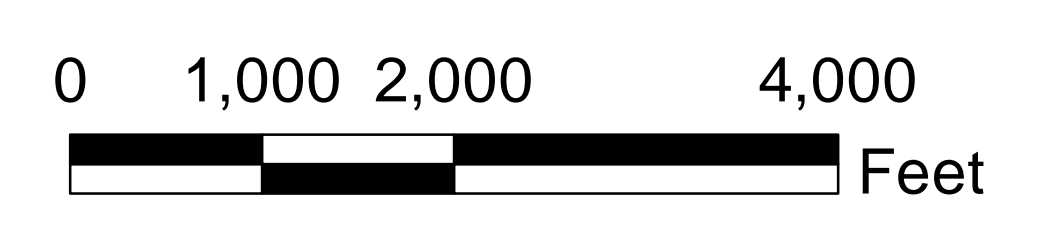
Jeffersonville is currently going through a transition plan to upgrade all walkways to be compliant with the ADA Standards for Accessible Design. Doing so will create sidewalks and roadway crossings safe for those with disabilities. Sidewalks will be upgraded to incorporate proper signage at crossings, proper ramps at curb cuts, have suitable grading transitions and be level with no uneven pavement.



JEFFERSONVILLE BIKE AND PED PLAN

Overall Scope Inventory

- Legend**
- Existing Bicycle Route
 - Existing / Proposed Trail
 - Proposed Study Areas
 - Wheels and Heels Plan
 - Spring St Route
 - 8th St Route
 - 10th St Route
 - Market St Route





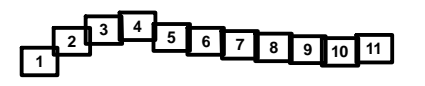
- Legend**
- Point of Interest
 - Typical Sections
 - Existing Bicycle Route
 - Existing / Proposed Trail
 - Proposed Study Areas
 - Wheels and Heels Plan
 - Retail / Dining
 - Park / Recreation Center



Looking northwest between Chestnut St. and Maple St.



Looking northwest at Chestnut St. and Spring St. intersection

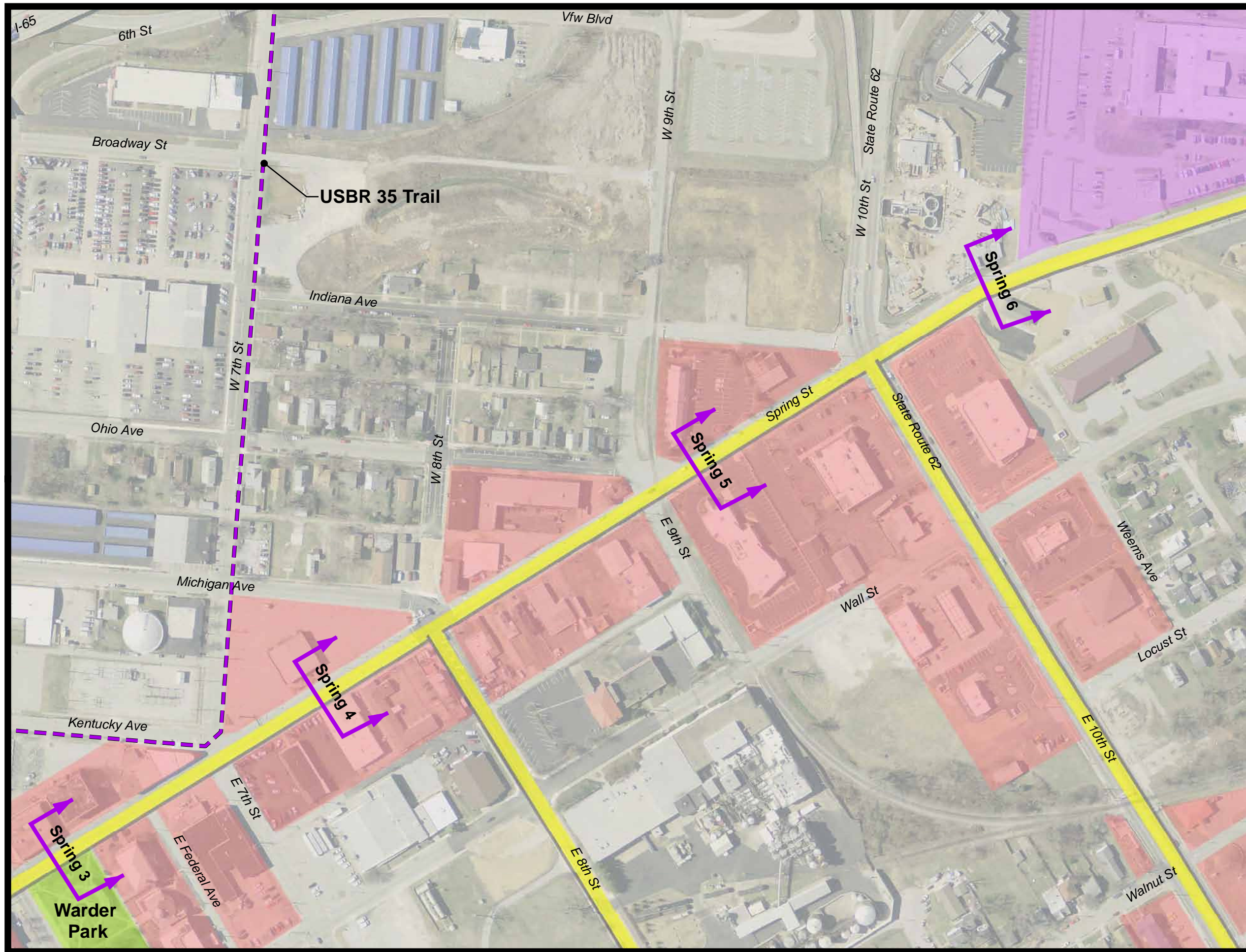


JEFFERSONVILLE BIKE AND PED PLAN

Spring St/Hamburg Pike

Inventory





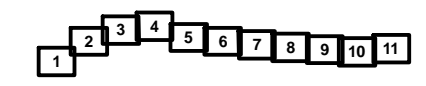
- Legend**
- Typical Sections
 - Existing Bicycle Route
 - Proposed Study Areas
 - Retail / Dining
 - Industrial / Commercial
 - Park / Recreation Center



Looking northwest between 8th St. and 9th St.

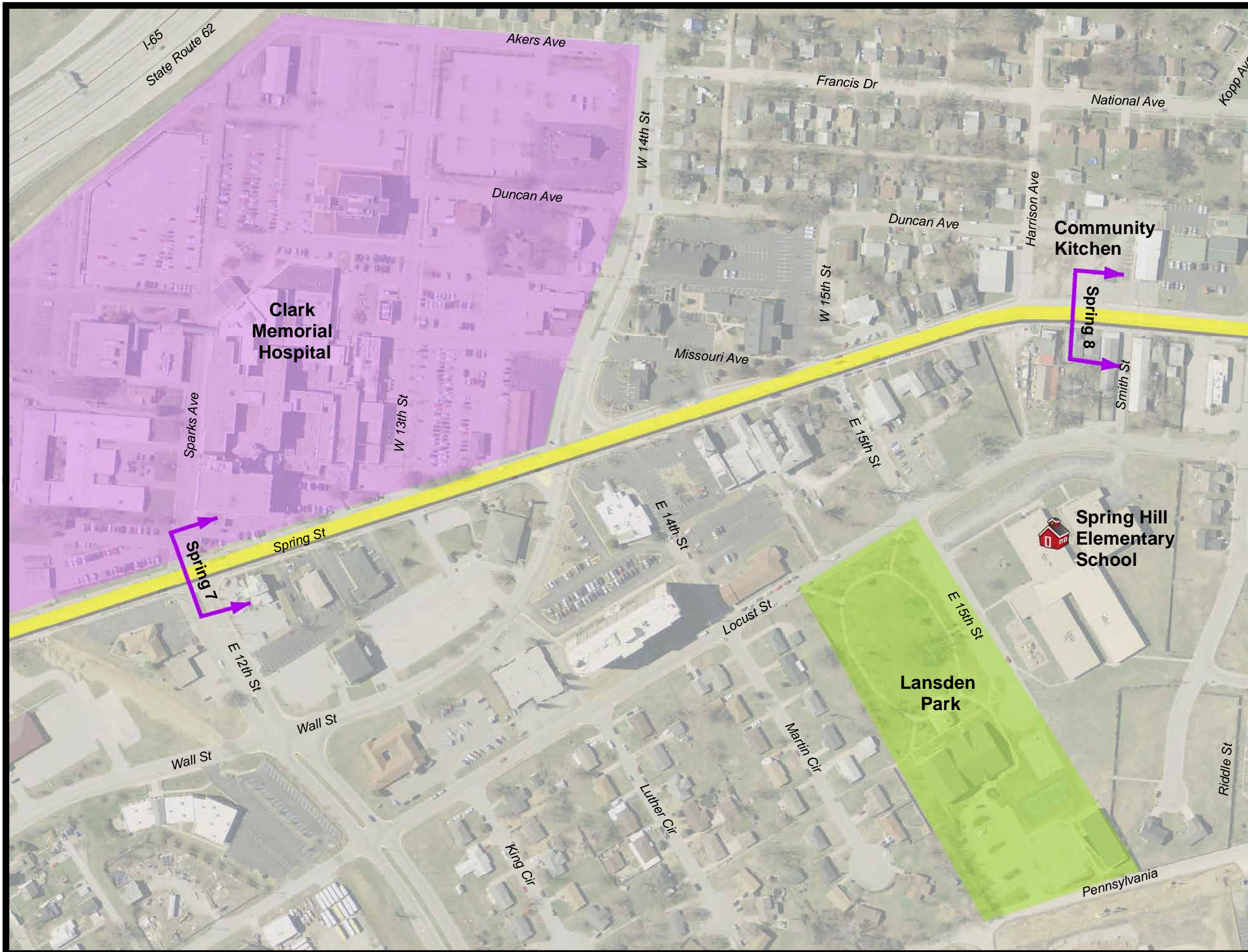


Looking southeast between 9th St. and 10th St.








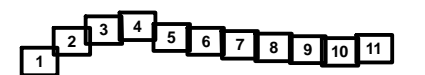
JEFFERSONVILLE BIKE AND PED PLAN
Spring St/Hamburg Pike
Inventory





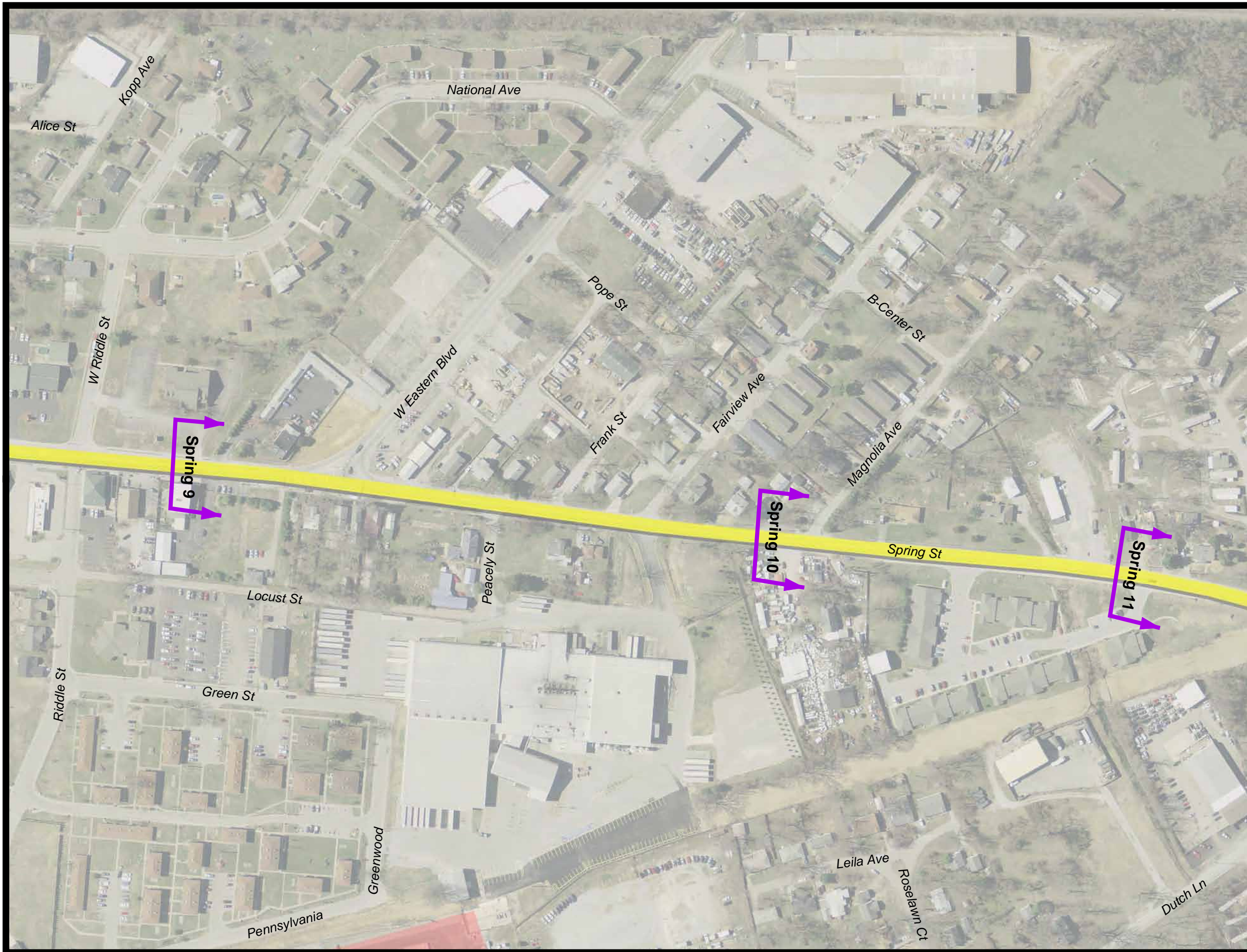
Legend

-  Schools
-  Typical Sections
-  Proposed Study Areas
-  Industrial / Commercial
-  Park / Recreation Center






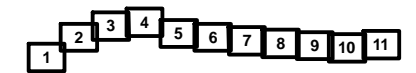
JEFFERSONVILLE BIKE AND PED PLAN
Spring St/Hamburg Pike
Inventory





Legend

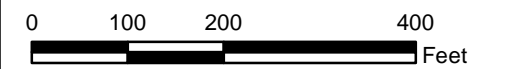
-  Typical Sections
-  Proposed Study Areas
-  Retail / Dining

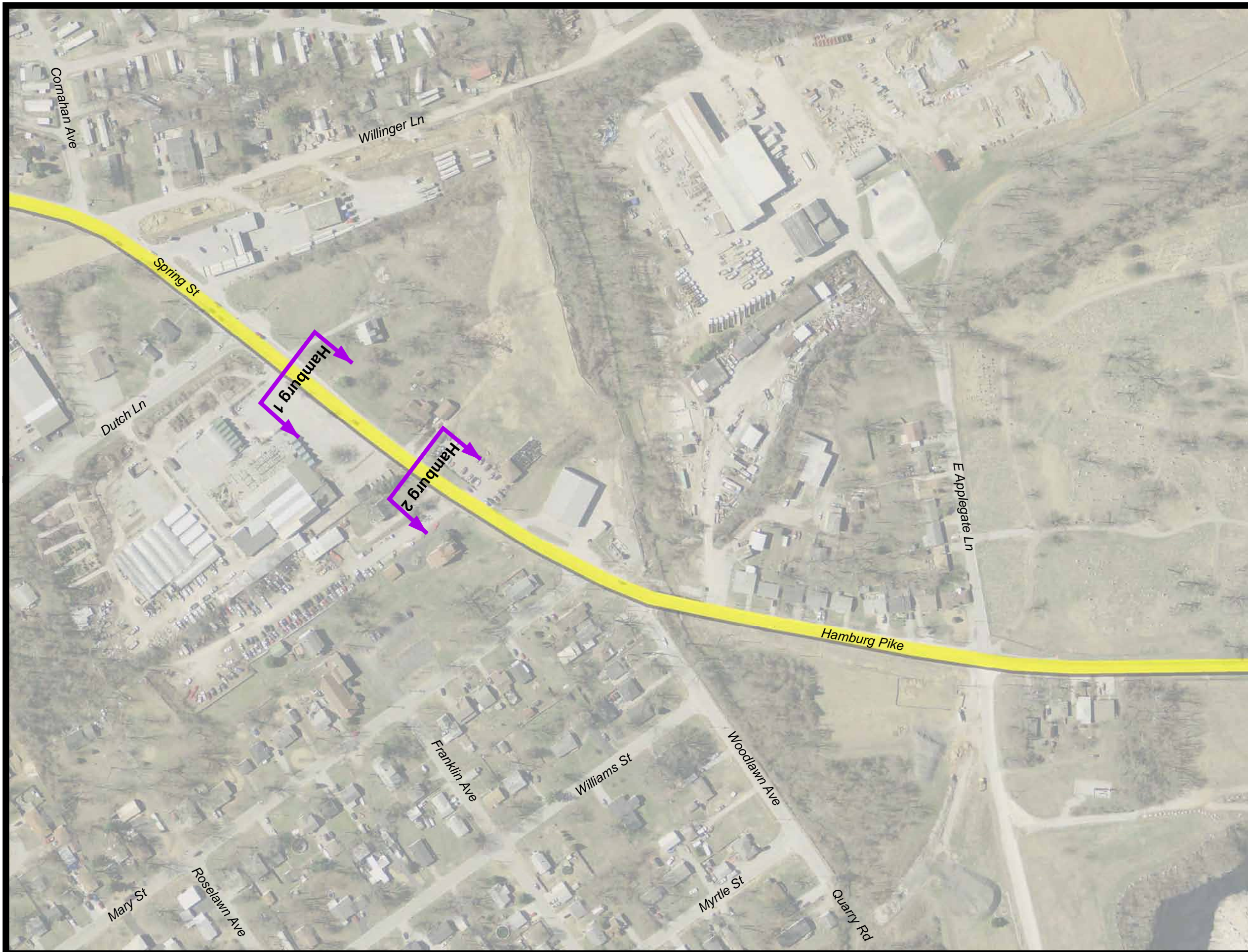


JEFFERSONVILLE BIKE AND PED PLAN

Spring St/Hamburg Pike


Inventory

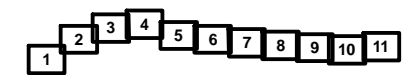




Legend

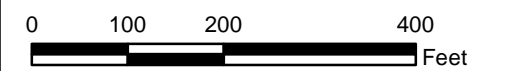
 Typical Sections

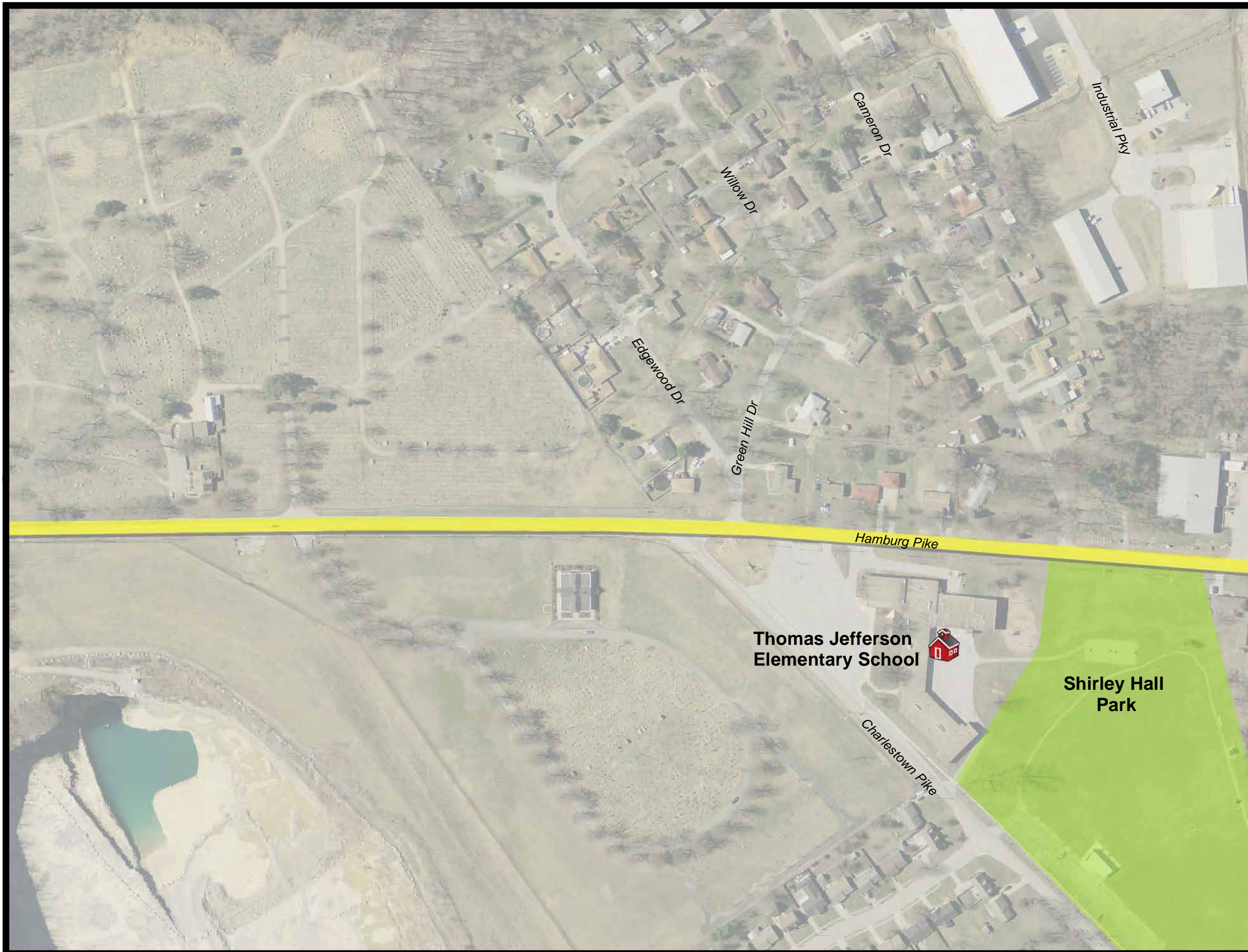
 Proposed Study Areas







JEFFERSONVILLE BIKE AND PED PLAN

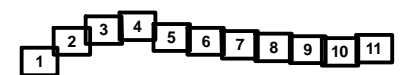
Spring St/Hamburg Pike Inventory





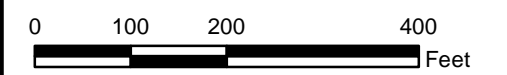
Legend

-  Schools
-  Typical Sections
-  Proposed Study Areas
-  Park / Recreation Center




**JEFFERSONVILLE BIKE
AND PED PLAN**


**Spring St/Hamburg Pike
Inventory**

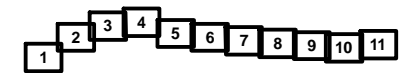




Legend

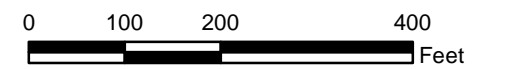
 Typical Sections

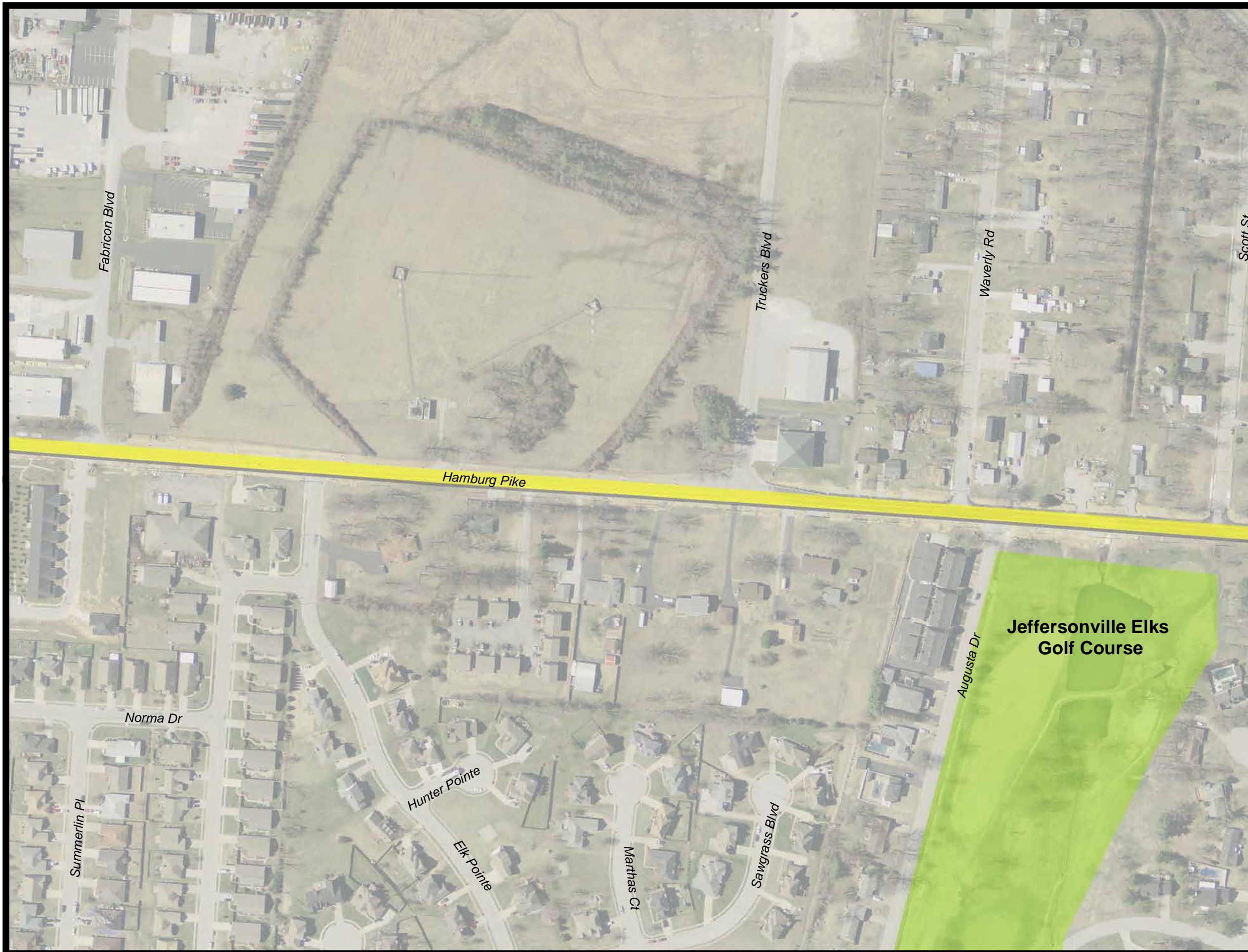
 Proposed Study Areas






JEFFERSONVILLE BIKE AND PED PLAN

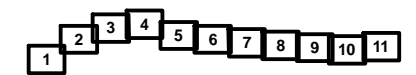
Spring St/Hamburg Pike Inventory





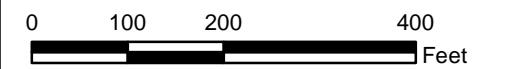
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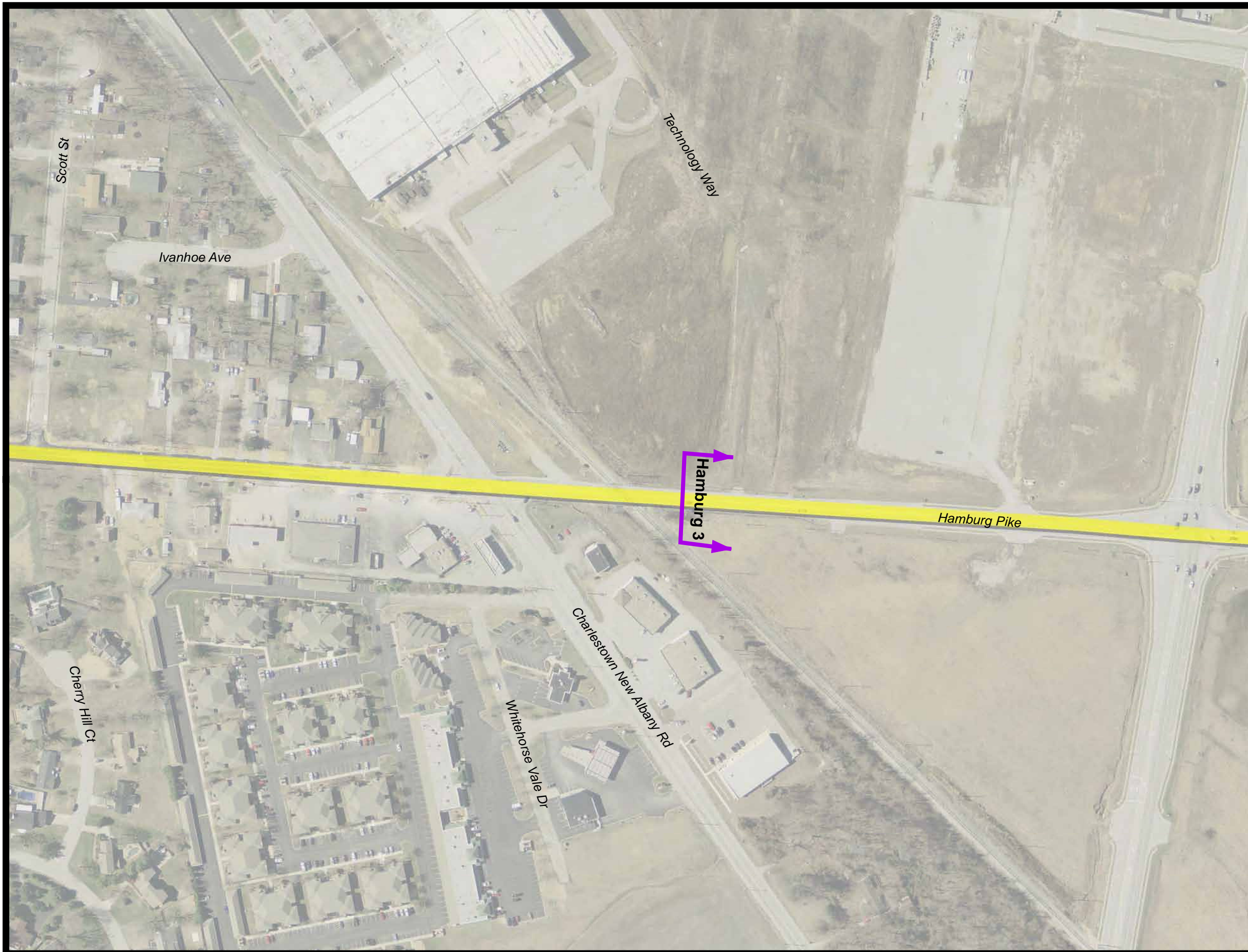
-  Typical Sections
-  Proposed Study Areas
-  Park / Recreation Center



JEFFERSONVILLE BIKE AND PED PLAN


Spring St/Hamburg Pike Inventory

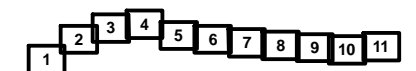




Legend

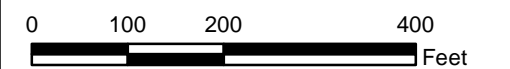
 Typical Sections

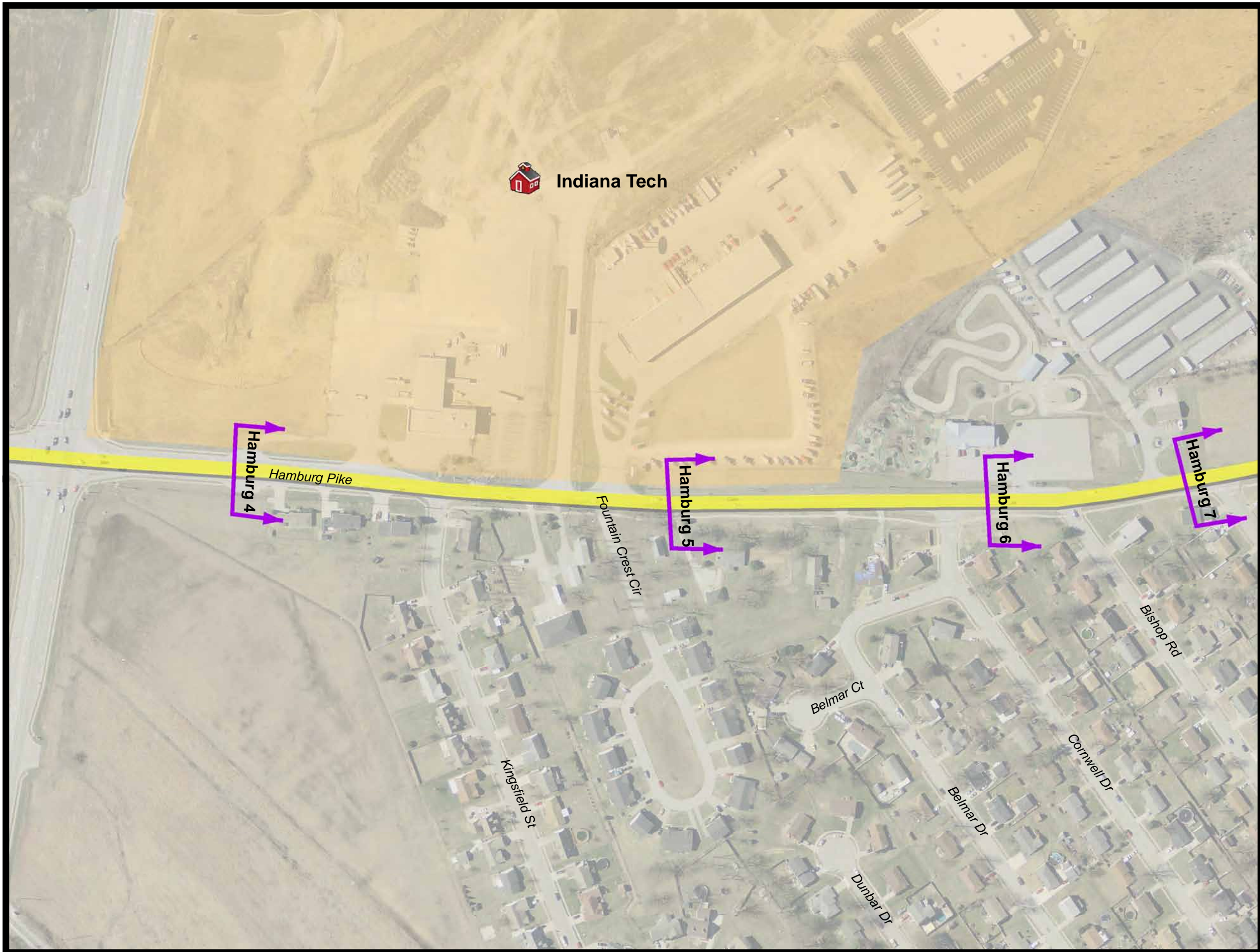
 Proposed Study Areas







**JEFFERSONVILLE BIKE
AND PED PLAN**

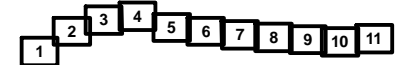
**Spring St/Hamburg Pike
Inventory**





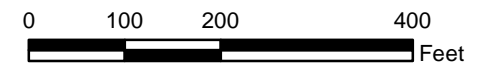
Legend

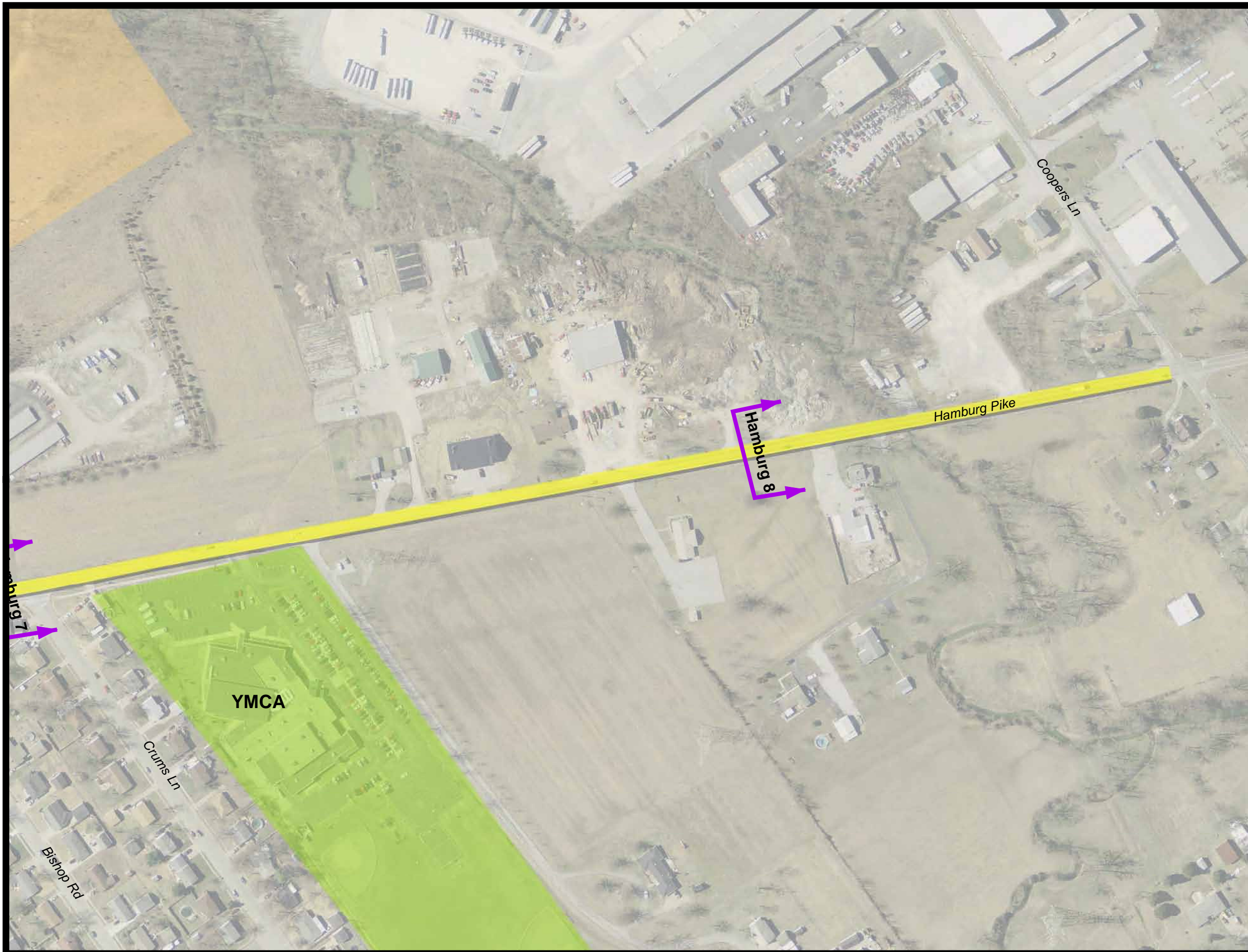
-  Schools
-  Typical Sections
-  Proposed Study Areas
-  Higher Education







JEFFERSONVILLE BIKE AND PED PLAN

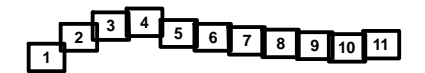
Spring St/Hamburg Pike Inventory





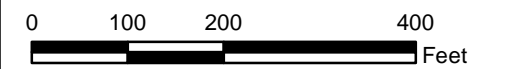
Legend

-  Typical Sections
-  Proposed Study Areas
-  Higher Education
-  Park / Recreation Center



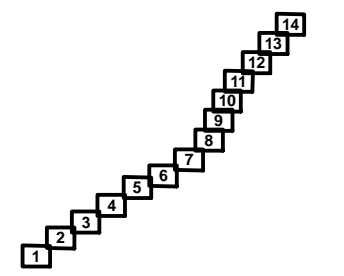
JEFFERSONVILLE BIKE AND PED PLAN

Spring St/Hamburg Pike Inventory

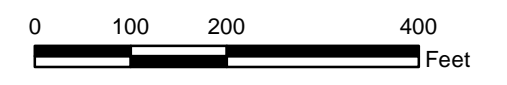


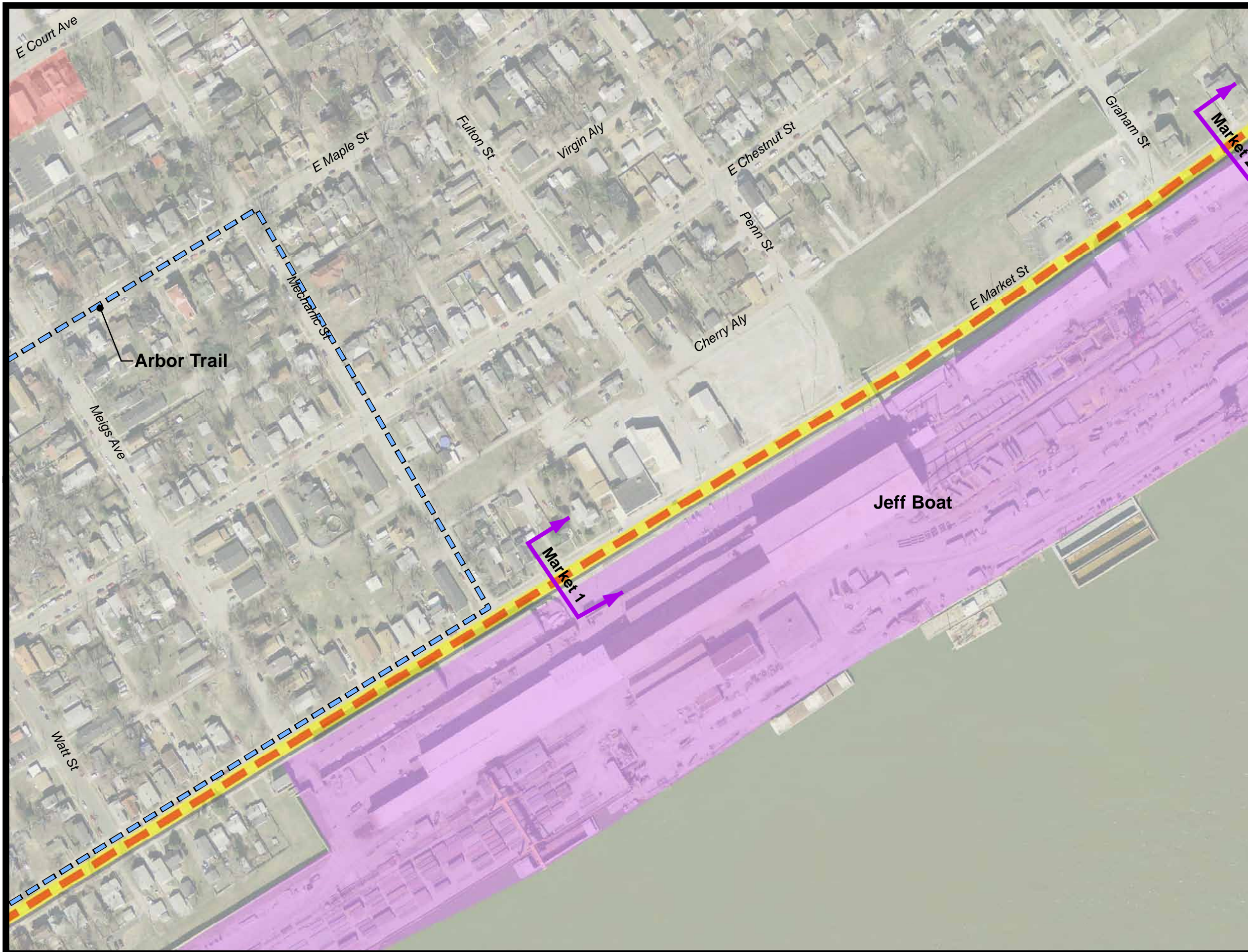


- Legend**
- Point of Interest
 - Typical Sections
 - Existing Bicycle Route
 - Existing / Proposed Trail
 - Wheels and Heels Plan
 - Proposed Study Areas
 - Retail / Dining
 - Park / Recreation Center









JEFFERSONVILLE BIKE AND PED PLAN
Market Street/Utica Pike
Inventory



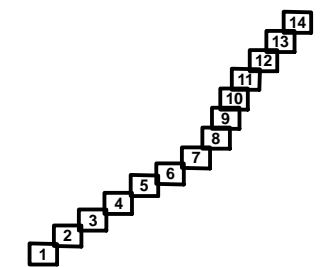


Legend

-  Typical Sections
-  Existing / Proposed Trail
-  Wheels and Heels Plan
-  Proposed Study Areas
-  Retail / Dining
-  Industrial / Commercial

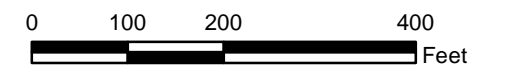


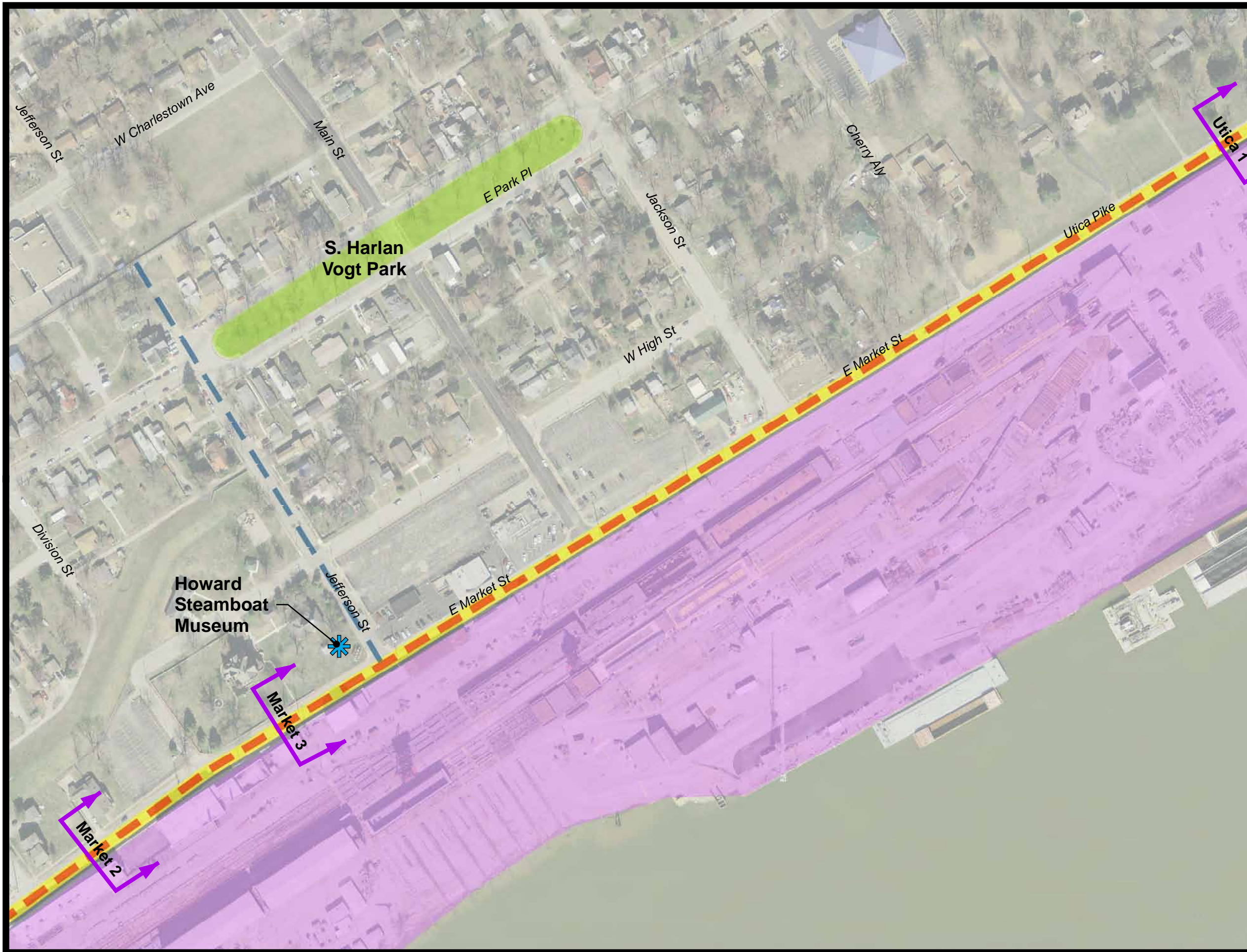
Looking northeast between Fulton St. and floodwall



JEFFERSONVILLE BIKE AND PED PLAN

Market Street/Utica Pike Inventory



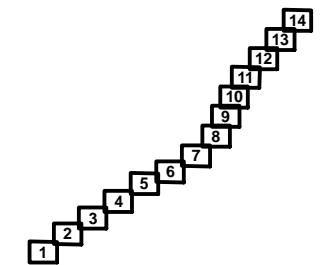


Legend

-  Point of Interest
-  Typical Sections
-  Wheels and Heels Plan
-  Proposed Connector Trail
-  Proposed Study Areas
-  Industrial / Commercial
-  Park / Recreation Center



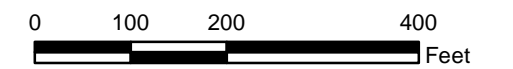
Looking northeast between Division St. and Jefferson St.

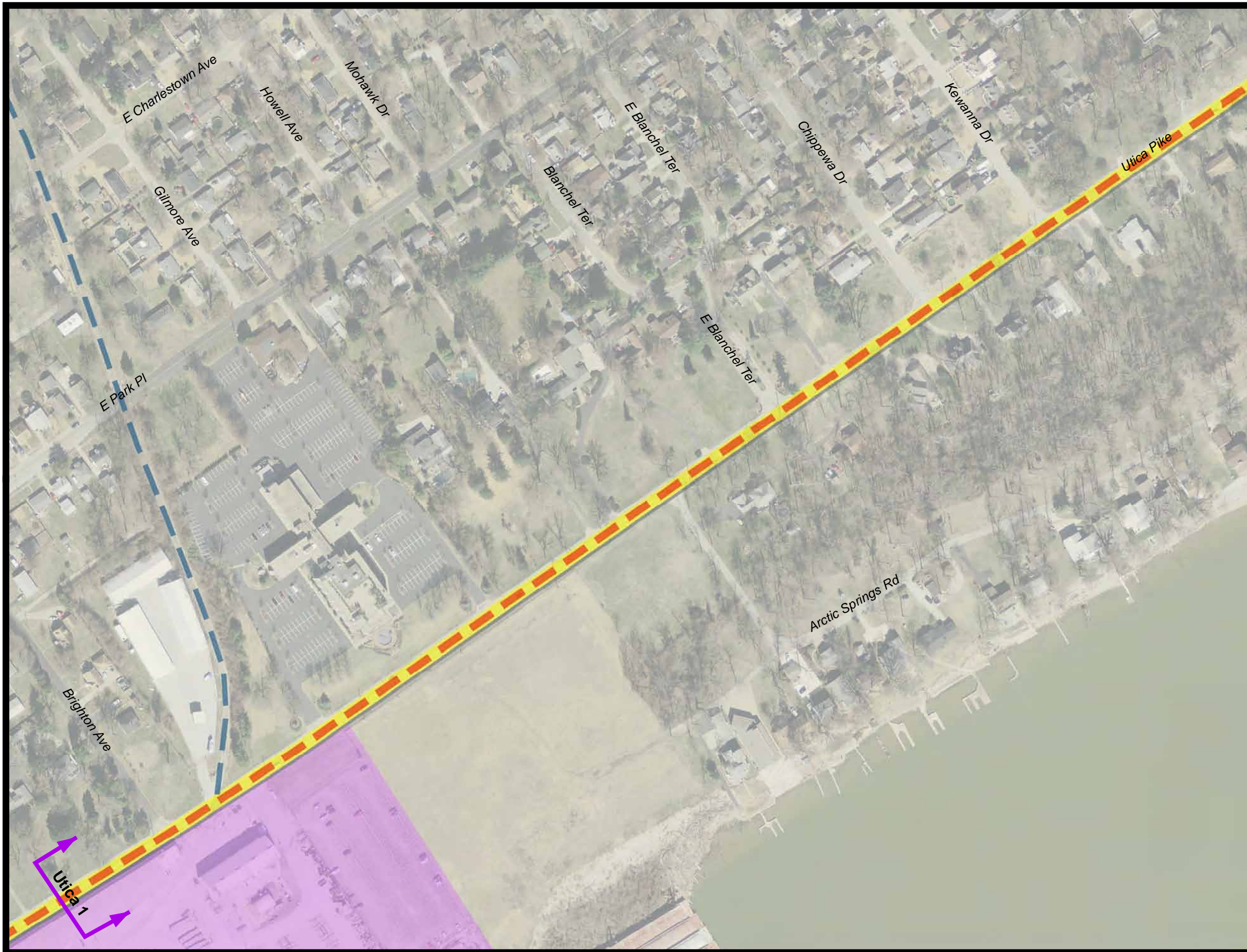


JEFFERSONVILLE BIKE AND PED PLAN







Market Street/Utica Pike

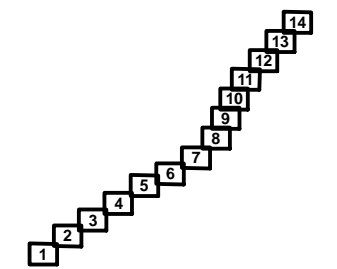
Inventory





Legend

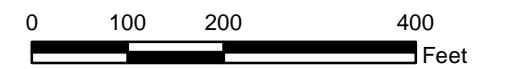
-  Typical Sections
-  Wheels and Heels Plan
-  Proposed Connector Trail
-  Proposed Study Areas
-  Industrial / Commercial
-  Park / Recreation Center

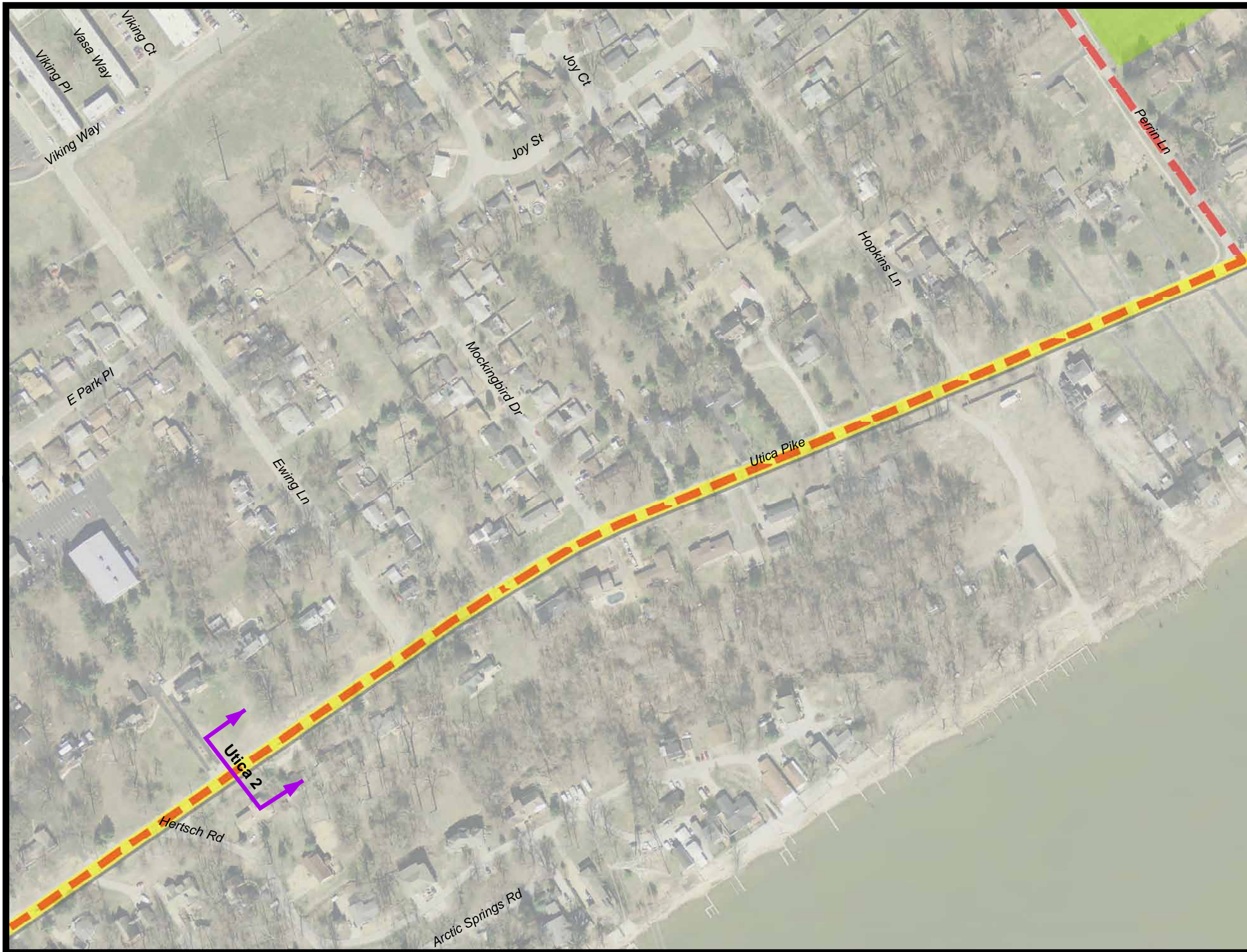


JEFFERSONVILLE BIKE AND PED PLAN





Market Street/Utica Pike

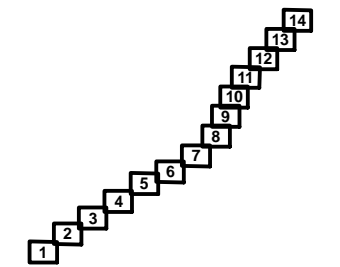
Inventory





Legend

-  Typical Sections
-  Wheels and Heels Plan
-  Proposed Study Areas
-  Park / Recreation Center







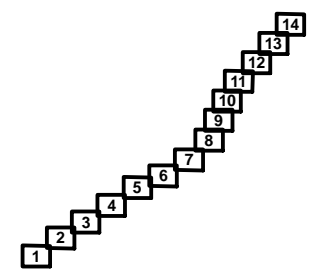
JEFFERSONVILLE BIKE AND PED PLAN
Market Street/Utica Pike
Inventory





Legend

-  Typical Sections
-  Wheels and Heels Plan
-  Proposed Study Areas
-  Park / Recreation Center




**JEFFERSONVILLE BIKE
AND PED PLAN**
Market Street/Utica Pike
Inventory

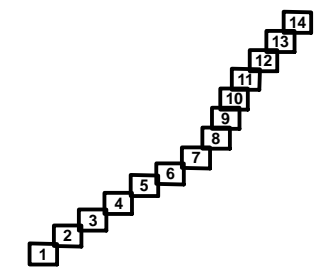




Legend

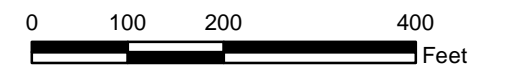
 Typical Sections

 Proposed Study Areas



JEFFERSONVILLE BIKE AND PED PLAN


Market Street/Utica Pike Inventory

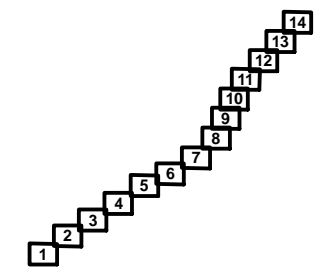




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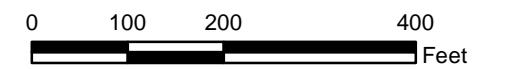
 Typical Sections

 Proposed Study Areas



JEFFERSONVILLE BIKE AND PED PLAN


Market Street/Utica Pike Inventory

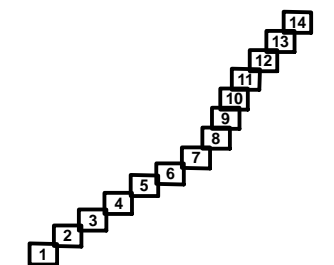




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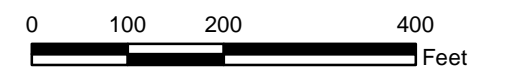
 Typical Sections

 Proposed Study Areas




JEFFERSONVILLE BIKE AND PED PLAN


Market Street/Utica Pike Inventory

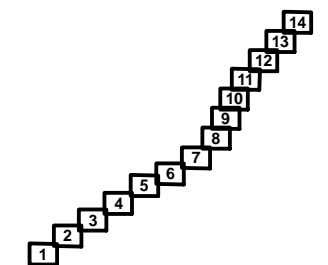




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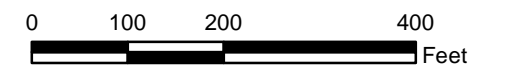
 Typical Sections

 Proposed Study Areas




JEFFERSONVILLE BIKE AND PED PLAN


Market Street/Utica Pike Inventory

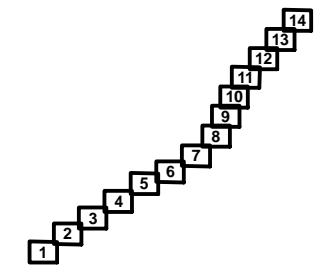




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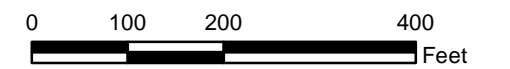
 Typical Sections

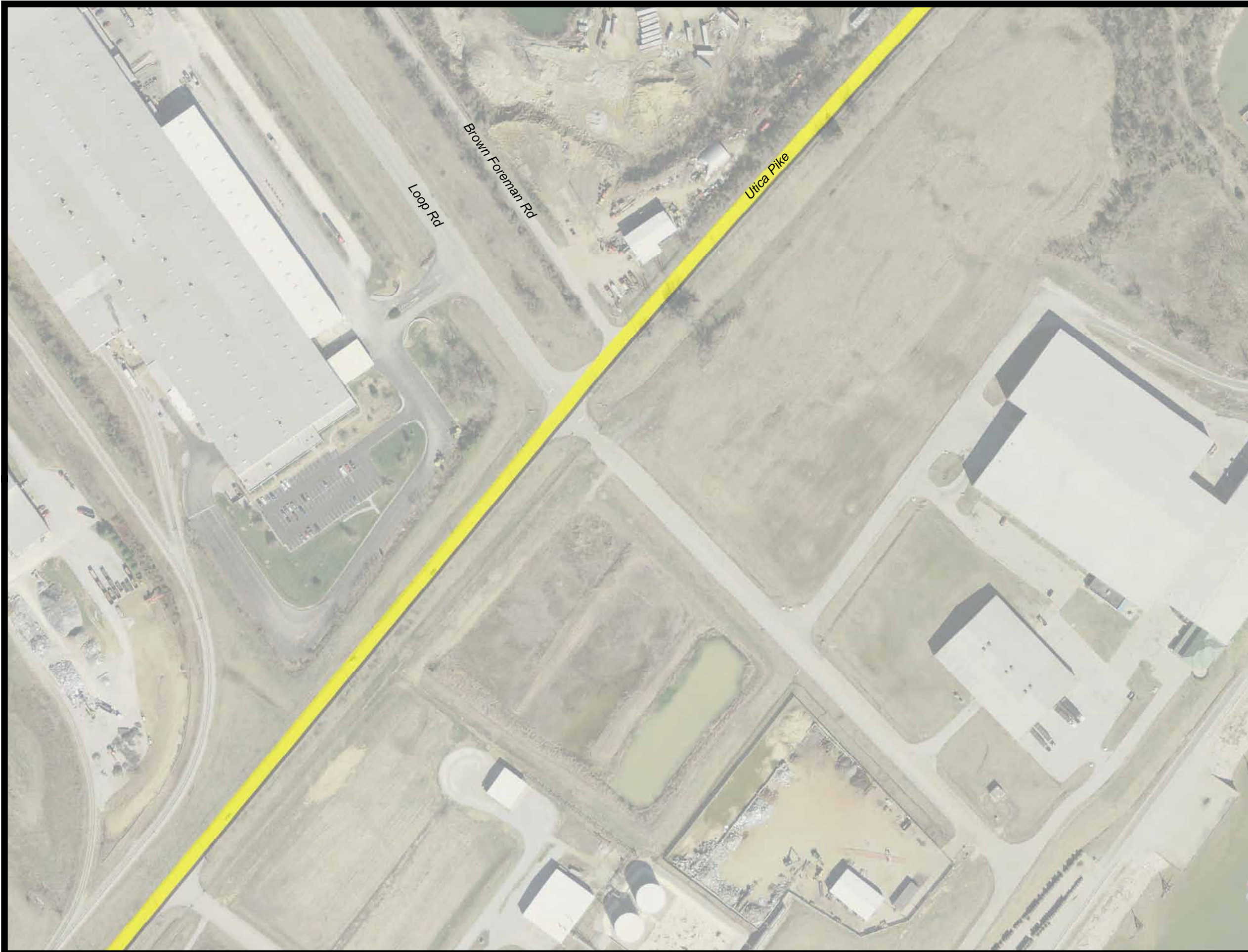
 Proposed Study Areas





JEFFERSONVILLE BIKE AND PED PLAN

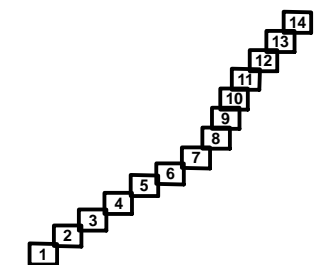
Market Street/Utica Pike Inventory





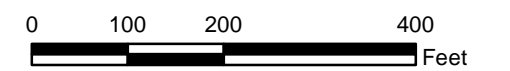
Legend

-  Typical Sections
-  Proposed Study Areas



**JEFFERSONVILLE BIKE
AND PED PLAN**


**Market Street/Utica Pike
Inventory**

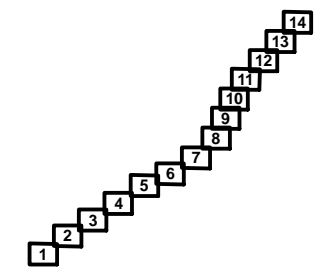




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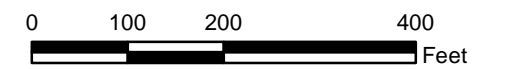
 Typical Sections

 Proposed Study Areas




**JEFFERSONVILLE BIKE
AND PED PLAN**


**Market Street/Utica Pike
Inventory**

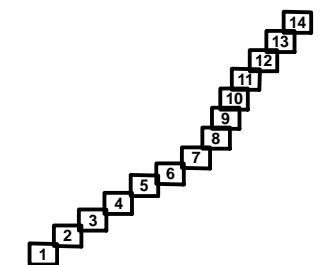




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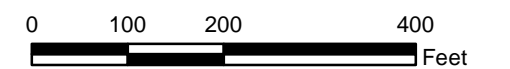
 Typical Sections

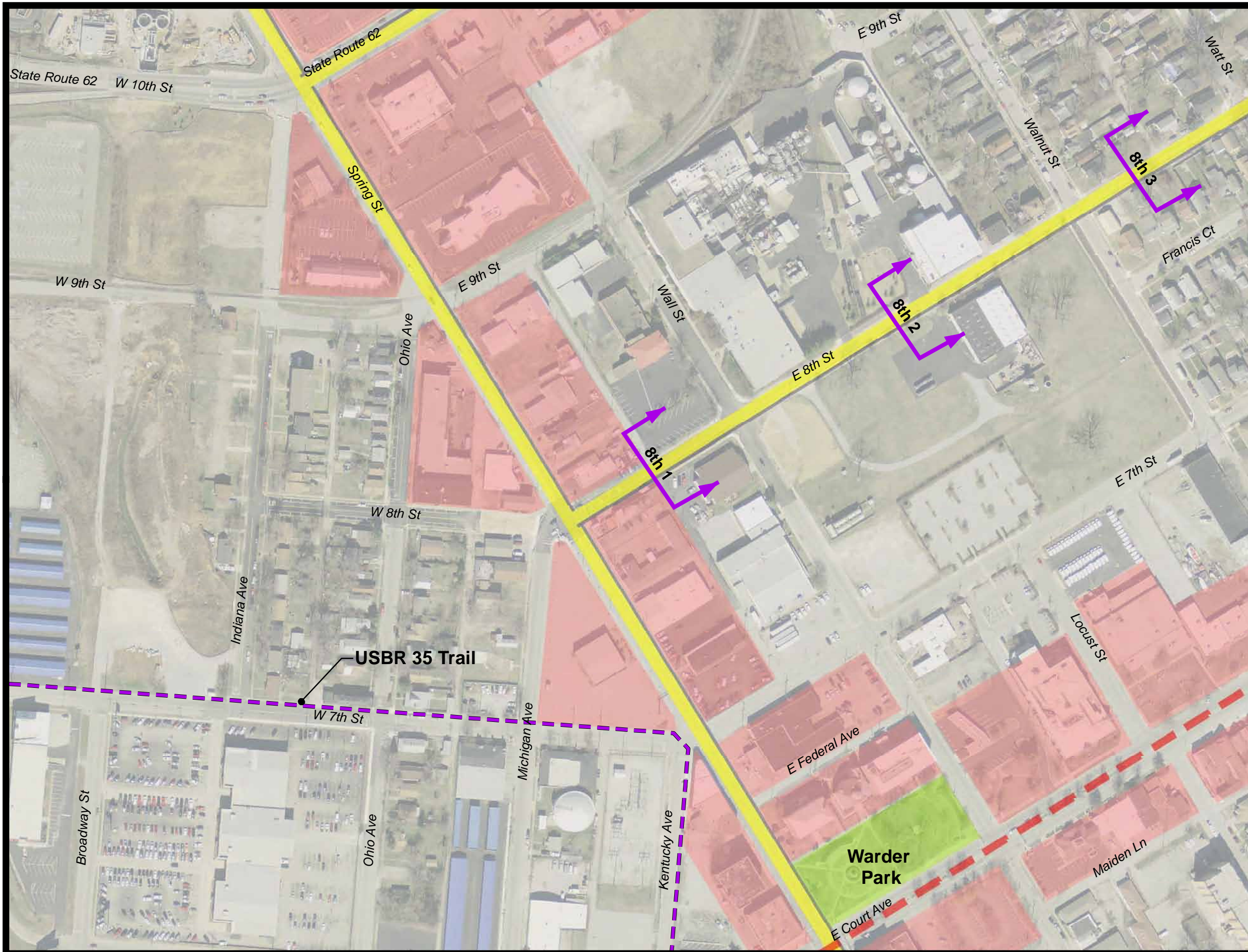
 Proposed Study Areas









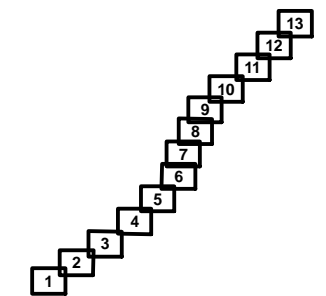
JEFFERSONVILLE BIKE AND PED PLAN

Market Street/Utica Pike Inventory

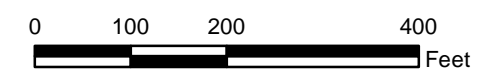


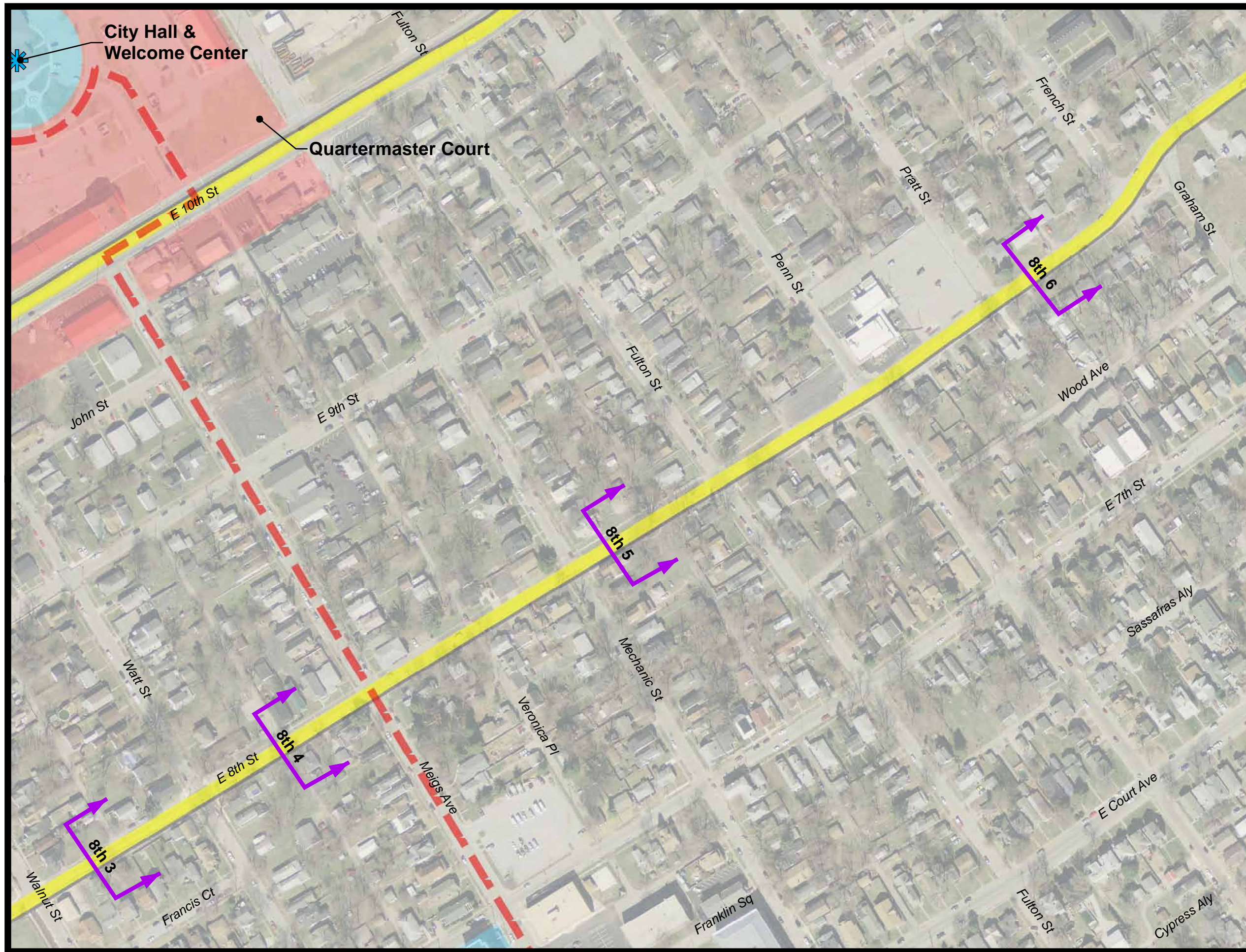


- Legend**
-  Typical Sections
 -  Existing Bicycle Route
 -  Wheels and Heels Plan
 -  Proposed Study Areas
 -  Retail / Dining
 -  Park / Recreation Center

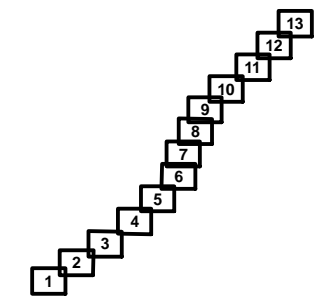


JEFFERSONVILLE BIKE AND PED PLAN
8th Street/Middle Road
Inventory

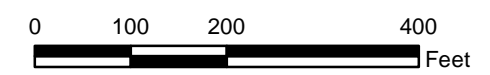








- Legend**
- Point of Interest
 - Typical Sections
 - Wheels and Heels Plan
 - Proposed Study Areas
 - Retail / Dining
 - Government

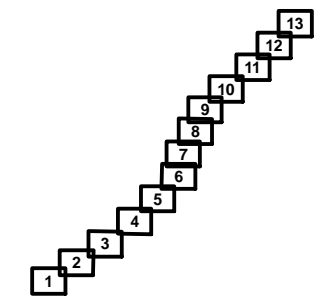


JEFFERSONVILLE BIKE AND PED PLAN
8th Street/Middle Road
Inventory

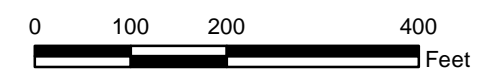


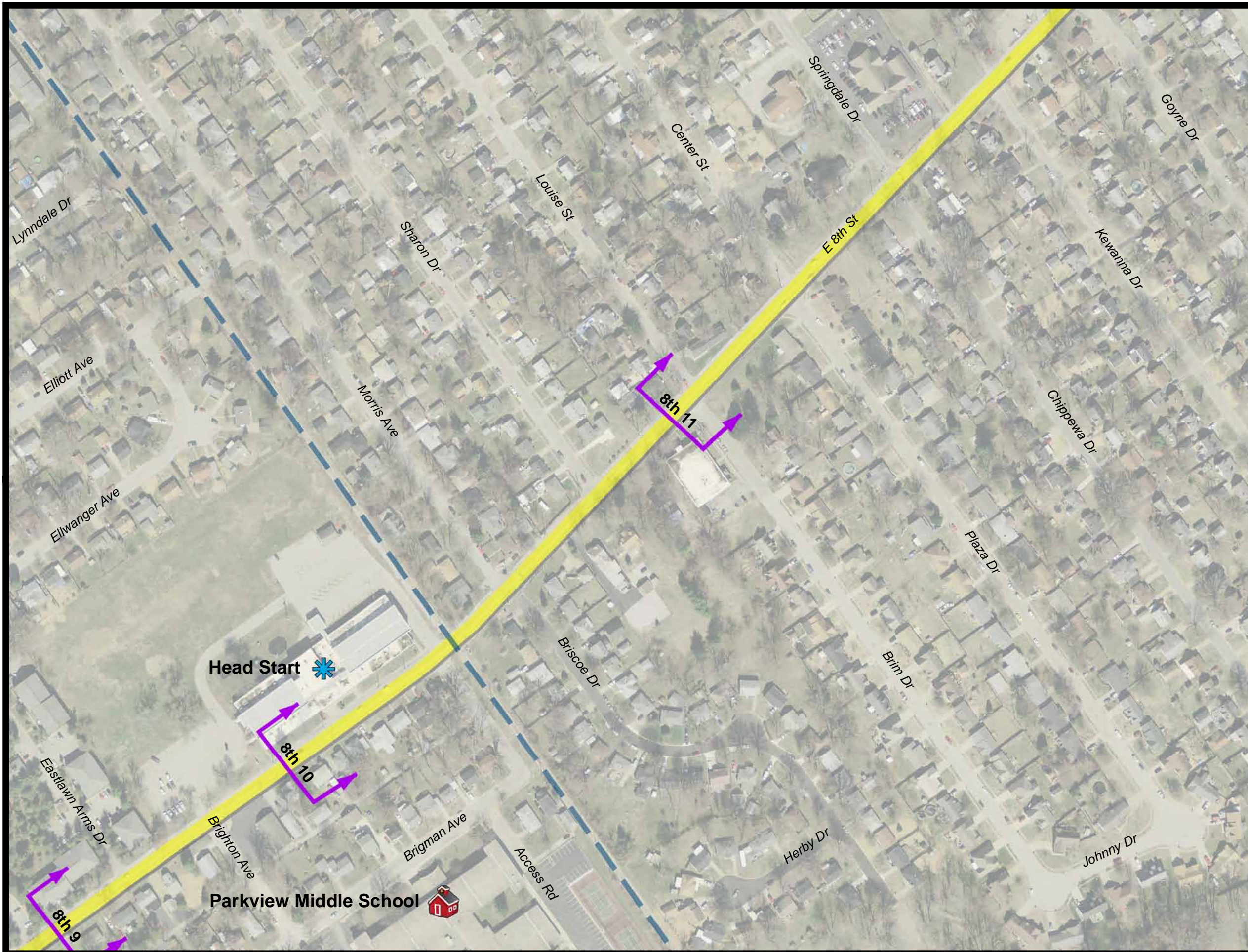


- Legend**
-  Typical Sections
 -  Proposed Study Areas
 -  Retail / Dining
 -  Park / Recreation Center








JEFFERSONVILLE BIKE AND PED PLAN
8th Street/Middle Road
Inventory



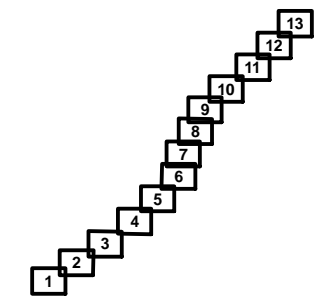


Legend

-  Schools
-  Point of Interest
-  Typical Sections
-  Proposed Connector Trail
-  Proposed Study Areas

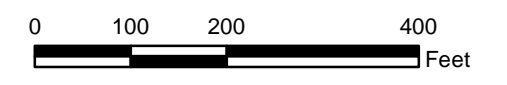


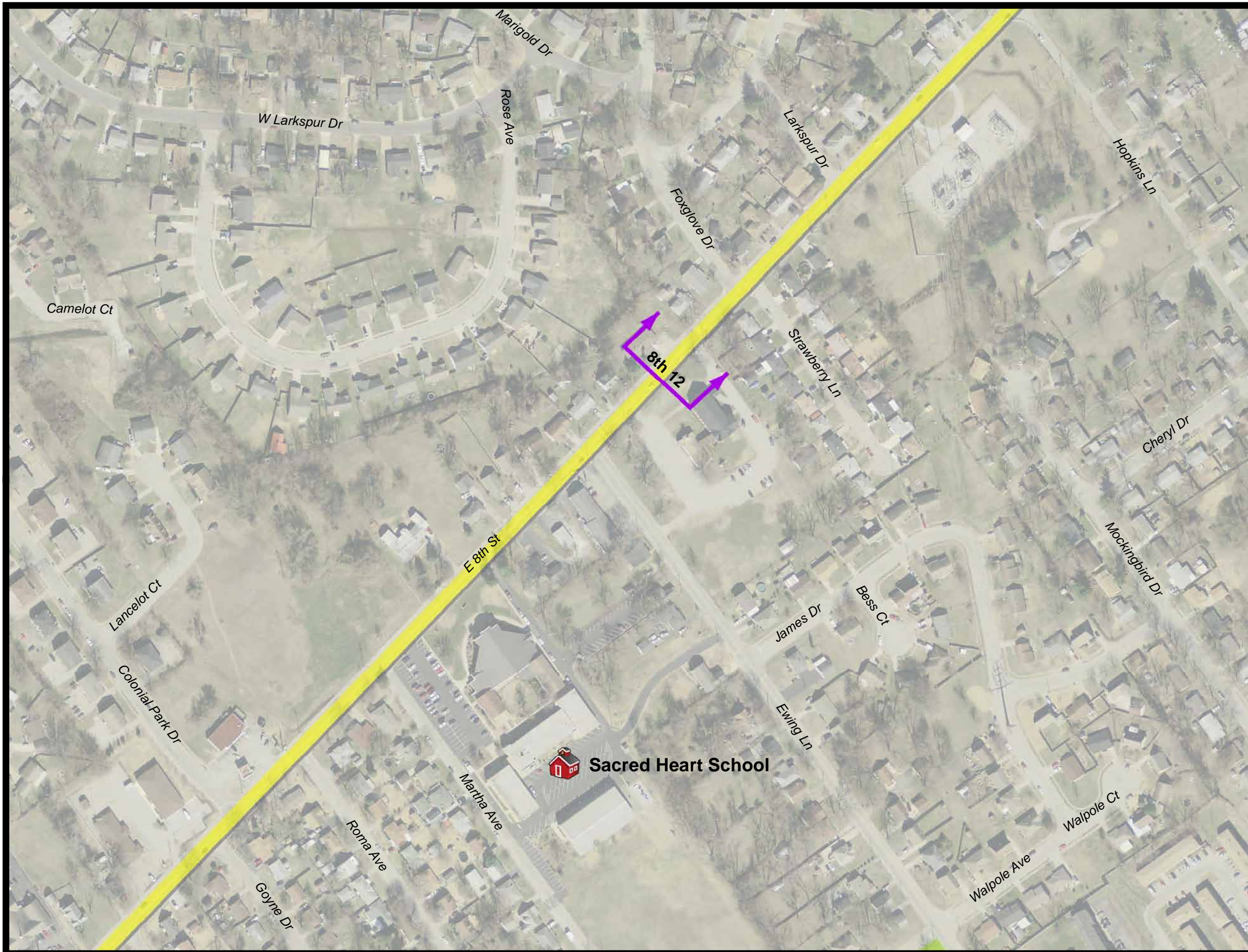
Looking northwest just south of Sharon Dr.







JEFFERSONVILLE BIKE AND PED PLAN

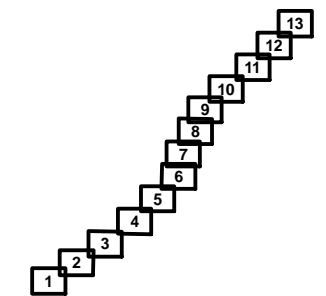
8th Street/Middle Road Inventory





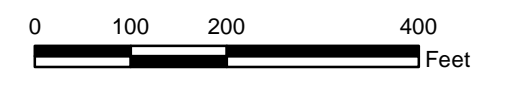
Legend

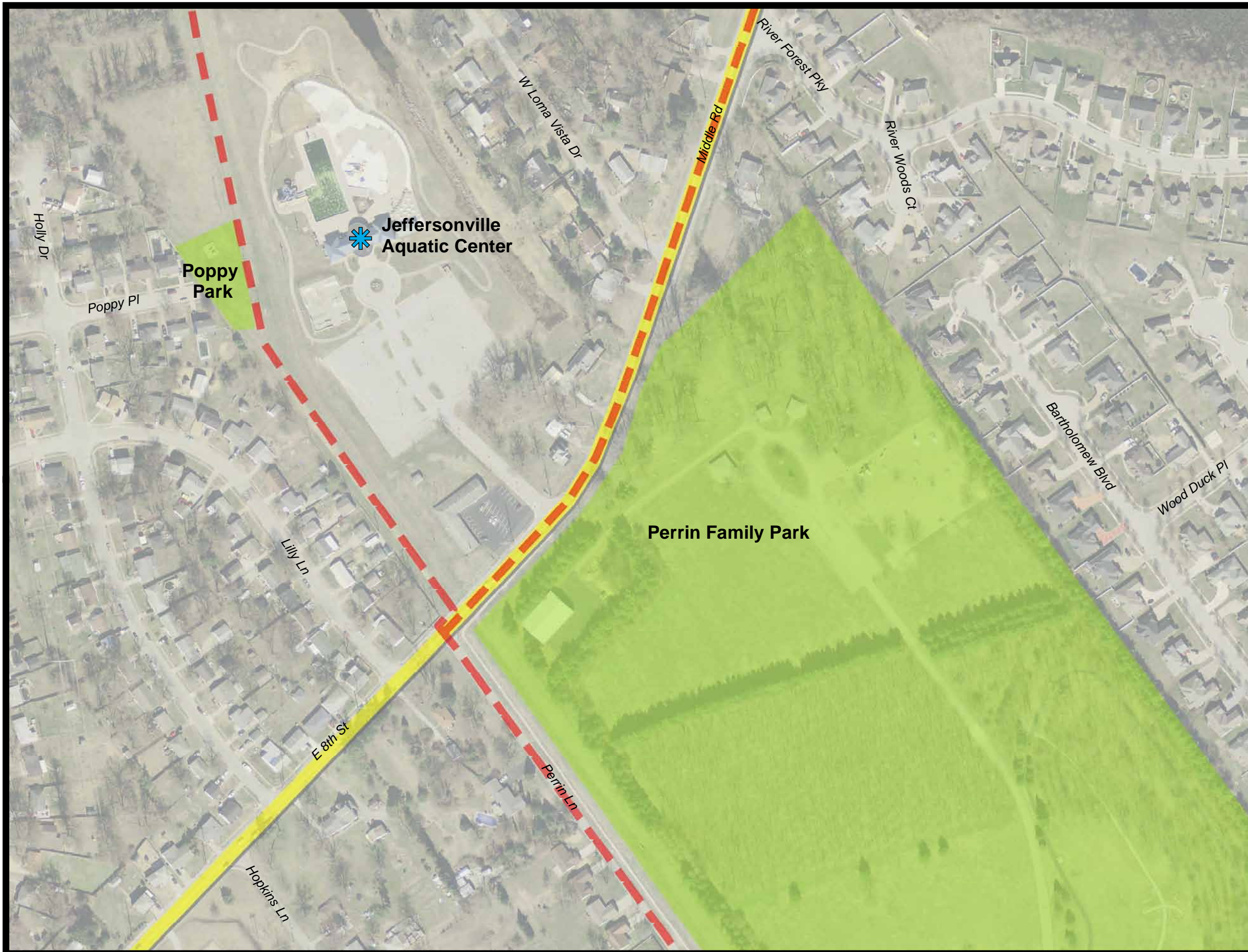
-  Schools
-  Typical Sections
-  Proposed Study Areas
-  Park / Recreation Center








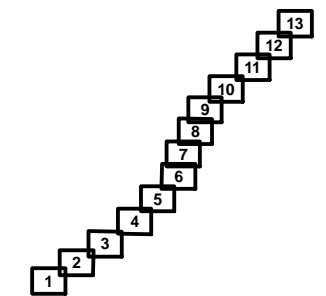
JEFFERSONVILLE BIKE AND PED PLAN

8th Street/Middle Road Inventory

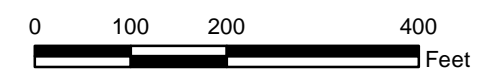


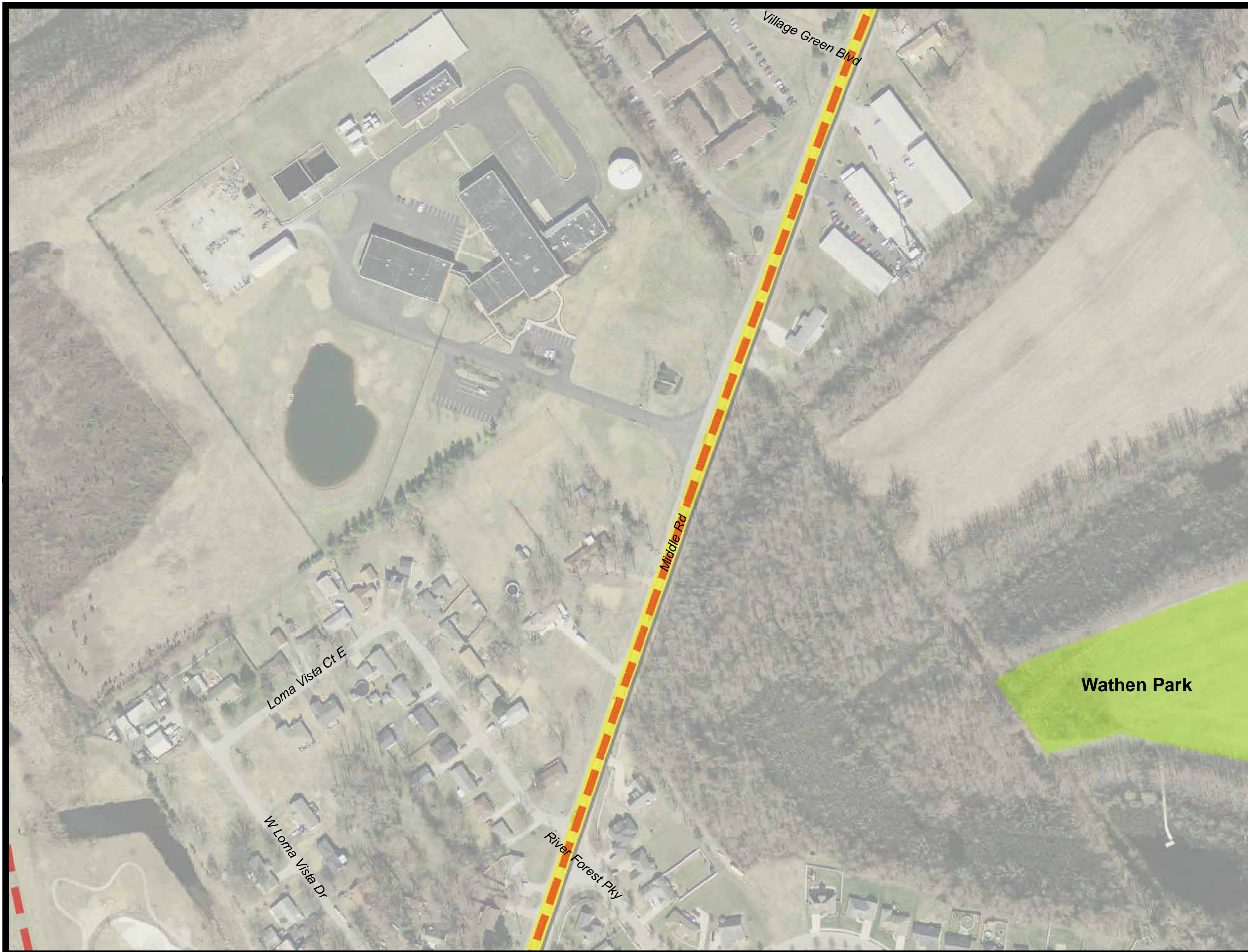






- Legend**
-  Point of Interest
 -  Typical Sections
 -  Wheels and Heels Plan
 -  Proposed Study Areas
 -  Park / Recreation Center

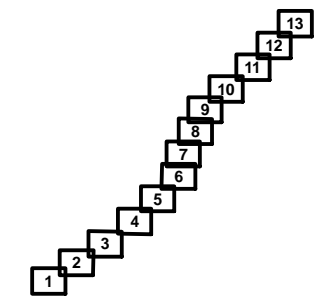


**JEFFERSONVILLE BIKE
AND PED PLAN**
8th Street/Middle Road
Inventory

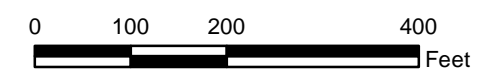


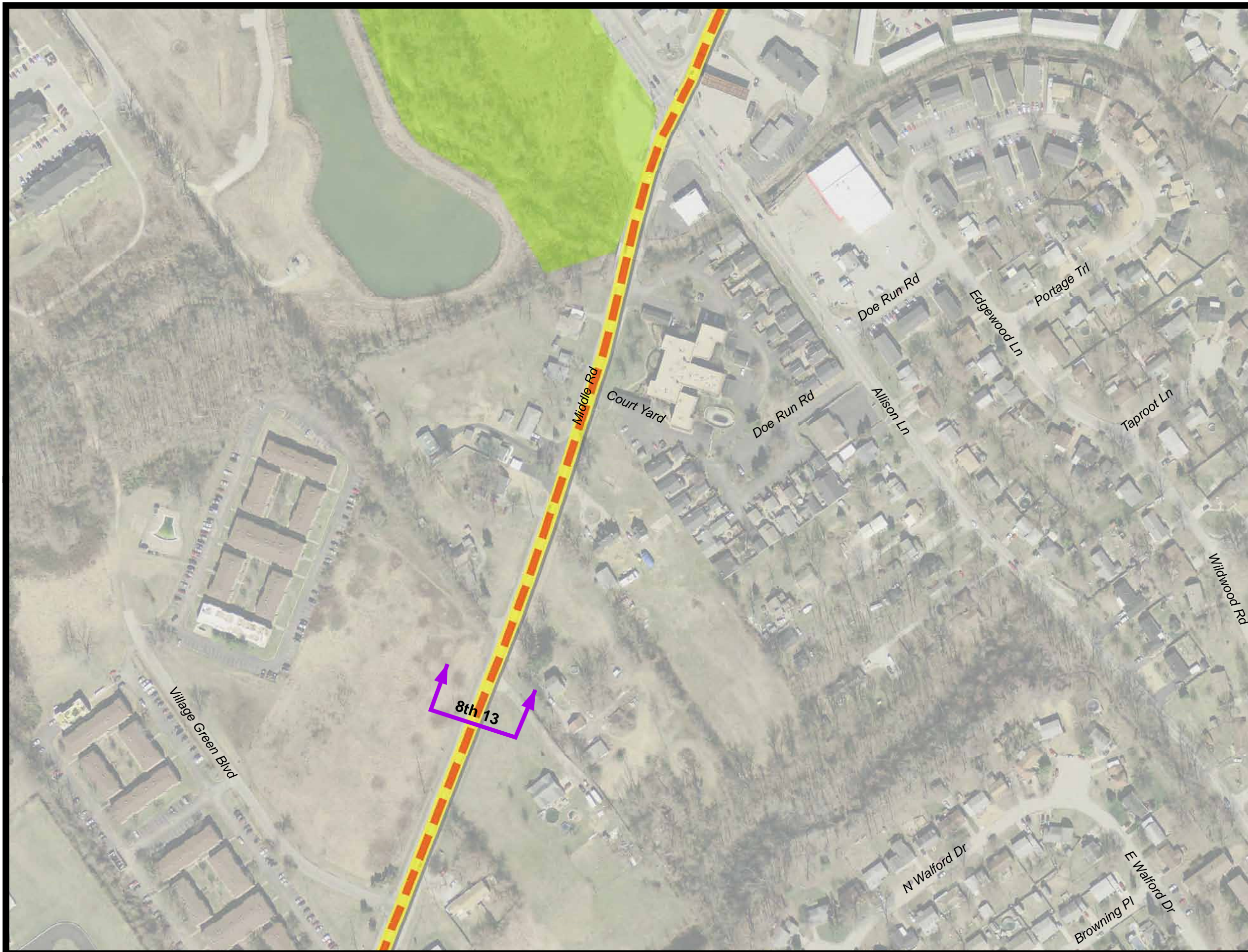






- Legend**
-  Typical Sections
 -  Wheels and Heels Plan
 -  Proposed Study Areas
 -  Park / Recreation Center

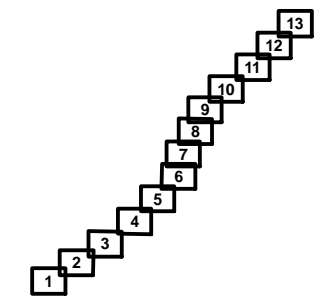


JEFFERSONVILLE BIKE AND PED PLAN
8th Street/Middle Road
Inventory





- Legend**
-  Typical Sections
 -  Wheels and Heels Plan
 -  Proposed Study Areas
 -  Park / Recreation Center

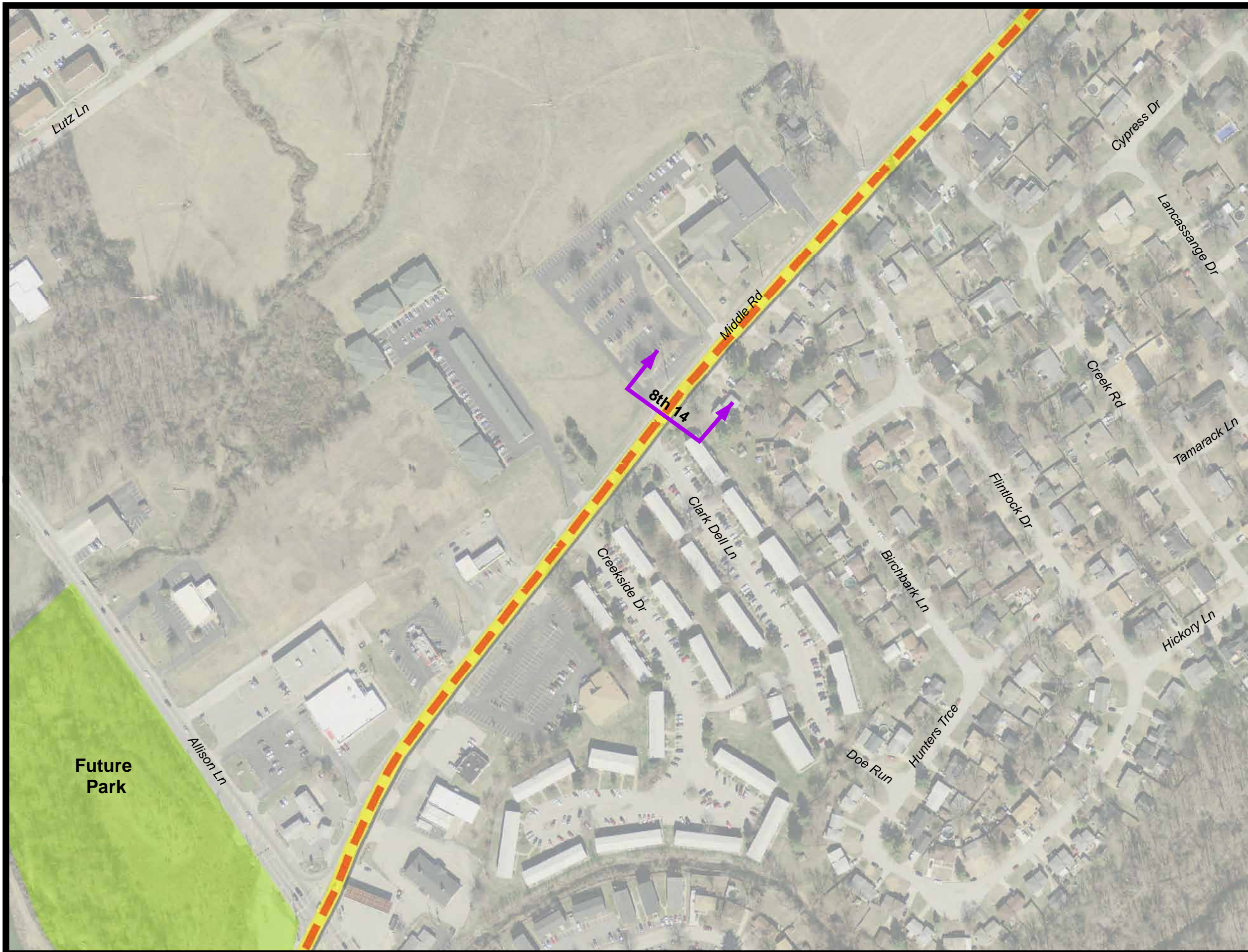






JEFFERSONVILLE BIKE AND PED PLAN

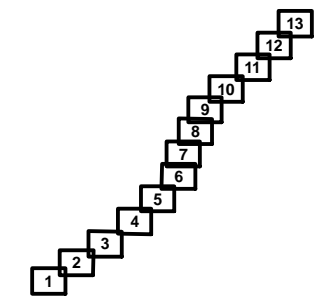
8th Street/Middle Road

Inventory

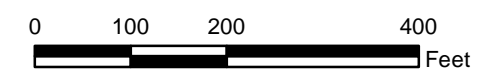


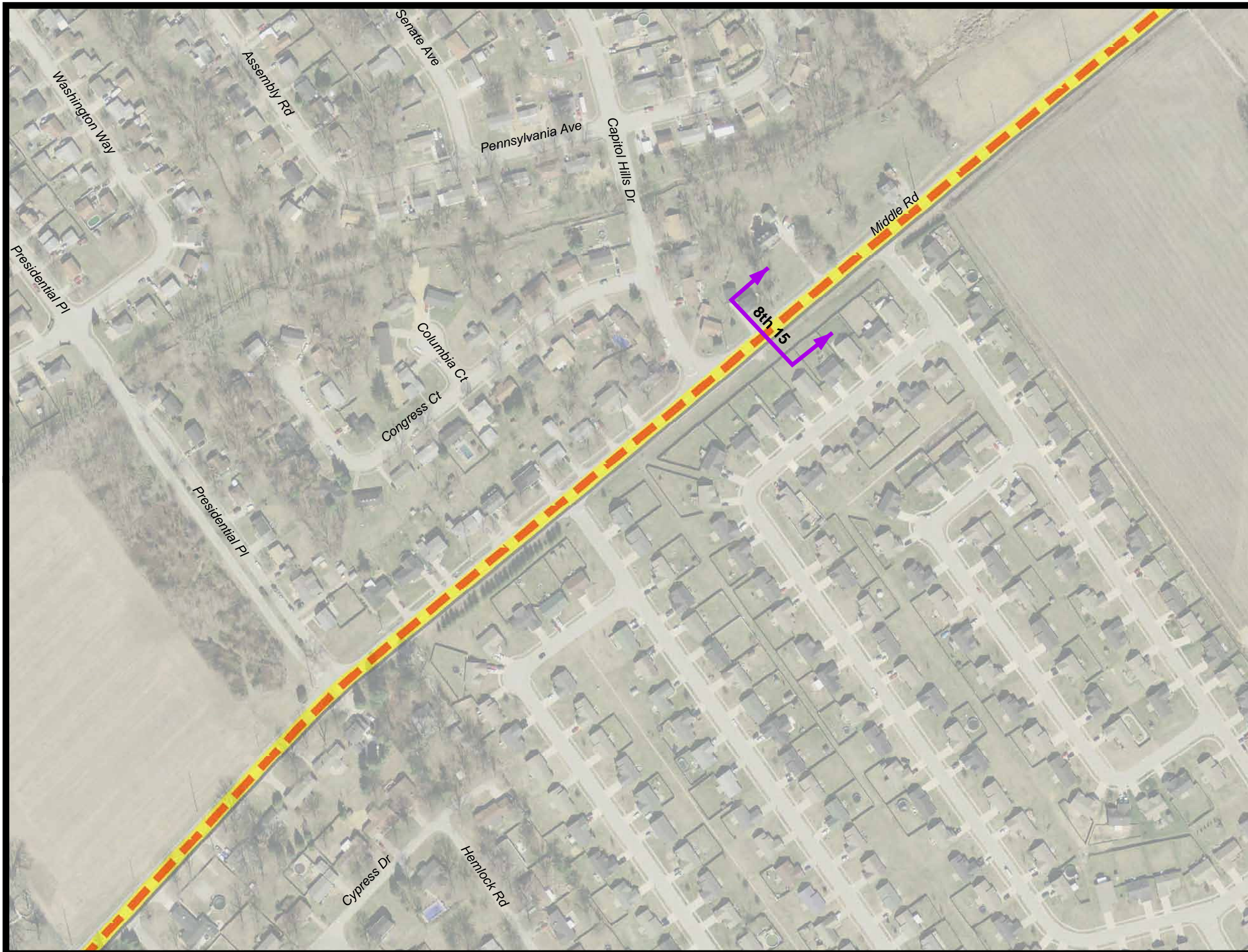


- Legend**
-  Typical Sections
 -  Wheels and Heels Plan
 -  Proposed Study Areas
 -  Park / Recreation Center






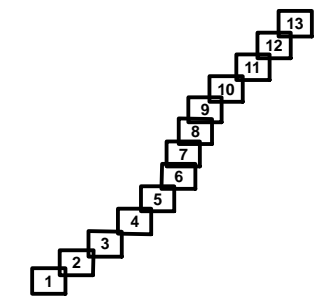
JEFFERSONVILLE BIKE AND PED PLAN
8th Street/Middle Road
Inventory





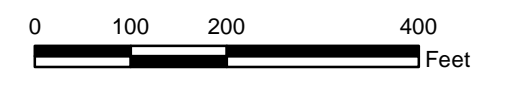
Legend

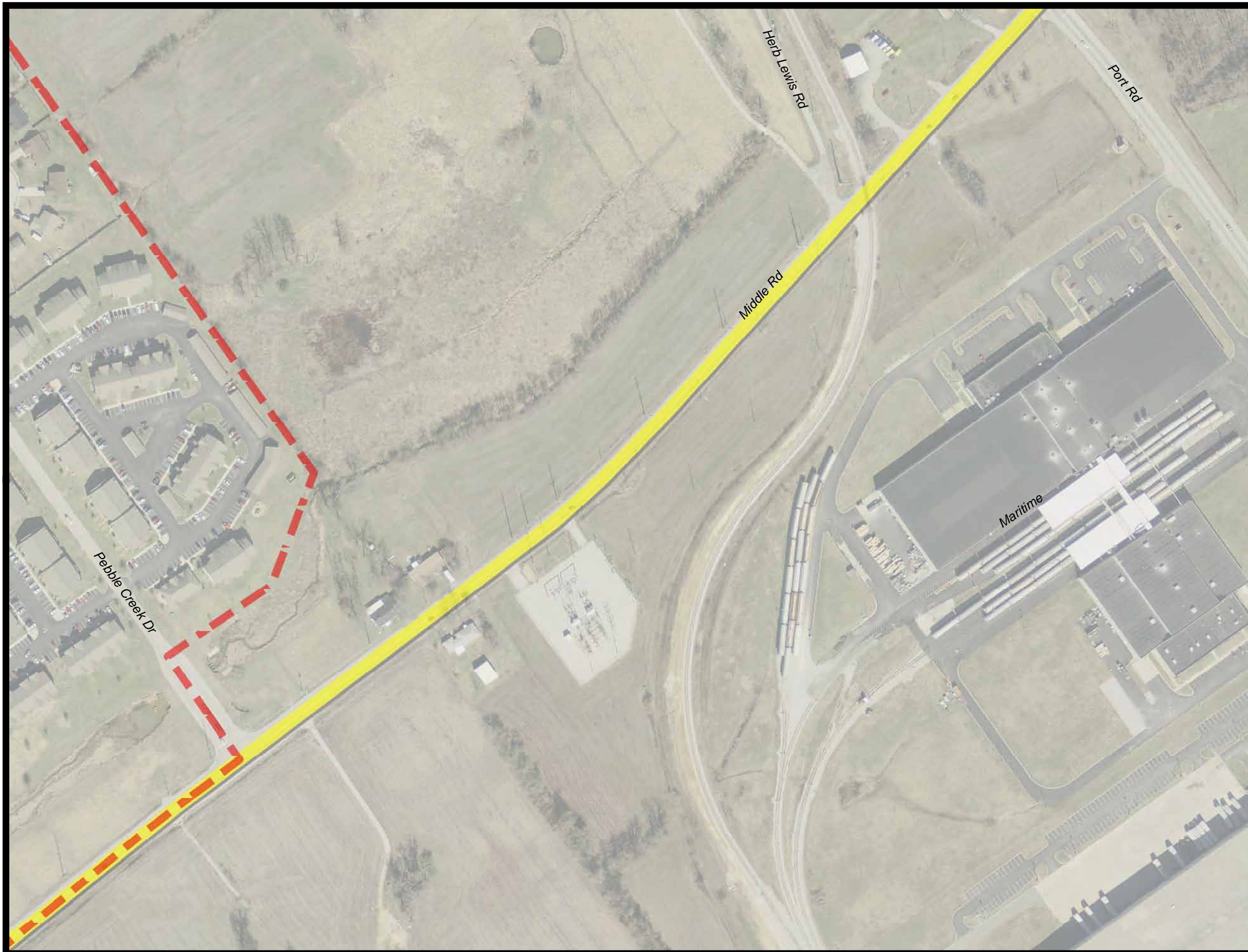
-  Typical Sections
-  Wheels and Heels Plan
-  Proposed Study Areas






JEFFERSONVILLE BIKE AND PED PLAN

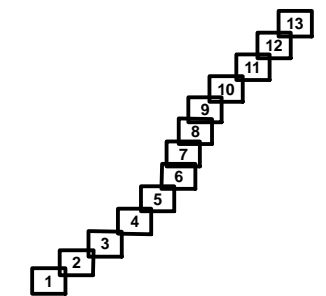
8th Street/Middle Road Inventory





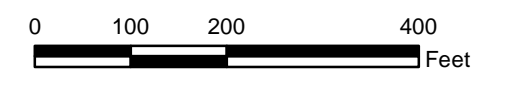
Legend

-  Typical Sections
-  Wheels and Heels Plan
-  Proposed Study Areas





JEFFERSONVILLE BIKE AND PED PLAN

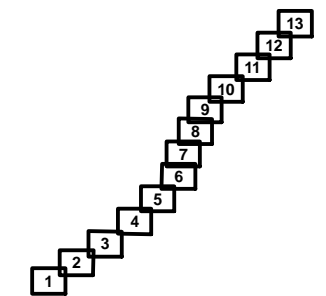
8th Street/Middle Road Inventory



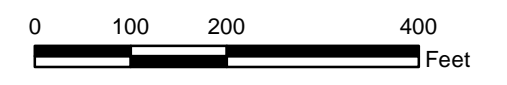


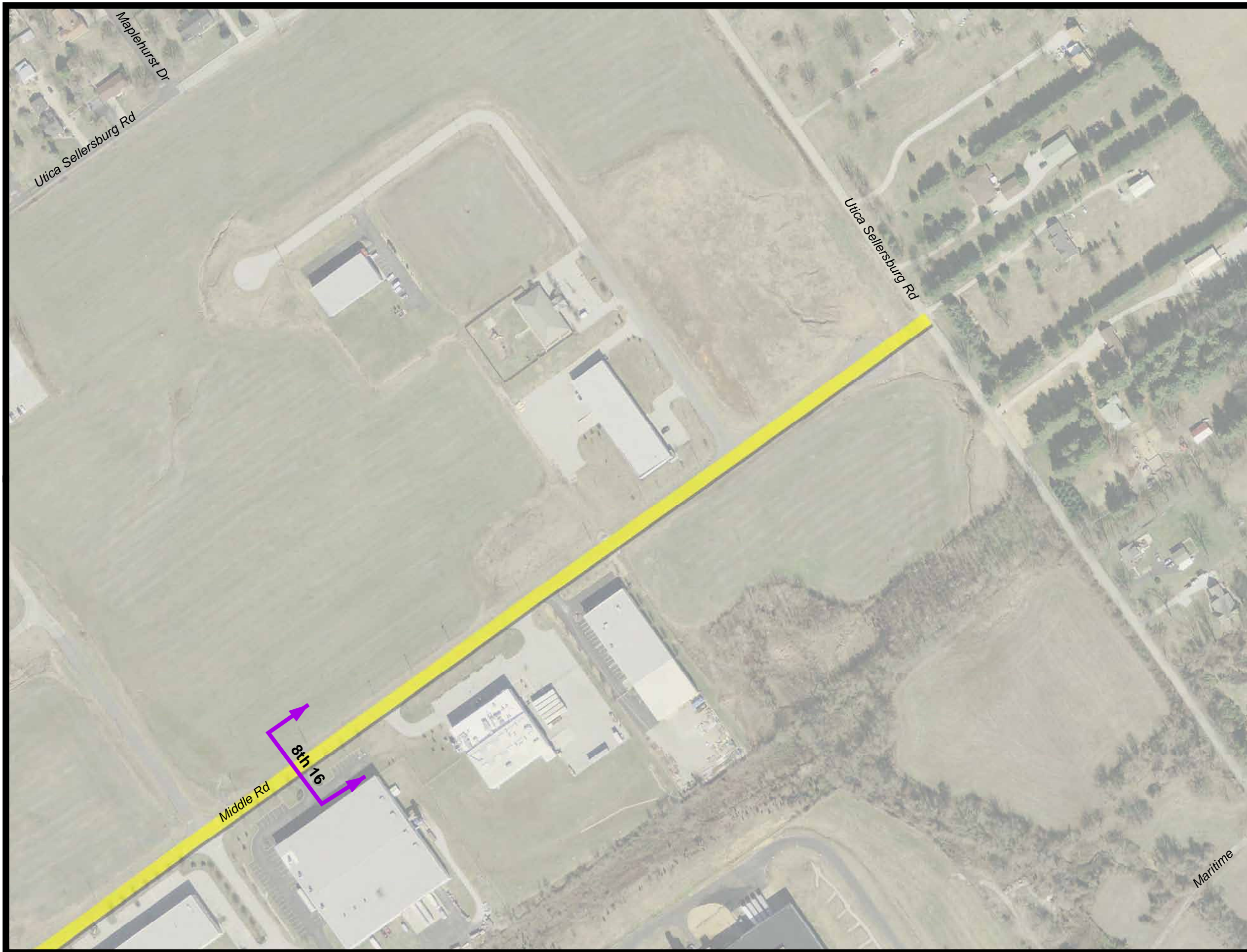
Legend

-  Typical Sections
-  Proposed Study Areas





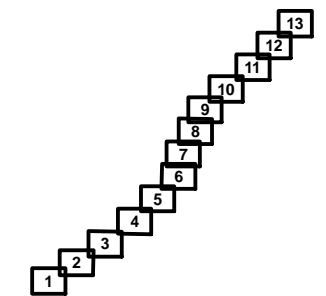
**JEFFERSONVILLE BIKE
AND PED PLAN**
8th Street/Middle Road
Inventory





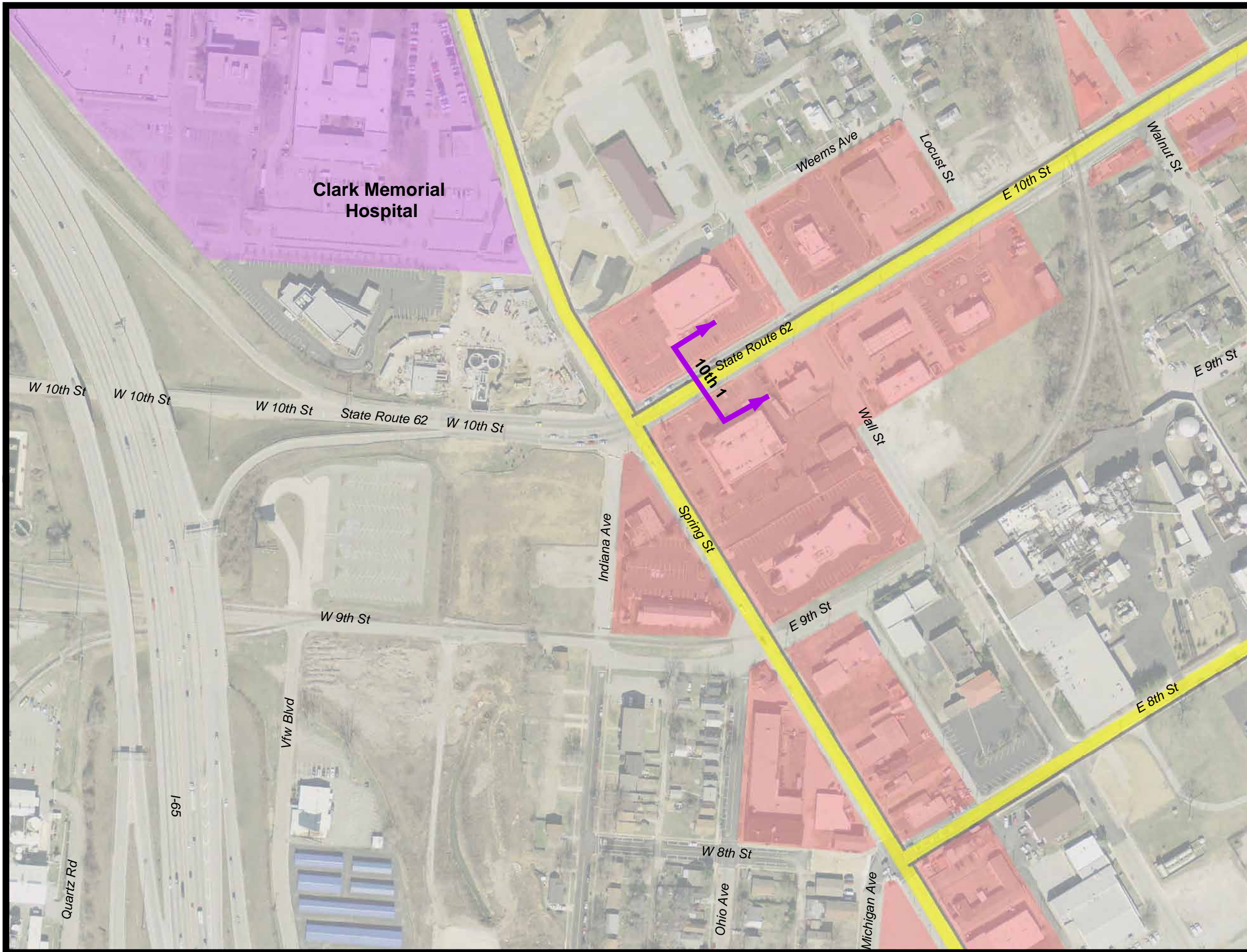
Legend

-  Typical Sections
-  Proposed Study Areas







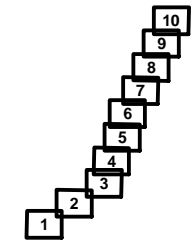
**JEFFERSONVILLE BIKE
AND PED PLAN**
8th Street/Middle Road
Inventory





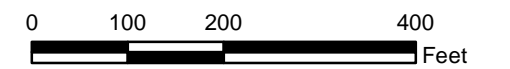
Legend

-  Typical Sections
-  Proposed Study Areas
-  Retail / Dining
-  Industrial / Commercial




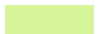
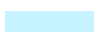
JEFFERSONVILLE BIKE AND PED PLAN

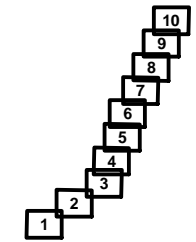
10th Street Inventory





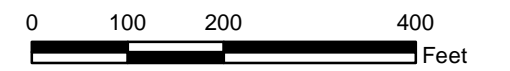
Legend

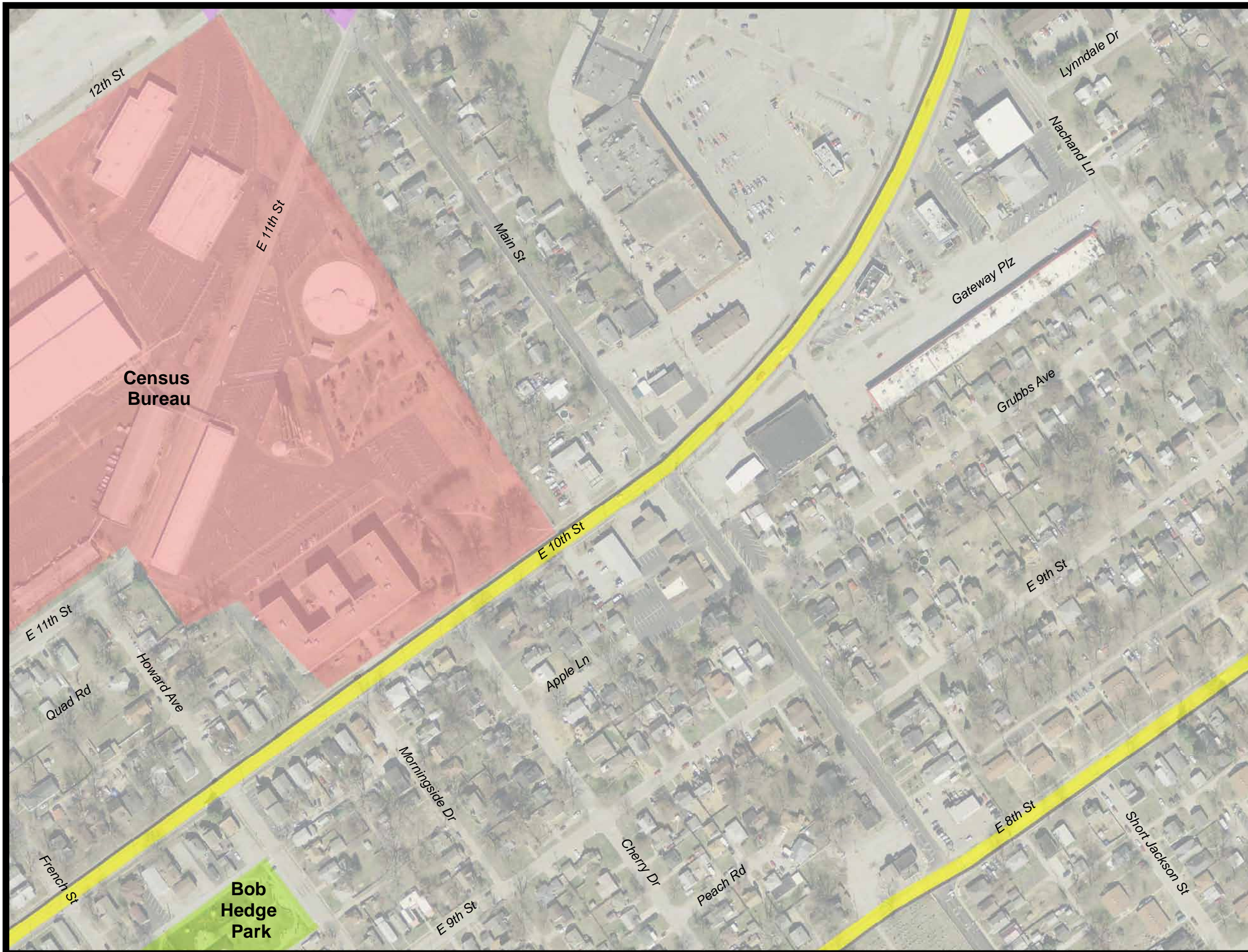
-  Point of Interest
-  Typical Sections
-  Wheels and Heels Plan
-  Proposed Study Areas
-  Retail / Dining
-  Park / Recreation Center
-  Government








JEFFERSONVILLE BIKE AND PED PLAN

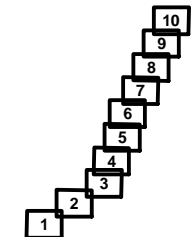
10th Street Inventory





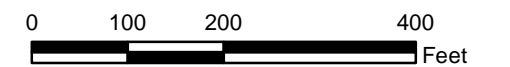
Legend

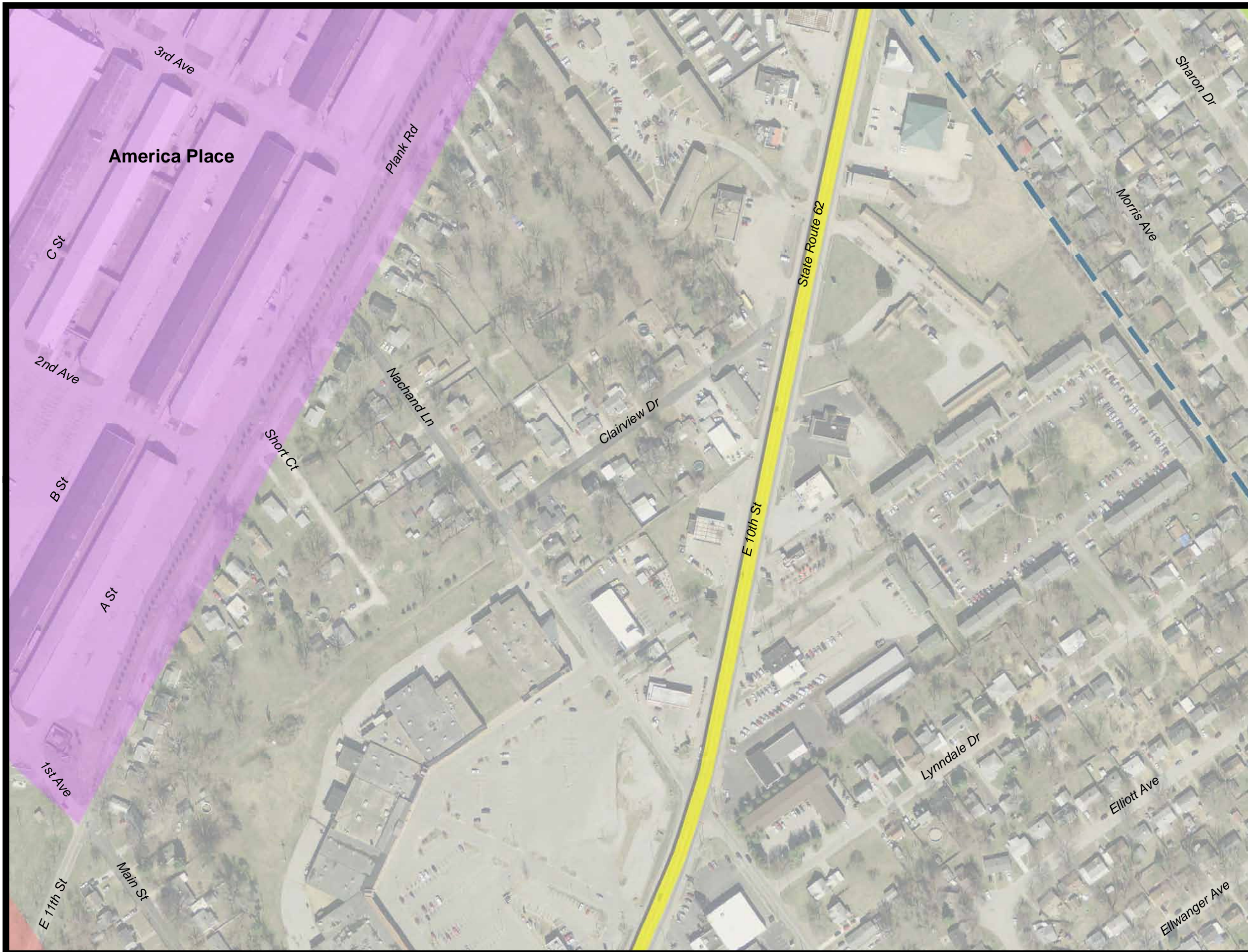
-  Typical Sections
-  Proposed Study Areas
-  Retail / Dining
-  Industrial / Commercial
-  Park / Recreation Center



JEFFERSONVILLE BIKE AND PED PLAN

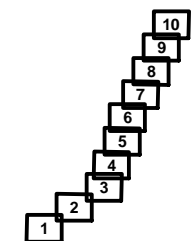
10th Street Inventory





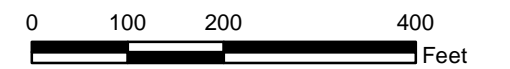
Legend

-  Typical Sections
-  Wheels and Heels Connector Trail
-  Proposed Study Areas
-  Retail / Dining
-  Industrial / Commercial
-  Park / Recreation Center








JEFFERSONVILLE BIKE AND PED PLAN

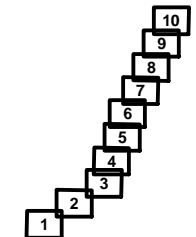
10th Street Inventory





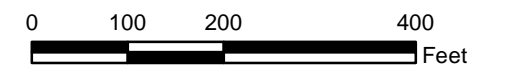
Legend

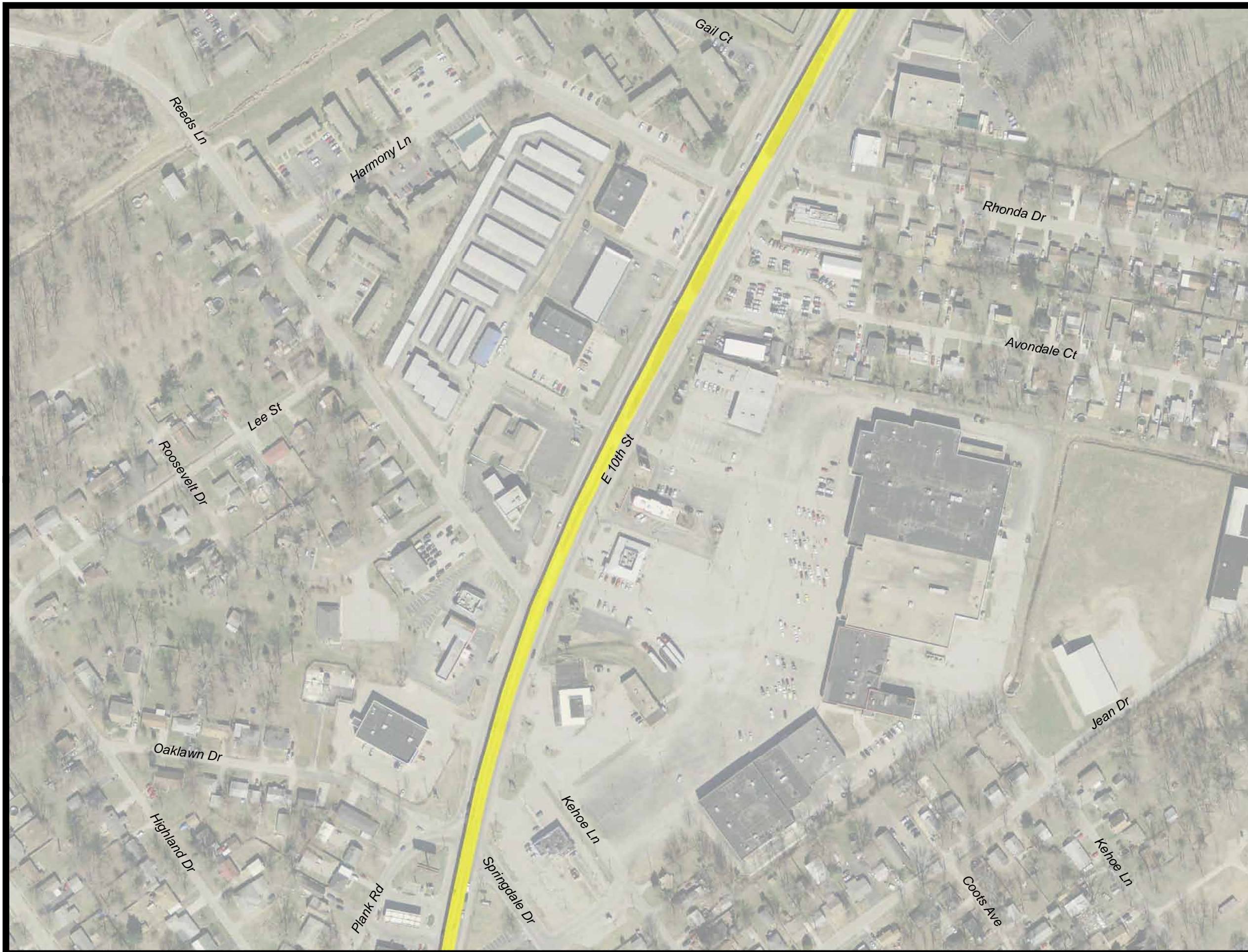
-  Typical Sections
-  Wheels and Heels Connector Trail
-  Proposed Study Areas
-  Industrial / Commercial
-  Park / Recreation Center



JEFFERSONVILLE BIKE AND PED PLAN


10th Street Inventory

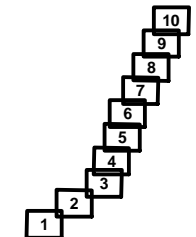




Legend

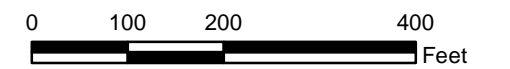
 Typical Sections

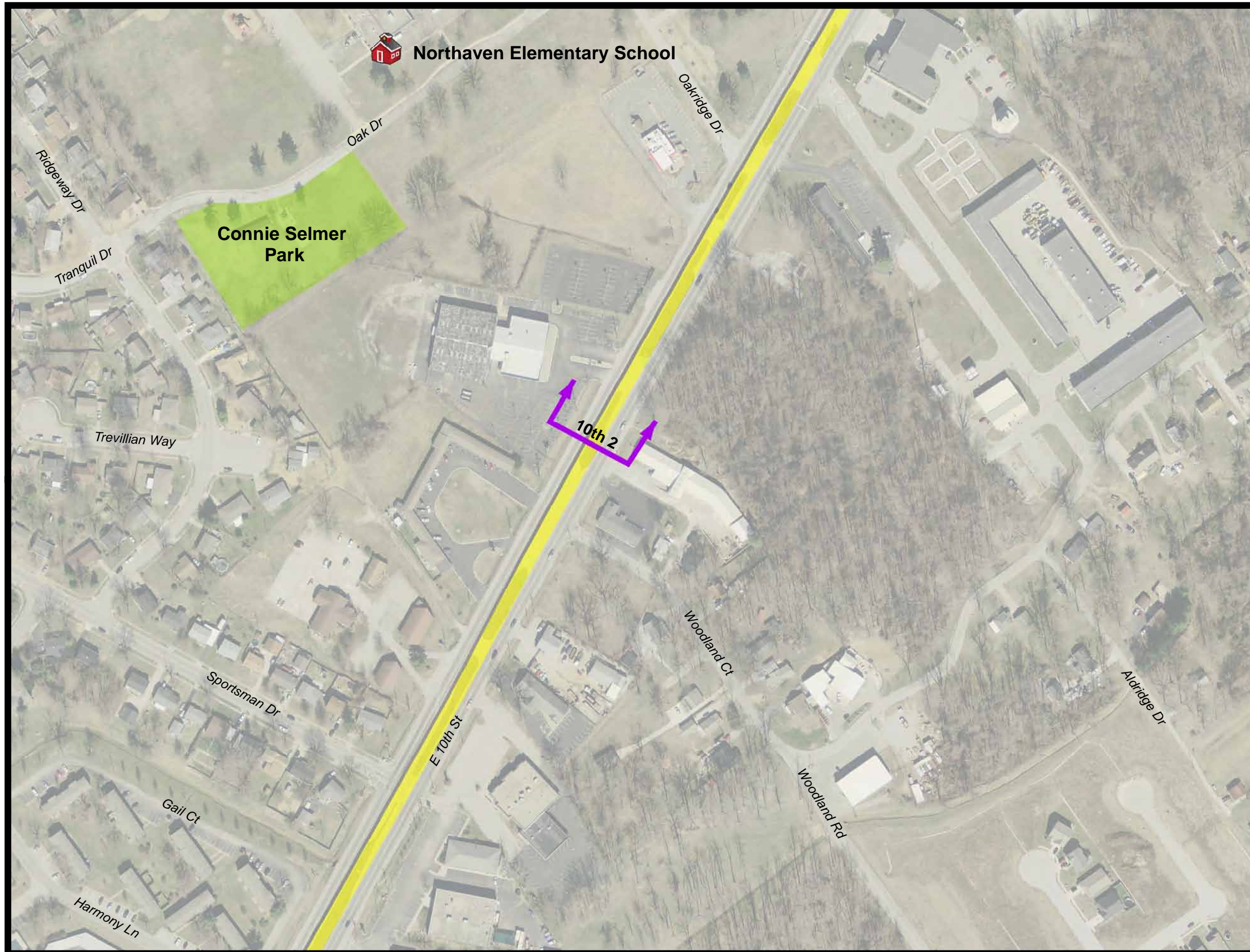
 Proposed Study Areas







JEFFERSONVILLE BIKE AND PED PLAN

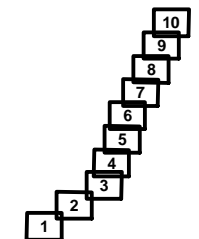
10th Street Inventory





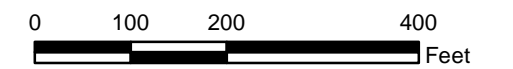
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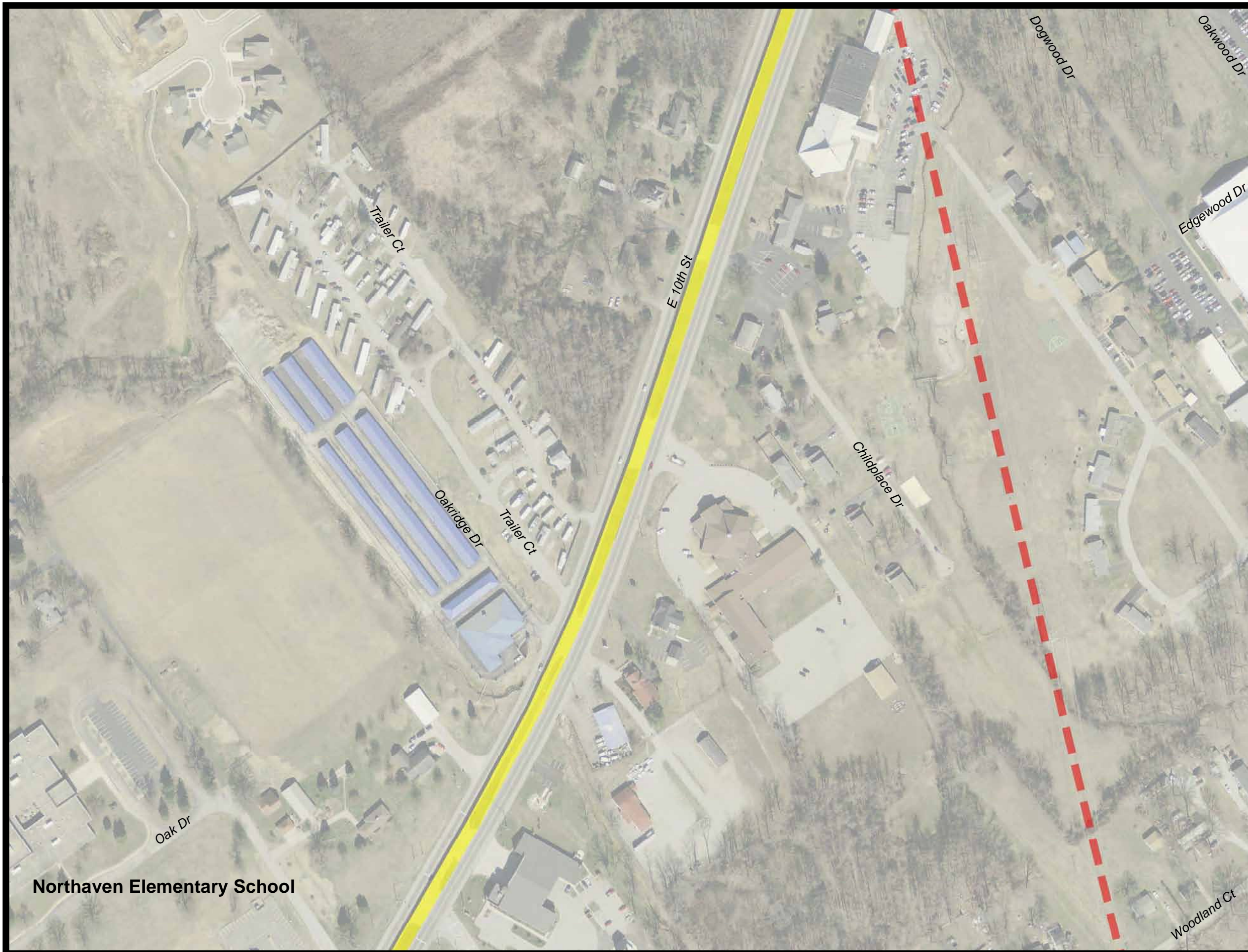
-  Schools
-  Typical Sections
-  Proposed Study Areas
-  Park / Recreation Center






JEFFERSONVILLE BIKE AND PED PLAN

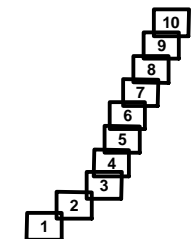
10th Street Inventory





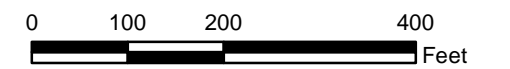
Legend

-  Typical Sections
-  Wheels and Heels Plan
-  Proposed Study Areas

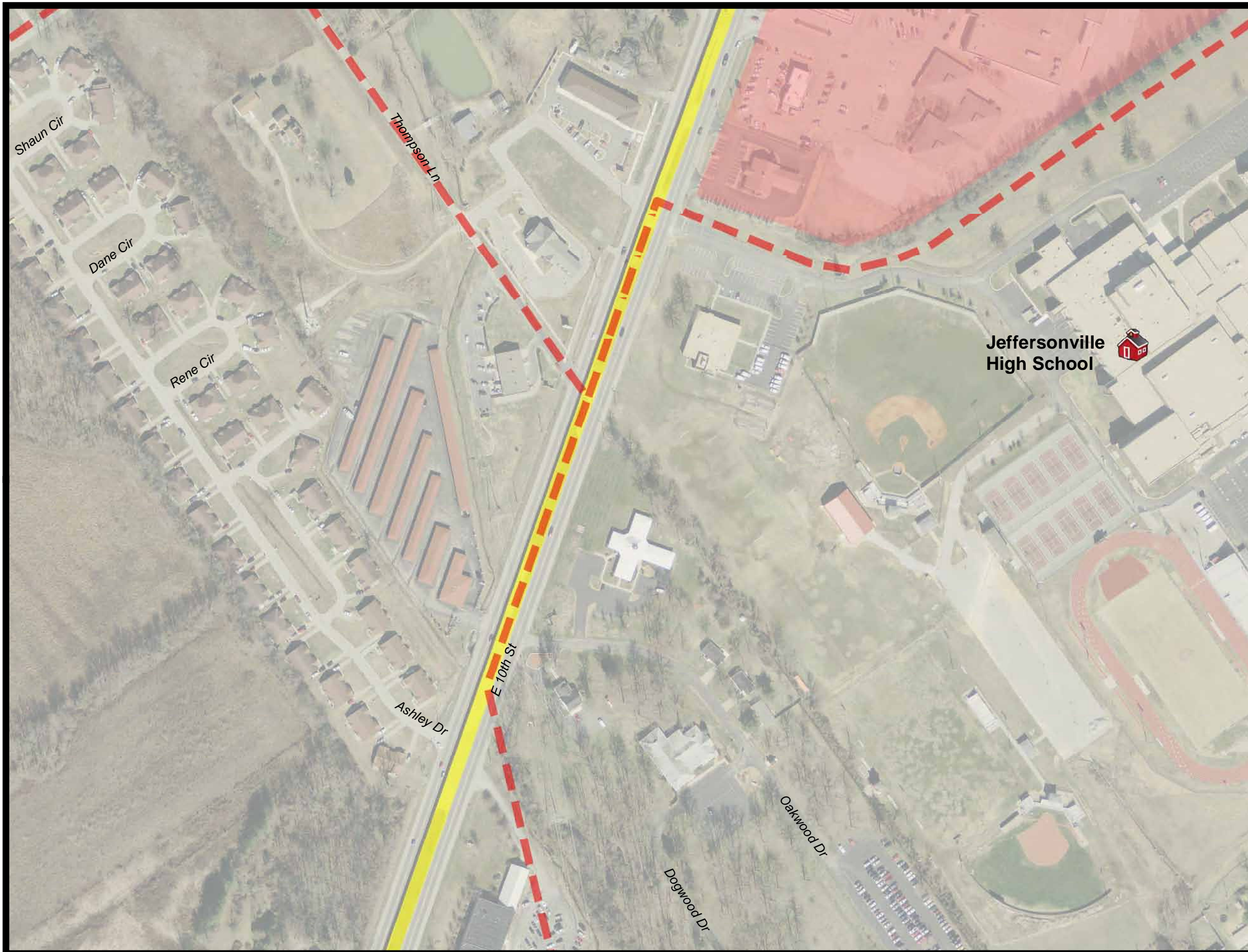


JEFFERSONVILLE BIKE AND PED PLAN






10th Street Inventory

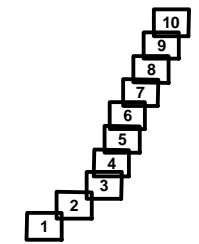


Northaven Elementary School



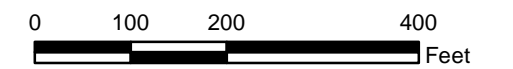
Legend

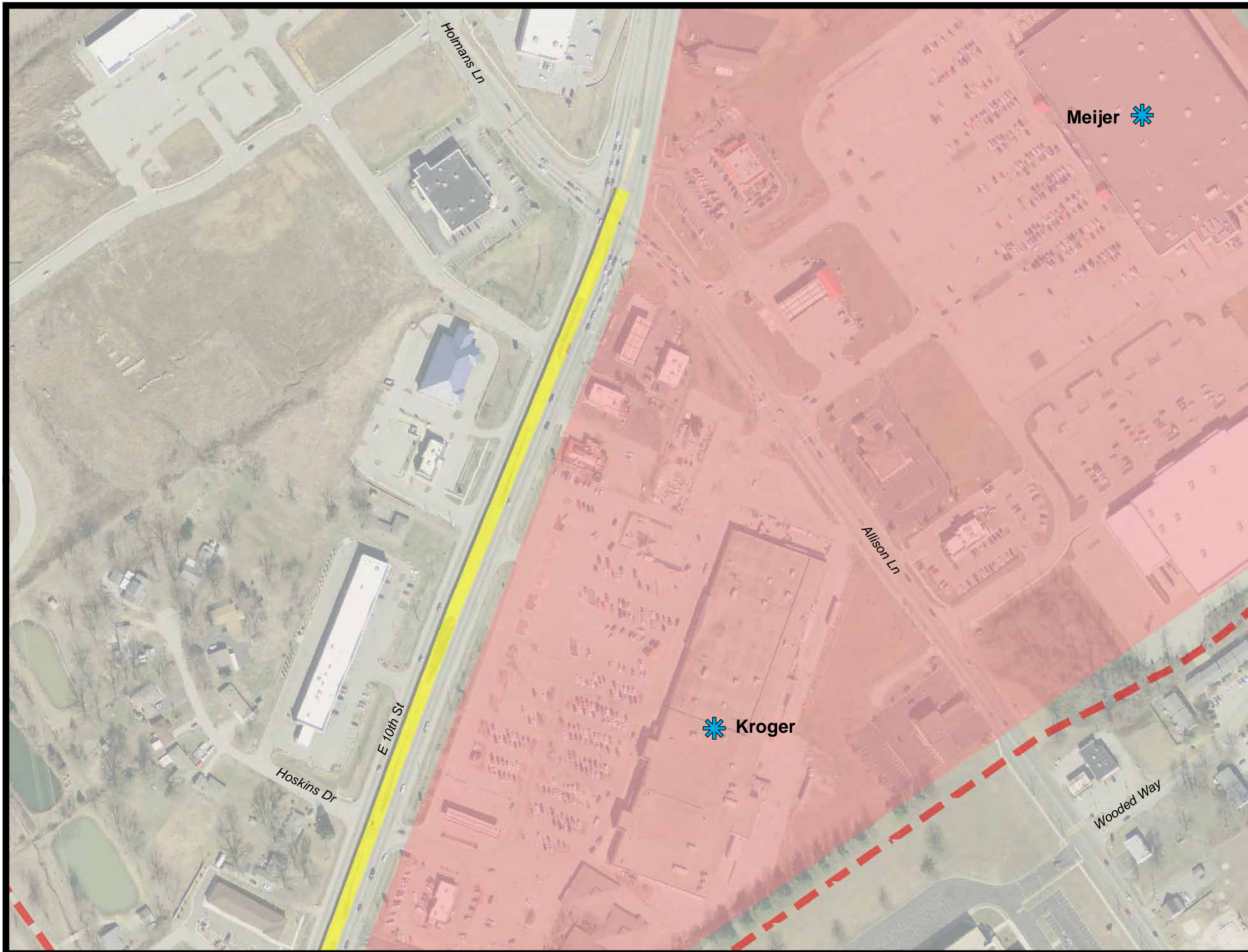
-  Schools
-  Typical Sections
-  Wheels and Heels Plan
-  Proposed Study Areas
-  Retail / Dining



JEFFERSONVILLE BIKE AND PED PLAN

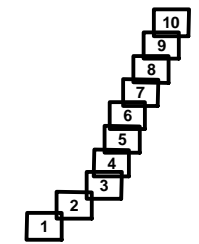
10th Street Inventory





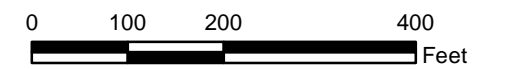
Legend

-  Point of Interest
-  Typical Sections
-  Wheels and Heels Plan
-  Proposed Study Areas
-  Retail / Dining

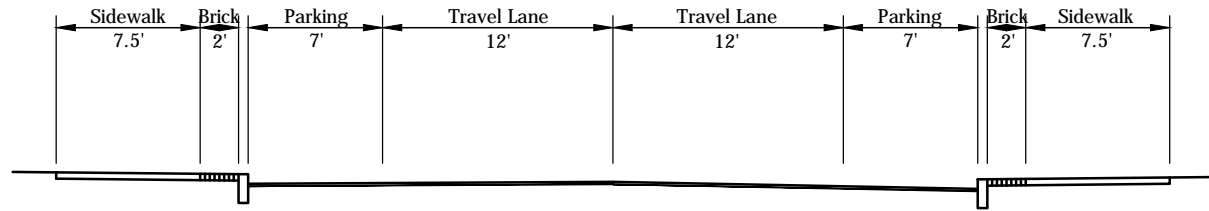


JEFFERSONVILLE BIKE AND PED PLAN

10th Street Inventory

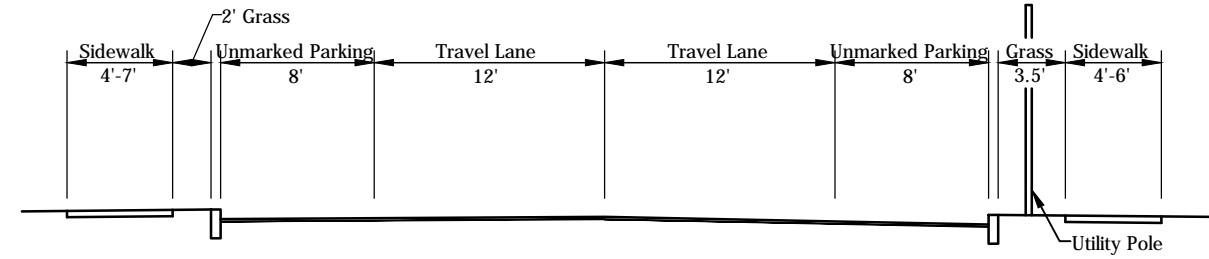


Typical Sections - Inventory



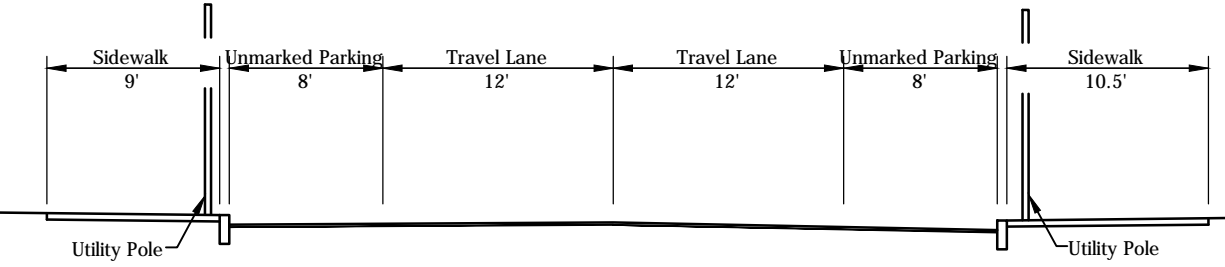
SPRING ST 1-3

Scale: 1"=10'
Spring St. from Riverside Dr. to 7th St.



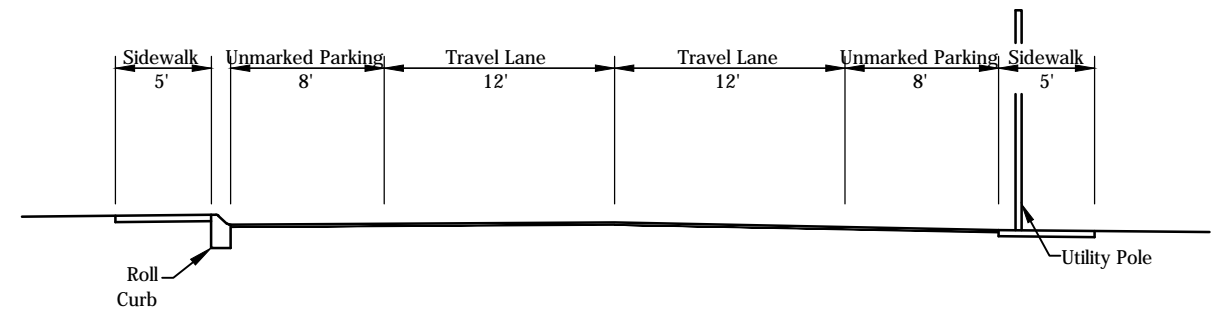
SPRING ST 7

Scale: 1"=10'
Spring St. from 12th St. to Harrison Ave.



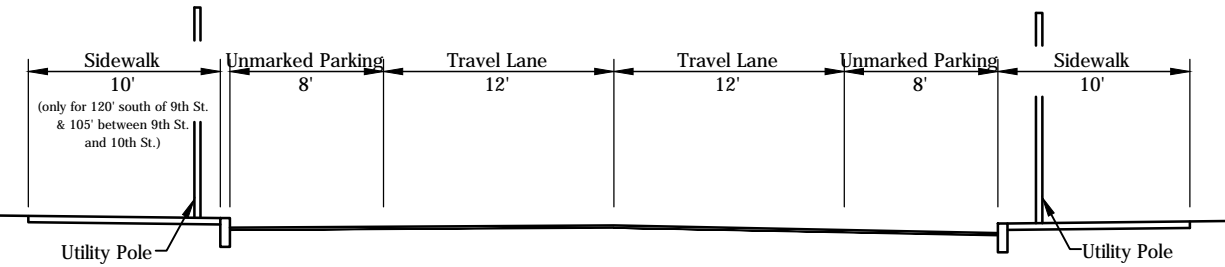
SPRING ST 4

Scale: 1"=10'
Spring St. from 7th St. to 8th St.



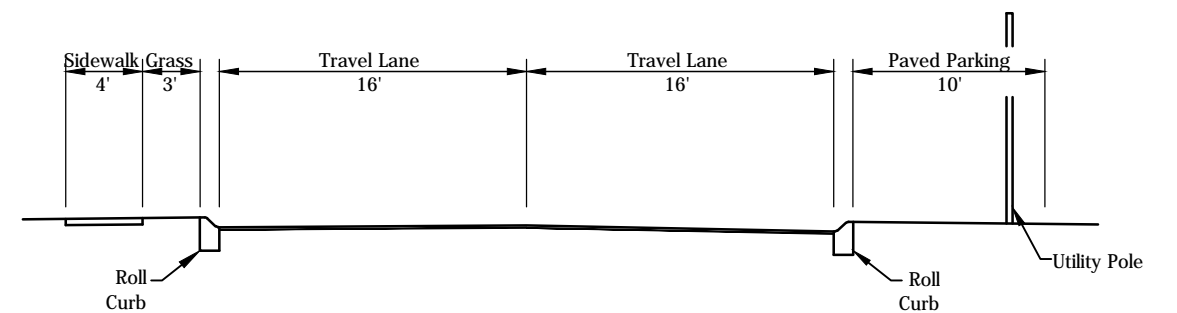
SPRING ST 8

Scale: 1"=10'
Spring St. from Harrison Ave. to Riddle St.



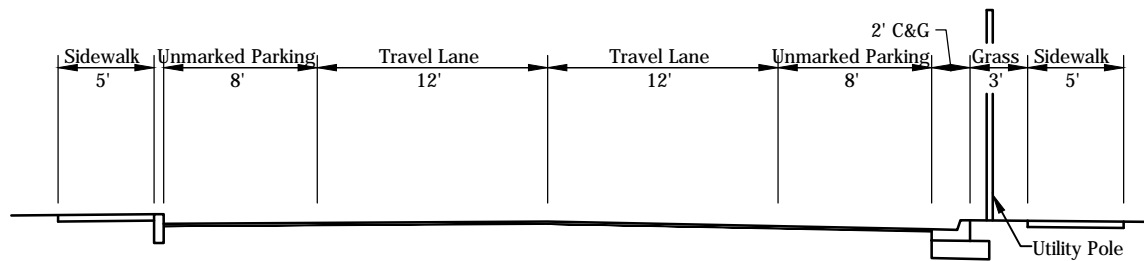
SPRING ST 5

Scale: 1"=10'
Spring St. from 8th St. to 10th St.



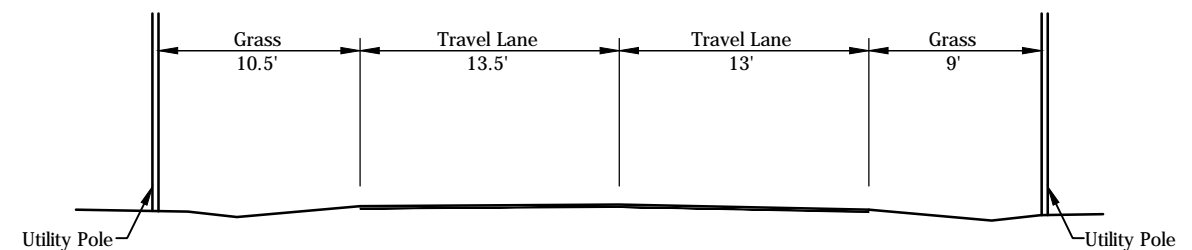
SPRING ST 9

Scale: 1"=10'
Spring St. from Riddle St. to Eastern Blvd.



SPRING ST 6

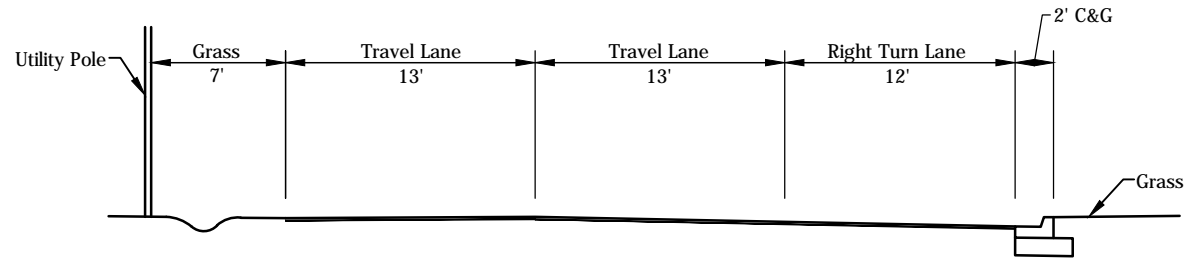
Scale: 1"=10'
Spring St. from 10th St. to 12th St.



SPRING ST 10

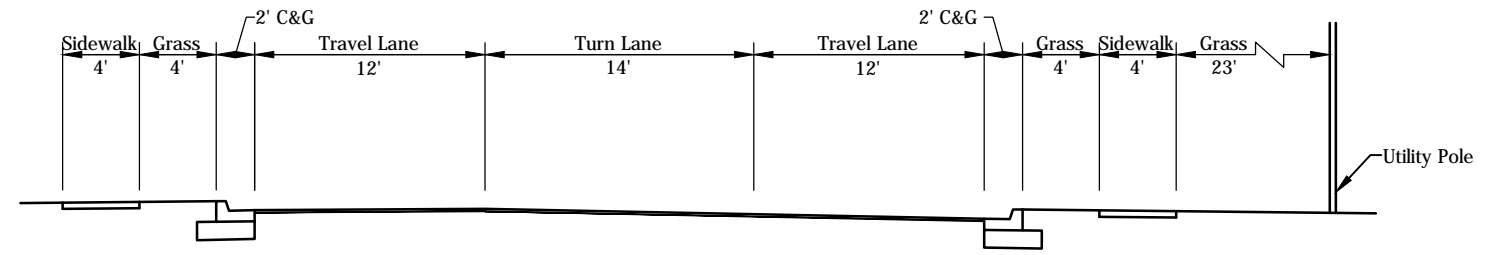
Scale: 1"=10'
Spring St. from Eastern Blvd. to Magnolia Ave.

Typical Sections - Inventory



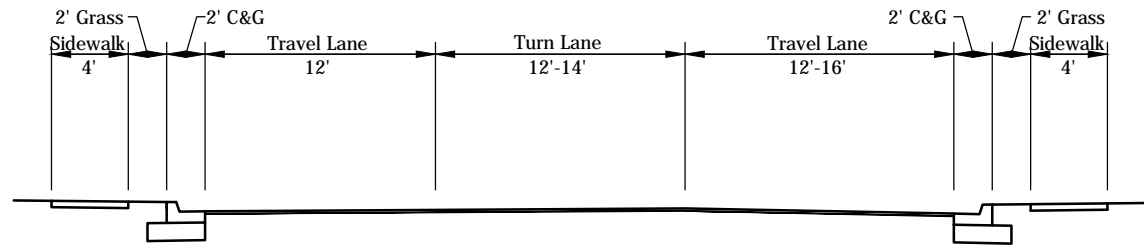
SPRING ST 11

Scale: 1"=10'
Spring St. from Magnolia Ave. to Dutch Ln.



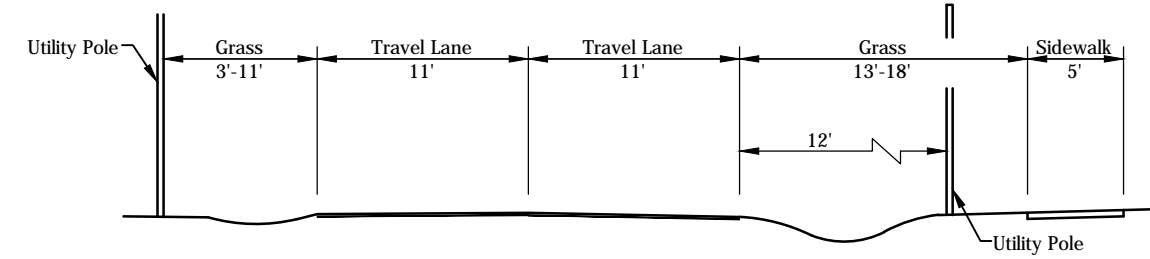
HAMBURG PIKE 4

Scale: 1"=10'
Hamburg Pike from 935' north of Charlestown New Albany Rd. to Kingsfield St.



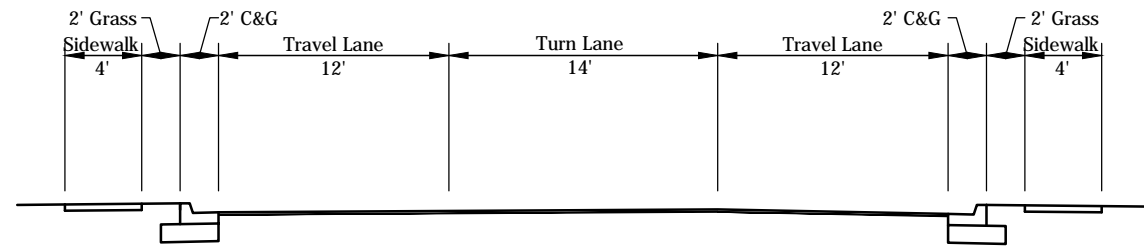
HAMBURG PIKE 1

Scale: 1"=10'
Hamburg Pike from Dutch Ln. to Walnut Ridge Nursery & Garden



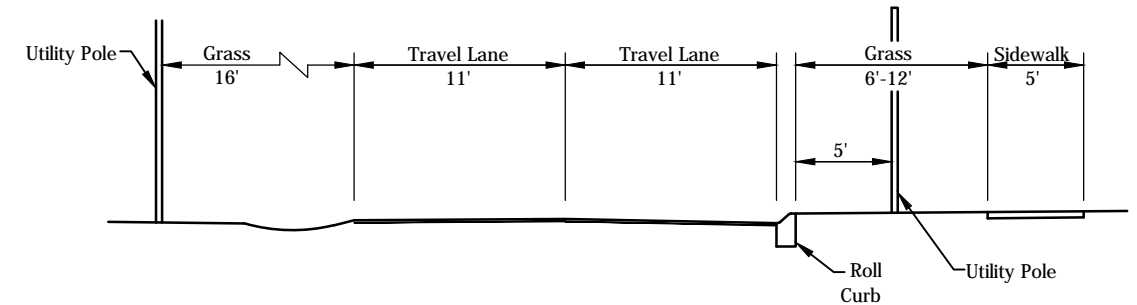
HAMBURG PIKE 5

Scale: 1"=10'
Hamburg Pike from Kingsfield St. to Cornwell Dr.



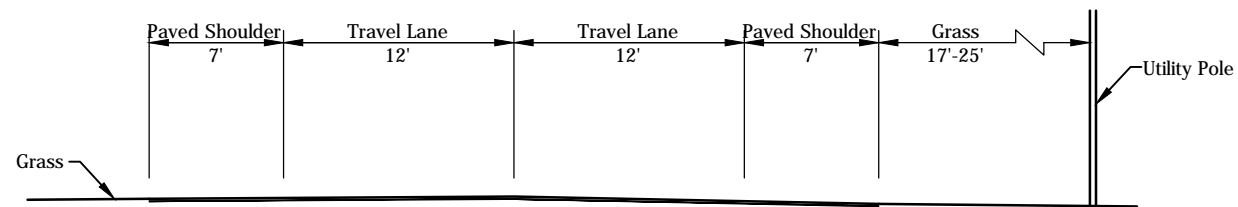
HAMBURG PIKE 2

Scale: 1"=10'
Hamburg Pike from Walnut Ridge Nursery & Garden to Charlestown New Albany Rd.



HAMBURG PIKE 6

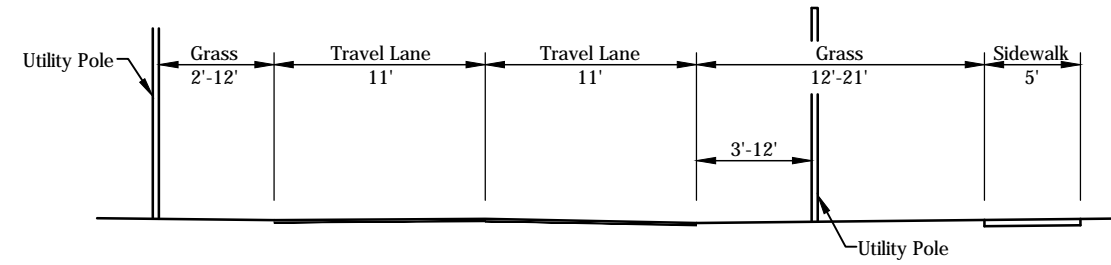
Scale: 1"=10'
Hamburg Pike from Cornwell Dr. to Bishop Rd.



HAMBURG PIKE 3

Scale: 1"=10'
Hamburg Pike from Charlestown New Albany Rd. to 935' north of Charlestown New Albany Rd.

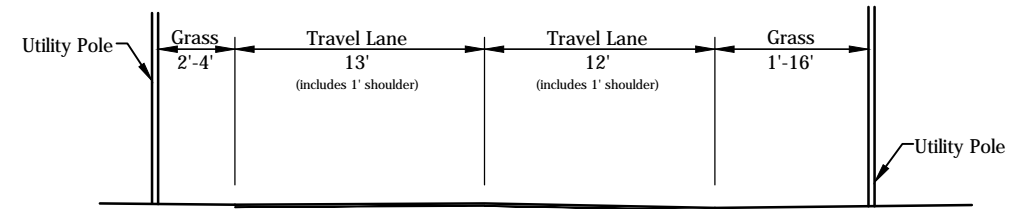
Typical Sections - Inventory



HAMBURG PIKE 7

Scale: 1"=10'

Hamburg Pike from Bishop Rd. to YMCA

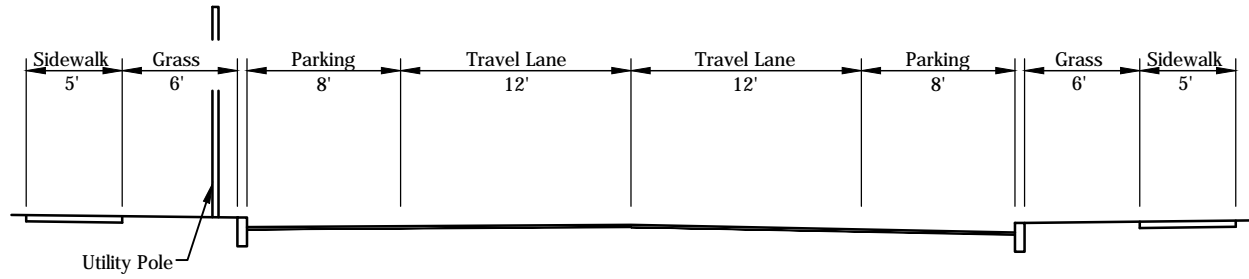


HAMBURG PIKE 8

Scale: 1"=10'

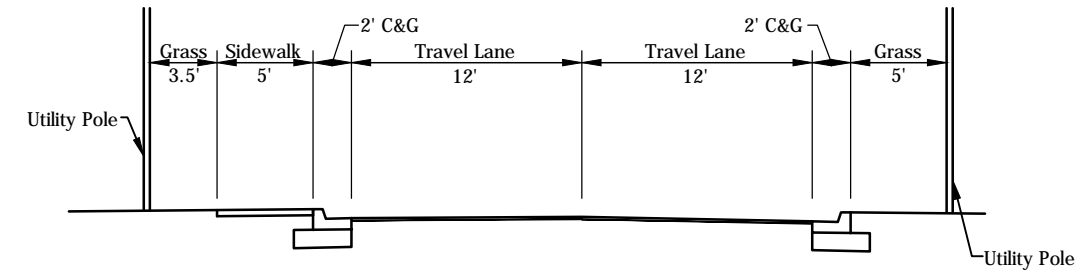
Hamburg Pike from YMCA to Coopers Ln.

Typical Sections - Inventory



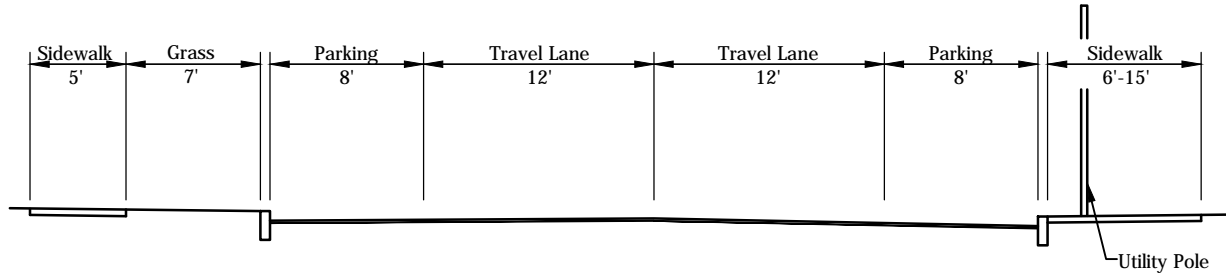
MARKET ST 1

Scale: 1"=10'
Market St. from Spring St. to Graham St.



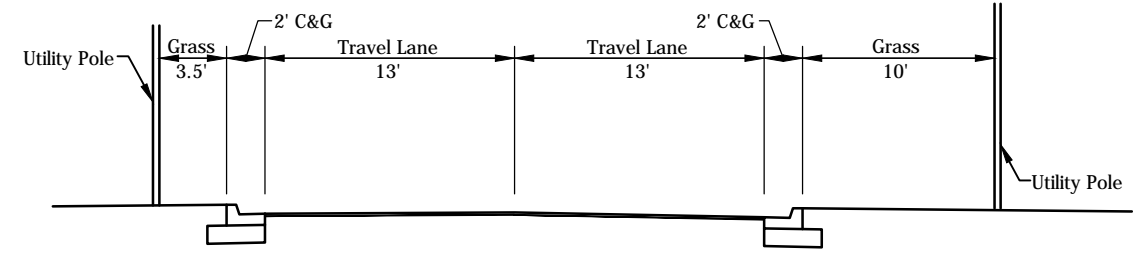
UTICA PIKE 2

Scale: 1"=10'
Utica Pike from Chippewa Dr. to Perrin Ln.



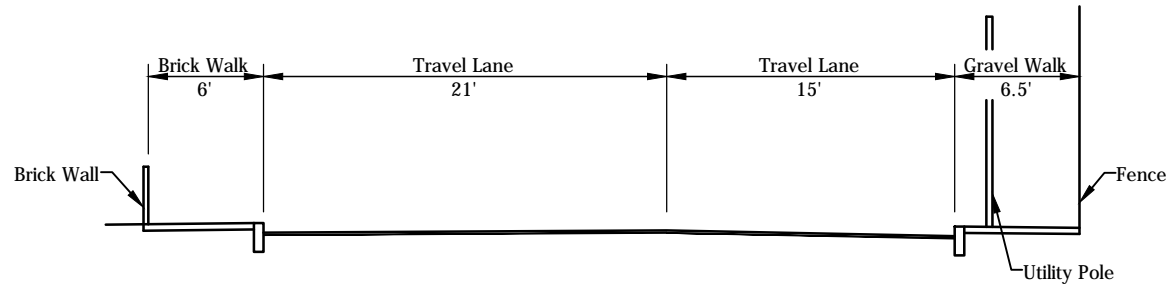
MARKET ST 2

Scale: 1"=10'
Market St. from Graham St. to Division St.



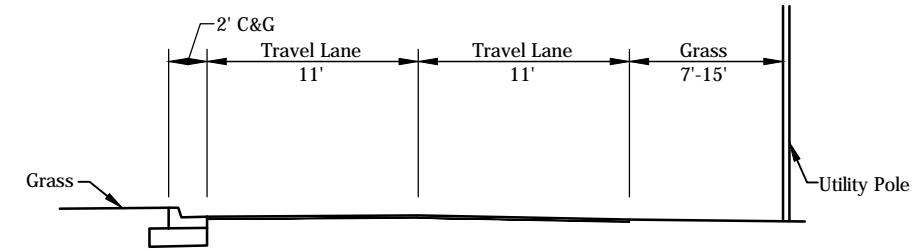
UTICA PIKE 3

Scale: 1"=10'
Utica Pike from Perrin Ln. to Turnberry Dr.



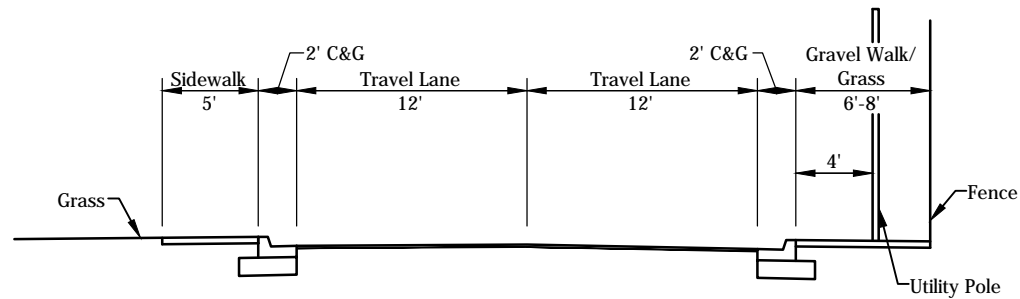
MARKET ST 3

Scale: 1"=10'
Market St. from Division St. to Jefferson St.



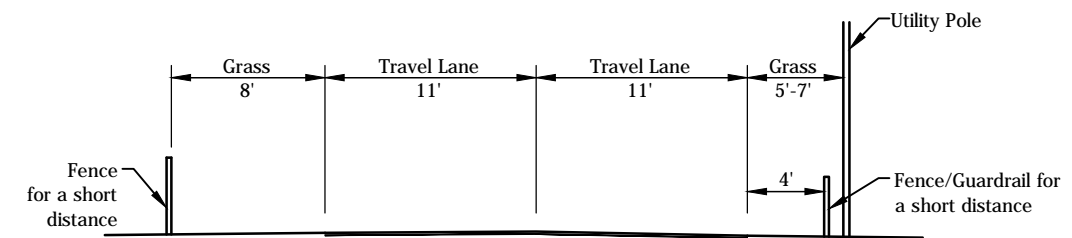
UTICA PIKE 4

Scale: 1"=10'
Utica Pike from Turnberry Dr. to 475' north of Turnberry Dr.



UTICA PIKE 1

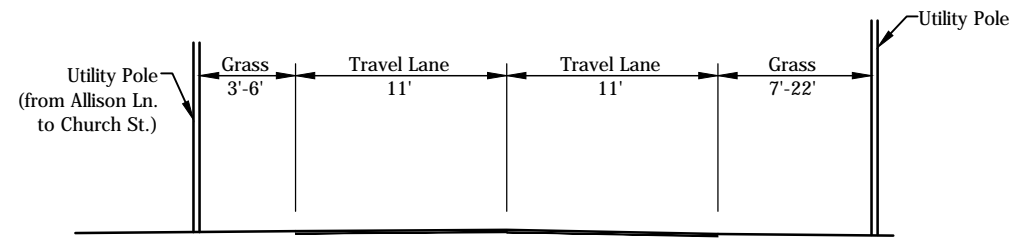
Scale: 1"=10'
Market St./Utica Pike from Jefferson St. to Chippewa Dr.



UTICA PIKE 5

Scale: 1"=10'
Utica Pike from 475' north of Turnberry Dr. to Allison Ln.

Typical Sections - Inventory

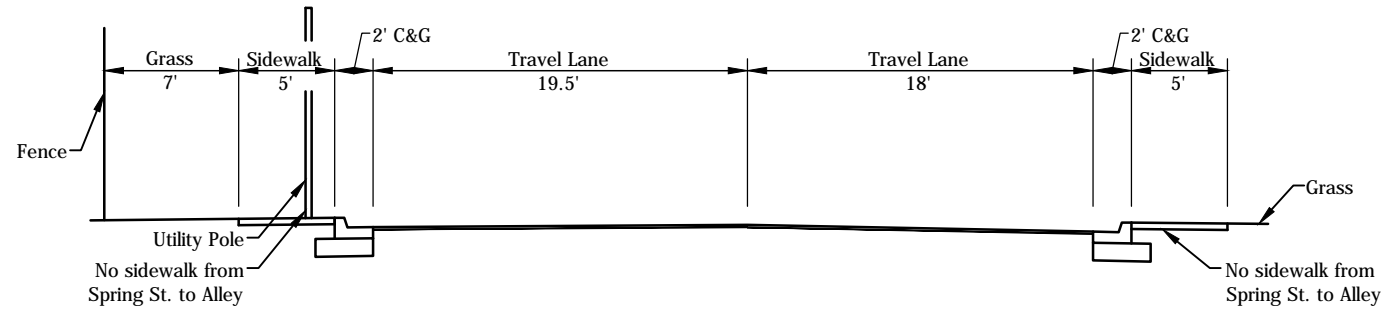


UTICA PIKE 6

Scale: 1"=10'

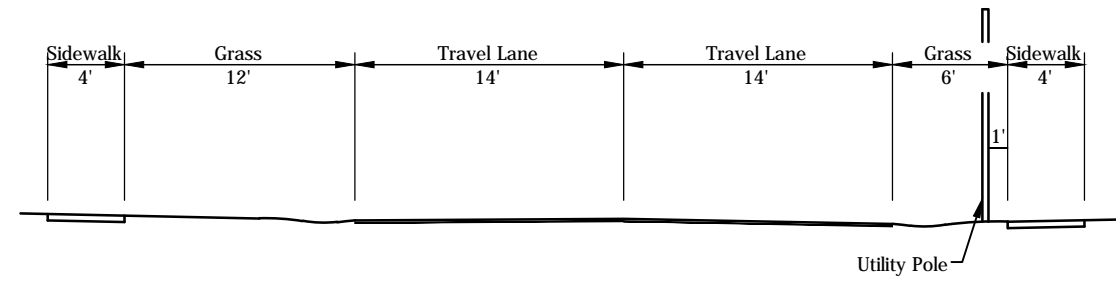
Utica Pike from Allison Ln. to Church St. (in Utica)

Typical Sections - Inventory



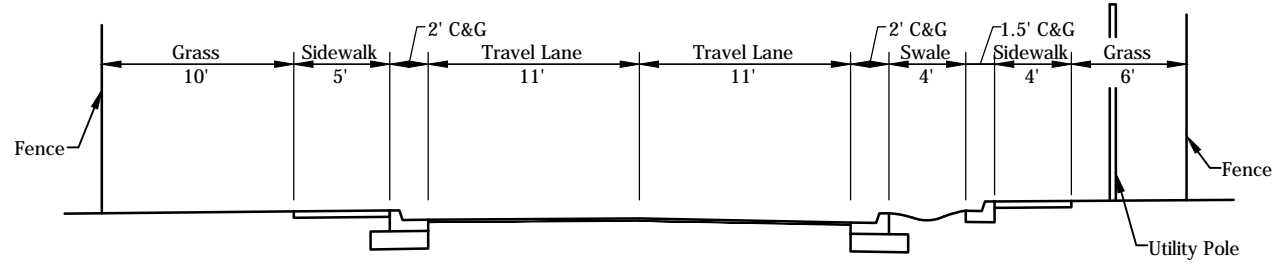
8TH ST 1

Scale: 1"=10'
8th St. from Spring St. to Wall St.



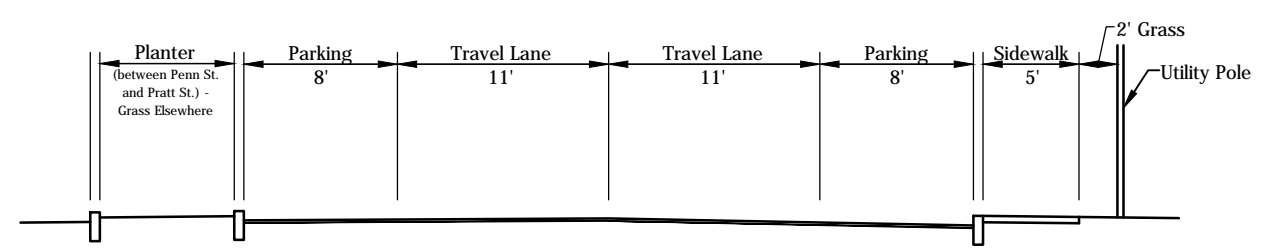
8TH ST 5

Scale: 1"=10'
8th St. from Meigs Ave. to Penn St.



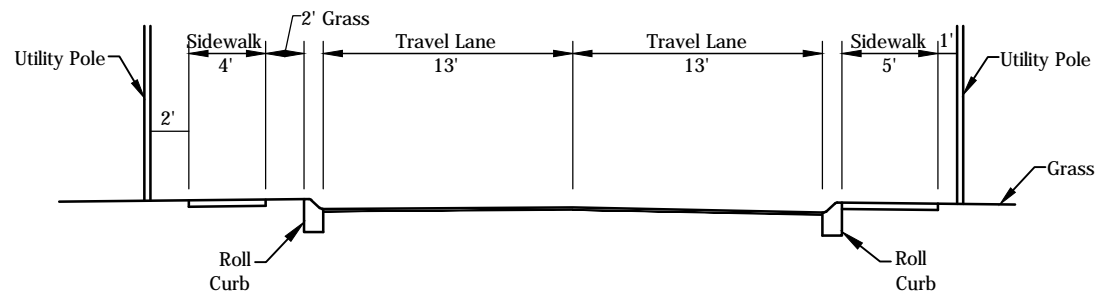
8TH ST 2

Scale: 1"=10'
8th St. from Wall St. to Walnut St.



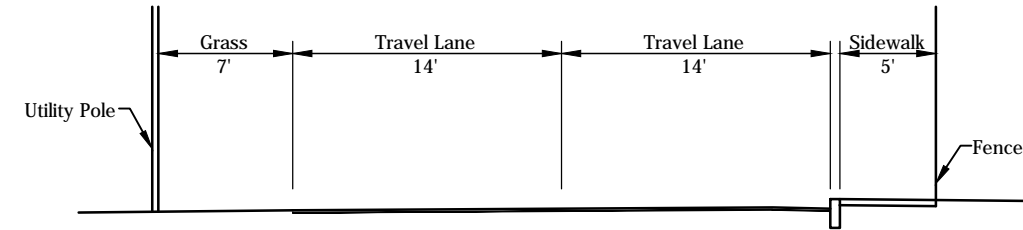
8TH ST 6

Scale: 1"=10'
8th St. from Penn St. to Graham St.



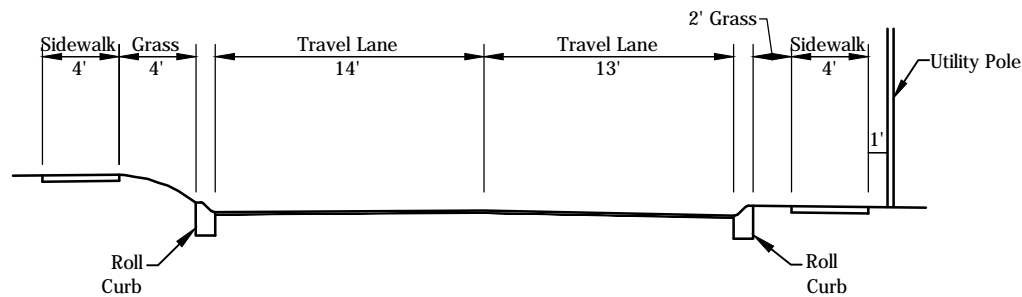
8TH ST 3

Scale: 1"=10'
8th St. from Walnut St. to Watt St.



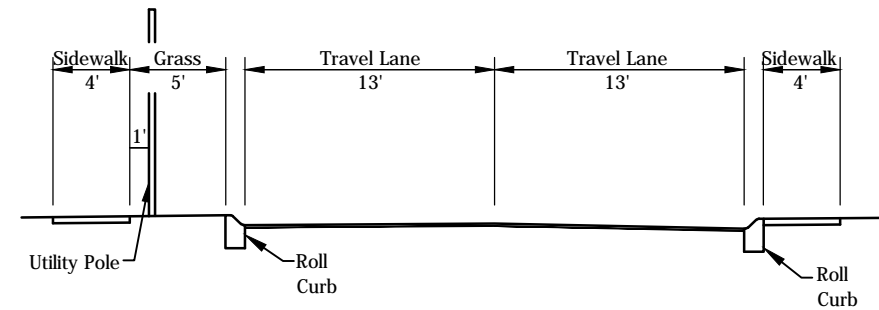
8TH ST 7

Scale: 1"=10'
8th St. from Graham St. to Main St. (at cemetery)



8TH ST 4

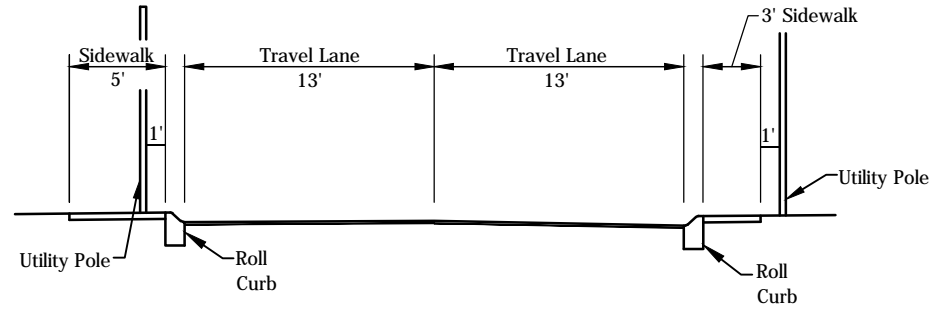
Scale: 1"=10'
8th St. from Watt St. to Meigs Ave.



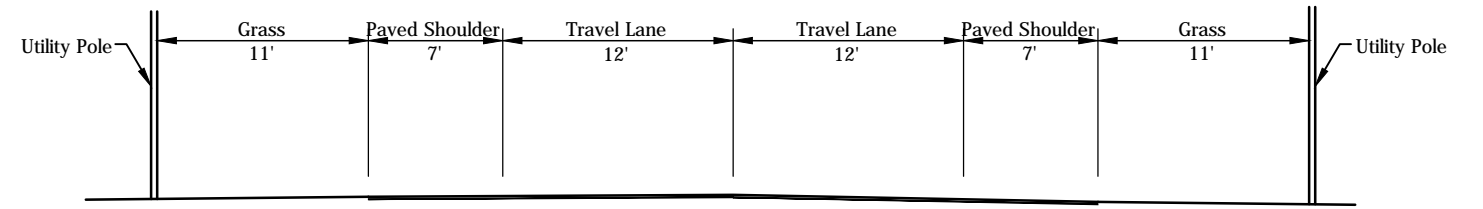
8TH ST 8

Scale: 1"=10'
8th St. from Main St. to Crestview Ct.

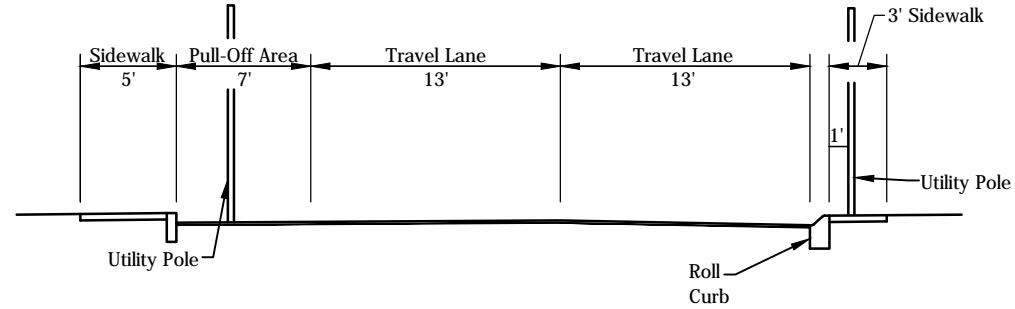
Typical Sections - Inventory



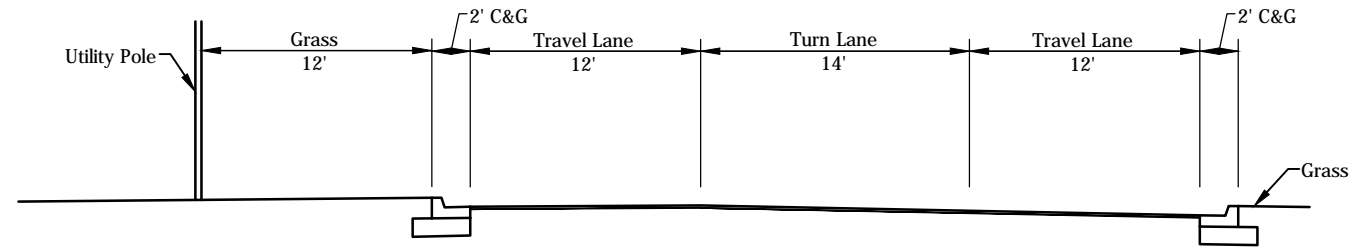
8TH ST 9
Scale: 1"=10'
8th St. from Crestview Ct. to Brighton Ave.



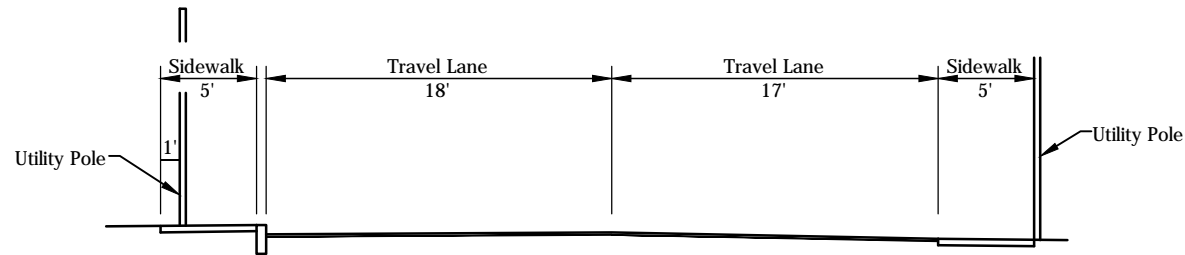
8TH ST 13
Scale: 1"=10'
Middle Rd. from Perrin Ln. to Allison Ln.



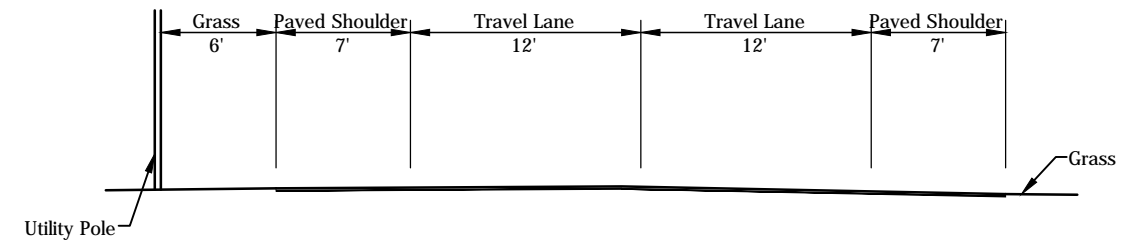
8TH ST 10
Scale: 1"=10'
8th St. from Brighton Ave. to Railroad



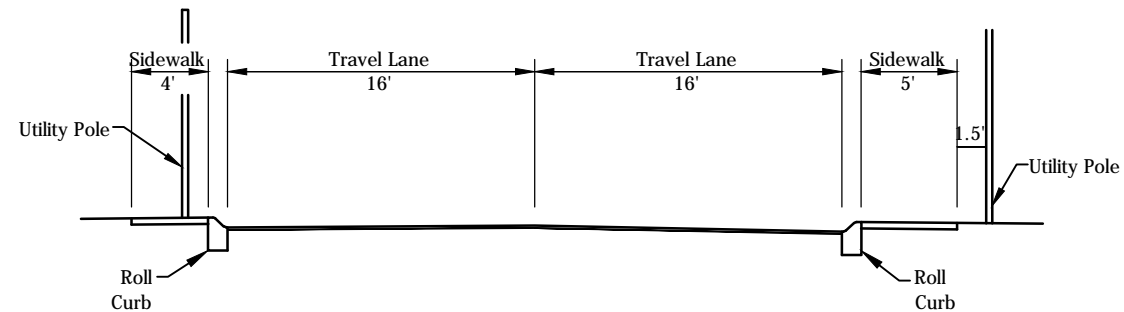
8TH ST 14
Scale: 1"=10'
Middle Rd. from Allison Ln. to Presidential Pl.



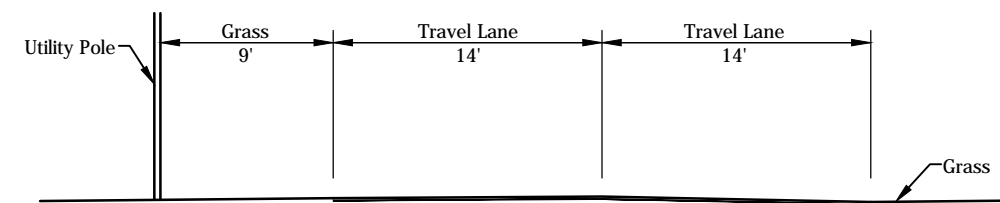
8TH ST 11
Scale: 1"=10'
8th St. from Railroad to Springdale Dr.



8TH ST 15
Scale: 1"=10'
Middle Rd. from Presidential Pl. to Port Rd.

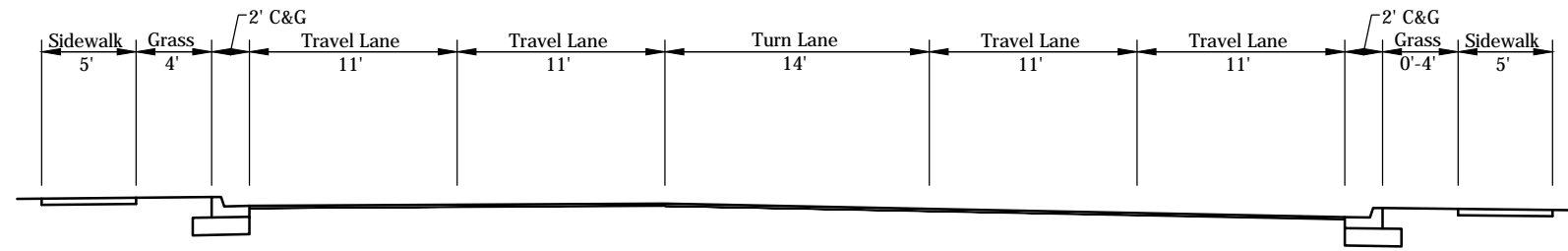


8TH ST 12
Scale: 1"=10'
8th St. from Springdale Dr. to Perrin Ln.



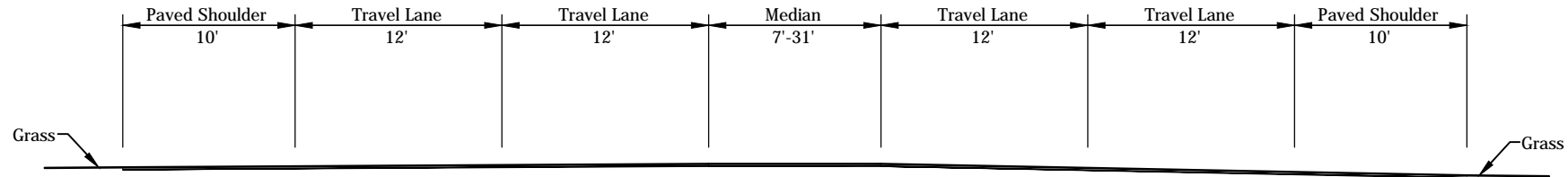
8TH ST 16
Scale: 1"=10'
Middle Rd. from Port Rd. to Utica Sellersburg Rd.

Typical Sections - Inventory



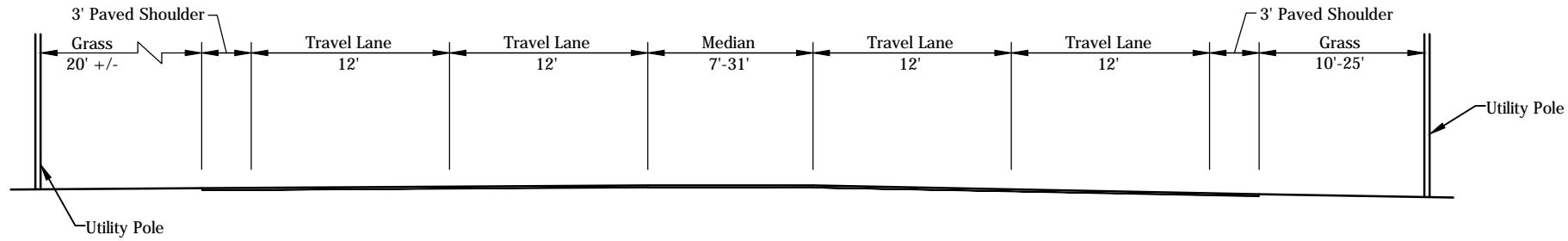
10TH ST 1

Scale: 1"=10'
10th St. from Spring St. to Reeds Ln.



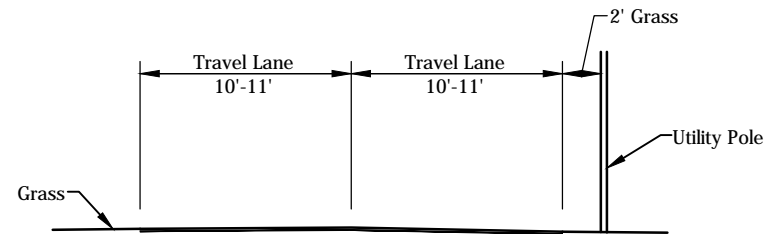
10TH ST 2

Scale: 1"=10'
10th St. from Reeds Ln. to Allison Ln.



10TH ST 3

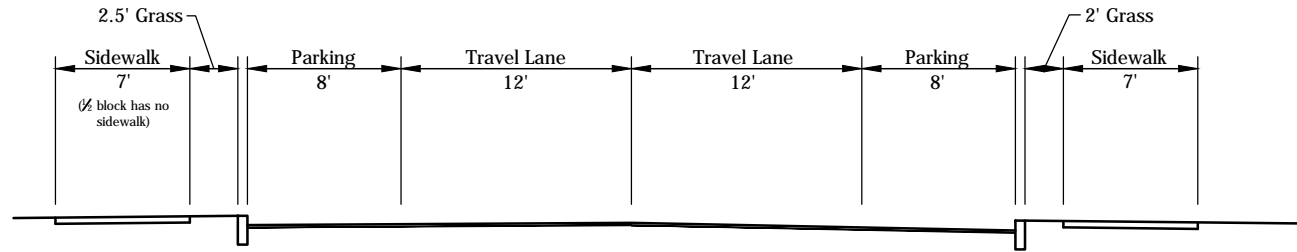
Scale: 1"=10'
10th St. from Allison Ln. to River City Park Rd.



10TH ST 4

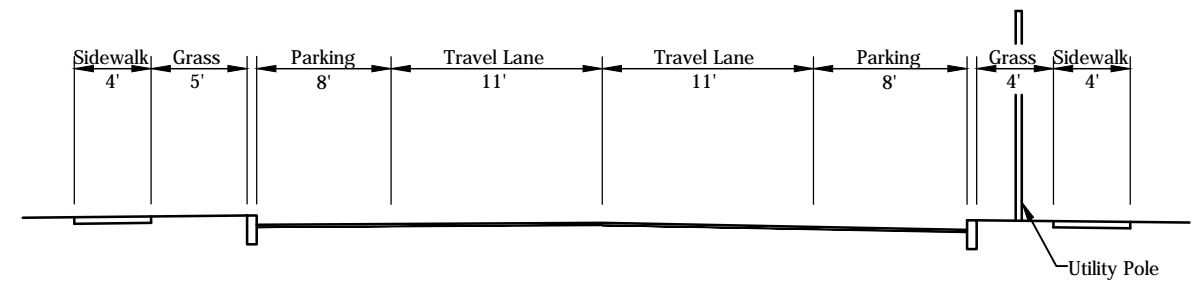
Scale: 1"=10'
River City Park Rd./Vissing Park Rd. from 10th St.
to Richard Vissing Park

Typical Sections - Inventory



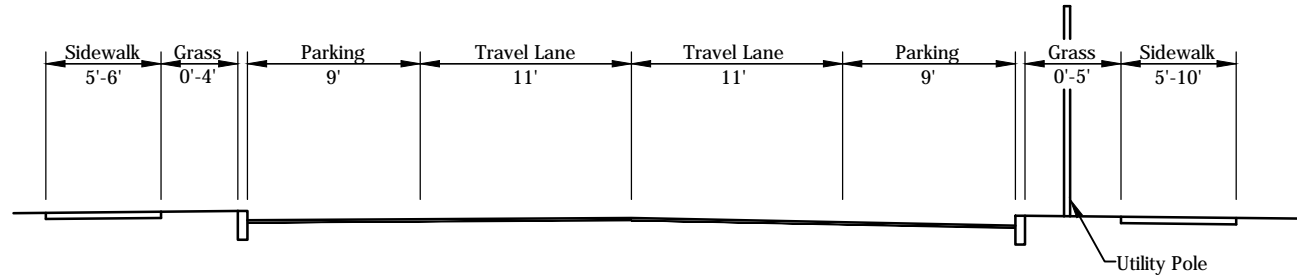
CHESTNUT ST 1

Scale: 1"=10'
Chestnut St. from Pearl St. to Spring St.



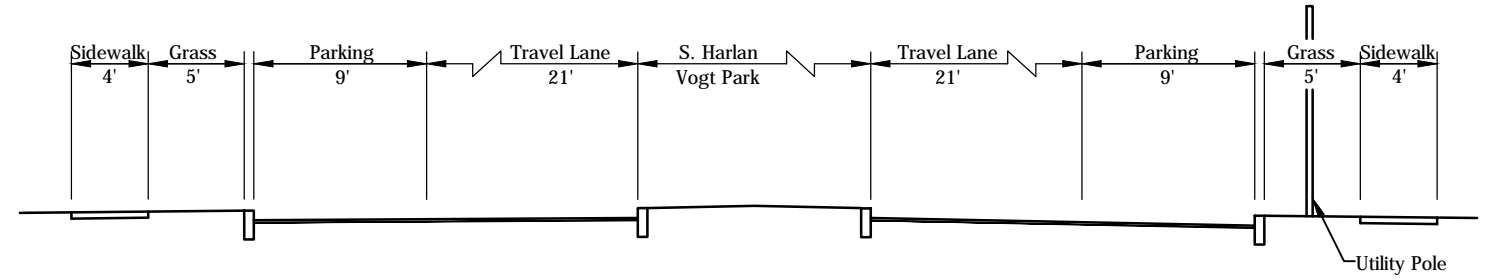
CHESTNUT ST 5

Scale: 1"=10'
Park Pl. from Division St. to Jefferson St.



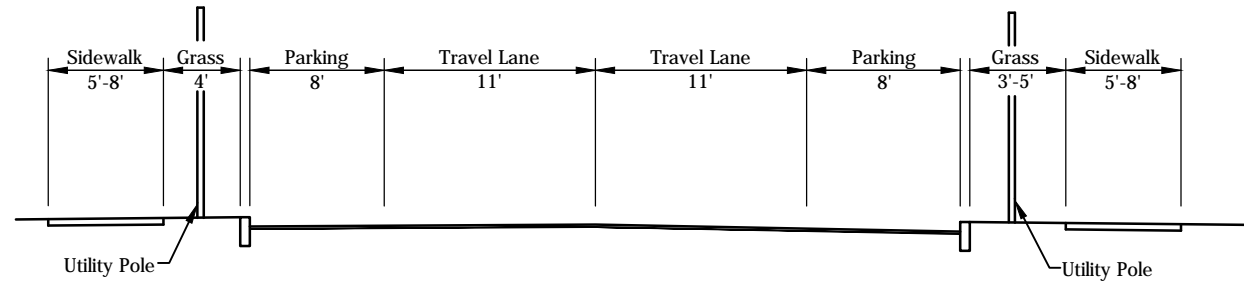
CHESTNUT ST 2

Scale: 1"=10'
Chestnut St. from Spring St. to Fulton St.



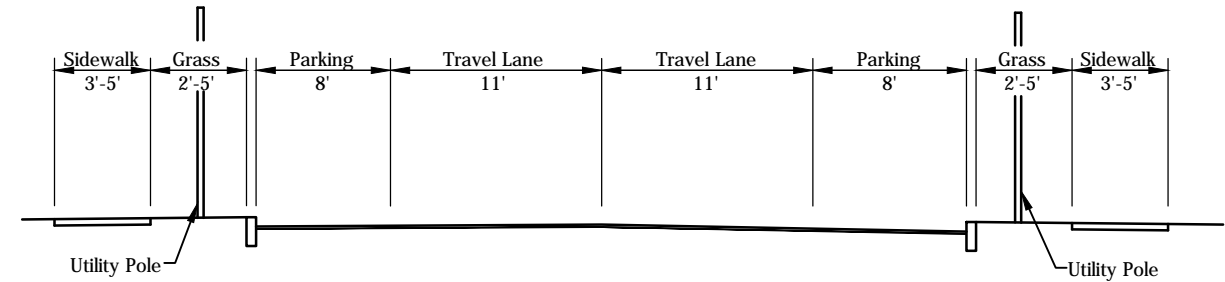
CHESTNUT ST 6

Scale: 1"=10'
Park Pl. from Jefferson St. to Jackson St.



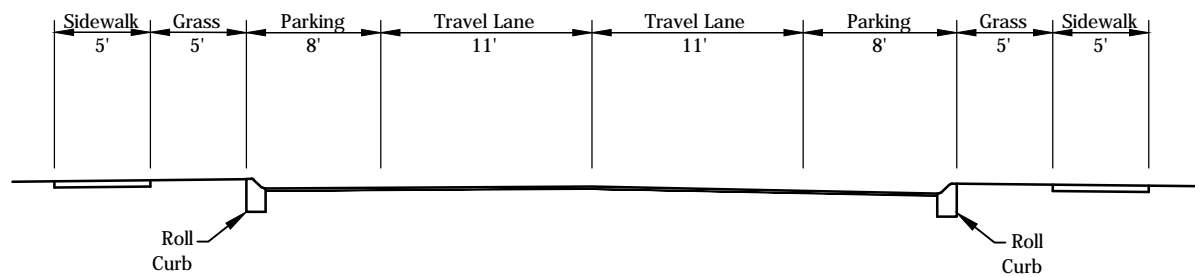
CHESTNUT ST 3

Scale: 1"=10'
Chestnut St. from to Fulton St. to Graham St.



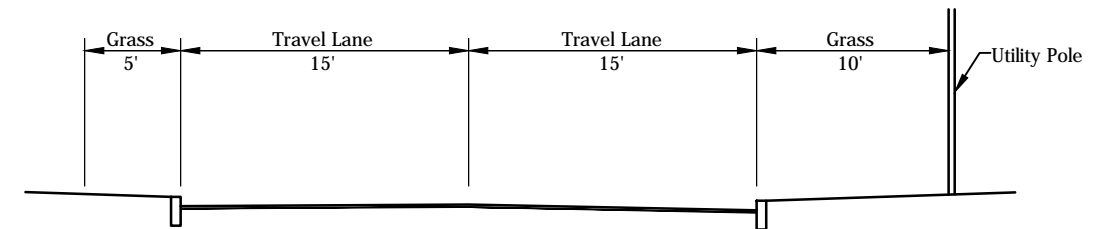
CHESTNUT ST 7

Scale: 1"=10'
Park Pl. from Jackson St. to the railroad



CHESTNUT ST 4

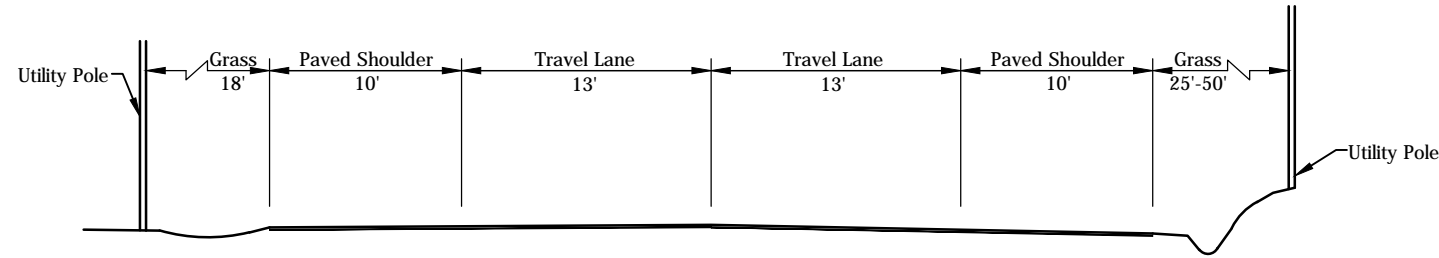
Scale: 1"=10'
Chestnut St. from Graham St. to Division St.



CHESTNUT ST 8

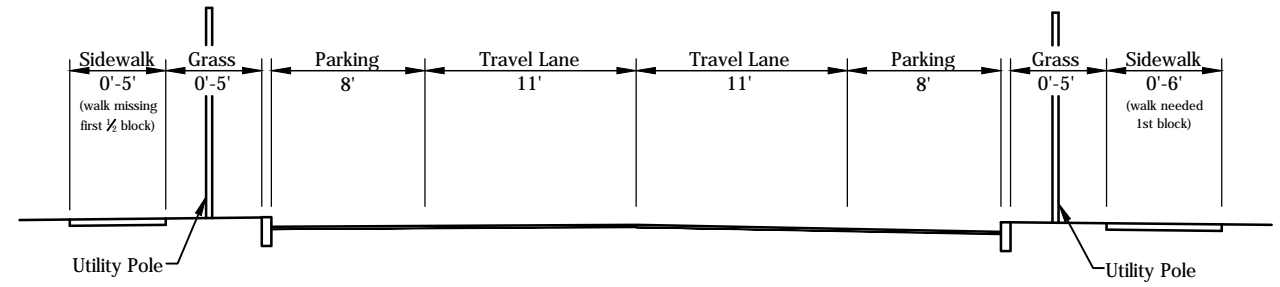
Scale: 1"=10'
Park Pl. from the railroad to Ewing Ln.

Typical Sections - Inventory



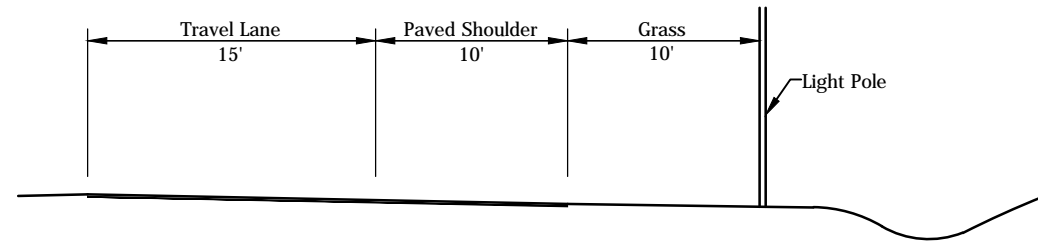
PORT RD 1

Scale: 1"=10'
Port Rd. from Utica Pike to On Ramp



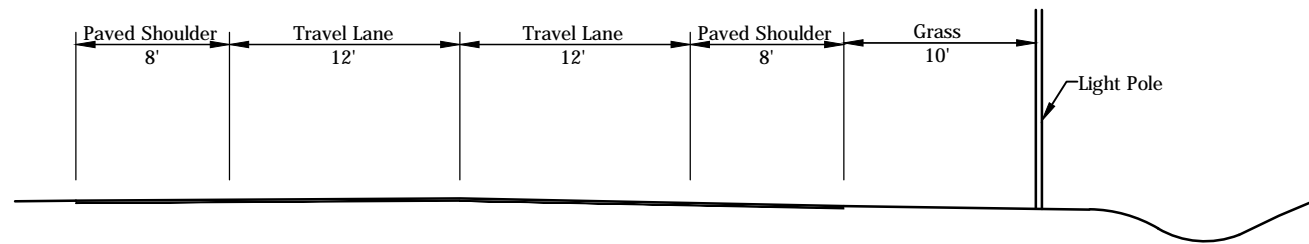
MEIGS AVE 1

Scale: 1"=10'
Meigs Ave. from Market St. to 10th St.



PORT RD 2

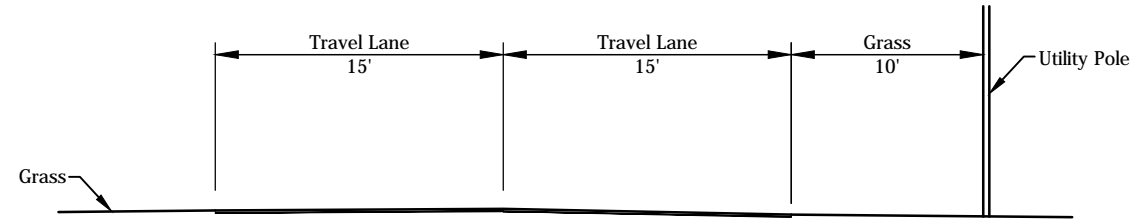
Scale: 1"=10'
Port Rd. 1-Lane On Ramp



PORT RD 3

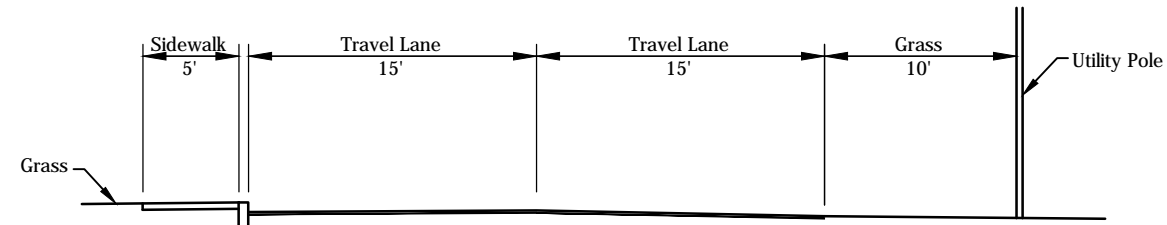
Scale: 1"=10'
Port Rd. 2-Lane On Ramp/Exit Ramp

Typical Sections - Inventory



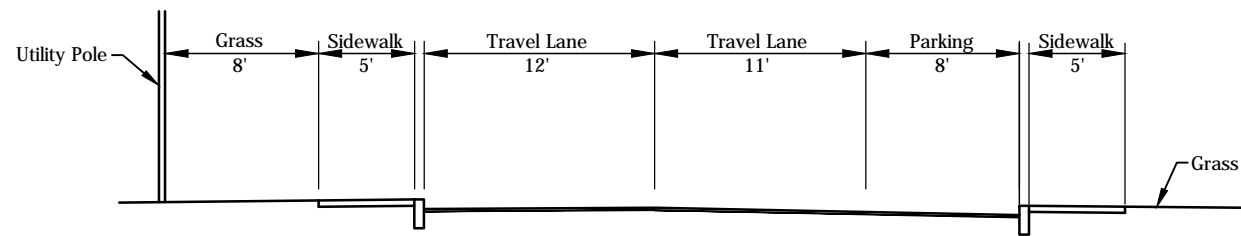
EWING LANE 1

Scale: 1"=10'
Ewing Lane from Utica Pike to Park Place



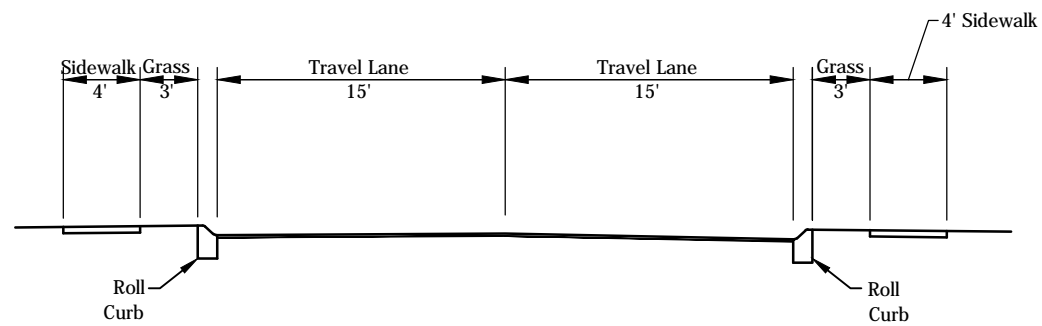
EWING LANE 2

Scale: 1"=10'
Ewing Lane from Park Place to Bridgepoint Elementary



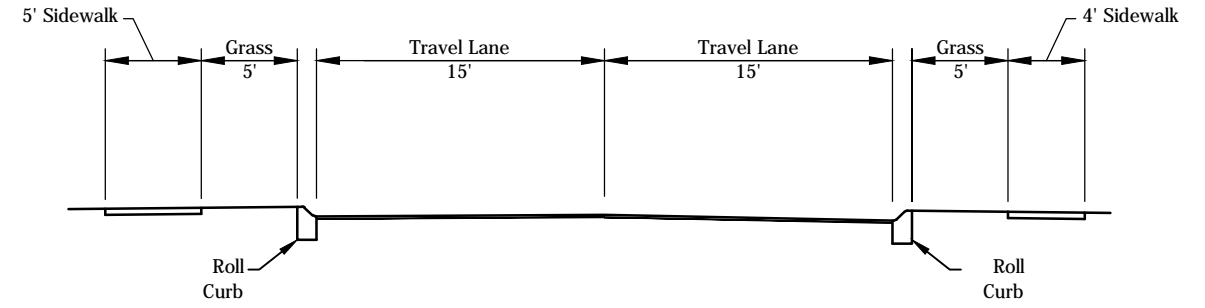
EWING LANE 3

Scale: 1"=10'
Ewing Lane from Bridgepoint Elementary to Walpole Ave.



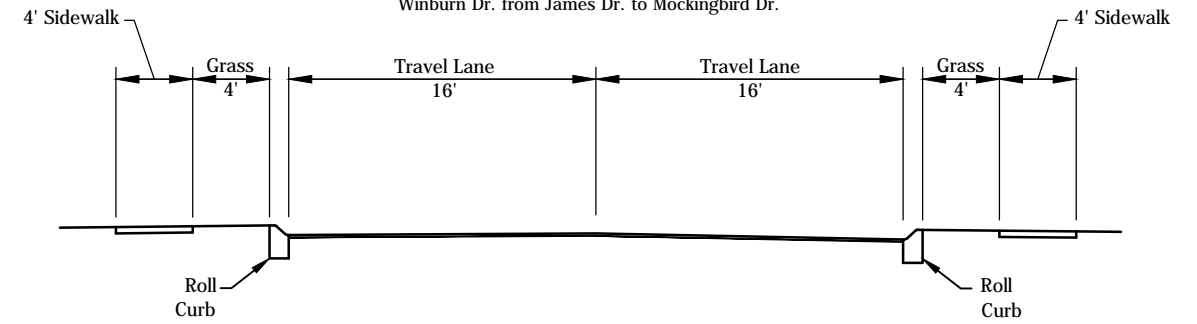
EWING LANE 4

Scale: 1"=10'
Walpole Ave. from Ewing Ln. to James Dr.



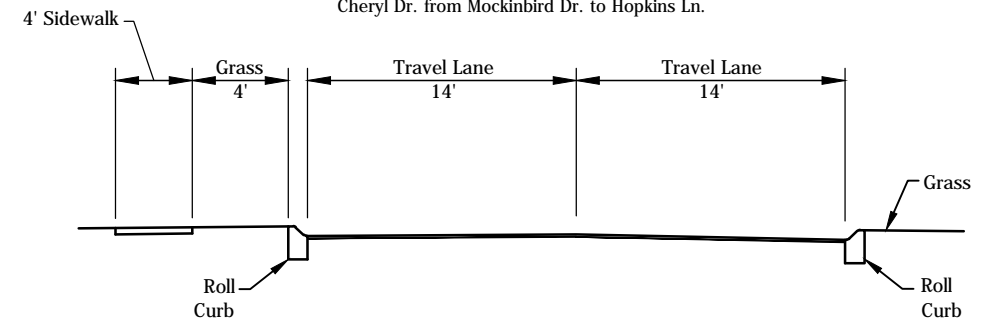
EWING LANE 5

Scale: 1"=10'
James Dr. from Walpole Ave. to Winburn Dr.
and
Winburn Dr. from James Dr. to Mockingbird Dr.



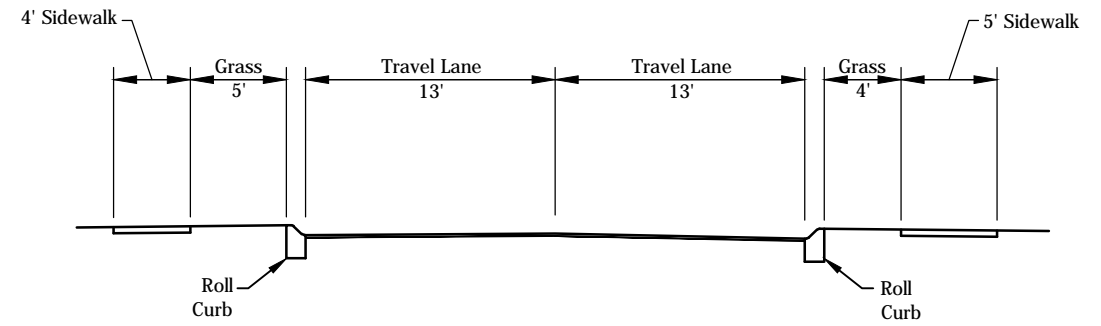
EWING LANE 6

Scale: 1"=10'
Mockingbird Dr. from Winburn Dr. to Cheryl Dr.
and
Cheryl Dr. from Mockinbird Dr. to Hopkins Ln.



EWING LANE 7

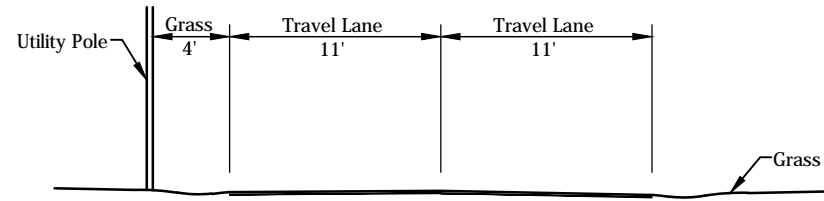
Scale: 1"=10'
Cheryl Dr. from Hopkins Ln. to Huston Dr.



EWING LANE 8

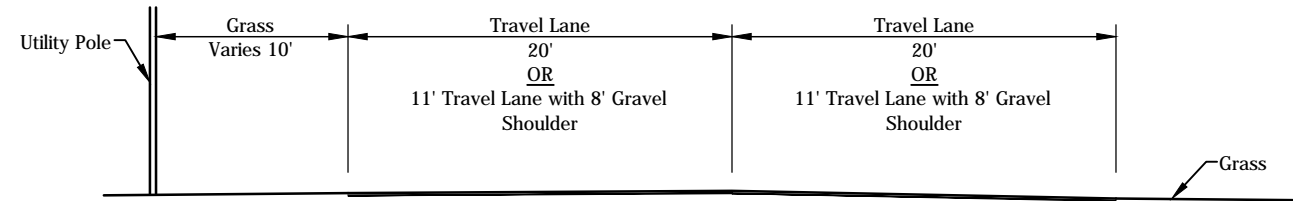
Scale: 1"=10'
Huston Dr. from Cheryl Dr. to Rudie Dr.
and
Rudie Dr. from Huston Dr. to Perrin Ln.

Typical Sections - Inventory



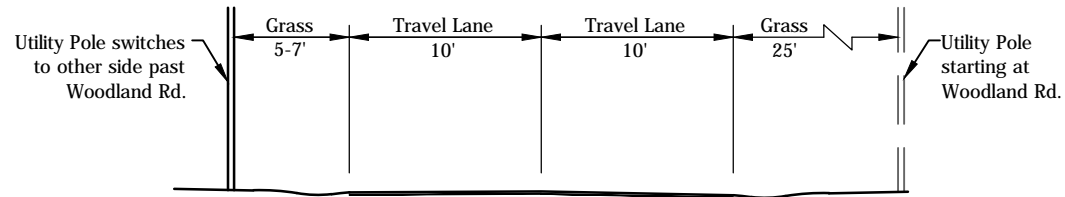
ALLISON LN 1

Scale: 1"=10'
Allison Ln. from Utika Pike to Bennett Ave.



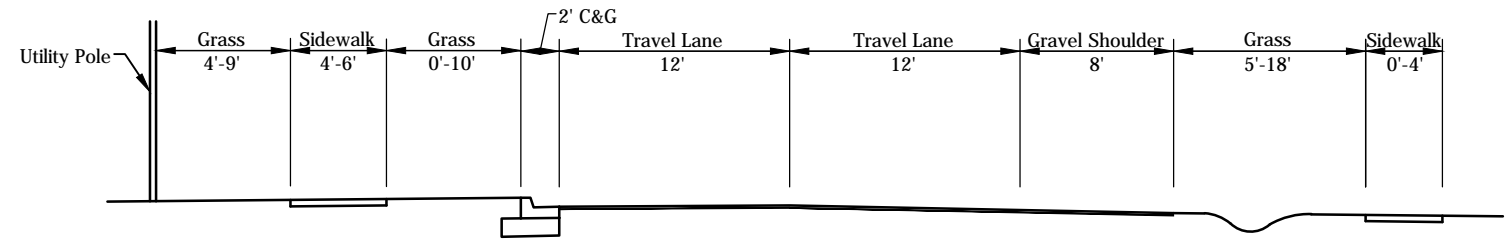
ALLISON LN 5

Scale: 1"=10'
Allison Ln. from Middle Rd. to Faith Lutheran Church



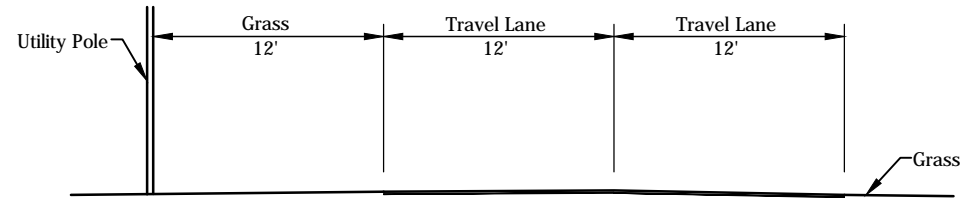
ALLISON LN 2

Scale: 1"=10'
Allison Ln. from Bennett Ave. to Wildwood Rd.



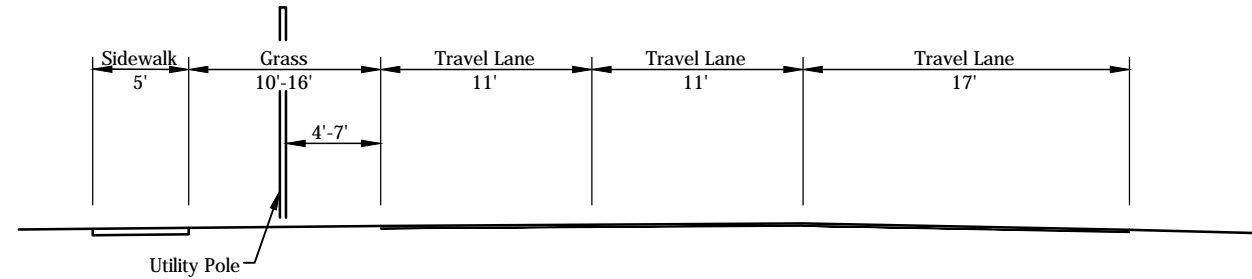
ALLISON LN 6

Scale: 1"=10'
Allison Ln. from Faith Lutheran Church to Seminole Dr.



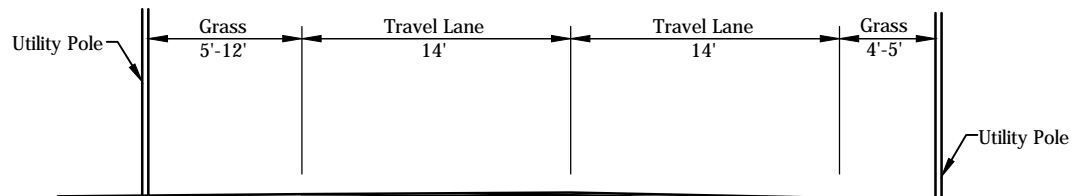
ALLISON LN 3

Scale: 1"=10'
Allison Ln. from Wildwood Rd. to Doe Run Rd.



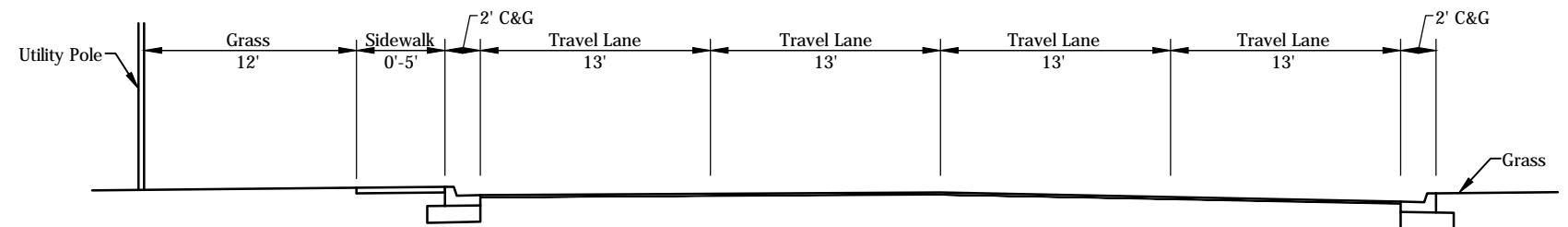
ALLISON LN 7

Scale: 1"=10'
Allison Ln. from Seminole Dr. to Wooded Way



ALLISON LN 4

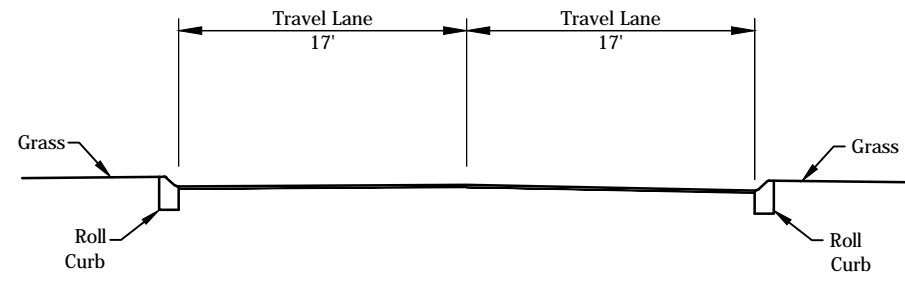
Scale: 1"=10'
Allison Ln. from Doe Run Rd. to Middle Rd.



ALLISON LN 8

Scale: 1"=10'
Allison Ln. from Wooded Way to 10th St.

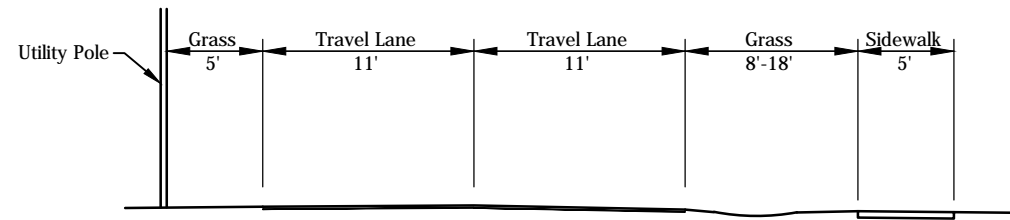
Typical Sections - Inventory



TALL OAKS DRIVE 1

Scale: 1"=10'

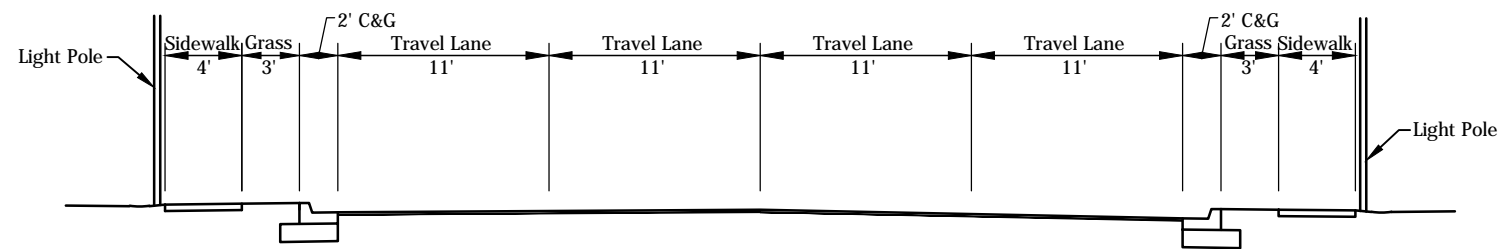
Tall Oaks Drive from Nole Drive to Charlestown Pike



CHARLESTOWN PIKE 1

Scale: 1"=10'

Charlestown Pike from Tall Oaks Drive to Woehrle Road



VETERANS PARKWAY 1

Scale: 1"=10'

Veterans Parkway from Woehrle Road to Hamburg Pike



INVENTORY & ANALYSIS



BIKABILITY CONDITIONS

The team used the cross sections created as part of the inventory process and analyzed each mid block to see where opportunities were available to gain space for bicycle facilities. The team looked at the existing lane widths to see if it would be appropriate to narrow them and how much space might be gained from that treatment. Opportunities and constraints were also noted for each mid-block based upon apparent available right-of-way, existing utilities, drainage structures, curb type, distance from street to building, used parking stalls

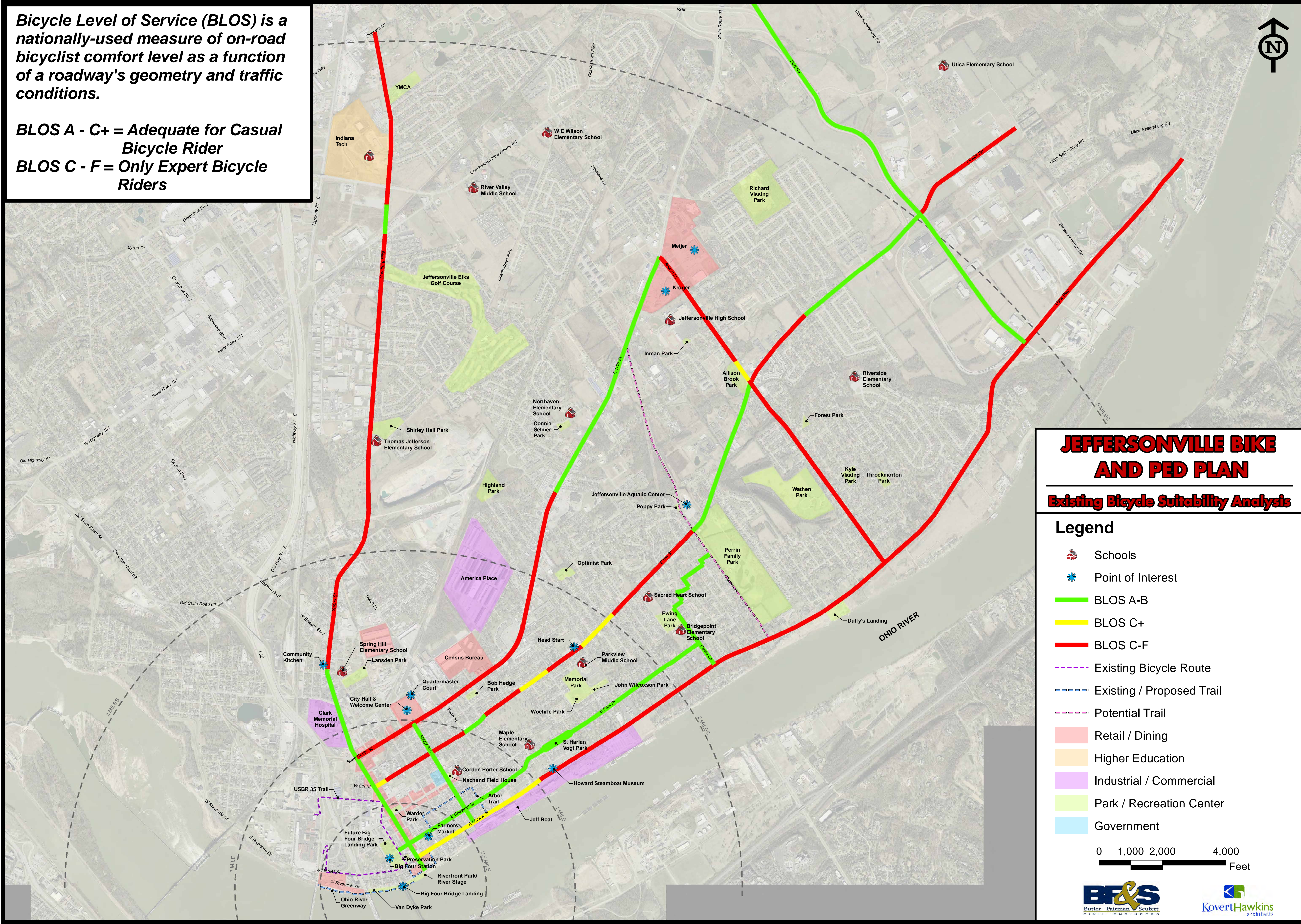
- a. Measurements of the mid-block geometry of each route along with the average daily traffic, speed limit, and percent of commercial traffic along each route was inserted into a Bicycle Level of Service Calculator (BLOS). The BLOS is a nationally-used measure of on-road bicycle level of comfort based upon a roadway's geometry and traffic conditions.
- b. A map was created that summarizes the existing Bicycle Level of Service (BLOS) conditions by color coding those sections that are more suitable for casual riders and those that are currently more appropriate for expert riders. The map was presented to the public and it was pointed out that Allison Lane, Chestnut Street, Ewing Lane, Port Rd. and a few residential streets were needed to connect additional residential areas to community destination points. These routes were added to the corridor study/evaluation based upon this public comment.

Based upon the BLOS map it was determined that there were a few low speed roads with on street parking that would be suitable for casual riders, and a few isolated segments of the routes studied that were borderline for casual riders. However, most of the routes studied do not currently meet the needs of casual riders to make connections to the destination spots that the public identified as wanting to reach.

The following map illustrates the existing BLOS for the routes studied. A grade of "A" through "B" indicates that the route is suitable for a casual rider. A grade that equal a high "C" indicates that the route is borderline suitable for casual riders. A grade of "C" through "F" means that only expert riders would feel comfortable riding the route in its present conditions and that an improvement is needed.

Bicycle Level of Service (BLOS) is a nationally-used measure of on-road bicyclist comfort level as a function of a roadway's geometry and traffic conditions.

BLOS A - C+ = Adequate for Casual Bicycle Rider
BLOS C - F = Only Expert Bicycle Riders

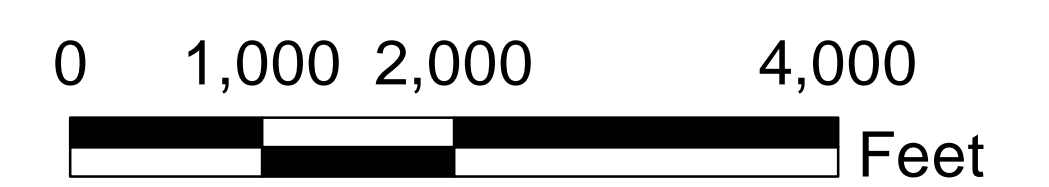


JEFFERSONVILLE BIKE AND PED PLAN

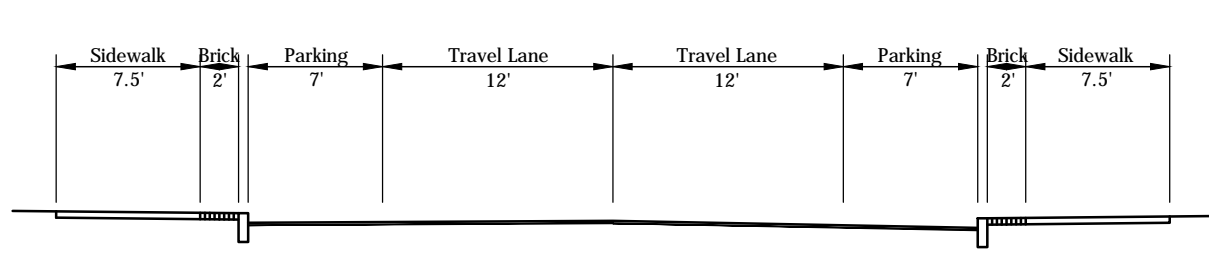
Existing Bicycle Suitability Analysis

Legend

- Schools
- Point of Interest
- BLOS A-B
- BLOS C+
- BLOS C-F
- Existing Bicycle Route
- Existing / Proposed Trail
- Potential Trail
- Retail / Dining
- Higher Education
- Industrial / Commercial
- Park / Recreation Center
- Government

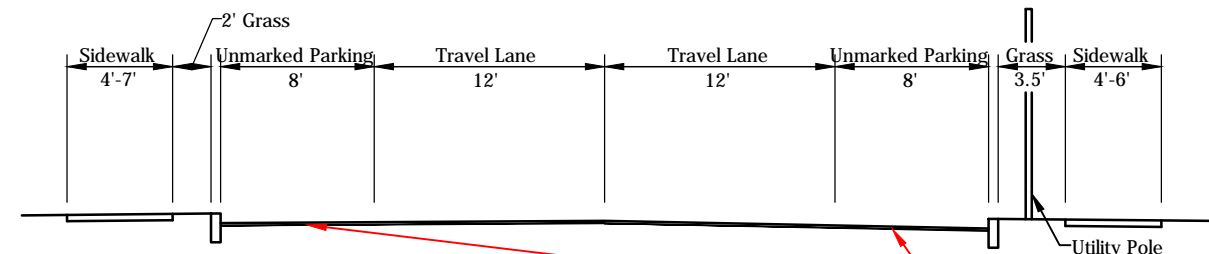


Typical Sections - Analysis



SPRING ST 1-3

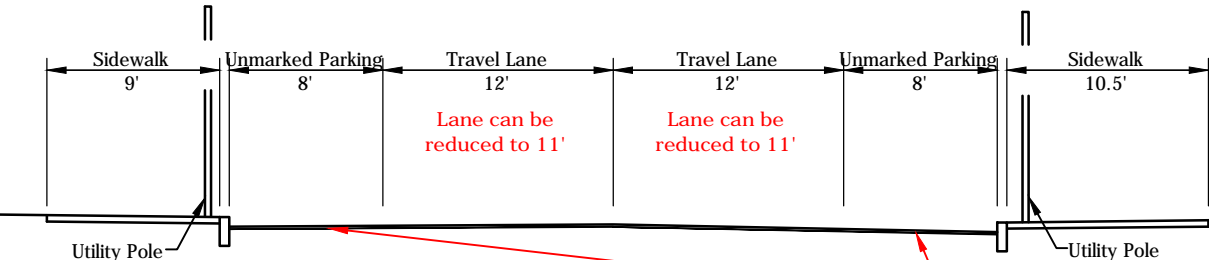
Scale: 1"=10'
Spring St. from Riverside Dr. to 7th St.



SPRING ST 7

Scale: 1"=10'
Spring St. from 12th St. to Harrison Ave.

Appears parking is not used and can be removed



SPRING ST 4

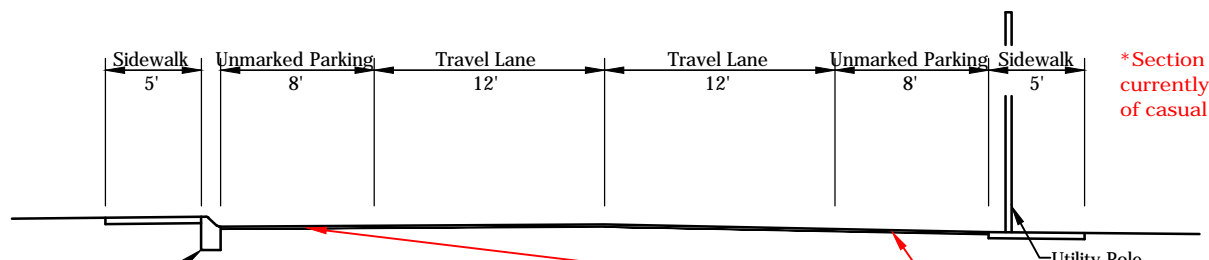
Scale: 1"=10'
Spring St. from 7th St. to 8th St.

Lane can be reduced to 11'

Lane can be reduced to 11'

*Appears that businesses in this section have off-street parking

Appears that parking could be removed

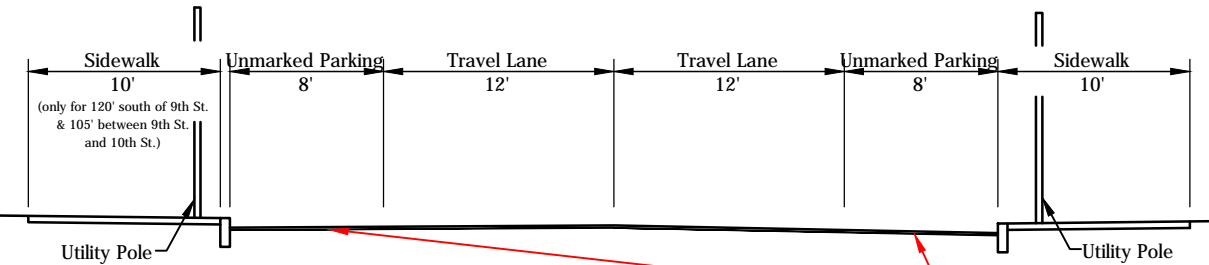


SPRING ST 8

Scale: 1"=10'
Spring St. from Harrison Ave. to Riddle St.

*Section does not currently meet needs of casual riders

Appears parking is not used and can be removed



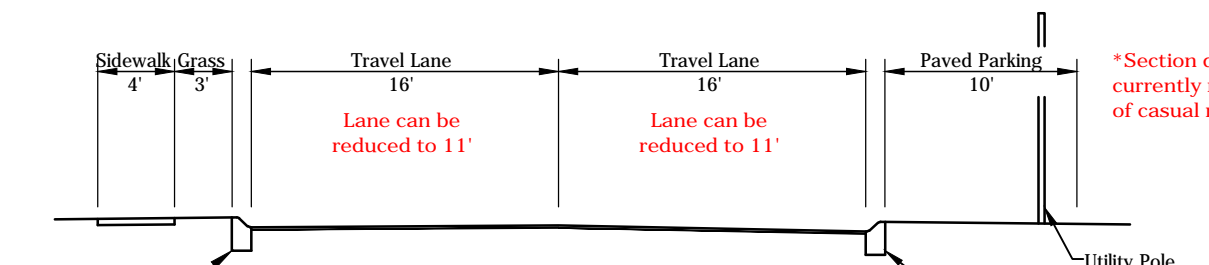
SPRING ST 5

Scale: 1"=10'
Spring St. from 8th St. to 10th St.

(only for 120' south of 9th St. & 105' between 9th St. and 10th St.)

*Appears that businesses in this section have off-street parking

Appears that parking could be removed



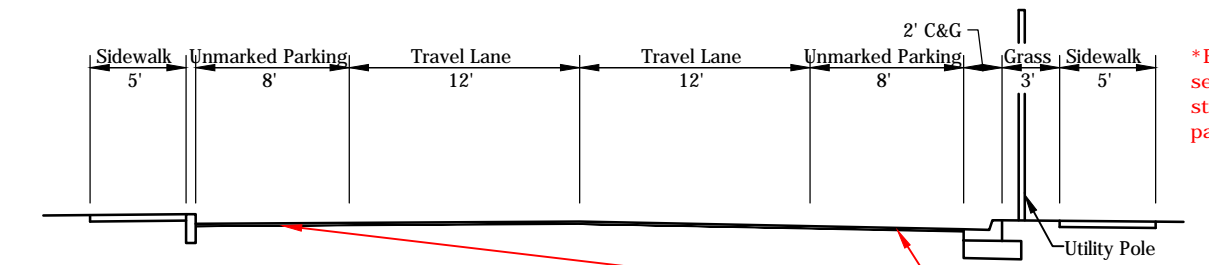
SPRING ST 9

Scale: 1"=10'
Spring St. from Riddle St. to Eastern Blvd.

*Section does not currently meet needs of casual riders

Lane can be reduced to 11'

Lane can be reduced to 11'

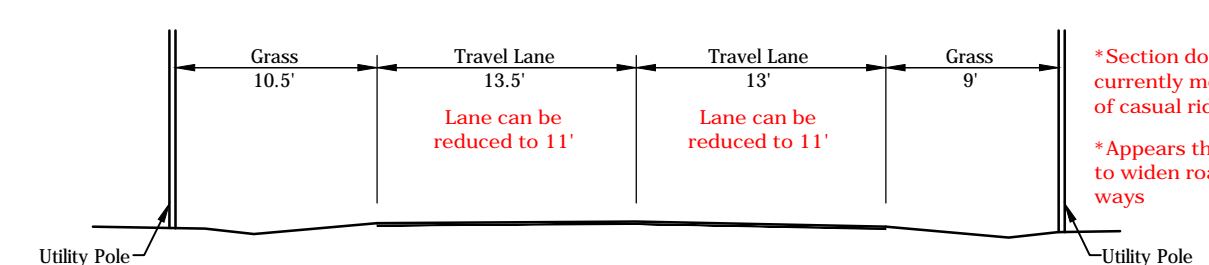


SPRING ST 6

Scale: 1"=10'
Spring St. from 10th St. to 12th St.

*Businesses in this section do not front the street & have off-street parking

Parking can be removed



SPRING ST 10

Scale: 1"=10'
Spring St. from Eastern Blvd. to Magnolia Ave.

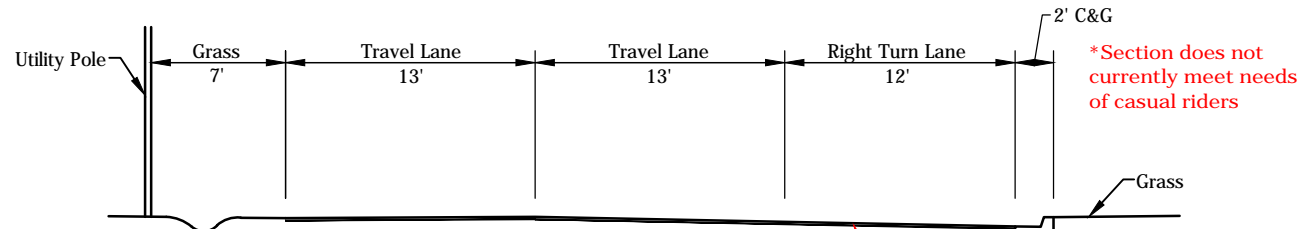
*Section does not currently meet needs of casual riders

*Appears there is room to widen road both ways

Lane can be reduced to 11'

Lane can be reduced to 11'

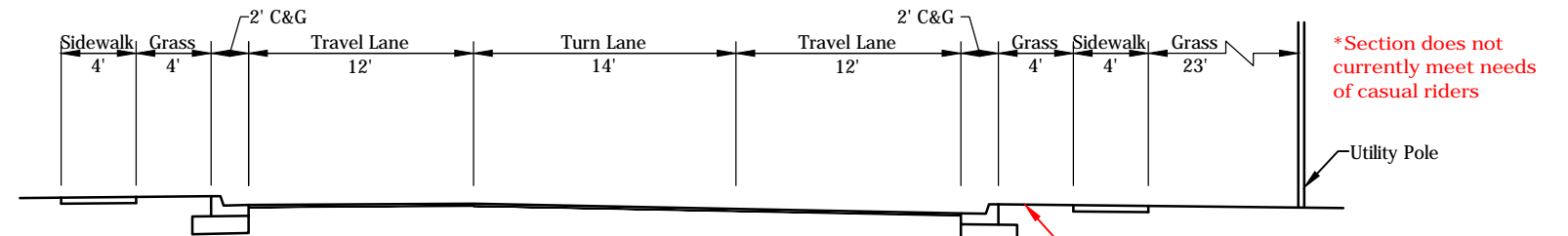
Typical Sections - Analysis



SPRING ST 11

Scale: 1"=10'
Spring St. from Magnolia Ave. to Dutch Ln.

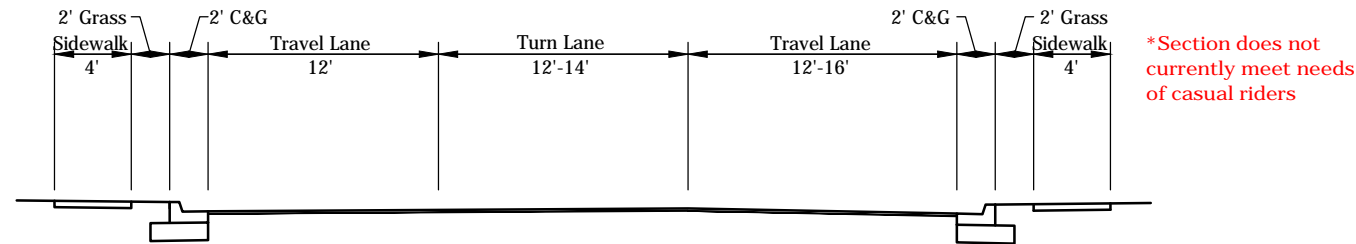
*Section does not currently meet needs of casual riders



HAMBURG PIKE 4

Scale: 1"=10'
Hamburg Pike from 935' north of Charlestown New Albany Rd. to Kingsfield St.

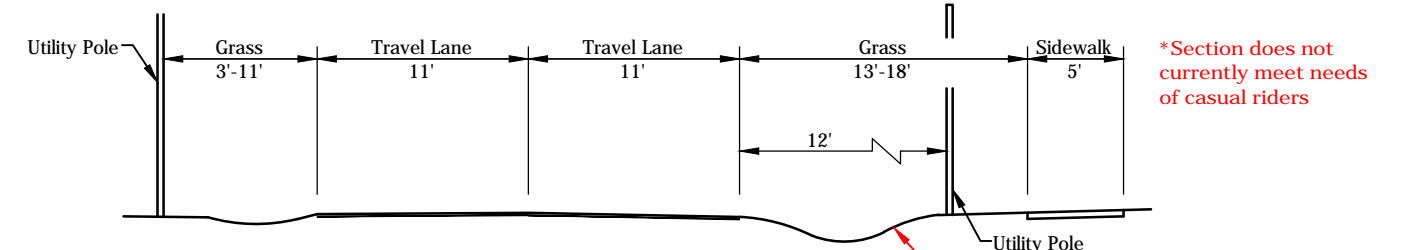
*Section does not currently meet needs of casual riders



HAMBURG PIKE 1

Scale: 1"=10'
Hamburg Pike from Dutch Ln. to Walnut Ridge Nursery & Garden

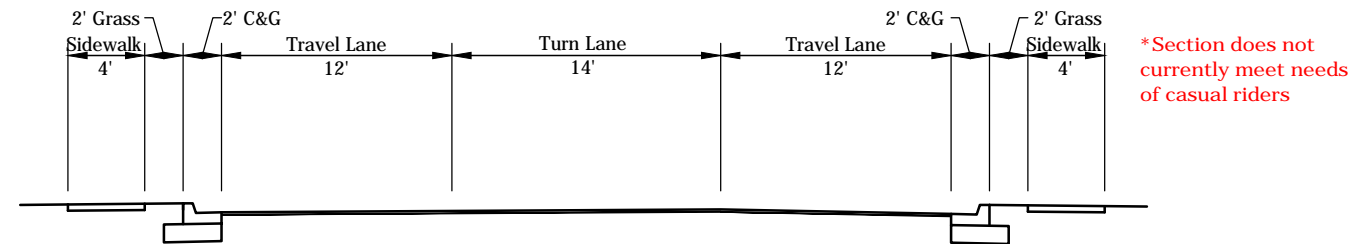
*Section does not currently meet needs of casual riders



HAMBURG PIKE 5

Scale: 1"=10'
Hamburg Pike from Kingsfield St. to Cornwell Dr.

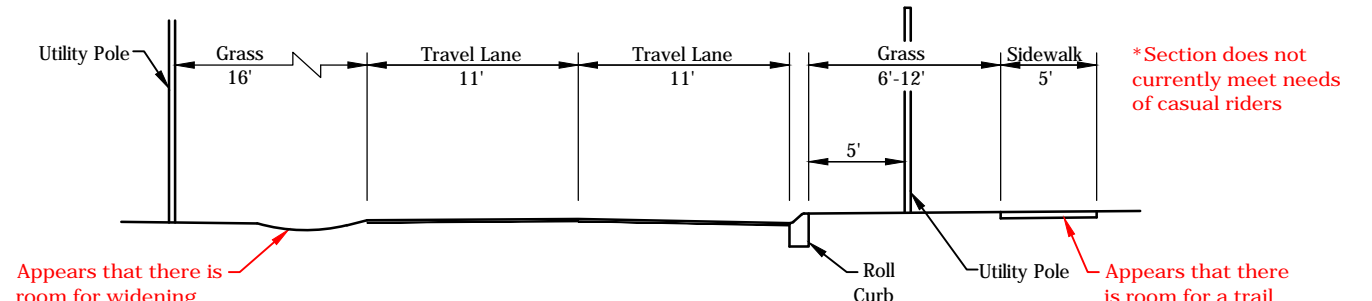
*Section does not currently meet needs of casual riders



HAMBURG PIKE 2

Scale: 1"=10'
Hamburg Pike from Walnut Ridge Nursery & Garden to Charlestown New Albany Rd.

*Section does not currently meet needs of casual riders

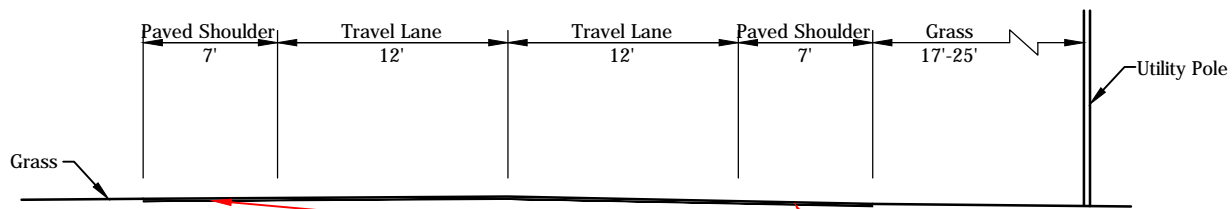


HAMBURG PIKE 6

Scale: 1"=10'
Hamburg Pike from Cornwell Dr. to Bishop Rd.

*Section does not currently meet needs of casual riders

Appears that there is room for a trail

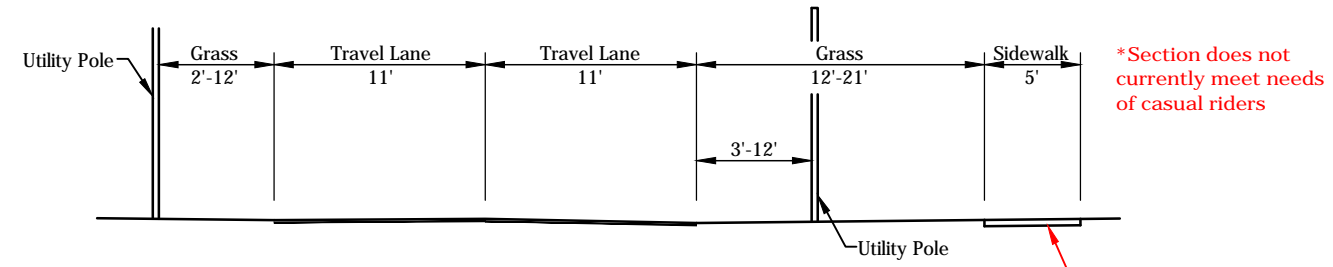


HAMBURG PIKE 3

Scale: 1"=10'
Hamburg Pike from Charlestown New Albany Rd. to 935' north of Charlestown New Albany Rd.

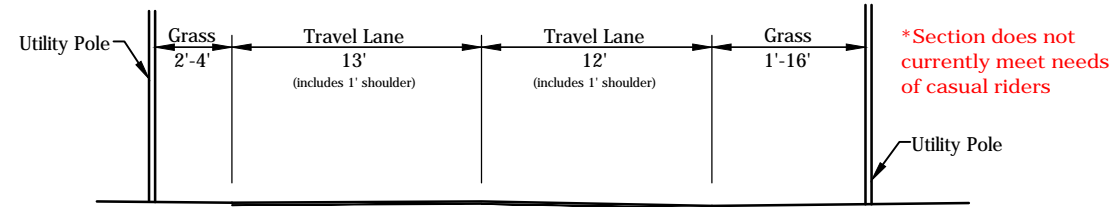
Paved shoulders allow opportunity for bike lanes

Typical Sections - Analysis



HAMBURG PIKE 7

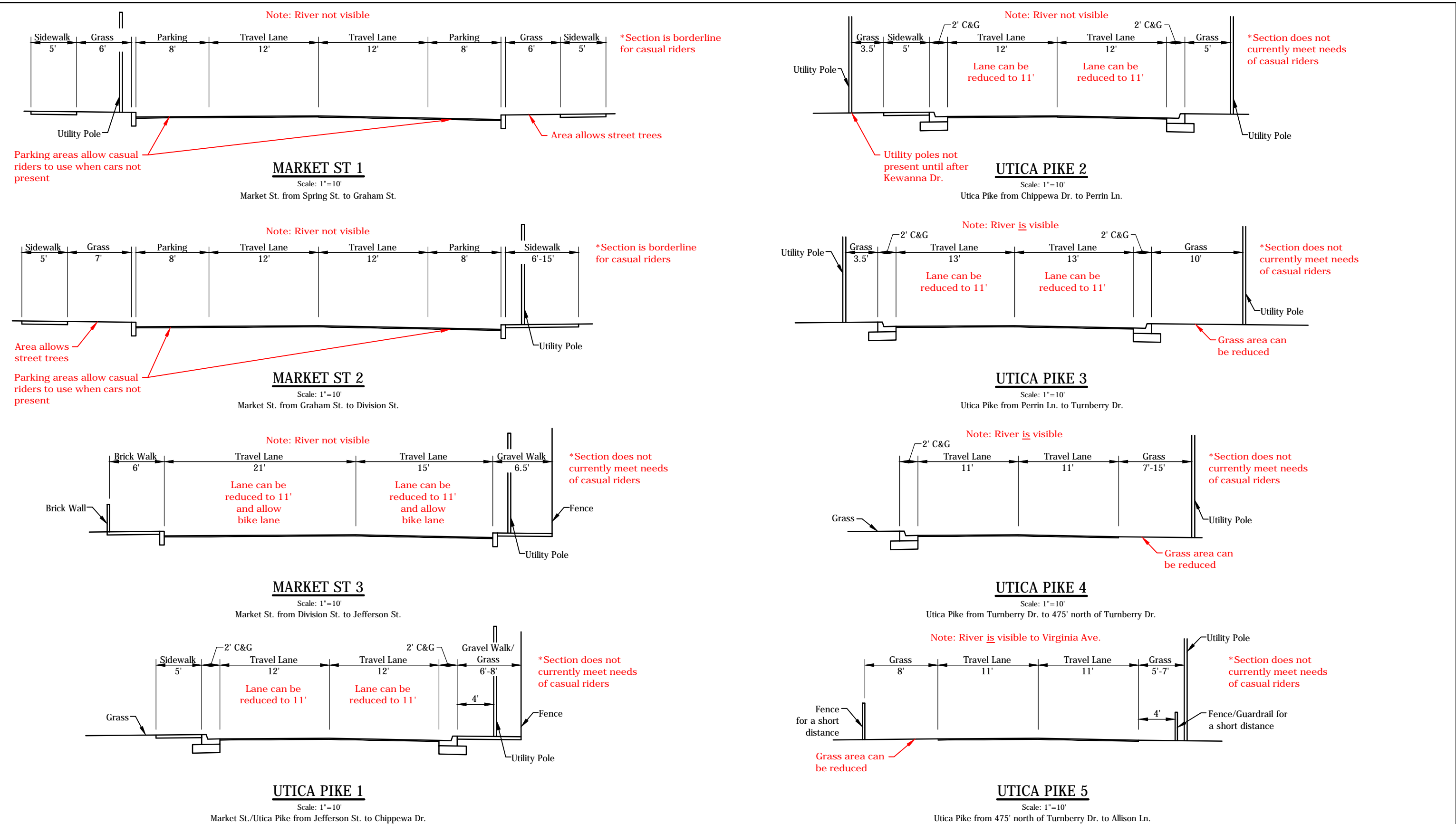
Scale: 1"=10'
Hamburg Pike from Bishop Rd. to YMCA



HAMBURG PIKE 8

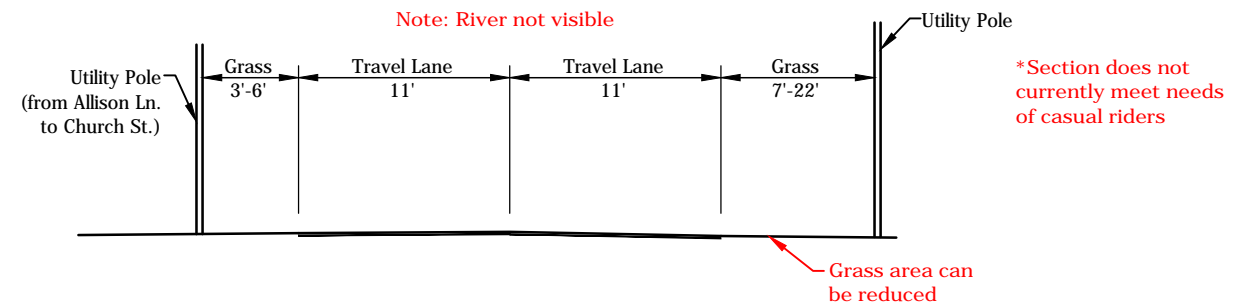
Scale: 1"=10'
Hamburg Pike from YMCA to Coopers Ln.

Typical Sections - Analysis



NOTE: Stakeholder meetings suggest that the reason people want to ride along this route is for the scenery of the river

Typical Sections - Analysis



UTICA PIKE 6

Scale: 1"=10'

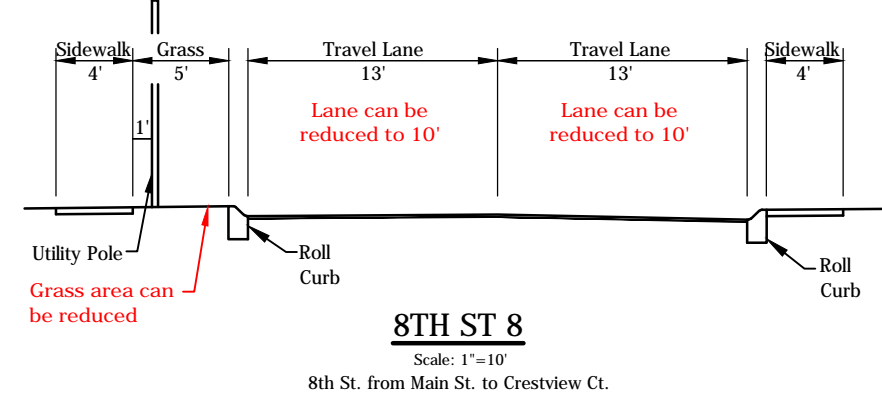
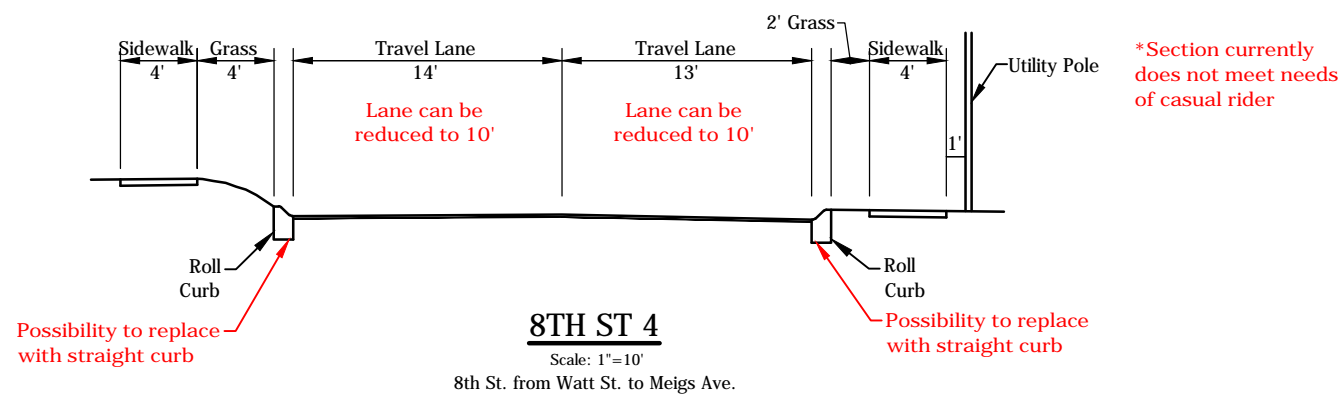
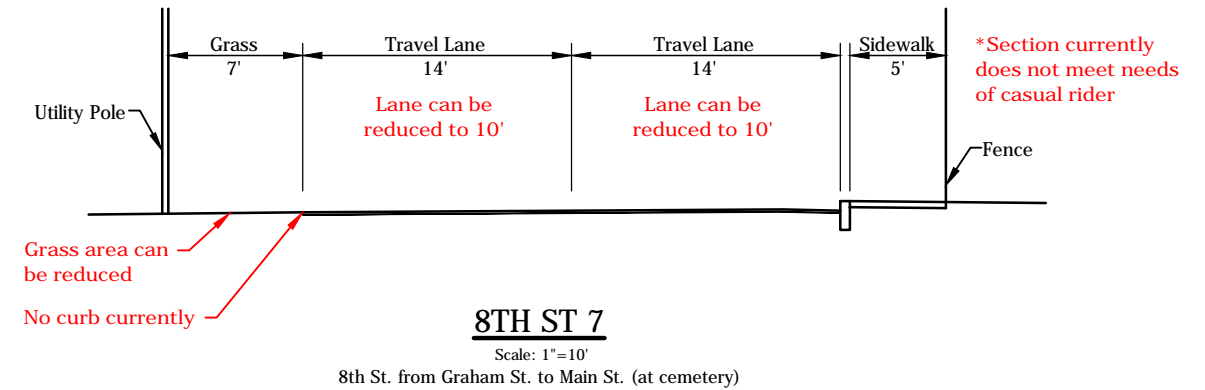
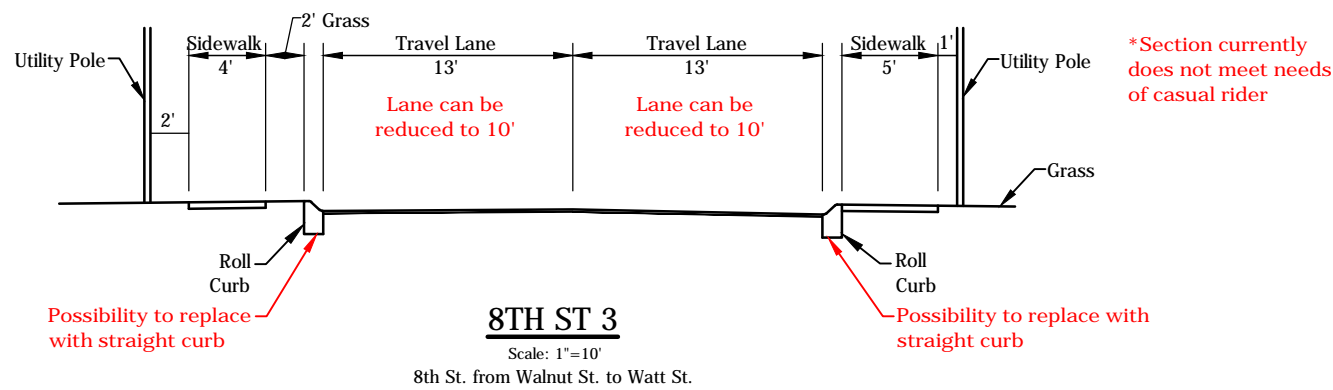
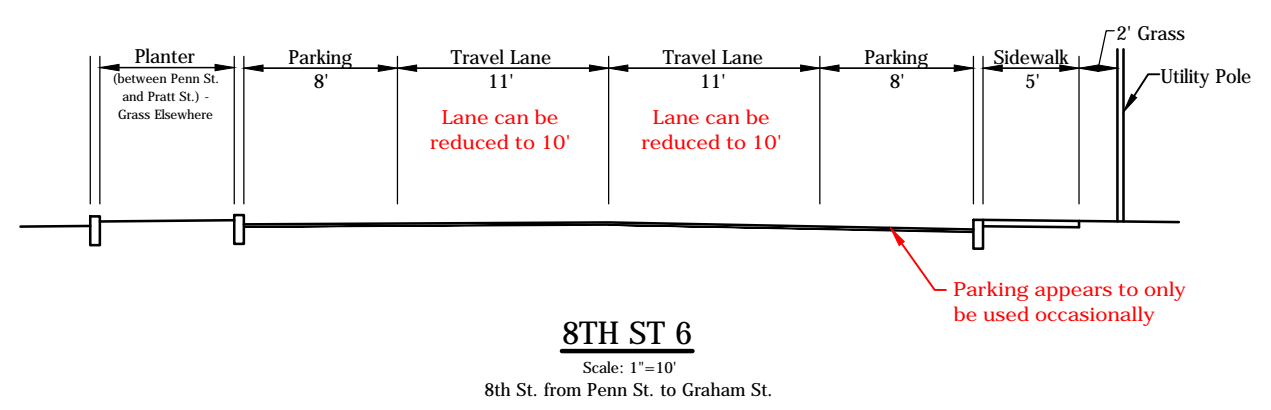
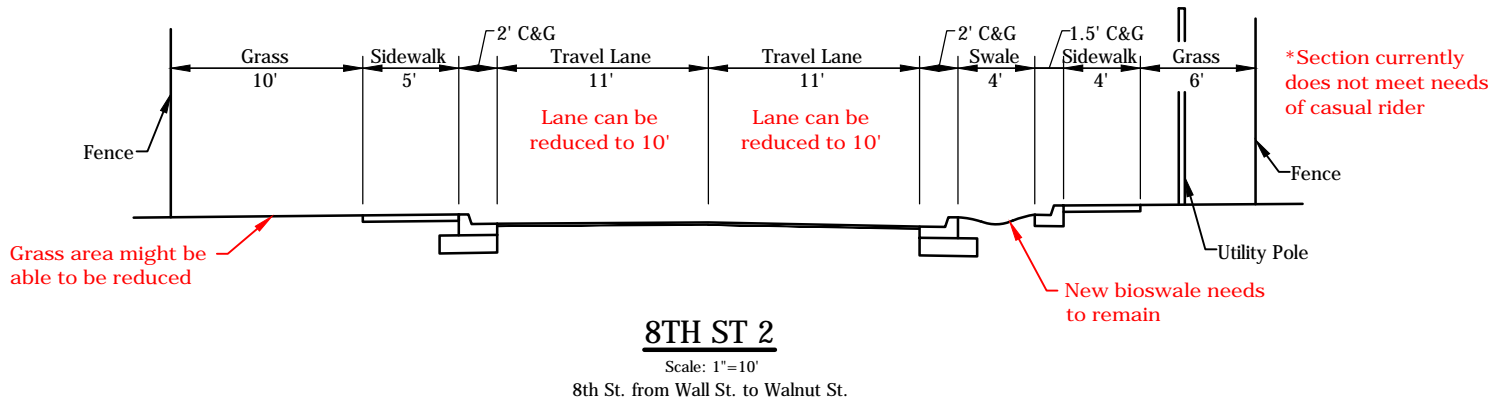
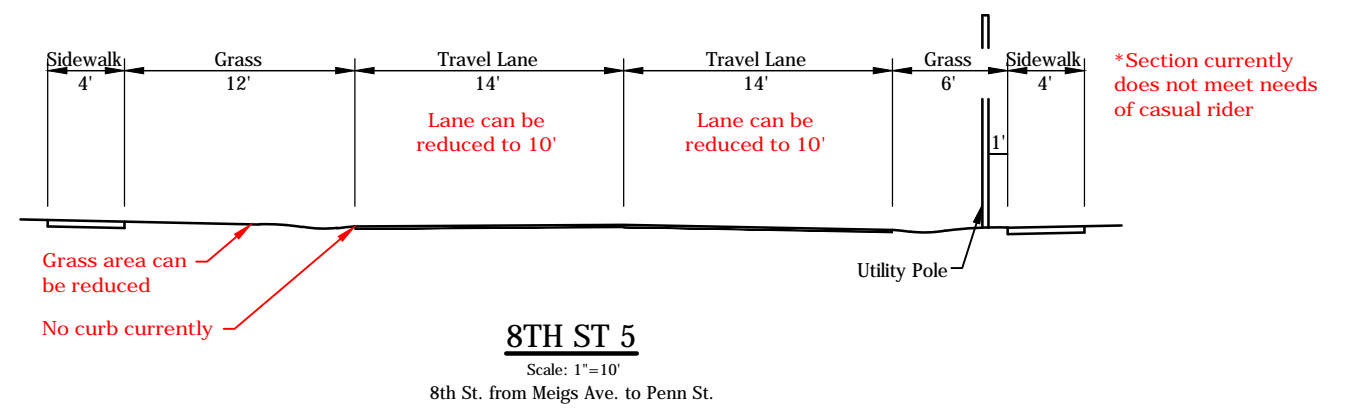
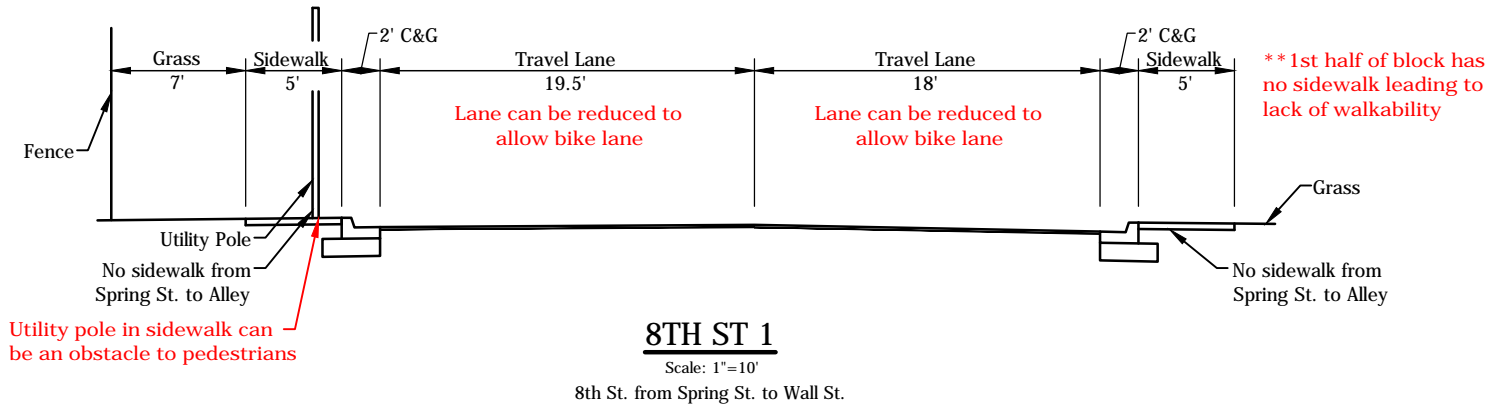
Utica Pike from Allison Ln. to Church St. (in Utica)

*Section does not currently meet needs of casual riders

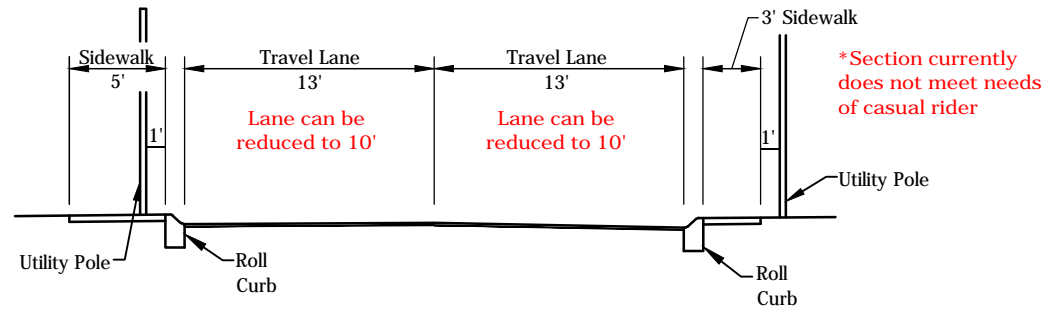
Grass area can be reduced

NOTE: Stakeholder meetings suggest that the reason people want to ride along this route is for the scenery of the river

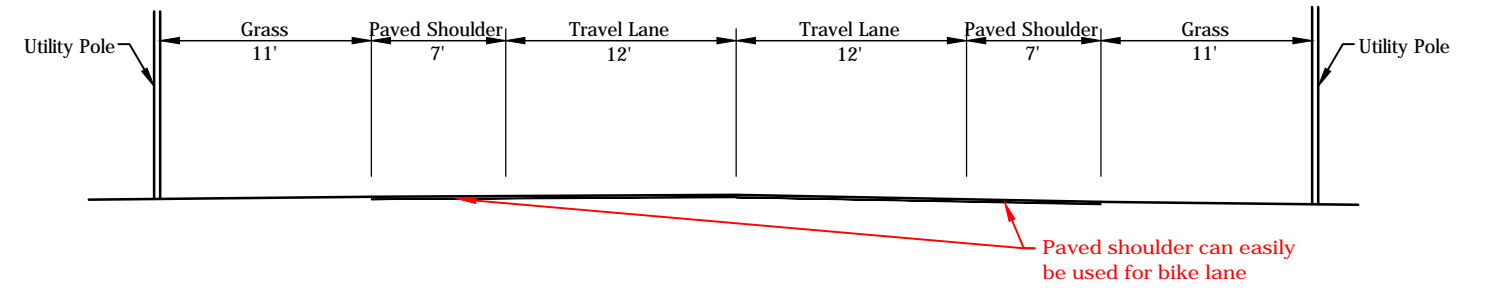
Typical Sections - Analysis



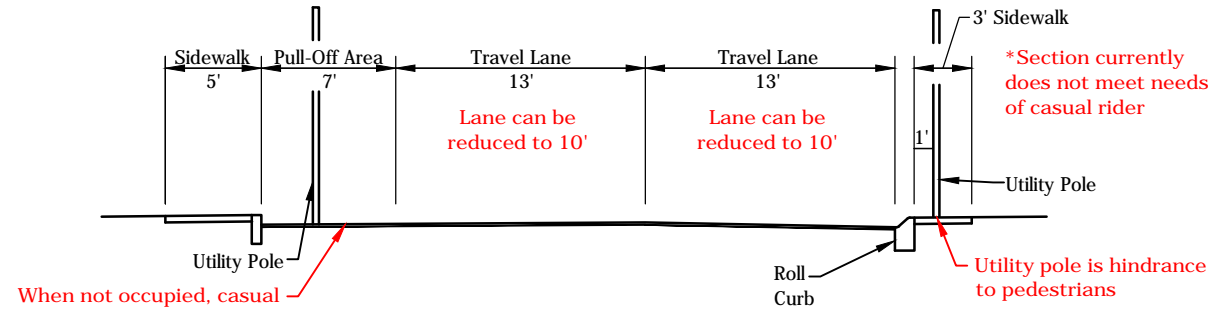
Typical Sections - Analysis



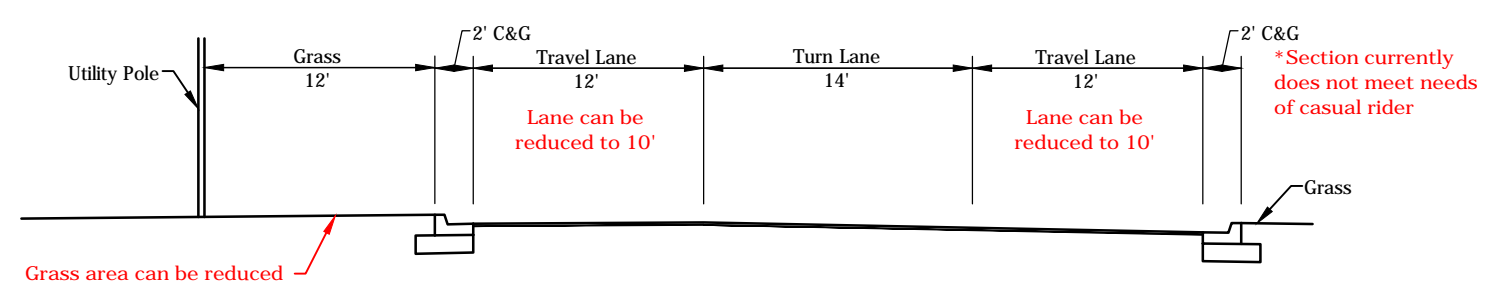
8TH ST 9
Scale: 1"=10'
8th St. from Crestview Ct. to Brighton Ave.



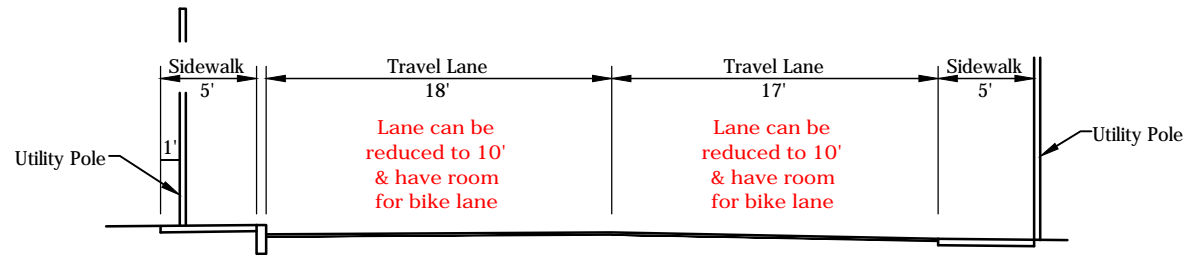
8TH ST 13
Scale: 1"=10'
Middle Rd. from Perrin Ln. to Allison Ln.



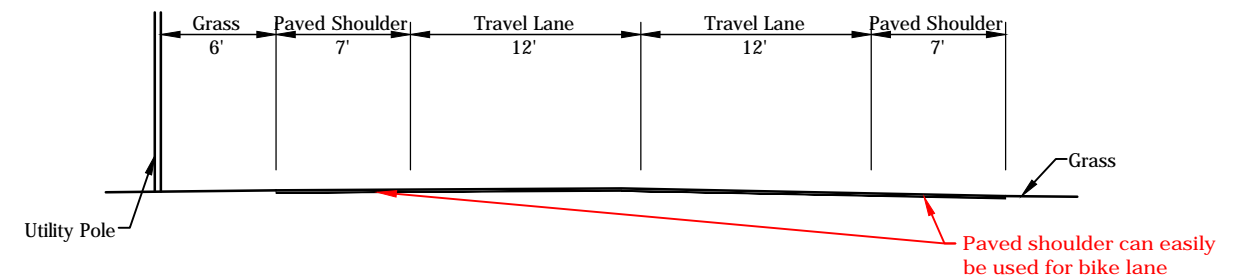
8TH ST 10
Scale: 1"=10'
8th St. from Brighton Ave. to Railroad
When not occupied, casual riders can use this area



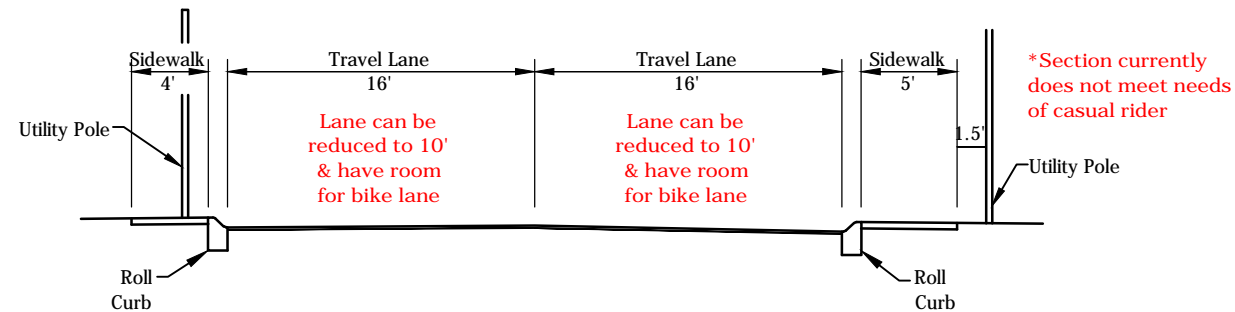
8TH ST 14
Scale: 1"=10'
Middle Rd. from Allison Ln. to Presidential Pl.
Grass area can be reduced



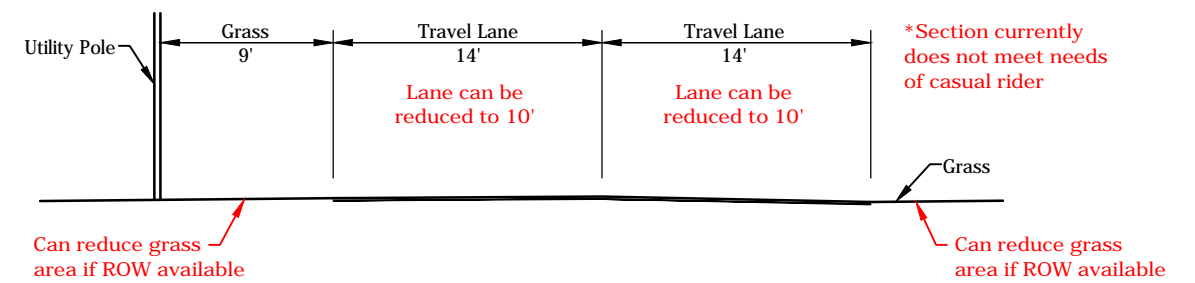
8TH ST 11
Scale: 1"=10'
8th St. from Railroad to Springdale Dr.



8TH ST 15
Scale: 1"=10'
Middle Rd. from Presidential Pl. to Port Rd.

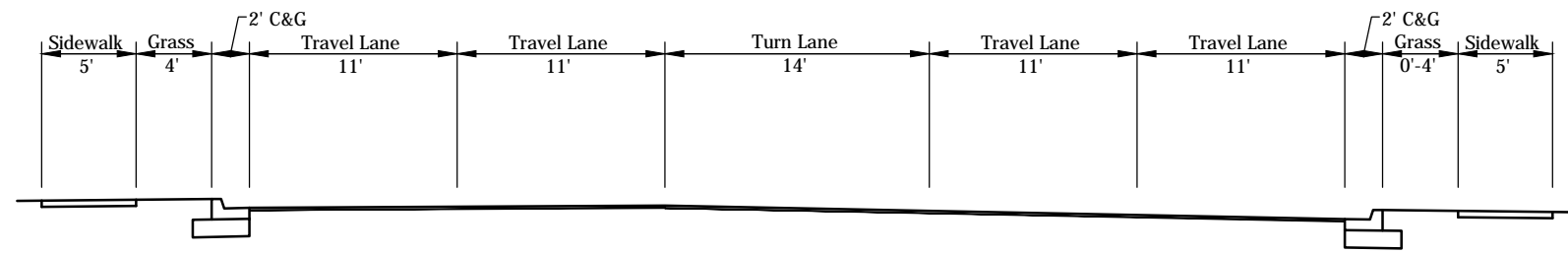


8TH ST 12
Scale: 1"=10'
8th St. from Springdale Dr. to Perrin Ln.



8TH ST 16
Scale: 1"=10'
Middle Rd. from Port Rd. to Utica Sellersburg Rd.
Can reduce grass area if ROW available

Typical Sections - Analysis

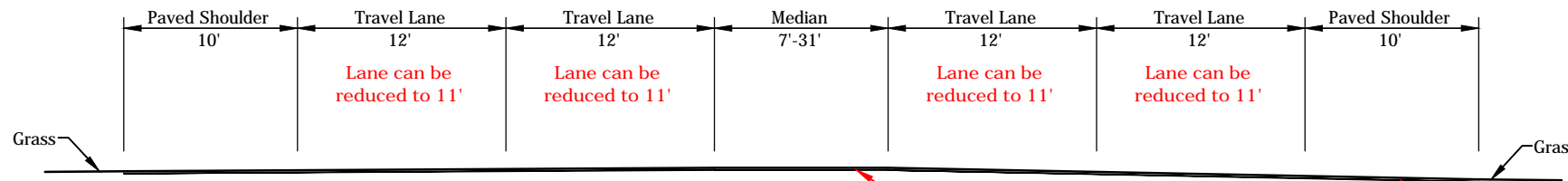


*Section currently does not meet needs of casual rider

NOTE: This section of 10th Street has either been recently upgraded or is currently under design. It may be difficult to quickly make this section accommodate casual bike riders.

10TH ST 1

Scale: 1"=10'
10th St. from Spring St. to Reeds Ln.

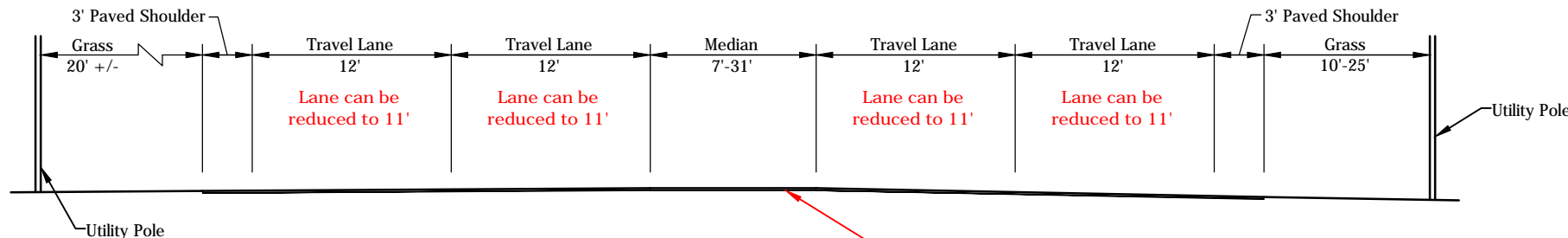


Median could be reduced in size if needed. Median helps to control areas where cars may access businesses on opposite side.

Paved shoulders allow accommodation of bicycle traffic. However, automobile traffic may also use shoulder as a turn lane and numerous commercial drives may cause danger of collision.

10TH ST 2

Scale: 1"=10'
10th St. from Reeds Ln. to Allison Ln.

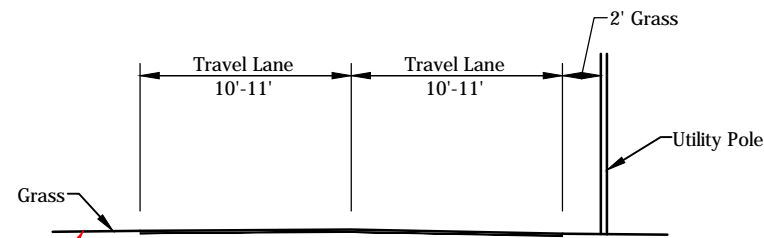


Median could be reduced in size if needed. Median helps to control areas where cars may access businesses on opposite side.

*Section currently does not meet needs of casual rider

10TH ST 3

Scale: 1"=10'
10th St. from Allison Ln. to River City Park Rd.

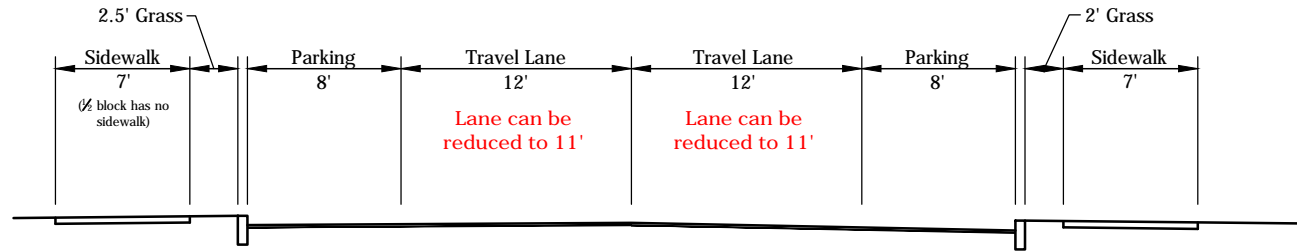


Grass area can be used for path

10TH ST 4

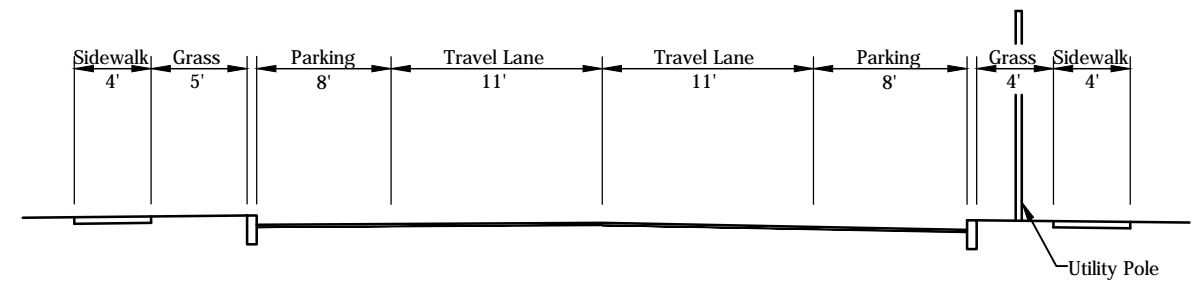
Scale: 1"=10'
River City Park Rd./Vissing Park Rd. from 10th St. to Richard Vissing Park

Typical Sections - Analysis



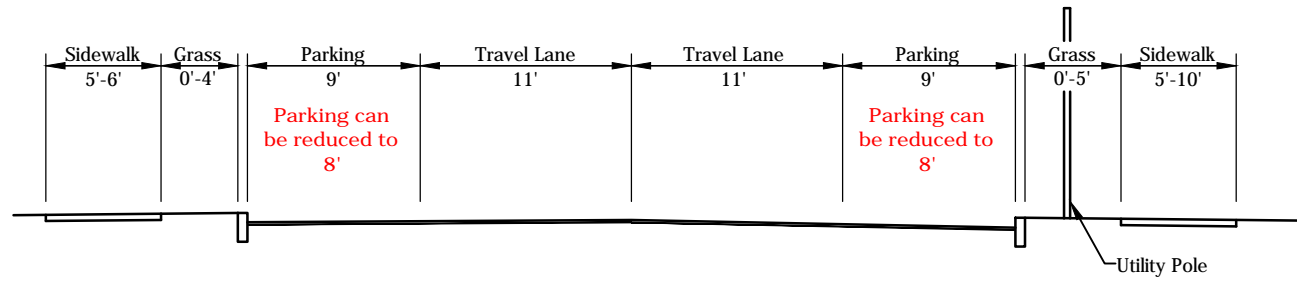
CHESTNUT ST 1

Scale: 1"=10'
Chestnut St. from Pearl St. to Spring St.



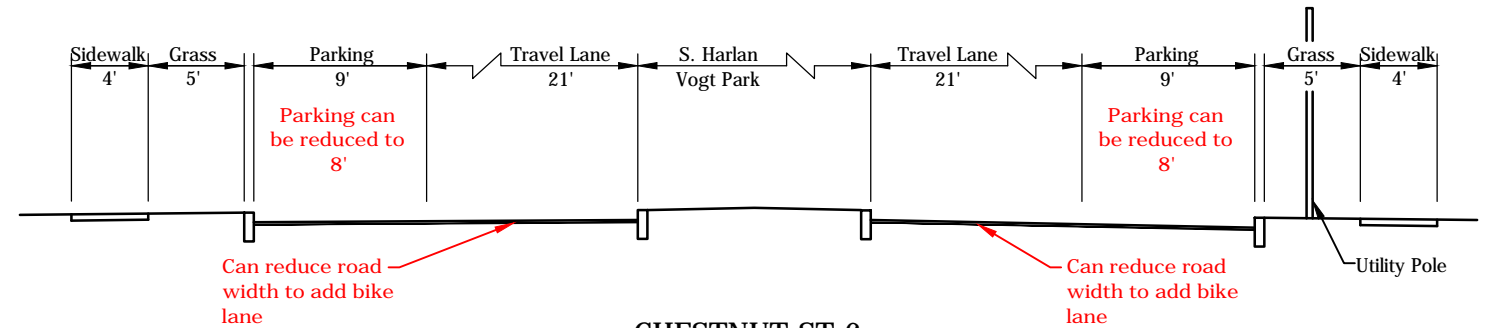
CHESTNUT ST 5

Scale: 1"=10'
Park Pl. from Division St. to Jefferson St.



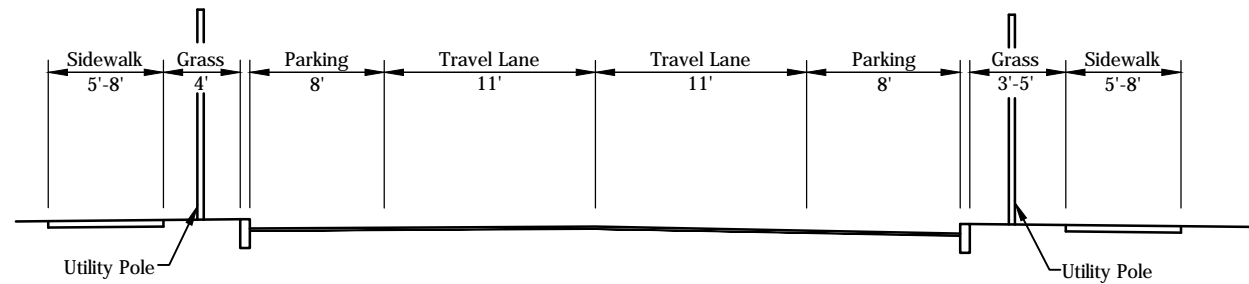
CHESTNUT ST 2

Scale: 1"=10'
Chestnut St. from Spring St. to Fulton St.



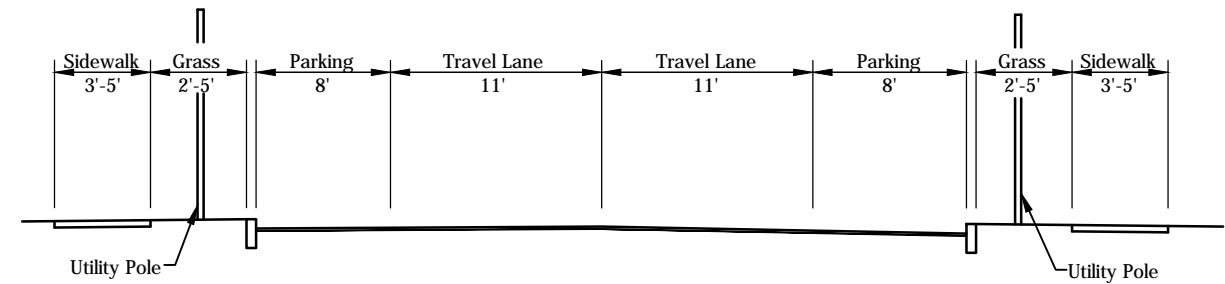
CHESTNUT ST 6

Scale: 1"=10'
Park Pl. from Jefferson St. to Jackson St.



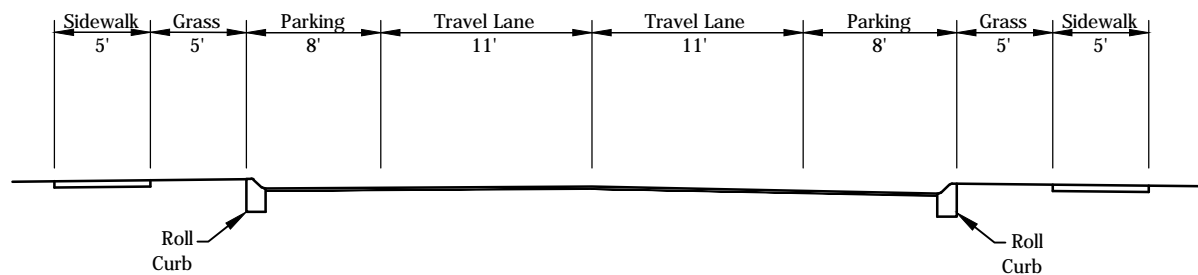
CHESTNUT ST 3

Scale: 1"=10'
Chestnut St. from to Fulton St. to Graham St.



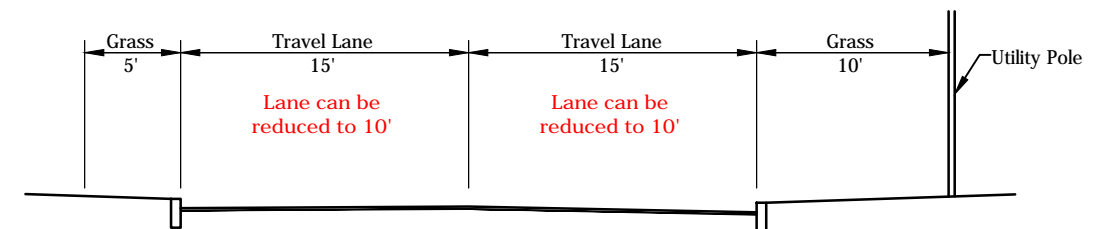
CHESTNUT ST 7

Scale: 1"=10'
Park Pl. from Jackson St. to the railroad



CHESTNUT ST 4

Scale: 1"=10'
Chestnut St. from Graham St. to Division St.

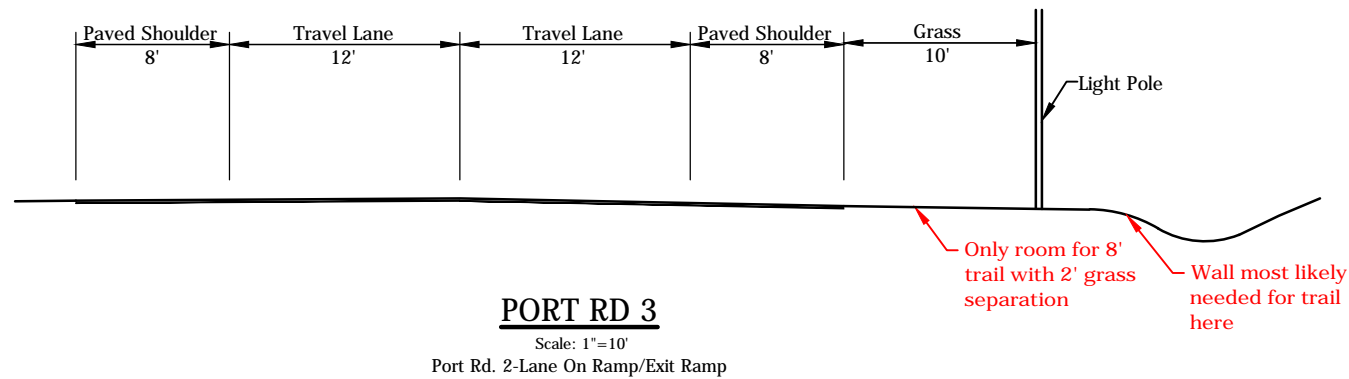
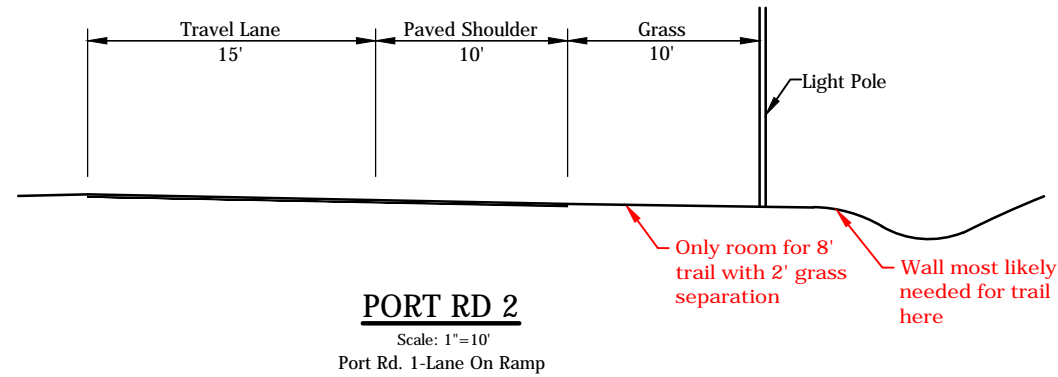
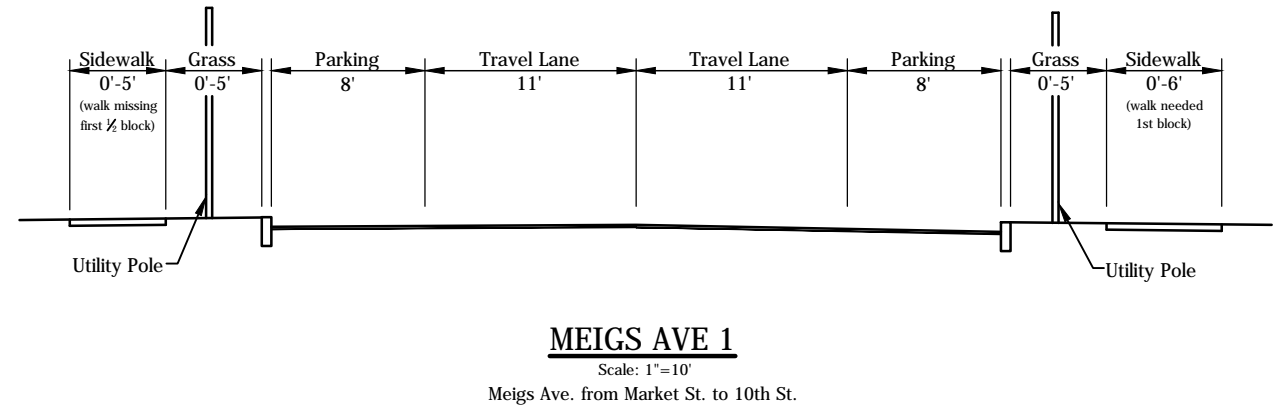
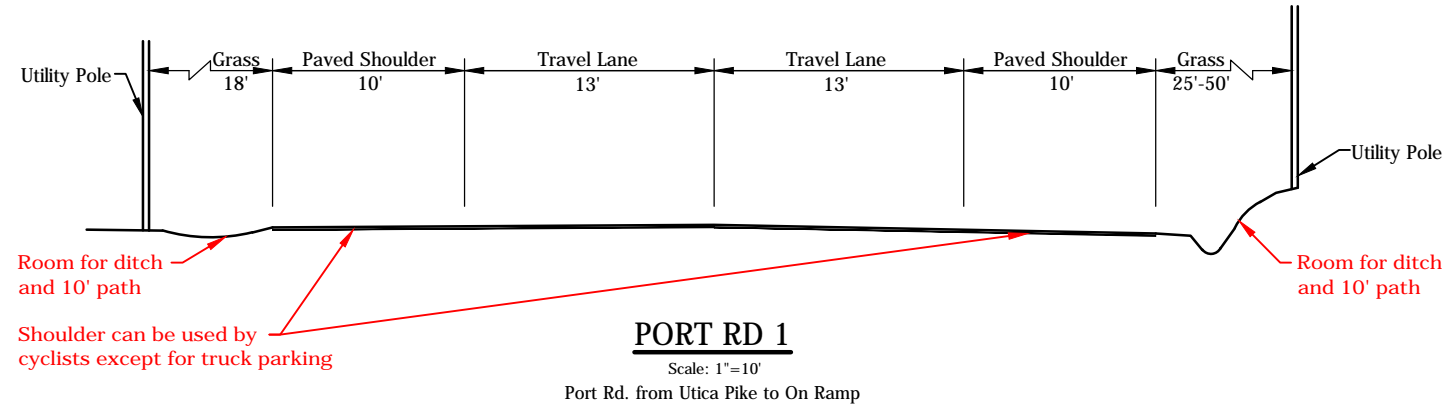


CHESTNUT ST 8

Scale: 1"=10'
Park Pl. from the railroad to Ewing Ln.

NOTE: All of Chestnut Street/Park Place, due to low average daily traffic and speeds, meets needs of casual riders. It just needs signage and markings to add extra awareness.

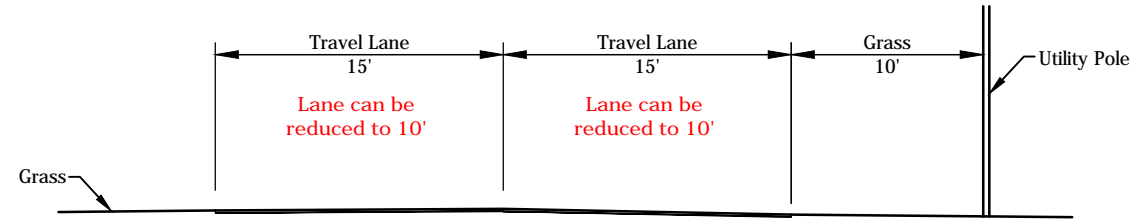
Typical Sections - Analysis



NOTE: Port of Indiana would prefer a separated path

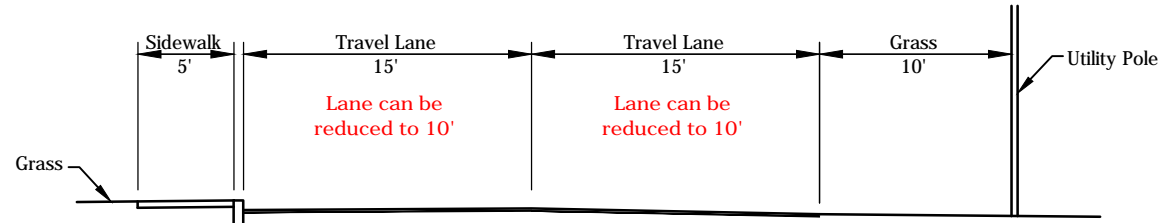
NOTE: Stakeholder and public input meetings indicate that cyclists would like a connection from Utica Pike to New Chapel Rd. along Port Rd. (New Chapel Rd. needs to connect to River Ridge Development).

Typical Sections - Analysis



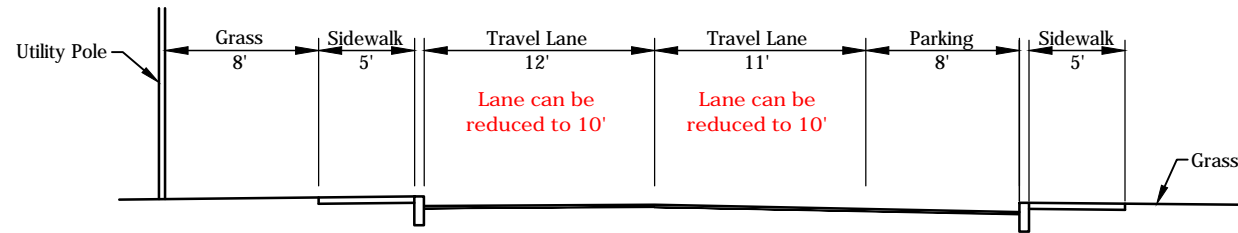
EWING LANE 1

Scale: 1"=10'
Ewing Lane from Utica Pike to Park Place



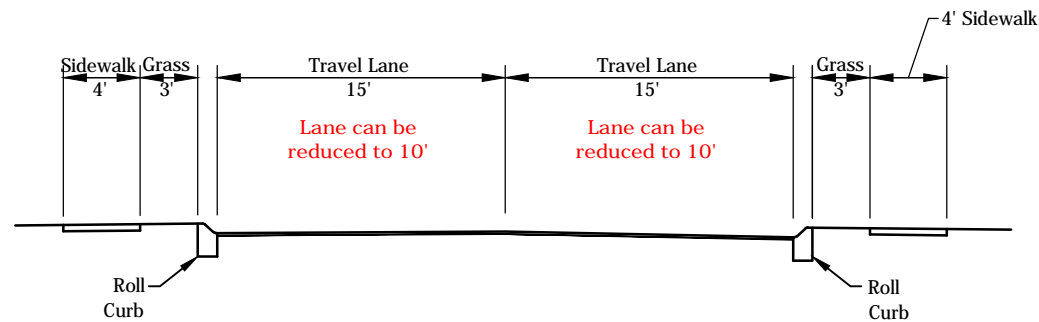
EWING LANE 2

Scale: 1"=10'
Ewing Lane from Park Place to Bridgepoint Elementary



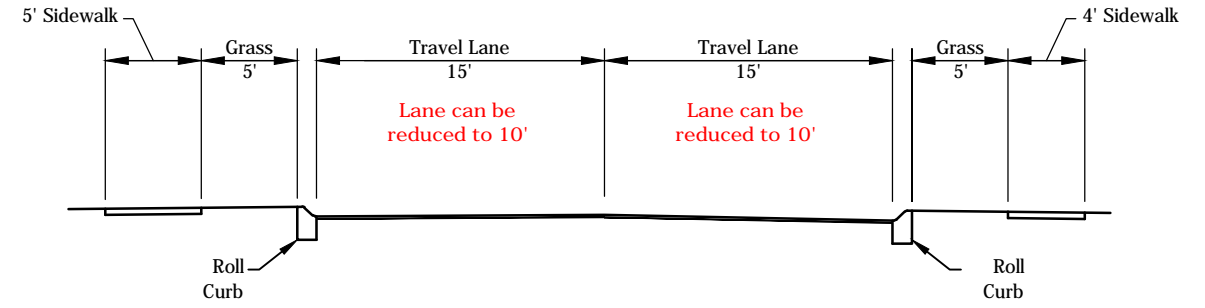
EWING LANE 3

Scale: 1"=10'
Ewing Lane from Bridgepoint Elementary to Walpole Ave.



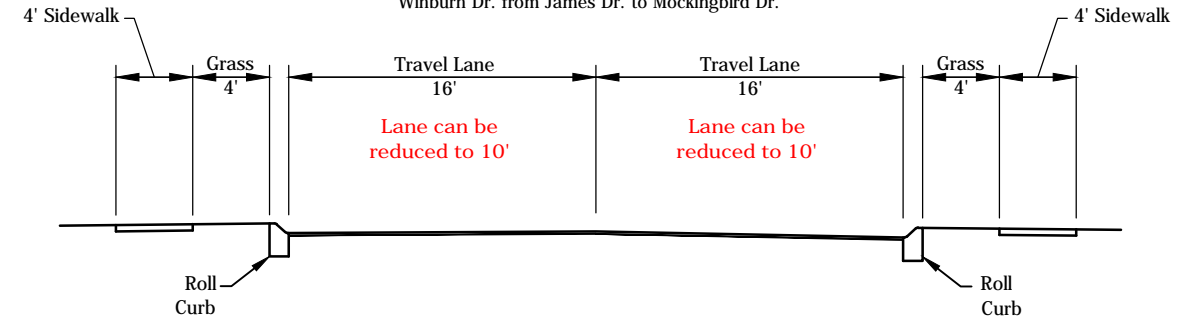
EWING LANE 4

Scale: 1"=10'
Walpole Ave. from Ewing Ln. to James Dr.



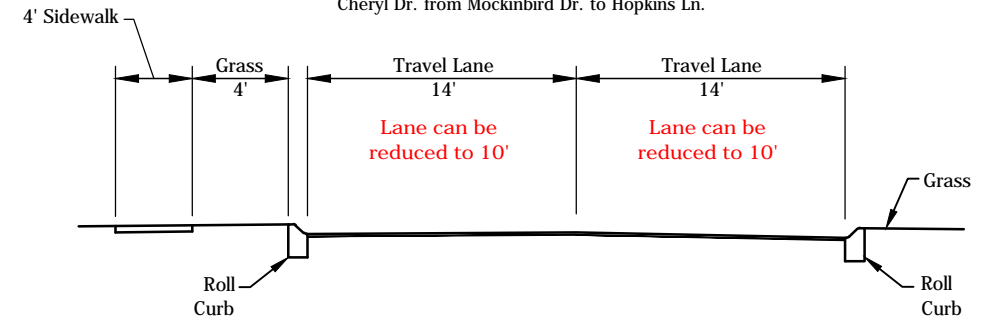
EWING LANE 5

Scale: 1"=10'
James Dr. from Walpole Ave. to Winburn Dr.
and
Winburn Dr. from James Dr. to Mockingbird Dr.



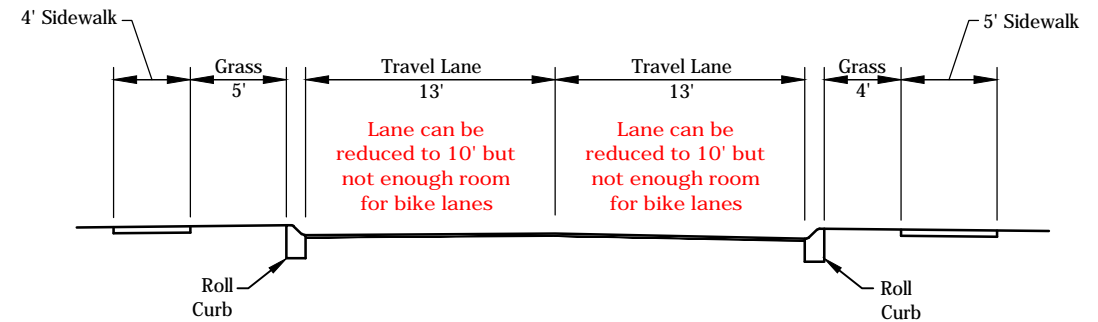
EWING LANE 6

Scale: 1"=10'
Mockingbird Dr. from Winburn Dr. to Cheryl Dr.
and
Cheryl Dr. from Mockinbird Dr. to Hopkins Ln.



EWING LANE 7

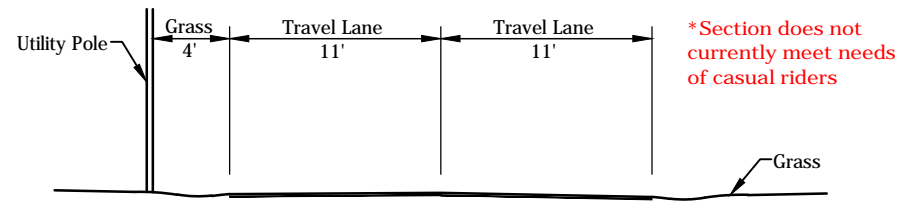
Scale: 1"=10'
Cheryl Dr. from Hopkins Ln. to Huston Dr.



EWING LANE 8

Scale: 1"=10'
Huston Dr. from Cheryl Dr. to Rudie Dr.
and
Rudie Dr. from Huston Dr. to Perrin Ln.

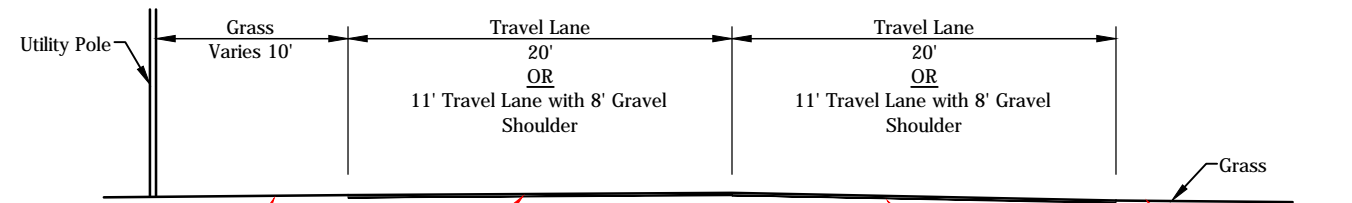
Typical Sections - Analysis



ALLISON LN 1

Scale: 1"=10'
Allison Ln. from Utika Pike to Bennett Ave.

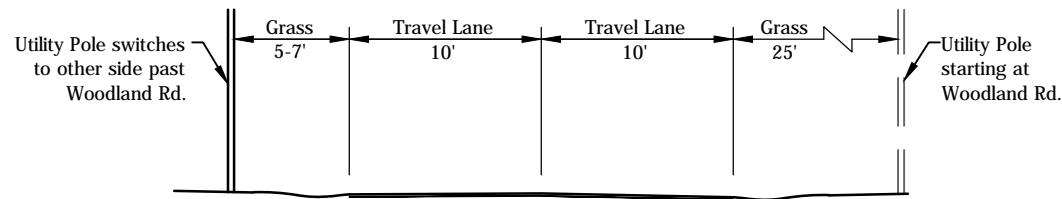
*Section does not currently meet needs of casual riders



ALLISON LN 5

Scale: 1"=10'
Allison Ln. from Middle Rd. to Faith Lutheran Church

Need sidewalk
Room to have 11' travel lane and 5' bike lane
Room to have 11' travel lane and 5' bike lane
Need sidewalk

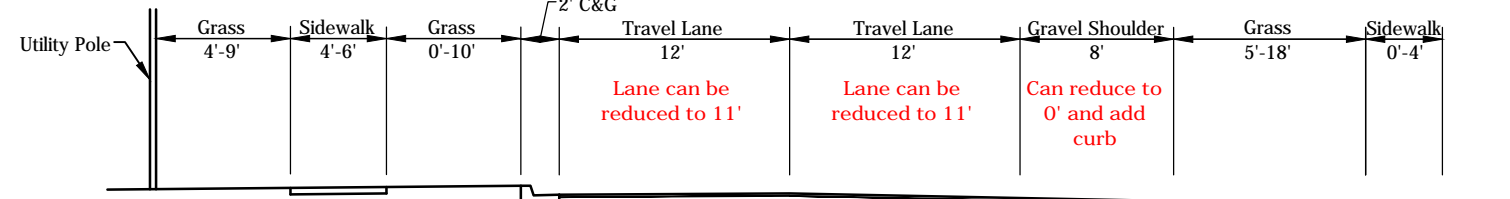


ALLISON LN 2

Scale: 1"=10'
Allison Ln. from Bennett Ave. to Wildwood Rd.

*Section does not currently meet needs of casual riders

NOTE: Room to widen road

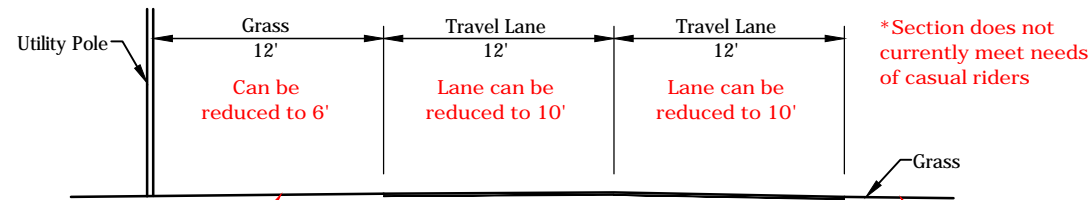


ALLISON LN 6

Scale: 1"=10'
Allison Ln. from Faith Lutheran Church to Seminole Dr.

Lane can be reduced to 11'
Lane can be reduced to 11'
Can reduce to 0' and add curb

NOTE: Room to widen to east
*Section does not currently meet needs of casual riders



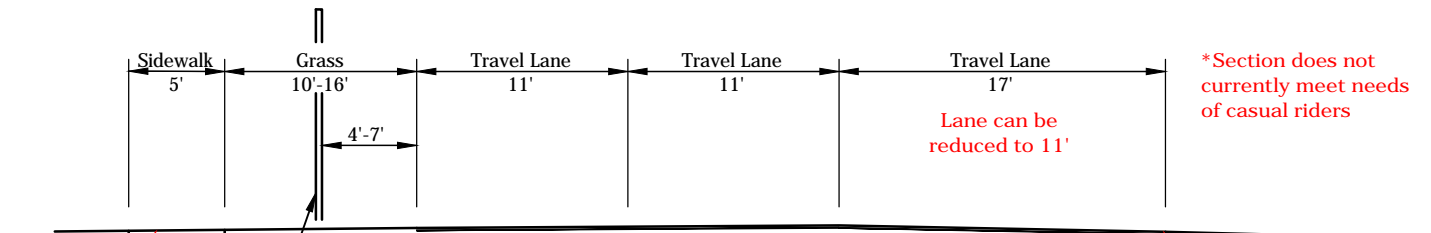
ALLISON LN 3

Scale: 1"=10'
Allison Ln. from Wildwood Rd. to Doe Run Rd.

*Section does not currently meet needs of casual riders

Can be reduced to 6'
Lane can be reduced to 10'
Lane can be reduced to 10'

Need sidewalk
Need sidewalk
NOTE: Room to widen road

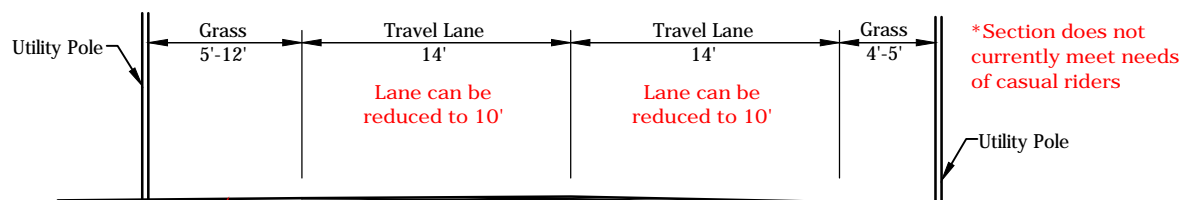


ALLISON LN 7

Scale: 1"=10'
Allison Ln. from Seminole Dr. to Wooded Way

*Section does not currently meet needs of casual riders

Room for multi-use path
Utility Pole
Lane can be reduced to 11'
Need sidewalk
NOTE: Busy area with a lot of turning movements



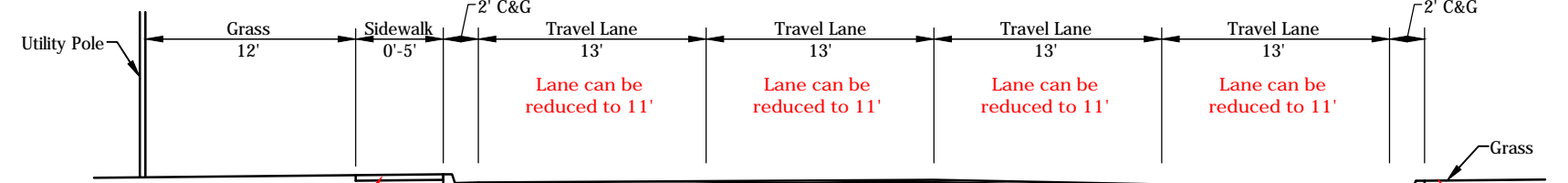
ALLISON LN 4

Scale: 1"=10'
Allison Ln. from Doe Run Rd. to Middle Rd.

*Section does not currently meet needs of casual riders

Lane can be reduced to 10'
Lane can be reduced to 10'

Need sidewalk
Need sidewalk



ALLISON LN 8

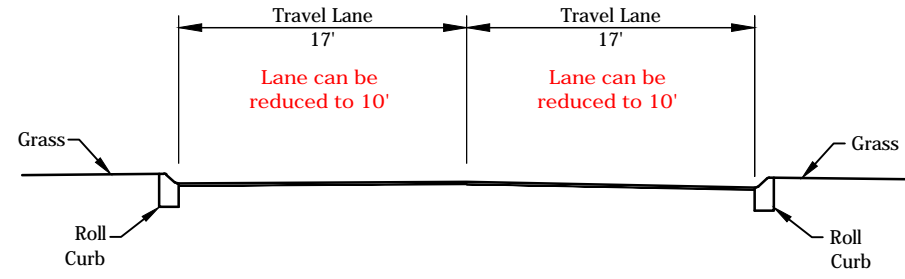
Scale: 1"=10'
Allison Ln. from Wooded Way to 10th St.

Lane can be reduced to 11'
Lane can be reduced to 11'
Lane can be reduced to 11'
Lane can be reduced to 11'

Room for multi-use path
Need sidewalk

NOTE: Busy area with a lot of turning movements
*Section does not currently meet needs of casual riders

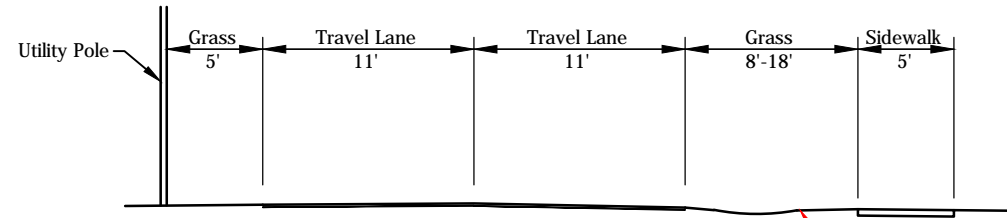
Typical Sections - Analysis



TALL OAKS DRIVE 1

Scale: 1"=10'

Tall Oaks Drive from Nole Drive to Charlestown Pike

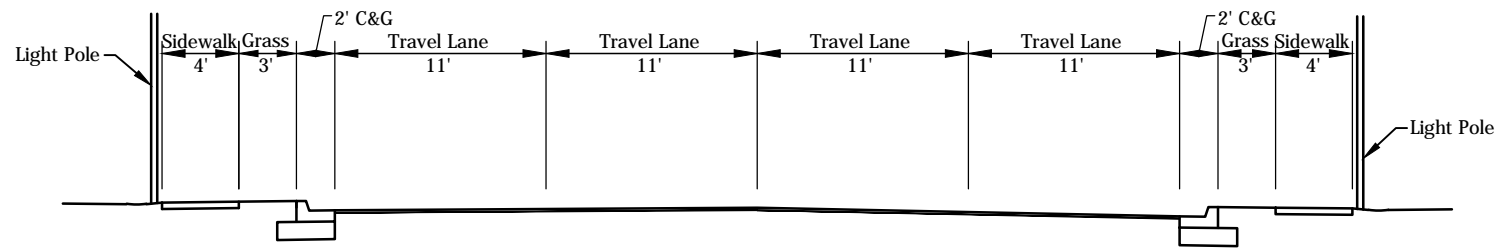


CHARLESTOWN PIKE 1

Scale: 1"=10'

Charlestown Pike from Tall Oaks Drive to Woehrle Road

Can reduce grass area - possible ditch grading needed



VETERANS PARKWAY 1

Scale: 1"=10'

Veterans Parkway from Woehrle Road to Hamburg Pike



DOWNTOWN WALKABILITY CONDITIONS

Measurements taken during the inventory portion of the project such as: the width of sidewalk; the width and presence of a planting strip between the sidewalk and road; the spacing of street trees along the corridor; the average daily traffic; speed limit; percent of on street parking; and percent of commercial traffic along each route was input into a Pedestrian Level of Service Calculator (PLOS). The PLOS is a nationally-used measure of on-road bicycle level of comfort based upon a roadway's geometry and traffic conditions.

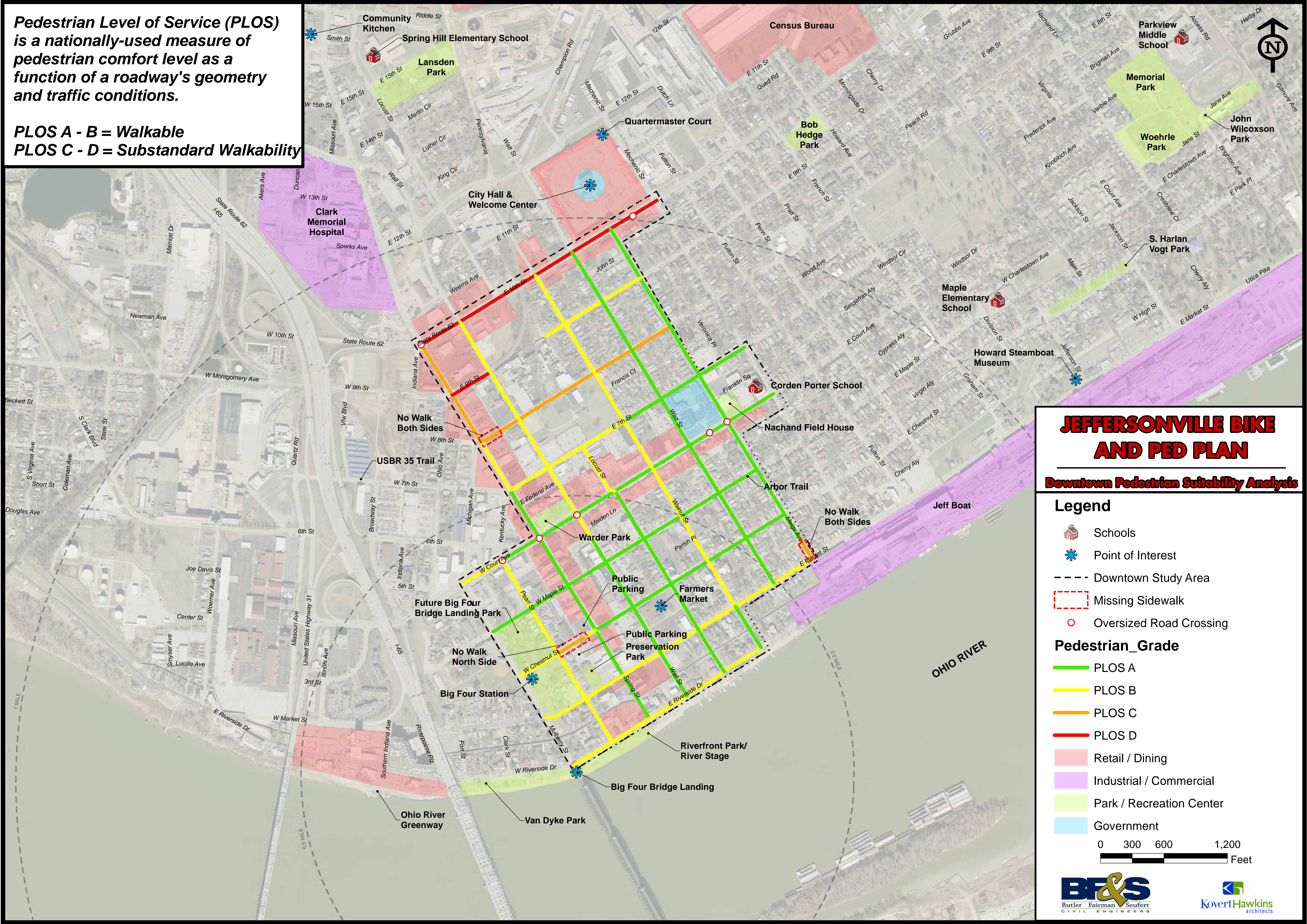
A map was then created that summarizes the existing Pedestrian Level of Service (PLOS) conditions by color coding those sections that are more suitable for walking and those that need improvement. Based upon the PLOS map it was determined that most of the downtown area falls into the "A" or "B" category and is considered on the high side of walkability. There were a few sections that fell into the C and D level and would be considered less walkable.

Several intersections were observed as needing improvements to crossing distances. Distances that were observed as being greater than 35 feet, or intersections with long distances and a high number of average daily vehicles were identified as needing improvement.

The following map illustrates the existing PLOS for the downtown area and intersections that need improvement.

Pedestrian Level of Service (PLOS) is a nationally-used measure of pedestrian comfort level as a function of a roadway's geometry and traffic conditions.

PLOS A - B = Walkable
PLOS C - D = Substandard Walkability



JEFFERSONVILLE BIKE AND PED PLAN

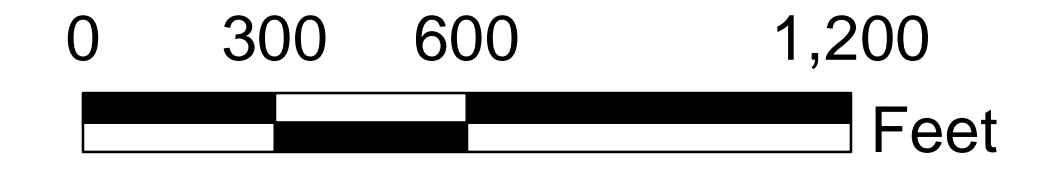
Downtown Pedestrian Suitability Analysis

Legend

- Schools
- Point of Interest
- Downtown Study Area
- Missing Sidewalk
- Oversized Road Crossing

Pedestrian_Grade

- PLOS A
- PLOS B
- PLOS C
- PLOS D
- Retail / Dining
- Industrial / Commercial
- Park / Recreation Center
- Government





JEFFERSONVILLE BIKE AND PED PLAN



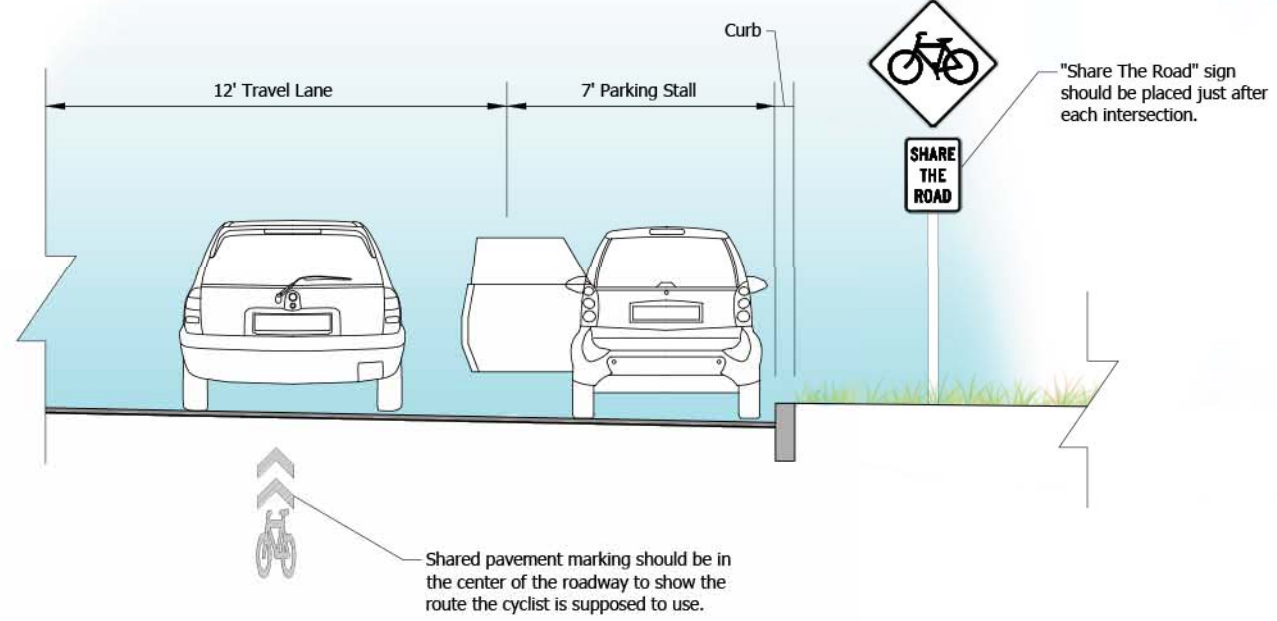
FINAL PLAN



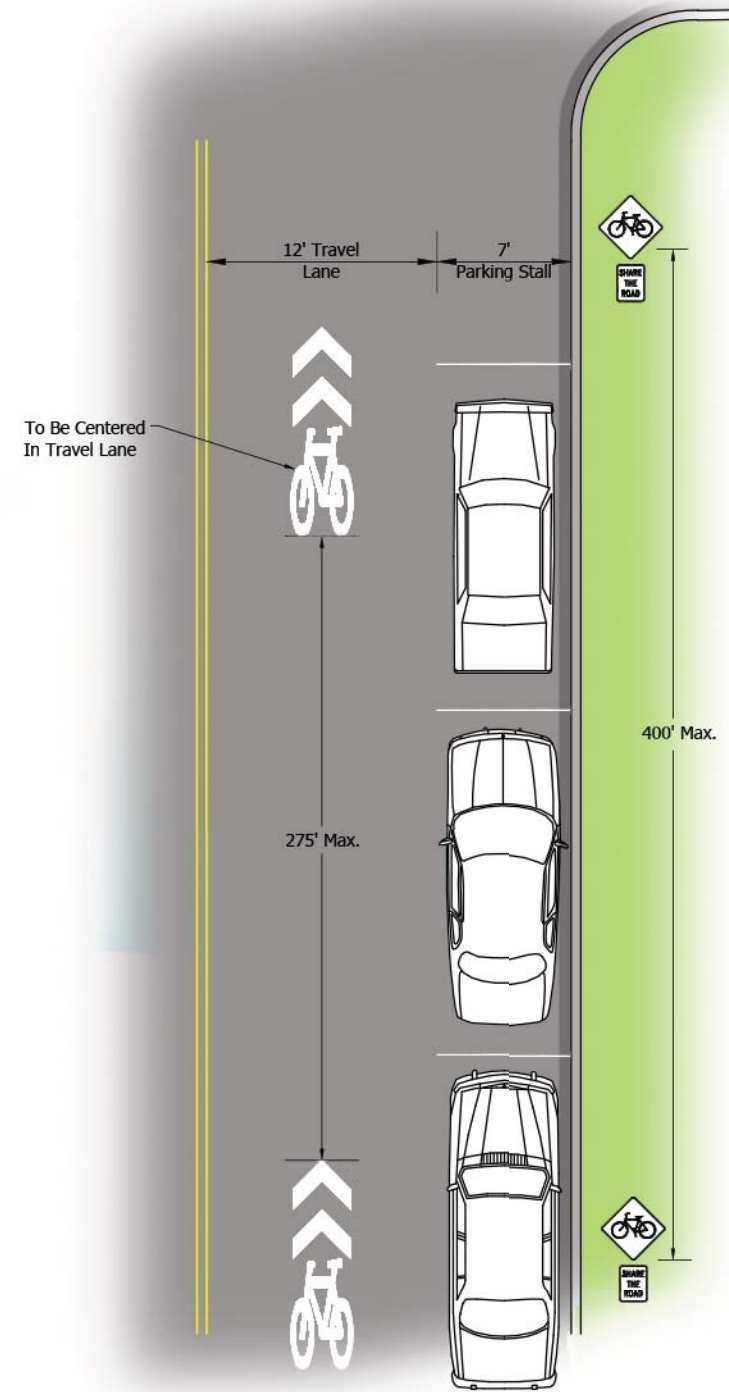
FINAL PLAN



TYPES OF BICYCLE FACILITIES



SHARED ROADWAY (SHARROW)



SHARROW DETAIL

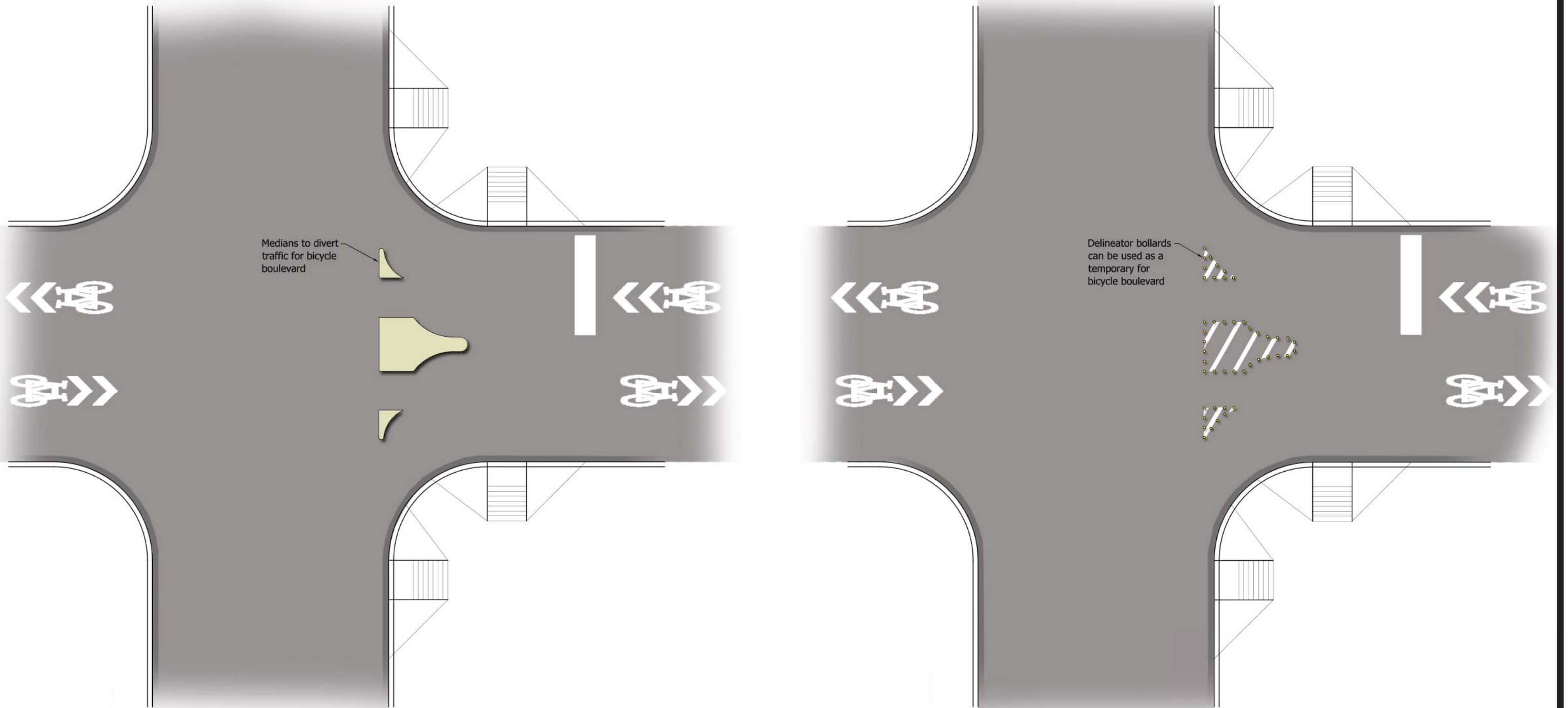


Signing & Marking
Shared Lane Markings



Bicycle Boulevards

Volume Management - Right-In Right-Out Diverter

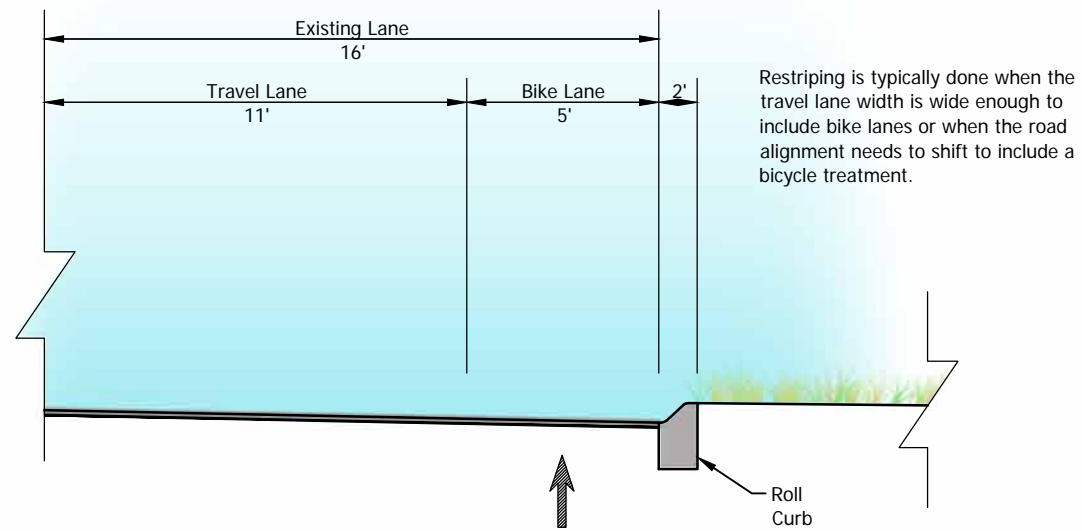


**BICYCLE BOULEVARD INTERSECTION
TREATMENT DETAIL**

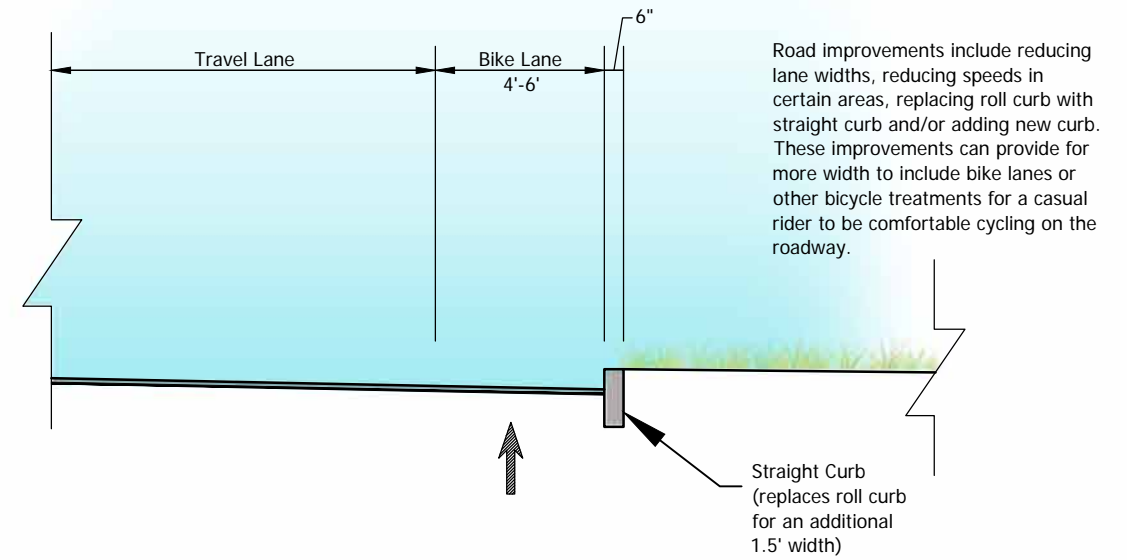
Scale: 1"=10'

**TEMPORARY BICYCLE BOULEVARD INTERSECTION
TREATMENT DETAIL**

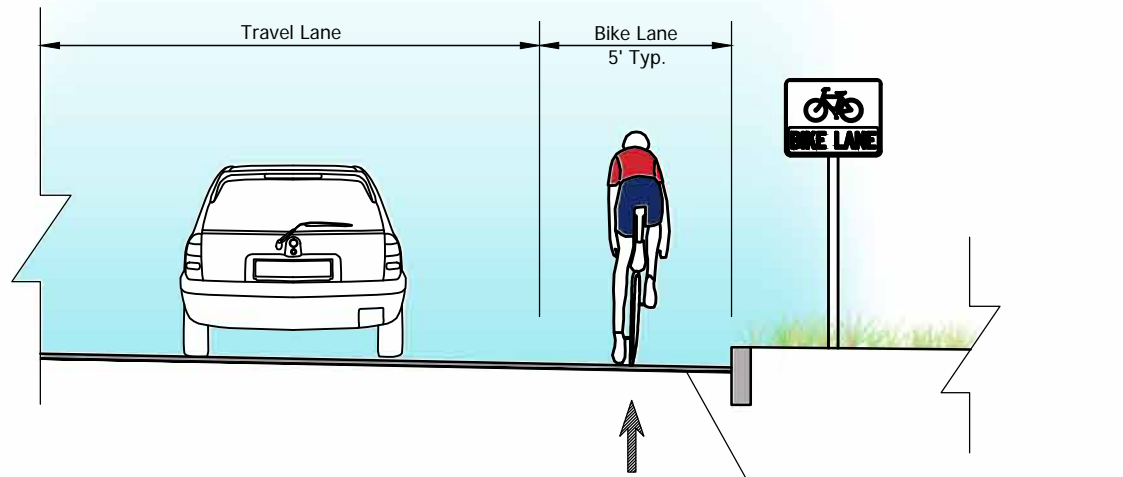
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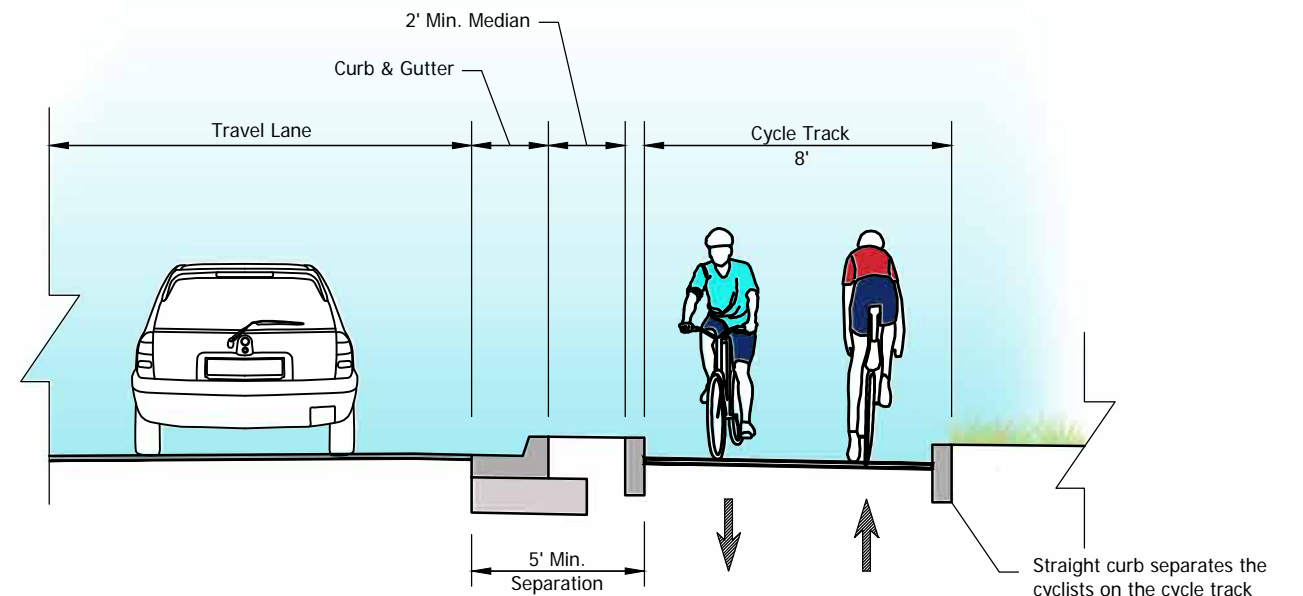
RESTRIPING
Scale: 1"=5'



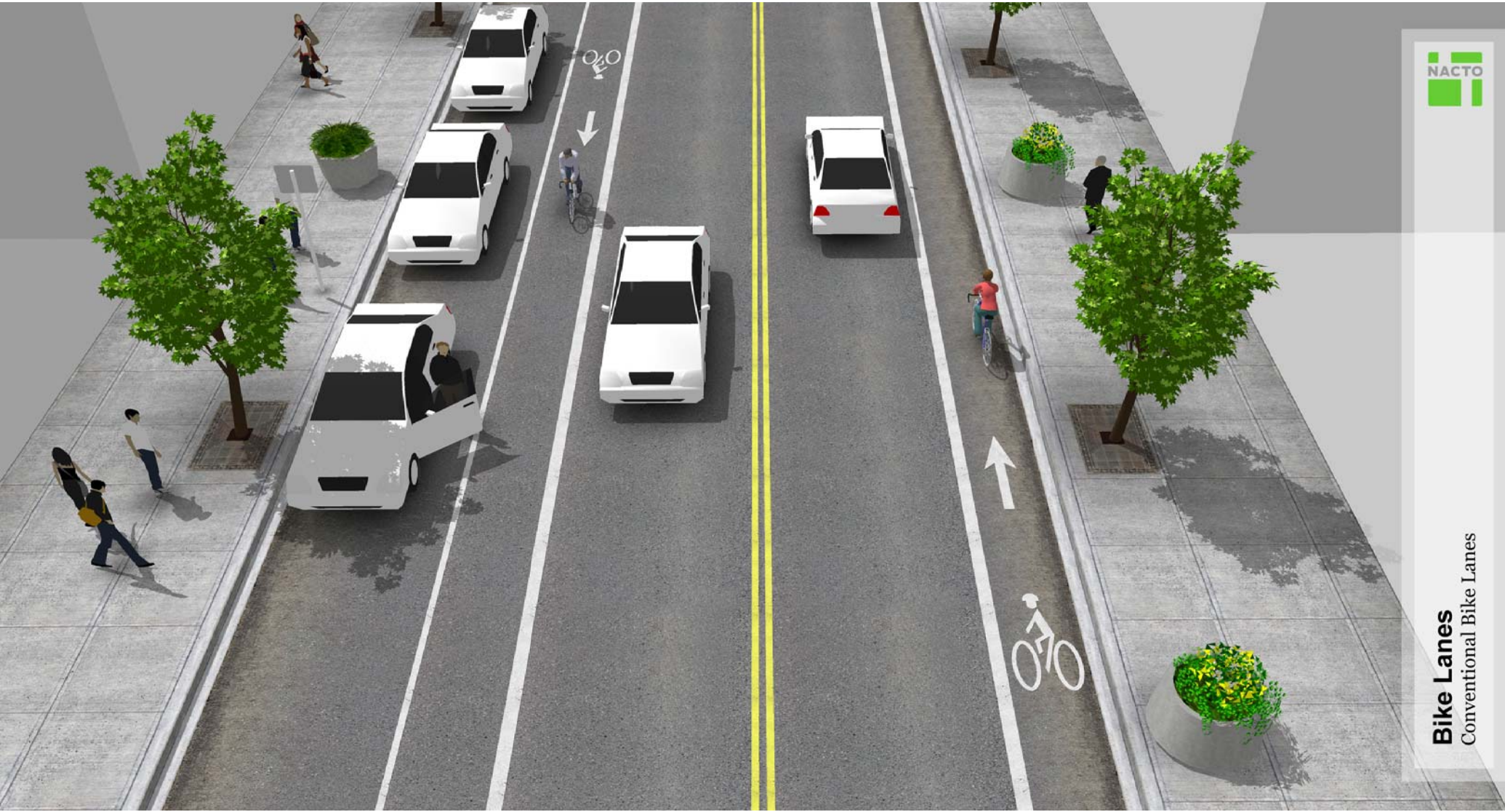
ROAD IMPROVEMENTS
Scale: 1"=5'



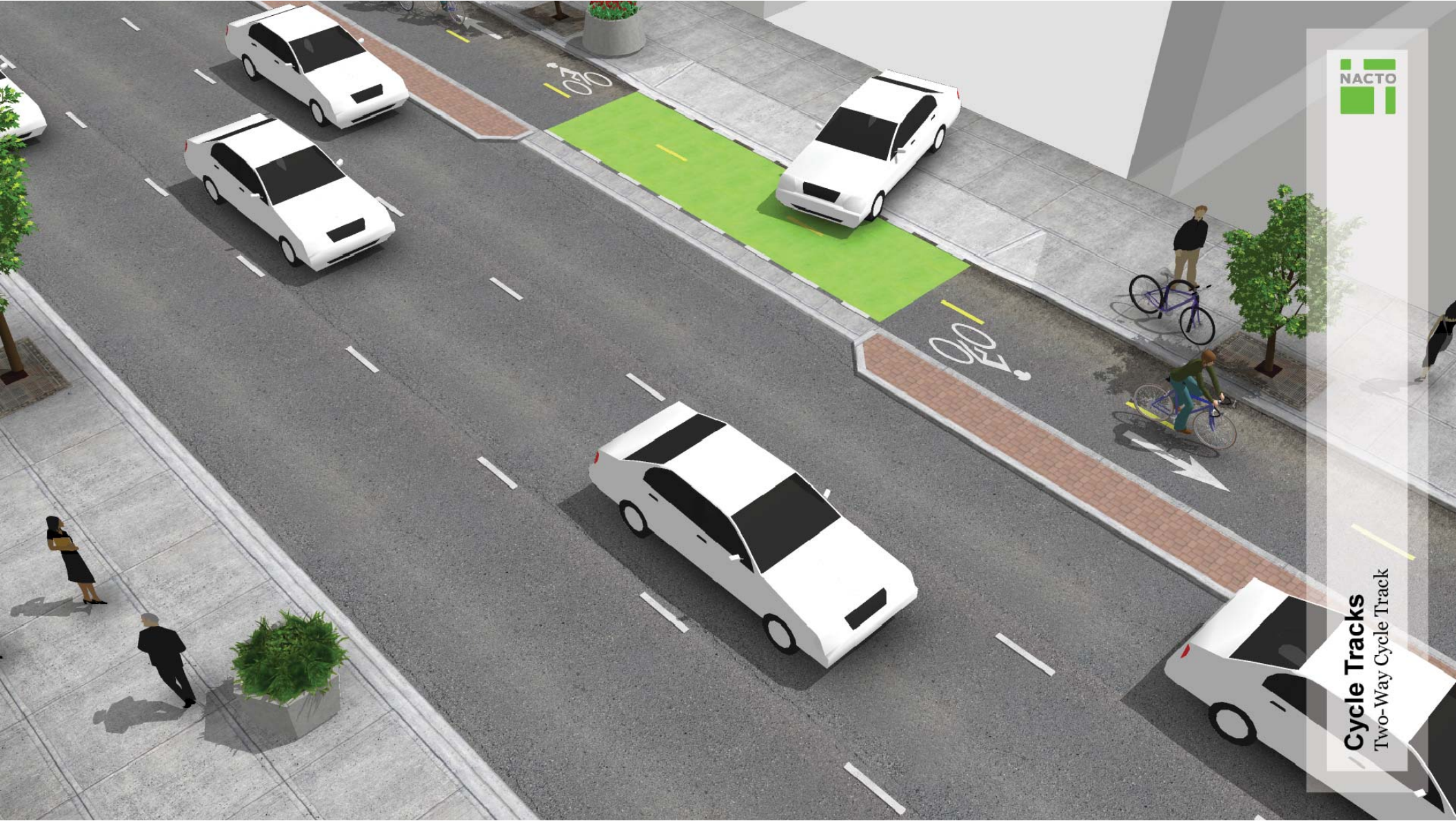
BIKE LANE
Scale: 1"=5'



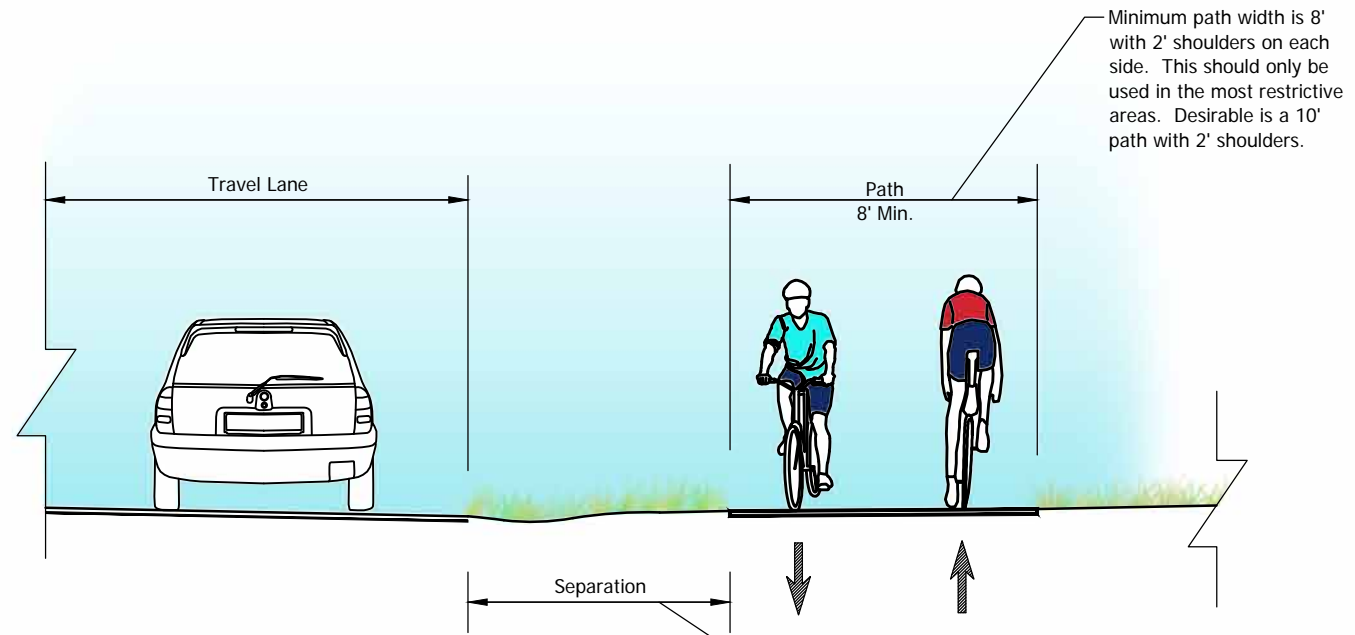
CYCLE TRACK
Scale: 1"=5'



Bike Lanes
Conventional Bike Lanes



Cycle Tracks
Two-Way Cycle Track



Minimum path width is 8' with 2' shoulders on each side. This should only be used in the most restrictive areas. Desirable is a 10' path with 2' shoulders.

SHARED-USE PATH
Scale: 1"=5'

Separation requirements vary, however, typically without curb the minimum separation from outside edge of shoulder to edge of path is 10'. With curb, the minimum separation is typically 5' from back of curb to edge of path.



FINAL PLAN



BICYCLE FACILITY PLAN



BICYCLE FACILITY PLAN

The original goal of the project was to create safe bicycle connections for users of all ages and abilities. At the start of the project, the study was to look at 5 main routes within a 5 mile radius. Following input from the initial community input meetings, the online survey, stakeholder meetings, and the public presentations the resulting bicycle facility plan outlines the potential for 10 routes and 36 miles of both on road and separated bicycle facilities.

Several types of facilities are proposed to make the community connections and each recommendation is based on a thorough analysis of the speed of the roadway, number of vehicles, number of drive and roadway crossings, available right-of-way, and the existence of on- street parking. The section before this outlined the proposed types of facilities. The following map shows the recommended treatment for each route and then cross sections of each corridor gives further detail of the characteristics of the proposed facility. A summary of the mileage of each route and the recommended order of development of each route is also provided.

In the standards section further recommendations are made on the guidelines that should be followed for the development of each facility.

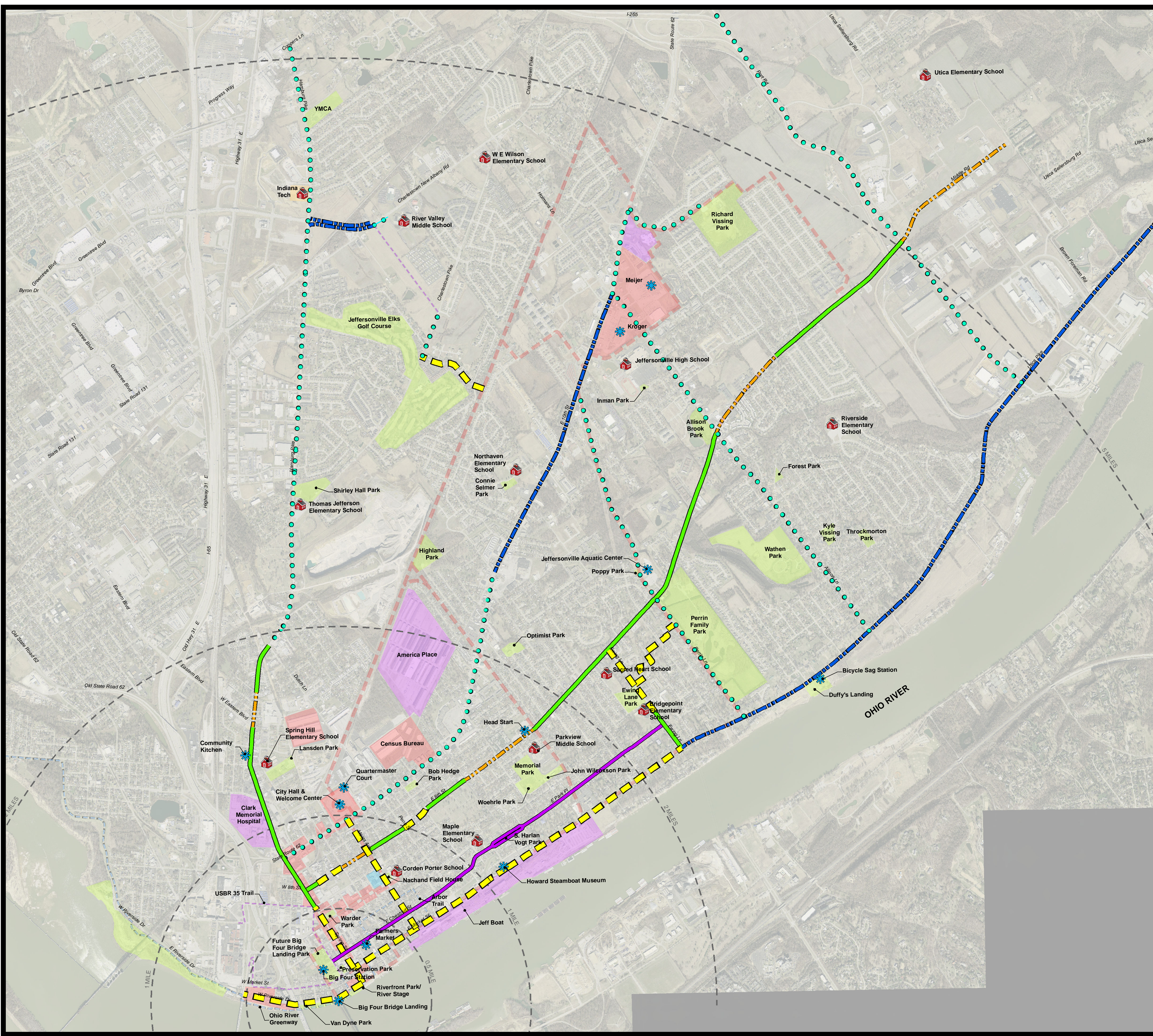
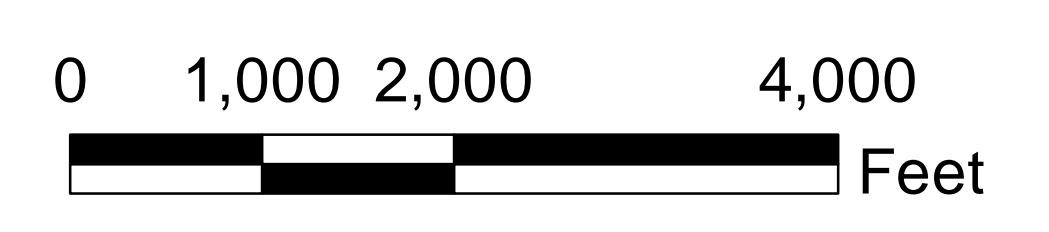


JEFFERSONVILLE BIKE AND PED PLAN

Bicycle Facilities Plan

LEGEND

- Schools
- Point of Interest
- Retail / Dining
- Higher Education
- Industrial / Commercial
- Park / Recreation Center
- Government
- Improvement Type**
- Shared Roadway
- Bike Lane
- Bicycle Boulevard
- Shared-use Path
- Road Improvements / Cycle Track
- Road Improvements / Bike Lane
- Existing Bicycle Route
- Existing / Planned Trail
- Wheels and Heels Plan

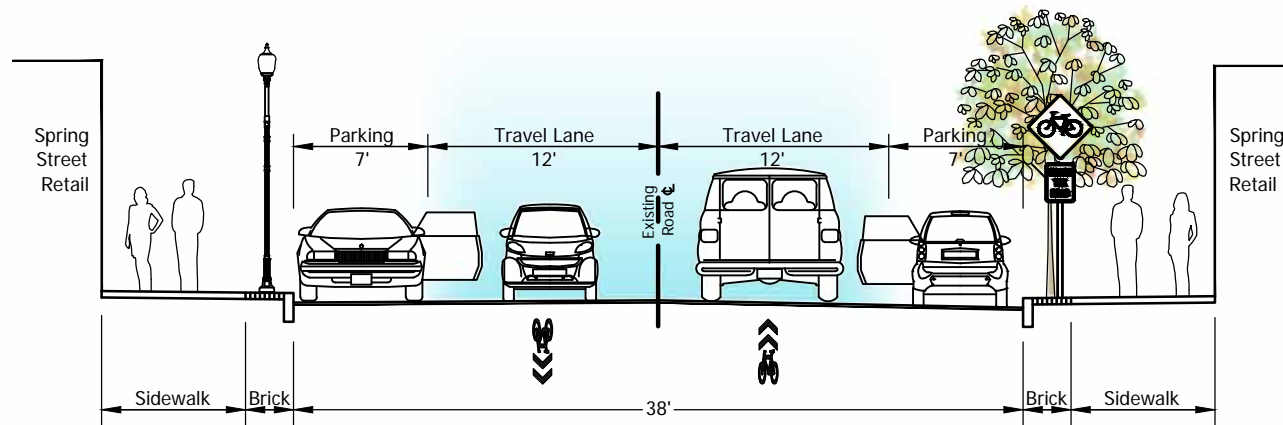




PRIORITY BICYCLE FACILITY ROUTES

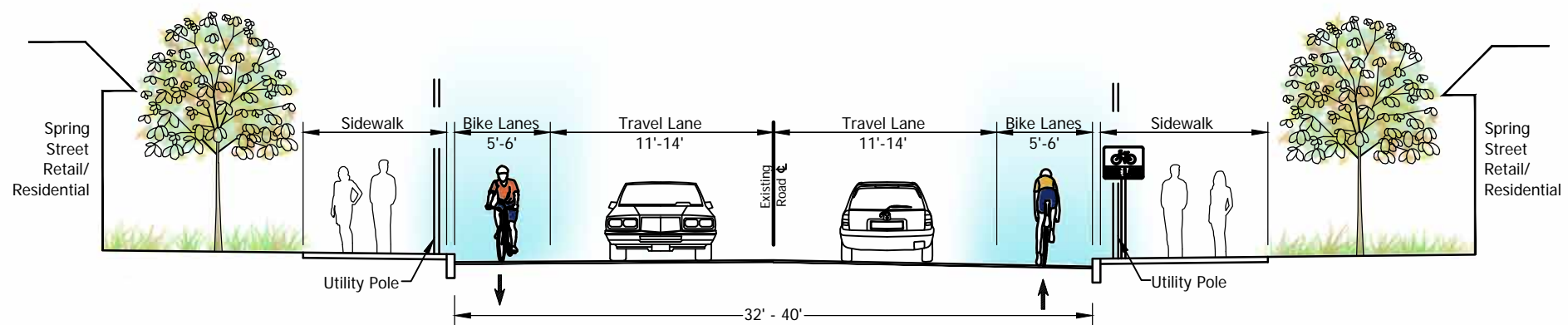
(Ranked in Order of Priority)

1. Chestnut St. / Park Pl. Bicycle Boulevard
2. Ewing Lane Bike Lanes and Shared Roadway
3. Spring Street Shared Roadway and Bike Lanes
4. Riverside Drive Shared Roadway
5. 8th St. Bike Lane / Shared Roadway (Spring St. to Allison Ln.)
6. Meigs Ave. Shared Roadway
7. Market Street Shared Roadway (Spring Street to Ewing Lane)
8. Tall Oaks Dr./ Charlestown Pk. / Woehrle Rd. / Veterans Prkwy. Route
9. Utica Pike 2-Way Cycle Track (Ewing Lane to the Town of Utica)
10. Allison Lane Shared-Use Path (Utica Pike to 10th Street)
11. Hamburg Pike Shared-Use Path (Dutch Lane to Coopers Lane)
12. Perrin Lane / Flood Wall / Utility Easement Shared-Use Path
13. 10th Street Shared-Use Path (Spring Street to Reeds lane)
14. 10th Street Cycle Tracks (Reeds Lane to Allison Lane)
15. Middle Rd. Bike Lane and Road Improvement (Allison Ln. to Utica / Sellersburg Rd.
16. Port Rd. Shared-Use Path (Utica Pike to New Chapel Road)



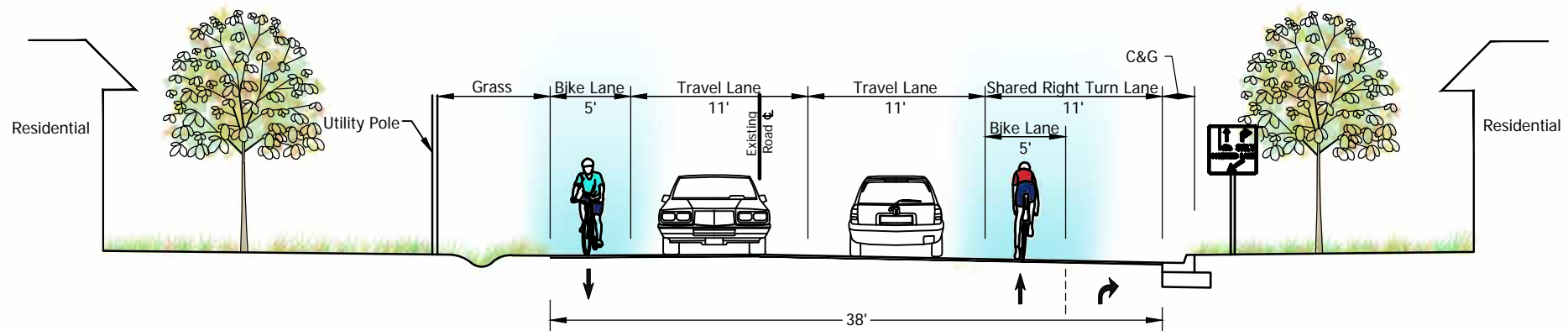
SPRING ST 1-3

Scale: 1"=10'
Spring St. from Riverside Dr. to 7th St.



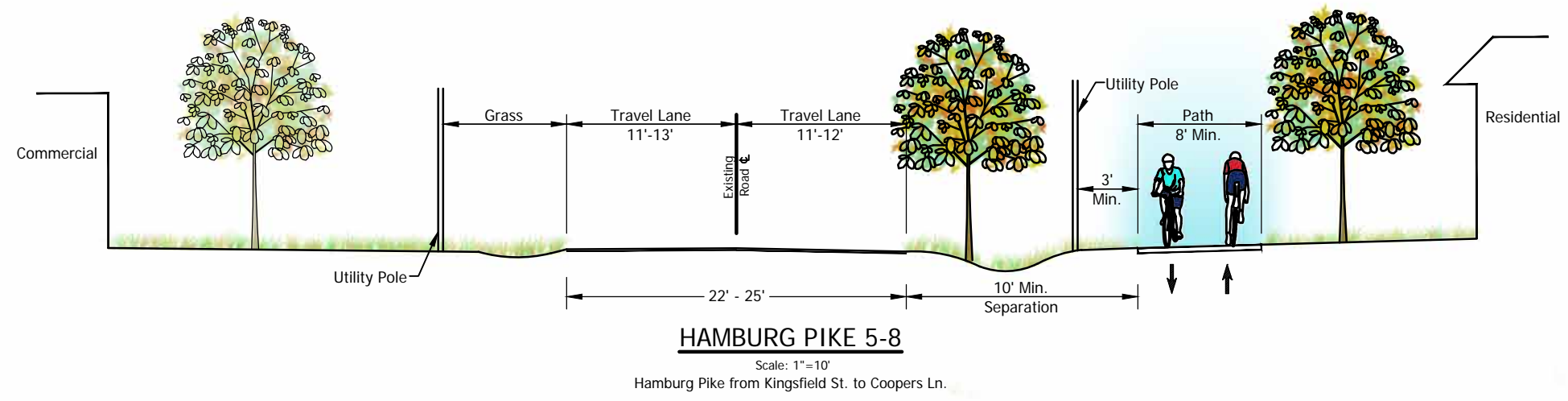
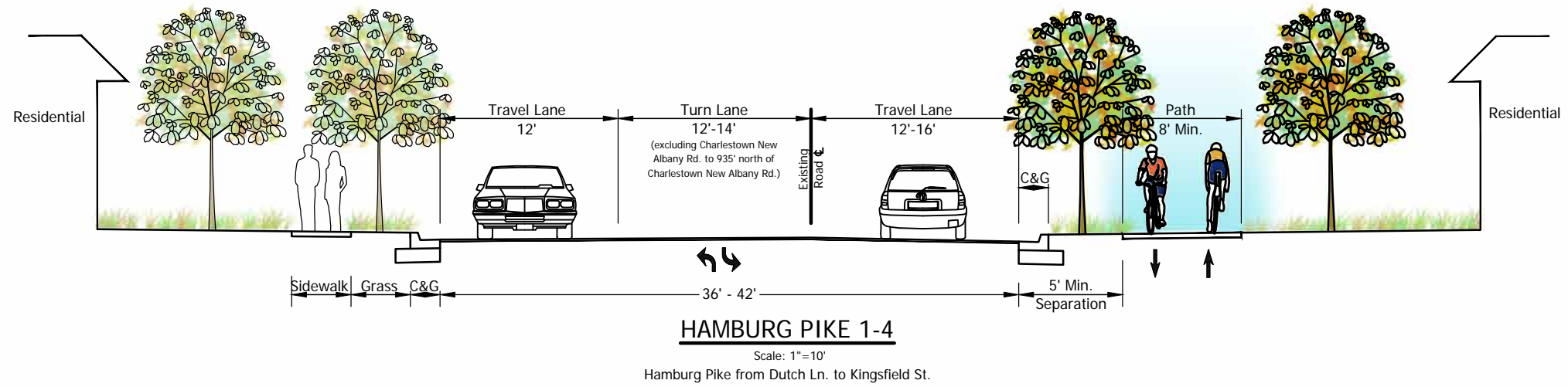
SPRING ST 4-10

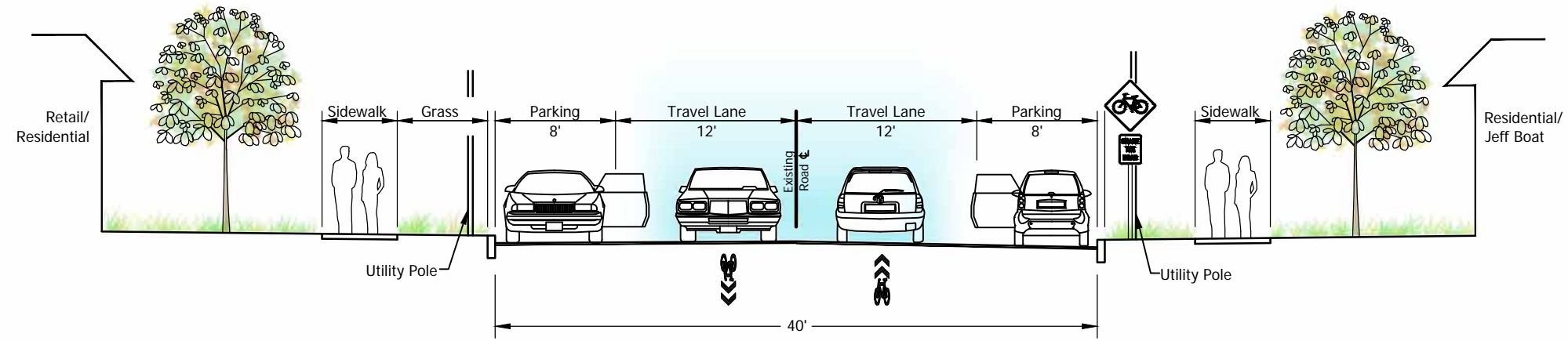
Scale: 1"=10'
Spring St. from 7th St. to Magnolia Ave.



SPRING ST 11

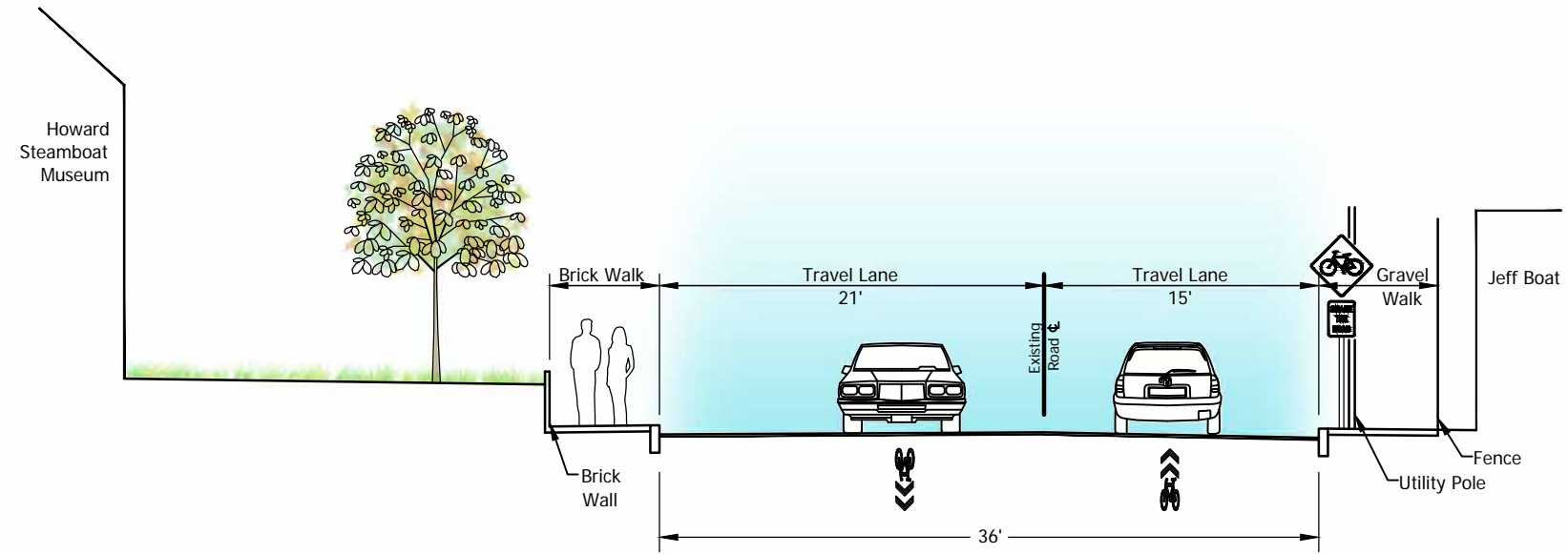
Scale: 1"=10'
Spring St. from Magnolia Ave. to Dutch Ln.





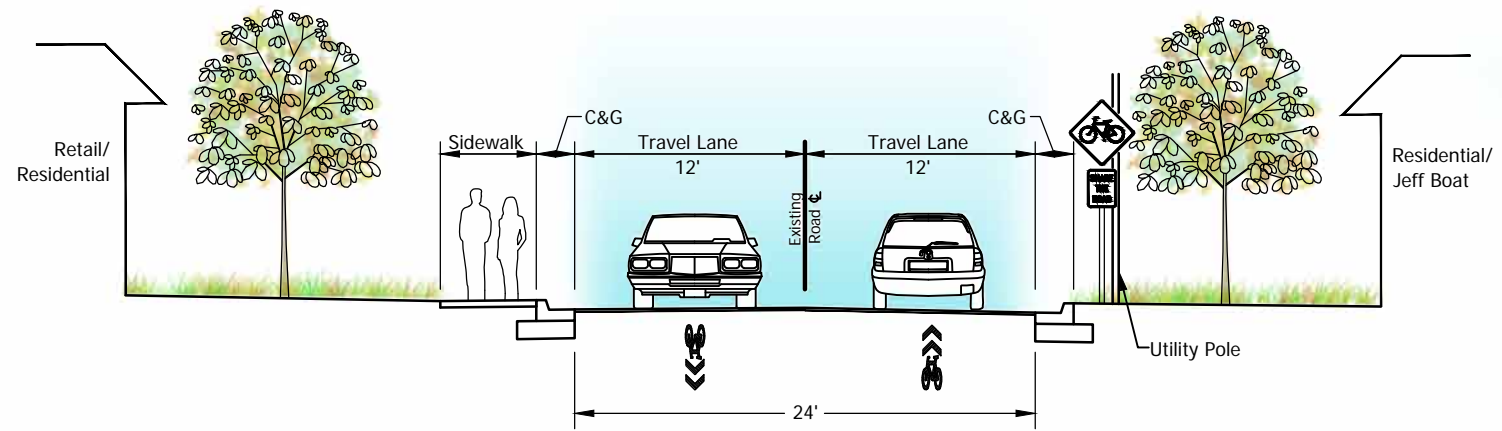
MARKET ST 1-2

Scale: 1"=10'
Market St. from Spring St. to Division St.



MARKET ST 3

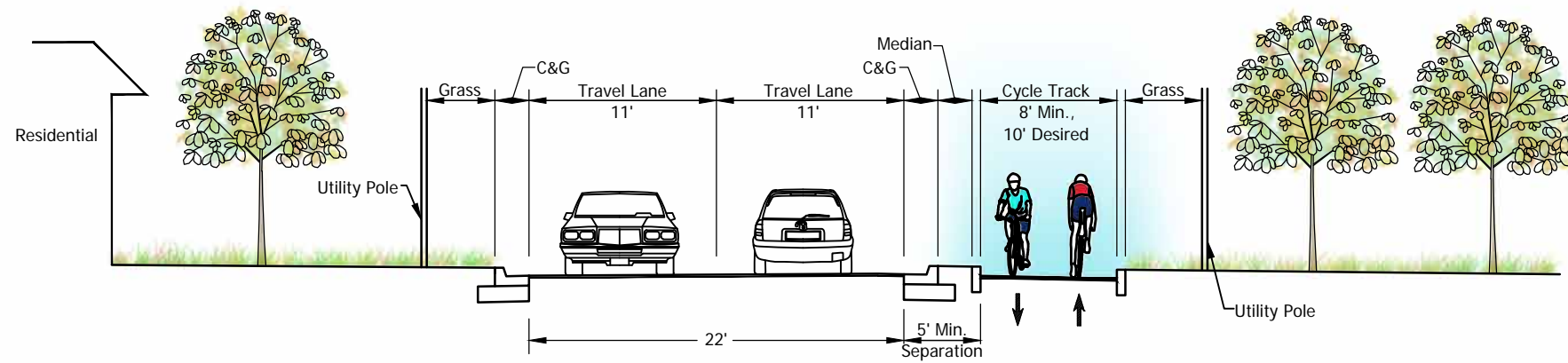
Scale: 1"=10'
Market St. from Division St. to Jefferson St.



UTICA PIKE 1

Scale: 1"=10'

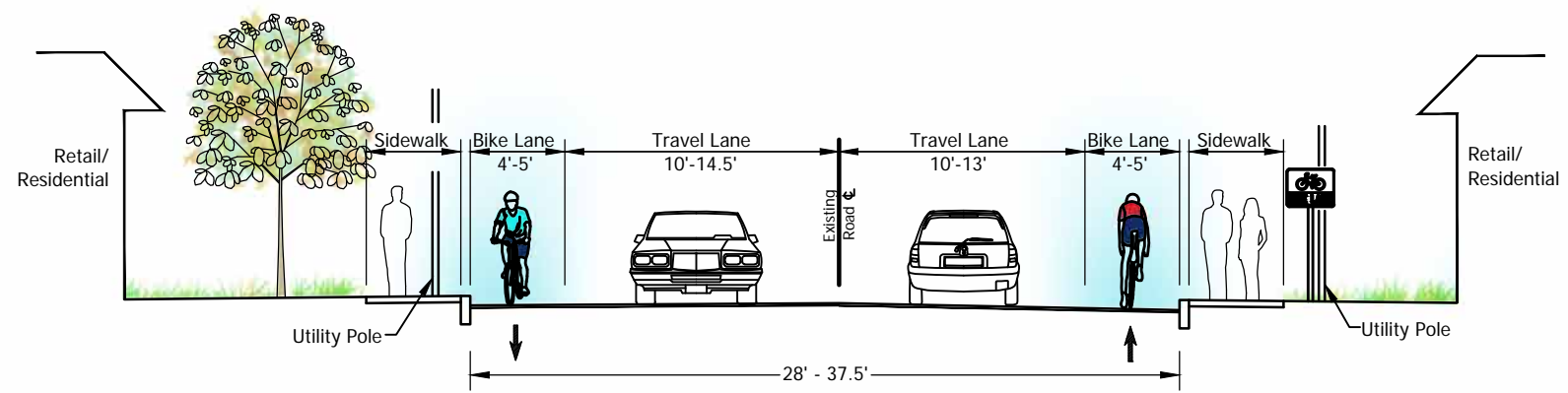
Market St./Utica Pike from Jefferson St. to Ewing Ln.



UTICA PIKE 2-6

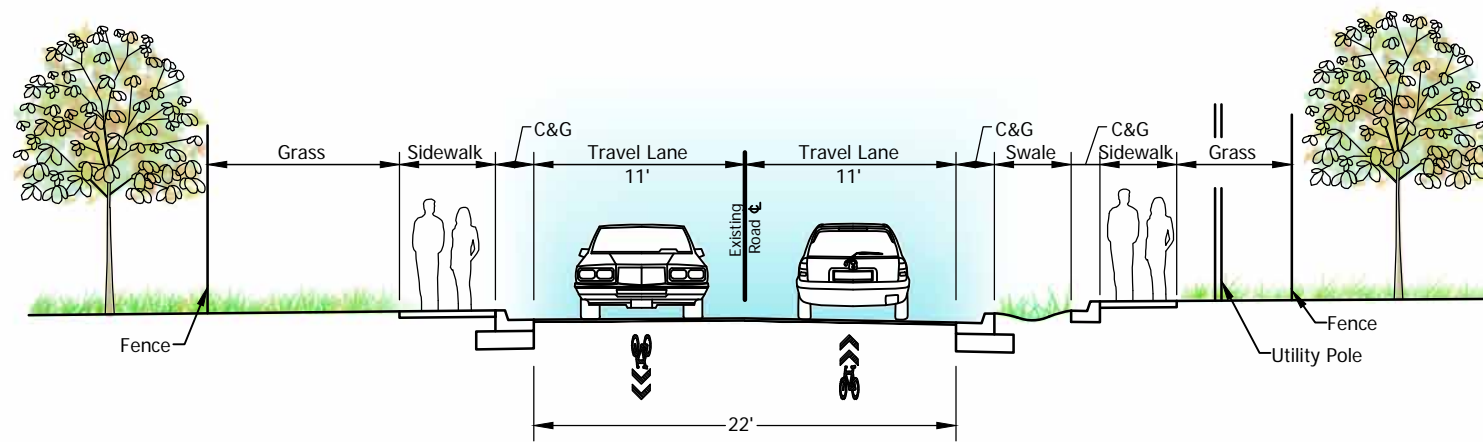
Scale: 1"=10'

Utica Pike from Ewing Ln. to Church St. (in Utica)



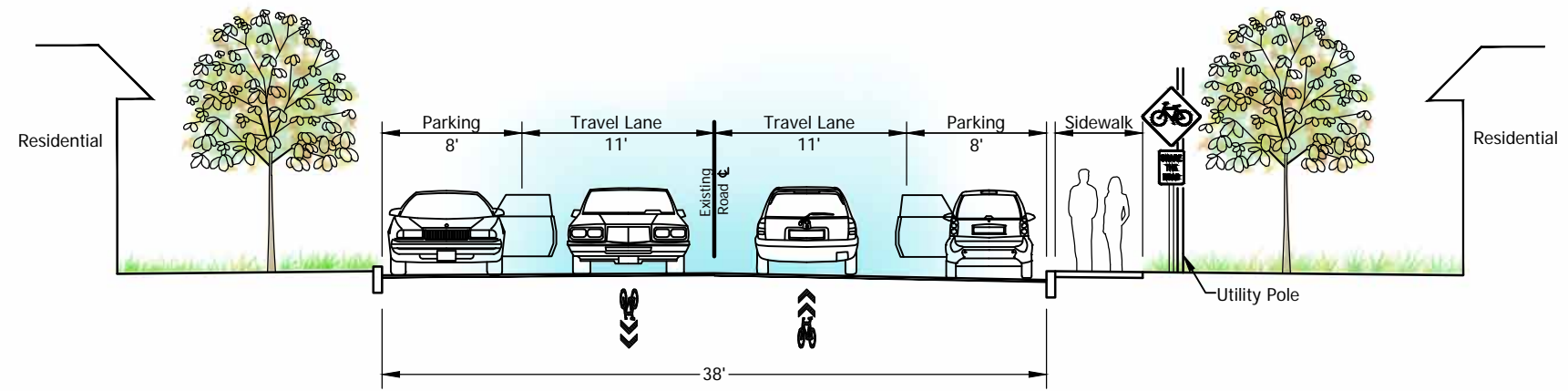
8TH ST 1, 3-5

Scale: 1"=10'
 8th St. from Spring St. to Wall St.
 and
 8th St. from Walnut St. to Penn St.



8TH ST 2

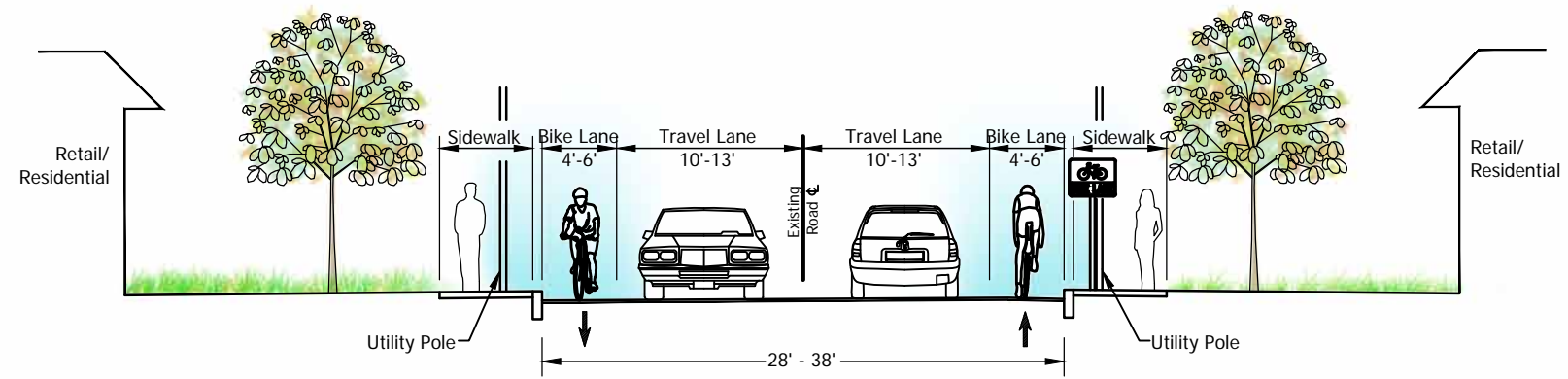
Scale: 1"=10'
 8th St. from Wall St. to Walnut St.



8TH ST 6

Scale: 1"=10'

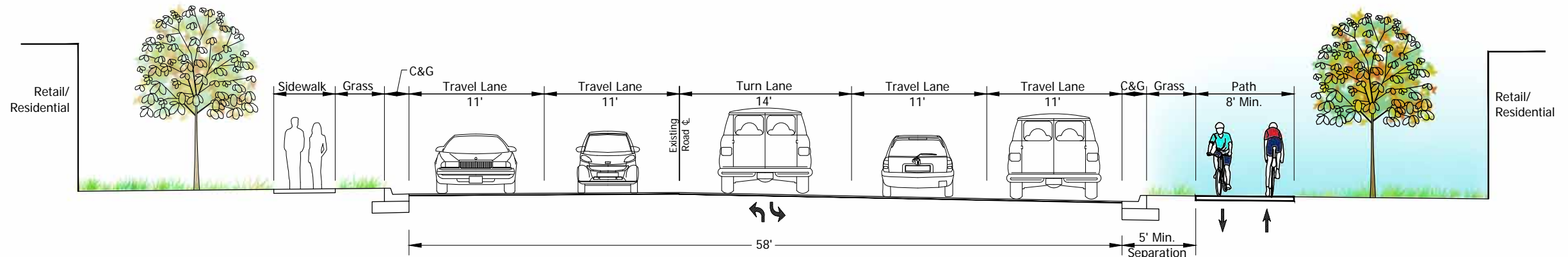
8th St. from Penn St. to Graham St.



8TH ST 7-16

Scale: 1"=10'

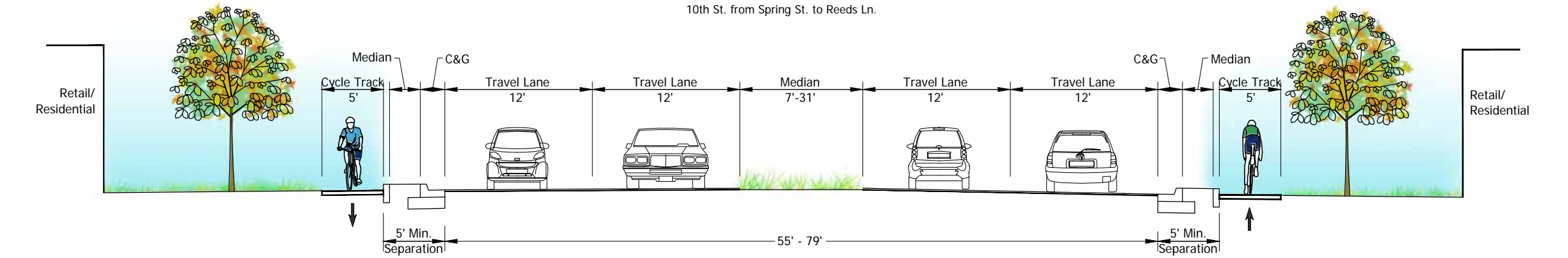
8th St. from Graham St. to Utica Sellersburg Rd.



10TH ST 1

Scale: 1"=10'

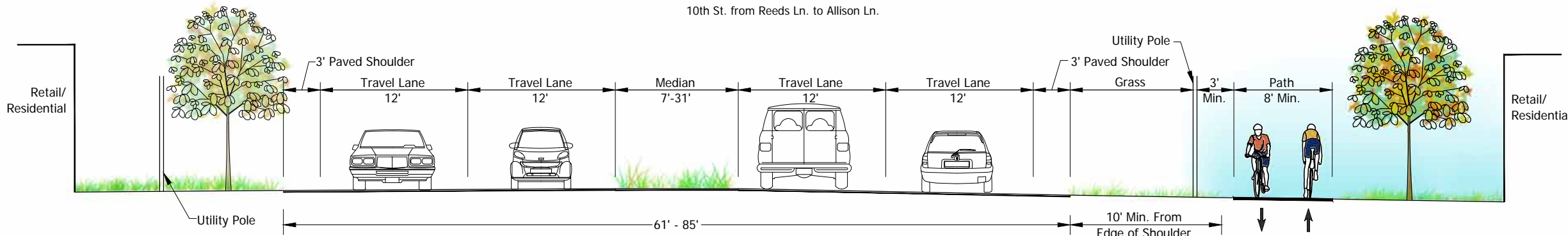
10th St. from Spring St. to Reeds Ln.



10TH ST 2

Scale: 1"=10'

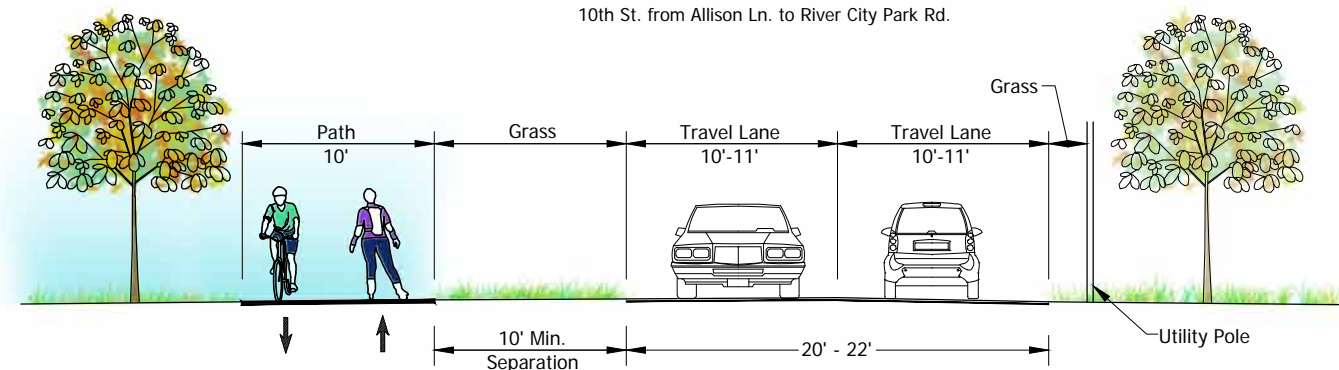
10th St. from Reeds Ln. to Allison Ln.



10TH ST 3

Scale: 1"=10'

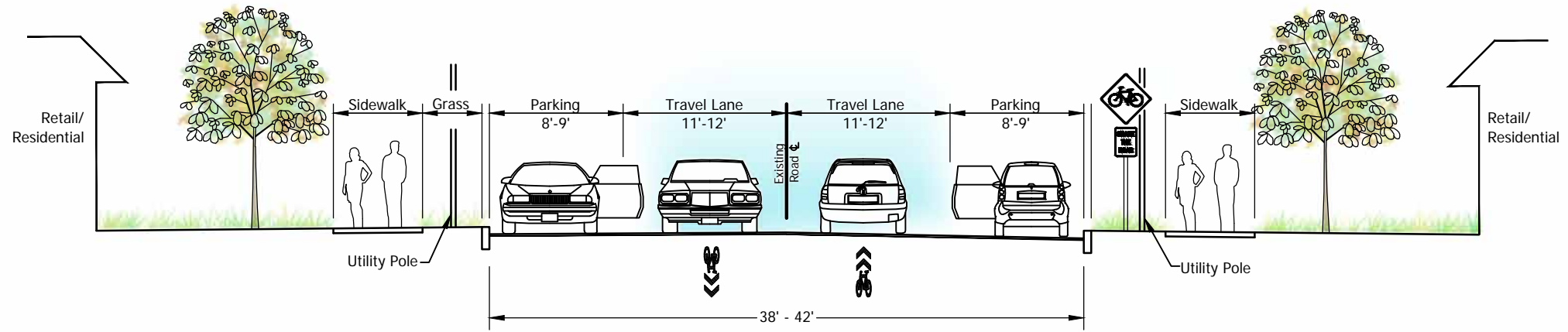
10th St. from Allison Ln. to River City Park Rd.



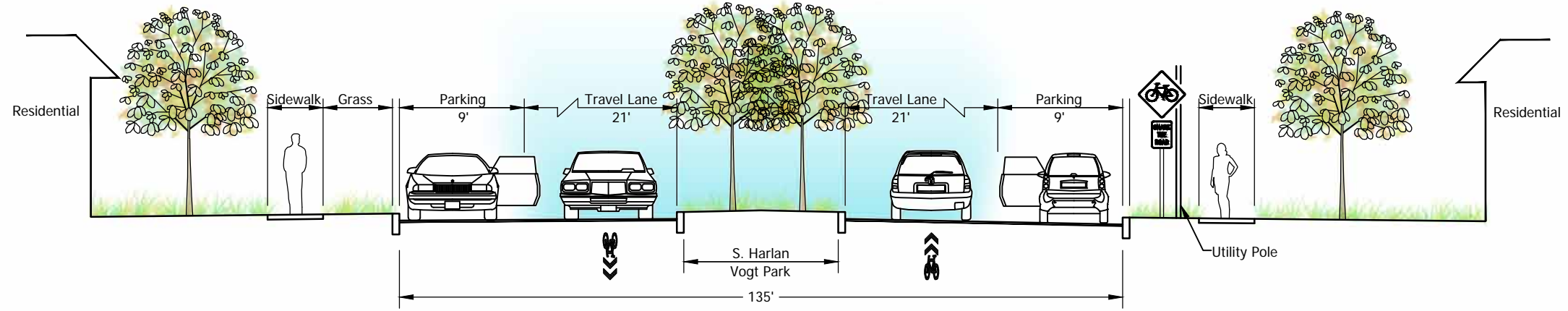
10TH ST 4

Scale: 1"=10'

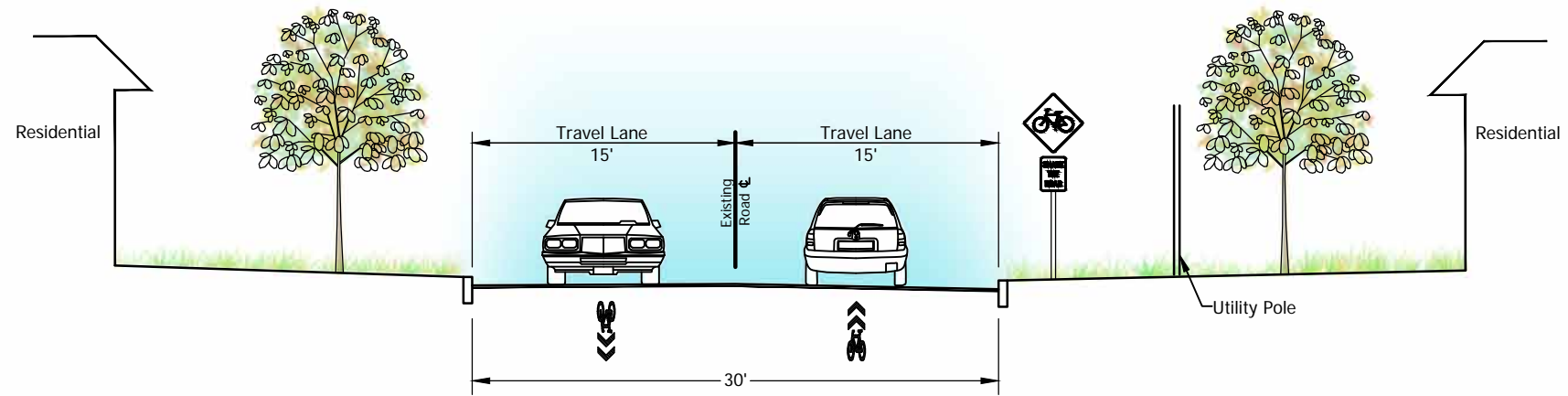
River City Park Rd./Vissing Park Rd. from 10th St. to Richard Vissing Park



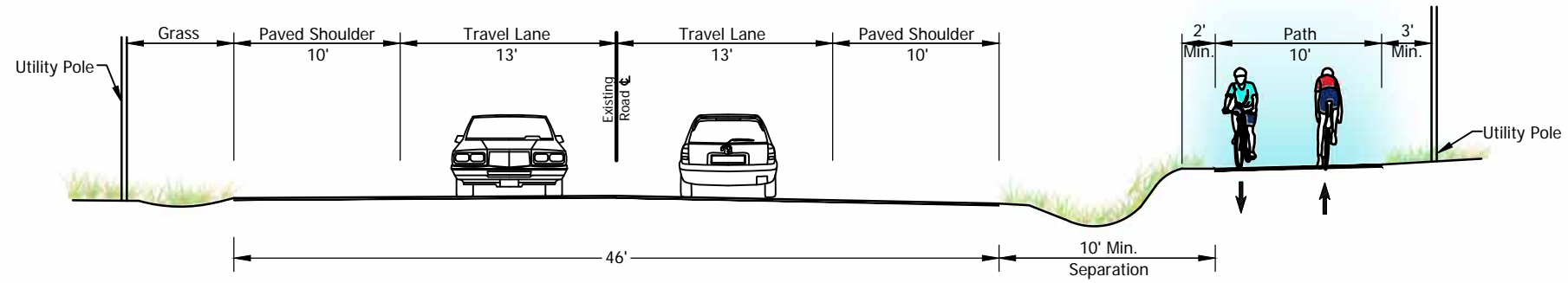
CHESTNUT ST 1-5, 7
 Scale: 1"=10'
 Chestnut St. from Pearl St. to Jefferson St.
 and
 Park Pl. from Jackson St. to the railroad



CHESTNUT ST 6
 Scale: 1"=10'
 Park Pl. from Jefferson St. to Jackson St.



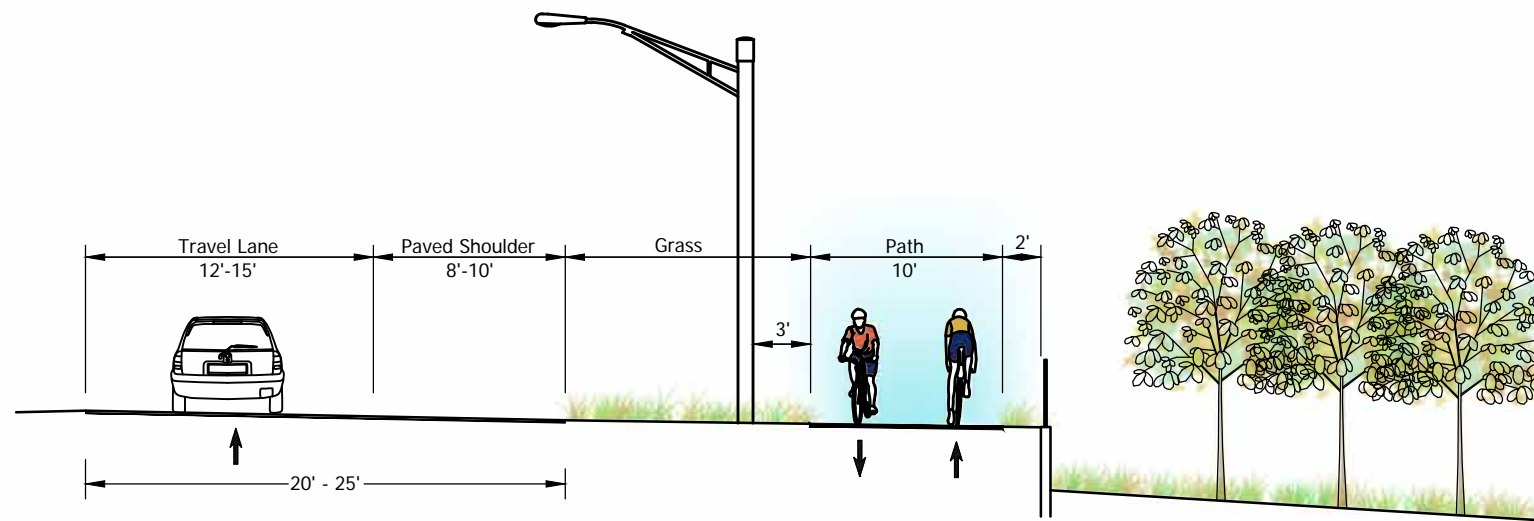
CHESTNUT ST 8
 Scale: 1"=10'
 Park Pl. from the railroad to Ewing Ln.



PORT RD 1

Scale: 1"=10'

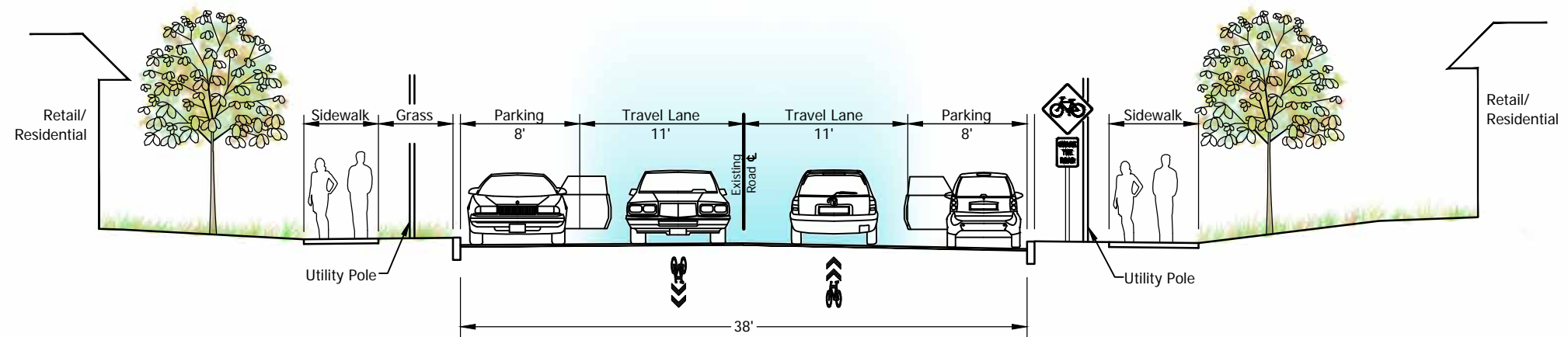
Port Rd. from Utica Pike to On Ramp



PORT RD 2-3

Scale: 1"=10'

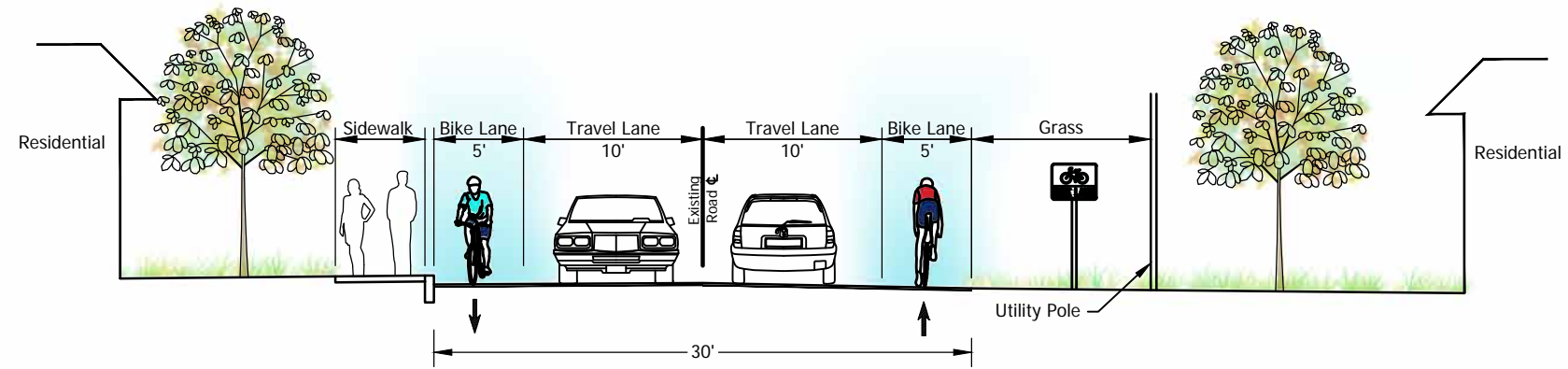
Port Rd. On Ramp/Off Ramp



MEIGS AVE 1

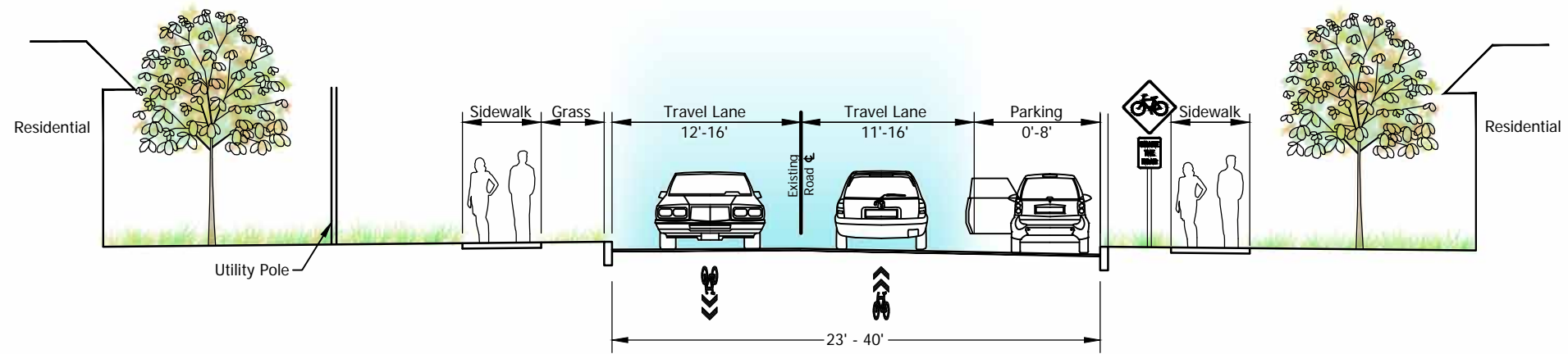
Scale: 1"=10'

Meigs Ave. from Market St. to 10th St.



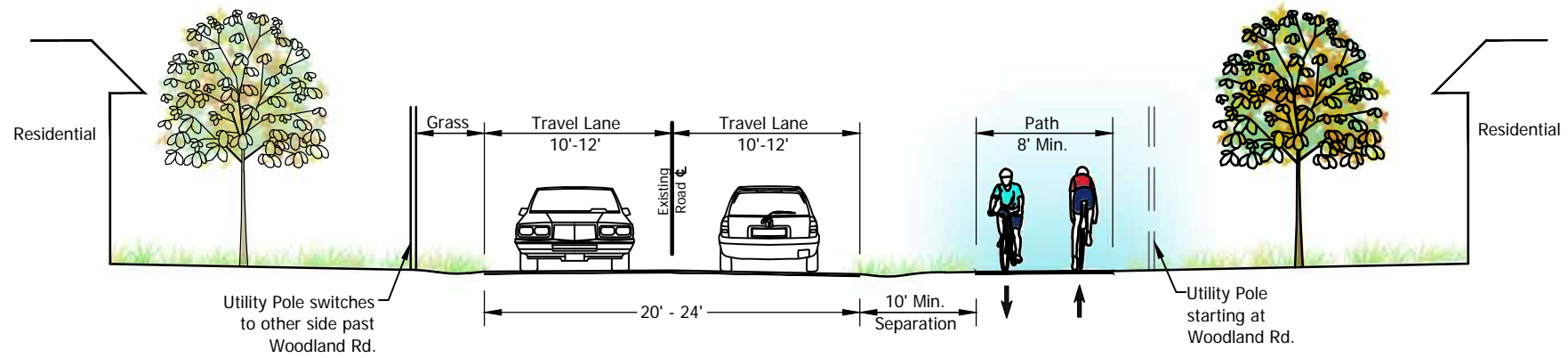
EWING LANE 1-2

Scale: 1"=10'
Ewing Lane from Utica Pike to Bridgepoint Elementary



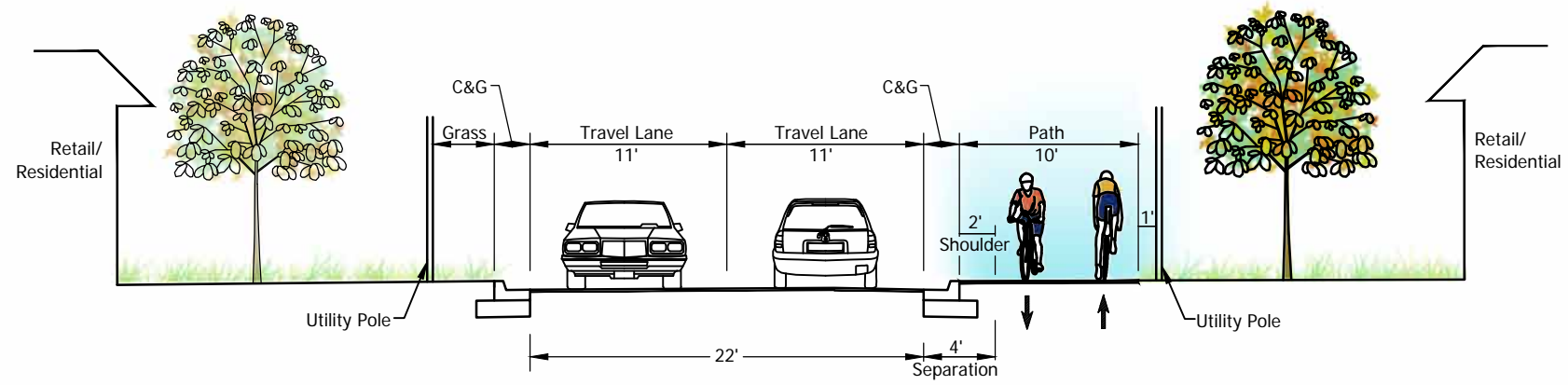
EWING LANE 3-8

Scale: 1"=10'
Ewing Lane from Bridgepoint Elementary to 8th St.
Walpole Ave. from Ewing Ln. to James Dr.
James Dr. from Walpole Ave. to Winburn Dr.
Winburn Dr. from James Dr. to Mockingbird Dr.
Mockingbird Dr. from Winburn Dr. to Cheryl Dr.
Cheryl Dr. from Mockinbird Dr. to Huston Dr.
Huston Dr. from Cheryl Dr. to Rudie Dr.
Rudie Dr. from Huston Dr. to Perrin Ln.



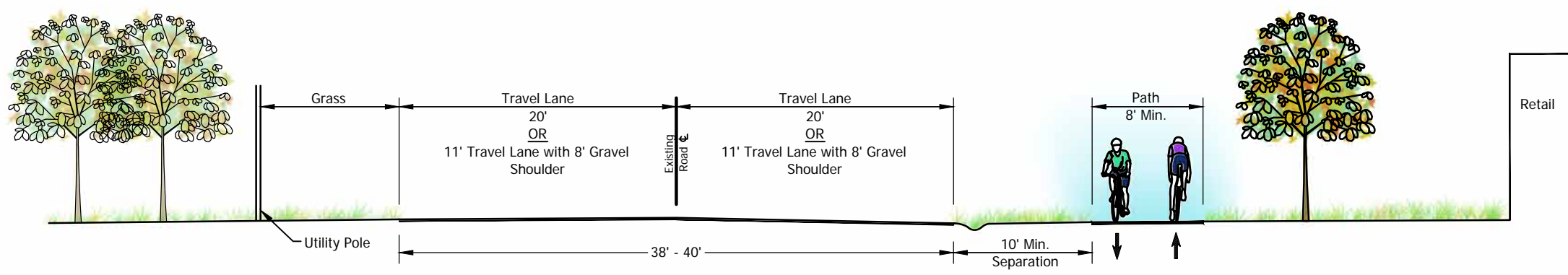
ALLISON LN 1-3

Scale: 1"=10'
Allison Ln. from Utika Pike to Doe Run Rd.



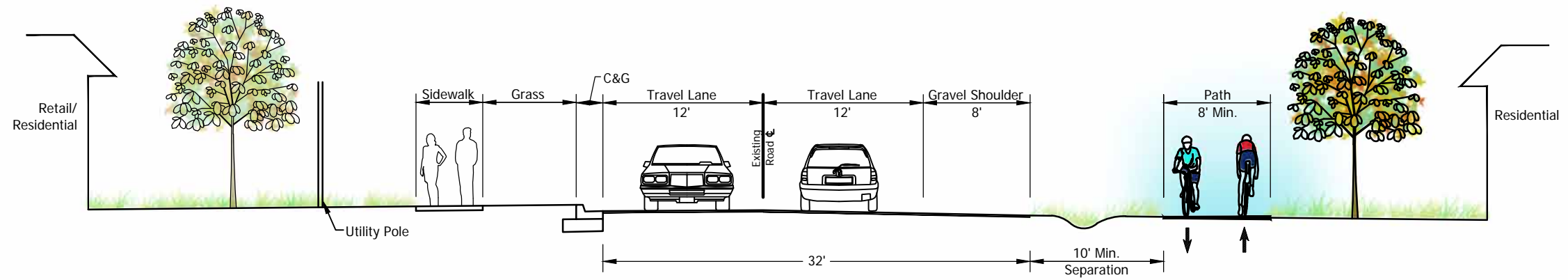
ALLISON LN 4

Scale: 1"=10'
Allison Ln. from Doe Run Rd. to Middle Rd.



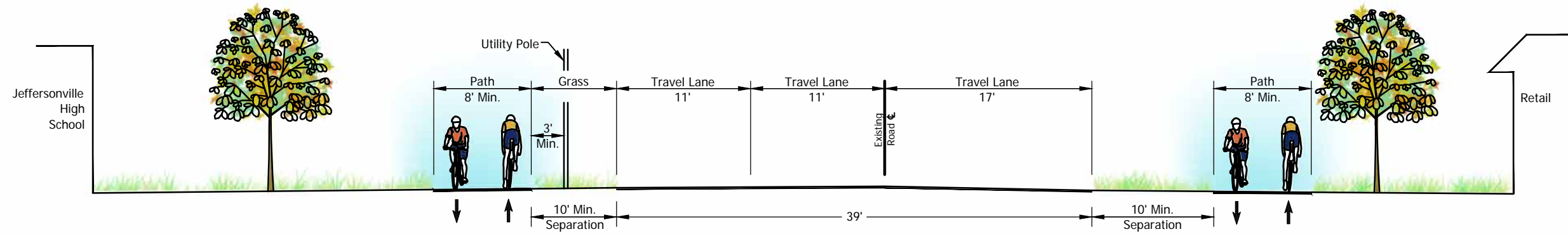
ALLISON LN 5

Scale: 1"=10'
Allison Ln. from Middle Rd. to Faith Lutheran Church



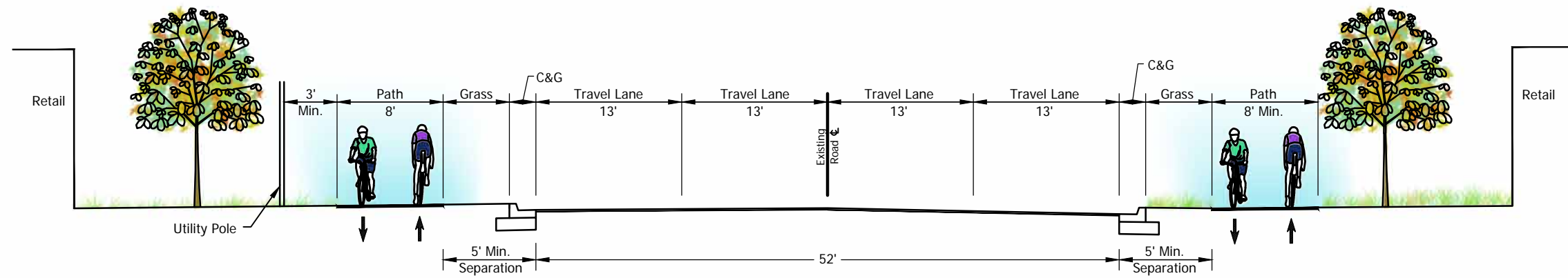
ALLISON LN 6

Scale: 1"=10'
Allison Ln. from Faith Lutheran Church to Seminole Dr.



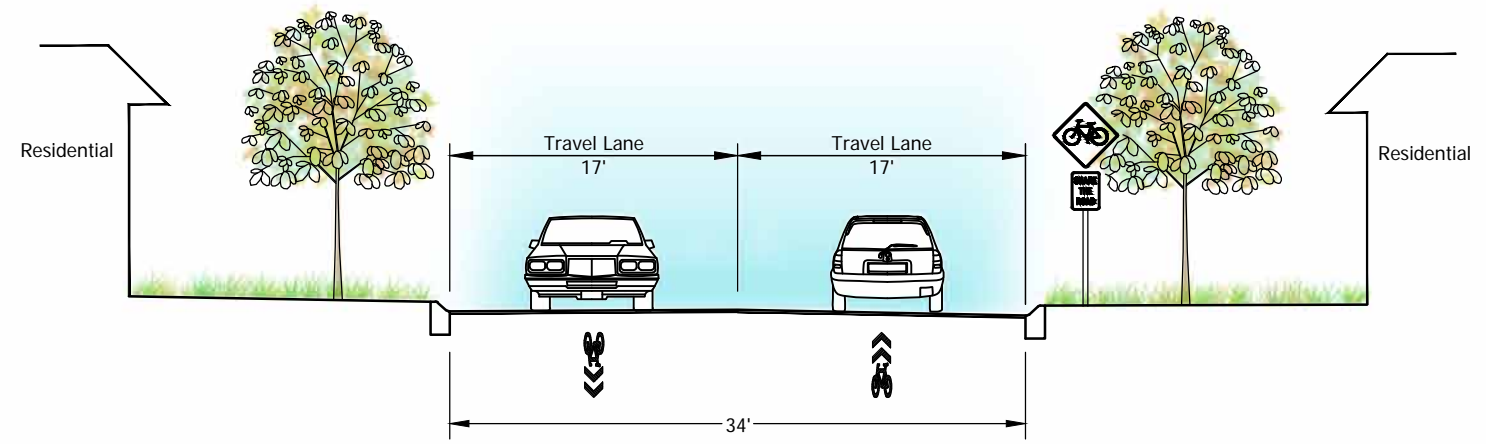
ALLISON LN 7

Scale: 1"=10'
Allison Ln. from Seminole Dr. to Wooded Way



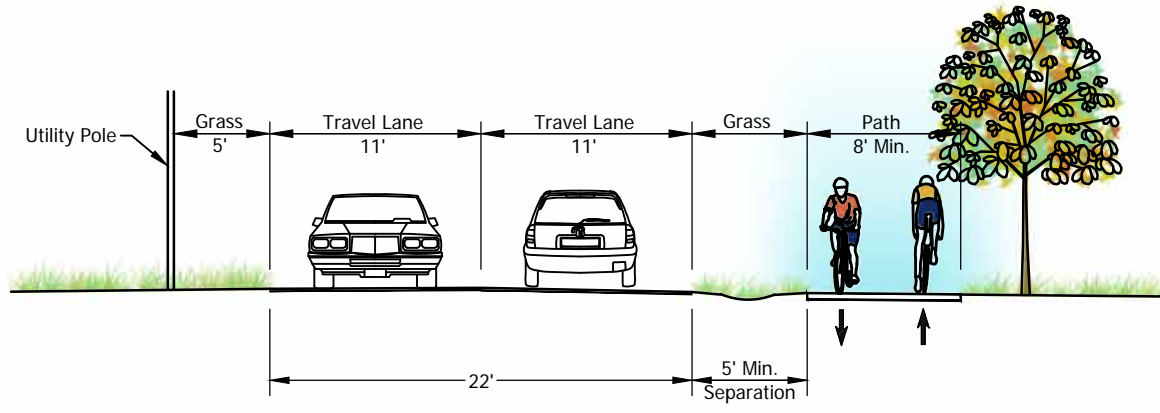
ALLISON LN 8

Scale: 1"=10'
Allison Ln. from Wooded Way to 10th St.



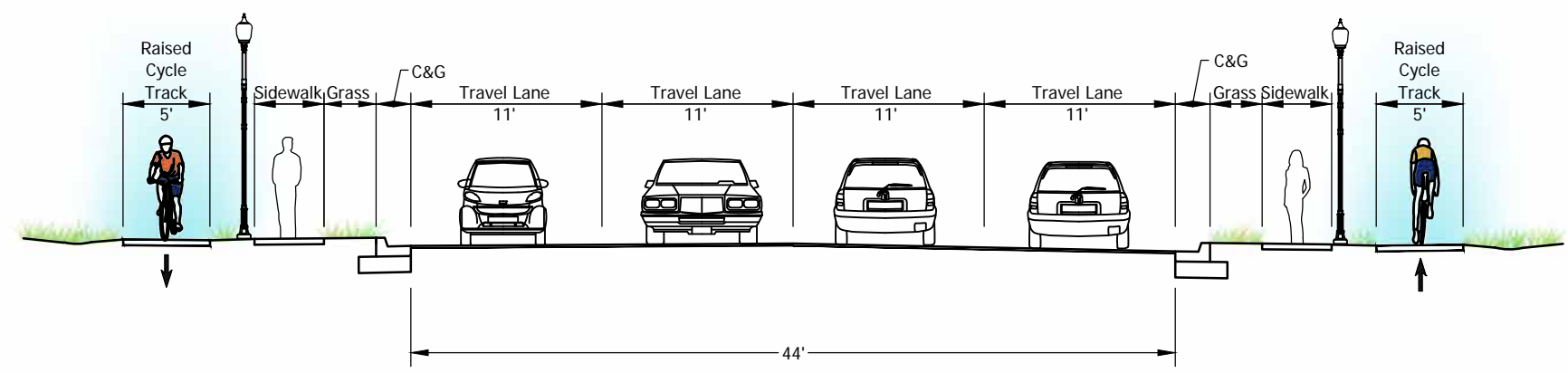
TALL OAKS DRIVE 1

Scale: 1"=10'
Tall Oaks Drive from Nole Drive to Charlestown Pike



CHARLESTOWN PIKE 1

Scale: 1"=10'
Charlestown Pike from Tall Oaks Drive to Woehrle Road



VETERANS PARKWAY 1

Scale: 1"=10'
Veterans Parkway from Woehrle Road to Hamburg Pike



FINAL PLAN



TOTAL MILES OF BICYCLE FACILITIES

**BICYCLE NETWORK
Summary**

Spring Street Length

Spring St. from Riverside Dr. to 7th St.	0.48 Miles
Spring St. from 7th St. to Riddle St.	0.95 Miles
Spring St. from Riddle St. to Eastern Blvd.	0.11 Miles
Spring St. from Eastern Blvd. to Magnolia Ave.	0.19 Miles
Spring St. from Magnolia Ave. to Dutch Ln.	0.27 Miles
	2 Miles

Hamburg Pike Length

Hamburg Pike from Dutch Ln. to Charlestown New Albany Rd.	2.03 Miles
Hamburg Pike from Charlestown New Albany Rd. to 935' north of Charlestown New Albany Rd	0.18 Miles
Hamburg Pike from 935' north of Charlestown New Albany Rd. to Kingsfield St.	0.42 Miles
Hamburg Pike from Kingsfield St. to Cornwell Dr.	0.21 Miles
Hamburg Pike from Cornwell Dr. to Bishop Rd.	0.05 Miles
Hamburg Pike from Bishop Rd. to YMCA	0.16 Miles
Hamburg Pike from YMCA to Coopers Ln.	0.38 Miles
	3.43 Miles

Market Street / Utica Pike Length

Market St. from Spring St. to Chippewa Dr.	1.8 Miles
Utica Pike from Chippewa Dr. to Perrin Ln.	0.37 Miles
Utica Pike from Perrin Ln. to Turnberry Dr.	0.14 Miles
Utica Pike from Turnberry Dr. to 475' north of Turnberry Dr.	0.08 Miles
Utica Pike from 475' north of Turnberry Dr. to Allison Ln.	0.61 Miles
Utica Pike from Allison Ln. to Church St. (in Utica)	3.03 Miles
	6.03 Miles

8th Street / Middle Road Length

8th St. from Spring St. to Wall St.	0.08 Miles
8th St. from Wall St. to Walnut St.	0.16 Miles
8th St. from Walnut St. to Watt St.	0.08 Miles
8th St. from Watt St. to Meigs Ave.	0.08 Miles
8th St. from Meigs Ave. to Penn St.	0.25 Miles
8th St. from Penn St. to Graham St.	0.15 Miles
8th St. from Graham St. to Main St. (at cemetery)	0.27 Miles
8th St. from Main St. to Crestview Ct.	0.2 Miles
8th St. from Crestview Ct. to Brighton Ave.	0.14 Miles
8th St. from Brighton Ave. to Railroad	0.12 Miles
8th St. from Railroad to Springdale Dr.	0.26 Miles
8th St. from Springdale Dr. to Perrin Ln.	0.69 Miles
Middle Rd. from Perrin Ln. to Allison Ln.	1.8 Miles
Middle Rd. from Allison Ln. to Presidential Pl.	0.53 Miles
Middle Rd. from Presidential Pl. to Port Rd.	0.91 Miles
Middle Rd. from Port Rd. to Utica Sellersburg Rd.	0.81 Miles
	6.53 Miles

10th Street Length

10th St. from Spring St. to Reeds Ln.	2.05 Miles
10th St. from Reeds Ln. to Allison Ln.	1.63 Miles
10th St. from Allison Ln. to River City Park Rd.	0.45 Miles
River City Park Rd./Vissing Park Rd. from 10th St. to Richard Vissing Park	0.52 Miles
	4.65 Miles

Chestnut Street Length

Chestnut St. from Pearl St. to Ewing Ln.	2.21 Miles
	2.21 Miles

Port Road Length

Port Rd. from Utica Pike to On Ramp	2.37 Miles
Port Rd. 1-Lane On Ramp through 2-Lane On Ramp/Exit Ramp	0.48 Miles
	2.85 Miles

**BICYCLE NETWORK
Summary**

Meigs Avenue Length

Meigs Ave. from Market St. to 10th St. *0.7 Miles*
0.7 Miles

Ewing Lane Length

Ewing Lane from Utica Pike to Bridgepoint Elementary *0.24 Miles*
Ewing Lane from Bridgepoint Elementary to Perrin Ln. *0.92 Miles*
1.16 Miles

Allison Lane Length

Allison Ln. from Utika Pike to Doe Run Rd. *1.12 Miles*
Allison Ln. from Doe Run Rd. to Middle Rd. *0.23 Miles*
Allison Ln. from Middle Rd. to Faith Lutheran Church *0.32 Miles*
Allison Ln. from Faith Lutheran Church to Seminole Dr. *0.18 Miles*
Allison Ln. from Seminole Dr. to Wooded Way *0.12 Miles*
Allison Ln. from Wooded Way to 10th St. *0.3 Miles*
2.27 Miles

Tall Oaks Drive Length

Tall Oaks Dr. from Nole Dr. to Charlestown Pike *0.40 Miles*
0.4 Miles

Charlestown Pike Length

Charlestown Pike from Tall Oaks Dr. to Woehrle Rd. *0.26 Miles*
0.26 Miles

Veterans Parkway Length

Veterans Parkway from Woehrle Rd. to Hamburg Pike *0.76 Miles*
0.76 Miles

Perrin Lane Shared-Use Path Length

Utica Pike to the Aquatic Center *1.00 Miles*
Aquatic Center to 10th Street *1.00 Miles*
2.00 Miles

Riverside Drive Length

Utica Pike to the Aquatic Center *0.93 Miles*
0.93 Miles

TOTAL MILES

36.18 Miles



FINAL PLAN



PEDESTRIAN PLAN



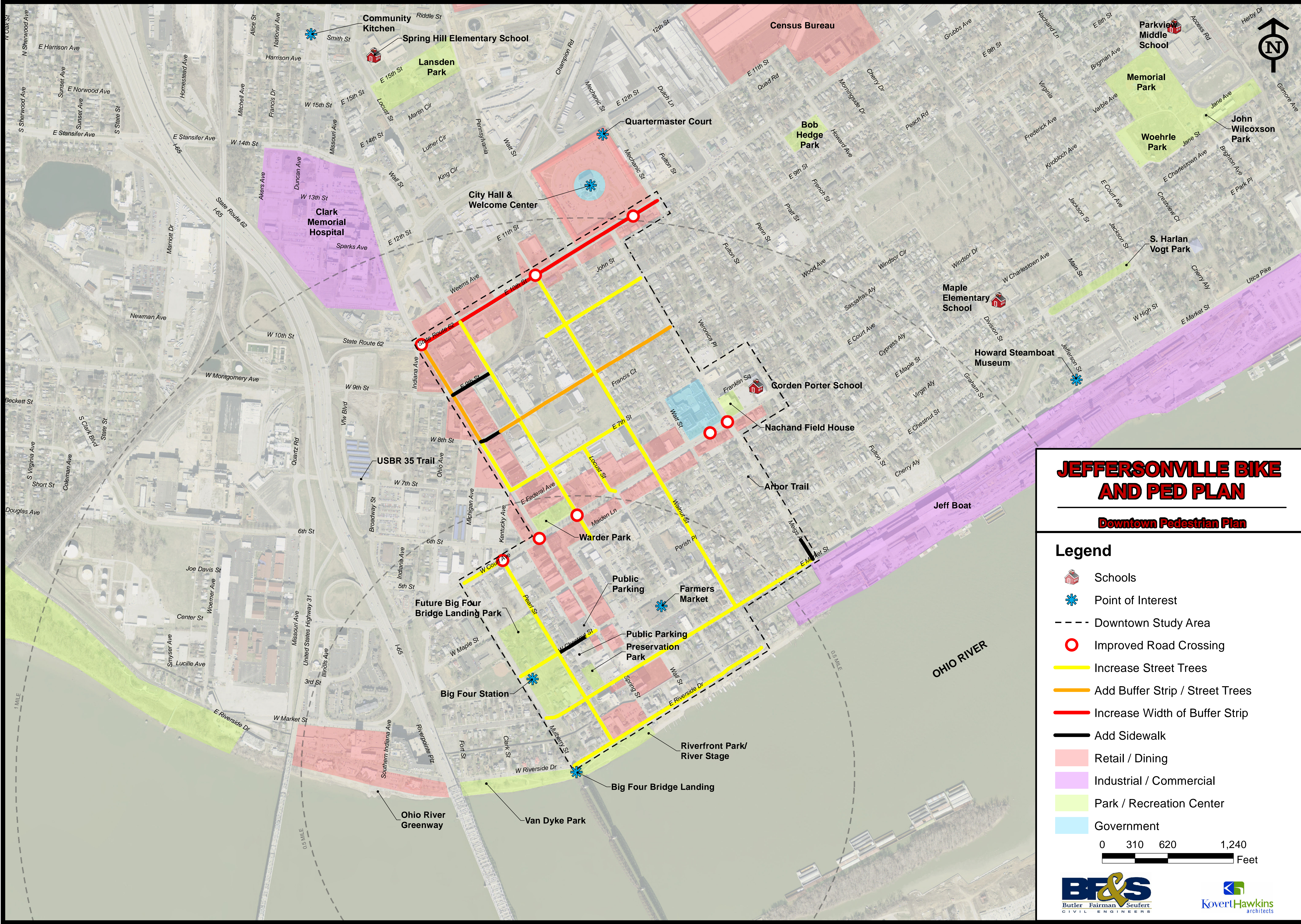
PEDESTRIAN PLAN

After careful analysis of the downtown area it was discovered that most of the existing sidewalks graded at a high level of pedestrian service and that only few small sections of roadway were missing sidewalk.

It was noted that several of the routes could use a planter strip to further separate the walker from the vehicular roadway and a program should be created to replace street trees or add new ones along some of the routes. Spacing street trees regularly between the sidewalk and the vehicular roadway will not only give users a feeling of safety, but will also help to keep the routes cooler and give them better aesthetic appeal.

Several intersections were observed as having crossings that exceed 30 feet in length. Additionally, the intersection of 10th Street and Spring Street was expressed as being dangerous for pedestrians at a public input meeting. Most of these intersections have been proposed for upgraded crossing treatments to shorten the distance that pedestrians must traverse and to beautify the intersection. A few of the crossings along 10th street will require either additional signalization or changing the configuration of the existing signalization. Due to the lack of additional right-of-way to create a refuge island the crossing of 10th Street and Spring Street should have the phasing of the signal analyzed to give pedestrians a longer crossing duration and to make sure that vehicles are not turning while pedestrians are crossing. The crossing of 10th Street and Walnut Street needs to have a pedestrian crossing added along with a refuge island and a Hawk Signal. The crossing of 10th Street and Quartermaster Court needs to have the ADA remap on the south side of 10th Street improved so that users don't need to leave the crosswalk to reach the sidewalk thru a drive entrance. The cross walk should also have "piano keys" installed in an effort to improve visibility.

See the standards section for further recommendations regarding pedestrian facility guidelines that should be followed.

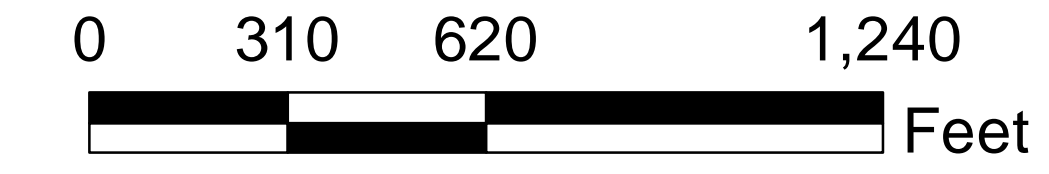


JEFFERSONVILLE BIKE AND PED PLAN

Downtown Pedestrian Plan

Legend

- Schools
- Point of Interest
- Downtown Study Area
- Improved Road Crossing
- Increase Street Trees
- Add Buffer Strip / Street Trees
- Increase Width of Buffer Strip
- Add Sidewalk
- Retail / Dining
- Industrial / Commercial
- Park / Recreation Center
- Government





FINAL PLAN



STANDARDS

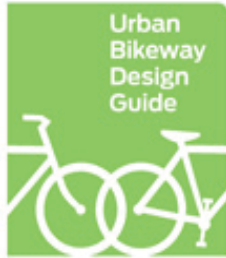
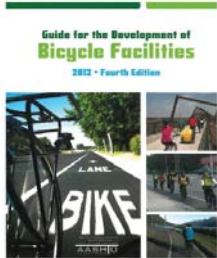


STANDARDS



BIKE FACILITY TYPES AND STANDARDS

See the Types of Bicycle Facilities section for those that are recommended as part of this plan. As all long term plans are meant to be adaptable to new information, this one should be reviewed at regular intervals to see if any standards have changed. At the time this document was created there were several guidelines that apply: 1) The 2012 American Association of State Highway and Transportation Officials Guide for the Development of Bicycle Facilities and 2) The National Association of City Transportation Officials Urban Bikeway Design Guide. It is recommended that these guidelines as well as the standards outlined below be followed unless new standards or information become available.



BIKE LANE WIDTH

Both NACTO and AASHTO recommend that the minimum width of a bike lane shall be 4' where there is a clear graded shoulder for recovery. The consultant team would further recommend that the clear graded shoulder be at least 5 feet wide before any drop off greater than 2 feet and that the closest vertical object be at least 2 feet from the edge of the bike lane. A bike lane shall have a minimum width of 4.5' next to a straight curb and only for short distances. The standard width of bike lane should be 5' or wider where there is a curb present and there is no on street parking. Where on street parking is adjacent to the bike lane, then the width of the lane shall be 6' minimum to allow for cars to open there doors into the bike lane without conflict. If possible, where parking is adjacent to the bike lane, then a 7' lane should be installed. Bike lanes shall be delineated from vehicular lanes by a solid white 6" stripe and between adjacent parking by a 4" solid white stripe.



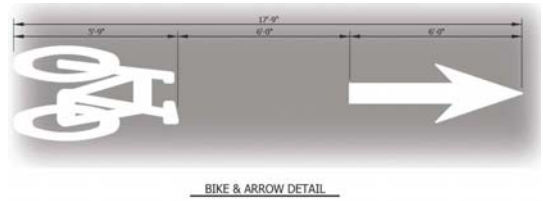


STANDARDS

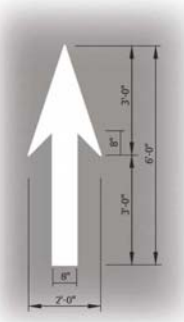


BIKE LANE MARKING AND SIGNAGE

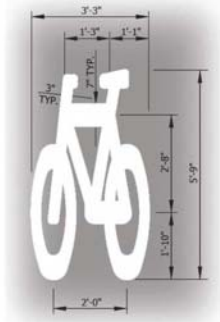
Bike lane markings shall consist of a bicycle symbol and an arrow placed together in the center of the lane. MUTCD sign R3-17 will also be used in conjunction with these markings. The bicycle symbol shall be placed so that it is the first symbol to be seen followed by the arrow. Bike lane markings and signage shall be placed at the start of each bike lane, after an intersection, after a bike path crossing, and after a major approach. Bike lane markings should be placed no more than a 1/2 mile apart in rural sections and no more than 500 feet in urban sections. Signs can be placed further apart in between intersections and can be placed every other occurrence of placing the bike lane markings. See illustrations to the left for more information on standard sizes. Signs should also be placed warning users of a bike lane ending and when the bike lane continues on the other side of an intersection with a supplemental "AHEAD" plaque. Bike lanes are appropriate on roadway with speeds under 45 mph.



BIKE & ARROW DETAIL



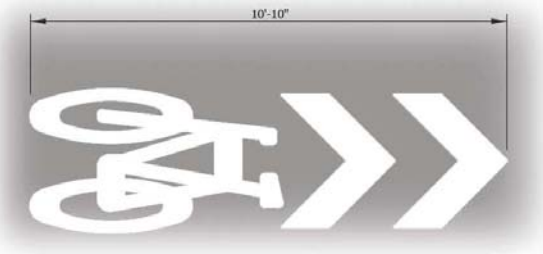
BIKE LANE ARROW



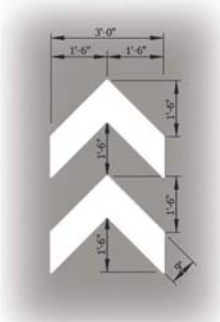
BIKE LANE SYMBOL

SHARED ROADWAY MARKING AND SIGNAGE

Markings shall consist of a bicycle symbol and chevrons placed together to create a "Sharrow". Sharrows shall be placed in the center of the lane to indicate where the bicyclist should ride. MUTCD signs W11-1 (Bike Symbol) with W16-1P (Share the Road) will also be used in conjunction with these markings. The bicycle symbol shall be placed so that it is the first symbol to be seen followed by the chevrons. Bike lane markings and signage shall be placed at the start of each shared roadway, after an intersection, after a bike path crossing, and after a major approach. Markings should be placed no more than 250 feet apart on low volume roads and no more than 100 feet apart in urban sections. Signs can be placed further apart in between intersections and can be placed every other occurrence of placing the bike lane markings. See illustrations to the left for more information on standard sizes. Signs should also be placed warning users of the shared roadway ending.



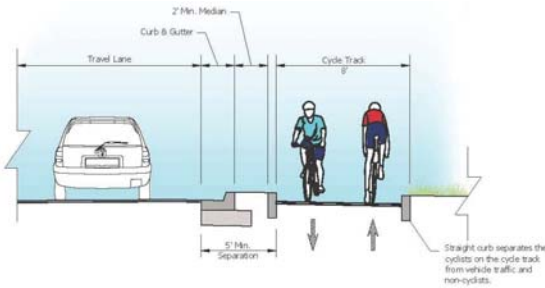
BIKE LANE SYMBOL



BIKE LANE CHEVRONS



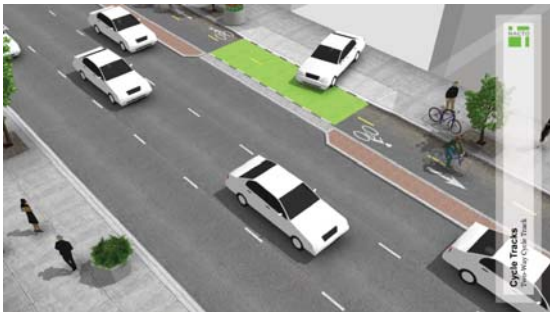
CYCLE TRACK MARKING AND SIGNAGE



The Cycle Tracks is a cross between a separated path and a conventional bike lane in that it is buffered from motor traffic, but is still a part of the roadway. There are two types of Cycle Tracks, a one-way cycle track and a two-way cycle track. Cycle tracks work best in locations where there are not too many roadway intersection crossings. A cycle track in constrained areas shall have minimum separation of 3 feet from the travel-way and be separated by delineator bollards. It is recommended that each cycle track be separated by separated from the travel-way by 5 feet and use a raised median for protections of the cyclist.

The two-way cycle track shall have a minimum width of 8 feet in constrained areas and it is recommended that the desired width should be 10 feet or wider to accommodate the volume of cyclists. A one-way cycle track has a lane on each side of the roadway riding with traffic. The minimum width for one lane of bicycle traffic is 5 feet.

Dive crossings should be kept to a minimum and marked with conflict zone markings at each crossing.





STANDARDS

CONFLICT ZONE MARKINGS

Vehicular crossings of bicycle facilities can happen at intersections and at private drives or entrances. Care must be taken by both bike and vehicles to watch out for one another in these transition zones. Marking these crossings to bring attention to these conflict areas can be helpful. Several options are available for marking these area:

1. An epoxy-modified, acrylic, waterborne coating has been successfully used for bike lanes in other large cities. There are several colors available and selection should be based upon the color choice that provides the most contrast and matches with the amenities/ color scheme selected along that particular trail.
2. Cabot Deck Stain is another option that might be considered on a trial basis. This coating has been used by the City of Portland, Oregon, to color neighborhood road intersections with less than 2,500 VPD. Go to www.cityrepair.org for more information.



Example of Epoxy Bike Coating on Asphalt

BICYCLE FRIENDLY CASTINGS

Bicycle friendly castings for drainage inlets are necessary where bicycle facilities are present. It is important to make sure that a bicycle tire will not fit into the grate opening and cause a bicycle user to be thrown from the bike causing injury.

The gap between the drainage grate and its frame should be 1 inch or less. Several casting types are available. The most versatile is the octagon style.



SAG STATIONS

BICYCLE SUPPORT AND GEAR STATIONS

It is not only important to provide safe on road facilities for bikers, but is also important to have key destination and support facilities around the community for bicyclists. These support stations will give users a place to rest, securely lock up their bikes, and do some minor repairs if needed. Below are the suggested locations and the amenities that should be considered in each location.

1. DUFFY'S LANDING

- Bike repair stand
- Directory sign
- Bike pump bollard
- Bike racks
- Educational signage
- Shelter
- Restrooms
- Drinking fountain
- Benches / trash receptacles

2. PERRIN PARK

- Directory sign
- Bike racks

3. EWING LANE PARK

- Directory sign
- Shelter
- Drinking fountain
- Bike racks
- Benches / trash receptacles

4. AQUATIC CENTER

- Directory sign
- Bike repair stand
- Bike pump bollard
- Bike racks

5. ALLISON BROOKE PARK

- Directory sign
- Bike racks
- Drinking fountain
- Shelter bench

6. RICHARD VISSING PARK

- Bike repair stand
- Directory sign
- Bike pump bollard
- Educational signage
- Bike racks

7. BIG FOUR STATION

- Bike repair stand
- Directory sign
- Bike pump bollard
- Educational signage
- Shelter
- Restrooms
- Drinking fountain
- Bike racks
- Benches/trash receptacles

8. CITY HALL

- Bicycle repair stand
- Bicycle pump bollard
- Directory sign
- Bike racks

9. SHIRLEY HALL PARK

- Bike repair stand
- Directory sign
- Bike pump bollard
- Educational signage
- Shelter
- Restrooms
- Drinking fountain
- Bike racks
- Benches / trash receptacles

10. YMCA

- Bike repair stand
- Directory sign
- Bike pump bollard
- Educational signage
- Shelter
- Bike racks
- Benches /trash receptacles



STANDARDS



BICYCLE FACILITY AMENITIES:

BICYCLE PARKING

Bicycle Parking should follow the Association of Pedestrian and Bicycle Professionals (APBP) Bicycle Parking Guidelines 2nd Edition. At the bare minimum bicycle parking should offer a rack that supports the bicycle in at least two spaces, allows locking the frame and at least one wheel with a “U-Lock”, resists rusting, resists cutting, resists bending, and is securely anchored to the ground. An example of a rack meeting this criteria would be a “U-rack”. The rack should be coated with powder coating or thermoplastic to reduce maintenance. Racks that only support the bike by the front wheel shall not be used.

Further considerations should be made for bicycle parking that is intended to be for longer than 2 hours. Examples are areas where a considerable number of people who use the parking for commuting. Bicycle parking that is intended for longer than 2 hours should provide shelter or enclosure, be as close as possible to building fronts and in a secure location with active surveillance. It might even be wise to consider bicycle lockers or a supervised area.

Bike racks should be spaced a minimum of 36” apart from one another when placed side by side and a minimum of 24” from the nearest obstruction. Design should take into account that a bike is a minimum of 6 feet long.





STANDARDS



BICYCLE REPAIR STAND



Most experienced riders will carry some repair tools with them, however casual riders may be less likely to have them. A repair stand with tools will come in handy if placed around the community in convenient locations and or at locations where organized bicycle rides are likely to start from. The stand conveniently holds the bike by the seat and at a height easier for working on the bike. There are different configurations, but tools for minor repairs are secured to the stand by stainless steel aircraft cable. Tools that should be provided are allen wrenches, tire levers, screwdrivers, and a crescent wrench. The finish should be powder coated to match surrounding amenities.



BICYCLE PUMP BOLLARD

Many experienced riders will carry small bicycle pumps or air canisters for emergency repairs, but a good bike pump always comes in handy. A secure urban bike pump in the shape of a bollard can provide cyclist with air while still being vandal resistant and aesthetically pleasing. The pump is securely attached to a concrete surface and the pump design is sturdy enough to handle urban conditions. The hose should be made of cut resistant material.



STANDARDS



TRAIL TYPE

It is recommended that each trail be a universally accessible multi-use path. The American Association of State Highway and Transportation Officials' (AASHTO) 'Guide for the Development of Bicycle Facilities (2012) and Chapter 51 of the Indiana Department of Transportation (INDOT) Design Manual defines a multi-use path as an off-road, two-way facility designed for use by bicyclists, in-line skaters, wheelchair users, and pedestrians on exclusive right-of-way with minimal cross flow by motor vehicles. This means that the trails will have to be wide enough to accommodate two way travel for each type of use. In order to allow accessibility to each use, the trail surface must be adequate and slopes must follow guidelines developed by the US Access Board or regulations from the US Department of Justice. At the time this document was created there were several guidelines that apply: 1) Guidelines for Shared Use Paths; 2) Guidelines for Outdoor Developed Areas; and 3) Guidelines for Pedestrian Facilities in the Public Right-of-Ways. Although INDOT and AASHTO may not be required for all trails, it is recommended that these guidelines be followed on all trail applications.

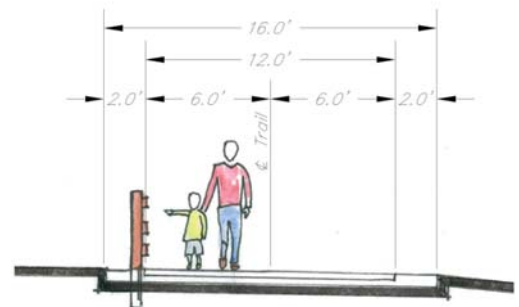


Multi-use Trail
Clear Creek Trail, Bloomington, IN

TRAIL WIDTH

AASHTO recommends a minimum width of 10 feet for shared used-paths, with 2-foot wide graded shoulders on either side of the trail. However, when a higher number of users are anticipated, at least a 12-foot wide trail with shoulders should be employed. This allows for two 6-foot wide lanes that will accommodate several different types of users.

Therefore, the design team recommends using a 10-foot wide trail (minimum) with 2-foot grass shoulders wherever possible. Only where absolutely necessary should an 8-foot trail with shoulders be implemented. This instance should only happen when the trail is considered a side path (a path that will have minimal traffic and isn't a through path) and/or when it is not feasible to fit a larger width of trail due to right-of-way or other limitations.





TRAIL SLOPE

It is important that the trail cross slope provide positive drainage, but not create a non-traversable slope for trail users or those in wheel chairs. For this reason all cross slopes shall be 2%. Trail shoulders create recovery areas for bicycle users and should not have cross slopes greater than 4%.



Side slopes beyond the shoulders should not be greater than 4:1. Steeper slopes are non-mowable and therefore create maintenance issues. Additionally, slopes steeper than 3:1 within 5 feet of the trail's edge must be protected.

Longitudinal trail slope should be no greater than 5% in most circumstances. The INDOT Design Manual gives more guidance on when it is permissible to exceed this guideline and appropriate mitigation techniques.

TRAIL SURFACE

The primary concern with trail surfacing is accommodating a variety of trail users and providing accessibility. While crushed stone is less expensive to construct and is more forgiving for runners and walkers, it does not accommodate all trail users. It is non-traversable for in-line skaters and can be difficult for people in wheel chairs because not all stone trails meet the definition of firm and stable. Asphalt, on the other hand, can accommodate all types of users, and even though initial construction costs are higher, it lasts longer and requires less annual maintenance.



Multi-use Trail
Lafayette, IN

In order to preserve the asphalt, consideration should be given to using an oil sealant right after construction. One popular product is a bio based / soy bean product called RePlay. Regular treatment will help to keep the asphalt from becoming dry and rigid which can lead to failure and cracking. See the Trail Maintenance Section for further recommendation.



DNR PERMITTING PROCESS

Any proposed trail or bridge structure within the floodway of a river, stream or creek, that has a drainage area larger than one square mile requires an Indiana Department of Natural Resources (IDNR) Construction in a Floodway Permit. A trail section and multiple bridges constructed in a single phase can be constructed under one permit provided they all occur within the same tributary. Each additional phase will require a separate permit even if construction occurs along the same tributary.

Construction in a Floodway Permit typically takes 5-6 months to obtain and requires a \$200 permit fee. Hydraulic modeling may be required to identify the impacts on the floodway. Boardwalk sections would also be covered under the permitting process. IDNR would consider the foundation spacing, the amount of fill required and the overall impacts to the floodway in analyzing the permit application.

OTHER PERMITS

There are several other permits that may be required in order to construct a trail. However, until actual construction documents are created it is hard to say which routes will require which permits. Below is a list of some of the more common permits that can be required.

1. Rule 5 – Required for any land disturbance over 1 acre.
2. US Army Corps of Engineers 404 Permi
 - a. Nationwide - Any disturbance of a stream or navigable waterway below ordinary high water and less than 350 lineal feet in length. Typically for very small disturbances.
 - b. Regional General - Any disturbance of a stream or navigable waterway below ordinary high water and less than 350 lineal feet in length.
 - c. Individual – Any disturbance of a stream or navigable waterway below ordinary high water and over 1000 lineal feet in length.
3. IDEM Section 401 – Required any time an Army Corps 404 permit is required.

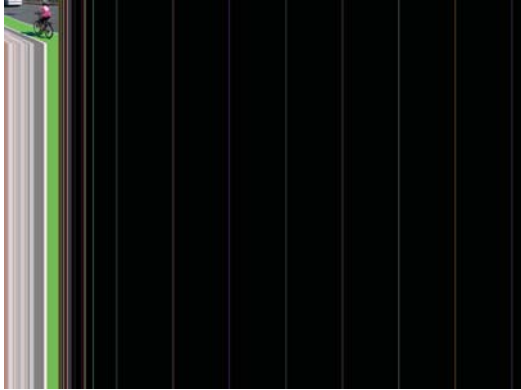


STANDARDS



TRAIL SUPPORT FACILITIES:

Providing accessibility to all users at key locations throughout the city is important to the success of each trail. Along with accessibility, users require that the trail have certain facilities to meet the needs of its use. These support facilities can be broken down into four categories: major trailheads, shared use trail heads, minor trail heads, and community access points. In addition to these public facilities, partnerships should be developed between the city and local businesses to provide secure bicycle parking and other trail support facilities as a part of their building or property. This will not only enhance their business but it will also enhance the opportunities given to the trail users.



Major Trailhead Example - Erie Lackawanna Trail
Griffith, Indiana



Major Trailhead Example - C&O Trail
Merrillville, Indiana

Major Trailheads:

Major trailheads provide the greatest amount of amenities to trail users and are recognizable points of access. They are like mini-parks alongside the trail that may include parking areas, shelters, restrooms, drinking fountains, benches, trash receptacles, picnic tables, bicycle racks, trail signage, trail access, and landscaping.

Due to the scope and type of facilities normally required for a major trailhead, it is difficult to locate them within the narrow constraints of a trail corridor. Typically it is necessary to find parcels of land adjacent to the corridor for development. These can be city-owned, such as parks or street right-of-way, or privately-owned properties that are created and operated with the owner's cooperation. These usually require the development of all new amenities for trail users' needs.



Major Trailhead Example - C&O Trail
Merrillville, Indiana



STANDARDS



Shared Use Trailheads:

Shared use trailheads are similar to major trailheads except they share amenities with other existing or potential uses. They are usually city owned and in many cases need only to have their amenities slightly upgraded in order to meet trail users' needs. These trailheads may or may not have existing shelters. This trailhead should be easily accessible from the trail, including amenities such as trash receptacles, bicycle racks, and benches.



Shared Use Trailhead Example - Twigg Rest Park
Terre Haute, Indiana

Minor Trailheads:

Minor trailheads are similar to major trailheads in that they provide amenities to serve trail users, but on a smaller scale. They usually occur more frequently and can be situated within the trail right-of-way. Minor trailheads are located between major trailheads and at certain trail intersections. Minor trailheads may provide benches, trash receptacles, bicycle racks, landscaping and signage, but usually will not provide parking.



Shared Use Trailhead Example - Friendship Gardens
Plainfield, Indiana

Community Access Points:

The last type of trail support facility is the Community Access Point, which provides a minimal amount of amenities (perhaps a trail directory sign or wayfinding sign and a connector path). It is the most frequently occurring type of support facility and provides citizens of adjacent neighborhoods access to the trail. Community Access Points simply provide an informal and direct access between community and trail much like the driveway connects to the street.



Minor Trailhead Example - Clear Creek Trail
Bloomington, Indiana

They are important in fostering a community's adoption of the trail and getting trail users to respect the rights of private property owners by establishing designated points of access.

Locations of community access points should be determined in consultation with adjacent landowners and through the selection of logical places to enter the right-of-way from surrounding communities.



Minor Trailhead Example - Whitelick Creek Trail
Plainfield, Indiana



STANDARDS



BRIDGE DESIGN STANDARDS

All bridges will be designed for bicycle and pedestrian traffic. Due to maintenance and emergency needs the bridges will occasionally need to be used by light vehicular traffic, such as passenger vehicles and light trucks. Therefore, the structural design should be based on a five-ton vehicular loading.



Example of a Standard Bridge on the Monon Trail
Indianapolis, Indiana

Typically, the width of the finished deck surface is a minimum of 12 feet. This allows for a minimum 8-foot wide path with two foot shoulders on each side. The deck should be a structural concrete slab or timber decking spanning between superstructure members on all standard bridges. Timber decks are generally appropriate for renovated historic bridges.

All bridge railing should consist of tubular metal shapes, finished in the appropriate color. Color of bridges and bridge railing shall be based upon the color designated for the trail. Railings should be parallel with the trail centerline and 42 inches in height as recommended by AASHTO. The railing should be side mounted to the concrete bridge deck or the existing structure as indicated by each bridge's configuration. Where bridges cross roadways, an enclosure or high fence should be considered to prevent objects from falling onto the roadway below.



Example of a Standard Bridge on the Monon Trail
Indianapolis, Indiana

An approach barrier railing should be included at each end of each bridge. The approach barrier railing may consist of additional metal railing, wood railing, or stonewalls.

The approach pavement at the ends of the bridges should be a continuation of the trail pavement, with some variation based on each bridge configuration. Concrete approach slabs should be utilized where new construction dictates that the approaches are located on new fill material.



Example of a Gateway Bridge on Tracy Trail
Greenwood, Indiana

Adaptive reuse of historic bridge structures should be considered wherever possible. The reuse of these structures presents opportunities for historic and cultural interpretation and provides an opportunity for a signature gateway bridge.



STANDARDS



STREET INTERSECTION DESIGN:

Each street intersection should be examined individually as each has unique characteristics. Uniformity in the use of traffic control devices is critical to encourage proper and predictable behavior by trail users. The Manual on Uniform Traffic Control Devices (MUTCD) shall be followed for size, shape, color and placement of signs on both the trail and the street. In addition, coordination with the City of Lafayette should ensure the proper design and layout of traffic control devices necessary to warn vehicular traffic on public streets of trail crossings.

Most street crossings will occur as at-grade except for a Con/ Span Structure below SR 38. Traffic will have the right-of-way and trail users, at most crossings, will have to stop.

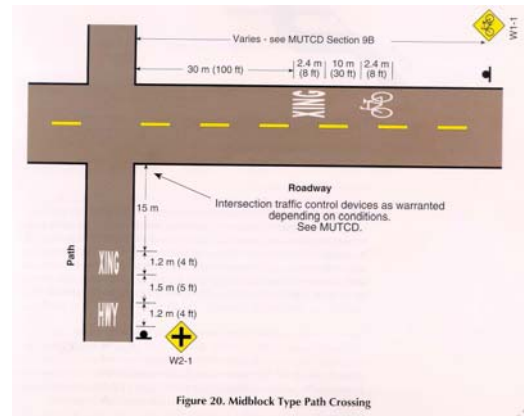
The team devised three different types of street crossing treatments to deal with the various at-grade crossings throughout Lafayette.

At-Grade Road Crossing - Level 1:

- Used on local roads with a maximum of two lanes. Speed limit should be under 40 mph.
- Warning Signs of an upcoming intersection will be placed on the roadway based upon MUTCD standards.
- No Motor Vehicles signs placed facing the street at all trail intersections
- Stop sign along the trail placed approximately 10 feet from the edge of the street.
- Crosswalk pavement markings at crossing point.
- "Trail Xing" markings on the roadway



Example of a Street Crossing on the Monon Trail Carmel, Indiana



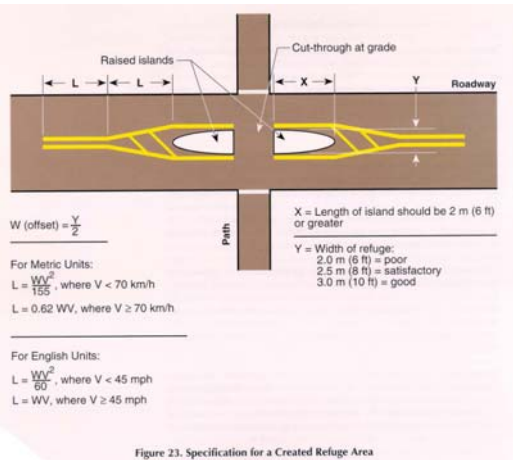
Example of an At-grade Crossing Level 1 - 'Guide for the Development of Bicycle Facilities' - AASHTO 1999



Example of an At-grade Crossing Level 2 - Monon Trail Carmel, Indiana

At-Grade Road Crossing - Level 2:

- Used on all roads with a maximum of two lanes and speed limit over 40 mph or greater.
- All treatments of a Level 1 Road Crossing apply
- In addition to Level 1, it is recommended that overhead flashers with signage be used, preferably with a motion activated warning signal. Flashers that are always on tend to be ignored or not noticed by the motorized vehicles because it isn't specific to if a trail user is in the area.



At Grade Road Crossing - Level 3:

- Used on all roads where there are more than two lanes of travel
- All treatments of a Level 2 Crossing apply
- In addition to Level 2, median refuge areas allow trail users to cross one direction of traffic at a time (additional street right-of-way may be required)
- If, and ONLY IF, a refuge island isn't feasible, speed tables are a secondary option.

Example of a Midblock Crossing Level 3 - "Guide for the Development of Bicycle Facilities" - AASHTO 1999



Example of a Speed Table



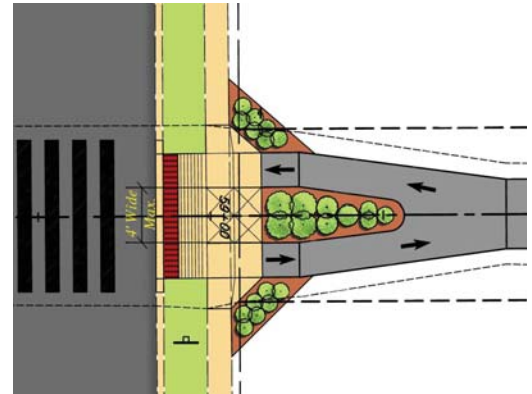
STANDARDS



Trail Entry At Public Road Crossings

A public road crossing provides an opportunity to bring identity and attention to the trail. It also should provide plenty of room for users to cross without having conflicts with other users crossing in the opposing direction. Restricting vehicular access without restricting maintenance vehicles can also be a concern. The following is a list of options to consider based upon available right-of-way.

- Option 1: Split entry with a 4' wide median. The plantings shall be no taller than 6". This will allow for easy flow of trail traffic, while allowing maintenance vehicles access. See detail at right.
- Option 2: Concrete node without a bollard or central median. This option should be used if the area appears to be too narrow or there is not enough Right-of-Way for a split entry, and the risk of motor vehicles entering the trail is low.
- Option 3: Concrete node with bollard. If the area appears to be too narrow and it is believed that public vehicles might try to access the trail in that area, a bollard should be added. The bollard should be easy to collapse or remove and only used when absolutely necessary, as the bollard itself is an obstacle for trail users to negotiate around. See the Site Furnishings section for bollard type.



Example of a Split Entry for Trail - Munger Trail Lafayette, Indiana



Example of a Concrete Node Entry without Bollards

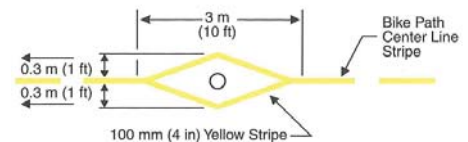


Figure 26. Barrier Post Striping

Example of a Bollard Location and Striping - 'Guide for the Development of Bicycle Facilities' - AASHTO 1999



Example of a Concrete Node Entry with Bollard



STANDARDS



RAILROAD INTERSECTION DESIGN

Due to the speed of train travel, sight distance needed to stop a train, and regulatory stipulations, it is recommended that wherever possible rail crossings occur at already existing road crossings. If an existing road crossing is not available then a bridge or tunnel may have to be utilized. Railroad crossings will follow the guidelines established in the Federal Highway Administration's 'Railroad-Highway Grade Crossing Handbook – 2nd Edition FHWA-TS-86-215', AASHTO, the MUTCD, and the requirements and specifications of the individual railroad companies.



Existing Rubber Panel, Rail Crossing - Amtrak Rail Line Michigan City, Indiana

- It is advised to abide by the following treatments as a minimum for railroad crossings:
- A rubber panel crossing will be used with an asphalt approach.
- A rail warning sign shall be placed a minimum of 115 feet from the nearest rail
- A Crossbuck sign will be placed 15 feet from the nearest rail and shall have a sign denoting number of track crossings.
- Where existing gate arms are, a new pedestrian gate shall be placed if the path must go outside the post.
- A 24" stop bar will be placed approximately 15 feet from the nearest rail.
- The trail will have a minimum 45 degree skew from the center line of the rail with 90 degrees being desirable.
- The trail pavement width will be widened from 12 feet to 14 feet.
- Railroad pavement markings will be placed adjacent to the rail warning sign.

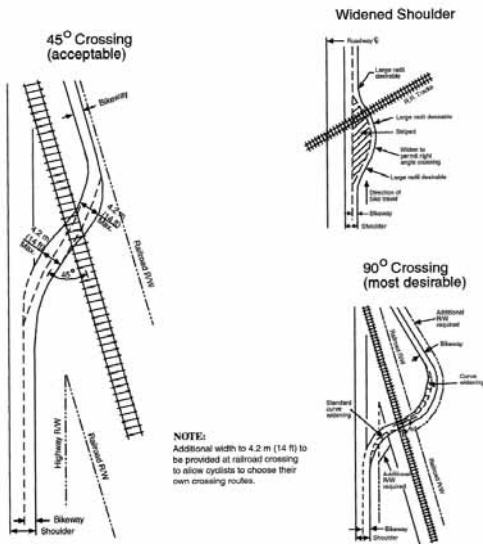
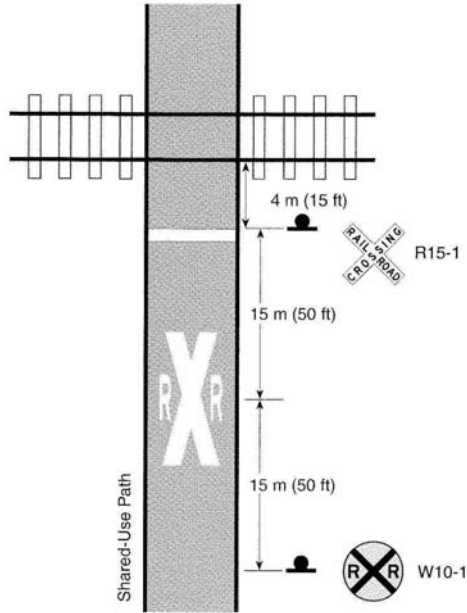


Figure 27. Railroad Crossings

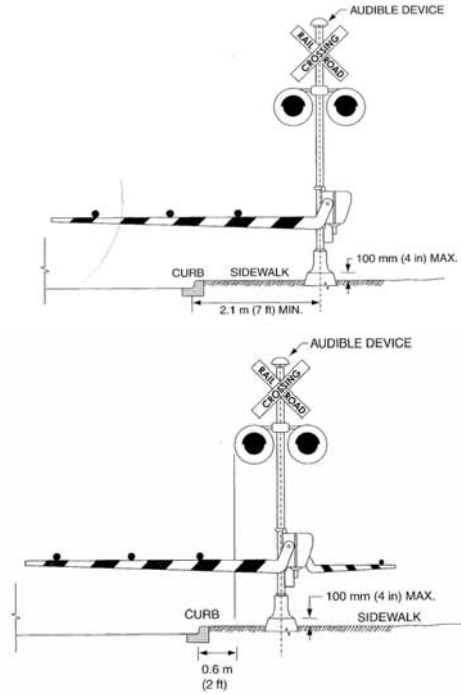
Rail Crossing Standards 'Guide for the Development of Bicycle Facilities' - AASHTO 1999



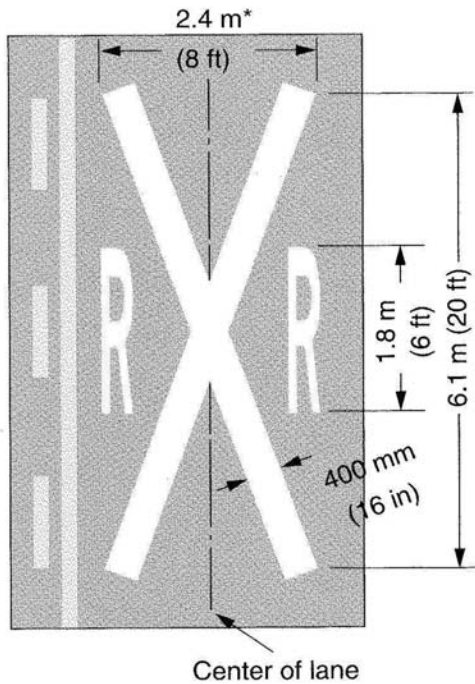
STANDARDS



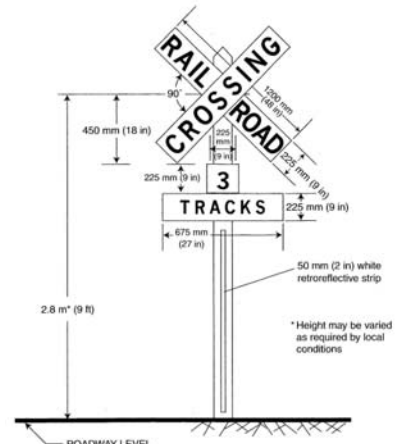
MUTCD (Figure 9B-3) Railroad Sign and Markings Locations for Shared-Use Paths



MUTCD (Figure 10D-3 and 10D-4) Typical Gate Arm Placement in Relation to Paths



MUTCD (Figure 8B-3) Pavement Markings for Rail Grade Crossings



MUTCD (Figure 8B-1) Rail Grade Crossing Crossbuck



TRAIL SIGNAGE

There are many different issues to consider in the design of signs for a trail. Signs along the trail system will need to serve a variety of purposes, including: providing traffic control along the trail, alerting users to potential hazards, identifying trail access points, providing historic information, providing educational information, indicating trail distance, and providing orientation on the trail and to surrounding communities.

Signs will need to be located so they are legible to trail users and must be constructed in methods and materials that are somewhat vandal resistant and easy to maintain.

The need for different types of signs must be balanced with the idea of creating a visually pleasing landscape in which to use the trail. The trails will feature a system of signage to clearly communicate a variety of messages in a graphically consistent manner. The signage system is divided into the following categories: Trail Traffic Signs, Trail Identity Signs, Trail Guidance and Interpretive Signs, and Mile Markers.

Trail Traffic Signs:

The trail system will be a transportation corridor and, therefore, must have recognizable transportation signs that follow MUTCD guidelines. The trail traffic signs will include regulatory and warning signs, such as: STOP, YIELD, and TRAIL NARROWS signs.

The design of the trail traffic signs should be consistent from trail to trail and will feature an aluminum sheet of alloy and temper, recommended by the aluminum producer, not less than 0.100 inch thickness. The trail traffic signs shall have a reflective sheeting material and silkscreen paint. The posts shall consist of a 6061 Alloy Aluminum, have a 3 ½ inch overall diameter and a wall thickness of 0.375 inches. These aluminum posts are required because they have less maintenance costs long term, they will not rot at the base and they cannot be easily cut, like wood. The posts shall have a powder coating based upon the color designated for the trail it is on. Signs can have graphic information on one or both sides, reducing the overall number of signs needed. Signs should be placed 3 feet from the trail's edge and be mounted at a height of 5 feet.

Additionally, any trail traffic sign which is below a power line shall be of a 4" square,

treated, wood post. Signs shall be a co-extruded HDPE sign board. These wooden posts shall only be under power lines as it will have more maintenance, a chance of rotting and can be easily cut. This has to be done under the power lines because of the electricity that can charge from the power lines to posts, if the posts are aluminum.





STANDARDS



Trail Identity Signs:

The Trail system will have numerous points of access. It is important that these points of entry be identified for the public in an appropriate and consistent manner. The trail identity sign is intended to serve two functions: identify the main entry points to the trail and establish for the public a consistent and lasting identity for the trail. By selecting a consistent treatment for each trail it will help the trail user to know which trail they are currently on. Each sign should be designed to incorporate a unique feature of each trail. The City of Lafayette Park’s logo should be incorporated into each sign and the identity sign should follow the same color scheme as the trail it is representing. The posts should be 4 inch overall diameter and made out of aluminum alloy with powder coating. The identity sign should be 9 feet to the bottom of the sign, minimum, to provide visibility and clearance. The signs should be visible by the public at trail and street intersections and at other significant access points.



Trail Guidance & Interpretive Signs:

Along the trail, there should be several different types of signs that provide the trail user with guidance information such as points of interest, trail support facilities, and orientation.

Trail guidance signs can be placed into two different categories. One type would be a directory sign which would show trail users how they can reach key destination points within the entire community. This sign would give an overall view of the entire trail system and would need to be 30"x42" in size to show enough detail. There should be a consistent layout for all these signs so they match and give a cohesive design throughout the trail system. Directory signs would typically be placed at major trailheads or key trail access points.



The second type of guidance sign is a wayfinding sign. This type of sign is a map indicating amenities that are within close proximity to your current location on the trail. These signs should be located at intersecting trails. A wayfinding sign should be at 24"x36" or smaller, but at a scale that shows much more detail than the directory signs. The image to the left shows a good example of this type of sign.





STANDARDS



Interpretive signs are another type of sign that provide educational information to trail users and enhance the trail experience. These signs help to convey the historical, cultural, or ecological significance of certain points along the trail. Examples would be the importance of protecting wetlands or water bodies, geological formations unique to the area, or a historically significant feature within the Lafayette Community.

With all these functions, the materials that the signs are made of must be flexible enough to incorporate a variety of graphic information and, yet, be consistent in appearance and presentation. It is recommended that a high pressure laminate be used for the directory, wayfinding, and interpretive signs. High pressure laminates provide high quality graphics and longevity at a reasonable price. A 1/2" thick sign should be employed to avoid the use of a frame. As opposed to other types of signs, the high pressure laminate has a very clean print, a long guarantee time of 10 years, has a low replacement cost, does not have the hassles of a frame, and resists shattering. The interpretive signs and guidance signs should be mostly conveyed graphically, with minimal text and at a size that is readable without having to bend over too far to see.



Mile Markers:

Mile markers provide orientation for trail users and emergency personnel as well as traveled distance along the trail. Distance along the trail should be marked in quarter-mile intervals or less by transverse pavement markings placed directly on top of the trail. Information included on the markers should be distance in miles and each trail's logo. This type of mileage marker was chosen to be easily readable and reduce conflicts during routine maintenance such as mowing.





STANDARDS



SITE FURNISHINGS

In addition to signage, the design of the trail system will include site furnishings to accommodate the needs of the trail users along the length of the entire trail. Amenities such as benches, informal seating areas, trash receptacles, bicycle racks, and bollards will be clustered together at major, minor, and shared-use trailheads.

Locations of amenities along trails will depend on the characteristics of each trail segment and should be addressed on a case by case situation. The purpose of most trails is to move people from various locations and for recreation. As such people are less likely to stop in between access points. Benches generally should be located at overlook points along trails where appropriate and where enough right-of-way exists. Trails located in sections of the city where there is a more elderly population or where there might be a need for people to stop more frequently may require benches to be placed in between access points. Trails located near hospitals may need to have benches placed more frequently if the hospital plans to use the trail for rehabilitation programs.

Along with trail signage, site furniture will be among the most frequently utilized elements along the trail, setting the tone for the overall image of the trail system in the minds of the users. It is important that design standards for the trails' site furnishings be established to ensure overall consistency of design and trail image. The colors should be consistent with the trail color scheme that the furnishing is located along. Along with consistency of color, a consistent style of furnishings needs to be established and followed as trails begin to be constructed. With establishing a color and style to use throughout the trail it will minimize the amount of cost for the City of Jeffersonville because replacement parts can be stockpiled for ONE style of bench as opposed to FIVE styles. See the following product information for consistency in site furnishings.



For federally funded projects it will be important to use the information in this document to complete the proprietary selection form.



STANDARDS



Benches:

Minimum of 6 feet long

Color and style should match other amenities along the trail for a cohesive look

Arm rests should be provided to help those that are more physically challenged

A backrest should be provided to help those that are more physically challenged

Powder or plastisol coating should be applied to reduce maintenance

Option: Center Arm can be provided to keep people from sleeping on the bench

The bench must have a firm and stable pad underneath it and provide a 3 foot wide area for a wheelchair to sit next to it



Example of Bench w/ Back and Arm Rests

Trash Receptacle:

Color and style shall match benches and other amenities to help with cohesion

Minimum size of 32 gallons to reduce emptying

A flare top lid will help to keep water from collecting in the trash bag

A liner helps to reduce leaking of refuse on to surrounding surfaces

The receptacle must have a firm and stable access path to it



Example of Trash Receptacle



STANDARDS



Bicycle Rack:

36" Bike Loop

Manufacturer: Keystone Ridge Designs

Model #: GV2E-4 or SN01-3

Color: Color to be based on designated trail color

Installation: In accordance with manufacturer's instructions

Style: Loop (supports bicycle in two spots)



Example of U-Rack

Bollard:

Use: Only in problem areas where motorized vehicle access seems to be more prevalent

Collapsible is preferred to allow access for maintenance or emergency vehicles

Color to match other amenities for cohesion



Drinking Fountain:

Color: To match other amenities for cohesion

Installation: In accordance with manufacturer's instructions

Style: Two fountain heights (one accessible) & dog bowl

The fountain must have a firm and stable access path to it





TRAIL LANDSCAPING

The trail system, due to its overall length and diverse scenery, may require more landscaping in urban areas and less in rural areas. The presence of mature vegetative cover not only adds to the natural beauty of the trail experience, but also minimizes the amount of new landscaping necessary to improve the appearance of the trail system and screening of the trail from undesirable views and adverse adjacent trail conditions.

In areas along the trail where the appearance warrants improvement and no existing vegetation is present, plantings of trees, shrubs and ground cover should be considered to create a linear park effect alongside the trail. New plantings should also be used to identify and improve “entrances” to parks (trail access points) and street crossings.

In addition, plantings should be used to screen certain land uses adjacent to the corridor (such as business service areas and industrial sites) and to separate the trail from other improvements within the right-of-way (such as parking lots). Native plant material should be used where possible in an effort to keep landscape maintenance to a minimum and to maximize the ecological benefits of the plantings.

TRAIL LIGHTING

The trail system is intended for use during daylight hours only; therefore it is not anticipated that the trail will need trail lighting. However, the installation of security lighting at trailheads, road crossings, bridges, and other activity areas should be considered if conditions warrant. Should conditions deem lighting to be necessary, there should be a standard lighting choice throughout all of the trail system. A great example of this is in Bloomington, Indiana where they have several trail systems and trailheads, all having similar lighting schemes.

TRAIL MAINTENANCE ISSUES AND SAFETY

Maintenance costs are expected to be a minimum for the first 5-10 years. Costs will vary depending on the amount of trail needing to be maintained and the location of the trail. On a typical mile-long trail, it could be \$3,000 (plus or minus) per year in maintenance costs. Long term maintenance costs could consist of repairing any asphalt damage. Over 20 years it could be anticipated to spend approximately \$10,000 to \$20,000 on asphalt repair. The city or parks department should have a general maintenance fund set aside for this. Below is a list of general trail maintenance items to keep in mind during the upkeep of the trails:

- Treat any wooden railing at least every 5 years to keep from rotting
- Properly prune trees above trails and shoulders to maintain 12’ of vertical clearance. Properly prune trees and shrubs to maintain at least 5’ of horizontal clearance from trail pavement edge. Use horticultural accepted pruning techniques and do not “top” trees (do not cut mid branch). Improper pruning can put stress on trees and cause more harm to the public in the long run.
- Properly prune any dead limbs out of trees to protect trail users. Remove any existing trees within close proximity that may die over time to protect trail users.
- Perform routine maintenance: mowing, clearing, trimming, vandalism repair, and litter



STANDARDS



control

- Edge pavement or shoulder periodically to prevent roots/vegetation from compromising pavement.
- Seal cracks in pavement every 2 years to prevent debris build up, water from entering base, and continued deterioration. Rubberized sealant is recommended
- Consider using a seal coat every 4 years to arrest deterioration, prevent water filtration, restore oils to upper surface, and prevent loss of fines

Trail maintenance costs could be reduced by utilizing local volunteers and other programs for simple tasks like litter removal and storm clean-up. A full time employee could be the designated volunteer coordinator and help manage resources and efforts. The Cardinal Greenway is a good example of where a volunteer system has been used to reduce maintenance costs and would be a good resource for how to make one successful. Also, boy scouts, community corrections programs, community service programs, and youth programs could be utilized to do these tasks. More stringent repairs, like sealing asphalt and repairing cracks should still be handled with city forces or a contractor.

Another area where volunteers can help reduce cost is through regular patrols of the trail systems. Since many trail users will use the system daily for recreational or commuting needs, they can monitor any unwanted behavior at the same time. Their responsibility would not be to address any unwanted behavior, but rather report it immediately to the proper authorities. In this way, the program can help to reduce the number of law enforcement officers that would need to be dedicated to the trail system and the need to install call boxes along the trails. Examples for places to find local volunteers would be local bicycle clubs, avid cyclists, trail advocates, etc.

ACCESSIBILITY

As mentioned previously, all new trail construction must follow guidelines developed by the US Access Board or regulations from the US Department of Justice. At the time this document was created there were several guidelines that applied: 1) Guidelines for Shared Use Paths; 2) Guidelines for Outdoor Developed Areas; and 3) Guidelines for Pedestrian Facilities in the Public Right-of-Ways.

Some of these accessibility standards have already been addressed in other sections of the design guidelines, but there are a few others to consider:

- Ramps – See Guidelines for Pedestrian Facilities in the Public Right-of-Ways
- Detectable warnings – See ADA Chapter 7: Communication Elements and Features, Section 705 and Guidelines for Pedestrian Facilities in the Public Right-of-Ways
- Push buttons (activation)/signalization standards – See Guidelines for Pedestrian Facilities in the Public Right-of-Ways
- Site amenities – See Accessibility Guidelines for Outdoor Developed Areas



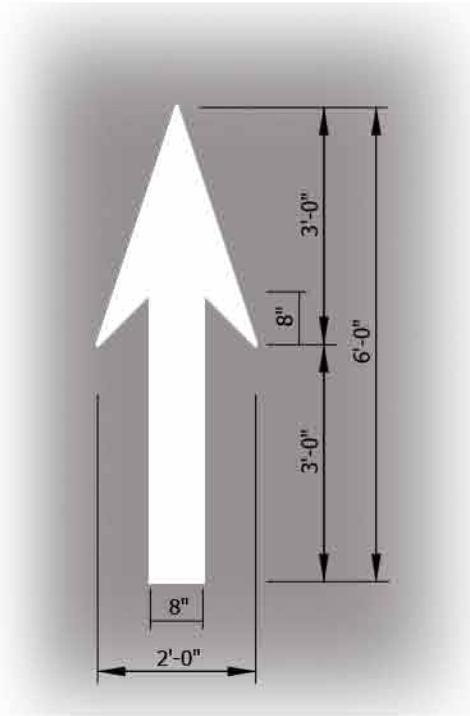
STANDARDS



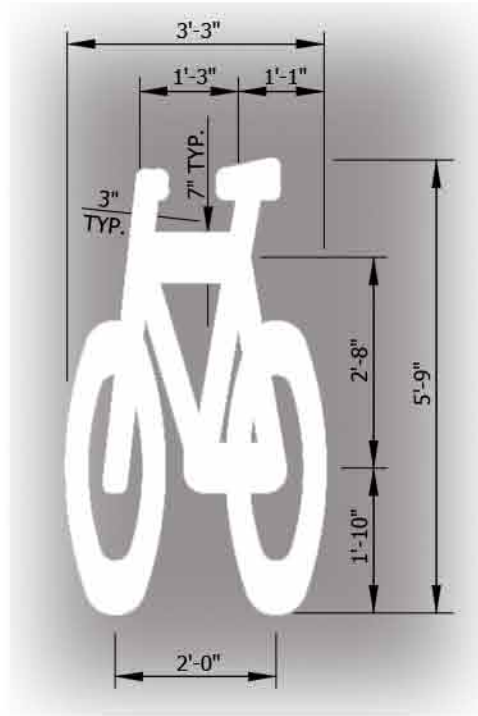
PEDESTRIAN FACILITIES

The downtown walking area already has a high level of pedestrian service. There are several design treatments that were proposed as part of the final pedestrian plan. All elements installed should follow the guidelines as outlined in the AASHTO Guide for the Planning, Design, and Operations of Pedestrian Facilities. Below are some treatments that would help support the existing sidewalk network in the historic district.

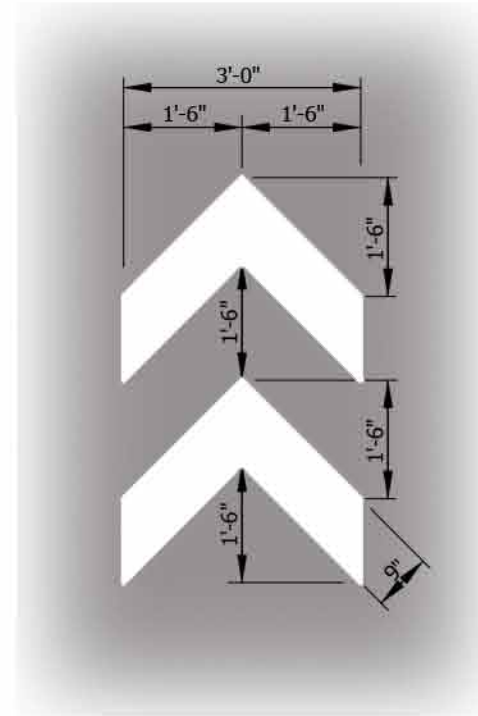
1. Crosswalks shall have piano bar striping to provide more visibility
2. Intersection Treatments
 - a. Install refuge islands where the number of lanes to be crossed is greater than 75 feet or a pedestrian walking at 2.5 ft/s cannot completely cross the street
 - b. Consider bump outs at intersections where on street parking is present to lessen the crossing distance
 - c. Mid-block crossings should consider Hawk signalization
3. Street trees should be planted a maximum of 40 feet apart. Street trees should have the following characteristics
 - a. Non-invasive varieties
 - b. Vase shaped as to not impede pedestrian or vehicular traffic
 - c. Maximum height of 40'
 - d. Maximum width of 20-25'
4. Tree grates should be considered to give street trees a maximum root zone, while not impeding the pedestrian walking area. This will help to cut down on tree roots heaving the existing walks as well
5. Install a downtown pedestrian support facility at one of the vacant lots the city has available with the following amenities
 - a. Public Restroom Building
 - b. Shelter for shade and to host downtown farmers markets
 - c. Benches for resting
 - d. Trash Receptacles
 - e. Trees for shade
 - f. Pedestrian Directory Sign
 - g. Drinking Fountain
 - h. Pet Waste Disposal
 - i. Bike Racks
 - j. Public Art
6. Countdown crosswalk signals with auditory warning
7. More trash receptacles
8. More benches for resting
 - a. Benches should have arm rests and back rests to help those people that are more physically challenged
9. Remove several strategic parking spaces along Spring Street for outdoor seating and bicycle facility support
10. An ADA transition plan needs to be completed that includes assessment of the existing facilities and a plan for correcting those areas not in compliance



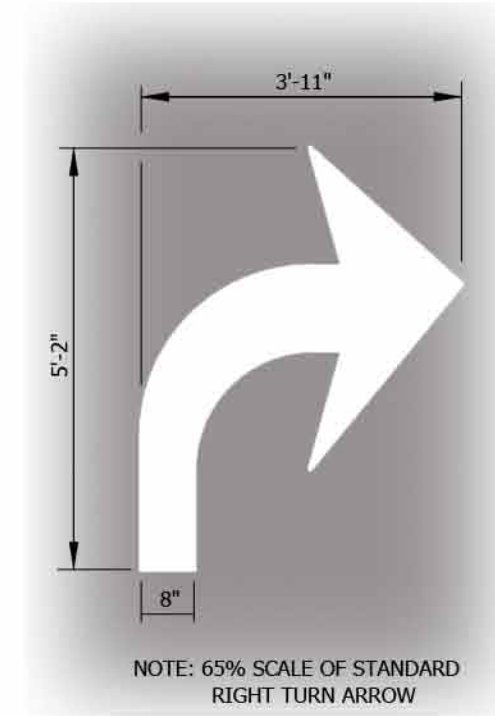
BIKE LANE ARROW



BIKE LANE SYMBOL

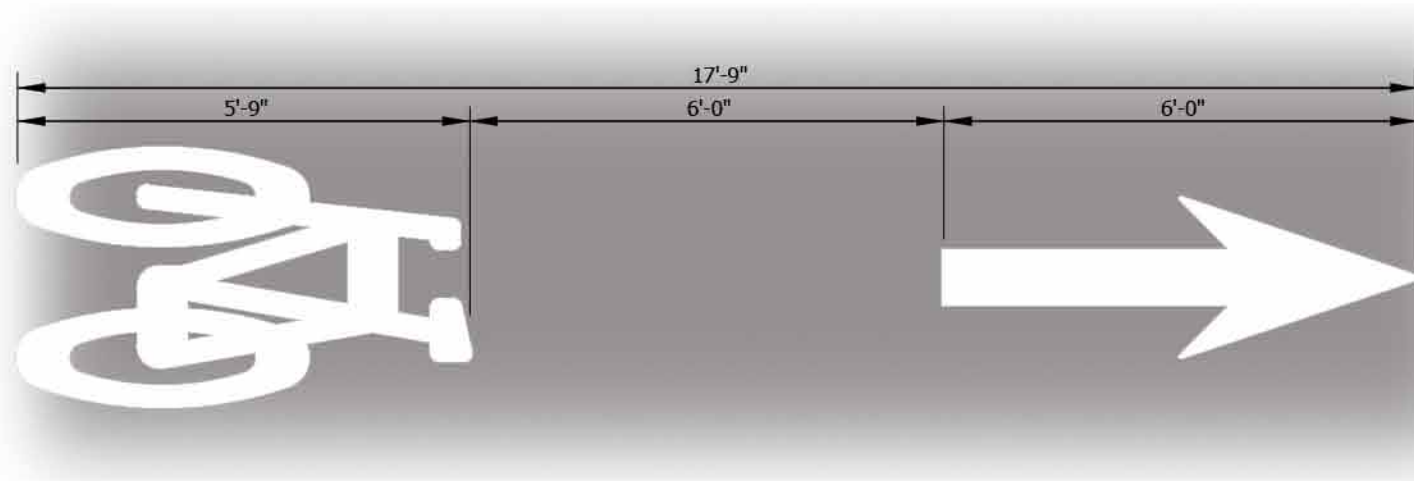


BIKE LANE CHEVRONS

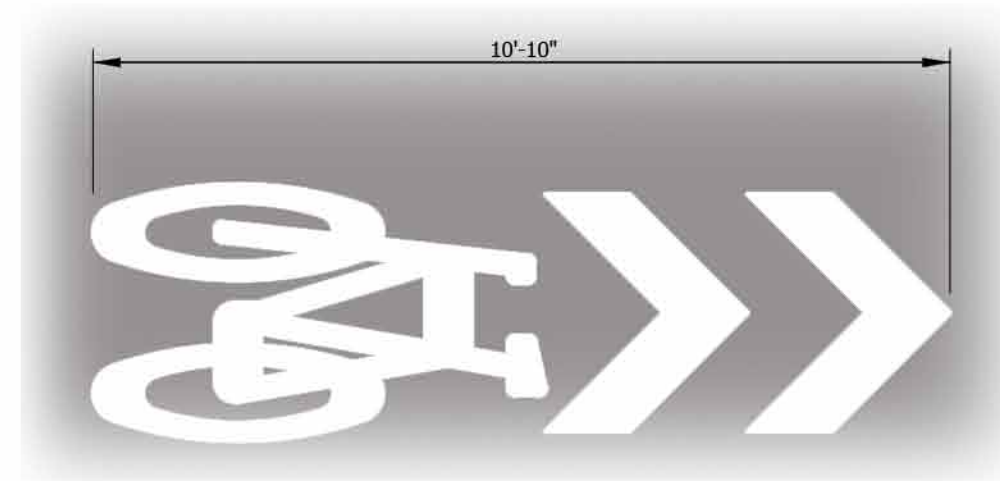


NOTE: 65% SCALE OF STANDARD RIGHT TURN ARROW

MODIFIED TURN ARROW

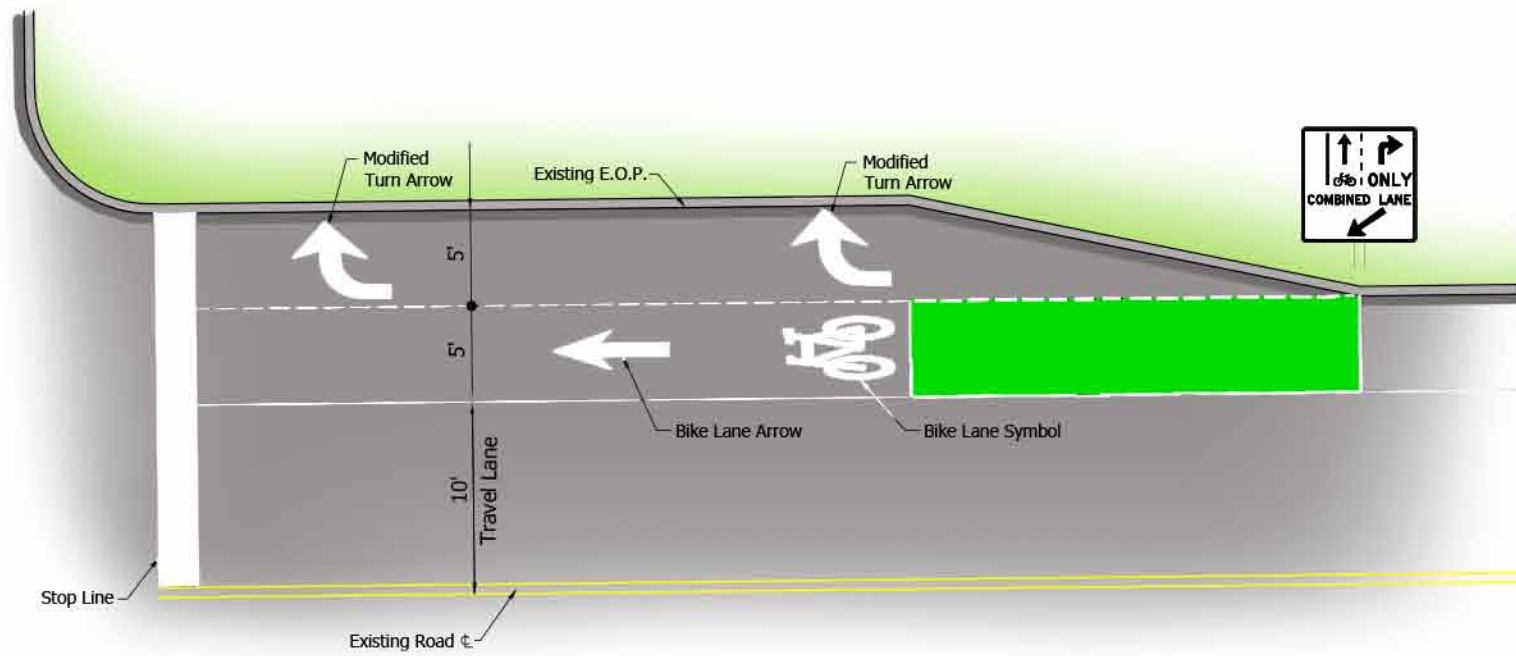


BIKE & ARROW DETAIL

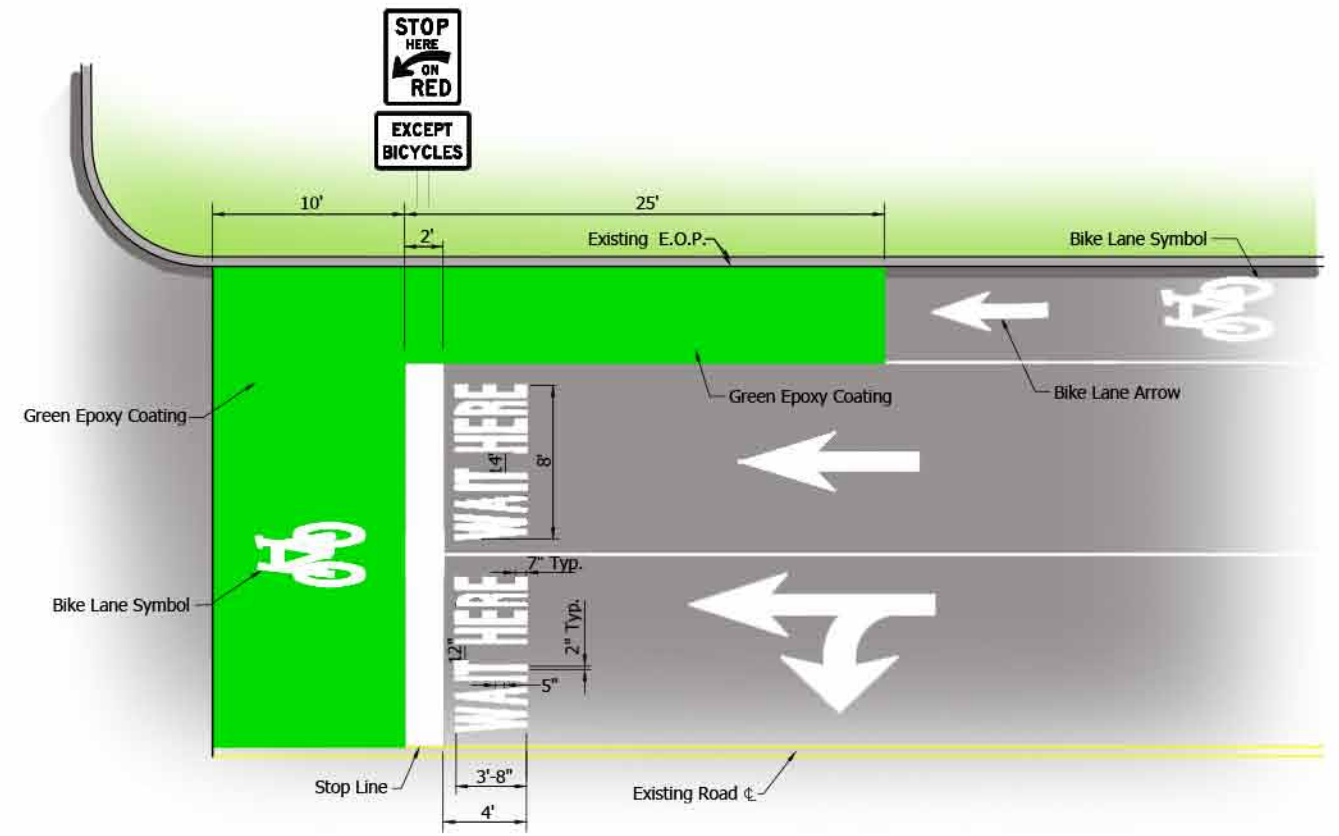


BIKE & CHEVRONS DETAIL

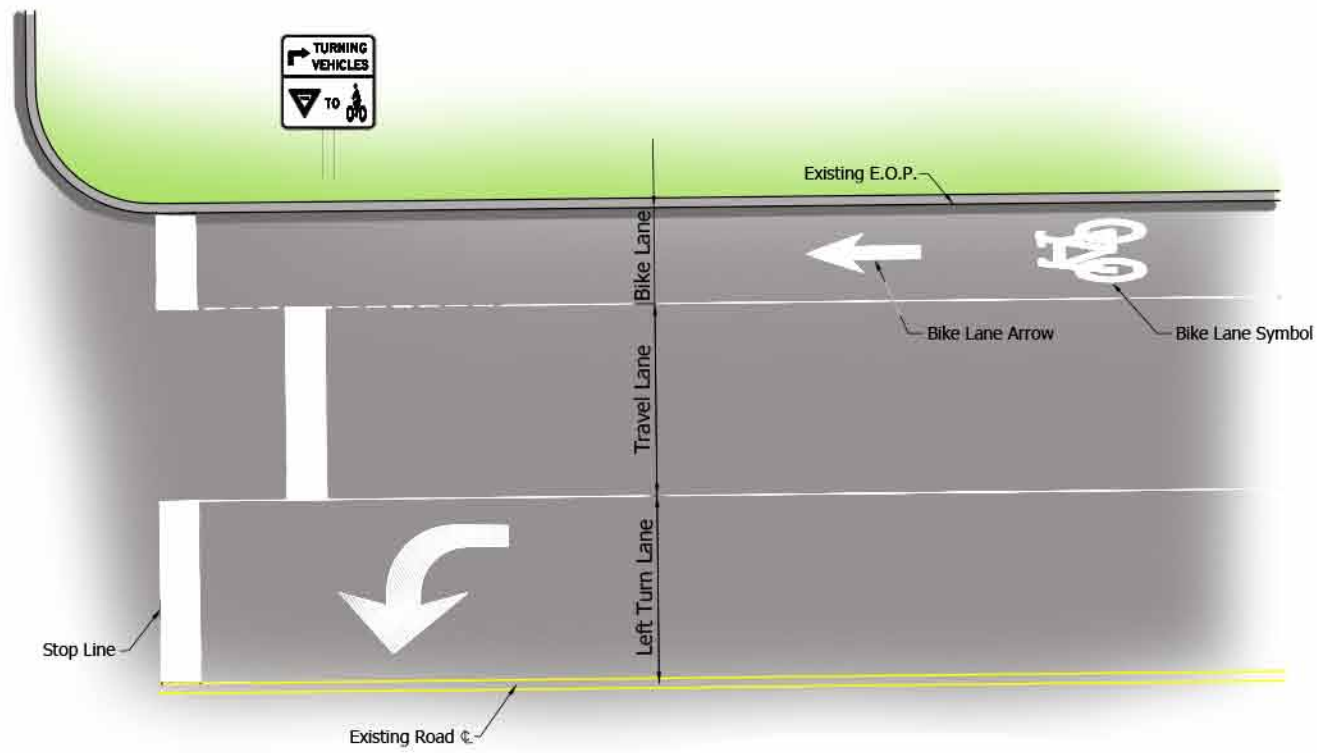
NOTE: TO BE PLACED AT 330' MAXIMUM



SHARED TURN LANE DETAIL

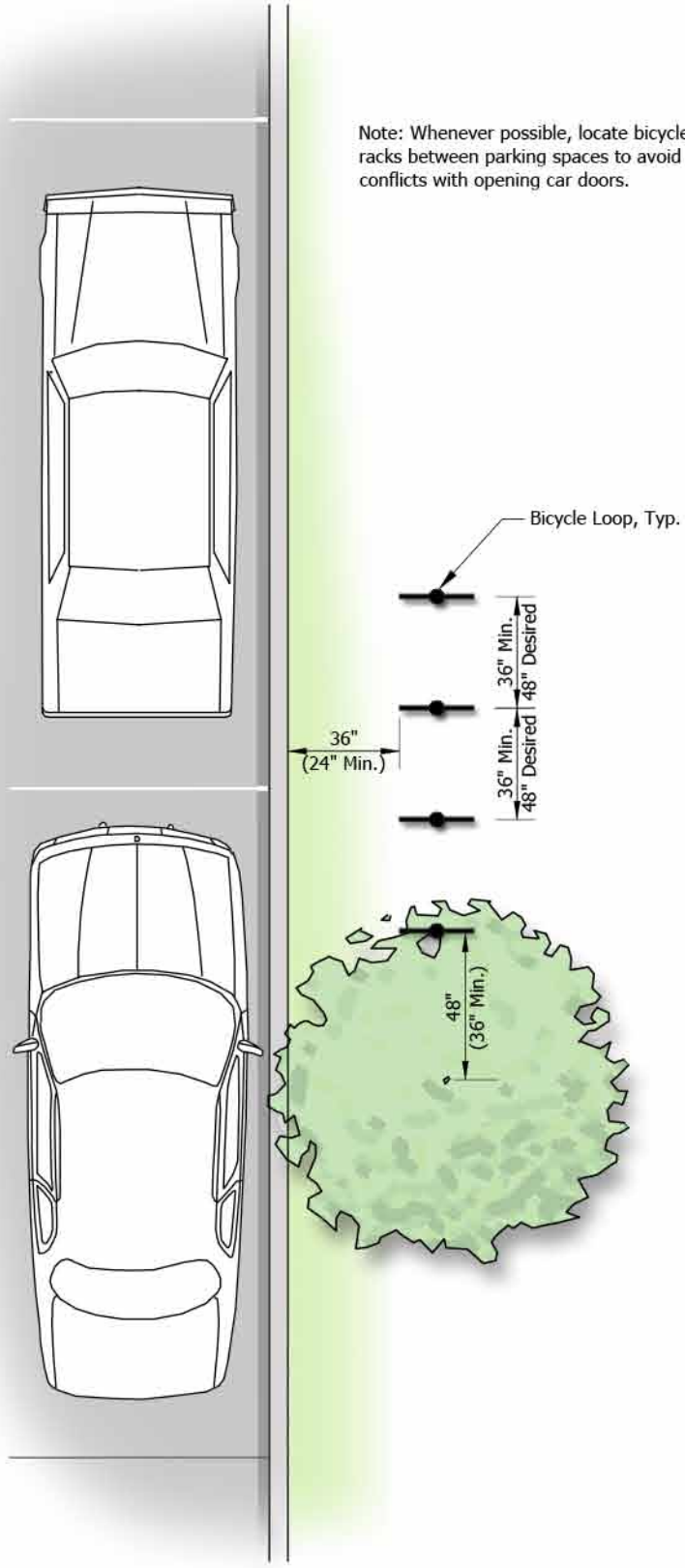


BIKE BOX DETAIL

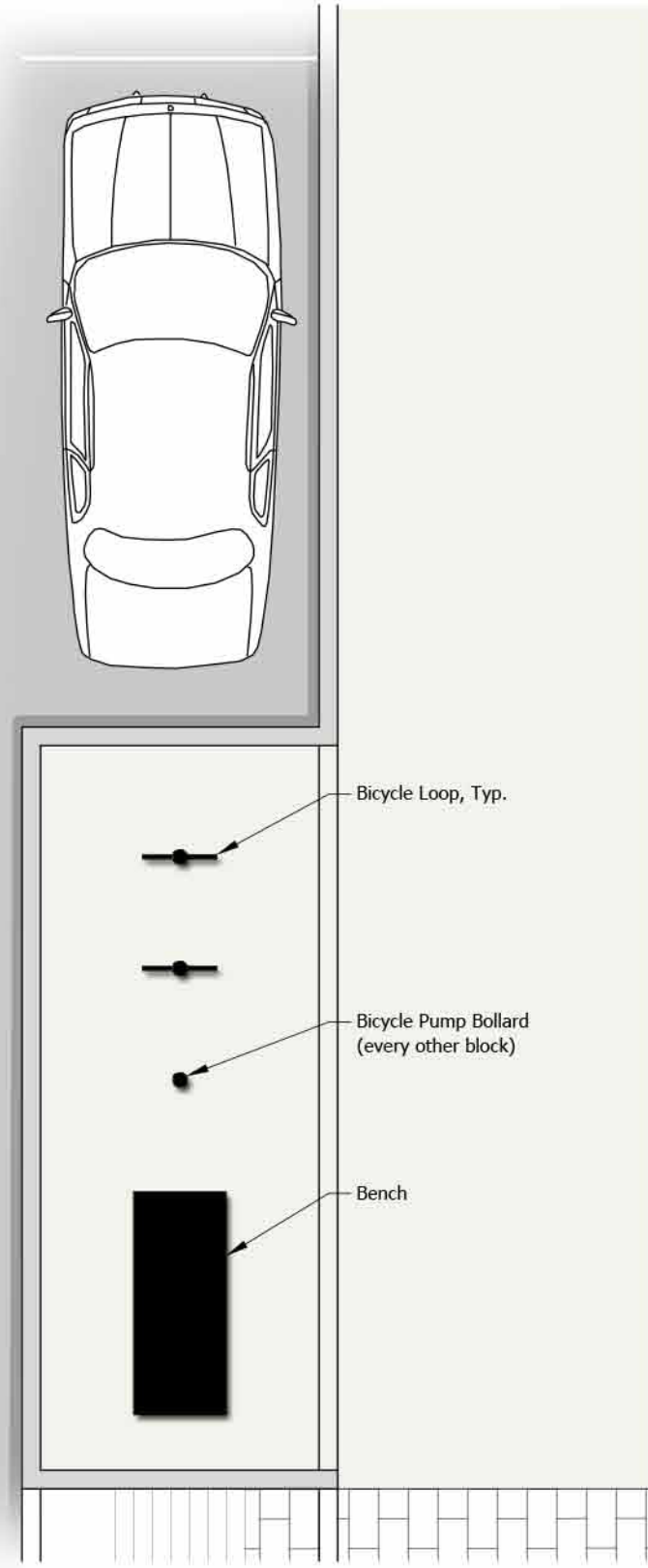


STAGGERED STOP DETAIL

Note: Whenever possible, locate bicycle racks between parking spaces to avoid conflicts with opening car doors.



SAMPLE BICYCLE PARKING
Scale: 1"=5'

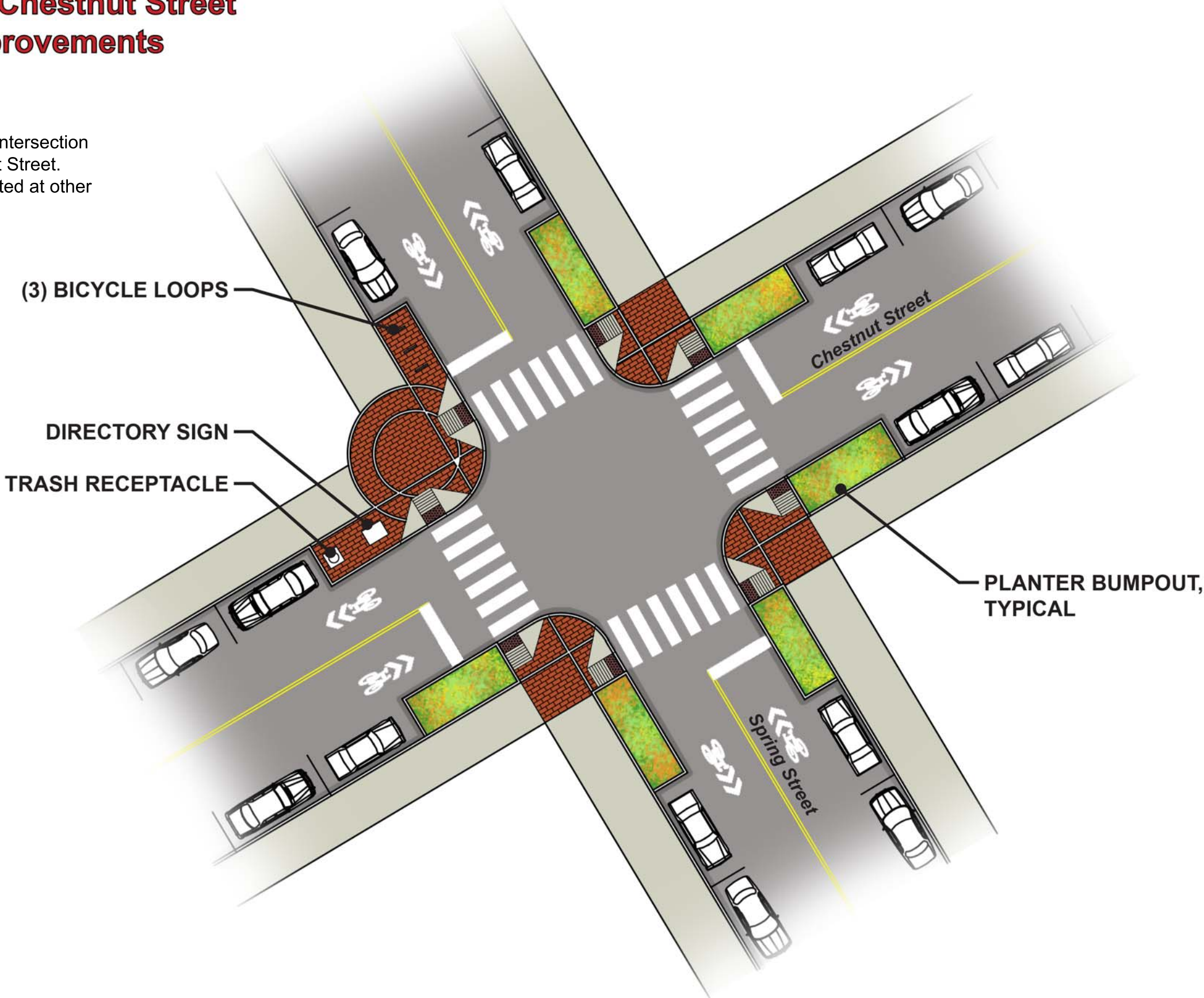


BICYCLE FACILITY BUMPOUT
Scale: 1"=5'

* Bicycle Facility Bumpout is intended to remove and replace an existing parking space at each intersection designated

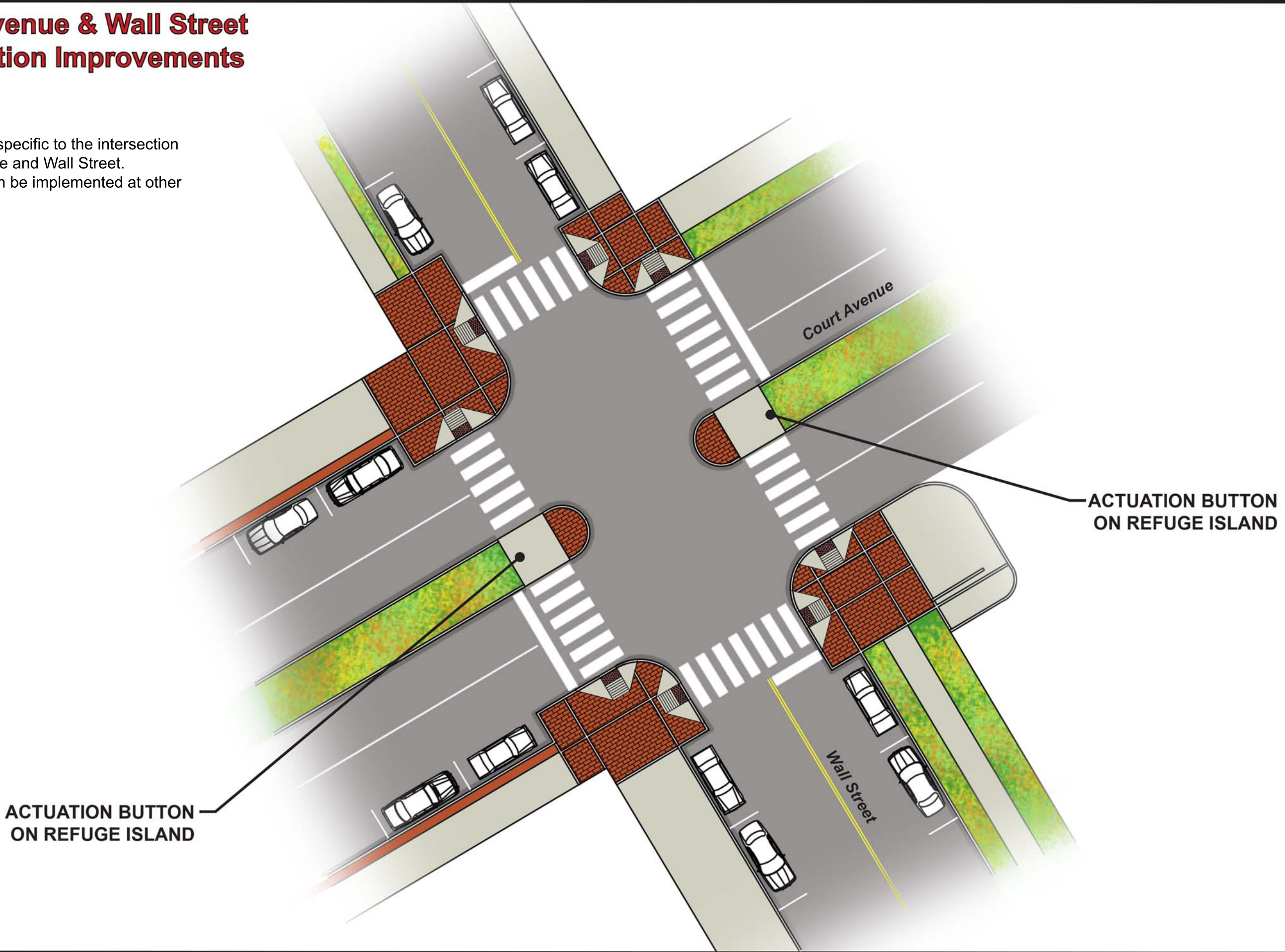
Spring Street & Chestnut Street Intersection Improvements

This design is specific to the intersection at Spring Street and Chestnut Street. This design can be implemented at other intersections.



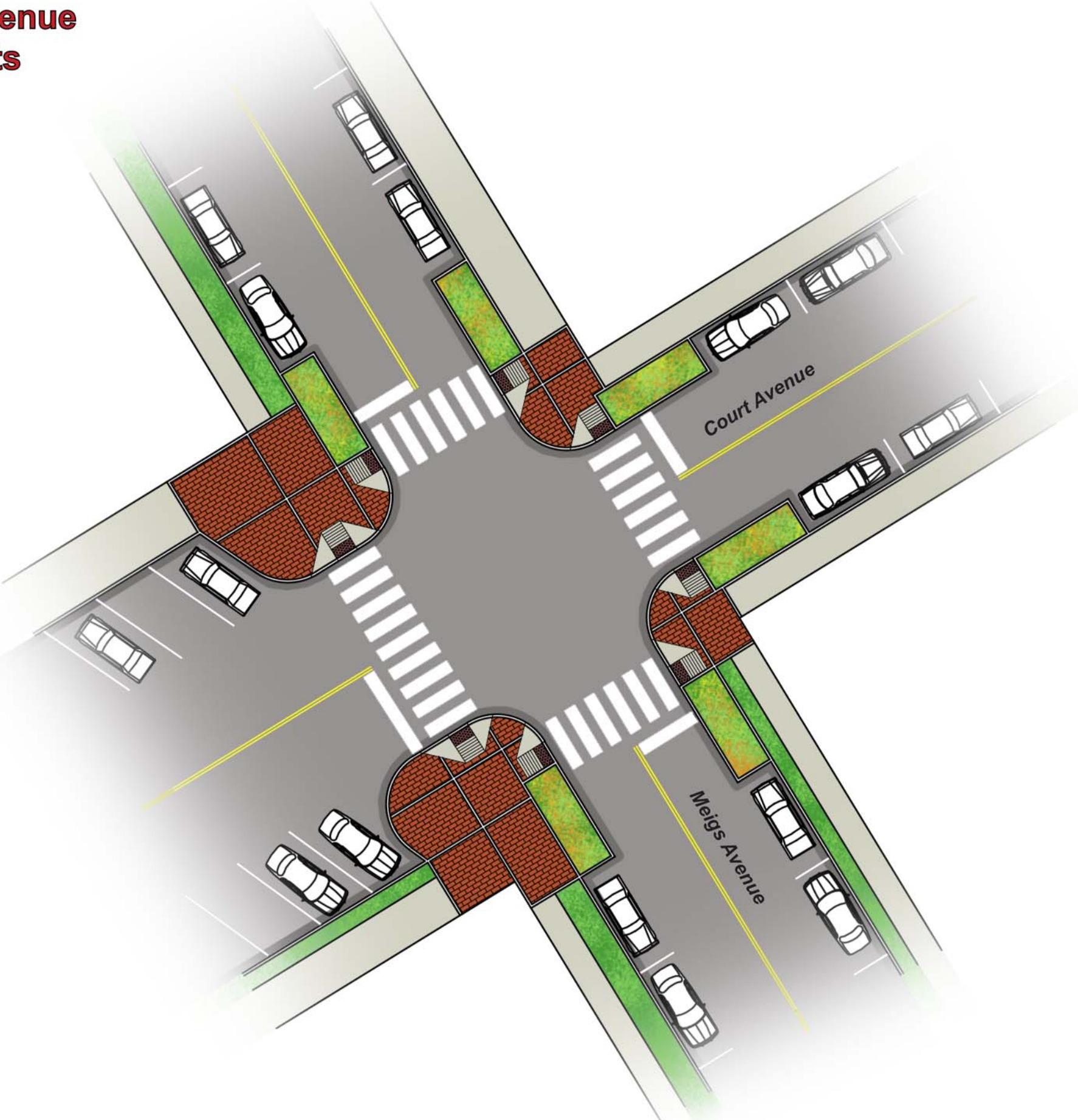
Court Avenue & Wall Street Intersection Improvements

This design is specific to the intersection at Court Avenue and Wall Street.
This design can be implemented at other intersections.



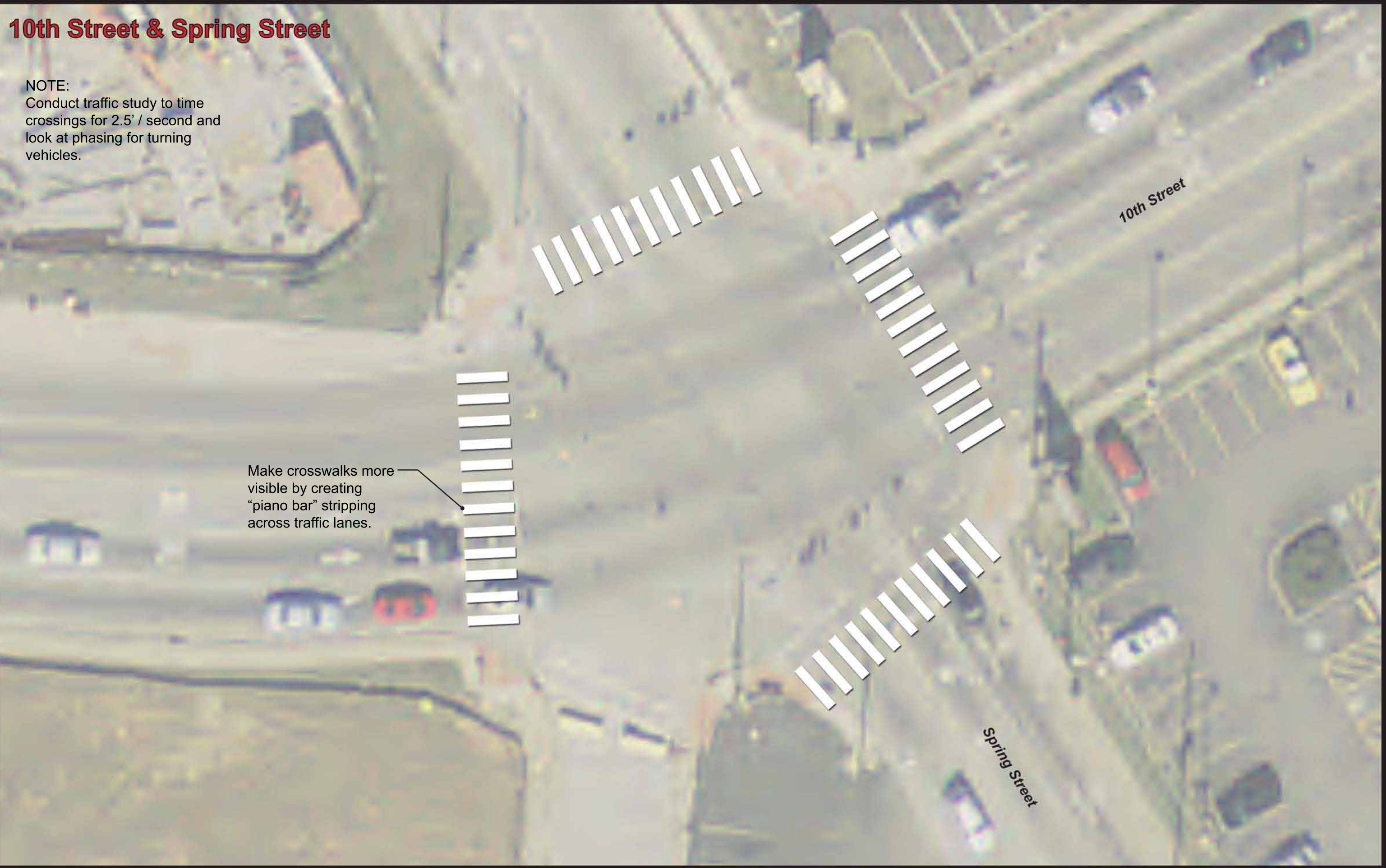
Court Avenue & Meigs Avenue Intersection Improvements

This design is specific to the intersection at Court Avenue and Meigs Avenue.
This design can be implemented at other intersections.



10th Street & Spring Street

NOTE:
Conduct traffic study to time crossings for 2.5' / second and look at phasing for turning vehicles.

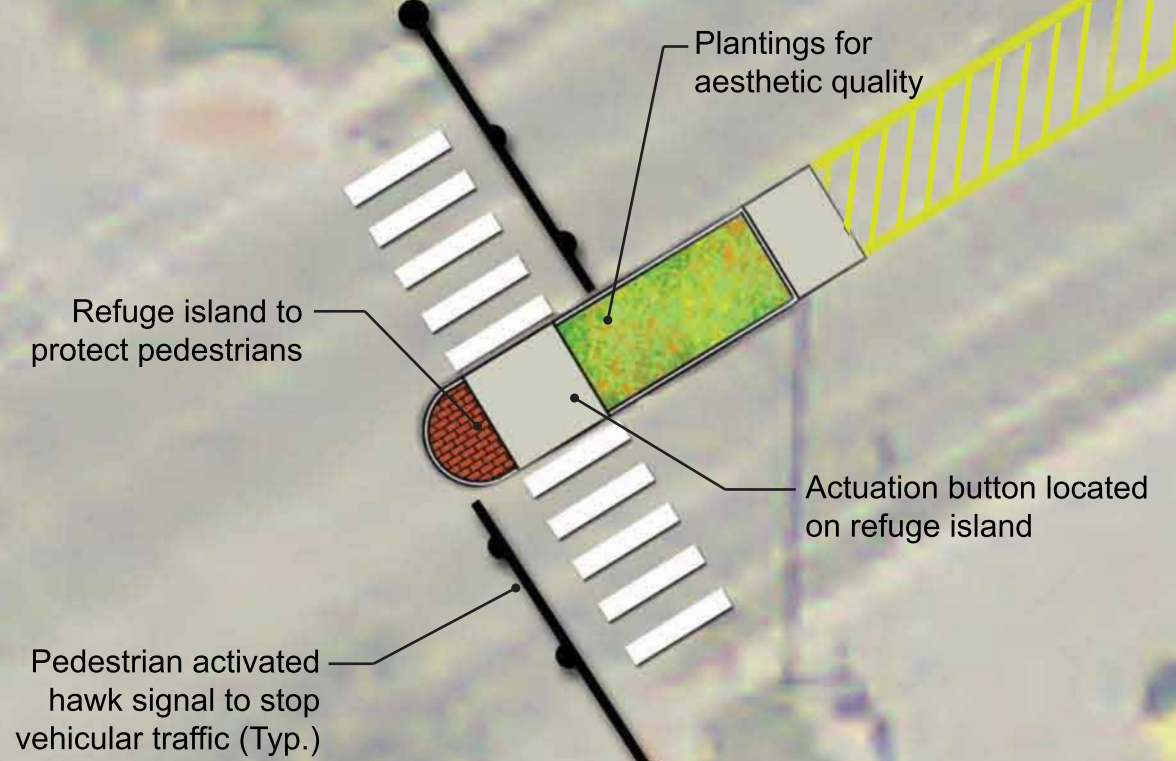


Make crosswalks more visible by creating "piano bar" stripping across traffic lanes.

10th Street & Walnut Street

10th Street

Walnut Street

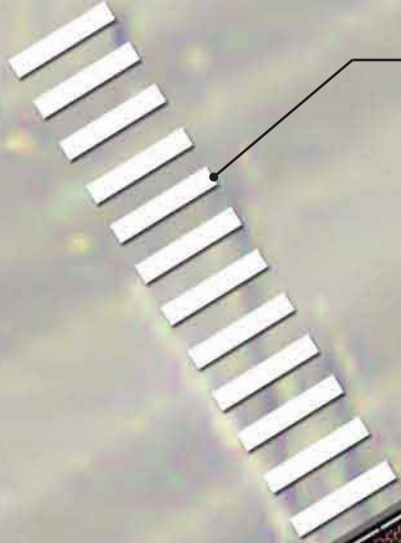


10th Street & Quartermaster Court

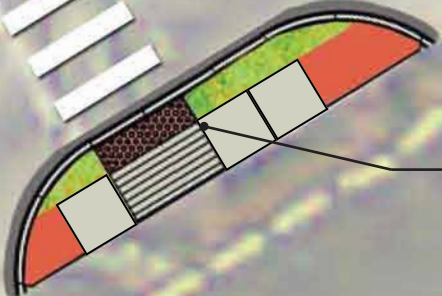
NOTE:
Conduct traffic study to time crossings for 2.5' / second.

Quartermaster Court

10th Street



Make crosswalks more visible by creating "piano bar" striping across traffic lanes



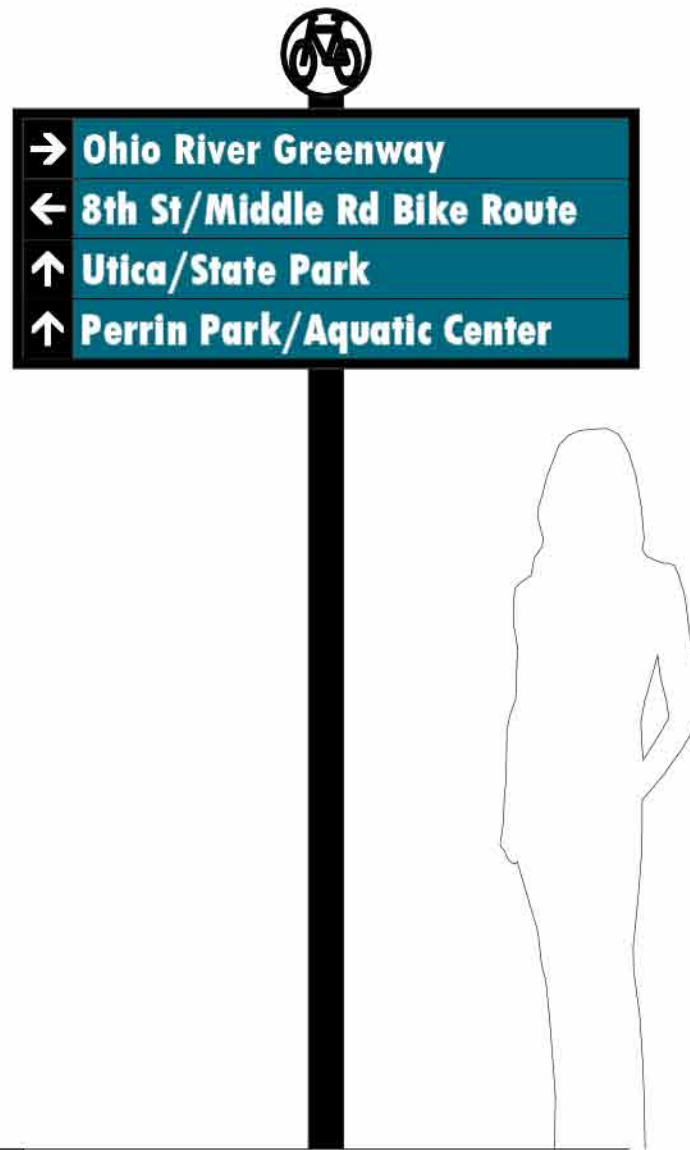
Modified type K sidewalk curb ramp with detectable warning



FINAL PLAN

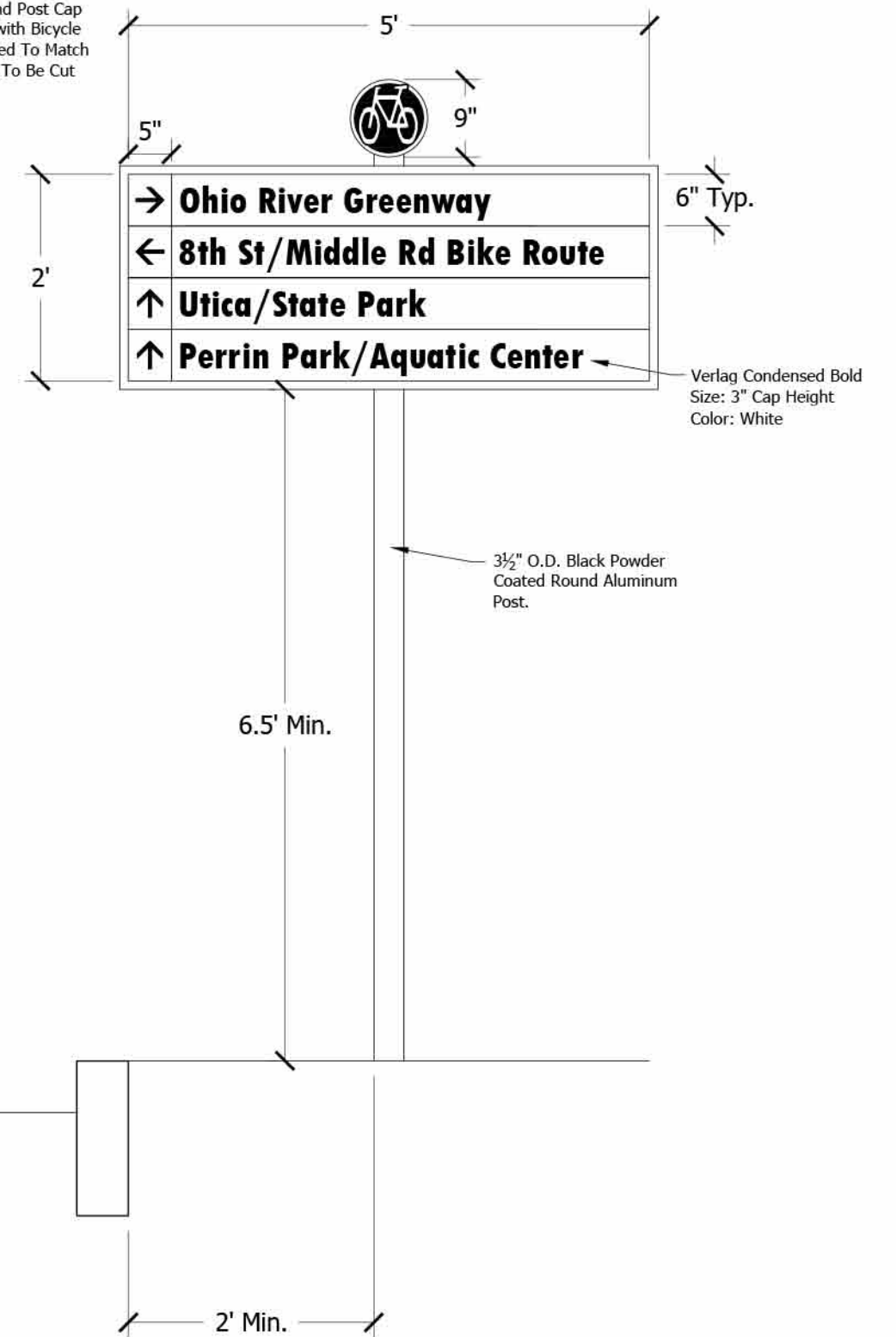


BICYCLE WAYFINDING



Sample Bicycle Wayfinding Sign
Not to Scale

* 3 1/2" O.D. Round Post Cap
Welded to Post, with Bicycle
Meddallion, Painted To Match
Post. Solid Hatch To Be Cut
Out.



Sample Bicycle Wayfinding Sign
Not to Scale



FINAL PLAN



BICYCLE WAYFINDING SIGNAGE LOCATIONS

Wayfinding signage placed along the bike routes will promote a distinct identity to the city and promote the use of the bike system. It will help raise community and visitor awareness of downtown Jeffersonville and its surrounding communities. Also, it will provide the ability to easily navigate throughout the community.

The list of numbers below correspond with the numbers on the wayfinding map following this list.

- | | |
|--|---|
| <p>1. Riverside and 31 (SE)</p> <ul style="list-style-type: none"> a. Big Four Station/Downtown ↑ b. Utica/State Park ↑ <p>2. Spring and Riverside (SW)</p> <ul style="list-style-type: none"> a. Utica/State Park ← b. Perrin Park/ Aquatic Center ← c. Big Four Station ← <p>3. Spring and Riverside (NW)</p> <ul style="list-style-type: none"> a. Ohio River Greenway → <p>4. Spring and Market (NE)</p> <ul style="list-style-type: none"> a. Big Four Station → b. Ohio River Greenway ← <p>5. Spring and Chestnut (SE)</p> <ul style="list-style-type: none"> a. Utica/State Park → b. Perrin Park/ Aquatic Center → c. Big Four Station ← d. 8th St/Middle Rd Bike Route ↑ <p>6. Spring and Chestnut (NE)</p> <ul style="list-style-type: none"> a. Big Four Station ↑ b. Ohio River Greenway ← c. 8th St/Middle Rd Bike Route → <p>7. Spring and Chestnut (NW)</p> <ul style="list-style-type: none"> a. Ohio River Greenway ↑ b. Big Four Station → c. Utica/State Park ← d. Perrin Park/Aquatic Center ← | <p>8. Spring and Chestnut (SW)</p> <ul style="list-style-type: none"> a. Ohio River Greenway → b. 8th St/Middle Rd Bike Route ← c. Utica/State Park ↑ d. Perrin Park/Aquatic Center ↑ <p>9. Spring and Court (SE)</p> <ul style="list-style-type: none"> a. Warder Park ↗ <p>10. Spring and Court (NW)</p> <ul style="list-style-type: none"> a. Warder Park ↖ <p>11. Spring and 8th (SE)</p> <ul style="list-style-type: none"> a. 8th St/Middle Rd Bike Route → b. Perrin Park/ Aquatic Center → c. 10th St Bike Route ↑ <p>12. Spring and 8th (NE)</p> <ul style="list-style-type: none"> a. 10th St Bike Route → b. Big Four Station ← c. Ohio River Greenway ← <p>13. Spring and 8th (NW)</p> <ul style="list-style-type: none"> a. 8th St/Middle Rd Bike Route ← b. Perrin Park/Aquatic Center ← c. Big Four Station ↑ d. Ohio River Greenway ↑ <p>14. Spring and 10th (SE)</p> <ul style="list-style-type: none"> a. 10th St Bike Route → b. City Hall → c. Indiana Tech ↑ d. YMCA ↑ |
|--|---|



FINAL PLAN

15. Spring and 10th (NE)
 - a. Big Four Station ←
 - b. Ohio River Greenway ←
 - c. Indiana Tech →
 - d. YMCA →
16. Spring and 10th (NW)
 - a. 10th St Bike Route ←
 - b. City Hall ←
 - c. Big Four Station ↑
 - d. Ohio River Greenway ↑
17. Market and Meigs (SW)
 - a. Utica/State Park ↑
 - b. Perrin Park/Aquatic Center ←
 - c. County Government Center ←
 - d. City Hall ←
18. Market and Meigs (NE)
 - a. Big Four Station ↑
 - b. Ohio River Greenway ↑
 - c. County Government Center →
 - d. City Hall →
19. Market and Meigs (NW)
 - a. Utica/State Park ←
 - b. Big Four Station →
 - c. Ohio River Greenway →
20. Meigs and Chestnut (SW)
 - a. Perrin Park/Aquatic Center ↑
 - b. Utica/State Park ↑
 - c. County Government Center ←
 - d. City Hall ←
21. Meigs and Chestnut (SE)
 - a. Perrin Park/Aquatic Center →
 - b. Utica/State Park →
 - c. County Government Center ↑
 - d. City Hall ↑
22. Meigs and Chestnut (NE)
 - a. County Government Center →
 - b. City Hall →
 - c. Big Four Station ↑
 - d. Ohio River Greenway ↑
23. Meigs and Chestnut (NW)
 - a. Big Four Station →
 - b. Ohio River Greenway →
 - c. Perrin Park/Aquatic Center ←
 - d. Utica/State Park ←
24. Meigs and Court (SE)
 - a. Corden Porter School ↗
 - b. Nachand Field House ↗
 - c. County Government Center ↙
 - d. City Hall
25. Meigs and 8th (SW)
 - a. Perrin Park/Aquatic Center ↑
 - b. City Hall ←
 - c. 10th St Bike Route ←
 - d. County Government Center →
26. Meigs and 8th (SE)
 - a. Perrin Park/Aquatic Center →
 - b. City Hall ↑
 - c. 10th St Bike Route ↑
27. Meigs and 8th (NE)
 - a. City Hall →
 - b. County Government Center ←
 - c. Downtown ↑
28. Meigs and 8th (NW)
 - a. County Government Center ↑
 - b. Perrin Park/Aquatic Center ←
 - c. Utica/State Park ←
29. Meigs and 10th (SW)
 - a. Grocery ↑
 - b. Perrin Park/Aquatic Center →
 - c. Big Four Station →
 - d. City Hall ←



FINAL PLAN



30. Meigs and 10th (SE)
 - a. City Hall ↑
 - b. Quartermaster Court ↑
 - c. Grocery →
31. Meigs and 10th (NE)
 - a. County Government Center ←↵
 - b. Big Four Station ↑
 - c. YMCA ↑
32. Market and Jefferson (SW)
 - a. Howard Steamboat Museum ←
 - b. Perrin Park/Aquatic Center ←
 - c. Utica/State Park ↑
33. Chestnut and Division (SW)
 - a. Maple Elementary School ←
34. Chestnut and Division (NE)
 - a. Maple Elementary School →
35. Chestnut and Jefferson (SW)
 - a. Howard Steamboat Museum →
 - b. Perrin Park/Aquatic Center ↑
 - c. Utica/State Park ↑
36. Chestnut and Jefferson (NE)
 - a. Howard Steamboat Museum ←
 - b. Big Four Station ↑
 - c. Ohio River Greenway ↑
37. Chestnut and Crestview (SW)
 - a. Memorial Park ←
38. Chestnut and Crestview (NE)
 - a. Memorial Park →
39. 8th and French (SW)
 - a. Bob Hedge Park ←
 - b. Perrin Park/Aquatic Center ↑
 - c. Utica/State Park ↑
40. 8th and French (NE)
 - a. Bob Hedge Park →
 - b. Downtown ↑
41. Spring and 15th (SE)
 - a. Lansden Park →
 - b. Spring Hill Elementary →
42. Spring and 15th (NW)
 - a. Lansden Park ←
 - b. Spring Hill Elementary ←↵
43. Spring and Dutch Ln (SE)
 - a. Indiana Tech ↑
 - b. YMCA ↑
44. Spring and Dutch Ln (NW)
 - a. Downtown ↑
45. Spring and Charlestown Pike (SE)
 - a. Thomas Jefferson Elementary ↗
 - b. Shirley Hall Park →
 - c. Indiana Tech ↑
 - d. YMCA ↑
46. Spring and Cameron Dr (SW)
 - a. Thomas Jefferson Elementary ←↵
 - b. Shirley Hall Park ←↵
 - c. Downtown ↑
47. Spring and Charlestown New Albany (SE)
 - a. River Valley Middle School →
 - b. W E Elementary School →
 - c. YMCA ↑
 - d. Indiana Tech ↑
48. Spring and Charlestown New Albany (NE)
 - a. Indiana Tech →
 - b. YMCA →
 - c. Downtown ←



FINAL PLAN

49. Spring and Charlestown New Albany (NW)
- a. River Valley Middle School ←
 - b. W E Elementary School ←
 - c. Downtown ↑
50. Woehrle and Charlestown New Albany (SW)
- a. River Valley Middle School ↑
 - b. W E Wilson Elementary School ↑
51. Woehrle and Charlestown New Albany (SE)
- a. River Valley Middle School →
 - b. W E Wilson Elementary School →
 - c. Indiana Tech ←
 - d. YMCA ←
52. 10th and Perrin (SW)
- a. Aquatic Center →
 - b. Perrin Park →
 - c. Grocery ↑
 - d. Richard Vissing Park ↑
53. 10th and Perrin (SE)
- a. Grocery →
 - b. Richard Vissing Park →
 - c. City Hall ←
 - d. Downtown ←
54. 10th and Perrin (NE)
- a. Aquatic Center ←
 - b. Perrin Park ←
 - c. City Hall ↑
 - d. Downtown ↑
55. 10th and Allison (SW)
- a. Grocery →
 - b. Utica/State Park →
 - c. Jeffersonville High School ↑
 - d. Richard Vissing Park ↑
56. 10th and Allison (SE)
- a. Richard Vissing Park →
 - b. City Hall ←
 - c. Downtown ←
57. 10th and Allison (NE)
- a. Jeffersonville High School ←
 - b. Utica/State Park ←
 - c. City Hall ↑
 - d. Downtown ↑
58. 10th and River City Park Rd (SW)
- a. Richard Vissing Park →
59. 10th and River City Park Rd (SE)
- a. Grocery ←
 - b. Downtown ←
60. 8th and Brighton (SW)
- a. Head Start ↙
 - b. Memorial Park →
 - c. Parkview Middle School →
 - d. Aquatic Center/Perrin Park ↑
61. 8th and Railroad (NE)
- a. Head Start ↗
 - b. Memorial Park ↙
 - c. Parkview Middle School ↙
 - d. Downtown ↑
62. 8th and Martha Ave (SW)
- a. Sacred Heart School →
63. 8th and Martha Ave (NE)
- a. Sacred Heart School ←
64. 8th and Ewing (SW)
- a. Perrin Park/Aquatic Center ↑
 - b. Ewing Lane Park →
 - c. Bridgepoint Elementary School →
 - d. Utica/State Park →



FINAL PLAN



- 65. 8th and Ewing (SE)
 - a. Perrin Park →
 - b. Aquatic Center →
 - c. Downtown ←
- 66. 8th and Ewing (NE)
 - a. Downtown ↑
 - b. Ewing Lane Park ←
 - c. Bridgepoint Elementary School ←
 - d. Utica/State Park ←
- 67. 8th and Perrin (SW)
 - a. Aquatic Center ←
 - b. Perrin Park →
 - c. Utica/State Park →
- 68. 8th and Perrin (SE)
 - a. Aquatic Center →
 - b. Downtown ←
- 69. 8th and Perrin (NE)
 - a. Perrin Park ←
 - b. Utica/State Park ←
 - c. Downtown ↑
- 70. 8th and Allison (SW)
 - a. Grocery ←
 - b. Richard Vissing Park ←
 - c. Utica/State Park →
- 71. 8th and Allison (SE)
 - a. Grocery ↑
 - b. Richard Vissing Park ↑
 - c. Perrin Park/Aquatic Center ←
 - d. Downtown ←
- 72. 8th and Allison (NE)
 - a. Grocery →
 - b. Utica/State Park ←
 - c. Perrin Park/Aquatic Center ↑
 - d. Downtown ↑
- 73. 8th and Allison (NW)
 - a. Utica/State Park ↑
 - b. Perrin Park/Aquatic Center →
 - c. Downtown →
- 74. 8th and Port Rd (SW)
 - a. Utica →
 - b. Charlestown State Park →
- 75. 8th and Port Rd (SE)
 - a. Perrin Park/Aquatic Center ←
 - b. Downtown ←
- 76. 8th and Port Rd (NE)
 - a. Utica →
 - b. Charlestown State Park →
 - c. Perrin Park/Aquatic Center ↑
 - d. Downtown ↑
- 77. 8th and Port Rd (NW)
 - a. Utica ↑
 - b. Charlestown State Park ↑
 - c. Perrin Park/Aquatic Center →
 - d. Downtown →
- 78. Ewing and Walpole (SE)
 - a. Perrin Park ↘
 - b. Aquatic Center ↘
 - c. 8th St/Middle Rd Bike Route ↑
- 79. Ewing and Walpole (NE)
 - a. Perrin Park/Aquatic Center →
 - b. Ewing Lane Park ←
 - c. Bridgepoint Elementary School ←
 - d. Utica/State Park ←
- 80. Perrin and Rudie Dr (SW)
 - a. Perrin Park →
 - b. Aquatic Center ←
 - c. Utica/State Park →



FINAL PLAN



81. Ewing and Park Place (SW)
a. Bridgepoint Elementary School ←
b. Ewing Lane Park ←
c. Perrin Park/Aquatic Center ←
d. Utica/State Park →
82. Ewing and Park Place (SE)
a. Big Four Station ←
b. Bridgepoint Elementary School ↑
c. Ewing Lane Park ↑
d. Perrin Park/Aquatic Center ↑
83. Ewing and Park Place (NW)
a. Big Four Station →
b. Ohio River Greenway →
c. Utica/State Park ↑
84. Ewing and Market (NW)
a. Big Four Station →
b. Ohio River Greenway →
c. Utica/State Park ←
85. Ewing and Market (SW)
a. Bridgepoint Elementary School ←
b. Ewing Lane Park ←
c. Perrin Park/Aquatic Center ←
d. Utica/State Park ↑
86. Ewing and Market (NE)
a. Perrin Park/Aquatic Center →
b. Big Four Station ↑
c. Ohio River Greenway ↑
87. Perrin and Market (SW)
a. Utica/State Park ↑
b. Perrin Park ←
c. Aquatic Center ←
d. Duffy's Landing ↑
88. Perrin and Market (NE)
a. Perrin Park →
b. Aquatic Center →
c. Big Four Station ↑
d. Ohio River Greenway ↑
89. Perrin and Market (NW)
a. Utica/State Park ←
b. Big Four Station →
c. Ohio River Greenway →
90. Market and Duffy's Landing (SW)
a. Duffy's Landing SAG Station →
b. Utica ↑
c. Charlestown State Park ↑
91. Market and Duffy's Landing (NE)
a. Duffy's Landing ←
b. Big Four Station ↑
c. Ohio River Greenway ↑
92. Market and Allison (SW)
a. Grocery ←
b. Richard Vissing Park ←
c. Utica ↑
d. Charlestown State Park ↑
93. Market and Allison (NE)
a. Grocery →
b. Richard Vissing Park →
c. Perrin Park/Aquatic Center ↑
d. Downtown ↑
94. Market and Allison (NW)
a. Utica ←
b. Charlestown State Park ←
c. Perrin Park/Aquatic Center →
d. Downtown →
95. Market and Port (SW)
a. Utica ↑
b. Charlestown State Park ↑
96. Market and Port (NE)
a. Downtown ↑
b. Perrin Park/Aquatic Center ↑



FINAL PLAN



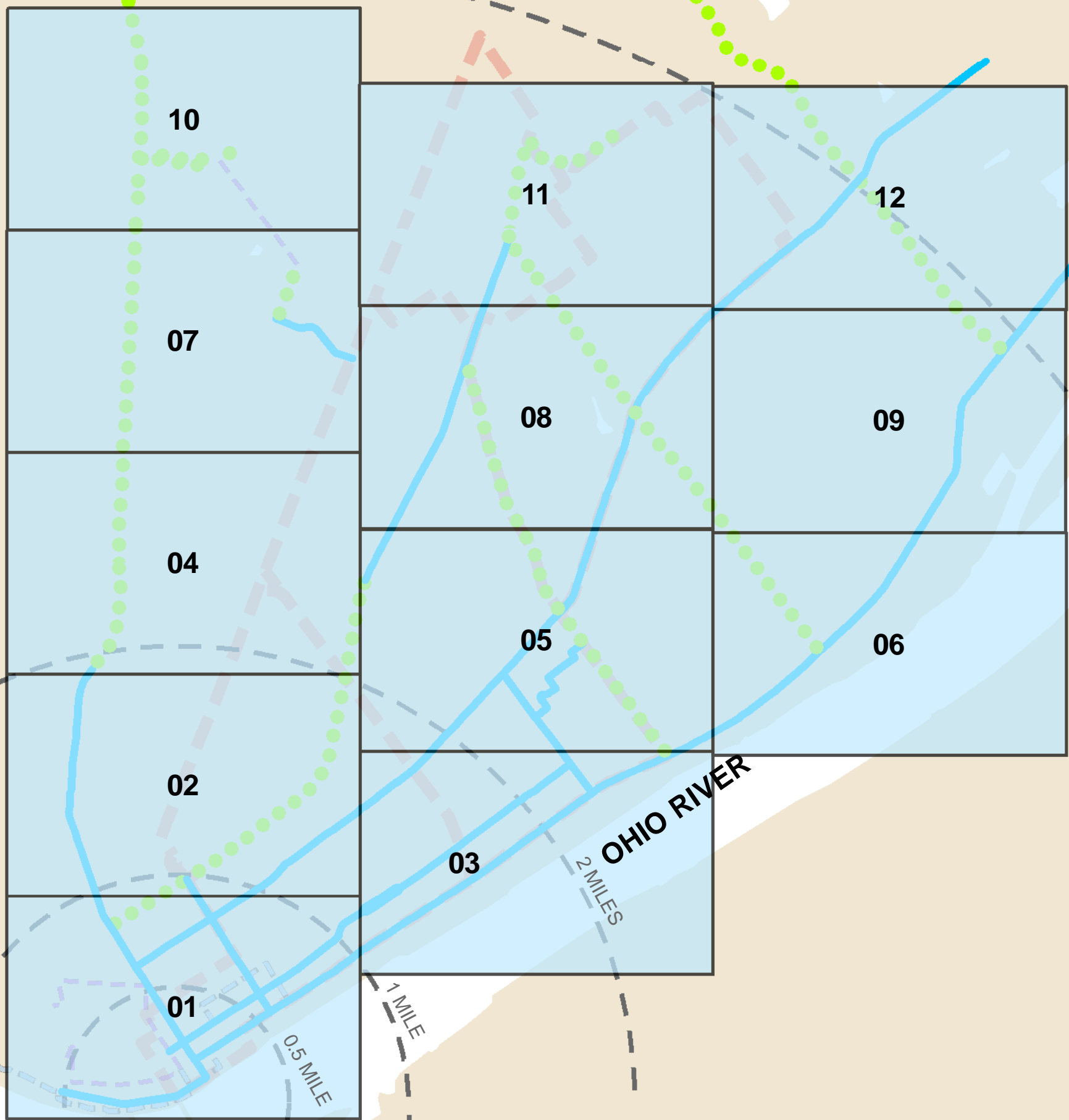
97. Market and Port (NW)
 - a. Utica ←
 - b. Charlestown State Park ←
 - c. Downtown →

98. 10th and Railroad (SW)
 - a. Grocery ↑
 - b. Richard Vissing Park ↑
 - c. Perrin Park/Aquatic Center ↑

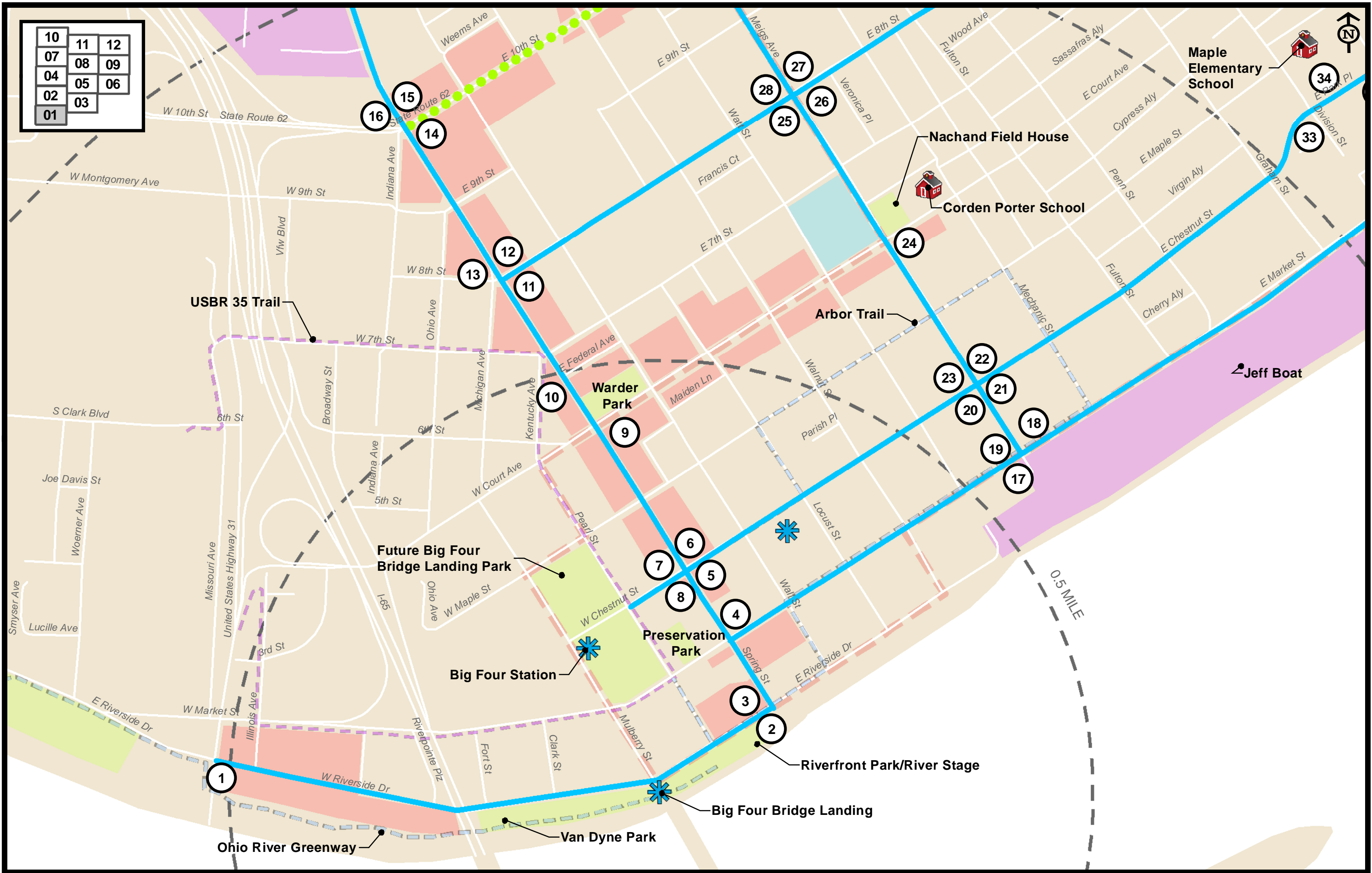
99. 10th and Railroad (NE)
 - a. City Hall ↑
 - b. Downtown ↑

100. 10th and Oakridge (SW)
 - a. Northaven Elementary School ←
 - b. Grocery ↑
 - c. Richard Vissing Park ↑
 - d. Perrin Park/Aquatic Center ↑

101. 10th and Oakridge (NE)
 - a. Northaven Elementary School →
 - b. City Hall ↑
 - c. Downtown ↑



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04	05	06
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01		



USBR 35 Trail

Nachand Field House

Corden Porter School

Maple Elementary School

Warder Park

Preservation Park

Big Four Station

Riverfront Park/River Stage

Big Four Bridge Landing

Van Dyne Park

Ohio River Greenway

Jeff Boat

0.5 MILE



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Head Start



Parkview Middle School

Memorial Park

John Wilcoxson Park

Woehrle Park

S. Harlan Vogt Park

Howard Steamboat Museum

2 MILES

OHIO RIVER

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Shirley Hall Park



Thomas Jefferson Elementary School

Highland Park

99

46

45

44

43

Industrial Pky
Sunshine Ln
Charlestown Pike
Hamburg Pike
Cameron Dr
Green Hill Dr
Willow Dr
Edgewood Dr
Quarry Rd
Woodlawn Ave
Myrtle St
Mary St
Williams St
Jefferson Ct
Ash Ct
Sportsman Dr
Ridgeway Dr
Skyline Dr
Tranquil Dr
Firwood Ct
Gail Dr
Ironwood Ct
Mosswood Ct
Melody Ln
Reeds Ln
Harmony Ln
Lee St
Roosevelt Dr
Oaklawn Dr
Highland Dr
Plank Rd
E 10th St
1st Ave
A St
Cedarview Dr
1st Ave
A St
C St
B St
A St
4th Ave
E Applegate Ln
E Applegate Ln
I-65
Old Hwy 31 E
Yale Dr
Kopp Ln

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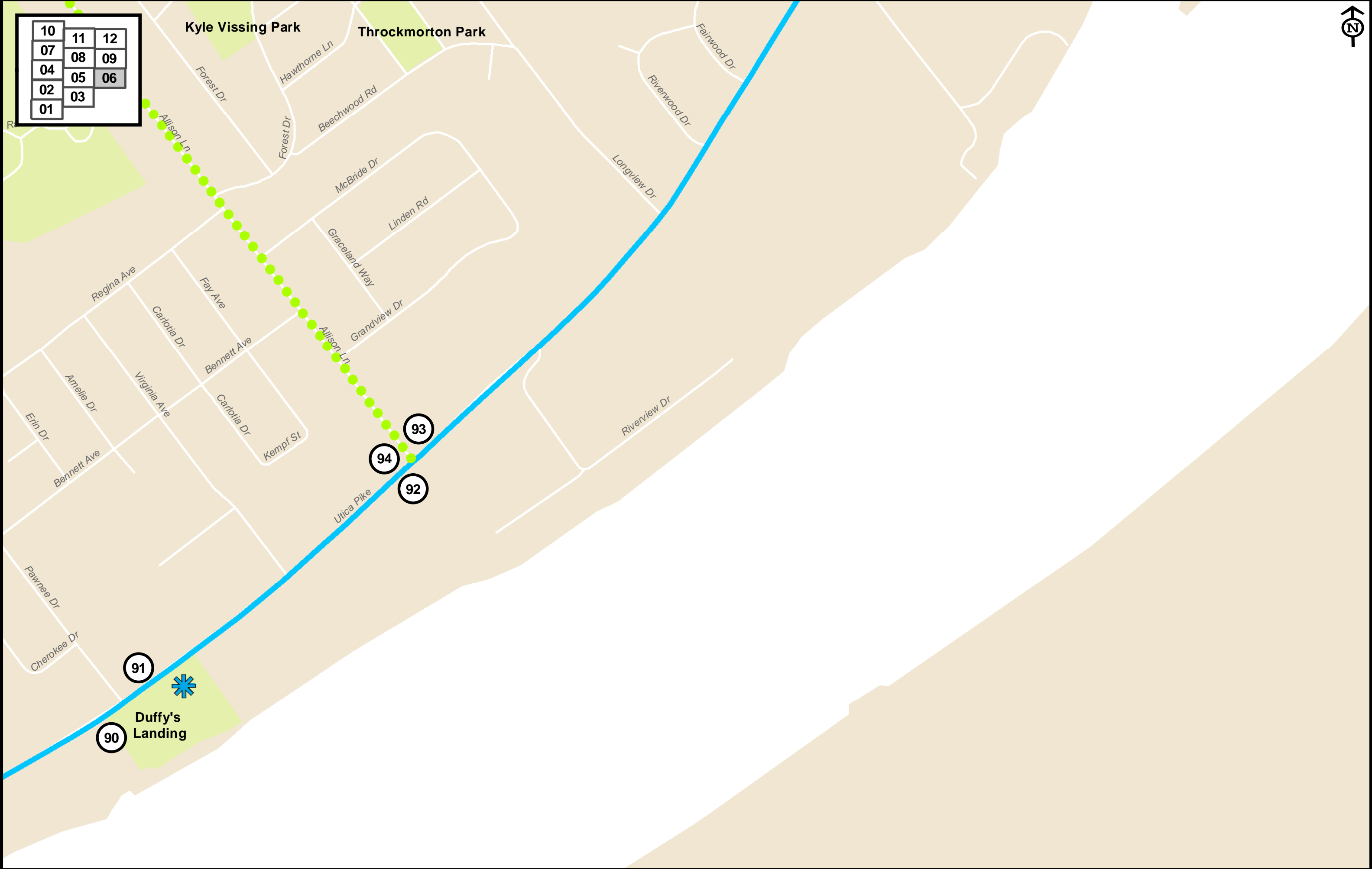
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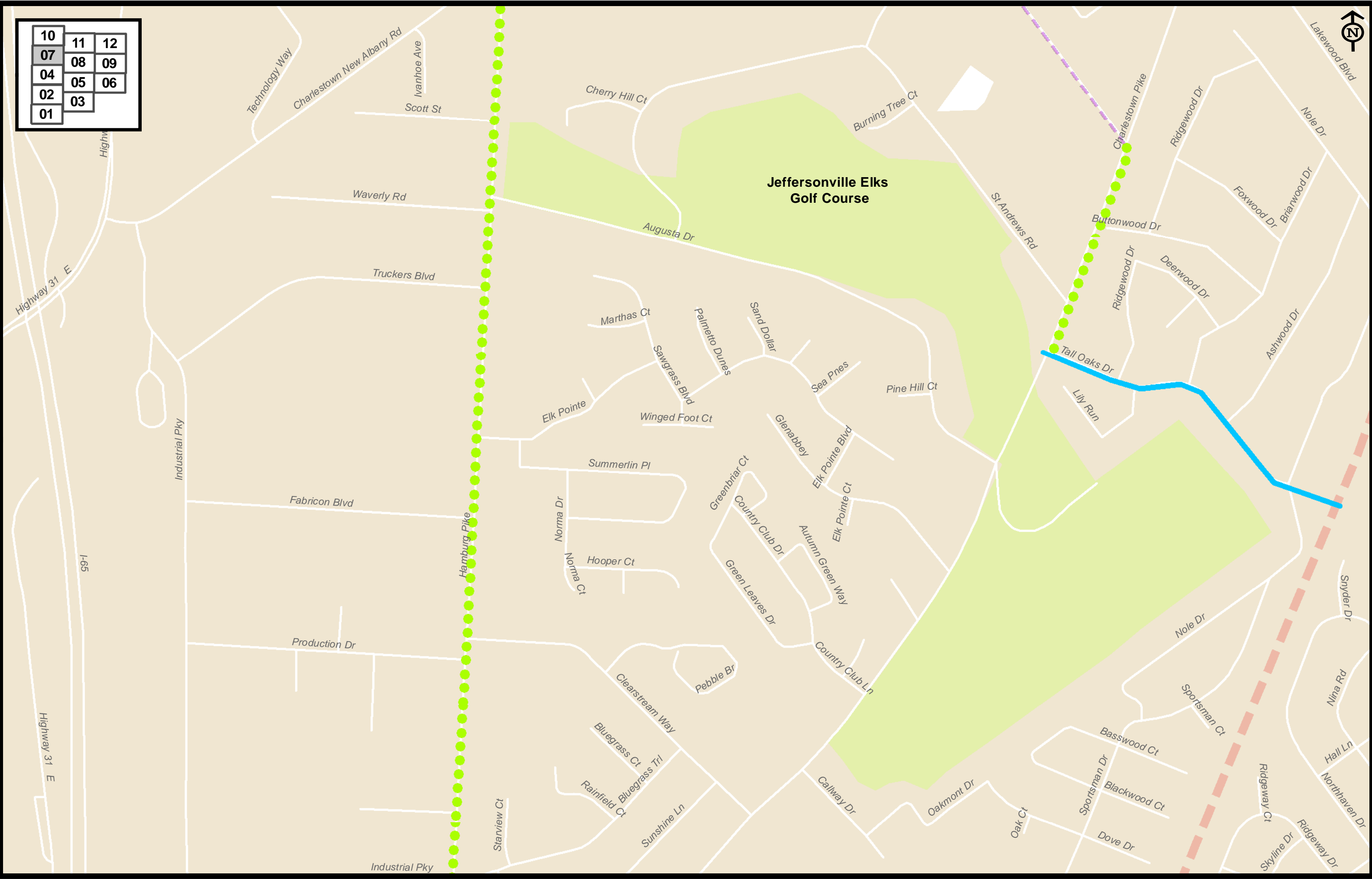
Kyle Vissing Park

Throckmorton Park

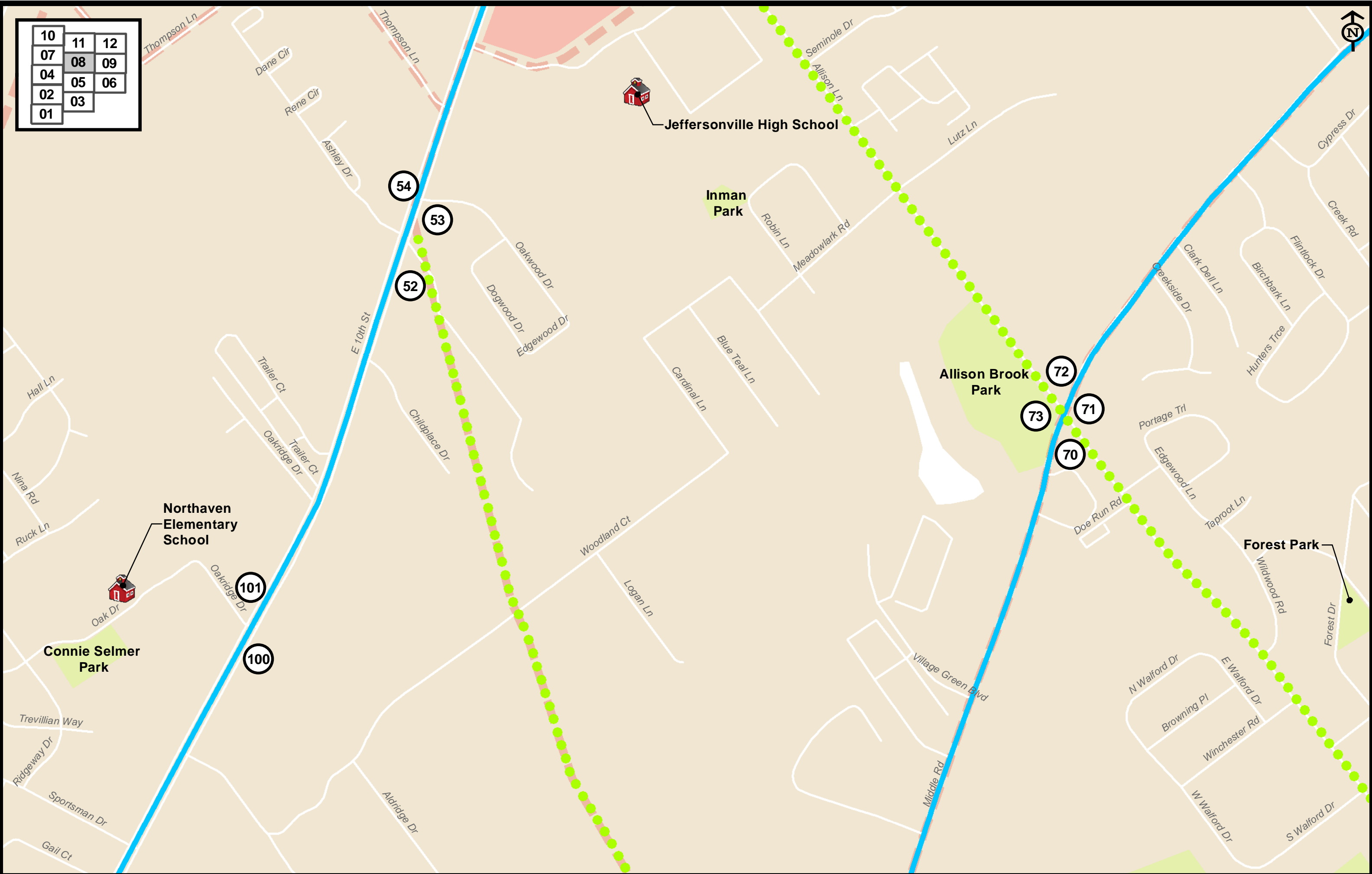
Duffy's Landing



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**Northaven
Elementary
School**

**Connie Selmer
Park**

Jeffersonville High School

**Inman
Park**

**Allison Brook
Park**

Forest Park

54

53

52

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100

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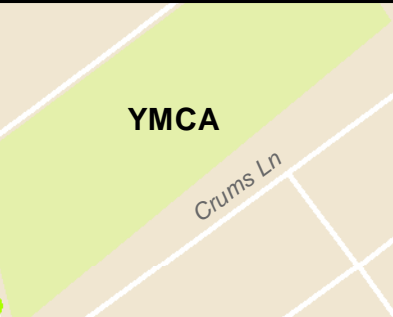


Riverside Elementary School



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97
95

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01		



YMCA



Indiana Tech



W E Wilson Elementary School



River Valley Middle School

49

48

47

50

51

Highway 31 E

Hamburg Pike

Technology Way

Whitehorse Vale Dr

Bishop Rd

Cornwell Dr

Belmar Dr

Belmar Ct

Fountain Crest Cir

Bishop Cir

Crums Ln

Cornwell Dr

Belmar Dr

Belmar Ct

Fountain Crest Cir

Dunbar Dr

Kingsfield St

Meadows Dr

Scott Dr

Bishop Cir

Kevin Ct

Arthur St

Crown Ct

Fallow Dr

Hampton Dr

Hill Side Ln

Charlestown New Albany Rd

Charlestown Pike

Gander Dr

Muscovy Ct

Bunting Dr

Banner Dr

Flagstaff Dr

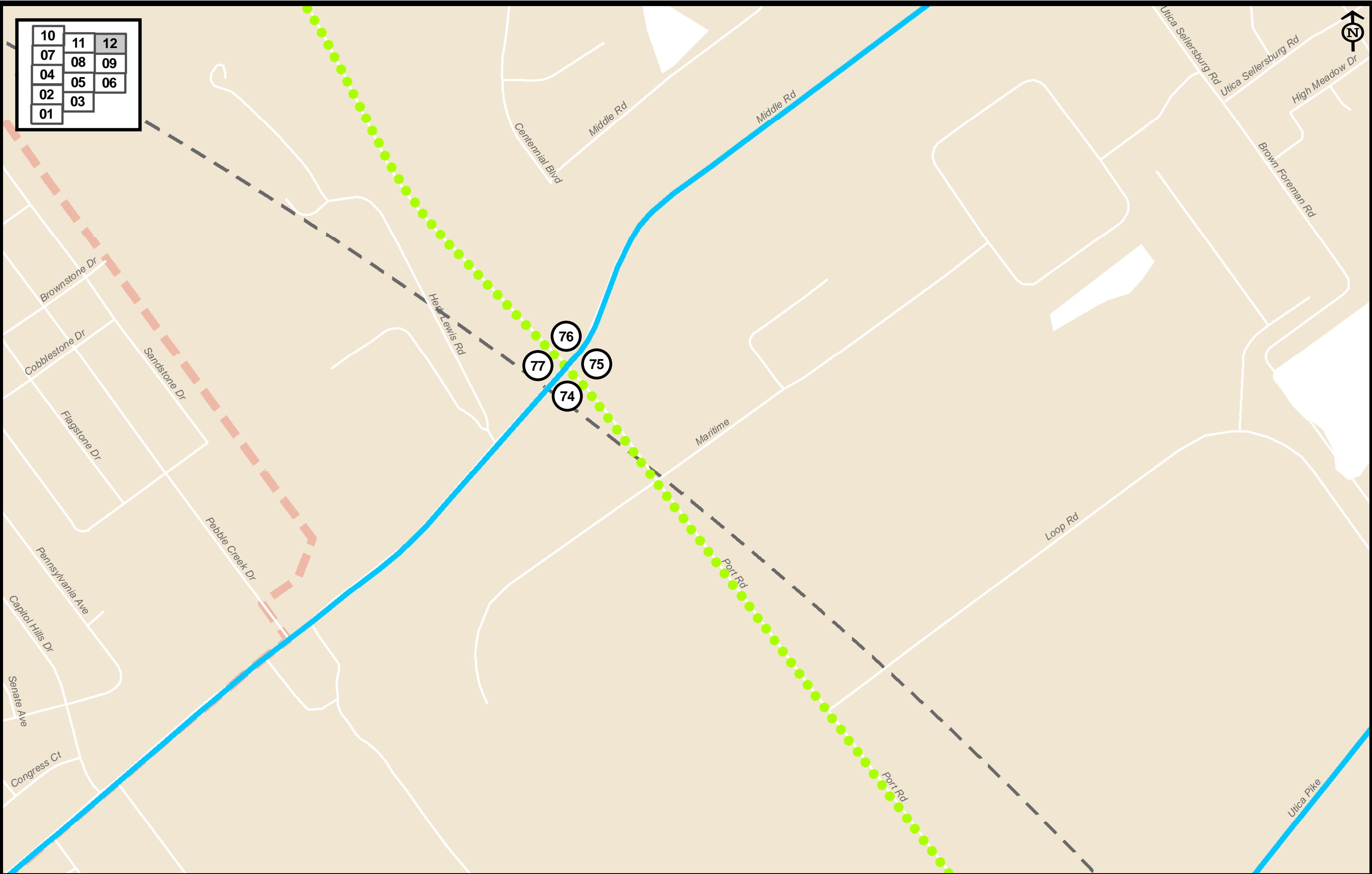
Lakewood Blvd

Georgian Way

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Brownstone Dr

Cobblestone Dr

Flagstone Dr

Pennsylvania Ave

Capitol Hills Dr

Senate Ave

Congress Ct

Sandstone Dr

Pebble Creek Dr

Herb Lewis Rd

Centennial Blvd

Middle Rd

Maritime

Port Rd

Port Rd

Loop Rd

Utica Sellersburg Rd

Utica Sellersburg Rd

High Meadow Dr

Brown Foreman Rd

Utica Pike

77

76

75

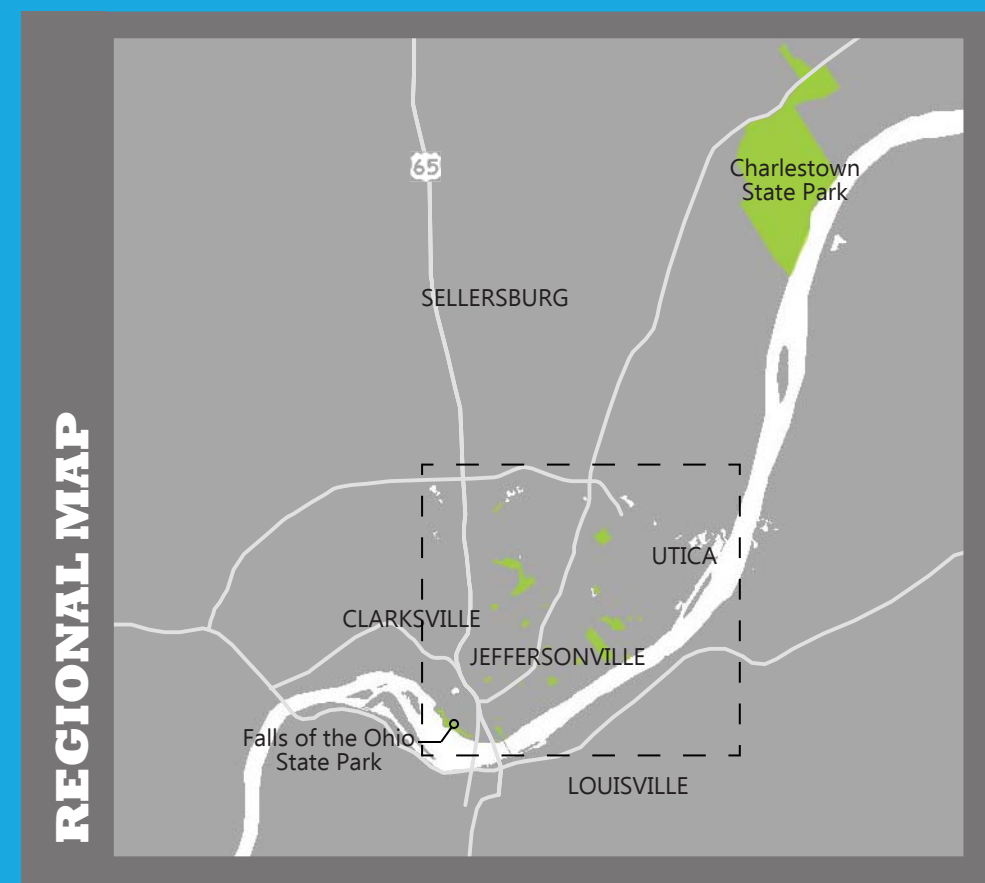
74



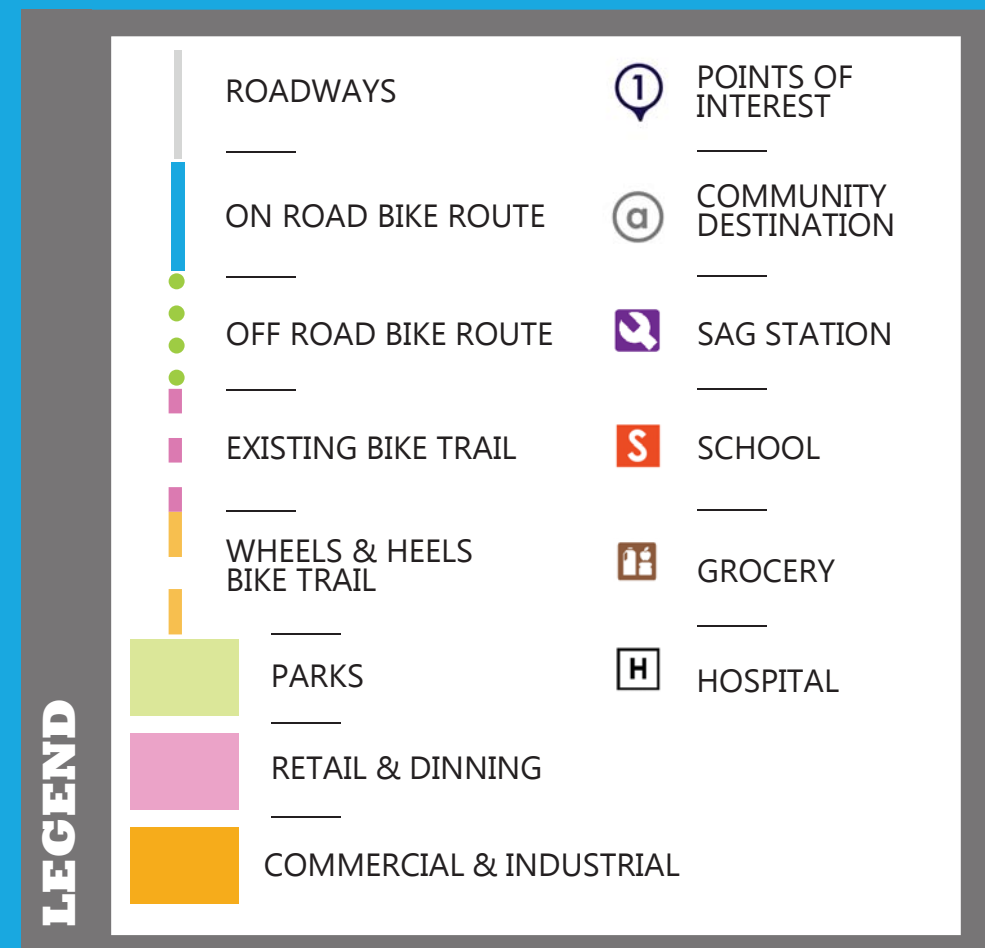
FINAL PLAN



BICYCLE GUIDE MAP



REGIONAL MAP



LEGEND

- POINTS OF INTEREST**
- 1 OHIO RIVER GREENWAY: A seven and a half mile linear park along the Ohio River between Jeffersonville, Clarksville and New Albany, Indiana.
 - 2 BIG FOUR STATION: The entrance park when coming across the Big Four Pedestrian/Bicycle Bridge into Jeffersonville.
 - 3 CLARK COUNTY GOVERNMENT OFFICES: Jeffersonville is the county seat for Clark County.
 - 4 CITY HALL & QUARTERMASTER COURT: Jeffersonville City Hall anchors Quatermaster Station which is Jeffersonville's newest office, retail, and medical facility.
 - 5 HOWARD STEAMBOAT MUSEUM: Housed at the 1894 Howard family mansion, this museum displays many artifacts and models of steamboats during the height of its era.
 - 6 DUFFY'S LANDING: Public access boat launch.
 - 7 PERRIN FAMILY PARK: 98-acre park that provides areas for walking trails, picnic shelters, open space, and playgrounds.
 - 8 JEFFERSONVILLE AQUATIC CENTER: An outdoor swimming facility which has competition and lap pools, a zero depth entry family pool, sprayground, changing rooms, as well as an outdoor skate park.
 - 9 YMCA: Part of the YMCA of Southern Indiana, it provides a recreational space for youth development, healthy living, and social responsibility.
 - a COMMUNITY KITCHEN: A nonprofit organization providing meals for the needy.
 - b HEAD START: Provides comprehensive child development services to economically disadvantaged children and families.
 - c DISCOVERY SCIENCE CAMP: Summer day camp that offers a wide variety of interactive learning experiences for young children.

the benefits of a bicycle friendly community.

Bicycle transportation is at the intersection of personal, community, and global health. It epitomizes the reverberating effect that individual choices have on the world around us. Bicycling can empower us to become healthier, happier, and more in touch with the world we live in.

Biking is fun, cost-effective, and safe. We believe that the more people ride bikes, the stronger we will grow as a community. The positive effects can be hard to put into quantifiable terms, but as the bike movement grows, so does our ability to provide critical assessment and state measurable benefits.

Cities with high bicycling rates tend to have lower crash rates for all road users.

If the number of kids who walk and bike to school returned to 1969 levels, it would save 3.2 billion vehicle miles, 1.5 million tons of CO2 and 89,000 tons of other pollutants annually. This is the equivalent of keeping more than 250,000 cars off the road for a year

According to the federal government, biking for transportation can count toward the minimum 150 minutes/week of moderate-intensity aerobic activity recommended for physical health. It is also listed as the safest way to get physical activity.

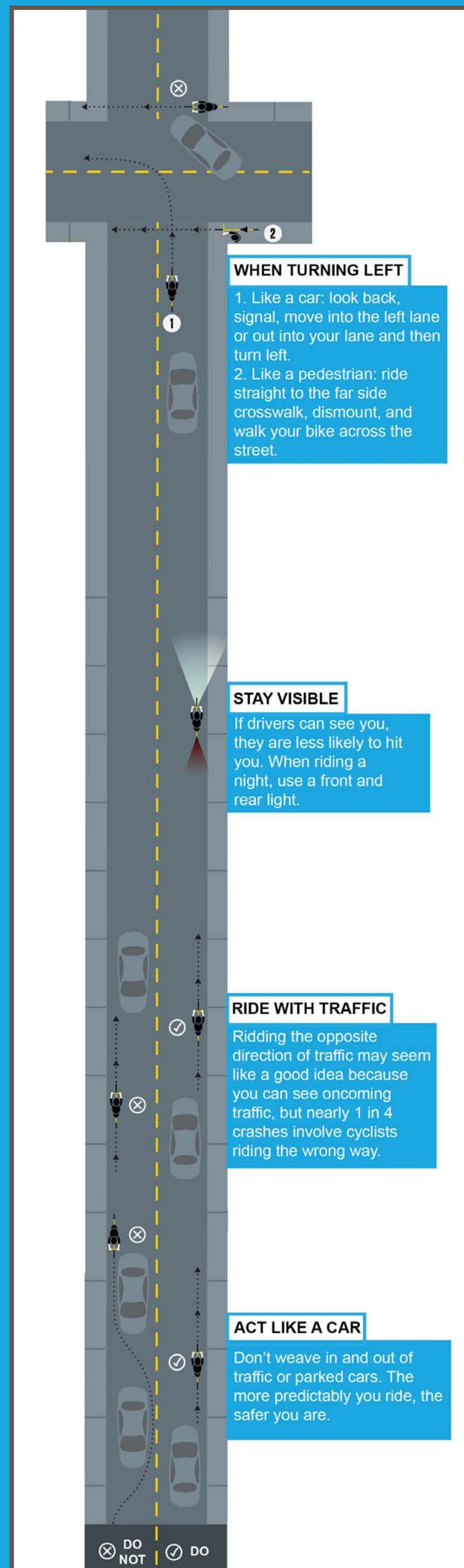
Information provided courtesy of:
BTA Oregon
Bikes Belong

the ten commandments of bicycling.

- I. Wear a helmet for every ride, and use lights at night.
- II. Conduct a thorough safety check of your bike before every ride.
- III. Obey traffic laws: ride on the right, slowest traffic to the right.
- IV. Ride predictably and be visible at all times.
- V. At intersections, ride in the right-most lane that goes in your direction.
- VI. Scan for traffic and signal lane changes and turns.
- VII. Be prepared for mechanical emergencies with tool and know-how.
- VIII. Control your bike by practicing bike handling skills.
- IX. Drink before you are thirsty and eat before you are hungry.
- X. Have fun!

From the League of American Bicyclist: www.bikeleague.org

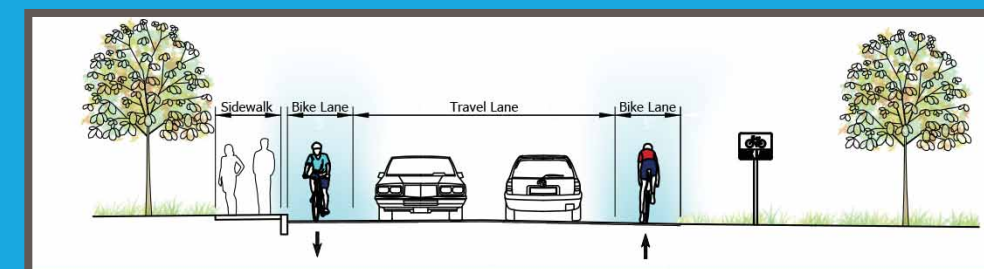
sharing the road.



Some map graphics provided courtesy of IndyCog

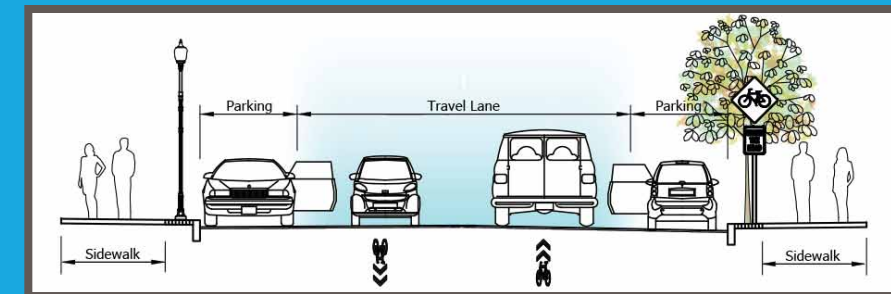
types of bicycle facilities.

MARKED BIKE LANES



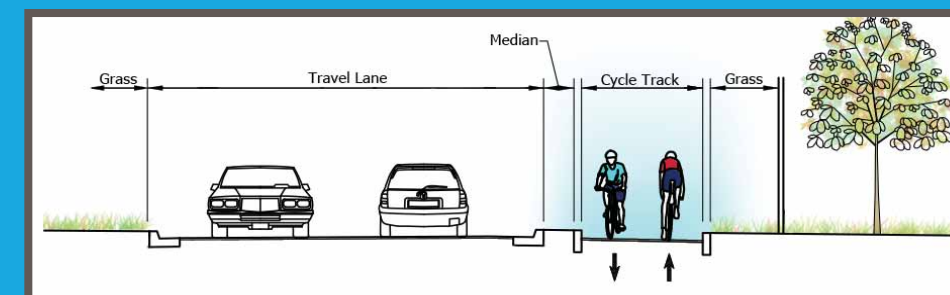
Bike lanes designate a separate space for bicyclists to ride on through the use of pavement markings and signage. Conventional bike lanes are located next to the travel lanes and flows in the same direction as vehicle traffic.

SHAROW BIKE LANES



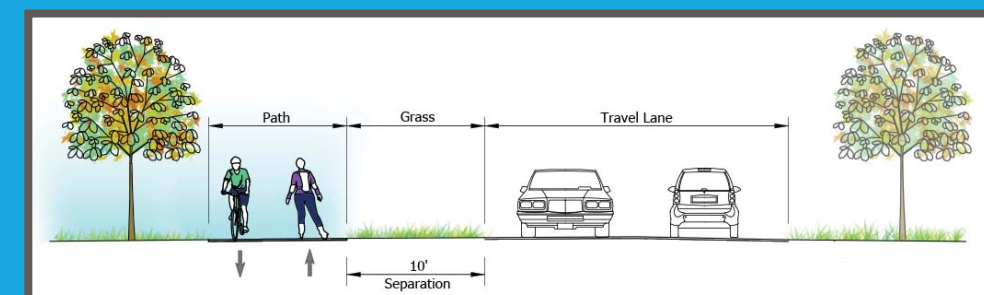
There is no designated bicycle path on the travel lanes. Bicyclists and vehicles are allowed to use the same travel lane with caution and awareness of one another.

CYCLE TRACK



A cycle tracks are separated physically from vehicular lanes and distinct from the sidewalk. Separation buffers can come in different forms such as: a median, on street parking, bollards. Cycle tracks can offer more security and are attractive for riders of all experience.

SHARED-USE TRAILS



Often called trails, shared use paths are distinct from vehicular lanes and are viewed as a separate entity. Users are non-motorized include but are not limited to: bicyclists, roller skaters, wheelchair users, runners, and walkers. These facilities are most commonly designed for two-way travel.

Graphics drawn by Sharon Blackwell, BF&S, Inc.

what is a SAG station?



SAG is the acronym standing for "Support and Gear" Stations. These stations are placed periodically along a bike path, and its main purpose is to provide mechanical assistance to riders in need.

Its attributes include: a repair arm which allows a bicycle's pedals and wheels to spin freely, a bike pump, and all the tools necessary to perform basic bicycle repairs.



Image: www.securabike.com.au

information resources.

Emergencies - Dial 911

League of American Bicyclists - National non-profit education and advocacy organization
www.bikeleague.org

Report an issue with a bike lane, path or trail - www.cityofjeff.net and click the icon [Your Gov](#)



Jeffersonville.
ride





FINAL PLAN



PROGRAMS & POLICIES



Bicycle and Pedestrian Programs

Moving Jeffersonville into a bicycle and pedestrian friendly community will need to be supported through programs and policies. Programs will be used to support and continue efforts in making Jeffersonville safe for all non-motorized modes of transportation. As stated before, The League of American Bicyclists has developed a 5 E's program which they use as the foundation for labeling a City as a Bicycle Friendly Community. This plan will further use the 5 E's program to promote pedestrian walking routes throughout the City with programs and policy.

Education

As defined by the League of American Bicyclists, education is the amount of information available for bicyclists, motorists and pedestrians to allow for safe routing along all defined pathways. Jeffersonville currently has few programs in place to educate residents and visitors about safety while walking and biking inside the City.

Jeffersonville should build upon their existing programs by continuing to develop a variety of education programs which teach young and old about safety, proper bicycling techniques on the road, bicycle maintenance, rules of the road and responsibilities. The following chart, developed from committee meetings, stakeholders meetings and public meetings, gives suggestions for new education programs to be implemented within the City of Jeffersonville.

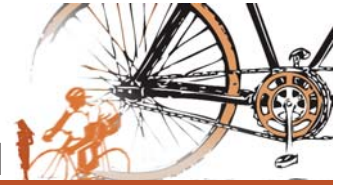




Jeffersonville Bicycle and Pedestrian Comprehensive Plan: Programs

Education

Recommended Programs	Implementation and Details
Program: Public Schools Education program to be implemented in grades 1-12 (walking and biking).	Elementary, Middle and Secondary schools to provide classes as part of their regular curriculum; teaching students rules of the road, proper traffic procedures, bicycle safety, bicycle maintenance and any other information to promote walking and bicycling within the City of Jeffersonville.
Program: A bike safety school for children.	An education program outside the school system to instruct young children proper bicycling techniques, rules of the road and use of proper bicycle safety equipment while riding.
Program: Drivers Education Course on Bike Safety.	Drivers education for young adults to include education on how to properly drive with bicycles on the road. Class to be geared around safely passing bikes, proper etiquette while driving with bicycles on the road, signage, different types of bicycle lanes and how to avoid collisions.
Program: Share the road program to education drivers on how to drive with bikes on the road.	Led by the transportation department, educating pedestrians, bicyclists and motorists on rights and responsibilities in sharing the roadway.
Program: Develop League Cycling Instructors (LCI's)	Have city employees certified by League of American Bicyclists that can offer local bicycle skills training courses.
Program: Crossing Guard Training Program.	Establish a training program through the law enforcement division to train individuals as proper crossing guards. Doing so will help increase the level of safety for children as they gain the ability to walk and bike to school.
Program: Basics of bicycling program.	A course developed for adults who would like to start bicycling. The course will offer general maneuvering on the roadway, sharing the road, bike safety and the basics about a bicycle.
Program: Bike repair video, pamphlets and courses.	Offer free information material to instruct bicyclists on basic repair and maintenance of their bike.
Program: Traffic schools to instruct motorists on sharing the road.	During mandatory traffic school for traffic violators, attendees must learn about sharing the road with pedestrians and bicyclists.
Program: Internal Planning and Design Training Program	Agency staff and planning review boards to receive training on integrating sidewalks and bicycle lanes into all new projects.
Program: Develop brochures and videos for TARC and DMV to hand out and make available to the public.	Video and brochures to be available for TARC bus drivers and local DMV's to help campaign for bicycles on the road and educating driver on how to share the road.



Encouragement

The City should promote and encourage bicycling, walking and running within the City of Jeffersonville. The City will need to participate in national events, such as, Bike to Work Month, and set up their own promotional events to encourage residents and visitors to bike and walk within Jeffersonville. The City must also provide the tools to promote awareness for bike riding, walking and running. Placing routing maps, proper wayfinding signage, bike lock-up areas and restrooms around the City will help create a bike friendly and walkable city.

Jeffersonville needs to develop a variety of promotional events to encourage bicycling, walking and running throughout the City. Additionally, the City will need to create spaces, places and signage to help promote and portray their dedication to biking and walking throughout the area. The following chart, developed from committee meetings, stakeholders meetings and public meetings, gives suggestions for new promotional programs to be implemented within the City of Jeffersonville.





FINAL PLAN



Jeffersonville Bicycle and Pedestrian Comprehensive Plan: Programs

Encouragement

Recommended Programs	Implementation and Details
Program: Participate in the national Bike to Work Day every year.	The League of American Bicyclists sets up a day every year dedicated to biking to work. Jeffersonville should participate in this event on a yearly basis.
Program: Bike or Walk with the Mayor Day.	Have the Mayor of Jeffersonville have a day where residence join him in walking or biking to work.
Program: Annual / Regular Commuter Events.	Commuter contest for those biking, walking to work. Cycling treasure hunts for children and adults to make them aware of all the places they can reach on a bike or by walking. Once a month, during summer months, is bicycle breakfast day.
Program: Bike and walk for health events.	Increase awareness for the need to incorporate physical activity into the daily routine.
Program: Promote bike valet parking at all Jeffersonville events.	Staging a place at every event which Jeffersonville holds with dedicated bike parking. This place should be secured and watched by local police to assure to the public their bike is safe.
Program: Create a Safe Routes to School program.	A nation wide program to encourage children to walk and ride bikes to school by provide a safe means for them to travel.
Program: Walk a child to school day.	A day once a month, during spring and fall, where guardians walk their child to school to promote a healthy style of living.
Program: Develop a bicycle and walking wayfinding plan.	Develop wayfinding signage to encourage residents and visitors to walk, run and bike throughout Jeffersonville. Develop printed bike and walking maps to help find popular destination by way of biking and walking.
Program: Develop bike signage routes	Post signage along bike routes to guide residents and visitors to destination within and outside of Jeffersonville.
Program: Implement facilities to promote biking and walking.	Facilities should be placed around Jeffersonville to encourage biking, walking and running. Facilities to include bike lock-up areas, public restrooms, picnic benches, public bike maintenance areas, park and bike locations and shelters.
Program: Share the Road Jeffersonville campaign.	Promote biking within the City by distributing information and marketing material on sharing the road within Jeffersonville.
Program: Bicycle recycle program.	Develop a program to obtain old and broken bikes which can be fixed and given to needy people who would like to use them for commuting and traveling throughout Jeffersonville.



Enforcement

Jeffersonville will need to address bicycling as it relates to law enforcement. Similar to vehicles on the road, police need to be aware of proper procedures for upholding the law when it comes to bicycles navigating the streets. Law enforcement officers will need to protect motorists and bicyclists as they travel together along the same pathway. Jeffersonville will need to evaluate how they protect bicyclists, pedestrians and motorists by adding to their current curriculum; new bike police, new share the road laws and a way to distribute penalties for violators.

New programs, laws and policy may need to be implemented as bicycle traffic increases in Jeffersonville. This will be an important addition to the City as it creates a safe place for pedestrians, bicyclists and motorists to intermingle. The following chart, developed from committee meetings, stakeholders meetings and public meetings, gives suggestions for new enforcement programs to be implemented within the City of Jeffersonville.





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Jeffersonville Bicycle and Pedestrian Comprehensive Plan: Programs

Enforcement

Recommended Programs	Implementation and Details
<p>Program: Provide bicycle patrol within the law enforcement division.</p>	<p>Jeffersonville will need to provide bicycle police officers to patrol bike and vehicle activity during busy times. Police officers may need to participate in any of the following programs: International Police Mountain Bike Association training, Law Enforcement Bicycle Association training, Smart Cycling Course, Presentation by League Cycling Instructor or provide an Institute for Police Training and Development Bicycle Training program.</p>
<p>Program: Target enforcement program within the police department.</p>	<p>Analyze crash and speeding data to help patrol problem areas throughout the City. Unsafe bicycle behaviors can also be targeted and patrolled.</p>
<p>Program: Update laws and ordinances.</p>	<p>Give specific guidelines to be followed for each type of mode of transportation. New traffic laws should be implemented to promote shared roads. Laws to include are; penalties for failing to yield to a cyclist while turning, illegal to park or drive in a bike lane, penalties for motor vehicles that 'door' cyclists, ban on cell phones while driving, safe passing distance laws and it is illegal to harass a cyclist.</p>
<p>Program: Provide a share the road campaign.</p>	<p>In addition to signage, provide the public with printed material, web resources and any other type of multi-media to promote sharing the road.</p>
<p>Program: Certify police officers for bike patrol.</p>	<p>All bicycle police should be certified on proper policing techniques and procedures while riding a bike.</p>
<p>Program: Develop a crossing guard program.</p>	<p>A program led by the police department to educate staff who will be used as crossing guards at Jeffersonville schools. The program will be used to educate those involved on proper procedures, rules of the road and coordinating traffic.</p>
<p>Program: Develop a giveaway program that targets improving cyclist safety.</p>	<p>Develop handouts to the public which promote safe travel along the roadways including; helmet giveaways, light giveaways, bike lock giveaways and reflector giveaways.</p>



Engineering

This will be the most direct way to create a bicycle and pedestrian friendly community. Providing the actual built environment so bicyclists and pedestrians can use roadways and walkways; getting the public to main destination point around the city. Additionally, the City should provide facilities at main destination points for riders, walkers and runners. These facilities provide security, rest stops, wayfinding and support for those riding, running and walking within the area.

Implementing the suggested routes and facilities proposed by this plan will be the next step in becoming a bicycle and pedestrian friendly community. The following chart, developed from committee meetings, stakeholders meetings and public meetings, gives suggestions for new routes and facilities to be implemented within the City of Jeffersonville.





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Jeffersonville Bicycle and Pedestrian Comprehensive Plan: Programs	
Engineering	
Recommended Programs	Implementation and Details
Program: Implement the lane and sidewalk improvements suggestions as part of this plan.	Add bike lanes and walking routes to the City's infrastructure. Lanes and walking routes should be implemented according to the priority list provided in this document.
Program: Implement facilities as suggested by this plan.	Add supporting facilities to help encourage bicycling, running and walking throughout the City. Facilities to include but not limited to, public restrooms, seating areas, shelters, public bike maintenance stations, update sidewalks to ADA regulations, lock-up areas, drinking fountains, trash receptacles and wayfinding signage.
Program: Add additional bike paths outside the roadway lanes.	Add other trail systems within Jeffersonville. Other trails to include: cyclocross course, velodrome and mountain biking trails.
Program: Implement sidewalk master plan.	Accomplish tasks on the sidewalk master plan to add more sidewalks to City of Jeffersonville.
Program: Complete Street program.	Start a complete street program to increase usability for multiple modes of transportation. Street to include bike lanes, proper signage, proper sidewalks, ADA compliant and have safety in mind.
Program: Increase trips made by bicycle.	Implemented additional bike lanes and routes throughout the City to help increase ridership.
Program: All paths lead to the Big Four Bridge.	Use the Big Four pedestrian bridge as a catalyst to increase biking, running and walking throughout Jeffersonville.
Program: Connection to neighboring communities.	New bike lanes and sidewalks to be implemented and coordinated so they connect to neighboring communities and their major destination points.
Program: Create a maintenance program.	A maintenance program should be implemented within the City to keep new and existing sidewalks clean and safe. The maintenance program should also include new bike lanes within the City. Bike lanes should be street swept to keep them clear of debris and clutter from everyday use.
Program: Develop the river front as a recreation area.	Further develop the river front in Jeffersonville for new bike lanes and sidewalks. Connect new bike lanes to the river front and specifically the Ohio River Greenway. Expand the Ohio River Greenway east to increase public access to the river.



Evaluation

Planning for the future can be the most important in creating a bicycle and pedestrian friendly community. In order to keep up with current trends and expand the City’s bicycle and sidewalk network, Jeffersonville must evaluate existing programs and policies for future development. Gather statistical data on crashes, finding current ridership counts and update the location of existing sidewalks should be evaluated on a yearly basis to increase the current infrastructure network. The bicycle and pedestrian comprehensive plan must be updated as more sidewalks and bike routes are added.

Approving a pedestrian and bicycle plan into the Jeffersonville Comprehensive Plan will be the first step in evaluating the current conditions of the City. Doing so will enable Jeffersonville to implement policies, programs and infrastructure into the City, creating a pedestrian and bicycle network. The following chart, developed from committee meetings, stakeholders meetings and public meetings, gives further suggestions for new evaluation programs to be implemented within the City of Jeffersonville.





Jeffersonville Bicycle and Pedestrian Comprehensive Plan: Programs	
Evaluation	
Recommended Programs	Implementation and Details
Program: Approve the Jeffersonville Bicycle and Pedestrian Comprehensive Plan to be apart of the Jeffersonville Comprehensive Plan 2030.	This plan should be presented to the Plan Commission and be approved as a supplement of the Jeffersonville Comprehensive Plan 2030.
Program: Update the Bicycle and Pedestrian Comprehensive Plan.	As policy, program and infrastructure is implemented into the City, the comprehensive plan should be updated to allow Jeffersonville to expand beyond the original designs. This plan should be updated on a five year basis or accordingly with the City's improvements.
Program: Bicycle inventory analysis.	Select major site locations to take inventory of the number of bicyclists using the main routes around the City. Make adjustments where necessary according to the data gathered.
Program: Sidewalk inventory analysis.	Continually update the sidewalk master plan on existing sidewalks in place and what areas to expand new sidewalks. Make notes on sidewalk areas that need to be updated to become ADA compliant. The sidewalk master plan should be updated every 5 years or accordingly with the City's improvements.
Program: Secure funding.	Find reliable funding sources to support the implementation of the Bicycle and Pedestrian Comprehensive Plan.
Program: Bicycle and Pedestrian Report Card.	Create a checklist to evaluate the progression the Bicycle and Pedestrian Comprehensive Plan. The checklist should include the 5 E's and react to what is in place presently and plans for implementation in the future.



Program Examples and References

The following links and reference websites can be used to help Jeffersonville set the framework for their own programs. Jeffersonville may use the information in these websites to see what other communities have created and see their successes and failures. This will help properly develop the programs which Jeffersonville would like to see implemented in the community. The links below are categorized according to the 5 E's mentioned above.

Education Links

Bicycle Safety Education:

www.bicyclinginfo.org/education/resource/bestguidedoc.html
www.ibike.org/education/safety-materials.htm
www.saferoutespartnership.org/state/bestpractices/curriculum
www.fhwa.dot.gov/environment/bicycle_pedestrian/index.cfm

League Cycling Instructors (LCI's)

www.bikeleague.org/content/become-instructor

Share the Road:

www.sharetheroadsafely.gov

Encouragement

Walk/Bike to School:

www.walkbiketoschool.org/keep-going/bike-safety
www.saferoutesinfo.org/events-and-training/national-course
www.saferoutespartnership.org

Bike to Work Day:

www.biketowork2013.org

Bicycle Recycle Program:

www.ibike.org/environment/recycling
www.recycleabicycle.org

Enforcement

Bicycle Patrol:

www.leba.org

Bicycle Law:

www.bicyclelaw.com

Engineering

Complete Streets:

www.smartgrowthamerica.org/complete-streets



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Other Bicycle and Pedestrian Reference Websites

www.bicyclinginfo.org

www.walkinginfo.org

www.bikeleague.org

www.peoplepoweredmovement.org

www.bikesbelong.org

www.bicycleindiana.org

www.americawalks.org

www.bikewalk.org



Bicycle and Pedestrian Policy

Developing and adopting policy for this comprehensive plan will effectively create momentum within the City to help implement the infrastructure and programs designed. Policy is the basic principle by which a governing body is guided. They directly benefit the City by improving the health, safety and welfare of its citizens by guaranteeing goals and objectives are achieved. The policies developed for this document directly correlate with pedestrian and bicycle transportation planned for the City of Jeffersonville.

The policy section of this comprehensive plan will be divided into the following sections:

- Pedestrian Land Use Policy
- Pedestrian Safety Policy
- Bicycle Land Use Policy
- Bicycle Safety Policy
- Bicycle and Pedestrian Infrastructure Policy
- Complete Streets Policy
- Development Review Policy

Policies in this chapter build on broader policy goals and objectives stated in the Jeffersonville Comprehensive Plan 2030. These policies will make specific recommendations geared toward the vision which Jeffersonville desires in pedestrian and bicycle transportation. Policies developed in these sections will give authority to City officials to implement the infrastructure and programs set forward by this document. It is recommended that this document be added to the Jeffersonville Comprehensive Plan 2030, showing the City’s commitment to building and preserving pedestrian and bicycle transportation as the community continues to grow.





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Pedestrian Policies

Pedestrian policies developed in this section protect the most common form of transportation. The City currently has many sidewalks running through downtown, its commercial districts and neighborhoods. These policies will help preserve, maintain, expand and improve this form of transportation.

Pedestrian Land Use Policies

As the community continues to grow it will be important to keep the pedestrian level of service current with the needs of the community. This includes maintaining connectivity between uses, expanding the current network of sidewalks, maintaining existing routes and supporting multiple levels of activity. The following policies are recommended for Jeffersonville's pedestrian transportation system:

- In all design and engineering activity, accommodating the pedestrian should be given the highest priority as it leads to the positive growth in the City's health, safety and welfare.
- Add support facilities to promote walking, running and hiking within the community. Continue to add walking trails, water fountains, benches and landscape within the City to accommodate pedestrian activity.
- Accommodate pedestrian routes during all new city funded projects. All new redevelopment or infill project should include sidewalks to fully accommodate pedestrian activity.
- Accommodate pedestrian routes during all new roadway projects. During design of any new roadway project within the City, all efforts should be taken to implement pedestrian facilities along the roadway.
- Accommodate pedestrian routes during all new land development projects, public or private. Efforts should be made to improve and/or add pedestrian walkways during any new project.
- Connect pedestrian routes to the Big Four pedestrian bridge. Use this pedestrian walkway as a way to bring people in and out of the city. Further develop this feature as a major transportation hub

for the City of Jeffersonville

- Connect neighborhoods to schools and other community facilities using pedestrian routes. Making efforts to connect all existing and new neighborhoods with new sidewalks.
- Connection to major commercial districts using pedestrian routes. Make efforts to create safe walking routes to major commercial centers.
- New and existing pedestrian routes should be maintained. A maintenance plan should be developed to keep all pedestrian walkways clean and up to code.
- Priority zones identified by this Comprehensive Plan shall receive emphasis and treatments as outlined.



Creating 'Safe Routes to School' should be a primary goal for the City as it further develops its pedestrian routes.



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Pedestrian Safety Policies

Maintaining a high level of safety for our most vulnerable transportation type should carry the utmost of importance. Individuals of all ages use the sidewalks and intersection crossings. The following policies are recommended to help keep Jeffersonville’s pedestrian out of harms way while using these pedestrian routes.

- During design, construction and enforcement of new and existing pedestrian routes, the health, safety and welfare of the community should be given top priority.
- Traffic enforcement officers shall target automobile drivers who endanger the safety of pedestrians.
- Create the necessary accommodations and programs for pedestrians to promote safe travel along roadways.



Utilize a hawk signal at busy roadway to provide extra protection for pedestrians crossing the road. These signals can be used at intersections or at mid-block.

Bicycle Policy

Bicycle transportation make up 20%-30% of how the public travel to their destination points. Bicycles offer a cheap, fast and low environmental impact way for people to move around. Bicycles also offer a recreation tool for all age groups. Young and old, the bicycle can become a tool to keep active and maintain a level of independence for those who do not drive a vehicle. The following policies will serve to implement bicycle

transportation as a major mode of transportation within Jeffersonville. Because bicycle traffic share the road with automobiles, these policies will further protect individuals as they travel along side motorized traffic.

Bicycle Land Use Policies

As a major mode of transportation for the City of Jeffersonville, the City must implement bike routes to connect neighborhoods, commercial districts, entertainment districts and recreation areas. The following policies will guide the City as they begin to build this new transportation system within Jeffersonville.

- In all design and engineering activity, accommodating bicycle routes should be given the highest priority as it leads to the positive growth in the City’s health, safety and welfare.
- Accommodate new bicycle routes during all new roadway projects. During design of any new roadway project within the City, all efforts should be taken to implement bicycle facilities along the roadway.
- Add support facilities to promote bicycling within the community. Continue to look at ways to add bicycle parking, maintenance stations, rest facilities, landscaping and signage to support the bicycling community.



Creating signage to promote bicycling will show the City’s support of this mode of transportation.



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- Accommodate bicycle routes during all new city funded projects. All new redevelopment or infill projects should include bicycling facilities to fully accommodate biking activity.
- Connect bicycle routes to the Big 4 pedestrian bridge. Use this bicycling bridgeway as a way to bring people in and out of the city. Further develop this feature as a major transportation hub for the City of Jeffersonville



The Big Four Bridge is a great new amenity for the City of Jeffersonville and should be used to bring people from around the area to bike, walk, run and inline skate downtown.

- Accommodate the bicycle during all new land development projects, private or public. Efforts should be made to improve and/or add bicycle facilities during any new project.
- Connect neighborhoods to schools and other community facilities using bicycle routes. Making efforts to connect all existing and new neighborhoods with bicycle facilities in order to create a complete interconnected network.
- Connection to major commercial districts using bicycle routes. Make efforts to create safe bicycle routes to major commercial centers.
- New bicycle routes should be maintained. A maintenance plan should be developed to keep all bicycle routes clean and up to code.

- Priority routes identified by this Comprehensive Plan shall receive emphasis and treatments as outlined.
- Develop new bicycle routes along the river front for recreational purposes. Extending the existing Ohio River Greenway and other pathways north to take advantage of the views and amenities along the riverfront.
- Develop mountain biking and other off road bicycling facilities within the City. Other bicycling activities should be implemented within the City to provide variety and interest among the community.



Mountain biking is a popular activity of many age groups and should be implemented when possible at park nature centers.



Small gathering spaces break up the congestion of downtown areas and provide rest areas for cyclists.



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- To eliminate vacant lots and sprawling parking areas, infill development is encouraged and given a priority along the bicycling and walking corridors to create energetic pedestrian zones.
- Create pleasant gathering spaces along bicycling and pedestrian corridors to allow people to rest and provide visual interest. These urban gathering spaces should be spaced between 1/4 - 1/2 miles away from neighborhoods and businesses.

Bicycle Safety Policies

Bicycle traffic share the road with automobile traffic. Because of this, safety should be taken into consideration when developing and designing new bike routes. Proper roadway design and enforcement must be created to allow for both forms of traffic to coexist. The following are policies to protect cyclists on roadways as their numbers increase within Jeffersonville.

- During design, construction and enforcement of new bicycle routes, the health, safety and welfare of the community should be given top priority.
- Traffic enforcement officers shall target automobile drivers who endanger the safety of bicyclists. Traffic officers should receive proper training and education on how to enforce and protect the driver and cyclist. Rules of the road should be updated to better protect both parties.
- Develop a bicycle patrol program within the police department. To show dedication to this form of transportation, a bicycle patrol department should be created to ensure safe travel methods are established on the road during busy travel times.
- Develop proper roadway signage. Signage will promote and protect cyclists as they travel on roadways. Use of signage will make vehicles aware that bicycles travel along the same pathway and result in better protection for both groups.
- Develop programs to promote safe and legal cycling. Provide "Share the Road" and other education programs to motorists and cyclists. Education will be an important tool in creating a safe environment for both groups. Programs

should be developed for all age groups and experience levels.



Programs should be offered starting at an early age to allow children to learn proper rules of the road and safe biking procedures.

Bicycle and Pedestrian Infrastructure Policies

Developing land and safety measures may be different for bicyclists and pedestrians but their infrastructure needs are very similar in nature. The City must consider implementing the infrastructure to support pedestrian and bicycle activity. Bicycle and pedestrians alike, will need safe intersections, new routes, proper facilities and a good maintenance plan. These concepts should be completed with careful planning, sound design and competent construction. The following are infrastructure policies addressing pedestrian and bicycle transportation needs within the City.

- Implement new bike routes within the current infrastructure using sharrows, bike lanes, cycle tracks and multi-use trails.
- Develop a signage wayfinding system for bicyclists and pedestrians along current roadways and sidewalks.
- Develop accessible routes along all current and new sidewalks. Heavily traveled routes, such as, 10th street and Middle Road should incorporate sidewalks with curb, gutter and a landscape buffer



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strips to allow for pedestrian, foot and wheelchair traffic.

- Make connections using bicycle and pedestrian routes to local schools, parks, neighborhoods, shopping centers, transit hubs and other highly populated areas.
- Focus redevelopment of the City's infrastructure system on non-vehicular modes of transportation. Future roadway improvements should focus on bicycle and pedestrian routes to relieve congestion. This should be done in areas where there are neighborhoods, commercial and entertainment zones, giving people a choice on how to travel to their destination.



Give the community a choice on how they decide to move around the City. Many will choose walking or biking which will result in lower vehicular traffic volumes.

- Pedestrian and bicycle routing should take precedence over vehicular flow in downtown and neighborhood areas.
- New and existing roadway intersections should be designed/redesigned to fully accommodate the safety, comfort and convenience of pedestrians and bicyclists.
- Supply or update crossing control systems for pedestrians at new and current intersections. Crossing controls should be implemented at wide

intersections which are frequented by pedestrians. Updates to the current systems should allow walkers to cross the street at the speed of an average pedestrian.



Design proper intersections to fully accommodate all modes of transportation. Make all intersections accessible and highly visible to decrease the amount of conflict between vehicle, cyclist and pedestrian.

- Future roadways should be better connected with the existing neighborhoods and subdivisions. Keep pedestrians and bicyclists in mind when designing the number of lanes and lane width.
- All future development, private and public, should be designed for ways to accommodate non-motorized vehicles. Make sure all new developments have interconnected sidewalks, bicycle lanes and proper facilities to accommodate a vehicular free style of life.



Offer shelters and bicycle parking to support alternate modes of transportation. Shelters also provide interesting features in urban areas.



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- Include new facilities to support pedestrians and bicyclists including landscape buffers, shade areas, street furniture, bike racks, trash receptacles, news stations, water fountains, outdoor cafes, information kiosks, public art and restrooms.
- Promote nighttime use by expanding the pedestrian scaled street light system to include all existing and future pedestrian and bicycle routes.
- Use alternate paving types for pedestrian and bicyclists at busy intersections. Paving treatments include crosswalk striping, change in material or painted conflict areas.
- Develop roadway diets to better accommodate bicycle lanes, create slower speeds in neighborhoods, develop shorter crossing zones and implement landscape areas.



alternate forms of transportation. Using this feature will create safer neighborhoods by redirecting vehicular traffic to main thoroughfares and preventing cut-through scenarios.

- All sidewalks and street intersections should comply with ADA regulations. A plan shall be completed to address all existing sidewalks and evaluate them on how to bring them into compliance with ADA regulations.
- The City should cooperate with the school systems to provide safe walking and bicycling routes

between home and school.

- Bicycle routes should connect neighborhoods and subdivisions. More attention shall be given on routing between neighboring communities using bicycle lanes and pedestrian routes. Create better connections to the neighboring communities of Charlestown, Utica, Louisville, Clarksville and New Albany. Work with neighboring community leaders to facilitate these connections.
- Additional connections north and south shall be developed using rail lines, existing roadways, utility easements and waterways. Create multi-use trails to connect subdivisions and commercial centers.



Make use of the many water ways in the community to make connections to neighborhoods and commercial districts. This can be helpful especially in outside neighborhood that are hard to reach.

- Connect to newly annexed areas using additional bicycle lanes and multi-use trails.
- Work with existing industrial zones, including River Ridge and the Port, to build safe bicycling trail through the area. Create bike lanes to these areas for commuters wishing to use bicycles as a mode of transportation.
- Create park and bike opportunities for those living in outside communities but still would like commute using a non-motorized mode of transportation.



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- Develop Market Street and Utica Pike into a recreational bike area. Create safe biking routes for those traveling this route using bike lanes or cycle tracks. Work with the Town of Utica to expand the biking route further up the Ohio river and eventually into Charlestown State Park.
- Develop the corridors of Market/Utica Pike, 8th Street/Middle Road, 10th Street and Spring Street/Hamburg Pike into the main biking routes of the City. Connection to these corridors are encouraged creating an all encompassing bike network. Make use of sharrows, bike lanes, cycle tracks, bike boulevards and multi-use trails to create the biking routes throughout the City.
- Make roadway updates to allow for bike lanes and sidewalks to be implemented throughout the City. Updates include but are not limited to: road diets, additional striping, curb changes, roadway expansions, right-of-way acquisition, utility relocation/alterations and pavement changes.
- Develop a maintenance program to ensure pedestrian and bicycle routes are well kept. The maintenance programs should include tasks such as street sweeping, pothole maintenance, vegetation maintenance, snow clearance, surface repair and an online reporting system.



Street sweeping the bike lanes can be an easy solution for the City to maintain new bicycle lanes. Keeping the lanes clear of debris and litter will keep cyclists safe as they travel down the roadways.

Complete Streets Policy

With the implementation of this document, Jeffersonville started the process for developing a Complete Streets Program. As shown by this document, the streets of our community are used for much more than speeding vehicles and a way to get from home to work. The roadway becomes the living, vital arteries which we entertain, exercise, shop, meet and move around.

Redirecting our emphasis away from fast moving cars and more towards a parklike setting, Smart Growth America has developed the Complete Streets Coalition. This movement has developed so communities across the country “complete the street”. Community’s now build road networks that are safer, more livable, and welcoming to everyone. Instituting a Complete Streets Policy ensures that planners and engineers consistently design and operate the entire roadway with all users in mind - including bicyclists, public transportation and pedestrians of all ages and abilities.

The following program was developed by the National Complete Streets Coalition. This policy will ensure the City will move forward with adopting a Complete Street Program and Policy requiring the needs of all users be addressed in transportation and development projects within Jeffersonville.

- Set A Vision - every City has a different vision of what transportation network should focus on. Create an ultimate goal the City would like to achieve as part of the Complete Streets Policy.
- Specify All Users - Ideally, everyone traveling along the road should be identified as a user. Identify each group and what the City would like to accomplish as it relates to the roadway.
- Projects - A strong Complete Streets policy will integrate planning into all types of projects, including new construction, reconstruction, rehabilitation, repair and maintenance.
- Expectations - According to the Federal Highway Administration there are three expectations that the Complete Streets should consider when developing their own policy: 1) accommodation is



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- not necessary on corridors where non-motorized use is prohibited, such as interstate freeways; 2) the cost is excessively disproportionate to the need and use; 3) a documented absence of current and future need. The City may need to come up with their own expectations as they start the process for Complete Streets.
- Create A Network - The complete streets programs should result in a balance between all modes of transportation. Create a network to supply all modes of transportation with an array of streets that provide quality accessibility for everyone.
- All Agencies All Roads - Involve state, county and local agencies when developing the Complete Streets network. Different agencies control the roadways within the City, collaboration between all agencies will need to be developed and maintained throughout the process.
- Design Criteria - Review the design criteria so that it is flexible and ensure all modes of travel have been considered.
- Context-sensitive - While developing the Complete Streets Programs and Policy be aware of sensitive issues within the Community. Design streets with the surrounding context in order to not create unnecessary alterations.
- Performance Measures - Make sure all modes of transportation are taken into consideration from design through implementation.
- Implementation - According to the National Complete Street Coalition there are four key steps for successful implementation: 1) Restructure procedures to accommodate all users on every project(s); 2) Develop new design policies and guides; 3) Offer workshops and other educational opportunities to transportation professionals, community leaders and residents; and 4) Institute better ways to measure performance and collect data on how well the streets are serving all users.
- Contact the Indiana Complete Streets Coalition coordinator to set up design workshops and get started in creating a Complete Streets Policy for

Jeffersonville. The contact information is as follows: Zia Brucaya, Alliance for Health Promotion, 401 West Michigan Street, Indianapolis, IN 46202. Phone: (317)352-3804; Email: zbrucaya@acsm.org



An active street where there are ways for cyclists, pedestrians, of all ages and abilities, and vehicles to interact safely is considered a 'Complete Street'.

Development Review Policy

Analyzing the impact of creating additional pedestrian and bicycle routes within the City should be a fixed component in the development review process. Steps should be taken to make sure employees of the City are making efforts to expand the pedestrian and bicycle network. The following policies support the advancement of non-motorized infrastructure by including a mandatory review of these elements as part of the development review process.

- Develop a Bicycle and Pedestrian Committee to help keep momentum in the development of non-motorized routes of transportation within Jeffersonville. The Committee should be made up of a variety of entities who share stake in these projects and excitement for them to move forward. The Committee should be led by a government employee with the ability to find funding, gain consensus, gather community input and implement new designs throughout the City. This committee should meet quarterly at a minimum to coordinate, update and progress.



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become gold ranking as specified by the League of American Bicyclists.

- Create a Public Health Advisor position within the City tasked with creating community health education and promotional events and material for the public.
- Update the current Jeffersonville Zoning Ordinance to include bicycle and pedestrian facilities during the design and construction of new developments within the City. Designs should include facilities such as bicycle parking spaces, pedestrian seating areas, rest areas, showers or bike lockers.
- Update the current Jeffersonville Zoning Ordinance to include Form Based Codes to help focus on designing spaces, buildings and streets. Use of Form Based Code will result in predictable creation of spaces according to specific areas within the City. Designs will often include the need for more human-scale development and non-motorized facilities.
- Develop a Local Bicycle and Pedestrian Accommodation Policy for the City of Jeffersonville. The policy shall require new bicycle and pedestrian routes to be included during new roadwork being designed. This policy would also require the existing transportation system be updated to include bicycle and pedestrian routes. This policy shall include a needs assessment, bicycle travel demand, maintenance, funding and design criteria in its content.
- Educate all government staff using seminars, webinars, hired consultants and training courses to ensure the engineers and planners accommodate cyclists and pedestrians according to AASHTO, MUTCD and NACTO standards.
- Develop a mechanism for cyclists and pedestrians to identify problematic intersections or dangerous road conditions to the City Engineer and Planner.
- Adopt this Bicycle and Pedestrian Plan into the Jeffersonville Comprehensive Plan 2030.
- Become a Bicycle Friendly Community by implementing the plans, programs and policies as part of this document. Make yearly updates to the plan and update the City's application to eventually



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COST ESTIMATES

**BICYCLE NETWORK
Summary**

Spring Street Cost

Riverside Dr. to 7th St. (Markings and Signage Only)	\$	17,290.00
Spring St. - Riverside Dr. to 7th St. (Support Facilities)	\$	84,500.00
Spring St. from 7th St. to Riddle St.	\$	52,300.00
Spring St. from Riddle St. to Eastern Blvd.	\$	6,900.00
Spring St. from Eastern Blvd. to Magnolia Ave.	\$	119,700.00
Spring St. from Magnolia Ave. to Dutch Ln.	\$	116,600.00
	\$	397,290.00

Hamburg Pike Cost

Dutch Ln. to Charlestown New Albany Rd.	\$	1,156,200.00
Hamburg Pike from Charlestown New Albany Rd. to 935' north of Charlestown New Albany Rd	\$	407,500.00
Hamburg Pike from 935' north of Charlestown New Albany Rd. to Kingsfield St.	\$	346,600.00
Hamburg Pike from Kingsfield St. to Cornwell Dr.	\$	150,400.00
Hamburg Pike from Cornwell Dr. to Bishop Rd.	\$	82,600.00
Hamburg Pike from Bishop Rd. to YMCA	\$	132,300.00
Hamburg Pike from YMCA to Coopers Ln.	\$	190,500.00
	\$	2,466,100.00

Market Street / Utica Pike Cost

Market St. from Spring St. to Ewing Ln.	\$	39,800.00
Utica Pike from Ewing Ln. to Perrin Ln.	\$	1,447,600.00
Utica Pike from Perrin Ln. to Turnberry Dr.	\$	324,900.00
Turnberry Dr. to 475' north of Turnberry Dr.	\$	226,500.00
475' north of Turnberry Dr. to Allison Ln.	\$	1,694,500.00
Utica Pike from Allison Ln. to Church St. (in Utica)	\$	7,977,600.00
	\$	11,710,900.00

8th Street / Middle Road Cost

8th St. from Spring St. to Wall St.	\$	3,600.00
8th St. from Wall St. to Walnut St.	\$	1,500.00
8th St. from Walnut St. to Watt St.	\$	114,400.00
8th St. from Watt St. to Meigs Ave.	\$	59,600.00
8th St. from Meigs Ave. to Penn St.	\$	10,700.00
8th St. from Penn St. to Graham St.	\$	3,300.00
8th St. from Graham St. to Main St. (at cemetery)	\$	11,300.00
8th St. from Main St. to Crestview Ct.	\$	292,400.00
8th St. from Crestview Ct. to Brighton Ave.	\$	222,600.00
8th St. from Brighton Ave. to Railroad	\$	179,000.00
8th St. from Railroad to Springdale Dr.	\$	11,000.00
8th St. from Springdale Dr. to Perrin Ln.	\$	28,200.00
Middle Rd. from Perrin Ln. to Allison Ln.	\$	72,200.00
Middle Rd. from Allison Ln. to Presidential Pl.	\$	884,900.00
Middle Rd. from Presidential Pl. to Port Rd.	\$	31,700.00
Middle Rd. from Port Rd. to Utica Sellersburg Rd.	\$	298,200.00
	\$	2,224,600.00

10th Street Cost

10th St. from Spring St. to Reeds Ln.	\$	1,391,900.00
10th St. from Reeds Ln. to Allison Ln.	\$	4,960,500.00
10th St. from Allison Ln. to River City Park Rd.	\$	239,900.00
River City Park Rd./Vissing Park Rd. from 10th St. to Richard Vissing Park	\$	320,500.00
	\$	6,912,800.00

Chestnut Street Cost

Pearl St. to Ewing Ln. (Markings and Signage Only)	\$	46,200.00
Pearl St. to Ewing Ln. (Intersection Treatments Only)	\$	17,800.00
	\$	64,000.00

Port Road Cost

Port Rd. from Utica Pike to On Ramp	\$	1,119,300.00
Port Rd. 1-Lane On Ramp through 2-Lane On Ramp/Exit Ramp	\$	1,257,700.00
	\$	2,377,000.00

SECTIONS DENOTED IN LIGHT BLUE TEXT INCLUDE THE COST OF MATERIALS ONLY AND ARE INTENDED FOR JEFFERSONVILLE FORCES TO INSTALL

**BICYCLE NETWORK
Summary**

Meigs Avenue Cost

Meigs Ave. from Market St. to 10th St.	\$	13,300.00
	\$	13,300.00

Ewing Lane Cost

Ewing Lane from Utica Pike to Bridgepoint Elementary	\$	9,700.00
Ewing Lane from Bridgepoint Elementary to Perrin Ln.	\$	17,100.00
	\$	26,800.00

Allison Lane Cost

Allison Ln. from Utika Pike to Doe Run Rd.	\$	611,100.00
Allison Ln. from Doe Run Rd. to Middle Rd.	\$	835,700.00
Allison Ln. from Middle Rd. to Faith Lutheran Church	\$	392,200.00
Allison Ln. from Faith Lutheran Church to Seminole Dr.	\$	119,100.00
Allison Ln. from Seminole Dr. to Wooded Way	\$	197,200.00
Allison Ln. from Wooded Way to 10th St.	\$	427,300.00
	\$	2,582,600.00

Tall Oaks Drive Cost

Tall Oaks Dr. from Nole Dr. to Charlestown Pike	\$	8,800.00
	\$	8,800.00

Charlestown Pike Cost

Charlestown Pike from Tall Oaks Dr. to Woehrle Rd.	\$	192,700.00
	\$	192,700.00

Veterans Parkway Cost

Veterans Parkway from Woehrle Rd. to Hamburg Pike	\$	272,900.00
	\$	272,900.00

Perrin Road Shared Use Path Cost

Utica Pike to the Aquatic Center	\$	626,100.00
Aquatic Center to 10th Street	\$	574,000.00
	\$	1,200,100.00

Riverside Drive Cost

Spring Street to 420' Past Woerner Ave.	\$	17,100.00
	\$	17,100.00

Bike SAG Station Cost

Duffy's Landing SAG Station	\$	325,000.00
Perrin Park SAG Station	\$	19,300.00
Ewing Lane Park SAG Station	\$	113,400.00
Aquatic Center SAG Station	\$	34,500.00
Allison Brooke Park SAG Station	\$	37,100.00
Richard Vissing Park SAG Station	\$	31,900.00
Big 4 Station Sag Station	\$	337,800.00
City Hall SAG Station	\$	23,700.00
Shirley Hall Park SAG Station	\$	300,800.00
YMCA SAG Station	\$	67,200.00
	\$	1,290,700.00

TOTAL COST	\$	31,757,690.00
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**SECTIONS DENOTED IN LIGHT BLUE TEXT
INCLUDE THE COST OF MATERIALS ONLY AND
ARE INTENDED FOR JEFFERSONVILLE FORCES
TO INSTALL**

****13.3 miles of the bike plan can be installed by
Jeffersonville forces for under \$450,000**

PEDESTRIAN NETWORK
Summary

Pedestrian Plan Cost

Pearl Street from Riverside Dr. to Court Ave.	\$	29,400.00
Spring Street from 7th St. to 10th St.	\$	104,400.00
Wall Street from Maiden Ln. to 10th St.	\$	87,400.00
Locust Street from Court Ave. to 7th St.	\$	43,400.00
Walnut Street from Market St. to 10th St.	\$	107,400.00
Meigs Avenue from Market St. to 300' North of Market St.	\$	64,700.00
Riverside Drive from Mulberry St. to Walnut St.	\$	73,500.00
Market Street from Mulberry St. to Meigs Ave.	\$	100,200.00
Chestnut Street from Mulberry St. to Spring St.	\$	125,200.00
Court Avenue from from Mulberry St. to Meigs Ave.	\$	628,500.00
7th Street from Spring St. to Walnut St.	\$	59,400.00
8th Street from Spring St. to Meigs Ave.	\$	164,500.00
9th Street from Spring St. to Meigs Ave.	\$	100,400.00
10th Street from Spring St. to Mechanic St.	\$	448,200.00

TOTAL COST \$ **2,136,600.00**

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Spring Street - Riverside Drive to 7th Street

0.48 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sharrow Pavement Marking (EVERY 100 LFT) - (2,520 LFT Sharrow / SIDE)	52	EA	\$ 200.00	\$ 10,400.00
Sharrow Signage (EVERY 200 LFT)	26	EA	\$ 300.00	\$ 7,800.00
SUBTOTAL (JUST SIGNAGE AND PAVEMENT MARKINGS)				\$ 18,200.00
Minus Labor (20%)				\$ 3,640.00
Contingency (15%)				\$ 2,730.00
TOTAL for Pavement Markings and Signage				\$ 17,290.00
Bump Out (1/block)				
Curb, Remove	20	LFT	\$ 15.00	\$ 300.00
Asphalt Excavation (288 SFT) [assumes an average of 1 foot depth]	11	CYS	\$ 55.00	\$ 700.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	1	EA	\$ 5,000.00	\$ 5,000.00
Special Conc. Pavement, 6" Thick	18	SYS	\$ 85.00	\$ 1,600.00
Curb & Gutter	36	LFT	\$ 30.00	\$ 1,100.00
Asphalt Patching (112 SFT) [assumes an average of 6 inches deep with 6 inches of stone]	8	TON	\$ 100.00	\$ 800.00
Bicycle Pump Bollard	1	EA	\$ 750.00	\$ 750.00
Bicycle Racks	2	EA	\$ 500.00	\$ 1,000.00
Bench	1	EA	\$ 2,000.00	\$ 2,000.00
Bump Out (1/block)				
Curb, Remove	20	LFT	\$ 15.00	\$ 300.00
Asphalt Excavation (288 SFT) [assumes an average of 1 foot depth]	11	CYS	\$ 55.00	\$ 700.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	1	EA	\$ 5,000.00	\$ 5,000.00
Special Conc. Pavement, 6" Thick	18	SYS	\$ 85.00	\$ 1,600.00
Curb & Gutter	36	LFT	\$ 30.00	\$ 1,100.00
Asphalt Patching (112 SFT) [assumes an average of 6 inches deep with 6 inches of stone]	8	TON	\$ 100.00	\$ 800.00
Bicycle Pump Bollard	1	EA	\$ 750.00	\$ 750.00
Bicycle Racks	2	EA	\$ 500.00	\$ 1,000.00
Bench	1	EA	\$ 2,000.00	\$ 2,000.00
Bump Out (1/block)				
Curb, Remove	20	LFT	\$ 15.00	\$ 300.00
Asphalt Excavation (288 SFT) [assumes an average of 1 foot depth]	11	CYS	\$ 55.00	\$ 700.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	1	EA	\$ 5,000.00	\$ 5,000.00
Special Conc. Pavement, 6" Thick	18	SYS	\$ 85.00	\$ 1,600.00
Curb & Gutter	36	LFT	\$ 30.00	\$ 1,100.00
Asphalt Patching (112 SFT) [assumes an average of 6 inches deep with 6 inches of stone]	8	TON	\$ 100.00	\$ 800.00
Bicycle Pump Bollard	1	EA	\$ 750.00	\$ 750.00
Bicycle Racks	2	EA	\$ 500.00	\$ 1,000.00
Bench	1	EA	\$ 2,000.00	\$ 2,000.00
Bump Out (1/block)				
Curb, Remove	20	LFT	\$ 15.00	\$ 300.00
Asphalt Excavation (288 SFT) [assumes an average of 1 foot depth]	11	CYS	\$ 55.00	\$ 700.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	1	EA	\$ 5,000.00	\$ 5,000.00
Special Conc. Pavement, 6" Thick	18	SYS	\$ 85.00	\$ 1,600.00
Curb & Gutter	36	LFT	\$ 30.00	\$ 1,100.00
Asphalt Patching (112 SFT) [assumes an average of 6 inches deep with 6 inches of stone]	8	TON	\$ 100.00	\$ 800.00
Bicycle Pump Bollard	1	EA	\$ 750.00	\$ 750.00
Bicycle Racks	2	EA	\$ 500.00	\$ 1,000.00
Bench	1	EA	\$ 2,000.00	\$ 2,000.00
SUBTOTAL				\$ 66,250.00
Mobilization & Demobilization (5%)				\$ 3,312.50
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 5,000.00	\$ 5,000.00
Contingency (15%)				\$ 9,937.50
TOTAL for Support Facility Bump Outs	1	LS	\$ 41,000.00	\$ 84,500.00
Total Estimated SPRING STREET 1-3 Construction Cost Opinion (1) (2)				\$ 101,800.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
 2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Spring Street - 7th Street to Riddle Street (4-8)

0.95 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Striping Removal [DOUBLE YELLOW CENTER LINE]	10,000	LFT	\$ 0.50	\$ 5,000.00
Bike Lane Symbol (EVERY 250 LFT) (5,000 LFT / SIDE)	40	EA	\$ 200.00	\$ 8,000.00
Bike Lane Sign (EVERY 250 LFT)	40	EA	\$ 300.00	\$ 12,000.00
Restriping for Road Re-Work [DOUBLE YELLOW CENTER LINE, DASHED WHITE FOR BIKE LANE (x	30,000	LFT	\$ 1.00	\$ 30,000.00
Subtotal				\$ 55,000.00
Minus Labor (20%)				\$ 11,000.00
Contingency (15%)				\$ 8,250.00
Total Estimated SPRING STREET 4-8 Construction Cost Opinion (1) (2)				\$ 52,300.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Spring Street - Riddle Street to Eastern Blvd. (9)

0.11 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Striping Removal [DOUBLE YELLOW CENTER LINE]	1,200	LFT	\$ 0.50	\$ 600.00
Bike Lane Symbol (EVERY 250 LFT) (600 LFT / SIDE)	6	EA	\$ 200.00	\$ 1,200.00
Bike Lane Sign (EVERY 250 LFT)	6	EA	\$ 300.00	\$ 1,800.00
Restriping for Road Re-Work [DOUBLE YELLOW CENTER LINE, SOLID WHITE FOR BIKE LANE (x2 /	3,600	LFT	\$ 1.00	\$ 3,600.00
Subtotal				\$ 7,200.00
Minus Labor (20%)				\$ 1,440.00
Contingency (15%)	1	LS	\$ 4,000.00	\$ 1,080.00
Total Estimated SPRING STREET 9 Construction Cost Opinion (1) (2)				\$ 6,900.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Spring Street - Eastern Blvd. to Magnolia Ave. (10)

0.19 Miles

Bridge

Description	Qty	Unit	Unit Cost	Cost
Bike Lane Symbol (EVERY 250 LFT) (985 LFT / SIDE)	8	EA	\$ 200.00	\$ 1,600.00
Bike Lane Sign (EVERY 250 LFT)	8	EA	\$ 300.00	\$ 2,400.00
Restriping for Road Re-Work [SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	3,940	LFT	\$ 1.00	\$ 4,000.00
Mill & Overlay (1.5")	495	SYS	\$ 8.50	\$ 4,300.00
New Pavement for Bike Lane [5420 SFT]				
HMA Widening Type D (165 #/SYS Surface, 495 #/SYS Intermediate)	200	TON	\$ 150.00	\$ 30,000.00
6" Compacted Aggregate #53	200	TON	\$ 20.00	\$ 4,000.00
Subgrade Treatment Type III	605	SYS	\$ 10.00	\$ 6,100.00
Ditch Grading	1,970	LFT	\$ 7.00	\$ 13,800.00
Earthwork	1	LS	\$ 8,000.00	\$ 8,000.00
Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 5,000.00	\$ 5,000.00
Clearing ROW (3%)	1	LS	\$ 3,000.00	\$ 3,000.00
Contingency (20%)	1	LS	\$ 20,000.00	\$ 20,000.00
Total Estimated SPRING STREET 10 Construction Cost Opinion (1) (2)				\$ 119,700.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.

2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Spring Street - Magnolia Ave. to Dutch Lane (11)

0.27 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Bike Lane Symbol (EVERY 250 LFT) (1,400 LFT / SIDE)	12	EA	\$ 200.00	\$ 2,400.00
Bike Lane Sign (EVERY 250 LFT)	12	EA	\$ 300.00	\$ 3,600.00
Restriping for Road Re-Work [DOUBLE YELLOW CENTER LINE, SOLID WHITE FOR BIKE LANE (x2), DASHED WHITE FOR SHARED TURN, SOLID WHITE FOR SHARED TURN (x2)]	9,800	LFT	\$ 1.00	\$ 9,800.00
Mill & Overlay (1.5")	5,915	SYS	\$ 8.50	\$ 50,300.00
Earthwork	1	LS	\$ 5,000.00	\$ 5,000.00
Erosion Control	1	LS	\$ 8,000.00	\$ 8,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 5,000.00	\$ 5,000.00
Contingency (20%)	1	LS	\$ 20,000.00	\$ 20,000.00
Total Estimated SPRING STREET 11 Construction Cost Opinion (1) (2)				\$ 116,600.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Hamburg Pike 1-2 (Dutch Lane to Charlestown New Albany Rd.)

2.03 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove	4,760	SYS	\$ 20.00	\$ 95,200.00
8' Wide Asphalt Trail w/ 2' Shoulders	2.03	Miles	\$ 190,000.00	\$ 385,700.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	370	SYS	\$ 85.00	\$ 31,500.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	9	EA	\$ 5,000.00	\$ 45,000.00
Intersection Improvements @ - Level 3 (Median, Signal, Signage, Pavement Markings)	1	EA	\$ 90,000.00	\$ 90,000.00
Intersection Improvements @ - Commercial Drive (Epoxy Coating, assume 25'x10')	16	EA	\$ 2,000.00	\$ 32,000.00
Intersection Improvements @ - Residential Drive (Epoxy Coating, assume 15'x10')	28	EA	\$ 1,200.00	\$ 33,600.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	40	EA	\$ 500.00	\$ 20,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	40	EA	\$ 100.00	\$ 4,000.00
Trail Identification Signage (1/CROSSING)	10	EA	\$ 2,500.00	\$ 25,000.00
Directory Signage	2	EA	\$ 2,500.00	\$ 5,000.00
Mile Markers @ 1/4 mile intervals	8	EA	\$ 500.00	\$ 4,000.00
Mulched Seeding (assumes 6' disturbance along trail)	7,135	SYS	\$ 1.00	\$ 7,200.00
General Trail Landscape Work	1	LS	\$ 20,000.00	\$ 20,000.00
Earthwork	1	LS	\$ 30,000.00	\$ 30,000.00
Erosion Control	1	LS	\$ 45,000.00	\$ 45,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 20,000.00	\$ 20,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 45,200.00	\$ 45,200.00
Clearing ROW (3%)	1	LS	\$ 27,100.00	\$ 27,100.00
Contingency (20%)	1	LS	\$ 180,700.00	\$ 180,700.00
Total Estimated HAMBURG PIKE 1-2 Construction Cost Opinion (1) (2)				\$ 1,156,200.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Hamburg Pike 3 (Chalrelstown New Albany Rd. to 935' North of Chalrelstown New Albany Rd.)

0.18 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Asphalt Excavation (3,740 SFT) [assumes an average of 1 foot depth]	140	CYS	\$ 55.00	\$ 7,700.00
8' Wide Asphalt Trail w/ 2' Shoulders	0.18	Miles	\$ 190,000.00	\$ 34,200.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	37	SYS	\$ 85.00	\$ 3,200.00
Intersection Improvements @ - Level 3 (Median, Signal, Signage, Pavement Markings)	1	EA	\$ 90,000.00	\$ 90,000.00
Intersection Improvements @ - Commercial Drive (Epoxy Coating, assume 25'x10')	1	EA	\$ 2,000.00	\$ 2,000.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	4	EA	\$ 500.00	\$ 2,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	4	EA	\$ 100.00	\$ 400.00
Trail Identification Signage (1/CROSSING)	1	EA	\$ 2,500.00	\$ 2,500.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Mile Markers @ 1/4 mile intervals	1	EA	\$ 500.00	\$ 500.00
Asphalt Patching (3,740 SFT) [assumes an average of 6 inches deep with 6 inches of stone]	275	TON	\$ 100.00	\$ 27,500.00
Curb & Gutter	935	LFT	\$ 30.00	\$ 28,100.00
Mulched Seeding (assumes 6' disturbance along trail)	625	SYS	\$ 1.00	\$ 700.00
General Trail Landscape Work	1	LS	\$ 3,000.00	\$ 3,000.00
Inlet (1 EVERY 100 LFT NEW PIPE)	10	EA	\$ 2,000.00	\$ 20,000.00
18" RCP	935	LFT	\$ 60.00	\$ 56,100.00
Earthwork	1	LS	\$ 18,000.00	\$ 18,000.00
Erosion Control	1	LS	\$ 15,000.00	\$ 15,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 16,000.00	\$ 16,000.00
Clearing ROW (3%)	1	LS	\$ 9,600.00	\$ 9,600.00
Contingency (20%)	1	LS	\$ 63,700.00	\$ 63,700.00
Total Estimated HAMBURG PIKE 3 Construction Cost Opinion (1) (2)				\$ 407,500.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Hamburg Pike 4 (935' North of Chalrelstown New Albany Rd. to Kingsfield Street)

0.42 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove	985	SYS	\$ 20.00	\$ 19,700.00
8' Wide Asphalt Trail w/ 2' Shoulders	0.42	Miles	\$ 190,000.00	\$ 79,800.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	74	SYS	\$ 85.00	\$ 6,300.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	1	EA	\$ 5,000.00	\$ 5,000.00
Intersection Improvements @ - Level 3 (Median, Signal, Signage, Pavement Markings)	1	EA	\$ 90,000.00	\$ 90,000.00
Intersection Improvements @ - Commercial Drive (Epoxy Coating, assume 25'x10')	2	EA	\$ 2,000.00	\$ 4,000.00
Intersection Improvements @ - Residential Drive (Epoxy Coating, assume 15'x10')	3	EA	\$ 1,200.00	\$ 3,600.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	8	EA	\$ 500.00	\$ 4,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	8	EA	\$ 100.00	\$ 800.00
Trail Identification Signage (1/CROSSING)	2	EA	\$ 2,500.00	\$ 5,000.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Mile Markers @ 1/4 mile intervals	2	EA	\$ 500.00	\$ 1,000.00
Mulched Seeding (assumes 6' disturbance along trail)	1,475	SYS	\$ 1.00	\$ 1,500.00
Top Soil	40	CYS	\$ 60.00	\$ 2,400.00
General Trail Landscape Work	1	LS	\$ 8,000.00	\$ 8,000.00
Earthwork	1	LS	\$ 12,000.00	\$ 12,000.00
Erosion Control	1	LS	\$ 10,000.00	\$ 10,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 5,000.00	\$ 5,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 13,600.00	\$ 13,600.00
Clearing ROW (3%)	1	LS	\$ 8,200.00	\$ 8,200.00
Contingency (20%)	1	LS	\$ 54,200.00	\$ 54,200.00
Total Estimated HAMBURG PIKE 4 Construction Cost Opinion (1) (2)				\$ 346,600.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Hamburg Pike 5 (Kingsfield St. to Cornwell Dr.)

0.21 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove	615	SYS	\$ 20.00	\$ 12,300.00
8' Wide Asphalt Trail w/ 2' Shoulders	0.21	Miles	\$ 190,000.00	\$ 39,900.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	74	SYS	\$ 85.00	\$ 6,300.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	2	EA	\$ 5,000.00	\$ 10,000.00
Intersection Improvements @ - Residential Drive (Epoxy Coating, assume 15'x10')	4	EA	\$ 1,200.00	\$ 4,800.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	8	EA	\$ 500.00	\$ 4,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	8	EA	\$ 100.00	\$ 800.00
Trail Identification Signage (1/CROSSING)	2	EA	\$ 2,500.00	\$ 5,000.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Mile Markers @ 1/4 mile intervals	1	EA	\$ 500.00	\$ 500.00
Mulched Seeding (assumes 6' disturbance along trail)	735	SYS	\$ 1.00	\$ 800.00
General Trail Landscape Work	1	LS	\$ 5,000.00	\$ 5,000.00
Earthwork	1	LS	\$ 8,000.00	\$ 8,000.00
Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 5,900.00	\$ 5,900.00
Clearing ROW (3%)	1	LS	\$ 3,600.00	\$ 3,600.00
Contingency (20%)	1	LS	\$ 23,500.00	\$ 23,500.00
Total Estimated HAMBURG PIKE 5 Construction Cost Opinion (1) (2)				\$ 150,400.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.

2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Hamburg Pike 6 (Cornwell Dr. to Bishop Rd.)

0.05 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove	140	SYS	\$ 20.00	\$ 2,800.00
8' Wide Asphalt Trail w/ 2' Shoulders	0.05	Miles	\$ 190,000.00	\$ 9,500.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	74	SYS	\$ 85.00	\$ 6,300.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	2	EA	\$ 5,000.00	\$ 10,000.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	8	EA	\$ 500.00	\$ 4,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	8	EA	\$ 100.00	\$ 800.00
Trail Identification Signage (1/CROSSING)	2	EA	\$ 2,500.00	\$ 5,000.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Mile Markers @ 1/4 mile intervals	1	EA	\$ 500.00	\$ 500.00
Mulched Seeding (assumes 6' disturbance along trail)	170	SYS	\$ 1.00	\$ 200.00
General Trail Landscape Work	1	LS	\$ 3,000.00	\$ 3,000.00
Earthwork	1	LS	\$ 3,000.00	\$ 3,000.00
Erosion Control	1	LS	\$ 2,500.00	\$ 2,500.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 4,000.00	\$ 4,000.00
Clearing ROW (3%)	1	LS	\$ 2,000.00	\$ 2,000.00
Contingency (20%)	1	LS	\$ 14,000.00	\$ 14,000.00
Total Estimated HAMBURG PIKE 6 Construction Cost Opinion (1) (2)				\$ 82,600.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.

2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Hamburg Pike 7 (Bishop Rd. to YMCA)

0.16 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove	475	SYS	\$ 20.00	\$ 9,500.00
8' Wide Asphalt Trail w/ 2' Shoulders	0.16	Miles	\$ 190,000.00	\$ 30,400.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	74	SYS	\$ 85.00	\$ 6,300.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	2	EA	\$ 5,000.00	\$ 10,000.00
Intersection Improvements @ - Commercial Drive (Epoxy Coating, <i>assume 25'x10'</i>)	1	EA	\$ 2,000.00	\$ 2,000.00
Intersection Improvements @ - Residential Drive (Epoxy Coating, <i>assume 15'x10'</i>)	1	EA	\$ 1,200.00	\$ 1,200.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	8	EA	\$ 500.00	\$ 4,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	8	EA	\$ 100.00	\$ 800.00
Trail Identification Signage (1/CROSSING)	2	EA	\$ 2,500.00	\$ 5,000.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Mile Markers @ 1/4 mile intervals	1	EA	\$ 500.00	\$ 500.00
Mulched Seeding (assumes 6' disturbance along trail)	570	SYS	\$ 1.00	\$ 600.00
General Trail Landscape Work	1	LS	\$ 5,000.00	\$ 5,000.00
Earthwork	1	LS	\$ 8,000.00	\$ 8,000.00
Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 5,200.00	\$ 5,200.00
Clearing ROW (3%)	1	LS	\$ 3,100.00	\$ 3,100.00
Contingency (20%)	1	LS	\$ 20,700.00	\$ 20,700.00
Total Estimated HAMBURG PIKE 7 Construction Cost Opinion (1) (2)				\$ 132,300.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Hamburg Pike 8 (YMCA to Coopers Ln.)

0.38 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
8' Wide Asphalt Trail w/ 2' Shoulders	0.38	Miles	\$ 190,000.00	\$ 72,200.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	74	SYS	\$ 85.00	\$ 6,300.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	2	EA	\$ 5,000.00	\$ 10,000.00
Intersection Improvements @ - Commercial Drive (Epoxy Coating, assume 25'x10')	2	EA	\$ 2,000.00	\$ 4,000.00
Intersection Improvements @ - Residential Drive (Epoxy Coating, assume 15'x10')	2	EA	\$ 1,200.00	\$ 2,400.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	8	EA	\$ 500.00	\$ 4,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	8	EA	\$ 100.00	\$ 800.00
Trail Identification Signage (1/CROSSING)	2	EA	\$ 2,500.00	\$ 5,000.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Mile Markers @ 1/4 mile intervals	2	EA	\$ 500.00	\$ 1,000.00
Mulched Seeding (assumes 6' disturbance along trail)	1,335	SYS	\$ 1.00	\$ 1,400.00
General Trail Landscape Work	1	LS	\$ 5,000.00	\$ 5,000.00
Earthwork	1	LS	\$ 10,000.00	\$ 10,000.00
Erosion Control	1	LS	\$ 8,000.00	\$ 8,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 5,000.00	\$ 5,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 7,400.00	\$ 7,400.00
Clearing ROW (3%)	1	LS	\$ 4,500.00	\$ 4,500.00
Contingency (20%)	1	LS	\$ 31,000.00	\$ 31,000.00
Total Estimated HAMBURG PIKE 8 Construction Cost Opinion (1) (2)				\$ 190,500.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.

2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Market Street 1-3, Utica Pike 1 (From Spring Street to Ewing Lane)

1.80 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sharrow Pavement Marking (EVERY 275 LFT) - (11,200 LFT Sharrow / SIDE)	82	EA	\$ 200.00	\$ 16,400.00
Sharrow Signage (EVERY 275 LFT)	82	EA	\$ 300.00	\$ 24,600.00
SUBTOTAL				\$ 41,000.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 20,000.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 5,000.00	\$ -
MINUS LABOR (20%)				\$ 8,200.00
Contingency (15%)	1	LS	\$ 7,000.00	\$ 7,000.00
Total Estimated MARKET STREET 1-3, UTICA PIKE 1 Construction Cost Opinion (1) (2)				\$ 39,800.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Utica Pike 2 (Ewing Ln. to Perrin Ln.)

0.37 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove	1,085	SYS	\$ 20.00	\$ 21,700.00
Curb, Remove	3,900	LFT	\$ 15.00	\$ 58,500.00
Pipe, Remove	3,900	LFT	\$ 10.00	\$ 39,000.00
Casting / Manhole Remove	19	EA	\$ 850.00	\$ 16,200.00
Asphalt Excavation (20,475 SFT) [assumes an average of 1 foot depth]	760	CYS	\$ 55.00	\$ 41,800.00
Cycle Track				
Dashed Center Line (for 2-way cycle track)	1,950	LFT	\$ 1.00	\$ 2,000.00
Bike Pavement Marking [at each intersection / drive (x2)]	26	EA	\$ 200.00	\$ 5,200.00
Signage [at each intersection / drive (x2)]	26	EA	\$ 150.00	\$ 3,900.00
Green Epoxy Coating [at each intersection / drive]	1,350	SFT	\$ 7.00	\$ 9,500.00
New Asphalt Pavement for Cycle Track with Drives (1,950 LFT)				
1.5" Surface, Type B	180	TON	\$ 70.00	\$ 12,600.00
3.5" Intermediate, Type B	420	TON	\$ 65.00	\$ 27,300.00
Subgrade Treatment Type IIIA	2,170	SYS	\$ 10.00	\$ 21,700.00
Straight Curb	3,900	LFT	\$ 25.00	\$ 97,500.00
Curb & Gutter	1,950	LFT	\$ 30.00	\$ 58,500.00
Median	435	SYS	\$ 50.00	\$ 21,800.00
Bicycle Friendly Casting	20	EA	\$ 1,000.00	\$ 20,000.00
Inlet (1 EVERY 100 LFT NEW PIPE)	20	EA	\$ 2,000.00	\$ 40,000.00
18" RCP	1,950	LFT	\$ 60.00	\$ 117,000.00
Restriping for Road Re-Work [DOUBLE YELLOW CENTER LINE]	3,900	LFT	\$ 1.00	\$ 3,900.00
Asphalt Patching (15,600 SFT) [assumes an average of 6 inches deep with 6 inches of stone]	1,145	TON	\$ 100.00	\$ 114,500.00
Curb & Gutter	1,950	LFT	\$ 30.00	\$ 58,500.00
Bicycle Friendly Casting	20	EA	\$ 1,000.00	\$ 20,000.00
Inlet (1 EVERY 100 LFT NEW PIPE)	20	EA	\$ 2,000.00	\$ 40,000.00
18" RCP	1,950	LFT	\$ 60.00	\$ 117,000.00
Mill & Overlay (1.5")	2,925	SYS	\$ 8.50	\$ 24,900.00
New Pavement for Road Extension [16,575 SFT]				
1.5" Surface, Type B	155	TON	\$ 70.00	\$ 10,900.00
2.5" Intermediate, Type B	280	TON	\$ 60.00	\$ 16,800.00
4" Base, Type B	405	TON	\$ 65.00	\$ 26,400.00
4" Compacted Aggregate #53	410	TON	\$ 20.00	\$ 8,200.00
Subgrade Treatment Type IA	1,845	SYS	\$ 10.00	\$ 18,500.00
Earthwork	1	LS	\$ 12,000.00	\$ 12,000.00
Erosion Control	1	LS	\$ 30,000.00	\$ 30,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 5,000.00	\$ 5,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 56,600.00	\$ 56,600.00
Clearing ROW (3%)	1	LS	\$ 34,000.00	\$ 34,000.00
Contingency (20%)	1	LS	\$ 226,200.00	\$ 226,200.00
Total Estimated UTICA PIKE 2 Construction Cost Opinion (1) (2)				\$ 1,447,600.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bicycle facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Utica Pike 3 (Perrin Ln. to Turnberry Dr.)

0.14 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Curb, Remove	710	LFT	\$ 15.00	\$ 10,700.00
Pipe, Remove	710	LFT	\$ 10.00	\$ 7,100.00
Casting / Manhole Remove	3	EA	\$ 850.00	\$ 2,600.00
Asphalt Excavation (2,840 SFT) <i>[assumes an average of 1 foot depth]</i>	105	CYS	\$ 55.00	\$ 5,800.00
Cycle Track				
Dashed Center Line (for 2-way cycle track)	710	LFT	\$ 1.00	\$ 800.00
Bike Pavement Marking <i>[at each intersection / drive (x2)]</i>	10	EA	\$ 200.00	\$ 2,000.00
Signage <i>[at each intersection / drive (x2)]</i>	10	EA	\$ 150.00	\$ 1,500.00
Green Epoxy Coating <i>[at each intersection / drive]</i>	480	SFT	\$ 7.00	\$ 3,400.00
New Asphalt Pavement for Cycle Track <i>with Drives (710 LFT)</i>				
1.5" Surface, Type B	65	TON	\$ 70.00	\$ 4,600.00
3.5" Intermediate, Type B	155	TON	\$ 65.00	\$ 10,100.00
Subgrade Treatment Type IIIA	790	SYS	\$ 10.00	\$ 7,900.00
Straight Curb	1,420	LFT	\$ 25.00	\$ 35,500.00
Curb & Gutter	710	LFT	\$ 30.00	\$ 21,300.00
Median	160	SYS	\$ 50.00	\$ 8,000.00
Bicycle Friendly Casting	7	EA	\$ 1,000.00	\$ 7,000.00
Inlet (1 EVERY 100 LFT NEW PIPE)	7	EA	\$ 2,000.00	\$ 14,000.00
18" RCP	710	LFT	\$ 60.00	\$ 42,600.00
Restriping for Road Re-Work [DOUBLE YELLOW CENTER LINE]	1,420	LFT	\$ 1.00	\$ 1,500.00
Mill & Overlay (1.5")	1,735	SYS	\$ 8.50	\$ 14,800.00
Asphalt Patching (2,840 SFT) <i>[assumes an average of 6 inches deep with 6 inches of stone]</i>	210	TON	\$ 100.00	\$ 21,000.00
Earthwork	1	LS	\$ 8,000.00	\$ 8,000.00
Erosion Control	1	LS	\$ 4,000.00	\$ 4,000.00
Utility Relocations	1	LS	\$ 17,000.00	\$ 17,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 12,700.00	\$ 12,700.00
Clearing ROW (3%)	1	LS	\$ 7,700.00	\$ 7,700.00
Contingency (20%)	1	LS	\$ 50,800.00	\$ 50,800.00
Total Estimated UTICA PIKE 3 Construction Cost Opinion (1) (2)				\$ 324,900.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Utica Pike 4 (Turnberry Dr. to 475' North of Turnberry Dr.)

0.08 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Curb, Remove	475	LFT	\$ 15.00	\$ 7,200.00
Pipe, Remove	475	LFT	\$ 10.00	\$ 4,800.00
Casting / Manhole Remove	1	EA	\$ 850.00	\$ 900.00
Asphalt Excavation (3,090 SFT) <i>[assumes an average of 1 foot depth]</i>	115	CYS	\$ 55.00	\$ 6,400.00
Cycle Track				
Dashed Center Line (for 2-way cycle track)	475	LFT	\$ 1.00	\$ 500.00
Solid White Line (for edge of pavement where curb isn't being placed)	475	LFT	\$ 1.00	\$ 500.00
Bike Pavement Marking <i>[at each intersection / drive (x2)]</i>	6	EA	\$ 200.00	\$ 1,200.00
Signage <i>[at each intersection / drive (x2)]</i>	6	EA	\$ 150.00	\$ 900.00
Green Epoxy Coating <i>[at each intersection / drive]</i>	288	SFT	\$ 7.00	\$ 2,100.00
New Asphalt Pavement for Cycle Track <i>with Drives (475 LFT)</i>				
1.5" Surface, Type B	45	TON	\$ 70.00	\$ 3,200.00
3.5" Intermediate, Type B	105	TON	\$ 65.00	\$ 6,900.00
Subgrade Treatment Type IIIA	530	SYS	\$ 10.00	\$ 5,300.00
Straight Curb	475	LFT	\$ 25.00	\$ 11,900.00
Curb & Gutter	475	LFT	\$ 30.00	\$ 14,300.00
Median	105	SYS	\$ 50.00	\$ 5,300.00
Bicycle Friendly Casting	5	EA	\$ 1,000.00	\$ 5,000.00
Inlet (1 EVERY 100 LFT NEW PIPE)	5	EA	\$ 2,000.00	\$ 10,000.00
18" RCP	475	LFT	\$ 60.00	\$ 28,500.00
Restriping for Road Re-Work [DOUBLE YELLOW CENTER LINE]	950	LFT	\$ 1.00	\$ 1,000.00
Mill & Overlay (1.5")	820	SYS	\$ 8.50	\$ 7,000.00
Asphalt Patching (1,900 SFT) <i>[assumes an average of 6 inches deep with 6 inches of stone]</i>	145	TON	\$ 100.00	\$ 14,500.00
New Pavement for Road Extension [3,090 SFT]				
1.5" Surface, Type B	30	TON	\$ 70.00	\$ 2,100.00
2.5" Intermediate, Type B	55	TON	\$ 60.00	\$ 3,300.00
4" Base, Type B	75	TON	\$ 65.00	\$ 4,900.00
4" Compacted Aggregate #53	80	TON	\$ 20.00	\$ 1,600.00
Subgrade Treatment Type IA	345	SYS	\$ 10.00	\$ 3,500.00
Earthwork	1	LS	\$ 4,000.00	\$ 4,000.00
Erosion Control	1	LS	\$ 7,500.00	\$ 7,500.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 8,900.00	\$ 8,900.00
Clearing ROW (3%)	1	LS	\$ 5,400.00	\$ 5,400.00
Contingency (20%)	1	LS	\$ 35,400.00	\$ 35,400.00
Total Estimated UTICA PIKE 4 Construction Cost Opinion (1) (2)				\$ 226,500.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Utica Pike 5 (475' North of Turnberry Dr. to Allison Ln.)

0.61 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Asphalt Excavation (30,400 SFT) [assumes an average of 1 foot depth]	1,125	CYS	\$ 55.00	\$ 61,900.00
Cycle Track				
Dashed Center Line (for 2-way cycle track)	3,200	LFT	\$ 1.00	\$ 3,200.00
Solid White Line (for edge of pavement where curb isn't being placed)	3,200	LFT	\$ 1.00	\$ 3,200.00
Bike Pavement Marking [at each intersection / drive (x2)]	4	EA	\$ 200.00	\$ 800.00
Signage [at each intersection / drive (x2)]	4	EA	\$ 150.00	\$ 600.00
Green Epoxy Coating [at each intersection / drive]	192	SFT	\$ 7.00	\$ 1,400.00
New Asphalt Pavement for Cycle Track with Drives (600 LFT)				
1.5" Surface, Type B	55	TON	\$ 70.00	\$ 3,900.00
3.5" Intermediate, Type B	130	TON	\$ 65.00	\$ 8,500.00
Subgrade Treatment Type IIIA	670	SYS	\$ 10.00	\$ 6,700.00
New Asphalt Pavement for Cycle Track without Drives (2,600 LFT) **				
1.5" Surface, Type B	240	TON	\$ 70.00	\$ 16,800.00
2" Intermediate, Type B	320	TON	\$ 55.00	\$ 17,600.00
6" Compacted Aggregate #53	965	TON	\$ 20.00	\$ 19,300.00
Subgrade Treatment Type III	2,890	SYS	\$ 10.00	\$ 28,900.00
Straight Curb	3,200	LFT	\$ 25.00	\$ 80,000.00
Curb & Gutter	3,200	LFT	\$ 30.00	\$ 96,000.00
Median	715	SYS	\$ 50.00	\$ 35,800.00
Bicycle Friendly Casting	32	EA	\$ 1,000.00	\$ 32,000.00
Inlet (1 EVERY 100 LFT NEW PIPE)	32	EA	\$ 2,000.00	\$ 64,000.00
18" RCP	3,200	LFT	\$ 60.00	\$ 192,000.00
Restriping for Road Re-Work [DOUBLE YELLOW CENTER LINE]	6,400	LFT	\$ 1.00	\$ 6,400.00
Mill & Overlay (1.5")	4,450	SYS	\$ 8.50	\$ 37,900.00
Asphalt Patching (12,800 SFT) [assumes an average of 6 inches deep with 6 inches of stone]	940	TON	\$ 100.00	\$ 94,000.00
New Pavement for Road Extension [30,400 SFT]				
1.5" Surface, Type B	280	TON	\$ 70.00	\$ 19,600.00
2.5" Intermediate, Type B	510	TON	\$ 60.00	\$ 30,600.00
4" Base, Type B	745	TON	\$ 65.00	\$ 48,500.00
4" Compacted Aggregate #53	750	TON	\$ 20.00	\$ 15,000.00
Subgrade Treatment Type IA	3,380	SYS	\$ 10.00	\$ 33,800.00
Fence Relocation	280	LFT	\$ 10.00	\$ 2,800.00
Bicycle Friendly Casting	32	EA	\$ 1,000.00	\$ 32,000.00
Inlet (1 EVERY 100 LFT NEW PIPE)	32	EA	\$ 2,000.00	\$ 64,000.00
18" RCP	3,200	LFT	\$ 60.00	\$ 192,000.00
Earthwork	1	LS	\$ 12,000.00	\$ 12,000.00
Erosion Control	1	LS	\$ 45,000.00	\$ 45,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 7,500.00	\$ 7,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 66,200.00	\$ 66,200.00
Clearing ROW (3%)	1	LS	\$ 39,800.00	\$ 39,800.00
Contingency (20%)	1	LS	\$ 264,800.00	\$ 264,800.00
Total Estimated UTICA PIKE 5 Construction Cost Opinion (1) (2)				\$ 1,694,500.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.

2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

**Section is thinner because there are relatively no drive crossings across the cycle track

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Utica Pike 6 (Allison Ln. to Church Street)

3.03 Miles

2 Bridges

Description	Qty	Unit	Unit Cost	Cost
Asphalt Excavation (104,000 SFT) [assumes an average of 1 foot depth]	3,855	CYS	\$ 55.00	\$ 212,100.00
Cycle Track				
Dashed Center Line (for 2-way cycle track)	16,000	LFT	\$ 1.00	\$ 16,000.00
Solid White Line (for edge of pavement where curb isn't being placed)	16,000	LFT	\$ 1.00	\$ 16,000.00
Bike Pavement Marking [at each intersection / drive (x2)]	86	EA	\$ 200.00	\$ 17,200.00
Signage [at each intersection / drive (x2)]	86	EA	\$ 150.00	\$ 12,900.00
Green Epoxy Coating [at each intersection / drive]	5,860	SFT	\$ 7.00	\$ 41,100.00
New Asphalt Pavement for Cycle Track with Drives (6,000 LFT)				
1.5" Surface, Type B	555	TON	\$ 70.00	\$ 38,900.00
3.5" Intermediate, Type B	1,290	TON	\$ 65.00	\$ 83,900.00
Subgrade Treatment Type IIIA	6,670	SYS	\$ 10.00	\$ 66,700.00
New Asphalt Pavement for Cycle Track without Drives (10,000 LFT)**				
1.5" Surface, Type B	925	TON	\$ 70.00	\$ 64,800.00
2" Intermediate, Type B	1,225	TON	\$ 55.00	\$ 67,400.00
6" Compacted Aggregate #53	3,705	TON	\$ 20.00	\$ 74,100.00
Subgrade Treatment Type III	11,115	SYS	\$ 10.00	\$ 111,200.00
Straight Curb	16,000	LFT	\$ 25.00	\$ 400,000.00
Curb & Gutter	16,000	LFT	\$ 30.00	\$ 480,000.00
Median	3,560	SYS	\$ 50.00	\$ 178,000.00
Bicycle Friendly Casting	160	EA	\$ 1,000.00	\$ 160,000.00
Inlet (1 EVERY 100 LFT NEW PIPE)	160	EA	\$ 2,000.00	\$ 320,000.00
18" RCP	16,000	LFT	\$ 60.00	\$ 960,000.00
Restriping for Road Re-Work [DOUBLE YELLOW CENTER LINE]	32,000	LFT	\$ 1.00	\$ 32,000.00
Mill & Overlay (1.5")	27,555	SYS	\$ 8.50	\$ 234,300.00
Asphalt Patching (64,000 SFT) [assumes an average of 6 inches deep with 6 inches of stone]	4,695	TON	\$ 100.00	\$ 469,500.00
New Pavement for Road Extension [104,000 SFT]				
1.5" Surface, Type B	960	TON	\$ 70.00	\$ 67,200.00
2.5" Intermediate, Type B	1,735	TON	\$ 60.00	\$ 104,100.00
4" Base, Type B	2,545	TON	\$ 65.00	\$ 165,500.00
4" Compacted Aggregate #53	2,570	TON	\$ 20.00	\$ 51,400.00
Subgrade Treatment Type IA	11,560	SYS	\$ 10.00	\$ 115,600.00
New Pavement for Paved Shoulder [96,000 SFT]				
1.5" Surface, Type B	885	TON	\$ 70.00	\$ 62,000.00
2.5" Intermediate, Type B	1,600	TON	\$ 60.00	\$ 96,000.00
8" Compacted Aggregate #53	4,740	TON	\$ 20.00	\$ 94,800.00
Subgrade Treatment Type IA	10,670	SYS	\$ 10.00	\$ 106,700.00
Proposed Bridge Structure [(\$1200 x LFT) x 1.5] (up to 120 LFT) - Just north of 6 Mile Lane	75	LFT	\$ 1,800.00	\$ 135,000.00
Modular Block Wall (includes Reinforcing and Excavation)	280	SYS	\$ 400.00	\$ 112,000.00
Proposed Bridge Structure [(\$1200 x LFT) x 1.5] (up to 120 LFT) - Just south of Church Street	120	LFT	\$ 1,800.00	\$ 216,000.00
Earthwork	1	LS	\$ 100,000.00	\$ 100,000.00
Erosion Control	1	LS	\$ 220,000.00	\$ 220,000.00
Utility Relocations (approximately 50 overhead utility relocations)	1	LS	\$ 500,000.00	\$ 500,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 30,000.00	\$ 30,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 311,700.00	\$ 311,700.00
Clearing ROW (3%)	1	LS	\$ 187,000.00	\$ 187,000.00
Contingency (20%)	1	LS	\$ 1,246,500.00	\$ 1,246,500.00
Total Estimated UTICA PIKE 6 Construction Cost Opinion (1) (2)				\$ 7,977,600.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.

2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

**Section is thinner because there are relatively no drive crossings across the cycle track

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 1 (Spring St. to Wall Street)

0.08 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Bike Lane Symbol (EVERY 250 LFT) (425 LFT / SIDE)	4	EA	\$ 200.00	\$ 800.00
Bike Lane Sign (EVERY 250 LFT)	4	EA	\$ 300.00	\$ 1,200.00
Restriping for Road Re-Work [SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	1,700	LFT	\$ 1.00	\$ 1,700.00
SUBTOTAL				\$ 3,700.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 2,500.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 1,000.00	\$ -
MINUS LABOR (20%)				\$ 740.00
Contingency (15%)	1	LS	\$ 600.00	\$ 600.00
Total Estimated 8TH STREET Construction Cost Opinion (1) (2)				\$ 3,600.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 2 (Wall St. to Walnut Street)

0.16 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sharrow Pavement Marking (EVERY 275 LFT) - (850 LFT Sharrow / SIDE)	3	EA	\$ 200.00	\$ 600.00
Sharrow Signage (EVERY 275 LFT)	3	EA	\$ 300.00	\$ 900.00
SUBTOTAL				\$ 1,500.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 2,500.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 1,000.00	\$ -
MINUS LABOR (20%)				\$ 300.00
Contingency (15%)	1	LS	\$ 300.00	\$ 300.00
Total Estimated 8TH STREET 2 Construction Cost Opinion (1) (2)				\$ 1,500.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.

2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 3 (Walnut Street to Watt Street)

0.08 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Curb, Remove	840	LFT	\$ 15.00	\$ 12,600.00
Asphalt Excavation (3,360 SFT) <i>[assumes an average of 1 foot depth]</i>	125	CYS	\$ 55.00	\$ 6,900.00
Bike Lane Symbol (EVERY 250 LFT) (420 LFT / SIDE)	4	EA	\$ 200.00	\$ 800.00
Bike Lane Sign (EVERY 250 LFT)	4	EA	\$ 300.00	\$ 1,200.00
Restriping for Road Re-Work [SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	1,680	LFT	\$ 1.00	\$ 1,700.00
Straight Curb	840	LFT	\$ 25.00	\$ 21,000.00
Curb Cut	50	LFT	\$ 15.00	\$ 800.00
Asphalt Patching (3,360 SFT) <i>[assumes an average of 6 inches deep with 6 inches of stone]</i>	250	TON	\$ 100.00	\$ 25,000.00
Adjust Casting to Grade	3	EA	\$ 600.00	\$ 1,800.00
Bicycle Friendly Casting	3	EA	\$ 1,000.00	\$ 3,000.00
Earthwork	1	LS	\$ 4,000.00	\$ 4,000.00
Erosion Control	1	LS	\$ 8,000.00	\$ 8,000.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 4,500.00	\$ 4,500.00
Clearing ROW (3%)	1	LS	\$ 2,700.00	\$ 2,700.00
Contingency (20%)	1	LS	\$ 17,900.00	\$ 17,900.00
Total Estimated 8TH STREET 3 Construction Cost Opinion (1) (2)				\$ 114,400.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 4 (Watt St. to Meigs Ave.)

0.08 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Curb, Remove	420	LFT	\$ 15.00	\$ 6,300.00
Asphalt Excavation (1,680 SFT) [assumes an average of 1 foot depth]	65	CYS	\$ 55.00	\$ 3,600.00
Bike Lane Symbol (EVERY 250 LFT) (420 LFT / SIDE)	4	EA	\$ 200.00	\$ 800.00
Bike Lane Sign (EVERY 250 LFT)	4	EA	\$ 300.00	\$ 1,200.00
Restriping for Road Re-Work [SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	1,680	LFT	\$ 1.00	\$ 1,700.00
Straight Curb	420	LFT	\$ 25.00	\$ 10,500.00
Curb Cut	50	LFT	\$ 15.00	\$ 800.00
Asphalt Patching (1,680 SFT) [assumes an average of 6 inches deep with 6 inches of stone]	125	TON	\$ 100.00	\$ 12,500.00
Earthwork	1	LS	\$ 4,000.00	\$ 4,000.00
Erosion Control	1	LS	\$ 2,500.00	\$ 2,500.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 2,400.00	\$ 2,400.00
Clearing ROW (3%)	1	LS	\$ 1,500.00	\$ 1,500.00
Contingency (20%)	1	LS	\$ 9,300.00	\$ 9,300.00
Total Estimated 8TH STREET 4 Construction Cost Opinion (1) (2)				\$ 59,600.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 5 (Meigs Ave. to Penn St.)

0.25 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Bike Lane Symbol (EVERY 250 LFT) (1,300 LFT / SIDE)	12	EA	\$ 200.00	\$ 2,400.00
Bike Lane Sign (EVERY 250 LFT)	12	EA	\$ 300.00	\$ 3,600.00
Restriping for Road Re-Work [SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	5,200	LFT	\$ 1.00	\$ 5,200.00
SUBTOTAL				\$ 11,200.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 2,500.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 2,000.00	\$ -
MINUS LABOR (20%)				\$ 2,240.00
Contingency (15%)	1	LS	\$ 1,700.00	\$ 1,700.00
Total Estimated 8TH STREET 5 Construction Cost Opinion (1) (2)				\$ 10,700.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 6 (Penn St. to Graham St.)

0.15 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sharrow Pavement Marking (EVERY 275 LFT) - (800 LFT Sharrow / SIDE)	6	EA	\$ 200.00	\$ 1,200.00
Sharrow Signage (EVERY 275 LFT)	6	EA	\$ 300.00	\$ 1,800.00
SUBTOTAL				\$ 3,000.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 2,500.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 1,000.00	\$ -
MINUS LABOR				\$ 600.00
Contingency (15%)	1	LS	\$ 900.00	\$ 900.00
Total Estimated 8TH STREET 6 Construction Cost Opinion (1) (2)				\$ 3,300.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.

2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bicycle facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 7 (Graham St. to Main St. - Cemetery)

0.27 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Bike Lane Symbol (EVERY 250 LFT) (1,430 LFT / SIDE)	12	EA	\$ 200.00	\$ 2,400.00
Bike Lane Sign (EVERY 250 LFT)	12	EA	\$ 300.00	\$ 3,600.00
Restriping for Road Re-Work [SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	5,720	LFT	\$ 1.00	\$ 5,800.00
SUBTOTAL				\$ 11,800.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 2,500.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 2,000.00	\$ -
MINUS LABOR				\$ 2,360.00
Contingency (15%)	1	LS	\$ 1,800.00	\$ 1,800.00
Total Estimated 8TH STREET 7 Construction Cost Opinion (1) (2)				\$ 11,300.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 8 (Main Street to Crestview)

0.20 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Curb, Remove	2,100	LFT	\$ 15.00	\$ 31,500.00
Asphalt Excavation (8,400 SFT) [assumes an average of 1 foot depth]	315	CYS	\$ 55.00	\$ 17,400.00
Bike Lane Symbol (EVERY 250 LFT) (1,050 LFT / SIDE)	10	EA	\$ 200.00	\$ 2,000.00
Bike Lane Sign (EVERY 250 LFT)	10	EA	\$ 300.00	\$ 3,000.00
Restriping for Road Re-Work [SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	4,200	LFT	\$ 1.00	\$ 4,200.00
Straight Curb	2,100	LFT	\$ 25.00	\$ 52,500.00
Curb Cut	225	LFT	\$ 15.00	\$ 3,400.00
Asphalt Patching (8,400 SFT) [assumes an average of 6 inches deep with 6 inches of stone]	620	TON	\$ 100.00	\$ 62,000.00
Adjust Casting to Grade	8	EA	\$ 600.00	\$ 4,800.00
Bicycle Friendly Casting	8	EA	\$ 1,000.00	\$ 8,000.00
Earthwork	1	LS	\$ 12,000.00	\$ 12,000.00
Erosion Control	1	LS	\$ 15,000.00	\$ 15,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 11,500.00	\$ 11,500.00
Clearing ROW (3%)	1	LS	\$ 6,900.00	\$ 6,900.00
Contingency (20%)	1	LS	\$ 45,700.00	\$ 45,700.00
Total Estimated 8TH STREET 8 Construction Cost Opinion (1) (2)				\$ 292,400.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 9 (Crestview Ct. to Brighton Ave.)

0.14 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Curb, Remove	1,500	LFT	\$ 15.00	\$ 22,500.00
Asphalt Excavation (6,000 SFT) <i>[assumes an average of 1 foot depth]</i>	225	CYS	\$ 55.00	\$ 12,400.00
Bike Lane Symbol (EVERY 250 LFT) (750 LFT / SIDE)	6	EA	\$ 200.00	\$ 1,200.00
Bike Lane Sign (EVERY 250 LFT)	6	EA	\$ 300.00	\$ 1,800.00
Restriping for Road Re-Work [SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	3,000	LFT	\$ 1.00	\$ 3,000.00
Straight Curb	1,500	LFT	\$ 25.00	\$ 37,500.00
Curb Cut	240	LFT	\$ 15.00	\$ 3,600.00
Asphalt Patching (6000 SFT) <i>[assumes an average of 6 inches deep with 6 inches of stone]</i>	445	TON	\$ 100.00	\$ 44,500.00
Adjust Casting to Grade	8	EA	\$ 600.00	\$ 4,800.00
Bicycle Friendly Casting	8	EA	\$ 1,000.00	\$ 8,000.00
Earthwork	1	LS	\$ 10,000.00	\$ 10,000.00
Erosion Control	1	LS	\$ 12,000.00	\$ 12,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 8,700.00	\$ 8,700.00
Clearing ROW (3%)	1	LS	\$ 5,300.00	\$ 5,300.00
Contingency (20%)	1	LS	\$ 34,800.00	\$ 34,800.00
Total Estimated 8TH STREET 9 Construction Cost Opinion (1) (2)				\$ 222,600.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 10 (Brighton Ave. to Railroad)

0.12 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Curb, Remove	1,280	LFT	\$ 15.00	\$ 19,200.00
Asphalt Excavation (8,000 SFT) <i>[assumes an average of 1 foot depth]</i>	300	CYS	\$ 55.00	\$ 16,500.00
Bike Lane Symbol (EVERY 250 LFT) (640 LFT / SIDE)	6	EA	\$ 200.00	\$ 1,200.00
Bike Lane Sign (EVERY 250 LFT)	6	EA	\$ 300.00	\$ 1,800.00
Restriping for Road Re-Work [SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	2,560	LFT	\$ 1.00	\$ 2,600.00
Straight Curb	1,280	LFT	\$ 25.00	\$ 32,000.00
Curb Cut	80	LFT	\$ 15.00	\$ 1,200.00
Asphalt Patching (2,560 SFT) <i>[assumes an average of 6 inches deep with 6 inches of stone]</i>	380	TON	\$ 100.00	\$ 38,000.00
Mulched Seeding	285	SYS	\$ 1.00	\$ 300.00
Top Soil	25	CYS	\$ 60.00	\$ 1,500.00
Earthwork	1	LS	\$ 8,000.00	\$ 8,000.00
Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 7,000.00	\$ 7,000.00
Clearing ROW (3%)	1	LS	\$ 4,200.00	\$ 4,200.00
Contingency (20%)	1	LS	\$ 28,000.00	\$ 28,000.00
Total Estimated 8TH STREET 10 Construction Cost Opinion (1) (2)				\$ 179,000.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 11 (Railroad to Springsdale Drive)

0.26 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Bike Lane Symbol (EVERY 250 LFT) (1,360 LFT / SIDE)	12	EA	\$ 200.00	\$ 2,400.00
Bike Lane Sign (EVERY 250 LFT)	12	EA	\$ 300.00	\$ 3,600.00
Restriping for Road Re-Work [SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	5,440	LFT	\$ 1.00	\$ 5,500.00
SUBTOTAL				\$ 11,500.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 2,500.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 2,000.00	\$ -
MINUS LABOR (20%)				\$ 2,300.00
Contingency (15%)	1	LS	\$ 1,800.00	\$ 1,800.00
Total Estimated 8TH STREET 11 Construction Cost Opinion (1) (2)				\$ 11,000.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 12 (Springdale Dr. to Perrin Ln.)

0.69 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Bike Lane Symbol (EVERY 250 LFT) (3,630 LFT / SIDE)	30	EA	\$ 200.00	\$ 6,000.00
Bike Lane Sign (EVERY 250 LFT)	30	EA	\$ 300.00	\$ 9,000.00
Restriping for Road Re-Work [SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	14,520	LFT	\$ 1.00	\$ 14,600.00
SUBTOTAL				\$ 29,600.00
Utility Relocations	-	LS	\$ 10,000.00	
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 7,500.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 3,000.00	\$ -
MINUS LABOR (20%)				\$ 5,920.00
Contingency (15%)	1	LS	\$ 4,500.00	\$ 4,500.00
Total Estimated 8TH STREET 12 Construction Cost Opinion (1) (2)				\$ 28,200.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 13 (Perrin Ln. to Allison Ln.)

1.80 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Bike Lane Symbol (EVERY 250 LFT) (9,500 LFT / SIDE)	76	EA	\$ 200.00	\$ 15,200.00
Bike Lane Sign (EVERY 250 LFT)	76	EA	\$ 300.00	\$ 22,800.00
Restriping for Road Re-Work [DOUBLE YELLOW CENTER LINE, SOLID WHITE FOR BIKE LANE (x2 /	38,000	LFT	\$ 1.00	\$ 38,000.00
SUBTOTAL				\$ 76,000.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 20,000.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 8,000.00	\$ -
MINUS LABOR (20%)				\$ 15,200.00
Contingency (15%)	1	LS	\$ 11,400.00	\$ 11,400.00
Total Estimated 8TH STREET 13 Construction Cost Opinion (1) (2)				\$ 72,200.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 14 (Allison Ln. to Presidential Pl.)

0.53 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Curb, Remove	2,800	LFT	\$ 15.00	\$ 42,000.00
Pipe, Remove	2,800	LFT	\$ 10.00	\$ 28,000.00
Casting / Manhole Remove	16	EA	\$ 850.00	\$ 13,600.00
Striping Removal [DOUBLE YELLOW TURN LANE LINE (x2)]	11,200	LFT	\$ 0.50	\$ 5,600.00
Bike Lane Symbol (EVERY 250 LFT) (2,800 LFT / SIDE)	24	EA	\$ 200.00	\$ 4,800.00
Bike Lane Sign (EVERY 250 LFT)	24	EA	\$ 150.00	\$ 3,600.00
Restriping for Road Re-Work [DOUBLE YELLOW TURN LANE LINE (x2), SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	16,800	LFT	\$ 1.00	\$ 16,800.00
Curb & Gutter	2,800	LFT	\$ 30.00	\$ 84,000.00
Mill & Overlay (1.5")	11,825	SYS	\$ 8.50	\$ 100,600.00
New Pavement for Bike Lane [16,800 SFT]				
HMA Widening Type D (165 #/SYS Surface, 495 #/SYS Intermediate)	620	TON	\$ 150.00	\$ 93,000.00
6" Compacted Aggregate #53	625	TON	\$ 20.00	\$ 12,500.00
Subgrade Treatment Type III	1,870	SYS	\$ 10.00	\$ 18,700.00
Bicycle Friendly Casting	16	EA	\$ 1,000.00	\$ 16,000.00
Inlet (1 EVERY 100 LFT NEW PIPE)	16	EA	\$ 2,000.00	\$ 32,000.00
18" RCP	2,800	LFT	\$ 60.00	\$ 168,000.00
Earthwork	1	LS	\$ 15,000.00	\$ 15,000.00
Erosion Control	1	LS	\$ 12,000.00	\$ 12,000.00
Utility Relocations (approximately 2 overhead utility relocations)	1	LS	\$ 20,000.00	\$ 20,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 5,000.00	\$ 5,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 34,600.00	\$ 34,600.00
Clearing ROW (3%)	1	LS	\$ 20,800.00	\$ 20,800.00
Contingency (20%)	1	LS	\$ 138,300.00	\$ 138,300.00
Total Estimated 8TH STREET 14 Construction Cost Opinion (1) (2)				\$ 884,900.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.

2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 15 (Presidential Pl. to Port Rd.)

0.91 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Bike Lane Symbol (EVERY 250 LFT) (4,820 LFT / SIDE)	40	EA	\$ 200.00	\$ 8,000.00
Bike Lane Sign (EVERY 250 LFT)	40	EA	\$ 150.00	\$ 6,000.00
Restriping for Road Re-Work [SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	19,280	LFT	\$ 1.00	\$ 19,300.00
SUBTOTAL				\$ 33,300.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 10,000.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 4,000.00	\$ -
MINUS LABOR				\$ 6,660.00
Contingency (15%)	1	LS	\$ 5,000.00	\$ 5,000.00
Total Estimated 8TH STREET 15 Construction Cost Opinion (1) (2)				\$ 31,700.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

8th Street 16 (Port Rd. to Utica Sellersburg Rd.)

0.81 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Bike Lane Symbol (EVERY 250 LFT) (4,300 LFT / SIDE)	18	EA	\$ 200.00	\$ 3,600.00
Bike Lane Sign (EVERY 250 LFT)	18	EA	\$ 300.00	\$ 5,400.00
Restriping for Road Re-Work [SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	17,200	LFT	\$ 1.00	\$ 17,200.00
Mill & Overlay (1.5")	2,870	SYS	\$ 8.50	\$ 24,400.00
New Pavement for Bike Lane [17,200 SFT]				
HMA Widening Type D (165 #/SYS Surface, 495 #/SYS Intermediate)	635	TON	\$ 150.00	\$ 95,300.00
6" Compacted Aggregate #53	640	TON	\$ 20.00	\$ 12,800.00
Subgrade Treatment Type III	1,915	SYS	\$ 10.00	\$ 19,200.00
Earthwork	1	LS	\$ 15,000.00	\$ 15,000.00
Erosion Control	1	LS	\$ 20,000.00	\$ 20,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 11,700.00	\$ 11,700.00
Clearing ROW (3%)	1	LS	\$ 7,000.00	\$ 7,000.00
Contingency (20%)	1	LS	\$ 46,600.00	\$ 46,600.00
Total Estimated 8TH STREET 16 Construction Cost Opinion (1) (2)				\$ 298,200.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

10th Street 1 (Spring Street to Reeds Ln.)

2.05 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove	6,000	SYS	\$ 20.00	\$ 120,000.00
8' Wide Asphalt Trail w/ 2' Shoulders	2.05	Miles	\$ 190,000.00	\$ 389,500.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	666	SYS	\$ 85.00	\$ 56,700.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	17	EA	\$ 5,000.00	\$ 85,000.00
Intersection Improvements @ - Level 3 (Median, Signal, Signage, Pavement Markings)	1	EA	\$ 90,000.00	\$ 90,000.00
Intersection Improvements @ - Commercial Drive (Epoxy Coating, assume 25'x10')	56	EA	\$ 2,000.00	\$ 112,000.00
Intersection Improvements @ - Residential Drive (Epoxy Coating, assume 15'x10')	6	EA	\$ 1,200.00	\$ 7,200.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	72	EA	\$ 500.00	\$ 36,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	72	EA	\$ 100.00	\$ 7,200.00
Trail Identification Signage (1/CROSSING)	18	EA	\$ 2,500.00	\$ 45,000.00
Directory Signage	3	EA	\$ 2,500.00	\$ 7,500.00
Mile Markers @ 1/4 mile intervals	8	EA	\$ 500.00	\$ 4,000.00
Mulched Seeding (assumes 6' disturbance along trail)	7,200	SYS	\$ 1.00	\$ 7,200.00
General Trail Landscape Work	1	LS	\$ 20,000.00	\$ 20,000.00
Earthwork	1	LS	\$ 25,000.00	\$ 25,000.00
Erosion Control	1	LS	\$ 45,000.00	\$ 45,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 20,000.00	\$ 20,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 54,400.00	\$ 54,400.00
Clearing ROW (3%)	1	LS	\$ 32,700.00	\$ 32,700.00
Contingency (20%)	1	LS	\$ 217,500.00	\$ 217,500.00
Total Estimated 10TH STREET 1 Construction Cost Opinion (1) (2)				\$ 1,391,900.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

10th Street 2 (Reeds Ln. to Allison Ln.)

1.63 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Asphalt Excavation (172,000 SFT) [assumes an average of 1 foot depth]	6,370	CYS	\$ 55.00	\$ 350,400.00
Cycle Track				
Bike Pavement Marking [at each intersection / drive (x2)]	148	EA	\$ 200.00	\$ 29,600.00
Signage [at each intersection / drive (x2)]	148	EA	\$ 150.00	\$ 22,200.00
Green Epoxy Coating [at each intersection / drive]	8,400	SFT	\$ 7.00	\$ 58,800.00
New Asphalt Pavement for Cycle Track with Drives (8,600 LFT)				
1.5" Surface, Type B	795	TON	\$ 70.00	\$ 55,700.00
3.5" Intermediate, Type B	1,845	TON	\$ 65.00	\$ 120,000.00
Subgrade Treatment Type IIIA	9,560	SYS	\$ 10.00	\$ 95,600.00
Straight Curb	17,200	LFT	\$ 25.00	\$ 430,000.00
Curb & Gutter	17,200	LFT	\$ 30.00	\$ 516,000.00
Median	4,780	SYS	\$ 50.00	\$ 239,000.00
Inlet (1 EVERY 100 LFT NEW PIPE)	172	EA	\$ 2,000.00	\$ 344,000.00
18" RCP	17,200	LFT	\$ 60.00	\$ 1,032,000.00
Asphalt Patching (68,800 SFT) [assumes an average of 6 inches deep with 6 inches of stone]	5,045	TON	\$ 100.00	\$ 504,500.00
Earthwork	1	LS	\$ 15,000.00	\$ 15,000.00
Erosion Control	1	LS	\$ 35,000.00	\$ 35,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 17,500.00	\$ 17,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 193,800.00	\$ 193,800.00
Clearing ROW (3%)	1	LS	\$ 116,300.00	\$ 116,300.00
Contingency (20%)	1	LS	\$ 775,100.00	\$ 775,100.00
Total Estimated 10TH STREET 2 Construction Cost Opinion (1) (2)				\$ 4,960,500.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

10th Street 3 (Allison Ln. to River City Park Rd.)

0.45 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
8' Wide Asphalt Trail w/ 2' Shoulders	0.45	Miles	\$ 190,000.00	\$ 85,500.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	111	SYS	\$ 85.00	\$ 9,500.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	3	EA	\$ 5,000.00	\$ 15,000.00
Intersection Improvements @ - Commercial Drive (Epoxy Coating, assume 25'x10')	5	EA	\$ 2,000.00	\$ 10,000.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	12	EA	\$ 500.00	\$ 6,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	12	EA	\$ 100.00	\$ 1,200.00
Trail Identification Signage (1/CROSSING)	3	EA	\$ 2,500.00	\$ 7,500.00
Directory Signage	2	EA	\$ 2,500.00	\$ 5,000.00
Mile Markers @ 1/4 mile intervals	2	EA	\$ 500.00	\$ 1,000.00
Mulched Seeding (assumes 6' disturbance along trail)	1,590	SYS	\$ 1.00	\$ 1,600.00
General Trail Landscape Work	1	LS	\$ 10,000.00	\$ 10,000.00
Earthwork	1	LS	\$ 10,000.00	\$ 10,000.00
Erosion Control	1	LS	\$ 10,000.00	\$ 10,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 5,000.00	\$ 5,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 9,400.00	\$ 9,400.00
Clearing ROW (3%)	1	LS	\$ 5,700.00	\$ 5,700.00
Contingency (20%)	1	LS	\$ 37,500.00	\$ 37,500.00
Total Estimated 10TH STREET 3 Construction Cost Opinion (1) (2)				\$ 239,900.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

10th Street 4 (10th St. to Richard Vissing Park)

0.52 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
10' Wide Asphalt Trail w/ 2' Shoulders	0.52	Miles	\$ 240,000.00	\$ 124,800.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	74	SYS	\$ 85.00	\$ 6,300.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	2	EA	\$ 5,000.00	\$ 10,000.00
Intersection Improvements @ - Commercial Drive (Epoxy Coating, assume 25'x10')	1	EA	\$ 2,000.00	\$ 2,000.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	8	EA	\$ 500.00	\$ 4,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	8	EA	\$ 100.00	\$ 800.00
Trail Identification Signage (1/CROSSING)	2	EA	\$ 2,500.00	\$ 5,000.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Mile Markers @ 1/4 mile intervals	2	EA	\$ 500.00	\$ 1,000.00
Mulched Seeding (assumes 6' disturbance along trail)	1,850	SYS	\$ 1.00	\$ 1,900.00
General Trail Landscape Work	1	LS	\$ 8,000.00	\$ 8,000.00
Mitigation	0.3	ACRE	\$ 150,000.00	\$ 45,000.00
Earthwork	1	LS	\$ 10,000.00	\$ 10,000.00
Erosion Control	1	LS	\$ 12,000.00	\$ 12,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 5,000.00	\$ 5,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 12,500.00	\$ 12,500.00
Clearing ROW (3%)	1	LS	\$ 7,500.00	\$ 7,500.00
Contingency (20%)	1	LS	\$ 52,200.00	\$ 52,200.00
Total Estimated 10TH STREET 4 Construction Cost Opinion (1) (2)				\$ 320,500.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Chestnut Street 1-8 (Pearl Street to Ewing Street)

2.21 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sharrow Pavement Marking (3 / BLOCK / SIDE)	162	EA	\$ 200.00	\$ 32,400.00
Sharrow Signage (1 / BLOCK / SIDE)	54	EA	\$ 300.00	\$ 16,200.00
SUBTOTAL				\$ 48,600.00
MINUS LABOR (20%)				\$ 9,720.00
Contingency (15%)				\$ 7,290.00
TOTAL (Marking and Signage Only)				\$ 46,200.00
Bike Boulevard Intersection Treatment @ Watt & Chestnut *				
Signage	2	EA	\$ 150.00	\$ 300.00
Median	10	SYS	\$ 50.00	\$ 500.00
Pavement Markings	1	EA	\$ 200.00	\$ 200.00
Asphalt Excavation (90 SFT) [assumes an average of 1 foot depth]	4	CYS	\$ 55.00	\$ 300.00
Asphalt Patching (90 SFT) [assumes an average of 6 inches deep with 6 inches of stone]	7	TON	\$ 100.00	\$ 700.00
Bike Boulevard Intersection Treatment @ Mechanic & Chestnut *				
Signage	2	EA	\$ 150.00	\$ 300.00
Median	10	SYS	\$ 50.00	\$ 500.00
Pavement Markings	1	EA	\$ 200.00	\$ 200.00
Asphalt Excavation (#### SFT) [assumes an average of 1 foot depth]	4	CYS	\$ 55.00	\$ 300.00
Asphalt Patching (#### SFT) [assumes an average of 6 inches deep with 6 inches of stone]	7	TON	\$ 100.00	\$ 700.00
Earthwork	-	LS	\$ 5,000.00	\$ -
Erosion Control	-	LS	\$ 2,500.00	\$ -
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 1,000.00	\$ 1,000.00
Clearing ROW (3%)	-	LS	\$ 5,300.00	\$ -
Contingency (20%)	1	LS	\$ 2,800.00	\$ 2,800.00
TOTAL (Intersection Treatments Only)				\$ 17,800.00
Total Estimated CHESTNUT STREET 1-8 Construction Cost Opinion (1) (2)				\$ 64,000.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

* See standards for cost of temporary treatment

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Port Road 1 (Utica Pike to On Ramp)

2.37 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
10' Wide Asphalt Trail w/ 2' Shoulders	2.37	Miles	\$ 240,000.00	\$ 568,800.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	259	SYS	\$ 85.00	\$ 22,100.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	5	EA	\$ 5,000.00	\$ 25,000.00
Intersection Improvements @ - Commercial Drive (Epoxy Coating, assume 25'x10')	5	EA	\$ 2,000.00	\$ 10,000.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	20	EA	\$ 500.00	\$ 10,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	20	EA	\$ 100.00	\$ 2,000.00
Trail Identification Signage (1/CROSSING)	5	EA	\$ 2,500.00	\$ 12,500.00
Directory Signage	-	EA	\$ 2,500.00	\$ -
Mile Markers @ 1/4 mile intervals	10	EA	\$ 500.00	\$ 5,000.00
Mulched Seeding (assumes 6' disturbance along trail)	8,335	SYS	\$ 1.00	\$ 8,400.00
General Trail Landscape Work	1	LS	\$ 15,000.00	\$ 15,000.00
Ditch Grading	12,500	LFT	\$ 7.00	\$ 87,500.00
Earthwork	1	LS	\$ 30,000.00	\$ 30,000.00
Erosion Control	1	LS	\$ 50,000.00	\$ 50,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 18,000.00	\$ 18,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 43,800.00	\$ 43,800.00
Clearing ROW (3%)	1	LS	\$ 26,300.00	\$ 26,300.00
Contingency (20%)	1	LS	\$ 174,900.00	\$ 174,900.00
Total Estimated PORT ROAD 1 Construction Cost Opinion (1) (2)				\$ 1,119,300.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.

2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Port Road 2-3 (Exit Ramps and On Ramps)

0.48 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
10' Wide Asphalt Trail w/ 2' Shoulders	0.48	Miles	\$ 240,000.00	\$ 115,200.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	37	SYS	\$ 85.00	\$ 3,200.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	1	EA	\$ 5,000.00	\$ 5,000.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	4	EA	\$ 500.00	\$ 2,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	4	EA	\$ 100.00	\$ 400.00
Trail Identification Signage (1/CROSSING)	1	EA	\$ 2,500.00	\$ 2,500.00
Directory Signage	-	EA	\$ 2,500.00	\$ -
Mile Markers @ 1/4 mile intervals	1	EA	\$ 500.00	\$ 500.00
Mulched Seeding (assumes 6' disturbance along trail)	1,700	SYS	\$ 1.00	\$ 1,700.00
General Trail Landscape Work	1	LS	\$ 8,000.00	\$ 8,000.00
Modular Block Wall (includes Reinforcing and Excavation)	1,700	SYS	\$ 400.00	\$ 680,000.00
Wood Railing, 42" Tall	2,550	LFT	\$ 40.00	\$ 102,000.00
Earthwork	1	LS	\$ 35,000.00	\$ 35,000.00
Erosion Control	1	LS	\$ 12,000.00	\$ 12,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 5,000.00	\$ 5,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 49,200.00	\$ 49,200.00
Clearing ROW (3%)	1	LS	\$ 29,500.00	\$ 29,500.00
Contingency (20%)	1	LS	\$ 196,500.00	\$ 196,500.00
Total Estimated PORT ROAD 2-3 Construction Cost Opinion (1) (2)				\$ 1,257,700.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Meigs Avenue 1 (Market Street to 10th Street)

0.70 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sharrow Pavement Marking (EVERY 275 LFT) - (3,680 LFT Sharrow / SIDE)	28	EA	\$ 200.00	\$ 5,600.00
Sharrow Signage (EVERY 275 LFT)	28	EA	\$ 300.00	\$ 8,400.00
SUBTOTAL				\$ 14,000.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 7,500.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 2,000.00	\$ -
Contingency (15%)	1	LS	\$ 2,100.00	\$ 2,100.00
MINUS LABOR				\$ 2,800.00
Total Estimated MEIGS AVENUE 1 Construction Cost Opinion (1) (2)				\$ 13,300.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Ewing Lane 1-2 (Utica Pike to Bridgepoint Elementary)

0.24 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Bike Lane Symbol (EVERY 250 LFT) (1,270 LFT / SIDE)	10	EA	\$ 200.00	\$ 2,000.00
Bike Lane Sign (EVERY 250 LFT)	10	EA	\$ 300.00	\$ 3,000.00
Restriping for Road Re-Work [SOLID WHITE FOR BIKE LANE (x2 / SIDE)]	5,080	LFT	\$ 1.00	\$ 5,100.00
SUBTOTAL				\$ 10,100.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 2,500.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 2,000.00	\$ -
Contingency (15%)	1	LS	\$ 1,600.00	\$ 1,600.00
MINUS LABOR (20%)				\$ 2,020.00
Total Estimated EWING LANE 1-2 Construction Cost Opinion (1) (2)				\$ 9,700.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.

2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Ewing Lane 3-8 (Bridgepoint Elementary to Perrin Ln.)

0.92 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sharrow Pavement Marking (EVERY 275 LFT) - (4,870 LFT Sharrow / SIDE)	36	EA	\$ 200.00	\$ 7,200.00
Sharrow Signage (EVERY 275 LFT)	36	EA	\$ 300.00	\$ 10,800.00
SUBTOTAL				\$ 18,000.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 10,000.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 2,000.00	\$ -
Contingency (15%)	1	LS	\$ 2,700.00	\$ 2,700.00
MINUS LABOR (20%)				\$ 3,600.00
Total Estimated EWING LANE 3-8 Construction Cost Opinion (1) (2)				\$ 17,100.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Allison Lane 1-3 (Utica Pike to Doe Run Rd.)

1.12 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
8' Wide Asphalt Trail w/ 2' Shoulders	1.12	Miles	\$ 190,000.00	\$ 212,800.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	222	SYS	\$ 85.00	\$ 18,900.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	6	EA	\$ 5,000.00	\$ 30,000.00
Intersection Improvements @ - Residential Drive (Epoxy Coating, assume 15'x10')	42	EA	\$ 1,200.00	\$ 50,400.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	24	EA	\$ 500.00	\$ 12,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	24	EA	\$ 100.00	\$ 2,400.00
Trail Identification Signage (1/CROSSING)	6	EA	\$ 2,500.00	\$ 15,000.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Mile Markers @ 1/4 mile intervals	5	EA	\$ 500.00	\$ 2,500.00
Mulched Seeding (assumes 6' disturbance along trail)	3,935	SYS	\$ 1.00	\$ 4,000.00
General Trail Landscape Work	1	LS	\$ 20,000.00	\$ 20,000.00
Ditch Grading	5,900	LFT	\$ 7.00	\$ 41,300.00
Earthwork	1	LS	\$ 18,000.00	\$ 18,000.00
Erosion Control	1	LS	\$ 25,000.00	\$ 25,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 12,500.00	\$ 12,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 23,900.00	\$ 23,900.00
Clearing ROW (3%)	1	LS	\$ 14,400.00	\$ 14,400.00
Contingency (20%)	1	LS	\$ 95,500.00	\$ 95,500.00
Total Estimated ALLISON LANE 1-3 Construction Cost Opinion (1) (2)				\$ 611,100.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Allison Lane 4 (Doe Run Rd. to Middle Rd.)

0.23 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Asphalt Excavation (9,600 SFT) <i>[assumes an average of 1 foot depth]</i>	355	CYS	\$ 55.00	\$ 19,600.00
10' Wide Asphalt Trail w/ 2' Shoulders	0.23	Miles	\$ 240,000.00	\$ 55,200.00
Restriping for Road Re-Work [DOUBLE YELLOW CENTER LINE, SOLID WHITE ALONG TRAIL SHOULDER]	3,600	LFT	\$ 1.00	\$ 3,600.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	37	SYS	\$ 85.00	\$ 3,200.00
Intersection Improvements @ - Level 3 (Median, Signal, Signage, Pavement Markings)	1	EA	\$ 90,000.00	\$ 90,000.00
Intersection Improvements @ - Commercial Drive (Epoxy Coating, assume 25'x10')	5	EA	\$ 2,000.00	\$ 10,000.00
Intersection Improvements @ - Residential Drive (Epoxy Coating, assume 15'x10')	8	EA	\$ 1,200.00	\$ 9,600.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	4	EA	\$ 500.00	\$ 2,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STOP)	4	EA	\$ 100.00	\$ 400.00
Trail Identification Signage (1/CROSSING)	1	EA	\$ 2,500.00	\$ 2,500.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Mile Markers @ 1/4 mile intervals	1	EA	\$ 500.00	\$ 500.00
Asphalt Patching (9,600 SFT) <i>[assumes an average of 6 inches deep with 6 inches of stone]</i>	710	TON	\$ 100.00	\$ 71,000.00
Curb & Gutter	2,400	LFT	\$ 30.00	\$ 72,000.00
Mill & Overlay (1.5")	2,935	SYS	\$ 8.50	\$ 25,000.00
Mulched Seeding (assumes 6' disturbance along trail)	800	SYS	\$ 1.00	\$ 800.00
General Trail Landscape Work	1	LS	\$ 5,000.00	\$ 5,000.00
Inlet (1 EVERY 100 LFT NEW PIPE)	24	EA	\$ 2,000.00	\$ 48,000.00
18" RCP	2,400	LFT	\$ 60.00	\$ 144,000.00
Earthwork	1	LS	\$ 15,000.00	\$ 15,000.00
Erosion Control	1	LS	\$ 30,000.00	\$ 30,000.00
Utility Relocations (approximately 6 overhead utility relocations)	1	LS	\$ 60,000.00	\$ 60,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 32,700.00	\$ 32,700.00
Clearing ROW (3%)	1	LS	\$ 19,600.00	\$ 19,600.00
Contingency (20%)	1	LS	\$ 130,600.00	\$ 130,600.00
Total Estimated ALLISON LANE 4 Construction Cost Opinion (1) (2)				\$ 835,700.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Allison Lane 5 (Middle Rd. to Faith Lutheran Church)

0.32 Miles

1 Bridge

Description	Qty	Unit	Unit Cost	Cost
8' Wide Asphalt Trail w/ 2' Shoulders	0.32	Miles	\$ 190,000.00	\$ 60,800.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	37	SYS	\$ 85.00	\$ 3,200.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	1	EA	\$ 5,000.00	\$ 5,000.00
Intersection Improvements @ - Commercial Drive (Epoxy Coating, assume 25'x10')	9	EA	\$ 2,000.00	\$ 18,000.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	4	EA	\$ 500.00	\$ 2,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	4	EA	\$ 100.00	\$ 400.00
Trail Identification Signage (1/CROSSING)	1	EA	\$ 2,500.00	\$ 2,500.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Mile Markers @ 1/4 mile intervals	2	EA	\$ 500.00	\$ 1,000.00
Mulched Seeding (assumes 6' disturbance along trail)	1,135	SYS	\$ 1.00	\$ 1,200.00
General Trail Landscape Work	1	LS	\$ 5,000.00	\$ 5,000.00
Modular Block Wall (includes Reinforcing and Excavation)	125	SYS	\$ 400.00	\$ 50,000.00
Proposed Bridge Structure [(\$1200 x LFT) x 1.5] (up to 120 LFT)	50	LFT	\$ 1,800.00	\$ 90,000.00
Wood Railing, 42" Tall	120	LFT	\$ 40.00	\$ 4,800.00
Ditch Grading	1,700	LFT	\$ 7.00	\$ 11,900.00
Earthwork	1	LS	\$ 25,000.00	\$ 25,000.00
Erosion Control	1	LS	\$ 8,000.00	\$ 8,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 5,000.00	\$ 5,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 15,400.00	\$ 15,400.00
Clearing ROW (3%)	1	LS	\$ 9,200.00	\$ 9,200.00
Contingency (20%)	1	LS	\$ 61,300.00	\$ 61,300.00
Total Estimated ALLISON LANE 5 Construction Cost Opinion (1) (2)				\$ 392,200.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Allison Lane 6 (Faith Luthern Church to Seminole Dr.)

0.18 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove	290	SYS	\$ 20.00	\$ 5,800.00
8' Wide Asphalt Trail w/ 2' Shoulders	0.18	Miles	\$ 190,000.00	\$ 34,200.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	37	SYS	\$ 85.00	\$ 3,200.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	1	EA	\$ 5,000.00	\$ 5,000.00
Intersection Improvements @ - Residential Drive (Epoxy Coating, assume 15'x10')	4	EA	\$ 1,200.00	\$ 4,800.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	4	EA	\$ 500.00	\$ 2,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	4	EA	\$ 100.00	\$ 400.00
Trail Identification Signage (1/CROSSING)	1	EA	\$ 2,500.00	\$ 2,500.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Mile Markers @ 1/4 mile intervals	1	EA	\$ 500.00	\$ 500.00
Ditch Grading	930	LFT	\$ 7.00	\$ 6,600.00
Earthwork	1	LS	\$ 8,000.00	\$ 8,000.00
Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 4,700.00	\$ 4,700.00
Clearing ROW (3%)	1	LS	\$ 2,800.00	\$ 2,800.00
Contingency (20%)	1	LS	\$ 18,600.00	\$ 18,600.00
Total Estimated ALLISON LANE 6 Construction Cost Opinion (1) (2)				\$ 119,100.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Allison Lane 7 (Seminole Dr. to Wooded Way)

0.12 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove	365	SYS	\$ 20.00	\$ 7,300.00
8' Wide Asphalt Trail w/ 2' Shoulders	0.24	Miles	\$ 190,000.00	\$ 45,600.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	148	SYS	\$ 85.00	\$ 12,600.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	4	EA	\$ 5,000.00	\$ 20,000.00
Intersection Improvements @ - Commercial Drive (Epoxy Coating, assume 25'x10')	6	EA	\$ 2,000.00	\$ 12,000.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	16	EA	\$ 500.00	\$ 8,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	16	EA	\$ 100.00	\$ 1,600.00
Trail Identification Signage (1/CROSSING)	4	EA	\$ 2,500.00	\$ 10,000.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Mile Markers @ 1/4 mile intervals	2	EA	\$ 500.00	\$ 1,000.00
Mulched Seeding (assumes 6' disturbance along trail)	870	SYS	\$ 1.00	\$ 900.00
General Trail Landscape Work	1	LS	\$ 10,000.00	\$ 10,000.00
Earthwork	1	LS	\$ 6,000.00	\$ 6,000.00
Erosion Control	1	LS	\$ 4,000.00	\$ 4,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 7,700.00	\$ 7,700.00
Clearing ROW (3%)	1	LS	\$ 4,700.00	\$ 4,700.00
Contingency (20%)	1	LS	\$ 30,800.00	\$ 30,800.00
Total Estimated ALLISON LANE 7 Construction Cost Opinion (1) (2)				\$ 197,200.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Allison Lane 8 (Wooded Way to 10th St.)

0.30 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove	600	SYS	\$ 20.00	\$ 12,000.00
8' Wide Asphalt Trail w/ 2' Shoulders	0.6	Miles	\$ 190,000.00	\$ 114,000.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	370	SYS	\$ 85.00	\$ 31,500.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	10	EA	\$ 5,000.00	\$ 50,000.00
Intersection Improvements @ - Commercial Drive (Epoxy Coating, assume 25'x10')	11	EA	\$ 2,000.00	\$ 22,000.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	40	EA	\$ 500.00	\$ 20,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	40	EA	\$ 100.00	\$ 4,000.00
Trail Identification Signage (1/CROSSING)	10	EA	\$ 2,500.00	\$ 25,000.00
Directory Signage	2	EA	\$ 2,500.00	\$ 5,000.00
Mile Markers @ 1/4 mile intervals	4	EA	\$ 500.00	\$ 2,000.00
Mulched Seeding (assumes 6' disturbance along trail)	2,135	SYS	\$ 1.00	\$ 2,200.00
Top Soil	50	CYS	\$ 60.00	\$ 3,000.00
General Trail Landscape Work	1	LS	\$ 10,000.00	\$ 10,000.00
Earthwork	1	LS	\$ 10,000.00	\$ 10,000.00
Erosion Control	1	LS	\$ 8,000.00	\$ 8,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 5,000.00	\$ 5,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 16,700.00	\$ 16,700.00
Clearing ROW (3%)	1	LS	\$ 10,100.00	\$ 10,100.00
Contingency (20%)	1	LS	\$ 66,800.00	\$ 66,800.00
Total Estimated ALLISON LANE 8 Construction Cost Opinion (1) (2)				\$ 427,300.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Tall Oaks Drive 1 (Wheels and Heels Trail to Charlestown Pike)

0.40 Miles

Description	Qty	Unit	Unit Cost	Cost
Sharrow Pavement Marking (EVERY 275 LFT) - (2,120 LFT Sharrow / SIDE)	16	EA	\$ 200.00	\$ 3,200.00
Sharrow Signage (EVERY 275 LFT)	16	EA	\$ 300.00	\$ 4,800.00
SUBTOTAL				\$ 8,000.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 5,000.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 1,000.00	\$ -
Contingency (15%)	1	LS	\$ 2,400.00	\$ 2,400.00
MINUS LABOR (20%)				\$ 1,600.00
Total Estimated TALL OAKS DRIVE 1 Construction Cost Opinion (1) (2)				\$ 8,800.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Charlestown Pike 1 (Tall Oaks Dr. to Whoerle Rd.)

0.26 Miles

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove	600	SYS	\$ 20.00	\$ 12,000.00
8' Wide Asphalt Trail w/ 2' Shoulders	0.26	Miles	\$ 190,000.00	\$ 49,400.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	37	SYS	\$ 85.00	\$ 3,200.00
Intersection Improvements @ - Level 2 (Overhead Flasher, Signage, Pavement Markings)	1	EA	\$ 40,000.00	\$ 40,000.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	4	EA	\$ 500.00	\$ 2,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	4	EA	\$ 100.00	\$ 400.00
Trail Identification Signage (1/CROSSING)	1	EA	\$ 2,500.00	\$ 2,500.00
Mulched Seeding (assumes 6' disturbance along trail)	900	SYS	\$ 1.00	\$ 900.00
General Trail Landscape Work	1	LS	\$ 5,000.00	\$ 5,000.00
Ditch Grading	1,350	LFT	\$ 7.00	\$ 9,500.00
Earthwork	1	LS	\$ 8,000.00	\$ 8,000.00
Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 2,500.00	\$ 2,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 7,600.00	\$ 7,600.00
Clearing ROW (3%)	1	LS	\$ 4,600.00	\$ 4,600.00
Contingency (20%)	1	LS	\$ 30,100.00	\$ 30,100.00
Total Estimated CHARLESTOWN PIKE 1 Construction Cost Opinion (1) (2)				\$ 192,700.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Veterans Parkway 1 (Whoerle Rd. To Hamburg Pike)

0.76 Miles

Description	Qty	Unit	Unit Cost	Cost
Raised Cycle Track				
Solid White Line (for edge of pavement where curb isn't being placed)	14,200	LFT	\$ 1.00	\$ 14,200.00
Bike Pavement Marking [at each intersection / drive (x2)]	8	EA	\$ 200.00	\$ 1,600.00
Signage [at each intersection / drive (x2)]	8	EA	\$ 150.00	\$ 1,200.00
Green Epoxy Coating [at each intersection / drive]	480	SFT	\$ 7.00	\$ 3,400.00
New Asphalt Pavement for Cycle Track without Drives (3,550 LFT) **				
1.5" Surface, Type B	165	TON	\$ 70.00	\$ 11,600.00
2" Intermediate, Type B	220	TON	\$ 55.00	\$ 12,100.00
6" Compacted Aggregate #53	660	TON	\$ 20.00	\$ 13,200.00
Subgrade Treatment Type III	1,975	SYS	\$ 10.00	\$ 19,800.00
8' Wide Asphalt Trail w/ 2' Shoulders	0.1	Miles	\$ 190,000.00	\$ 19,000.00
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	37	SYS	\$ 85.00	\$ 3,200.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	1	EA	\$ 5,000.00	\$ 5,000.00
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	4	EA	\$ 500.00	\$ 2,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	4	EA	\$ 100.00	\$ 400.00
Trail Identification Signage (1/CROSSING)	1	EA	\$ 2,500.00	\$ 2,500.00
Mulched Seeding (assumes 6' disturbance along trail)	2,670	SYS	\$ 1.00	\$ 2,700.00
General Trail Landscape Work	1	LS	\$ 10,000.00	\$ 10,000.00
Ditch Grading	7,100	LFT	\$ 7.00	\$ 49,700.00
Earthwork	1	LS	\$ 12,000.00	\$ 12,000.00
Erosion Control	1	LS	\$ 12,000.00	\$ 12,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 7,500.00	\$ 7,500.00
Mobilization & Demobilization (5%)	1	LS	\$ 10,700.00	\$ 10,700.00
Clearing ROW (3%)	1	LS	\$ 6,400.00	\$ 6,400.00
Contingency (20%)	1	LS	\$ 42,700.00	\$ 42,700.00
Total Estimated VETERANS PARKWAY 1 Construction Cost Opinion (1) (2)				\$ 272,900.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.

2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

**Section is thinner because there are relatively no drive crossings across the cycle track

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Duffy's Landing Bike SAG Station

Description	Qty	Unit	Unit Cost	Cost
SAG Station @ Duffy's Landing				
Bicycle Repair Station	1	EA	\$ 3,500.00	\$ 3,500.00
Bicycle Pump Bollard	1	EA	\$ 750.00	\$ 750.00
Restroom Facility with Drinking Fountain	1	LS	\$ 150,000.00	\$ 150,000.00
Prefabricated Shelter	1	LS	\$ 60,000.00	\$ 60,000.00
Bicycle Racks	3	EA	\$ 500.00	\$ 1,500.00
Bench	2	EA	\$ 2,000.00	\$ 4,000.00
Trash Receptacle	1	EA	\$ 2,000.00	\$ 2,000.00
Interpretive Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
General Trail Landscape Work	1	LS	\$ 10,000.00	\$ 10,000.00
Earthwork	1	LS	\$ 12,000.00	\$ 12,000.00
Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Mobilization & Demobilization (5%)	1	LS	\$ 12,700.00	\$ 12,700.00
Clearing ROW (3%)	1	LS	\$ 7,700.00	\$ 7,700.00
Contingency (20%)	1	LS	\$ 50,800.00	\$ 50,800.00
Total Estimated DUFFY'S LANDING BIKE SAG STATION Construction Cost Opinion (1) (2)				\$ 325,000.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Perrin Park Bike SAG Station

Description	Qty	Unit	Unit Cost	Cost
SAG Station @ Perrin Park				
Bicycle Racks	3	EA	\$ 500.00	\$ 1,500.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
General Trail Landscape Work	1	LS	\$ 3,000.00	\$ 3,000.00
Earthwork	1	LS	\$ 5,000.00	\$ 5,000.00
Erosion Control	1	LS	\$ 3,000.00	\$ 3,000.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Mobilization & Demobilization (5%)	1	LS	\$ 800.00	\$ 800.00
Clearing ROW (3%)	1	LS	\$ 500.00	\$ 500.00
Contingency (20%)	1	LS	\$ 3,000.00	\$ 3,000.00
Total Estimated PERRIN PARK BIKE SAG STATION Construction Cost Opinion (1) (2)				\$ 19,300.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Ewing Lane Park Bike SAG Station

Description	Qty	Unit	Unit Cost	Cost
SAG Station @ Ewing Lane Park				
Drinking Fountain	1	LS	\$ 6,500.00	\$ 6,500.00
Prefabricated Shelter	1	LS	\$ 45,000.00	\$ 45,000.00
Bicycle Racks	3	EA	\$ 500.00	\$ 1,500.00
Bench	2	EA	\$ 2,000.00	\$ 4,000.00
Trash Receptacle	1	EA	\$ 2,000.00	\$ 2,000.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
General Trail Landscape Work	1	LS	\$ 10,000.00	\$ 10,000.00
Earthwork	1	LS	\$ 12,000.00	\$ 12,000.00
Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Mobilization & Demobilization (5%)	1	LS	\$ 4,500.00	\$ 4,500.00
Clearing ROW (3%)	1	LS	\$ 2,700.00	\$ 2,700.00
Contingency (20%)	1	LS	\$ 17,700.00	\$ 17,700.00
Total Estimated EWING LANE PARK BIKE SAG STATION Construction Cost Opinion (1) (2)				\$ 113,400.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Aquatic Center Bike SAG Station

Description	Qty	Unit	Unit Cost	Cost
SAG Station @ Aquatic Center				
Bicycle Repair Station	1	EA	\$ 2,000.00	\$ 2,000.00
Bicycle Pump Bollard	1	EA	\$ 750.00	\$ 750.00
Bicycle Racks	3	EA	\$ 500.00	\$ 1,500.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
General Trail Landscape Work	1	LS	\$ 5,000.00	\$ 5,000.00
Earthwork	1	LS	\$ 12,000.00	\$ 12,000.00
Erosion Control	1	LS	\$ 3,000.00	\$ 3,000.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Mobilization & Demobilization (5%)	1	LS	\$ 1,400.00	\$ 1,400.00
Clearing ROW (3%)	1	LS	\$ 900.00	\$ 900.00
Contingency (20%)	1	LS	\$ 5,400.00	\$ 5,400.00
Total Estimated AQUATIC CENTER BIKE SAG STATION Construction Cost Opinion (1) (2)				\$ 34,500.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Allison Brook Park Bike SAG Station

Description	Qty	Unit	Unit Cost	Cost
SAG Station @ Allison Brook Park				
Drinking Fountain	1	LS	\$ 6,500.00	\$ 6,500.00
Bicycle Racks	3	EA	\$ 800.00	\$ 2,400.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
General Trail Landscape Work	1	LS	\$ 8,000.00	\$ 8,000.00
Earthwork	1	LS	\$ 6,000.00	\$ 6,000.00
Erosion Control	1	LS	\$ 3,500.00	\$ 3,500.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Mobilization & Demobilization (5%)	1	LS	\$ 1,500.00	\$ 1,500.00
Clearing ROW (3%)	1	LS	\$ 900.00	\$ 900.00
Contingency (20%)	1	LS	\$ 5,800.00	\$ 5,800.00
Total Estimated ALLISON BROOK PARK BIKE SAG STATION Construction Cost Opinion (1) (2)				\$ 37,100.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Richard Vissing Park Bike SAG Station

Description	Qty	Unit	Unit Cost	Cost
SAG Station @ Richard Vissing Park				
Bicycle Repair Station	1	EA	\$ 3,500.00	\$ 3,500.00
Bicycle Pump Bollard	1	EA	\$ 750.00	\$ 750.00
Bicycle Racks	3	EA	\$ 500.00	\$ 1,500.00
Bench	2	EA	\$ 2,000.00	\$ 4,000.00
Trash Receptacle	1	EA	\$ 1,000.00	\$ 1,000.00
Interpretive Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
General Trail Landscape Work	1	LS	\$ 5,000.00	\$ 5,000.00
Earthwork	1	LS	\$ 2,000.00	\$ 2,000.00
Erosion Control	1	LS	\$ 2,000.00	\$ 2,000.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Mobilization & Demobilization (5%)	1	LS	\$ 1,300.00	\$ 1,300.00
Clearing ROW (3%)	1	LS	\$ 800.00	\$ 800.00
Contingency (20%)	1	LS	\$ 5,000.00	\$ 5,000.00
Total Estimated RICHARD VISSING PARK BIKE SAG STATION Construction Cost Opinion (1) (2)				\$ 31,900.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Big Four Station Bike SAG Station

Description	Qty	Unit	Unit Cost	Cost
SAG Station @ Big Four Station				
Bicycle Repair Station	1	EA	\$ 3,500.00	\$ 3,500.00
Bicycle Pump Bollard	1	EA	\$ 750.00	\$ 750.00
Restroom Facility with Drinking Fountain	1	LS	\$ 150,000.00	\$ 150,000.00
Prefabricated Shelter	1	LS	\$ 70,000.00	\$ 70,000.00
Bicycle Racks	3	EA	\$ 500.00	\$ 1,500.00
Bench	2	EA	\$ 2,000.00	\$ 4,000.00
Trash Receptacle	1	EA	\$ 2,000.00	\$ 2,000.00
Interpretive Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
General Trail Landscape Work	1	LS	\$ 8,000.00	\$ 8,000.00
Earthwork	1	LS	\$ 12,000.00	\$ 12,000.00
Erosion Control	1	LS	\$ 7,000.00	\$ 7,000.00
Utility Relocations	1	LS	\$ -	\$ -
Mobilization & Demobilization (5%)	1	LS	\$ 13,200.00	\$ 13,200.00
Clearing ROW (3%)	1	LS	\$ 8,000.00	\$ 8,000.00
Contingency (20%)	1	LS	\$ 52,800.00	\$ 52,800.00
Total Estimated BIG FOUR STATION BIKE SAG STATION Construction Cost Opinion (1) (2)				\$ 337,800.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

City Hall Bike SAG Station

Description	Qty	Unit	Unit Cost	Cost
SAG Station @ City Hall				
Bicycle Repair Station	1	EA	\$ 3,500.00	\$ 3,500.00
Bicycle Pump Bollard	1	EA	\$ 1,000.00	\$ 1,000.00
Bicycle Racks	3	EA	\$ 800.00	\$ 2,400.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
General Trail Landscape Work	1	LS	\$ 2,000.00	\$ 2,000.00
Earthwork	1	LS	\$ 4,000.00	\$ 4,000.00
Erosion Control	1	LS	\$ 3,000.00	\$ 3,000.00
Utility Relocations	1	LS	\$ -	\$ -
Mobilization & Demobilization (5%)	1	LS	\$ 1,000.00	\$ 1,000.00
Clearing ROW (3%)	1	LS	\$ 600.00	\$ 600.00
Contingency (20%)	1	LS	\$ 3,700.00	\$ 3,700.00
Total Estimated CITY HALL BIKE SAG STATION Construction Cost Opinion (1) (2)				\$ 23,700.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Shirley Hall Park Bike SAG Station

Description	Qty	Unit	Unit Cost	Cost
SAG Station @ Shirley Hall Park				
Bicycle Repair Station	1	EA	\$ 3,500.00	\$ 3,500.00
Bicycle Pump Bollard	1	EA	\$ 1,000.00	\$ 1,000.00
Restroom Facility with Drinking Fountain	1	LS	\$ 150,000.00	\$ 150,000.00
Prefabricated Shelter	1	LS	\$ 40,000.00	\$ 40,000.00
Bicycle Racks	3	EA	\$ 800.00	\$ 2,400.00
Bench	2	EA	\$ 2,000.00	\$ 4,000.00
Trash Receptacle	1	EA	\$ 2,000.00	\$ 2,000.00
Interpretive Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
General Trail Landscape Work	1	LS	\$ 8,000.00	\$ 8,000.00
Earthwork	1	LS	\$ 12,000.00	\$ 12,000.00
Erosion Control	1	LS	\$ 7,000.00	\$ 7,000.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Mobilization & Demobilization (5%)	1	LS	\$ 11,800.00	\$ 11,800.00
Clearing ROW (3%)	1	LS	\$ 7,100.00	\$ 7,100.00
Contingency (20%)	1	LS	\$ 47,000.00	\$ 47,000.00
Total Estimated SHIRLEY HALL PARK BIKE SAG STATION Construction Cost Opinion (1) (2)				\$ 300,800.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

YMCA Bike SAG Station

Description	Qty	Unit	Unit Cost	Cost
SAG Station @ YMCA				
Bicycle Repair Station	1	EA	\$ 3,500.00	\$ 3,500.00
Bicycle Pump Bollard	1	EA	\$ 1,000.00	\$ 1,000.00
Prefabricated Shelter	1	LS	\$ 20,000.00	\$ 20,000.00
Bicycle Racks	3	EA	\$ 800.00	\$ 2,400.00
Bench	1	EA	\$ 2,000.00	\$ 2,000.00
Trash Receptacle	1	EA	\$ 2,000.00	\$ 2,000.00
Interpretive Signage	1	EA	\$ 2,500.00	\$ 2,500.00
Directory Signage	1	EA	\$ 2,500.00	\$ 2,500.00
General Trail Landscape Work	1	LS	\$ 5,000.00	\$ 5,000.00
Earthwork	1	LS	\$ 8,000.00	\$ 8,000.00
Erosion Control	1	LS	\$ 3,500.00	\$ 3,500.00
Utility Relocations	1	LS	\$ -	\$ -
Mobilization & Demobilization (5%)	1	LS	\$ 2,700.00	\$ 2,700.00
Clearing ROW (3%)	1	LS	\$ 1,600.00	\$ 1,600.00
Contingency (20%)	1	LS	\$ 10,500.00	\$ 10,500.00
Total Estimated YMCA BIKE SAG STATION Construction Cost Opinion (1) (2)				\$ 67,200.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Pedestrian Route - Pearl Street

Description	Qty	Unit	Unit Cost	Cost
Landscape, Trees (80' On Center) - [2,000 LFT / SIDE]	50	EA	\$ 450.00	\$ 22,500.00
Earthwork	-	LS	\$ 5,000.00	\$ -
Erosion Control	-	LS	\$ 7,500.00	\$ -
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic	-	LS	\$ 10,000.00	\$ -
Mobilization & Demobilization (5%)	1	LS	\$ 2,000.00	\$ 2,000.00
Clearing ROW (3%)	-	LS	\$ 1,000.00	\$ -
Contingency (20%)	1	LS	\$ 4,900.00	\$ 4,900.00
Total Estimated PEARL STREET PEDESTRIAN Construction Cost Opinion (1) (2)				\$ 29,400.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Pedestrian Route - Spring Street

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove (<i>assume average of 5' removal per side</i>) [1,700 LFT x 5']	1,890	SYS	\$ 20.00	\$ 37,800.00
Sawcut, Full Depth	3,400	LFT	\$ 2.00	\$ 6,800.00
Landscape, Trees (80' On Center) - [1,700 LFT / SIDE]	42	EA	\$ 450.00	\$ 18,900.00
Earthwork	-	LS		\$ -
Erosion Control	1	LS	\$ 4,000.00	\$ 4,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	1	LS	\$ 4,000.00	\$ 4,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 4,100.00	\$ 4,100.00
Clearing ROW (3%)	1	LS	\$ 2,500.00	\$ 2,500.00
Contingency (20%)	1	LS	\$ 16,300.00	\$ 16,300.00
Total Estimated SPRING STREET PEDESTRIAN Construction Cost Opinion (1) (2)				\$ 104,400.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each improvement will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Pedestrian Route - Wall Street

Description	Qty	Unit	Unit Cost	Cost
Landscape, Trees (80' On Center) - [2,500 LFT / SIDE]	62	EA	\$ 450.00	\$ 27,900.00
Earthwork	1	LS	\$ 10,000.00	\$ 10,000.00
Erosion Control	1	LS	\$ 7,500.00	\$ 7,500.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 4,000.00	\$ 4,000.00
Clearing ROW (3%)	1	LS	\$ 3,000.00	\$ 3,000.00
Contingency (20%)	1	LS	\$ 15,000.00	\$ 15,000.00
Total Estimated WALL STREET PEDESTRIAN Construction Cost Opinion (1) (2)				\$ 87,400.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Pedestrian Route - Locust Street

Description	Qty	Unit	Unit Cost	Cost
Landscape, Trees (80' On Center) - [500 LFT / SIDE]	12	EA	\$ 450.00	\$ 5,400.00
Earthwork	1	LS	\$ 3,000.00	\$ 3,000.00
Erosion Control	1	LS	\$ 3,000.00	\$ 3,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 2,000.00	\$ 2,000.00
Clearing ROW (3%)	1	LS	\$ 2,000.00	\$ 2,000.00
Contingency (20%)	1	LS	\$ 8,000.00	\$ 8,000.00
Total Estimated LOCUST STREET PEDESTRIAN Construction Cost Opinion (1) (2)				\$ 43,400.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Pedestrian Route - Walnut Street

Description	Qty	Unit	Unit Cost	Cost
Landscape, Trees (80' On Center) - [3,700 LFT / SIDE]	92	EA	\$ 450.00	\$ 41,400.00
Earthwork	1	LS	\$ 8,000.00	\$ 8,000.00
Erosion Control	1	LS	\$ 12,000.00	\$ 12,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 5,000.00	\$ 5,000.00
Clearing ROW (3%)	1	LS	\$ 3,000.00	\$ 3,000.00
Contingency (20%)	1	LS	\$ 18,000.00	\$ 18,000.00
Total Estimated WALNUT STREET PEDESTRIAN Construction Cost Opinion (1) (2)				\$ 107,400.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Pedestrian Route - Meigs Avenue

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, 4" (5' x 300' / SIDE) - includes compacted aggregate	340	SYS	\$ 55.00	\$ 18,700.00
Earthwork	1	LS	\$ 5,000.00	\$ 5,000.00
Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 3,000.00	\$ 3,000.00
Clearing ROW (3%)	1	LS	\$ 2,000.00	\$ 2,000.00
Contingency (20%)	1	LS	\$ 11,000.00	\$ 11,000.00
Total Estimated MEIGS AVENUE PEDESTRIAN Construction Cost Opinion (1) (2)				\$ 64,700.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Pedestrian Route - Riverside Drive

Description	Qty	Unit	Unit Cost	Cost
Landscape, Trees (80' On Center) - [2,000 LFT / SIDE]	50	EA	\$ 450.00	\$ 22,500.00
Earthwork	1	LS	\$ 5,000.00	\$ 5,000.00
Erosion Control	1	LS	\$ 8,000.00	\$ 8,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 3,000.00	\$ 3,000.00
Clearing ROW (3%)	1	LS	\$ 2,000.00	\$ 2,000.00
Contingency (20%)	1	LS	\$ 13,000.00	\$ 13,000.00
Total Estimated RIVERSIDE DRIVE PEDESTRIAN Construction Cost Opinion (1) (2)				\$ 73,500.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Pedestrian Route - Market Street

Description	Qty	Unit	Unit Cost	Cost
Landscape, Trees (80' On Center) - [3,000 LFT / SIDE]	76	EA	\$ 450.00	\$ 34,200.00
Earthwork	1	LS	\$ 12,000.00	\$ 12,000.00
Erosion Control	1	LS	\$ 10,000.00	\$ 10,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 4,000.00	\$ 4,000.00
Clearing ROW (3%)	1	LS	\$ 3,000.00	\$ 3,000.00
Contingency (20%)	1	LS	\$ 17,000.00	\$ 17,000.00
Total Estimated MARKET STREET PEDESTRIAN Construction Cost Opinion (1) (2)				\$ 100,200.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Pedestrian Route - Chestnut Street

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, 4" (5' x 850' / SIDE) - includes compacted aggregate	950	SYS	\$ 55.00	\$ 52,300.00
Landscape, Trees (80' On Center) - [850 LFT / SIDE]	22	EA	\$ 450.00	\$ 9,900.00
Earthwork	1	LS	\$ 8,000.00	\$ 8,000.00
Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 5,000.00	\$ 5,000.00
Clearing ROW (3%)	1	LS	\$ 4,000.00	\$ 4,000.00
Contingency (20%)	1	LS	\$ 21,000.00	\$ 21,000.00
Total Estimated CHESTNUT STREET PEDESTRIAN Construction Cost Opinion (1) (2)				\$ 125,200.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Pedestrian Route - Court Avenue

Description	Qty	Unit	Unit Cost	Cost
Intersection Improvements @ - Level 3 (Median, Signal, Signage, Pavement Markings)	5	EA	\$ 90,000.00	\$ 450,000.00
Landscape, Trees (80' On Center) - [430 LFT / SIDE]	10	EA	\$ 450.00	\$ 4,500.00
Earthwork	1	LS	\$ 5,000.00	\$ 5,000.00
Erosion Control	1	LS	\$ 3,000.00	\$ 3,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 25,000.00	\$ 25,000.00
Clearing ROW (3%)	1	LS	\$ 16,000.00	\$ 16,000.00
Contingency (20%)	1	LS	\$ 105,000.00	\$ 105,000.00
Total Estimated COURT AVENUE PEDESTRIAN Construction Cost Opinion (1) (2)				\$ 628,500.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Pedestrian Route - 7th Street

Description	Qty	Unit	Unit Cost	Cost
Landscape, Trees (80' On Center) - [1,300 LFT / SIDE]	32	EA	\$ 450.00	\$ 14,400.00
Earthwork	1	LS	\$ 5,000.00	\$ 5,000.00
Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 3,000.00	\$ 3,000.00
Clearing ROW (3%)	1	LS	\$ 2,000.00	\$ 2,000.00
Contingency (20%)	1	LS	\$ 10,000.00	\$ 10,000.00
Total Estimated 7TH STREET PEDESTRIAN Construction Cost Opinion (1) (2)				\$ 59,400.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Pedestrian Route - 8th Street

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove (<i>assume average of 5' removal per side</i>) [1,580 LFT x 5']	1,760	SYS	\$ 20.00	\$ 35,200.00
Sidewalk, 4" (5' x 420' / SIDE) - includes compacted aggregate	470	SYS	\$ 55.00	\$ 25,900.00
Sawcut, Full Depth	3,160	LFT	\$ 2.00	\$ 6,400.00
Landscape, Trees (80' On Center) - [2,000 LFT / SIDE]	50	EA	\$ 450.00	\$ 22,500.00
Earthwork	1	LS	\$ 8,000.00	\$ 8,000.00
Erosion Control	1	LS	\$ 7,500.00	\$ 7,500.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 7,000.00	\$ 7,000.00
Clearing ROW (3%)	1	LS	\$ 4,000.00	\$ 4,000.00
Contingency (20%)	1	LS	\$ 28,000.00	\$ 28,000.00
Total Estimated 8TH STREET PEDESTRIAN Construction Cost Opinion (1) (2)				\$ 164,500.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Pedestrian Route - 9th Street

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, 4" (5' x 420' / SIDE) - includes compacted aggregate	470	SYS	\$ 55.00	\$ 25,900.00
Landscape, Trees (80' On Center) - [1,550 LFT / SIDE]	40	EA	\$ 450.00	\$ 18,000.00
Earthwork	1	LS	\$ 7,500.00	\$ 7,500.00
Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 4,000.00	\$ 4,000.00
Clearing ROW (3%)	1	LS	\$ 3,000.00	\$ 3,000.00
Contingency (20%)	1	LS	\$ 17,000.00	\$ 17,000.00
Total Estimated 9TH STREET PEDESTRIAN Construction Cost Opinion (1) (2)				\$ 100,400.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Pedestrian Route - 10th Street

Description	Qty	Unit	Unit Cost	Cost
Intersection Improvements @ - Level 3 (Median, Signal, Signage, Pavement Markings)	3	EA	\$ 90,000.00	\$ 270,000.00
Landscape, Trees (80' On Center) - [3,000 LFT / SIDE]	76	EA	\$ 450.00	\$ 34,200.00
Earthwork	1	LS	\$ 10,000.00	\$ 10,000.00
Erosion Control	1	LS	\$ 10,000.00	\$ 10,000.00
Utility Relocations	1	LS	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 18,000.00	\$ 18,000.00
Clearing ROW (3%)	1	LS	\$ 11,000.00	\$ 11,000.00
Contingency (20%)	1	LS	\$ 75,000.00	\$ 75,000.00
Total Estimated 10TH STREET PEDESTRIAN Construction Cost Opinion (1) (2)				\$ 448,200.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Perrin Road Shared Use Path - Phase 1 (Utica Pike to the Aquatic Center)

1.00 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove (4135 ft x 5)	2,300	SYS	\$ 20.00	\$ 46,000.00
8' Wide Asphalt Trail w/ 2' Shoulders	0	Miles	\$ 190,000.00	\$ -
10' Wide Asphalt Trail w/ 2' Shoulders	1	Miles	\$ 250,000.00	\$ 250,000.00
Sidewalk, 4" (5' x ###) - includes compacted aggregate	-	SYS	\$ 55.00	\$ -
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	115	SYS	\$ 85.00	\$ 9,800.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	1	EA	\$ 5,000.00	\$ 5,000.00
Intersection Improvements @ - Level 2 (Overhead Flasher, Signage, Pavement Markings)	2	EA	\$ 40,000.00	\$ 80,000.00
Intersection Improvements @ - Level 3 (Median, Signal, Signage, Pavement Markings)		EA	\$ 90,000.00	\$ -
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	10	EA	\$ 500.00	\$ 5,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	10	EA	\$ 100.00	\$ 1,000.00
Trail Identification Signage (1/CROSSING)	3	EA	\$ 2,500.00	\$ 7,500.00
Directory Signage	2	EA	\$ 2,500.00	\$ 5,000.00
Mile Markers @ 1/4 mile intervals	4	EA	\$ 500.00	\$ 2,000.00
Straight Curb		LFT	\$ 25.00	\$ -
Curb Cut		LFT	\$ 15.00	\$ -
Curb & Gutter		LFT	\$ 30.00	\$ -
Sawcut, Full Depth		LFT	\$ 2.00	\$ -
Mulched Seeding (assumes 20' disturbance along trail)	11,735	SYS	\$ 1.00	\$ 11,800.00
Landscape, Trees	-	EA	\$ 450.00	\$ -
Landscape, Shrubs	-	EA	\$ 105.00	\$ -
General Trail Landscape Work	1	LS	\$ 20,000.00	\$ 20,000.00
Modular Block Wall (includes Reinforcing and Excavation)		SYS	\$ 400.00	\$ -
MSE Wall with facing		SFT	\$ 50.00	\$ -
Fill for Wall		CYS	\$ 18.00	\$ -
Wood Railing, 42" Tall		LFT	\$ 40.00	\$ -
Adjust Casting to Grade		EA	\$ 600.00	\$ -
Bicycle Friendly Casting		EA	\$ 1,000.00	\$ -
Inlet (1 EVERY 100 LFT NEW PIPE)		EA	\$ 2,000.00	\$ -
18" RCP		LFT	\$ 60.00	\$ -
Culvert		LFT	\$ 125.00	\$ -
Ditch Grading		LFT	\$ 7.00	\$ -
Mitigation		ACRE	\$ 150,000.00	\$ -
Land Acquisition for Farm Field		SFT	\$ 0.50	\$ -
Land Acquisition for Commercial Property		SFT	\$ 5.00	\$ -
Land Acquisition for Residential Property		SFT	\$ 1.50	\$ -
Earthwork	1	LS	\$ 20,000.00	\$ 20,000.00
Erosion Control	1	LS	\$ 15,000.00	\$ 15,000.00
Utility Relocations (approximately ## overhead utility relocations plus ## hydrant relocations)	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 25,000.00	\$ 25,000.00
Clearing ROW (3%)	1	LS	\$ 15,000.00	\$ 15,000.00
Contingency (20%)	1	LS	\$ 98,000.00	\$ 98,000.00
Total Estimated Construction Cost Opinion				\$ 626,100.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Perrin Road Shared Use Path - Phase 1 (Aquatic Center to 10th Street)

1.00 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sidewalk, Remove (4135 ft x 5)	2,300	SYS	\$ 20.00	\$ 46,000.00
8' Wide Asphalt Trail w/ 2' Shoulders	0	Miles	\$ 190,000.00	\$ -
10' Wide Asphalt Trail w/ 2' Shoulders	1	Miles	\$ 250,000.00	\$ 250,000.00
Sidewalk, 4" (5' x ###) - includes compacted aggregate	-	SYS	\$ 55.00	\$ -
Special Conc. Pavement, 6" Thick (18.5 SYS EACH - 2/CROSSING)	56	SYS	\$ 85.00	\$ 4,800.00
Intersection Improvements @ - Level 1 (Signage, Pavement Markings)	1	EA	\$ 5,000.00	\$ 5,000.00
Intersection Improvements @ - Level 2 (Overhead Flasher, Signage, Pavement Markings)	1	EA	\$ 40,000.00	\$ 40,000.00
Intersection Improvements @ - Level 3 (Median, Signal, Signage, Pavement Markings)		EA	\$ 90,000.00	\$ -
Regulatory, Warning, & Guidance Signage (STOP, YIELD, STOP AHEAD) (4/CROSSING)	6	EA	\$ 500.00	\$ 3,000.00
Regulatory, Warning, & Guidance Signage (NO MOTOR VEHICLES, CROSS TRAFFIC DOES NOT STO	6	EA	\$ 100.00	\$ 600.00
Trail Identification Signage (1/CROSSING)	2	EA	\$ 2,500.00	\$ 5,000.00
Directory Signage	-	EA	\$ 2,500.00	\$ -
Mile Markers @ 1/4 mile intervals	4	EA	\$ 500.00	\$ 2,000.00
Straight Curb		LFT	\$ 25.00	\$ -
Curb Cut		LFT	\$ 15.00	\$ -
Curb & Gutter		LFT	\$ 30.00	\$ -
Sawcut, Full Depth		LFT	\$ 2.00	\$ -
Mulched Seeding (assumes 20' disturbance along trail)	11,735	SYS	\$ 1.00	\$ 11,800.00
Landscape, Trees	-	EA	\$ 450.00	\$ -
Landscape, Shrubs	-	EA	\$ 105.00	\$ -
General Trail Landscape Work	1	LS	\$ 20,000.00	\$ 20,000.00
Modular Block Wall (includes Reinforcing and Excavation)		SYS	\$ 400.00	\$ -
MSE Wall with facing		SFT	\$ 50.00	\$ -
Fill for Wall		CYS	\$ 18.00	\$ -
Wood Railing, 42" Tall	120	LFT	\$ 40.00	\$ 4,800.00
Adjust Casting to Grade		EA	\$ 600.00	\$ -
Bicycle Friendly Casting		EA	\$ 1,000.00	\$ -
Inlet (1 EVERY 100 LFT NEW PIPE)		EA	\$ 2,000.00	\$ -
18" RCP		LFT	\$ 60.00	\$ -
Box Culvert	20	LFT	\$ 450.00	\$ 9,000.00
Ditch Grading		LFT	\$ 7.00	\$ -
Mitigation		ACRE	\$ 150,000.00	\$ -
Land Acquisition for Farm Field		SFT	\$ 0.50	\$ -
Land Acquisition for Commercial Property		SFT	\$ 5.00	\$ -
Land Acquisition for Residential Property		SFT	\$ 1.50	\$ -
Earthwork	1	LS	\$ 20,000.00	\$ 20,000.00
Erosion Control	1	LS	\$ 15,000.00	\$ 15,000.00
Utility Relocations (approximately ## overhead utility relocations plus ## hydrant relocations)	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	1	LS	\$ 10,000.00	\$ 10,000.00
Mobilization & Demobilization (5%)	1	LS	\$ 23,000.00	\$ 23,000.00
Clearing ROW (3%)	1	LS	\$ 14,000.00	\$ 14,000.00
Contingency (20%)	1	LS	\$ 90,000.00	\$ 90,000.00
Total Estimated Construction Cost Opinion				\$ 574,000.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each trail will be built.

JEFFERSONVILLE BICYCLE AND PEDESTRIAN PLAN: Construction Cost Opinion

Riverside Drive (Spring Street to 420' Past Woerner Ave.)

0.93 Miles

0 Bridge

Description	Qty	Unit	Unit Cost	Cost
Sharrow Pavement Marking (EVERY 275 LFT) - (4900 LFT Sharrow / SIDE)	36	EA	\$ 200.00	\$ 7,200.00
Sharrow Signage (EVERY 275 LFT)	36	EA	\$ 300.00	\$ 10,800.00
SUBTOTAL				\$ 18,000.00
Utility Relocations	-	LS	\$ 10,000.00	\$ -
Maintenance of Traffic (assumes \$5,000 / day - 1/2 mile of work per day)	-	LS	\$ 2,500.00	\$ -
Mobilization & Demobilization (5%)	-	LS	\$ 2,000.00	\$ -
MINUS LABOR (20%)				\$ 3,600.00
Contingency (15%)	1	LS	\$ 2,700.00	\$ 2,700.00
Total Estimated 8TH STREET 2 Construction Cost Opinion (1) (2)				\$ 17,100.00

1. Cost opinion does not include costs for survey, design, land acquisition, and inspection.
2. Cost opinion is based on 2013 costs: Inflation is not included due to the uncertainty of when each bike facility will be built.



FINAL PLAN



FUNDING



FUNDING SOURCES

There are various sources of funding available for the design, development and construction of bicycle facilities and pedestrian projects. The following is a summary of some of the most often utilized sources.

TRANSPORTATION ALTERNATIVES PROGRAM (TAP)

The current federal highway bill, Moving Ahead for Progress in the 21st Century, or MAP-21, is a two year bill that will provide transportation funding from October 1, 2012, through September 30, 2014. MAP-21 combines several previous biking and pedestrian programs into one program known as the Transportation Alternatives Program (TAP). TAP includes the Recreational Trails Program (RTP), Transportation Alternatives (TA) activities (many of the projects and programs that were included in the former Transportation Enhancement [TE] program), and Safe Routes to School (SRTS). The following discussion is related to all of these programs. Information specific to each program is addressed in later sections.

If the State does not opt out of the RTP funding, the RTP funds are set aside, and the remaining TAP funds are divided equally into two categories. The first half is sub-allocated based on population, in which INDOT will distribute half of the TAP funds to communities according to their share of population within the state. These population categories are as follows:

- MPOs with populations greater than 200,000: INDOT will sub-allocate funds to Metropolitan Planning Organizations (MPOs). MPOs will distribute their funds through their own competitive application process.
- Other urbanized and rural areas: MAP-21 allows state DOT's to hold a competitive application process for communities to compete for these funds. INDOT is currently developing their process, including the possibility of sub-allocating to smaller MPOs.

The second half of the remaining TAP funds will be distributed state-wide by a competitive application process through INDOT, where population is not considered. Eligible entities include local governments, school districts, tribal governments, and public lands agencies. In MAP-21, the State has the ability to transfer funds both into and out of TAP for other transportation programs

Federal TAP funds provide 80% of the costs for preliminary engineering (survey, design, and construction documents), right-of-way (engineering, management, acquisition), construction, and construction supervision. The local agency is required to provide the matching 20%. The local match for TA funds can be obtained from various sources, such as budget appropriations, cash donations, right-of-way donations, and other grant sources, provided the other grant programs allow their funds to be used as a match for MAP-21 funds. Currently, Indiana has received approximately \$21 million for funding the TAP program. Approximately \$1 million is taken off the top and distributed to Recreational Trails Program, and the other \$20 million is distributed to Transportation Alternatives and Safe Routes to School.



RECREATIONAL TRAILS PROGRAM (RTP)

As part of TAP, funding for the Recreational Trails Program (RTP) is set aside as a separate program. Each state has the option to “opt out” of the RTP. For 2013, the Governor has opted in, and will continue the RTP in Indiana.

This program is a federal financial assistance program administered through IDNR. It provides grants for 80% of the cost of land acquisition and/or development of multi-use recreational trail projects. Both motorized and non-motorized projects are eligible. The program is administered at the federal level by the Federal Highway Administration (FHWA), but is operated at the state level by IDNR. Previously provided funds for individual projects have ranged from \$10,000 to \$150,000. Currently, Indiana has received approximately \$1 million for RTP funding. All units of government and not-for-profit organizations with 501(c)(3) tax exempt status are eligible to participate. Applications are typically available in February and due back to IDNR by May 1 of each year.

Contact for RTP:

Bob Bronson
State & Community Outdoor Recreation Planning Section
Division of Outdoor Recreation
Indiana Department of Natural Resources
402 W. Washington Street, Room W271
Indianapolis, IN 46204
317-232-4075
bbronson@dnr.in.gov
www.state.in.us/dnr/outdoor

TRANSPORTATION ALTERNATIVES (TA)

Under MAP-21, eligible activities included in the former Transportation Enhancement (TE) program are now referred to as Transportation Alternatives (TA) activities, and are included in TAP funding that remains after RTP funds are set aside. Although some former TE eligible activities are not included in TA, the activities most closely related to the development of trails, greenways, and bike/pedestrian facilities are still eligible. These activities include: on-road and off-road facilities for pedestrians, bicyclists, and other non-motorized forms of transportation; developing safe routes for non-drivers; conversion of abandoned railroad corridors for trails; and, historic preservation and rehabilitation of historic transportation facilities.

At this time, the new federal guidelines for the implementation and use of TA funds are being reviewed. The details for the State’s program and process for acquiring and using the funds is being developed. In recent years, approximately \$16 million to \$20 million in TE funds were available annually in Indiana. At this time, Indiana has received approximately \$20 million to be split between TA and Safe Routes to School. The process for applying for the funds and the funding cycle has not yet been determined.



FINAL PLAN



Contact for TA Funds:

Kathy Eaton-McKalip
LPA/MPO& Grants Administration
Indiana Department of Transportation
100 N. Senate Ave. IGCN 955
Indianapolis, IN 46204
keaton-mckalip@indot.in.gov

Michael Cales
Local Programs Specialist
Indiana Department of Transportation
100 N. Senate Ave. IGCN 808
Indianapolis, IN 46204
317-232-3021
mcales@indot.in.gov

SAFE ROUTES TO SCHOOL (SRTS)

The Indiana Safe Routes to School (SRTS) program is based on the federal programs designed to make walking and bicycling to school safe, more convenient, and routine, providing a true option for school travel. Growing areas of emphasis of the program are the physical activity, environmental, and social benefits of walking and biking. INDOT is responsible for administering SRTS as part of the TAP. Both infrastructure projects and non-infrastructure projects, such as encouragement, education, and enforcement, are eligible. Kindergarten through 8th grade is the primary focus and these projects should help improve access for children with physical disabilities.

The funding for SRTS is part of the TAP funds that remain after the RTP funds are set aside. In the past, the maximum infrastructure improvement project award was \$250,000. At this time, Indiana has received approximately \$20 million to be split between TA and SRTS. The process for applying for the funds and the funding cycle has not yet been determined.

Contact for SRTS:

Michael O'Loughlin
Indiana Department of Transportation
100 N. Senate Ave. IGCN. 955
Indianapolis, IN 46204
317-232-5653
moloughlin@indot.in.gov



CONGESTION MITIGATION & AIR QUALITY IMPROVEMENT PROGRAM (CMAQ)

The Congestion Mitigation and Air Quality Improvement Program (CMAQ) is a federal financial assistance program administered through the U.S. Department of Transportation (USDOT) in consultation with the Environmental Protection Agency (EPA). The funds are set aside for projects that encourage the reduction of smog-producing emissions in communities that fall below the EPA minimum standard for air quality (not in attainment). Under MAP-21, CMAQ funds will require a 20% local match. Currently the Kentuckiana Regional Planning and Development Agency (KIPDA) receive funds for the southern Indiana area in the amount of \$975,000 each year.

Contact for CMAQ:

Kentuckiana Regional Planning and Development Agency (KIPDA)
Mary Hauber, Transportation Planner
11520 Commonwealth Drive
Louisville, Kentucky, 40299
(502) 266-6084
FAX (502) 266-5074
MaryLou.Hauber@ky.gov
www.kipda.org

SURFACE TRANSPORTATION PROGRAM (STP) & HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

The Surface Transportation Program (STP) provides funding that may be used by States and localities for projects to preserve and improve the conditions and performance on Federal-aid projects. Eligible projects include highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. Therefore, any pedestrian or bicycle facility that has been previously funded by federal-aid can use this funding to “preserve and improve the conditions and performance.” Eligible activities that relate to bicycle and pedestrian projects are as follows: fringe and corridor parking facilities and programs, bicycle transportation and pedestrian walkways, ADA sidewalk modifications; transportation alternatives; and recreational trails projects. KIPDA has historically received an STP allocation of approximately \$2,768,535 annually for the Indiana urbanized area. .

Similarly, under MAP-21 there appear to be opportunities for bicycle and pedestrian facilities funding in the Highway Safety Improvement Program (HSIP). Traffic and accident data would need to support the development of bicycle and pedestrian facilities as a means to improve overall safety. KIPDA currently receives \$280,000 annually to be used in Clark and Floyd Counties.



FINAL PLAN



Contact for STP and HSIP

Kentuckiana Regional Planning and Development Agency (KIPDA)
Mary Hauber, Transportation Planner
11520 Commonwealth Drive
Louisville, Kentucky, 40299
(502) 266-6084
FAX (502) 266-5074
MaryLou.Hauber@ky.gov

Tax Increment Financing (TIF)

Tax increment financing or TIF is a way of subsidizing redevelopment, infrastructure, or other community improvement projects. Future gains in taxes from the completion of a community improvement project are dedicated within a certain defined district to finance the debt that is issued or money that is borrowed to pay for the project. Gains can come from the projected increase of surrounding real estate as a result from the project, which generates additional tax revenue. Tax revenue increases can also come from increased sales-tax and the addition of more jobs within the community as a result of the project. Defined districts are usually areas of distressed, underdeveloped, or underutilized parts of the community that might not otherwise see development and that would benefit from the completion of a the project.

LAND AND WATER CONSERVATION FUND (LWCF)

Land and Water Conservation Fund (LWCF) is a federal financial assistance program administered through IDNR. It provides matching grants for 50% of the cost of land acquisition and/or development of outdoor recreation sites and facilities. Funds for this program come primarily from federal off-shore oil lease receipts. The program is administered at the federal level by the National Parks Service (NPS), but is operated at the state level by IDNR. Individual projects typically receive \$10,000 to \$200,000 in funds. Only legally established park boards with an approved 5-year Park and Recreation Master Plan are eligible to participate. Applications are available on or after March 1 and are required to be submitted or post-marked by June 1 of each year.

Contact for LWCF:

Bob Bronson
State & Community Outdoor Recreation Planning Section
Division of Outdoor Recreation
Indiana Department of Natural Resources
402 W. Washington Street, Room W271
Indianapolis, IN 46204
317-232-4075
bbronson@dnr.in.gov
www.state.in.us/dnr/outdoor



PRIVATE FOUNDATIONS

There are a number of foundations and trust funds which support the planning and development of trails and greenways, in the interest of conservation, preservation, and outdoor recreation. Although many of them fund only nonprofit organizations, some will assist local public agencies. A few of these organizations include:

1. Kodak American Greenways Awards through the Conservation Fund
www.conservationfund.org/?article=2106
2. Nina Mason Pulliam Charitable Trust
<http://www.ninapulliamtrust.org/index.php/grant-information/>
3. Robert Wood Johnson Foundation's Active Living by Design program
<http://www.activelivingbydesign.org/what-we-do/albd-grant-program>

CORPORATE SPONSORSHIP

In addition to the federal and private foundation options, corporate sponsorship presents another opportunity for funding. As trails and roadways are developed, especially in close proximity to businesses or industries, there are opportunities for corporations to sponsor trails. Sponsorships can be direct financial support of construction activities for trails, trailheads, specific trail or trailhead amenities, or even trail maintenance. The donation of land for the development of trails is also an excellent method of corporate support that can become a sponsorship opportunity. Sponsorship often includes granting naming rights to the sponsor for the items or areas that were financed or donated. Contacting adjacent or area corporations should be considered for these types of sponsorships.