



# Safe Streets, Healthy Neighborhoods

## South Philadelphia Project

S. 10th, 13th, and 15th Streets | Philadelphia, PA  
June 2012 | Project Number 2011-20

**COMMUNITY DESIGN**  
COLLABORATIVE

*Strengthening neighborhoods through design*



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# Safe Streets, Healthy Neighborhoods

## South Philadelphia Project

S. 10th, 13th, and 15th Streets | Philadelphia, PA  
June 2012 | Project Number 2011-20

### Prepared for

### Bicycle Coalition of Greater Philadelphia

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The Community Design Collaborative is a community design center that provides pro bono preliminary design services to nonprofit organizations, offers unique volunteer opportunities for design professionals, and raises awareness about the importance of design in community revitalization. Founded in 1991 as a program of AIA Philadelphia, the Collaborative is an independent 501(c)(3) nonprofit organization with a network of more than 1,000 volunteers.

The Collaborative awards grants of preliminary design services to over 30 nonprofit organizations each year. Its service grants are tailored to meet the specific facility and community development needs of each nonprofit recipient. Through these service grants, design professionals—volunteering their services pro bono—help nonprofits communicate their goals for rebuilding their neighborhoods through smart, innovative design. The Collaborative also brings together diverse partners, stakeholders, and design disciplines to investigate important themes in the revitalization of communities through its Infill Philadelphia initiative.

The Collaborative relies on a variety of resources to achieve its goal of assisting nonprofits in need of preliminary design services. Our programs are supported through grants from the William Penn Foundation, City of Philadelphia's Office of Housing and Community Development, City of Philadelphia's Department of Commerce, PNC Bank Foundation, Wells Fargo Foundation, Connelly Foundation, and AIA Philadelphia.

The Collaborative also relies on the generous support of individual and corporate donors for operational support. The Collaborative's signature annual event is the Bowling Ball, which raises funds through a night of bowling fun for firms, friends, and fans. In addition, the Collaborative's volunteers donate hundreds of hours of in-kind services each year. To learn more about the Collaborative, visit our website at [www.cdesignc.org](http://www.cdesignc.org) or contact us at [info@cdesignc.org](mailto:info@cdesignc.org).

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# Introduction

► Safe Streets, Healthy Neighborhoods  
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## Overview

The Bicycle Coalition of Greater Philadelphia (BCGP) launched a new initiative called “Safe Streets, Healthy Neighborhoods” in order to advance Philadelphia’s biking and walking facilities and increase safety. BCGP sought professional assistance for creating designs and garnering community support for corridors that will safely connect neighborhoods with the existing bike lane and regional trail network. They prioritized specific neighborhood corridors for design treatment to make them better places for walking, biking, and transit. Due to a high level of bicycling, South Philadelphia is BCGP’s first undertaking as part of this new initiative.

The Safe Streets, Healthy Neighborhoods: South Philadelphia Project was initiated through a service grant provided to BCGP by the Community Design Collaborative (Collaborative). The goal for the volunteer Collaborative Design Team was to prioritize specific neighborhood corridors in South Philadelphia and offer design solutions to make them better places for walking, biking, and transit – expanding the potential of walking and cycling as a preferred travel mode for recreation, commuting and for household errands, while increasing safety and quality of life for all users.

### **The Safe Streets, Healthy Neighborhoods: South Philadelphia Project Area**

A “missing link” in the emerging city-wide network is the South Broad corridor – connecting the vital, complex South Philadelphia neighborhoods with Center City commerce and new-economy Navy Yard jobs. This study is focused on the Broad Street Corridor between City Hall and the Navy Yard. The task assigned to the Collaborative Design Team was to design a way to accommodate bicycle travel along the South Broad Street Corridor between South Street and Oregon Avenue. The assignment assumed that bikeway connections below Oregon are being mapped out and designed as part of an ongoing Delaware Valley Regional Planning Commission project.

### **Project Definition**

Philadelphia’s South Broad Street is an important gateway into the city for visitors, workers, shoppers, and residents, including those arriving and departing from Philadelphia International Airport. It serves as a ceremonial place for parades and celebrations. The street is active at all hours, heavily traveled by car, bus, pedestrians and subway. South Broad is the de facto “main street” for numerous surrounding neighborhoods; and would be the logical, preferred north-south route for cyclists except for:

- inflexible dimensional limitations that eliminate the potential for dedicated bicycle lanes
- “fatal flaw” operational conflicts in the blocks above South Street especially at bus stops.

As a result, the City and BCGP recommended that bike travel shift to the 13th/15th Street one-way pair. South bound 10th Street is also designated as a Bicycle-Friendly Street in the City’s plan. The elements of the bikeway facility shown for 13th and 15th are recommended for 10th street as well.

The City of Philadelphia has been successful in implementing bicycling infrastructure improvements in Center City and other neighborhoods by utilizing excess capacity. Where geometry allowed, the Philadelphia Streets Department has incorporated bike lanes into their repaving plans since the 1990s. In recent years, the Mayor’s Office of Transportation and Utilities has extended the grid of bicycle infrastructure into Center City with the implementation of buffered bike lanes on Spruce, Pine and 13th Streets. The bold move of removing automobile travel lanes to accomplish this showed vision and provided much needed infrastructure for the burgeoning Philadelphia cycling population.

# Introduction

► Safe Streets, Healthy Neighborhoods  
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## Overview

The challenge in South Philadelphia is that there is neither excess capacity, nor are there excess travel lanes. The tight geometry of the predominantly residential streets offers a challenge for designing bicycle- and pedestrian-friendly infrastructure to improve safety in this neighborhood with cycling rates over 5.5% overall and as high as 18% in some census tracts. These high levels of cycling implore Philadelphia to find solutions to this difficult design problem. The ultimate goal of the Safe Streets, Healthy Neighborhoods: South Philadelphia Project is to provide safe infrastructure that improves the quality of life for all users of the street.

## Process

BCGP and the Collaborative formed a Task Force that included area neighborhood groups, and representatives of the Philadelphia City Planning Commission, Philadelphia Streets Department, Philadelphia Water Department, Philadelphia Parks & Recreation, Philadelphia City Council, state and local politicians, and the Mayor's Office of Transportation and Utilities.

The design services and recommendations offered by the Collaborative Design Team emerged from two public workshops and two technical working meetings (one with Philadelphia City Planning Commission, one with Philadelphia Water Department) and two sessions with a Collaborative peer review group.

## Work Products

The team created a number of products documenting the corridor and illustrating recommendations:

- Map of the Broad Street/13th Street/ 15th Street Corridor
- Power Point presentation for the public workshops showing relevant design strategies illustrated with examples from the U.S. and Europe
- Video of windshield tour of the 13th Street and 15th Street corridors
- Plan view drawings showing "Quick-start" recommended design at a "Typical" Block
- Plan view drawings showing a longer term "Complete Street" recommended design at a "Typical" Block and a "Typical" intersection (2 options)
- Photo simulation - Mid-block view: illustrating what the recommended design elements might look like
- Photo simulation - Intersection view: illustrating what the recommended design elements might look like
- Narrative record describing project process and recommendations

## What's Next?

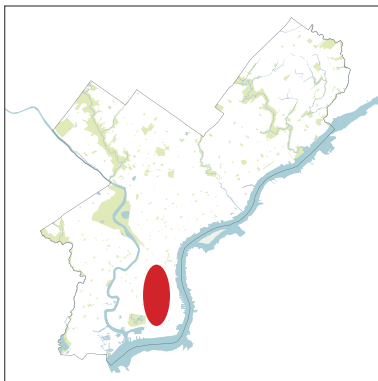
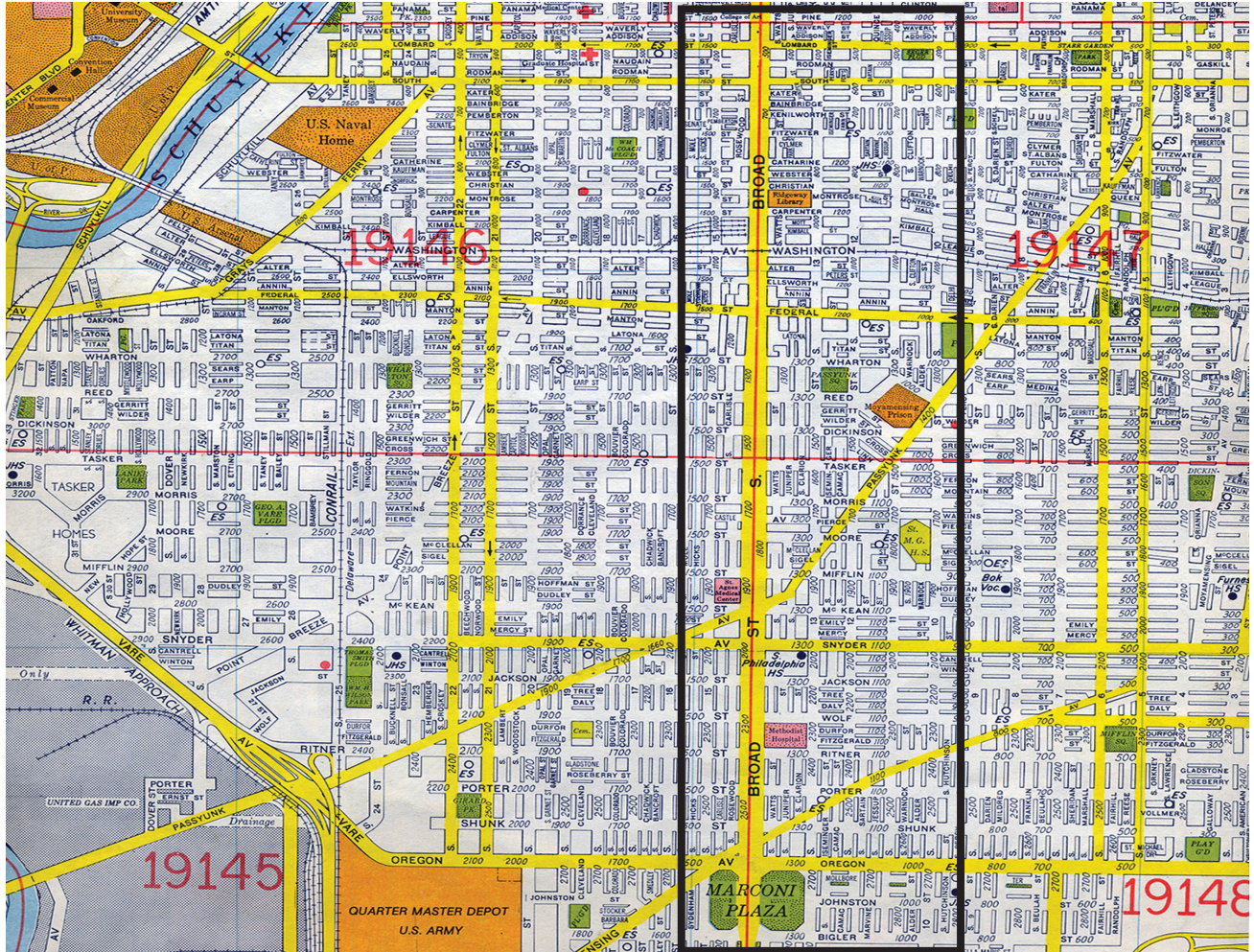
Based on the work of the Collaborative Design Team and the input of workshop participants and City staff, BCGP will pursue funding and implementation of the Safe Streets, Healthy Neighborhoods: South Philadelphia Project in partnership with the City of Philadelphia. Over the last decade, significant numbers of Philadelphians have shifted to bicycle commuting and positioned Philadelphia as an excellent big city for biking. By building on these trends, Philadelphia has the opportunity to transform itself into a world-class bicycling city.



# Introduction

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## Project Location



## Safe Streets, Healthy Neighborhoods

S. 10th, 13th and 15th Streets | Philadelphia, PA

South Philadelphia

Client Category: Open Space

Project Category: Open Space

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## Project Location



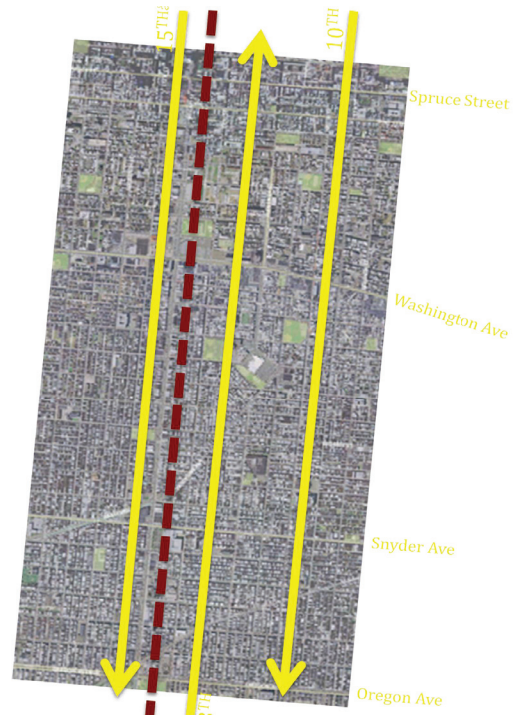
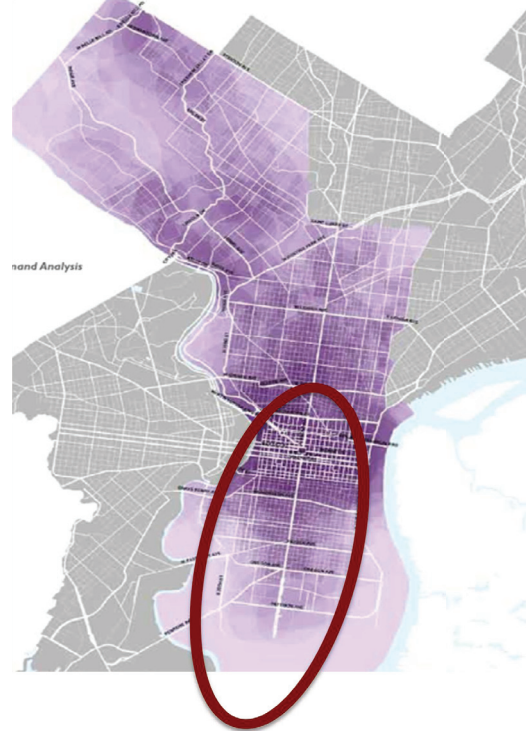
10th Street



13th Street



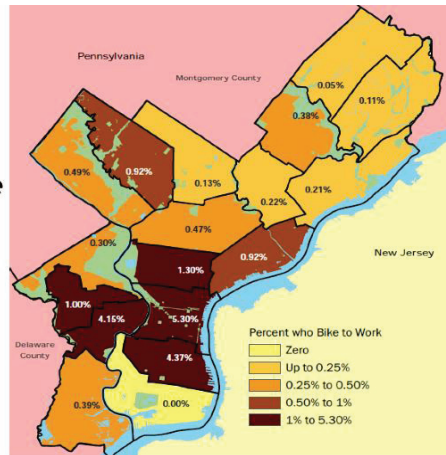
15th Street



# Introduction

## Context

Real and growing demand for cycling infrastructure



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Over the last decade, significant numbers of Philadelphians have shifted to bicycle commuting and positioned Philadelphia as an excellent big city for biking. Philadelphia has, per capita, twice as many bicycle commuters as any other big city in the US. Bicycle commuting increased 151 percent from 2000 to 2009. The number of cyclists crossing the Schuylkill River increased 360%. By building on these trends, Philadelphia has the opportunity to transform itself into a world-class bicycling city.



Lessons learned from Spruce and Pine Street buffered bike lanes:

On Spruce and Pine Streets, buffered bike lanes resulted in safer streets for all users. Upon implementation of buffered bike lanes, reportable automobile accidents dropped 40% and fender benders over 15%. At the same time, quality of life was improved for all users. The single lane of automobile travel has created a less chaotic driving environment by eliminating lane changes and high-speed traffic, while maintaining traffic flow. Buffered bike lanes attract and protect bicyclists while serving as a buffer between pedestrians and automobiles. Street life is more animated with bicyclists using the new lanes.



Lessons learned from 13th Street buffered bike lane:

The Mayor's Office of Transportation and Utilities conducted traffic counts before and after installation of pilot bike lanes on 13th Street. The numbers indicate the high level of latent demand for bicycle infrastructure in Center City. Bicycle commuters flocked to the buffered bike lanes. Despite the reduction to one travel lane, there was no significant slowing of automobile traffic.

# Introduction

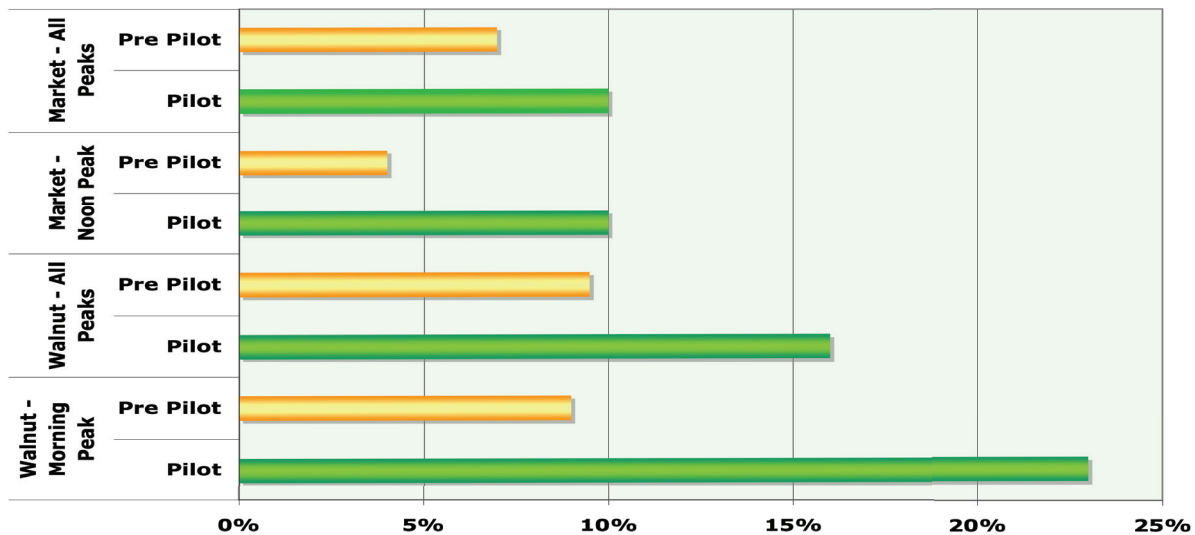
► Safe Streets, Healthy Neighborhoods  
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## Context

### 13th Street by the numbers:

According to the report from the Mayor's Office of Transportation and Utilities, prior to installation of the buffered bike lanes, bicycles constituted 9% of the traffic during the morning peak at 13th and Walnut Streets. After, bicyclists constituted 23% of all vehicles. Along the length of the pilot, bicycle traffic increased between 30% and 250% and cyclist behavior also improved. Fewer cyclists engaged in wrong-way and sidewalk riding.

**Preliminary Data: 13th Street Bike Lane**



Source: MOTU

# Existing Conditions

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## Photos

### One-way pair

13th Street - northbound, one block east of Broad Street and 15th Street - southbound, one block west of Broad Street

Both streets are:

- Approx 23' curb to curb
- one way with parking both sides
- lined by brick fronted row houses 2-3 stories tall with 10' sidewalks

Sidewalks are occupied by power poles on one side of the street. There are few trees on either street with the notable exception of the 1800 block of South 15th Street. Nighttime illumination is at intersections and storefronts so mid-blocks are often dark where houses do not keep an outdoor light on.



13th Street at Federal Street: northbound travel



15th Street at South Street: southbound travel



10th Street at Tasker Street: southbound travel



Broad Street Corridor: two-way travel



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# Conceptual Design

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Design Discussion

Proposed Drawings





# Conceptual Design

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## Design Discussion: Building Bicycle-Friendly Streets

### A Bicycle Priority Street

A Bicycle Priority Street (BPS) is a major cycling route that shares the travel lane with motorized vehicles, yet gives priority to the bicycle. A green-backed “Super-Sharrow” lets cyclists and drivers know that this is part of the network of Bicycle Priority Streets that connect neighborhoods with key destinations.

The BPS shares many characteristics with the Bicycle-Friendly Street, as defined by the Philadelphia City Planning Commission in their Philadelphia Pedestrian and Bicycle Plan:

*“A street, or series of contiguous streets, that has been modified to discourage high speed motor vehicle traffic while accommodating through bicycle traffic becomes a Bicycle-Friendly Street. This treatment is intended primarily for residential streets. In the study area, this type of bikeway is recommended for narrow streets, often having only one traffic lane and parking on both sides. Bicycle Friendly Streets should apply a “tool box” approach by considering a range of mid-block and intersection improvements aimed at making the corridors more attractive for bicycling and less attractive to fast or high volume motor vehicle traffic. It is recommended that this type of facility be implemented within the framework of a larger community process that considers neighborhood traffic management and parking impacts. In some cases, special pavement markings and signs may be sufficient to designate the bikeway. Bicycle-friendly streets are also ideal locations to incorporate sustainable design features such as street trees and rain gardens compatible with the City’s stormwater management program (Green City, Clean Waters). Potential modifications include bicycle-friendly traffic calming. Where speed humps are an appropriate countermeasure, they should be installed with a bicycle-friendly profile. Curb extensions (bumpouts) at intersections can contribute to improved visibility of bicycles and pedestrians, but care should be taken to ensure that bumpouts do not extend beyond parked cars and pose a hazard for bicyclists. Other potential intersection treatments include traffic circles, raised crosswalks and intersections, and bike boxes at key intersections.”*

The BPS differs from the Bicycle-Friendly Street in that it is part of a network of BPS’ providing connections between neighborhoods and key destinations, where the bicycle has priority over motorized vehicles.

**Recommendation:** The Bicycle Coalition of Greater Philadelphia and the City of Philadelphia should pursue establishment of high-priority bike routes and develop specifications and policies that will lay out the elements of a high-amenity/high quality street-type that will be very attractive to cyclists AND residents /businesses along the street.

*Note: In some instances the recommendations for the 13th/15th Street pair may differ from the City’s design manual. These differences acknowledge the intention of this travel way to compete with the more intuitive Broad Street route – to offer:*



Bicycle boulevard with large markings

- a safer, smarter, smoother ride for the cyclist
- A palette of improvements that neighbors will welcome because it makes for a better public realm – a street that is a better “room-by-agreement”\*\*

*\*\*architect Louis Kahn defined a street as a “room by agreement”*

# Conceptual Design

## Design Discussion: Building Bicycle-Friendly Streets

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Sharrow markings

### Shared Lane Marking: SHARROW

A sharrow is a pavement graphic, demarcating lanes where the bicycle may occupy the full travel lane and set the pace for travel.

The sharrow also alerts other users of the potential presence of bicyclists and discourages wrong-way cycling.

**Recommendation:** BCGP and the City should install sharrows when repaving.

*Note: Bicycle Priority Streets should utilize the green-backed Super-Sharrow to reinforce the special nature of the street. It is important to continue these markings through the intersection to alert cross traffic of the presence of a BPS, as shown in the South Philadelphia Bicycle Priority illustrations.*

### A "Slow Zone"

One objective of the BPS is to make a street where cyclists and motorists share the travel lane **AND** where the cyclist **sets the speed**. Discussions with the area residents yielded the observations that 15th Street and 13th Street are favored "cut-throughs" often used by motorists that find it quicker than Broad Street. Through-travelers tend to speed. This led to discussion of a posted "Slow Speed Zone" similar to those recently initiated in London and New York neighborhoods. Claremont, in the Bronx, is posted at 20 MPH. A 15 MPH limit seems reasonable for South Philadelphia neighborhood streets designed to be high-priority bike routes.

The new Claremont zone covers the roughly 35 city blocks bounded by 167th Street, 174th Street, Southern Boulevard and West Farms Road/Boone Avenue. At each entrance to the zone, street signs flank the road announcing the lower speed limit and that it is a residential area. Inside the zone, stencils and street signs continue to trumpet the lower speed limit. Nine new speed humps have been added to five already in place, which the City's transportation director, Janette Sadik-Khan said makes the zone largely self-enforcing. In London, slow-speed zones incorporating traffic-calming treatments are preventing dozens of deaths and serious injuries in each year.

At the meeting where this idea was discussed, Philadelphia Streets Department representatives cautioned that creating a Slow Zone would require action by the State Legislature. At present, 15 MPH Slow Zones are limited to roads near schools.

**Recommendation:** BCGP and the City should pursue establishment of Slow Zone legislation for certain high-priority bike routes.

*Note: Acknowledging that this is likely to take time to enact, Slow Zone signage is shown in images depicting longer-term "Complete Street" recommendations for the South Philadelphia BPS.*

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## Design Discussion: Building Bicycle-Friendly Streets



Claremont slow zone



Claremont slow zone



Slow zone



Bicycle boulevard with traffic calming

### Speed Humps or Tables

If you are in a car going too fast, then places where the street is raised up a few inches (across 10' or so) will give you a bit of a jolt – and only a gentle nudge if you are going at an appropriate speed. If designed properly, cyclist flow right over, smooth as silk. The purpose of this hump in the street is to remind drivers that they are in a special “zone” designed to support the safety and confidence of cyclists – and that they (drivers) are guests in this place. The message is delivered in a considerate, polite way when it arrives in advance of any jolt or nudge – that is the purpose of the pavement graphics and the yellow diamond signs.

**Recommendation:** Evaluate travel speeds and car/bike conflicts to establish where raised crosswalks at intersections and mid-block speed humps may be desirable to moderate the speed of motorized vehicles.

# Conceptual Design

## Design Discussion: Building Bicycle-Friendly Streets

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Signage to go with BPS

### Sign it for Full Lane

Streets designated as Bicycle Priority or Bike-Friendly Streets have new rules that should be explained. Elsewhere, drivers may assume that the travel way is primarily meant to support the conveyance of motorized vehicles and, except at intersection crosswalks, cars command the “right of way”. Signs explain that cyclists may occupy the travel lane and set the speed. The signage is necessary to complement the effectiveness of the pavement graphics and traffic calming elements.

**Recommendation:** Signs posted every 200 feet or so, 2 per block – so as to be conspicuous but not intrusive.



*Note that the phrase “get over it” on the rectangular sign on the left is meant to be humorous and would not be an approved message on a city or DOT sign.*



### Sign for Speed

Signs that make drivers aware of a bump or hump in advance will ensure that drivers maintain a reasonable rate of speed, making the street safer and quieter.

# Conceptual Design

## Design Discussion: Building Bicycle-Friendly Streets

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Green bicycle lane



Green bicycle lane and...Marie does not get "doored"!



Sharrow on green background

### Green Lane With Sharrow

The Green Lane is becoming part of the recognized "language" of bicycle facilities – indicating places where motorists and cyclists need to proceed with an additional level of awareness. The association of the Green Lane travel with roadways where motorists and cyclists "pay attention" and where there are special rules to be observed should transfer to the BPS. A Green Lane "patch" is shown in images depicting recommendations for the South Philadelphia 13th / 15th pair. This photo shows a Salt Lake City bike lane that is traveling in a roadway that is also used by cars – but this arrangement clearly shows that bikes have the Right-of-Way.

**Recommendation:** For certain high-priority bike routes, heighten the contrast, effectiveness and durability of pavement graphics by adding an integral green back panel behind the sharrow as shown in the South Philadelphia Bicycle Priority illustrations.

This photo shows a Long Beach California bike lane that is traveling in a roadway that is also used by cars. It shows that the bike lane is located some distance (4' to 6') from the parking lane so that a cyclist passing a parked car will not be injured when the door of a parked car is opened.

Green color behind the sharrow heightens contrast with the white markings, and the integral coating should increase durability of the sharrow.

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## Design Discussion: Building Bicycle-Friendly Streets

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Green bicycle lane with bike box

### Bike Box

At signals and stop signs, motorists often feel that bike riders should yield the roadway up to the stop bar. Pavement markings that create a “Bike Box” refuge tells drivers where cyclists are supposed to be – removing the ambiguity that some find confusing and anxiety-creating. It also helps bicycle riders who are turning onto a perpendicular crossing street to make that movement more quickly and confidently.

**Recommendation:** Incorporate Bike Box into the pavement marking system of the South Philadelphia 13th/15th pair.

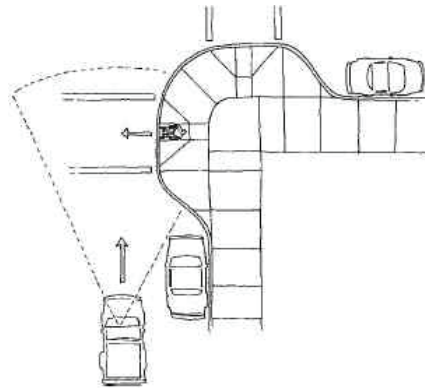


Benjamin Franklin Parkway bike box

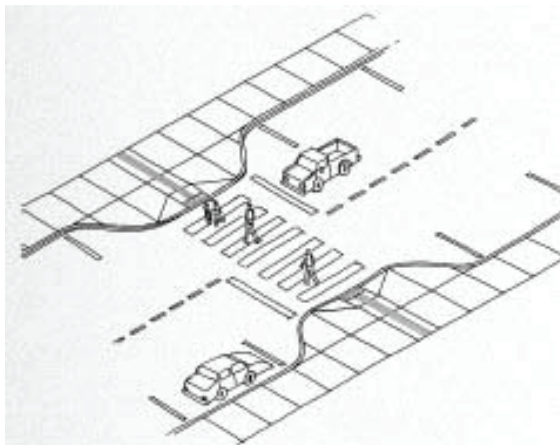
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## Design Discussion: Building Bicycle-Friendly Streets

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Bump-out at intersection



Bump-out at mid-block



Bump with on-street parking

### Curb Extension at Intersections

Curb extensions that “bump out”, reduce the crossing distance and improve sight lines at street corners, allowing pedestrians about to cross and approaching vehicle drivers to see each other when vehicles parked in a parking lane would otherwise block visibility. Bump-outs with a raised crosswalk at the intersections will slow traffic and make the walk back and forth to Broad Street more comfortable and safe.

**Recommendation:** As funding becomes available, install curb extensions together with stormwater facilities and required sidewalk ramps. If undertaken at the same time, as a single, coordinated construction project, significant savings will be realized – especially at signalized intersections, because sidewalk access specifications can be made without relocating signal masts.

### Mid-Block Hump

Mid-block speed humps can be designed so as not to limit parking or the movement of stormwater.

**Recommendation:** Once a specification is approved for Philadelphia neighborhoods by emergency service providers, mid-block humps should be tested at several locations for effectiveness, noise and performance.

# Conceptual Design

## Design Discussion: Building Bicycle-Friendly Streets

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Street trees on 15th Street



1800 block of 15th Street

### Street Trees

A continuous tree-lined street creates an overarching canopy and will signal to drivers that this is a special street. In summer, trees will shade the street and parked cars, as well as the sidewalks, stoops and house fronts. People slow down when driving on treed streets. Urban streets lined by trees have been shown to return many other benefits: higher sales for businesses, reduced stormwater runoff, improved property values, and reduced air conditioning demand. Some studies claim that treed streets have a calming effect - reducing agitation, impatience, and anxiety. A tree canopy will prolong the life of street pavements and markings.

**Recommendation:** Review Planning Commission and Water Department protocols for street tree placement. Provisions that limit trees where the effective sidewalk width will be reduced to less than five feet, or tree placement directly in front of building entrances may have an impact on some places along some blocks of 13th and 15th Streets.



# Conceptual Design

## Design Discussion: Building Bicycle-Friendly Streets

► Southwest Community Development Corporation  
Conceptual Design for Facility Improvements  
2009-06



### Rain Garden Tree Pit

A Rain Garden Tree Pit is installed in the sidewalk area. It is designed to be an attractive landmark feature and to manage street and sidewalk runoff. The pit is lined with a permeable fabric, filled with gravel or stone, and topped off with soil, plants, and trees. It is designed to allow runoff to sheet into the bed through an inlet at street level. The planted tree pits provide storage, infiltration, and evapotranspiration of runoff. Excess runoff is directed into an overflow pipe connected to the existing combined sewer pipe.



**Recommendation:** Install a Rain Garden Tree Pit at each intersection on the side opposite the fire hydrant and on both sides where there is no fire hydrant at the corner. These are located at intersections because there is greater opportunity for infiltration that is not conducted into basements through lateral pipes and conduit. Intersections are also where stormwater inlets are located so overflow can be easily conveyed to the existing sewer system. Where a Rain Garden Tree Pit is not feasible, a storm water trench can be installed to perform the same functions at intersections under the sidewalk bumpout.



### A System

Ultimately it is ALSO important that the Bicycle-Friendly Street be conceived of and designed as a part of the city-wide re-tooling of its civic infrastructure and how it delivers utility services. Complete Streets are part of a bigger multi-billion dollar, 25-year "Green City Clean Waters" initiative.



**Recommendation:** Define specific ways that South Philadelphia's high priority Bike-Friendly Streets can be a demonstration project – Illustrating key concepts of the City's "Green City Clean Waters" initiative. See <http://www.phillywatersheds.org/>



# Conceptual Design

## Design Discussion: Building Bicycle-Friendly Streets

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South of South Neighborhood Association's Better Blocks project: "Before"



South of South Neighborhood Association's Better Blocks project: "During"



South of South Neighborhood Association's Better Blocks project: "After"

### Hands-On Community

Ultimately it is important that high priority Bike-Friendly Streets are conceived of and designed as a neighborhood amenity – and part of a bigger “Safe Streets/Better Blocks” initiative that envisions quality of life improvements for the whole Broad Street corridor. See Pennsylvania Environmental Council’s Spring Garden Greenway project or South of South Neighborhood Association’s Better Blocks project for examples.

**Recommendation:** Think bigger. Conceptualize South Philadelphia’s high priority Bicycle-Friendly Streets project as part of a larger vision that brings a number of tangible benefits to each area resident and property owner.

# Conceptual Design

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## Proposed Phasing Plan

Good plans have both broad vision and a practical way to get going.

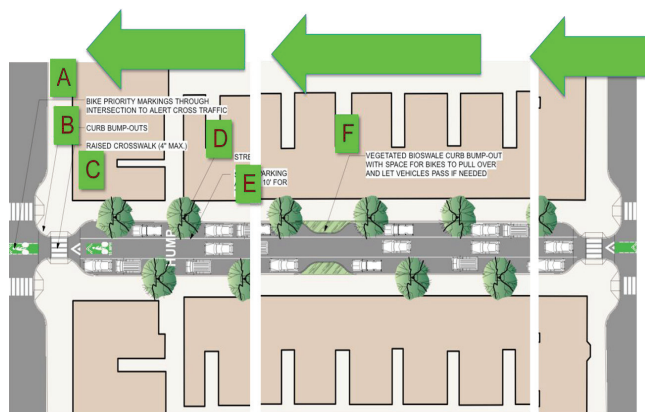
The Design Team proposes a practical "quick start" approach that can be implemented in tandem with other street improvement and maintenance projects, or that can be introduced with limited funding.

The Complete Street illustration shows a future where the neighborhood street supports cycling and walking; where trees shade cars, pedestrians and cyclists in summer; and where street trees slow traffic and add to property value. In this plan, rainfall, especially the first 1/4' that now floats contaminants into the rivers, will be contained and filtered. The plan anticipates how some stormwater would be directed to water gardens at intersections.



### QUICKSTART

1. Bike Priority symbol applied to street surface – 2 every block
2. Mid block “speed humps” or “cushion” to slow cars. From a practical cost perspective, it may be that the “quickstart” approach may not be able to accommodate this element.
3. Parking stripe to encourage cars to park close to curb
4. Bike Box – located on the turn-lane side
5. Bike Priority markings in the through intersection to alert cross traffic



### COMPLETE STREET

- A. Bike Priority markings in the through intersection to alert cross traffic
- B. Curb extensions that “bump out”, reducing the crossing distance and improving sight lines at street corners.
- C. Raised crosswalk at each intersection
- D. Street Trees planted at 30 to 80 foot intervals along each side of the street
- E. Bike Priority symbol applied to street surface – 2 every block
- F. Mid block “speed hump” to slow cars
- G. Parking stripe to encourage cars to park close to curb
- H. Bike Box – located on the turn-lane side
- I. Stormwater Management Features – 2 options:
  - Rain Garden Tree Pit at each intersection on the side opposite the fire hydrant and on both sides where there is no fire hydrant at the corner
  - Stormwater trench at intersections under the sidewalk bumpout



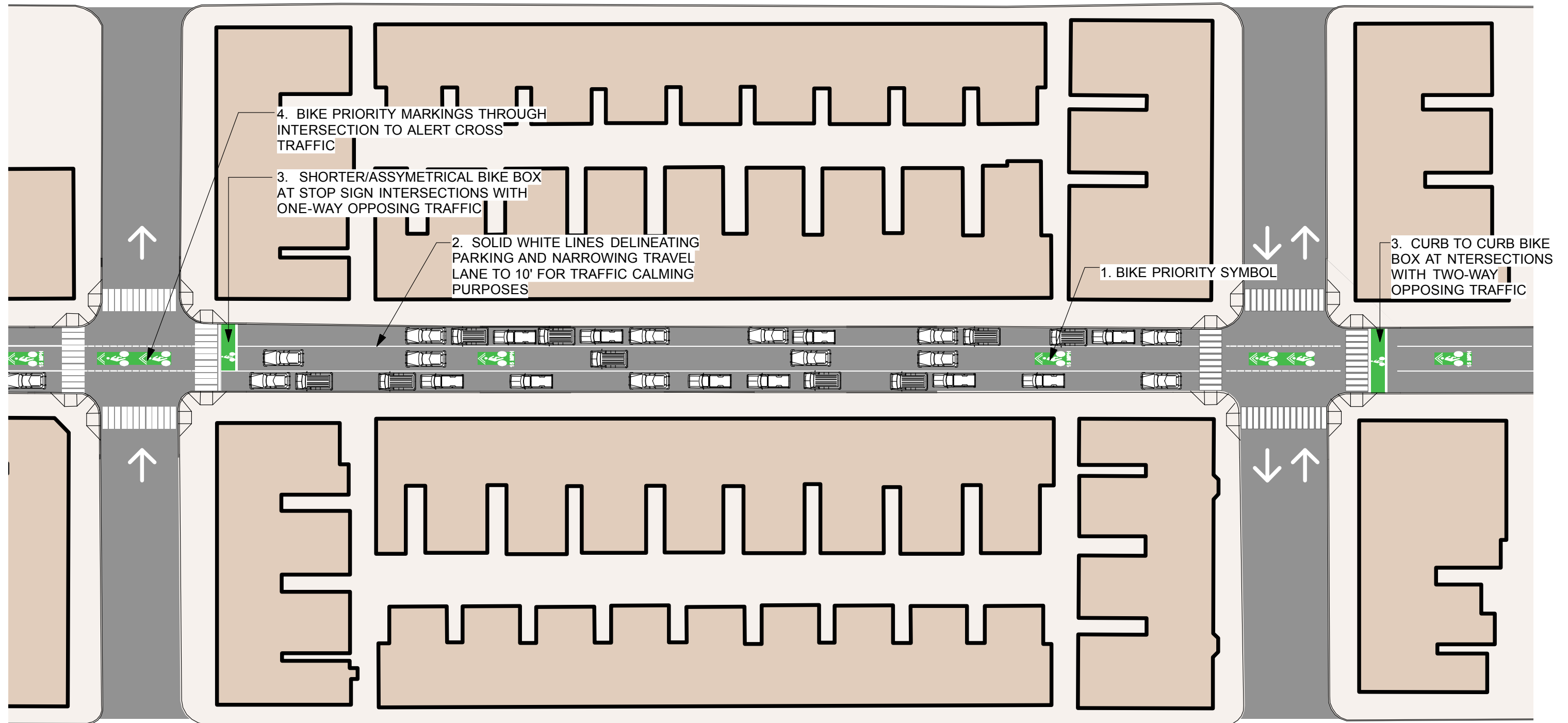
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# Conceptual Design

## Proposed Drawings

▶ Safe Streets, Healthy Neighborhoods  
South Philadelphia Project  
2011-20





4. BIKE PRIORITY MARKINGS THROUGH INTERSECTION TO ALERT CROSS TRAFFIC

3. SHORTER/ASYMMETRICAL BIKE BOX AT STOP SIGN INTERSECTIONS WITH ONE-WAY OPPOSING TRAFFIC

2. SOLID WHITE LINES DELINEATING PARKING AND NARROWING TRAVEL LANE TO 10' FOR TRAFFIC CALMING PURPOSES

1. BIKE PRIORITY SYMBOL

3. CURB TO CURB BIKE BOX AT INTERSECTIONS WITH TWO-WAY OPPOSING TRAFFIC

**COMMUNITY DESIGN  
COLLABORATIVE**

Project number 2011-20  
Date March 23, 2012  
Scale 1"=40'

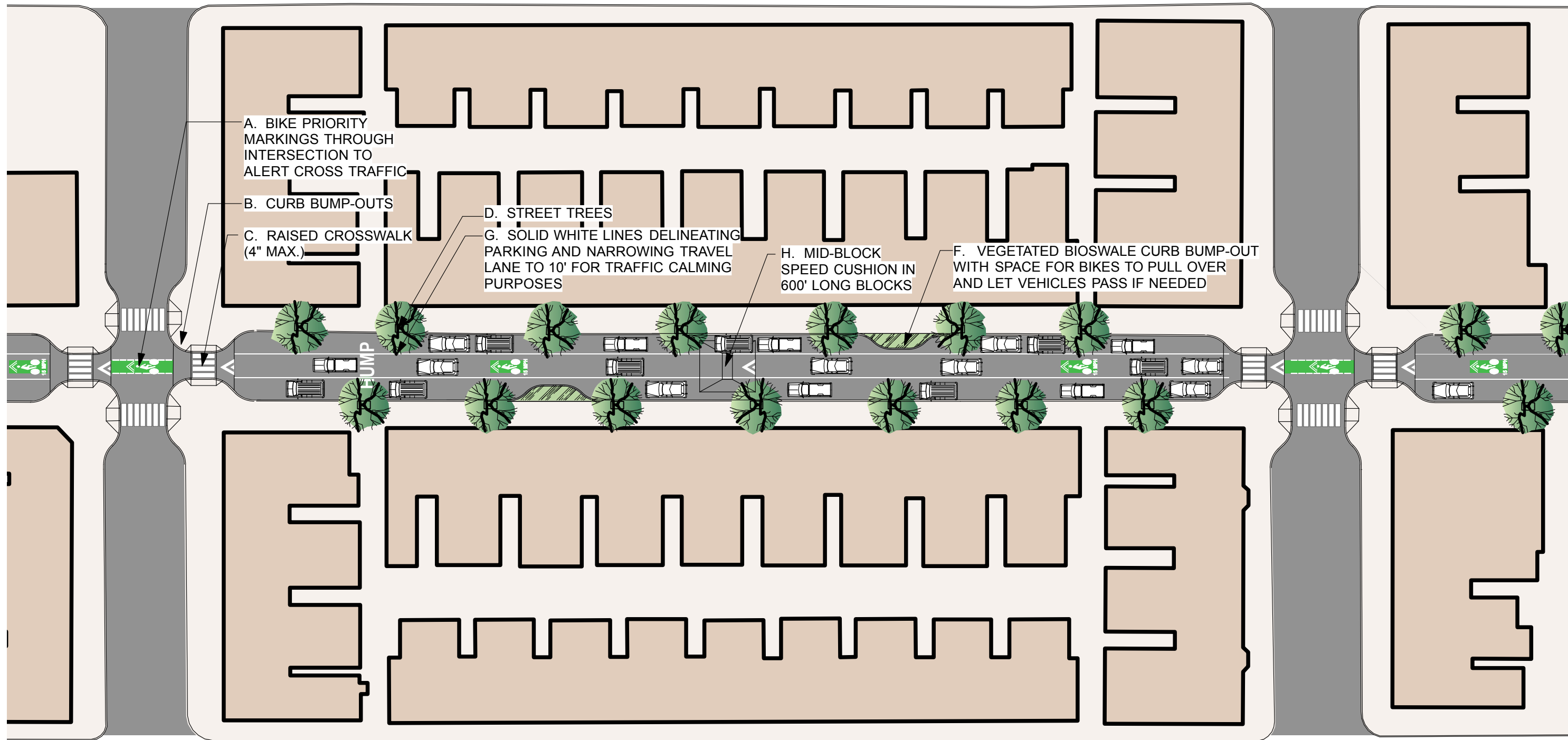
Project Name Safe Corridors for Healthy Neighborhoods Conceptual Design for Bicycle and Pedestrian Infrastructure

Drawing Title Typical Block Recommendations - Quick Start

The Community Design Collaborative's products are intended to provide visual concepts and to assist in project design and planning. All drawings are limited to conceptual design and are neither intended nor may be used for construction. Neither the Community Design Collaborative nor the project volunteers assume responsibility or liability for the technical accuracy of drawings or for any unauthorized use.







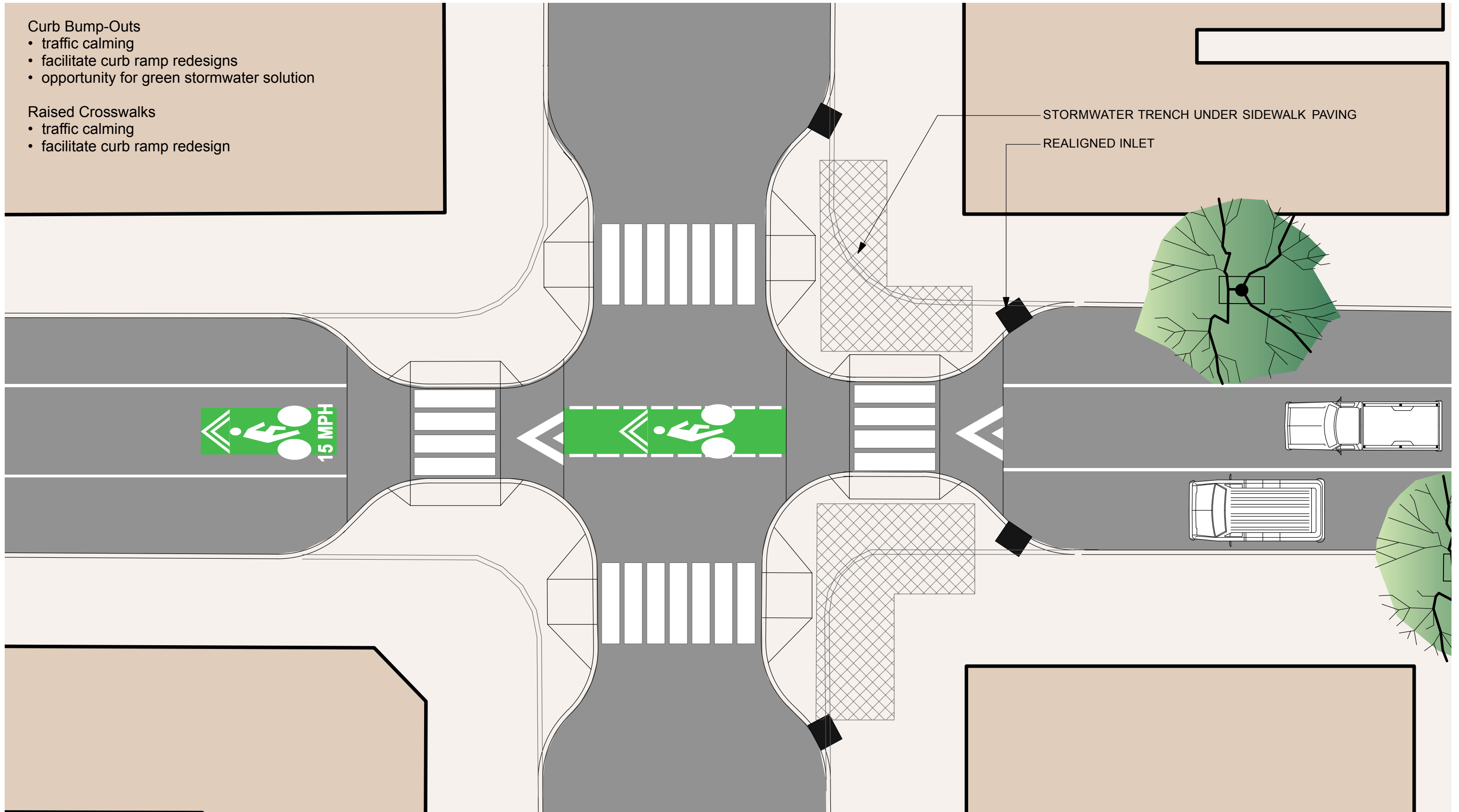


- Curb Bump-Outs
- traffic calming
  - facilitate curb ramp redesigns
  - opportunity for green stormwater solution

- Raised Crosswalks
- traffic calming
  - facilitate curb ramp redesign

STORMWATER TRENCH UNDER SIDEWALK PAVING

REALIGNED INLET



**COMMUNITY DESIGN  
COLLABORATIVE**

Project number 2011-20  
Date March 23, 2012  
Scale 1"=10'

Project Name Safe Corridors for Healthy Neighborhoods  
Conceptual Design for Bicycle and Pedestrian Infrastructure  
Drawing Title Typical Intersection - Option 1

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**Curb Bump-Outs**

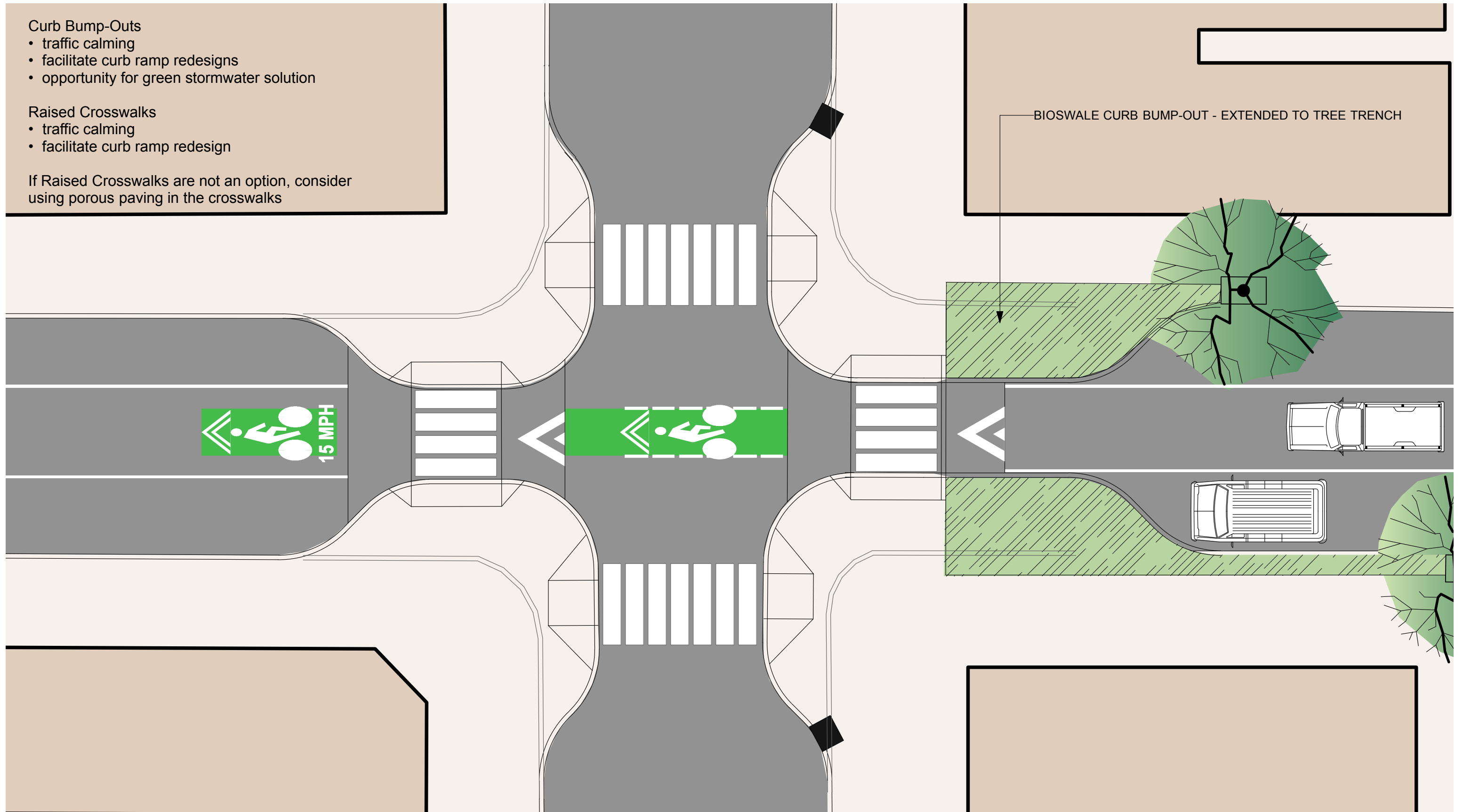
- traffic calming
- facilitate curb ramp redesigns
- opportunity for green stormwater solution

**Raised Crosswalks**

- traffic calming
- facilitate curb ramp redesign

If Raised Crosswalks are not an option, consider using porous paving in the crosswalks

BIOSWALE CURB BUMP-OUT - EXTENDED TO TREE TRENCH



**COMMUNITY DESIGN  
COLLABORATIVE**

Project number 2011-20  
Date March 23, 2012  
Scale 1"=10'

Project Name Safe Corridors for Healthy Neighborhoods  
Conceptual Design for Bicycle and Pedestrian Infrastructure  
Drawing Title Typical Intersection - Option 2

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**COMMUNITY DESIGN  
COLLABORATIVE**

Project number  
2011-20  
Date  
April 27, 2012  
Scale  
NTS

**Project Name** Safe Corridors for Healthy Neighborhoods: Conceptual Design for Bicycle and Pedestrian Infrastructure

**Drawing Title** Existing Conditions at Intersections

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**COMMUNITY DESIGN  
COLLABORATIVE**

Project number  
2011-20  
Date  
April 27, 2012  
Scale  
NTS

**Project Name** Safe Corridors for Healthy Neighborhoods: Conceptual Design for Bicycle and Pedestrian Infrastructure

**Drawing Title** Proposed Improvements at Intersections

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**COMMUNITY DESIGN  
COLLABORATIVE**

Project number  
2011-20  
Date  
April 27, 2012  
Scale  
NTS

**Project Name** Safe Corridors for Healthy Neighborhoods: Conceptual Design for Bicycle and Pedestrian Infrastructure

**Drawing Title** Proposed Improvements at mid-block

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# Description of Services

▶ Safe Streets, Healthy Neighborhoods  
South Philadelphia Project  
2011-20

Value of Services Donated

Letter of Agreement

Client Application



# Value of Services

► Safe Streets, Healthy Neighborhoods  
South Philadelphia Project  
2011-20

<b>VOLUNTEER</b>	<b>PROFESSION</b>	<b>HOURS</b>	<b>RATE*</b>	<b>VALUE</b>
Mark Keener, AIA, AICP	Urban Designer	61	\$130	\$7,930
Neil Desai, AICP	Planner	33	\$80	\$2,640
Julie Bush, ASLA	Landscape Architect, Principal	57	\$150	\$8,550
Frank Garnier	Landscape Arch. Designer	9	\$85	\$765
Anita Toby Lager, ASLA	Landscape Architect, Principal	2	\$150	\$300
Linda Reardon, PE	Civil Engineer, Principal	11	\$200	\$2,200
Jackson Wandres, RLA	Landscape Architect	34	\$170	\$5,780
<b>STAFF</b>				
Heidi Segall Levy, AIA	Senior Architect	45	\$100	\$4,500
<b>TOTAL VALUE OF DESIGN SERVICES</b>				<b>\$32,665</b>

## Billable Hourly Rates in the Philadelphia area for 2008

Principal (\$125 to \$220)

Senior Architect/Designer (\$100 to \$135)

Architect/Designer (\$70 to \$90)

Intern Architect/Designer (\$50 to \$65)

Senior Landscape Architectural Designer (\$100 to \$135)

Landscape Architectural Designer (\$70 to \$90)

Intern Landscape Architectural Designer (\$50 to \$65)

Planner (\$90 to \$115)

Historic Preservationist (\$90 to \$115)

Engineer (\$100 - \$150)

Cost Estimator (\$100 to \$135)

Senior Interior Designer (\$90 to \$135)

Interior Designer (\$50 to \$80)

*Billable hourly rates are based on the 2005 American Institute of Architects Compensation Report and a survey of a representative sample of local design professionals. Revised in January 2008.*







August 31, 2011

Mary Duffy  
Development Director  
Bicycle Coalition of Greater Philadelphia  
1500 Walnut Street, Suite 1107  
Philadelphia, PA 19102

RE: Project 2011-20  
Safe Corridors for Healthy Neighborhoods: Conceptual Design for Bicycle and Pedestrian Infrastructure

Dear Ms. Duffy:

We are pleased to inform you that your application for services has been accepted. We understand that Bicycle Coalition of Greater Philadelphia is launching a new program, Safe Corridors for Healthy Neighborhoods, in order to advance Philadelphia's biking and walking facilities. We understand that you are looking for assistance with creating designs and community support for corridors which will safely connect neighborhoods with the existing bike lane and regional trail network.

This letter outlines the work that the Collaborative will perform for Bicycle Coalition of Greater Philadelphia. Design professionals volunteering through the Collaborative will provide the services and products listed below. Your project will require a team of 4 volunteers – 2 urban designers/planners, one of whom will act as Lead Volunteer; a landscape architect; and a traffic engineer.

**Collaborative volunteers will provide the following products and services:**

1. Attendance at two meetings with a community task force as arranged by Bicycle Coalition of Greater Philadelphia – the first, to discuss the group's issues and concerns with the volunteers and to reach a consensus in terms of their priorities for creating a safe bicycle route through their communities. The volunteers will use the direction given at this meeting, as documented in meeting minutes provided by Bicycle Coalition of Greater Philadelphia, as a basis for their preliminary design. At the second meeting, the volunteers will present their preliminary design to the task force for feedback. The volunteers will use the direction given at this meeting, as documented in meeting minutes provided by Bicycle Coalition of Greater Philadelphia, as a basis for the completion of their design.
2. If requested by Bicycle Coalition of Greater Philadelphia, the team may make one presentation of their final proposal to either a group of stakeholders, or to the general community, immediately following completion of the final report.
3. An 8 ½" x 11" bound report including:
  - a) Written Introduction: Providing background information on the client organization, the task force members and the Collaborative project
  - b) Project Location Map: Indicating site location within the city
  - c) Photographs: Photographs of the focus area and its surrounding context
  - d) Site Context Map: Based on maps, plans, and aerial photos provided by Bicycle Coalition of Greater Philadelphia and field investigation, the map will be done at an appropriate scale to be presented in 11" x 17" format. This map will include the

full corridor and will indicate the focus area within the larger context. The map will also indicate streets and land use along the corridor, i.e., residential, commercial, institutional, etc.

- e) Focus Area Plan(s): Existing Conditions: Based on a City building and lot line map, field investigation and plans provided by Bicycle Coalition of Greater Philadelphia, and drawn to an appropriate scale to be presented no larger than 11" x 17" format, this plan will include the existing conditions of the selected focus area(s). Individual blocks with parcel lines, building footprints, streets and street names, addresses, institutions, businesses, and existing streetscape conditions and elements, such as sidewalks, pedestrian and vehicular areas, lighting, street furnishings, and trees will be included. The photographs of the existing conditions may also be incorporated into this base plan. Up to (3) focus areas, i.e., blocks and/or major intersections may be selected. They may represent either prototypical conditions along the corridor or may address a unique and particularly challenging condition.
- f) Proposed Color-Rendered Streetscape/Site Plan(s): Based on the existing focus area plan(s) and drawn to an appropriate scale to be presented no larger than 11" x 17" format, these plans will indicate the proposed design for the selected area(s), including streetscape and site design. The plan(s) will address the potential for creating innovative bicycle and pedestrian infrastructure on narrow residential and commercial streets.
- g) Conceptual Plan Detail Drawings: As appropriate, to illustrate specific aspects of the streetscape/site plan(s) and to be presented in 11" x 17" format.
- h) Color-rendered perspective drawing: To illustrate an aspect of the proposed design and to be presented in 11" x 17" format.

**Bicycle Coalition of Greater Philadelphia will be responsible for providing the following:**

1. Creation and coordination of the community task force; ***a list of the task force members is to be provided to the Collaborative prior to the in-house team kick-off meeting***
2. Scheduling of meetings with the Collaborative volunteers and the task force
3. Written information about the organization and the task force members, to be included in the introduction of the final report
4. Selection of corridor for the study
5. A copy of any neighborhood strategic plans that may be relevant to the corridor
6. A copy of the PCPC Bicycle and Pedestrian Report
7. Electronic base plan of the selected area
8. Design precedent information
9. Meeting minutes from the two task force meetings
10. Attendance at a follow-up meeting at the Collaborative to review the final report
11. Completion of a questionnaire evaluating the performance of the Collaborative staff and volunteers

We expect this work to take approximately six (6) months to complete after the volunteer team gets started. It must be noted that inclement weather and unforeseen circumstances in a volunteer's schedule could delay this project. All professional and technical services provided by the Collaborative volunteers are *pro bono* and we estimate the value of these *pro bono* services to be approximately \$12,000 - \$20,000.

Work on your project will begin after this letter of agreement is signed and returned with a check made payable to the "Community Design Collaborative" in the amount of \$1,000.00 for direct costs. ***This letter must be returned within thirty (30) days of the date of this letter to remain eligible for the services described.***

The Collaborative's products are intended to provide visual concepts and to assist in the preliminary phase of project design and planning. All drawings and construction budgeting figures are limited to conceptual design and are neither intended nor may be used for construction.

Although we will endeavor to provide the highest quality volunteer services for this project, the Community Design Collaborative and our project volunteers assume no responsibility or liability for our services including the recommendations of our volunteers, the technical accuracy of our work product or for any unauthorized use. In addition, Bicycle Coalition of Greater Philadelphia agree to indemnify, defend and hold harmless the Collaborative and its officers, directors, employees, agents and volunteers (including, but not limited to, any firm or other business entity which provides services or products as a volunteer, or which permits its employees to provide volunteer services or products) (collectively the "Collaborative volunteers") from and against all claims, demands, losses, suits, damages and expenses (including attorneys' fees and court or other costs) arising from any act or omission, or services or products, provided by Collaborative volunteers under this letter of agreement or otherwise.

The Collaborative shall be deemed the author of all reports, drawings, specifications and other documents prepared by the Collaborative volunteers for this project and, as such, shall retain all common law, statutory and other reserved rights, including copyrights, in and to them. Your organization will be provided with copies of the final report, which you may retain and use for information, reference and distribution in connection with this project. You may not, however, alter, revise or amend the report, either directly or indirectly, or use it for any purpose other than for this project, without the express written consent of the Collaborative. The Collaborative shall have the right to use the report, and to distribute copies of it, for educational, promotional or other purposes.

If you have any questions regarding the agreement outlined above, please contact me at the Collaborative offices at 215-587-9290.

Sincerely,

**Accepted and agreed:**

Heidi Segall Levy, AIA  
Project Manager  
Community Design Collaborative

\_\_\_\_\_  
Mary Duffy  
Development Director  
Bicycle Coalition of Greater Philadelphia

Date

Rec'd 7/15/11

Building neighborhood visions...

# Service Grant Application

Date: 7/15/11

## ORGANIZATIONAL PROFILE

Mail Completed  
Application to:  
**COMMUNITY DESIGN  
COLLABORATIVE**  
1216 Arch Street, 1st Floor  
Philadelphia, PA 19107

1. Organization Name: Bicycle Coalition of Greater Philadelphia

2. Address: 1500 Walnut Street, Suite 1107

City: Philadelphia State: PA Zip: 19102

3. Phone: 215-242-9253 4. Fax: \_\_\_\_\_

5. Website: www.bicyclecoalition.org

6. Executive Director: Alex Doty

7. Project Contact: Mary Duffy Title: Development Director

Phone (day): 215-242-9253 x304 Phone (eve): 443-350-1120

Phone (cell): 443-350-1120 Email: mary@bicyclecoalition.org

Fax: 267-909-8726

8. Briefly state your mission and describe your services:

The Bicycle Coalition of Greater Philadelphia works to promote bicycling as a healthy, low-cost, and environmentally-friendly form of transportation and recreation in Philadelphia and the 5-county area. Our programs reach thousands of schoolchildren in Philadelphia each year; our advocacy work has helped implement the Spruce and Pine Street bike lanes, and continues to extend the bicycle network with our Complete the Schuylkill River Trail Campaign.

9. Does your organization have a Board of Directors?  yes  no

Board Chair: Chris Kingsley Financial Officer: Tim Ifill

10. When was your organization founded? 1972

11. Does your organization have 501(c)(3) status?  yes  no

What year was 501(c)(3) status established? 1972

12. Operating budget for current year: \$1.2 million

13. Total number of staff: 13 Full Time: 12 Part Time: 1 Volunteer: \_\_\_\_\_

14. What are your organization's current sources of funding?  
Government contracts, membership income, private and foundation support, and events.

15. What neighborhood(s) does your organization serve? Philadelphia, the 5 county region, South NJ, & DE.

16. Total number of clients served by your organization in the last fiscal year: \_\_\_\_\_

17. What organizations, public agencies, and/or elected officials have assisted your organization?  
We work closely with the Philadelphia School District, City of Philadelphia, and the Health Dept.

18. Has your organization ever received services from an architect, landscape architect, planner or engineer?

Yes  No

If yes, identify who and describe services: n/a

19. Has your organization completed other capital development projects?

List projects with completion dates: n/a

Questions?  
Contact us at:  
215.587.9290 ph  
215.587.9277 fx  
cdesignc@cdesignc.org  
[www.cdesignc.org](http://www.cdesignc.org)

# Service Grant Application

## PROJECT PROFILE

Mail Completed  
Application to:

COMMUNITY DESIGN  
COLLABORATIVE

1216 Arch Street, 1st Floor  
Philadelphia, PA 19107

### Questions?

Contact us at:

215.587.9290 ph

215.587.9277 fx

[cdesignc@cdesignc.org](mailto:cdesignc@cdesignc.org)

[www.cdesignc.org](http://www.cdesignc.org)

20. Project Title: Safe Corridors for Healthy Neighborhoods

21. Describe the project's scope, timetable, and importance to your organization:

We will advance Philadelphia's next generation biking and walking facilities by launching a new program called Safe Corridors for Healthy Neighborhoods, creating designs and community support for corridors connecting neighborhoods to the existing bike lane network and to the growing regional trail network, enhancing how people bike, walk or take transit to both workplaces and green spaces. The new designs and public support built up for those designs will enable the Bicycle Coalition to advocate more effectively.

22. What preliminary design services are you seeking?

We are seeking conceptual designs for innovative bicycle and pedestrian infrastructure. This design could take the form of a "redesign" of a standard residential/commercial street in South Philadelphia.

23. Project Address: n/a

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Neighborhood: \_\_\_\_\_ Census Tract: \_\_\_\_\_

24. Project Type (check all that apply)  New Construction  Renovation  Expansion  Other

25. Lot and/or building size: n/a

26. Current Use: n/a

27. Do you:  Lease  Own  Plan to Acquire

28. If you lease, note the property owner and term of the lease:

n/a

29. If you plan to acquire, list the current property owner(s) and describe your acquisition strategy and timetable:

n/a

30. Do you have plan drawings of the lot and/or building?  Yes  No

31. Proposed project budget: \$114,000

How did you determine this? Developed a comprehensive budget/plan for the project

32. Is funding available for the project?  Yes  No

If yes, please note funding sources and amounts:

Applied for funding from Alliance for Biking & Walking \$50,000; Golden Rule Foundation \$10,000

33. What other fundraising strategies are being considered?:

Bicycle Coalition membership income will contribute to the project.

34. Are there fundraising deadlines or other time constraints related to this project?

No. The project will move forward in FY12/FY13, and as we continue to approach new funders.

35. Has your organization contacted other groups, consultants, or contractors to assist you with the project?

Partners will include schools, civic associations, and city officials and others.

36. Who referred you to the Community Design Collaborative?

Ben Cromie





▶ 1216 Arch Street | First Floor | Philadelphia, PA 19107  
ph 215.587.9290 | fx 215.587.9277

**[cdesignnc.org](http://cdesignnc.org)**

### **The Community Design Collaborative**

is a community design center that provides *pro bono* predevelopment design services to nonprofit organizations, offers unique volunteer opportunities for design professionals, and raises awareness about the importance of design in community revitalization.