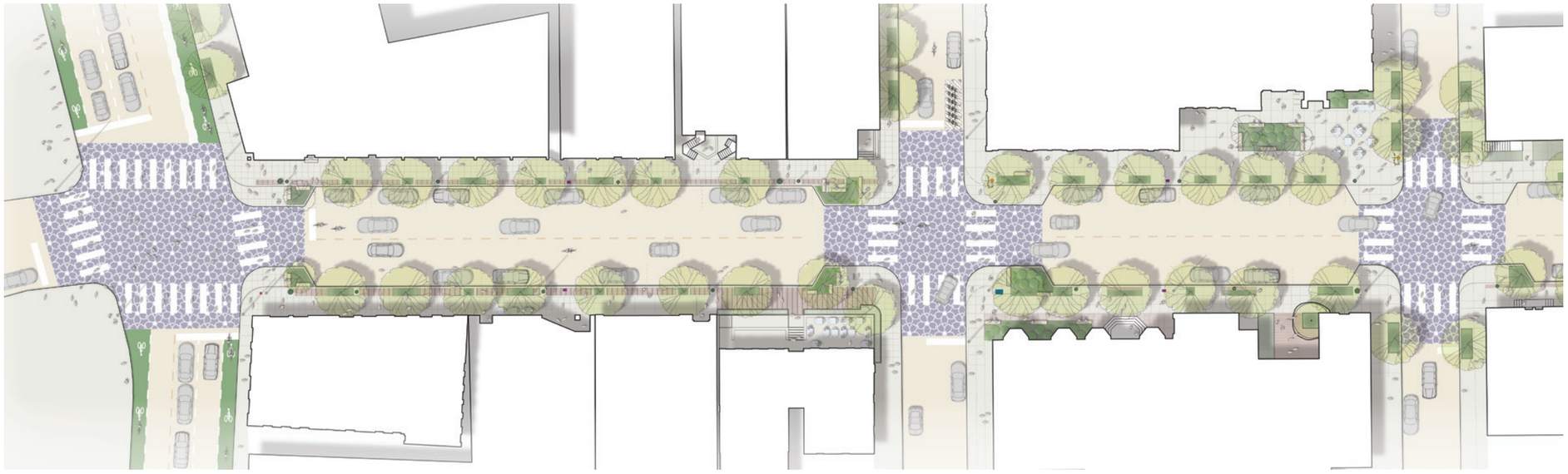
DRAFT



South Craig Street Public Realm **Study**

November 2017

DRAFT

Table of Contents

Acknowledgements

This study was developed by Studio for Spatial Practice in collaboration with Councilman Dan Gilman and the Oakland Business Improvement District.

All maps and graphics were created by Studio for Spatial Practice.

Published November 2017.

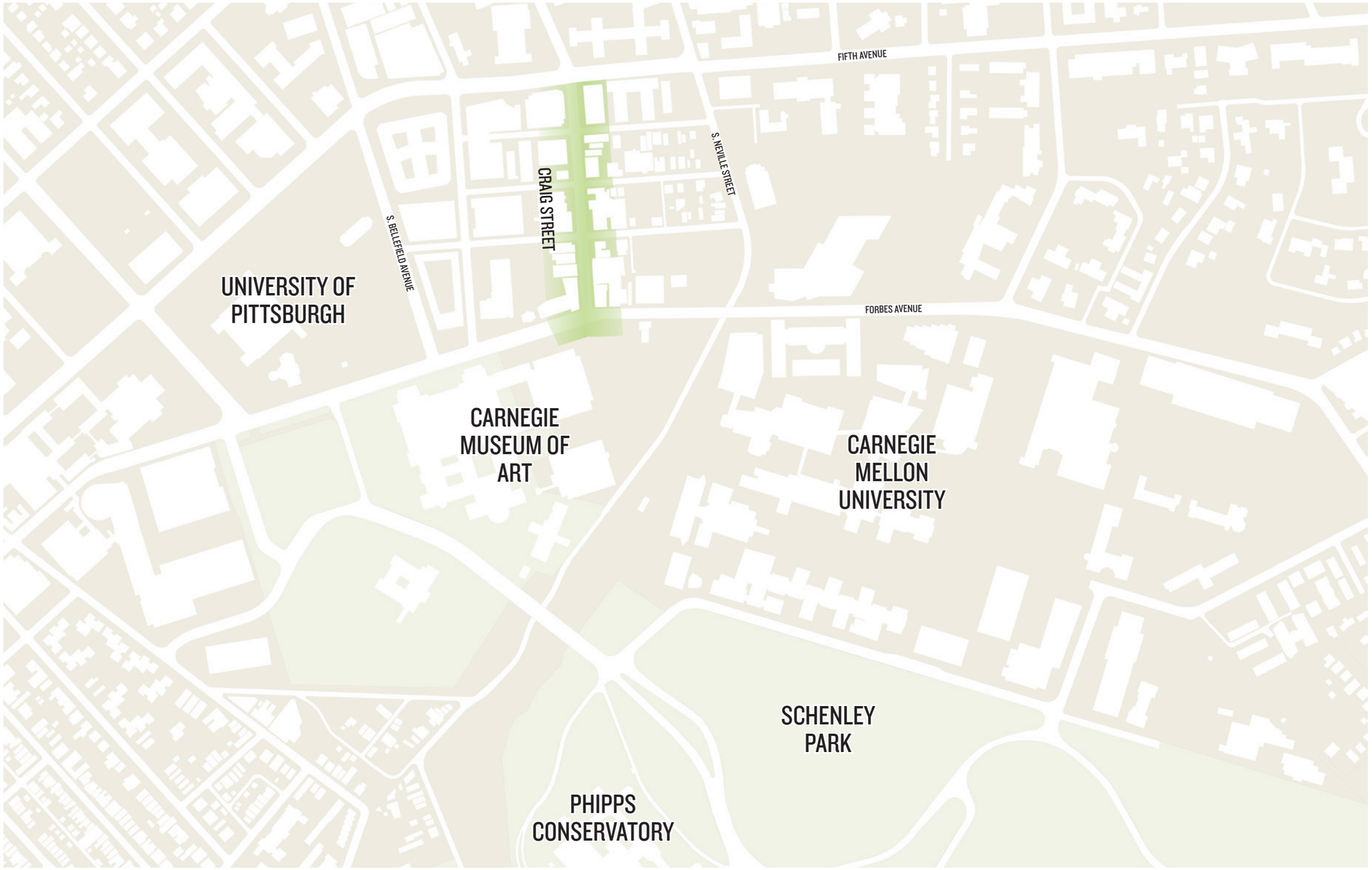
Introduction

Craig Street Public Realm Study

Located in the North Oakland neighborhood of Pittsburgh, the South Craig Street business district is bounded by Forbes Avenue to the south and Fifth Avenue to the north. This section of Craig Street, located adjacent to the Carnegie Library and Museums, Carnegie Mellon and the University of Pittsburgh, is frequented by visitors, commuters and the university community alike. South Craig Street, which includes campus-serving office buildings as well as many storefront restaurants and shops, has many attractions but few pedestrian amenities.

In 2017, Studio for Spatial Practice worked with Councilman Dan Gilman's office and the Oakland Business Improvement District to conduct a public realm study of South Craig Street's business district to identify ways to improve the pedestrian and retail shopping experience. The term streetscape, or public realm, refers to the natural and built fabric of the activated street environment, including its design quality and visual experience. The street, including sidewalks, landscape elements and vehicle cartways, is a public space where people can engage in various activities. A well-designed streetscape influences where people gather, encourages pedestrians to linger longer, and helps define a district's aesthetics.

As part of the planning project, the design team assessed South Craig Street's existing physical conditions. The team worked with business and property owners to identify a set of district-specific, prioritized enhancements that could be implemented discretely over time, as resources are secured, and without completely rebuilding the entire public right-of-way. This planning study also takes into consideration the public realm modifications that would occur as a result of the proposed Bus Rapid Transit (BRT) project planned for Forbes Avenue.



This map highlights the South Craig Street Business District study area in green.

This document, which includes a schematic-level streetscape plan for the district, is intended to be used as a tool for fundraising, to help advance specific streetscape recommendations, to raise awareness about the value of our public realm, and generally build interest in this study.

This report summarizes the planning process, highlights Craig Street existing conditions at the time the study was conducted, presents the streetscape scenarios that were reviewed by the stakeholder group, and provides a list of prioritized public realm improvements. Material palettes, referencing existing, already-built streetscape examples, were developed with guidance from the stakeholder group. The Appendix of this document includes relevant streetscape and planting details, recommended plant lists, and meeting minutes from stakeholder sessions.

DRAFT

Process Summary

How the South Craig Street Public Realm Study Process Worked

Commissioned by Councilman Dan Gilman's office in the Winter of 2016, the South Craig Street Public Realm study is a streetscape plan for Oakland's South Craig Street business district. The schematic-level streetscape design incorporates and reflects stakeholder input that was obtained through three interactive stakeholder meetings, as well as a thorough inventory and analysis of South Craig Street's physical conditions. Participating stakeholders included Craig Street business and property owners. Design scenarios were discussed, reviewed, and refined throughout the planning process.

The final plan: identifies priority streetscape elements and initiatives; selects and locates new landscape, street furniture, and lighting elements; and recommends key improvements to sidewalks, crosswalks, and bicycle parking. This report also highlights district-wide recommendations and suggests possible alternatives and/ or additions to the proposed streetscape design.

This study consisted of three phases.

Phase 1: Understanding Needs and Documenting Existing Conditions

During Phase 1, the planning team documented existing South Craig Street physical conditions, identifying and locating physical elements within the public right-of-way, including: sidewalks, benches, light poles, bike racks, parking pay stations, planters, and tree pits. The team compiled this data into a detailed plan of the study area, and presented the information to a stakeholder group to solicit feedback and better understand issues and opportunities relating to the corridor.

Stakeholders placed stickers at locations where an enhanced pedestrian experience, greenery, public art, district identity, and/ or better lighting are needed. They added notes to the plan drawing and identified places where mobility conflicts between business operations (deliveries, dumpsters, loading and unloading), patron parking areas, and pedestrian and bike infrastructure occur. The group also identified places that currently accommodate, or could potentially accommodate, district-wide or community events.

Phase 2: Exploring Design Scenarios

During Phase 2, the planning team processed the feedback and data compiled during Phase 1. The team explored a series of design options for South Craig Street which would incorporate streetscape alterations, including new/ modified landscape elements, street furniture, lighting, and other improvements. Possible modifications to traffic patterns were explored: converting a portion of the roadway into a one-way street, and reclaiming on-street parking spaces to expand pedestrian zones. The design team compiled "shared-street" design precedents to share with stakeholders as a possible long-term strategy for increasing the pedestrian realm. The shared-street approach to urban design minimizes separations between vehicles and pedestrians by removing curbs and traffic markings, creating space for recreation, socializing, and leisure.

Preliminary design alternatives were presented at a second stakeholder meeting. Photos of streetscape elements were also presented and meeting participants used stickers to identify their preferred precedents. The most-preferred material palette, identified by stakeholders, was useful in guiding the design team as it developed the style and character of the street and selected complementary street furnishings.

In conjunction with the second stakeholder meeting, an initial meeting with City of Pittsburgh's Department of Public Works (DPW) and Department of Mobility and Infrastructure (DOMI) was held to discuss the maintenance implications of physical modifications to South Craig Street. DPW requested that City-approved pedestrian light standards be used. The Director of City Planning cautioned the design team about the effects of long-term construction projects on a business district, stating that 20% of businesses do not usually survive the transition.

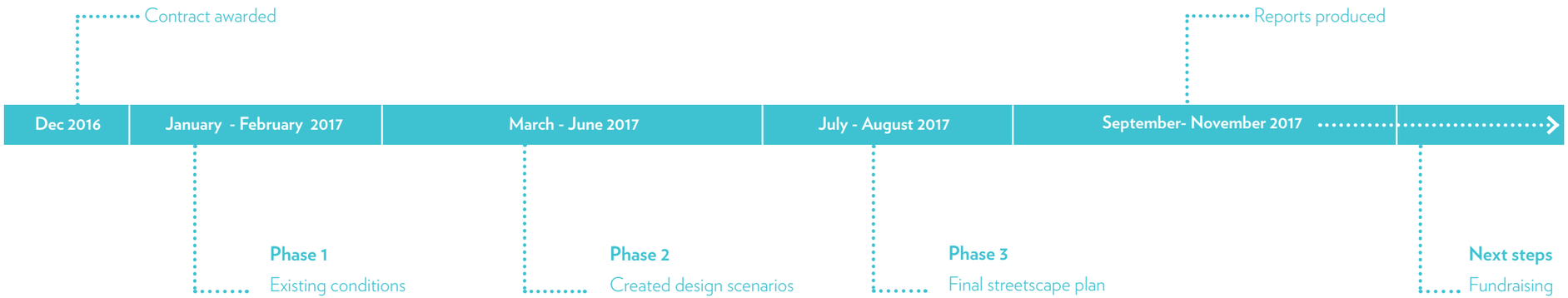
Phase 3: Final Streetscape Plan

Based on input gathered during Phase 2 meetings, the design team refined the streetscape design direction for Craig Street. An updated schematic design was presented as a series of illustrative drawings showing how a set of discrete elements and interventions could each be implemented independently, as funding is secured. At the final stakeholder meeting, participants selected their top three priority elements, and a lively discussion ensued. Input from the final meeting influenced the development of the final streetscape plan, and meeting notes are incorporated into the appendix of this report.

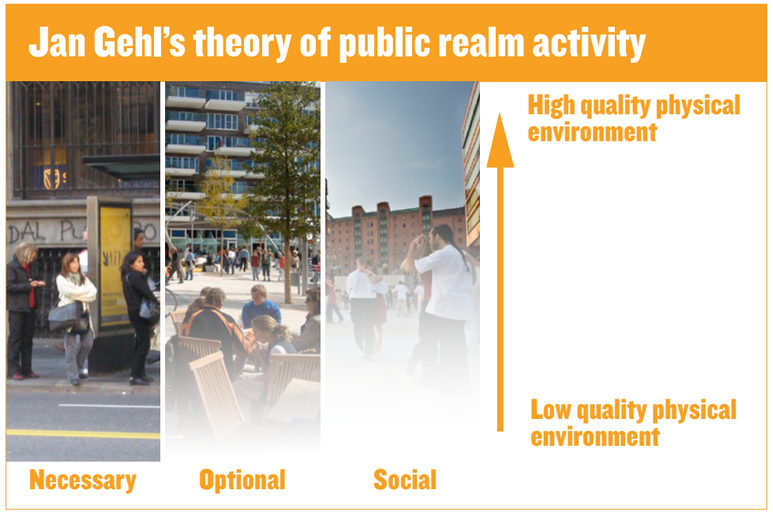
Next Steps

After completing the South Craig Street Public Realm Study, Councilman Gilman's office will pursue funding for the prioritized elements that are defined in greater detail in the following pages. Further design, engineering and utility coordination will be required prior to any construction project along South Craig Street.

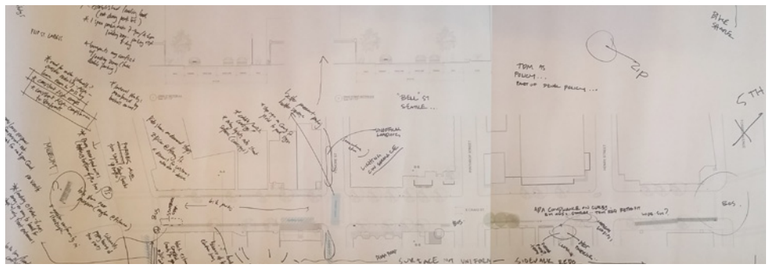
Project Timeline



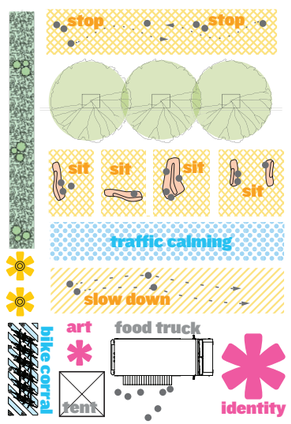
Phase 1 Understanding Needs & Existing Conditions Documentation



SfSP presented Jan Gehl's theory of public realm activity that relates a high quality physical environment to the presence of social functions beyond the necessary and optional streetscape elements.



Existing Conditions Board 1 from first Stakeholder meeting.



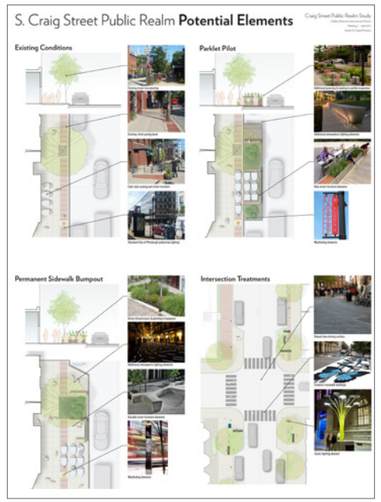
Palette of elements (stickers) used during meeting 1 by stakeholders to identify areas requiring enhanced streetscape design

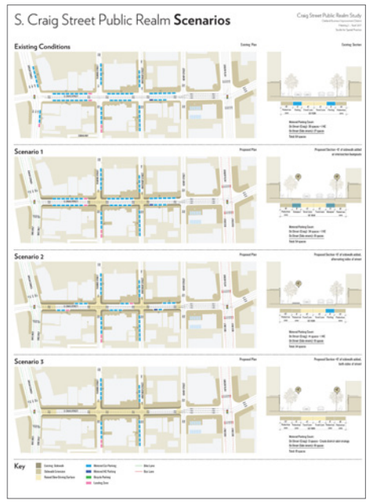
SfSP presents study overview at first stakeholder meeting.

Phase 2 Exploring Design Scenarios

ABOVE: Stakeholders review scenarios for Craig Street

RIGHT: Activity at second stakeholder meeting includes selecting favorite precedents of streetscape design images.



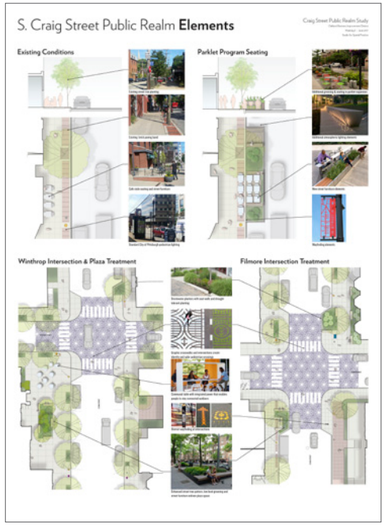


ABOVE + LEFT: Design and material boards presented at second meeting. Participants selected their favorite precedents that might appear on Craig Street and provided feedback on scenarios and elements.

Phase 3 Final Streetscape Plan

ABOVE: At the third meeting, stakeholders debate priority initiatives for Craig Street.

Final Strategy board presented at the third meeting.

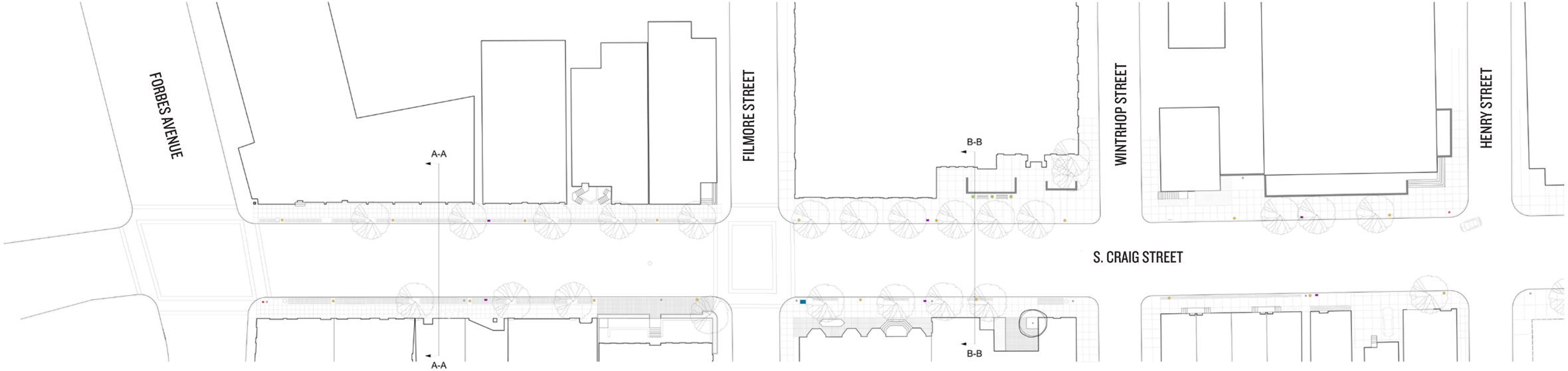


Final Priority Elements board presented at the third meeting.

Final Material Palette boards presented the most selected images.

DRAFT

Existing Conditions



Existing Conditions

The above plan depicts the location of existing streetscape elements along South Craig Street between Forbes and Fifth Avenues, the defined scope of the study. The design team also considered connections to the universities, the museums and library, to better understand Craig Street within its larger context. This plan was presented and reviewed at the initial stakeholder meeting to help inform future discussions about the streetscape design.

MOBILITY AND ACCESS

The South Craig Street business district is comprised of neighborhood-serving retail, restaurants, and offices. With public transportation serving Forbes and Fifth Avenues, as well as Craig Street, the district is easily accessible without a car. Numerous bicycle racks provide multi-modal opportunities, and metered on-street parking also serves the district. South Craig Street has numerous crosswalks, curb ramps and stop signs, but pedestrian visibility and safety is often compromised by cars parked illegally, too close to intersections.

STREET CHARACTER

South Craig Street, a bustling business district within North Oakland, in Pittsburgh's east end, is best known for its proximity to nearby universities and institutions. With its nearly-constant flow of students, visitors and commuters, South Craig Street is a major pedestrian thoroughfare. Throughout the day, sidewalks are filled with shoppers, diners, and museum-goers, leaving little space in the public realm for additional amenities: expanded planting zones, street furniture, and wayfinding signage, for example. The public realm has not had a major, coordinated streetscape update since the 1980s, and now looks dated and in need of repairs.

PAVING AND STREET FURNITURE

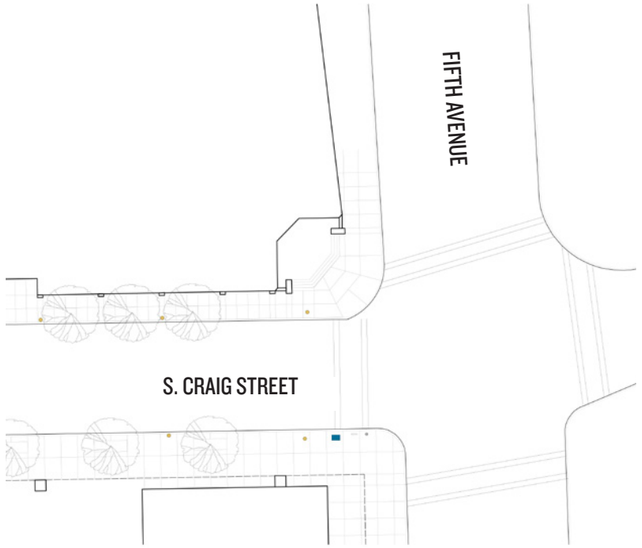
Craig Street's sidewalks are a patchwork of paving materials illustrating incremental changes and repairs made over time. Brick banding located at the curbside of the sidewalk, however, does play a prominent role in the overall material palette. In some areas, the paving is broken and heaving due to street tree roots or freeze and thaw conditions. At other locations, the sidewalk is cracked, damaged, or slippery-when-wet, and is in need of repairs or replacement. City of Pittsburgh pedestrian light poles line the street along with city-issued benches and trash/recycling receptacles. Sandwich boards placed along the sidewalk often clutter the route, sometime eliminating accessible passageways and generally reducing the available pedestrian circulation space.

LOADING

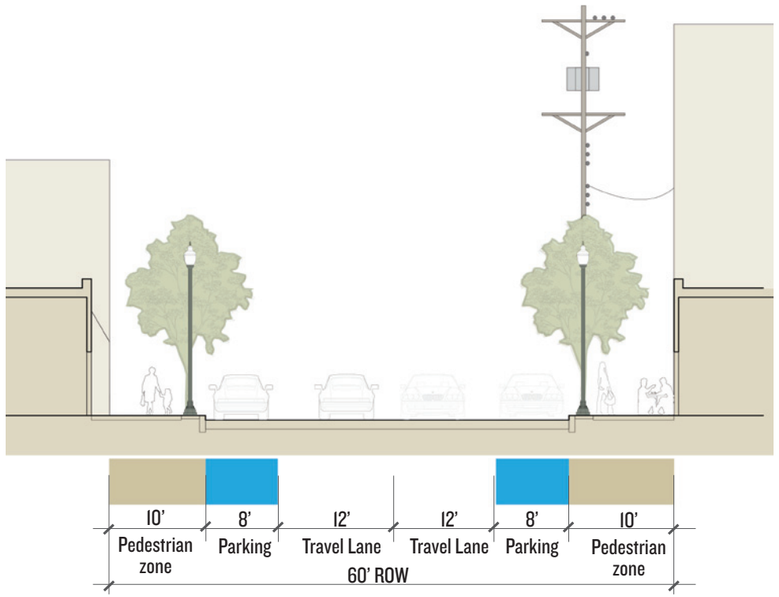
As with any small business district, mobility issues abound. When loading zones are unavailable, trucks loading and unloading goods cause traffic congestion along South Craig Street. Some Forbes Avenue businesses, around the corner from South Craig Street, do not have alley access; when the proposed Forbes Avenue bike lanes are constructed, their loading zones will be removed.

PEDESTRIAN PLAZAS

Along South Craig Street, pockets of semi-public property immediately adjacent to the right-of-way dot the street. These interstitial spaces could be used to extend the available pedestrian realm and possibly accommodate more street furniture and plantings.



The above plan documents the location of existing streetscape elements along South Craig Street including: street trees, planters, light poles, telephone poles, mailboxes, pay stations and paving material changes.



Existing section through S. Craig Street.

Brick paving bands line portions of S. Craig Street.

Semi-public pedestrian space adjacent to the right-of-way featuring some pedestrian amenities.

View looking south on S. Craig Street.

The photos above illustrate typical paving conditions along S. Craig Street.

Typical on-street parking along S. Craig Street.

Semi-public pedestrian space adjacent to the right-of-way

Plan Development

Approach

The design team worked with Councilman Gilman's office to develop a multi-faceted planning approach incorporating the following Design Principles:

- Design the street as a stage for public life. South Craig Street is more than just a cartway; it is a critical public space that animates the social and economic life of Oakland.
- Improve the physical quality and character of the public realm to draw more people to the district and encourage them to linger.
- Enhance and amplify South Craig Street's existing identity.
- Apply a palette of streetscape elements, contributing to a sequence of unique places, rather than establishing a generic standard.
- Integrate Pittsburgh's Complete Streets policy into the design.

These Principles guided the design team in preparing for the first stakeholder meeting.

A Palette of Elements

At the first stakeholder meeting, the design team asked participants to consider where, along South Craig Street, a more robust public realm would be desirable. Participants were provided with a Palette of Elements, in sticker format, to aid in the interactive streetscape design discussion.

The Palette of Elements included the following:

1. PEDESTRIAN EXPERIENCE. This category focused on pedestrian improvements that would enhance and help diversify social activity in the street. Possible improvements might include design scenarios through which sidewalk space could be expanded in permanent or temporary ways.
2. GREENING. This category includes: low plantings (decorative and performative, helping to absorb stormwater), hanging baskets, street trees in planted areas and within grates, planters, and planted pots.
3. ART, IDENTITY & LIGHTING. The following items can be combined in the public realm to help celebrate and express South Craig Street's unique character: identity and wayfinding signage and banners, City-standard pole lights, light swags across Craig Street, building-mounted lights, and public art.
4. MOBILITY. These elements / actions include: calming traffic with crosswalk enhancements and bumpouts, making loading zone improvements, creating designated bike share stations and parking, and instituting a strategic parking and loading management plan.
5. EVENTS. This category of elements includes permanent or temporary structures and / or infrastructure to support vendor festivals, food truck access and operations, film screenings, concerts, and other events in the district.

Stakeholders located these elements on a map of South Craig Street where they felt they would have the greatest positive impact. The design team reviewed the feedback provided, tested element locations and design strategies, and finally produced the Conceptual Plan that follows.

After documenting existing streetscape elements and holding the first round of stakeholder engagement meetings, it was clear to the planning team that generic recommendations or a one-size-fits-all design for South Craig Street would not be appropriate. The Palette of Elements provides a flexible kit of parts that can be used to:

- help reinforce the character and identity of the district, while also
- enhancing the pedestrian experience by creating a series of unique spaces along South Craig Street.

For each of the Priority Initiatives listed in the following pages, relevant components from the Palette of Elements are identified.

Parking / Vehicular Movement Inventory and Preliminary Scenarios

At the first stakeholder meeting, participants identified numerous locations within the South Craig Street district where there are conflicts between pedestrians, moving vehicles, visitor parking areas, and loading operations, resulting in sub-optimal public realm conditions. The design team took a careful inventory of existing parking locations and capacities, loading areas, and vehicle movement patterns to better understand the flow of people and cars throughout the district. This inventory, shown to the right, was presented at stakeholder meeting 2.

At the second stakeholder meeting, three alternate design scenarios were presented for review and discussion. All scenarios explore alterations to parking and the street geometry, with the intent of prioritizing pedestrians by expanding sidewalks and slowing traffic movements. The scenarios also explore the potential of using special paving markings or a curbless environment to create a shared street, to further prioritize pedestrians.

- Scenario 1 expands curb bumpout areas, and tables the intersection surfaces at Winthrop and Filmore Streets, preserving fifty-four parking spaces.
- Scenario 2 is more aggressive, tabling the entrance to South Craig Street from Forbes Avenue, and a portion of the Henry Street intersection as well. Only thirty-four on-street parking spaces would remain.
- In addition to the tabled areas proposed in Scenario 2, Scenario 3 tables Craig Street from Filmore to Winthrop Street, creating a shared-street environment with only nineteen on-street parking spaces remaining.

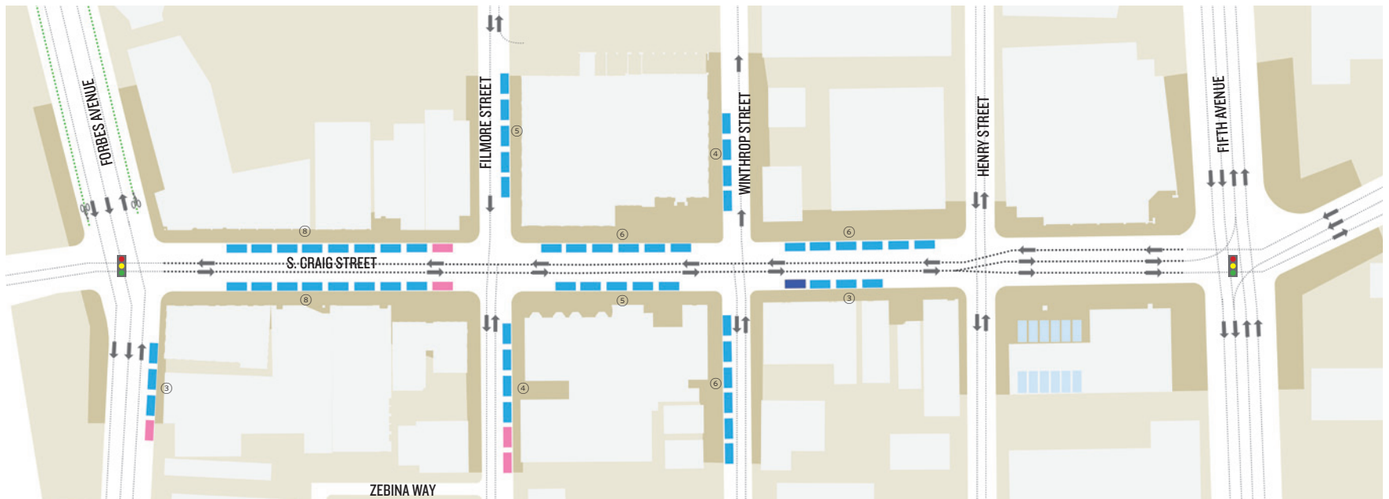
Stakeholders reviewed the alternate scenarios and did not feel that losing on-street parking spaces was justifiable at this time. Gaining additional pedestrian realm area was viewed as being important, but the loss of on-street parking was deemed too detrimental to the district. Instead, the design team proposed that interested parties should pursue the soon-to-be-enacted Parklet Program, which is detailed on the following pages, to temporarily test the impact of removing parking and gaining pedestrian space at key locations.

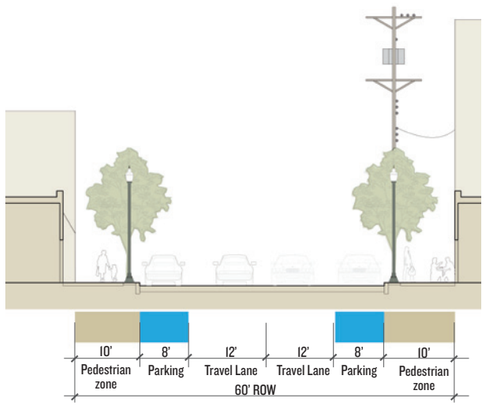
Conceptual Plan

Ultimately, a modified version of Scenario 2 was chosen for further development, with alterations to simplify bumpouts, limit street geometry changes and retain all on-street parking spaces.

In Phase 3 of the study, the design team synthesized analysis, feedback and design scenarios from Phases 1 and 2 and developed the following Conceptual Plan and Priority Initiatives for review by the stakeholder group. Stakeholders ranked the proposed interventions and provided feedback.

Existing Conditions

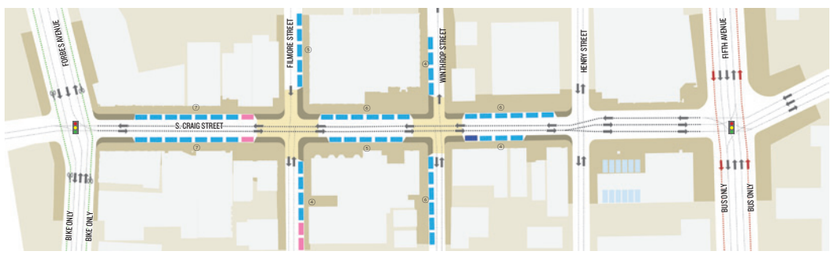


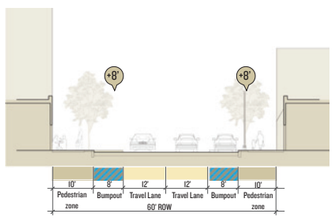


Typical existing street section looking north

Metered Parking Count:
On Street (Craig): 36 spaces + 1 accessible space
On Street (Side Streets): 19 spaces
On Street (Forbes): 3 spaces
Total: 59 spaces + 1 accessible space

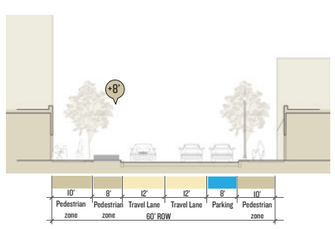
Alternate Scenario 1





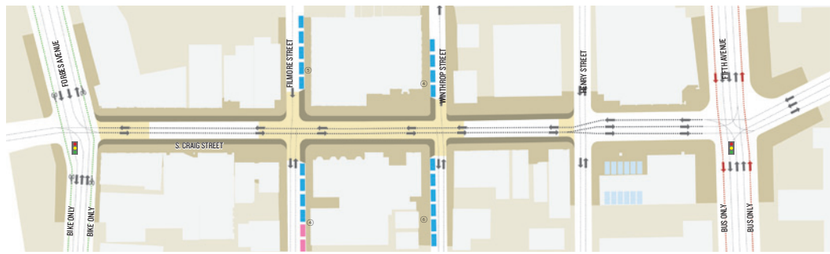
Metered Parking Count:
On-street (Craig): 34 spaces + 1 accessible space
On-street (side streets): 19 spaces
Total: 54 spaces

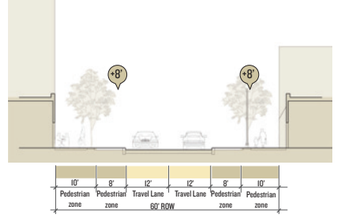
Alternate Scenario 2



Metered Parking Count:
On-street (Craig): 14 spaces + 1 accessible space
On-street (side streets): 19 spaces
Total: 34 spaces

Alternate Scenario 3

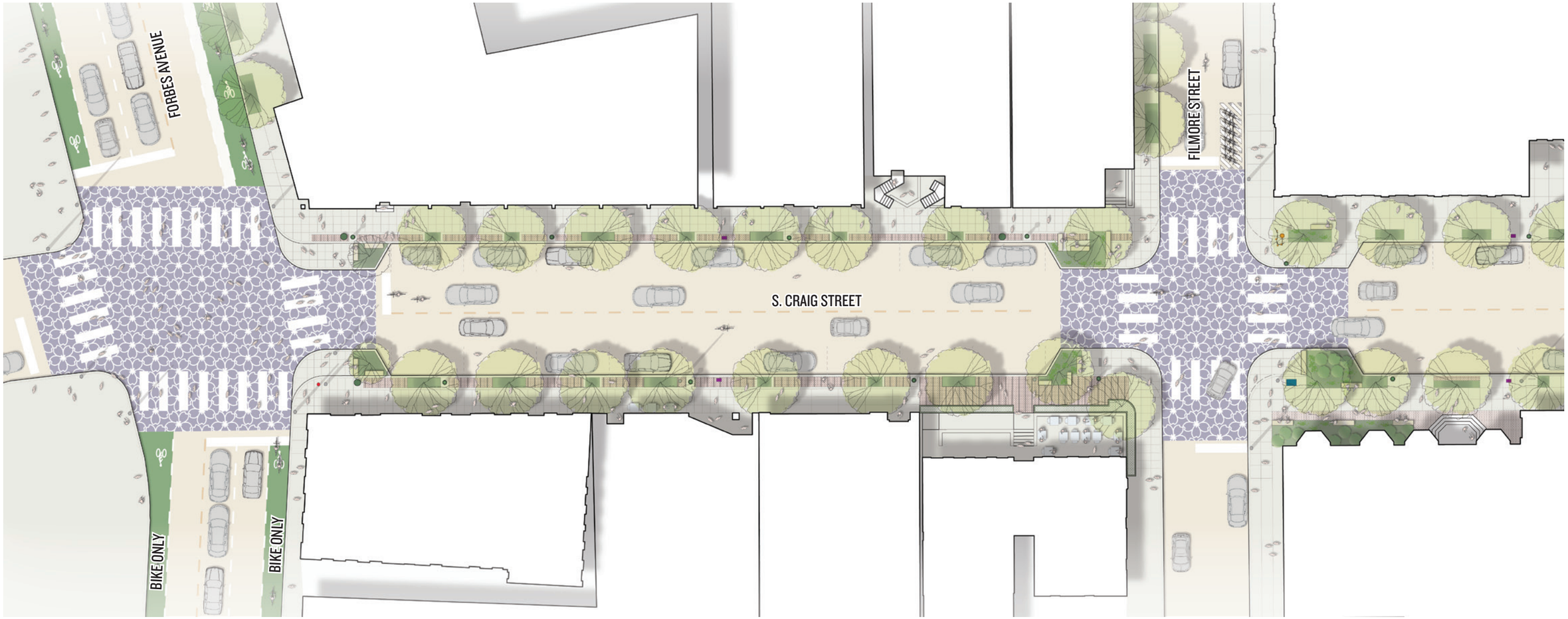




Metered Parking Count:
On-street (Craig): 0 spaces
Would require a district valet strategy
On-street (side streets): 19 spaces
Total: 19 spaces

DRAFT

Conceptual Plan



Overview

The final conceptual plan for South Craig Street enhances the pedestrian experience with a linked palette of elements that can be phased in over time. Rather than completely reconstructing the streetscape from building-face to building-face, the plan recommends integrating a limited set of new elements into the existing environment to enhance the visual character and identity of the street, improve pedestrian comfort and safety and improve visitor way-finding and navigation. The elements are designed to be implemented incrementally, as funding becomes available, to limit disruption to South Craig Street businesses.

Conceptual Plan Components

INTERSECTION TREATMENT & BUMPOUTS

Three intersections on South Craig Street - at Forbes, Winthrop and Filmore - should have a new, patterned surface treatment applied to the asphalt roadway, increasing pedestrian visibility and safety. Curb bumpouts, proposed at intersection areas where illegal parking is common, will help preserve clear, unobstructed access to curb ramps and improve pedestrians' visibility. Permanent or temporary in application, these bumpouts, while shortening pedestrian crossing distances, could also create space for plantings and stormwater infrastructure, public art, and information kiosks.

WAYFINDING

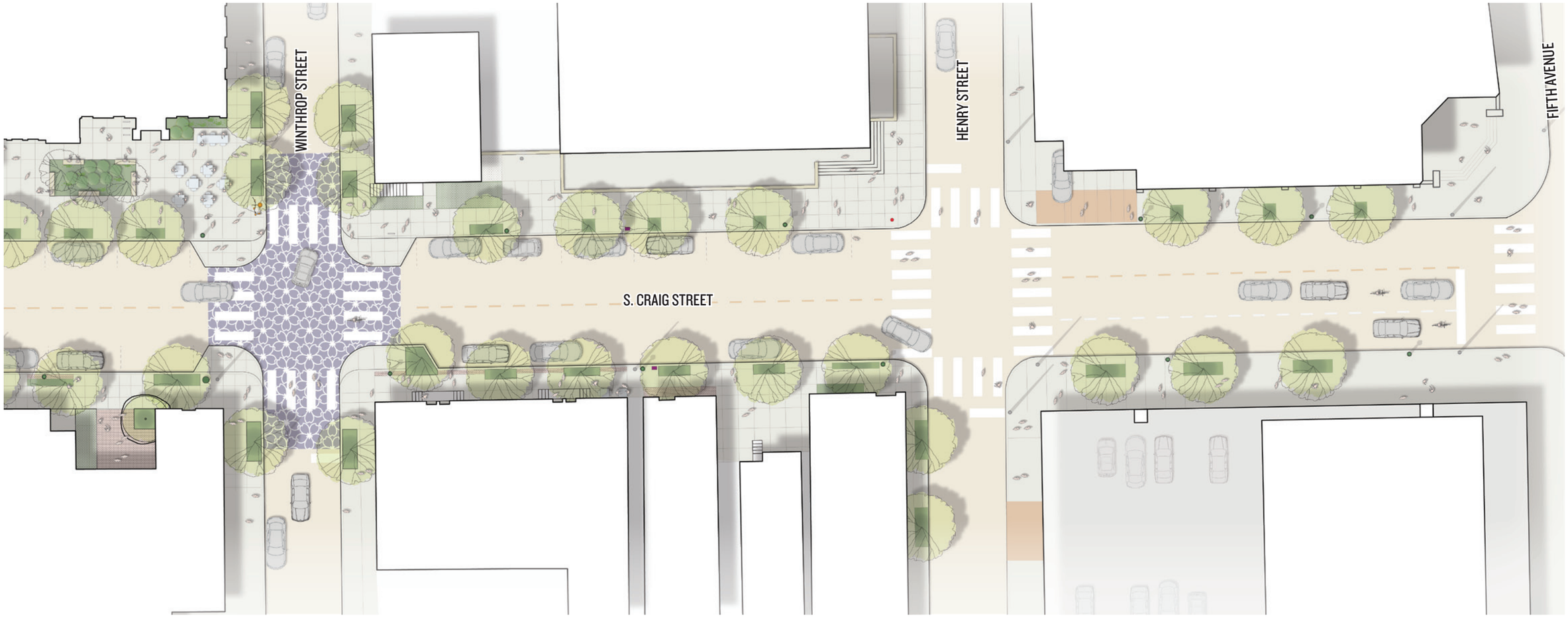
Information kiosks, placed at major pedestrian intersections, can contain business directories, a map of the business district, and bicycle and vehicle parking information. Vehicular gateway signage at Forbes and Fifth Avenue may help direct drivers to the business district and parking locations.

STREET TREES

Additional street trees should be re-introduced into empty tree pits and planted at new locations along South Craig Street in an evenly-spaced arrangement. Tree pit dimensions should follow city standards, providing enough space for healthy tree root conditions, with public art opportunities potentially created via customized South Craig Street tree grates.

PARKLET

Working with the city and business district stakeholders, a temporary parklet could be introduced along the South Craig Street corridor in place of one or two on-street parking space(s). The parklet would accommodate outdoor seating and planters, which are currently difficult to provide due to the narrowness of South Craig Street's sidewalks.


WINTHROP STREET
S. CRAIG STREET
HENRY STREET
FIFTH AVENUE

DRAFT

Priority Initiatives | Overview

District-Wide Recommendations

The two diagrams on this spread provide a graphic summary of proposed improvements to South Craig Street's public realm, as they were presented by the design team to the stakeholder group during Phase 2 of the planning process. These recommendations can be implemented in tandem or independently of each other as funding becomes available. It is important to note, however, that further design, technical expertise, and coordination with City departments may be required to optimally and legally implement the initiatives.

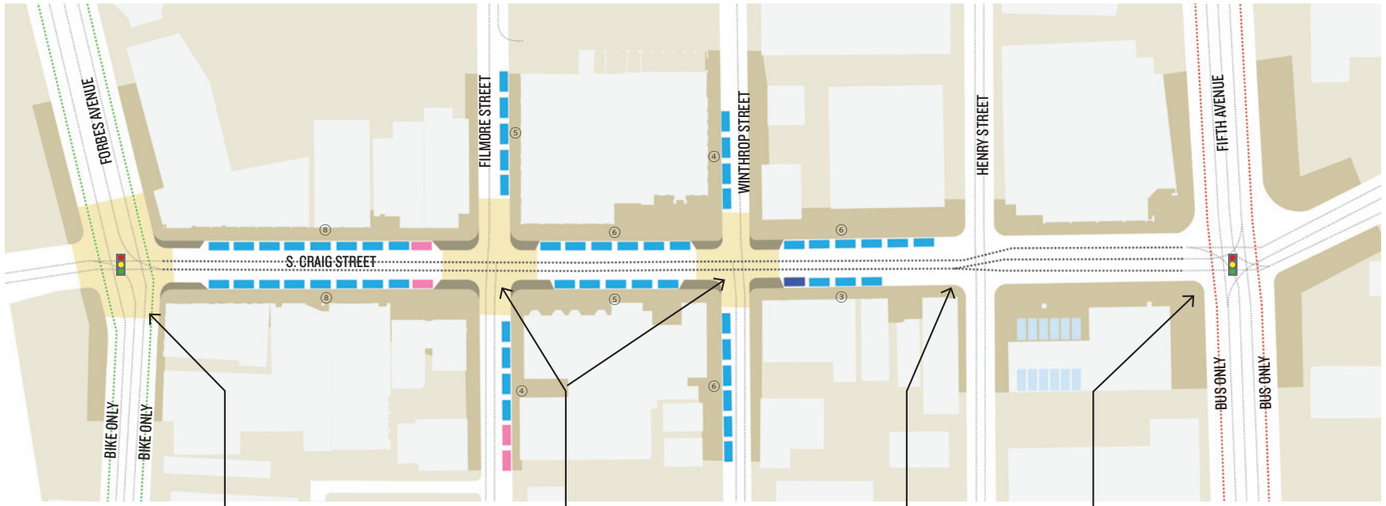
At the second stakeholders meeting, participants were asked to prioritize the Conceptual Plan elements to help direct future fund-raising activities.

The resulting Priority Initiatives include:

- Intersection Treatment at Winthrop,
- Intersection Treatment at Filmore,
- Parklet Program (in development)

The Parking, Loading and Bumpouts diagram illustrates modifications to parking and loading areas along Forbes Avenue after Bus Rapid Transit infrastructure is implemented. One loading zone and three parking spaces along Forbes Avenue will be lost from the total current count. The diagram also shows the location of proposed bumpouts at key intersections along South Craig Street. Stakeholders felt strongly that increasing sidewalk dimensions at the expense of losing on-street parking was not an acceptable solution. With this input in mind, the design team proposed modest, traffic-calming bumpouts and special crosswalks at intersections to slow traffic and slightly increase the pedestrian zone by capturing unused roadway areas. No on-street parking spaces, along South Craig Street, are proposed to be removed. The street section diagram shows the typical/ proposed dimension of sidewalks, parking/ bumpout areas and travel lanes along the corridor.

Parking, Loading and Bumpouts



Key

- Sidewalk Extension
- Existing Sidewalk
- Slow Driving Surface
- Metered Car Parking
- Metered Accessible Parking
- Bicycle Parking
- Loading Zone
- Private Parking
- Bike Lane
- Bus Lane

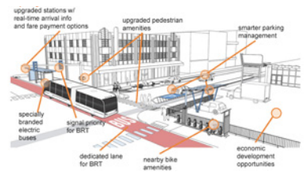
Metered Parking Count

On-street (Craig):	36 spaces + 1 accessible space
On-street (side streets):	19 spaces
On-street (Forbes):	0 spaces
Total:	**56 spaces + 1 accessible space**

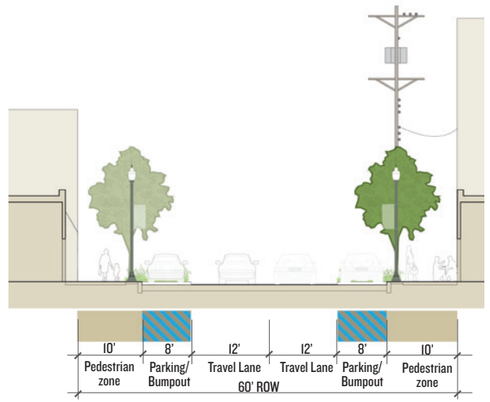
PennDOT/BRT changes to Forbes Avenue: New bike lanes on both sides of the street and a new Bus Rapid Transit (BRT) station. 3 parking spaces and 1 loading space along Forbes Avenue were removed when the inbound bike lane was implemented.

Traffic calming bumpouts and special crosswalks are proposed at Filmore and Winthrop Street intersections.

The existing on-street parking count on South Craig Street will be maintained.

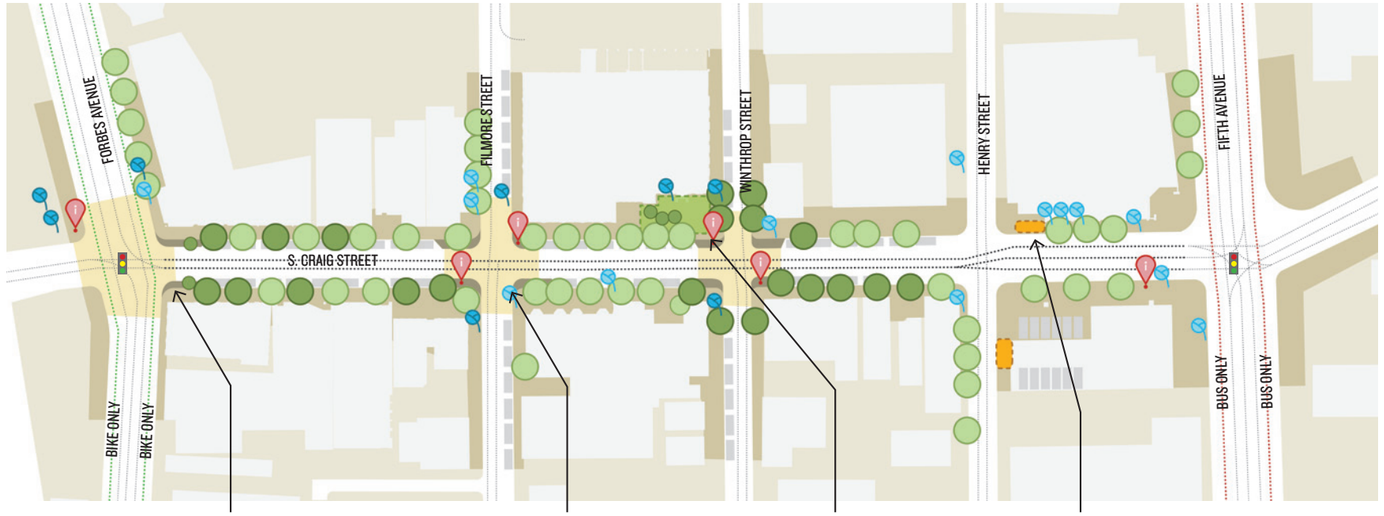


BRT changes to Fifth Avenue: Dedicated bus lanes on both sides of the street and a new BRT station.



Proposed street section with +8' of sidewalk added only at intersection bumpouts.

Street Trees and Wayfinding



Key

- Sidewalk Extension
- Existing Sidewalk
- Slow Driving Surface
- Metered Car Parking
- Metered Accessible Parking
- Bicycle Parking
- Loading Zone
- Private Parking
- Bike Lane
- Bus Lane
- Existing Street Tree
- Proposed Street Tree
- Proposed Wayfinding Kiosk
- Existing Bicycle Rack
- Proposed Bicycle Rack
- Proposed Driveway Marking

Street Tree Count

On-street existing:	44 trees
On-street proposed:	21 trees
Total:	**65 trees**

District-wide wayfinding should be located at the edges of the business district to help orient and direct pedestrian traffic.

Stormwater planters and seating areas in bumpouts could beautify and enliven Filmore and Winthrop Street intersections.

Reorganized plazas can highlight building entrances, increase planting areas and provide usable pedestrian space.

Regular street furniture enlivens the public realm, creating an intimate pedestrian scale where one building dominates a block.

In addition to parking, loading and pedestrian-oriented sidewalk improvements, the design team developed a set of recommendations for enhancing South Craig Street's streetscape environment.

The Street Trees and Wayfinding diagram, at left, shows the location of proposed streetscape elements as they were approved by the stakeholder group. Streetscape elements would include stormwater plantings, additional street trees, wayfinding information at intersections, and gateway identity markers at prominent intersections.

Stakeholders reviewed these targeted interventions at the Phase 2 meeting and approved of the concepts and their distribution along South Craig Street.

The following pages summarize all of the proposed interventions, in the order deemed most-to-least critical, and describe the associated details and material palettes that would likely be used when implementing them in the future. Supporting information, including material palettes selected by the stakeholder group and technical details, may be found in the attached Appendix.

DRAFT

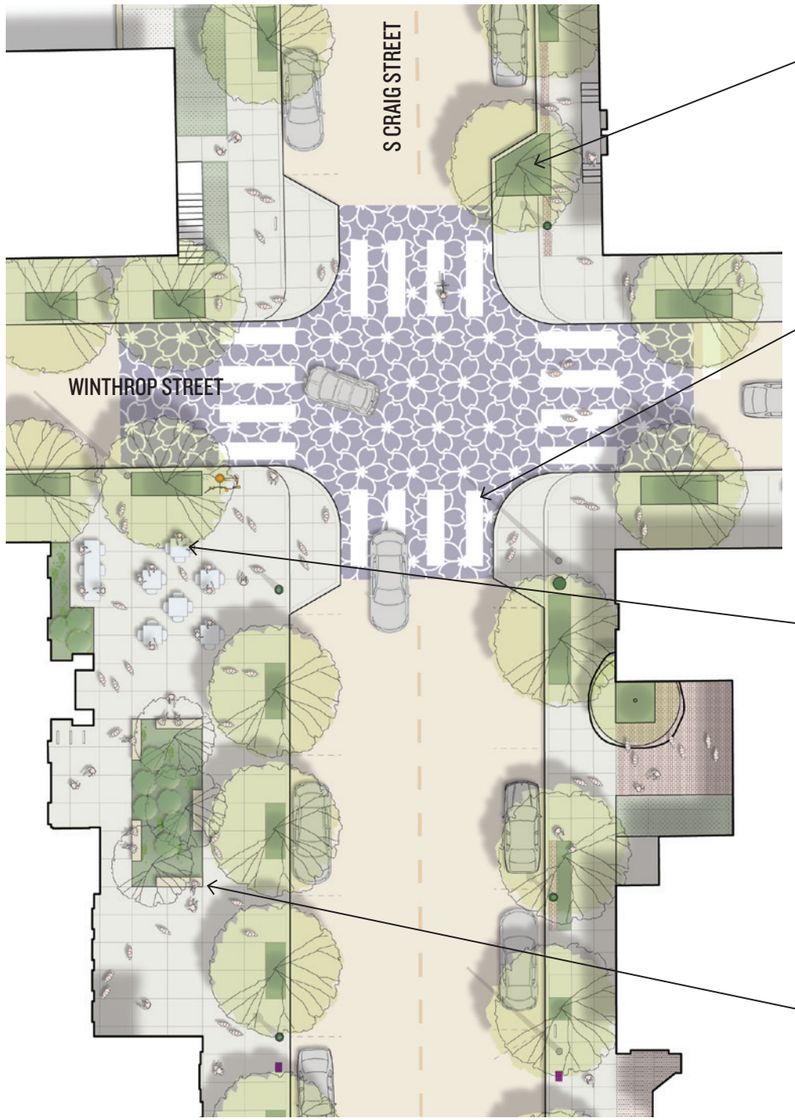
Priority Initiatives | Intersection Treatment & Bumpouts

Winthrop Intersection and Plaza Treatment

Bumpouts, expansions to the sidewalk at intersections, reduce the street-crossing distance for pedestrians and create additional space for streetscape amenities. As requested by the stakeholder group, the proposed bumpouts for South Craig Street do not remove on-street parking spaces. The intersection of Craig and Winthrop Streets will introduce curb bumpouts and explore tabling the intersection, raising the street surface to the sidewalk elevation, as an added safety measure.

The surface of the intersection itself may also be treated. Creative, patterned crosswalk and/or intersection markings (graphically-enhancing the space between crosswalks) would reinforce the district's identity and create public art opportunities. Painted markings are cost-effective and can be temporary, allowing strategies to be tested in-place. Permanent intersection treatments, which alter the built environment, are more costly and are best introduced after a period of pilot testing.

The pedestrian plaza at Winthrop and South Craig Street may be reconfigured to allow for more seating options and larger planting zones. Street furniture with integrated power sources may be considered for this area.



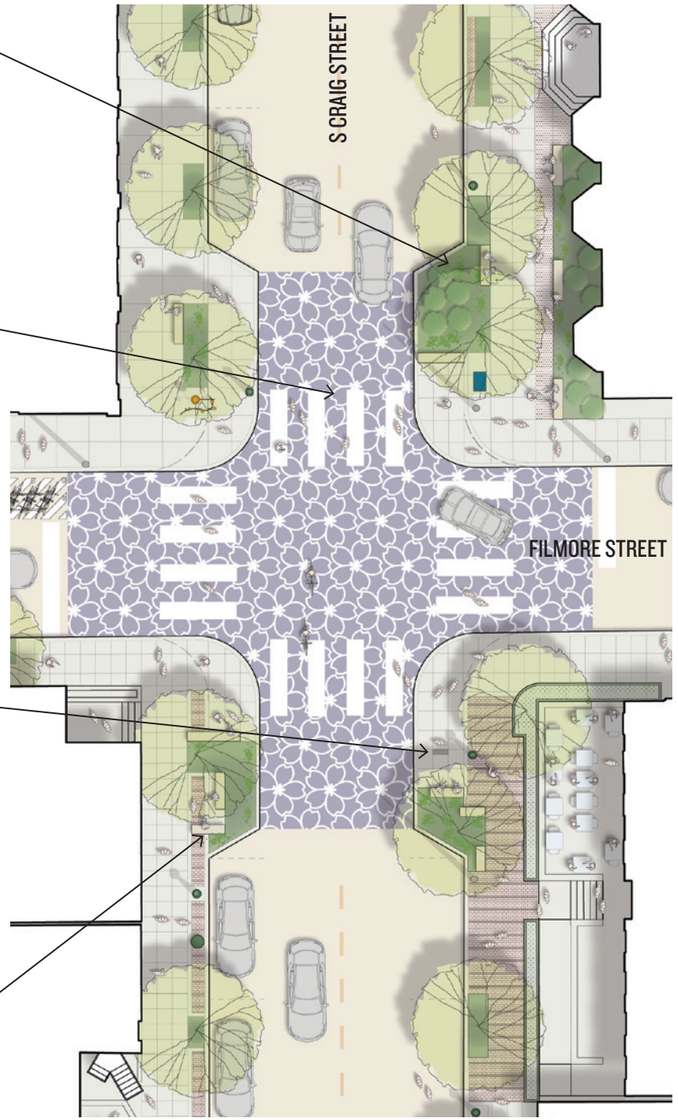
Stormwater planters with seat walls and drought tolerant planting.

Graphic crosswalks and intersections reinforce a district identity and create safer pedestrian crossings.

Communal table with integrated power that enables people to stay connected outdoors.

District wayfinding at intersections.

An enhanced street tree pattern, with low-level greening and street furniture, helps to enliven plaza spaces.



Filmore Intersection Treatment

In addition to curb bumpouts along South Craig Street, tabling the intersection and/or surface treatment is proposed for the Filmore and Craig intersection. Crosswalks should be created at this intersection at all corners. The crosswalks can be decorative and developed in conjunction with an artist.

Bumpouts create additional sidewalk space for district way-finding guides, additional seating, and stormwater planting areas. Additionally, building owners should consider reorganizing semi-public spaces adjacent to the right-of-way to include more pedestrian furniture and easily-maintained planting zones, as shown the plan drawing above.

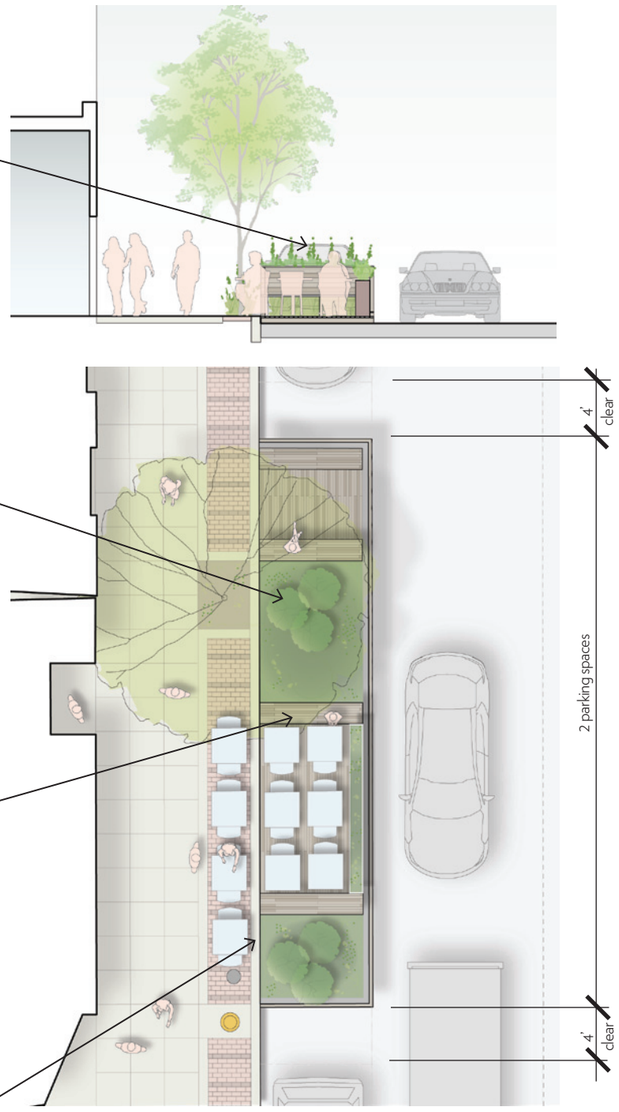
Priority Initiatives | Parklet Program (In Development)

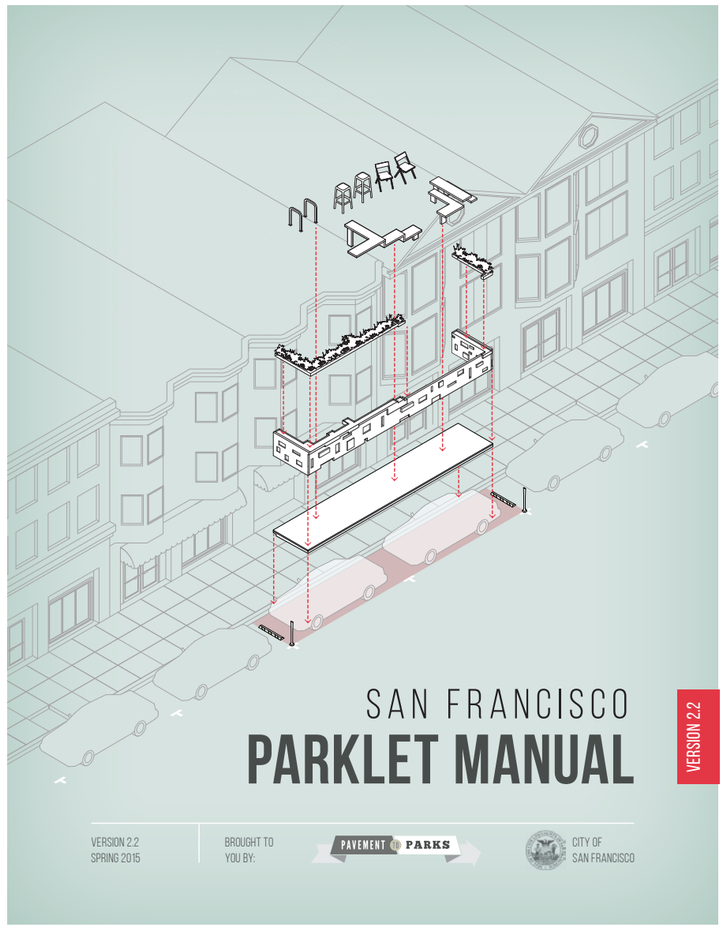
Additional greening and seating in parklet expansion.

Additional atmospheric lighting elements.

New street furniture elements.

Wayfinding elements.





Many US cities have developed thriving parklet programs.

The City of Pittsburgh is developing a pilot parklet program as part of an overall strategy for creating Complete Streets and new pedestrian open space within the existing public realm. By recapturing two on-street parking spaces, new open space with seating, plantings and public art could be placed to help enhance the pedestrian realm. The parklet model has been developed successfully in many US cities and is seen as a temporary measure that tests the impact of expanded pedestrian realms via the elimination of parking spaces.

In models around the country, parklets are funded and maintained by community organizations, local businesses, or individuals, but are open to the public as extensions to the sidewalk. Parklets foster district interaction by providing opportunities for chance encounters with places to sit and converse. Parklets also support local businesses by creating a feeling of safety with the reduction of vehicular traffic immediately adjacent and encouraging people to stay longer within the district.

While the details of the City of Pittsburgh program are as-of-yet unknown, parklet programs around the US typically require neighborhood support as well as site documentation and construction drawings. Drawings are reviewed by relevant city agencies and designs must be approved prior to installation. Typically, parklets are designed to be easily removed and possibly relocated.

The design team strongly recommends that interested stakeholders consider adopting a parklet along the S Craig Street business district, perhaps adjacent to a cafe or restaurant, to further activate and add to the existing pedestrian realm amenities. Stakeholders were supportive of the Parklet Program concept during Phases 2 and 3 of the planning process.

DRAFT

Material Palettes

Overview

In Phase 2 and 3 of this study, the design team curated groupings of precedent photography that depicted a variety of streetscape components. The photos that were presented to the stakeholder group incorporated practical, durable solutions with artfully-designed, everyday site furniture and materials. The categories presented were greening, site furniture, lighting, and wayfinding. Each category contained photos highlighting a variety of materials, arrangements and possible locations within the public realm of the element.

By selecting their favorites from a series of precedent images, stakeholders reached an unspoken consensus about the character of the material palettes proposed for South Craig Street. The design team synthesized the visual feedback and further refined the material palettes to create a kit-of-parts that will help create a vibrant streetscape and fulfill the project's design objectives.

Best Practices

When furthering designs for South Craig Street's Public Realm, it is best to adhere to a set of best practices regarding the sustainability of materials and the quality of craftsmanship. Such practices include:

- Incorporating locally-sourced or recycled materials into the design. Consider working with DPW or district vendors to find available materials.
- Selecting native, salt-tolerant plant material for project plant lists.
- Considering the durability and ease of maintenance when selecting materials.

Greening + Art

Tree grates:
Tree protection with perforated surface to allow water collection. Possible artist collaboration. ADA compliant surface. Recycled content preferred.

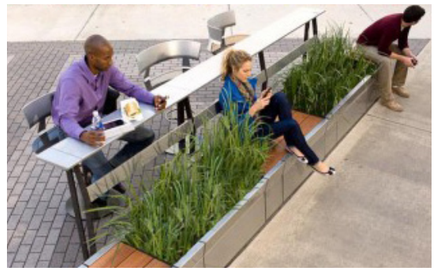
Manufacturer(s): Urban Accessories
www.urbanaccessories.com

Street Trees:
Refer to City of Pittsburgh's recommended tree species list in appendix. Select trees appropriate to the setting- consider final tree canopy, root zone compaction issues, and fall color

Suppliers(s): TreeVitalize
www.waterlandlife.org/216/treevitalize

Plant material:
Native, non-invasive plant material is highly recommended. Consider drought tolerant species that also have high salt tolerances in locations adjacent to roadways. In larger contiguous planting beds, consider selecting plants that provide seasonal color change and winter interest.

Supplier(s): See the appendix for Pittsburgh nurseries supplying native plant materials



Site Furniture + Art

Benches/ seating:
Select durable, high-performance, distinctive designs with high recycled content. Preferably locally sourced. Consider collaborations with local artists to design custom furniture

Manufacturer(s): Landscape Forms
www.landscapeforms.com

Forms+Surfaces, www.forms-surfaces.com

Planters:
Select planters that help to frame pedestrian space, constructed of durable materials with a high-recycled content. The UrbanEdge product line from Landscape Forms contains planters and benches that can be interlocked, utilizing space more effectively.

Suppliers(s): Landscape Forms
www.landscapeforms.com

Lighting + Art

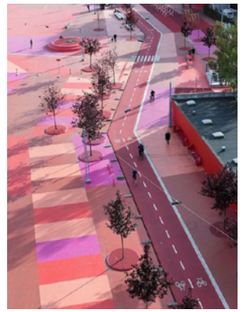
Street lights:
City of Pittsburgh standard light fixtures and posts

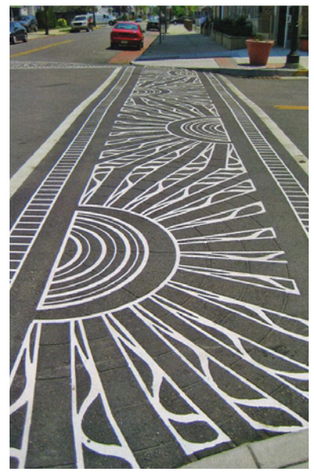
Manufacturer(s): City of Pittsburgh standard www.urbanaccessories.com

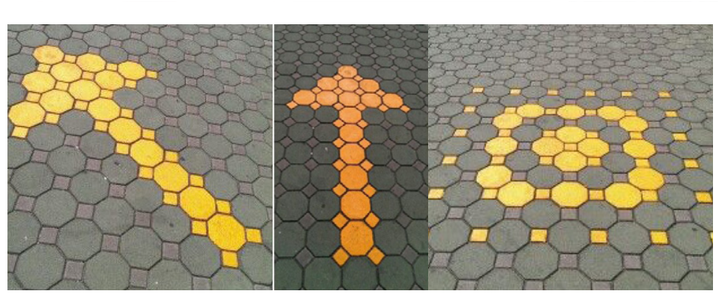
Ambient lighting- GOBO:
GOBO projectors may be building mounted and added at strategic locations along the street. GOBOS may be custom designed for Walnut Street or use standard textured/ abstract designs

Manufacturer(s): ROSCO, www.us.rosco.com

Ambient lighting- overhead light strings
Overhead, ambient lighting should be designed in conjunction with an artist including a public process. The signage may be 2 or 3 dimensional, freestanding or building mounted.







Wayfinding + Art

Business directory kiosks:
Monolithic, free standing with hinged door allowing for updated business directory, with internal lighting

Manufacturer(s): Chameleon by Encompass Sign Systems www.encompasssign.com

Engraved directional pavers:
Concrete pavers may be engraved with directional markings or text.

Manufacturer(s): Artline or other approved equal by Unilock, see appendix. www.unilock.com

Material Palettes

Greening + Art

Street trees with decorative tree grates and street trees in large, richly planted beds were selected most frequently by stakeholders. Depicted planting beds typically caught stormwater runoff from the street and sidewalk. The tree pits with tree grates were deeper, allowing for a larger root zone and additional stormwater capture as well. Integrating seating below canopy trees was favored as was the use of planters to define pedestrian zones.

Site Furniture + Art

Stakeholders selected images of cafe tables and chairs lining pedestrian walks, transit-oriented seating, custom bus stops, and artist-designed benches of metal and wood. Also selected were pairings of products, such as a standing table integrated into a bench back, and transit lean benches alongside planters. Benches illuminated from below were selected to provide more ambient light on the street.

Lighting + Art

Atmospheric lighting precedents were the most selected images. In most cases, the preferred photo featured an overhead lighting installation. A few favored photos introduced a line of artful light sticks/ trellises along the pedestrian walk or used strategically-placed light fixtures to reflect light off of surfaces, creating additional atmospheric light. One selected photo proposed pedestrian-scale fixtures, street-scale fixtures and banners on the same pole.

Wayfinding + Art

Precedents selected featured kiosk directories mapping the surrounding areas or featuring upcoming events. Directional tiles, custom stencils at crosswalks and decorative panels set in the ground plane also resonated with the stakeholder group.

DRAFT

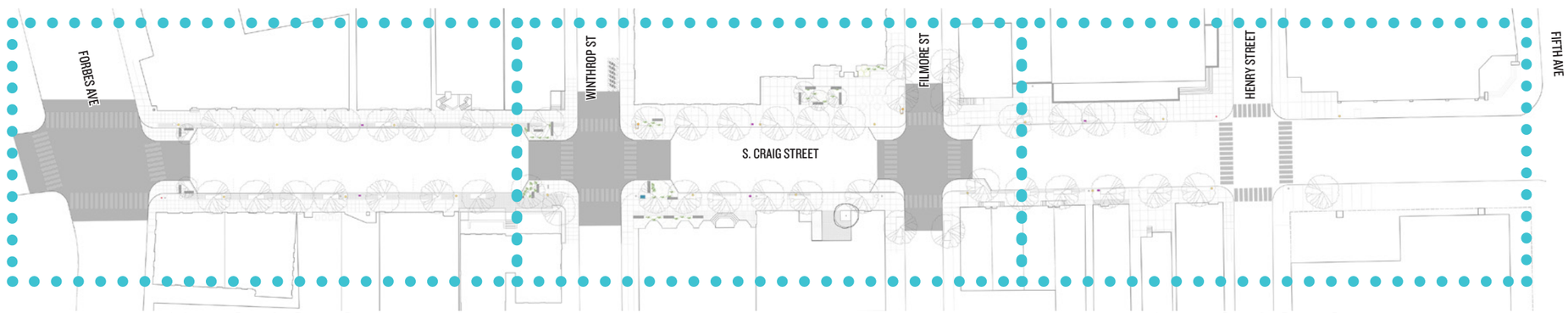
Detail Drawings & Material Take-Offs | Overview

Overview

The following pages contain schematic level design drawings, to scale, illustrating the priority elements proposed for South Craig Street. A summary table on each drawing quantifies the amount of material required for the proposed element. The summary tables may be utilized to establish preliminary opinions of probable costs as funding is pursued. Please note, only new material/ elements are included in the tables. Existing site furniture is precluded.

The following is a list of the materials included on the summary tables:

- Concrete curb (lf)
- New sidewalk (sqft)
- Planting (sqft)
- Intersection/ includes crosswalk (sqft)
- Specialty paving (sqft)
- Street trees (each)
- Understory trees (each)
- Lighting elements (each)
- Benches/ stone blocks (each)
- Receptacles (each)
- Wayfinding elements (each)
- Public art elements (each)
- Bike racks (each)



Map 1: South Craig St at Forbes Ave

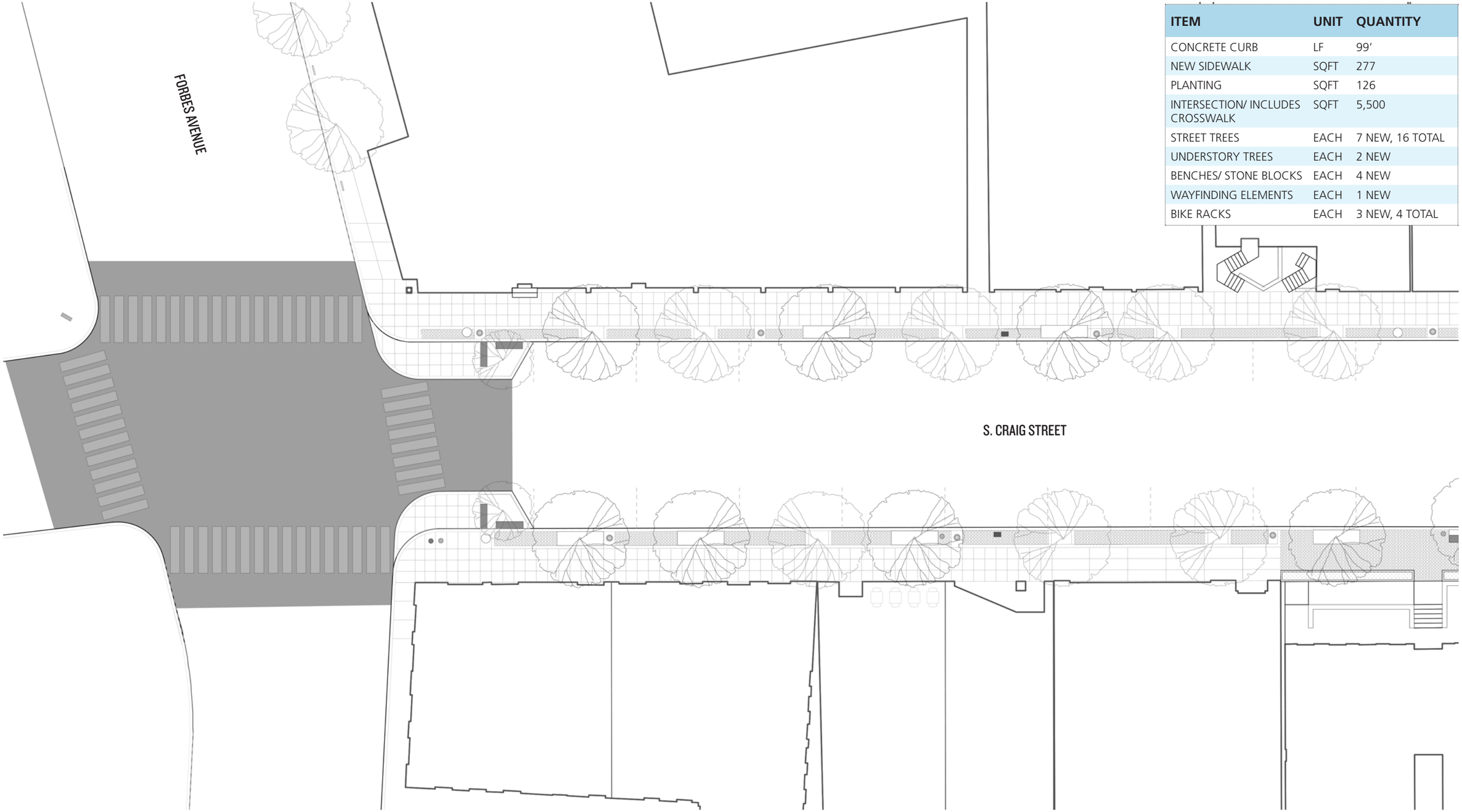
Map 2: South Craig Street - Filmore to Winthrop

Map 3: South Craig Street - Henry to Fifth Ave

South Craig Street Summary Table

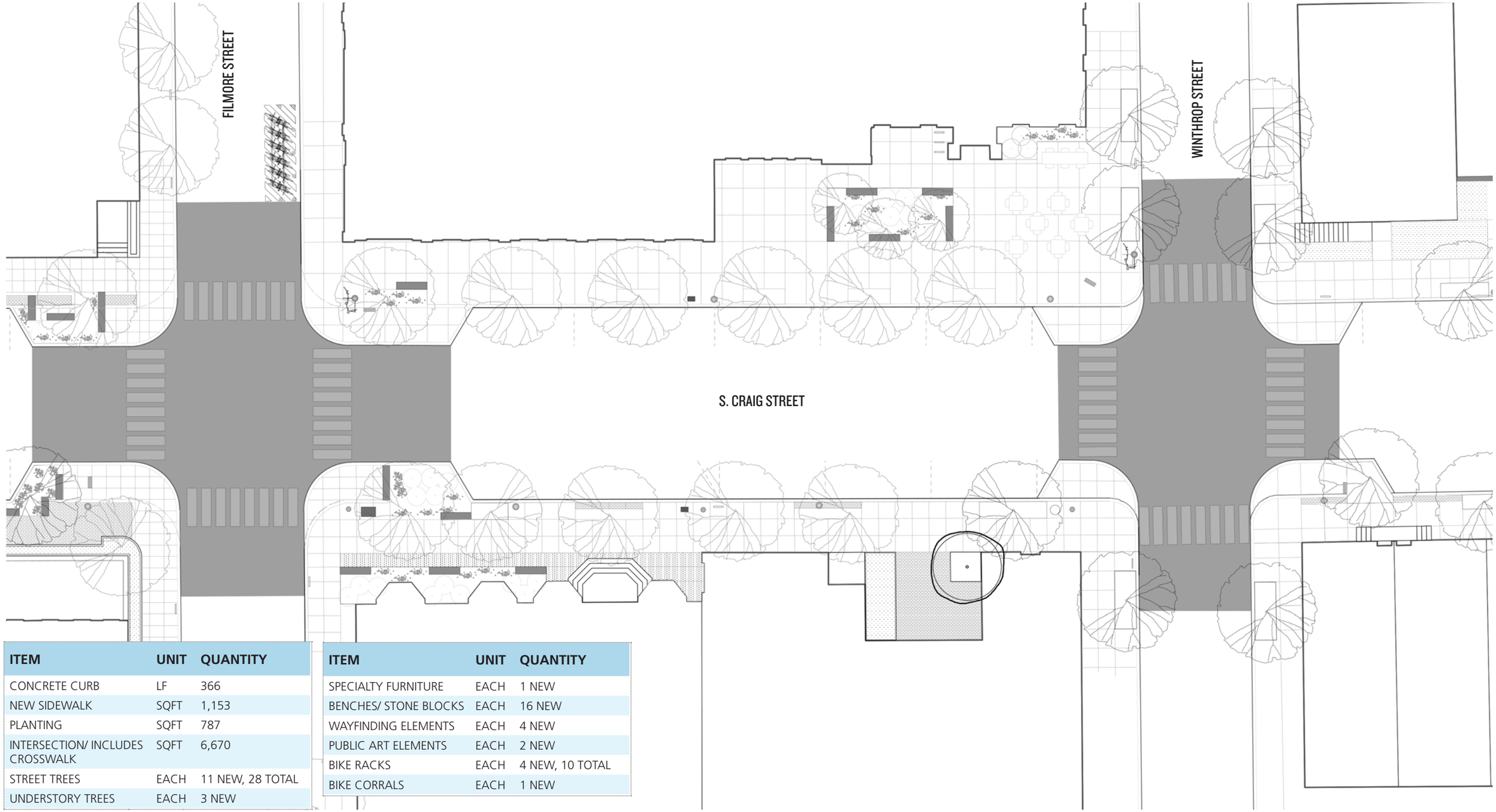
ITEM	UNIT	QUANTITY
CONCRETE CURB	LF	465
NEW SIDEWALK	SQFT	1,430
PLANTING	SQFT	913
INTERSECTION/ INCLUDES CROSSWALK	SQFT	13,220
SPECIALTY PAVING	SQFT	577
STREET TREES	EACH	21 NEW, 65 TOTAL
UNDERSTORY TREES	EACH	5 NEW
SPECIALTY FURNITURE	EACH	1 NEW
BIKE RACK	EACH	7 NEW, 22 TOTAL
BIKE CORRAL	EACH	1 NEW
BENCHES/ STONE BLOCKS	EACH	20 NEW
WAYFINDING ELEMENTS	EACH	6 NEW
PUBLIC ART ELEMENTS	EACH	2 NEW

Map 1 | South Craig Street at Forbes Ave



ITEM	UNIT	QUANTITY
CONCRETE CURB	LF	99’
NEW SIDEWALK	SQFT	277
PLANTING	SQFT	126
INTERSECTION/ INCLUDES CROSSWALK	SQFT	5,500
STREET TREES	EACH	7 NEW, 16 TOTAL
UNDERSTORY TREES	EACH	2 NEW
BENCHES/ STONE BLOCKS	EACH	4 NEW
WAYFINDING ELEMENTS	EACH	1 NEW
BIKE RACKS	EACH	3 NEW, 4 TOTAL

Map 2 | South Craig Street - Filmore Street to Winthrop Street

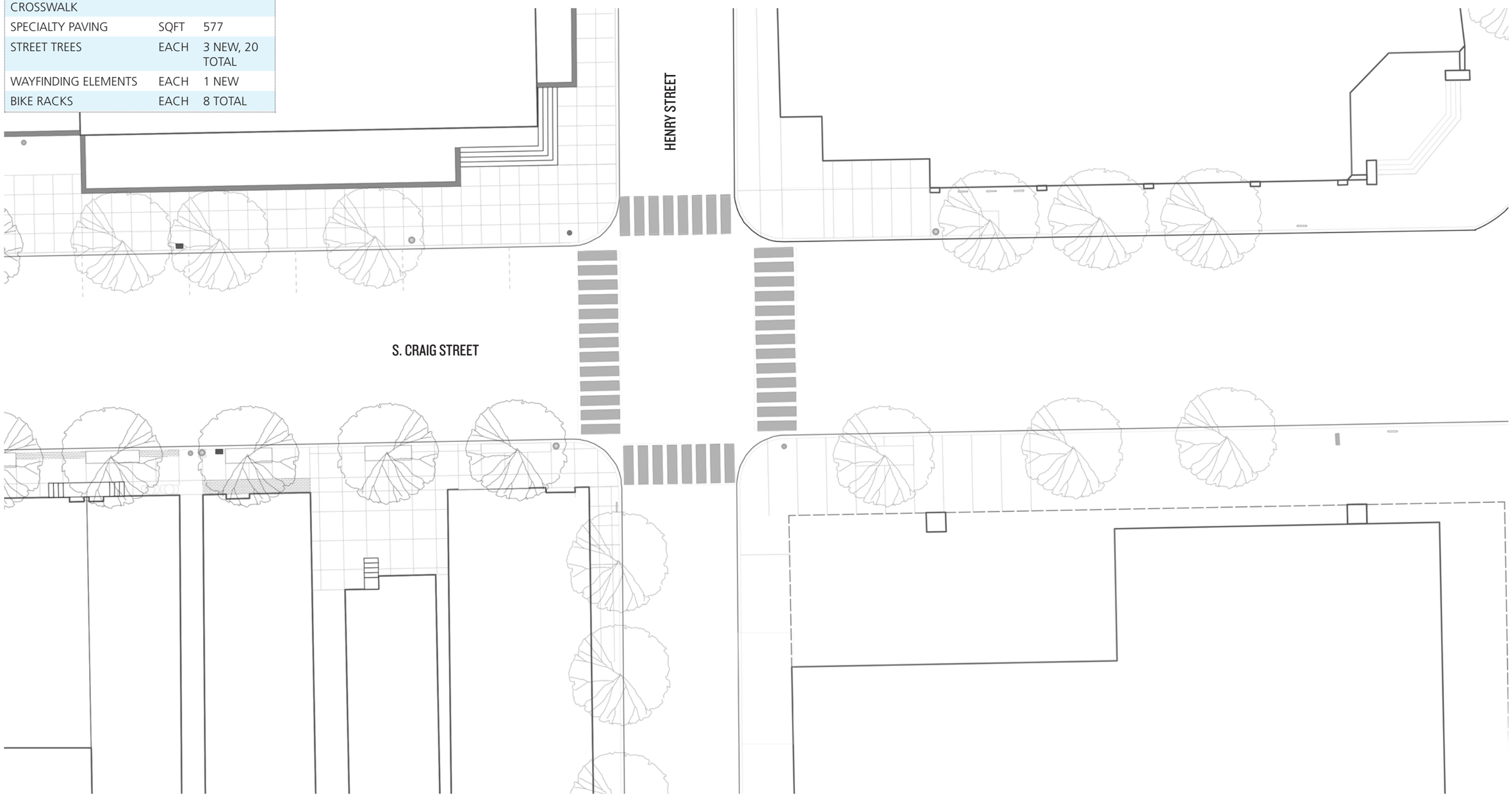


ITEM	UNIT	QUANTITY
CONCRETE CURB	LF	366
NEW SIDEWALK	SQFT	1,153
PLANTING	SQFT	787
INTERSECTION/ INCLUDES CROSSWALK	SQFT	6,670
STREET TREES	EACH	11 NEW, 28 TOTAL
UNDERSTORY TREES	EACH	3 NEW

ITEM	UNIT	QUANTITY
SPECIALTY FURNITURE	EACH	1 NEW
BENCHES/ STONE BLOCKS	EACH	16 NEW
WAYFINDING ELEMENTS	EACH	4 NEW
PUBLIC ART ELEMENTS	EACH	2 NEW
BIKE RACKS	EACH	4 NEW, 10 TOTAL
BIKE CORRALS	EACH	1 NEW

Map 3 | South Craig Street - Henry Street to Fifth Avenue

ITEM	UNIT	QUAN-TITY
INTERSECTION/ INCLUDES CROSSWALK	SQFT	1,050
SPECIALTY PAVING	SQFT	577
STREET TREES	EACH	3 NEW, 20 TOTAL
WAYFINDING ELEMENTS	EACH	1 NEW
BIKE RACKS	EACH	8 TOTAL



DRAFT

Appendix

The following pages include technical details for pricing, preferred material palettes and possible sourcing information and meeting minute summaries from the Stakeholder engagement sessions.

Recommended Tree Species For Pittsburgh's Streets

There are two main categories; Shade Trees where no overhead utilities conflict with tree growth, and Utility Trees where overhead utilities call for shorter trees. The Utility Tree section has 2 parts to account for the occasional situation where wires are 25' or higher above ground.

Shade Trees

Trees in the Shade Tree category should be planted where no overhead utilities exist. Shade trees are the most desirable size of tree for planting, and should be used at all times in the absence of overhead wires.

Acer rubrum 'Franksred'- Red Sunset Red Maple (do not use within 5' of sidewalks; aggressive root system)

Acer x freemanni 'Celzam'- Celebration Freeman Maple (do not use within 5' of sidewalks; aggressive root system)

Aesculus x carnea 'Briotii'- Ruby Red Horsechestnut (less mid-summer scorch than hippocastanum

Cercidiphyllum japonecum Tree Form- Katsura Tree (requires more water during establishment years than most other trees)

Corylus colurna (tree form)- Turkish Hazel or Turkish Filbert

Eucommia ulmoides - Hardy Rubber Tree (not pretty but can be useful)

Ginkgo biloba (any male variety) - Ginkgo (male example is Princeton Sentry)

Gleditsia triacanthos (any thornless, seedless, variety) - Honeylocust

Gymnocladus dioicus (male variety only) - Kentucky Coffeetree

Liriodendron tulipifera - Tulip Tree (open lawn or large parking island)

Metasequoia glytostroboides – Dawn Redwood (requires larger than usual pit if used as a street tree, or use in open planting areas)

Nyssa sylvatica - Blackgum

Ostrya virginiana – American Hophornbeam

Platanus x acerifolia 'Bloodgood' - Bloodgood London Planetree

Quercus bicolor - Swamp White Oak

Quercus macrocarpa – Bur Oak

Quercus rubra - Northern Red Oak

Quercus palustris - Pin Oak

Sophora japonica - Scholartree (flower issues make this an open space tree not suited to sidewalk use)

Taxodium distichum – Baldcypress

Tilia tomentosa - Silver Linden

Ulmus parvifolia – Lacebark Elm/Chinese Elm

Ulmus Hybrids – disease resistant trees like 'Homestead', 'Pioneer', 'Accolade', 'Frontier', 'Liberty' and 'Urban'.

Zelkova serrata – Zelkova ('Green Vase' is not recommended in commercial areas where it may block signage)

Utility-Compatible Trees Group A (under-wire use)

Group A applies to most plantings under utility lines. This is necessary because most wires are less than 25' above ground. Where possible, offset trees so they are not directly under the wires.

Acer ginnala – Amur Maple 15'-20'

Acer tataricum – Tatarian maple 15'-25'

Crataegus crus-galli var.'Inermis' – Thornless cockspur hawthorn 15'-20'

Crataegus laevigata 'Superba' – Crimson Cloud hawthorn (tree form) 15'-20'

Magnolia stellata – Star Magnolia (tree form) 10'-20'

Malus cultivars – crabapple (disease resistance emphasized) all under 22' Adams, Amsalzam, Centurion, Donald Wyman, Harvest Gold, Prairifire, Professor Sprenger, Red Jewel, Robinson, Sentinel, Sugar Tyme, Strawberry Parfait (always specify tree form for crabapple selection)

Malus floribunda – Japanese flowering crabapple under 25'

Malus sieboldii x zumi 'Calocarpa' – Zumi crabapple under 25'

Malus 'Spring Snow' tree form – Spring Snow Crabapple 15-20' (fruit makes Malus undesireable in commercial areas)

Group B (use only under wires 25' and higher)

Group B applies only to utility plantings where the bottom wire is over 25' above ground. Where possible, offset trees so they are not directly under the wires.

Acer buergeranum – Trident Maple (tree form) 20-30'

Acer campestre – Hedge maple (tree form) 25'-40'

Acer campestre 'Evelyn' – Queen Elizabeth hedge maple 30'-40'

Acer griseum – Paperbark Maple 25'-35'

Amelanchier laevis 'Cumulus' or "Majestic' – Apple Serviceberry 20'-30'

Amelanchier x grandiflora – Serviceberry (many cultivars) 20'-30'

Carpinus betulus "Fastigiata' – European Hornbeam (tree form) 30'-40'

Carpinus caroliniana – American Hornbeam (useful in full shade) 20-35'

Cercis canadensis – Eastern Redbud 25'-30'

Cornus kousa – Kousa Dogwood (esp. Rutgers hybrids) 20'-30'

Koelreuteria paniculata - Goldenrain Tree 25'–40'

Magnolia 'Galaxy' – Galaxy Magnolia (tree form) 20'-30'

Phellodendron amurense – Amur Corktree 30'-40'

Prunus sargentii – 'Columnar' – Sargent cherry 30'

Prunus serrulata 'Amanogawa', 'Kwanzan' – Japanese flowering cherry 25'-35'

Prunus virginiana 'Shubert' – Shubert Chokecherry 20'-30'

Sorbus species – Mountain Ash 15'-35' (in limited quantities)

Syringa reticulata 'Summer Snow', 'Ivory Silk' – Japanese Tree lilac 20'-25'

Trees planted on city property shall be:

- 2" caliper (minimum) measured 6" above the root ball;
- set rootball level slightly above soil grade (1-2"), finished soil grade being 2" below top of sidewalk (see Tree Planting Detail).
- mulched with 2" of shredded wood mulch for weed control;
- stake trees just below the first branch with 1"-3" wide polypropylene straps (2 per tree on opposite sides of tree, connecting from tree to stake horizontally). DO NOT use rope or wire through a hose. ArborTie is an acceptable product.
- Remove all staking materials after one (1) year, or as otherwise directed by the City Forester.
- Planting beds shall measure a minimum of 3' X 10' in order to assure space for the root zone. Where box style planting beds currently exist, the space shall be enlarged to the above dimensions. The rectilinear shape may be substituted with Forestry approval, but a minimum of 30 sq. ft. of root zone must still be observed. Trees require ample root space for optimum growth and longevity, so planting beds larger than the minimum are welcome and desirable where there is still sufficient space for pedestrian traffic.

Prepared by Forestry Division
City of Pittsburgh
412-665-3625

Salt Tolerant Plant List

The following list contains plant species that are highly tolerant of salt. Select species with final growth size in mind. Some species below need a larger root zone to thrive. Consider this list when planting adjacent to roadways.

Shade trees

Aesculus hippocastanum - Horsechestnut

Amelanchier canadensis - Serviceberry

Betula lenta - Cherry birch

Crataegus crusgalli var. inermis - Cockspur hawthorn

Ginkgo biloba - Maidenhair

Gleditsia triacanthos var. inermis - Honeylocust

Gymnocladus dioica - Kentucky coffeetree

Hamamelis spp. - Witchhazel

Juniperus virginiana - Eastern redcedar

Magnolia spp. - Magnolia

Nyssa sylvatica - Black gum

Quercus alba - White oak

Quercus rubra - Red oak

Sophora japonica - Japanese pagodatree

Taxodium distichum - Baldcypress

Shrubs/groundcovers

Arctostaphylos uva-ursi - Bearberry

Aronia spp. - Chokeberry

Caragana arborescens - Siberian pea shrub

Cornus racemosa - Gray dogwood

Cotoneaster divaricatus - Spreading cotoneaster

Cotoneaster horizontalis - Rock cotoneaster

Cytisus scoparius - Scotch broom

Hibiscus syriacus - Rose-of-Sharon

Hydrangea spp. - Hydrangea

Hypericum spp. - St. Johnswort

Philadelphus spp. - Mockorange

Potentilla fruiticosa - Potentilla

Ribes alpinum - Alpine currant

Rosa rugosa - Saltspray rose

Rhus spp. - Sumac

Syringa spp. - Lilacs

Vaccinium spp. - Blueberry/cranberry

Perennials

Armeria maritima - Sea thrift

Calamagrostis acutiflora - 'Karl Foerster' reed grass

Dianthus gratianopolitanus - Cheddar pink

Festuca glauca - 'Elijah Blue' Blue Fescue Grass

Helleborus orientalis - Lenten rose

Hemerocallis spp. - Daylily

Iberis sempervirens - Candytuft

Limonium latifolium - Sea lavender

Liriope spicata - Lilyturf

Pennisetum alopecuroides - Fountain grass

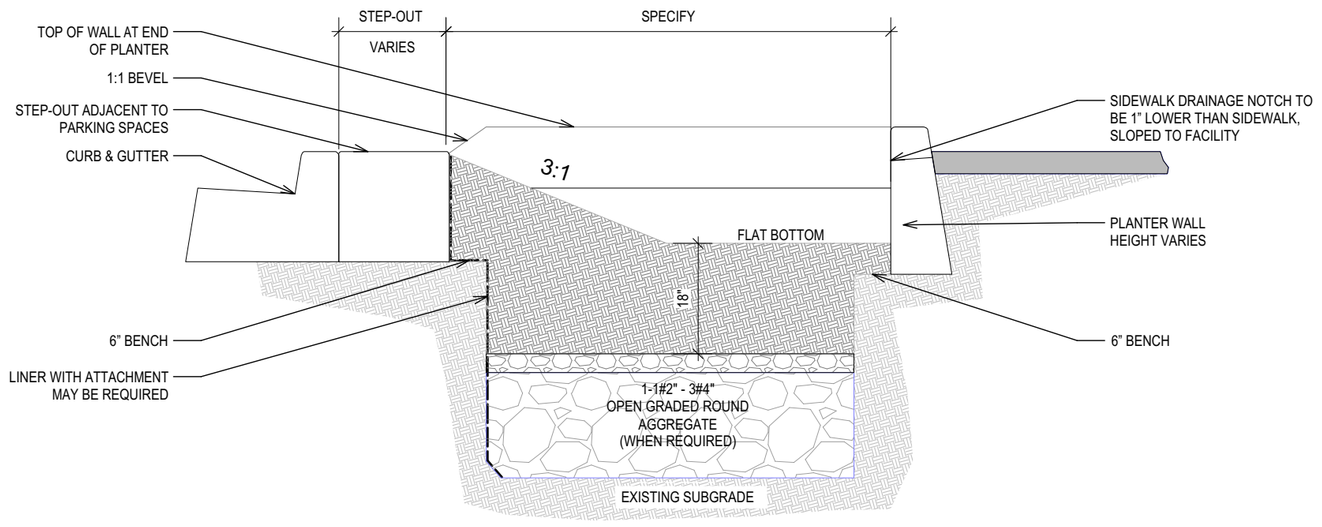
Sedum spectabile- Sedum 'Autumn Joy'

Schizachyrium scoparium - Little bluestem

Waldsteinia fragarioides - Barren strawberry

Yucca filamentosa - Adam's-needle Yucca

Stormwater Planter Detail



DESIGNER INFORMATION

1. SHOW LINER AND PERF-PIPE IN THE SECTION VIEW IF THEY ARE REQUIRED.

2. MAXIMIZE 9" OF SURFACE STORAGE.

3. MINIMUN FACILITY WIDTH IS 30" FROM BACK OF CURB TO FACE OF PLANTER WALL.

4. TOP OF CURB AND TOP OF SIDEWALK AT APPROXIMATELY SAME ELEVATION, UNLESS STORMWATER FACILITY RETROFIT.

CONSTRUCTION NOTE

IN FACILITIES THAT ARE UNLINED, FRACTURE AND LOOSEN SOIL TO A DEPTH OF 12" BELOW GRADE BEFORE INSTALLING BLENDED SOIL OR AGGREGATE. DO NOT TILL.

PLANTER WALL DESIGNER INFORMATION

1.SPECIAL DESIGN CONSIDERATIONS OR STRUCTURAL REVIEW MAY BE REQUIRED FOR LONGER PLANTER WALL SPANS. STEEL REINFORCEMENT OR ADDITIONAL CONCRETE CHECK DAMS MAY BE NEEDED FOR STABILITY

2. SPECIFY ONE OF THE ABOVE PLANTER WALL OPTIONS BASED ON SITE CONDITIONS.

3. MAINTAIN 1:6 BATTER FOR WALLS AND 4" MINIMUM FROM TOP OF WALL TO TOP OF SIDEWALK.

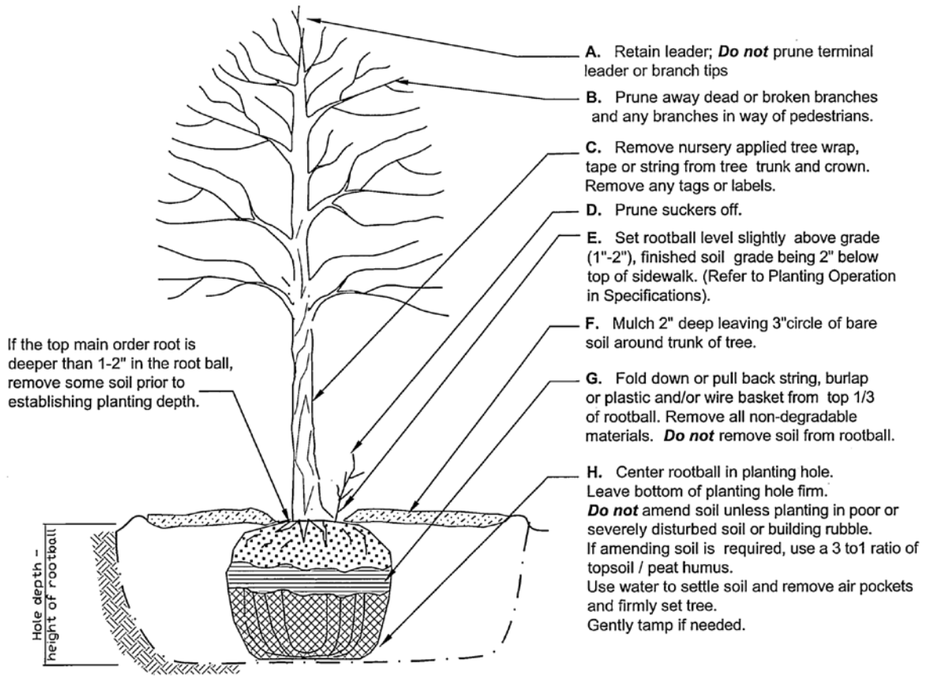
Detail adapted from the City of Portland's Green Streets Manual. For additional details, please visit:

www.portlandoregon.gov/bes/64040

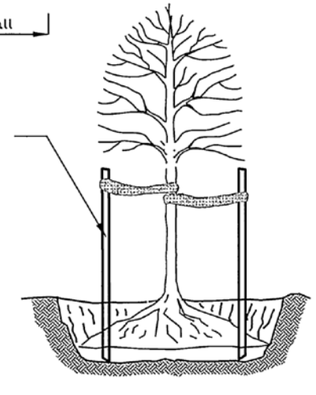
DRAFT

Appendix

City of Pittsburgh Tree Planting Detail



I. Stake with two (2) 8' long wood "Tee" posts or approved equal driven 6"-8" outside of rootball. Loosely stake tree trunk to allow for trunk flexing. Stake trees just below first branch with 1"-3" wide polypropylene straps (2 per tree on opposite sides of tree, connect from tree to stake horizontally. *Do not* use rope or wire through a hose.) ArborTie is an acceptable product. Remove all staking materials after one (1) year, or as otherwise directed by City Forester.



Wall Mounted Green Screens/ Planting Lattice

In tight urban streetscapes where planting space is limited, wall-mounted trellis panels can transform walls into soft-textured, vine covered, seasonally changing surfaces. The panel or cable elements are typically modular, easy to install and cost-effective. Below and to the right are some examples of wall mounted systems seen in cities around the US along with manufacturer contact information.

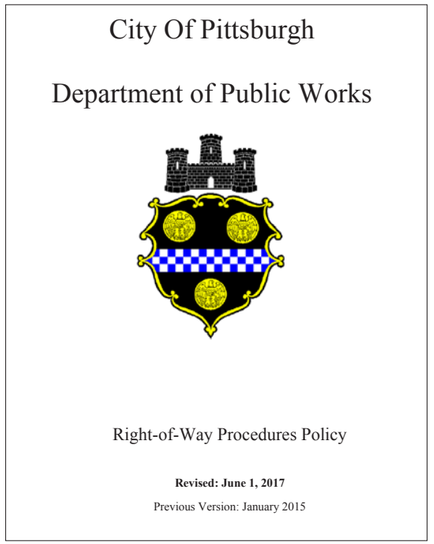
greenscreen®
(p) 800.450.3494 (e) sales@greenscreen.com
www.greenscreen.com

Jakob Inc
casa2665 NW 1st Ave, Boca Raton, FL 33431
(p) 866.215.1421 (e) info@jakob-usa.com
www.jakob-usa.com/green-walls/

Site Furniture: City of Pittsburgh Right-of-Way Procedures

Within Walnut Street's right-of-way, the City of Pittsburgh's policy document revised June 1, 2017, provides details and specifications regarding the installation of paving, typical site furniture, ADA ramps and more.

If non City standard site furniture is selected, a waiver and/ or adoption of the site elements may be required.



City Of Pittsburgh

Department of Public Works

Right-of-Way Procedures Policy

Revised: June 1, 2017

Previous Version: January 2015

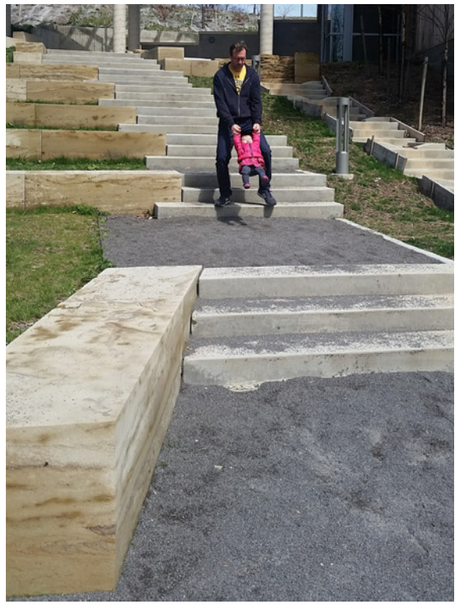
Site Furniture: Stone Plinths

Introducing stone into a streetscape palette provides a durable, tactile material that enlivens the public realm. Stone plinths sourced from local quarries may provide non-traditional seating adjacent to planting areas.

Designers should also consider reusing stockpiled bridge stones as seating plinths, depending on the availability of larger pieces.

By using locally-sourced material, the carbon footprint of a streetscape project's implementation is greatly reduced.

PLACEHOLDER
bridgestone at eastside?



Smooth-sawn sandstone plinths define Frick Environmental Center's Amphitheater

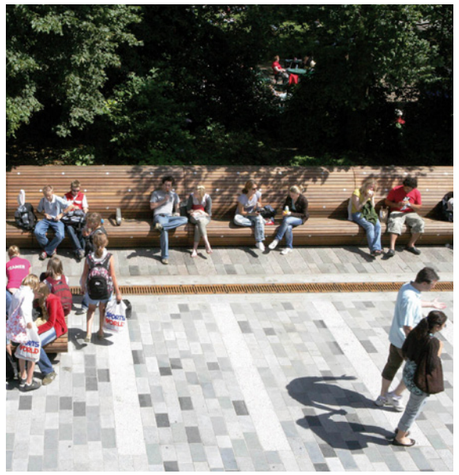
Sandstone plinths edge East Liberty Transit Center's planting beds and provide additional seating

Site Furniture: Decorative Pavers

Decorative pavers introduced into portions of a streetscape help to define pedestrian spaces, break up large fields of paving by providing texture and color changes, slow traffic when placed in intersections, and provide fundraising opportunities by allowing engraved units.

Designers should select pavers that are durable, fade-proof and sturdy enough to withstand emergency vehicle traffic is within the public realm.

Unilock's Artline pavers installed at Snowdon Square Park in Brownsville PA. Pavers can support emergency vehicle traffic and are fade-proof.



Pavers on a shared street in New Brighton

DRAFT

Stakeholder Meeting 1

Project: **Craig Street Public Realm Study**
Regarding: Stakeholder Meeting 1
Date: February 28, 2017 9:00 am
Location: CMU- 417 Forbes-Craig Building

1. Introductions and presentation by SfSP discussing project overview, process, time line, existing conditions along Highland Ave, and explanation of break-out activities

2. BREAK OUT ACTIVITY, report out:
   - PEDESTRIAN EXPERIENCE:

     Is there a need for a larger sidewalk where restaurants are concentrated? Can cafe tables flip to street side?

     Consider ADA accessibility and compliance in all upgrades. Currently it is hard to navigate around broken sidewalks, sandwich boards and other street furniture.

     Need consistent ADA ramps at crossings

     Sidewalks popping because of tree roots. Need to allow more space for greening and to fix paving.

     Can we bury overhead wires to clean up pedestrian realm? Others not in favor of burying the lines because it may be too costly on the front end and result in complicated maintenance.

     Refer to Bell Street in Seattle as a precedent for Craig Street pedestrian realm.

     Encourage business owners to replace and upgrade water and sewer and other utility lines during this project while the sidewalks are being redone. Keep the sidewalks basic to allow for easier ongoing maintenance of underground lines. Do not use brick pavers which require maintenance.

     Create a few bump-out parklets or bump-out sidewalk cafés, even if it takes up a parking space.

     Desire for greater uniformity of sidewalks, trees, even width of sidewalk, and a plan going forward with standards to conform to the sidewalk.

     Block near Forbes very congested
   - GREENING:

     Tree roots pop sidewalk. Overhead wires force extreme trimming of trees. Pick tree species that do not conflict with overhead lines.

     Low level plantings currently maintained by business owners.

     Increase street tree and low level planting along blocks between Winthrop Street and Fifth Avenue.
   - IDENTITY & LIGHTING:

     More consistent identity along Craig Street (better paving, greening, etc)
   - MOBILITY:

     Parking rates on-street are higher than in other comparable locations.

     Can a bike share be located across Forbes by the museum? Need more bike parking along Craig St

     Proposed infrastructure improvements along Forbes Avenue would eliminate loading zone in front of the Jewish University Center which has only Forbes Avenue loading access. Need to reconcile loading zone/ bike lane conflict.

     Concern that curb bumpouts at intersections may interfere with loading zones

     Explore moving loading zones to side streets.

     Establish designated loading zone hours (7 - 9 am and 4 - 6 pm) so that at off hours, loading zone is a parking space.

     Add ride share stops along Craig Street

     Provide cobble stone or brick crosswalks to slow cars down. Explore tabling cross walks to make crossing easier for pedestrians. Are inlaid lights in surface crossings effective? Need to figure out a strategy to slow down traffic, make it safer for pedestrians to cross the street

     Unofficial loading occurs along Filmore St. Can we designate a loading zone here?

     Transportation Demand Management (considering all modes of transportation) is slated to become part of development review.

     Provide upgraded intersections striping for pedestrian crossings.

     Do not make Craig Street one-way to increase sidewalks.

     Can CMU provide additional parking in future development to offset parking demand on Craig?

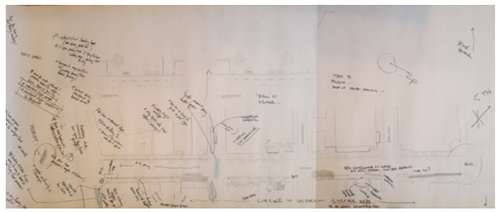
     Contact Carnegie Museum about possibility of sharing parking spaces at off hours.

     Locate regions specific studies on the future of urban mobility for review prior to making recommendations for Craig Street
   - EVENTS:

     No events requiring street closings discussed.

3. NEXT STEPS: Meeting minutes to be distributed. Create design options to be presented at 2nd stakeholder meeting in April. Meet with Public Works to review design options.

Minutes prepared by SfSP



Existing Conditions Board 1 from first Stakeholder meeting

Stakeholder Meeting 2

Project: **Craig Street Public Realm Study**
Regarding: Stakeholder Meeting 2
Date: April 18, 2017 9:00 am
Location: CMU- 417 Forbes-Craig Building

1. Pre-meeting : Stakeholders were asked to review streetscape precedent images and put stickers next to examples they reacted positively to.

2. Introductions and presentation by SfSP discussing project overview, precedent images, and potential elements.

3. REMARKS ABOUT POTENTIAL ELEMENTS PROPOSALS :

   BUMP-OUTS :

   - Bump-outs are not necessary, not a good idea. There is no need for pedestrian improvements. They interfer with trucks and delivery.
   - They are good as long as they do not interfer with width of bus traffic.
   - Good to be done in moderation. Ex: Forbes in Oakland. Bumpouts were created because of large gathering of pedestrians that spilled over the sidewalk. Created breathing room.
   - They can discourage illegal parking which is good

   PARKLETS :

   - By taking away a parking space and allowing a specific store owner to use it, it only benefits one at the detriment of all.
   - Trees need to be maintained.

   PAVING :

   - Selections need to be suitable for all season. Freeze & thaw is bad for certain paving.

4. REMARKS ABOUT SCENARIOS PROPOSALS :

   FORBES :

   - Busses and tractor trailers will not be able to make that turning radius.

   FILMORE :

   - Should be made more attractive.
   - Does not need pedestrian improvements. There is not that much traffic.
   - Loading needs to be maintained.
   - Filmore is the "Crossroads" of Craig St.
   - Can drivers see pedestrians at this interesection? Seems less visibility than other intersections.
   - What are the traffic crashes at this intersection?

   WINTHORP:

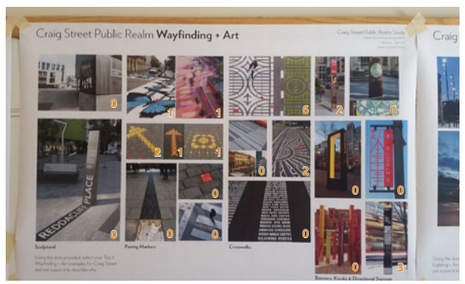
   - The bus stop bump-out at WINTHROP would require 2 parking spaces.

5. NEXT STEPS: Meeting minutes to be distributed. Create "menu" of design elements.

Minutes prepared by SfSP

Greening + Art Board
w/ stickers on favorable selections

Street Furniture + Art Board
w/ stickers on favorable selections



Wayfinding + Art Board
w/ stickers on favorable selections

Lighting + Art Board
w/ stickers on favorable selections

DRAFT

Stakeholder Meeting 3

Project: **Craig Street Public Realm Study**
Regarding: Stakeholder Meeting 3
Date: June 15, 2017 9:00 am
Location: CMU- 417 Forbes-Craig Building

1. Introductions and presentation by SfSP discussing project overview, precedent images, strategies, and elements.

2. Following the presentation, the stakeholders provided the following comments:

BRT BUS SHELTERS

- Reach out to the Port Authority to coordinate bus shelters with different identity for each district it passes through. The bus shelter could tell patrons that one has entered a museum district or business district.
- CMU's Reppe mentioned the upcoming public meeting for the Forbes Betterment Project to be held on July 17th as another way to voice opinions.

INFORMATION / WAYFINDING KIOSKS

- Incorporate information about the business district into a bus shelter in front of the Carnegie Museum on Forbes and Craig.
- Utilize the existing LAMAR kiosk at Craig and Fifth, currently used for advertising only. OBID suggested calling LAMAR and sending a map for them to print and place in the kiosk.

CROSSWALKS

- Push PennDOT to allow for a more colorful crosswalk stencil through the district, especially on Forbes and Fifth. Another member stated that PennDOT has approved piano crosswalks, and that anything more intricate or "artistic" might further delay the Forbes Betterment Project.
- Create an app to alert pedestrians when crosswalks are approaching. Many pedestrians are looking at their smart phones when walking, not aware of approaching traffic

300 CRAIG / CMU PLAZA

- There is currently no dedicated public WiFi available. Would someone pay for WIFI?
- Consider the grade change in this plaza when designing. SfSP stated that the planting area with its stone block walls would help to mitigate grade.

BUMPOUTS

- Do not let plantings in bumpouts grow too large and block views of pedestrians. Maintain driver's sight line to see pedestrians.
- Bumpouts at bus stops might cause more congestion. A traffic study would probably need to be conducted to at these bump-out intersections with bus stops to understand the ramifications.
- Consider the bus turning radius from Craig to Forbes inbound with the introduction of bumpouts at this intersection.

FORBES INTERSECTION

- General support for maintaining the pedestrian all walk signal. Some noted it as tradition. Others noted it as complementary to proposed left-turn signals being introduced.

PARKING

- One member expressed concern over any loss of parking for new planting. If there is a way to introduce new planting in the current paving area, that would be more desirable than losing a parking space.

TREES

- One member expressed concerns that a hedge row of trees might block signage and obscure storefronts, which is undesirable.
- OBID stated that studies have shown that tree-lined trees help attract pedestrians and improve sales.
- Q: Can the City's tree pit standards could fit on Craig St? A: SfSP stated that creative solutions would be needed to increase the amount of tree pit space required. Bridging concrete was suggested as well as tree pits with decorative grates similar to the newly installed grated on Penn Ave in Garfield.

SIGNAGE

- Consider projecting store signage- blade signs- to alleviate the conflict with signage and street trees. Signs perpendicular to the building front could be at corners to list stores by block or for each individual establishment.

PARKLETS

- OBID stated that in cities where parklets have been implemented, sales increased. This effort could be seen in a soon-to-be implemented parklet in central Oakland on Meyran Ave.
- General support for the parklet program especially if liability was provided by the financing entity.

3. Following the presentation, the stakeholders provided some final comments:
    - Improving on currently underutilized space and plazas on Craig is a good idea, and could be done first.
    - Q. Is there any public art included in this plan? A. Intersection and crosswalk treatments are public art potential projects as well as areas at the bumpouts on Winthrop and Filmore.
    - Q: Will be any treatment of the intersection at Henry St.? A: SfSP stated that because of the traffic lane shift in the next block, bumpouts might not be recommended on the Fifth Avenue side of the street but might be possible on the Forbes Avenue side of Henry.
    - Funding sources for green infrastructure should be pursued.
    - Q: (OBID) Will there be access to a DRAFT of the report prior to the final for review? A: SfSP will provide OBID and CMU draft copies for review by their boards prior to completion of the project.
4. NEXT STEPS: SfSP will create a report with recommendations grouped into distinct projects. Funding for different elements can be pursued, depending on grant opportunities, feasibility, and stakeholder support.

Minutes prepared by SfSP