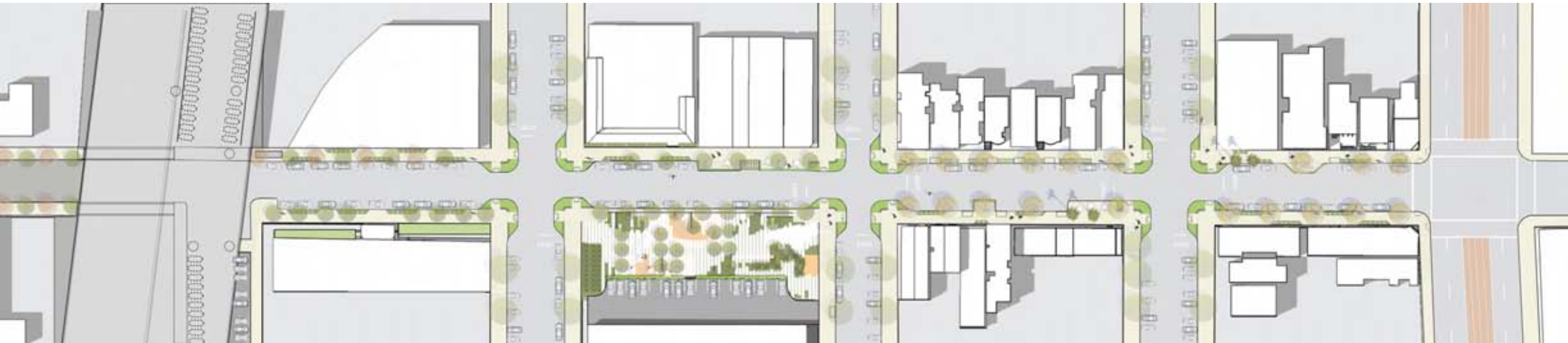


# Dogpatch/22nd Street Greening



# Dogpatch/22nd Street Greening

## TEAM MEMBERS

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GreenTrustSF  
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Design Consultant

Jennifer Serwer



Design Consultant



# Dogpatch/22nd Street Greening

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### Muni Park

Proposed Design for Park  
Perspectives

## GOALS AND OBJECTIVES

### ECOLOGY AND ENVIRONMENT

- Establish a model Green Street using a Kit of Parts of today's best practices.
- Plant Native vegetation and increase landscaped areas
- Improve Water Quality
- Increase Biodiversity
- Decrease water volume
- Recharge Ground Water
- Improve Air Quality
- Utilize Best Management Practices advocated by the San Francisco Public Utilities Commission

### FORM A UNIQUE IDENTITY FOR THE 22ND STREET CORRIDOR

- Elevate 22nd Street as vibrant mixed use corridor to the center of the Dogpatch Neighborhood.
- Enhance public space for Commercial, Residential, and Institutional Users
- Traffic calming
- Improve public safety
- Enhance pedestrian, bicycle and mass transit street use
- Add amenities that promote use
- Increase Property Values
- Upgrade the Muni Park to improve public access

## STRATEGY AND VISION

### CONNECT THE COMMUNITY

- Jump-start the transformation of 22nd Street into a Green Street as envisioned by the Central Waterfront Plan
- Replicate 22nd Street Improvement Tools throughout the Dogpatch Neighborhood
- Connect 22nd Street to the Expanding Green Street Network created by the Eastern Neighborhoods Plan





# Dogpatch/22nd Street Greening

INTRODUCTION - Future Neighborhood Plans

Eastern Neighborhoods Plan



Connections: LIVING STREETS

Connections: LIVING STREETS



# Dogpatch/22nd Street Greening

## INTRODUCTION - Current Local Movements

Flexible Parking



In this approach, car parking spaces are converted to other uses, from cafe seating to greenery. San Francisco is implementing this concept into widespread use. The Great Streets Project will demonstrate the future of what an official “flexible parking space” will look like. We envision these spaces to be built with a secure platform that extends the curb but can be easily removed to provide for parking when necessary.

Pavement to Parks



San Francisco’s streets and public rights-of-way make up fully 25% of the city’s land area, which is greater than the total space comprised in all of the city’s parks. In order to ameliorate this imbalance the city has converted intersections to parks. San Francisco’s new “Pavement to Parks” projects seek to temporarily reclaim these extra swathes by quickly and inexpensively turning them into public plazas and parks. As in the above example, their projects enclose this “extra” space for public use with the help of large scale planters.

Sunday Streets



Sunday Streets occur monthly during the summer when the city temporarily closes some streets to automobile traffic and re-designates them for walking, cycling, skating and playing for a few hours. This creates safe, fun car-free space on city streets that give San Francisco residents and visitors an opportunity to be active without having to compete with vehicular traffic. Sunday Streets events create a stronger sense of community in every neighborhood they touch and throughout the City.



# Dogpatch/22nd Street Greening

## STREET GREENING PRECEDENTS

### Noe Street



Project:  
Noe Street Traffic Calming

Clients: CA Pacific Medical Center  
Location: San Francisco, CA  
Date: 2008  
Size: 4 Blocks

Typologies Used:



Benefits:



Description:

This project aimed to increase pedestrian and bicyclist safety by installing bulb outs, widening the sidewalk in three locations, and adding angled parking on Noe Street between Duboce Avenue and 14th Street. The plan was to be funded by the hospital, and help reduce speeding while also retaining the existing tree islands on each end of the block.

### SW 12th Ave



Project:  
SW 12th Avenue Street Greening

Clients: Portland State University  
Location: Portland, Or  
Date: Summer 2005  
Size: 2 Blocks

Typologies Used:



Benefits:



Description:

This project uses landscaped storm water planters to capture and infiltrate approximately 8,000 square feet of street runoff, while still maintaining strong pedestrian circulation and on-street parking. The project also demonstrates how highly urbanized areas can be designed to provide direct environmental benefits and beautiful.



# Dogpatch/22nd Street Greening

## STREET GREENING PRECEDENTS

### 2nd Ave NW



Project:  
Street Edge Alternatives(SEA)

Clients: Seattle Public Utilities  
Location: Seattle, Wa  
Date: 2001  
Size: 3 Blocks

Typologies Used:



Benefits:



Description:

The street is designed to provide drainage that more closely mimics the natural landscape prior to development than traditional piped systems. To accomplish this, impervious surfaces were reduced to 11% less than a traditional street, provided surface detention in swales, and added over 100 evergreen trees and 1100 shrubs. Two years of monitoring show that SEA Street has reduced the total volume of stormwater leaving the street by 99%.

### Shotwell St.



Project:  
Shotwell Model Sidewalk

Clients: DPW, PUC, PlantSF  
Location: San Francisco, CA  
Date: March 2005  
Size: 1 Blocks

Typologies Used:



Benefits:



Description:

This project was installed by removing significant portions of formerly existing concrete sidewalks, it demonstrates one approach to reducing storm water loads on the city's combined sewer system. Instead of entering the sewer, rain water is now permitted to permeate the exposed soil and nourish plants. Plantings were undertaken during the wet season and no irrigation is provided or required.



# Dogpatch/22nd Street Greening

## STREET GREENING TOOLS



Sidewalk Planting



Crosswalk



Median



Bulbout



Bicycle Lane



Chicane



Sidewalk Lighting



Underpass Lighting



Street Paint



Water Treatment



Sidewalk Bench



Bus Shelter



Bike Rack



Traffic Circle



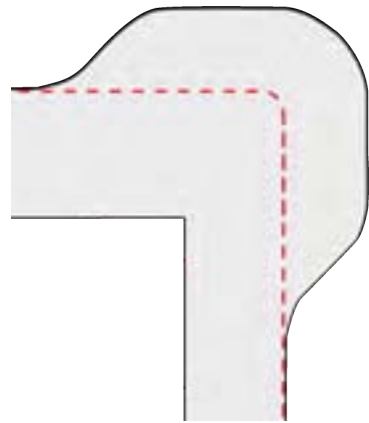
Traffic Table



# Dogpatch/22nd Street Greening

## TOOLKIT

### B Bulb-out



#### Benefits:



- Calms Traffic
- Increases Landscape Space
- Beautifies Neighborhood
- Increases Public Space
- May Recharge Groundwater

#### Approximate Size:

- 290 s.f.

#### Approximate Cost:

- \$80,000 - \$200,000

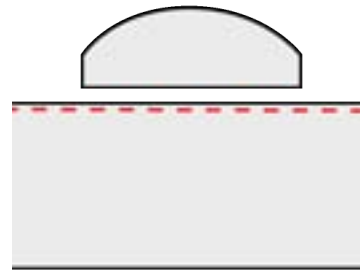
#### Precedent Projects:

- Noe Street, San Francisco

#### Usage:



### C Chicane



#### Benefits:



- Calms Traffic
- Increases Landscape Space
- Beautifies Neighborhood
- Increases Public Space
- May Recharge Groundwater

#### Approximate Size:

- 80 s.f.

#### Approximate Cost:

- \$6,000 - \$14,000

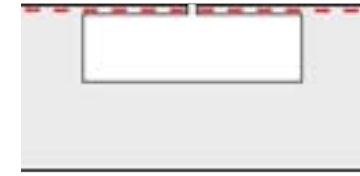
#### Precedent Projects:

- Noe Street, San Francisco

#### Usage:



### I Infiltration Trench



#### Benefits:



- Recharges Groundwater
- Increases Landscape Space
- Beautifies Neighborhood

#### Approximate Size:

- 75 s.f.

#### Approximate Cost:

- \$4,000

#### Precedent Projects:

- Sea Street, Portland

#### Usage:





# Dogpatch/22nd Street Greening

## TOOLKIT

### Planter

Benefits:



- Increases Landscape Space
- Beautifies Neighborhood



Approximate Size:

- 5 - 10 s.f.

Approximate Cost:

- \$500 - \$800

Precedent Projects:

- xxxxxx

Usage:

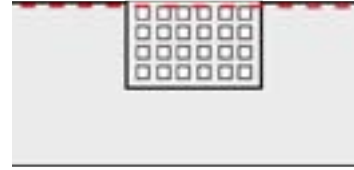


### Permeable Pavement

Benefits:



- Increases Landscape Space
- Beautifies Neighborhood
- May Recharge Groundwater



Approximate Size:

- N.A.

Approximate Cost:

- \$xxx

Precedent Projects:

- Shotwell, San Francisco

Usage:



### Tree Basin

Benefits



- Increases Landscape Space
- Beautifies Neighborhood
- Recharges Groundwater
- Improves Air Quality
- Increases Biodiversity



Approximate Size:

- 20 s.f.

Approximate Cost:

- \$xxx

Precedent Projects:

- Green Street, Portland

Usage:





# Dogpatch/22nd Street Greening

## ANALYSIS - Existing Conditions



Wide Streets



Over Head Power Lines



Cracked Sidewalks



Little to no Street Vegetation



Popular Truck Route



Bird's Eye View



# Dogpatch/22nd Street Greening


Existing Spatial  
Conditions

## ANALYSIS - Existing Conditions



Parking: 59-62 spaces  
Road Space: 54,600 sf  
Public Space: 31,200 sf  
Landscape Area: 620 sf

QA.

-  Parking Spaces
-  Road Space
-  Public Space
-  Landscape Area



Existing Plan



Aerial View



# Dogpatch/22nd Street Greening

## ANALYSIS

### Land Use

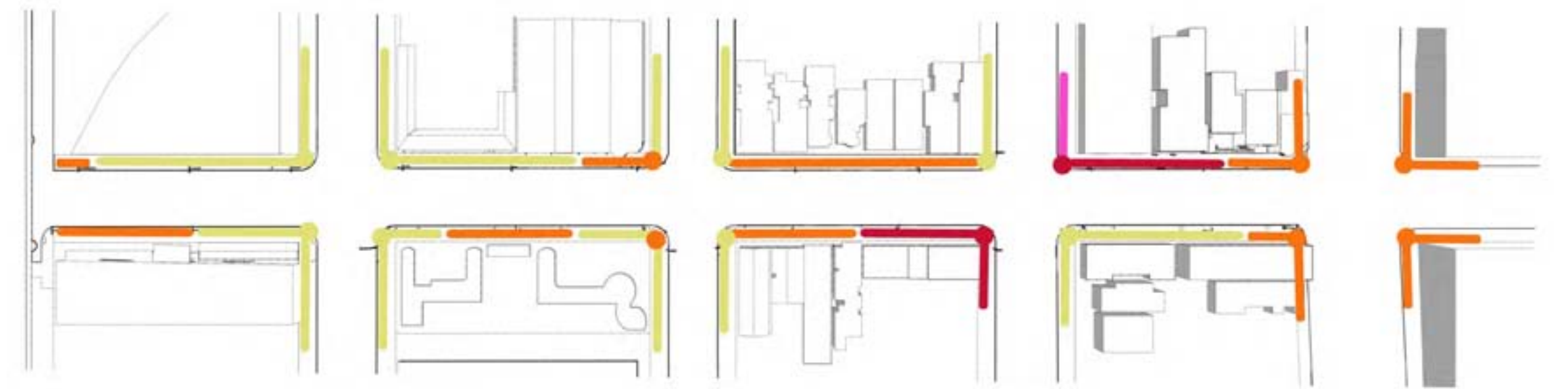
- Industry
  - Commercial
  - Residential
  - Mixed-use
  - Church
  - Open space
- ### Street Level
- Industry
  - Commercial
  - Residential
  - Mixed-use
  - Church
  - Open space



Land Use

### Use Intensity

- High
- Moderate
- Low



Use Intensity

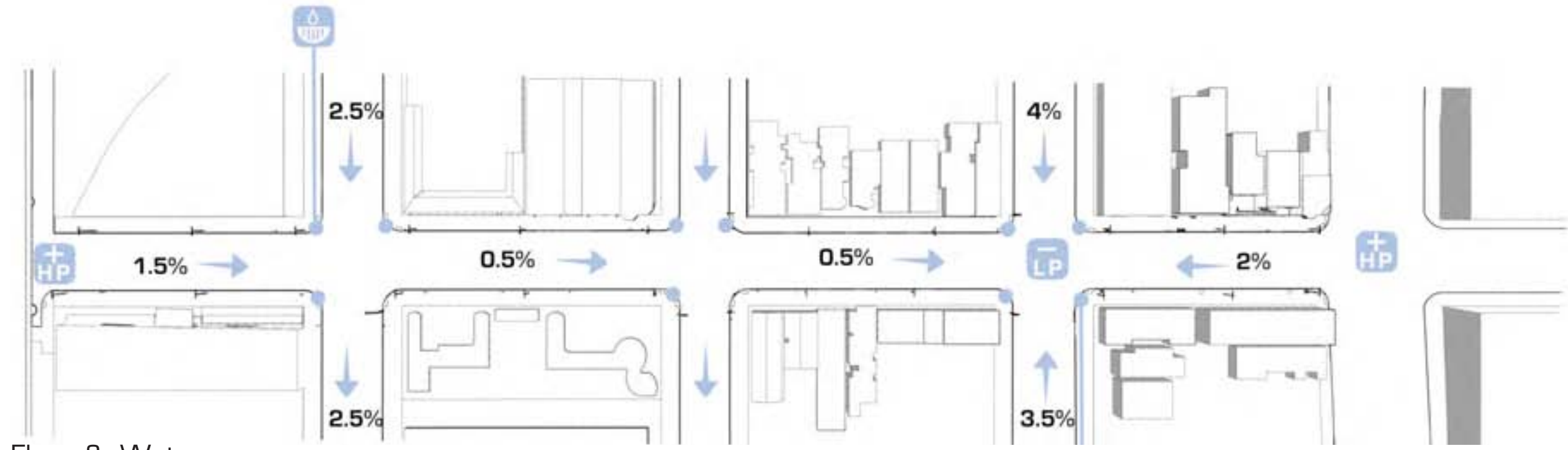


# Dogpatch/22nd Street Greening

## ANALYSIS

### Street Components

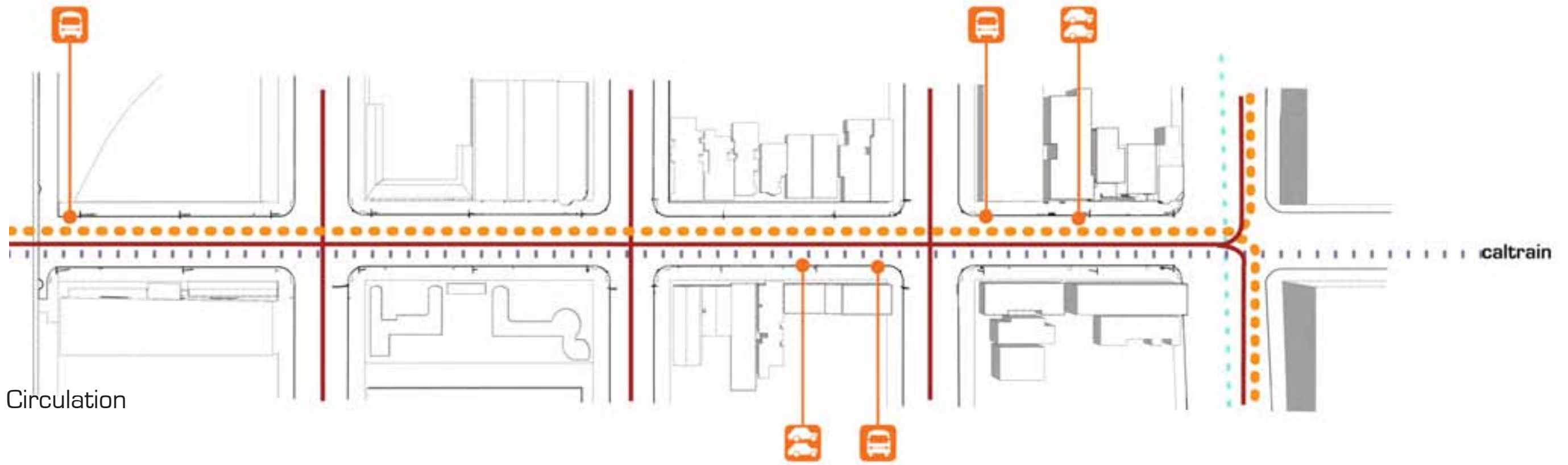
- Water Flow
- Street Drain
- Elevation Low Point
- Elevation High Point



Flow & Water

### Circulation

- Muni
- Vehicular
- Pedestrian
- Bicyclists

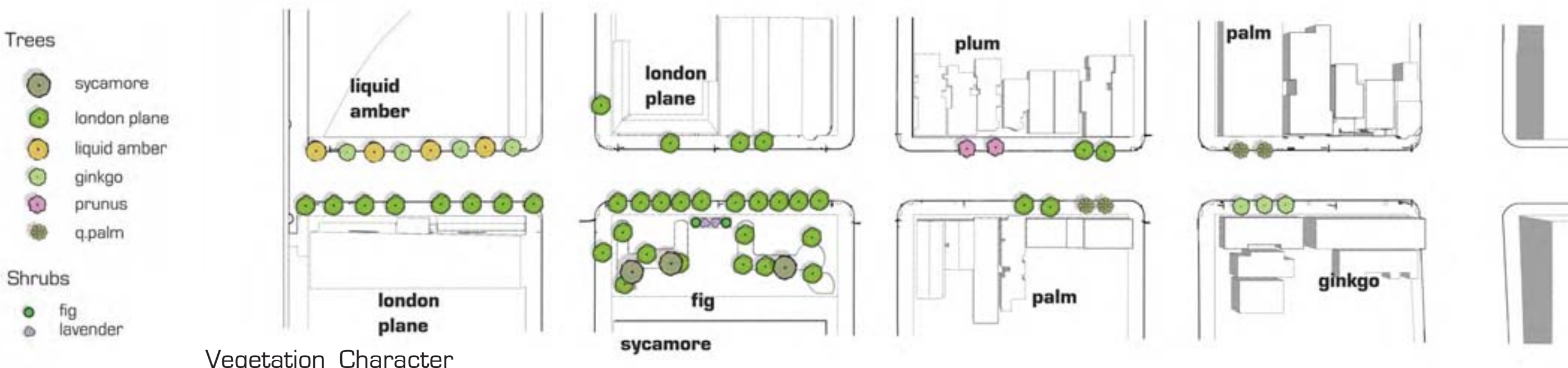
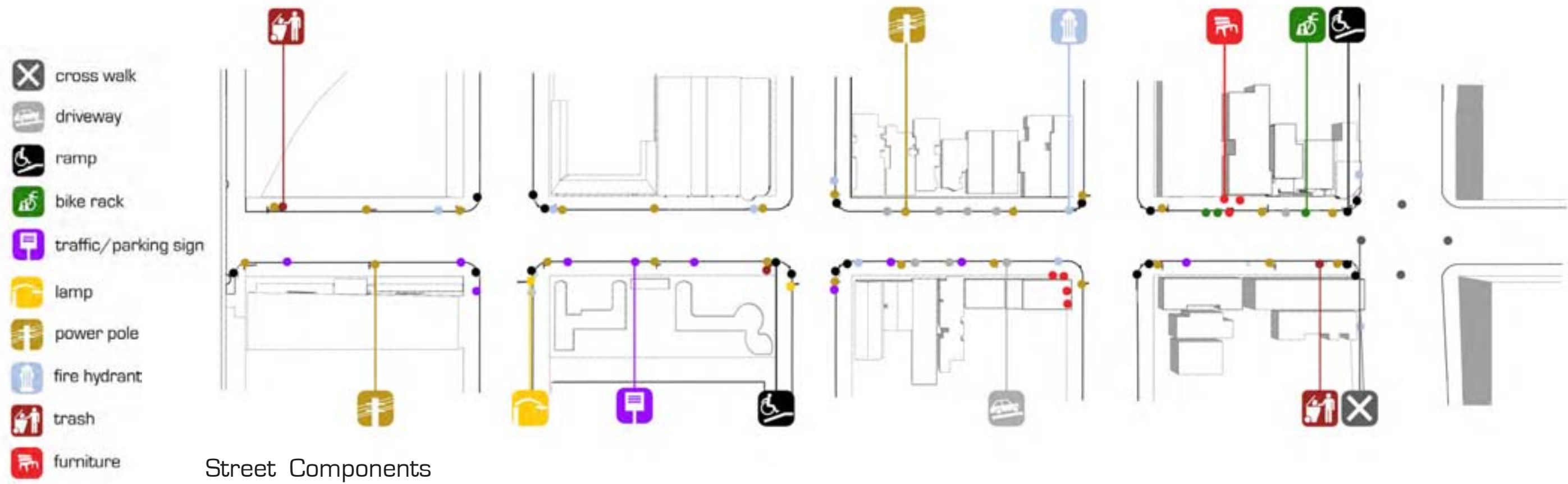


Circulation



# Dogpatch/22nd Street Greening

## ANALYSIS



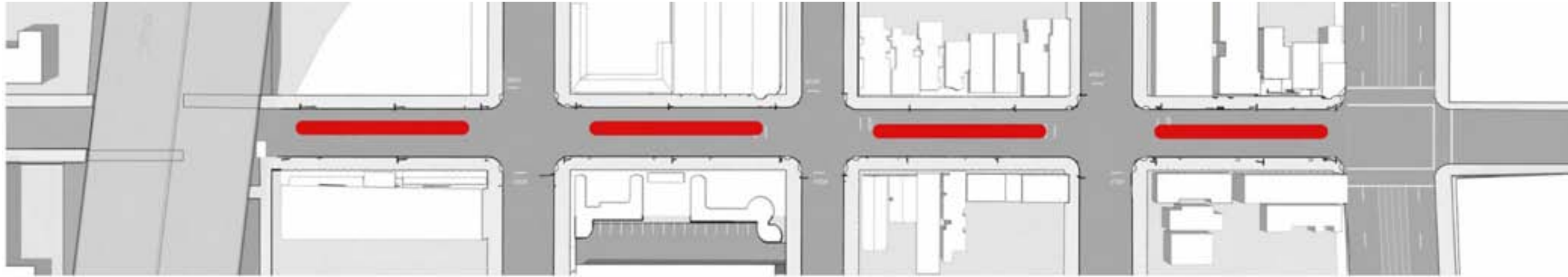


# Dogpatch/22nd Street Greening

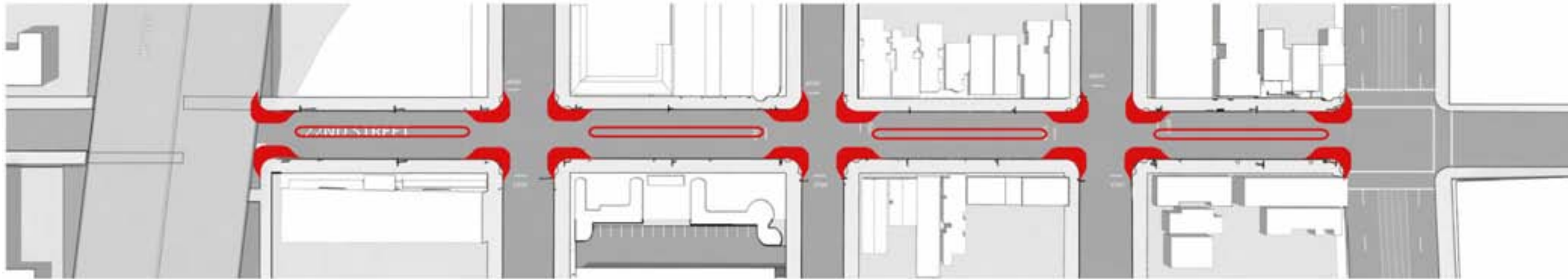
## TYPICAL GREEN STREET PLAN



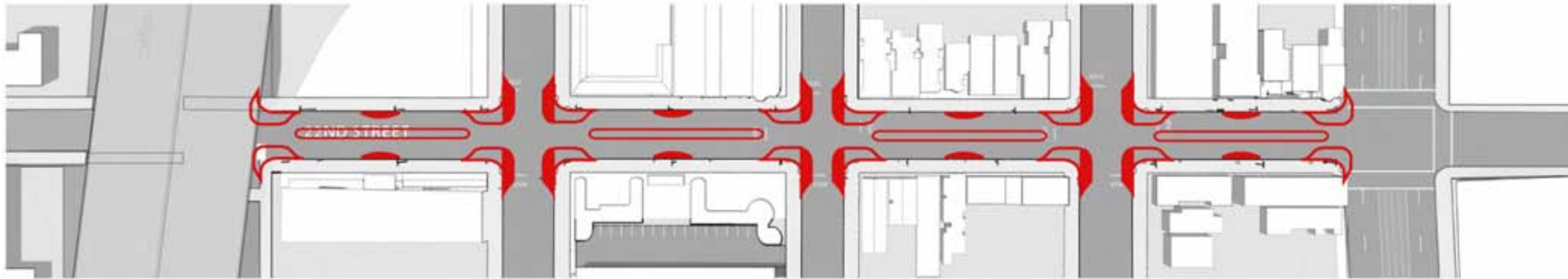
Medians



Bulbouts on  
22nd St.



Chicanes



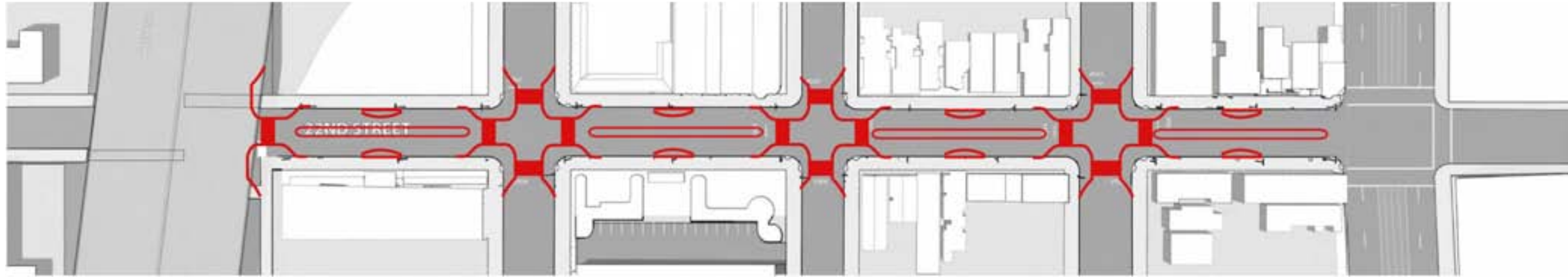


# Dogpatch/22nd Street Greening

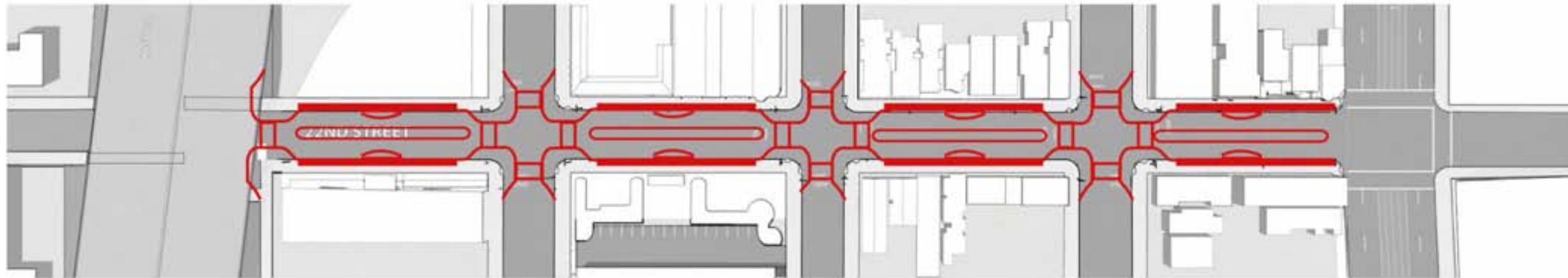
## TYPICAL GREEN STREET PLAN



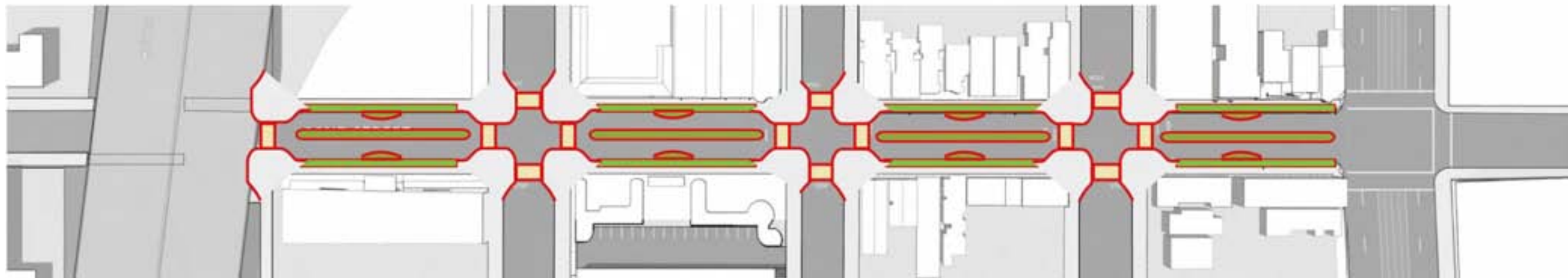
Crosswalks



Street Planting



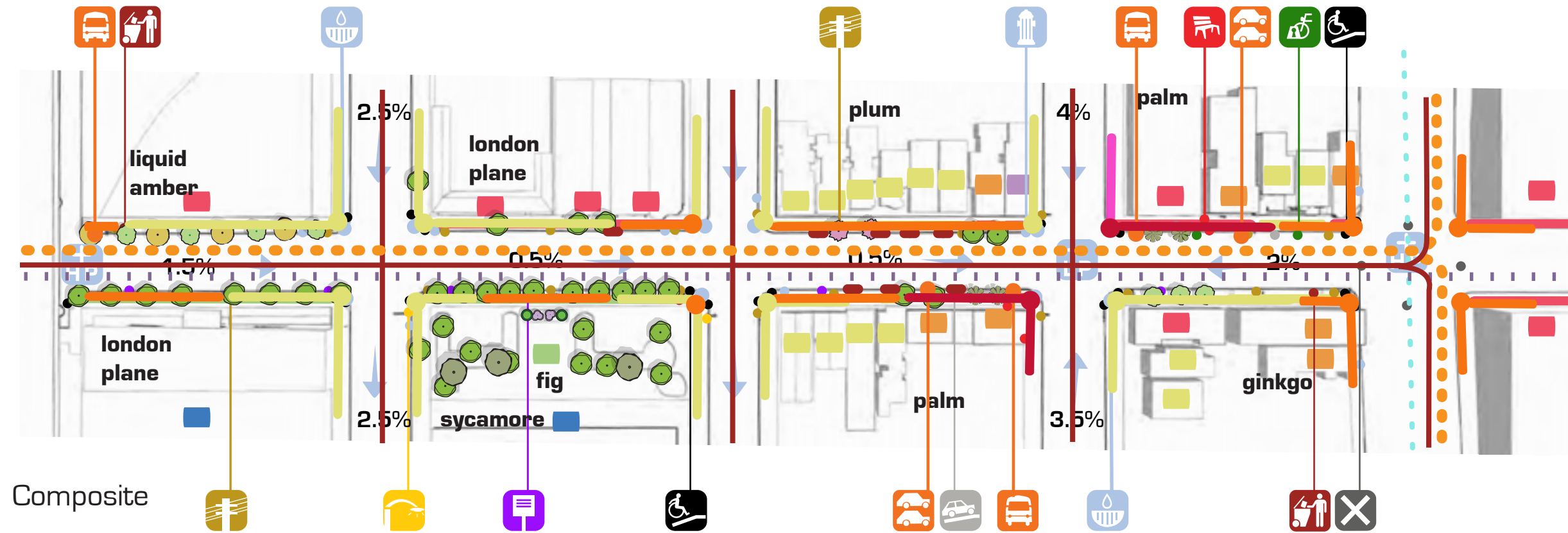
The typical Plan





# Dogpatch/22nd Street Greening

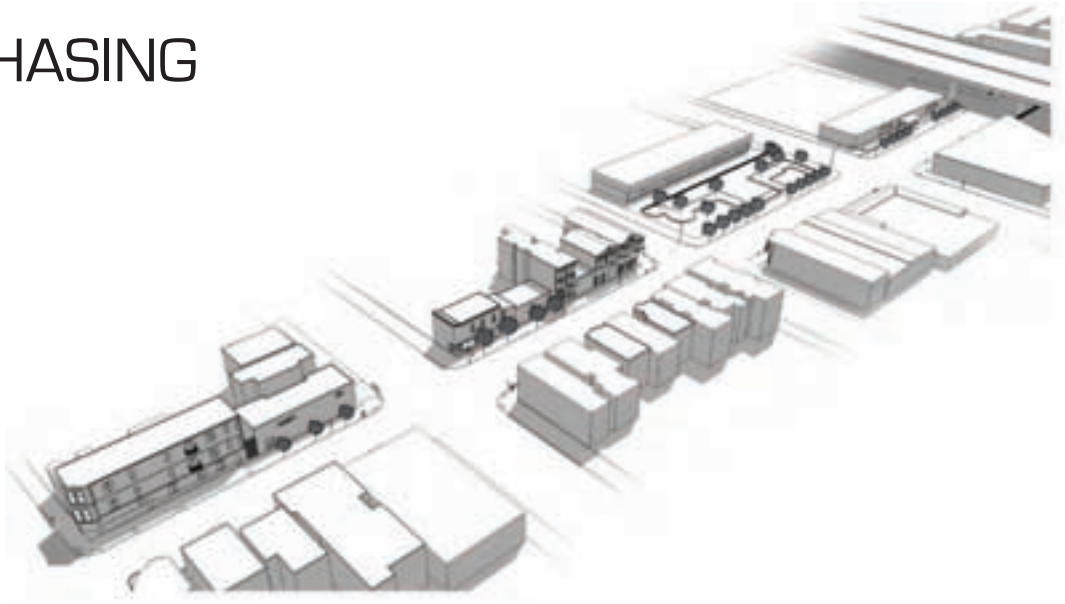
## ANALYSIS



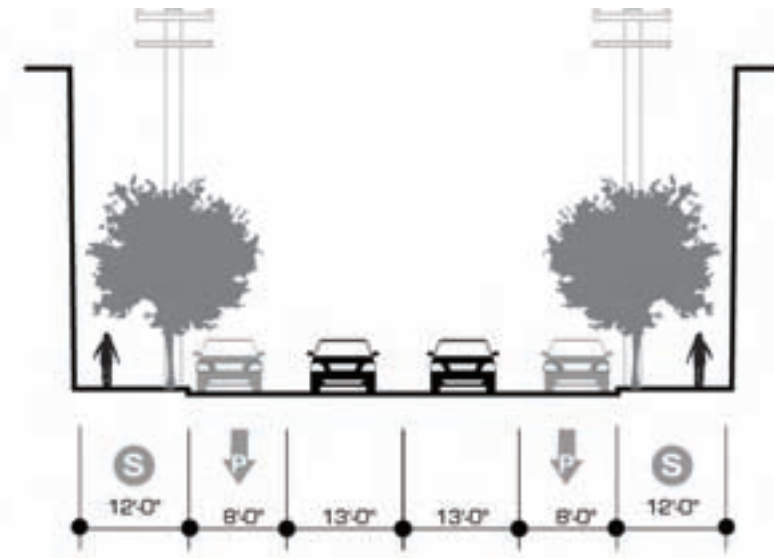
An atypical plan

# Dogpatch/22nd Street Greening

## PHASING

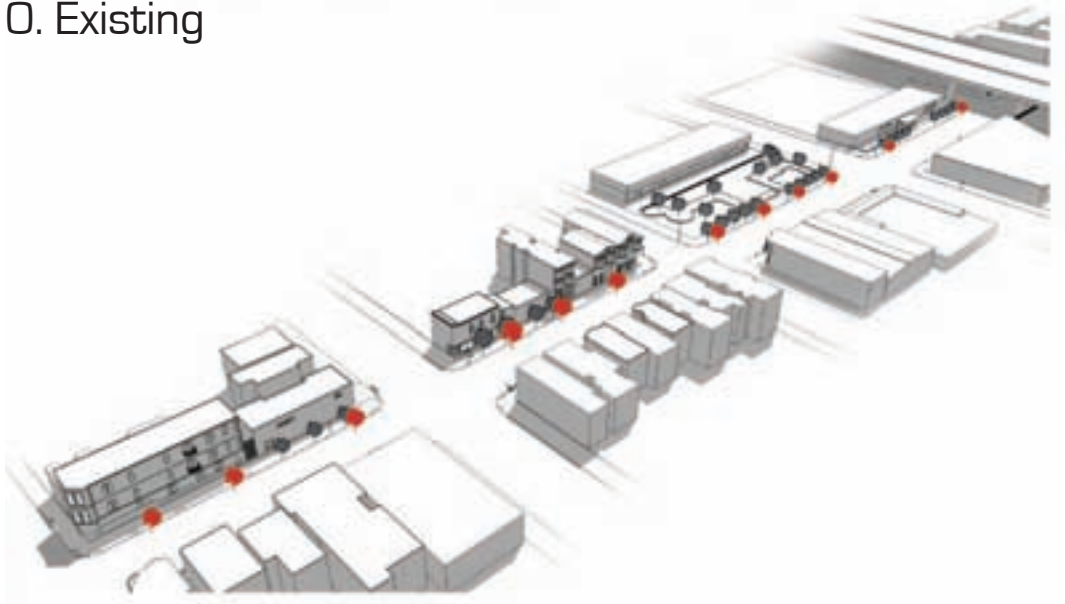


0. Existing

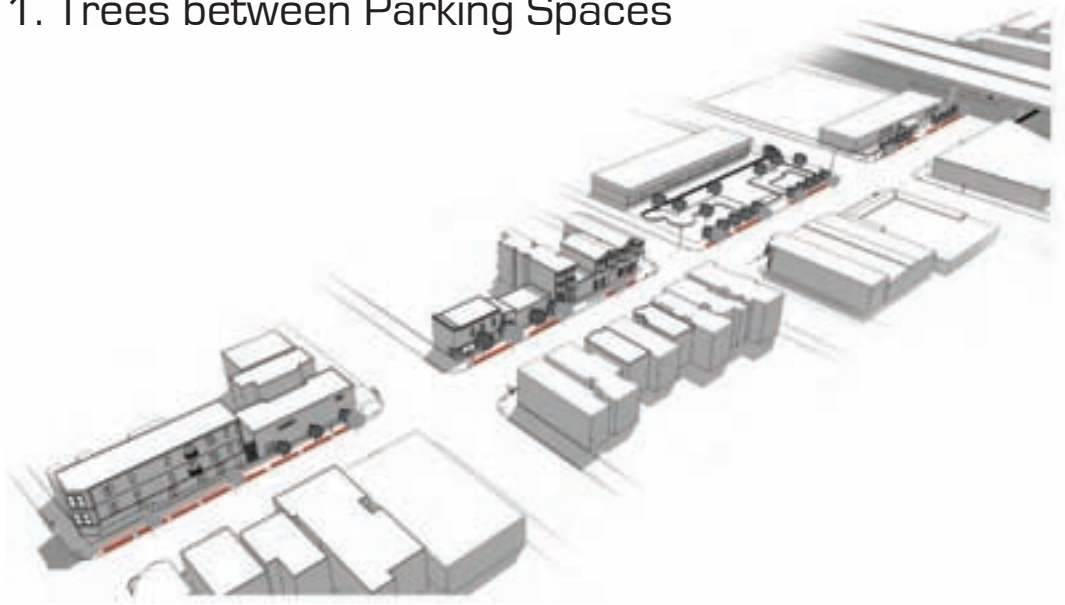
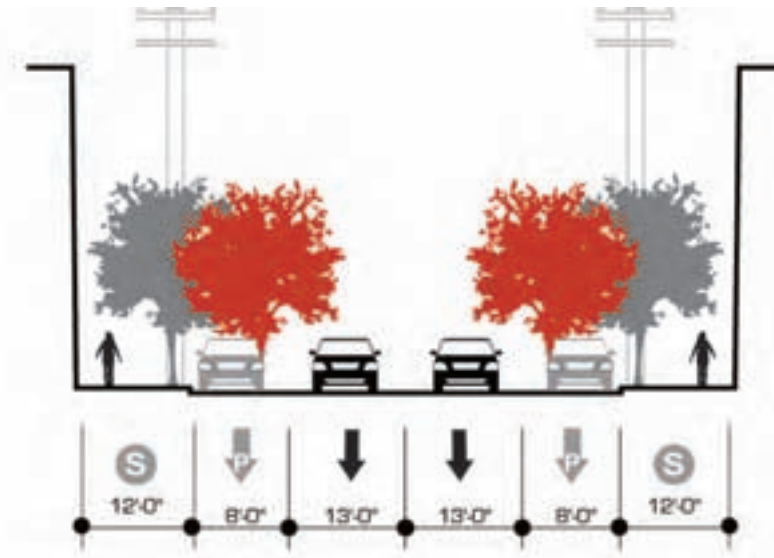


### Legend

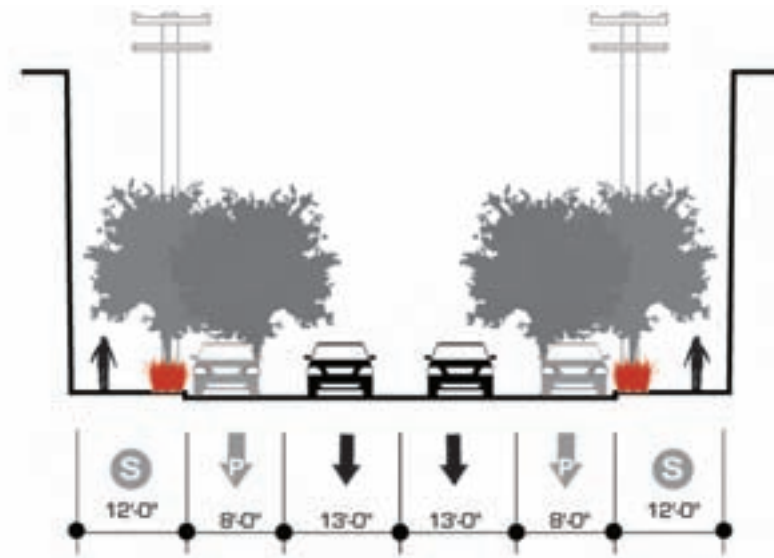
- S Sidewalk
- B Bulb-out
- P Parking Lane
- Driving Lane



1. Trees between Parking Spaces



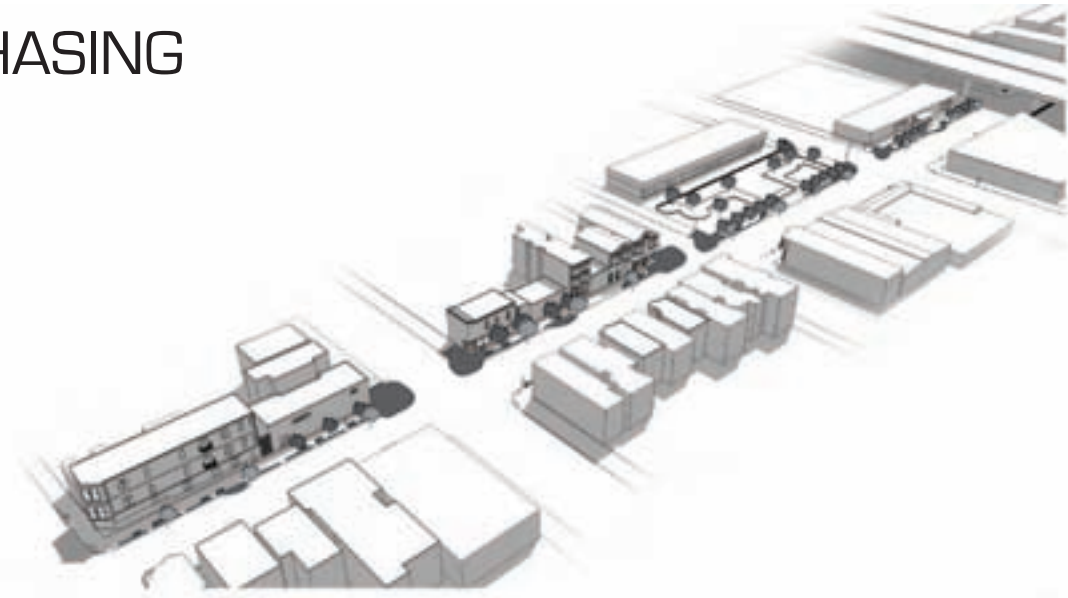
2. Sidewalk Planting



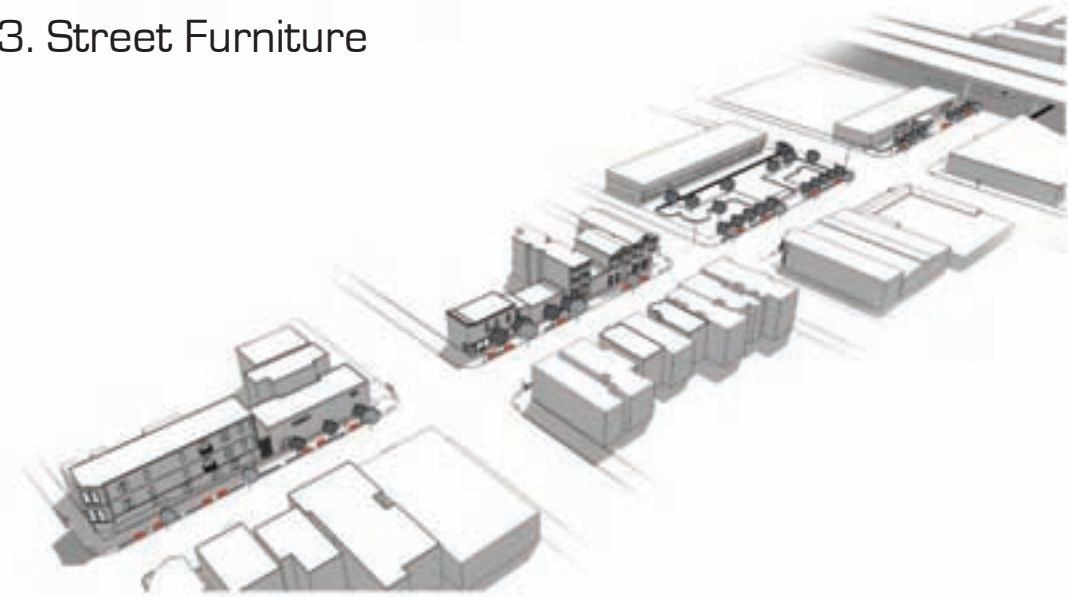


# Dogpatch/22nd Street Greening

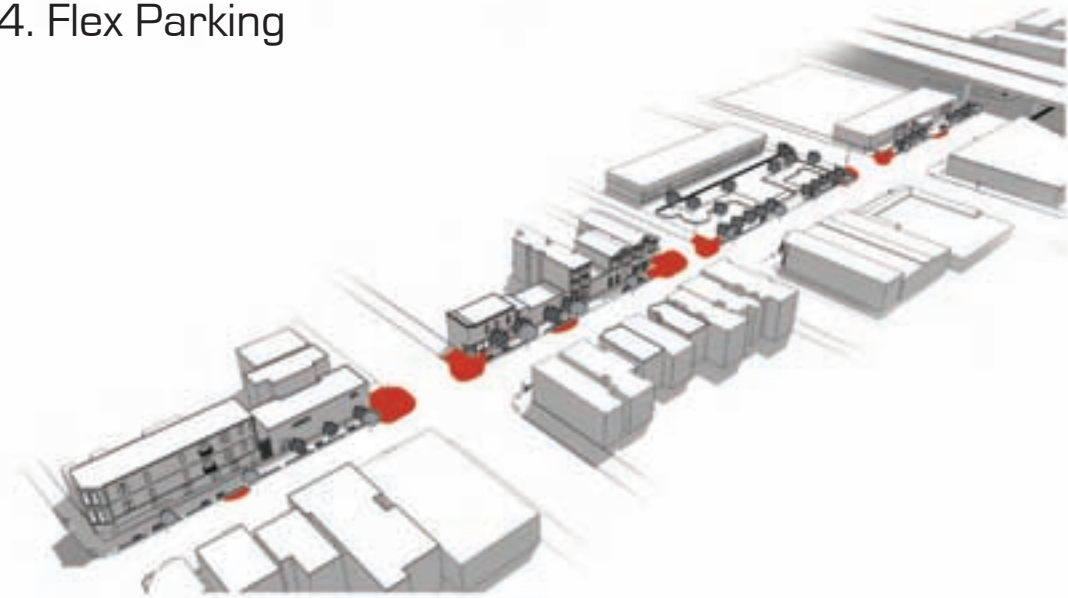
## PHASING



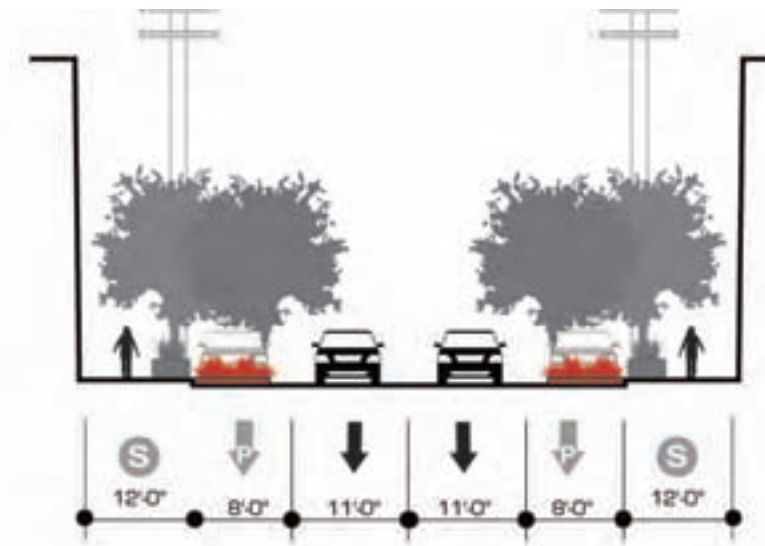
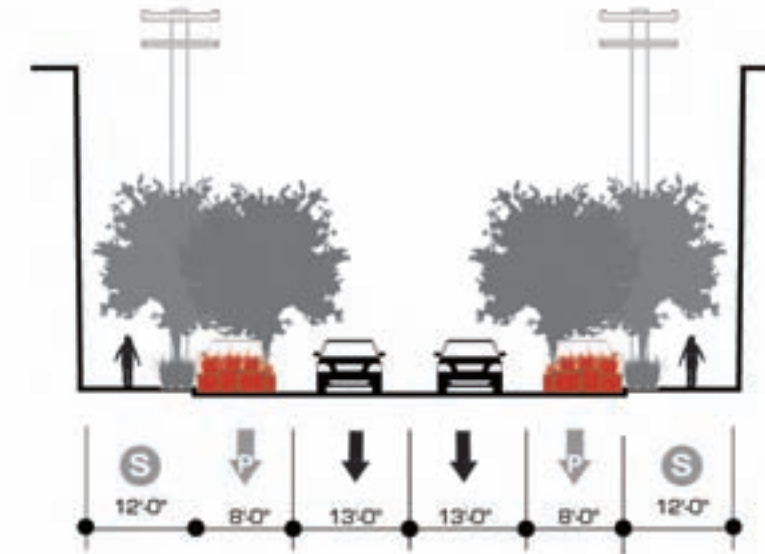
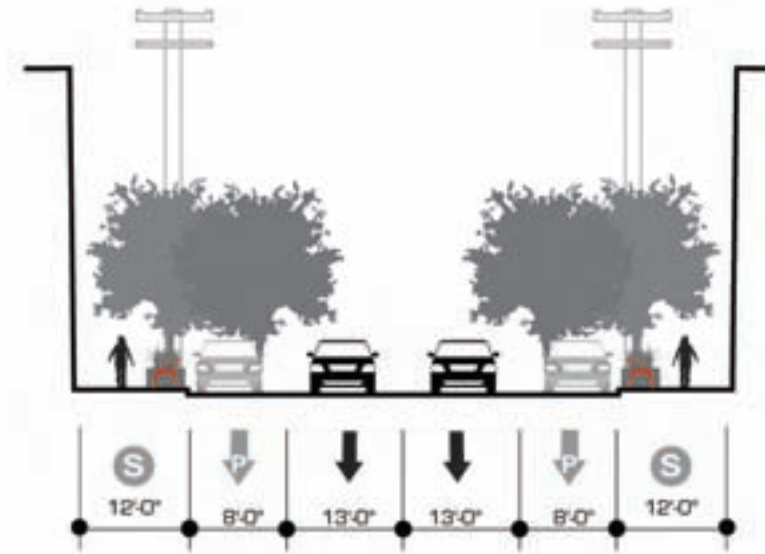
3. Street Furniture



4. Flex Parking



5.. Bulbouts & Chicanes



### Legend

- S Sidewalk
- B Bulb-out
- P Parking Lane
- ↓ Driving Lane

# Dogpatch/22nd Street Greening

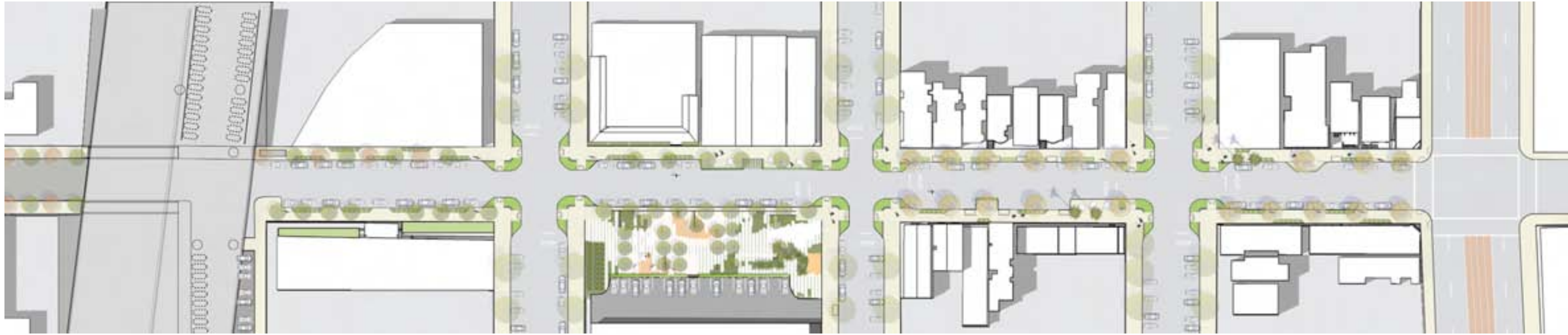
MASTER PLAN - Perspectives, Immediate Greening





# Dogpatch/22nd Street Greening

MASTER PLAN: Partial Greening



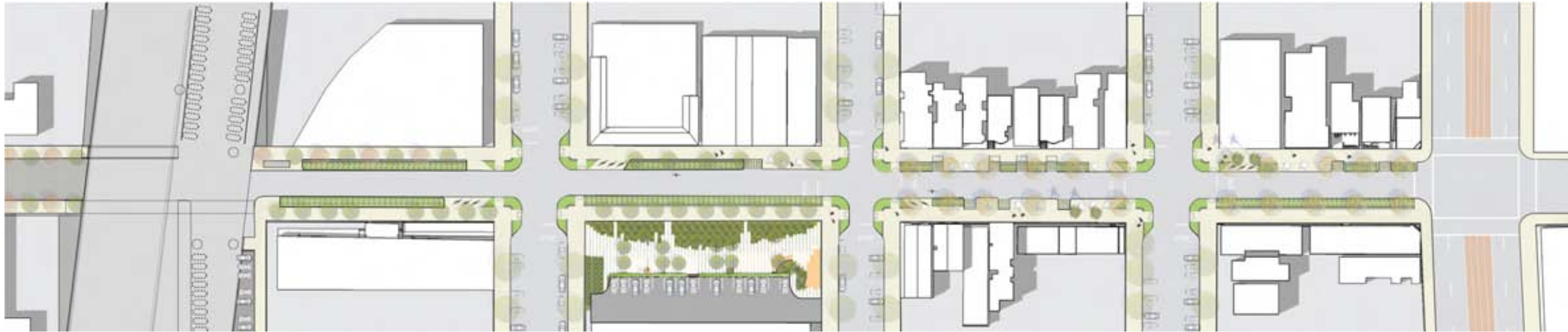
Chicanes and Bulbouts, 0-5 years





# Dogpatch/22nd Street Greening

MASTER PLAN: Total Greening



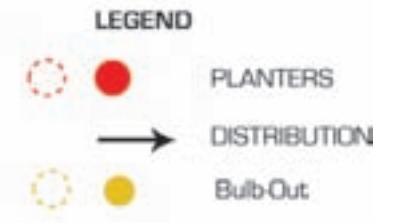
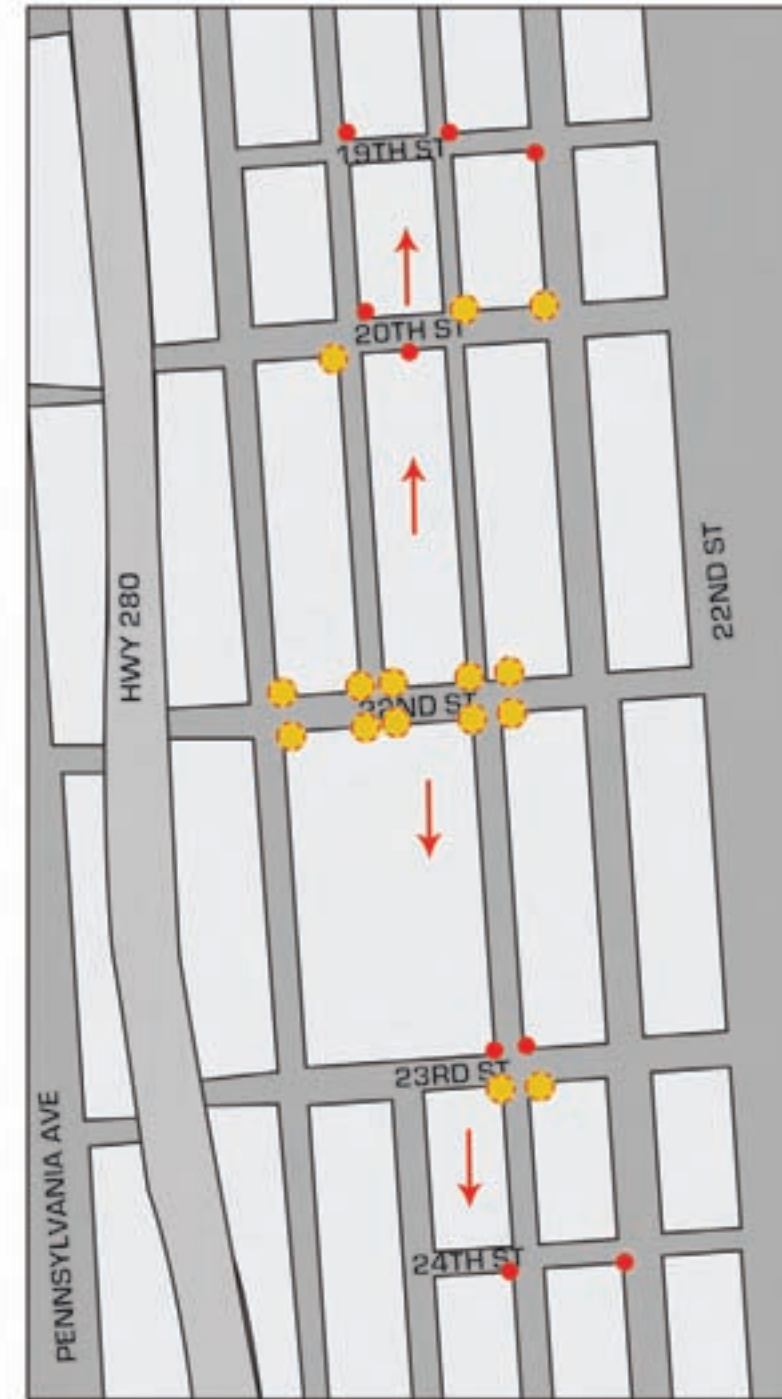
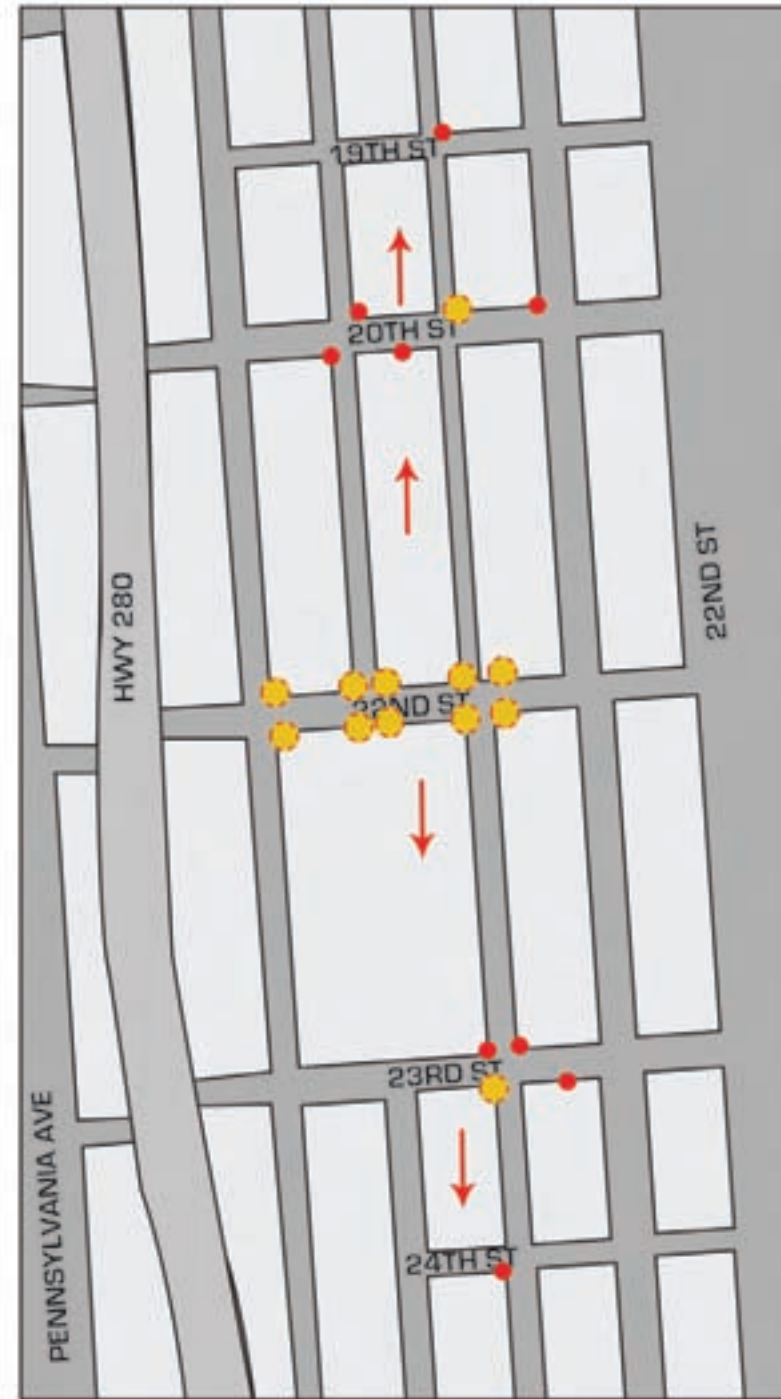
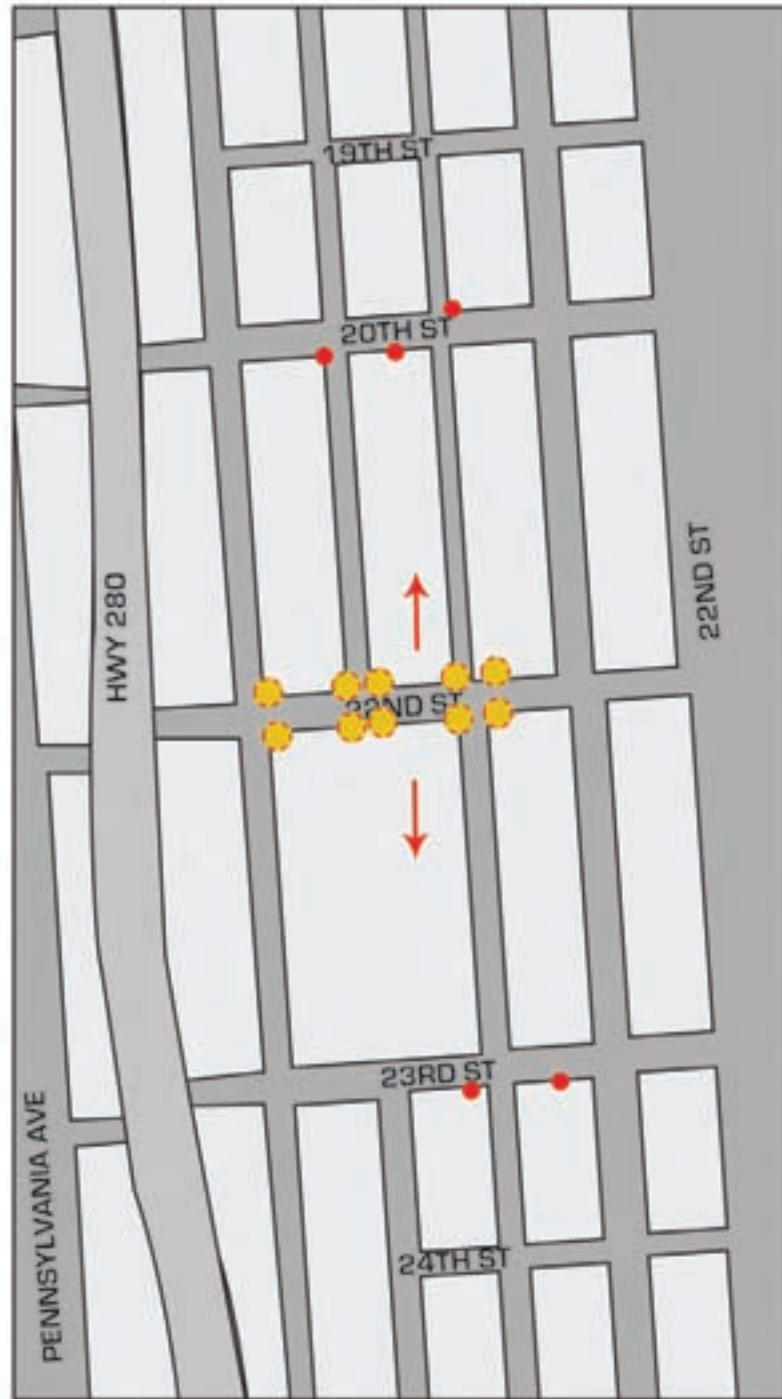
Continuous Sidewalk Extensions, 10-20 years





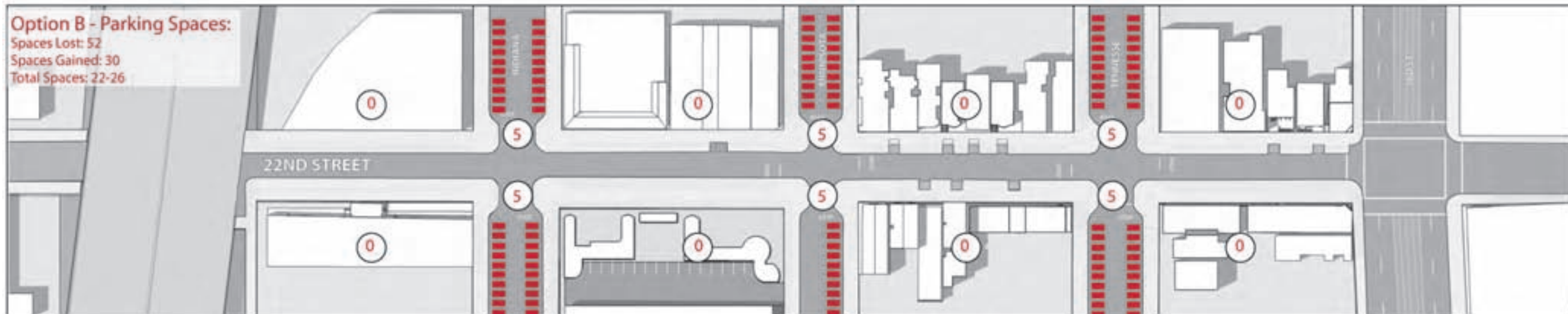
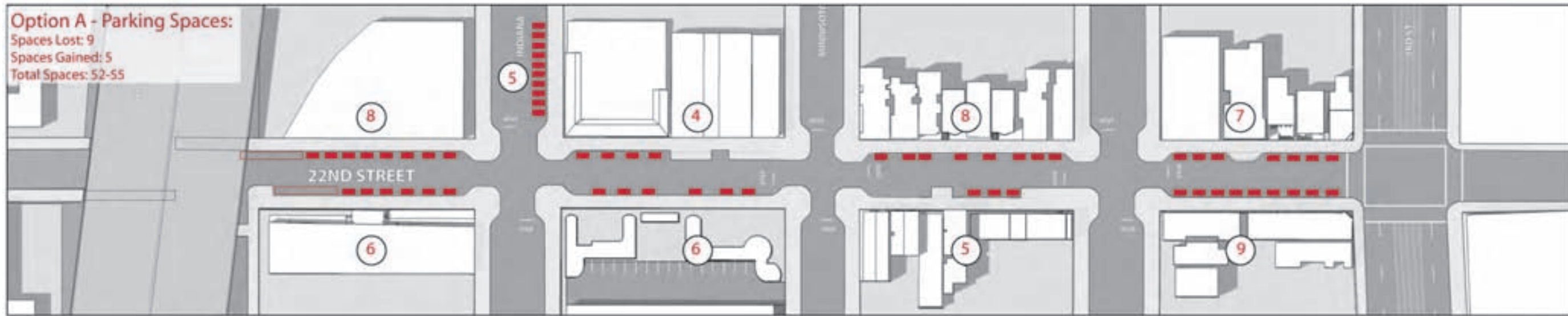
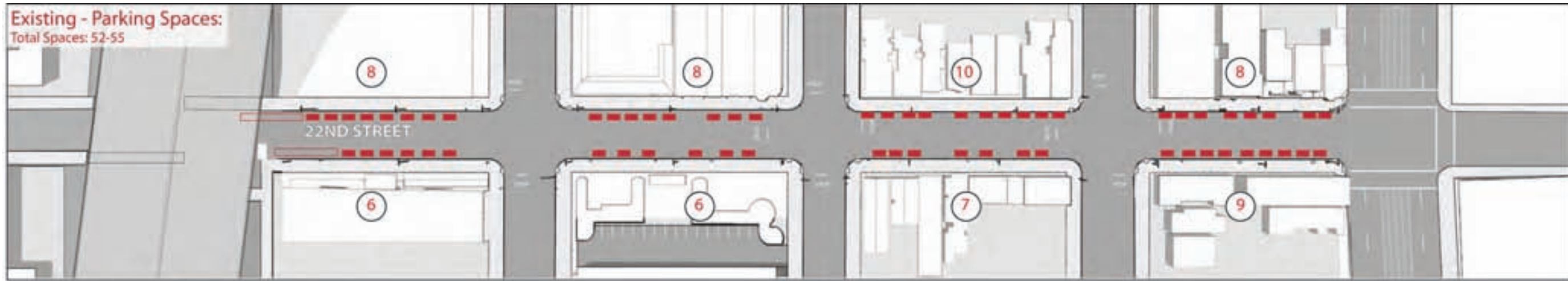
# Dogpatch/22nd Street Greening

MASTER PLAN - Distribution



# Dogpatch/22nd Street Greening

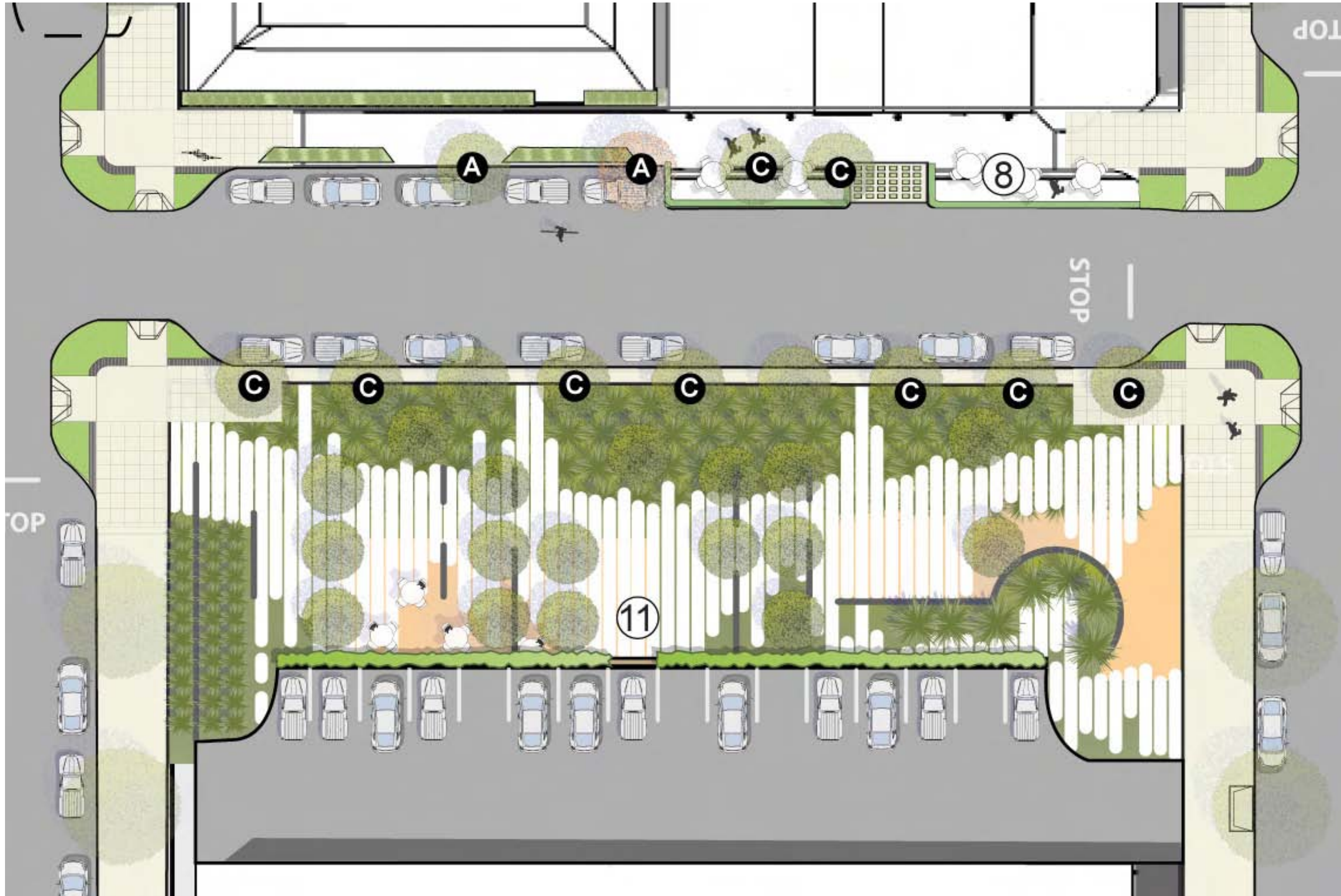
## MASTER PLAN - Parking Plans





# Dogpatch/22nd Street Greening

MUNI PARK





# Dogpatch/22nd Street Greening

MUNI PARK - Perspective

