

City of Naperville
DOWNTOWN STREETScape

Design Standards

City of Naperville

DOWNTOWN STREETScape



City of Naperville
400 South Eagle Street
Naperville, Illinois 60540



Consultant Team:
P2C Designs LLC
43 East Jefferson Avenue
Suite 201B
Naperville, Illinois 60540



Upland Design Ltd.
24042 West Lockport Street
Suite 200
Plainfield, Illinois 60544



Urban GIS
1143 West Rundell Place
Suite 301
Chicago, Illinois 60607

Table of Contents

1.0 Introduction

2.0 Streetscape Standards

Streetscape Standards	2.3
Streetscape Types	2.9
<i>Downtown</i>	2.9
<i>Base</i>	2.12
<i>Narrow</i>	2.14
<i>Wide</i>	2.16
<i>Standard Corner</i>	2.18
<i>Enhanced Corner</i>	2.19
<i>Flexible</i>	2.20
<i>Festival</i>	2.22
<i>Alleyscape</i>	2.23
Landscape	2.25
Irrigation	2.27

3.0 Appendix

Appendix A	3.3
<i>Construction Details</i>	3.3
<i>Hardscape</i>	3.5
<i>Furniture</i>	3.23
<i>Landscape</i>	3.39
Appendix B.....	3.57
<i>Implementation Plan</i>	3.59
Appendix C	3.61
<i>Summary of Public Involvement</i>	3.63

List of Figures

1.0 INTRODUCTION

<i>Overall Streetscape Map</i>	Figure 1.1
--------------------------------------	------------

2.0 STREETSCAPE DESIGN

<i>Cultural Amenities Map</i>	Figure 2.1
<i>Downtown Streetscape Types Map</i>	Figure 2.2
<i>Sidewalk Classifications</i>	Figure 2.3
<i>Widening Areas Map</i>	Figure 2.4
<i>Downtown - Base Streetscape Plan View</i>	Figure 2.5
<i>Downtown - Base Streetscape Section</i>	Figure 2.6
<i>Downtown - Narrow Streetscape Plan View</i>	Figure 2.7
<i>Downtown - Narrow Streetscape Section</i>	Figure 2.8
<i>Downtown - Wide Streetscape Plan View</i>	Figure 2.9
<i>Downtown - Wide Streetscape Section</i>	Figure 2.10
<i>Standard Corner Plan View</i>	Figure 2.11
<i>Enhanced Corner Plan View</i>	Figure 2.12
<i>Flexible Streetscape</i>	Figure 2.13
<i>Streetscape Landscape Bed Templates</i>	Figure 2.14

3.0 APPENDIX

<i>Overall Streetscape Map</i>	Figure 3.1
<i>Implementation Map</i>	Figure 3.2

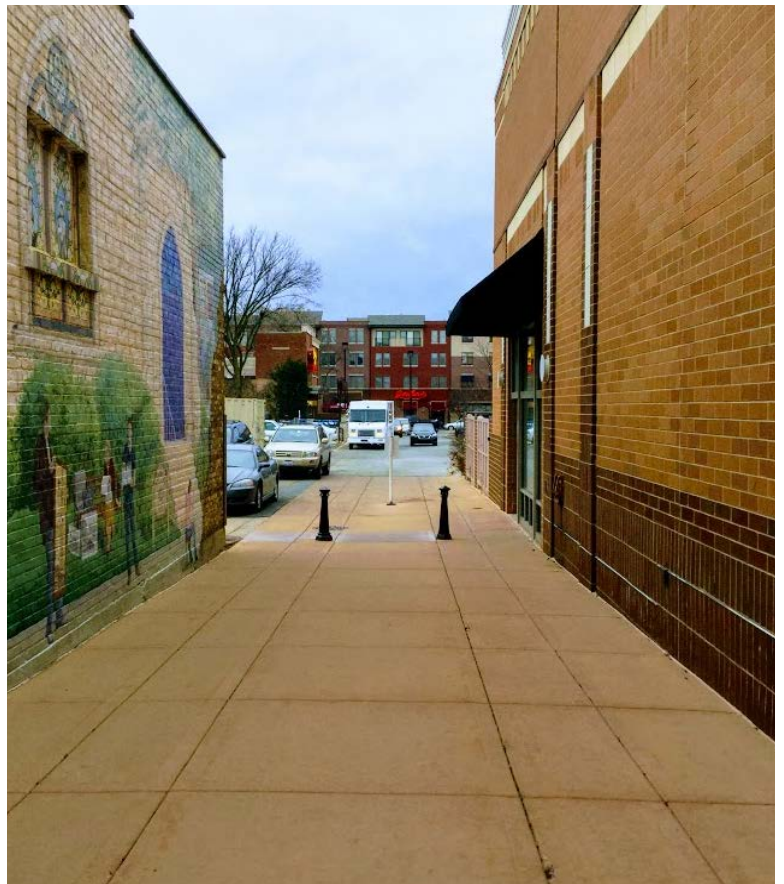
1.0

Introduction

Study Purpose

Process & Public Involvement

Application



Introduction

Study Purpose

Downtown Naperville is a vibrant city center where residents and visitors come to enjoy a multitude of activities. The downtown streetscape creates a sense of place while providing aesthetically enhanced access to restaurants, shops, and offices. Pedestrian comfort and safety is paramount around the downtown.

The installation of downtown streetscape began in 1978 without a unified set of design standards. The Downtown Plan (2000) identified the need to establish a downtown streetscape standard in order to provide a cohesive streetscape approach to be installed with downtown development. As a result, in 2003, the City of Naperville adopted Downtown Streetscape Standards. Since that time these standards have been installed with downtown developments, such as Main Street Promenade and Water Street.

Several areas throughout the downtown do not provide a comfortable pedestrian experience and contain a variety of conditions that have not been updated to the 2003 standard. Each year significant City resources are used to maintain the existing streetscape and keep it in reasonable repair. However, extensive maintenance will be needed as the streetscape continues to age and show signs of deterioration. Many of the materials identified in the 2003 standards are no longer readily available and no longer reflect current best practices in material technology and installation. For these reasons the Naperville Downtown 2030 Plan recommended the establishment of updated standards and a maintenance and rehabilitation plan for downtown streetscape for the purposes of:

- Enhancing the active, safe, convenient, and clean pedestrian environment of downtown;
- Ensuring that future streetscape improvements are compliant with

accessibility requirements;

- Updating existing streetscape standards and, where needed, developing new standards for alleys, transitional areas, and festival and flexible spaces; and
- Identifying and prioritizing locations in the downtown where pedestrian capacity on sidewalks can be expanded.

Process & Public Involvement

At the onset of the project a series of meetings were held with City staff to better understand existing concerns and goals for the streetscape design. An existing conditions analysis was conducted in order to evaluate the current infrastructure and identify any gaps in streetscape. This analysis gave a comprehensive view of the downtown streetscape conditions to be utilized in the development of a maintenance and implementation plan.

Proposed streetscape recommendations were shared with the Downtown Naperville Alliance, Downtown Advisory Commission, and the public through an open house. Feedback on proposed concepts was gathered through an on-line survey as well as comments shared verbally. The feedback gathered was utilized to modify and update the concepts into the final streetscape standards.

Per the Naperville Municipal Code, the Downtown Advisory Commission is responsible for reviewing, interpreting, clarifying and recommending modifications to the downtown streetscape standards. Therefore, the final proposed streetscape recommendations, as well as a maintenance and implementation plan, were presented to the Downtown Advisory Commission (DAC) for endorsement and recommendation to proceed to City Council. The recommendations made by DAC are summarized in the Appendix.

Application

The Naperville Downtown Streetscape Standards are to be used throughout the downtown. Each area has been designated with a streetscape type, as guided by the 2030 plan, and updated based on stakeholder input received during the development of the current Downtown Streetscape Standards as well as a review of existing conditions and land use. The updated map is included below as the Overall Streetscape Map, Figure 1.1.

Included in the Downtown Streetscape Standards are specific street furniture, paving, seat walls, landscape layout, irrigation, and construction details. These are guidelines for development and may require minor adjustments to fit existing conditions and site specific needs. The Downtown Streetscape Standards are intended to create a cohesive look within the downtown planning area and should be implemented based upon the priorities established in the Implementation Plan included in Appendix B.

Overall Streetscape Map

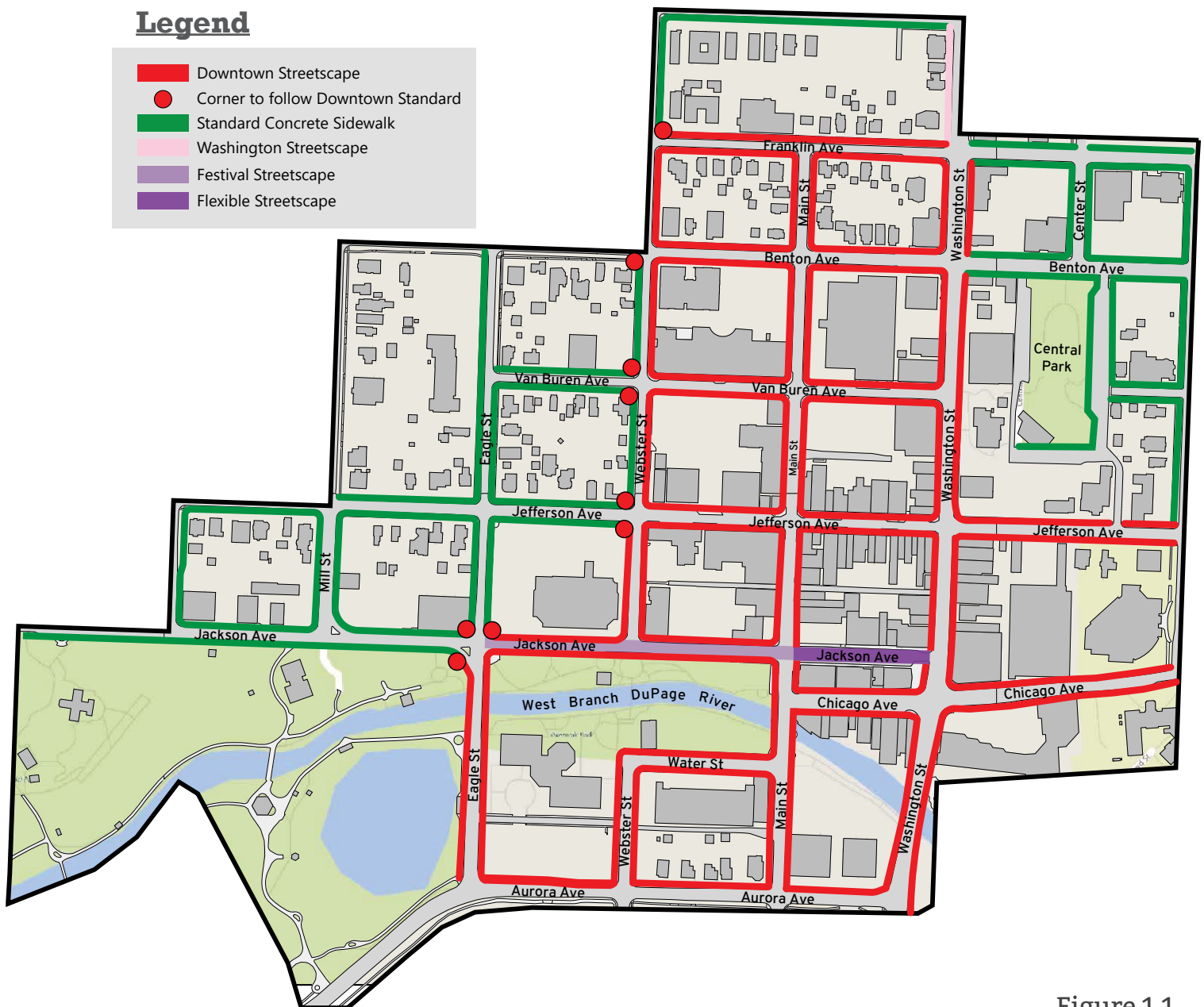


Figure 1.1

2.0

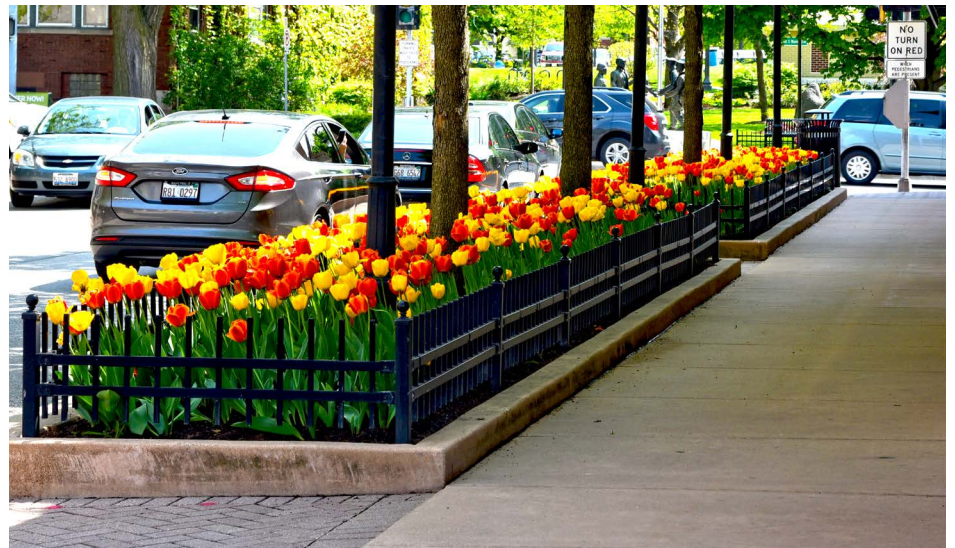
Streetscape Standards

Streetscape Standards

Streetscape Types

Landscape

Irrigation



Streetscape Standards

Primary Components and Considerations

This section presents streetscape standards to be implemented throughout downtown. The streetscape standards serve as a guideline and each installation will be designed with consideration given to the area's unique characteristics and following current engineering and accessibility requirements.

Streetscape Elements

Paving

Concrete paving and precast concrete pavers are both included in the streetscape standard. Concrete paving will define the pedestrian way and precast concrete pavers will be used in the amenity zones. Enlarged details of the precast concrete paving patterns, along with a description of the paver finish, color, and manufacturer are available in the Appendix.

Seat Walls

The streetscape standard encourages limestone seat walls to be incorporated where space allows and to enhance key gathering spaces. Walls shall have a limestone veneer and cap as identified below. Construction details of the limestone seat wall, including the recommended materials, are available in the Appendix.



Precast Cap

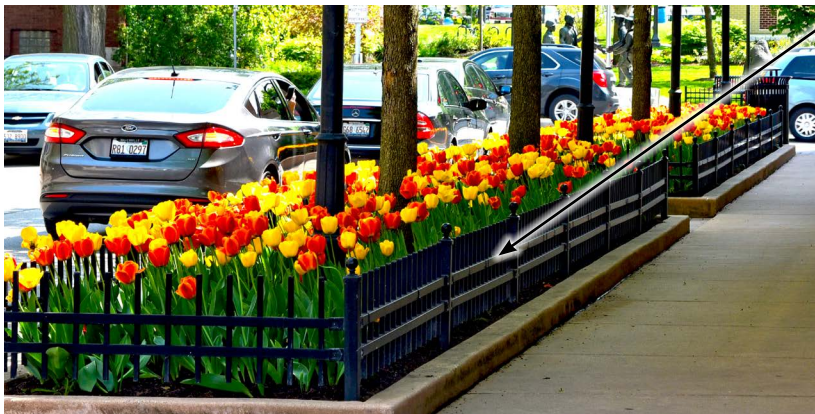
Buckingham Royal
Château Sawn Height
Bedface mixed with
Valders Dimensional Bluff
Split-face

Total wall height to be
18" -21". Variation
allowed for grade
changes.



Planter Railing

Black metal railings shall be placed around raised planter beds to create an enclosed planter area, add visual interest to the street, and establish consistency throughout downtown. Planter railings should not be installed adjacent to seat walls to encourage use of the seat wall and ensure pedestrian comfort. Planter railing construction details are available in the Appendix.



18" Tall Black Steel
Planter Railing

Street Furniture

Street furniture includes small-scale amenities, such as benches, tables, and waste receptacles located within the amenity zone of the streetscape. These items improve pedestrian comfort and are key in defining the character of the surrounding area. Generally, street furniture is grouped at intersections or mid-block locations where pedestrians tend to congregate; though some pieces are recommended to be spaced evenly throughout the extent of the streetscape.

A high quality streetscape furniture palette has been selected as part of the City's streetscape standards to ensure uniformity as streetscape improvements are undertaken. A Street Furniture Matrix which identifies specific models and recommended spacing for each of these elements can be found in the Appendix.



Litter Receptacle



Recycle Receptacle



Bollard



Standard Bike Rack



Playful Bike Rack

With City's approval, artful and playful bike racks may be installed in the Downtown streetscape in lieu of standard bike racks



Planter Pots



Standard Bench - 6' to 8' length

Street Trees

Trees provide shade and increase comfort for pedestrians. Trees are recommended to only be planted within raised planters to ensure a quality living environment and extended life expectancy. The Department of Public Works shall select a variety of tree species and cultivars which are tolerant of salt and urban conditions. Additionally, the mix of trees should consider spring flower, fall color, and summer attractiveness, as well as space available for the root system and crown.

Planters

A variety of plants will be installed in raised or movable planters. Raised planters should be utilized in amenity areas that are 4 ½ feet or wider. The raised planter should be no smaller than 4' x 6' in size, and will be raised 6 inches off the ground with a concrete curb and shall be irrigated as detailed in the Appendix. Moveable planters should be placed in locations lacking adequate space for a raised planter.

Cultural Amenities

Century Walk has added over 40 public art installations throughout downtown. As the downtown streetscape is repaired and replaced, it is recommended that cultural amenities located within the public right-of-way be spread evenly throughout the amenity area of the pedestrian zone. The map below identifies the location of all existing cultural amenities documented as part of this study, as well as recommended areas for new cultural amenities. New cultural amenities should be located in areas where a wide public right-of-way can accommodate a larger amenities area enhanced with street furniture and cultural elements.

Cultural Amenities Map

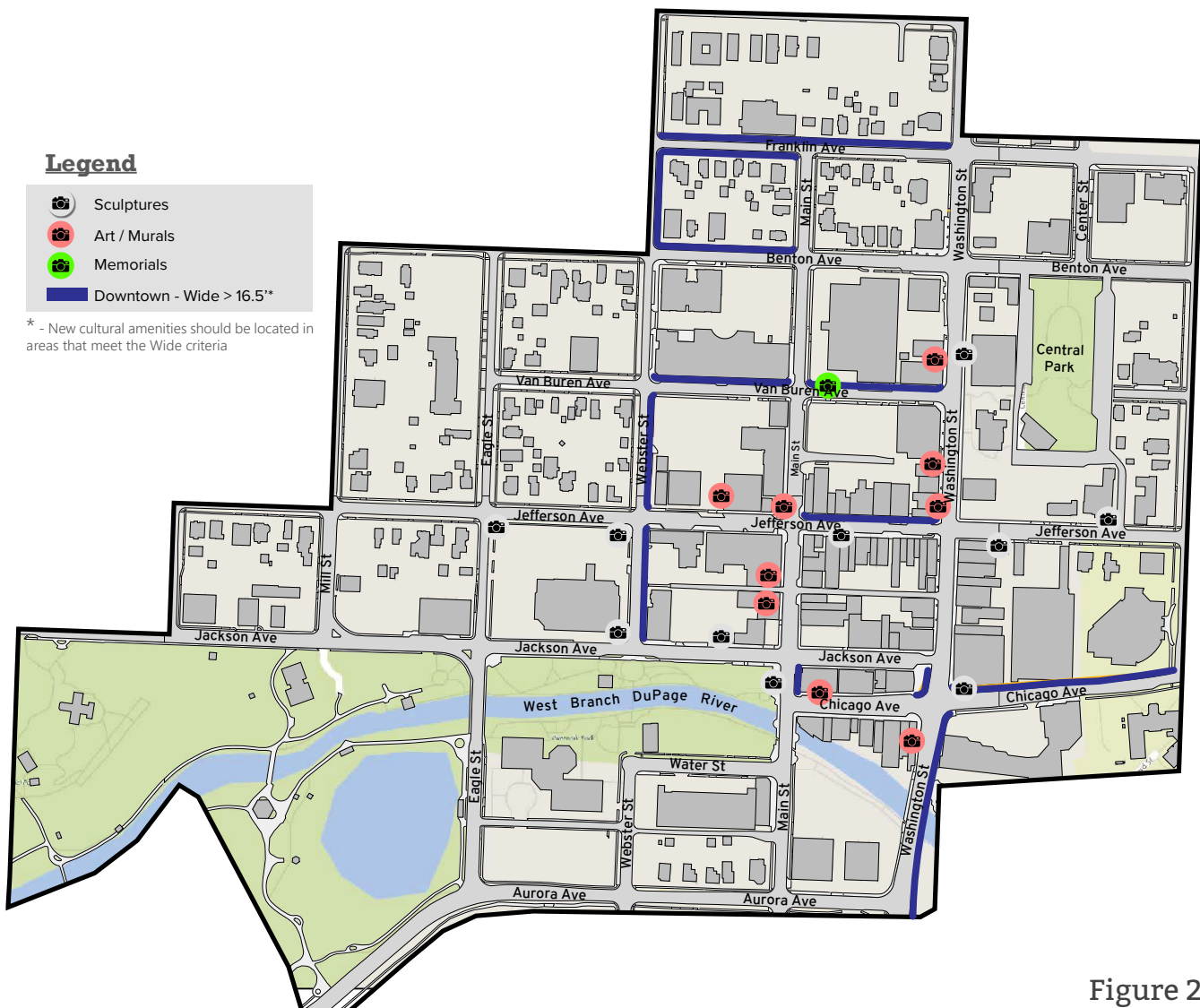


Figure 2.1

Lighting

While identification of a new light standard was not included in the scope of this project, concerns were raised throughout the public process related to the current downtown lighting standard. At the time of this study a city-wide initiative to convert the existing streetlights to LED was underway. Based upon the input received, the downtown lights will be evaluated in a future phase of this initiative.



Streetscape Types

Downtown Streetscape Overview

The downtown streetscape type has been designed to meet the needs of a busy business district while reserving areas for pedestrians to sit, relax, and interact. The downtown streetscape has been broken down into three sub-categories to reflect the varying widths of the pedestrian zone, provision of on-street parking, and different building setbacks. The three sub-categories are:

- *Downtown - Base*
- *Downtown - Narrow*
- *Downtown - Wide*

The existing pedestrian zone width between the back of curb and the building façade dictates which category is recommended for each streetscape area within the downtown. The location of each of the three sub-categories is defined on the Downtown Streetscape Types Map below.

Downtown Streetscape Types Map

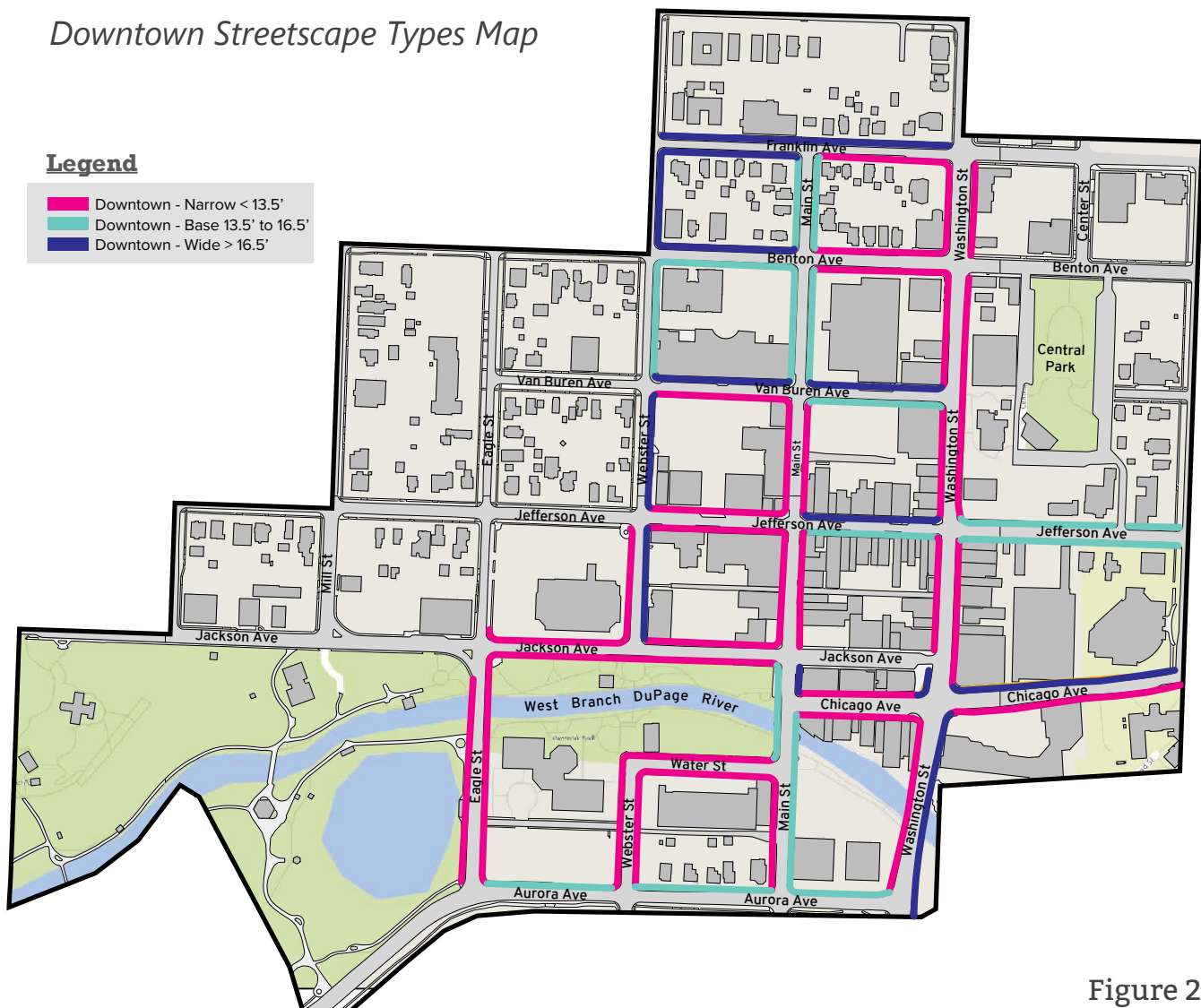


Figure 2.2

Sidewalk Classifications

Each downtown streetscape type is described using defined areas within the pedestrian zone:

- *Carriage Walk*: Access walkway along the concrete curb with concrete pavers
- *Walking Area*: The main walking area for pedestrians is made up of concrete paving and begins at the building façade extending out toward the back of curb a minimum of 6'. The total width will vary depending on space and sub-category. The Walking Area shall be the highest priority area when designing streetscape installations.
- *Amenity Area*: The amenity area is found between the Carriage Walk and Walking Area and is the space for trees, planting beds, benches, planter pots, litter receptacles, seat walls, and permanent and temporary signage. This area is defined by concrete pavers and planting areas. The width of the amenity area varies depending on space and sub-category.

Sidewalk Classifications

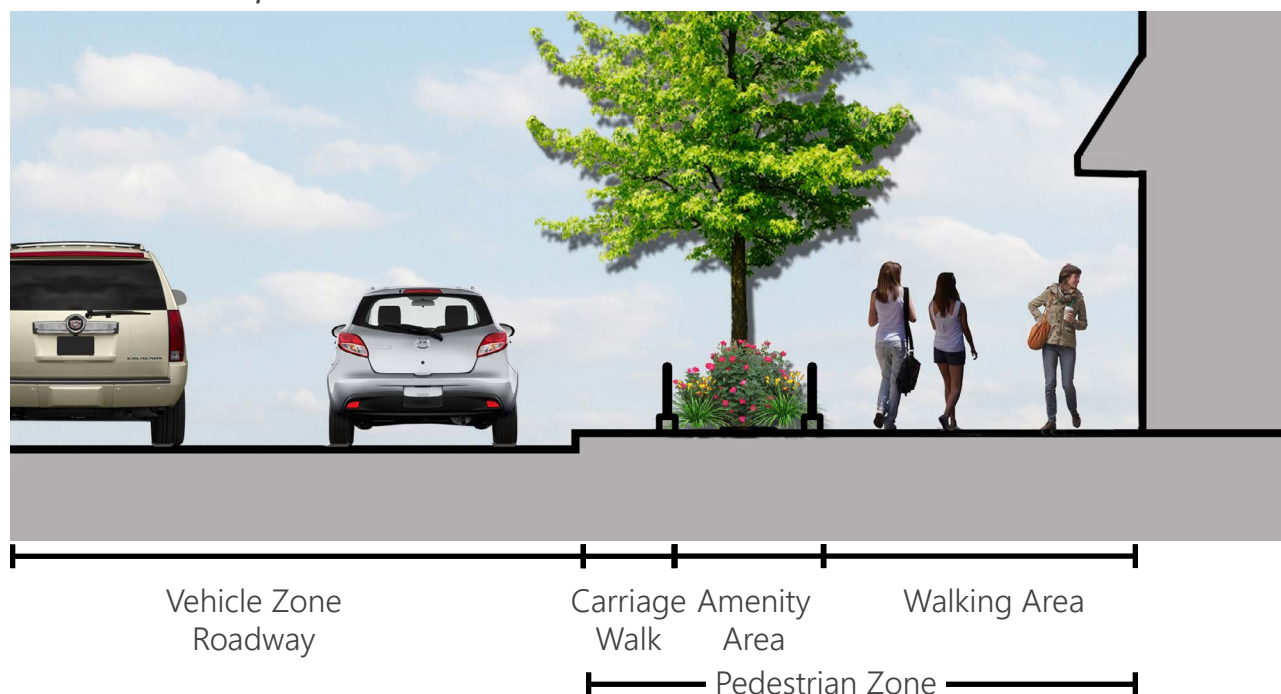


Figure 2.3

Widening Areas

Along downtown streets, there are some locations where it is recommended that existing angled parking spaces be converted to parallel parking spaces to create a wider pedestrian zone. This wider pedestrian zone will allow for a more spacious walking area and additional amenities to be installed.

Three areas are recommended for pedestrian zone widening:

1. Main Street (east side) – Jackson Avenue to Jefferson Avenue
2. Main Street (east side) – Jefferson Avenue to Van Buren Lot Entry
3. Jefferson Avenue (south side) – Webster Street to Main Street

Widening Areas Map

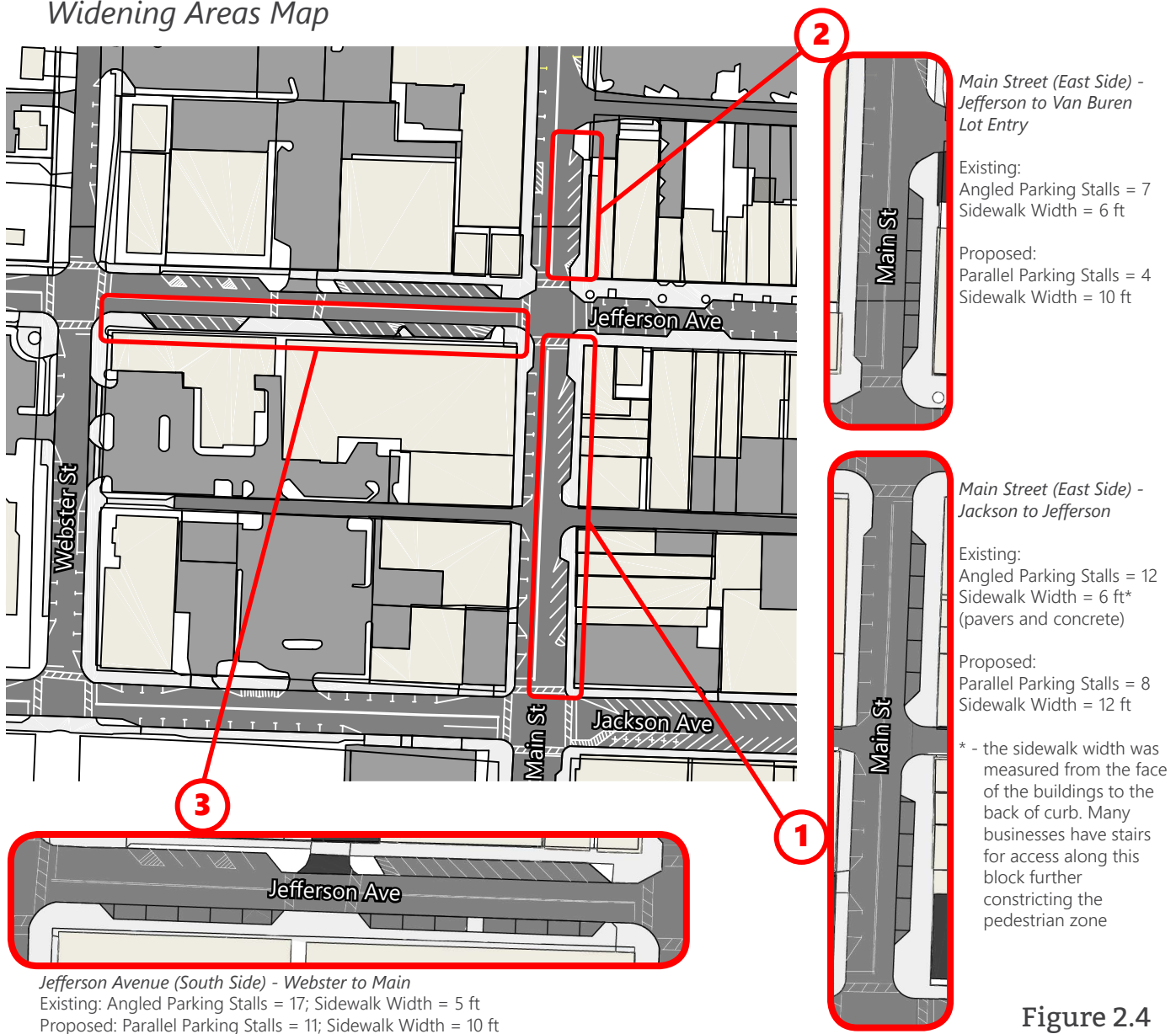


Figure 2.4

Downtown - Base

The Downtown - Base design will be applied in locations where the overall pedestrian zone width ranges from 13.5 ft. to 16.5 ft. from the building face to back of curb. Many of the existing street and sidewalk widths support these base improvements without requiring any changes to parking or curb layout.

Key Features

- *Walking Area:* Minimum of 8 feet wide
- *Amenities Area:* 4.5 to 8 feet wide
- *Carriage Walk:* 24 inches wide

Downtown - Base Streetscape Plan View

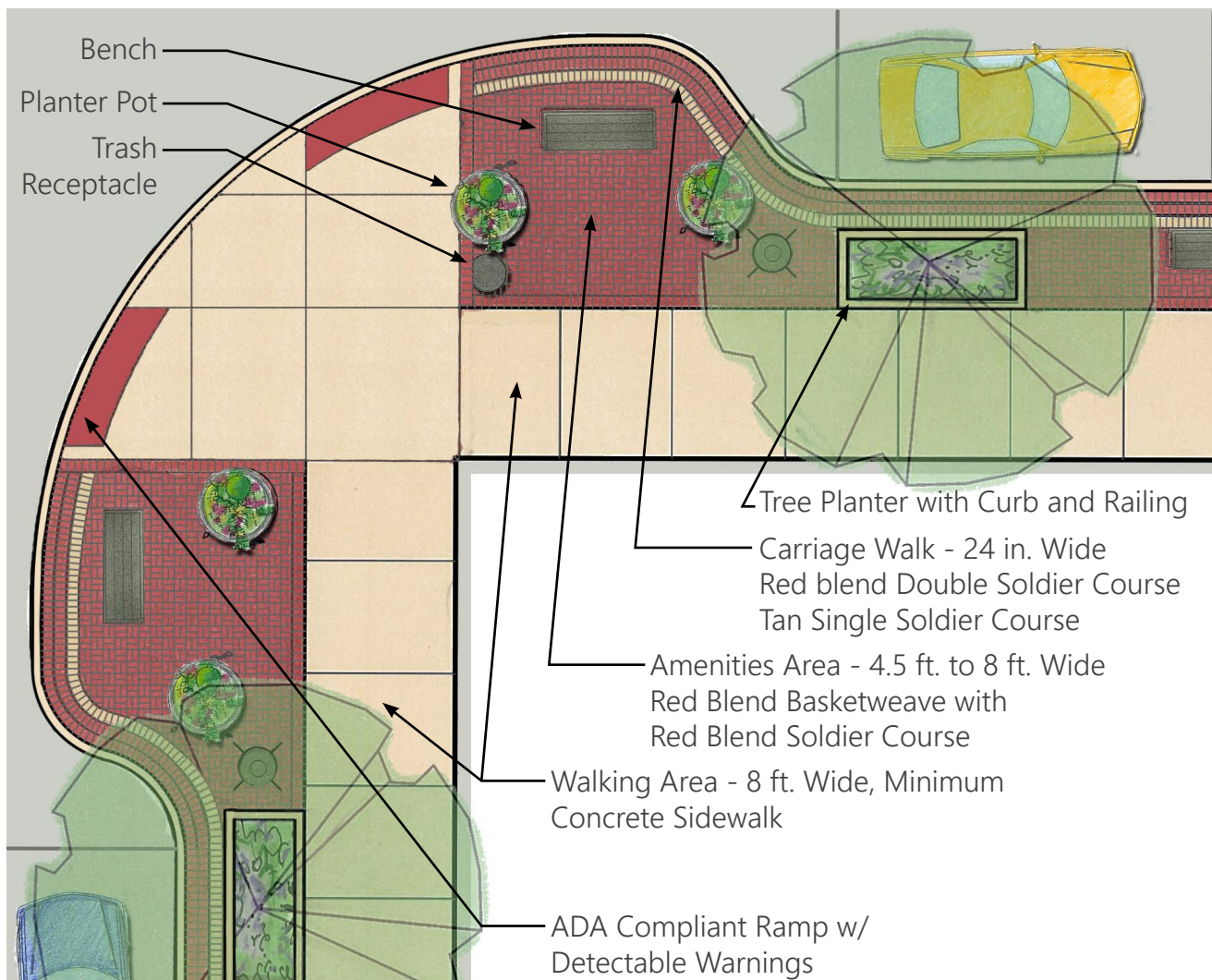


Figure 2.5

Downtown - Base Streetscape Section

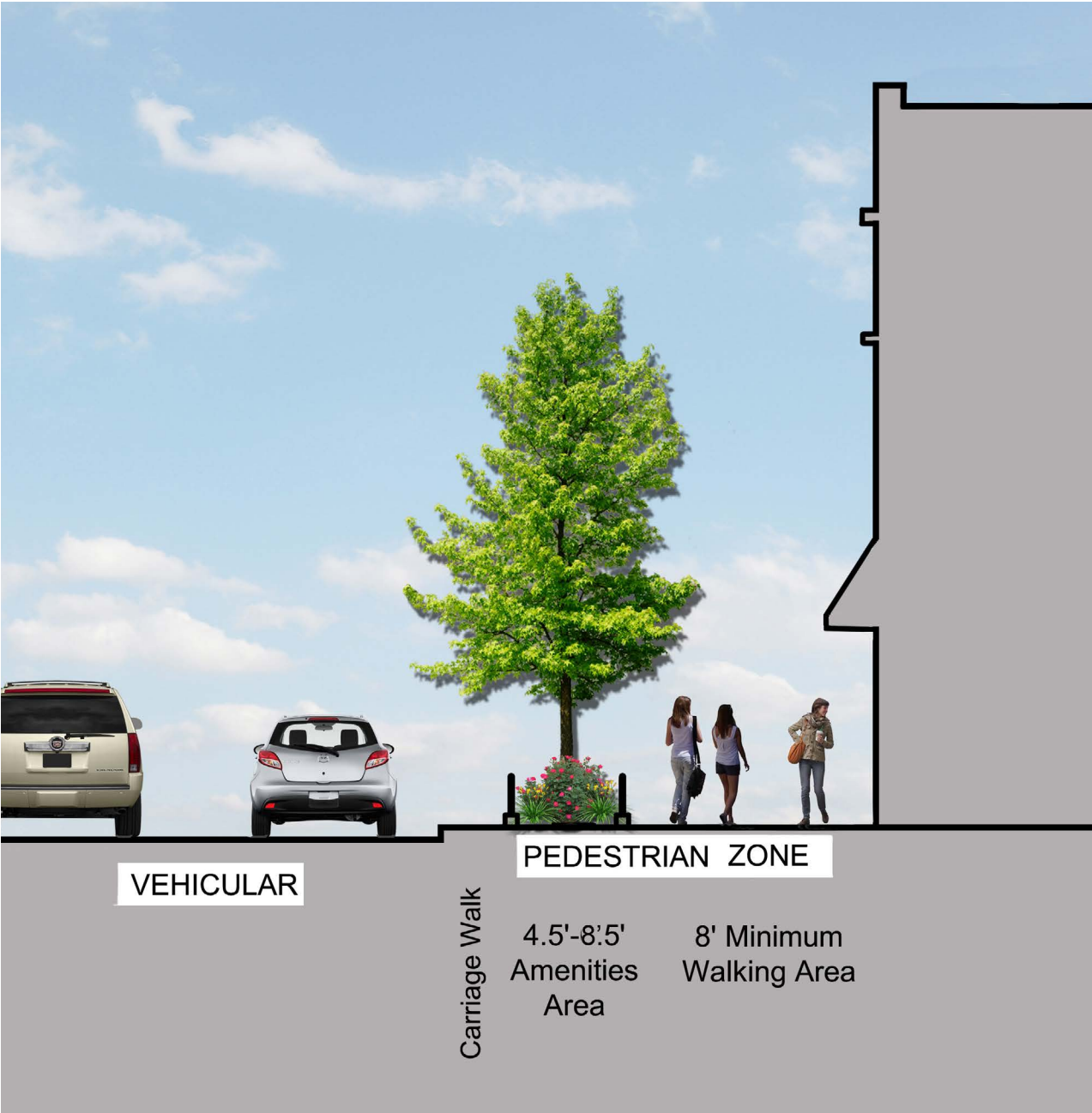


Figure 2.6

Downtown - Narrow

The Downtown - Narrow design will be applied in locations where the existing pedestrian zone width will not accommodate the Downtown - Base design. Areas with overall pedestrian zone widths of less than 11 feet shall not have a paver amenity area.

Key Features

- *Walking Area*: Minimum of 6 feet wide; 8 feet where possible
- *Amenities Area*: 2.5 to 5 feet wide
- *Carriage Walk*: 24 inches wide

Downtown - Narrow Streetscape Plan View

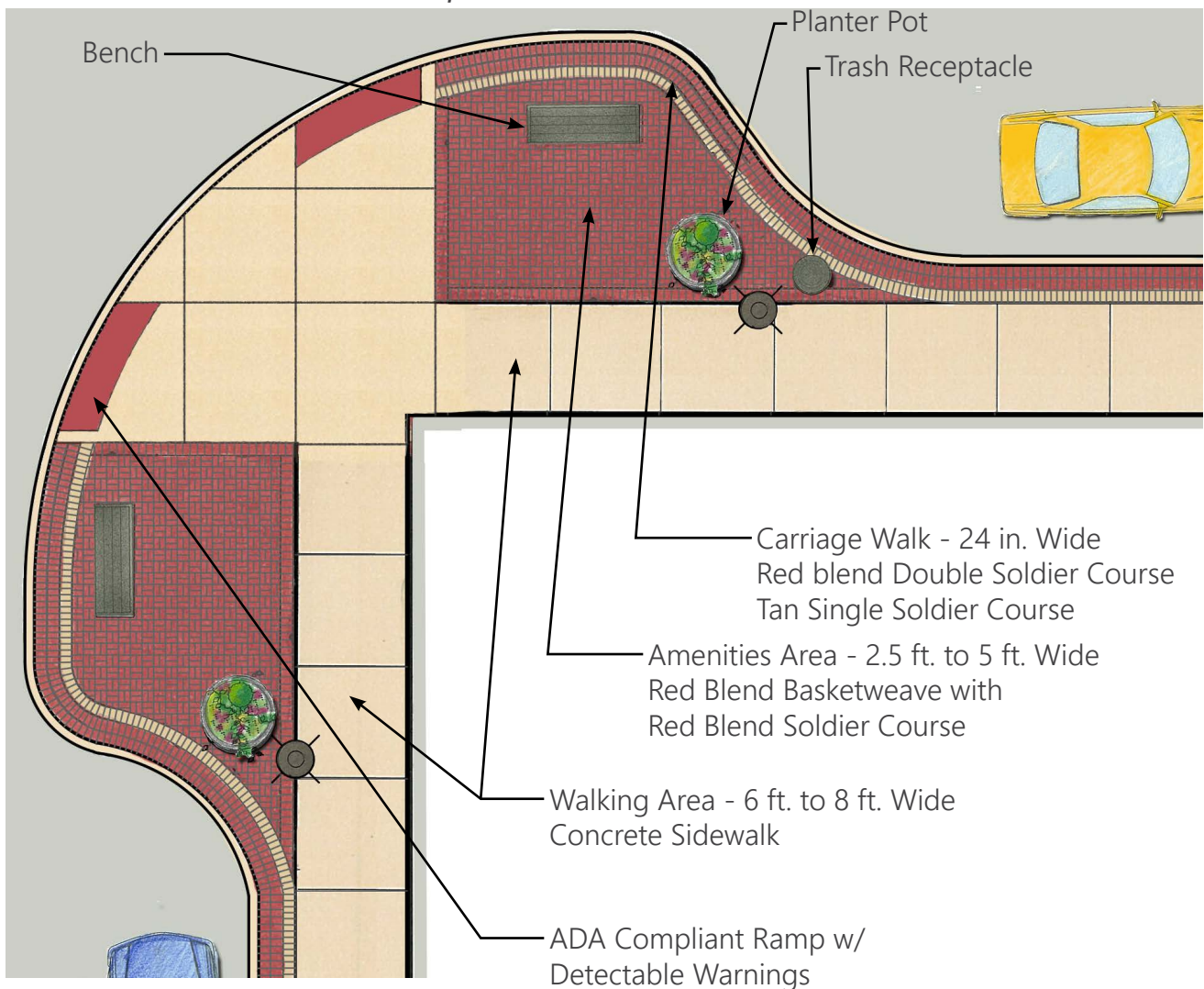


Figure 2.7

Downtown - Narrow Streetscape Section

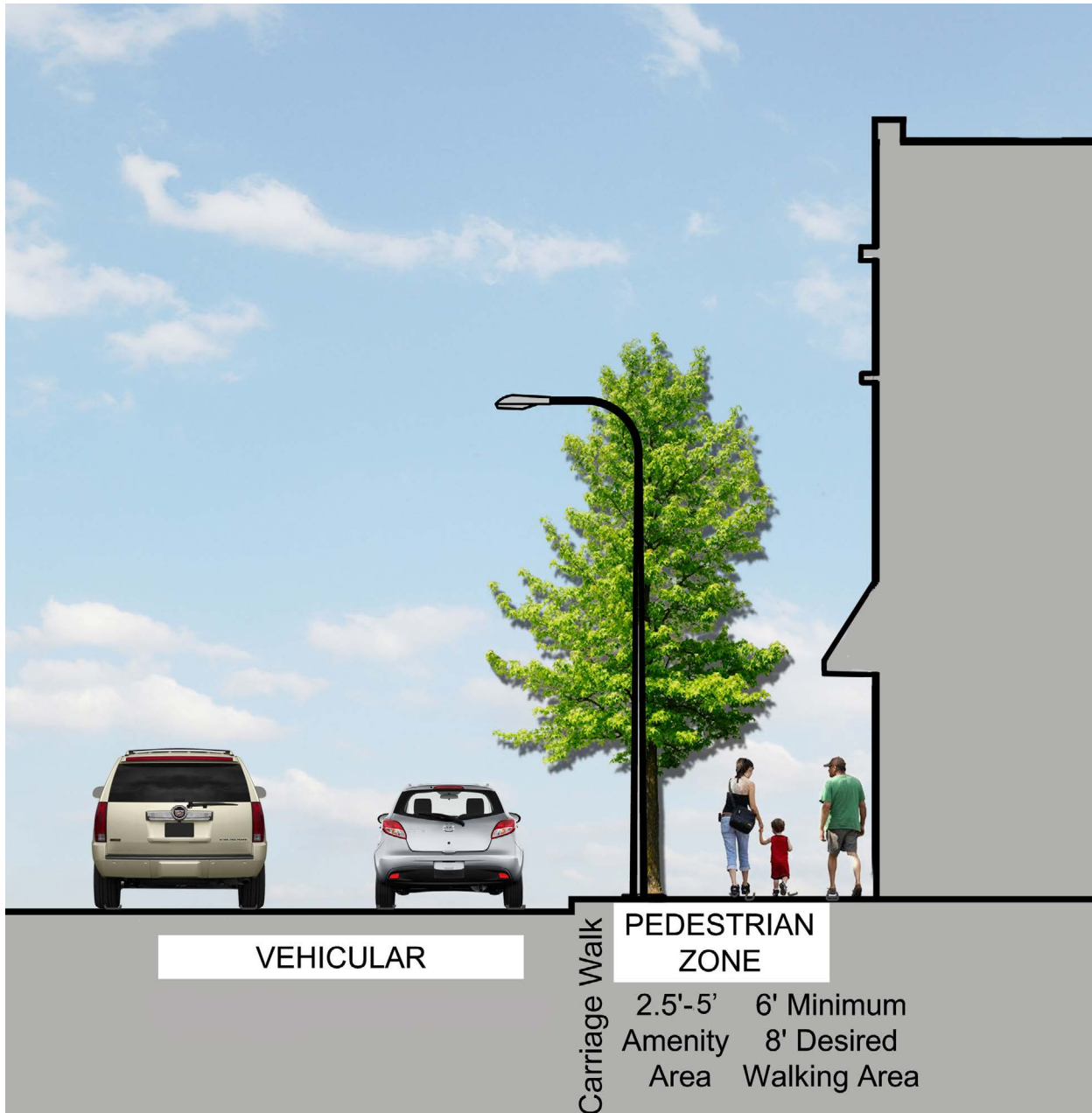


Figure 2.8

Downtown - Wide

The Downtown - Wide streetscape design will be applied to areas where the pedestrian zone is 16.5 feet or wider from the building façade to the back of curb. Within the downtown, some areas benefit from an existing pedestrian zone width that is larger than the Downtown - Base design requires, and provides the opportunity for additional pedestrian seating and amenities at these locations.

Key Features

- *Walking Area*: Minimum of 8 feet wide; 10 feet where possible
- *Amenities Area*: 6.5 feet wide minimum
- *Carriage Walk*: 24 inches wide

Downtown - Wide Streetscape Plan View

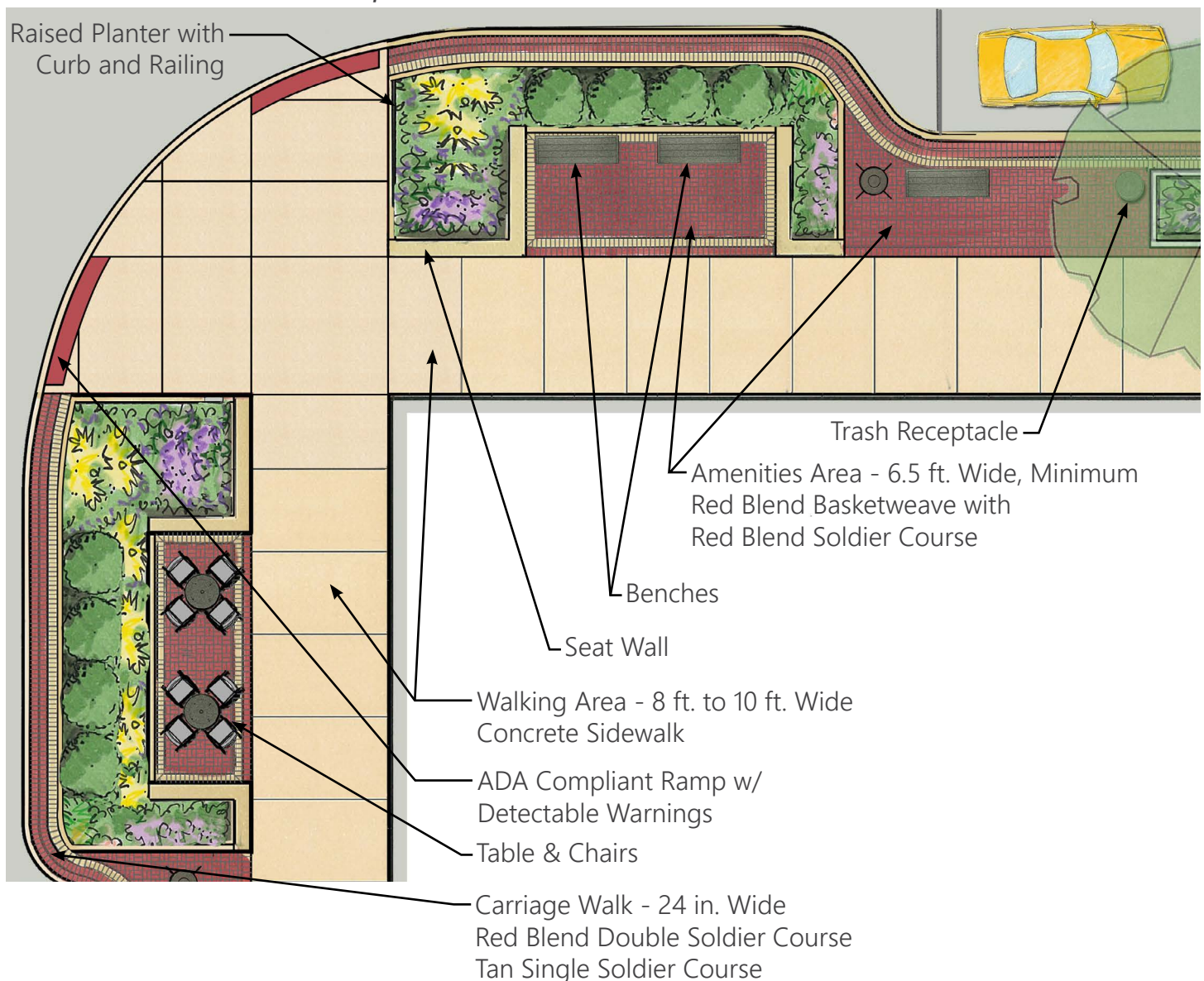


Figure 2.9

Downtown - Wide Streetscape Section

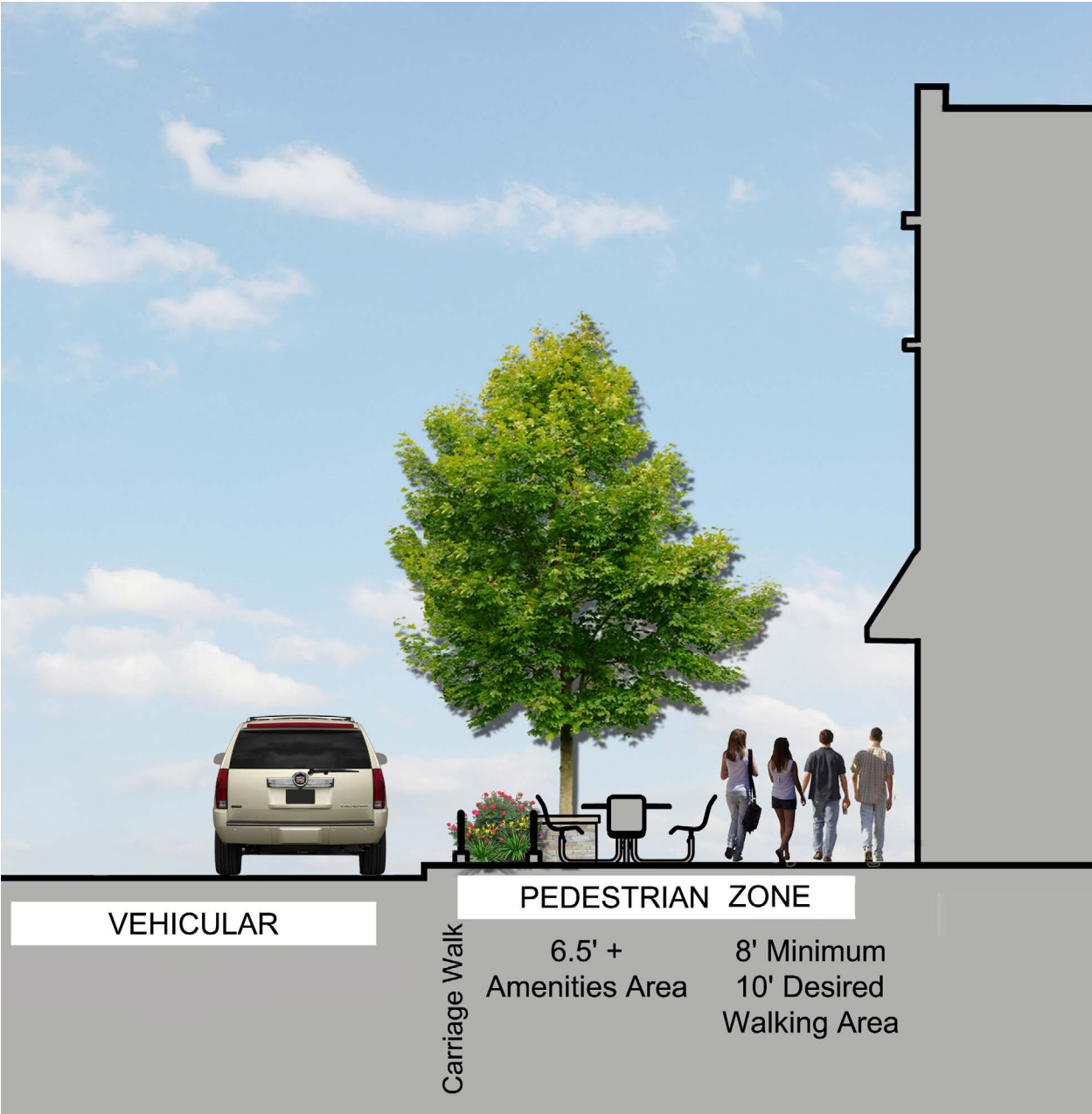


Figure 2.10

Standard Downtown Corner

Corners are defined by the intersection of two or more pedestrian zones. The Standard Downtown Corner design should be used on all downtown corner locations, except for areas where an Enhanced Downtown Corner is recommended. Consistent with the recommendations of the Downtown Advisory Commission and the Accessibility Commission on Disabilities, standard corners are to be constructed of concrete. Depressed curbs and tactile warnings will be provided in accordance with accessibility requirements and each location will be designed based on its unique site considerations and existing conditions. Amenity areas of varying widths will connect the corners to the adjacent streetscape and be enhanced with planter pots and other street furniture as space and sight distance permits.

Standard Downtown Corner Plan View

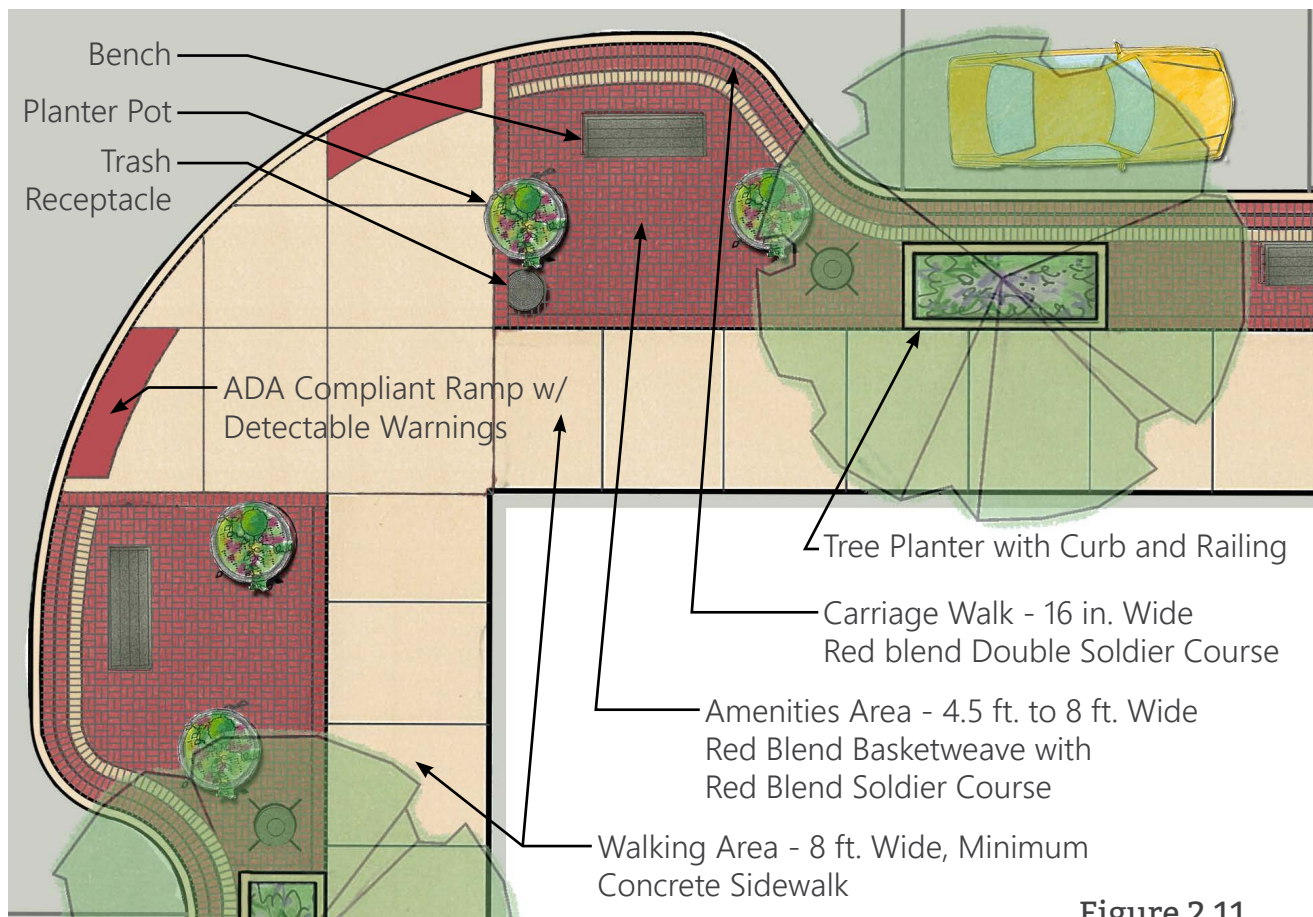


Figure 2.11

Enhanced Downtown Corner

At key intersections with a lot of pedestrian traffic and available space, it is recommended that Enhanced Downtown Corners be installed to create more usable open space and gathering areas. Enhanced Downtown Corners will provide larger pedestrian areas protected from vehicular traffic, and be improved with additional plantings and seating in the forms of limestone seat walls, benches, cafe tables and chairs.

Applicability

Corner locations capable of accommodating all of the amenities recommended for Enhanced Downtown Corners will need to have an amenity area measuring a minimum of 10 feet wide and 15 feet long, for approximately 150 sq. ft. of usable space.

Key Features

In addition to the pavement markings and street furniture located throughout the rest of downtown, Enhanced Downtown Corners will feature additional amenities to make them more inviting to pedestrians. These amenities include:

- Protected seating area with pavers
- Limestone seat walls
- Planter beds
- Cafe table & chairs

Enhanced Downtown Corner Plan View

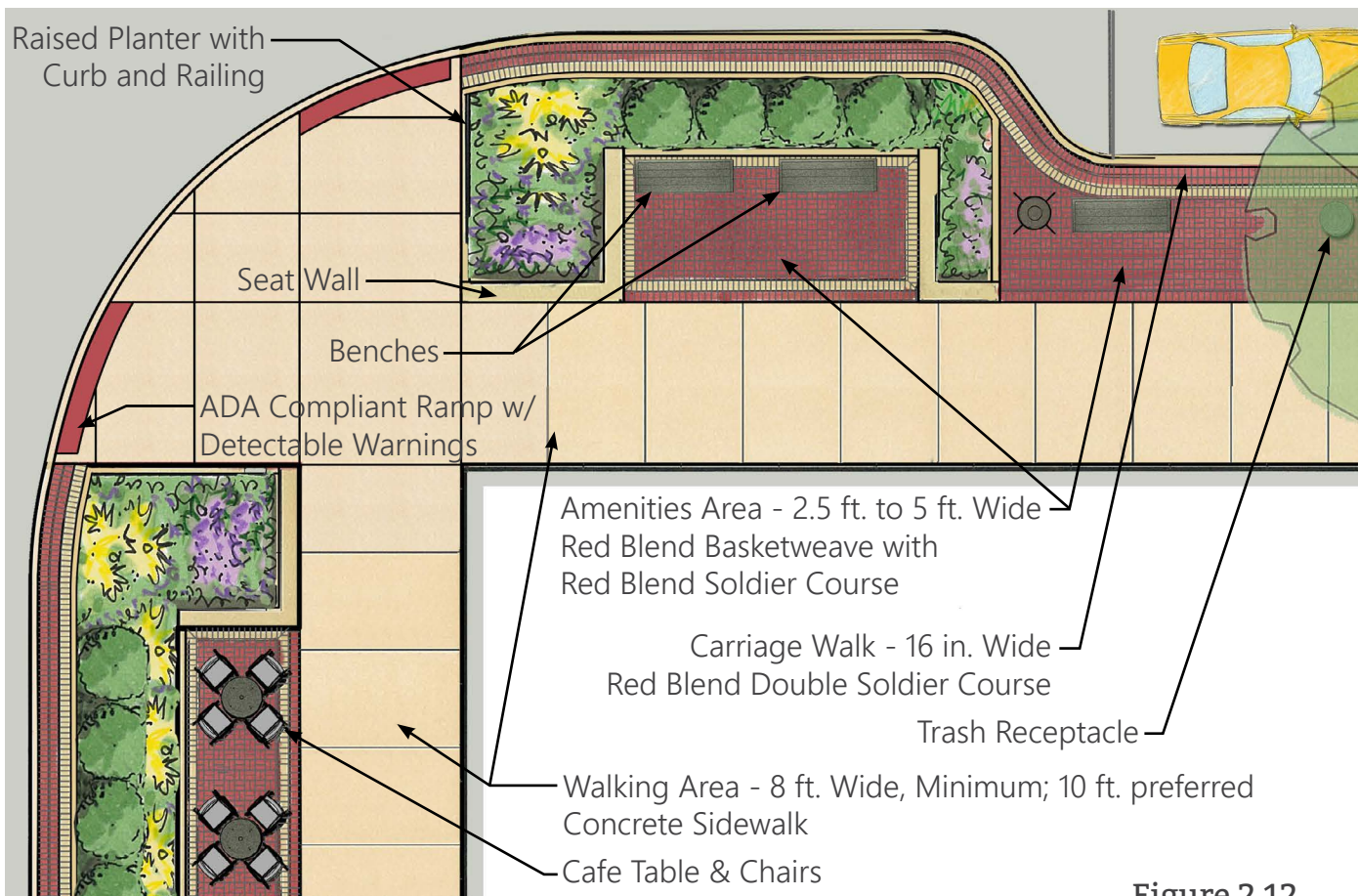


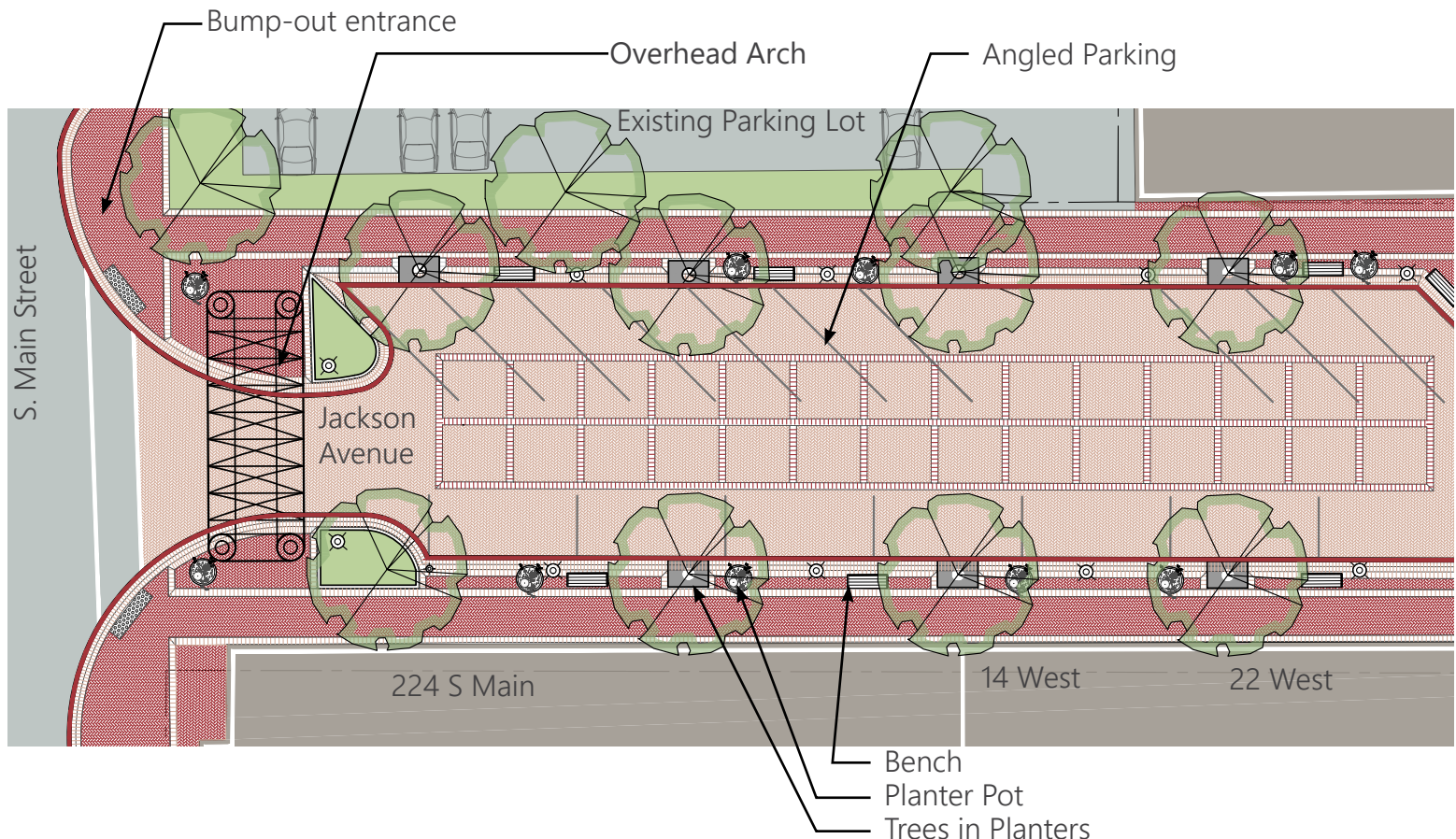
Figure 2.12

Flexible Streetscape

To add excitement and vibrancy along Jackson Avenue, a Flexible Streetscape was envisioned in the Downtown2030 plan. Extending along Jackson Avenue from Main Street to Washington Street, this area is designed as a Woonerf, with flush curbs and concrete pavers in both the sidewalks and roadway. The pedestrian area utilizes many of the characteristics of the Downtown - Base streetscape, with additional amenities that create a more flexible and distinguishable space.

A key feature recommended as part of the Flexible Streetscape is the addition of lighted archways at each end of the street and over a mid-block crossing. These archways evoke a sense of vibrancy and create an outdoor room for downtown patrons and businesses.

The term Woonerf is a European concept of turning a street into a social, active space rather than just a channel for traffic. Utilizing this idea, this block of Jackson Avenue redistributes some space from vehicular traffic and provides more comfortable and usable space for pedestrians. The concept maintains the access to buildings and parking while the street is in use, but can easily be closed to vehicles and opened only to pedestrians, creating a large usable space. The Woonerf style separates vehicular and pedestrian areas through the use of colored pavers, benches, bollards, trees, lights, and planters. A recommended mid-block crossing will assist in slowing traffic and create safe pedestrian zones. The angled parking on the south side of Jackson Avenue will be converted to parallel parking to allow for wider pedestrian areas on both sides of the street.





View of Jackson Street during a Festival

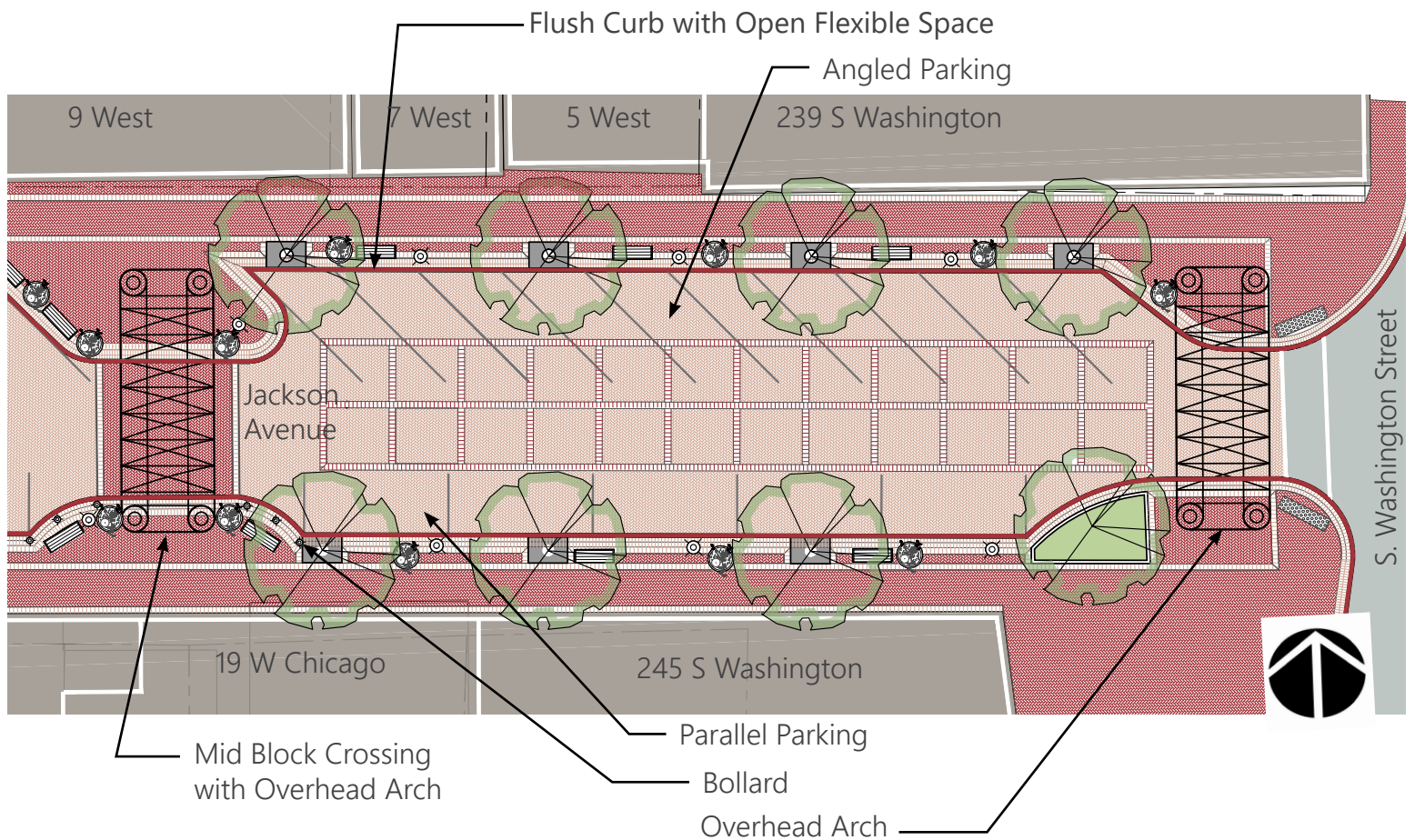


Figure 2.13

Festival Streetscape

The Festival Streetscape is located on Jackson Avenue between Eagle Street and Main Street. It is envisioned that this area will follow the Downtown - Base design standards while better accommodating festivals and events. To facilitate the easy conversion of the streetscape to festival space, enhanced seating, removable bollards, additional street furniture and electrical outlets are recommended along the north side. The south side of the street will utilize the established Riverwalk standard.

Alleyscape

Alleys are an important component of downtown as they provide delivery and utility access, and connections between parking lots and main thoroughfares. Alleys may also be used to provide connections from businesses to parking areas. To encourage higher functioning alleys, it is recommended that pedestrian access to businesses be promoted, mid-block crossings be installed, and additional amenities be incorporated to make alleys a safer and more comfortable place for pedestrians. It should be noted that many of the suggested improvements take place on private property. Collaboration between the private property owner and the city is suggested to implement recommended improvements.

Two alley types are detailed in this section

- Pedestrian Alleys (Paseo)
- Vehicular Alleys

Pedestrian-only paseos focus solely on the pedestrian user. These areas should utilize bollards and curbing to discourage vehicular conflicts. Vehicular alleys are primarily used to access buildings and utilities. The goal is to maintain functional use while improving the pedestrian experience.

Key Recommendations

- Expand use of physical overhead gateways
- Continue streetscape into Paseo areas
- Add overhead string lighting
- Encourage business access - windows/doors
- Incorporate green screens and plantings
- Wayfinding signage
- Cluster dumpsters and improve screening
- Green roof and walls at dumpster areas

Alley w/ Public Art



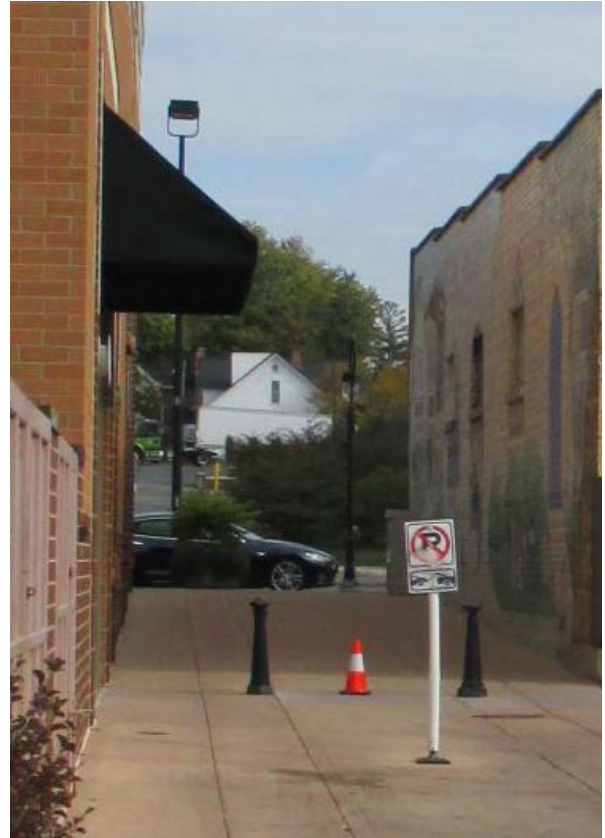
Windows Facing Alley



Paseo



Paseo



Vehicular Alleys



Landscape

Landscape

Streetscape design defines the visual impact of cities as well as provides comfort to people as they move through these spaces. Both of these are greatly impacted by the landscape. Trees, shrubs, perennials, grasses, and seasonal annuals add interest and shade increasing user comfort and encouraging people to linger longer. People are innately drawn to biodiversity and living environment. By incorporating these items into our everyday lives and environments we create a richer fabric to live in.

Plant Locations

Plants will be installed either in raised planters or movable planters. Raised planters will be 6" above finished grade and can include trees, shrubs, perennials, grasses, and annuals. Movable planters are an ornamental pot which can be placed in the streetscape at a variety of locations with seasonal annuals. Tree grates will no longer be encouraged as the health of trees is increased by placing trees in larger planting areas.

Plant Material

Plant selection is an important component of the overall landscape design. It is instrumental in the longevity and success of the urban landscape. Plant selection considers a number of goals including: seasonal color and attractiveness, light level requirements, salt tolerance, and soil moisture needs. Because of varying conditions in the downtown, a variety of plants will be required to fit specific locations. When possible, native plants can be utilized as they are well adapted to Northern Illinois and generally need less supplemental moisture.

Trees

Trees provide shade and increase comfort for pedestrians. Trees will be placed in raised planters. Tree selection should include a variety of species and cultivars which are tolerant of

salt and urban conditions. Additionally, the mix of trees can consider spring flower, fall color and summer attractiveness as well as space available for the root system and crown.

Raised Planters

Raised planters shall be utilized in the downtown streetscape areas where the amenity areas are 4'-6" or wider. The planters will not encroach the carriage walk or walking area. Raised planters will be no smaller than 4' x 6' in size, and will be raised 6" off the ground with a concrete curb. In some instances, a limestone seat wall will be combined with the concrete curb as part of a raised bed. Where pedestrian zones widen and allow for wider amenity areas, planters too can become wider for more plant variety.

The streetscape bed templates in *Figure 2.27* are general layout guides. A variety of Bed A and Bed B can be used on any single block. Plantings may vary in different parts of downtown as the micro climate varies with wind, sun and moisture.

Moveable Planters

Planter pots shall be utilized in small spaces where raised planters do not fit and as ornamental highlights in the streetscape. Movable planters are to have annuals. These planters will require regular hand watering. Planters are designed to withstand freezing temperatures, therefore some may be utilized to provide seasonal winter displays.



Streetscape Landscape Bed Templates

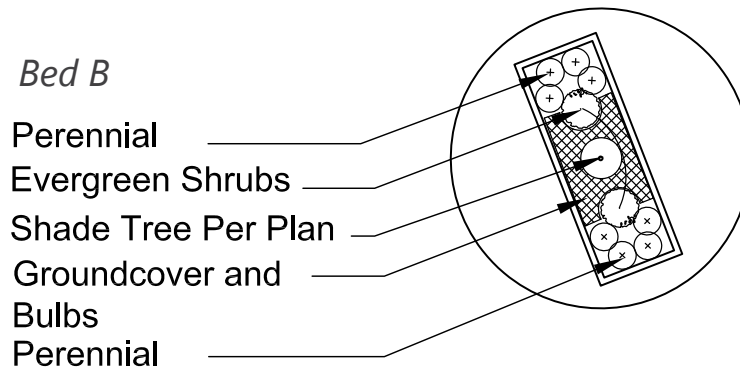
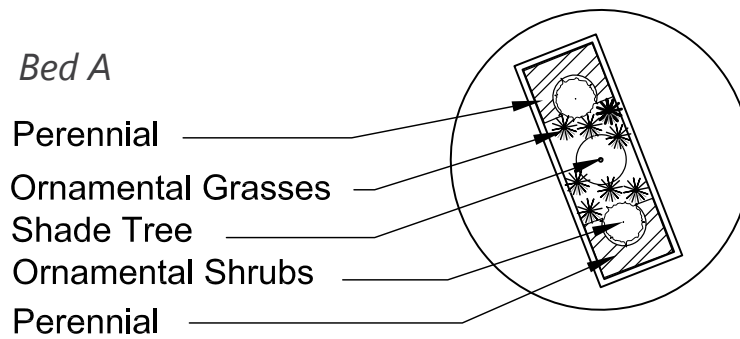


Figure 2.14

Irrigation

Irrigation Requirements

All raised planters shall be irrigated with a spray irrigation system and supplied with a quick coupler valve.

Specifications

Spray System shall have a battery-powered control system, Hunter SVC or approved equal, and related batter-powered control valves with appropriate enclosure or a 110 volt single control station. Each bed shall have 6" institutional pop-up fixed spray heads with integral pressure regulators, Hunter INST with PRS or approved equal. Spray heads will be appropriate flow rate, spray radius and spray pattern to properly irrigate the areas while not over spraying onto paving or adjacent areas.

A quick coupler valve shall be provided in each planter. Couplers shall be located 1 foot from the planter corner on the building side of the planter.

Quick coupler valves shall be bronze body with 1 -1/2" IPS female thread inlet and a 1-1/2" key outlet and as manufactured by Rainbird Sales Inc, Toro Co. or an approved equal. The contractor shall provide the City with 6 quick coupler keys equipped with 1" fpt x 1" mht hose.

The irrigation system shall be designed such that the system can be evacuated of water via gravity or air pressure. Irrigation water shall be separate from potable water supplies by means of a reduced pressure zone (RPZ) backflow preventer.

3.0

Appendix

*Appendix A
Construction Details*

*Appendix B
Implementation Plan*

*Appendix C
Summary of Public Engagement*

Appendix A

Construction Details

Hardscape

Site Furniture

Landscape

Overall Streetscape Map

Legend

- █ Downtown Streetscape
- Corner to follow Downtown Standard
- █ Standard Concrete Sidewalk
- █ Washington Streetscape
- █ Festival Streetscape
- █ Flexible Streetscape

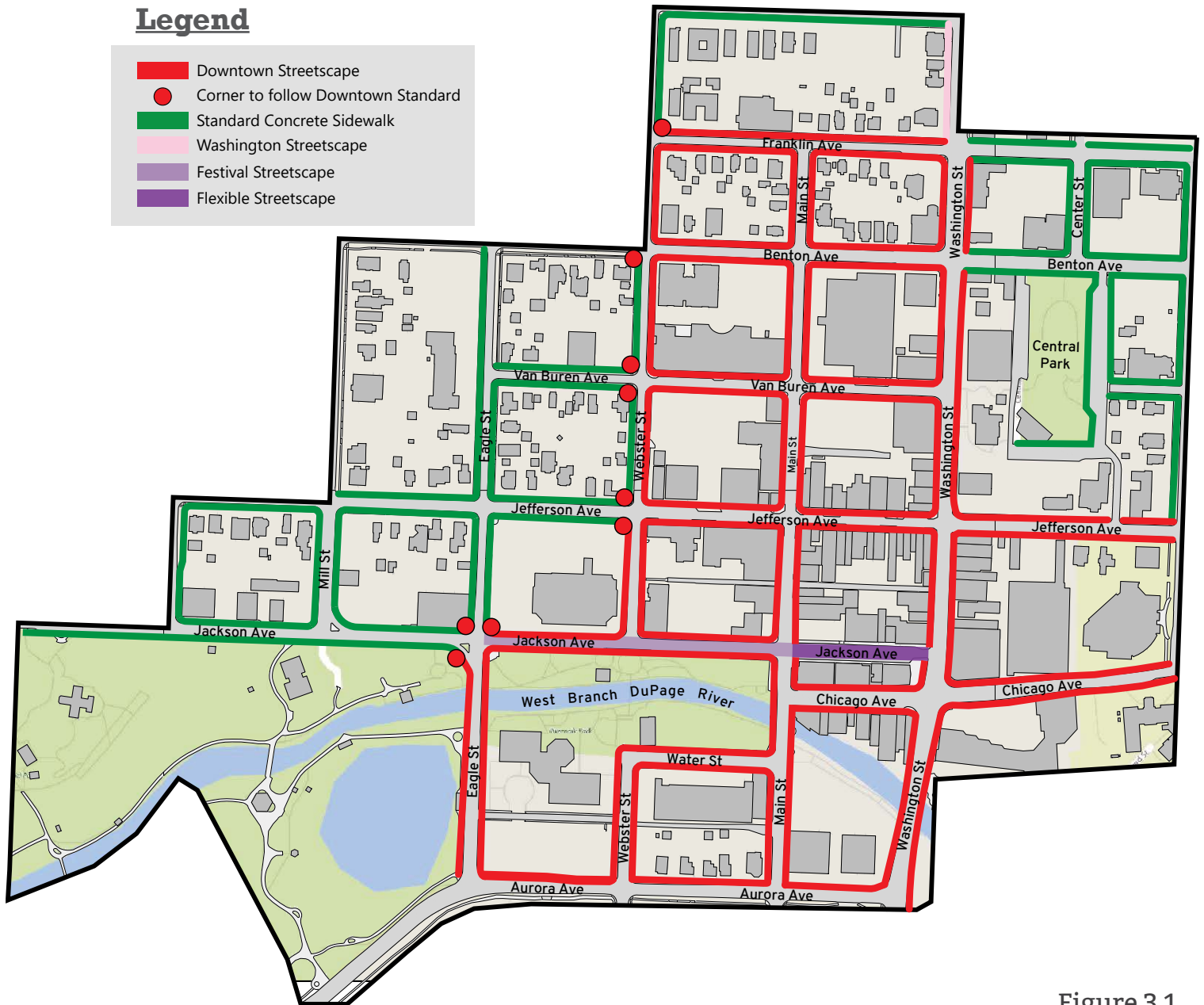


Figure 3.1

Hardscape Details

<i>590.15 Sheet 1</i>	<i>Downtown Streetscape Materials</i>
<i>590.15 Sheet 2</i>	<i>Downtown Streetscape Type Pavement Detail</i>
<i>590.15 Sheet 3</i>	<i>Downtown Streetscape Type - Narrow < 11' (Plan)</i>
<i>590.15 Sheet 4</i>	<i>Downtown Streetscape Type - Narrow 11' to 13.5' (Plan)</i>
<i>590.15 Sheet 5</i>	<i>Downtown Streetscape Type - Base (Plan)</i>
<i>590.15 Sheet 6</i>	<i>Downtown Streetscape Type - Wide (Plan)</i>
<i>590.15 Sheet 7</i>	<i>Downtown Streetscape Type - Standard Corner</i>
<i>590.15 Sheet 8</i>	<i>Downtown Streetscape Type - Enhanced Corner</i>

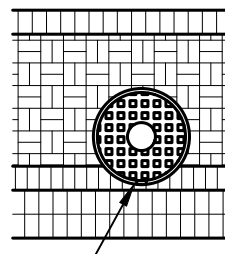
PAVER SPECIFICATIONS:

1. RED BLEND CONCRETE PAVERS
MANUFACTURER: UNILOCK
PRODUCT: IL CAMPO
SIZE: 7.75" X 4" X 2.25"
COLOR: HERITAGE BROWN
2. TAN CONCRETE PAVERS
MANUFACTURER: UNILOCK
PRODUCT: HOLLAND PREMIER
SIZE: 7.75" X 4" X 2.25"
COLOR: SANDSTONE
3. JOINTING MATERIAL:
MANUFACTURER APPROVED
POLYMERIC SAND
COLOR: TAN
4. CONCRETE PAVERS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS SET FORTH IN ASTM C-936:
 - 4.1. MEASURED LENGTH OF TEST SPECIMENS SHALL NOT DIFFER BY MORE THAN +/- 0.063 IN., WHILE MEASURED THICKNESS SHALL NOT DIFFER BY MORE THAN +/- 0.125 IN.
 - 4.2. AVERAGE COMPRESSIVE STRENGTH OF 8,000 PSI WITH NO INDIVIDUAL UNIT UNDER 7,200 PSI WHEN TESTED ACCORDANCE WITH ASTM C-140.
 - 4.3. FREEZE-THAW TESTING IS REQUIRED AND THE AVERAGE MASS LOSS OF ALL SPECIMENS TESTED SHALL NOT BE GREATER THAN (A) 225G/M2 WHEN SUBJECT TO 28 FREEZE THAW CYCLES, OR (B) 500GM/M2 WHEN SUBJECT TO 49 FREEZE THAW CYCLES. TESTING SHALL BE CONDUCTED USING A 3% SALINE SOLUTION IN ACCORDANCE WITH ASTM C-1645.
 - 4.4. PIGMENT IN CONCRETE PAVERS SHALL CONFORM TO ASTM C-979.
5. PAVERS SHALL BE INSTALLED PER MANUFACTURER SPECIFICATIONS AND ACCORDING TO CURRENT ICPI STANDARDS.

SIDEWALK SPECIFICATIONS:

1. CONCRETE SHALL BE IDOT CLASS SI.
2. MINIMUM SIDEWALK THICKNESS SHALL BE 4".
3. SIDEWALK THICKNESS ACROSS DRIVEWAYS SHALL BE AT A MINIMUM 6" FOR RESIDENTIAL DRIVEWAYS AND 8" FOR COMMERCIAL DRIVEWAYS.
4. MAXIMUM LONGITUDINAL SLOPE SHALL NOT EXCEED 8.3% (12:1). FOR ANY SLOPE IN EXCESS OF 5% UP TO 8.3%, LANDINGS AND HANDRAILS WILL BE REQUIRED PER THE ILLINOIS ACCESSIBILITY CODE (LATEST EDITION).
5. MINIMUM TRANSVERSE SLOPE SHALL BE 1.0% (1:100). MAXIMUM TRANSVERSE SLOPE SHALL BE LESS THAN 2.0% (1:50).
6. A MINIMUM 4" AGGREGATE SUBBASE (CA-6) SHALL BE PROVIDED. (6" THROUGH COMMERCIAL DRIVES).
7. AGGREGATE SUBBASE SHALL BE MECHANICALLY COMPACTED.
8. ALL SIDEWALKS SHALL BE PROMPTLY BACKFILLED AND PROTECTED FROM DAMAGE.
9. SIDEWALK CONSTRUCTION SHALL FOLLOW IDOT STANDARDS.
10. SIDEWALKS SHALL FOLLOW CURRENT ADA GUIDELINES.

OBSTRUCTIONS WITHIN PAVERS



CUT PAVERS TO
FIT AROUND
OBSTRUCTIONS

NOTES:

APPLIES TO ALL UTILITIES AND
OBSTRUCTIONS WITHIN THE PAVER
AREAS.



City of Naperville
**STANDARD
DETAIL**

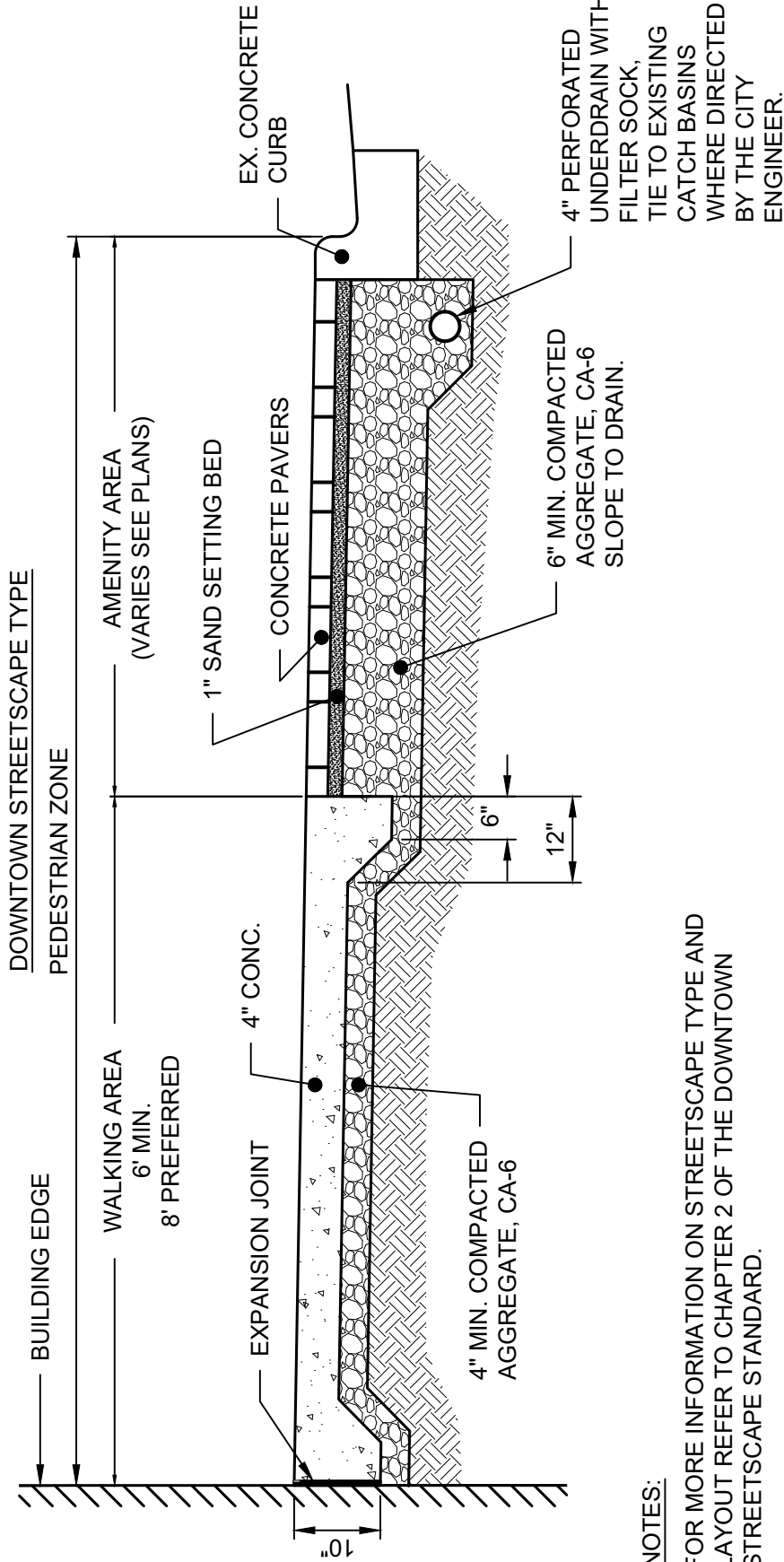
DOWNTOWN STREETSCAPE MATERIALS

REVISED: 4/24/2019

SHEET 1 OF 8

PAVEMENT 15

590.15



NOTES:

1. FOR MORE INFORMATION ON STREETSCAPE TYPE AND LAYOUT REFER TO CHAPTER 2 OF THE DOWNTOWN STREETSCAPE STANDARD.
2. REFER TO STANDARD 590.15 SHEET 1 FOR HARDSCAPE MATERIALS AND SPECIFICATIONS.
3. 3/4" REMOLDED EXPANSION JOINT BETWEEN BUILDING AND SIDEWALK.
4. PAVERS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.



**STANDARD
DETAIL**

DOWNTOWN STREETSCAPE

DOWNTOWN STREETSCAPE TYPE PAVEMENT DETAIL

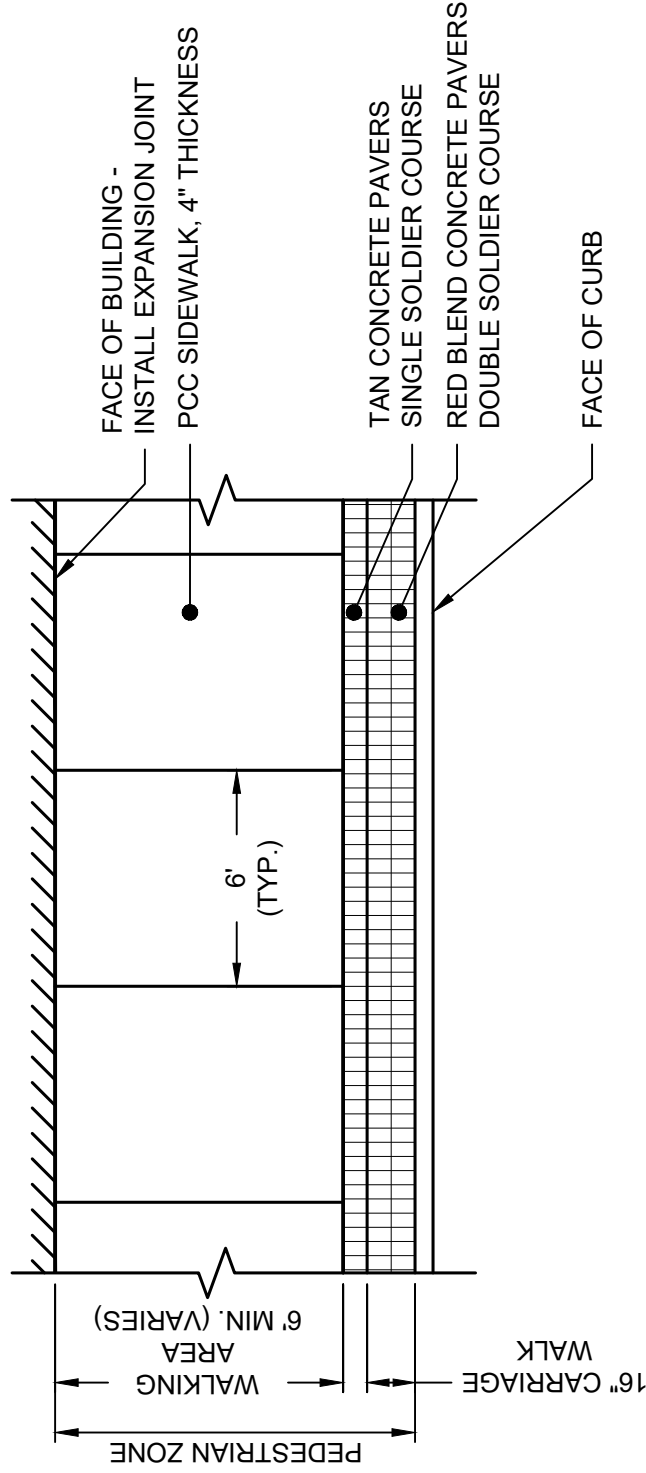
REVISED: 4/24/2019

SHEET 2 OF 8

PAVEMENT 15

590.15

DOWNTOWN STREETSCAPE TYPE - NARROW < 11'



NOTES:

1. FOR MORE INFORMATION ON STREETSCAPE TYPE AND LAYOUT REFER TO CHAPTER 2 OF THE DOWNTOWN STREETSCAPE STANDARD.
2. REFER TO STANDARD 590.15 SHEET 1 FOR HARDSCAPE MATERIALS AND SPECIFICATIONS.
3. 3/4" PREMOLDED EXPANSION JOINT BETWEEN BUILDING AND SIDEWALK. WATERPROOF CAULK SHALL BE APPLIED TO THE TOP 3/4".
4. INSTALL PAVERS PER MANUFACTURER'S RECOMMENDATIONS.
5. TOOLED CONTROL JOINTS SHALL BE MADE AS SHOWN, AND A 1/2" PREMOLDED EXPANSION JOINT PLACED AT 42' INTERVALS.
6. MEDIUM BRUSH FINISH WITH TOOLED JOINTS. CALIFORNIA FINISH IS PROHIBITED. SAW CUT JOINTS ARE PROHIBITED.



**STANDARD
DETAIL**

DOWNTOWN STREETSCAPE

DOWNTOWN STREETSCAPE TYPE - NARROW < 11' (PLAN)

REVISED: 4/24/2019

SHEET 3 OF 8

PAVEMENT 15

590.15

FACE OF BUILDING -
INSTALL EXPANSION JOINT

PCC SIDEWALK, 4" THICKNESS

6' (TYP.)

8' MIN.
WALKING
AREA

PEDESTRIAN ZONE

RED BLEND CONCRETE PAVERS
SINGLE SOLDIER COURSE

RED BLEND CONCRETE PAVERS
BASKET WEAVE PATTERN (VARIABLE WIDTH)

TAN CONCRETE PAVERS
SINGLE SOLDIER COURSE

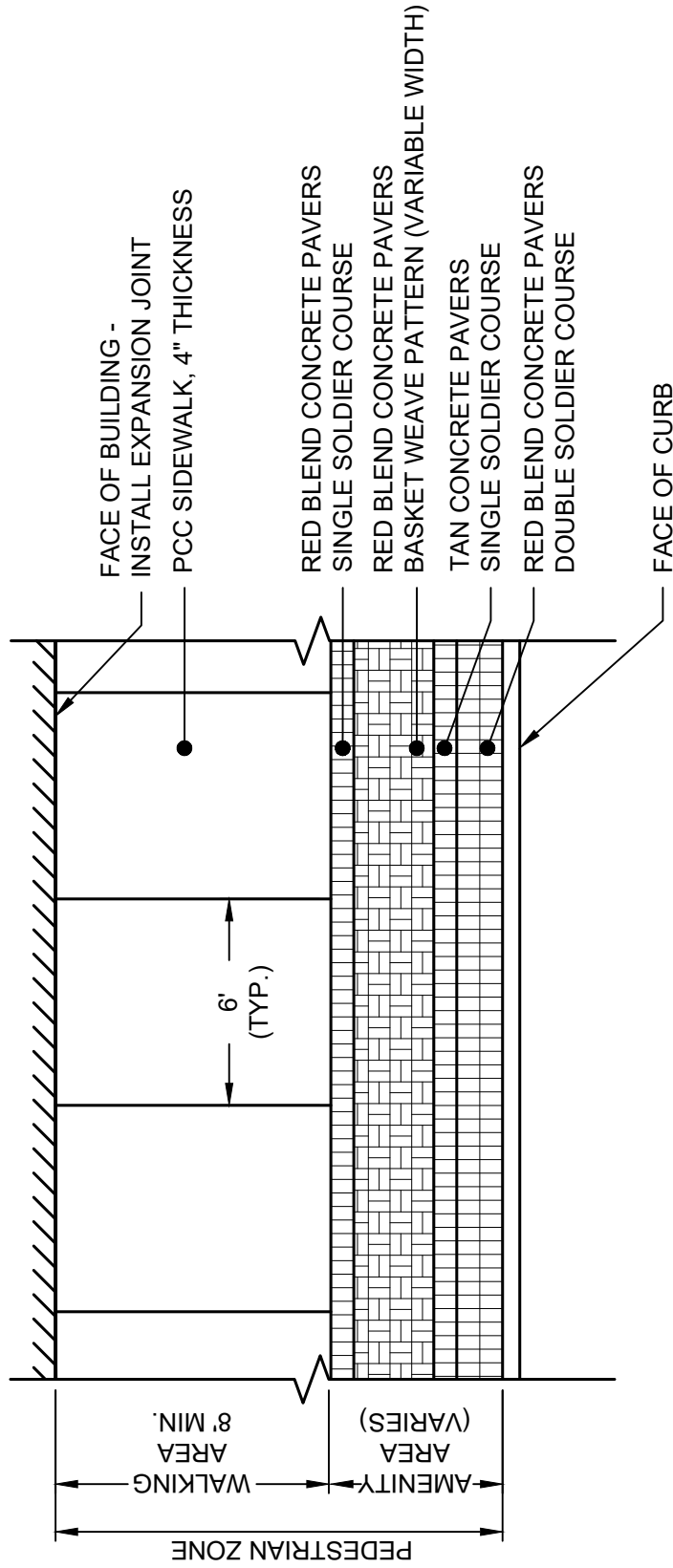
RED BLEND CONCRETE PAVERS
DOUBLE SOLDIER COURSE

FACE OF CURB

AMENITY
AREA
(VARIES)

1. FOR MORE INFORMATION ON STREETSCAPE TYPE AND LAYOUT REFER TO CHAPTER 2 OF THE DOWNTOWN STREETSCAPE STANDARD.
2. REFER TO STANDARD 590.15 SHEET 1 FOR HARDSCAPE MATERIALS AND SPECIFICATIONS.
3. 3/4" PREMOLDED EXPANSION JOINT BETWEEN BUILDING AND SIDEWALK.
4. INSTALL PAVERS PER MANUFACTURER'S RECOMMENDATIONS.
5. TOOLED CONTROL JOINTS SHALL BE MADE AS SHOWN, AND A 1/2" PREMOLDED EXPANSION JOINT PLACED AT 42' INTERVALS.
6. MEDIUM BRUSH FINISH WITH TOOLED JOINTS. CALIFORNIA FINISH IS PROHIBITED. SAW CUT JOINTS ARE PROHIBITED.

DOWNTOWN STREETSCAPE TYPE - BASE 13.5' TO 16.5' WIDTH



NOTES:

1. FOR MORE INFORMATION ON STREETSCAPE TYPE AND LAYOUT REFER TO CHAPTER 2 OF THE DOWNTOWN STREETSCAPE STANDARD.
2. REFER TO STANDARD 590.15 SHEET 1 FOR HARDSCAPE MATERIALS AND SPECIFICATIONS.
3. 3/4" PREMOLDED EXPANSION JOINT BETWEEN BUILDING AND SIDEWALK.
4. INSTALL PAVERS PER MANUFACTURER'S RECOMMENDATIONS.
5. TOOLED CONTROL JOINTS SHALL BE MADE AS SHOWN, AND A 1/2" PREMOLDED EXPANSION JOINT PLACED AT 42' INTERVALS.
6. MEDIUM BRUSH FINISH WITH TOOLED JOINTS. CALIFORNIA FINISH IS PROHIBITED. SAW CUT JOINTS ARE PROHIBITED.



**STANDARD
DETAIL**

DOWNTOWN STREETSCAPE

DOWNTOWN STREETSCAPE TYPE - BASE (PLAN)

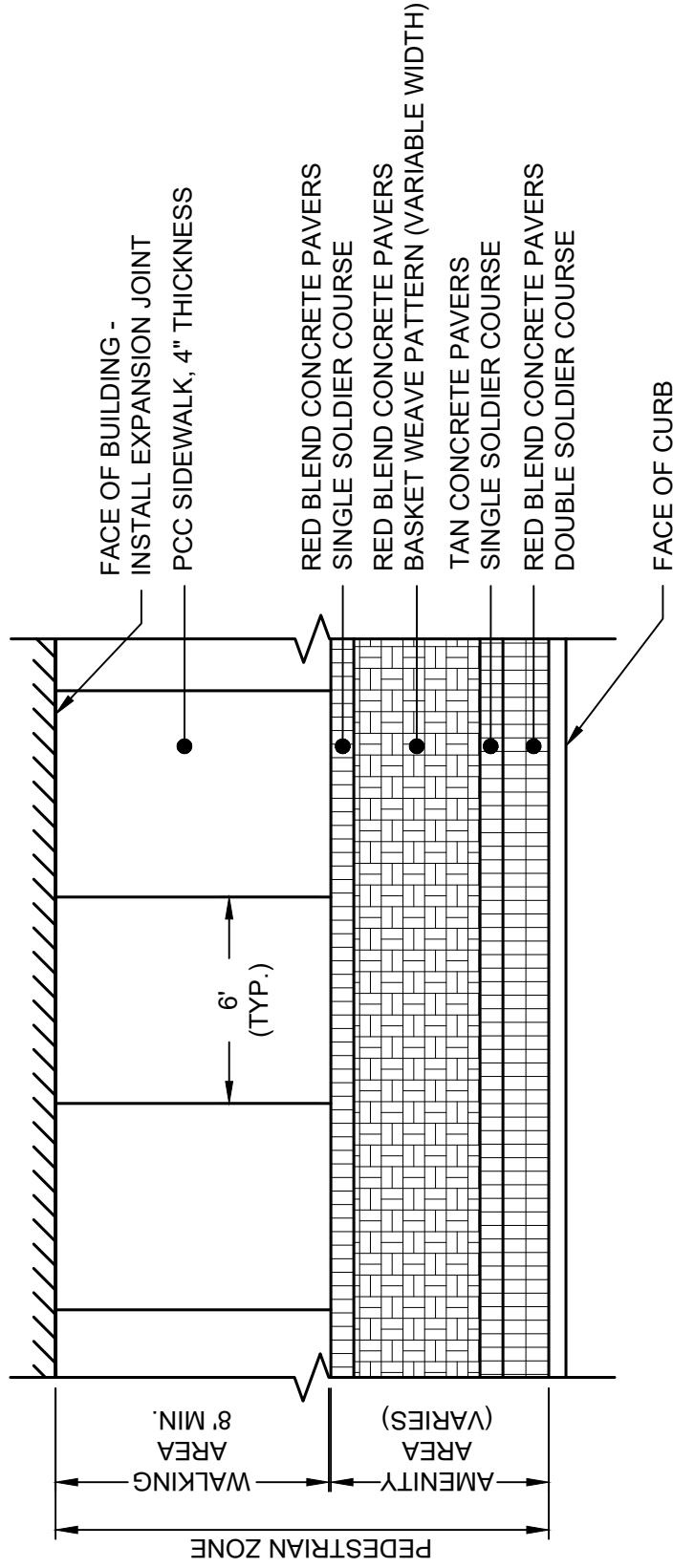
REVISED: 4/24/2019

SHEET 5 OF 8

PAVEMENT 15

590.15

DOWNTOWN STREETSCAPE TYPE - WIDE > 16.5' WIDTH



NOTES:

1. FOR MORE INFORMATION ON STREETSCAPE TYPE AND LAYOUT REFER TO CHAPTER 2 OF THE DOWNTOWN STREETSCAPE STANDARD.
2. REFER TO STANDARD 590.15 SHEET 1 FOR HARDSCAPE MATERIALS AND SPECIFICATIONS.
3. 3/4" PREMOLDED EXPANSION JOINT BETWEEN BUILDING AND SIDEWALK.
4. INSTALL PAVERS PER MANUFACTURER'S RECOMMENDATIONS.
5. TOOLED CONTROL JOINTS SHALL BE MADE AS SHOWN, AND A 1/2" PREMOLDED EXPANSION JOINT PLACED AT 42' INTERVALS.
6. MEDIUM BRUSH FINISH WITH TOOLED JOINTS. CALIFORNIA FINISH IS PROHIBITED. SAW CUT JOINTS ARE PROHIBITED.



**STANDARD
DETAIL**

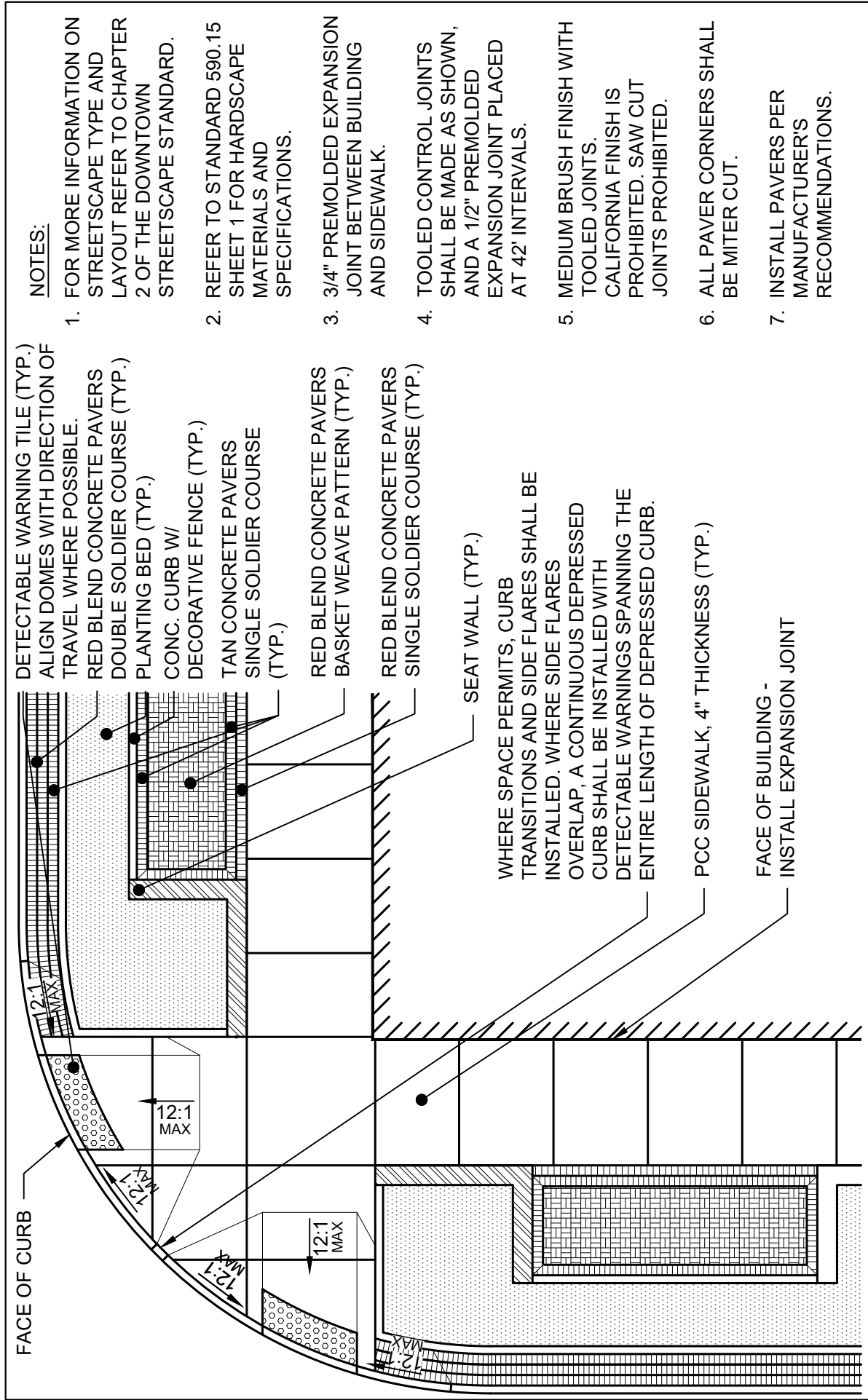
**DOWNTOWN STREETSCAPE
DOWNTOWN STREETSCAPE TYPE - WIDE (PLAN)**

REVISED: 4/24/2019

SHEET 6 OF 8

PAVEMENT 15

590.15



City of Naperville
**STANDARD
DETAIL**

**DOWNTOWN STREETSCAPE
DOWNTOWN STREETSCAPE TYPE - ENHANCED CORNER**

REVISED: 4/24/2019

SHEET 8 OF 8

PAVEMENT 15

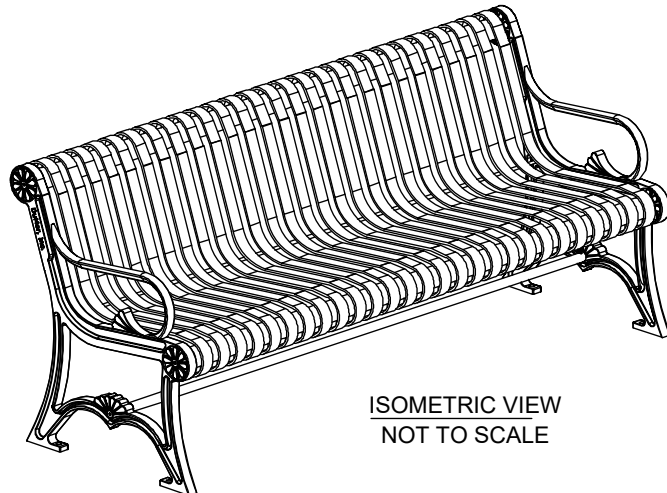
590.15

Furniture Details

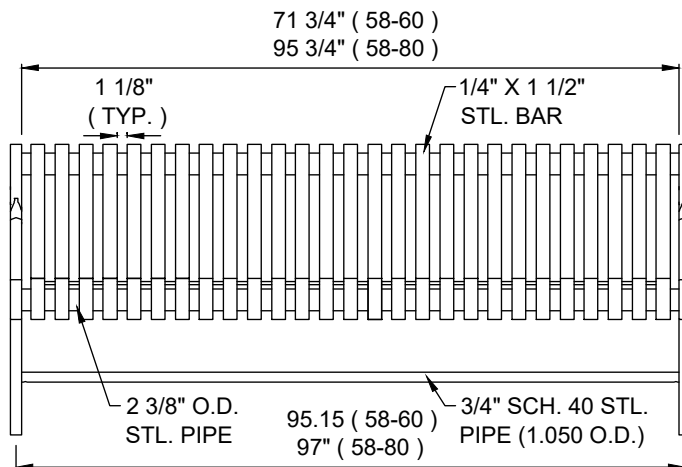
<i>590.16 Sheet 1</i>	<i>Downtown Streetscape Furniture - Bench</i>
<i>590.16 Sheet 2</i>	<i>Downtown Streetscape Furniture - Litter Receptacle</i>
<i>590.16 Sheet 3</i>	<i>Downtown Streetscape Furniture - Recycling Receptacle</i>
<i>590.16 Sheet 4</i>	<i>Downtown Streetscape Furniture - Bike Rack</i>
<i>590.16 Sheet 5</i>	<i>Downtown Streetscape Furniture - Bollard</i>
<i>590.16 Sheet 6</i>	<i>Downtown Streetscape Furniture - Drinking Fountain</i>
<i>590.16 Sheet 7</i>	<i>Downtown Streetscape Furniture - Matrix</i>



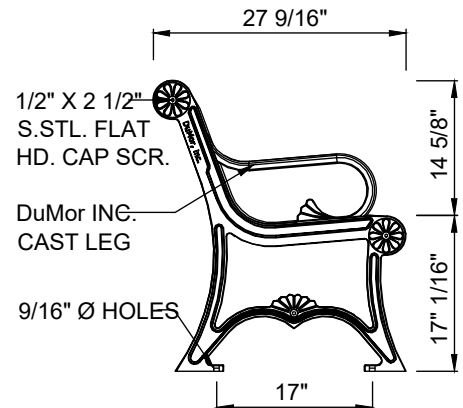
DU MOR, INC.
 15 INDUSTRIAL CIRCLE, P.O. BOX 142
 MIFFLINTOWN, PA 17059-0142
 TOLL FREE: 1-800-598-4018
 PHONE: (717) 436-2106
 FAX: (717) 436-9839
 www.dumor.com



ISOMETRIC VIEW
 NOT TO SCALE



FRONT VIEW
 NOT TO SCALE



SIDE VIEW
 NOT TO SCALE

NOTES:

1. BENCH

MANUFACTURER: DUMOR
 MODEL: 58-60; 58-80 WITH CAST IRON SUPPORTS
 COLOR: BLACK
 FINISH: POWDERCOAT
 DISTRIBUTOR: NUTOYS LEISURE PRODUCTS 800-526-6197

2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.



City of Naperville
**STANDARD
 DETAIL**

**DOWNTOWN STREETSCAPE
 FURNITURE - BENCH**

REVISED: 4/24/2019

SHEET 1 OF 7

FURNITURE 16

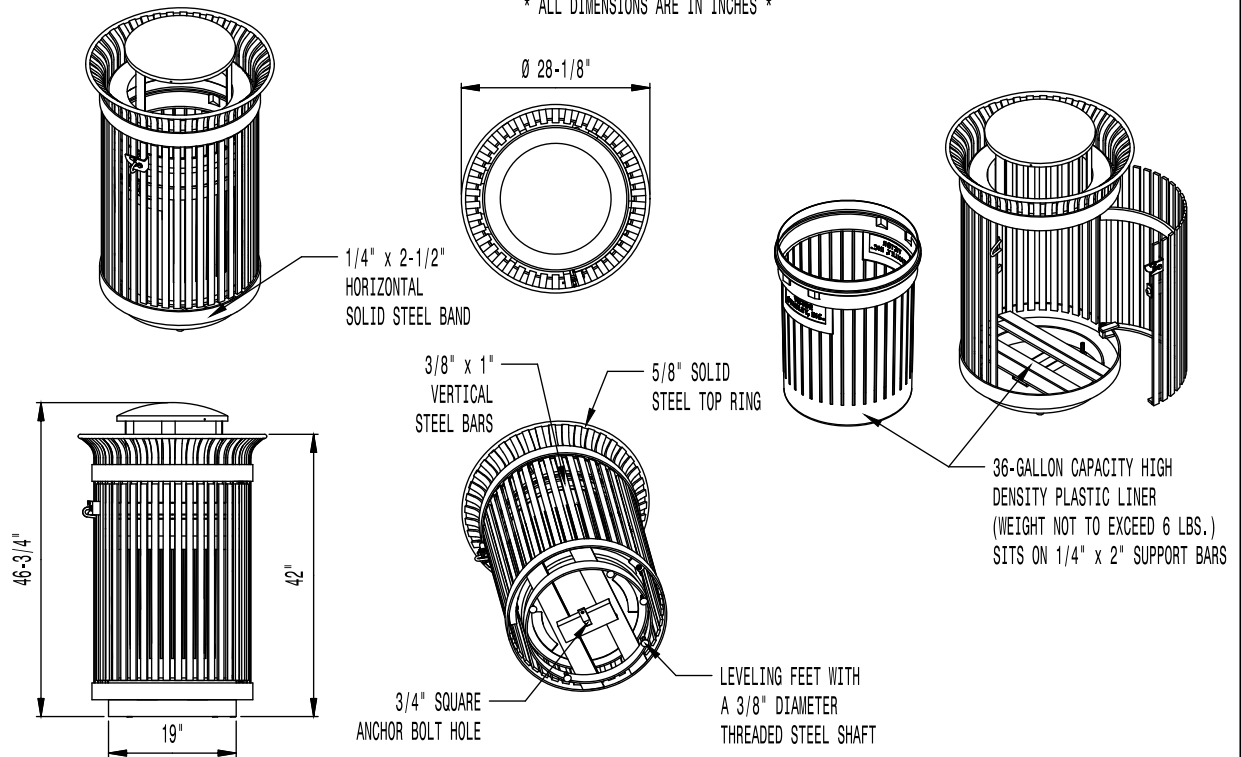
590.16



VICTOR STANLEY, INC.®
-Manufacturers of Quality Site Furnishings since 1962-

P.O. DRAWER 330 - DUNKIRK, MD 20754 USA
TOLL FREE: (800) 368-2573 (USA & CANADA)
TEL (301) 855-8300 - FAX (410) 257-7579
WEB SITE: [HTTP://WWW.VICTORSTANLEY.COM](http://www.victorstanley.com)

* ALL DIMENSIONS ARE IN INCHES *



NOTES:

1. LITTER RECEPTACLE

MANUFACTURER: VICTOR STANLEY

MODEL: SD-42 (36 GALLON); DOME LID SHALL BE USED; DOME ASH TRAY LID OPTIONAL

COLOR: BLACK

FINISH: POLYESTER POWDER COAT

DISTRIBUTER: HOWARD WHITE & ASSOCIATES, INC. - 800.225.2880

2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.



City of Naperville
**STANDARD
DETAIL**

**DOWNTOWN STREETSCAPE
FURNITURE - LITTER RECEPTACLE**

REVISED: 4/24/2019

SHEET 2 OF 7

FURNITURE 16

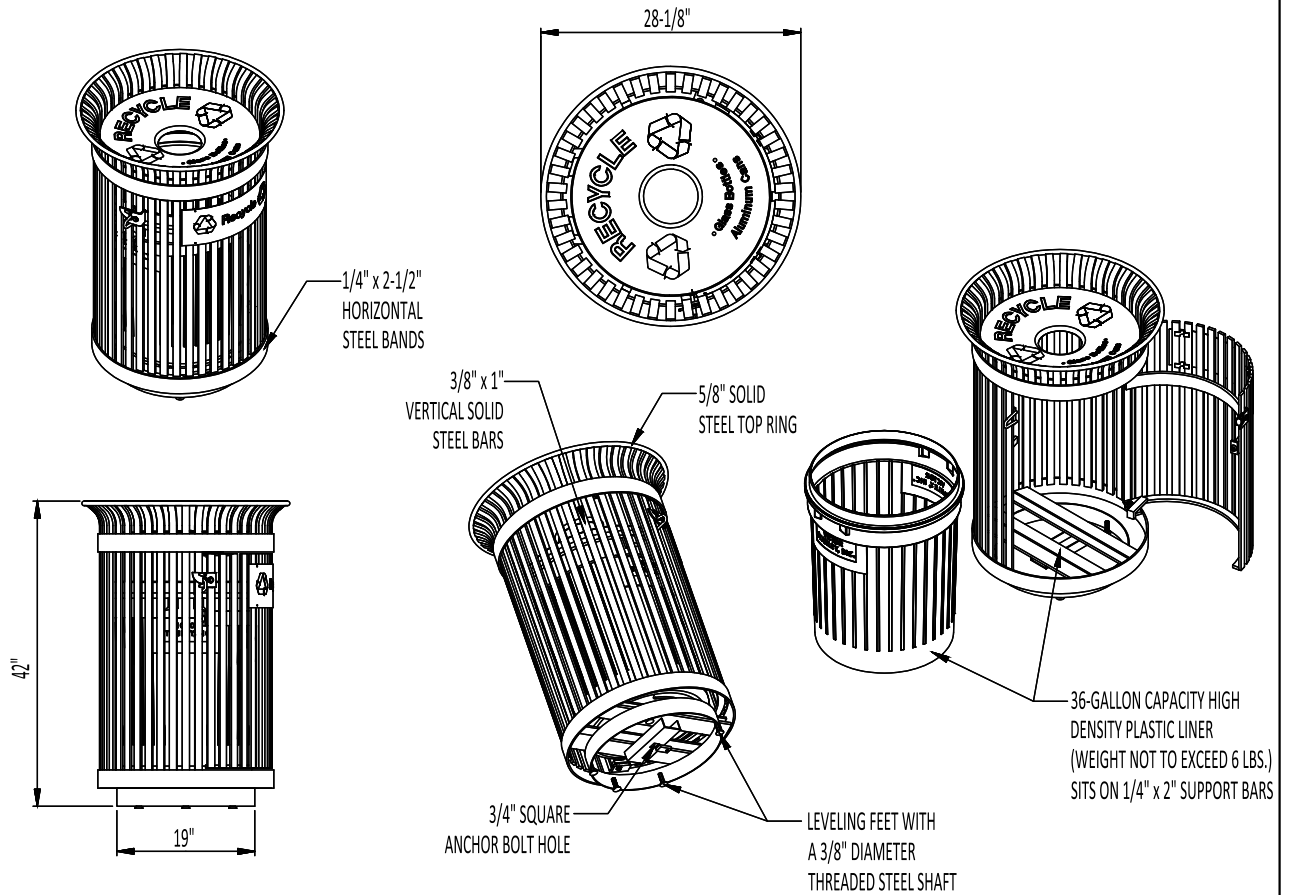
590.16



VICTOR STANLEY, INC.®
-Manufacturers of Quality Site Furnishings since 1962-

* ALL DIMENSIONS ARE IN INCHES *

P.O. DRAWER 330 - DUNKIRK, MD 20754 USA
TOLL FREE: (800) 368-2573 (USA & CANADA)
TEL (301) 855-8300 - FAX (410) 257-7579
WEB SITE: [HTTP://WWW.VICTORSTANLEY.COM](http://WWW.VICTORSTANLEY.COM)



* - DOME LID SHALL BE PROVIDED.

NOTES:

1. LITTER RECEPTACLE

MANUFACTURER: VICTOR STANLEY

MODEL: SD-42 (36 GALLON); DOME LID SHALL BE USED; DOME ASH TRAY LID OPTIONAL

COLOR: BLACK

FINISH: POLYESTER POWDER COAT

DISTRIBUTER: HOWARD WHITE & ASSOCIATES, INC. - 800.225.2880

2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.



City of Naperville
**STANDARD
DETAIL**

**DOWNTOWN STREETSCAPE
FURNITURE-RECYCLING RECEPTACLE**

REVISED: 4/24/2019

SHEET 3 OF 7

FURNITURE 16

590.16

* ALL DIMENSIONS ARE IN INCHES *

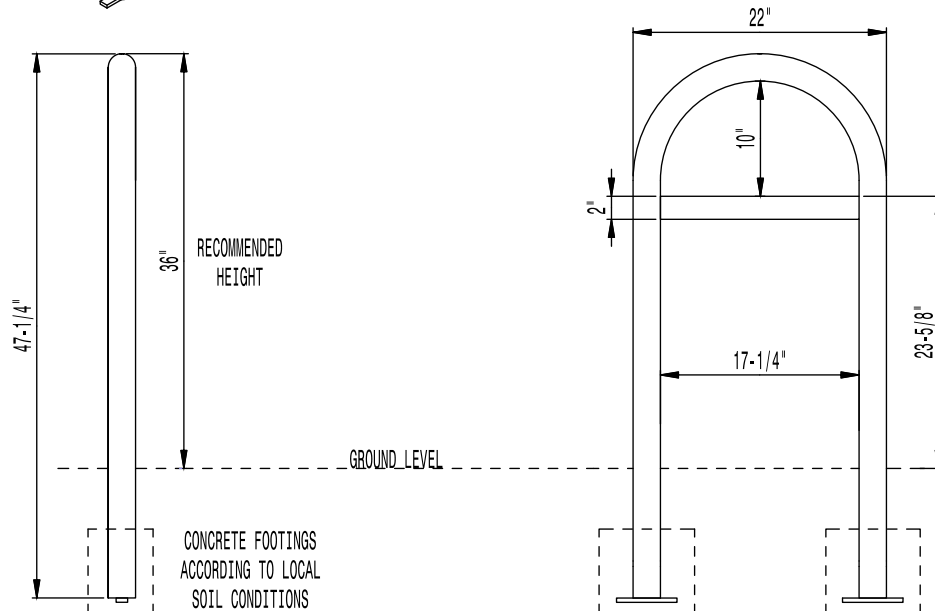
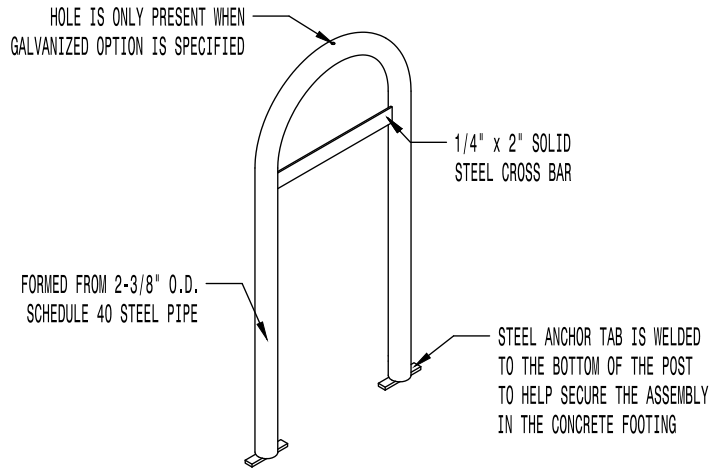
TOLL FREE (USA & CANADA): 1-888-ANTI-RAM (888-268-4726)

410-286-3375 : FAX 410-479-0175

P.O. BOX 307, DUNKIRK, MD 20754 U.S.A.

INFO@SECURESITEDESIGN.COM

WWW.SECURESITEDESIGN.COM



NOTES:

1. BIKE RACK

MANUFACTURER: VICTOR STANLEY

MODEL: BRWS-161

COLOR: BLACK

FINISH: POLYESTER POWDER COAT

DISTRIBUTOR: HOWARD WHITE & ASSOCIATES, INC. - 800.225.2880

2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

3. MAY ALSO BE SURFACE MOUNTED.



City of Naperville
**STANDARD
DETAIL**

**DOWNTOWN STREETSCAPE
FURNITURE - BIKE RACK**

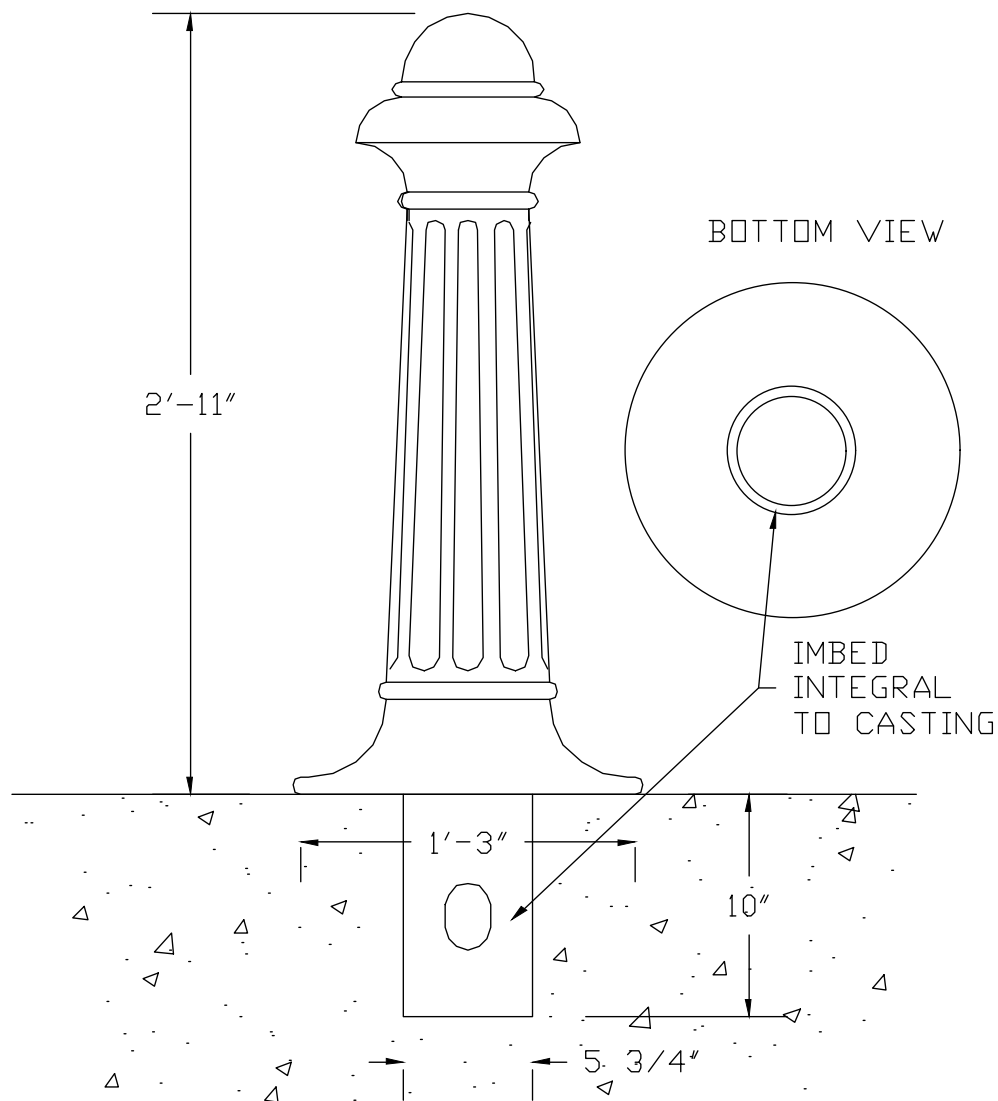
REVISED: 4/24/2019

SHEET 4 OF 7

FURNITURE 16

590.16

SALEM



M9023 BOLLARD

NOTES:

1. BOLLARD

MANUFACTURER: IRONSMITH

MODEL: M9023

COLOR: BLACK

MATERIAL: CAST IRON

FINISH: POLYESTER POWDER COAT (FACTORY)

DISTRIBUTOR: ZENON - 847.215.6050

2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.



City of Naperville
**STANDARD
DETAIL**

DOWNTOWN STREETSCAPE FURNITURE - BOLLARD

REVISED: 4/24/2019

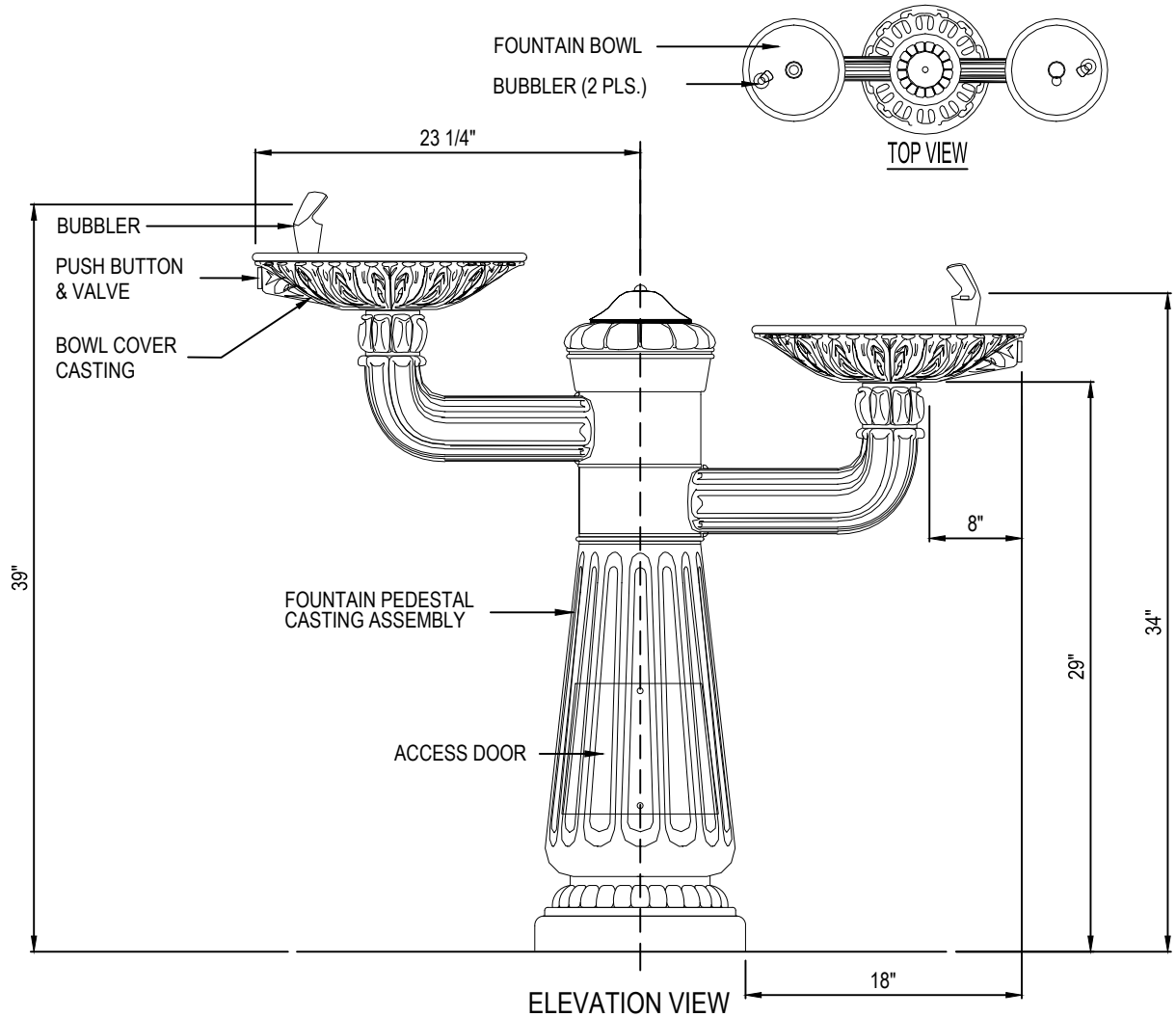
SHEET 5 OF 7

FURNITURE 16

590.16

CANTERBURY[®] INTERNATIONAL

CANTERBURY DESIGNS, INC.
5632 W. WASHINGTON BLVD.
LOS ANGELES, CA 90016
1 (800) 935-7111
PHONE (323) 936-7111
FAX (323) 936-7115
www.canterburyintl.com



NOTES:

1. DRINKING FOUNTAIN
MANUFACTURER: CANTERBURY INTERNATIONAL
MODEL: 1890
COLOR: BLACK
MATERIAL: CAST IRON
FINISH: POWDER COAT
DISTRIBUTOR: FACTORY DIRECT - 800.935.7111
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
3. DRINKING FOUNTAIN SHALL BE ADA COMPLIANT.



City of Naperville
**STANDARD
DETAIL**

DOWNTOWN STREETSCAPE FURNITURE - DRINKING FOUNTAIN

REVISED: 4/24/2019

SHEET 6 OF 7

FURNITURE 16

590.16

Description/Item	Manufacturer	Model #	Recommended Spacing	Color	Material	Finish	Attachment
6' Bench	DuMor	58-60	2 per 100 feet	Black	Steel	Powdercoat	Surface Mount
8' Bench	DuMor	58-80	where requested	Black	Steel	Powdercoat	Surface Mount
Litter Receptacle w/ Dome Lid	Victor Stanley	SD-42-Dome	1 per 100 feet	Black	Steel	Powdercoat	Surface Mount
Litter Receptacle w/ Ash Dome Lid	Victor Stanley	SD-42-Dome Ash	where requested	Black	Steel	Powdercoat	Surface Mount
Recycle Receptacle w/ Dome Lid	Victor Stanley	SD-42	1 per 100 feet	Black	Steel	Powdercoat	Surface Mount
Recycle Receptacle w/ Ash Dome Lid	Victor Stanley	SD-42-Recycle w/Ash	where requested	Black	Steel	Powdercoat	Surface Mount
Standard Bike Rack	Victor Stanley	BRWS-161	as needed 30" O.C.	Black	Steel	Powdercoat	Embedded
Bollard	Ironsmith	M9023	as needed	Black	Gray Iron	Polyurethane Finish	Embedded
Planter Pot	Landscapeforms	Rosa Model 30"x 18" and 36" x 23"	3 per 100 feet	Fog	Polyethylene, rotationally molded	Standard	Surface Mount
Drinking Fountain	Canterbury	1890	as needed	Black	Cast Iron	Powder Coat	Embedded
Table	Innovative Designs	Tuscano Round Plaza Table, 40"	as needed	Black	Steel	Powder Coat	Surface Mount
Chairs	Innovative Designs	Tuscano Stacking Arm Chair	as needed	Black	Steel	Powder Coat	Surface Mount
Umbrella	Innovative Designs	Market Umbrella	as needed	Neutral Color	Fabric	N/A	Table Mount



City of Naperville
**STANDARD
DETAIL**

**DOWNTOWN STREET
FURNITURE - MATRIX**

REVISED: 4/24/2019

SHEET 7 OF 7

FURNITURE 16

590.16

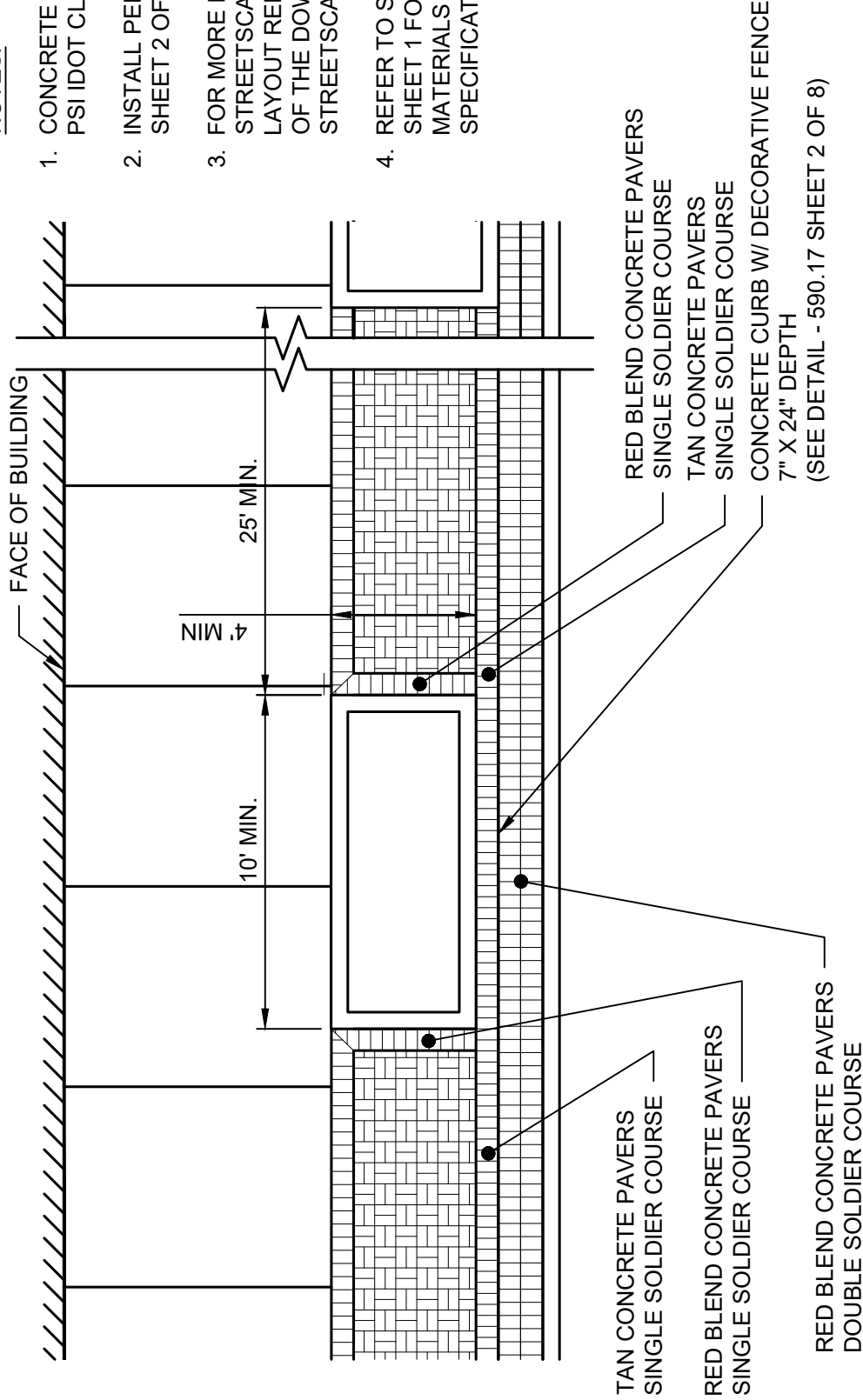
Landscape Details

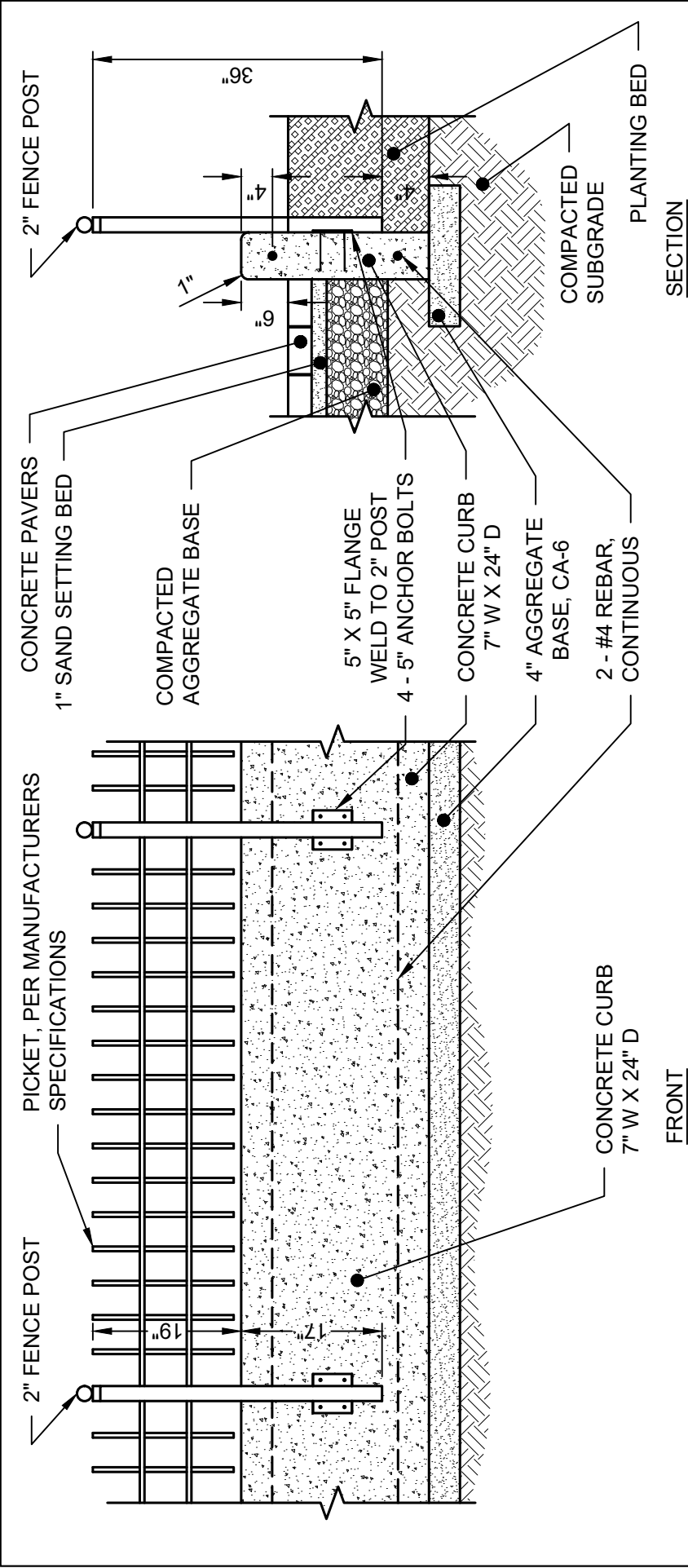
<i>590.17 Sheet 1</i>	<i>Downtown Streetscape Landscape - Planter</i>
<i>590.17 Sheet 2</i>	<i>Downtown Streetscape Landscape - Decorative Fence & Planter Curb Detail</i>
<i>590.17 Sheet 3</i>	<i>Downtown Streetscape Planter Landscape</i>
<i>590.17 Sheet 4</i>	<i>Downtown Streetscape Landscape Seat Wall Detail</i>
<i>590.17 Sheet 5</i>	<i>Downtown Streetscape Tree Installation</i>
<i>590.17 Sheet 6</i>	<i>Downtown Streetscape Shrub Installation</i>
<i>590.17 Sheet 7</i>	<i>Downtown Streetscape Perennial Installation</i>
<i>590.17 Sheet 8</i>	<i>Downtown Streetscape Irrigation Specifications</i>

DOWNTOWN STREETSCAPE TYPE - BASE & WIDE - PLANTER

NOTES:

1. CONCRETE CURB SHALL BE 4000 PSI IDOT CLASS SI CONCRETE.
2. INSTALL PER DETAIL 590.17 SHEET 2 OF 8.
3. FOR MORE INFORMATION ON STREETSCAPE TYPE AND LAYOUT REFER TO CHAPTER 2 OF THE DOWNTOWN STREETSCAPE STANDARD.
4. REFER TO STANDARD 590.15 SHEET 1 FOR HARDSCAPE MATERIALS AND SPECIFICATIONS.





NOTES:

1. FOR MORE INFORMATION ON STREETSCAPE TYPE AND LAYOUT REFER TO CHAPTER 2 OF THE DOWNTOWN STREETSCAPE STANDARD.
2. REFER TO STANDARD 590.15 SHEET 1 FOR HARDSCAPE MATERIALS AND SPECIFICATIONS.
3. CONCRETE CURB SHALL BE 4000 PSI IDOT CLASS SI CONCRETE
4. SEE DOWNTOWN STREETSCAPE PLANTER LANDSCAPE DETAIL FOR PLANTER INFORMATION.
5. MANUFACTURER: INTEGRITY FENCE*, MERCHANTS METALS*
MATERIAL: STEEL
FINISH: BLACK POWDER COAT
SUPPLIER: K BROTHERS, MERCHANTS METALS
(* - OR APPROVED EQUAL)



**STANDARD
DETAIL**

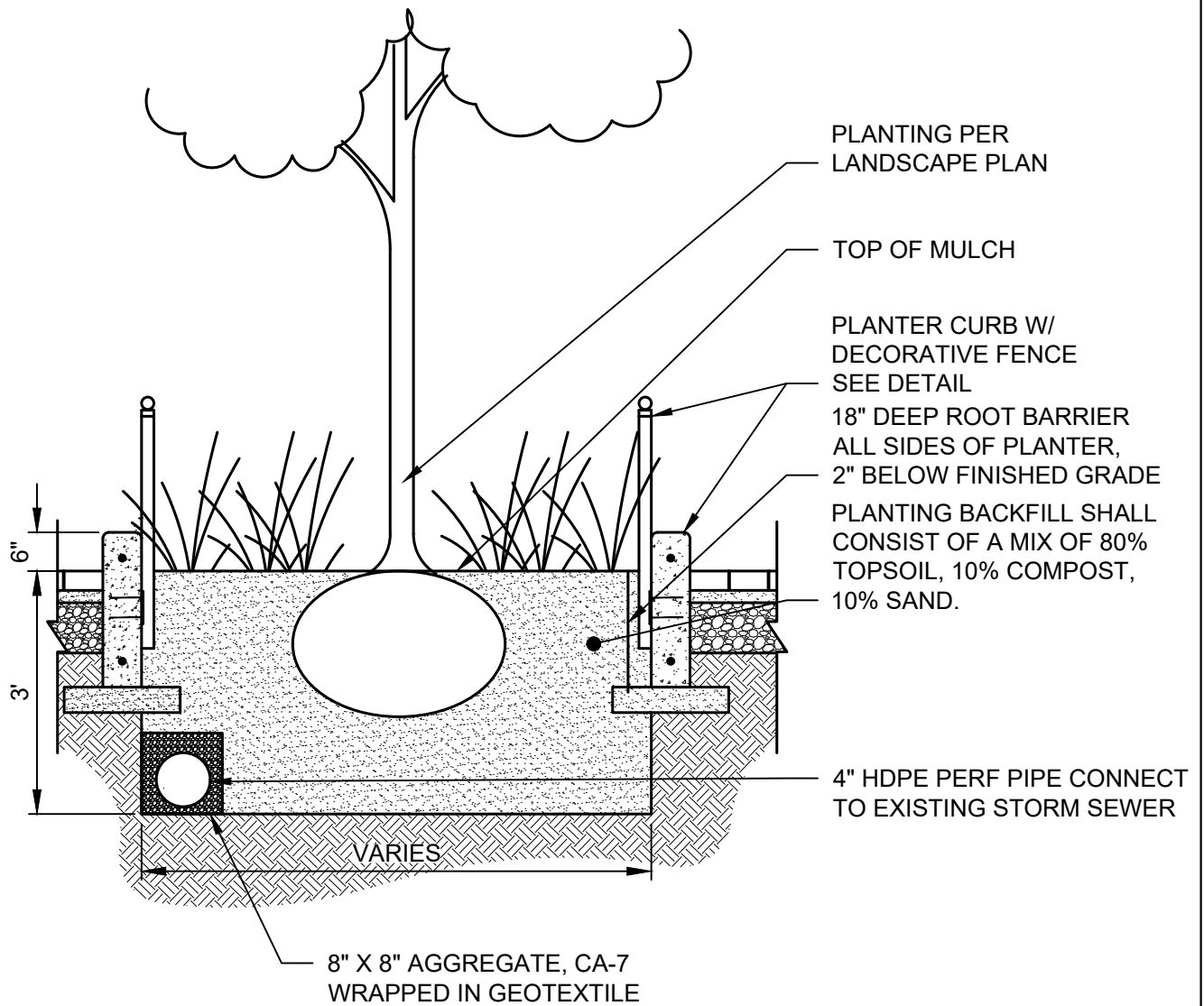
**DOWNTOWN STREETSCAPE
LANDSCAPE - DECORATIVE FENCE & PLANTER CURB DETAIL**

REVISED: 4/24/2019

SHEET 2 OF 8

LANDSCAPE 17

590.17



NOTES:

1. FOR MORE INFORMATION ON PLANTER AND LANDSCAPE LAYOUT REFER TO CHAPTER 2 OF THE DOWNTOWN STREETSCAPE STANDARD.



City of Naperville
**STANDARD
DETAIL**

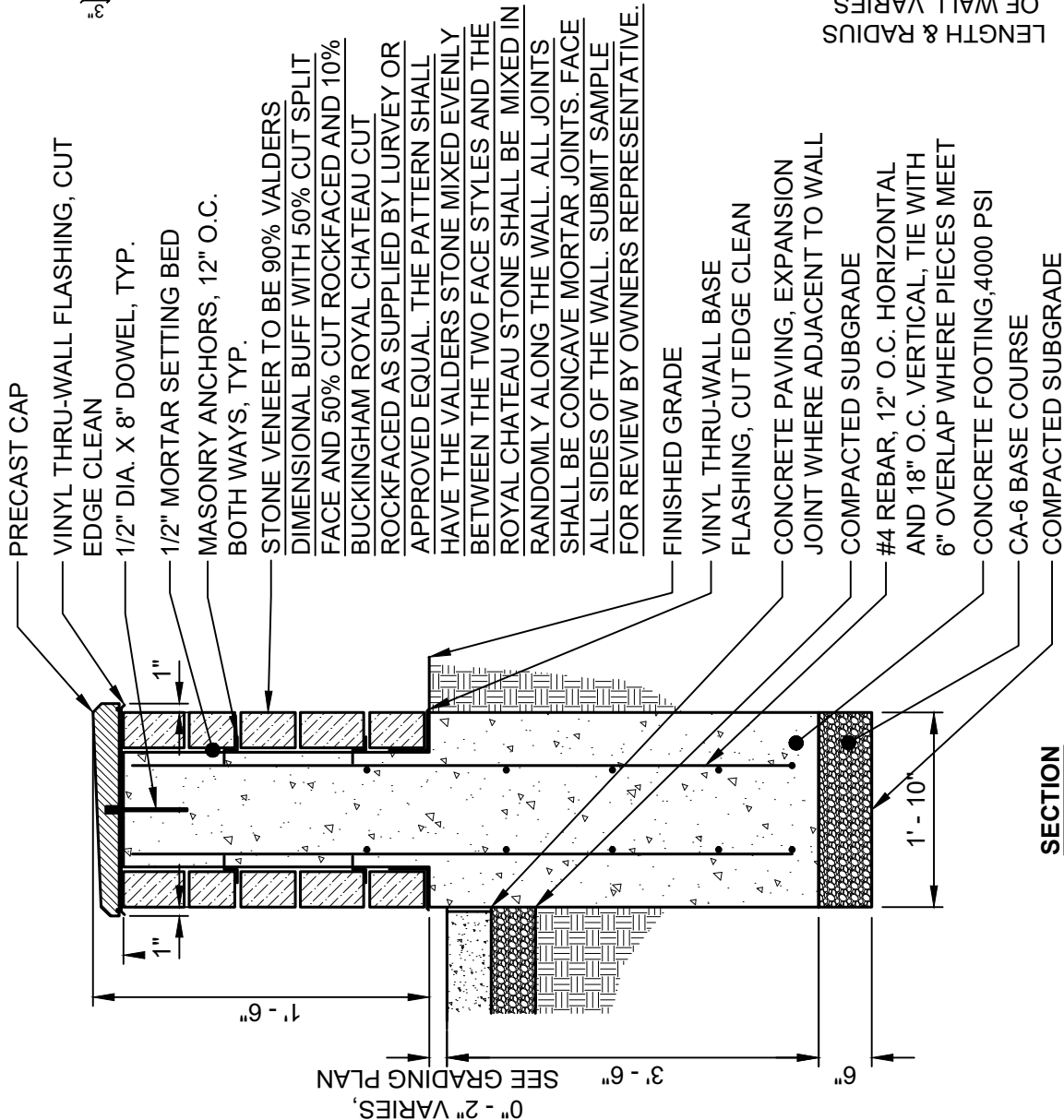
**DOWNTOWN STREETSCAPE
PLANTER LANDSCAPE**

REVISED: 4/24/2019

SHEET 3 OF 8

LANDSCAPE 17

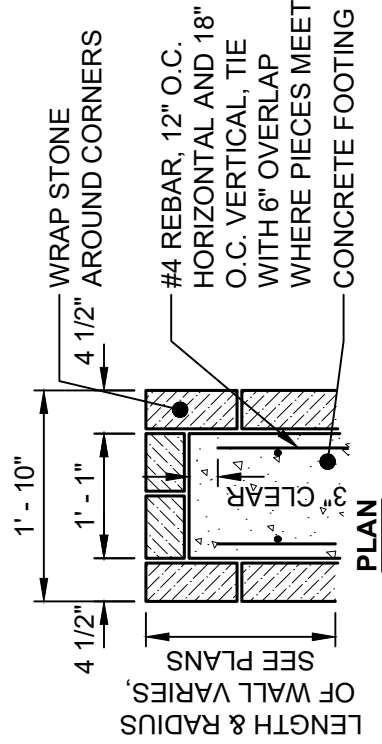
590.17

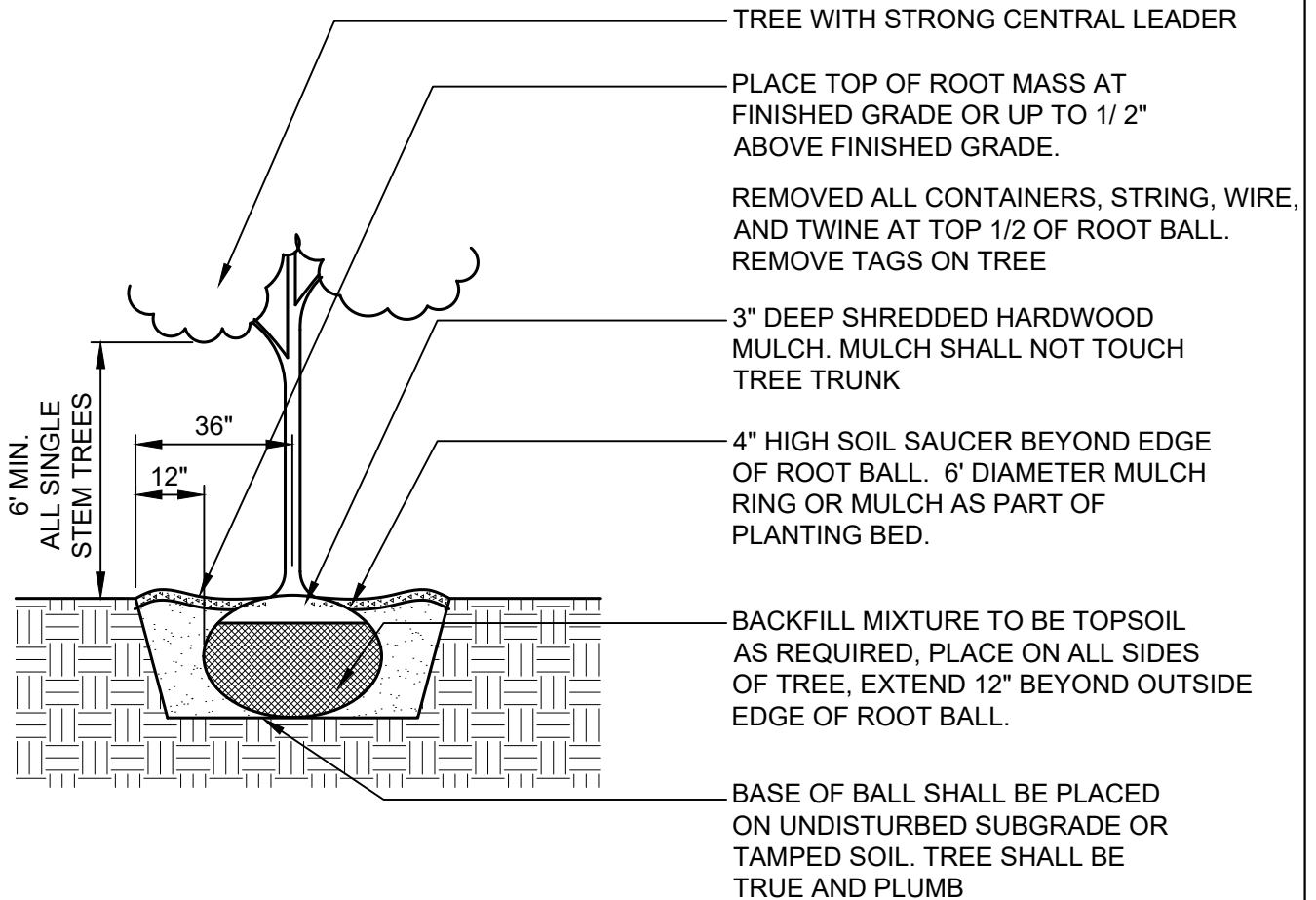


PRECAST CAP - ELEVATION

NOTES:

1. VERIFY ALL DIMENSIONS IN FIELD.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO MANUFACTURING ANY PRECAST.
3. ALL PRECAST ITEMS TO BE FREE FROM IMPERFECTIONS, INCLUDING BUT NOT LIMITED TO CHIPPED EDGES, BROKEN CORNERS, AND CRACKS.
4. PRECAST CAP COLOR SHALL BE CREME, SUPPLIED BY CUSTOM STONE WORKS 815-748-2109 OR APPROVED EQUAL.
5. ARM REST & SKATE DETERRENT SHALL BE DUMOR (TO MATCH BENCH STYLE). DISTRIBUTED BY NUTOYS 800-526-6197.





NOTES:

1. FOR MORE INFORMATION ON PLANTER AND LANDSCAPE LAYOUT REFER TO CHAPTER 2 OF THE DOWNTOWN STREETSCAPE STANDARD.



City of Naperville
**STANDARD
DETAIL**

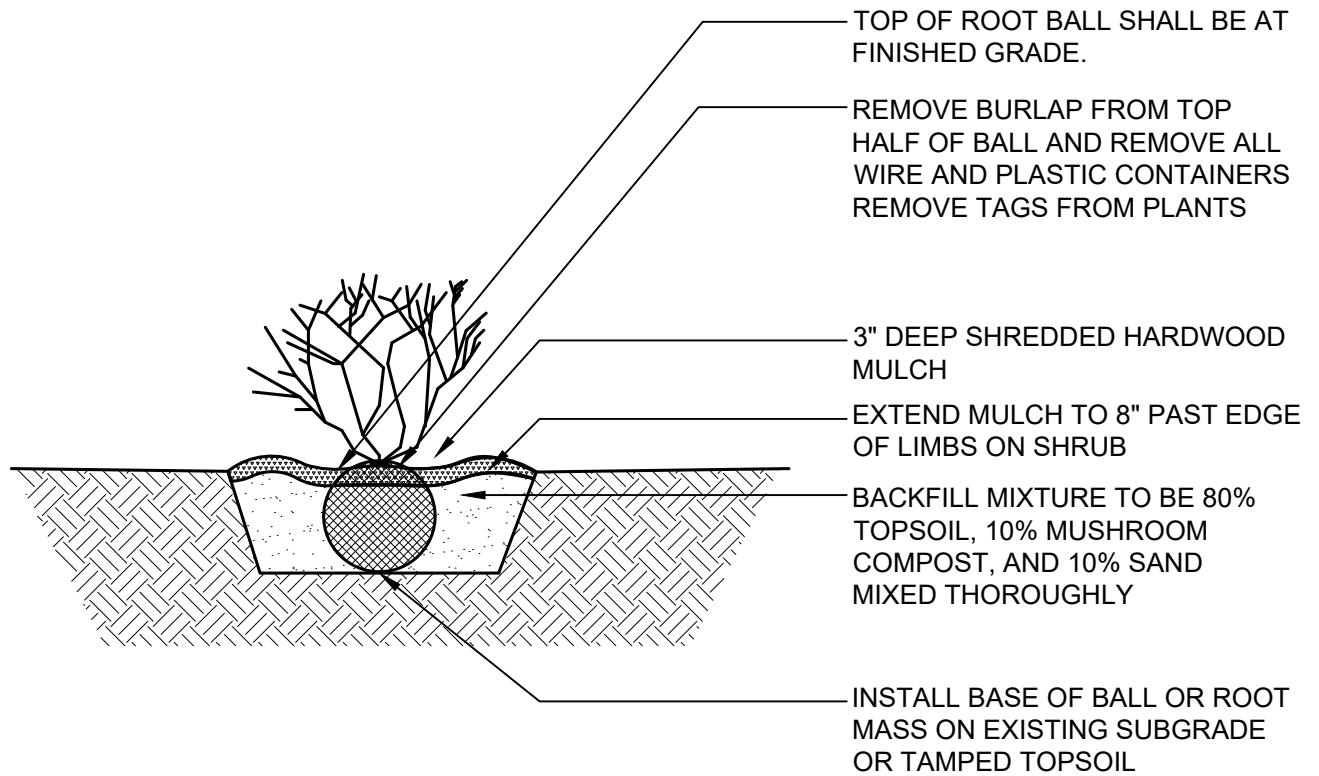
**DOWNTOWN STREETSCAPE
TREE INSTALLATION**

REVISED: 4/27/2019

SHEET 5 OF 8

LANDSCAPE 17

590.17



NOTES:

1. FOR MORE INFORMATION ON PLANTER AND LANDSCAPE LAYOUT REFER TO CHAPTER 2 OF THE DOWNTOWN STREETScape STANDARD.



City of Naperville
**STANDARD
DETAIL**

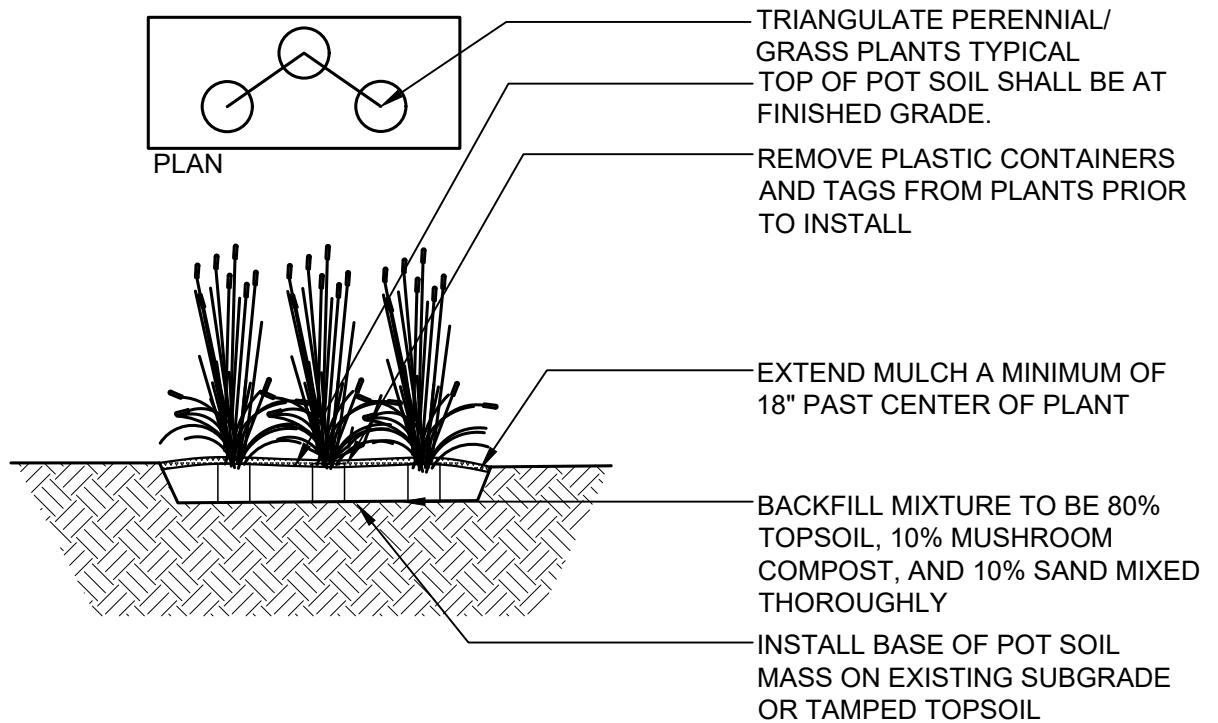
**DOWNTOWN STREETScape
SHRUB INSTALLATION**

REVISED: 4/24/2019

SHEET 6 OF 8

LANDSCAPE 17

590.17



NOTES:

1. FOR MORE INFORMATION ON PLANTER AND LANDSCAPE LAYOUT REFER TO CHAPTER 2 OF THE DOWNTOWN STREETSCAPE STANDARD.



City of Naperville
**STANDARD
DETAIL**

**DOWNTOWN STREETSCAPE
PERENNIAL INSTALLATION**

REVISED: 4/24/2019

SHEET 7 OF 8

LANDSCAPE 17

590.17

IRRIGATION SYSTEM INSTALLATION

CONTRACTOR WILL DESIGN, LAY OUT, AND INSTALL IRRIGATION SPRAY SYSTEMS IN ALL RAISED PLANTING BEDS. SYSTEM COMPONENTS WILL INCLUDE:

1. BATTER POWERED CONTROL SYSTEM, HUNTER SVC OR APPROVED EQUAL, AND RELATED BATTERY-POWERED CONTROL VALVES WITH APPROPRIATE ENCLOSURE OR A 110 VOLT SINGLE CONTROL STATION.
2. 6" INSTITUTIONAL POP-UP FIXED SPRAY HEADS WITH INTEGRAL PRESSURE REGULATORS, HUNTER INST W/PRS OR APPROVED EQUAL. SPRAY HEADS WILL BE APPROPRIATE FLOW RATE, SPRAY RADIUS, AND SPRAY PATTERN TO PROPERLY IRRIGATE THE AREAS IN WHICH THEY ARE INSTALLED WITHOUT EXCESSIVE OVERSPRAY ONTO ADJACENT SIDEWALK OR STREET AREAS.
3. EACH SYSTEM SHALL HAVE A MOISTURE SENSOR.
4. EACH SYSTEM SHALL BE ABLE TO INJECT FERTILIZER.
5. ALL RELATED EXCAVATION, TRENCHING, PIPE AND FITTINGS, BACKFILLING, PRESSURE, FLOW, AND COVERAGE TESTING.
6. CONNECTIONS WILL BE MADE TO THE EXISTING WATER PIPING IN EACH BED.

UPON COMPLETION OF WORK AT STARTUP THE CONTRACTOR WILL PROVIDE:

1. ONE HOUR INSTRUCTION REGARDING OPERATION OF THE SYSTEMS TO DPW PERSONNEL
2. AS-BUILT DRAWINGS OF THE SPRINKLER SYSTEMS THAT WERE INSTALLED. THESE DO NOT NEED TO BE ENGINEERING DRAWINGS. AN ACCURATE SKETCH OF EACH BED SHOWING THE LOCATION AND TYPES OF SYSTEM COMPONENTS WILL BE ADEQUATE.



City of Naperville
**STANDARD
DETAIL**

DOWNTOWN STREETSCAPE IRRIGATION SPECIFICATIONS

REVISED: 4/24/2019

SHEET 8 OF 8

LANDSCAPE 17

590.17

Appendix B

Implementation Plan

Implementation Plan

The Naperville Downtown2030 Plan identified enhancing the pedestrian experience as a continued transportation goal. Streetscape is key to achieving this goal, as well as enhancing the downtown’s aesthetic and functional appeal. At the initiation of the streetscape study, an existing conditions analysis was conducted to evaluate current infrastructure and identify gaps in streetscape. Many areas throughout the downtown do not provide a comfortable pedestrian experience due to narrow sidewalk widths, a lack of streetscape improvements, or deteriorating conditions of past streetscape installations.

The Downtown Streetscape Standards are intended to create a cohesive look within the downtown area and can be implemented on a block level or with individual development. Implementation of the standards to improve the pedestrian experience will be most effectively achieved by a systematic approach comprehensively and proactively planning for streetscape maintenance and upgrades. During the study process, the Downtown Advisory Commission provided guidance on priorities for comprehensively implementing the standards. Figure 3.2 below outlines the priorities.

Implementation Map

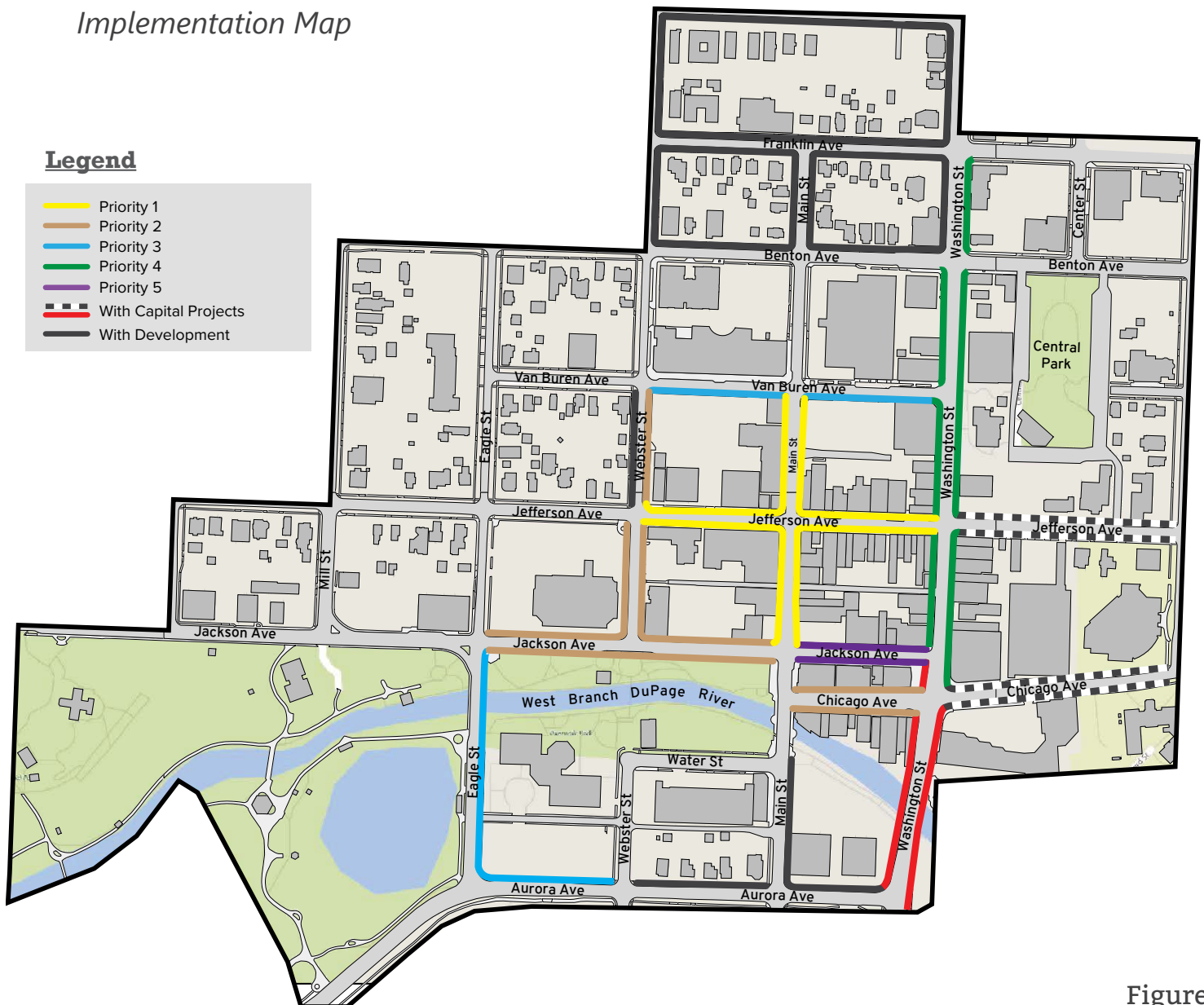


Figure 3.2

Appendix C

Summary of Public Involvement

Summary of Public Involvement

Streetscape influences the experience of all downtown users; therefore, many stakeholders and the public were encouraged to participate in the development of the Downtown Streetscape Design Standards. Public involvement included two phases: Concept Design and Standard Refinement.

Concept Design

The initial phase of public involvement included presentation of conceptual streetscape designs to the public and stakeholders for consideration and feedback. The designs were presented at the following meetings:

- Downtown Naperville Alliance – May 5, 2016
- Downtown Advisory Commission – May 12, 2016
- Public Open House – July 13, 2016

In addition, the proposed designs were made available on the City's website with an online survey for providing input. A summary of the input received during the Concept Design phase is provided on the following pages.

Standard Refinement

Review and recommendation of revisions to downtown streetscape standards is one of the duties of the Downtown Advisory Commission. Input received on the concepts presented during the initial public involvement phase was used to further develop the designs into standards. The standards were reviewed and refined by the Downtown Advisory Commission and other stakeholders during the following meetings:

- Downtown Advisory Commission – September 8, 2016
- Downtown Advisory Commission – October 13, 2016
- Downtown Advisory Commission – December 8, 2016
- Downtown Advisory Commission – January 12, 2017
- Downtown Advisory Commission – May 11, 2017
- Advisory Commission on Disabilities – August 2, 2017
- Downtown Advisory Commission, Advisory Commission on Disabilities, Accessible Community Task Force and Senior Task Force – September 11, 2017

Through the decisions made and guidance provided during these meetings, the resulting Downtown Streetscape Design Standards place an emphasis on pedestrian comfort through a clearly defined pedestrian area constructed of concrete, including through the corners. Aesthetic enhancements are provided through an amenity area that includes pavers, landscaping and street furniture. To achieve a more comfortable pedestrian environment, several areas of angled parking will be converted to parallel stalls to provide added sidewalk width.

Input Received During Concept Design Phase

Key Themes:

- Modify angled parking to parallel where possible
- Widen sidewalks where possible
- Replace “Shepherd’s Crook” lighting
- Alley and Paseo improvements are not a priority
- Improve pedestrian safety and pedestrian flow
- Consider cost and efficiency
- Consider concrete sidewalk options; safety & walkability
- Prioritize the core of downtown
- Incorporate bollards or decorative chain along Washington Street; safety
- Concerned with overgrown trees; look into smaller tree options
- Tree grates can be a trip hazard

Public Open House and Survey Feedback:

1. The proposed streetscape standards allow flexibility for varying conditions. What do you like or not like about the proposed design?

Summary of Comments:

- Flexibility and more emphasis on walking space
- Love the goal of uncluttered/wide pedestrian areas
- Prefer Paver Concept B due to tan accents in seating areas
- Not keen on “fog” planter color – perhaps “millstone” would be more integrated
- Playful bike racks are fine if more than ample space exists around them and not too many
- This is the Midwest and streetscape needs to accommodate all four seasons
- Tastefully Futuristic
- Additional Seating Areas
- The materials blend in well with the existing components and the layout flows well
- Don’t change things just to change them. Safety factors should be considered first. The curved Riverwalk bricks have served us well and provide continuity and conformity throughout the downtown and should be kept whenever possible.
- It is a good idea to tie the sidewalk and street all together in downtown. Not sure if brick is the best answer; there is a real problem downtown now.
- Not sold on pavers as the answer
- Like use of red-toned pavers with beige sandstone in wide areas
- Like the brushed top pavers
- Don’t like use of the sandstone to delineate in 6’ under width areas (too busy)
- Priority is safety; remove the patches
- Do not like closing Jackson Street
- Would like to see more neutral colors rather than the very bright red. More neutral beige and dark grays would fit the current color scheme of Naperville Downtown area and work much better with the black benches.
- Ban parking on Washington Street or ban parking starting at 3:00 pm instead of 4:00 pm. Cars are waiting to be towed but they aren’t in time and the train has unloaded hundreds that clog Washington Street; very costly for police to sit there and is ticking off visitors to Naperville to have car towed.
- The sidewalks along Main Street need to be improved, leveled, and smoothed. The rest is

completely not needed. This is not what homeowners had in mind when we pay Naperville taxes and fees. This is very shocking.

- I like all the designs, they seem to be an extension of what is already in place.
- Some long-standing elements of downtown could be improved with new designs. "Shepherd's Crook" lights seem to accumulate dead bugs at the bottom of their glass base and only seem to be appropriate with utilitarian light bulbs – six-sided pedestrian-scale lamps would be a lot nicer.
- The metal benches hold water at the back for the seat because of how the bars are curved.
- Like the refined appearance with the borders but keeping the amenity areas the same color
- We need more walking space
- Like the arches; Improve Main Street from Van Buren to Jackson

2. What element(s) is the most important to include in the downtown streetscape improvements?

Summary of Comments:

- Improved pedestrian safety, better walking delineation; more planters
- Improve pedestrian flow, visual appeal, and safety and dampening of noise for pedestrians; visually integrate the access to Central Park at Van Buren with the downtown standard; add a pedestrian drop off and loading area central to festival, business, and Riverwalk area along with adjacent seating; implement the festival streetscape; introduce natural landscaping, green screens and dumpster screens - no artificial turf.
- Do not overdo the streetscape; shoppers need freedom of movement
- Festival streetscape
- Gathering space
- Features that encourage shared space and human interaction are crucial.
- Public art; Public art creates a great aesthetic to the downtown and should be included in any future plan.
- Fix the sidewalks
- Walkability; Widening the sidewalk where possible
- Sustainability (environmentally and fiscally); adding other features where appropriate to make downtown unique and different from other towns; to make it a true destination (art and historically interpreted signage); important to blend new areas so it's not choppy between old and new.
- Jackson as festival street could be a single elevation for vehicular and pedestrian and same for Central Park area; expand pedestrian uses with moveable planters, etc.
- Safe parking where vehicles in angled parking to not poke into the driving road
- Include drinking fountains with dog and bottle functions
- Include Wi-Fi
- Love the more eco-friendly sidewalks and that the benches are replaced with a lower maintenance material.
- Main Street sidewalk improvements: leveling, smoothing. Nothing else is needed.
- They are all very attractive and use high grade, lasting materials installed properly. Installation and maintenance are a big part of the ongoing cost and I do not object to spending more up front on quality to reduce operating expenses over the useful life of the assets.
- Bicycle facilities; existing racks do not support bikes securely.
- Widen sidewalks in as many places possible
- All sidewalks are the same
- Maximize sidewalk space and reduce parking areas
- Safety and continuity

3. The new standards suggest changing some angled parking to parallel parking to improve the pedestrian experience.

A. What do you think of this idea?

Summary of Comments:

- Get rid of all or most of the angled parking. Give more spaces to pedestrians and eliminate the hazard of angled parking
- Excellent idea in some areas
- Reduce angled parking as much as possible throughout the downtown
- Good idea
- Great idea
- Makes sense, particularly if partnered with efforts to convey the availability of parking throughout the downtown.
- It is a good idea especially where safety concerns are present
- If it takes too much parking away that is a problem, you cannot go from angled to parallel and not lose parking
- Great idea where it is needed
- Parking is a premium in downtown; a few spots lost may work (3-4) but 10-20 spaces won't work.
- Probably ok
- Add a place(s) to drop off people (i.e., elderly, disabled)
- Some good design ideas
- Hate it. I cannot parallel park and many people feel the same way. I think that is a huge disadvantage. Either remove the parking area all together to increase sidewalk space or have them in really sharp angles.
- For the streets involved in this proposed design, parallel parking is a very bad idea - it takes a long time for most people to park, which creates a dangerous condition for traffic that backs up into intersections. Also, some cars do not leave enough room for other cars to pull out
- Very bad. Please keep angled parking or replaced that parking with additional parking lots
- Agree. It is difficult to back out of angled parking and see oncoming traffic
- Add a foot to the sidewalk width and also bike lanes in the street
- Ok if it expands width for pedestrians, especially on Main Street
- Great idea
- Not crazy about it on Jackson but east of Main makes sense

3. The new standards suggest changing some angled parking to parallel parking to improve the pedestrian experience.

B. What streets would this be appropriate on?

Summary of Comments:

- All; we have plenty of parking especially with Water Street
- East side of Main Street between Jackson and Van Buren
- As much as possible throughout downtown
- Jefferson Avenue and Jackson Avenue
- Wherever possible
- Jackson Avenue and Main Street
- Where sidewalks are narrow to gain optimum width
- Not sure where you don't lose that much parking

- Main Street between Jefferson and Jackson (east side)
- Jackson Avenue
- Jackson Avenue and Court Place
- None
- Jackson Avenue and remove all street side parking on South Washington in the core
- Every street except Jackson Ave. between Main Street and Washington Street, which could easily be converted only on one side and given the same treatment
- Main Street and Webster Street between Jefferson and Van Buren
- Main Street between Jefferson and Jackson
- Main Street
- East side of Main Street

4. What do you like or not like about the proposed festival streetscape?

Summary of Comments:

- Like it, but businesses might like it better if it's more consistent with the downtown type.
- Like the concept, though it would be nice to have a pedestrian drop-off location near it and Some green screens rather than just trees and planters
- Eliminate any plans to close streets
- Creates interest and gets cars out of immediate area
- Don't think it's needed, seems expensive
- It identifies and delineates a logical spot for the proposed use
- Not needed. We have plenty of party space as it is, especially considering events at the Riverwalk and Settlement.
- Street should not be done in pavers
- Biggest mistake. Downtown is a business district; we have the Naper Settlement and Riverwalk for space to hold a festival
- Like the look of the festival streetscape but how would the City limit road closures? Perhaps better spots around Naper Settlement
- Like it
- Don't call it "festival". Consider: super-wide, Jackson, terrace, court. "Jackson Terrace", "Court Place Terrace", "Webster Terrace". Include banner areas
- The arches/bridges proposed are an extremely bad idea. They will limit height and be difficult during the festivals and create a lot of obstacles. They will also be a disadvantage when heavy machinery or semi-trucks are moving things.
- Too expensive
- Good idea and presents focal point for the festival activity
- Like everything except the overhead arches
- Like the concept as the current configuration is extremely underused and ineffective.
- Concerned about parking
- Great idea, do not reduce festival blocks
- Too costly

5. What is your highest priority in regards to the alley and paseo improvements?

Summary of Comments:

- Improving pedestrian safety, visual attractiveness, and business access
- Public safety, cost and efficiency
- Not a high priority
- Public art

- Should be done later
- Beautifying alleys to create safe areas
- Make places for works of art and new works as well
- Main to Webster; Chicago Avenue between parking deck and Washington Street; Washington Street to Main Street between Van Buren and Jefferson; Court Place
- The green overhang that would require a lot of watering and maintenance by the City should be replaced with solar cells and possibly spiral wind turbines for further decoration
- Safety for pedestrians
- No complaints; looks fine
- Like the designation by archways
- Installing pavers to match sidewalks

Additional Comments Provided

Summary of Comments:

- It seems as though the mid-block walkways on Jefferson are being neglected in terms of visual appeal and pedestrian flow.
- Maps of downtown for planning should not include private property such as the paseo near Hugo's. To include them gives the mistaken impression that those areas are available for public use and fall under the same design standards and legal requirements as public right of ways. Planners and consultants should not depend on private property when assessing pedestrian flow. To do so is misleading to anyone who subsequently looks at the plans.
- I am very concerned about the semi-finalized renderings of the enhanced corners in light of what happened to the mid-block crossing in front of The Craftsman and the anticipated large number of enhanced corners.
- Concern about the brick corners as shown on concepts. Specifically, concerned with maintenance costs as well as visibility at corners based upon the number of plantings and clearance for outdoor dining areas.
- The appearance is nice, however, in inclement weather, especially in the winter, the bricks will be difficult to traverse.
- Prefer low ground cover over trees in order to maintain visibility.
- Brick pavers are impossible for non-motorized wheel chairs to navigate. Serious concerns that wheelchairs will get stuck and people will fall.
- Maintenance costs should be a very important factor considered prior to any concept endorsed.
- Passenger "drop off" is difficult to accomplish with parallel parking.
- Concrete is a superior material for corner treatment instead of bricks.

