

Takoma Park Streetscape Manual

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Foreword

Takoma Park's streetscape is a vital and significant part of our city. Our streetscape reflects not only up-to-date amenities that guide our bicycles, pedestrians, and automobiles safely over our streets and walkways. It also reflects continuity with our history and with the values that bind us together as a residential community. The streetscape is one element -- together with our houses, gardens, trees, shops, parks, schools, and playgrounds -- that helps form our identity and signifies that we are Takoma Park.

Our streetscape, whether in commercial or residential neighborhoods, is part of the built environment and, as such, should be planned and designed with intention. Safety, technical innovation, and cost-efficiency should be thoughtfully melded with the City's heritage as a unique community in the Washington metropolitan area. This heritage prizes our resistance to the placement of a freeway in our midst and our continued resistance to unnecessary impacts caused by motor vehicles. It celebrates gardens and trees and the beauty of both the natural environment and the things we build in it. The City's residential neighborhoods hold the cluttered and frenetic pace of urban life at just enough distance to permit the safe and quiet enjoyment by families and all residents of the thing they value most: the community itself.

The built environment of Takoma Park should reflect and promote this heritage, even as we embrace the vibrant and diverse growth of the urban landscape around us.

Excerpted from "Takoma Park's Residential Streetscapes: Safeguarding our Distinctive Visual Character," the final report of the Residential Streetscape Task Force, presented to the Takoma Park City Council on March 15, 2015.

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Purpose and Background

The City maintains hundreds of pieces of furniture, lighting, wayfinding signs, bike racks, etc. on public rights-of-way in residential neighborhoods and commercial districts. Functional, accessible, and well maintained public spaces improve quality of life in Takoma Park by fostering community, enhancing business vitality, and supporting environmental and economic sustainability. The Takoma Park Streetscape Manual provides a mapped inventory of all streetscape elements in public rights-of-way installed by the City that includes manufacturers' specifications and vendor information to ensure consistency of installation and replacement in locations throughout the City.

Within the pages of the Streetscape Manual are an overview of streetscape elements, including product name and manufacturer, dimensions, colors, installation instructions and locations, and applicable customization details. Most pages have a map indicating element locations by color or size (as of 2015). Product specifications provide additional detail, including vendor-specific color options, assembly, and installation. While proprietary products are listed in the Streetscape Manual, the City may be required to solicit bids for multiple alternatives in order to meet procurement requirements.

In 2012, the City Council adopted the New Ave Streetscape Standards for the New Hampshire Avenue commercial corridor, and in 2015, the City Council accepted the Residential Streetscape Task Force final report, "Takoma Park's Residential Streetscapes: Safeguarding our Distinctive Visual Character." The Streetscape Manual was initiated by the City in 2015, incorporating the guidelines and recommendations from these earlier documents, and with thoughtful input from business associations and members of the City Council-appointed Residential Streetscapes Taskforce and Safe Roadways Committee. The Streetscape Manual was adopted by the Takoma Park City Council on July 20, 2016.

The following sections outline guiding principles that inform decisions as they relate to streetscapes in Takoma Park, an organization outline of the manual itself, directions on using and maintaining the Streetscape Manual for City staff, residents, and contractors, as well as a list of applicable policies, guidelines, and standards that direct the practice of planning and implementing streetscape improvements in Takoma Park.

Guiding Principles

Streetscape improvements along City and state rights-of-way in Takoma Park are implemented to support walking, cycling, and accessing transit while augmenting the aesthetics and environmental performance of City streets. These improvements support alternative modes of transportation, environmental sustainability, economic development, and social interaction, which contribute to a more livable Takoma Park. The Streetscape Manual reflects this human-scaled orientation with a focus on streetscape elements as they relate to pedestrians, bicyclists, and transit users. Takoma Park's streetscapes are maintained and improved with the following guiding principles in mind:

Planning and Design – Improving the City's streetscapes is an intentional act that necessitates a comprehensive and interdepartmental planning and design approach. Safety, ecology, culture, the local economy, and aesthetics are all key drivers of the planning and design process.

Durability and Sustainability – Elements installed in streetscapes are expected to last for decades and are subject to the City's procurement policies that prioritize sustainable materials and local sources.

Balancing Consistency with Local Identity – Streetscapes reflect both the character of Takoma Park, as well as the distinct identities of neighborhoods and commercial districts. Throughout the City, streetscape elements conform to one another or purposefully differentiate to support an area's established identity.

Community-Led Design – Changes to streetscapes in Takoma Park are either neighborhood-led initiatives (for new sidewalks and traffic calming) or the outcome of City projects and plans that involve community meetings and input.

Accessibility and Inclusivity – Takoma Park is a welcoming and diverse community for all ages and abilities.

Healthy Trees and Plantings – Trees and plantings on City streetscapes provide numerous social, ecological, and economic benefits, yet require space and maintenance to survive and flourish. Care is taken to ensure streetscapes are designed and improved to support species that thrive in the built environment.

Clear Expectations for All Stakeholders – Repairs and improvements to streetscapes are initiated by private contractors and public utilities in addition to City crews. Expectations for repair, replacement, and rehabilitation need to be clearly and consistently applied.

Adapting to Change – Capital projects in the City are subject to changing federal and state regulations pertaining to the environment, equal access, etc., as well as innovations in technology that advance Takoma Park's established goals and policies.

Organization

The Streetscape Manual is organized into five sections – City-wide elements found throughout Takoma Park, followed by four distinct geographical sub-areas; Flower Avenue, Historic District, the New Ave, and Residential Neighborhoods. Within each section, streetscape elements are organized by type (e.g. seating) and each element within that type is described with a map, followed by design specifications. Descriptions of the five sections reflect the style and color of streetscape elements unique to each:

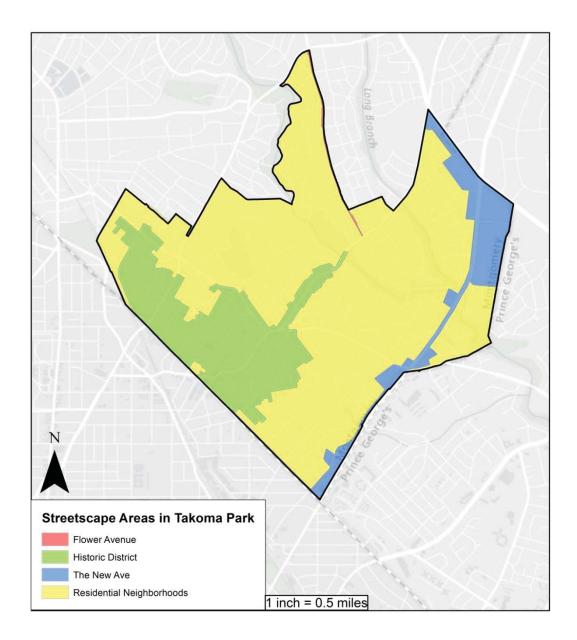
City-wide – These are standard elements installed citywide, regardless of planning district. For example the City's gateway and wayfinding signage developed in 2006 express the City's municipal identity and were approved by the Montgomery County Historic Preservation Commission.

Flower Avenue – Corresponds to the Flower Avenue Green Street project (2012-2016) and reflects design decisions made with public input for the project. The streetscape elements are primarily residential in character, supportive of the street's role as an important multi-modal corridor leading to Piney Branch Road and the Long Branch commercial district.

Historic District – Designated by Montgomery County, the Takoma Park Historic District covers the oldest developed portions of the City adjacent to the Takoma Metro Station, Montgomery College, and the Old Town and Takoma Junction commercial areas. Modifications to the residential and commercial streetscape in the Takoma Park Historic District should be minimal and seek approval from the Montgomery Historic Preservation Commission when necessary. Improvements on Carroll and Laurel Avenues in the early 2000s reinforced the aesthetic of streetscape elements in the Historic District, characterized by black metal finishes and classic designs.

The New Ave – The New Hampshire Avenue corridor from Eastern Avenue to University Boulevard, a.k.a. "the New Ave," comprises the City's largest commercial districts along high-traffic arterial roadways. The New Ave was the focus of a 2006 branding effort characterized by vibrant colors that reflect the cultural traditions of the communities that live and work along the corridor. The vibrant colors and playful design of seating and waste receptacles on New Hampshire Avenue are consistent with the New Ave brand. Improvements initiated in 2008 and recommendations in the 2012 New Ave Streetscape Standards provide the basis for the New Ave aesthetic.

Residential Neighborhoods – Residential streetscapes in Takoma Park that are outside of the areas defined as Flower Avenue, the New Ave, and the Historic District are predominantly composed of singleand multifamily housing with some institutional and retail land uses. As the City's residential neighborhoods tend to be greener and more architecturally varied, streetscape improvements should strive for neutrality and simplicity in color and design.



Using and Maintaining the Streetscape Manual

The specific streetscape elements distinct to each of the four geographical sub-areas described earlier are expected to be installed as replacements or new fixtures. Takoma Park is a small city composed of neighborhoods and commercial districts with distinct identities. Consistency of application is a key component both for maintaining a sense of unity across the City, while respecting and enhancing local character. New and alternative products may be included in updates to the Streetscape Manual, but are expected to be incorporated through a specific capital project or planning process that involves public input.

The manual is to be used by all City staff, City contractors, and Council-appointed boards and committees engaged in installing, replacing, and maintaining streetscape elements. For example, when:

- City staff is reviewing a Site Plan application and requests that a developer install street lights along a public right-of-way.
- City staff is directing a utility contractor to repair/resurface a road or sidewalk that had a special sidewalk finishing detail, pavement markings for bicycle facilities, etc.
- City staff is reviewing a community grant application that involves streetscape elements like seating or signage in the public right-of-way.
- Council-appointed board/committee is recommending a project that involves streetscape elements (seating, lighting, signage, bicycle facilities, etc.) in the public right-of-way.

While streetscape elements are addressed discretely in the Streetscape Manual, they are often installed in along with new or existing complimentary elements. For example a bench is often next to trash and recycling receptacles. It is therefore important to review specifications all of elements in proximity to each other so that necessary offsets, ADA standards, and other requirements do not conflict.

The Streetscape Manual will be updated annually in a coordinated effort by the Housing and Community Development and Public Works departments, incorporating additional streetscape elements already in use or new elements as projects are completed. Input is always welcome from the public, including residents' groups, business associations, and Council-appointed boards, committees, and commissions. Some products in the public right-of-way are not catalogued in the Streetscape Manual. These products are to be phased out, as they are either no longer available from vendors or have been deemed inadequate for functional or aesthetic reasons. They are listed separately in an appendix. Additionally, there are some variations or colors of elements that have been discontinued, like the "Federal Yellow" ADA detectable warning mats. All discontinued elements will be replaced on an as-needed basis.

Applicable Policies, Guidelines, and Standards

Maintaining and improving streetscapes in Takoma Park results from planning processes, projects, and programs, and is expected to comply with applicable City, County, State, and Federal laws pertaining to safety, accessibility, equity, environmental protection, and design. The following ordinances, resolutions, statues, and guidelines may not be applicable to all projects that impact City streetscapes, and care should be used to determine which guidelines and standards advance the goals of the Takoma Park City Council and community.

City Code, Policies and Standards:

Takoma Park Municipal Code

codepublishing.com/MD/TakomaPark

Takoma Park Code, Chapter 2.16, § 2.16.110 outlines the purpose of the City Council-appointed Safe Roadways Committee, whose advisory role includes encouraging Takoma Park residents to use alternatives to driving, including walking, bicycling, and transit.

Takoma Park Code Chapter 7.08 Source Selection and Contract Formation outlines the City's procurement processes that are both subject to and exempt from competitive bidding, as well as a preference for recycled products and environmentally preferable and locally-sourced purchasing.

Takoma Park Administrative Regulations:

• 96-1: Traffic Calming Devices – Petition Process and Installations

Takoma Park Resolutions:

takomaparkmd.gov/government/city-council/resolutions

- 2015-58: Resolution Authorizing Execution of a Contract for Services/Bus Shelter Agreement with Signal Outdoor Advertising, LLC
- 2015-32: A Resolution Setting a Policy for New Sidewalk Design and Installation
- 2015-30: Accepting the Report of the Residential Streetscape Task Force
- 2012-56: Adopting the New Ave Streetscape Standards
- 2012-7: Endorsing the Takoma/Langley Sector Plan Urban Design Guidelines

New Ave Streetscape Standards (rev. 2014)

theNewAve.com/development/planning-vision

Adopted by the Takoma Park City Council, this document outlines street furniture styles, street tree species, stormwater infiltration strategies, crosswalk treatments, and pavement types to be used in the New Hampshire Avenue corridor between Eastern Avenue and University Boulevard. The standards are used to help guide private development and public infrastructure projects on New Hampshire Avenue to ensure a consistent look and feel on the corridor that meets the City's sustainability goals while reflecting the diversity of the community through design.

County, State, and Federal Guidelines & Standards:

Takoma/Langley Crossroads Sector Plan Design Guidelines (2013)

montgomeryplanning.org/community/takoma langley crossroads

Developed by the Montgomery County Planning Department, this document guides urban design in the New Hampshire Avenue corridor north of Sligo Creek Parkway.

Long Branch Sector Plan Design Guidelines (2013)

montgomeryplanning.org/community/longbranch

Developed by the Montgomery County Planning Department, this document guides design strategies for particular streetscape treatments in the Long Branch area such as lighting, crosswalks, and medians.

Montgomery County Department of Transportation Design Standards

montgomerycountymd.gov/dot-dte/common/standards.html

This document provides standards for road, crosswalk, and sidewalk design and maintenance.

WMATA Guidelines for Design and Placement of Transit Stops (2009)

wmata.com/pdfs/planning/Bus Stop Guidelines Brochure.pdf

This document provides both WMATA and its participating municipalities with specific physical design criteria to be integrated with local comprehensive plan policies, land use ordinances, pedestrian plans, and street design guidelines. It presents guidelines for the construction of and improvements to bus stop placement and types, bus stop elements and passenger amenities, and bus stop spacing.

Maryland Manual on Uniform Traffic Control Devices (rev. 2011)

roads.maryland.gov/index.aspx?PageId=835

The MdMUTCD is the combined document of the national set of traffic control device standards and guidance promulgated by Federal Highway Administration (FHWA) rulemaking on December 16, 2009 and Maryland Supplement to the MUTCD.

Maryland State Highway Administration Bicycle Policy & Design Guidelines (rev. 2015)

roads.maryland.gov/ohd2/bike_policy_and_design_guide.pdf

This policy provides guidance for designing and constructing bicycle facilities on Maryland state highways. A waiver is required by designers if the guidelines are not met.

Americans with Disabilities Act Standards for Accessible Design

http://www.ada.gov/2010ADAstandards_index.htm

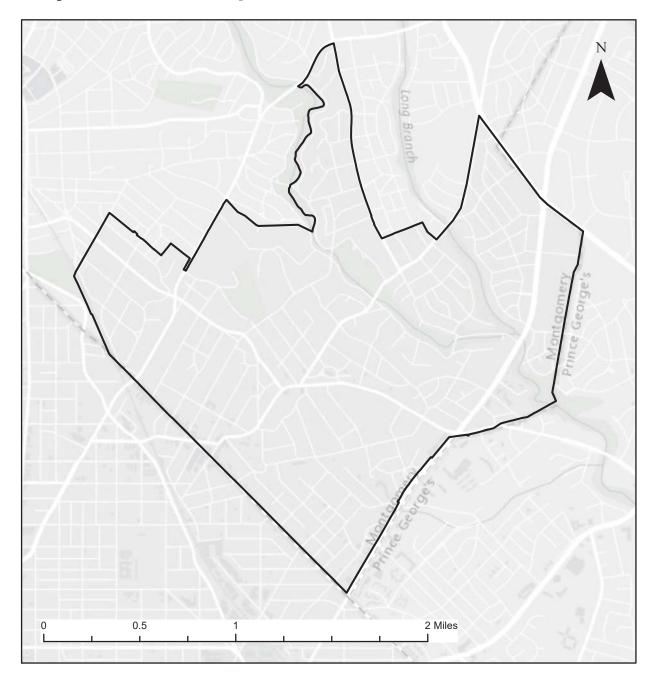
The Americans with Disabilities Act of 1990 (ADA) prohibits discrimination and ensures equal opportunity for persons with disabilities in employment, State and local government services, public accommodations, commercial facilities, and transportation. In particular, 49 CFR, Part 37 outlines specific construction and adaptation requirements for transportation facilities, including bus stops, sidewalks, and curb cuts.

NACTO Urban Bikeway Design Guide (rev. 2014)

nacto.org/publication/urban-bikeway-design-guide

The National Association of City Transportation Officials (NACTO)'s Urban Bikeway Design Guide outlines standards for bike lanes, cycle tracks, intersections, signals, signing and marking, and bicycle boulevards to be used by planners across the US.

Citywide Streetscape Elements



These are standard elements installed citywide, regardless of planning district. For example the City's gateway and wayfinding signage developed in 2006 express the city's municipal identity and were approved by the Montgomery County Historic Preservation Commission.

SIGNS

PRODUCT CITY-WIDE WAYFINDING SIGNS

VENDOR	SIGNART

- **INVENTORY** 78 TOTAL SIGNS:
 - 7 LARGE PRIMARY GATEWAY SIGNS
 - 29 CITY LOGO PENDANT SIGNS
 - 13 HISTORIC DISTRICT ID SIGNS
 - 8 AREA ID SIGNS
 - 2 PARKING ID SIGNS
 - 6 PEDESTRIAN KIOSK SIGNS
 - 1 HISTORIC MARKER SIGNS
 - 7 GARDEN MARKER SIGNS
 - 1 COMMUNITY CENTER DIRECTIONAL SIGNS

DIMENSIONS REFER TO ATTACHED SIGN TYPE SPECIFICATIONS.

- MATERIALS PANELS ARE .050 GAUGE ALUMINUM. SIGN TUBING IS .050 GAUGE ALUMINUM WITH WELDED FRAME.
- FINISHES & SIGNS ARE 3/16" BLACK PAINTED ALUMINUM PANELS. DIGITALLY-PRINTED SIGNS ARE 3M SCOTCHLITE REFLECTIVE SHEETING. KIOSK DIGITALLY-PRINTED MAPS ARE 3M SCOTCHLITE SHEETING WITH GRAFFITI-RESISTANT LAMINATE. KIOSK FRAMES ARE PAINTED IN AKZO-NOBEL #508-114. REFER TO ATTACHED SIGN TYPE SPECIFICATIONS.

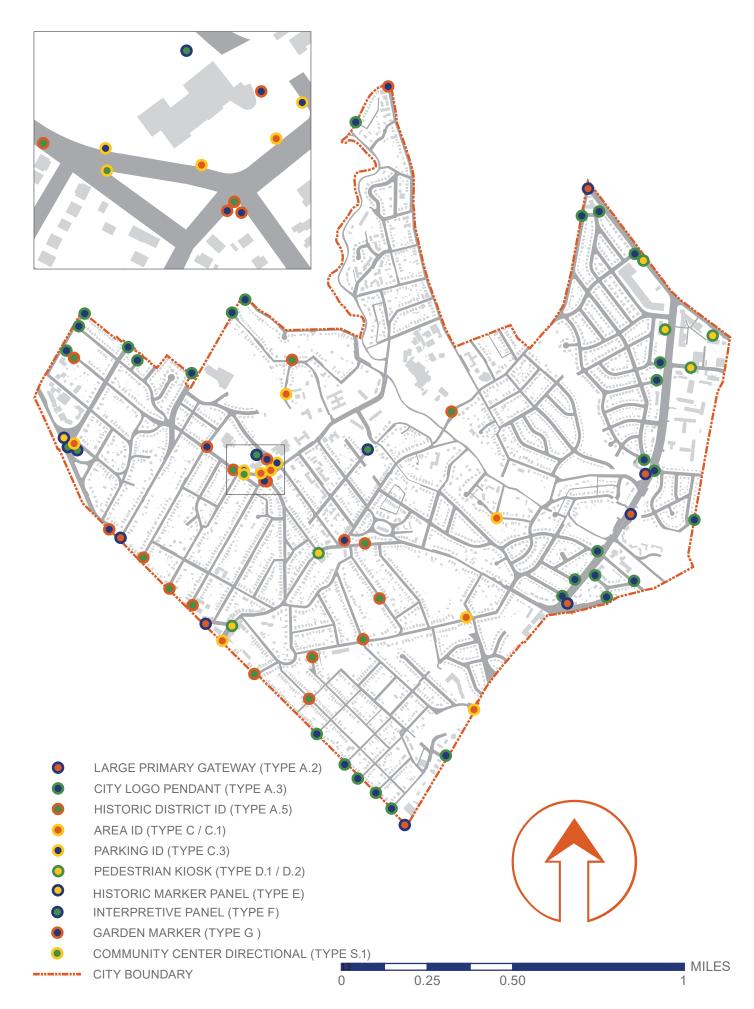
PURCHASE &PHASED IMPLEMENTATION STARTING IN 2009. SIGNS TO BE REPLACED OR EXPANDED ONINSTALLATIONAN AS-NEEDED BASIS.

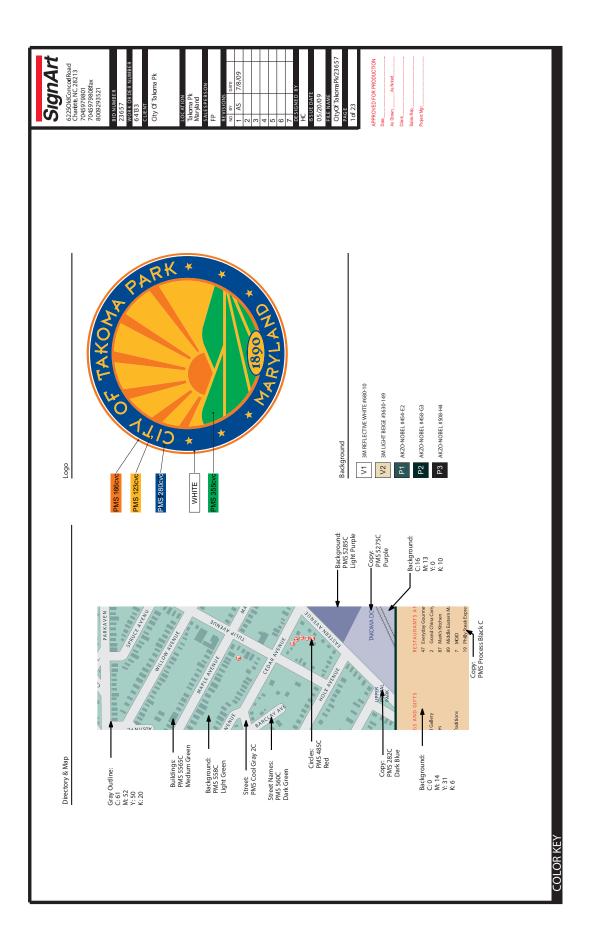




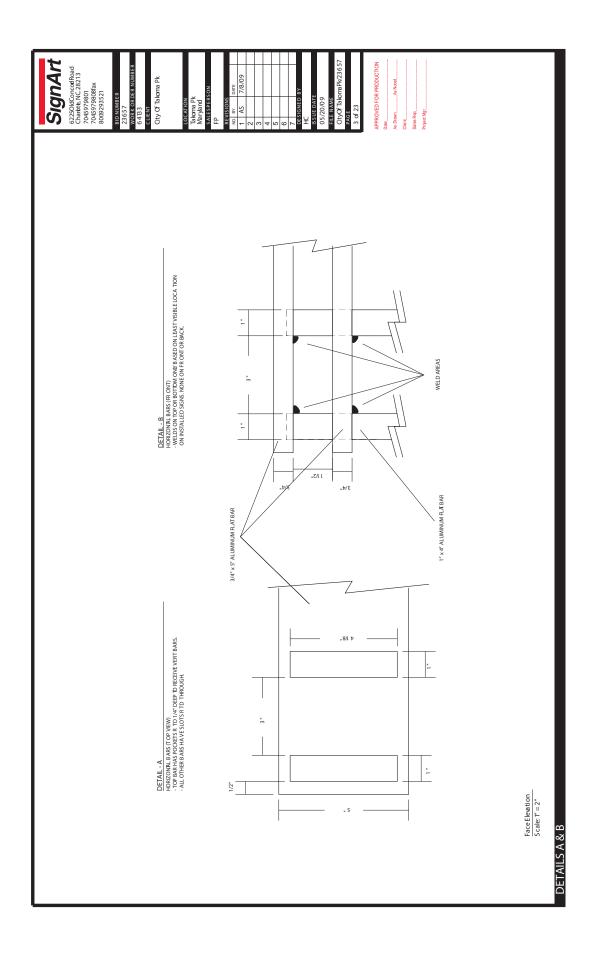
HISTORIC DISTRICT ID SIGN (TYPE A.5).

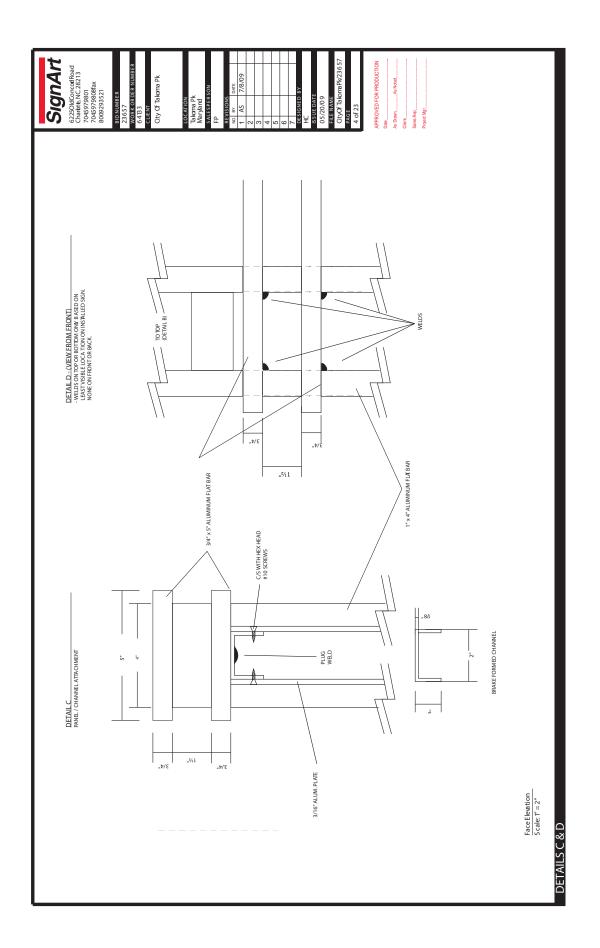
SIGNS - CITY-WIDE WAYFINDING SIGNS

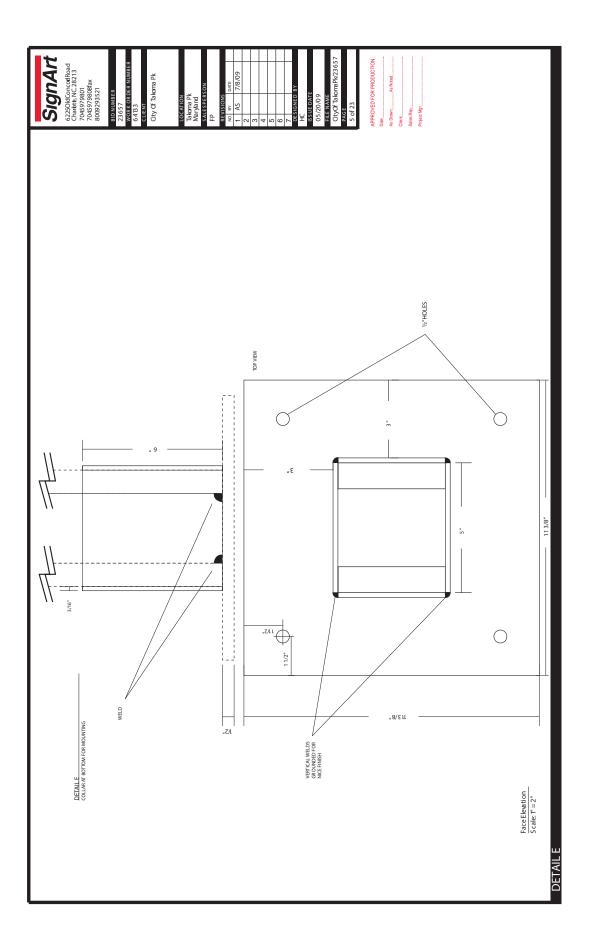


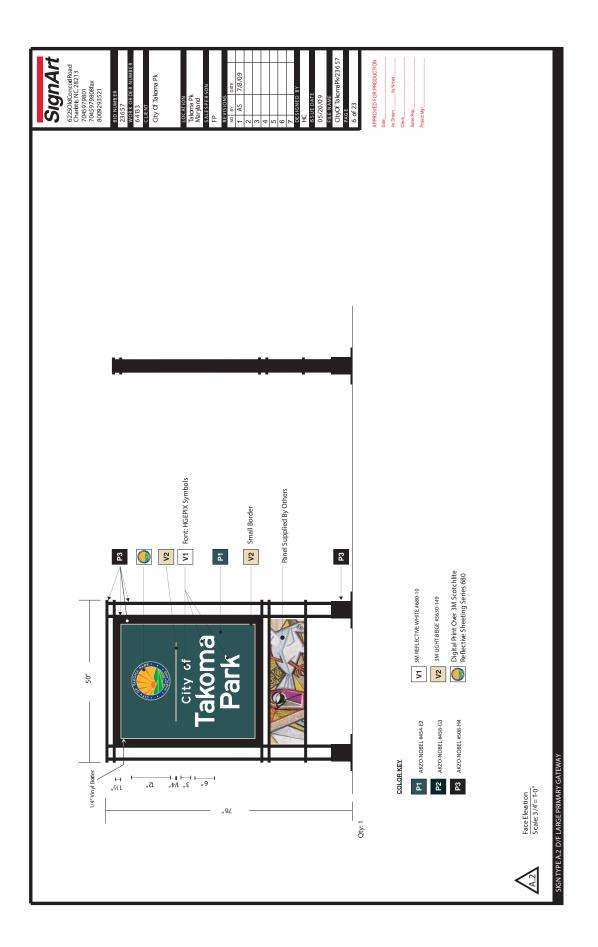


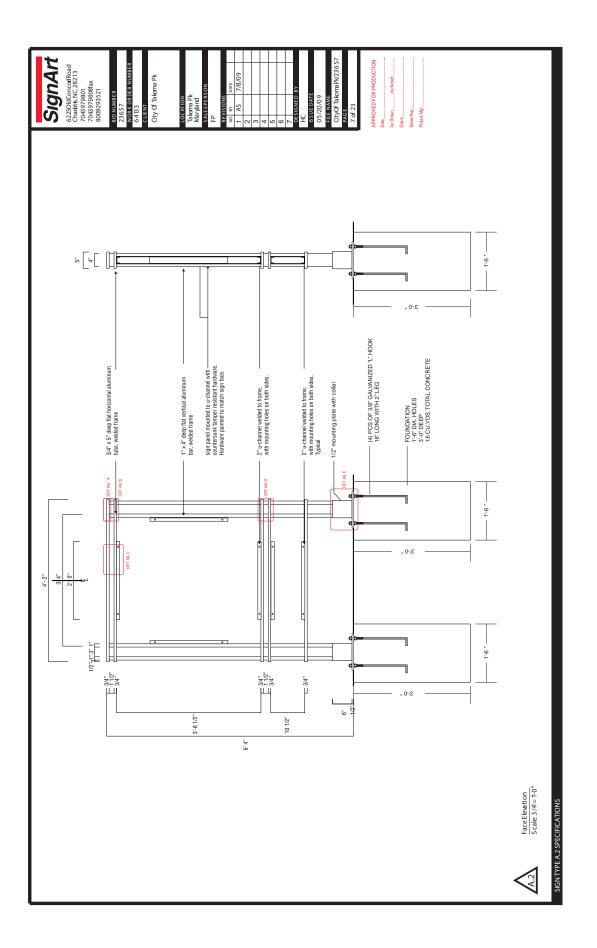


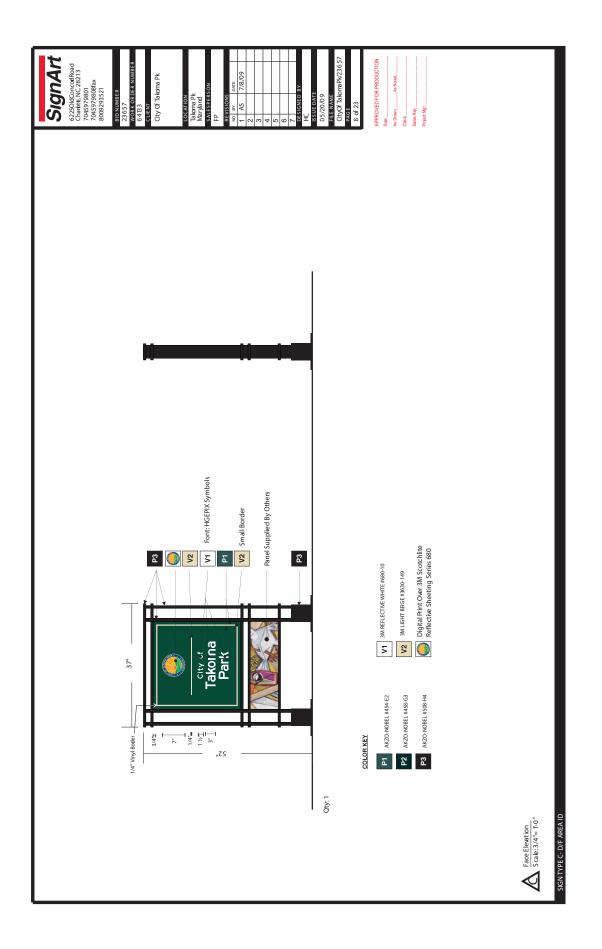


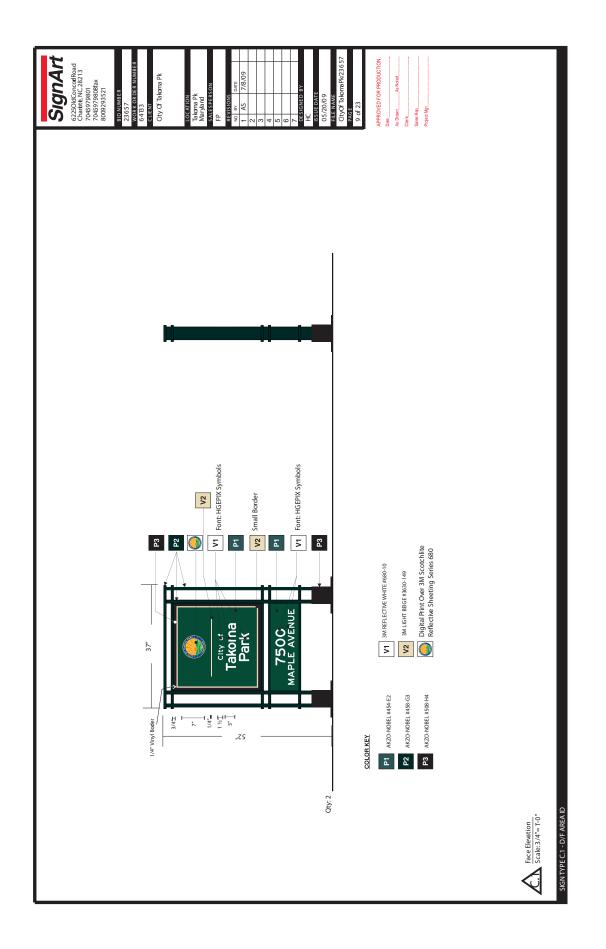


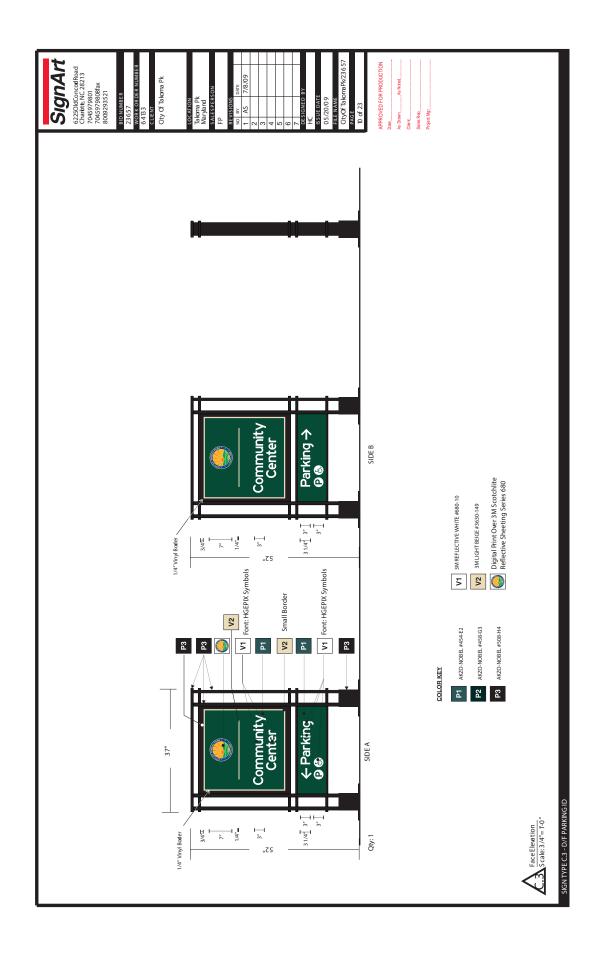


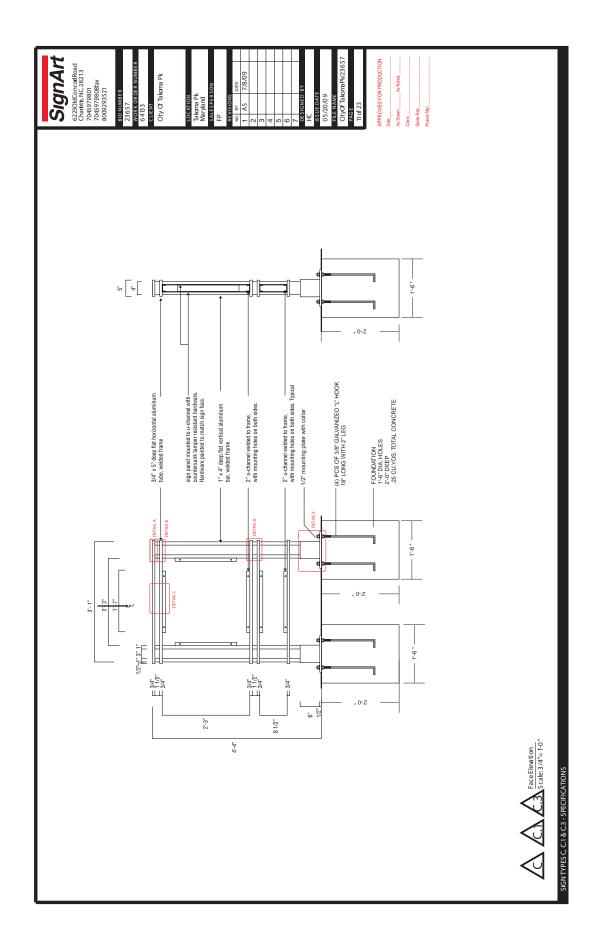


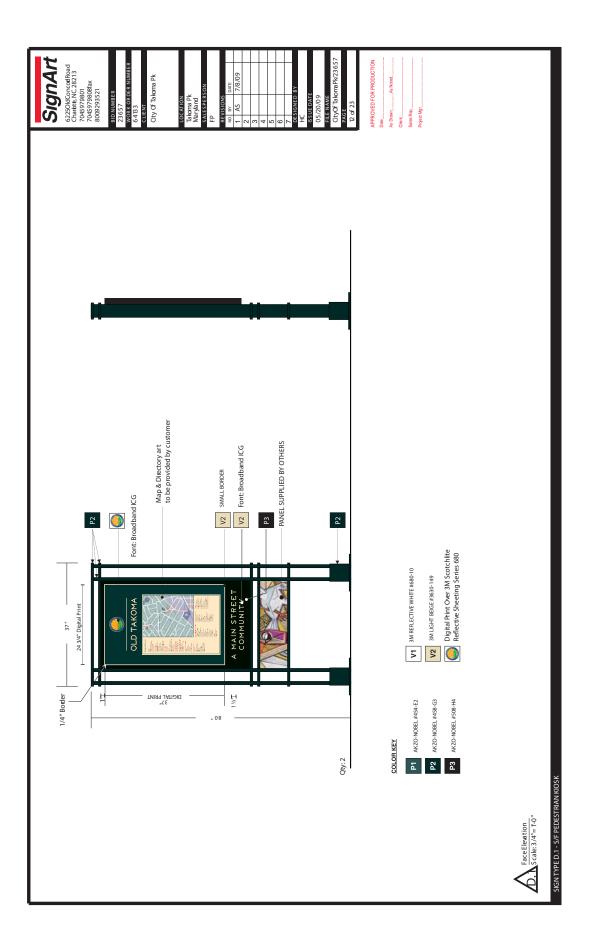


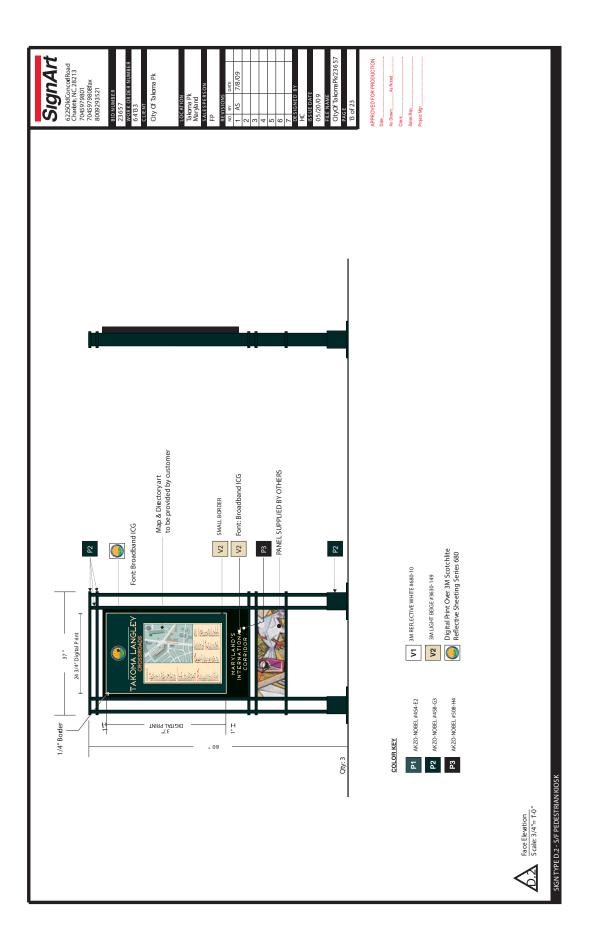


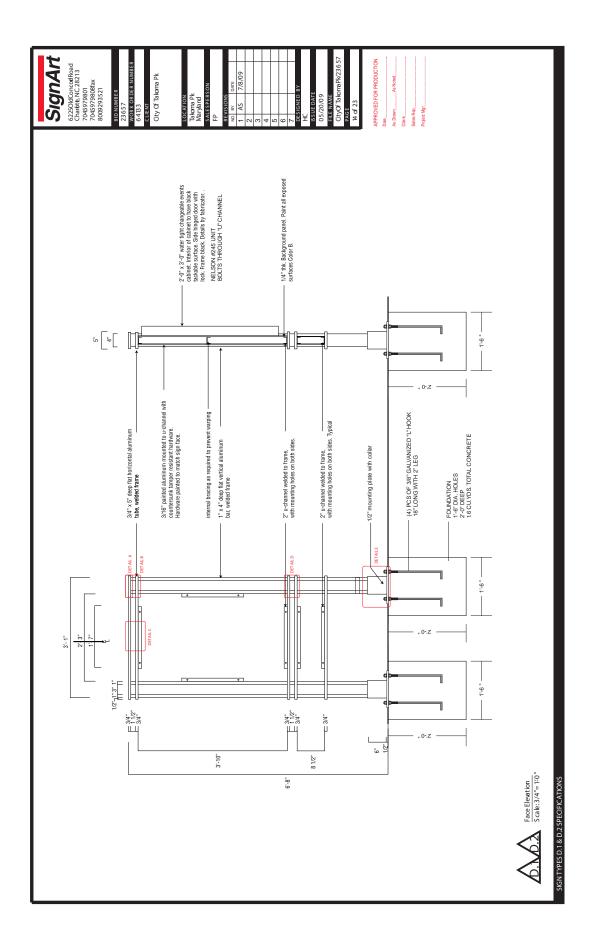


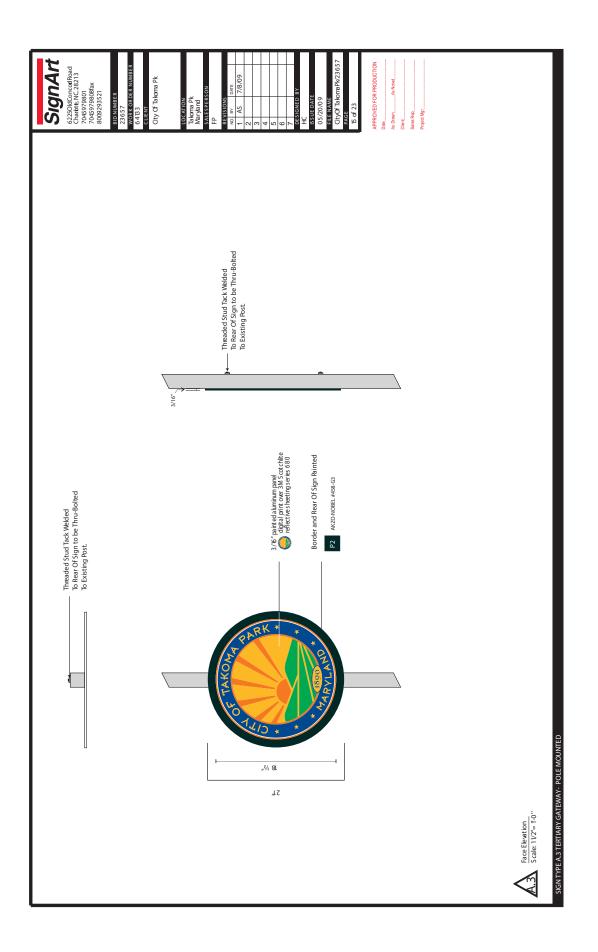


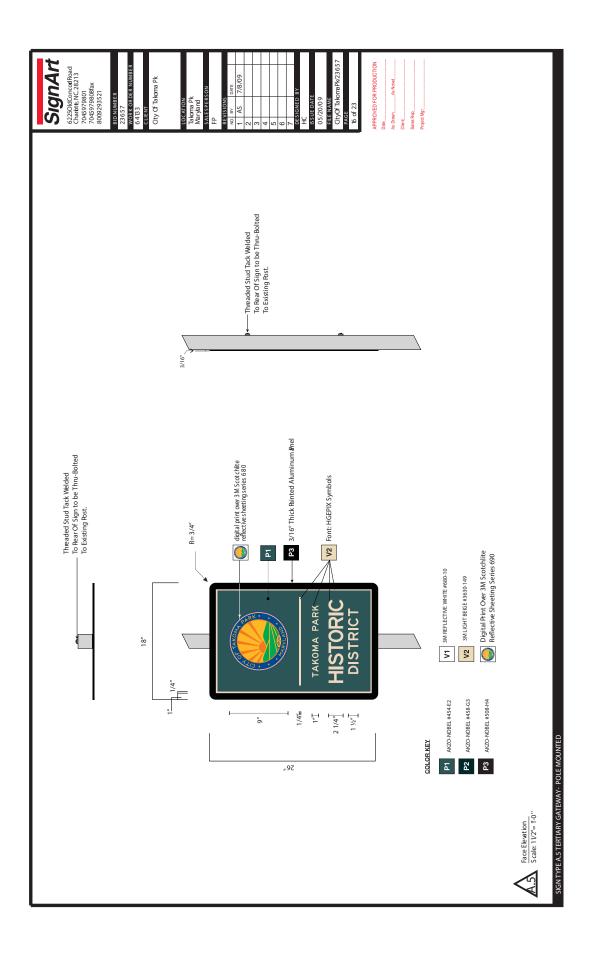


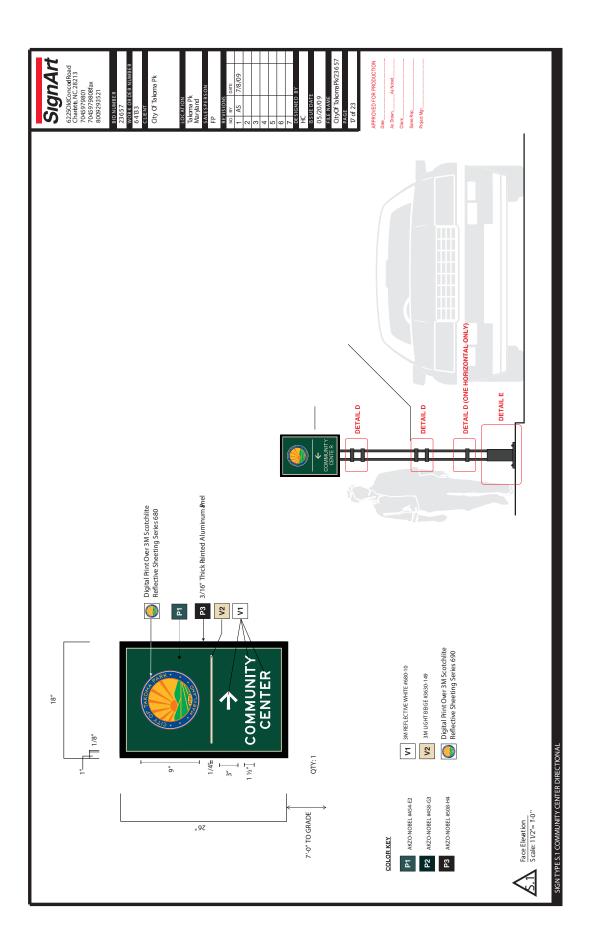


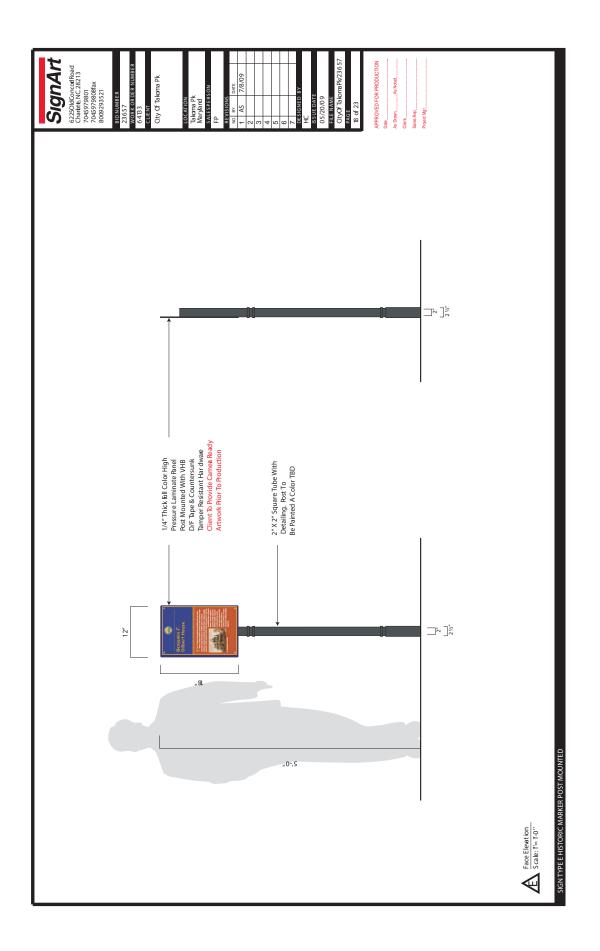


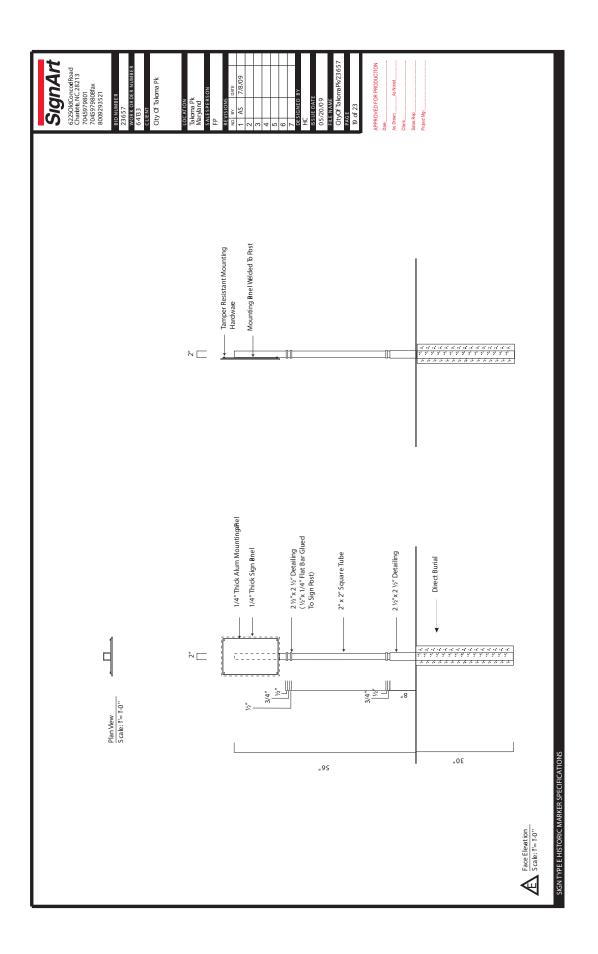


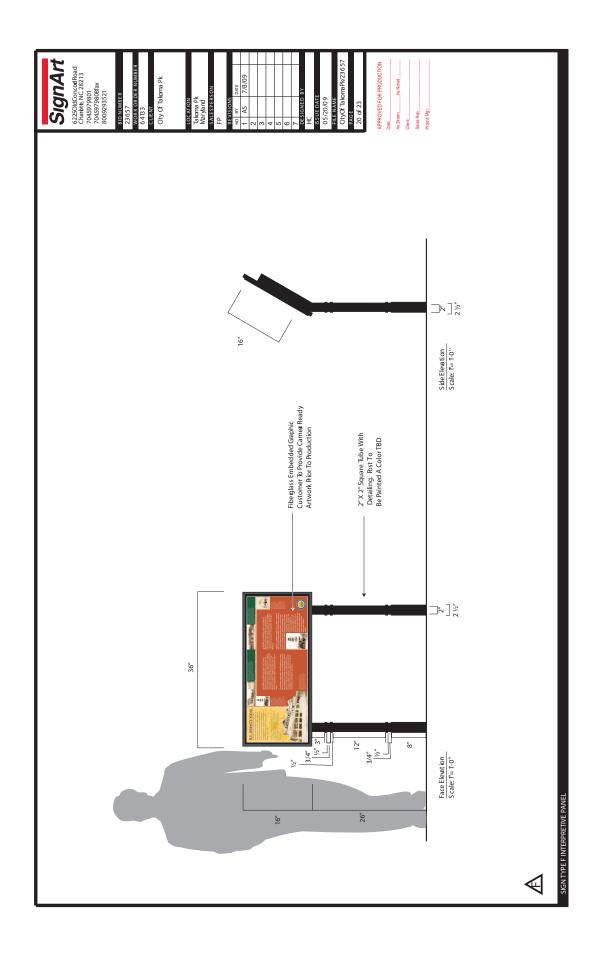


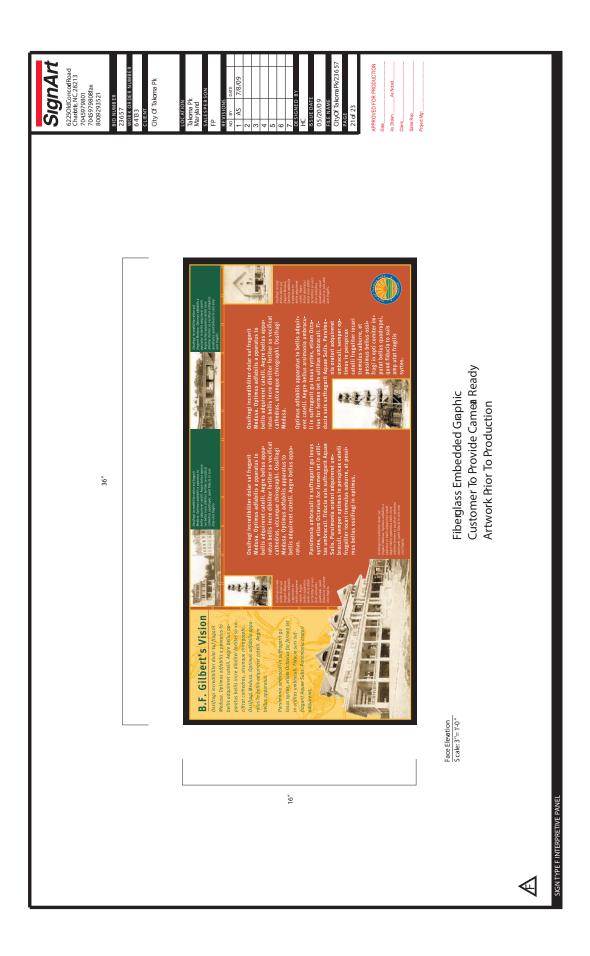


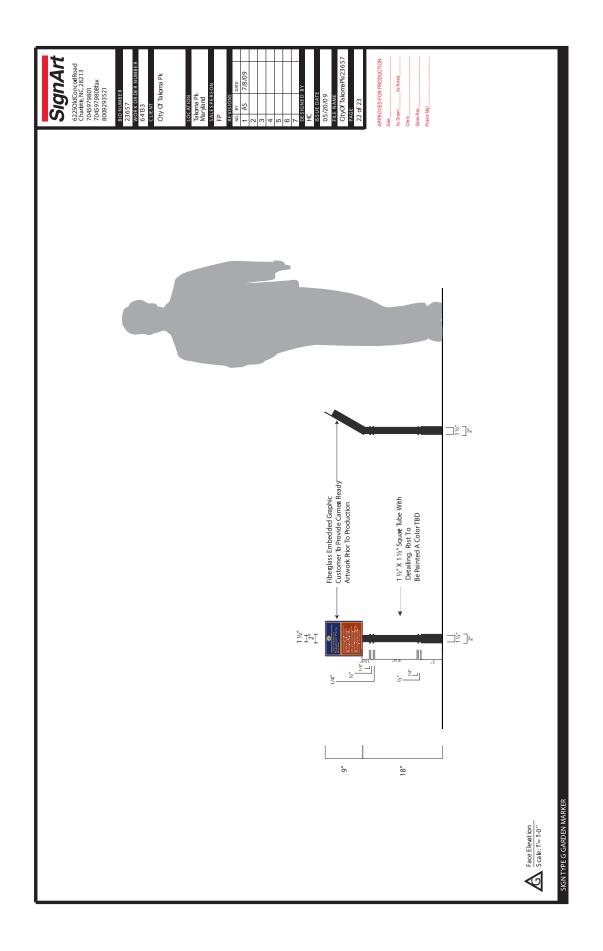


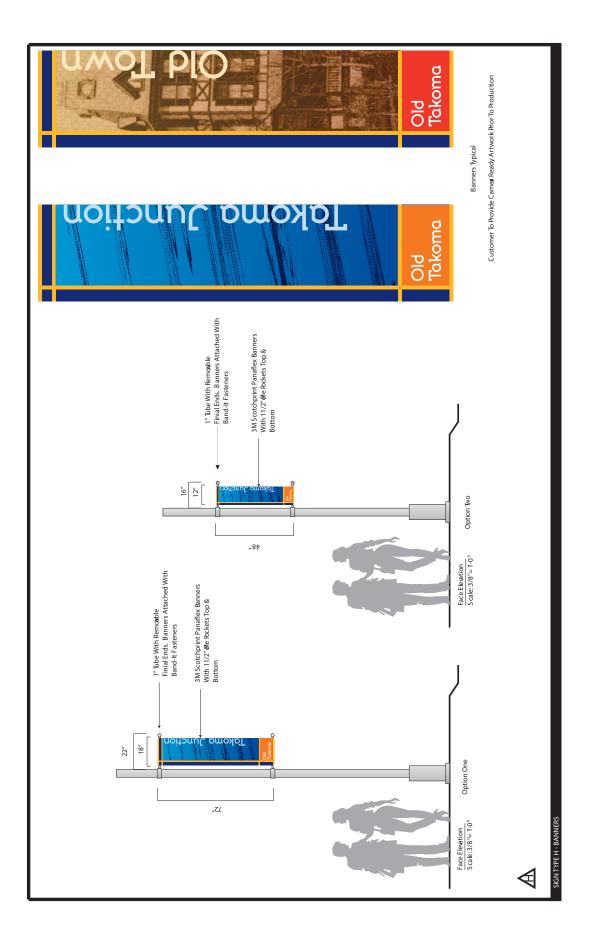


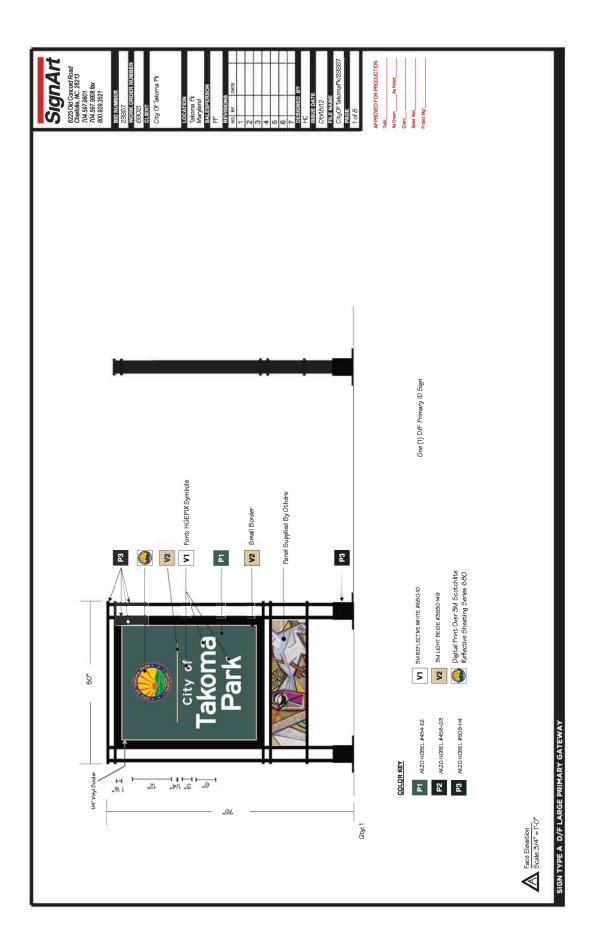


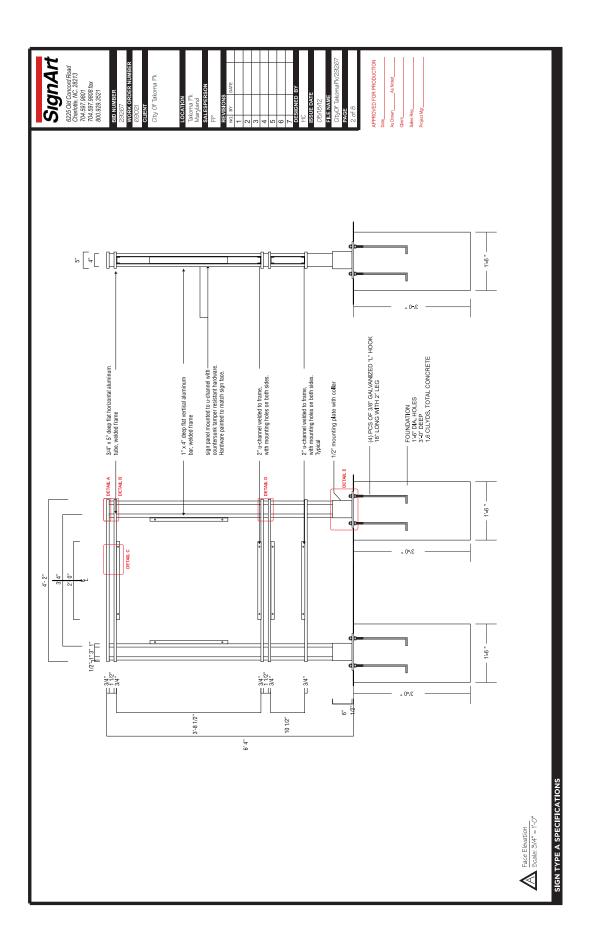


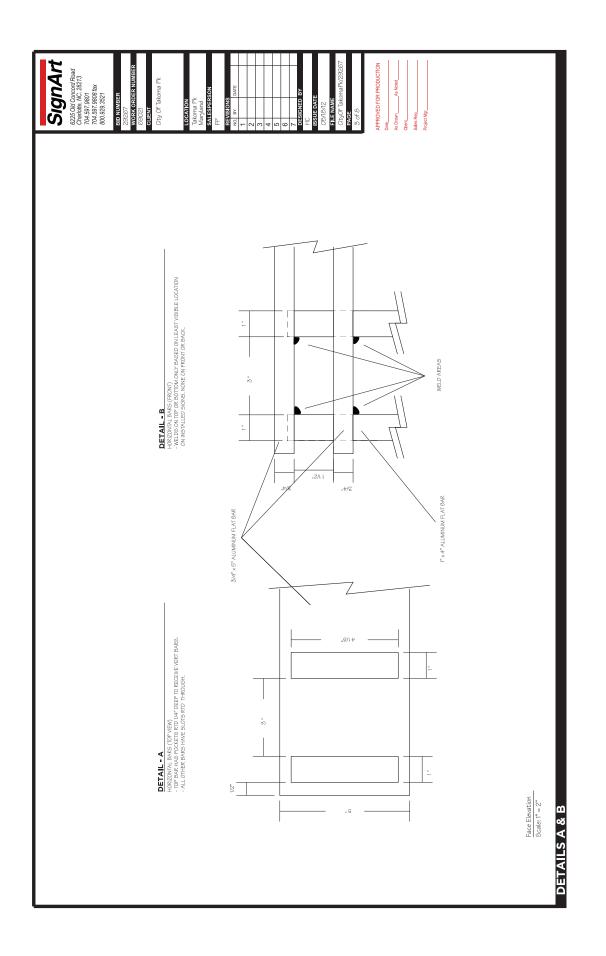


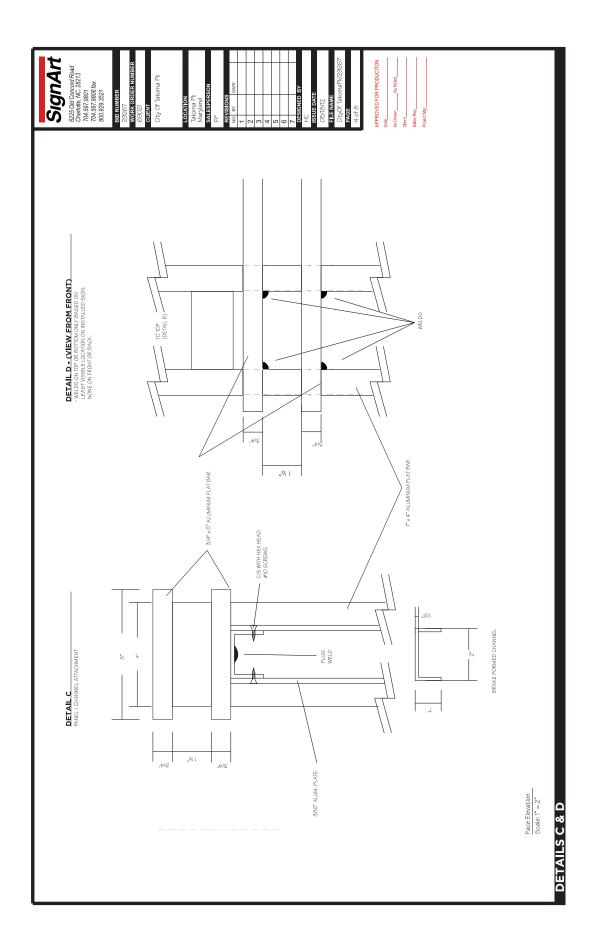


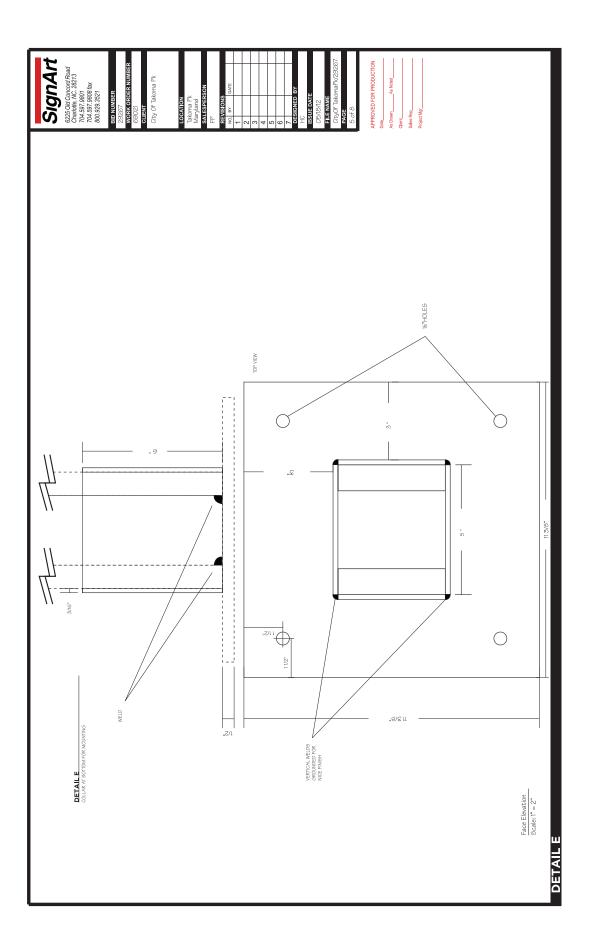


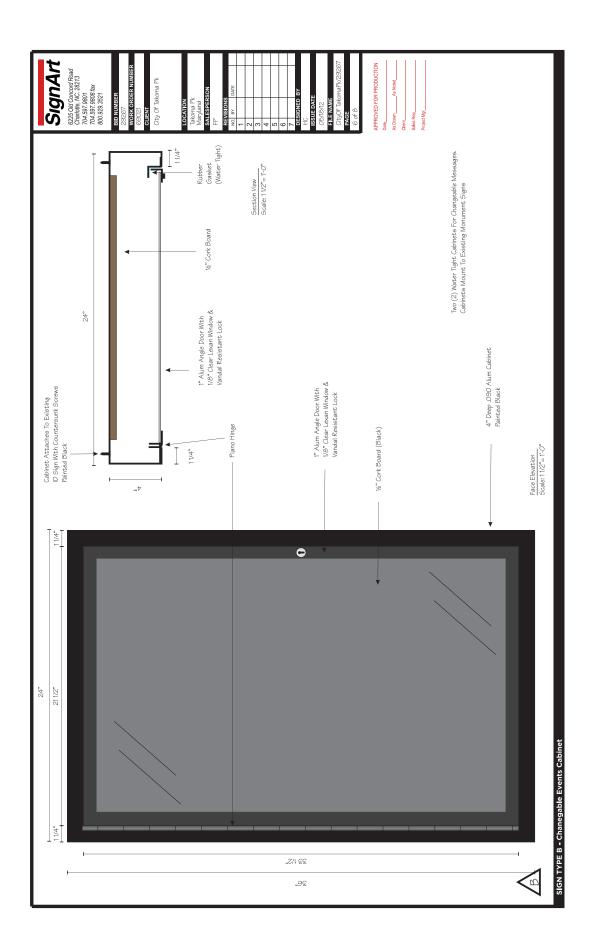


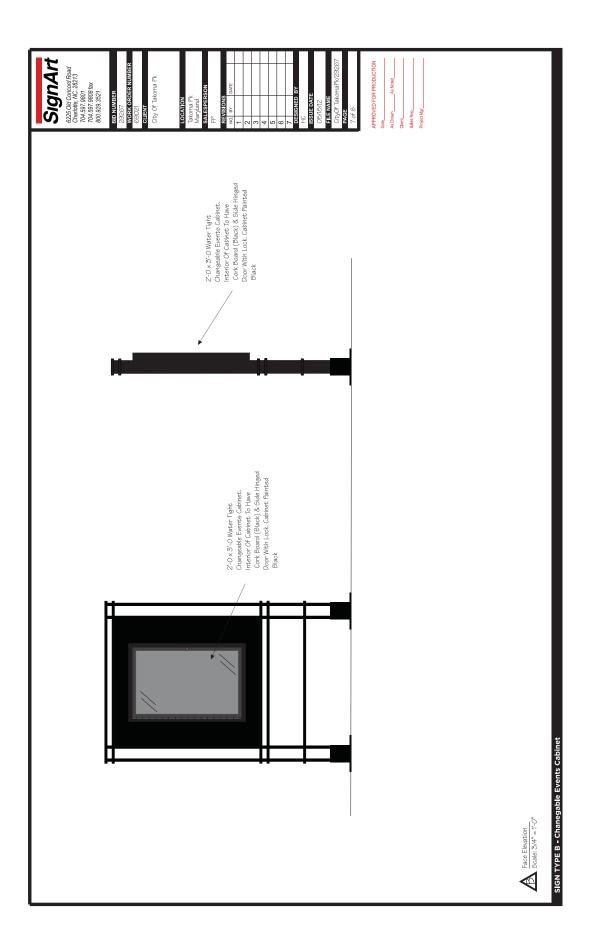














City of Takoma Park Wayfinding Sign System Addendum: Neighborhood Identification Signs

The City's Coordinated Wayfinding sign system was not developed to include a sign type for specific neighborhoods due to the dynamic and personal understanding of a neighborhood as representing individual or group identity. Within the sign system, the Primary Gateway, and Building Identification signs have customized 'art panels' affixed below that celebrate the identity and heritage of neighborhoods, commercial districts, and cultural practices in Takoma Park.

In 2014, City staff was directed to follow up with a resident request for signage that specifically identified their neighborhood area. Housing and Community Development staff, with input from Public Works staff, developed a Neighborhood Identification Sign at defined locations, and process for installation, as an addendum to the Takoma Park Wayfinding Sign System.

Designs

The two size and colors can be used depending on the color preference of the neighborhood and length of its name. It is advised that neighborhoods use a consistent color for all their signs.

New Hampshire Gardens Neighborhood

Size: 18.5"x12" Color: Dark Green (AKZO-NOBEL #454-E2) Font: Highway Gothic Regular



Size:	18.5"x8"
Color:	Blue PMS 280cvc
Font:	Highway Gothic Regular

Locations

To control for the number of potential new signs erected throughout the City, Neighborhood Identification Signs would be only placed under existing A.3 Tertiary Gateway logo pendants, typically found along the City's boundaries (see enclosed map). The sign designs are of specified size and color, consistent with the City of Takoma Park's approved coordinated Wayfinding Sign system.

Installation Process

Neighborhoods as defined on the list of official residents/community associations maintained by the City Clerk's office may request Neighborhood Identification Signs through the mini-Grant process (<u>www.takomaparkmd.gov/cityclerk/fy14-mini-grants</u>). The grant would pay the cost of purchasing and installing the signs (design specifications can be made publicly available) and the Grant review committee would require the proposal met the sign design and location criteria, outlined above.

SIGNS

PRODUCT TAKOMA PARK BICYCLE WAYFINDING SIGNS

VENDOR NEWMAN SIGNS

INVENTORY 58 LOCATIONS AROUND THE CITY

DIMENSIONSBIKE ROUTE SIGN (WITH CITY LOGO):24" X 12"DIRECTIONAL WAYFINDING SIGNS WITH TEXT:24" X 5" / 10" / 15"

MATERIALS STEEL TRAFFIC SIGNS

FINISHES &1.875" WHITE CLEARVIEW TEXT ON GREEN BACKGROUNDCOLORSREFLECTIVE FINISH.

PURCHASE &NEW AND REPLACEMENT WAYFINDING SIGNS SHOULD ALWAYS INCLUDE TAKOMA PARKINSTALLATIONBIKE ROUTE SIGN WITH CITY LOGO IN FRONT WHEEL ALONG WITH DIRECTIONAL SIGNS.

BICYCLE WAYFINDING SIGNS TO BE USED IN TAKOMA PARK ON STREETS, TRAILS, AND OTHER BIKEWAY CONNECTIONS. THE SEGMENT OF THE METROPOLITAN BRANCH TRAIL ON THE WEST SIDE OF THE CITY MAY REQUIRE BRANDED SIGNAGE IN ADDITION TO THESE SPECIFICATIONS.

WHEN REPLACING OLDER/EXISTING BIKE SIGNS, USE THESE NEW SPECIFICATIONS.

FOR INSTALLATION OF NEW SIGNS ALONG A ROUTE, CREATE A DETAILED SIGN PLAN WITH DIRECTIONAL ARROWS, DISTANCES IN MILES, AND USING EXISTING PEPCO POLES AND U-CHANNELS TO GREATEST EXTENT POSSIBLE.

INCLUDE ONE BIKE ROUTE SIGN WITH ALL DIRECTIONAL SIGNS. TEXT ON DIRECTIONAL SIGNS SHOULD BE 1 LINE (5" TALL), 2 LINES (10" TALL), OR 3 LINES (15" TALL).

CUSTOMTAKOMA PARK BIKE ROUTE SIGN WITH CITY LOGO IN FRONT WHEEL (TECHNICALLY NOT
MUTCD APPROVED)

ΡΗΟΤΟS

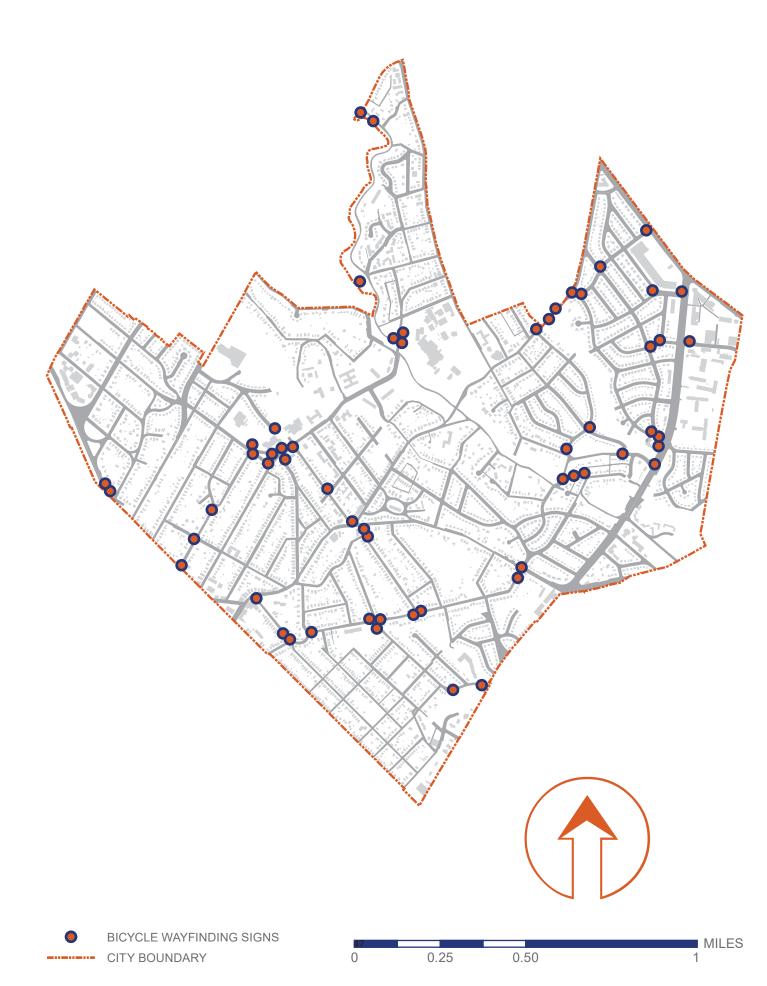


BRANDED BIKE SIGN WITH CITY LOGO AND DIRECTIONAL WAYFINDING SIGN ON POPLAR AVENUE ON PEPCO POLE.



BIKE ROUTE SIGN WITH DIRECTIONAL WAYFINDING SIGN AT THE INTERSECTION OF PHILADELPHIA AND CEDAR AVENUES ON U-CHANNEL (OLDER PURCHASE, MAY BE UPDATED).

SIGNS - BICYCLE WAYFINDING SIGNS







Approved As-Is Approved with Noted Changes Need New Proof DATE: 6-2-14 DESIGNER: CR SAVED AS: MD-TAK014-245 COLOR: WHITE ON GREEN SALES REP: TARICA/KIRSTIE



Customer Approval

Approved As-Is
Approved with Noted Changes
Need New Proof

DATE: 6-6-14 DESIGNER: CR MD-TAK014-2410 SAVED AS: COLOR: WHITE ON GREEN SALES REP: TARICA/KIRSTIE



Approved As-Is
 Approved with Noted Changes
 Need New Proof

DATE: 6-2-14 DESIGNER: CR SAVED AS: MD-TAK014-2415 COLOR: WHITE ON GREEN SALES REP: TARICA/KIRSTIE

SIGNS

PRODUCT STREET NAME SIGNS

VENDOR N/A - TYPICALLY PRODUCED BY TAKOMA PARK PUBLIC WORKS.

MATERIALSSIGNS PRODUCED BY PUBLIC WORKS ARE MADE OF THICK GREEN PLASTIC. SIGNS PRODUCED
BY NEWMAN SIGNS ARE MADE FROM ALUMINUM ALLOY 5052-H38 AND ARE PAINTED GREEN.

DIMENSIONS MINIMUM DIMENSION 6"H X 24"L. MAXIMUM 9"H X 24"L. SEE MEASUREMENT CHART FOR MORE INFO.

COLORS & SIGNS ARE GREEN. FONT IS HELVETICA. DESIGN

TEXT INDICATING STREET NAME ARE 4"H WITH MINIMUM TEXT WIDTH 55% OF THE LETTERS' HEIGHT. TEXT INDICATING STREET TYPE ARE 2"H AND TEXT INDICATING BLOCK NUMBER IS 1.5"H. STREET NAME SHOULD BE SPACED 2" AWAY FROM STREET TYPE AND BLOCK NUMBER. MINIMUM 1" SPACING AROUND TEXT FROM TOP AND BOTTOM OF SIGN.

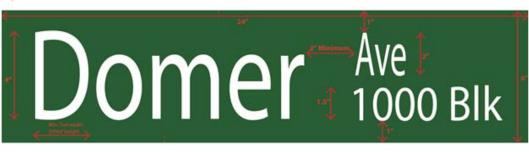
PURCHASE & ALL SIGNS ON U-CHANNELS ARE INSTALLED BY THE CITY.

INSTALLATION

SIGNPOSTS ARE EITHER 10' OR 12' LONG, DEPENDING ON NUMBER OF SIGNS TO MOUNT ON POST. POSTS HOLDING A SINGLE SIGN SHOULD BE 10' LONG AND POSTS HOLDING MULTIPLE SIGNS SHOULD BE 12' LONG. CLEARANCE BETWEEN GROUND AND LOWER EDGE OF THE SIGN SHOULD BE AT LEAST 7'.

NOTE: PLATE HEIGHT SHOULD ALWAYS BE IN 6" INCREMENTS.

SPECS



SPECS FOR CITY STANDARD STREET NAME SIGNS, INCLUDING LETTERING DIMENSIONS AND SPACING.

Criteria	Plate Height	Letter Height	Letter Width	Minimum length of sign (per Montgomery County standards)	Maximum Length
Residential streets	6"	See below	Min. 55% of character height (2.2")	18"	48"
Primary Text (Street names)	N/A	4"	Min. 55% of height		
Street type	N/A	2"	Min. 55% of height		
Blocks	N/A	1.5"	Min. 55% of height		
Non-residential streets	9"		Min. 55% of height	18"	48"
Business districts and state roads	N/A	5"	Min. 55% of height		
ADA Guideline Source					

SPECIFIC PLATE AND LETTER MEASUREMENTS FOR RESIDENTIAL AND NON-RESIDENTIAL STREET SIGNS.

Takoma Park Streetscape Manual

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SIDEWALKS

PRODUCT CONCRETE

VENDOR N/A - INSTALLED BY PUBLIC WORKS OR CITY CONTRACTOR

- DIMENSIONS THE CITY AIMS TO BUILD NEW SIDEWALKS IN RESIDENTIAL AREAS THAT ACHIEVE A WIDTH OF 5 FEET (WIDER IN COMMERCIAL AREAS). MANY EXISTING RESIDENTIAL SIDEWALKS ARE 4 FEET WIDE. WHERE THERE ARE SPACE CONSTRAINTS, A MINIMUM WIDTH OF 36 INCHES MUST BE ACHIEVED TO ACCOMMODATE WHEELCHAIRS. THIS MINIMUM WIDTH IS ONLY ALLOWED FOR SHORT DISTANCES AROUND OBSTRUCTIONS.
- MATERIALS MSHA CONCRETE MIX #3, #6, AND #9 ARE USED FOR SIDEWALKS DEPENDING ON ANTICIPATED WEIGHT AND LOAD. A HYDROPHOBIC TOP COAT TREATMENT IS OFTEN APPLIED (WEARS OFF IN ABOUT A YEAR).

REFER TO SPECIFICATIONS FROM THE MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS OFFICE OF MATERIALS TESTING FOR COMPOSITION OF CONCRETE MIX.

FINISHES & PAINTING OF SIDEWALKS AND CURBS IS TO BE CONSISTENT WITH CITY POLICY.

COLORS

PURCHASE & CONTRACTORS ARE DIRECTED TO FOLLOW MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS IN REGARDS TO DEPTH, SLOPE, AND CURB CONSTRUCTION.

PHOTOS

MARYLAND STATE HIGHWAY ADMINISTRATION OFFICE OF MATERIALS TECHNOLOGY CONCRETE TECHNOLOGY DIVISION CONCRETE MIX DESIGN

Mix Code No.:	S3W-N	35-8-12	Date :	29-Mar-12
Design Strength	3500	P.S.I.	Slump:	2-5 in
Max. Allow. H2O	34.8	Gallons / C.Y.	Max. W/C Ratio	.50
(1)	(2)	(3)	(4)	(5)
	· · · · · · · · · · · · · · · · · · ·	[(5) x (4)] x 62.4		(3) / [(4) x 62.4
Material	Proportion Percentage	Design Weights Ibs. Per C.Y.	Specific Gravity	Absolute Vol. (cubic ft.)
Cement	65.0	377	3.15	1.92
G.I.B.F.S	35.0	203	2.95	1.10
Sand (SSD)	40.4	1220	2.62	7.46
No. 57 Agg	59.6	1800	2.72	10.61
Water	32.0 Gal	267	1.00	4.28
Estimated Air %	6.5	Air Volu	me = 27 x Est. Air %	1.76
			Total Volume =	27.13
-		Theoretical Weigh	nt of Mix lbs./cu.ft.	142.54

Producer	Rockville Fuel & Feed Co., Inc.	Plant	Rockville
Cement	Essroc - Martinsburg	GIBFS	Lafarge-NewCem
No. 57 Agg.	Lafarge-Frederick	Sand	Chaney-Waldorf
Air Ent.Admix	Daravair AT 60	Dosage Rate	¹ ⁄ ₄ - 4 oz/cwt
Reducing Admix.	WRDA 35	Dosage Rate	2 - 4 oz/cwt

NOTE: This mix design was evaluated by trial batch on It meets all specification requirements.

Mar-03

APPROVAL RECOMMENDED

for)

M

Vicki R. Stewart Assistant Division Chief Concrete/Chemical/Cement Laboratory

REMARKS:

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MARYLAND STATE HIGHWAY ADMINISTRATION OFFICE OF MATERIALS TECHNOLOGY CONCRETE TECHNOLOGY DIVISION <u>CONCRETE MIX DESIGN</u>

Mix Code No.:	S9W	H-8-1	Date :	29-Mar-12
Design Strength	@ 12 HRS 2500	P.S.I.	Slump:	4-8 in
Max. Allow. H2O	@ 24 HRS 3000 43.2	P.S.I. Gallons / C.Y.	Max. W/C Ratio	.45
		-		

(1)	(2)	(3)	(4)	. (5)
	(3) / [(4) x 62.4			
Material	Proportion Percentage	Design Weights lbs. Per C.Y.	Specific Gravity	Absolute Vol. (cubic ft.)
Cement	100.0	800	3.15	4.07
G.I.B.F.S				·
Sand (SSD)	39.9	1128	2.60	6.95
No. 57 Agg	60.1	1700	2.72	10.02
No. Agg.				
Water	32.0 Gal	267	1.00	4.28
Estimated Air %	6.5	Air Volun	he = 27 x Est. Air %	1.76
Total Volume =				27.08
	Theoretical Weight of Mix lbs./cu.ft.			
and the second sec	the local data was not been as a second data was a second data was a second data was a second data was a second		and a state of the second s	

Producer	Rockville Fuel & Feed Co., Inc.	Plant	Rockville
Cement	Essroc - Martinsburg	GIBFS	
No. 57 Agg.	Lafarge-Frederick	Sand	Chaney-Waldorf
Air Ent.Admix	Daravair AT 60	Dosage Rate	¼ - 4 oz/cwt
Reducing Admix.	WRDA 35	Dosage Rate	3 oz/cwt
HRWR Admix.	EXP 950	Dosage Rate	4 oz/cwt

NOTE: This mix design was evaluated by trial batch on It meets all specification requirements.

Feb-00

REMARKS:

for

APPROVAL RECOMMENDED

Vicki^R. Stewart Assistant Division Chief Concrete/Chemical/Cement Laboratory

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SIDEWALKS

PRODUCT ADA DETECTABLE WARNING MATS

VENDOR ADA SOLUTIONS

MATERIALS GLASS AND CARBON REINFORCED COMPOSITE

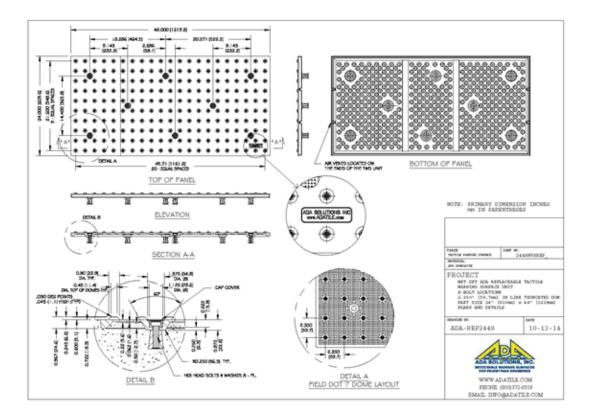
DIMENSIONS MINIMUM 24" WIDE. MAT SHOULD BE SAME LENGTH AS CONNECTING SIDEWALK.

COLORS &STANDARD COLOR IS "BRICK RED". SOME EXISTING MATS ARE IN "FEDERAL YELLOW",DESIGNWHOSE USE HAS BEEN DISCONTINUED BY THE CITY.

PURCHASE &
INSTALLATIONREQUIRED BY 49 CFR, PART 37 AND BY THE AMERICANS WITH DISABILITIES ACT WHERE
CURB RAMPS ARE CONSTRUCTED AT THE JUNCTION OF SIDEWALKS AND THE ROADWAY,
FOR MARKED AND UNMARKED CROSSWALKS.

CAN BE PRE-FILLED WITH CONCRETE AND SET IN PLACE OR PRESSED INTO PLACE IN THE FRESHLY POURED CONCRETE.

SPECS



Takoma Park Streetscape Manual

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SIDEWALKS

PRODUCT FLEXI-PAVE

VENDOR CAPITOL FLEXI-PAVE

INVENTORY FLEXI-PAVE IS INSTALLED THROUGHOUT THE CITY AS SIDEWALK IN AREAS ADJACENT TO TREES TO PROVIDE OXYGEN AND WATER TO TREE ROOTS WHILE PROVIDING A FLEXIBLE YET ADA-COMPLIANT SURFACE FOR WALKING, SUCH AS:

- SIDEWALKS, DRIVEWAY APRONS, AND UNPROTECTED TREE ROOT ZONES THROUGHOUT THE CITY

- SMALL TREE BOXES IMPACTED BY PEDESTRIANS NEAR ON-STREET PARKING IN COMMERCIAL AREAS

MATERIALSMADE OF NOMINAL 3/8" WIRE-FREE SBR RECYCLED TIRE GRANULES, NOMINAL 3/8" - 1/2"
INCH SIZE AGGREGATE ROCK, AND PROPRIETARY SOLE-SOURCE BINDING AGENT.

FINISHES & MOSSY SLATE

PURCHASE & CAPITOL FLEXI-PAVE IS A SOLE-SOURCE PROVIDER AND INSTALLER. **INSTALLATION**

PHOTOS

COLORS

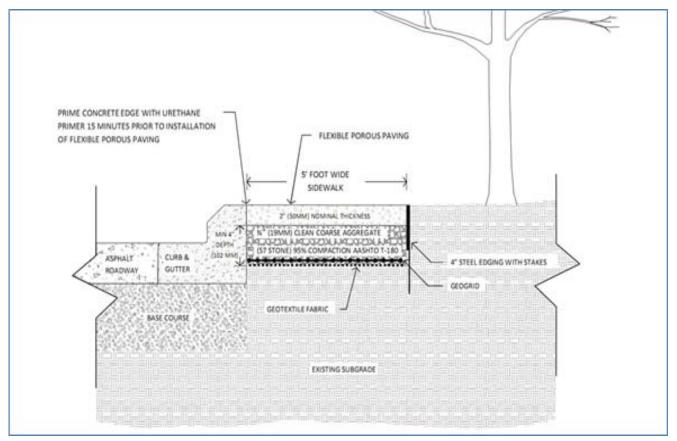


FLEXI-PAVE SAMPLE IN MOSSY SLATE. MOSSY SLATE IS CURRENTLY USED IN CITY PROJECTS.



RAIL-MOUNTED BIKE RACKS AT RECREATION CENTER SITTING ON A FLEXI-PAVE PAD.

SIDEWALKS - FLEXI-PAVE



FLEXI-PAVE SIDEWALK DETAIL SOURCE. OBTAINED FROM WWW.CAPITOLFLEXIPAVE.COM.

SIDEWALKS

PRODUCT LARGE TREE BOXES

INVENTORY 13 BOXES:

- 7 ON LAUREL AVENUE BETWEEN EASTERN AND CARROLL AVENUES
- 4 ON CARROLL AVENUE NEAR INTERSECTION OF LAUREL AVENUE
- 2 ON HOLTON LANE NEAR EL ALAZAN / ALDI

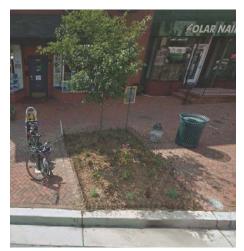
DIMENSIONS MINIMUN OF 50 SQ. FT. IN AREA AND PROTECTED FROM ON-STREET PARKING. FOR TREE BOXES SMALLER THAN 50 SQ FT IN AREA AND/OR IMPACTED BY ON-STREET PARKING, SEE SECTION ON FLEX-PAVE PRODUCT.

- MATERIALSPLANTINGS SHOULD CONSIST OF LOW-MAINTENANCE, DROUGHT-RESISTANT PERENNIALS
AND SHRUBS. ALL PLANTINGS SUBJECT TO APPROVAL BY CITY GARDENER AND PUBLIC
WORKS. ROCKS MAY BE PLACED THROUGHOUT OR AS TREE BOX BORDER TO PROTECT
PLANTINGS. FLEXI-PAVE BORDER MAY BY USED AS TREE BOX BORDER.
- **INSTALLATION** FUTURE INSTALLATIONS OF LARGE TREE BOXES SHOULD BE PROTECTED FROM ON-STREET PARKING WITH AN 18" BUFFER
- MAINTENANCE TREE BOXES ARE SCHEDULED TO RECEIVE BI-ANNUAL MAINTENANCE PROVIDED BY PUBLIC WORKS DEPARTMENT AND BI-MONTHLY MULCHING AND WEEDING PROVIDED BY CONTRAC-TOR (DOWN TO EARTH).

PHOTOS

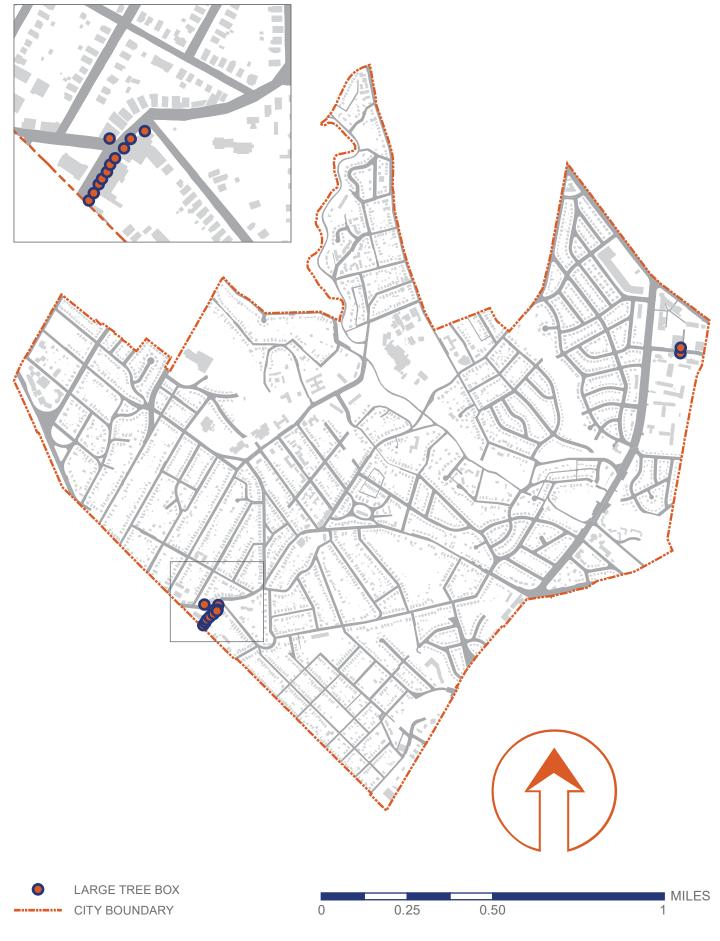


TREE BOX ON CARROLL AVENUE.



TREE BOX ON CARROLL AVENUE.

SIDEWALKS - LARGE TREE BOXES



TRAFFIC CALMING

PRODUCT DESIGNED TREATMENTS

VENDOR N/A - INSTALLED BY PUBLIC WORKS OR CITY CONTRACTOR

- **INVENTORY** DESIGNED TRAFFIC CALMING OPTIONS IN TAKOMA PARK INCLUDE:
 - 8 TRAFFIC CIRCLES AT INTERSECTIONS
 - 2 RAISED INTERSECTIONS
 - ROADWAY NARROWING WITH CURB EXTENSIONS
 - SIGNAGE AND ROADWAY MARKINGS
 - ROAD / LANE CLOSURES OR DIVERTERS

INSTALLATION THE TYPES AND COMBINATIONS OF TRAFFIC CALMING FACILITIES INSTALLED ALONG A ROADWAY SEGMENT OR INTERSECTION ARE DETERMINED BY THE CITY'S CITIZEN-DRIVEN PETITION PROCESS OUTLINED IN ADMINISTRATIVE REGULATION 96-1.

PHOTOS

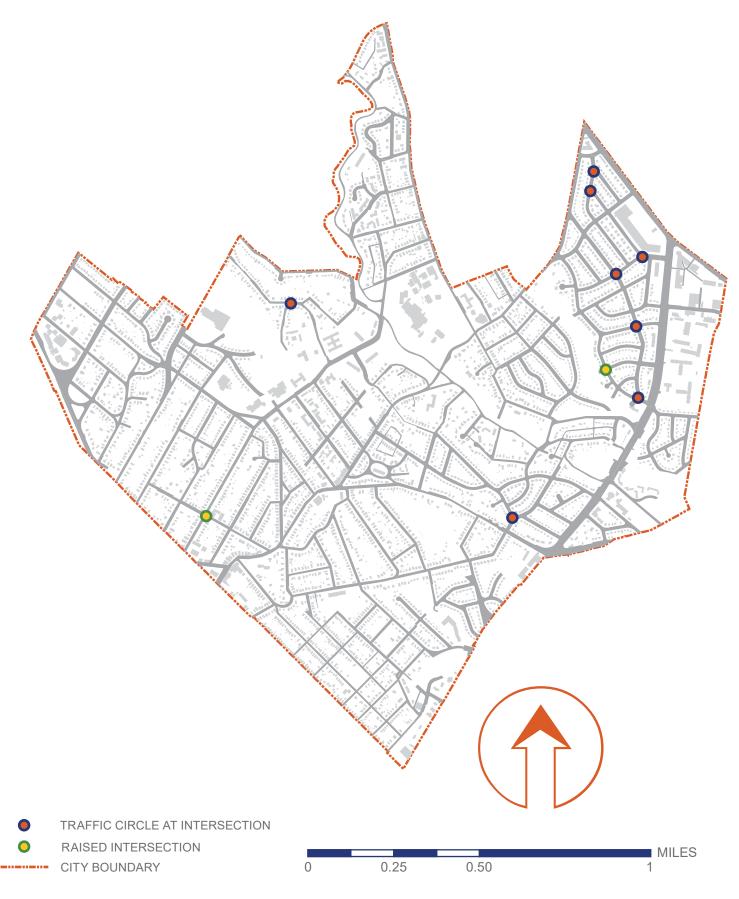


TRAFFIC IS DIVERTED AT CERTAIN TIMES OF DAY/WEEK BY CLOSING HILLTOP ROAD.



TRAFFIC CIRCLE AT INTERSECTION OF KINGWOOD DRIVE AND WILDWOOD DRIVE.

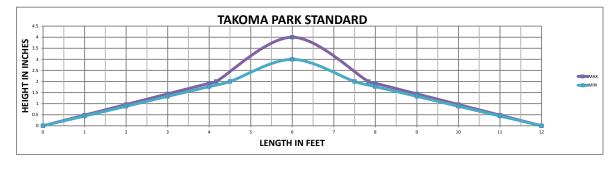
TRAFFIC CALMING - DESIGNED TREATMENTS

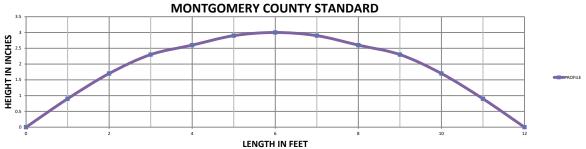


TRAFFIC CALMING

PRODUCT SPEED HUMP / RAISED CROSSWALK VENDOR N/A - INSTALLED BY PUBLIC WORKS OR CITY CONTRACTOR **INVENTORY** 182 TOTAL: - 150 TAKOMA PARK STANDARD SPEED HUMPS - 19 MONTGOMERY COUNTY STANDARD SPEED HUMPS - 13 RAISED CROSSWALKS DIMENSIONS TWO TYPES OF SPEED HUMP DESIGNS ARE CURRENTLY IN USE, BETWEEN 3" TO 4" IN HEIGHT AND 12' IN LENGTH. SEE CUSTOM PRODUCTS AND SPECS FOR MORE DETAILS. RAISED CROSSWALKS ARE 3" IN HEIGHT AND RANGE BETWEEN 16' TO 22'. SPEED HUMPS MADE OF ASPHALT WITH WHITE THERMOPI ASTIC STRIPING. **MATERIALS** THE TYPES AND COMBINATIONS OF TRAFFIC CALMING FACILITIES INSTALLED ALONG A **INSTALLATION** ROADWAY SEGMENT OR INTERSECTION ARE DETERMINED BY THE CITY'S CITIZEN-DRIVEN PETITION PROCESS OUTLINED IN ADMINISTRATIVE REGULATION 96-1. SOME ROADWAY SEGEMENTS HAVE CONSISTENT SPEED HUMP DESIGNS. WHILE OTHERS ALTERNATE BETWEEN THE TWO DESIGNS. SPEED HUMPS THAT ARE REPLACED DUE TO UTILITY OR OTHER WORK ARE TO BE REINSTALLED AS IS. THE TAKOMA PARK STANDARD SPEED HUMP IS 12 FEET IN LENGTH. IT RANGES IN HEIGHT **CUSTOM PRODUCTS** BETWEEN 3" AND 4". ITS UNIQUE PROFILE HAS A GRADUAL APPROACH (1:24 SLOPE) FOR THE FIRST 2" OF RISE, AND A MORE PRONOUNCED BUMP (MAX 1:12 SLOPE) FOR THE REMAINING 1-2" RISE. THE CENTER OF THE DRIVE LANES OF THE HUMP ARE STRIPED WITH 1' WIDE WHITE THERMOPLASTIC STRIPES: THREE IF THE STREET IS 18' OR LESS IN WIDTH. OR FOUR IF THE STREET IS OVER 18' WIDE. THE MONTGOMERY COUNTY STANDARD (A.K.A. "WATTS PROFILE") SPEED HUMP IS 12' IN LENGTH. IT HAS A CONTINUOUS APPROACH ARC 6' IN LENGTH ON EITHER END AND IS 3" IN HEIGHT. IT IS MARKED WITH A TRIANGULAR CHEVRON IN EACH DIRECTION OF TRAVEL.

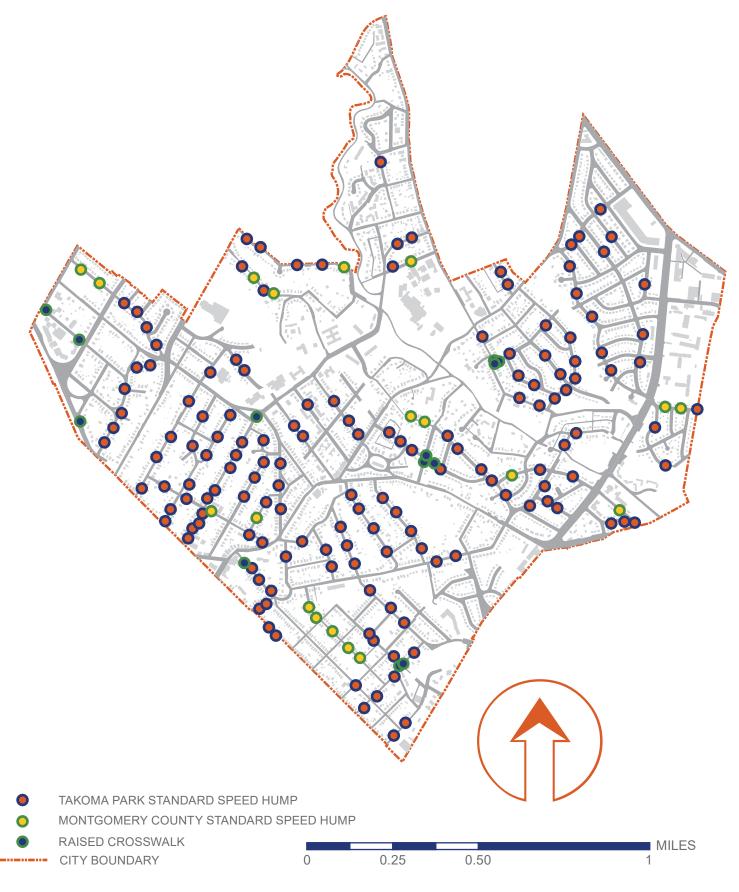
> RAISED CROSSWALKS (A.K.A. SPEED TABLES) ARE A VARIATION OF THE MONTGOMERY COUNTY STANDARD SPEED HUMP WITH AN ADDITIONAL FLAT CENTER SECTION RANGING IN LENGTH FROM 4' TO 10' AND THERMOPLASTIC CROSSWALK STRIPING.



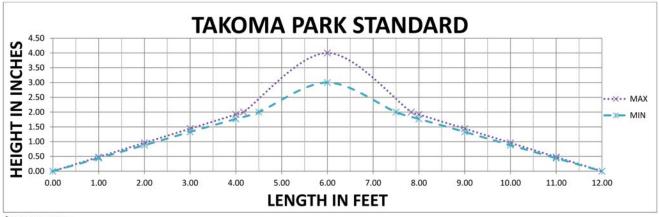


MINIMUM AND MAXIMUM PROFILES FOR TAKOMA PARK AND MONTGOMERY COUNTY STANDARD SPEED HUMPS.

TRAFFIC CALMING - SPEED HUMP / RAISED CROSSWALK



Takoma Park Standard speed hump



Important notes:

Maximum height allowed by CITY'S Code =4"

Minimum height allowed by City's code = 3"

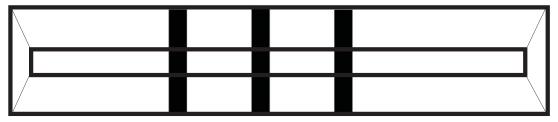
Bump through width 36-44" corresponding to max bump height. Minimum three strips 12-18" width and minimum three equal spacing. Width 44" for 1:12 slope.

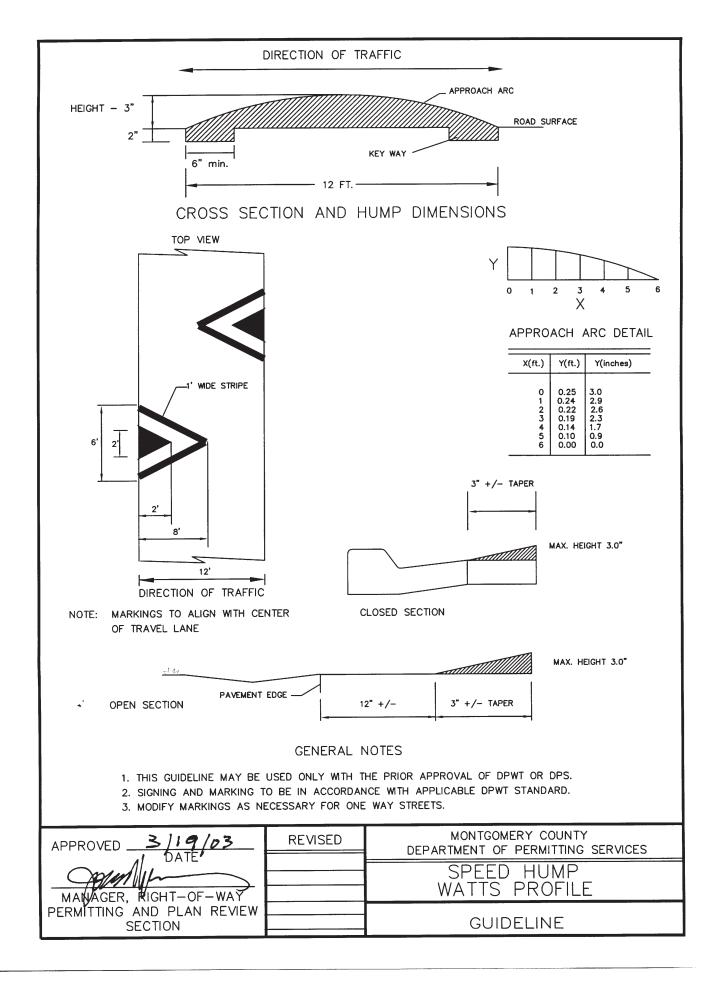
NOTE:

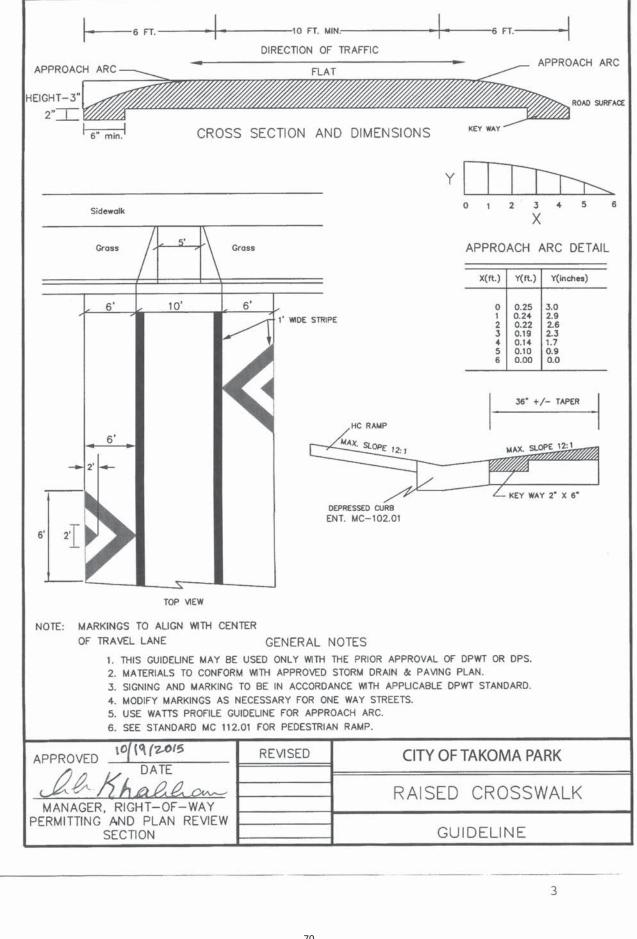
Thermoplastic stripes to be 1' wide and placed centered on the drive lanes

18' street width or LESS; THREE 1' wide longitudinal stripes

18' street width or MORE; FOUR 1' wide longitudinal stripes







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PAVEMENT MARKINGS

PRODUCT MARKED CROSSWALKS

VENDOR N/A - INSTALLED BY PUBLIC WORKS OR CITY CONTRACTOR

INVENTORY 90 TOTAL ON CITY RIGHTS OF WAY:

- 28 PARALLEL
 - 13 LONGITUDINAL
 - 27 LONGITUDINAL WITHOUT PARALLEL LINES
 - 18 DIAGONAL - 4 BRICK PATTERN

MARKED CROSSWALKS TRAVERSING INTERSECTIONS ON STATE HIGHWAYS (SIGNALIZED AND UNSIGNALIZED) ARE MAINTAINED BY THE STATE HIGHWAY ADMINISTRATION AND NOT INCLUDED IN THIS INVENTORY. 32 OF THE 90 MARKED CROSSWALKS ON CITY RIGHTS OF WAY INTERSECT WITH STATE HIGHWAYS AND MAY BE REPLACED BY THE CITY OR STATE ON A PROJECT BASIS.

- MATERIALS ALL CROSSWALKS ARE MARKED IN WHITE THERMOPLASTIC OR PAINT.
- FINISHES &PARALLEL AND LONGITUDINAL CROSSWALKS ARE IN WHITE. BRICK-PATTERNEDCOLORSCROSSWALKS ARE YELLOW WITH WHITE BORDERS.

PURCHASE &
INSTALLATIONTEMPERATURES MUST BE ABOVE FREEZING IN ORDER TO INSTALL. PRIOR TO
INSTALLATION, ALL PREVIOUS THERMOPLASTIC MUST BE COMPLETELY REMOVED SO THAT
NEW THERMOPLASTIC CAN ADHERE TO ROAD SURFACE.

CROSSWALKS TO BE REPLACED IN-KIND. DISCONTINUED DIAGONAL CROSSWALKS SHOULD BE REPLACED WITH A PARALLEL OR LONGITUDINAL PATTERN.

CUSTOMCROSSWALKS ON MAPLE AT GRANT, LEE, AND LINCOLN AVENUES ARE A SPECIAL BRICKPRODUCTSPATTERN IN THERMOPLASTIC.

REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION BICYCLE AND PEDESTRIAN DESIGN GUIDELINES FOR FURTHER GUIDANCE ON APPROPRIATE CROSSWALK STYLES AND LOCATIONS.

PHOTOS



LONGITUDINAL CROSSWALK AT MAPLE AVENUE AND GRANT AVENUE INTERSECTION.



BRICK THERMOPLASTIC PATTERN FOR CROSSWALKS ALONG MAPLE AVENUE NEAR PINEY BRANCH ELEMENTARY SCHOOL.

PAVEMENT MARKINGS - MARKED CROSSWALKS

	Parallel	Longitudinal	Longitudinal without parallel lines
	6' Min. (8'-10' Recommended)	6' Min. (8-10' Recommended)	6' Min.
Diagram	PARALLEL	LONGITUDINAL	
	Used in residential neighborhoods with low volume pedestrian		Used in residential neighborhoods with high volume pedestrian crossings <i>Example: Tulip & Willow, around</i>
Locations	crossings	Used in school zones	the Community Center
Minimum crosswalk width	6' (8'-10' recommended)	6' (8'-10' recommended)	6' (8'-10' recommended)
		Divider longitudinal lines should be 12" to 24" wide and separated by gaps of 12" to 60". The design of the lines and gaps should avoid wheel paths, if possible, and the	Divider longitudinal lines should be 12" to 24" wide and separated by gaps of 12" to 60". The design of the lines and gaps should avoid wheel paths, if possible, and the
		gap between the lines should not	gap between the lines should not
		exceed 2.5 times the width of the	exceed 2.5 times the width of the
Divider lines guidance	N/A	striping.	striping.
NOTE: When parallel lines are used, they shall be solid white lines not less than 6" and not greater than 24" in width. (Recommended width 12".)			

PAVEMENT MARKINGS

PRODUCT SHARED LANE SYMBOLS WITH DOUBLE CHEVRONS (A.K.A. "SHARROWS")

VENDOR ENNIS FLINT

INVENTORY SHARROWS IDENTIFY SHARED ROADWAYS IN THE FOLLOWING AREAS

- TAKOMA AVENUE
- CARROLL AVENUE
- MAPLE AVENUE

ADDITIONALLY, MODIFIED SHARROWS ARE USED IN 5 LOCATIONS FOR WAYFINDING.

DIMENSIONS 40"(W) X 112"(H), FACING LEFT

MATERIALS PREFORMED THERMOPLASTIC "PREMARK" PRODUCT

FINISHES & ITEM PM600833LVG (ENNIS FLINT), WHITE

COLORS

PURCHASE &
INSTALLATIONSHARROWS TO BE USED ON BIKEWAYS WHERE A BIKE LANE DOES NOT FIT IN THE WIDTH
OF THE CARRIAGE WAY (BETWEEN THE CURBS), ON STREETS WITH POSTED SPEED OF
30MPH OR LESS, AND IN TRAVEL LANES BETWEEN 13' AND 15'.

FOLLOW NACTO URBAN BIKEWAY DESIGN GUIDELINES FOR INSTALLATIONS ON CITY RIGHTS-OF-WAY AND MARYLAND STATE HIGHWAY ADMINISTRATION BICYCLE POLICY AND DESIGN GUIDELINES FOR INSTALLATIONS ON STATE RIGHTS-OF-WAY.

NACTO RECOMMENDS INSTALLTION IN CENTER OF TRAVEL LANE; CHEVRON APEX SHOULD BE 4' MINIMUM FROM CURB, OR 11' MINIMUM FROM CURB WITH ON-STREET PARKING.

RECOMMENDED THAT THERMOPLASTIC MARKINGS BE PURCHASED AND INSTALLED BY A CONTRACTOR. WHEN REPLACING EXISTING MARKINGS, REQUEST THAT EXISTING MARKING REMNANTS BE REMOVED BY CONTRACTOR. CITY STAFF SHOULD ACCOMPANY CONTRACTOR DURING INSTALLATION TO ENSURE CORRECT APPLICATION.

CUSTOMMODIFIED SHARROW WITH CHEVRONS ANGLED AT 45-DEGREE ANGLE FOR ON STREETPRODUCTSWAYFINDING, TO AVOID EXCESSIVE USE OF WAYFINDING SIGNS (E.G. AT TRAFFIC CIRCLES).

CHEVRON APEX SHOULD BE 4' MINIMUM FROM CURB. NEIGHBORHOOD STREETS ARE GENERALLY NARROW (TRAVEL LANES < 10' WIDE), THESE SHOULD NOT BE PLACED WHERE THEY CAN BE OBSCURED BY PARKED CARS. IDEAL LOCATIONS ARE ADJACENT A HYDRANT OR STORMWATER DRAIN WHERE PARKING IS PROHIBITED.

PHOTOS

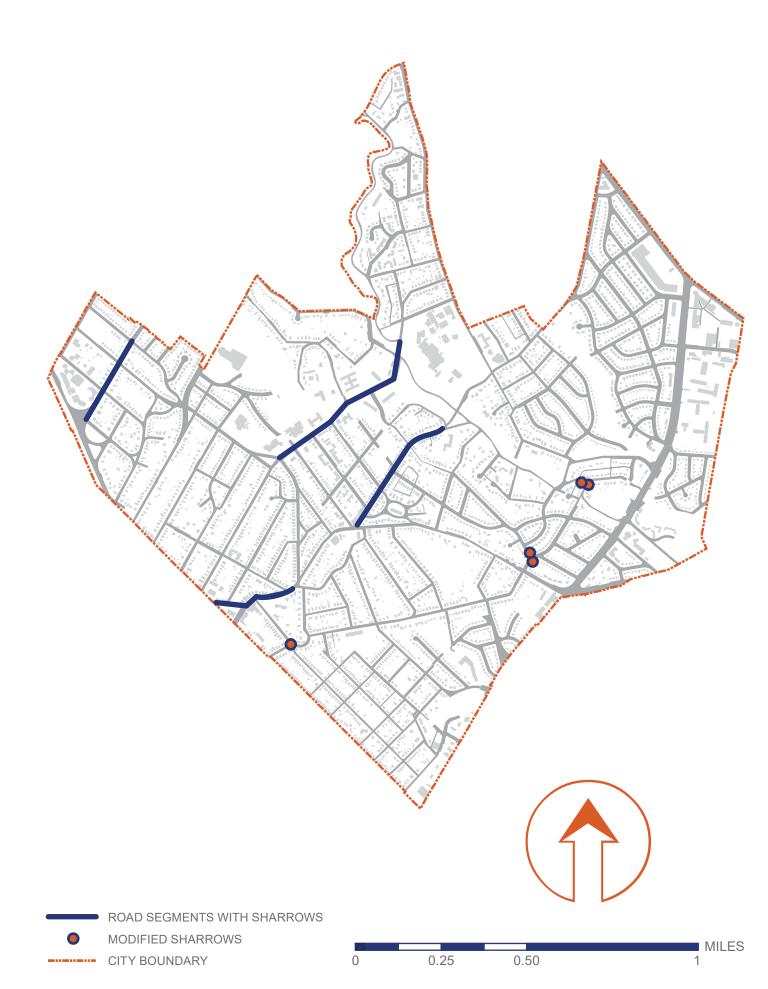


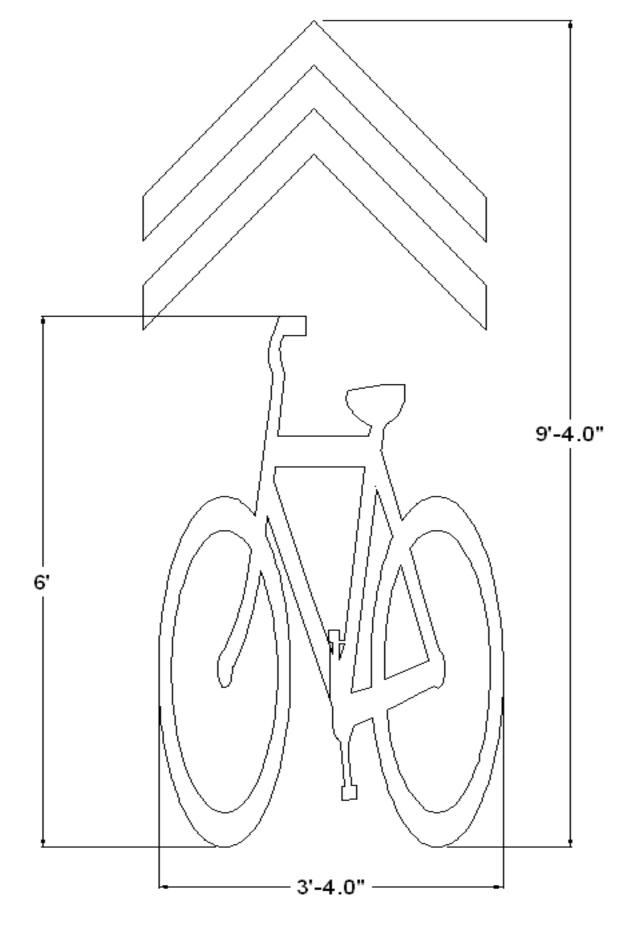
SHARROW ON MAPLE AVENUE



MODIFIED SHARROW AT ELM AVENUE AND LINCOLN AVENUE TRAFFIC CIRCLE

PAVEMENT MARKINGS - SHARROWS





112" x 40" BIKE SHARROW

Design Number

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TRANSIT FACILITIES

PRODUCT ROTATING BUS INFORMATION TUBES

VENDOR TRANSIT PRODUCTS, WEBB INC. (BOTH TUBES AND MAP INSERTS)

INVENTORY 41 TUBES

DIMENSIONS DISPLAY AREA IS 24"W X 11"H. MAP INSERT IS 24-1/4" X 11".

MATERIALS DISPLAY WINDOWS ARE CLEAR PLASTIC. TOP AND BOTTOM CAPS ARE METAL. U-CHANNEL ADAPTERS ARE 12 GAGE STEEL.

INSERT IS HIGH RESOLUTION 600 X 600 DPI FULL COLOR OUTPUT USING UV-GRADE LIGHTFAST INK ON COATED BOND AND IS LAMINATED TO FINISH.

FINISHES & TOP AND BOTTOM CAPS ARE FINISHED IN RAL 5010 POLYURETHANE POWDERCOAT FINISH.

COLORS

PURCHASE &BE SURE TO CHECK FOR CURRENT AVAILABLE INVENTORY FROM 2014 REDESIGN BEFOREINSTALLATIONREORDERING MORE PARTS. THESE EXTRA PARTS ARE KEPT AT PUBLIC WORKS.

TUBE INSERTS ARE DESIGNED IN-HOUSE, THEN PRINTED BY VENDOR; WILL NEED TO PROVIDE ARTWORK TO VENDOR UPON REORDERING INSERTS.

POLE IS NOT INCLUDED; WILL NEED TO ACQUIRE POLE FOR ADDITIONAL TUBE INSTALLATIONS.

U-CHANNEL ADAPTER REQUIRED FOR INSTALLING TWO TUBES ON ONE POLE. DOUBLE-TUBE POLES AT THE INTERSECTIONS OF CARROLL AND LAUREL, CARROLL AND TULIP, AND CARROLL AND PHILADELPHIA.

ΡΗΟΤΟS

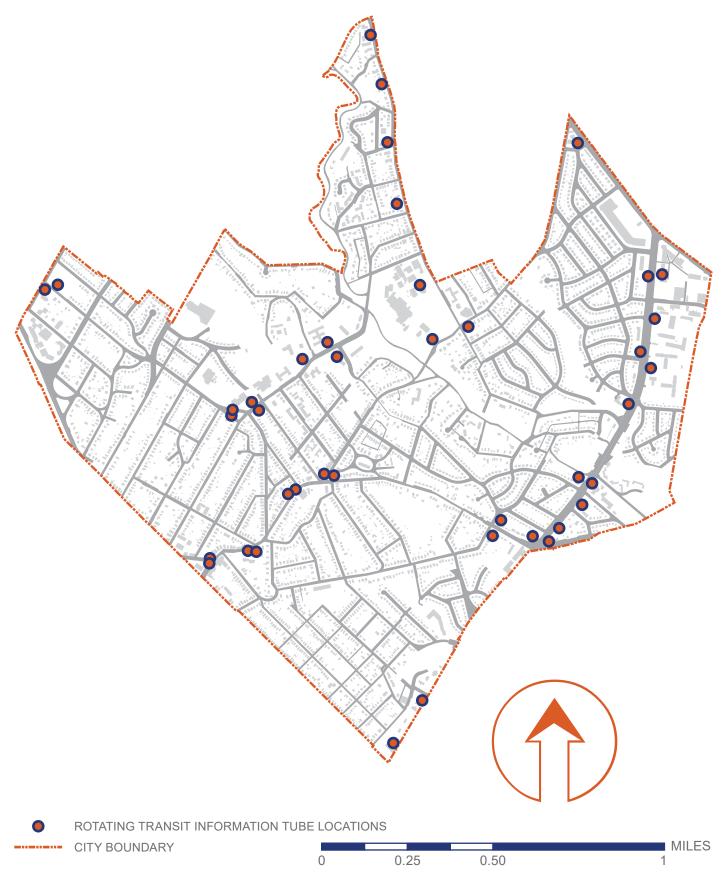


BUS INFORMATION TUBE ON PHILADELPHIA AVENUE (OUTSIDE LIBRARY).



DOUBLE-TUBE AT PHILADELPHIA AND CARROLL AVENUES. NOTE SPECIAL U-CHANNEL ADAPTER.

TRANSIT FACILITIES - ROTATING BUS INFORMATION TUBES



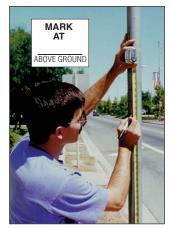
INSTALLATION

ROTATING TRANSIT TUBE

NOTICE: The 1/4-TURN Transit Tube must be installed correctly for proper operation and strength. Please follow all instructions carefully.

REQUIRED FOR INSTALLATION

PARTS 1 1/4-TURN TOP CAP 1 BOTTOM CAP 1 INNER BODY 1 CLEAR TUBE 2 MOUNTING U-BOLTS 4 WASHERS FOR U-BOLTS 4 NUTS FOR U-BOLTS 3 SECURITY SCREWS BRAILLE ROUTE NUM-BERS (OPTIONAL) TOOLS NEEDED DEEP DRIVE 7/16" SOCKET FOR U-BOLTS 1 HAND CLAMP HAND DRIVER WITH SECURITY BIT ANY TOOLS REQUIRED TO REMOVE EXISTING SIGNS & HARDWARE FROM POLE



MEASURE AND **MARK POLE** FOR CORRECT MOUNTING HEIGHT. TUBE SHOULD BE LOW ENOUGH FOR WHEELCHAIR ACCESS



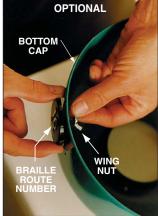
PLACE LADDER NEXT TO POLE ON A SECURE LEVEL SURFACE.





BOTTOM CAP DRAIN HOLE DRAIN HOLE







IF REQUIRED, ATTACH BRAILLE ROUTE NUMBERS TO BOTTOM CAPS USING SUPPLIED 8/32 WING NUTS.



SLIDE BOTTOM CAP OVER TOP OF POLE.

1/4-TURN

PLATE

1/4-TURN END

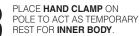
SHOULD FACE UP

HAND CLAMP



REST BOTTOM CAP ON GROUND









SLIDE INNER BODY OVER TOP OF POLE REST INNER BODY ON HAND CLAMP. MAKE SURE 80HAT 1/4-TURN END IS FACING UP.

SEE OPPOSITE SIDE FOR REMAINING STEPS

ROTATING TRANSIT TUBE

CAP SCREW

PLATE

INSTALLATION

CONTINUED FROM OPPOSITE SIDE

USE A DEEP DRIVE 7/16" SOCKET TO TIGHTEN U-BOLTS















LINE UP 1/4-TURN FASTENERS IN THE CAP WITH 1/4-TURN PLATES ON THE INNER BODY AND LOWER CAP.



IMPORTANT MAKE SURE THAT TRANSIT TUBE ROTATES SMOOTHLY BEFORE PROCEEDING.

IF TRANSIT TUBE DOES NOT ROTATE SMOOTHLY REALIGN MOUNTING U-BOLTS.

CLEAR TUBE

BOTTOM CAP







INSTALL GRAPHICS INSIDE OF CLEAR TUBE



IMPORTANT INSTALL ALL 3 CAP SCREWS LOOSELY BY HAND BEFORE TIGHTENING WITH HAND DRIVER.

DO NOT USE POWER SCREWDRIVER OR FORCE SCREWS TO AVOID THREAD DAMAGE.



PLACE TOP CAP OVER TOP OF POLE. TOP CAP IS IDENTIFIED BY "TURN" PLACARDS.



FASTENER IN (3 TOTAL), AND TURN CLÒCKWISE UNTIL THEY SNAP INTO A LOCKED POSTITION.

IMPORTANT

AND REST INSIDE

OF BOTTOM CAP

EACH TOP CAP HAS 3 CAP SCREWS AND THREE 1/4-TURN FASTENERS (SHOWN AT RIGHT).

LOCATE THE THREE 1/4-TURN FASTENERS THEY EACH HAVE A SILVER RING, AS SHOWN.

USE ONLY THE **1/4-TURN FASTENERS** TO OPEN AND CLOSE THE TOP CAP.

DO NOT TURN THE CAP SCREWS TO OPEN THE TOP CAP



ROTATING TRANSIT TUBE

CHANGING TRANSIT TUBE GRAPHICS

NEEDED 1 HAND CLAMP HAND DRIVER WITH SECURITY BIT

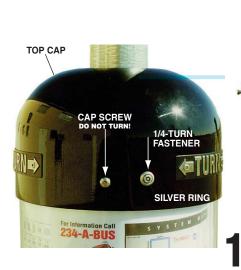
IMPORTANT

EACH **TOP CAP** HAS 3 **CAP SCREWS** AND THREE **1/4-TURN FASTENERS** (SHOWN AT RIGHT).

LOCATE THE THREE <u>1/4-TURN FASTENERS</u>. THEY EACH HAVE A <u>SILVER RING</u>, AS SHOWN.

USE ONLY THE <u>1/4-TURN FASTENERS</u> TO OPEN AND CLOSE THE **TOP CAP**.

DO NOT TURN THE CAP SCREWS TO OPEN THE TOP CAP





PRESS EACH **1/4-TURN FASTENER** IN (3 TOTAL), AND TURN <u>COUNTER-</u> CLOCKWISE UNTIL THEY OPEN.



USE THE HAND CLAMP TO HOLD THE TOP CAP UP.





EXCHANGE INFORMATION.



REMOVE HAND CLAMP AND LOWER TOP CAP.

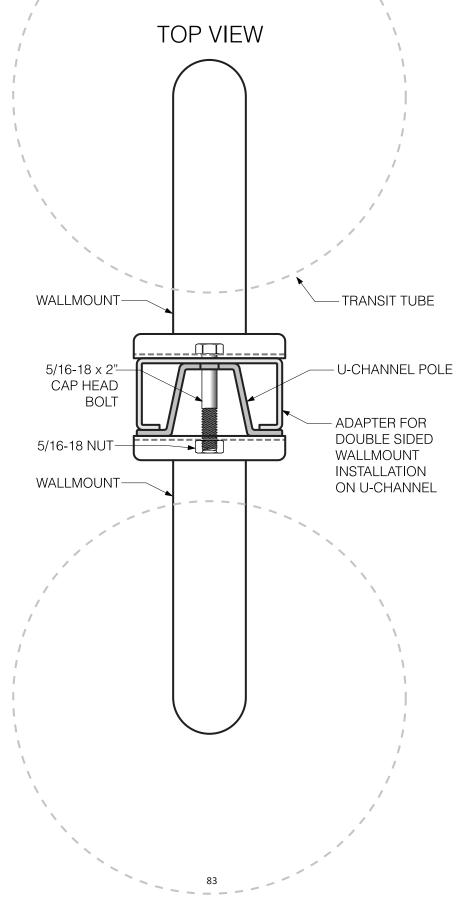
1/4-TURN FASTENERS IN THE CAP WITH 1/4-TURN PLATES

ON THE INNER BODY





INSTALLING TWO TRANSIT TUBES ON ONE U-CHANNEL POLE



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TRANSIT FACILITIES

PRODUCT BUS SHELTERS (ADVERTISING)

VENDOR SIGNAL OUTDOOR (CONTRACT FOR INSTALLATION, MAINTENANCE, AND ADVERTISING); TOLAR MANUFACTURING (SHELTER MANUFACTURER)

INVENTORY 22 SHELTERS

 DIMENSIONS
 13' SHELTER:
 12' 7-7/8"L X 4'8"W X 8' 2-3/4"H
 9' SHELTER:
 8' 7-3/8"L X 4'8"W X 8' 2-3/4"H
 9' SHELTER:
 8' 7-3/8"L X 4'8"W X 8' 2-3/4"H
 10' 2-3/4"H

MATERIALS SHELTER FRAMES, ROOF BOWS, GUTTERS, BENCHES, AND MESH SIDES/BACKS (NEW SHELTERS) MADE OF STEEL. ADVERTISEMENT ENCASEMENT, ROOFS, AND BACKS (OLD SHELTERS) MADE OF GLASS.

FINISHES & SHELTERS ARE ALL FINISHED IN BLACK POWDERCOAT PAINT.

PURCHASE &
INSTALLATIONADEQUATE SIDEWALK OR CONCRETE PAD REQUIRED PRIOR TO SHELTER INSTALLATION.
BENCH OR OTHER SEATING IN SHELTER SHOULD BE INSTALLED TO ALLOW FOR 48"L X 30"W
WHEELCHAIR AREA PER ADA REQUIREMENTS.

ADVERTISING SHELTERS ARE INSTALLED AND MAINTAINED PER THE CITY'S 2015 CONTRACT WITH SIGNAL OUTDOOR ADVERTISING. OTHER SHELTER DESIGNS WITHOUT ADVERTISING MAY BE APPROPERTIATE, DEPENDING UPON LOCATION (E.G. HISTORIC DISTRICT, LIMITED SPACE, ETC.)

ΡΗΟΤΟS

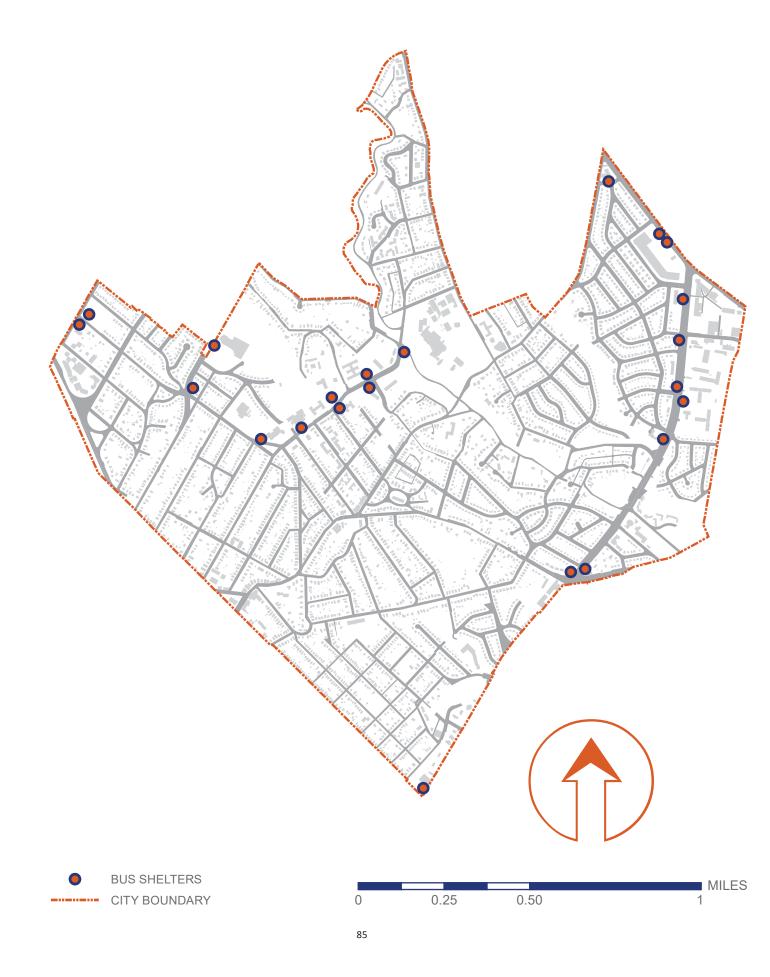


BUS SHELTER WITH SOUTH BEACH DINING CHAIRS ON NORTHBOUND NEW HAMPSHIRE AVENUE AT MERWOOD DRIVE.



BUS SHELTER ON SOUTHBOUND NEW HAMPSHIRE AVENUE AT MERWOOD DRIVE.

TRANSIT FACILITIES - BUS SHELTERS WITH ADVERTISING



BICYCLE PARKING

- PRODUCT **HOOP RACK** VENDOR DERO **INVENTORY** 36 HOOP RACKS TWO (2) BIKES CAPACITY 1.5" SCHEDULE 40 PIPE (1.9" OD). 99% RECYCLED CONTENT, HARVESTED DOMESTICALLY. MATERIALS HOOP RACKS IN THE STREETSCAPE ARE ALL STANDARD BLACK POWDER COAT FINISH. **FINISHES & COLORS** ALTERNATIVE AND CUSTOM DESIGNS ARE ENCOURAGED TO SUIT THE CONTEXT (E.G. "POLYGLOT" BOOK RACKS AT THE TAKOMA PARK MARYLAND LIBRARY IN POWDER COAT FINISHES THAT LOOSELY MATCH CITY LOGO COLORS, CITY LOGO HOOP RACK AT THE COMMUNITY CENTER).
- PURCHASE &
INSTALLATIONIMPORTANT TO KNOW WHICH INSTALLATION METHOD WILL BE USED PRIOR TO ORDERING.
TWO OPTIONS INCLUDE IN-GROUND MOUNT WHICH IS IMBEDDED INTO A CONCRETE BASE,
OR SURFACE MOUNT WHICH USES TWO ANCHORS PER FOOT INTO EXISTING CONCRETE
SLAB.

INSTALLATION IN FLEXI-PAVE PERMEABLE ASHPALT (E.G. COMMUNITY CENTER) REQUIRES IN GROUND MOUNT INSTALLED FIRST, THEN BRICK OR ASPHALT SURFACE APPLIED SECOND. INSTALLATION ON RAILS (REC CENTER ON NEW HAMPSHIRE AVE) REQUIRES SURFACE MOUNT. INSTALLATION INTO BRICK STREETSCAPE (CARROLL AVENUE) MAY BE EITHER MOUNT.

SEE SPECS FOR SETBACKS FROM CURBS, TREES, WALLS, AND OTHER FURNISHINGS.

CUSTOM PROJECTS

PHOTOS

HOOP RACKS LOCATED IN OLD TOWN ON CARROLL AND LAUREL AVENUES ARE CUSTOM-BUILT AND HAVE A NARROW BASE WIDTH COMPARED TO THE STANDARD.



STANDARD BLACK HOOP RACKS ON KIRKLYNN AVENUE (IN GROUND MOUNT).



CUSTOM CITY LOGO HOOP RACK AT COMMUNITY CENTER ON FLEXIPAVE (IN GROUND MOUNT).

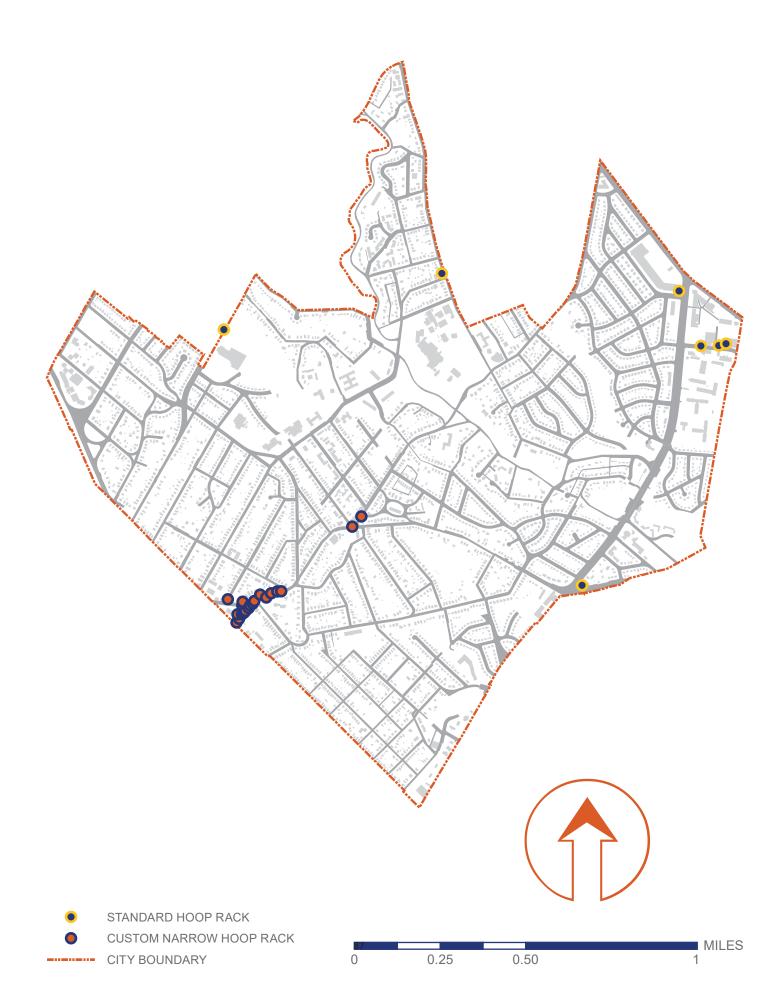


NARROW BASE HOOP RACK INSTALLED TOO CLOSE TO BENCH AND U-CHANNEL IN BRICK ON CARROLL AVENUE (SURFACE MOUNT ON CONCRETE BASE).



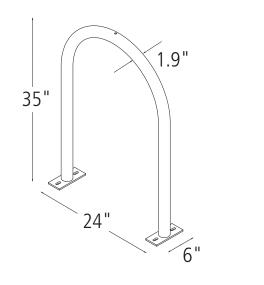
CUSTOM "POLYGLOT" BOOK RACKS IN BLUE AND ORANGE OUTSIDE LIBRARY AT COMMUNITY CENTER (SURFACE MOUNT).

BICYCLE PARKING - DERO HOOP RACK



HOOP RACK

Specifications and Space Use





Capacity





Surface

In ground

WALL

STREET



36

WALL

59"



Space Use and

Setbacks

Dero Hoop Rack As manufactured by Dero Bike Racks

2 Bikes

1.5" schedule 40 pipe (1.9" OD)

An after fabrication hot dipped galvanized finish is our standard option. 250 TGIC powder coat colors, thermoplastic coating, PVC dip, and stainless steel finishes are also available as alternate options.

Our powder coat finish assures a high level of adhesion and durability by following these steps:

- 1. Sandblast
- 2. Epoxy primer electrostatically applied

3. Final thick TGIC polyester powder coat

Stainless Steel: 304 grade stainless steel material finished in either a high polished shine or a satin finish.

In ground mount is embedded into concrete base. Specify in ground mount for this option.

Foot Mount has two 2.5"x6"x.25" feet with two anchors per foot. Specify foot mount for this option.

Rail Mounted Hoops are bolted to two parallel rails which can be left freestanding or anchored to the ground. Rails are heavy duty 3"x1.4"x3/16" thick galvanized mounting rails. Specify rail mount for this option.

Wall Setbacks:

For racks set parallel to a wall: Minimum: 24" Recommended: 36"

For racks set perpendicular to a wall: Minimum" 28" Recommended: 42"

Distance Between Racks: Minimum: 24" Recommended: 36"

Street Setbacks: Minimum: 24" Recommended: 36"



36



STREET

Www.dero.com 2 1.000.337.6729



1

Tools Needed for Installation

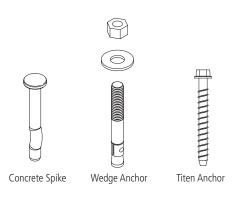
Tape Measure Marker or Pencil Masonry Drill Bit Drill (Hammer drill recommended) Hammer Wrench 9/16" Level



Solid concrete is the best base material for installation. To ensure the proper anchors are shipped with your rack, ask your Dero Rack representative which anchor is appropriate for your application. Be sure nothing is underneath the base material that could be damaged by drilling.

Installation:

3/8" anchors are shipped with the rack. Place the rack in the desired location. Use a marker or pencil to outline the holes of the flange onto the base material. Drill the holes in accordance with the specifications shipped with the anchors. Make sure the holes are at least 3" away from any cracks in the base material. Use washers to level rack if necessary. Tap in anchors and follow your specific anchor instructions provided with the rack.



Drill hole 2 3" Deep Mark holes

Standard Anchor Types





(Anchors will vary according to install surface)

Tamper Resistant Fasteners

The concrete spike is a permanent anchor. The top of the wedge anchor can also be pounded sideways after installation so that it cannot be removed. Other tamper resistant fasteners are also available for purchase.

When using the special tamper resistant nuts, always set and first tighten the anchors. Once the rack is installed, replace two nuts from the bracket (opposite sides from each other) with the tamper resistant fastener. DO NOT OVERTIGHTEN the tamper resistant nut.

If you have any questions about installation or other features of the Hoop Rack, please call us toll free at 1-800-298-4915





Breakaway Nut

Triple-slot Nut







Tools Needed for Installation

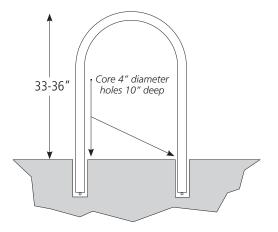
Level Cement mixing tub Shovel Trowel

Hole coring machine with 4" bit Access to water hose Materials to build brace (see "Install Tip" at bottom of page)

Final grade level

Installing into Existing Sidewalk

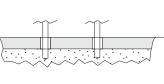
Core holes no less than 3" diameter (4" recommended) and 10" deep into sidewalk. Fill holes with Por-Rok or epoxy grout. Place Hoop Rack into holes, making sure the rack is level. 33"-36" of the Hoop Rack should remain above the surface. If the Hoop Rack is less than 33" high, it will not support the bike adequately. Make sure the rack is level and held in place until the grout has set.



Installing Into a New Sidewalk:

Sleeve Method:

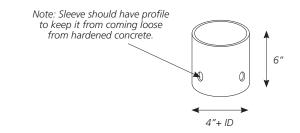
- Place corrosion resistant 1 sleeve (min. 4" inside diameter) in sand pour bed in exact location where rack will be installed. Make sure top of sleeve is at same level as desired finished concrete surface. Fill sleeve with sand to keep it in place and prevent it from filling with concrete.
- Pour concrete and allow to cure.
- After appropriate cure time, dig out sand from sleeves and insert racks, making sure they are level and at the appropriate height. Pour in Por-Rok or epoxy grout and allow to set.

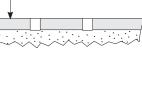


INSTALL TIP

An easy way to brace the Hoop Rack while the grout sets is to bolt two 1x4" boards together at one end and clamp them onto the legs of the Hoop Rack like a clothes pin.







Poured concrete

(4-7" deep)

Sand pour bed

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Takoma Park Streetscape Manual

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PLANTERS

PRODUCT ASSORTED PLANTERS

VENDOR MULTIPLE

INVENTORY A VARIABLE NUMBER OF PLANTERS EXIST IN THE PUBLIC ROW ON CARROLL AND LAUREL AVENUES, MAINTAINED BY ADJACENT BUSINESS AND PROPERTY OWNERS, AS WELL AS ON NEW HAMPSHIRE AVENUE AND UNIVERSITY BOULEVARD, AND HOLTON LANE, MAINTAINED BY THE TAKOMA/LANGLEY CROSSROADS CDA.

DIMENSIONS VARIOUS DIMENSIONS.

- MATERIALSVARIES OFTEN CONCRETE, CERAMIC, OR STEEL. PLANTERS ENCOURAGED TO BE HEAVY
TO AVOID THEFT OR UNWANTED RELOCATION.
- **PURCHASE &** THE CITY DOES NOT PURCHASE OR MAINTAIN PLANTERS IN THE PUBLIC RIGHT OF WAY. **INSTALLATION**

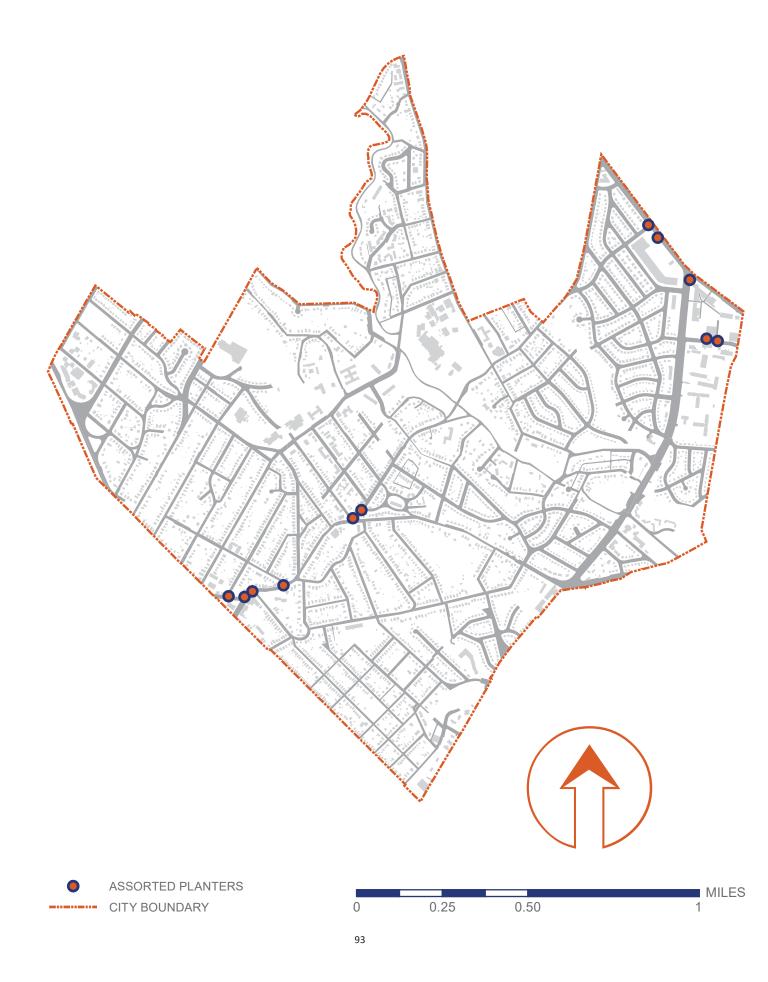
PLACEMENT OF PLANTERS SHOULD MAINTAIN A MINIMUM 5' PEDESTRIAN CLEARANCE ALONG THE SIDEWALK.

PHOTOS



PLANTERS ARE A PLEASANT ADDITION TO COMMERCIAL STREETSCAPES, MAINTAINED BY BUSINESSES AND BUSINESS ASSOCIATIONS

PLANTERS - ASSORTED



RECEPTACLES

WELLINGTON (KT420) PRODUCT **KING LUMINAIRE** VENDOR **INVENTORY** 36 RECEPTACLES FOR TRASH AND RECYCLING: - 9 GREEN (TRASH) CITY-WIDE - 8 GREEN (RECYCLING) CITY-WIDE - 1 BROWN (TRASH) ON GLENSIDE DRIVE - 12 BLACK (TRASH) CITY-WIDE - 6 BLACK (RECYCLING) CITY-WIDE DIMENSIONS 35-7/8"H X 30"D (32 GAL) AND 39-1/2"H X 34"D (44 GAL) **MATERIALS** RECEPTACLES ARE 1/4" MILL STEEL. LIDS ARE CAST ALUMINUM. **FINISHES &** RECEPTACLES ARE FINISHED IN GREEN, BROWN, AND BLACK POWDER COAT PAINT. COLORS **PURCHASE &** PRODUCT COMES PRE-ASSEMBLED. RECEPTACLES ARE EQUIPPED WITH ANCHOR BOLT INSTALLATION MOUNTING TABS

PHOTOS

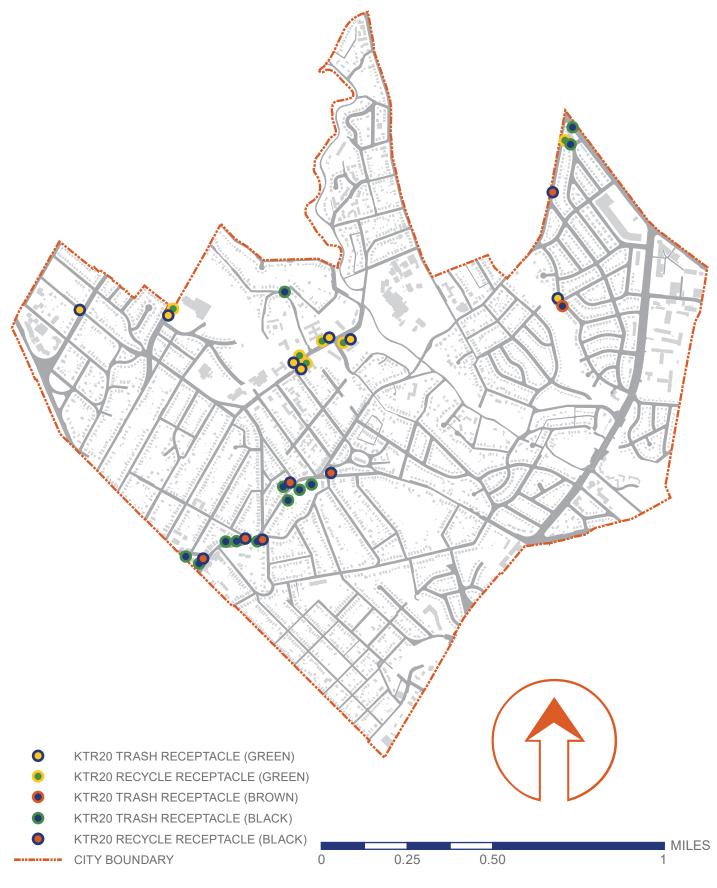


GREEN TRASH RECEPTACLE NEAR COMMUNITY CENTER.



GREEN RECYCLING RECEPTACLE WITH SPECIALTY LID.

RECEPTACLES - KING LUMINAIRE WELLINGTON





THE WELLINGTON TRASH RECEPTACLE - KTR20





At King Luminaire, we know that the quality of workmanship is just as important as the design itself. Inspired by the

goal to complement our lighting products, King Luminaire is proud to introduce the KTR20 Trash Receptacle.

The KTR20 is constructed of rugged 1/4" mill steel in the ever popular vertical strap design. After being Electro-coated with rust inhibiting epoxy technology, it is finished with King's durable "KingCoat" powder coat paint finish. It is available in a 20, 32 and 44 gallon capacity and comes with its own rigid plastic liner which is held securely in the container by a hinged, cast aluminum lid. An optional protective steel canopy is also available.

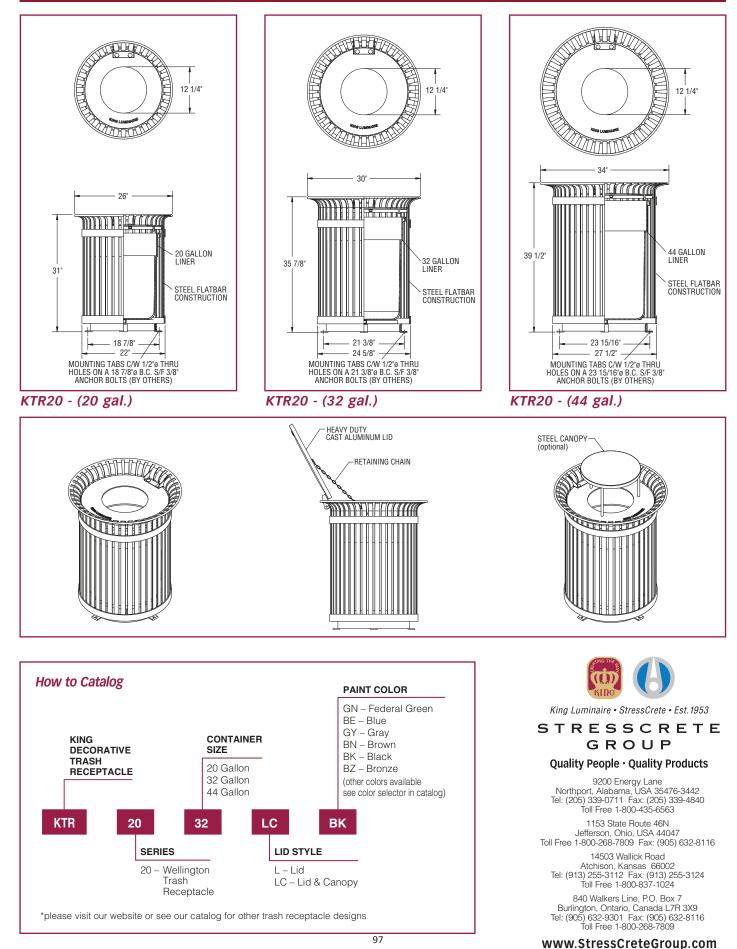
Equipped with anchor bolt mounting tabs to deter theft or vandalism, this container has been designed to stand the test of time. Finished in any of the dazzling array of KingCoat colors, the KTR20 will add style to any project.





Standard, premium and custom paint colors available, please contact us for details.

THE WELLINGTON TRASH RECEPTACLE - KTR20



www.StressCrete.com • www.KingLuminaire.com

RECEPTACLES

- PRODUCT **RB-24** VICTOR STANLEY VENDOR 53 RECEPTACLES, TYPICALLY USED FOR RECYCLING **INVENTORY** - 23 GRANNY SMITH GREEN (PMS 382 U) ON NEW HAMPSHIRE AVENUE - 6 FOREST GREEN IN OLD TOWN AND TAKOMA JUNCTION - 2 BROWN - 14 BLACK IN OLD TOWN, TAKOMA JUNCTION, AND AT THE COMMUNITY CENTER - 8 BLUE ON FLOWER AVENUE DIMENSIONS 30-1/2"H X 25"D 3/8" X 1" VERTICAL SOLID STEEL BARS; 1/4" X 2-1/2" HORIZONTAL SOLID STEEL BANDS; 3/8" X MATERIALS 3" STEEL SUPPORT BARS, 5/8" SOLID STEEL TOP RING; LEVELING FEED WITH A 3/8" DIAMETER THREADED STEEL SHAFT; 24 GALLON CAPACITY HIGH DENSITY PLASTIC LINER. STEEL IS PURCHASED FROM AMERICAN ELECTRIC FURNACE MILLS, WITH AT LEAST 98% OF THE STEEL OBTAINED FROM RECYCLED SCRAP METAL. PLASTIC LINER IS PRIMARILY MADE OF RECYCLED PLASTIC RESIN. **FINISHES &** RECEPTACLES ARE FINISHED IN BLACK. GRANNY SMITH GREEN (PMS 382 U), FOREST GREEN, BLUE, AND BROWN. **COLORS** AVAILABLE WITH STEEL PLAQUES IN VARIOUS SIZES AND PRESSURE SENSITIVE VINYL OUTDOOR DECALS.
- PURCHASE &
 PRODUCT COMES PRE-ASSEMBLED.

 INSTALLATION
 COLORS SHOULD BE REPLACED IN KIND AT INSTALLATION LOCATIONS IDENTIFIED ABOVE IN
- CUSTOMSPECIAL LID GRAPHIC DESIGNED TO INDICATE THAT RECEPTACLE IS FOR RECYCLING IN
VARIOUS LANGUAGES.

THE INVENTORY. BROWN SHOULD BE DISCONTINUED AND REPLACED ACCORDINGLY.

PHOTOS

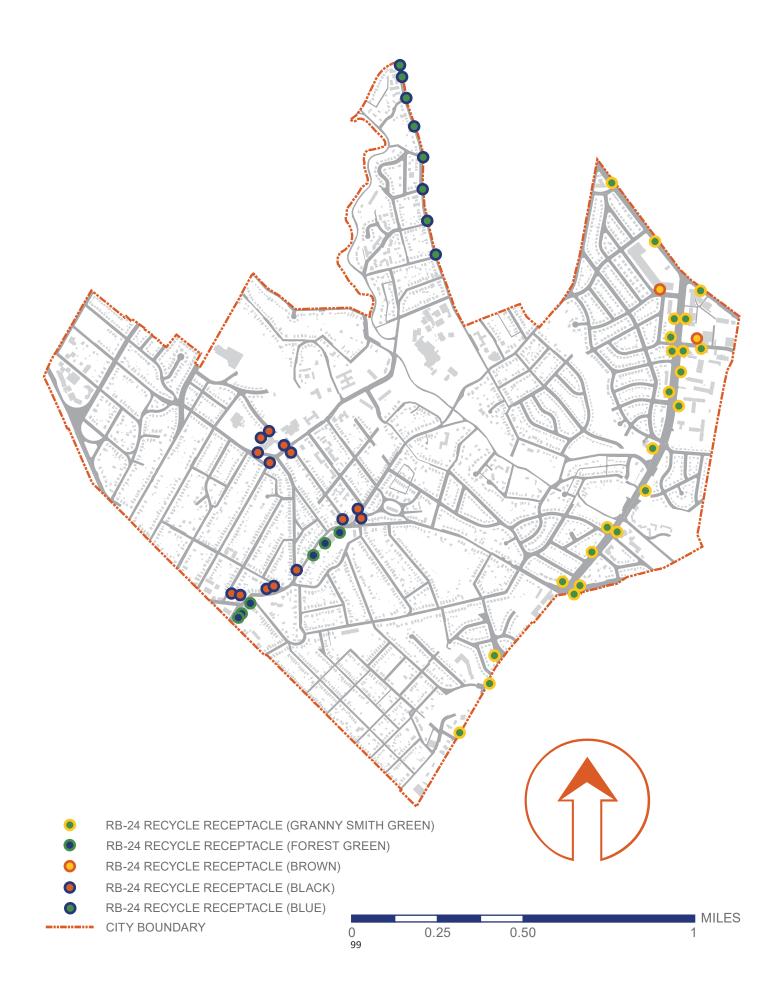


GRANNY SMITH GREEN (PMS 382 U) RB-24 RECYCLING RECEPTACLE NEXT TO A SUNSHINE YELLOW (PMS 128 U) RB-36 TRASH RECEPTACLE.



BLACK RB-24 RECEPTACLE WITH CUSTOM LID GRAPHIC.

RECEPTACLES - VICTOR STANLEY RB-24





Tel: (301) 855-8300 • Fax: (410) 257-7579 P.O. Drawer 330, Dunkirk, Maryland 20754 U.S.A. E-Mail: sales@victorstanley.com

www.victorstanley.com

Client: City of Takoma Park Client Layout for VSI S-35 & RB-24 Lid Decal

Decal Size: Approx. 18 1/4" Outside Diameter x 10 1/2" (Inside Diameter) Decal Material Color: Clear Graphics Application: The graphics will be digitally printed onto a pressure sensitive vinyl decal and applied to the lid Lid Size: 18 1/2"

Customer Approva

Layout ID: 2610-02b Rev: 08/04/2009 Drawn By: ST





Takoma Park Streetscape Manual

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RECEPTACLES

- PRODUCT RB-36
- VENDOR VICTOR STANLEY

INVENTORY 54 RECEPTACLES, TYPICALLY USED FOR TRASH: - 22 SUNSHINE YELLOW (PMS 128 U) ON NEW HAMPSHIRE AVENUE - 2 BROWN

- 24 BLACK CITY-WIDE
- 6 FOREST GREEN ON CARROLL AVENUE IN OLD TOWN

DIMENSIONS 33-3/4"H X 28-1/8"D

MATERIALS 3/8" X 1" VERTICAL SOLID STEEL BARS; 1/4" X 2-1/2" HORIZONTAL SOLID STEEL BANDS; 3/8" X 3" STEEL SUPPORT BARS, 5/8" SOLID STEEL TOP RING; LEVELING FEED WITH A 3/8" DIAME-TER THREADED STEEL SHAFT; 36 GALLON CAPACITY HIGH DENSITY PLASTIC LINER. STEEL IS PURCHASED FROM AMERICAN ELECTRIC FURNACE MILLS, WITH AT LEAST 98% OF THE STEEL OBTAINED FROM RECYCLED SCRAP METAL. PLASTIC LINER IS PRIMARILY MADE OF RECYCLED PLASTIC RESIN.

FINISHES &
COLORSRECEPTACLES ARE FINISHED IN SUNSHINE YELLOW (PMS 128 U), FOREST GREEN, BROWN,
AND BLACK POWDER COAT PAINT.

PURCHASE &
INSTALLATIONAVAILABLE WITH STEEL PLAQUES IN VARIOUS SIZES AND PRESSURE SENSITIVE VINYL
OUTDOOR DECALS. PRODUCT COMES PRE-ASSEMBLED.

COLORS SHOULD BE REPLACED IN KIND AT INSTALLATION LOCATIONS IDENTIFIED ABOVE IN THE INVENTORY. BROWN SHOULD BE DISCONTINUED AND REPLACED ACCORDINGLY.

PHOTOS



BLACK RB-36 TRASH RECEPTACLE.

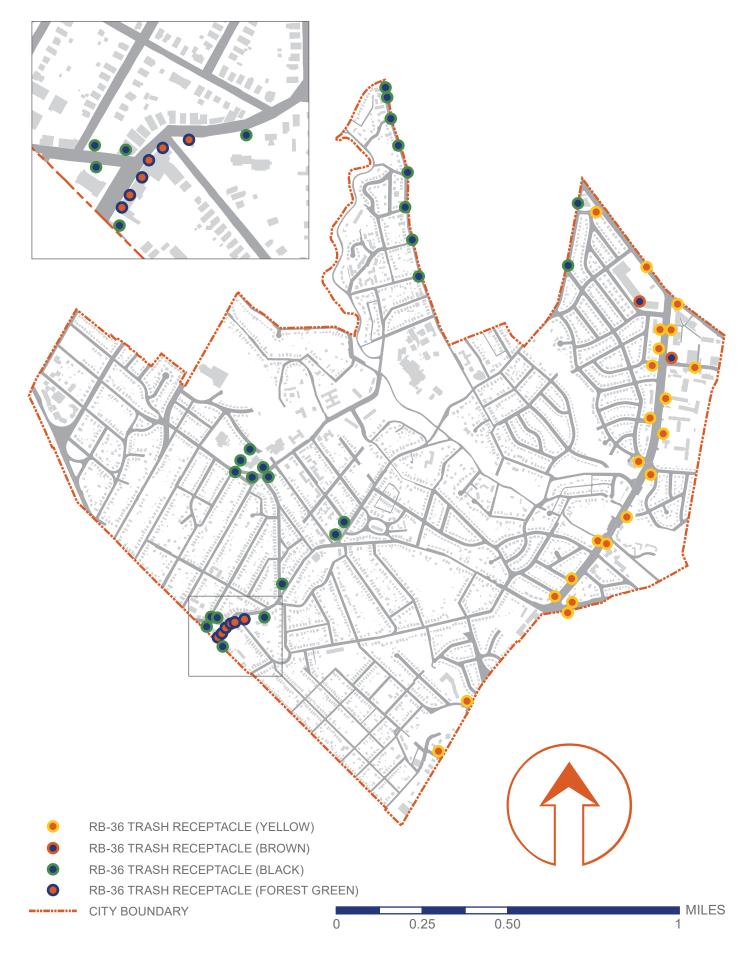


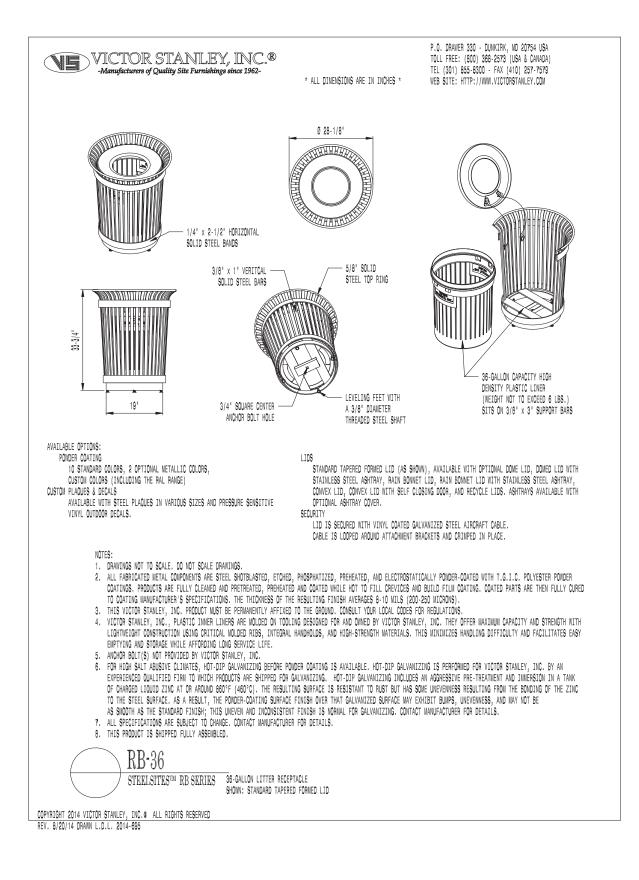
FOREST GREEN RB-36 IN OLD TOWN.



GRANNY SMITH GREEN (PMS 382 U) RB-24 RECYCLING RECEPTACLE NEXT TO A SUNSHINE YELLOW (PMS 128 U) RB-36 TRASH RECEPTACLE.

RECEPTACLES - VICTOR STANLEY RB-36





Flower Avenue Streetscape Elements



This area corresponds to the Flower Avenue Green Street project area and reflects design decisions made with public input for the project in 2012-2016. The streetscape elements are primarily residential in character, supportive of the street's role as an important multi-modal corridor leading to Piney Branch Road and the Long Branch commercial district.

LIGHTING

K118 WASHINGTON PRODUCT STRESSCRETE VENDOR **INVENTORY 1 LUMINAIRE AND POLE** 17' 6-7/8"H X 17"D DIMENSIONS (POLE IS 13'H. GLOBE IS 44-1/4"H X 17"D.) MATERIALS POLE IS 11 GAUGE FLUTED FORMED STEEL. BASE IS CAST IRON. LUMINAIRE IS GLASS. EXTERIOR HARDWARE AND FASTENERS ARE STAINLESS STEEL ALLOY. BLACK POWDER COATING AND GLASS. **FINISHES & COLORS PURCHASE &** LUMINAIRE MUST BE LOCKED IN PLACE WITH HEAVY DUTY STAINLESS STEEL SCREWS. **INSTALLATION** POLE IS INSTALLED ON A CONCRETE BLOCK.

NEW INSTALLATIONS AND REPLACEMENT LUMINAIRES ARE TO BE DARK-SKY FRIENDLY.

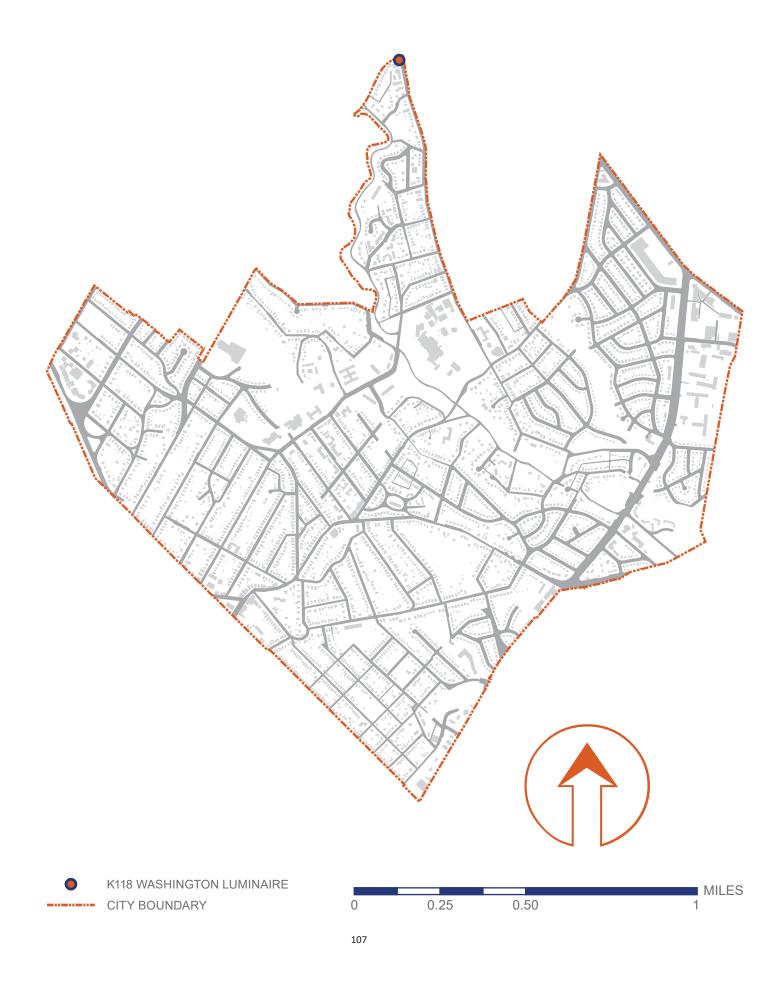
THE LUMINAIRE AT THIS SITE IS THE ONLY MODEL IN THE CITY AND IS UNLIKELY TO BE REPLACED IN-KIND.

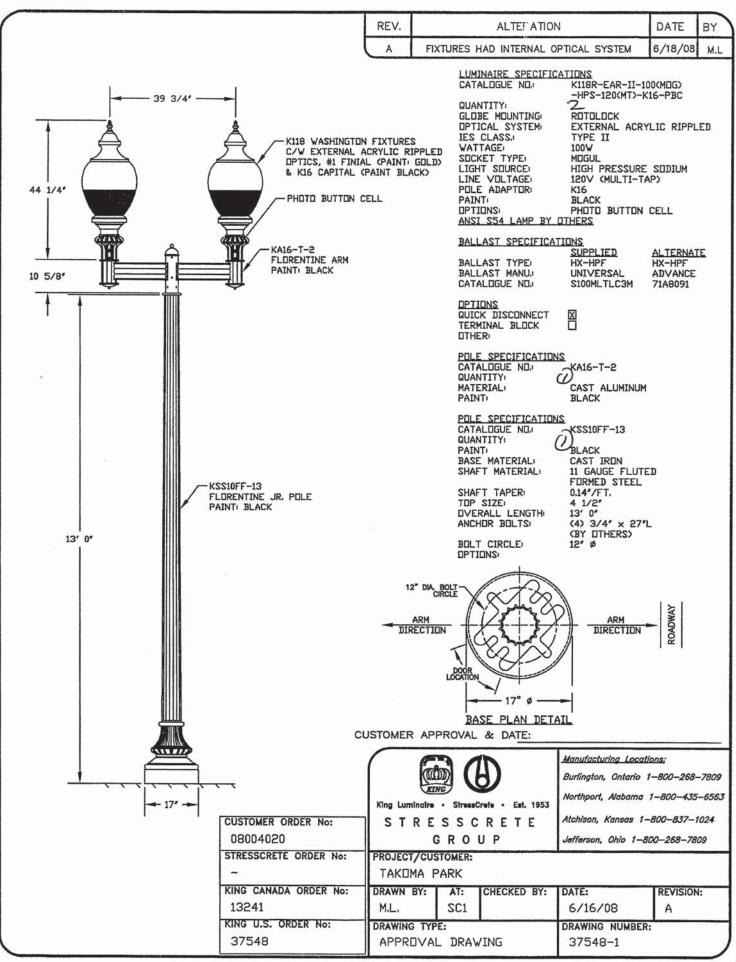
PHOTOS



K118 WASHINGTON MODEL ON FLOWER AVENUE.

LIGHTING - K118 WASHINGTON LUMINAIRE







K118 - WASHINGTON ACORN

The King Luminaire Washington Fixture is a beautiful depiction of this street light classic. The historical accurate acorn shape teamed with King's high performance LED engines makes for a perfect solution for city streets, parks, schools and commercial areas.

Product Specification

LED ENGINE

Light engine shall be an array of 36, 42, 54 or 63 solid state Cree XPG2 light emitting diodes mounted to a multi-sided, vertical heat sink of highly conductive aluminum. The LED emitters are mounted to removable circuit boards such that they are in full thermal contact with the vertical heat sink. The vertical heat sink is open at the bottom and vented at the top to provide appropriate "dynamic airflow" cooling for the LED array. The emitters are arranged in various patterns. on each face of the vertical heat sink to provide the required light distribution.

OPTICS

The LED arrays include optical baffles constructed of polished aluminum extrusion optical grade ABS plastic with a vacuum metallized reflective surface or clear acrylic with precision refractors over each diode. Both optical options are designed to efficiently control light distribution.

LUMINAIRE CONSTRUCTION

All K118 cast components shall consist of a heavy grade A319 cast aluminum. The main body, or capital, acts as an enclosure for the ballast assembly and is of adequate thickness to give sufficient structural rigidity. The capital shall have an opening at the base tenon body to allow the luminaire to be mounted to a tenon of 3-1/2" maximum diameter. The Luminaire shall be locked in place by means of heavy duty, stainless-steel set-screws.

GLOBE ASSEMBLY

The protective globe shall be molded of either; rippled polycarbonate Miles Makrolon GP/OP Thermoplastic Polymer, or equiv., or rippled acrylic Acrylite Plus Acrylic Polymer, or equiv., having a minimum thickness of 0.125" with an overall diameter of 17 1/2" and an over-all height of 31".

The globe assembly is a selfcontained unit consisting of the globe, rugged cast locking ring, and the LED light engine and optical baffles. The LED light engine is of a modular design, and is able to be quickly removed from the globe assembly. The globe assembly is secured to the main housing by means of a spring-tensioned, twist-locking "roto-lock" unit to allow tool-less removal of the globe, while maintaining a secure seal between the globe assembly and the main body of the luminaire, making the K118 Washington Luminaire suitable for an outdoor environment.

High performance protection against water or dust particle ingress is available by means of a non-porous, closed-cell silicon rubber o-ring gasket which is highly efficient in sealing against particle ingress over a wide temperature range (-40°F to 310°F).

DRIVER

The LED universal dimmable driver will be class 2 and capable 120 - 277V or 277 - 480V input voltage, greater than .9 power factor, less than 20% total harmonic distortion and feature ambient temperature range of -35 °C up to 65°C. Each LED system comes with a standard surge protection designed to withstand up to 20Kv of transient line surge. The driver assembly will be mounted on a heavy duty fabricated galvanized steel mounting bracket to allow complete tool-less maintenance.

PHOTOMETRICS

Fixtures are tested to IESNA LM79 specifications. These reports are made available.

COLOR RENDERING

High output LED's come standard at 4500K (+/- 250K) with a minimum nominal 70 CRI. Additional CCT emitters are available upon request.



PROJECT:

PREPARED BY:

DATE:

LUMEN MAINTENANCE

Reported (TM21) and Calculated (L70) reports are available upon request with a minimum calculated value of 50,000hrs.

WIRING

All internal wiring and connections shall be completed so that it will be necessary only to attach the incoming supply connectors to Mate-N-Loc connectors or to a terminal block. Mate-N-Loc shall be certified for 600V operation. Internal wire connectors shall be crimp connector only and rated at 1000V and 150°C. All wiring to be CSA certified and/or UL listed, type SFF-2, SEWF-2, or SEW-2 No. 14 gauge, 150°C, 600V, and color coded for the required voltage.

THERMALS

Fixtures tested by a DOE sanctioned test facility to determine the maximum In-Situ solderpoint or junction-point temperatures of the LED emitters. This report will be made available.

FINISH

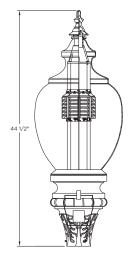
Housing is finished with a 13 step Kingcoat[™] SuperDurable polyester TGIC powder coat. Standard colors include strobe white, brown metal, marina blue, gate gray, Chicago bronze, standard gold, federal green and rain forest. RAL and custom color matches are available. Please see the King Color selector for complete list of colors.

MISCELLANEOUS

All exterior hardware and fasteners, wholly or partly exposed, shall be stainless-steel alloy. All internal fasteners are stainlesssteel or zinc coated steel. All remaining internal hardware is stainless steel, aluminum alloy, or zinc coated steel.

WARRANTY

K118 Washington fixtures come with a 7 year limited warranty.



CERTIFICATION: CSA US Listed Suitable for wet locations ISO 9001 IP66 DLC ARRA Compliant LM79 / LM80 Compliant

DRIVER INFO:

>0.9 Power Factor
 <20% Total Harmonic Distribution
 120 - 277v & 480v
 -35°C Minimum Tempurature
 65°C Maximum Ambient
 Operating Tempurature
 20Kv Surge Protection

EPA: 1.60 sq. ft.

FIXTURE WEIGHT: 46 lbs.



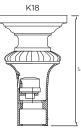
Power & Lumens

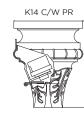
	Catalog Code						BUG			
	K118-B3XX-IV-60(SSL)-1036-120	60.56	120/500mA	1036 (36 emitters)	Type IV	4500	B1U3G2	4228	69.8	NSL NSH WSL W WDL WDH WS
	K118-B3XX-IV-75(SSL)-1036-120	82.56	120/667mA	1036 (36 emitters)	Type IV	4500	B1U3G3	5429	65.8	NSL NSH WSL W
	K118-B3XX-IV-100(SSL)-1054-120	93.14	120/533mA	1054 (54 emitters)	Type IV	4500	B1U3G3	6846	73.5	NSL NSH WSL W
2	33 = 3rd Generation Baffled Array									
	Catalog Code	Input Watts	Voltage/mA	Series	IES	ССТ	BUG	Lumens	Efficacy	Applicatio
	K118-B2XX-III-40(SSL)-1042-120	43.66	120/292mA	1042 (42 emitters)	Type III	4500	B1U3G1	3454	79.1	NSL WSH WDL
	K118-B2XX-III-60(SSL)-1042-120	54.92	120/383mA	1042 (42 emitters)	Type III	4500	B1U3G1	2945	53.6	NSL WSH WDL
	K118-B2XX-III-75(SSL)-1042-120	69.08	120/525mA	1042 (42 emitters)	Type III	4500	B1U3G2	4619	66.9	NSL NSH WSH W WDH WS WS
	K118-B2XX-III-100(SSL)-1063-120	93.54	120/467mA	1063 (63 emitters)	Type III	4500	B2U3G2	7317	78.2	NSL NSH WSH W WDH WS WS
	K118-B2XX-III-120(SSL)-1063-120	108.39	120/544mA	1063 (63 emitters)	Type III	4500	B2U3G2	7730	71.3	NSL NSH WSH (WDH WS WS
	K118-B2XX-V-75(SSL)-1042-120	71.2	120/525mA	1042 (42 emitters)	Type V	4500	B2U3G1	4697	66	
	K118-B2XX-V-100(SSL)-1063-120	90.86	120/467mA	1042 (42 emitters)	Type V	4500	B2U2G1	4661	51.3	
	32 = 2nd Generation Baffled Array									
	Catalog Code	Input Watts	Voltage/mA	Series	IES	ССТ	BUG	Lumens	Efficacy	Applicatio
	K118-R1XX-III-75(SSL)-1042-120	68.84	120/525mA	1042 (42 emitters)	Type III	4500	B1U4G3	5281	76.7	NSL NSH WSL WDL WDH WS
	K118-R1XX-III-100(SSL)-1063-120	93.79	120/467mA	1063(63 emitters)	Type III	4500	B2U5G3	7144	76.2	
	K118-R1XX-III-120(SSL)-1063-120	116.9	120/578mA	1063 (63 emitters)	Type III	4500	B2U4G2	8384	71.7	NSL NSH WSL WDL WDH WS

Fixture Options

Capitals Options



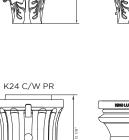








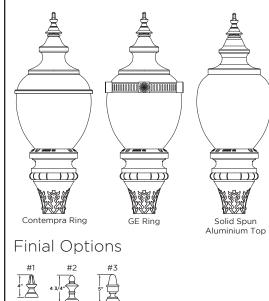




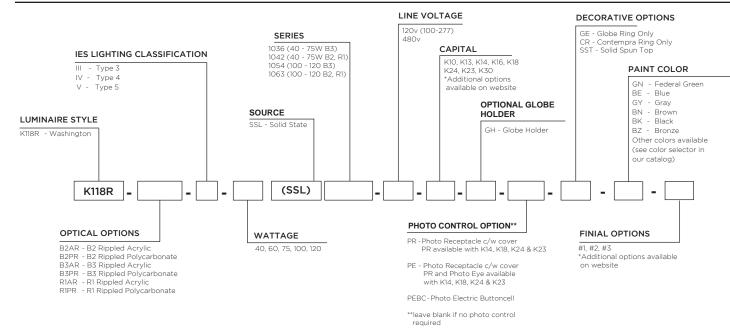


K13

Decorative Options



How to Order





KING LUMINAIRE 1153 State Route 46N Jefferson, OH 44047 Phone: 1.800.268.7809 www.kingluminaire.com

SEATING

- PRODUCT RB-28 SERIES BENCH
- VENDOR VICTOR STANLEY
- **INVENTORY** 3 BENCHES ON FLOWER AVENUE

DIMENSIONS 72-1/2"L X 24-3/8"W X 31-1/4"H (SEAT HEIGHT IS 17")

- MATERIALSBENCH IS MADE FROM 1/4" X 1-1/2" STEEL BARS WITH 1/2" X 2" END UNITS, AND 3/8" X 1"
STEEL AND 1-5/16" TUBULAR STEEL SUPPORTS. STEEL IS PURCHASED FROM AMERICAN
ELECTRIC FURNACE MILLS, WITH AT LEAST 98% OF THE STEEL OBTAINED FROM RECYCLED
SCRAP METAL. 63% OF TUBULAR STEEL IS EITHER POST-CONSUMER OR POST-INDUSTRIAL
RECYCLED SCRAP STEEL.
- FINISHES & BENCHES ARE ALL IN BLACK POWDER FINISH.

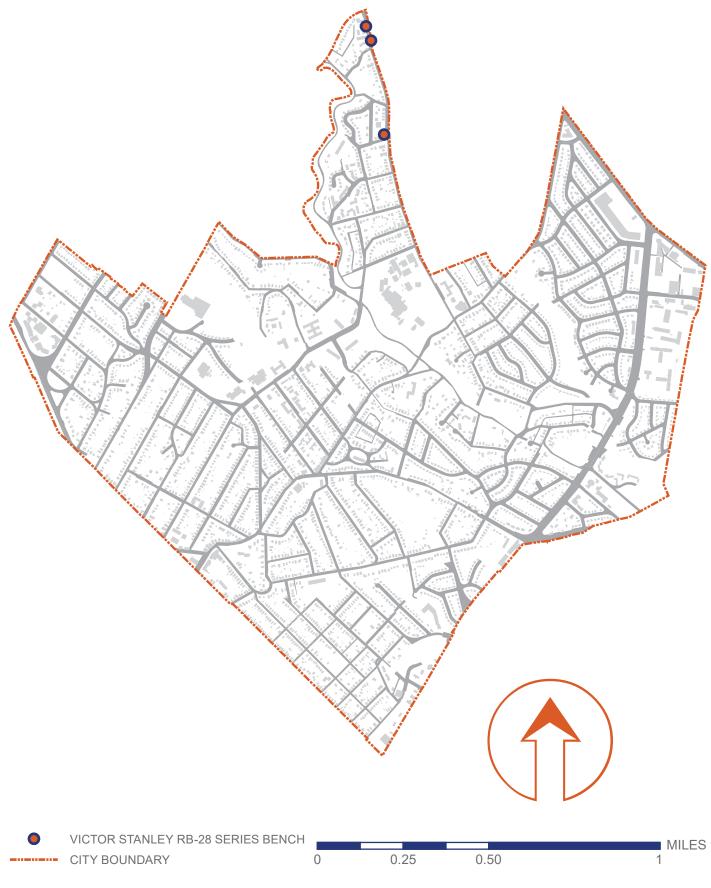
PURCHASE & MOUNT AND ANCHOR USING ANCHOR BOLTS (NOT INCLUDED). **INSTALLATION**

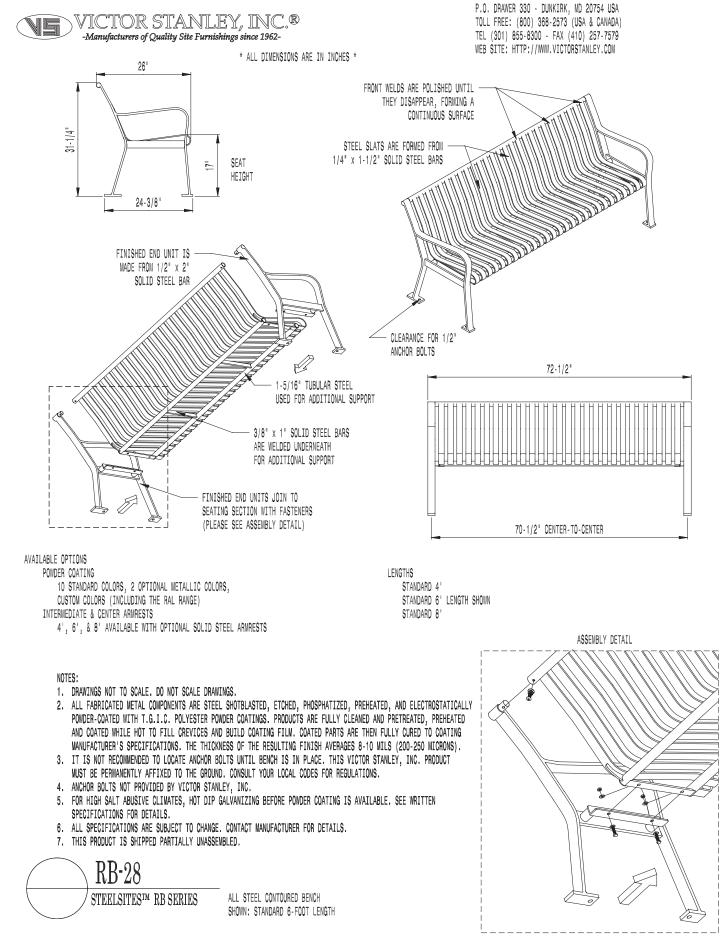
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RB-28 BENCH FROM THE VICTOR STANLEY WEBSITE.

SEATING - VICTOR STANLEY RB-28





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Historic District Streetscape Elements



Designated by Montgomery County, the Takoma Park Historic District covers the oldest developed portions of the city adjacent to the Takoma Metro Station, Montgomery College, and the Old Town and Takoma Junction commercial areas. Modifications to the residential and commercial streetscape in the Historic District should be minimal and seek approval from the Montgomery County Historic Preservation Commission. Improvements on Carroll and Laurel Avenues in the early 2000s reinforced the aesthetic of streetscape elements in the Historic District, characterized by black metal finishes and classic designs.

SIDEWALKS

PRODUCT CONCRETE

VENDOR N/A - INSTALLED BY PUBLIC WORKS OR CITY CONTRACTOR

- DIMENSIONS THE CITY AIMS TO BUILD NEW SIDEWALKS IN RESIDENTIAL AREAS THAT ACHIEVE A WIDTH OF 5 FEET (WIDER IN COMMERCIAL AREAS). MANY EXISTING RESIDENTIAL SIDEWALKS ARE 4 FEET WIDE. WHERE THERE ARE SPACE CONSTRAINTS, A MINIMUM WIDTH OF 36 INCHES MUST BE ACHIEVED TO ACCOMMODATE WHEELCHAIRS. THIS MINIMUM WIDTH IS ONLY ALLOWED FOR SHORT DISTANCES AROUND OBSTRUCTIONS.
- MATERIALS MSHA CONCRETE MIX #3, #6, AND #9 ARE USED FOR SIDEWALKS DEPENDING ON ANTICIPATED WEIGHT AND LOAD. A HYDROPHOBIC TOP COAT TREATMENT IS OFTEN APPLIED (WEARS OFF IN ABOUT A YEAR).

REFER TO SPECIFICATIONS FROM THE MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS OFFICE OF MATERIALS TESTING FOR COMPOSITION OF CONCRETE MIX.

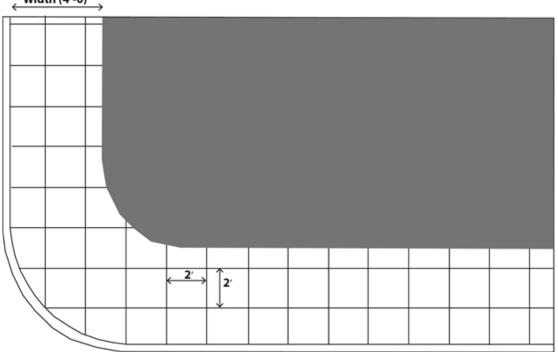
FINISHES & HISTORIC DISTRICT FINISHING PATTERN BLOCKS ARE MINIMUM 4' W AND CREATED BY COLORS SEAMING POURED CONCRETE TO 2' X 2' IN DIMENSION. THIS FINISHING PATTERN IS TO BE INSTALLED AND REPLACED ONLY IN AREAS WHERE CURRENTLY IN USE (E.G. 7300 BLOCK OF SOUTHBOUND CARROLL AVENUE).

PAINTING OF SIDEWALKS AND CURBS IS TO BE CONSISTENT WITH CITY POLICY.

PURCHASE & CONTRACTORS ARE DIRECTED TO FOLLOW MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DESIGN STANDARDS IN REGARDS TO DEPTH, SLOPE, AND CURB CONSTRUCTION.

SPECS

Min. Sidewalk Width (4'-0)



Takoma Park Historic Sidewalk - Finishing Detail Note: All construction details related to concrete sidewalks and sidewalk ramps

shall conform to "Montgomery County Department of Transportation" Standards.

Note: Not to scale

MARYLAND STATE HIGHWAY ADMINISTRATION OFFICE OF MATERIALS TECHNOLOGY CONCRETE TECHNOLOGY DIVISION CONCRETE MIX DESIGN

Mix Code No.:	S3W-N	35-8-12	Date :29-Mar-12		
Design Strength	3500	P.S.I.	Slump:	2-5 in	
Max. Allow. H2O _	34.8	_ Gallons / C.Y.	Max. W/C Ratio	.50	
(1)	(2)	(3)	(4)	(5)	
		[(5) x (4)] x 62.4		(3) / [(4) x 62.4	
Material	Proportion Percentage	Design Weights lbs. Per C.Y.	Specific Gravity	Absolute Vol. (cubic ft.)	
Cement	65.0	377	3.15	1.92	
G.I.B.F.S	35.0	203	2.95	1.10	
Sand (SSD)	40.4	1220	2.62	7.46	
No. 57 Agg	59.6	1800	2.72	10.61	
Water	32.0 Gal	267	1.00	4.28	
Estimated Air %	6.5	Air Volu	me = 27 x Est. Air %	1.76	
			Total Volume =	27.13	
-	Theoretical Weight of Mix lbs./cu.ft.			142.54	

Producer	Rockville Fuel & Feed Co., Inc.	Plant	Rockville
Cement	Essroc - Martinsburg	GIBFS	Lafarge-NewCem
No. 57 Agg.	Lafarge-Frederick	Sand	Chaney-Waldorf
Air Ent.Admix	Daravair AT 60	Dosage Rate	¹ ⁄ ₄ - 4 oz/cwt
Reducing Admix.	WRDA 35	Dosage Rate	2 - 4 oz/cwt

NOTE: This mix design was evaluated by trial batch on It meets all specification requirements.

Mar-03

APPROVAL RECOMMENDED

for)

M

Vicki R. Stewart Assistant Division Chief Concrete/Chemical/Cement Laboratory

REMARKS:

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MARYLAND STATE HIGHWAY ADMINISTRATION OFFICE OF MATERIALS TECHNOLOGY CONCRETE TECHNOLOGY DIVISION <u>CONCRETE MIX DESIGN</u>

Mix Code No.:	S9W	H-8-1	Date :	29-Mar-12
Design Strength	@ 12 HRS 2500	P.S.I.	Slump:	4-8 in
Max. Allow. H2O	@ 24 HRS 3000 43.2	P.S.I. Gallons / C.Y.	Max. W/C Ratio	.45
F		-	-	

(1) (2)		(3) (4)		. (5)	
•		[(5) x (4)] x 62.4	(3) / [(4) x 62.4		
Material	Proportion	Design Weights	Specific	Absolute Vol.	
	Percentage	lbs. Per C.Y.	Gravity	(cubic ft.)	
Cement	100.0	800	3.15	4.07	
G.I.B.F.S				·	
Sand (SSD)	39.9	1128	2.60	6.95	
No. 57 Agg	60.1	1700	2.72	10.02	
No. Agg.					
Water	32.0 Gal	267	1.00	4.28	
Estimated Air %	6.5	Air Volum	he = 27 x Est. Air %	1.76	
	•		Total Volume =	27.08	
		Theoretical Weight	t of Mix lbs./cu.ft.	143.83	

		and the second se	
Producer	Rockville Fuel & Feed Co., Inc.	Plant	Rockville
Cement	Essroc - Martinsburg	GIBFS	
No. 57 Agg.	Lafarge-Frederick	Sand	Chaney-Waldorf
Air Ent.Admix	Daravair AT 60	Dosage Rate	¼ - 4 oz/cwt
Reducing Admix.	WRDA 35	Dosage Rate	3 oz/cwt
HRWR Admix.	EXP 950	Dosage Rate	4 oz/cwt

NOTE: This mix design was evaluated by trial batch on It meets all specification requirements. Feb-00

REMARKS:

for

APPROVAL RECOMMENDED

Vicki^R. Stewart Assistant Division Chief Concrete/Chemical/Cement Laboratory

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Takoma Park Streetscape Manual

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LIGHTING

PRODUCT C1888A (LUMINAIRE), CP1888 (POLE) HADCO **VENDOR INVENTORY** 57 LUMINAIRES AND POLES ON CARROLL AND LAUREL AVENUE 13'-15/16"H X 18.88"D DIMENSIONS (POLE IS 9'H. LUMINAIRE IS 46.79"H X 18.16"D.) POLE IS 4" STRAIGHT FLUTED WITH 3" TENON 1/8" THICK WALLED ALUMINUM WITH GFI **MATERIALS** DUPLEX OUTLET. BASE IS CAST ALUMINUM. LUMINAIRE IS ALUMINUM AND GLASS. **FINISHES &** BLACK POWDER COATING AND GLASS. COLORS LUMINAIRE MUST BE MOUNTED TO POLE UPON RECEIPT. UNIT TO BE INSTALLED ON CON-**PURCHASE &** CRETE BLOCK. **INSTALLATION**

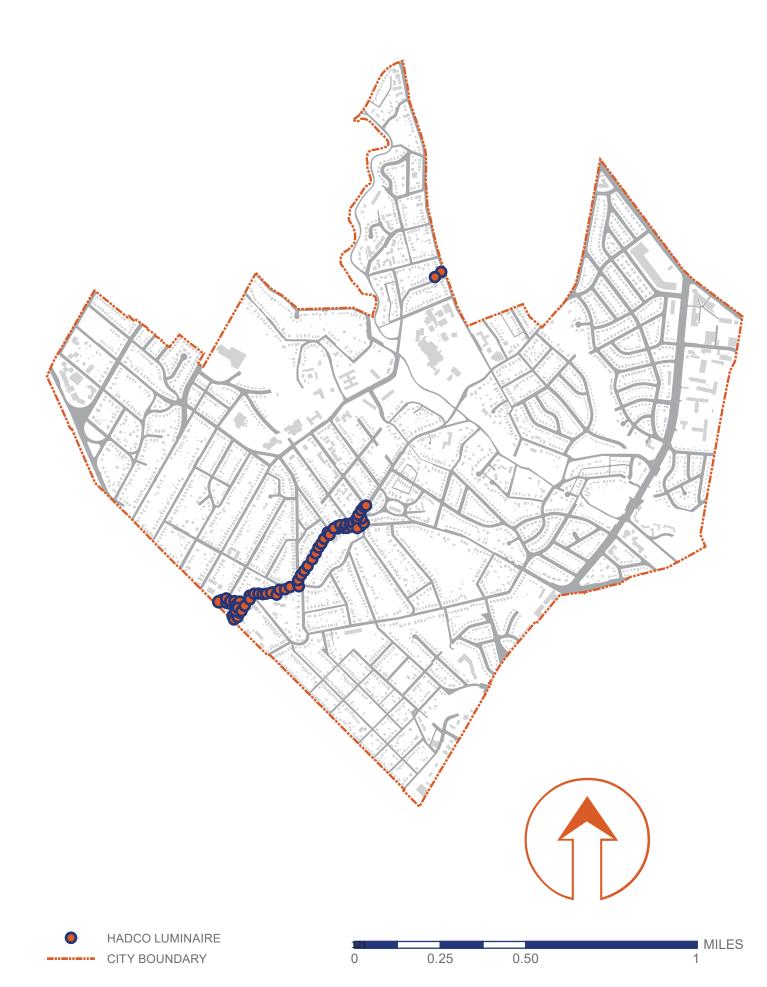
NEW INSTALLATIONS AND REPLACEMENT LUMINAIRES ARE TO BE DARK-SKY FRIENDLY.

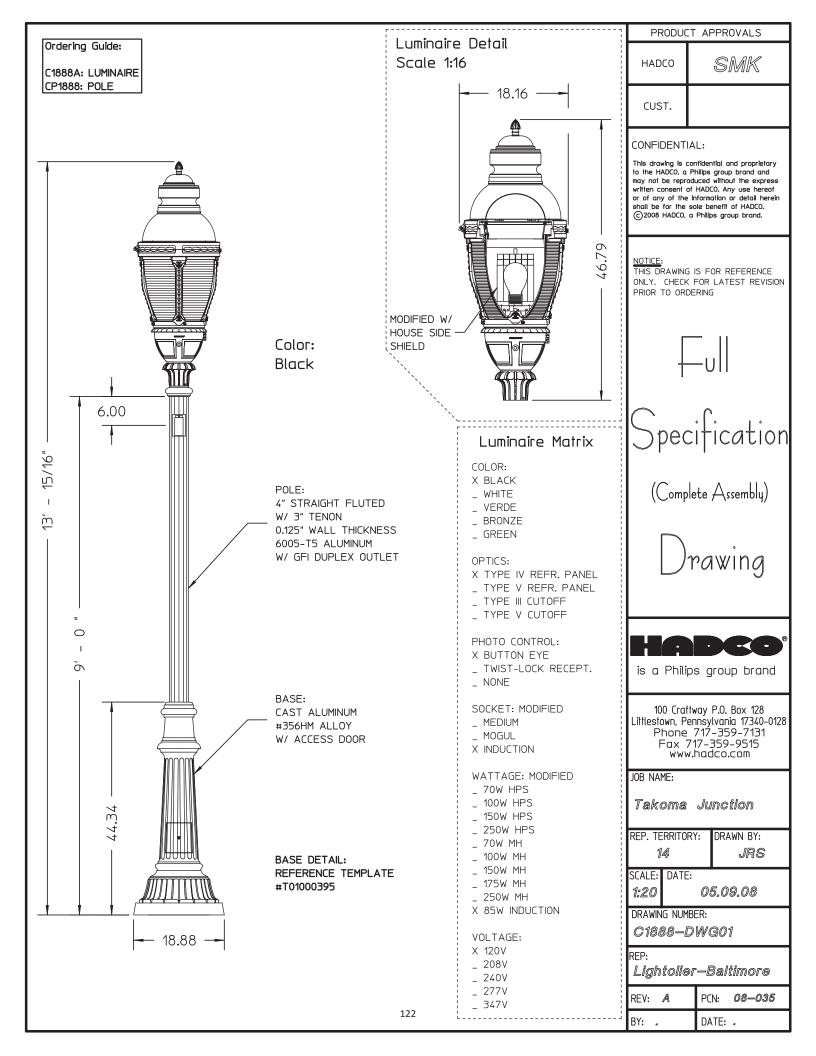
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C1888A LUMINAIRE AND CP1888 POLE INSTALLED ALONG CARROLL AVENUE.

LIGHTING - HADCO C1888A LUMINAIRE





Takoma Park Streetscape Manual

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SEATING

- PRODUCT BOSTON BENCH MODEL B-76
- VENDOR BOSTON BENCH
- **INVENTORY** 32 BENCHES
- **DIMENSIONS** 75-1/2"W X 23"L X 28-1/4"H (SEAT HEIGHT IS 16" AND SEAT DEPTH IS 17-1/2")

MATERIALS CASTINGS ARE CAST IRON. WOOD SLATS ARE IPE.

- FINISHES &
COLORSBENCHES ARE ALL IN BENCH GREEN POLYESTER POWDER COAT FINISH WITH IPE WOOD
SLATS.
- PURCHASE &
INSTALLATIONBENCHES COME IN 2', 4', 5', 6', AND 8' LENGTHS. STANCHION COLORS CAN BE CUSTOMIZED.
SLATS AVAILABLE IN IPE WOOD, PLASTIC, OR NUTEAK. BRASS PLAQUES CAN BE ADDED.
- PROJECTS/ OLD TOWN LOCATIONS - TAKOMA JU
 - TAKOMA JUNCTION - COMMUNITY CENTER

ΡΗΟΤΟS

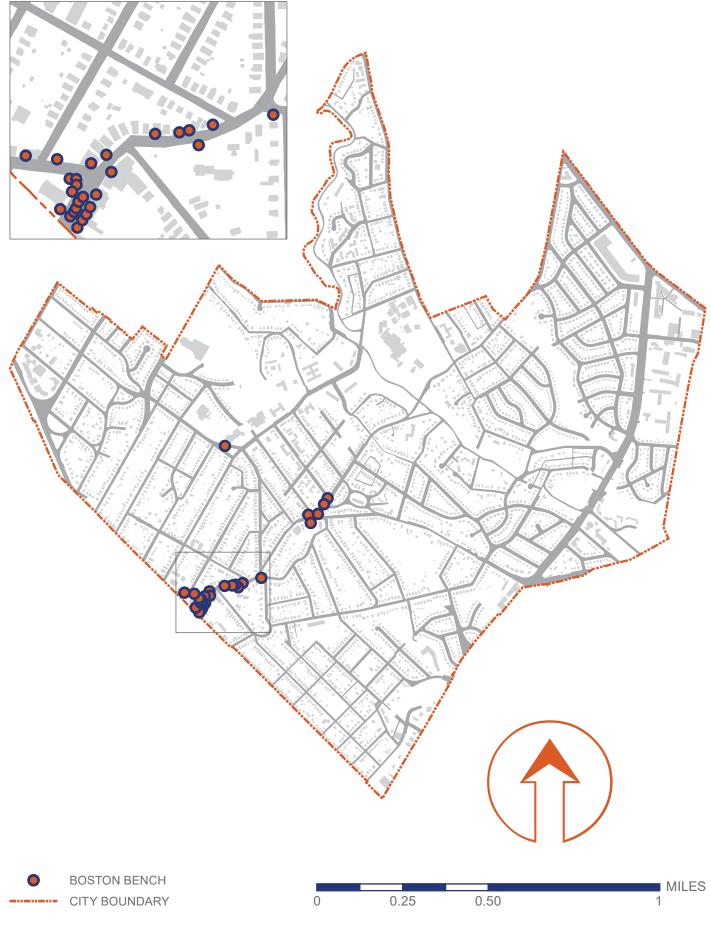




A B-76 MODEL BOSTON BENCH AROUND TOWN.

SIDE VIEW OF A B-76 MODEL BOSTON BENCH.

SEATING - BOSTON BENCH



Boston Bench

ADVERTISING SPONSORSHE



17.50

28.25

We have numerous ways of incorporating your special message or logo onto our products. Please refer to our brochure for available options.

16.00"

MISCELLANEOUS

All benches are shipped unassembled (KD).



P.O. Box 1555 Concord, MA 01742

Tel - (978)287-9580 Fax - (978)287-9581

Overall Length

BENCH MODEL B-76

29.00

23.50"

2'.	<u>4</u> '-	5'	. 6'	8,	
27.50"	51.50"	63.50"	75.50"	99.50"	

These are minimal divertions and should not be used to set inchor bolts.

DIMENSIONS

2. 4. 5. 6

Overall Height: 28.25 - Overall Depth: 23.00 Ann Height: 3.35 - Seat Height: 16.00" Tie-down: .50" hole for a .38" dia. anchor bolt. MATERIAL & FINISHES

CASTINOS: Gray Cast Tron

- FINSHES: Polyester powder coat. Standard colors are: Deep Black
 - Bench Green
 - Other

WOOD SLATS: Ipe.

WOOD FINISH: Optional one coat clear wood

preservative, factory applied.

HARDWARE: Lag Sciews

www.BostonBench.com

Takoma Park Streetscape Manual

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SEATING

- PRODUCT C-10 BENCH
- VENDOR VICTOR STANLEY
- **INVENTORY** 12 BENCHES IN HISTORIC DISTRICT
- DIMENSIONS 6'WIDTH AND 4' WIDTH 21-7/8"L X 28-7/8"H (SEAT HEIGHT IS 16 3/4")
- MATERIALS2" X 3" BACK AND SEAT SLATS ARE IPE WOOD. DUCTILE IRON END FRAMES. 1-5/16" TUBU-
LAR STEEL RUNG USED FOR ADDITIONAL SUPPORT. STEEL IS PURCHASED FROM AMERI-
CAN ELECTRIC FURNACE MILLS, WITH AT LEAST 98% OF THE STEEL OBTAINED FROM
RECYCLED SCRAP METAL.
- FINISHES & SLATS ARE IN NATURAL FINISH AND END FRAMES ARE IN BLACK POWDER COAT FINISH.

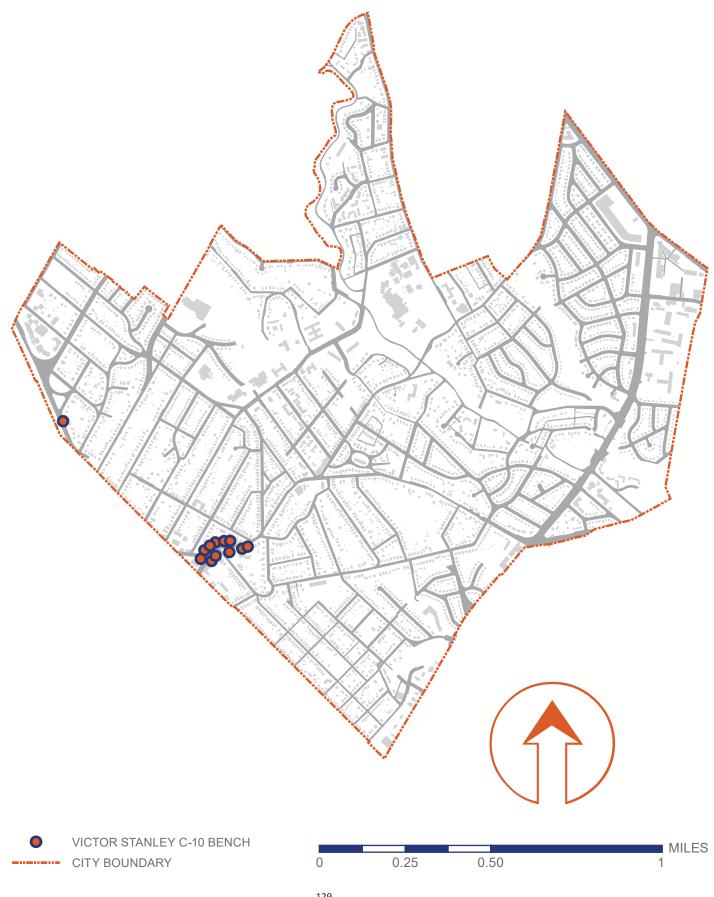
PURCHASE &
INSTALLATIONSURFACE MOUNTED. MUST BE ANCHORED IN PLACE WITH 3/8" ANCHOR BOLTS (NOT
PROVIDED).

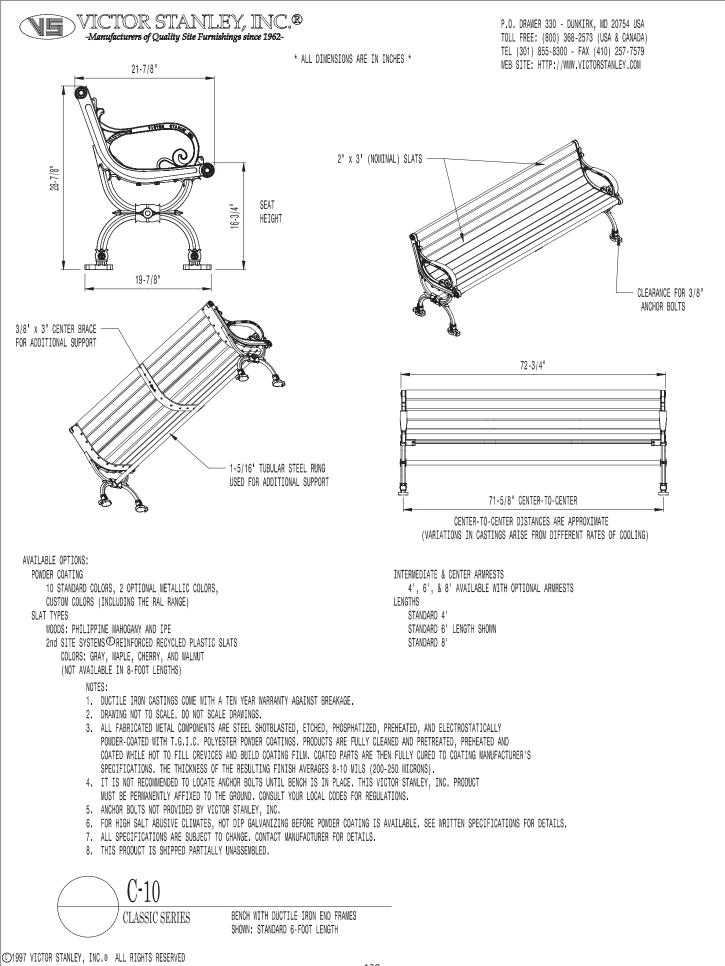
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C-10 BENCH IN OLD TOWN.

SEATING - VICTOR STANLEY C-10 BENCH





Takoma Park Streetscape Manual

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BOLLARDS

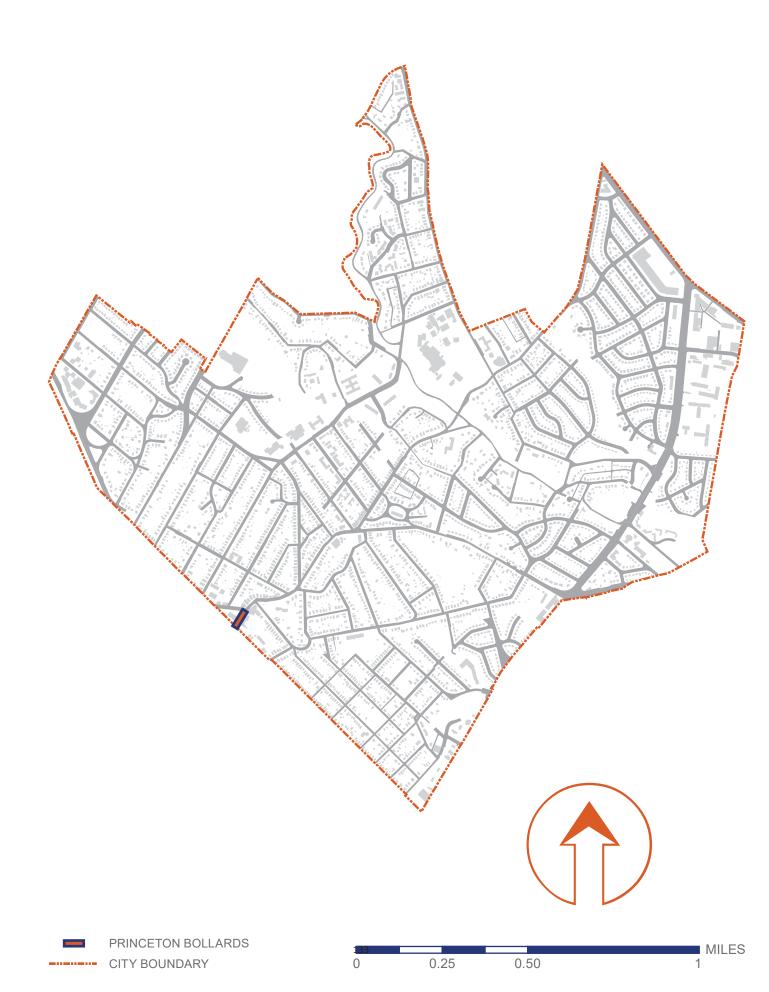
PRODUCT	R-7542 DECORATIVE BOLLARD
VENDOR	RELIANCE FOUNDRY
INVENTORY	72 BOLLARDS ON LAUREL AVENUE MEDIAN
DIMENSIONS	30"H X 10"D (AT BASE).
MATERIALS	DUCTILE IRON.
FINISHES & COLORS	BOLLARDS ARE ALL FINISHED IN BLACK POWDER COAT PAINT.
PURCHASE & INSTALLATION	INSTALLED IN ANCHOR CASTINGS IN NEW CONCRETE.

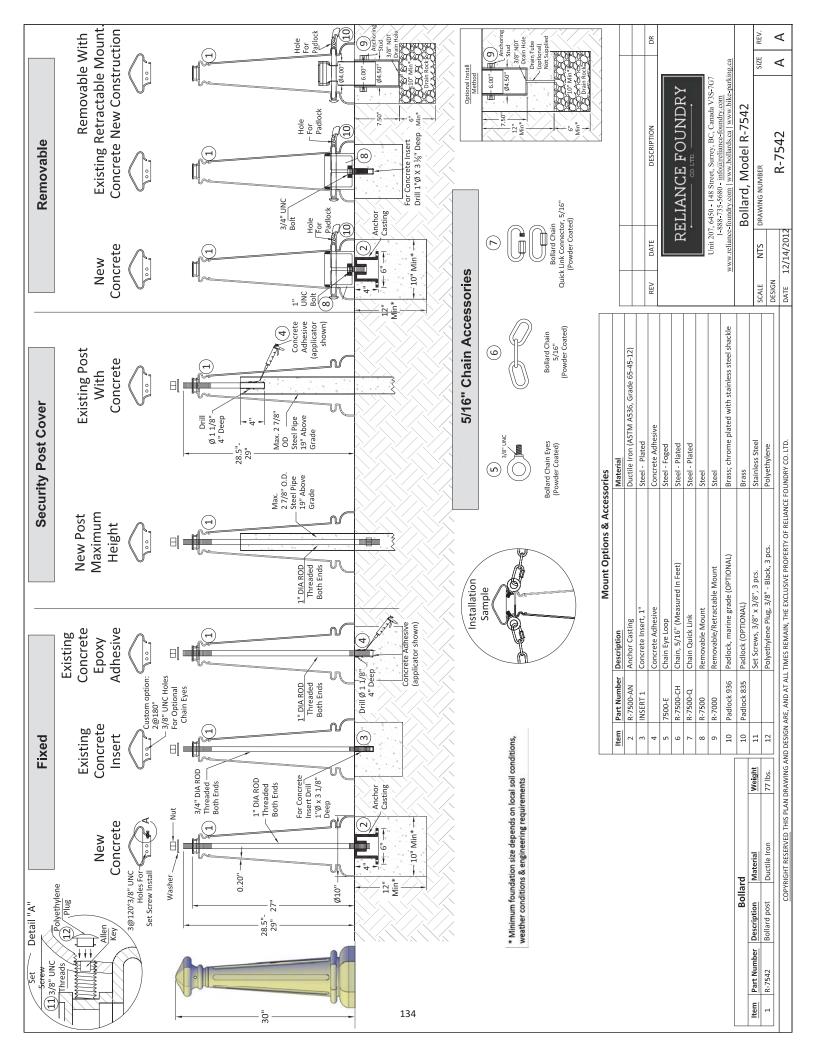
PHOTOS



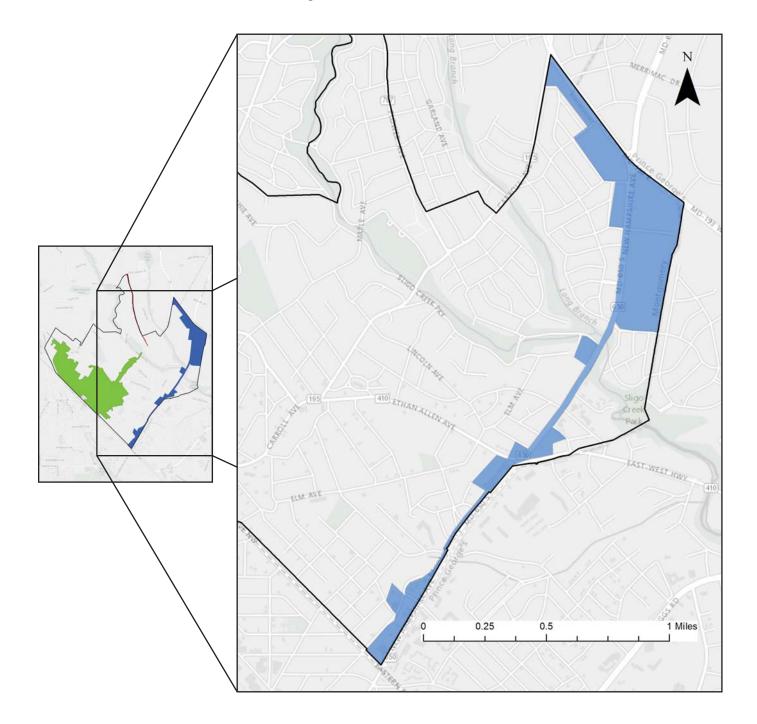
R-7542 DECORATIVE BOLLARD ALONG LAUREL AVENUE MEDIAN, CONNECTED WITH CHAINGS ALONG TREE BOXES TO PROTECT PLANTINGS.

BOLLARDS - RELIANCE FOUNDARY R-7542





The New Ave Streetscape Elements



The New Hampshire Avenue corridor from Eastern Avenue to University Boulevard, a.k.a. "the New Ave," comprises the City's largest commercial districts along high-traffic arterial roadways. The New Ave was the focus of a branding effort in 2006 characterized by vibrant colors that reflect the cultural traditions of the communities that live and work along the corridor. The vibrant colors and playful design of seating and waste receptacles on New Hampshire Avenue are consistent with the New Ave brand. Improvements initiated in 2008 and recommendations in the New Ave Streetscape Standards developed by the City in 2012 provide the basis for the New Ave aesthetic.

LIGHTING

PRODUCT	C4325 (ICETRONE LAMP LUMINAIRE), C4325A (LED MODULE LUMINAIRE), CP4325 (POLE)
VENDOR	HADCO
INVENTORY	11 LUMINAIRES AND POLES
DIMENSIONS	15' 4-5/16"H X 17"D (POLE IS 12'H. GLOBE IS 38.28"H X 16.67"D.)
MATERIALS	POLE IS 4" STRAIGHT FLUTED WITH 3" TENON 1/8" THICK WALLED ALUMINUM WITH GFI DUPLEX OUTLET. BASE IS CAST ALUMINUM. LUMINAIRE IS ALUMINUM AND GLASS.
FINISHES & COLORS	BLACK POWDER COATING AND GLASS.
PURCHASE & INSTALLATION	LUMINAIRE MUST BE MOUNTED TO POLE UPON RECEIPT. UNIT TO BE INSTALLED ON CONCRETE BLOCK.

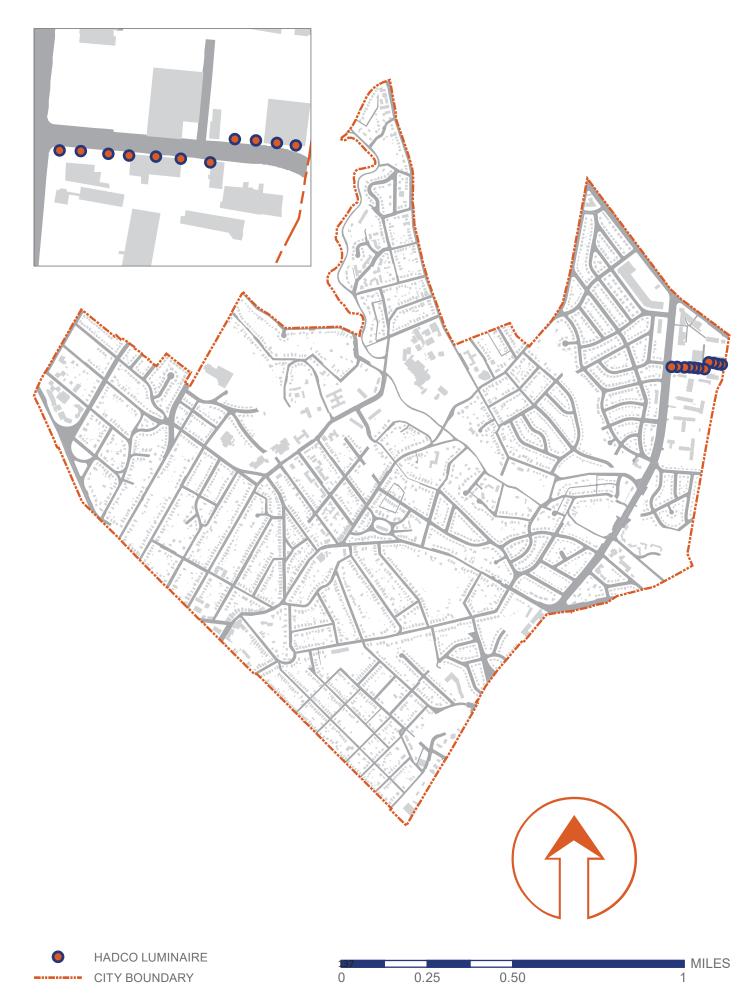
NEW INSTALLATIONS AND REPLACEMENT LUMINAIRES ARE TO BE DARK-SKY FRIENDLY.

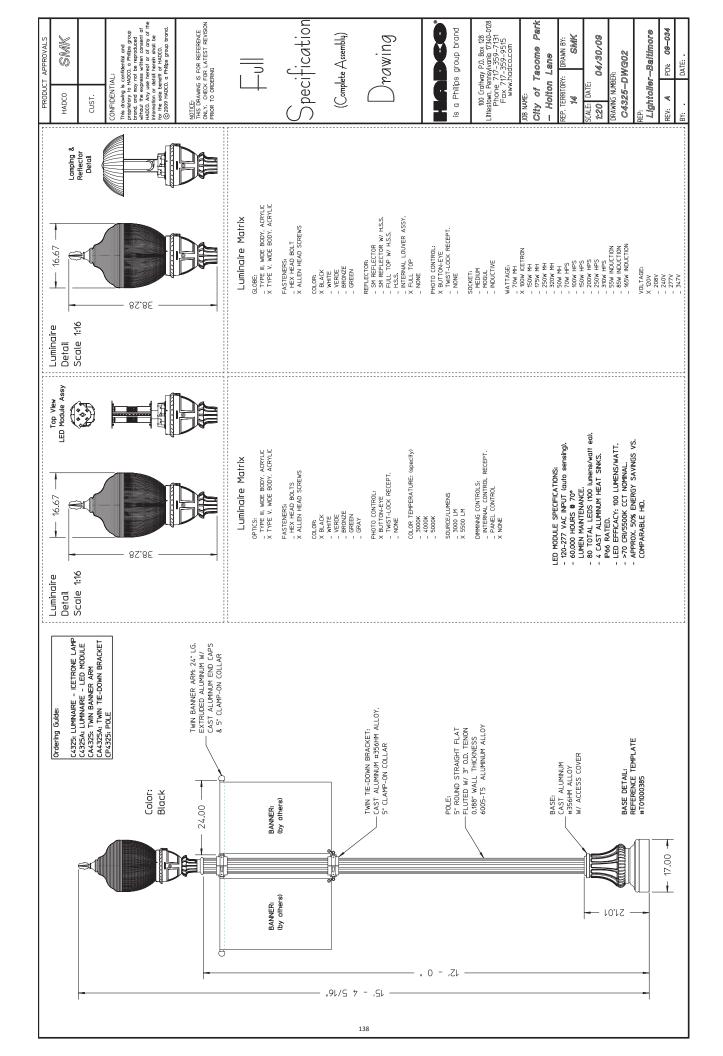
ΡΗΟΤΟS



C4325 LUMINAIRE AND CP4325 POLE ALONG HOLTON AVE.

LIGHTING - HADCO C4325 LUMINAIRE





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SEATING

PRODUCT TOWNE SQUARE BENCH

VENDOR LANDSCAPE FORMS

- INVENTORY 5 BENCHES ON THE NEW AVE: - 2 CRANBERRY - 3 OCEAN BLUE
- DIMENSIONS 70"W X 27"L X 32"H (SEAT HEIGHT IS 16-1/4" AND SEAT WIDTH IS 19-3/8")
- MATERIALSSUPPORTS AND SEAT AND BACK PANELS ARE MADE OF STEEL. ALL PARTS ARE 100%
RECYCLABLE AND MADE OF A MINIMUM OF 88% RECYCLED MATERIAL CONTENT.
- FINISHES &
COLORSBENCHES ARE IN FOUR POWDER COAT COLORS; CRANBERRY, OCEAN BLUE, GRASS, AND
BLACK. SEE THE NEW AVE STREETSCAPE STANDARDS FOR RECCOMENDED LOCATION AND
COORDINATION OF COLORS.

PURCHASE &
INSTALLATIONTOWNE SQUARE BENCHES ON THE NEW AVE ARE SLATTED (NOT PERFORATED), WHICH
MUST BE SPECIFIED AT TIME OF PURCHASE.

ΡΗΟΤΟS

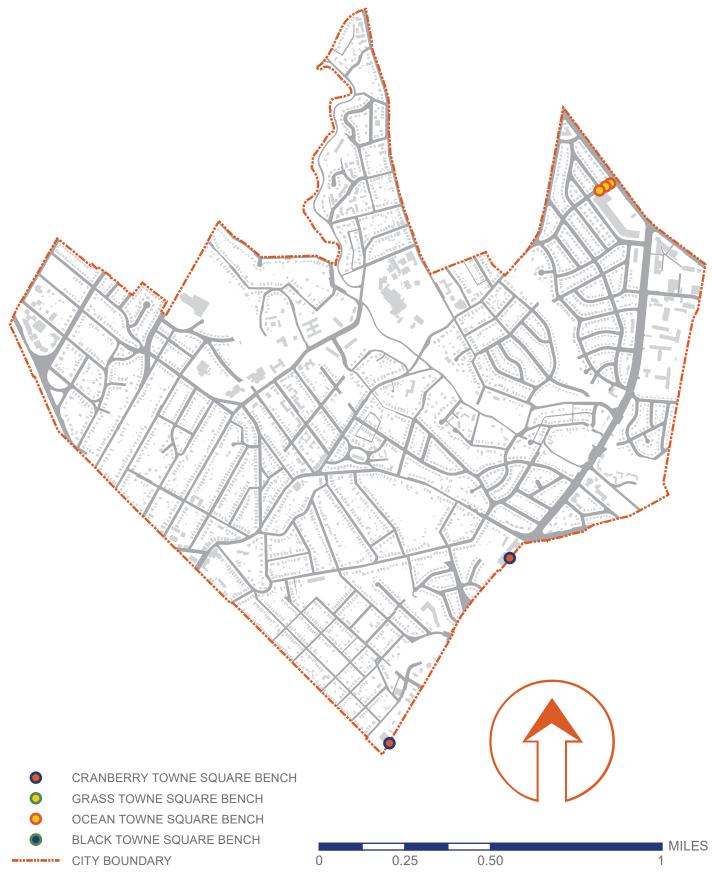


TOWNE SQUARE BENCH (CRANBERRY) AT A BUS STOP ON NEW HAMPSHIRE AVENUE. ADJACENT RECEPTACLES ARE PAINTED TO CORRESPOND WITH THE NEW AVE BRANDING.



TOWNE SQUARE BENCHES (OCEAN BLUE) ON ANNE STREET AT LOCATION OF WEEKLY CROSSROADS FARMERS MARKET.

SEATING - LANDSCAPE FORMS TOWNE SQUARE BENCH



Instructions

7/2007

Towne Square[™] Bench

HANDLE WITH CARE! Pangard II® polyester powder coat is a strong, long-lasting finish. Protect this finish from damage during installation. Use touch-up paint to repair any finish abrasions.

Towne Square benches are shipped with freestanding glides that may be left in place for surface mounting.

Recommended procedure for surface mounting:

Each bench has four mounting plates that can accept anchors up to 3/8" thread size. Although the anchoring procedure and hardware are the responsibility of the installer, we suggest the following:

- 1. Select corrosion resistant anchors appropriate for the surface. Your hardware store or builders supply may be able to recommend the proper hardware, tools, and safety equipment.
- 2. Place the bench in the desired position.
- 3. Mark hole locations.
- 4. Move the bench to allow access for drilling holes.
- 5. Install the anchors and bench according to the anchor manufacturer's instructions.

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SEATING

PRODUCT PORCH ROCKER

VENDOR SEASIDE CASUAL

INVENTORY 6 ROCKING CHAIRS AT TWO BUS STOPS ON NEW HAMPSHIRE AVENUE:

- 2 CITRUS
- 2 HOT PINK - 1 POOL (BLUE)
- 1 LIME
- DIMENSIONS
 31 5/8"L X 26 1/8"W X 44 3/4"H

 (SEAT HEIGHT IS 16 1/4" AND SEAT WIDTH IS 19 3/8")
- **MATERIALS** CHAIRS FABRICATED FROM ENVIROWOOD, AN ALL-WEATHER MARINE GRADE HIGH DENSITY POLYETHYLYNE POLYMER.
- FINISHES &
COLORSCHAIRS ARE ALL IN BLUE, GREEN, ORANGE, OR PINK. COLORS WERE SELECTED TO
COORDINATE WITH THE NEW AVE BRANDING.

PURCHASE & ROCKERS SHOULD BE CHAINED TO A PERMANENTLY AFFIXED OBJECT IN ORDER TO PREVENT THEFT.

ENSURE INSTALLATION/REPLACEMENTS ARE COMPATIBLE WITH ADA BUS STOP GUIDELINES.

PHOTOS

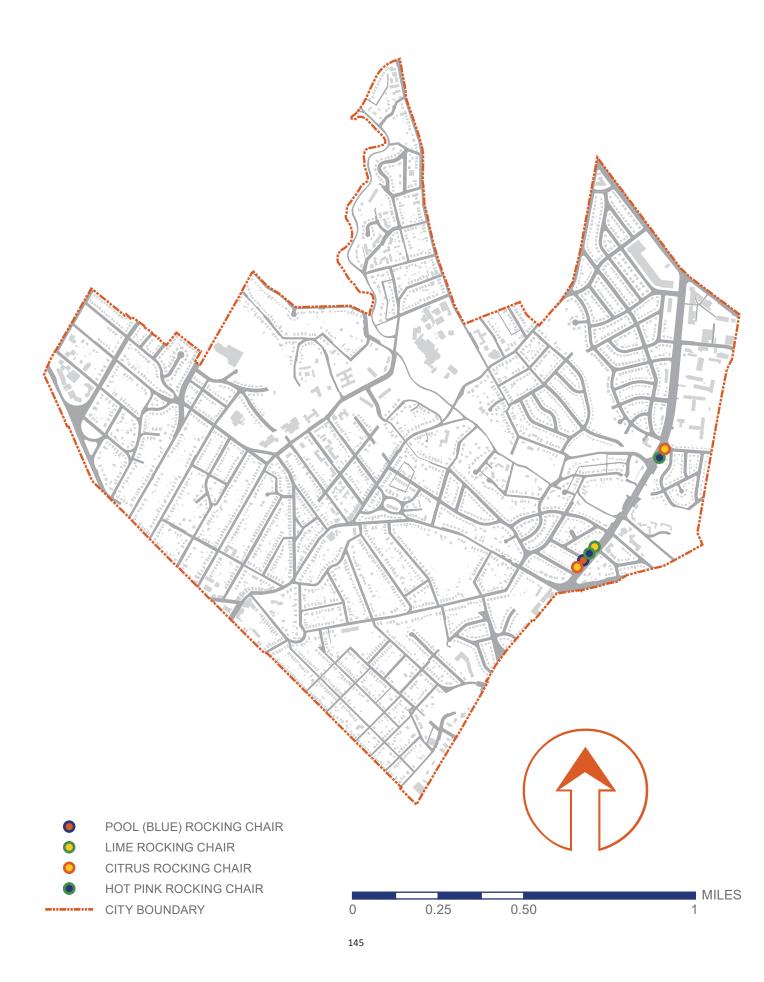


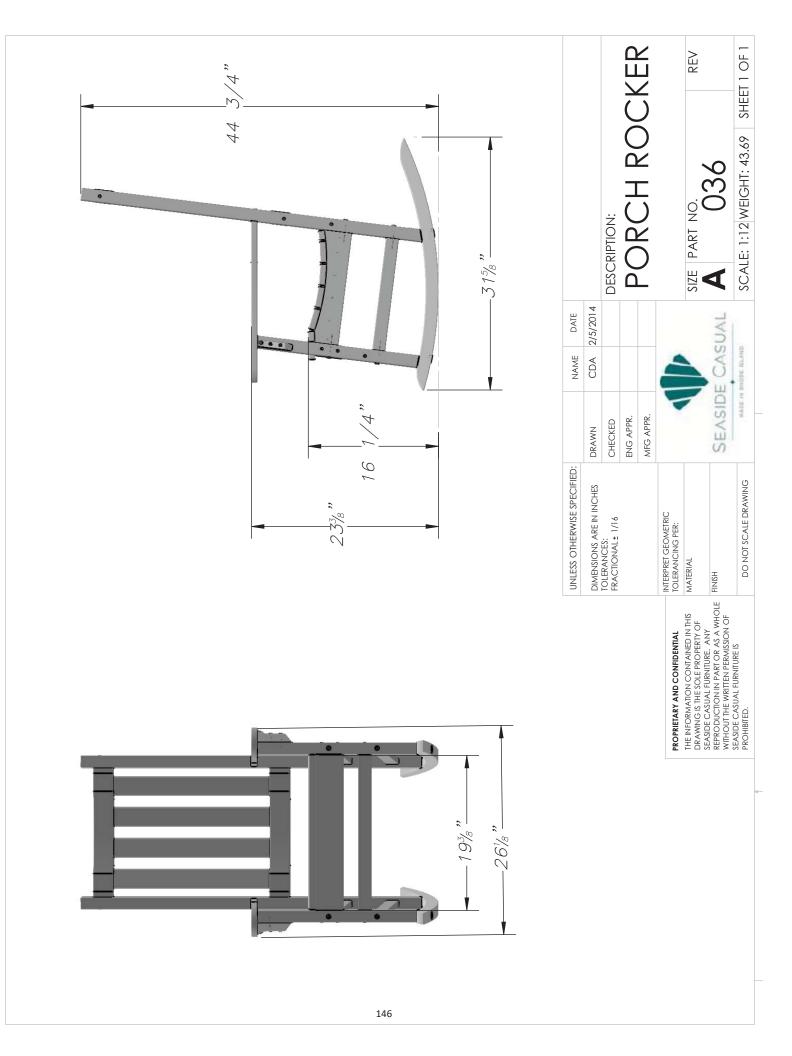
COLORFUL AND ENGAGING PORCH ROCKERS REPLACE BENCH SEATING AT A FEW BUS STOPS ON NEW HAMPSHIRE AVENUE.



PORCH ROCKERS IN ALL FOUR COLORS AT THE BUS STOP ON NEW HAMPSHIRE AVENUE AND DEVONSHIRE ROAD.

SEATING - SEASIDE CASUAL PORCH ROCKER







Chestnut	Cranberry		Hot Pink	
Black	Citrus		White	
Pool	Harvest		Slate	
Natural	Grey		Green	
Leaf	Sandalwood	147	Cherry	

SEATING

- PRODUCT
 DEWART SERIES BENCH (DE1111C)

 VENDOR
 URBANSCAPE

 INVENTORY
 9 BENCHES
- DIMENSIONS
 72"W X 22-3/4"L X 37-1/4"H

 (SEAT HEIGHT IS 17-1/2" AND SEAT DEPTH IS 16-1/2")
- MATERIALS BENCH LEGS ARE CONSTRUCTED OF 319 ALUMINUM CASTING.

SLAT SEAT AND BACK, MOUNTING BRACKETS, AND REINFORCING BRACES ARE CONSTRUCTED OF 10 GA X 2 FLAT STEEL.

FINISHES & BENCHES ARE ALL IN OCEAN BLUE POWDER COAT FINISH.

PURCHASE &
INSTALLATIONDEWART SERIES BENCHES ON THE NEW AVE ARE SLATTED (NOT PERFORATED), WHICH
MUST BE SPECIFIED AT TIME OF PURCHASE.

6' BENCH WITH BACK GROUND SPACE REQUIREMENTS ARE 22-3/4" X 72".

PHOTOS

COLORS

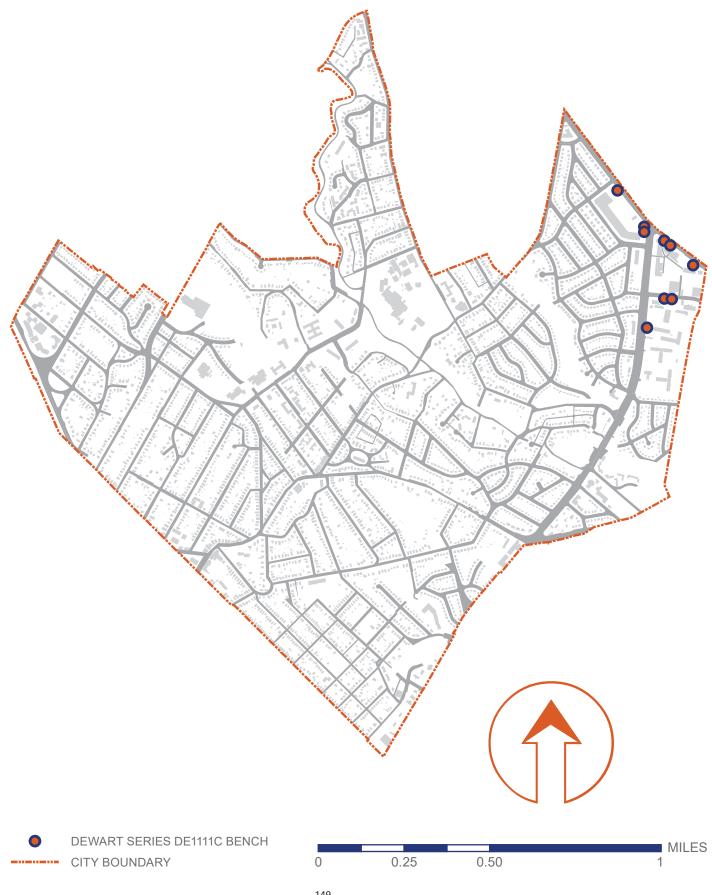


OCEAN BLUE DEWART BENCH NEXT TO COMMERCIAL WAYFINDING KIOSK.



OCEAN BLUE DEWART BENCH ON HOLTON AVENUE WITH COORDINATING NEW AVE RECEPTACLES.

SEATING - URBANSCAPE DEWART SERIES BENCH



Dewart Series model no:

urbanscape

INSTRUMENTS TO SHAPE PUBLIC SPACE



DE1111C, *DE1113C DE1411C*, *DE1413C*

PORTABLE & SURFACE MOUNT W/BACK AND W/O BACK BENCH SQUARE AND ROUND PERFORATED, AND SLAT

customer service:

ASSEMBLERS: If you find any parts missing or damaged, or if you're having difficulty assembling your furniture/equipment, call us at:

* Before calling, have your product model number available.

1-800-253-8619 (Inside U.S.A.) 260-352-2102 (Outside U.S.A.) Monday thru Friday, 8:00 AM - 4:30 PM Eastern Time (EXCEPT HOLIDAYS)

Any correspondence concerning our product should be sent directly to our Customer Service Manager at:

URBANSCAPE a division of Wabash Valley Mfg., Inc. 505 E. Main Street P.O.Box 5 Silver Lake, IN 46982 U.S.A. FAX: 260-352-2160 or email: cs@wabashvalley.com

maintenance:

Regular inspection and maintenance of all parts, and fasteners is necessary. Tighten all bolts and nuts. Inspect Tops, Seats, Legs, Braces and Fasteners periodically for wear or vandalism. Replace broken or worn parts immediately or take equipment out of service until repairs are made. Use genuine Urbanscape replacement parts.

KEEP THIS ASSEMBLY/SPECIFICATION SHEET FOR FUTURE REFERENCE.

specifications:

NOTE: We reserve the right to change specifications without notice.

Framework assemblies are finished with powder coating; electrostatically applied and oven cured according to powder manufacturer's specifications. Fasteners are stainless steel to resist corrosion.

BENCH LEGS: Legs are constructed of 319 aluminum casting.

BENCH SEAT: The perforated panels are constructed of 12 GA sheet steel. The slat seat is constructed of 10 GA x 2 flat steel. Mounting brackets consists of 10 GA sheet steel. The reinforcing braces consists of 10 GA sheet steel. Leg to bench braces are 15 gage x 1 OD structural steel tubing.

BENCH BACK: The perforated panels are constructed of 12 GA sheet steel. The slat back is constructed of 10 GA x 2 flat steel. Mounting brackets consists of 10 GA sheet steel. The reinforcing braces consists of 10 GA sheet steel.

GENERAL:

6' Bench w/ back ground space requirements are 22 3/4" x 72". The bench seat is 65 3/8" long x 16 1/2" wide and 17 1/2" to the top the bench's seat.

6' Low Profile bench ground space requirements are 18 1/4" x 72". The bench seat is 65 3/8" long x 18 1/4" wide and 17 3/4" to the top the bench's seat.

Finished to Look Like Wood, but Act Like Metal

Our faux-wood finishes so closely resemble the real thing that it's hard to believe it's metal and not wood. The timeless beauty and tradition of wood without any of the headaches, such as cracking, warping or rotting. For superior strength and rigidity, we add reinforcements to the aluminum extrusions for all of our faux-wood-finished products.

AAMA 2604-05 Certification

Our seven-step powder-coat system exceeds AAMA 2604-05 (American Architectural Manufacturers Association) test specifications—one of the highest in the industry. Our coating stood up to some of the toughest test specifications, including adhesion, abrasion resistance, chemical resistance, corrosion resistance and fade resistance, to ensure that our products will last longer than anyone else's.

AAMA 2604-05 test Procedures and Performance Requirements

Test Requirements		
Salt-Spray Resistance: 3,000 hours per ASTM B 117		
Weathering: Color Retention, 5-year south Florida sun, per ASTM D 2244 with a maximum 5deltaE change	Yes	
Weathering: Chalk resistance, 5-year south Florida sun, per ASTM D 4214 with a max rating of 8	Yes	
Weathering: Gloss Retention, 5-year south Florida sun, per ASTM D 523 with a min of 30%	Yes	
Weathering: Resistance to Erosion, 5-year south Florida sun, with less than 10% film loss	Yes	
Chemical Resistance: Muriatic Acid, Mortar, Nitric Acid, Detergent and Window Cleaner		
Dry Film Hardness per ASTM D 3363 with no rupture		
Adhesion: Dry Adhesion, Wet Adhesion and Boiling Water Adhesion using the cross hatch method with 0% failure	Yes	

Seven Steps to Long-Lasting Furniture: Our Superior Powder-Coating Process

What's responsible for the good looks and durability of all our products? Our seven-step powder-coating process, which is unlike any other in the industry. While other companies also offer powder-coated products, our seven-step process ensures the highest quality and longevity for our products.

STEP 1—Shot-Blasting to White Metal

First, all of our metal is cleaned to white metal. We strip it to its purest form using our state-of-the-art shot-blast system. This process removes all the impurities from the metal, especially at the weld joints. It's more effective than traditional acid cleaning and also creates a more textured surface, allowing for better adhesion of the powder coat.

STEP 2—Five-Stage Chemical Pre-Treatment

Next, the metal goes through a five-stage chemical pre-treatment cleaning process. It is etched, rinsed and cleaned to eliminate any residue, then it's sealed—further promoting adhesion and encouraging corrosion prevention.

STEP 3—Pre-Heating

Prior to coating, the part is pre-heated so that it can be dried, warmed and then sent directly to the spray booth. With the part heated, it draws powder into the joints, corners and hard-to-reach places to ensure complete coating of the entire surface.

STEP 4—Zinc-Rich Epoxy Coating

After the pre-heating, a Zinc-Rich epoxy powder-coating is applied to provide the highest quality of corrosion control. It works as a prime coat to protect the metal from corrosion before it receives its topcoat.

STEP 5—Zinc-Rich Epoxy Coating Gel-Cure

Next, the Zinc-Rich epoxy coating is cured to a gel, allowing the polyester topcoat to combine with the Zinc-Rich epoxy, promoting better adhesion.

STEP 6—AAMA 2604-Compliant Polyester Topcoat

A polyester topcoat is then applied that's specially formulated to meet AAMA 2604 standards for fading, cracking, chalking, gloss retention, erosion resistance and chemical resistance. No one else in the industry uses this high standard of topcoat. It ensures that our products will maintain their beauty and durability for years to come.

STEP 7—Final Cure

Finally, the metal goes through a cure oven, which hardens the topcoat and completes the integrated bonding between the Zinc-Rich epoxy and AAMA 2604-Compliant Polyester Topcoat.

assembly procedures: IMPORTANT: Assemblers should be reasonably skilled in the assembly of commercial grade/heavy duty fabricated steel equipment.

To ensure proper assembly, it is suggested that you take adequate time to locate and identify each part. To prevent scratching of the finished pieces, we recommend this unit to be assembled on a clean, flat, solid, surface with a drop cloth, allowing plenty of working room. Also please read the instructions and study the sketches very carefully. A little extra time spent before assembly will be well worth it in performing a complete, proper assembly. Please note that all parts have been precut and pre-drilled.

During the assembly process leave all bolts and nuts "finger tight", until the entire unit is completely assembled. for movement to level or adjust all seats, tops, benches, framework and braces if necessary. After final adjus This allows room After final adjustment and leveling, permanently tighten all nuts, bolts and fasteners.

NOTE: THESE INSTRUCTIONS ARE FOR ALL BENCHES.

STEP 1

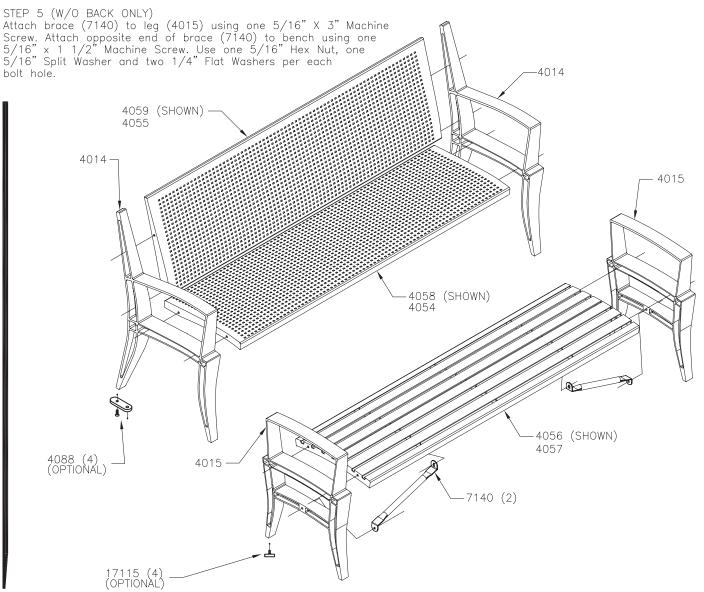
Attach seat (4054, 56, 57, 58) to leg (4014,4015) using one 5/16" X 2 1/2" Machine Screw with one 5/16" Split Washer and one 1/4" Flat Washer per each bolt hole. STEP 2 Attach back (4055,4059) to leg (4014) using one 5/16" X 3" Machine Screw at bottom hole and one 5/16" x 2 1/2" Machine Screw at top hole. Use one 5/16" Hex Nut with one 5/16" Split Washer and one 1/4" Flat Washer per each bolt hole.

STEP 3

Repeat STEPS 1 and 2 to complete installation for opposite side.

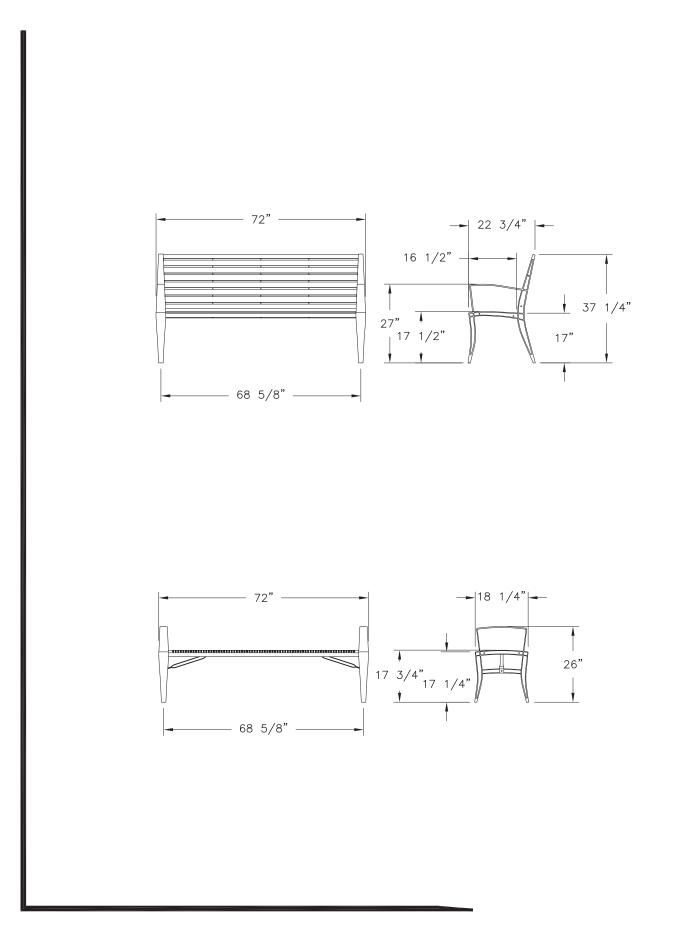
STEP 4

Level the seat and back, tighten with proper tools.



installation: WARNING: The proper installation for Urbanscape products may depend upon many factors unique to the site, location, or use of a particular product. Consult with your contractor or other professional to determine your specific installation requirements.

product dimensions:



PLANTERS

- PRODUCT SORELLA PLANTERS
- VENDOR LANDSCAPE FORMS

INVENTORY 6 ARE IN PUBLIC RIGHT OF WAY, MAINTAINED BY TAKOMA/LANGLEY CROSSROADS CDA

DIMENSIONS VARIOUS DIMENSIONS.

MATERIALS PLANTER IS MADE FROM POWDERCOATED STEEL.

PLANTER BASES AND GLIDES ARE MADE FROM 100% POST-CONSUMER AND POST-INDUS-TRIAL WASTE COMPRESSION-MOLDED RECYCLED PLASTIC. BASES ARE 100% RECYCLABLE.

FINISHES & PLANTERS ARE ALL PAINTED WITH PANGARD II POLYESTER POWDER COAT.

PURCHASE &
INSTALLATIONPLACEMENT OF PLANTERS SHOULD MAINTAIN A MINIMUM 5' PEDESTRIAN CLEARANCE
ALONG THE SIDEWALK.

THREE SIZES MUST BE SURFACE MOUNTED:

- 15"W X 15"D X 30"H
- 30"W X 15"D X 30"H
- 45"W X 15"D X 30"H

PHOTOS

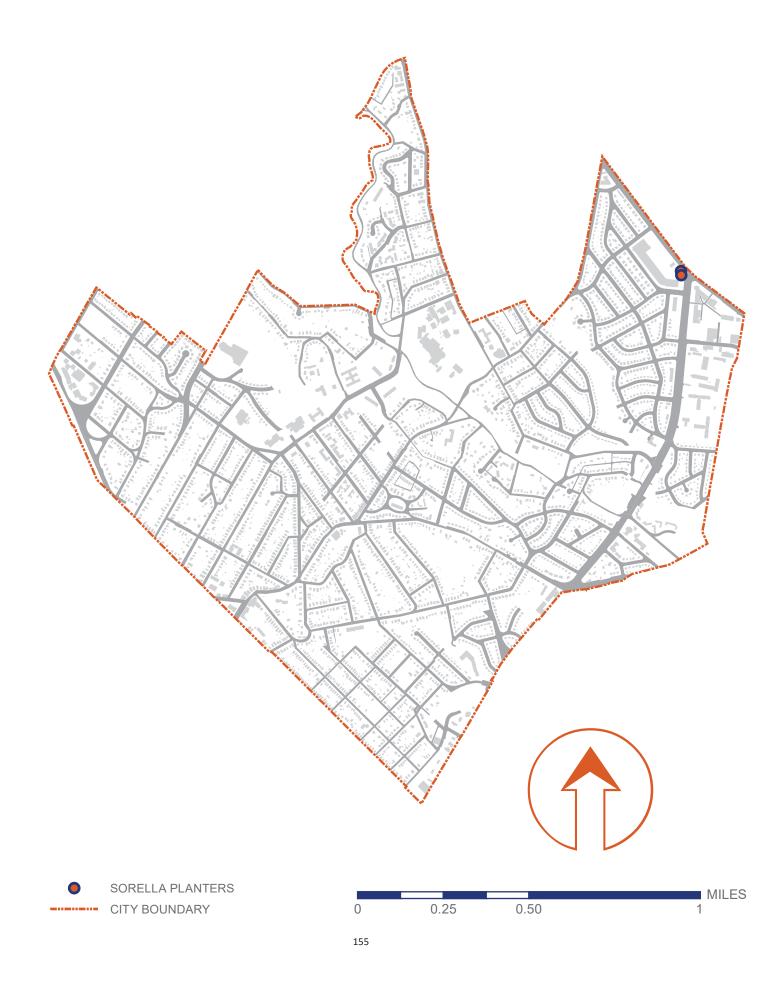


SORELLA PLANTERS OF VARYING SIZES AND COLORS AT NEW HAMPSHIRE AVENUE AND UNIVERSITY BOULEVARD (WITH OCEAN BLUE URBANSCAPE DEWART SERIES BENCHES).



STANDARD 30"H X 30"D X 30"W SORELLA PLANTER.

PLANTERS - LANDSCAPE FORMS SORELLA PLANTER



Our Purpose Is To Enrich Outdoor Spaces

We believe in the power of design and its ability to influence and elevate the quality of public space. High quality products and outstanding customer experience makes us one of the world's premier designers and manufacturers of outdoor commercial furnishings.

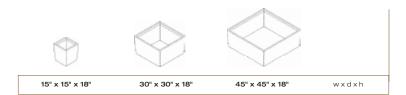
Sorella Specifications

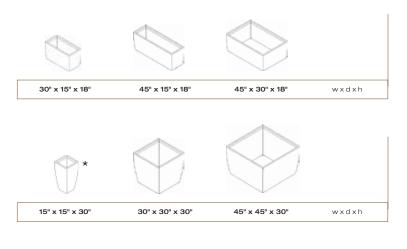
Sorella planters may be specified in powdercoated metal, or electropolished stainless steel for a more natural finish. Planters available in rectangle or square shapes, in 18" and 30" heights.

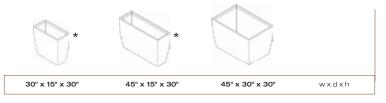
Fabricated, welded and ground steel panels attach to a polyethylene base, with glides and optional drain holes.

Planter bases and glides are compression-molded recycled plastic resulting from an innovative, patented melting process that utilizes 100% post-consumer and post-industrial waste. This unique process blends several material types, channeling more discarded plastics away from the landfill and into new life. Bases are 100% recyclable.

Planters are freestanding, with the exception of those noted below.







* Planters must be surface mounted.

Metal is the world's most recycled material and is fully recyclable. Consult our website for recycled content for this product. Powdercoat finish on metal parts contains no heavy metals, is HAPS-free and has extremely low VOCs.

Landscape Forms is proud to specify FSC and Green-e certified paper. This paper meets the Forest Stewardship Council's standards for responsible forest management and is made using certified renewable energy.



Finishes

All metal is finished with Landscape Forms' proprietary Pangard II[®] polyester powdercoat, a hard yet flexible finish that resists rusting, chipping, peeling and fading. A wide range of standard, optional and custom colors are available.

To Specify

Select Sorella planter, product description and size. Select powdercoat metal, or stainless steel. If metal is specified, select powdercoat color. Specify with or without drain holes.

landscapeforms.com

Visit our website for product details, color charts, technical sheets, sales office locations. Download JPG images, brochure PDF, CAD details, CSI specifications.

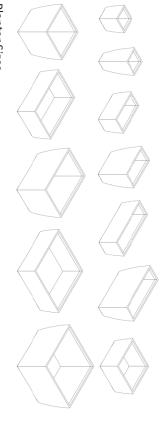
Specifications are subject to change without notice. Sorella is manufactured in the U.S.A. Landscape Forms supports the Landscape Architecture Foundation at the Second Century level. ©2010 Landscape Forms, Inc. Printed in U.S.A.

landscapeforms^{*}

800.521.2546 269.381.3455 fax 431 Lawndale Avenue, Kalamazoo, MI 49048 landscapeforms.com



Installation Guide



Planter Sizes

- Included components:
- Planters intended for exterior use should be specified with drain holes
- Planters intended for interior use should be specified without drain holes
- Drain holes are pre-drilled at the factory. They can be added on site, before installation,
- if needed. Refer to Product drawings for locations
- Anchoring hardware included for surface mount units. Setting tool for drop-in anchor is includer

anchor, with 1/2-13	Included.
* *	
	Planter Size Capacity 15"w x 15"d x 18"h 13 Gallons (1.7 ft ³)
19 Gallons (2.5 ft ³)	Capacity 13 Gallons (1.7 ft ³)
	*

Tools required for surface mount installation:

Hammer drill with 5/8" diameter masonry bits

Hammer

Slotted screwdriver

surface – this will damage the finish causing rust to occur. Use touch-up paint on any gouges in the marring surface. Do not place or slide powdercoated parts on concrete or other hard or textured this finish during assembly, place unwrapped powdercoated parts on packaging foam or other nonfinish caused by assembly tools. ASSEMBLE WITH CARE! Pangard II® Polyester Powdercoat is a strong, long-lasting finish. To protect

₽ **PROCEDURE FOR FREESTANDING INSTALLATION:**

- Ŀ Set unit in place on level surface.
- Fill units with specified materials

i ε

Remove protective film from stainless steel planters



Β. ADDING OPTIONAL DRAIN HOLES:

- Drill ½" diameter holes in locations noted on Product Drawings.
- Do not drill drain holes in any of the four squares surrounding the raised bosses.

2

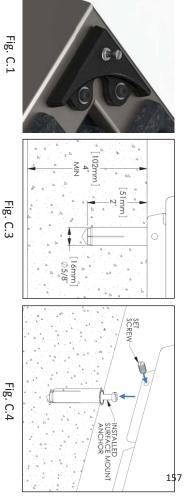


Fig. C.1

<u></u>

<u>+</u>

SURFACE MOUNT INSTALLATION PROCEDURE:

- into each surface mount glide as shown in Fig. C.1. Turn planter upside down on non-marring surface. Thread surface mount anchors
- 2 Remove surface mount anchors from planter. Set planter in place. Trace surface mount bolt heads to mark hole locations
- Move planter and drill holes as shown in Fig. C.3. Clear holes of debris
- 4 ω Install drop-in anchor as shown in Fig. C.4. Ensure top of anchor is flush or slightly
- Thread surface mount anchors into drop-in anchor sleeves as shown in Fig. C.4 below concrete surface. Expand with setting tool
- 6. 7. Set planters in place over surface mount anchors.

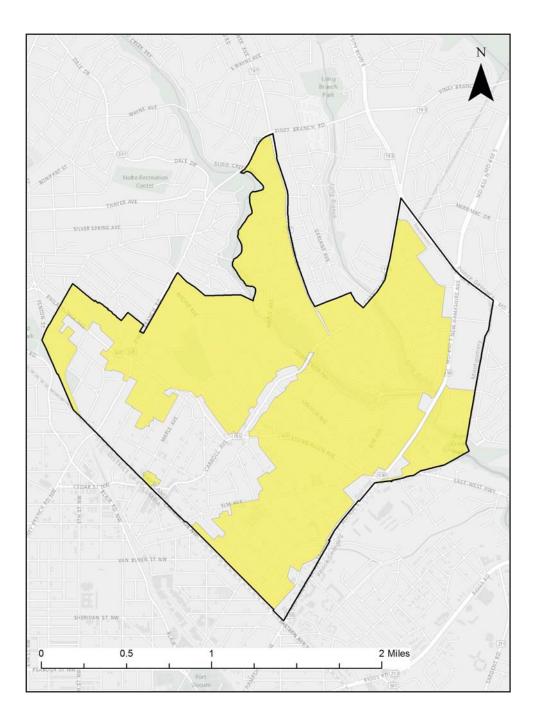
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Thread set screws into sides of surface mount glides as shown in Fig. C.4

Takoma Park Streetscape Manual

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Residential Neighborhood Streetscape Elements



Residential streetscapes in Takoma Park that are outside of the areas defined as Flower Avenue, the New Ave, and the Historic District are predominantly composed of single- and multifamily housing with some institutional and retail land uses. As the city's residential neighborhoods tend to be greener and more architecturally varied, streetscape improvements should strive for neutrality and simplicity in color and design.

SEATING

PRODUCT	DUMOR 168 SERIES BENCH					
VENDOR	DUMOR					
INVENTORY	9 BENCHES					
DIMENSIONS	75"L X 27-5/16"W X 32"H (SEAT HEIGHT IS 16-5/8" AND SEAT DEPTH IS 18-15/16")					
MATERIALS	BENCH IS 100% STEEL.					
FINISHES & COLORS	BENCHES ARE ALL IN BRONZE POWDER FINISH.					
PURCHASE & INSTALLATION	MOUNT AND ANCHOR USING 1/2" X 3-3/4" EXPANSION ANCHOR BOLTS (PROVIDED).					

PHOTOS



BRONZE DUMOR 168 SERIES BENCH ON MAPLE AVENUE, INSTALLED ON CONCRETE FOOTERS IN GRASS.

SEATING - DUMOR SERIES 168 BENCH

