



AMENDED MAY 26, 2026

STALLINGS STREETSCAPE

DESIGN STANDARDS AND DETAILS PLAN

CONTACT



TOWN OF STALLINGS
315 STALLINGS ROAD
STALLINGS, NC 28104
(704)821-8557



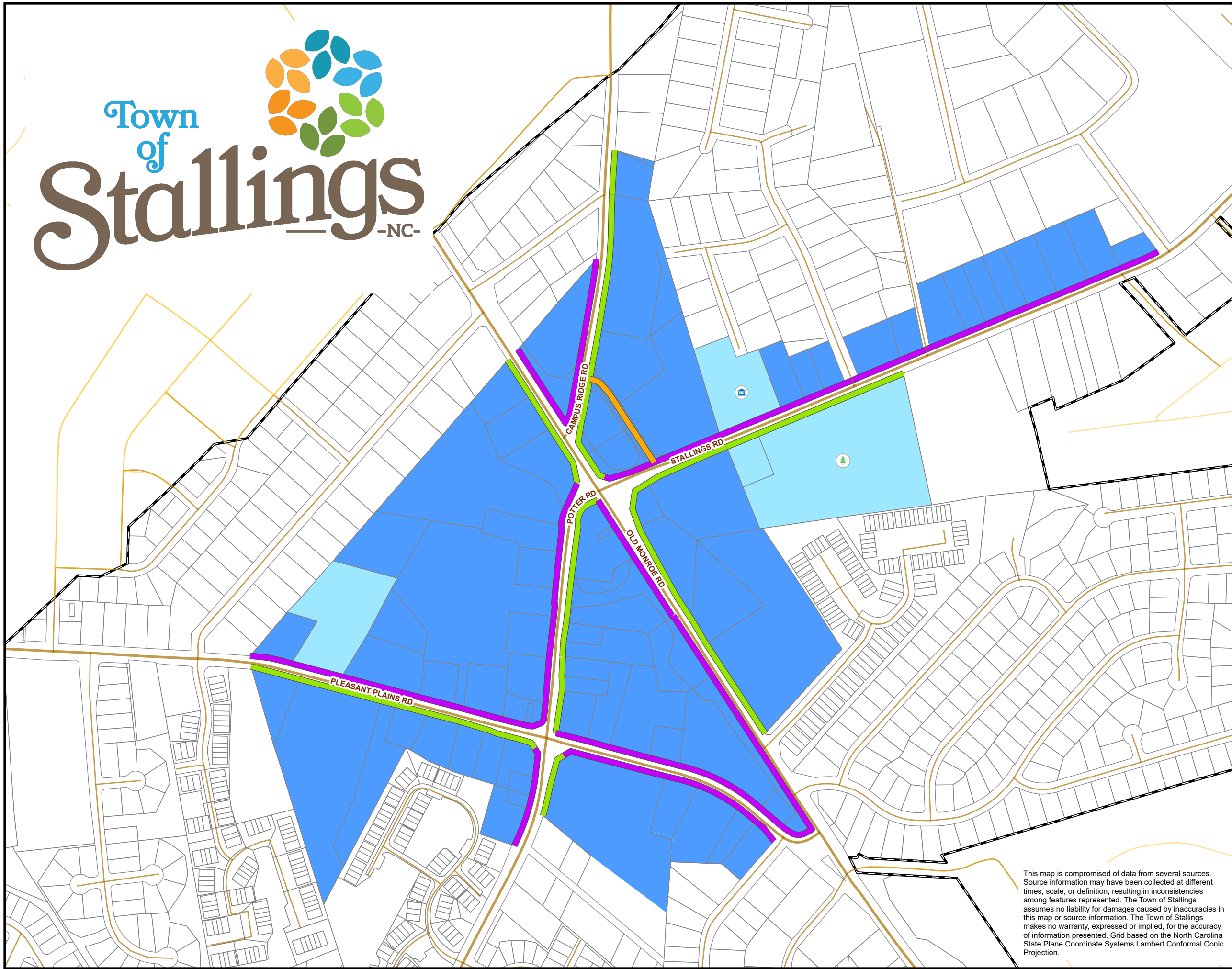
LANDSCAPE ARCHITECT / PROJECT MANAGER: ALEX GOTHERMAN, PLA
DESTINATION BY DESIGN PLANNING
136 FURMAN ROAD, SUITE 6
BOONE, NC 28607
(828)386-1866

CONTENTS

AMENDED MAY 26, 2026

ADD 1	ADDENDUM: MAP OVERVIEW
ADD 2-5	ADDENDUM: NEW STREETSCAPE TYPES
C1-C2	IN ACTION
D1-D8	HARDSCAPE MATERIAL + SITE FURNISHINGS
E1-E10	STREET TREES

NOTE: THE ADDENDUM ESTABLISHES THE REVISED
RECOMMENDED DESIGN STANDARDS FOR THE STALLINGS
STREETSCAPE PLAN.



This map is comprised of data from several sources. Source information may have been collected at different times, scale, or definition, resulting in inconsistencies among features represented. The Town of Stallings assumes no liability for damages caused by inaccuracies in this map or source information. The Town of Stallings makes no warranty, expressed or implied, for the accuracy of information presented. Grid based on the North Carolina State Plane Coordinate Systems Lambert Conformal Conic Projection.

Town Center Streetscape

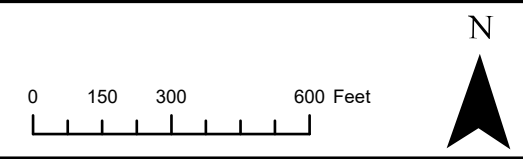
Effective Date:
May 26, 2026

Legend

- Town Hall
- Stallings Park
- Roads
- Town of Stallings
- Streetscape Corridors**
 - Greenway
 - Typical
 - Narrow
- Town Center Area**
 - Town Center (TC)
 - Civic (CIV)

21.1-1 Applicability. Where applicable, the addition of active open space shall adhere to the Stallings Recreation and Greenway Master Plan. The standards set forth below establish regulations for open space. (Amended May 10, 2021) (Amended December 9, 2024)

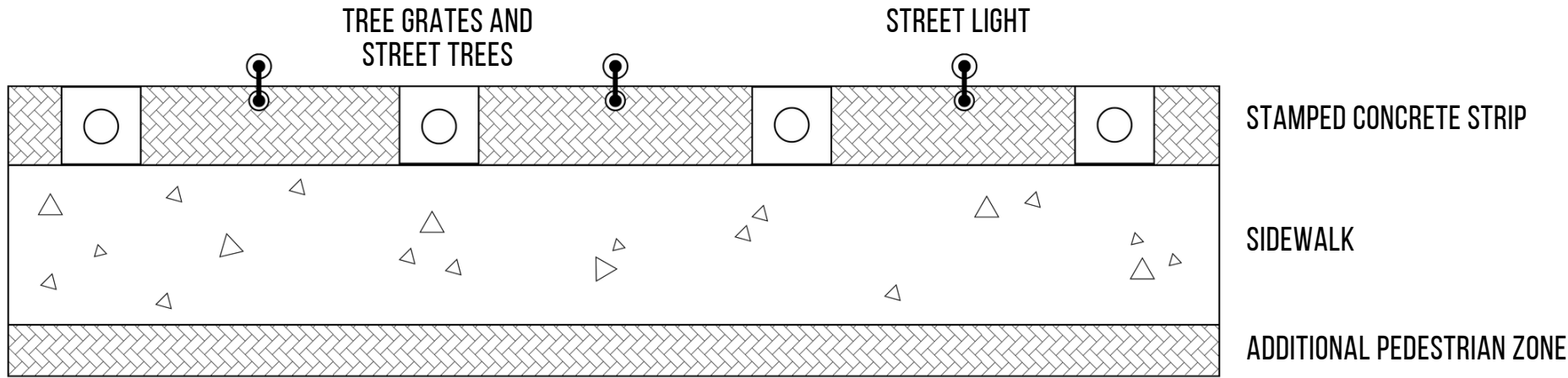
21.4-2 Applicability. This ordinance applies to all new developments identified in the Stallings Streetscape Design Standards and Details Plan area and Town Center (TC) zoning. For purposes of this requirement, "developments" shall mean any development requiring a Major Site Development Plan Review. The Development Administrator will identify the suitable Streetscape Plan type based on the plan and corridor location according to the Town Center Streetscape map. (Amended May 26, 2026)



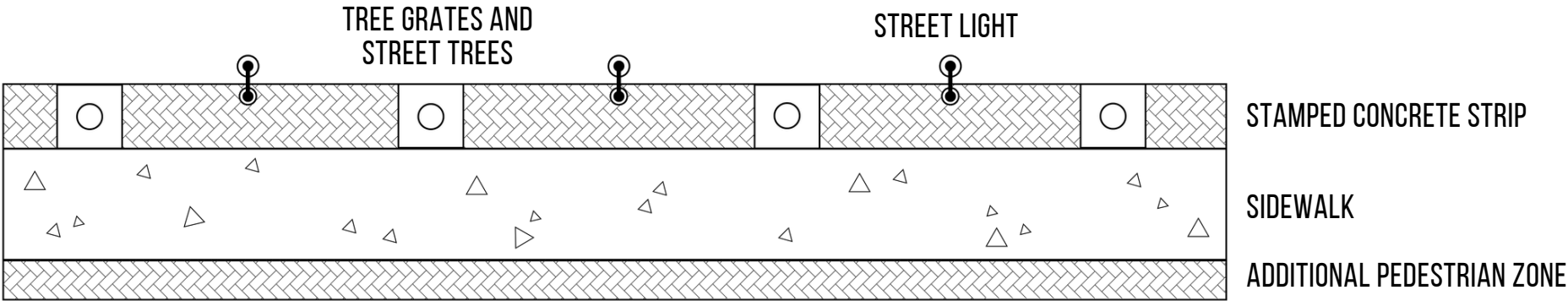
Streetscape type areas are identified by the Development Administrator.

ADD-1

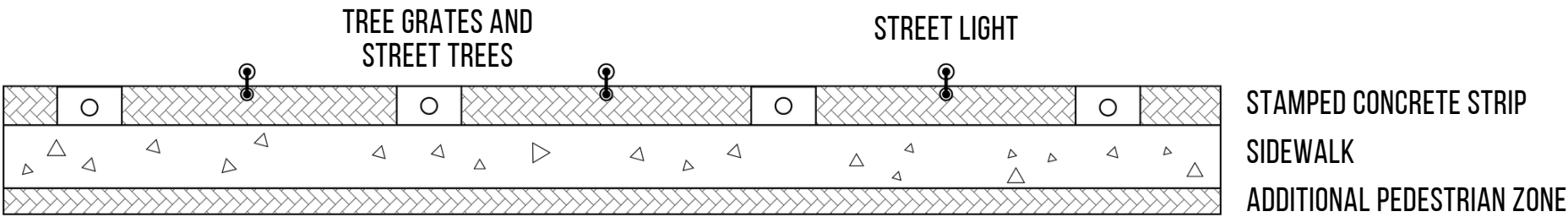
SECTIONS



GREENWAY CORRIDOR



TYPICAL



NARROW

OVERVIEW

- GREENWAY
- PRIMARY CORRIDOR WITH PEDESTRIAN AND GREENWAY SPINE FACILITIES

- TYPICAL
- PRIMARY CORRIDOR WITH PEDESTRIAN-ONLY FACILITIES

- NARROW
- SECONDARY OR INTERIOR ROADS WITH PEDESTRIAN-ONLY FACILITIES

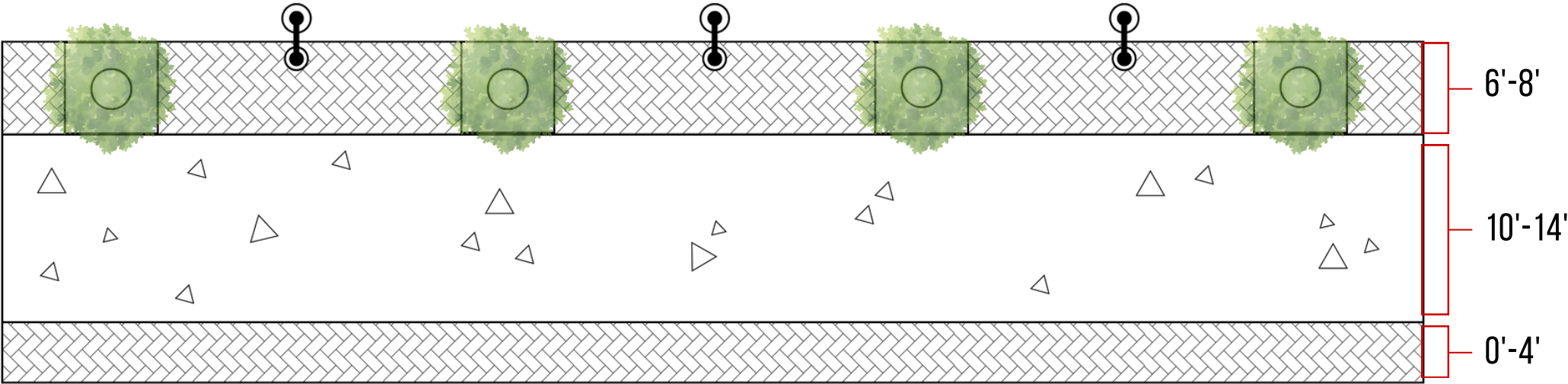
EACH STREETSCAPE TYPE OUTLINES DESIGN STANDARDS FOR AGAINST BUILDING, NOT AGAINST BUILDING, AND LANDSCAPE FORM.

DISCLAIMER: ALL PROPOSED STREET TREES SHALL BE SUBJECT TO FINAL REVIEW AND APPROVAL BY NCDOT AND MAY BE ADJUSTED OR MODIFIED DURING THE NCDOT PERMITTING AND REVIEW PROCESS.

THE DESIGN STANDARDS HAVE BEEN UPDATED TO REPLACE THE PREVIOUSLY REQUIRED PAVER STRIP WITH A STAMPED CONCRETE STRIP.

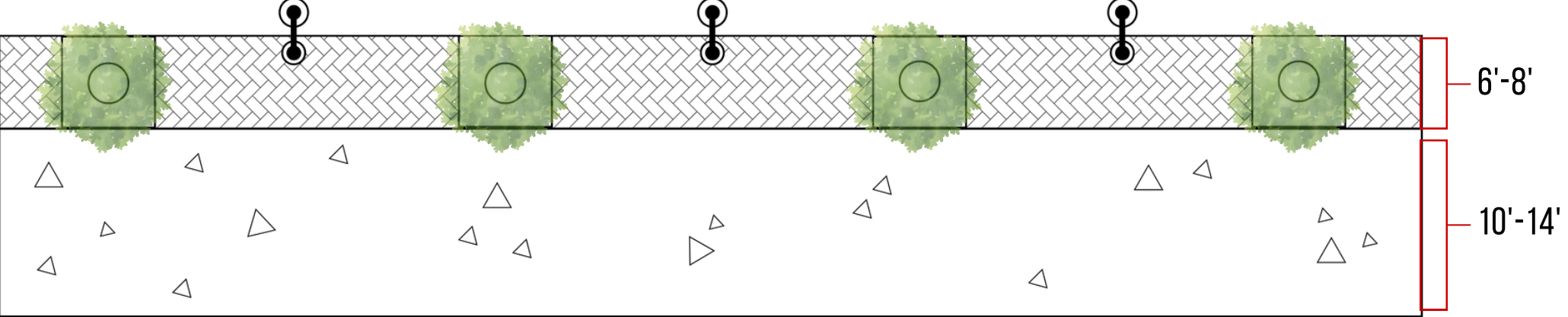
GREENWAY AGAINST BUILDING

STREET



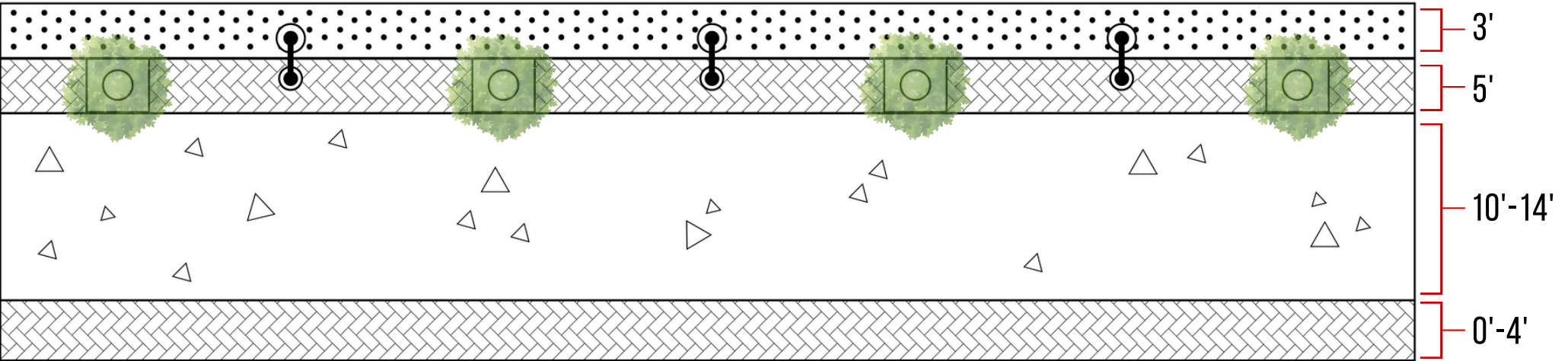
GREENWAY NOT AGAINST BUILDING

STREET



GREENWAY LANDSCAPE FORM

STREET



GREENWAY

- BIKE AND PEDESTRIAN
- PRIMARY CORRIDOR

GREENWAY AGAINST BUILDING

- 6'-8' WIDE STAMPED CONCRETE STRIP
- 10'-14' MULTI-USE PATH
- 0'-4' ADDITIONAL PEDESTRIAN ZONE
- **TOTAL WIDTH: 16'-26'**

GREENWAY NOT AGAINST BUILDING

- 6'-8' WIDE STAMPED CONCRETE STRIP
- 10'-14' MULTI-USE PATH
- **TOTAL WIDTH: 16'-22'**

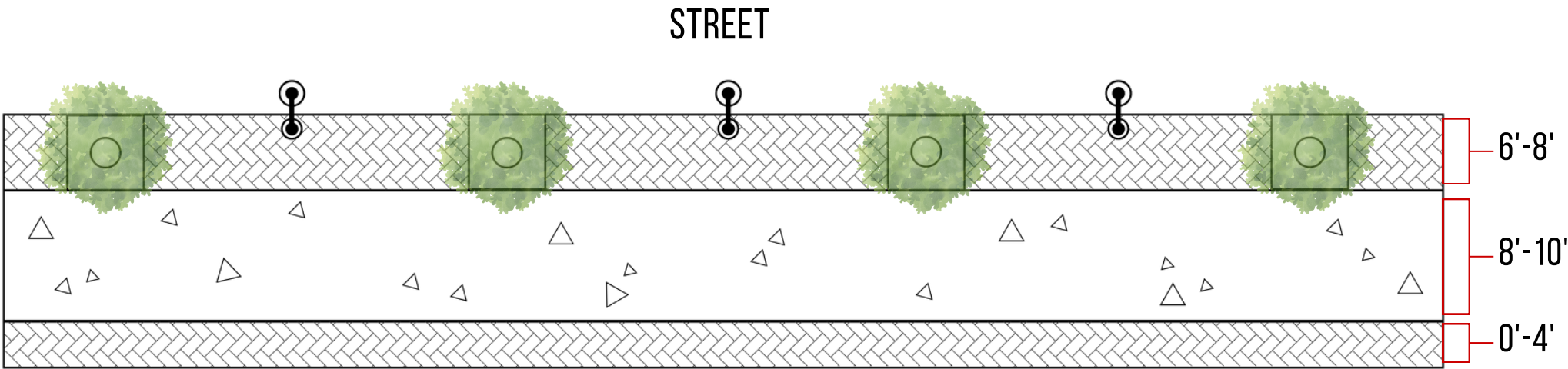
GREENWAY LANDSCAPE FORM

- 3' WIDE LANDSCAPE STRIP
- 5' WIDE STAMPED CONCRETE STRIP
- 10'-14' MULTI-USE PATH
- 0'-4' ADDITIONAL PEDESTRIAN ZONE
- **TOTAL WIDTH: 18'-26'**

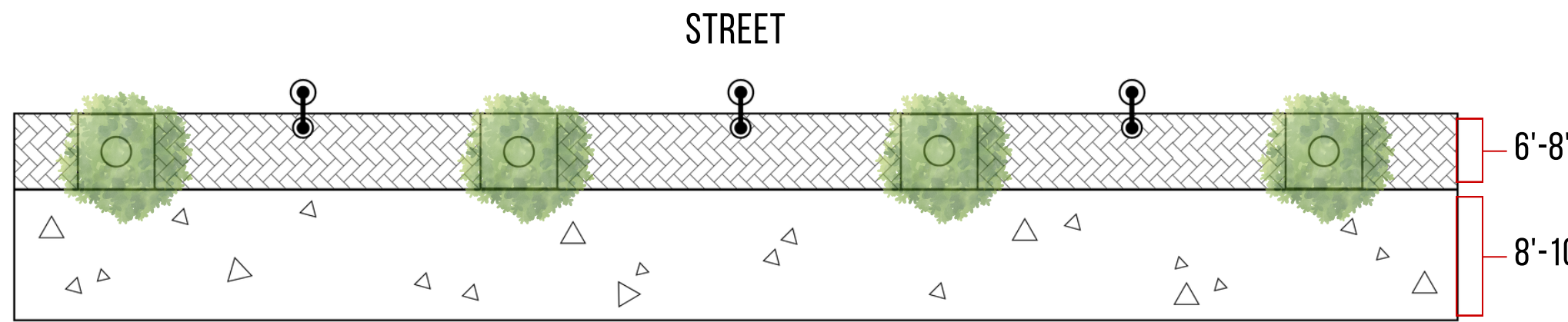
GREENWAY

ADD-3

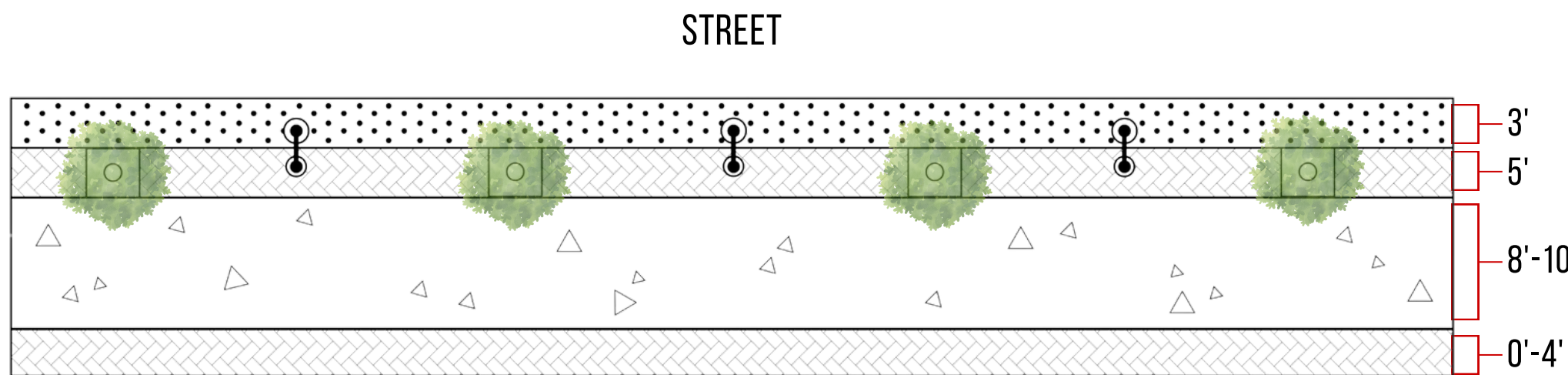
TYPICAL AGAINST BUILDING



TYPICAL NOT AGAINST BUILDING



TYPICAL LANDSCAPE FORM



TYPICAL

- PEDESTRIAN ONLY
- PRIMARY CORRIDOR

TYPICAL AGAINST BUILDING

- 6'-8' WIDE STAMPED CONCRETE STRIP
- 8'-10' MULTI-USE PATH
- 0'-4' ADDITIONAL PEDESTRIAN ZONE
- **TOTAL WIDTH: 14'-22'**

TYPICAL NOT AGAINST BUILDING

- 6'-8' WIDE STAMPED CONCRETE STRIP
- 8'-10' MULTI-USE PATH
- **TOTAL WIDTH: 14'-18'**

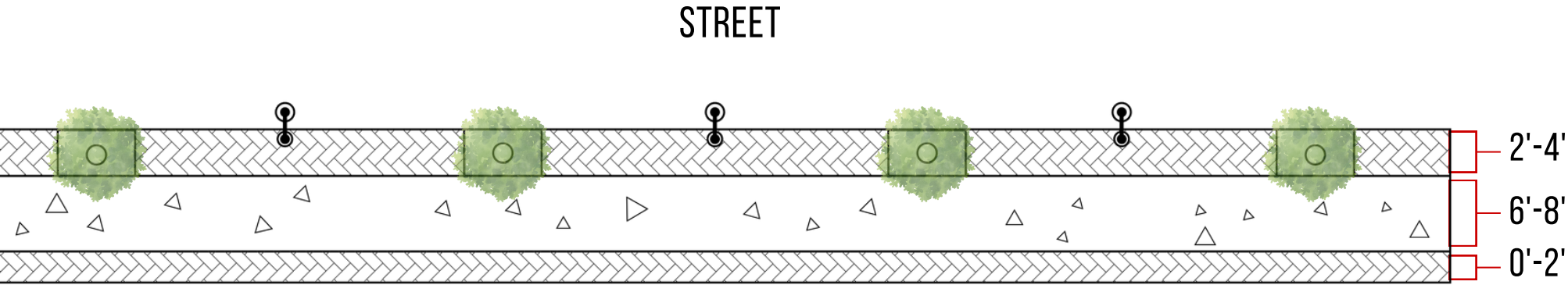
TYPICAL LANDSCAPE FORM

- 3' WIDE LANDSCAPE STRIP
- 5' WIDE STAMPED CONCRETE STRIP
- 8'-10' MULTI-USE PATH
- 0'-4' ADDITIONAL PEDESTRIAN ZONE
- **TOTAL WIDTH: 16'-22'**

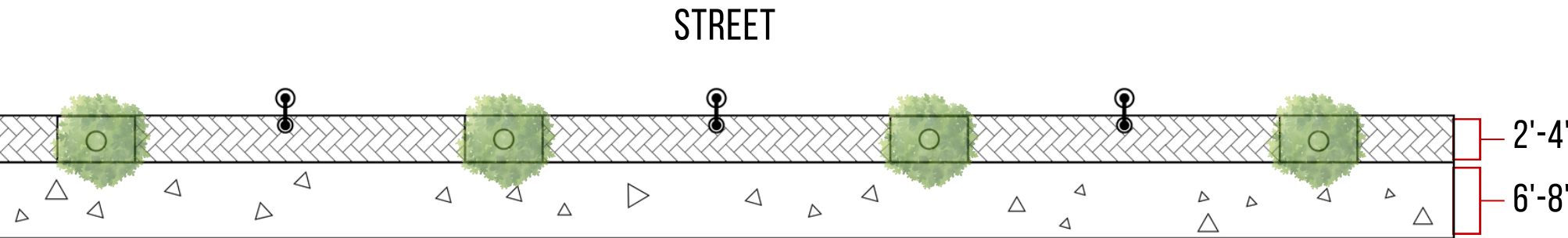
TYPICAL

ADD-4

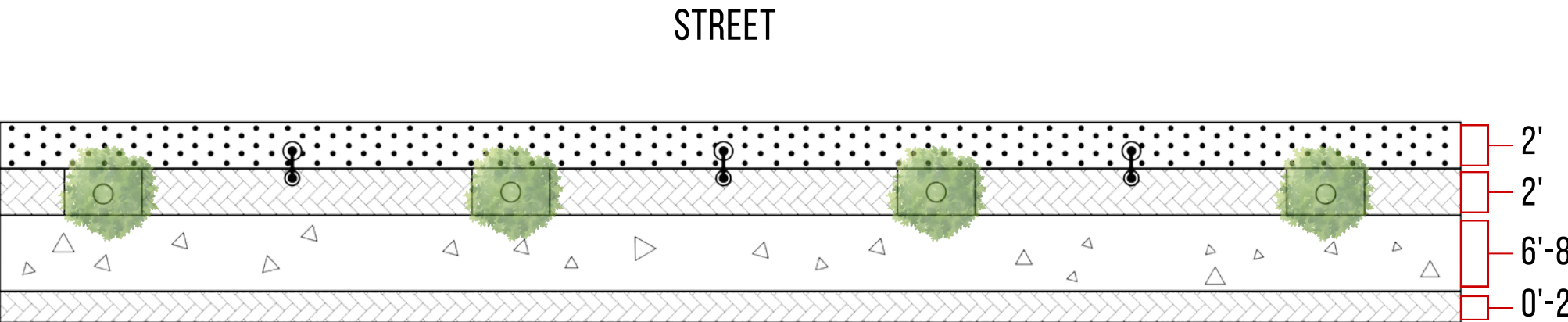
NARROW AGAINST BUILDING



NARROW NOT AGAINST BUILDING



NARROW LANDSCAPE FORM



NARROW

- PEDESTRIAN ONLY
- SECONDARY OR INTERIOR ROADS

NARROW AGAINST BUILDING

- 2'-4" WIDE STAMPED CONCRETE STRIP
- 6'-8" MULTI-USE PATH
- 0'-2" ADDITIONAL PEDESTRIAN ZONE
- **TOTAL WIDTH: 8'-14'**

NARROW NOT AGAINST BUILDING

- 2'-4" WIDE STAMPED CONCRETE STRIP
- 6'-8" MULTI-USE PATH
- **TOTAL WIDTH: 8'-12'**

NARROW LANDSCAPE FORM

- 2' WIDE LANDSCAPE STRIP
- 2' WIDE STAMPED CONCRETE STRIP
- 6'-8" MULTI-USE PATH
- 0'-2" ADDITIONAL PEDESTRIAN ZONE
- **TOTAL WIDTH: 10'-14'**

NARROW

ADD-5



EXISTING CONDITIONS





STREETSCAPE DESIGN STANDARDS

Client: CITY OF STALLINGS 315 STALLINGS ROAD STALLINGS, NC 28104 (704)821-8557	 DESTINATION BY DESIGN PLANNING ENGINEERING COMMUNICATIONS 136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866	Project #: Drawn By: Checked By: Scale: Varies
		Issue 1 Date JULY 2022

DOWNTOWN CORE ALONG STALLINGS ROAD	C-1
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EXISTING CONDITIONS





STREETSCAPE
DESIGN STANDARDS

Client: CITY OF STALLINGS 315 STALLINGS ROAD STALLINGS, NC 28104 (704)821-8557	 DESTINATION <u>BY</u> DESIGN PLANNING ENGINEERING COMMUNICATIONS 136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866	Project #: Drawn By: Checked By: Scale: Varies IssueDate 1JULY 2022
	EXTENSION ROAD WITH STREETSCAPE	C-2



Town of Stallings NC STREETSCAPE DESIGN STANDARDS		
Client: CITY OF STALLINGS 315 STALLINGS ROAD STALLINGS, NC 28104 (704)821-8557	DESTINATION BY DESIGN PLANNING ENGINEERING COMMUNICATIONS 136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866	Project #: Drawn By: Checked By: Scale: Varies Issue 1 Date May 2022
	MATERIALS OVERVIEW	D-1



BREAKWATER BENCH WITH BACK
The Breakwater flat bench is covered by Patent No. Des. D465,936. All other Breakwater pieces are Exclusive By Design™.

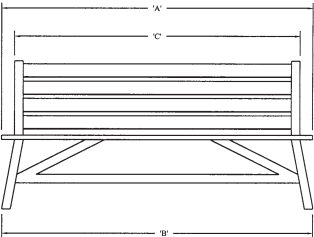
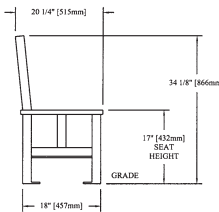
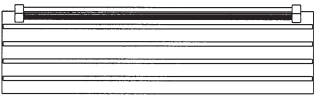
KEYSHIELD® METAL FINISH
The trademarked KEYSHIELD® finish protects each piece of furniture from chipping, cracking, and UVA damage while providing unparalleled corrosion resistance. Steel products are finished with a two-coat powder coating process applied to a 7-15 mil thickness. Substrate preparation includes sandblasting to a white finish to remove all surface contaminants. The raw product then receives a corrosion-inhibiting phosphate coating prior to the application of the powder coating. The first coat applied to the substrate is zinc rich epoxy powder primer used

exclusively on sandblasted parts. The second coat is a colored polyester powder coating. Both coats are electrostatically applied and oven cured according to powder coating manufacturing specifications to create a smooth, satin-like finish and a low-emitting non-porous armor.

FULLY ASSEMBLED UNIT
The Breakwater bench with back is manufactured in the USA as a fully assembled unit to provide ultimate stability and avoid damage during transit to the site, saving time and money.

MATERIALS
Fully-welded commercial-grade steel construction.

	BW24 4ft	BW26 6ft	BW28 8ft
LENGTH (A)	48"	72"	96"
WIDTH	20 1/4"	20 1/4"	20 1/4"
HEIGHT	34 1/8"	34 1/8"	34 1/8"
SEAT HEIGHT	17"	17"	17"
WEIGHT	175 lbs.	200 lbs.	225 lbs.



PROPRIETARY STATEMENT
Keystone Ridge Designs, Inc. is proud to offer the design community exceptional site amenities. Due to the time and resources invested in designing, manufacturing and marketing Keystone Ridge Designs' products and services,

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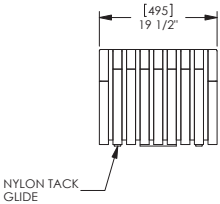
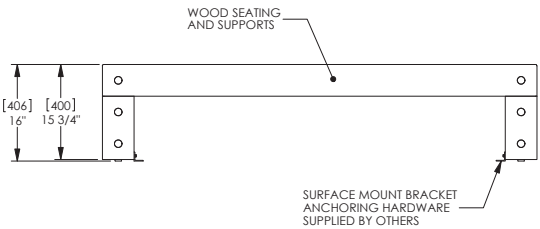
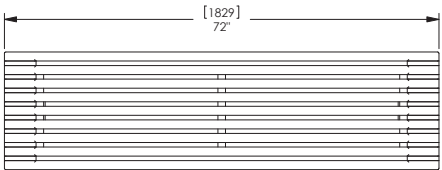


670 Mercer Road | Butler, PA 16001-1840
Toll-free: 1-800-284-8208 | Phone: 724-284-1213 | Fax: 724-284-1253
www.keystoneridgedesigns.com

Palisade Bench, 72", Surface Mount, Backless
Product Drawing

Date: 5/5/2010
Ph: 800.521.2546

www.landscapeforms.com



landscapeforms® Drawing: PS375-02
Dimensions are in inches [mm]

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PRODUCT	BREAKWATER
MANUFACTURER	KEYSTONE RIDGE DESIGNS KEYSTONERIDGEDESIGNS.COM 724.284.1213
LENGTH	6'
FINISH	CHOCOLATE
COST ESTIMATE	\$1455



PRODUCT	PALISADE
MANUFACTURER	LANDSCAPE FORMS LANDSCAPEFORMS.COM 800.430.6209
LENGTH	6' AND 8'
FINISH	THERMALLY MODIFIED ASH
COST ESTIMATE	\$2810 AND \$3270



STREETSCAPE DESIGN STANDARDS

Client:

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315 STALLINGS ROAD
STALLINGS, NC 28104
(704)821-8557



DESTINATION BY DESIGN
PLANNING | ENGINEERING | COMMUNICATIONS

136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866

Project #:

Drawn By:

Checked By:

Scale: Varies

Issue

1

Date

JULY 2022

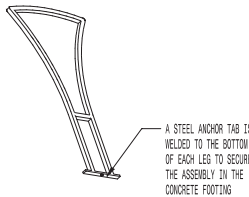
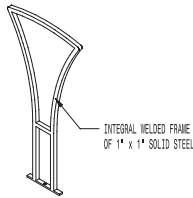
**BENCH
DETAILS**

D-2



* ALL DIMENSIONS ARE IN INCHES

THIS PRODUCT IS COVERED BY ONE OR MORE OF THE FOLLOWING
U.S. PATENTS 0722,921_S



A diagram of a vertical rod. At the top, there is a horizontal cross-section with a central vertical line and two short horizontal lines extending outwards. Below the rod, there is a dashed rectangular box.

MOUNTING
STANDING SURFACE AND IN-GROUND (AS SHOWN)

AVAILABLE OPTIONS:
POWDER COATING
10 STANDARD COLORS, 2 OPTIONAL METALLIC COLORS,
CUSTOM COLORS (INCLUDING THE RAL RANGE)

NOTES:

1. DRAWINGS NOT TO SCALE. DO NOT SCALE DRAWINGS.
2. ALL FABRICATED METAL COMPONENTS ARE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.-K. POLYESTER POWDER COATINGS. PRODUCTS ARE FULLY CLEANED AND PREHEATED, PREHEATED AND COATED WHILE HOT TO FLOW COATINGS AND BUILD COATING FILM. COATED PARTS ARE THEN FULLY COOLED TO COATING MANUFACTURER'S SPECIFICATIONS. THE THICKNESS OF THE RESULTING FILM AVERAGES 8-10 MILS (200-250 MICRONS).
3. THIS VICTOR STANLEY, INC. PRODUCT MUST BE PERMANENTLY AFFIXED TO THE GROUND, CONSULT YOUR LOCAL CODES FOR REGULATIONS. FOR HIGH BALT ABUSE UNITS, HOT-SPOT GALVANIZING BEFORE POWDER COATING IS AVAILABLE. HOT-SPOT GALVANIZING IS PERFORMED FOR VICTOR STANLEY, INC. BY AN EXPERIENCED QUALIFIED FIRM. HOT-SPOT GALVANIZING IS SHIPPED FOR GALVANIZING. HOT-SPOT GALVANIZING INCLUDES AGGRESSIVE PRE-TREATMENT AND IMMERSION IN A TANK OF CHANGED LIQUID ZINC AT OR ABOVE 800°F (480°C). THE RESULTING FILM IS RESISTANT TO RUST BUT HAS SOME UNEVENNESS RESULTING FROM THE BONDING OF THE ZINC TO THE STEEL SURFACE. AS A RESULT, THE POWDER-COATING SURFACE FINISH OVER THAT GALVANIZING MAY EXHIBIT BLOTS, UNEVENNESS, AND MAY NOT BE AS SMOOTH AS THE STANDARD FINISH. THIS UNEVEN AND INCONSISTENT FINISH IS NORMAL. FOR GALVANIZING, CONTACT MANUFACTURER FOR DETAILS.
4. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE. CONTACT MANUFACTURER FOR DETAILS.
5. THIS PRODUCT IS SHIPPED FULLY ASSEMBLED.



BFRE-101

PERENNE

FREESIA BIKE RACK
SHOWN: STANDARD IN-GROUND MOUNT

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REV. 7/2/15 DRAWN R.G.O. 2015-733

A black, stylized, inverted V-shaped logo or symbol. The shape is formed by two thick, curved lines that meet at a sharp point at the bottom. The top of the shape is a horizontal bar that is slightly wider than the base of the V. The overall appearance is that of a thick, black outline of an inverted triangle with curved sides.

STREETSCAPE DESIGN STANDARDS

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(704)821-8557



DESTINATION BY DESIGN

PLANNING | ENGINEERING | COMMUNICATIONS

136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866

Project #:

Drawn By:

Checked By:

Scale: Varies

Issue

1

Date
JULY 2022

JULY 2022

BIKE RACK DETAILS

D-3

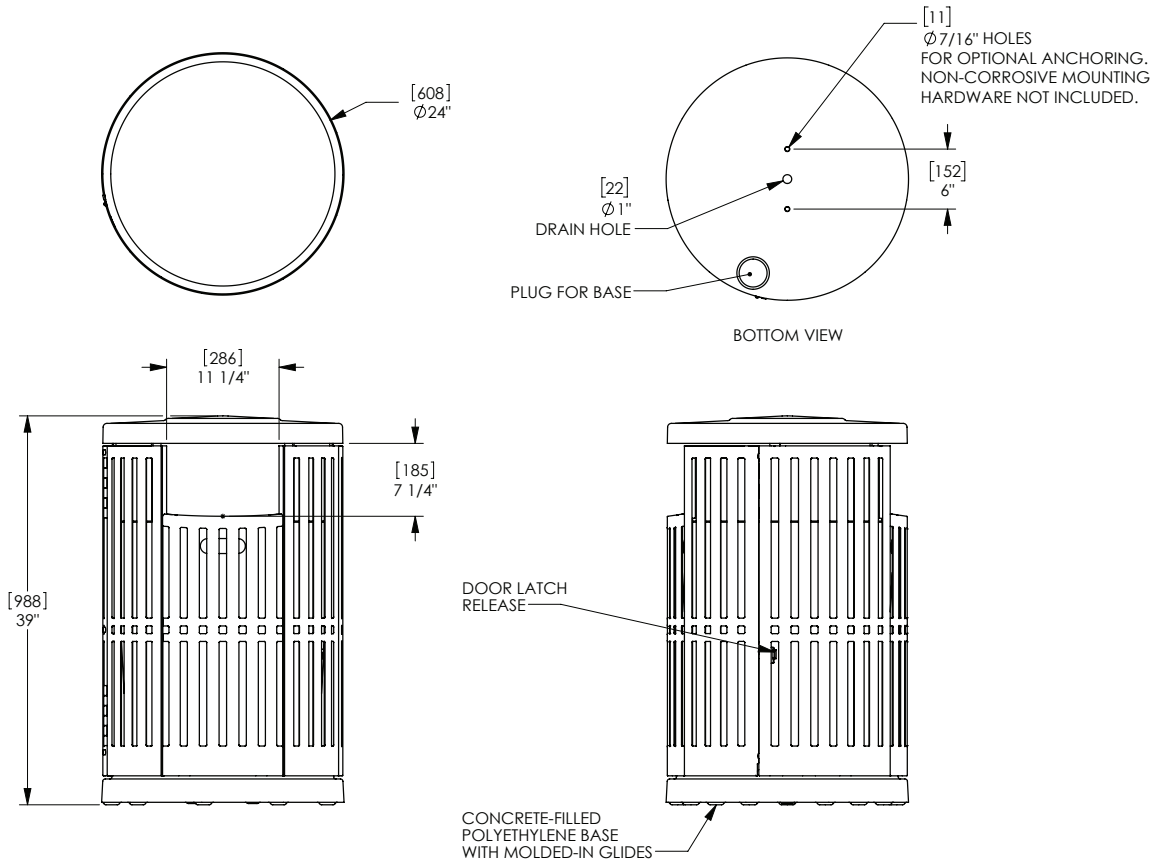
PRODUCT	MFRN-RS1-N5 5” FIXED ROUND STYLE BOLLARD
MANUFACTURER	MAXIFORCE MAXIFORCEBOLLARDS.COM 410.552.9888
FINISH	ROMAN BRONZE MATTE
COST ESTIMATE	\$860-\$925 BASE MOUNT DEPENDENT





STREETSCAPE
DESIGN STANDARDS

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	BOLLARD DETAILS	D-4



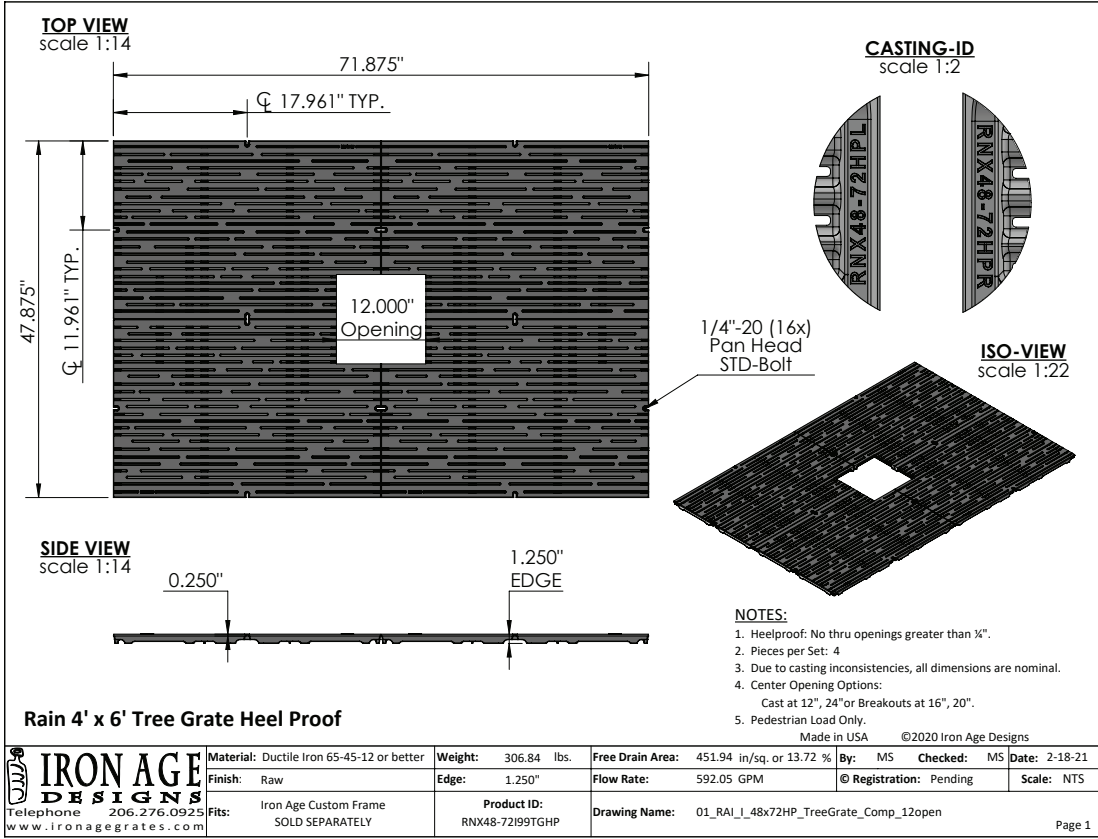
landscapeforms® Drawing: CP362-01
Dimensions are in inches [mm]

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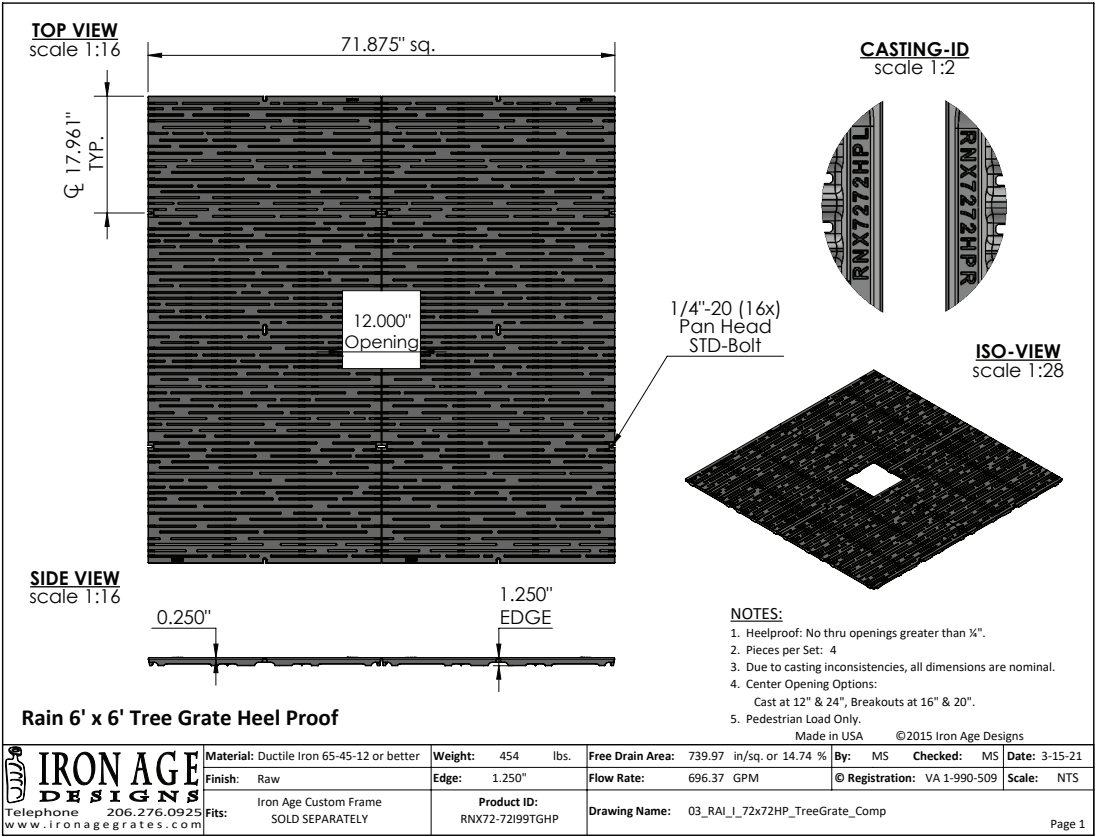
PRODUCT	CHASE PARK LITTER
MANUFACTURER	LANDSCAPE FORMS LANDSCAPEFORMS.COM 800.430.6209
CAPACITY	36-GALLON
FINISH	NUTMEG
COST ESTIMATE	\$1820



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	TRASH RECEPTACLE DETAILS	D-7



PRODUCT	RAIN
MANUFACTURER	IRON AGE DESIGNS IRONAGEGRATES.COM 877.418.3568
SIZE	4'X6'
FINISH	CAST IRON WITH BAKED-ON OIL
COST ESTIMATE	\$1000-2000 + \$300-400 FOR FRAMES



PRODUCT	RAIN
MANUFACTURER	IRON AGE DESIGNS IRONAGEGRATES.COM 877.418.3568
SIZE	6'X6'
FINISH	CAST IRON WITH BAKED-ON OIL
COST ESTIMATE	\$1000-2000 + \$300-400 FOR FRAMES



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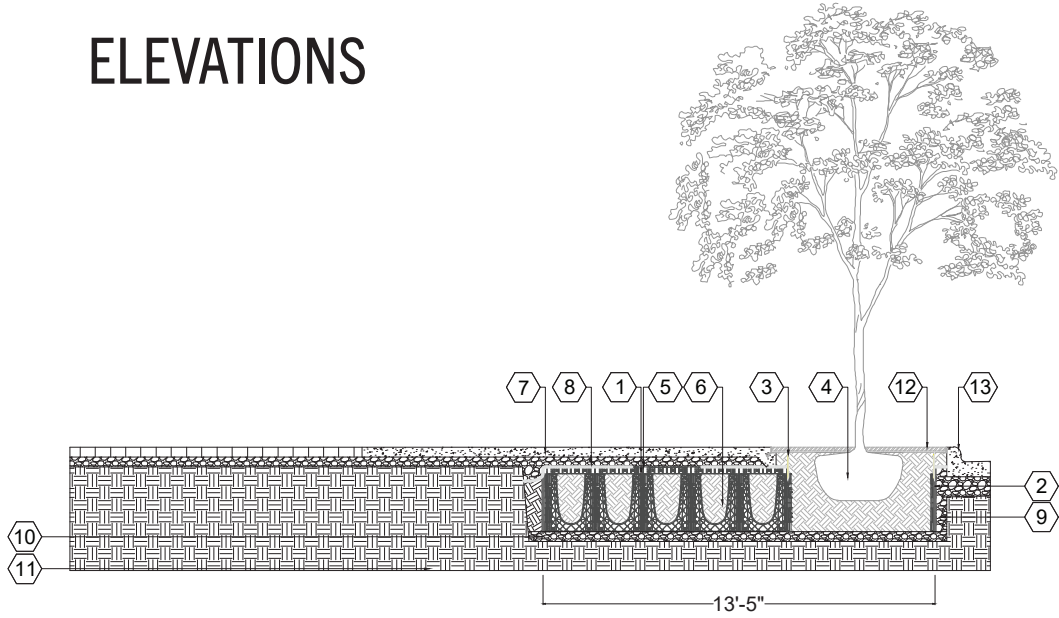
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Drawn By:
Checked By:
Scale: Varies

Issue 1 Date JULY 2022

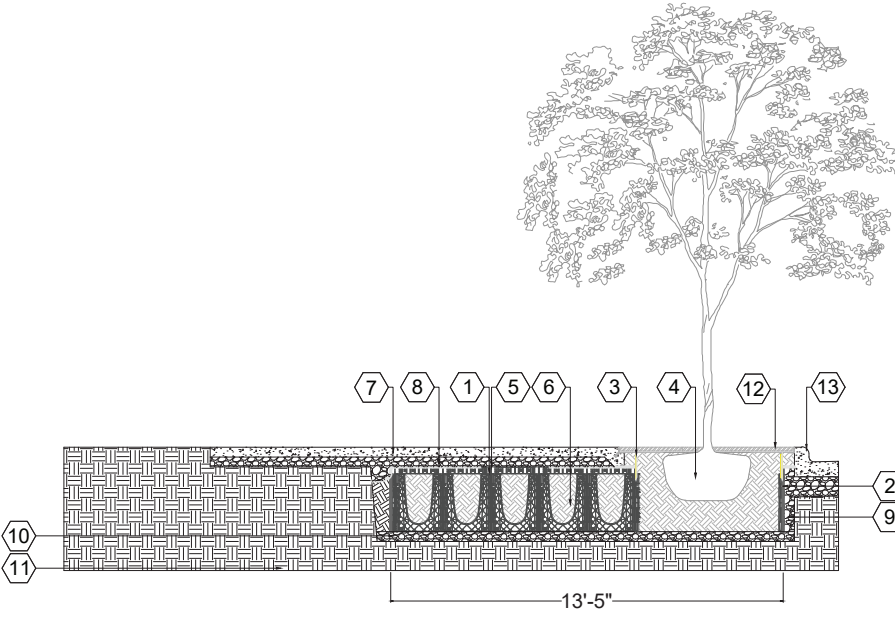
TREE GRATE
DETAILS

D-8

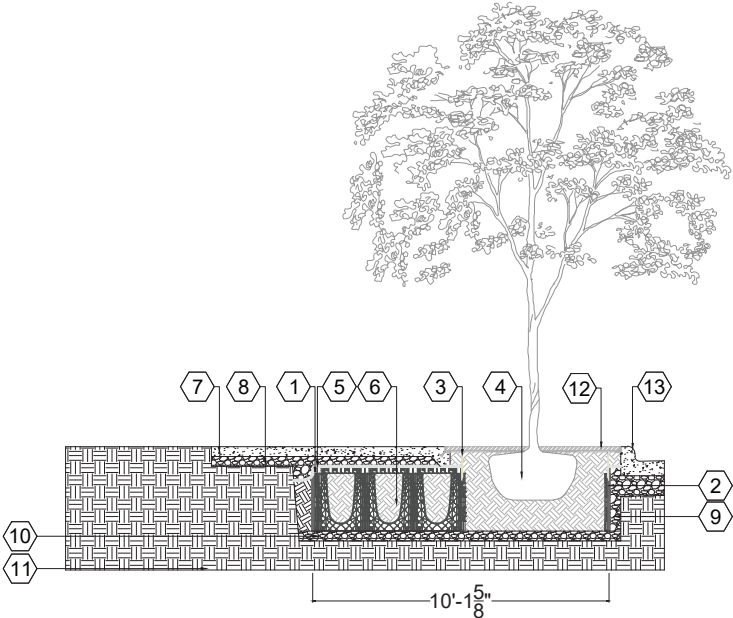
ELEVATIONS



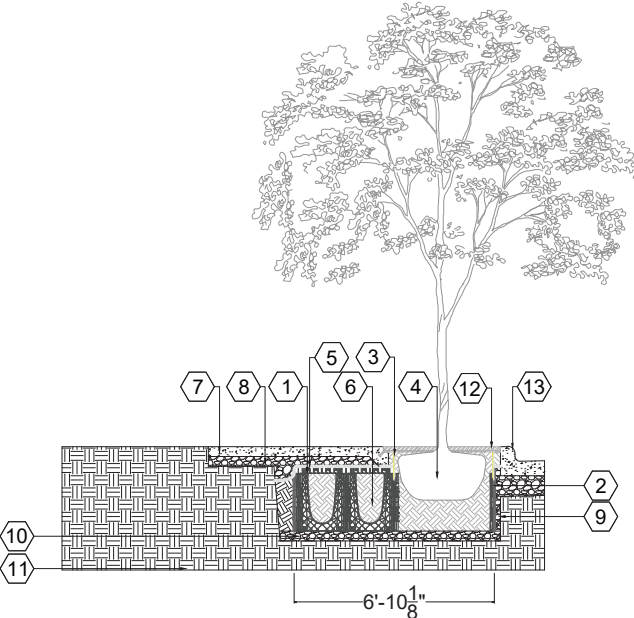
PLAN TYPE 1A



PLAN TYPE 1B



PLAN TYPE 2



PLAN TYPE 3

ARBORSYSTEM® URBAN TREE PLANTING SYSTEM

- 1. RootSpace® 600 Series Soil Cell System (24" depth)
- 2. RootStop™ 600 Root & Moisture Barrier (24" depth)
- 3. ReRoot™ Ribbed Root Barrier (12" depth)
- 4. Tree / Rootball
- 5. CombiGrid® Geocomposite Fabric/Grid
- 6. Planting Soil
- 7. Pavement

- 8. Aggregate Base
- 9. Compacted Backfill Material
- 10. Aggregate Sub-base
- 11. Compacted Native Subgrade
- 12. Tree Grate (optional)
- 13. Curb and Gutter

NOTES:

- SOIL CELLS CAN BE CONFIGURED IN VARIETY OF WAYS DEPENDING ON CONDITIONS AS LONG AS TOTAL ROOT CELL SPACE EQUALS SOIL AMOUNTS OF WITH 400, 600, OR 800 CUBIC FEET.
- SOIL CAPACITY IS DETERMINED PER TREE, SEE FOLLOWING CHARTS FOR MORE DETAILS.
- FOR DESIGN ASSISTANCE CALL 1-865-951-7290 OR EMAIL MATTHEW.WERLE@GREENBLUE.COM.

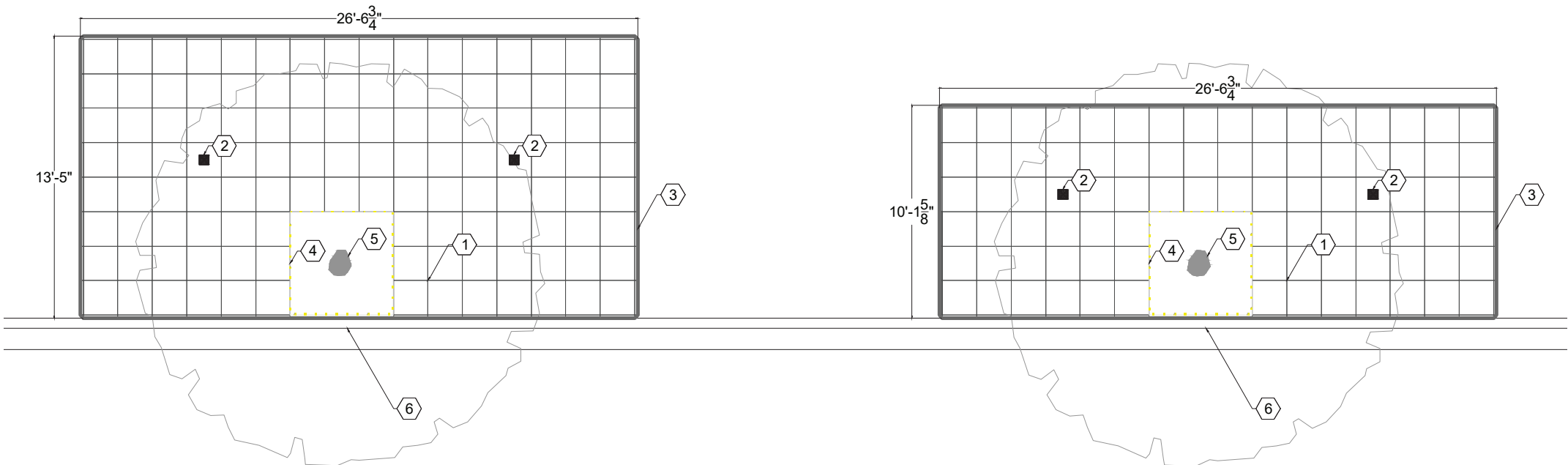


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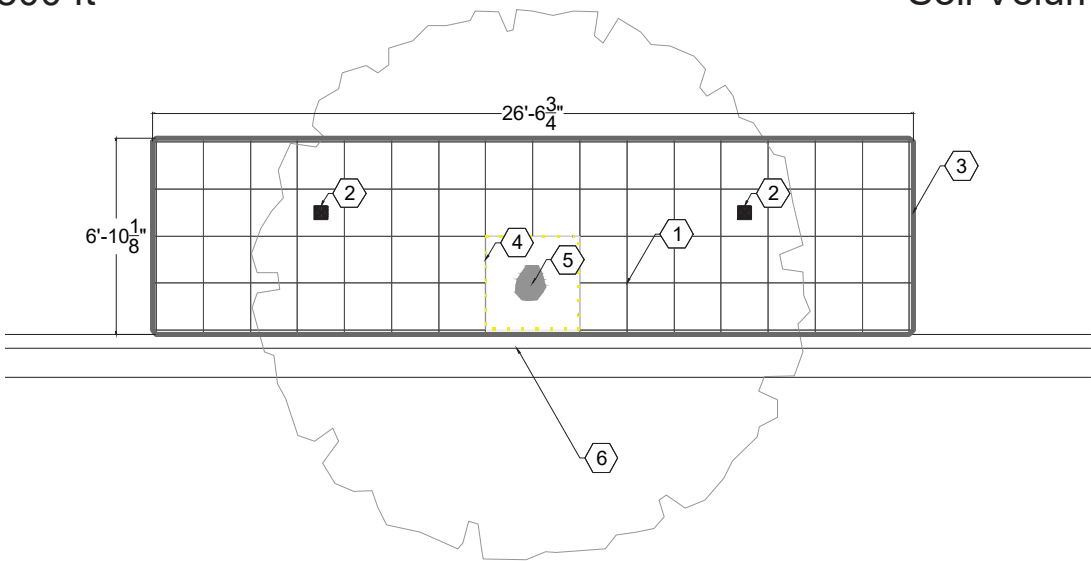
SOIL CELL DETAILS

TREE PIT LAYOUTS



TREE PIT LAYOUT
Soil Volume: 800 ft³

TREE PIT LAYOUT
Soil Volume: 600 ft³



TREE PIT LAYOUT
Soil Volume: 400 ft³

ARBORSYSTEM® URBAN TREE PLANTING SYSTEM

- 1. RootSpace® 600 Series Soil Cell System (24" depth)
- 2. ArborVent™ Aeration/Irrigation Inlet
- 3. RootStop™ 600 Root & Moisture Barrier (24" depth)
- 4. ReRoot™ Ribbed Root Barrier (12" depth)
- 5. Tree
- 6. Curb and Gutter

NOTES:

- SOIL CELLS CAN BE CONFIGURED IN VARIETY OF WAYS DEPENDING ON CONDITIONS AS LONG AS TOTAL ROOT CELL SPACE EQUALS SOIL AMOUNTS OF WITH 400, 600, OR 800 CUBIC FEET.
- SOIL CAPACITY IS DETERMINED PER TREE, SEE FOLLOWING CHARTS FOR MORE DETAILS.
- FOR DESIGN ASSISTANCE CALL 1-865-951-7290 OR EMAIL MATTHEW.WERLE@GREENBLUE.COM.



STREETSCAPE
DESIGN STANDARDS

Client: CITY OF STALLINGS 315 STALLINGS ROAD STALLINGS, NC 28104 (704)821-8557	 DESTINATION <u>BY</u> DESIGN PLANNING ENGINEERING COMMUNICATIONS 136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866	Project #: Drawn By: Checked By: Scale: Varies Issue 1 Date JULY 2022
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1. SUMMARY

TREES IN URBAN ENVIRONMENTS OFTEN DO NOT REACH FULL SPECIES MATURITY DUE TO THE LACK OF SUITABLE SOIL VOLUME. THE ARBORSYSTEM® IS SPECIFICALLY DESIGNED TO PROVIDE THE NECESSARY ELEMENTS FOR GROWING TREES TO THEIR FULL POTENTIAL IN DENSE URBAN ENVIRONMENTS. THE MAIN COMPONENT OF THE ARBORSYSTEM® IS THE ROOTSPACE® SOIL CELL, WHICH IS A LOAD-BEARING, ENGINEERED PLASTIC, STRUCTURAL CELLULAR SYSTEM COMPRISED OF INTERLOCKING VERTICAL UPRIGHTS AND HORIZONTAL DECKS DESIGNED TO ASSEMBLE TO CREATE A MATRIX UNDER PAVEMENTS. THE INTERCONNECTED SKELETAL MATRIX SHALL PROVIDE VOID SPACES TO ACCOMMODATE FILLING WITH PLANTING SOIL FOR TREE ROOTING AND/OR STORING STORMWATER WHILE SUPPORTING VEHICLE LOADED PAVEMENTS AT THE SURFACE. OTHER MATERIALS USED IN CONJUNCTION WITH THE ROOTSPACE® SOIL CELLS INCLUDE, BUT ARE NOT LIMITED TO, GEOTEXTILE FABRIC, GEOGRID, AGGREGATE, SUB-BASE MATERIAL, BACKFILL, ROOT BARRIERS, AND PLANTING SOIL.

2. MATERIALS

ROOTSPACE® SOIL CELLS: SOIL CELLS SHALL BE CAPABLE OF BEING FILLED WITH A VARIETY OF SOIL TYPES CREATED FOR THE PURPOSE OF GROWING HEALTHY TREES AND PROVIDING STORMWATER MANAGEMENT. THEY SHALL BE MODULAR, STRUCTURAL SYSTEMS. EACH CELL SHALL BE CAPABLE OF BEING INSTALLED INDEPENDENTLY AND/OR INTERCONNECTED TO THE ADJOINING CELLS, SHALL ACCOMMODATE UTILITIES, STORMWATER, AND OTHER SITE FEATURES AT A NEW TREE PLANTING SITE. THE CELLS SHALL BE CAPABLE OF SUPPORTING LOADS UP TO AND INCLUDING AASHTO H-20/HS-20, H-25/HS-25 (UNITED STATES), OR CSA-S6 87.5 KN (CANADA) WHEN USED IN CONJUNCTION WITH APPROVED PAVEMENT PROFILES. THE CELLS SHALL BE CAPABLE OF PROVIDING A LARGE VOLUME OF PLANTING SOIL THAT DOES NOT INHIBIT OR PREVENT THE PLACEMENT AND COMPACTION OF PLANTING SOIL, NOR THE MOVEMENT AND GROWTH OF ROOTS. THE CELLS WILL ALLOW THE MOVEMENT OF WATER WITHIN THE PROVIDED SOIL VOLUME, INCLUDING LATERAL CAPILLARY MOVEMENT.

ROOTBALL AERATION/IRRIGATION PIPING SYSTEM: A PERFORATED PIPING SYSTEM SHALL BE USED FOR THE CIRCULATION OF AIR AND DISTRIBUTION OF WATER AND NUTRIENTS AROUND THE TREE ROOTBALL. IT IS CONNECTED TO A SURFACE INLET AT GRADE, TYPICALLY WITHIN THE TREE PIT OPENING.

SOIL AERATION/IRRIGATION SYSTEM: A PIPE AND INLET SYSTEM SHALL BE USED TO PROVIDE A MEANS OF GETTING AIR AND WATER INTO THE SOIL, AND A MEANS OF ALLOWING ORGANIC GASES, FROM THE DECAY OF ORGANIC MATTER WITHIN THE SOIL, TO ESCAPE. IT IS CONNECTED TO A SURFACE INLET AT THE STREET LEVEL.

SUB-DRAINAGE PIPING SYSTEM: AS REQUIRED FOR DRAINAGE OF THE TREE PIT, A PERFORATED UNDER-DRAIN MAY BE CONNECTED TO THE CITY’S STORMWATER SEWER SYSTEM.

SOIL INSPECTION SYSTEM: A VERTICAL PIPING SYSTEM MAY BE INSTALLED TO ALLOW FOR THE SAMPLING AND INSPECTION OF THE SOIL AND/OR WATER LEVELS WITHIN THE SOIL CELL SYSTEM. THIS SYSTEM MAY ALSO BE USED AS A MEANS OF ADDING NUTRIENTS TO THE SOIL.

ROOT AND MOISTURE BARRIER: A LINEAR MEMBRANE MAY BE INSTALLED TO PREVENT ROOT AND MOISTURE PENETRATION AT CERTAIN SPECIFIED LOCATIONS.

ROOT BARRIER: LINEAR ROOT BARRIERS SHALL BE INSTALLED WITH VERTICAL INTEGRAL ROOT TRAINING RIBS AT SPECIFIED LOCATIONS, USUALLY NEAR THE TREE TRUNK AND AT THE SOIL SURFACE.

PLANTING SOIL: A CORRECTLY BALANCED UNSCREENED SOIL MIX SHALL PROVIDE OPTIMUM GROWTH CONDITIONS FOR TREE ROOTS WITHIN THE SOIL CELL-MATRIX AND STORMWATER MANAGEMENT AREA AS NEEDED.

TREE PIT OPENING: A PAVEMENT OPENING SHALL BE PROVIDED WITHIN WHICH A TREE IS PLANTED.

TREE PIT: THE EXCAVATED SPACE SHALL BE FILLED WITH APPROPRIATE SOIL MEDIA FOR TREE PLANTING.





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3. INSTALLATION

PRE-INSTALLATION MEETING: PRIOR TO THE INSTALLATION OF THE SOIL CELL SYSTEM, A MEETING SHALL BE HELD WITH THE GENERAL CONTRACTOR, SOIL CELL SYSTEM INSTALLER, SOIL CELL MANUFACTURER’S TECHNICAL REPRESENTATIVE, THE CITY OR CLIENT REPRESENTATIVE, AND OTHER ENTITIES CONCERNED WITH THE SOIL CELL PERFORMANCE. THE MEETING AGENDA WILL INCLUDE ALL REQUIRED SUBMITTALS, THE SEQUENCE OF INSTALLATION AND THE CONSTRUCTION SCHEDULE, THE COORDINATION WITH OTHERS, AND THE PROCEDURES, DETAILS, AND METHODS OF INSTALLATION.

PRODUCT DATA: FOR EACH TYPE OF PRODUCT, THE MANUFACTURER’S PRODUCT LITERATURE SHALL BE SUBMITTED WITH TECHNICAL DATA SUFFICIENT TO DEMONSTRATE THAT THE PRODUCT MEETS THESE SPECIFICATIONS.

TEST AND EVALUATION REPORTS: THE RESULTS OF COMPACTION TESTING SHALL BE SUBMITTED TO ALL PARTIES INVOLVED WITH THIS PROJECT.

MANUFACTURER’S REPORT: SUBMIT THE MANUFACTURER’S LETTER OF REVIEW AND APPROVAL OF THE PROJECT, INCLUDING SHOP DRAWINGS AND SPECIFICATIONS.

INSTALLER: THE WORK SHALL BE PERFORMED BY AN EXPERIENCED INSTALLER WITH A SUCCESSFUL TRACK RECORD IN PERFORMING WORK OF THE SAME SCOPE AND QUALITY AS REQUIRED BY THESE SPECIFICATIONS.

BULK MATERIALS: DO NOT DELIVER OR PLACE BACKFILL, SOILS, OR SOIL AMENDMENTS IN FROZEN, WET, OR MUDDY CONDITIONS. BEFORE PROCEEDING WITH FULL-SCALE EXCAVATION WORK, CONFIRM THE EXISTING SOIL QUALITY AND CONDITION. ALSO, DETERMINE THE DRAINAGE CHARACTERISTICS OF THE EXISTING SOIL.

SOIL CELL INSTALLATION: THE SOIL CELL SYSTEM COMPONENTS SHALL BE PROTECTED FROM DAMAGE DURING DELIVERY, STORAGE, AND HANDLING. THEY SHALL BE INSTALLED BY THE APPROPRIATE INSTALLER IN STRICT ACCORDANCE WITH THE MANUFACTURER’S WRITTEN INSTRUCTIONS AND INSTALLATION DIAGRAMS, THE MANUFACTURER’S REPRESENTATIVE, AND PROCEDURES REQUIRED BY THE MANUFACTURER. THE INSTALLER SHALL ENSURE THAT THE MODULES IN CONTACT WITH THE GRANULAR BASE COURSE ARE FIRMLY SEATED, WITH NO ROCKING. THE INSTALLER SHALL ENSURE THAT THE MODULE COMPONENTS ARE MECHANICALLY INTERCONNECTED. ALL DIMENSIONS, QUANTITIES, AND GRADE ELEVATIONS SHALL BE CHECKED AND VERIFIED. IF REQUIRED, INSTALL ROOT BARRIERS AS SHOWN ON THE DRAWINGS. VERIFY THE LOCATION OF ABOVE AND BELOW GROUND UTILITY LINES, INFRASTRUCTURE, OTHER IMPROVEMENTS, AND EXISTING TREES, SHRUBS, AND PLANTS TO REMAIN INCLUDING THEIR ROOT SYSTEMS. IN ADDITION, REFER TO THE MANUFACTURER’S INSTALLATION MATERIALS TO ENSURE THE SAFE AND PROPER INSTALLATION OF THE SYSTEM. IN NO CASE SHALL THE SOIL BE COMPACTED AFTER INSTALLATION WITHIN THE SOIL CELLS.

CONFLICTS: IF CONFLICTS ARISE DURING INSTALLATION, STOP WORK, AND NOTIFY ALL THE ENTITIES INVOLVED IN THE PROJECT, IN WRITING, OF THE PROBLEM, AND MAKE RECOMMENDATIONS FOR ACTION. PROCEED WITH WORK ONLY WHEN ACTION IS APPROVED IN WRITING.

4. CLEAN UP

THE CONTRACTOR SHALL PERFORM CLEAN UP DURING INSTALLATION AND UPON COMPLETION OF EACH PHASE OF THE WORK. MAINTAIN THE SITE FREE OF SOIL, SEDIMENT, TRASH, AND DEBRIS. REMOVE EXCESS SOIL MATERIALS, DEBRIS, AND EQUIPMENT FROM THE SITE FOLLOWING COMPLETION OF EACH PHASE OF THE WORK. REPAIR DAMAGE TO ADJACENT MATERIALS AND SURFACES RESULTING FROM THE INSTALLATION OF THIS WORK USING MECHANICS SKILLED IN REMEDIAL WORK OF THE CONSTRUCTION TYPE AND TRADES AFFECTED.



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SOIL CELL DETAILS

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COMMON NAME	BLACK OAK	SOUTHERN RED OAK	WHITE OAK
SCIENTIFIC NAME	QUERCUS COCCINEA	QUERCUS FALCATA	QUERCUS ALBA
HEIGHT	50'-80'	70'-80'	50'-135'
WIDTH	45'-78'	60'-70'	50'-80'
WHY THIS TREE?	• YELLOW FALL COLOR • DROUGHT TOLERANT • HIGH WILDLIFE VALUE • NATIVE	• RED FALL COLOR • DROUGHT TOLERANT • HIGH WILDLIFE VALUE • NATIVE	• BURGUNDY FALL COLOR • DROUGHT TOLERANT • HIGH WILDLIFE VALUE • NATIVE
SOIL CELL CAPACITY	800 CF	800 CF	800 CF

NOTE:

- ALL ARE CONSIDERED A “LARGE TREE” BY NCDOT BECAUSE TRUNK CALIPER EXCEEDS 4” DIAMETER
- NOT SUITABLE FOR PLANTING BENEATH POWER LINES DUE TO HEIGHT



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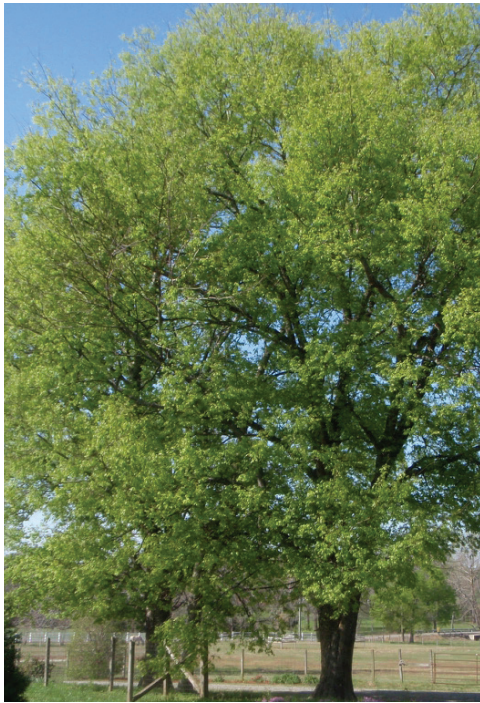
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APPROVED TREES

E-5



NOTE:

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- NOT SUITABLE FOR PLANTING BENEATH POWER LINES DUE TO HEIGHT

COMMON NAME	TULIP POPLAR	AMERICAN HACKBERRY	SUGARBERRY
SCIENTIFIC NAME	LIRIODENDRON TULIPIFERA	CELTIS OCCIDENTALIS	CELTIS LAEVIGATA
HEIGHT	65’-90’	40’-100’	50’-70’
WIDTH	45’-60’	40’-60’	30’-60’
WHY THIS TREE?	• YELLOW FALL COLOR • SUITED FOR MOIST CONDITIONS • HIGH WILDLIFE VALUE • NATIVE	• PERFORMS WELL UNDER ADVERSE CONDITIONS • NATIVE • FLOWERS > SMALL FRUIT	• WIDE SOIL TOLERANCE • NATIVE • TOLERANT OF SOIL COMPACTION + URBAN CONDITIONS • FLOWERS > SMALL FRUIT
SOIL CELL CAPACITY	800 CF	800 CF	600 CF



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APPROVED TREES

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COMMON NAME	ZELKOVA	YELLOWWOOD	EUROPEAN HORNBEAM	KENTUCKY COFFEE
SCIENTIFIC NAME	ZELKOVA SERRATA 'GREEN VASE'	CLADRASTIS KENTUKEA	CARPINUS BETULUS	GYMNOCLADUS DIOICUS
HEIGHT	60'-80'	30'-50'	40'-60'	60'-75'
WIDTH	40'-50'	30'-50'	30'-40'	40'-50'
WHY THIS TREE?	• RESISTANCE TO DUTCH ELM DISEASE • DROUGHT TOLERANT • EASY LEAF CLEANUP IN FALL	• WHITE FLOWERS > DRY SEED PODS • HIGH WILDLIFE VALUE • NATIVE	• SUITED FOR NARROW PLANTING STRIPS	• WIDE SOIL TOLERANCE • DROUGHT TOLERANT • WHITE FLOWER > DRY SEED PODS • NATIVE
SOIL CELL CAPACITY	800 CF	600 CF	800 CF	800 CF

NOTE:

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APPROVED TREES

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COMMON NAME	WILLOW OAK	RED MAPLE	SHUMARD OAK
SCIENTIFIC NAME	QUERCUS PHELLOS	ACER RUBRUM	QUERCUS SHUMARDII
HEIGHT	50'-80'	40'-120'	50'-70'
WIDTH	30'-40'	30'-50'	30'-40'
WHY THIS TREE?	• THE “MYERS PARK TREE” • YELLOW FALL COLOR • HIGH WILDLIFE VALUE • NATIVE	• RED FALL COLOR • WIDE SOIL TOLERANCE • NATIVE	• RED FALL COLOR • DROUGHT TOLERANT • HIGH WILDLIFE VALUE • NATIVE
SOIL CELL CAPACITY	600 CF	600 CF	800 CF

NOTE:

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APPROVED TREES

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COMMON NAME	EASTERN REDBUD	JAPANESE FLOWERING CHERRY	AMERICAN HORNBEAM
SCIENTIFIC NAME	CERCIS CANADENSIS	PRUNUS X YEDOENSIS	CARPINUS CAROLINIANA
HEIGHT	20’-30’	25’-30’	20’-30’
WIDTH	25’-35’	20’-35’	20’-35’
WHY THIS TREE?	• PINK FLOWERS > DRY SEED PODS • NATIVE • HIGH WILDLIFE VALUE • SUITED TO MOIST SOILS	• PINK FLOWERS > SMALL FRUIT	• NATIVE • TOLERATES FLOODING AND SHADE • WHITE FLOWERS > DRY SEED PODS
SOIL CELL CAPACITY	400 CF	600 CF	600 CF

NOTE:

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- SUITABLE FOR PLANTING BENEATH POWER LINES DUE TO HEIGHT



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	APPROVED TREES	E-9



COMMON NAME	FRINGE TREE	GREEN HAWTHORNE
SCIENTIFIC NAME	CHIONANTHUS RETUSUS	CRATAEGUS VIRIDIS 'WINTER KING'
HEIGHT	15'-25'	20'-35'
WIDTH	10'-20'	20'-35'
WHY THIS TREE?	• WIDE SOIL TOLERANCE • WHITE FLOWERS > SMALL FRUIT	• "BALLANTYNE TREE" • LARGELY SPINELESS • WIDE SOIL TOLERANCE • WHITE FLOWERS > SMALL ATTRACTIVE FRUIT
SOIL CELL CAPACITY	600 CF	600 CF

NOTE:

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APPROVED TREES

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