



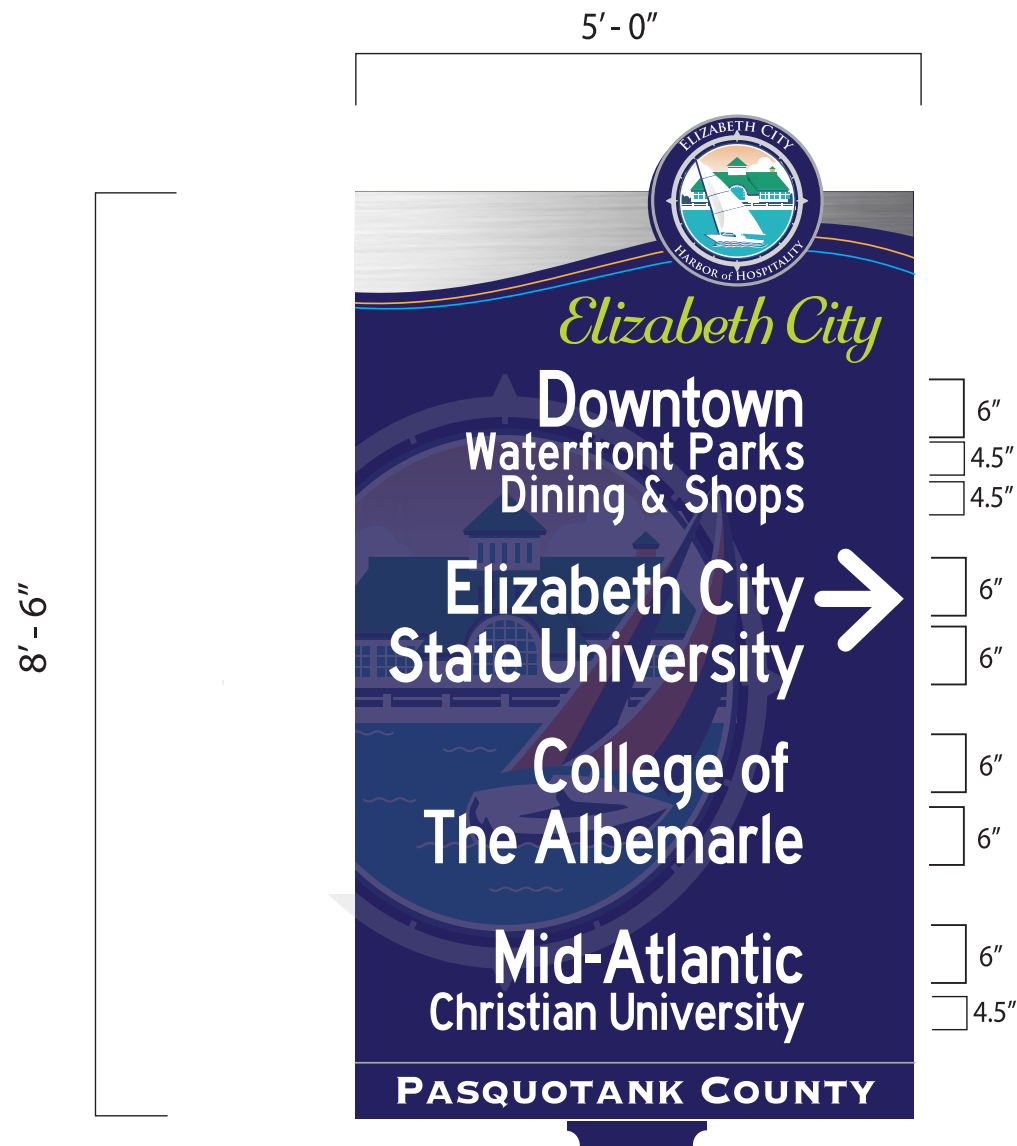
Wayfinding Program / NCDOT Approval Package
Town of Elizabeth City, NC
Phase One #327-2020



May 19, 2020 / Bizzell Design, Inc.

Boulevard Wayfinding / Lettering and Message guidelines / Breakaway Mounting Guidelines

NOTE: ALL DESTINATIONS LISTED ARE CITY OR COUNTY OWNED OR MANAGED PUBLIC, ART, EDUCATIONAL AND CULTURAL FACILITIES.



3M™ Diamond Grade™ DG³ Reflective Sheeting Series 4000 is digitally printed per manufacturers specifications.

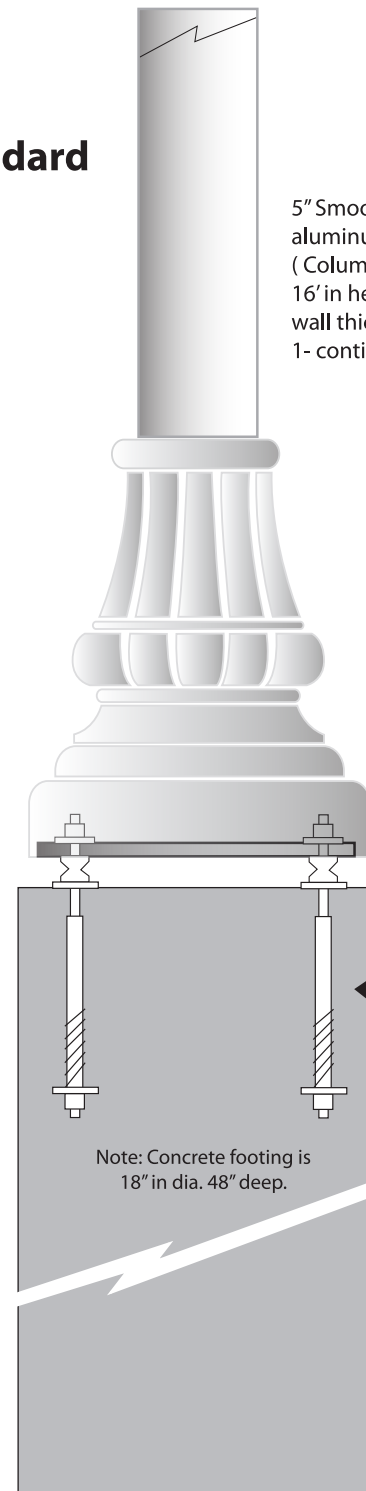
MUTCD Lettering is Highway Gothic
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 1234567890

MUTCD Letter height guidelines:

The principal legend on guide signs shall be in letters and numerals at least 6 inches in height for all uppercase letters and 4.5 inches in height for lower-case letters.

For signs on lower volume streets with speed limit at 25mph or below 4 inches in height.

Standard

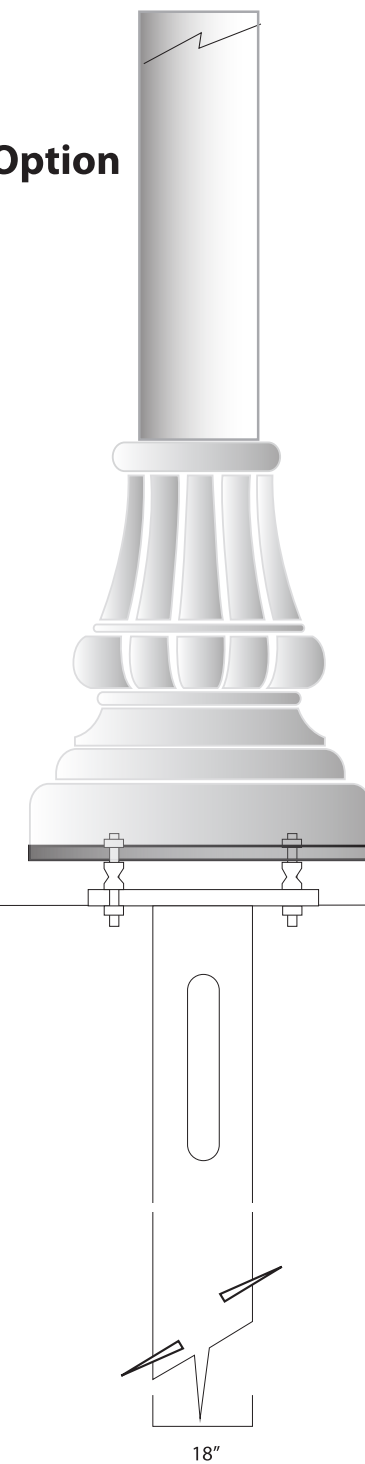


5" Smooth round aluminum pole. (Columbia Series) 16' in height. Has 1/4" wall thickness and is 1-continuous casting.

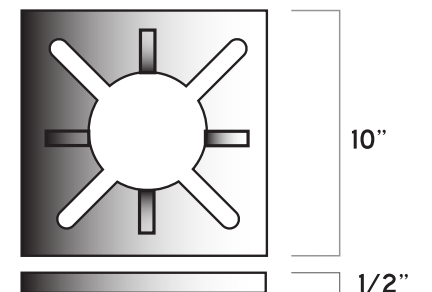
5/8" Dent Breakaway bolt (DB-6878) is tested and approved as fully compliant with NCHRP Report 350.

Note: Concrete footing is 18" in dia. 48" deep.

Option

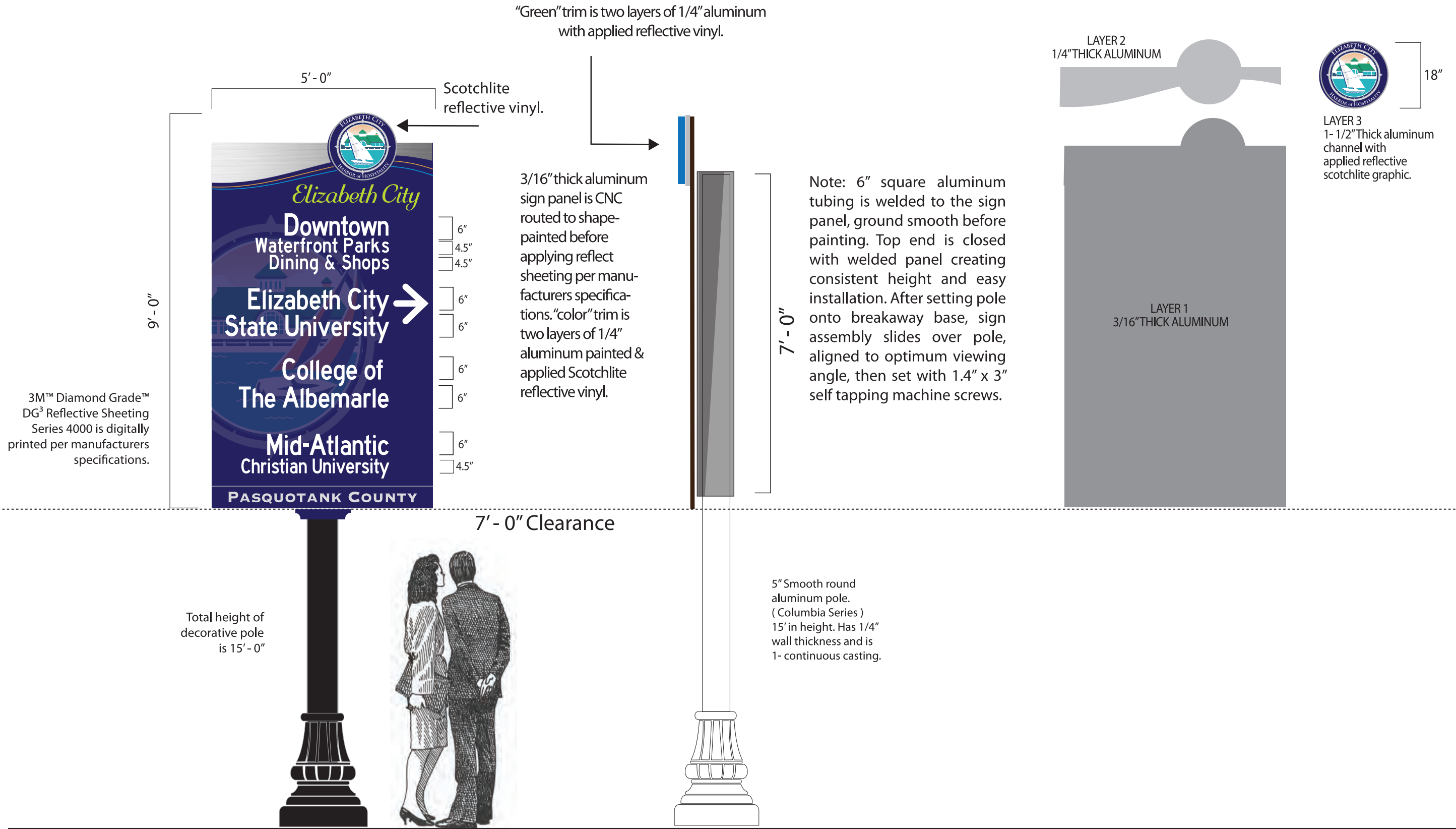


Note: MUTCD approved breakaway bolts must be used to mount wayfinding pole to foundation assembly.



Note: Steel foundation plate is 1/2" thick. Base plate on sign is 1/2" aluminum and matches dimensions.

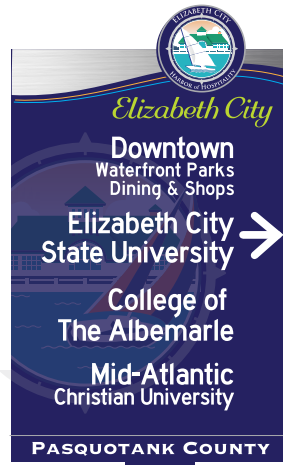
Boulevard Wayfinding/ Fabrication Details



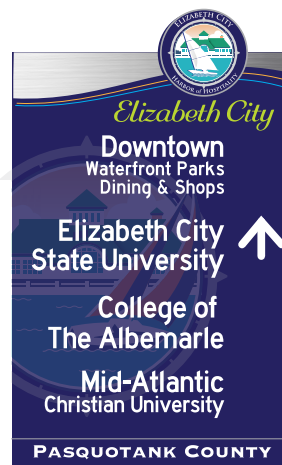
27 Signs Required.

Boulevard Wayfinding/ Messaging

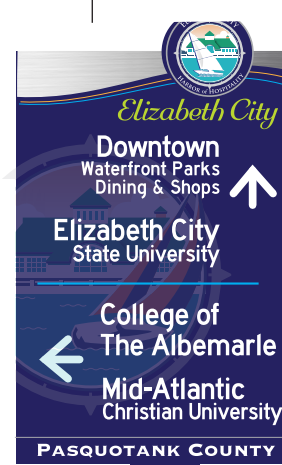
Note: Signs 3&4 are designed to lead visitors to lodging destinations then downtown via Eringhaus to the Visitor Center and the best parking. Sign 5 picks up the left turn.



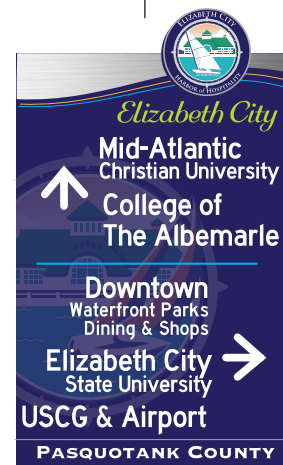
1 & 1A Left Arrow



2



3



4



5



6



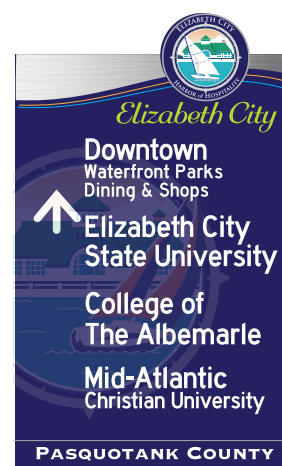
7



8



9



10



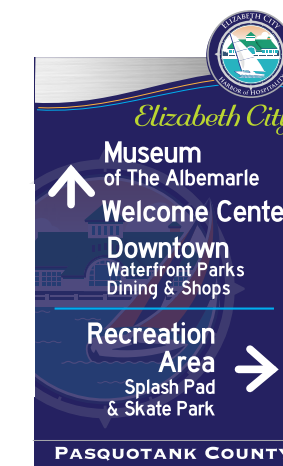
11



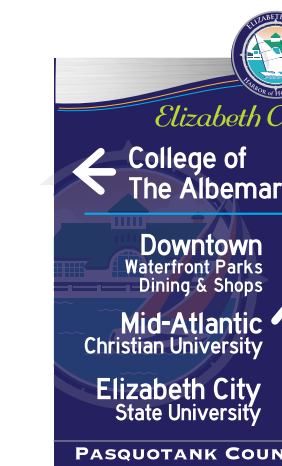
12



13



14



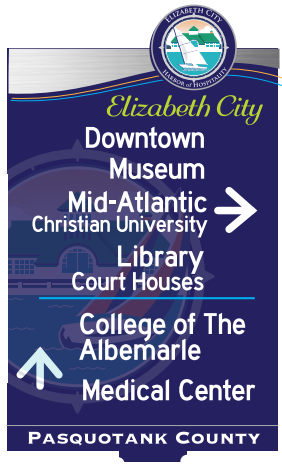
15



17



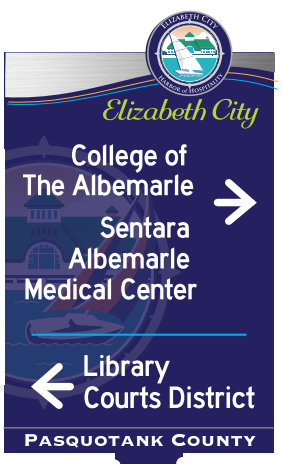
19 Very crowded messaging NCDOT may kick out a destination.



20



21



22



23



24



25

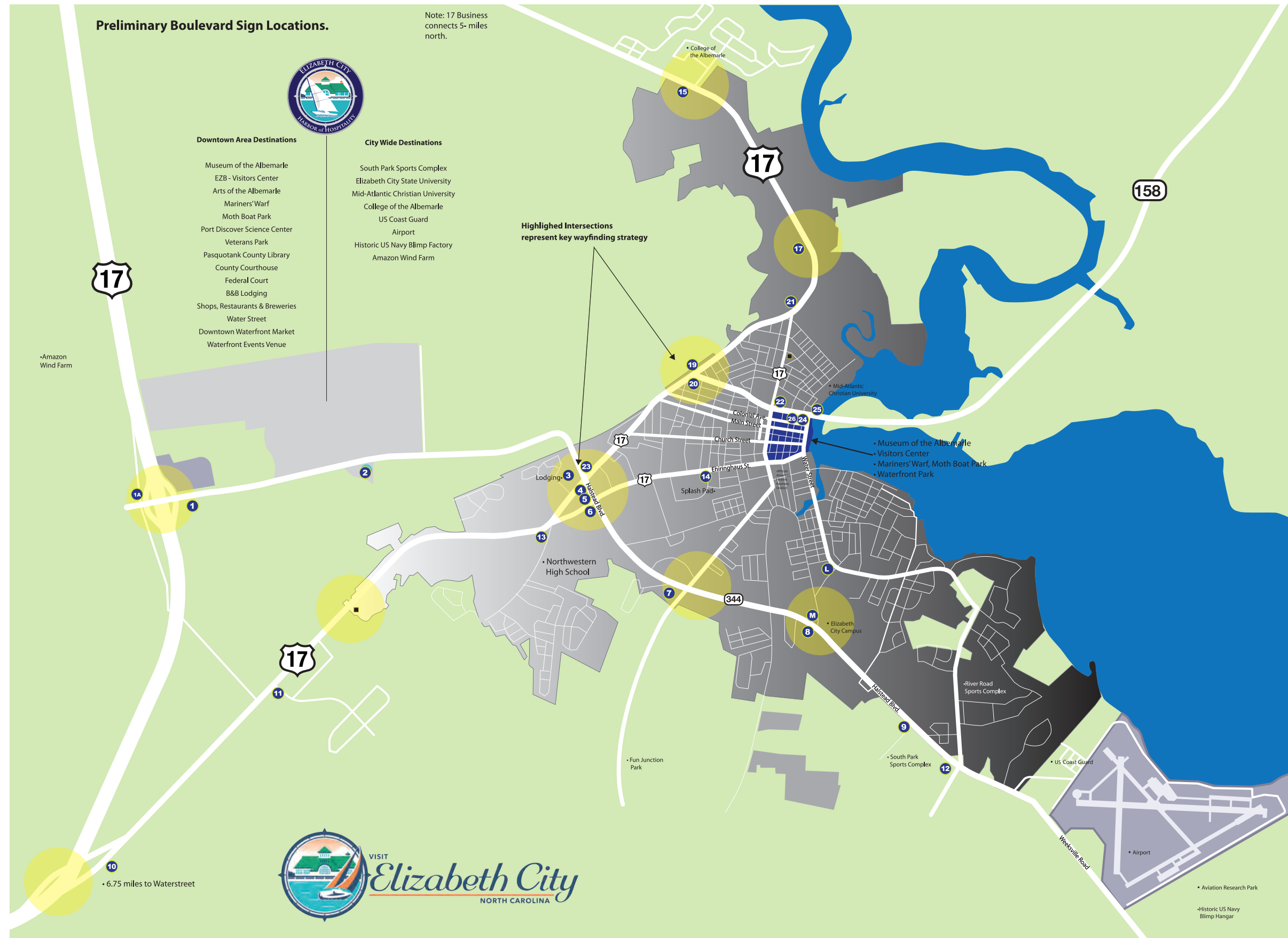


26

Note: Final messaging may change slightly. BDI will provide full scale (ai) patterns for cutting and printing.

Wayfinding Sign / Locations

Wayfinding Signs / Locations

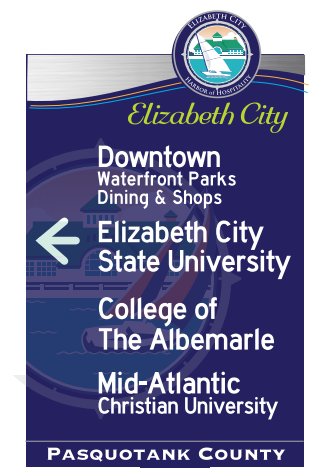
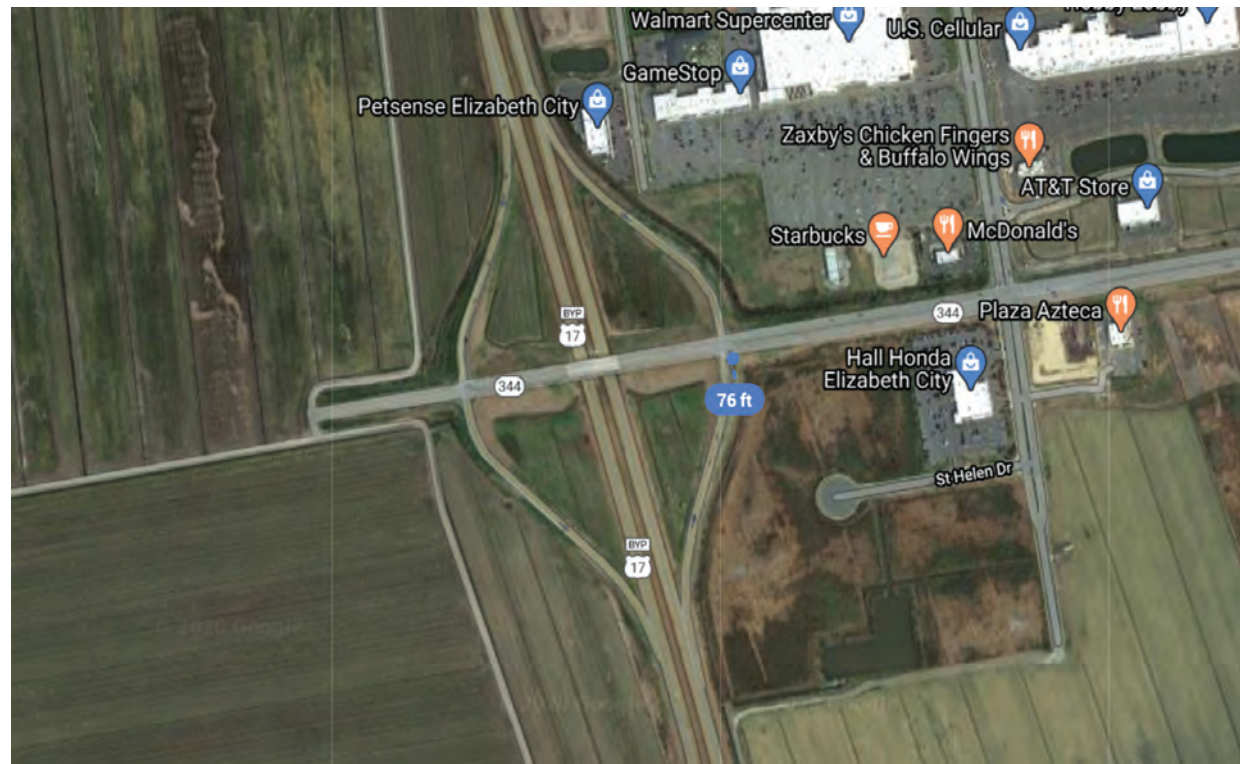


- 1- Traveling East on Hwy 344/ Halstead Blvd. Sign is 345' East of stopbar at Exit 258.
- 1-A- Traveling South on Hwy 17 Sign is located 77' South of the stopbar at Exit 258.
- 2 - Traveling East on Hwy 344/ Halstead Sign is approx. 1.25 miles northeast from Exit 258
- 3 - Traveling Southeast on Halstead Sign is 200' North of S. Hughes Blvd.
- 4 - Traveling North on Hwy 17 Sign is 300' South of stopbar at Halstead Blvd.
- 5 - Traveling Southeast on HWY 344/Halstead Blvd. Sign is 80' North of Stopbar at Ehrlinghaus St.
- 6 - East on West Ehrlinghaus St. Sign is 276' West of stopbar at Halstead.
- 7 -Traveling Southeast on Hwy344/Halstead Sign is 230' Northwest of Body Road.
- 8 -Traveling Southeast on Hwy344/Halstead Sign is 125' Northwest of Harrington Road
- 9 - Southeast on Hwy344/Weeksville Rd Sign is 100' Northwest of Capital Terrace.
- 10 - Traveling north on Hwy 17 Bus. Sign is 200' North of SR 1362
- 11- Traveling north on Hwy 17 Bus. Sign is 200' south of Interpath Parkway.
- 12 - Traveling Southeast on Weeksville Rd. Sign is 236' Northwest of Pitts Chapel Rd.
- 13 -Traveling East on Hwy 17 Sign is 210' West of Oak Stump Road
- 14 - Traveling East on Ehrlinghaus St. Sign is 90' West of Seldon Rd.
- 15 -Traveling South on Hwy 17 Bus. Sign is approx 210' North of Coa Drive
- 17 - Traveling South on Hwy 17 Bus. Sign is approx. 175' North of Villa Dr
- 19- Traveling South on Hwy 17 Bus. Sign is 300' North of stopbar at US 158
- 20- Traveling North on Hwy 17/N. Hughes Blvd. sign is 250' from stopbar at Hwy 158
- 21-Traveling South on Hwy 17/N. Hughes Blvd. Sign is 249' from stopbar at Griggs St.
- 22- Traveling West on Hwy 158 Sign is 320' from stopbar at N. Road St
- 23 - Traveling South on S. Hughes Blvd. Sign is 250' North of stopbar Halstead Exd.
- 24 - Traveling East on Hwy158 Sign is 35' West of stopbar at N. Water Street
- 25 - Traveling West on Hwy 158 Sign is 5' west of stopbar at N. Waterstreet.
- 26 - Traveling East on Hwy 158 Sign is 50' West of stopbar at N. Poindexter



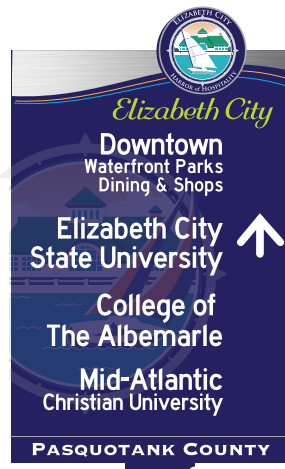
1 & 1A Left Arrow

1- Traveling North on Hwy 74 Exit
Sign is 76' South of stopbar at Exit 258.



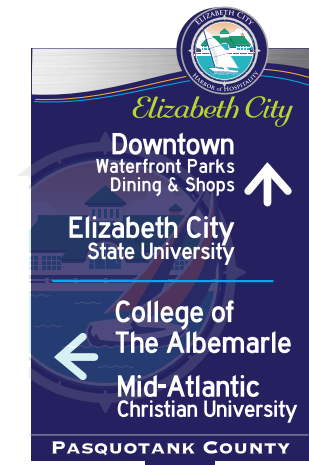
1A Left Arrow

1-A- Traveling South on Hwy 17
Sign is located 77' South of the stopbar at Exit 258.



2

2 - Traveling East on Hwy 344/ Halstead
Sign is approx. 1.25 miles northeast from Exit 258



3

3 - Traveling Southeast on Halstead
Sign is 200' North of S. Hughes Blvd.



4

4 - Traveling North on Hwy 17
Sign is 300' South of stopbar
at Halstead Blvd.



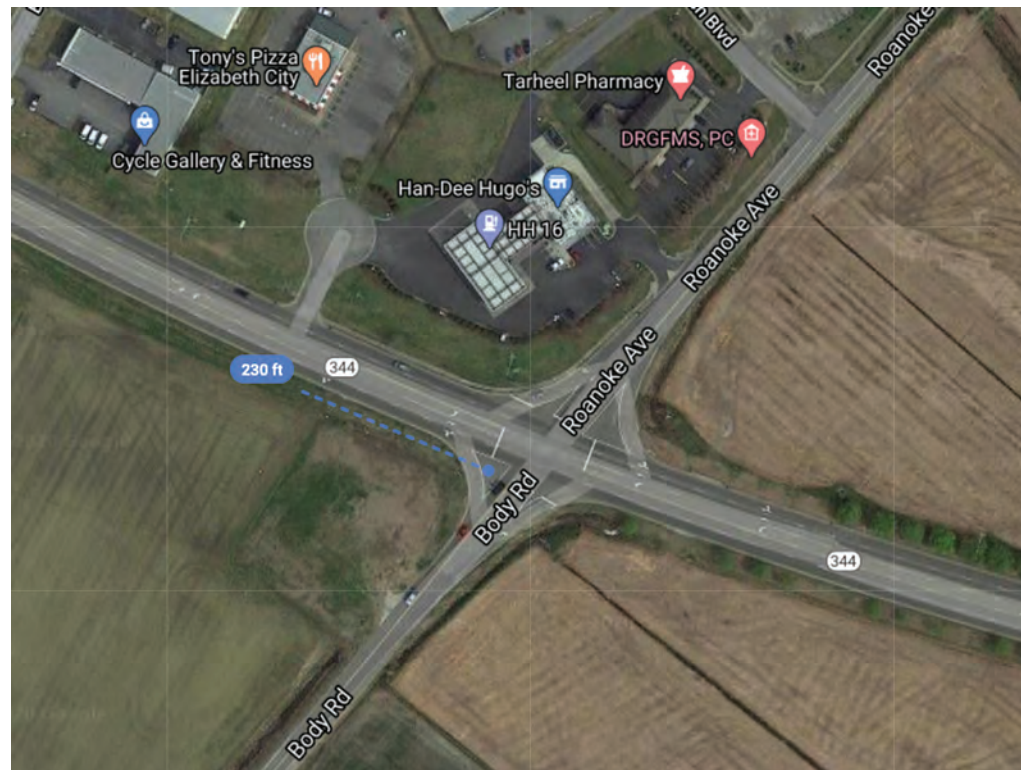
5

5 - Traveling Southeast on HWY 344/Halstead Blvd.
Sign is 80' North of Stopbar at Ehringhaus St.



6

6 - East on West Ehringhaus St. Sign is 276' West of stopbar at Halstead.



7

7 -Traveling Southeast on Hwy344/Halstead Sign is 230' Northwest of Body Road.



8

8 - Traveling Southeast on Hwy344/Halstead Sign is 125' Northwest of Harrington Road



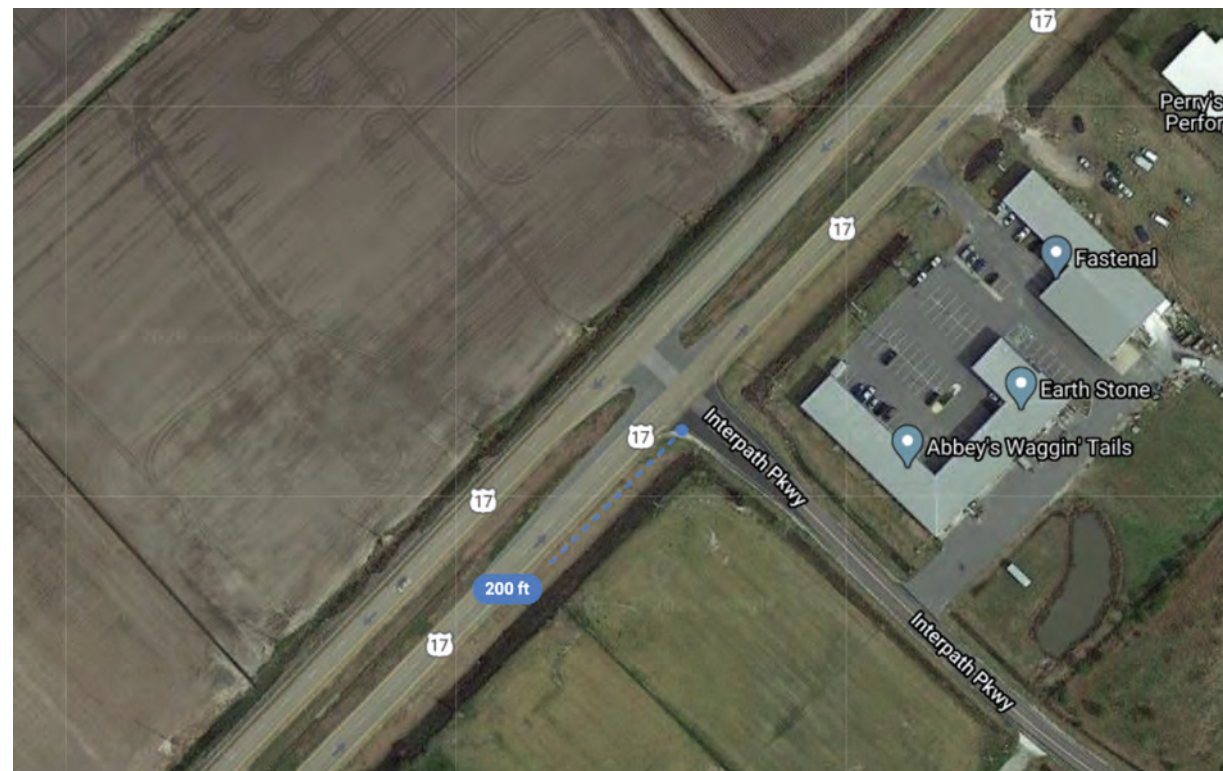
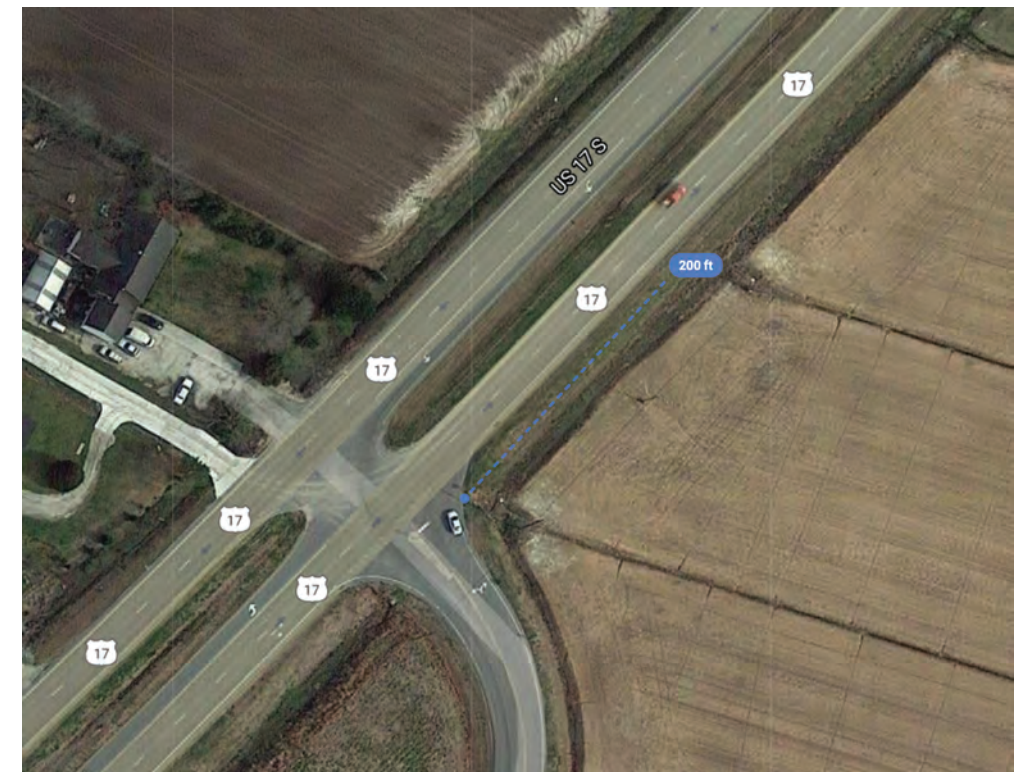
9

9 - Southeast on Hwy344/Weeksville Rd Sign is 100' Northwest of Capital Terrace.



10

10 - Traveling north on Hwy 17 Bus.
Sign is 200' North of SR 1362



11

11- Traveling north on Hwy 17 Bus.
Sign is 200' south of Interpath Parkway.



12

12 - Traveling Southeast on Weeksville Rd. Sign is 236' Northwest of Pitts Chapel Rd.



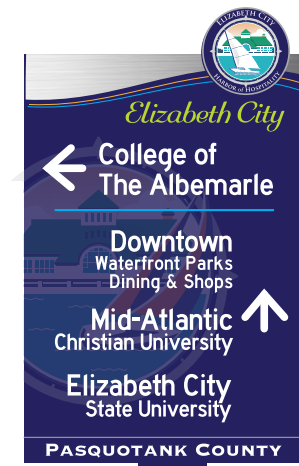
13

13 - Traveling East on Hwy 17 Sign is 210' West of Oak Stump Road



14

14 - Traveling East on Ehringhaus St.
Sign is 90' West of Seldon Rd.



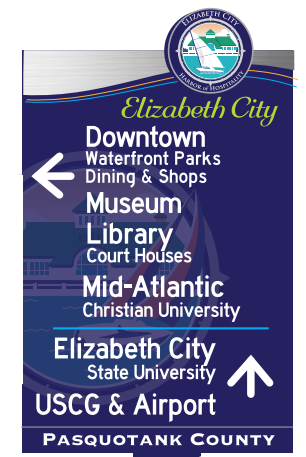
15

15 - Traveling South on Hwy 17 Bus.
Sign is approx 210' North of Coa Drive



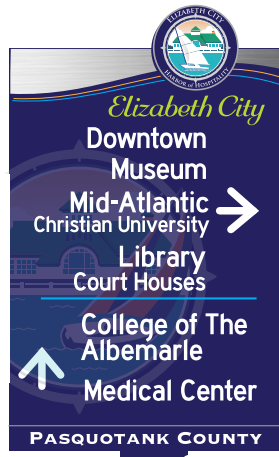
17

17 - Traveling South on Hwy 17 Bus. Sign is approx. 175' North of Villa Dr



19 Very crowded messaging NCDOT may kick out a destination.

19- Traveling South on Hwy 17 Bus. Sign is 300' North of stopbar at US 158



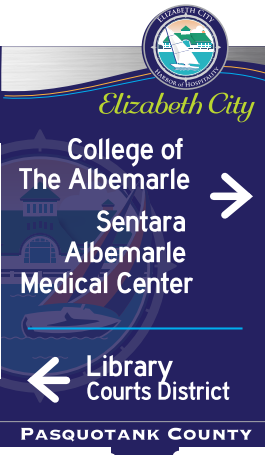
20

20- Traveling North on Hwy 17/N. Hughes Blvd. sign is 250' from stopbar at Hwy 158



21

21-Traveling South on Hwy 17/N. Hughes Blvd. Sign is 249' from stopbar at Griggs St.



22

22- Traveling West on Hwy 158
Sign is 320' from stopbar at N. Road St



23

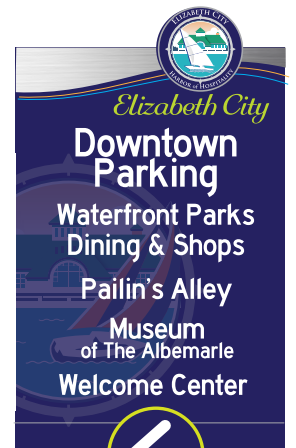
23 - Traveling South on S. Hughes Blvd.
Sign is 250' North of stopbar Halstead Exd.



24



24 - Traveling East on Hwy158
Sign is 35' West of stopbar at N. Water Street



25

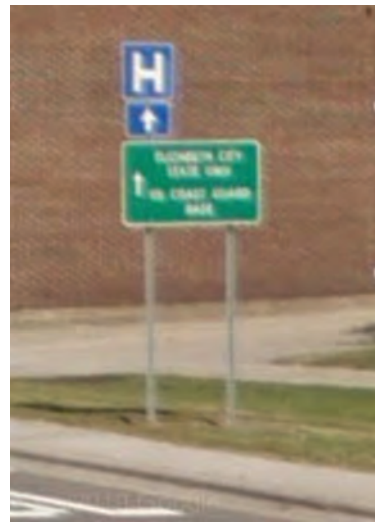


25 - Traveling West on Hwy 158
Sign is 5' west of stopbar at N. Waterstreet.

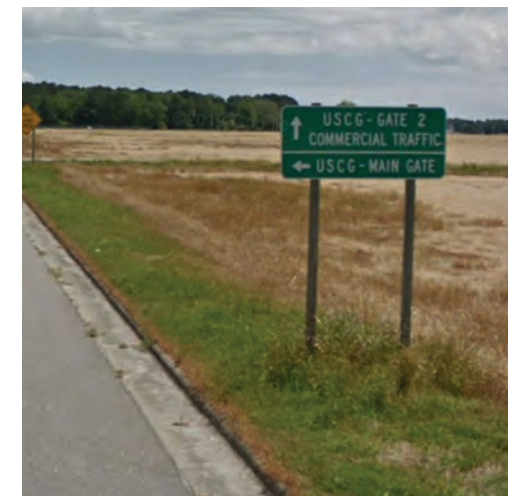


26 - Traveling East on Hwy 158
Sign is 50' West of stopbar at N. Poindexter

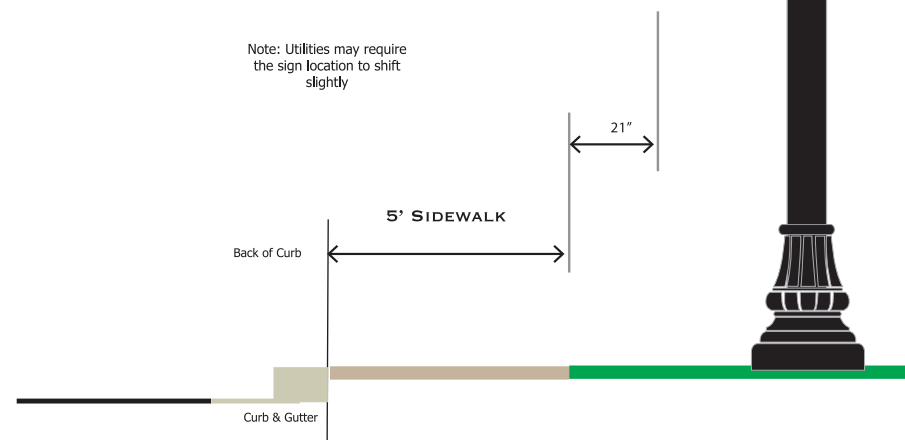
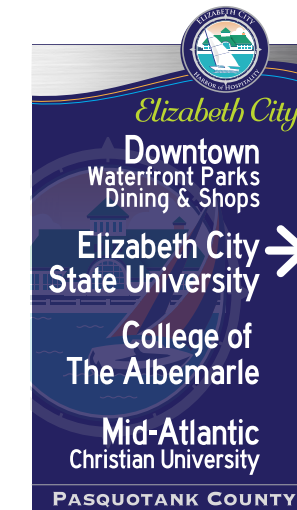
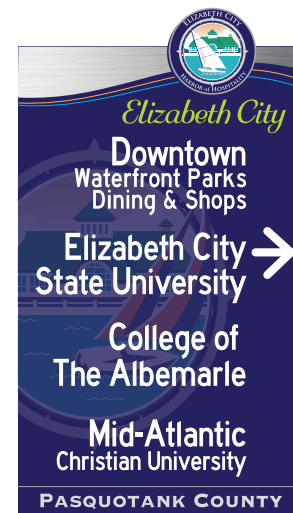




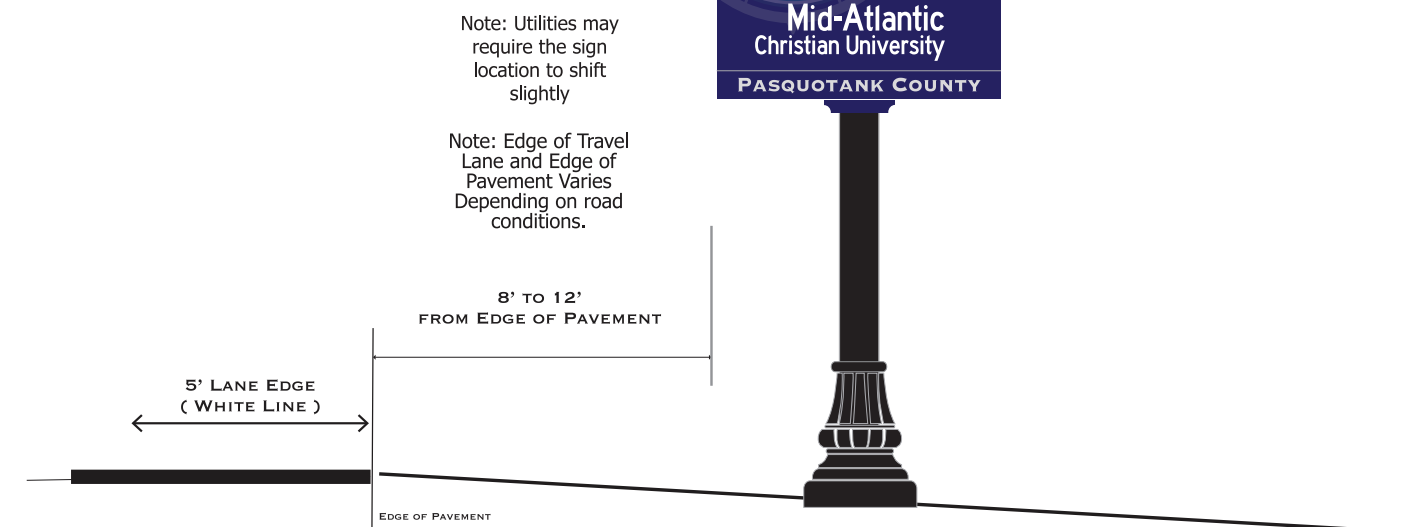
Wayfinding Sign Placement
Follows Typical NCDOT
Directional
Sign Placement.



Wayfinding Sign Placement
Follows Typical NCDOT
Directional
Sign Placement.



Road with Curb, Planting Strip & Sidewalk



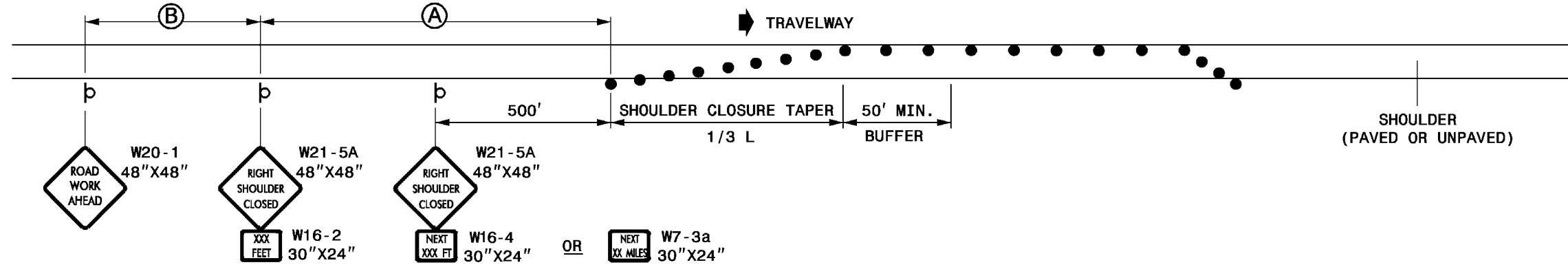
Road with Shoulder Only

Wayfinding signs will not be installed in a way that obscures the motorist's view of any regulatory, warning, or other guide signs.

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DIVISION OF HIGHWAYS
RALEIGH, N.C.

7-06

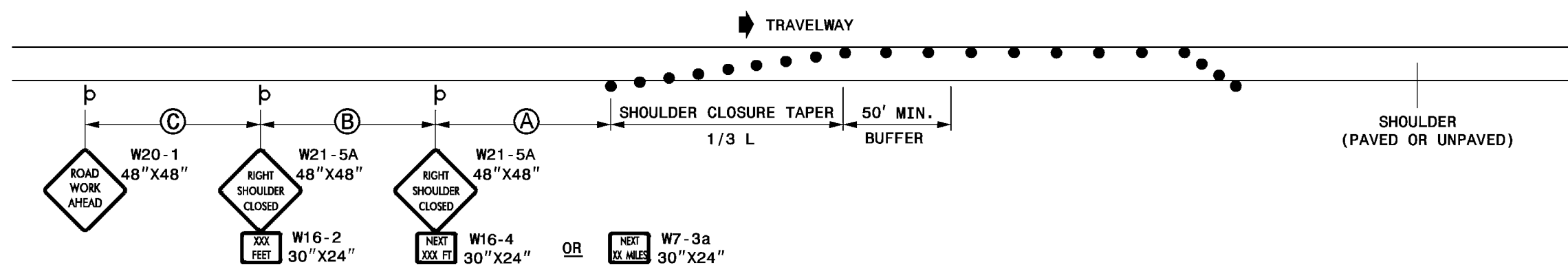
SHOULDER CLOSURE ON CONTROLLED ACCESS FACILITIES - 55 MPH OR ABOVE



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DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

7-06

SHOULDER CLOSURE ON OTHER DIVIDED FACILITIES - 55 MPH OR LESS



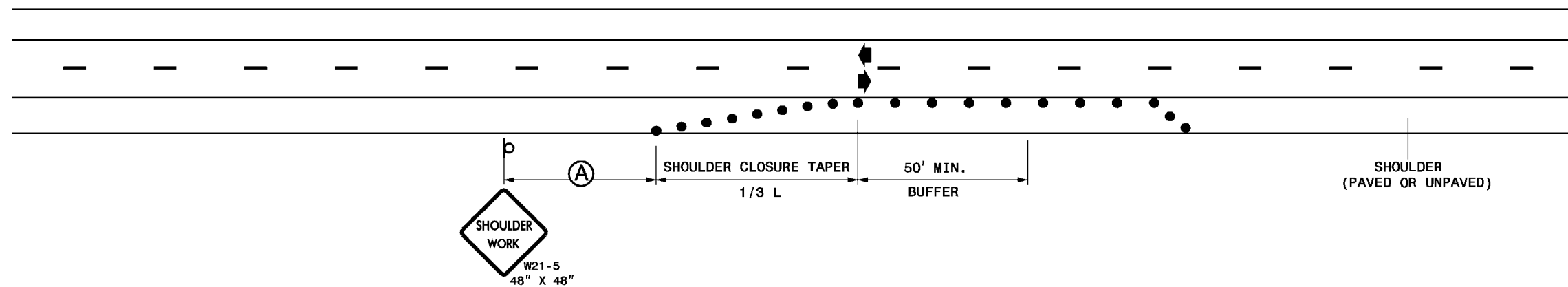
ENGLISH STANDARD DRAWING FOR
TEMPORARY SHOULDER CLOSURES

SHEET 1 OF 1

1101.04

SHOULDER CLOSURE ON TWO-LANE, TWO-WAY ROADWAYS

(SEE NOTE 5)



LEGEND

- DRUM
- ⊥ STATIONARY OR PORTABLE SIGN
- ➔ DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

- 1- PLACE SHOULDER CLOSURE SIGNS ON THE SAME SIDE AS THE SHOULDER THAT IS CLOSED.
- 2- PLACE DRUMS IN THE SHOULDER TAPER AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. THE MAXIMUM SPACING OF DRUMS ALONG THE WORK AREA IS EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
- 3- USE STATIONARY SIGNS FOR LONG TERM OPERATIONS (LONGER THAN 3 DAYS).
- 4- REFER TO STD. 1101.11 SHEETS 1, 3, & 4, FOR "L" DISTANCE, AND SIGN SPACING.
- 5- THE TWO-LANE, TWO-WAY DRAWING MAY BE APPLIED TO UNDIVIDED, MULTI-LANE FACILITIES.

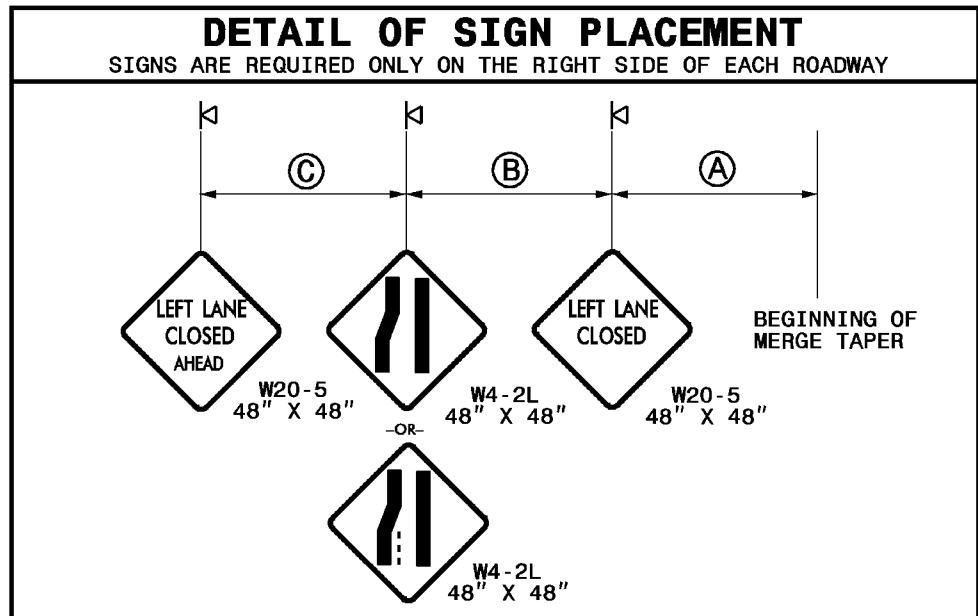
SHEET 1 OF 1

1101.04

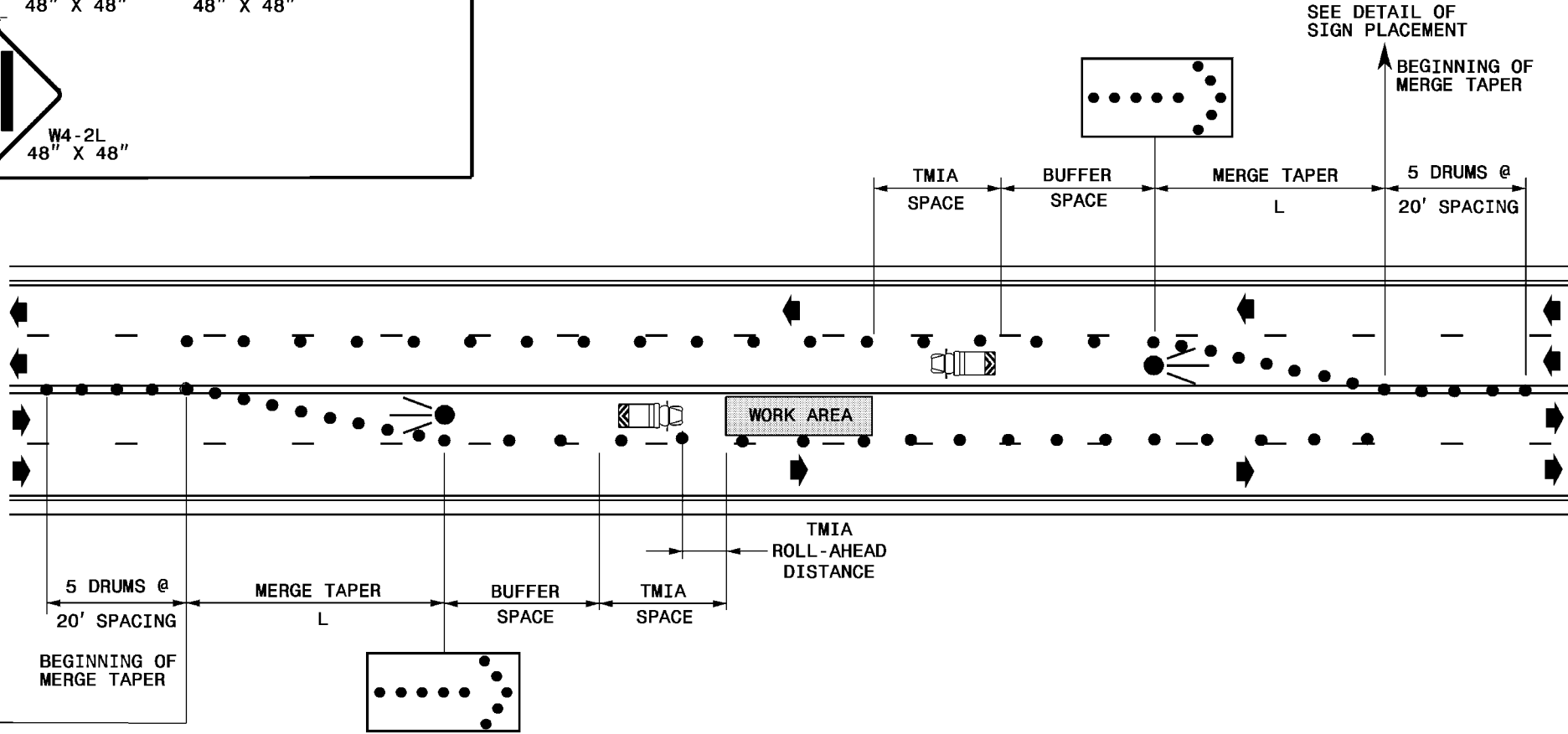
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ENGLISH STANDARD DRAWING FOR
TEMPORARY LANE CLOSURES
UNDIVIDED MULTI-LANE ROADWAY
CENTER LANES CLOSED

SHEET 4 OF 9
1101.02



LEFT LANE CLOSURE



LEGEND

- FLASHING ARROW PANEL (TYPE C)
- TRUCK MOUNTED IMPACT ATTENUATOR(TMIA)
- DRUM
- PORTABLE SIGN
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

- 1- RIGHT LANE CLOSURES ON UNDIVIDED ROADWAYS ARE THE SAME AS FOR DIVIDED ROADWAYS AS SHOWN ON STD. 1101.02 SHEET 3, WITH THE EXCEPTION THAT THE APPROACH WARNING SIGNS ARE NOT REQUIRED TO BE MOUNTED ON THE LEFT SIDE OF THE ROADWAY.
- 2- REFER TO NOTES ON STD. 1101.02 SHEET 3.

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ENGLISH STANDARD DRAWING FOR
TEMPORARY LANE CLOSURES
UNDIVIDED MULTI-LANE ROADWAY
CENTER LANES CLOSED

SHEET 4 OF 9
1101.02

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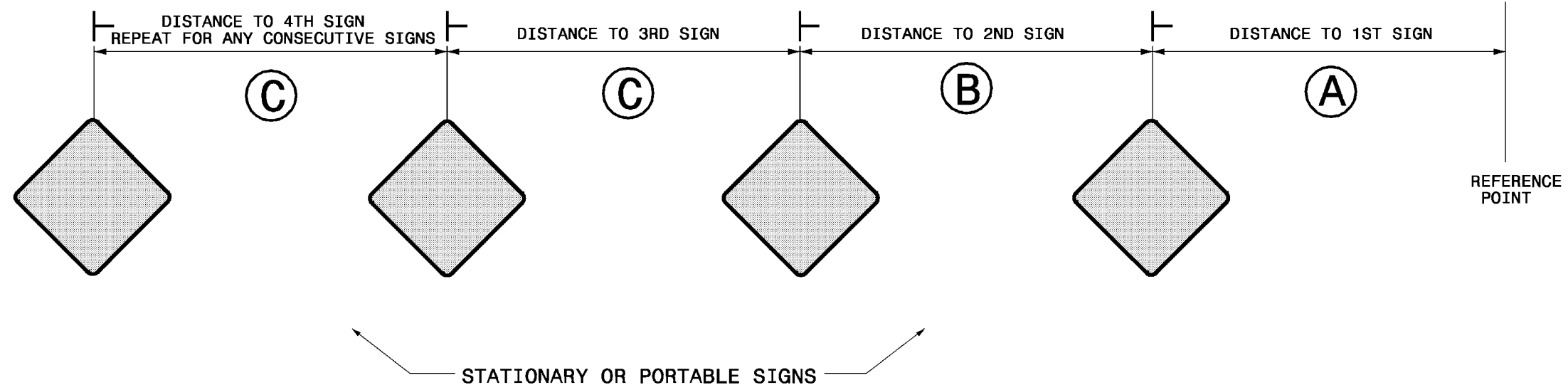
ENGLISH STANDARD DRAWING FOR
TRAFFIC CONTROL DESIGN TABLES
SPACING OF TEMPORARY SIGNS IN SERIES

SHEET 4 OF 4
1101.11

GENERAL NOTES

- 1-USE THIS STANDARD DRAWING IN CONJUNCTION WITH OTHER TRAFFIC CONTROL ROADWAY STANDARD DRAWINGS WHERE SIGN SPACING DISTANCES A, B, C, ARE SPECIFIED.
- 2-APPLY THE ADVANCE WARNING SIGN SPACING CHART WHERE A SERIES OF 2 OR MORE SIGNS ARE USED. ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE. FIELD ADJUST AS VARIOUS CONDITIONS OCCUR, SUCH AS LIMITED SIGHT DISTANCE, OBSTRUCTION INTERFERENCE, ETC.

ADVANCE WARNING SIGN SPACING CHART			
POSTED SPEED LIMIT (MPH)	RECOMMENDED DISTANCE BETWEEN SIGNS (FEET) ±		
	(A)	(B)	(C)
≤ 35	200	200	200
40-50	350	350	350
55	500	500	500
CONTROLLED ACCESS ROADS (≥ 55)	1000	1500	2700



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ENGLISH STANDARD DRAWING FOR
TRAFFIC CONTROL DESIGN TABLES
SPACING OF TEMPORARY SIGNS IN SERIES

SHEET 4 OF 4
1101.11

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
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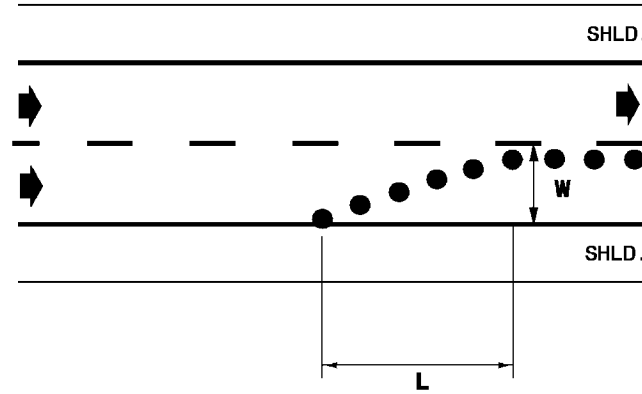
7-06

ENGLISH STANDARD DRAWING FOR
TRAFFIC CONTROL DESIGN TABLES
"L" DISTANCE AND CHANNELIZING
DEVICE TAPER CRITERIA

SHEET 1 OF 4

1101.11

EXAMPLE OF "L" & "W" DESIGNATIONS



QUICK REFERENCE - "L" DISTANCE TABLE												
LATERAL WIDTH (W) FEET	1	2	3	4	5	6	7	8	9	10	11	12
POSTED SPEED (S) MPH	MINIMUM LONGITUDINAL DISTANCE "L" (FEET) (ROUNDED VALUES)											
20	10	15	20	30	35	40	50	55	60	70	75	80
25	15	25	35	45	55	65	75	85	95	105	115	125
30	15	30	45	60	75	90	105	120	135	150	165	180
35	25	45	65	85	105	125	145	165	185	205	225	245
40	30	55	80	110	135	160	190	215	240	270	295	320
45	45	90	135	180	225	270	315	360	405	450	495	540
50	50	100	150	200	250	300	350	400	450	500	550	600
55	55	110	165	220	275	330	385	440	495	550	605	660
60	60	120	180	240	300	360	420	480	540	600	660	720
65	65	130	195	260	325	390	455	520	585	650	715	780
70	70	140	210	280	350	420	490	560	630	700	770	840

TAPER LENGTH CRITERIA FOR CHANNELIZING DEVICES IN WORK ZONES

TYPES OF TAPERS	TAPER LENGTH
UPSTREAM TAPER	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/3 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPER	
	100 FEET PER LANE

GENERAL NOTES

- TABLE FOR "L" DISTANCE IS BASED ON CHANNELIZATION TAPER FORMULA FROM THE M.U.T.C.D. WHERE:

<u>SPEED LIMIT</u>	<u>FORMULA</u>
40 MPH OR LESS	$L = \frac{W \times S^2}{60}$
45 MPH OR GREATER	$L = W \times S$

L = MINIMUM TAPER LENGTH IN FEET (LONGITUDINAL DISTANCE)
W = WIDTH OF OFFSET IN FEET (LATERAL DISTANCE)
S = POSTED SPEED LIMIT, OR OFF-PEAK 85 PERCENTILE SPEED IN MPH PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH
- "L" DISTANCE IS FOR APPLICATION WITH CHANNELIZING DEVICE AND PAVEMENT MARKING TAPERS AND TRANSITIONS. CHANNELIZING DEVICES INCLUDE DRUMS, CONES, TUBULAR MARKERS, BARRICADES, RAISED ASPHALT ISLANDS, AND VERTICAL PANELS.

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ENGLISH STANDARD DRAWING FOR
TRAFFIC CONTROL DESIGN TABLES
"L" DISTANCE AND CHANNELIZING
DEVICE TAPER CRITERIA

SHEET 1 OF 4

1101.11

A. Quality Standards

The materials, products, equipment and performance specifications described in this document, establish a standard of required function, dimension, appearance, performance and quality to be met by the fabricator.

B. Structural Design

Designs and details indicate the approach for sign structure but do not necessarily include all fabrication details required for the complete structural integrity of the signs, including consideration for static, dynamic and erection loads during handling, erecting, and service at the installed locations, nor do they consider the preferred shop practices of the individual fabricator. Therefore, it shall be the responsibility of the fabricator to perform the complete structural design and engineering of the signs and to incorporate all the safety features necessary to adequately support the sign for its intended use and purpose and to protect the Owner. Fabricator shall also be responsible for ensuring that all signs meet local, state and federal codes.

C. Vandalism Design

Fabrication and installation design is to withstand severe abuse and souvenir theft vandalism, but not less than the equivalent of resisting simple hand implements and tools (screwdrivers, knives, coins, keys, and similar items), and adult physical force. All hardware and fasteners within reach shall be vandal resistant.

D. Substitution

No substitution will be considered unless the Owner has received written request for approval. Fabricator may recommend equal or better equipment or method, but will be required to provide full documentation establishing such a substitution's equality or superiority as measured in the following: The burden of proof of the merit of the proposed substitute is upon the Fabricator. The Owners decision of approval or disapproval of a proposed substitution shall be final.

E. Material Handling

The Fabricator is to pack, wrap, crate, bundle, box, bag, or otherwise package, handle, transport, and store all fabricated work as necessary to provide protection from damage by every cause. Fabricator shall provide clear and legible identifying information on all product packaging to ensure proper on-site identification and installation.

F. Sign Specifications

Construction Methodology

The drawings call for a variety of fabrication techniques. Fabricators are given leeway to construct the signs to meet the intent of the designs depicted by the drawings. Because different systems of extrusions may result in slightly different dimensional requirements, the total height and width dimensions described in the sign construction on the drawings may be considered slightly variable for the purposes of cost quote.

- Sign faces are to be fabricated using aluminum plate of varying thicknesses, as specified with a minimum thickness of .3/16" inches unless otherwise noted.

- All finishes are to be free from fading, peeling or cracking. Paint and/or powder coat required preparation of all exterior metal surfaces of the sign to include removal of all scratches and imperfections, sanding and chemical etching. Substrate cleaning, preparation, paint and/or powder coat application and paint thickness to be in strict compliance with manufacturers published recommendations. Acceleration of the drying process is not allowed.

- Any sign faces smaller than 5' by 9' are to be fabricated from 1 piece of seamless material.

- Dimensional and structural welding defects will not be accepted, including but not limited to: poor weld contours, including excessive bead convexity and reinforcement, and considerable concavity or under-stainless steel as appropriate.

- Non-welded joints between various portions of signs must have a tight, hairline-type appearance, without gaps. Provide sufficient fastenings to preclude looseness, racking, or similar movement.

- Provide drain holes as needed to prevent accumulation of water within signs. Holes must be inconspicuous such that drainage does not occur onto signs, or other surfaces subject to staining. Provide internal system of baffles to prevent "light leaks" through drain holes of illuminated signs. Provide color-coordinated insect screening over drain holes.

- Non-illuminated sign faces are to have lettering and graphics created as surface-applied vinyl typography using Avery or 3M exterior grade, minimum 7-year warranty, unless otherwise noted in the drawings.

- Unlit channel letter faces must be .25" aluminum. Channel letter returns must be .080" aluminum.

G. Fonts/Typefaces

The fonts used in these sign designs were selected specifically for this project by the Designer and Owner, and are listed in the graphic standards. No substitutions are allowed. It is the fabricators responsibility to acquire the required fonts and layout the specific sign panels as designed. Proofs should be submitted to the owner/designer for approval before final application of graphics.

Under no circumstances are typefaces to be electronically distorted ("squeezed" or "extended") for purposes of fitting to the specified sign or general alteration of the sign face composition unless noted in the drawings. This includes (but is not limited to) stretching, squeezing, tilting, outlining or shadowing.

1. All letterforms, symbols or graphics shall be reproduced either by photographic or computer-generated means. Hand-cut characters are not acceptable. Cutting shall be done in such manner that edges and corners of with nicked, cut, ragged, rounded corners, and similar disfigurements will not be acceptable.

- All letterforms shall be made from material and gauge as indicated on the drawings. Typefaces shall be replicated as indicated on the drawing.

- Silk-screened and vinyl copy is to match the sheen of the cabinet and base paint. Surface of letters shall be uniform in color finish, and free from pinholes and other imperfections.

- Vinyl graphics and letterforms shall be computer-cut.

- Custom logos and symbols will be specified as vector art or digital art and supplied by the owner or designer. These symbols can not be altered in any way.

WAYFINDING SIGNAGE FABRICATION GUIDELINES

H. Permits and Variances

Fabricator shall be knowledgeable of relevant local code requirements and honor same in fabrication and installation. Fabricator is responsible for securing any and all necessary permits for signage installation. It is the responsibility of the Owner to secure encroachment permissions from property owners including Department of Transportation. It is the responsibility of the Owner to secure variances, should any be required. It is the Owner's responsibility to call the appropriate agency to have all underground utilities properly located and marked. Any damage to below-grade utilities or structures for which the Owner has provided adequate location information is the responsibility of the fabricator.

I. Site Visit

Prior to installation of the signs, the fabricator is to visit the proposed site to observe existing conditions and verify all signage required and its location with Owner. At this time the locations shall be staked using a non permanent visible device such as spray chalk or non-permanent paint. Certain signs may be located on sloped grades and may require uneven footings for each post. Site-verify all locations to determine special requirements for footing templates, if required. shall be consulted together and shall be approved by the Owner to determine the precise location for each sign. Any necessary adjustments will be made with the approval of the Owner. Site conditions unacceptable for installation will require improvement by the owner, or alternate location if possible.

J. Masonry/Footings

Any concrete bases for signage are to be poured in place and footings are to extend beneath the frost line, or deeper to meet local code. All footings or bases should be poured within a form and level with grade unless otherwise specified in the design intent drawings. Foundation/footings should be level with grade unless otherwise noted or as specified by state or local code. Foundation/footings should not extend above grade more than 2" and exposed edges

should be finished with a bevel to prevent chipping. It is recommended that the concrete be floated by machine or hand before finishing in order to embed larger aggregates especially when part of the footing or base extends above ground. Concrete surface should have a smooth or brushed finish grade appearance. All concrete bases and footings should be edged to break any bond with the form and create a neat appearance. All forms should be removed once the concrete has properly cured. Concrete and reinforcement specifications shall be shown on shop drawing submittals. The fabricator is responsible for the necessary templates, mounting plates and hardware for concrete and masonry bases. A minimum 1' rock bed with landscape edging or concrete pad must be added around each concrete base as protection from landscaping maintenance. All masonry (concrete block, poured concrete, brick, slab, veneer, mortar, etc.) is to be properly treated and protected to maintain the structural integrity of the masonry work with exposure to all environmental conditions found at the site. For exposed or visible masonry, this shall include the application of protective sealers or similar finishes to diminish the effects of close-proximity sprinkling or irrigation systems. Signs are to be mounted on J-bolt footings, centered on the concrete base or footing, and engineered per code, unless otherwise specified in the design intent drawings.

L. Wind Load

Signs, banners and mounting devices shall be engineered to withstand a minimum 30-psf wind load normal to the sign, or greater as per local code, in addition to the weight of the sign. The Fabricator shall determine appropriate method of anchoring signs to the locations specified to meet these requirements as well as all local code requirements.

M. Mounting

All signs to be mounted level and true. All exposed hardware is to be touch-up painted on site as required. It is preferred that all bolts, nuts, washers, or other fasteners

shall be stainless steel. However galvanized steel is acceptable, so long as all exposed surfaces are sealed. mounting and/or mounting hardware details, the fabricator will be able to substitute equal or better hardware and techniques, based upon their experience with similar mounting situations and as long as the visual appearance of the sign is not compromised from that shown in the drawings.

All signage products must be installed such that there are no misalignments between visible components. Sign elements intended to be removable or changeable after installation must function as intended without binding, sticking or blocking. It will be the responsibility of the fabricator to correct any installation misalignments at no charge. Fabricator and their installers are expected to have knowledge of ADA mounting guidelines and city zoning codes, general sign locating practices, and any particular unique installations defined by designer. It is the desire of the Owner that the fabricator follow these guidelines as well as architectural cues in installing for the best visual placement, keeping a reasonable distance from protruding objects. Any signage that is improperly located is to be moved to the proper location by the fabricator/ installer, and repairs to wall surfaces and signage are to be at the fabricator/ installer, expense. If the installers are unable to make a decision about any sign locations, they can contact the Designer, providing a graphic representation of the questionable area, or contact the Owner for on-site options.

N. Electrical

The Owner will be responsible for providing a power source to within 10 feet of the base of each sign requiring power (either at grade or below grade). Power is to be 120 or 277. It is the responsibility of the Fabricator to manipulate the existing conduit to its proper location, install an external disconnect, extend the conduit through the concrete base (or posts) to align with the point of hookup,

and run the power supply through it. Conduit running from the disconnect to the sign shall travel within the concrete base, not on its surface. The Owner will be responsible for the final electrical connection.

O. Punchlist

It is required that the Fabricator complete a walk through with the Owner immediately following installation to identify any errors, such as construction or installation issues. Such errors are to be corrected in a timely manner, and to the satisfaction of the Owner.

P. Signage Warranty

Fabricator is solely responsible for applying products (paints, finishes, components, etc.) according to manufacturers' specifications and validating the warranty. The Fabricator is to provide a written five (5) year full replacement warranty to the Owner that all signs will be free of defects due to workmanship and materials including, but not limited to: sign faces, brackets, posts or other support assemblies. Vinyl sheeting, lettering, paint and or powder coat finishes will be warranted to manufacturer's stated guarantees. All selected materials will require a minimum of seven year performance. Fabricator shall also extend in writing to the Owner all manufacturers' warranties.

Q. Repair or Replacement

The fabricator will be required to repair or replace, including installation, any defective signs or hardware that develop during the warranty period and repair any damage to other work due to such imperfections. The fabricator will be required to fully replace all signs that are in error relative to the working documents (sign message schedule and sign type drawings) that were submitted to the fabricator as final version after awarded contract.