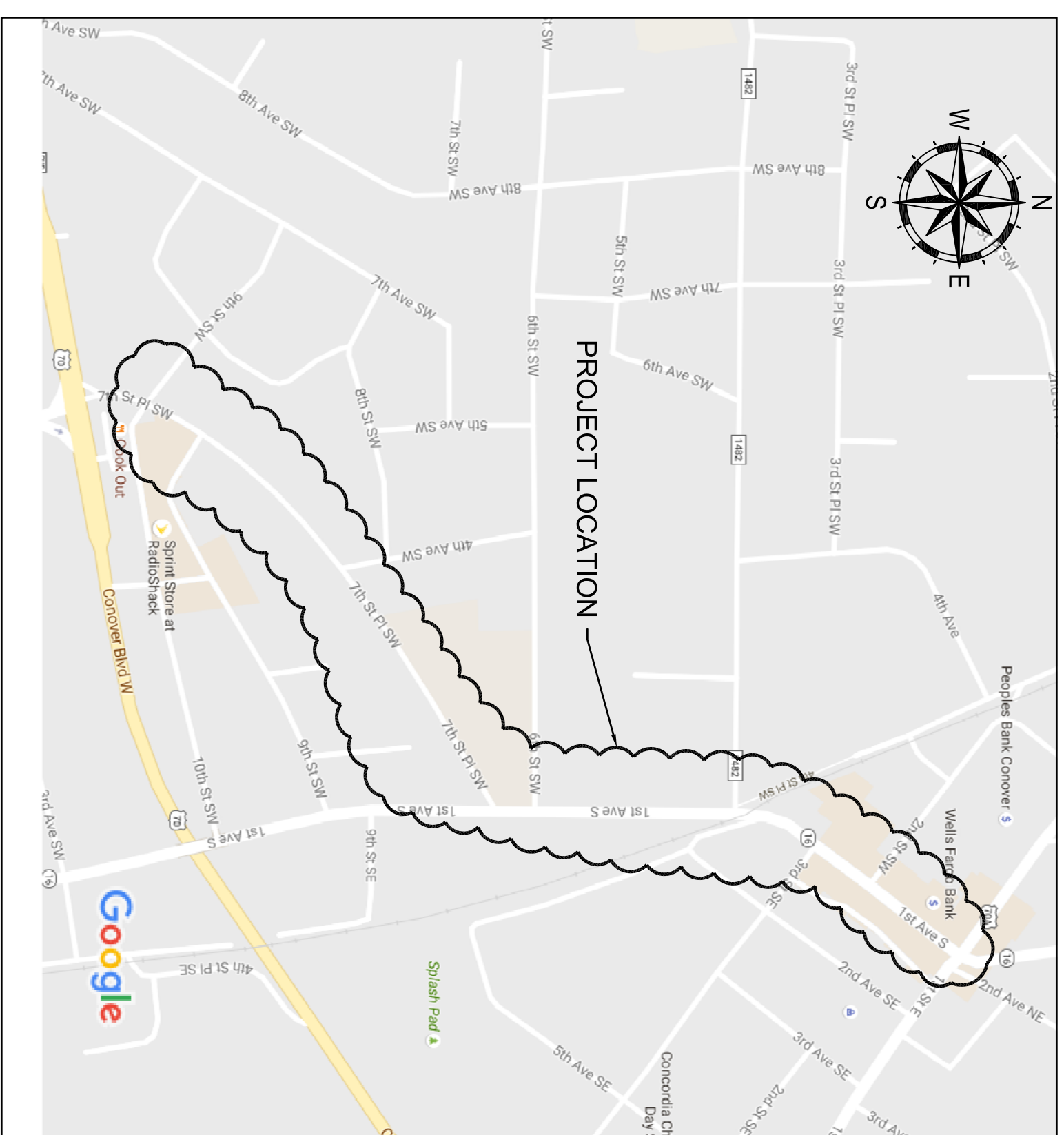


# CONOVER STREETSCAPE

for  
CITY OF CONOVER  
MARCH 2017

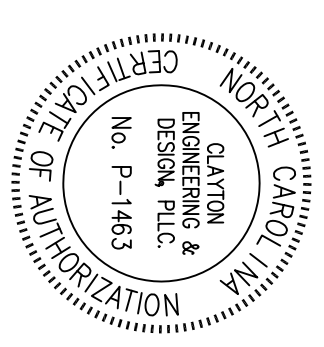


**SHEET LIST**

- COVER
- VFE101 - KEY PLAN SHEET
- VFE102 - EXTENDED SHARED BIKE LANES
- CSN101 - 1st AVE S (STA 10+00 - 19+75)
- CSN102 - 1st AVE S (STA 19+75 - 29+63)
- CSN103 - 7th ST PL SW (STA 10+00 - 21+25)
- CSN104 - 7th ST PL SW (STA 21+25 - 31+59)
- CSN105 - 1st AVE S (PAVEMENT MARKING PLAN)
- CSN106 - 1st AVE S (PAVEMENT MARKING PLAN)
- CSNS01 - SITE DETAILS
- XSN101 - CROSS SECTIONS
- XSN102 - CROSS SECTIONS
- XSN103 - CROSS SECTION TYPICAL DETAILS
- L1.0 - OVERALL PLANTING PLAN (VIZ, PLLC)
- L1.1 - PLANTING PLAN (VIZ, PLLC)
- L1.2 - PLANTING PLAN (VIZ, PLLC)

**UTILITIES NOTICE:**  
EXISTING UNDERGROUND UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS. ACTUAL LOCATIONS MAY VARY SIGNIFICANTLY. ALL EXISTING UTILITIES BEFORE COMMENCING WORK. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES THAT RESULT FROM HIS FAILURE TO EXACTLY LOCATE AND PROTECT ANY AND ALL UNDERGROUND UTILITIES.

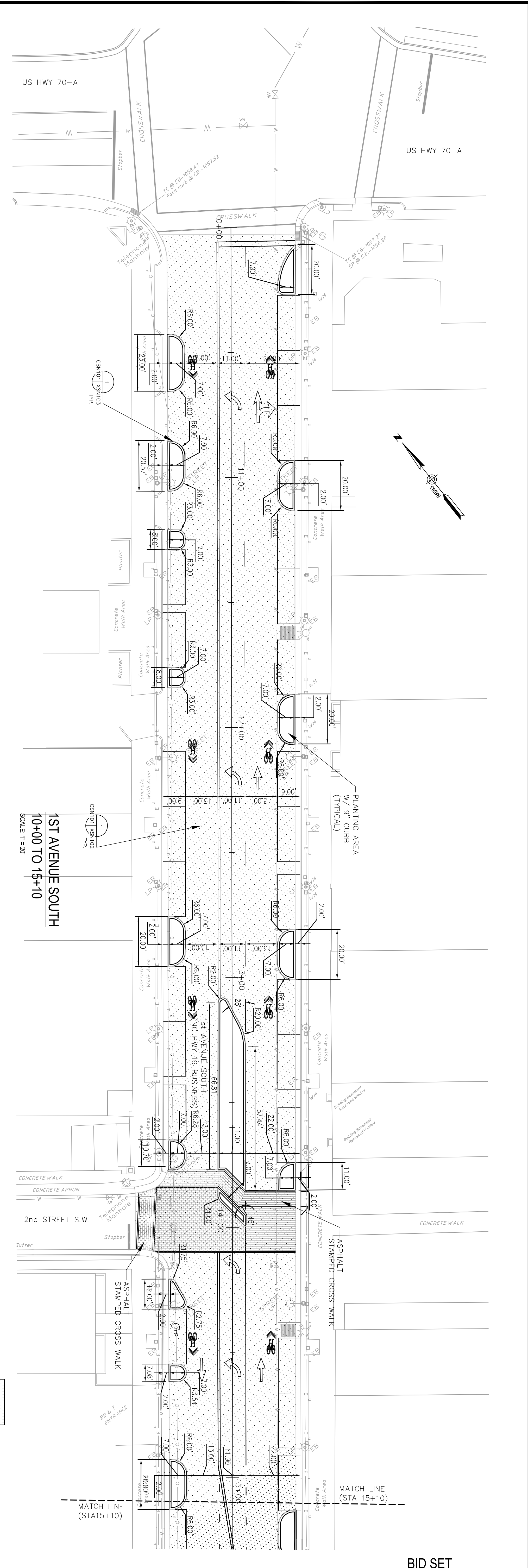
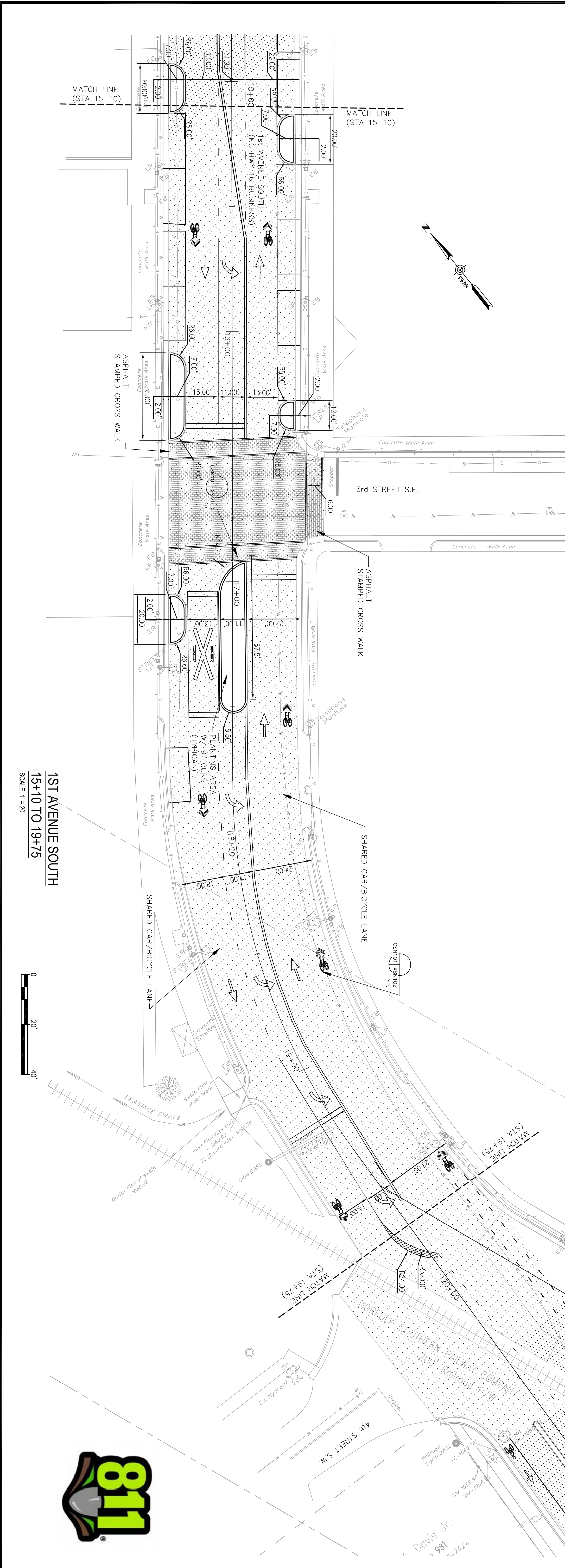
**BID SET**  
ENGINEER  
FOR CONSTRUCTION : \_\_\_\_\_  
DATE : 03/07/17



NC DOT PROJECT NUMBER: EB-5803  
CED JOB No.: 16010

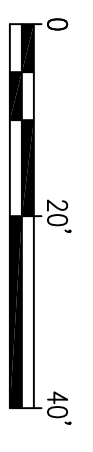






1ST AVENUE SOUTH  
15+10 TO 19+75  
SCALE: 1" = 20'

1ST AVENUE SOUTH  
10+00 TO 15+10  
SCALE: 1" = 20'



BID SET

SHEET	3	
OF	5	
CSN101		
NO.	DESCRIPTION	DATE
REVISIONS		
DESIGNED BY:	WISC	
DRAWN BY:	EMB	
CHECKED BY:		
DATE:	03/07/17	
JOB NUMBER:	16010	

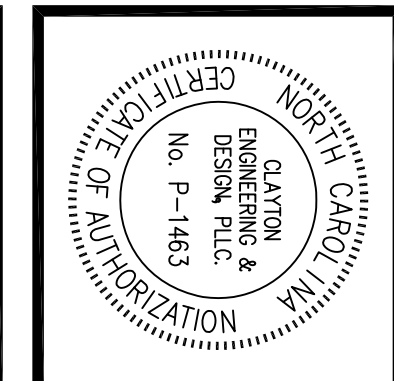
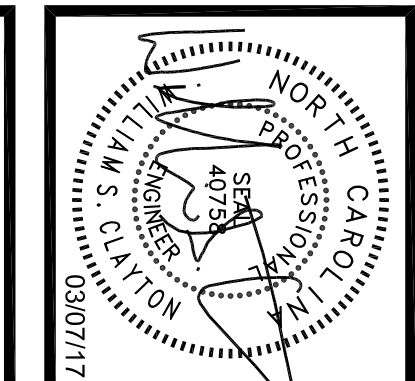
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STATION 10+00 TO 19+75

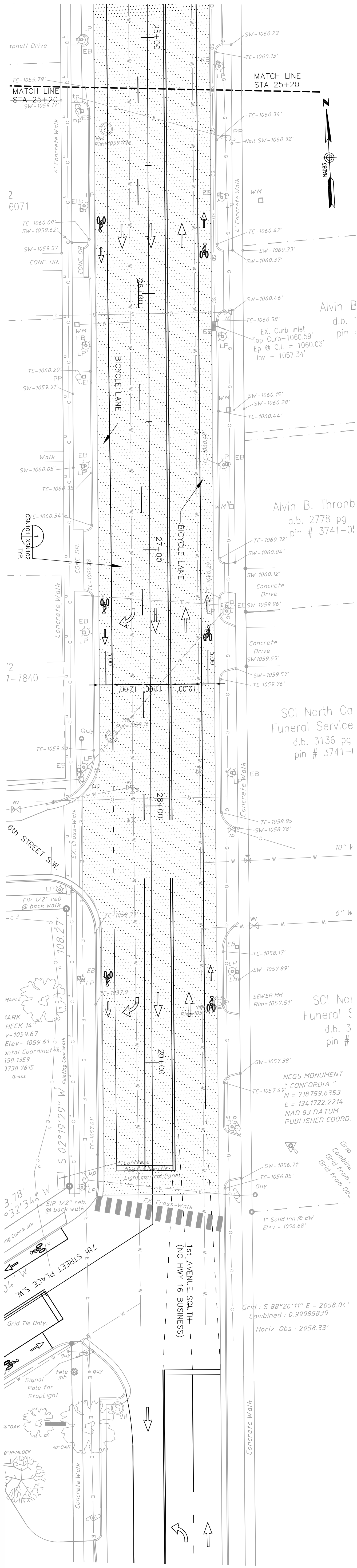
CITY OF CONOVER  
CONOVER, NORTH CAROLINA  
OWNER

CONOVER STREETSCAPE  
PROJECT TITLE

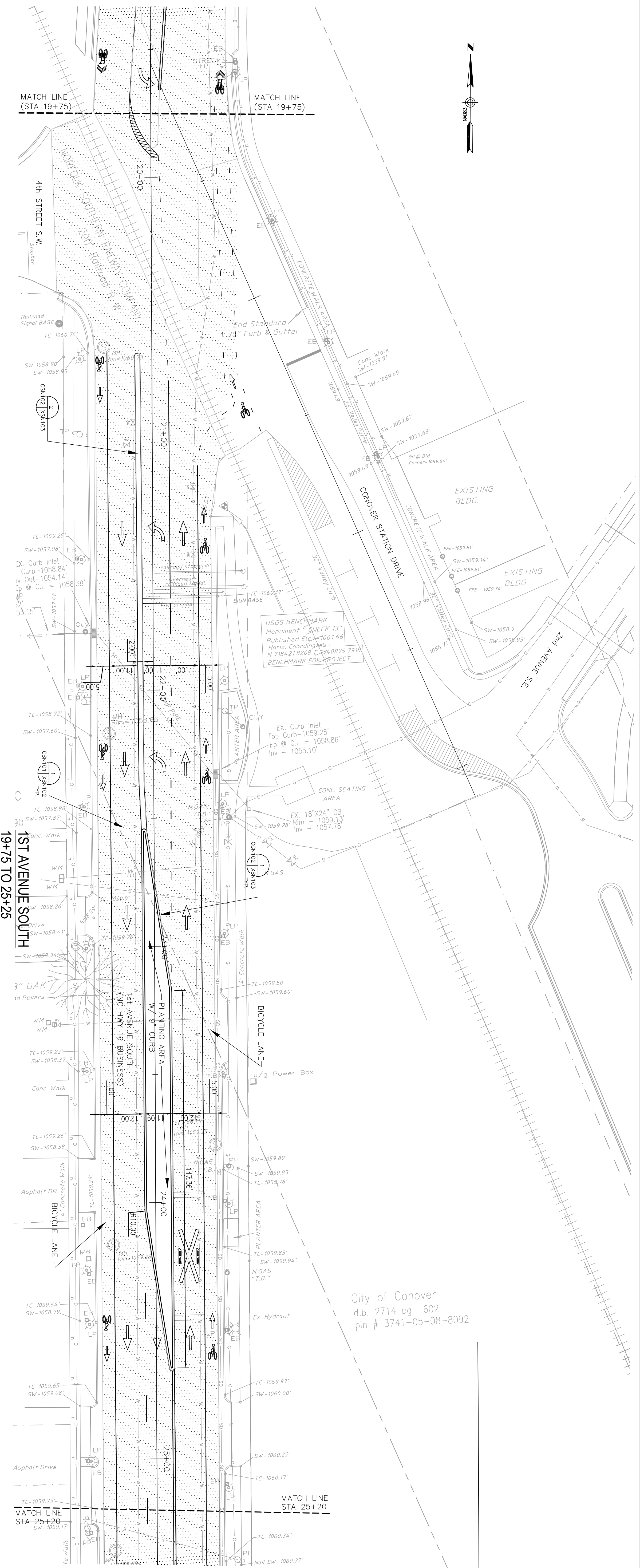
**CLAYTON**  
ENGINEERING & DESIGN

304 15th STREET SE, PO BOX 2351  
HICKORY, NC 28603



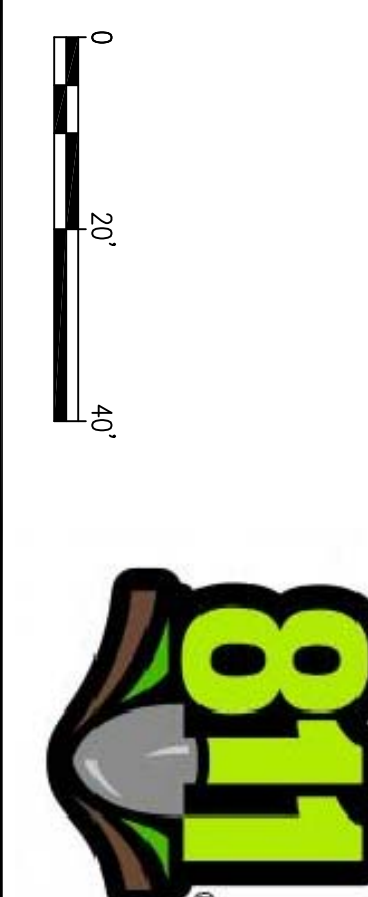


1ST AVENUE SOUTH  
25+25 TO 29+63  
SCALE: 1"=20'



1ST AVENUE SOUTH  
19+75 TO 25+25  
SCALE: 1"=20'

BID SET



NO.	DESCRIPTION	DATE
1	REVISIONS	
2	REVISIONS	
3	REVISIONS	
4	REVISIONS	

DATE	160110
DESIGNER	EMB
CHECKED BY	WSC
DRAWING TITLE	1st AVENUE SOUTH (NC HWY 16) STA 19+50 TO 29+63

CITY OF CONOVER	OWNER
CONOVER NORTH CAROLINA	OWNER
CONOVER STREETScape	PROJECT TITLE

**CLAYTON**  
ENGINEERING & DESIGN

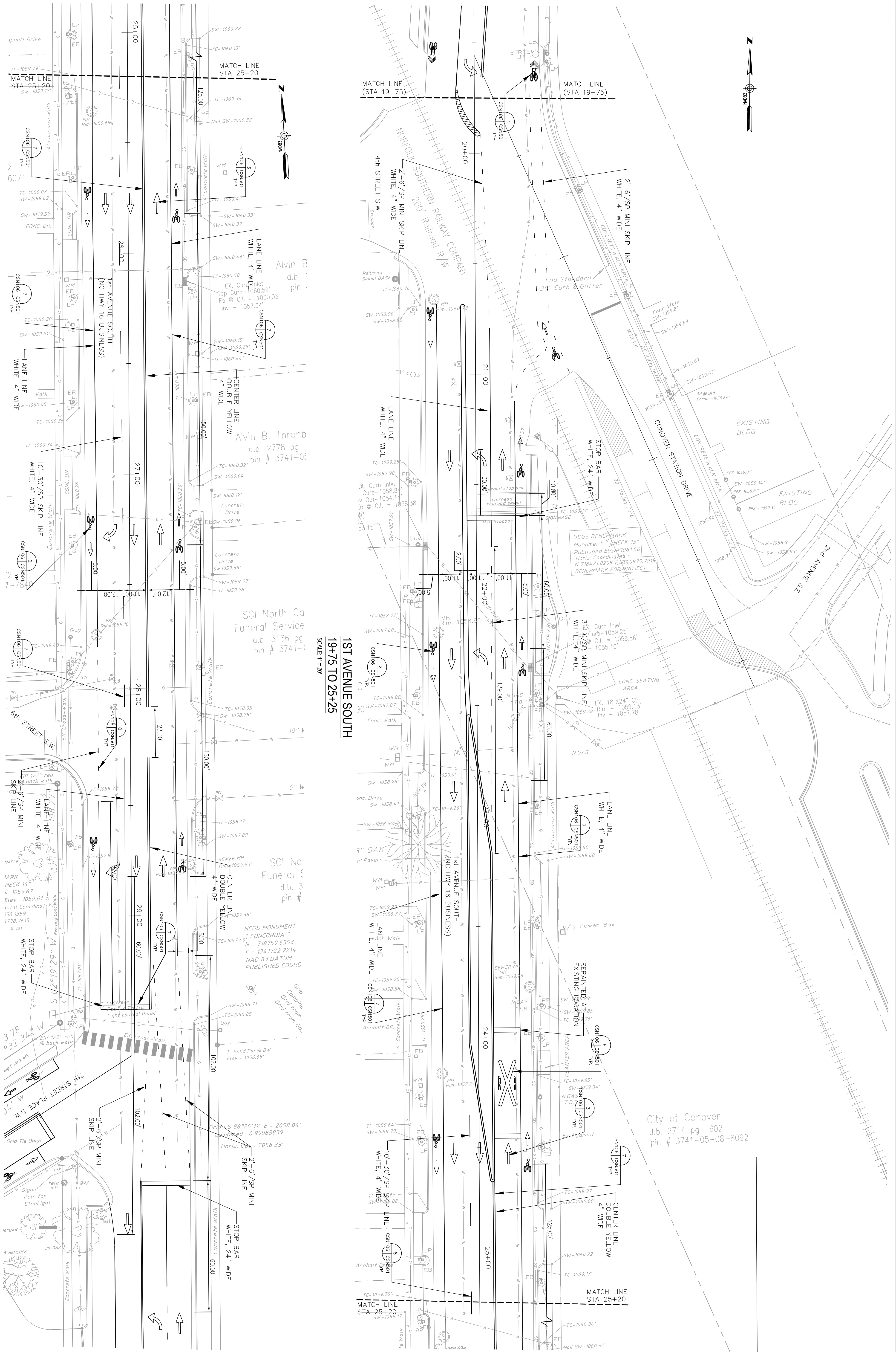
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HICKORY, NC 28603







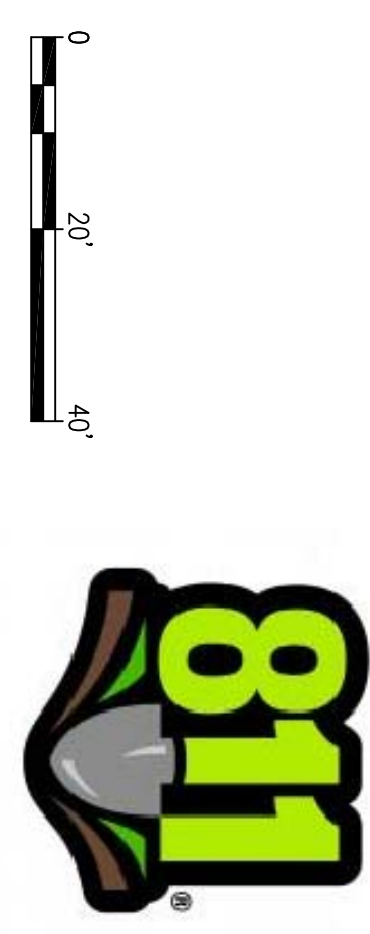




1ST AVENUE SOUTH  
25+25 TO 29+63  
SCALE: 1" = 20'

1ST AVENUE SOUTH  
19+75 TO 25+25  
SCALE: 1" = 20'

City of Conover  
d.b. 2714 pg 602  
pin # 3741-05-08-8092



BID SET

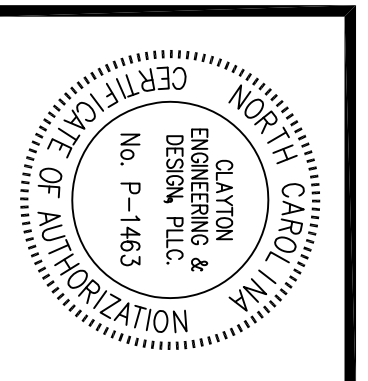
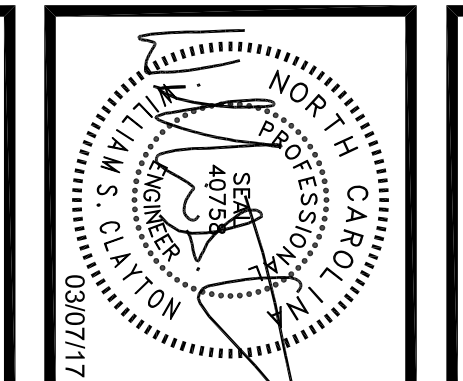
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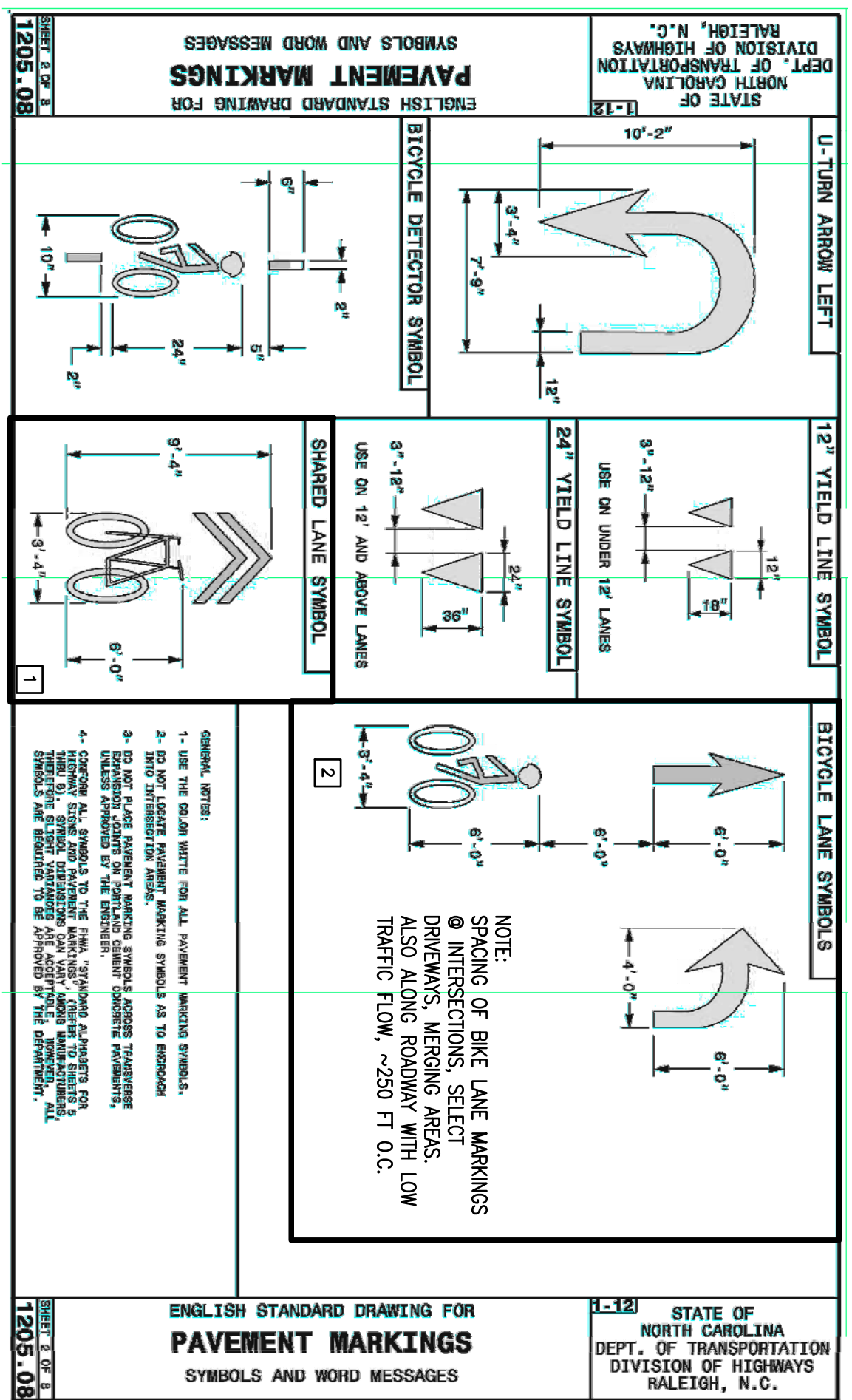
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CHECKER	WBC
SCALE	

CITY OF CONOVER	OWNER
CONOVER, NORTH CAROLINA	
CONOVER STREETSCAPE	PROJECT TITLE

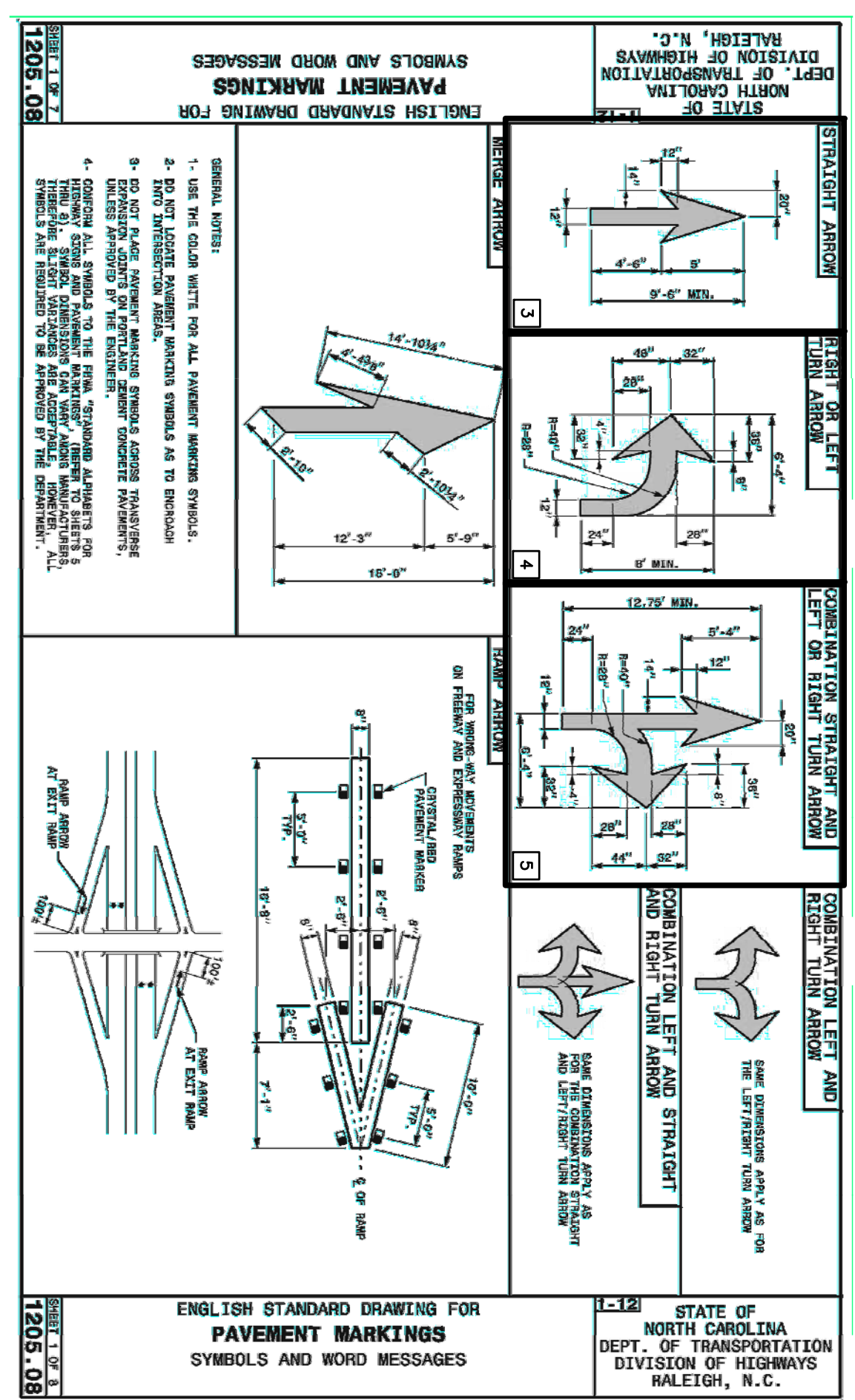
**CLAYTON ENGINEERING & DESIGN**

304 15th STREET SE, PO BOX 2351  
HICKORY, NC 28603

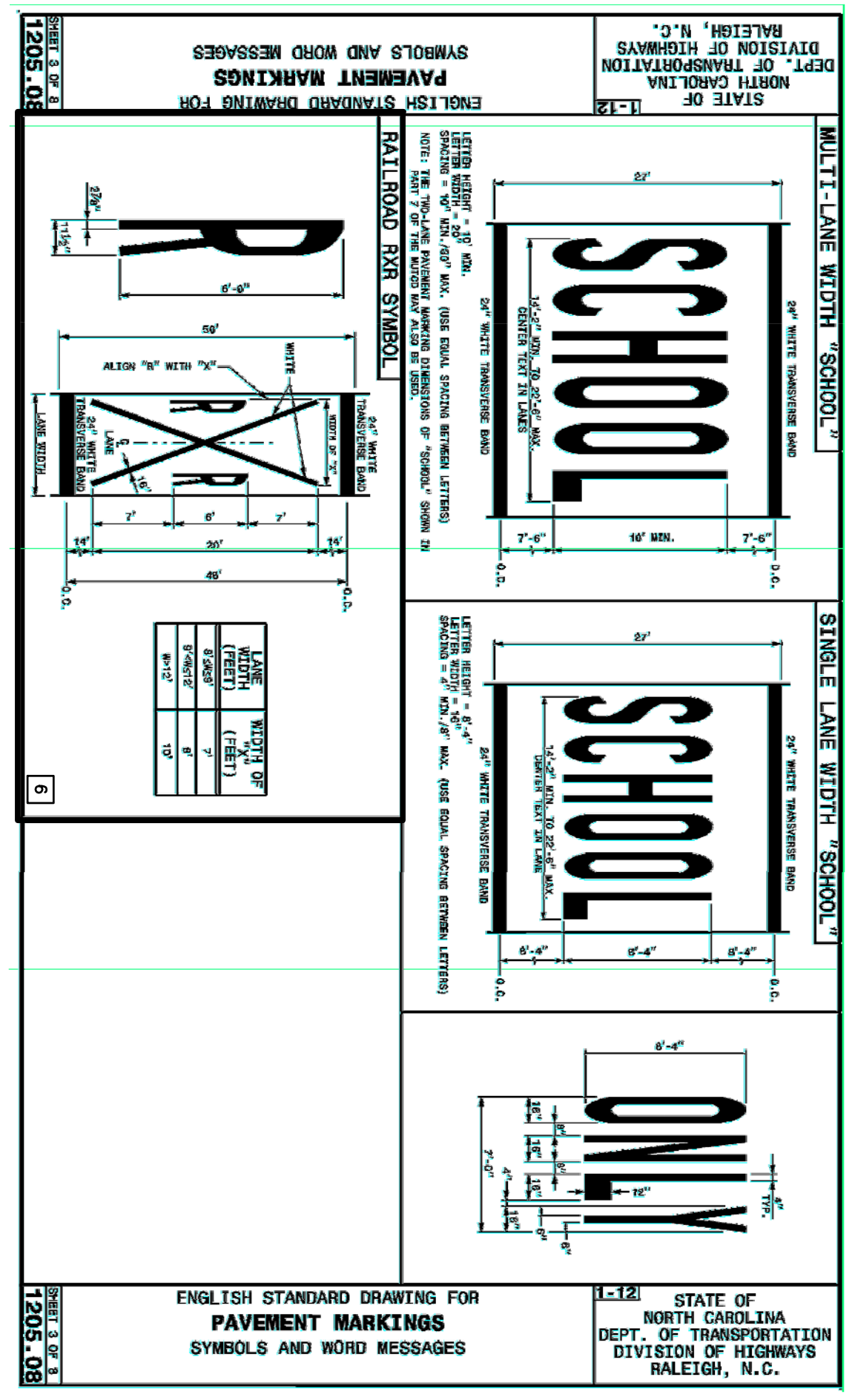




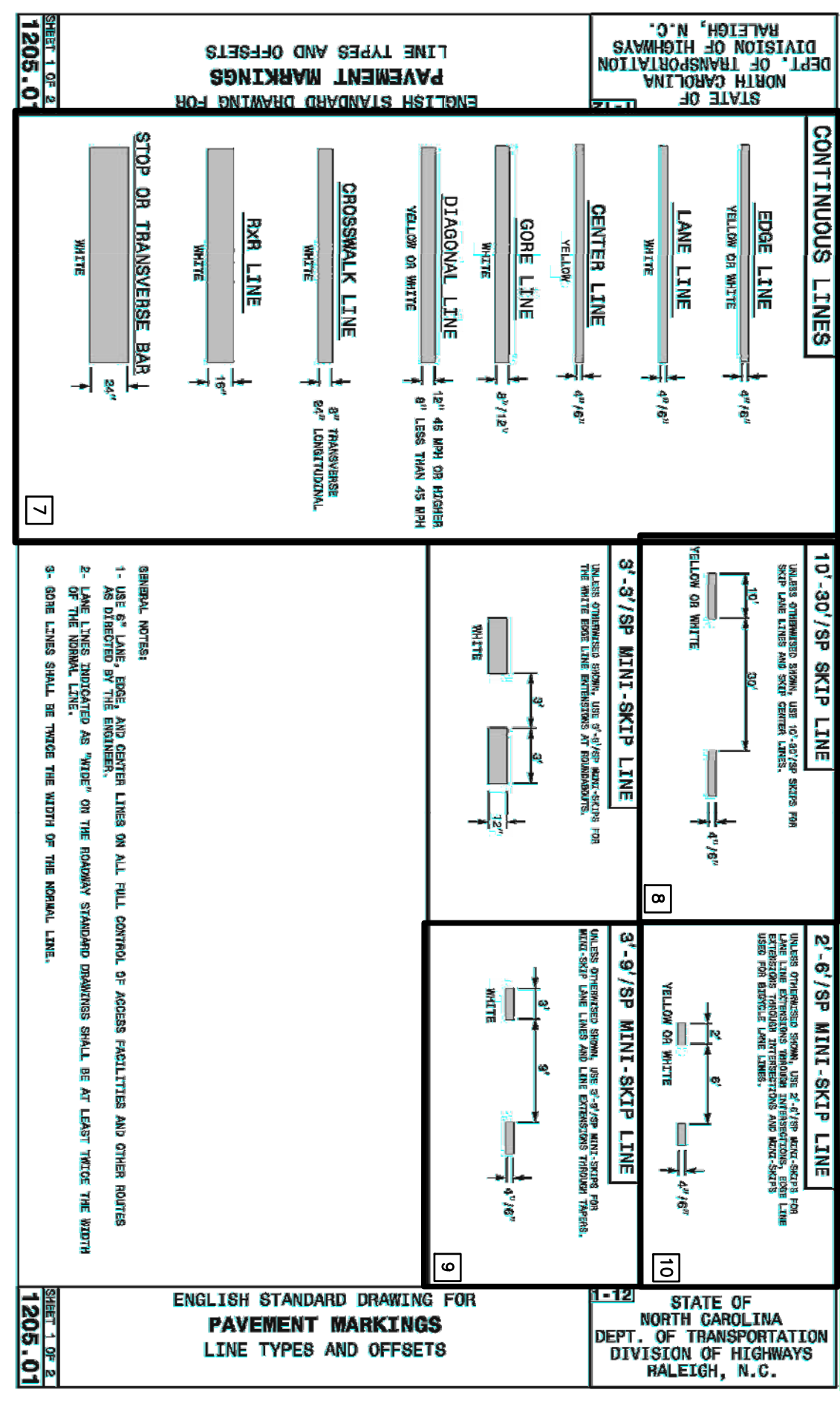
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CSN103-106 CSN501



TYPICAL ARROW TYPES DETAILS  
NO SCALE  
CSN103-106 CSN501



TYPICAL R/R CROSSING DETAIL  
NO SCALE  
CSN103-106 CSN501



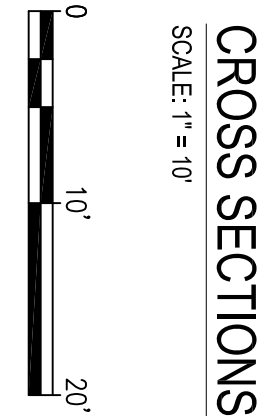
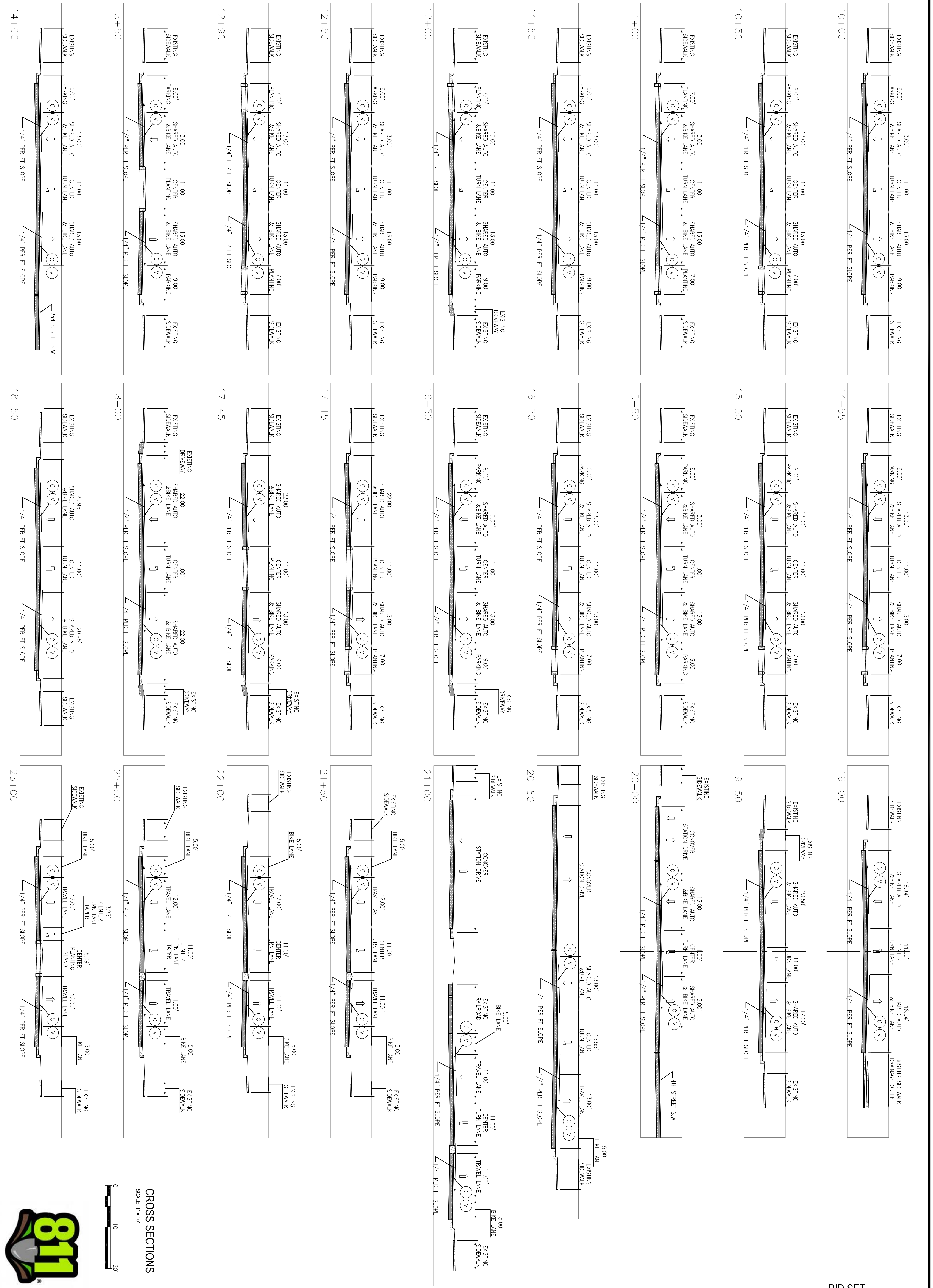
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NO SCALE  
CSN103-106 CSN501

BID SET

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		DATE 03/07/17	
DRAWN BY EMB	CHECKED BY WSC	REVISIONS	CITY OF CONOVER CONOVER, NORTH CAROLINA OWNER  CONOVER STREETSCAPE PROJECT TITLE
NO. / DESCRIPTION / DATE	NO. / DESCRIPTION / DATE	NO. / DESCRIPTION / DATE	CITY OF CONOVER CONOVER, NORTH CAROLINA OWNER  CONOVER STREETSCAPE PROJECT TITLE

**CLAYTON**  
ENGINEERING & DESIGN

304 15th STREET SE, PO BOX 2351  
HICKORY, NC 28603



BID SET

DRAWING TITLE		PROJECT TITLE	
CROSS SECTIONS 1st AVENUE SOUTH (NC HWY 16)		CITY OF CONOVER CONOVER, NORTH CAROLINA CONOVER STREETScape	
DATE	03/07/17	DATE	03/07/17
DESIGNED BY	WSC	DESIGNED BY	WSC
CHECKED BY		CHECKED BY	
NO.		NO.	
DESCRIPTION		DESCRIPTION	
DATE		DATE	

DRAWING TITLE		PROJECT TITLE	
CROSS SECTIONS 1st AVENUE SOUTH (NC HWY 16)		CITY OF CONOVER CONOVER, NORTH CAROLINA CONOVER STREETScape	
DATE	03/07/17	DATE	03/07/17
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CHECKED BY		CHECKED BY	
NO.		NO.	
DESCRIPTION		DESCRIPTION	
DATE		DATE	

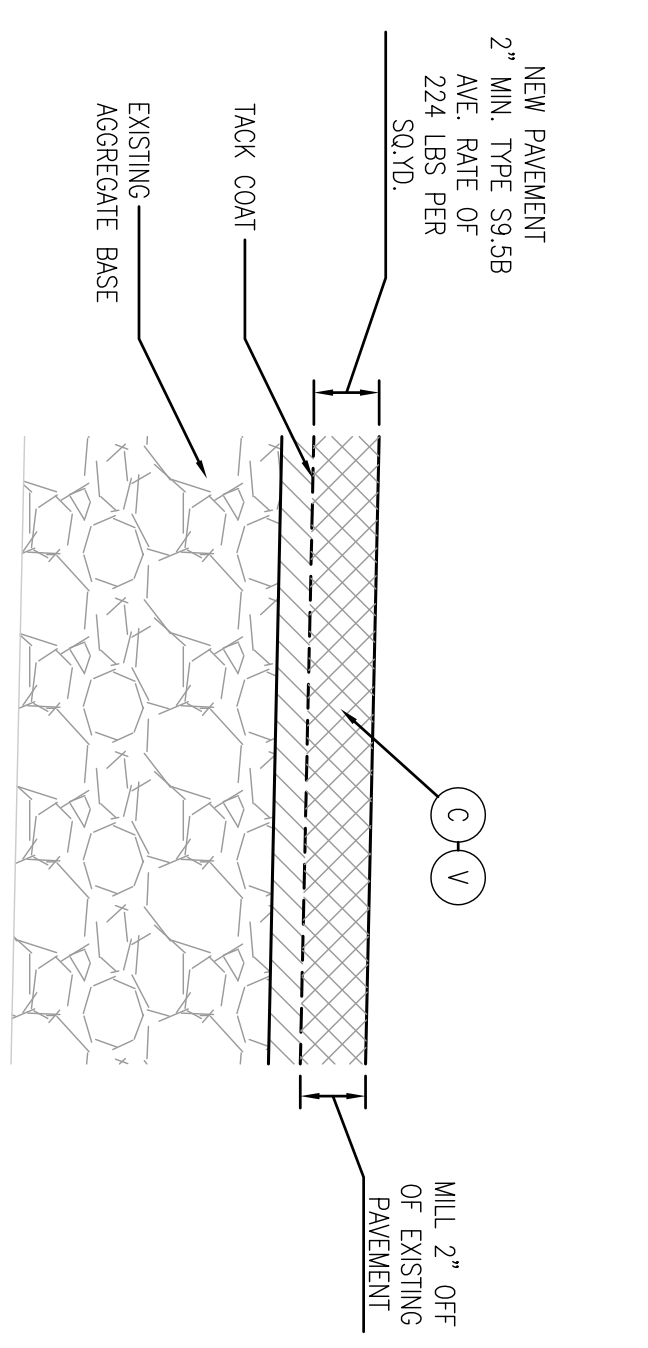
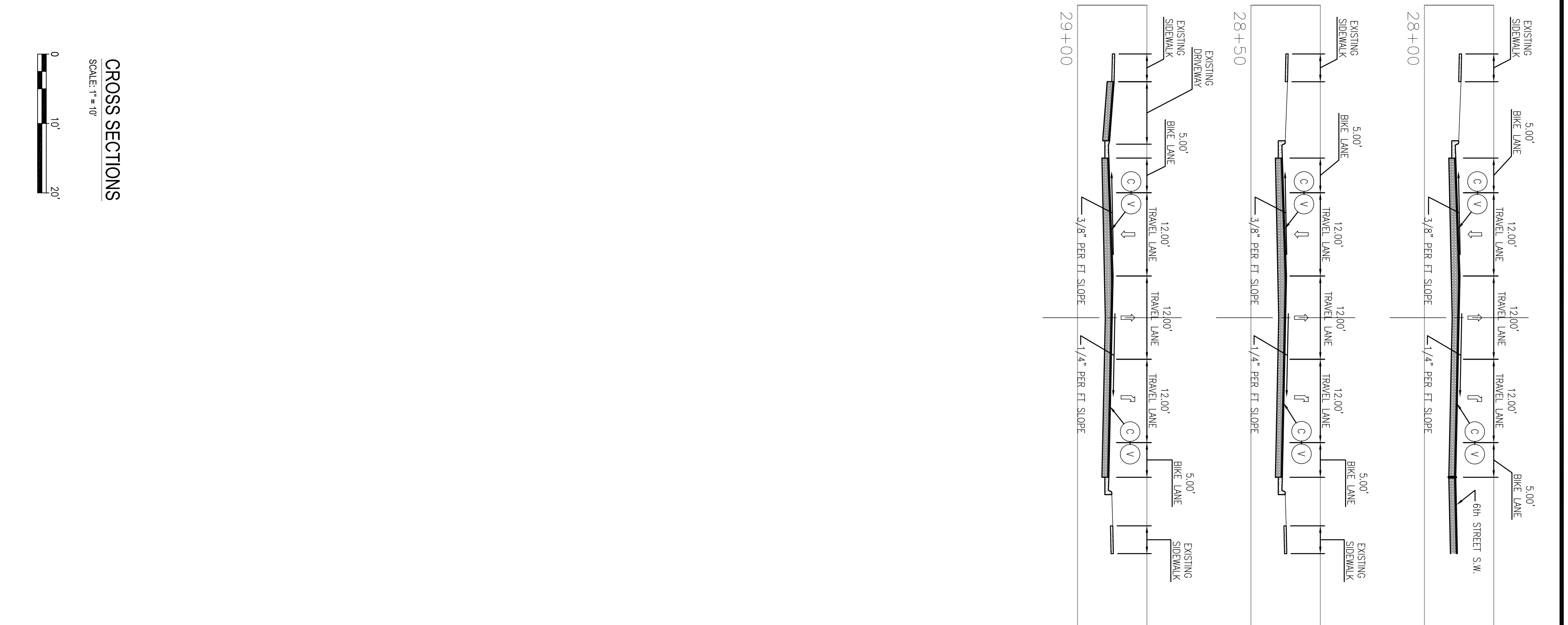
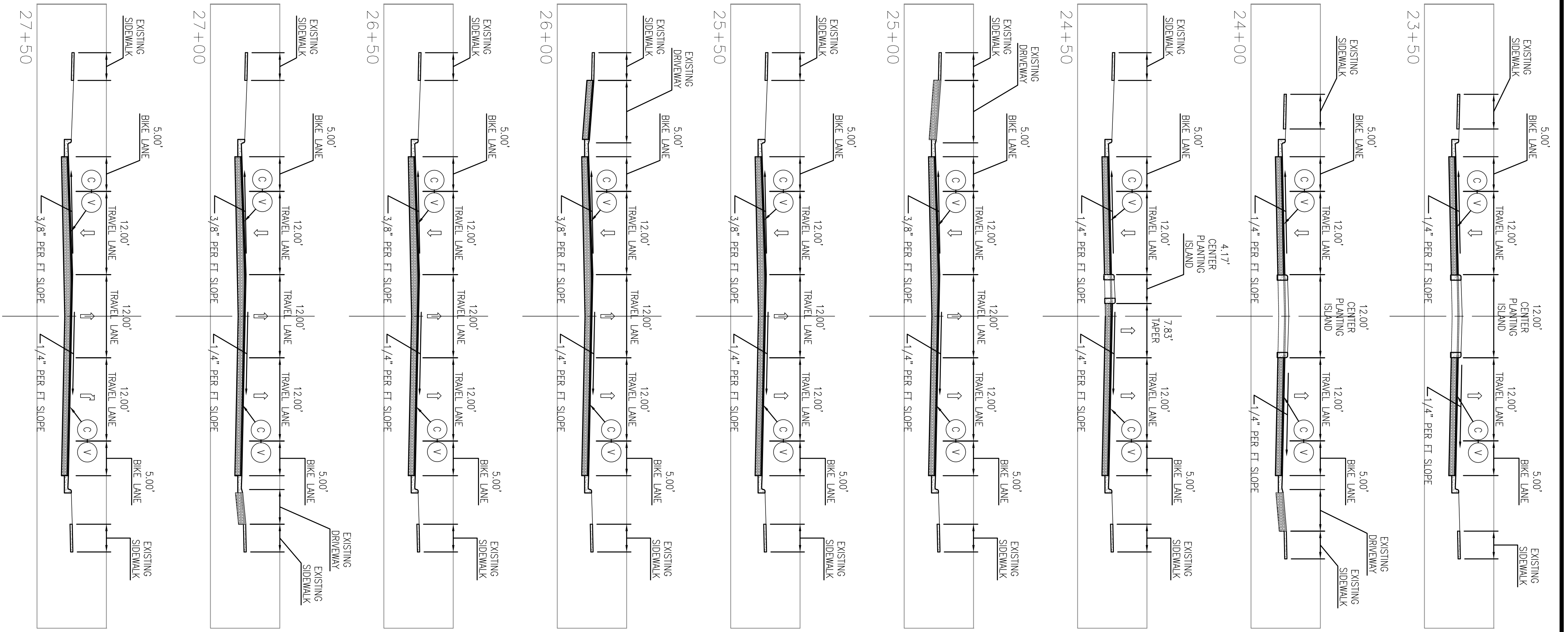
**CLAYTON ENGINEERING & DESIGN**

304 15th STREET SE, PO BOX 2351  
HICKORY, NC 28603

**CERTIFICATE OF AUTHORIZATION**

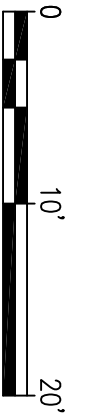
CLAYTON & DESIGN, PLLC  
No. P-1463

STATE OF NORTH CAROLINA  
JAMES S. COOPER, III  
03/07/17



REPAVEMENT DETAIL  
SCALE: 1" = 6"

CROSS SECTIONS  
SCALE: 1" = 10'



BID SET



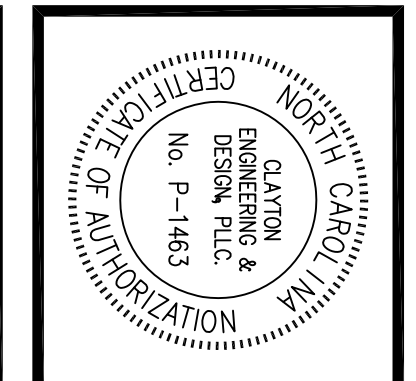
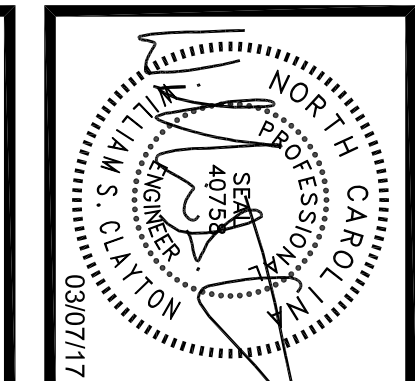
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REVISIONS		
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DATE	03/07/17	
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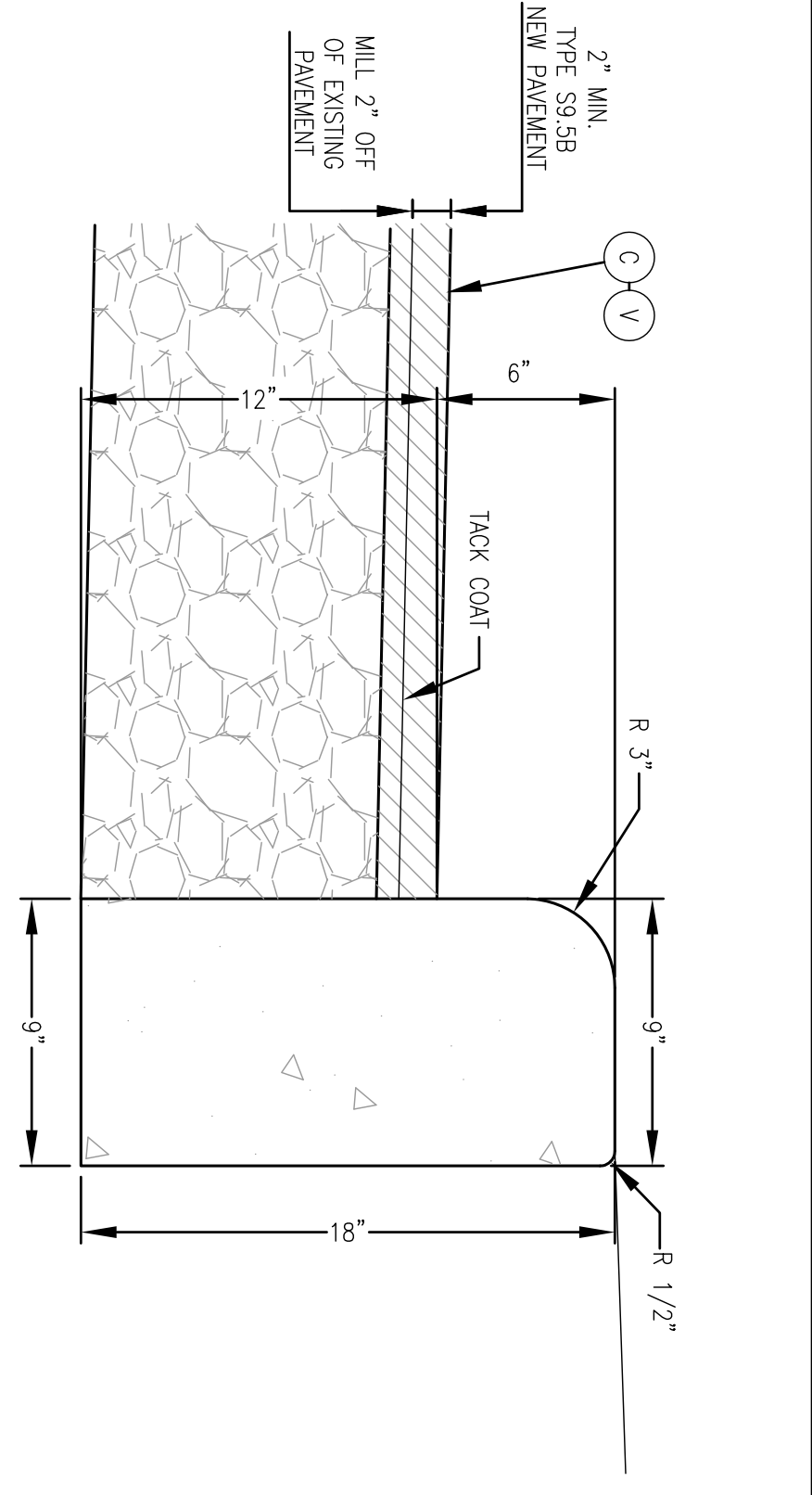
CITY OF CONOVER	OWNER
CONOVER, NORTH CAROLINA	
CONOVER STREETScape	PROJECT TITLE

**CLAYTON**  
ENGINEERING & DESIGN

304 15th STREET SE, PO BOX 2351  
HICKORY, NC 28603

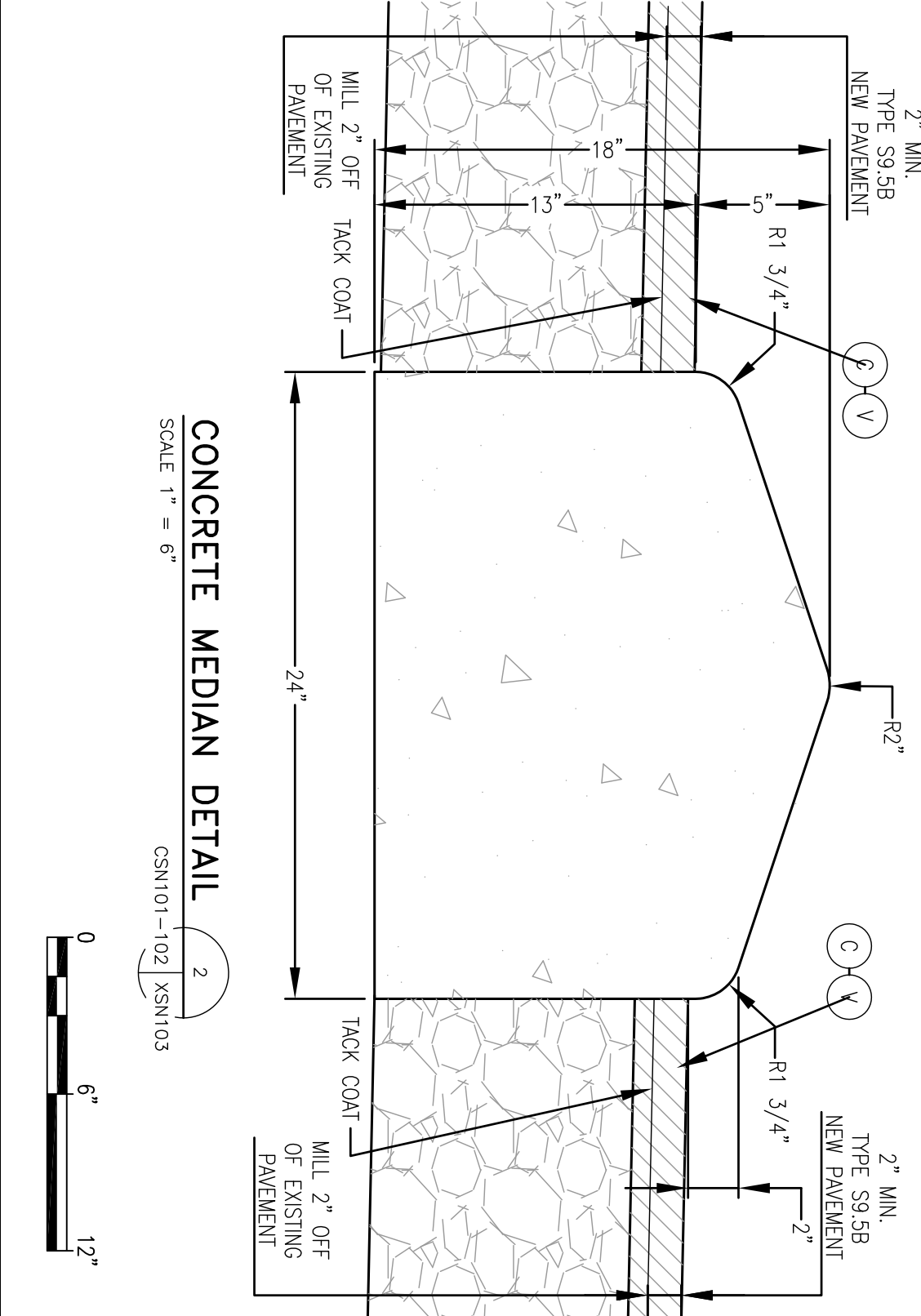


SHEET  
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OF

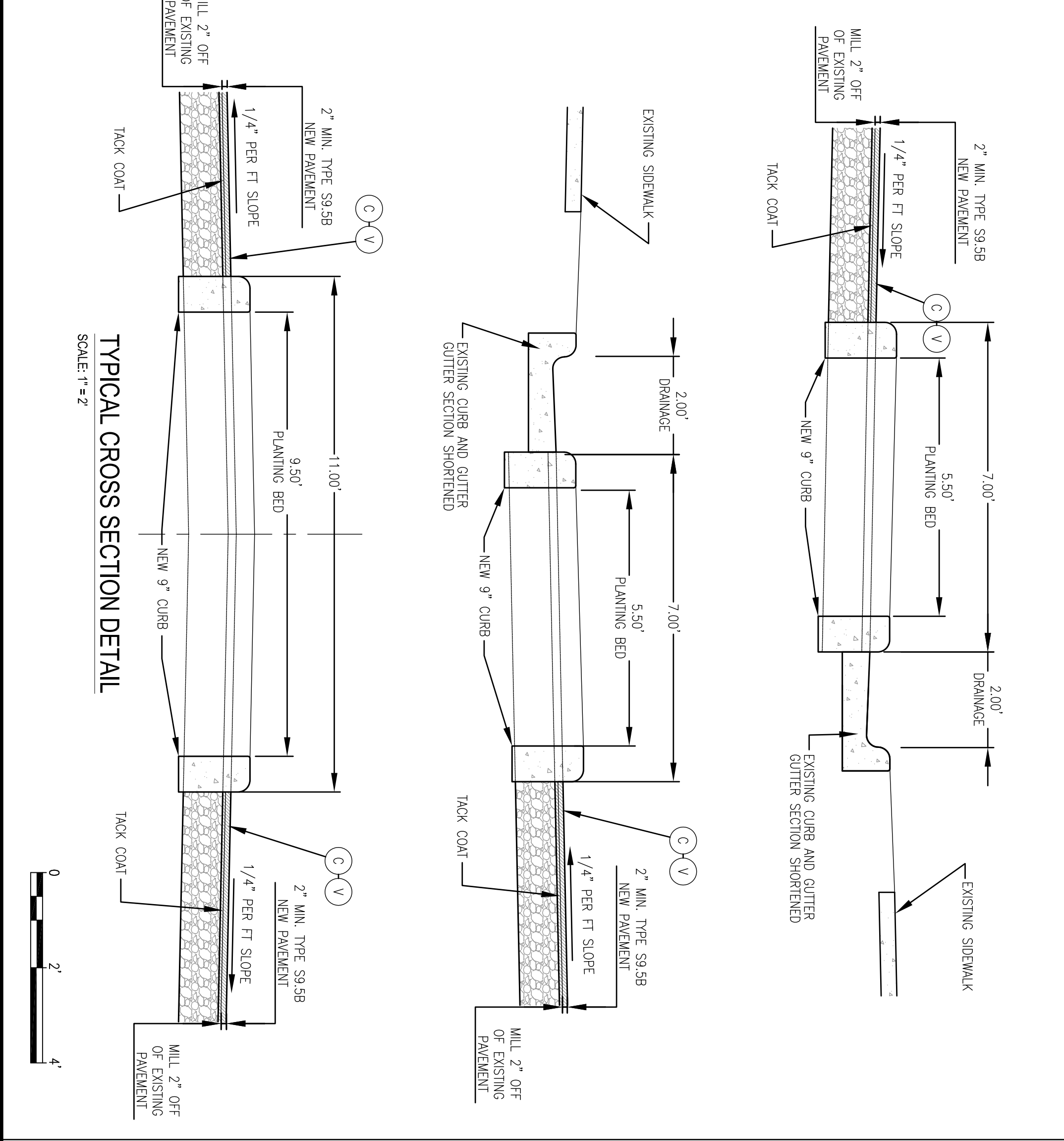


**CURB DETAIL**  
SCALE 1" = 6"  
CSN101-102 | XSN103

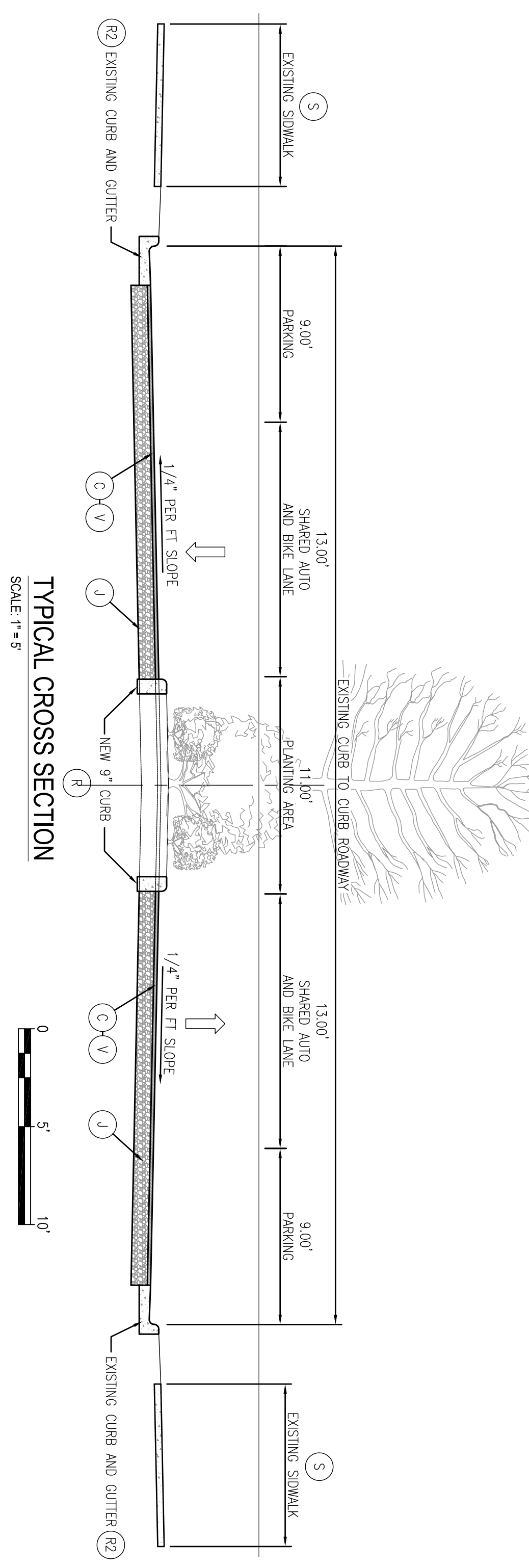
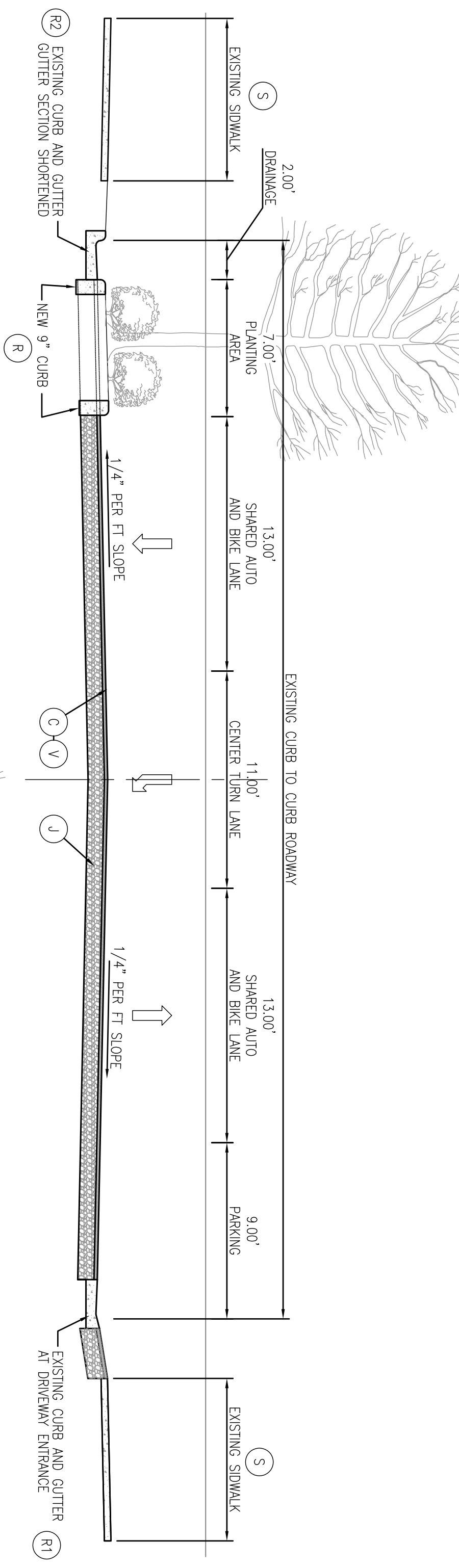
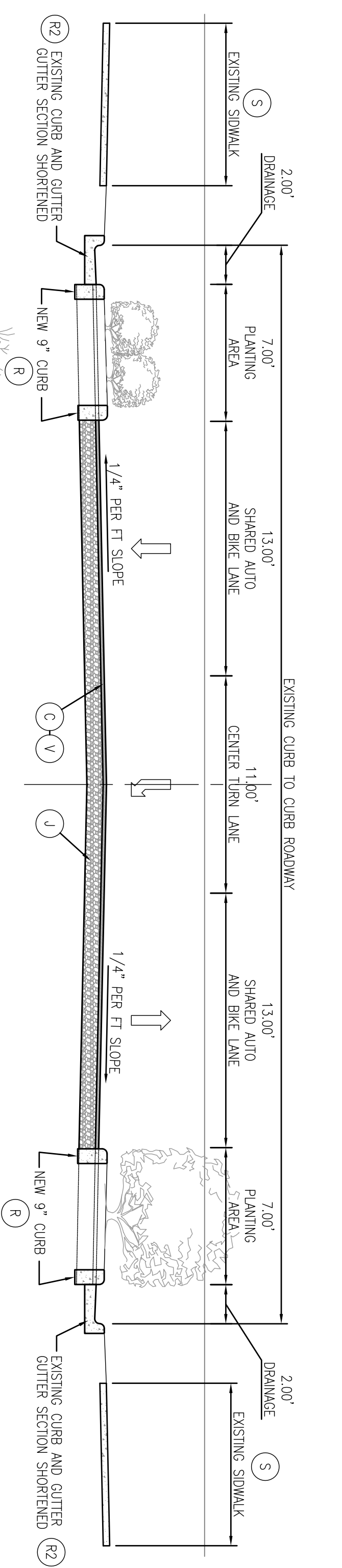
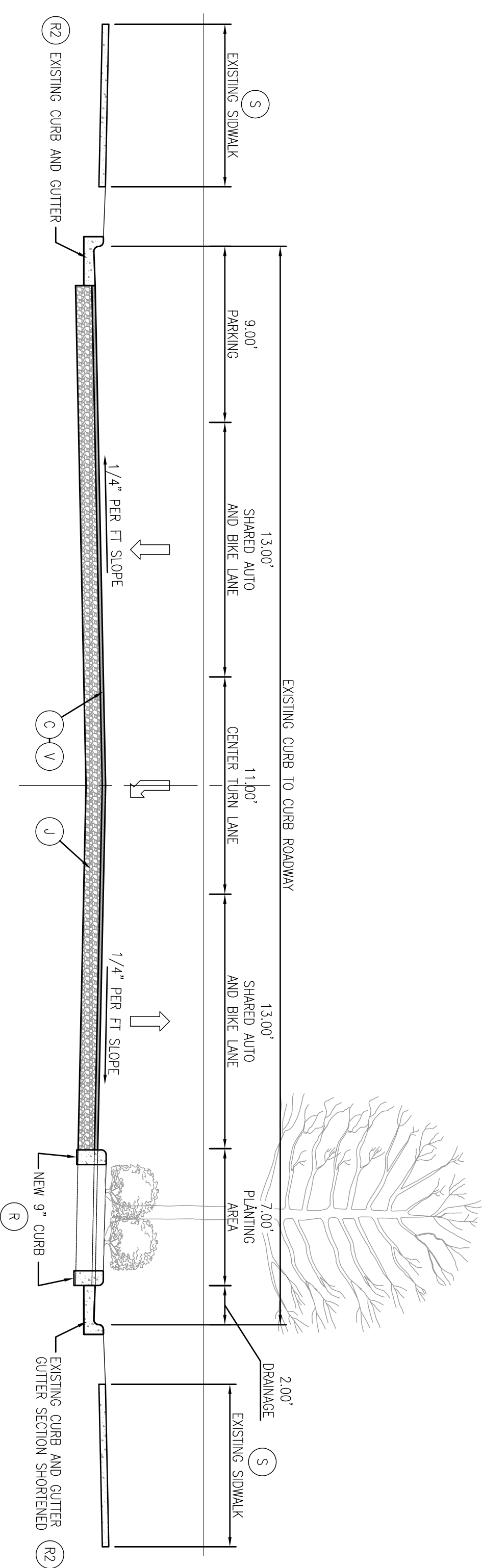
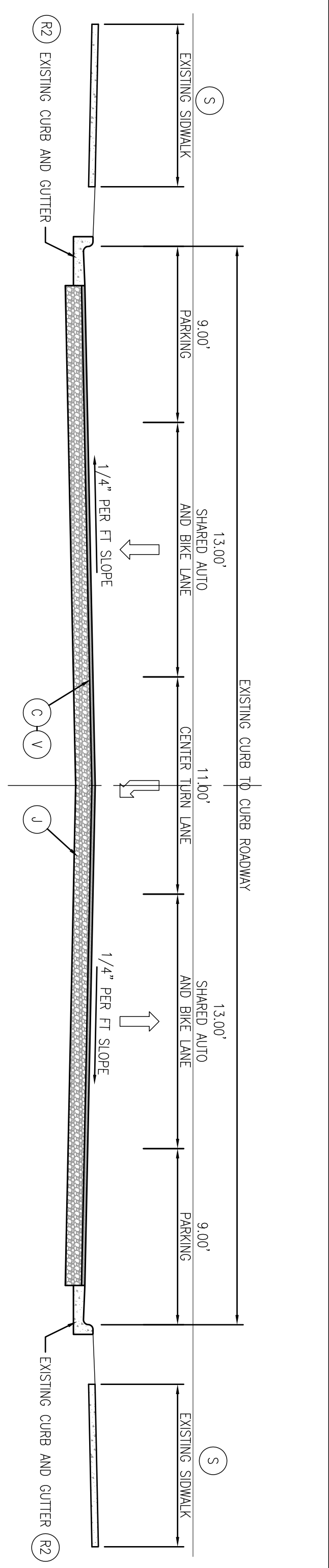
PAVEMENT SCHEDULE	
C	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE 99.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
J	EXISTING AGGREGATE BASE COURSE
R	9" CONCRETE CURB
R1	EXISTING CURB CUT AT DRIVEWAY ENTRANCE
R2	EXISTING CURB AND GUTTER
S	EXISTING CONCRETE SIDEWALK
V	MILLING BITUMINOUS PAVEMENT 2" DEPTH



**CONCRETE MEDIAN DETAIL**  
SCALE 1" = 6"  
CSN101-102 | XSN103



**TYPICAL CROSS SECTION DETAIL**  
SCALE 1" = 2"



**TYPICAL CROSS SECTION**  
SCALE 1" = 8"

BID SET



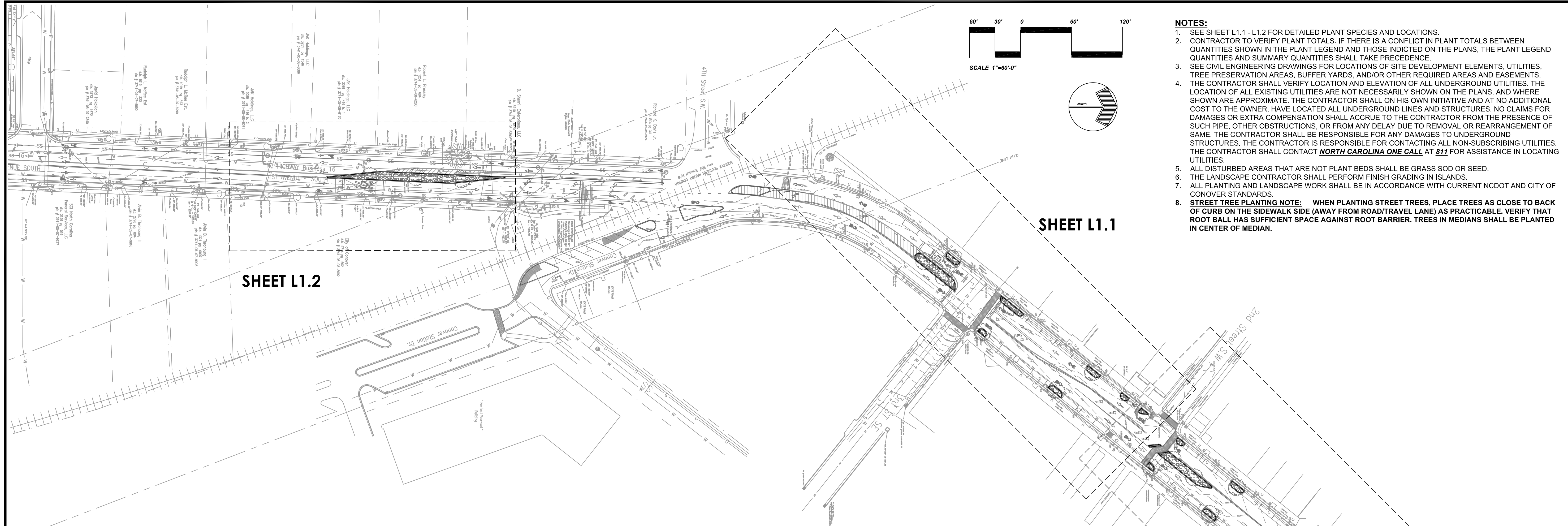
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DESIGNED BY	EMB	
CHECKED BY	WSC	
NO.	DESCRIPTION	DATE
1	REVISIONS	

CITY OF CONOVER  
CONOVER, NORTH CAROLINA  
CONOVER STREETScape

CROSS SECTIONS DETAILS  
1st AVENUE SOUTH (NC HWY 16)

**CLAYTON ENGINEERING & DESIGN**  
304 15th STREET SE, PO BOX 2351  
HICKORY, NC 28603

CERTIFICATE OF AUTHORIZATION  
No. P-1463  
CLAYTON ENGINEERING & DESIGN, PLLC  
NORTH CAROLINA PROFESSIONAL ENGINEER  
40754  
09/07/12



- NOTES:**
- SEE SHEET L1.1 - L1.2 FOR DETAILED PLANT SPECIES AND LOCATIONS.
  - CONTRACTOR TO VERIFY PLANT TOTALS. IF THERE IS A CONFLICT IN PLANT TOTALS BETWEEN QUANTITIES SHOWN IN THE PLANT LEGEND AND THOSE INDICATED ON THE PLANS, THE PLANT LEGEND QUANTITIES AND SUMMARY QUANTITIES SHALL TAKE PRECEDENCE.
  - SEE CIVIL ENGINEERING DRAWINGS FOR LOCATIONS OF SITE DEVELOPMENT ELEMENTS, UTILITIES, TREE PRESERVATION AREAS, BUFFER YARDS, AND/OR OTHER REQUIRED AREAS AND EASEMENTS.
  - THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON THE PLANS, AND WHERE SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL ON HIS OWN INITIATIVE AND AT NO ADDITIONAL COST TO THE OWNER, HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPE, OTHER OBSTRUCTIONS, OR FROM ANY DELAY DUE TO REMOVAL OR REARRANGEMENT OF SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NON-SUBSCRIBING UTILITIES. THE CONTRACTOR SHALL CONTACT **NORTH CAROLINA ONE CALL AT 811** FOR ASSISTANCE IN LOCATING UTILITIES.
  - ALL DISTURBED AREAS THAT ARE NOT PLANT BEDS SHALL BE GRASS SOD OR SEED.
  - THE LANDSCAPE CONTRACTOR SHALL PERFORM FINISH GRADING IN ISLANDS.
  - ALL PLANTING AND LANDSCAPE WORK SHALL BE IN ACCORDANCE WITH CURRENT NCDOT AND CITY OF CONOVER STANDARDS.
  - STREET TREE PLANTING NOTE:** WHEN PLANTING STREET TREES, PLACE TREES AS CLOSE TO BACK OF CURB ON THE SIDEWALK SIDE (AWAY FROM ROAD/TRAVEL LANE) AS PRACTICABLE. VERIFY THAT ROOT BALL HAS SUFFICIENT SPACE AGAINST ROOT BARRIER. TREES IN MEDIANS SHALL BE PLANTED IN CENTER OF MEDIAN.

**PLANTING SPECIFICATIONS**

- PLANT MATERIAL**
  - FURNISH NURSERY-GROWN PLANTS INDICATED IN PLANT LEGEND SHOWN ON DRAWINGS AND COMPLYING WITH ANSI Z60.1 - 2014, *AMERICAN STANDARD FOR NURSERY STOCK*.
  - ANNUALS: PROVIDE HEALTHY, DISEASE-FREE PLANTS OF SPECIES AND VARIETY SHOWN OR LISTED, WITH WELL-ESTABLISHED ROOT SYSTEMS. PROVIDE ONLY PLANTS THAT ARE ACCLIMATED TO OUTDOOR CONDITIONS BEFORE DELIVERY.
  - CONTRACTOR SHALL PROVIDE A ONE YEAR WARRANTY FROM FINAL ACCEPTANCE ON ALL PLANTS UNLESS APPROVED OTHERWISE BY THE OWNER.**
- SOIL AMENDMENTS AS REQUIRED FROM SOILS REPORT/TESTING**
  - LIME: ASTM C 602, AGRICULTURAL LIMING MATERIAL CONTAINING A MINIMUM OF 80 PERCENT CALCIUM CARBONATE EQUIVALENT.
  - SULFUR: GRANULAR, BIODEGRADABLE, AND CONTAINING A MINIMUM OF 90 PERCENT SULFUR.
  - IRON SULFATE: GRANULATED FERROUS SULFATE CONTAINING A MINIMUM OF 20 PERCENT IRON AND 10 PERCENT SULFUR.
  - ALUMINUM SULFATE: COMMERCIAL GRADE, UNADULTERATED.
  - PERLITE: HORTICULTURAL PERLITE, SOIL AMENDMENT GRADE.
  - AGRICULTURAL GYPSUM: MINIMUM 90 PERCENT CALCIUM SULFATE.
  - SAND: CLEAN, WASHED, NATURAL OR MANUFACTURED, AND FREE OF TOXIC MATERIALS.
  - COMPOST: WELL-COMPOSTED, STABLE, AND WEED-FREE ORGANIC MATTER, PH RANGE OF 5.5 TO 8; MOISTURE CONTENT 35 TO 55 PERCENT BY WEIGHT; 100 PERCENT PASSING THROUGH 3/4-INCH SIEVE.
  - SPHAGNUM PEAT: PARTIALLY DECOMPOSED SPHAGNUM PEAT MOSS, FINELY DIVIDED OR GRANULAR TEXTURE, WITH A PH RANGE OF 3.4 TO 4.8.
  - MANURE: WELL-ROTTED, UNLEACHED, STABLE OR CATTLE MANURE CONTAINING NOT MORE THAN 25 PERCENT BY VOLUME OF STRAW, SAWDUST, OR OTHER BEDDING MATERIALS; FREE OF TOXIC SUBSTANCES, STONES, STICKS, SOIL, WEED SEED, DEBRIS, AND MATERIAL HARMFUL TO PLANT GROWTH.
- FERTILIZERS**
  - BONEMEAL: COMMERCIAL, RAW OR STEAMED, FINELY GROUND; A MINIMUM OF 1 PERCENT NITROGEN AND 10 PERCENT PHOSPHORIC ACID.
  - SUPERPHOSPHATE: COMMERCIAL, PHOSPHATE MIXTURE, SOLUBLE; A MINIMUM OF 20 PERCENT AVAILABLE PHOSPHORIC ACID.
  - COMMERCIAL FERTILIZER: COMMERCIAL-GRADE COMPLETE FERTILIZER OF NEUTRAL CHARACTER, CONSISTING OF FAST- AND SLOW-RELEASE NITROGEN.
  - SLOW-RELEASE FERTILIZER: GRANULAR OR PELLETED FERTILIZER.
- PLANTING MIX**
  - PLANTING MIX: SHALL BE NATURAL, FERTILE, AGRICULTURAL TOPSOIL, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH. WITH PH RANGE OF 6.5 TO 7. IT MAY BE DEVELOPED BY AMENDING THE EXISTING SOIL, OR REMOVING THE EXISTING SOIL AND REPLACING WITH NEW SOIL. IT SHALL BE FREE OF ROOTS, PLANTS, SOD, STONES, CLODS, CLAY LUMPS, POCKETS OF COARSE SAND, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, BUILDING DEBRIS, AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH. PLANTING MIX SHALL NOT BE USED WHILE IN A FROZEN OR MUDDY CONDITION. UNLESS OTHERWISE SPECIFIED, THE PLANTING MIX SHALL CONTAIN THE FOLLOWING PERCENTAGES:
    - CLAY: MIN. 10% - MAX. 30% (RED CLAY WELL PULVERIZED); CLAY SHALL BE STERILE.
    - SILT: MIN. 30% - MAX. 50%
    - COARSE SAND: MIN. 30% - MAX. 45% (1.0mm TO 0.5mm DIA., AND FREE OF ROCK)
    - ORGANIC MAT.: MIN. 5% (COMPOST/HUMUS SUCH AS SAWDUST OR LEAF MOLD THAT IS DECOMPOSED)
    - ELEMENTS: CALCIUM 55% - 80%; MAGNESIUM 10% - 30%; POTASSIUM 5% - 8%
  - CONTRACTOR TO PROVIDE SOILS TEST/ANALYSIS INDICATING ABOVE REQUIREMENTS.**

**PLANTING SPECIFICATIONS (CONT.)**

- TREE, SHRUB, AND VINE PLANTING**
  - BEFORE PLANTING, VERIFY THAT ROOT FLARE IS VISIBLE AT TOP OF ROOT BALL ACCORDING TO ANSI Z60.1.
  - REMOVE STEM GIRDLING ROOTS AND KINKED ROOTS. REMOVE INJURED ROOTS BY CUTTING CLEANLY; DO NOT BREAK.
  - SET STOCK PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 1 INCH ABOVE ADJACENT FINISH GRADES.
  - USE PLANTING SOIL FOR BACKFILL.
  - BALLED AND BURLAPPED: AFTER PLACING SOME BACKFILL AROUND ROOT BALL TO STABILIZE PLANT, CAREFULLY CUT AND REMOVE BURLAP, ROPE, AND WIRE BASKETS FROM TOPS OF ROOT BALLS AND FROM SIDES, BUT DO NOT REMOVE FROM UNDER ROOT BALLS. REMOVE PALLETS, IF ANY, BEFORE SETTING. DO NOT USE PLANTING STOCK IF ROOT BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATION.
  - CONTAINER-GROWN: CAREFULLY REMOVE ROOT BALL FROM CONTAINER WITHOUT DAMAGING ROOT BALL OR PLANT.
  - BACKFILL AROUND ROOT BALL IN LAYERS, TAMPING TO SETTLE SOIL AND ELIMINATE VOIDS AND AIR POCKETS. WHEN PLANTING PIT IS APPROXIMATELY ONE-HALF FILLED, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO MORE WATER IS ABSORBED.
  - CONTINUE BACKFILLING PROCESS. WATER AGAIN AFTER PLACING AND TAMPING FINAL LAYER OF SOIL.
  - WHEN PLANTING ON SLOPES, SET THE PLANT SO THE ROOT FLARE ON THE UPHILL SIDE IS FLUSH WITH THE SURROUNDING SOIL ON THE SLOPE; THE EDGE OF THE ROOT BALL ON THE DOWNHILL SIDE WILL BE ABOVE THE SURROUNDING SOIL. APPLY ENOUGH SOIL TO COVER THE DOWNHILL SIDE OF THE ROOT BALL.
  - PRUNE/REMOVE ONLY DEAD, DYING, OR BROKEN BRANCHES. DO NOT PRUNE FOR SHAPE. PRUNE TO RETAIN NATURAL CHARACTER.
  - PRUNE, THIN, AND SHAPE TREES, SHRUBS, AND VINES ACCORDING TO STANDARD PROFESSIONAL HORTICULTURAL AND ARBORICULTURAL PRACTICES FOR NEWLY PLANTED PLANTS. UNLESS OTHERWISE INDICATED BY LANDSCAPE ARCHITECT, DO NOT CUT TREE LEADERS.
- GROUND COVER, PERENNIAL, AND ANNUAL PLANTING**
  - SET OUT AND SPACE GROUND COVER, PERENNIALS, AND/OR ANNUALS AS INDICATED IN EVEN ROWS WITH TRIANGULAR SPACING.
  - USE PLANTING MIX FOR BACKFILL.
  - DIG HOLES LARGE ENOUGH TO ALLOW SPREADING OF ROOTS.
  - WORK SOIL AROUND ROOTS TO ELIMINATE AIR POCKETS AND LEAVE A SLIGHT SAUCER INDENTATION AROUND PLANTS TO HOLD WATER.
  - WATER THOROUGHLY AFTER PLANTING, TAKING CARE NOT TO COVER PLANT CROWNS WITH WET SOIL.
  - PROTECT PLANTS FROM HOT SUN AND WIND; REMOVE PROTECTION IF PLANTS SHOW EVIDENCE OF RECOVERY FROM TRANSPLANTING SHOCK.
- PLANT AND PLANT BED MULCHING**
  - MULCH BACKFILLED SURFACES OF PLANTING BEDS AND OTHER AREAS INDICATED.
  - TREES AND TREE-FORM SHRUBS IN TURF AREAS: APPLY ORGANIC MULCH RING OF 3-INCH AVERAGE THICKNESS, WITH MINIMUM 36-INCH RADIUS AROUND TRUNKS OR STEMS. DO NOT PLACE MULCH WITHIN 3 INCHES OF TRUNKS OR STEMS.
  - ORGANIC MULCH IN PLANT BEDS: APPLY 3-INCH AVERAGE THICKNESS OF MULCH OVER ENTIRE SURFACE OF PLANT BED, AND FINISH LEVEL WITH ADJACENT FINISH GRADES. DO NOT PLACE MULCH WITHIN 2 INCHES OF TRUNKS OR STEMS.
- PLANT MAINTENANCE**
  - MAINTAIN PLANTINGS BY PRUNING, CULTIVATING, WATERING, WEEDING, FERTILIZING, MULCHING, RESTORING PLANTING SAUCERS, RESETTling TO PROPER GRADES OR VERTICAL POSITION, AND PERFORMING OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE PLANTINGS. SPRAY OR TREAT AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE.
  - SET IRRIGATION SYSTEM FOR ZONE DURATION APPLICABLE FOR NEWLY PLANTED PLANTS IF APPLICABLE.
  - FILL IN AS NECESSARY SOIL SUBSIDENCE THAT MAY OCCUR BECAUSE OF SETTLING OR OTHER PROCESSES. REPLACE MULCH MATERIALS DAMAGED OR LOST IN AREAS OF SUBSIDENCE.
  - APPLY TREATMENTS AS REQUIRED TO KEEP PLANT MATERIALS, PLANTED AREAS, AND SOILS FREE OF PESTS AND PATHOGENS OR DISEASE. USE PRACTICES TO MINIMIZE THE USE OF PESTICIDES AND REDUCE HAZARDS.
  - APPLY PESTICIDES AND OTHER CHEMICAL PRODUCTS AND BIOLOGICAL CONTROL AGENTS IN ACCORDANCE WITH AUTHORITIES HAVING JURISDICTION AND MANUFACTURER'S WRITTEN RECOMMENDATIONS. COORDINATE APPLICATIONS WITH OWNER'S OPERATIONS AND OTHERS IN PROXIMITY TO THE WORK. NOTIFY OWNER BEFORE EACH APPLICATION IS PERFORMED.
  - PROTECT PLANTS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND OPERATIONS OF OTHER CONTRACTORS AND TRADES. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR, OR REPLACE DAMAGED PLANTINGS.

**Plant Legend**

KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QUANTITY
1	<i>Ulmus parvifolia</i>	Lacebark Elm	3 1/2' cal.	As Shown	15
2	<i>Lagerstroemia indica 'Natchez'</i>	Natchez Crape Myrtle	12' height	As Shown	7
3	<i>Distylium 'Vintage Jade'</i>	Vintage Jade Distylium	3 gal.	36" o.c.	21
4	<i>Ligustrum sinense 'Sunshine'</i>	Sunshine Ligustrum	3 gal.	36" o.c.	27
5	<i>Loropetalum chinense 'Purple Pixie'</i>	Purple Pixie Loropetalum	3 gal.	36" o.c.	33
6	<i>Euonymus fortunei 'Emerald Gaiety'</i>	Emerald Gaiety Wintercreeper	3 gal.	30" o.c.	36
7	<i>Rosa 'Meidrifora'</i>	Coral Drift Rose Groundcover	3 gal.	30" o.c.	58
8	<i>Liriope muscari 'Big Blue'</i>	Big Blue Liriope	1 gal.	15" o.c.	436

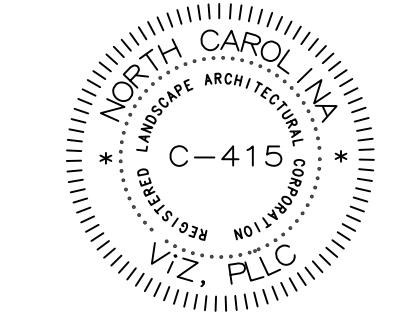


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**City of Conover**  
 Streetscape  
 Planting

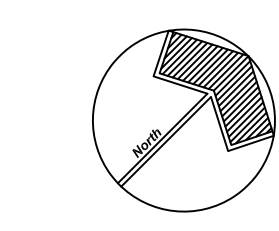
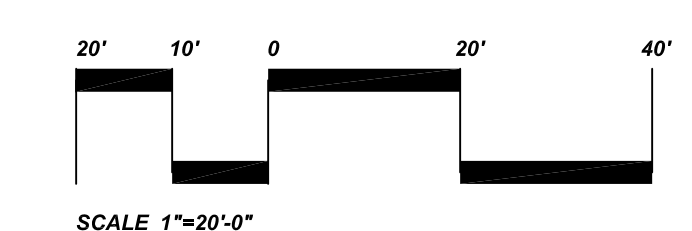
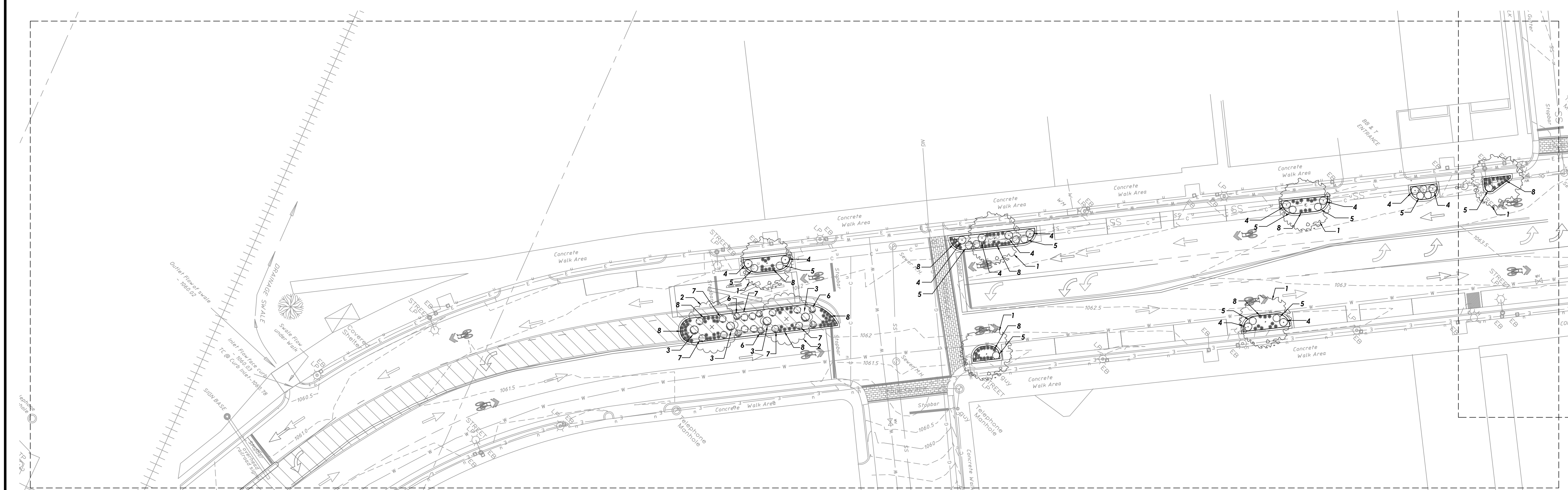
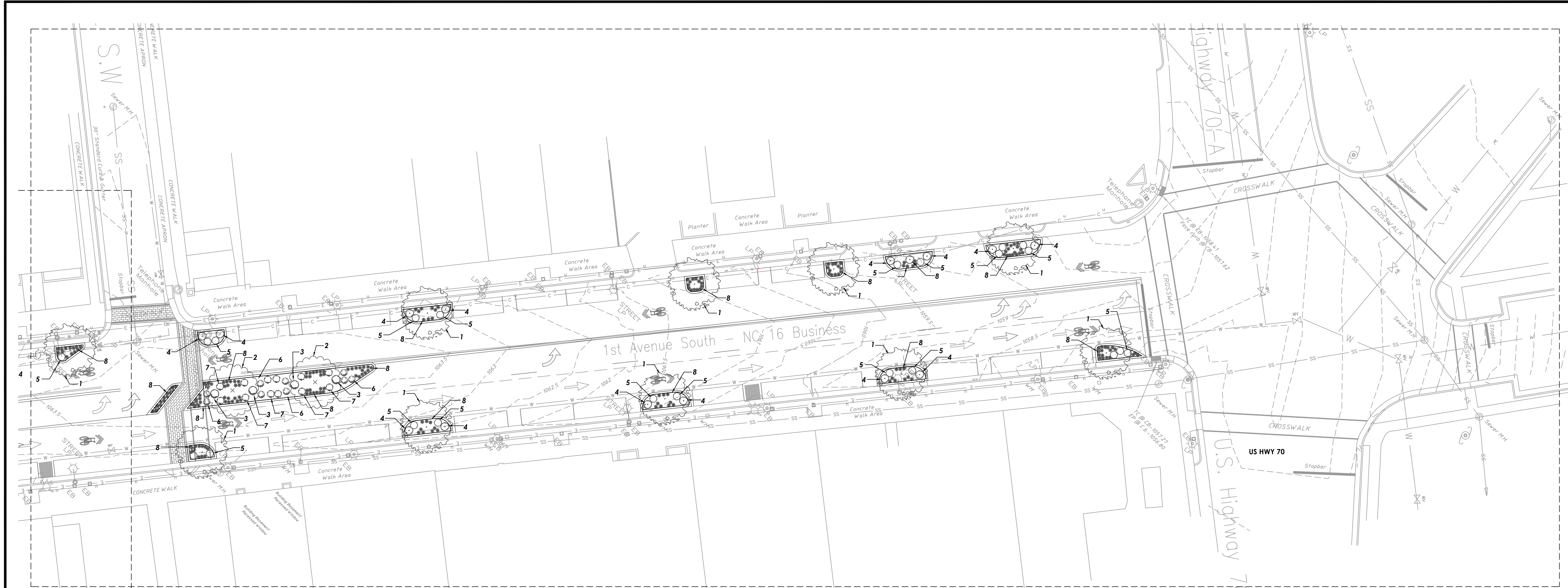
REV.#	DATE	DESCRIPTION	COMMENTS
1	1/1/2017		



DATE: 2/6/2017  
 SCALE: AS SHOWN  
 JOB NUMBER: 16-76-1  
 DESIGNED BY: GRF  
 DRAWN BY: GRF

SHEET TITLE: **OVERALL PLANTING KEY PLAN**

**L1.0**

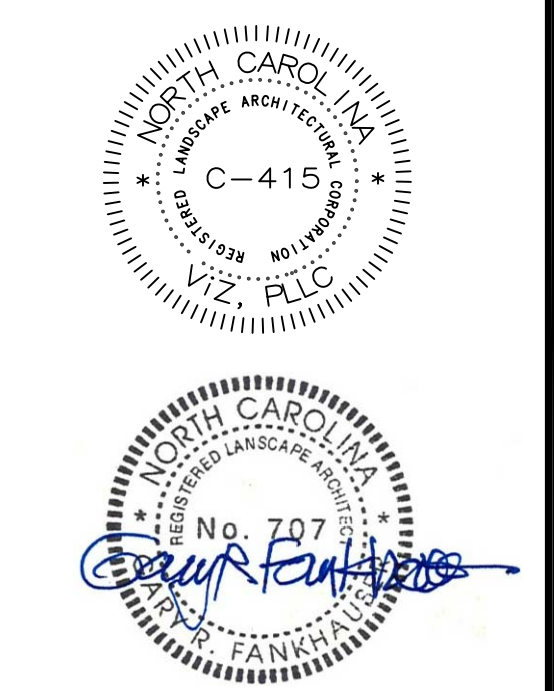


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**City of Conover**  
**Streetscape**  
**Planting**

REV. #	DATE	DESCRIPTION	COMMENTS
1	1/11/2017		



DATE: 2/6/2017  
 SCALE: AS SHOWN  
 JOB NUMBER: 16-76.1  
 DESIGNED BY: GRF  
 DRAWN BY: GRF

SHEET TITLE:  
**PLANTING PLAN**

**L1.1**

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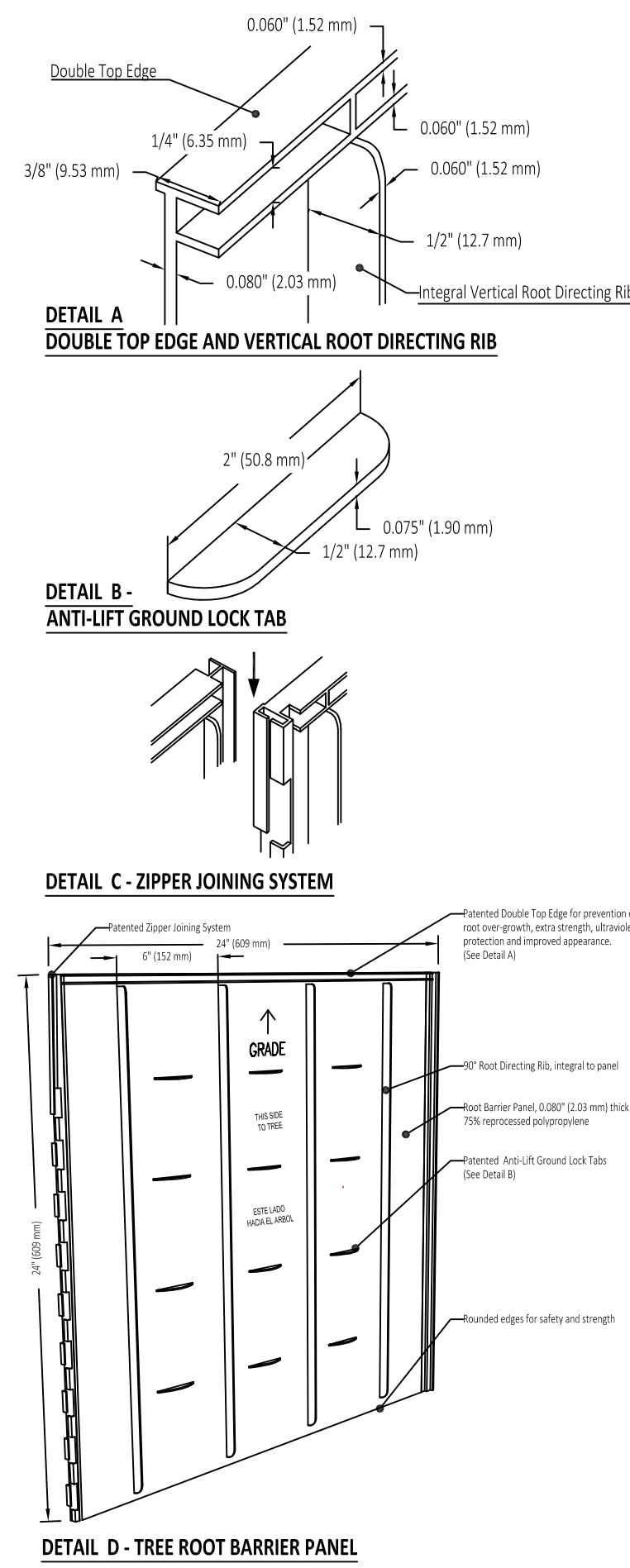
# Specifications 24" Tree Root Barrier

Specified tree root barrier is a mechanical barrier and root deflector used to prevent tree roots from damaging hardscapes and landscapes. Assembled in 24" (609 mm) long modules to create varying lengths for linear applications, or perimeter surround applications in varying sizes.

### A. Materials

- The contractor shall furnish and install tree root barrier as specified.
- Root barrier shall be recyclable, black, injection molded panels with 0.80" (2.03 mm) wall thickness in modules 24" (609 mm) long and 24" (609 mm) deep.
- Root barrier shall be manufactured with 75% reprocessed polypropylene with added ultraviolet inhibitors.
- Root barrier shall be comprised of 24" (60.96 cm) panels. Each panel shall have no less than four (4) Moulded Integral Vertical Root Directing Ribs of a minimum 0.075" (1.90 mm) thickness, protruding 1/2" (12.7 mm) at 90° from interior of the barrier panel, spaced 6" (152.4 mm) apart. (See Details A & D)
- Root barrier shall have a Double Top Edge consisting of two parallel, integral, horizontal ribs at the top of the panel at 0.060" (1.52 mm) thickness, 3/8" (9.53 mm) wide and 1/4" (6.35 mm) apart with the lower rib attached to the vertical Root Directing Ribs (See Detail A).
- Root barrier shall have a minimum of twelve (12) Anti-Lift Ground Lock Tabs consisting of integral horizontal ridges of minimum 0.075" (1.90 mm) thickness in the shape of a segment of an oblong, the 2" (50.8 mm) chord of the segment joining the panel wall and the segment, protruding 3/8" (9.53 mm) from the panel. The twelve ground locks on each panel shall be about equally spaced between each of the vertical root directing ribs (Four (4) between each set of ribs, see Details B & D).
- Root barrier shall have an integrated Zipper Joining System for assembly by sliding one panel into another (See Detail C).

Properties	Typical Value	ASTM Test Method
Tensile strength @ yield - Wall	2,354 PSI	D638
Tensile strength @ yield - Hinge	2,846 PSI	D638
Yield Elongation - Wall	7.44%	D638
Yield Elongation - Hinge	7.01%	D638
Flexural Modulus	139,625 PSI	D790B
Notched Izod Impact - Wall	3.84 (ft-lbs)	D255A
Rockwell Hardness r, scale - Wall	84.4	D785A



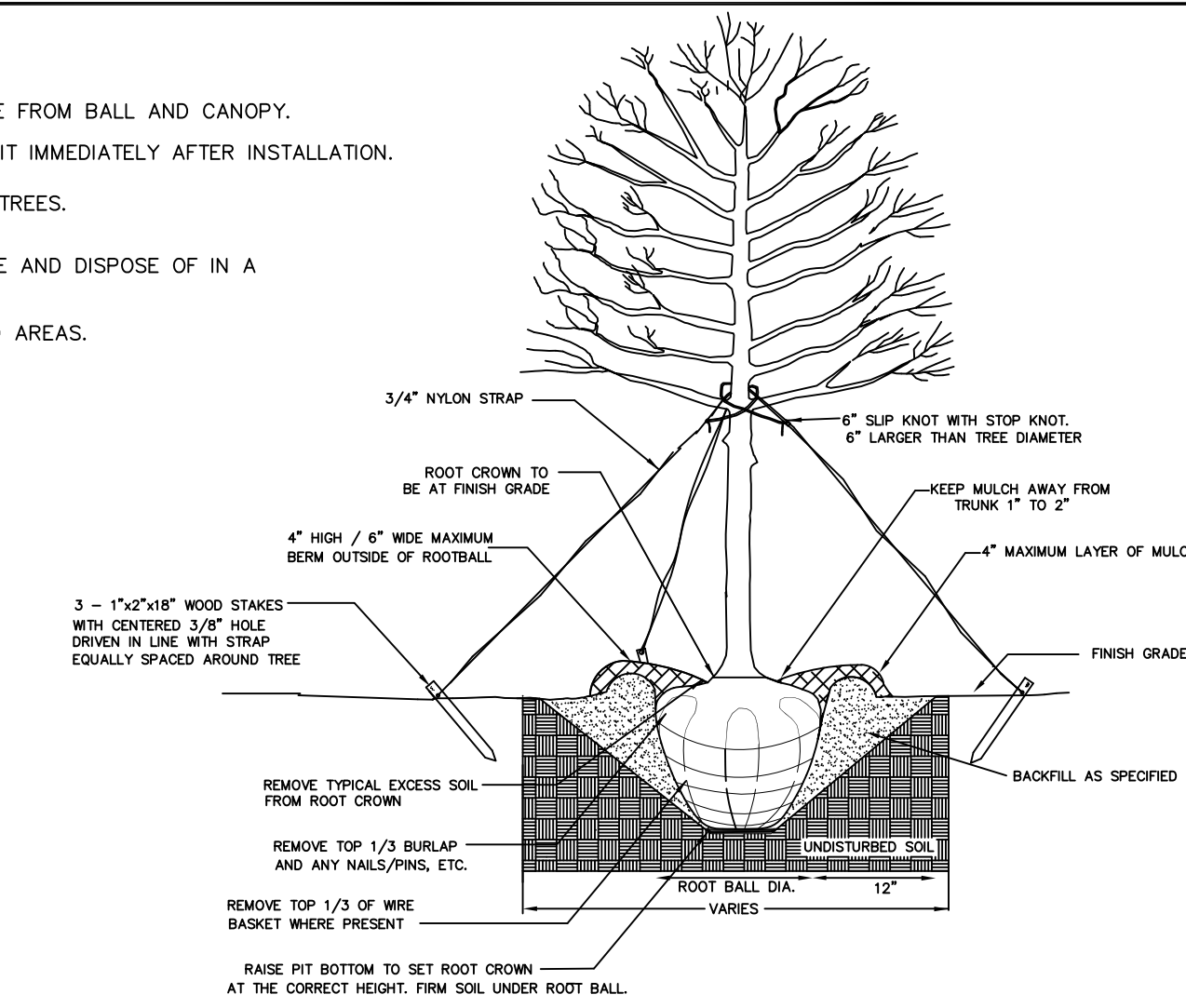
DETAIL D - TREE ROOT BARRIER PANEL

### ROOT BARRIER NOTES:

- PROVIDE APPROXIMATELY 30" (15 PANELS) OF ROOT BARRIER FOR THE LACEBARK ELMS, AND APPROXIMATELY 26" (13 PANELS) OF ROOT BARRIER FOR THE CRAPE MYRTLES.
- PLACE PANELS AS CLOSE TO BACK OF CURB AS PRACTICABLE.
- PLACE PANELS TO A DEPTH AS INDICATED ON MANUFACTURE'S INSTALLATION RECOMMENDATIONS.

### NOTES:

- REMOVE WIRE AND NYLON TWINE FROM BALL AND CANOPY.
- SOAK ROOT BALL AND PLANT PIT IMMEDIATELY AFTER INSTALLATION.
- STAKING IS REQUIRED FOR ALL TREES.
- REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF IN A LEGAL MANNER.
- RESEED UNMULCHED, DISTURBED AREAS.



ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014)  
FOR EXAMPLE: CALIPER HEIGHT (RANGE) MAX. HEIGHT MIN. ROOT BALL DIA. MIN. ROOT BALL DEPTH.

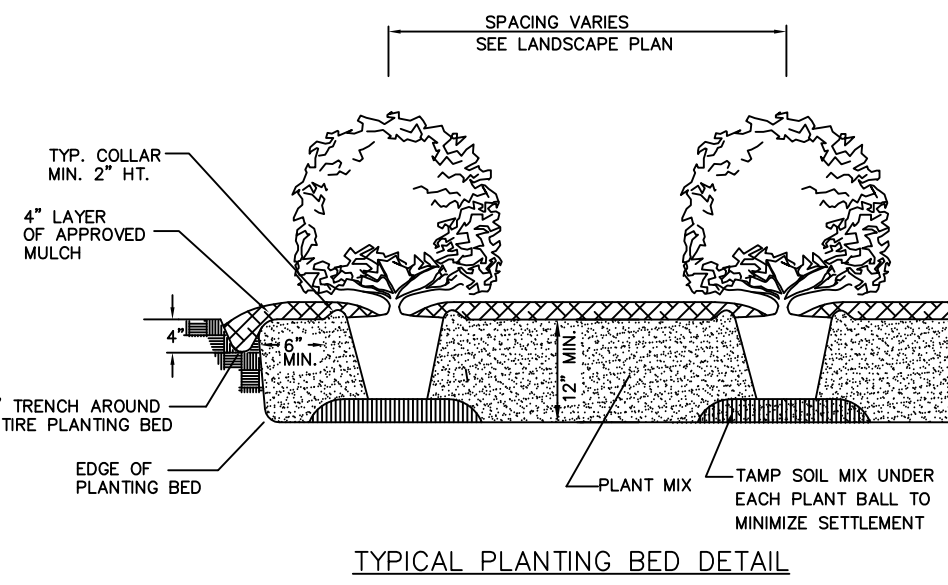
2"	12-14"	16'	24"	16'
3"	14-16"	18'	32"	21'

NOT TO SCALE

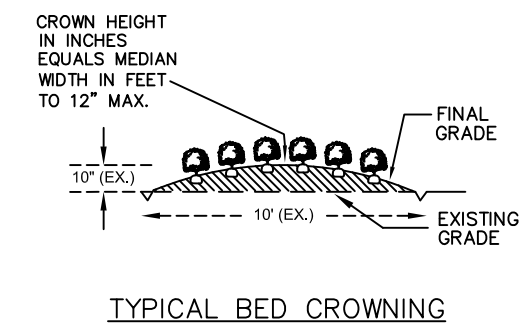
## TREE PLANTING (FOR SINGLE AND MULTI-STEM TREES)

### NOTES:

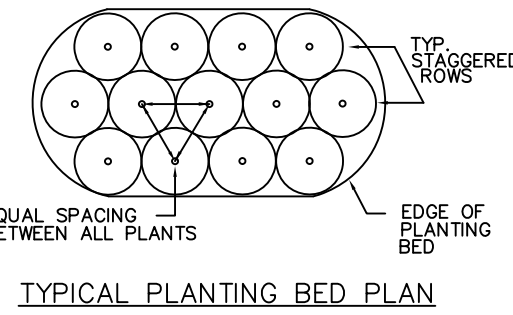
- SCARIFY ROOT MASS OF CONTAINERIZED PLANT MATERIAL.
- INSTALL CONTAINERIZED PLANTS AT FINISHED GRADE.
- TAMP PLANTING MIX FIRMLY AS PIT IS FILLED AROUND EACH PLANT BALL.
- OMIT COLLAR AROUND EACH SHRUB WHEN IRRIGATION SYSTEM IS PRESENT.
- SOAK EACH PLANT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.



TYPICAL PLANTING BED DETAIL

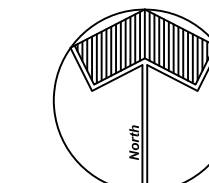
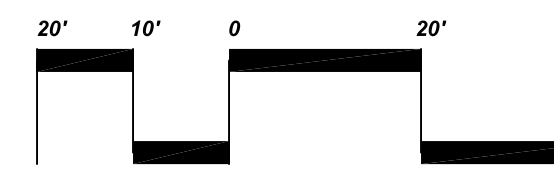
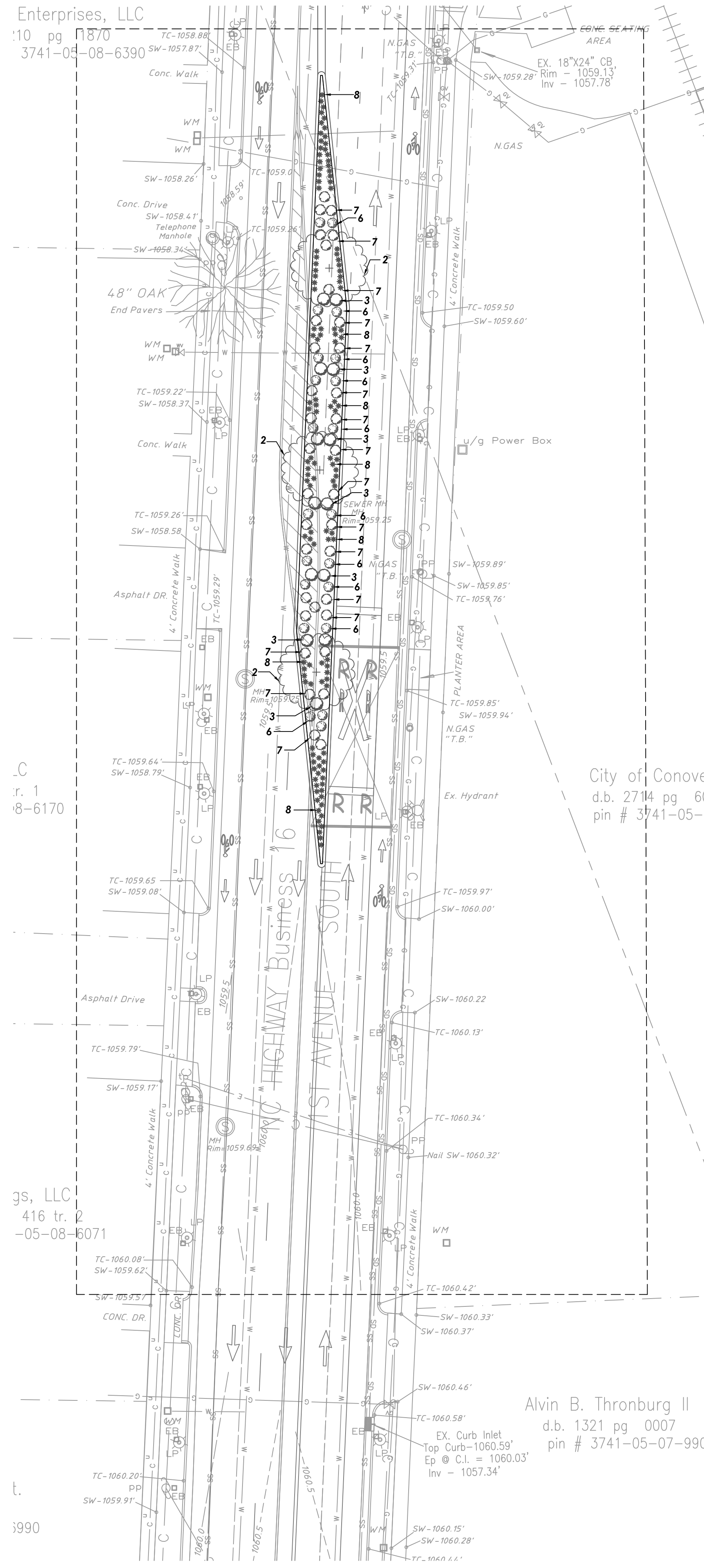


TYPICAL BED CROWNING



TYPICAL PLANTING BED PLAN

## SHRUB PLANTING BED

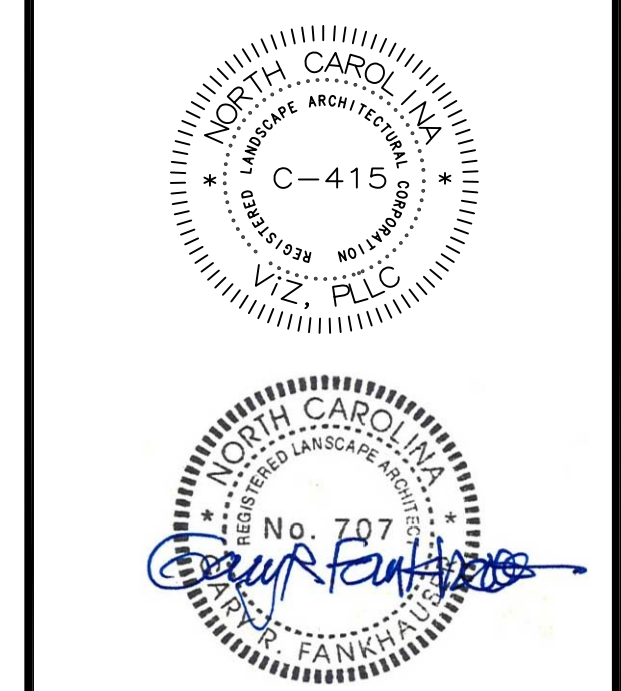


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# City of Conover Streetscape Planting

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DATE: 2/6/2017  
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## PLANTING PLAN & DETAILS

# L1.2