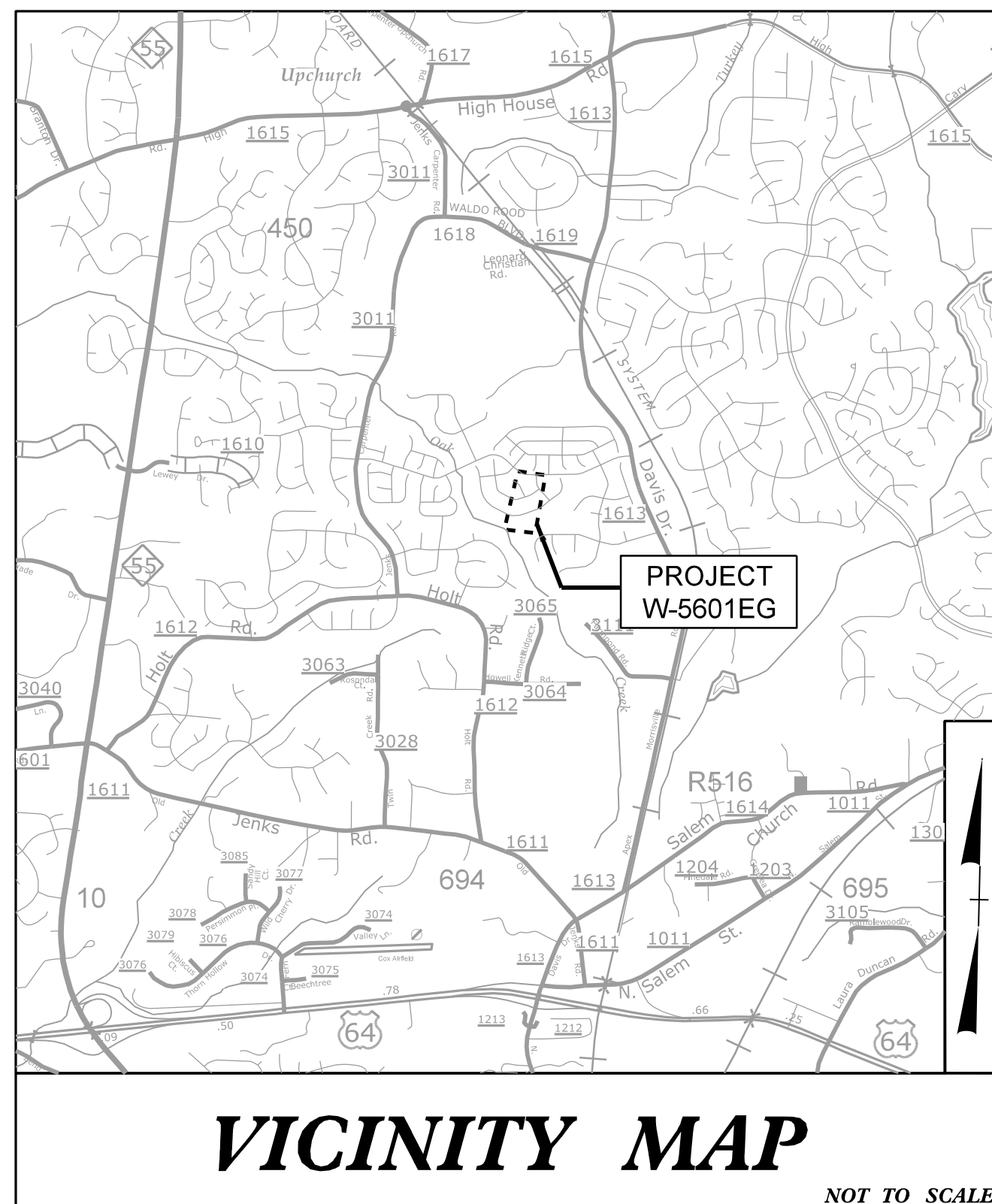


TIP PROJECT: W-5601EG

CONTRACT: DE00157

See Sheet 1A For Index of Sheets
See Sheet 1B For Symbology Sheet
See Sheet 1C-1 For Survey Control Sheet



100% PLANS

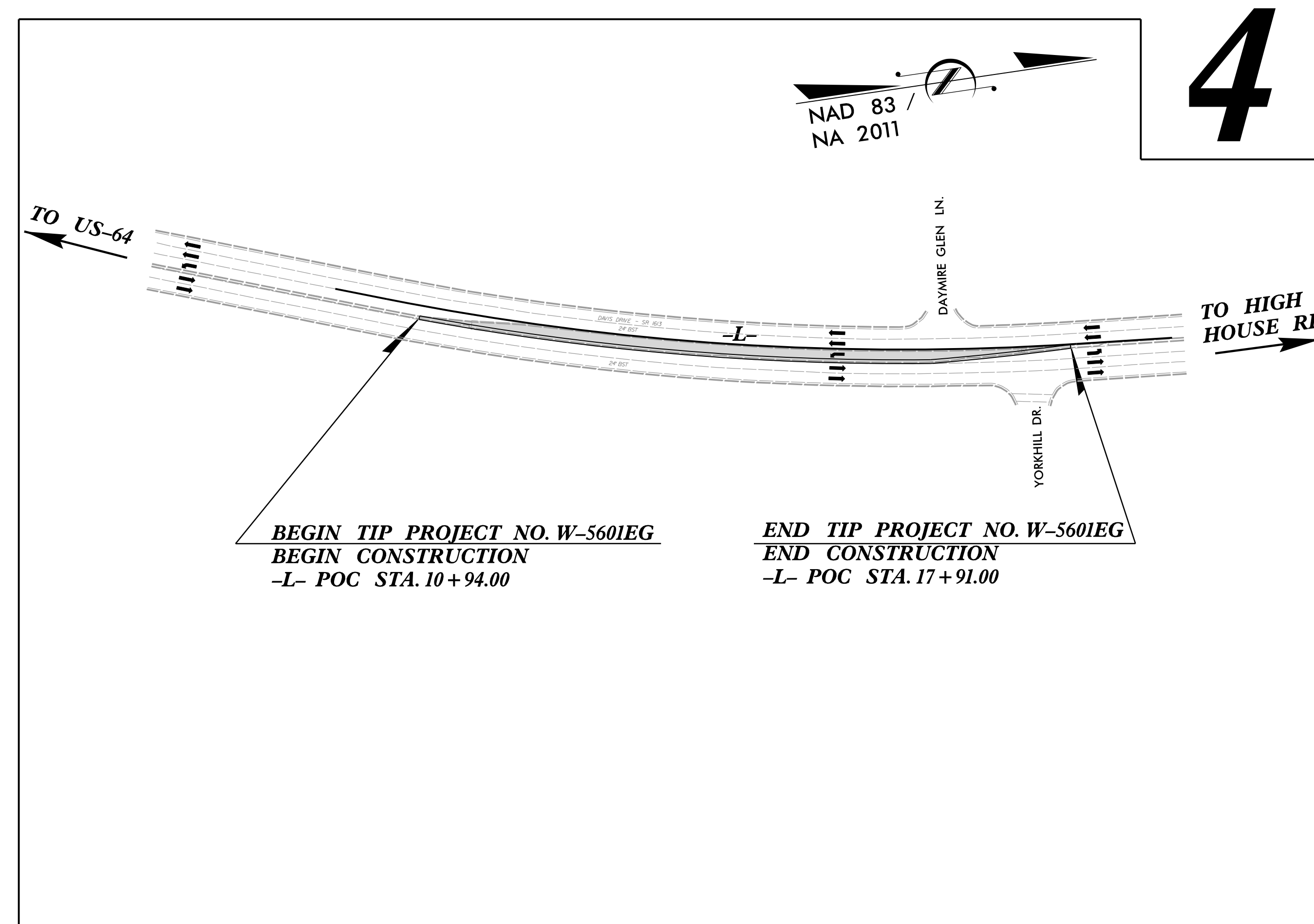
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WAKE COUNTY

**LOCATION: SR 1613 (DAVIS DR.) FROM NORTH OF
SR (1619) WALDO ROOD BLVD TO YORKHILL DR.**

TYPE OF WORK: GRADING, DRAINAGE, AND PAVING

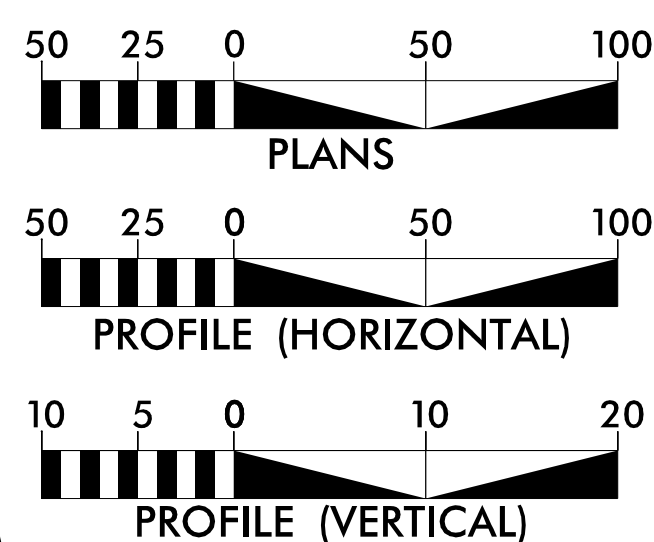
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5601EG	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
50138.1.137	HSIP-1613(008)	PE	
50138.3.137	HSIP-1613(008)	CONST.	



THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE TOWN OF CARY.

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

GRAPHIC SCALES



DESIGN DATA

ADT 2013 = 17,000
V = 50 MPH
FUNC. CLASS = MINOR ARTERIAL

PROJECT LENGTH

TOTAL LENGTH TIP PROJECT W-5601EG = 0.132 MILES



PREPARED IN THE OFFICE OF:
STANTEC CONSULTING
801 Jones Franklin Road | Suite 300 | Raleigh, NC 27606
Tel. (919) 851-6866 | Fax. (919) 851-7024 | www.stantec.com
License No. P-0672



FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2012 STANDARD SPECIFICATIONS

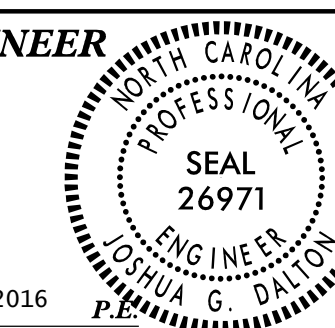
RIGHT OF WAY DATE:
N/A

LETTING DATE:
N/A

MICHAEL LITTLEFIELD, P.E.
PROJECT ENGINEER

HAN NGUYEN, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

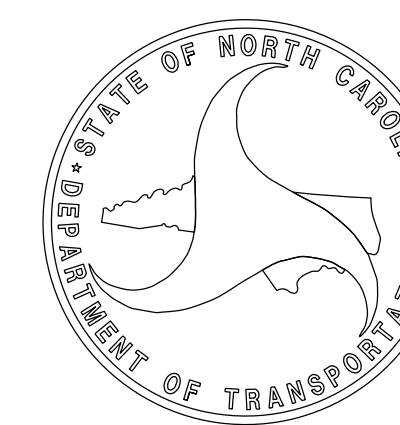


DocuSigned by:
Joshua G. Dalton 8/16/2016
SIGNATURE

ROADWAY DESIGN ENGINEER

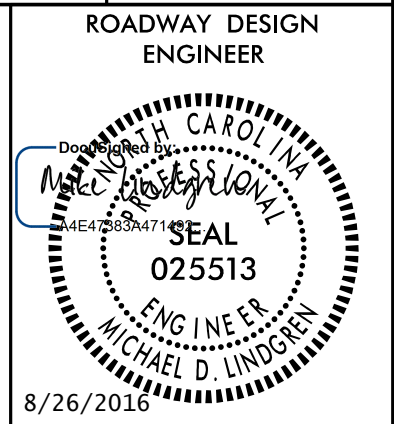


DocuSigned by:
Michael B. Littlefield 8/15/2016
SIGNATURE



8/17/99

PROJECT REFERENCE NO. <i>W-560/EG</i>	SHEET NO. <i>1A</i>
--	------------------------



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801 Jones Franklin Road
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INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
1C-1	SURVEY CONTROL SHEET
2A-1	PAVEMENT SCHEDULE AND TYPICAL SECTION
2C-1	DETAIL TO CONVERT EXISTING CATCH BASIN OR JUNCTION BOX TO DI OR 2-G1
3B-1	SUMMARY OF EARTHWORK AND DRAINAGE
4	PLAN AND PROFILE SHEET
TMP-1 THRU TMP-2	TRAFFIC MANAGEMENT PLANS
PMP-1 THRU PMP-2	PAVEMENT MARKING PLANS
EC-1 THRU EC-2	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-3	SIGNING PLANS
X-A	CROSS-SECTION INDEX SHEET
X-1A	CROSS-SECTION SUMMARY SHEET
X-1 THRU X-3	CROSS-SECTIONS

2012 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

STD. NO.	TITLE
DIVISION 2 - EARTHWORK	
225.02	Guide for Grading Subgrade - Secondary and Local
DIVISION 8 - INCIDENTALS	
852.01	Concrete Islands

EFF. 01-17-2012
REV. 02-29-2016

GENERAL NOTES:

2012 SPECIFICATIONS
EFFECTIVE: 01-17-2012
REVISED: 10-31-2014

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

SHOULDER CONSTRUCTION:

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE TOWN OF CARY, AT&T AND DUKE ENERGY.
ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

8/26/2016
U:\Projects\W560\EG_r.dwg_1A.dgn
mcm

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale *S.U.E. = Subsurface Utility Engineering

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○ EIP
Property Corner	-----
Property Monument	□ EGM
Parcel/Sequence Number	⑫③
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	----- WLB
Proposed Wetland Boundary	----- WLB
Existing Endangered Animal Boundary	----- EAB
Existing Endangered Plant Boundary	----- EPB
Existing Historic Property Boundary	----- HPB

Known Contamination Area: Soil	☠
Potential Contamination Area: Soil	☠
Known Contamination Area: Water	☠
Potential Contamination Area: Water	☠
Contaminated Site: Known or Potential	☠

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○
Well	○
Small Mine	✕
Foundation	□
Area Outline	□
Cemetery	+
Building	□
School	□
Church	□
Dam	□

HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	-----
Jurisdictional Stream	----- JS
Buffer Zone 1	----- BZ 1
Buffer Zone 2	----- BZ 2
Flow Arrow	←
Disappearing Stream	-----
Spring	○
Wetland	-----
Proposed Lateral, Tail, Head Ditch	-----
False Sump	-----

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○
Switch	□
RR Abandoned	-----
RR Dismantled	-----

RIGHT OF WAY:

Baseline Control Point	◆
Existing Right of Way Marker	△
Existing Right of Way Line	-----
Proposed Right of Way Line	-----
Proposed Right of Way Line with Iron Pin and Cap Marker	○
Proposed Right of Way Line with Concrete or Granite R/W Marker	△
Proposed Control of Access Line with Concrete C/A Marker	○
Existing Control of Access	○
Proposed Control of Access	○
Existing Easement Line	-----
Proposed Temporary Construction Easement	-----
Proposed Temporary Drainage Easement	-----
Proposed Permanent Drainage Easement	-----
Proposed Permanent Drainage / Utility Easement	-----
Proposed Permanent Utility Easement	-----
Proposed Temporary Utility Easement	-----
Proposed Aerial Utility Easement	-----
Proposed Permanent Easement with Iron Pin and Cap Marker	◆

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	-----
Proposed Slope Stakes Fill	-----
Proposed Curb Ramp	-----
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	○
Pavement Removal	-----

VEGETATION:

Single Tree	○
Single Shrub	○
Hedge	-----
Woods Line	-----

Orchard	-----
Vineyard	-----

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	-----
Bridge Wing Wall, Head Wall and End Wall	-----
MINOR:	
Head and End Wall	-----
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	□
Paved Ditch Gutter	-----
Storm Sewer Manhole	○
Storm Sewer	-----

UTILITIES:

POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	○
Power Line Tower	□
Power Transformer	□
U/G Power Cable Hand Hole	○
H-Frame Pole	●
U/G Power Line LOS B (S.U.E.*)	-----
U/G Power Line LOS C (S.U.E.*)	-----
U/G Power Line LOS D (S.U.E.*)	-----

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	○
Telephone Pedestal	□
Telephone Cell Tower	○
U/G Telephone Cable Hand Hole	○
U/G Telephone Cable LOS B (S.U.E.*)	-----
U/G Telephone Cable LOS C (S.U.E.*)	-----
U/G Telephone Cable LOS D (S.U.E.*)	-----
U/G Telephone Conduit LOS B (S.U.E.*)	-----
U/G Telephone Conduit LOS C (S.U.E.*)	-----
U/G Telephone Conduit LOS D (S.U.E.*)	-----
U/G Fiber Optics Cable LOS B (S.U.E.*)	-----
U/G Fiber Optics Cable LOS C (S.U.E.*)	-----
U/G Fiber Optics Cable LOS D (S.U.E.*)	-----

WATER:

Water Manhole	○
Water Meter	○
Water Valve	○
Water Hydrant	○
U/G Water Line LOS B (S.U.E.*)	-----
U/G Water Line LOS C (S.U.E.*)	-----
U/G Water Line LOS D (S.U.E.*)	-----
Above Ground Water Line	-----

TV:

TV Pedestal	□
TV Tower	○
U/G TV Cable Hand Hole	○
U/G TV Cable LOS B (S.U.E.*)	-----
U/G TV Cable LOS C (S.U.E.*)	-----
U/G TV Cable LOS D (S.U.E.*)	-----
U/G Fiber Optic Cable LOS B (S.U.E.*)	-----
U/G Fiber Optic Cable LOS C (S.U.E.*)	-----
U/G Fiber Optic Cable LOS D (S.U.E.*)	-----

GAS:

Gas Valve	◇
Gas Meter	◇
U/G Gas Line LOS B (S.U.E.*)	-----
U/G Gas Line LOS C (S.U.E.*)	-----
U/G Gas Line LOS D (S.U.E.*)	-----
Above Ground Gas Line	-----

SANITARY SEWER:

Sanitary Sewer Manhole	○
Sanitary Sewer Cleanout	○
U/G Sanitary Sewer Line	-----
Above Ground Sanitary Sewer	-----
SS Forced Main Line LOS B (S.U.E.*)	-----
SS Forced Main Line LOS C (S.U.E.*)	-----
SS Forced Main Line LOS D (S.U.E.*)	-----

MISCELLANEOUS:

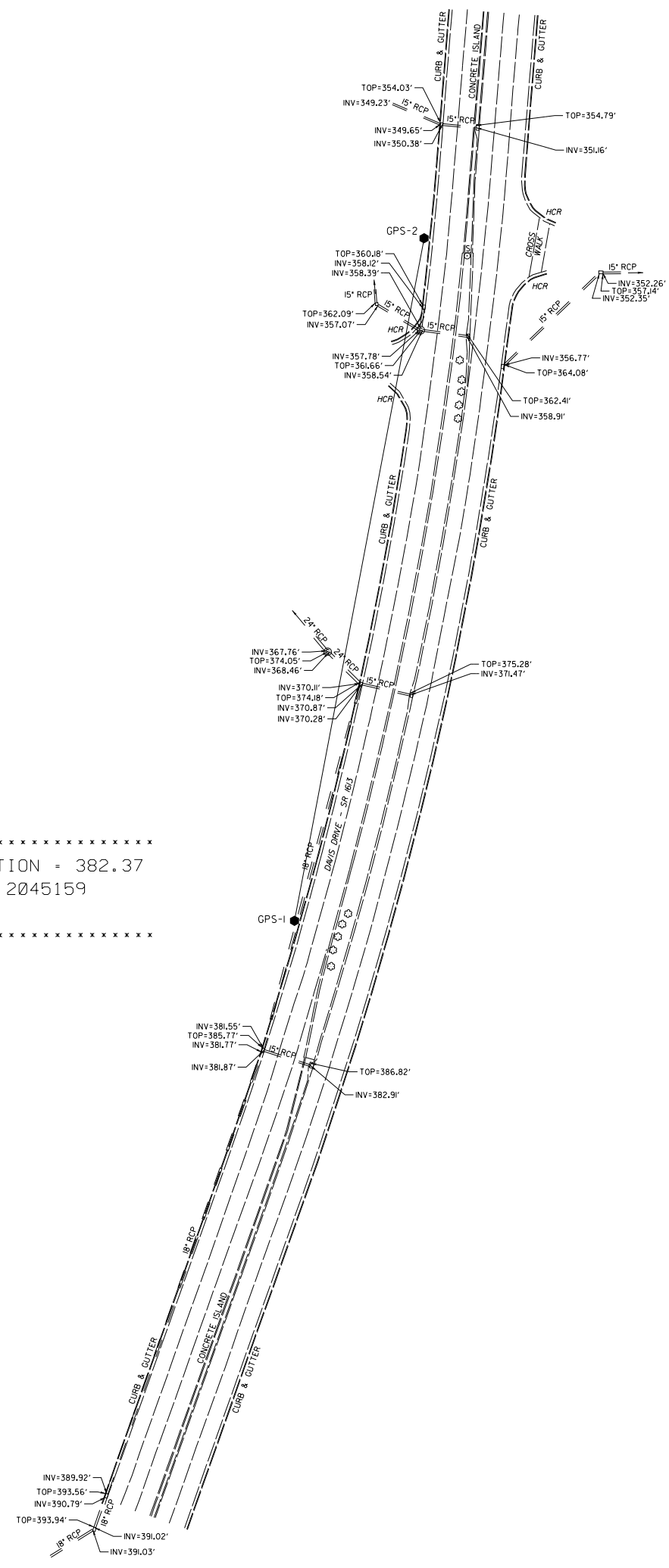
Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	□
Utility Unknown U/G Line LOS B (S.U.E.*)	-----
U/G Tank; Water, Gas, Oil	□
Underground Storage Tank, Approx. Loc.	□
A/G Tank; Water, Gas, Oil	□
Geoenvironmental Boring	○
U/G Test Hole LOS A (S.U.E.*)	○
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

SURVEY CONTROL SHEET

PROJECT REFERENCE NO. <i>W-5601EG</i>	SHEET NO. <i>IC-1</i>
Location and Surveys	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



.....
 GPS-1 ELEVATION = 382.37
 N 740211 E 2045159
 BL STATION 5+00



BL	POINT	DESC.	NORTH	EAST	ELEVATION	BL STATION
1		GPS-1	740211.462	2045159.259	382.37	5+00.00
2		GPS-2	740701.459	2045252.268	358.24	9+98.75

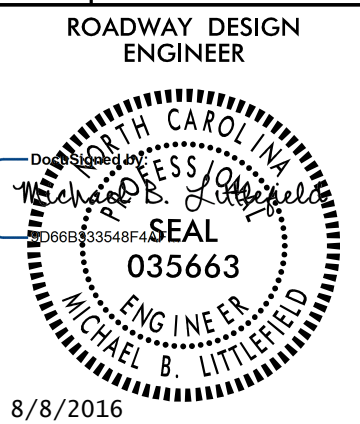
EXISTING CONDITIONS SURVEY

SITE COORDINATE CONTROL AND EXISTING CONDITIONS FOR PROJECT ARE FROM A TOPOGRAPHIC SURVEY PERFORMED IN APRIL 2016 BY:
 STANTEC CONSULTING
 801 JONES FRANKLIN ROAD
 RALEIGH, NC 27606

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY STANTEC FOR MONUMENT "GPS-1"
 WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF
 NORTHING: 740211.462(ft) EASTING: 2045159.259(ft)
 ELEVATION: 382.37(ft)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999902338
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS-1" TO -L- STATION IS
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

NOTE: DRAWING NOT TO SCALE



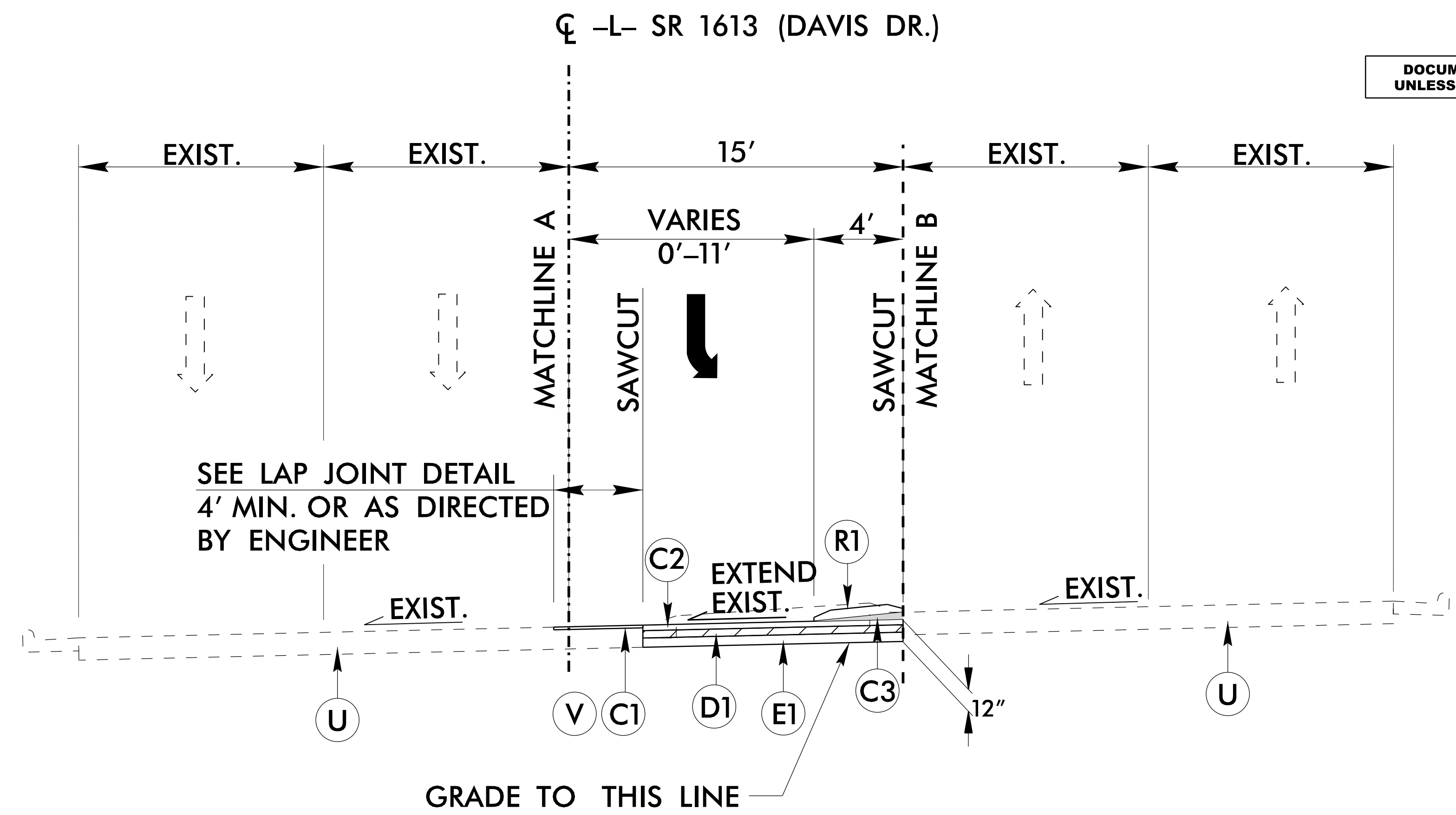
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Stantec
 Stantec Consulting Services Inc.
 801 Jones Franklin Road
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 Raleigh, NC 27606
 Tel. (919) 851-6866
 Fax. (919) 851-7024
 www.stantec.com
 License No. F-0672

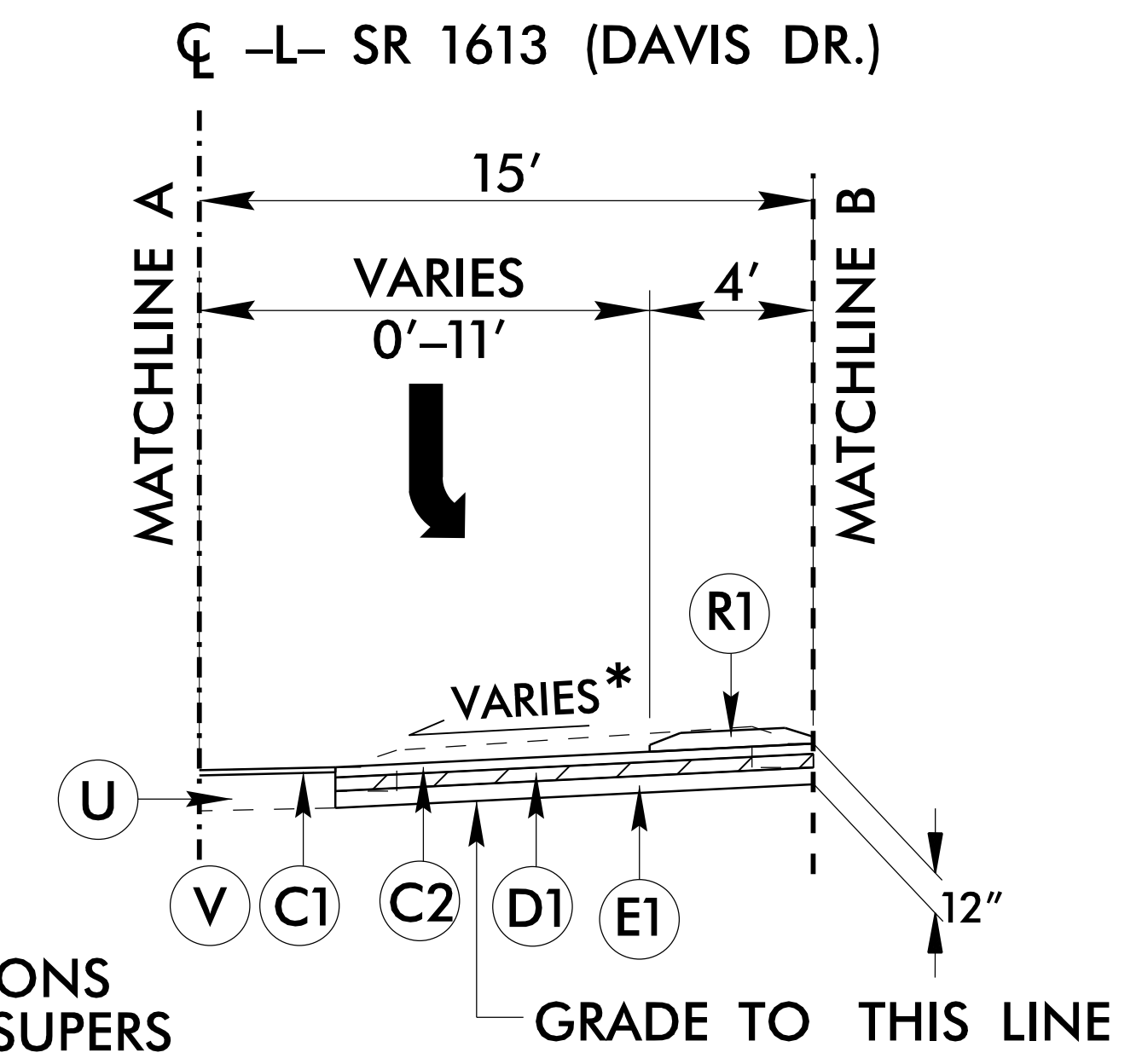
PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E1	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
R1	5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED)
U	EXISTING PAVEMENT.
V	MILLING 1.5" IN DEPTH

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

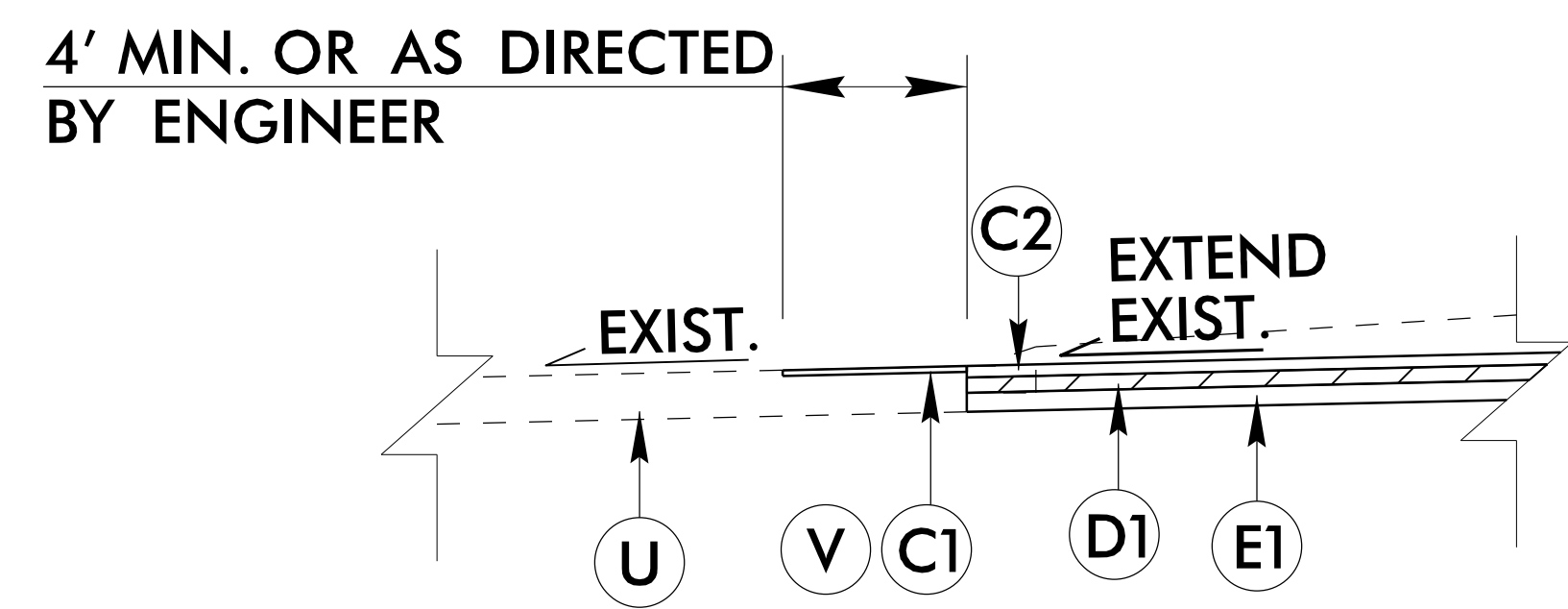


TYPICAL SECTION 1
 -L- STA. 11+60 TO 17+91



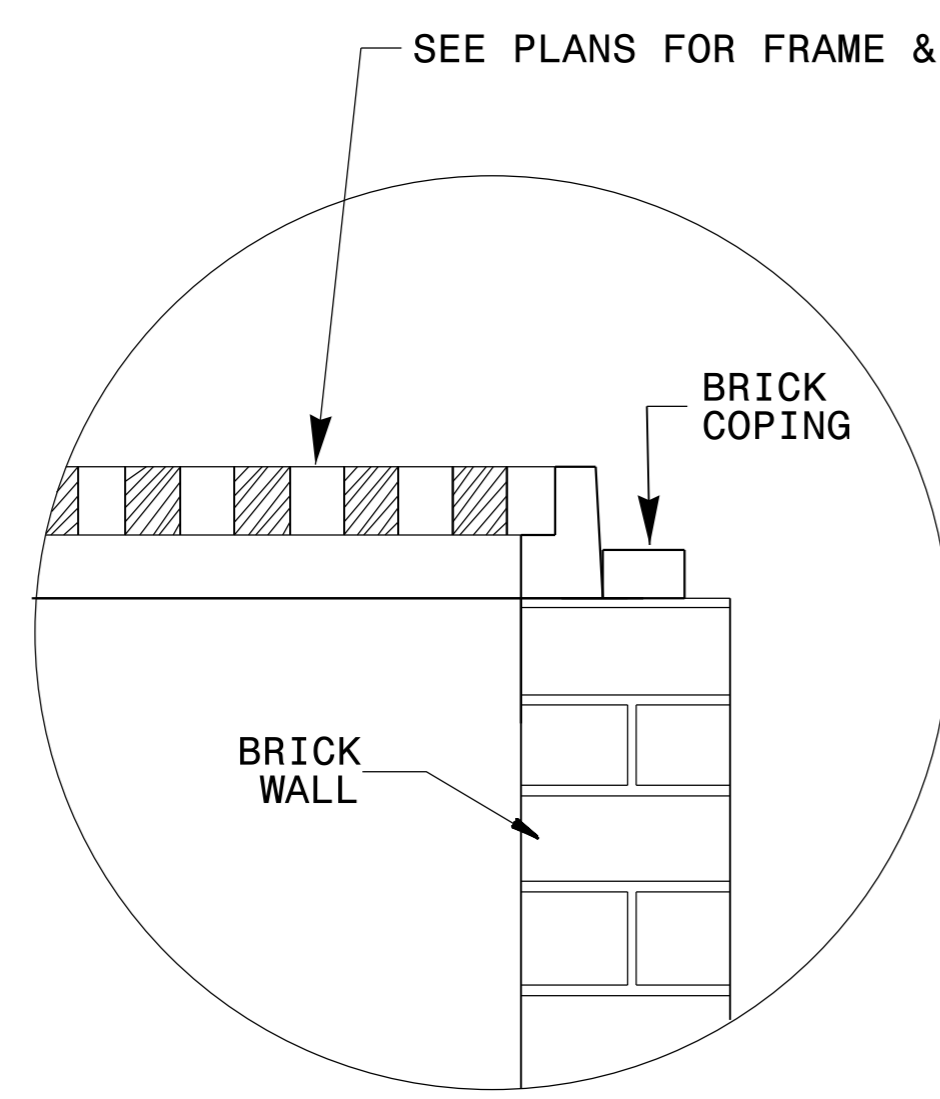
* SEE CROSS SECTIONS FOR PROPOSED SUPERS

INSET A
 -L- STA. 10+94 TO 11+60

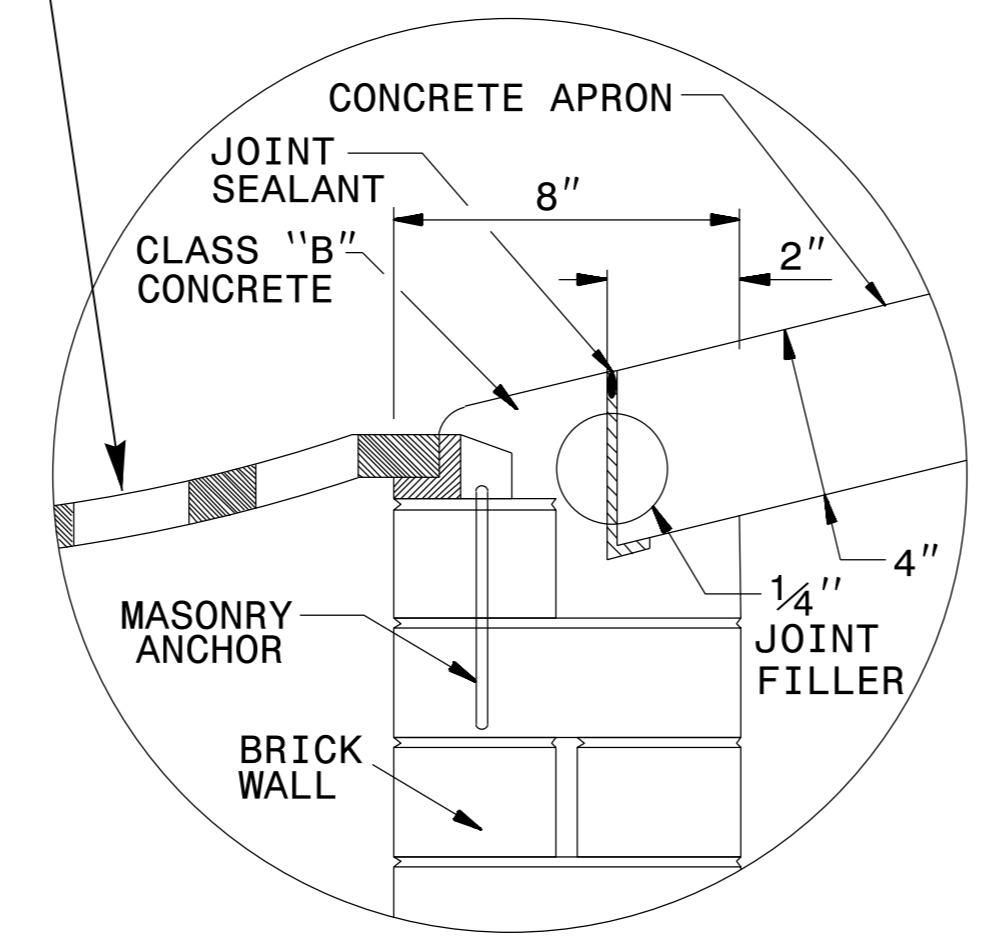


LAP JOINT DETAIL

6/2/99
 8/8/2016
 U:\Roadway\Projects\W5601EG-rdy_typ.dgn



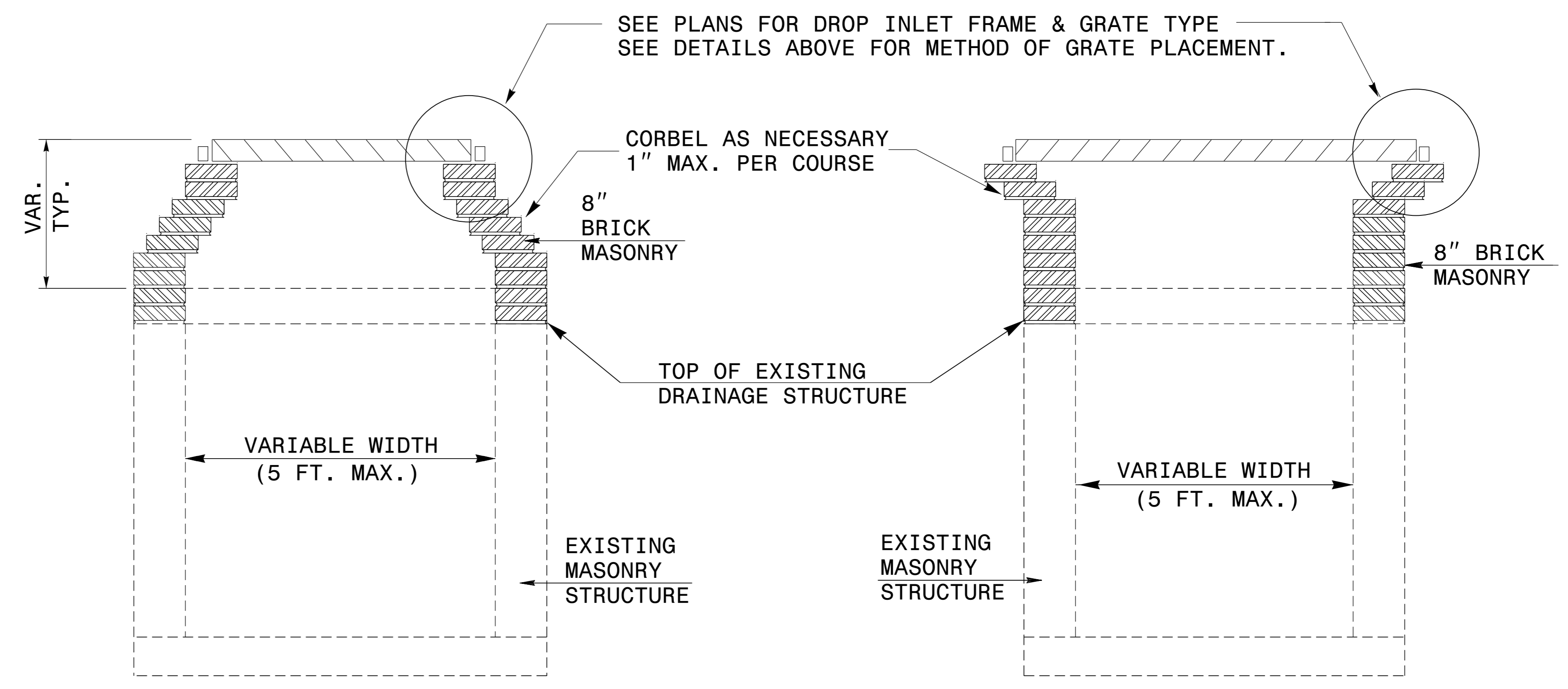
GRATE PLACEMENT DETAIL
FOR DROP INLETS



GRATE PLACEMENT DETAIL
FOR GRATED DROP INLETS

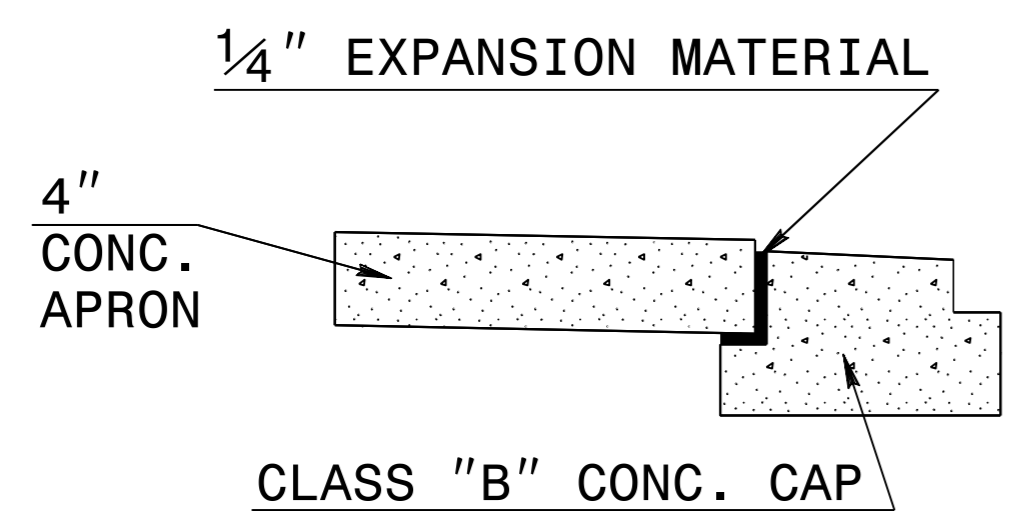
GENERAL NOTES:

- CONSTRUCT IN ACCORDANCE WITH SECTION 859 OF THE STANDARD SPECIFICATIONS.
- USE CLASS B CONCRETE.
- THE DIMENSIONS FOR THE EXISTING BOXES ARE APPROXIMATE AND MAY VARY SLIGHTLY.
- JUMBO CONCRETE BRICK WILL BE PERMITTED. 4" CONCRETE BRICK OR 8" SOLID CONCRETE BLOCK ARE REQUIRED FOR DRAINAGE STRUCTURE.
- INCLUDE 18" CONCRETE APRON IN UNIT PRICE BID PER EACH, CONVERT EXISTING CATCH BASIN TO DROP INLET.
- SPECIAL DESIGN IS REQUIRED FOR USE UNDER PAVEMENT.
- CONFIRM DIMENSIONS ON EACH INDIVIDUAL FRAME & GRATE PROPOSAL.
- SEE STD. DRAWING 840.25 FOR MASONRY ANCHORAGE.



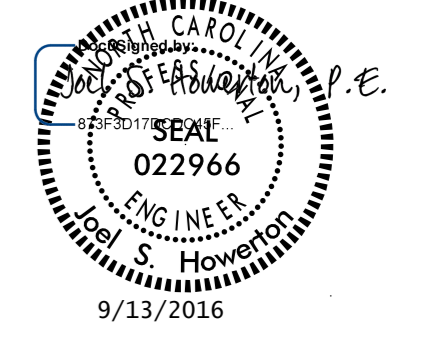
TYPICAL SECTION

TYPICAL SECTION



EXPANSION JOINT DETAIL

\$\$\$\$\$\$
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 XREF: 150386.DWG
 \$\$\$\$\$\$
 USER: TSE
 TIME: 4/13/2016 11:14:58 AM
 \$\$\$\$\$\$



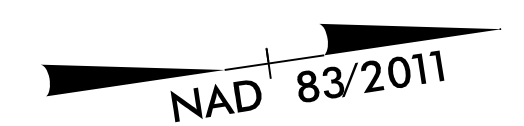
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950 FAX 919-250-4119	
DETAIL TO CONVERT EXISTING CATCH BASIN OR JUNCTION BOX TO DI OR 2-GI	
ORIGINAL BY: T.S.S.	DATE: NOV. 1997
MODIFIED BY: T.S.S.	DATE: FEB. 2000
CHECKED BY:	DATE:
FILE SPEC.: s:\usr\details\stand\cbtod102.dgn	

8/17/16

-L-

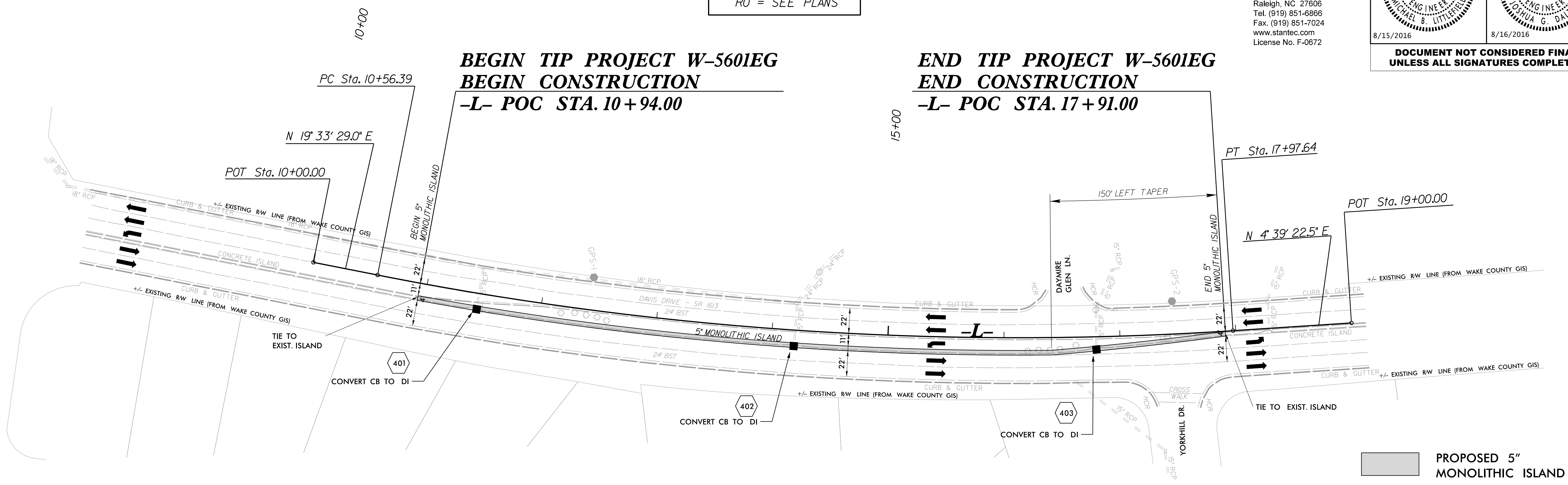
PI Sta 14+29.12
 $\Delta = 14^\circ 54' 06.5" (LT)$
 $D = 2^\circ 00' 37.4"$
 $L = 741.24'$
 $R = 372.73'$
 $T = 2,850.00'$
 SE = SEE PLANS
 RO = SEE PLANS



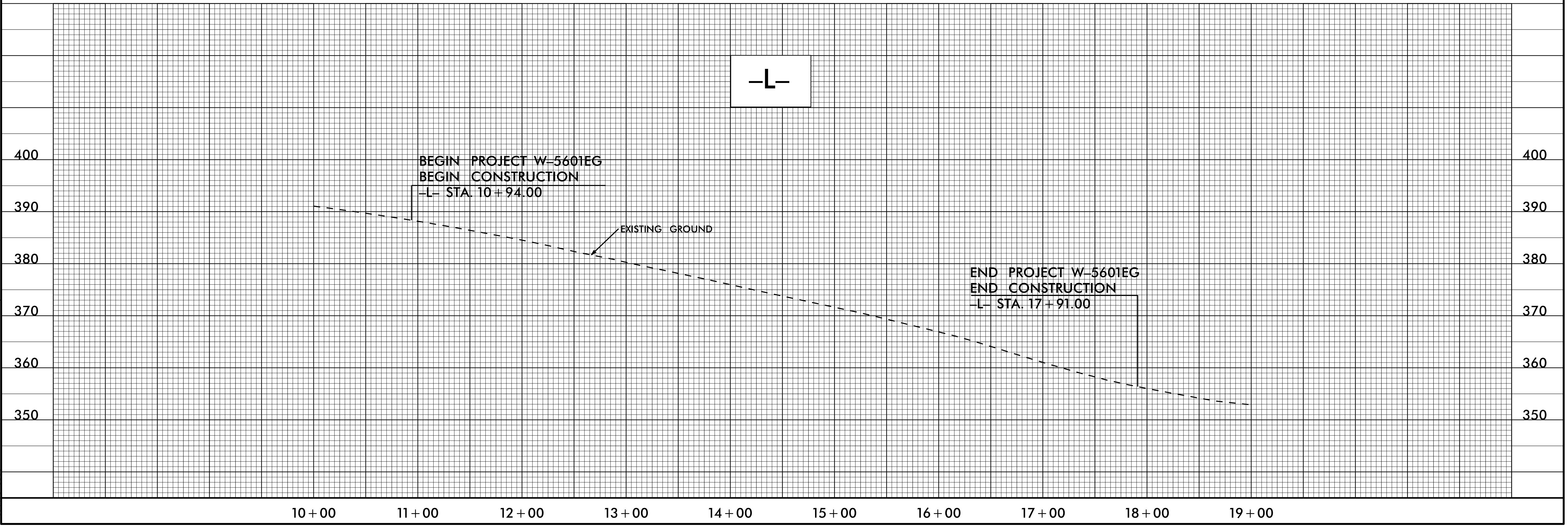
SUNGATE DESIGN GROUP, P.A.
 915 JONES FRANKLIN ROAD
 RALEIGH, NORTH CAROLINA 27606
 TEL: (919) 851-2443 FAX: (919) 851-2425
 ENG FIRM LICENSE NO. C-892

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 801 Jones Franklin Road
 Suite 300
 Raleigh, NC 27606
 Tel: (919) 851-9966
 Fax: (919) 851-7024
 www.stantec.com
 License No. F-0672

PROJECT REFERENCE NO. W-5601EG	SHEET NO. 4
ROADWAY DESIGN ENGINEER <i>Michael G. Littlefield</i> 035663	HYDRAULICS ENGINEER <i>Joshua G. Dalton</i> 26971
8/15/2016	8/16/2016
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



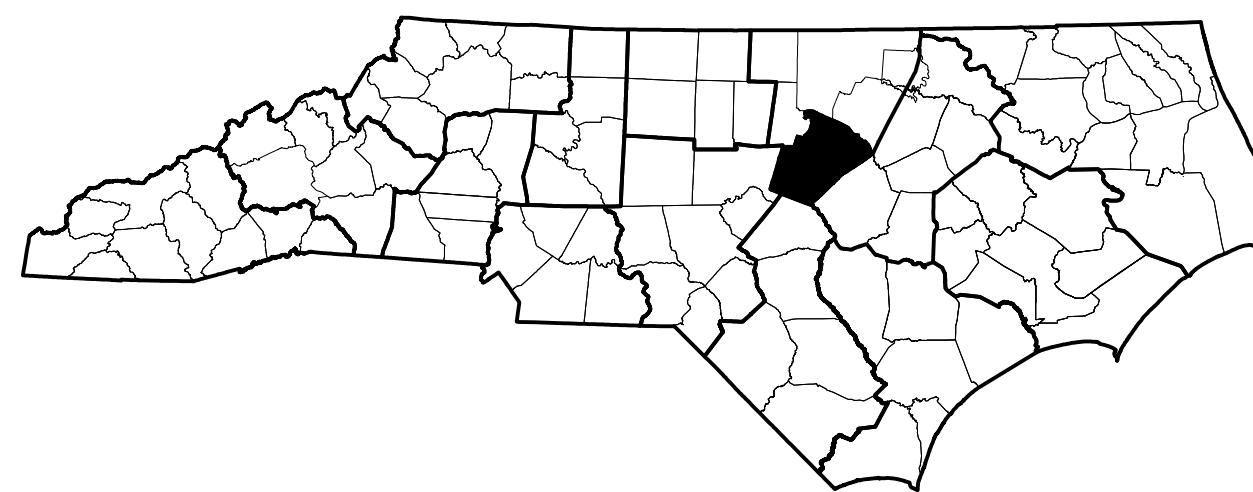
REVISIONS



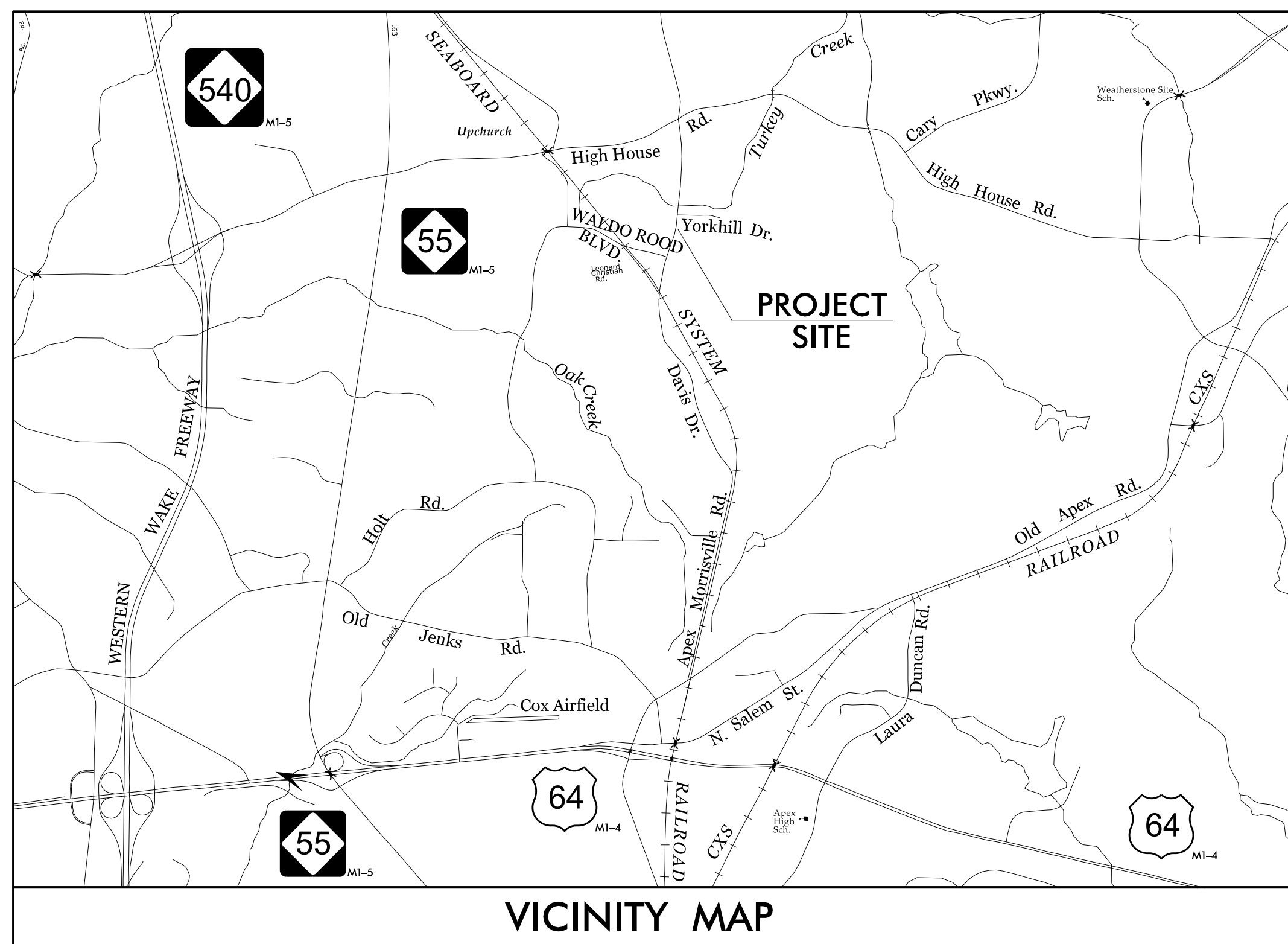
8/10/2016
 U:\Roadway\Proj\W5601EG-rdy_psh04.dgn
 Michael Littlefield

DIVISION OF HIGHWAYS
TRANSPORTATION MANAGEMENT PLAN

WAKE COUNTY
DIVISION 5



**SR 1613 (DAVIS DR.) FROM NORTH OF
SR 1619 (WALDO ROAD BLVD) TO YORKHILL DR.**



INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, INDEX OF SHEETS, AND LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS
TMP-2	GENERAL NOTES, TEMPORARY TRAFFIC CONTROL PHASING

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1180.01	SKINNY - DRUM

7/26/2016 11:00:16 AM \\transportation\design\TrafficControl\TrafficControl\PLAN SHEETS\W560EG_TMP_01.TITLE.dgn User: jwoolard



N.C.D.O.T. CONTACT: DIVISION 5 PROJECT MANAGEMENT

BEN UPSHAW, P.E. PROJECT ENGINEER



APPROVED: *J. W. Wooldredge, Jr.*
DATE: 7/26/2016

SEAL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TIP PROJECT: W-5601EG

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

- A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
DAVIS DRIVE (-L-)	6:00 A.M.-9:00 A.M. MONDAY THRU FRIDAY 4:00 P.M.-7:00 P.M. MONDAY THRU FRIDAY

LANE AND SHOULDER CLOSURE REQUIREMENTS

- B) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

PAVEMENT EDGE DROP OFF REQUIREMENTS

- E) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPEN TRAVEL LANE THAT HAS A DROP-OFF AS FOLLOWS:
- BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.
- BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.
- BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.
- F) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 500 FT IN ADVANCE AND A MINIMUM OF ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

SIGNING

- G) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

TRAFFIC CONTROL DEVICES

- H) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- I) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS, CONES OR SKINNY DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON (300 FT) CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

- J) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- K) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

PHASING

STEP 1:

INSTALL ADVANCE WARNING SIGNS PER ROADWAY STANDARD DRAWING (RSD) 1101.01 (SHEET 2 OF 3).

STEP 2:

USING RSD 1101.02 (SHEET 7 OF 15), CLOSE THE INSIDE LANE OF BOTH DIRECTIONS OF -L- (DAVIS DRIVE) FROM STA. 10+50 ±L- TO STA. 18+50±L- AND PERFORM THE FOLLOWING:


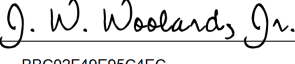
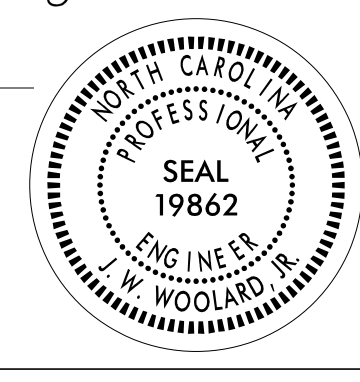
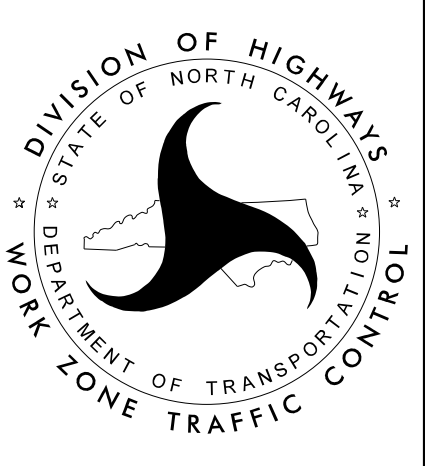
(NOTE: KEEP THE NEW PORTION OF THE LEFT TURN LANE DRUMMED OFF UNTIL READY TO OPEN.)

- A. SAW CUT THE EXISTING PAVEMENT AS SHOWN IN THE CONSTRUCTION PLANS FROM STA. 10+94 ±TO STA. 17+91 ±.
- B. CONVERT CATCH BASIN (CB) TO DROP INLETS (DI) AND CONSTRUCT PAVEMENT UP TO BUT NOT INCLUDING THE FINAL SURFACE COURSE.
- C. MILL EXISTING PAVEMENT AS SHOWN IN THE CONSTRUCTION PLANS AND PLACE THE FINAL SURFACE COURSE.
- D. CONSTRUCT MONOLITHIC CONCRETE ISLAND AS SHOWN IN THE CONSTRUCTION PLANS FROM STA. 10+94 ±L- TO STA. 17+91 ±L-.
- E. PLACE FINAL PAVEMENT MARKINGS AS SHOWN IN THE PAVEMENT MARKING PLAN.

STEP 3:

REMOVE ALL REMAINING TRAFFIC CONTROL DEVICES AND OPEN NEW TURN LANE TO TRAFFIC.

7/26/2016 11:00:16 AM Transportation\design\TrafficControl\Plan_Sheets\W5601EG_TMP_02_GENERALNOTES_PHASEING.dgn User: jwoolard

 <p>Stantec Consulting Services Inc. 801 Jones Franklin Road, Suite 300 Raleigh, NC 27608 Tel. 919.851.6866 Fax. 919.851.7024 www.stantec.com License No. F-0672</p>	<p>APPROVED:  <small>DocuSigned by: J. W. Woolard Jr. B8C0CF49E95CAE6.</small></p> <p>DATE: 7/26/2016</p> <div style="text-align: center;">  </div>	<div style="text-align: center;">  </div>	<p>GENERAL NOTES & PHASING</p>
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

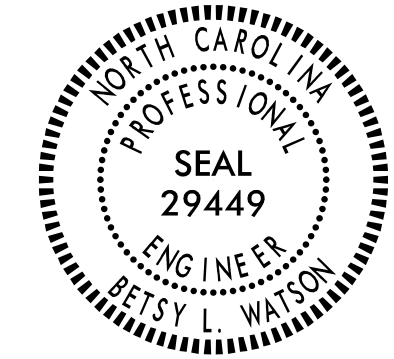
T.I.P.: W-5601EG

CONTRACT NO.:

**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING PLAN
WAKE COUNTY**

**LOCATION: SR 1613 (DAVIS DR) FROM NORTH OF
SR 1619 (WALDO ROAD BLVD) TO YORKHILL DR**

TIP NO. W-5601EG	SHEET NO. PMP - 1
<small>Digitally signed by:</small> APPROVED: <u>Betsy L. Watson</u> <small>DN: cn=Betsy L. Watson, o=Stantec Consulting Services Inc., ou=Stantec Consulting Services Inc., email=Betsy.L.Watson@stantec.com</small> DATE: 7/26/2016	
SEAL 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

FINAL PAVEMENT MARKING SCHEDULE


SYMBOL	DESCRIPTION	PAY ITEM
TC	10 FT WHITE SKIP	(4", 120 MIL) THERMOPLASTIC
TD	3 FT-9 FT/SP WHITE MINISKIP	(4", 120 MIL) THERMOPLASTIC
UA	LEFT TURN ARROW	(90 MIL) THERMOPLASTIC

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

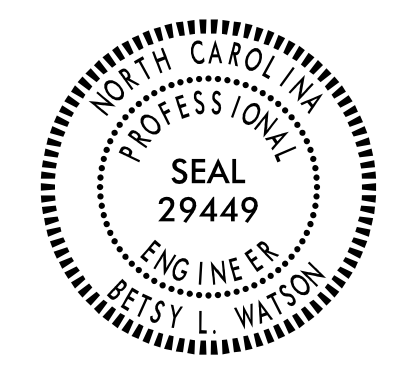

- A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

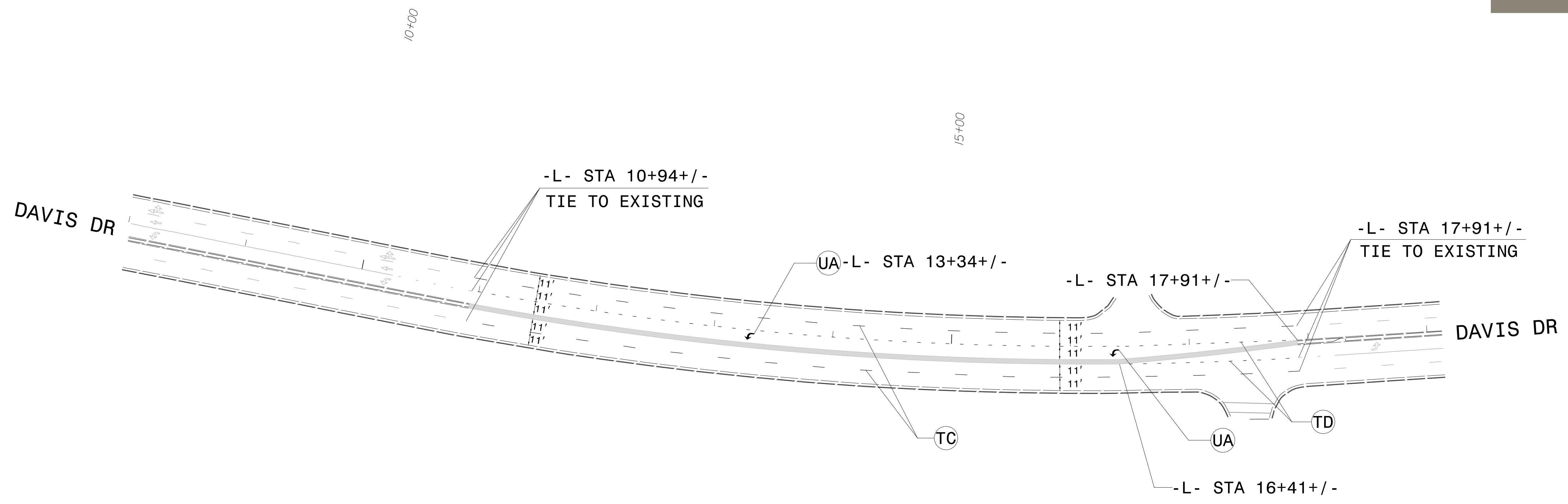
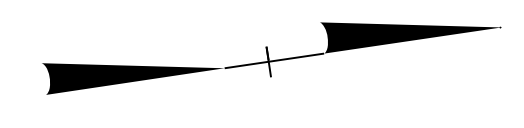
ROAD NAME	MARKING	MARKER
ALL ROADS	THERMOPLASTIC	RAISED
- B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.
- D) PASSING ZONES WILL BE DETERMINED IN THE FIELD AND MUST BE APPROVED BY THE ENGINEER.
- E) UNLESS OTHERWISE SPECIFIED, HEATED-IN-PLACE THERMOPLASTIC MAY BE USED IN LIEU OF EXTRUDED THERMOPLASTIC FOR STOP BARS, SYMBOLS, CHARACTERS AND DIAGONALS.




PLAN PREPARED BY:	 <small>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</small>
BETSY L. WATSON, P.E. TRAFFIC ENGINEER	
ROSI R. HENNEIN TRANSPORTATION DESIGNER	

INDEX

SHEET NO.	DESCRIPTION
PMP - 1	PAVEMENT MARKING PLAN TITLE AND SCHEDULE SHEET
PMP - 2	PAVEMENT MARKING DETAIL

TIP NO. W-5601EG	SHEET NO. PMP-2
APPROVED: <i>Betsy L. Watson</i> <small>DocuSigned by: Betsy L. Watson 35E978B34F8743F...</small>	
DATE: 7/26/2016	
SEAL	
	
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THERMOPLASTIC PAVEMENT MARKING LEGEND	
 LEFT TURN ARROW	 10 FT WHITE SKIP (4")
	 3 FT - 9 FT/SP WHITE MINISKIP (4")

PAVEMENT MARKING DETAIL

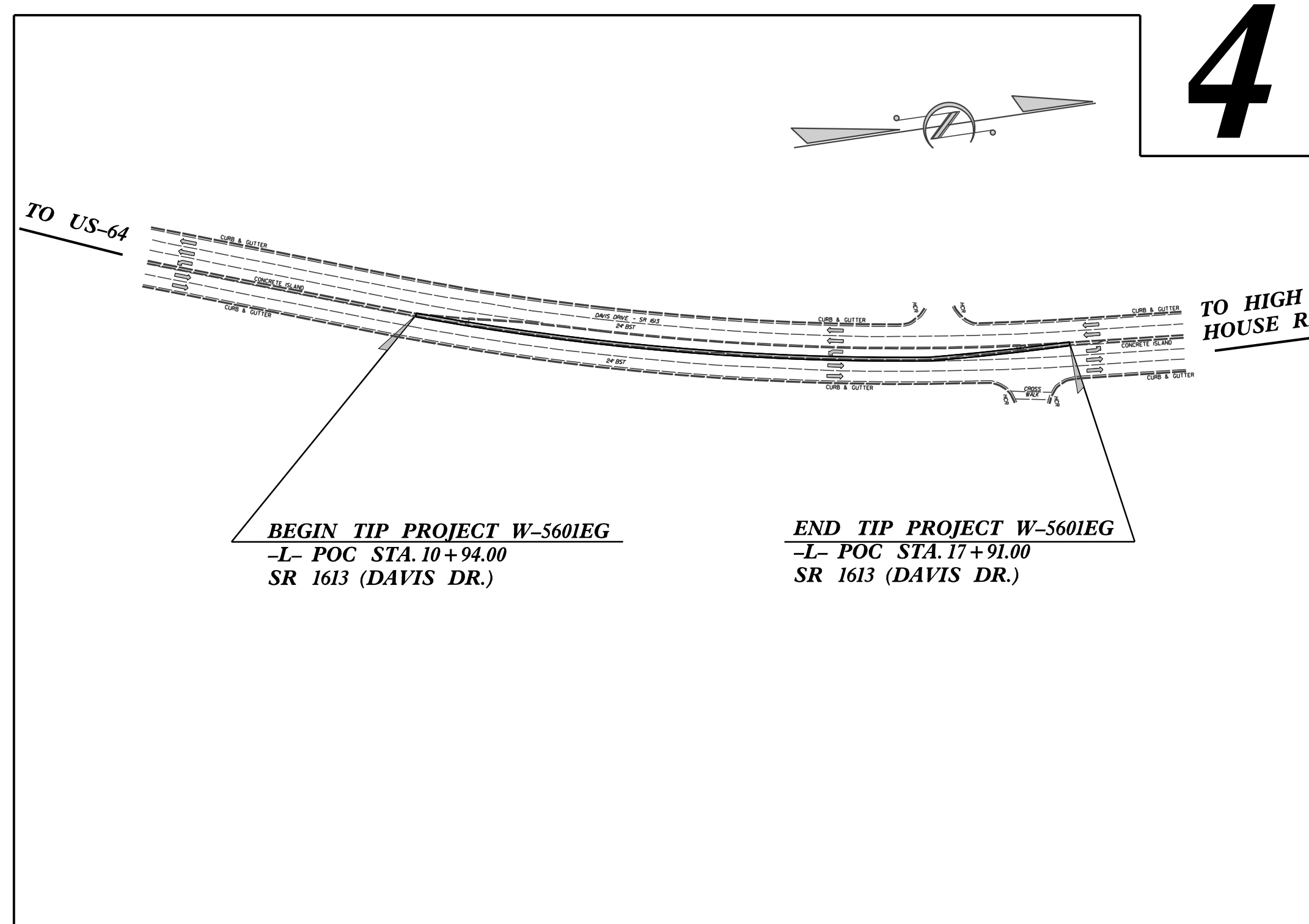
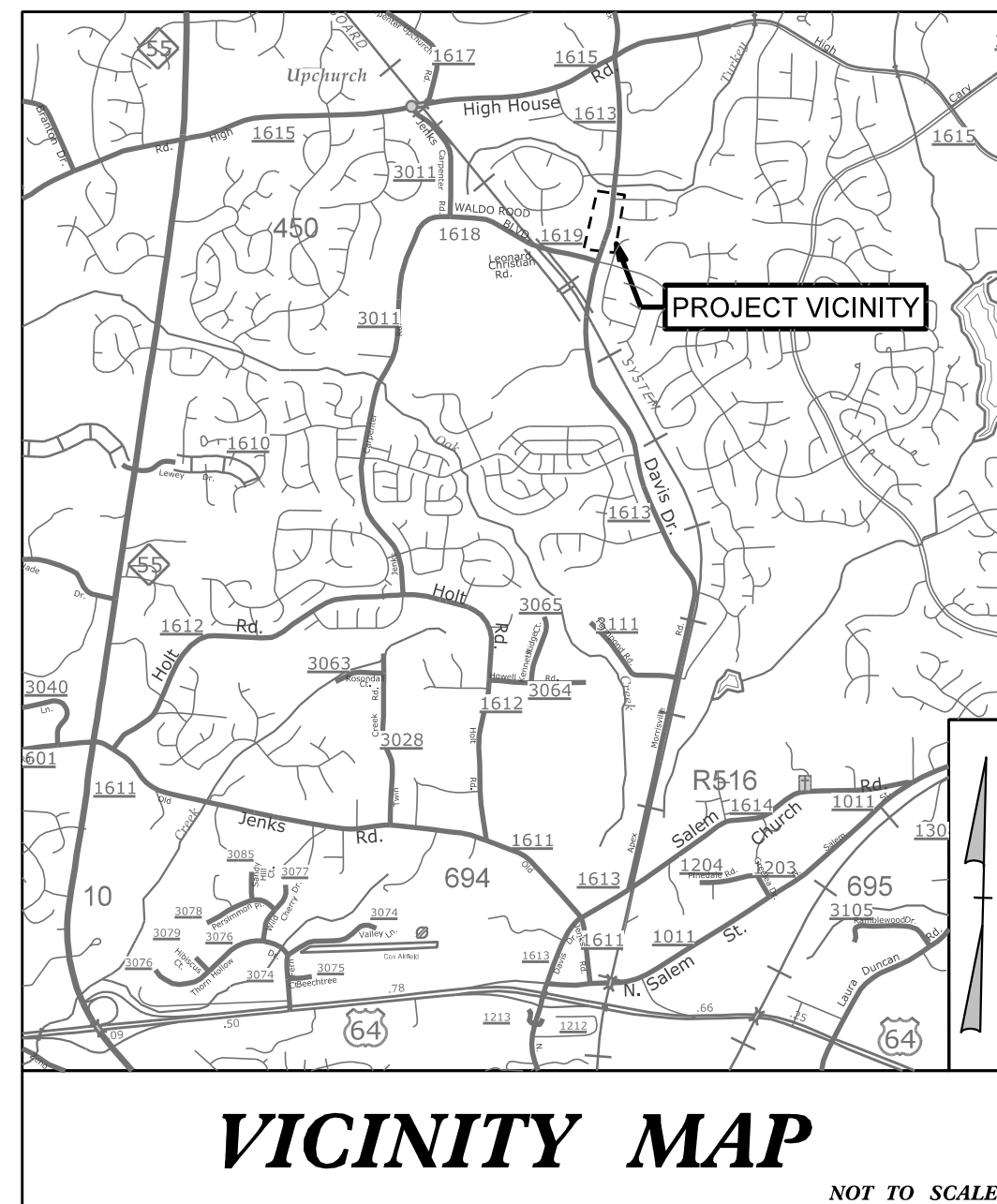
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TIP PROJECT: W-5601EG

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL
WAKE COUNTY

**LOCATION: SR 1613 (DAVIS DR.) FROM NORTH OF
SR (1619) WALDO ROAD BLVD TO YORKHILL DR.**

TYPE OF WORK: GRADING, DRAINAGE, AND PAVING



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5601EG	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

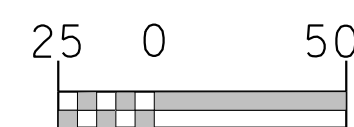
Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	no
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	▲▲▲▲▲
1622.01	Temporary Berms and Slope Drains	—
1630.02	Silt Basin Type B	▨
1633.01	Temporary Rock Silt Check Type-A	▨
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	▨
1633.02	Temporary Rock Silt Check Type-B	▶
	Wattle / Coir Fiber Wattle	—
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	—
1634.01	Temporary Rock Sediment Dam Type-A	▨
1634.02	Temporary Rock Sediment Dam Type-B	▨
1635.01	Rock Pipe Inlet Sediment Trap Type-A	⊓
1635.02	Rock Pipe Inlet Sediment Trap Type-B	⊓
1630.04	Stilling Basin	▭
1630.06	Special Stilling Basin	▭
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	▭
	Tiered Skimmer Basin	▭
	Infiltration Basin	▭

**THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.**

**THIS PROJECT HAS
BEEN DESIGNED TO
SENSITIVE WATERSHED
STANDARDS.**

**ENVIRONMENTALLY
SENSITIVE AREA(S) EXIST
ON THIS PROJECT**
*Refer To E. C. Special Provisions
for Special Considerations.*

GRAPHIC SCALE



PLANS

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

**THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY
WITH THE REGULATIONS SET FORTH BY THE
NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011
ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES DIVISION OF WATER QUALITY.**

Prepared in the Office of:

SUNGATE DESIGN GROUP, P.A.



915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-6258
ENG FIRM LICENSE NO. C-890

Designed by:

JOSHUA G. DALTON PE, CPESC

#3552

NAME

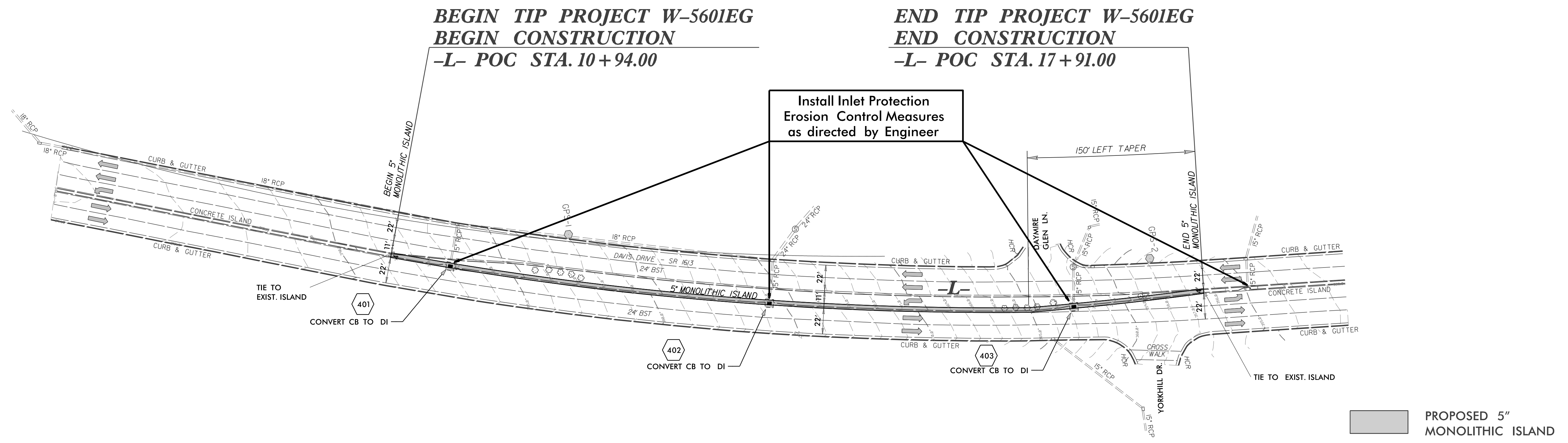
LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1633.02 Temporary Rock Silt Check Type B
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type B	1634.02 Temporary Rock Sediment Dam Type B
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.04 Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	1640.01 Coir Fiber Baffle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

PROJECT REFERENCE NO. <i>W-5601EG</i>	SHEET NO. <i>EC-02/CONST.04</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

T.I.P.: W-5601EG

CONTRACT:

**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN
WAKE COUNTY**

**LOCATION: SR 1613 (DAVIS DR) FROM NORTH OF
SR 1619 (WALDO ROAD BLVD) TO YORKHILL DR**

TIP NO. W-5601EG	SHEET NO. SIGN-1
APPROVED:	
DATE: 7/26/2016	
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ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

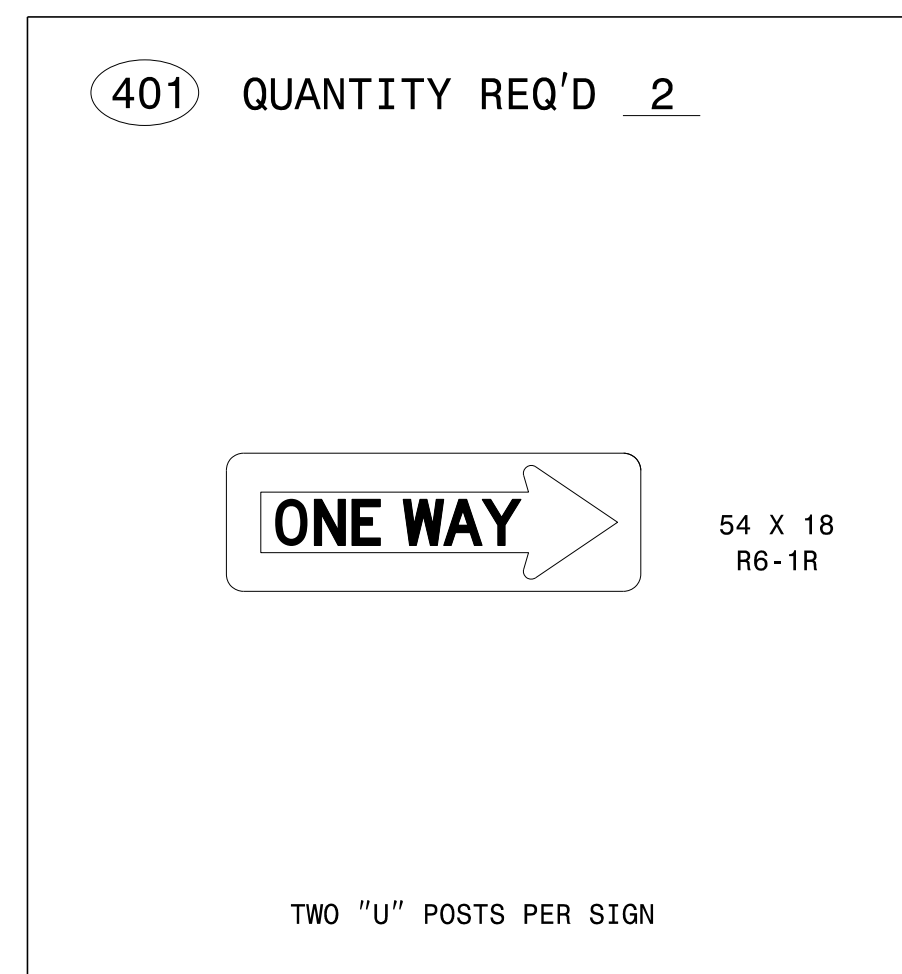
STD. NO.	TITLE
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS

GENERAL NOTES

- . SIGNS FURNISHED BY STATE.
- . IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.
- . WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER.
- . ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.
- . WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.
- . THE BACKGROUND FOR TYPE E SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.

SUMMARY OF QUANTITIES

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4072000000	903	SUPPORTS, 3-LB STEEL U-CHANNEL.....	66	L.F.
4102000000	904	SIGN ERECTION, TYPE E.....	2	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL.....	1	EA.

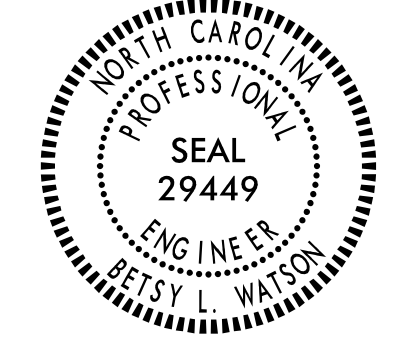



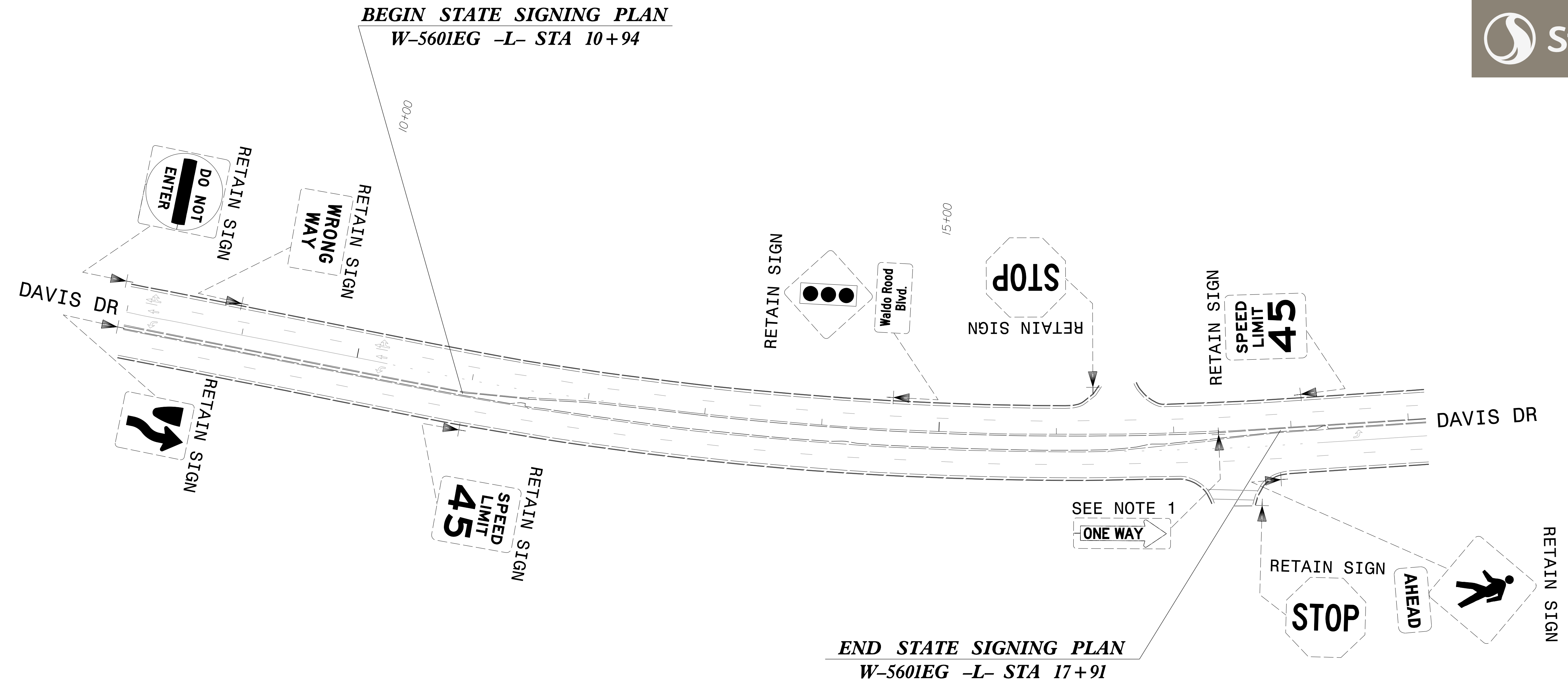
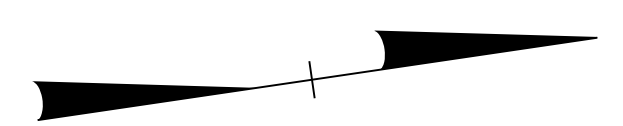
INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET & TYPE 'E' SIGN
SIGN-2	EXISTING SIGNING SHEET
SIGN-3	PROPOSED SIGNING SHEET

PLAN PREPARED BY: BETSY L. WATSON, P.E. TRAFFIC ENGINEER ROSI R. HENNEIN TRANSPORTATION DESIGNER	 <small>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-8886 Fax. (919) 851-7024 www.stantec.com License No. F-0672</small>
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\$\$\$\$\$USERNAME\$\$\$\$\$

TIP NO. W-5601EG	SHEET NO. SIGN-2
APPROVED: <i>Betsy L. Watson</i> <small>DocuSigned by: Betsy L. Watson 35E978B34F8743F...</small>	
DATE: 7/26/2016	
SEAL	
	
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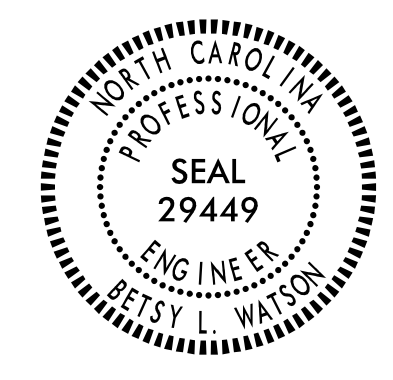



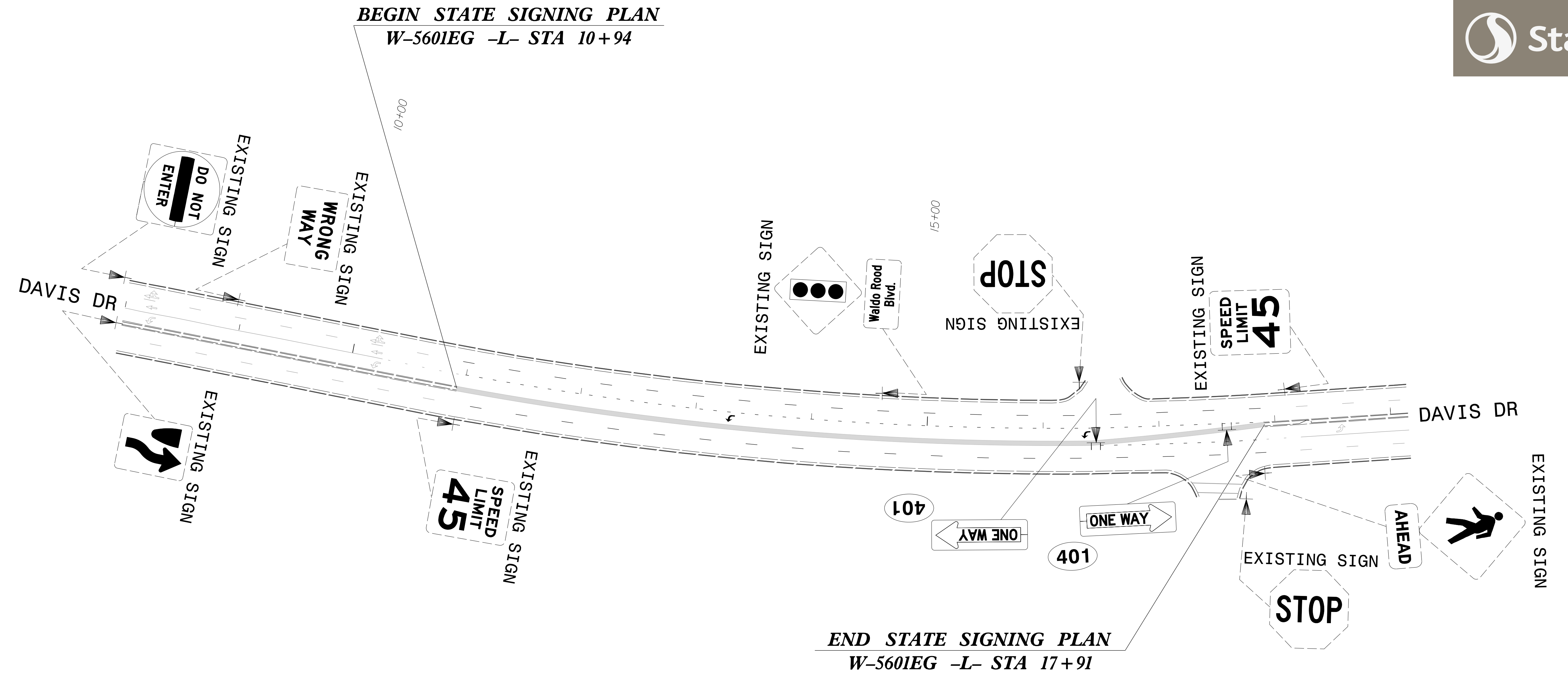
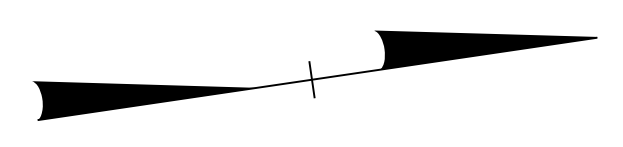
PROJECT NOTES

1 DISPOSAL OF SIGN SYSTEM, U-CHANNEL

EXISTING SIGNING
SR 1613 (DAVIS DR)
-L- STA 8+00 TO 19+15

\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$DDGN\$\$\$\$\$
\$\$\$\$\$USERNAME\$\$\$\$\$

TIP NO. W-5601EG	SHEET NO. SIGN-3
APPROVED: <i>Betsy L. Watson</i> SEAL 29449 ENGINEER	
DATE: 7/26/2016	
SEAL	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
	



\$\$\$\$\$SYTIME\$\$\$\$\$
 \$\$\$DDGN\$\$\$\$\$
 \$\$\$USERNAME\$\$\$\$\$

PROPOSED SIGNING
 SR 1613 (DAVIS DR)
 -L- STA 8+00 TO 19+15

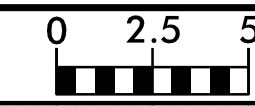
CROSS SECTION INDEX

<u>ROADWAY</u>	<u>STATION</u>	<u>TO</u>	<u>STATION</u>	<u>SHEET NO.</u>
CROSS SECTION INDEX				X-A
CROSS SECTION SUMMARY				X-1A
-L- DAVIS DRIVE	10 + 00.00		18 + 50.00	X-1 - X-3

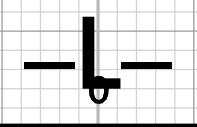
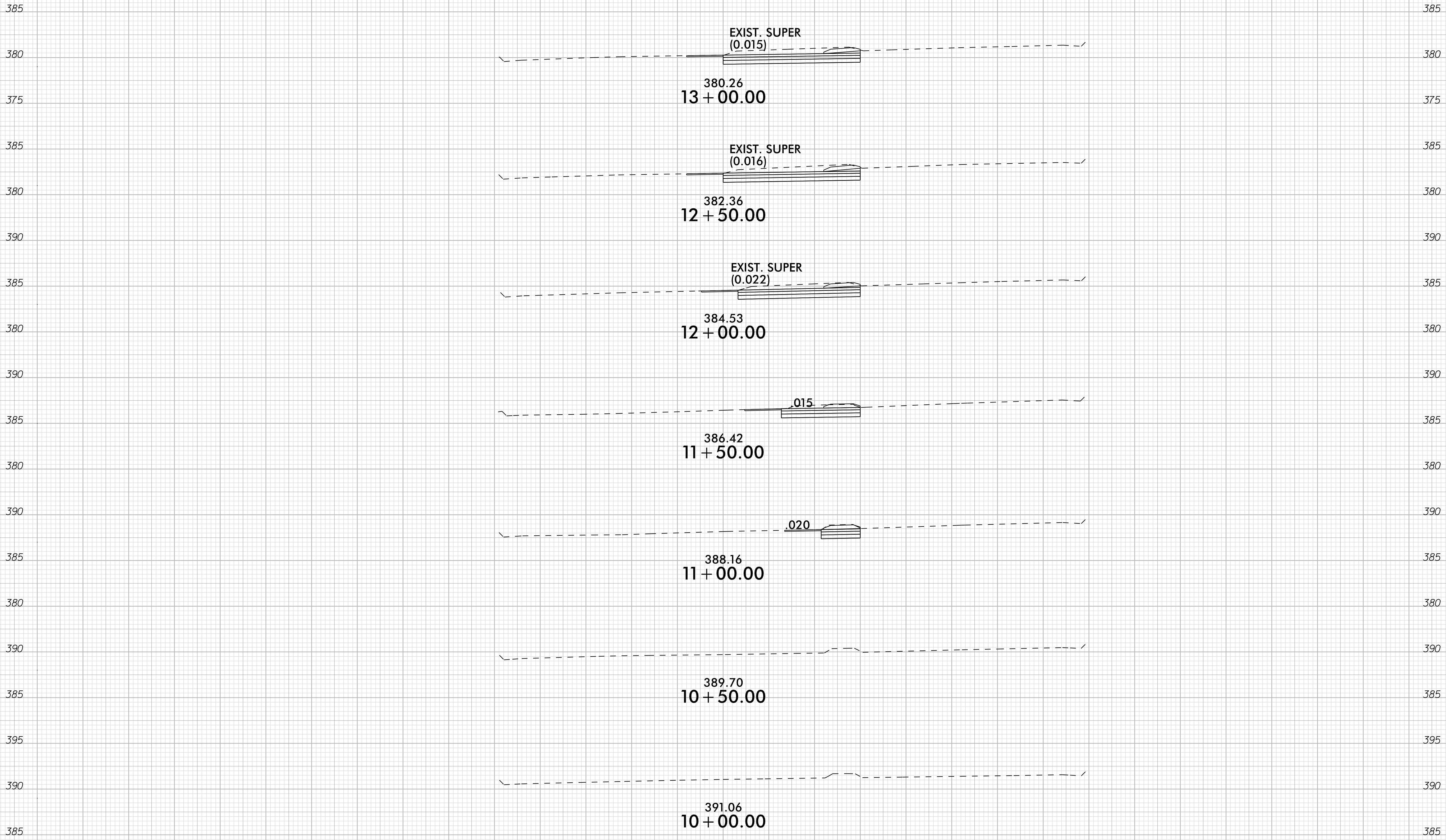
Station	Uncl. Exc.	Embt
L	(cu. yd.)	(cu. yd.)
10+94.00	0	0
11+00.00	1	0
11+50.00	16	0
12+00.00	28	0
12+50.00	39	0
13+00.00	43	0
13+50.00	43	0
14+00.00	43	0
14+50.00	43	0
15+00.00	43	0
15+50.00	43	0
16+00.00	42	0
16+50.00	40	0
17+00.00	34	0
17+50.00	23	0
17+91.00	7	0

Note: Approximate quantities only. Unclassified Excavation, Fine Grading, and Clearing and Grubbing will be paid for at the contract lump sum price for "Grading"

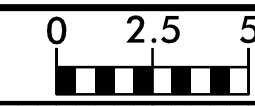
Note: Embankment quantity does not include backfill for undercut



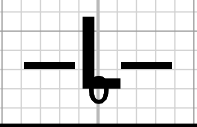
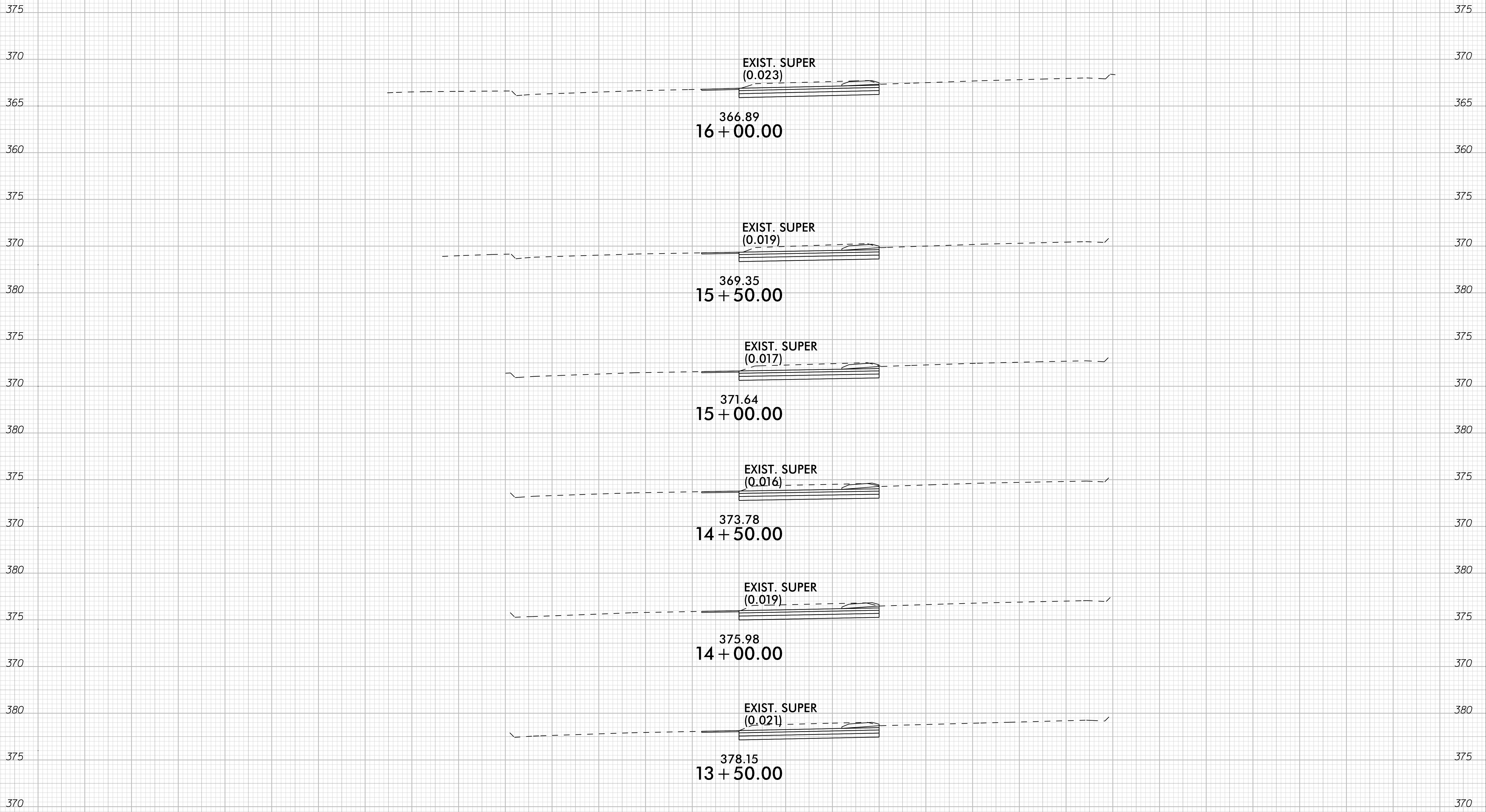
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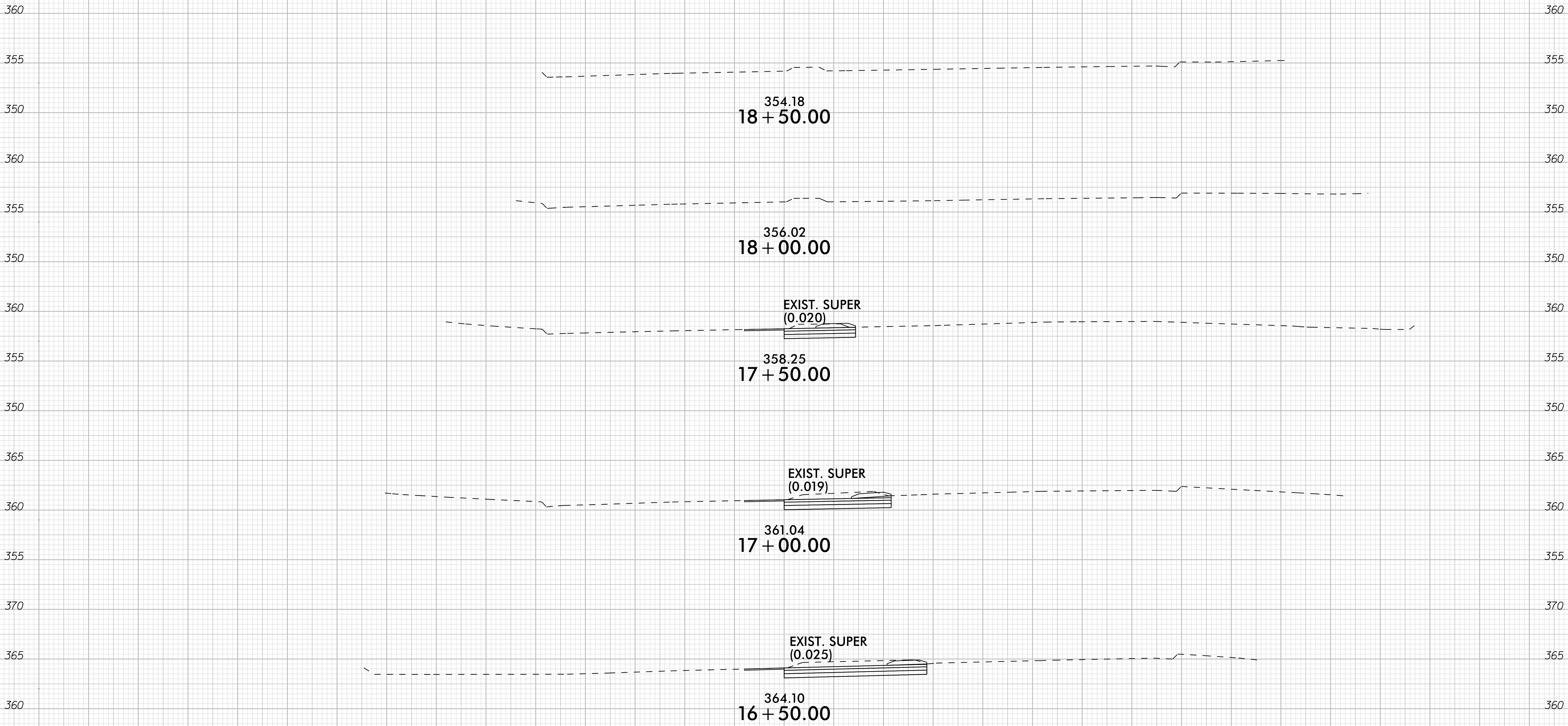


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