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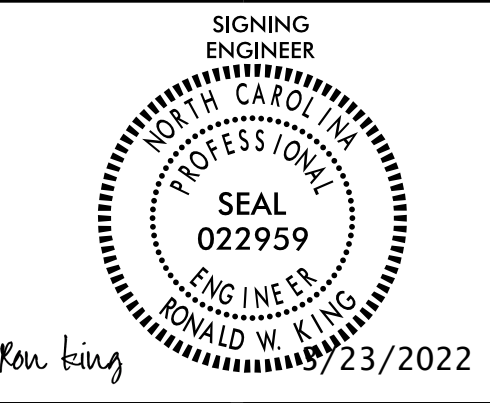

**CONTRACT: C204747**

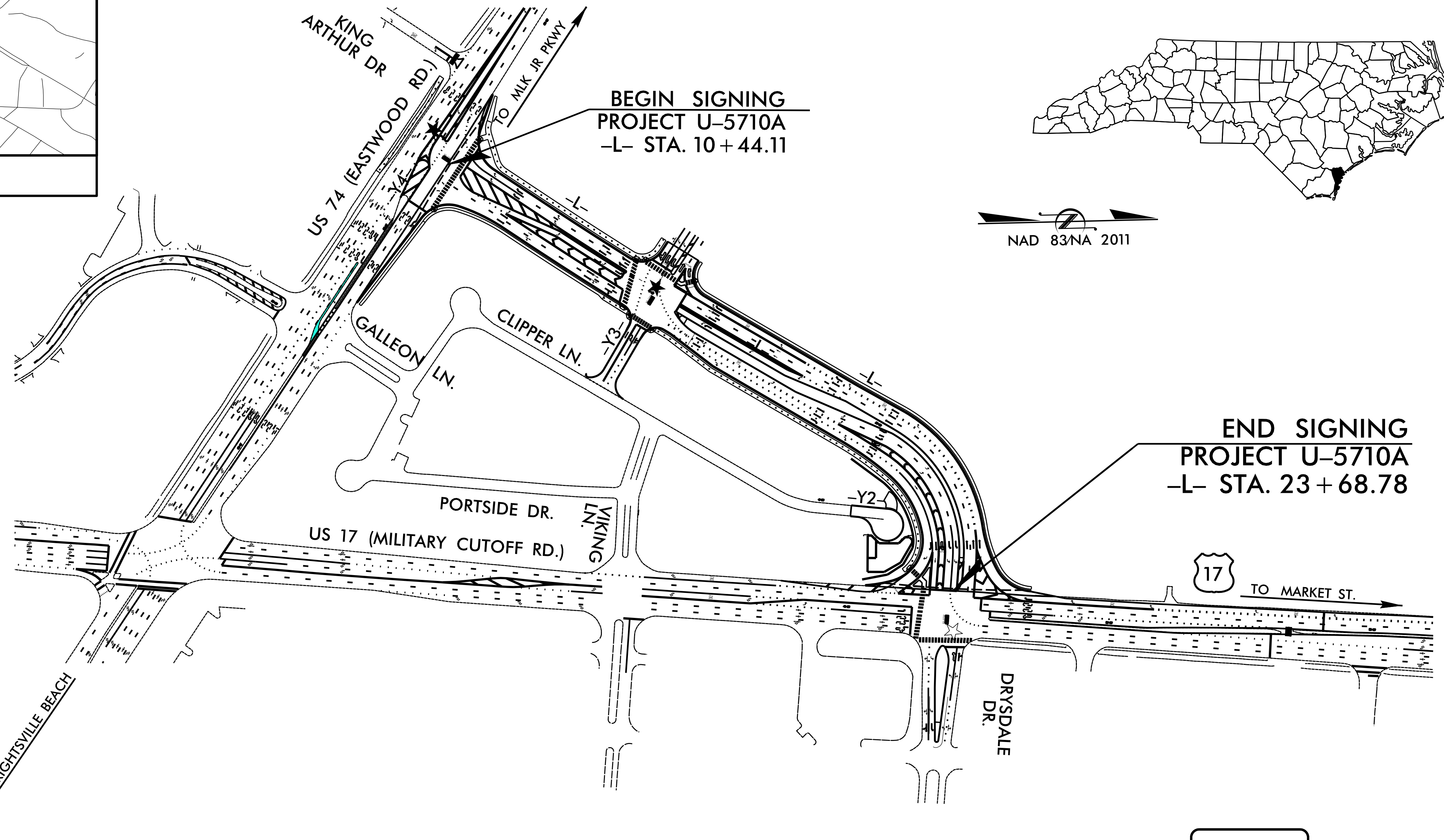
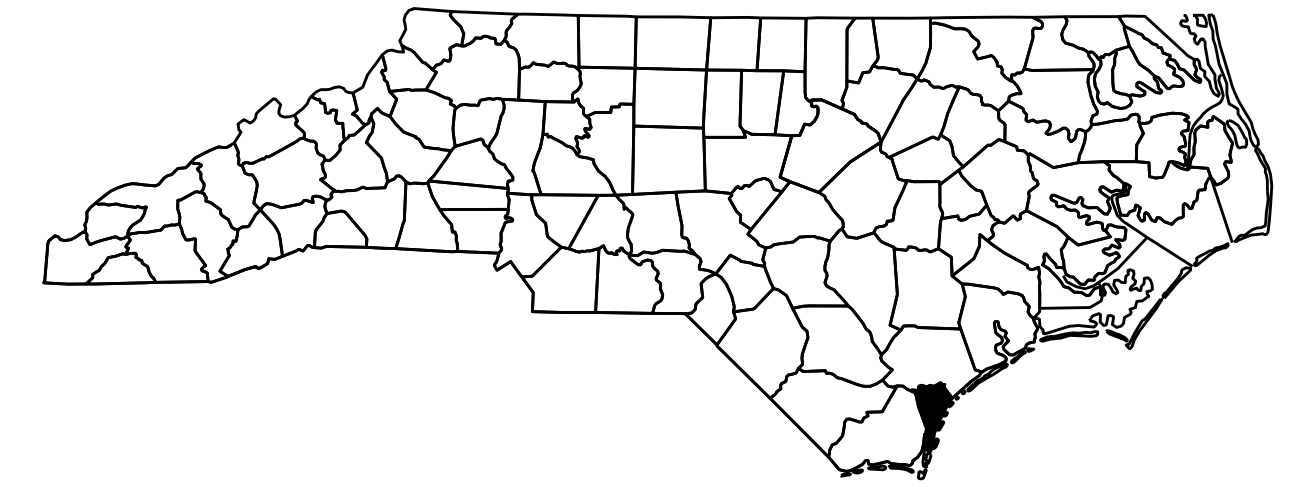
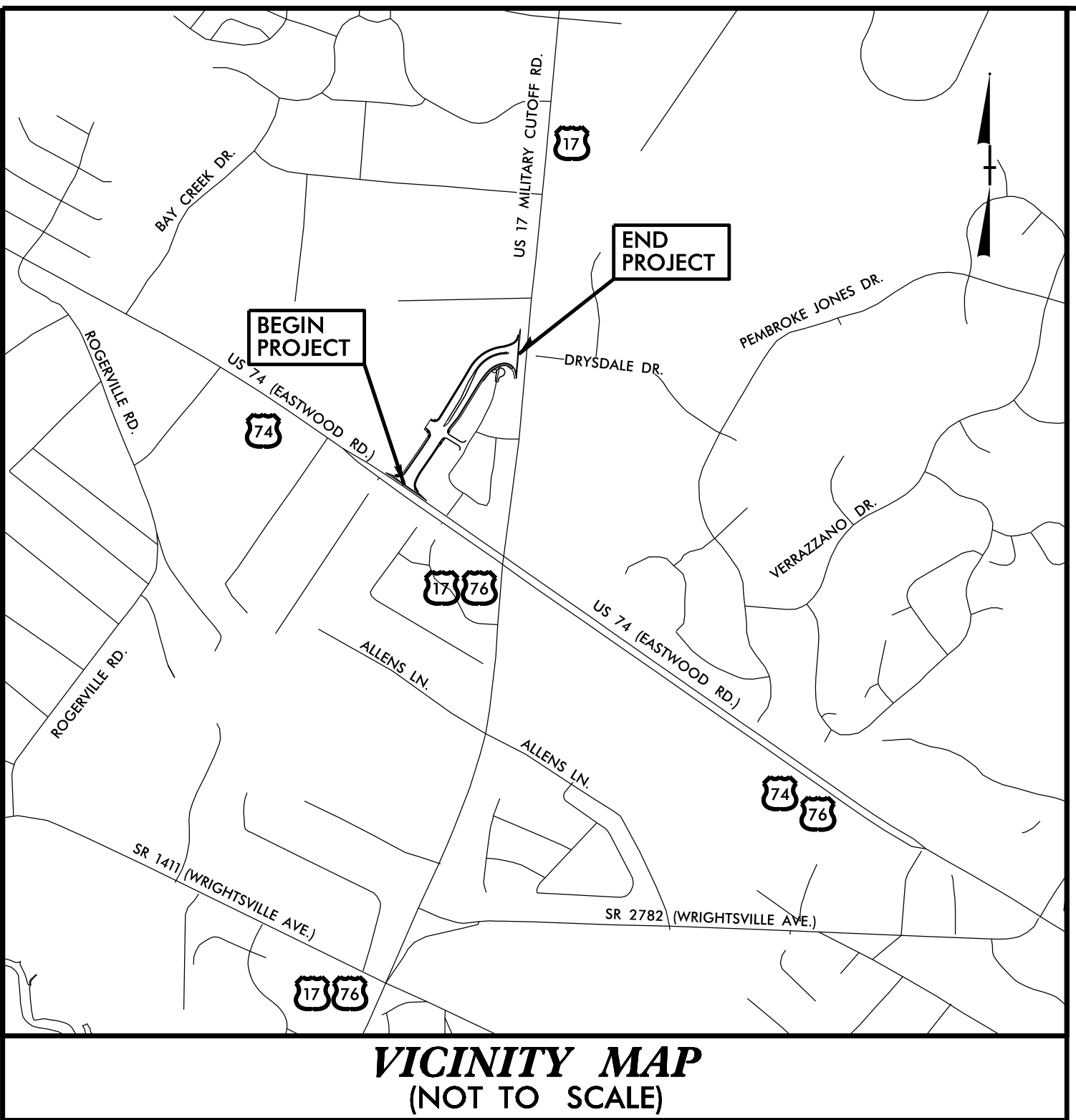
**TIP PROJECT: U-5710A**

**STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN  
NEW HANOVER COUNTY**

**NEW LOCATION NORTHWESTERN QUADRANT  
CONNECTION BETWEEN US 74 (EASTWOOD RD.)  
AND US 17 (MILITARY CUTOFF RD.)**

PROJECT REFERENCE NO. U-5710A	SHEET NO. SIGN-1
	
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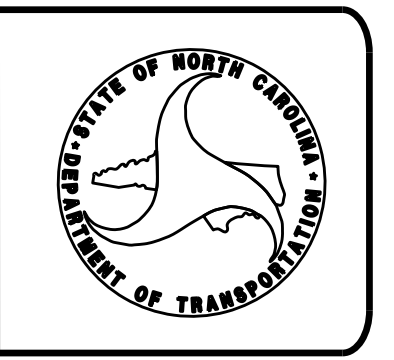


- ☆ MODIFIED TRAFFIC SIGNAL
- ★ PROPOSED TRAFFIC SIGNAL

**PLAN SUBMITTED TO: N.C.D.O.T. SIGNING & DELINEATION UNIT**

AYMAN ALQUDWAH, P.E. SIGNING & DELINEATION REGIONAL ENGINEER

MATT TRACEY, P.E. SIGNING & DELINEATION PROJECT DESIGN ENGINEER



**PLAN PREPARED BY: HDR Engineering, Inc. of the Carolinas**

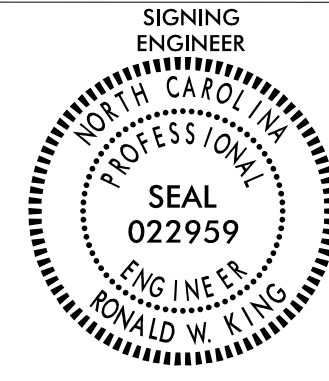

RON KING, PE PROJECT ENGINEER

RICHARD DRAYTON TRAFFIC DESIGN ENGINEER

**INDEX**

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2	NOTES
SIGN-2A	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS (RSD SHEET 1 OF 2)
SIGN-3	"E" & "F" SIGNS
SIGN-4 & 5	SIGN DETAIL SHEETS



TIP NO.	SHEET NO.
U-5710A	SIGN-2
APPROVED: <u>Ron King</u>	
DATE: <u>12/8/2021</u>	
SEAL	
	
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### ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 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 (SHEET 2 OF 2)

### GENERAL NOTES

- . SIGNS FURNISHED BY CONTRACTOR
- . CONFIRM IN WRITING AT LEAST 4 MONTHS IN ADVANCE, THE ACTUAL DATE THE DEPARTMENT FURNISHED SIGNS WILL BE REQUIRED.
- . 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' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER
- . ALL EXISTING SIGNS ON "U" 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 & F 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	355	L.F.
4025000000	901	CONTRACTOR FURNISHED, TYPE E SIGN	111	S.F.
4025000000	901	CONTRACTOR FURNISHED, TYPE F SIGN	37	S.F.
4102000000	904	SIGN ERECTION, TYPE E	17	EA.
4108000000	904	SIGN ERECTION, TYPE F	4	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	1	EA.
4360000000-N	SP	VERTICAL PANEL TYPE 3 OBJECT MARKER-OM3-L	2	EA.

### PROJECT NOTES

1. DISPOSAL OF SIGN SYSTEM, U-CHANNEL

# NOTES

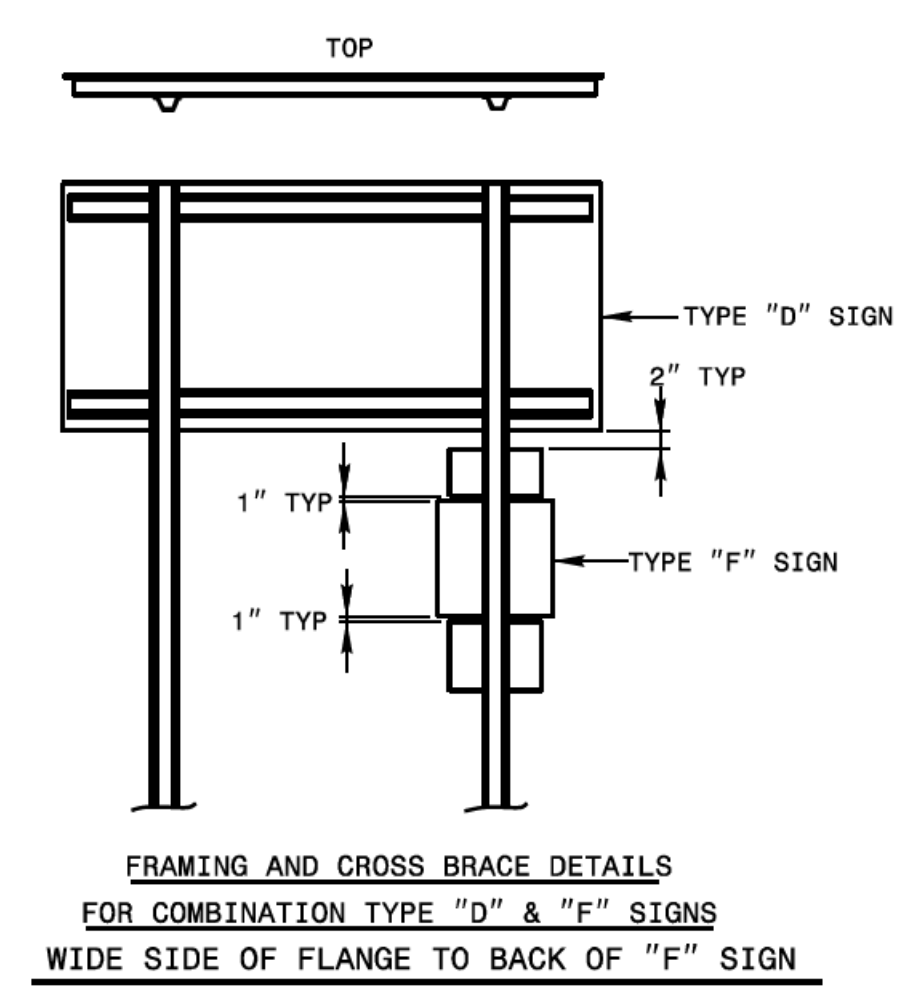
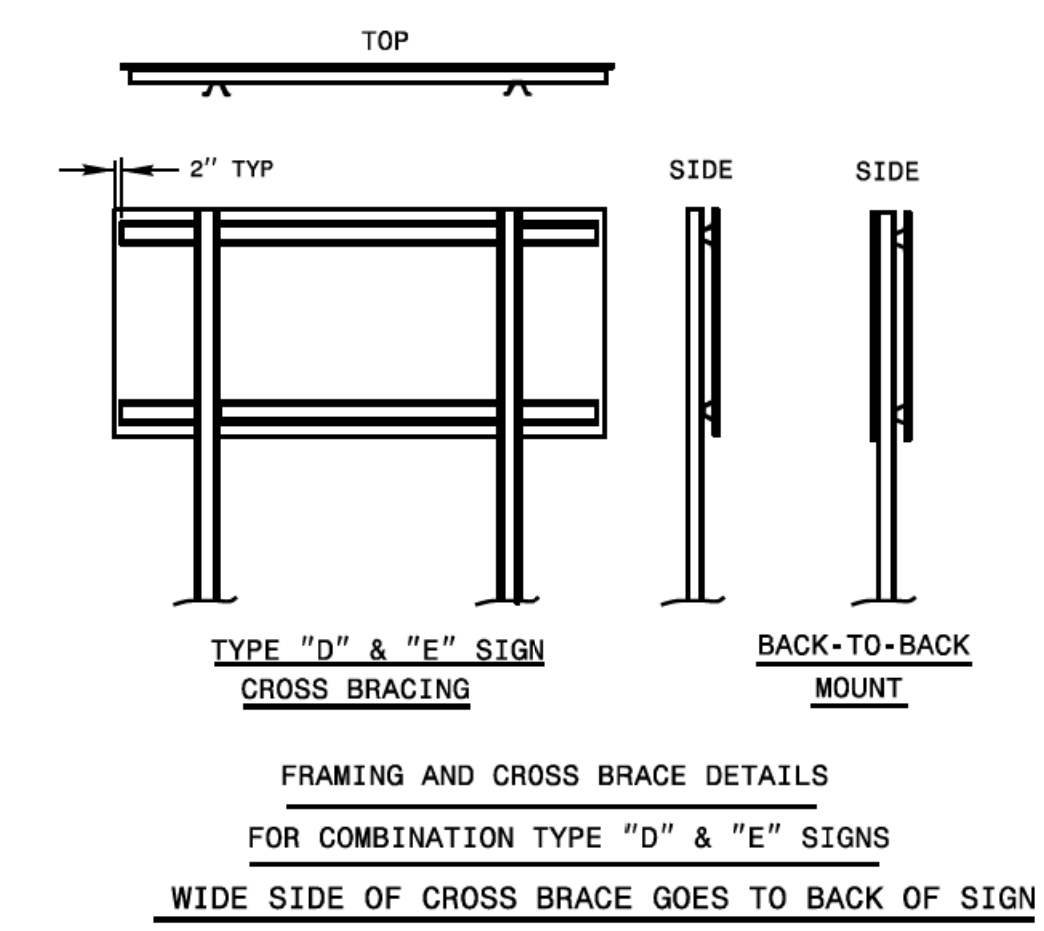
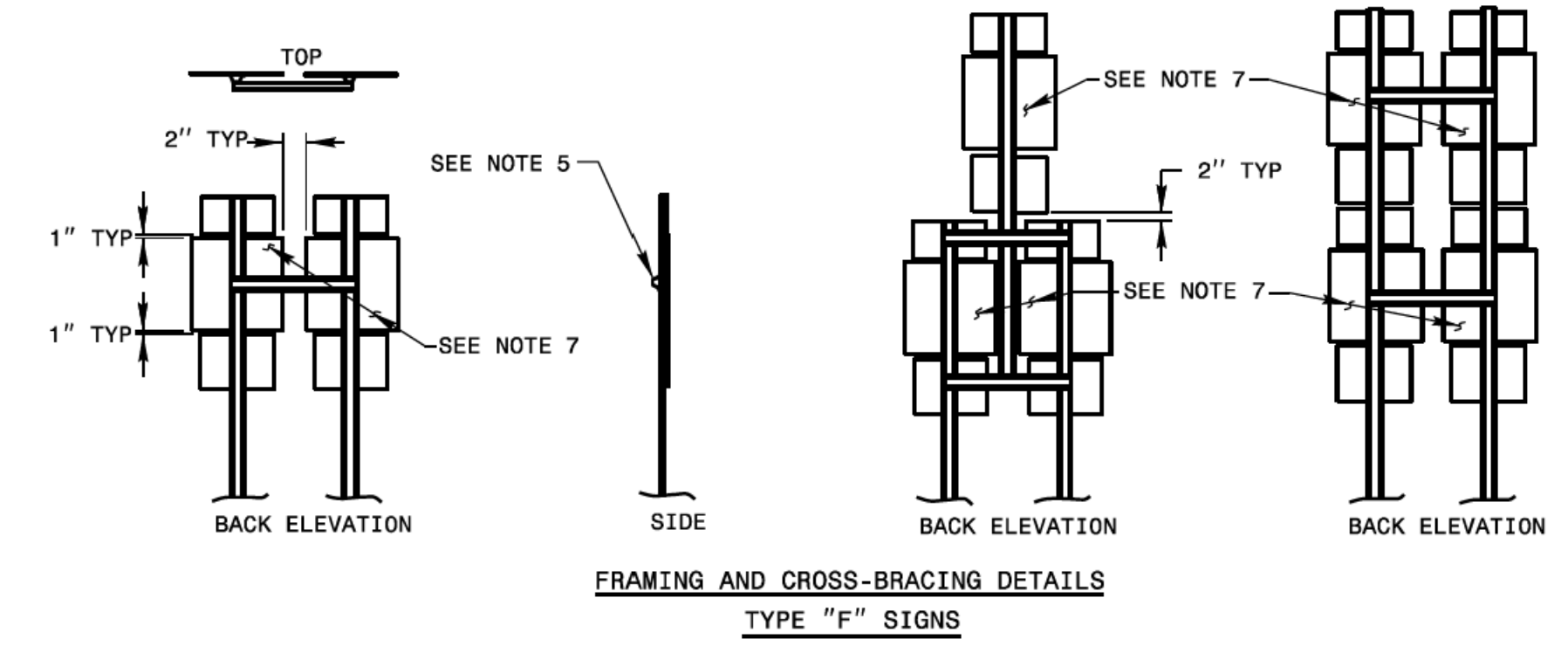
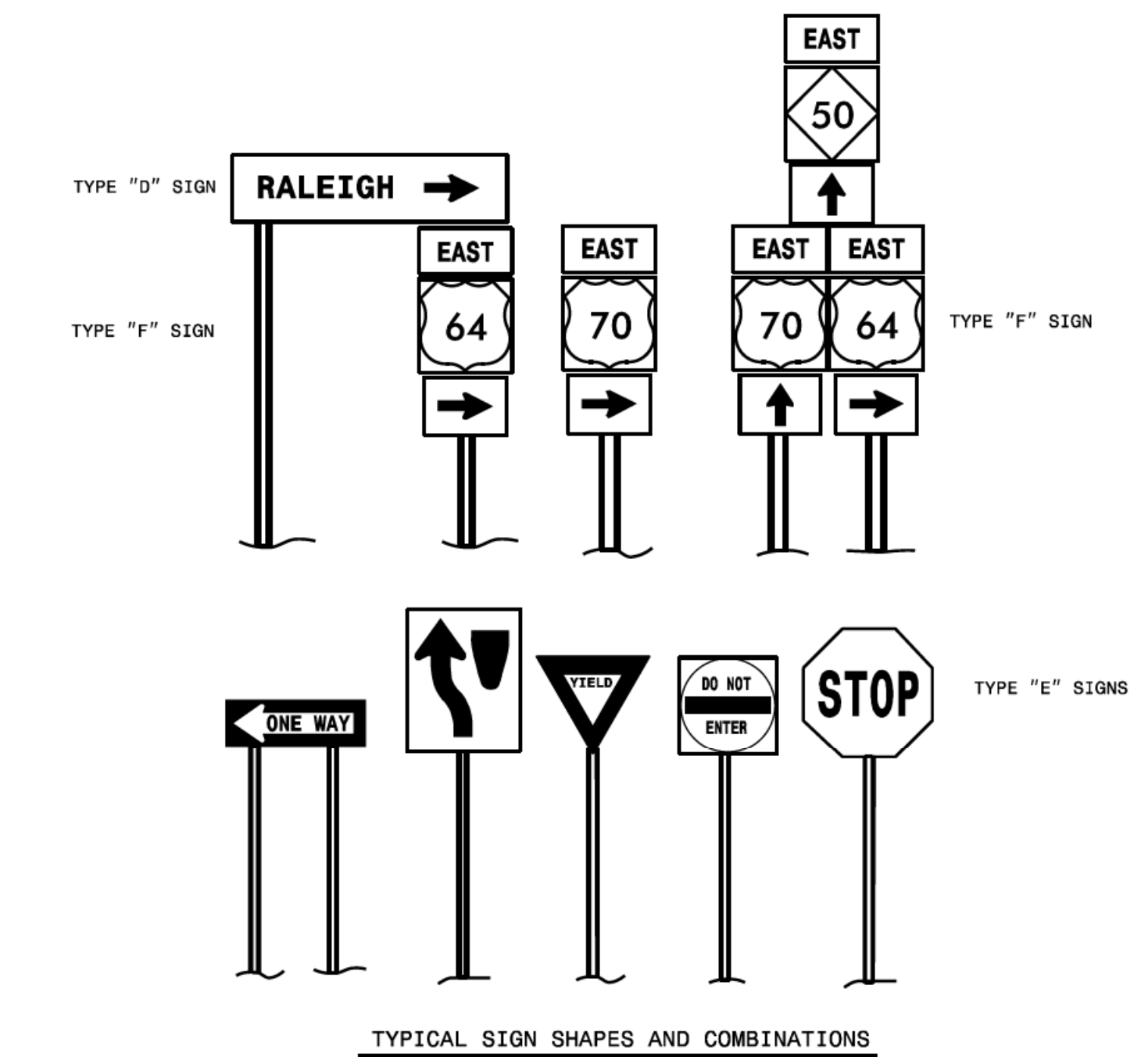
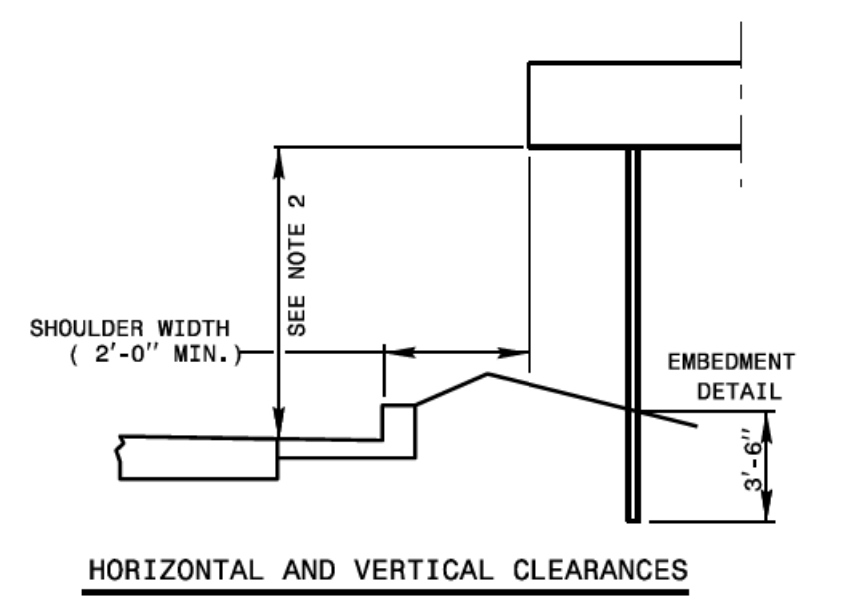
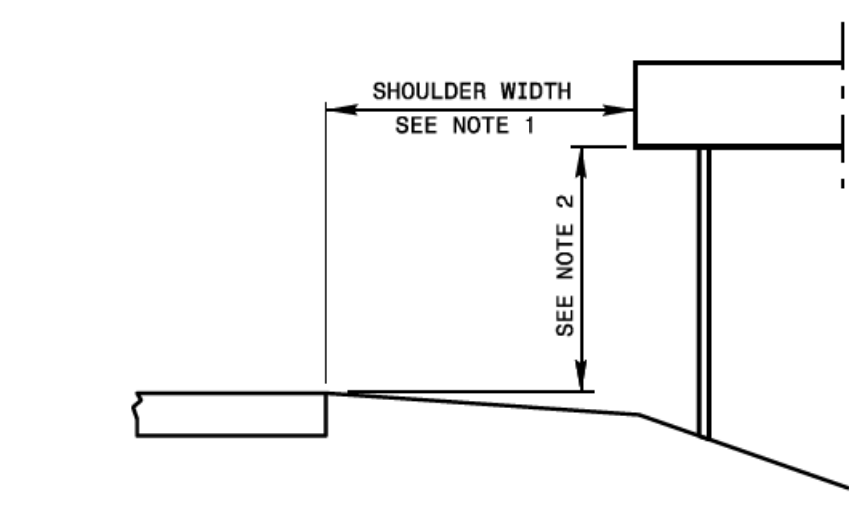
TIP NO. U-5710A SHEET NO. SIGN-2A  
 APPROVED: *Matthew V. Springer*  
 DATE: 6/23/2021  
 SEAL: 042546  
 NORTH CAROLINA PROFESSIONAL ENGINEER MATTHEW V. SPRINGER

STATE OF NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.

6-21

ENGLISH DETAIL DRAWING FOR  
 MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS  
 ON 'U' CHANNEL POSTS

SHEET 1 OF 2  
 904D50



- NOTES:
1. ERECT TYPE "D", "E", AND "F" SIGNS ON FREEWAYS WITH THE NEAR EDGE OF THE SIGN 20 FT. FROM THE TRAVEL LANE. ERECT ALL OTHER "D", "E", AND "F" SIGNS WITH THE NEAR EDGE OF THE SIGN AT THE EDGE OF THE SHOULDER BREAK (6 FT. MINIMUM CLEARANCE, 12 FT. DESIRABLE, FROM THE EDGE OF TRAVEL LANE), OR AS DIMENSIONED ON PLAN SHEETS.
  2. ERECT TYPE "D", "E", AND "F" SIGNS WITH THE BOTTOM OF SIGN ASSEMBLY AT LEAST 7 FT. ABOVE THE EDGE OF THE TRAVEL LANE ON ROADS WITH 2 OR MORE LANES IN THE SAME DIRECTION AND AT LEAST 5 FT. ON OTHER ROUTES. THE VERTICAL CLEARANCE IS 7 FT. WHERE REQUIRED FOR PEDESTRIAN TRAFFIC AND/OR PARKED VEHICLES.
  3. THE VERTICAL DIMENSION BETWEEN MOUNTING HOLE CENTERS ON ALL TYPES "D", "E", AND "F" SIGNS IS 30" MAXIMUM. THE VERTICAL AND HORIZONTAL DIMENSIONS BETWEEN MOUNTING HOLES IS TO THE WHOLE INCH. EACH SIGN PANEL HAS A MINIMUM OF 2 BOLTS PER SUPPORT.
  4. ATTACH SIGN W/ 5/16" HEX HEAD BOLT, NYLON WASHER, SHIM, FLAT WASHER, LOCK WASHER, HEX NUT. NO BUCKLING OF THE SIGN WILL BE PERMITTED. SEE ASSEMBLY DETAIL SHEET# 2 OF 904.50.
  5. FURNISH AND INSTALL CROSS-BRACING AS SHOWN IN DETAIL. PAINT ENDS OF CROSS BRACES W/ APPROVED. ZINC PAINT
  6. INSTALL POST AND CROSS-BRACING WITH THE WIDE SIDE OF THE FLANGE TOWARD THE BACK OF SIGN(S) FOR COMBINATION TYPE "D" AND "F" SIGNS.
  7. THE SHIELD HEIGHTS IN THESE ASSEMBLIES CAN NOT BE LARGER THAN 24".
  8. IF SIGN ASSEMBLIES REQUIRE MORE THAN TWO U-CHANNEL SUPPORTS, THE SUPPORTS SHALL BE PLACED A MINIMUM OF 4 FT. BETWEEN POSTS. NO MORE THAN TWO POSTS SHALL FALL WITHIN 7 FT. PATH, OR THE SIGN ASSEMBLY MUST BE PLACED BEHIND BARRIER PROTECTION.

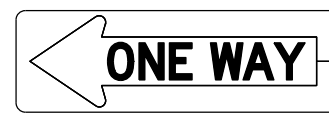
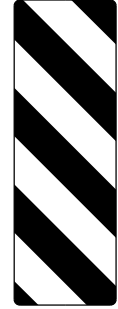

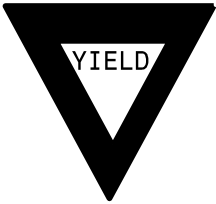
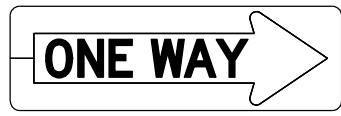
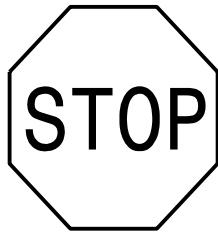
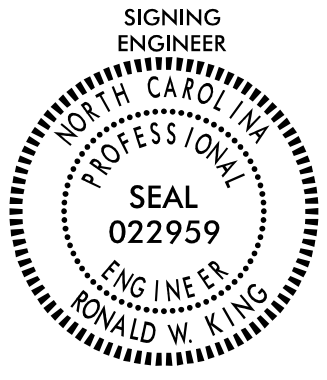



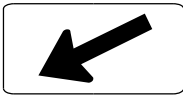
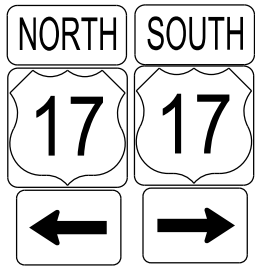
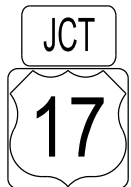
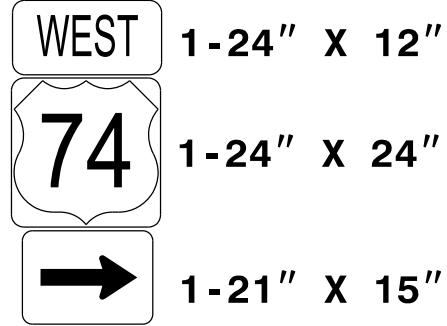
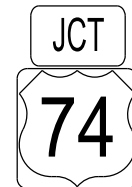
STATE OF NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
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 RALEIGH, N.C.

6-21

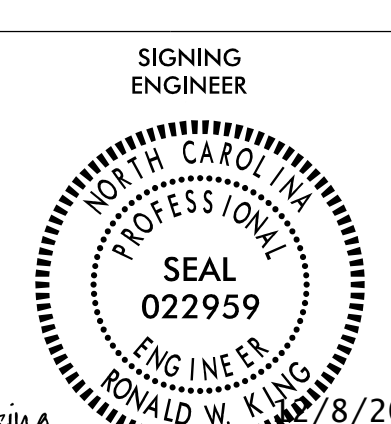

ENGLISH DETAIL DRAWING FOR  
 MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS  
 ON 'U' CHANNEL POSTS

SHEET 1 OF 2  
 904D50

REVISED SIGNING  
 ROADWAY STANDARD DRAWING

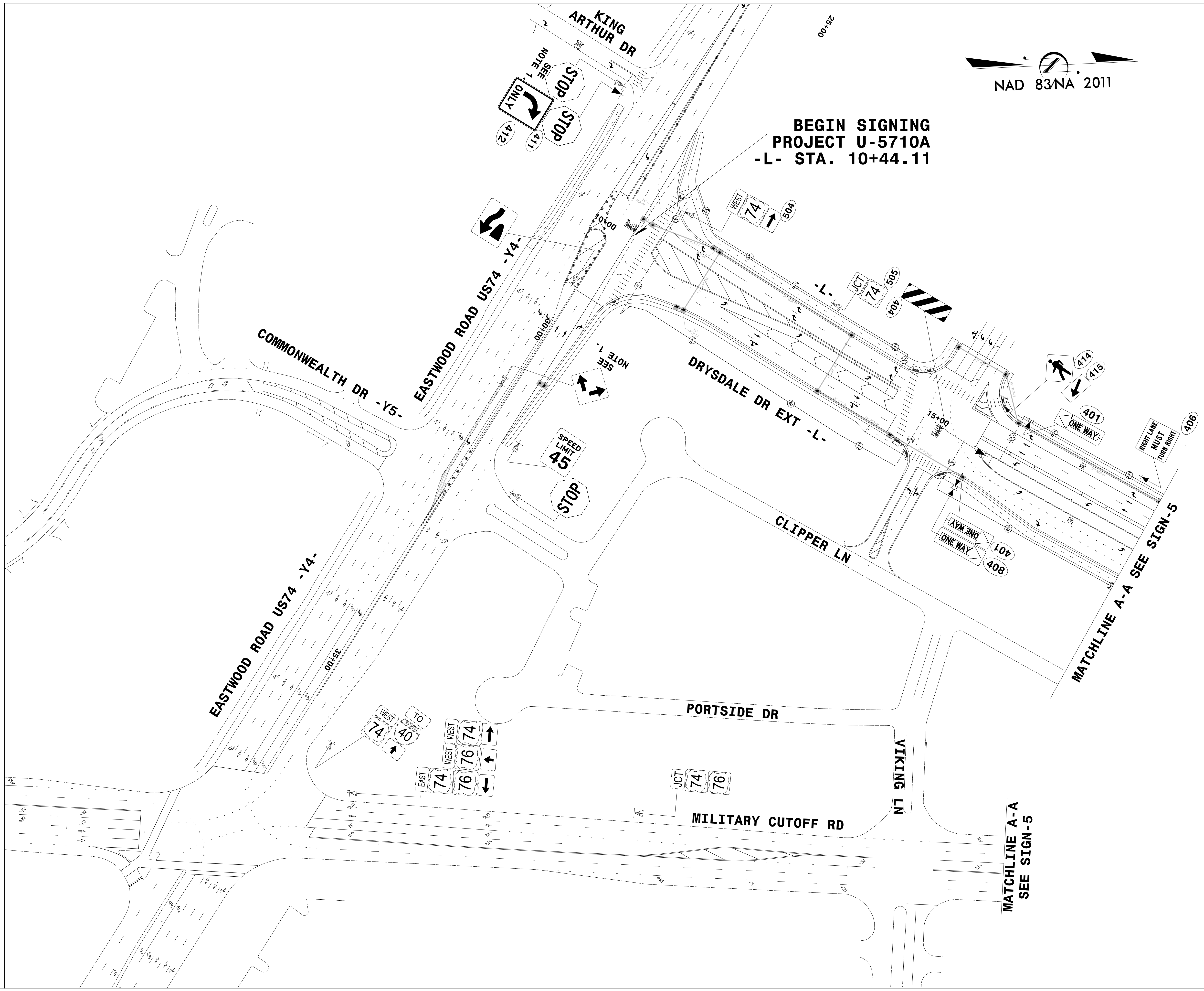
						TIP NO. U-5710A	SHEET NO. SIGN-3
<p>401) QUANTITY REQ'D .2_</p>  <p>54 X 18 R6-1 (L)</p> <p>TWO "U" CHANNEL POSTS PER SIGN</p>	<p>404) QUANTITY REQ'D .2_</p>  <p>12 X 36 OM3-L</p> <p>ONE VERTICAL PANEL POST PER SIGN</p>	<p>406) QUANTITY REQ'D .4_</p>  <p>36 X 36 R3-7R</p> <p>ONE "U" CHANNEL POST PER SIGN</p>	<p>407) QUANTITY REQ'D .1_</p>  <p>30 X 30 X 30 R1-2</p> <p>ONE "U" CHANNEL POST</p>	<p>408) QUANTITY REQ'D .1_</p>  <p>54 X 18 R6-1 (R)</p> <p>MOUNT BEHIND SIGN 401 IN 1 INSTALL</p>	<p>411) QUANTITY REQ'D .1_</p>  <p>30 X 30 R1-1</p> <p>ONE "U" CHANNEL POST</p>	<p>APPROVED: <i>Ron King</i></p> <p>DATE: 12/8/2021</p> <p>SEAL</p>  <p><b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b></p> <p><b>HDR</b> HDR Engineering, Inc. of the Carolinas 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116</p>	
<p>412) QUANTITY REQ'D .1_</p>  <p>30 X 36 R3-5R</p> <p>MOUNT BELOW SIGN 411 IN 1 INSTALLATION</p>	<p>413) QUANTITY REQ'D .1_</p>  <p>36 X 36 R3-4</p> <p>MOUNT ON SIGNAL MAST ARM FACING WB US 74 LEFT TURN TRAFFIC ONTO CAVALIER DR IN 1 INSTALLATION</p>	<p>414) QUANTITY REQ'D .2_</p>  <p>36 X 36 W11-2</p> <p>FLUORESCENT YELLOW</p> <p>ONE "U" CHANNEL POST PER SIGN</p>	<p>415) QUANTITY REQ'D .2_</p>  <p>24 X 12 W16-7P</p> <p>FLUORESCENT YELLOW</p> <p>MOUNT BELOW SIGN 414 IN 2 INSTALLATIONS</p>				
<p>501)</p>  <p>2-24" X 12" 2-24" X 24" 2-21" X 15"</p> <p>TWO "U" CHANNEL POSTS</p>	<p>503)</p>  <p>1-21" X 15" 1-24" X 24"</p> <p>ONE "U" CHANNEL POST</p>	<p>504)</p>  <p>1-24" X 12" 1-24" X 24" 1-21" X 15"</p> <p>ONE "U" CHANNEL POST</p>	<p>505)</p>  <p>1-21" X 15" 1-24" X 24"</p> <p>ONE "U" CHANNEL POST</p>				
						<p><b>TYPE "E" &amp; "F" SIGNS</b></p>	



PROJECT REFERENCE NO. U-5710A	SHEET NO. SIGN-4
SIGNING ENGINEER  SEAL 022959 ENGINEER RONALD W. KING 8/2021 <i>Ron King</i>	
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**BEGIN SIGNING  
PROJECT U-5710A  
-L- STA. 10+44.11**





SIGNING ENGINEER

RONALD W. KING  
12/8/2021

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