

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

TIP NO. U-2507A	SHEET NO. SIGN-1
APPROVED: <i>[Signature]</i>	
DATE: 8/7/13	
SEAL	

**SIGNING PLAN**  
**MECKLENBURG COUNTY**

LOCATION: CHARLOTTE - SR 2467 (MALLARD CREEK ROAD)  
FROM SR 2480 (SUGAR CREEK ROAD) TO  
SR 2665 (HARRIS BOULEVARD)

T.I.P.: U-2507A

CONTRACT: C202849

**ROADWAY STANDARD DRAWING**

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
- . ALL TYPE 'D' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS.
- . 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" 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 & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.
- . SEE ROADWAY PLANS FOR GUARD/GUIDE RAIL DETAILS.
- . TYPE 'E' & 'F' SIGNS ARE TO BE INSTALLED BETWEEN CURB/GUTTER AND SIDEWALK UNLESS RIGHT OF WAY ALLOWS OTHERWISE.
- . CONTRACTOR SHOULD LOCATE ALL UTILITIES BEFORE INSTALLING ALL SIGNS.

**SUMMARY OF QUANTITIES**

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	4211	L.F.
4096000000	904	SIGN ERECTION, TYPE D	2	EA.
4102000000	904	SIGN ERECTION, TYPE E	185	EA.
4108000000	904	SIGN ERECTION, TYPE F	11	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE E	3	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	75	EA.
4192000000	907	DISPOSAL OF SUPPORT, U-CHANNEL	3	EA.
4238000000	907	DISPOSAL OF SIGN, D, E OR F	15	EA.

**PROJECT NOTES**

- 1 - DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 2 - DISPOSAL OF SIGN, D, E OR F
- 3 - DISPOSAL OF SUPPORT, U-CHANNEL
- 4 - SIGN ERECTION, RELOCATE SIGN TYPE E

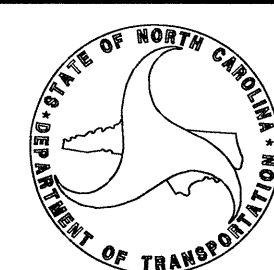
**INDEX**

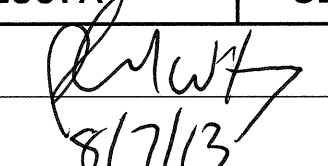
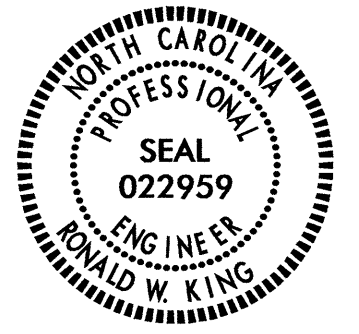
SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2-2B	E AND F SHEETS
SIGN-3	SIGN DESIGNS
SIGN-4-14	SIGN DETAIL SHEETS

PLAN PREPARED BY: N.C.D.O.T. SIGNING AND DELINEATION UNIT

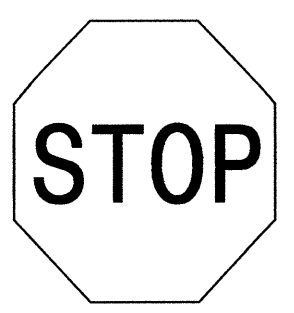
KELVIN L. JORDAN SIGNING & DELINEATION REGIONAL ENGINEER

DERRICK H. BEARD SIGNING & DELINEATION PROJECT DESIGN ENGINEER



TIP NO. U-2507A	SHEET NO. SIGN-2
APPROVED: 	
DATE: 8/7/13	
SEAL 	

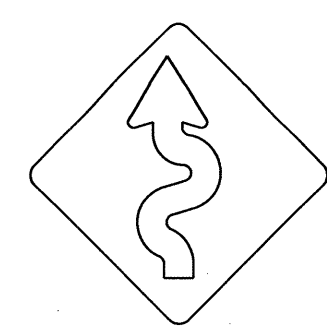
401 QUANTITY REQ'D   2  



36" X 36"  
R1-1

ONE "U" POST PER SIGN

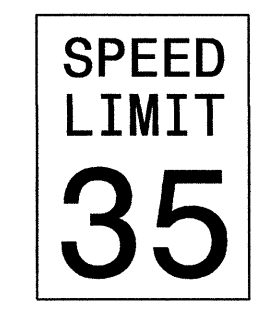
406 QUANTITY REQ'D   1  



30" X 30"  
W1-5

ONE "U" POST PER SIGN

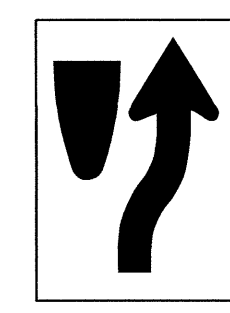
411 QUANTITY REQ'D   1  



30" X 36"  
R2-1

ONE "U" POST PER SIGN


416 QUANTITY REQ'D  27 



24" X 30"  
R4-7

ONE "U" POST PER SIGN

421 QUANTITY REQ'D   2  

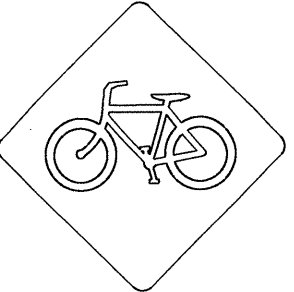


36" X 36"  
S1-1

YELLOW/GREEN REFLECTIVE SHEETING

ONE "U" POSTS PER SIGN

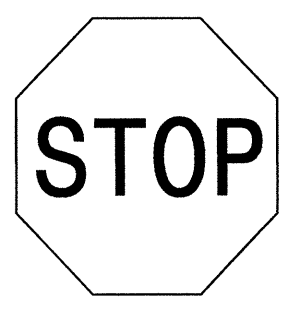
426 QUANTITY REQ'D   2  



30" X 30"  
W11-1

ONE "U" POST PER SIGN

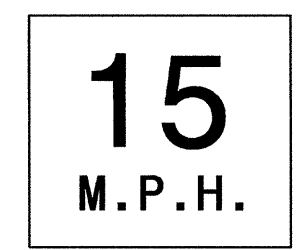
402 QUANTITY REQ'D  17 



36" X 36"  
R1-1

TWO "U" POSTS PER SIGN

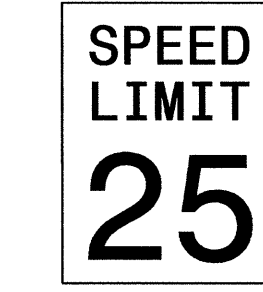
407 QUANTITY REQ'D   1  



18" X 18"  
W13-1P

MOUNT BELOW SIGN 406  
IN 1 INSTALLATION

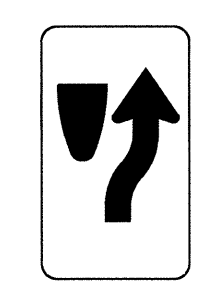
412 QUANTITY REQ'D   1  



24" X 30"  
R2-1

ONE "U" POST PER SIGN


417 QUANTITY REQ'D   6  



18" X 30"  
R4-7C

ONE "U" POST PER SIGN


422 QUANTITY REQ'D   2  



24" X 8"  
S4-3

MOUNT BELOW SIGN 421  
IN 2 INSTALLATIONS


427 QUANTITY REQ'D   2  



18" X 24"  
W16-1P

MOUNT BELOW SIGN 426  
IN 2 INSTALLATIONS


430 QUANTITY REQ'D   1  



36" X 36"  
W3-5

ONE "U" POST PER SIGN

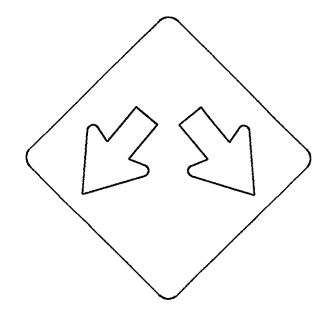
403 QUANTITY REQ'D  35 



54" X 18"  
R6-1 (R)

MOUNT ABOVE SIGN 402  
IN 17 INSTALLATIONS

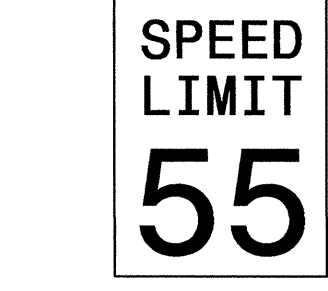
408 QUANTITY REQ'D   7  



36" X 36"  
W12-1

ONE "U" POST PER SIGN


413 QUANTITY REQ'D   2  



30" X 36"  
R2-1

ONE "U" POST PER SIGN

418 QUANTITY REQ'D   6  

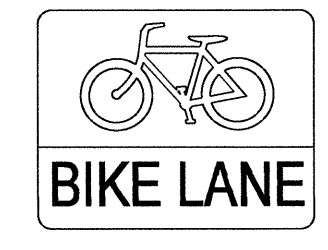


36" X 36"  
W11-2

YELLOW/GREEN REFLECTIVE SHEETING

ONE "U" POST PER SIGN

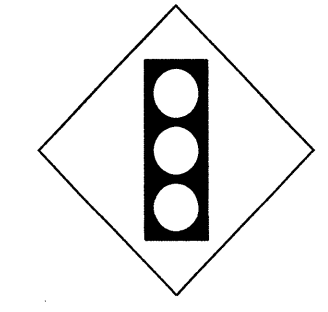
423 QUANTITY REQ'D  10 



24" X 18"  
R3-17

ONE "U" POST PER SIGN

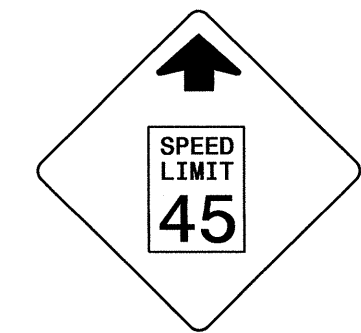
428 QUANTITY REQ'D   2  



30" X 30"  
W3-3

ONE "U" POST PER SIGN

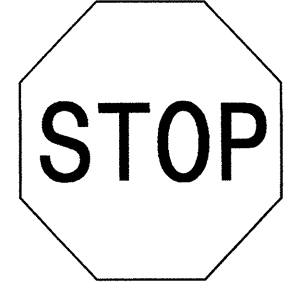
431 QUANTITY REQ'D   2  



36" X 36"  
W3-5

ONE "U" POST PER SIGN

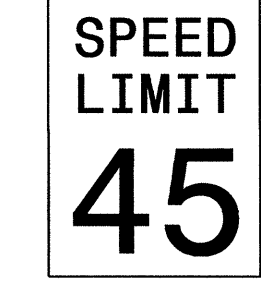
404 QUANTITY REQ'D   8  



30" X 30"  
R1-1

ONE "U" POST PER SIGN

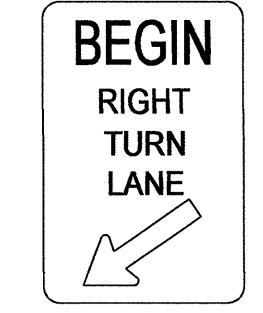
409 QUANTITY REQ'D  20 



30" X 36"  
R2-1

ONE "U" POST PER SIGN

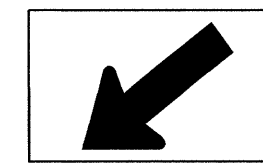
414 QUANTITY REQ'D   1  



24" X 36"  
R3-20R

ONE "U" POST PER SIGN

419 QUANTITY REQ'D   6  




24" X 12"  
W16-7

YELLOW/GREEN REFLECTIVE SHEETING

MOUNT BELOW SIGN 418  
IN 6 INSTALLATIONS

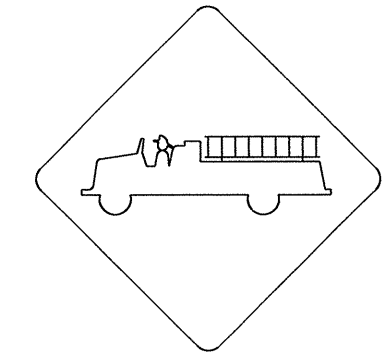
424 QUANTITY REQ'D   2  



24" X 8"  
R3-17bP

MOUNT BELOW SIGN 423  
IN 2 INSTALLATIONS

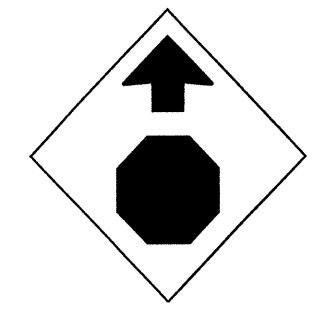
429 QUANTITY REQ'D   1  



36" X 36"  
W11-8

ONE "U" POST PER SIGN


432 QUANTITY REQ'D   2  



30" X 30"  
W3-1a

ONE "U" POST PER SIGN

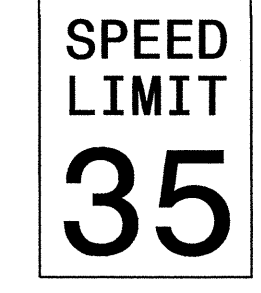
405 QUANTITY REQ'D  22 



54" X 18"  
R6-1 (L)

TWO "U" POSTS PER SIGN

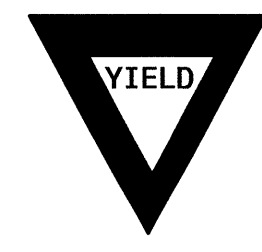
410 QUANTITY REQ'D   1  



24" X 30"  
R2-1

ONE "U" POST PER SIGN

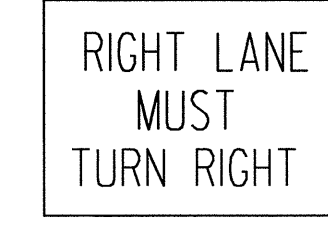
415 QUANTITY REQ'D   3  



48" X 48" X 48"  
R1-2

ONE "U" POST PER SIGN

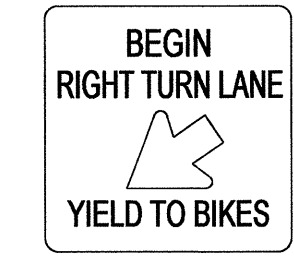
420 QUANTITY REQ'D  11 



36" X 36"  
R3-7

ONE "U" POST PER SIGN

425 QUANTITY REQ'D   8  

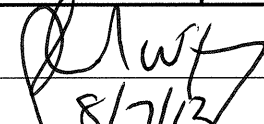



36" X 30"  
R4-4

ONE "U" POST PER SIGN

**TYPE "E" SIGNS**

07-AUG-2013 07:57:11  
 C:\Users\dhbeard\Documents\Projects\U2507A\Traffic\Signing\CAADD\Signing Layout Plans\Engseed.dgn  
 dhbeard

TIP NO. U-2507A	SHEET NO. SIGN-2B
APPROVED: 	
DATE: 8/7/13	
SEAL	
	

433 QUANTITY REQ'D .1\_

**NO  
OUTLET** 30" X 30"  
W14-2

ONE "U" POST PER SIGN

501  
502

**TO** 1 - 24" X 12"  
**INTERSTATE 85** 1 - 24" X 24"  
**→** 1 - 21" X 15"

ONE "U" POST

508

**EAST WEST** 2 - 24" X 12"  
**24 24** 2 - 24" X 24"  
**← →** 2 - 21" X 15"  
**TO TO** 2 - 24" X 12"  
**INTERSTATE 85 INTERSTATE 77** 2 - 24" X 24"  
**← →** 2 - 21" X 15"

TWO "U" POSTS

503  
504

**TO** 1 - 24" X 12"  
**INTERSTATE 85** 1 - 24" X 24"  
**←** 1 - 21" X 15"

ONE "U" POST

505

**WEST EAST** 2 - 24" X 12"  
**24 24** 2 - 24" X 24"  
**← →** 2 - 21" X 15"  
**TO TO** 2 - 24" X 12"  
**INTERSTATE 77 INTERSTATE 85** 2 - 24" X 24"  
**← →** 2 - 21" X 15"

TWO "U" POSTS

509

**EAST** 1 - 24" X 12"  
**24** 1 - 24" X 24"

ONE "U" POST

510

**WEST** 1 - 24" X 12"  
**24** 1 - 24" X 24"

ONE "U" POST

506  
507

**JCT** 1 - 24" X 12"  
**24** 1 - 24" X 24"

ONE "U" POST

511


**TO** 1 - 24" X 12"  
**INTERSTATE 85** 1 - 24" X 24"  
**↑** 1 - 21" X 15"

ONE "U" POST

**TYPE "E" & "F" SIGNS**

05-AUG-2013 11:55  
 \\dot\dfs\projects\01\Projects\Traffic\U2507A\Traffic\Signing\CADD\Signng Layout Plans\Engseed.dgn  
 jhbeard AT 265832

TIP NO. U-2507A	SHEET NO. SIGN-3
APPROVED: <i>[Signature]</i>	
DATE: 8/7/13	
SEAL	



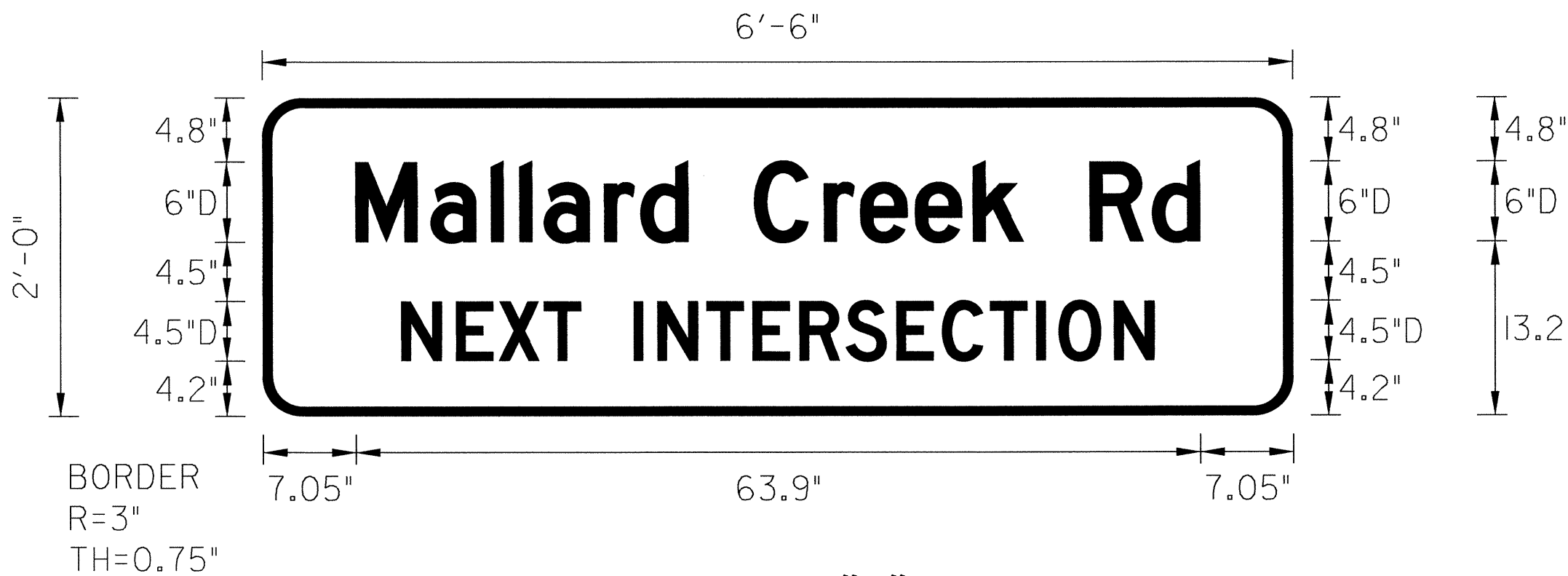
<p>SIGN NUMBER: 301, 302 TYPE: D QUANTITY: 2</p> <p>SIGN WIDTH: 6'-6" HEIGHT: 2'-0" TOTAL AREA: 13.0 Sq.Ft.</p> <p>BORDER TYPE: FLUSH RECESS: 0" WIDTH: 0.75" RADII: 3"</p> <p>NO. Z BARS: LENGTH:</p>	<p>BACKG COLOR: Green COPY COLOR: White</p> <table border="1"> <tr> <th>SYMBOL</th> <th>X</th> <th>Y</th> <th>WID</th> <th>HT</th> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table> <p>MAT'L: 0.125" (3.2 mm) ALUMINUM</p>	SYMBOL	X	Y	WID	HT																															<p>DESIGN BY: DHB PROJECT ID: U-2507A</p> <p>CHECKED BY: KLJ DIV: 10</p> <p>DATE: Jul 15, 2013</p>
SYMBOL	X	Y	WID	HT																																	

USE NOTES: 1,2

1. Legend and border(except those that are colored black) shall be direct applied Grade C sheeting.

2. Background shall be Grade C reflective sheeting.



**MOUNT ON TWO "U" POSTS**

Spacing Factor is 1 unless specified otherwise

**LETTER POSITIONS**

Letter spacings are to start of next letter

	M	a	l	l	a	r	d	C	r	e	e	k	R	d	Series/Size					
	7	5.7	4.6	2.2	1.9	4.6	2.8	3.6	5	5.3	2.8	4.1	4.4	3.8	5	4.7	3.6	7	D 2000	
	10.5	4.1	3.2	3.4	2.8	4	1.8	3.7	3.5	3.6	3.5	3.8	3.5	3.6	3.5	1.7	4.2	3.1	10.5	D 2000

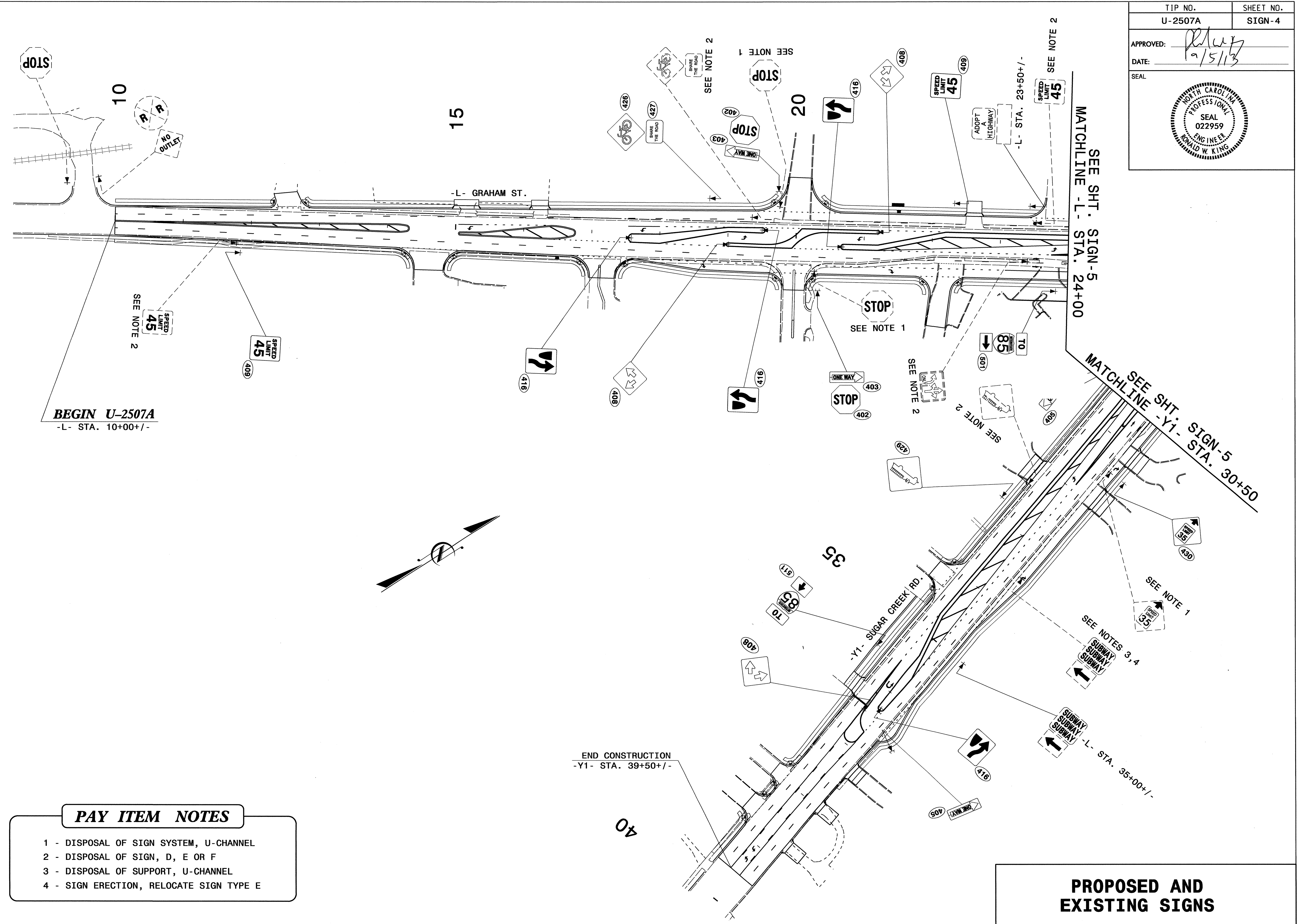
FILENAME: U-2507A\_Sgn\_SGN\_design NORTH CAROLINA D.O.T. SIGN DETAIL

**SIGN DESIGNS**

05-AUG-2013 11:56 AM \\c03\proj\projects-U\U2507A-Traffic\Signing\Layout\Plans\Engseed.dgn



TIP NO. U-2507A	SHEET NO. SIGN-4
APPROVED: <i>[Signature]</i>	
DATE: 9/5/13	
SEAL	



**BEGIN U-2507A**  
-L- STA. 10+00+/-

SEE SHT. SIGN-5  
MATCHLINE -L- STA. 24+00

SEE SHT. SIGN-5  
MATCHLINE -Y1- STA. 30+50

END CONSTRUCTION  
-Y1- STA. 39+50+/-

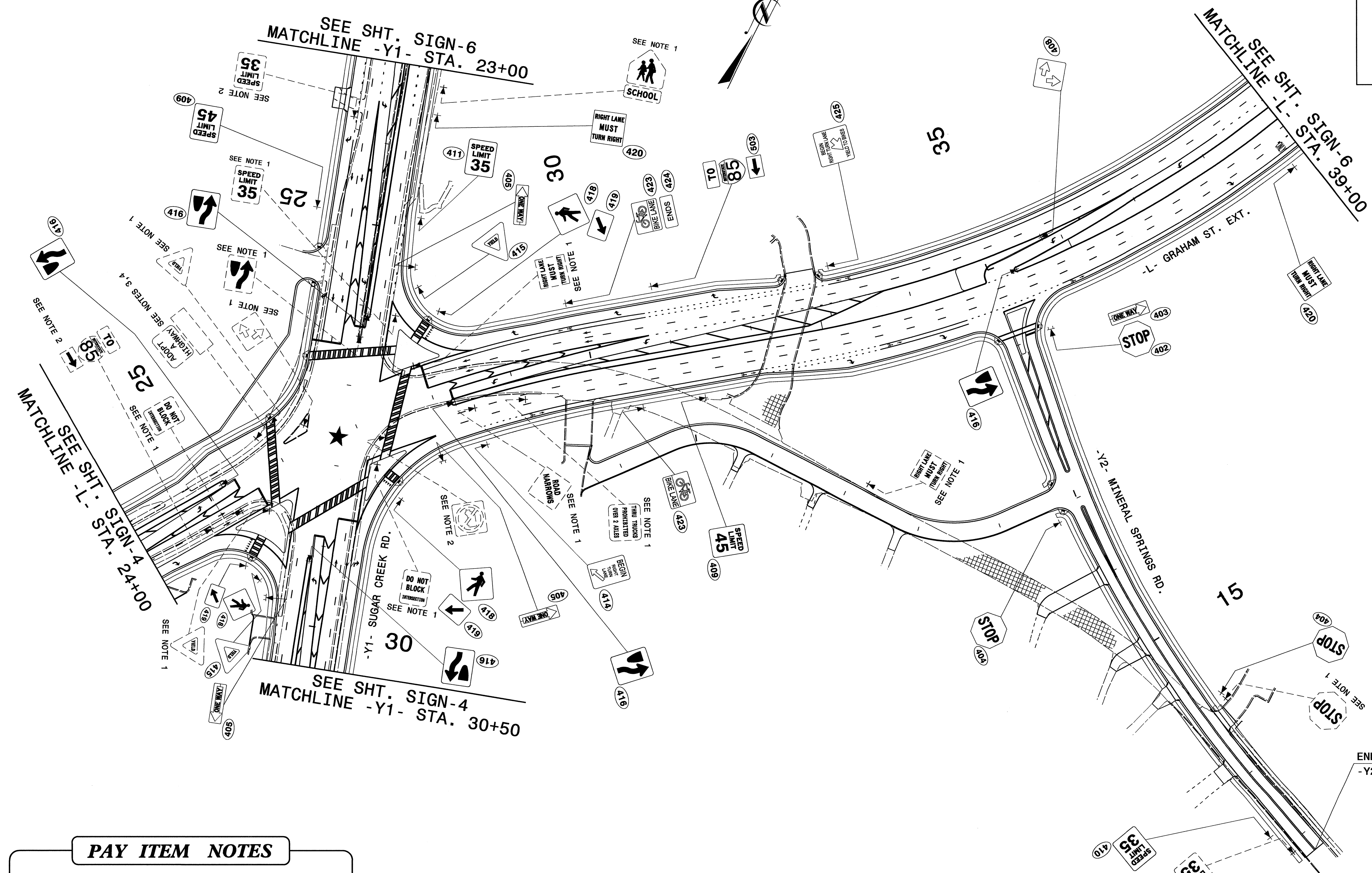
**PAY ITEM NOTES**

- 1 - DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 2 - DISPOSAL OF SIGN, D, E OR F
- 3 - DISPOSAL OF SUPPORT, U-CHANNEL
- 4 - SIGN ERECTION, RELOCATE SIGN TYPE E

**PROPOSED AND EXISTING SIGNS**

05-SEP-2013 10:31 AM  
 \\dot\dfsro3\01\66666666\IPPP\projects\U2507A\Traffic\Signing\CADD\Signing Layout Plans\U-2507A\_Sgn\_SGN\_4.dgn  
 Sheard A1 12255332

TIP NO. U-2507A	SHEET NO. SIGN-5
APPROVED: <i>[Signature]</i>	
DATE: 8/7/13	
SEAL	



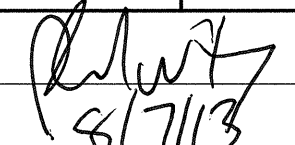
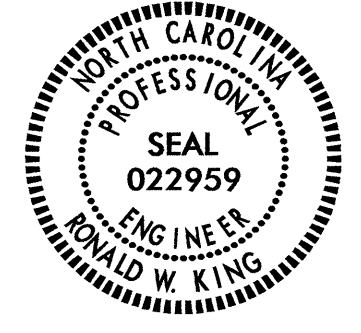
- PAY ITEM NOTES**
- 1 - DISPOSAL OF SIGN SYSTEM, U-CHANNEL
  - 2 - DISPOSAL OF SIGN, D, E OR F
  - 3 - DISPOSAL OF SUPPORT, U-CHANNEL
  - 4 - SIGN ERECTION, RELOCATE SIGN TYPE E

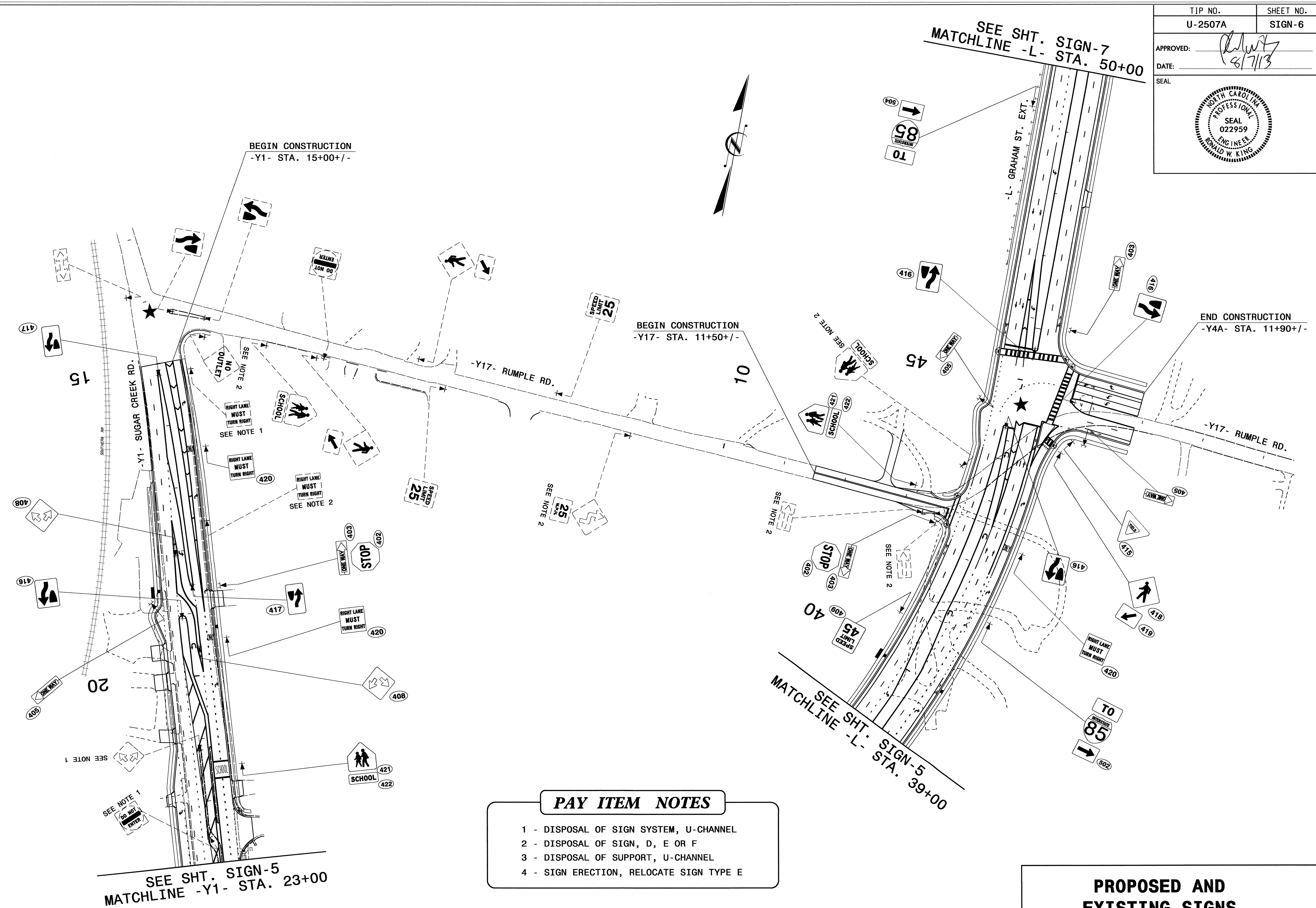
**PROPOSED AND EXISTING SIGNS**

END CONSTRUCTION  
-Y2- STA. 18+25+/-

O:\AUC-2013\13127\2013\Projects\TIP\Projects-U\2507A\Traffic\Signing Layout\Plans\U-2507A\_Sgn\_SGN-5.dgn  
 01-AUC-2013-13127-2013-08-14-11:11:11  
 dbbeard



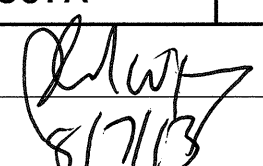
TIP NO. U-2507A	SHEET NO. SIGN-6
APPROVED: 	
DATE: 8/7/13	
SEAL	
	

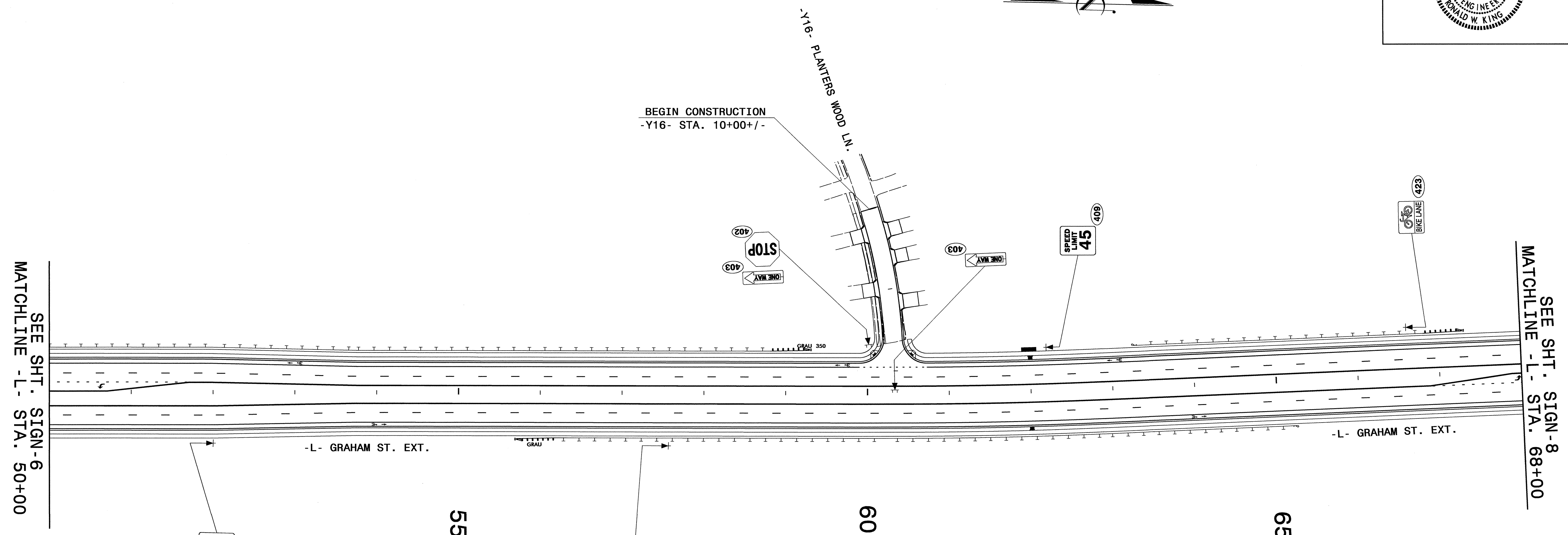


- PAY ITEM NOTES**
- 1 - DISPOSAL OF SIGN SYSTEM, U-CHANNEL
  - 2 - DISPOSAL OF SIGN, D, E OR F
  - 3 - DISPOSAL OF SUPPORT, U-CHANNEL
  - 4 - SIGN ERECTION, RELOCATE SIGN TYPE E

**PROPOSED AND EXISTING SIGNS**

01-AUG-2013 14:09 P:\01-TIP-Proj\Projects-U\2507A\Traffic\Signing\CADD\Signing\_Layout\_Plans\U-2507A\_Sgn\_SGN\_6.dgn  
 abbeard

TIP NO. U-2507A	SHEET NO. SIGN-7
APPROVED: 	
DATE: 8/17/13	
SEAL	



**PAY ITEM NOTES**

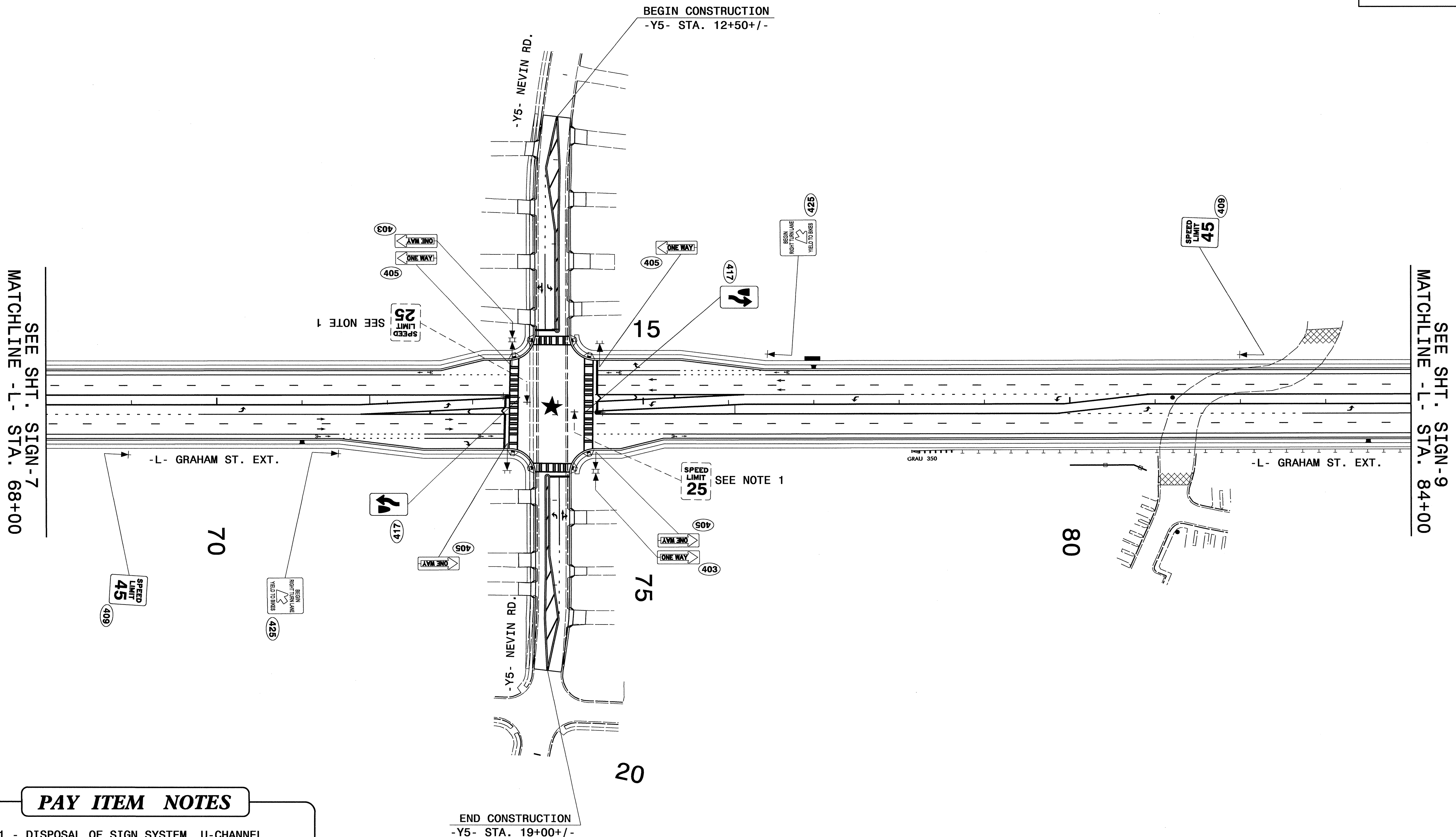
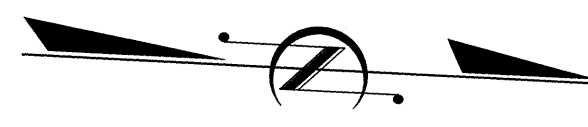
- 1 - DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 2 - DISPOSAL OF SIGN, D, E OR F
- 3 - DISPOSAL OF SUPPORT, U-CHANNEL
- 4 - SIGN ERECTION, RELOCATE SIGN TYPE E

**PROPOSED AND EXISTING SIGNS**

01-AUG-2013 14:28  
 d:\p03\14228\01-AUG-2013 14:28\TIPProjects-U2507A\Traffic\Signing\CADD\Signing Layout Plans-U-2507A-Sgn-SGN-7.dgn  
 d:\p03\14228\01-AUG-2013 14:28\TIPProjects-U2507A\Traffic\Signing\CADD\Signing Layout Plans-U-2507A-Sgn-SGN-7.dgn



TIP NO. U-2507A	SHEET NO. SIGN-8
APPROVED: <i>[Signature]</i>	
DATE: 8/7/13	
SEAL	

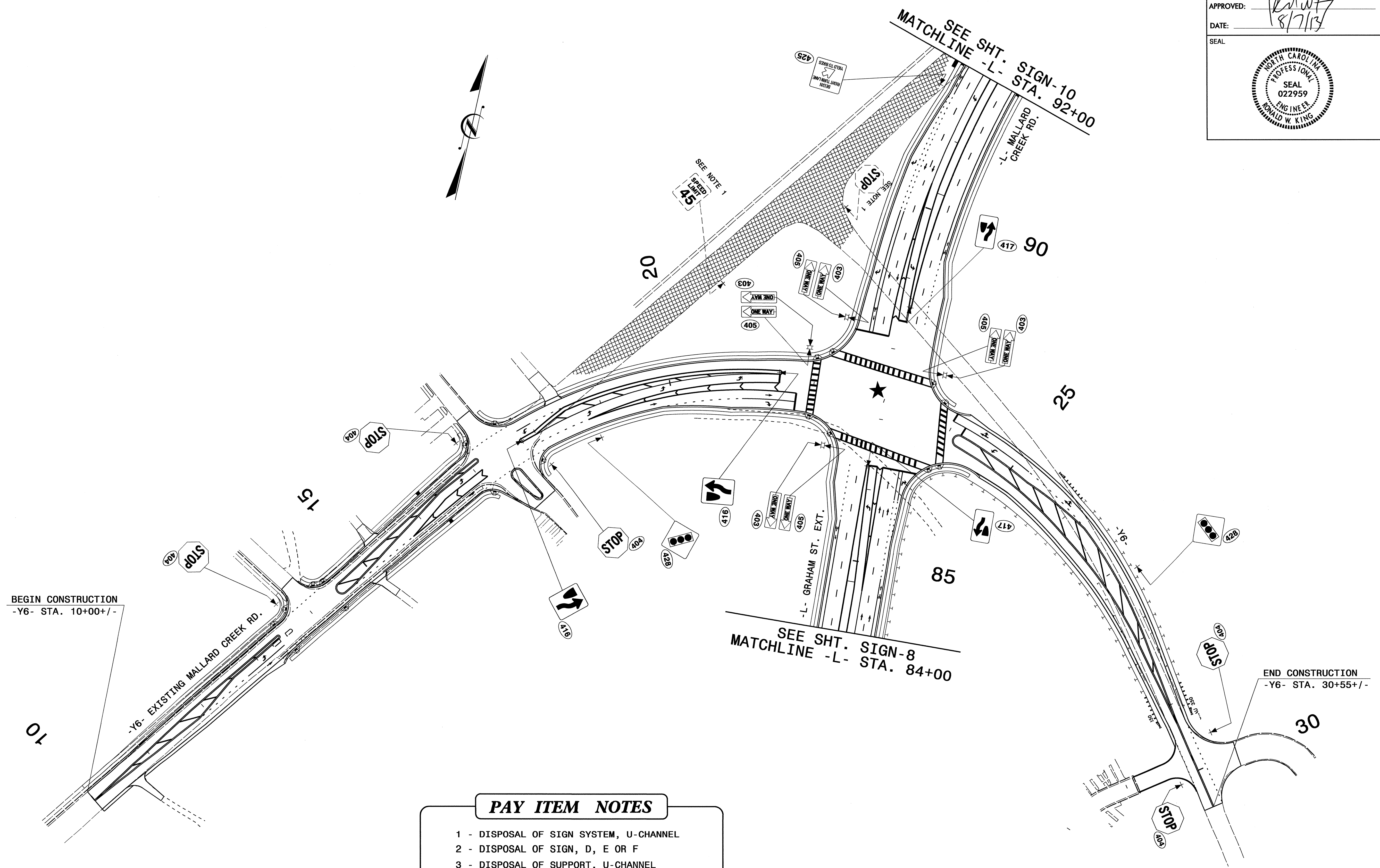


- PAY ITEM NOTES**
- 1 - DISPOSAL OF SIGN SYSTEM, U-CHANNEL
  - 2 - DISPOSAL OF SIGN, D, E OR F
  - 3 - DISPOSAL OF SUPPORT, U-CHANNEL
  - 4 - SIGN ERECTION, RELOCATE SIGN TYPE E

**PROPOSED AND  
EXISTING SIGNS**

Q:\AUC-2013\1431\Drawings\Traffic\Projects\U-2507A\Traffic\Signing\CADD\Signing\_Layout\_Plans\U-2507A\_Sgn\_SGN\_8.dgn  
 Date of Plot: 8/7/13  
 AT: TE265832  
 dhbeard

TIP NO. U-2507A	SHEET NO. SIGN-9
APPROVED: <i>[Signature]</i>	
DATE: 8/17/13	
SEAL	



BEGIN CONSTRUCTION  
-Y6- STA. 10+00+/-


END CONSTRUCTION  
-Y6- STA. 30+55+/-

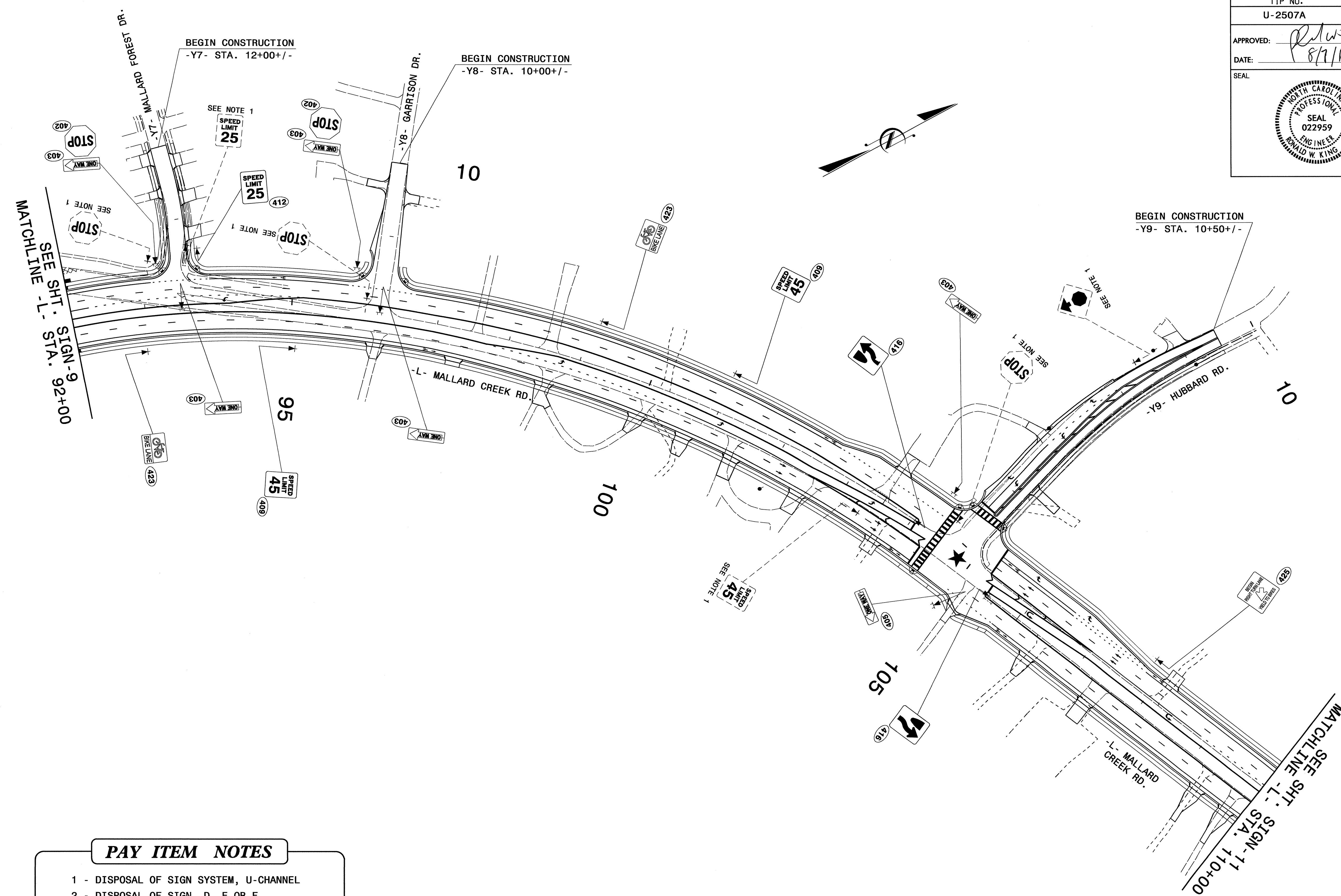
**PAY ITEM NOTES**

- 1 - DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 2 - DISPOSAL OF SIGN, D, E OR F
- 3 - DISPOSAL OF SUPPORT, U-CHANNEL
- 4 - SIGN ERECTION, RELOCATE SIGN TYPE E

**PROPOSED AND  
EXISTING SIGNS**

O:\AUC-2013\15-06\Projects\TIP\Projects-U\U2507A\Traffic\Signing\CA00\Signing Layout\Plans\U-2507A\_Sgn\_S0N\_9.dgn  
 8/17/13 11:13 AM  
 chbeard

TIP NO. U-2507A	SHEET NO. SIGN-10
APPROVED: <i>R. W. King</i>	
DATE: 8/7/13	
SEAL	
	



**PAY ITEM NOTES**

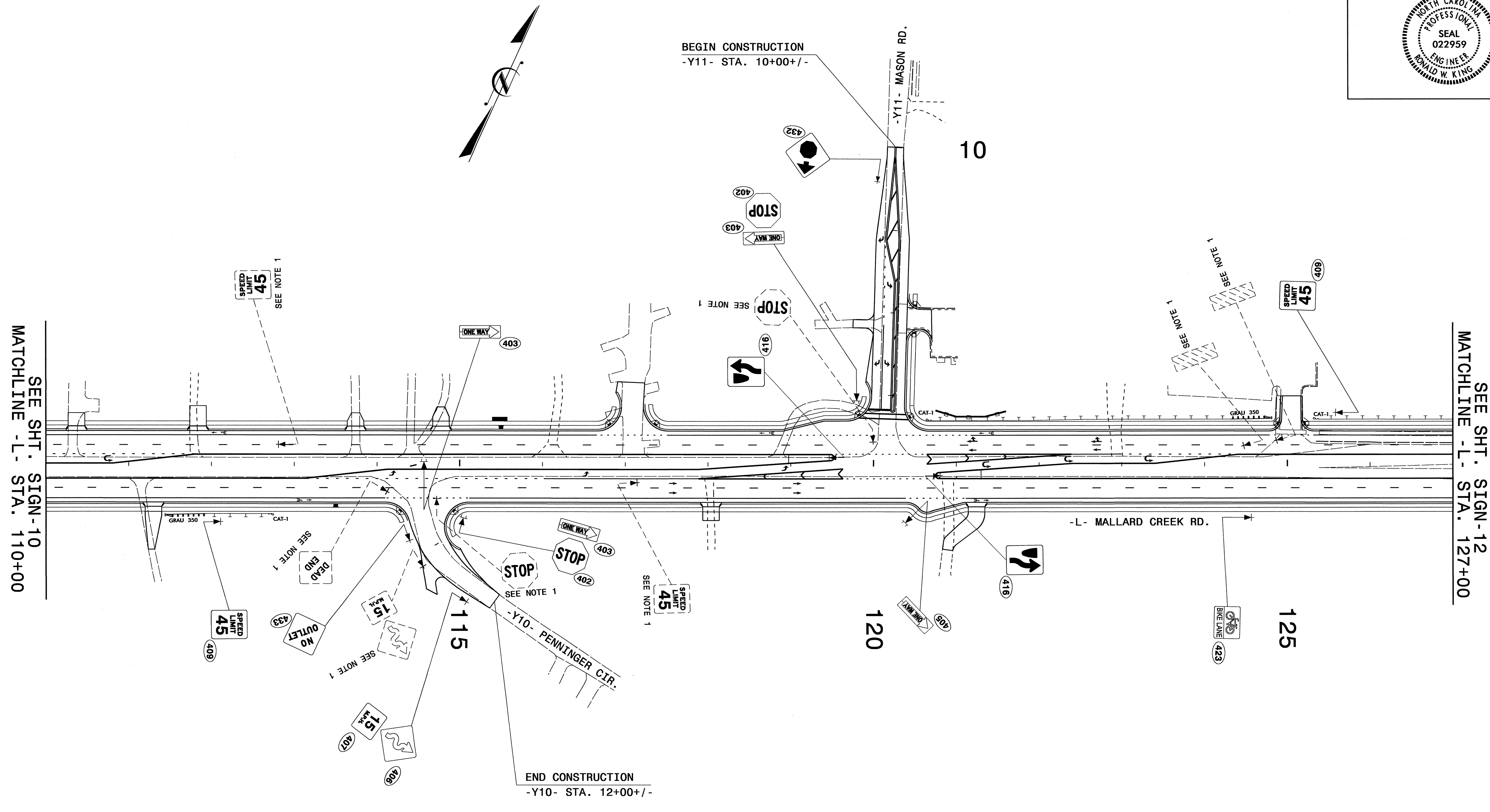
- 1 - DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 2 - DISPOSAL OF SIGN, D, E OR F
- 3 - DISPOSAL OF SUPPORT, U-CHANNEL
- 4 - SIGN ERECTION, RELOCATE SIGN TYPE E

**PROPOSED AND EXISTING SIGNS**

05-AUG-2013 14:24  
 \\dot\office\01\Projects-U\U2507A\Traffic\CAADD\Signing\Layout\Plans\U-2507A-Sgn-SGN\_10.dgn  
 dhbeard



TIP NO. U-2507A	SHEET NO. SIGN-11
APPROVED: <i>[Signature]</i>	
DATE: 8/7/13	
SEAL	



SEE SHT. SIGN-10  
MATCHLINE -L- STA. 110+00

SEE SHT. SIGN-12  
MATCHLINE -L- STA. 127+00

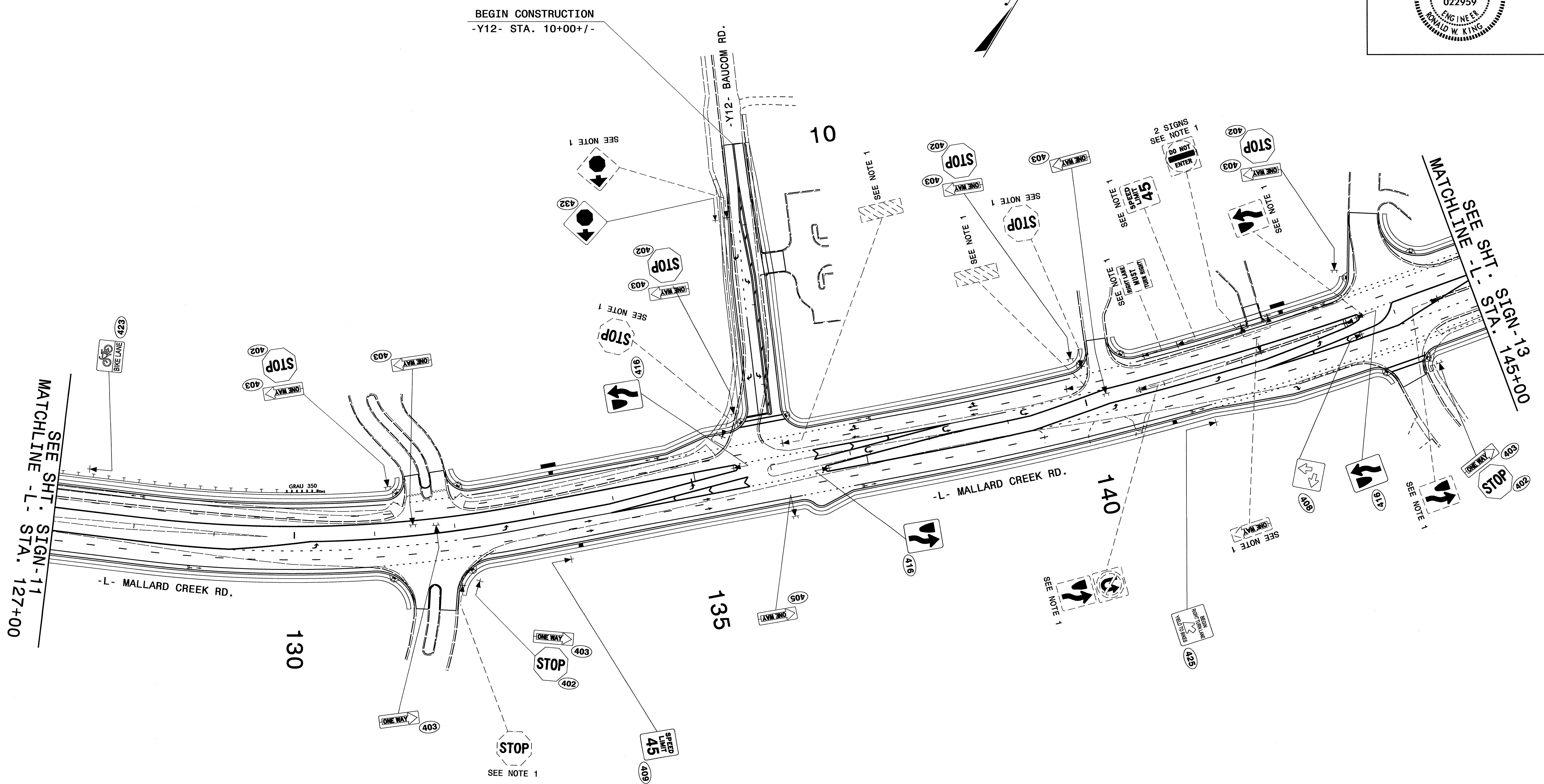
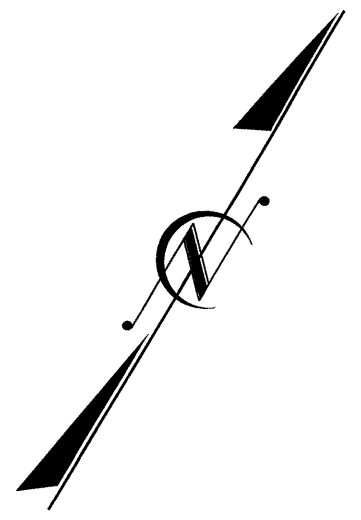
**PAY ITEM NOTES**

- 1 - DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 2 - DISPOSAL OF SIGN, D, E OR F
- 3 - DISPOSAL OF SUPPORT, U-CHANNEL
- 4 - SIGN ERECTION, RELOCATE SIGN TYPE E

**PROPOSED AND EXISTING SIGNS**

05-AUG-2013 14:05  
 V:\CADD\TIP\Projects-U\2507A\Traffic\Signing\CADD\Signing\_Layout\Plans\U-2507A\_Sgn-SGN\_11.dgn  
 d:\beard

APPROVED: *[Signature]*  
DATE: 8/7/13




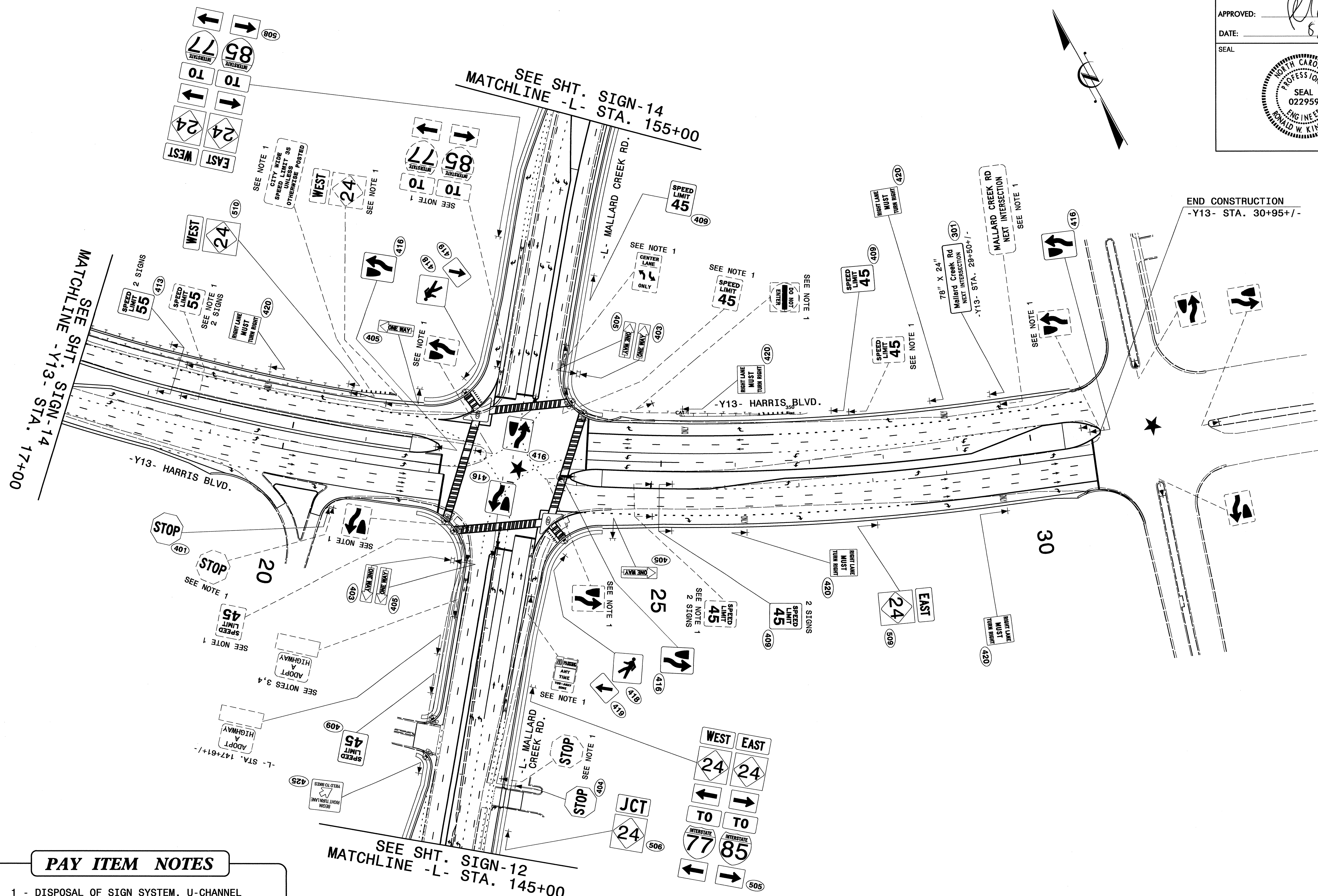
**PAY ITEM NOTES**

- 1 - DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 2 - DISPOSAL OF SIGN, D, E OR F
- 3 - DISPOSAL OF SUPPORT, U-CHANNEL
- 4 - SIGN ERECTION, RELOCATE SIGN TYPE E

**PROPOSED AND EXISTING SIGNS**

05-AUG-2013 14:02  
 V:\Data\Projects\U-2507A\Traffic\Signing\CADD\Signing Layout\Plans\U-2507A\_Sign\_SGN-12.dgn  
 User: dbeard  
 Job: U-2507A Traffic Signing  
 Date: 8/7/13

TIP NO. U-2507A	SHEET NO. SIGN-13
APPROVED: <i>RW</i>	
DATE: 8/7/13	
SEAL	
	



**PAY ITEM NOTES**

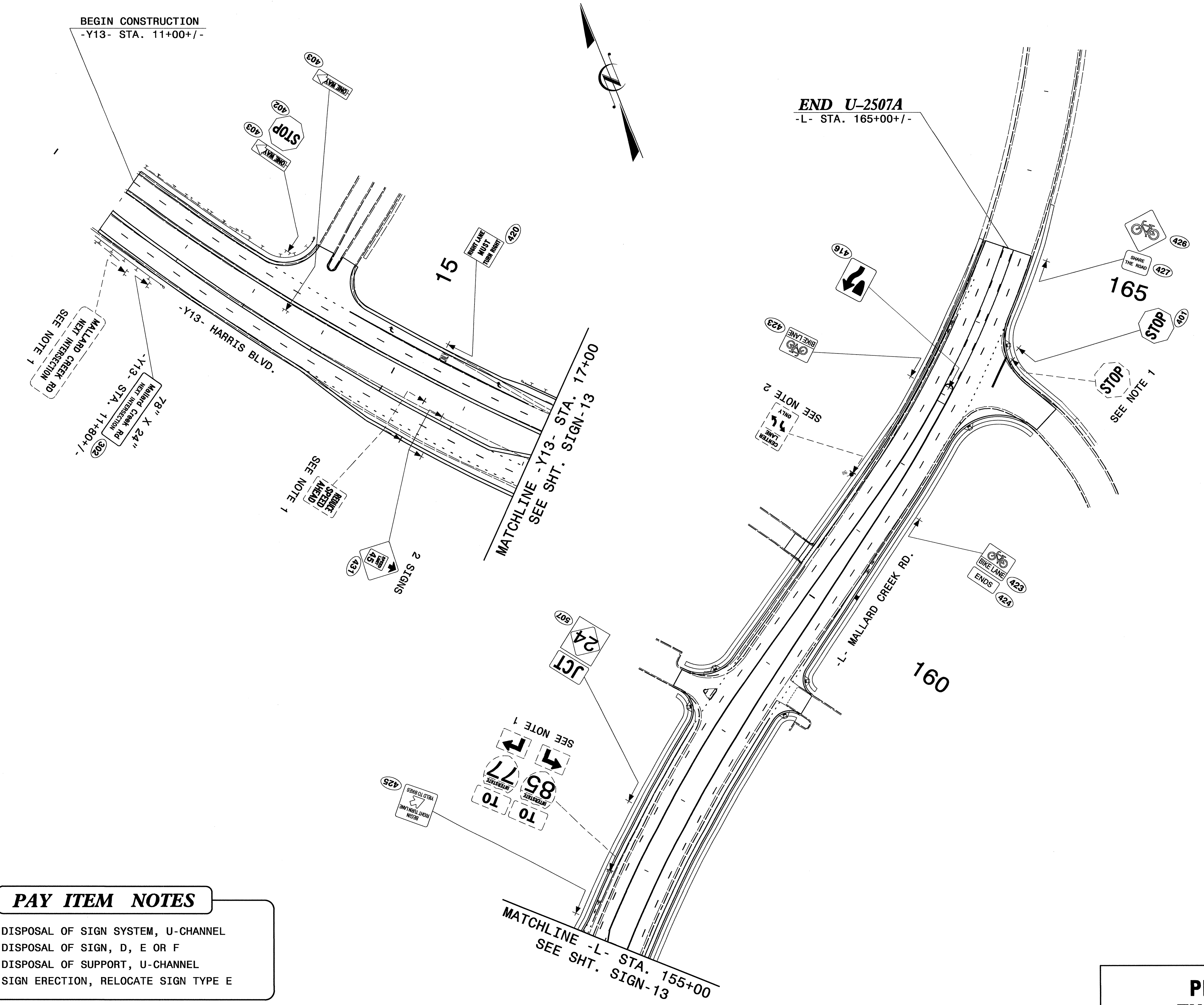
- 1 - DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 2 - DISPOSAL OF SIGN, D, E OR F
- 3 - DISPOSAL OF SUPPORT, U-CHANNEL
- 4 - SIGN ERECTION, RELOCATE SIGN TYPE E

**PROPOSED AND EXISTING SIGNS**

05-AUG-2013 15:50  
 \\dot\server\projects\U2507A\Traffic\Signing\CADD\Sign\Layout\Plans\U-2507A\_Sgn-50N\_13.dgn  
 AT TE266832  
 chbeard



TIP NO. U-2507A	SHEET NO. SIGN-14
APPROVED: <i>R. King</i>	
DATE: 8/7/13	
SEAL	



- PAY ITEM NOTES**
- 1 - DISPOSAL OF SIGN SYSTEM, U-CHANNEL
  - 2 - DISPOSAL OF SIGN, D, E OR F
  - 3 - DISPOSAL OF SUPPORT, U-CHANNEL
  - 4 - SIGN ERECTION, RELOCATE SIGN TYPE E

**PROPOSED AND EXISTING SIGNS**

05-AUG-2013 13:46 P:\TIP\Projects-U\2507A\Traffic\Signing\CADD\Signing Layout Plans\U-2507A\_Sgn\_SGN\_14.dgn  
 d:\ps\0412268332