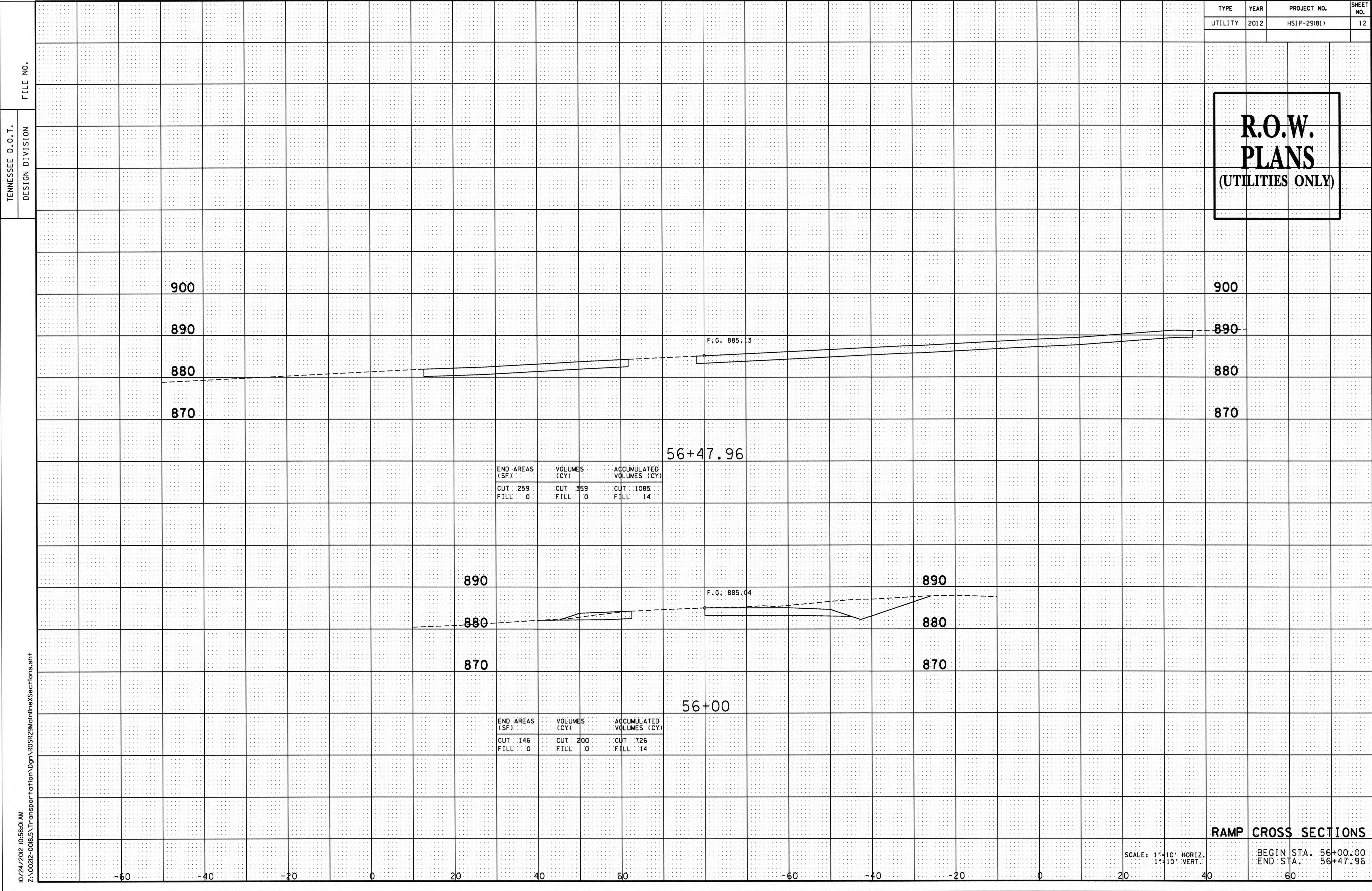
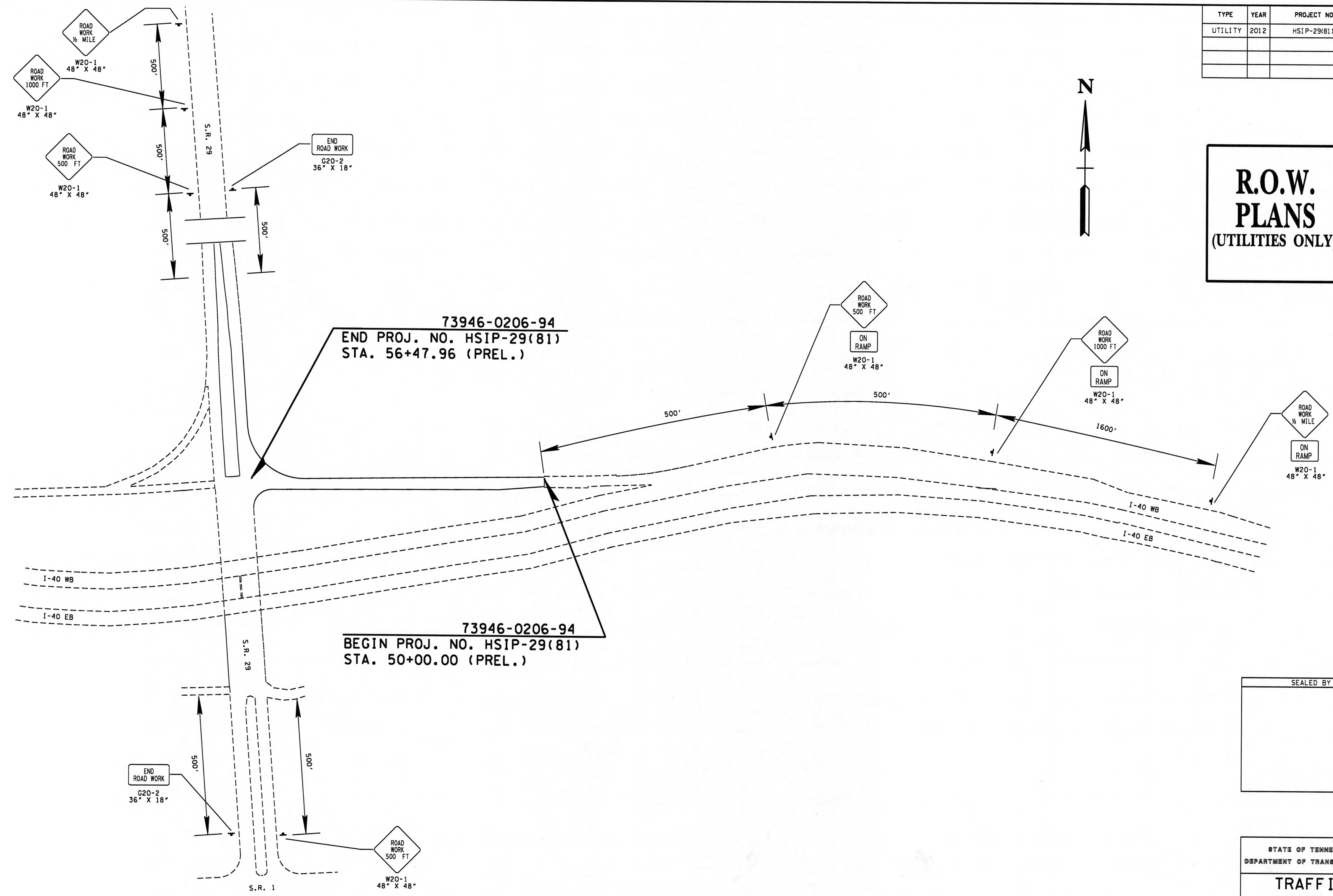




TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITY	2012	HSIP-29(81)	7

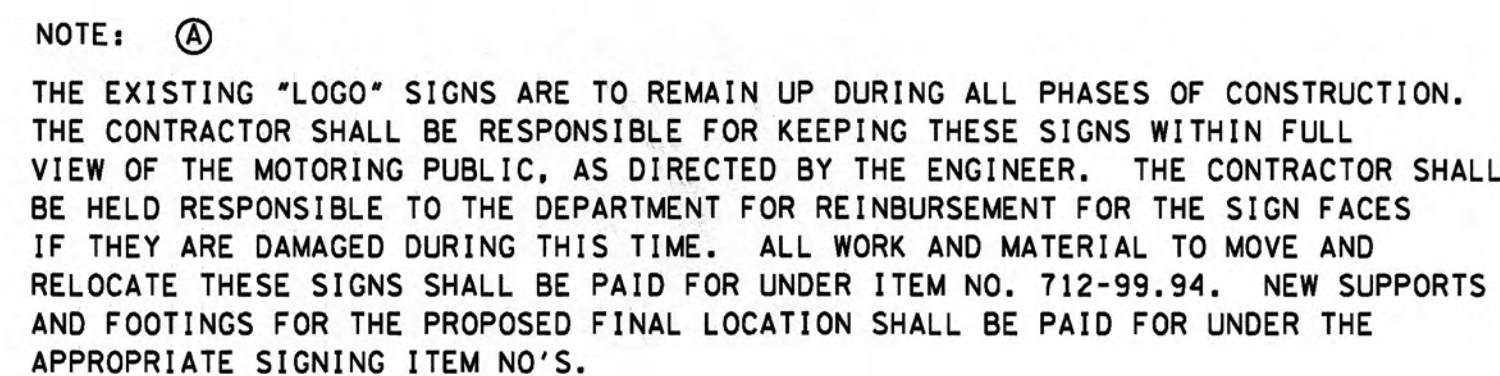
**R.O.W.
PLANS
(UTILITIES ONLY)**



SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
**TRAFFIC
CONTROL
PLAN**
STA. 50+00 TO STA. 58+00
SCALE: 1"=100'

R.O.W. PLANS (UTILITIES ONLY)



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COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.000090 AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

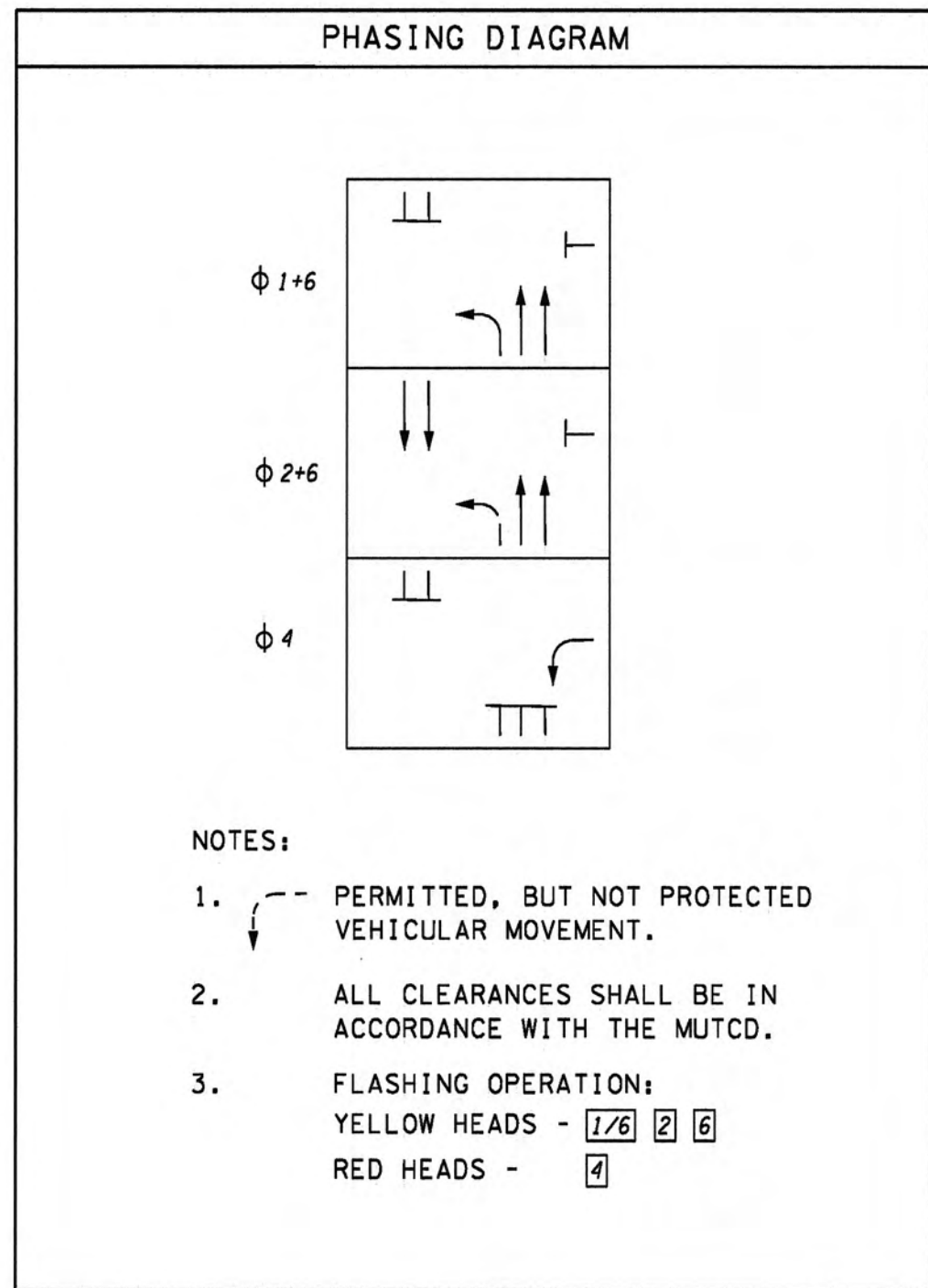
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN

STA. 50+00 TO STA. 58+00
SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITY	2012	HSIP-29(81)	9

R.O.W.
PLANS
(UTILITIES ONLY)



SIGNAL TIMING								
BASIC TIMING (SECS):								
PHASE	MINIMUM INITIAL	VEHICLE INTERVAL	MAX I	MAX II	CLEARANCE		RECALL TO	MEMORY POSITION
					YELLOW	ALL RED		
1	6	3.0	15	15	4.0	2.0		OFF
2	20	4.0	40	40	4.5	1.5	MIN.	OFF
4	8	2.0	30	30	4.0	2.0		OFF
6	20	4.0	40	40	4.5	1.5	MIN.	OFF

NOTES:

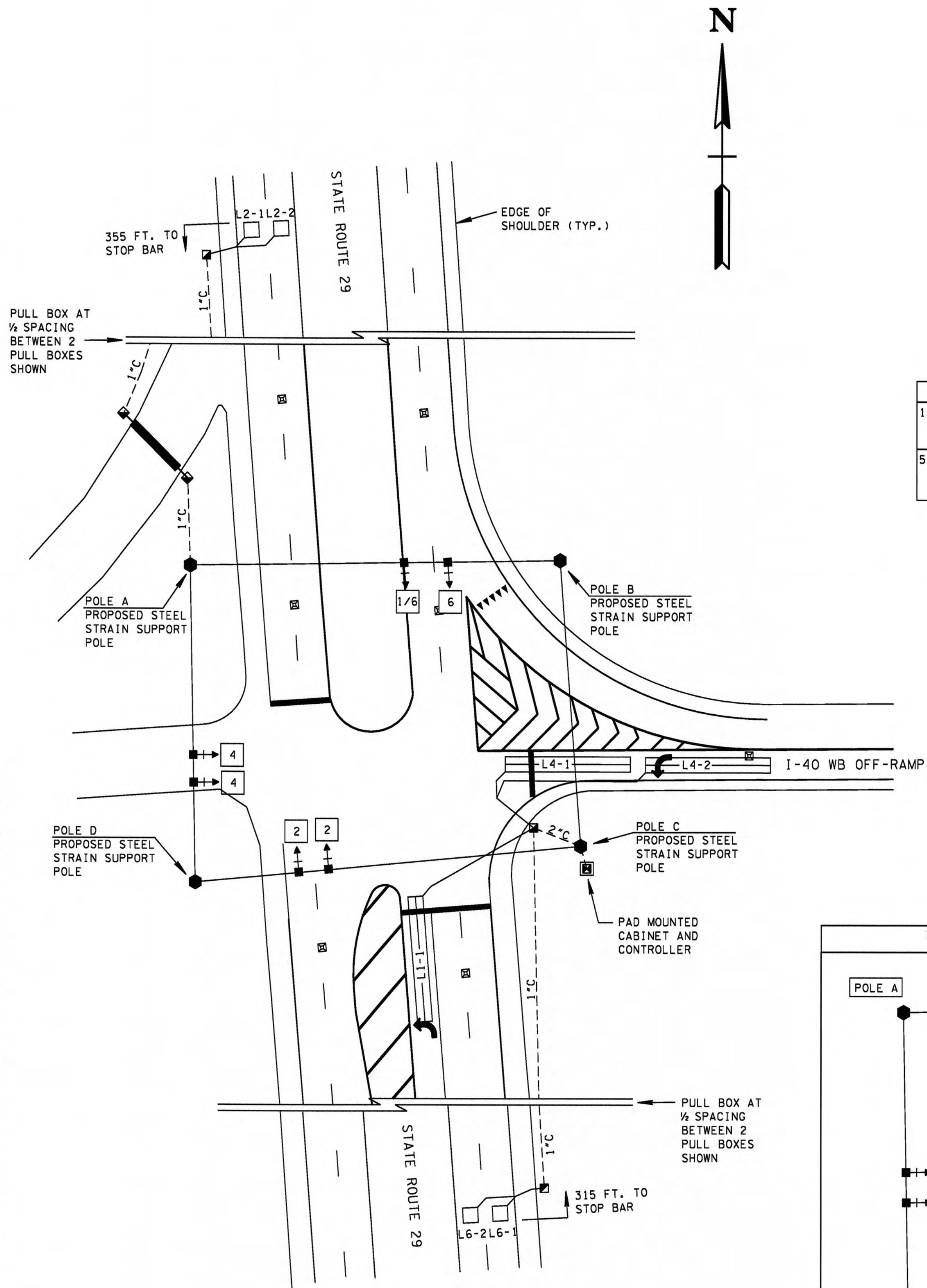
1. PROGRAM 'PASSAGE SEQUENTIAL' AS INACTIVE (N).
2. OTHER REQUIRED SETTINGS AND FUNCTIONS SHALL BE APPROPRIATE VALUES AS RECOMMENDED BY THE CONTROLLER MANUFACTURER.

LOOP AND DETECTOR ASSIGNMENTS						
LOOP NO.	DETECTOR / CHANNEL	TURNS*	LOOP SIZE (FT.)	ASSOC. PHASE	AMP MODE	COMMENTS
L1-1	1	2-4-2	6 x 50	1	PRES.	
L2-1	2	3	6 x 6	2	PRES.	
L2-2	3	3	6 x 6	2	PRES.	
L4-1	4	2-4-2	6 x 50	4	PRES.	
L4-2	5	2-4-2	6 x 50	4	PRES.	
L6-1	6	3	6 x 6	6	PRES.	
L6-2	7	3	6 x 6	6	PRES.	

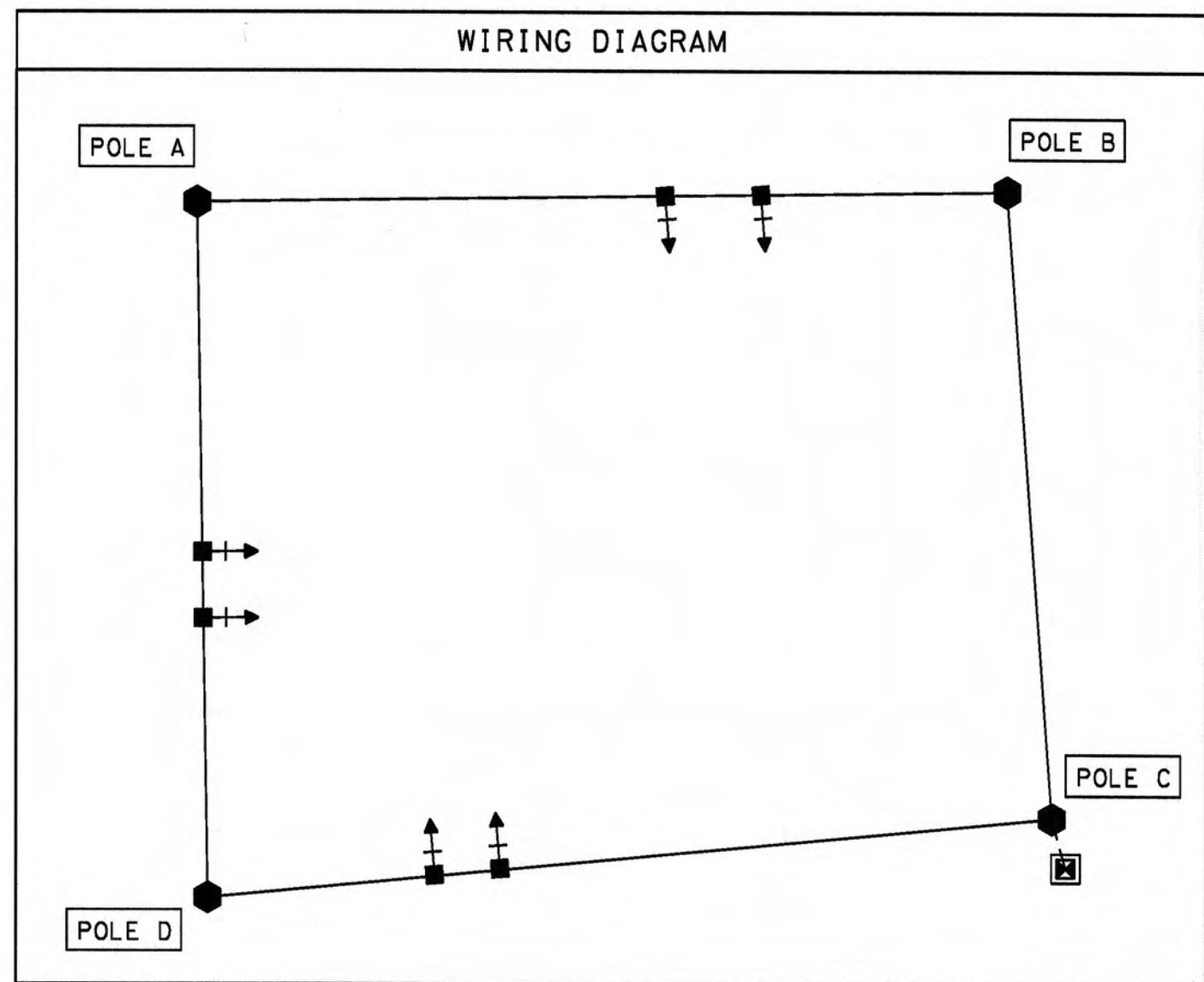
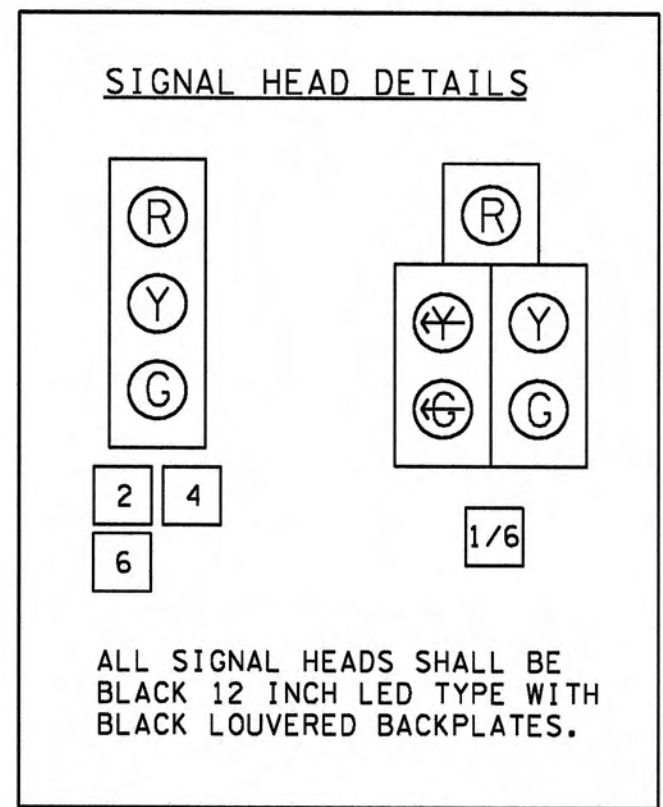
* ALL STOP BAR LOOPS ARE QUADRUPOLE TYPE.

** DETECTORS SPECIFIED AS DELAY/NORMAL SHALL HAVE A TIME DELAYED OUTPUT WHEN ASSOCIATED PHASE NOT GREEN. DELAY SETTINGS AS SPECIFIED. OUTPUT SHALL BE NORMAL WHEN ASSOCIATED PHASE IS GREEN.

SIGNAL SUPPORT POLE DATA							
POLE NO.	STATION	OFFSET (FT.)	NORTHING	EASTING	GROUND ELEV. @ POLE	ATTACHMENT ELEV.	FOOTING DEPTH (FT.)
A	205+37.50	69.5' L	572055.0512	2399405.4132			
B	205+28.50	78' R	572057.1115	2399553.4044			
C	204+14.50	78' R	571943.3788	2399561.6701			
D	204+11.50	77' L	571928.7839	2399407.4449			



CONTROLLER RING DIAGRAM							
1	2	3	4	5	6	7	8
←	↓	BARRIER	NOT USED	←	↑	NOT USED	NOT USED

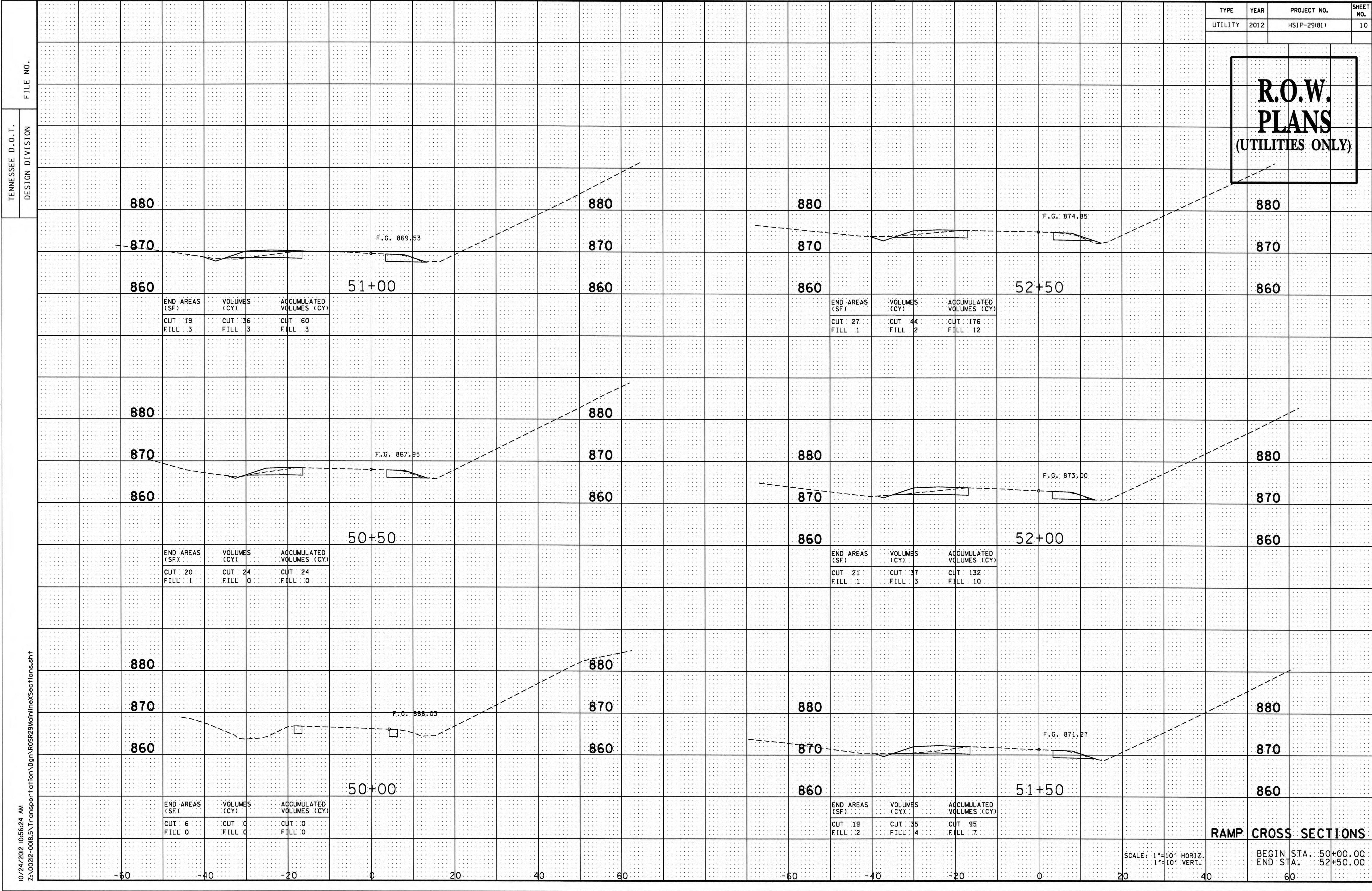


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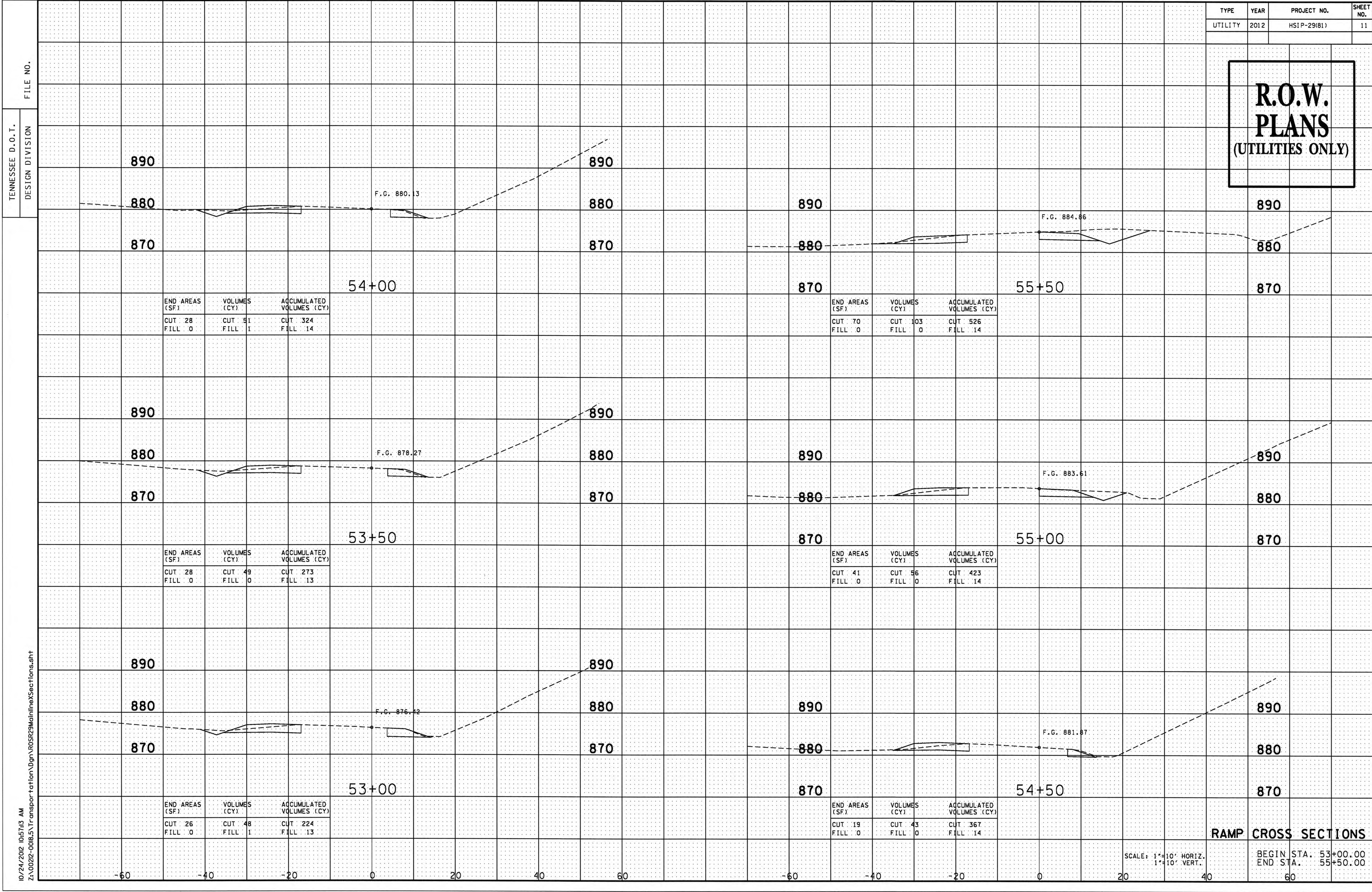
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED
SIGNAL LAYOUT

S.R. 29 AT
I-40 WB OFFRAMP
SCALE: 1"=30'



R.O.W.
PLANS
(UTILITIES ONLY)



890

880

870

53+00

END AREAS (SF)

CUT 26

FILL 0

VOLUMES (CY)

CUT 48

FILL 1

ACCUMULATED VOLUMES (CY)

CUT 224

FILL 13

890

880

870

54+50

END AREAS (SF)

CUT 19

FILL 0

VOLUMES (CY)

CUT 43

FILL 0

ACCUMULATED VOLUMES (CY)

CUT 367

FILL 14

890

880

870

SCALE: 1"=10' HORIZ.
1"=10' VERT.

BEGIN STA. 53+00.00

END STA. 55+50.00

RAMP CROSS SECTIONS

R.O.W.
PLANS
(UTILITIES ONLY)

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

Index Of Sheets

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
4	PRESENT LAYOUT
4A	PROPOSED LAYOUT
4B	RAMP PROFILE
5	DRAINAGE MAP
6	EROSION PREVENTION AND SEDIMENT CONTROL PLAN
7	TRAFFIC CONTROL PLAN
8	PAVEMENT MARKING AND SIGNING PLAN
9	PROPOSED SIGNAL LAYOUT
10	RAMP CROSS SECTIONS
11	RAMP CROSS SECTIONS
12	RAMP CROSS SECTIONS

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

BUREAU OF ENGINEERING

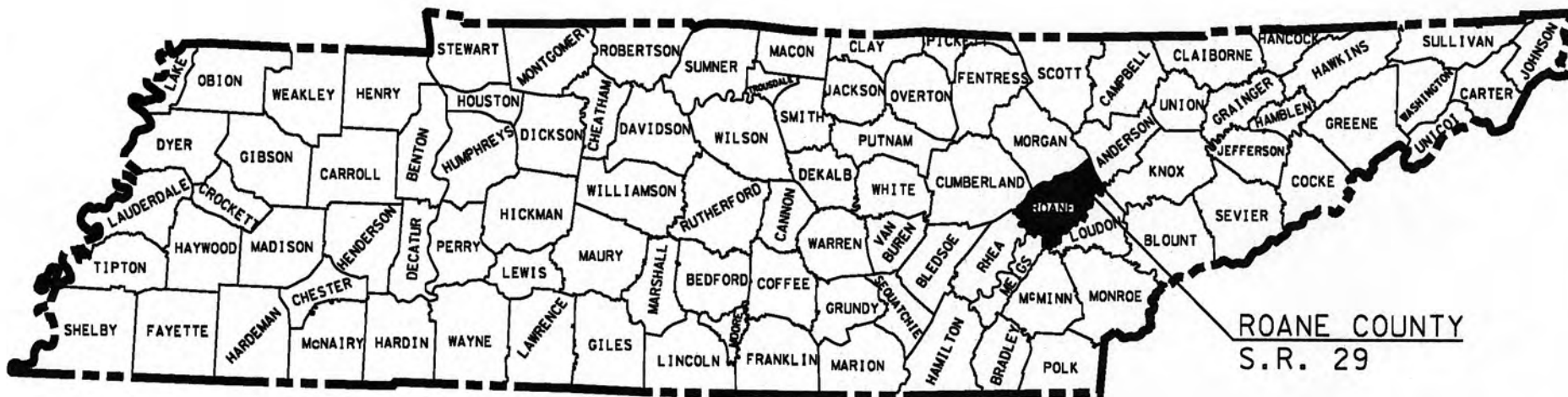
ROANE COUNTY

S.R. 29 (PINE RIDGE ROAD), INTERSECTION AT
I-40 WB OFFRAMP IN HARRIMAN

UTILITY

STATE HIGHWAY NO. 29 F.A.H.S. NO. 29

TENN.	YEAR	SHEET NO.
	2012	1
FED. AID PROJ. NO.	HSIP-29(81)	
STATE PROJ. NO.	73946-0206-94	
S.R. 29	ROANE CO.	

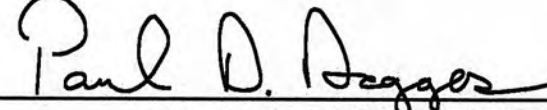


R.O.W.
PLANS
(UTILITIES ONLY)

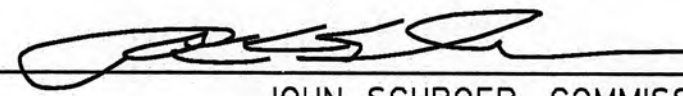
73946-0206-94
BEGIN PROJ. NO. HSIP-29(81)
STA. 50+00.00 (PREL.)

NO EXCLUSIONS
NO EQUATIONS

SEALED BY

APPROVED: 
PAUL D. DEGGES, CHIEF ENGINEER

DATE:

APPROVED: 
JOHN SCHROER, COMMISSIONER

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES
CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW
THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE
TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 2006 AND ADDITIONAL
SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN
THE PROPOSAL CONTRACT.

TDOT C.E. MANAGER 1 ROLAND L. JONES P.E.

DESIGNED BY CANNON & CANNON, INC.

DESIGNER JASON ELLIOTT, P.E. CHECKED BY ALAN CHILDERS, P.E.

P.E. NO. 73946-0206-94

PIN NO. 115971.00



SCALE: 1"= 1 MILE

PROJECT LENGTH 0.123 MILES

ORIGINAL SURVEY JULY 2012

TRAFFIC DATA	
ADT (2013)	11,280
ADT (2033)	16,920
DHV (2033)	1,579
D	70 - 30
T (ADT)	4 %
T (DHV)	3 %
V	40 MPH

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR

DATE

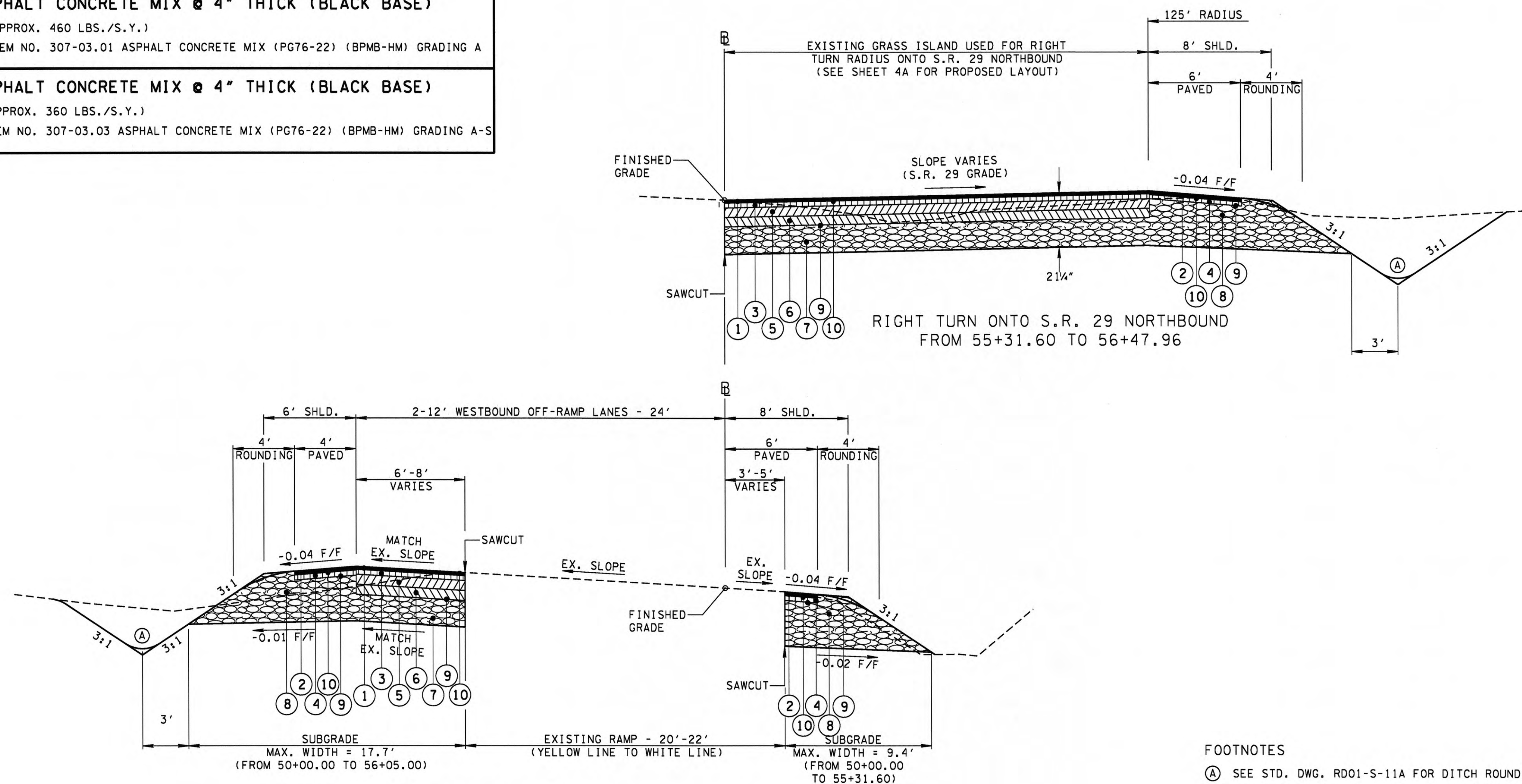
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

PROPOSED PAVEMENT SCHEDULE

① ASPHALT CONCRETE SURFACE @ 1.25" THICK (ROADWAY) (APPROX. 132.50 LBS./S.Y.) ITEM NO. 411-01.10 ACS MIX (PG76-22) GRADING D	⑦ MINERAL AGGREGATE BASE @ 10" THICK (ROADWAY) (APPROX. 1127.78 LBS./S.Y.) (FULL DEPTH AT SHLDR) ITEM NO. 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D
② ASPHALT CONCRETE SURFACE @ 1.25" THICK (SHOULDER) (APPROX. 128.75 LBS./S.Y.) ITEM NO. 411-01.07 ACS MIX (PG64-22) GRADING E SHOULDER	⑧ MINERAL AGGREGATE BASE @ 18" THICK (SHOULDER) (APPROX. 2029.89 LBS./S.Y.) ITEM NO. 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D
③ ASPHALT CONCRETE MIX @ 2" THICK (BINDER) (APPROX. 226 LBS./S.Y.) ITEM NO. 307-03.08 ASPHALT CONCRETE MIX (PG76-22) (BPMB-HM) GRAD B-M2	⑨ PRIME COAT FOR SUBGRADE BASE ITEM NO. 402-01 BITUMINOUS MATERIAL FOR PC (APPROX. 0.35 GAL./S.Y.) ITEM NO. 402-02 AGGREGATE FOR COVER MATERIAL (APPROX. 12 LBS./S.Y.)
④ ASPHALT CONCRETE MIX @ 2" THICK (BINDER) (APPROX. 226 LBS./S.Y.) ITEM NO. 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRAD B-M2	⑩ TACK COAT FOR PAVEMENT LAYERS (APPROX. 0.02 GAL./S.Y.) ITEM NO. 403-01 BITUMINOUS MATERIAL FOR TACK COAT
⑤ ASPHALT CONCRETE MIX @ 4" THICK (BLACK BASE) (APPROX. 460 LBS./S.Y.) ITEM NO. 307-03.01 ASPHALT CONCRETE MIX (PG76-22) (BPMB-HM) GRADING A	
⑥ ASPHALT CONCRETE MIX @ 4" THICK (BLACK BASE) (APPROX. 360 LBS./S.Y.) ITEM NO. 307-03.03 ASPHALT CONCRETE MIX (PG76-22) (BPMB-HM) GRADING A-S	

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITY	2012	HSIP-29(81)	2

**R.O.W.
PLANS
(UTILITIES ONLY)**



FOOTNOTES
① SEE STD. DWG. RD01-S-11A FOR DITCH ROUNDING.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**TYPICAL
SECTIONS**

TENNESSEE D.O. T.
DESIGN DIVISION
FILE NO.

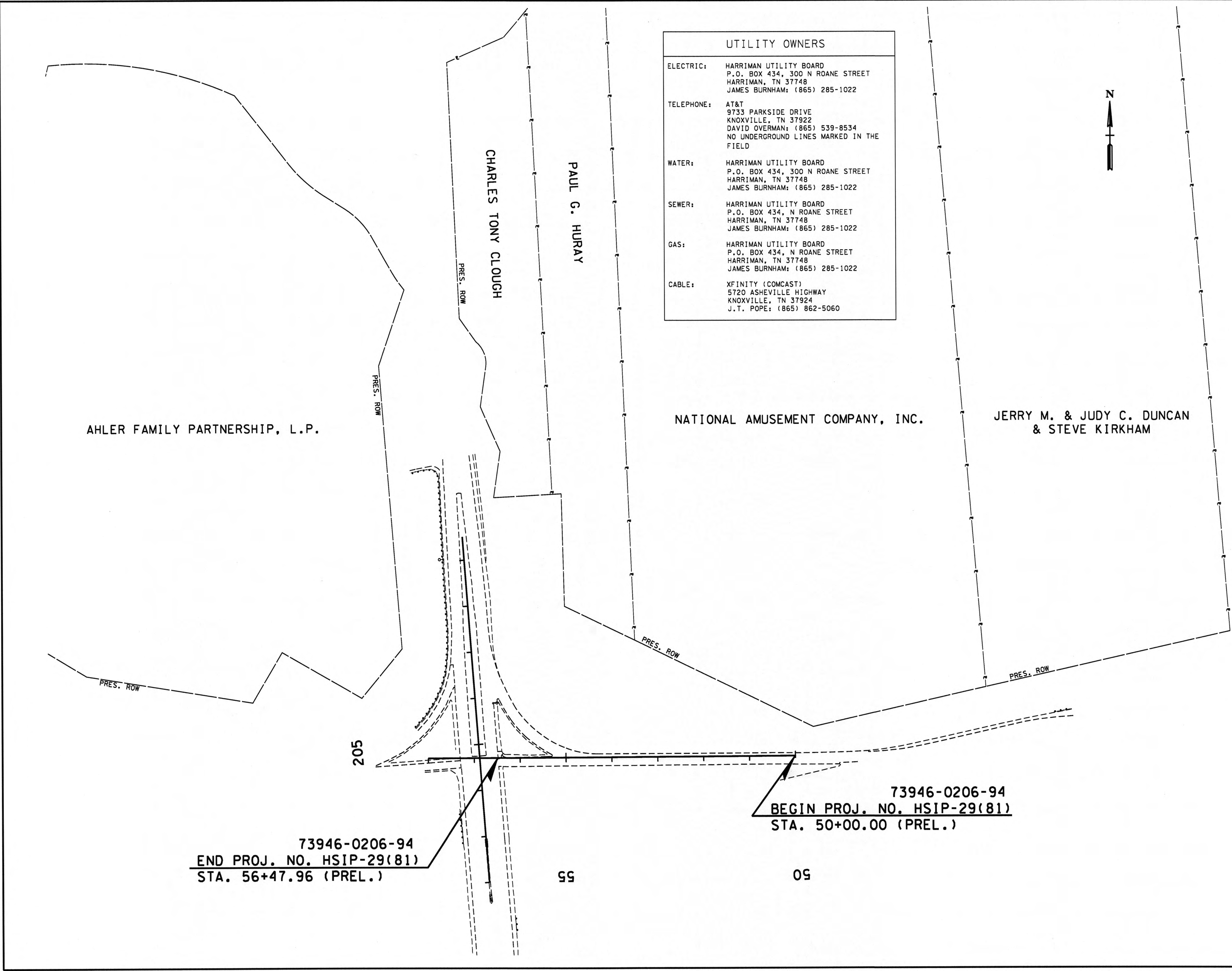
TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITY	2012	HSIP-29(81)	3

UTILITY OWNERS	
ELECTRIC:	HARRIMAN UTILITY BOARD P.O. BOX 434, 300 N ROANE STREET HARRIMAN, TN 37748 JAMES BURNHAM: (865) 285-1022
TELEPHONE:	AT&T 9733 PARKSIDE DRIVE KNOXVILLE, TN 37922 DAVID OVERMAN: (865) 539-8534 NO UNDERGROUND LINES MARKED IN THE FIELD
WATER:	HARRIMAN UTILITY BOARD P.O. BOX 434, 300 N ROANE STREET HARRIMAN, TN 37748 JAMES BURNHAM: (865) 285-1022
SEWER:	HARRIMAN UTILITY BOARD P.O. BOX 434, N ROANE STREET HARRIMAN, TN 37748 JAMES BURNHAM: (865) 285-1022
GAS:	HARRIMAN UTILITY BOARD P.O. BOX 434, N ROANE STREET HARRIMAN, TN 37748 JAMES BURNHAM: (865) 285-1022
CABLE:	XFINITY (COMCAST) 5720 ASHEVILLE HIGHWAY KNOXVILLE, TN 37924 J.T. POPE: (865) 862-5060



**R.O.W.
PLANS**
(UTILITIES ONLY)

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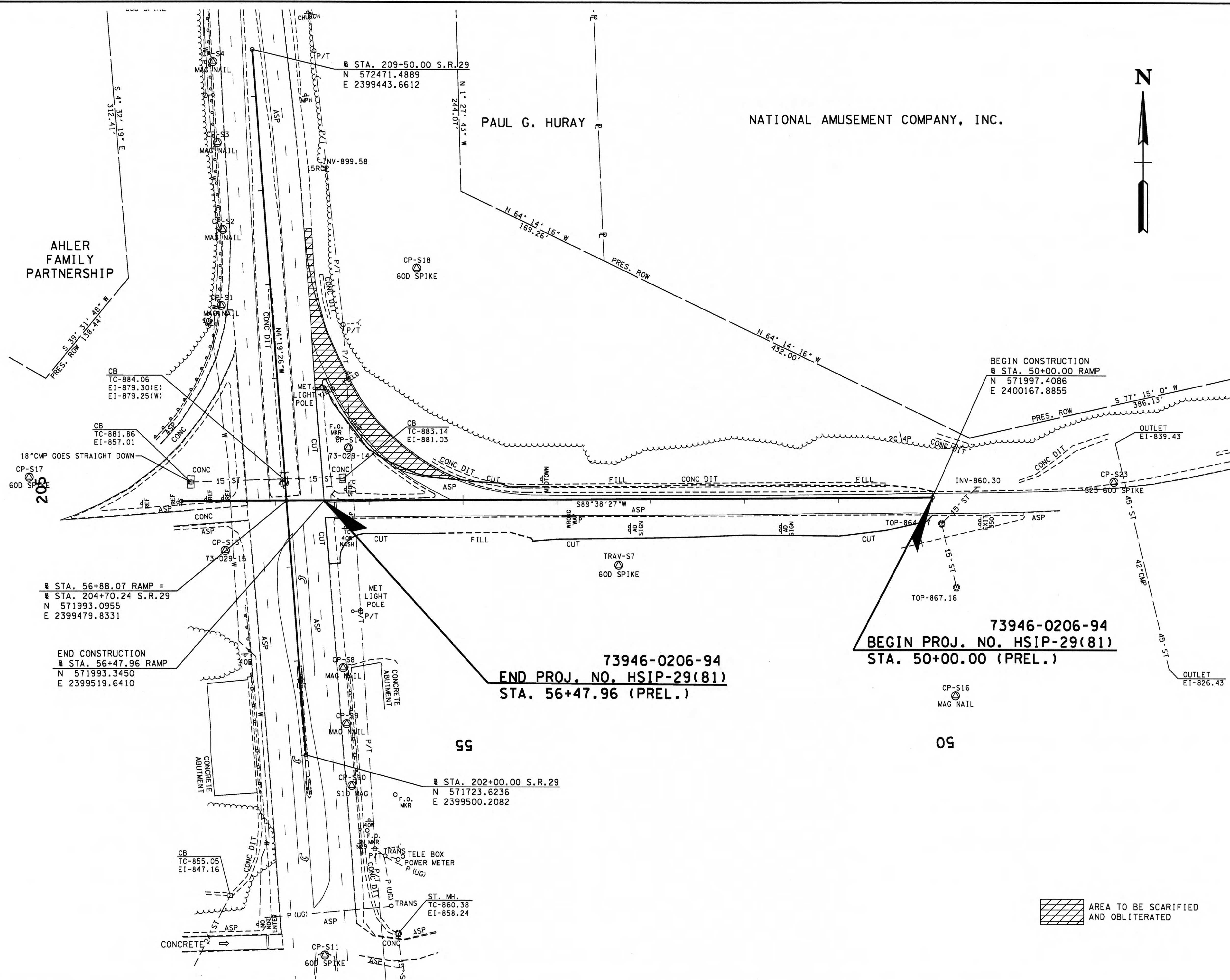


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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
PROPERTY MAP STA. 50+00 TO STA. 58+00 SCALE: 1"= 100'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITY	2012	HSIP-29(81)	4

R.O.W. PLANS (UTILITIES ONLY)



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STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
PRESENT LAYOUT
STA. 50+00 TO STA. 58+00
SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITY	2012	HSIP-29(81)	4A

**R.O.W.
PLANS
(UTILITIES ONLY)**



205

STA. 56+88.07 RAMP =
 STA. 204+70.24 S.R.29
 N 571993.0955
 E 2399479.8331

END CONSTRUCTION
 STA. 56+47.96 RAMP
 N 571993.3450
 E 2399519.6410

STA. 209+50.00 S.R.29
 N 572471.4889
 E 2399443.6612

125' R

40' R

SS

STA. 202+00.00 S.R.29
 N 571723.6236
 E 2399500.2082

73946-0206-94
 END PROJ. NO. HSIP-29(81)
 STA. 56+47.96 (PREL.)

END TAPER
 STA. 51+00
 24.00' LT.

100' TAPER

BEGIN TAPER
 STA. 50+00
 16.62' LT.

BEGIN CONSTRUCTION
 STA. 50+00.00 RAMP
 N 571997.4086
 E 2400167.8855

73946-0206-94
 BEGIN PROJ. NO. HSIP-29(81)
 STA. 50+00.00 (PREL.)

OS

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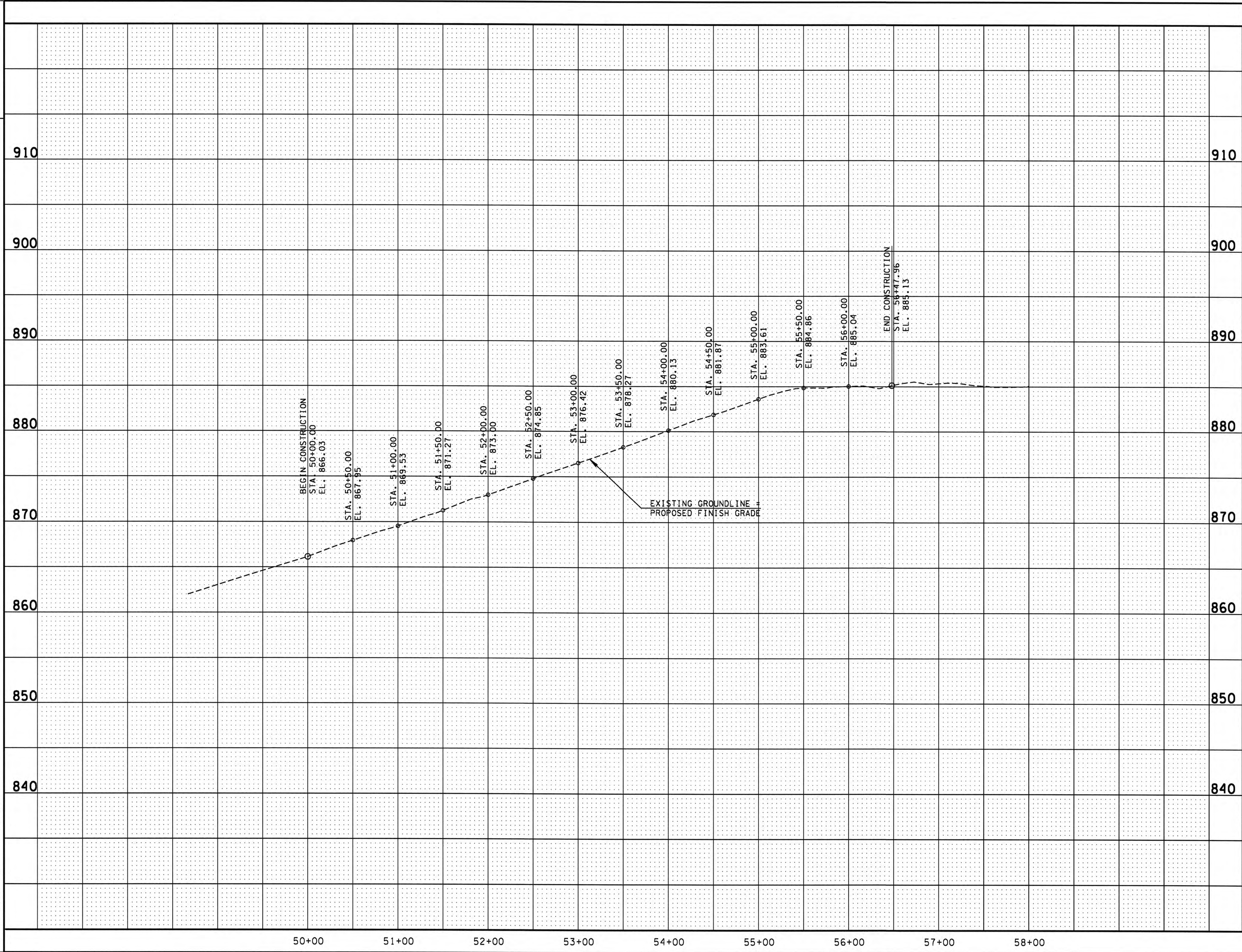
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STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**PROPOSED
LAYOUT**

STA. 50+00 TO STA. 58+00

SCALE: 1"= 50'



TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITY	2012	HSIP-29(81)	4B

R.O.W.
PLANS
(UTILITIES ONLY)

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DEPARTMENT OF TRANSPORTATION

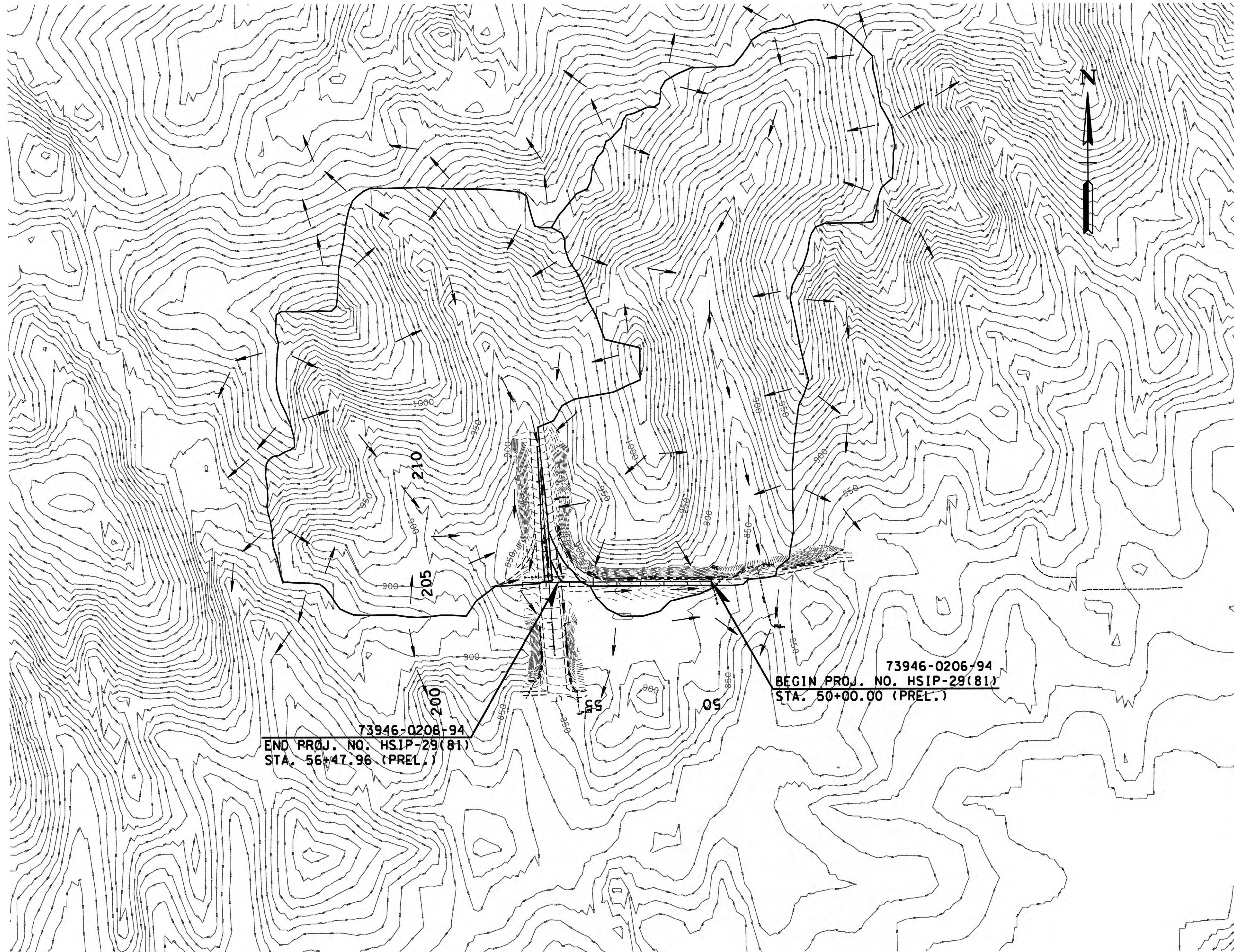
RAMP
PROFILE

STA. 50+00 TO STA. 58+00
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITY	2012	HSIP-29(81)	5

**R.O.W.
PLANS**
(UTILITIES ONLY)



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

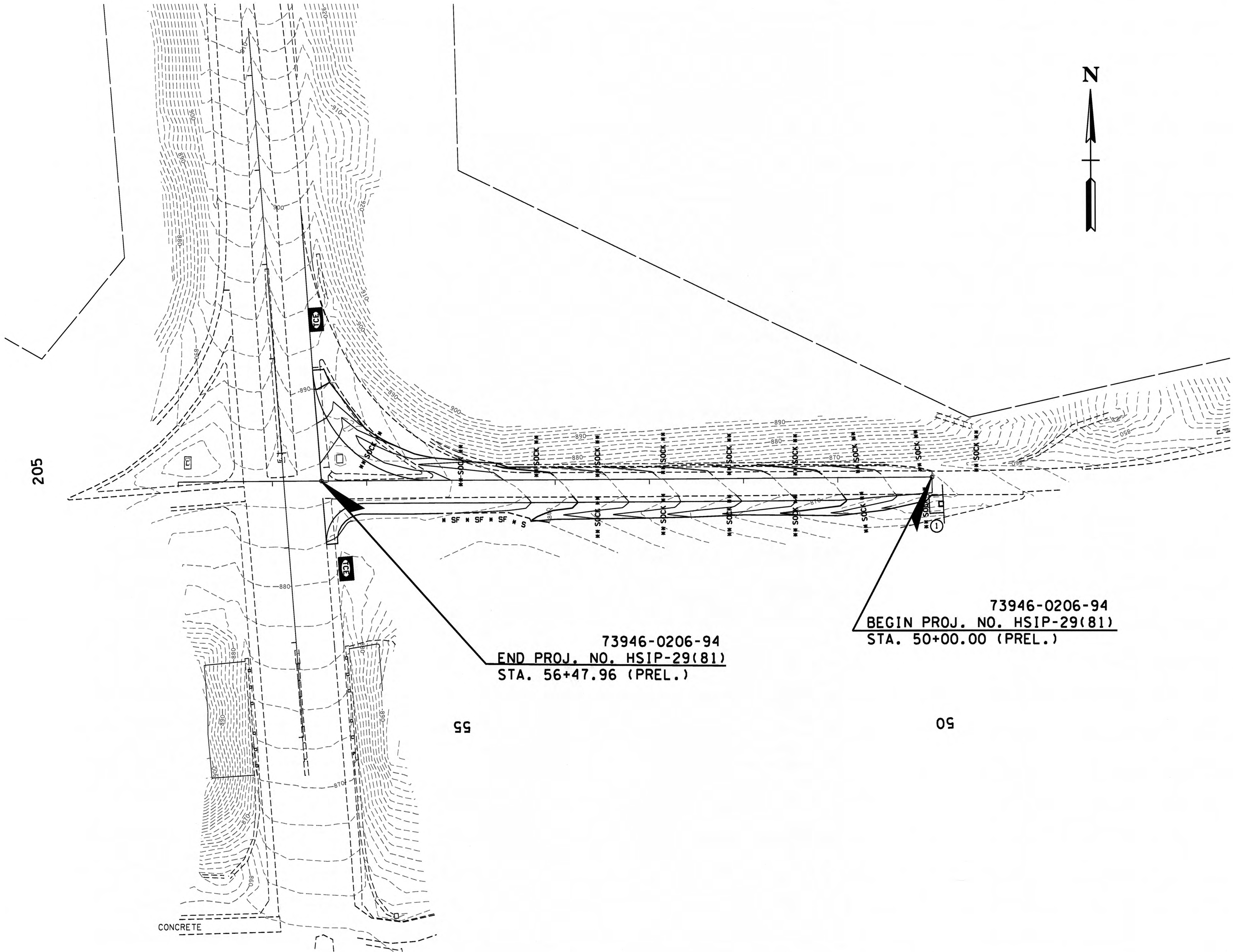
**DRAINAGE
MAP**

STA. 50+00 TO STA. 58+00
SCALE: 1"=200'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITY	2012	HSIP-29(81)	6

**R.O.W.
PLANS
(UTILITIES ONLY)**



73946-0206-94
END PROJ. NO. HSIP-29(81)
STA. 56+47.96 (PREL.)

73946-0206-94
BEGIN PROJ. NO. HSIP-29(81)
STA. 50+00.00 (PREL.)

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN**

STA. 50+00 TO STA. 58+00
SCALE: 1"= 50'