STATE	STATE PROJECT REFERENCE NO.		SHEET NO.	TOTAL SHEETS
N.C.	SF-4911D		1	8
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION		
41710.1		ENGINEERING		
41710.2		RW & UTILITY		
41710.3		CONSTRUCTION		

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WILKES COUNTY

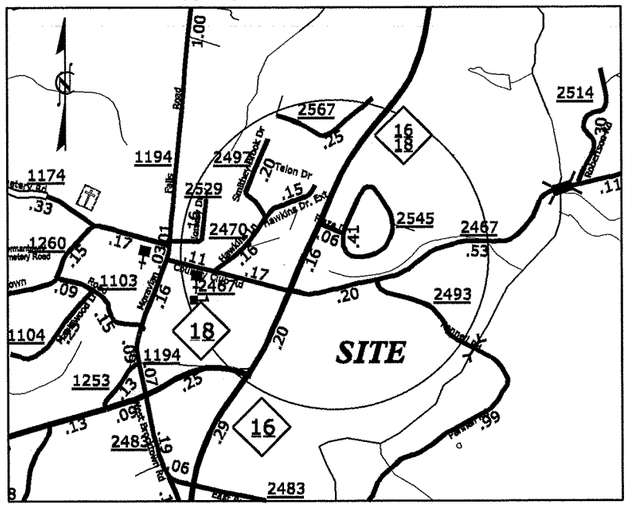
LOCATION: HWY 16-18 PROPOSED TURN LANE FOR SR 2545 PLAZA DR. AND SR 2467 COUNTRY CLUB RD.

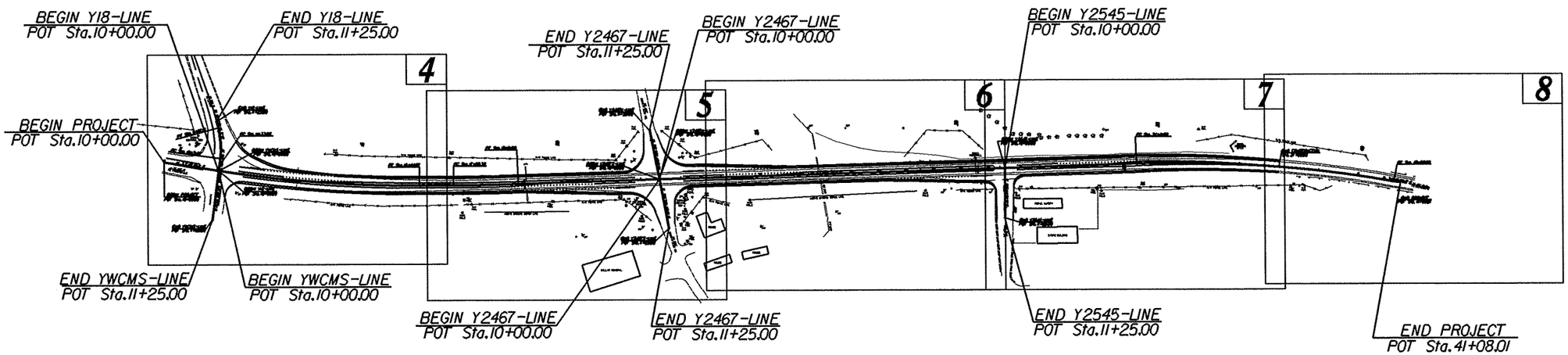
TYPE OF WORK: GRADE, BASE, WIDENING AND PAVE

TIP PROJECT: _____

CONTRACT: DK00047

VICINITY MAP





GRAPHIC SCALES

25 0 25 50
PLANS

5 0 5 10
PROFILE (HORIZONTAL)

2.5 0 2.5 5
PROFILE (VERTICAL)

DESIGN DATA

ADT _____=
ADT _____=
DHV = ___ %
D = ___ %
T = ___ % *
V = ___ MPH
* TTST = __ DUAL __
FUNC CLASS = _____
_____ TIER

PROJECT LENGTH

PROJECT LENGTH _____ 0.58 MILE

Prepared in the Office of:
DIVISION OF HIGHWAYS
709 STATESVILLE RD. NORTH WILKESBORO, NC 28659

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: _____

LETTING DATE: _____

MICHAEL A. PETTYJOHN, PE
DIVISION ENGINEER

DOUG J. TETZLAFF
DISTRICT ENGINEER

DRAWN BY:
A. L. ADAMS

FIELD WORK:
J. R. HODGES
T. D. HAMILTON
A. L. ADAMS

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

27-APR-2012 07:46
S:\Dist3\Vdgn\Wilkes_Hwy_16-18\hwy16-18_topo_dsn_dist3_22908.dgn
dadams AT DICAD-25f323

04/16/11

PROJECT REFERENCE NO.	SHEET NO.
HWY 16-18 TURN LANE	2

Note: Not to Scale

****S.U.E. = Subsurface Utility Engineering***

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin — IP
- Property Corner
- Property Monument — EOM
- Parcel/Sequence Number — 123
- Existing Fence Line
- 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
- Known Soil Contamination: Area or Site
- Potential Soil Contamination: Area or Site

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign
- Well — W
- 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 — FLOW
- False Sump

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — 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 Marker
- Existing Control of Access — CA
- Proposed Control of Access — CA
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage / Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE
- Proposed Permanent Easement with Iron Pin and Cap Marker

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR
- Curb Cut Future Ramp — CCFR
- 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 — Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:

- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole — S
- Storm Sewer — S

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- Recorded U/G Power Line — P
- Designated U/G Power Line (S.U.E.*) — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Booth
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- Recorded U/G Telephone Cable — T
- Designated U/G Telephone Cable (S.U.E.*) — T
- Recorded U/G Telephone Conduit — TC
- Designated U/G Telephone Conduit (S.U.E.*) — TC
- Recorded U/G Fiber Optics Cable — T FO
- Designated U/G Fiber Optics Cable (S.U.E.*) — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- Recorded U/G Water Line — W
- Designated U/G Water Line (S.U.E.*) — W
- Above Ground Water Line — A/G Water

TV:

- TV Satellite Dish
- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- Recorded U/G TV Cable — TV
- Designated U/G TV Cable (S.U.E.*) — TV
- Recorded U/G Fiber Optic Cable — TV FO
- Designated U/G Fiber Optic Cable (S.U.E.*) — TV FO

GAS:

- Gas Valve
- Gas Meter
- Recorded U/G Gas Line — G
- Designated U/G Gas Line (S.U.E.*) — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

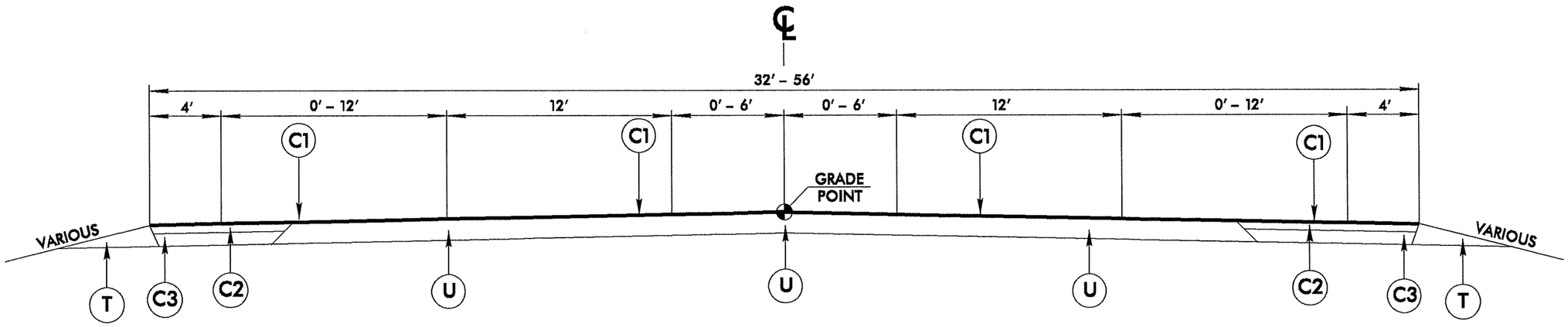
- Sanitary Sewer Manhole — SS
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- Recorded SS Forced Main Line — FSS
- Designated SS Forced Main Line (S.U.E.*) — FSS

MISCELLANEOUS:

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

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
HWY 16-18 TURN LANE	3



TYPICAL SECTION (L-LINE)

HWY 16 – 18

(FROM STATION 11+80 TO STATION 41+08)

PAVEMENT SCHEDULE	
C1	PROP. TWO LIFTS OF 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 I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
C3	PROP. APPROX. 5.5″ ASPHALT CONCRETE BASE COURSE, TYPE B25.0B , AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
T	PROPOSED SHOULDER MATERIAL
U	EXISTING PAVEMENT

PROJECT REFERENCE NO.	SHEET NO.
HWY 16-18 TURN LANE	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

REVISIONS

8/17/99

MATCH LINE SEE SHEET 5

END Y18-LINE
POT Sta. 11+25.00

PT Sta. 11+07.91

SIGINAL CONTROL BOX

FH

SP

PC Sta. 10+31.07

NC HWY 18 TO LENIOR

N 80° 09' 16.3" W

PC Sta. 11+33.02

SP

BEGIN YWCMS-LINE
POT Sta. 10+00.00

N 58° 08' 23.6" W

N 33° 19' 15.6" E

NC HWY 16 TO TAYLORSVILLE

SP

BEGIN PROJECT
POT Sta. 10+00.00

SP

BEGIN Y18-LINE
POT Sta. 10+00.00

END YWCMS-LINE
POT Sta. 11+25.00

(1)

IRA AND JO ANN MYERS
DB 823 PG 258

15

R/W MON.

R/W FENCE LINE

PT Sta. 16+44.07

N 44° 24' 10

12'

12'

12'

C

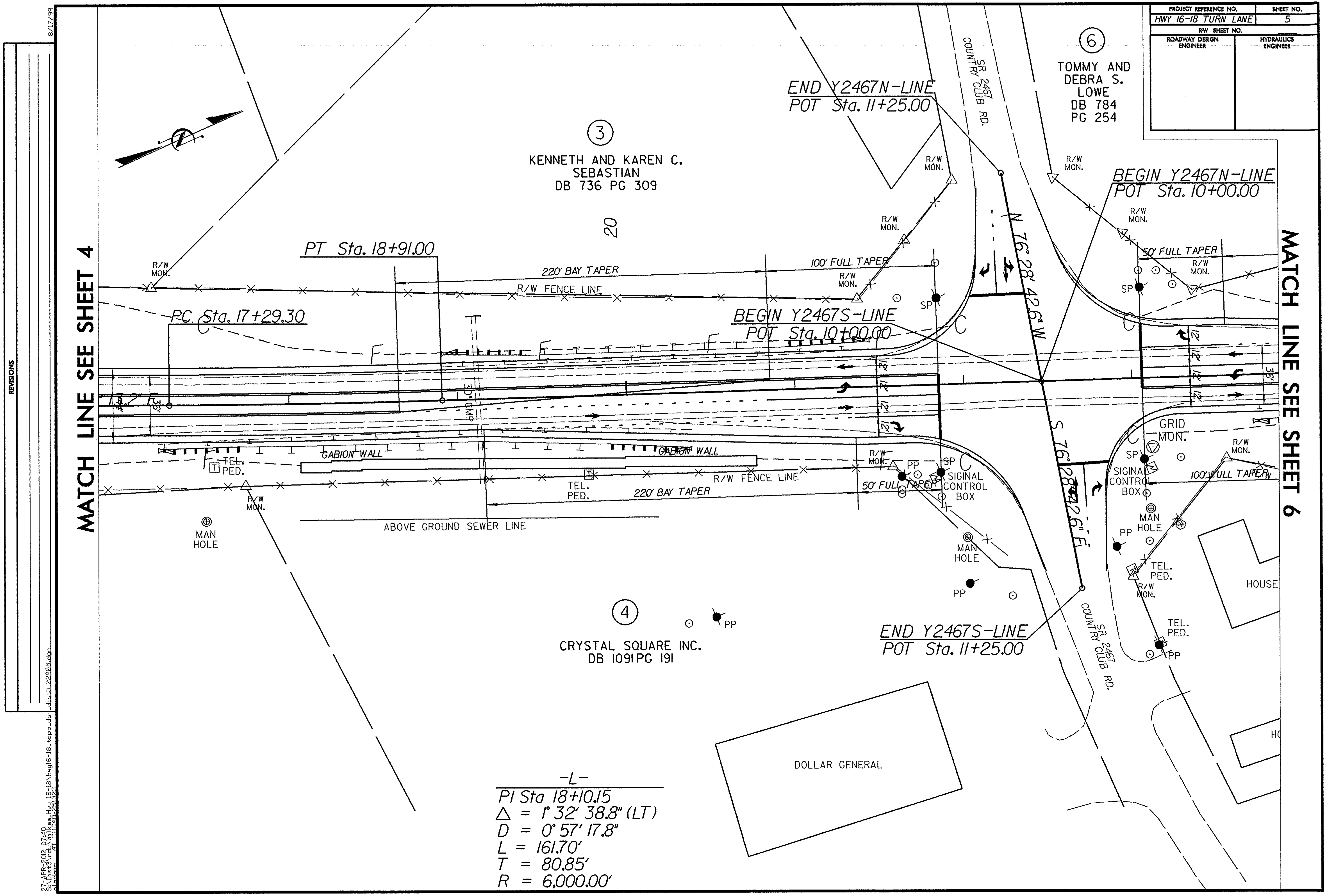
R/W FENCE LINE

(2)

WILKES COUNTY
DB 843 PG 619

-Y18-	-L-
PI Sta 10+69.97	PI Sta 13+89.10
△ = 22° 00' 52.7" (LT)	△ = 9° 09' 02.5" (LT)
D = 28° 38' 52.4"	D = 1° 47' 26.0"
L = 76.85'	L = 511.05'
T = 38.90'	T = 256.08'
R = 200.00'	R = 3,200.00'

27-APR-2012 07:37
S:\Dist-3\Projects\Wilkes_Hwy 16-18\hwy16-18_topo_dist3_22908.dgn
Plotted By: Allison Hicks


PROJECT REFERENCE NO.
SHEET NO.
HWY 16-18 TURN LANE
5
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
REVISIONS
8/17/99
27-APR-2012 07:40
S:\Dist3\rdy\Wilkes_Hwy 16-18\hwy16-18_topo_dsn_dist3_22908.dgn
MATCH LINE SEE SHEET 4
MATCH LINE SEE SHEET 6
3
KENNETH AND KAREN C. SEBASTIAN
DB 736 PG 309
20
6
TOMMY AND DEBRA S. LOWE
DB 784
PG 254
4
CRYSTAL SQUARE INC.
DB 1091 PG 191
SR 2467 COUNTRY CLUB RD.
END Y2467N-LINE
POT Sta. 11+25.00
BEGIN Y2467N-LINE
POT Sta. 10+00.00
BEGIN Y2467S-LINE
POT Sta. 10+00.00
END Y2467S-LINE
POT Sta. 11+25.00
PT Sta. 18+91.00
PC. Sta. 17+29.30
N 76° 28' 42.6" W
S 76° 28' 42.6" E
220' BAY TAPER
100' FULL TAPER
50' FULL TAPER
R/W FENCE LINE
R/W MON.
GABION WALL
30" CMP
TEL. PED.
MAN HOLE
ABOVE GROUND SEWER LINE
SP
PP
SIGINAL CONTROL BOX
GRID MON.
12'
36'
HOUSE
DOLLAR GENERAL
-L-
PI Sta 18+10.15
Δ = 1° 32' 38.8" (LT)
D = 0° 57' 17.8"
L = 161.70'
T = 80.85'
R = 6,000.00'

PROJECT REFERENCE NO.	SHEET NO.
HWY 16-18 TURN LANE	6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

MATCH LINE SEE SHEET 5

MATCH LINE SEE SHEET 7

6

TOMMY AND DEBRA S. LOWE
DB 784 PG 254

7

WILLIAM R. AND BRENDA GEE
DB 821 PG 644

8

PHILLIP O. AND KATHLEEN L. WYATT
DB 947 PG 065

9

JOHN AND ALI[illegible] KARPJAK
DB 850 PG

EIP

EIP

EIP

25

30

220' BAY TAPER

GABION WALL

GABION WALL

C

CONC. HEADWALL

N 28°37'34.4" E

35'

30" CMP

GABION WALL

GABION WALL

MAN HOLE

PP

R/W FENCE LINE

PP

15" CMP

C

220' BAY TAPER

ABOVE GROUND SEWER LINE

50' FULL TAPER

MAN HOLE

220' BAY TAPER

PP

5

CLAUDE W. FOSTER
DB 536 PG 144

PP

24" CMP

5

CLAUDE W. FOSTER
DB 564 PG 276

5

CLAUDE W. FOSTER
DB 564 PG 276

HOUSE

27-APR-2012 07:13
S:\Projects\Highways\Hwy 16-18\hwy16-18_topo.dgn
Bentley Systems, Inc. Microstation V8 2004 (07.10.03.443)
dist3_22908.dgn

PROJECT REFERENCE NO.	SHEET NO.
HWY 16-18 TURN LANE	7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

REVISIONS

8/17/99

MATCH LINE SEE SHEET 6

MATCH LINE SEE SHEET 8

(10) THOMAS EARL AND SANDRA LAMBERT HERRELSON DB 948 PG 460

(12) THOMAS GERALD (SR.) AND JEANETTE B. STRADER DB 861 PG 292

(13) PATRICIA ANN CARSON ANDERSON DB 862 PG 405

(14) MARK JAMES AND PAULA SUZAN KENNEDY DB 864 PG 140

(15) BRADLEY P. LUTY AND KELLY E. CONNOR DB 1063 PG 273

(16)

(19) JAMIE WAYNE AND MILDRED R. EDMISTEN DB 668 PG 342

(11) STEPHEN LARRY AND MARGARET JARVIS TRUSTEE DB 801 PG 349

(5) CLAUDE W. FOSTER DB 872 PG 133

(5) CLAUDE W. FOSTER DB 872 PG 133

35

EIP

R/W MON.

PC Sta. 34+41.80

BEGIN Y2545-LINE
POT Sta. 10+00.00

100' FULL TAPER

220' BAY TAPER

330' APPROACH TAPER

CONC. DRAINAGE DITCH

10

12

12

12

PP

MAN HOLE

TEL. PED.

PP

MAN HOLE

R/W MON.

EIP

PP

R/W FENCE LINE

PP

S 65° 14' 01.2" E

METAL CANOPY

END Y2545-LINE
POT Sta. 11+25.00

STORE BUILDING

SR 2545
PLAZA DR.

-L-
PI Sta 37+68.03
Δ = 11° 38' 32.2" (RT)
D = 1° 47' 26.0"
L = 650.20'
T = 326.24'
R = 3,200.00'

27-APR-2012 07:14
S:\Active Projects\Hwy 16-18\hwy16-18_topo.dgn
dist3_22908.dgn
plotted at 1:1 on 24x36

PROJECT REFERENCE NO.	SHEET NO.
HWY 16-18 TURN LANE	8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

MATCH LINE SEE SHEET 7

16
DALE E. AND TERESA T.
WADDELL
DB 843 PG 272

17
JAMES O. AND REBA M.
CANNON
DB 881 PG 414

18
JOHN M. AND REGINAT
LEWIS
DB 837 PG 208

R/W FENCE LINE

END CONSTRUCTION
Sta. 37+00.00

40

PT Sta. 40+92.00

N 34°16'06.6" E

NC HWY 16-18
TO WILKESBORO

END PROJECT
POT Sta. 41+08.01

TEL.
PED.

R/W
MON.

19
JAMIE WAYNE AND
MILDRED R.
EDMISTEN
DB 668
PG 342

20
GEOFF M. WALTHER
DB 1057 PG 257

27-APR-2012 07:45
S:\Division 7\Wilkes_Hwy_16-18\hwy16-18_topo.dsf_dist3_22908.dgn
default

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	SF-4911D	X-1

S.S. 1150.22

1148.913

1151.29

12+50.00

S.S. 1150.364

1148.82

1150.80

12+00.00

S.S. 1150.194

1149.648

1150.40

11+50.00

S.S. 1150.665

1148.943

S.S. 1149.441

1147.911

1149.78

11+00.00

S.S. 1149.914

1148.259

467.47

10+50.00

10+00.00

—A—

27-APR-2012 07:50
S:\Dist\rdy\Wilkes_Hwy_16_18\hwy16-18_Rdy_xpl.dist3_071811.dgn
eisdams 21 DI(CAD-251323

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	SF-4911D	X-2

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

485 480 475 470 465 460

S.S. 1150.804

2:1 4:1

1150.736

1153.14

14+00.00

S.S. 1154.907

4:1 2:1

1152.201

S.S. 1150.662

2:1 4:1

1150.191

1152.50

13+50.00

S.S. 1154.968

4:1 2:1

1151.276

S.S. 1150.332

2:1 4:1

1149.60

1151.92

13+00.00

S.S. 1155.074

4:1 2:1

1150.695

-A-

27-APR-2012 08:02
S:\Dist3\roadway\Wilkes_Hwy_16-18\hwy16-18_Rdy-xpl_dist3_071811.dgn
aladams AT DliCAD-25.323

8/23/99

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	SF-4911D	X-3

S.S. 1152.201

4:1

1152.201

1154.880

15+50.00

1157.590

4:1

2:1

1153.965

S.S. 1151.760

4:1

1151.750

1154.270

15+00.00

S.S. 1158.592

4:1

2:1

1153.267

S.S. 1151.705

2:1

1153.80

14+50.00

S.S. 1156.455

4:1

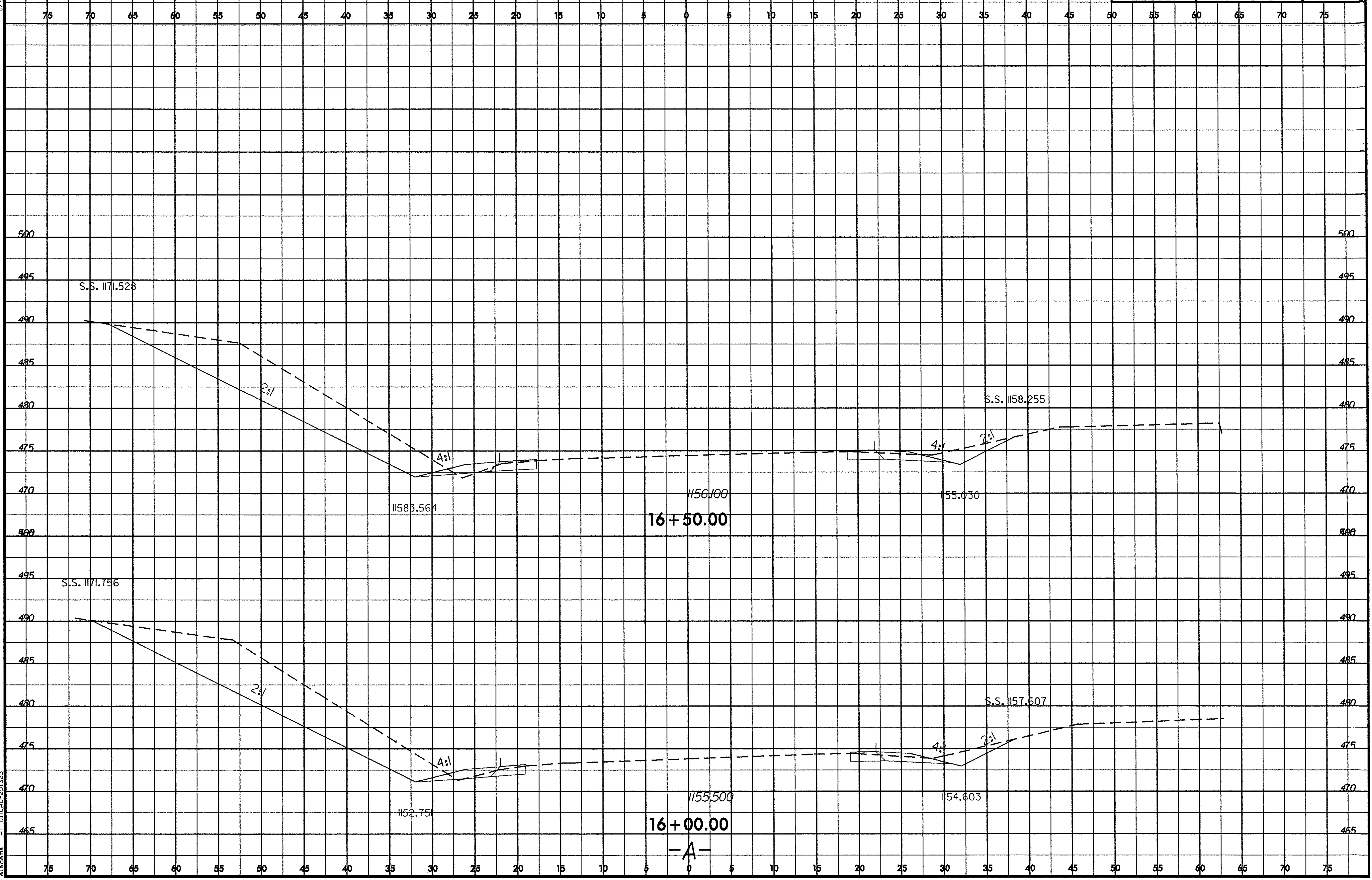
2:1

1152.942

-A-

27-APR-2012 08:03
S:\Dist3\rdy\Wilkes_Hwy 16-18\hwy16-18_Rdy_xpl_dist3_071811.dgn
aladams PT DITCAD 28.1.23

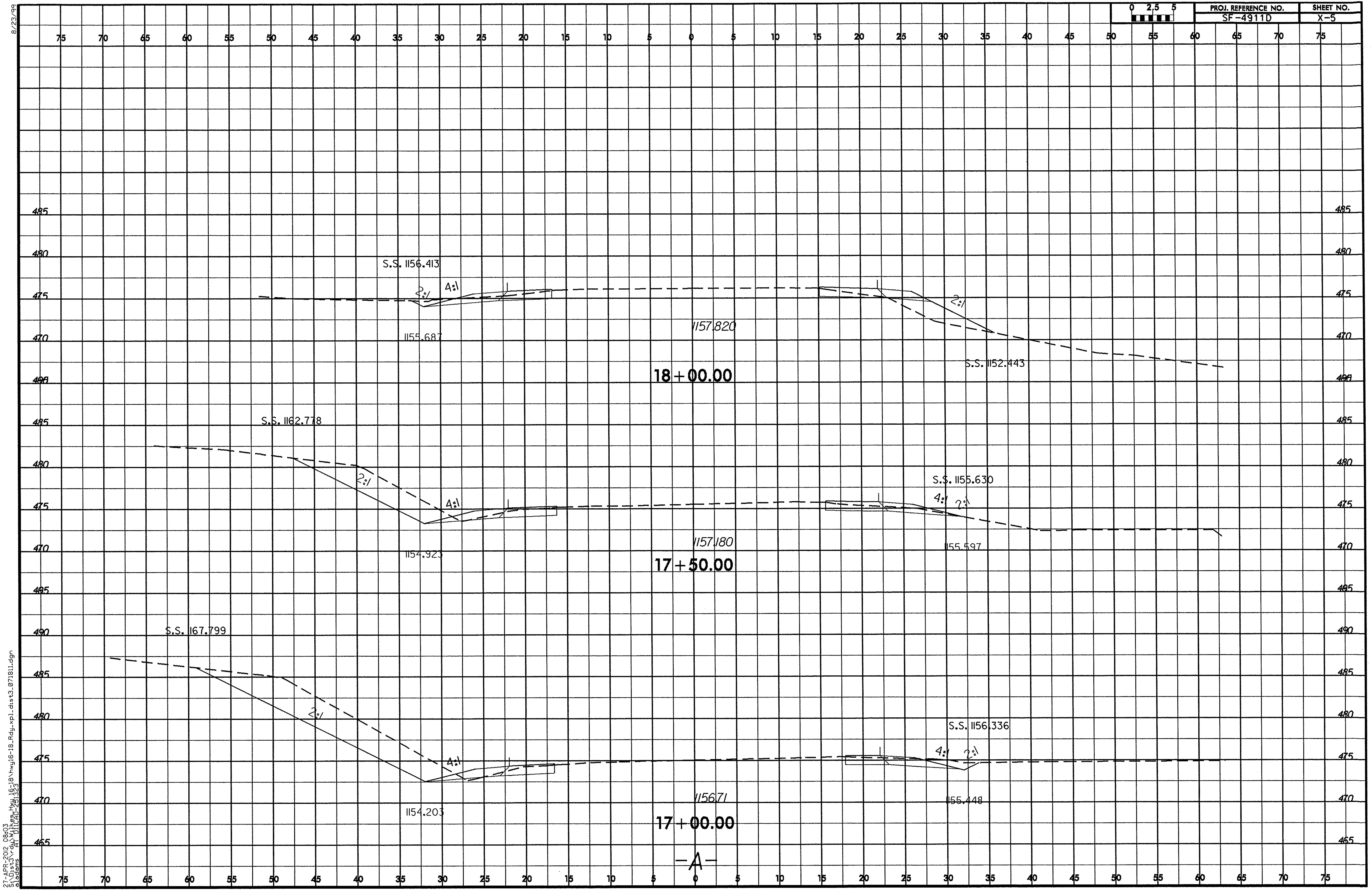
PROJ. REFERENCE NO.	SHEET NO.
SF-4911D	X-4



8/23/99

27-APR-2012 08:03
S:\Dist3\rdy\Wilkes_Hwy_16-18\hwy16-18_Rdy_xpl_dist3_071811.dgn
aladams AT D11CAD-2S1323

PROJ. REFERENCE NO.	SHEET NO.
SF-4911D	X-5



8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	SF-4911D	X-6

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

480 475 470 465 460 455

2:1

S.S. 1157.906

1159.34

2:1

GABION BASKETS

ABOVE GROUND SANITARY SEWER LINE

SS

RIGHT OF WAY FENCE LINE

S.S. 1142.014

19+50.00

2:1

S.S. 1157.277

1158.70

GABION BASKETS

ABOVE GROUND SANITARY SEWER LINE

SS

RIGHT OF WAY FENCE LINE

19+00.00

2:1

S.S. 1156.783

1158.27

2:1

GABION BASKETS

ABOVE GROUND SANITARY SEWER LINE

SS

RIGHT OF WAY FENCE LINE

18+50.00

—A—

27-APR-2012 08:09
S:\Dist3\rdy\Wilkes-Hwy 16-18\hwy16-18_Rdy_xpl_dist3_071811.dgn
aladams
AT (dtCAD 25.32)

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	SF-4911D	X-7

S.S. 1160.712

1162.100

21+50.00

S.S. 1160.083

1159.790

GABION BASKETS

RIGHT OF WAY FENCE LINE

S.S. 1159.808

1161.43

21+00.00

GABION BASKETS

RIGHT OF WAY FENCE LINE

S.S. 1158.957

1160.72

20+50.00

S.S. 1151.314

GABION BASKETS

RIGHT OF WAY FENCE LINE

S.S. 1158.686

1160.06

20+00.00

ABO SANITAR

SS

-A-

27-APR-2012 08:10
S:\Dist3\roh\Wilkes\Hwy 16-18\hwy16-18_Rdy_xpl_dist3_071811.dgn
sladams
AT DIICAD 23.23

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	SF-4911D	X-8

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

495 490 485 480 475 470

S.S. 1166.194

2:1 4:1

1162.834

1164.570

23+50.00

S.S. 1163.407

2:1 4:1

1162.511

1164.020

23+00.00

S.S. 1162.523

4:1 2:1

1161.962

S.S. 1163.425

2:1 4:1

1161.897

1163.490

22+50.00

S.S. 1162.472

4:1 2:1

1161.235

S.S. 1162.825

2:1 4:1

1161.152

1162.84

22+00.00

S.S. 1161.428

4:1 2:1

1160.459

—A—

27-APR-2012 08:10
S:\Dist-25\Projects_Hwy_16-18\hwy16-18_Rdy_xpl_dist3_071811.dgn
ST DITCAD-28.323
eladams

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	SF-4911D	X-9

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

490 485 480 475 470 465

GABION BASKETS

ABOVE GROUND SANITARY SEWER LINE

SS

2:1

1166.20

S.S. 1156.537

25+00.00

1165.67

S.S. 1163.262

S.S. 1160.014

24+50.00

1165.110

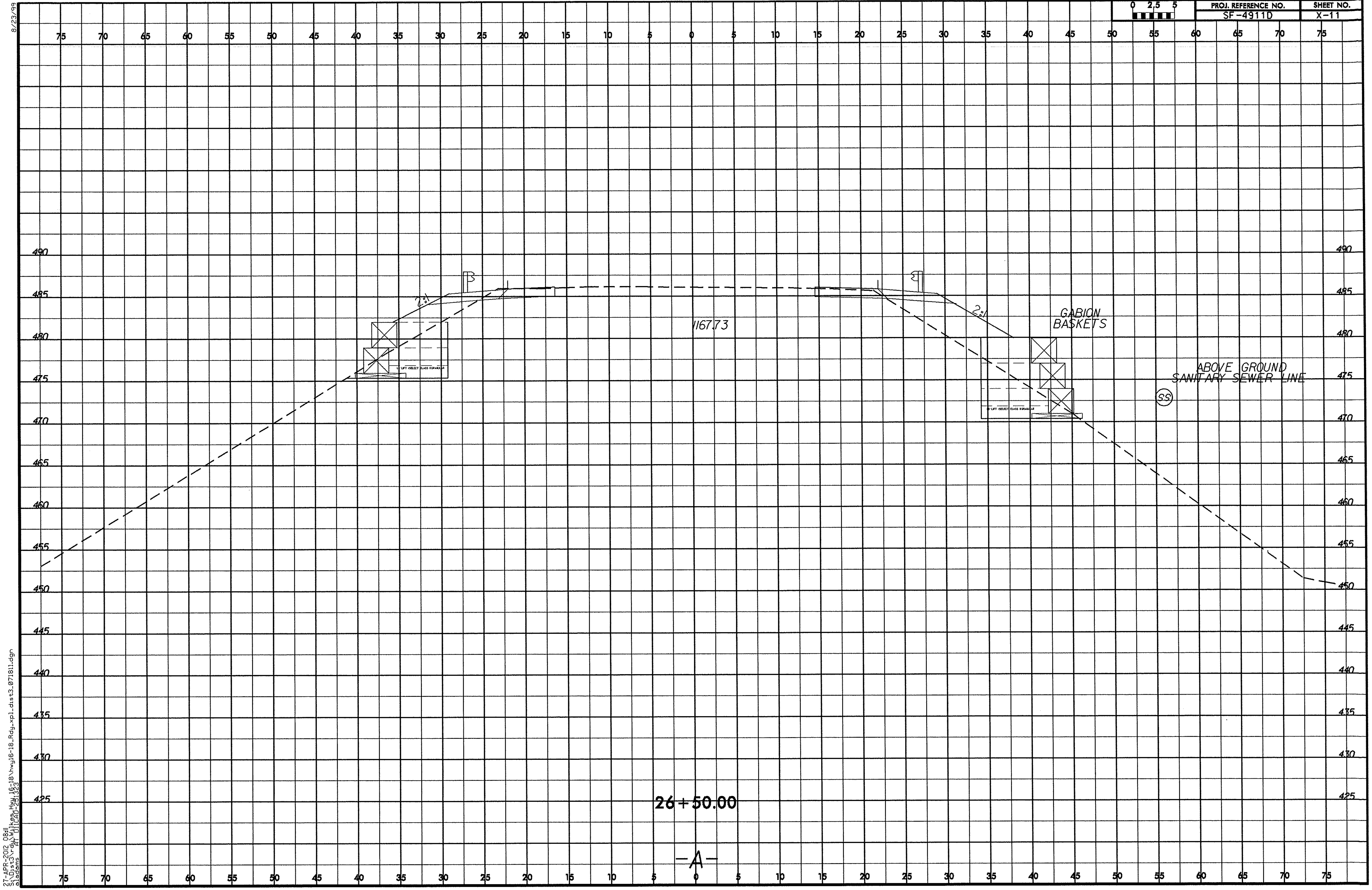
S.S. 1163.446

24+00.00

-A-

27-APR-2012 08:10
S:\Dist3\rdwk\Wilkes_Hwy_16-18\hwy16-18_Rdy_xpl_dist3_071811.dgn
aladams
AT DIGAD-251323

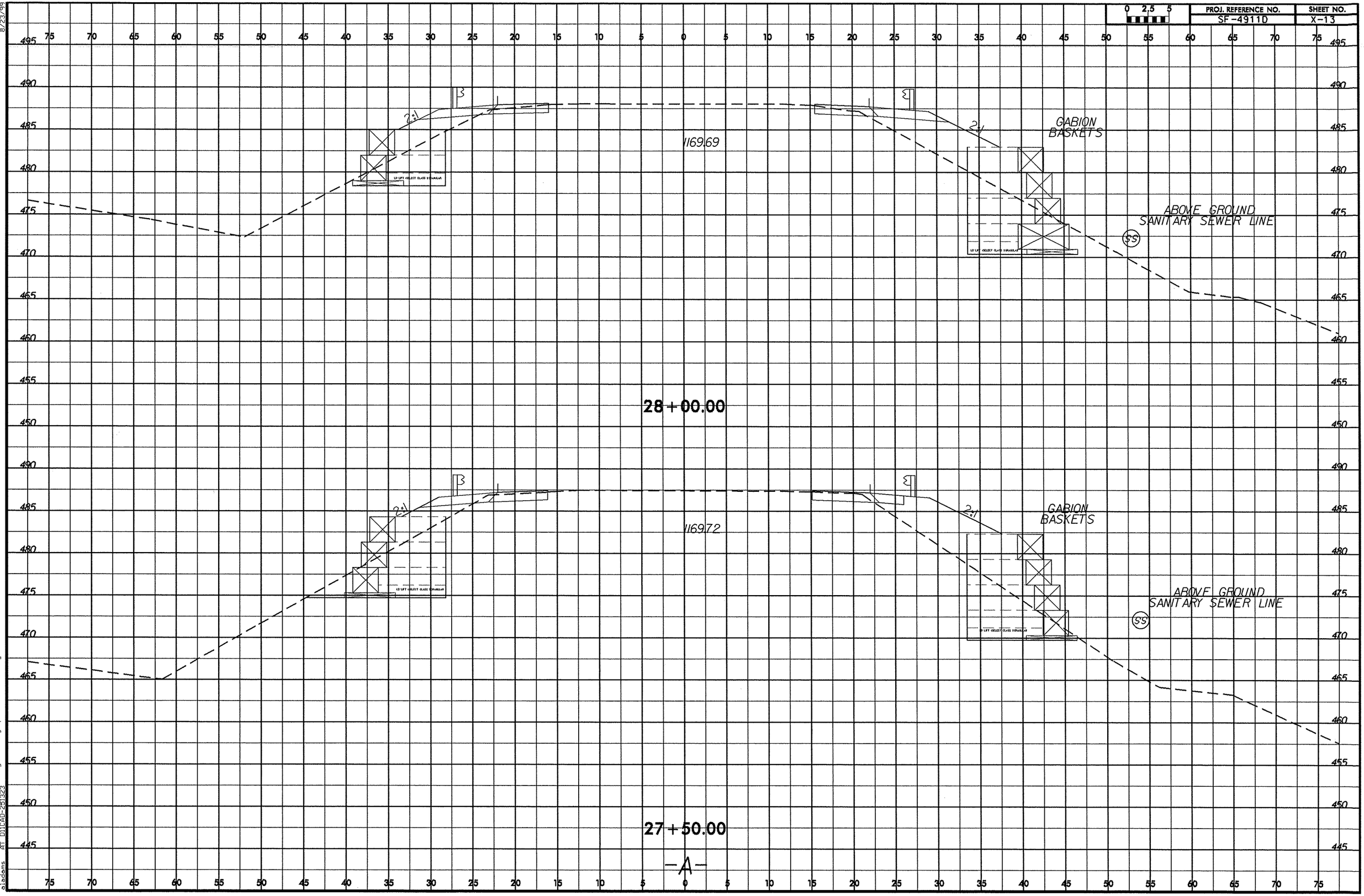
8/23/99



27-APR-2012 08:11
S:\Dist3\rdy\Wilkes_Hwy_16-18\hwy16-18_Rdy-xpl-dist3_071811.dgn
aladams AT DIICAD-251323

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	SF-4911D	X-13



27-APR-2012 08:12
S:\Dist3\Rdy\Wilkes_Hwy_16-18\hwy16-18_Rdy_xpl.dist3_071811.dgn
aladams
AT DILGAD-29323

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	SF-4911D	X-14

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

495 490 485 480 475 470 465 460

2:1

1171.12

2:1

GABION BASKETS

29+00.00

2:1

1170.37

2:1

GABION BASKETS

ABOVE GROUND SANITARY SEWER LINE

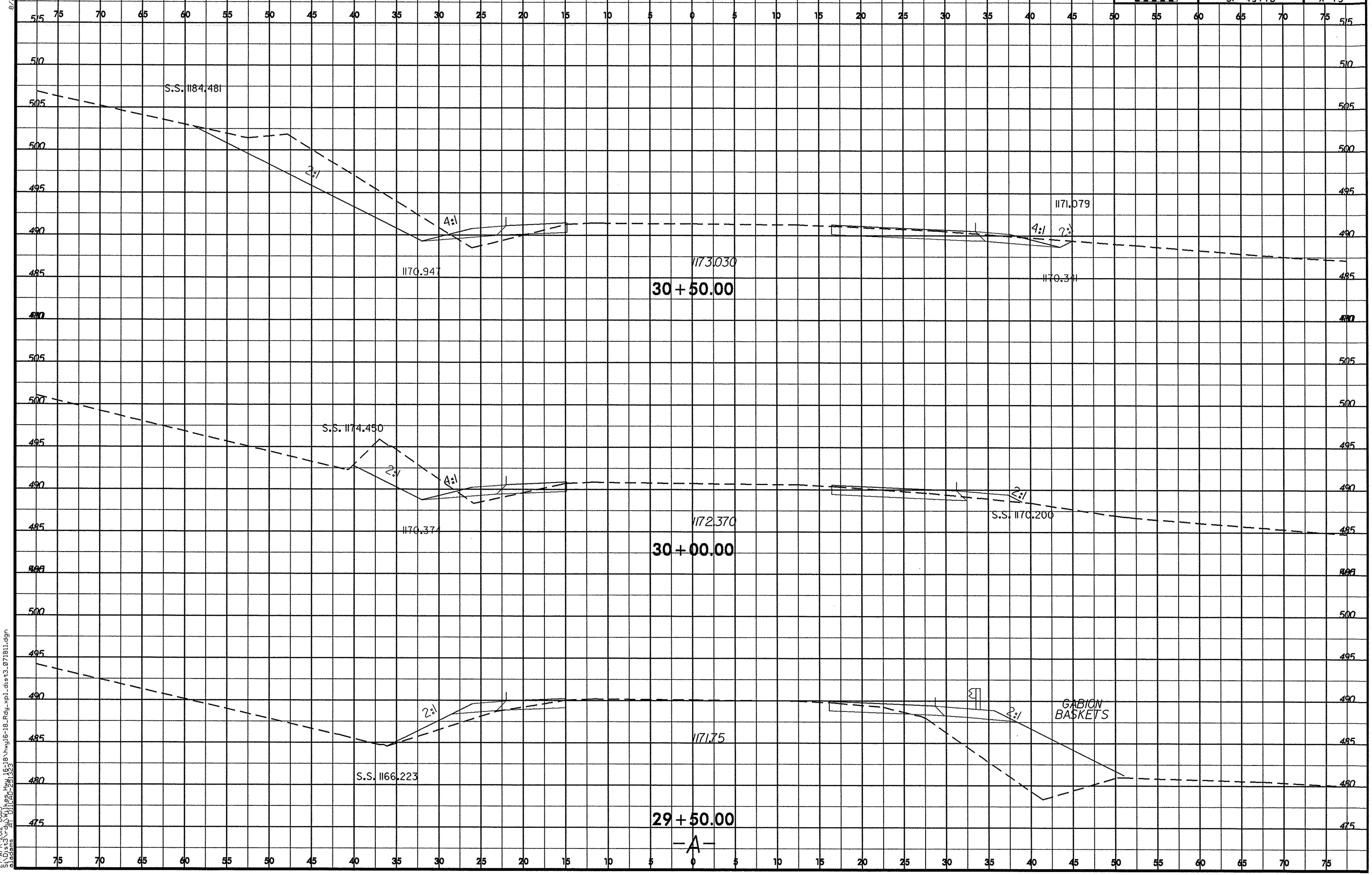
SS

28+50.00

—A—

27-APR-2012 08:13
S:\Dist3\rdy\Wilkes-Hwy 16-18\hwy16-18_Rdy_xpl.dist3_071811.dgn
aladams AT DilCAD-2013.23

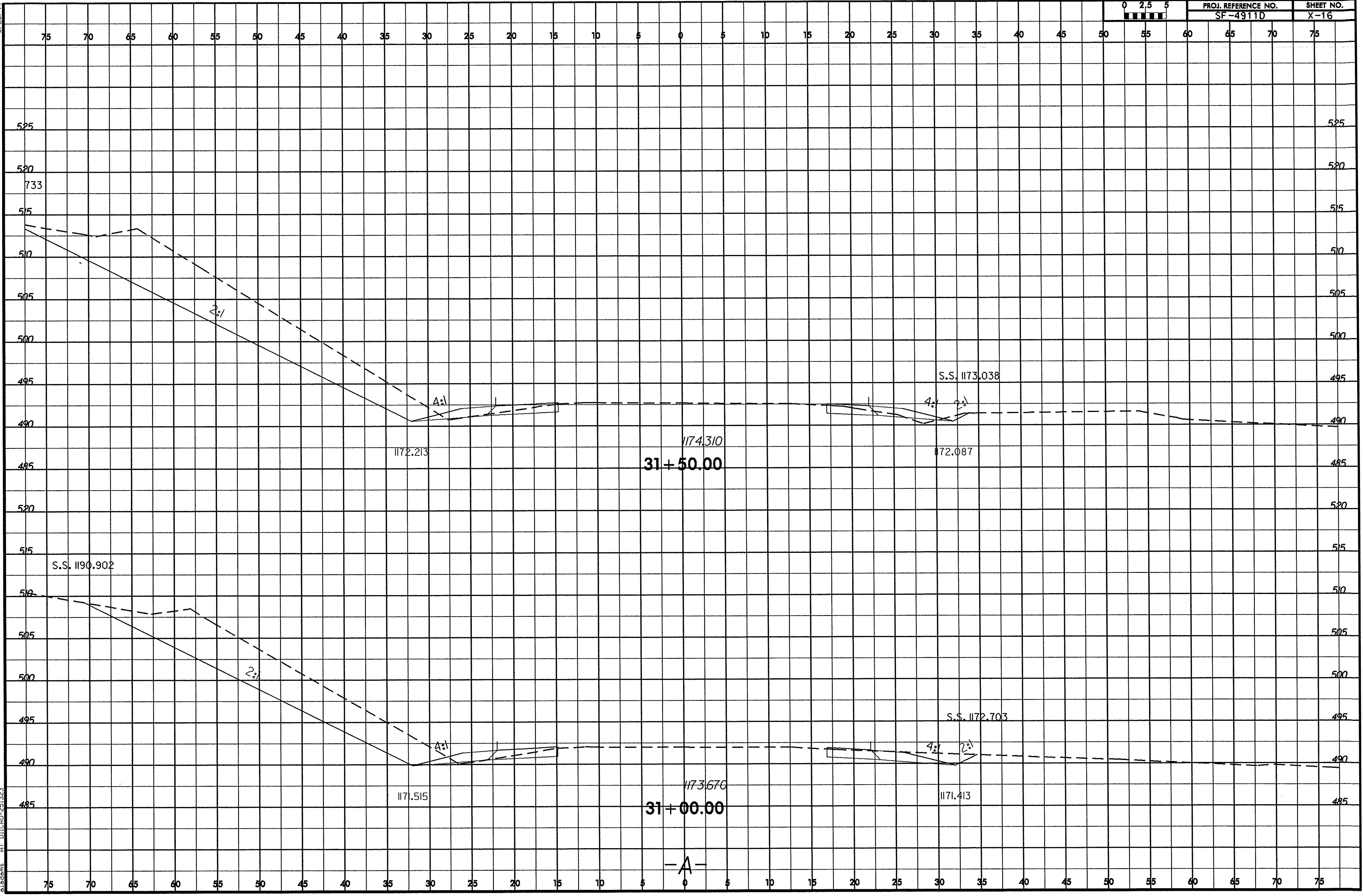
PROJ. REFERENCE NO.	SHEET NO.
SF-4911D	X-15



8/23/99

27-APR-2012 08:13
S:\Dist3\rdy\Wilkes_Hwy_16-18\hwy16-18_Rdy_xpl_dist3_071811.dgn
aladams AT D1ICAD-251323

PROJ. REFERENCE NO.	SHEET NO.
SF-4911D	X-16



8/23/99

27-APR-2012 08:14

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	SF-4911D	X-17

S.S. 1174.745

1173.225

1175.580

32+50.00

1173.405

S.S. 1173.924

1172.66

1174.940

32+00.00

1172.613

-A-

27-APR-2012 08:14
S:\Dist3\rdy\Wilkes_Hwy_16-18\hwy16-18_Rdy_xpl.dst3.071811.dgn
ai dilCAD 28.323
aladams

8/23/99

PROJ. REFERENCE NO.	SHEET NO.
SF-4911D	X-18

0 2.5 5

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

525 520 515 510 505 500 495 490 485

2:1

4:1

1174.632

1176760

33+50.00

1174.468

S.S. 1176.014

4:1 2:1

2:1

4:1

1173.977

1176180

33+00.00

1173.964

S.S. 1175.295

4:1 2:1

—A—

27-APR-2012 08:15
S:\Dist3\rdy\Wilkes_Hwy_16-18\hwy16-18_Rdy_xpl_dist3_071811.dgn
elsdoms
PT DIGAD-251923

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	SF-4911D	X-19

S.S. 1198.025

2:1

4:1

1176.370

1178.070

34+50.00

S.S. 1176.398

4:1

2:1

1175.735

S.S. 1176.576

2:1

4:1

1176.587

1177.380

34+00.00

1175.131

—A—

27-APR-2012 08:15
S:\Dist3\Va\Wilkes_Hwy_16-18\hwy16-18_Rdy_xpl_dist3_071811.dgn
ai dilCAD-28.1323
eladams

8/23/99

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
SF-4911D	X-20

1178.62

2:1 4:1

1178.075

1179.260

35+50.00

2:1

S.S. 1177.456

S.S. 1197.340

2:1

4:1

1177.330

1178.700

35+00.00

S.S. 1176.361

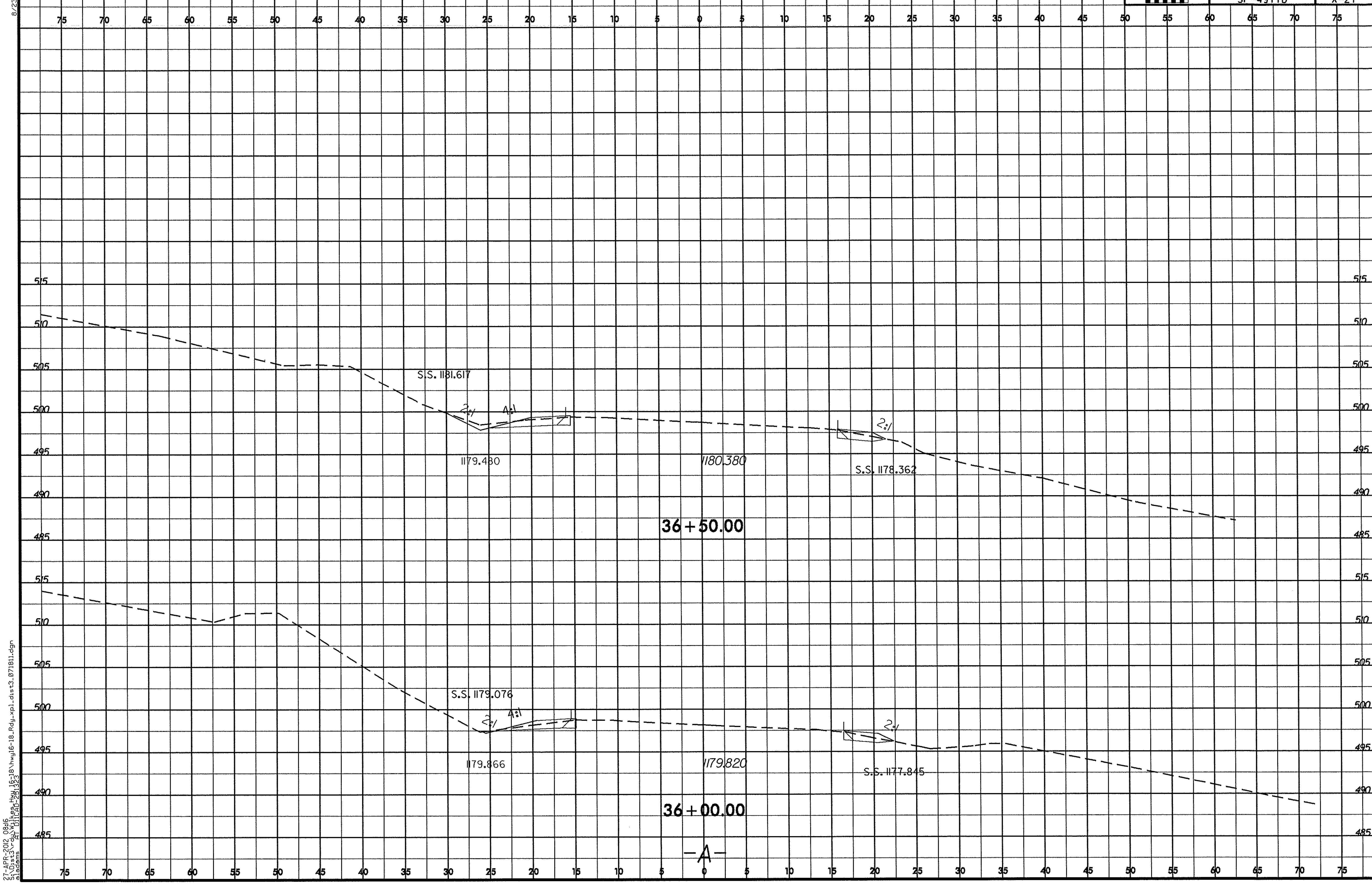
4:1 2:1

1176.316

-A-

27-APR-2012 08:15
S:\Dist3\roadway\Wilkes_Hwy_16-18\hwy16-18_Rdy_xpl_dist3_071811.dgn
eadams AT OFFICE 291.23

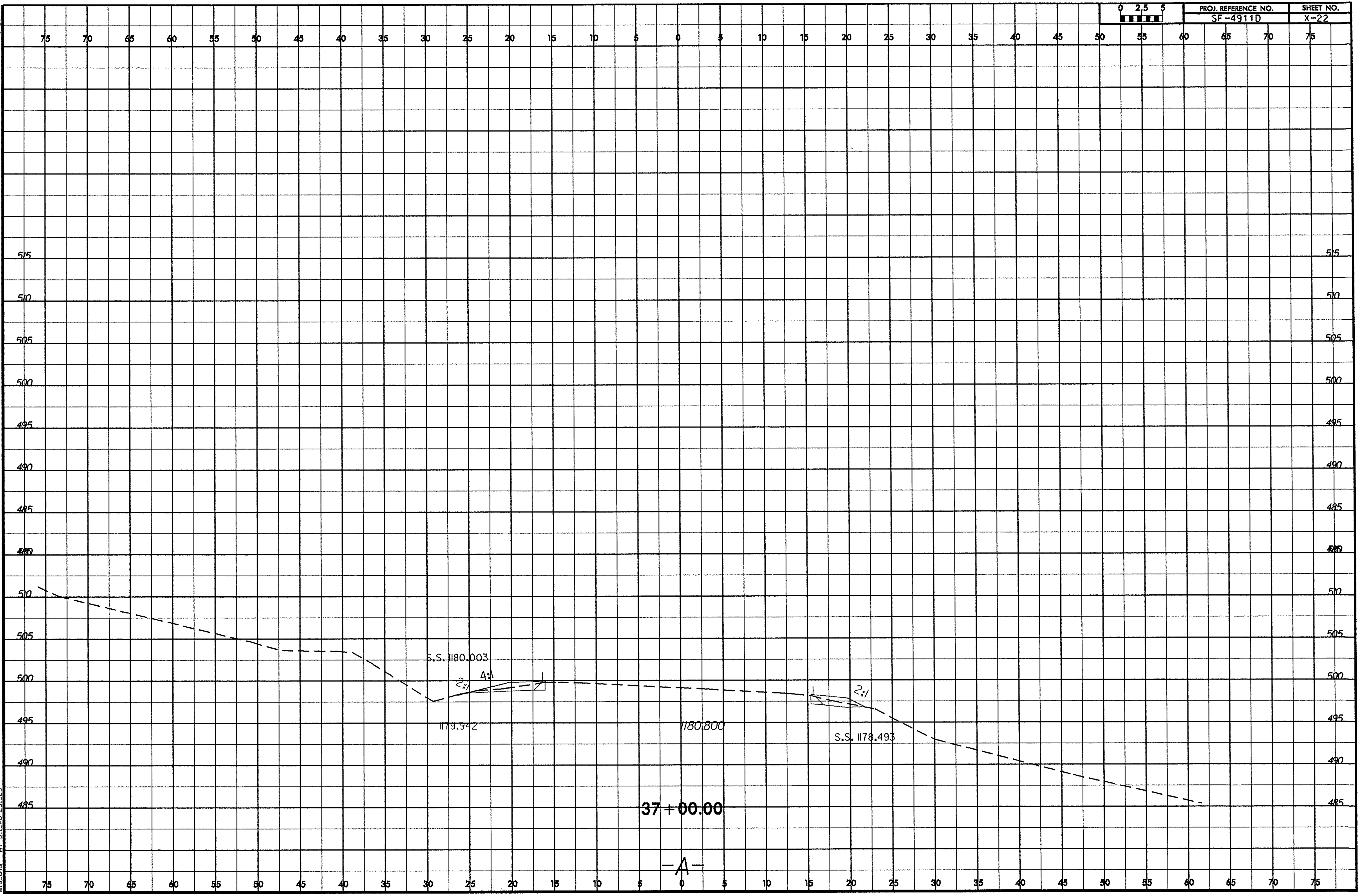
PROJ. REFERENCE NO.	SHEET NO.
SF-4911D	X-21



8/23/99

27-APR-2012 08:16
S:\Dist3\rdy\Wilkes_Hwy_16-18\hwy16-18_Rdy-xpl_dist3_071811.dgn
aladams AT D11CAD-251323

PROJ. REFERENCE NO.	SHEET NO.
SF-4911D	X-22



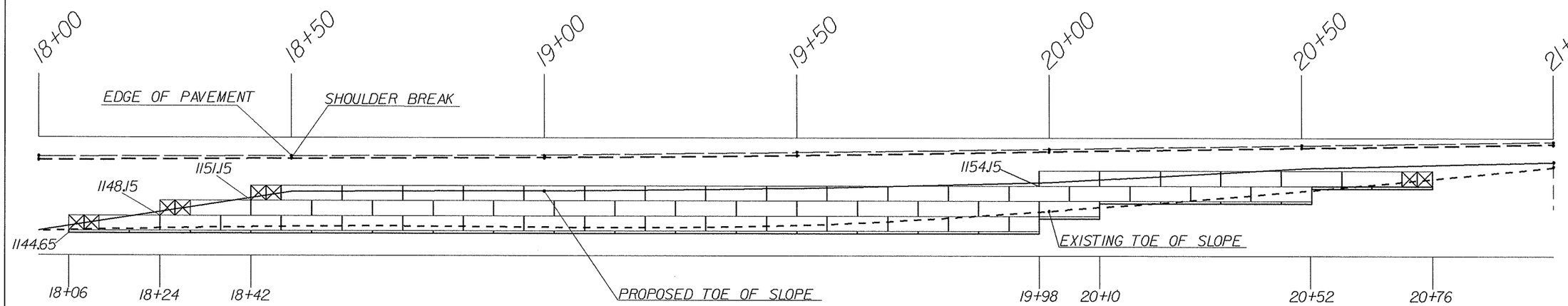
8/23/99

27-APR-2012 08:16
S:\Dist3\rdy\Wilkes_Hwy_16-18\hwy16-18_Rdy-xpl-dist3_071811.dgn
aladams AT D11CAD-251323

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
SF-49110	D1
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

HWY 16-18
GABION BASKET DETAIL FOR
STATIONS 18+00 TO 21+00 RIGHT SIDE



GABION BASKETS

9 - 6' X 3' X 3'
53 - 12' X 3' X 3'
TOTAL CAPACITY = 240 CUBIC YARDS
CALCULATED CLASS B RIP RAP TONNAGE = 390

RENO MATTRESSES

1 - 6' X 6' X 6"
22 - 12' X 6' X 6"
TOTAL CAPACITY = 32.3 CUBIC YARDS
CALCULATED CLASS A RIP RAP TONNAGE = 50

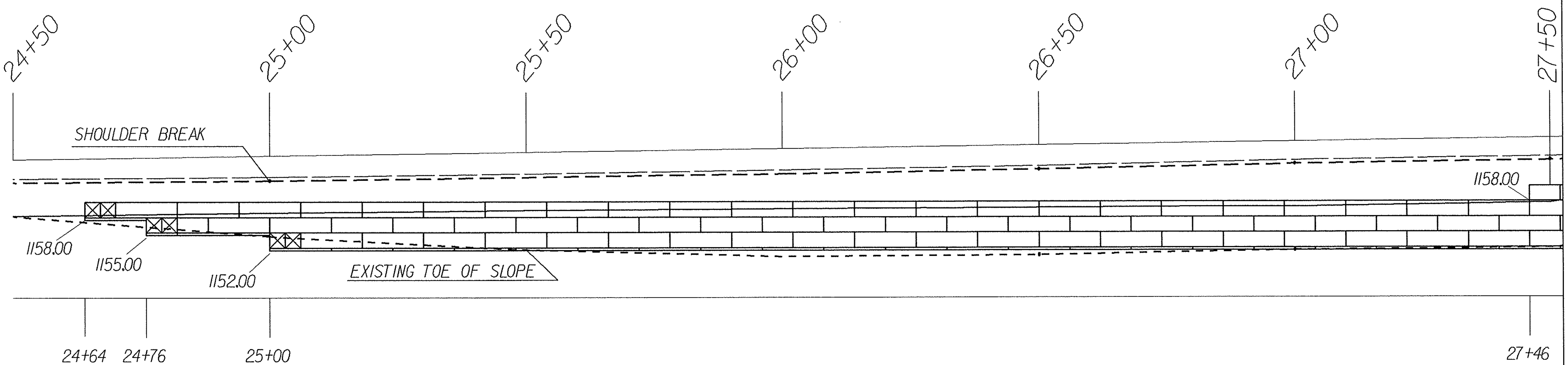
NOTE: ALL PROPOSED ELEVATIONS ON BASKETS ARE ASSUMED FROM SURVEY DATA

NOT TO SCALE

27-APR-2012 08:25
S:\Dist-3\Projects\Hwy 16-18\hwy16-18_xsc_dist3.dgn
Alabama 4" Offset 28.323

PROJECT REFERENCE NO.	SHEET NO.
SF-49110	D2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

HWY 16-18
GABION BASKET DETAIL FOR
STATIONS 24+50 TO 30+00 RIGHT SIDE



MATCH LINE SEE DETAIL D2B

GABION BASKETS

15 - 6' X 3' X 3'
117 - 12' X 3' X 3'
TOTAL CAPACITY = 498 CUBIC YARDS
CALCULATED CLASS B RIP RAP TONNAGE = 810

RENO MATTRESSES

2 - 6' X 6' X 6"
42 - 12' X 6' X 6"
TOTAL CAPACITY = 105 CUBIC YARDS
CALCULATED CLASS A RIP RAP TONNAGE = 150

NOTE: ALL PROPOSED ELEVATIONS ON BASKETS ARE ASSUMED FROM SURVEY DATA

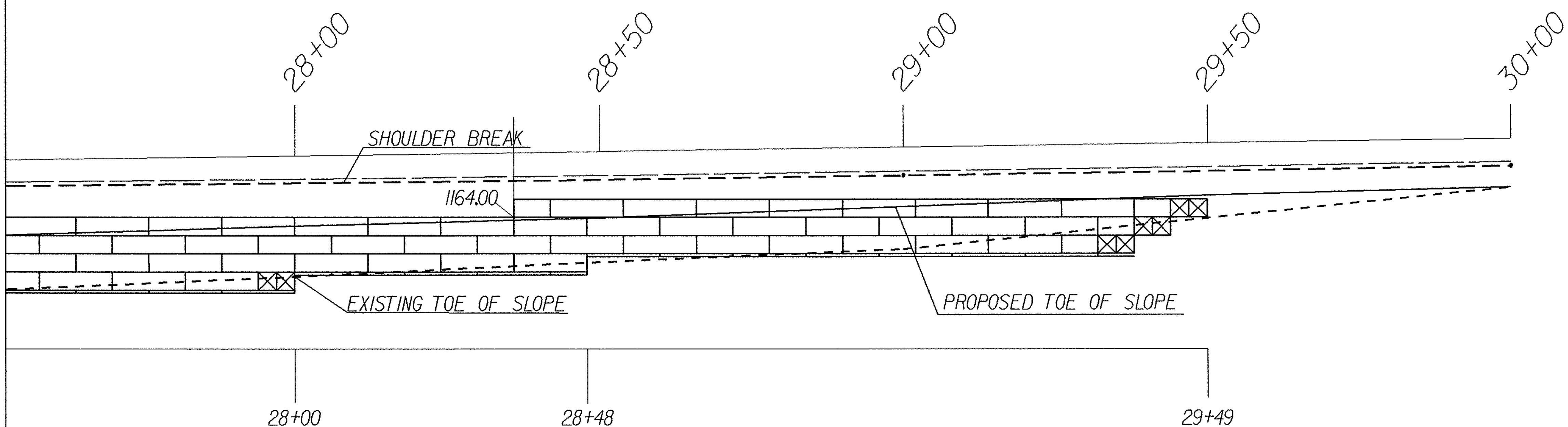
NOT TO SCALE

8/17/99
27-APR-2012 08:27

PROJECT REFERENCE NO.	SHEET NO.
SF-49110	D2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

HWY 16–18
GABION BASKET DETAIL FOR
STATIONS 24+50 TO 30+00 RIGHT SIDE

MATCH LINE SEE. DETAIL D2A

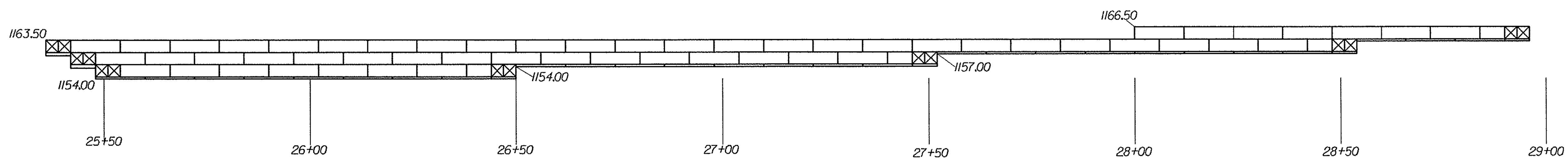


NOTE: ALL PROPOSED ELEVATIONS ON BASKETS ARE ASSUMED FROM SURVEY DATA

NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
SF-49110	D3
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

HWY 16-18
GABION BASKET DETAIL FOR
STATIONS 25+00 TO 29+00 LEFT SIDE



NOTE: ALL PROPOSED ELEVATIONS ON BASKETS ARE ASSUMED FROM SURVEY DATA

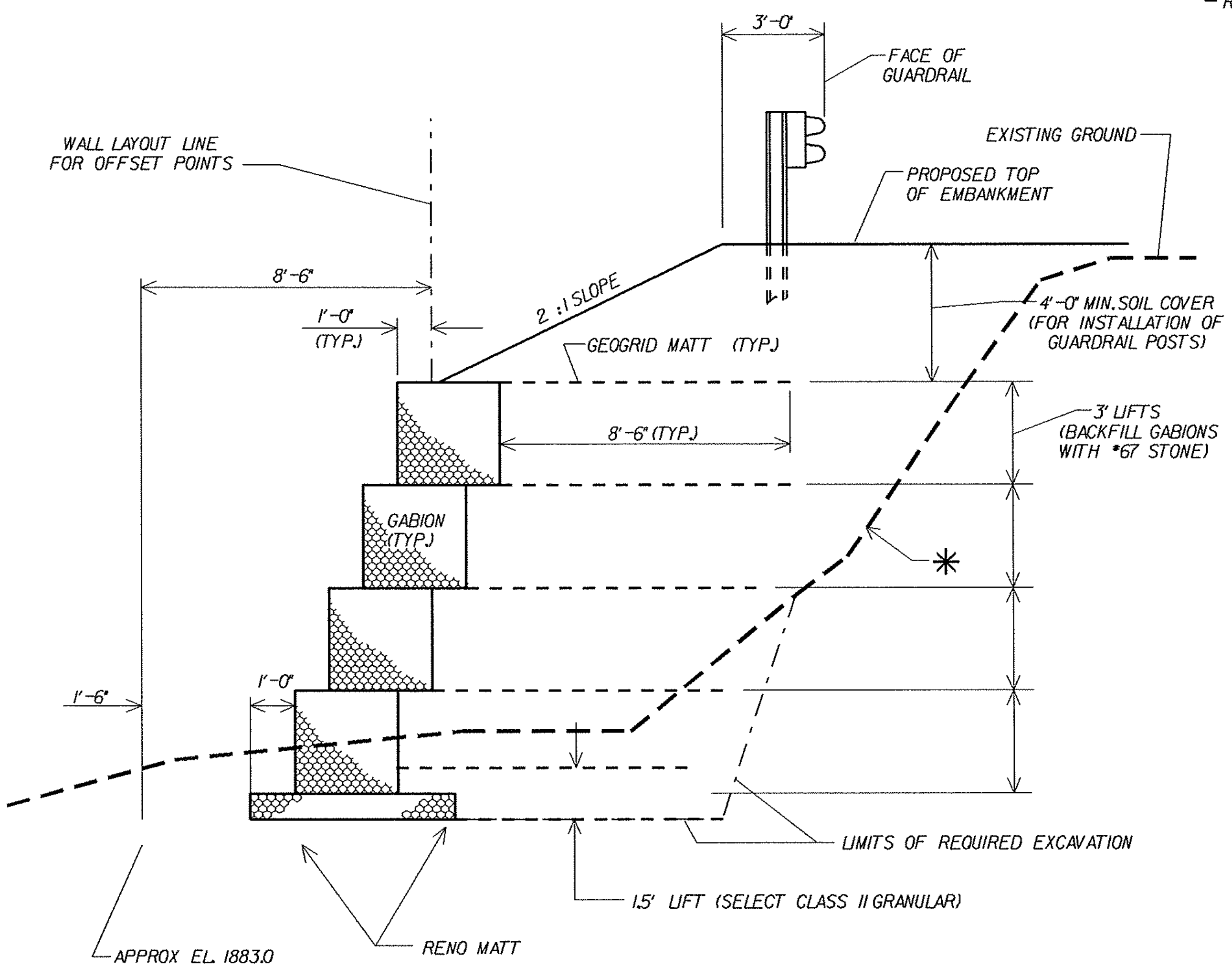
NOT TO SCALE

27-APR-2012 08:28
S:\Dist3\rdy\Wilkes_Hwy 16-18\hwy16-18_xsc_dist3.dgn
aladams AT DURAD-25L1323

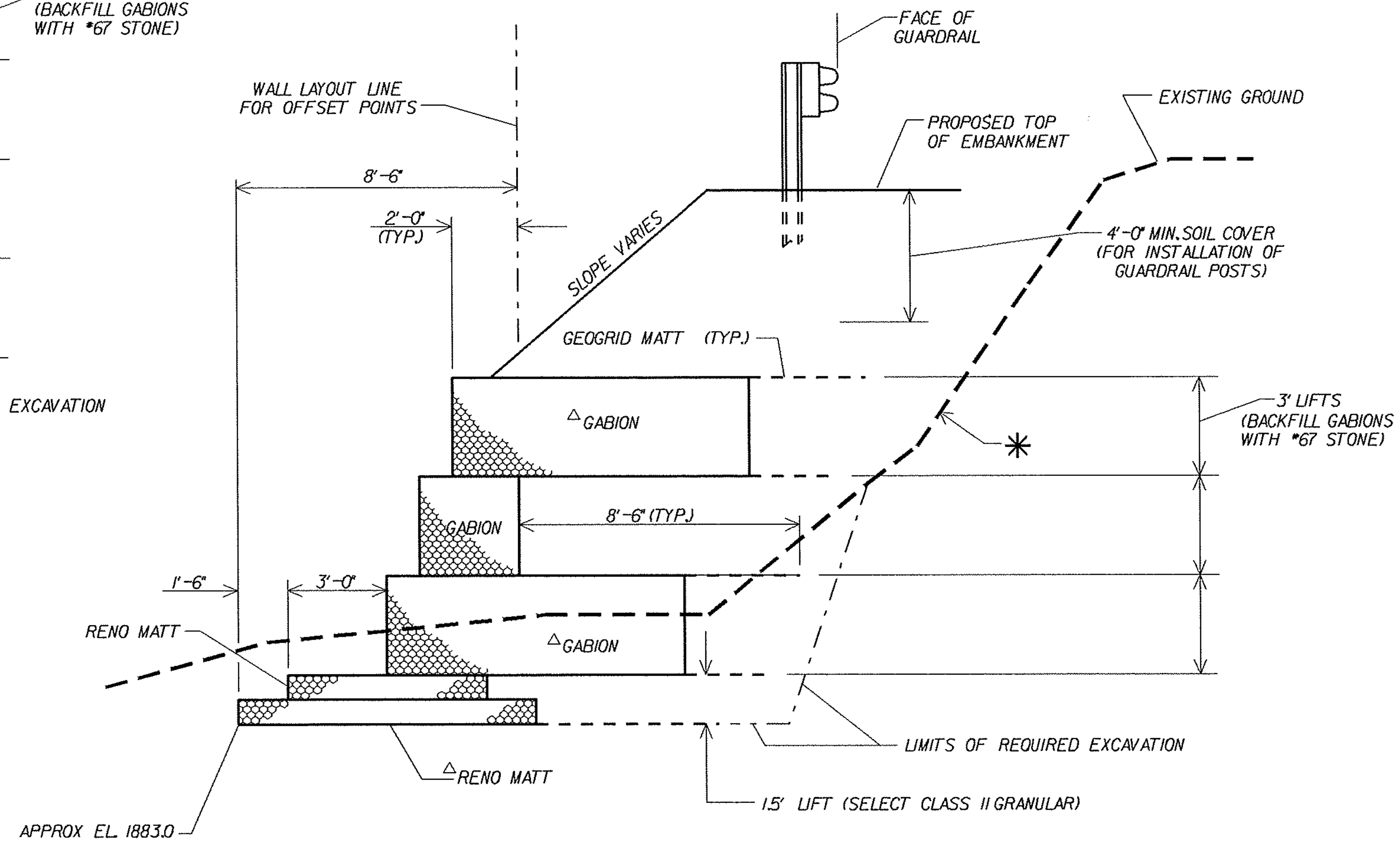
PROJECT REFERENCE NO.	SHEET NO.
SF-49110	D4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CONSTRUCTION SEQUENCE:

- LAYOUT WALL LOCATION ALONG CURVE OF WALL.
- EXCAVATE DOWN TO ELEVATION 1883.0 AND INSTALL ANY SHORING THAT MIGHT BE NECESSARY.
- PLACE AND FILL WITH STONE BOTTOM LEVEL RENO MATTS ACCORDING TO WALL ELEVATION DESIGN. KEY INTO SLOPE RENO MATTS AS SHOWN ON PLANS.
- BACKFILL RENO MATTS WITH SELECT CLASS II GRANULAR.
- PLACE GEO-GRID AND ATTACH TO RENO MATTS.
- PLACE NEXT LEVEL OF RENO MATTS AND ATTACH TO BOTTOM LAYER. FILL MATTS WITH STONE.
- REPEAT SAME PROCESS WITH GABIONS UNTIL DESIRED LEVEL IS ACHIEVED.



TYPICAL SECTION THRU WALL



SECTION A-A THRU WALL

SHOWING RENO MATTS AND GABIONS KEYED INTO SLOPE

NOTES:

- GABIONS ARE TO FILLED WITH CLASS A RIP RAP AS DIRECTED BY THE ENGINEER.

✳ EXISTING SLOPE THAT HAS BEEN CLEARED AND GRUBBED TO BE OVERLAID WITH GEO-FABRIC TO AID IN SLOPE STABILIZATION

△GABIONS OR RENO MATTS THAT ARE KEYED INTO SLOPE

REVISIONS

8/17/99

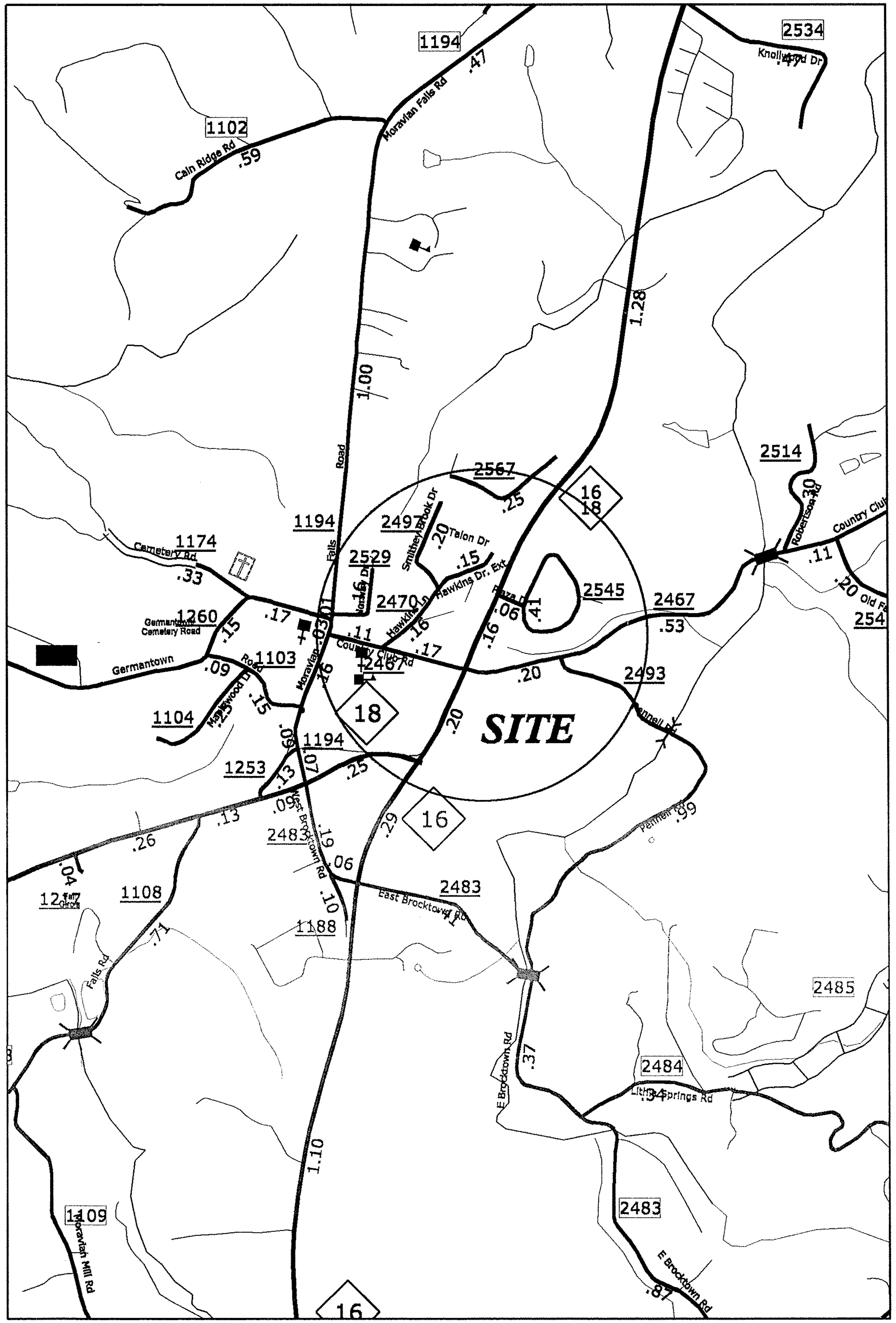
27-APR-2012 08:24
S:\Dist3\rdy\Wilkes_Hwy 16-18\hwy16-18_xsc_dist3.dgn

8/17/99

REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
HWY 16-18 TURN LANE	EC 1
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

VICITITY MAP



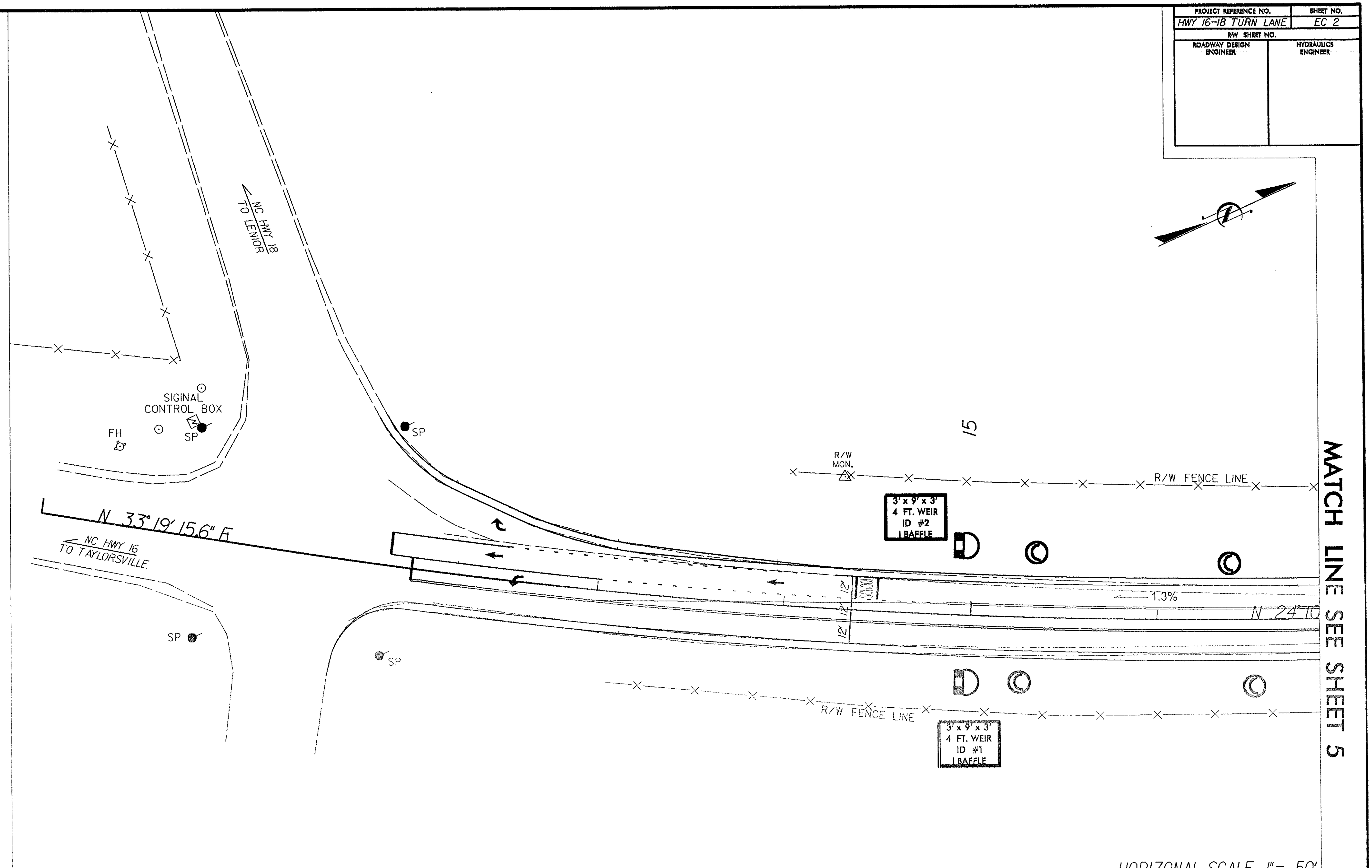
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WILKES COUNTY

EROSION CONTROL PLANS FOR NC HWY 16-18 TURN LANE

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	

PROJECT REFERENCE NO.	SHEET NO.
HWY 16-18 TURN LANE	EC 2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



HORIZONAL SCALE 1" = 50'

MATTING IS REQUIRED FOR DITCH LINE

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS OF THE TIME CLEARING AND GRUBBING BEGINS.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

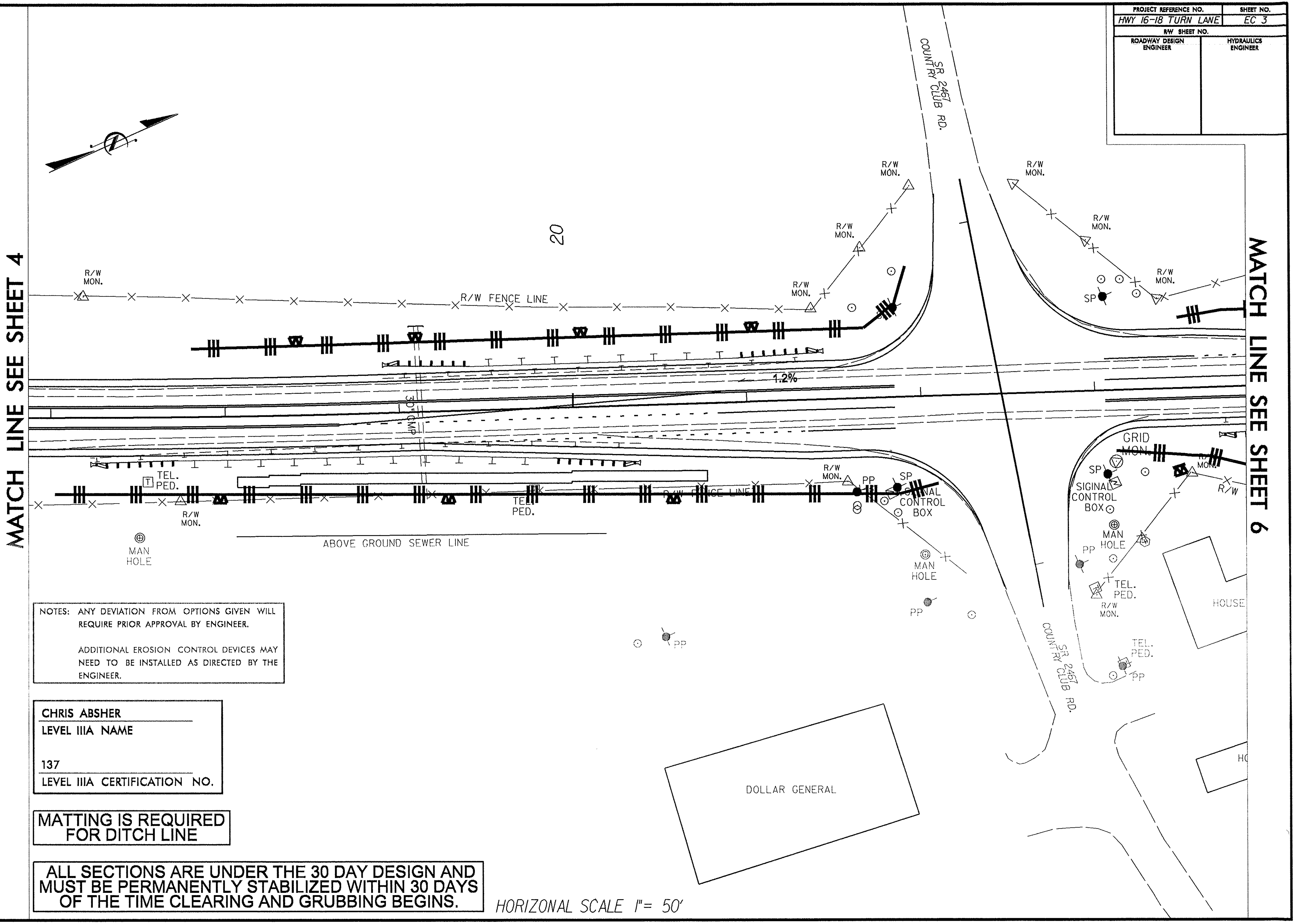
CHRIS ABSHER
LEVEL IIIA NAME

137
LEVEL IIIA CERTIFICATION NO.

REVISIONS

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
HWY 16-18 TURN LANE	EC 3
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

CHRIS ABSHER
LEVEL IIIA NAME

137
LEVEL IIIA CERTIFICATION NO.

MATTING IS REQUIRED FOR DITCH LINE

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS OF THE TIME CLEARING AND GRUBBING BEGINS.

HORIZONAL SCALE 1" = 50'

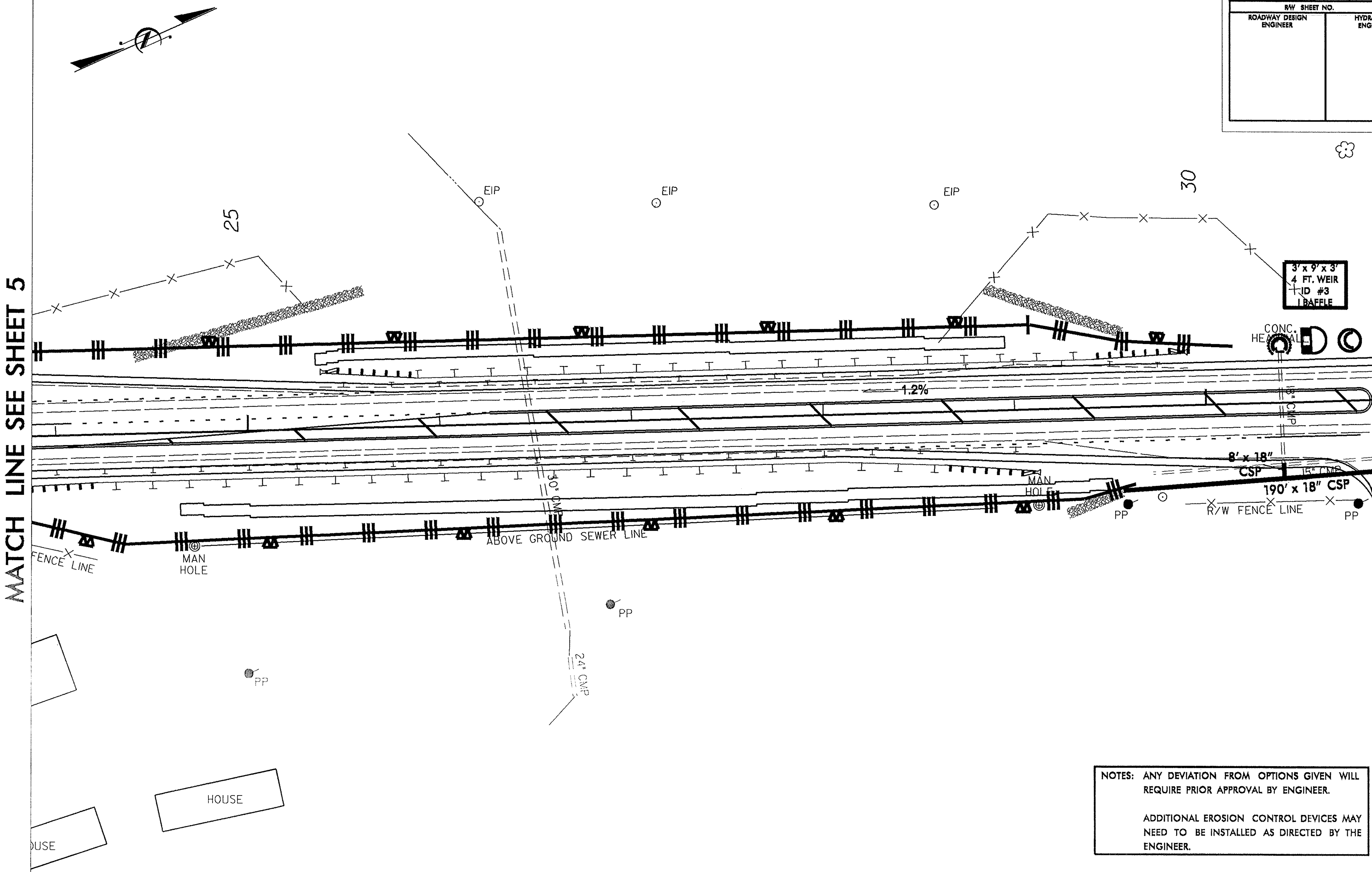
8/17/99

REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
HWY 16-18 TURN LANE	EC 4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS



NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS OF THE TIME CLEARING AND GRUBBING BEGINS.

MATTING IS REQUIRED FOR DITCH LINE

HORIZONAL SCALE 1" = 50'

CHRIS ABSHER
LEVEL IIIA NAME

137
LEVEL IIIA CERTIFICATION NO.

PROJECT REFERENCE NO.	SHEET NO.
HWY 16-18 TURN LANE	7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

MATCH LINE SEE SHEET 6

MATCH LINE SEE SHEET 8

35

EIP

R/W MON.

CONC. DRAINAGE DITCH

1.2%

1.2%

PP

3' x 3' x 3'
4 FT. WEIR
ID #4
I BAFFLE

MAN HOLE

TEL. PED.

MAN HOLE

R/W MON.

EIP

PP

R/W FENCE LINE

PP

METAL CANOPY

STORE BUILDING

SR 2545
PLAZA DR.

MATTING IS REQUIRED FOR DITCH LINE

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS OF THE TIME CLEARING AND GRUBBING BEGINS.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

HORIZONAL SCALE 1"= 50'

CHRIS ABSHER
LEVEL IIIA NAME

137
LEVEL IIIA CERTIFICATION NO.

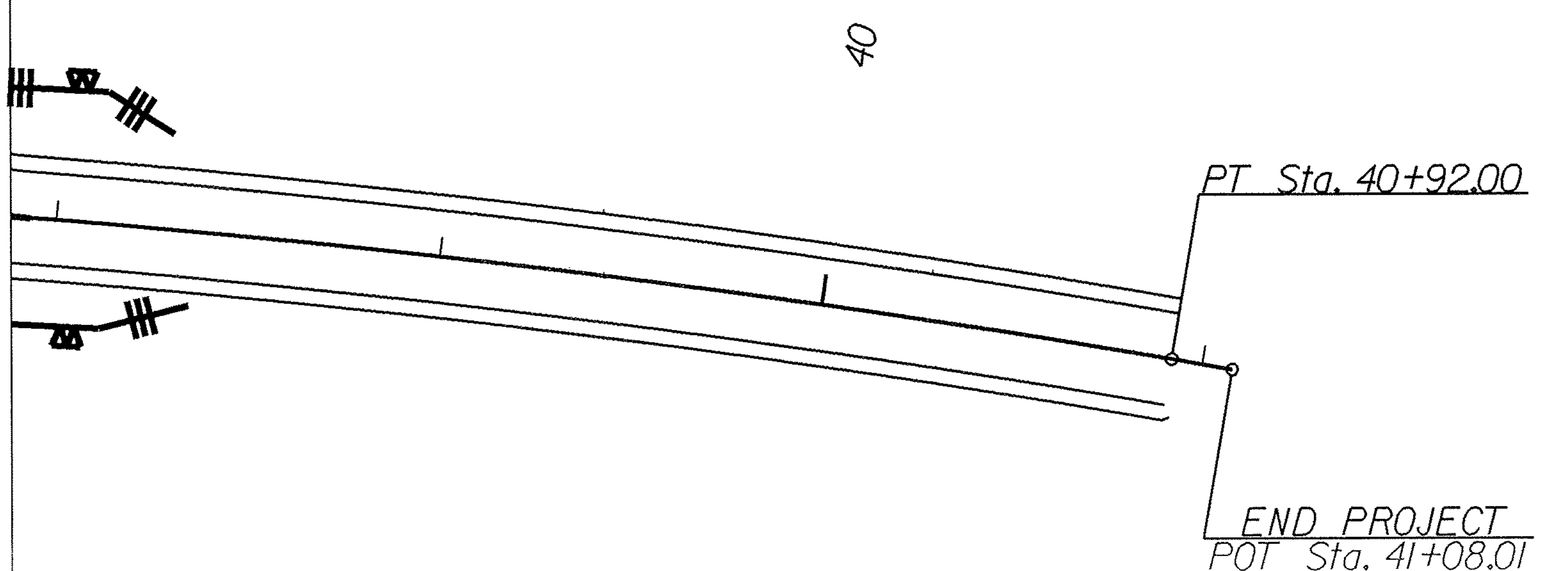
01-MAR-2012 08:13
R:\New_Proj\16-18\16-18_EC.dsn, dis:2, 083011.dgn

PROJECT REFERENCE NO.	SHEET NO.
HWY 16-18 TURN LANE	EC 6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

REVISIONS

8/17/99

MATCH LINE SEE SHEET 7



NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

MATTING IS REQUIRED FOR DITCH LINE

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS OF THE TIME CLEARING AND GRUBBING BEGINS.

HORIZONAL SCALE 1" = 50'

CHRIS ABSHER
LEVEL IIIA NAME

137
LEVEL IIIA CERTIFICATION NO.

01-MAR-2012 11:14
R:\New_Rdy_Post_02132012\Wilkes_Hwy 16-18\16-18_EC_dsn_dist3_083011.dgn