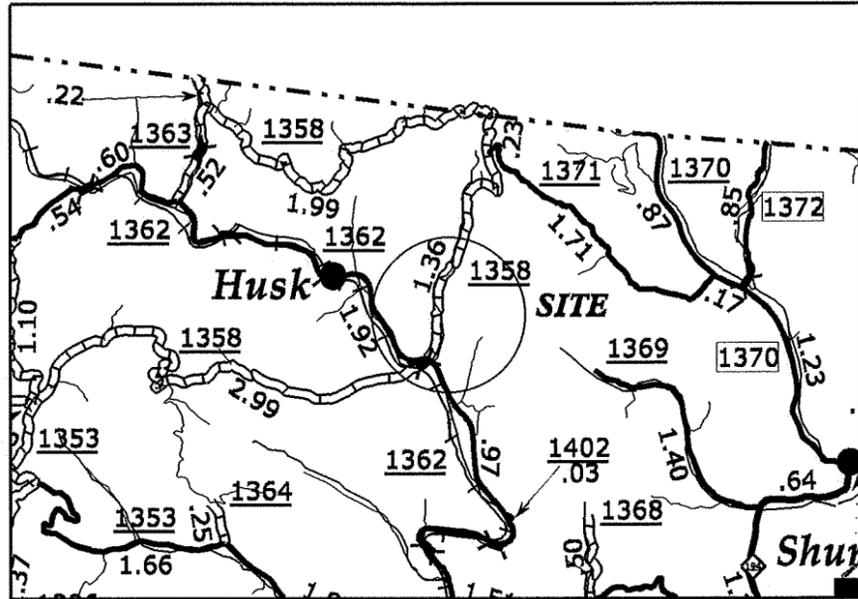


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 ciadams AT D:\CAD-251323

**TIP PROJECT:**

**CONTRACT:**

VICINITY MAP



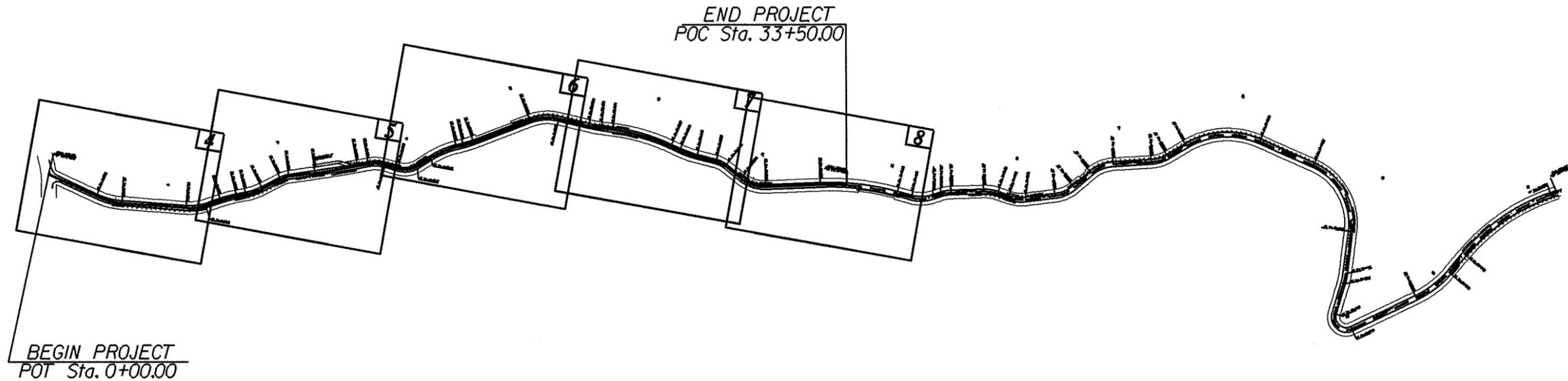
STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS

**ASHE COUNTY**

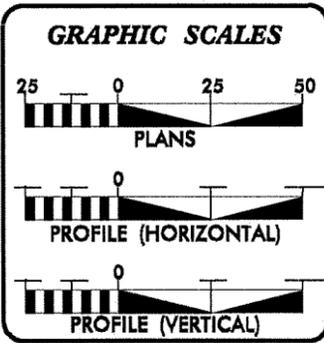
**LOCATION: FROM THE INTERSECTION OF SR 1362 BIG HORSE CREEK  
 0.63 MILE TO THE BEGINNING OF E-1 SECTION.**

**TYPE OF WORK: GRADE, DRAIN, BASE AND PAVE**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	11C.005081	1	8
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
11C.005081		CONSTRUCTION	



**SR 1358E BEAR WALLOW RD.  
 E-2 SECTION**



**DESIGN DATA**

ADT	=	
ADT	=	
DHV	=	%
D	=	%
T	=	%
V	=	MPH
TTST	=	DUAL
FUNC CLASS	=	
		TIER

**PROJECT LENGTH**

PROJECT LENGTH	=	0.63 MILE
----------------	---	-----------

PREPARED IN THE OFFICE OF:  
**DIVISION OF HIGHWAYS**  
 709 STATESVILLE RD. NORTH WILKESBORO, NC 28659

2012 STANDARD SPECIFICATIONS

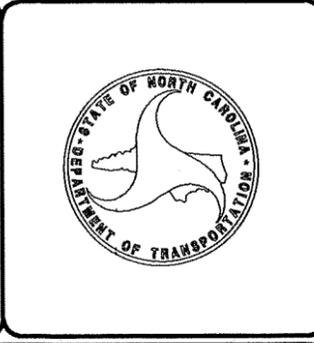
RIGHT OF WAY DATE:	MICHAEL A. PETTYJOHN, PE DIVISION ENGINEER
LETTING DATE:	DOUG J. TETZLAFF DISTRICT ENGINEER

**DRAWN BY:**

A. L. ADAMS

**FIELD WORK:**

J.R. HODGES  
 A.L. ADAMS  
 T.D. HAMILTON



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	○
Property Corner	✕
Property Monument	□
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	-v-l-b-
Proposed Wetland Boundary	-v-l-b-
Existing Endangered Animal Boundary	-e-a-b-
Existing Endangered Plant Boundary	-e-p-b-
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	○
Small Mine	✕
Foundation	▭
Area Outline	▭
Cemetery	⊕
Building	▭
School	▭
Church	▭
Dam	▭

## HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	▭
Jurisdictional Stream	-j-s-
Buffer Zone 1	-b-z-1-
Buffer Zone 2	-b-z-2-
Flow Arrow	←
Disappearing Stream	→
Spring	○
Wetland	⋈
Proposed Lateral, Tail, Head Ditch	▭
False Sump	▭

## RAILROADS:

Standard Gauge	-----
RR Signal Milepost	CSX TRANSPORTATION 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 R/W Marker	▭
Proposed Control of Access Line with Concrete C/A Marker	▭
Existing Control of Access	▭
Proposed Control of Access	▭
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
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	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	⊕
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	●
Recorded U/G Power Line	-----
Designated U/G Power Line (S.U.E.*)	-----

## TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Booth	⊕
Telephone Pedestal	⊕
Telephone Cell Tower	⊕
U/G Telephone Cable Hand Hole	-----
Recorded U/G Telephone Cable	-----
Designated U/G Telephone Cable (S.U.E.*)	-----
Recorded U/G Telephone Conduit	-----
Designated U/G Telephone Conduit (S.U.E.*)	-----
Recorded U/G Fiber Optics Cable	-----
Designated U/G Fiber Optics Cable (S.U.E.*)	-----

## WATER:

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

## TV:

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

## GAS:

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

## SANITARY SEWER:

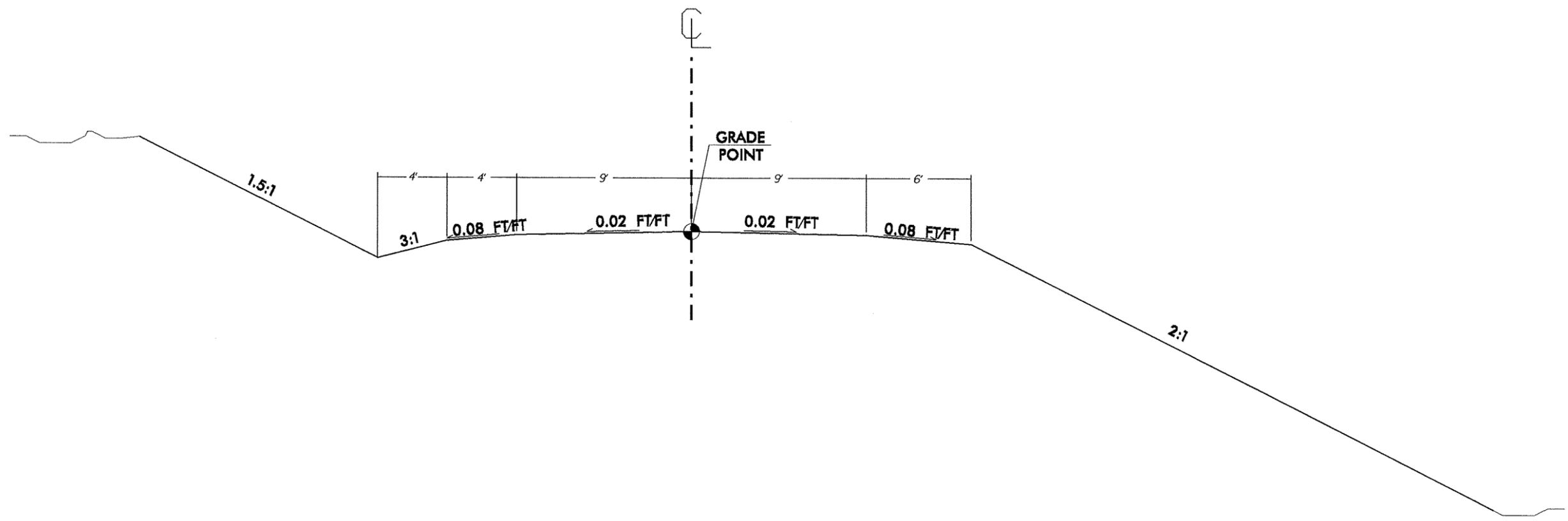
Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	-----
Above Ground Sanitary Sewer	A/G Sanitary Sewer
Recorded SS Forced Main Line	-----
Designated SS Forced Main Line (S.U.E.*)	-----

## MISCELLANEOUS:

Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	⊕
Utility Unknown U/G Line	-----
U/G Tank; Water, Gas, Oil	▭
Underground Storage Tank, Approx. Loc.	⊕
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.

PROJECT REFERENCE NO. 11C.005081	SHEET NO. 3
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# PROPOSED TYPICAL

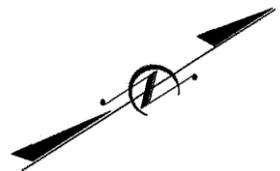


REVISIONS

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 Yellow\1358E\_Rdy\_dsp\_dist3\_3911.dgn

NOT TO SCALE

PROJECT REFERENCE NO. 11C.005081		SHEET NO. 4
RW SHEET NO.		HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER		



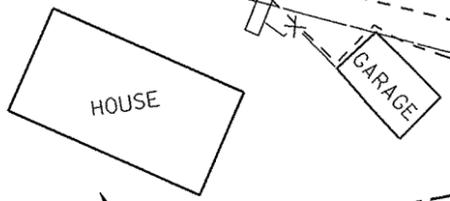
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BEGIN PROJECT  
POT Sta. 0+00.00

③  
EDDIE AND DONA  
GUY  
DB 282 PG 1321

PC Sta. 5+90.06

MATCH LINE SEE SHEET 5



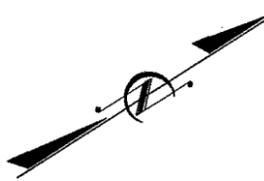
①  
TIMOTHY A. AND LISA ANN  
STAMPER  
DB 186 PG 1297

②  
NANCY D. WALKER (L/E)  
DB 401 PG 2337

④  
SYLVIA C. BAKER AND  
JAMES N. CARTER  
DB 392 PG 1261

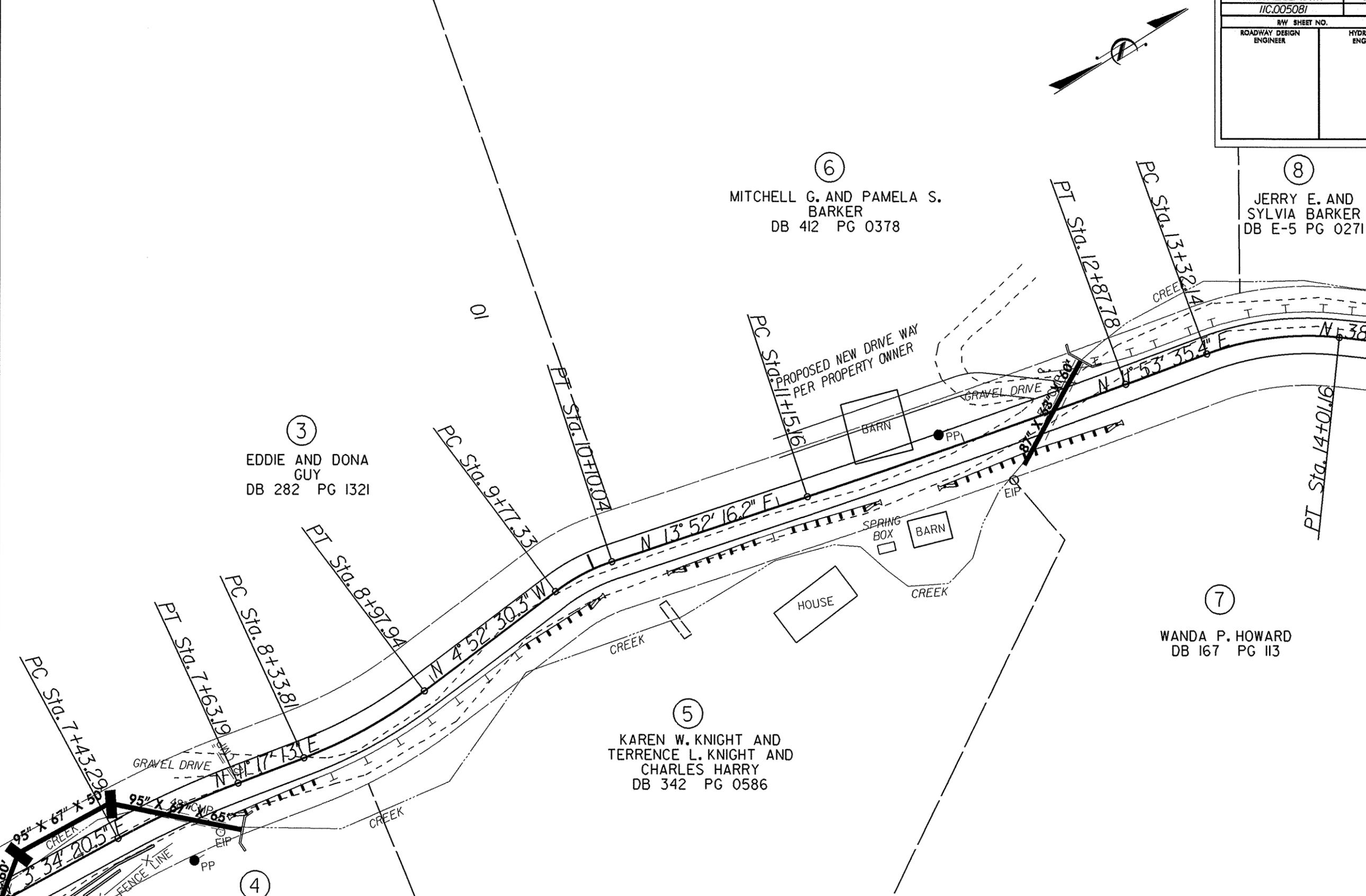
PI Sta 2+63.79	PI Sta 6+30.25
$\Delta = 20^\circ 27' 49.1''$ (LT)	$\Delta = 22^\circ 43' 16.0''$ (LT)
$D = 19^\circ 05' 54.9''$	$D = 28^\circ 38' 52.4''$
$L = 107.15'$	$L = 79.31'$
$T = 54.15'$	$T = 40.18'$
$R = 300.00'$	$R = 200.00'$

PROJECT REFERENCE NO. 11C.005081	SHEET NO. 5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCH LINE SEE SHEET 6

MATCH LINE SEE SHEET 4



PI Sta 7+53.24	PI Sta 8+65.99	PI Sta 9+93.83	PI Sta 12+01.48	PI Sta 13+67.27
$\Delta = 3^\circ 48' 00.2''$ (RT)	$\Delta = 12^\circ 14' 51.1''$ (LT)	$\Delta = 18^\circ 44' 46.6''$ (RT)	$\Delta = 1^\circ 58' 40.8''$ (LT)	$\Delta = 26^\circ 21' 43.6''$ (RT)
$D = 19^\circ 05' 54.9''$	$D = 19^\circ 05' 54.9''$	$D = 57^\circ 17' 44.8''$	$D = 1^\circ 08' 45.3''$	$D = 38^\circ 11' 49.9''$
$L = 19.90'$	$L = 64.13'$	$L = 32.72'$	$L = 172.61'$	$L = 69.02'$
$T = 9.95'$	$T = 32.19'$	$T = 16.51'$	$T = 86.31'$	$T = 35.13'$
$R = 300.00'$	$R = 300.00'$	$R = 100.00'$	$R = 5,000.00'$	$R = 150.00'$

④ SYLVIA C. BAKER AND JAMES N. CARTER  
DB 392 PG 1261

⑤ KAREN W. KNIGHT AND TERRENCE L. KNIGHT AND CHARLES HARRY  
DB 342 PG 0586

⑦ WANDA P. HOWARD  
DB 167 PG 113

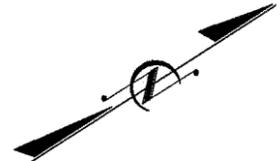
③ EDDIE AND DONA GUY  
DB 282 PG 1321

⑥ MITCHELL G. AND PAMELA S. BARKER  
DB 412 PG 0378

⑧ JERRY E. AND SYLVIA BARKER  
DB E-5 PG 0271

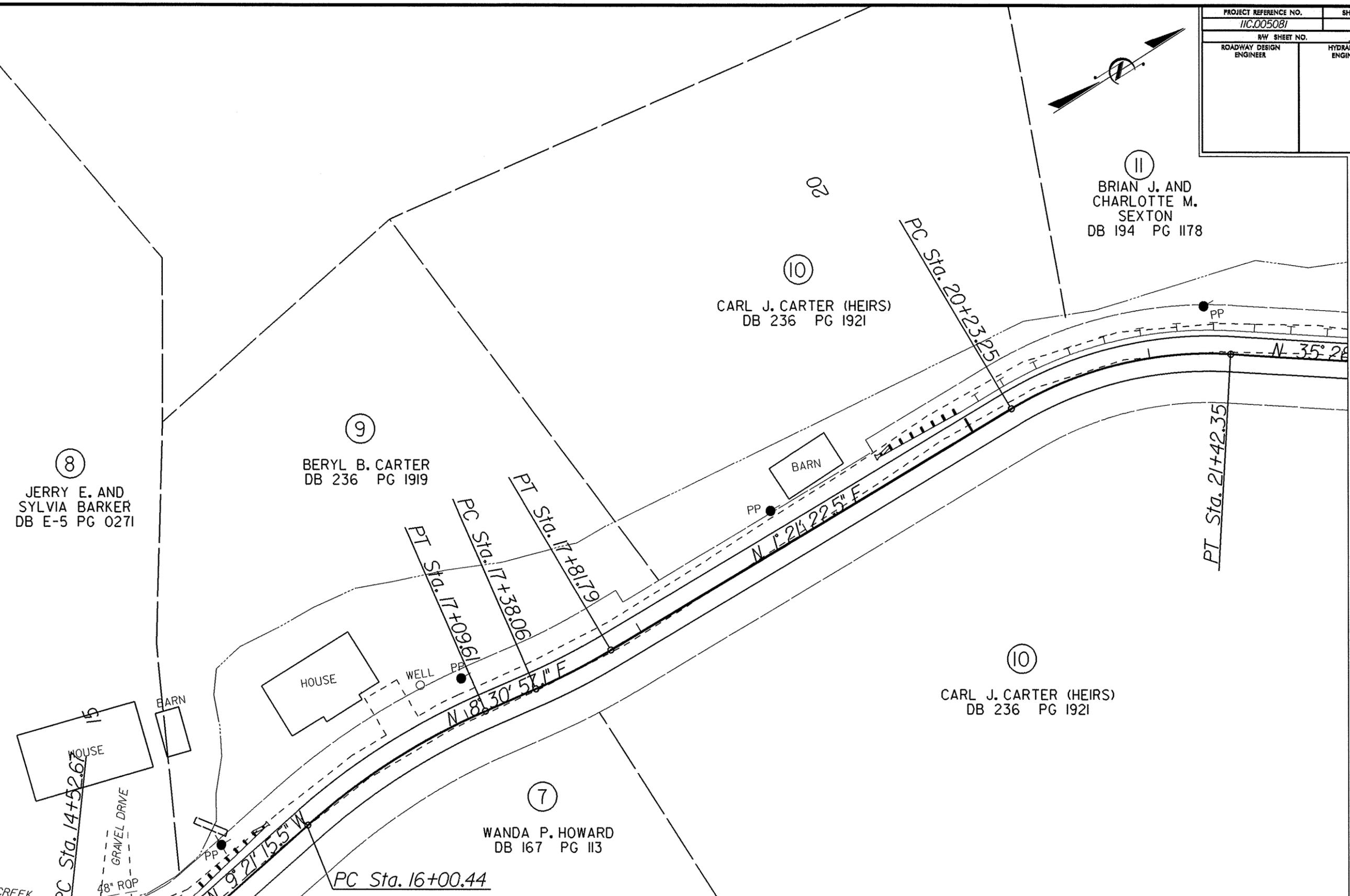
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REVISIONS  
8-MAY-2013 15:00  
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11C.005081.dgn

PROJECT REFERENCE NO. 11C.005081	SHEET NO. 6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCH LINE SEE SHEET 2

MATCH LINE SEE SHEET 4



8  
JERRY E. AND SYLVIA BARKER  
DB E-5 PG 0271

9  
BERYL B. CARTER  
DB 236 PG 1919

10  
CARL J. CARTER (HEIRS)  
DB 236 PG 1921

11  
BRIAN J. AND CHARLOTTE M. SEXTON  
DB 194 PG 1178

10  
CARL J. CARTER (HEIRS)  
DB 236 PG 1921

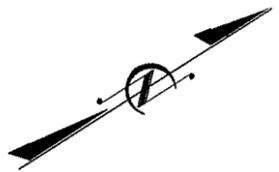
7  
WANDA P. HOWARD  
DB 167 PG 113

PI Sta 14+96.79 Δ = 47° 36' 34.5" (LT) D = 57° 17' 44.8" L = 83.09' T = 44.12' R = 100.00'	PI Sta 16+55.47 Δ = 17° 52' 12.6" (RT) D = 16° 22' 12.8" L = 109.16' T = 55.03' R = 350.00'	PI Sta 17+59.95 Δ = 7° 09' 34.5" (LT) D = 16° 22' 12.8" L = 43.74' T = 21.90' R = 350.00'	PI Sta 20+84.62 Δ = 34° 07' 20.1" (RT) D = 28° 38' 52.4" L = 119.11' T = 61.38' R = 200.00'
---	--	--	--

REVISIONS

2-MAY-2013 15:01 R:\New-Rel-Post-02132012\Ashe\SR 1358E-Beer-Vel\10x1358E\_Rdy-dsn\_d1.s3.3911.dgn.dgn

PROJECT REFERENCE NO.	SHEET NO.
IIC.005081	7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCH LINE SEE SHEET 3

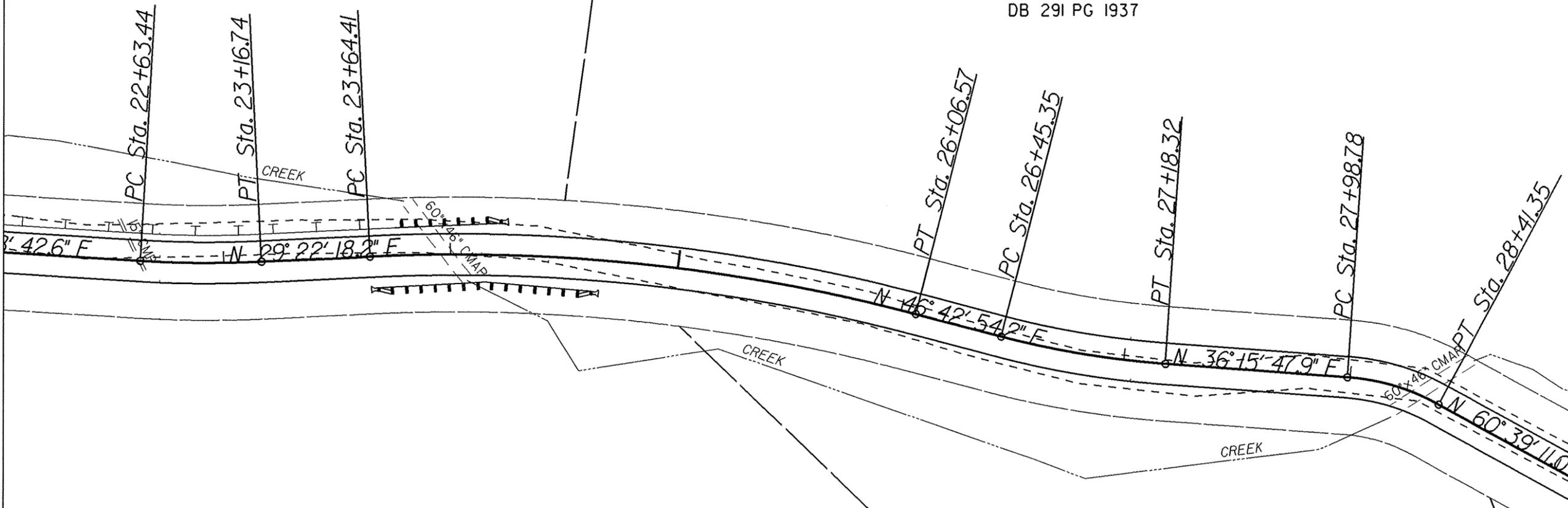
MATCH LINE SEE SHEET 5

11  
BRIAN J. AND CHARLOTTE M. SEXTON  
DB 194 PG 1178

12  
CHARLES RAY CARTER  
DB 291 PG 1937

10  
CARL J. CARTER (HEIRS)  
DB 236 PG 1921

13  
JANE C. OSBORNE  
DB 152 PG 1754

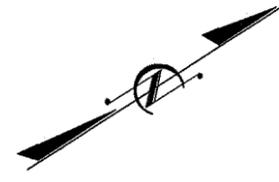


PI Sta 22+90.12	PI Sta 24+86.42	PI Sta 26+81.94	PI Sta 28+20.40
$\Delta = 6^\circ 06' 24.4''$ (LT)	$\Delta = 17^\circ 20' 36.0''$ (RT)	$\Delta = 10^\circ 27' 06.4''$ (LT)	$\Delta = 24^\circ 23' 23.2''$ (RT)
D = 11' 27' 33.0"	D = 7' 09' 43.1"	D = 14' 19' 26.2"	D = 57' 17' 44.8"
L = 53.29'	L = 242.16'	L = 72.97'	L = 42.57'
T = 26.67'	T = 122.01'	T = 36.59'	T = 21.61'
R = 500.00'	R = 800.00'	R = 400.00'	R = 100.00'

REVISIONS

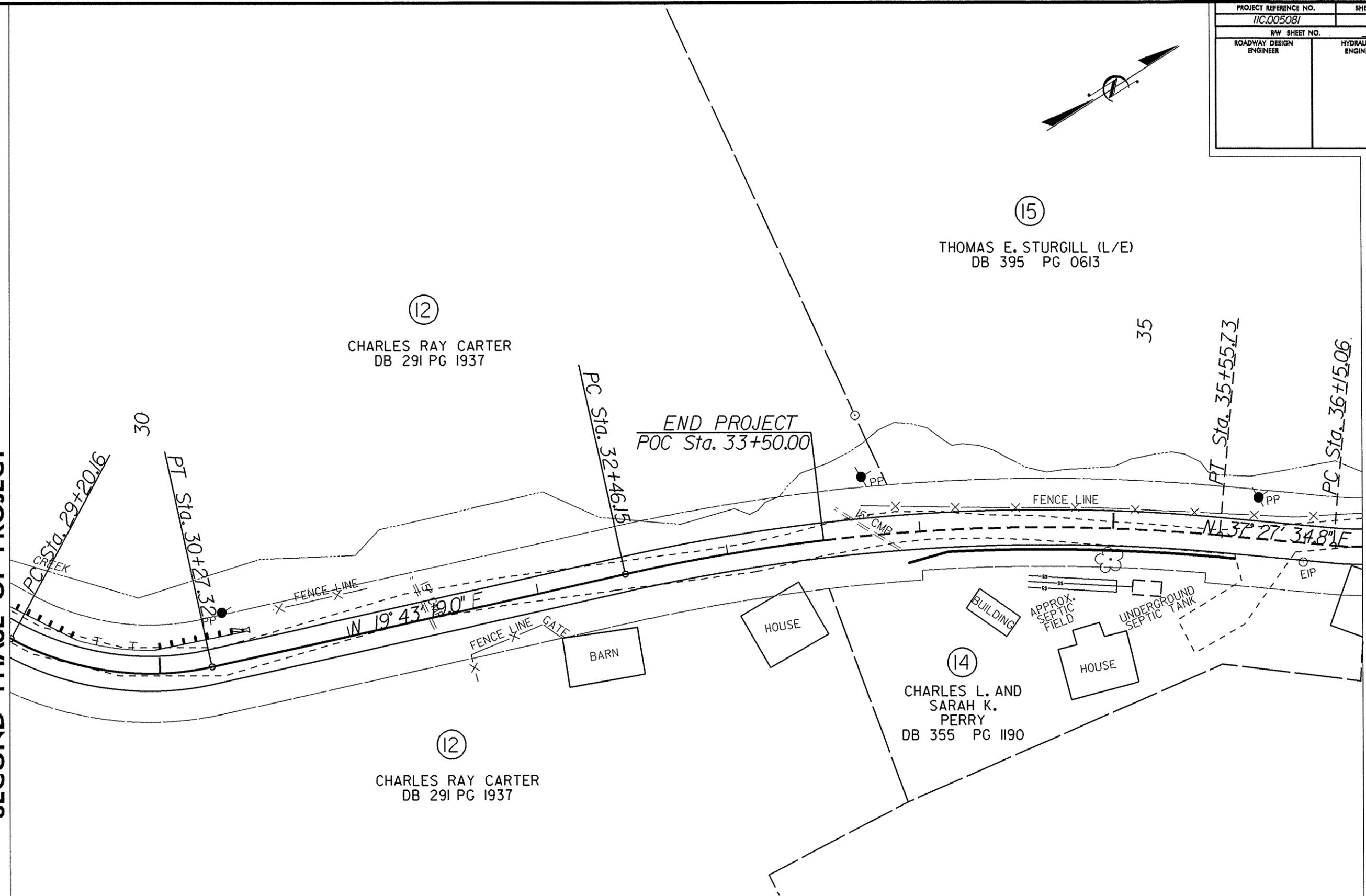
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PROJECT REFERENCE NO. 11C.005081	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



SECOND PHASE OF PROJECT

MATCH LINE SEE SHEET 5



(12)  
CHARLES RAY CARTER  
DB 291 PG 1937

(15)  
THOMAS E. STURGILL (L/E)  
DB 395 PG 0613

(14)  
CHARLES L. AND SARAH K. PERRY  
DB 355 PG 1190

(12)  
CHARLES RAY CARTER  
DB 291 PG 1937

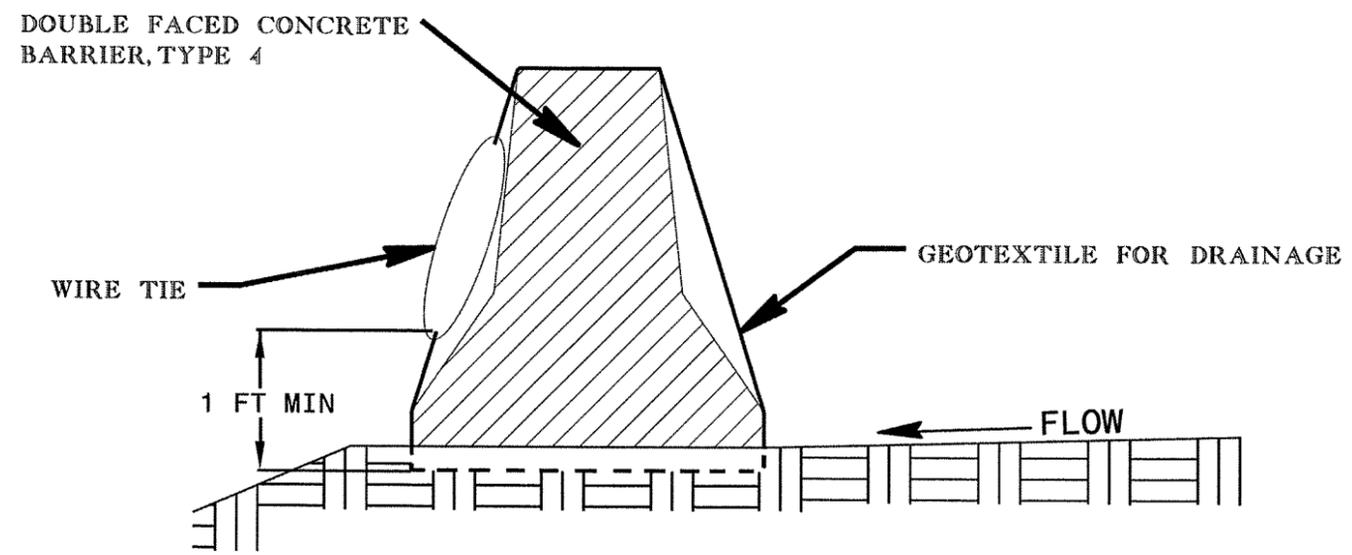
PI Sta 29+76.14	PI Sta 34+02.19	PI Sta 36+60.44
$\Delta = 40^\circ 55' 52.1''$ (LT)	$\Delta = 17^\circ 44' 15.9''$ (RT)	$\Delta = 33^\circ 40' 05.4''$ (LT)
$D = 38^\circ 11' 49.9''$	$D = 5^\circ 43' 46.5''$	$D = 38^\circ 11' 49.9''$
$L = 107.16'$	$L = 309.58'$	$L = 88.14'$
$T = 55.98'$	$T = 156.04'$	$T = 45.39'$
$R = 150.00'$	$R = 1,000.00'$	$R = 150.00'$

REVISIONS

8/17/99  
2-MAY-2013 15:03  
R:\New\_Road\_Post\_02132013\Ashe\SR 13518E-Beer-V\110x\13518E\_Rdy.dwg Dist 3 3911.dwg dgm  
110x\13518E\_Rdy.dwg Dist 3 3911.dwg dgm

PROJECT REFERENCE NO. X-XXXX	SHEET NO. EC-XX/CONST.XX
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# TEMPORARY CONCRETE BARRIER REINFORCED SILT FENCE



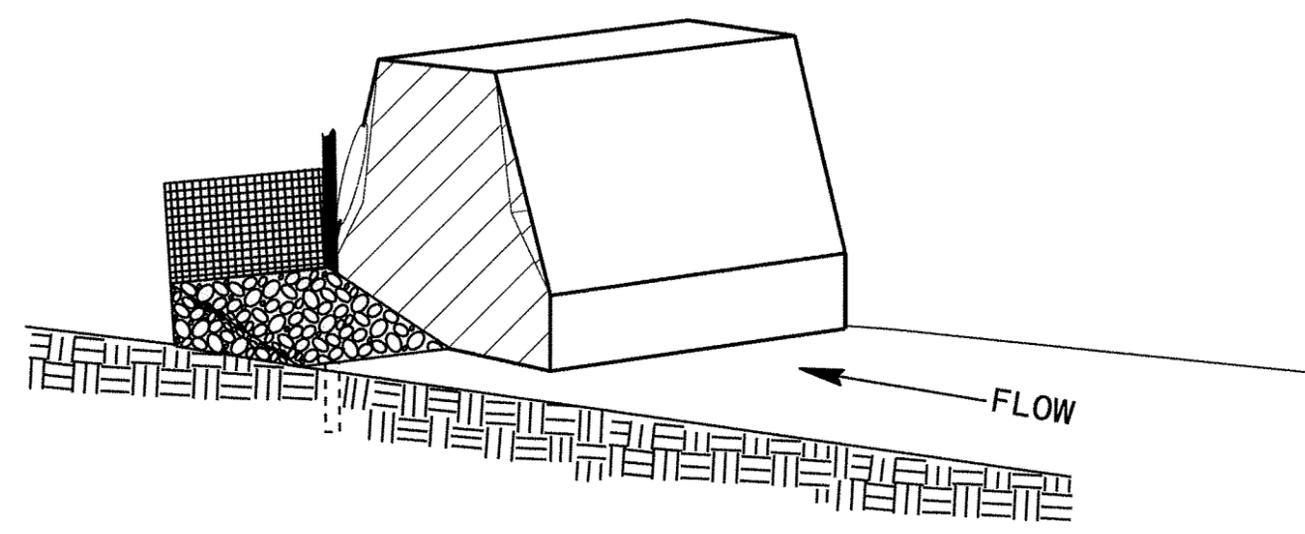
**GENERAL NOTES:**

CLEAR STONE OR OTHER OBSTRUCTION TO CREATE A SEAL BETWEEN GEOTEXTILE AND THE GROUND.

PLACE GEOTEXTILE IN LOCATIONS SHOWN OR AS DIRECTED. PLACE DOUBLE FACED CONCRETE BARRIER ON TOP OF GEOTEXTILE WITH A MINIMUM 1 FOOT FROM THE BACK EDGE.

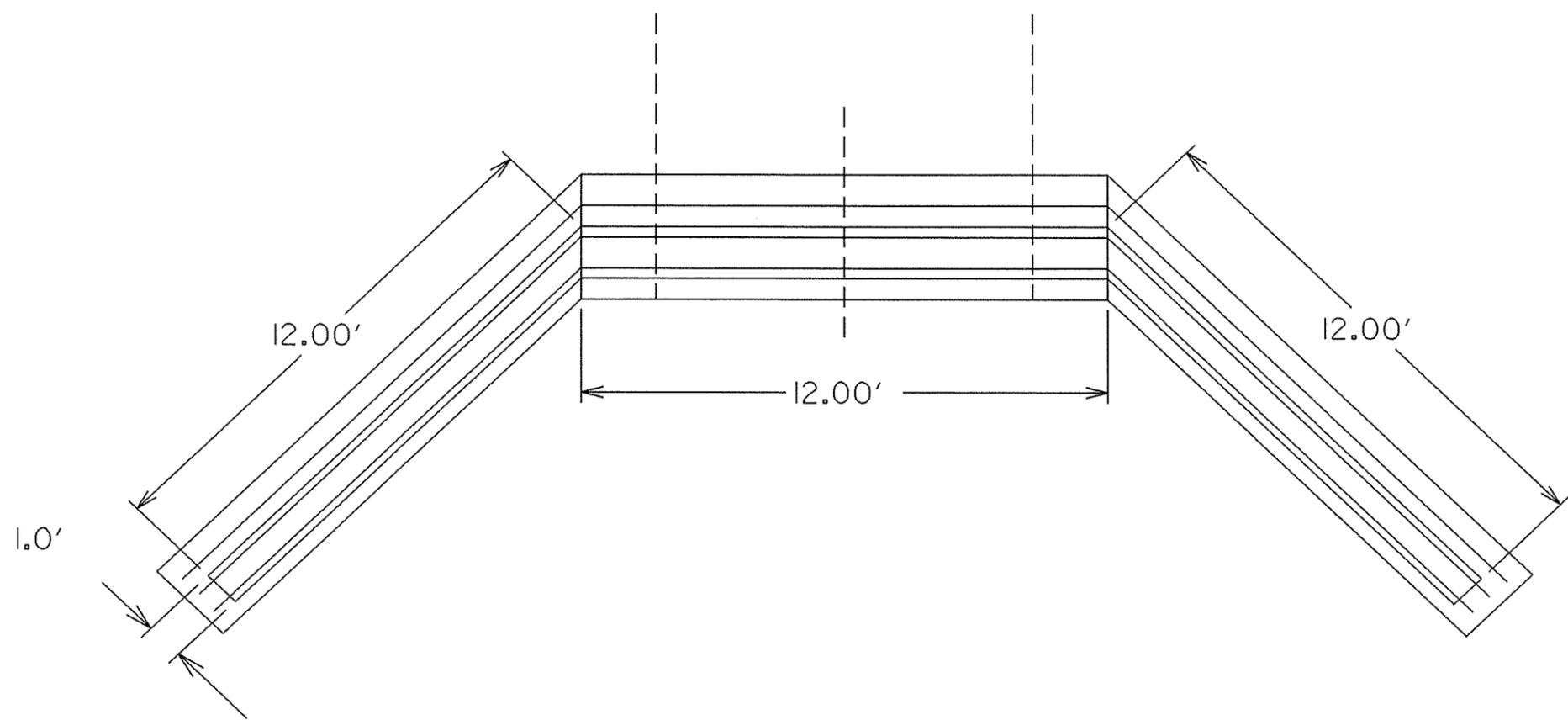
WRAP GEOTEXTILE AROUND CONCRETE BARRIER AND SECURE THE ENDS WITH A WIRE TIE OR OTHER APPROVED FASTENER.

ADD STONE FOR EROSION CONTROL AT JUNCTION OF TEMPORARY CONCRETE BARRIER REINFORCED SILT FENCE AND SPECIAL SEDIMENT CONTROL FENCE TO KEEP RUNOFF FROM PASSING DIRECTLY THROUGH ANY GAPS.





REVISIONS



**PLAN VIEW OF ENDWALL**

**NOTE: REBAR SPACINGS ARE SHOWN ON PROFILE VIEW OF PROPOSED PIPE.**

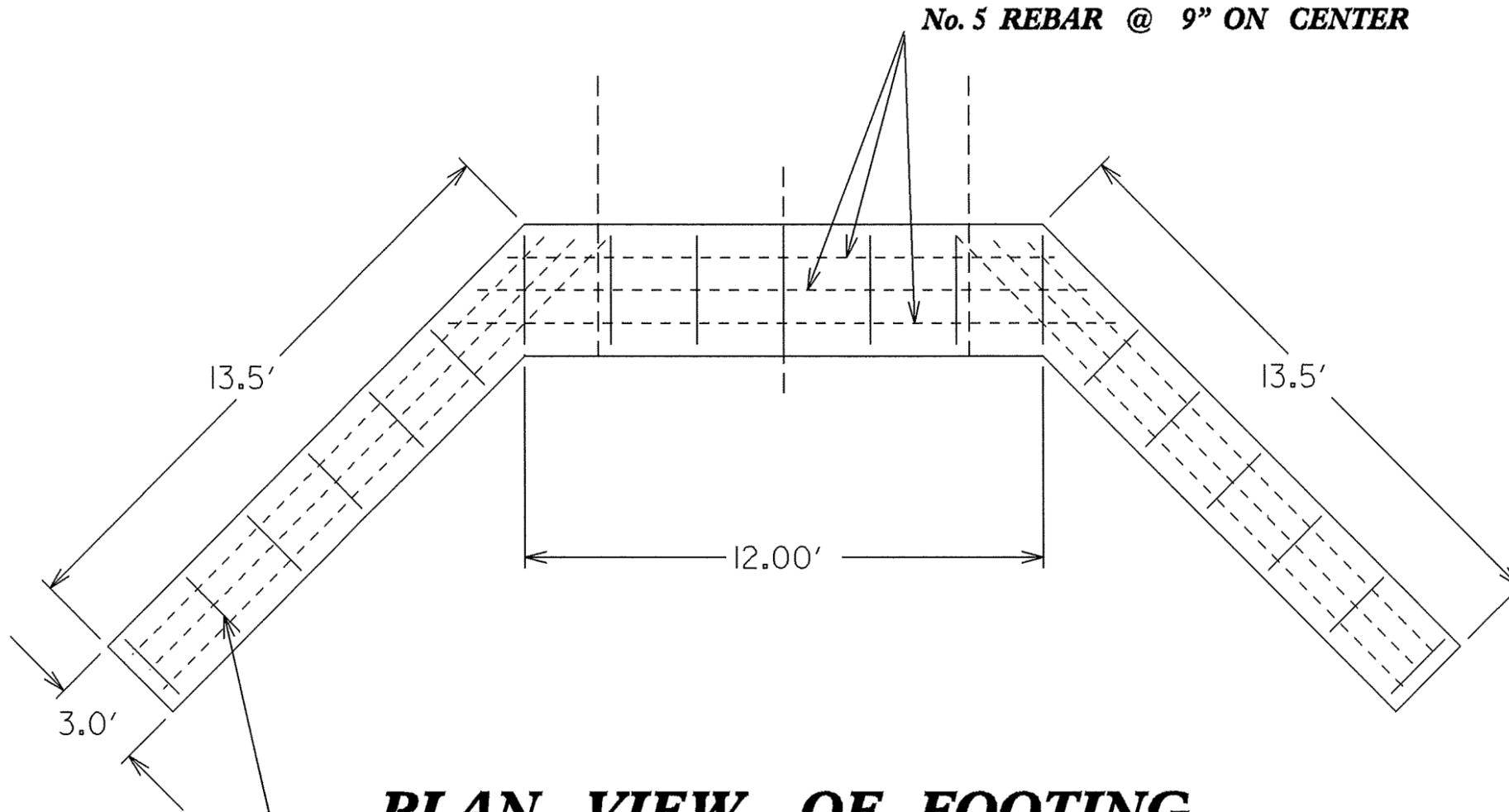
**STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
DIVISION II DISTRICT OFFICE**

**ASHE COUNTY**

**PIPE REPLACEMENT  
60' X 87" X 63" W/ENDWALLS  
HEADWALL W/(2) VARIABLE DEGREE WINGWALLS  
ADJUST WING WALL ANGLE TO MATCH STREAM  
BANK AS DIRECTED BY ENGINEER**

REVISIONS

27-MAY-2013 13:42 R:\New\_Rdy\_Poss\_02132012\Ashe\SR 1358E-Bear Yellow\_Endwall Footing planview.dwg 195X67.dgn



### **PLAN VIEW OF FOOTING**

**APPROXIMATELY 36' LONG BY 3' WIDE BY 2.5' DEEP**

**No. 5 REBAR @ 2' CENTERS**

**STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
DIVISION II DISTRICT OFFICE**

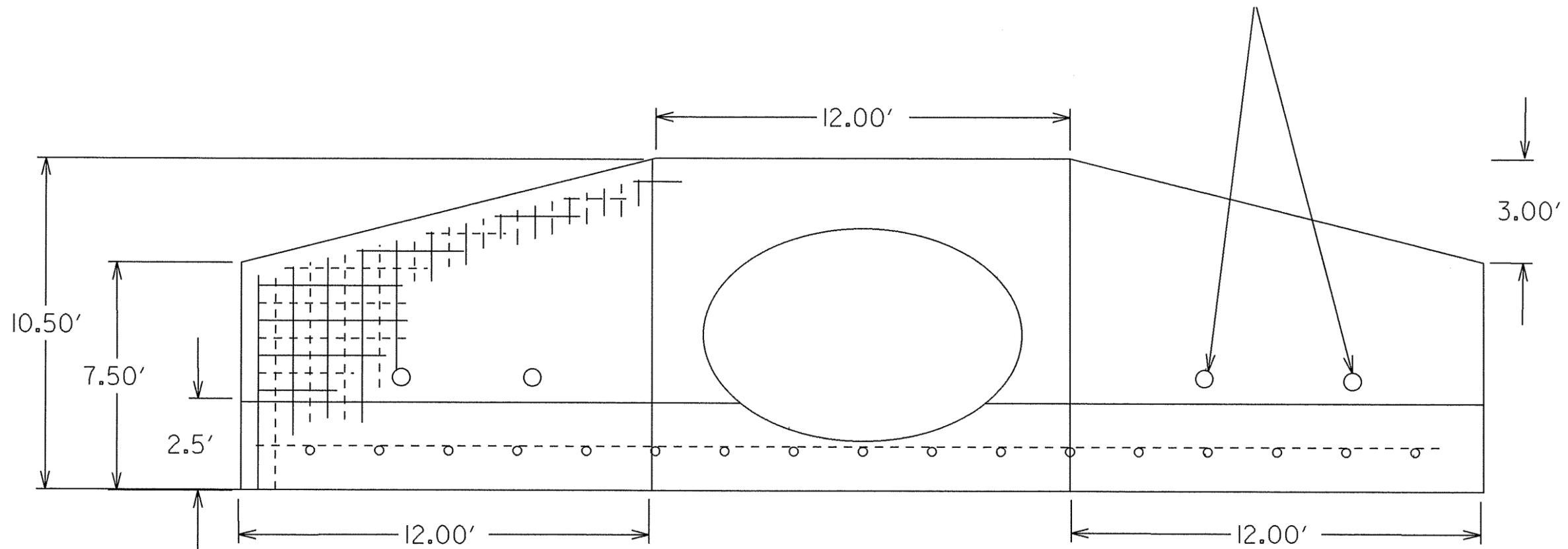
**ASHE COUNTY**

**NOTE: PIPE SHOULD BE PLACED AT 1' BELOW STREAMBED THEREFORE FOOTING SHOULD BE BUILT TO ACCOMADATE THIS ELEVATION CHANGE. REBAR FOR FOOTING SHOULD ALSO INCLUDE VERTICAL STEEL FOR ENDWALL. REBAR SHALL BE PLACED AT CENTER DEPTH OF FOOTING, WHICH SHOULD BE AT APPROXIMATELY 15".**

**PIPE REPLACEMENT  
60' X 87" X 63" W/ENDWALLS  
HEADWALL W/(2) VARIABLE DEGREE WINGWALLS  
ADJUST WING WALL ANGLE TO MATCH STREAM  
BANK AS DIRECTED BY ENGINEER**

# PROFILE VIEW OF ENDWALL

WEEP HOLES SHALL BE 3" IN DIAMETER  
AND LOCATED 8" ABOVE WATER LEVEL.



**NOTES:** HEADWALL AND WINGWALL SHALL BE CONSTRUCTED AT 1' THICK.  
No. 5 REBAR SHALL BE USED TO REINFORCE THE ENTIRE STRUCTURE.  
VERTICAL AND HORIZONTAL STEEL MUST BE PLACED TO ALLOW 2" MINIMUM COVER.  
THIS MAY BE COMPLETED BY PLACING STEEL INSIDE TO INSIDE  
WHEN CONNECTING TO FOOTING.  
THE FIRST HORIZONTAL BAR SHALL BE PLACED 4" FROM THE TOP OF FOOTING.  
REBAR IS TO BE SPACED AT 12" ON CENTER USING A STAGGERING PATTERN  
FROM FRONT TO BACK (THERE SHOULD BE STEEL EVERY 6").  
EDGES SHALL BE CHAMFERED.

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
DIVISION 11 DISTRICT OFFICE

ASHE COUNTY

PIPE REPLACEMENT

60' X 87" X 63" W/ENDWALLS

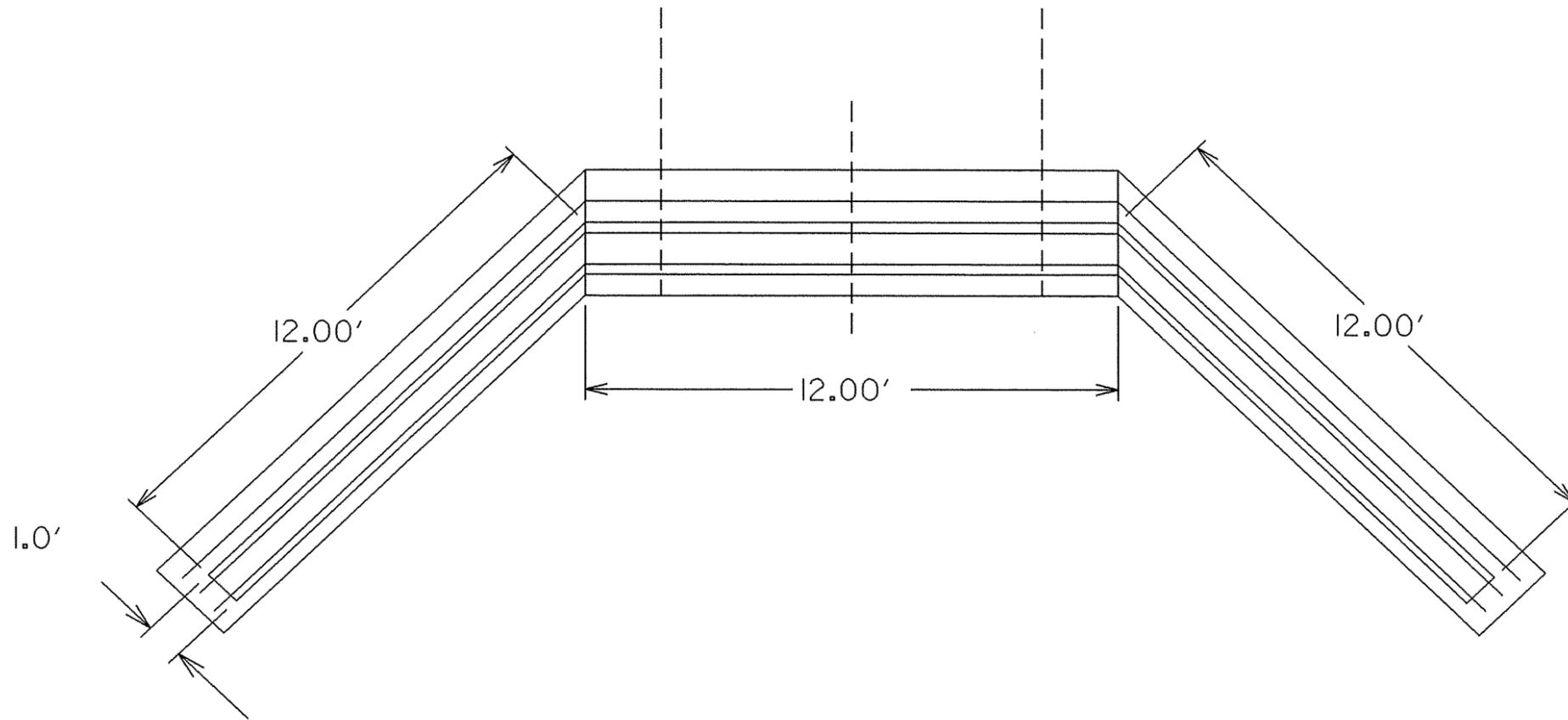
HEADWALL W/(2) VARIABLE DEGREE WINGWALLS  
ADJUST WING WALL ANGLE TO MATCH STREAM  
BANK AS DIRECTED BY ENGINEER

8/17/99

REVISIONS

23-MAY-2013 13:47  
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At: H:\P\11-251323

REVISIONS



**PLAN VIEW OF ENDWALL**

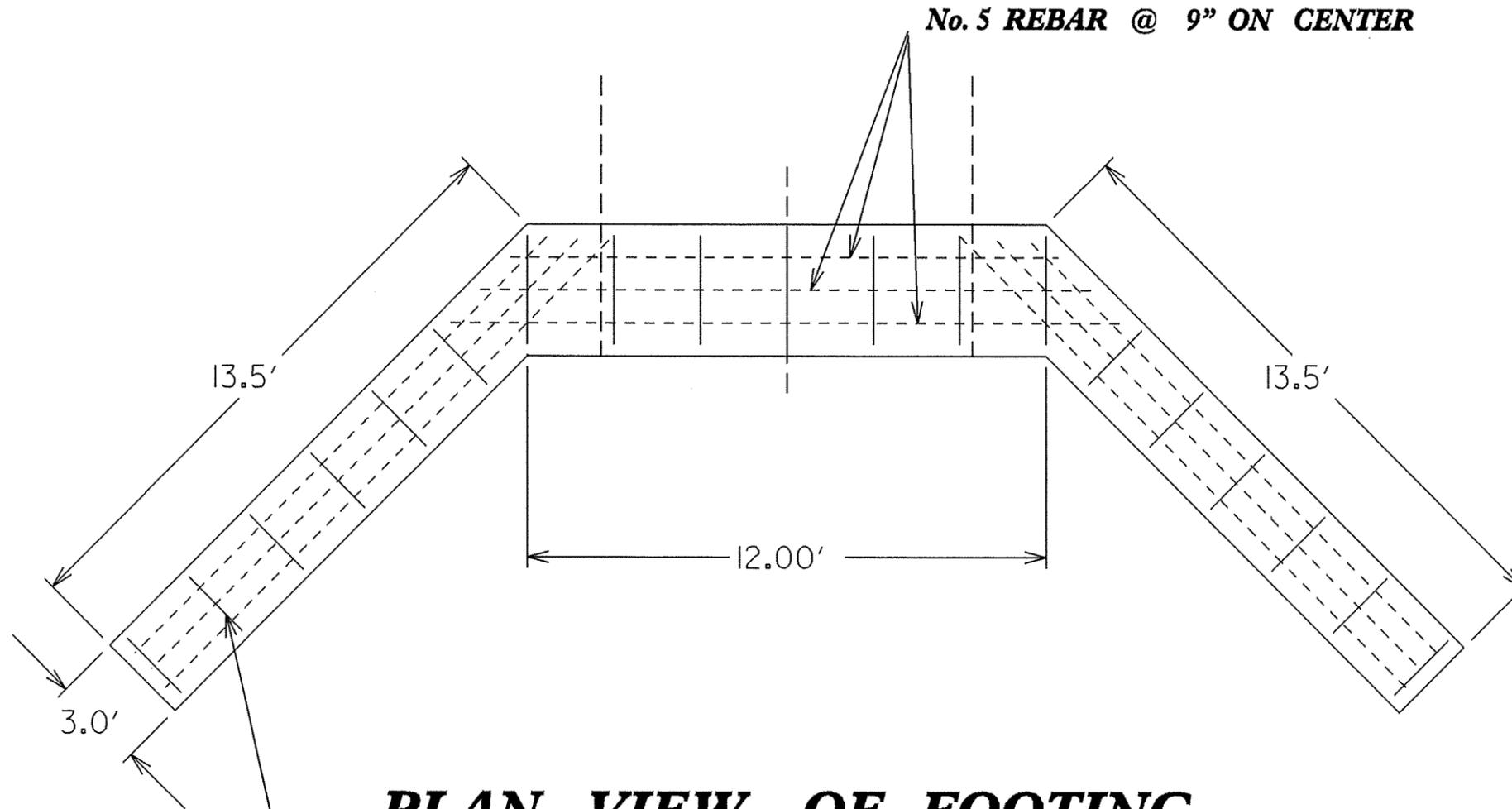
**NOTE: REBAR SPACINGS ARE SHOWN ON PROFILE VIEW OF PROPOSED PIPE.**

**STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
DIVISION II DISTRICT OFFICE**

**ASHE COUNTY**

**PIPE REPLACEMENT  
65' X 95" X 67" W/ENDWALLS  
HEADWALL W/(2) VARIABLE DEGREE WINGWALLS  
ADJUST WING WALL ANGLE TO MATCH STREAM  
BANK AS DIRECTED BY ENGINEER**

REVISIONS



### **PLAN VIEW OF FOOTING**

**APPROXIMATELY 36' LONG BY 3' WIDE BY 2.5' DEEP**

**No. 5 REBAR @ 2' CENTERS**

**STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
DIVISION II DISTRICT OFFICE**

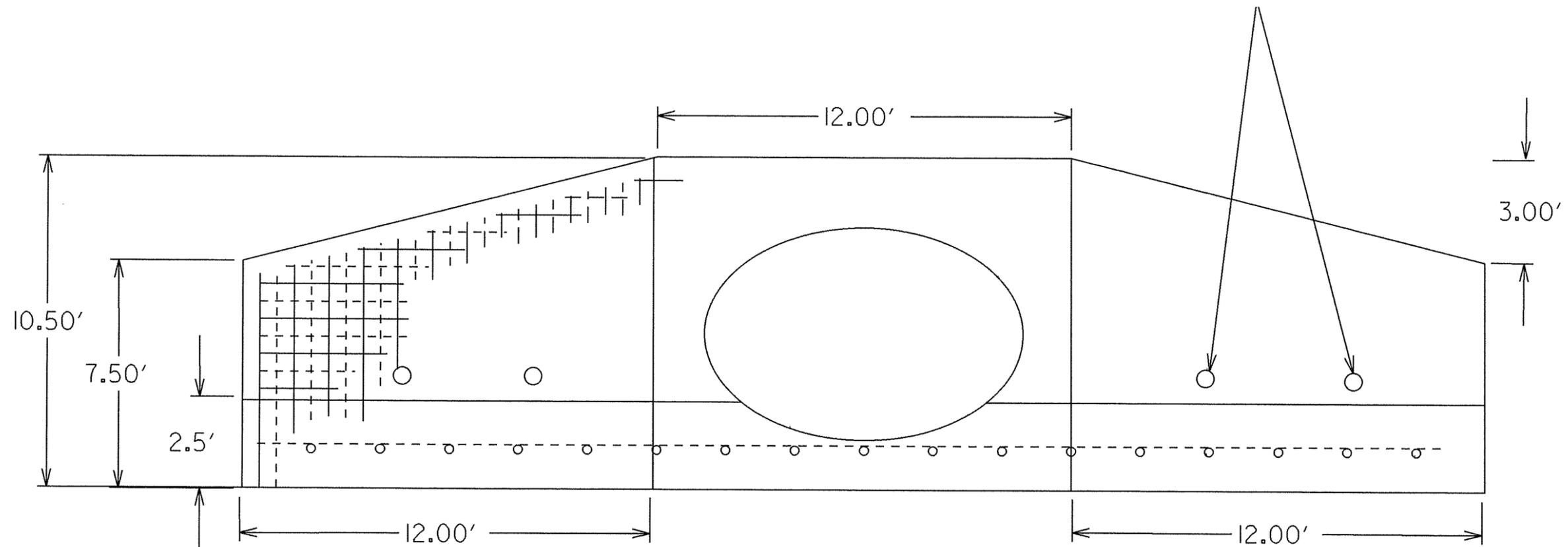
**ASHE COUNTY**

**NOTE: PIPE SHOULD BE PLACED AT 1' BELOW STREAMBED THEREFORE FOOTING SHOULD BE BUILT TO ACCOMADATE THIS ELEVATION CHANGE. REBAR FOR FOOTING SHOULD ALSO INCLUDE VERTICAL STEEL FOR ENDWALL. REBAR SHALL BE PLACED AT CENTER DEPTH OF FOOTING, WHICH SHOULD BE AT APPROXIMATELY 15".**

**PIPE REPLACEMENT  
65' X 95" X 67" W/ENDWALLS  
HEADWALL W/(2) VARIABLE DEGREE WINGWALLS  
ADJUST WING WALL ANGLE TO MATCH STREAM  
BANK AS DIRECTED BY ENGINEER**

# PROFILE VIEW OF ENDWALL

**WEEP HOLES SHALL BE 3" IN DIAMETER  
AND LOCATED 8" ABOVE WATER LEVEL.**



**NOTES:** HEADWALL AND WINGWALL SHALL BE CONSTRUCTED AT 1' THICK.  
 No. 5 REBAR SHALL BE USED TO REINFORCE THE ENTIRE STRUCTURE.  
 VERTICAL AND HORIZONTAL STEEL MUST BE PLACED TO ALLOW 2" MINIMUM COVER.  
 THIS MAY BE COMPLETED BY PLACING STEEL INSIDE TO INSIDE  
 WHEN CONNECTING TO FOOTING.  
 THE FIRST HORIZONTAL BAR SHALL BE PLACED 4" FROM THE TOP OF FOOTING.  
 REBAR IS TO BE SPACED AT 12" ON CENTER USING A STAGGERING PATTERN  
 FROM FRONT TO BACK (THERE SHOULD BE STEEL EVERY 6").  
 EDGES SHALL BE CHAMFERED.

**STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION II DISTRICT OFFICE**

**ASHE COUNTY**

**PIPE REPLACEMENT**

**65" X 95" X 67" W/ENDWALLS**

**HEADWALL W/(2) VARIABLE DEGREE WINGWALLS  
 ADJUST WING WALL ANGLE TO MATCH STREAM  
 BANK AS DIRECTED BY ENGINEER**

REVISIONS

8/17/99

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