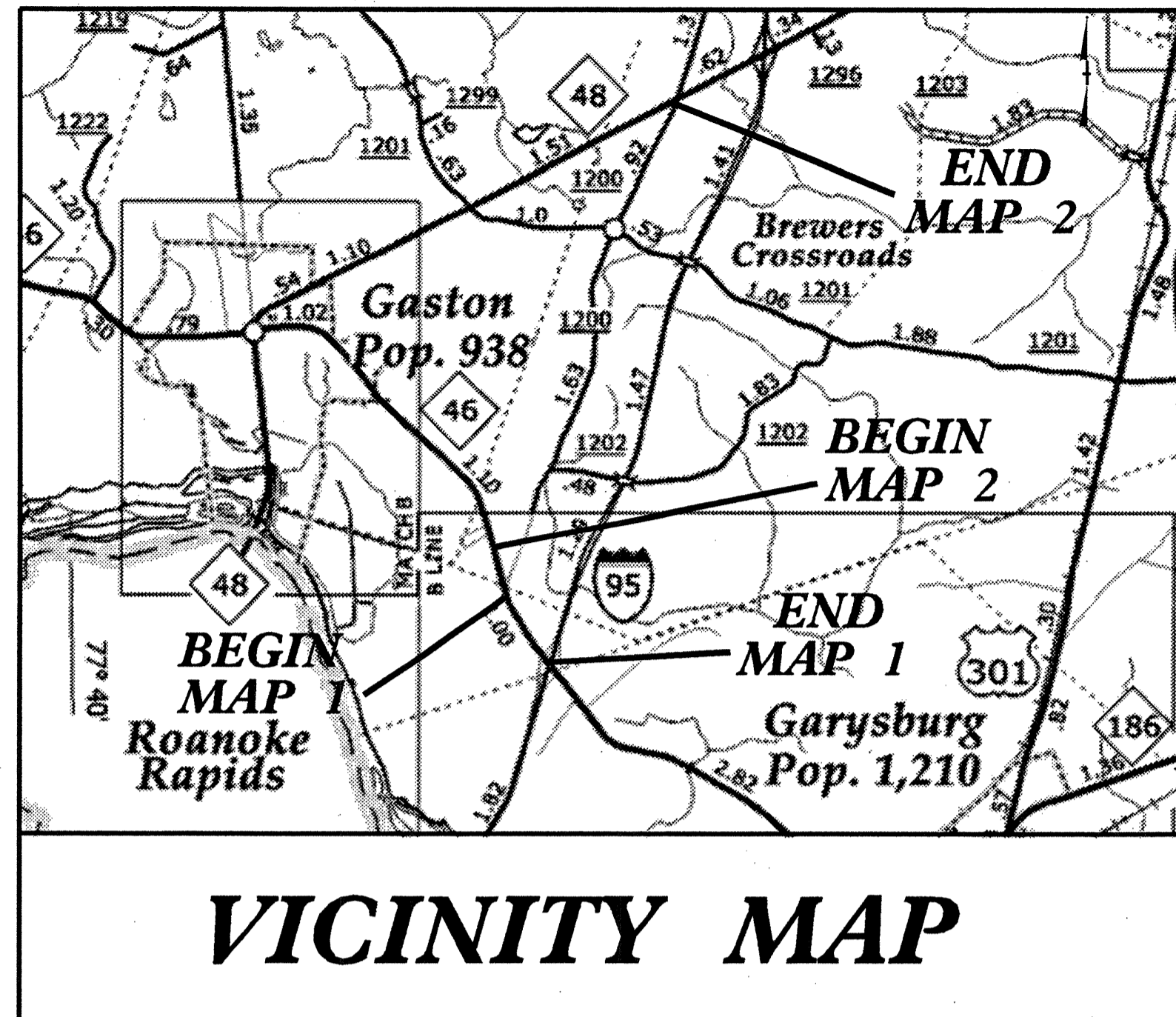


CONTRACT: C203056 **TIP PROJECT: W-5016 & R-5519**

See Sheet 1-A For Index of Sheets



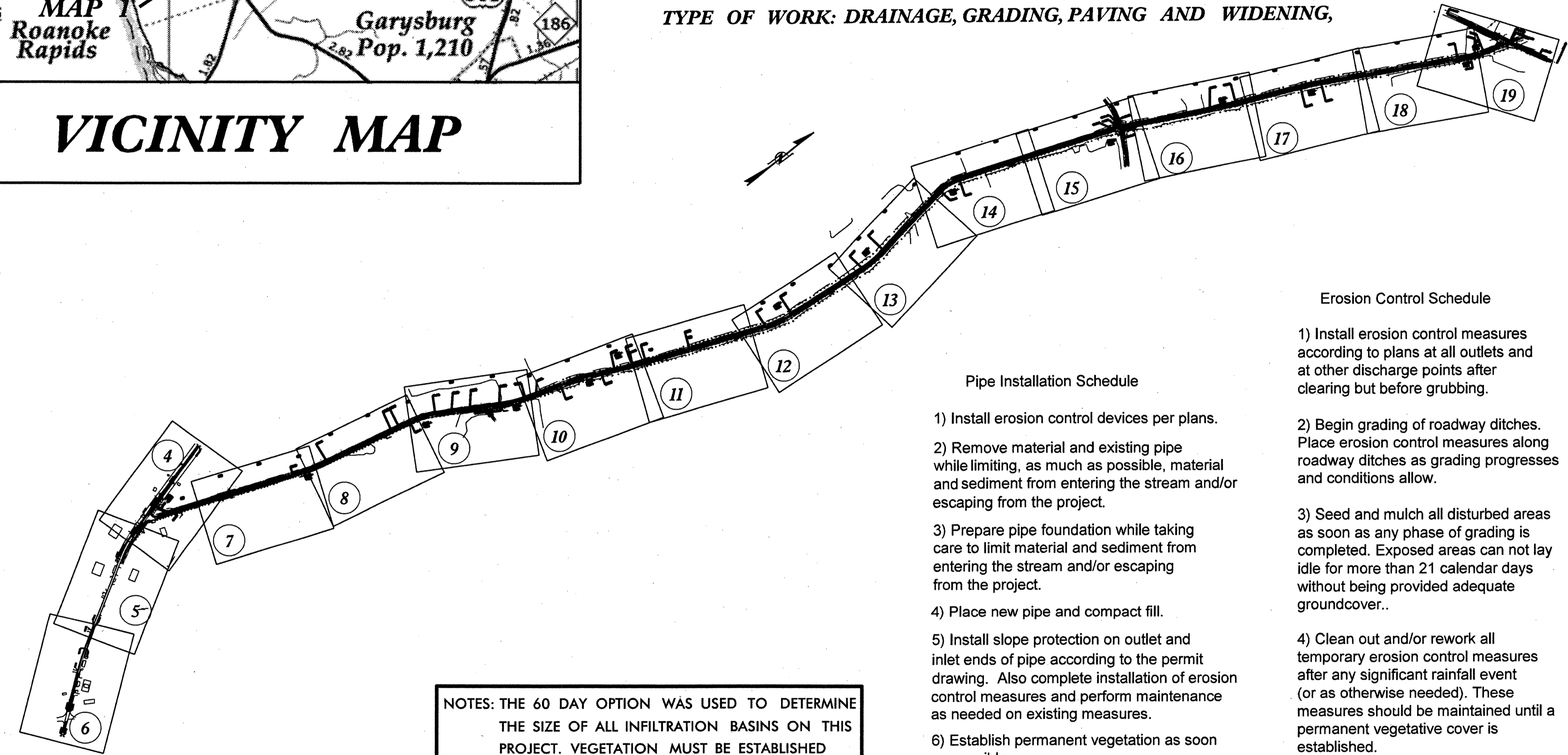
STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

 PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

NORTHAMPTON COUNTY

**LOCATION: NC 46 FROM I-95 SOUTHBOUND RAMPS TO WEST OF SR 1200
 AND SR 1200 BETWEEN NC 46 AND NC 48**

TYPE OF WORK: DRAINAGE, GRADING, PAVING AND WIDENING,



**NOTES: THE 60 DAY OPTION WAS USED TO DETERMINE
 THE SIZE OF ALL INFILTRATION BASINS ON THIS
 PROJECT. VEGETATION MUST BE ESTABLISHED
 WITHIN 60 DAYS IN THESE AREAS.**

Pipe Installation Schedule

- 1) Install erosion control devices per plans.
- 2) Remove material and existing pipe while limiting, as much as possible, material and sediment from entering the stream and/or escaping from the project.
- 3) Prepare pipe foundation while taking care to limit material and sediment from entering the stream and/or escaping from the project.
- 4) Place new pipe and compact fill.
- 5) Install slope protection on outlet and inlet ends of pipe according to the permit drawing. Also complete installation of erosion control measures and perform maintenance as needed on existing measures.
- 6) Establish permanent vegetation as soon as possible.

Erosion Control Schedule

- 1) Install erosion control measures according to plans at all outlets and at other discharge points after clearing but before grubbing.
- 2) Begin grading of roadway ditches. Place erosion control measures along roadway ditches as grading progresses and conditions allow.
- 3) Seed and mulch all disturbed areas as soon as any phase of grading is completed. Exposed areas can not lay idle for more than 21 calendar days without being provided adequate groundcover.
- 4) Clean out and/or rework all temporary erosion control measures after any significant rainfall event (or as otherwise needed). These measures should be maintained until a permanent vegetative cover is established.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5016 & R-5519	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
41831.1.1	STP-0046(6)	PE.	
41831.2.1		ROW, UTILITY	
41831.3.1		CONST.	
45535.1.1		PE.	
45535.2.1		ROW, UTILITY	
45535.3.1		CONST.	

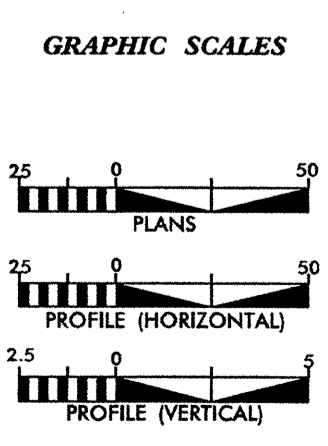
EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	---
1630.05	Temporary Diversion	---
1605.01	Temporary Silt Fence	---
1606.01	Special Sediment Control Fence	---
1622.01	Temporary Berms and Slope Drains	---
1630.02	Silt Basin Type B	---
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 / Coir Fiber Wattle	---
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	---
1634.01	Temporary Rock Sediment Dam Type-A	---
1634.02	Temporary Rock Sediment Dam Type-B	---
1635.01	Rock Pipe Inlet Sediment Trap Type-A	---
1635.02	Rock Pipe Inlet Sediment Trap Type-B	---
1630.04	Stilling Basin	---
1630.06	Special Stilling Basin	---
	Rock Inlet Sediment Trap:	
1632.01	Type A	---
1632.02	Type B	---
1632.03	Type C	---
	Skimmer Basin	---
	Tiered Skimmer Basin	---
	Infiltration Basin	---

**THIS PROJECT CONTAINS
 EROSION CONTROL PLANS
 FOR DITCH RELOCATION
 PHASE OF CONSTRUCTION.**

**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.**



**LEVEL III-A:
 DESIGNER OF
 EROSION AND
 SEDIMENT CONTROL
 PLANS**

D. Heath Stallings

**CERTIFICATION
 NUMBER: 290**

**THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY
 WITH THE REGULATIONS SET FORTH BY THE
 NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011
 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND
 NATURAL RESOURCES DIVISION OF WATER QUALITY.**

Prepared In the Office of:
DIVISION OF HIGHWAYS
 113 Airport Rd.
 Edenton, NC 27932

2012 STANDARD SPECIFICATIONS

Roadway Standard Drawings

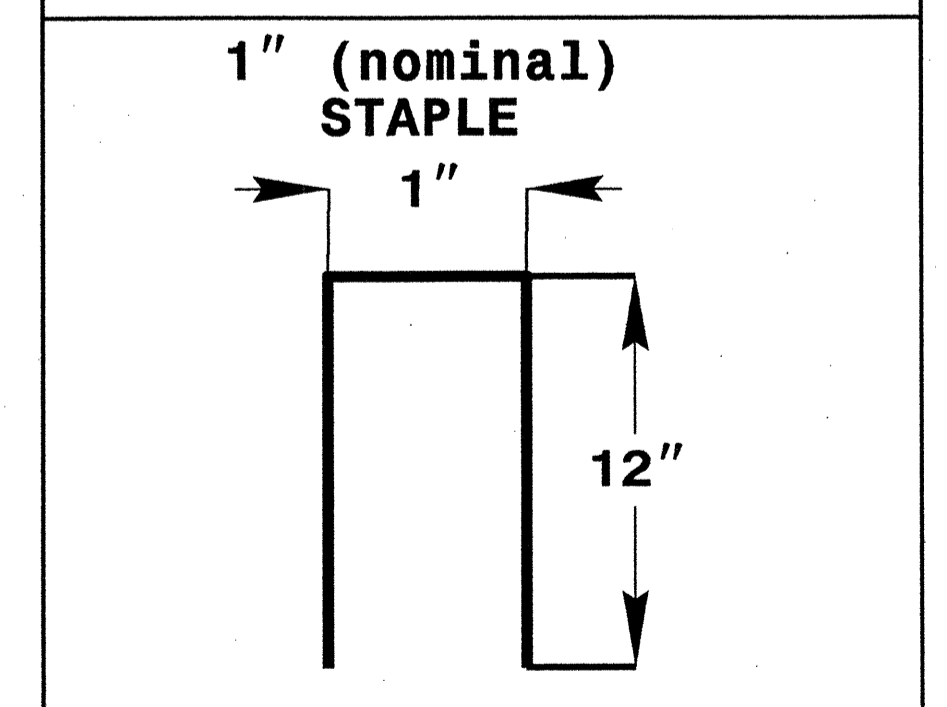
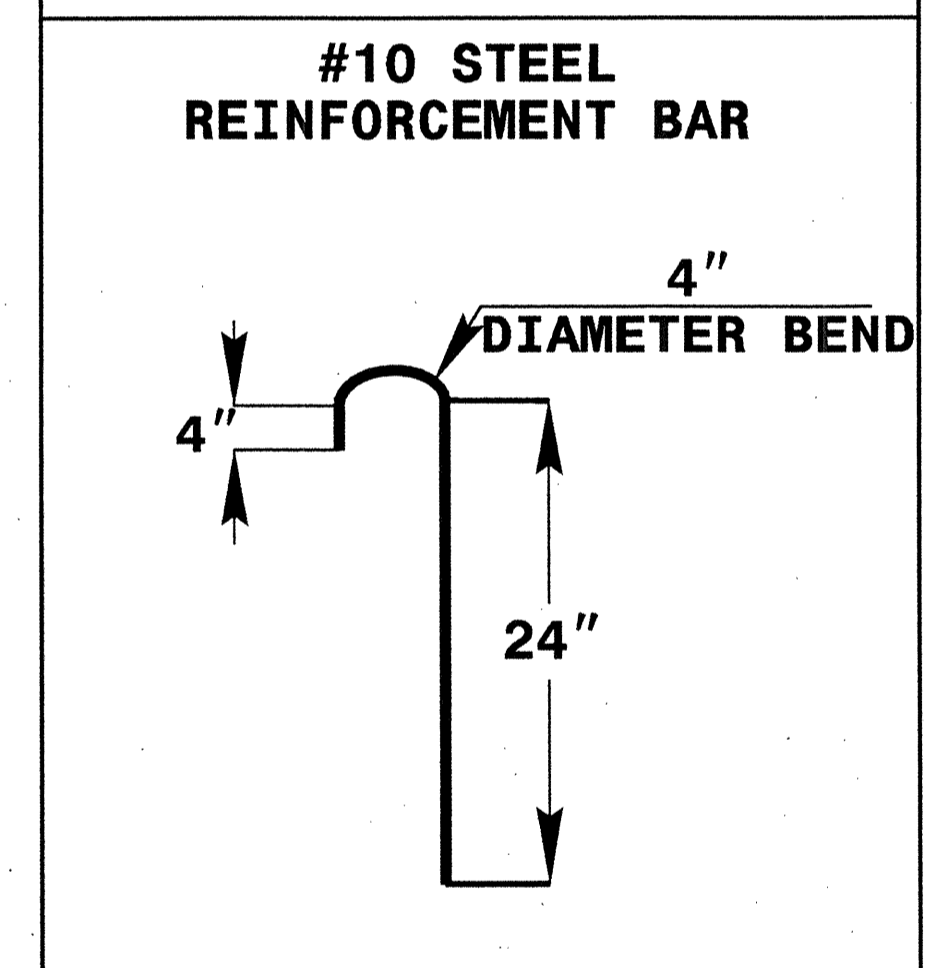
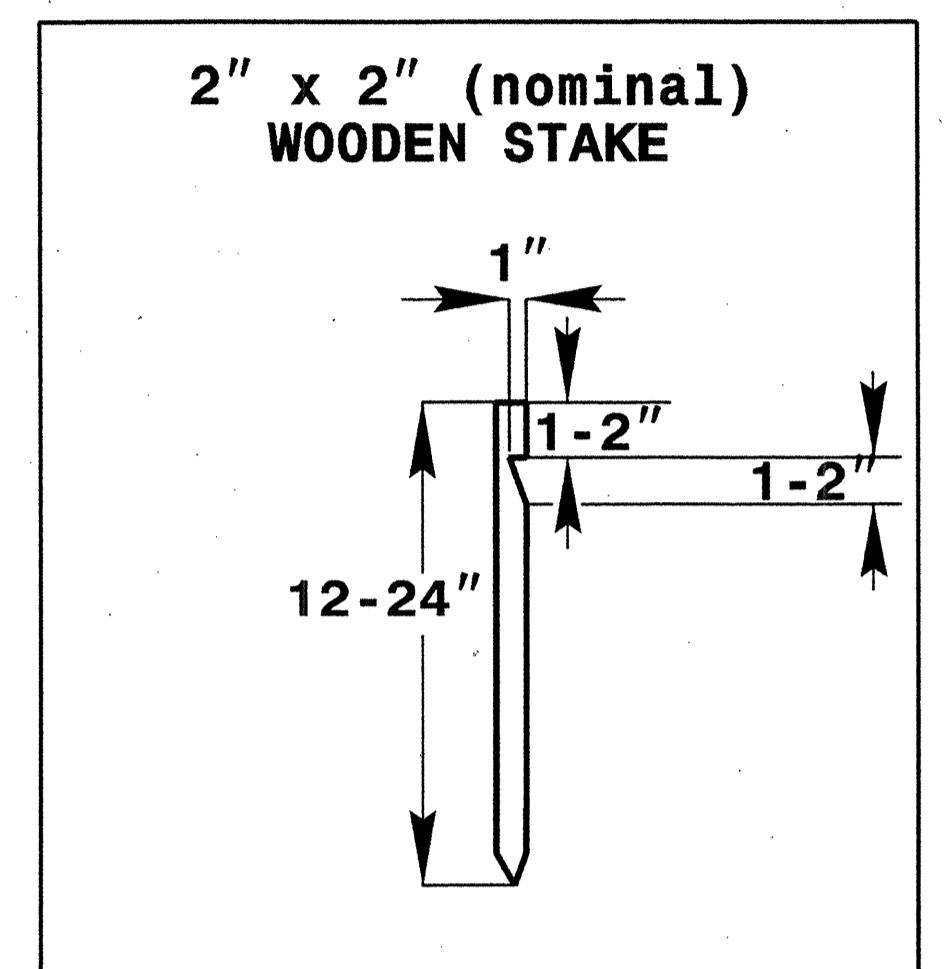
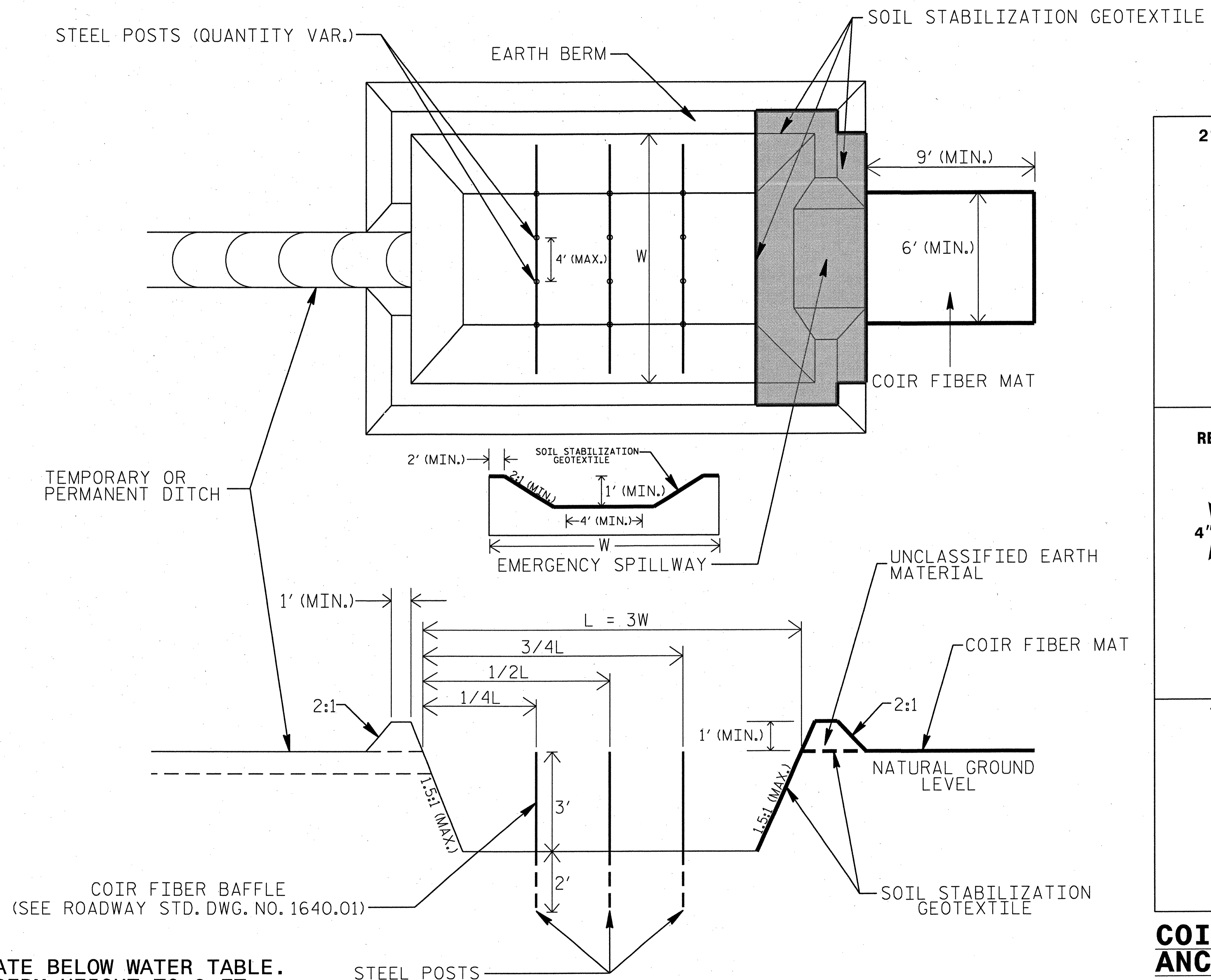
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1633.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1633.02 Temporary Rock Silt Check Type B
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type B	1634.02 Temporary Rock Sediment Dam Type B
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.04 Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	1640.01 Coir Fiber Baffle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

24-APR-2012 07:42
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 Sheet: 1 of 1
 Plot: 1 of 1

INFILTRATION BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. W-5016 & R-5519	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



COIR FIBER MAT ANCHOR OPTIONS

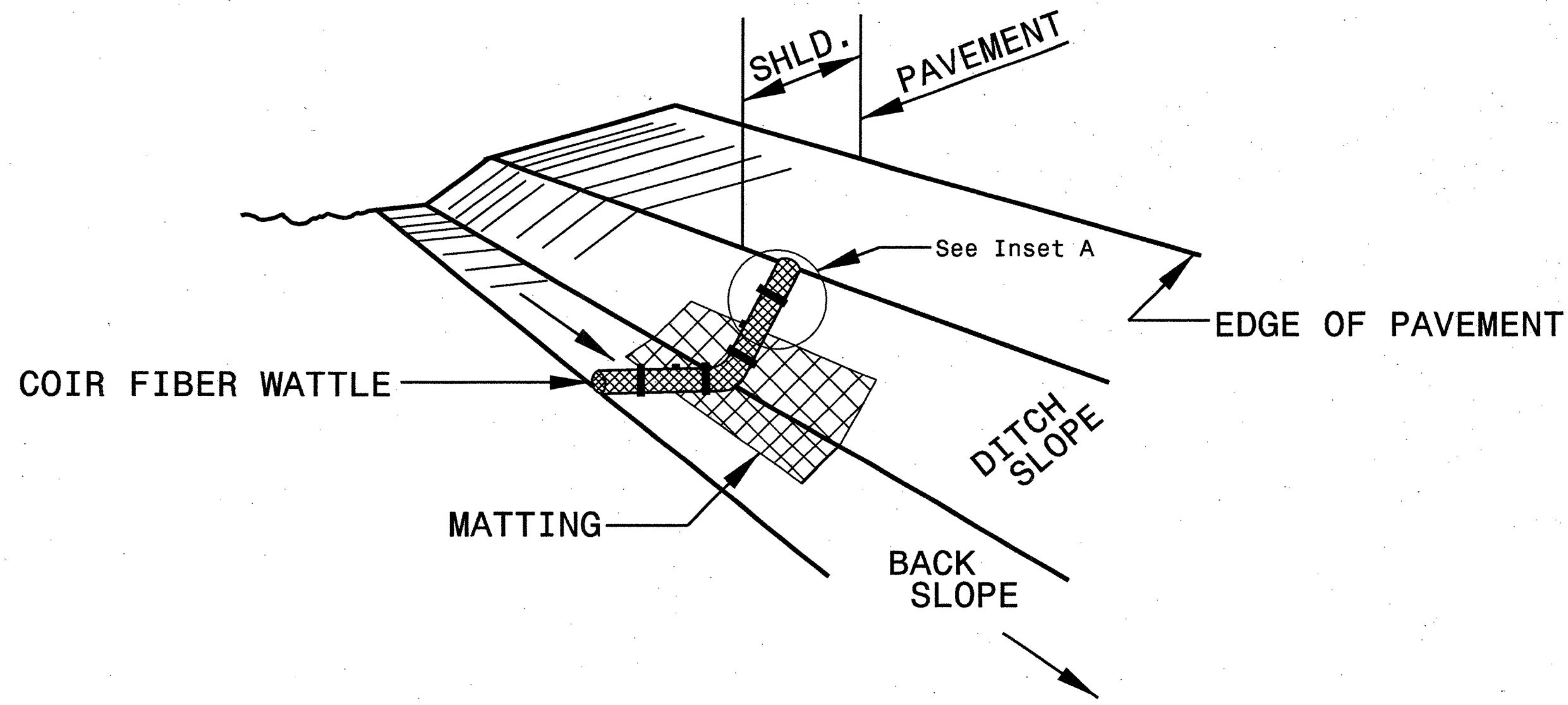
NOTES

1. DO NOT EXCAVATE BELOW WATER TABLE.
2. LIMIT EARTH BERM HEIGHT TO 3 FT.
3. AVOID COMPACTING BOTTOM OF BASIN.
4. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
5. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.

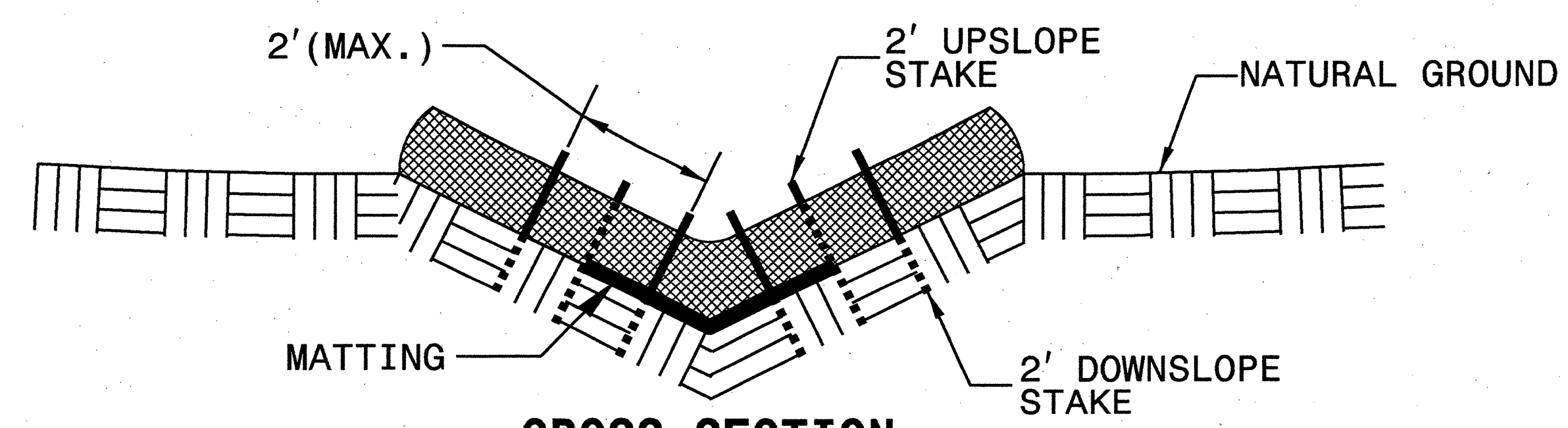
NOT TO SCALE

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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

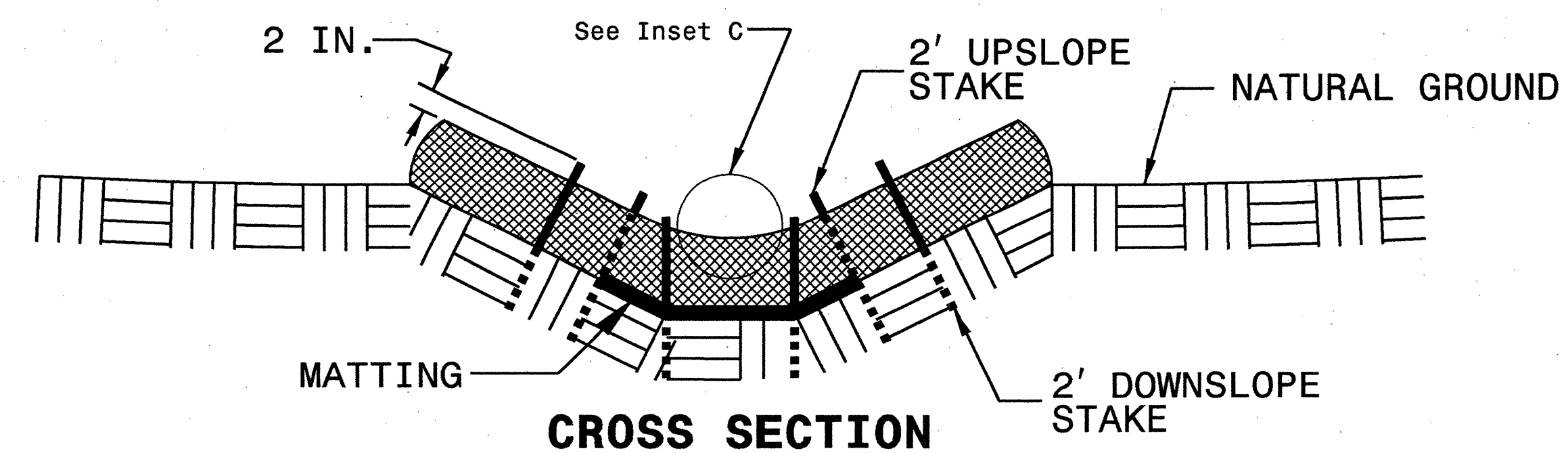
COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



ISOMETRIC VIEW

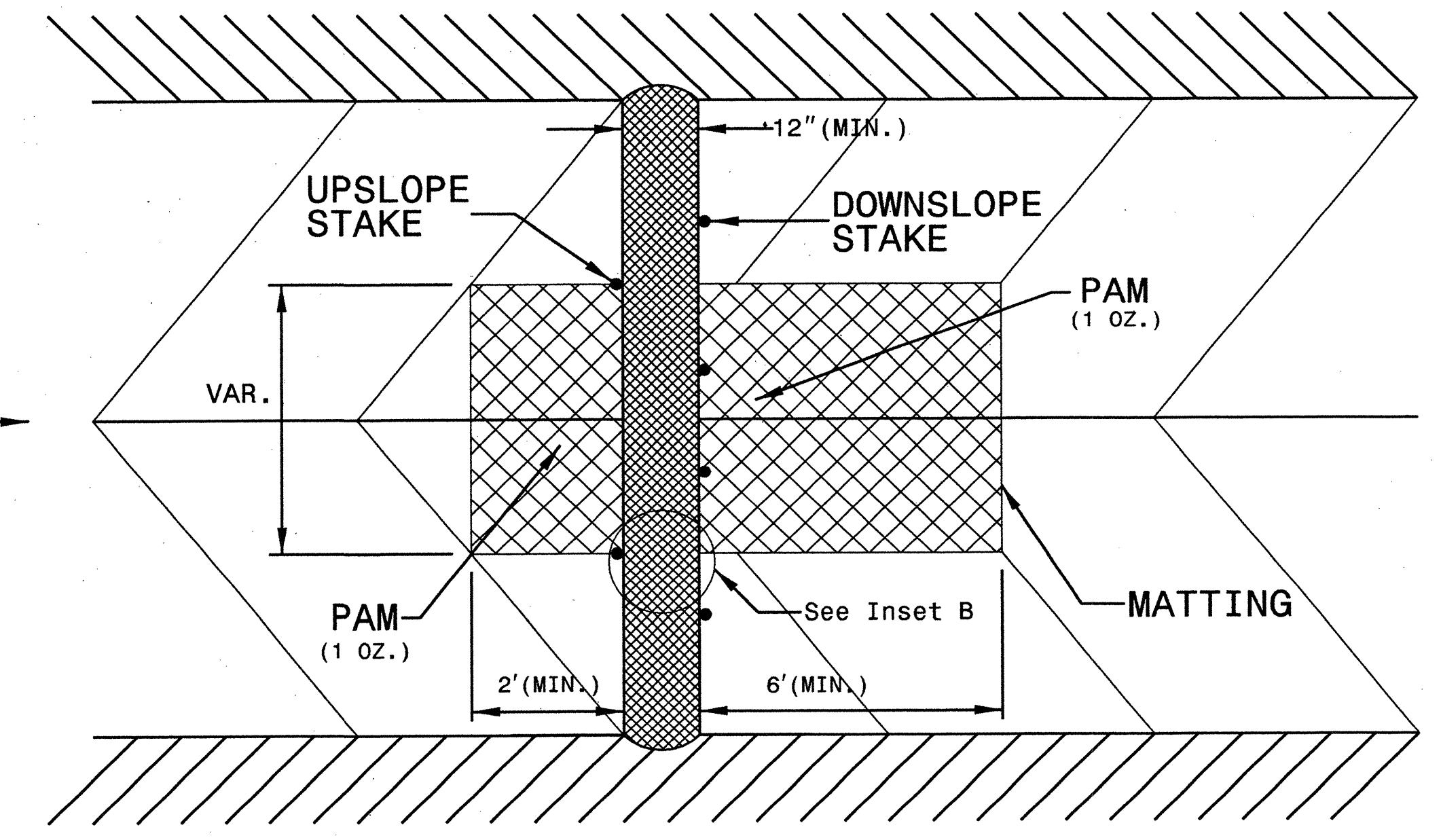
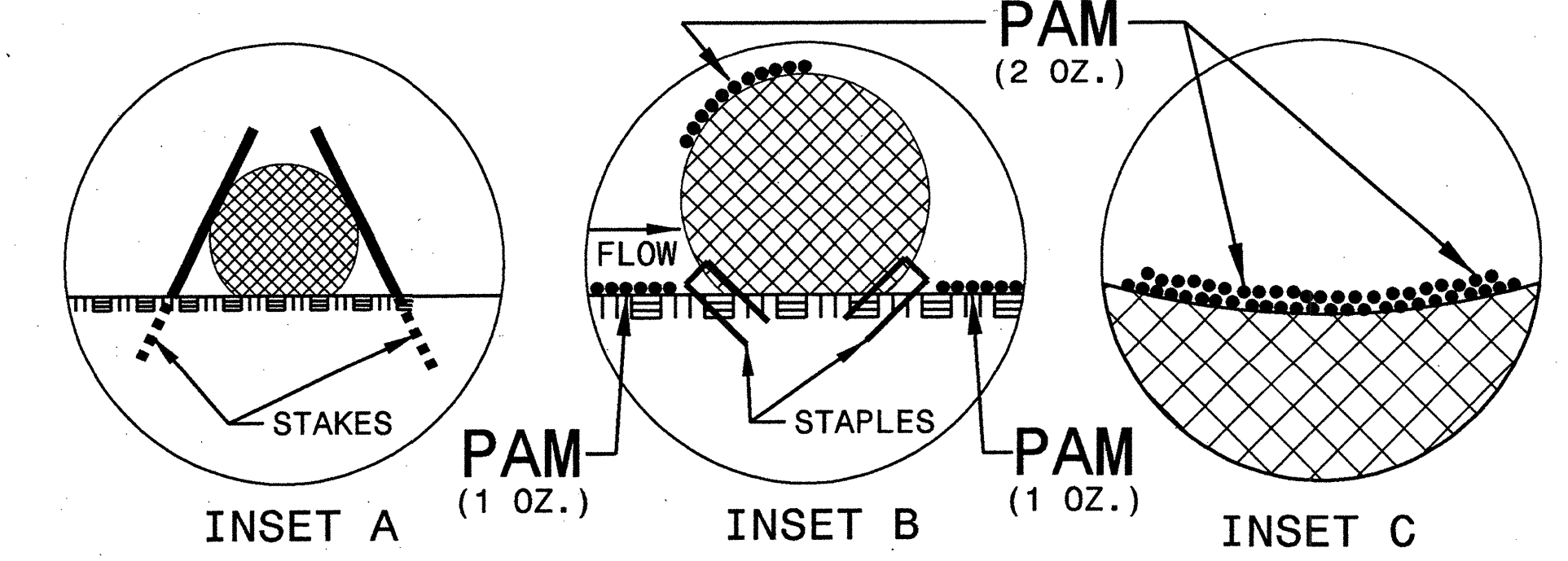


CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

- NOTES:
- USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.
 - USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
 - ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
 - INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
 - PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
 - INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
 - INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.
 - PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.
 - INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



TOP VIEW

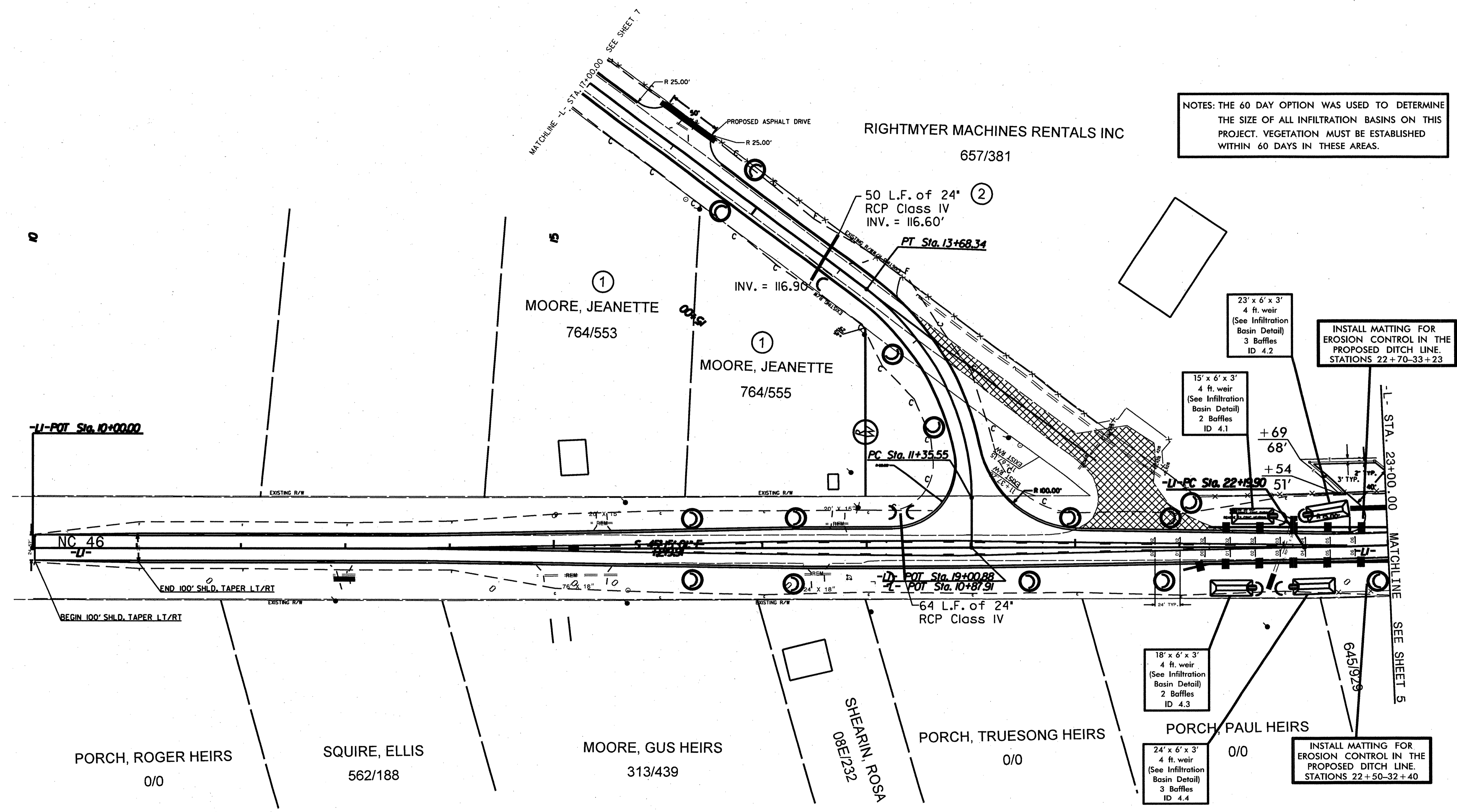
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HOW ZONES.

EROSION CONTROL PLAN

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 fenwick



NOTES: THE 60 DAY OPTION WAS USED TO DETERMINE THE SIZE OF ALL INFILTRATION BASINS ON THIS PROJECT. VEGETATION MUST BE ESTABLISHED WITHIN 60 DAYS IN THESE AREAS.

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE. STATIONS 22+70-33+23

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE. STATIONS 22+50-32+40

23' x 6' x 3'
 4 ft. weir
 (See Infiltration Basin Detail)
 3 Baffles
 ID 4.2

15' x 6' x 3'
 4 ft. weir
 (See Infiltration Basin Detail)
 2 Baffles
 ID 4.1

18' x 6' x 3'
 4 ft. weir
 (See Infiltration Basin Detail)
 2 Baffles
 ID 4.3

24' x 6' x 3'
 4 ft. weir
 (See Infiltration Basin Detail)
 3 Baffles
 ID 4.4

MATCHLINE -L- STA. 23+00.00 SEE SHEET 5

MATCHLINE -L- STA. 17+00.00 SEE SHEET 7

RIGHTMYER MACHINES RENTALS INC
 657/381

MOORE, JEANETTE
 764/553

MOORE, JEANETTE
 764/555

MOORE, GUS HEIRS
 313/439

PORCH, TRUESONG HEIRS
 0/0

PORCH, PAUL HEIRS
 0/0

PORCH, ROGER HEIRS
 0/0

SQUIRE, ELLIS
 562/188

SHEARIN, ROSA
 08E1232

-U-POT Sta. 10+00.00

NC 46

END 100' SHLD. TAPER LT/RT

BEGIN 100' SHLD. TAPER LT/RT

EXISTING R/W

EXISTING R/W

64 L.F. of 24" RCP Class IV

-U-POT Sta. 19+00.88
-L-POT Sta. 10+87.91

PT Sta. 13+68.34

INV. = 116.90'

PC Sta. 11+35.55

-U-PC Sta. 22+19.90

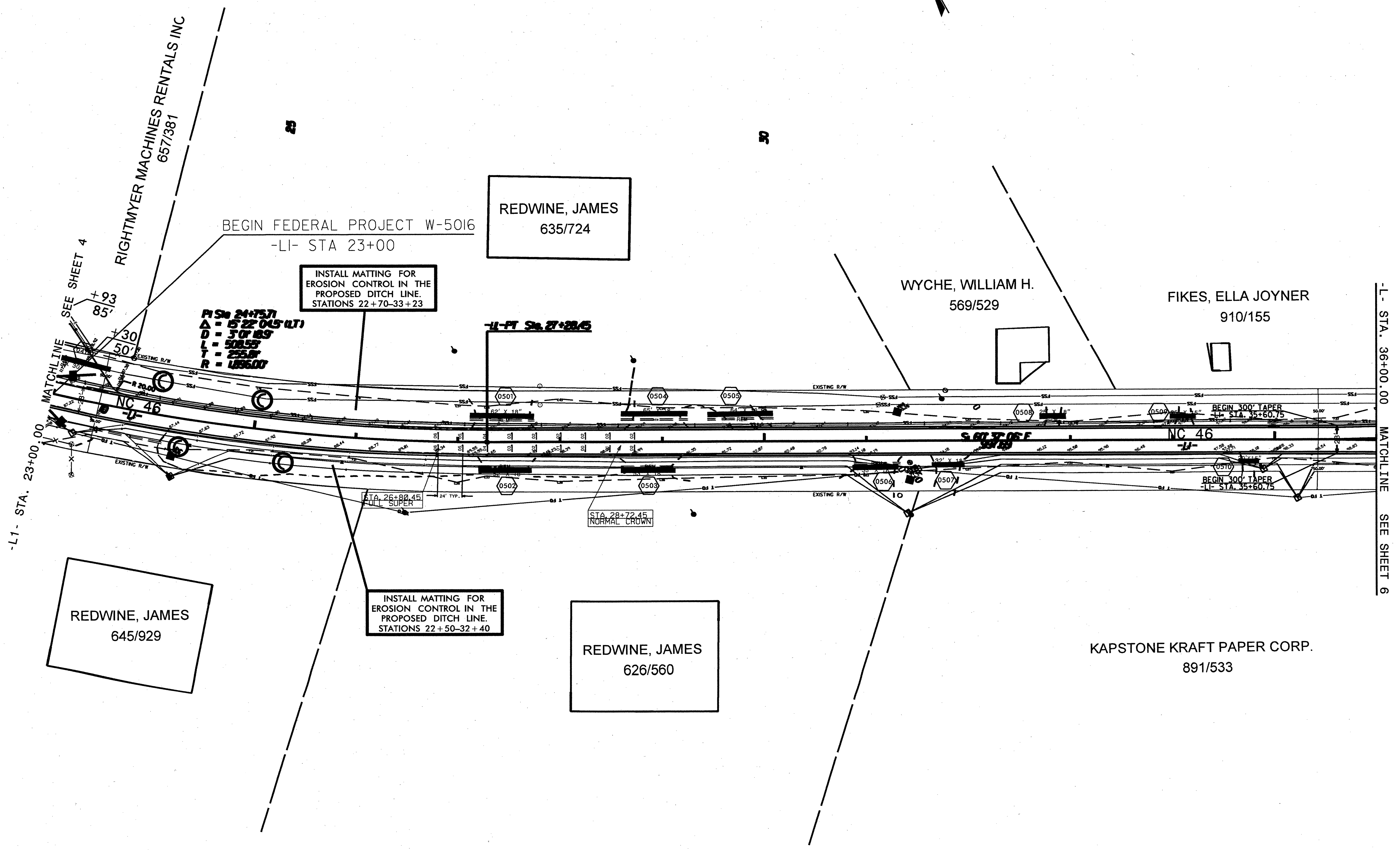
+69
+68
+54
+51

3' TYP.

6451929

EROSION CONTROL PLAN

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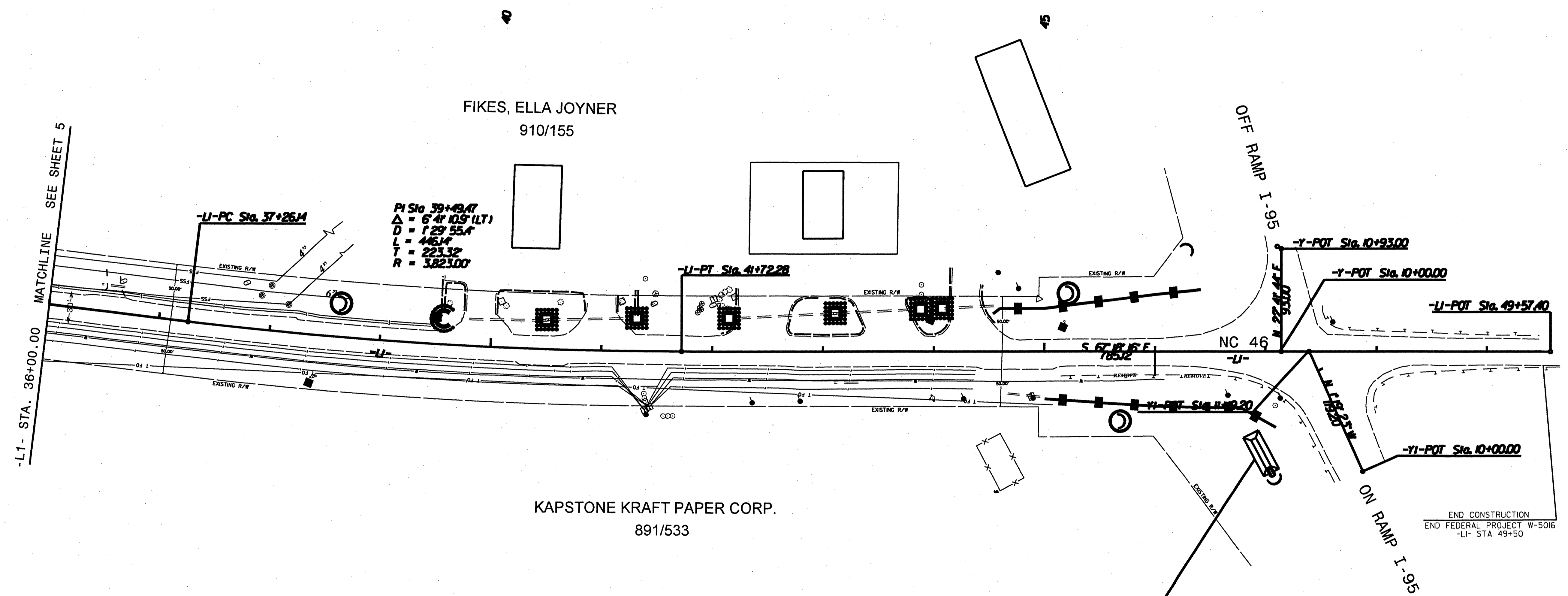
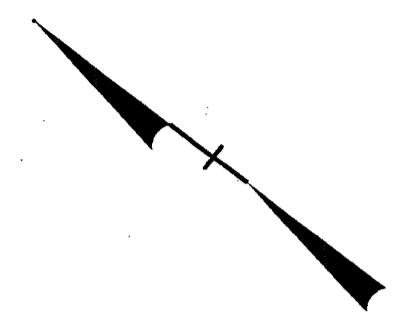


-L1- STA. 23+00.00
 MATCHLINE SEE SHEET 4

-L- STA. 36+00.00
 MATCHLINE SEE SHEET 6

EROSION CONTROL PLAN

PROJECT REFERENCE NO. W-5016 & R-5519	SHEET NO. EC-6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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 8/17/99
 REVISIONS

12' x 6' x 3'
 4 ft. weir
 (See Earthen
 Dam Detail)
 2 Baffles
 ID 6.2

END CONSTRUCTION
 END FEDERAL PROJECT W-5016
 -LI- STA 49+50

NOTES: THE 60 DAY OPTION WAS USED TO DETERMINE THE SIZE OF ALL INFILTRATION BASINS ON THIS PROJECT. VEGETATION MUST BE ESTABLISHED WITHIN 60 DAYS IN THESE AREAS.

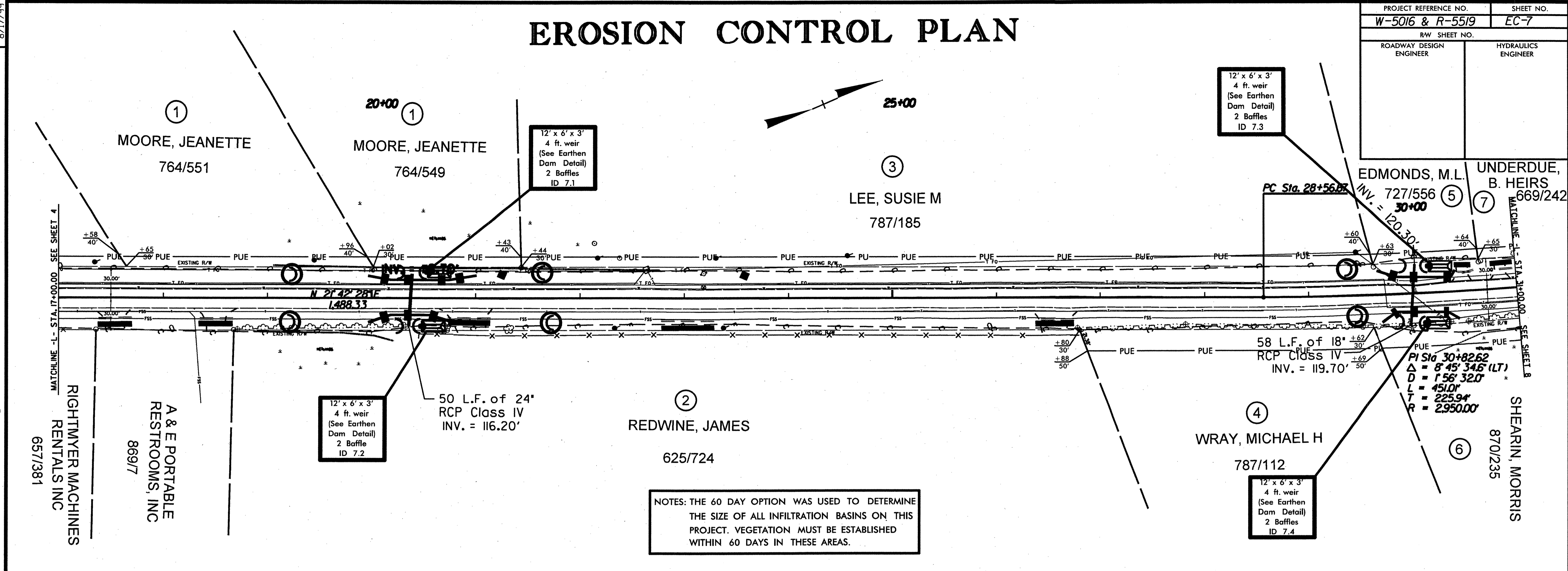
EROSION CONTROL PLAN

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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

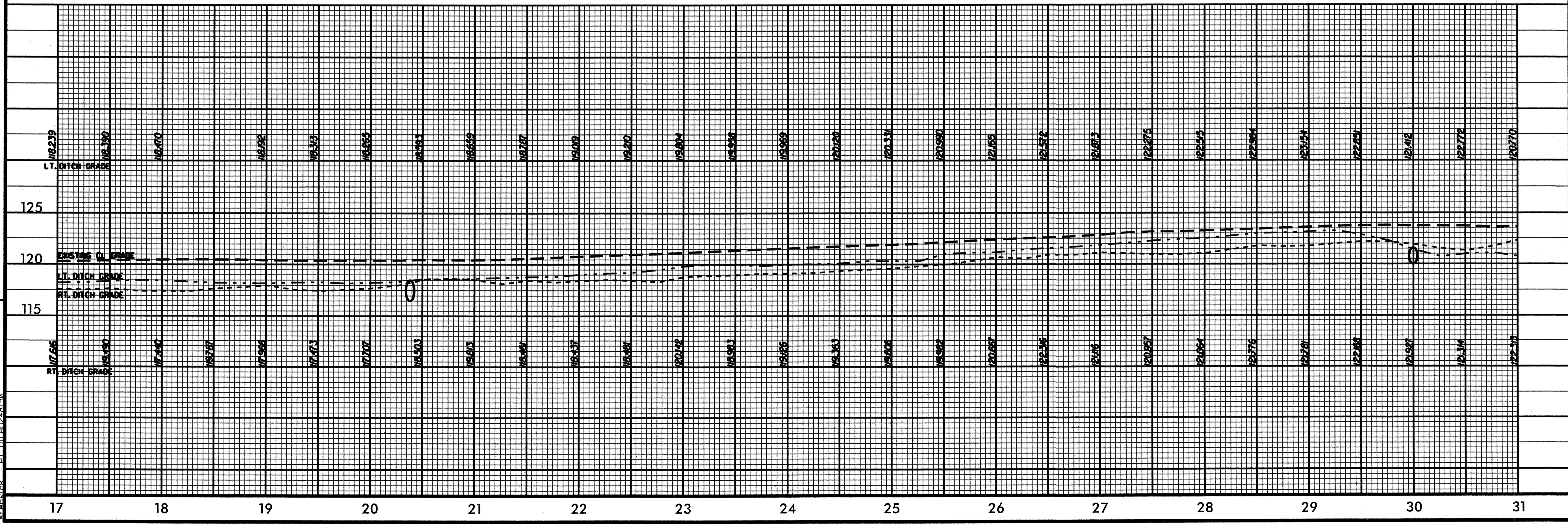
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REVISIONS



NOTES: THE 60 DAY OPTION WAS USED TO DETERMINE THE SIZE OF ALL INFILTRATION BASINS ON THIS PROJECT. VEGETATION MUST BE ESTABLISHED WITHIN 60 DAYS IN THESE AREAS.



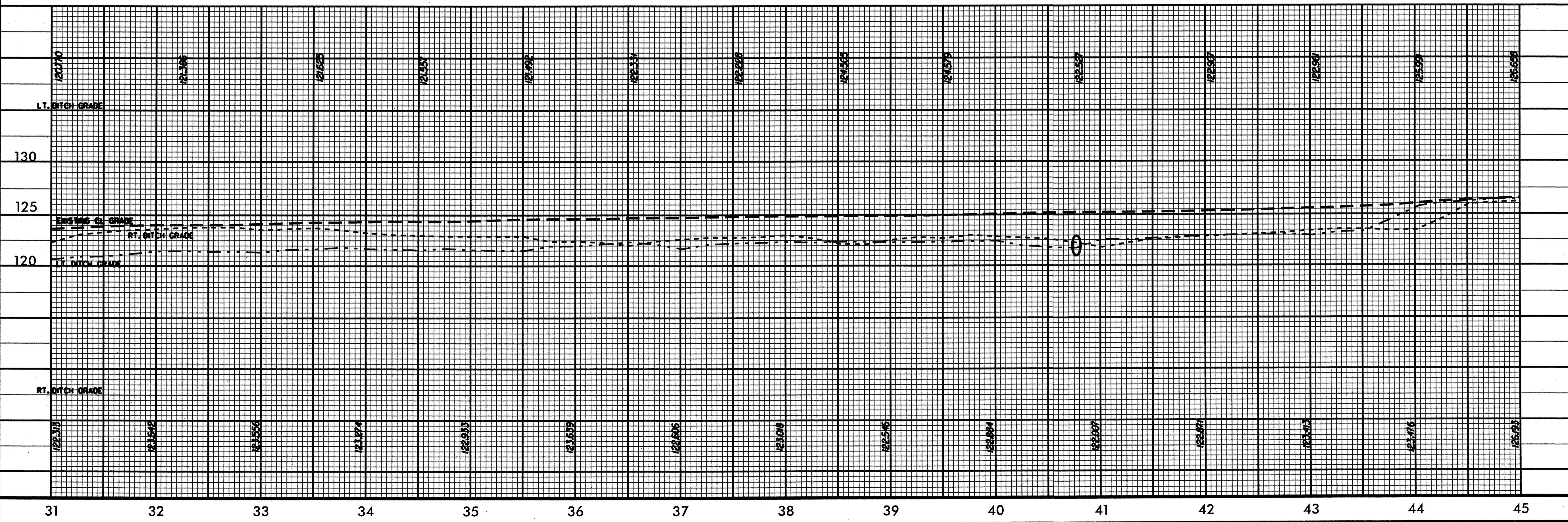
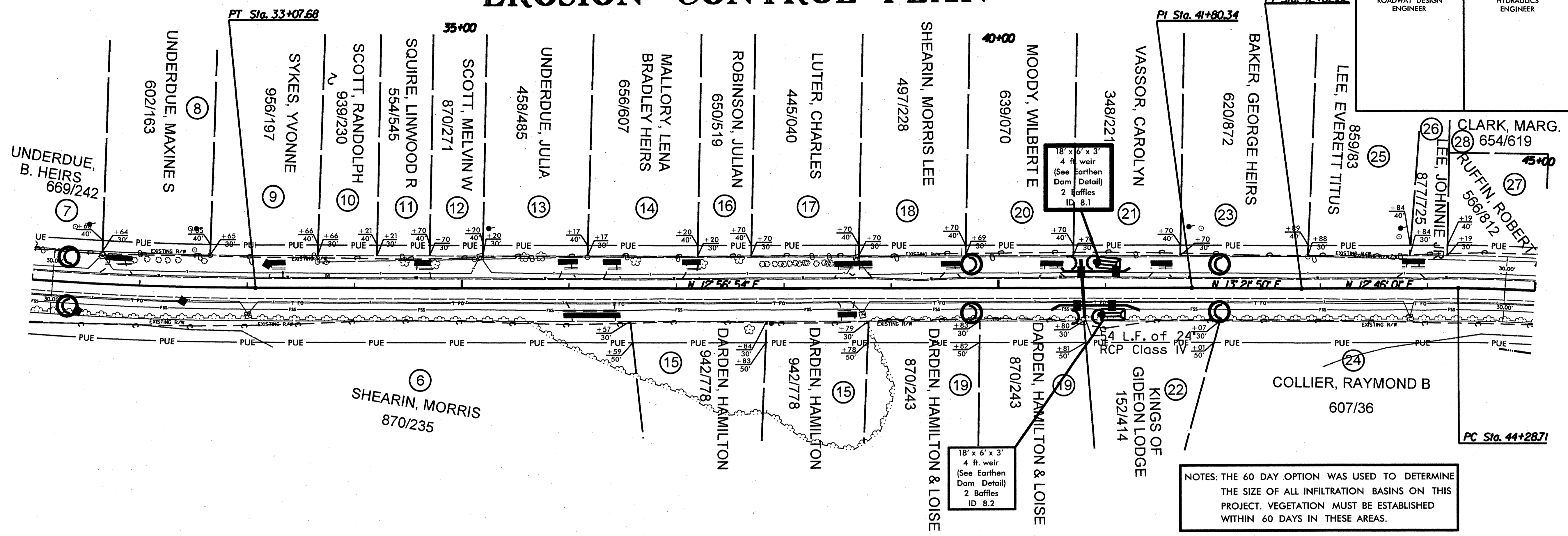
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REVISED P.U.E. Station and Offsets - Jan. 6, 2002

8/17/99

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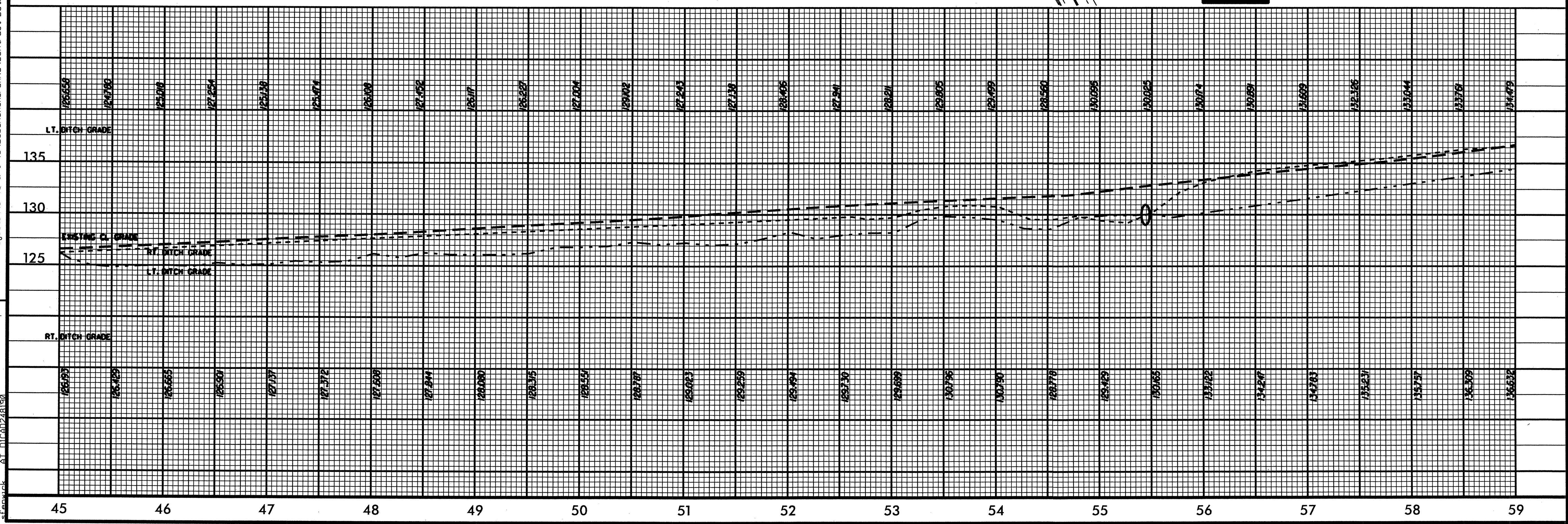
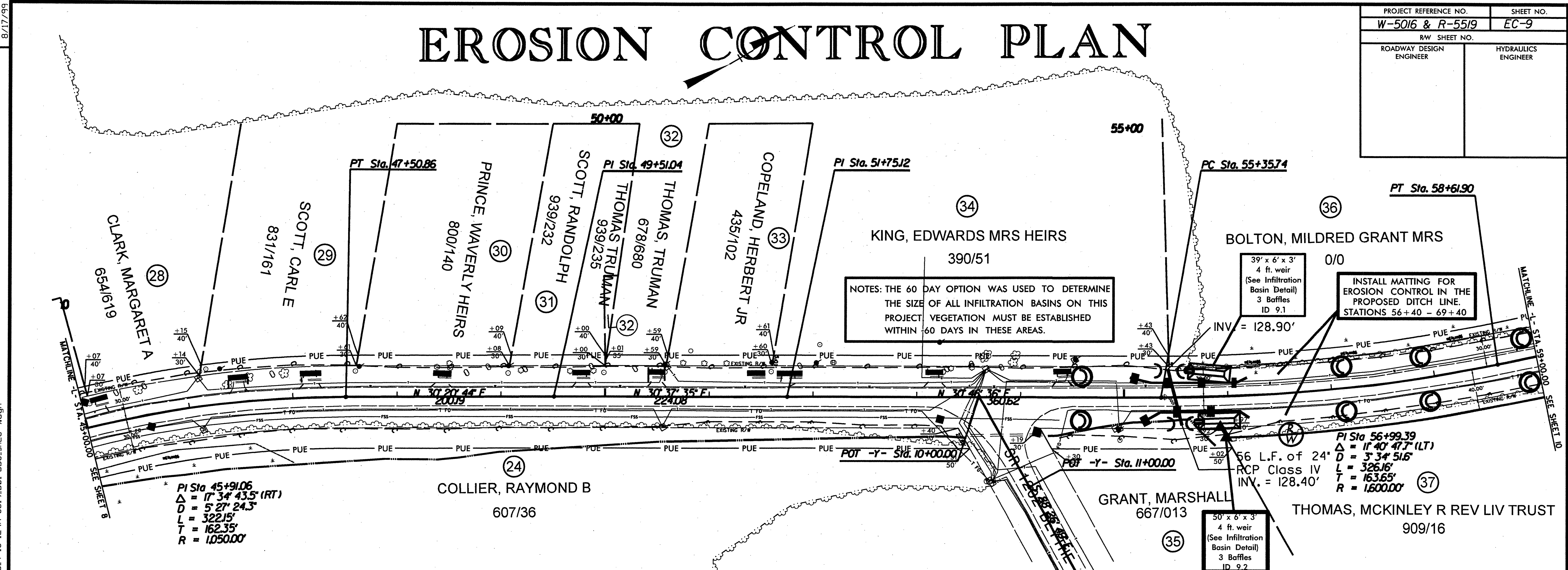
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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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EROSION CONTROL PLAN

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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

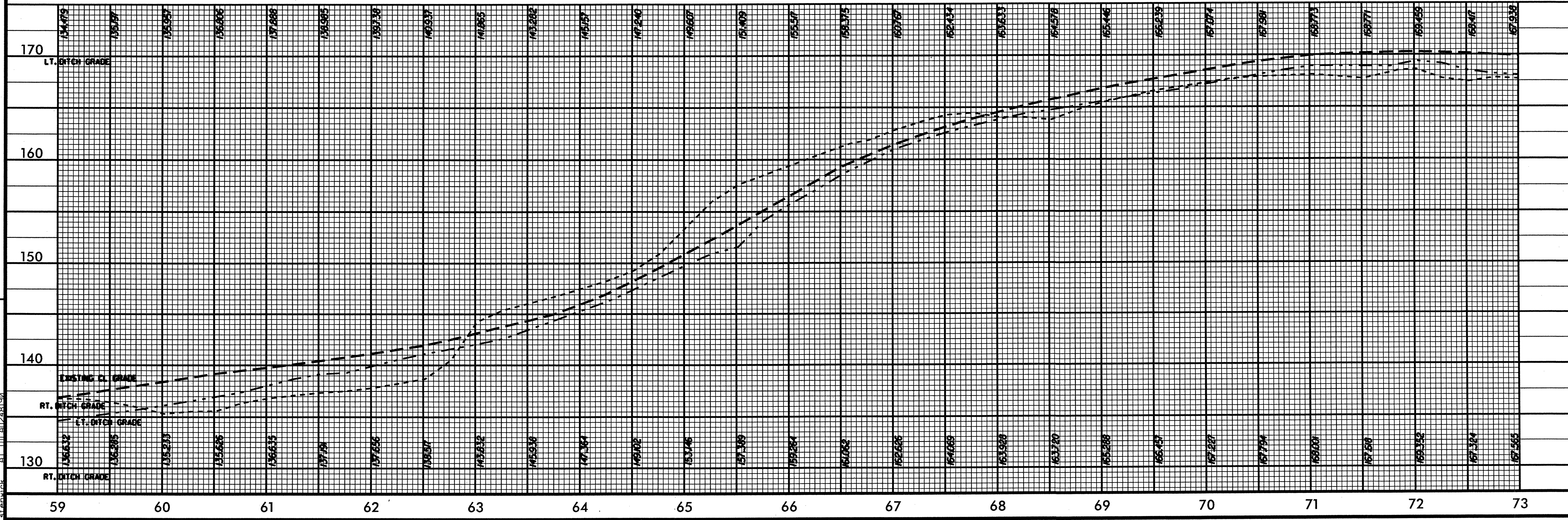
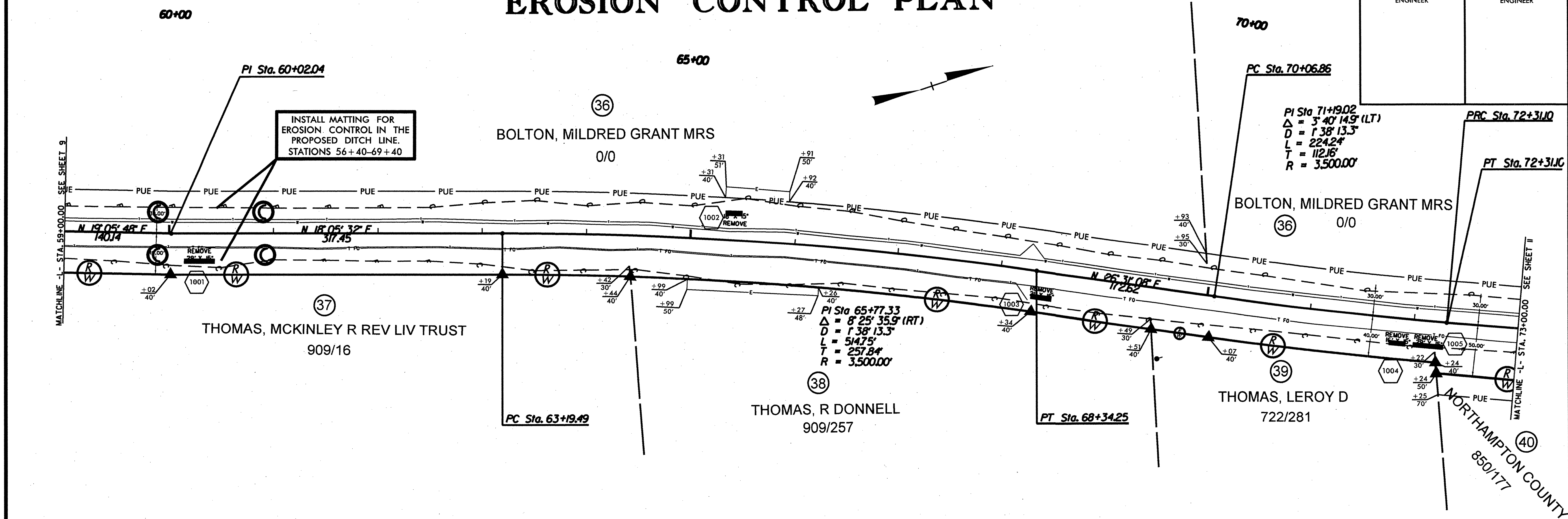


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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EROSION CONTROL PLAN

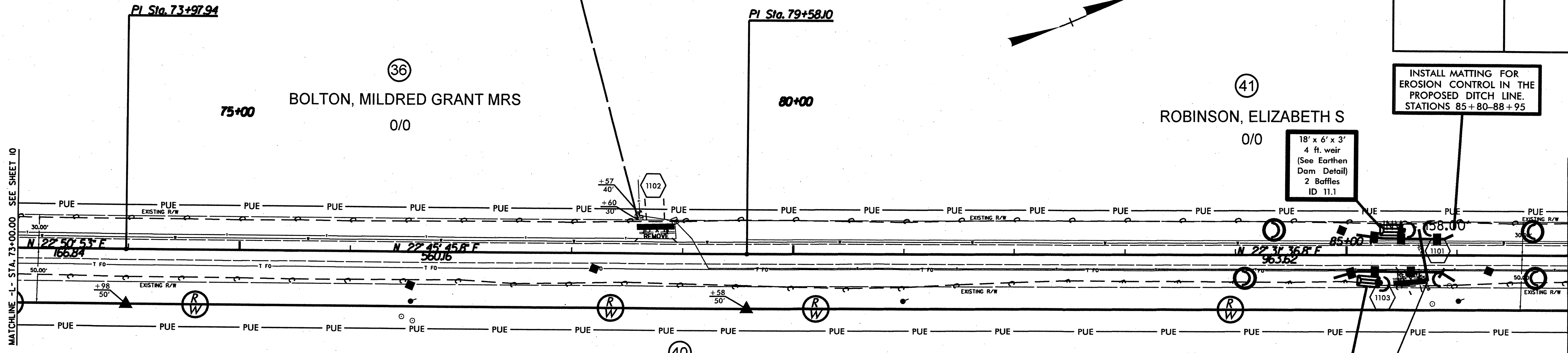


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8/17/99

EROSION CONTROL PLAN

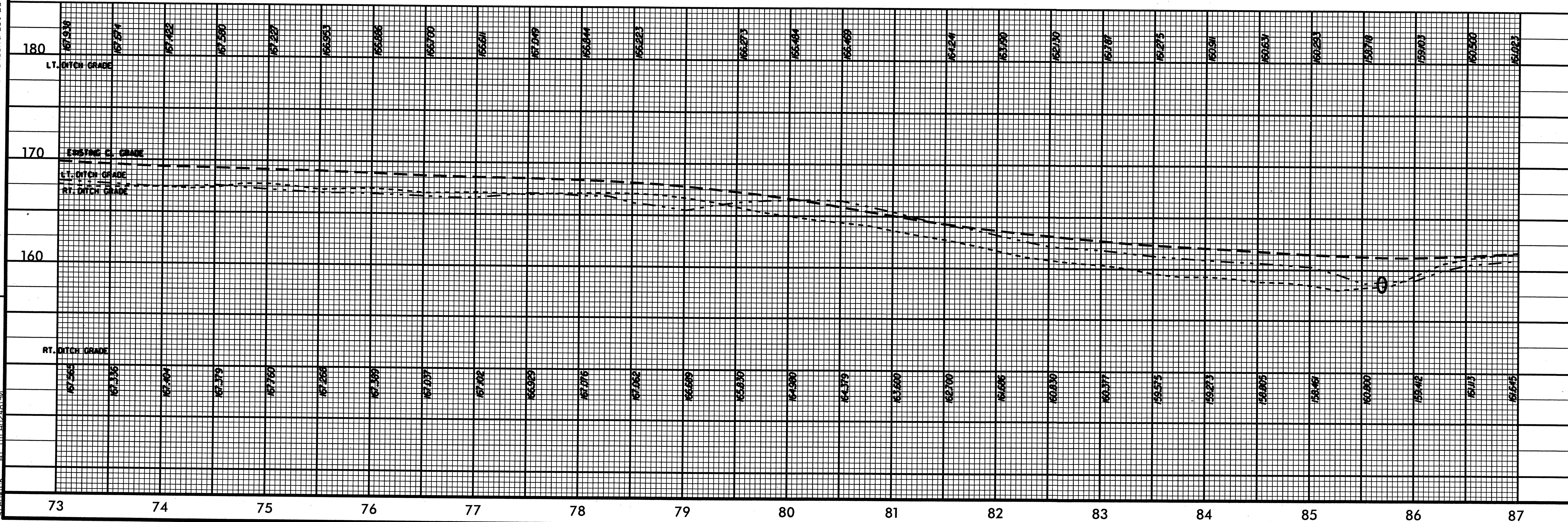
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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



(40)
NORTHAMPTON COUNTY
850/177

NOTES: THE 60 DAY OPTION WAS USED TO DETERMINE THE SIZE OF ALL INFILTRATION BASINS ON THIS PROJECT. VEGETATION MUST BE ESTABLISHED WITHIN 60 DAYS IN THESE AREAS.

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE. STATIONS 85+80-88+95

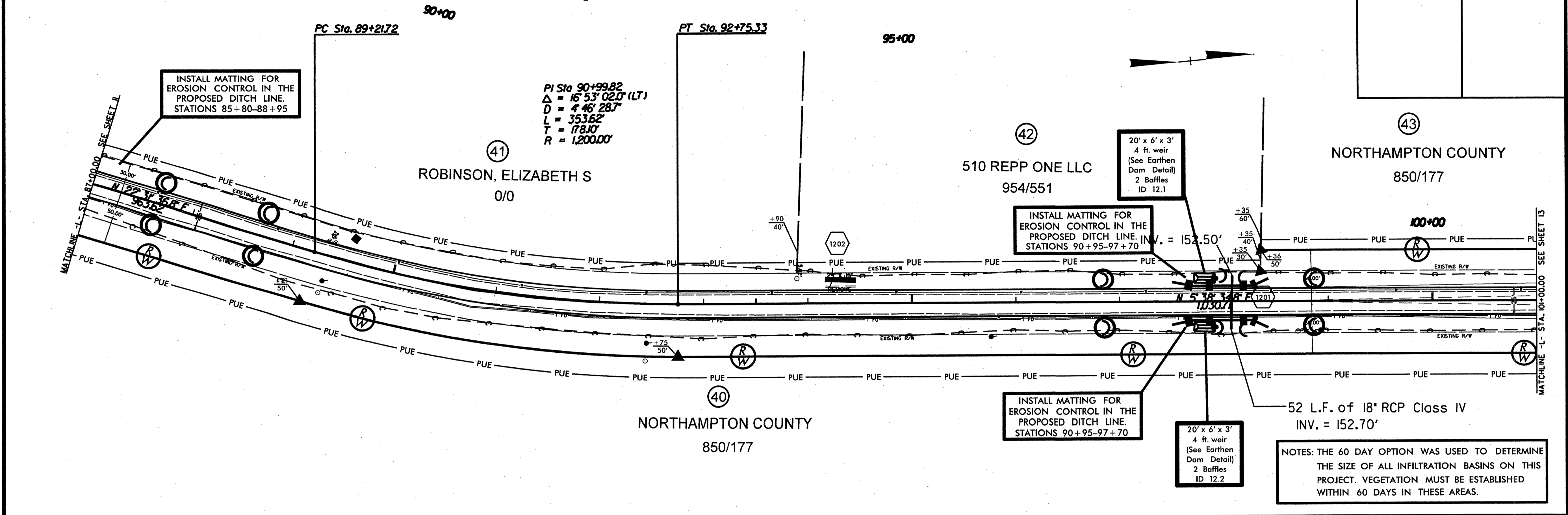


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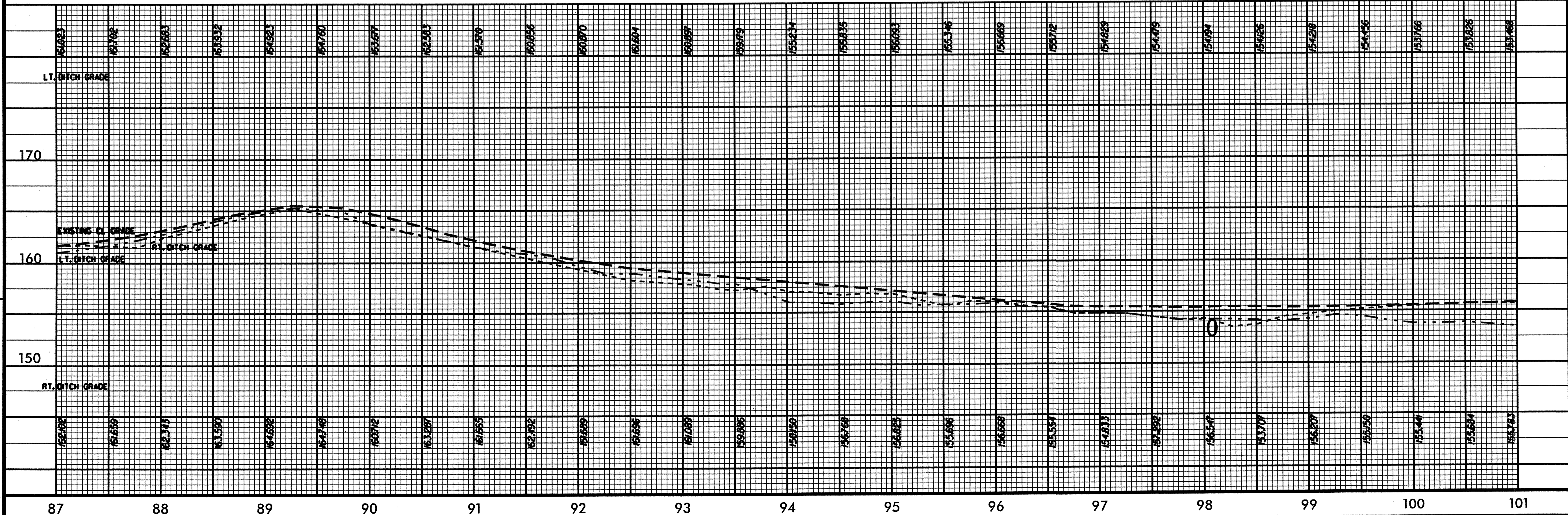
8/17/99

EROSION CONTROL PLAN

PROJECT REFERENCE NO. W-5016 & R-5519	SHEET NO. EC-12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



REVISIONS

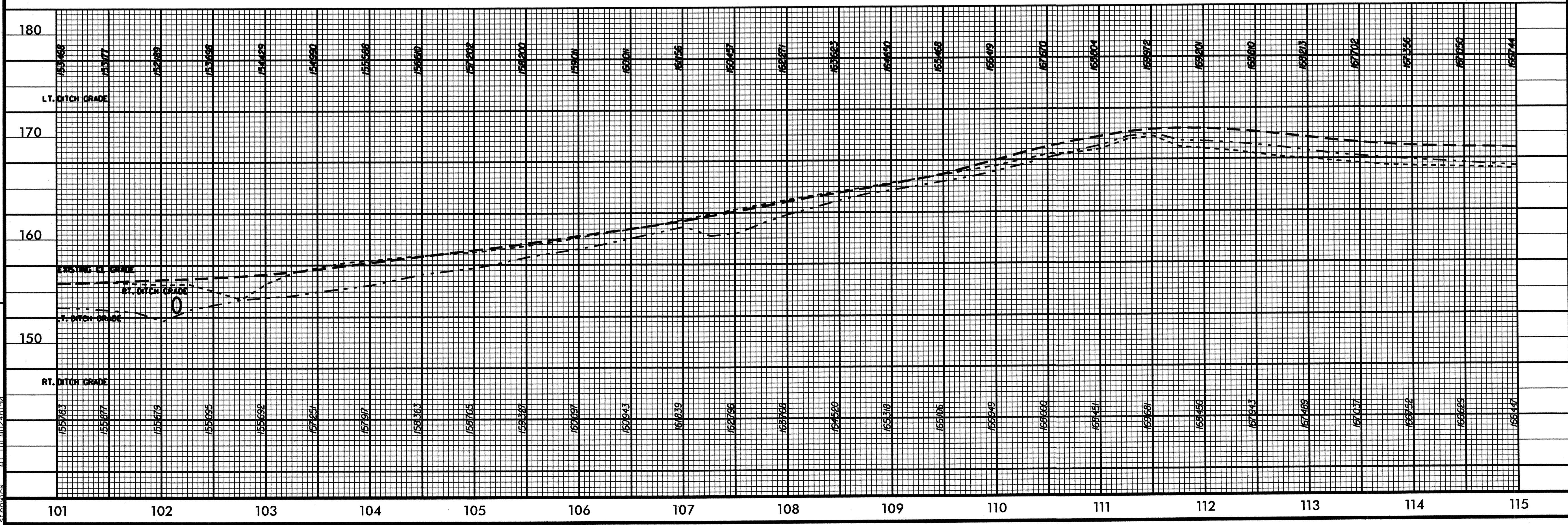
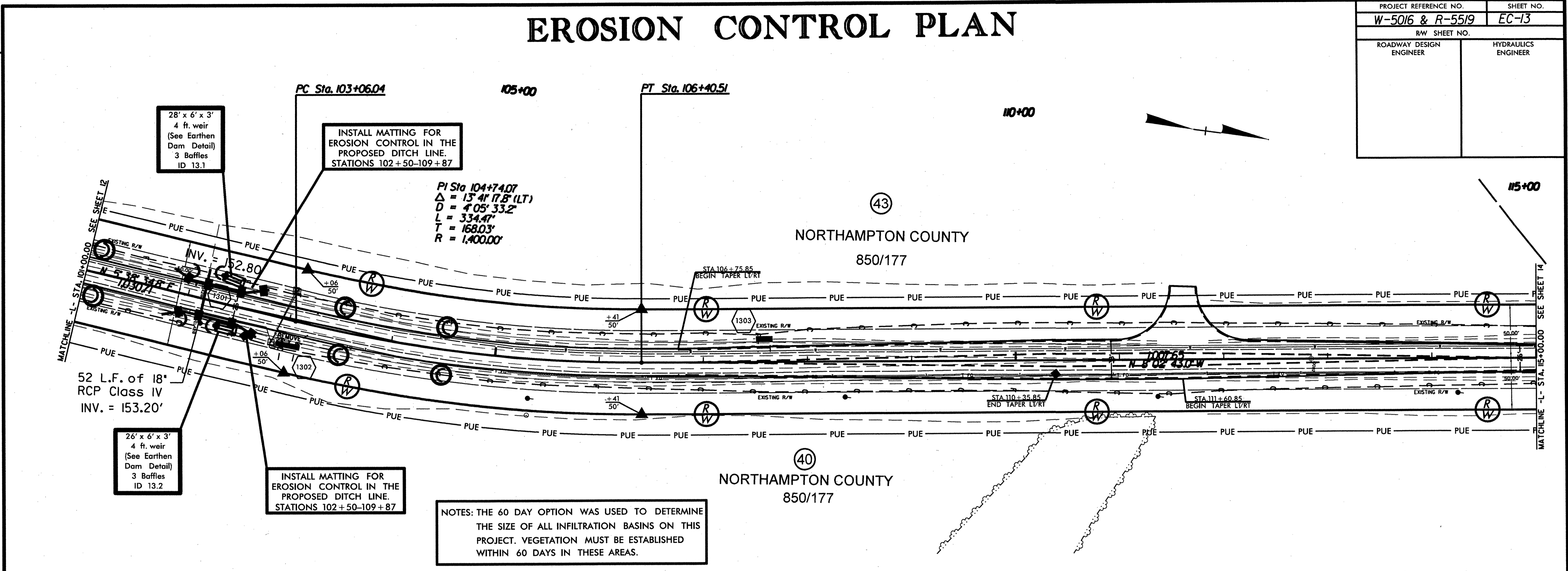


NOTES: THE 60 DAY OPTION WAS USED TO DETERMINE THE SIZE OF ALL INFILTRATION BASINS ON THIS PROJECT. VEGETATION MUST BE ESTABLISHED WITHIN 60 DAYS IN THESE AREAS.

EROSION CONTROL PLAN

PROJECT REFERENCE NO. W-5016 & R-5519	SHEET NO. EC-13
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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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REVISIONS

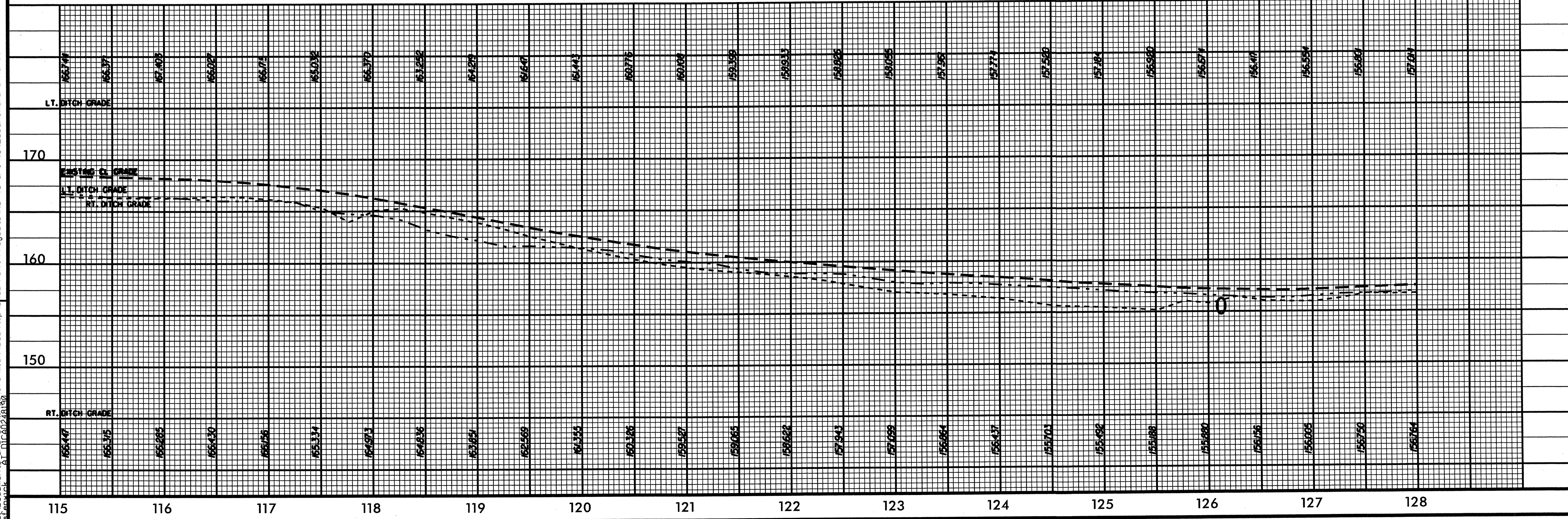
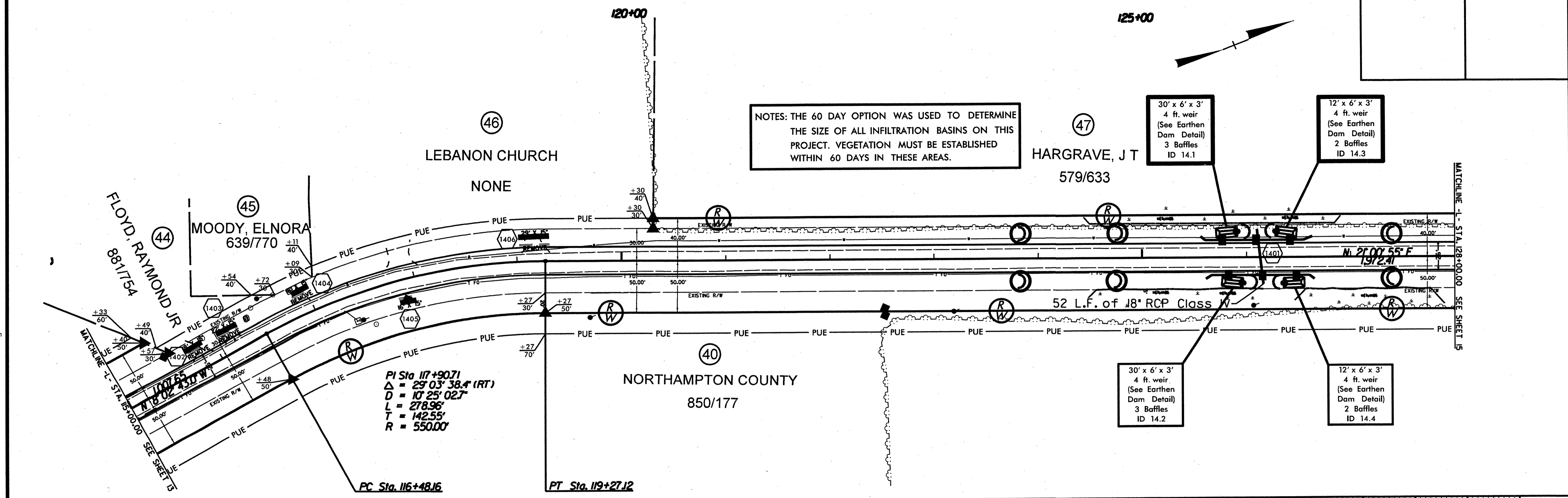
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8/17/99

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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EROSION CONTROL PLAN

NOTES: THE 60 DAY OPTION WAS USED TO DETERMINE THE SIZE OF ALL INFILTRATION BASINS ON THIS PROJECT. VEGETATION MUST BE ESTABLISHED WITHIN 60 DAYS IN THESE AREAS.



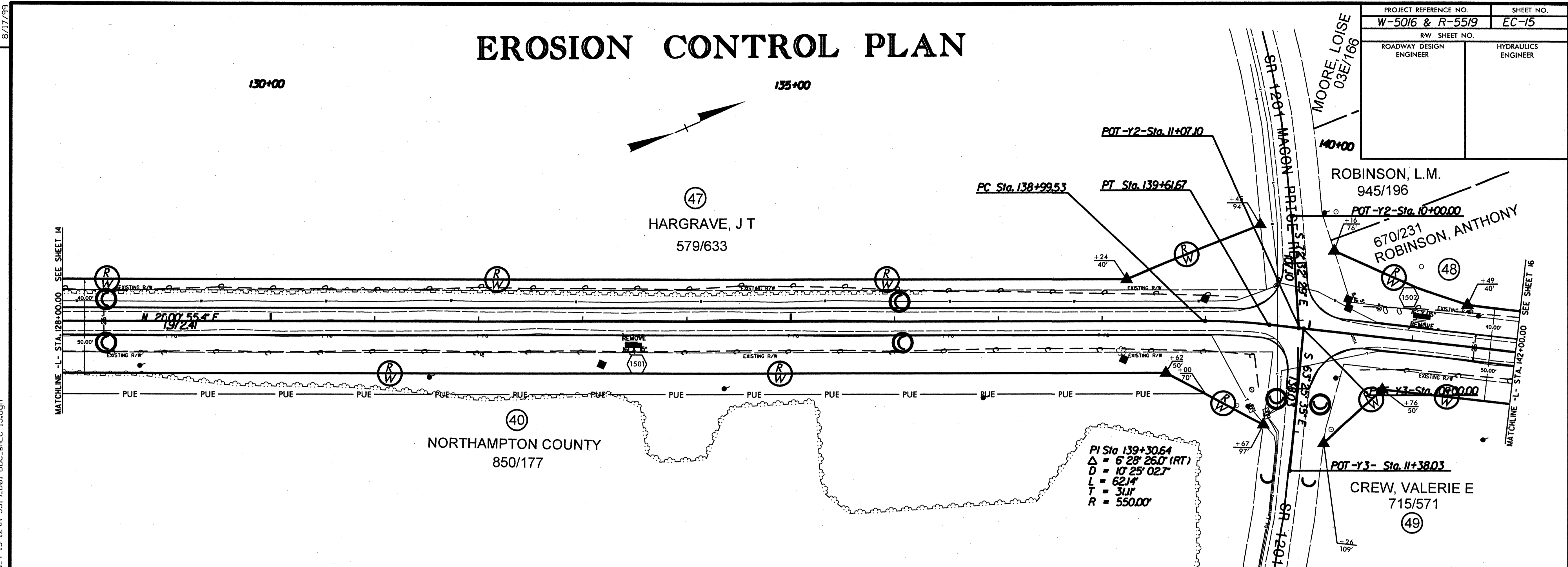
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 sfenwick

MATCHLINE 1 - STA. 128+00.00 SEE SHEET 15

8/17/99

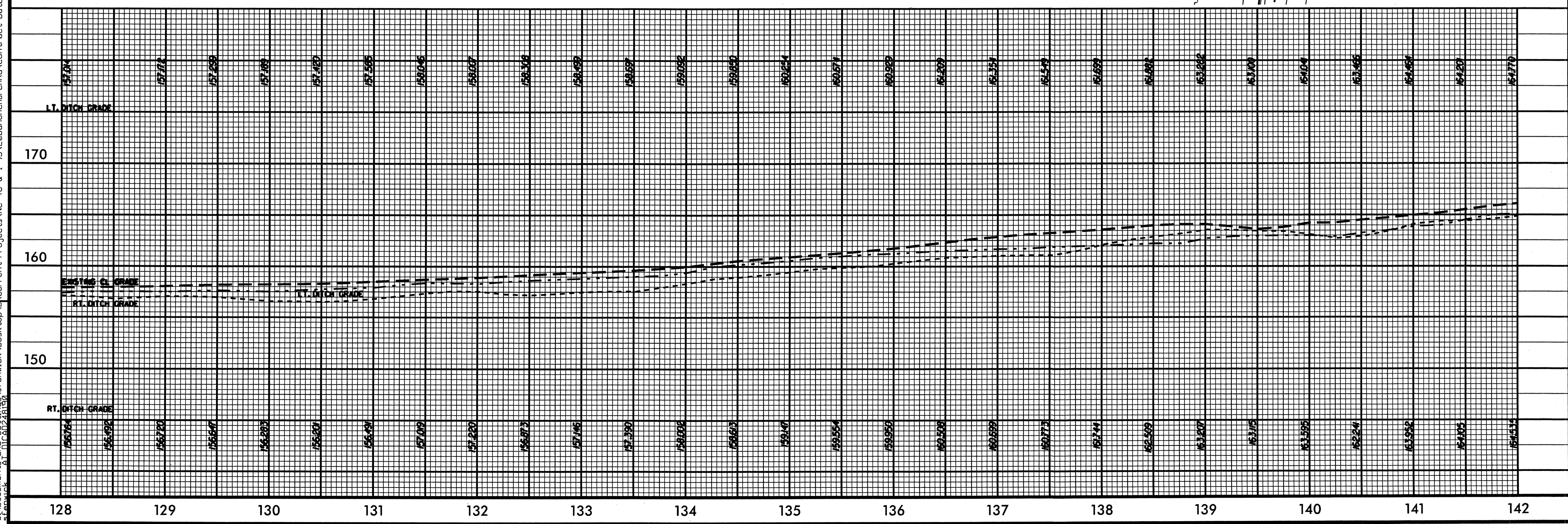
EROSION CONTROL PLAN

PROJECT REFERENCE NO. W-5016 & R-5519	SHEET NO. EC-15
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



REVISIONS

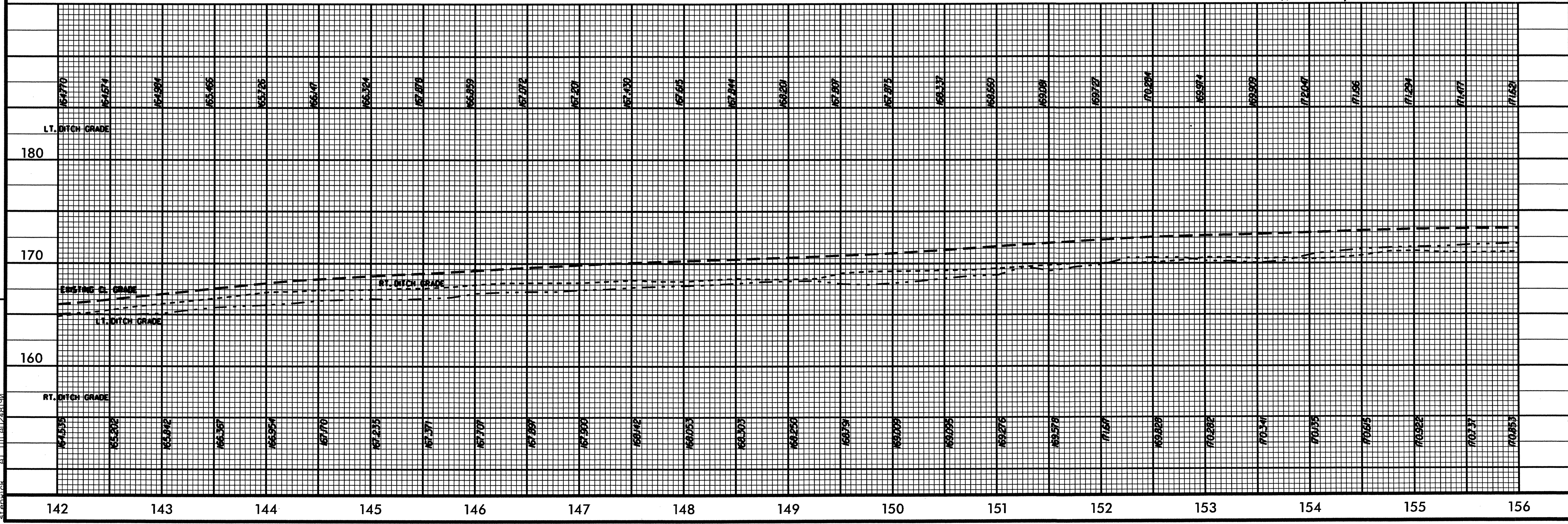
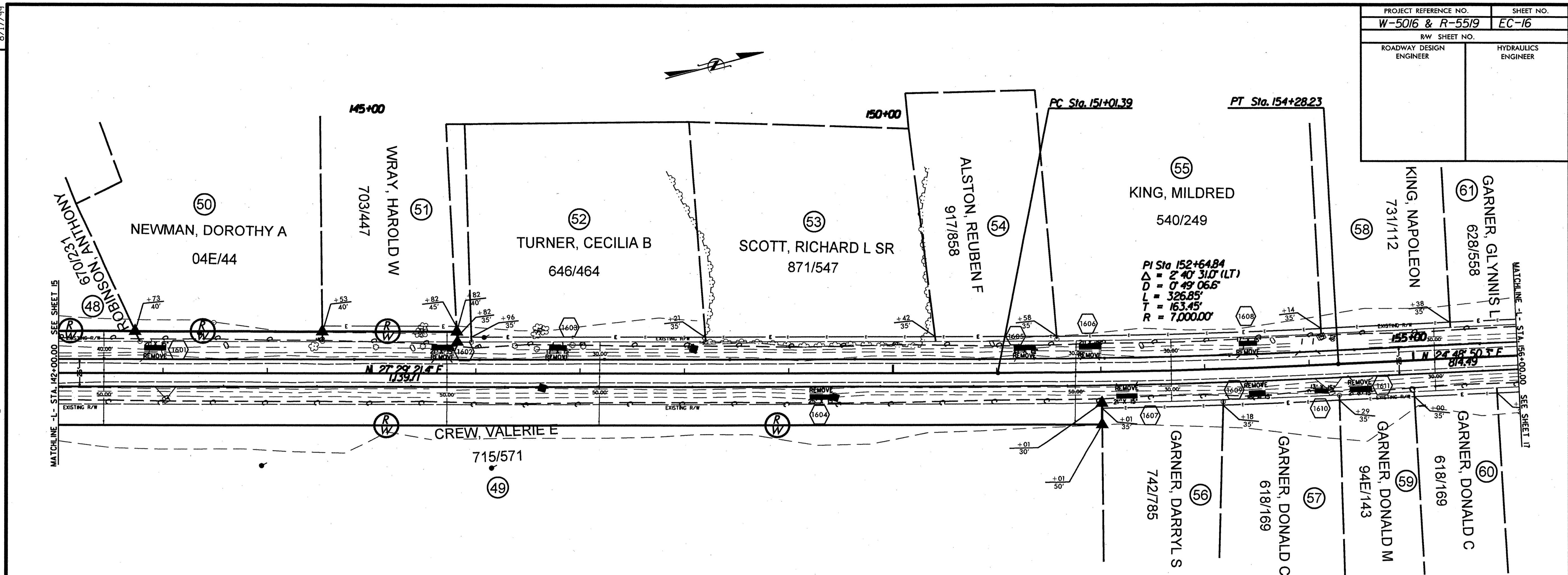
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8/17/99

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REVISIONS

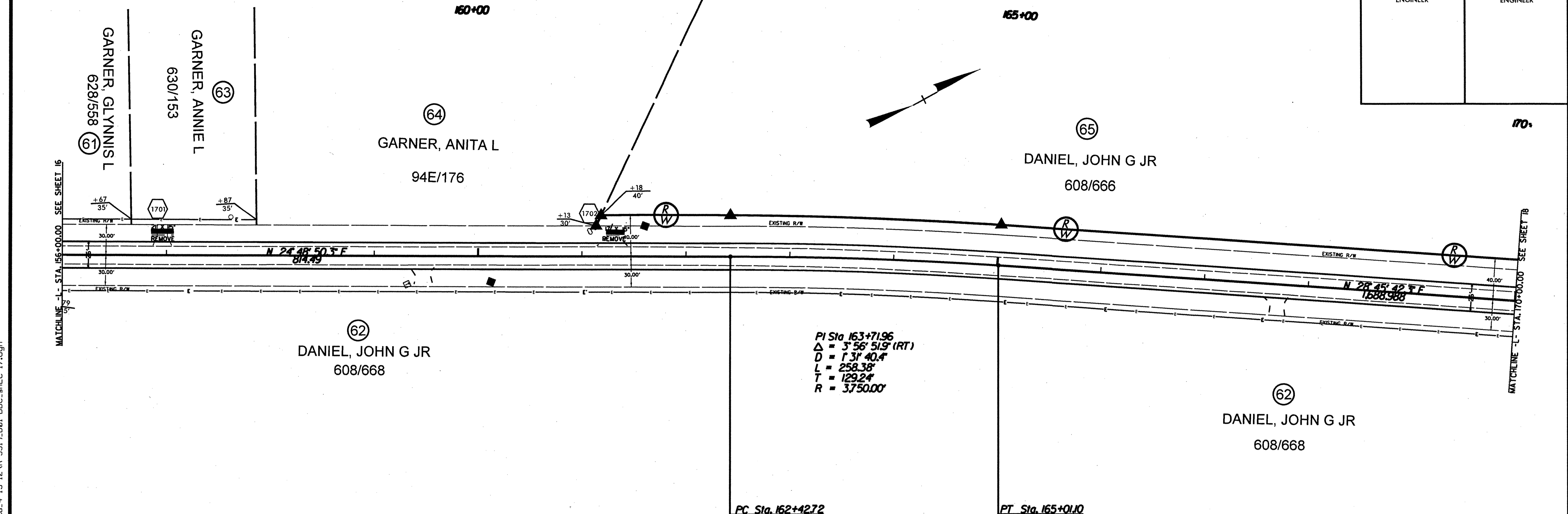


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8/17/99

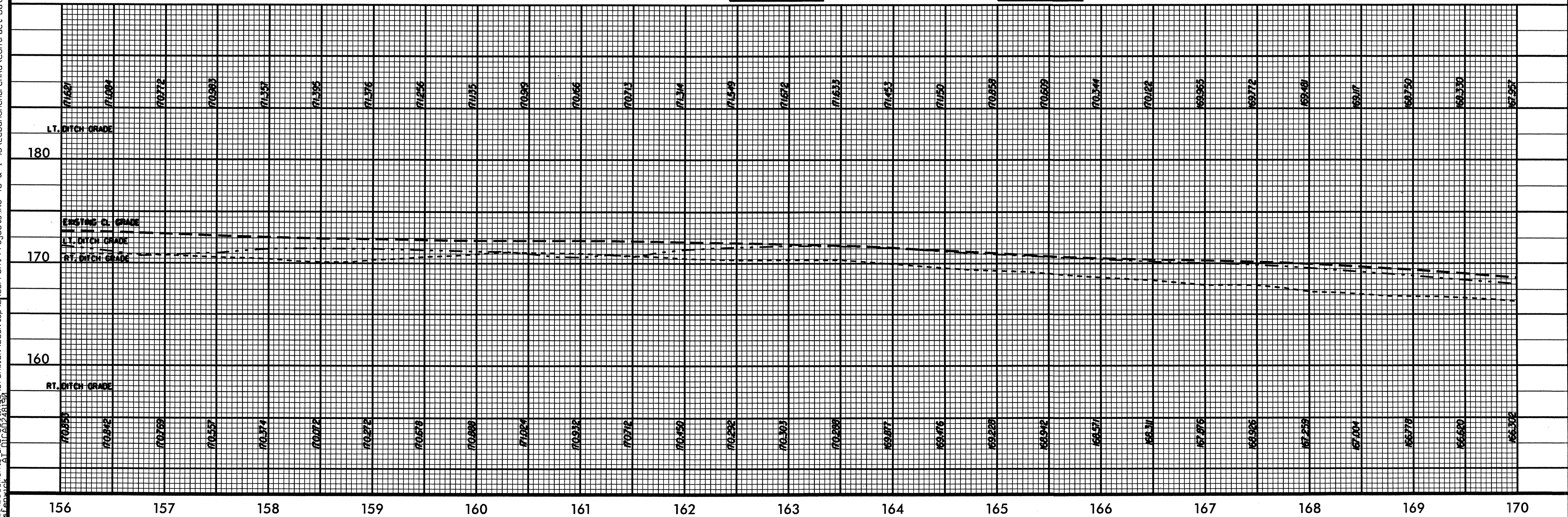
EROSION CONTROL PLAN

PROJECT REFERENCE NO. W-5016 & R-5519		SHEET NO. EC-17	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



REVISIONS

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 sfenwick



8/17/99

EROSION CONTROL PLAN

180+00

175+00

PROJECT REFERENCE NO. W-5016 & R-5519		SHEET NO. EC-18	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

70+00

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608/666

66
TURNER, N R HEIRS
0/0

68
COOKE, MARY J HEIRS
458/110

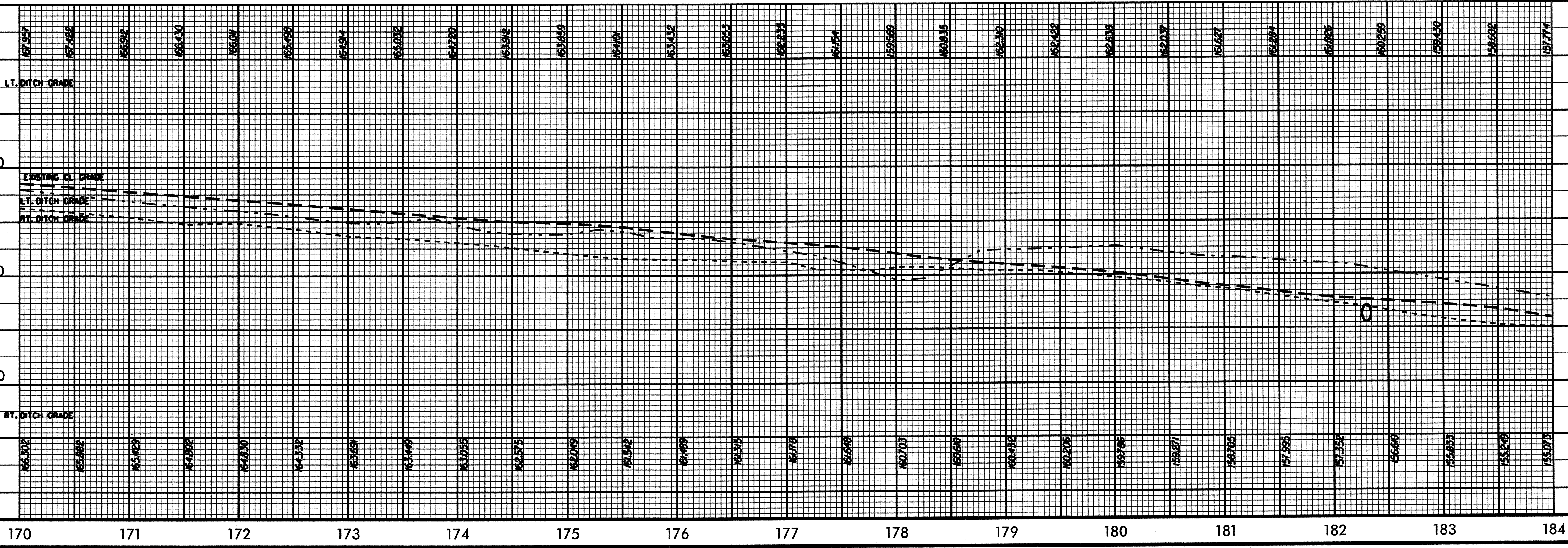
62
DANIEL, JOHN G JR
608/668

67
RASH, ELIZABETH F REV TRUST
760/667

PI Sta. 183+78.52
Δ = 4° 29' 57" (LT)
D = 8' 48" 53.0"
L = 51.0'
T = 25.5'
R = 650.0'
PC Sta. 183+52.98

MATCHLINE - L - STA. 170+00.00 SEE SHEET 17

MATCHLINE - L - STA. 184+00.00 SEE SHEET 19

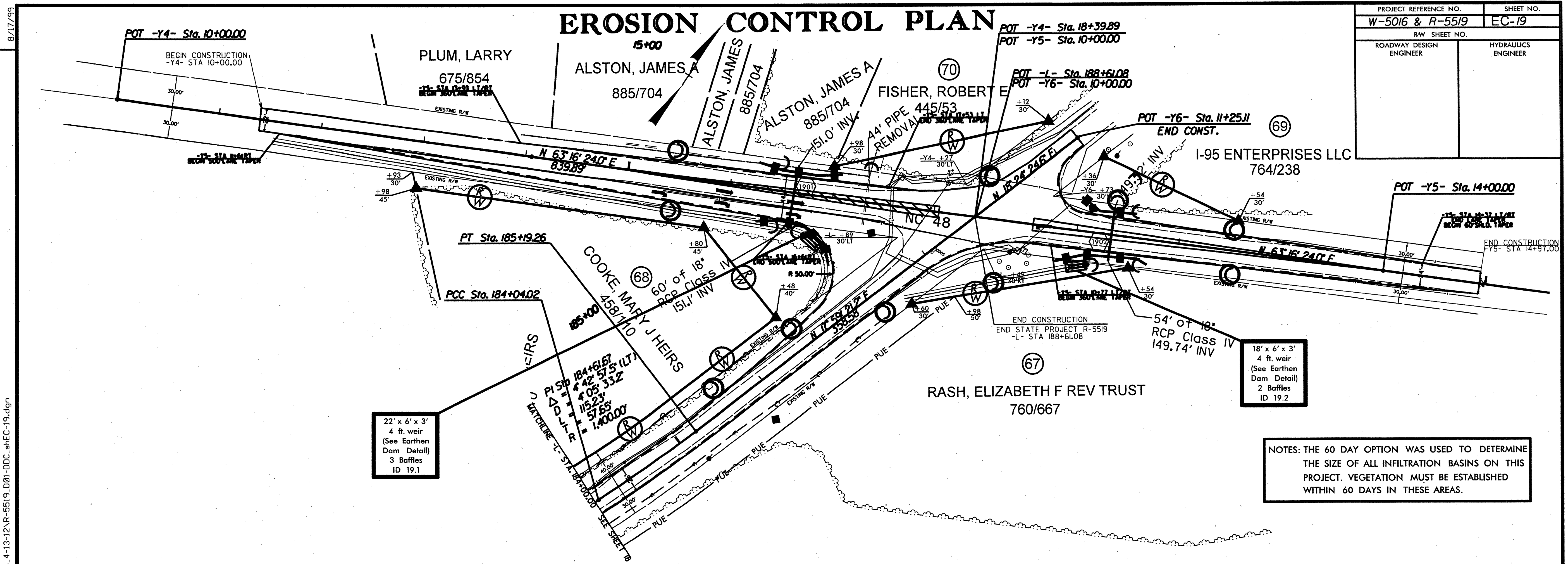


REVISIONS

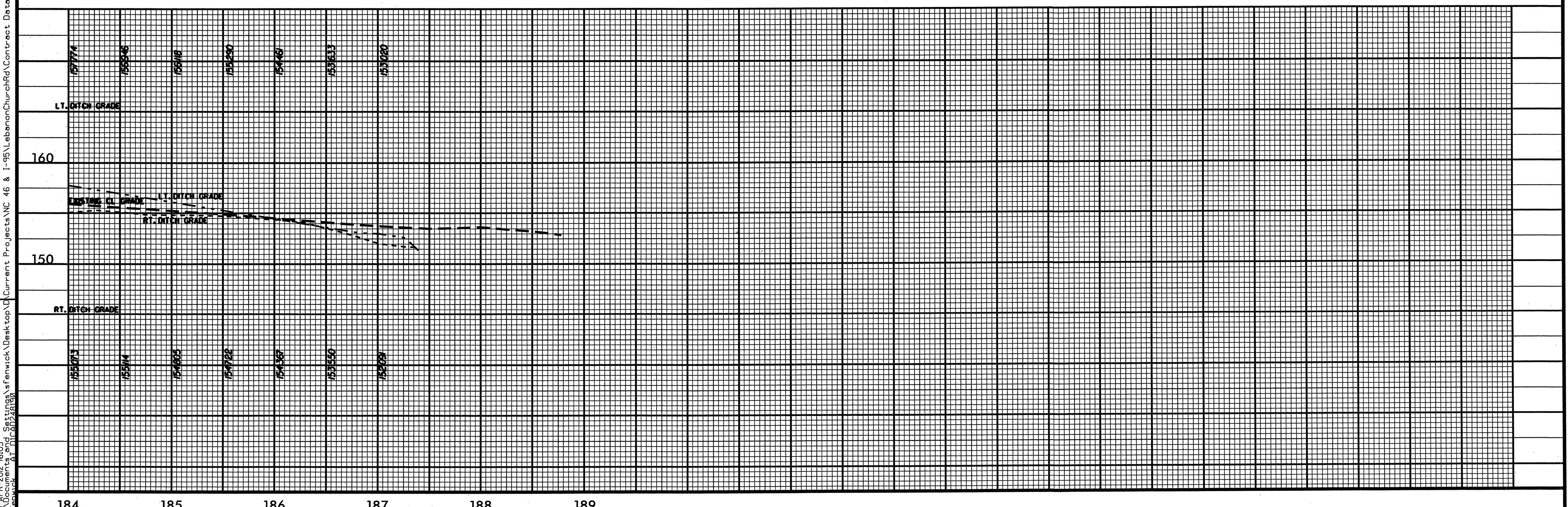
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EROSION CONTROL PLAN

PROJECT REFERENCE NO. W-5016 & R-5519	SHEET NO. EC-19
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTES: THE 60 DAY OPTION WAS USED TO DETERMINE THE SIZE OF ALL INFILTRATION BASINS ON THIS PROJECT. VEGETATION MUST BE ESTABLISHED WITHIN 60 DAYS IN THESE AREAS.



8/17/99
 REVISIONS
 23-APR-2012 16:05
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 stfenwick AT 11/26/2013