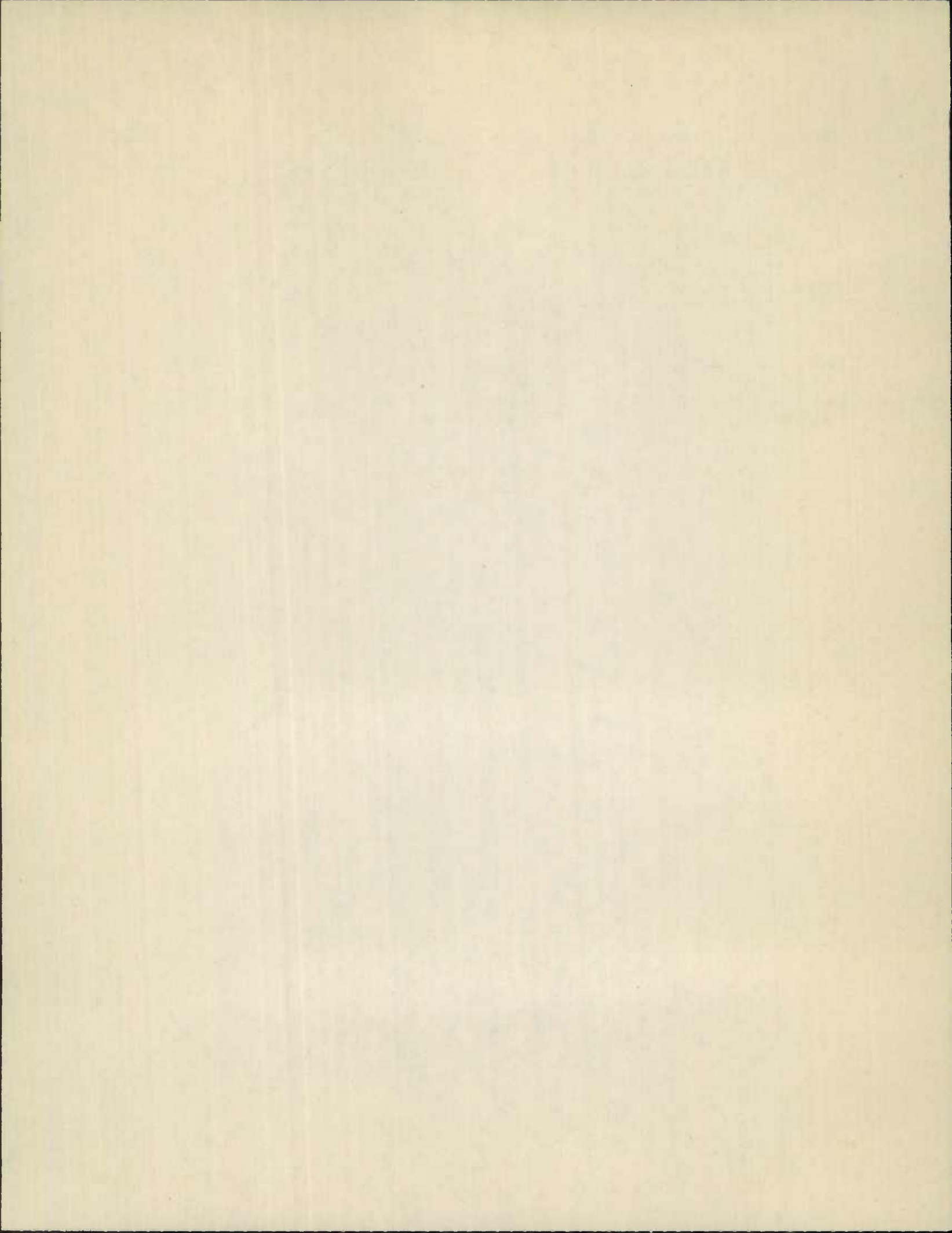


WASHINGTON CO

09/23/92 STATE HIGHWAY HPMS SAMPLES THAT REQUIRE CURVE DATA

PAGE 14

CO	ROUTE	BEGIN	SECT	LENTH	END	MAP	COORD
1	21 IS 68	08.04		00.64	08.68	A6	687 - 461
2	21 US 11	06.32		00.17	06.49	A8	658 - 592
3	21 US 11	06.49		00.29	06.78	A8	659 - 592
4	21 US 11	09.26		00.22	09.48	A8	670 - 598
5	21 US 11	09.48		00.07	09.55	AA	671 - 598
6	21 US 11	10.43		00.51	10.94	A6	678 - 597
7	21 US 11	10.94		00.10	11.04	A8	680 - 597
8	21 US 11	11.04		00.59	11.63	A8	681 - 597
9	21 US 11	11.63		00.65	12.28	A8	682 - 597
10	21 US 11	12.28		00.05	12.33	A8	685 - 597
11	21 US 11	12.33		00.18	12.51	A8	686 - 597
12	21 US 11	12.51		00.32	12.83	A8	688 - 597
13	21 US 40AL	00.24		00.34	00.58	A8	- - -
14	21 US 40AL	00.92		00.44	01.36	A8	- - -



V/1247

CURVE - GRADE DATA COLLECTION
NON - STATE ROADS - FY - 1992

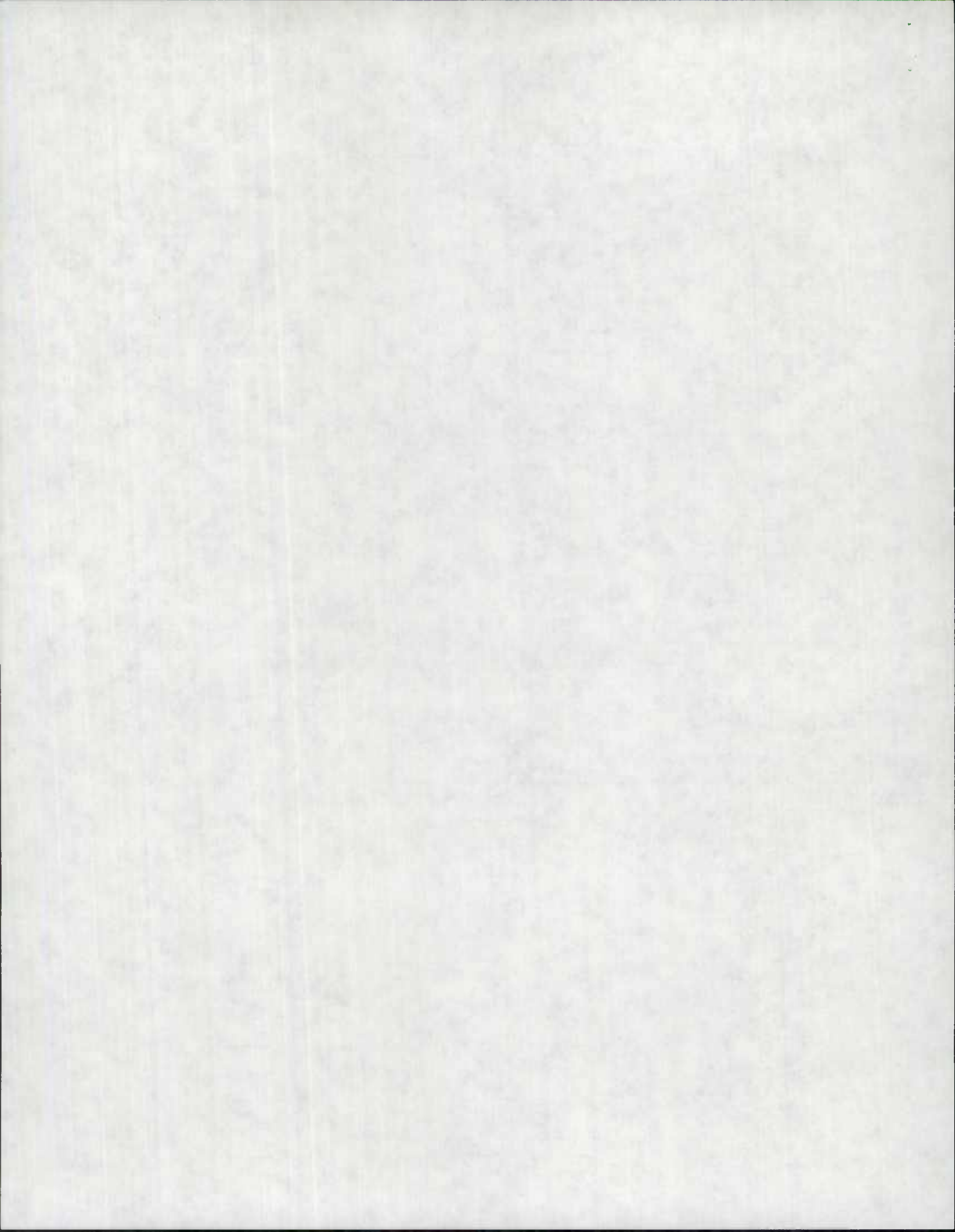
Route No: I-68
Sample No: 1
County: 21

Starting Mile Pt: 8.04
Ending Mile Pt: 8.68
(.64)

Horizontal Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Chord</u> <u>length</u> <u>(/100ft)</u>	<u>Central</u> <u>Ordi. Length</u> <u>(/100ft)</u>	<u>Length of Total</u> <u>Curve in(x.xxmile)</u>
<u>0</u>	<u>3379</u>	<u>100</u>	<u>0</u>	<u>-----</u>
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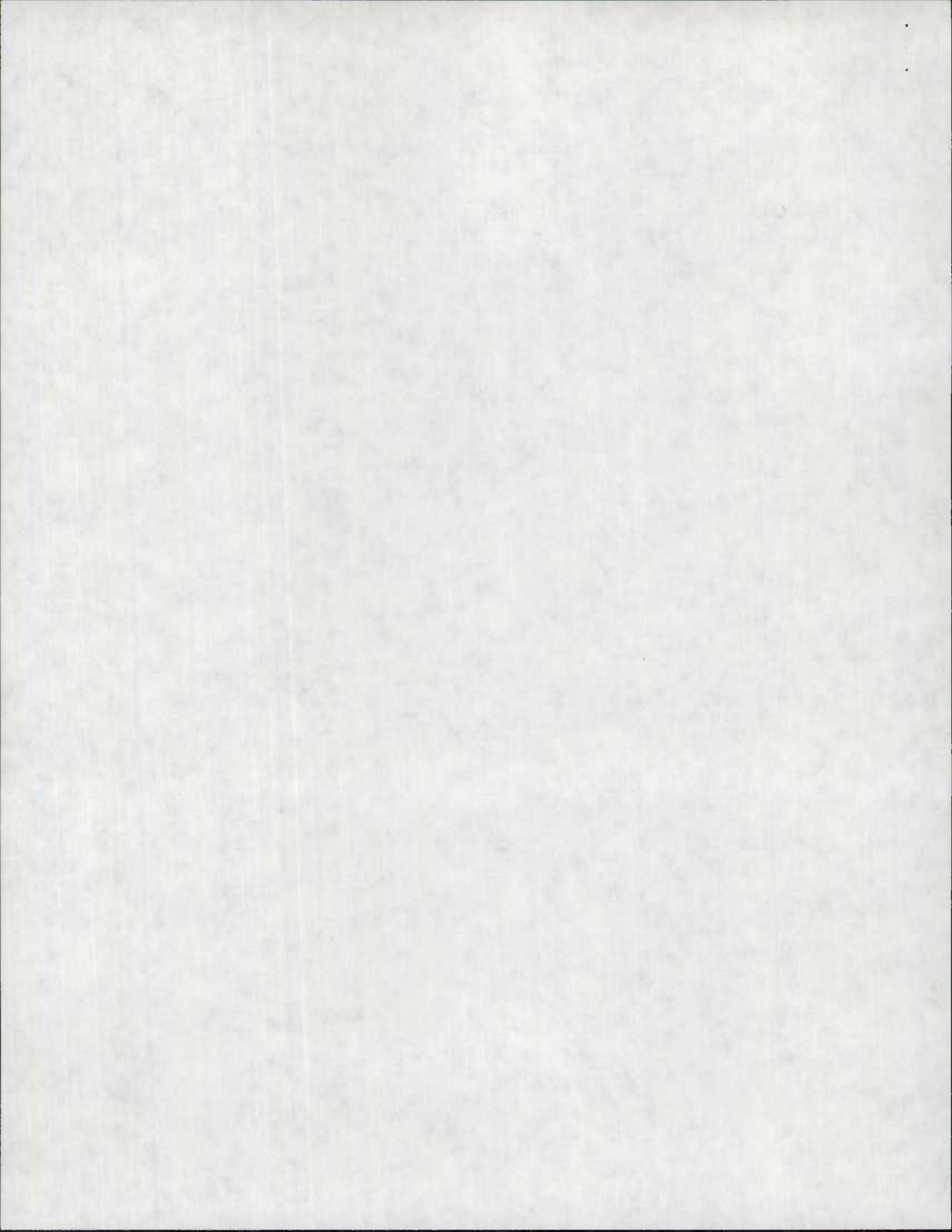
	<u>Curve</u> <u>Classes</u> <u>by</u> <u>Degree of</u> <u>Curvature</u>	<u>Number of</u> <u>Curves</u> <u>(Right-</u> <u>Justified)</u>	<u>Length</u> <u>of Curves</u> <u>in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	<u>-----</u>	<u>-----</u>
b.	0.5-1.4	<u>-----</u>	<u>-----</u>
c.	1.5-2.4	<u>-----</u>	<u>-----</u>
d.	2.5-3.4	<u>-----</u>	<u>-----</u>
e.	3.5-4.4	<u>-----</u>	<u>-----</u>
f.	4.5-5.4	<u>-----</u>	<u>-----</u>
g.	5.5-6.9	<u>-----</u>	<u>-----</u>
h.	7.0-8.4	<u>-----</u>	<u>-----</u>
i.	8.5-10.9	<u>-----</u>	<u>-----</u>
j.	11.0-13.9	<u>-----</u>	<u>-----</u>
k.	14.0-19.4	<u>-----</u>	<u>-----</u>
l.	19.5-27.9	<u>-----</u>	<u>-----</u>
m.	23+	<u>-----</u>	<u>-----</u>



Vertical Curve Section

<u>Start Pt.</u> (in ft.)	<u>End Pt.</u> (in ft.)	<u>Gradient Percent</u>	<u>Length of Curve</u> (in x.xx miles)
0	2010	+ 3.5%	-----
2010	3379	- 3.9%	-----
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	<u>Grade Classes by Gradient (Percent)</u>	<u>Number of Grades (Right- Justified)</u>	<u>Length of Grades in Class (Implied Decimal) (xx.xxx miles)</u>
a.	0.0-0.4	-----	-----
b.	0.5-2.4	-----	-----
c.	2.5-4.4	-----	-----
d.	4.5-6.4	-----	-----
e.	6.5-8.4	-----	-----
f.	8.5-	-----	-----



✓ 12/7

CURVE - GRADE DATA COLLECTION
NON - STATE ROADS - FY - 1992

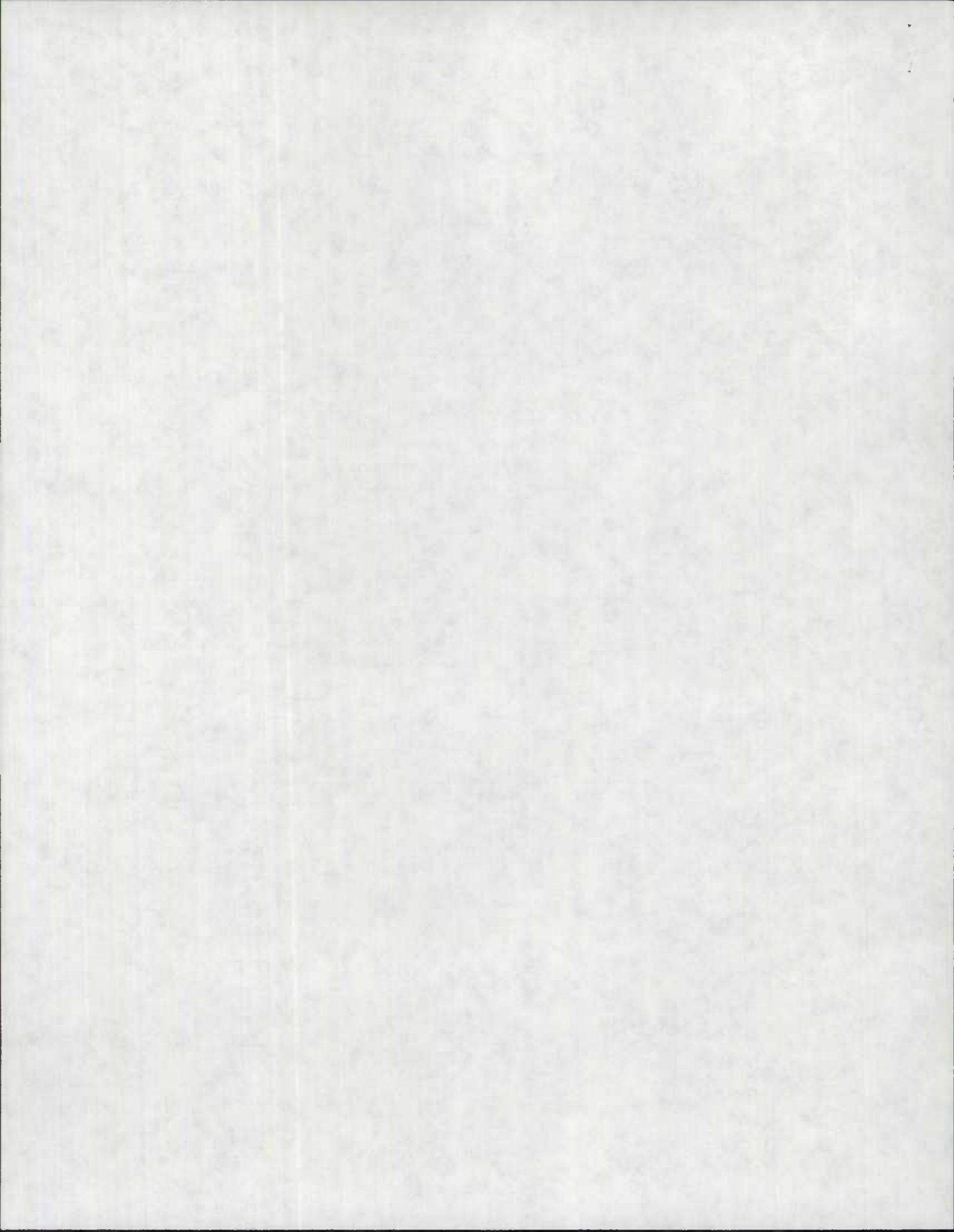
Route No: US 11
 Sample No: 2
 County: 21

Starting Mile Pt: 6.32
 Ending Mile Pt: 6.49
(.17)

Horizontal Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Chord</u> <u>length</u> <u>(/100ft)</u>	<u>Central</u> <u>Ord1. Length</u> <u>(/100ft)</u>	<u>Length of Total</u> <u>Curve in(x.xxmile)</u>
<u>0</u>	<u>998</u>	<u>100</u>	<u>0</u>	-----
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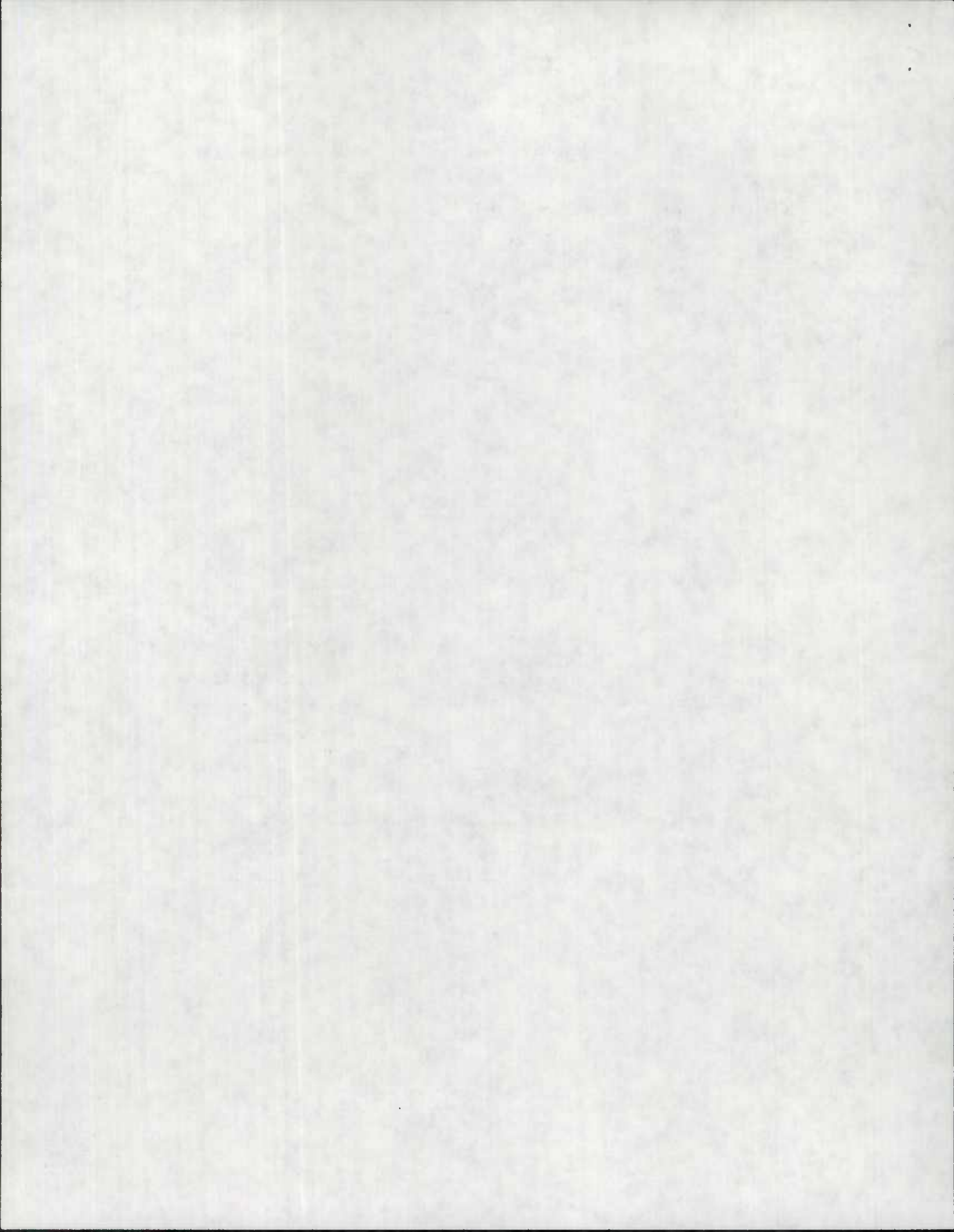
	<u>Curve</u> <u>Classes</u> <u>by</u> <u>Degree of</u> <u>Curvature</u>	<u>Number of</u> <u>Curves</u> <u>(Right-</u> <u>Justified)</u>	<u>Length</u> <u>of Curves</u> <u>in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	-----	-----
b.	0.5-1.4	-----	-----
c.	1.5-2.4	-----	-----
d.	2.5-3.4	-----	-----
e.	3.5-4.4	-----	-----
f.	4.5-5.4	-----	-----
g.	5.5-6.9	-----	-----
h.	7.0-8.4	-----	-----
i.	8.5-10.9	-----	-----
j.	11.0-13.9	-----	-----
k.	14.0-19.4	-----	-----
l.	19.5-27.9	-----	-----
m.	23+	-----	-----



Vertical Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Gradient Percent</u>	<u>Length of Curve</u> <u>(in x.xx miles)</u>
0	614	- 3.4 %	
614	898	- 0.8 %	

	<u>Grade Classes by Gradient (Percent)</u>	<u>Number of Grades (Right- Justified)</u>	<u>Length of Grades in Class (Implied Decimal) (xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-2.4	_____	_____
c.	2.5-4.4	_____	_____
d.	4.5-6.4	_____	_____
e.	6.5-8.4	_____	_____
f.	8.5-	_____	_____



✓ 12/7

CURVE - GRADE DATA COLLECTION
NON - STATE ROADS - FY - 1992

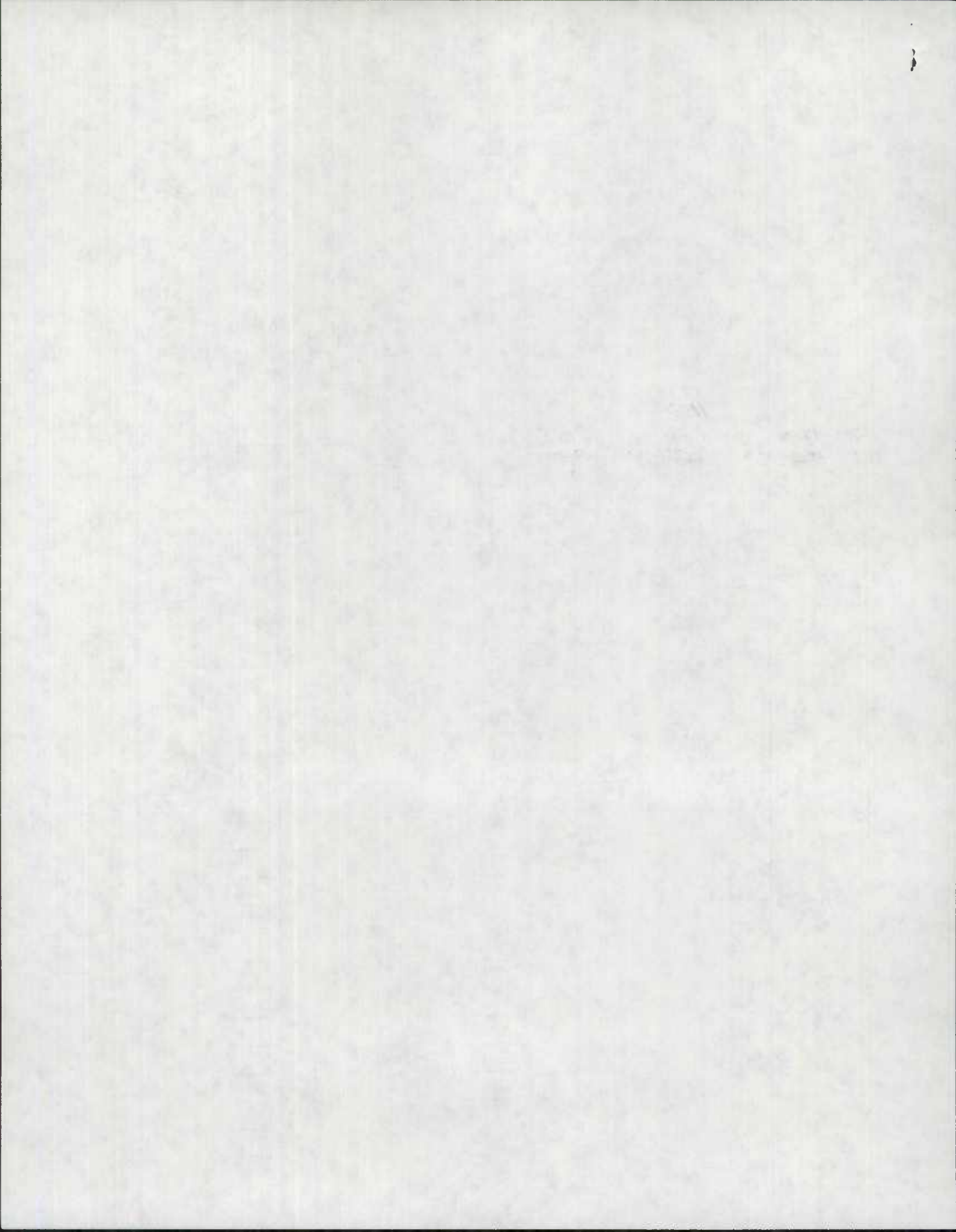
Route No: US 11
 Sample No: 3
 County: 21

Starting Mile Pt: 6.49
 Ending Mile Pt: 6.78
(.29)

Horizontal Curve Section

<u>Start Pt.</u> (in ft.)	<u>End Pt.</u> (in ft.)	<u>Chord</u> <u>length</u> (/100ft)	<u>Central</u> <u>Ord. Length</u> (/100ft)	<u>Length of Total</u> <u>Curve in(x.xxmile)</u>
0	1030	100	0	
1030	1158	99.0		
1158	1310	100	0	
1310	1547	99.0		

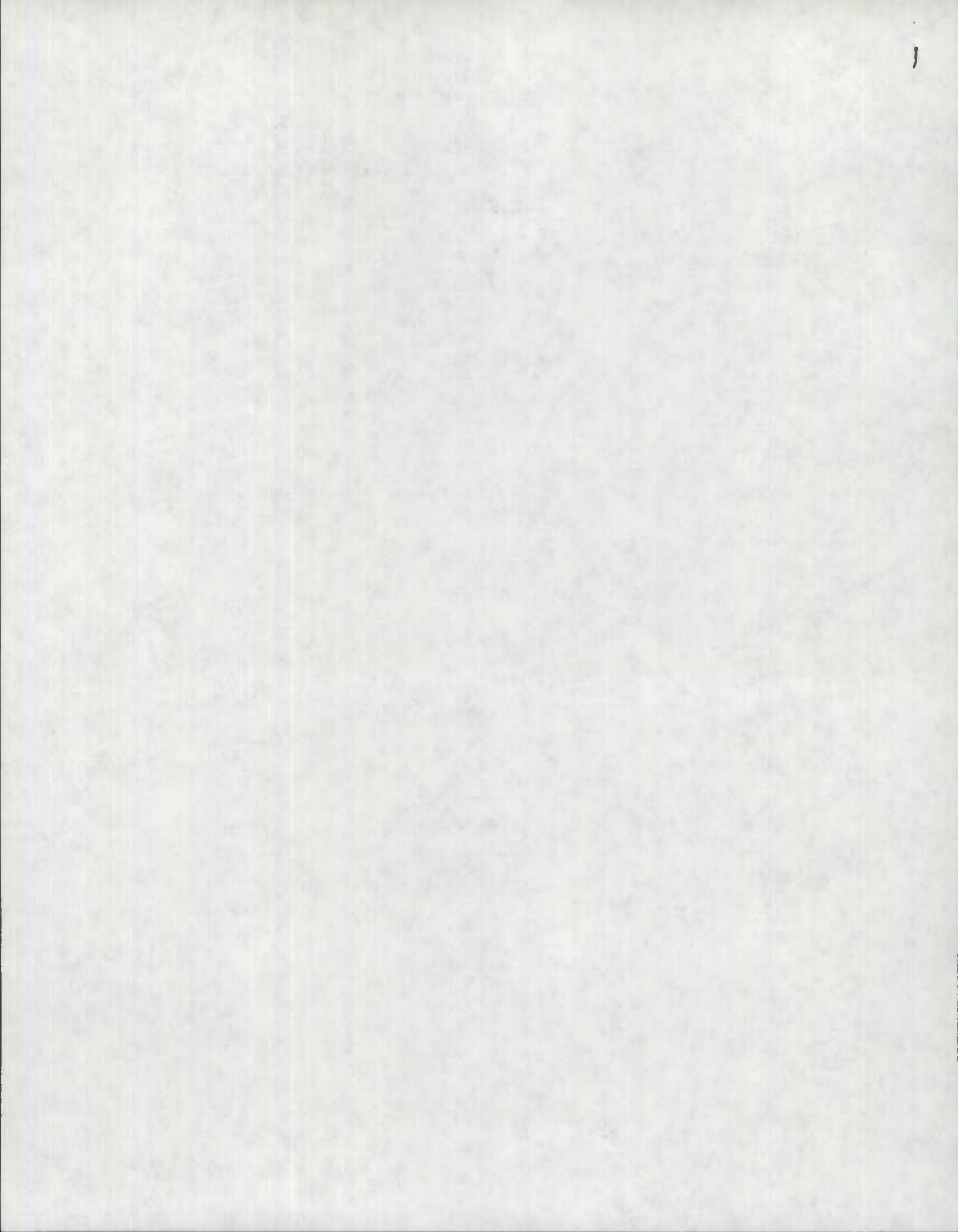
	<u>Curve</u> <u>Classes</u> <u>by</u> <u>Degree of</u> <u>Curvature</u>	<u>Number of</u> <u>Curves</u> <u>(Right-</u> <u>Justified)</u>	<u>Length</u> <u>of Curves</u> <u>in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-1.4	_____	_____
c.	1.5-2.4	_____	_____
d.	2.5-3.4	_____	_____
e.	3.5-4.4	_____	_____
f.	4.5-5.4	_____	_____
g.	5.5-6.9	_____	_____
h.	7.0-8.4	_____	_____
i.	8.5-10.9	_____	_____
j.	11.0-13.9	_____	_____
k.	14.0-19.4	_____	_____
l.	19.5-27.9	_____	_____
m.	23+	_____	_____



Vertical Curve Section

<u>Start Pt.</u> (in ft.)	<u>End Pt.</u> (in ft.)	<u>Gradient Percent</u>	<u>Length of Curve</u> (in x.xx miles)
0	405	+ 2.8 %	
405	1084	- 0.6	
1084	1547	- 4.2	

	<u>Grade Classes by Gradient (Percent)</u>	<u>Number of Grades (Right-Justified)</u>	<u>Length of Grades in Class (Implied Decimal) (xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-2.4	_____	_____
c.	2.5-4.4	_____	_____
d.	4.5-6.4	_____	_____
e.	6.5-8.4	_____	_____
f.	8.5-	_____	_____



✓ 12/17

CURVE - GRADE DATA COLLECTION
 NON - STATE ROADS - FY - 1992

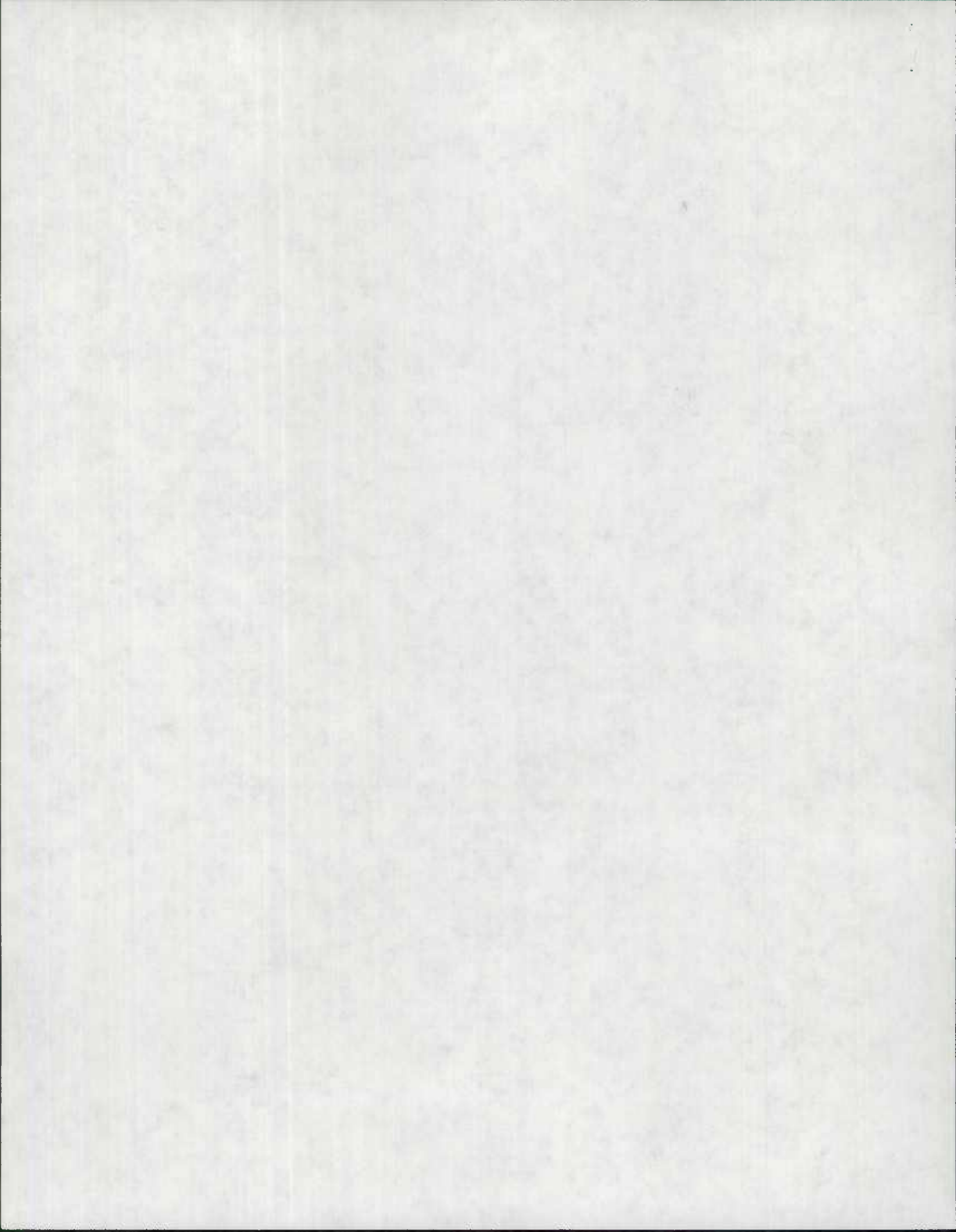
Route No: US 11
 Sample No: B 4
 County: 21

Starting Mile Pt: 9.26
 Ending Mile Pt: 9.48
 (.22)

Horizontal Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Chord</u> <u>length</u> <u>(/100ft)</u>	<u>Central</u> <u>Ord. Length</u> <u>(/100ft)</u>	<u>Length of Total</u> <u>Curve in(x.xxmile)</u>
<u>0</u>	<u>1162</u>	<u>100</u>	<u>0</u>	
<u>520</u>	<u>520</u>			
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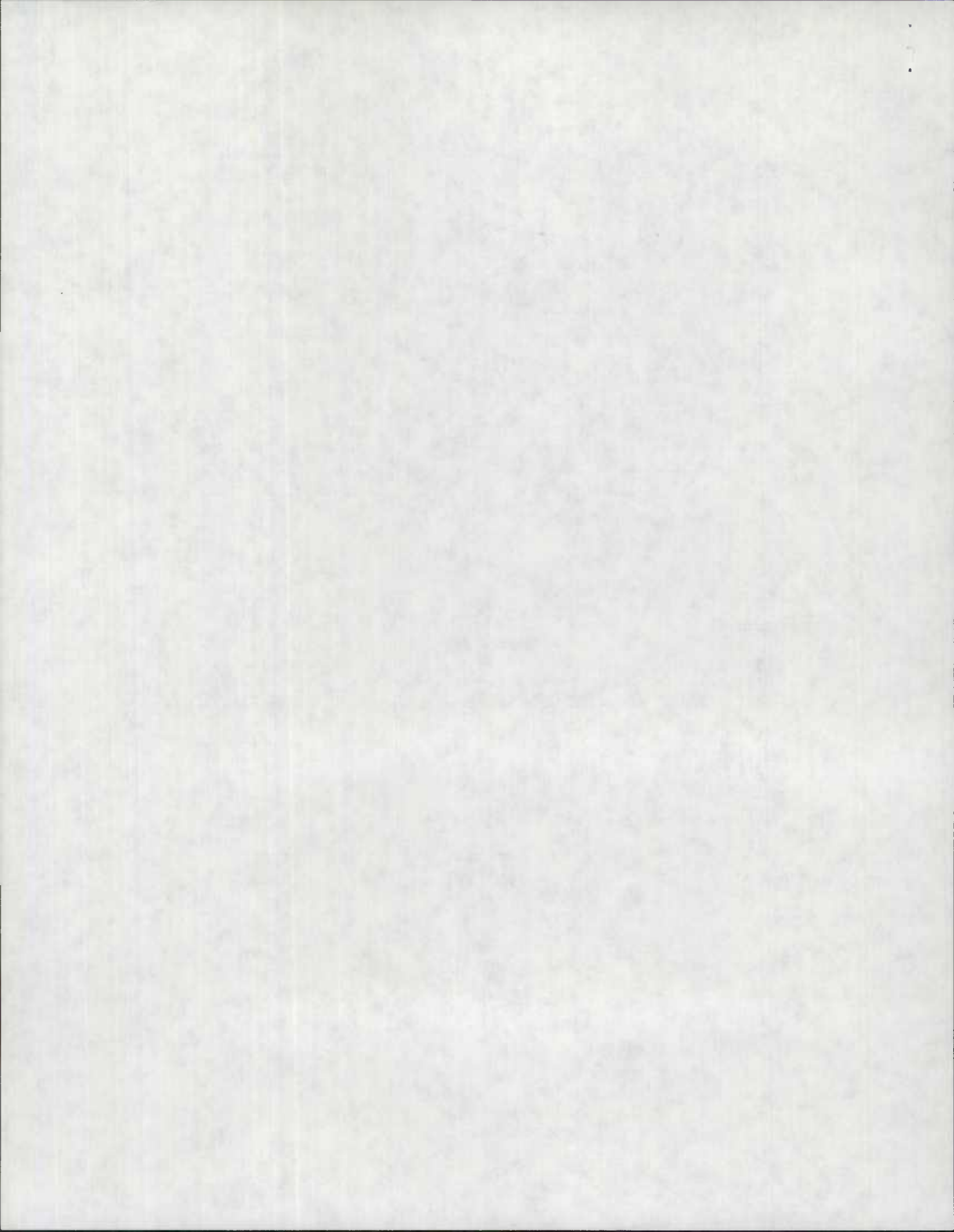
	<u>Curve</u> <u>Classes</u> <u>by</u> <u>Degree of</u> <u>Curvature</u>	<u>Number of</u> <u>Curves</u> <u>(Right-</u> <u>Justified)</u>	<u>Length</u> <u>of Curves</u> <u>in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-1.4	_____	_____
c.	1.5-2.4	_____	_____
d.	2.5-3.4	_____	_____
e.	3.5-4.4	_____	_____
f.	4.5-5.4	_____	_____
g.	5.5-6.9	_____	_____
h.	7.0-8.4	_____	_____
i.	8.5-10.9	_____	_____
j.	11.0-13.9	_____	_____
k.	14.0-19.4	_____	_____
l.	19.5-27.9	_____	_____
m.	23+	_____	_____



Vertical Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Gradient Percent</u>	<u>Length of Curve</u> <u>(in x.xx miles)</u>
0	538	+ .7	
538	1162	- .9	

	<u>Grade Classes by Gradient (Percent)</u>	<u>Number of Grades (Right- Justified)</u>	<u>Length of Grades in Class (Implied Decimal) (xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-2.4	_____	_____
c.	2.5-4.4	_____	_____
d.	4.5-6.4	_____	_____
e.	6.5-8.4	_____	_____
f.	8.5-	_____	_____



✓ 12/12

CURVE - GRADE DATA COLLECTION
NON - STATE ROADS - FY - 1992

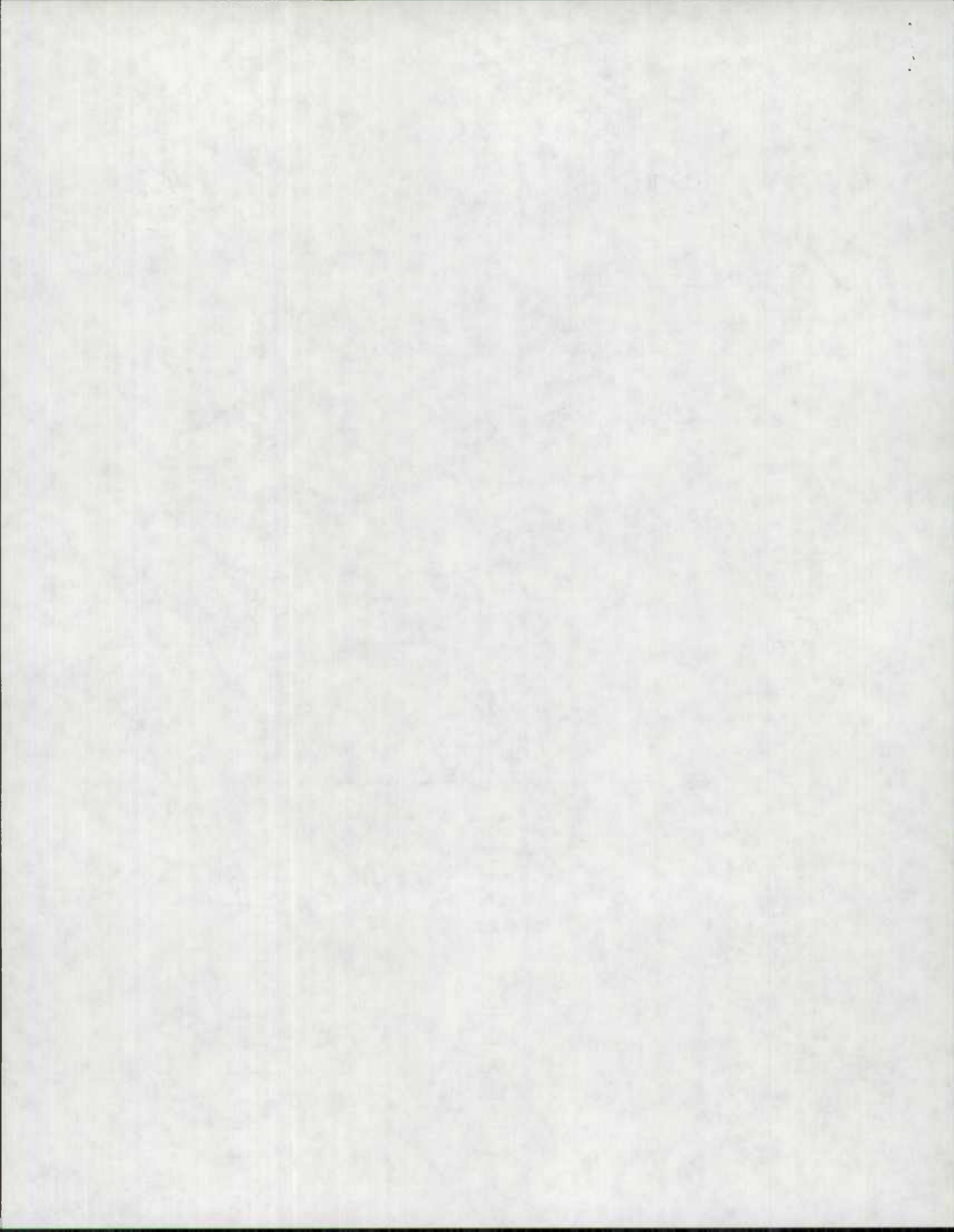
Route No: US 11
Sample No: 5
County: 21

Starting Mile Pt: 9.48
Ending Mile Pt: 9.55
(.07)

Horizontal Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Chord</u> <u>length</u> <u>(/100ft)</u>	<u>Central</u> <u>Ord. Length</u> <u>(/100ft)</u>	<u>Length of Total</u> <u>Curve in(x.xxmile)</u>
<u>0</u>	<u>370</u>	<u>100</u>	<u>0</u>	<u>-----</u>
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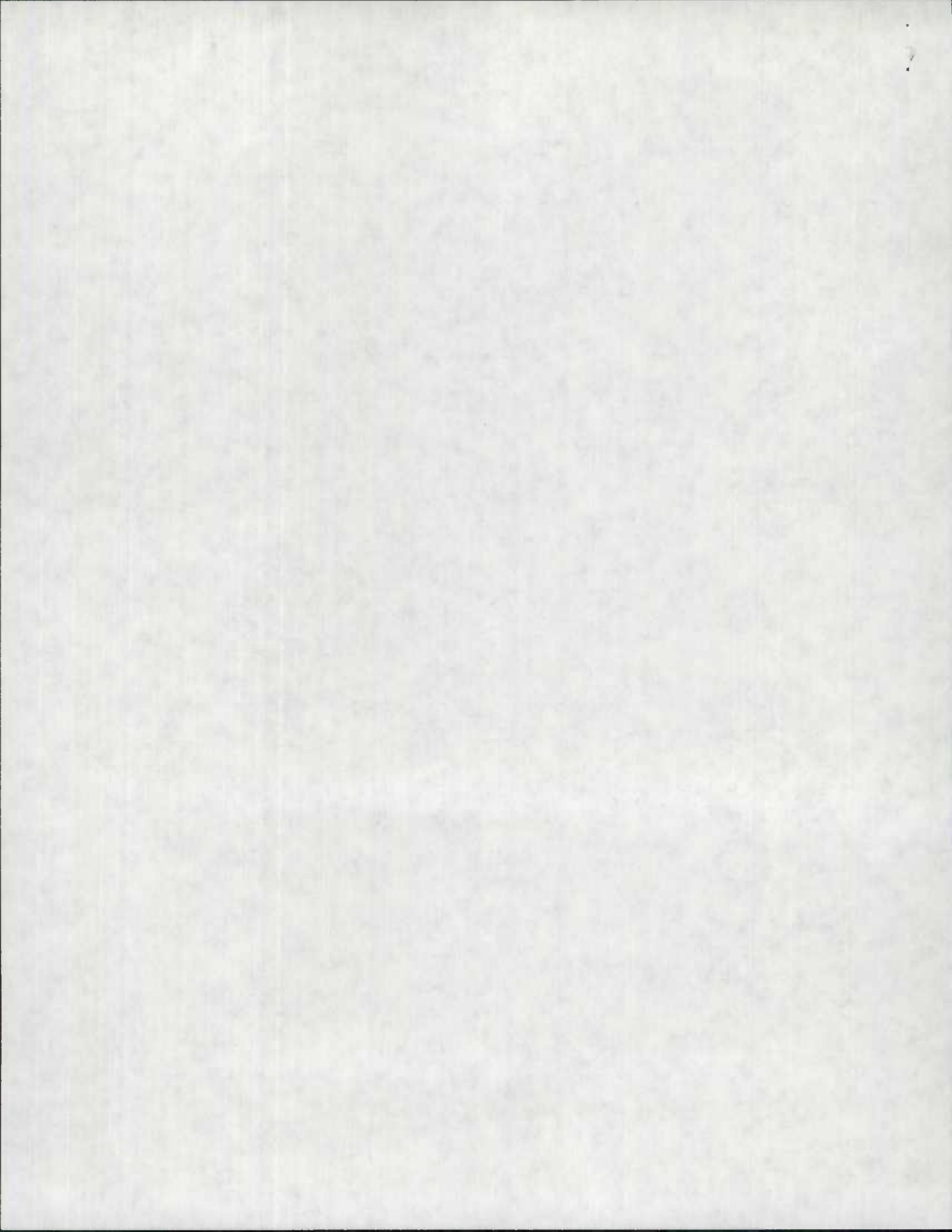
	<u>Curve</u> <u>Classes</u> <u>by</u> <u>Degree of</u> <u>Curvature</u>	<u>Number of</u> <u>Curves</u> <u>(Right-</u> <u>Justified)</u>	<u>Length</u> <u>of Curves</u> <u>in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	<u>-----</u>	<u>-----</u>
b.	0.5-1.4	<u>-----</u>	<u>-----</u>
c.	1.5-2.4	<u>-----</u>	<u>-----</u>
d.	2.5-3.4	<u>-----</u>	<u>-----</u>
e.	3.5-4.4	<u>-----</u>	<u>-----</u>
f.	4.5-5.4	<u>-----</u>	<u>-----</u>
g.	5.5-6.9	<u>-----</u>	<u>-----</u>
h.	7.0-8.4	<u>-----</u>	<u>-----</u>
i.	8.5-10.9	<u>-----</u>	<u>-----</u>
j.	11.0-13.9	<u>-----</u>	<u>-----</u>
k.	14.0-19.4	<u>-----</u>	<u>-----</u>
l.	19.5-27.9	<u>-----</u>	<u>-----</u>
m.	23+	<u>-----</u>	<u>-----</u>



Vertical Curve Section

<u>Start Pt.</u> (in ft.)	<u>End Pt.</u> (in ft.)	<u>Gradient Percent</u>	<u>Length of Curve</u> (in x.xx miles)
0	370	-.9	
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	<u>Grade Classes by Gradient (Percent)</u>	<u>Number of Grades (Right- Justified)</u>	<u>Length of Grades in Class (Implied Decimal) (xx.xxx miles)</u>
a.	0.0-0.4	-----	-----
b.	0.5-2.4	-----	-----
c.	2.5-4.4	-----	-----
d.	4.5-6.4	-----	-----
e.	6.5-8.4	-----	-----
f.	8.5-	-----	-----



V127

CURVE - GRADE DATA COLLECTION
NON - STATE ROADS - FY - 1992

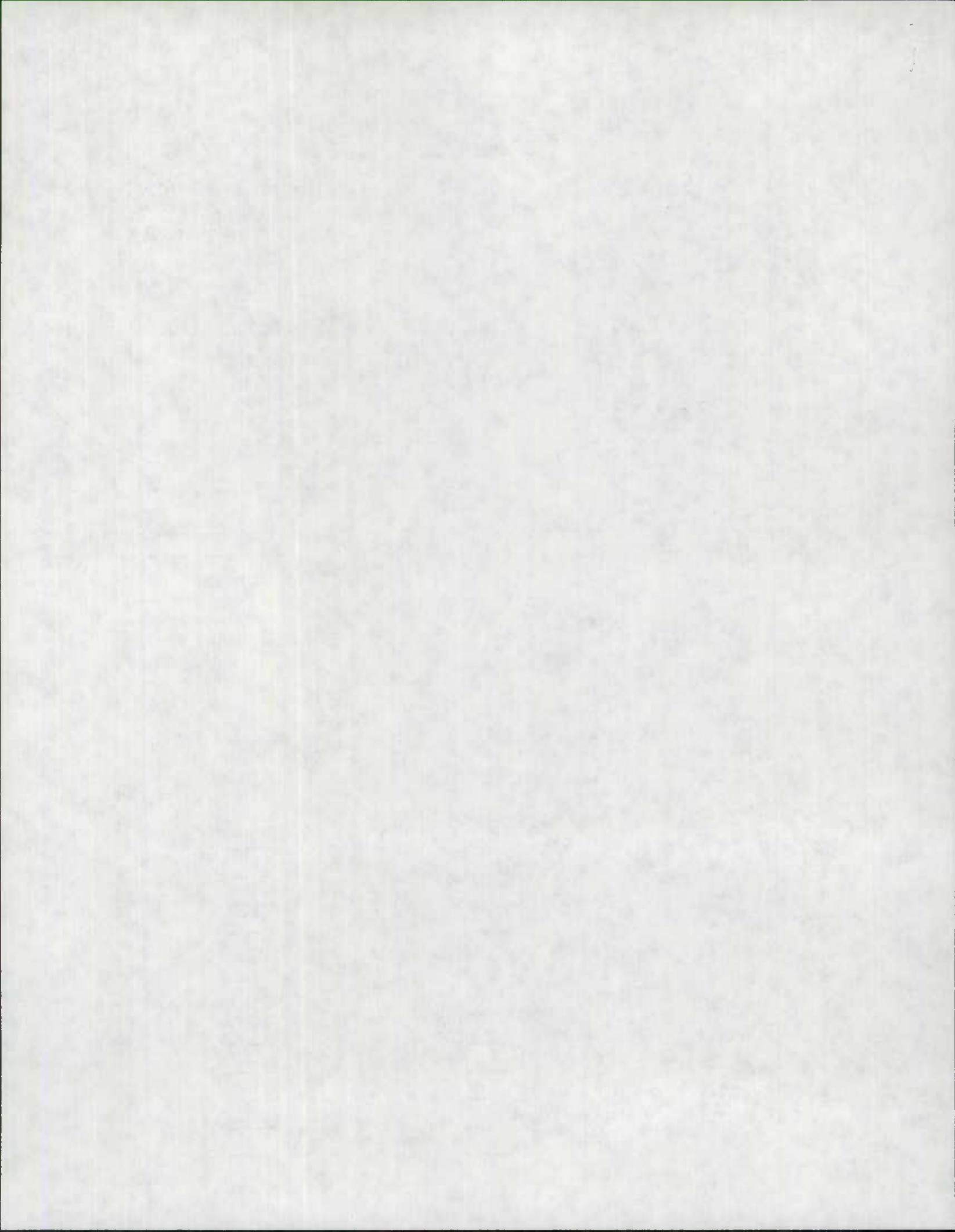
Route No: US 11
Sample No: 6
County: 21

Starting Mile Pt: 10.43
Ending Mile Pt: 10.94
(.51)

Horizontal Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Chord</u> <u>length</u> <u>(/100ft)</u>	<u>Central</u> <u>Ord1. Length</u> <u>(/100ft)</u>	<u>Length of Total</u> <u>Curve in(x.xxmile)</u>
<u>0</u>	<u>2693</u>	<u>100</u>	<u>0</u>	
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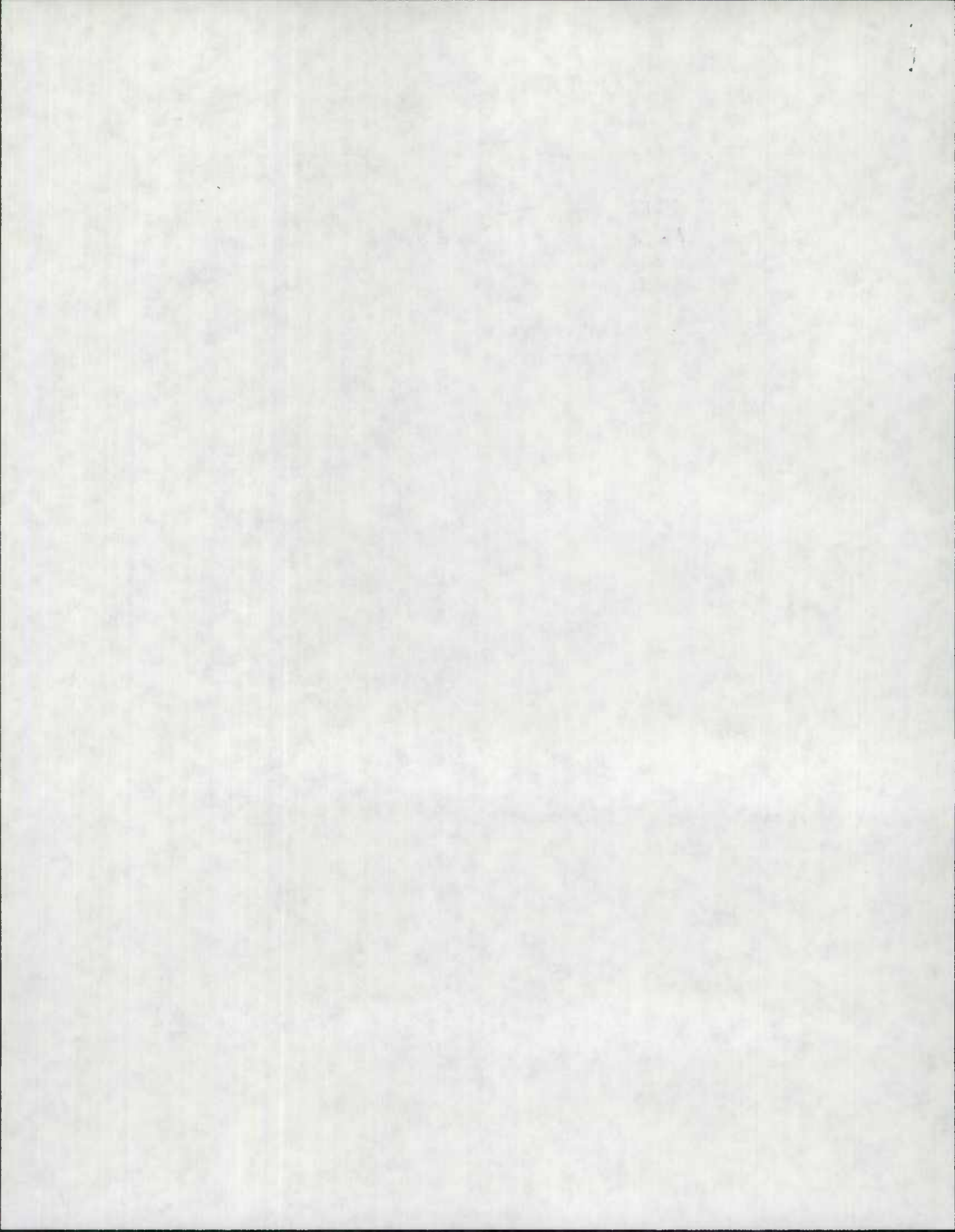
	<u>Curve</u> <u>Classes</u> <u>by</u> <u>Degree of</u> <u>Curvature</u>	<u>Number of</u> <u>Curves</u> <u>(Right-</u> <u>Justified)</u>	<u>Length</u> <u>of Curves</u> <u>in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-1.4	_____	_____
c.	1.5-2.4	_____	_____
d.	2.5-3.4	_____	_____
e.	3.5-4.4	_____	_____
f.	4.5-5.4	_____	_____
g.	5.5-6.9	_____	_____
h.	7.0-8.4	_____	_____
i.	8.5-10.9	_____	_____
j.	11.0-13.9	_____	_____
k.	14.0-19.4	_____	_____
l.	19.5-27.9	_____	_____
m.	23+	_____	_____



Vertical Curve Section

<u>Start Pt.</u> (in ft.)	<u>End Pt.</u> (in ft.)	<u>Gradient Percent</u>	<u>Length of Curve</u> (in x.xx miles)
0	1028	- .9	
1028	2693	+ 1.9	
1693	2693	0%	

	<u>Grade Classes by Gradient (Percent)</u>	<u>Number of Grades (Right- Justified)</u>	<u>Length of Grades in Class (Implied Decimal) (xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-2.4	_____	_____
c.	2.5-4.4	_____	_____
d.	4.5-6.4	_____	_____
e.	6.5-8.4	_____	_____
f.	8.5-	_____	_____



V147

CURVE - GRADE DATA COLLECTION
NON - STATE ROADS - FY - 1992

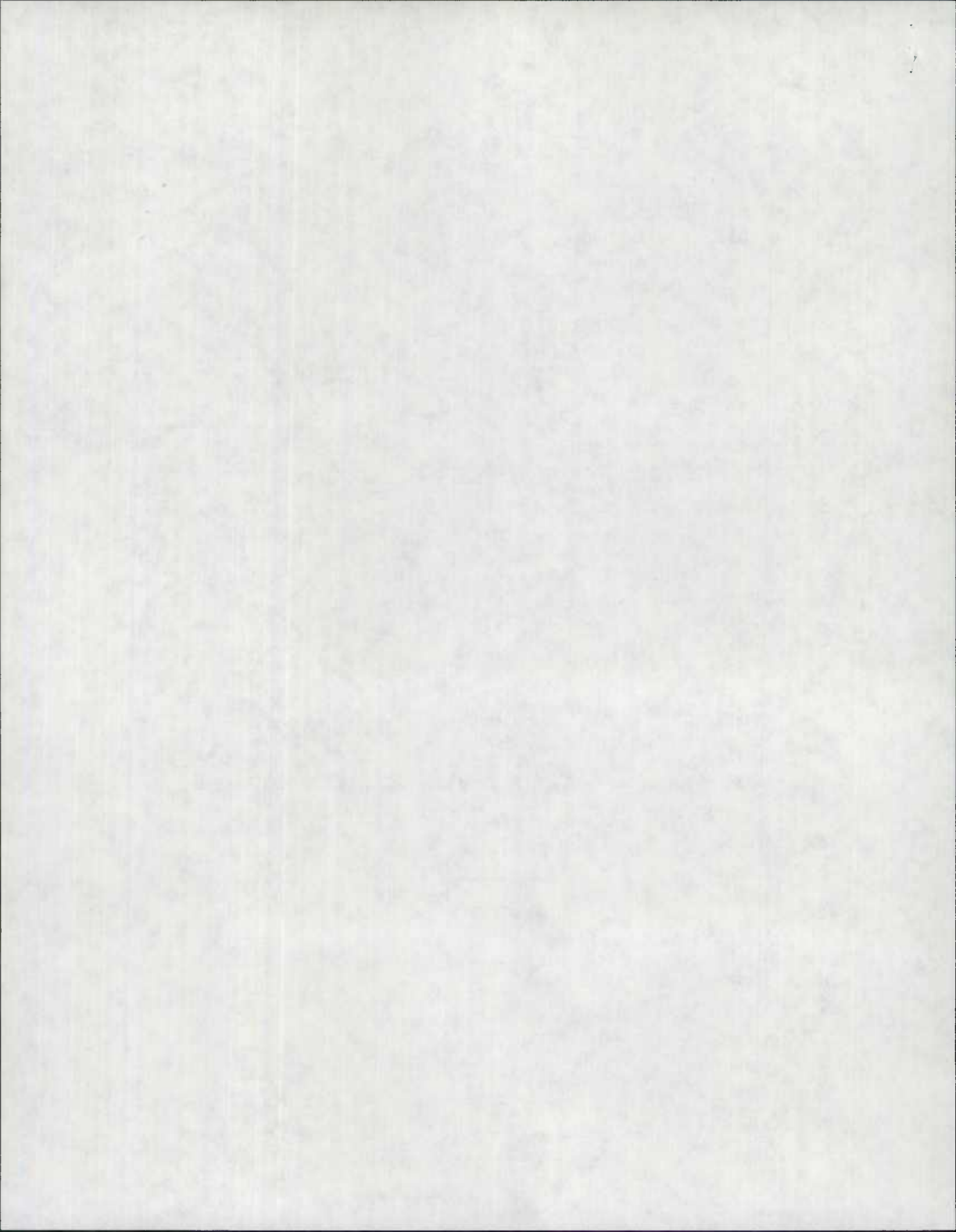
Route No: US 11
 Sample No: 7
 County: 21

Starting Mile Pt: 10.94
 Ending Mile Pt: 11.04
 (.10)

Horizontal Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Chord</u> <u>length</u> <u>(/100ft)</u>	<u>Central</u> <u>Ord1. Length</u> <u>(/100ft)</u>	<u>Length of Total</u> <u>Curve in(x.xxmile)</u>
<u>0</u>	<u>528</u>	<u>100</u>	<u>0</u>	
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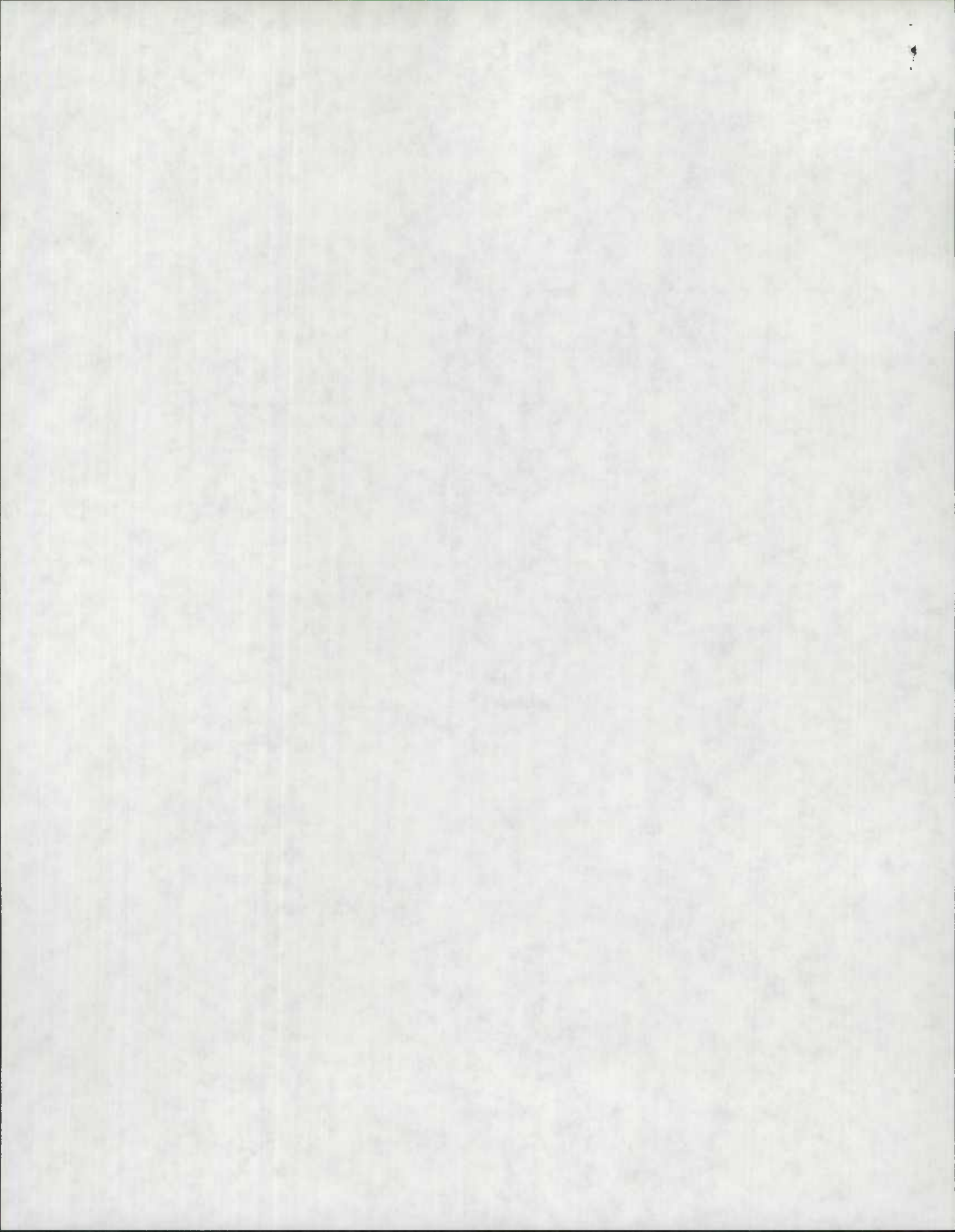
	<u>Curve</u> <u>Classes</u> <u>by</u> <u>Degree of</u> <u>Curvature</u>	<u>Number of</u> <u>Curves</u> <u>(Right-</u> <u>Justified)</u>	<u>Length</u> <u>of Curves</u> <u>in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-1.4	_____	_____
c.	1.5-2.4	_____	_____
d.	2.5-3.4	_____	_____
e.	3.5-4.4	_____	_____
f.	4.5-5.4	_____	_____
g.	5.5-6.9	_____	_____
h.	7.0-8.4	_____	_____
i.	8.5-10.9	_____	_____
j.	11.0-13.9	_____	_____
k.	14.0-19.4	_____	_____
l.	19.5-27.9	_____	_____
m.	23+	_____	_____



Vertical Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Gradient Percent</u>	<u>Length of Curve</u> <u>(in x.xx miles)</u>
0	528	+ 2.5	
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	<u>Grade Classes by Gradient (Percent)</u>	<u>Number of Grades (Right- Justified)</u>	<u>Length of Grades in Class (Implied Decimal) (xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-2.4	_____	_____
c.	2.5-4.4	_____	_____
d.	4.5-6.4	_____	_____
e.	6.5-8.4	_____	_____
f.	8.5-	_____	_____



✓ 127

CURVE - GRADE DATA COLLECTION
NON - STATE ROADS - FY - 1992

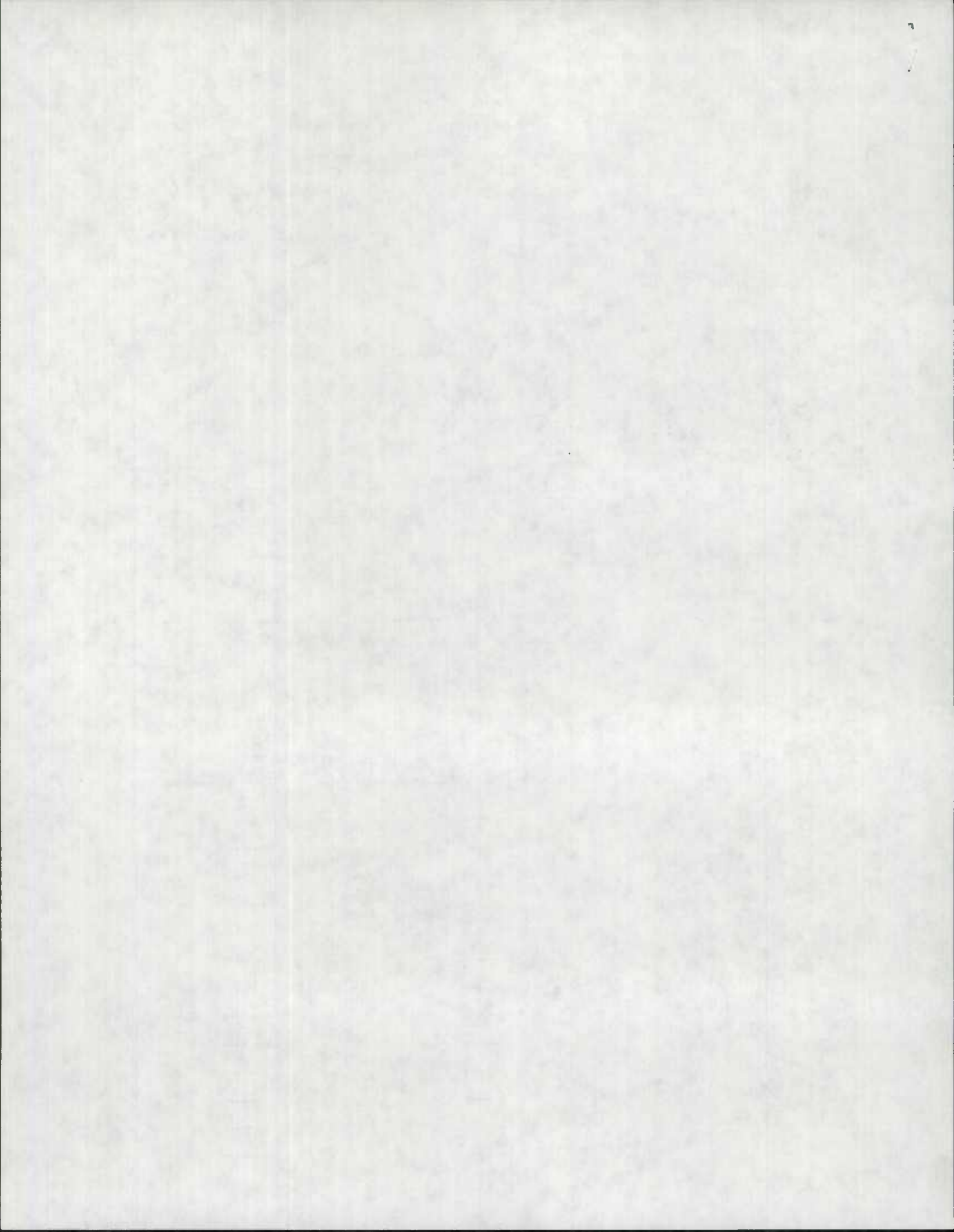
Route No: US 11
 Sample No: 8
 County: 21

Starting Mile Pt: 11.04
 Ending Mile Pt: 11.63
(.59)

Horizontal Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Chord</u> <u>length</u> <u>(/100ft)</u>	<u>Central</u> <u>Ord. Length</u> <u>(/100ft)</u>	<u>Length of Total</u> <u>Curve in(x.xxmile)</u>
<u>0</u>	<u>1781</u>	<u>100</u>	<u>0</u>	<u>-----</u>
<u>1781</u>	<u>2866</u>	<u>99.9</u>	<u>-----</u>	<u>-----</u>
<u>2866</u>	<u>3117</u>	<u>100</u>	<u>0</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
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<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
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	<u>Curve</u> <u>Classes</u> <u>by</u> <u>Degree of</u> <u>Curvature</u>	<u>Number of</u> <u>Curves</u> <u>(Right-</u> <u>Justified)</u>	<u>Length</u> <u>of Curves</u> <u>in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	<u>-----</u>	<u>-----</u>
b.	0.5-1.4	<u>-----</u>	<u>-----</u>
c.	1.5-2.4	<u>-----</u>	<u>-----</u>
d.	2.5-3.4	<u>-----</u>	<u>-----</u>
e.	3.5-4.4	<u>-----</u>	<u>-----</u>
f.	4.5-5.4	<u>-----</u>	<u>-----</u>
g.	5.5-6.9	<u>-----</u>	<u>-----</u>
h.	7.0-8.4	<u>-----</u>	<u>-----</u>
i.	8.5-10.9	<u>-----</u>	<u>-----</u>
j.	11.0-13.9	<u>-----</u>	<u>-----</u>
k.	14.0-19.4	<u>-----</u>	<u>-----</u>
l.	19.5-27.9	<u>-----</u>	<u>-----</u>
m.	23+	<u>-----</u>	<u>-----</u>



Vertical Curve Section

<u>Start Pt.</u> (in ft.)	<u>End Pt.</u> (in ft.)	<u>Gradient Percent</u>	<u>Length of Curve</u> (in x.xx miles)
0	1116	+ 2.2 %	-----
1116	1781	- 1.4 %	-----
1781	2866	+ 1.2 %	-----
2866	3117	0 %	-----
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	<u>Grade Classes by Gradient (Percent)</u>	<u>Number of Grades (Right- Justified)</u>	<u>Length of Grades in Class (Implied Decimal) (xx.xxx miles)</u>
a.	0.0-0.4	-----	-----
b.	0.5-2.4	-----	-----
c.	2.5-4.4	-----	-----
d.	4.5-6.4	-----	-----
e.	6.5-8.4	-----	-----
f.	8.5-	-----	-----

✓ 1247

CURVE - GRADE DATA COLLECTION
NON - STATE ROADS - FY - 1992

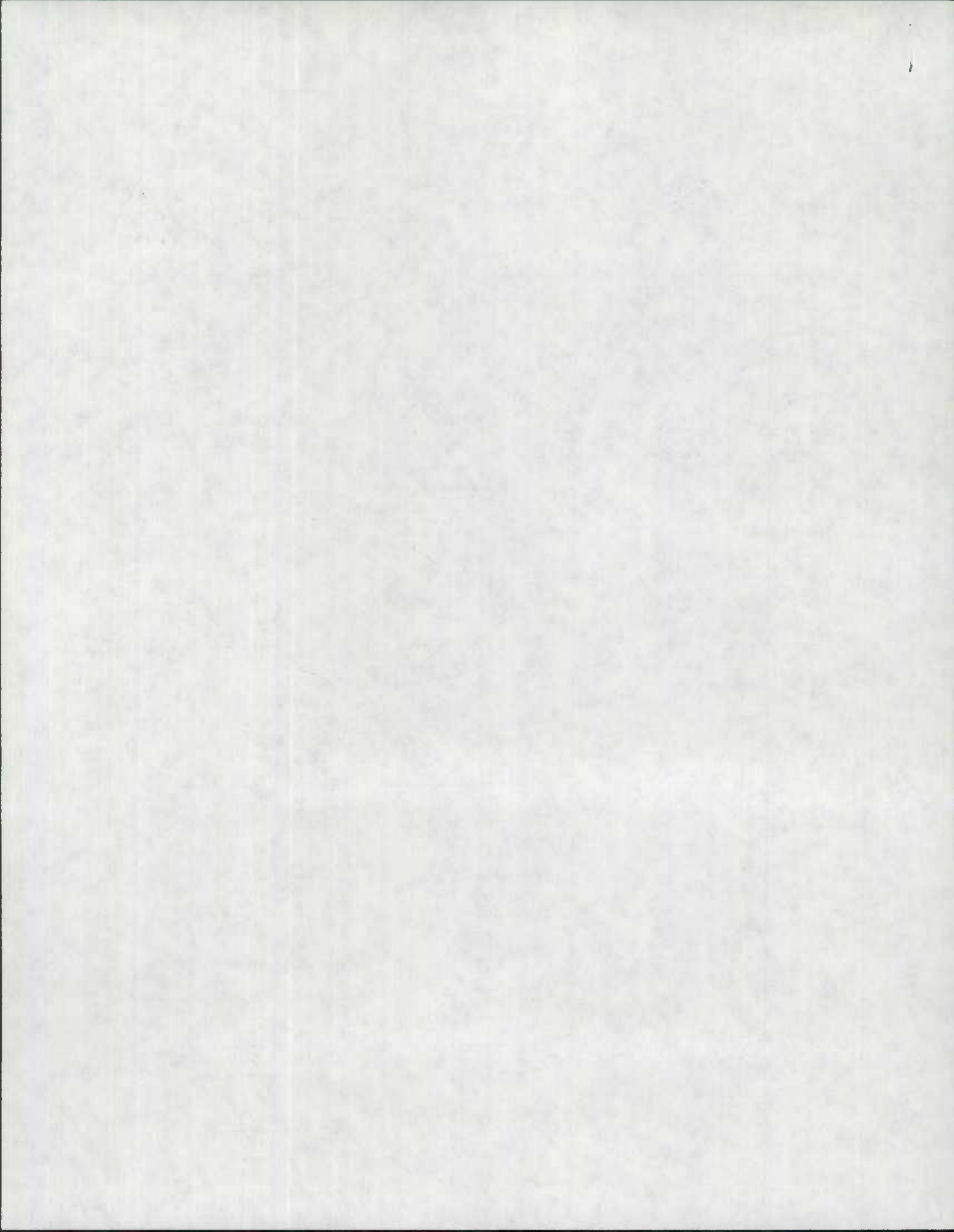
Route No: US 11
 Sample No: 9
 County: 21

Starting Mile Pt: 11.63
 Ending Mile Pt: 12.28
 (.65)

Horizontal Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Chord</u> <u>length</u> <u>(/100ft)</u>	<u>Central</u> <u>Ord. Length</u> <u>(/100ft)</u>	<u>Length of Total</u> <u>Curve in(x.xxmile)</u>
<u>0</u>	<u>1230</u>	<u>99.9</u>	<u>0</u>	<u>-----</u>
<u>1230</u>	<u>1728</u>	<u>100</u>	<u>0</u>	<u>-----</u>
<u>1728</u>	<u>3430</u>	<u>99.0</u>	<u>-----</u>	<u>-----</u>
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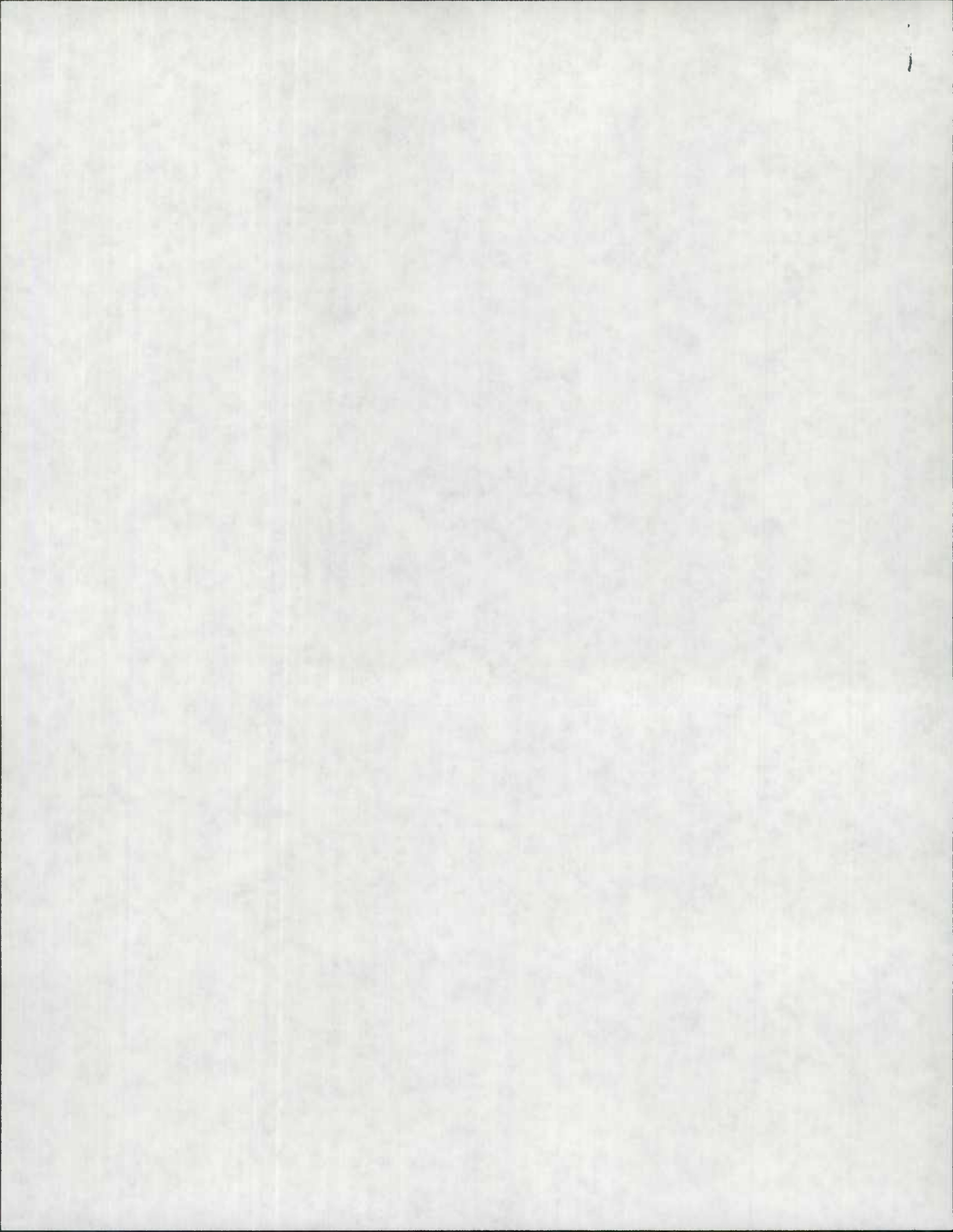
	<u>Curve</u> <u>Classes</u> <u>by</u> <u>Degree of</u> <u>Curvature</u>	<u>Number of</u> <u>Curves</u> <u>(Right-</u> <u>Justified)</u>	<u>Length</u> <u>of Curves</u> <u>in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	<u>-----</u>	<u>-----</u>
b.	0.5-1.4	<u>-----</u>	<u>-----</u>
c.	1.5-2.4	<u>-----</u>	<u>-----</u>
d.	2.5-3.4	<u>-----</u>	<u>-----</u>
e.	3.5-4.4	<u>-----</u>	<u>-----</u>
f.	4.5-5.4	<u>-----</u>	<u>-----</u>
g.	5.5-6.9	<u>-----</u>	<u>-----</u>
h.	7.0-8.4	<u>-----</u>	<u>-----</u>
i.	8.5-10.9	<u>-----</u>	<u>-----</u>
j.	11.0-13.9	<u>-----</u>	<u>-----</u>
k.	14.0-19.4	<u>-----</u>	<u>-----</u>
l.	19.5-27.9	<u>-----</u>	<u>-----</u>
m.	23+	<u>-----</u>	<u>-----</u>



Vertical Curve Section

<u>Start Pt.</u> (in ft.)	<u>End Pt.</u> (in ft.)	<u>Gradient Percent</u>	<u>Length of Curve</u> (in x.xx miles)
0	628	- 2.4%	-----
628	1025	+ 1.6%	-----
1025	3430	0%	-----
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	<u>Grade Classes by Gradient (Percent)</u>	<u>Number of Grades (Right- Justified)</u>	<u>Length of Grades in Class (Implied Decimal) (xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-2.4	_____	_____
c.	2.5-4.4	_____	_____
d.	4.5-6.4	_____	_____
e.	6.5-8.4	_____	_____
f.	8.5-	_____	_____



CURVE - GRADE DATA COLLECTION
NON - STATE ROADS - FY - 1992

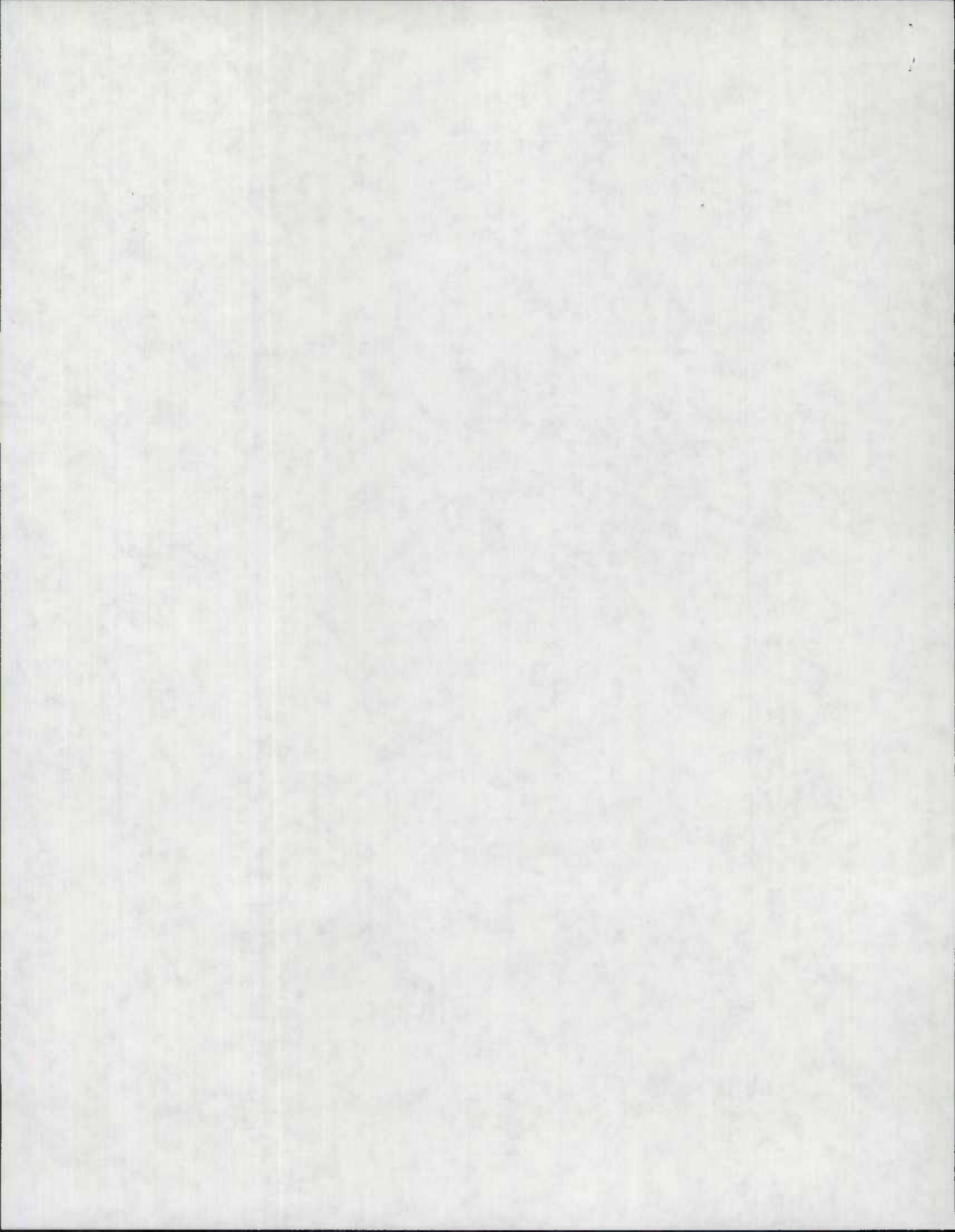
Route No: US 11
Sample No: 10
County: 21

Starting Mile Pt: 12.28
Ending Mile Pt: 12.33
(.05)

Horizontal Curve Section

<u>Start Pt.</u> (in ft.)	<u>End Pt.</u> (in ft.)	<u>Chord</u> <u>length</u> (/100ft)	<u>Central</u> <u>Ord1. Length</u> (/100ft)	<u>Length of Total</u> <u>Curve in(x.xxmile)</u>
<u>0</u>	<u>264</u>	<u>99.9</u> 100	<u>0</u>	
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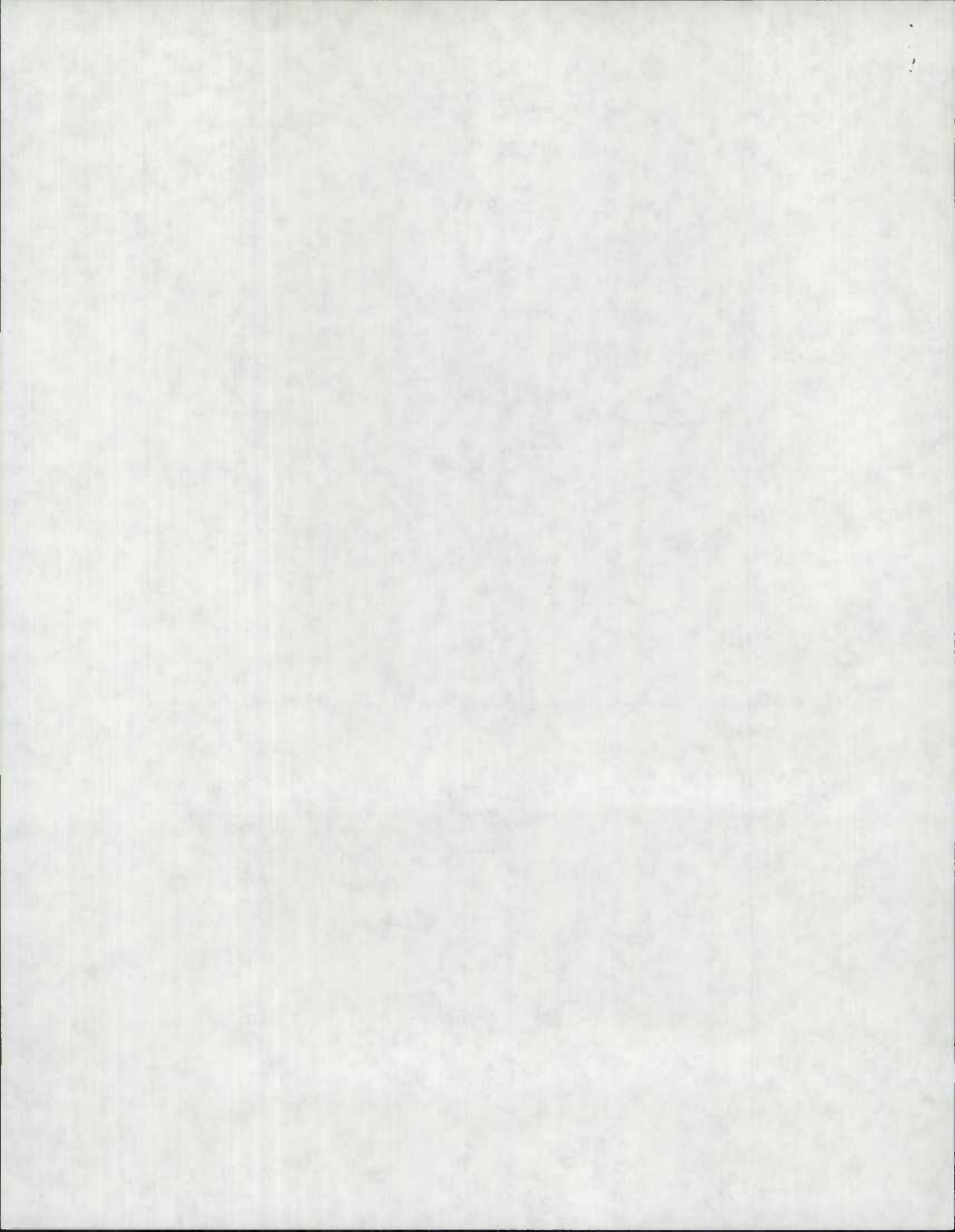
	<u>Curve</u> <u>Classes</u> <u>by</u> <u>Degree of</u> <u>Curvature</u>	<u>Number of</u> <u>Curves</u> <u>(Right-</u> <u>Justified)</u>	<u>Length</u> <u>of Curves</u> <u>in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-1.4	_____	_____
c.	1.5-2.4	_____	_____
d.	2.5-3.4	_____	_____
e.	3.5-4.4	_____	_____
f.	4.5-5.4	_____	_____
g.	5.5-6.9	_____	_____
h.	7.0-8.4	_____	_____
i.	8.5-10.9	_____	_____
j.	11.0-13.9	_____	_____
k.	14.0-19.4	_____	_____
l.	19.5-27.9	_____	_____
m.	23+	_____	_____



Vertical Curve Section

<u>Start Pt.</u> (in ft.)	<u>End Pt.</u> (in ft.)	<u>Gradient Percent</u>	<u>Length of Curve</u> (in x.xx miles)
0	264	0%	
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	<u>Grade Classes by Gradient (Percent)</u>	<u>Number of Grades (Right- Justified)</u>	<u>Length of Grades in Class (Implied Decimal) (xx.xxx miles)</u>
a.	0.0-0.4	---	---
b.	0.5-2.4	---	---
c.	2.5-4.4	---	---
d.	4.5-6.4	---	---
e.	6.5-8.4	---	---
f.	8.5-	---	---



✓ 12/7

CURVE - GRADE DATA COLLECTION
NON - STATE ROADS - FY - 1992

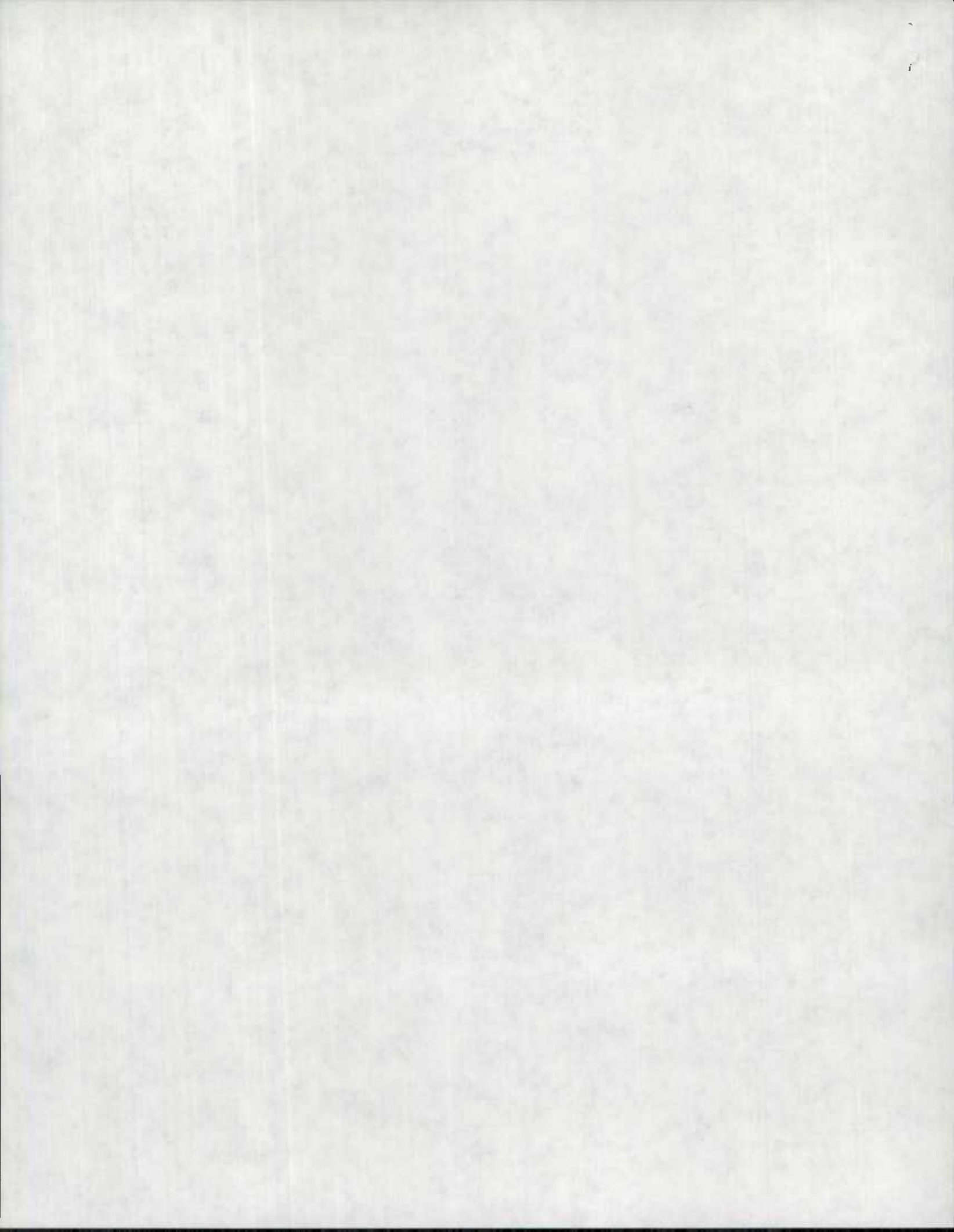
Route No: US 11
Sample No: 11
County: 21

Starting Mile Pt: 12.33
Ending Mile Pt: 12.51
(.18)

Horizontal Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Chord</u> <u>length</u> <u>(/100ft)</u>	<u>Central</u> <u>Ord. Length</u> <u>(/100ft)</u>	<u>Length of Total</u> <u>Curve in(x.xxmile)</u>
<u>0</u>	<u>300</u>	<u>99.9</u>	<u>0</u>	
<u>300</u>	<u>950</u>	<u>160</u>	<u>0</u>	

	<u>Curve</u> <u>Classes</u> <u>by</u> <u>Degree of</u> <u>Curvature</u>	<u>Number of</u> <u>Curves</u> <u>(Right-</u> <u>Justified)</u>	<u>Length</u> <u>of Curves</u> <u>in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-1.4	_____	_____
c.	1.5-2.4	_____	_____
d.	2.5-3.4	_____	_____
e.	3.5-4.4	_____	_____
f.	4.5-5.4	_____	_____
g.	5.5-6.9	_____	_____
h.	7.0-8.4	_____	_____
i.	8.5-10.9	_____	_____
j.	11.0-13.9	_____	_____
k.	14.0-19.4	_____	_____
l.	19.5-27.9	_____	_____
m.	23+	_____	_____



Vertical Curve Section

<u>Start Pt.</u> (in ft.)	<u>End Pt.</u> (in ft.)	<u>Gradient Percent</u>	<u>Length of Curve</u> (in x.xx miles)
0	950	+ 3.6	
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	<u>Grade</u> <u>Classes</u> <u>by</u> <u>Gradient</u> <u>(Percent)</u>	<u>Number of</u> <u>Grades</u> <u>(Right-</u> <u>Justified)</u>	<u>Length of</u> <u>Grades in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-2.4	_____	_____
c.	2.5-4.4	_____	_____
d.	4.5-6.4	_____	_____
e.	6.5-8.4	_____	_____
f.	8.5-	_____	_____

V127

CURVE - GRADE DATA COLLECTION
NON - STATE ROADS - FY - 1992

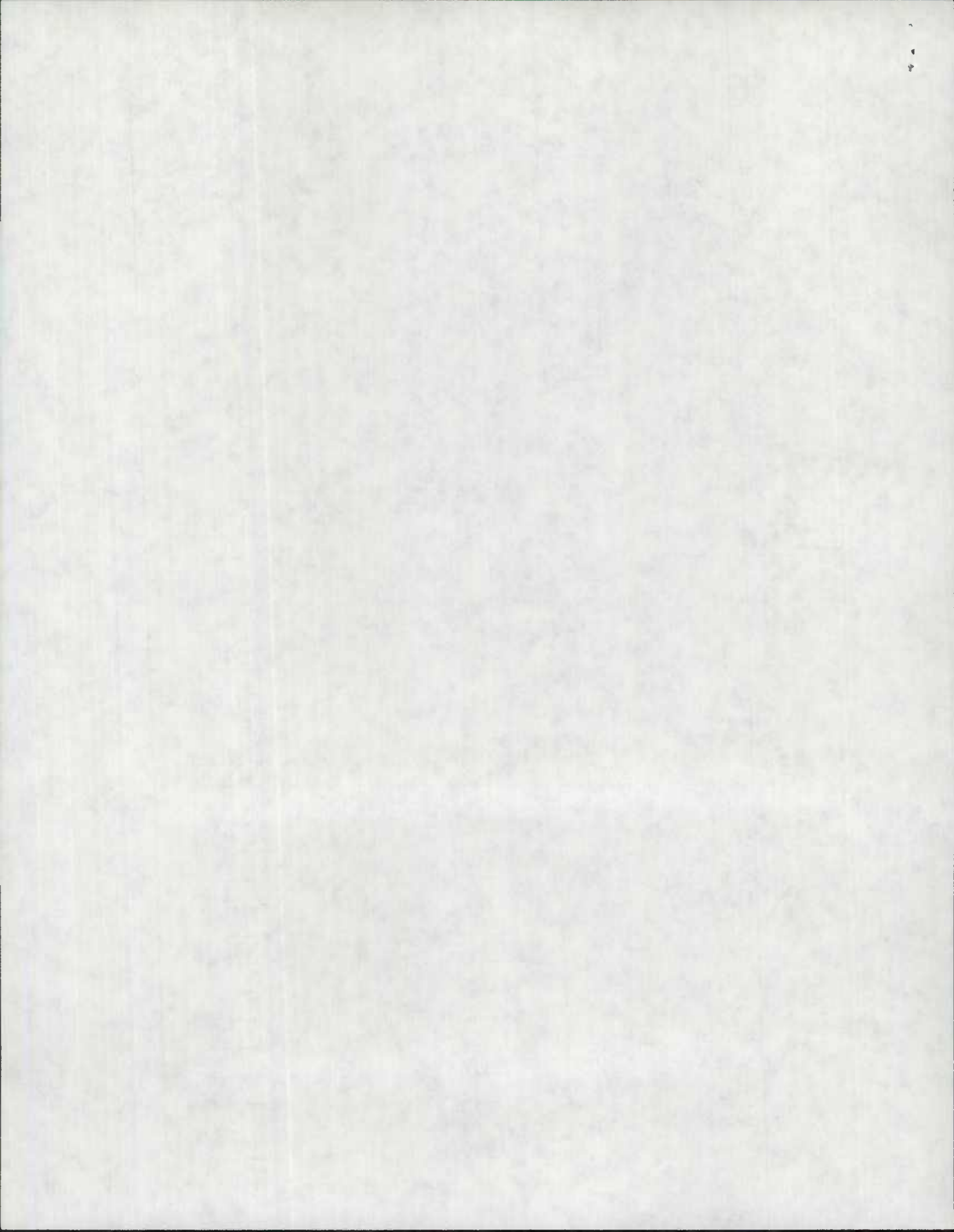
Route No: US 11
 Sample No: 12
 County: 21

Starting Mile Pt: 12.51
 Ending Mile Pt: 12.83
 (.32)

Horizontal Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Chord</u> <u>length</u> <u>(/100ft)</u>	<u>Central</u> <u>Ord1. Length</u> <u>(/100ft)</u>	<u>Length of Total</u> <u>Curve in(x.xxmiles)</u>
<u>0</u>	<u>1690</u>	<u>100</u>	<u>0</u>	
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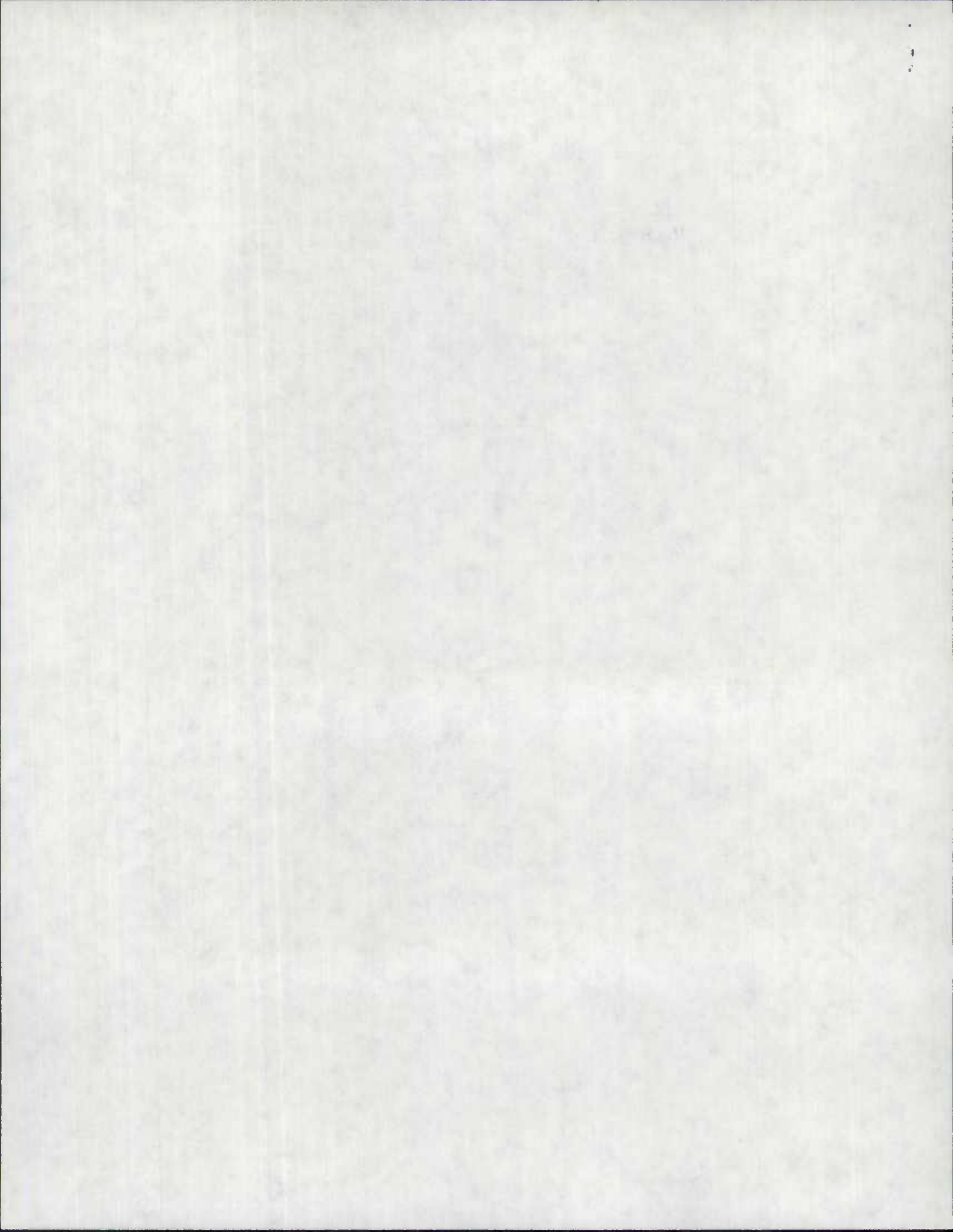
	<u>Curve</u> <u>Classes</u> <u>by</u> <u>Degree of</u> <u>Curvature</u>	<u>Number of</u> <u>Curves</u> <u>(Right-</u> <u>Justified)</u>	<u>Length</u> <u>of Curves</u> <u>in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-1.4	_____	_____
c.	1.5-2.4	_____	_____
d.	2.5-3.4	_____	_____
e.	3.5-4.4	_____	_____
f.	4.5-5.4	_____	_____
g.	5.5-6.9	_____	_____
h.	7.0-8.4	_____	_____
i.	8.5-10.9	_____	_____
j.	11.0-13.9	_____	_____
k.	14.0-19.4	_____	_____
l.	19.5-27.9	_____	_____
m.	23+	_____	_____



Vertical Curve Section

<u>Start Pt.</u> (in ft.)	<u>End Pt.</u> (in ft.)	<u>Gradient Percent</u>	<u>Length of Curve</u> (in x.xx miles)
0	367	+ 3.6 %	-----
367	125 1352	- 2.7 %	-----
1352	1690	0%	-----
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	<u>Grade Classes by Gradient (Percent)</u>	<u>Number of Grades (Right- Justified)</u>	<u>Length of Grades in Class (Implied Decimal) (xx.xxx miles)</u>
a.	0.0-0.4	-----	-----
b.	0.5-2.4	-----	-----
c.	2.5-4.4	-----	-----
d.	4.5-6.4	-----	-----
e.	6.5-8.4	-----	-----
f.	8.5-	-----	-----



✓ 12/7

CURVE - GRADE DATA COLLECTION
NON - STATE ROADS - FY - 1992

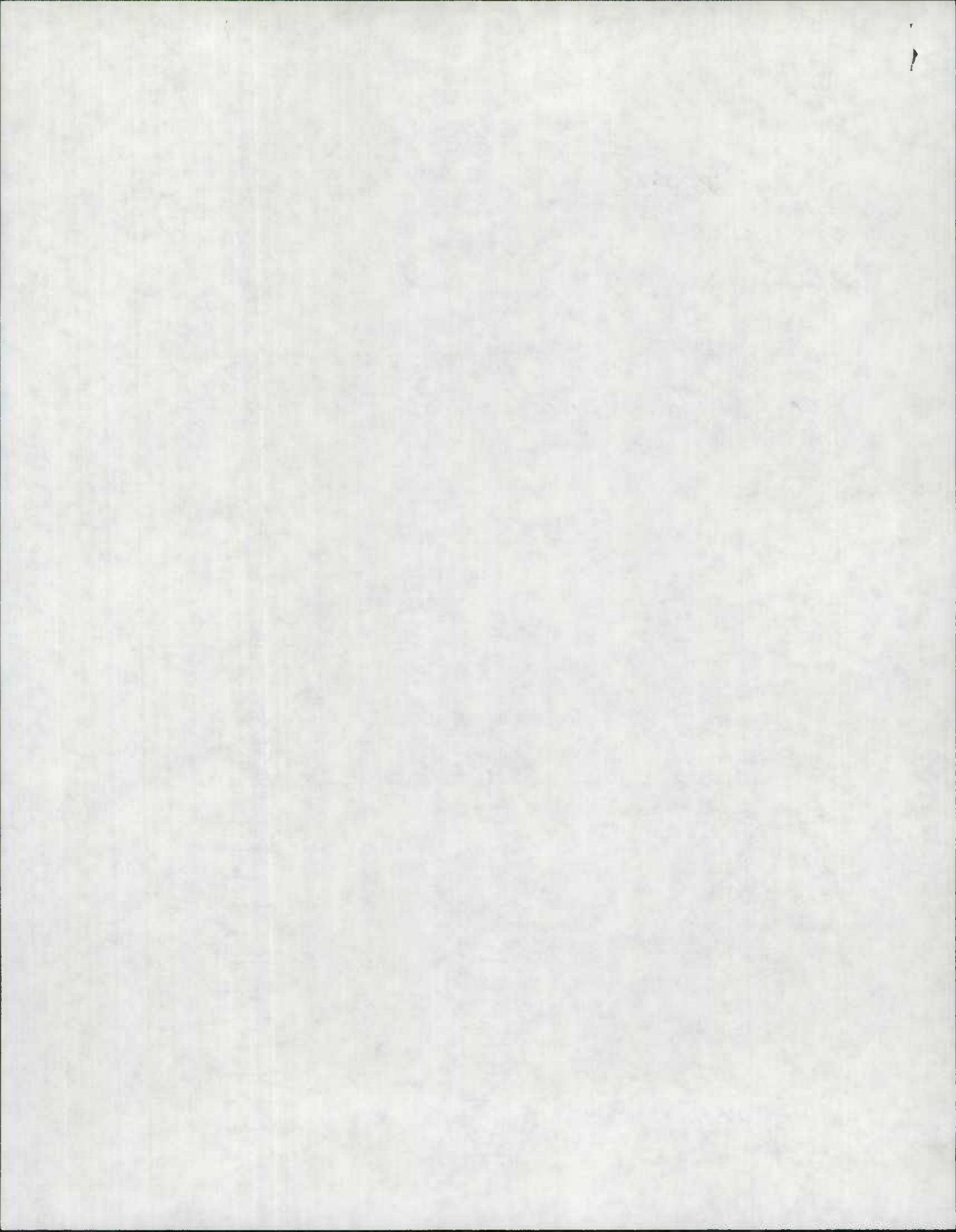
Route No: US 40AL
 Sample No: 13
 County: 21

Starting Mile Pt: .24
 Ending Mile Pt: .58
(.34)

Horizontal Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Chord</u> <u>length</u> <u>(/100ft)</u>	<u>Central</u> <u>Ordi. Length</u> <u>(/100ft)</u>	<u>Length of Total</u> <u>Curve in(x.xxmile)</u>
<u>0</u>	<u>1793</u>	<u>100</u>	<u>0</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
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<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
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<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>

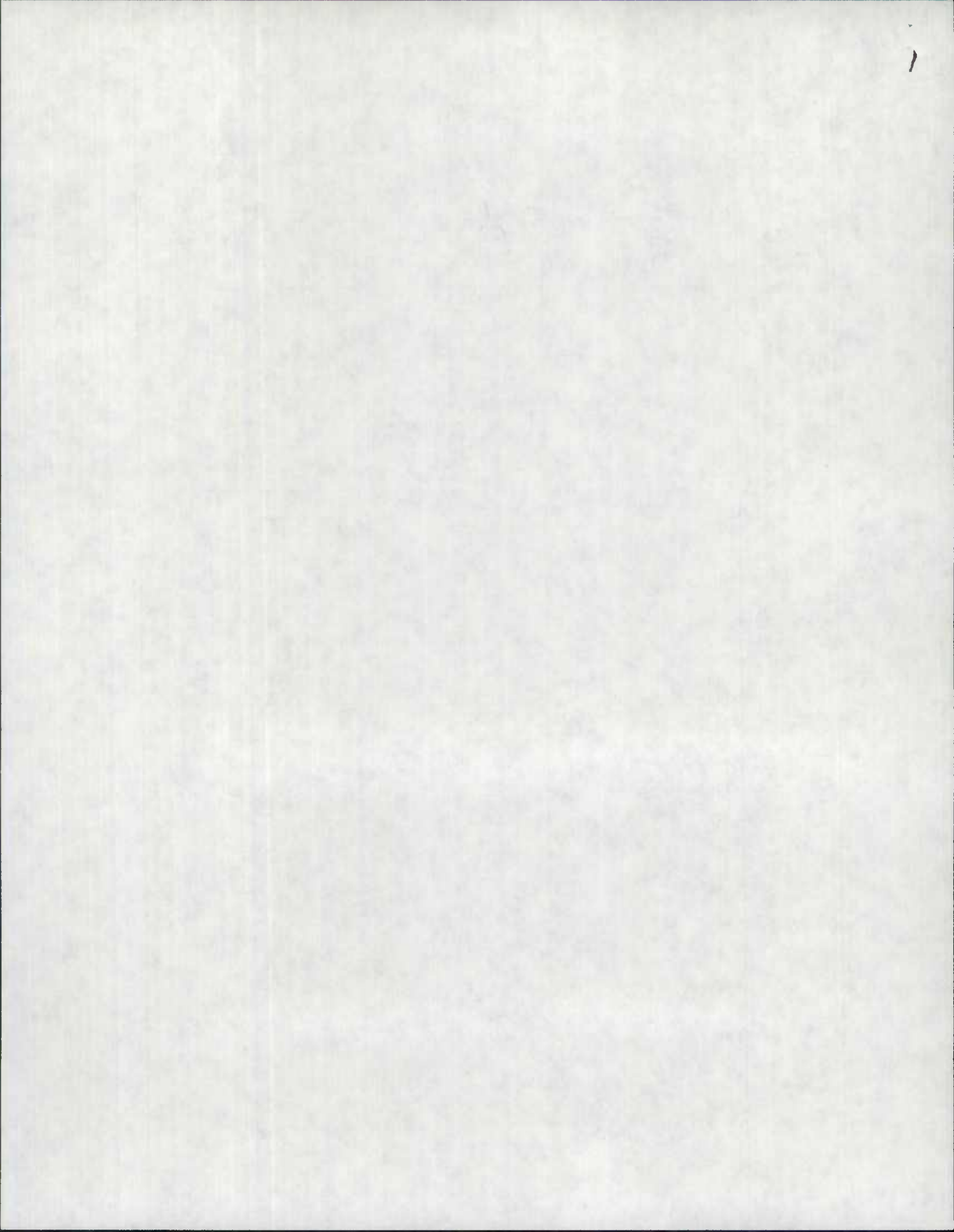
	<u>Curve</u> <u>Classes</u> <u>by</u> <u>Degree of</u> <u>Curvature</u>	<u>Number of</u> <u>Curves</u> <u>(Right-</u> <u>Justified)</u>	<u>Length</u> <u>of Curves</u> <u>in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	<u>-----</u>	<u>-----</u>
b.	0.5-1.4	<u>-----</u>	<u>-----</u>
c.	1.5-2.4	<u>-----</u>	<u>-----</u>
d.	2.5-3.4	<u>-----</u>	<u>-----</u>
e.	3.5-4.4	<u>-----</u>	<u>-----</u>
f.	4.5-5.4	<u>-----</u>	<u>-----</u>
g.	5.5-6.9	<u>-----</u>	<u>-----</u>
h.	7.0-8.4	<u>-----</u>	<u>-----</u>
i.	8.5-10.9	<u>-----</u>	<u>-----</u>
j.	11.0-13.9	<u>-----</u>	<u>-----</u>
k.	14.0-19.4	<u>-----</u>	<u>-----</u>
l.	19.5-27.9	<u>-----</u>	<u>-----</u>
m.	23+	<u>-----</u>	<u>-----</u>



Vertical Curve Section

<u>Start Pt.</u> (in ft.)	<u>End Pt.</u> (in ft.)	<u>Gradient Percent</u> <small style="margin-left: 10px;">%</small>	<u>Length of Curve</u> (in x.xx miles)
0	593	- 2.1	
593	1024	+ 1.9	
1024	1793	- 4.1	

	<u>Grade Classes by Gradient (Percent)</u>	<u>Number of Grades (Right- Justified)</u>	<u>Length of Grades in Class (Implied Decimal) (xx.xxx miles)</u>
a.	0.0-0.4	_____	_____
b.	0.5-2.4	_____	_____
c.	2.5-4.4	_____	_____
d.	4.5-6.4	_____	_____
e.	6.5-8.4	_____	_____
f.	8.5-	_____	_____



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12/7

CURVE - GRADE DATA COLLECTION
NON - STATE ROADS - FY - 1992

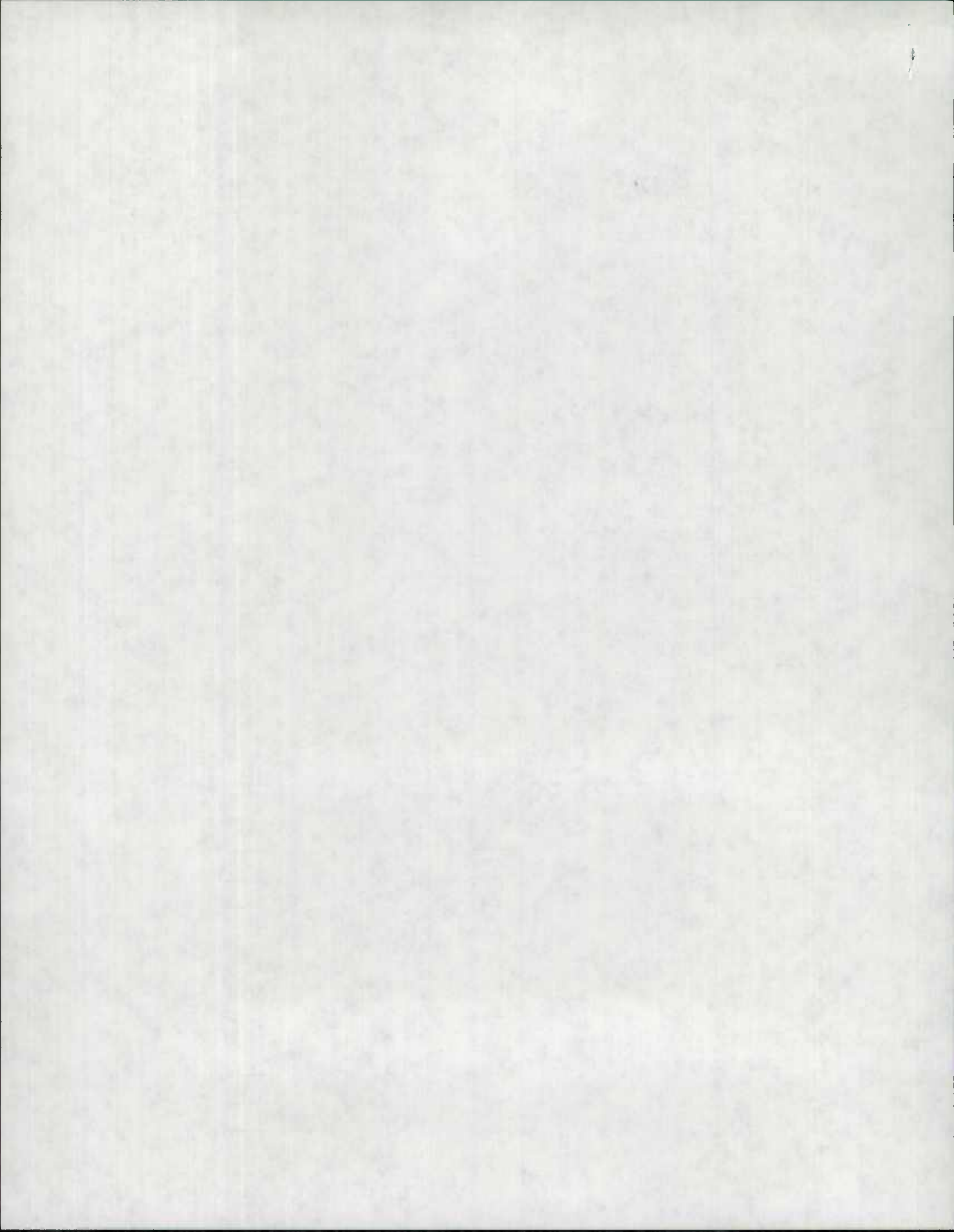
Route No: US 40AL
Sample No: 14
County: 21

Starting Mile Pt: .92
Ending Mile Pt: 1.36
(.44)

Horizontal Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Chord</u> <u>length</u> <u>(/100ft)</u>	<u>Central</u> <u>Ordi. Length</u> <u>(/100ft)</u>	<u>Length of Total</u> <u>Curve in(x.xxmile)</u>
<u>0</u>	<u>2323</u>	<u>100</u>	<u>0</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
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<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
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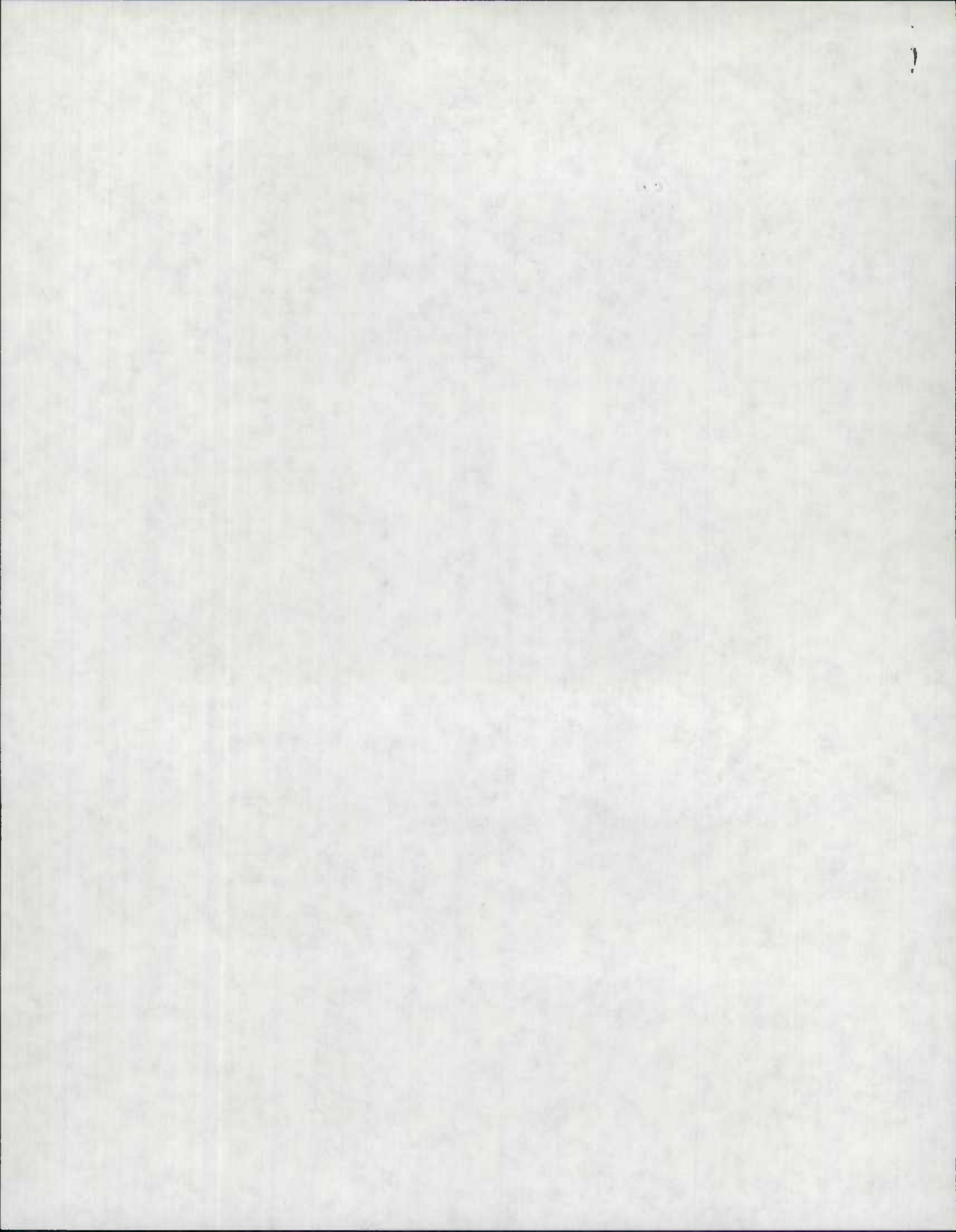
	<u>Curve</u> <u>Classes</u> <u>by</u> <u>Degree of</u> <u>Curvature</u>	<u>Number of</u> <u>Curves</u> <u>(Right-</u> <u>Justified)</u>	<u>Length</u> <u>of Curves</u> <u>in Class</u> <u>(Implied Decimal)</u> <u>(xx.xxx miles)</u>
a.	0.0-0.4	<u>-----</u>	<u>-----</u>
b.	0.5-1.4	<u>-----</u>	<u>-----</u>
c.	1.5-2.4	<u>-----</u>	<u>-----</u>
d.	2.5-3.4	<u>-----</u>	<u>-----</u>
e.	3.5-4.4	<u>-----</u>	<u>-----</u>
f.	4.5-5.4	<u>-----</u>	<u>-----</u>
g.	5.5-6.9	<u>-----</u>	<u>-----</u>
h.	7.0-8.4	<u>-----</u>	<u>-----</u>
i.	8.5-10.9	<u>-----</u>	<u>-----</u>
j.	11.0-13.9	<u>-----</u>	<u>-----</u>
k.	14.0-19.4	<u>-----</u>	<u>-----</u>
l.	19.5-27.9	<u>-----</u>	<u>-----</u>
m.	23+	<u>-----</u>	<u>-----</u>



Vertical Curve Section

<u>Start Pt.</u> <u>(in ft.)</u>	<u>End Pt.</u> <u>(in ft.)</u>	<u>Gradient Percent</u> [%]	<u>Length of Curve</u> <u>(in x.xx miles)</u>
<u>0</u>	<u>301</u>	<u>- .7</u>	<u>-----</u>
<u>301</u>	<u>1775</u>	<u>+ 1.6</u>	<u>-----</u>
<u>1775</u>	<u>2323</u>	<u>- .2</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
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<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
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<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
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<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>
<u>-----</u>	<u>-----</u>	<u>-----</u>	<u>-----</u>

	<u>Grade Classes by Gradient (Percent)</u>	<u>Number of Grades (Right- Justified)</u>	<u>Length of Grades in Class (Implied Decimal) (xx.xxx miles)</u>
a.	0.0-0.4	<u>-----</u>	<u>-----</u>
b.	0.5-2.4	<u>-----</u>	<u>-----</u>
c.	2.5-4.4	<u>-----</u>	<u>-----</u>
d.	4.5-6.4	<u>-----</u>	<u>-----</u>
e.	6.5-8.4	<u>-----</u>	<u>-----</u>
f.	8.5-	<u>-----</u>	<u>-----</u>



(1)

ROAD INVENTORY SHEET IS 08

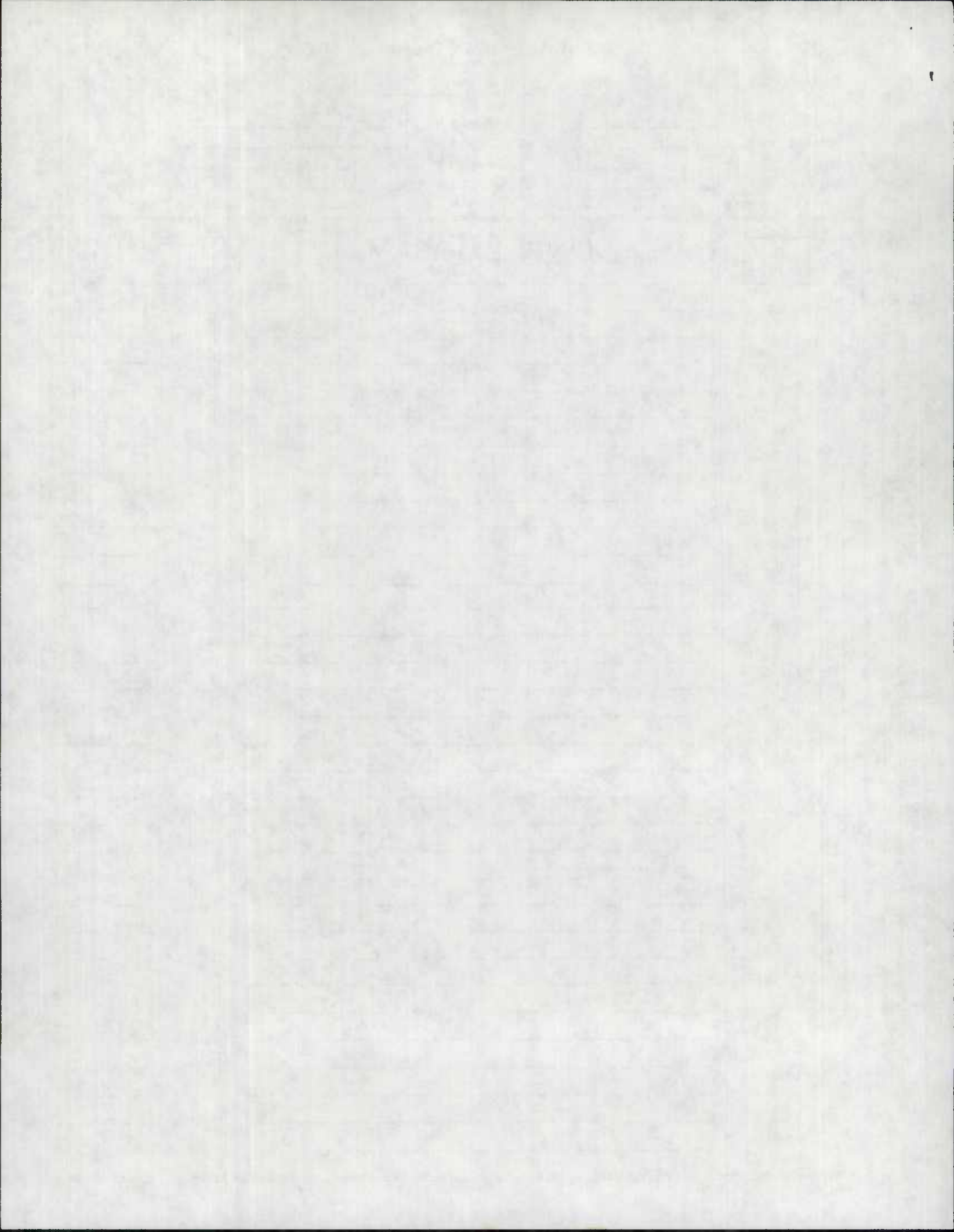
Party Chief B Burton
Recorder J Klausung
Assistant _____
Map No./Dir. A6/E
State Coordinates 429-683

Road No. 4548
Road Name National Freeway
County Washington
Date 6-21-90
Sheet No. 7? OF 8?

TRAFFIC CONTROLS: STOP SIGN S.S.,
TRAFFIC LIGHT=T.L.,
FLASHING RED BALL=F.R.

TRAFFIC CODES
PARKING RESTRICTIONS: A.M. PEAK,
P.M. PEAK, A.M./P.M. PEAK, NO PARKING
ANYTIME-N.P., COMM/IND. ACCESS=E

SYSTEM				TRAFFIC				PAVEMENT DATA			
FED. AID.	FUNCT. CLASS.	HWY. SYS.	HPMS SAMPLE	PRIO. REST.	COMM/IND. ACCESS	CONTROL	COMM/IND. ACCESS	PRIO. REST.			
LINE DIAGRAM											
<p style="text-align: right;">I-70 I-70 I-70</p>											
<p style="text-align: right;">24' J RT 10' I shld RT 4' I shld LT 2 ML</p>											
<p style="text-align: right;">2-24' I 2-10' I shld out 2-4' I shld in Var. NB med. 4 ML</p>											
<p style="text-align: right;">2-24' I 2-10' I shld out 4' I shld in RT 10' I shld in LT 45' Gess Flwywy 4 ML</p>											
<p style="text-align: right;">7 99 11' multiplate pipe</p>											
<p style="text-align: right;">7 85 9' multiplate pipe</p>											
<p style="text-align: right;">7 43 48" CP</p>											



ROAD INVENTORY SHEET

1310

2 3

Party Chief B Burton
Recorder J Klausung
Assistant _____
Map No./Dir. B8 / N
State Coordinates 567-645

Road No. US 11
Road Name Burtons Blvd
County Washington
Date 7-26-90
Sheet No. 15 OF 28

TRAFFIC CONTROLS: STOP SIGN=S.S.
TRAFFIC LIGHT=T.L.,
FLASHING RED BALL=F.R.

TRAFFIC CODES
PARKING RESTRICTIONS: A.M. PEAK,
P.M. PEAK, A.M./P.M. PEAK, NO PARKING
ANYTIME=N.P., COMM/IND. ACCESS=E

SYSTEM				TRAFFIC		LINE DIAGRAM				TRAFFIC			PAVEMENT DATA	
FED. AID	FUNCT. CLASS.	HWY. SYS.	HPMS SAMPLE	PRKG. REST.	COMM/IND. ACCESS	CONTROL	COMM/IND. ACCESS	PRKG. REST.	LINE DIAGRAM		CONTROL	COMM/IND. ACCESS	PRKG. REST.	PAVEMENT DATA
									671	PT				
									Chase	35°				
									mu.	420				
									670	(3)				
									668	PC				
									Center St					27'I
									mu 590					7'I SHLD LT
									659					J-cc
														(34'I, J-cc)
									Claire St					2mL
									mu 0450					X
									649					
									643					
									640					
									(WASEL BLVD)					
									(Proposed)					
									mu 2547					
									639	(2)				
									# WH22					
									632	R/R				
									630	SPUR				
									628	#CR534898T				
														34'I
														J-cc
														2mL

NP

NP

NP

MARYLAND STATE HIGHWAY ADMINISTRATION

ROAD INVENTORY SHEET

Party Chief B. Burton
 Recorder J. Klausung
 Assistant _____
 Map No./Dir. BB / N
 State Coordinates 567-645

Road No. US 11
 Road Name Pennsylvania Ave
 County Washington
 Date 7-26-90
 Sheet No. 23 OF 28

TRAFFIC CONTROLS: STOP SIGN - S.S.
 TRAFFIC LIGHT=T.L.,
 FLASHING RED BALL=F.R.

TRAFFIC CODES

PARKING RESTRICTIONS: A.M. PEAK,
 P.M. PEAK, A.M./P.M. PEAK, NO PARKING
 ANYTIME=N.P., COMM/IND. ACCESS=E

SYSTEM				TRAFFIC		LINE DIAGRAM	TRAFFIC			PAVEMENT DATA
FED. AID	FUNCT CLASS	HWY SYS.	HPMS SAMPLE	PRKG. REST.	COM/IND. ACCESS		CONTROL	COM/IND. ACCESS	PRKG. REST.	
						976				
						975				
						974				
						972				
						989				
						984				24' I 2-10' F SHLD 2mL
						980				
						973				
						Mack Trucks 975				
						972				
						969				
						967				24' I 8' I SHLD RT 4' I SHLD LT 2mL
						Fountainhead Plaza 959				X

MARYLAND STATE HIGHWAY ADMINISTRATION

ROAD INVENTORY SHEET

Party Chief B. Barton
 Recorder J. Klausung
 Assistant _____
 Map No./Dir. BB / N
 State Coordinates 567-645

Road No. US. 11
 Road Name Pennsylvania AVE
 County Washington
 Date 7-26-90
 Sheet No. 25 OF 28

TRAFFIC CONTROLS: STOP SIGN = S.S.,
 TRAFFIC LIGHT = T.L.,
 FLASHING RED BALL = F.R.

TRAFFIC CODES
 PARKING RESTRICTIONS: A.M. PEAK,
 P.M. PEAK, A.M./P.M. PEAK, NO PARKING
 ANYTIME=N.P., COMM/IND. ACCESS=E

SYSTEM				TRAFFIC		LINE DIAGRAM	TRAFFIC			PAVEMENT DATA
FED. AID.	FUNCT. CLASS.	HWY. SYS.	HPMS SAMPLE	PRKG. REST.	COMM/IND. ACCESS		CONTROL	COMM/IND. ACCESS	PRKG. REST.	
						(7)				
						10 24				
						Northridge Dr				
						10 85 Co 648				
						O.P. 102				
						10 80				
				E		Trailer Park 10 69				
						(6)				
						10 63 5-18" CP'S				
				E		Trailer Park 10 60				
						O.P. 96				
						10 58				
				E		Trailer Park 10 57				
						10 56		E		
						10 53		E		
						10 51 Trailer Park		E		24'I 2-8'I SHLD 3ml
						10 44				

20 F 20

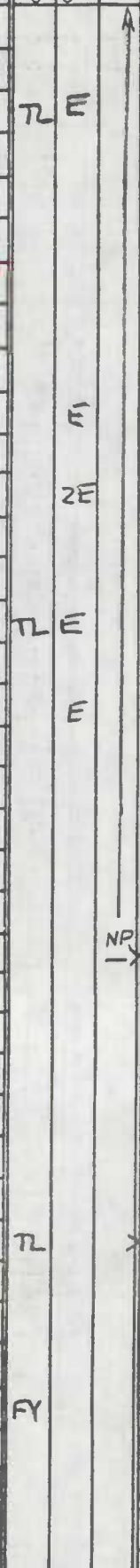
LINE DIAGRAM

SYSTEM				TRAFFIC		TRAFFIC				PAVEMENT DATA					
FED. AID.	FUNCT. CLASS.	HWY. SYS.	HPMS SAMPLE	PRG. REST.	COM/IND ACCESS	CONTROL	COM/IND ACCESS	PRG. REST.							
FAU 8003 UNBANN OTHER PRINCIPAL ARTERIAL 10040AL00093 10040AL00024															
				Commonwealth Ave											
				MU 0512	098										
					093										
				#CSX139499U											
					092										
					090										
					088	sign									
				Eastern Blvd											
				MU 0705	085										
					082										
				Taylor Ave											
				079	MU 2350									44'I	
				Alley 93										J-cc	
				076	MU 5930									2mL	
Roland Ave															
MU.	070	2170													
Memorial Blvd															
MU.	053	1650													
Mill ST															
MU.	053	1670													
	050														
	048														

14

R

13



NP
X

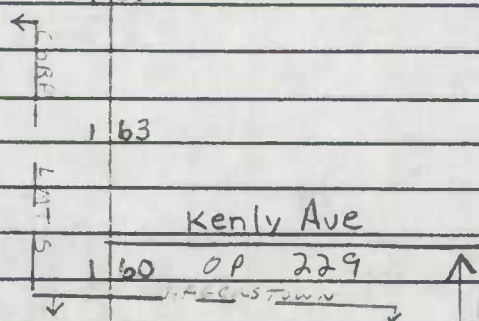
X

SYSTEM				TRAFFIC		LINE DIAGRAM				TRAFFIC				PAVEMENT DATA	
FED. AID.	FUNCT. CLASS.	HWY. SYS.	HPMS SAMPLE	PRKG. REST.	COM/IND ACCESS	CONTROL	COM/IND ACCESS	PRKG. REST.	CONTROL	COM/IND ACCESS	PRKG. REST.	CONTROL	COM/IND ACCESS	PRKG. REST.	PAVEMENT DATA
															24'I
															6' SHLD RT
															4' SHLD LT
															2ML
															X
															24'I
															2-3' SHLD
															2ML
															X
															24'I
															10' SHLD RT
															8' SHLD LT
															2ML
															X
															24'I
															2-11' SHLD
															2ML
															(46'I, JCC)
															X
															40'I
															J-CC
															2-ML
															X
															1154
															CBC 4'D-16'L-36'W
															(Road C)
															1153
															1150
															X

FAU 8003
UNION OTHER PRINCIPAL A. TRON

100-11400161 (1) X (2) X (3) X (4)

NP



NP

1151
1150

24'I
6' SHLD RT
4' SHLD LT
2ML
X
24'I
2-3' SHLD
2ML
X
24'I
10' SHLD RT
8' SHLD LT
2ML
X
24'I
2-11' SHLD
2ML
(46'I, JCC)
X
40'I
J-CC
2-ML
X
1154
CBC 4'D-16'L-36'W
(Road C)
1153
1150
X