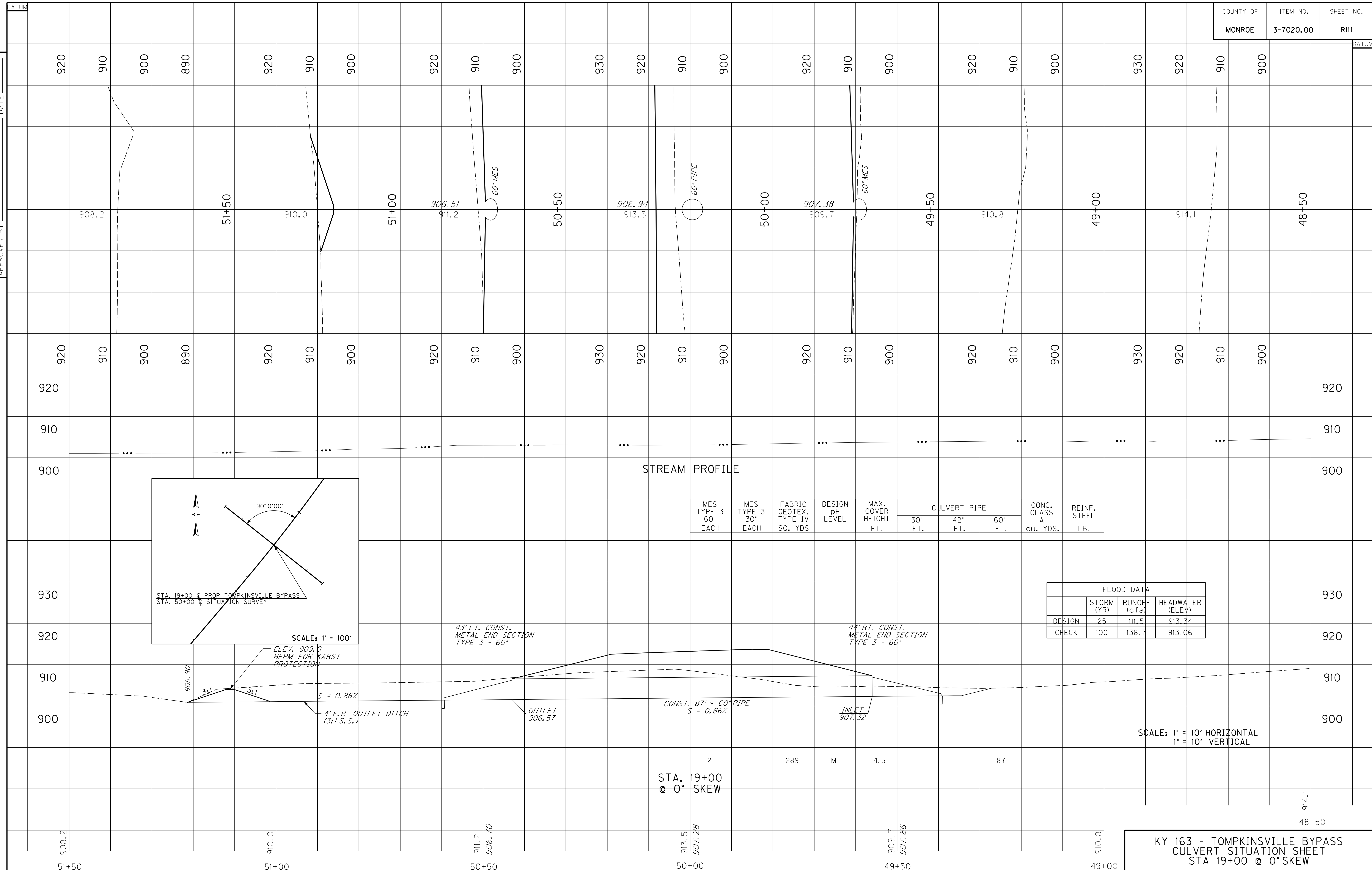


PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

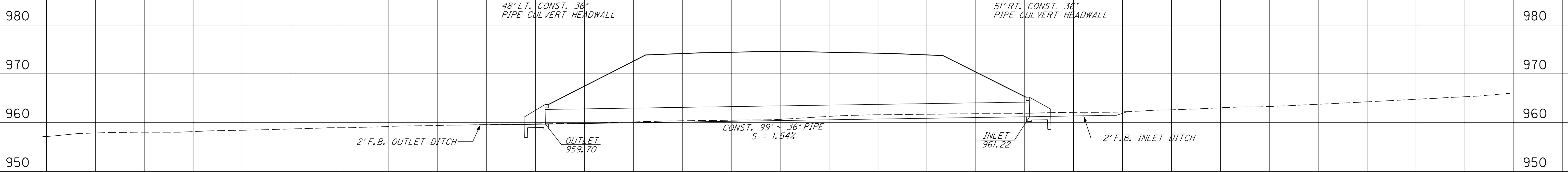


USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfiles\$\$\$
 E-SHEET NAME:

KY 163 - TOMPKINSVILLE BYPASS
 CULVERT SITUATION SHEET
 STA 19+00 @ 0° SKEW

MES TYPE 3 60" EACH	MES TYPE 3 30" EACH	FABRIC GEOTEX. TYPE IV SO. YDS	DESIGN pH LEVEL	MAX. COVER HEIGHT FT.	CULVERT PIPE 30" FT.	36" FT.	CONC. CLASS A cu. YDS.	REINF. STEEL LB.
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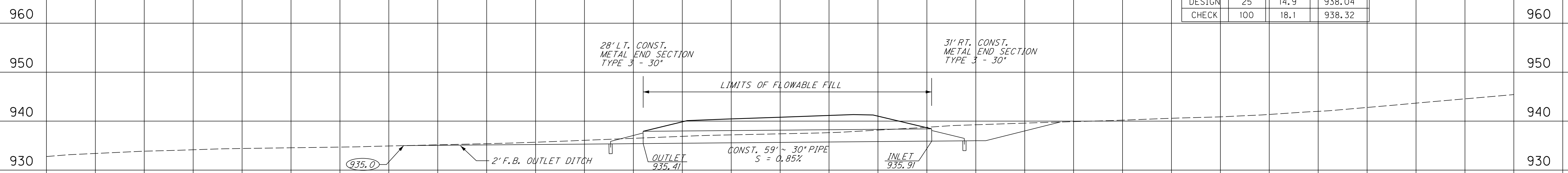
FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	38.4	964.54
CHECK	100	46.1	964.99



206.9	M	11.2	99	4.30	363
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STA. 44+50
@ 0° SKEW

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	14.9	938.04
CHECK	100	18.1	938.32



2	111.5	M	3.1	59
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STA. 29+00
@ 0° SKEW

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

TOMPKINSVILLE BYPASS
PIPE SECTIONS

STA. 19+00 TO STA. 44+50

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

USER: \$\$\$USER\$\$\$
DATE: \$\$\$DATE\$\$\$
FILE NAME: \$\$\$designsfiles\$\$\$specifications\$\$\$
E-SHEET NAME:

MES TYPE 3 24" EACH	MES TYPE 3 30" EACH	FABRIC GEOTEX. TYPE IV SO. YDS	DESIGN pH LEVEL	MAX. COVER HEIGHT FT.	CULVERT PIPE			CONC. CLASS A	REINF. STEEL LB.
					24" FT.	30" FT.	48" FT.	cu. YDS.	

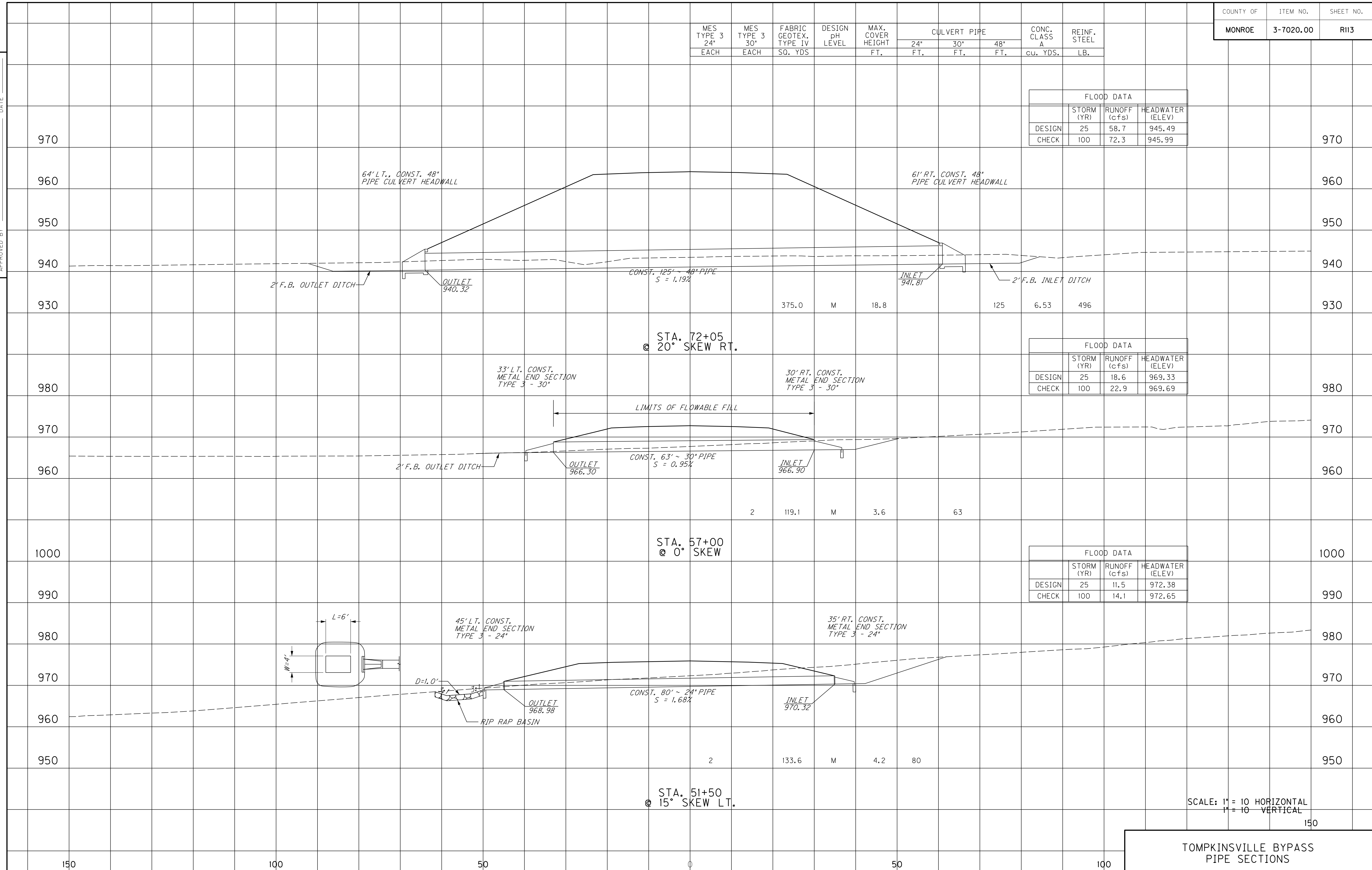
FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	58.7	945.49
CHECK	100	72.3	945.99

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	18.6	969.33
CHECK	100	22.9	969.69

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	11.5	972.38
CHECK	100	14.1	972.65

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfilespecifications\$\$\$
 E-SHEET NAME:



SCALE: 1" = 10' HORIZONTAL
 1" = 10' VERTICAL

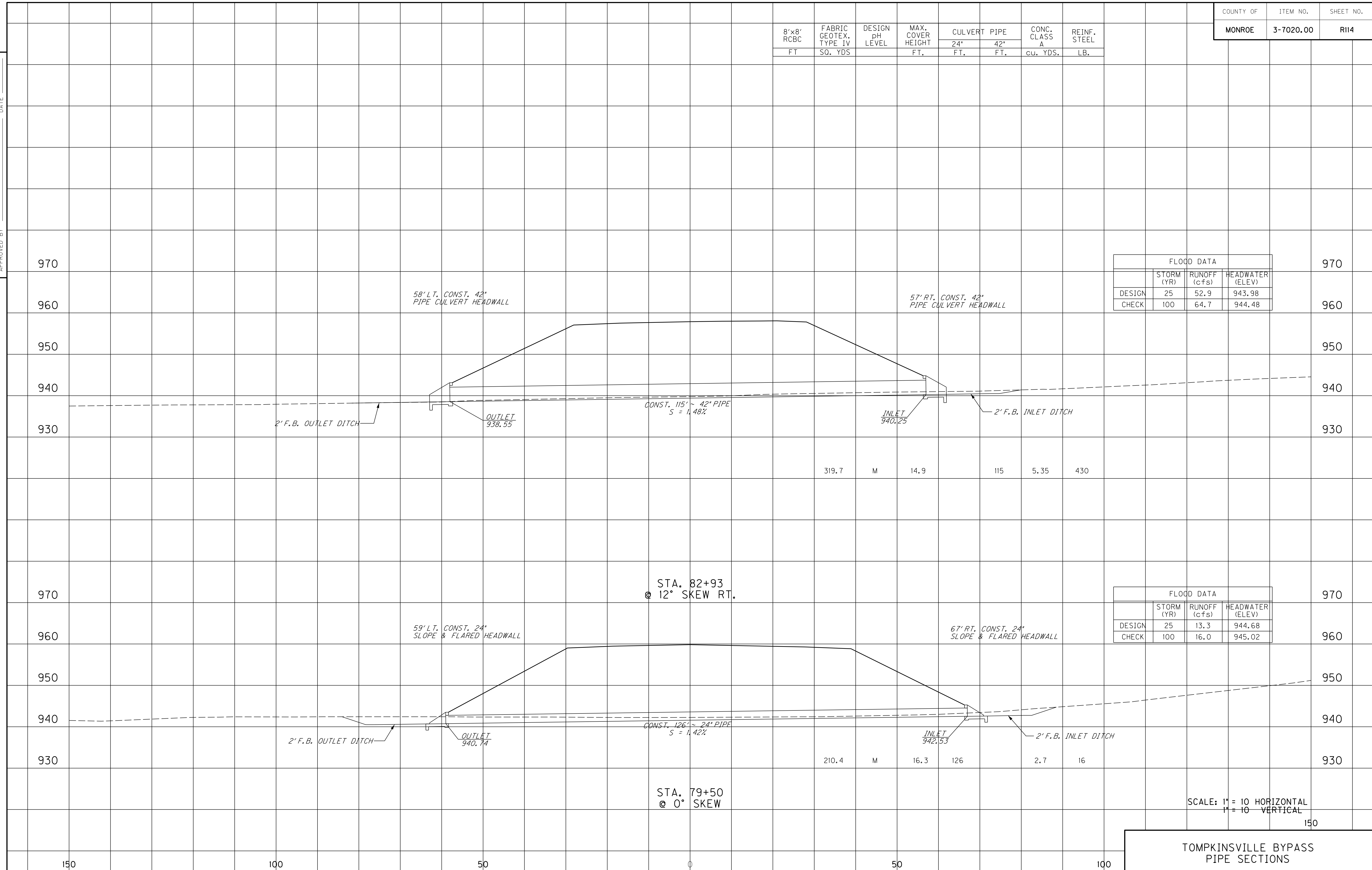
TOMPKINSVILLE BYPASS
 PIPE SECTIONS

8'x8' RCBC	FABRIC GEOTEX. TYPE IV	DESIGN pH LEVEL	MAX. COVER HEIGHT	CULVERT PIPE	CONC. CLASS	REINF. STEEL
FT	SO. YDS		FT.	24" FT. 42" FT.	A	LB.
					cu. YDS.	

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	52.9	943.98
CHECK	100	64.7	944.48

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	13.3	944.68
CHECK	100	16.0	945.02

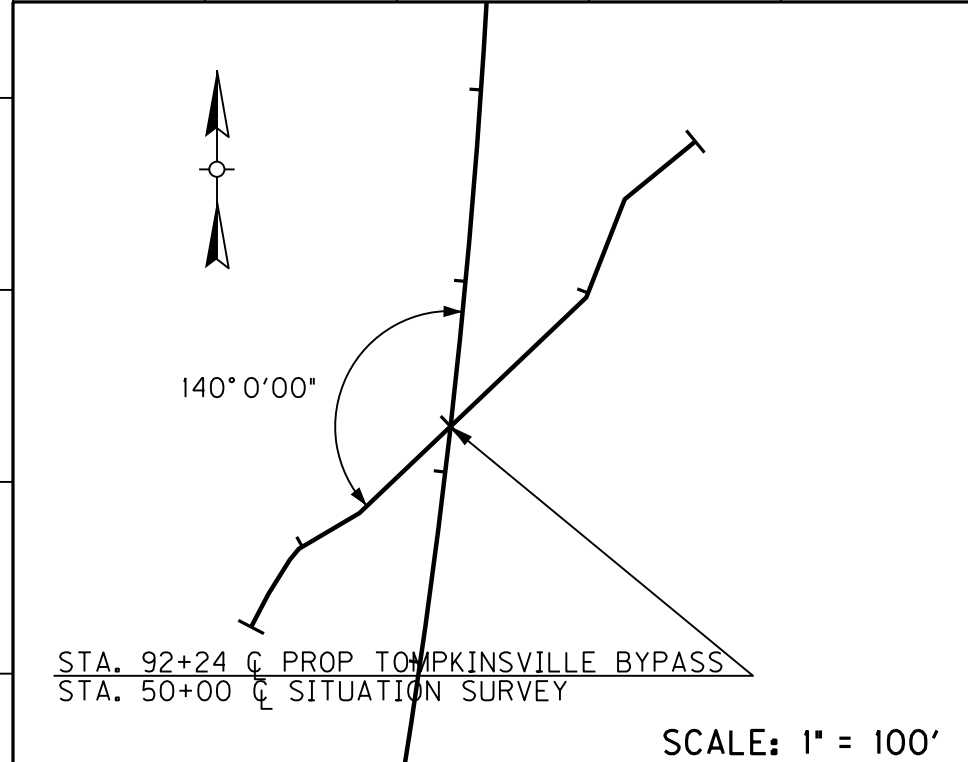
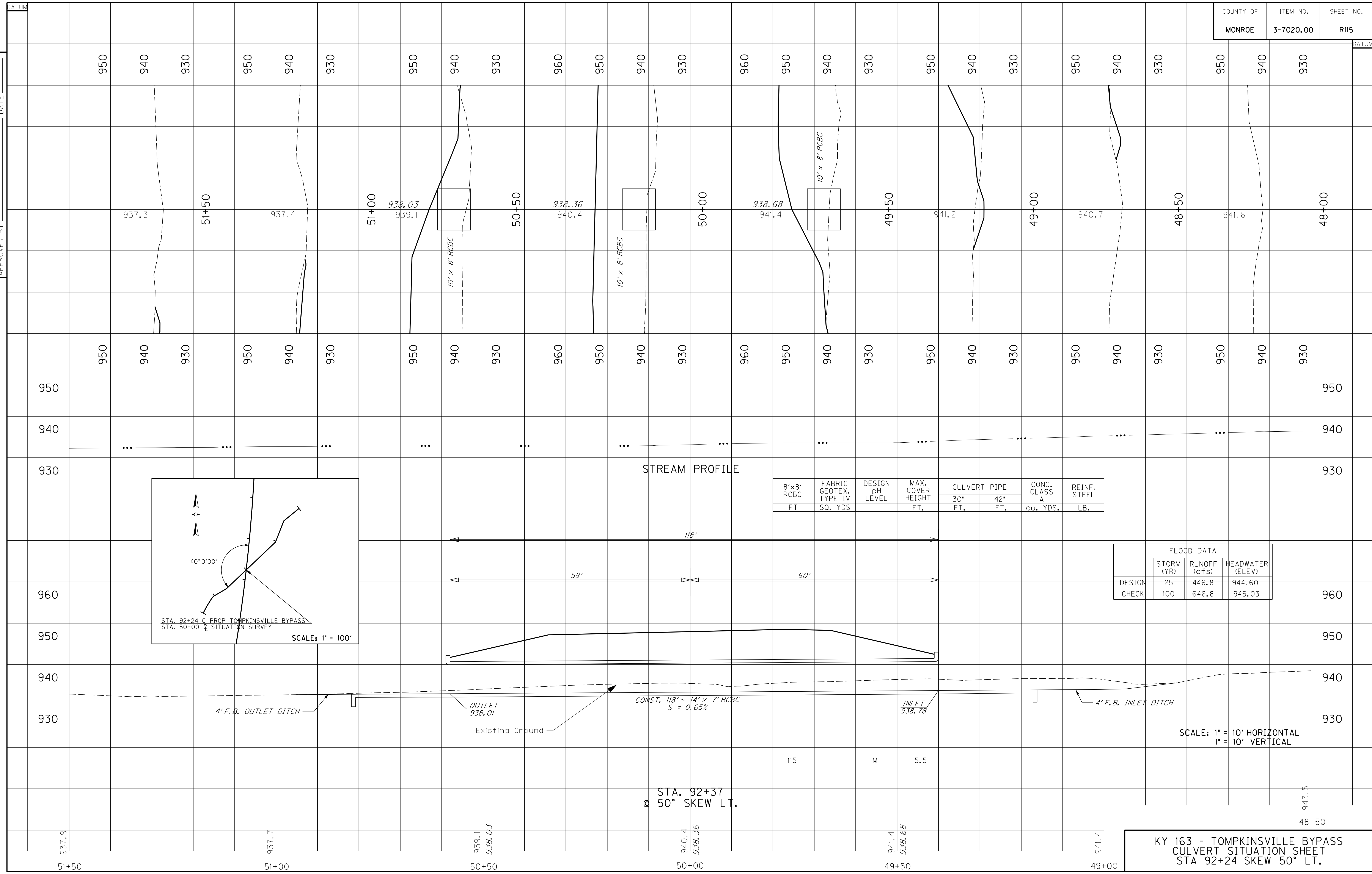


USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfilespecifications\$\$\$
 E-SHEET NAME:

SCALE: 1" = 10' HORIZONTAL
 1" = 10' VERTICAL

TOMPKINSVILLE BYPASS
 PIPE SECTIONS

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____



8'x8' RCBC	FABRIC GEOTEX. TYPE IV	DESIGN PH LEVEL	MAX. COVER HEIGHT	CULVERT PIPE	CONC. CLASS	REINF. STEEL
FT	SO. YDS		FT.	30" 42"	A	LB.

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	446.8	944.60
CHECK	100	646.8	945.03

4' F.B. OUTLET DITCH OUTLET 938.01 CONST. 118' ~ 14' x 7' RCBC S = 0.65% INLET 938.78 4' F.B. INLET DITCH

Existing Ground

STA. 92+37 @ 50° SKEW LT.

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

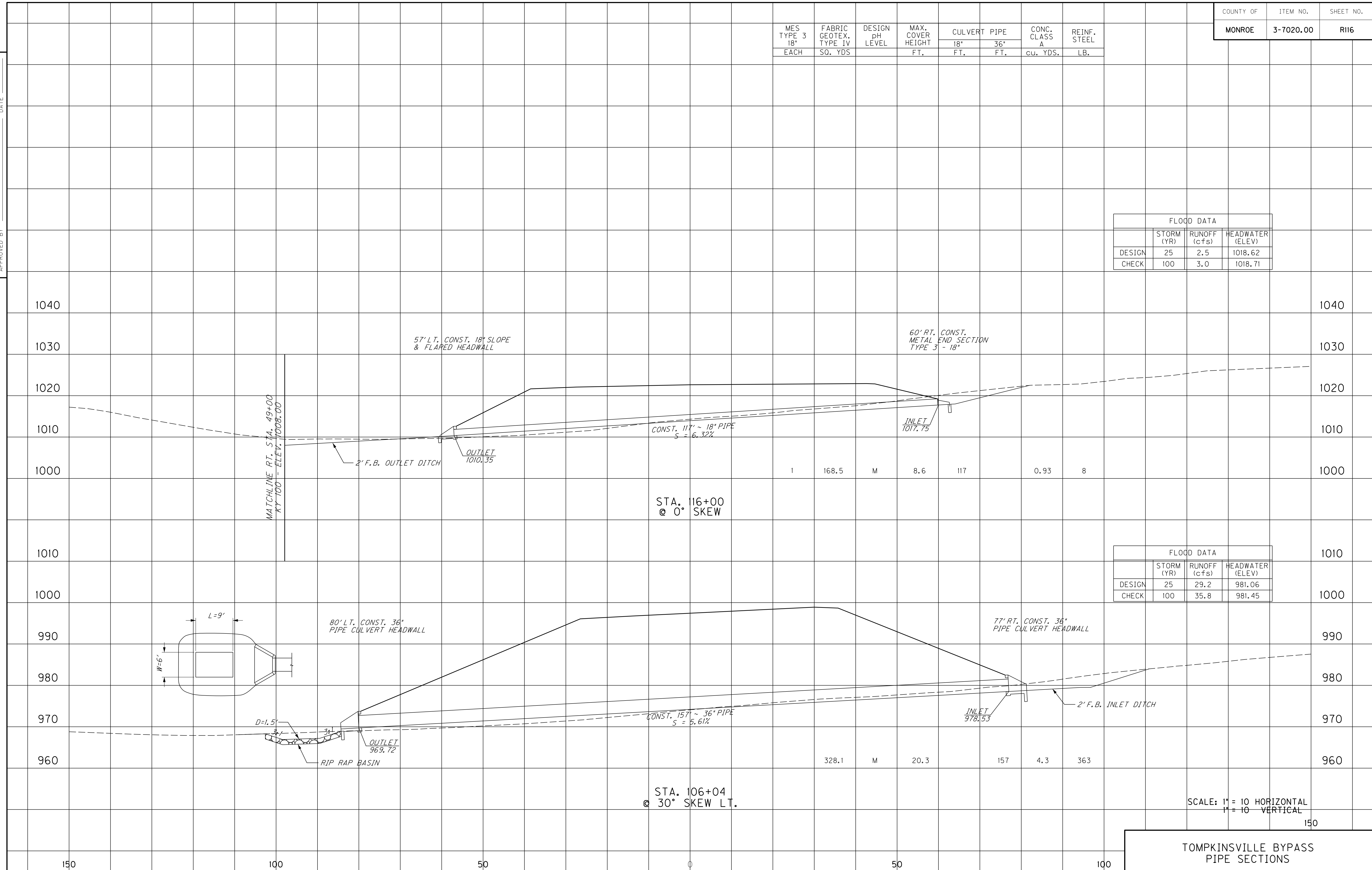
USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfilespecifications\$\$\$
 E-SHEET NAME:

MES TYPE 3	FABRIC GEOTEX. TYPE IV	DESIGN pH LEVEL	MAX. COVER HEIGHT	CULVERT PIPE	CONC. CLASS	REINF. STEEL
18" EACH	SO. YDS		FT.	18" FT. 36" FT.	A cu. YDS.	LB.

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	2.5	1018.62
CHECK	100	3.0	1018.71

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	29.2	981.06
CHECK	100	35.8	981.45



USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfilespecifications\$\$\$
 E-SHEET NAME:

SCALE: 1" = 10' HORIZONTAL
 1" = 10' VERTICAL

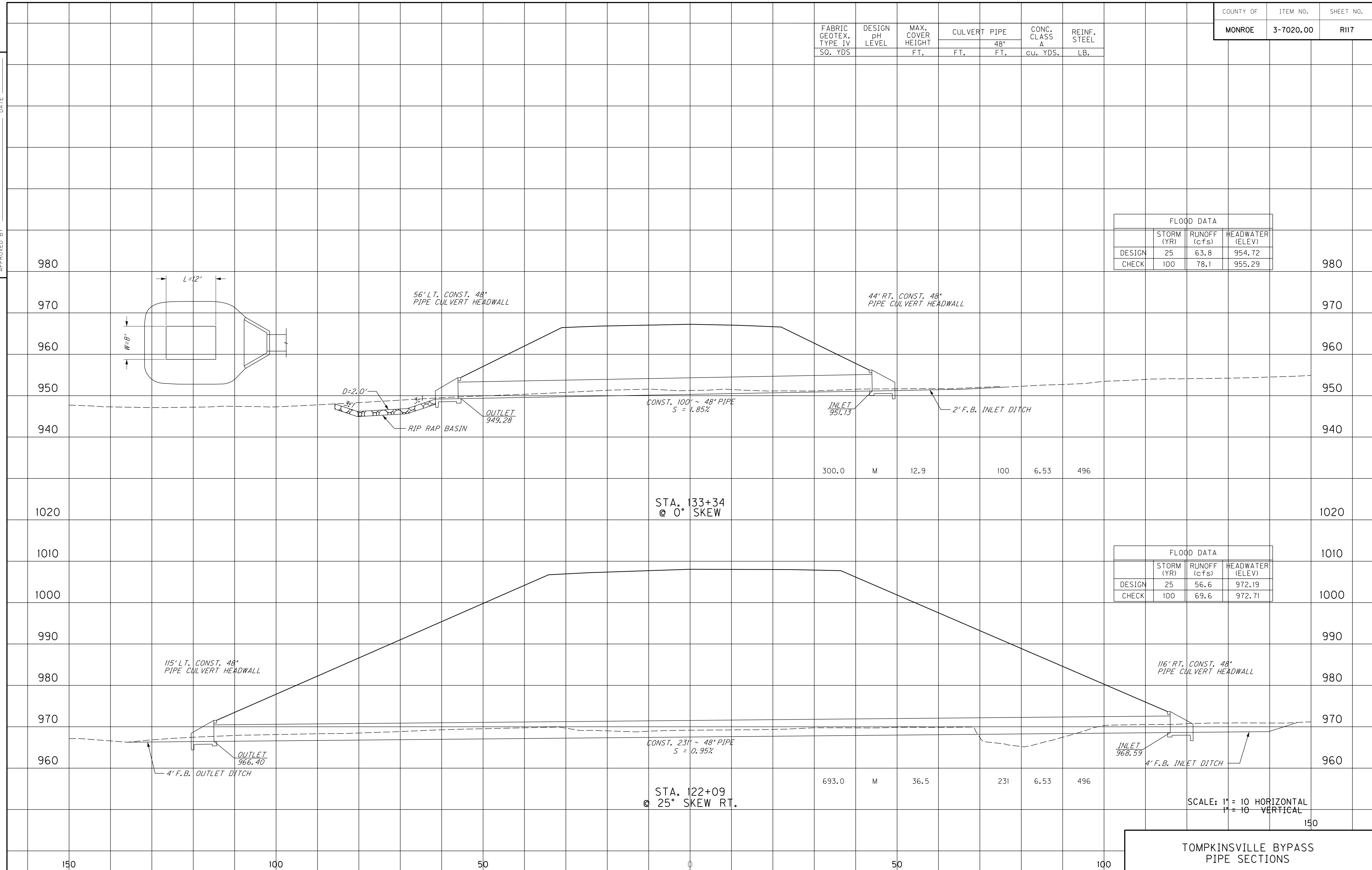
TOMPKINSVILLE BYPASS
 PIPE SECTIONS

FABRIC GEOTEX. TYPE IV	DESIGN pH LEVEL	MAX. COVER HEIGHT	CULVERT PIPE	CONC. CLASS	REINF. STEEL
SO. YDS.		FT.	48" FT.	A cu. YDS.	LB.

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	63.8	954.72
CHECK	100	78.1	955.29

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	56.6	972.19
CHECK	100	69.6	972.71

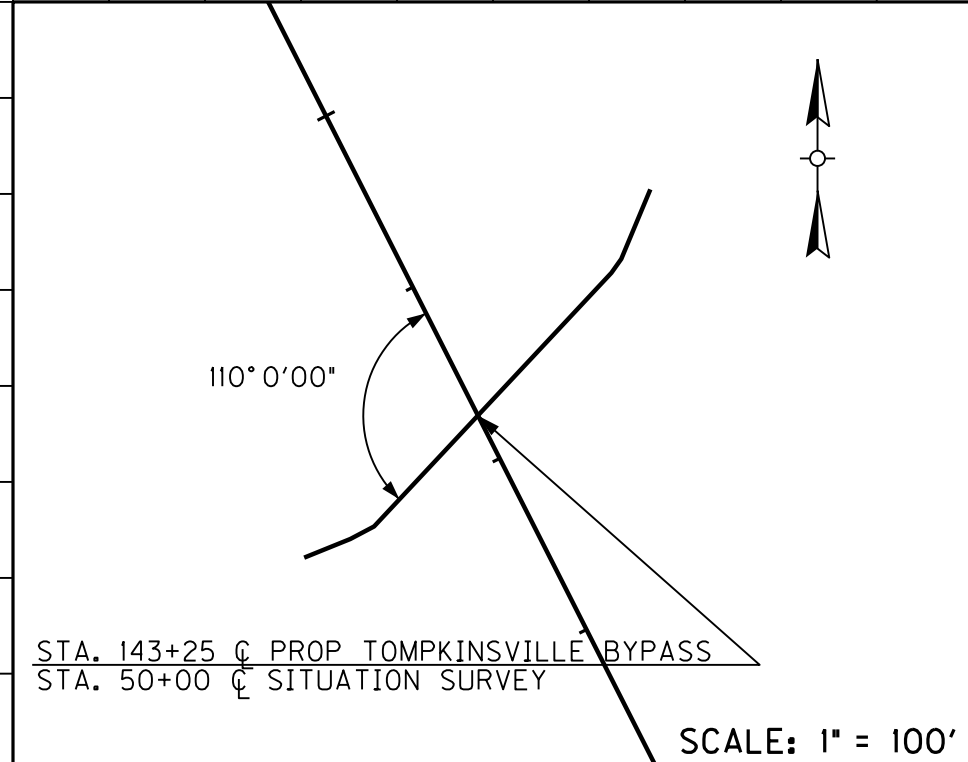
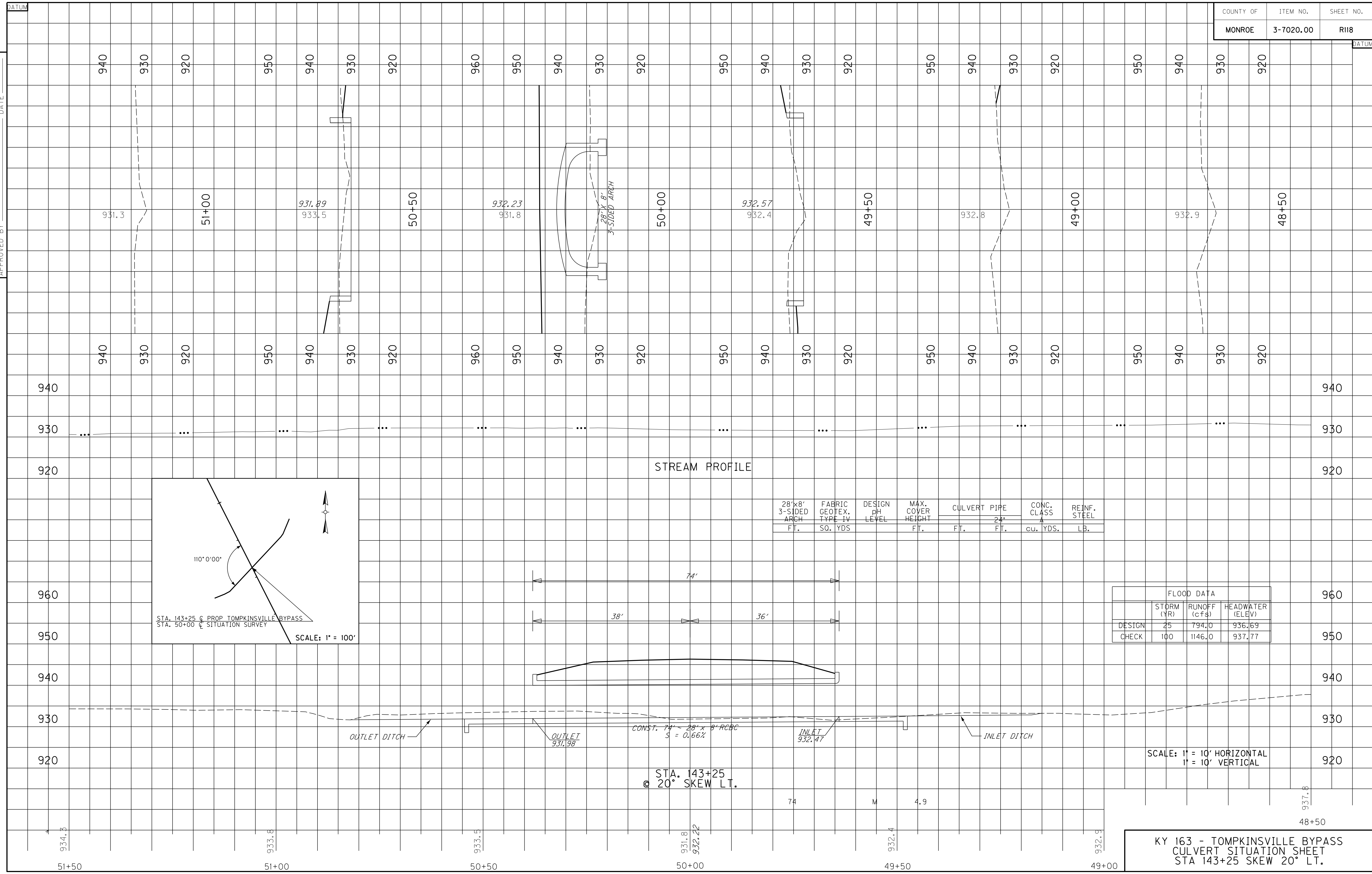


SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

TOMPKINSVILLE BYPASS
PIPE SECTIONS

USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfilespecifications\$\$\$
 E-SHEET NAME:

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____



28'x8' 3-SIDED ARCH	FABRIC GEOTEX. TYPE IV	DESIGN PH LEVEL	MAX. COVER HEIGHT	CULVERT PIPE 24"	CONC. CLASS A	REINF. STEEL
FT.	SQ. YDS		FT.	FT.	cu. YDS.	LB.

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	794.0	936.69
CHECK	100	1146.0	937.77

CONST. 74' - 28' x 8' RCBC
S = 0.66%

STA. 143+25
@ 20° SKEW LT.

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

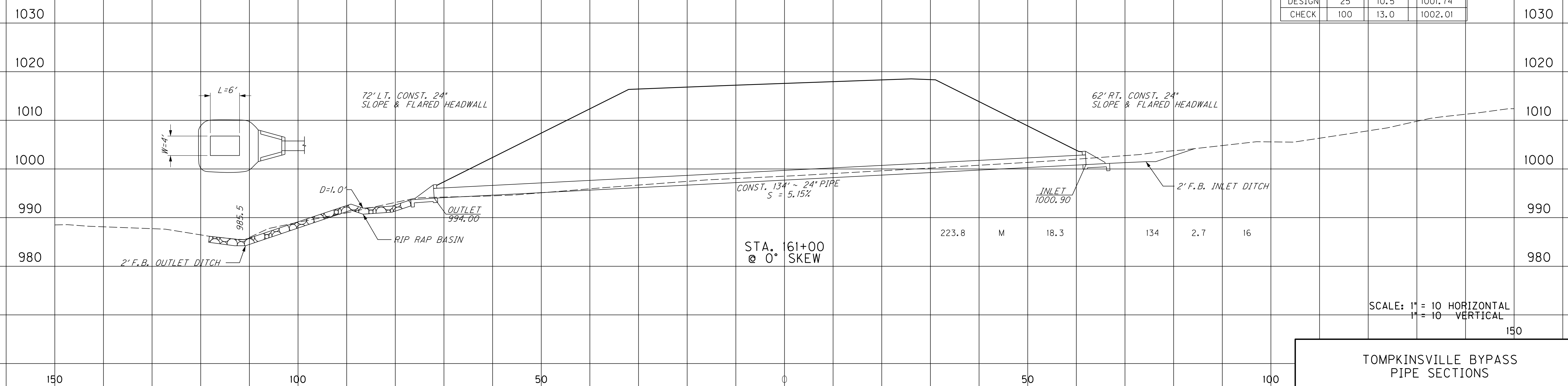
KY 163 - TOMPKINSVILLE BYPASS
 CULVERT SITUATION SHEET
 STA 143+25 SKEW 20° LT.

USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfilespecifications\$\$\$
 E-SHEET NAME:

10'x10' RCBC	FABRIC GEOTEX. TYPE IV	DESIGN PH LEVEL	MAX. COVER HEIGHT	CULVERT	PIPE	CONC. CLASS A	REINF. STEEL
FT.	SO. YDS		FT.	FT.	24" FT.	cu. YDS.	LB.

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	10.5	1001.74
CHECK	100	13.0	1002.01



SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

TOMPKINSVILLE BYPASS
PIPE SECTIONS

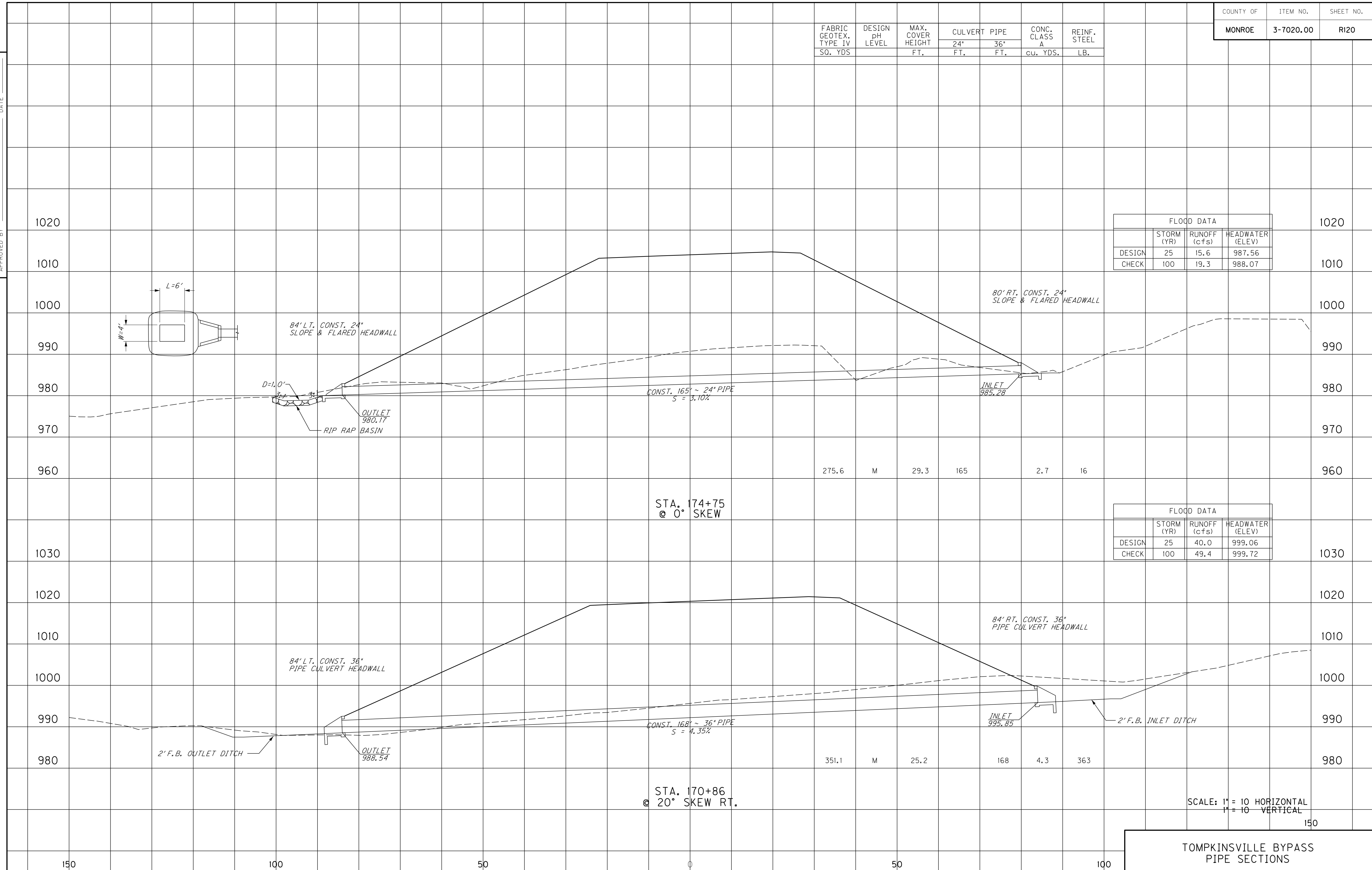
USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfilespecifications\$\$\$
 E-SHEET NAME:

FABRIC GEOTEX. TYPE IV SQ. YDS.	DESIGN PH LEVEL	MAX. COVER HEIGHT FT.	CULVERT PIPE 24" FT.	36" FT.	CONC. CLASS A cu. YDS.	REINF. STEEL LB.
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PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	15.6	987.56
CHECK	100	19.3	988.07

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	40.0	999.06
CHECK	100	49.4	999.72



275.6 M 29.3 165 2.7 16

STA. 174+75
@ 0° SKEW

351.1 M 25.2 168 4.3 363

STA. 170+86
@ 20° SKEW RT.

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

TOMPKINSVILLE BYPASS
PIPE SECTIONS

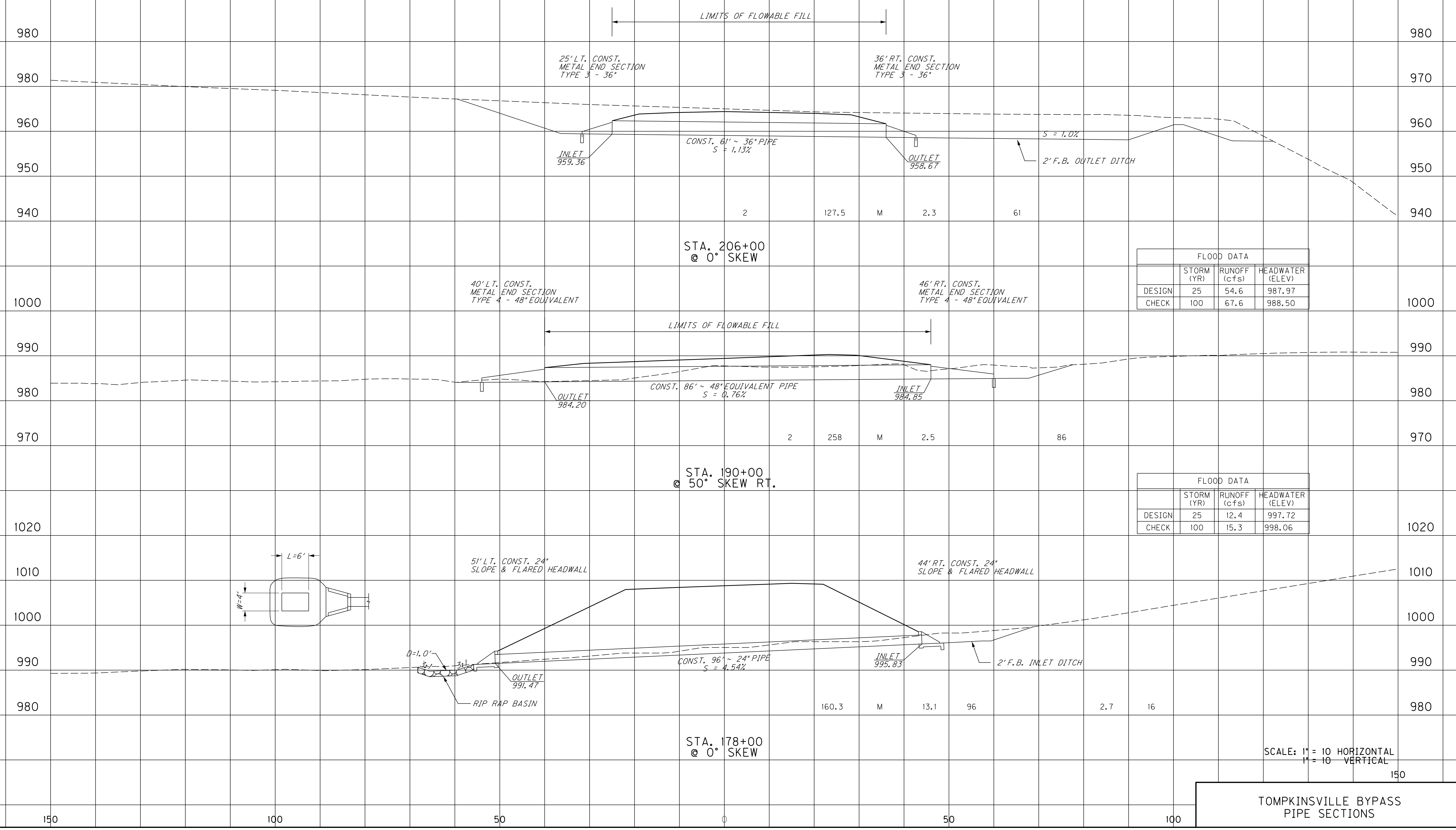
STA. 170+86 TO STA. 174+75

USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfilespecifications\$\$\$
 E-SHEET NAME:

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	26.2	962.31
CHECK	100	31.8	962.61

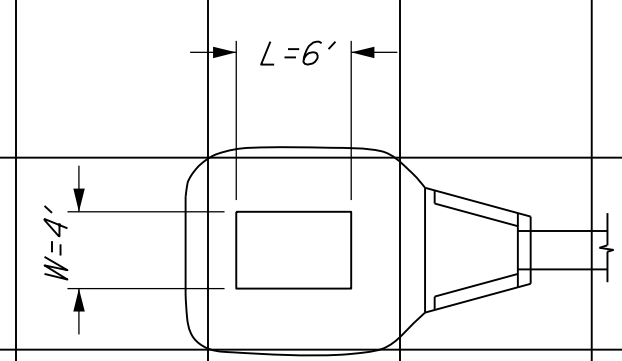
MES TYPE 3 36" EACH	MES TYPE 4 48" EQUIV. EACH	FABRIC GEOTEX. TYPE IV SO. YDS	DESIGN pH LEVEL	MAX. COVER HEIGHT FT.	CULVERT PIPE			CONC. CLASS A cu. YDS.	REINF. STEEL LB.
					24" FT.	36" FT.	48" EQUIV. FT.		

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____



FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	54.6	987.97
CHECK	100	67.6	988.50

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	12.4	997.72
CHECK	100	15.3	998.06



SCALE: 1" = 10' HORIZONTAL
 1" = 10' VERTICAL

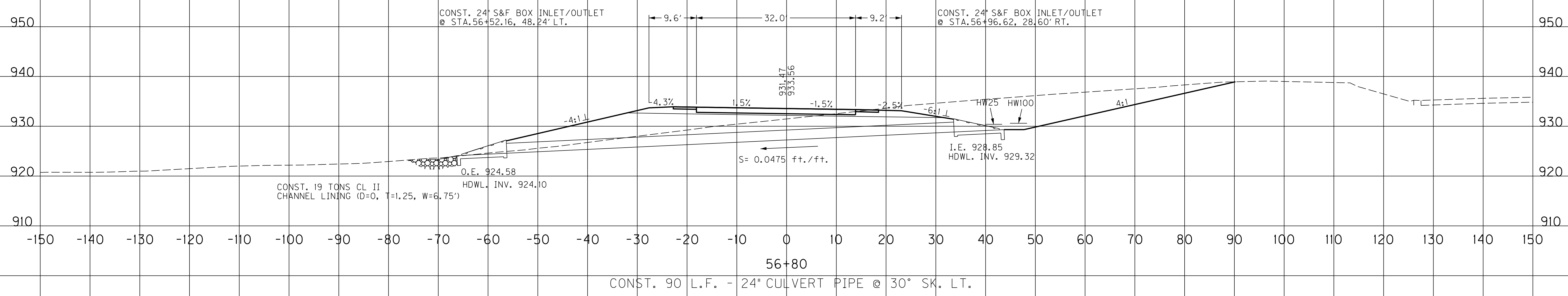
TOMPKINSVILLE BYPASS
 PIPE SECTIONS

USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfilespecifications\$\$\$
 E-SHEET NAME:

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

DESIGN PH LEVEL	MAX COVER HEIGHT		PIPE CULVERT				S & F BOX HOWL. EACH	SLOPED BOX OUTLET TYPE I EACH	STEEL REINF. LBS.	CONC. CLASS A C.Y.	CHANNEL LINING CLASS II TONS	DITCH EXCAV. C.Y.
	18"	24"	30"	36"	42"	54"						
M	5.73	-	90	-	-	-	2	-	-	-	19	-

$Q_{25} = 8.90$ CFS	$HW_{25} = 930.39$ ft.	$V = 11.9$ FPS
$Q_{100} = 10.90$ CFS	$HW_{100} = 930.60$ ft.	$V = 13.0$ FPS

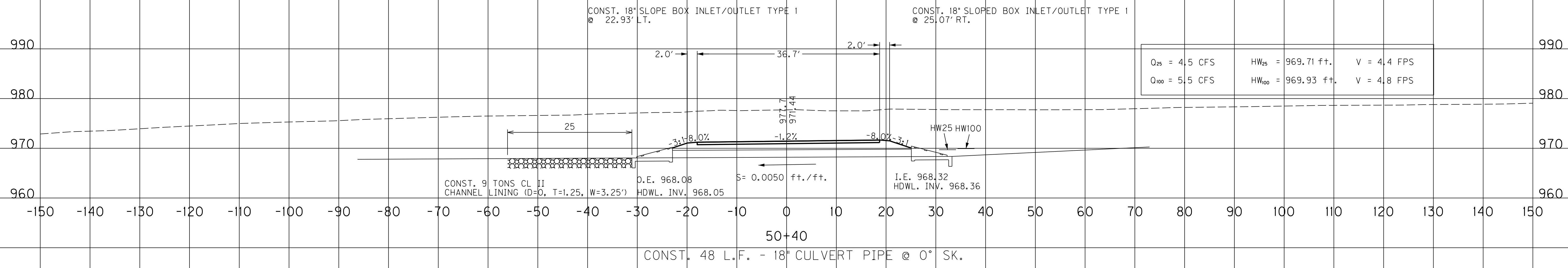


USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfiles\$\$\$specifications\$\$\$
 E-SHEET NAME:

SCALE: 1" = 10' HORIZONTAL
 1" = 10' VERTICAL

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

DESIGN PH LEVEL	MAX COVER HEIGHT		PIPE CULVERT				S & F BOX HOWL. EACH	SLOPED BOX OUTLET TYPE I EACH	STEEL REINF. LBS.	CONC. CLASS A C.Y.	CHANNEL LINING CLASS II TONS	DITCH EXCAV. C.Y.
	18"	24"	30"	36"	42"	54"						
M	1.72	48	-	-	-	-	-	2	-	-	9	-



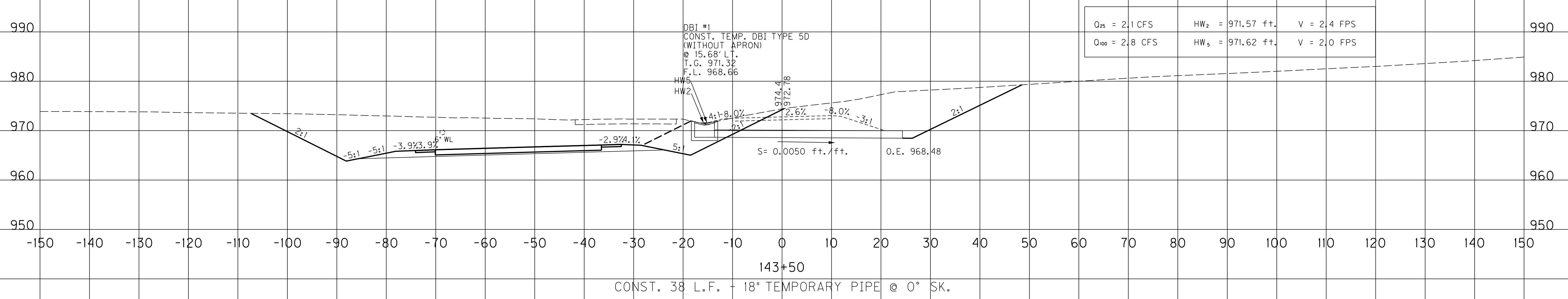
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

PIPE SHEET
CLARK ESTATES RD. STA. 50+40

USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfilespecifications\$\$\$
 E-SHEET NAME:

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

DESIGN PH LEVEL	MAX COVER HEIGHT		PIPE CULVERT				S & F BOX HOWL.	DBI TYPE 5D	STEEL REINF.	CONC. CLASS A	CHANNEL LINING CLASS II	DITCH EXCAV. C.Y.
	18"	24"	30"	36"	42"	54"						
	FT.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	LBS.	C.Y.	TONS	C.Y.
M	3.0	38	-	-	-	-	-	1	-	-	-	-



Q ₂₅ = 2.1 CFS	HW ₂ = 971.57 ft.	V = 2.4 FPS
Q ₁₀₀ = 2.8 CFS	HW ₅ = 971.62 ft.	V = 2.0 FPS

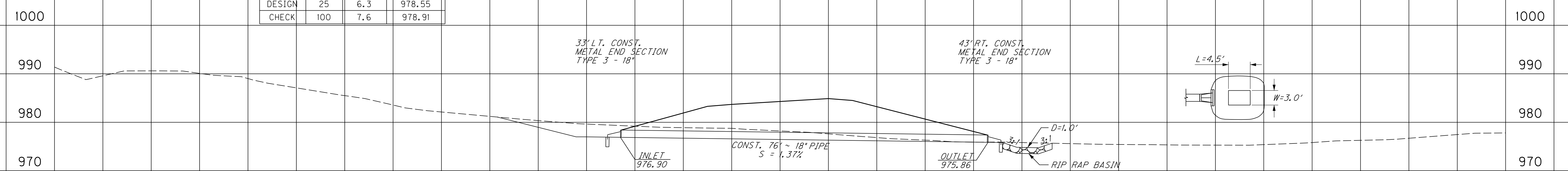
USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfiles\$\$\$specifications\$\$\$
 E-SHEET NAME:

SCALE: 1" = 10' HORIZONTAL
 1" = 10' VERTICAL

MES TYPE 3 48" EQUIV. EACH	MES TYPE 3 18" EACH	FABRIC GEOTEX. TYPE IV SO. YDS	DESIGN pH LEVEL	MAX. COVER HEIGHT FT.	CULVERT PIPE 18" FT.	48" EQUIV. FT.	CONC. CLASS A CU. YDS.	REINF. STEEL LB.
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PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	6.3	978.55
CHECK	100	7.6	978.91

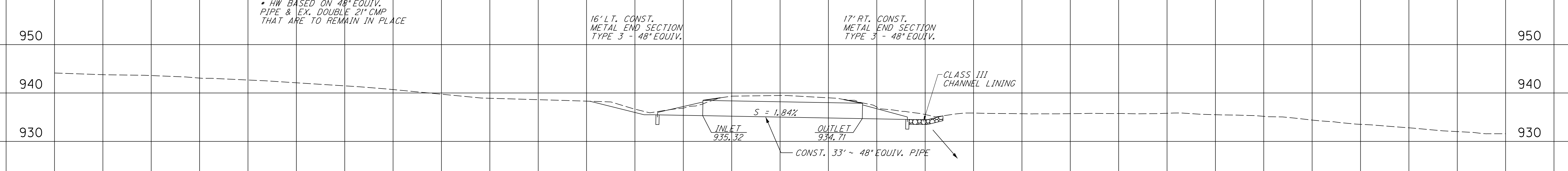


2	109.4	M	5	76
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STA. 54+32
@ 0° SKEW

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	102.5	938.91*
CHECK	100	125.6	939.57*

* HW BASED ON 48" EQUIV. PIPE & EX. DOUBLE 21" CMP THAT ARE TO REMAIN IN PLACE



2	99	M	0.5	33
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STA. 41+83
@ 16° SKEW RT.

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

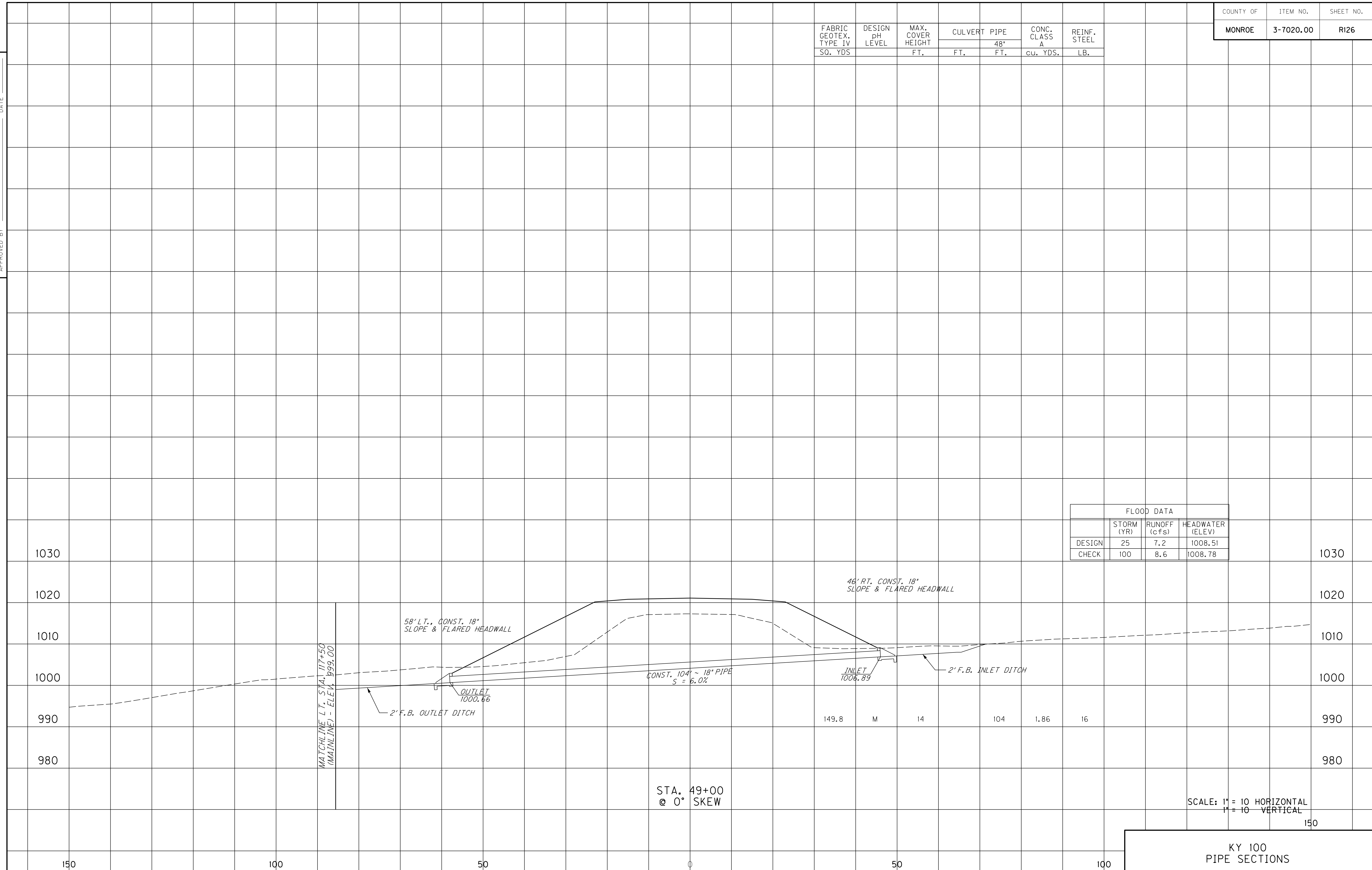
CAPP HARLAN
PIPE SECTIONS

USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfiles\$\$\$
 E-SHEET NAME:

FABRIC GEOTEX. TYPE IV SQ. YDS.	DESIGN PH LEVEL	MAX. COVER HEIGHT FT.	CULVERT PIPE 48" FT.	CONC. CLASS A cu. YDS.	REINF. STEEL LB.
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PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	25	7.2	1008.51
CHECK	100	8.6	1008.78



USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfilespecifications\$\$\$
 E-SHEET NAME:

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

KY 100
 PIPE SECTIONS
 STA. 49+00 TO STA. 49+00

MES TYPE 3 18"	DBI TYPE 6F	FABRIC GEOTEX. TYPE IV	DESIGN PH LEVEL	MAX. COVER HEIGHT	CULVERT PIPE	CONC. CLASS A	REINF. STEEL
EACH	EACH	SO. YDS		FT.	18" 24" FT.	cu. YDS.	LB.

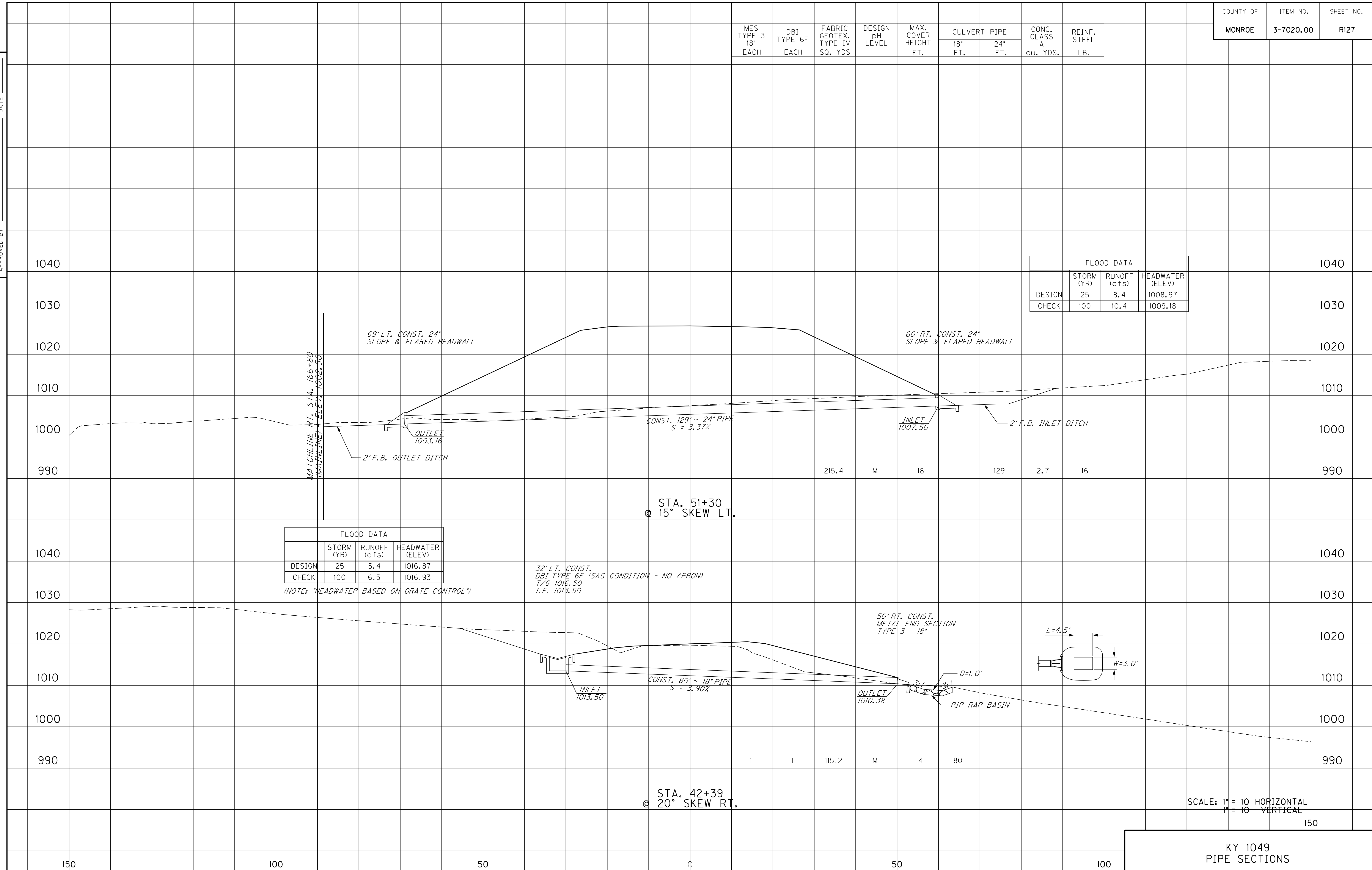
PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

FLOOD DATA		
STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN 25	8.4	1008.97
CHECK 100	10.4	1009.18

FLOOD DATA		
STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN 25	5.4	1016.87
CHECK 100	6.5	1016.93

(NOTE: HEADWATER BASED ON GRATE CONTROL)

USER: \$\$\$USER\$\$\$
 DATE: \$\$\$DATE\$\$\$
 FILE NAME: \$\$\$designsfilespecifications\$\$\$
 E-SHEET NAME:



SCALE: 1" = 10' HORIZONTAL
 1" = 10' VERTICAL

KY 1049
 PIPE SECTIONS
 STA. 42+39 TO STA. 51+30