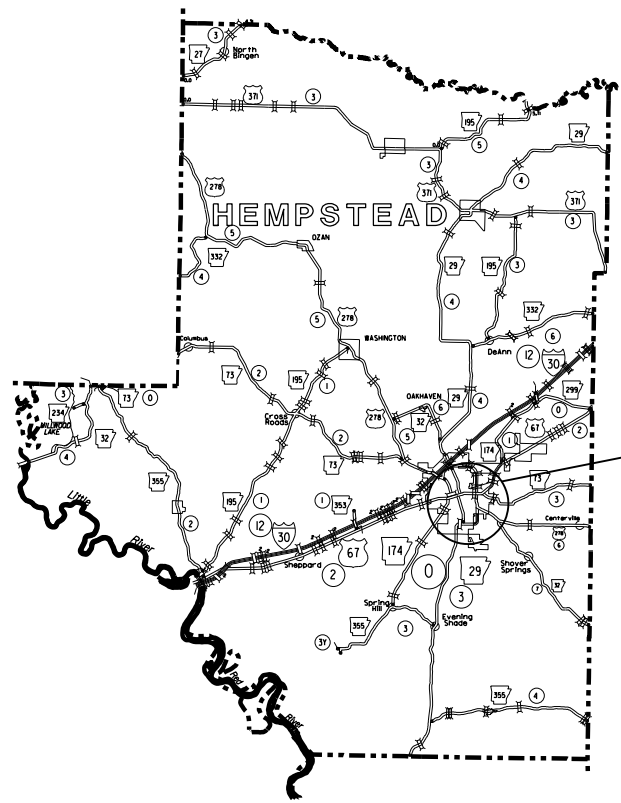


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	C29002		1	54
				4 HOPE 6TH STREET RECONSTRUCTION (S)				

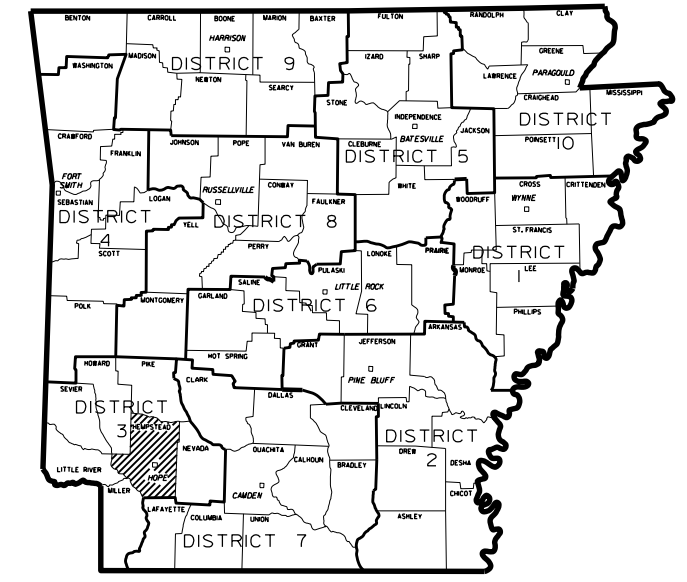


PROJECT LOCATION

ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS FOR PROPOSED CITY STREET

HOPE 6TH ST. RECONSTRUCTION (S)
WEST 6TH STREET
HEMPSTEAD COUNTY
JOB C29002

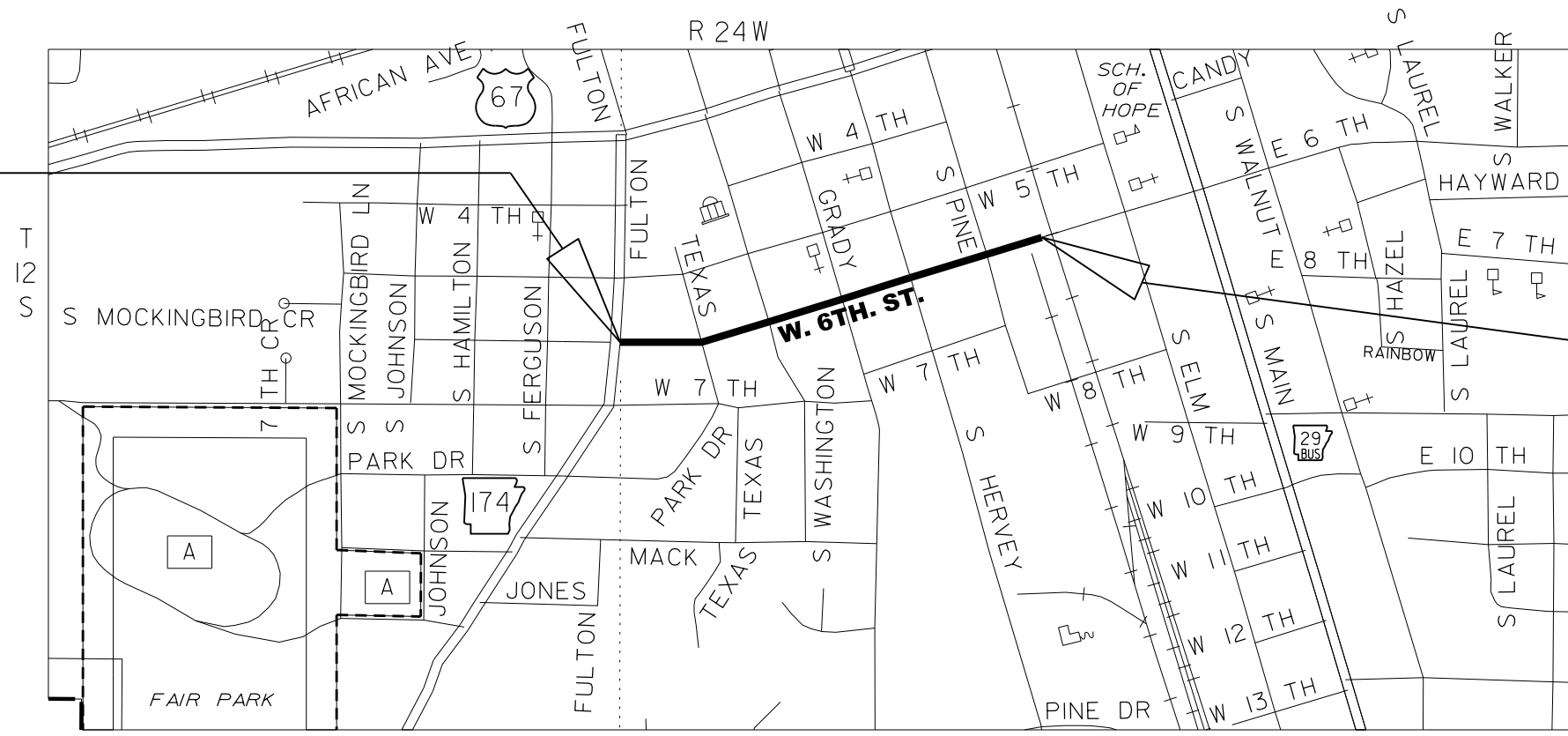
NOT TO SCALE



ARKANSAS HWY. DISTRICT NO. 3

VICINITY MAP

STA. 100+10.00
BEGIN JOB C29002



DESIGN TRAFFIC DATA

DESIGN YEAR.....	2042
2022 ADT.....	4454
2042 ADT.....	5054
2042 DHV.....	539
DIRECTIONAL DISTRIBUTION.....	0.60
TRUCKS.....	3%
DESIGN SPEED.....	30MPH

STA. 121+88.00
END JOB C29002

APPROVED



Kelvin Rex Vines
Dec 8 2021 2:37 PM

DEPUTY DIRECTOR
AND CHIEF ENGINEER

PROJECT COORDINATES

	BEGIN	MID-POINT	END
LAT.	N33°39'44"	N33°39'45"	N33°39'49"
LONG.	W93°36'01"	W93°35'49"	W93°35'36"

LENGTH OF PROJECT CALCULATED ALONG CL CONSTRUCTION

	LENGTH	FEET OR	MILES
GROSS LENGTH OF PROJECT	2178.00		0.413
NET " " ROADWAY	2178.00		0.413
NET " " BRIDGES	0.00		0.000
NET " " PROJECT	2178.00		0.413

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. C29002	2	54

4 INDEX OF SHEETS AND STANDARD DRAWINGS

INDEX OF SHEETS



SHEET NO.	TITLE
1	TITLE SHEET
2	INDEX OF SHEETS AND STANDARD DRAWINGS
3	GOVERNING SPECIFICATIONS AND GENERAL NOTES
4	TYPICAL SECTIONS OF IMPROVEMENT
5-6	SPECIAL DETAILS
7-8	TEMPORARY EROSION CONTROL DETAILS
9-12	UTILITIES AND DESIGN DETAIL
13-17	MAINTENANCE OF TRAFFIC
18-21	PAVEMENT MARKING AND PERMANENT SIGN DETAILS
22-27	QUANTITIES
28	SUMMARY OF QUANTITIES AND REVISIONS
29-30	SURVEY CONTROL DETAILS
31-34	RIGHT OF WAY
35-38	PLAN AND PROFILE SHEETS
39-54	CROSS SECTIONS

ROADWAY STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
CG-1	CURBING DETAILS	11-29-07
DR-1	DETAILS OF DRIVEWAYS & ISLANDS	11-07-19
FES-1	FLARED END SECTION	10-18-96
FES-2	FLARED END SECTION	10-18-96
FPC-9E	DETAILS OF DROP INTLET (TYPE C)	08-22-02
FPC-9M	DETAILS OF DROP INLET (TYPE MO)	08-22-02
MB-1	MAILBOX DETAILS	11-18-04
PCC-1	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING	02-27-14
PM-1	PAVEMENT MARKING DETAILS	02-27-20
SHS-1	STANDARD HIGHWAY SIGNS AND SUPPORT ASSEMBLIES	09-12-13
SHS-2	U-CHANNEL POST ASSEMBLIES	07-25-19
TC-1	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	11-07-19
TC-2	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	05-20-21
TC-3	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	08-12-21
TEC-1	TEMPORARY EROSION CONTROL DEVICES	11-16-17
TEC-2	TEMPORARY EROSION CONTROL DEVICES	06-02-94
TEC-3	TEMPORARY EROSION CONTROL DEVICES	11-03-94
WF-3	CHAIN LINK FENCE	11-17-10
WR-1	WHEEL CHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS	11-10-05

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
01-26-2022				6	ARK.			
						JOB NO. C29002	3	54

4 GOVERNING SPECIFICATIONS AND GENERAL NOTES

GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014, AND THE FOLLOWING SPECIAL PROVISIONS



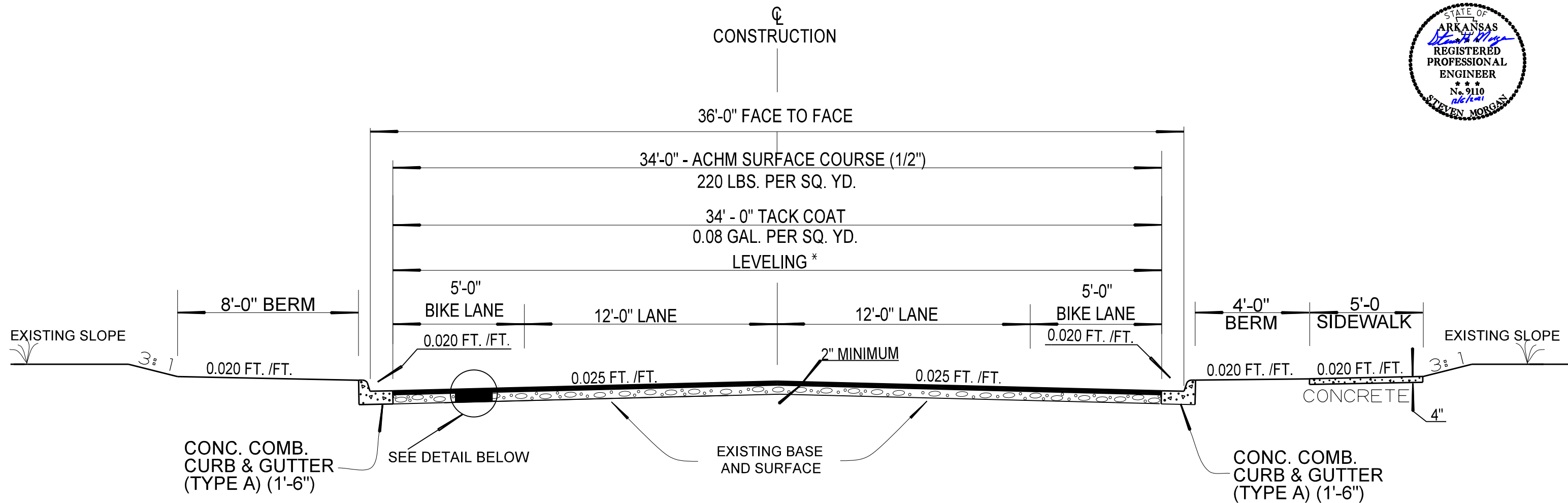
NUMBER	TITLE
ERRATA _____	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
100-3 _____	CONTRACTOR'S LICENSE
100-4 _____	DEPARTMENT NAME CHANGE
102-2 _____	ISSUANCE OF PROPOSALS
105-4 _____	MAINTENANCE DURING CONSTRUCTION
107-2 _____	RESTRAINING CONDITIONS
108-1 _____	LIQUIDATED DAMAGES
108-2 _____	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
110-1 _____	PROTECTION OF WATER QUALITY AND WETLANDS
210-1 _____	UNCLASSIFIED EXCAVATION
306-1 _____	QUALITY CONTROL AND ACCEPTANCE
400-1 _____	TACK COATS
400-4 _____	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
400-5 _____	PERCENT AIR VOIDS FOR ACHM MIX DESIGNS
400-6 _____	LIQUID ANIT-STRIP ADDITIVE
400-7 _____	TRACKLESS TACK
404-3 _____	DESIGN OF ASPHALT MIXTURES
410-1 _____	CONSTRUCTION REQUIREMENTS AND ACCEPTACE OF ASPHALT CONCRETE PLANT MIX COURSES
410-2 _____	DEVICES FOR MEASURING DENSITY FOR ROLLING PATTERNS
410-4 _____	EVALUATION OF ACHM SUBLOT REPLACEMENT MATERIAL
505-1 _____	PORTLAND CEMENT CONCRETE DRIVEWAY
600-2 _____	INCIDENTAL CONSTRUCTION
604-1 _____	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
604-3 _____	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES (MASH)
620-1 _____	MULCH COVER
621-1 _____	FILTER SOCKS
633-1 _____	CONCRETE WALKS, CONCRETE STEPS, AND HAND RAILING
634-1 _____	CURBING
723-1 _____	GENERAL REQUIREMENTS FOR SIGNS
729-1 _____	CHANNEL POST SIGN SUPPORT
JOB C29002 _____	BIDDING REQUIREMENTS AND CONDITIONS
JOB C29002 _____	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB C29002 _____	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB C29002 _____	ESTABLISHING CONTRACT TIME - WORKING DAY CONTRACT
JOB C29002 _____	EXTENSION FOR PIPE CULVERTS
JOB C29002 _____	LIQUIDATED DAMAGES PROCEDURE FOR BID LETTINGS.
JOB C29002 _____	MANDATORY ELECTRONIC CONTRACT
JOB C29002 _____	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB C29002 _____	RECYCLED ASPHALT SHINGLES
JOB C29002 _____	SHORING FOR CULVERTS
JOB C29002 _____	SOIL STABILIZATION
JOB C29002 _____	STORM WATER POLLUTION PREVENTION PLAN
JOB C29002 _____	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB C29002 _____	UTILITY ADJUSTMENTS
JOB C29002 _____	WARM MIX ASPHALT

GENERAL NOTES

- GRADE LINE DENOTES FINISHED GRADE WHERE SHOWN ON PLANS.
- ALL PIPES LINES, POWER, TELEPHONE, AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE REPSECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
- ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF U. S. MAILBOXES WITHIN THE PROJECT LIMITS IN SUCH A MANNER THAT THE PUBLIC MAY RECEIVE CONTINUED MAIL SERVICE. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS BID ITEMS.
- ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
- ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED IF AND WHERE DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO INSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
- THE SEQUENCE AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS IS A GENERAL OUTLINE FOR THE CONSTRUCTION OF THIS PROJECT, AND IN NO WAY IS IT INTENDED TO COVER EVERY ITEM IN THE PROJECT. ITEMS NOT CRITICAL TO THE CONSTRUCTION SEQUENCE MAY BE CONSTRUCTED IN ANY STAGE AS APPROVED BY THE RESIDENT ENGINEER.
- ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
- THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE OF THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

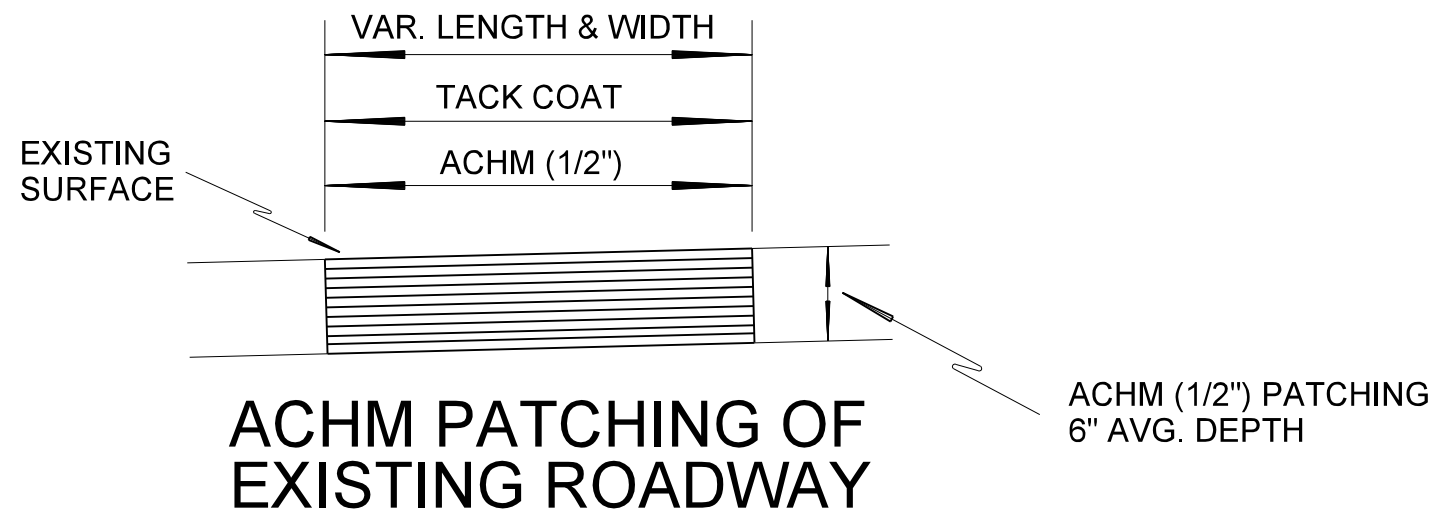
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. C29002							4	54

4 TYPICAL SECTION OF IMPROVEMENT



TYPICAL SECTION OF IMPROVEMENT

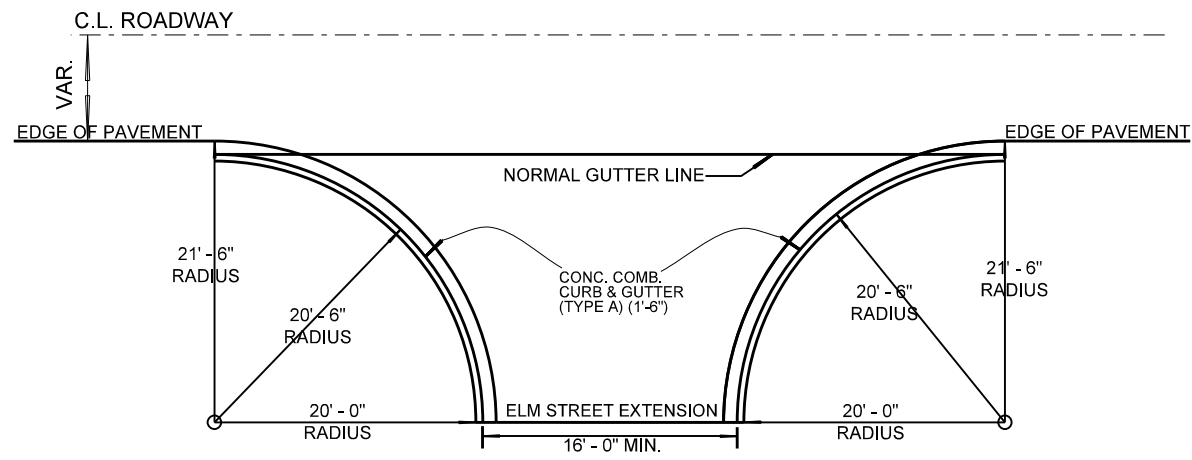
STATIONS 100+13.00 - 121+88.00 OVERLAY, LEVELING, ACHM PATCHING, CURB & GUTTER, AND SIDEWALK



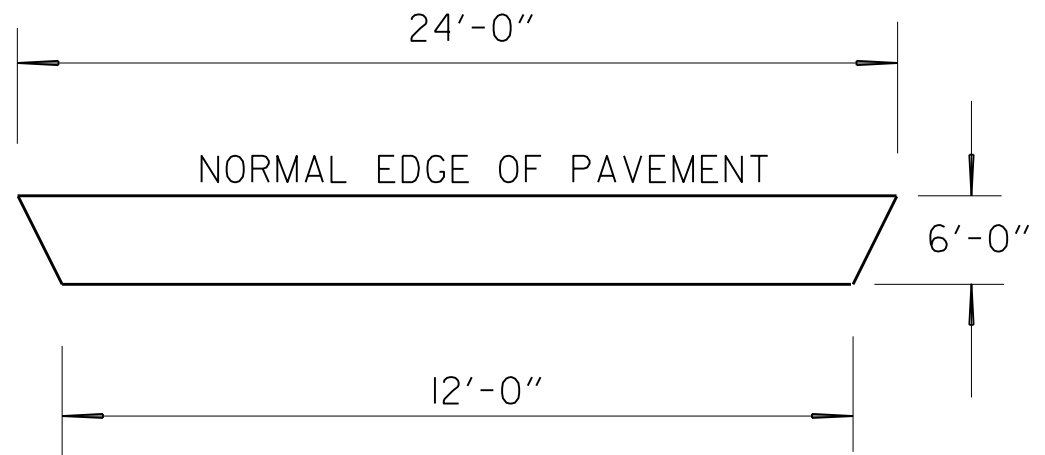
*LOCATION AND APPLICATION RATES ARE AT THE DIRECTION OF THE ENGINEER. SEE THE QUANTITY SHEETS FOR ESTIMATED AMOUNTS. REFER TO CROSS SECTIONS FOR DEVIATION FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER. SKETCHES ARE NOT TO SCALE

TYPICAL SECTION OF IMPROVEMENT

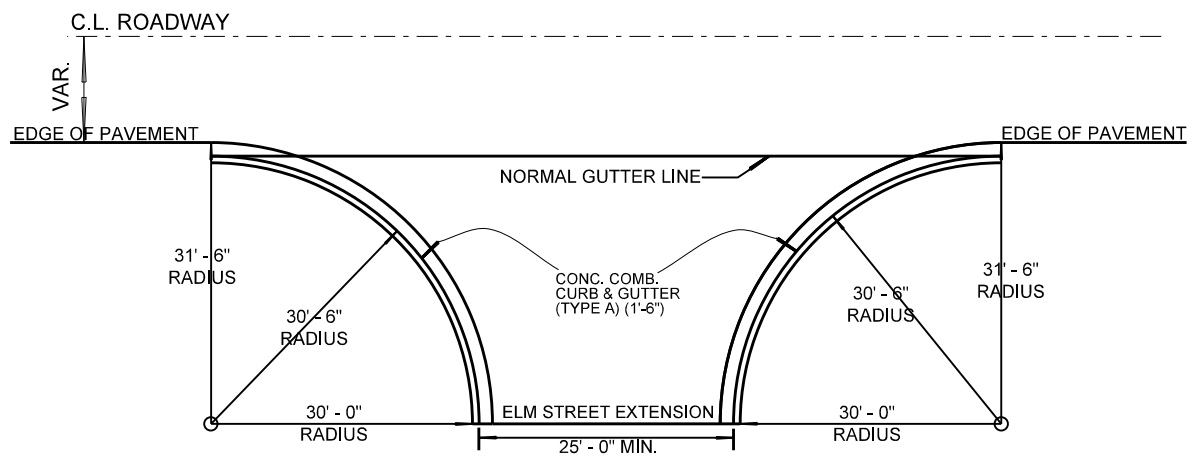
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				6	ARK.			
				JOB NO.	C29002	5	54	
④ SPECIAL DETAILS								



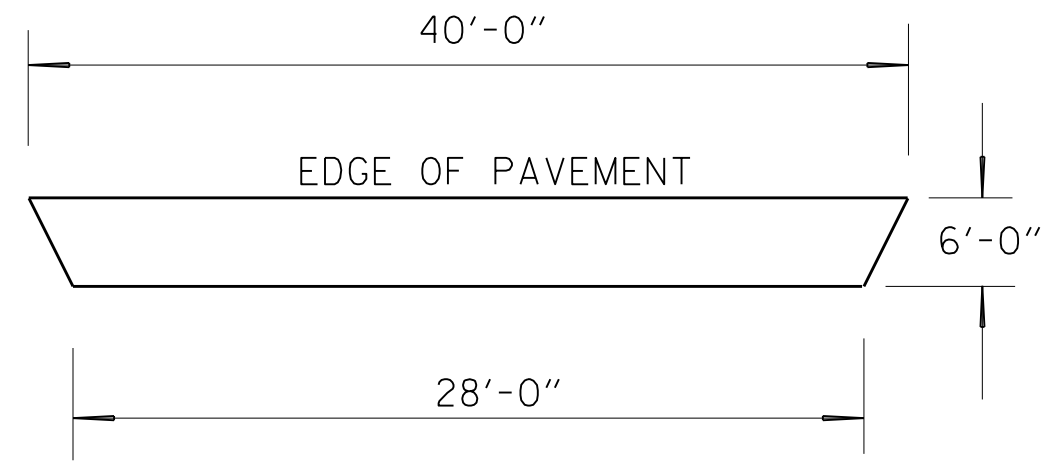
CITY STREET TURNOUT
 STATION 104+50.00
 RIGHT SIDE
 ADD'L. SURFACING AREA = 63.5 SQ. YDS.
 LEFT SIDE
 ADD'L. SURFACING AREA = 83.7 SQ. YDS.



TYPICAL PRIVATE ENTRANCES
 ADD'L. SURFACING AREA = 12.0 SQ. YDS.



CITY STREET TURNOUT
 RIGHT & LEFT SIDE
 ADD'L. SURFACING AREA = 109.6 SQ. YDS.



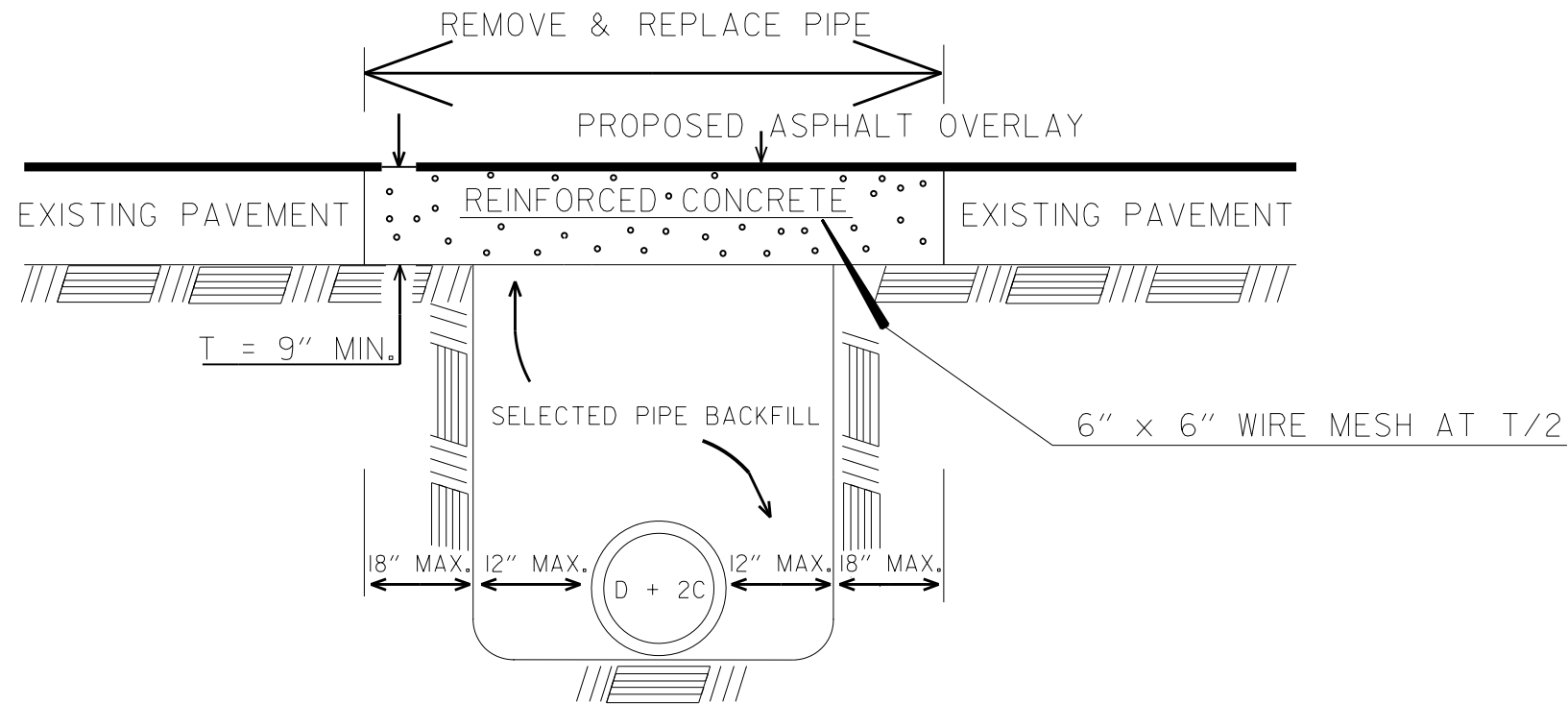
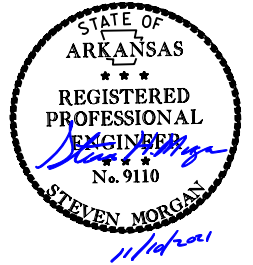
EXTENDED PRIVATE ENTRANCE
 ADD'L. SURFACING AREA = 22.7 SQ. YDS.
 STATION 105+36.00 RIGHT
 STATION 112+39.00 RIGHT

SKETCHES ARE NOT TO SCALE

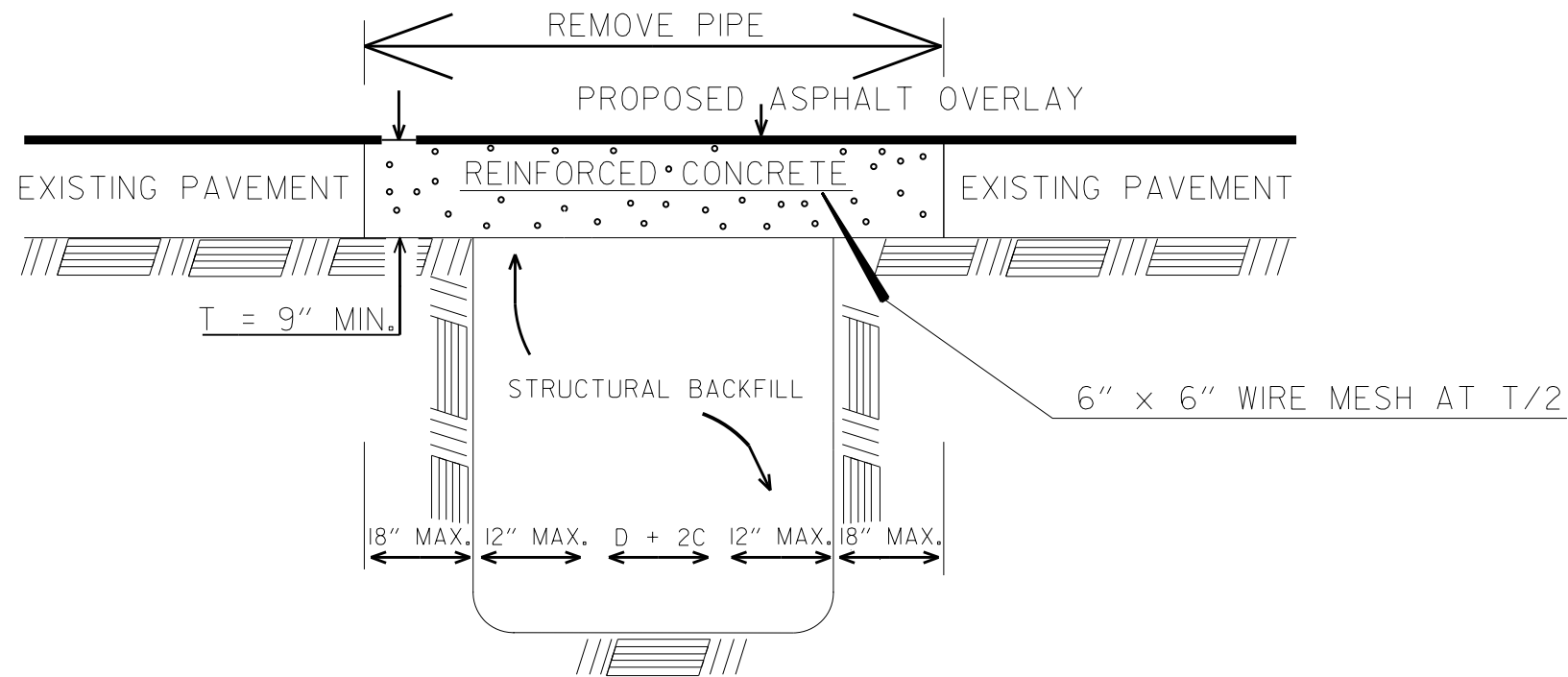
SPECIAL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	C29002	6	54	

4 SPECIAL DETAILS



PAVEMENT REPAIR OVER REMOVED AND REPLACED CULVERTS (CONCRETE)



PAVEMENT REPAIR OVER REMOVED CULVERTS (CONCRETE)

SKETCHES ARE NOT TO SCALE

SPECIAL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	C29002		7	54

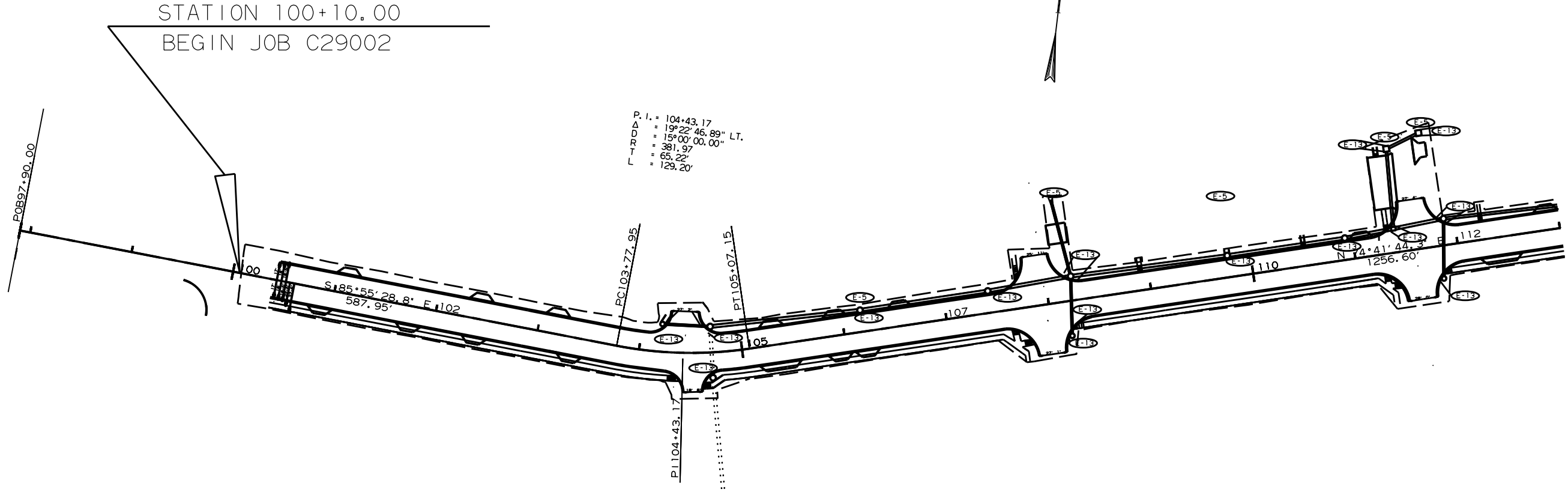
4 TEMPORARY EROSION CONTROL DETAILS

12" FILTER SOCK DROP INLET PROTECTION (E-13)

- STA. 104+25.00 LT. = 40 LIN. FT.
- STA. 104+71.00 LT. & RT. = 80 LIN. FT.
- STA. 106+05.00 LT. = 40 LIN. FT.
- STA. 107+50.00 LT. = 40 LIN. FT.
- STA. 108+21.00 LT. & RT. = 80 LIN. FT.
- STA. 109+69.00 LT. = 40 LIN. FT.
- STA. 111+17.00 LT. = 40 LIN. FT.
- STA. 111+40.00 LT. = 80 LIN. FT.
- STA. 111+45.00 OFFSET 101' LT. = 80 LIN. FT.
- STA. 111+78.00 OFFSET 111' LT. = 80 LIN. FT.
- STA. 111+85.00 LT. & RT. = 80 LIN. FT.

SEDIMENT REMOVAL & DISPOSAL

- 1 CU. YDS.
- 2 CU. YDS.
- 1 CU. YDS.
- 1 CU. YDS.
- 2 CU. YDS.
- 1 CU. YDS.
- 1 CU. YDS.
- 2 CU. YDS.
- 2 CU. YDS.
- 2 CU. YDS.



STATION 100+10.00
BEGIN JOB C29002

P.I. = 104+43.17
= 19°22'46.89" LT.
= 15°00'00.00"
= 381.97
= 65.22'
= 129.20'

REVISIONS

DATE	REVISION

SAND BAG DITCH CHECKS (E-5)

- STA. 111+45.00 LT. = 12 BAGS
- STA. 106+05.00 LT. = 12 BAGS
- STA. 108+21.00 LT. = 12 BAGS
- STA. 109+69.00 LT. = 12 BAGS
- STA. 111+78.00 LT. = 12 BAGS

SEDIMENT REMOVAL & DISPOSAL

- 1 CU. YDS.
- 1 CU. YDS.
- 1 CU. YDS.
- 1 CU. YDS.
- 1 CU. YDS.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	C29002	9	54	
				4 UTILITIES AND DESIGN DETAIL				



SANITARY SEWER MIDDLE OF WEST 6TH STREET
STATIONS 100+20 - 112+90

UTILITY POLES STATIONS
103+35, 104+16, & 105+47
ON LEFT SIDE

WATER MAIN - WATER UTILITIES
STATIONS 101+70, 101+95, 102+67, & 104+03
ON LEFT SIDE

UNDERGROUND CABLE
STATION 100+54
ON LEFT SIDE

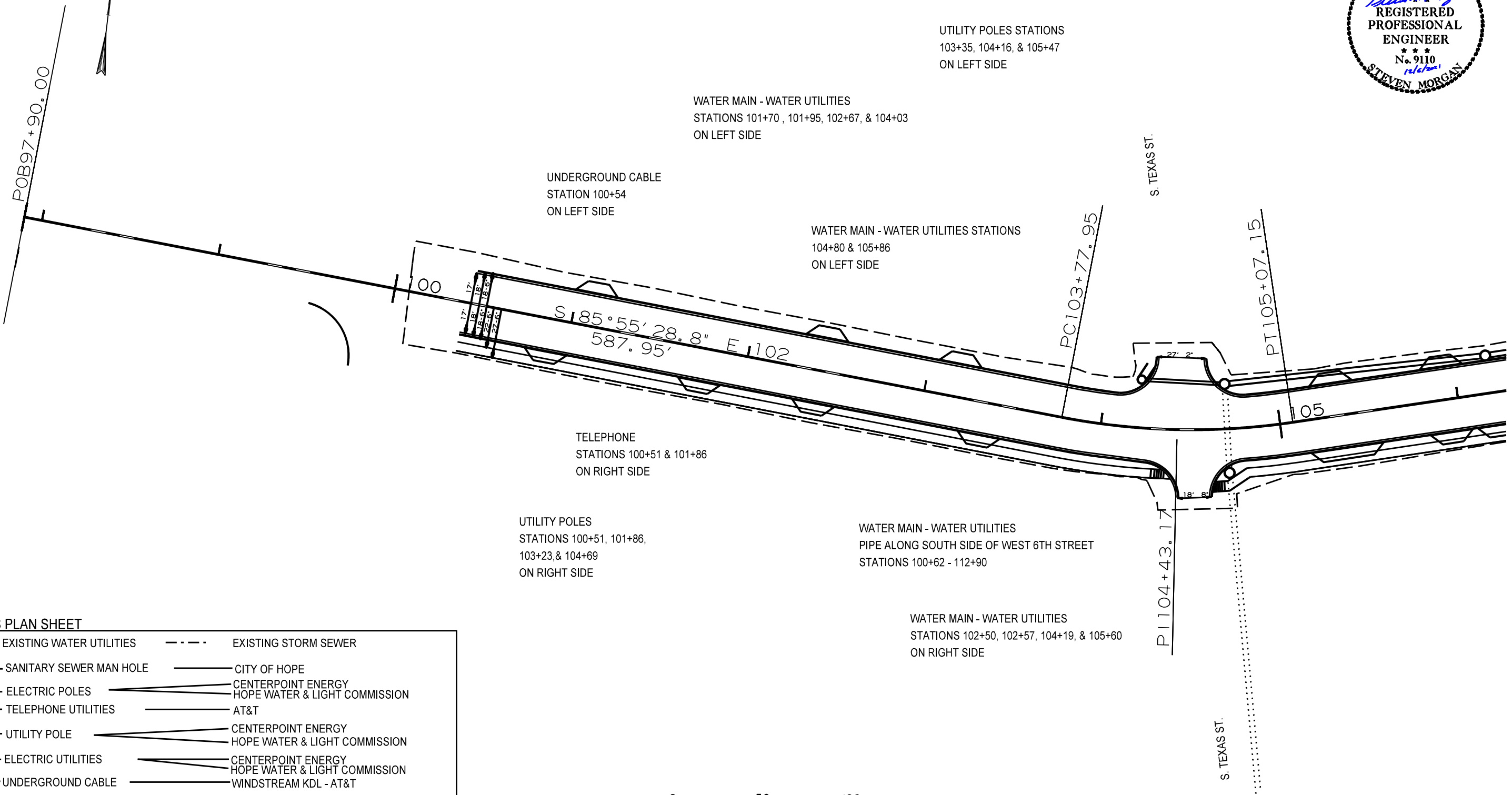
WATER MAIN - WATER UTILITIES STATIONS
104+80 & 105+86
ON LEFT SIDE

TELEPHONE
STATIONS 100+51 & 101+86
ON RIGHT SIDE

UTILITY POLES
STATIONS 100+51, 101+86,
103+23, & 104+69
ON RIGHT SIDE

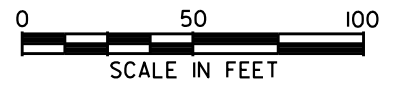
WATER MAIN - WATER UTILITIES
PIPE ALONG SOUTH SIDE OF WEST 6TH STREET
STATIONS 100+62 - 112+90

WATER MAIN - WATER UTILITIES
STATIONS 102+50, 102+57, 104+19, & 105+60
ON RIGHT SIDE



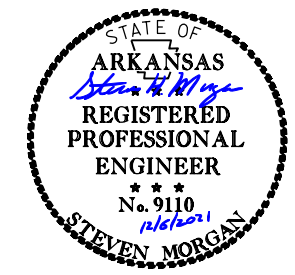
UTILITIES PLAN SHEET

-----	EXISTING WATER UTILITIES	-----	EXISTING STORM SEWER
	SANITARY SEWER MAN HOLE		CITY OF HOPE
	ELECTRIC POLES		CENTERPOINT ENERGY
	TELEPHONE UTILITIES		HOPE WATER & LIGHT COMMISSION
	UTILITY POLE		AT&T
	ELECTRIC UTILITIES		CENTERPOINT ENERGY
	UNDERGROUND CABLE		HOPE WATER & LIGHT COMMISSION
	STORM SEWER MAN HOLE		WINDSTREAM KDL - AT&T
	WATER MAIN - WATER UTILITIES		CITY OF HOPE
	WATER MAIN - STORM WATER		HOPE WATER & LIGHT COMMISSION
	WATER VALVE - WATER UTILITIES		CENTERPOINT ENERGY
	GAS UTILITIES GAS MAIN		



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. C29002	10	54

4 UTILITIES AND DESIGN DETAIL



WATER MAIN - WATER UTILITIES
PIPE ALONG SOUTH SIDE OF WEST 6TH STREET
STATIONS 100+62 - 112+90

SANITARY SEWER MIDDLE OF WEST 6TH STREET
STATIONS 100+20 - 112+90

WATER MAIN - WATER UTILITIES
STATIONS 100+62 - 112+90
CROSS DRAIN STATION 107+90
CROSS DRAIN STATION 115+62

TELEPHONE UTILITIES
STATION 111+37
ON LEFT SIDE

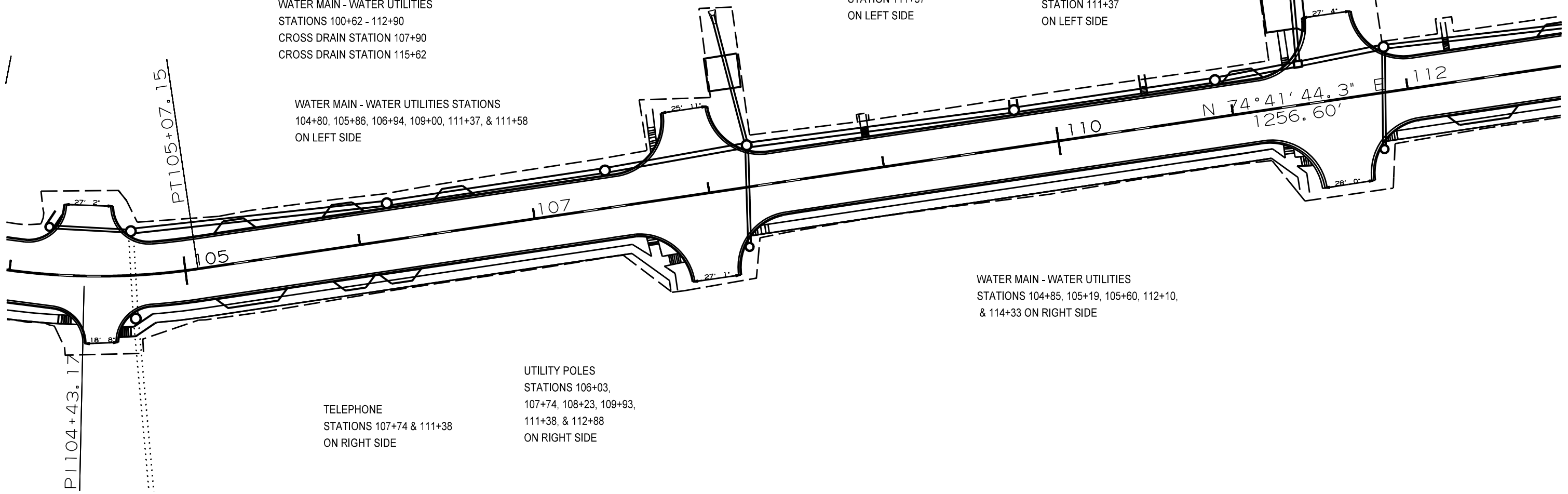
GAS UTILITIES GAS MAIN
STATION 111+37
ON LEFT SIDE

WATER MAIN - WATER UTILITIES STATIONS
104+80, 105+86, 106+94, 109+00, 111+37, & 111+58
ON LEFT SIDE

WATER MAIN - WATER UTILITIES
STATIONS 104+85, 105+19, 105+60, 112+10,
& 114+33 ON RIGHT SIDE

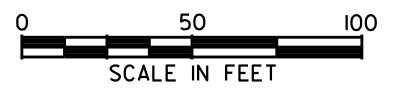
UTILITY POLES
STATIONS 106+03,
107+74, 108+23, 109+93,
111+38, & 112+88
ON RIGHT SIDE

TELEPHONE
STATIONS 107+74 & 111+38
ON RIGHT SIDE



UTILITIES PLAN SHEET

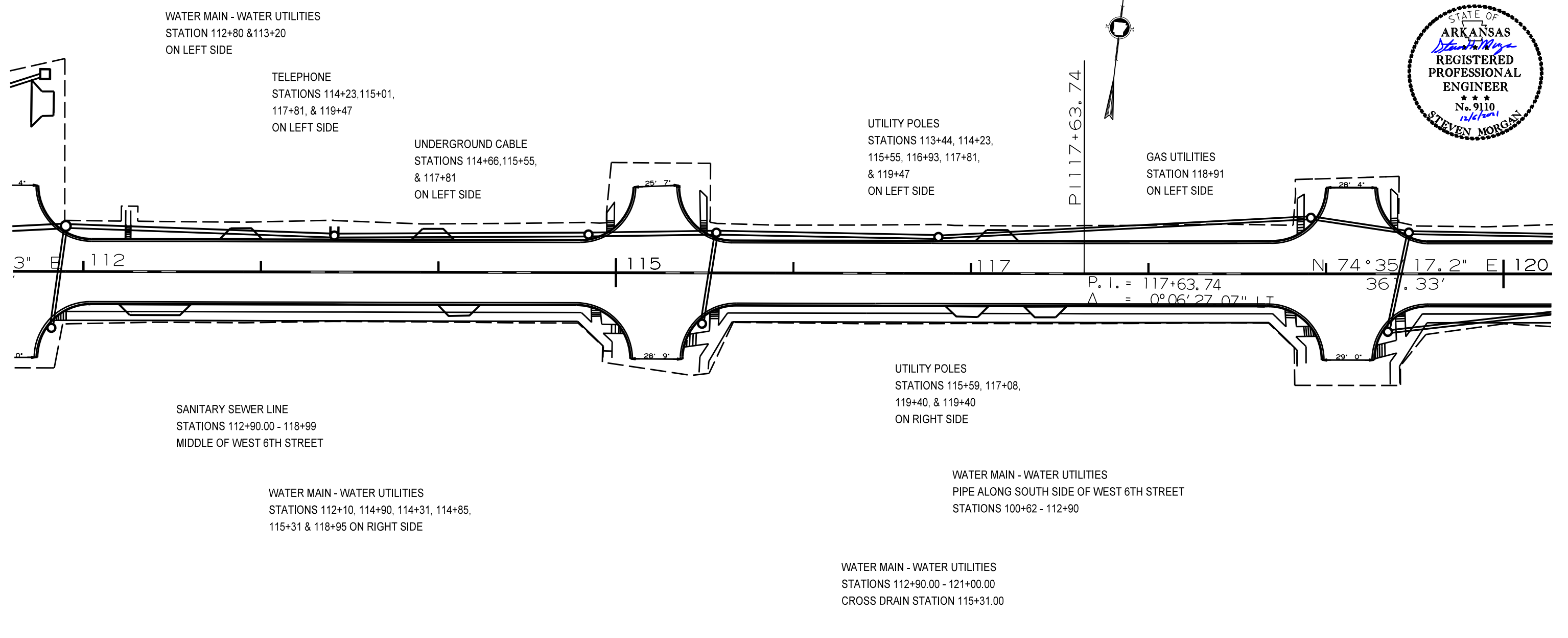
---	EXISTING WATER UTILITIES	---	EXISTING STORM SEWER
⊙	SANITARY SEWER MAN HOLE	—	CITY OF HOPE
⊙	ELECTRIC POLES	—	CENTERPOINT ENERGY
⊙	TELEPHONE UTILITIES	—	HOPE WATER & LIGHT COMMISSION
⊙	UTILITY POLE	—	AT&T
⊙	UTILITY POLE	—	CENTERPOINT ENERGY
⊙	UTILITY POLE	—	HOPE WATER & LIGHT COMMISSION
⊙	ELECTRIC UTILITIES	—	CENTERPOINT ENERGY
⊙	ELECTRIC UTILITIES	—	HOPE WATER & LIGHT COMMISSION
⊙	UNDERGROUND CABLE	—	WINDSTREAM KDL - AT&T
⊙	STORM SEWER MAN HOLE	—	CITY OF HOPE
⊙	WATER MAIN - WATER UTILITIES	—	HOPE WATER & LIGHT COMMISSION
⊙	WATER MAIN - STORM WATER	—	HOPE WATER & LIGHT COMMISSION
⊙	WATER VALVE - WATER UTILITIES	—	HOPE WATER & LIGHT COMMISSION
⊙	WATER VALVE - WATER UTILITIES	—	HOPE WATER & LIGHT COMMISSION
⊙	GAS UTILITIES GAS MAIN	—	CENTERPOINT ENERGY



UTILITIES AND DESIGN DETAIL

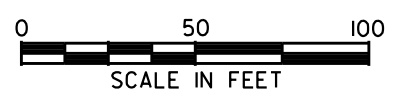
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		11	54
				JOB NO. C29002				

4 UTILITIES AND DESIGN DETAIL



UTILITIES PLAN SHEET

-----	EXISTING WATER UTILITIES	-----	EXISTING STORM SEWER
⊙	SANITARY SEWER MAN HOLE	—	CITY OF HOPE
⊙	ELECTRIC POLES	—	CENTERPOINT ENERGY
⊙	TELEPHONE UTILITIES	—	HOPE WATER & LIGHT COMMISSION
⊙	UTILITY POLE	—	AT&T
⊙	UTILITY POLE	—	CENTERPOINT ENERGY
⊙	UTILITY POLE	—	HOPE WATER & LIGHT COMMISSION
⊙	ELECTRIC UTILITIES	—	CENTERPOINT ENERGY
⊙	ELECTRIC UTILITIES	—	HOPE WATER & LIGHT COMMISSION
⊙	UNDERGROUND CABLE	—	WINDSTREAM KDL - AT&T
⊙	STORM SEWER MAN HOLE	—	CITY OF HOPE
⊙	WATER MAIN - WATER UTILITIES	—	HOPE WATER & LIGHT COMMISSION
⊙	WATER MAIN - STORM WATER	—	HOPE WATER & LIGHT COMMISSION
⊙	WATER VALVE - WATER UTILITIES	—	HOPE WATER & LIGHT COMMISSION
⊙	GAS UTILITIES GAS MAIN	—	CENTERPOINT ENERGY



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	C29002		12	54

4 UTILITIES AND DESIGN DETAIL



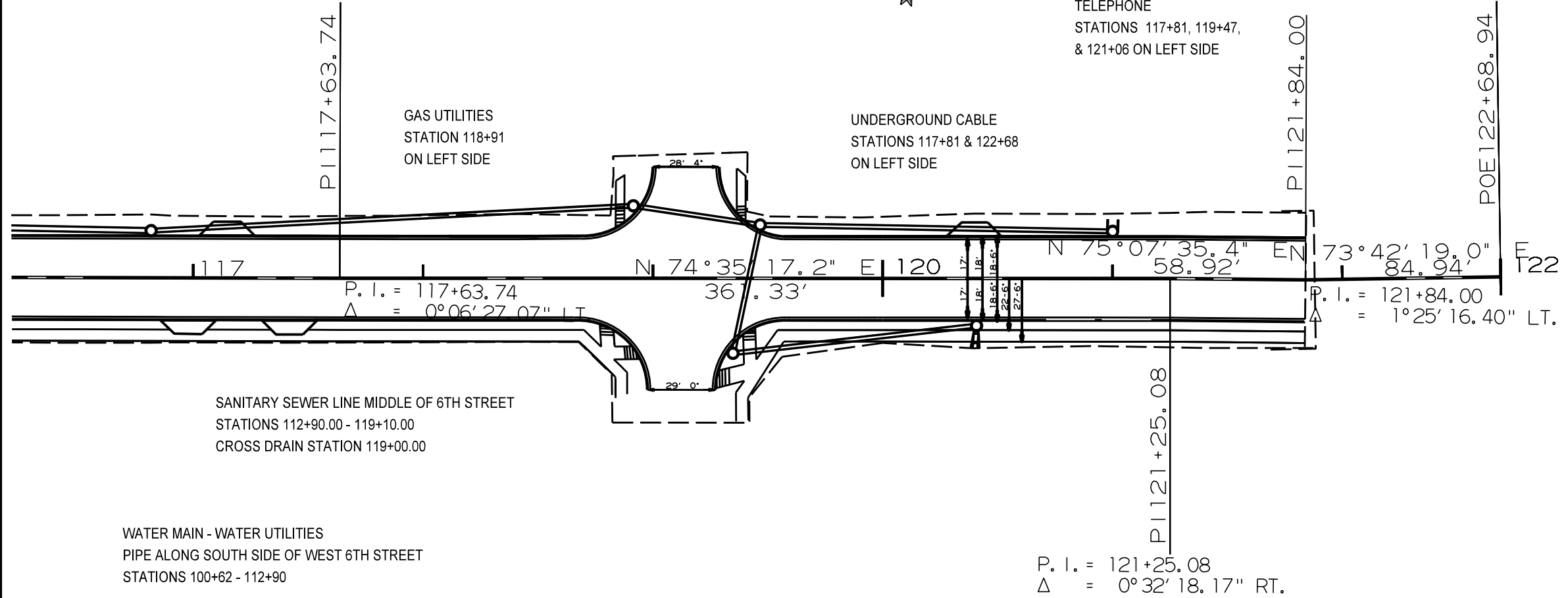
SANITARY SEWER MIDDLE OF WEST 6TH STREET
STATIONS 100+20 - 112+90

UTILITY POLES
STATIONS 117+00, 117+81, 119+47,
121+00, & 122+00 ON LEFT SIDE

TELEPHONE
STATIONS 117+81, 119+47,
& 121+06 ON LEFT SIDE

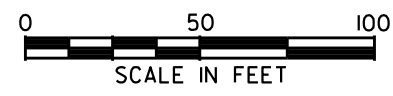
GAS UTILITIES
STATION 118+91
ON LEFT SIDE

UNDERGROUND CABLE
STATIONS 117+81 & 122+68
ON LEFT SIDE



UTILITIES PLAN SHEET

-----	EXISTING WATER UTILITIES	-----	EXISTING STORM SEWER
	SANITARY SEWER MAN HOLE		CITY OF HOPE
	ELECTRIC POLES		CENTERPOINT ENERGY
	TELEPHONE UTILITIES		HOPE WATER & LIGHT COMMISSION
	UTILITY POLE		AT&T
	ELECTRIC UTILITIES		CENTERPOINT ENERGY
	UNDERGROUND CABLE		HOPE WATER & LIGHT COMMISSION
	STORM SEWER MAN HOLE		WINDSTREAM KDL - AT&T
	WATER MAIN - WATER UTILITIES		CITY OF HOPE
	WATER MAIN - STORM WATER		HOPE WATER & LIGHT COMMISSION
	WATER VALVE - WATER UTILITIES		CENTERPOINT ENERGY
	GAS UTILITIES GAS MAIN		HOPE WATER & LIGHT COMMISSION

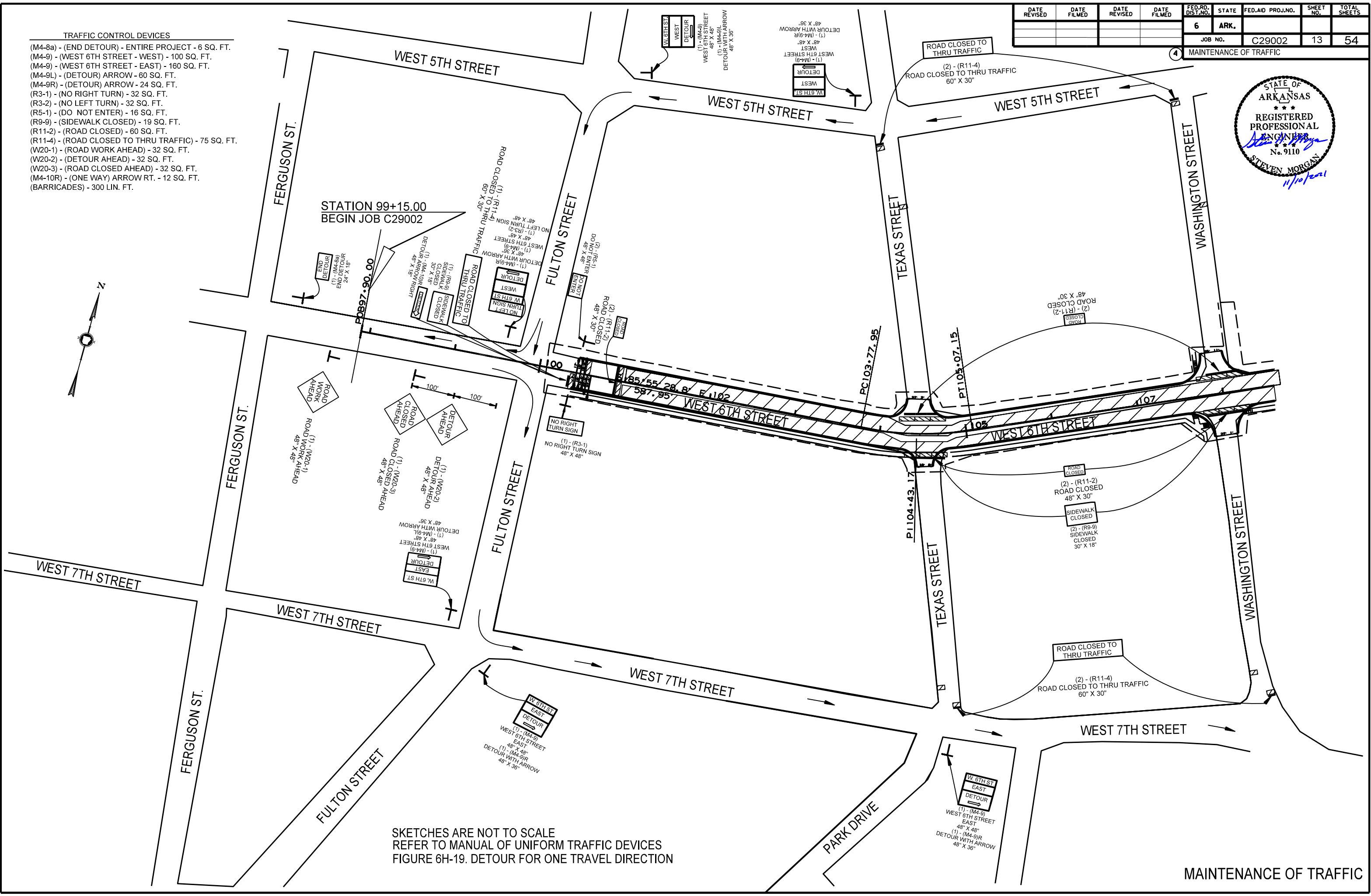


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. C29002							13	54

MAINTENANCE OF TRAFFIC



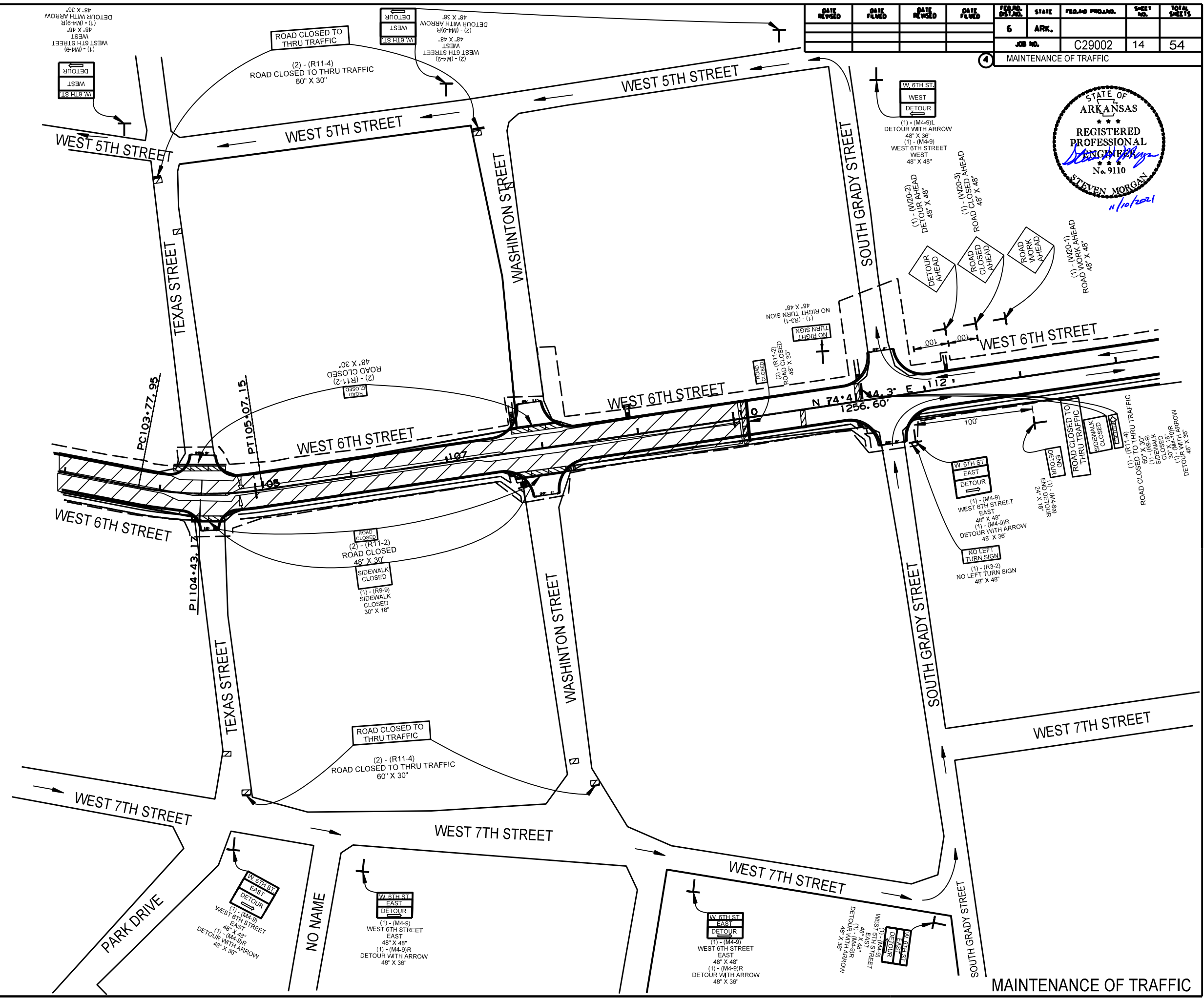
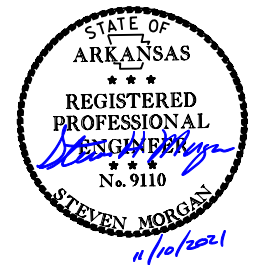
- TRAFFIC CONTROL DEVICES**
- (M4-8a) - (END DETOUR) - ENTIRE PROJECT - 6 SQ. FT.
 - (M4-9) - (WEST 6TH STREET - WEST) - 100 SQ. FT.
 - (M4-9) - (WEST 6TH STREET - EAST) - 160 SQ. FT.
 - (M4-9L) - (DETOUR) ARROW - 60 SQ. FT.
 - (M4-9R) - (DETOUR) ARROW - 24 SQ. FT.
 - (R3-1) - (NO RIGHT TURN) - 32 SQ. FT.
 - (R3-2) - (NO LEFT TURN) - 32 SQ. FT.
 - (R5-1) - (DO NOT ENTER) - 16 SQ. FT.
 - (R9-9) - (SIDEWALK CLOSED) - 19 SQ. FT.
 - (R11-2) - (ROAD CLOSED) - 60 SQ. FT.
 - (R11-4) - (ROAD CLOSED TO THRU TRAFFIC) - 75 SQ. FT.
 - (W20-1) - (ROAD WORK AHEAD) - 32 SQ. FT.
 - (W20-2) - (DETOUR AHEAD) - 32 SQ. FT.
 - (W20-3) - (ROAD CLOSED AHEAD) - 32 SQ. FT.
 - (M4-10R) - (ONE WAY) ARROW RT. - 12 SQ. FT.
 - (BARRICADES) - 300 LIN. FT.



SKETCHES ARE NOT TO SCALE
REFER TO MANUAL OF UNIFORM TRAFFIC DEVICES
FIGURE 6H-19. DETOUR FOR ONE TRAVEL DIRECTION

MAINTENANCE OF TRAFFIC

DATE REVISION	DATE REVISION	DATE REVISION	DATE REVISION	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		14	54
				JOB NO.		C29002		
				MAINTENANCE OF TRAFFIC				

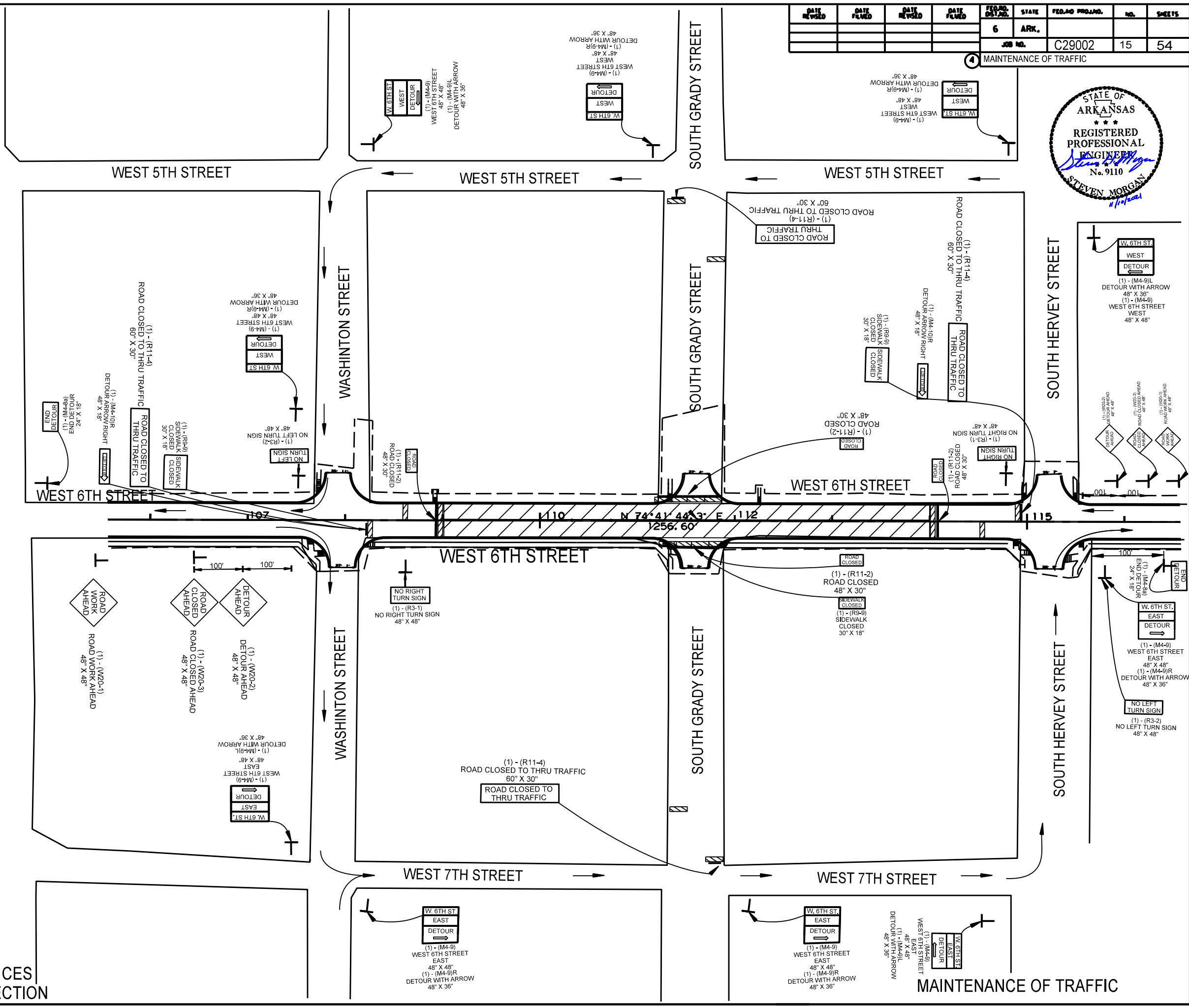


- TRAFFIC CONTROL DEVICES**
- (M4-8a) - (END DETOUR) - ENTIRE PROJECT - 6 SQ. FT.
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 - (M4-9) - (WEST 6TH STREET - EAST) - 160 SQ. FT.
 - (M4-9L) - (DETOUR) ARROW - 60 SQ. FT.
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 - (M4-10R) - (ONE WAY) ARROW RT. - 12 SQ. FT.
 - (BARRICADES) - 300 LIN. FT.

SKETCHES ARE NOT TO SCALE
REFER TO MANUAL OF UNIFORM TRAFFIC DEVICES
FIGURE 6H-19. DETOUR FOR ONE TRAVEL DIRECTION

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST.	STATE	FED. PROJ. NO.	NO.	SHEETS	
				6	ARK.				
						JOB NO.	C29002	15	54

4 MAINTENANCE OF TRAFFIC



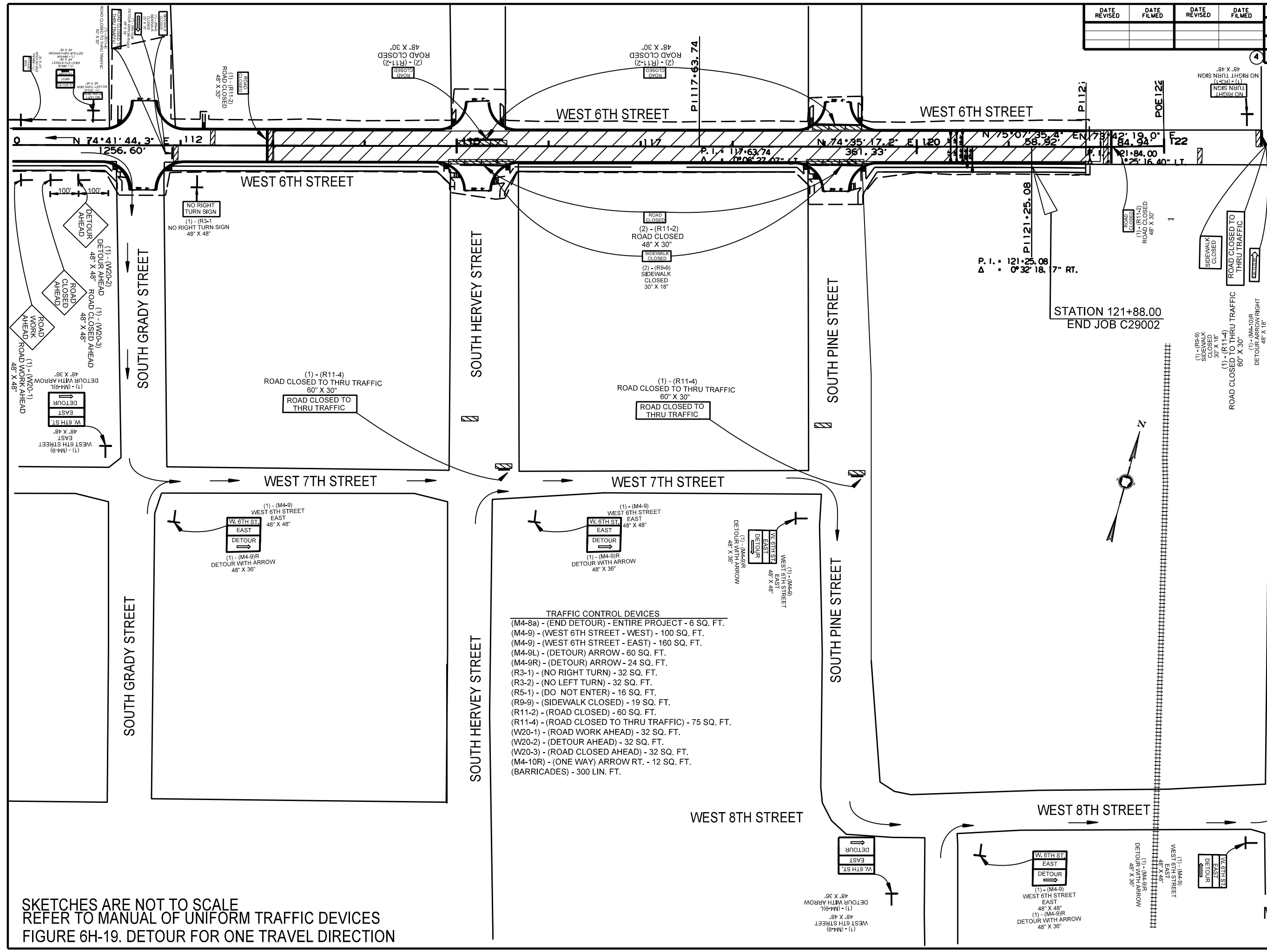
- TRAFFIC CONTROL DEVICES**
- (M4-8a) - (END DETOUR) - ENTIRE PROJECT - 6 SQ. FT.
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 - (BARRICADES) - 300 LIN. FT.

SKETCHES ARE NOT TO SCALE
 REFER TO MANUAL OF UNIFORM TRAFFIC DEVICES
 FIGURE 6H-19. DETOUR FOR ONE TRAVEL DIRECTION

MAINTENANCE OF TRAFFIC

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	C29002		16	54

4 MAINTENANCE OF TRAFFIC



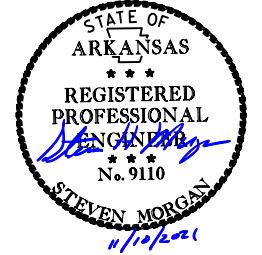
- TRAFFIC CONTROL DEVICES**
- (M4-8a) - (END DETOUR) - ENTIRE PROJECT - 6 SQ. FT.
 - (M4-9) - (WEST 6TH STREET - WEST) - 100 SQ. FT.
 - (M4-9) - (WEST 6TH STREET - EAST) - 160 SQ. FT.
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 - (BARRICADES) - 300 LIN. FT.

SKETCHES ARE NOT TO SCALE
REFER TO MANUAL OF UNIFORM TRAFFIC DEVICES
FIGURE 6H-19. DETOUR FOR ONE TRAVEL DIRECTION

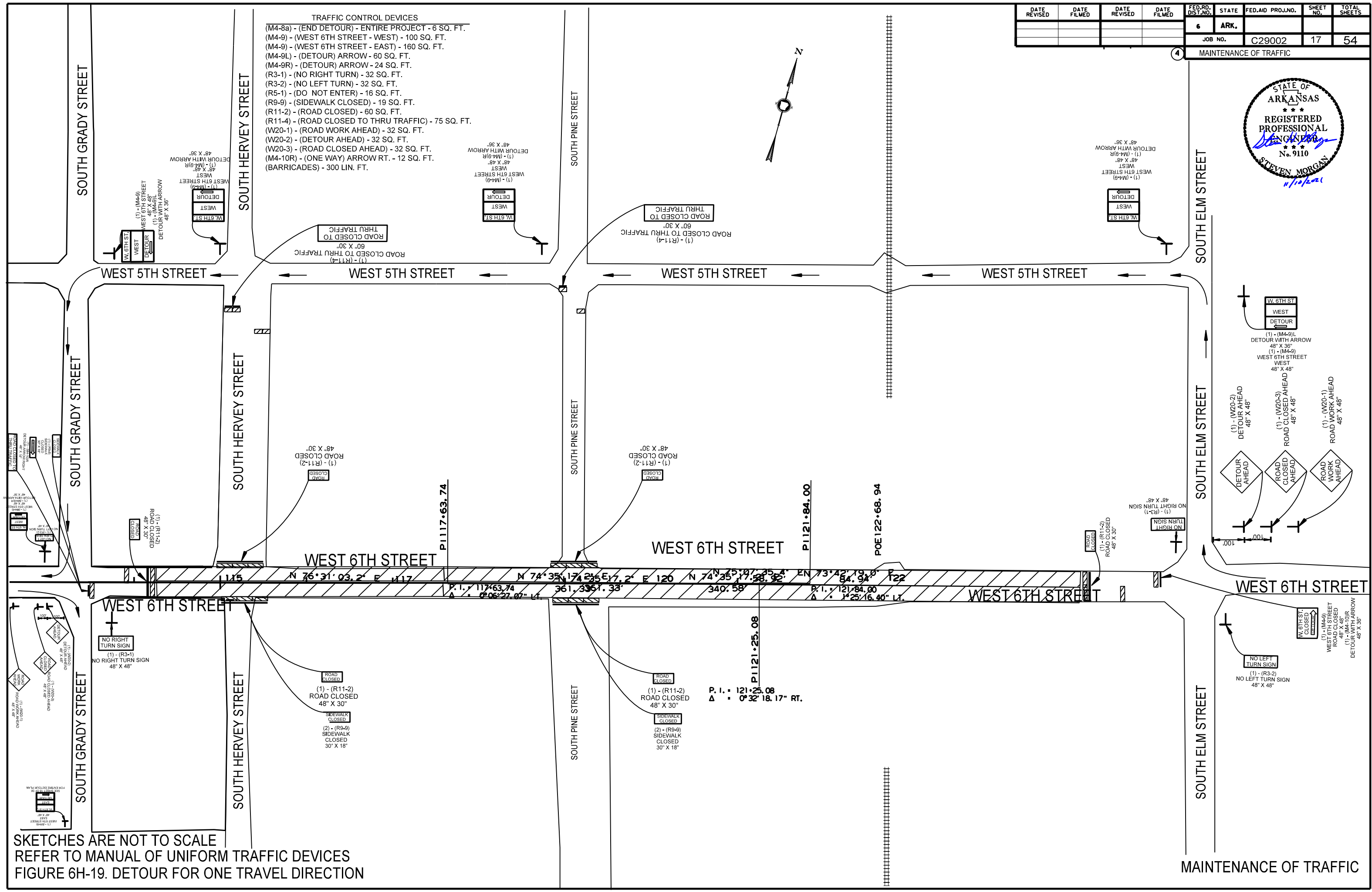
MAINTENANCE OF TRAFFIC

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	C29002	17	54	

4 MAINTENANCE OF TRAFFIC



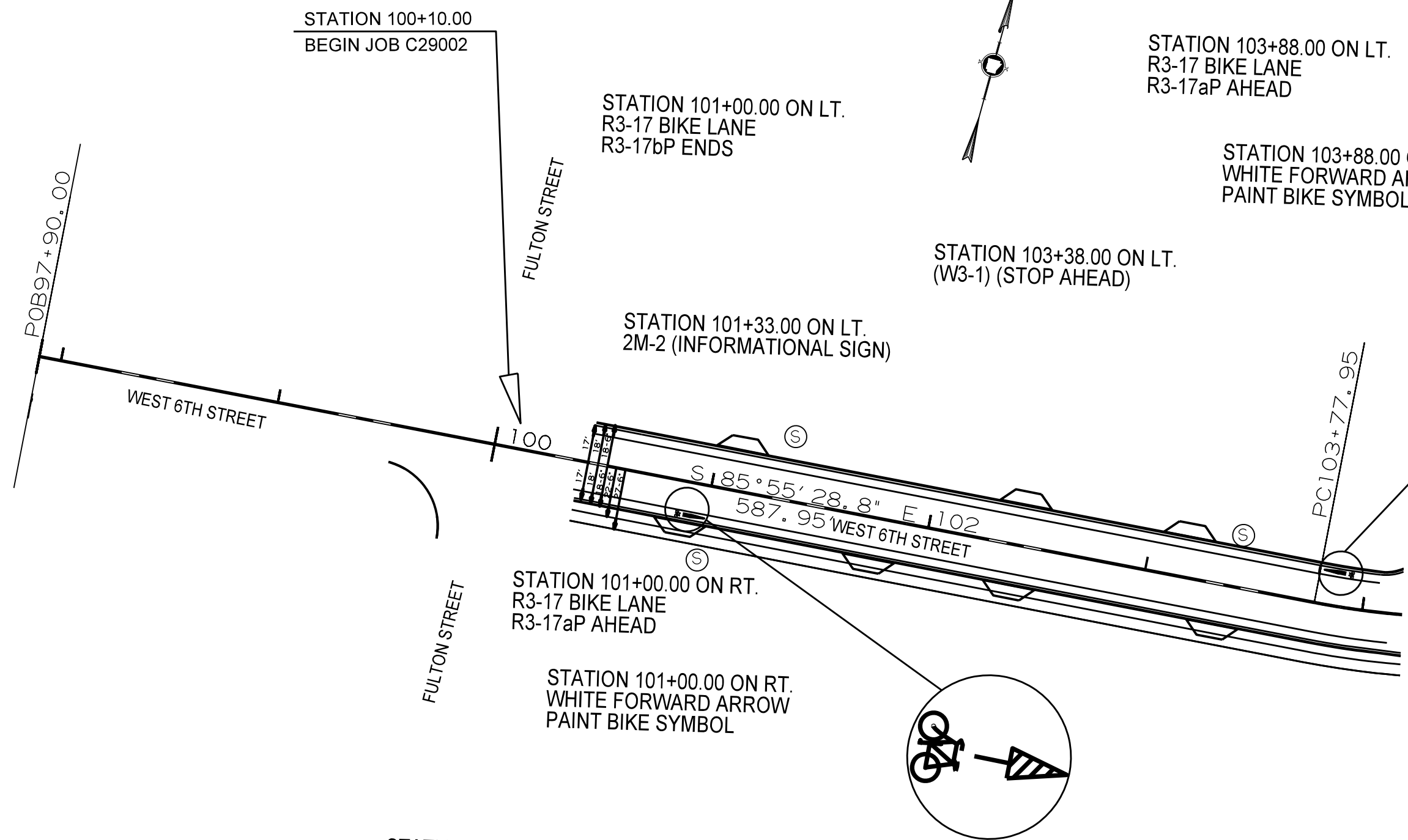
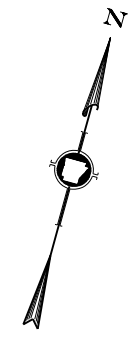
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- (M4-8a) - (END DETOUR) - ENTIRE PROJECT - 6 SQ. FT.
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 - (W20-3) - (ROAD CLOSED AHEAD) - 32 SQ. FT.
 - (M4-10R) - (ONE WAY) ARROW RT. - 12 SQ. FT.
 - (BARRICADES) - 300 LIN. FT.



SKETCHES ARE NOT TO SCALE
REFER TO MANUAL OF UNIFORM TRAFFIC DEVICES
FIGURE 6H-19. DETOUR FOR ONE TRAVEL DIRECTION

MAINTENANCE OF TRAFFIC

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
12-21-2021				6	ARK.			
						JOB NO.	C29002	18
						4 PAVEMENT MARKING & PERMANENT SIGNS DETAIL		



STATIONS 100+10.00 - 121+88.00
BIKE LANE 6" SOLID WHITE LINE
ON RT. & LT. EXCEPT THROUGH
INTERSECTIONS. STOP WHITE
LANE 100' PRIOR TO THE CROSSWALK.

STATIONS 100+10.00 - 121+88.00
DOUBLE YELLOW CENTERLINE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
12-21-2021				6	ARK.		19	54
							JOB NO. C29002	

4 PAVEMENT MARKING & PERMANENT SIGNS DETAIL



STATION 104+16.00 ON LT.
STOP LINE
12" SOLID WHITE LINE

STATION 104+16.00 ON LT.
R1-1 (STOP SIGN)

STATION 107+44.00 ON LT.
R3-17 BIKE LANE
R3-17aP AHEAD

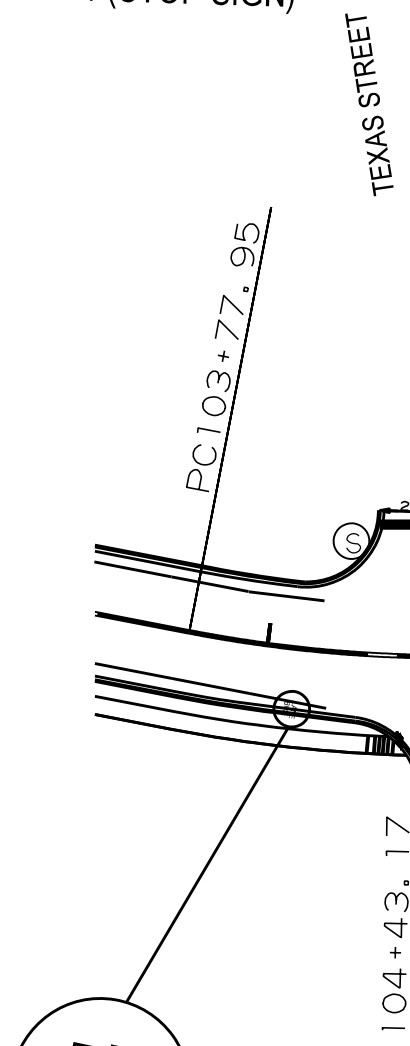
STATION 107+76.00 ON LT.
STOP LINE
12" WHITE SOLID LINE

STATIONS 107+76.00 ON LT.
INTERSECTION (CROSSWALK)
ACROSS WEST 6TH STREET
170' OF 12" SOLID WHITE LINE

STATION 105+75.00 ON LT.
S5-2 (END SCHOOL ZONE)

STATION 107+44.00 ON LT.
R3-17 BIKE LANE
R3-17aP AHEAD

STATION 107+76.00 ON LT.
R1-1 (STOP SIGN)



LANE BIKE

LANE BIKE

LANE BIKE

LANE BIKE

LANE BIKE

LANE BIKE

LANE BIKE

STATION 105+00.00 ON RT.
R3-17 BIKE LANE
R3-17aP AHEAD

STATION 107+00.00 ON RT.
R3-2A (NO PARKING SIGN)

STATION 104+74.00 ON RT.
R1-1 (STOP SIGN)

STATION 104+74.00 ON RT.
STOP LINE
12" SOLID WHITE LINE

STATIONS 100+10.00 - 121+88.00
DOUBLE YELLOW CENTERLINE

STATIONS 100+10.00 - 121+88.00
BIKE LANE 6" SOLID WHITE LINE
ON RT. & LT. EXCEPT THROUGH
INTERSECTIONS. STOP WHITE
LANE 100' PRIOR TO THE CROSSWALK.

STATION 107+33.00 ON RT.
S4-3P (SCHOOL)
R2-1 (SPEED)
S4-2P (WHEN CHILDREN ARE PRESENT)

STATION 105+00.00 ON RT.
WHITE FORWARD ARROW
PAINT BIKE SYMBOL

STATION 108+60.00
WHITE FORWARD ARROW
PAINT BIKE SYMBOL

STATION 107+56.00 ON RT.
S1-1 (SCHOOL CROSSING)
W16-7P (LEFT ARROW)

STATION 108+14.00 ON RT.
R1-1 (STOP SIGN)

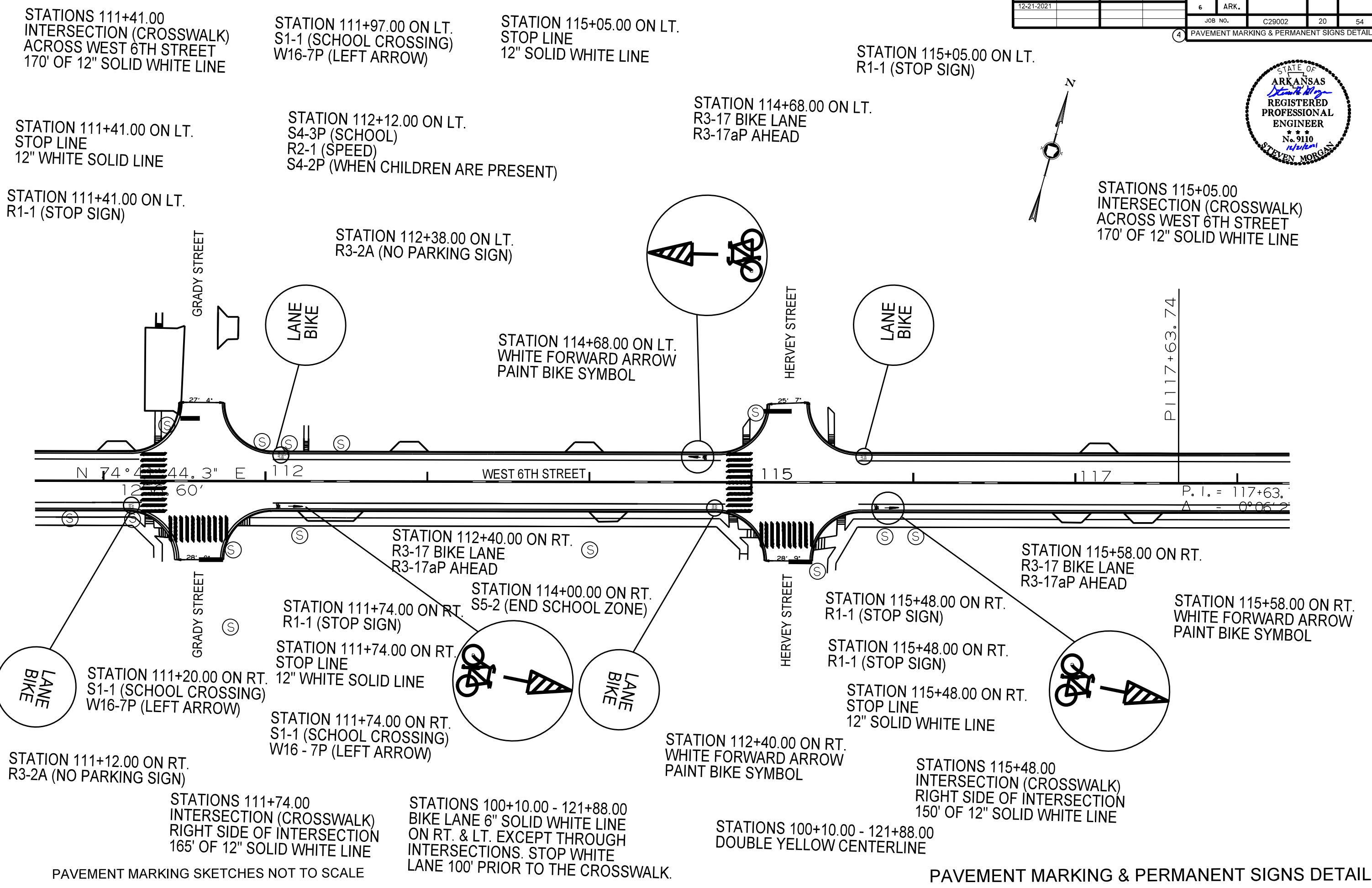
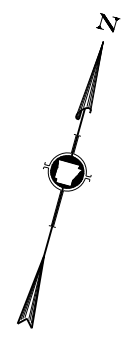
STATION 108+14.00 ON RT.
STOP LINE
12" WHITE SOLID LINE

STATION 108+18.00 ON RT.
S1-1 (SCHOOL CROSSING)
W16 - 7P (LEFT ARROW)

STATIONS 108+14.00
INTERSECTION (CROSSWALK)
RIGHT SIDE OF INTERSECTION
150' OF 12" SOLID WHITE LINE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
12-21-2021				6	ARK.		20	54
				JOB NO. C29002				

4 PAVEMENT MARKING & PERMANENT SIGNS DETAIL



STATIONS 111+41.00
INTERSECTION (CROSSWALK)
ACROSS WEST 6TH STREET
170' OF 12" SOLID WHITE LINE

STATION 111+97.00 ON LT.
S1-1 (SCHOOL CROSSING)
W16-7P (LEFT ARROW)

STATION 115+05.00 ON LT.
STOP LINE
12" SOLID WHITE LINE

STATION 115+05.00 ON LT.
R1-1 (STOP SIGN)

STATION 111+41.00 ON LT.
STOP LINE
12" WHITE SOLID LINE

STATION 112+12.00 ON LT.
S4-3P (SCHOOL)
R2-1 (SPEED)
S4-2P (WHEN CHILDREN ARE PRESENT)

STATION 114+68.00 ON LT.
R3-17 BIKE LANE
R3-17aP AHEAD

STATIONS 115+05.00
INTERSECTION (CROSSWALK)
ACROSS WEST 6TH STREET
170' OF 12" SOLID WHITE LINE

STATION 112+38.00 ON LT.
R3-2A (NO PARKING SIGN)

STATION 114+68.00 ON LT.
WHITE FORWARD ARROW
PAINT BIKE SYMBOL

LANE BIKE

P1117+63.74

P.I. = 117+63.74
Δ = 0°06'2"

STATION 112+40.00 ON RT.
R3-17 BIKE LANE
R3-17aP AHEAD

STATION 115+58.00 ON RT.
R3-17 BIKE LANE
R3-17aP AHEAD

STATION 115+58.00 ON RT.
WHITE FORWARD ARROW
PAINT BIKE SYMBOL

STATION 111+74.00 ON RT.
R1-1 (STOP SIGN)

STATION 115+48.00 ON RT.
R1-1 (STOP SIGN)

STATION 114+00.00 ON RT.
S5-2 (END SCHOOL ZONE)

STATION 115+48.00 ON RT.
R1-1 (STOP SIGN)

LANE BIKE
STATION 111+20.00 ON RT.
S1-1 (SCHOOL CROSSING)
W16-7P (LEFT ARROW)

STATION 111+74.00 ON RT.
STOP LINE
12" WHITE SOLID LINE

LANE BIKE

LANE BIKE

STATION 115+48.00 ON RT.
STOP LINE
12" SOLID WHITE LINE

LANE BIKE

STATION 111+12.00 ON RT.
R3-2A (NO PARKING SIGN)

STATION 112+40.00 ON RT.
WHITE FORWARD ARROW
PAINT BIKE SYMBOL

STATIONS 115+48.00
INTERSECTION (CROSSWALK)
RIGHT SIDE OF INTERSECTION
150' OF 12" SOLID WHITE LINE

STATIONS 111+74.00
INTERSECTION (CROSSWALK)
RIGHT SIDE OF INTERSECTION
165' OF 12" SOLID WHITE LINE

STATIONS 100+10.00 - 121+88.00
BIKE LANE 6" SOLID WHITE LINE
ON RT. & LT. EXCEPT THROUGH
INTERSECTIONS. STOP WHITE
LANE 100' PRIOR TO THE CROSSWALK.

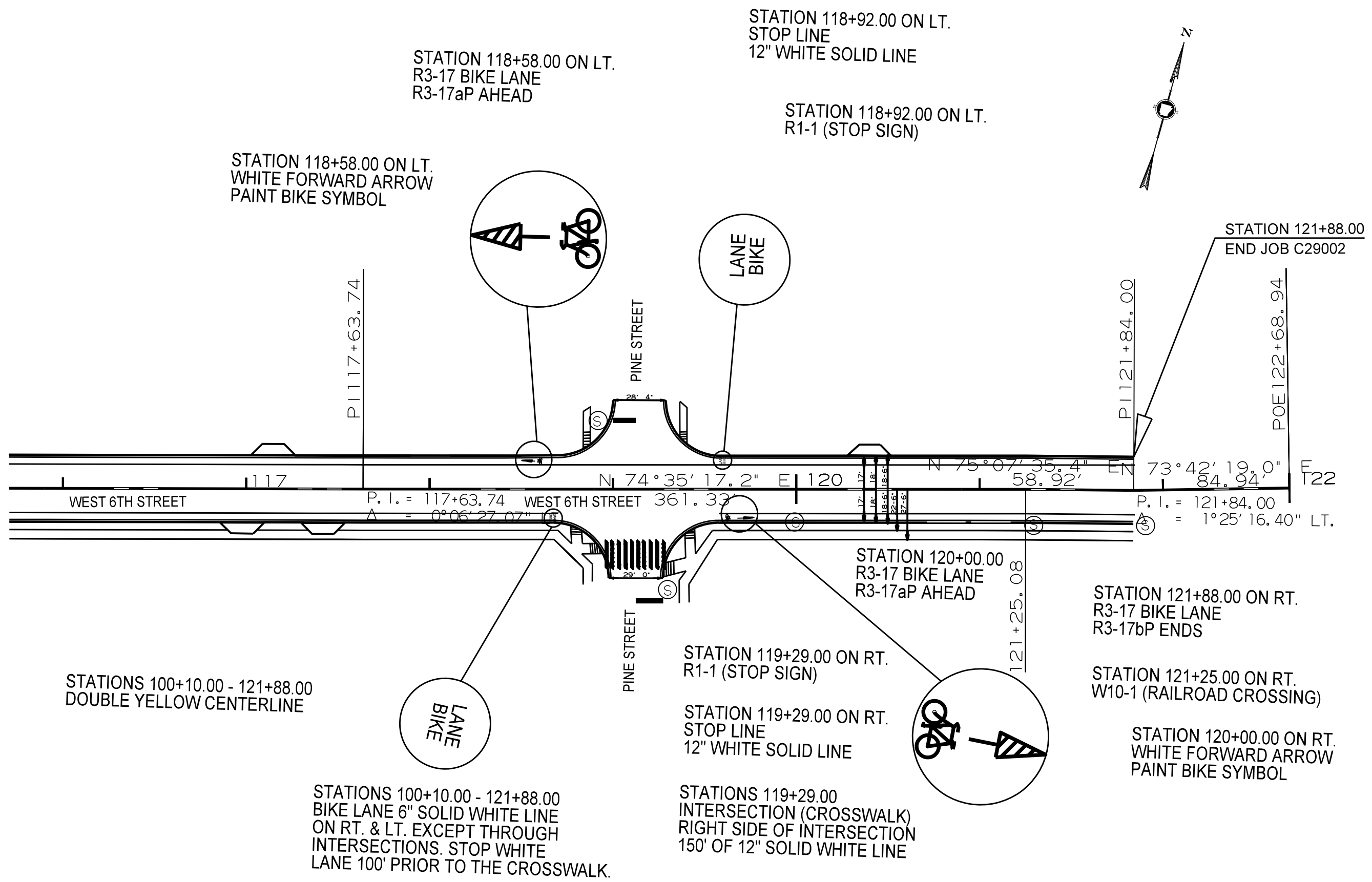
STATIONS 100+10.00 - 121+88.00
DOUBLE YELLOW CENTERLINE

PAVEMENT MARKING SKETCHES NOT TO SCALE

PAVEMENT MARKING & PERMANENT SIGNS DETAIL

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
12-21-2021				6	ARK.		21	54
						JOB NO. C29002		

4 PAVEMENT MARKING & PERMANENT SIGNS DETAIL



PAVEMENT MARKING SKETCHES NOT TO SCALE

PAVEMENT MARKING & PERMANENT SIGNS DETAIL

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
12-21-2021				6	ARK.			
				JOB NO.	C29002	22	54	

4 QUANTITIES

TEMPORARY EROSION CONTROL

STATION	DESCRIPTION	SIDE	SAND BAG DITCH CHECKS (E-5)	COMPOST FILTER SOCK DROP INLET PROTECTION (E-13)	STANDARD DRAWING NUMBER
			BAGS	LIN. FT.	
104+25.00	INLET	LT.		40.00	TEC - 1, 2, & 3
104+71.00	INLET	LT. & RT.		80.00	TEC - 1, 2, & 3
106+05.00	INLET	LT.		40.00	TEC - 1, 2, & 3
106+05.00	PIPE	LT.	12		TEC - 1, 2, & 3
107+50.00	INLET	LT.		40.00	TEC - 1, 2, & 3
108+21.00	PIPE	LT.	12		TEC - 1, 2, & 3
108+21.00	INLET	LT. & RT.		80.00	TEC - 1, 2, & 3
109+69.00	PIPE	LT.	12		TEC - 1, 2, & 3
109+69.00	INLET	LT.		40.00	TEC - 1, 2, & 3
111+17.00	INLET	LT.		40.00	TEC - 1, 2, & 3
111+40.00	JUNCTION BOX	LT.		80.00	TEC - 1, 2, & 4
111+45.00	INLET/PIPE	LT.	12	40.00	TEC - 1, 2, & 4
111+78.00	INLET/PIPE	LT.	12	80.00	TEC - 1, 2, & 3
111+85.00	INLET	LT. & RT.		80.00	TEC - 1, 2, & 3
111+99.00	PIPE	LT.	12		TEC - 1, 2, & 3
113+34.00	PIPE	LT.	12		TEC - 1, 2, & 3
113+34.00	INLET	LT.		40.00	TEC - 1, 2, & 3
114+76.00	INLET	LT.		40.00	TEC - 1, 2, & 3
115+47.00	INLET	LT. & RT.		80.00	TEC - 1, 2, & 3
117+32.00	INLET	LT.		40.00	TEC - 1, 2, & 3
118+85.00	INLET	LT.		40.00	TEC - 1, 2, & 3
119+34.00	INLET	LT. & RT.		80.00	TEC - 1, 2, & 3
120+41.00	INLET	RT.		40.00	TEC - 1, 2, & 4
120+41.00	PIPE	RT.	12		TEC - 1, 2, & 5
121+00.00	PIPE	LT.	12		TEC - 1, 2, & 3
121+00.00	INLET	LT.		40.00	TEC - 1, 2, & 3
TOTALS:			108	1040.00	

BASIS OF ESTIMATE:

NOTE: TEMPORARY EROSION CONTROL DEVICES SHOWN ABOVE AND ON THE PLANS SHALL BE INSTALLED IN SUCH A SEQUENCE AS TO DETER EROSION AND SEDIMENTATION OF U.S. WATERWAYS AS EXPLAINED BY THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT.

NOTE: QUANTITIES ESTIMATED. SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS.
 *SAND BAG DITCH CHECKS, AND FILTER SOCKS ARE TEMPORARY EROSION CONTROLS.

EROSION CONTROL

STATION	STATION	DESCRIPTION	LIME	TEMPORARY SEEDING*	SEEDING*	MULCH COVER	WATER	SOLID SODDING**
			TONS	ACRE			M. GALLON	SQ. YDS.
100+10	122+69	ENTIRE PROJECT	3.60	1.82	1.82	3.64	371.4	250.00
TOTALS:			3.60	1.82	1.82	3.64	371.4	250.0

BASIS OF ESTIMATE:

LIME _____ 2 TONS PER ACRE SEEDING
 WATER _____ 102.0 M. GALLON PER ACRE SEEDING
 *SEEDING MIXTURE TO BE DETERMINED BY ENGINEER.
 **LOCATION TO BE DETERMINED BY FIELD ENGINEER.

EARTHWORK

STATION	STATION	LOCATION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT	SOIL STABILIZATION *
			CU. YDS.		TON
100+10.00	121+00.00	WEST 6TH STREET	221.50	930.00	
ENTIRE SECTION		WEST 6TH STREET			100.00
TOTALS:			221.50	930.00	100.00

NOTE: EARTHWORK TO BE PAID FOR AS PLAN QUANTITY.
 *LOCATION TO BE DETERMINED IN THE FIELD BY ENGINEER.

SEDIMENT REMOVAL & DISPOSAL

DESCRIPTION	SEDIMENT REMOVAL & DISPOSAL
	CU. YDS.
ENTIRE PROJECT	33.00
TOTAL:	33.00

*QUANTITIES ARE ESTIMATED AMOUNTS. THE LOCATION AND APPLICATION QUANTITY ARE AT THE DIRECTION OF THE ENGINEER.

MAILBOXES & MAILBOX SUPPORTS

STATION	MAILBOX	MAILBOX SUPPORTS (SINGLE)
	EACH	EACH
ENTIRE PROJECT	3	3
TOTALS:	3	3

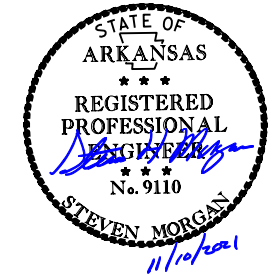


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	C29002	23	54	

4 QUANTITIES

CONCRETE

LOCATION	DESCRIPTION	CONCRETE COMBINATION CURB & GUTTER (TY. A) (1'-6")	PORTLAND CEMENT CONCRETE DRIVEWAY	CONCRETE WALKS	WHEELCHAIR RAMPS		
					TYPE 2	TYPE 3	
					LIN. FT.	SQ. YDS.	SQ. YDS.
100+40.00	104+44.00	WEST 6TH STREET ON LEFT & RIGHT	816.00	84.00			
100+40.00	104+38.00	WEST 6TH STREET ON RIGHT SIDE			221.10		
104+38.00	104+38.00	RIGHT SIDE OF INTERSECTION WITH TEXAS STREET				5.40	
104+62.00	104+62.00	RIGHT SIDE OF INTERSECTION WITH TEXAS STREET				5.40	
104+59.00	107+85.00	WEST 6TH STREET ON LEFT & RIGHT	705.00	82.70			
104+70.00	107+65.00	WEST 6TH STREET RIGHT SIDE			163.30		
107+73.00	106+64.00	LEFT SIDE OF INTERSECTION WITH SOUTH WASHINGTON STREET				5.40	
107+64.00	107+64.00	RIGHT SIDE OF INTERSECTION WITH SOUTH WASHINGTON STREET			6.40		
108+11.00	111+26.00	WEST 6TH STREET ON RIGHT			175.00		
108+24.00	108+24.00	RIGHT SIDE OF INTERSECTION WITH SOUTH WASHINGTON STREET				5.40	
108+10.00	111+47.00	WEST 6TH STREET ON RIGHT	366.00				
108+05.00	111+48.00	WEST 6TH STREET ON LEFT	373.00	12.00			
111+10.00	111+10.00	LEFT SIDE OF WEST 6TH STREET		12.00		5.40	
111+31.00	111+31.00	LEFT SIDE OF INTERSECTION WITH SOUTH GRADY STREET		123.00		10.80	
111+31.00	111+31.00	RIGHT SIDE OF INTERSECTION WITH SOUTH GRADY STREET			6.40		
111+71.00	111+71.00	LEFT SIDE OF INTERSECTION WITH SOUTH GRADY STREET		23.00			
111+86.00	111+86.00	RIGHT SIDE OF INTERSECTION WITH SOUTH GRADY STREET				5.40	
111+72.00	115+09.00	WEST 6TH STREET ON LEFT & RIGHT	740.00	12.00			
111+71.00	112+30.00	WEST 6TH STREET ON RIGHT SIDE			38.90		
112+00.00	114+94.00	WEST 6TH STREET ON LEFT SIDE		24.00			
112+00.00	114+94.00	WEST 6TH STREET ON RIGHT SIDE		34.70	163.30		
114+94.00	114+94.00	LEFT SIDE OF INTERSECTION WITH SOUTH HERVEY STREET				5.40	
115+49.00	115.49.00	LEFT SIDE OF INTERSECTION WITH SOUTH HERVEY STREET				5.40	
114+94.00	114+94.00	RIGHT SIDE OF INTERSECTION WITH SOUTH HERVEY STREET				6.40	
115+49.00	115+49.00	RIGHT SIDE OF INTERSECTION WITH SOUTH HERVEY STREET				6.40	
115+34.00	119+01.00	WEST 6TH STREET ON LEFT & RIGHT	789.00	36.00			
115+49.00	118+83.00	WEST 6TH STREET ON RIGHT SIDE			185.60		
118+83.00	118+83.00	LEFT SIDE OF THE INTERSECTION WITH SOUTH PINE STREET				5.40	
119+41.00	119+41.00	LEFT SIDE OF THE INTERSECTION WITH SOUTH PINE STREET				5.40	
118+83.00	118+83.00	RIGHT SIDE OF THE INTERSECTION WITH SOUTH PINE STREET				6.40	
119+41.00	119+41.00	RIGHT SIDE OF INTERSECTION WITH SOUTH PINE STREET				6.40	
119+41.00	121+88.00	WEST 6TH STREET ON LEFT & RIGHT	556.00	36.00	88.30		
TOTALS:			4345.00	479.40	1035.50	38.40	64.80



ACHM PATCHING

LOCATION	ACHM PATCHING OF EXISTING ROADWAY
	TONS
ENTIRE PROJECT	20
TOTAL:	20

FILTER BLANKET & DUMPED RIPRAP

LOCATION	FILTER BLANKET*	DUMPED RIPRAP*
	SQ. YDS.	CU. YDS.
ENTIRE PROJECT	40	40
TOTALS:	40	40

*QUANTITIES ARE ESTIMATED AMOUNTS. THE LOCATION AND APPLICATION QUANTITY ARE AT THE DIRECTION OF THE ENGINEER.

BASE AND SURFACING QUANTITIES

DESCRIPTION	STATIONS		LENGTH	WIDTH	TACK COAT	ACHM SURFACE COURSE (1/2")* (PG 70-22)		
	FROM	TO				LIN. FT.	SQ. YDS.	GALS.
WEST 6TH STREET LEVELING	100+13.00	121+88.00	2175.00	34.00	8216.67	657.33	8216.67	903.83
INTERSECTION WITH TEXAS STREET	104+18.00	104+18.00			147.20	11.78	147.20	16.19
INTERSECTION WITH WASHINGTON STREET	107+90.00	107+90.00			219.20	17.54	219.20	24.11
INTERSECTION WITH GRADY STREET	111+61.00	111+61.00			219.20	17.54	219.20	24.11
INTERSECTION WITH HERVEY STREET	115+23.00	115+23.00			219.20	17.54	219.20	24.11
INTERSECTION WITH PINE STREET	119+14.00	119+14.00			219.20	17.54	219.20	24.11
TOTALS:						739.27		1216.46

BASIS OF ESTIMATE:

TACK COAT STATIONS 100+00.00 - 121+88.00 _____ 0.08 GALLONS PER SQ. YD.
 ACHM SURFACE COURSE _____ 220 LBS./SQ. YD.

PROPORTION BY WEIGHT:

ASPHALT BINDER (PG 70-22) IN ACHM SURFACE COURSE (1/2") _____ 5.2%
 MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2") _____ 94.8%

*Nmax=160

CLEARING AND GRUBBING

STATION	STATION	CLEARING	GRUBBING
		STATION	STATION
100+10.00	121+88.00	22	22
TOTALS:		22	22

FENCE

STATION	STATION	SIDE	4' STEEL CHAIN LINK FENCE	FENCE REMOVED AND RECONSTRUCTED
			LIN. FT.	LIN. FT.
100+31.00	101+00.00	LT.	69.00	
105+86.00	106+13.00	RT.		27.00
107+61.00	107+68.00	RT.		79.00
114+66.00	114+66.00	RT.	38.00	
116+19.00	116+86.00	RT.		67.00
116+10.00	116+98.00	LT.	88.00	
ENTIRE PROJECT			LT. & RT.	
TOTALS:			195.00	173.00

QUANTITIES

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
12-21-2021				6	ARK.				
						JOB NO.	C29002	24	54

4 QUANTITIES



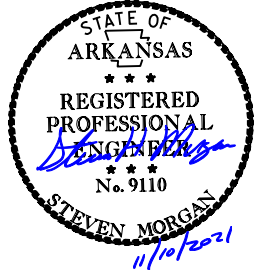
STRUCTURES

STATION	STATION	DESCRIPTION	YARD DRAINS	DROP INLETS				DROP INLETS (TYPE E)	JUNCTION BOXES (TYPE E)	REINFORCED CONCRETE PIPE CULVERTS					SELECTED PIPE BEDDING	SELECTED PIPE BACKFILL	FLARED END SECTIONS		STANDARD DRAWINGS	
				TYPE MO		EXTENSIONS				ARCHED PIPE	ROUND PIPE						22" x 14" R.C. ARCHED PIPE FLARED END SECTION	18" R.C. ROUND PIPE FLARED END SECTION		
				DIAMETER		4'	8'				(CLASS IV) 22" X 14"	(CLASS III) 18"	(CLASS III) 24"	(CLASS V) 30"						JOINT*
				4'	5'															
EACH			EACH				CU. YDS.	CU. YDS.	EACH	EACH										
104+22.00	104+22.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS OPEN IN THE BACK			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
104+22.00	104+71.00	CONSTRUCT 18" R.C. PIPE PARALLEL ALONG 6TH THAT CONNECTS TWO INLETS								46			1.30	23.00				FPC-9E, FPC-9M, PCC-1, PCM-1		
104+71.00	104+71.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS			1		1					6						FPC-9E, FPC-9M, PCC-1, PCM-1		
104+70.00	104+70.00	CONSTRUCT DROP INLET ON RIGHT W/R.C. PIPE OUTLETS			1		1					12						FPC-9E, FPC-9M, PCC-1, PCM-1		
104+71.00	106+18.00	CONSTRUCT 30" R.C. PIPE ALONG 6TH THAT CONNECTS TWO INLETS										146		6.80	121.70			FPC-9E, FPC-9M, PCC-1, PCM-1		
106+18.00	106+18.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS OPEN IN THE BACK			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
106+18.00	107+43.00	CONSTRUCT 30" R.C. PIPE ALONG 6TH THAT CONNECTS TWO INLETS										125		5.80	104.20			FPC-9E, FPC-9M, PCC-1, PCM-1		
107+43.00	107+43.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
107+43.00	108+25.00	CONSTRUCT 30" R.C. PIPE ALONG 6TH THAT CONNECTS TWO INLETS										82		3.80	40.90			FPC-9E, FPC-9M, PCC-1, PCM-1		
108+17.00	108+25.00	CONSTRUCT 18" R.C. PIPE ALONG SOUTH WASHINGTON STREET THAT CONNECTS TO INLET								77				2.10	38.50		1	FES-1, FES-2, PCC-1, PCM-1		
108+25.00	108+25.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
108+18.00	108+25.00	CONSTRUCT 18" R.C. PIPE UNDER 6TH THAT CONNECTS TWO INLETS								59				1.60	29.50			FPC-9E, FPC-9M, PCC-1, PCM-1		
108+18.00	108+18.00	CONSTRUCT DROP INLET ON RIGHT W/R.C. PIPE OUTLET			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
108+31.00	109+78.00	CONSTRUCT 30" R.C. PIPE ALONG 6TH THAT CONNECTS TWO INLETS										153		7.10	127.50			FPC-9E, FPC-9M, PCC-1, PCM-1		
109+78.00	109+78.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS OPEN IN THE BACK			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
109+78.00	110+93.00	CONSTRUCT 30" R.C. PIPE ALONG 6TH THAT CONNECTS TWO INLETS										116		5.40	96.70			FPC-9E, FPC-9M, PCC-1, PCM-1		
110+93.00	110+93.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
110+93.00	111+45.00	CONSTRUCT 30" R.C. PIPE ALONG 6TH THAT CONNECTS INLET TO JUNCTION BOX										49		1.80	40.80			FPC-9E, FPC-9M, PCC-1, PCM-1		
111+76.00	111+76.00	CONSTRUCT DROP INLET ON LEFT OFFSET 89.00 FT.						1										FPC-9E, FPC-9M, PCC-1, PCM-1		
111+76.00	111+76.00	CONSTRUCT A 22" X 14" ARCHED R.C. PIPE SIDE DRAIN FOR GRADY STREET ON RIGHT								89				3.30	44.50			FPC-9E, FPC-9M, PCC-1, PCM-1		
111+45.00	111+45.00	CONSTRUCTION DROP INLET ON LEFT OFFSET 73.00 FT.						1										FPC-9E, FPC-9M, PCC-1, PCM-1		
111+45.00	111+45.00	CONSTRUCT A 22" X 14" R.C. PIPE SIDE DRAIN FOR GRADY STREET ON LEFT								73				2.00	36.50			FPC-9E, FPC-9M, PCC-1, PCM-1		
111+45.00	111+45.00	CONSTRUCTION JUNCTION BOX TYPE E							1									FPC-9E, FPC-9M, PCC-1, PCM-1		
111+45.00	111+90.00	CONSTRUCT 30" R.C. PIPE ALONG 6TH THAT CONNECTS JUNCTION BOX TO AN INLET										50						FPC-9E, FPC-9M, PCC-1, PCM-1		
111+90.00	111+90.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
111+82.00	111+90.00	CONSTRUCT 18" R.C. PIPE UNDER 6TH THAT CONNECTS TWO INLETS								60				1.70	30.00			FPC-9E, FPC-9M, PCC-1, PCM-1		
111+82.00	111+82.00	CONSTRUCT DROP INLET ON RIGHT W/R.C. PIPE OUTLET			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
111+82.00	113+41.00	CONSTRUCT 24" R.C. PIPE ALONG 6TH THAT CONNECTS TWO INLETS										152		5.60	101.30			FPC-9E, FPC-9M, PCC-1, PCM-1		
113+41.00	113+41.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS OPEN IN THE BACK			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
113+38.00	114+84.00	CONSTRUCT 24" R.C. PIPE ALONG 6TH THAT CONNECTS TWO INLETS										144		5.30	96.00			FPC-9E, FPC-9M, PCC-1, PCM-1		
114+84.00	114+84.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
114+84.00	115+57.00	CONSTRUCT 24" R.C. PIPE ALONG 6TH THAT CONNECTS TWO INLETS										73		2.70	48.70			FPC-9E, FPC-9M, PCC-1, PCM-1		
115+57.00	115+57.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
115+57.00	115+49.00	CONSTRUCT 18" R.C. PIPE UNDER 6TH THAT CONNECTS TWO INLETS								54				1.50	27.00			FPC-9E, FPC-9M, PCC-1, PCM-1		
115+49.00	115+49.00	CONSTRUCT DROP INLET ON RIGHT W/R.C. PIPE OUTLET			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
115+57.00	116+82.00	CONSTRUCT 24" R.C. PIPE ALONG 6TH THAT CONNECTS TWO INLETS										126		3.50	63.00			FPC-9E, FPC-9M, PCC-1, PCM-1		
116+82.00	116+82.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
116+82.00	118+91.00	CONSTRUCT 18" R.C. PIPE ALONG 6TH THAT CONNECTS TWO INLETS								211				5.90	105.50			FPC-9E, FPC-9M, PCC-1, PCM-1		
118+91.00	118+91.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
118+91.00	119+47.00	CONSTRUCT 18" R.C. PIPE ALONG 6TH THAT CONNECTS TWO INLETS								56				1.60	28.00			FPC-9E, FPC-9M, PCC-1, PCM-1		
119+47.00	119+47.00	CONSTRUCT 18" R.C. PIPE UNDER 6TH THAT CONNECTS TWO INLETS								60				1.70	30.00			FPC-9E, FPC-9M, PCC-1, PCM-1		
119+33.00	119+33.00	CONSTRUCT DROP INLET ON RIGHT W/R.C. PIPE OUTLET			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
119+47.00	119+47.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS			1		1											FPC-9E, FPC-9M, PCC-1, PCM-1		
119+33.00	120+41.00	CONSTRUCT 18" R.C. PIPE ON RIGHT ALONG 6TH STREET THAT CONNECTS TWO INLETS								107								FPC-9E, FPC-9M, PCC-1, PCM-1		
120+41.00	120+41.00	CONSTRUCT DROP INLET ON RIGHT W/R.C. PIPE OUTLET			1		1					8						FPC-9E, FPC-9M, PCC-1, PCM-1		
120+41.00	120+41.00	CONSTRUCT 22" X 14" ARCHED R.C. PIPE THAT CONNECTS TO INLET								8							1	FES-1, FES-2 PCC-1, PCM-1		
119+47.00	121+00.00	CONSTRUCT 18" R.C. PIPE ALONG 6TH THAT CONNECTS TWO INLETS								154				4.30	77.00			FPC-9E, FPC-9M, PCC-1, PCM-1		
121+00.00	121+00.00	CONSTRUCT DROP INLET ON LEFT W/R.C. PIPE OUTLETS OPEN IN THE BACK			1		1					20		0.60	10.00			FPC-9E, FPC-9M, PCC-1, PCM-1		
ENTIRE PROJECT		CONSTRUCT YARD DRAINS AT DIRECTION OF ENGINEER**	6																	
TOTALS:			6	11	10	5	15	2	1	170	912	495	739	3	75.40	1320.30	1	1		

NOTE: FOR CLASS III R.C. PIPE CULVERTS INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE NOTED.
 FOR C.M. OR PLASTIC PIPE CULVERT INSTALLATION USE TYPE 2 BEDDING UNLESS OTHERWISE NOTED.
 *THERE SHALL BE NO DIRECT PAYMENT MADE FOR FULFILLING THE REQUIREMENTS OF THIS SPECIAL PROVISION "EXTENSION FOR PIPE CULVERTS".
 PAYMENT FOR WORK COMPLETED AND ACCEPTED AS PROVIDED ABOVE WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.
 **NECESSITY OF YARD DRAINS AND LOCATION OF CONSTRUCTION OF YARD DRAINS ARE AT THE DIRECTION OF THE ENGINEER.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		C29002	25	54

4 QUANTITIES



REMOVAL AND DISPOSAL ITEMS

STATION	STATION	DESCRIPTION	REMOVAL AND DISPOSAL OF PIPE CULVERTS	REMOVAL AND DISPOSAL OF FLARED END SECTIONS	REMOVAL AND DISPOSAL OF DROP INLETS	REMOVAL AND DISPOSAL OF STEPS	REMOVAL AND DISPOSAL OF FENCE	REMOVAL AND DISPOSAL OF CONCRETE DRIVEWAYS	REMOVAL AND DISPOSAL OF WALKS	REMOVAL AND DISPOSAL OF CURB & GUTTER	REMOVAL AND DISPOSAL OF SIGN POSTS
			EACH	EACH	EACH	SQ. YDS.	LIN. FT.	SQ. YD.	SQ. YD.	LIN. FT.	EACH
	104+24.00	REMOVAL OF CATCH BASIN ON LEFT SIDE OF WEST 6TH STREET			1			34.30	232.80	838.00	
100+21.00	104+40.00	WEST 6TH STREET					54.00				
100+46.00	101+01.00	REMOVAL OF FENCE LEFT SIDE OF WEST 6TH STREET									4
100+45.00	103+41.00	REMOVAL OF SIGN POSTS LEFT SIDE OF WEST 6TH STREET							10.80		
104+50.00	104+50.00	INTERSECTION OF TEXAS STREET WITH WEST 6TH STREET						34.60	172.80	622.00	
104+64.00	107+75.00	WEST 6TH STREET									
	104+50.00	12" X 19.92' RCP STORMWATER PIPE ALONG THE NW CORNER OF TEXAS STREET - 3.5' DEPTH	1	1							
104+21.00	104+68.00	12" x 43.41' RCP STORMWATER PIPE FROM NW - NE CORNER - 4' DEPTH	1	1							
104+66.00	107+33.00	REMOVAL AND DISPOSAL OF SIGN POSTS RIGHT SIDE OF WEST 6TH STREET									2
	104+70.00	REMOVAL OF CATCH BASIN ON RIGHT SIDE OF WEST 6TH STREET			1						
	104+71.00	REMOVAL OF CATCH BASIN ON LEFT SIDE OF WEST 6TH STREET			1						
104+71.00	104+72.00	36" X 40.27' RCP STORMWATER PIPE FROM NE - SE CORNER - 4.5' DEPTH	1								
104+75.00	108+23.00	24" X 346.49' RCP STORMWATER PIPE ALONG NORTH SIDE OF 6TH STREET - 4' DEPTH	1								
107+76.00	107+76.00	REMOVAL AND DISPOSAL OF SIGN POSTS LEFT SIDE OF WEST 6TH STREET									1
105+86.00	105+86.00	REMOVAL OF FENCE RIGHT SIDE OF WEST 6TH STREET					17.00				
106+03.00	106+13.00	REMOVAL OF FENCE RIGHT SIDE OF WEST 6TH STREET					10.00				
108+00.00	108+00.00	INTERSECTION OF SOUTH WASHINGTON STREET WITH WEST 6TH STREET							10.80		
107+61.00	107+68.00	REMOVAL OF FENCE RIGHT SIDE OF WEST 6TH STREET					97.00				
	107+55.00	REMOVAL OF CATCH BASIN ON RIGHT SIDE OF WEST 6TH STREET			1						
107+76.00	111+77.00	24" X 346.49' RCP STORMWATER PIPE FROM NE CORNER WASHINGTON ST. TO SW CORNER OF GRADY STREET - 4.7' DEPTH	1								
108+14.00	111+41.00	REMOVAL AND DISPOSAL OF SIGN POSTS RIGHT SIDE OF WEST 6TH STREET									2
	108+30.00	REMOVAL OF CATCH BASIN ON LEFT AND RIGHT SIDE OF WEST 6TH STREET			2						
108+90.00	108+90.00	REMOVAL OF STEPS OF LEFT SIDE OF WEST SIXTH STREET				2.67					
108+25.00	111+45.00	WEST 6TH STREET						224.10	177.80	640.00	
	111+18.00	REMOVAL OF CATCH BASIN ON LEFT SIDE OF WEST 6TH STREET			1						
111+35.00	111+35.00	REMOVAL OF STEPS OF LEFT SIDE OF WEST SIXTH STREET				4.44					
111+40.00	118+92.00	REMOVAL AND DISPOSAL OF SIGN POSTS LEFT SIDE OF WEST 6TH STREET									4
111+50.00	111+50.00	INTERSECTION OF SOUTH GRADY STREET WITH WEST 6TH STREET							10.80		
	111+35.00	NW SIDE OF GRADY STREET AND WEST 6TH STREET INTERSECTION						130.20	14.50		
	111+43.00	NE SIDE OF GRADY STREET AND WEST 6TH STREET INTERSECTION						23.20			
	111+43.00	18" X 85.78' RCP STORMWATER PIPE ALONG SE SIDE OF GRADY STREET - 2.8' DEPTH	1								
	111+35.00	12" X 69.90' RCP STORMWATER DRAIN PIPE ALONG NW SIDE OF GRADY STREET - 1.75' DEPTH	1	1							
	111+87.00	REMOVAL OF CATCH BASIN ON RIGHT SIDE OF WEST 6TH STREET			1						
111+78.00	111+89.00	18" X 82.24' RCP STORMWATER PIPE ALONG NE SIDE OF GRADY STREET - 2.8' DEPTH	1								
111+89.00	111+80.00	18" X 46.56' RCP STORMWATER PIPE FROM SE CORNER TO NE CORNER - 4' DEPTH	1								
	111+90.00	REMOVAL OF CATCH BASIN ON LEFT SIDE OF WEST 6TH STREET			1						
111+90.00	114+90.00	WEST 6TH STREET						19.60	166.70	600.00	
114+28.00	114+67.00	WIRE FENCE ON RIGHT SIDE OF WEST 6TH STREET					39.00				
	114+84.00	REMOVAL OF CATCH BASIN ON LEFT SIDE OF WEST 6TH STREET			1						
115+25.00	115+25.00	INTERSECTION OF SOUTH HARVEY STREET WITH WEST 6TH STREET							10.80		
	115+49.00	REMOVAL OF CATCH BASIN ON RIGHT SIDE OF WEST 6TH STREET			1						
111+83.00	115+57.00	18" X 374.00' CPP PIPE FROM THE SOUTH SIDE OF WEST 6TH STREET - DEPTH 4'	1								
	115+57.00	REMOVAL OF CATCH BASIN ON LEFT SIDE OF WEST 6TH STREET			1						
115+57.00	118+85.00	WEST 6TH STREET						19.60	182.20	656.00	
116+19.00	116+29.00	REMOVAL OF FENCE RIGHT SIDE OF WEST 6TH STREET					20.00				
116+10.00	116+98.00	REMOVAL OF FENCE LEFT SIDE OF WEST 6TH STREET					88.00				
	118+91.00	REMOVAL OF CATCH BASIN ON LEFT SIDE OF WEST 6TH STREET			1						
119+25.00	119+25.00	INTERSECTION OF PINE STREET WITH WEST 6TH STREET							10.80		
	119+33.00	REMOVAL OF CATCH BASIN ON RIGHT SIDE OF WEST 6TH STREET			1						
	119+40.00	REMOVAL OF CATCH BASIN ON RIGHT SIDE OF WEST 6TH STREET			1						
119+40.00	119+40.00	REMOVAL OF STEPS OF LEFT SIDE OF WEST SIXTH STREET				4.44					
119+92.00	121+17.00	REMOVAL AND DISPOSAL OF SIGN POSTS RIGHT SIDE OF WEST 6TH STREET									2
119+40.00	121+88.00	WEST 6TH STREET						19.60	137.80	496.00	
TOTALS:			10	4	14	11.55	325.00	505.20	1138.60	3852.00	15

QUANTITIES

TRAFFIC CONTROL DEVICES BOX (1 OF 2)

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
12-21-2021				6	ARK.			
				JOB NO.	C29002	26	54	
								4
								QUANTITIES

LOCATION	M4-8a (END DETOUR)		M4-9 (SPECIAL 60" X 48") WEST 6TH STREET WEST DETOUR (ARROW)		M4-9 (SPECIAL 60" X 48") WEST 6TH STREET EAST DETOUR (ARROW)		M4-9L (DETOUR) ARROW		M4-9R (DETOUR) ARROW		R3-1 (NO RIGHT TURN)		R3-2 (NO LEFT TURN)	
	NO.	SQ. FT.	NO.	SQ. FT.	NO.	SQ. FT.	NO.	SQ. FT.	NO.	SQ. FT.	NO.	SQ. FT.	NO.	SQ. FT.
ENTIRE PROJECT	2	6.00	5	100.00	8	160.00	5	60.00	2	24.00	2	32.00	2	32.00
TOTALS:	2	6.00	5	100.00	8	160.00	5	60.00	2	24.00	2	32.00	2	32.00

NOTE: REFER TO STANDARD DRAWINGS TC-1, TC-2, TC-3, MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND THE STANDARD HIGHWAY SIGNS
 NOTE: ALL STANDARD SIGN BLANKS TO BE 0.080" THICK.



TRAFFIC CONTROL DEVICES BOX (2 OF 2)

LOCATION	R5-1 (DO NOT ENTER)		R9-9 (SIDEWALK CLOSED)		R11-2 (ROAD CLOSED)		R11-4 (ROAD CLOSED - LOCAL TRAFFIC ONLY)		W20-1 (ROAD WORK AHEAD)		W20-2 (DETOUR AHEAD)		W20-3 (ROAD CLOSED AHEAD)		(M4-10)R (DETOUR) ARROW RT.		BARRICADES
	NO.	SQ. FT.	NO.	SQ. FT.	NO.	SQ. FT.	NO.	SQ. FT.	NO.	SQ. FT.	NO.	SQ. FT.	NO.	SQ. FT.	NO.	SQ. FT.	LIN. FT.
ENTIRE PROJECT	1	16.00	5	18.75	6	60.00	6	75.00	2	32.00	2	32.00	2	32.00	2	12.00	300.00
TOTALS:	1	16.00	5	18.75	6	60.00	6	75.00	2	32.00	2	32.00	2	32.00	2	12.00	300.00

NOTE: REFER TO STANDARD DRAWINGS TC-1, TC-2, TC-3, MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND THE STANDARD HIGHWAY SIGNS MANUAL.

NOTE: ALL STANDARD SIGN BLANKS TO BE 0.080" THICK.

REFLECTORIZED PAINT PAVEMENT MARKING

LOCATION	WHITE MARKING	YELLOW MARKING	WHITE MARKING	WHITE MARKING	WHITE MARKING	WHITE MARKING
	12" CONTINUOUS	4" CONTINUOUS	6" CONTINUOUS	WORDS (BIKE LANE)	ARROWS	BIKE EMBLEMS
	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH
100+10.00 -121+88.00		3856				
100+10.00 - 121+88.00 RT. & LT. (EXCEPT THROUGH INTERSECTIONS AND 100 FT. PRIOR TO CROSSWALKS)			3456			
RIGHT SIDE OF ENTIRE PROJECT				10	6	6
LEFT SIDE OF ENTIRE PROJECT				10	5	5
104+74 CROSSWALK - RIGHT SIDE OF INTERSECTION	105					
107+76 CROSSWALK ACROSS WEST 6TH STREET	170					
108+14 CROSSWALK - RIGHT SIDE OF INTERSECTION	150					
111+41 CROSSWALK ACROSS WEST 6TH STREET	170					
111+74 CROSSWALK - RIGHT SIDE OF INTERSECTION	165					
115+05 CROSSWALK ACROSS WEST 6TH STREET	170					
115+48 CROSSWALK - RIGHT SIDE OF INTERSECTION	150					
119+29 CROSSWALK - RIGHT SIDE OF INTERSECTION	150					
SOUTH SIDE OF EACH INTERSECTION - STOP LINE	75					
NORTH SIDE OF EACH INTERSECTION - STOP LINE	75					
TOTALS:	1380	3856	3456	20	11	11

NOTE: THIS IS A HIGH TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2014 EDITION.

NOTE: REFER TO STANDARD DRAWING PM-1 AND PAVEMENT MARKING SPECIAL DETAIL FOR DETAILS.

QUANTITIES

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
					6	ARK.		
				JOB NO.	C29002	27	54	

4 QUANTITIES

PAVEMENT REPAIR OVER CULVERTS

STATION	STATION	DESCRIPTION	CONCRETE
			CU. YDS.
	104+50.00	12" X 19.92' RCP STORM WATER PIPE ALONG THE NW CORNER OF TEXAS STREET - 3.5' DEPTH	5.2
104+21.00	104+68.00	12" x 43.41' RCP STORM WATER PIPE FROM NW - NE CORNER - 4' DEPTH	11.4
104+71.00	104+72.00	36" X 40.27' RCP STORM WATER PIPE FROM NE - SE CORNER - 4.5' DEPTH	13.0
104+75.00	108+23.00	24" X 346.49' RCP STORM WATER PIPE ALONG NORTH SIDE OF 6TH STREET - 4' DEPTH	101.1
107+76.00	111+77.00	24" X 346.49' RCP STORM WATER PIPE FROM NE CORNER WASHINGTON ST. TO SW CORNER OF GRADY STREET - 4.7' DEPTH	101.1
	111+43.00	18" X 85.78' RCP STORM WATER PIPE ALONG SE SIDE OF GRADY STREET - 2.8' DEPTH	23.6
111+83.00	115+57.00	18" X 374.00' CPP PIPE FROM THE SOUTH SIDE OF WEST 6TH STREET - DEPTH 4'	103.1
TOTAL:			358.5



STANDARD HIGHWAY SIGNS AND SUPPORT ASSEMBLIES

STATION	SIDE	2M - 2 (INFORMATIONAL SIGN) SQ. FT.	W10 - 1 30 INCH (RAILROAD CROSSING) SQ. FT.	W3-1 (STOP AHEAD) SQ. FT.	R1-1 (STOP SIGN) SQ. FT.	BICYCLE LANE			SCHOOL ZONE					R8-3a (NO PARKING) SQ. FT.	SUPPORT ASSEMBLY TYPE A EACH	STANDARD DRAWING NUMBER OR REFERENCE MANUAL	
						R3-17 (BIKE LANE) SQ. FT.	R3-17aP (AHEAD) SQ. FT.	R3-17bP (END) SQ. FT.	R2-1 (SPEED LIMIT) SQ. FT.	S4-3P (SCHOOL) SQ. FT.	S4-2P (WHEN CHILDREN ARE PRESENT) SQ. FT.	S1-1 (SCHOOL CROSSING) SQ. FT.	W16-7P LEFT SQ. FT.				S5-2 (END SCHOOL ZONE) SQ. FT.
101+00.00	RT.					1.33	1.33								1	MUTCD AND SHS	
101+00.00	LT.					1.33	1.33	1.33							1	MUTCD AND SHS	
101+33.00	LT.	4.00													1	MUTCD AND SHS	
103+38.00	LT.			6.25											1	MUTCD AND SHS	
103+88.00	LT.					1.33	1.33								1	MUTCD AND SHS	
104+16.00	LT.				6.25										1	SHS-1, SHS-2	
105+00.00	RT.					1.33	1.33								1	MUTCD AND SHS	
105+75.00	LT.												5.00		1	MUTCD AND SHS	
104+74.00	RT.				6.25										1	SHS-1, SHS-2	
107+00.00	RT.													3.00	1	MUTCD AND SHS	
107+33.00	RT.								5.00	1.33	1.67				1	SHS-1, SHS-2	
107+44.00	LT.					1.33	1.33								1	MUTCD AND SHS	
107+56.00	RT.											9.00	2.00		1	MUTCD AND SHS	
107+76.00	LT.				6.25										1	SHS-1, SHS-2	
108+14.00	RT.				6.25										1	SHS-1, SHS-2	
108+18.00	RT. - WASHINGTON STREET											9.00	2.00		1	MUTCD AND SHS	
108+60.00	RT.					1.33	1.33								1	MUTCD AND SHS	
110+70.00	LT.					1.33	1.33								1	MUTCD AND SHS	
111+12.00	RT.													3.00	1	MUTCD AND SHS	
111+20.00	RT.											9.00	2.00		1	MUTCD AND SHS	
111+41.00	LT.				6.25										1	SHS-1, SHS-2	
111+74.00	RT. - GRADY STREET				6.25							9.00	2.00		2	MUTCD AND SHS	
111+92.00	RT.				6.25										1	SHS-1, SHS-2	
111+97.00	LT.											9.00	2.00		1	MUTCD AND SHS	
112+14.00	LT.								5.00	1.33	1.67				1	SHS-1, SHS-2	
112+38.00	LT.													3.00	1	MUTCD AND SHS	
112+40.00	RT.					1.33	1.33								1	MUTCD AND SHS	
114+00.00	RT.												5.00		1	MUTCD AND SHS	
114+68.00	LT.					1.33	1.33								1	MUTCD AND SHS	
115+05.00	LT.				6.25										1	SHS-1, SHS-2	
115+48.00	RT.				6.25										1	SHS-1, SHS-2	
115+58.00	RT.					1.33	1.33								1	MUTCD AND SHS	
114+58.00	LT.					1.33	1.33								1	MUTCD AND SHS	
118+92.00	LT.				6.25										1	SHS-1, SHS-2	
119+29.00	RT.				6.25										1	SHS-1, SHS-2	
120+00.00	RT.					1.33	1.33								1	MUTCD AND SHS	
121+25.00	RT.		4.91												1	MUTCD AND SHS	
121+88.00	RT.					1.33		1.33							1	MUTCD AND SHS	
TOTALS:		4.00	4.91	6.25	68.75	17.29	15.96	2.66	10.00	2.66	3.34	45.00	10.00	10.00	9.00	39	

NOTES: ALL STANDARD SIGN BLANKS ARE TO BE 0.080" THICK. REFER TO STANDARD DRAWING SHS-2 FOR CHANNEL POST SPLICING DETAILS.

QUANTITIES

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
12-21-2021				6	ARK.			
01-26-2022								
				JOB NO.	C29002	28	54	

4 SUMMARY OF QUANTITIES AND REVISION BOX

SUMMARY OF QUANTITIES				
ITEM NUMBER	ITEM	TOTAL QUANTITY	UNIT	
201	CLEARING	22	STATION	
201	GRUBBING	22	STATION	
202	REMOVAL AND DISPOSAL OF CURB AND GUTTER	3852	LIN. FT.	
202	REMOVAL AND DISPOSAL OF FENCE	325	LIN. FT.	
202	REMOVAL AND DISPOSAL OF SIGN POSTS	15	EACH	
202	REMOVAL AND DISPOSAL OF DRIVEWAYS	505	SQ. YD.	
202	REMOVAL AND DISPOSAL OF STEPS	12	SQ. YD.	
202	REMOVAL AND DISPOSAL OF WALKS	1139	SQ. YD.	
202	REMOVAL AND DISPOSAL OF DROP INLETS	14	EACH	
202	REMOVAL AND DISPOSAL OF PIPE CULVERTS	10	EACH	
202	REMOVAL AND DISPOSAL OF FLARED END SECTIONS	4	EACH	
208	FENCE REMOVED AND RECONSTRUCTED	173	LIN. FT.	
SS & 210	UNCLASSIFIED EXCAVATION	222	CU. YD.	
210	COMPACTED EMBANKMENT	930	CU. YD.	
SP & 210	SOIL STABILIZATION	100	TON	
SS & 401	TACK COAT	739	GAL.	
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")	1153	TON	
SP, SS, & 407	ASPHALT BINDER (PG 70-22) IN ACHM SURFACE COURSE (1/2")	63	TON	
SP, SS, & 415	ACHM PATCHING OF EXISTING ROADWAY	20	TON	
SS & 505	PORTLAND CEMENT CONCRETE DRIVEWAY	479.40	SQ. YD.	
601	MOBILIZATION	1.00	LUMP SUM	
SP & 602	FURNISHING FIELD OFFICE	1	EACH	
603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM	
SS & 604	SIGNS	692	SQ. FT.	
SS & 604	BARRICADES	300	LIN. FT.	
606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	912	LIN. FT.	
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS II)	495	LIN. FT.	
606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)	739	LIN. FT.	
606	22" X 14" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS IV)	170	LIN. FT.	
606	18" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	1	EACH	
606	22" X 14" FLARED END SECTIONS FOR REINFORCED CONCRETE ARCH PIPE CULVERTS	1	EACH	
606	SELECTED PIPE BEDDING	75	CU. YD.	
606	SELECTED PIPE BACKFILL	1320	CU. YD.	
SS & 609	DROP INLETS (TYPE E)	2	EACH	
SS & 609	DROP INLETS (TYPE MO)	21	EACH	
SS & 609	JUNCTION BOXES (TYPE E)	1	EACH	
SS & 609	DROP INLET EXTENSIONS (4')	5	EACH	
SS & 609	DROP INLET EXTENSIONS (8')	15	EACH	
SS & 609	YARD DRAINS	6	EACH	
615	PAVEMENT REPAIR OVER CULVERTS (CONCRETE)	358.5	CU. YD.	
619	4' STEEL CHAINLINK FENCE	195	LIN. FT.	ALTERNATE NUMBER 1
619	4' ALUMINUM CHAINLINK FENCE	195	LIN. FT.	ALTERNATE NUMBER 2
620	LIME	4	TON	
620	SEEDING	1.82	ACRE	
SS & 620	MULCH COVER	3.64	ACRE	
620	WATER	371.4	M. GAL.	
621	TEMPORARY SEEDING	1.82	ACRE	
621	SAND BAG DITCH CHECKS	108	BAG	
621	SEDIMENT REMOVAL AND DISPOSAL	33	CU. YD.	
SS & 621	FILTER SOCK (12")	1040	LIN. FT.	
624	SOLID SODDING	250	SQ. YD.	
SS & 633	CONCRETE WALKS	1036	SQ. YD.	
SS & 634	CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (1' 6")	4345	LIN. FT.	
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM	
637	MAILBOXES	3	EACH	
637	MAILBOX SUPPORTS (SINGLE)	3	EACH	
641	WHEELCHAIR RAMPS (TYPE 2)	38	SQ. YD.	
641	WHEELCHAIR RAMPS (TYPE 3)	65	SQ. YD.	
718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (6")	3456	LIN. FT.	
718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (12")	1380	LIN. FT.	
718	REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (4")	3856	LIN. FT.	
718	REFLECTORIZED PAINT PAVEMENT MARKING (WORDS)	20	EACH	
718	REFLECTORIZED PAINT PAVEMENT MARKING (ARROWS)	11	EACH	
718	REFLECTORIZED PAINT PAVEMENT MARKING (BIKE EMBLEMS)	11	EACH	
SS & 726	STANDARD SIGN	209.82	SQ. FT.	
SS & 729	CHANNEL POST SIGN SUPPORT (TYPE A)	39	EACH	
816	FILTER BLANKET	40	SQ. YD.	
816	DUMPED RIPRAP	40	CU. YD.	

* DENOTES ALTERNATE BID ITEMS.

REVISIONS		
DATE	REVISION	SHEET NUMBER
12/21/2021	REMOVED YARD DRAIN BOX QUANTITY. ADDED SELECTED PIPE BACKFILL AND REVISED REFLECTORIZED PAVEMENT MARKING YELLOW (4") QUANTITY. CHANGED NOTES IN PAVEMENT MARKING SHEETS.	18-22, 24, 26 & 28
01/26/2022	ADDED SS105-4, SS107-2, AND SS410-4. ADDED LIQUIDATED DAMAGES PROCEDURE FOR BID LETTINGS SP.	3 & 28



SURVEY CONTROL COORDINATES
 Project Name: C29002
 Date: 9/27/2024
 Coordinate System: Arkansas State Plane Coordinates
 Based on AHTD GPS PTS : 200266 & 20026A
 Projected to Ground Coordinates
 Units: U.S. Survey Foot

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	C29002	29	54	

COORDINATES LISTED BELOW ARE GROUND (Localized) COORDINATES !!!

Point No.	Northing	SY	Easting	SK	Elevation	SZ	Feature Code	Point Description
1	1678524.8084	0.0000	82567.6004	0.0000	333.50	0.0000	CTL	PO-AHTD STD. MON STAMPED T-1
2	1678488.8066	0.0000	82563.8029	0.0000	333.72	0.0000	CTL	PO-AHTD STD. MON STAMPED T-2
3	1678644.3078	0.0000	826516.8177	0.0000	335.12	0.0000	CTL	PO-AHTD STD. MON STAMPED T-3
4	1678796.7637	0.0000	827057.6114	0.0000	337.97	0.0000	CTL	PO-AHTD STD. MON STAMPED T-4
5	1678908.7296	0.0000	827434.5123	0.0000	341.98	0.0000	CTL	PO-AHTD STD. MON STAMPED T-5
6	1678988.0217	0.0000	827759.0485	0.0000	347.35	0.0000	CTL	PO-AHTD STD. MON STAMPED T-6
100	1677388.8143	0.0000	828584.0423	0.0000	340.11	0.0000	GPS	PO-AHTD GPS MON 200266
101	167926.9235	0.0000	828014.4696	0.0000	349.18	0.0000	GPS	PO-AHTD GPS MON 20026A
900	1678657.9993	0.0000	825607.9396	0.0000	334.17	0.0000	TBM	PO-SQ CUT IN N END CA, 21' WEST OF CL FULTON ST.
901	1678721.3228	0.0000	826626.2483	0.0000	336.42	0.0000	TBM	PO-SQ CUT IN CONC. STEPS 27' WEST OF CL GRADY ST.
902	1679028.7019	0.0000	827896.5913	0.0000	346.48	0.0000	TBM	PO-SQ CUT IN CA, 20' SOUTH OF CL 6TH ST.
903	168006.7787	30.0000	82835.7967	30.0000	360.77	0.0000	BM	PO-NGS MARK W 62
991	168006.7787	30.0000	82835.7967	30.0000	361.62	0.0000	BM	PO-NGS MARK V 62

*Standard Primary Control Monument - Rebar and Cap - Standard - 5/8" x 24" Rebar with 2" Aluminum Cap stamped. (Include all common information here) plus other markings indicated in the point description of the individual point. AHTD monuments will be stamped "Arkansas Hwy & Trans Dept" with "PN: ###" & "Job #####". Monuments that are set by Consultants will be stamped "Arkansas Hwy & Trans Dept" with "PN: ###", "Job #####", & "PS####". The consultant Professional Surveyor in charge will stamp his/her PS license number on the cap.
 **Standard GPS Control Point Monument - 5/8" x 48" Rebar with 2" Aluminum Cap stamped. (Include all common information here) plus other markings indicated in the point description of the individual point. These monuments will be stamped "Ark. State Hwy Trans. Dept.", "GPS Survey", & "Point No. #####".
 SK, SY, SZ - Represents the standard error estimate of the coordinate values of each point at the 67% confidence level (one sigma) based on the least squares analysis of the control network. See the AASHTO SONS Technical Data Guide (tag definition for SK, SY, and SZ for additional information. These values shall be used when control points are added and the entire network is reprocessed using least square analysis. A value of 0.001 is defined as fixed (no adjustment) in the least square analysis process. A value of 3D is defined as location by handheld GPS device or scaled from USGS Quadmap.
 Reference Control points (1300 series) shall be used to re-establish horizontal datum if the primary control has been destroyed. These reference control points shall not be used for vertical control unless the elevation has been established from the project datum with 3 wire level techniques.
 All additional project control shall be occupied, measured, and adjusted with direct survey ties to at least two of the control points listed in the table above. New survey control shall not be independent of the survey control listed above. This includes horizontal coordinates and elevations.

Positional Accuracy:

Horizontal - GPS (1.0 cm 3PPM)	PN: 100-102
Horizontal - Primary (2.0cm 30PPM)	PN: 1-6
Horizontal - Secondary (3 cm ± 50PPM)	PN/A
Vertical - NGS 1st Order (±8mm x vdist in km)	PN: 990 & 991
Vertical - NGS 2nd Order (±6mm x vdist in km)	PN/A
Vertical - NGS 3rd Order (±6mm x vdist in km)	PN/A

Horizontal Datum: NAD 1983 (1997) State Plane Zone: 0002 - South Zone
 The adjustment year is based on the epoch in the SONS Control File.
 A project CAF of: 0.999915523 has been used to compute the above coordinates.
 The project CAF shall have a minimum precision of 9 digits right of the decimal.
 This CAF is intended for use within the project limits only.
 Grid Distance = Ground Distance X CAF
 If Coordinates are listed as Ground:
 To compute Grid Coordinates, multiply the Ground Coordinates by CAF about the origin of X=0 & Y=0
 If Coordinates are listed as Grid:
 To compute Ground Coordinates, divide the Grid Coordinates by CAF about the origin of X=0 & Y=0

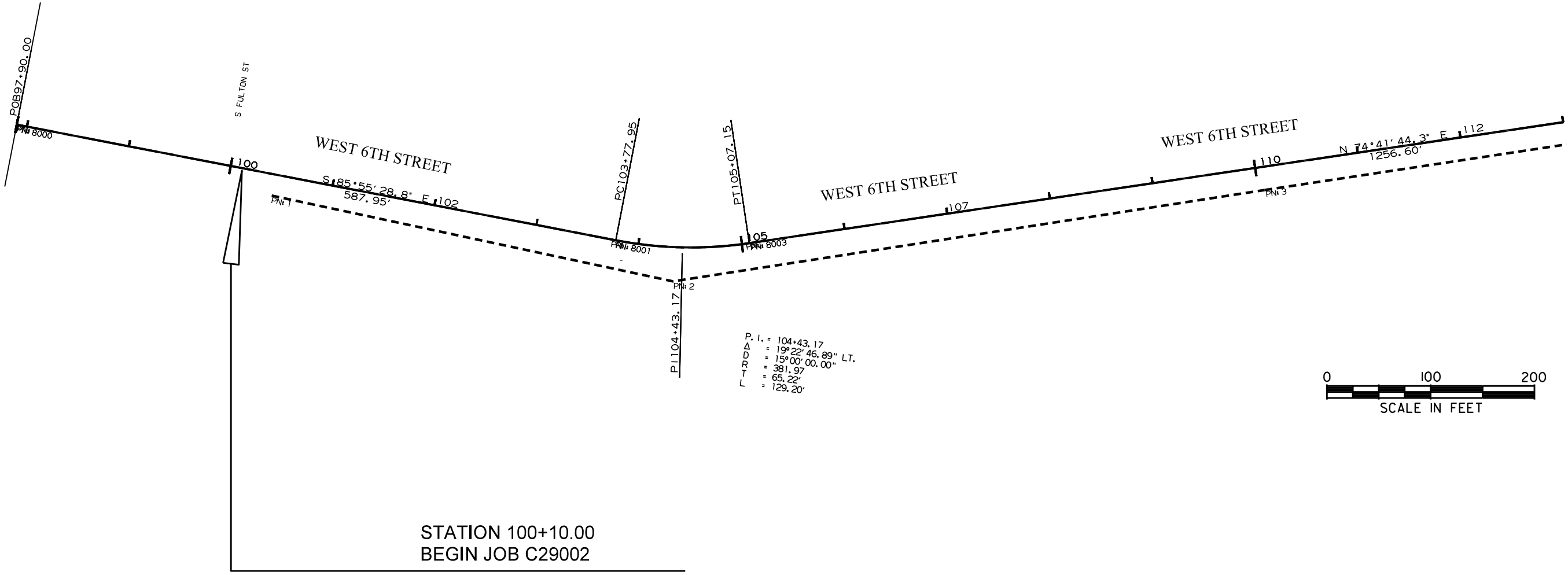
Vertical Datum: NAVD 1988 based NGS BM: W62 & V 62
 A project Elevation Factor of: 0.999832956 has been computed and incorporated in the above CAF.
 This is based on the average elevation of the project: 342.95 Feet
 3 Wire leveling techniques have been used to establish elevations on Points: 16, 100-101 From NGS BM: W 62 & V 62

Basis of Bearing: Grid Bearing based on AHTD GPS points: 200266 & 20026A
 Convergence Angle is: 00° 53' 28" LEFT at PN: 3
 LT: 33-39-45.2 N 16-03-35-48.9 W
 Grid Azimuth = Astronomical Azimuth - Convergence Angle



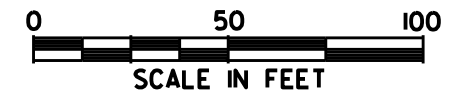
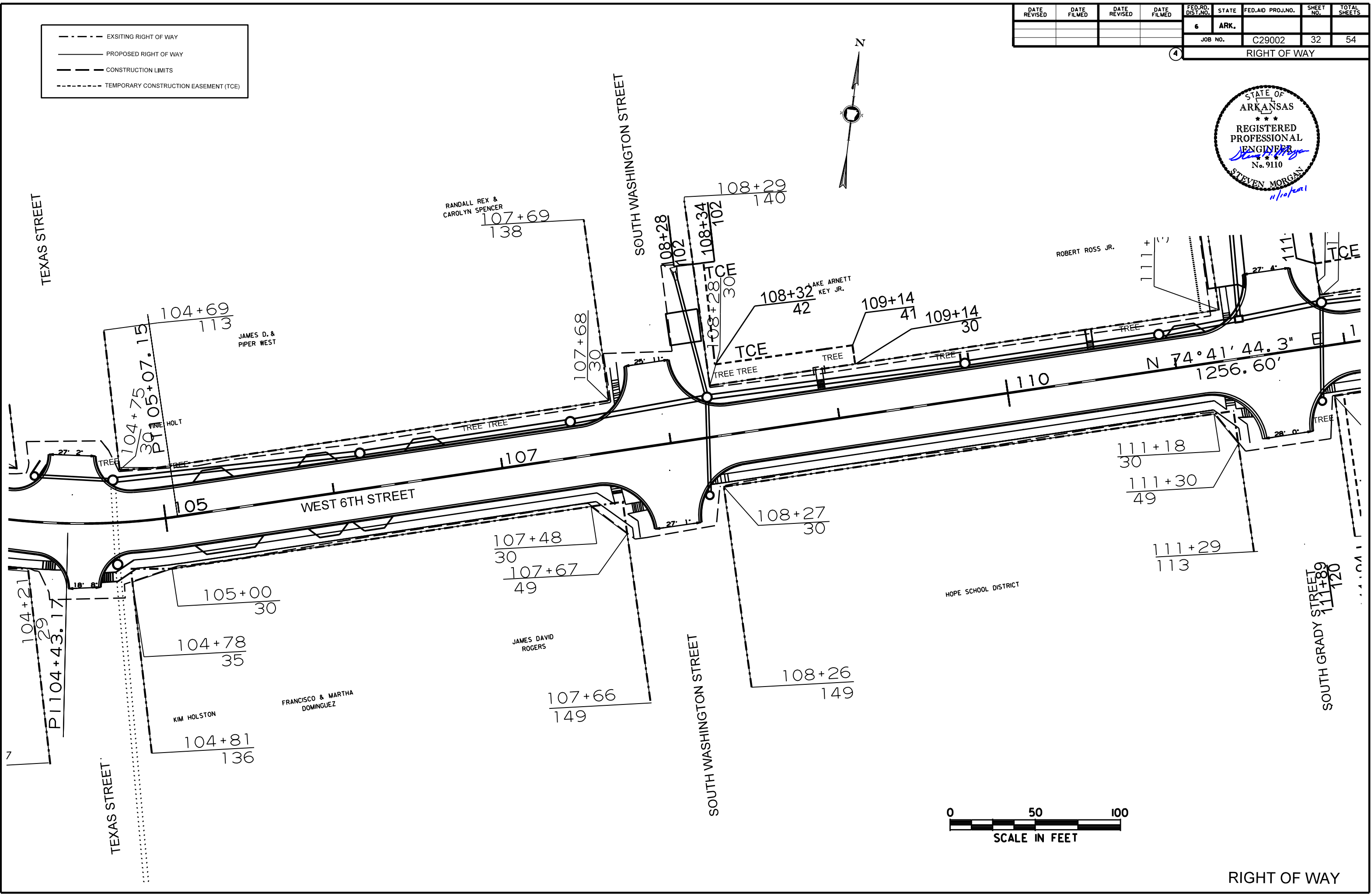
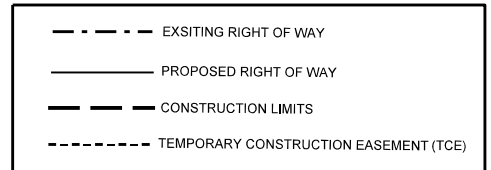
CONSTRUCTION

POINT NO.	TYPE	STATION	NORTHING	EASTING
8000	POB	97+90.00	1678563.44	825315.50
8001	PC	103+77.95	1678521.65	825901.96
8003	PT	105+07.15	1678534.23	826029.93
8004	PI	117+63.74	1678865.90	827241.96
8005	PI	121+25.08	1678961.93	827590.30
8006	PI	121+84.00	1678977.06	827647.25
8007	POE	122+68.94	1679000.89	827728.78



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	C29002	32	54	

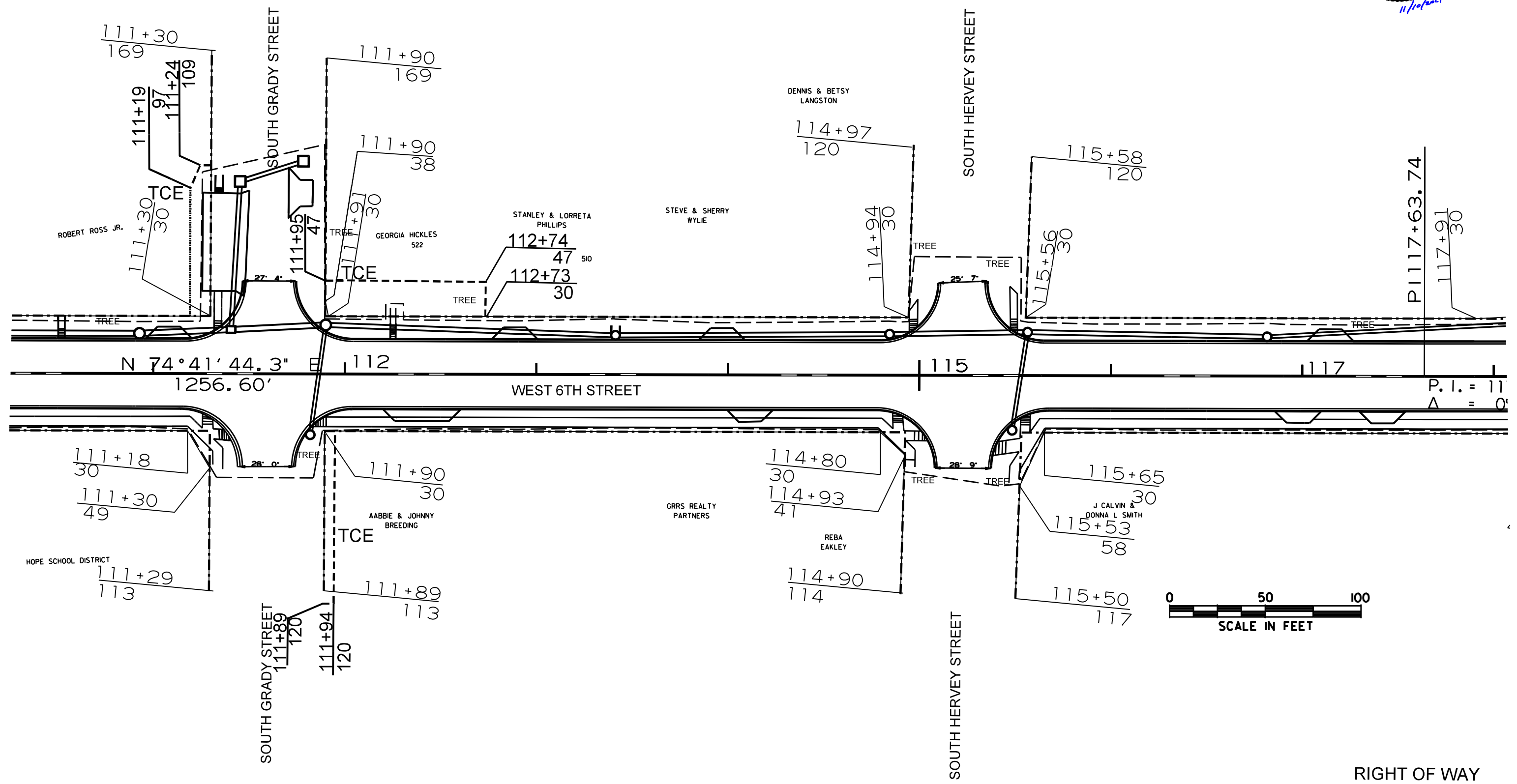
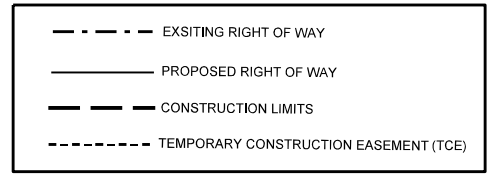
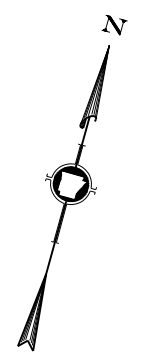
4 RIGHT OF WAY



RIGHT OF WAY

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	C29002	33	54	

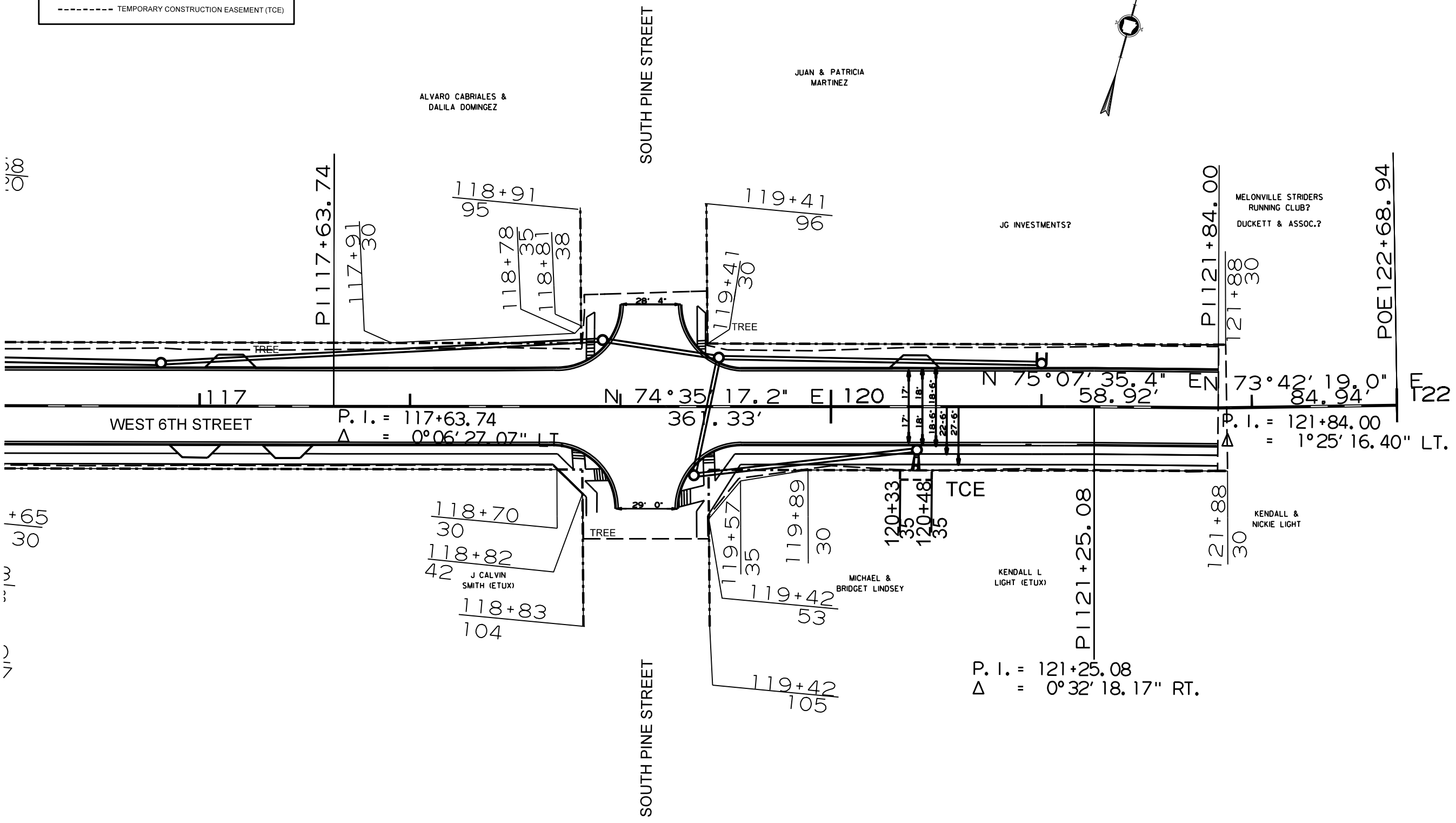
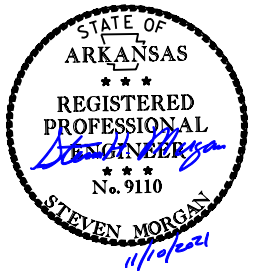
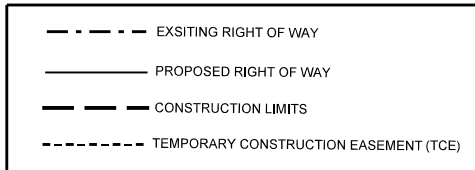
4 RIGHT OF WAY



RIGHT OF WAY

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	C29002	34	54	

4 RIGHT OF WAY

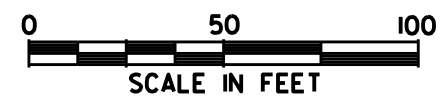


117
30

+65
30

3
3

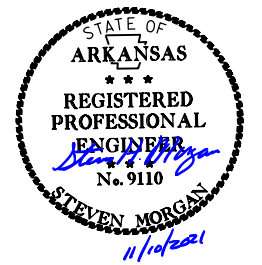
7



RIGHT OF WAY

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. C29002							35	54

4 PLAN AND PROFILE SHEET 97+50.00 - 104+00.00



STA. 100+13.00 - STA. 121+88.00
WEST 6TH STREET OVERLAY

STATION 100+10.00
BEGIN JOB C29002

STA. 100+43 - STA. 104+06
CONSTRUCT TYPE A CURB & GUTTER
ON LEFT 363.0 LINEAR FEET



STA. 101+09.00 CONSTRUCT
PRIVATE ENTRANCE ON LEFT
12.0 SQ. YDS.

STA. 102+42.00 CONSTRUCT
PRIVATE ENTRANCE ON LEFT
12.0 SQ. YDS.

STA. 103+17.00 CONSTRUCT
PRIVATE ENTRANCE ON LEFT
12.0 SQ. YDS.

STA. 100+00.00 OVERLAY
CITY STREET TURNOUTS ON
LEFT & RIGHT = 109.6 SQ. YDS. EACH

STA. 100+91.00 CONSTRUCT
PRIVATE ENTRANCE ON RIGHT
12.0 SQ. YDS.

STA. 101+76.00 CONSTRUCT
PRIVATE ENTRANCE ON RIGHT
12.0 SQ. YDS.

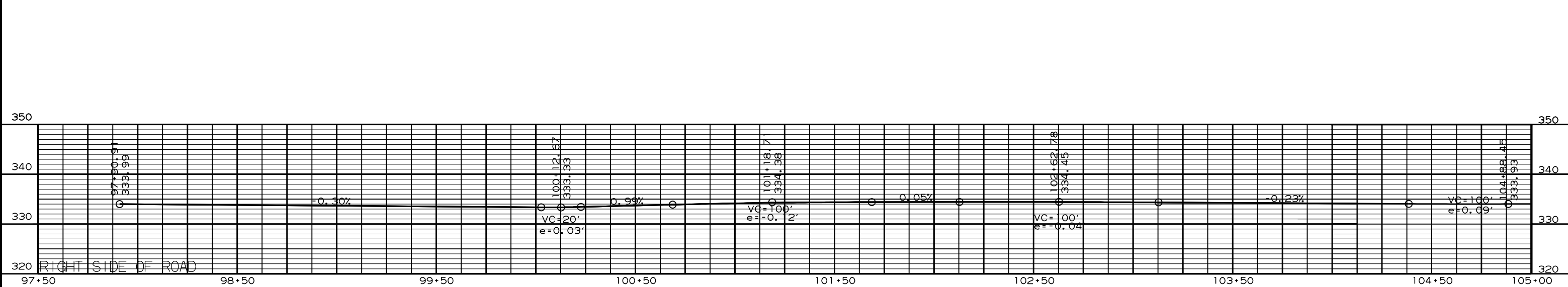
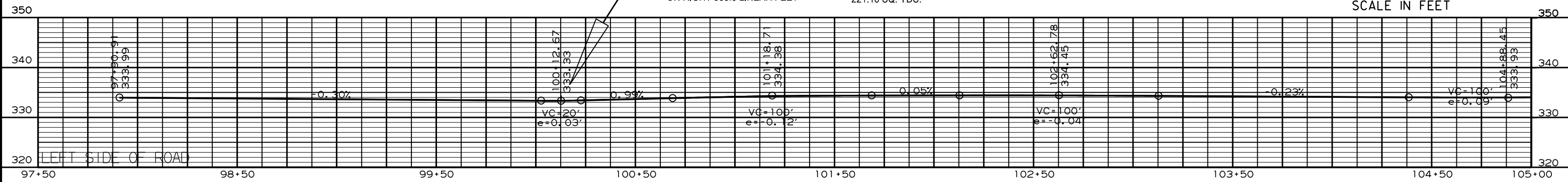
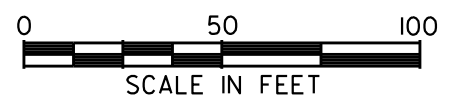
STA. 102+40.00 CONSTRUCT
PRIVATE ENTRANCE ON RIGHT
12.0 SQ. YDS.

STA. 103+34.00 CONSTRUCT
PRIVATE ENTRANCE ON RIGHT
12.0 SQ. YDS.

BEGIN JOB C29002
STATION 100+10.00

STA. 100+40 - STA. 104+25
CONSTRUCT TYPE A CURB & GUTTER
ON RIGHT 385.0 LINEAR FEET

STA. 100+40.00 - STA. 104+38.00
CONSTRUCT SIDEWALKS ON THE RIGHT
221.10 SQ. YDS.



POB97+90.00

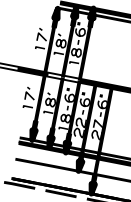
WEST 6TH STREET

FULTON STREET

FULTON STREET

PC103+77.95

S 185° 55' 28.8" E 1102
WEST 6TH STREET



STA. 111+31.00 ON NW CORNER OF GRADY STREET AND WEST 6TH STREET CONSTRUCT PRIVATE ENTRANCE ON LEFT 123.00 SQ. YDS.

STA. 111+71.00 ON NE CORNER OF GRADY STREET AND WEST 6TH STREET CONSTRUCT PRIVATE ENTRANCE ON LEFT 23.00 SQ. YDS.

STA. 111+45.00 OFFSET 75' ON LEFT CONSTRUCT 5' X 5' (TYPE E) DROP INLET H=4.7 FT. WITH A 22" X 14" ARCHED R.C.P. THAT CONNECTS TO 5' X 5' (TYPE E) JUNCTION BOX AT STA. 111+76.00 OFFSET 85' ON LEFT.

STA. 111+45.00 OFFSET 49' ON LEFT CONSTRUCT 3' X 4' (TYPE E) JUNCTION BOX H=4.01 FT. WITH A 22" X 14" ARCHED R.C.P. AND A 24" R.C.P. INLET PIPES. A 30" R.C.P. OUTLET PIPE.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	C29002		37	54

4 PLAN AND PROFILE SHEET 111+00.00 - 117+00.00

STA. 111+31.00 CONSTRUCT TWO TYPE 3 WHEELCHAIR RAMP ON LEFT 10.8 SQ. YDS.

STA. 111+45.00 OFFSET 75' ON LEFT REMOVE THE 12" X 75" DRAINAGE PIPE AND CONSTRUCT 22" X 14" X 75" ARCHED R.C.P. DRAINAGE PIPE THAT CONNECTS TO THE 3'X4' JUNCTION BOX STA. 111+45 OFFSET 49' ON LEFT.

STA. 112+04.00 - STA. 114+80.00 CONSTRUCT TYPE A CURB & GUTTER ON LEFT 276.0 LINEAR FEET

STA. 111+61.00 OVERLAY CITY STREET TURNOUTS ON LEFT = 109.6 SQ. YDS. EACH

STA. 114+94.00 & STA. 115+49.00 CONSTRUCT TYPE 3 WHEELCHAIR RAMPS ON LEFT 5.4 SQ. YDS. EACH

STA. 108+36 - STA. 111+15 CONSTRUCT TYPE A CURB & GUTTER ON LEFT 279.0 LINEAR FEET

STA. 111+07.00 CONSTRUCT PRIVATE ENTRANCE ON LEFT 12.0 SQ. YDS.

STA. 111+76.00 TO STA. 111+45.00 CONSTRUCT A 22" X 14" X 69" ARCHED R.C.P. STORM WATER PIPE UNDER GRADY STREET THAT CONNECTS BETWEEN TWO INLETS.

STA. 111+90.00 REMOVE A D.I. ON LEFT AND CONSTRUCT A TYPE MO H=4.75 FT. D.I. ON THE LEFT WITH 8' EXTENSION. ONE 18" INLET PIPE A 24" INLET PIPE, AND A 30" PIPE OUTLET CONNECT TO STA. 111+18.00.

STA. 115+57.00 REMOVE A D.I. AND CONSTRUCT A D.I. WITH 4' DIAMETER TYPE MO H=5.37 FT. D.I. ON THE LEFT WITH 8' EXTENSION, AND A 24" PIPE OUTLET CONNECT TO STA. 114+84.00.

STA. 115+65.00 - STA. 118+68.00 CONSTRUCT TYPE A CURB & GUTTER ON LEFT 303.0 LINEAR FEET

STA. 100+13.00 - STA. 121+88.00 WEST 6TH STREET OVERLAY

STA. 111+78.00 OFFSET 83' ON LEFT CAP AND LEAVE A 12" X 82" DRAINAGE PIPE THAT CONNECTS TO THE EXISTING INLET.

STA. 113+41.00 CONSTRUCT A D.I. WITH 5' DIAMETER TYPE MO H=4.92 FT. D.I. ON THE LEFT WITH 8' EXTENSION, OPEN IN THE BACK, AND A 24" PIPE OUTLET CONNECT TO STA. 111+90.00.

STA. 114+84.00 REMOVE D.I. ON LEFT AND CONSTRUCT A D.I. WITH 4' DIAMETER TYPE MO H=5.28 FT. D.I. ON THE LEFT WITH 4' EXTENSION, AND A 24" PIPE OUTLET CONNECT TO STA. 113+41.00.

STA. 115+34 - STA. 115+65 CONSTRUCT TYPE A CURB & GUTTER ON LEFT AROUND INTERSECTION 47 LINEAR FEET

STA. 115+23.00 OVERLAY CITY STREET TURNOUTS ON LEFT = 109.6 SQ. YDS. EACH

STA. 111+15 - STA. 111+48 CONSTRUCT TYPE A CURB & GUTTER ON LEFT AROUND INTERSECTION 47 LINEAR FEET

STA. 111+73 - STA. 112+04 CONSTRUCT TYPE A CURB & GUTTER ON LEFT AROUND INTERSECTION 47 LINEAR FEET

STA. 112+90.00 CONSTRUCT PRIVATE ENTRANCE ON LEFT 12.0 SQ. YDS.

STA. 114+80 - STA. 115+11 CONSTRUCT TYPE A CURB & GUTTER ON LEFT AROUND INTERSECTION 47 LINEAR FEET

STA. 115+34 - STA. 115+65 CONSTRUCT TYPE A CURB & GUTTER ON LEFT AROUND INTERSECTION 47 LINEAR FEET

STA. 115+23.00 OVERLAY CITY STREET TURNOUTS ON LEFT = 109.6 SQ. YDS. EACH

STA. 116+82.00 CONSTRUCT A D.I. WITH 4' DIAMETER TYPE MO D.I. H=5.34 FT. ON THE LEFT WITH 8' EXTENSION, AND A 24" PIPE OUTLET CONNECT TO STA. 115+57.00.

N 74°41'44.3" E 112
1256.60'

WEST 6TH STREET

WEST 6TH STREET

STA. 111+14 - STA. 111+47 CONSTRUCT TYPE A CURB & GUTTER ON RIGHT AROUND INTERSECTION 47 LINEAR FEET

STA. 111+72 - STA. 112+03 CONSTRUCT TYPE A CURB & GUTTER ON RIGHT AROUND INTERSECTION 47 LINEAR FEET

STA. 112+39.00 CONSTRUCT PRIVATE ENTRANCE ON RIGHT 22.7 SQ. YDS.

STA. 114+11.00 CONSTRUCT PRIVATE ENTRANCE ON RIGHT 12.0 SQ. YDS.

STA. 115+36 - STA. 115+68 CONSTRUCT TYPE A CURB & GUTTER ON RIGHT AROUND INTERSECTION 47 LINEAR FEET

STA. 115+68.00 - STA. 118+66.00 CONSTRUCT TYPE A CURB & GUTTER ON RIGHT 298.0 LINEAR FEET

STA. 117+15.00 CONSTRUCT PRIVATE ENTRANCE ON LEFT 12.0 SQ. YDS.

STA. 111+61.00 OVERLAY CITY STREET TURNOUTS ON RIGHT = 109.6 SQ. YDS. EACH

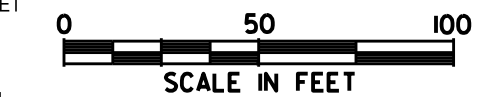
STA. 111+82.00 REMOVE D.I. ON RIGHT AND CONSTRUCT A D.I. WITH 4' DIAMETER TYPE MO H=4.06 FT. D.I. ON THE RIGHT WITH 8' EXTENSION, AND A 18" PIPE OUTLET CONNECT TO STA. 111+90.00.

STA. 112+03.00 - STA. 114+79.00 CONSTRUCT TYPE A CURB & GUTTER ON RIGHT 276.0 LINEAR FEET

STA. 114+79 - STA. 115+09 CONSTRUCT TYPE A CURB & GUTTER ON RIGHT AROUND INTERSECTION 47 LINEAR FEET

STA. 115+49.00 REMOVE AND CONSTRUCT A D.I. WITH 4' DIAMETER TYPE MO H=3.47 FT. D.I. ON THE RIGHT WITH 8' EXTENSION, AND A 18" PIPE OUTLET CONNECT TO STA. 115+57.00.

STA. 115+23.00 OVERLAY CITY STREET TURNOUTS ON RIGHT = 109.6 SQ. YDS. EACH



STA. 111+31.00 CONSTRUCT TYPE 2 WHEELCHAIR RAMP ON RIGHT 6.4 SQ. YDS.

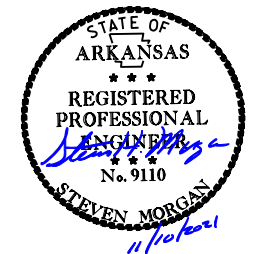
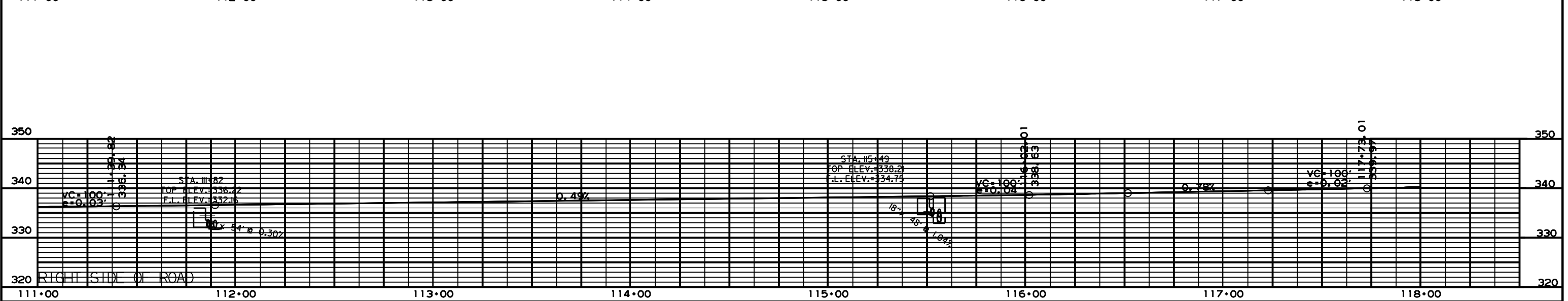
STA. 111+86.00 CONSTRUCT TYPE 3 WHEELCHAIR RAMP ON RIGHT 5.4 SQ. YDS.

STA. 112+00.00 - STA. 114+94.00 CONSTRUCT SIDEWALK ON RIGHT 163.30 SQ. YDS.

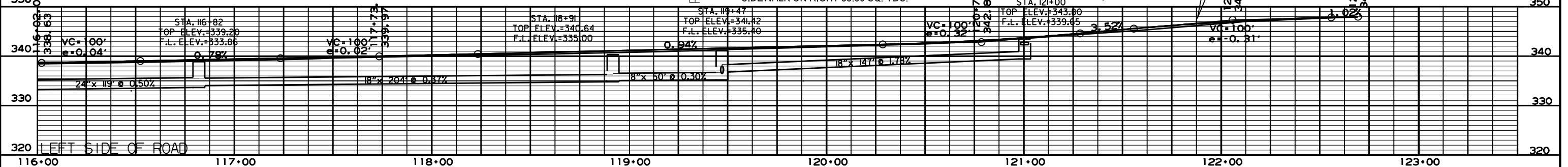
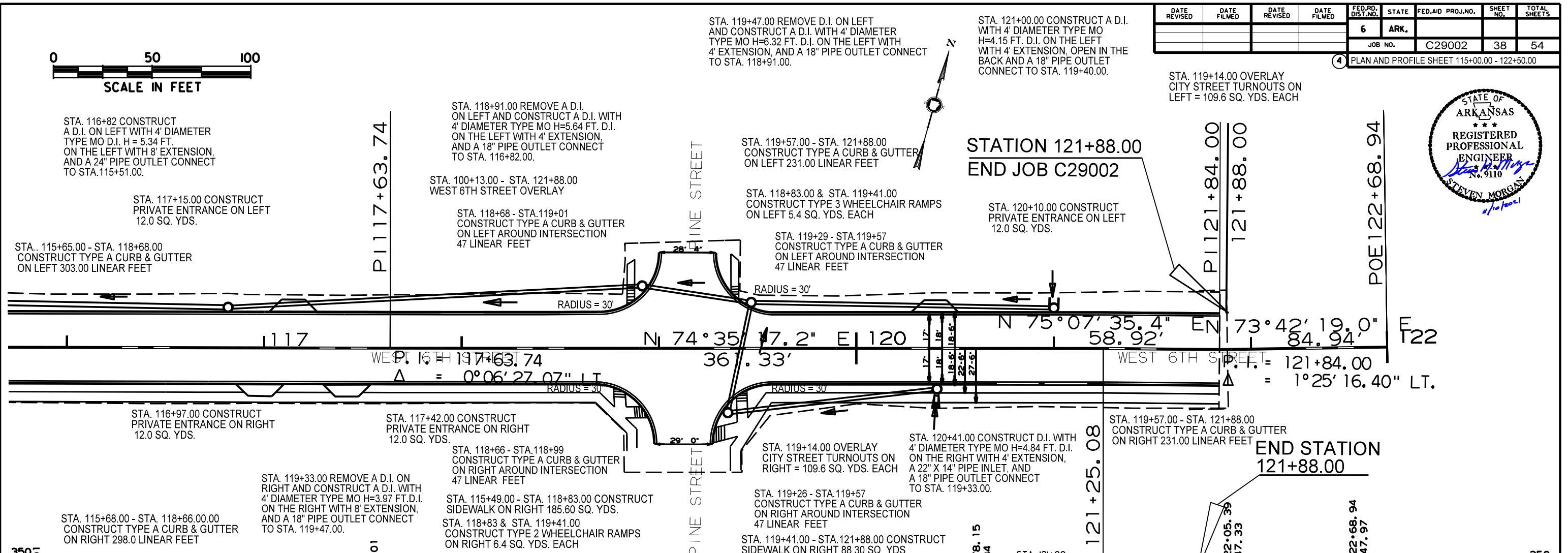
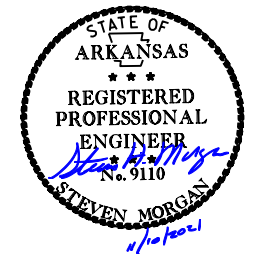
STA. 114+94.00 CONSTRUCT TYPE 2 WHEELCHAIR RAMP ON RIGHT 6.4 SQ. YDS.

STA. 115+49.00 CONSTRUCT TYPE 2 WHEELCHAIR RAMP ON RIGHT 6.4 SQ. YDS.

STA. 115+49.00 - STA. 118+83.00 CONSTRUCT SIDEWALK ON RIGHT 334 LINEAR FEET



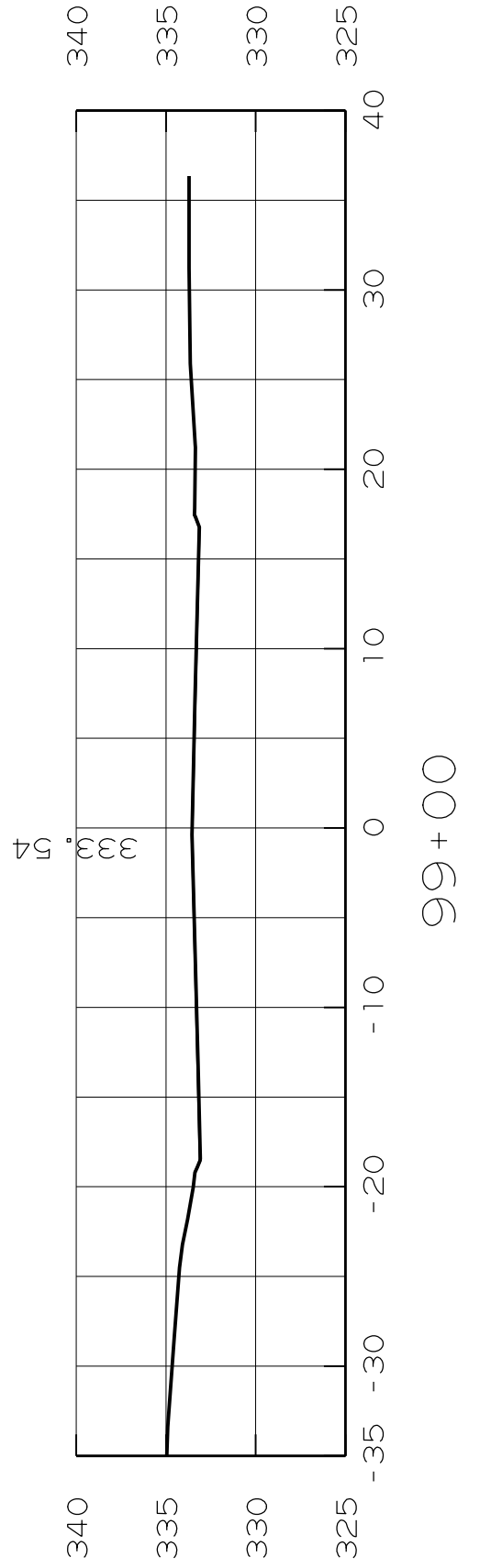
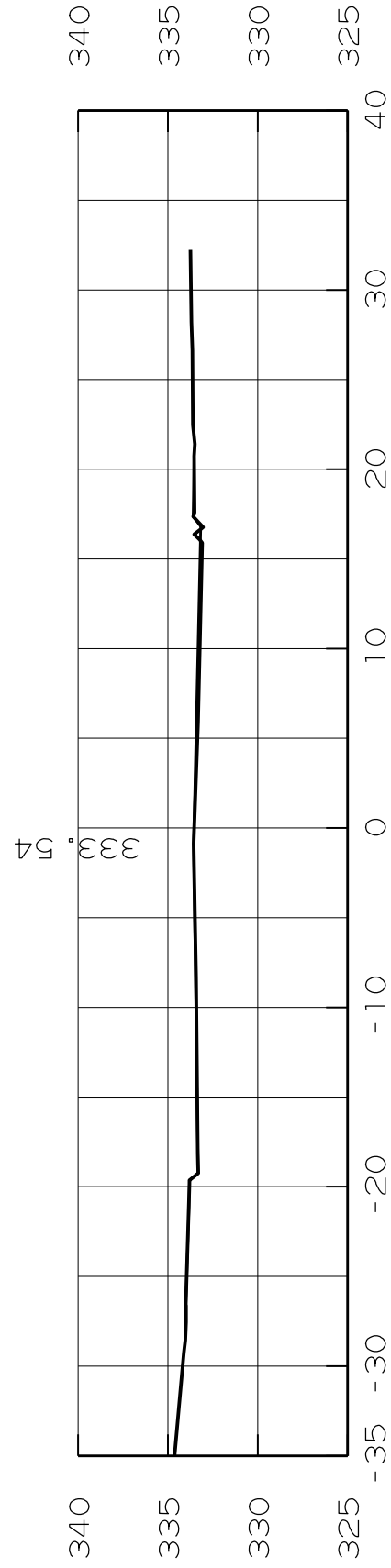
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	C29002	38	54	
				PLAN AND PROFILE SHEET 115+00.00 - 122+50.00				



THE PROJECT'S VERTICAL ELEVATIONS ARE APPROXIMATELY 2' ABOVE THE EXISTING SURFACE REFER TO THE TYPICAL SECTION AND CROSS SECTIONS FOR REPRESENTATIVE ELEVATIONS FOR THE CONSTRUCTION OF THE CURB & GUTTER.

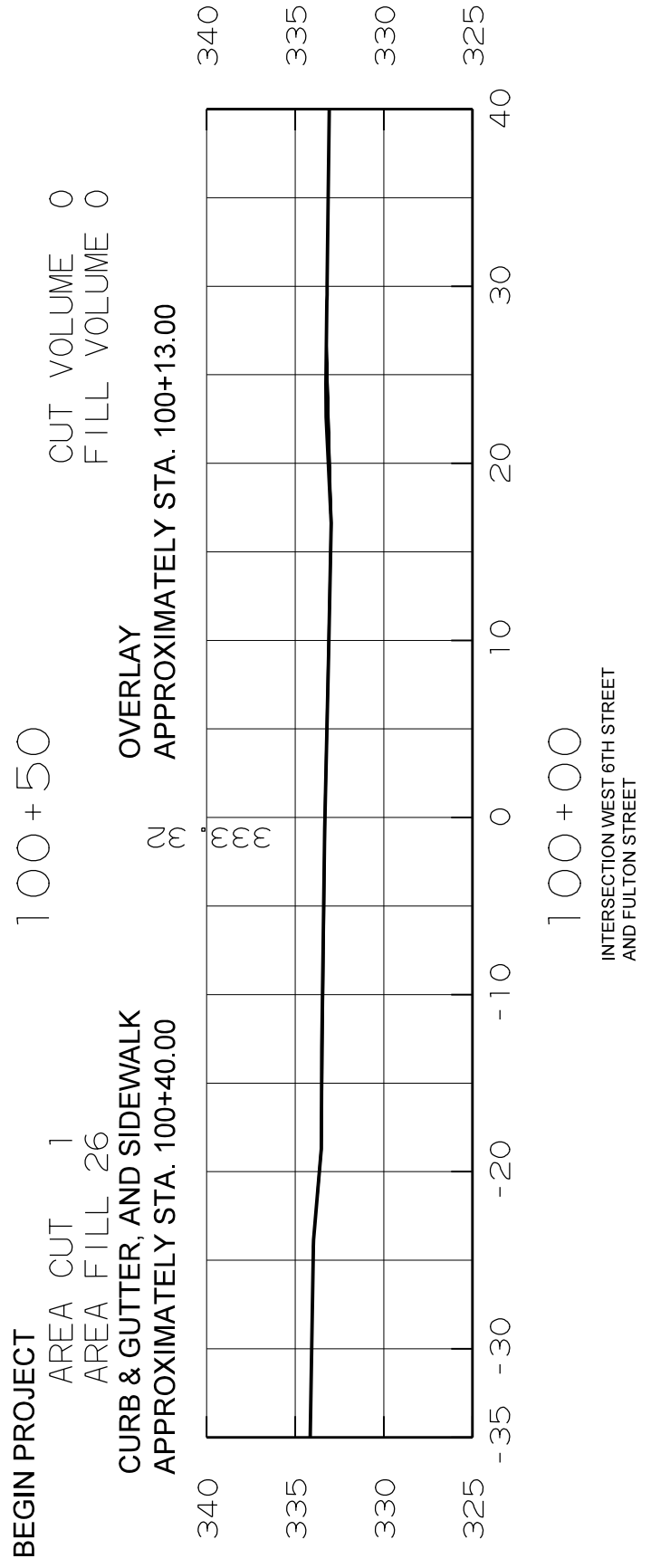
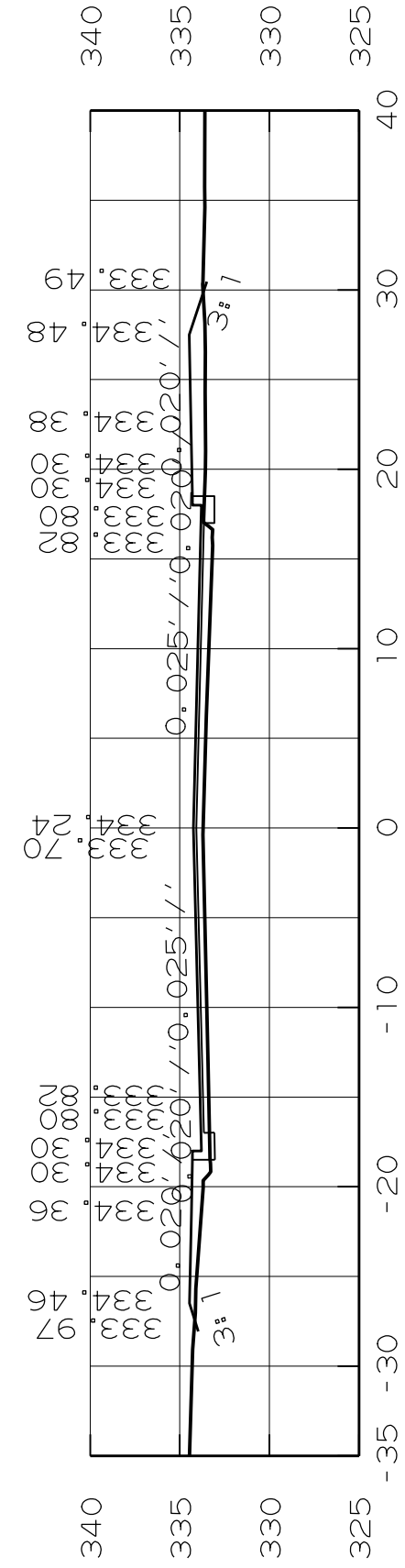
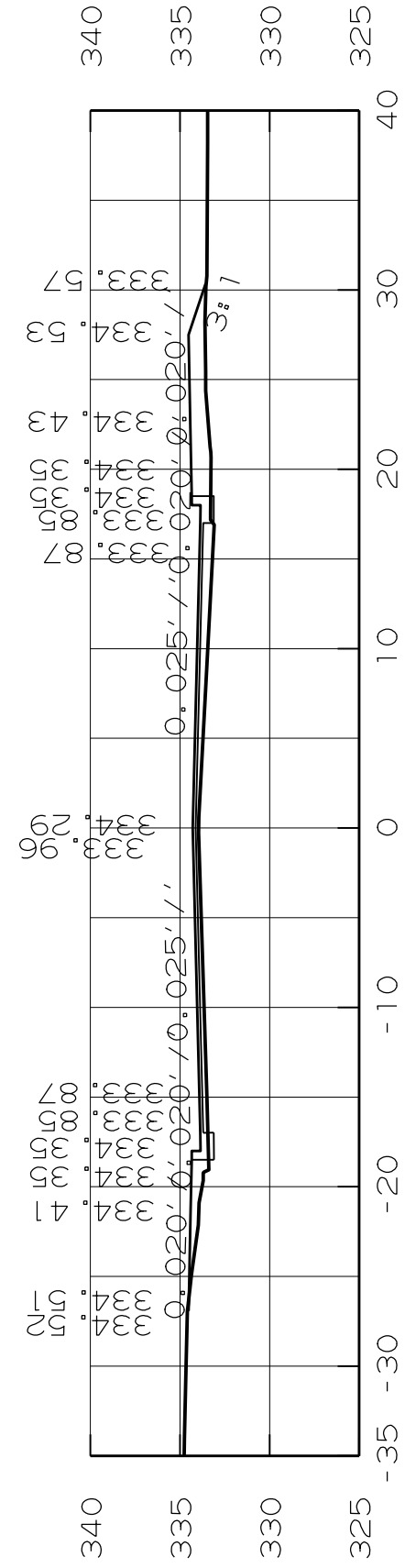
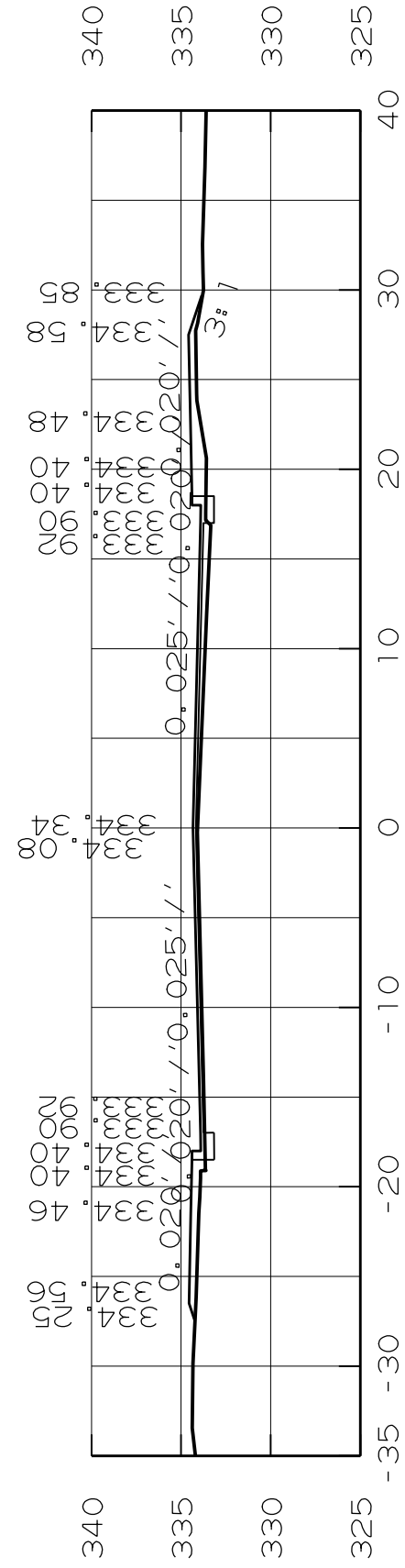
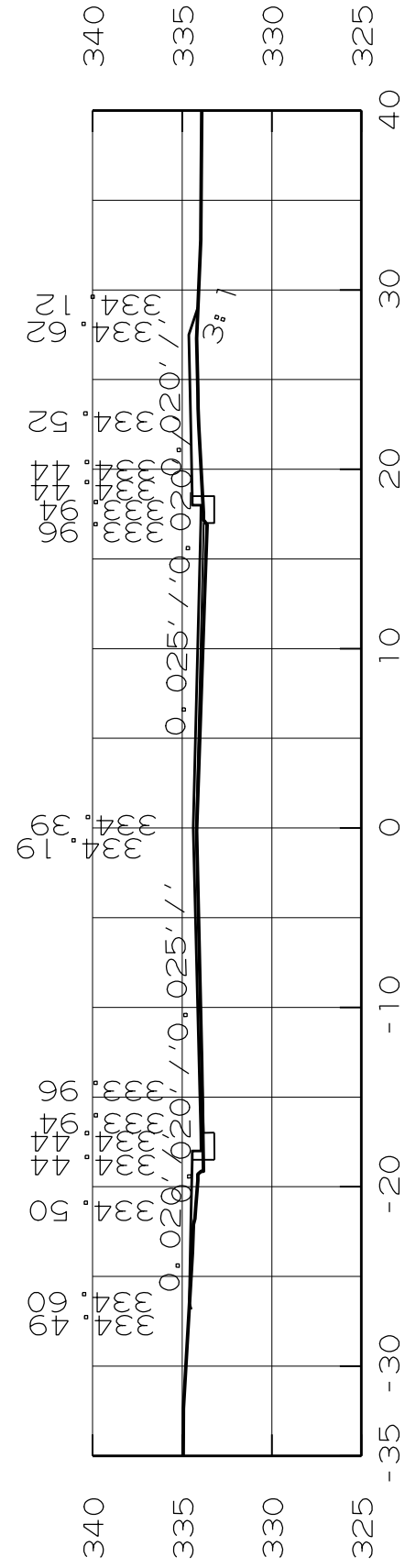
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				6	ARK.			
				JOB NO. C29002			39	54

④ STA. 97+90 TO STA. 99+50



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		40	54
				JOB NO.		C29002		

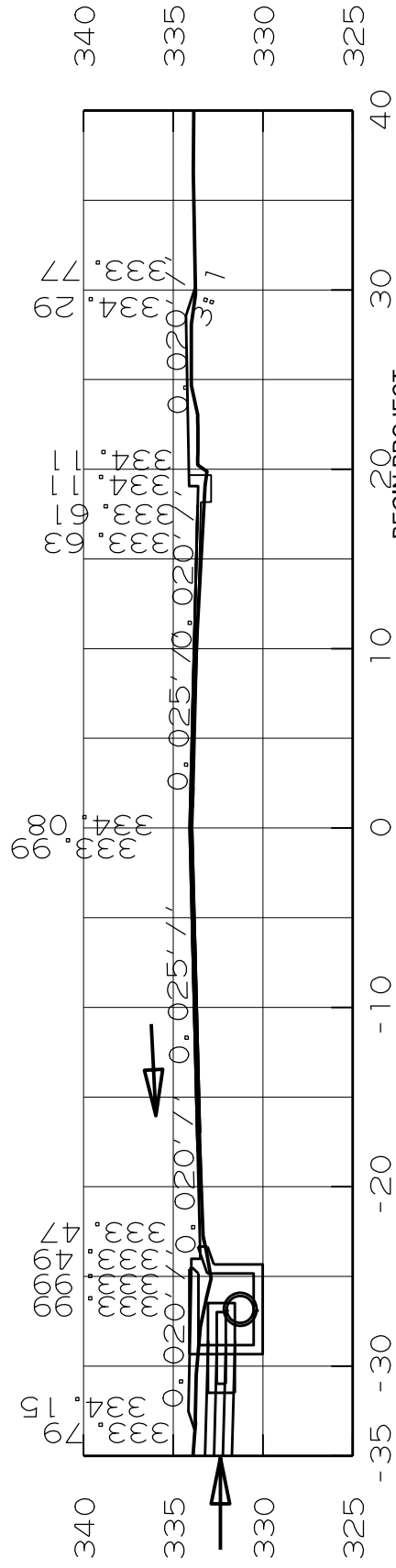
④ STA. 100+00 TO STA. 102+00



BEGIN PROJECT
 CURB & GUTTER, AND SIDEWALK
 APPROXIMATELY STA. 100+40.00

OVERLAY
 APPROXIMATELY STA. 100+13.00

100+00
 INTERSECTION WEST 6TH STREET
 AND FULTON STREET



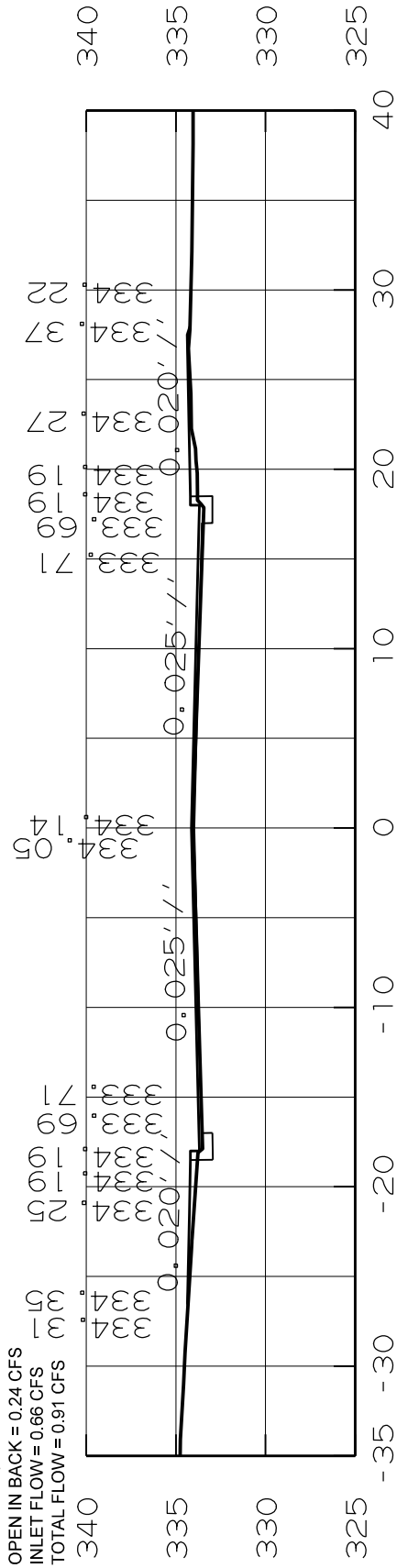
BEGIN PROJECT
STORM WATER DRAINAGE CONSTRUCTION
APPROXIMATELY STA. 104+22.00

104+22

AREA CUT 1
AREA FILL 16

CUT VOLUME 2
FILL VOLUME 8

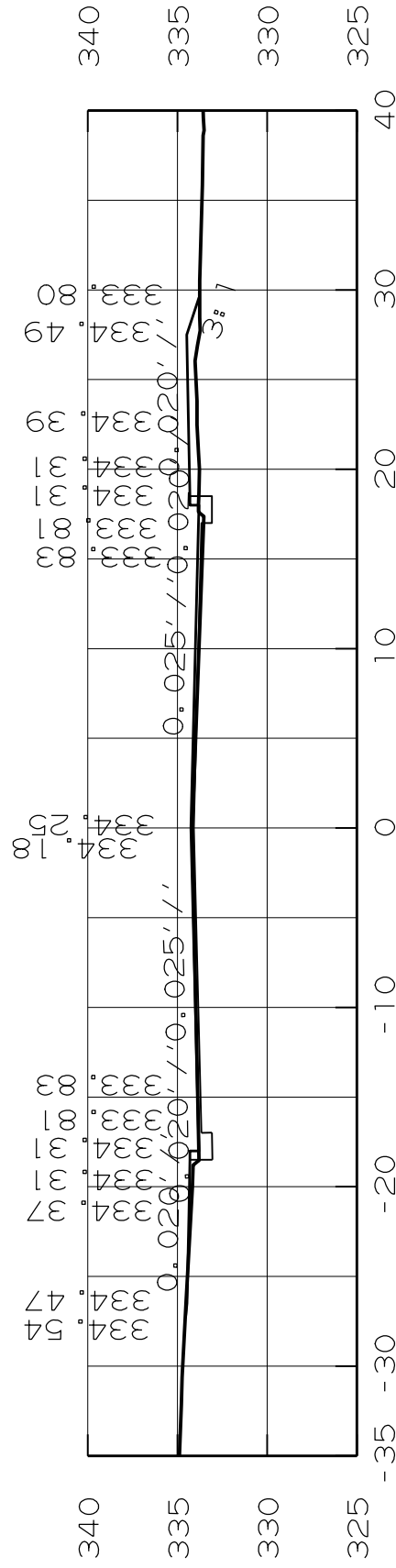
INLET - IN19
OPEN IN BACK = 0.24 CFS
INLET FLOW = 0.66 CFS
TOTAL FLOW = 0.91 CFS



104+00

AREA CUT 3
AREA FILL 4

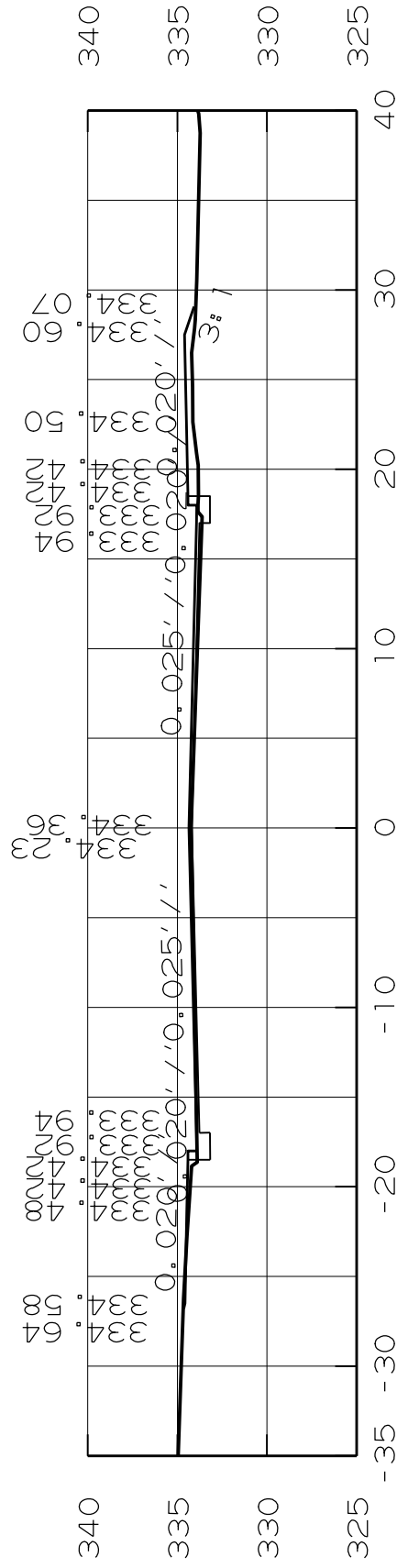
CUT VOLUME 7
FILL VOLUME 10



103+50

AREA CUT 5
AREA FILL 7

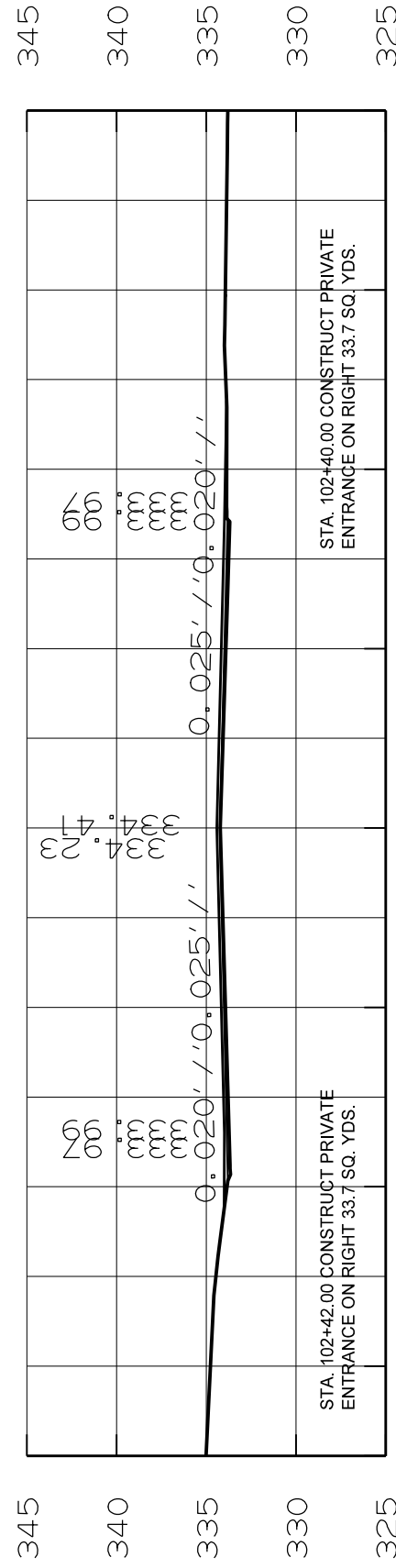
CUT VOLUME 9
FILL VOLUME 12



103+00

AREA CUT 4
AREA FILL 6

CUT VOLUME 5
FILL VOLUME 10



102+50

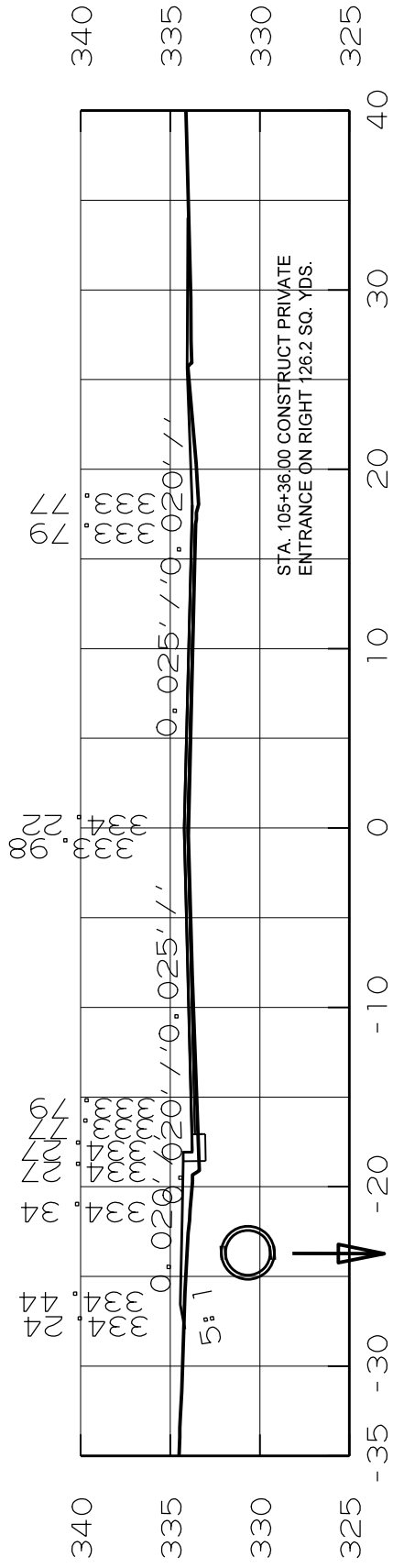
AREA CUT 0
AREA FILL 5

CUT VOLUME 2
FILL VOLUME 12

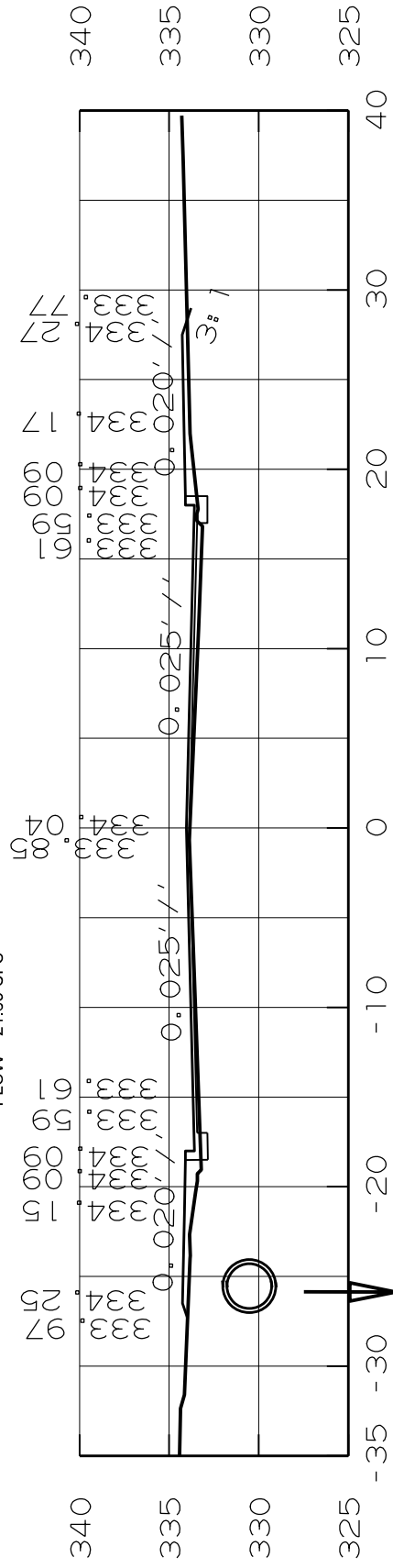
STA. 102+40.00 CONSTRUCT PRIVATE
ENTRANCE ON RIGHT 33.7 SQ. YDS.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		41	54
				JOB NO.		C29002		

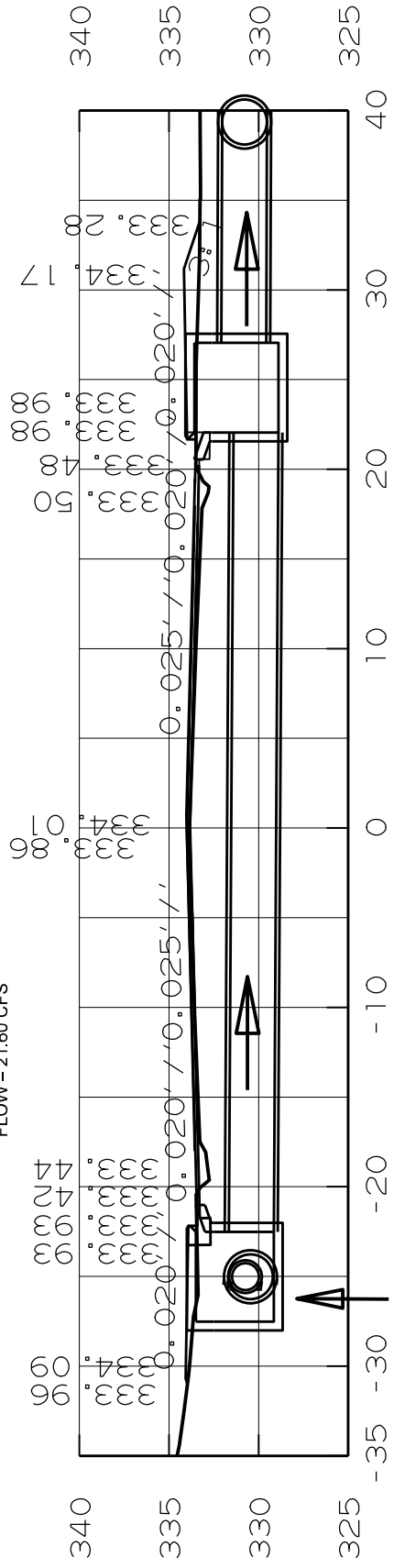
4 STA. 102+50 TO STA. 104+22



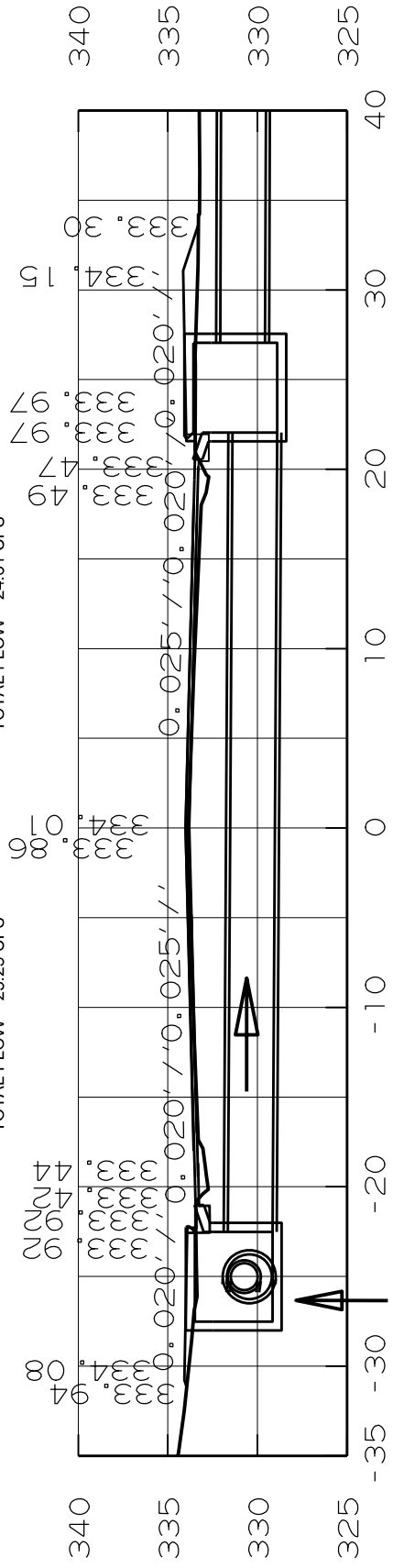
105+50
 AREA CUT 1
 AREA FILL 4
 30" RCP PIPE CONNECTING
 INLET 17 TO INLET 18
 FLOW = 21.60 CFS
 CUT VOLUME 3
 FILL VOLUME 16



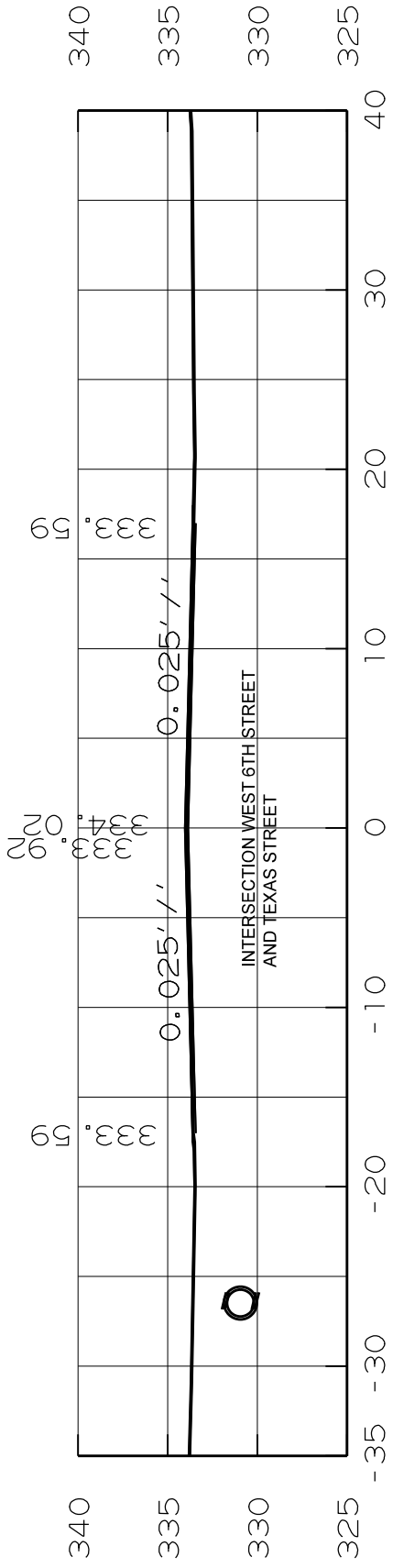
105+00
 AREA CUT 2
 AREA FILL 12
 30" RCP PIPE CONNECTING
 INLET 17 TO INLET 18
 FLOW = 21.60 CFS
 CUT VOLUME 2
 FILL VOLUME 16



104+71
 AREA CUT 1
 AREA FILL 17
 INLET - IN18
 30" PIPE = 21.60 CFS
 18" PIPE = 0.91 CFS
 INLET FLOW = 0.72 CFS
 TOTAL FLOW = 23.23 CFS
 INLET - IN20
 30" PIPE = 23.23 CFS
 INLET FLOW = 1.38 CFS
 TOTAL FLOW = 24.61 CFS
 CUT VOLUME 0
 FILL VOLUME 0



104+70
 AREA CUT 1
 AREA FILL 18
 INLET - IN18
 30" PIPE = 21.60 CFS
 18" PIPE = 0.91 CFS
 INLET FLOW = 0.72 CFS
 TOTAL FLOW = 23.23 CFS
 INLET - IN20
 30" PIPE = 23.23 CFS
 INLET FLOW = 1.38 CFS
 TOTAL FLOW = 24.61 CFS
 CUT VOLUME 0
 FILL VOLUME 7

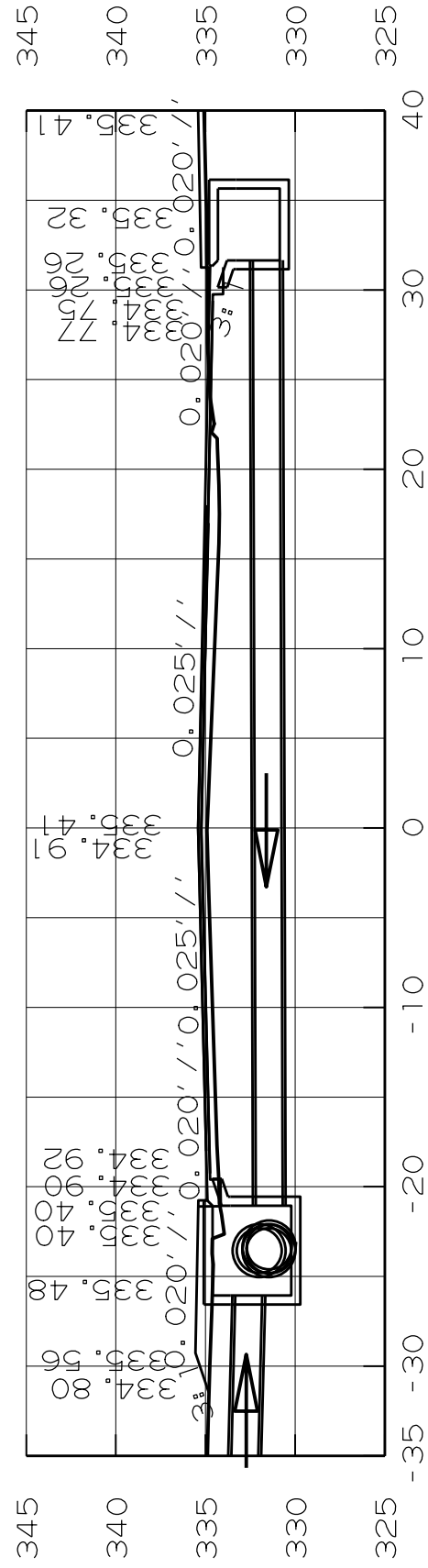


104+50
 18" RCP CROSS DRAIN PIPE CONNECTING
 INLET 19 - INLET 18
 FLOW = 0.91 CFS
 AREA CUT 0
 AREA FILL 0
 CUT VOLUME 1
 FILL VOLUME 9

DATE REVISION	DATE FILMED	DATE REVISION	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		42	54
				JOB NO. C29002				
④ STA. 104+50 TO STA. 105+50								

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		44	54
				JOB NO.		C29002		

④ STA. 107+43 TO STA. 108+18

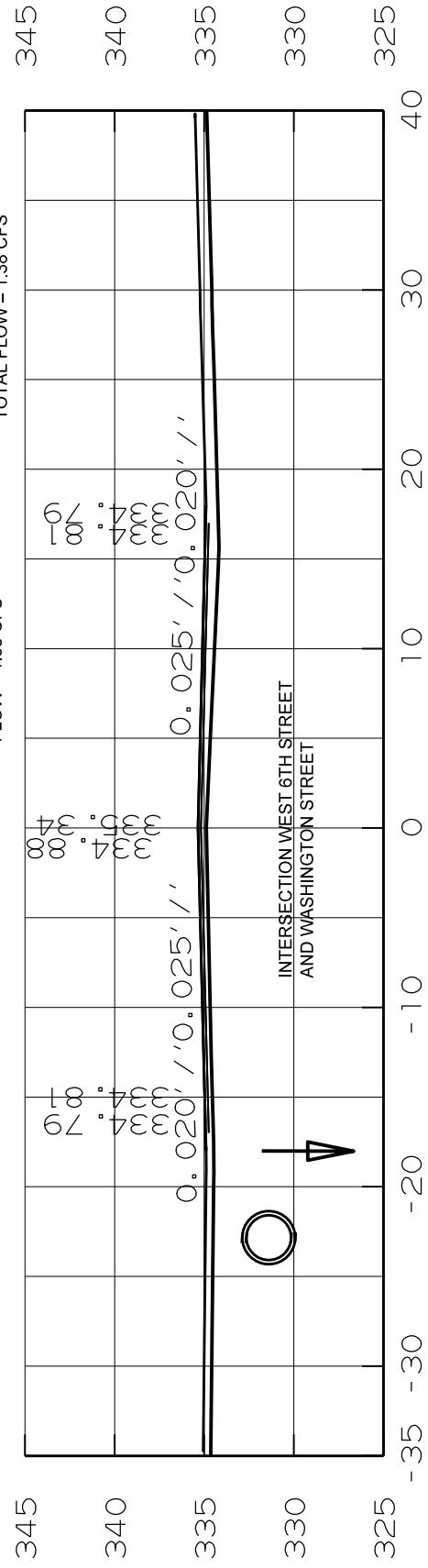


AREA CUT 6
AREA FILL 12
108+18
CUT VOLUME 2
FILL VOLUME 8

18" RCP PIPE CONNECTING
DRAINAGE DITCH TO INLET 14
FLOW = .44 CFS

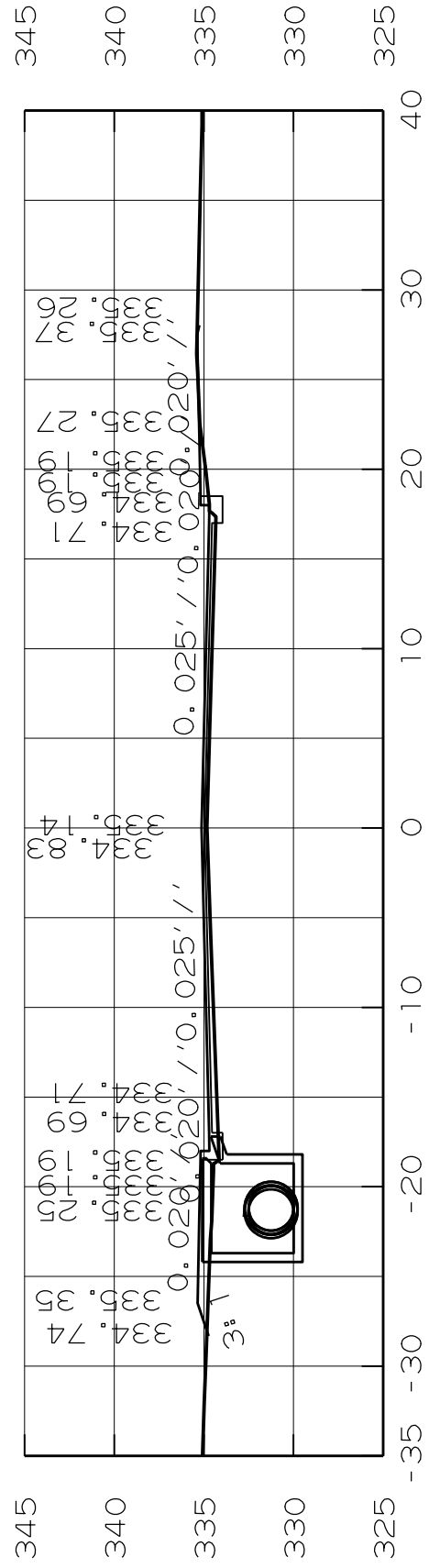
INLET - IN14
18" PIPE = 0.44 CFS
30" PIPE = 17.45 CFS
18" PIPE = 1.38 CFS
INLET FLOW = 0.66 CFS
TOTAL FLOW = 19.93 CFS

18" RCP PIPE CONNECTING
INLET 14 TO INLET 15
FLOW = 1.38 CFS
INLET - IN15
INLET FLOW = 1.38 CFS
TOTAL FLOW = 1.38 CFS



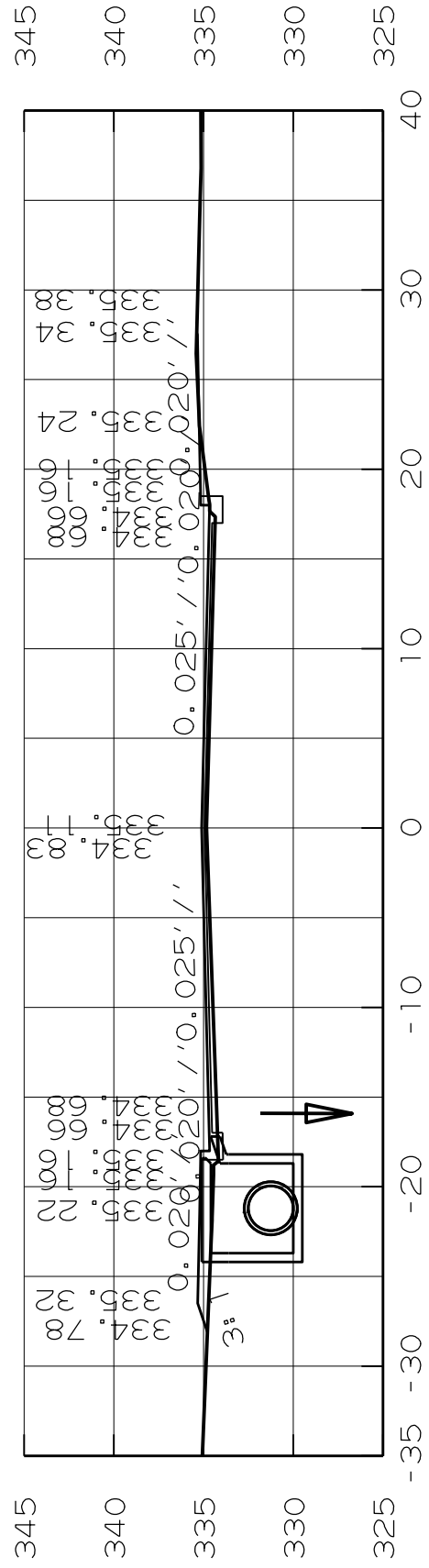
AREA CUT 0
AREA FILL 12
108+00
CUT VOLUME 1
FILL VOLUME 24

30" RCP PIPE CONNECTING
INLET 14 TO INLET 16
FLOW = 19.93 CFS



AREA CUT 1
AREA FILL 14
107+50
CUT VOLUME 0
FILL VOLUME 4

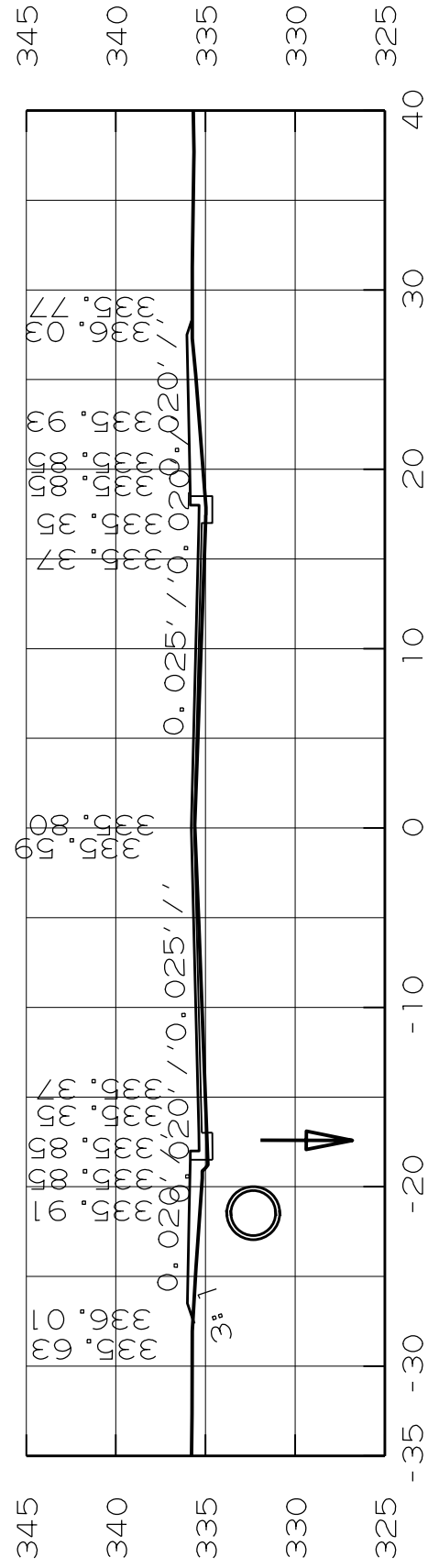
INLET - IN16
30" PIPE = 19.93 CFS
INLET FLOW = 0.55 CFS
TOTAL FLOW = 20.48 CFS



AREA CUT 2
AREA FILL 13
107+43
CUT VOLUME 4
FILL VOLUME 18

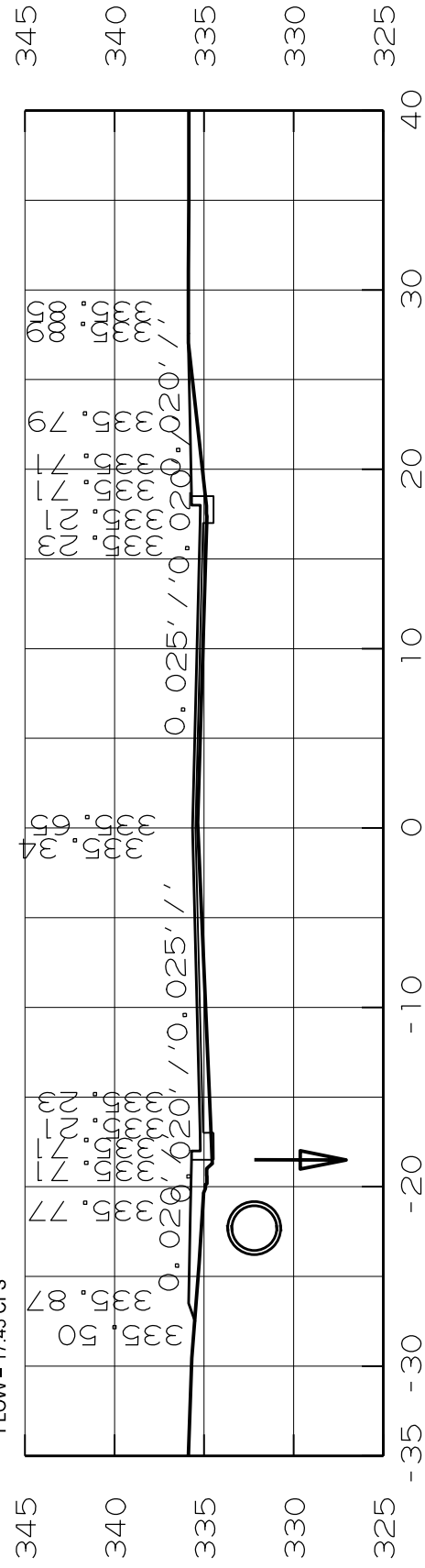
INLET - IN16
30" PIPE = 19.93 CFS
INLET FLOW = 0.55 CFS
TOTAL FLOW = 20.48 CFS

INLET - IN13
 OPEN IN BACK = 0.41 CFS
 INLET FLOW = 0.50 CFS
 TOTAL FLOW = 17.45 CFS



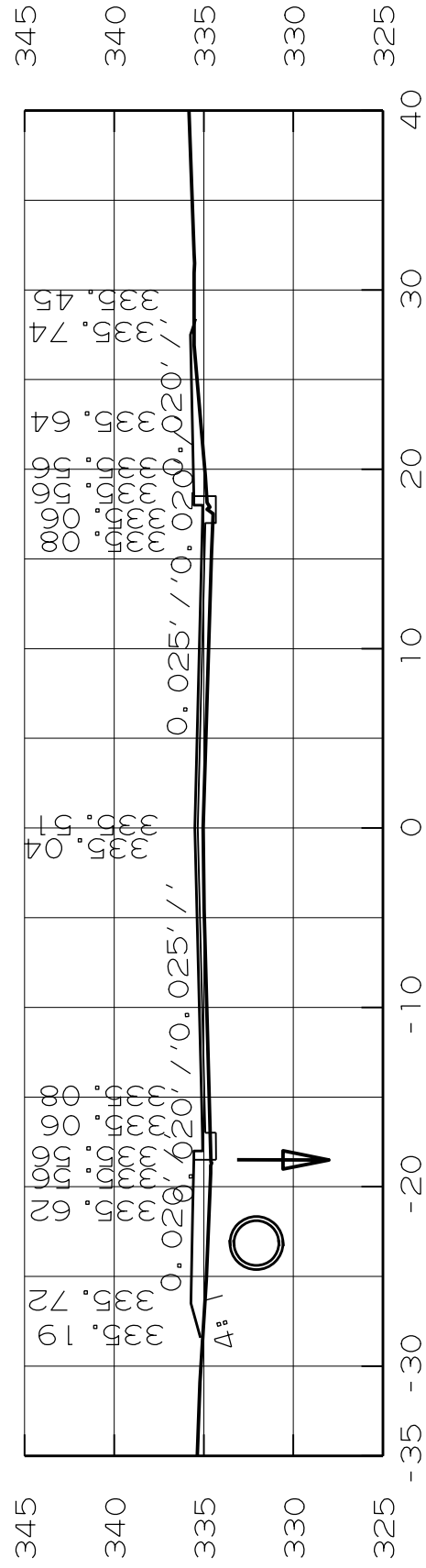
AREA CUT 1
 AREA FILL 15
 109+50
 CUT VOLUME 2
 FILL VOLUME 30

30" RCP PIPE CONNECTING
 INLET 13 TO INLET 14
 FLOW = 17.45 CFS



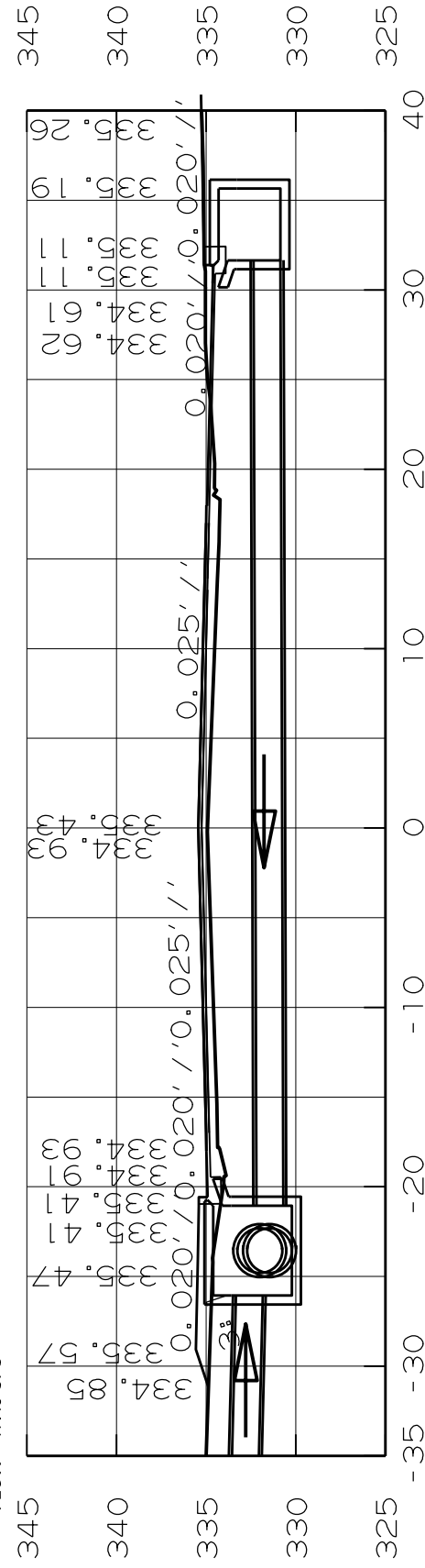
AREA CUT 1
 AREA FILL 17
 109+00
 CUT VOLUME 0
 FILL VOLUME 37

30" RCP PIPE CONNECTING
 INLET 13 TO INLET 14
 FLOW = 17.45 CFS



AREA CUT 1
 AREA FILL 23
 108+50
 CUT VOLUME 3
 FILL VOLUME 16

30" RCP PIPE CONNECTING
 INLET 13 TO INLET 14
 FLOW = 17.45 CFS



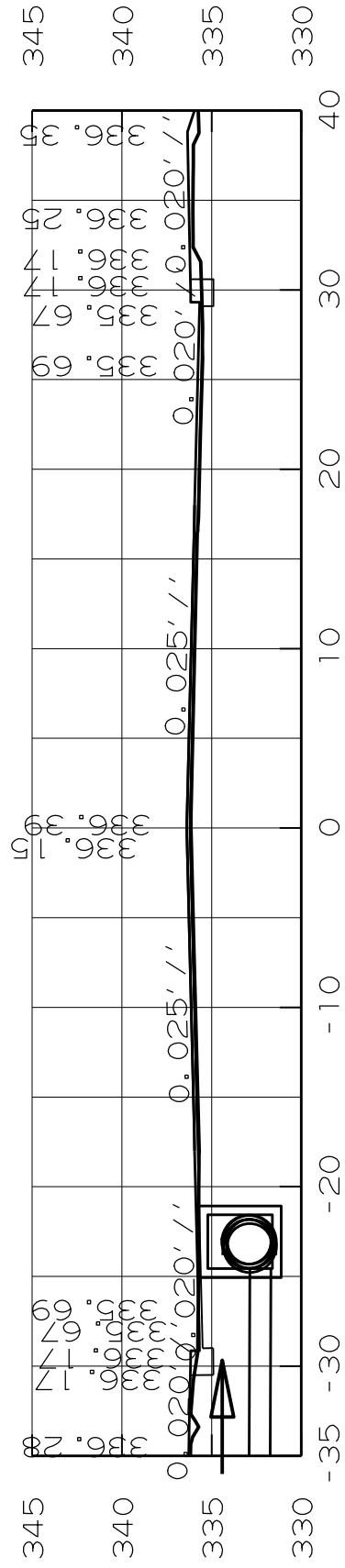
18" RCP PIPE CONNECTING
 DRAINAGE DITCH TO INLET 14
 FLOW = .44 CFS
 AREA CUT 6
 AREA FILL 12
 108+25
 INLET - IN14
 18" PIPE = 0.44 CFS
 30" PIPE = 17.45 CFS
 18" PIPE = 1.38 CFS
 INLET FLOW = 0.66 CFS
 TOTAL FLOW = 19.93 CFS
 18" RCP PIPE CONNECTING
 INLET 14 TO INLET 15
 FLOW = 1.38 CFS
 INLET - IN15
 INLET FLOW = 1.38 CFS
 TOTAL FLOW = 1.38 CFS
 CUT VOLUME 2
 FILL VOLUME 3

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		45	54
				JOB NO. C29002				

4 STA. 108+25 TO STA. 109+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		46	54
				JOB NO.		C29002		

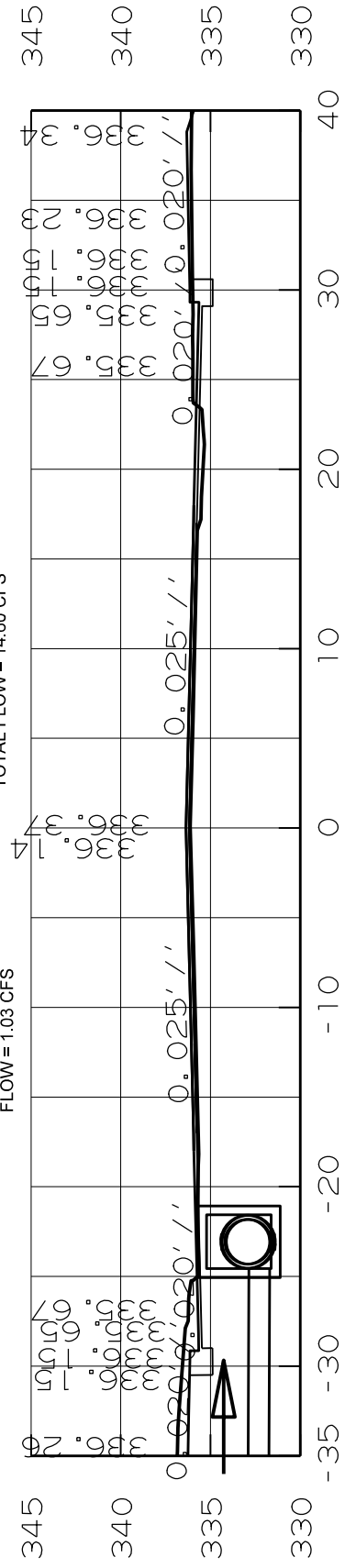
4 STA. 110+00 TO STA. 111+45



111+45
 AREA CUT 15
 AREA FILL 5
 CUT VOLUME 3
 FILL VOLUME 1

22" X 14" RC ARCHED PIPE
 CONNECTING TO JUNCTION
 BOX, DRAINING THE LEFT
 SIDE OF GRADY STREET.
 FLOW = 1.03 CFS

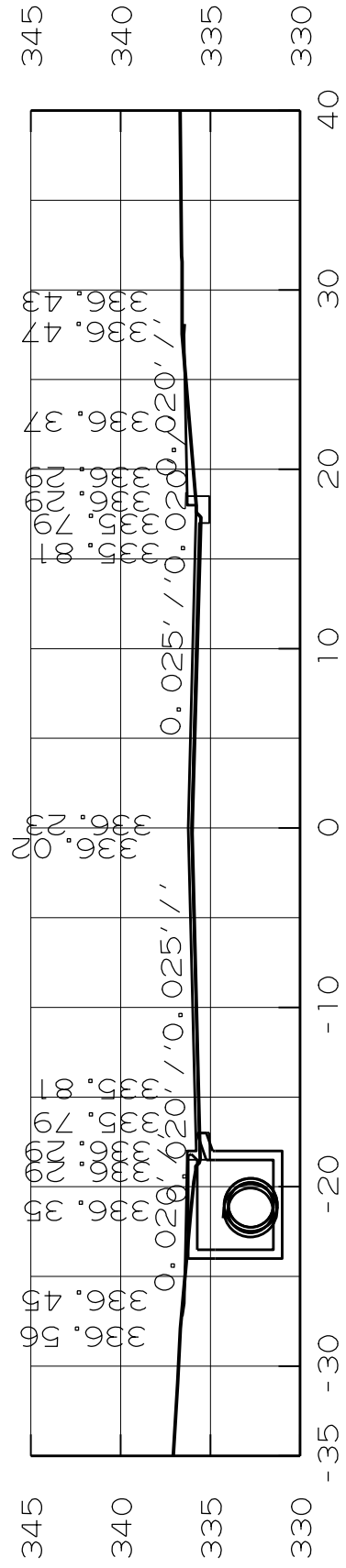
JUNCTION BOX & MAN HOLE
 30" RCP INFLOW = 13.57 CFS
 22" X 14" ARCHED RCP INFLOW = 1.03 CFS
 TOTAL FLOW = 14.60 CFS



111+40
 AREA CUT 15
 AREA FILL 5
 CUT VOLUME 13
 FILL VOLUME 7

22" X 14" RC ARCHED PIPE
 CONNECTING TO JUNCTION
 BOX, DRAINING THE LEFT
 SIDE OF GRADY STREET.
 FLOW = 1.03 CFS

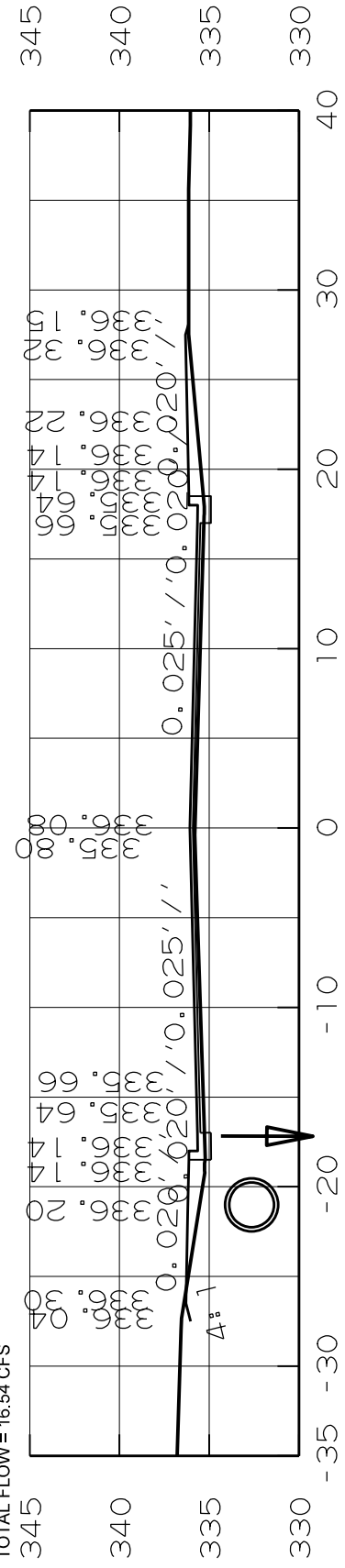
JUNCTION BOX & MAN HOLE
 30" RCP INFLOW = 13.57 CFS
 22" X 14" ARCHED RCP INFLOW = 1.03 CFS
 TOTAL FLOW = 14.60 CFS



111+00
 AREA CUT 2
 AREA FILL 5
 CUT VOLUME 3
 FILL VOLUME 17

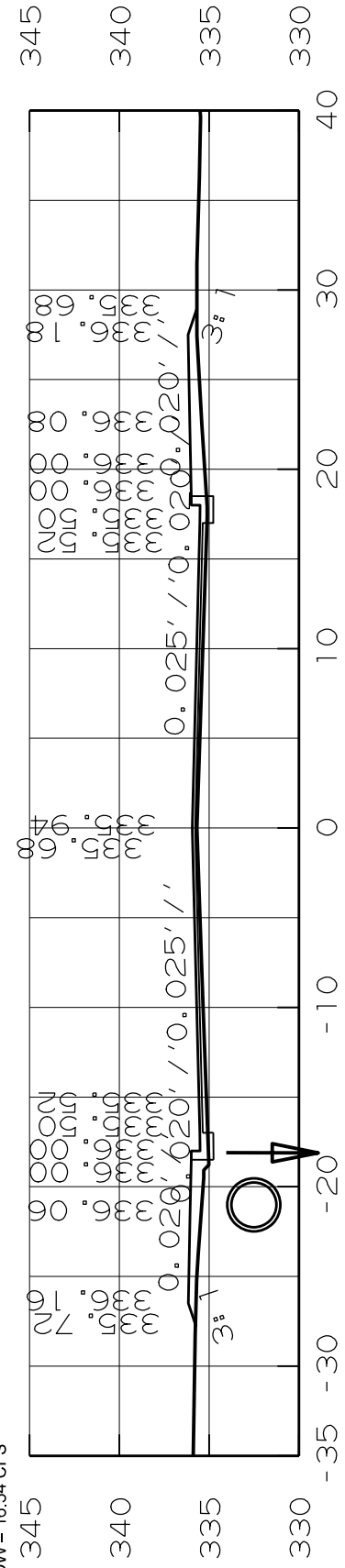
INLET 12
 30" PIPE = 14.60 CFS
 INLET FLOW = 1.93 CFS
 TOTAL FLOW = 16.54 CFS

30" RCP PIPE CONNECTING
 JUNCTION BOX TO INLET 12
 FLOW = 14.60 CFS



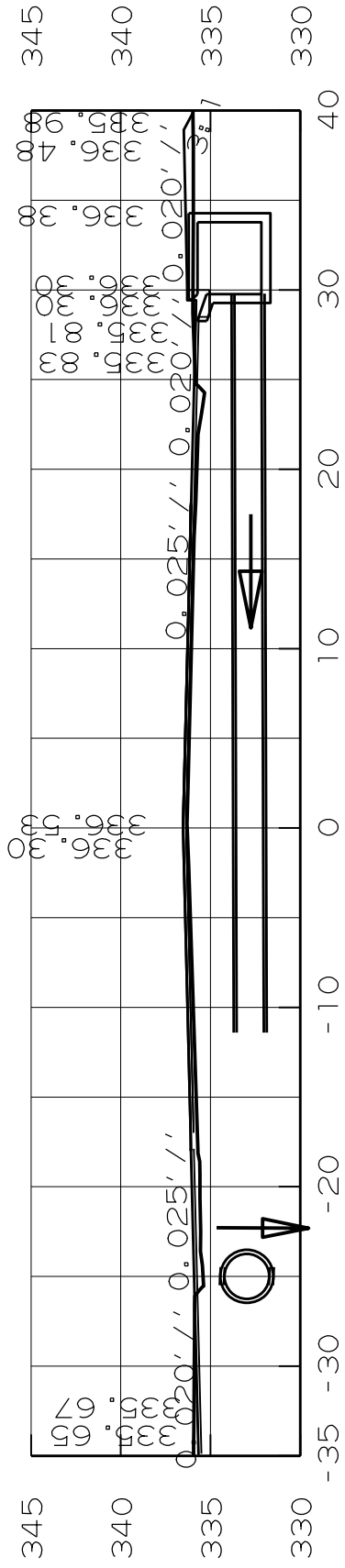
110+50
 AREA CUT 1
 AREA FILL 13
 CUT VOLUME 2
 FILL VOLUME 28

30" RCP PIPE CONNECTING
 INLET 12 TO INLET 13
 FLOW = 16.54 CFS



110+00
 AREA CUT 1
 AREA FILL 17
 CUT VOLUME 2
 FILL VOLUME 30

30" RCP PIPE CONNECTING
 INLET 12 TO INLET 13
 FLOW = 16.54 CFS



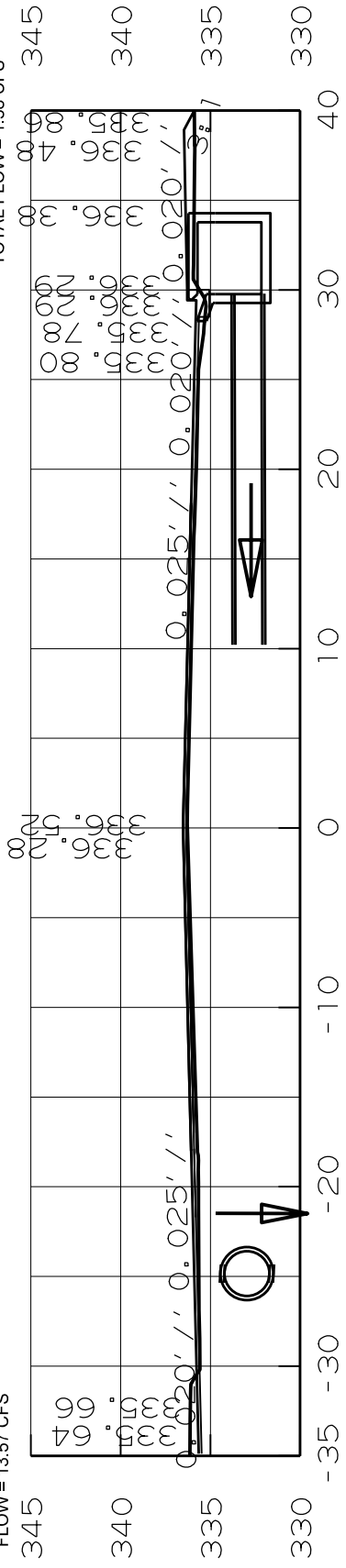
111+78

AREA CUT 7
AREA FILL 15

30" RCP PIPE CONNECTING
INLET 10 TO JUNCTION BOX
FLOW = 13.57 CFS

18" RCP PIPE CONNECTING
INLET 11 TO INLET 10
FLOW = 1.38 CFS

CUT VOLUME 1
FILL VOLUME 2



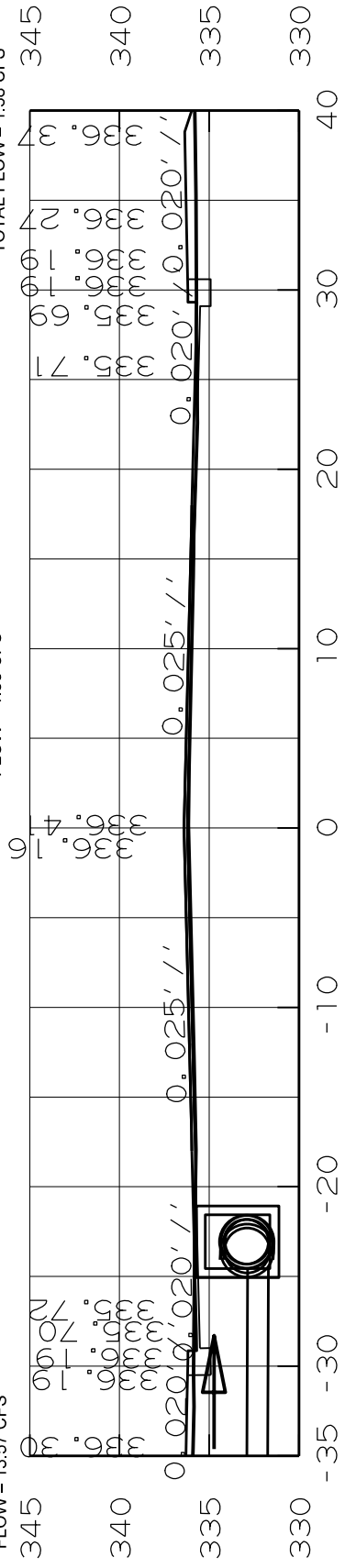
111+75

AREA CUT 8
AREA FILL 12

30" RCP PIPE CONNECTING
INLET 10 TO JUNCTION BOX
FLOW = 13.57 CFS

18" RCP PIPE CONNECTING
INLET 11 TO INLET 10
FLOW = 1.38 CFS

CUT VOLUME 8
FILL VOLUME 12



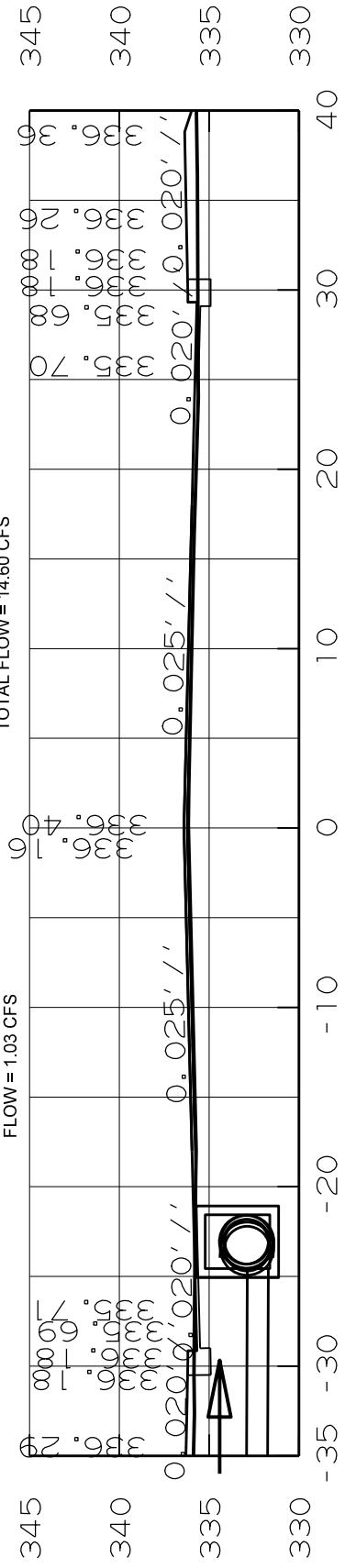
111+50

AREA CUT 9
AREA FILL 11

22" X 14" RC ARCHED PIPE
CONNECTING TO JUNCTION
BOX, DRAINING THE LEFT
SIDE OF GRADY STREET.
FLOW = 1.03 CFS

JUNCTION BOX & MAN HOLE
30" RCP INFLOW = 13.57 CFS
22" X 14" ARCHED RCP INFLOW = 1.03 CFS
TOTAL FLOW = 14.60 CFS

CUT VOLUME 9
FILL VOLUME 11



111+48

AREA CUT 9
AREA FILL 11

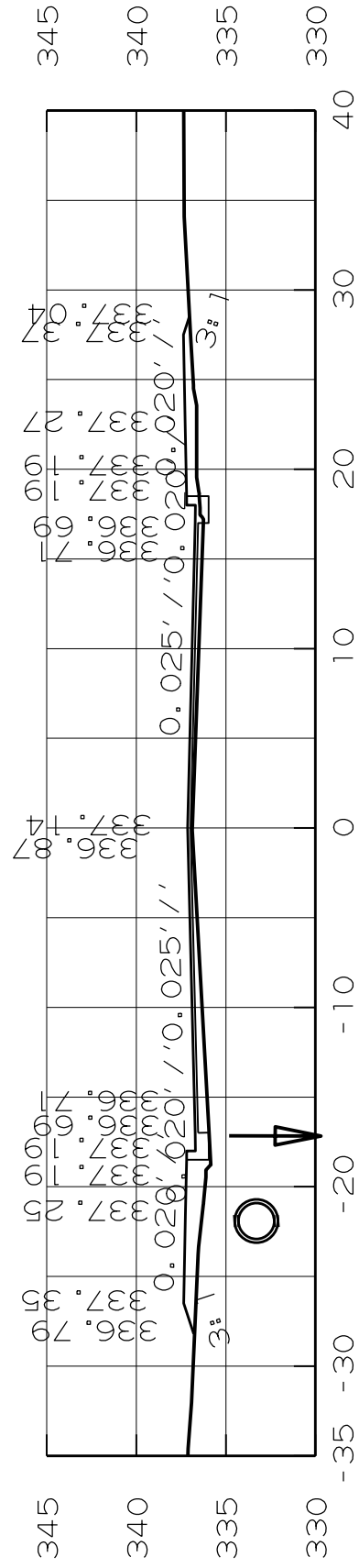
22" X 14" RC ARCHED PIPE
CONNECTING TO JUNCTION
BOX, DRAINING THE LEFT
SIDE OF GRADY STREET.
FLOW = 1.03 CFS

JUNCTION BOX & MAN HOLE
30" RCP INFLOW = 13.57 CFS
22" X 14" ARCHED RCP INFLOW = 1.03 CFS
TOTAL FLOW = 14.60 CFS

CUT VOLUME 9
FILL VOLUME 11

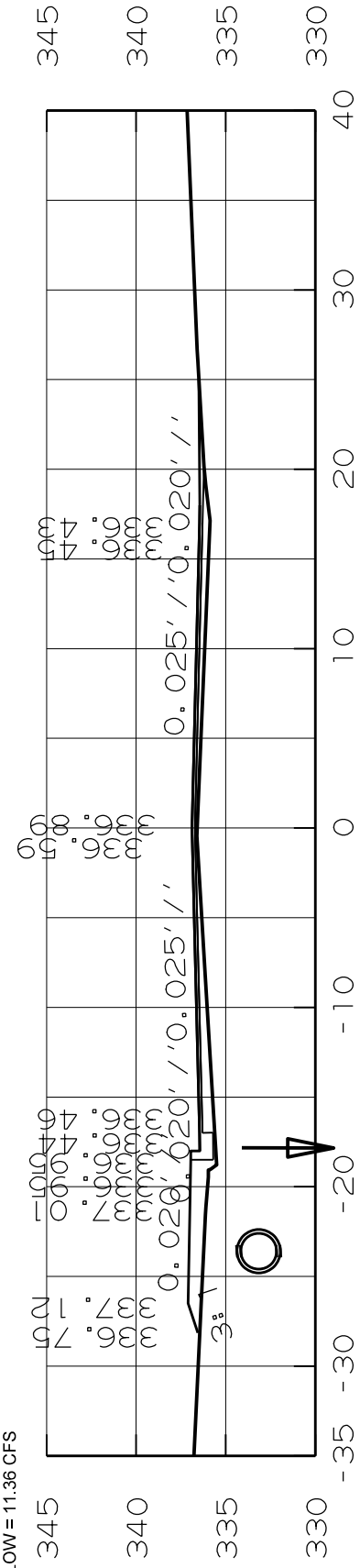
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. C29002	47	54

④ STA. 111+48 TO STA. 111+82



113+00
 AREA CUT 1
 AREA FILL 22
 CUT VOLUME 2
 FILL VOLUME 36

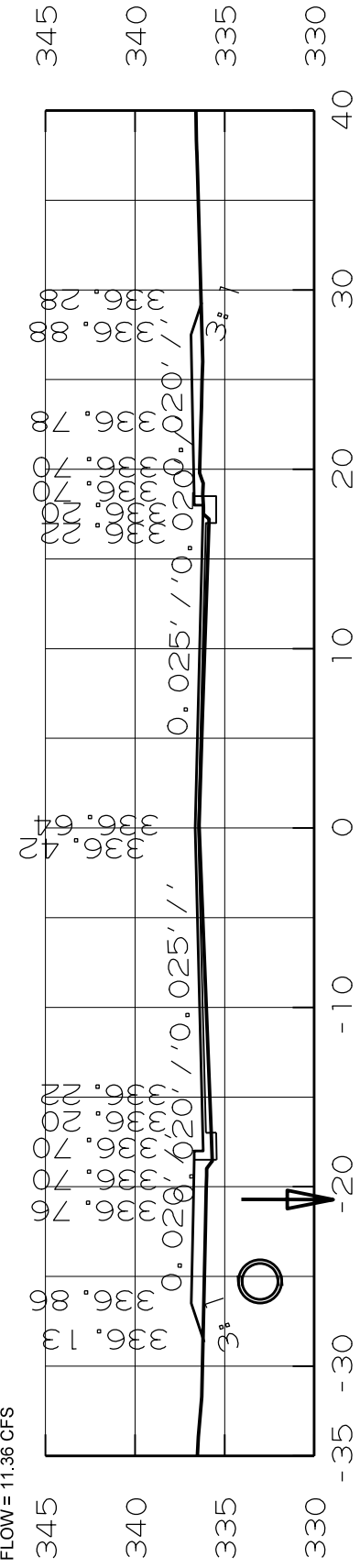
24" RCP PIPE CONNECTING
 INLET 9 TO INLET 10
 FLOW = 11.36 CFS



112+50
 AREA CUT 1
 AREA FILL 16
 CUT VOLUME 1
 FILL VOLUME 30

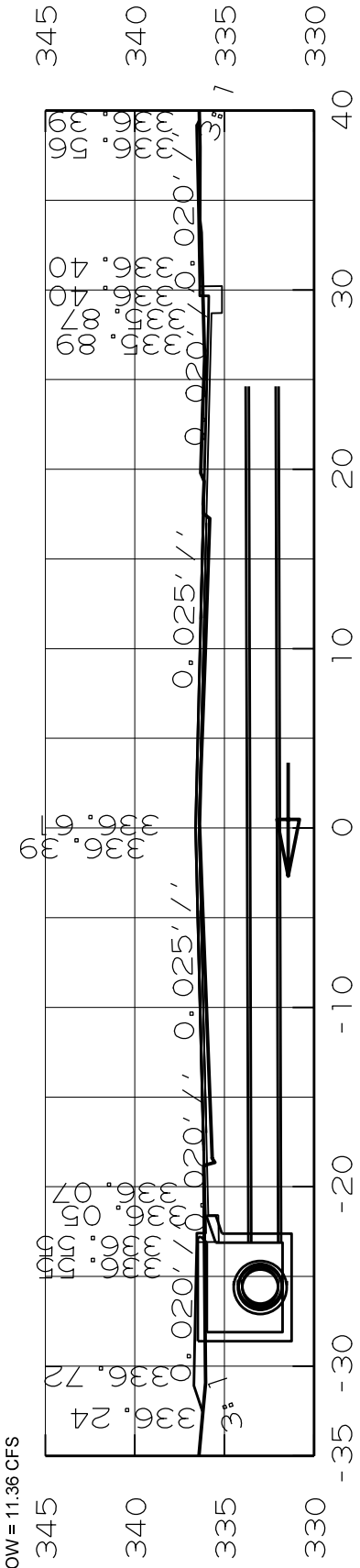
STA. 112+39 CONSTRUCT PRIVATE
 ENTRANCE ON RIGHT 126.2 SQ. YDS.

24" RCP PIPE CONNECTING
 INLET 9 TO INLET 10
 FLOW = 11.36 CFS



112+00
 AREA CUT 1
 AREA FILL 16
 CUT VOLUME 1
 FILL VOLUME 3

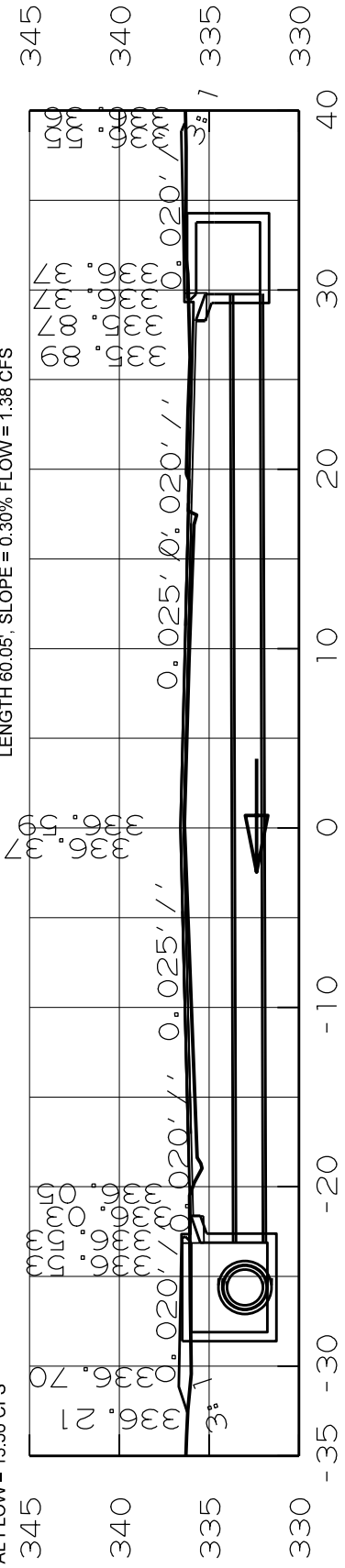
24" RCP PIPE CONNECTING
 INLET 9 TO INLET 10
 FLOW = 11.36 CFS



111+93
 AREA CUT 6
 AREA FILL 7
 CUT VOLUME 1
 FILL VOLUME 1

INLET - IN10
 24" PIPE = 11.36 CFS
 INLET FLOW = 0.83 CFS
 18" PIPE = 1.38 CFS
 TOTAL FLOW = 13.56 CFS

18" RCP PIPE CONNECTING
 INLET 11 TO INLET 10
 LENGTH 60.05', SLOPE = 0.30% FLOW = 1.38 CFS



111+90
 AREA CUT 6
 AREA FILL 8
 CUT VOLUME 3
 FILL VOLUME 5

INLET - IN10
 24" PIPE = 11.36 CFS
 INLET FLOW = 0.83 CFS
 18" PIPE = 1.38 CFS
 TOTAL FLOW = 13.56 CFS

18" RCP PIPE CONNECTING
 INLET 11 TO INLET 10
 FLOW = 1.38 CFS

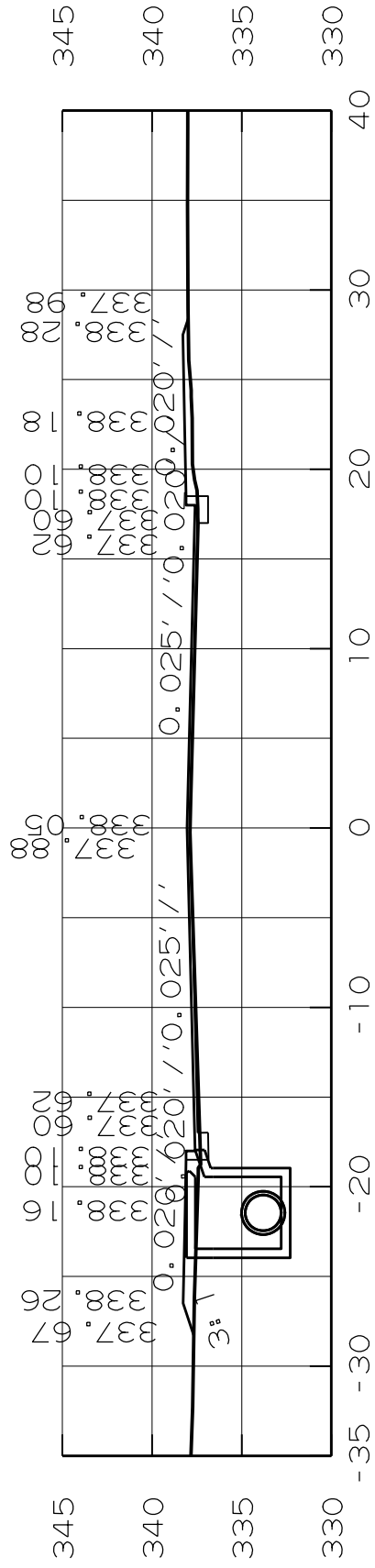
INLET - IN11
 INLET FLOW = 1.38 CFS
 TOTAL FLOW = 1.38 CFS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. C29002	48	54

4 STA. 111+90 TO STA. 113+00

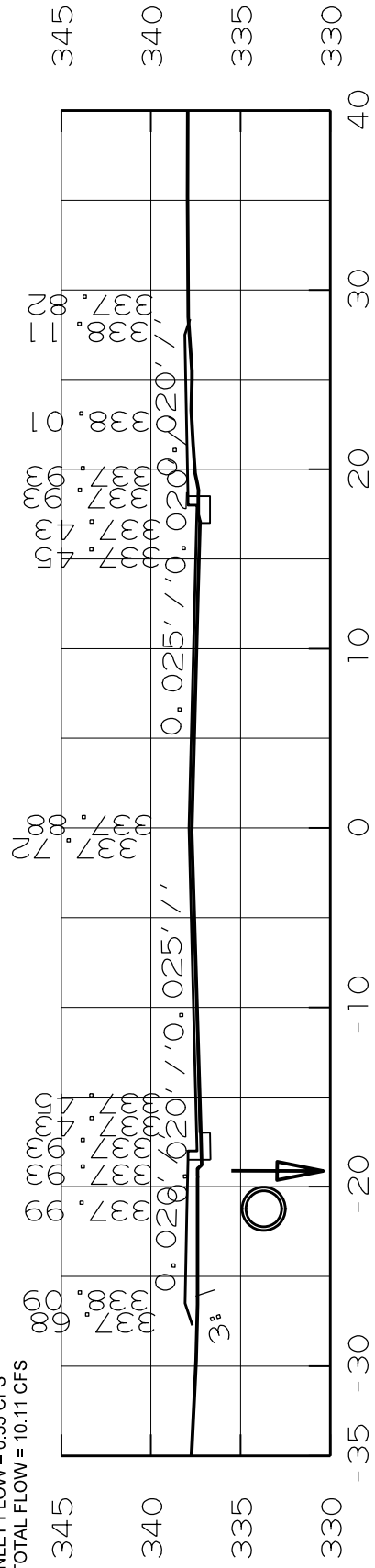
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. C29002	49	54

4 STA. 113+41 TO STA. 114+84



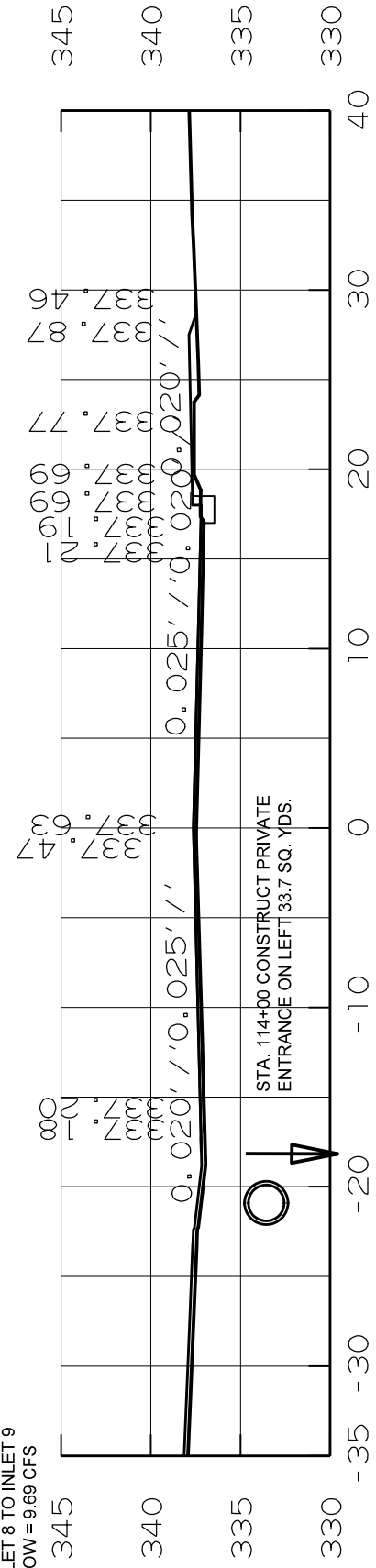
114+84
AREA CUT 2
AREA FILL 11
CUT VOLUME 3
FILL VOLUME 13

INLET - IN8
24" PIPE = 9.14 CFS
INLET FLOW = 0.55 CFS
TOTAL FLOW = 10.11 CFS



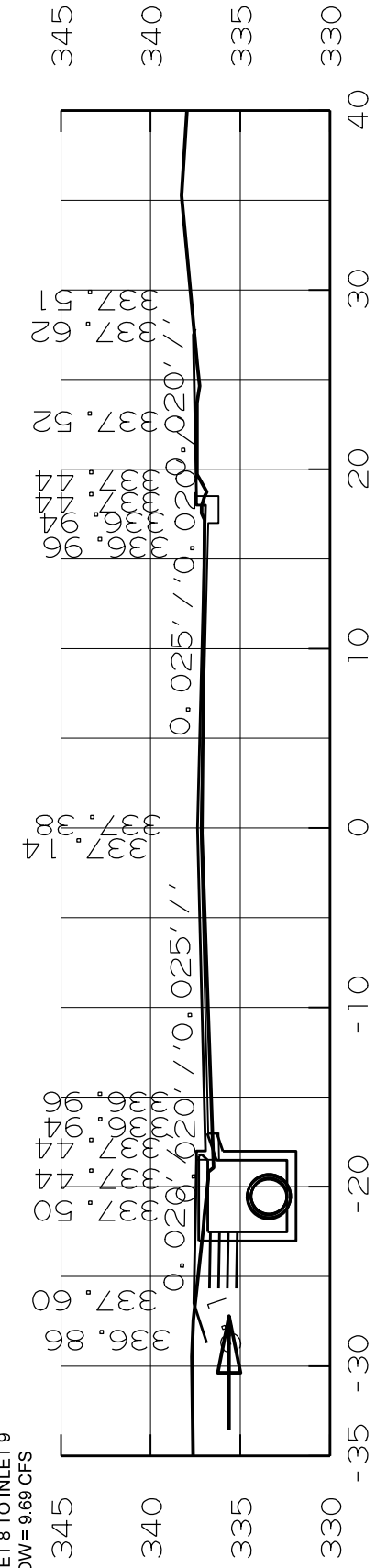
114+50
AREA CUT 2
AREA FILL 10
CUT VOLUME 3
FILL VOLUME 13

24" RCP PIPE CONNECTING
INLET 8 TO INLET 9
FLOW = 9.69 CFS



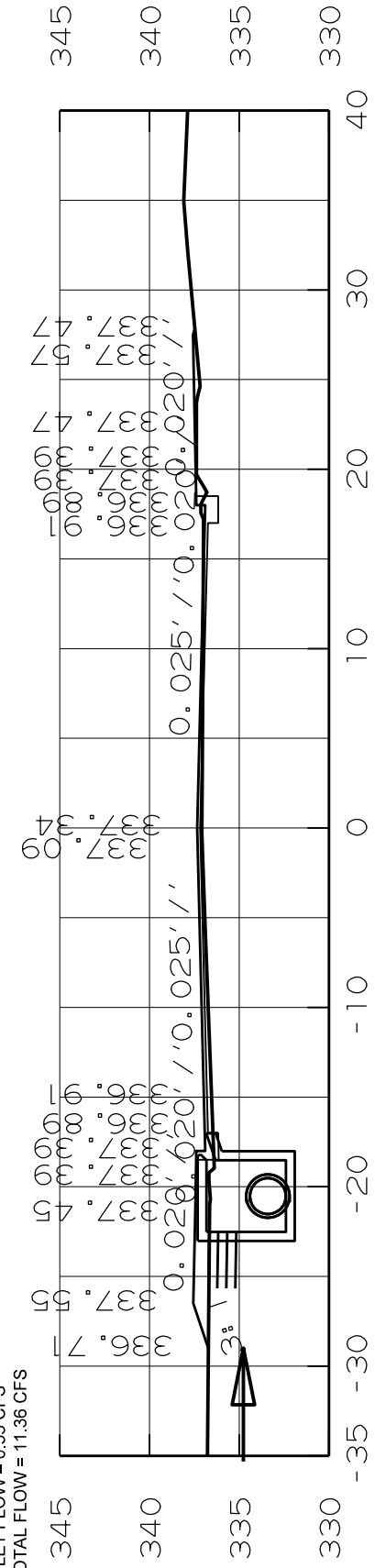
114+00
AREA CUT 1
AREA FILL 4
CUT VOLUME 4
FILL VOLUME 11

24" RCP PIPE CONNECTING
INLET 8 TO INLET 9
FLOW = 9.69 CFS



113+50
AREA CUT 4
AREA FILL 8
CUT VOLUME 1
FILL VOLUME 4

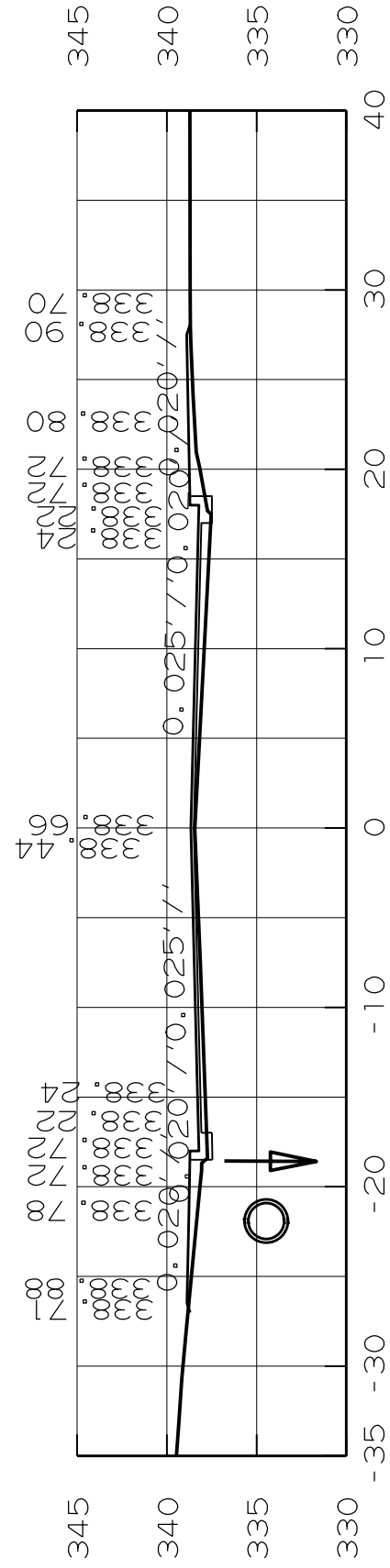
INLET - IN9
24" PIPE = 9.69 CFS
OPEN IN BACK = 1.12 CFS
INLET FLOW = 0.55 CFS
TOTAL FLOW = 11.36 CFS



113+41
AREA CUT 3
AREA FILL 13
CUT VOLUME 3
FILL VOLUME 27

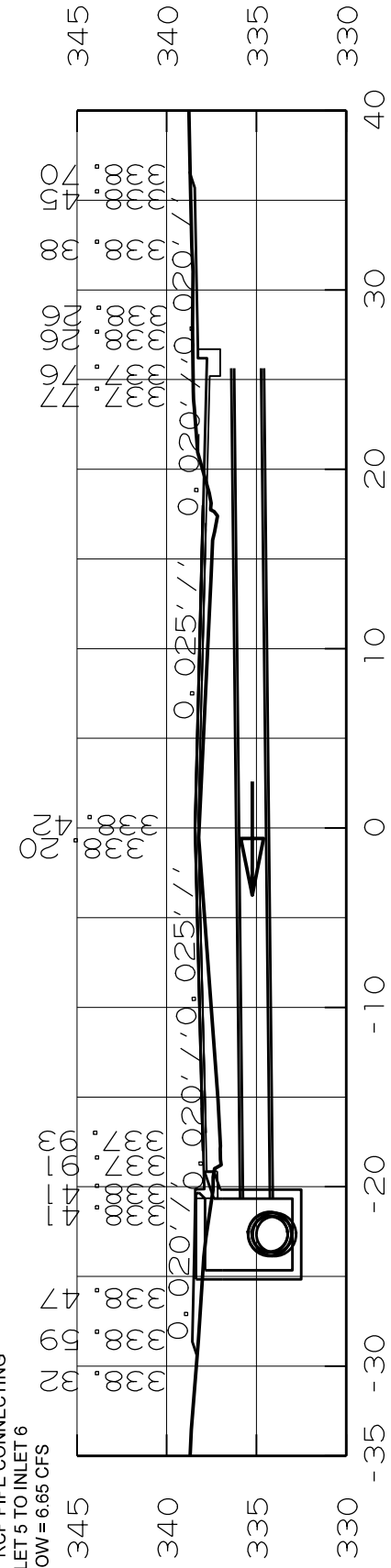
INLET - IN9
24" PIPE = 9.69 CFS
OPEN IN BACK = 1.12 CFS
INLET FLOW = 0.55 CFS
TOTAL FLOW = 11.36 CFS

DATE REVISION	DATE FILMED	DATE REVISION	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		50	54
				JOB NO.		C29002		
④ STA. 115+00 TO STA. 116+00								



116+00
 AREA CUT 1
 AREA FILL 15
 CUT VOLUME 5
 FILL VOLUME 25

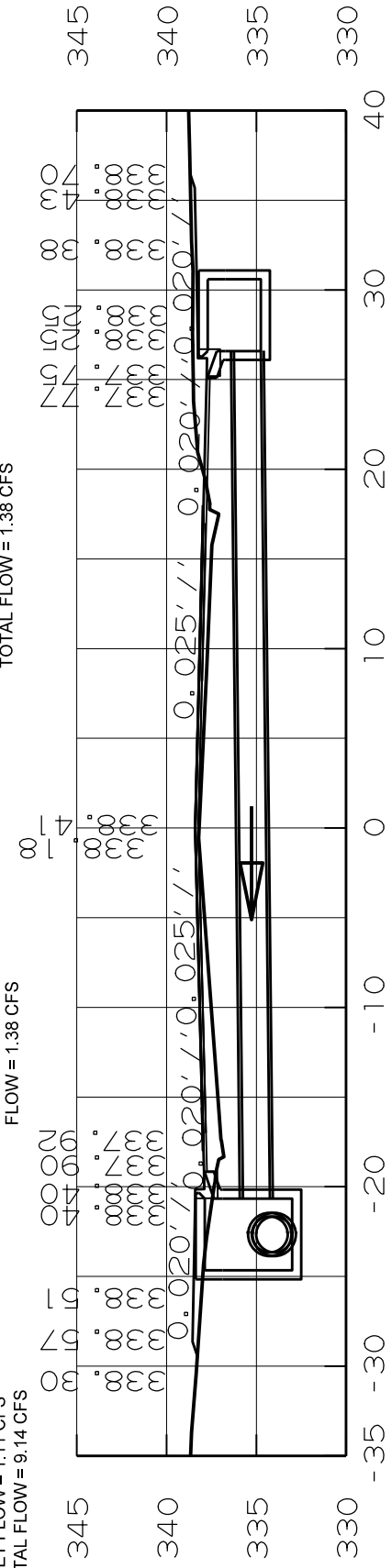
24" RCP PIPE CONNECTING
 INLET 5 TO INLET 6
 FLOW = 6.65 CFS



115+59
 AREA CUT 6
 AREA FILL 17
 CUT VOLUME 1
 FILL VOLUME 1

INLET - IN6
 24" PIPE = 6.65 CFS
 18" PIPE = 1.38 CFS
 INLET FLOW = 1.11 CFS
 TOTAL FLOW = 9.14 CFS

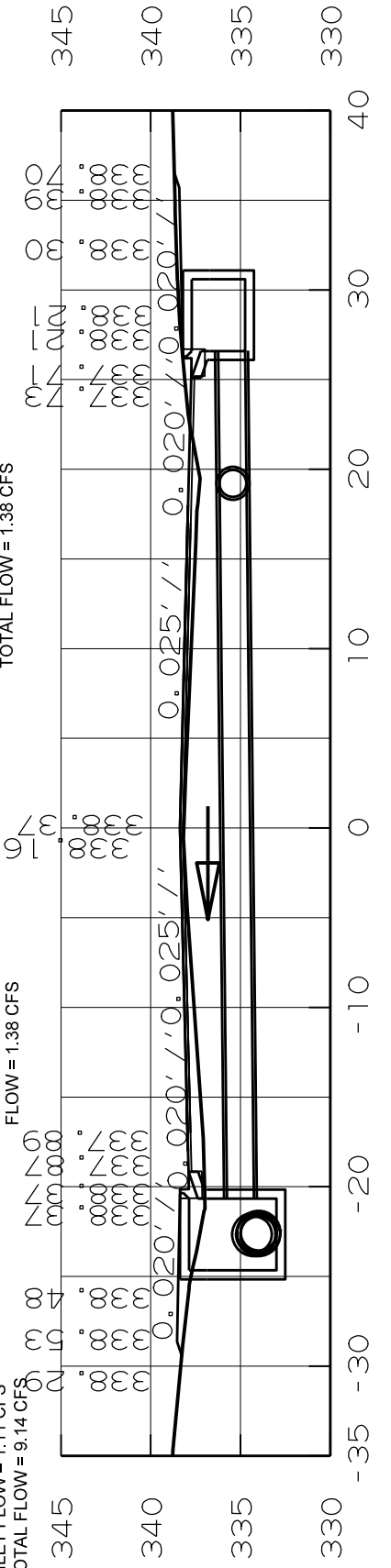
INLET - IN7
 INLET FLOW = 1.38 CFS
 TOTAL FLOW = 1.38 CFS



115+57
 AREA CUT 8
 AREA FILL 17
 CUT VOLUME 2
 FILL VOLUME 4

INLET - IN6
 24" PIPE = 6.65 CFS
 18" PIPE = 1.38 CFS
 INLET FLOW = 1.11 CFS
 TOTAL FLOW = 9.14 CFS

INLET - IN7
 INLET FLOW = 1.38 CFS
 TOTAL FLOW = 1.38 CFS

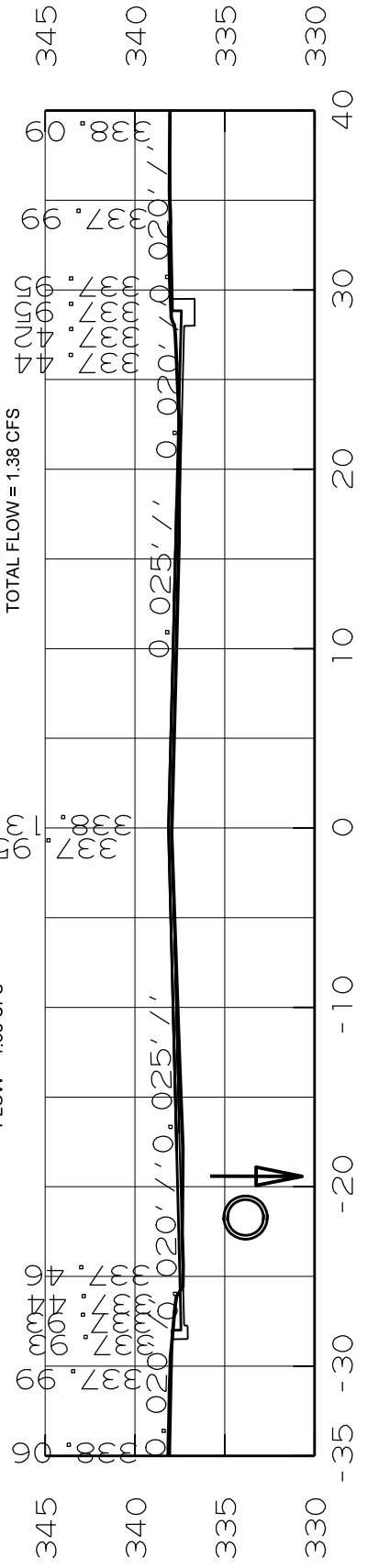


115+50
 AREA CUT 6
 AREA FILL 17
 CUT VOLUME 13
 FILL VOLUME 19

INLET - IN6
 24" PIPE = 6.65 CFS
 18" PIPE = 1.38 CFS
 INLET FLOW = 1.11 CFS
 TOTAL FLOW = 9.14 CFS

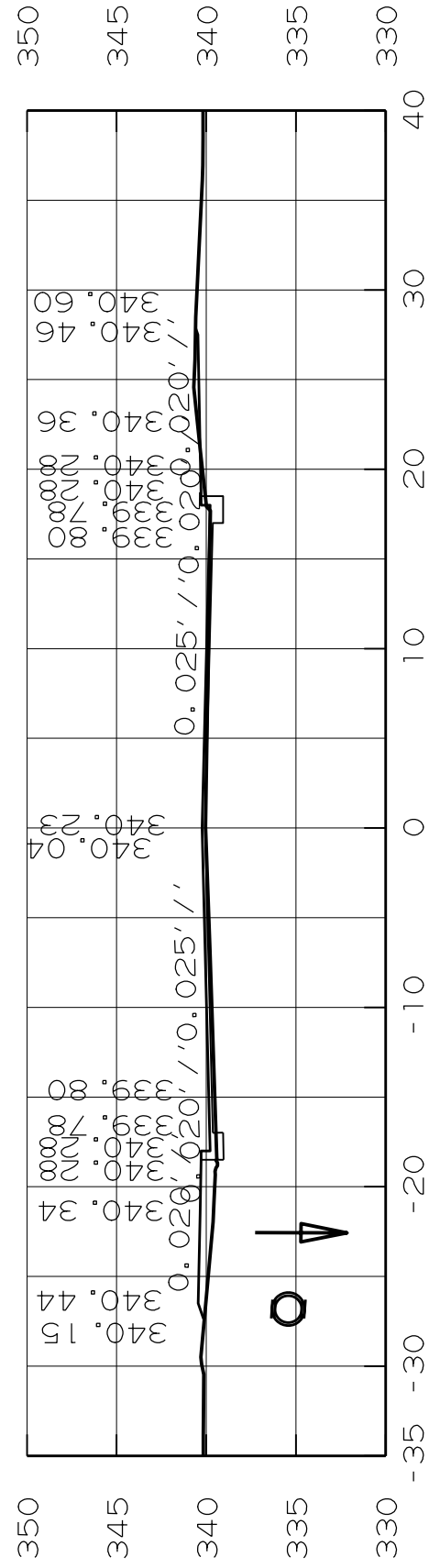
18" RCP PIPE CONNECTING
 INLET 7 TO INLET 6
 FLOW = 1.38 CFS

INLET - IN7
 INLET FLOW = 1.38 CFS
 TOTAL FLOW = 1.38 CFS



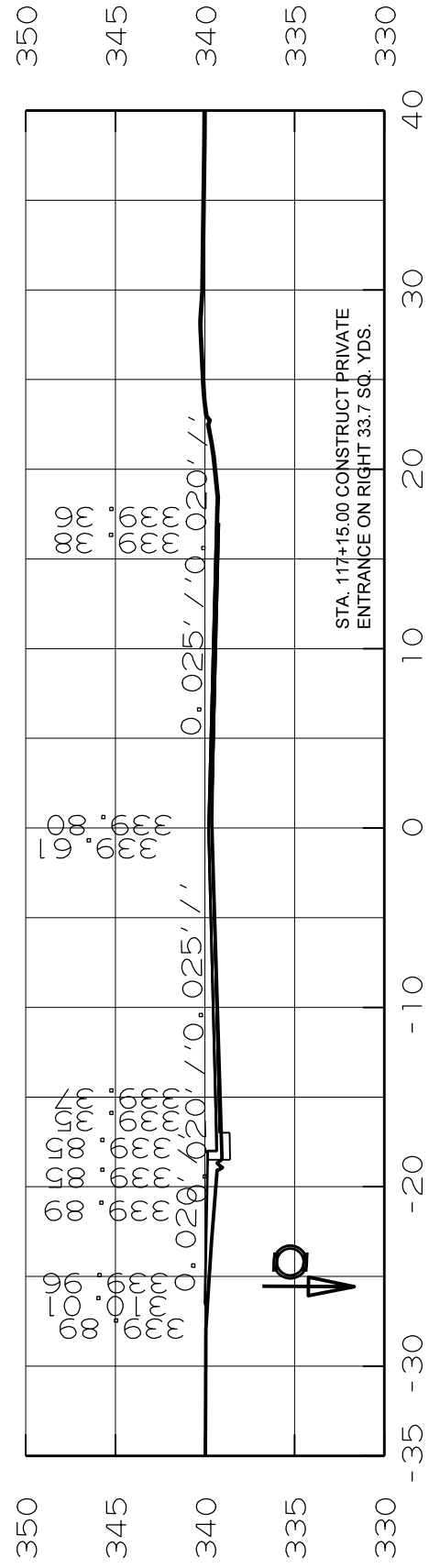
115+00
 AREA CUT 8
 AREA FILL 3
 CUT VOLUME 3
 FILL VOLUME 4

24" RCP PIPE CONNECTING
 INLET 6 TO INLET 8
 FLOW = 9.14 CFS



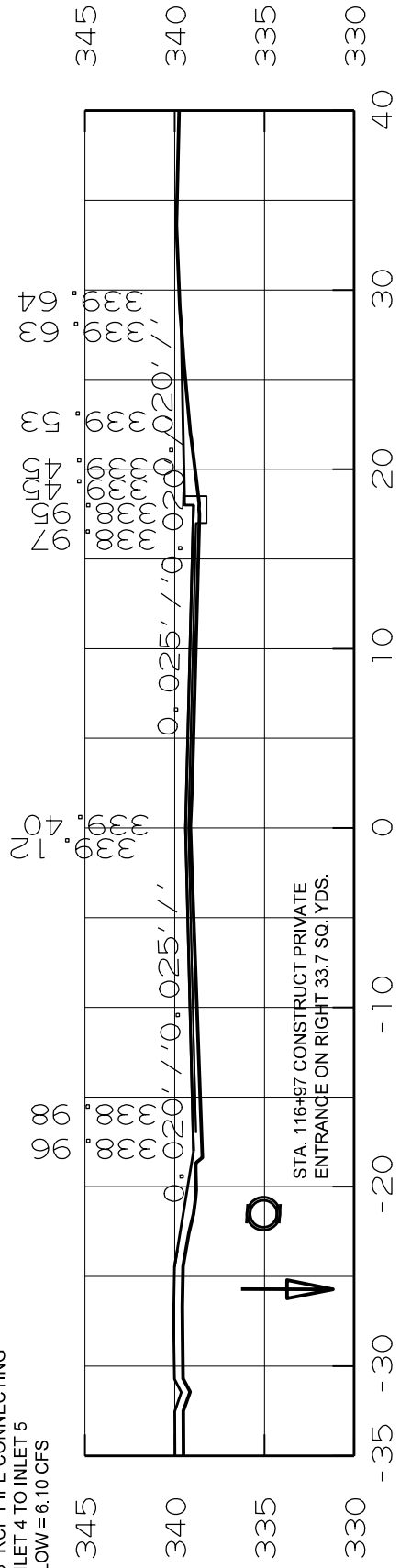
118+00
 AREA CUT 4
 AREA FILL 8
 CUT VOLUME 5
 FILL VOLUME 10

18" RCP PIPE CONNECTING
 INLET 4 TO INLET 5
 FLOW = 6.10 CFS



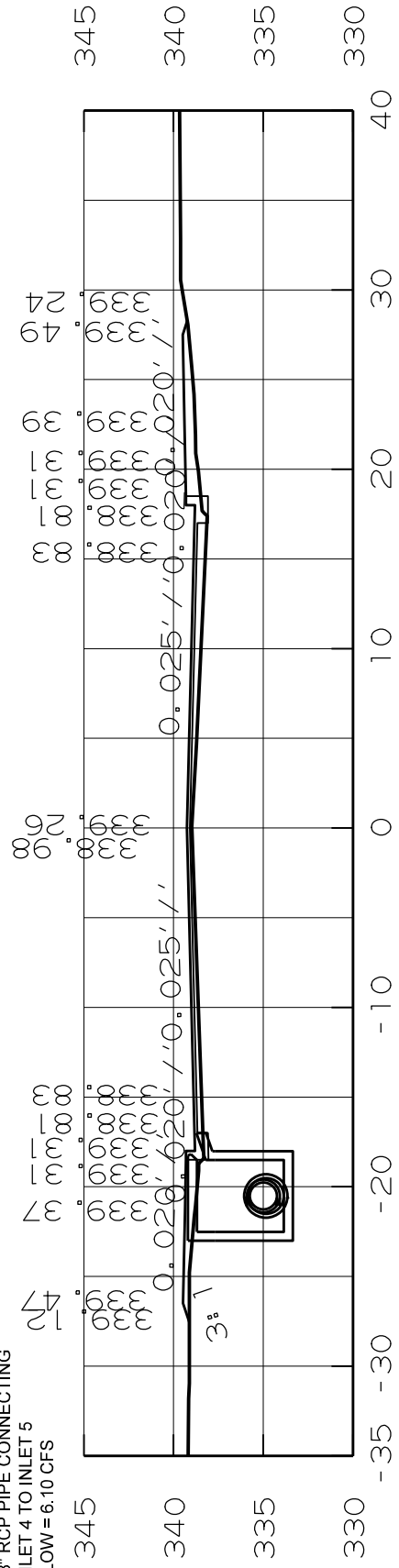
117+50
 AREA CUT 1
 AREA FILL 3
 CUT VOLUME 2
 FILL VOLUME 9

18" RCP PIPE CONNECTING
 INLET 4 TO INLET 5
 FLOW = 6.10 CFS



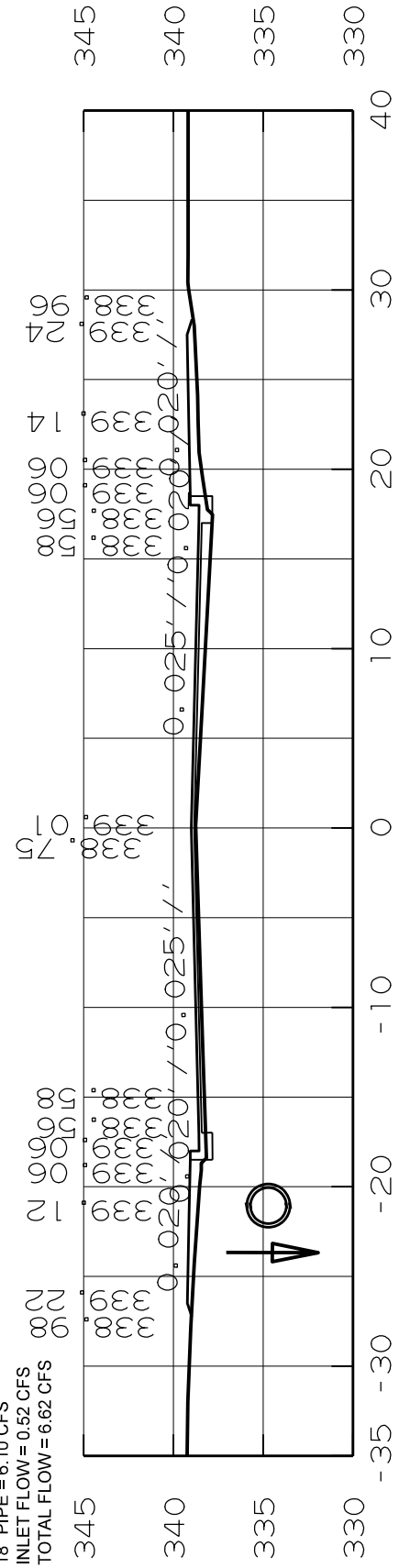
117+00
 AREA CUT 1
 AREA FILL 7
 CUT VOLUME 0
 FILL VOLUME 9

18" RCP PIPE CONNECTING
 INLET 4 TO INLET 5
 FLOW = 6.10 CFS



116+82
 AREA CUT 1
 AREA FILL 19
 CUT VOLUME 1
 FILL VOLUME 21

INLET - IN5
 18" PIPE = 6.10 CFS
 INLET FLOW = 0.52 CFS
 TOTAL FLOW = 6.62 CFS



116+50
 AREA CUT 1
 AREA FILL 17
 CUT VOLUME 2
 FILL VOLUME 30

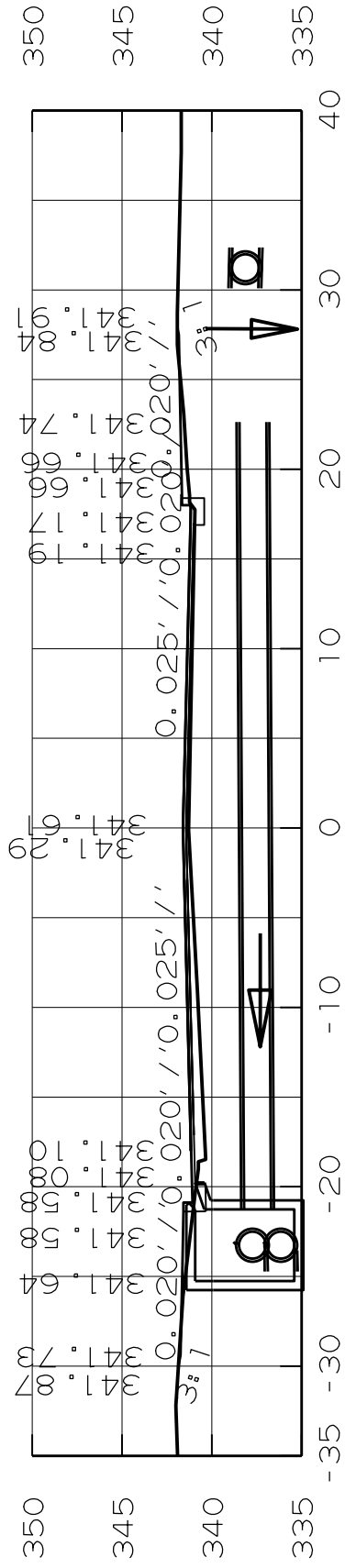
24" RCP PIPE CONNECTING
 INLET 5 TO INLET 6
 FLOW = 6.65 CFS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		51	54
				JOB NO. C29002				

4 STA. 116+50 TO STA. 118+00

DATE REVISION	DATE FILMED	DATE REVISION	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		52	54
				JOB NO.		C29002		

4 STA. 118+50 TO STA. 119+47

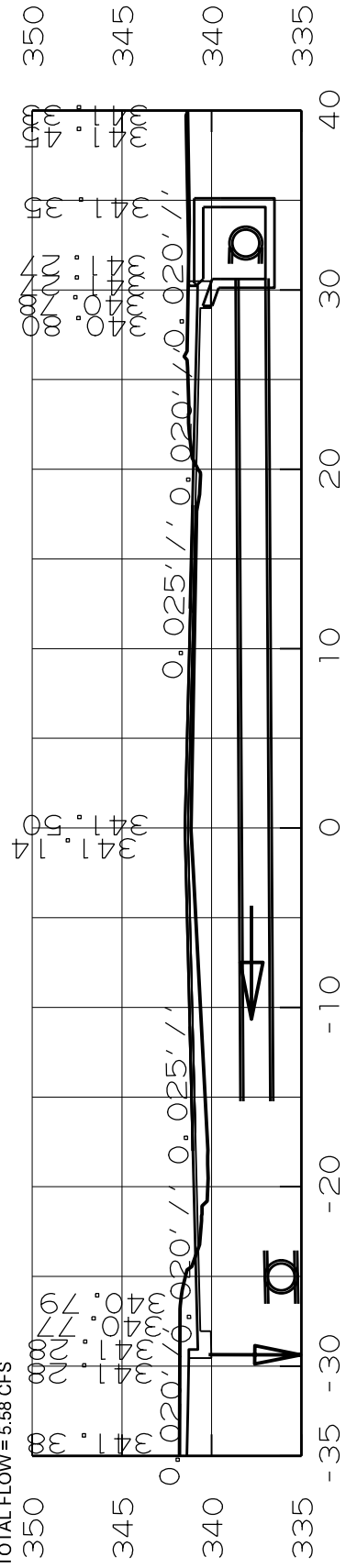


CUT VOLUME 5
FILL VOLUME 3

119+47

AREA CUT 4
AREA FILL 6

INLET - IN2
18" PIPE = 2.26 CFS
18" PIPE = 2.23 CFS
INLET FLOW = 1.09 CFS
TOTAL FLOW = 5.58 CFS

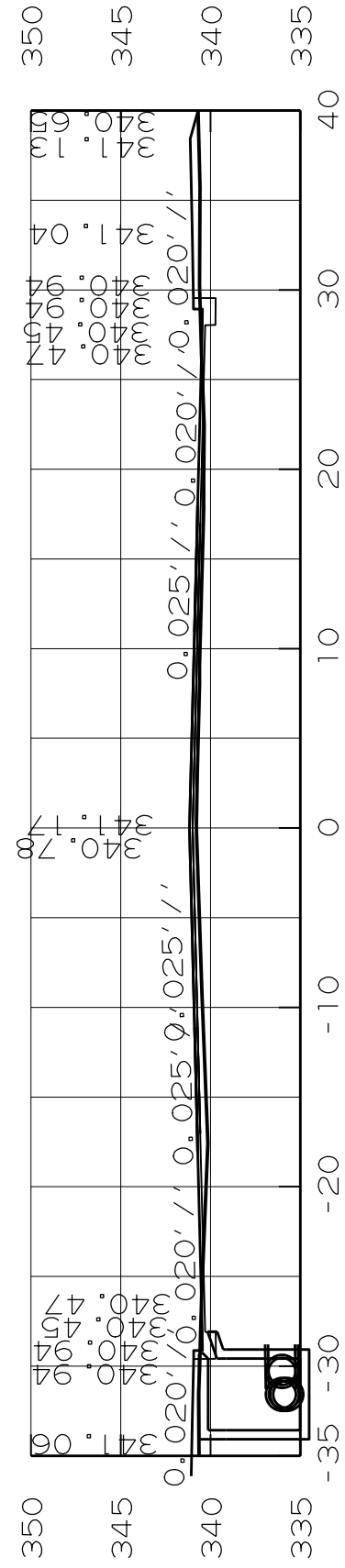


CUT VOLUME 18
FILL VOLUME 10

119+35

AREA CUT 20
AREA FILL 8

18" RCP PIPE CONNECTING
INLET 3 TO INLET 2
FLOW = 2.23 CFS

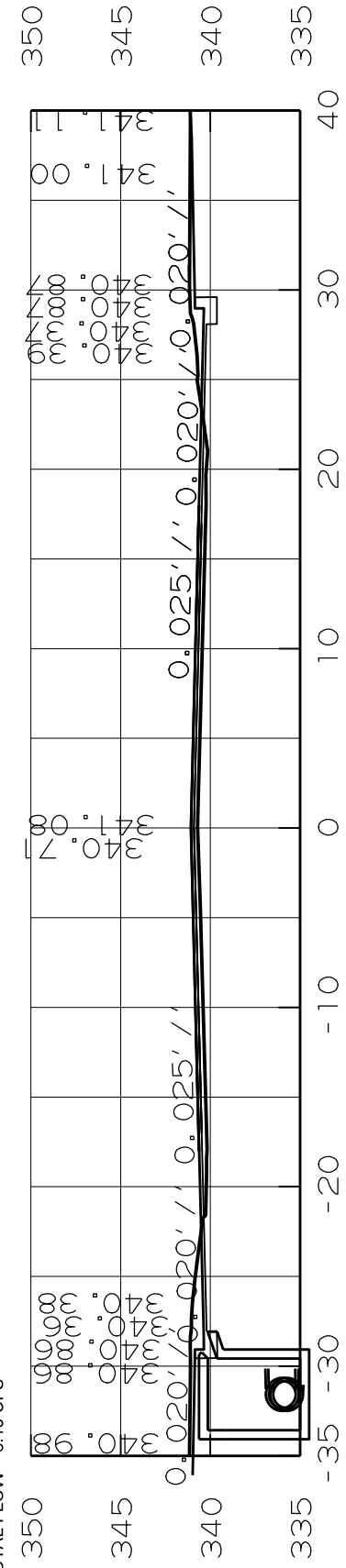


CUT VOLUME 5
FILL VOLUME 1

119+00

AREA CUT 8
AREA FILL 6

INLET - IN4
18" PIPE = 5.58 CFS
INLET FLOW = 0.52 CFS
TOTAL FLOW = 6.10 CFS

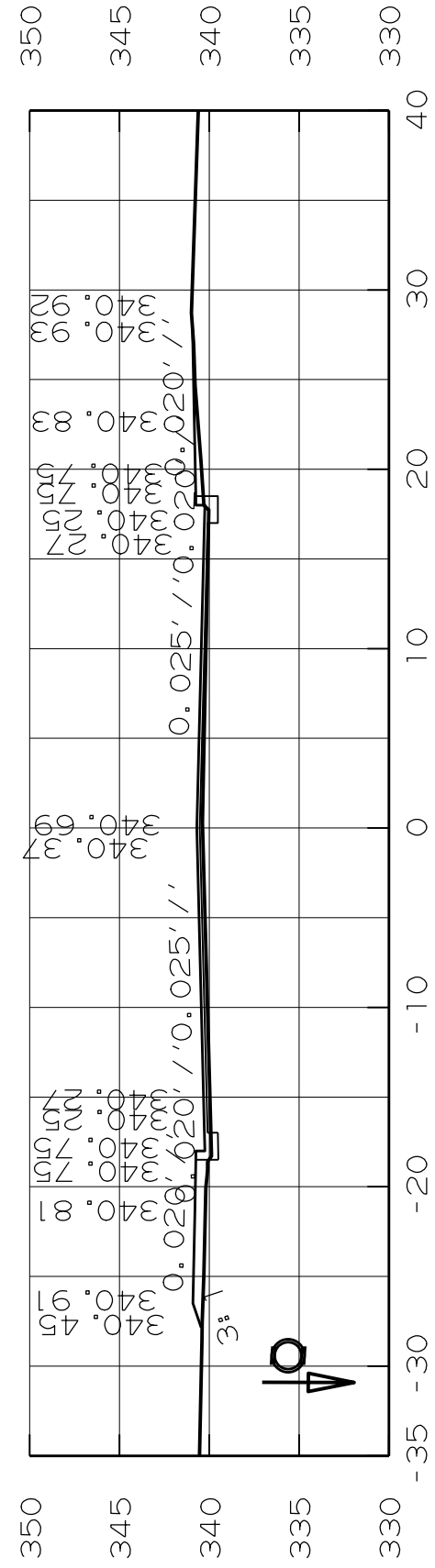


CUT VOLUME 17
FILL VOLUME 8

118+91

AREA CUT 0
AREA FILL 20

INLET - IN4
18" PIPE = 5.58 CFS
INLET FLOW = 0.52 CFS
TOTAL FLOW = 6.10 CFS



CUT VOLUME 6
FILL VOLUME 18

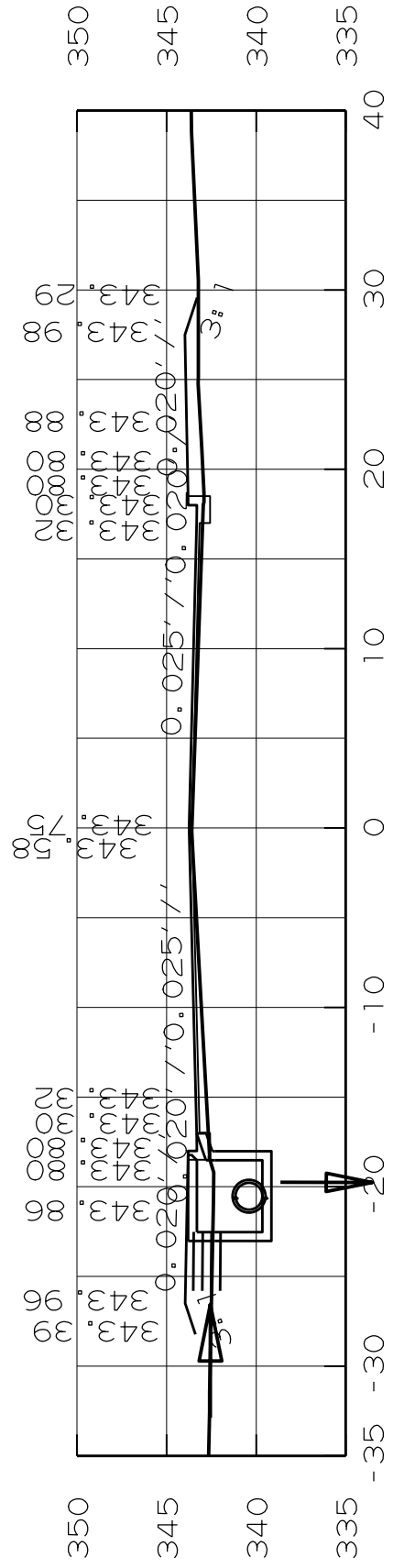
118+50

AREA CUT 2
AREA FILL 11

18" RCP PIPE CONNECTING
INLET 4 TO INLET 5
FLOW = 6.10 CFS

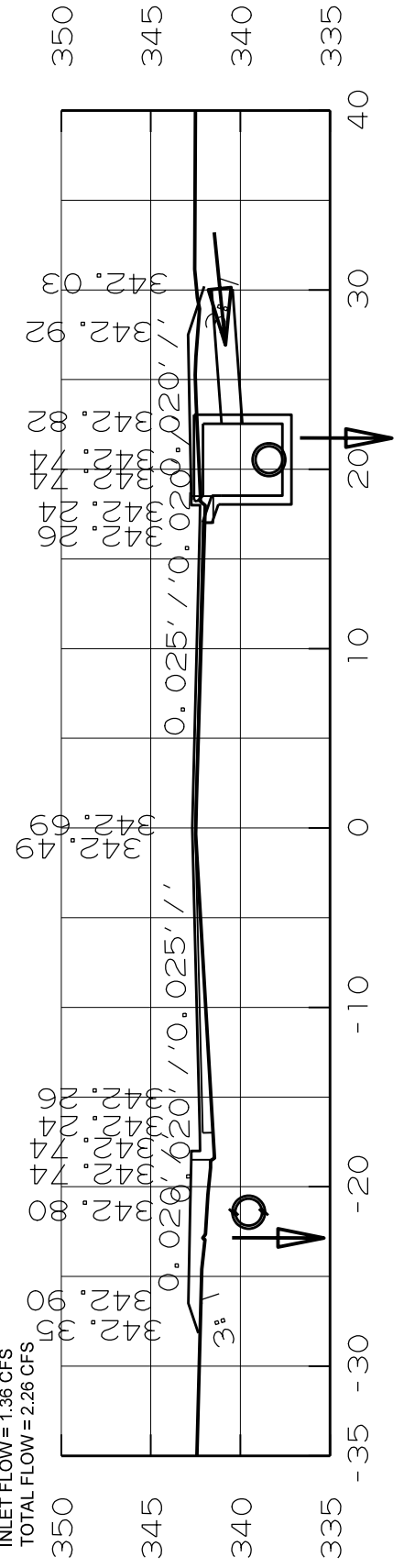
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		53	54
				JOB NO.		C29002		

④ STA. 119+50 TO STA. 121+00



121+00
 AREA CUT 1
 AREA FILL 27
 CUT VOLUME 1
 FILL VOLUME 42

INLET - IN1
 OPEN IN THE BACK = 0.90 CFS
 INLET FLOW = 1.36 CFS
 TOTAL FLOW = 2.26 CFS

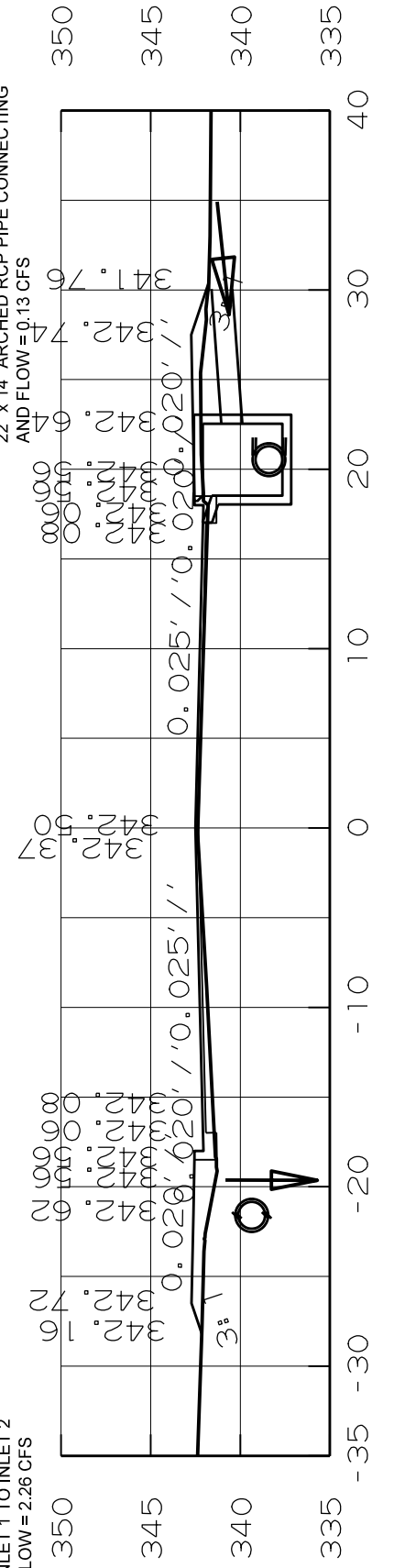


120+50
 AREA CUT 1
 AREA FILL 18
 CUT VOLUME 2
 FILL VOLUME 28

INLET - IN21
 22" X 14" PIPE = 0.13 CFS
 INLET FLOW = 0.83 CFS
 TOTAL FLOW = 0.96 CFS

18" RCP PIPE CONNECTING
 INLET 1 TO INLET 2
 FLOW = 2.26 CFS

22" x 14" ARCHED RCP PIPE CONNECTING
 AND FLOW = 0.13 CFS

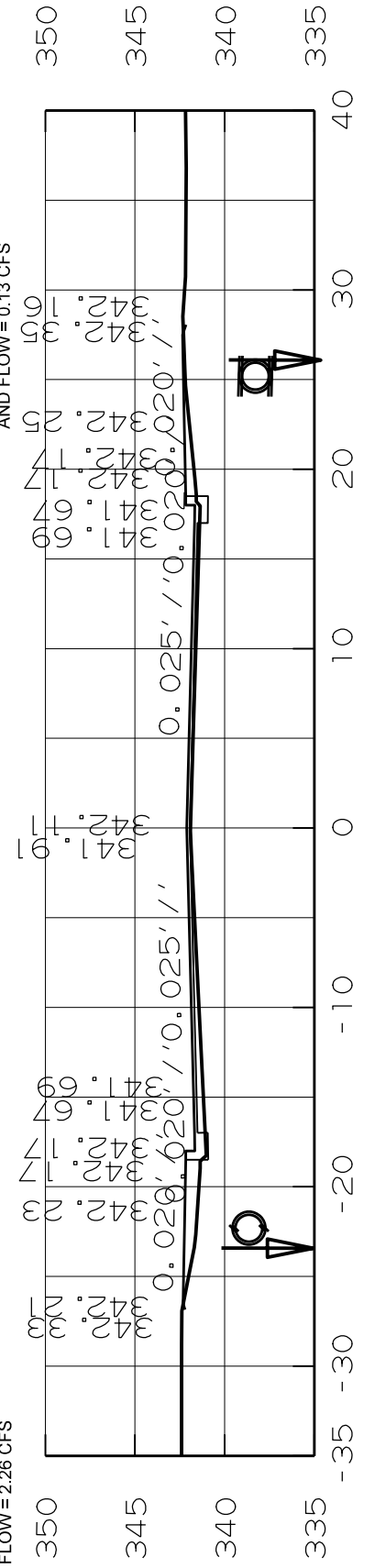


120+40
 AREA CUT 1
 AREA FILL 17
 CUT VOLUME 3
 FILL VOLUME 22

INLET - IN21
 22" X 14" PIPE = 0.13 CFS
 INLET FLOW = 0.83 CFS
 TOTAL FLOW = 0.96 CFS

18" RCP PIPE CONNECTING
 INLET 1 TO INLET 2
 FLOW = 2.26 CFS

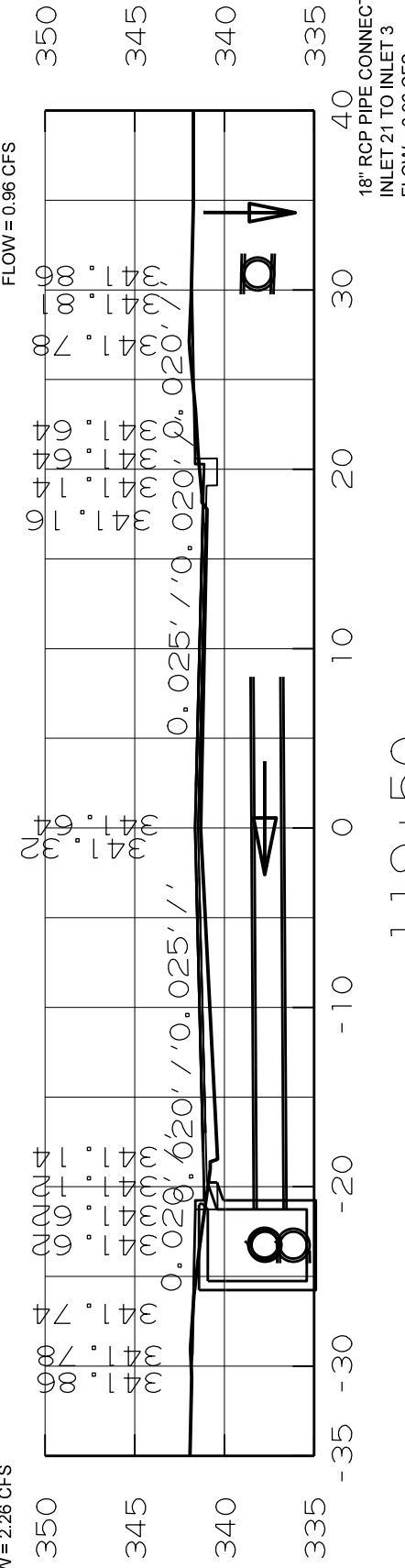
22" x 14" ARCHED RCP PIPE CONNECTING
 AND FLOW = 0.13 CFS



120+00
 AREA CUT 1
 AREA FILL 12
 CUT VOLUME 4
 FILL VOLUME 19

18" RCP PIPE CONNECTING
 INLET 1 TO INLET 2
 FLOW = 2.26 CFS

18" RCP PIPE CONNECTING
 INLET 21 TO INLET 3
 FLOW = 0.96 CFS



119+50
 AREA CUT 2
 AREA FILL 9
 CUT VOLUME 0
 FILL VOLUME 1

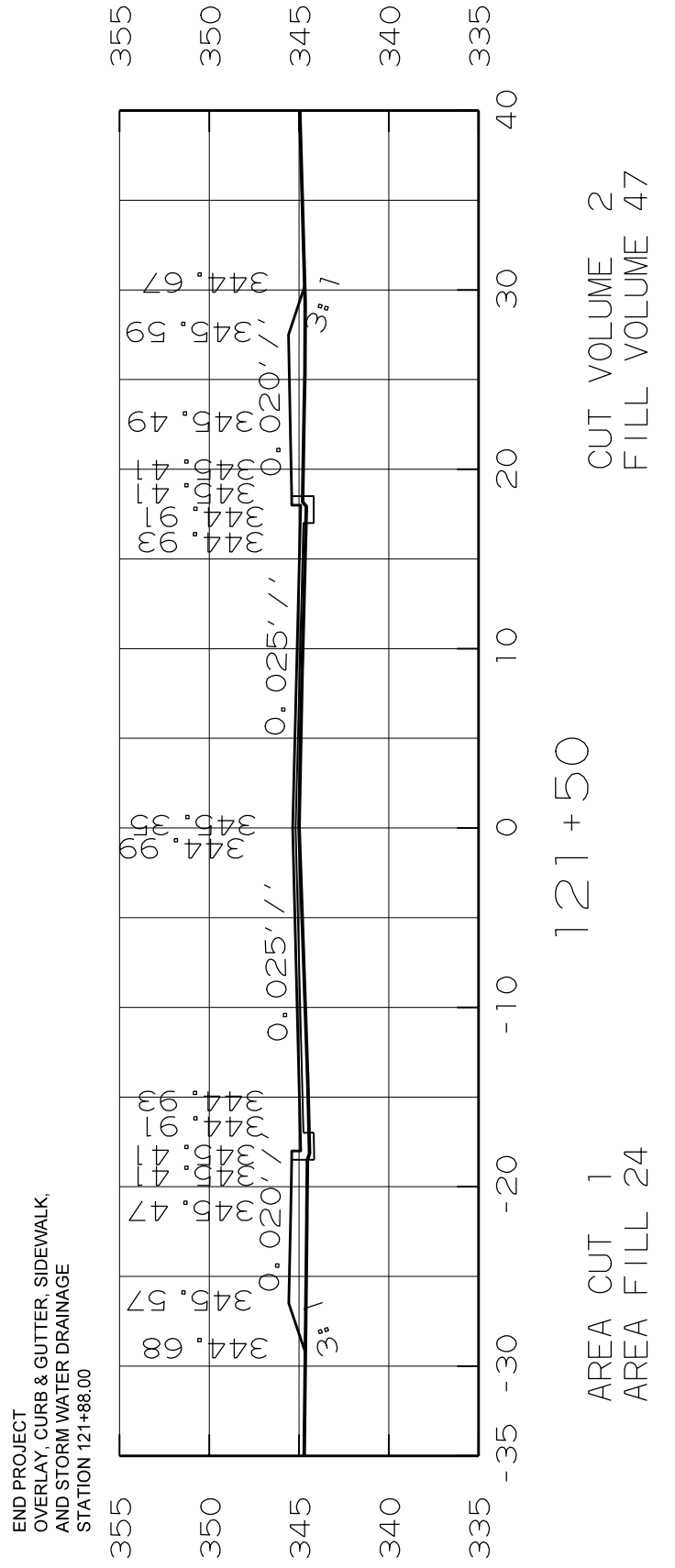
INLET - IN2
 18" PIPE = 2.26 CFS
 18" PIPE = 2.23 CFS
 INLET FLOW = 1.09 CFS
 TOTAL FLOW = 5.58 CFS

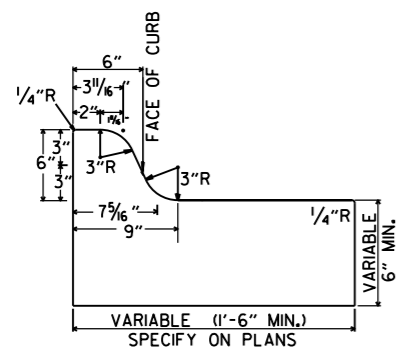
18" RCP PIPE CONNECTING
 INLET 3 TO INLET 2
 FLOW = 2.23 CFS

18" RCP PIPE CONNECTING
 INLET 21 TO INLET 3
 FLOW = 0.96 CFS

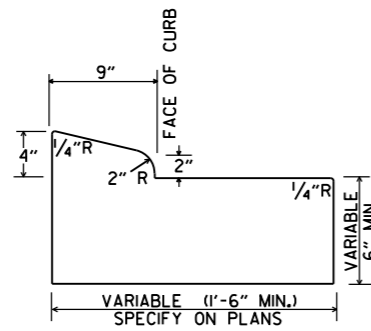
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		54	54
				JOB NO.		C29002	54	54

④ STA. 121+50 TO STA. 122+69

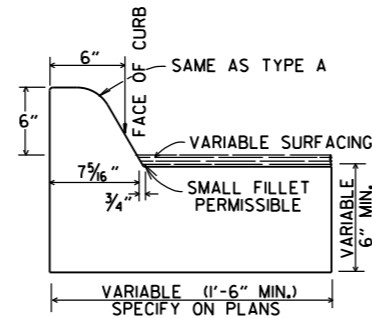




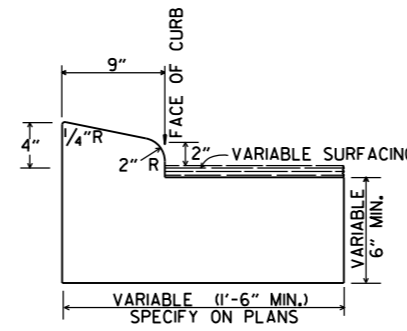
TYPE A



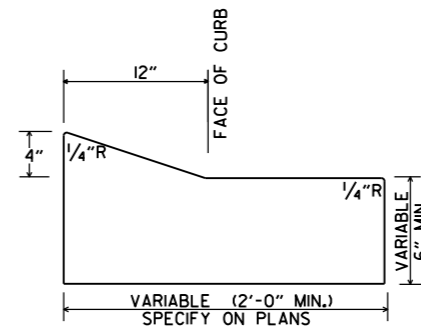
TYPE B-1



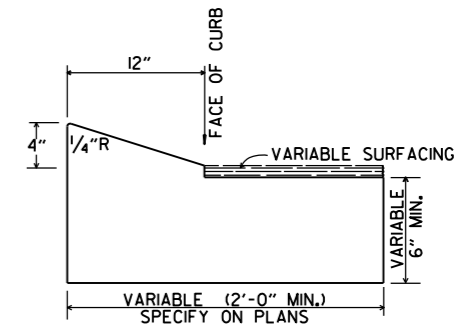
TYPE C



TYPE B-2

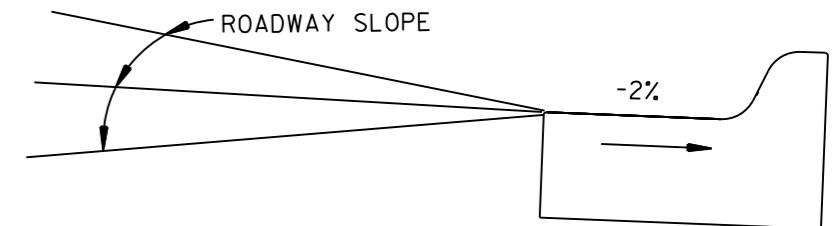


TYPE E-1

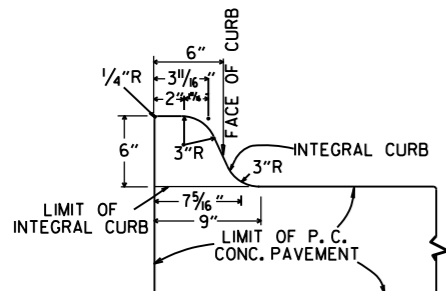


TYPE E-2

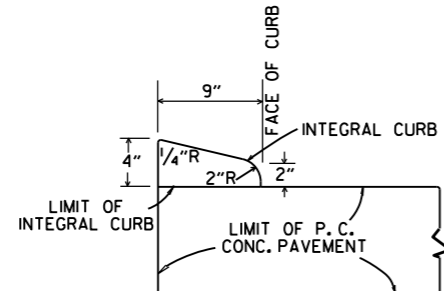
CONCRETE COMBINATION CURB AND GUTTER



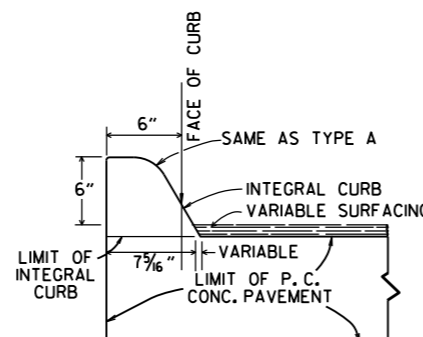
DETAIL OF GUTTER SLOPE
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

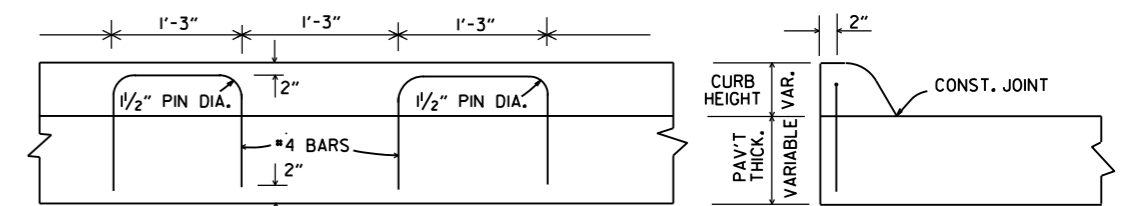


TYPE B



TYPE C

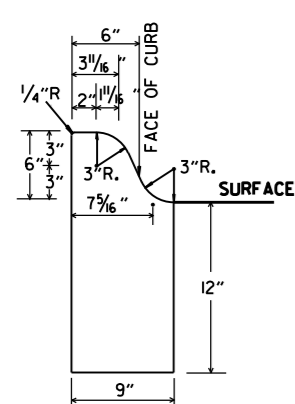
INTEGRAL CURB



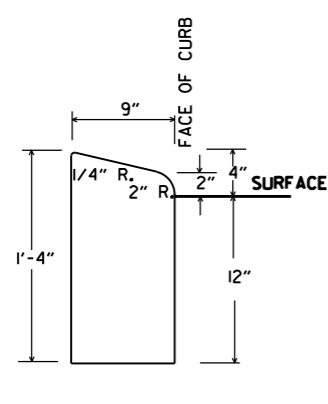
LONGITUDINAL SECTION

ELEVATION

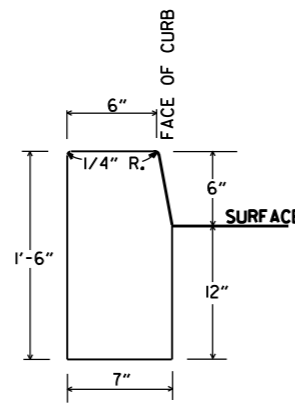
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



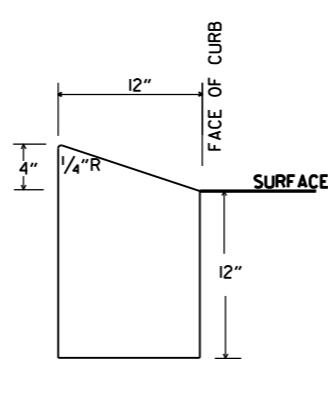
TYPE A



TYPE B

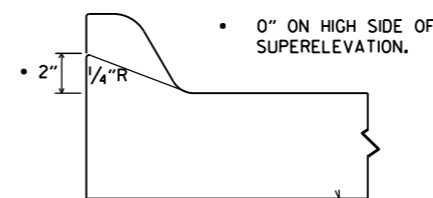


TYPE D



TYPE E

CONCRETE CURB



NOTE: USE MODIFIED CURB AS SPECIFIED ON STD. DR-1. COMPENSATION FOR MODIFIED CURB WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE TYPE OF CURB OR CURB AND GUTTER SPECIFIED.

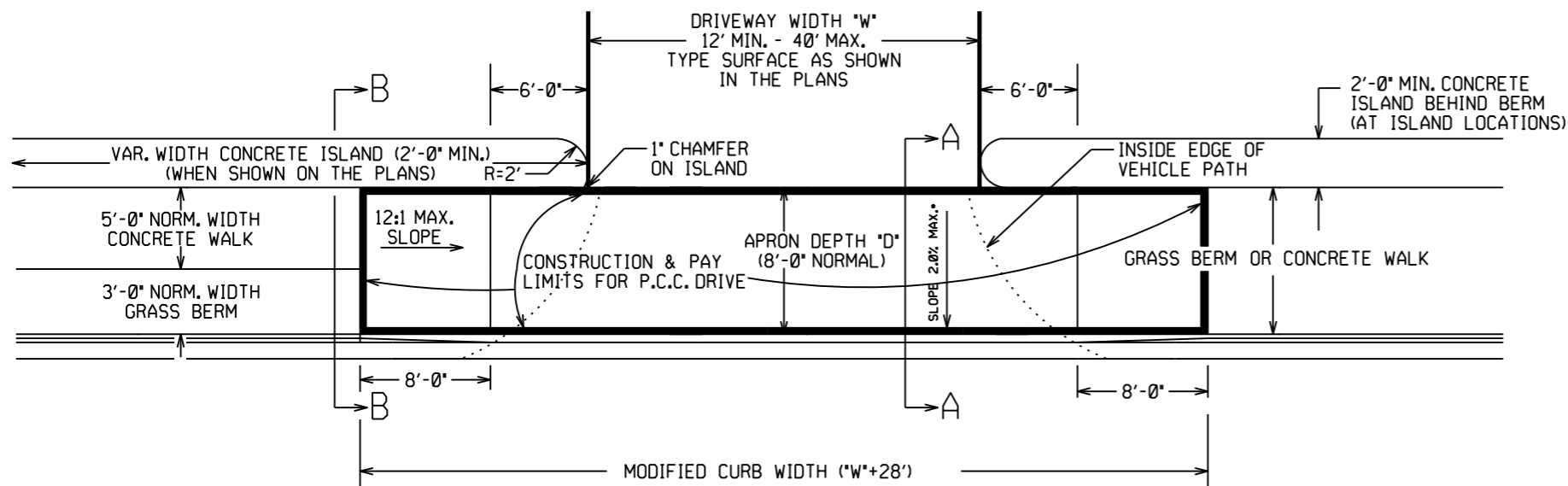
DETAILS OF MODIFIED CURB

DATE	REVISION	DATE FILMED
11-29-07	REVISED GUTTER SLOPE & MODIFIED CURB DETAILS	
11-10-05	ADDED DETAILS OF TYPE E CURBS	
11-16-01	REVISED CONCRETE CURB TYPE B	
11-18-98	REVISED MODIFIED CURB	
6-2-94	ADDED NOTE TO SPECIAL MODIFIED CURB	
8-5-93	CORRECTED GUTTER SLOPE	8-5-93
10-1-92	ADDED DETAILS OF GUTTER SLOPE	10-1-92
5-24-90	ADDED DETAILS OF MODIFIED CURB	5-24-90
11-30-89	VARIABLE DEPTH TYPE A & B 1	11-30-89
7-15-88	REVISED MODIFIED CURB	630-7-15-88
1-1-73	REVISED MODIFIED CURB	500-1-1-73
10-2-72	REVISED AND REDRAWN	512-10-2-72

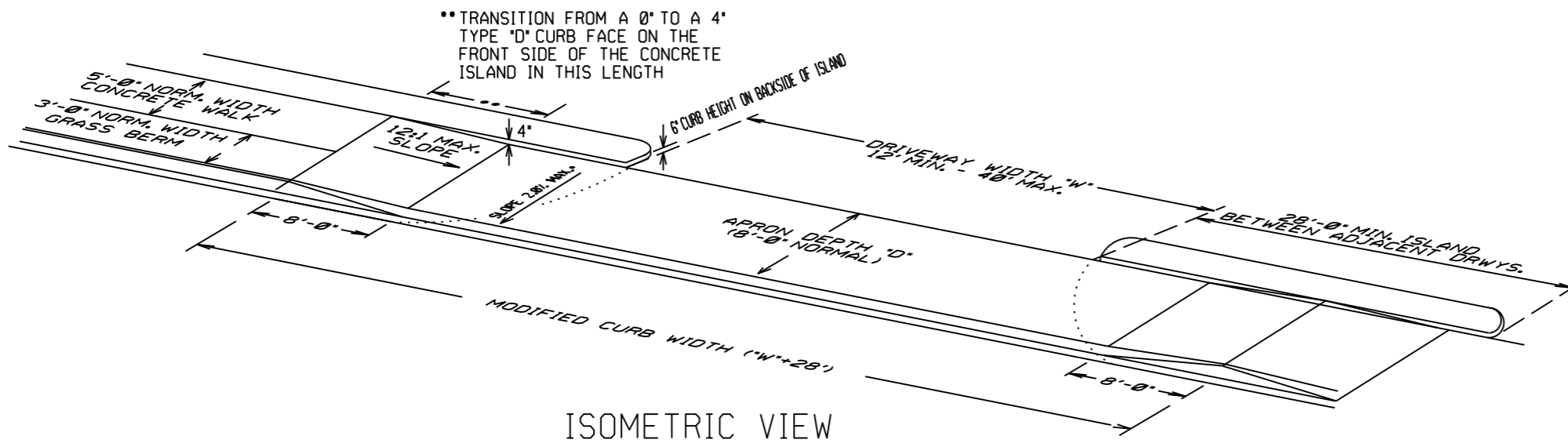
ARKANSAS STATE HIGHWAY COMMISSION

CURBING DETAILS

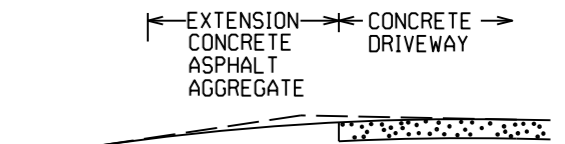
STANDARD DRAWING CG-1



PLAN VIEW



ISOMETRIC VIEW

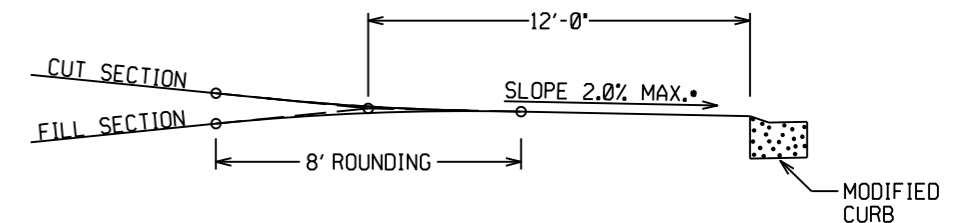


EXTENSION TYPICAL SECTIONS

- 1: CONCRETE - 6" P.C. CONCRETE DRIVEWAY
- 2: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
4" ACHM BINDER COURSE (1") OR
4" ACHM BASE COURSE (1-1/2")
- 3: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
7" AGGREGATE BASE COURSE
- 4: AGGREGATE - 6" AGGREGATE BASE COURSE

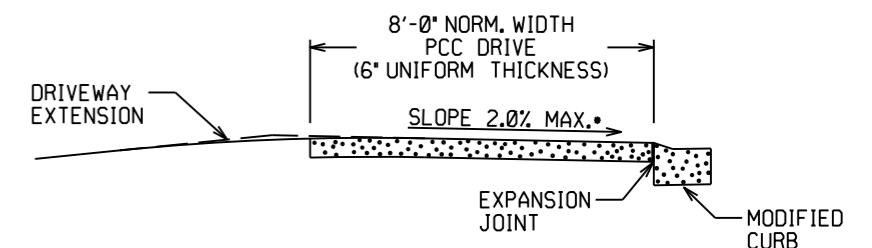
THE TYPE OF EXTENSION SHALL BE AS SHOWN IN THE PLANS. THE CONTRACTOR MAY, WITH THE APPROVAL OF THE ENGINEER, SUBSTITUTE A LOWER NUMBERED TYPE OF EXTENSION IN LIEU OF THE TYPE SPECIFIED IN THE PLANS, BUT AT NO ADDITIONAL COST TO THE DEPARTMENT.

DRIVEWAY EXTENSION DETAILS

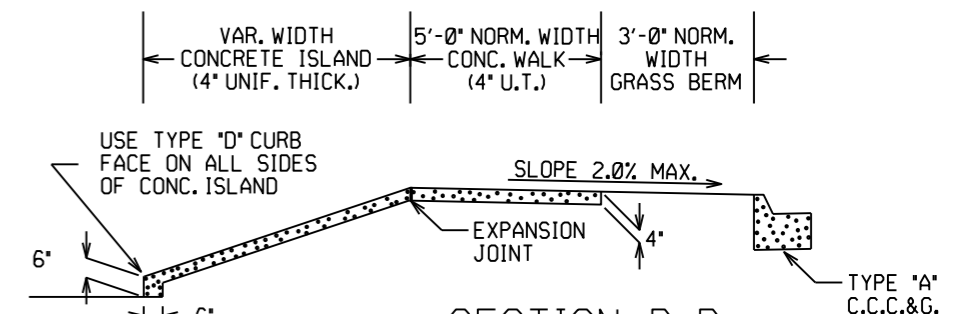


DRIVEWAY VERTICAL ALIGNMENT DETAILS

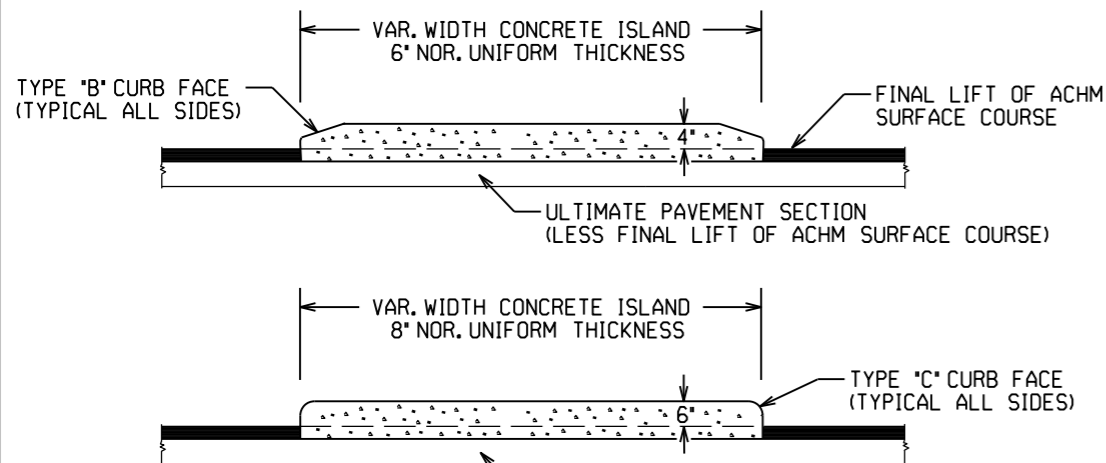
NOTE: DRIVEWAYS MAY NOT BE SLOPED AWAY FROM THE ROADWAY UNLESS APPROVED BY THE ENGINEER.



SECTION A-A



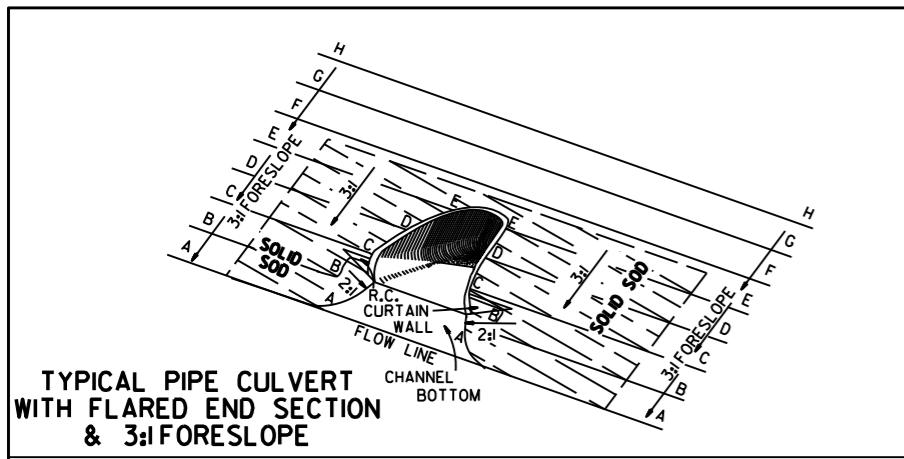
SECTION B-B
CURBED ISLAND BEHIND WALK



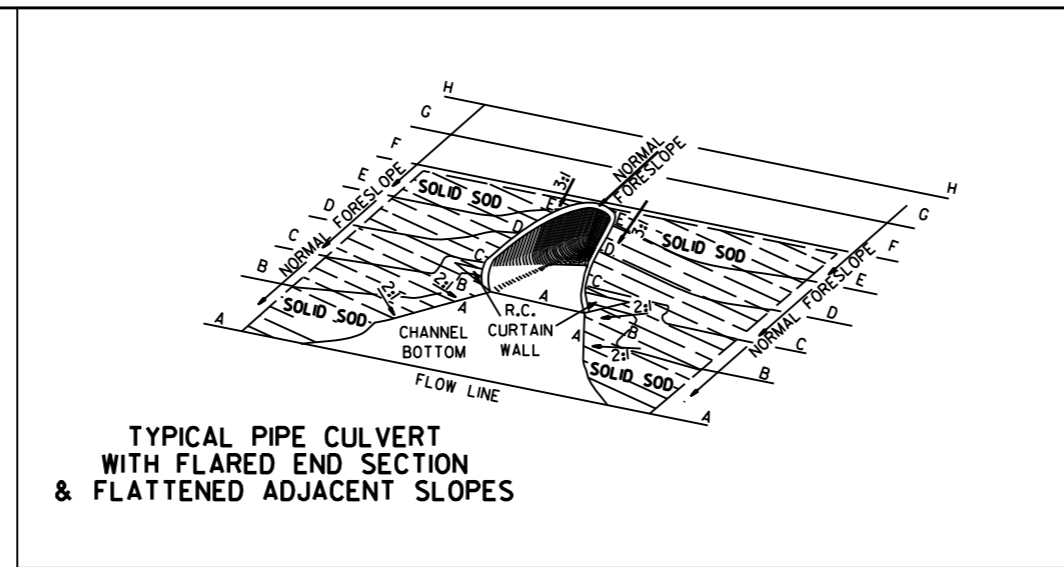
CURBED ISLANDS FOR CHANNELIZATION

REFER TO PLANS FOR TYPE OF CURB FACE TO BE USED. NO DIRECT PAYMENT WILL BE MADE FOR THE CURB FACES SHOWN ON THE ISLAND DETAILS. PAYMENT FOR THE CURB FACE WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEM "CONCRETE ISLAND".

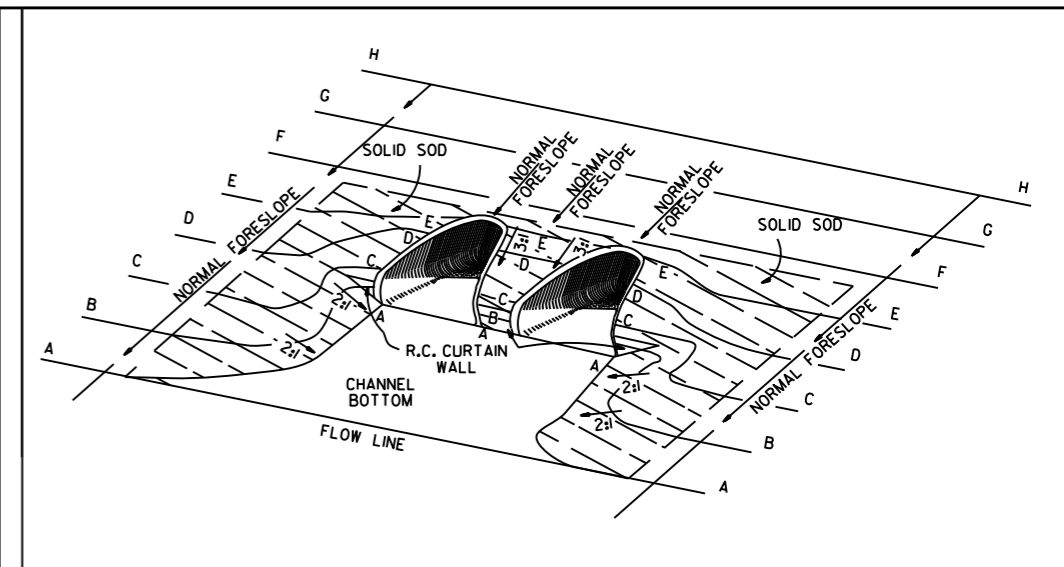
DATE	REV	DATE FILMED	DESCRIPTION
11-07-19			REVISED WALK DETAILS
2-27-14			REVISED PLAN & ISOMETRIC VIEW
11-29-07			ADDED CHANNELIZATION ISLAND WITH TYPE C CURB FACE & REVISED DRIVEWAY SLOPE NOTE & VERTICAL ALIGNMENT DETAIL
11-10-05			REV. APRON SLOPE & DEPTH OF AGG. BASE.
8-22-02			ADDED ISLAND DETAILS & NOTES
3-30-00			REV. MOD. CURB WIDTH & TRANS. NOTE
11-19-98			REVISED NOTES
11-18-98			REDRAWN AND REISSUED



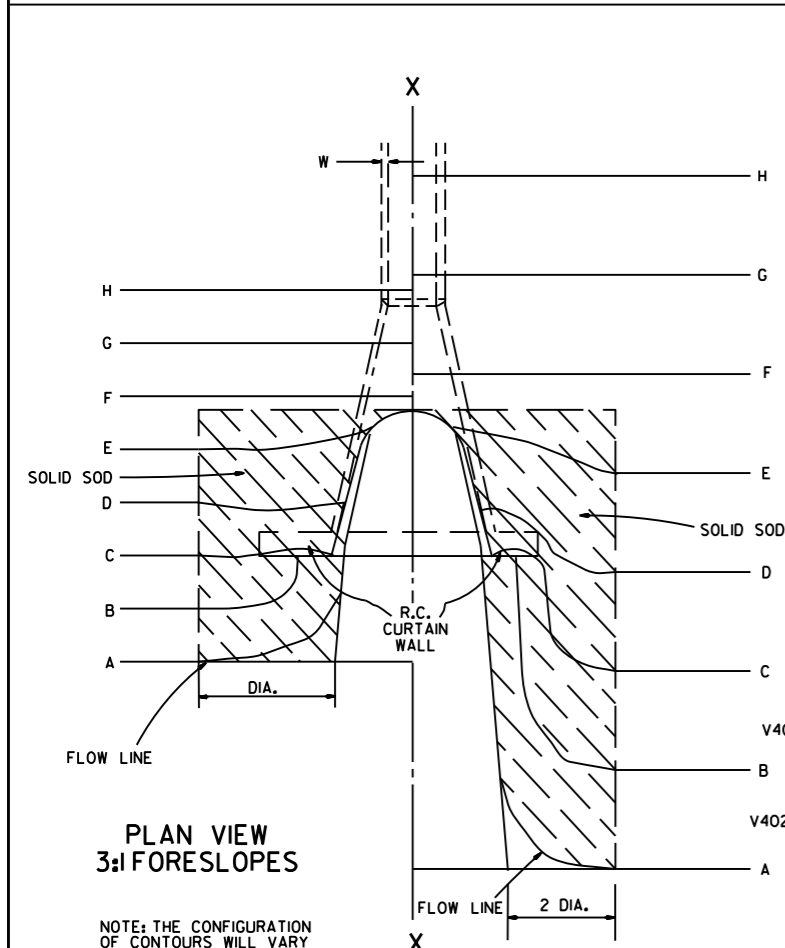
TYPICAL PIPE CULVERT WITH FLARED END SECTION & 3:1 FORESLOPE



TYPICAL PIPE CULVERT WITH FLARED END SECTION & FLATTENED ADJACENT SLOPES



TYPICAL MULTIPLE PIPE CULVERT WITH FLARED END SECTIONS & FLATTENED ADJACENT SLOPES



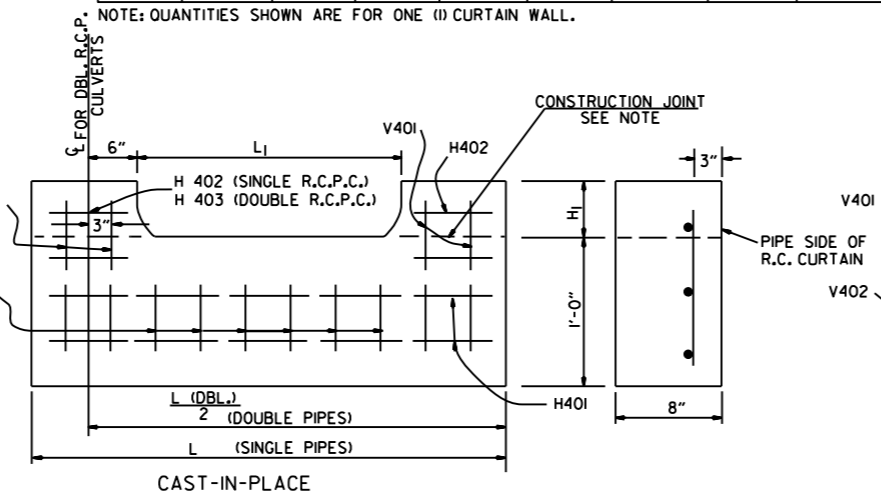
PLAN VIEW 3:1 FORESLOPES

NOTE: THE CONFIGURATION OF CONTOURS WILL VARY WITH FORESLOPE VARIATIONS.

R.C. CURTAIN WALL DIMENSIONS & QUANTITIES

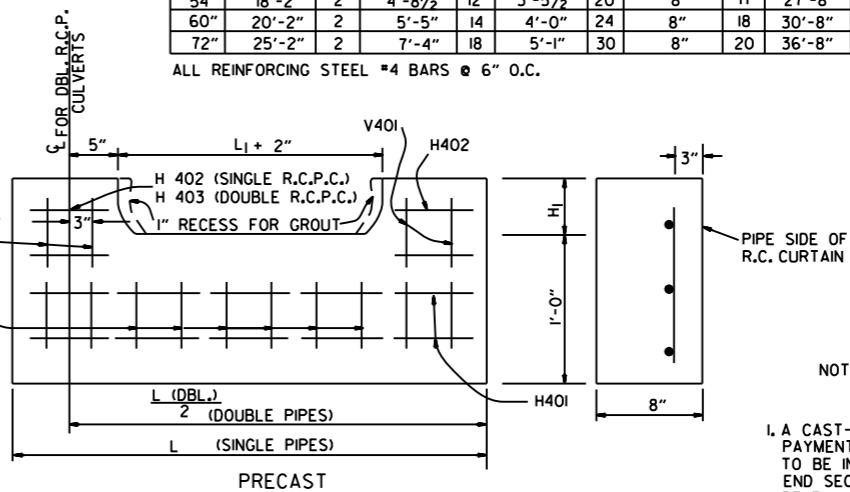
PIPE DIA.	H ₁	L ₁	L	L (DBL.) 2	SINGLE R.C.P.C.		DOUBLE R.C.P.C.	
					CONC.	REINF. STEEL	CONC.	REINF. STEEL
					CU. YDS.	LBS.	CU. YDS.	LBS.
18"	11 1/2"	3'-5"	8'-0"	6'-3"	0.31	27.7	0.45	39.5
24"	1'-0 1/2"	4'-6"	9'-6"	7'-6"	0.37	33.4	0.53	48.0
30"	1'-3 1/2"	5'-7"	11'-0"	9'-0"	0.45	39.0	0.67	59.0
36"	1'-7"	6'-8"	13'-0"	10'-6"	0.58	52.6	0.83	73.9
42"	2'-1 1/2"	7'-3"	15'-6"	12'-0"	0.82	77.1	1.10	100.7
48"	2'-5"	7'-10"	17'-0"	13'-0"	0.98	94.9	1.27	120.4
54"	2'-9 1/2"	8'-5"	18'-6"	14'-0"	1.16	115.8	1.47	143.7
60"	3'-4"	9'-0"	20'-6"	15'-6"	1.47	149.7	1.84	180.3
72"	4'-5"	10'-2"	25'-6"	18'-6"	2.31	232.6	2.73	271.0

NOTE: QUANTITIES SHOWN ARE FOR ONE (1) CURTAIN WALL.



R.C. CURTAIN WALL DETAILS

NOTE: THE PORTION OF THE R.C. CURTAIN WALL BENEATH THE FLARED END SECTION (LOWER 1'-0") SHALL BE PLACED MONOLITHICALLY. THE FLARED END SECTION SHALL THEN BE SET IN PLACE & THE REMAINING PORTIONS OF THE R.C. CURTAIN WALL PLACED.



NOTE: THE PRECAST CURTAIN WALL WILL BE SET AND BACKFILLED WITH COMPACTED MATERIAL. THE FLARED END SECTION SHALL THEN BE SET IN PLACE AND THE 1" RECESS FILLED WITH GROUT. WHERE "L" EXCEEDS 11' THE CURTAIN WALL MAY BE CAST IN TWO (2) OR MORE SECTIONS. THE METHOD OF JOINING THE SECTIONS FOR INSTALLATION SHALL BE APPROVED BY THE ENGINEER.

REINFORCING STEEL SCHEDULE

PIPE DIA.	SINGLE R.C. PIPE CULVERT								DOUBLE R.C. PIPE CULVERT									
	H401		H402		V401		V402		H401		H402		H403		V401		V402	
	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.
18"	7'-8"	2	1'-11 1/2"	4	1'-7 1/2"	8	8"	8	12'-2"	2	1'-11 1/2"	4	8"	2	1'-7 1/2"	10	8"	14
24"	9'-2"	2	2'-2"	4	1'-8 1/2"	10	8"	9	14'-8"	2	2'-2"	4	8"	2	1'-8 1/2"	12	8"	18
30"	10'-8"	2	2'-4 1/2"	4	1'-11 1/2"	10	8"	12	17'-8"	2	2'-4 1/2"	4	8"	2	1'-11 1/2"	14	8"	22
36"	12'-8"	2	2'-10"	6	2'-3"	12	8"	14	20'-8"	2	2'-10"	6	8"	3	2'-3"	14	8"	28
42"	15'-2"	2	3'-9 1/2"	8	2'-9 1/2"	16	8"	15	23'-8"	2	3'-9 1/2"	8	8"	4	2'-9 1/2"	18	8"	30
48"	16'-8"	2	4'-3"	10	3'-1"	18	8"	16	25'-8"	2	4'-3"	10	8"	5	3'-1"	20	8"	32
54"	18'-2"	2	4'-8 1/2"	12	3'-5 1/2"	20	8"	17	27'-8"	2	4'-9"	12	8"	6	3'-5 1/2"	22	8"	34
60"	20'-2"	2	5'-5"	14	4'-0"	24	8"	18	30'-8"	2	5'-5"	14	8"	7	4'-0"	26	8"	36
72"	25'-2"	2	7'-4"	18	5'-1"	30	8"	20	36'-8"	2	7'-4"	18	8"	9	5'-1"	33	8"	40

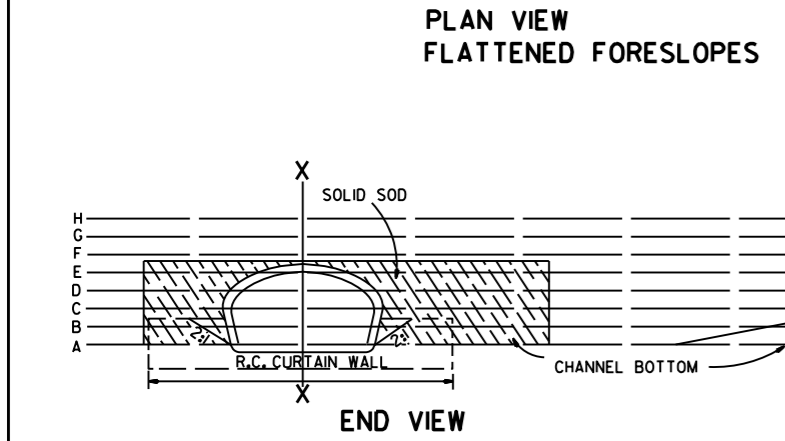
ALL REINFORCING STEEL #4 BARS @ 6" O.C.

SOLID SODDING

PIPE DIA.	SINGLE R.C.P.C.						DOUBLE R.C.P.C.					
	3:1	4:1	6:1	3:1	4:1	6:1	3:1	4:1	6:1	3:1	4:1	6:1
	SQ. YDS.						SQ. YDS.					
18"	5	7	12	6	8	13	5	7	12	6	8	13
24"	8	12	19	9	13	20	8	12	19	9	13	20
30"	13	18	29	14	19	30	13	18	29	14	19	30
36"	17	26	41	18	28	43	17	26	41	18	28	43
42"	23	35	55	25	37	57	23	35	55	25	37	57
48"	29	46	68	31	48	70	29	46	68	31	48	70
54"	35	57	85	37	59	87	35	57	85	37	59	87
60"	45	62	104	48	65	107	45	62	104	48	65	107
72"	64	92	156	67	95	159	64	92	156	67	95	159

NOTE: QUANTITIES SHOWN ABOVE ARE FOR ONE (1) END OF F.E.S.

- #### GENERAL NOTES
- A CAST-IN-PLACE OR PRECAST CURTAIN WALL MAY BE USED. PAYMENT FOR THE CURTAIN WALL SHALL BE CONSIDERED TO BE INCLUDED IN THE UNIT PRICE BID EACH FOR FLARED END SECTIONS OF THE SEVERAL SIZES, WHICH PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIALS INCLUDING REINFORCING STEEL AND CONCRETE; FOR FORMS, MIXING AND PLACING; FOR EXCAVATION AND BACKFILL; AND FOR ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.
 - ALL EXPOSED EDGES SHALL BE CHAMFERED 3/4".
 - CONCRETE FOR CURTAIN WALL SHALL MEET THE REQUIREMENTS FOR CLASS A OR S CONCRETE AS PROVIDED IN SECTION 802 OF THE STANDARD SPECIFICATIONS OR FOR PAVING CONCRETE AS PROVIDED IN SECTION 501 OF THE STANDARD SPECIFICATIONS.
 - WELDED WIRE MESH 3 x 3 W/10 x W/10 MAY BE USED IN LIEU OF REINFORCING BARS.



END VIEW

SECTIONAL VIEW "X-X"

10-18-96	ADDED NOTE TO SOLID SODDING		ARKANSAS STATE HIGHWAY COMMISSION
10-12-95	CORRECTED SPELLING		
11-3-94	ADDED GENERAL NOTE NO. 4		
8-15-91	REV. CURTAIN WALL QUANT. STEEL SCH. & SOLID SOD QUANT.		
3-2-81	ALLOW PRECAST IN 2 OR MORE PIECES CHAMFER EDGES		
5-15-80	ADDED PRECAST WALL & GENERAL NOTES		
10-2-72	REVISED AND REDRAWN		
DATE	REVISION	FILMED	STANDARD DRAWING FES-1

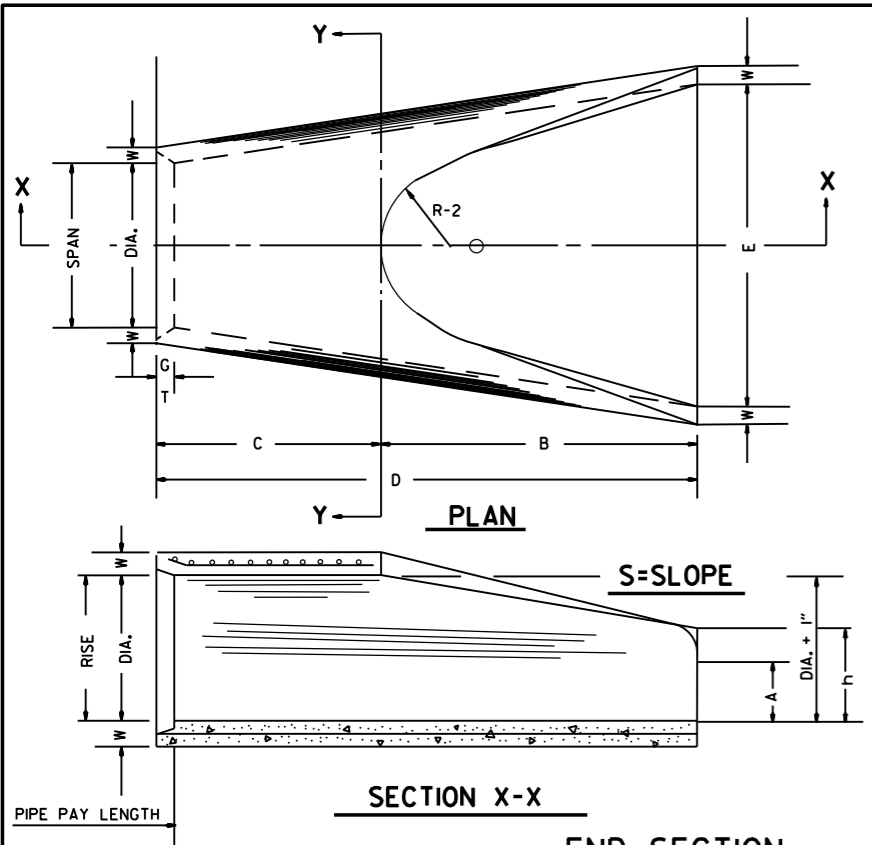
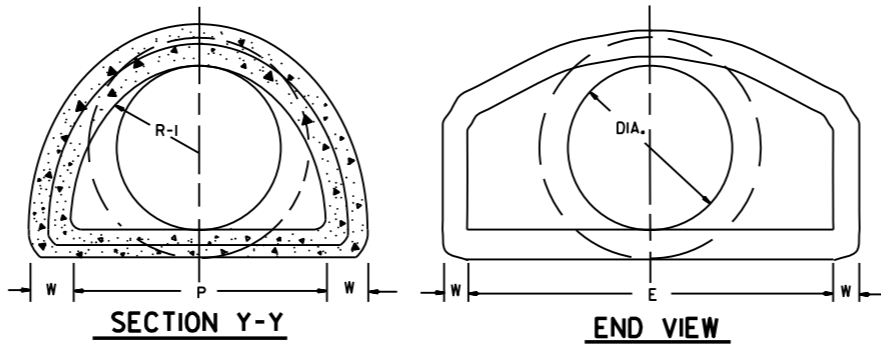


TABLE OF DIMENSIONS

DIA.	WALL	A	B	C	D	E	S	DIA. + 1"	P	R-1	R-2	G-T	WT.	h
18"	2 1/2"	9"	2'-3"	3'-10"	6'-1"	3'-0"	3:1	19"	29"	15 1/2"	12"	2"	1000	1'-0 1/2"
24"	3"	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	3:1	25"	33 3/8"	16 1/8"	14"	2 1/2"	1600	1'-1 1/2"
30"	3 1/2"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	3:1	31"	37"	18 1/2"	15"	3 1/4"	1940	1'-4 5/8"
36"	4"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	6'-0"	3:1	37"	47 1/8"	24 1/8"	20"	3 1/2"	4100	1'-8"
42"	4 1/2"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	3:1	43"	53 3/8"	27 1/2"	22"	3 1/2"	5380	2'-2 1/2"
48"	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	3:1	49"	56 1/2"	28 1/2"	22"	3 1/2"	6550	2'-6"
54"	5 1/2"	2'-4"	6'-6"	1'-10"	8'-4"	7'-6"	3:1	55"	65 1/2"	33 3/8"	24"	4"	8750	2'-10 1/2"
60"	6"	2'-10"	6'-6"	1'-10"	8'-4"	8'-0"	3:1	61"	72 1/2"	36 1/8"	24"	4"	9270	3'-5"
72"	7"	3'-10"	6'-6"	1'-10"	8'-4"	9'-0"	3:1	73"	77 3/8"	38 3/8"	24"	5"	13250	4'-6"



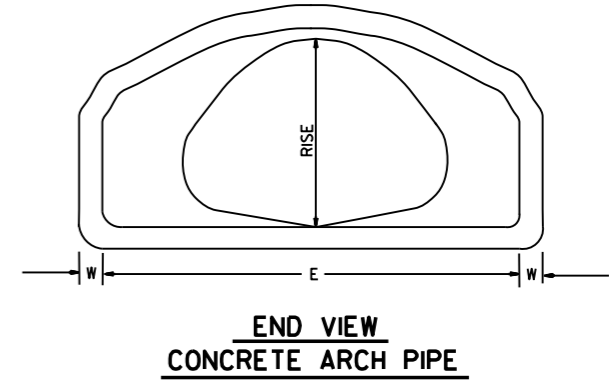
NOTE: TONGUE END ON UPSTREAM SECTION
GROOVE END ON DOWNSTREAM SECTION

**END SECTION
FOR REINFORCED CONCRETE PIPE CULVERTS**

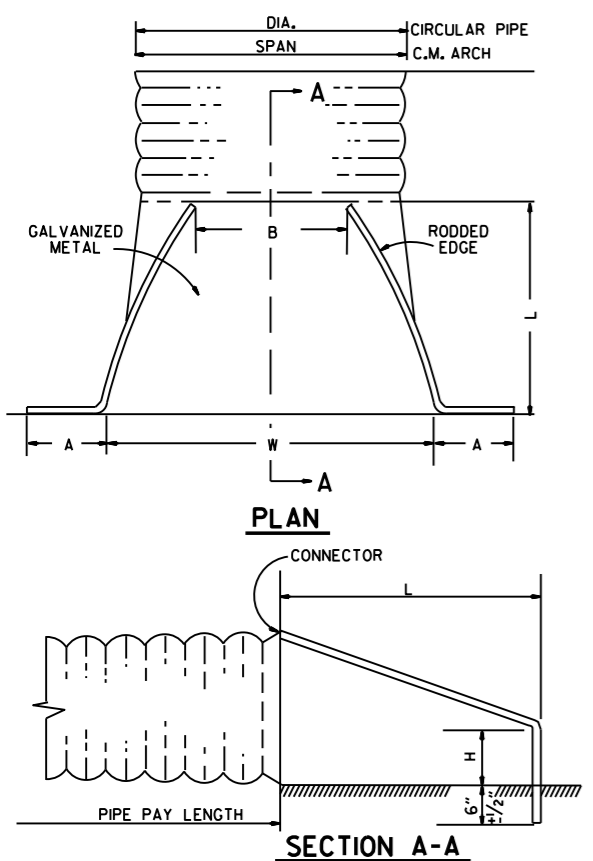
ARCH PIPE

EQUIV. DIA.	• SPAN		• RISE		W	A	B	C	D	E	P	R2	G-T	S
	AASHTO M 206	AHD NOMINAL	AASHTO M 206	AHD NOMINAL										
INCHES														
15	18	18	11	11	2"	4"	2'-0"	4'-0"	6'-0"	3'-0"	29"	12"	1 1/2"	2 1/2:1
18	22	22	13 1/2	14	2 1/2"	5"	2'-0"	4'-1"	6'-1"	3'-6"	32 1/8"	13"	2 1/2"	2 1/2:1
21	26	26	15 1/2	16	2 3/4"	7"	2'-3"	3'-10"	6'-1"	4'-0"	34 1/8"	14"	2 1/2"	2 1/2:1
24	28 1/2	29	18	18	3"	9"	2'-3"	3'-10"	6'-1"	5'-0"	36 3/8"	15"	2 1/2"	2 1/2:1
30	36 1/4	36	22 1/2	23	3 1/2"	10"	3'-1"	3'-0 1/2"	6'-1 1/2"	6'-0"	47 1/8"	20"	3"	2 1/2:1
36	43 3/4	44	26 3/8	27	4"	10 1/2"	4'-0"	2'-11 1/2"	6'-1 1/2"	6'-6"	54 3/8"	22"	3 1/2"	2 1/2:1
42	51 1/8	51	31 3/8	31	4 1/2"	11 1/2"	4'-7"	1'-10 1/4"	6'-5 1/4"	7'-2"	59 1/2"	23"	3 3/4"	2 1/2:1
48	58 1/2	59	36	36	5"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	7'-10"	70 3/8"	24"	4 1/4"	2 1/2:1
54	65	65	40	40	5 1/2"	1'-7"	5'-3"	2'-11"	8'-2"	8'-6"	72 1/8"	24"	4 3/4"	2 1/2:1
60	73	73	45	45	6"	1'-10"	5'-6"	2'-8"	8'-2"	9'-0"	77 3/8"	24"	5"	2 1/2:1

• THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PER CENT FROM THE VALUES SPECIFIED BY AASHTO M 206.



**END VIEW
CONCRETE ARCH PIPE**

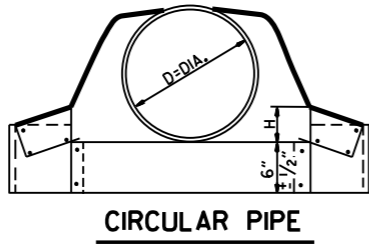


NOTE: ALTERNATE CONNECTIONS TO THE PIPE CULVERTS, IN ACCORDANCE WITH MANUFACTURER'S STANDARD PRACTICES, MAY BE MADE SUBJECT TO THE APPROVAL OF THE ENGINEER.

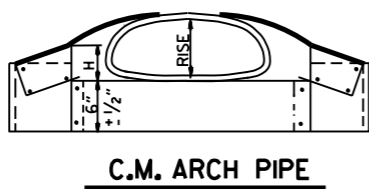
END SECTIONS FOR CORRUGATED METAL PIPE CULVERTS

CIRCULAR PIPE

D. DIA.	GAUGE	A	B. MAX.	H	L	W	S
12	16	6	6	6	21	24	2 1/2:1
15	16	7	8	6	26	30	2 1/2:1
18	16	8	10	6	31	36	2 1/2:1
21	16	9	12	6	36	42	2 1/2:1
24	16	10	13	6	41	48	2 1/2:1
30	14	12	16	8	51	60	2 1/2:1
36	14	14	19	9	60	72	2 1/2:1
42	12	16	22	11	69	84	2 1/2:1
48	12	18	27	12	78	90	2 1/2:1
54	12	18	30	12	84	102	2:1
60	12	18	33	12	87	114	1 3/4:1
66	12	18	36	12	87	120	1 1/2:1
72	12	18	39	12	87	126	1 1/3:1



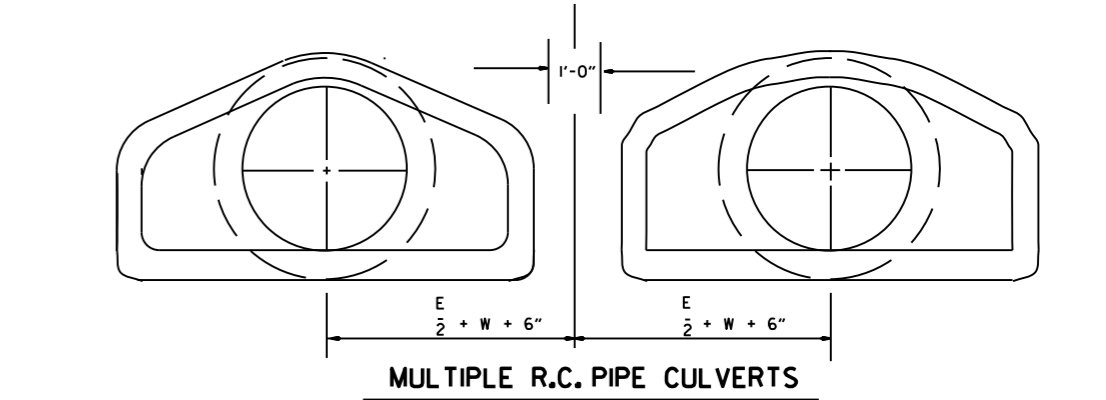
CIRCULAR PIPE



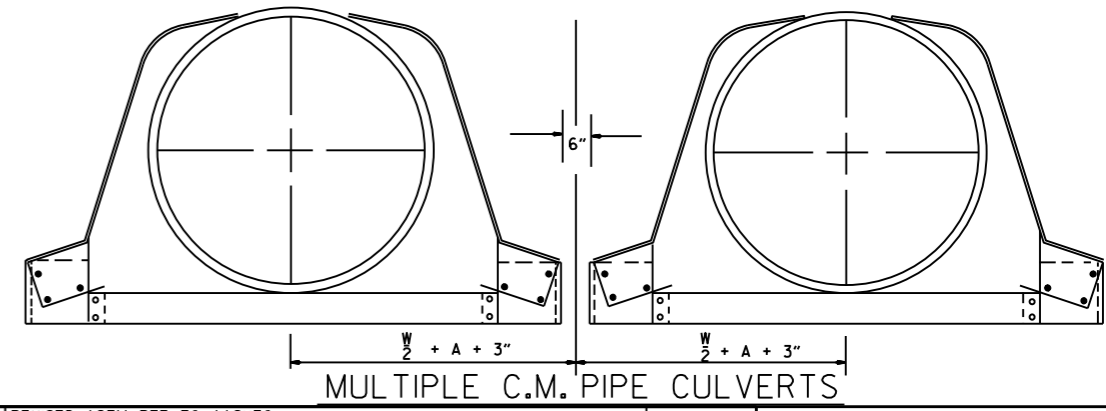
C.M. ARCH PIPE

C.M. ARCH PIPE

EQUIV. DIA.	SPAN	RISE	A		B	H	L	W	S	GAUGE
			1"	MAX.						
15"	17	13	7	9	6	19	30	2 1/2:1	16	
18"	21	15	7	10	6	23	36	2 1/2:1	16	
21"	24	18	8	12	6	28	42	2 1/2:1	16	
24"	28	20	9	14	6	32	48	2 1/2:1	16	
30"	35	24	10	16	6	39	60	2 1/2:1	14	
36"	42	29	12	18	8	46	75	2 1/2:1	14	
42"	49	33	13	21	9	53	85	2 1/2:1	12	
48"	57	38	18	26	12	63	90	2 1/2:1	12	
54"	64	43	18	30	12	70	102	2 1/4:1	12	
60"	71	47	18	33	12	77	114	2 1/4:1	12	



MULTIPLE R.C. PIPE CULVERTS



MULTIPLE C.M. PIPE CULVERTS

10-18-96	REVISED ASTM REF. TO AASHTO		ARKANSAS STATE HIGHWAY COMMISSION
5-15-80	REVISED DISTANCE BETWEEN MULTIPLE R.C.P. F.E.S.	664-5-15-80	
7-14-78	C.M. ARCH SIZES TO CONFORM WITH AASHTO SIZES	752-7-14-78	
8-22-75	ADDED MULTIPLE PIPE CULVERTS	517-8-22-75	FLARED END SECTION
12-5-74	REMOVED NOTE RE REINF. FOR R.C. F.E.S.	500-12-5-74	
5-24-73	CMP END SECTION, SHOW PIPE PAY LENGTH	627-5-24-73	
10-2-72	REVISED AND REDRAWN	760-10-2-72	STANDARD DRAWING FES-2
DATE	REVISION	FILMEN	

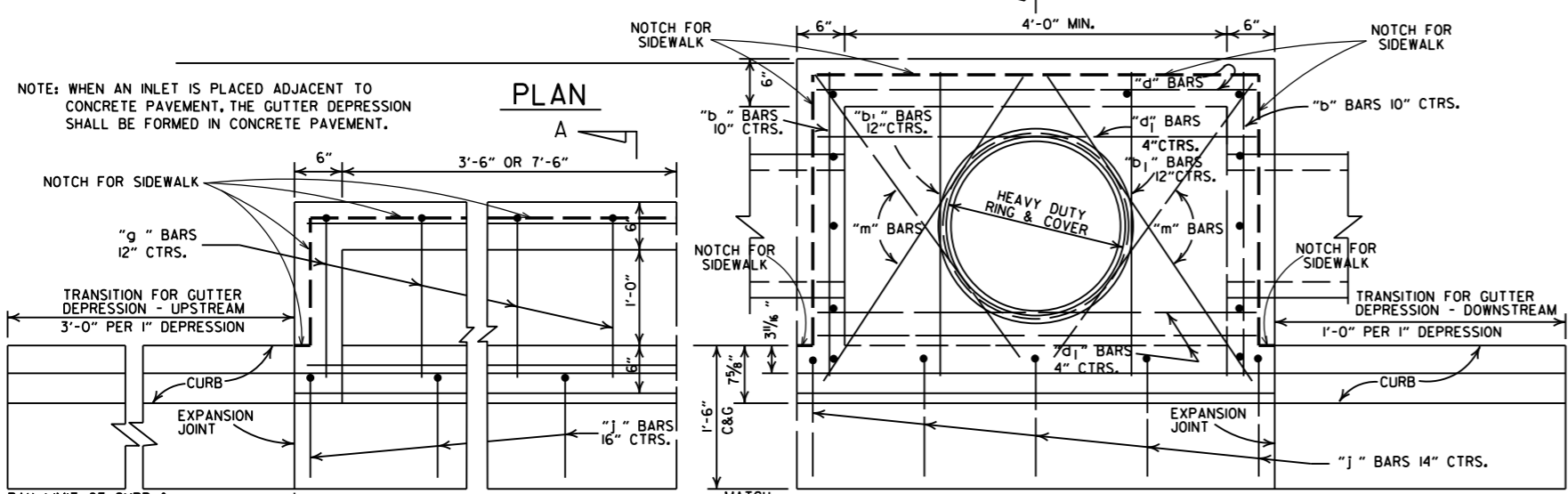
4'-0" LENGTH DROP INLET DROP INLET EXTENSION

PIPE SIZE	MIN. WIDTH	HEIGHT 5'-0"		PLUS OR MINUS PER LIN. FT. OF HEIGHT		4'-0"		8'-0"	
		CLASS A CONC.	REINF. STEEL	CLASS A CONC.	REINF. STEEL	CLASS A CONC.	REINF. STEEL	CLASS A CONC.	REINF. STEEL
		CU. YDS.	POUNDS	CU. YDS.	POUNDS	CU. YDS.	POUNDS	CU. YDS.	POUNDS
18"	2'-6"	1.77	156	0.28	22	0.58	38	0.87	72
24"	2'-6"	1.79	156	0.28	22				
30"	3'-2"	2.39	205	0.30	26				
36"	3'-8"	2.63	236	0.32	28				
42"	4'-4"	2.95	250	0.34	30				
48"	4'-10"	3.21	265	0.36	32				
						DEDUCT FROM QUANTITY COMPUTED FOR EACH EXTENSION ADDED.			
						0.04	3		

NOTE: QUANTITIES ARE APPROXIMATE AND ARE SHOWN FOR BIDDER INFORMATION ONLY.

NOTE: WHEN AN INLET IS PLACED ADJACENT TO CONCRETE PAVEMENT, THE GUTTER DEPRESSION SHALL BE FORMED IN CONCRETE PAVEMENT.

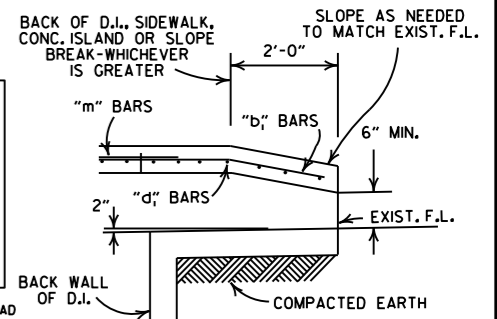
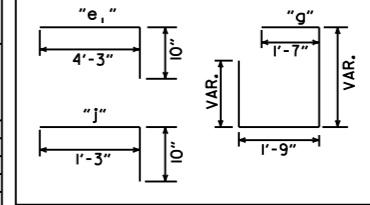
PLAN



DEDUCT FROM QUANTITY COMPUTED FOR EACH PIPE ENTERING INLET

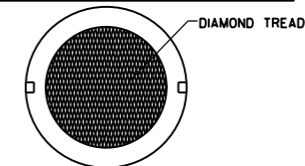
INSIDE DIA. PIPE	CLASS A CONC.	REINF. STEEL
INCHES	CU. YDS.	POUNDS
18	0.05	2
24	0.09	3
30	0.13	4
42	0.24	8

BAR DIAGRAM

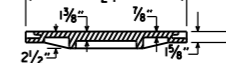


BACK OPENING

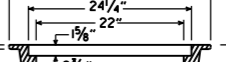
WHEN OPENING IN BACK IS CALLED FOR ON PLANS EXTEND OPENING AS SHOWN IN DETAIL. PAYMENT TO BE INCLUDED IN PRICE BID FOR DROP INLET (TYPE C).



COVER FACE



COVER SECTION

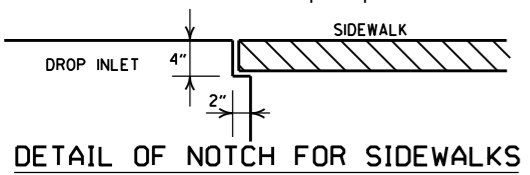


RING SECTION

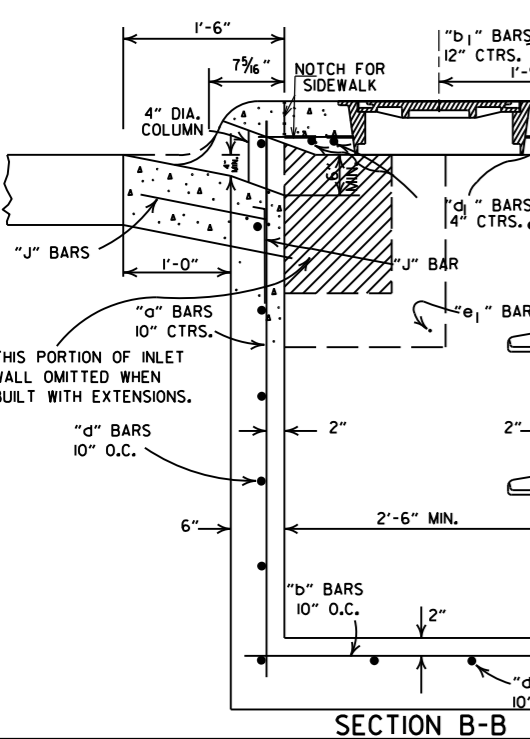
APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER

- GENERAL NOTES:
- ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
 - STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OF AS APPROVED BY THE ENGINEER.
 - ALL REINF. BARS SHALL BE #4 AND HAVE 1/2" COVER.
 - DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
 - THIS DROP INLET MAY BE CONSTRUCTED ON NEW OR EXISTING R.C. BOX CULVERT AS SHOWN ON F.P.C.-9.
 - WHEN PLANS CALL FOR DROP INLET OVER 10'-0" HIGH, FLOOR AND WALLS SHALL BE CONSTRUCTED AS SHOWN FOR TYPE "RM" DROP INLET (FPC-9D).
 - HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
 - DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
 - PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
 - HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
 - HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
 - 4"x2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
 - DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

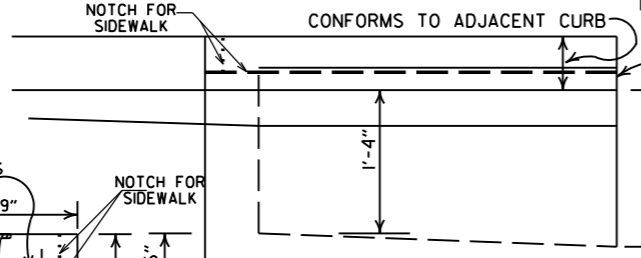


DETAIL OF NOTCH FOR SIDEWALKS

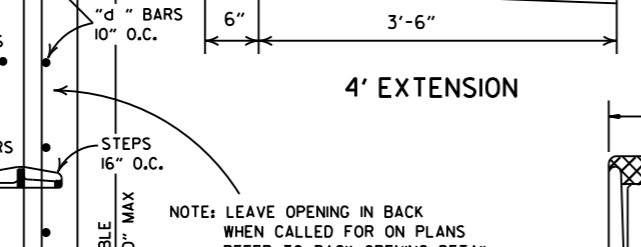


SECTION B-B

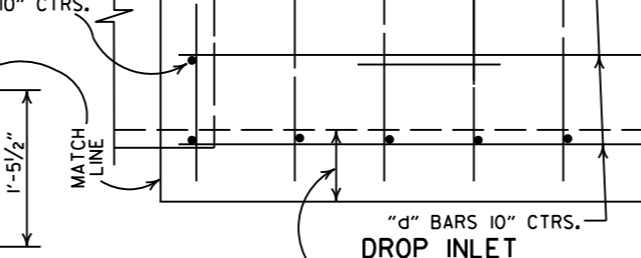
8' EXTENSION



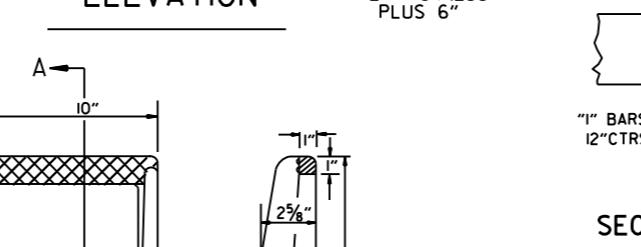
4' EXTENSION



ELEVATION



SECTION A-A



PLAN SECTION A-A

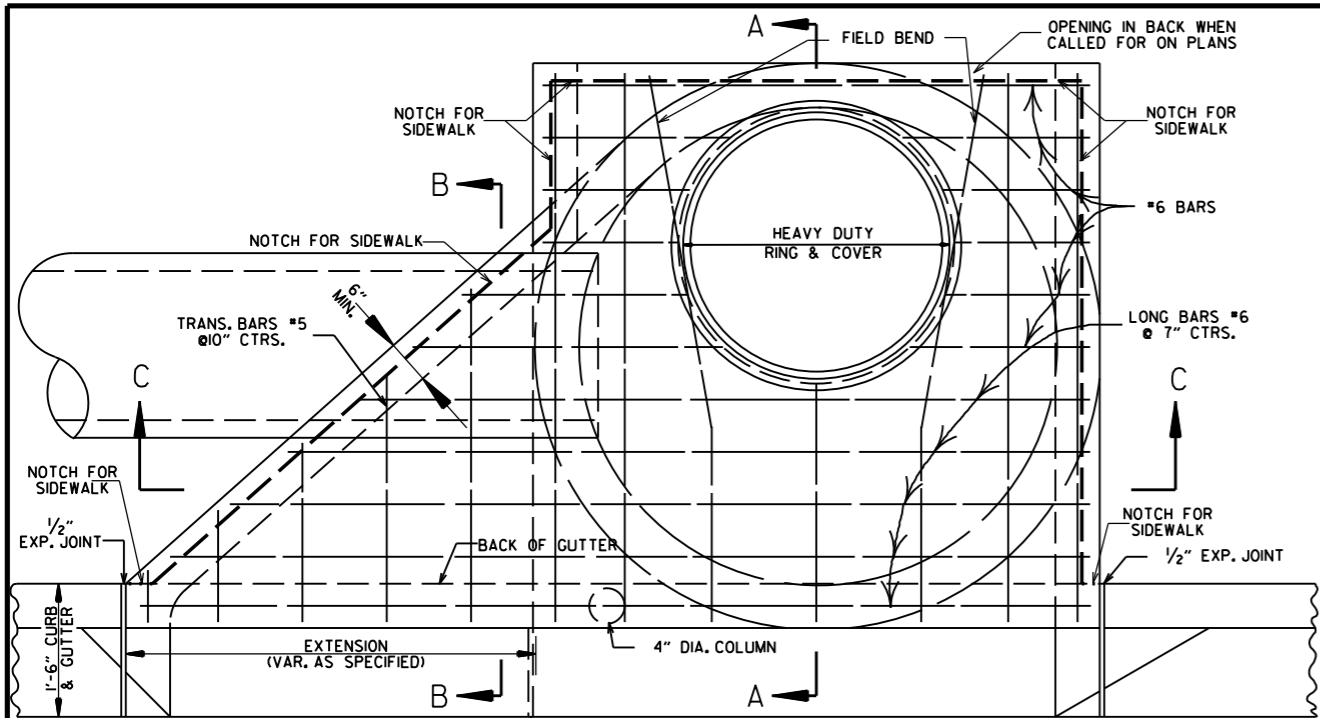
DETAIL OF STEP FOR DROP INLET
APPROX. WEIGHT = 11 LBS. (CAST IRON)
NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DATE	REV.	REVISION	DATE FILMED
8-22-02		ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01		ADDED NOTE 13; REVISED SECTION B-B	
1-12-00		CORRECTED DIMENSION ON SECTION B-B & REVISED RING & COVER	
5-13-99		ADDED DETAIL OF NOTCH FOR SIDEWALKS	
7-02-98		REPLACED RING & COVER W/HEAVY DUTY RING & COVER	
10-18-96		ADDED NOTES 9,10,&11	
4-26-96		CORRECTED SPELLING	
4-1-95		ADDED NOTE 8 & REVISED (4'x8') EXTENSION TITLES	10-18-96
8-15-91		REVISED BACK OPENING & NOTE	
7-15-88		DELETE TYPE IV GRATE	
5-20-83		REVISED STEP DETAIL	
2-4-83		REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
3-2-81		ADDED GENERAL NOTE NO. 4	
10-2-72		ADDED TYPE IV-A GRATE	
		DELETED INLET (TYPE F) & GRATE (TYPE III)	
		REVISED AND REDRAWN	

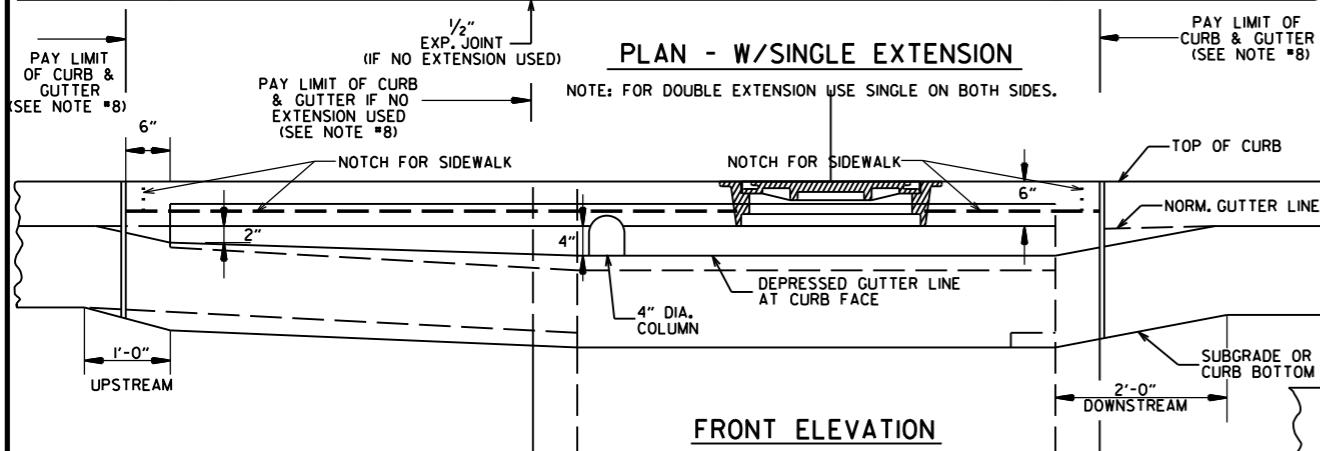
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS
(TYPE C)

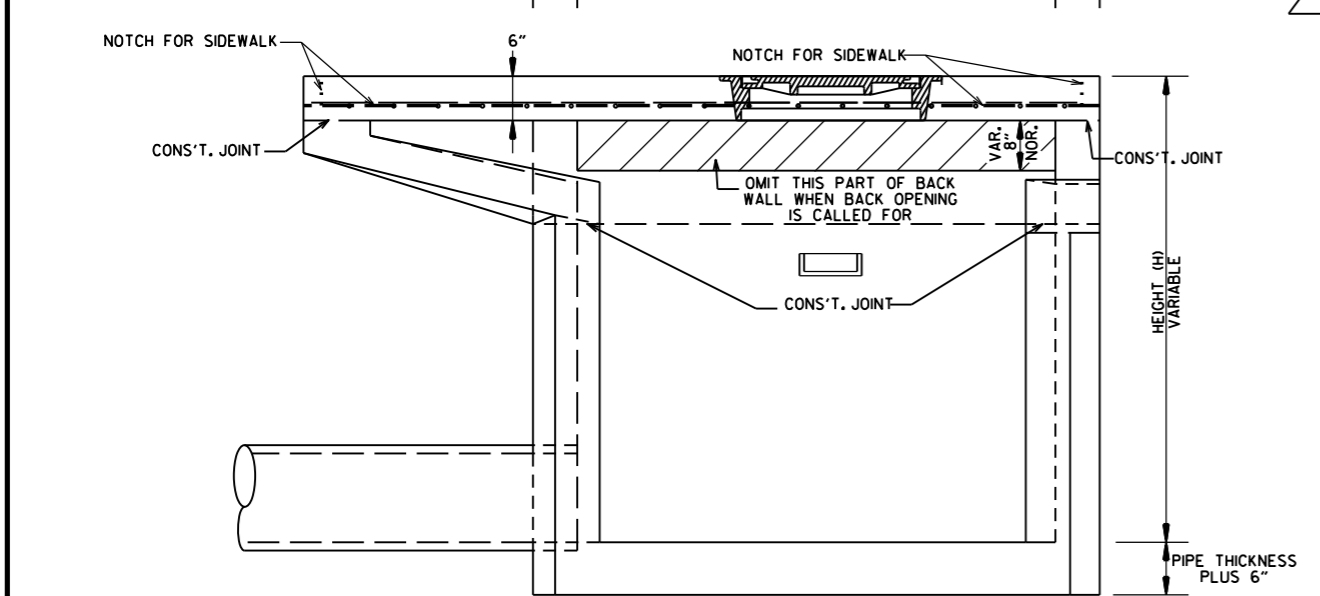
STANDARD DRAWING FPC-9E



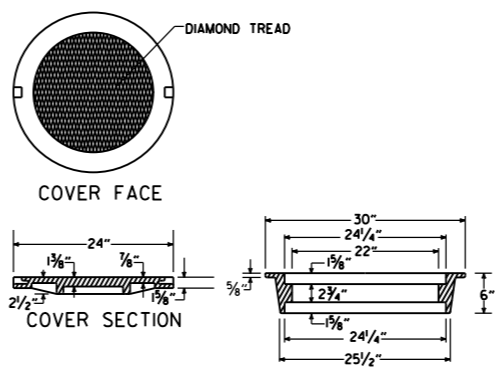
PLAN - W/SINGLE EXTENSION



FRONT ELEVATION

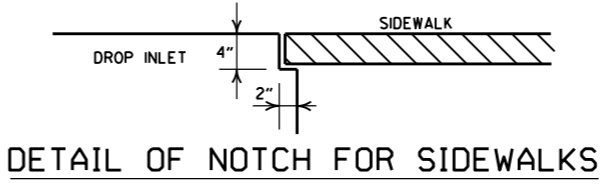


SECTION C-C

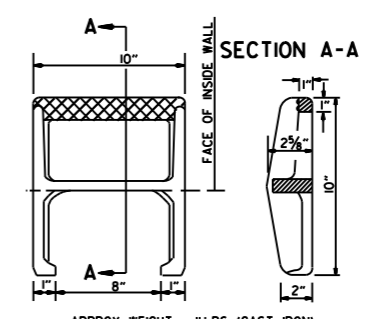


HEAVY DUTY RING & COVER

1. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
2. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
3. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.



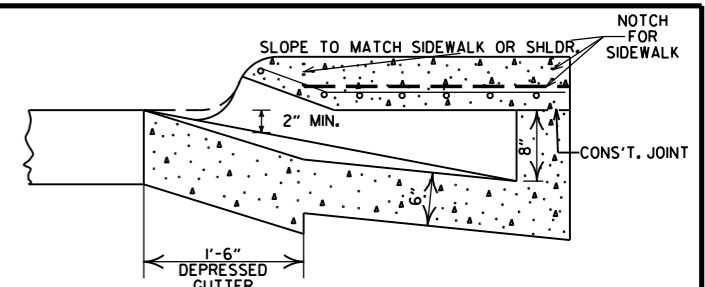
DETAIL OF NOTCH FOR SIDEWALKS



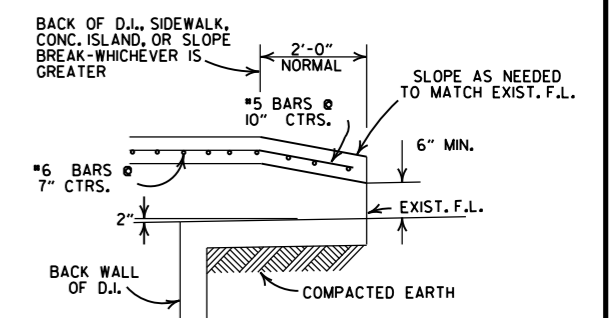
SECTION A-A

APPROX. WEIGHT = 11 LBS. (CAST IRON)
PLAN
NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET



SECTION B-B



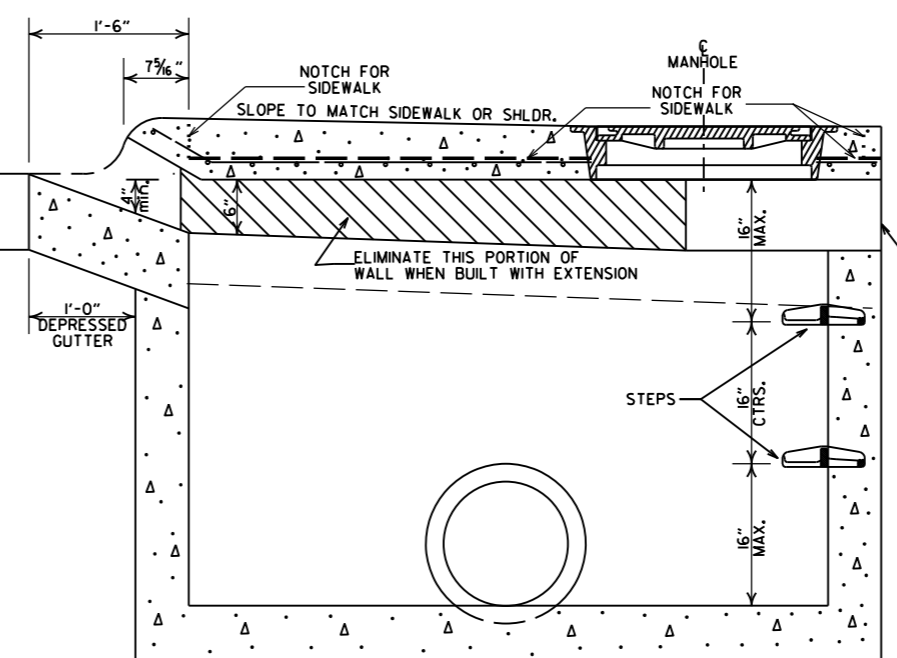
BACK OPENING

WHEN OPENING IN BACK IS CALLED FOR ON PLANS EXTEND OPENING AS SHOWN IN DETAIL. PAYMENT TO BE INCLUDED IN PRICE BID FOR DROP INLET (TYPE MO).

- GENERAL NOTES:
1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
 2. STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OR AS DIRECTED BY THE ENGINEER.
 3. ALL REINFORCING BARS SHALL BE GRADE 60 AND HAVE MIN. 1/2" COVER.
 4. DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
 5. 4" DIA. COLUMNS SPACED AT MAX. 4'-0" INTERVALS SHALL BE INSTALLED ALONG INLET AND EXTENSION TO SUPPORT TOP.
 6. BASE AND INLET WALLS SHALL BE CAST MONOLITHICALLY.
 7. THE THROAT SHALL BE CAST INTEGRALLY WITH THE GUTTER.
 8. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
 9. PIPES MAY ENTER DROP INLET FROM ANY ANGLE OR ELEVATION AS MAY BE APPROVED BY THE ENGINEER.
 10. APPROPRIATE SIZE TYPE C DROP INLETS MAY BE SUBSTITUTED FOR TYPE MO DROP INLETS AS APPROVED BY THE ENGINEER. PAYMENT TO BE AS DROP INLET (TYPE MO).
 11. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
 12. 4"x2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
 13. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

LEAVE OPENING IN BACK WHEN CALLED FOR ON PLANS REFER TO BACK OPENING DETAIL

MINIMUM WALL THICKNESS			
DIA. OF D.I.	DIA. OF OUTLET PIPE	CAST IN PLACE	PRECAST
4" I.D.	12" THRU 27"	6"	5"
5" I.D.	30" THRU 42"	8"	6"
6" I.D.	48" THRU 54"	8"	7"



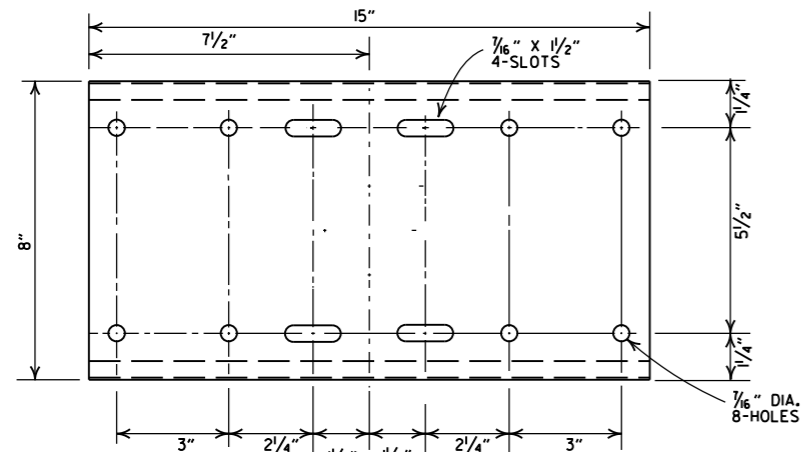
SECTION A-A

DATE	REVISIONS	DATE FILMED
8-22-02	ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01	ADDED NOTE 13	
1-12-00	REVISED HEAVY DUTY RING & COVER	
5-13-99	ADDED NOTCH DETAIL FOR SIDEWALKS	
7-02-98	REP. NOTE 8, REV. PLAN DET., REV. PICTURE FOR NEW RING & COVER, ADDED HEAVY DUTY RING & COVER AND DETAIL OF STEP FOR DROP INLET	
4-26-96	ADDED NOTE 11 AND OPENING DIMENSION	
10-12-95	CORRECTED #6 BAR SPACING	
7-20-95	CORRECTED DIAMETER OF D.I. IN BOX	
2-2-95	TYPE C TO TWO (OPEN BACK DETAIL)	
11-3-94	REVISED GENERAL NOTES	
4-1-93	REV. BACK OPEN DETAIL & NOTE	11-3-94
8-15-91	REVISED NOTES 11, 12 & ADDED BK. OPEN DETAIL	4-1-93
11-30-89	ADDED NOTE NO. 12	8-15-91
8-23-89	ADDED NOTE & MINIMUM WALL THICKNESS	11-30-89
7-15-88	ADDED EXTEND NOTE TO SECTION A-A	513-1-23-88
1-14-87	MODIFIED WALL THICKNESS	639-7-15-88
6-12-87	ISSUED	783-1-14-87
		4-6-87

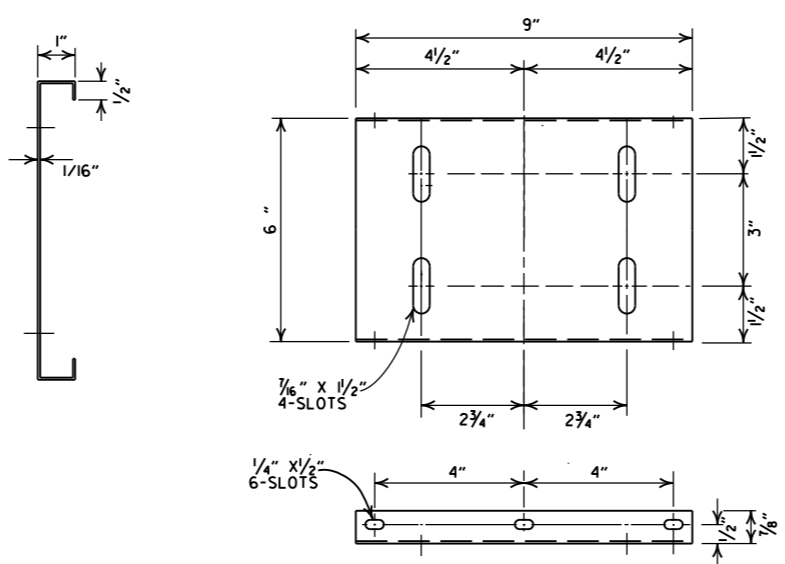
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLET (TYPE MO)

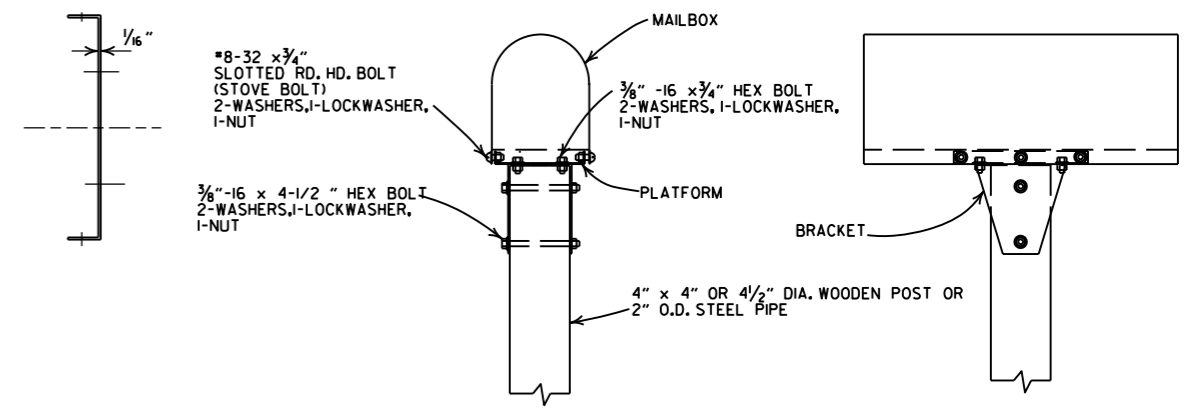
STANDARD DRAWING FPC-9M



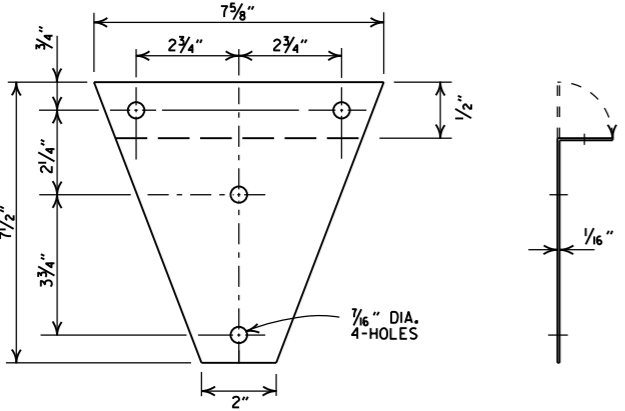
SHELF



PLATFORM

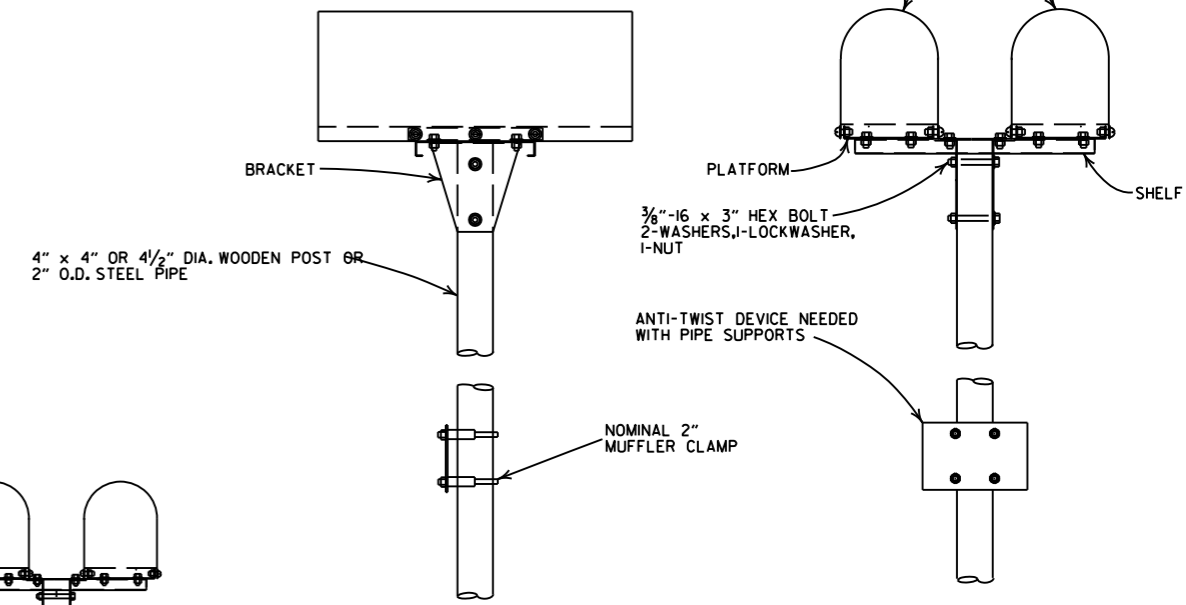


SINGLE INSTALLATION

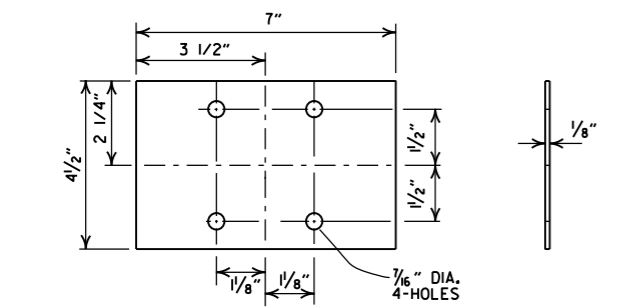


BRACKET

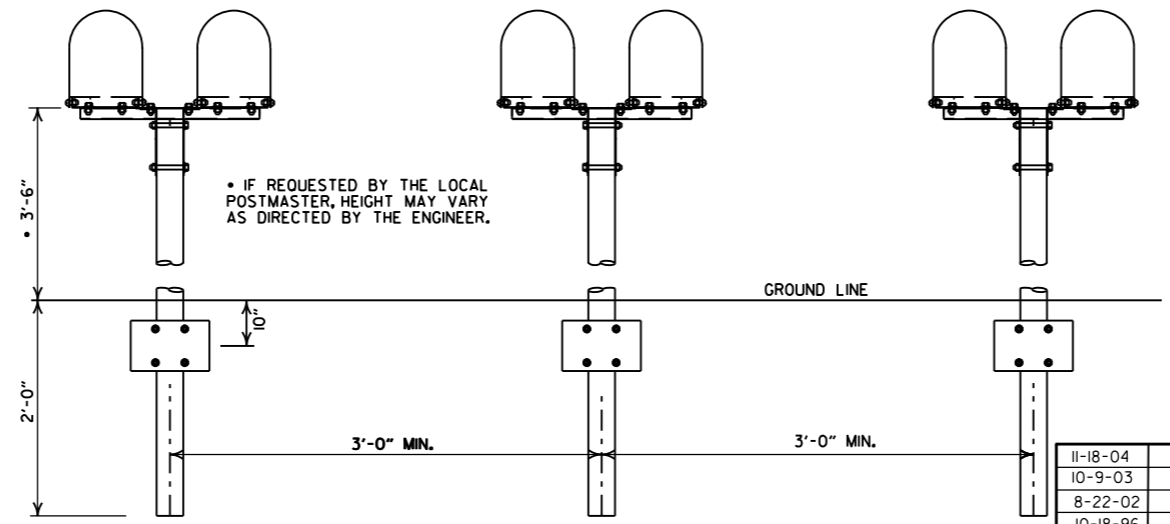
- GENERAL NOTES**
1. MAILBOX POSTS MAY BE WOOD OR METAL. WOOD POSTS SHALL BE PRESSURE TREATED FOR GROUND CONTACT IN ACCORDANCE WITH SECTION 637.02 OF THE STANDARD SPECIFICATIONS.
 2. ANTI-TWIST PLATES SHALL BE USED ONLY ON METAL POSTS.
 3. MAILBOX SHELF, BRACKET & PLATFORM SHALL BE GALVANIZED OR PAINTED STEEL, HOWEVER TREATED WOOD MAY BE USED WITH WOODEN POSTS. THE WOODEN SHELF, BRACKET & PLATFORM SHALL BE A MINIMUM OF 3/4" THICK AND SHALL BE ASSEMBLED WITH BOLTS OF THE APPROPRIATE LENGTH WITH SIX 8 X 3/4" FLATHEAD WOOD SCREWS USED TO ATTACH THE MAILBOX TO THE PLATFORM.
 4. THE MAILBOX SHELF AND PLATFORM THAT IS SHOWN IS FOR STANDARD SIZE MAILBOXES, THE SHELF AND PLATFORM SIZE SHALL BE MODIFIED TO FIT MAILBOXES OF A DIFFERENT SIZE.
 5. METAL PIPE FOR MAILBOX SUPPORT SHALL BE 2" OUTSIDE DIAMETER STEEL WITH A WALL THICKNESS OF 0.145" AND A WEIGHT OF 2.72 LBS PER FT. OUTSIDE DIAMETER AND WEIGHT SHALL HAVE A TOLERANCE OF +/- 5% ACCORDING TO AASHTO M 181.
 6. MAILBOX SUPPORT SYSTEM DIFFERING FROM THOSE SHOWN MAY BE USED, PROVIDED THEY ARE ON THE ARDOT QUALIFIED PRODUCTS LIST FOR MAILBOX SUPPORTS.



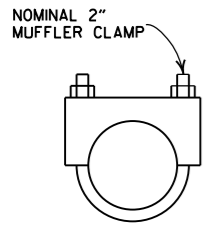
DOUBLE INSTALLATION



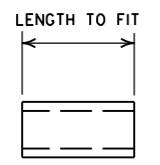
ANTI-TWIST PLATE



SPACING FOR MULTIPLE POST INSTALLATION



CLAMP



SPACER

NOMINAL 1/2" STD. WT. PIPE

11-18-04		REVISED NOTES
10-9-03		REVISED NOTE 6
8-22-02		REVISED NOTE 6
10-18-96		CORRECTED AASHTO
10-1-92		CORRECTED SPELLING
9-26-91		NEW PHONE NUMBER
8-15-91		ADDED NOTE
11-30-89		ADJUSTED HEIGHT & ADDED NOTE
2-16-89		DELETED SLOTS FROM SHELF & PLTF
11-17-88	10-1-92	ADJUSTED DIMENSIONS OF STEEL POSTS
7-15-88	120-7-15-88	ISSUED
DATE	FILMED	REVISION

ARKANSAS STATE HIGHWAY COMMISSION

MAILBOX DETAILS

STANDARD DRAWING MB-1

REINFORCED CONCRETE ARCH PIPE DIMENSIONS

EQUIV. DIA.	SPAN		RISE	
	AASHTO M 206	ARDDOT NOMINAL	AASHTO M 206	ARDDOT NOMINAL
INCHES	INCHES			
15	18	18	11	11
18	22	22	13½	14
21	26	26	15½	16
24	28½	29	18	18
30	36¼	36	22½	23
36	43¾	44	26¾	27
42	51½	51	31¾	31
48	58½	59	36	36
54	65	65	40	40
60	73	73	45	45
72	88	88	54	54
84	102	102	62	62
90	115	115	72	72
96	122	122	77½	77
108	138	138	87½	87
120	154	154	96¾	97
132	168¾	169	106½	107

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M206.

REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE DIMENSIONS

EQUIV. DIA.	AASHTO M 207	
	SPAN	RISE
INCHES	INCHES	
18	23	14
24	30	19
27	34	22
30	38	24
33	42	27
36	45	29
39	49	32
42	53	34
48	60	38
54	68	43
60	76	48
66	83	53
72	91	58
78	98	63
84	106	68

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M207.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE MIDDLE OF THE PIPE.
5. COMPLETE BACKFILL ACCORDING TO SUBSECTION 606.03.(f)(1).

NOTE: HAUNCH AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF CONCRETE PIPE.

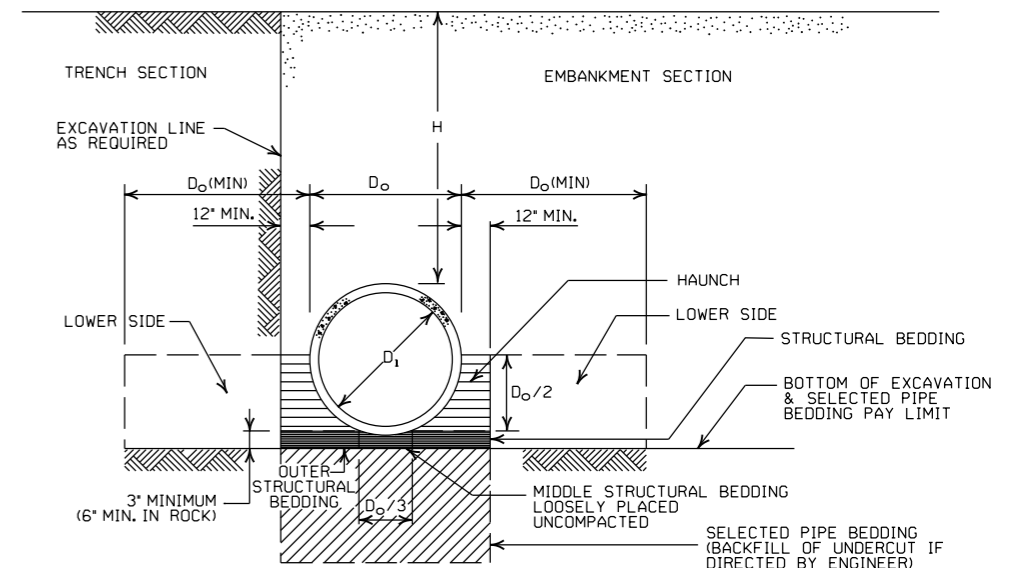
- LEGEND -

- D_i = NORMAL INSIDE DIAMETER OF PIPE
- D_o = OUTSIDE DIAMETER OF PIPE
- H = FILL COVER HEIGHT OVER PIPE (FEET)
- MIN. = MINIMUM
- [Symbol] = UNDISTURBED SOIL

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR HAUNCH AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 5 OR CLASS 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL*
TYPE 3**	AASHTO CLASSIFICATION A-1 THRU A-6 SOIL OR TYPE 1 OR 2 INSTALLATION MATERIAL

* SM-3 WILL NOT BE ALLOWED.

** MATERIALS SHALL NOT INCLUDE ORGANIC MATERIALS OR STONES LARGER THAN 3 INCHES.



EMBANKMENT AND TRENCH INSTALLATIONS

1. MATERIAL IN THE HAUNCH AND OUTER STRUCTURAL BEDDING SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. FOR TRENCHES WITH WALLS OF NATURAL SOIL, THE DENSITY OF THE SOIL IN THE LOWER SIDE ZONE SHALL BE AS FIRM AS THE 95% DENSITY REQUIRED FOR THE HAUNCH. IF THE EXISTING SOIL DOES NOT MEET THIS CRITERIA, IT SHALL BE REMOVED AND RECOMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OF MATERIAL USED.
3. FOR EMBANKMENTS, THE MATERIAL IN THE LOWER SIDE ZONE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

GENERAL NOTES

1. CONCRETE PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. CONCRETE PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. ALL PIPE SHALL CONFORM TO SECTION 606. CIRCULAR R.C. PIPE CULVERTS SHALL CONFORM TO AASHTO M170. R.C. ARCH PIPE CULVERTS SHALL CONFORM TO AASHTO M206 AND HORIZONTAL ELLIPTICAL PIPE CULVERTS SHALL CONFORM TO AASHTO M207.
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. NOT MORE THAN ONE LIFTING HOLE MAY BE PROVIDED IN CONCRETE PIPE TO FACILITATE HANDLING. HOLE MAY BE CAST IN PLACE, CUT INTO THE FRESH CONCRETE AFTER FORMS ARE REMOVED, OR DRILLED. THE HOLE SHALL NOT BE MORE THAN TWO INCHES IN DIAMETER OR TWO INCHES SQUARE. CUTTING OR DISPLACEMENT OF REINFORCEMENT WILL NOT BE PERMITTED. SPALLED AREAS AROUND THE HOLE SHALL BE REPAIRED IN A WORKMANLIKE MANNER. LIFTING HOLE SHALL BE FILLED WITH MORTAR, CONCRETE, OR OTHER METHOD AS APPROVED BY THE ENGINEER.
9. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
10. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS THE HAUNCH), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

MINIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE			
	CLASS III	CLASS IV	CLASS V	CLASS V
PIPE ID (IN.)	FEET			
12-15	2	2.5	2	1
18-24	2.5	3	2	1
27-33	3	4	2	1
36-42	3.5	5	2	1
48	4.5	5.5	2	1
54-60	5	7	2	1
66-78	6	8	2	1
84-108	7.5	8	2	1

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE		
	CLASS III	CLASS IV	CLASS V
TYPE 1	21	32	50
TYPE 2	16	25	39
TYPE 3	12	20	30

NOTE: IF FILL HEIGHT EXCEEDS 50 FEET, A SPECIAL DESIGN CONCRETE PIPE WILL BE REQUIRED USING TYPE 1 INSTALLATION.

MINIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
TYPE 2 OR TYPE 3	FEET	
	2.5	1.5

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
TYPE 2	13	21
TYPE 3	10	16

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

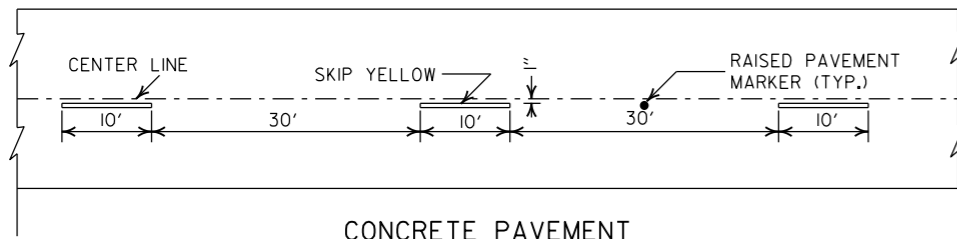
DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECIFICATIONS	
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

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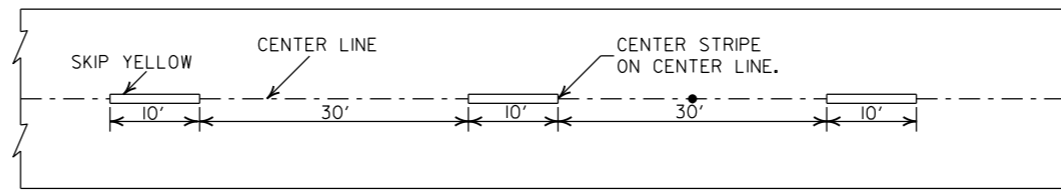
CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1



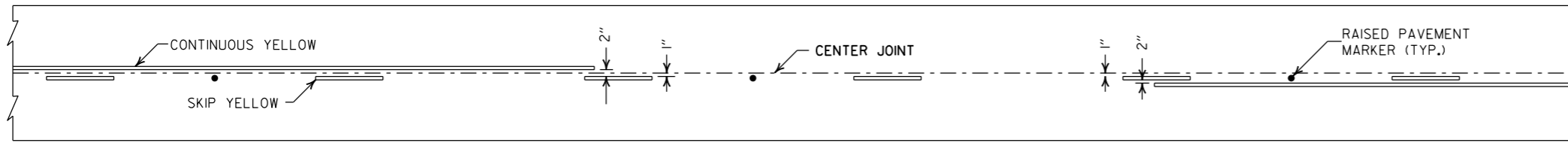


CONCRETE PAVEMENT

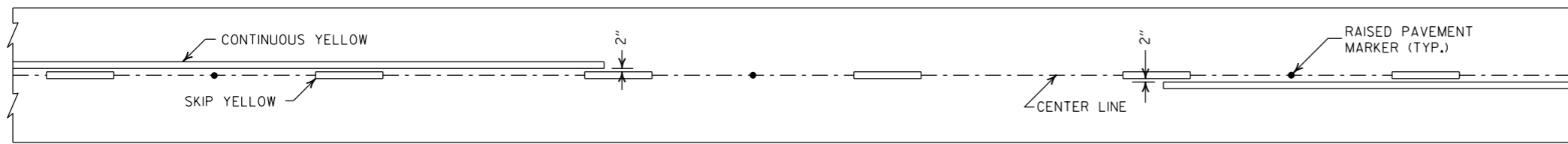


ASPHALT PAVEMENT

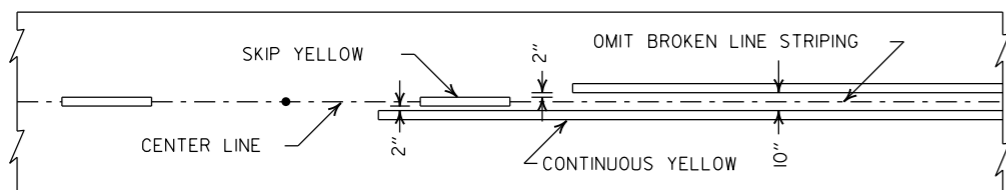
BROKEN LINE STRIPING



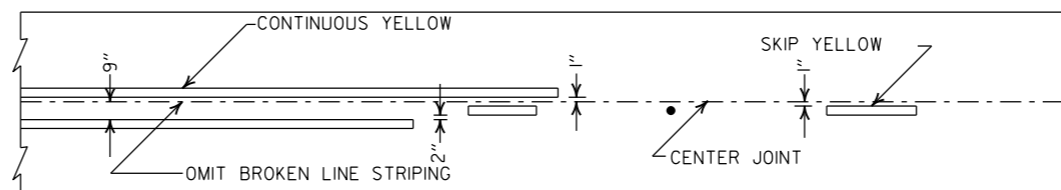
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

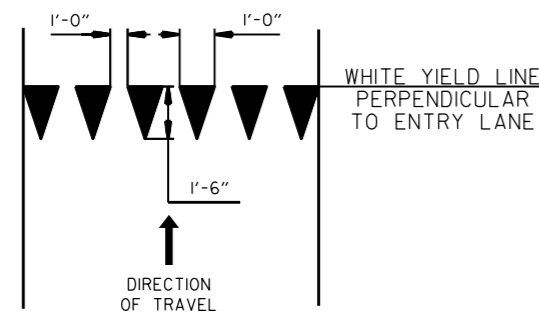


ASPHALT PAVEMENT

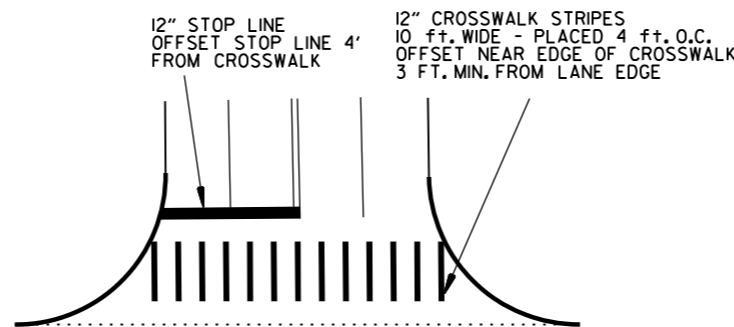


CONCRETE PAVEMENT

STRIPING AT ADJACENT NO PASSING LANES

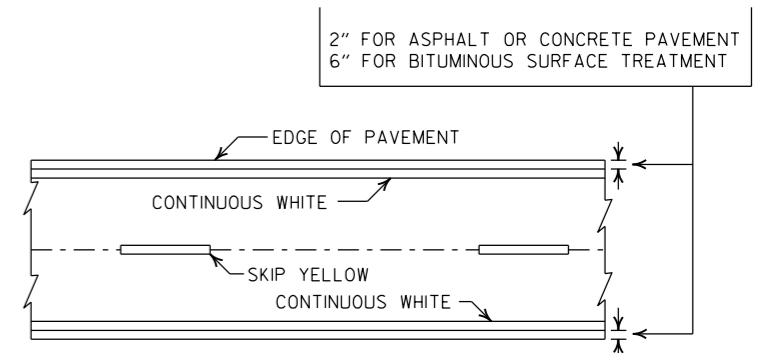


YIELD LINE DETAIL

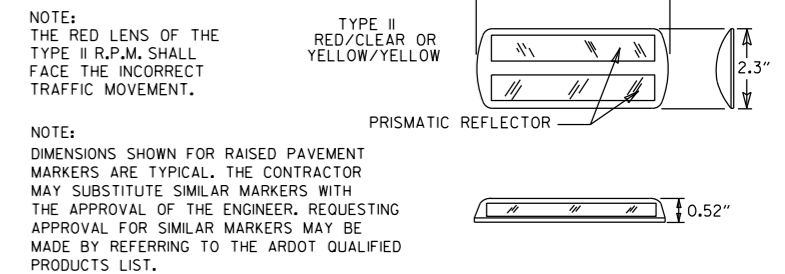


CROSSWALK AND STOP LINE DETAILS

- NOTES:
1. REFER TO THE STRIPING DETAILS FOR PAVEMENT MARKING LINE WIDTHS.
 2. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
 3. RAISED PAVEMENT MARKERS SHALL BE PLACED ON AN 80 FEET SPACING UNLESS OTHERWISE SHOWN IN THE PLANS.



PAVEMENT EDGE LINE MARKING





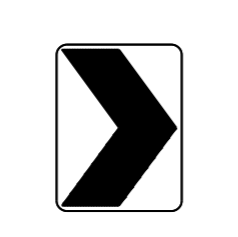



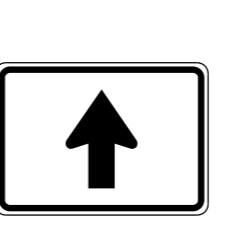
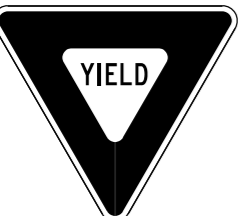

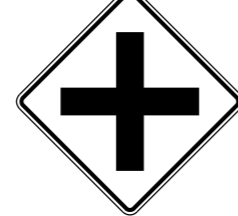



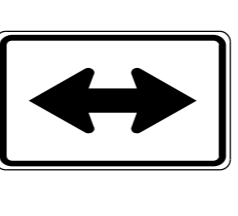


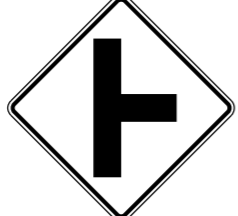



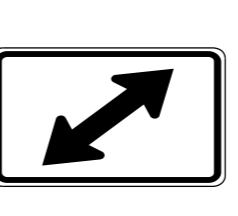

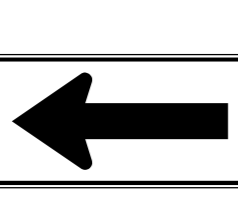
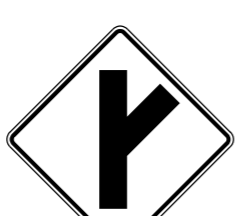

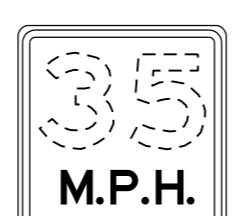
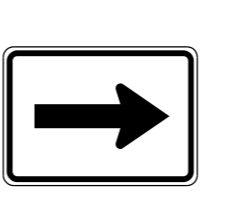
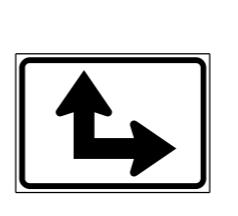
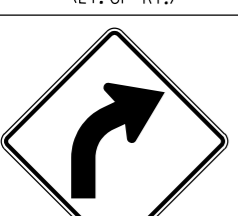
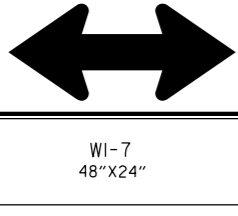
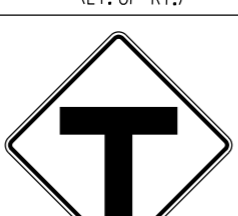

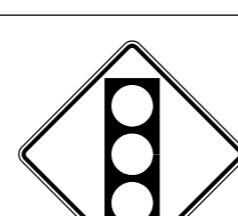

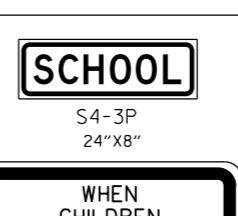

DETAIL OF STANDARD RAISED PAVEMENT MARKERS

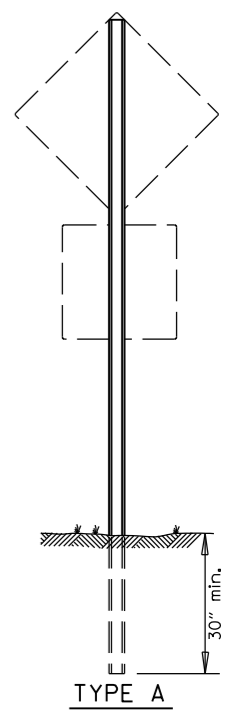
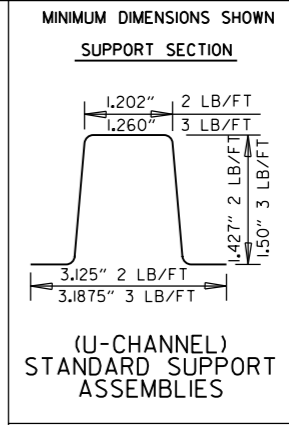
DATE	REVISION	FILMED
2-27-20	REVISED STOP LINE DETAILS	
6-1-17	ADDED YIELD LINE DETAIL	
5-12-16	REVISED LINE WIDTHS, SPACING, & NOTES	
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
11-17-10	REVISED GENERAL NOTES & REMOVED PLOWABLE PVMT MRKRS	
11-18-04	REVISED NOTE 2 & GENERAL NOTES	
8-22-02	ADDED CROSSWALK & STOPBAR DTL.	
7-02-98	ADDED DETAILS OF STD. RAISED PAV'T. MARKERS	
4-26-96	REV. NOTES 3&4; ADDED R.P.M.	
9-30-80	DRAWN	1-9-30-80

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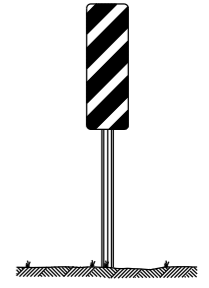
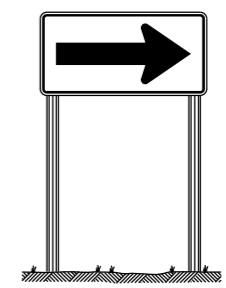
PAVEMENT MARKING DETAILS

STANDARD DRAWING PM-1

 RI-1 30"x30"	 W1-3 30"x30" (LT. OR RT.)	 W1-8 18"x24"	 W2-5 30"x30"	 W3-1 36"x36"	 W5-1 36"x36"	 M6-3 21"x15"
 RI-2 36"x36"x36"	 W1-4 30"x30" (LT. OR RT.)	 W2-1 30"x30"	 SI-1 36"x36"	 W3-2 36"x36"	 LASSEN 16 COUNTY County Route Marker MI-6 24"x24"	 M6-4 21"x15"
 R2-1 24"x30"	 W1-5 30"x30" (LT. OR RT.)	 W2-2 30"x30"	 W5-2 36"x36"	 PAVEMENT ENDS W8-3 36"x36"	 ALL WAY RI-3P 18"x6"	 M6-5 21"x15"
 W1-1 30"x30" (LT. OR RT.)	 W1-6 48"x24"	 W2-3 30"x30" (LT. OR RT.)	 ONE LANE BRIDGE W5-3 36"x36"	 35 M.P.H. W13-IP 18"x18"	 M6-1 21"x15"	 M6-6 21"x15"
 W1-2 30"x30" (LT. OR RT.)	 W1-7 48"x24"	 W2-4 30"x30"	 R X R W10-1 36" DIAMETER	 W3-3 36"x36"	 M6-2 21"x15"	 SCHOOL S4-3P 24"x8"
						 WHEN CHILDREN ARE PRESENT S4-2P 24"x10"



NOTE: LENGTH OF SIGN POSTS SHALL BE DETERMINED SO AS TO PROVIDE FOR MINIMUM VERTICAL CLEARANCES AS CALLED FOR IN THE SPECIFICATIONS PLUS A MINIMUM VERTICAL PENETRATION OF 30" IN THE SOIL.



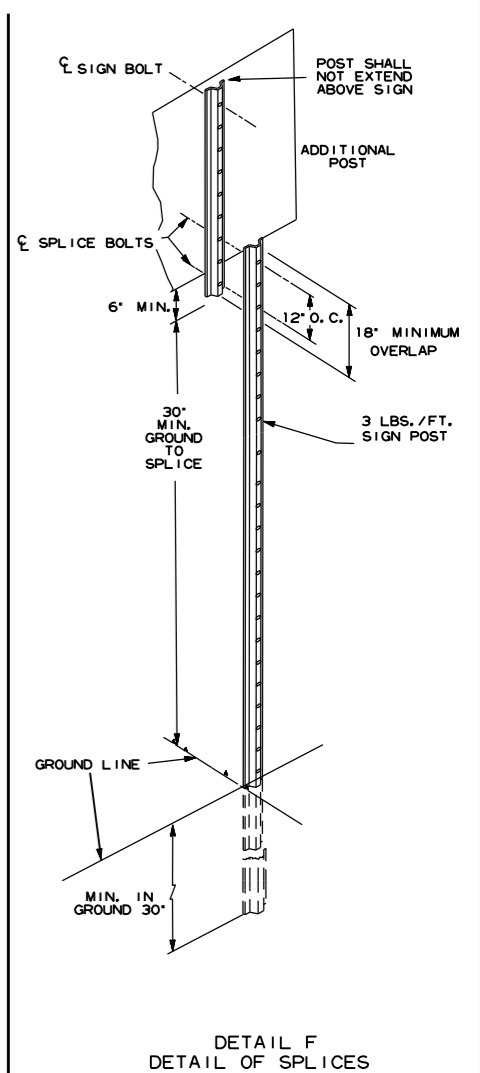
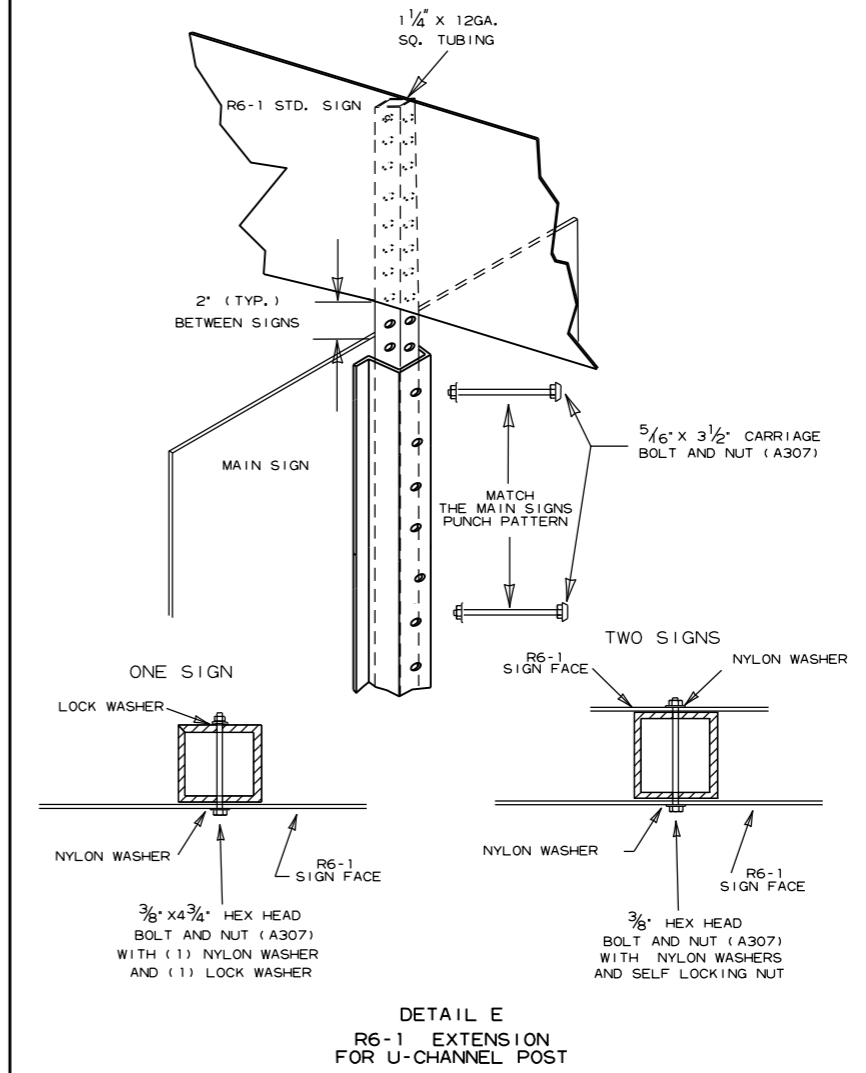
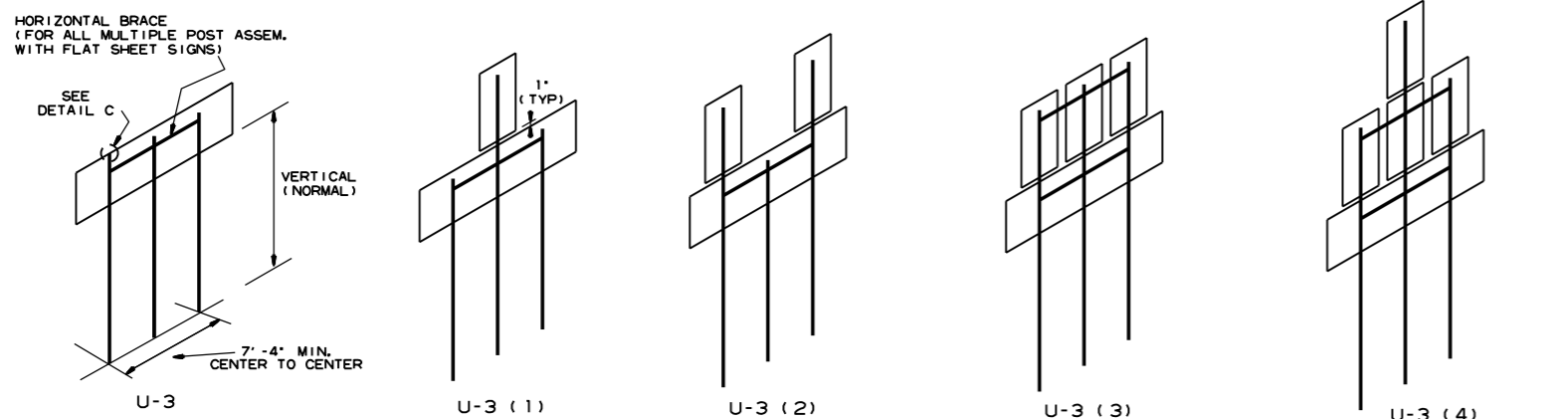
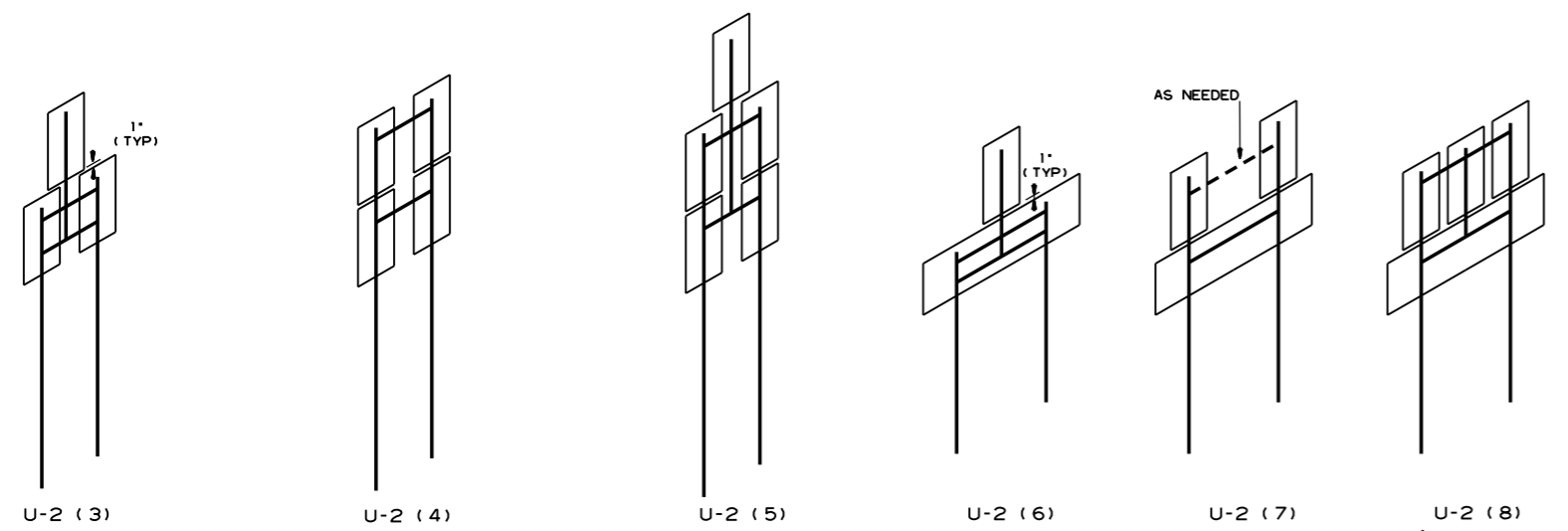
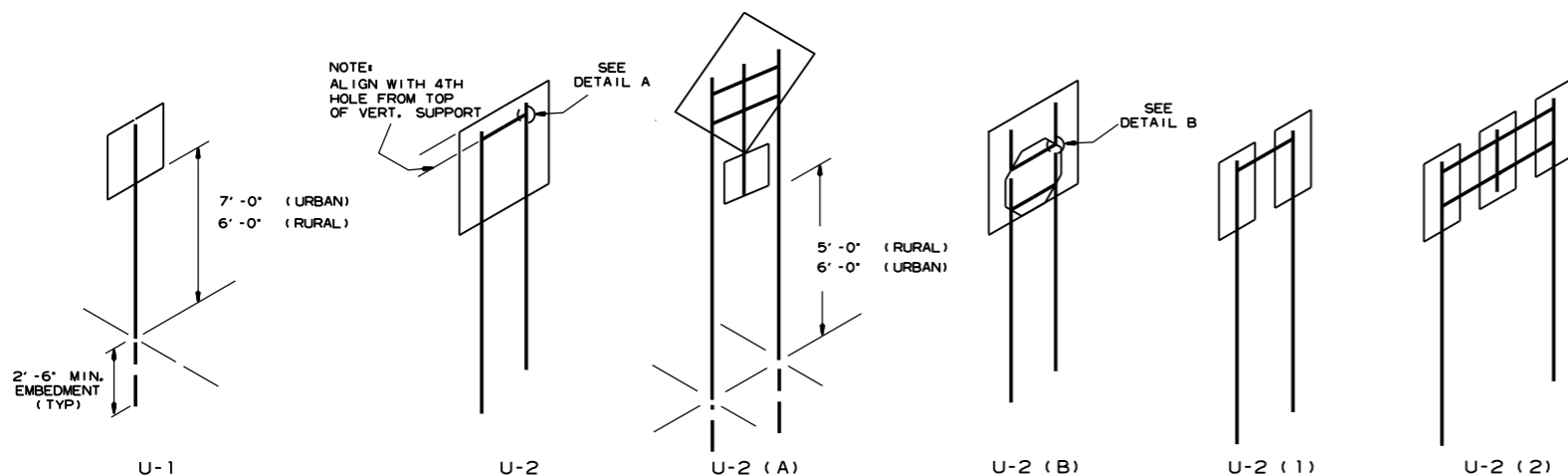
MINIMUM WEIGHT
TYPE A & B = 3 LBS./FT.
TYPE C = 2 LBS./FT.

STANDARD HIGHWAY SIGNS

SUPPORT ASSEMBLIES

9-12-13	DELETED JOB NO. BLOCK; REVISED RI-3 TO RI-3P	
4-17-08	REVISED SIGN DESIGNATION - W3-1 & W3-2	
4-10-03	REVISED W5-2, W8-3, OM-3; ADDED W1-8	
1-5-81	REDRAWN	960-1-15-81
9-15-78	ADDED W14-3	877-9-15-78
9-2-76	POST WT.	623-9-3-76
5-3-76	STEEL POST WT. FROM 2"-3"; ADDED S4-2 & S4-3	504-5-3-76
8-12-74	REV. HT. TYPE "C" ASSEMBLY	500-8-21-74
12-21-72	ADDED M6-2,3,4,5,6	500-12-21-72
12-1-72	ISSUED	562-12-1-72
DATE	REVISION	DATE FILMED

ARKANSAS STATE HIGHWAY COMMISSION
STANDARD HIGHWAY SIGNS
AND SUPPORT ASSEMBLIES
STANDARD DRAWING SHS-1



NOTES:

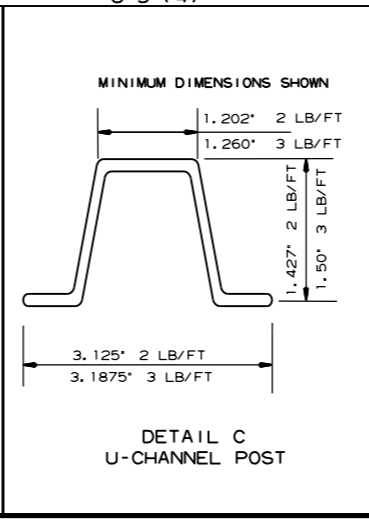
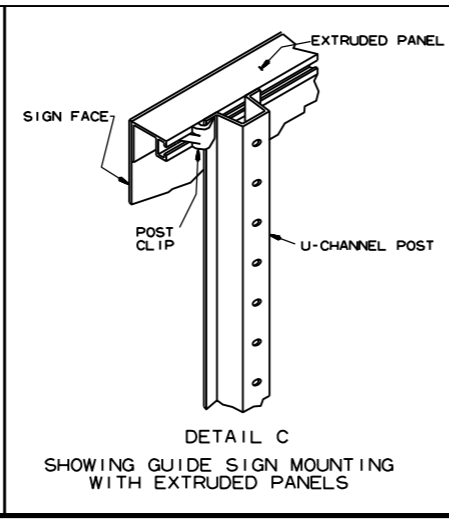
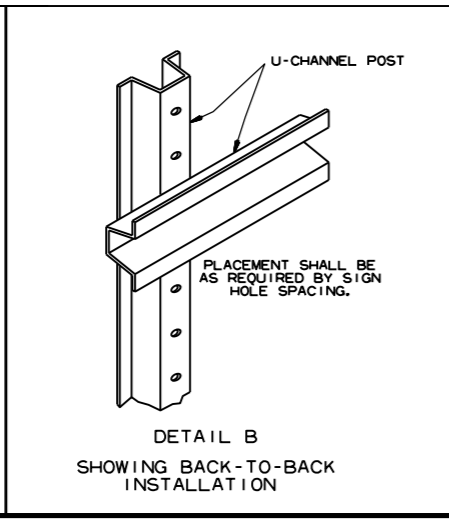
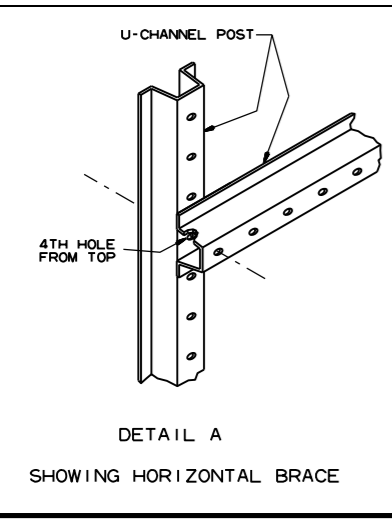
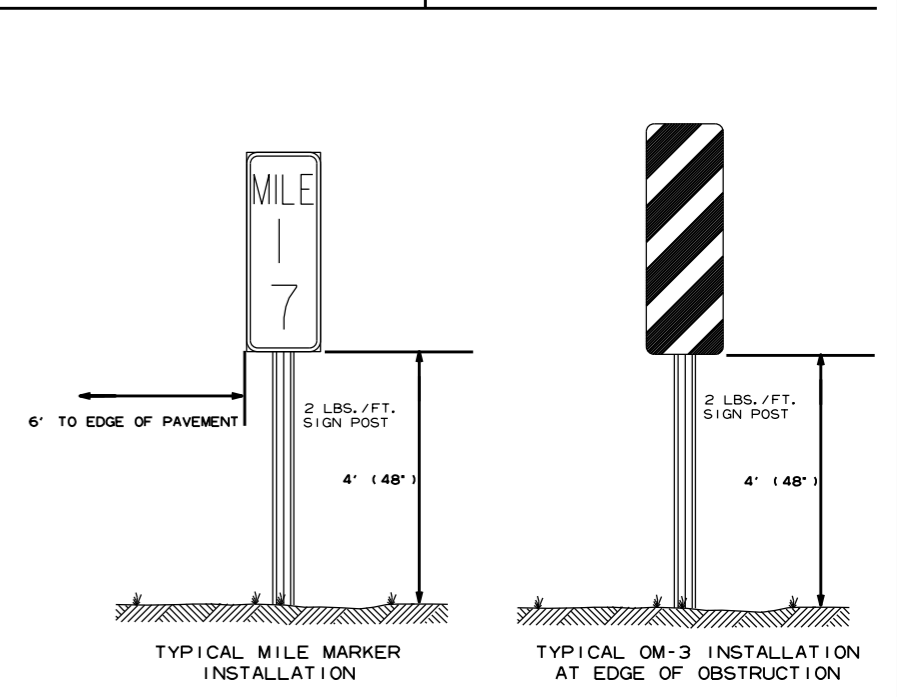
SIGNS AT LEAST 8' IN LENGTH MAY BE INSTALLED ON THREE 3 LB. POST. IN NO CASE SHALL THERE BE MORE THAN TWO 3 LB. POSTS WITHIN A 7' PATH.

SPLICES NECESSARY TO ATTAIN PROPER MOUNTING HEIGHT SHALL BE AS SHOWN IN DETAIL (F).

NORMAL INSTALLATIONS WILL REQUIRE 3/8" DIA. CARRIAGE BOLTS TO MOUNT SIGNS TO POST AND TO ASSEMBLE THE VARIOUS POST SUPPORTS.

ALL SIGN POSTS SHALL BE PLUMB.

THE POST FOR *TYPE U* SUPPORTS SHALL BE HOT DIP GALVANIZED.


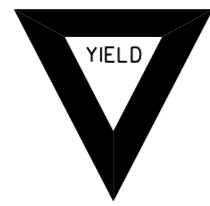







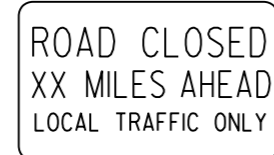
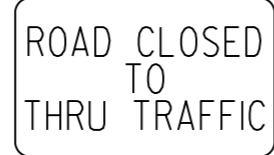

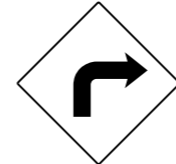

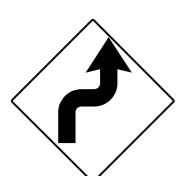

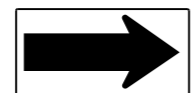

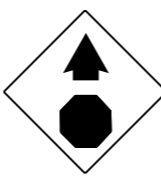

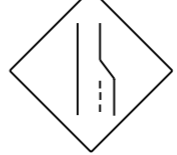

















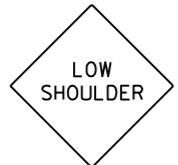
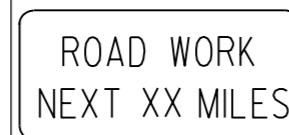
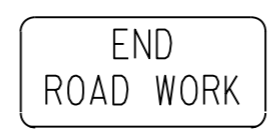
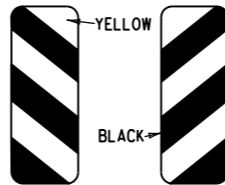


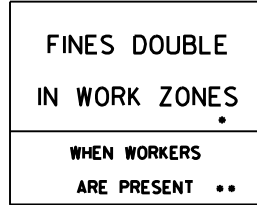


7-25-19	REVISED CARRIAGE BOLT WITH MATERIAL REQUIREMENT	
2-27-14	REVISED NOTES.	
9-12-13	REVISED U-2(3), U-2(6), U-3(1), DETAIL D; ADDED DETAILS E & F; ADDED TYPICAL MARKERS	
10-9-03	REMOVED ROUND POST & REVISED SPACING	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL	6-8-95
2-2-95	REDRAWN	2-2-95
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION

U-CHANNEL POST ASSEMBLIES

STANDARD DRAWING SHS-2

<p>RI-1</p>  <p>STANDARD 30"x30" EXPRESSWAY 36"x36" SPECIAL 48"x48"</p>	<p>RI-2</p>  <p>STD. 36"x36"x36" EXPWY. 48"x48"x48" FWY. 60"x60"x60"</p>	<p>R2-1</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>W3-5</p>  <p>STD. 36"x36" EXPWY. 48"x48" FWY. 48"x48"</p>	<p>W3-5a</p>  <p>STD. 36"x36" EXPWY. 48"x48" FWY. 48"x48"</p>	<p>R4-1</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R4-2</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	
<p>R5-1</p>  <p>STD. 30"x30" EXPWY. 36"x36" SPECIAL 48"x48"</p>	<p>R11-2</p>  <p>48"x30"</p>	<p>R11-3A</p>  <p>60"x30"</p>	<p>R11-4</p>  <p>60"x30"</p>	<p>W21-5a</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>WI-1</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>WI-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	
<p>WI-3</p>  <p>STD. 48"x48"</p>	<p>WI-4</p>  <p>STD. 48"x48"</p>	<p>WI-6</p>  <p>STD. 48"x24" SPECIAL 60"x30"</p>	<p>WI-8</p>  <p>STD. 18"x24" SPECIAL 24"x30" EXPWY. 30"x36" FWY. 36"x48"</p>	<p>W3-1</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W3-2</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W4-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	
<p>W5-1</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W6-3</p>  <p>EXPWY. 36"x36" SPECIAL 48"x48"</p>	<p>W8-7</p>  <p>EXPWY. 36"x36" FWY. 48"x48"</p>	<p>W9-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W13-1</p>  <p>STD. 24"x24"</p>	<p>W20-1</p>  <p>STD. 48"x48"</p>	<p>W20-2</p>  <p>STD. 48"x48"</p>	<p>W20-3</p>  <p>STD. 48"x48"</p>
<p>W20-4</p>  <p>STD. 48"x48"</p>	<p>W20-5</p>  <p>STD. 48"x48"</p>	<p>W20-7a</p>  <p>18" 500 FEET 24" W16-2</p> <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W21-2</p>  <p>STD. 30"x30" SPECIAL 36"x36"</p>	<p>W21-5</p>  <p>STD. 30"x30" SPECIAL 36"x36"</p>	<p>W24-1</p>  <p>STD. 36"x36"</p>	<p>WI-4b</p>  <p>STD. 48"x48"</p>	<p>R56-1</p>  <p>STD. 18"x18"</p>
<p>W8-11</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W8-9</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>G20-1</p>  <p>60"x24"</p>	<p>G20-2</p>  <p>48"x24"</p>	<p>OM-3L OM-3R</p>  <p>12"x36"</p>	<p>M4-9</p>  <p>STD. 30"x24" SPECIAL 48"x36" SPECIAL 60"x48"</p>	<p>M4-10</p>  <p>48"x18"</p>	<p>R55-1</p>  <p>36"x60"</p> <p>• USE 6" C LETTERS •• USE 4" D LETTERS</p>

ADVANCE DISTANCES (XXXX)

500 FT	1/2 MILE
1000 FT	3/4 MILE
1500 FT	1 MILE AHEAD

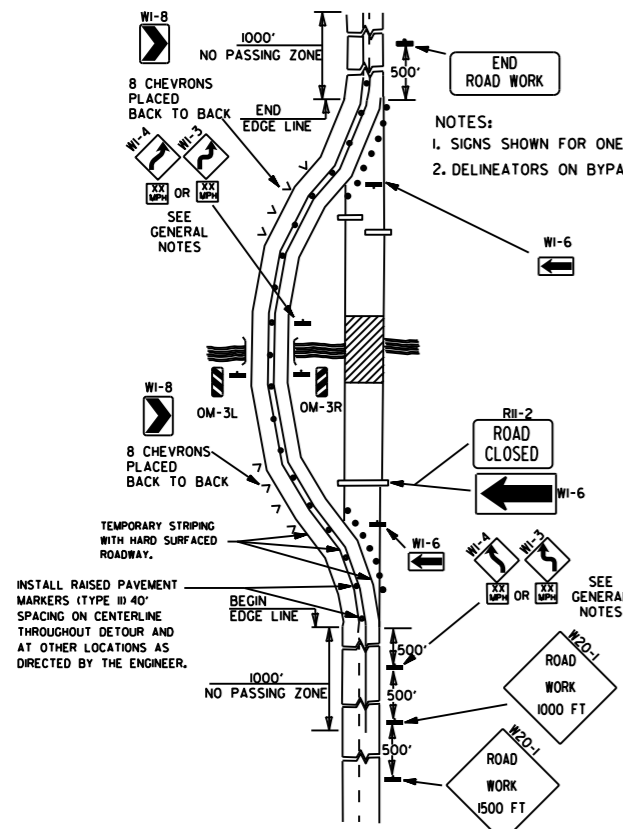
GENERAL NOTES:

- ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
- TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.
- EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.
- SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.
- SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.
- POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.
- ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.
- FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
- MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.
- R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.

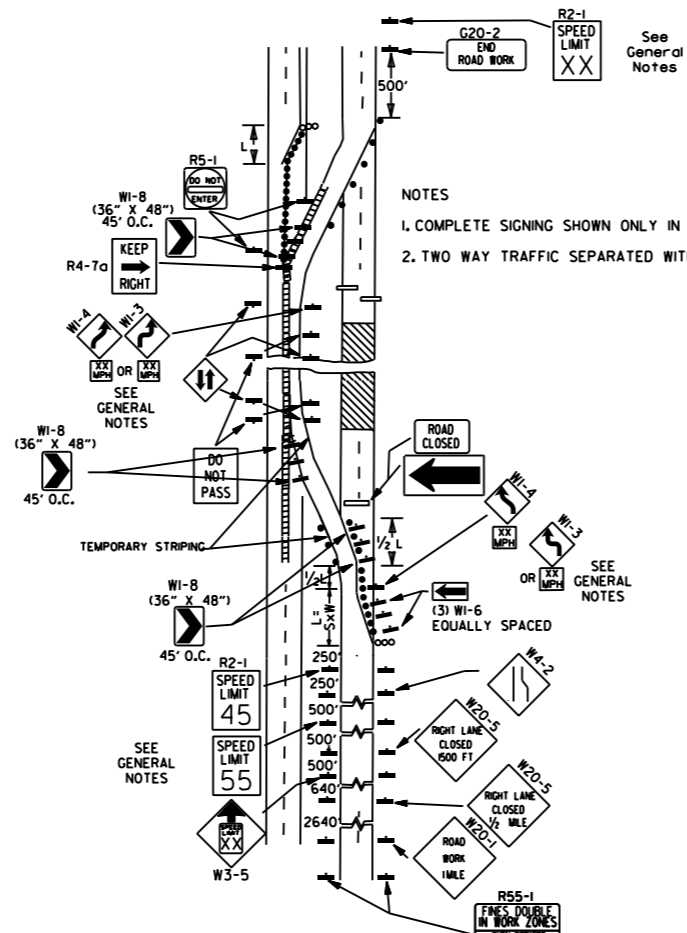
• NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED FOR ALL PROJECTS.

DATE	REVISION	FILMED
11-07-19	REVISED FOR MASH	
4-13-17	DELETED RSP-1 & ADDED W21-5a	
9-2-15	REVISED REDUCED SPEED LIMIT AHEAD SIGNS REVISED ROAD WORK NEXT XX MILES	
12-15-11	REVISED W24-1	
11-17-10	DELETED W8-9a & ADDED W8-9	
10-15-09	ADDED REFERENCE TO MASH & ADDED SIGN W24-1	
4-17-08	REVISED SIGN DESIGNATIONS	
11-18-04	REVISED NOTES	
10-9-03	REVISED NOTE 1	
11-16-01	REVISED NOTE 7	
9-28-00	REVISED NOTE	
11-18-98	ADDED NOTE	
6-26-97	REVISED NOTE 5	
4-03-97	REVISED NOTE 5	
10-18-96	ADDED CONTROLLED ACCESS HWY. SIGN & TO NOTE 7	
10-12-95	ADDED R55-1	
6-8-95	REVISED TO CORRECT SIGN ILLUSTRATIONS	6-8-95
2-2-95	REVISED PER PART VI, MUTCD SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

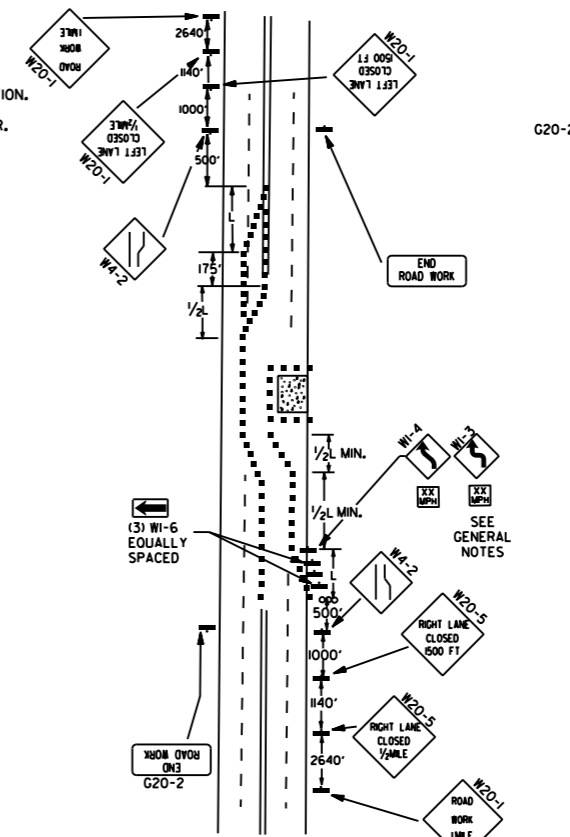
ARKANSAS STATE HIGHWAY COMMISSION
STANDARD TRAFFIC CONTROLS
FOR HIGHWAY CONSTRUCTION
STANDARD DRAWING TC-1



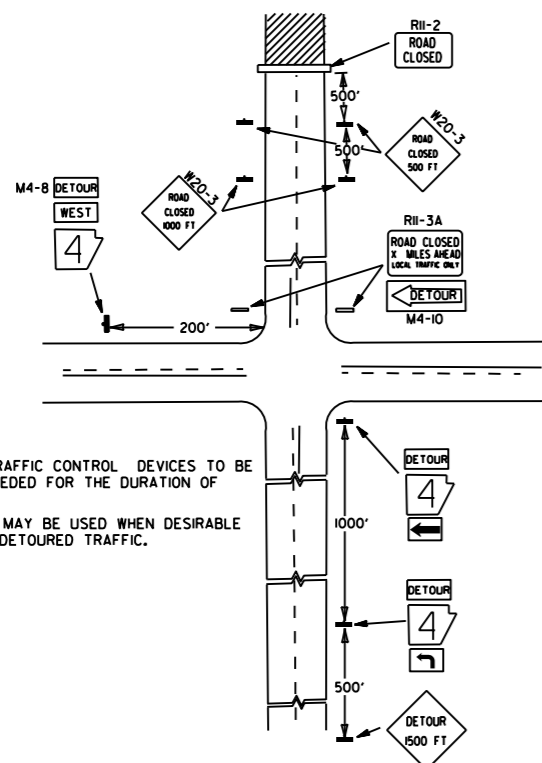
(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.



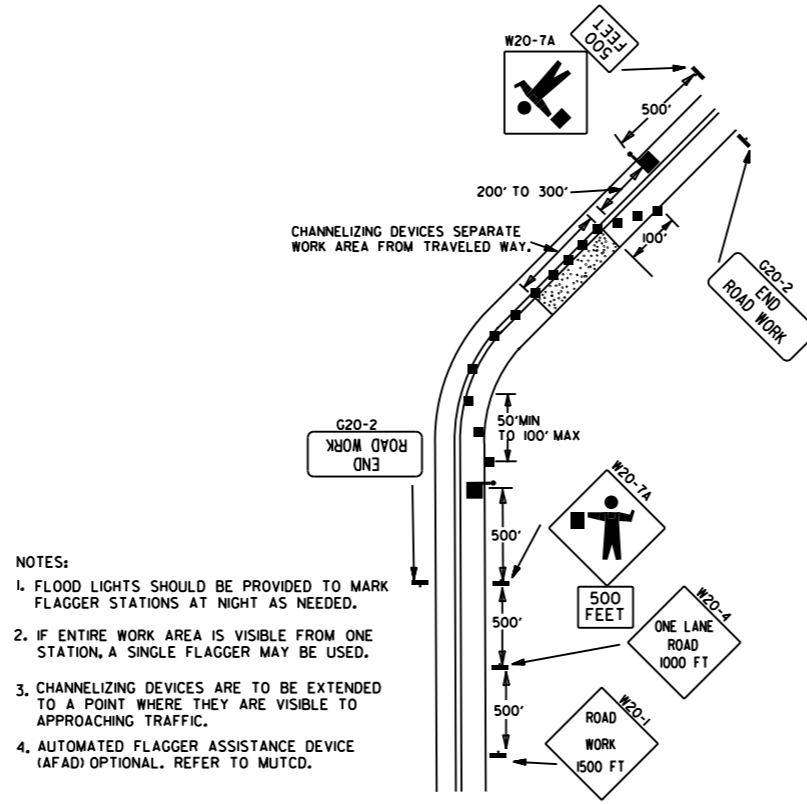
(B) TYPICAL APPLICATION - 4-LANE DIVIDED ROADWAY WHERE ONE ROADWAY IS CLOSED.



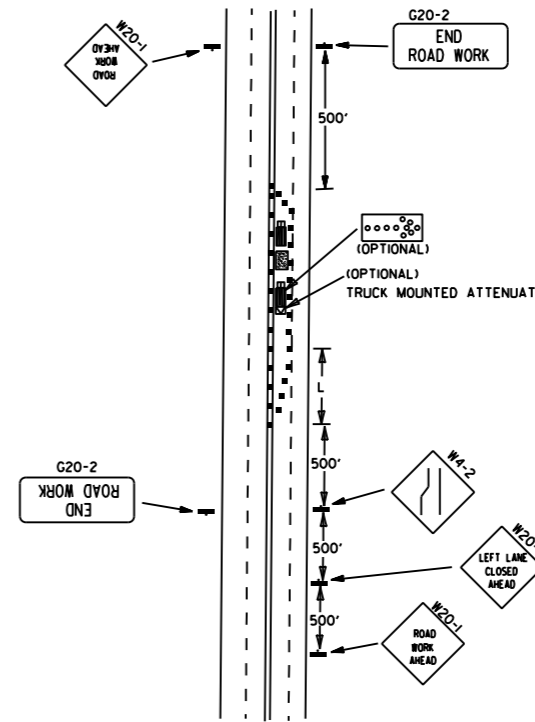
(C) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



(D) TYPICAL APPLICATION - ROADWAY CLOSED BEYOND DETOUR POINT.

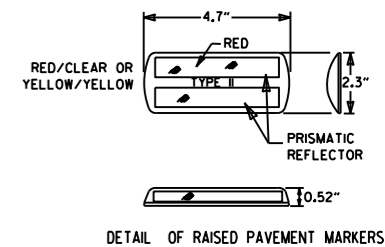


(E) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON 2-LANE HIGHWAY WHERE ONE LANE IS CLOSED AND FLAGGING IS PROVIDED.



(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

- KEY:
- FLAGGER
 - ▬ POSITIVE BARRIER
 - ∞ ARROW PANEL (IF REQUIRED)
 - ▬ TYPE III BARRICADE
 - CHANNELIZING DEVICE
 - TRAFFIC DRUM
 - RAISED PAVEMENT MARKER



TYPICAL ADVANCE WARNING SIGN PLACEMENT

TAPER FORMULAE:

$L = SXW$ FOR SPEEDS OF 45MPH OR MORE.

$L = \frac{WS^2}{60}$ FOR SPEEDS OF 40MPH OR LESS.

WHERE:

L = MINIMUM LENGTH OF TAPER.

S = NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.

W = WIDTH OF OFFSET.

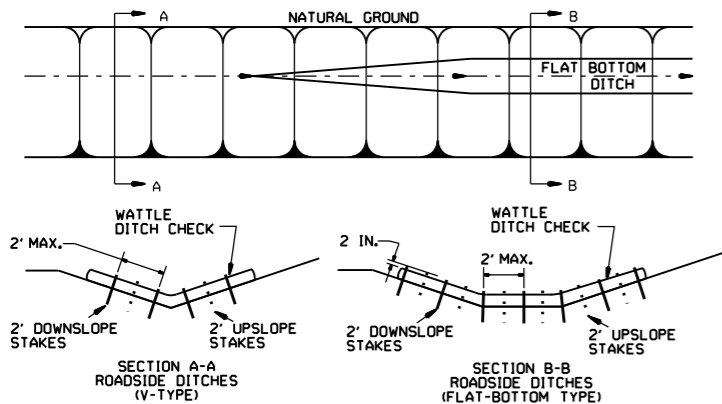
GENERAL NOTES:

1. THE MAINTENANCE DIVISION SHALL CONDUCT A BALL BANK STUDY TO DETERMINE THE ADVISORY SPEED LIMIT PRIOR TO OPENING TO TRAFFIC. THE ADVISORY SPEED WILL BE POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS.
2. WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-1(55) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1(45)MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(65) SHALL BE OMITTED. ADDITIONAL R2-1(55)MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT, OR AS DIRECTED BY THE ENGINEER.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER, WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE. PAYMENT FOR TRAFFIC DRUMS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR VARIOUS TRAILER MOUNTED DEVICES.
8. DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE ARDOT QUALIFIED PRODUCTS LIST.
9. ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).

DATE	REVISION	FILED
05-20-21	REVISED NOTE 7	
11-07-19	REVISED NOTE 1, ADDED NOTE 9	
9-2-15	REVISED NOTE 2, ADDED NOTE 8, REVISED DRAWING (A) & REPLACED R2-5A WITH W3-5	
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-11-10	ADDED (AFAD)	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-96	CORRECTED (a) BEHIND G20-2	
6-8-95	CORRECTED SIGN IDENT. ON W1-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

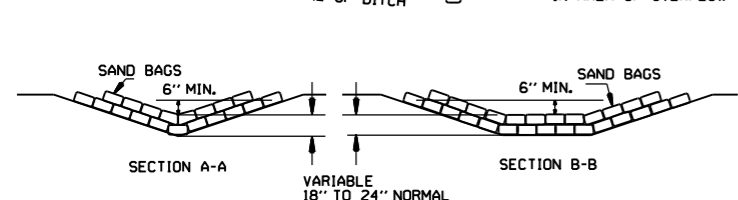
GENERAL NOTES

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

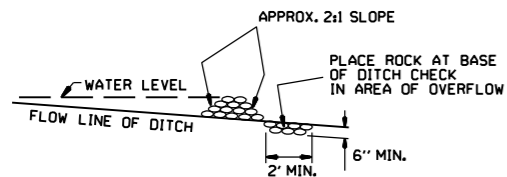


WATTLE DITCH CHECK (E-1)

NUMBER OF SAND BAGS AND ARRANGEMENT VARIABLE WITH ON-SITE CONDITIONS. PLACE SAND BAGS AT BASE OF DITCH CHECK IN AREA OF OVERFLOW.

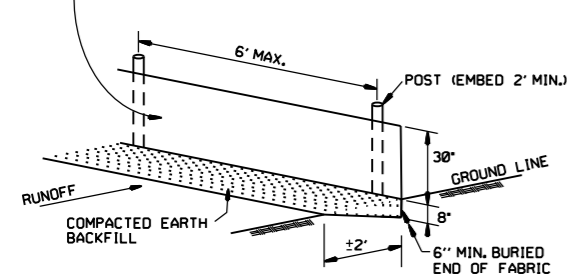


SAND BAG DITCH CHECK (E-5)

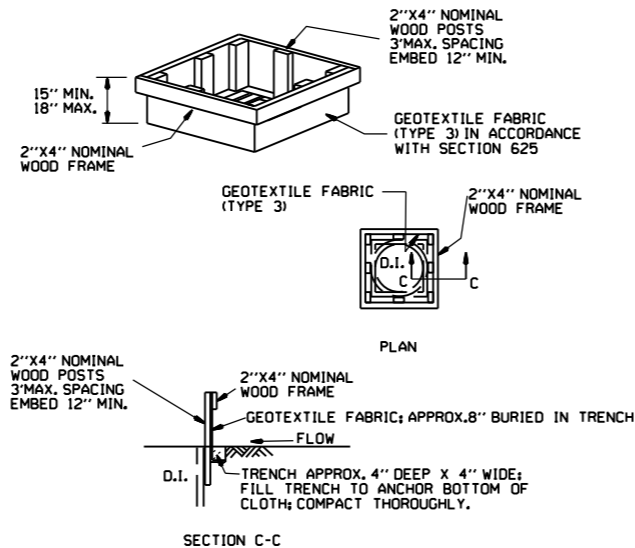


ROCK DITCH CHECK (E-6)

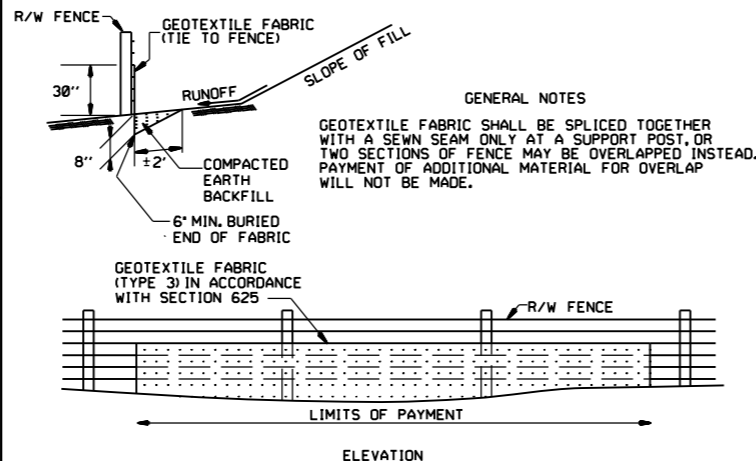
GENERAL NOTES
 GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625
 GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



SILT FENCE (E-11)

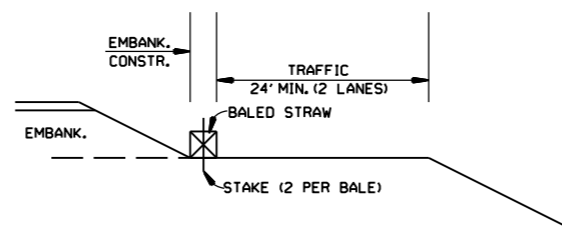


DROP INLET SILT FENCE (E-7)

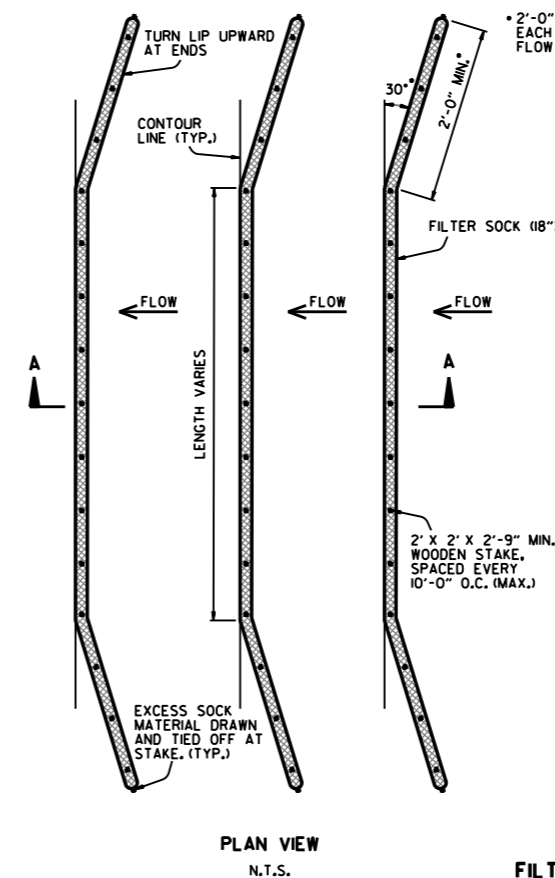


SILT FENCE ON R/W FENCE (E-4)

GENERAL NOTES
 1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
 2. NO GAPS SHALL BE LEFT BETWEEN BALES.
 3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.

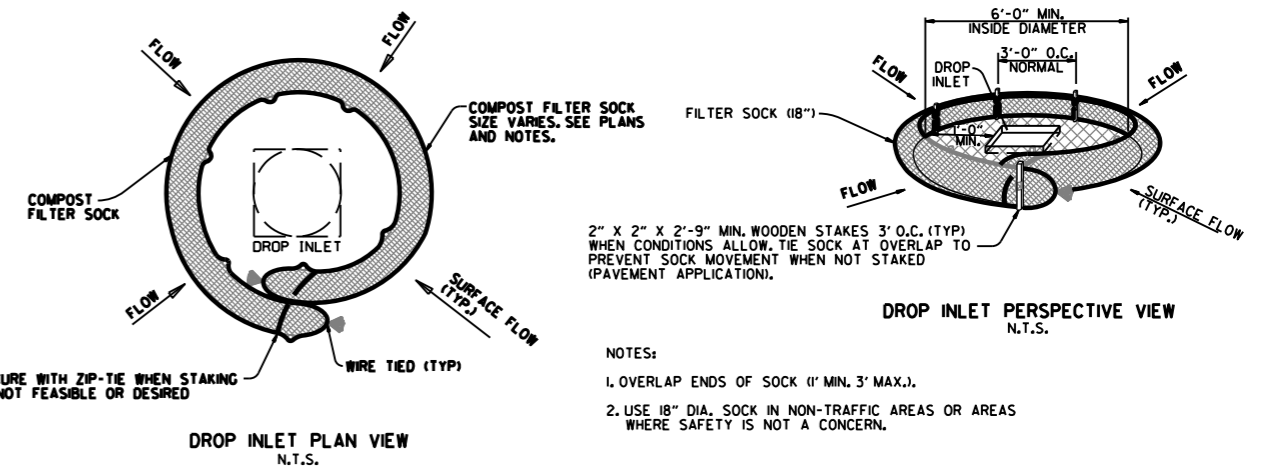


BALED STRAW FILTER BARRIER (E-2)



FILTER SOCK ALONG SLOPE (E-3)

NOTES:
 1. FILTER SOCKS CAN BE PLACED AT THE TOP, ON THE FACE, AND AT THE TOE OF SLOPES AS SEDIMENT-TRAPPING DEVICES FOR SHEET FLOW RUNOFF.
 2. FILTER SOCKS ARE TYPICALLY SUPPLIED AND INSTALLED WITH 18 INCH DIAMETERS. DIAMETER TOLERANCE IS 2 INCHES, AS FILTER SOCKS TEND TO FLATTEN OUT WHEN PLACED.
 3. STEEL POSTS MAY BE USED AND SHALL BE ROLLED FROM HIGH CARBON STEEL AND HAVE A MINIMUM OF 1.25 LB./FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH-GRADE WEATHER RESISTANT BROWN OR BLACK STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR STEEL POSTS, BUT PRICE WILL BE CONSIDERED SUBSIDIARY TO "FILTER SOCK (18")."
 4. FILTER SOCKS MAY BE UP TO 250 FEET LONG. WHEN USED ON LONG SLOPES, FILTER SOCKS MAY BE JOINTED OR STAGGERED AS SHOWN IN DETAILS.
 5. INSPECT FILTER SOCKS AFTER EACH RUNOFF EVENT. REMOVE AND REPLACE IF SIGNS OF UNDERCUTTING OR DOWNSTREAM RILLS ARE OBSERVED.

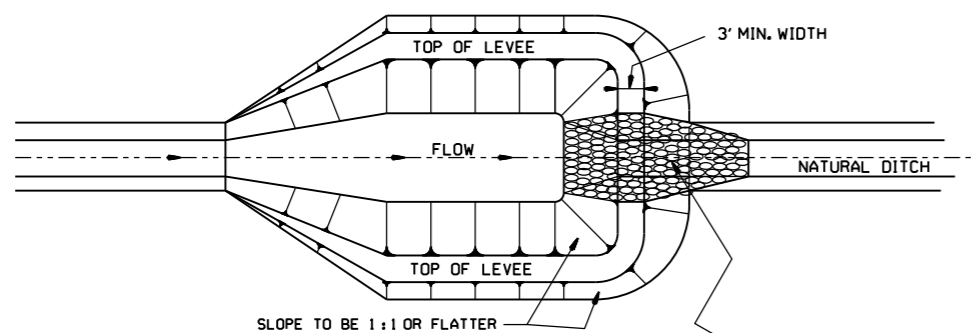


COMPOST FILTER SOCK DROP INLET PROTECTION (E-13)

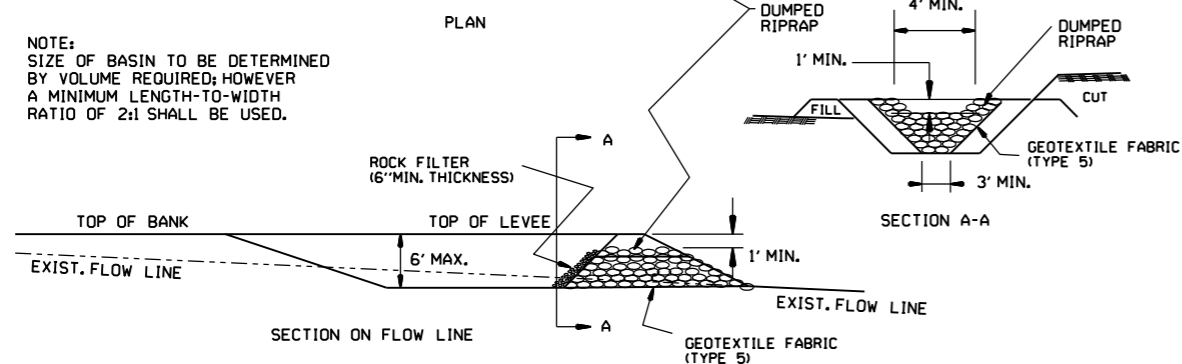
NOTES:
 1. OVERLAP ENDS OF SOCK (1' MIN. 3' MAX.).
 2. USE 18" DIA. SOCK IN NON-TRAFFIC AREAS OR AREAS WHERE SAFETY IS NOT A CONCERN.

DATE	REVISION
11-16-17	ADDED FILTER SOCK E-3 AND E-13
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK
11-18-98	ADDED NOTES
07-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)
07-20-95	REVISED SILT FENCE E-4 AND E-11
07-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC
06-02-94	REVISED E-1, 4, 7 & 11; DELETED E-2 & 3
04-01-93	REDRAWN
10-01-92	REDRAWN
08-02-76	ISSUED R.D.M.

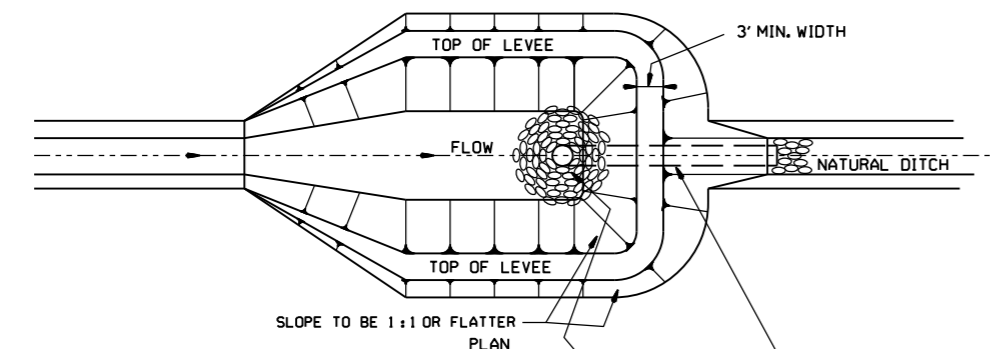
ARKANSAS STATE HIGHWAY COMMISSION
 TEMPORARY EROSION CONTROL DEVICES
 STANDARD DRAWING TEC-1



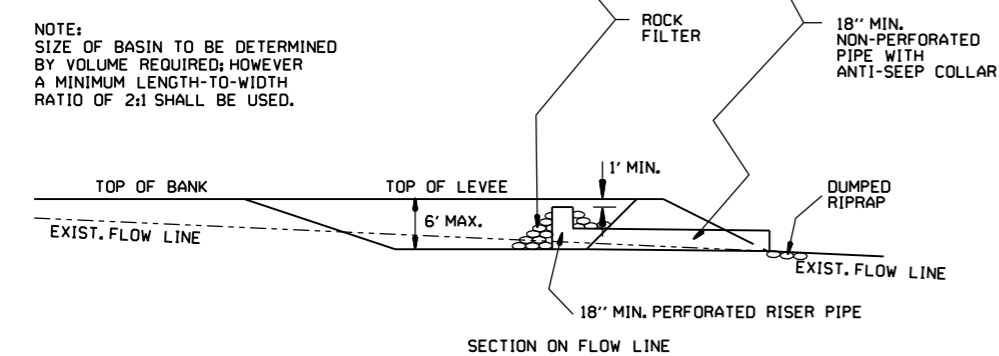
NOTE:
SIZE OF BASIN TO BE DETERMINED
BY VOLUME REQUIRED; HOWEVER
A MINIMUM LENGTH-TO-WIDTH
RATIO OF 2:1 SHALL BE USED.



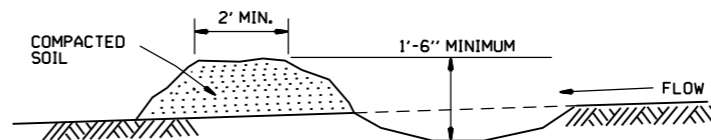
SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)



NOTE:
SIZE OF BASIN TO BE DETERMINED
BY VOLUME REQUIRED; HOWEVER
A MINIMUM LENGTH-TO-WIDTH
RATIO OF 2:1 SHALL BE USED.

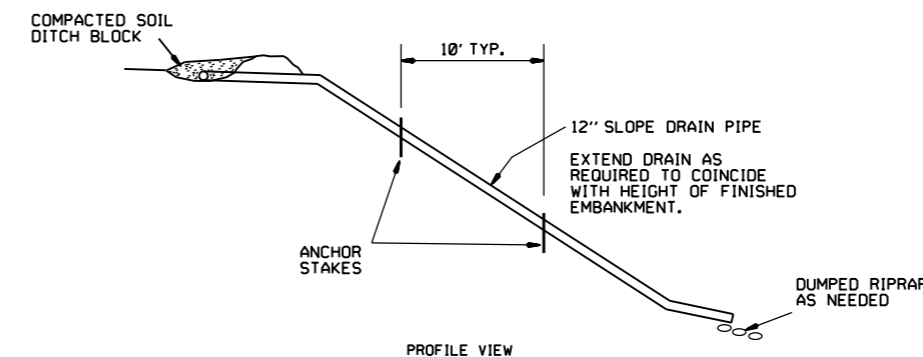
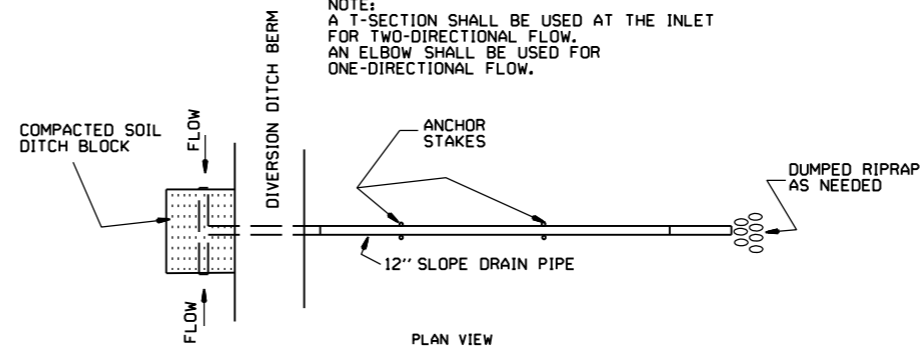


SEDIMENT BASIN WITH PIPE OUTLET (E-10)

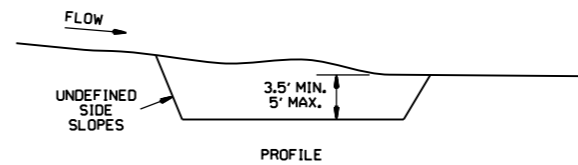
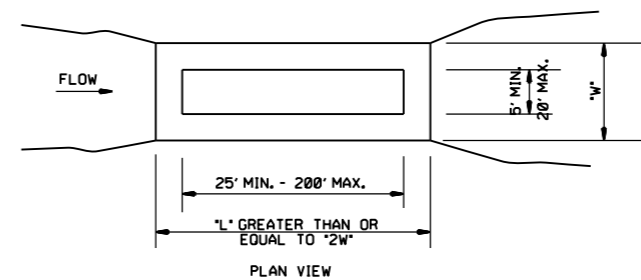


DIVERSION DITCH (E-8)

NOTE:
A T-SECTION SHALL BE USED AT THE INLET
FOR TWO-DIRECTIONAL FLOW.
AN ELBOW SHALL BE USED FOR
ONE-DIRECTIONAL FLOW.



SLOPE DRAIN (E-12)



SEDIMENT BASIN (E-14)

6-2-94	Revised E-8 & E-12; Added E-14 & Deleted E-13		
4-1-93	ISSUED		
DATE	REVISION		FILMED

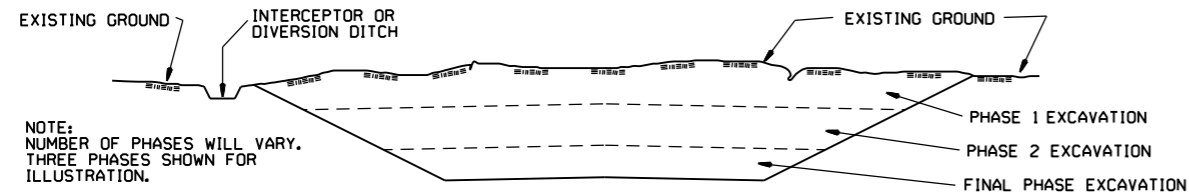
ARKANSAS STATE HIGHWAY COMMISSION
TEMPORARY EROSION
CONTROL DEVICES
STANDARD DRAWING TEC-2

CLEARING AND GRUBBING

CONSTRUCTION SEQUENCE

1. PLACE PERIMETER CONTROLS (I.E. SILT FENCES, DIVERSION DITCHES, SEDIMENT BASINS, ETC.)
2. PERFORM CLEARING AND GRUBBING OPERATION.

EXCAVATION



NOTE:
NUMBER OF PHASES WILL VARY.
THREE PHASES SHOWN FOR
ILLUSTRATION.

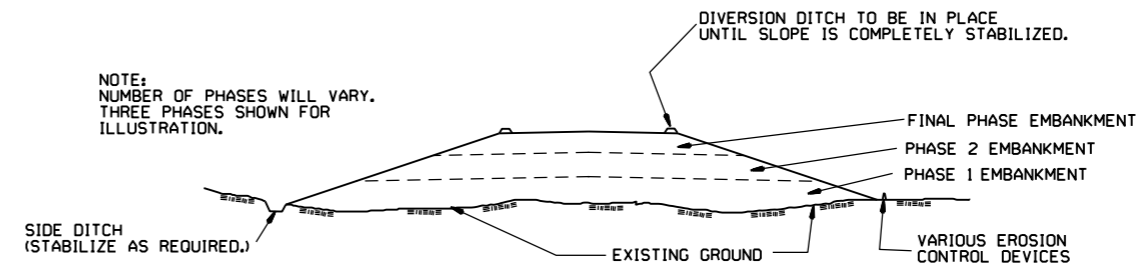
GENERAL NOTE

ALL CUT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE EXCAVATED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE

1. EXCAVATE AND STABILIZE INTERCEPTOR AND/OR DIVERSION DITCHES.
2. PERFORM PHASE 1 EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING.
3. PERFORM PHASE 2 EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING.
4. PERFORM FINAL PHASE OF EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING. STABILIZE DITCHES. CONSTRUCT DITCH CHECKS, DIVERSION DITCHES, SEDIMENT BASINS, OR OTHER EROSION CONTROL DEVICES AS REQUIRED.

EMBANKMENT



NOTE:
NUMBER OF PHASES WILL VARY.
THREE PHASES SHOWN FOR
ILLUSTRATION.

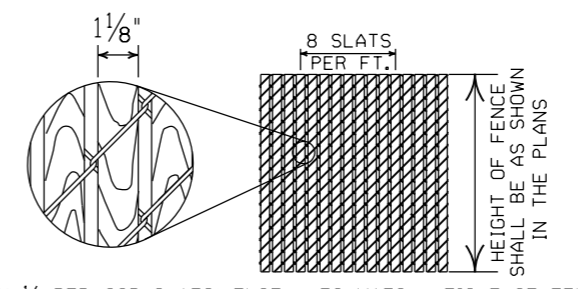
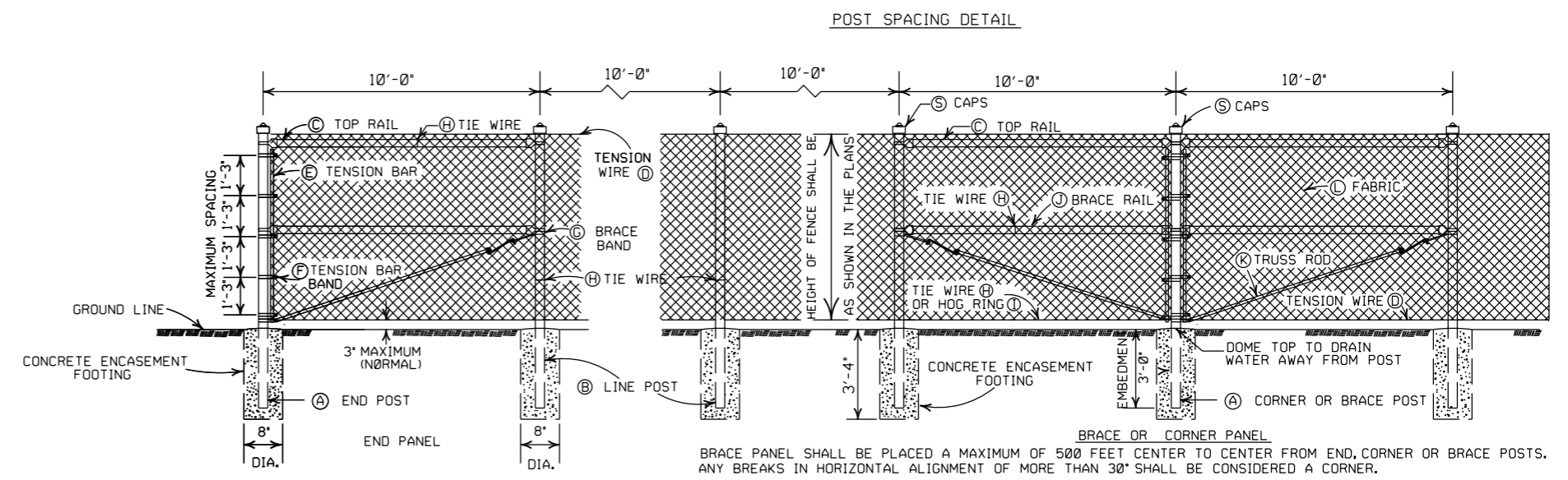
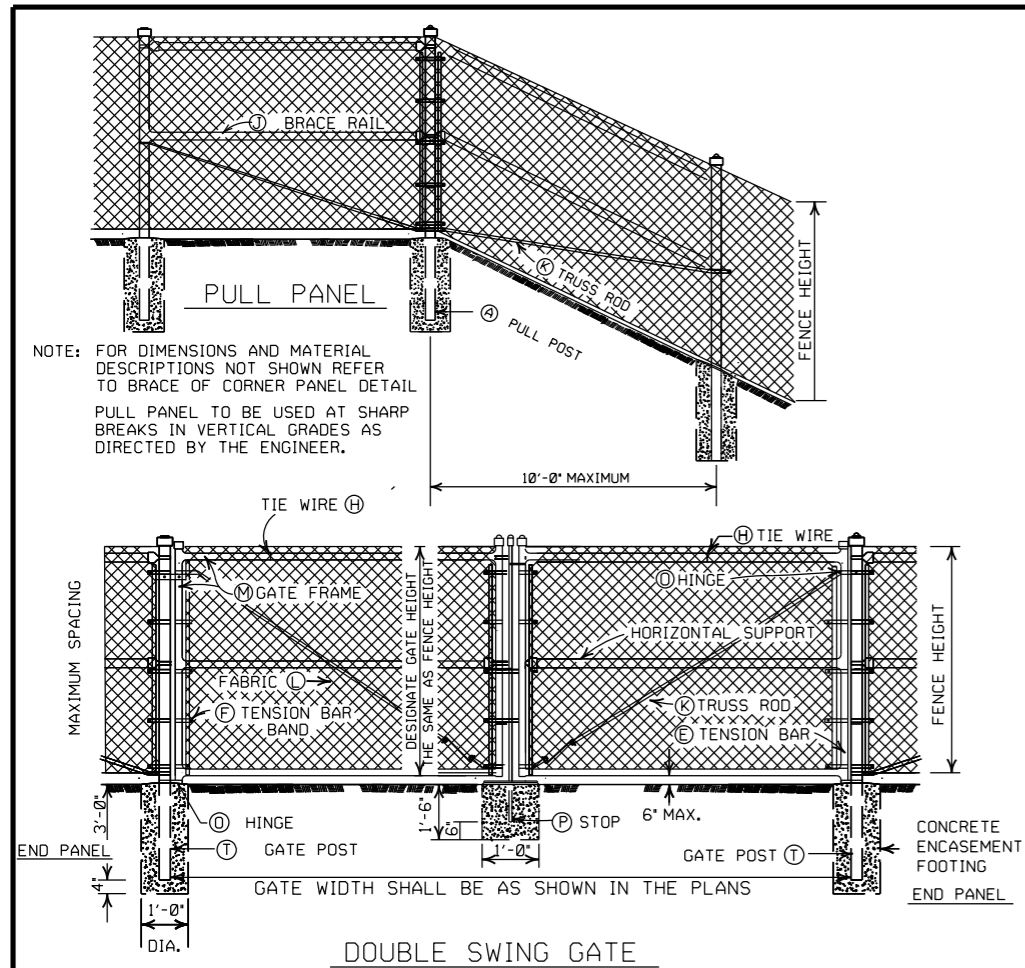
GENERAL NOTE

ALL EMBANKMENT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE CONSTRUCTED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE

1. CONSTRUCT DIVERSION DITCHES, DITCH CHECKS, SEDIMENT BASINS, SILT FENCES, OR OTHER EROSION CONTROL DEVICES AS SPECIFIED.
2. PLACE PHASE 1 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
3. PLACE PHASE 2 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
4. PLACE FINAL PHASE OF EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PLACE DIVERSION DITCHES AND SLOPE DRAINS AND MAINTAIN UNTIL ENTIRE SLOPE IS STABILIZED.

			ARKANSAS STATE HIGHWAY COMMISSION
			TEMPORARY EROSION CONTROL DEVICES
11-03-94	CORRECTED SPELLING		
6-2-94	Drawn & Issued		6-2-94
DATE	REVISION		FILMED
			STANDARD DRAWING TEC-3



- GENERAL NOTES:**
- (C) CHAIN LINK FENCE BEING PLACED ON PRIVATE PROPERTY SHALL INCLUDE A TOP RAIL. ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER LIN. FT. OF CHAIN LINK FENCE.
 - (D) TENSION WIRE: SHALL BE SECURED TO ALL TERMINAL, PULL, BRACE OR CORNER POSTS WITH TENSION BAR BANDS.
 - (J) BRACE RAIL: BRACE RAILS SHALL BE PROVIDED AT ALL TERMINAL, PULL, BRACE OR CORNER POSTS HALF WAY BETWEEN THE TOP RAIL AND GROUND LEVEL WHEN TOPRAIL IS SPECIFIED AND TWELVE INCHES (12") DOWN FROM TOP OF FABRIC WHEN TOP TENSION WIRE IS SPECIFIED. BRACE RAIL SHALL EXTEND FROM SUCH POST TO THE FIRST ADJACENT LINE POST.
 - (L) FABRIC: SHALL CONFORM TO THE SPECIFICATIONS.

HEIGHT OF FENCE FABRIC	(A) END, PULL CORNER OR BRACE POST		(B) LINE POSTS		(C) TOP RAIL			(D) TENSION WIRE		(E) TENSION BAR		(F) TENSION BAR BAND			(G) BRACE BAND	
	SIZE	TIE SPACING	SIZE	TIE SPACING	SIZE	TIE SPACING	MIN. LENGTH	SIZE	TIE SPACING	SIZE	LENGTH	SIZE	BOLT SIZE	SPACING	SIZE	BOLT SIZE
6' AND LESS	2 1/2" O.D.	2' O.D.	2' O.D.	1 TIE EVERY 1'-2" OF FABRIC HEIGHT	1 5/8" O.D.	1 TIE EVERY 2'-0"	10'-0"	7 GAUGE COIL SPRING WIRE	1 TIE EVERY 1'-0"	MIN. OF 3/8" x 3/4"	MIN. OF 2" LESS THAN FABRIC HEIGHT	3/4" x 5/8" x 1 1/4"	0.074	1 BAND AT TOP AND BOTTOM 15" MAX. INTERVAL BETWEEN BANDS	MIN. OF 3/4" x 3/8"	5/8" x 1/4"
OVER 6' TO 12' INCL.	3" O.D.	2 1/2" O.D.	2 1/2" O.D.	1 TIE EVERY 2'-0"	1 5/8" O.D.	1 TIE EVERY 2'-0"	10'-0"	7 GAUGE COIL SPRING WIRE	1 TIE EVERY 1'-0"	3/8" x 3/4"	MIN. OF 2" LESS THAN FABRIC HEIGHT	3/4" x 5/8" x 1 1/4"	0.074	1 BAND AT TOP AND BOTTOM 15" MAX. INTERVAL BETWEEN BANDS	MIN. OF 3/4" x 3/8"	5/8" x 1/4"

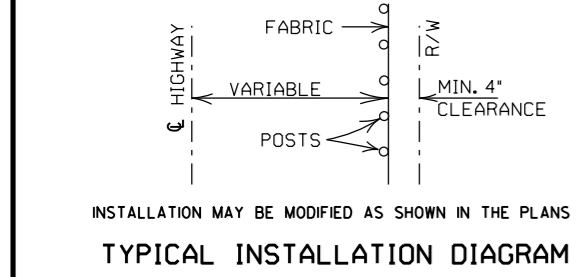
HEIGHT OF FENCE FABRIC	(H) TIE WIRE	(I) HOG RING	(J) BRACE RAIL		(K) TRUSS ROD	(L) FABRIC			(M) GATE FRAME		(N) HORIZONTAL SUPPORT	(O) HINGE TPE	(P) GATE POST		
	SIZE	TIE SPACING	SIZE	TIE SPACING	SIZE	GA.	MESH	SERVAGE	SIZE	TIE SPACING	SIZE	TIE SPACING	180° SWING	GATE WIDTH	GATE WIDTH OVER 12' AND LESS 24' INCL.
6' AND LESS	MIN. OF 12 GA. STEEL OR 9 GA. ALUM.	SAME GAUGE AS FABRIC	1 5/8" O.D.	1 TIE EVERY 2'-0"	MIN. OF 3/8" ROUND WITH TIGHTENERS AND FITTINGS	9 GA.	2"	KNUCKLING AND/OR TWISTING	2' O.D.	1 TIE EVERY 1'-0"	2' O.D.	1 TIE EVERY 1'-0"	OFFSET	3' O.D.	4' O.D.
OVER 6' TO 12' INCL.	MIN. OF 12 GA. STEEL OR 9 GA. ALUM.	SAME GAUGE AS FABRIC	1 5/8" O.D.	1 TIE EVERY 2'-0"	MIN. OF 3/8" ROUND WITH TIGHTENERS AND FITTINGS	9 GA.	2"	KNUCKLING AND/OR TWISTING	2' O.D.	1 TIE EVERY 1'-0"	2' O.D.	1 TIE EVERY 1'-0"	OFFSET	3' O.D.	4' O.D.

NOTE: POST SIZES SHOWN ARE FOR STEEL. WHERE ALUMINUM IS PROVIDED, LINE POSTS SHALL HAVE AN OUTSIDE DIAMETER OF 2 1/2" FOR FENCE HEIGHT OF 6' AND LESS, AN OUTSIDE DIAMETER OF 3" FOR FENCE HEIGHT OF 6' TO 12'. END, PULL, CORNER OR BRACE POSTS SHALL HAVE AN OUTSIDE DIAMETER OF 3" FOR FENCE HEIGHT OF 6' AND LESS; AN OUTSIDE DIAMETER OF 3 1/2" FOR FENCE HEIGHTS OF 6' TO 12'. GATE POSTS WHERE GATE WIDTH IS 12' AND LESS SHALL HAVE AN OUTSIDE DIAMETER OF 3 1/2" FOR FENCE HEIGHT OF 6' AND LESS. ALUMINUM TENSION WIRE SHALL BE 0.192" IN DIAMETER. MINIMUM THICKNESS OF MATERIAL FROM WHICH EXPANSION SLEEVES SHALL BE MADE WILL BE 0.078". POSTS AND RAILS MAY HAVE ANY CROSS-SECTIONAL SHAPE THAT WILL MEET THE SPECIFICATIONS.

OTHER DETAILS APPLY TO BOTH STEEL AND ALUMINUM FENCE.

ALL MISCELLANEOUS FITTINGS AND HARDWARE SHALL MEET THE REQUIREMENTS AND PRODUCTION TOLERANCES AS SET FORTH IN THE SPECIFICATIONS. 9 GAUGE ALUMINUM WIRE SHALL BE ACCEPTABLE FOR TIEING FABRIC TO TUBULAR AND ROLL FORMED MEMBERS OF STEEL FENCE.

- (M) GATE FRAMES: SHALL BE CONSTRUCTED OF TUBULAR MEMBERS ASSEMBLED BY USE OF HEAVY PRESSED STEEL, MALLEABLE FITTINGS OR BY WELDING. ALL GATES SHALL HAVE ONE HORIZONTAL SUPPORT EXTENDING THE WIDTH OF THE GATE AT THE MIDPOINTS OF VERTICAL FRAME MEMBERS. THE COMPLETE FRAME SHALL BE RIGID AND HAVE AMPLE STRENGTH TO BE FREE FROM SAG AND TWIST.
 - (O) HINGES: SHALL BE OF HEAVY PATTERN, OF ADEQUATE STRENGTH FOR GATE, AND WITH LARGE BEARING SURFACES FOR CLAMPING IN POSITION. THE HINGE SHALL BE OF THE PROPER TYPE TO ALLOW FOR THE DESIGNATED DEGREE OF SWING. THE HINGE SHALL NOT TWIST OR TURN UNDER THE ACTION OF THE GATE. THE GATES SHALL BE CAPABLE OF BEING OPENED AND CLOSED EASILY BY ONE PERSON.
 - (P) LATCHES AND STOPS: SHALL BE PROVIDED FOR ALL GATES. GATES SHALL HAVE A DROP BAR LATCH. LATCHES SHALL BE ARRANGED FOR LOCKING. THE STOP FOR DROP BAR LATCHES SHALL BE SET IN CONCRETE AND ENGAGE THE PLUNGER OF THE BAR LATCH.
 - (S) CAPS: ALL POSTS, EXCEPT ROLL FORMED POSTS AND "T" POSTS SHALL BE CAPPED OVER THE EXTERIOR OF THE POST, AND SHALL CONFORM TO ASTM F626.
- CONCRETE REQUIRED FOR THE EMBEDMENT OF ALL POSTS SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR CHAIN LINK FENCE.
- POSTS SHALL BE SPACED EQUIDISTANT ON A MAXIMUM OF 10' CENTERS.
- EXCAVATION FOR POSTS: IN OTHER THAN ROCK SHALL BE OF THE DIMENSIONS INDICATED. IF ROCK IS ENCOUNTERED BEFORE REACHING THE REQUIRED DEPTH, THE EXCAVATION SHALL BE CONTINUED TO THE DEPTH INDICATED OR 1'-6" INTO THE ROCK, WHICHEVER IS LESS, AND SHALL BE A MINIMUM OF 8 INCHES IN DIAMETER.



POSTS AND RAILS

SIZE O.D.	GRADE 1 AND ALUMINUM ALLOY						GRADE 2			
	O.D. INCHES	WALL THICKNESS	LBS. PER LINEAR FT.		O.D. INCHES	WALL THICKNESS	LBS. PER LINEAR FT.	O.D. INCHES	WALL THICKNESS	LBS. PER LINEAR FT.
			STEEL	ALUMINUM						
1 5/8	1.660	0.140	2.27	0.786	1.660	0.111	1.84			
2	1.900	0.145	2.72	0.940	1.900	0.120	2.28			
2 1/2	2.375	0.154	3.65	1.264	2.375	0.130	3.11			
3	2.875	0.203	5.79	2.004	2.875	0.160	4.64			
3 1/2	3.500	0.216	7.58	2.621	3.500	0.160	5.71			
4	4.000	0.226	9.11	3.151	4.000	0.160	6.56			

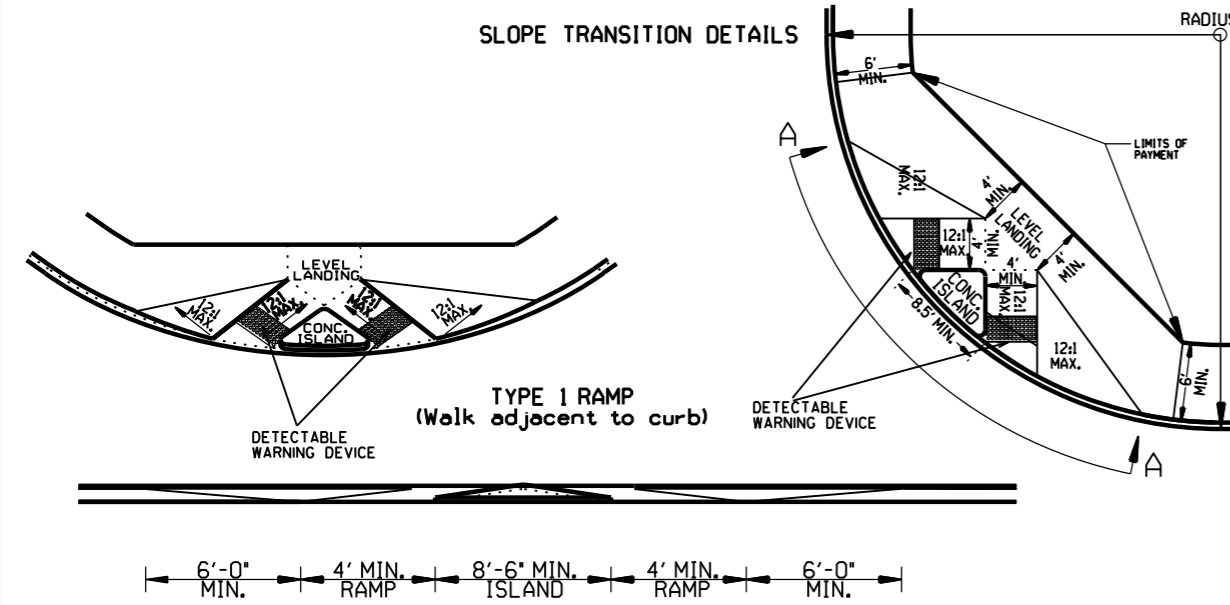
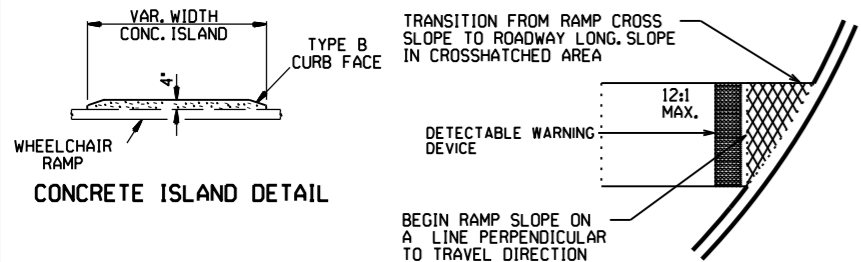
TOLERANCES ON DIMENSIONS AND WEIGHTS ACCORDING TO AASHTO M 181

DATE	REVISION	FILMED
11-17-10	REVISED TRUSS ROD	
12-10-09	REVISED POSTS & RAILS TABLE	
5-21-09	ADDED TABLE & GEN. NOTE (C)	
8-22-02	REVISED NOTES, REMOVED TABLE, & REMOVED FENCE ALTERNATE	
4-3-97	REVISED BRACE RAIL NOTE	
10-18-96	REVISED AASHTO & ASTM REF.	
11-3-94	REVISED NOTE (L)	
10-1-92	DELETED ALTERNATE POST	10-1-92
8-15-91	DELETED ROLL FORMED POST DETAIL & ADDED NOTE	8-15-91
11-30-89	DELETED CLASS CONCRETE	11-30-89
11-17-88	REVISED O.D. SIZES	668-11-17-88
10-30-87	GENERAL REVISIONS	548-10-30-87
4-20-79	REVISED TOP RAIL & TENSION WIRE	695-4-20-79
10-2-72	REVISED AND REDRAWN	530-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

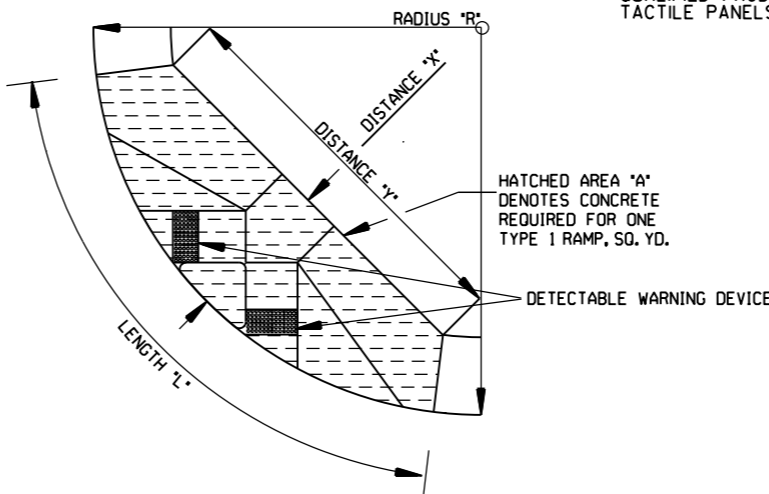
CHAIN LINK FENCE

STANDARD DRAWING WF-3



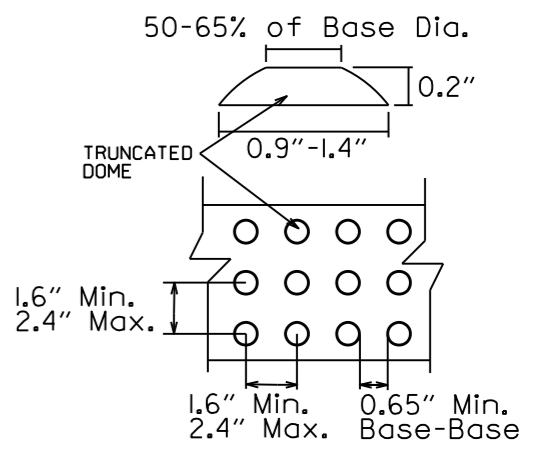
TYPE 1 RAMP DIMENSIONS AND QUANTITIES

RADIUS "R"	DISTANCE "X" FEET	DISTANCE "Y" FEET	LENGTH "L" FEET	RAMP AREA SQ. YD.
15	11.67	18.82	32.18	26.21
20	11.52	22.28	35.46	30.07
25	11.43	26.60	38.77	33.80
30	11.37	30.26	40.93	36.90
35	11.33	33.51	43.11	39.77
40	11.30	36.45	45.26	42.45
45	11.27	39.16	47.34	44.97
50	11.25	41.69	49.36	47.35
55	11.24	44.07	51.31	49.63
60	11.22	46.33	53.21	51.80



GENERAL NOTES FOR DETECTABLE WARNING DEVICES

THE DETECTABLE WARNING DEVICE SHALL BE LOCATED SO THAT THE NEAREST EDGE OF THE DEVICE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB. TRUNCATED DOMES IN THE DETECTABLE WARNING SURFACE SHALL MEET THE REQUIREMENTS OF THE GEOMETRIC CONFIGURATION SHOWN. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES. DETECTABLE WARNING DEVICE SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE. DETECTABLE WARNING DEVICE SHALL BE ON THE ADOPT QUALIFIED PRODUCTS LIST FOR CAST-IN-PLACE TACTILE PANELS (ADA DETECTABLE WARNING).

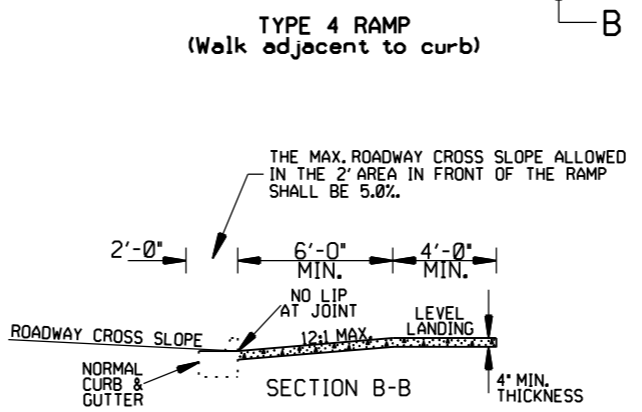
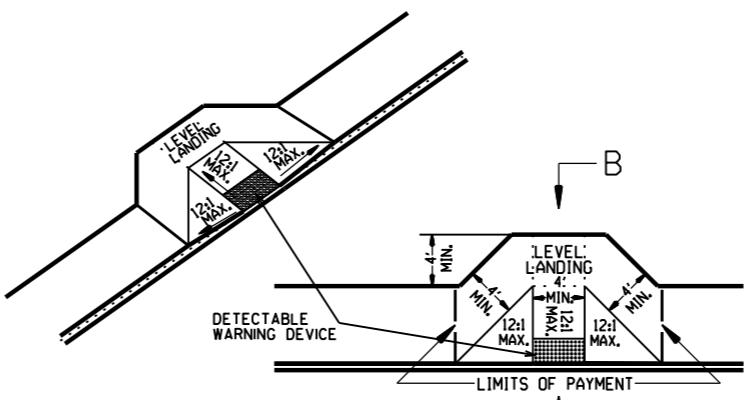


DETECTABLE WARNING DEVICE DETAIL

GENERAL NOTES:

IN NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED ON THE PLANS, WHEELCHAIR RAMPS ARE TO BE PROVIDED AT ALL CORNERS OF CURBED STREET INTERSECTIONS AND MID-BLOCK CROSSWALK LOCATIONS. IN ALTERATIONS WHEELCHAIR RAMPS ARE TO BE PROVIDED AT CURBED STREET INTERSECTIONS WITH PEDESTRIAN TRAFFIC AND MID-BLOCK CROSSWALK LOCATIONS. THE LENGTH OF THE RAMP SHALL BE SUCH THAT THE SLOPE DOES NOT EXCEED 12:1. THE SURFACE TEXTURE OF THE RAMP SHALL CONFORM TO A CLASS 6 FINISH ACCORDING TO SECTION 802.19. THE NORMAL GUTTER GRADE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP. ALL PAYMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION. THE MINIMUM THICKNESS OF THE RAMP, WALK, & LANDING SHALL BE 4". THE MINIMUM WIDTH OF THE RAMPS SHALL BE THE WALK WIDTH OR 36", WHICHEVER IS GREATER. RAMPS SHALL BE MODIFIED AS NECESSARY TO INSURE THAT THEY ARE PARALLEL TO A LINE DRAWN FROM THE CENTER OF ONE RAMP TO THE CENTER OF THE RAMP ON THE OPPOSITE SIDE OF THE INTERSECTION. THE DIMENSIONS AND QUANTITIES SHOWN ON THIS DRAWING ARE FOR A 90° INTERSECTION ONLY. DIMENSIONS AND QUANTITIES FOR SKEWED INTERSECTIONS WILL VARY, AND ARE TO BE DETERMINED BY THE ENGINEER.

NOTE: THE CROSS SLOPE OF THE RAMPS, LEVEL LANDINGS, AND SIDEWALKS SHALL NOT EXCEED 2.0% UNLESS REQUIRED TO MATCH STREET LONGITUDINAL GRADE.



RAMP SELECTION CRITERIA

CHOICE	TYPE	DESCRIPTION
FIRST CHOICE	TYPE 1	CORNER LOCATIONS WITH THE WALK ADJACENT TO THE CURB (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 2	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE INSUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 3	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE SUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
SECOND CHOICE	TYPE 4	TANGENT LOCATIONS (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 5	TANGENT LOCATIONS (ALTERATIONS ONLY).
THIRD CHOICE	TYPE 6	CORNER LOCATIONS (ALTERATIONS ONLY), THIS RAMP MAY BE USED ONLY IF THE TYPE 5 RAMPS CANNOT BE PLACED AT THE ENDS OF THE RADIUS.
FOURTH CHOICE		IF SITE CONSTRAINTS PREVENT THE CONSTRUCTION OF ANY OF THE TYPES LISTED, THEN AND ONLY THEN CAN THE 12:1 MAX. SLOPE ON THE RAMP BE EXCEEDED TO PROVIDE ACCESS TO THE STREET LEVEL (ALTERATIONS ONLY). THE SLOPE CAN BE STEEPENED TO A 10:1 MAX. FOR A MAX. LENGTH OF 5' OR A 8:1 MAX. FOR A MAX. LENGTH OF 2'. SLOPES STEEPER THAN 8:1 ARE NOT ALLOWED UNDER ANY CIRCUMSTANCES.

NOTE: IN ALTERATIONS, THE SELECTION OF THE TYPE OF WHEELCHAIR RAMP TO BE CONSTRUCTED SHALL BE BASED ON THE AMOUNT OF RIGHT-OF-WAY AVAILABLE, AND ON THE PRESENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.). THE TABLE ABOVE LISTS THE ORDER IN WHICH THE RAMPS ARE TO BE CONSIDERED. AN ALTERATION IS DEFINED AS A PROJECT THAT CHANGES OR AFFECTS THE USE OF A PEDESTRIAN PATHWAY (OVERLAYS, SIGNALIZATION PROJECTS, ETC.) BUT DOES NOT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY. ALL PROJECTS THAT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY WILL USUALLY BE CONSIDERED NEW CONSTRUCTION FOR THE PURPOSES OF THE CHART ABOVE.

DATE	REVISION	DATE FILM
11-10-05	REVISED TO NEW SIDEWALK POLICY	
10-9-03	REVISED GEN. NOTES & ADDED NOTE	
4-10-03	REV. DETECTABLE WARNING DEVICES	
8-22-02	ADD DETECTABLE WARNING DEVICES	
3-30-00	ADD SLOPE, TRANS. & REV. ISL. DIMS.	
11-8-98	REVISED NOTES	
8-12-98	REVISED TEXTURE	
7-02-98	REDRAWN & REISSUED	
10-18-96	CORRECTED DIMENSIONS	10-18-96
5-24-90	FROM 10:1 MAX. SLOPES	5-24-90
7-15-88	ADJUSTED MAX. SLOPE	652-7-15-88
7-14-88	INCLUD. "CONC. ISLD." IN PAY ITEM	-----
6-02-76	ISSUED-P.H.D.	299-7-28-76

ARKANSAS STATE HIGHWAY COMMISSION

**WHEELCHAIR RAMPS
NEW CONSTRUCTION
AND ALTERATIONS**

STANDARD DRAWING WR-1