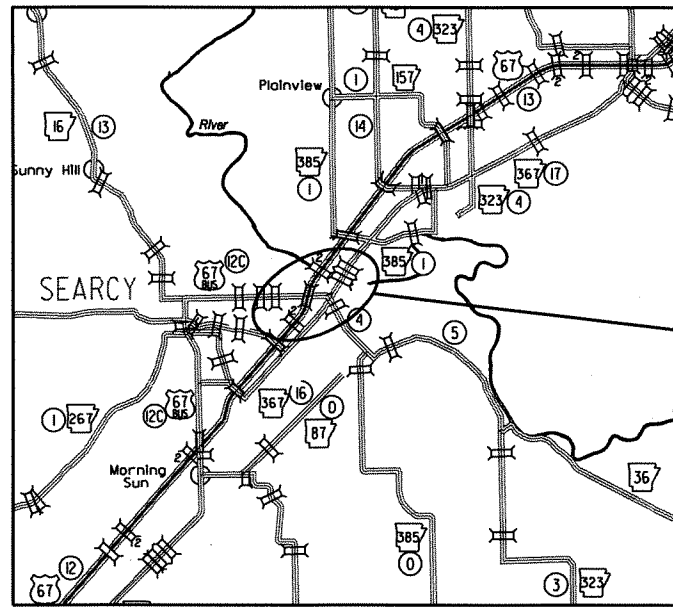


**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT  
CONSTRUCTION PLANS**

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 050244	1	27
② HWY. 67B/POPLAR ST. & HWY. 67 SB RAMP SIGNALS (SEARCY) (S)								



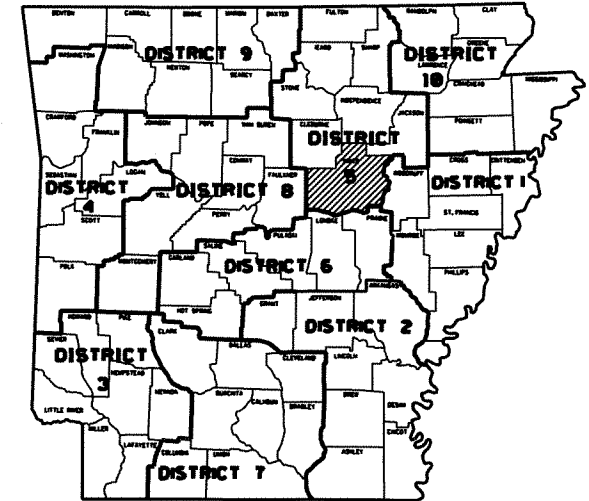
**VICINITY MAP**

**HWY. 67B/POPLAR ST. & HWY. 67 SB RAMP  
SIGNALS (SEARCY) (S)**

**WHITE COUNTY**

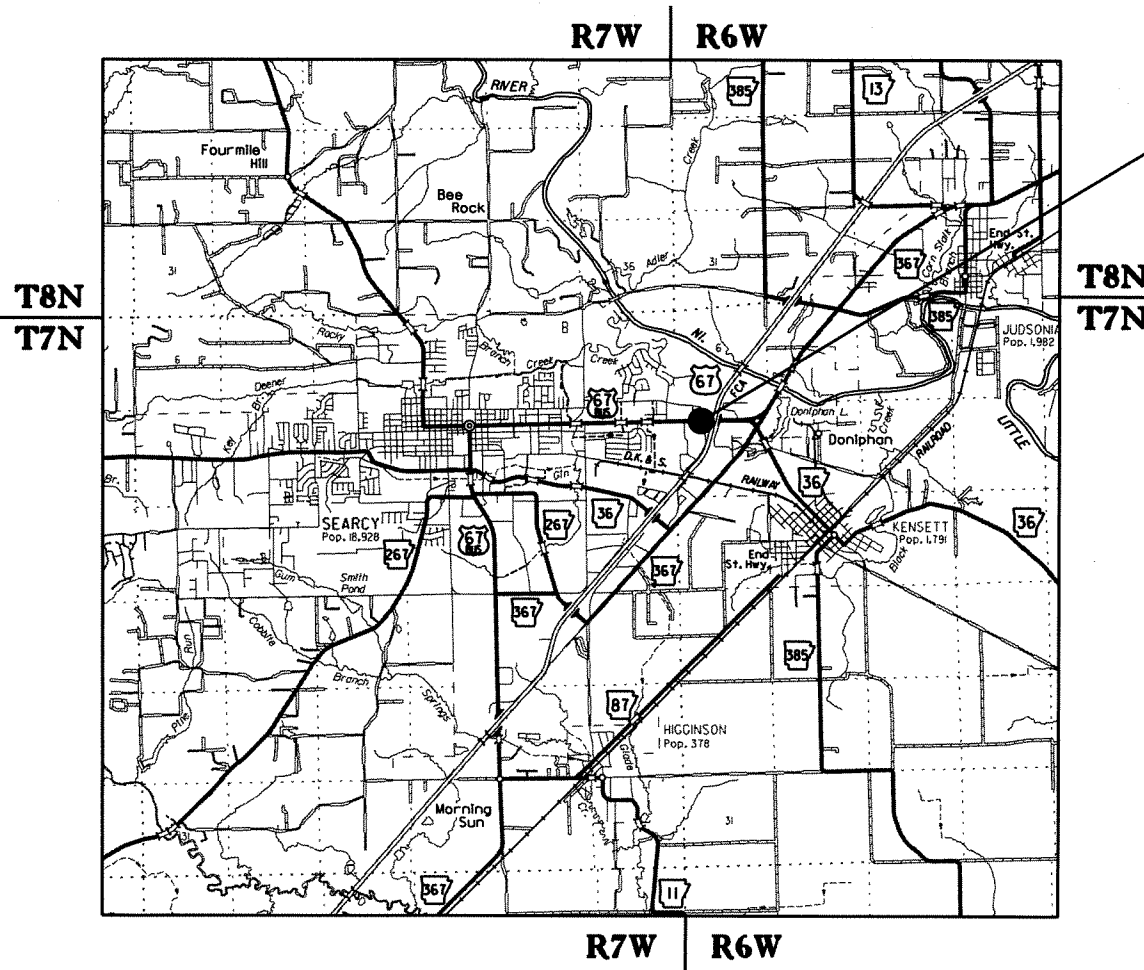
**ROUTE 67 SECTION 12  
ROUTE 67B SECTION 12C  
FAP STP-9386(18)**

**JOB 050244**



**ARK. HWY. DIST. NO. 5**

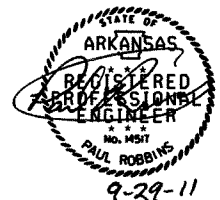
NOT TO SCALE



**PROJECT LOCATION  
HWY. 67B/POPLAR ST.  
& HWY. 67 SB RAMP**



MID-POINT OF PROJECT  
LAT. 35°15'01"N  
LONG. 91°41'27"W



9-29-11

JOB 050244

## INDEX OF SHEETS

SHEET NO.	TITLE	DRWG. NO.	DATE
1	TITLE SHEET		
2	INDEX OF SHEETS, GOVERNING SPECIFICATIONS AND NOTES		
3	SPECIAL DETAILS		
4	MAINTENANCE OF TRAFFIC DETAILS		
5	SYSTEM MAP		
6-7	PERMANENT PAVEMENT MARKINGS		
8	SUMMARY OF QUANTITIES AND REVISIONS		
9	SURVEY CONTROL DETAILS		
10-15	SIGNALIZATION PLAN SHEETS		
16-20	SIGNALIZATION DETAILS		
21	CURBING DETAILS	CG-1	11-29-07
22	DETAILS OF DRIVEWAYS & ISLANDS	DR-1	11-29-07
23	PAVEMENT MARKING DETAILS	PM-1	11-17-10
24	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-1	12-15-11
25	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-2	3-11-10
26	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-3	10-15-09
27	WHEELCHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS	WR-1	11-10-05

## GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2003, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS:

NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA -1273	FHWA -1273 REVISIONS
FHWA -1273	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA -1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA -1273	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA -1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA -1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA -1273	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA -1273	SUPPLEMENT - WAGE RATE DETERMINATION
100-2	MANUAL FOR ASSESSING SAFETY HARDWARE (MASH)
102-1	BIDDING REQUIREMENTS AND CONDITIONS
105-1	CONSTRUCTION CONTROL MARKINGS
105-2	EQUIPMENT AND MATERIAL STORAGE ON BRIDGE STRUCTURES
107-1	WORKER VISIBILITY
108-1	LIQUIDATED DAMAGES
600-1	WATER FOR VEGETATION
603-1	MAINTENANCE OF TRAFFIC
604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
711-1	CONCRETE PULL BOX
714-1	DESIGN AND MATERIAL REQUIREMENTS FOR TRAFFIC SIGNAL MAST ARMS AND POLES
715-1	DESIGN AND MATERIAL REQUIREMENTS FOR TRAFFIC SIGNAL PEDESTAL POLES
719-2	THERMOPLASTIC PAVEMENT MARKING MATERIAL
JOB 050244	CABINET DRAWER ASSEMBLY
JOB 050244	COMMUNICATION CABLE-FIBER
JOB 050244	DOCUMENTATION OF PAYMENTS MADE TO DISADVANTAGED BUSINESS ENTERPRISES
JOB 050244	EDGE CARD VIDEO PROCESSOR
JOB 050244	ELECTRICAL CONDUCTORS-IN-CONDUIT
JOB 050244	INTERNET BIDDING
JOB 050244	LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
JOB 050244	LED TRAFFIC SIGNAL HEADS
JOB 050244	LOUVERS FOR SIGNAL HEADS
JOB 050244	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT
JOB 050244	SERVICE POINT ASSEMBLY
JOB 050244	STREET NAME SIGN (MAST ARM MOUNTED)
JOB 050244	SYSTEM LOCAL CONTROLLER
JOB 050244	THERMOPLASTIC PAVEMENT MARKING (YIELD LINE)
JOB 050244	UTILITY ADJUSTMENTS
JOB 050244	VIDEO DETECTOR (COLOR)

### GENERAL NOTES

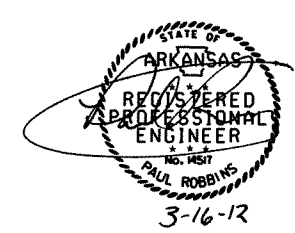
- ALL PIPE LINES, POWER, TELEPHONE AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
- ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
- 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 AS 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.

### TRAFFIC SIGNAL NOTES

- PERFORM ELECTRICAL WORK IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE NFPA 70 (2002) NATIONAL ELECTRICAL CODE, NFPA 101 (2000) LIFE SAFETY CODE, STATE ELECTRICAL CODE AND LOCAL ELECTRICAL CODE.
- EXTEND GREEN EQUIPMENT GROUNDING CONDUCTOR (EGC) FROM GROUND BAR AT MAIN BREAKER TO CONTROL PANEL AND TO FIRST POLE. SOLIDLY BOND EGC TO GROUND LUG OF CONTROL CABINET AND TO POLE GROUND. ENSURE THAT ONLY ONE NEUTRAL-TO-GROUND BOND EXISTS IN THE SYSTEM AND THAT IT IS AT THE MAIN BREAKER.
- ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY TO A SERVICE POLE WITH EXTERNAL RAINTIGHT BREAKER (MAIN BREAKER), GALVANIZED STEEL SERVICE RISER, METER LOOP (IF REQUIRED), AND WEATHERHEAD AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. IF THE SERVICE POINT IS OVER 10 FEET FROM THE CONTROLLER, THE CONTRACTOR SHALL PROVIDE AND INSTALL A SEPARATE TWO CIRCUIT EXTERNAL BREAKER (SECONDARY BREAKER) ON OR NEAR THE TRAFFIC SIGNAL CONTROLLER CABINET AND SHALL INSTALL CONDUIT, ELECTRICAL SERVICE WIRE (2c/#6 USE RATED, WITH GROUND TYPICAL), AND PERFORM WIRING TO TAP INTO THE CITY'S MAIN BREAKER AS PART OF THIS CONTRACT. CONDUIT IS PAID FOR AS A SEPARATE ITEM OF THIS CONTRACT. TWO CIRCUIT BREAKERS, CONSIDERED SUBSIDIARY TO THE CONTROL EQUIPMENT WHERE STREET LIGHTING IS INCLUDED. AS PART OF THE SIGNAL INSTALLATION, STREET LIGHTING CIRCUIT (2c/#12 AWG UF RATED, TYPICAL) SHALL BE KEPT FROM THE CIRCUIT SERVING THE TRAFFIC SIGNAL CONTROL EQUIPMENT FROM THE POINT OF TIE-IN AT THE SECONDARY BREAKER PROVIDED BY THE CONTRACTOR.
- CONTRACTOR SHALL CONNECT A SEPARATE NEUTRAL FOR EACH LOAD SWITCH REPRESENTED ON EACH SIGNAL POLE.
- TRAFFIC CONTROLLER CABINET AND LAYOUT SHALL BE SUCH THAT IT IS NOT NECESSARY TO SHUT DOWN POWER OR REMOVE LOAD SWITCHES IN ORDER TO EASILY TEST OR MODIFY DETECTOR INPUTS TO THE CONTROLLER.
- CONTROLLER CABINET SHALL BE WIRED SUCH THAT DURING FLASH OPERATIONS POWER TO THE LOAD SWITCHES CANNOT BACKFEED TO LOAD SWITCH POWER BUSS.
- ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH AASHTO, THE ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS AND DETAILS AND WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITIONS.
- CONDUIT INSTALLED UNDER ROADWAY SURFACES SHALL BE INSTALLED BY PUSHING OR BORING METHODS. IF THE ENGINEER DETERMINES THIS IS NOT FEASIBLE, THEN A TRENCHING METHOD AS SHOWN IN THE DETAILS MAY BE USED.
- TRAFFIC SIGNAL POLES SHALL BE GALVANIZED. BACKPLATES SHALL BE SUPPLIED FOR ALL SIGNAL HEADS.
- FOUNDATION FOR ALL POLES SHALL BE EXTENDED IF NECESSARY TO ACCOMMODATE THE REQUIREMENTS FOR SIGNAL HEAD CLEARANCE ABOVE ROADWAY ONLY AT LOCATIONS WHERE THE GROUND ELEVATION AT THE POLE IS BELOW THE ELEVATION OF THE ROADWAY (SEE NOTES ON SPECIAL DETAILS). PAYMENT WILL BE INCLUDED IN SECTION 714, AHTD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
- ALL BUSES SHALL BE (TYPE 2 HD) UNLESS OTHERWISE INDICATED. ALL CONDUIT SHALL BE 3" DIAMETER UNLESS SPECIFIED ON PLANS.
- CONTRACTOR SHALL NOTIFY ALL EXISTING UTILITY OWNERS BEFORE BEGINNING WORK ON THIS PROJECT.
- HARDWARE INPUTS MAY BE DETERMINED BY SUPPLIER. EACH DETECTOR OUTPUT SHALL INPUT THE CONTROLLER THROUGH A SEPARATE INPUT UNLESS OTHERWISE NOTED AND BE PROGRAMMED TO ACTUATE THE ASSOCIATED PHASE. COMBINATION (COMB.) DETECTORS SHALL ALSO BE PROGRAMMED TO PROVIDE VEHICLE COUNT/OCCUPANCY DATA.
- TO DETERMINE UTILITY CLEARANCES ABOVE THE TRAFFIC SIGNAL POLE, REFER TO THE POLE SCHEDULE FOR VERTICAL SHAFT HEIGHT. WHERE THE POLE SCHEDULE INDICATES THAT A LUMINAIRE ARM WILL BE USED, 38 FEET SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE LUMINAIRE ARM. WHERE THE POLE SCHEDULE INDICATES A TRAFFIC SIGNAL POLE WITHOUT A LUMINAIRE ARM, A HEIGHT OF 21' SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE TRAFFIC SIGNAL MAST ARM. AN ADDITIONAL 6 FEET SHOULD BE USED DIRECTLY ABOVE "VIDEO DETECTOR" AT LOCATIONS SHOWN ON THE SIGNAL PLANS.
- THE DESIRABLE MINIMUM DISTANCE FROM THE FACE OF ROADWAY CURB OR SHOULDER EDGE TO THE FACE OF NON-BREAKAWAY POLE OR OBSTRUCTION IS 6 FEET. REFER TO TRAFFIC SIGNAL PLANS FOR SPECIFIC LOCATION OF POLES, CONTROLLER AND ANY OTHER NON-BREAKAWAY OBSTRUCTIONS. REFER TO "DESIGN PARAMETERS, MINIMUM CLEAR ZONE DISTANCE" FOR MINIMUM DISTANCE FROM THE EDGE OF TRAVELED WAY TO THE FACE OF A NON-BREAKAWAY POLE OR OBSTRUCTION. TRAFFIC SIGNAL POLES OR ANY OTHER NON-BREAKAWAY OBSTRUCTION SHALL NOT BE INSTALLED WITHIN THE CLEAR ZONE.
- AS DETERMINED BY THE ENGINEER, FOUNDATION EMBEDMENT MAY BE DECREASED BY A MAXIMUM OF TWO FEET IF COMPETENT ROCK IS ENCOUNTERED PRIOR TO ACHIEVING PLAN EMBEDMENT AND AT LEAST HALF OF THE REMAINING PLAN EMBEDMENT LENGTH IS KEYED INTO COMPETENT ROCK.
- CONNECTION OF TRAFFIC SIGNAL DISPLAY TO FIELD WIRING SHALL UTILIZE AN APPROVED TERMINAL STRIP BEHIND HAND HOLE COVER AT BASE OF POLE. TERMINAL STRIP SHALL PROVIDE PROTECTION TO PREVENT EXPOSURE TO THE PUBLIC IN THE EVENT THAT THE POLE COVER IS MISSING. PAYMENT FOR TERMINAL STRIPS SHALL BE INCLUDED IN ITEM 714-TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION.
- CONTROLLER CABINET LAYOUT AND ORIENTATION SHALL CONFORM TO IMSA STANDARDS.
- ONE VIDEO PROGRAMMING MODULE SHALL BE PROVIDED FOR AIMING AND SETUP OF DETECTORS IF THE VIDEO SYSTEM CANNOT BE ADJUSTED THROUGH HARDWARE AND SOFTWARE PROVIDED BY ITEMS WITHIN THE JOB.
- TRAFFIC SIGNAL CONTRACTOR MUST NOTIFY RESIDENT ENGINEER OR ASSIGNED DEPARTMENT PROJECT INSPECTOR EACH DAY PRIOR TO SIGNAL RELATED WORK. NO WORK ON TRAFFIC SIGNALS WILL BE ALLOWED OR APPROVED WITHOUT THIS PRIOR NOTIFICATION.
- ALL STEEL POLES SHALL BE DESIGNED TO MEET THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4th EDITION (2001) WITH 2003 AND 2006 INTERIMS.
- CONTRACTOR SHALL PROVIDE CONTROLLER AND LOCAL RADIO TO THE DEPARTMENT'S TRAFFIC ENGINEERING STAFF AT THE MAINTENANCE DIVISION, FOR SETUP AND TIMING BEFORE IT IS PLACED INTO OPERATION.
- THE TRAFFIC SIGNAL CONTROLLER SHALL BE COMPATIBLE WITH THE CITY OF SEARCY'S EXISTING EAGLE/SIEMENS MARC NX CLOSED LOOP SYSTEM.
- THE LOCAL RADIO WITH ANTENNA SHALL BE COMPATIBLE WITH THE EXISTING MDS 9710 NARROW BAND RADIOS USED IN THE CLOSED LOOP COORDINATION SYSTEM IN THE CITY OF SEARCY.

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.		050244	2	27

② INDEX OF SHEETS, GOVERNING SPECS. & NOTES



LOCATION: HWY. 67B/POPLAR ST. & HWY. 67 SB RAMP SIGNALS  
 CITY: SEARCY  
 COUNTY: WHITE  
 DISTRICT: 5  
 DRAWN BY: F&H

**EROSION CONTROL**

STATION	STATION	LOCATION	SOLID SODDING SQ. YDS.	WATER M. GAL.
54+54.30	55+50.75	HWY. 67B (RACE AVE.) / POPLAR ST.	29	0.4
57+38.56	58+76.38	HWY. 67B (RACE AVE.) / HWY. 67 RAMPS	32	0.4
<b>TOTALS</b>			<b>61</b>	<b>0.8</b>

BASIS OF ESTIMATE: WATER - 12.6 GAL. PER SQ. YD. OF SOLID SODDING

**REMOVAL AND DISPOSAL QUANTITIES**

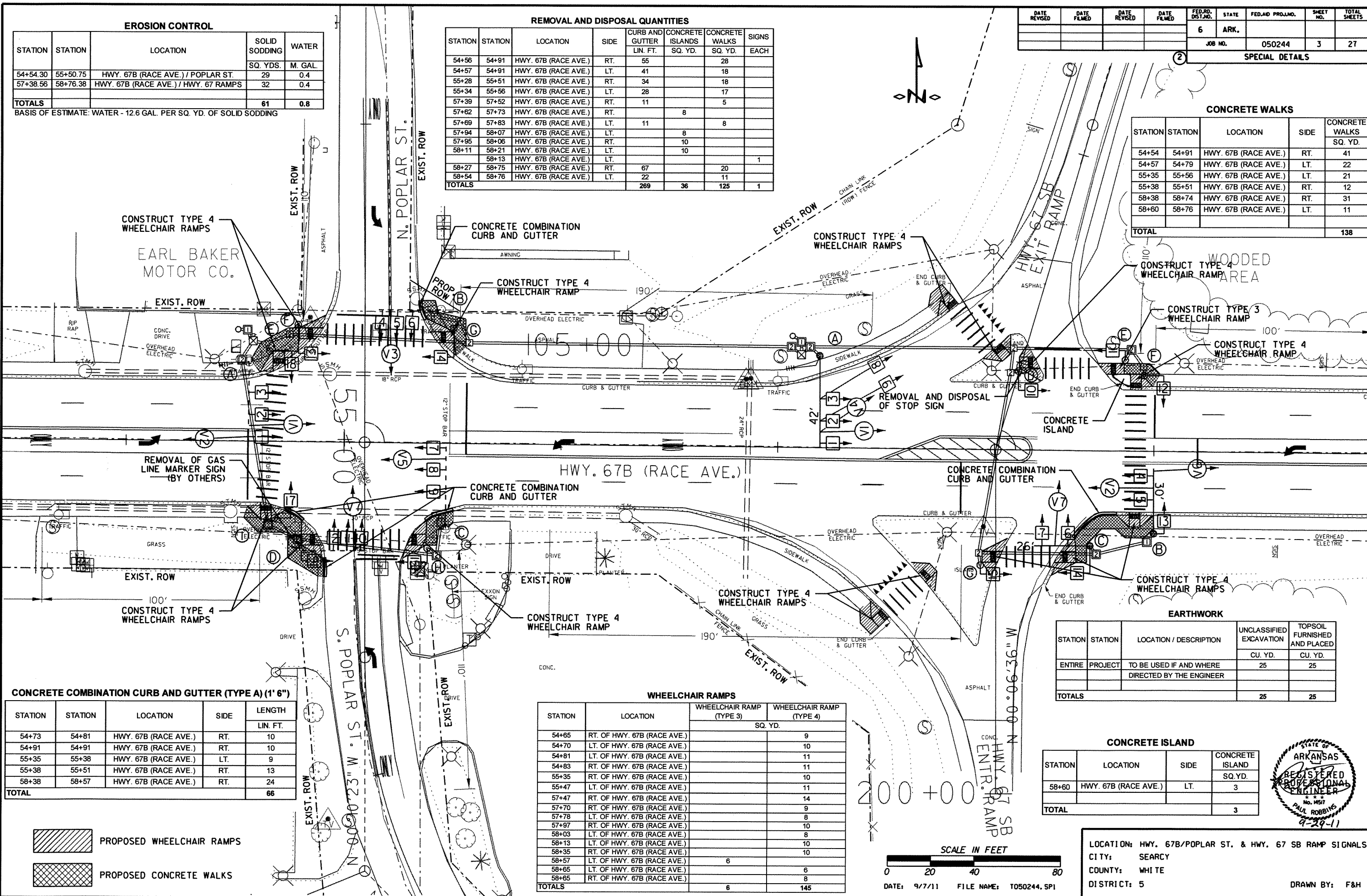
STATION	STATION	LOCATION	SIDE	CURB AND GUTTER LIN. FT.	CONCRETE ISLANDS SQ. YD.	CONCRETE WALKS SQ. YD.	SIGNS EACH
54+56	54+91	HWY. 67B (RACE AVE.)	RT.	55		28	
54+57	54+91	HWY. 67B (RACE AVE.)	LT.	41		18	
55+28	55+51	HWY. 67B (RACE AVE.)	RT.	34		18	
55+34	55+56	HWY. 67B (RACE AVE.)	LT.	28		17	
57+39	57+52	HWY. 67B (RACE AVE.)	RT.	11		5	
57+62	57+73	HWY. 67B (RACE AVE.)	RT.		8		
57+69	57+83	HWY. 67B (RACE AVE.)	LT.	11		8	
57+94	58+07	HWY. 67B (RACE AVE.)	LT.		8		
57+95	58+06	HWY. 67B (RACE AVE.)	RT.		10		
58+11	58+21	HWY. 67B (RACE AVE.)	LT.		10		
	58+13	HWY. 67B (RACE AVE.)	LT.				1
58+27	58+75	HWY. 67B (RACE AVE.)	RT.	67		20	
58+54	58+76	HWY. 67B (RACE AVE.)	LT.	22		11	
<b>TOTALS</b>				<b>269</b>	<b>36</b>	<b>125</b>	<b>1</b>

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.	050244		3	27

**SPECIAL DETAILS**

**CONCRETE WALKS**

STATION	STATION	LOCATION	SIDE	CONCRETE WALKS SQ. YD.
54+54	54+91	HWY. 67B (RACE AVE.)	RT.	41
54+57	54+79	HWY. 67B (RACE AVE.)	LT.	22
55+35	55+56	HWY. 67B (RACE AVE.)	LT.	21
55+38	55+51	HWY. 67B (RACE AVE.)	RT.	12
58+38	58+74	HWY. 67B (RACE AVE.)	RT.	31
58+60	58+76	HWY. 67B (RACE AVE.)	LT.	11
<b>TOTAL</b>				<b>138</b>



CONSTRUCT TYPE 4 WHEELCHAIR RAMPS

EARL BAKER MOTOR CO.

CONCRETE COMBINATION CURB AND GUTTER

CONSTRUCT TYPE 4 WHEELCHAIR RAMPS

CONSTRUCT TYPE 4 WHEELCHAIR RAMP

CONSTRUCT TYPE 3 WHEELCHAIR RAMP

CONSTRUCT TYPE 4 WHEELCHAIR RAMP

REMOVAL OF GAS LINE MARKER SIGN (BY OTHERS)

CONCRETE COMBINATION CURB AND GUTTER

CONCRETE COMBINATION CURB AND GUTTER

CONSTRUCT TYPE 4 WHEELCHAIR RAMPS

CONSTRUCT TYPE 4 WHEELCHAIR RAMPS

CONSTRUCT TYPE 4 WHEELCHAIR RAMP

CONSTRUCT TYPE 4 WHEELCHAIR RAMPS

CONSTRUCT TYPE 4 WHEELCHAIR RAMPS

**CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (1' 6")**

STATION	STATION	LOCATION	SIDE	LENGTH LIN. FT.
54+73	54+81	HWY. 67B (RACE AVE.)	RT.	10
54+91	54+91	HWY. 67B (RACE AVE.)	RT.	10
55+35	55+38	HWY. 67B (RACE AVE.)	LT.	9
55+38	55+51	HWY. 67B (RACE AVE.)	RT.	13
58+38	58+57	HWY. 67B (RACE AVE.)	RT.	24
<b>TOTAL</b>				<b>66</b>

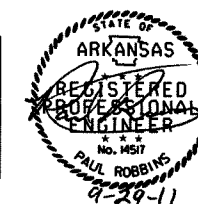
**WHEELCHAIR RAMPS**

STATION	LOCATION	WHEELCHAIR RAMP (TYPE 3) SQ. YD.	WHEELCHAIR RAMP (TYPE 4) SQ. YD.
54+65	RT. OF HWY. 67B (RACE AVE.)		9
54+70	LT. OF HWY. 67B (RACE AVE.)		10
54+81	LT. OF HWY. 67B (RACE AVE.)		11
54+83	RT. OF HWY. 67B (RACE AVE.)		11
55+35	RT. OF HWY. 67B (RACE AVE.)		10
55+47	LT. OF HWY. 67B (RACE AVE.)		11
57+47	RT. OF HWY. 67B (RACE AVE.)		14
57+70	RT. OF HWY. 67B (RACE AVE.)		9
57+78	LT. OF HWY. 67B (RACE AVE.)		8
57+97	RT. OF HWY. 67B (RACE AVE.)		10
58+03	LT. OF HWY. 67B (RACE AVE.)		8
58+13	LT. OF HWY. 67B (RACE AVE.)		10
58+35	RT. OF HWY. 67B (RACE AVE.)		10
58+57	LT. OF HWY. 67B (RACE AVE.)	6	
58+65	LT. OF HWY. 67B (RACE AVE.)		6
58+65	RT. OF HWY. 67B (RACE AVE.)		8
<b>TOTALS</b>		<b>6</b>	<b>145</b>

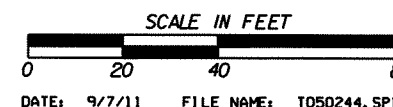
STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION CU. YD.	TOPSOIL FURNISHED AND PLACED CU. YD.
ENTIRE PROJECT		TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	25	25
<b>TOTALS</b>			<b>25</b>	<b>25</b>

**CONCRETE ISLAND**

STATION	LOCATION	SIDE	CONCRETE ISLAND SQ. YD.
58+60	HWY. 67B (RACE AVE.)	LT.	3
<b>TOTAL</b>			<b>3</b>



- PROPOSED WHEELCHAIR RAMPS
- PROPOSED CONCRETE WALKS



LOCATION: HWY. 67B/POPLAR ST. & HWY. 67 SB RAMP SIGNALS  
 CITY: SEARCY  
 COUNTY: WHITE  
 DISTRICT: 5  
 DRAWN BY: F&H

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. 050244							4	27

② MAINTENANCE OF TRAFFIC DETAILS



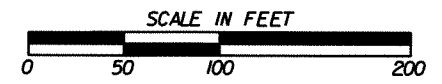
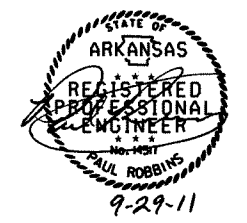
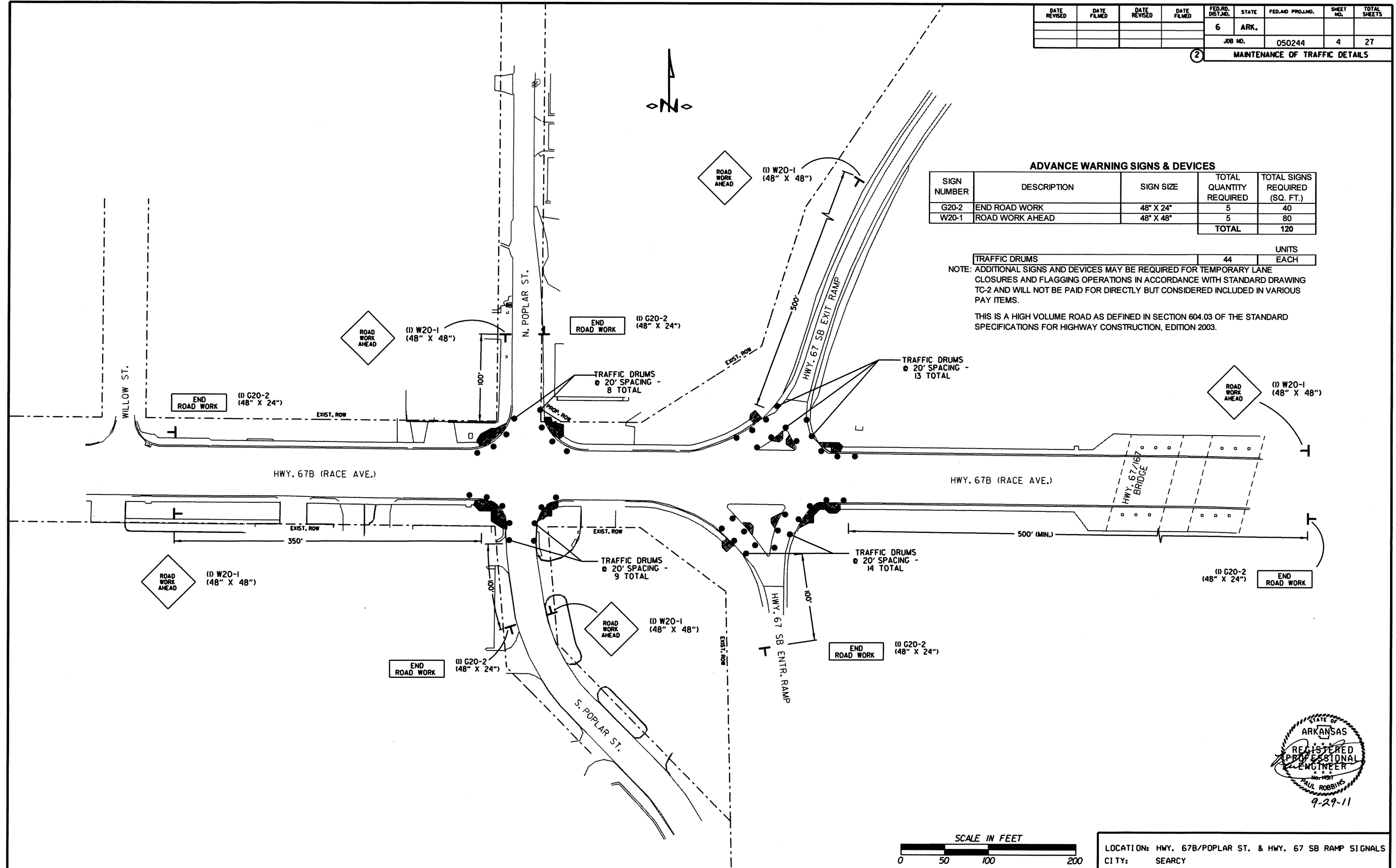
**ADVANCE WARNING SIGNS & DEVICES**

SIGN NUMBER	DESCRIPTION	SIGN SIZE	TOTAL QUANTITY REQUIRED	TOTAL SIGNS REQUIRED (SQ. FT.)
G20-2	END ROAD WORK	48" X 24"	5	40
W20-1	ROAD WORK AHEAD	48" X 48"	5	80
<b>TOTAL</b>			<b>10</b>	<b>120</b>

TRAFFIC DRUMS	UNITS
44	EACH

NOTE: ADDITIONAL SIGNS AND DEVICES MAY BE REQUIRED FOR TEMPORARY LANE CLOSURES AND FLAGGING OPERATIONS IN ACCORDANCE WITH STANDARD DRAWING TC-2 AND WILL NOT BE PAID FOR DIRECTLY BUT CONSIDERED INCLUDED IN VARIOUS PAY ITEMS.

THIS IS A HIGH VOLUME ROAD AS DEFINED IN SECTION 604.03 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION 2003.



DATE: 9/7/11 FILE NAME: T050244.MDT1

LOCATION: HWY. 67B/POPLAR ST. & HWY. 67 SB RAMP SIGNALS  
 CITY: SEARCY  
 COUNTY: WHITE  
 DISTRICT: 5  
 DRAWN BY: F&H

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.	050244		5	27

② SYSTEM MAP

SEARCY  
Pop. 18,928

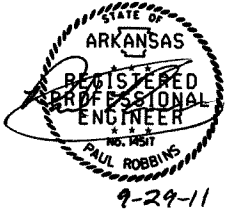
# SYSTEM MAP



HWY. 67B & POPLAR ST.  
(TRAFFIC SIGNAL)

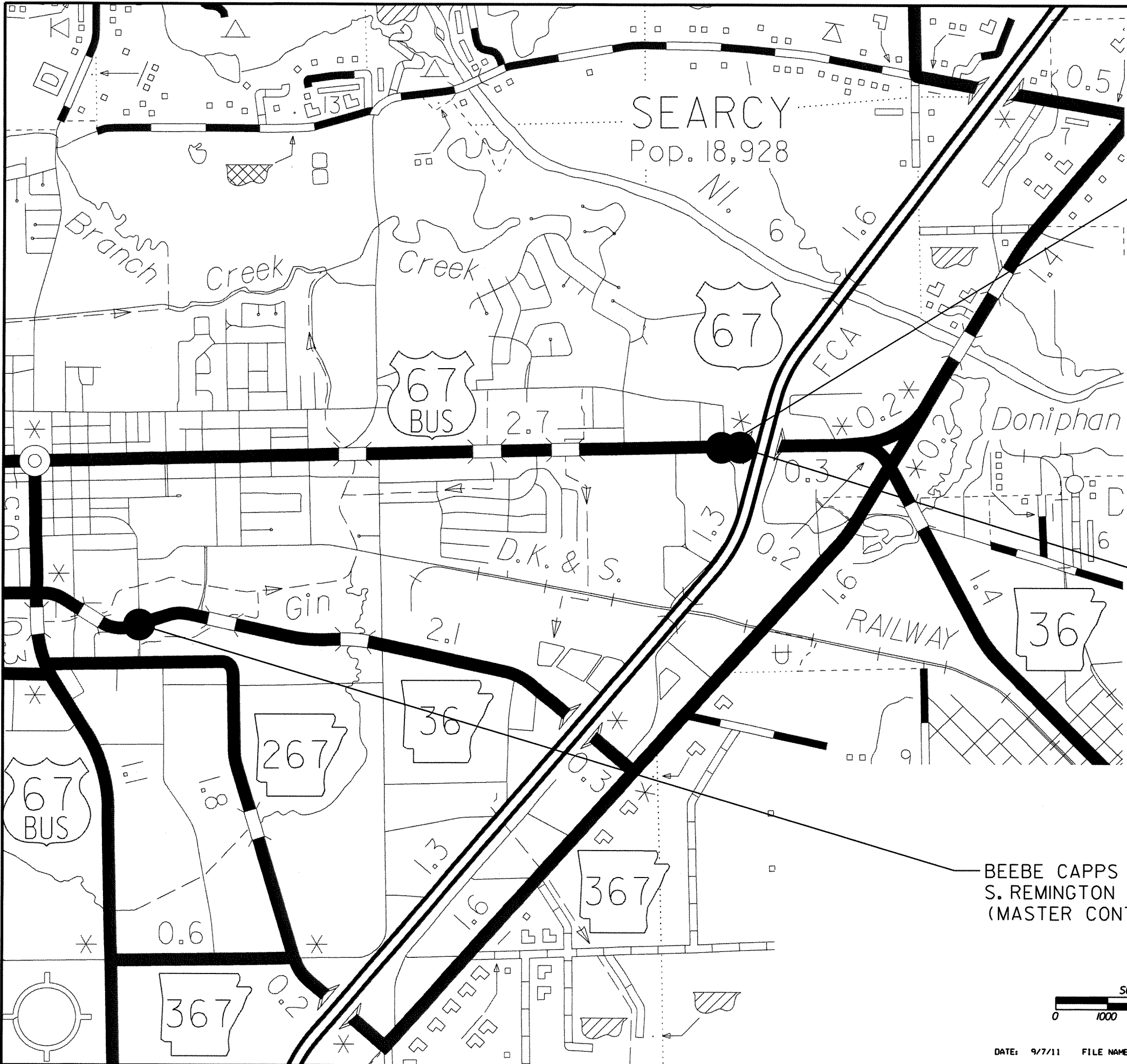
HWY. 67B & HWY. 67 SB RAMP  
(TRAFFIC SIGNAL)

BEEBE CAPPS EXPY. &  
S. REMINGTON ST./DR. JIMMY CARR ST.  
(MASTER CONTROLLER)



LOCATION: HWY. 67B/POPLAR ST. & HWY. 67 SB RAMP SIGNALS  
CITY: SEARCY  
COUNTY: WHITE  
DISTRICT: 5  
DRAWN BY: F&H

DATE: 9/7/11 FILE NAME: T050244.SYS

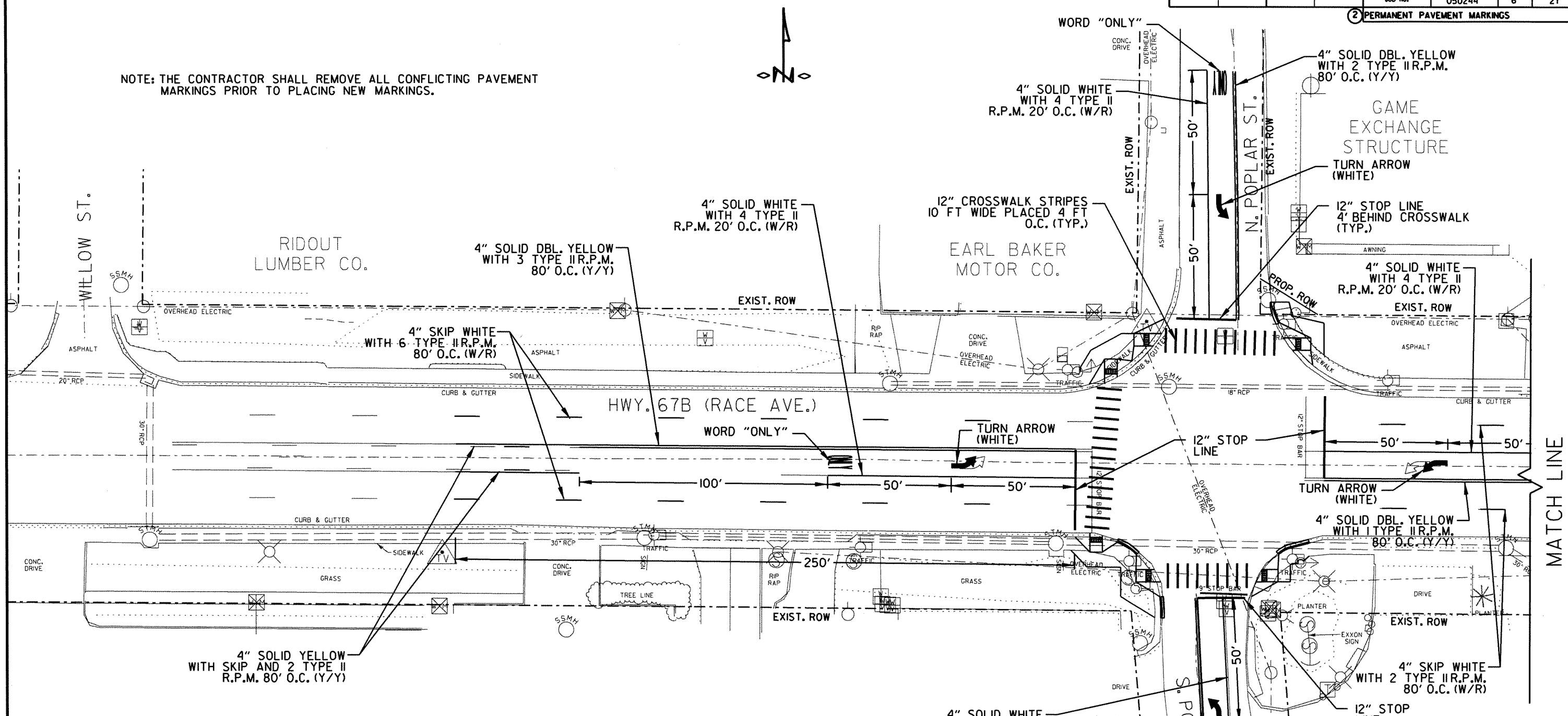




DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 050244							6	27

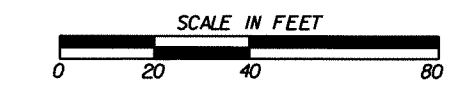
PERMANENT PAVEMENT MARKINGS

NOTE: THE CONTRACTOR SHALL REMOVE ALL CONFLICTING PAVEMENT MARKINGS PRIOR TO PLACING NEW MARKINGS.



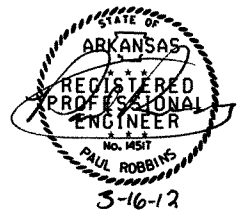
SUMMARY OF PAVEMENT MARKING QUANTITIES

ITEM NO.	ITEM	HWY. 67B/POPLAR ST. /HWY. 67 SB RAMPS	UNIT
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS	3781	LIN. FT.
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS (ARROWS)	3	EACH
SS & 719	THERMOPLASTIC PAVEMENT MARKING WHITE (4")	990	LIN. FT.
SS & 719	THERMOPLASTIC PAVEMENT MARKING WHITE (12")	915	LIN. FT.
SS & 719	THERMOPLASTIC PAVEMENT MARKING YELLOW (4")	1876	LIN. FT.
SS & 719	THERMOPLASTIC PAVEMENT MARKING YELLOW (8")	106	LIN. FT.
SS & 719	THERMOPLASTIC PAVEMENT MARKING (WORDS)	5	EACH
SS & 719	THERMOPLASTIC PAVEMENT MARKING (ARROWS)	5	EACH
SP, SS & 719	THERMOPLASTIC PAVEMENT MARKING (YIELD LINE)	40	LIN. FT.
721	RAISED PAVEMENT MARKERS (TYPE II)	59	EACH



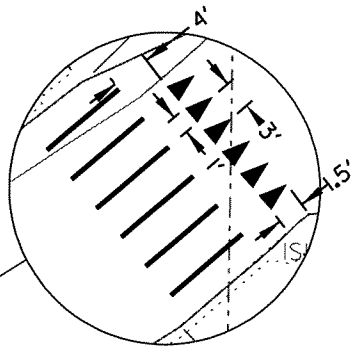
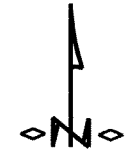
DATE: 9/7/11 FILE NAME: T050244.PMT1

LOCATION: HWY. 67B/POPLAR ST. & HWY. 67 SB RAMP SIGNALS  
 CITY: SEARCY  
 COUNTY: WHITE  
 DISTRICT: 5  
 DRAWN BY: F&H



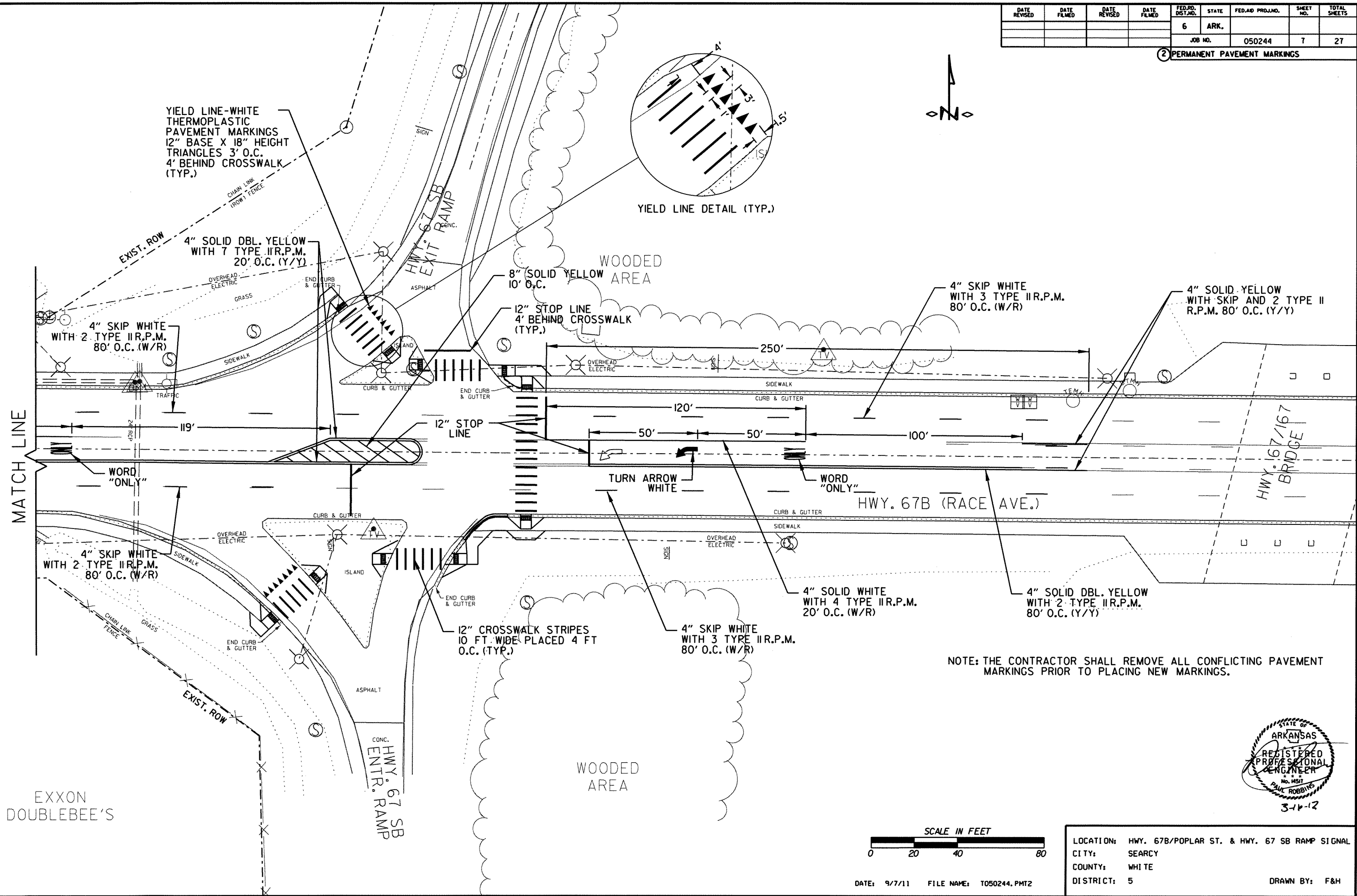
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	050244		7	27

PERMANENT PAVEMENT MARKINGS

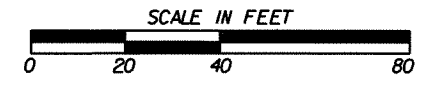
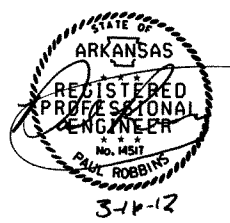


YIELD LINE DETAIL (TYP.)

YIELD LINE-WHITE THERMOPLASTIC PAVEMENT MARKINGS 12" BASE X 18" HEIGHT TRIANGLES 3' O.C. 4' BEHIND CROSSWALK (TYP.)



NOTE: THE CONTRACTOR SHALL REMOVE ALL CONFLICTING PAVEMENT MARKINGS PRIOR TO PLACING NEW MARKINGS.



DATE: 9/7/11 FILE NAME: T050244.PMT2

LOCATION: HWY. 67B/POPLAR ST. & HWY. 67 SB RAMP SIGNAL  
 CITY: SEARCY  
 COUNTY: WHITE  
 DISTRICT: 5  
 DRAWN BY: F&H

### SUMMARY OF QUANTITIES

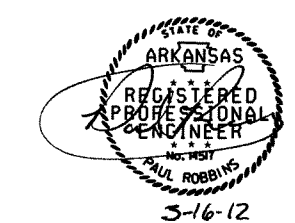
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		050244	8	27
② SUMMARY OF QUANTITIES & REVISIONS								

ITEM NO.	ITEM	QUANTITY	UNIT
202	REMOVAL AND DISPOSAL OF CURB AND GUTTER	269	LIN. FT.
202	REMOVAL AND DISPOSAL OF CONCRETE ISLANDS	36	SQ. YD.
202	REMOVAL AND DISPOSAL OF CONCRETE WALKS	125	SQ. YD.
202	REMOVAL AND DISPOSAL OF SIGNS	1	EACH
210	UNCLASSIFIED EXCAVATION	25	CU. YD.
601	MOBILIZATION	1.00	LUMP SUM
SS & 603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS	3781	LIN. FT.
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS (ARROWS)	3	EACH
SS & 604	SIGNS	120	SQ. FT.
SS & 604	TRAFFIC DRUMS	44	EACH
SS & 620	WATER	0.8	M.GAL.
624	SOLID SODDING	61	SQ. YD.
628	TOPSOIL FURNISHED AND PLACED	25	CU. YD.
632	CONCRETE ISLAND	3	SQ. YD.
633	CONCRETE WALKS	138	SQ. YD.
634	CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (1' 6")	66	LIN. FT.
641	WHEELCHAIR RAMPS (TYPE 3)	6	SQ. YD.
641	WHEELCHAIR RAMPS (TYPE 4)	145	SQ. YD.
SP & 701	SYSTEM LOCAL CONTROLLER TS2 - TYPE 2 (8 PHASES)	2	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	16	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	5	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	12	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	5385	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	346	LIN. FT.
708	TRAFFIC SIGNAL CABLE (12C/14 A.W.G.)	659	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	611	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	73	LIN. FT.
710	NON-METALLIC CONDUIT (2")	209	LIN. FT.
710	NON-METALLIC CONDUIT (3")	1039	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 1)	3	EACH
SS & 711	CONCRETE PULL BOX (TYPE 1 HD)	4	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2)	6	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2 HD)	8	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (26')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (30')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (42')	1	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	9	EACH
SS & 719	THERMOPLASTIC PAVEMENT MARKING WHITE (4")	990	LIN. FT.
SS & 719	THERMOPLASTIC PAVEMENT MARKING WHITE (12")	915	LIN. FT.
SS & 719	THERMOPLASTIC PAVEMENT MARKING YELLOW (4")	1876	LIN. FT.
SS & 719	THERMOPLASTIC PAVEMENT MARKING YELLOW (8")	106	LIN. FT.
SS & 719	THERMOPLASTIC PAVEMENT MARKING (WORDS)	5	EACH
SS & 719	THERMOPLASTIC PAVEMENT MARKING (ARROWS)	5	EACH
SP, SS & 719	THERMOPLASTIC PAVEMENT MARKING (YIELD LINE)	40	LIN. FT.
721	RAISED PAVEMENT MARKERS (TYPE II)	59	EACH
733	VIDEO CABLE	2311	LIN. FT.
* SP & 733	VIDEO DETECTOR (CLR)	11	EACH
733	VIDEO MONITOR (CLR)	2	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	2	EACH
* SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	7	EACH
SP & 733	VIDEO EDGE CARD EXTENDER	1	EACH
SP	18" STREET NAME SIGN	1	EACH
SP	ANTENNA CABLE (TYPE 6)	90	LIN. FT.
SP	COMMUNICATION CABLE, FIBER (6 CHANNEL)	315	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., EGC)	1208	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	81	LIN. FT.
SP	LOCAL RADIO WITH ANTENNA	2	EACH
SP	LOUVERS	23	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	1.00	LUMP SUM
SP	SERVICE POINT ASSEMBLY (1 CIRCUIT)	2	EACH

\* ONE SPARE VIDEO PROCESSOR AND VIDEO DETECTOR PROVIDED TO CITY.

#### REVISION BOX

DATE	DESCRIPTION	PAGE NO.(S)





SURVEY CONTROL COORDINATES

Project Name: s100737s01  
 Date: 7/15/2011  
 Coordinate System: ARKANSAS STATE PLANE - NORTH ZONE BASED ON GPS CONTROL,  
 PROJECTED TO GROUND.  
 Units: U.S. SURVEY FOOT

POINT NAME	NORTHING	EASTING	ELEVATION	FEATURE	DESCRIPTION
1	334011.7766	1404446.2059	253.54	TV	5/8" REBAR, NO CAP
2	333780.7950	1404454.9450	250.04	TV	5/8" REBAR, NO CAP
3	333916.3125	1404756.8179	250.72	TV	5/8" REBAR, NO CAP
4	334301.6641	1404840.1957	253.91	TV	5/8" REBAR, NO CAP
1000	334269.5501	1404522.3979	257.49	TV	MAG NAIL
1100	333918.5037	1404162.3371	255.69	TV	5/8" REBAR, NO CAP
1101	333998.8970	1404964.4220	249.36	TV	5/8" REBAR, NO CAP

\*Note - Rebar and Cap - Standard - 5/8" Rebar with 2" Aluminum Cap stamped  
 \*(standard markings common to all caps), or as indicated  
 (other markings indicated in the point description of the individual point).  
 ALL DISTANCES ARE GROUND.  
 SURVEY CONTROL NOTES

USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT.  
 A PROJECT CAF OF 0.999942845 HAS BEEN USED TO COMPUTE THE ABOVE GROUND COORDINATES.  
 THIS CAF IS INTENDED FOR USE WITHIN THE PROJECT LIMITS.  
 GRID DISTANCE = GROUND DISTANCE X CAF.  
 GRID COORDINATES ARE STORED UNDER FILE NAME s050244gi.CTL  
 HORIZONTAL DATUM: NAD 83 (1997)  
 VERTICAL DATUM: NAVD 88 POSITIONAL ACCURACY THIRD ORDER, UNLESS SPECIFIED OTHERWISE  
 AT A SPECIFIC POINT.

REFERENCE POINTS (1500 SERIES) ARE TO BE USED TO ESTABLISH CONTROL  
 IF THE PRIMARY CONTROL POINTS LISTED ABOVE HAVE BEEN DESTROYED.  
 REFERENCE POINTS ARE NOT TO BE USED FOR VERTICAL CONTROL

BASIS OF BEARINGS:  
 ARKANSAS STATE PLANE GRID BEARINGS - 0301-NORTH ZONE  
 DETERMINED FROM GPS CONTROL POINTS: 730028, 730028A, 730027A  
 CONVERGENCE ANGLE: 0-10-46 RIGHT AT PN:1  
 NORTHING 333992.6862 EASTING 1404365.9348  
 GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

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.	050244		9	27

2 SURVEY CONTROL DETAILS

CONSTRUCTION C.L.  
 HWY. 67B ( RACE AVE.)

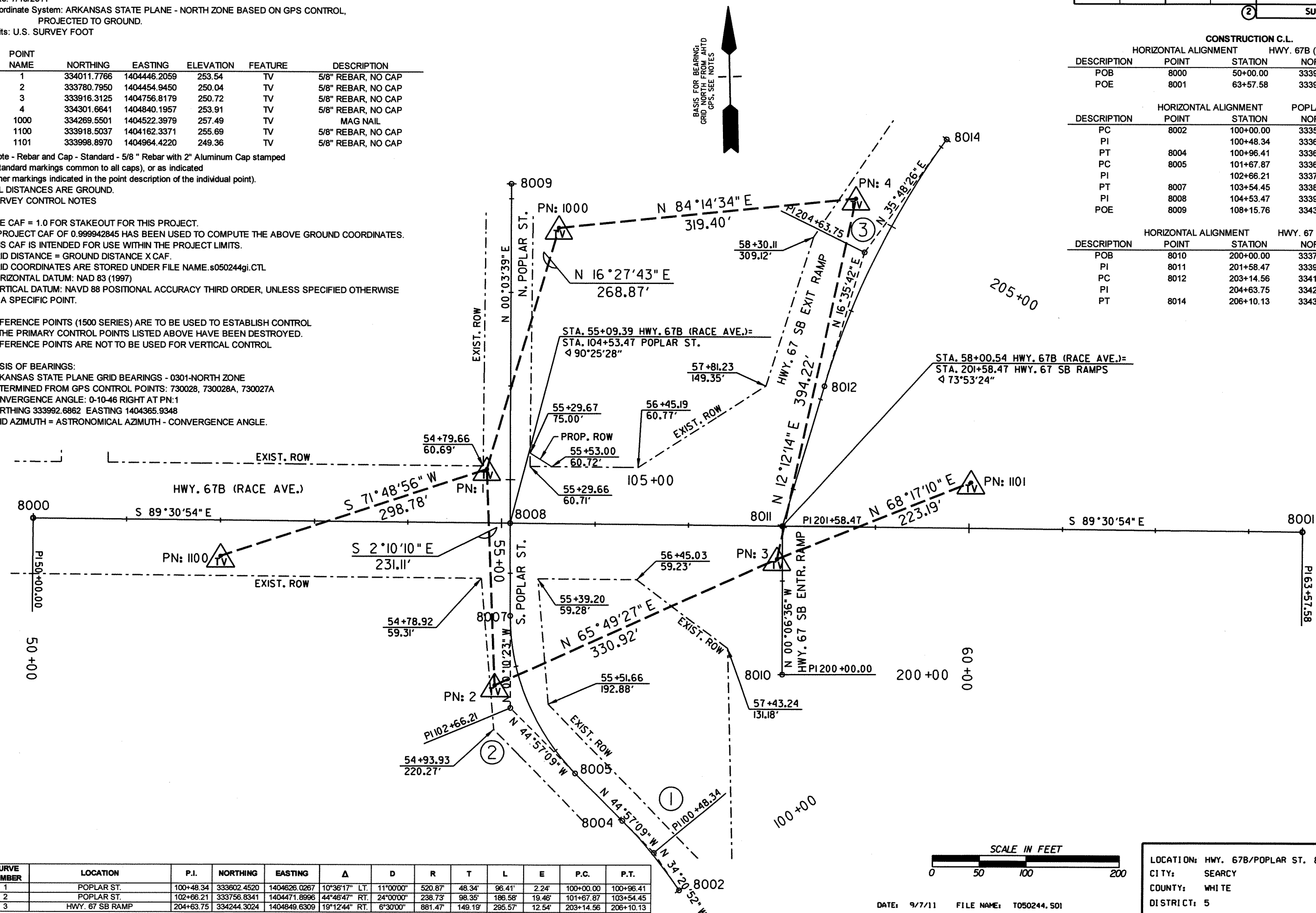
DESCRIPTION	POINT	STATION	NORTHING	EASTING
POB	8000	50+00.00	333958.5182	1403961.9337
POE	8001	63+57.58	333947.0243	1405319.4673

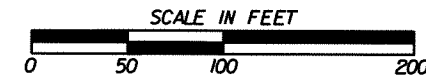
DESCRIPTION	POINT	STATION	NORTHING	EASTING
PC	8002	100+00.00	333562.5399	1404653.3018
PI		100+48.34	333602.4520	1404626.0267
PT	8004	100+96.41	333636.6629	1404591.8723
PC	8005	101+67.87	333687.2335	1404541.3852
PI		102+66.21	333756.8341	1404471.8996
PT	8007	103+54.45	333855.1824	1404471.6027
PI		104+53.47	333954.2055	1404471.3037
POE	8009	108+15.76	334316.4984	1404471.6875

DESCRIPTION	POINT	STATION	NORTHING	EASTING
POB	8010	200+00.00	333793.2689	1404762.7463
PI	8011	201+58.47	333951.7405	1404762.4421
PC	8012	203+14.56	334101.3293	1404807.0223
PI		204+63.75	334244.3024	1404849.6309
PT	8014	206+10.13	334365.2916	1404936.9145



CURVE NUMBER	LOCATION	P.I.	NORTHING	EASTING	Δ	D	R	T	L	E	P.C.	P.T.
1	POPLAR ST.	100+48.34	333602.4520	1404626.0267	10°36'17" LT.	11°00'00"	520.87'	48.34'	96.41'	2.24'	100+00.00	100+96.41
2	POPLAR ST.	102+66.21	333756.8341	1404471.8996	44°46'47" RT.	24°00'00"	238.73'	98.35'	186.58'	19.46'	101+67.87	103+54.45
3	HWY. 67 SB RAMP	204+63.75	334244.3024	1404849.6309	19°12'44" RT.	6°30'00"	881.47'	149.19'	295.57'	12.54'	203+14.56	206+10.13

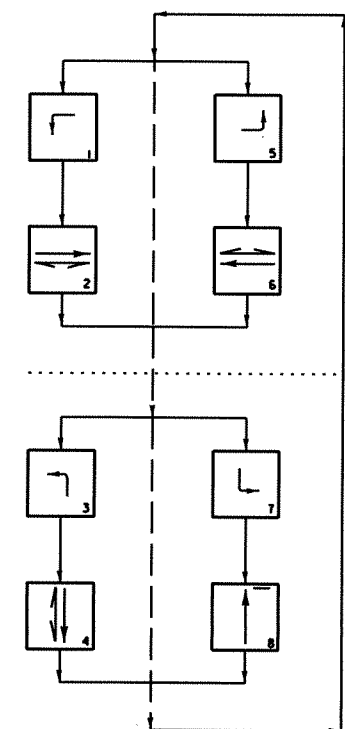


LOCATION: HWY. 67B/POPLAR ST. & HWY. 67 SB RAMP SIGNALS  
 CITY: SEARCY  
 COUNTY: WHITE  
 DISTRICT: 5  
 DATE: 9/7/11 FILE NAME: T050244.S01  
 DRAWN BY: F&H

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.	050244		10	27

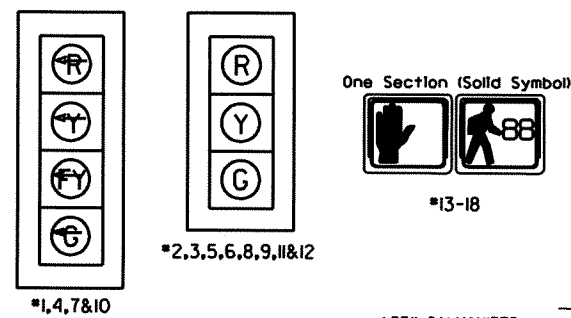
2 SIGNALIZATION PLAN SHEET

**PHASING DIAGRAM**

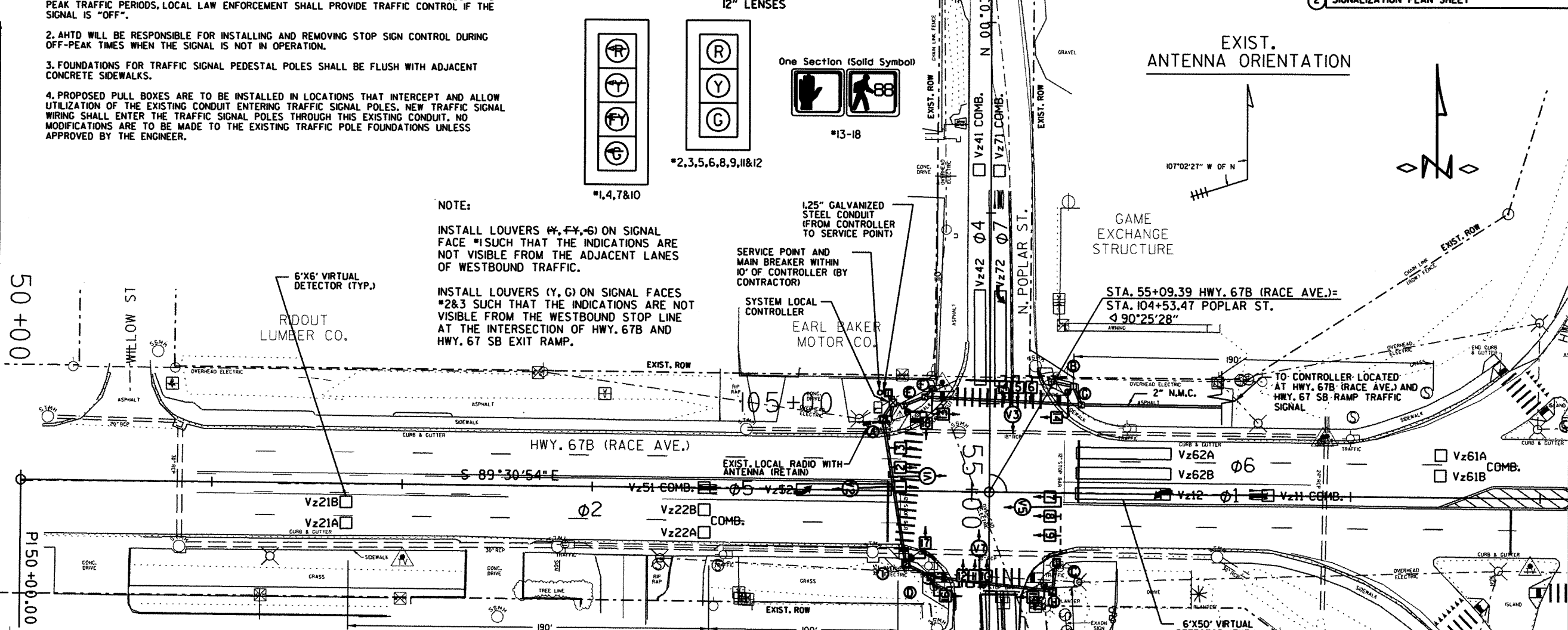


- NOTES:**
1. THE CONTRACTOR SHALL COORDINATE TRAFFIC CONTROL WITH AHTD, THE CITY OF SEARCY AND LOCAL LAW ENFORCEMENT IF THE SIGNAL IS "OFF" FOR ANY PERIOD OF TIME DURING CONSTRUCTION ACTIVITIES, DURING 7:00-9:00 AM AND 4:00-7:00 PM (MONDAY THROUGH FRIDAY) PEAK TRAFFIC PERIODS. LOCAL LAW ENFORCEMENT SHALL PROVIDE TRAFFIC CONTROL IF THE SIGNAL IS "OFF".
  2. AHTD WILL BE RESPONSIBLE FOR INSTALLING AND REMOVING STOP SIGN CONTROL DURING OFF-PEAK TIMES WHEN THE SIGNAL IS NOT IN OPERATION.
  3. FOUNDATIONS FOR TRAFFIC SIGNAL PEDESTAL POLES SHALL BE FLUSH WITH ADJACENT CONCRETE SIDEWALKS.
  4. PROPOSED PULL BOXES ARE TO BE INSTALLED IN LOCATIONS THAT INTERCEPT AND ALLOW UTILIZATION OF THE EXISTING CONDUIT ENTERING TRAFFIC SIGNAL POLES. NEW TRAFFIC SIGNAL WIRING SHALL ENTER THE TRAFFIC SIGNAL POLES THROUGH THIS EXISTING CONDUIT. NO MODIFICATIONS ARE TO BE MADE TO THE EXISTING TRAFFIC POLE FOUNDATIONS UNLESS APPROVED BY THE ENGINEER.

**LED SIGNAL FACES**



- NOTE:**
- INSTALL LOUVERS (#, F, Y, G) ON SIGNAL FACE #1 SUCH THAT THE INDICATIONS ARE NOT VISIBLE FROM THE ADJACENT LANES OF WESTBOUND TRAFFIC.
  - INSTALL LOUVERS (Y, G) ON SIGNAL FACES #2&3 SUCH THAT THE INDICATIONS ARE NOT VISIBLE FROM THE WESTBOUND STOP LINE AT THE INTERSECTION OF HWY. 67B AND HWY. 67 SB EXIT RAMP.



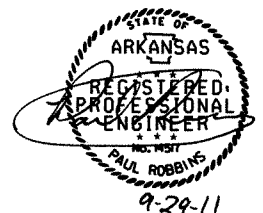
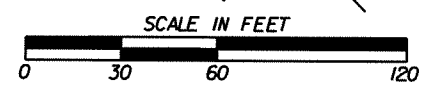
**SUMMARY OF TRAFFIC SIGNAL QUANTITIES**

ITEM NO.	ITEM	QUANTITY	UNIT
SP & 701	SYSTEM LOCAL CONTROLLER - TS2 TYPE 2 (8 PHASES)	1	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	8	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	4	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	6	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	1908	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	269	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	588	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	36	LIN. FT.
710	NON-METALLIC CONDUIT (2")	101	LIN. FT.
710	NON-METALLIC CONDUIT (3")	461	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 1)	2	EACH
SS & 711	CONCRETE PULL BOX (TYPE 1 HD)	2	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2)	3	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2 HD)	4	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	5	EACH
733	VIDEO CABLE	941	LIN. FT.
SP & 733	VIDEO DETECTOR (CLR)	6	EACH
733	VIDEO MONITOR (CLR)	1	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	4	EACH
SP & 733	VIDEO EDGE CARD EXTENDER	1	EACH
SP	ANTENNA CABLE (TYPE 6)	46	LIN. FT.
SP	COMMUNICATION CABLE, FIBER (6 CHANNEL)	216	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., EGC)	643	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	40	LIN. FT.
SP	LOCAL RADIO WITH ANTENNA	1	EACH
SP	LOUVERS	7	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	1.00	LUMP SUM
SP	SERVICE POINT ASSEMBLY (1 CIRCUIT)	1	EACH

\* ONE SPARE VIDEO PROCESSOR & VIDEO DETECTOR PROVIDED TO CITY.

**LEGEND**

- TYPE 1 PULL BOX
- TYPE 1 HD PULL BOX
- TYPE 2 PULL BOX
- TYPE 2 HD PULL BOX
- ⊠ CONTROL CABINET
- ⊠ SIGNAL HEAD
- N.M.C.-NON-METALLIC CONDUIT
- ⊙ VIDEO DETECTOR



LOCATION: HWY. 67B/POPLAR ST. SIGNAL  
 CITY: SEARCY  
 COUNTY: WHITE  
 DISTRICT: 5  
 DRAWN BY: F&H

**DESIGN PARAMETERS**

POSTED SPEED LIMIT:  
 30 MPH NORTH & SOUTH APPROACH (POPLAR ST.)  
 40 MPH WEST & EAST APPROACH (HWY. 67B)  
 NO RAILROAD TRACKS WITHIN 500 FT. OF THE INTERSECTION  
 NO BUS STOPS  
 NO EXISTING INTERCONNECTIONS  
 NO FIRE STATION  
 NO PARKING  
 NO SIGHT DISTANCE RESTRICTIONS

LOCATION OF STOP BARS SHOWN ON PAVEMENT MARKING DETAILS. SEE SEPARATE SHEET.

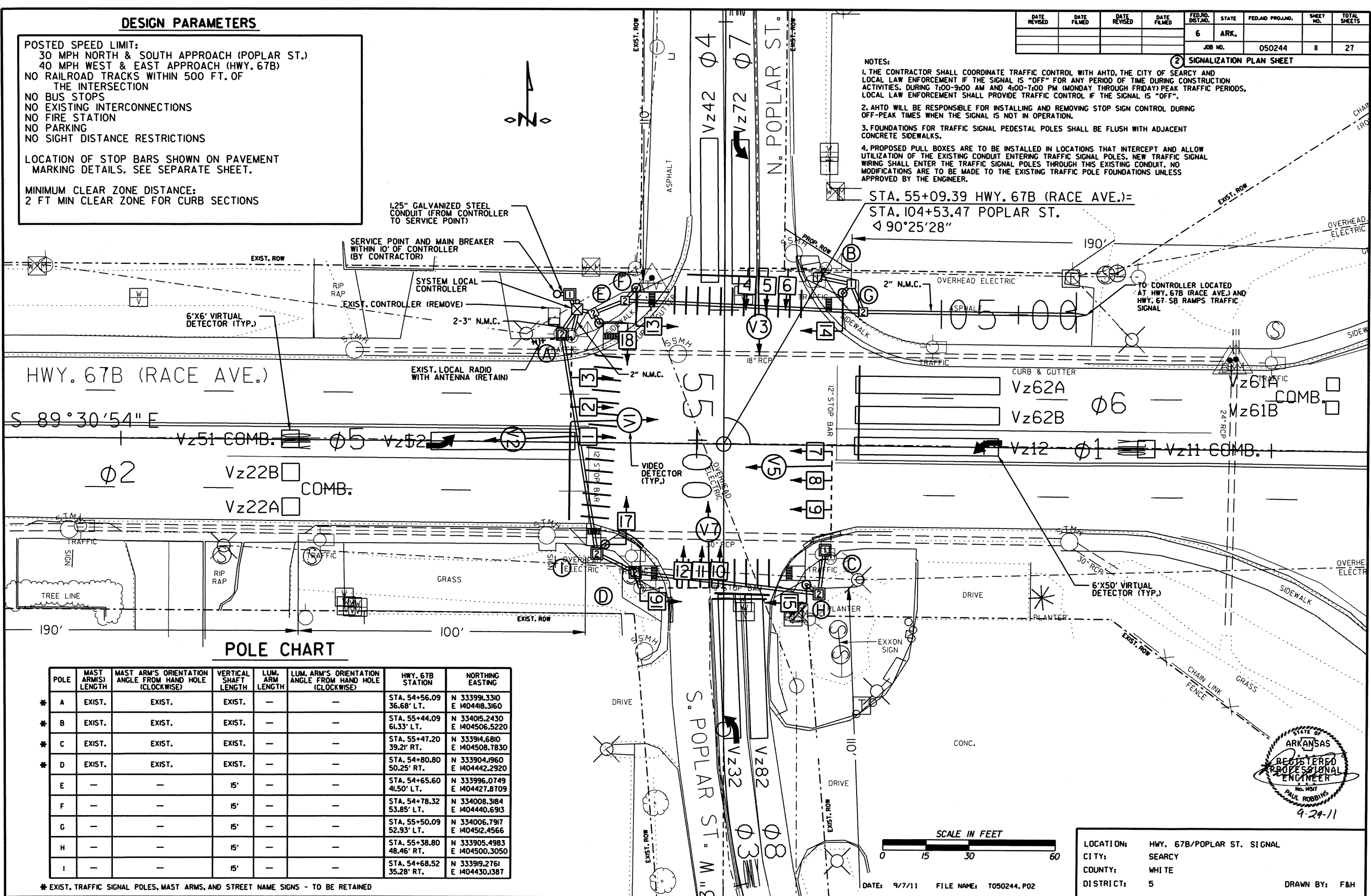
MINIMUM CLEAR ZONE DISTANCE:  
 2 FT MIN CLEAR ZONE FOR CURB SECTIONS

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. 050244							II	27

**2 SIGNALIZATION PLAN SHEET**

- NOTES:
- THE CONTRACTOR SHALL COORDINATE TRAFFIC CONTROL WITH AHTD, THE CITY OF SEARCY AND LOCAL LAW ENFORCEMENT IF THE SIGNAL IS "OFF" FOR ANY PERIOD OF TIME DURING CONSTRUCTION ACTIVITIES. DURING 7:00-9:00 AM AND 4:00-7:00 PM (MONDAY THROUGH FRIDAY) PEAK TRAFFIC PERIODS, LOCAL LAW ENFORCEMENT SHALL PROVIDE TRAFFIC CONTROL IF THE SIGNAL IS "OFF".
  - AHTD WILL BE RESPONSIBLE FOR INSTALLING AND REMOVING STOP SIGN CONTROL DURING OFF-PEAK TIMES WHEN THE SIGNAL IS NOT IN OPERATION.
  - FOUNDATIONS FOR TRAFFIC SIGNAL PEDESTAL POLES SHALL BE FLUSH WITH ADJACENT CONCRETE SIDEWALKS.
  - PROPOSED PULL BOXES ARE TO BE INSTALLED IN LOCATIONS THAT INTERCEPT AND ALLOW UTILIZATION OF THE EXISTING CONDUIT ENTERING TRAFFIC SIGNAL POLES. NEW TRAFFIC SIGNAL WIRING SHALL ENTER THE TRAFFIC SIGNAL POLES THROUGH THIS EXISTING CONDUIT. NO MODIFICATIONS ARE TO BE MADE TO THE EXISTING TRAFFIC POLE FOUNDATIONS UNLESS APPROVED BY THE ENGINEER.

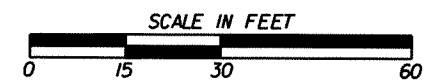
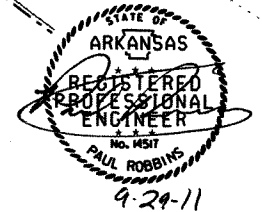
STA. 55+09.39 HWY. 67B (RACE AVE.)=  
 STA. 104+53.47 POPLAR ST.  
 ∠ 90°25'28"



**POLE CHART**

POLE	MAST ARM(S) LENGTH	MAST ARM'S ORIENTATION ANGLE FROM HAND HOLE (CLOCKWISE)	VERTICAL SHAFT LENGTH	LUM. ARM LENGTH	LUM. ARM'S ORIENTATION ANGLE FROM HAND HOLE (CLOCKWISE)	HWY. 67B STATION	NORTHING EASTING
* A	EXIST.	EXIST.	EXIST.	-	-	STA. 54+56.09 36.68' LT.	N 333991.3310 E 140448.3160
* B	EXIST.	EXIST.	EXIST.	-	-	STA. 55+44.09 61.33' LT.	N 334015.2430 E 1404506.5220
* C	EXIST.	EXIST.	EXIST.	-	-	STA. 55+47.20 39.21' RT.	N 333914.6810 E 1404508.7830
* D	EXIST.	EXIST.	EXIST.	-	-	STA. 54+80.80 50.25' RT.	N 333904.1960 E 1404442.2920
E	-	-	15'	-	-	STA. 54+65.60 41.50' LT.	N 333996.0749 E 1404427.8709
F	-	-	15'	-	-	STA. 54+78.32 53.85' LT.	N 334008.3184 E 1404440.6913
G	-	-	15'	-	-	STA. 55+50.09 52.93' LT.	N 334006.7917 E 1404512.4566
H	-	-	15'	-	-	STA. 55+38.80 48.46' RT.	N 333905.4983 E 1404500.3050
I	-	-	15'	-	-	STA. 54+68.52 35.28' RT.	N 333919.2761 E 1404430.1387

\* EXIST. TRAFFIC SIGNAL POLES, MAST ARMS, AND STREET NAME SIGNS - TO BE RETAINED



LOCATION: HWY. 67B/POPLAR ST. SIGNAL  
 CITY: SEARCY  
 COUNTY: WHITE  
 DISTRICT: 5  
 DATE: 9/7/11 FILE NAME: T050244.P02  
 DRAWN BY: F&H

### INTERVAL CHART

SIGNAL FACES	INTERVALS														FLASH SEQ.		
	1+5	CLR.	1+6	CLR.	2+5	CLR.	2+6	CLR.	3+7	CLR.	3+8	CLR.	4+7	CLR.		4+8	CLR.
1	-G	*	-G	*	-FY	***	-FY	***	-R	-R	-R	-R	-R	-R	-R	-R	-R
2	R	R	G	**	R	R	G	**	R	R	R	R	R	R	R	R	R
3	R	R	G	**	R	R	G	**	R	R	R	R	R	R	R	R	R
4	-R	-R	-R	-R	-R	-R	-R	-G	*	-G	*	-FY	***	-FY	***	-R	-R
5	R	R	R	R	R	R	R	R	R	R	R	G	**	R	R	G	**
6	R	R	R	R	R	R	R	R	R	R	R	G	**	R	R	G	**
7	-G	*	-FY	***	-G	*	-FY	***	-R	-R	-R	-R	-R	-R	-R	-R	-R
8	R	R	R	R	G	**	G	**	R	R	R	R	R	R	R	R	R
9	R	R	R	R	G	**	G	**	R	R	R	R	R	R	R	R	R
10	-R	-R	-R	-R	-R	-R	-R	-G	*	-FY	***	-G	*	-FY	***	-R	-R
11	R	R	R	R	R	R	R	R	R	R	R	R	G	**	G	**	R
12	R	R	R	R	R	R	R	R	R	R	R	R	G	**	G	**	R
13-14	DW	DW	W	▲	DW	DW	W	▲	DW	DW	DW	DW	DW	DW	DW	DW	BLANK
15-16	DW	DW	DW	DW	W	▲	W	▲	DW	DW	DW	DW	DW	DW	DW	DW	BLANK
17-18	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	▲	W	▲	W	▲

\* DENOTES GREEN OR YELLOW ARROW DEPENDING ON NEXT PHASE  
 \*\* DENOTES GREEN OR YELLOW BALL DEPENDING ON NEXT PHASE  
 \*\*\* DENOTES FLASHING YELLOW ARROW OR YELLOW ARROW DEPENDING ON NEXT PHASE  
 ▲ DENOTES WALK OR FLASHING DON'T WALK DEPENDING ON NEXT PHASE

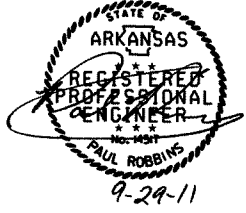
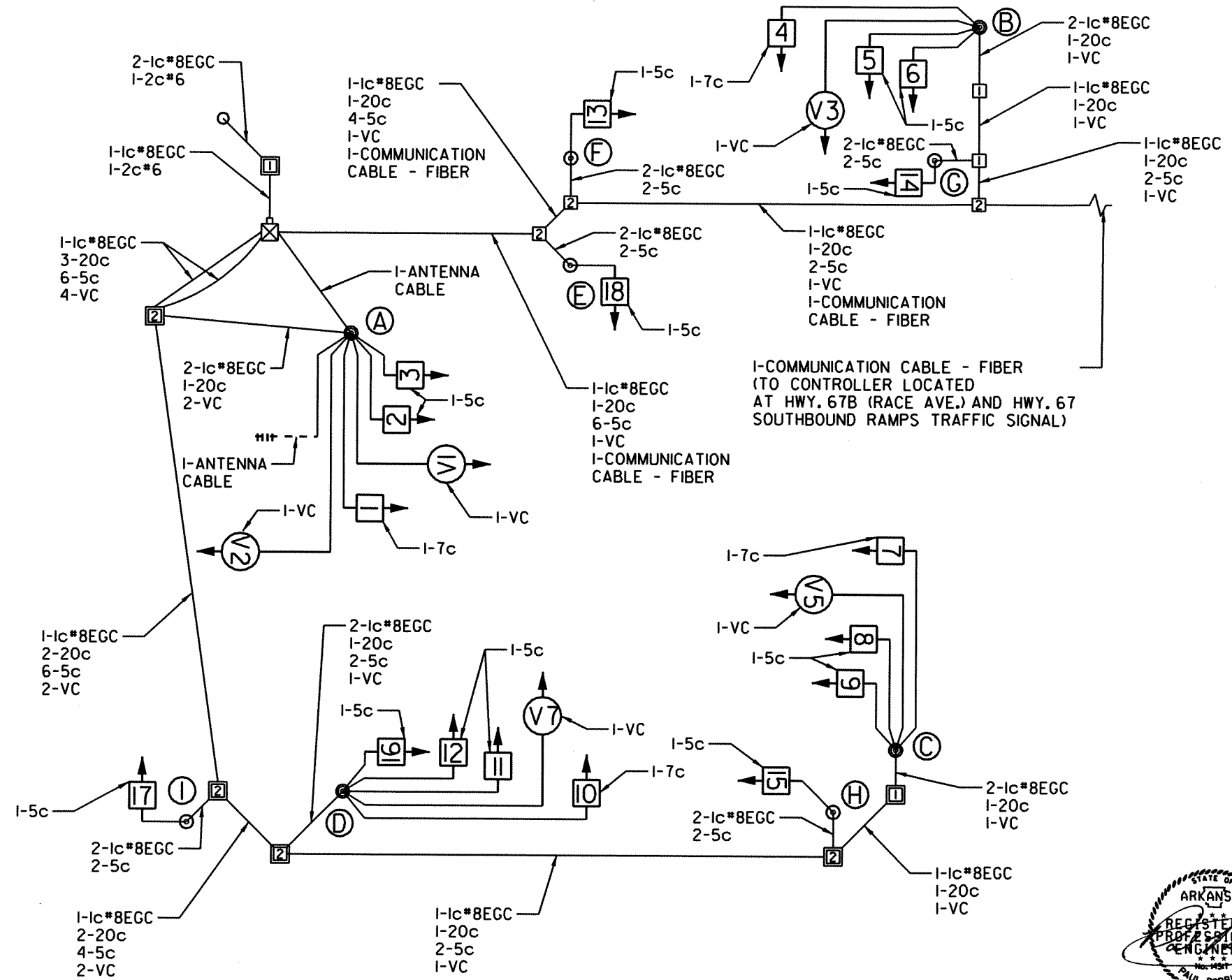
- NOTES:
- A SEPARATE 5c/14 AWG SHALL BE PROVIDED FROM EACH 3 SECTION HEAD TO THE BASE OF POLE.
  - A SEPARATE 5c/14 AWG SHALL BE PROVIDED TO EACH POLE WITH PEDESTRIAN PUSH BUTTONS.
  - ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA ON CABINET.
  - THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.

### DETECTOR CHART

DETECTOR I.D. NUMBER	DIRECTION & LOCATION	TYPE	DET. NUM.	HARDWARE INPUTS			PROGRAM ASSIGNMENTS			COMMENT	TUBE LENGTH
				CAB. TER. NUM.	AMP. CHN. NUM.	CON. INP. NUM.	LOCAL		MSTR. SYS. DET.		
							PHS.	SYS. DET.			
Vz11	WB LT ADV	COMB.	-	1	D1	1	1	-	VIDEO 1	74"	
Vz12	WB LT PRES	LOCAL	-	2	V1	1	-	-	VIDEO 1	74"	
Vz21A&B	EB ADV	LOCAL	-	5	V2	2	-	-	VIDEO 2	74"	
Vz22A&B	EB ADV	COMB.	-	6	D2	2	2	-	VIDEO 5	23"	
Vz31	NB LT ADV	COMB.	-	9	D3	3	3	-	VIDEO 3	23"	
Vz32	NB LT PRES	LOCAL	-	10	V3	3	-	-	VIDEO 3	23"	
Vz41	SB ADV	COMB.	-	13	D4	4	4	-	VIDEO 7	23"	
Vz42	SB PRES	LOCAL	-	14	V4	4	-	-	VIDEO 7	23"	
Vz51	EB LT ADV	COMB.	-	7	D5	5	5	-	VIDEO 5	23"	
Vz52	EB LT PRES	LOCAL	-	8	V5	5	-	-	VIDEO 5	23"	
Vz61A&B	WB ADV	COMB.	-	3	D6	6	6	-	VIDEO 1	74"	
Vz62A&B	WB PRES	LOCAL	-	4	V6	6	-	-	VIDEO 1	74"	
Vz71	SB LT ADV	COMB.	-	15	D7	7	7	-	VIDEO 7	23"	
Vz72	SB LT PRES	LOCAL	-	16	V7	7	-	-	VIDEO 7	23"	
Vz81	NB ADV	COMB.	-	11	D8	8	8	-	VIDEO 3	23"	
Vz82	NB PRES	LOCAL	-	12	V8	8	-	-	VIDEO 3	23"	
PB2	SW TO SE	PED.	-	-	P2	2	-	-	S. POPLAR ST.	-	
PB4	NW TO SW	PED.	-	-	P4	4	-	-	RACE AVE.	-	
PB6	NW TO NE	PED.	-	-	P6	6	-	-	N. POPLAR ST.	-	

CONTROLLER INPUT ABBREVIATIONS:  
 V - VEHICLE INPUT  
 D - SYSTEM OR AUXILIARY INPUT  
 P - PEDESTRIAN INPUT

### WIRING DIAGRAM



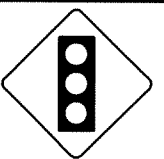
LOCATION: HWY. 67B/POPLAR ST. SIGNAL  
 CITY: SEARCY  
 COUNTY: WHITE  
 DISTRICT: 5  
 DRAWN BY: F&H

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		13	27

2 SIGNALIZATION PLAN SHEET

**LEGEND**

- TYPE 1 PULL BOX
- ▣ TYPE 1 HD PULL BOX
- ▣ TYPE 2 PULL BOX
- ▣ TYPE 2 HD PULL BOX
- ⊠ CONTROL CABINET
- ⊠ SIGNAL HEAD
- N.M.C.-NON-METALLIC CONDUIT
- ⊙ VIDEO DETECTOR



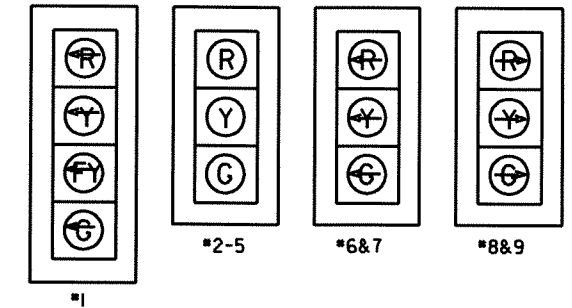
(I) W3-3  
(48" X 48")-  
BY OTHERS



(I) RI-5  
(36" X 36")-  
BY OTHERS

**LED SIGNAL FACES**

12" LENSES

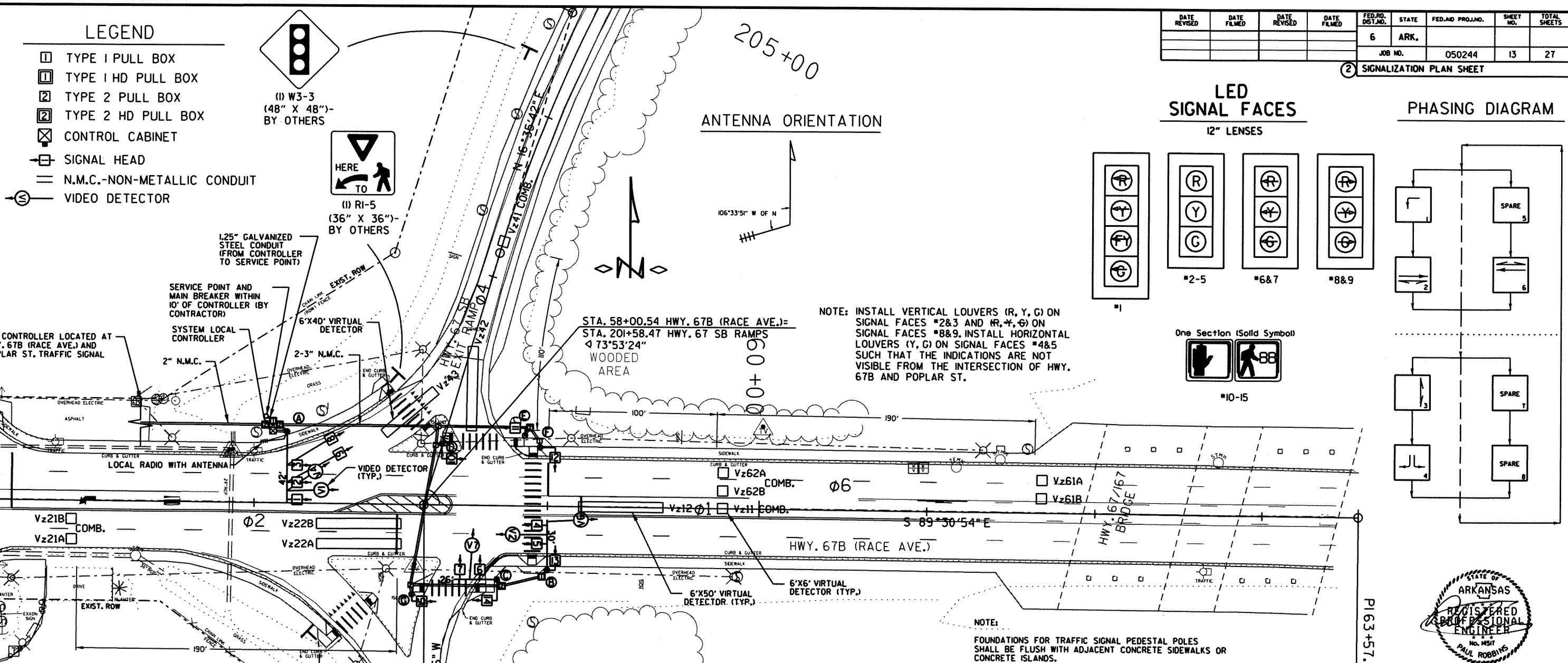
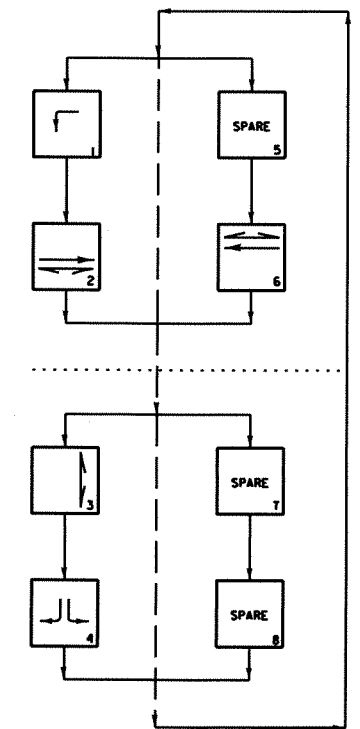


One Section (Solid Symbol)



#10-15

**PHASING DIAGRAM**



NOTE: INSTALL VERTICAL LOUVERS (R, Y, G) ON SIGNAL FACES #2&3 AND (R, Y, G) ON SIGNAL FACES #8&9. INSTALL HORIZONTAL LOUVERS (Y, G) ON SIGNAL FACES #4&5 SUCH THAT THE INDICATIONS ARE NOT VISIBLE FROM THE INTERSECTION OF HWY. 67B AND POPLAR ST.

NOTE: FOUNDATIONS FOR TRAFFIC SIGNAL PEDESTAL POLES SHALL BE FLUSH WITH ADJACENT CONCRETE SIDEWALKS OR CONCRETE ISLANDS.

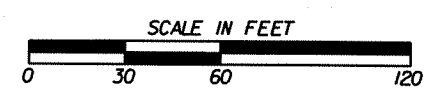


**SUMMARY OF TRAFFIC SIGNAL QUANTITIES**

ITEM NO.	ITEM	QUANTITY	UNIT
SP & 701	SYSTEM LOCAL CONTROLLER - TS2 TYPE 2 (8 PHASES)	1	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	8	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	1	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	6	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	3477	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	77	LIN. FT.
708	TRAFFIC SIGNAL CABLE (12C/14 A.W.G.)	659	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	23	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	37	LIN. FT.
710	NON-METALLIC CONDUIT (2")	108	LIN. FT.
710	NON-METALLIC CONDUIT (3")	578	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 1)	1	EACH
SS & 711	CONCRETE PULL BOX (TYPE 1 HD)	2	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2)	3	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2 HD)	4	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (26')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (30')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (42')	1	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	4	EACH
733	VIDEO CABLE	1370	LIN. FT.
SP & 733	VIDEO DETECTOR (CLR)	5	EACH
733	VIDEO MONITOR (CLR)	1	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	3	EACH
SP	18" STREET NAME SIGN	1	EACH
SP	ANTENNA CABLE (TYPE 6)	44	LIN. FT.
SP	COMMUNICATION CABLE, FIBER (6 CHANNEL)	99	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., EGC)	565	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	41	LIN. FT.
SP	LOCAL RADIO WITH ANTENNA	1	EACH
SP	LOUVERS	16	EACH
SP	SERVICE POINT ASSEMBLY (1 CIRCUIT)	1	EACH

**POLE CHART**

POLE	MAST ARM(S) LENGTH	MAST ARM'S ORIENTATION ANGLE FROM HAND HOLE (CLOCKWISE)	VERTICAL SHAFT LENGTH	LUM. ARM LENGTH	LUM. ARM'S ORIENTATION ANGLE FROM HAND HOLE (CLOCKWISE)	HWY. 67B STATION	NORTHING EASTING
A	42'	180 DEGREES	2'-0"	—	—	STA. 57+19.05 42.34' LT.	N 333994.7678 E 1404681.3183
B	30'	180 DEGREES	2'-0"	—	—	STA. 58+74.15 37.93' RT.	N 333913.1936 E 1404835.7359
C	26'	90 DEGREES	2'-0"	—	—	STA. 58+44.61 43.78' RT.	N 333907.5894 E 1404806.1399
D	—	—	15'-0"	—	—	STA. 58+10.65 36.28' LT.	N 333987.9330 E 1404772.8581
E	—	—	15'-0"	—	—	STA. 58+60.18 41.86' LT.	N 333993.0933 E 1404822.4397
F	—	—	15'-0"	—	—	STA. 58+69.24 34.86' LT.	N 333986.0169 E 1404831.4360
G	—	—	15'-0"	—	—	STA. 57+93.91 53.29' RT.	N 333898.5084 E 1404755.3646

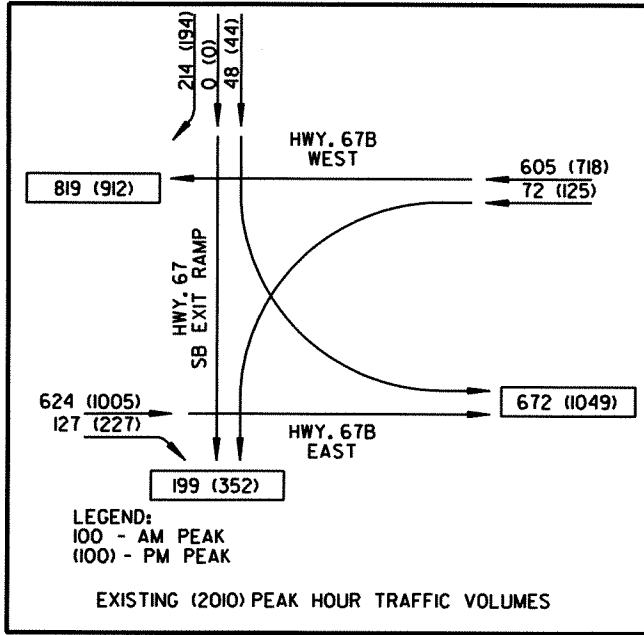


DATE: 9/7/11 FILE NAME: T050244.P03

LOCATION: HWY. 67B/HWY. 67 SB RAMP SIGNAL  
CITY: SEARCY  
COUNTY: WHITE  
DISTRICT: 5  
DRAWN BY: F&H



**TRAFFIC FLOW DIAGRAM**



DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. NO. DIST. NO.	STATE	FED. AD PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 050244							14	27

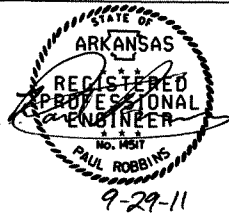
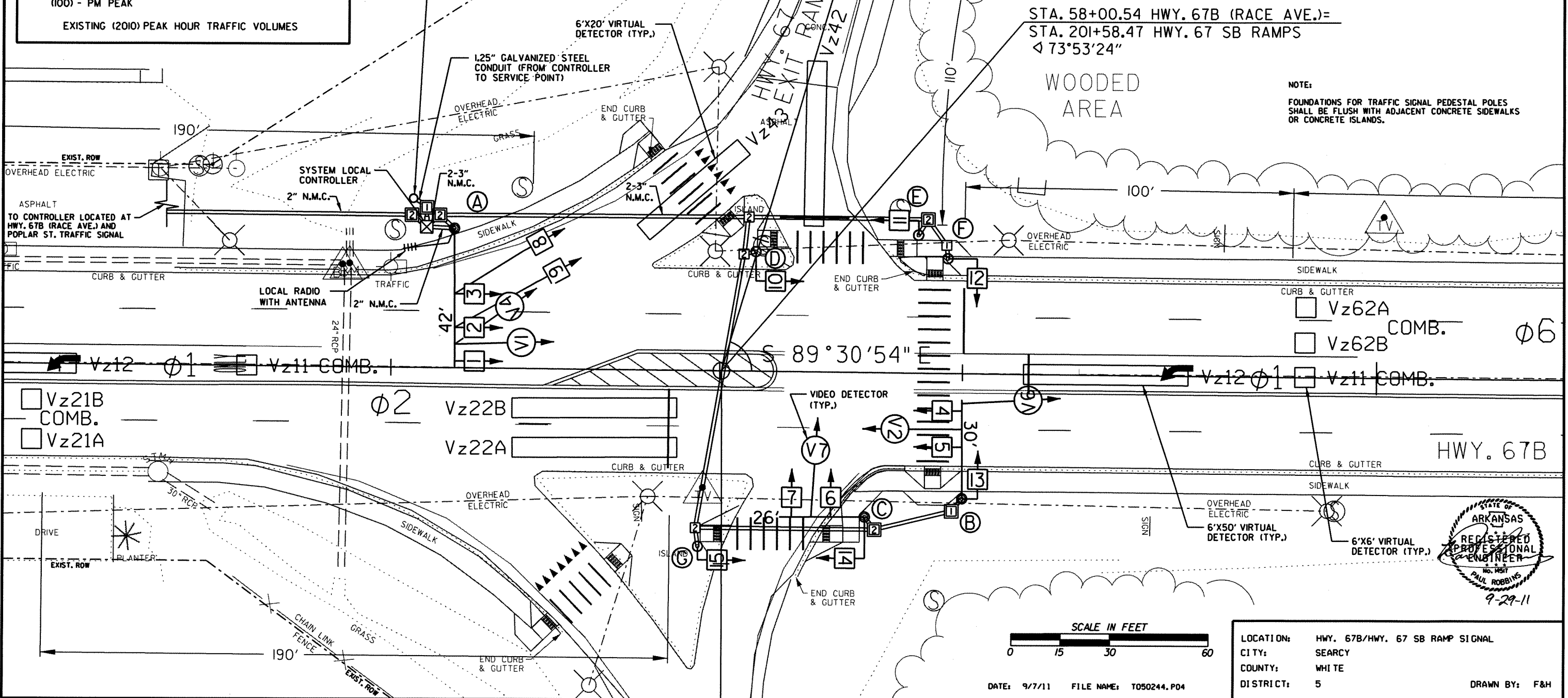
**2 SIGNALIZATION PLAN SHEET**

**DESIGN PARAMETERS**

POSTED SPEED LIMIT:  
 35 MPH SOUTH APPROACH (HWY. 67 SB EXIT RAMP)  
 40 MPH WEST & EAST APPROACH (HWY. 67B)  
 NO RAILROAD TRACKS WITHIN 500 FT. OF THE INTERSECTION  
 NO BUS STOPS  
 NO EXISTING INTERCONNECTIONS  
 NO FIRE STATION  
 NO PARKING  
 NO SIGHT DISTANCE RESTRICTIONS

LOCATION OF STOP BARS SHOWN ON PAVEMENT MARKING DETAILS. SEE SEPARATE SHEET.

MINIMUM CLEAR ZONE DISTANCE:  
 2 FT MIN CLEAR ZONE FOR CURB SECTIONS



LOCATION: HWY. 67B/HWY. 67 SB RAMP SIGNAL  
 CITY: SEARCY  
 COUNTY: WHITE  
 DISTRICT: 5  
 DRAWN BY: F&H

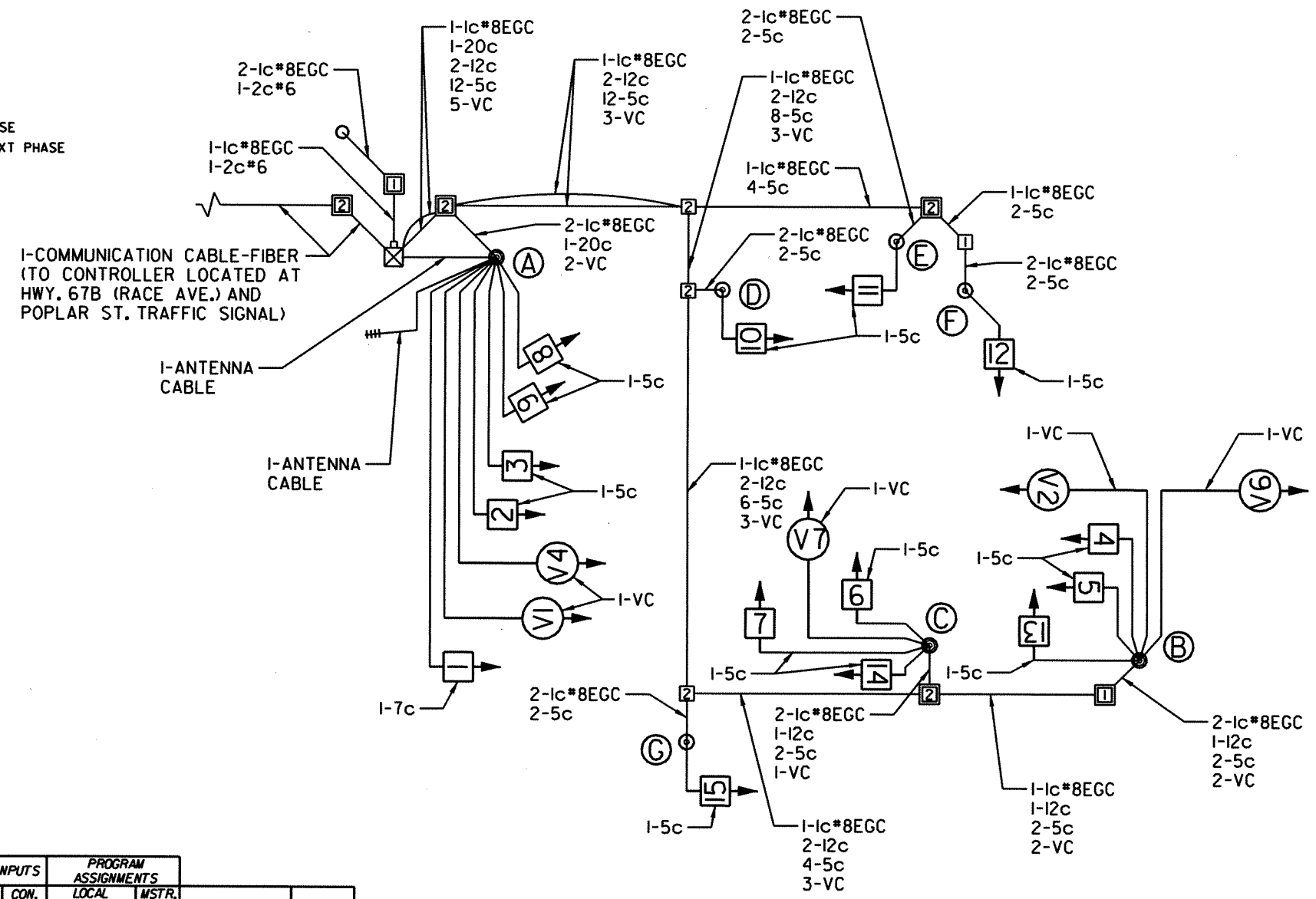
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	050244		15	27

2 SIGNALIZATION PLAN SHEET

### INTERVAL CHART

SIGNAL FACES	INTERVALS								FLASH SEQ.
	1+6	CLR.	2+6	CLR.	3	CLR.	4	CLR.	
1	-G	-Y	-Y	-Y	-R	-R	-R	-R	-R
2	G	**	G	**	R	R	R	R	R
3	G	**	G	**	R	R	R	R	R
4	R	R	G	Y	R	R	R	R	R
5	R	R	G	Y	R	R	R	R	R
6	-R	-R	-R	-R	-R	-R	-G	-Y	-R
7	-R	-R	-R	-R	-R	-R	-G	-Y	-R
8	R	R	R	R	R	R	G	Y	R
9	R	R	R	R	R	R	G	Y	R
10-11	W	▲	W	▲	DW	DW	DW	DW	BLANK
12-13	DW	DW	DW	DW	W	FDW	DW	DW	BLANK
14-15	DW	DW	W	▲	DW	DW	DW	DW	BLANK

### WIRING DIAGRAM

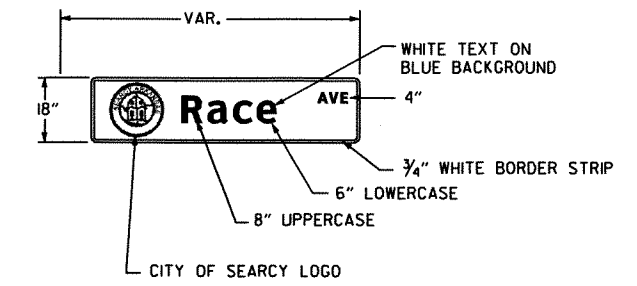


\*\* DENOTES GREEN OR YELLOW BALL DEPENDING ON NEXT PHASE  
▲ DENOTES WALK OR FLASHING DON'T WALK DEPENDING ON NEXT PHASE

- NOTES:
1. A SEPARATE 5c/14 AWG SHALL BE PROVIDED FROM EACH 3 SECTION HEAD TO THE BASE OF POLE.
  2. A SEPARATE 5c/14 AWG SHALL BE PROVIDED TO EACH POLE WITH PEDESTRIAN PUSH BUTTONS.
  3. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA ON CABINET.
  4. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.

1-COMMUNICATION CABLE-FIBER (TO CONTROLLER LOCATED AT HWY. 67B (RACE AVE.) AND POPLAR ST. TRAFFIC SIGNAL)

TYPICAL OVERHEAD STREET NAME MARKER  
MAST ARM MOUNTED  
(MOUNTED ON POLE "C")

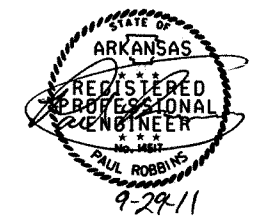


(SIGN TO BE PROVIDED BY OTHERS)  
SEE STD. DETAIL SHEET FOR MORE INFORMATION FOR MOUNTING ON MAST ARM ASSEMBLY.

### DETECTOR CHART

DETECTOR I.D. NUMBER	DIRECTION & LOCATION	TYPE	DET. NUM.	HARDWARE INPUTS			PROGRAM ASSIGNMENTS			COMMENT	TUBE LENGTH
				CAB. TER. NUM.	AMP. CHN. NUM.	CON. INP. NUM.	LOCAL		MSTR. SYS. DET.		
							PHS.	SYS. DET.			
Vz11	WB LT ADV	COMB.	-	1	D1	1	1	-	VIDEO 1	37"	
Vz12	WB LT PRES	LOCAL	-	2	V1	1	-	-	VIDEO 1	37"	
Vz21A&B	EB ADV	COMB.	-	5	D2	2	2	-	VIDEO 2	74"	
Vz22A&B	EB PRES	LOCAL	-	6	V2	2	-	-	VIDEO 2	74"	
Vz41	SB ADV	COMB.	-	9	D4	4	4	-	VIDEO 7	23"	
Vz42	SB PRES	LOCAL	-	10	V7	4	-	-	VIDEO 7	23"	
Vz43	SB RT.PRES	LOCAL	-	11	V4	4	-	-	VIDEO 4	23"	
Vz61A&B	WB ADV	LOCAL	-	3	V6	6	-	-	VIDEO 6	74"	
Vz62A&B	WB NEAR	COMB.	-	4	D6	6	6	-	VIDEO 1	37"	
PB1	E TO W	PED.	-	-	P2	2	-	-	HWY.67 RAMPS	-	
PB2	N TO S.E TO W	PED.	-	-	P3	3	-	-	PED.ONLY	-	

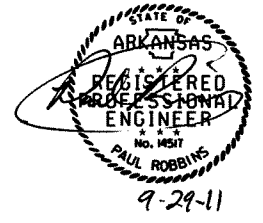
CONTROLLER INPUT ABBREVIATIONS:  
V - VEHICLE INPUT  
D - SYSTEM OR AUXILIARY INPUT  
P - PEDESTRIAN INPUT  
AMP.CHN.NOT USED:7,B,I2



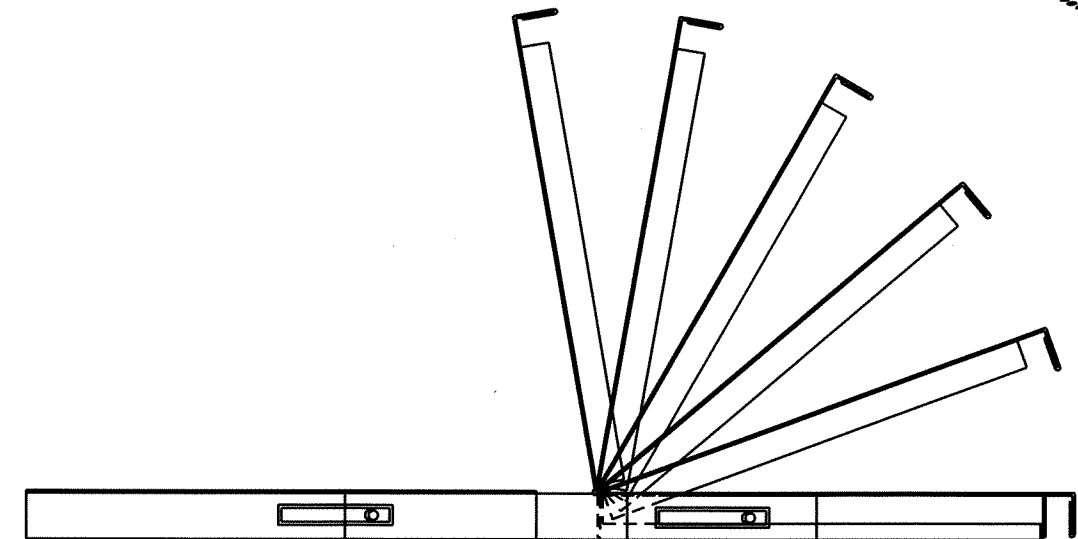
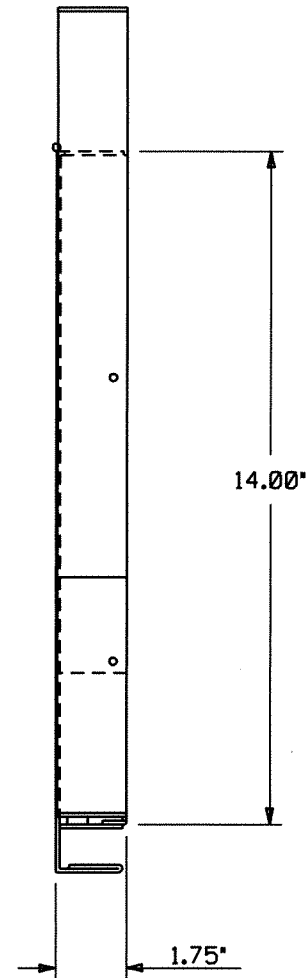
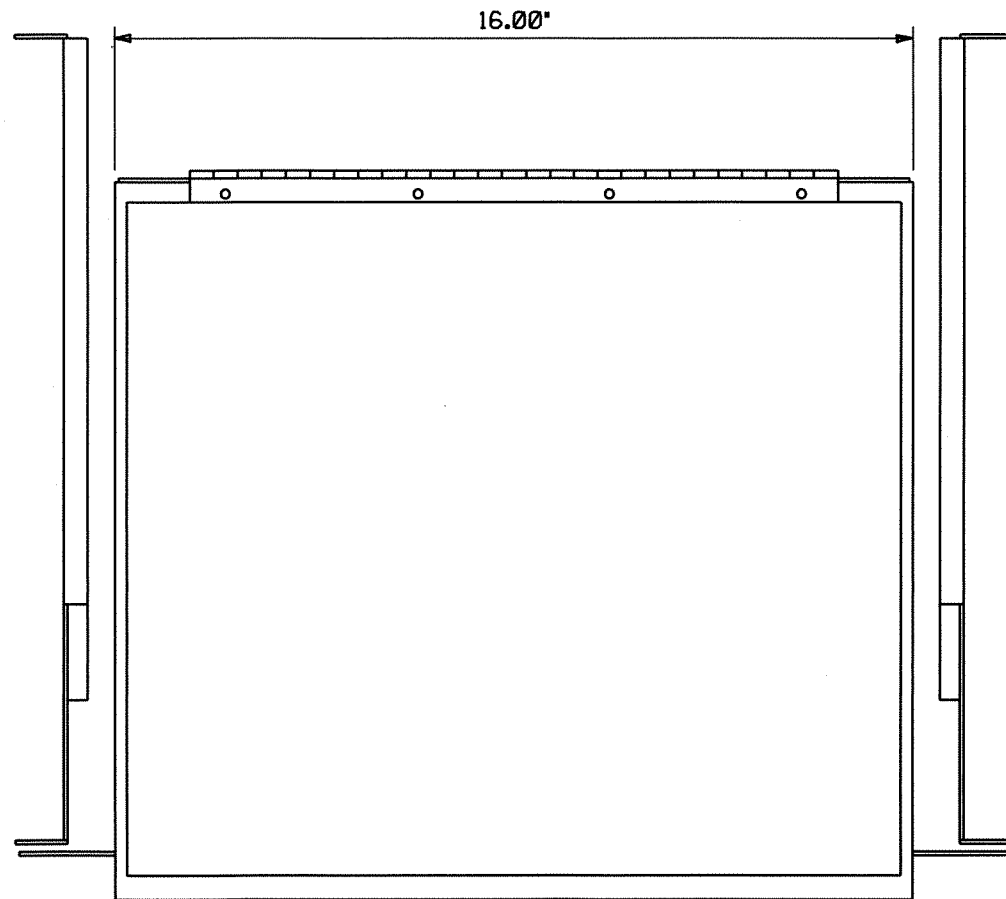
LOCATION: HWY. 67B/HWY. 67 SB RAMP SIGNAL  
CITY: SEARCY  
COUNTY: WHITE  
DISTRICT: 5  
DRAWN BY: F&H

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.	050244		16	27

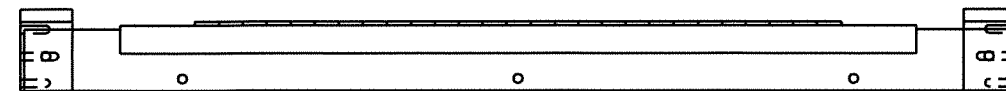
2 SIGNALIZATION DETAILS



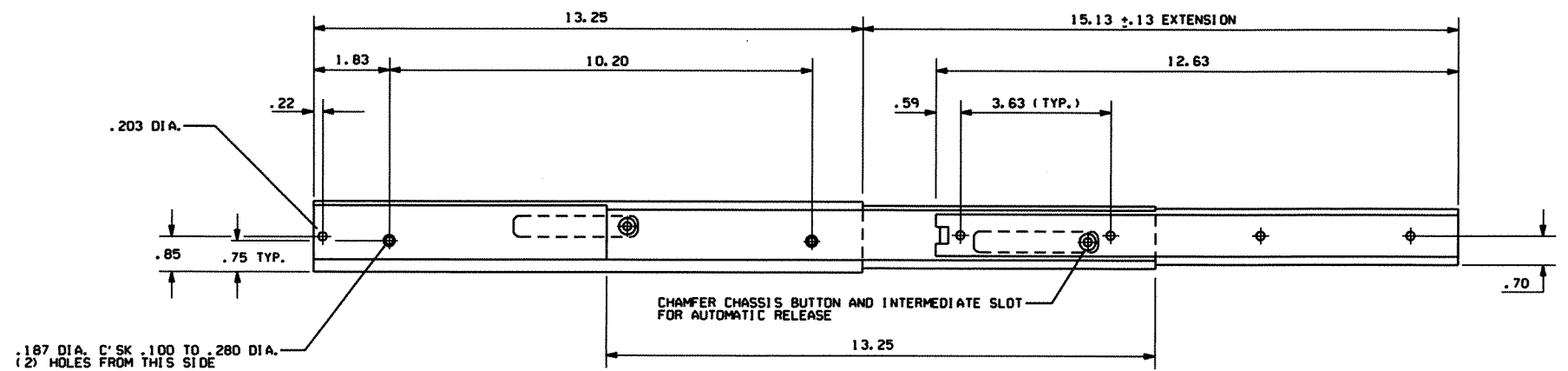
DRAWER PLAN VIEW



- NOTES:  
 1. RIGHT HAND SLIDE SHOWN, LEFT SLIDE OPPOSITE.  
 2. GENERAL DEVICES (CC3002-99-0102) OR EQUAL AND CONTAINS (1) RIGHT HAND SLIDE ASSEMBLY, (1) LEFT HAND SLIDE ASSEMBLY.  
 3. ALL HARDWARE NECESSARY TO FASTEN SLIDE ASSEMBLY TO UNDERSIDE OF CONTROLLER SHELF SHALL BE INCLUDED.



FRONT VIEW



RIGHT SIDE ASSEMBLY

A.H.T.D. STANDARD DETAILS

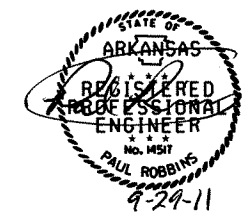
ARKANSAS STATE HIGHWAY COMMISSION

SIGNALIZATION DETAIL  
(Controller Cabinet Utility Drawer)

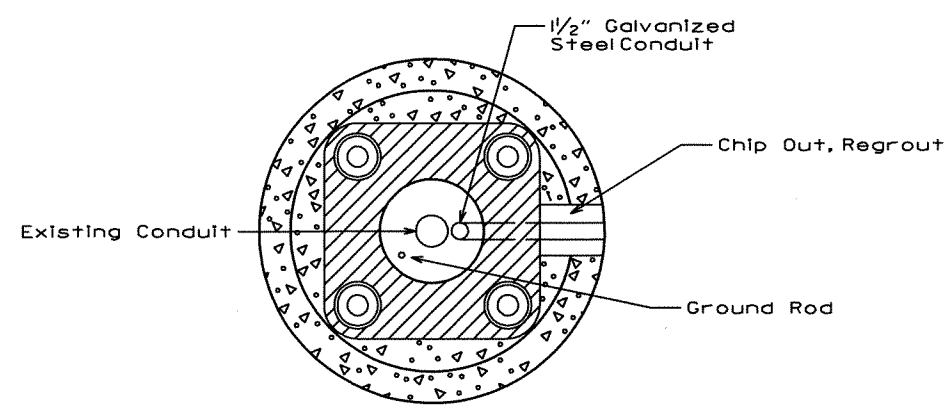
DATE	REVISION	DATE FILM
6-15-05	ISSUED	

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.	050244		17	27

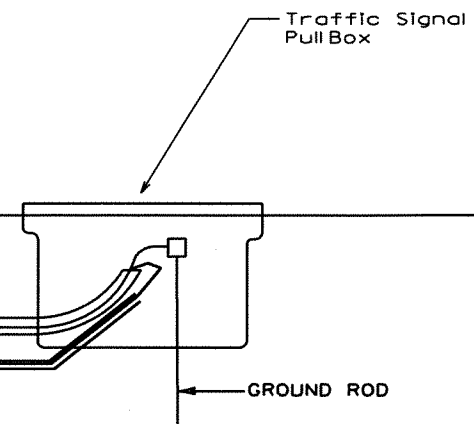
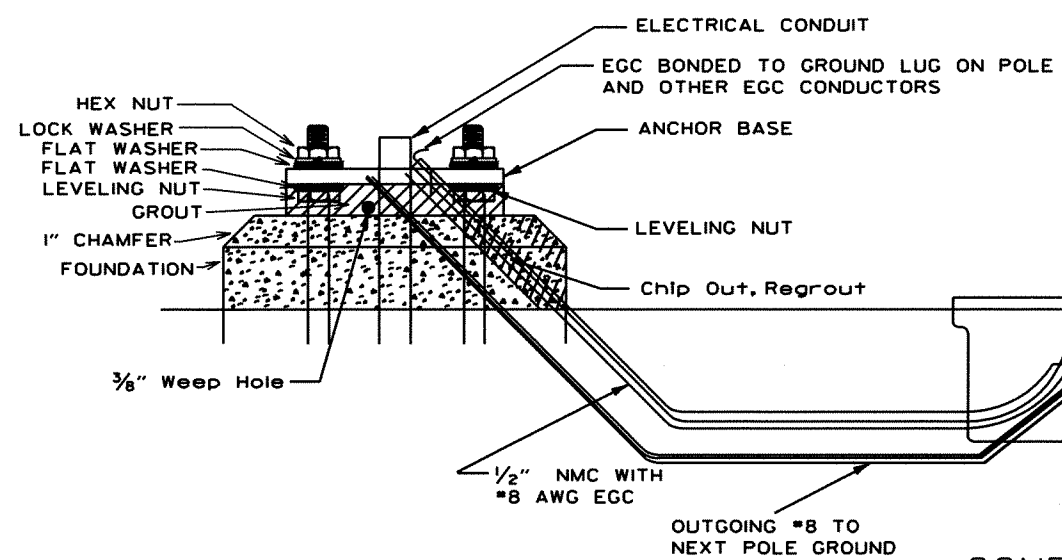
2 SIGNALIZATION DETAILS



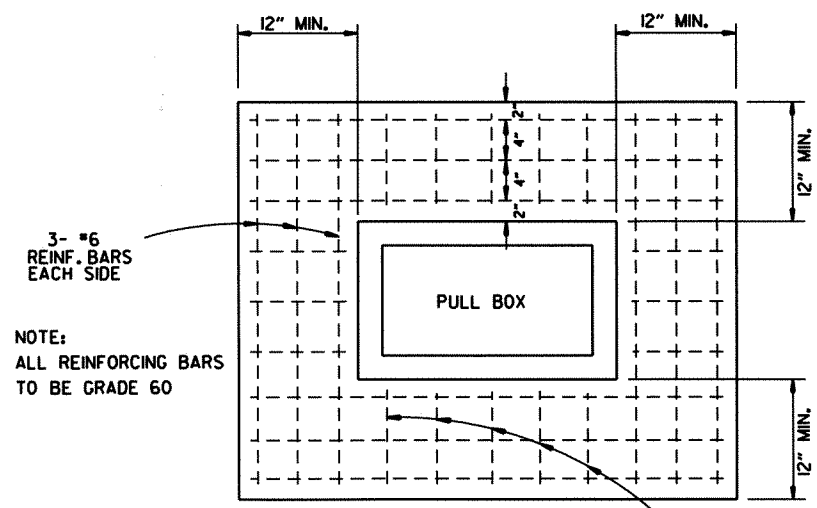
### CONDUIT ENTRY TO EXISTING POLE BASE



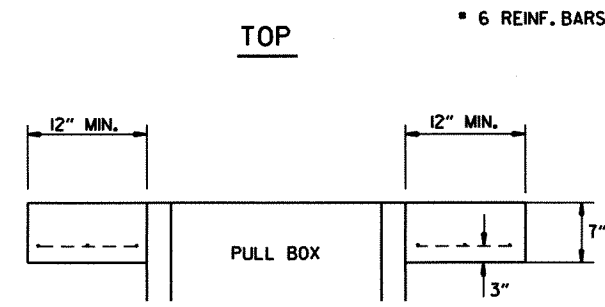
### ANCHOR BASE



### CONDUIT ENTRY TO EXISTING CONTROLLER CABINET

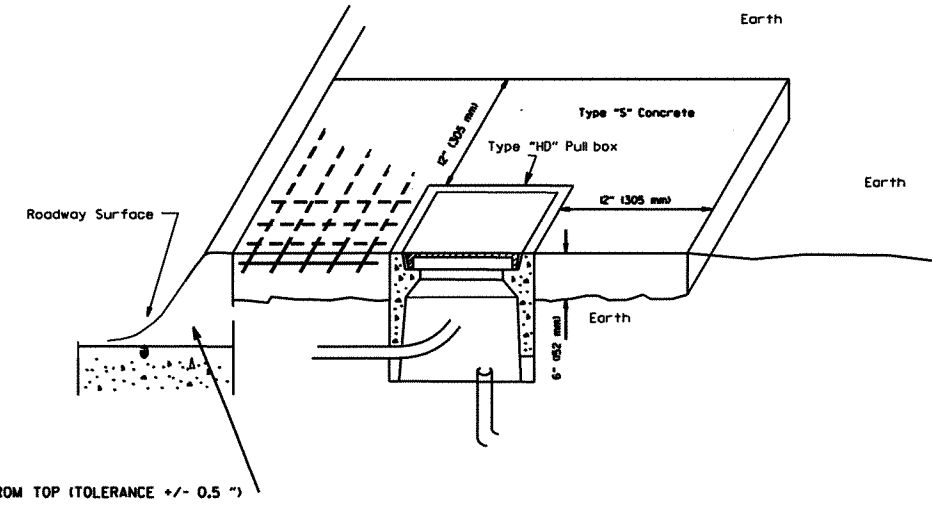


NOTE: ALL REINFORCING BARS TO BE GRADE 60



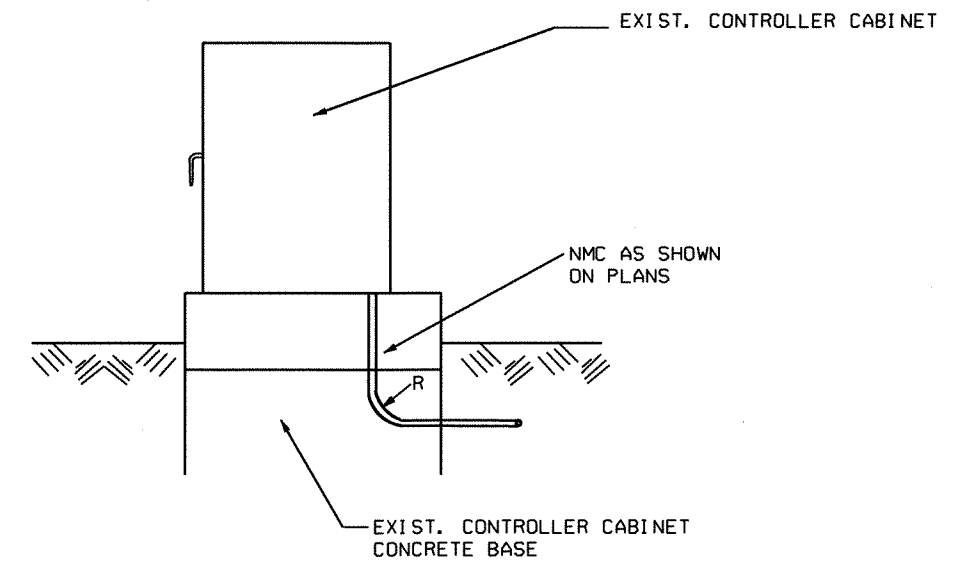
### ELEVATION

### Type "HD" Concrete PullBox Detail



2" CLEAR FROM TOP (TOLERANCE +/- 0.5")

Note: All Type 1 and Type 2 HD pullboxes are installed with an apron of concrete 12" (305 mm) wide and 6" (152 mm) in depth. All payment shall be included in the price of the Type HD pullbox. Pullbox shall be installed flush to surrounding grade unless otherwise instructed by the engineer. The concrete shall be Class "S." Three #6 reinforcing bars in the apron on all sides of the pullbox is required in concrete.



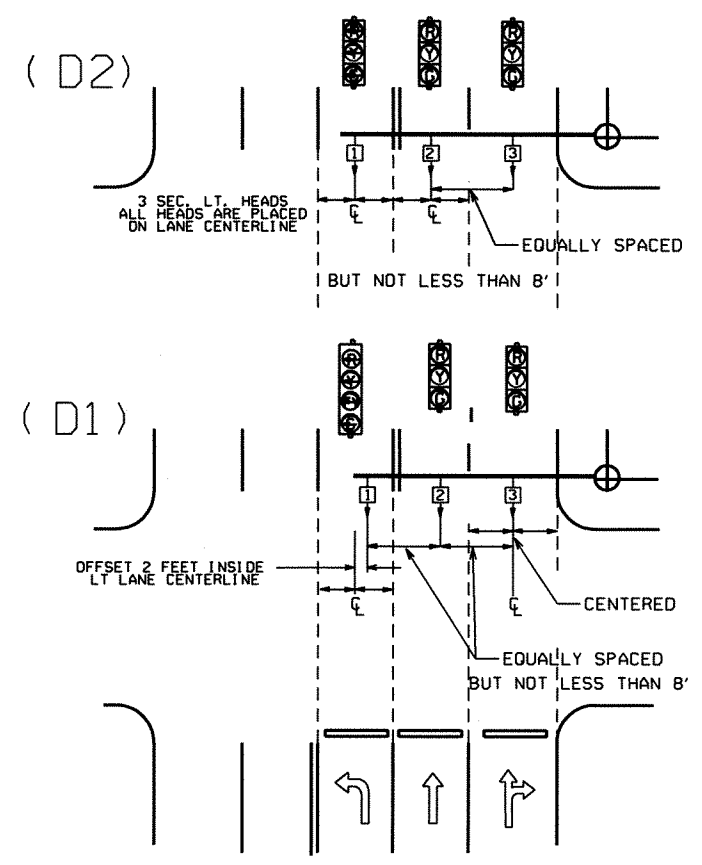
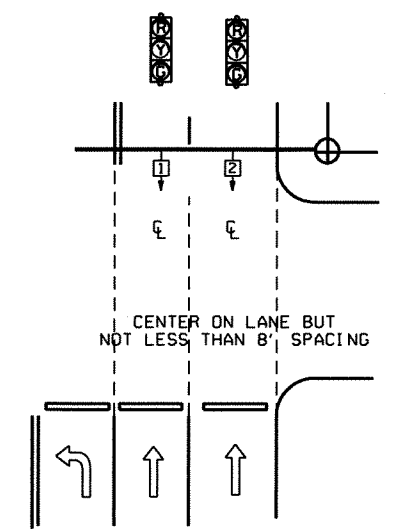
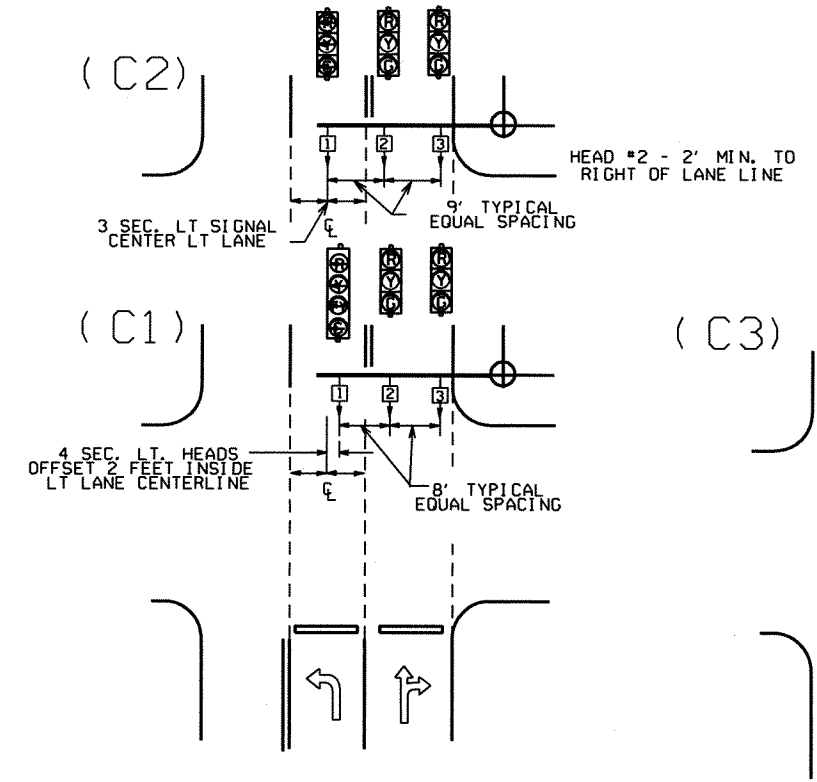
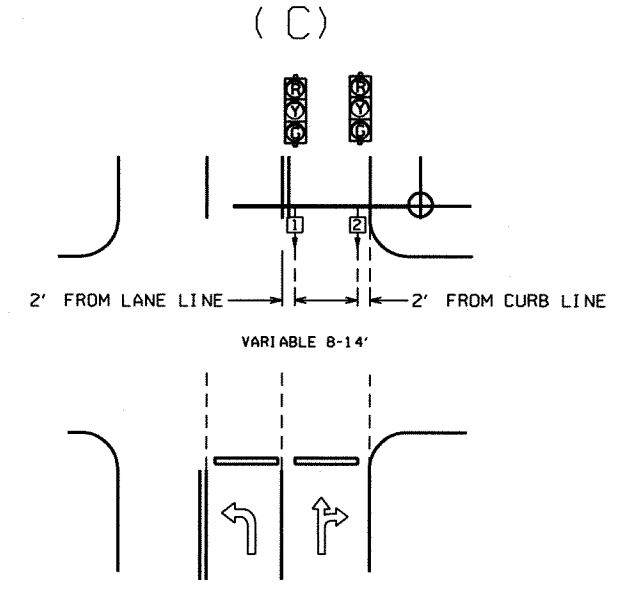
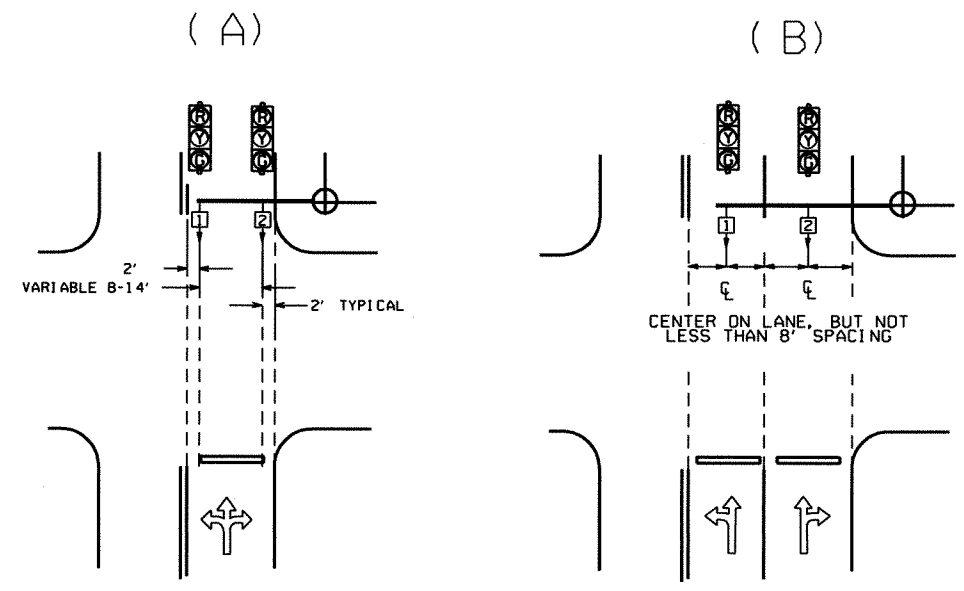
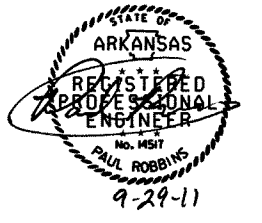
NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.

DATE	REVISION	DATE FILM
5-21-09	REVISED GROUNDING	
7-31-08	ADDED & REVISED CONDUIT ENTRY	
6-23-04	REVISED CLEARANCE AT CURB ENTRY	
1-4-02	ADDED REINFORCING TO BOX APRON	
7-2-01	REVISED	
12-27-99	REVISED NOTES	
11-18-98	ISSUED	

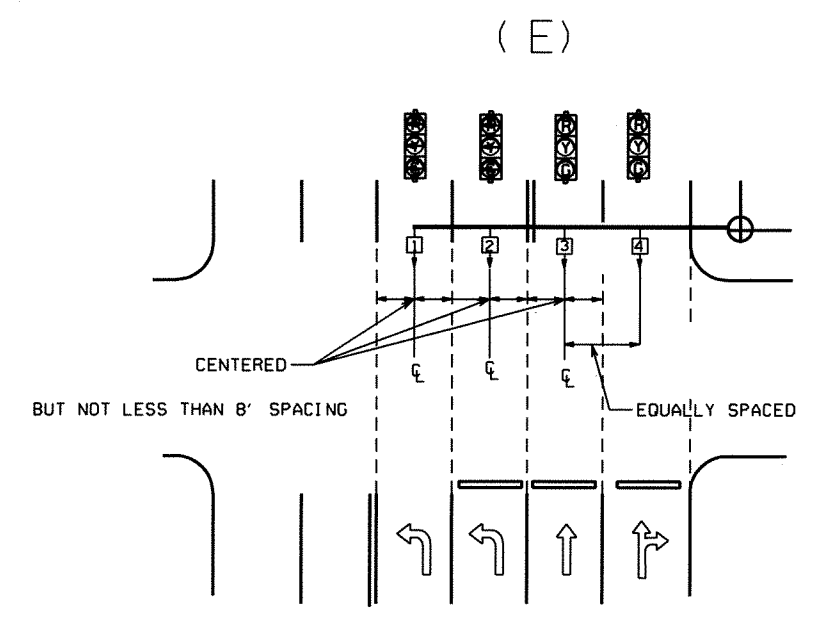
A.H.T.D. STANDARD DETAILS  
 ARKANSAS STATE HIGHWAY COMMISSION  
**SIGNALIZATION DETAIL**  
**(Heavy Duty PullBox)**

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.	050244	18	27	

2 SIGNALIZATION DETAILS



NOTE: WHERE LEFT TURN HEAD (HEAD 1 ON D1 AND D2) IS NOT CALLED FOR ON PLANS, MAST ARM LENGTH MAY STILL BE ALLOWED FOR FUTURE INSTALLATION. HEADS FOR THROUGH MOVEMENTS SHALL STILL BE ALIGNED WITH THROUGH LANES AS SHOWN ON DETAILS



GENERAL NOTES:

- FOUR SECTION "PROTECTED/PERMISSIVE" LEFT TURN HEADS SHOULD BE PLACED A MINIMUM OF TWO (2') FEET TO THE RIGHT OF THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.
- THREE SECTION "PROTECTED" LEFT TURN HEADS SHOULD BE PLACED ON THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.
- WHEN IT IS NECESSARY TO PLACE POLES OTHER THAN AS SHOWN ON PLAN SHEET(S) RESULTING IN MAST ARM EXTENDING MORE THAN TWO FEET PAST (TO THE LEFT OF) THE CENTERLINE OF THE APPROACHING LEFT TURN LANE, MAST ARM SHALL BE CUT TO APPROPRIATE LENGTH AS DETERMINED BY THE ENGINEER, AND A NEW END CAP PROVIDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THIS PRIOR TO INSTALLING THE MAST ARM IF ADDITIONAL COMPENSATION IS REQUIRED.
- SIGNAL HEAD SPACING SHALL, IN NO CASE, BE LESS THAN EIGHT (8') FEET BETWEEN HEADS ON CENTER, MEASURED HORIZONTALLY PERPENDICULAR TO THE APPROACH.
- ALL SIGNAL HEADS SHOWN ON THIS DETAIL SHEET SHALL BE LOCATED ACCORDING TO THE DIMENSIONS SHOWN IN RELATION TO THE APPROACH SIDE OF THE INTERSECTION.
- MAXIMUM MOUNTING HEIGHT OF SIGNAL FACES LOCATED BETWEEN 40 FEET AND 53 FEET FROM STOP BAR SHALL BE IN ACCORDANCE WITH FIGURE 4D-1 OF 2009 MUTCD.

℄ = CENTER OF LANE FROM APPROACH SIDE

A.H.T.D. STANDARD DETAILS		
ARKANSAS STATE HIGHWAY COMMISSION		
SIGNALIZATION DETAIL (Signal Head Placement)		
3-11-10	2009 MUTCD	
12-9-99	ISSUED	
DATE	REVISION	DATE FILM



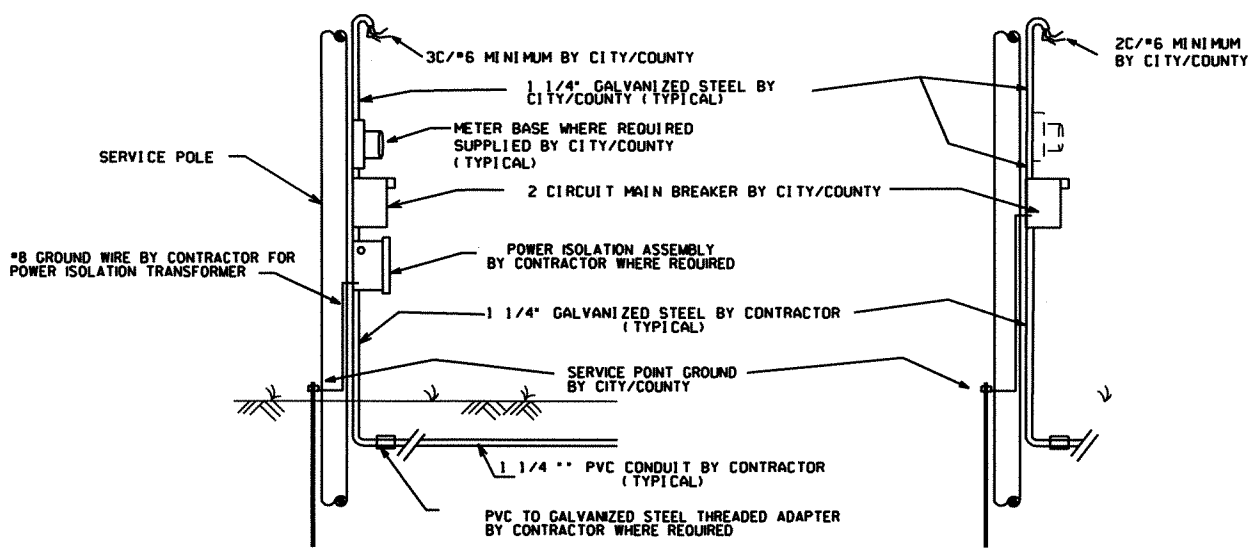
# MAIN BREAKER NOT NEAR CONTROLLER CABINET SECONDARY REQUIRED

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
							JOB NO. 050244	19 27

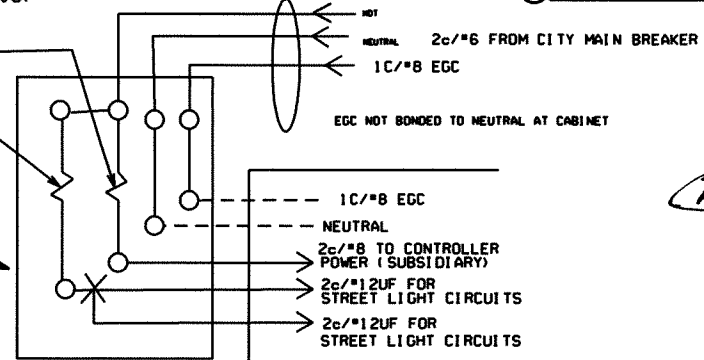
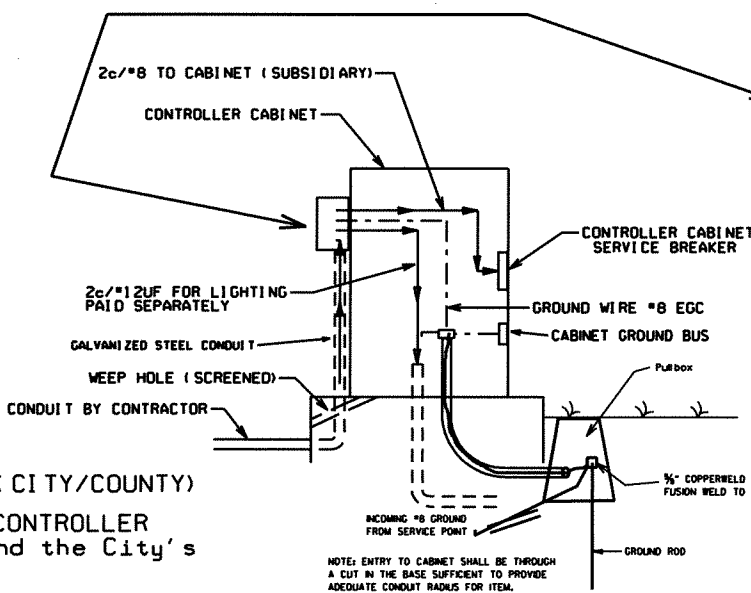
2 SIGNALIZATION DETAILS

WITH POWER ISOLATION ASSEMBLY

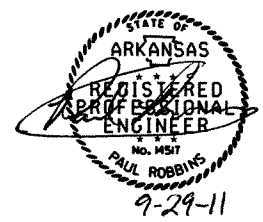
WITHOUT POWER ISOLATION ASSEMBLY



## SECONDARY BREAKER BY CONTRACTOR (SUBSIDIARY)



## MAIN BREAKER WIRING (TYPICAL)



### NOTES TO CONTRACTOR AND AGENCY RESPONSIBLE FOR MAINTENANCE OF THE INTERSECTION (CITY/COUNTY)

Electrical service typically falls into two categories: MAIN BREAKER NEAR CONTROLLER CABINET; and MAIN BREAKER NOT NEAR CONTROLLER CABINET. The Contractor's and the City's or County's responsibility varies accordingly as indicated on these details.

1. ALL SITUATIONS: Electrical service shall be provided by the City/County to a service pole with external raintight breaker (MAIN BREAKER) at a mutually acceptable point within the right-of-way. Service point includes galvanized steel conduit to a point 18" below ground line, two circuit main breaker, power isolation assembly where required, meter loop if required by local utility, electrical conductors and weatherhead. Where street lighting is included as part of signal installation, street lighting circuit (2c/#12 awg UF rated, typical) shall be kept separate from the circuit serving traffic signal. Service wire and wiring from the controller to main breaker is provided by the Contractor as a part of this contract. Wire and wiring from main breaker, and connection to the utility is the responsibility of the City/County.

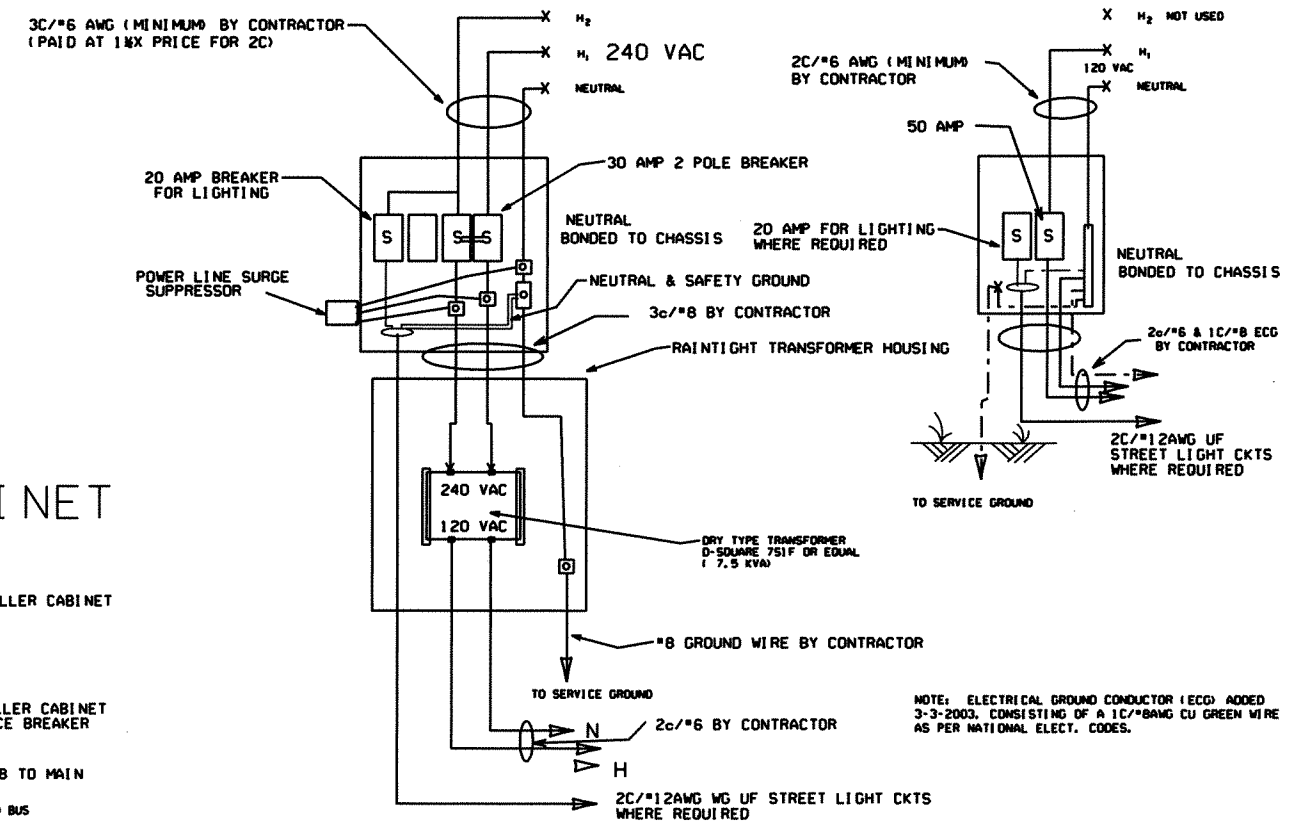
2. MAIN BREAKER NOT NEAR CONTROLLER CABINET: The Main Breaker assembly, galvanized steel conduit, weatherhead and wire above Main Breaker and connection to the utility shall be provided by City/County. Contractor shall provide as part of contract Secondary Breaker, conduit, wire and wiring to the Main Breaker.

3. MAIN BREAKER NEAR CONTROLLER CABINET: All components of the service point with the exception of the wire and wiring above the Main Breaker is furnished and installed by the Contractor. Wiring from Main Breaker including connection to the utility, is the responsibility of the City/County. If meter loop is required, meter base and hardware is provided by the City/County and installed by the contractor.

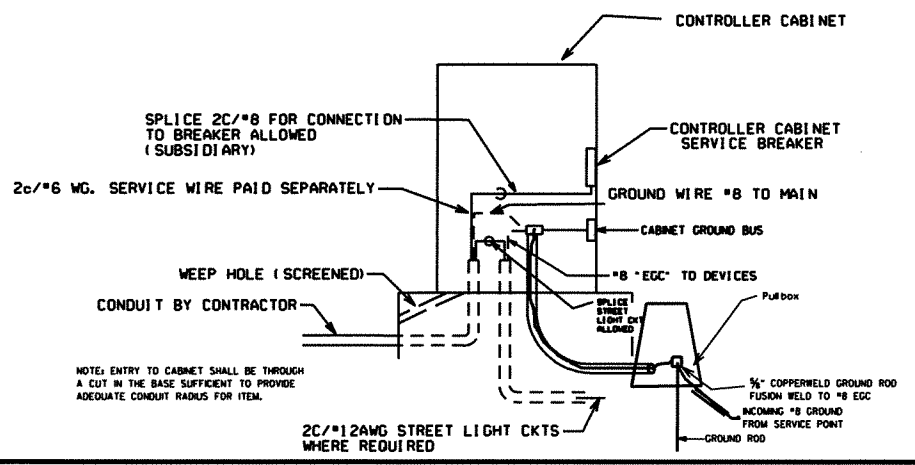
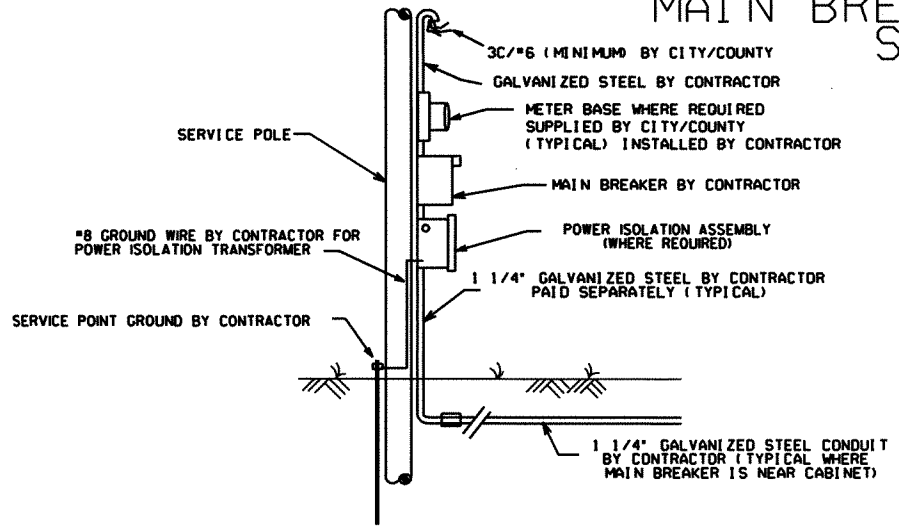
Service Ground is typically tied to neutral at the Main Breaker. As such, controller ground IS NOT tied to Neutral at secondary Breaker or in controller cabinet.

WITH POWER ISOLATION ASSEMBLY  
4 CIRCUIT MAIN BREAKER

WITHOUT POWER ISOLATION ASSEMBLY  
2 CIRCUIT MAIN BREAKER



# MAIN BREAKER NEAR CONTROLLER CABINET SECONDARY NOT REQUIRED



DATE	REVISION	DATE FILM
5-21-09	REVISED GROUNDING	
7-31-08	REVISED GROUNDING	
3-3-03	ADDED EGC NOTE	
9-26-01	REVISED	
12-27-99	REVISED	
7-28-99	REVISED	
2-5-99	ISSUED	

A.H.T.D. STANDARD DETAILS  
ARKANSAS STATE HIGHWAY COMMISSION  
SIGNALIZATION DETAIL  
(Service Point)

NOTES, PED AND TRAFFIC SIGNAL HEAD SIGNS:  
EACH ITEM "TRAFFIC SIGNAL HEAD (4 SEC., 1-WAY)" SHALL INCLUDE A SPECIAL SIGN AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD UNLESS REMOVED WITHIN THE SIGNAL PLAN NOTES.

EACH ITEM "TRAFFIC SIGNAL HEAD (3 SEC., 1-WAY)" TO BE USED AS A LEFT TURN INDICATION ONLY SHALL INCLUDE A SIGN (R10-10) AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD.

EACH PEDESTRIAN PUSHBUTTON SHALL HAVE ONE R10-3E SIGN ATTACHED TO THE POLE ABOVE THE BUTTON. ALL SIGN FACES SHALL BE CONSTRUCTED OF HIGH INTENSITY SHEETING (TYPE III) WITH SILKSCREEN LEGEND AND BORDER.

ALL SIGN BLANKS SHALL BE CONSTRUCTED OF ALUMINUM ALLOY (ASTM DESIGNATION B-209, ALLOY 5052-H3B) WITH THICKNESS OF 0.100 INCH.

**GENERAL NOTES:**

1. MAST ARM POLES SHALL BE MOUNTED A MINIMUM OF 4 FT. BEHIND CURB OR SHOULDER.

2. OCTAGONAL POLES AND ARMS MEETING THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS CAN BE INSTALLED IN LIEU OF ROUND. ALL POLES AND ARMS IN A JOB MUST BE THE SAME SHAPE.

3. MINIMUM STRUCTURAL REQUIREMENTS: DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2006 INTERIMS.

USE FATIGUE CATEGORY I FOR ALL STRUCTURES ON ROUTES WHERE THE SPEED LIMIT IS 65 MPH AND GREATER AT THE STRUCTURE LOCATION AND ON ROUTES WHERE SPEED LIMIT IS GREATER THAN 45 MPH WITH AN ARM 60' OR LONGER.

USE FATIGUE CATEGORY II FOR STRUCTURES ON ROUTES WITH A SPEED LIMIT LESS THAN 65 MPH AND GREATER THAN 45 MPH WITH ARMS LESS THAN 60' AND ROUTES WITH SPEED LIMITS OF 45 MPH AND LESS WITH AN ARM 60' OR LONGER.

USE FATIGUE CATEGORY III FOR ALL STRUCTURES WHERE SPEED LIMIT IS 45 MPH AND LESS AND ARMS LESS THAN 60'.

CONSTRUCTION SPECIFICATIONS: ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2003 EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

BASE WIND SPEED: 90 MPH.

STEEL MEMBERS CONSIDERED MAIN LOAD CARRYING MEMBERS WITH A THICKNESS GREATER THAN 1/2" SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TEST SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS.

DEAD LOAD: AS A MINIMUM, DESIGN SHALL BE BASED ON THE FIXED ATTACHMENTS SHOWN BELOW OR AS MODIFIED IN THE PLANS.

ALL SIGNAL HEADS TO BE ONE WAY, 12 INCH, AND HAVE 5 IN. BACK PLATES.

HEADS AT END OF ARM - ONE 4 SEC., 85 LB., 16.0 SQ. FT. ONE SIGN MOUNTED 3 FT. FROM SIGNAL x 2' x 0' x 2' x 6", 20 LB. REMAINING HEADS SPACED A 8 FT. x 3 SEC., 56 LB., TWO 5 SEC.;  
14.4 SQ. FT. DESIGN TO ACCOMMODATE (INCLUDING 2 HEADS FOR ARMS 10 TO 16 FT., 2 HEADS FOR ARMS 10 TO 16 FT., INCLUDING LB., 3 HEADS FOR 18 TO 24 FT. ARMS, 4 HEADS FOR OVER 26 FT. ARMS.

STREET NAME SIGN -- 72" X 18", 36 LB., MOUNTED SUCH THAT OUTSIDE EDGE IS NOT GREATER THAN 12 FT. FROM POLE. DEPENDING UPON POSITION OF SIGNAL HEAD ADJACENT TO POLE, SIGN MAY OVERLAP POLE SHAFT ROADWAY LUMINAIRES (WHERE REQUIRED ON PLAN SHEET) x VARIABLE ARM LENGTH (MAX.), 3.3 SQ. FT., 75 LB. PED SIGNALS -- TWO 2 SEC. 12 INCH MOUNTED 8 FT. FROM BASE OF POLE. POST MOUNTED 3 SEC. SIGNAL HEAD AT 10 FT. ON SIDE OF POLE.

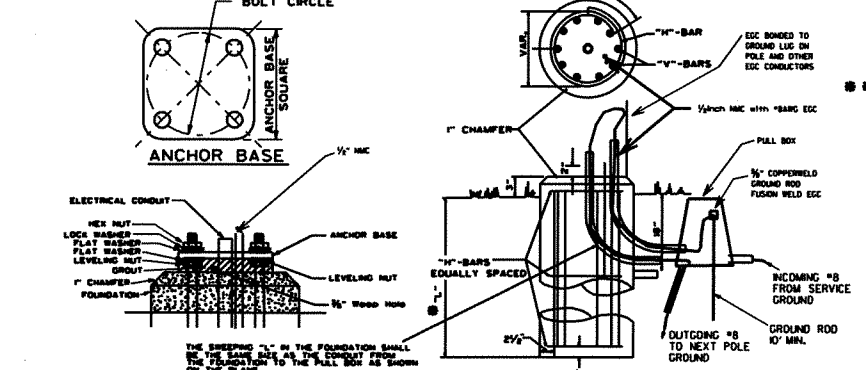
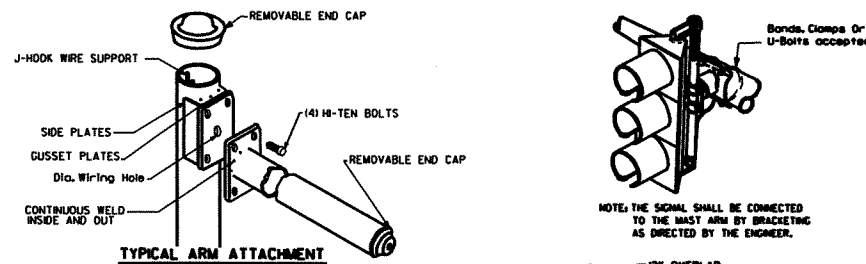
4. POLE/MAST ARM CAP -- POLE AND MAST ARMS CAPS SHALL BE PROVIDED, FABRICATED OF EITHER STEEL OR CAST ALUMINUM.

5. HAND HOLE -- HAND HOLES SHALL BE 4 X 6 INCHES FOR STANDARD, AND 3 X 5 INCHES FOR PED POLES, MINIMUM PLACED APPROXIMATELY 12 INCHES FROM BASE, AND SHALL BE FIXED WITH A BOLT DOWN COVER. A VACUUM FORMED ABS COVER IS AN ACCEPTABLE ALTERNATE TO STEEL. POLES GREATER THAN 21 FT. IN HEIGHT (FOR ROADWAY LUMINAIRE ATTACHMENT) SHALL INCLUDE A HAND HOLD WITHIN 12 INCHES OF MAST ARM(S) ATTACHMENT(S).

6. POLE/MAST ARM TAPER AND SLOPE - AVERAGE TAPER OF SIGNAL ARMS AND POLE SHALL BE 0.125 TO 0.15 INCHES PER FT.

MAST ARM CENTERLINE ANGLE AT ATTACHMENT POINT WITH POLE SHALL MAINTAIN NOT LESS THAN 0.5 DEGREES OR MORE THAN 4 DEGREES POSITIVE SLOPE WITH A LINE PERPENDICULAR TO THE POLE CENTERLINE. THE ARM SHALL MAINTAIN A POSITIVE AFTER IT IS PLACED UNDER LOAD.

7. NUT COVERS - EACH POLE SHALL INCLUDE A BOLT DOWN NUT COVER FOR EACH ANCHOR BOLT.

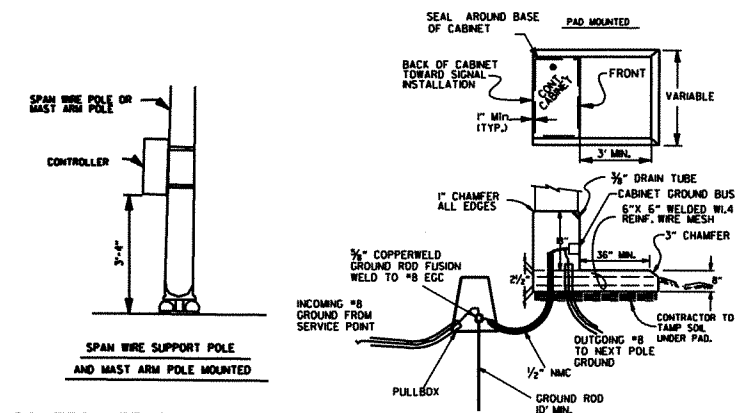


THE GROUND ROD SHALL BE FUSION WELDED TO A 1/2" A.W.G. SOLID COPPER GROUND WIRE. ATTACHMENT TO THE PRIMARY GROUND MAY BE BY AN APPROVED CLAMP. THE ROD IS TO BE LOCATED IN THE CONCRETE PULL BOX.

**TYPICAL FOUNDATION DETAILS**

POLE FOUNDATION MINIMUM DIMENSIONS AND STEEL REINFORCING. ALL REINFORCING STEEL SHALL BE GRADE 40 MIN.

ARM LENGTH	FDN. DIAMETER	DEPTH * L' #	STEEL		
			VERT.	HDRZ.	O/C.
PED	30'	7' - 0"	12-#7 (6' - 6")	10-#4	8.44'
2' to 12'	30'	10' - 6"	12-#7 (10' - 0")	15-#4	8.42'
over 12' to 20'	30'	11' - 6"	12-#7 (11' - 0")	16-#4	8.66'
over 20' to 35'	36'	12' - 6"	13-#8 (12' - 0")	17-#4	8.88'
over 35' to 50'	36'	13' - 6"	13-#8 (13' - 0")	19-#4	8.56'
over 50' to 72'	42'	14' - 6"	18-#8 (14' - 0")	20-#4	8.74'
Twins to 20'	30'	16' - 0"	12-#6 (15' - 6")	22-#4	8.76'
Twins over 20' to 44'	36'	16' - 0"	13-#8 (15' - 6")	22-#4	8.76'
Twins over 44' to 50'	42'	16' - 0"	18-#8 (15' - 6")	22-#4	8.76'
Twins over 50' to 72'	42'	16' - 6"	18-#8 (16' - 0")	23-#4	8.64'



**CONTROLLER CABINET MOUNTING DETAILS**

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, CABINET ORIENTATION SHALL BE SUCH THAT THE BACK OF THE CABINET IS PARALLEL TO THE STREET AND POSITIONED TO ALLOW VISIBILITY OF THE SIGNAL DISPLAY WHILE OBSERVING THE CONTROLLER FRONT PANEL.

8. GROUND ROD - A 10' X 5/8" GROUND ROD SHALL BE INSTALLED IN THE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND 1/2" NMC SHALL BE INCLUDED IN ITEM 714 FOR SIGNAL POLES AND ITEM 701 FOR THE CONTROLLER. THE PULL BOX AND CONDUCTOR BOX SHALL BE PAID FOR SEPARATELY.

9. POLE BASE/FOUNDATION - ANCHOR BOLTS SHALL INCLUDE AS A MINIMUM, ONE LEVELING NUT, TWO FLAT WASHERS, ONE LOCK WASHER, AND ONE HEX. NUT. PERIMETER OF ANCHOR BASE SHALL BE GROUTED WITH A 1/4" WEEP HOLE. ALL CONCRETE SHALL BE CLASS 'S' OR GREATER.

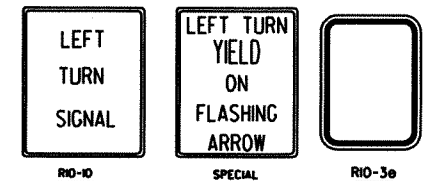
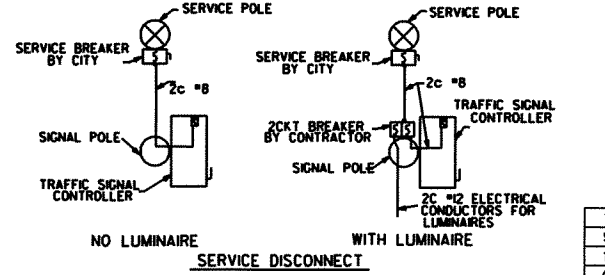
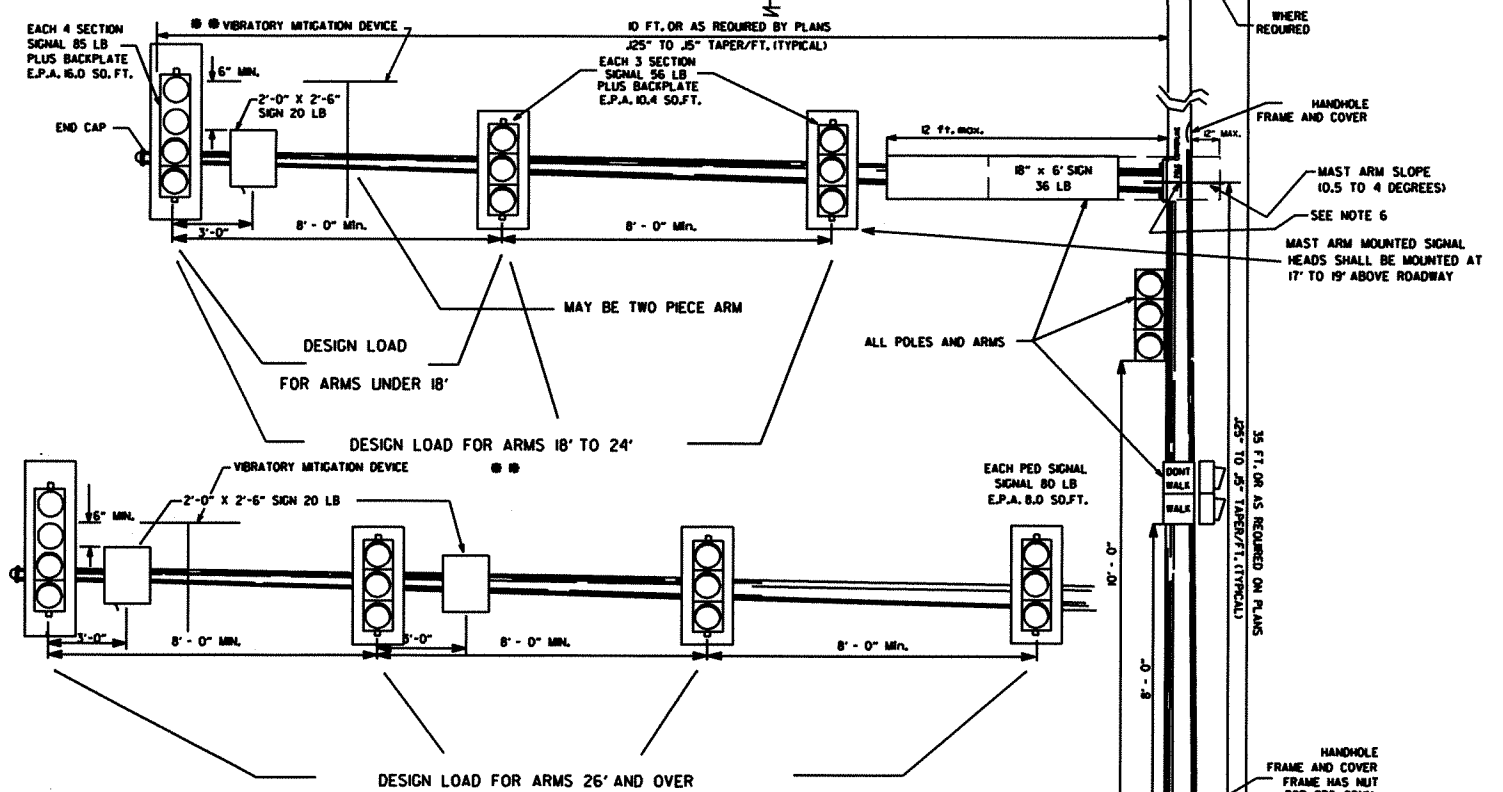
**SIGNAL OPERATION NOTES:**

FLASHING OPERATION - PRIOR TO NORMAL OPERATION, SIGNAL SHALL BE FLASHED FOR A PERIOD OF 3 TO 5 WORK DAYS OR AS DIRECTED BY THE ENGINEER. SIGNAL SHALL BE PLACED IN OPERATION ONLY ON A REGULAR WORK DAY, EXCEPT FRIDAY.  
THE CONTRACTOR MAY BE REQUIRED TO ALTER THE FLASHING DISPLAY DURING THE TEMPORARY FLASH PERIOD. AT THE TIME INTERSECTION IS PLACED IN PERMANENT OPERATION, THE FLASH SEQUENCE SHALL THEN BE RETURNED TO THAT INDICATED ON THE PLAN SHEETS. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THESE ALTERATIONS IN FLASH SEQUENCE.

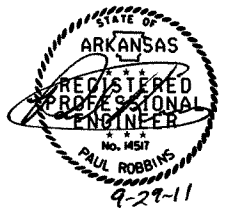
WHEN THE GROUND ELEVATION AT THE POLE IS LOWER THAN THE ROADWAY ELEVATION, THE LENGTH OF FOUNDATION ABOVE THE GROUND MAY BE INCREASED TO PROVIDE THE REQUIRED SIGNAL HEAD CLEARANCE ABOVE THE ROADWAY. WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 18" OR LESS, NO INCREASE IN DEPTH "L" WILL BE REQUIRED. WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 5'-6" OR LESS, INCREASE DEPTH "L" BY 1'-0". FOR LENGTHS GREATER THAN 5'-6", DEPTH "L" SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER. LONGITUDINAL REINFORCING, AS SHOWN IN THE TABLE, SHALL BE PROVIDED FOR THE LENGTH OF THE EXTENDED SHAFT AND #4 TIES SHALL BE PROVIDED AT A SPACING NOT TO EXCEED 9" ON CENTERS. PAYMENT WILL BE IN ACCORDANCE WITH SECTION 714 OF THE STANDARD SPECIFICATIONS.

IN LIEU OF DESIGNING THE STRUCTURE TO RESIST PERIODIC GALLOPING, A VIBRATORY MITIGATION DEVICE MAY BE PROVIDED BY THE POLE MANUFACTURER. THE VIBRATORY MITIGATION DEVICE SHALL BE AN ANTI-GALLOPING PANEL CONSISTING OF A 60"x16"x0.125" SIGN BLANK MOUNTED NEAR THE END OF THE MAST ARM NOT TO EXCEED ONE QUARTER OF THE LENGTH OF THE PANEL COLLINEAR WITH THE LONG AXIS OF THE MAST ARM. THE PANEL SHOULD BE MOUNTED AT SUCH A HEIGHT AS TO PROVIDE AT LEAST 6" CLEAR FROM THE TOP OF ANY SIGNAL ASSEMBLY OR SIGN PANEL LOCATED ON THE MAST ARM WITHIN THE LENGTH OF THE ANTI-GALLOPING PANEL.

TRUCK-INDUCED GUST LOADS SHALL BE EXCLUDED FOR FATIGUE DESIGN FOR ALL STRUCTURES EXCEPT MAST ARMS MOUNTED OVER FACILITIES WITH POSTED SPEEDS OF 65 MPH OR GREATER AT THE LOCATION OF THE STRUCTURE.



DATE	REVISION	DATE FILM
7-21-1	REVISED VMD, SIGNAL HEADS	
5-21-09	REVISED GROUNDING	
1-3-08	REVISED GROUNDING	
4-25-08	ADDED VIBRATORY MITIGATION DEVICE & NOTES	
4-8-08	REVISED AASHTO NOTES	
4-17-08	REVISED TO 2008 AASHTO STANDARDS	
10-2-04	REVISED CABINET ORIENTATION	
6-23-04	REVISED	
5-1-04	REV. NOTE 3/AASHTO REQUIREMENTS	
6-1-01	REV. NOTES & POLE MAST ARM SLOPE	
4-8-01	REVISED POLE TAPERS	
4-25-00	REV. NOTES & SIGNAL HEAD PLACEMENT	
8-22-99	REVISED FOUNDATION DETAILS	
8-17-98	REVISED DETAILS AND NOTES	
8-21-95	ISSUED	



**SIGNALIZATION DETAILS**

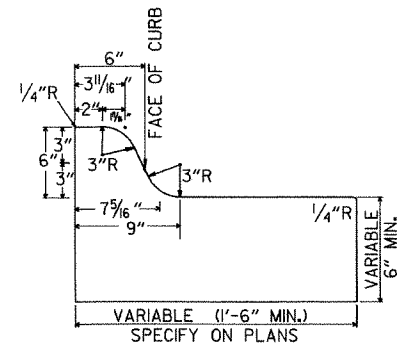
SPECIAL NOTE: 90 MPH WIND ZONE DESIGN, SEE NOTE 3. MINIMUM STRUCTURAL REQUIREMENTS.

A.H.T.D. STANDARD DETAILS

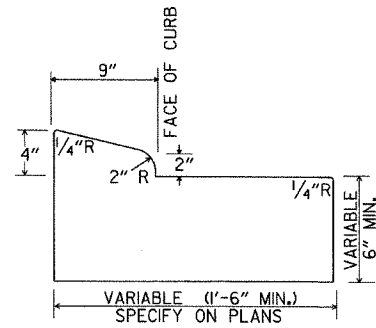
ARKANSAS STATE HIGHWAY COMMISSION

**SIGNALIZATION DETAILS**  
(Steel Pole With Mast Arm)

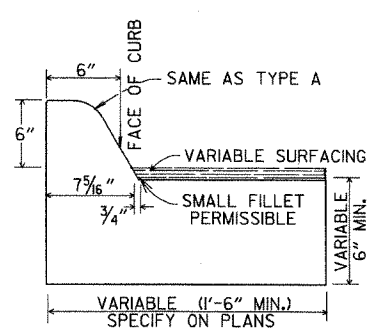
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		20	27
				JOB NO.		050244		



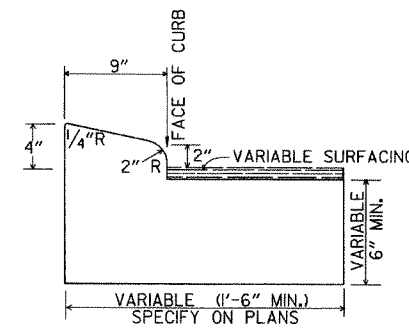
TYPE A



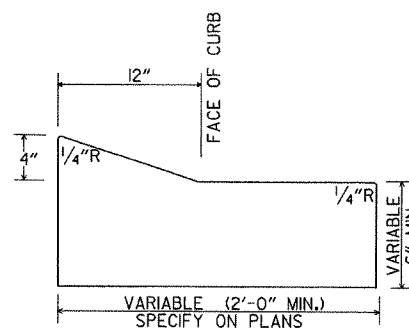
TYPE B-1



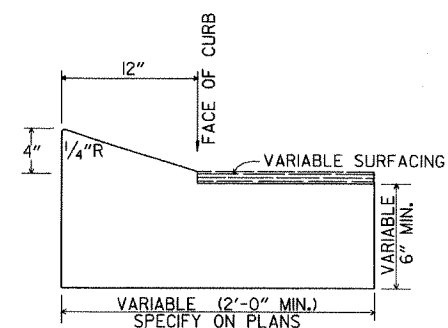
TYPE C



TYPE B-2

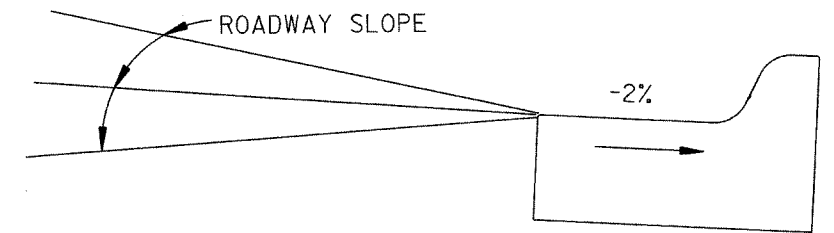


TYPE E-1

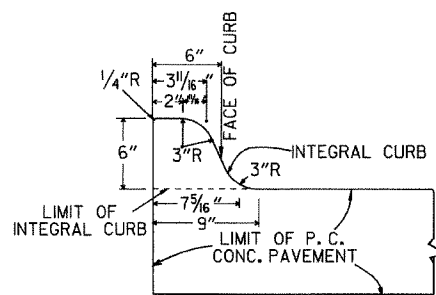


TYPE E-2

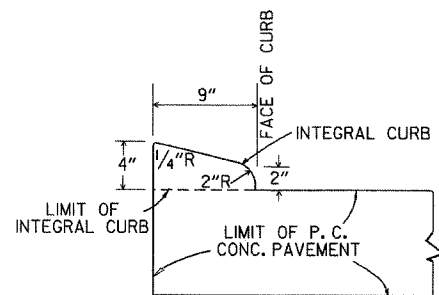
CONCRETE COMBINATION CURB AND GUTTER



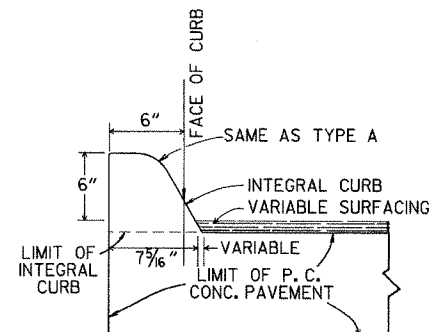
DETAIL OF GUTTER SLOPE  
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

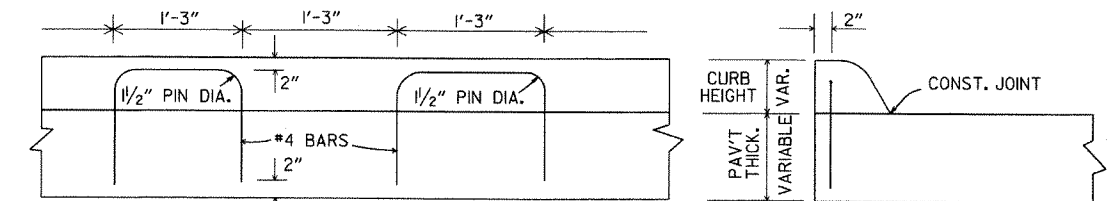


TYPE B



TYPE C

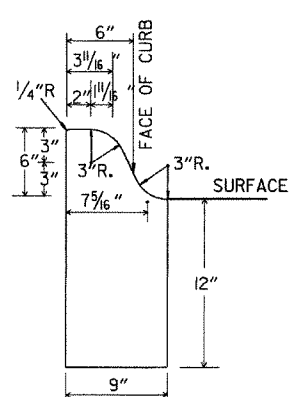
INTEGRAL CURB



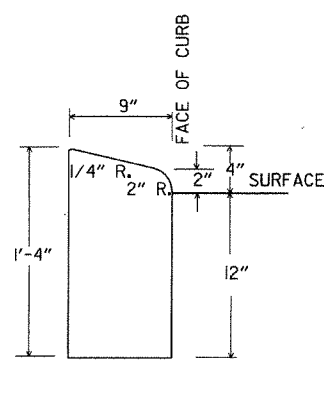
LONGITUDINAL SECTION

ELEVATION

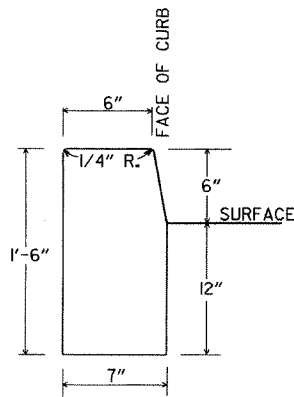
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



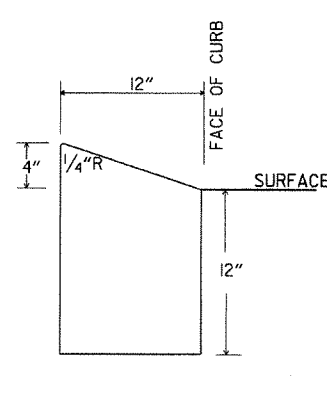
TYPE A



TYPE B

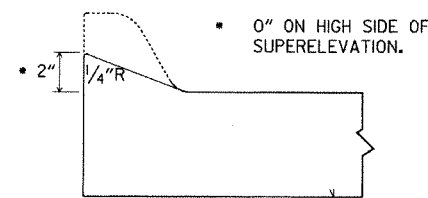


TYPE D



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.

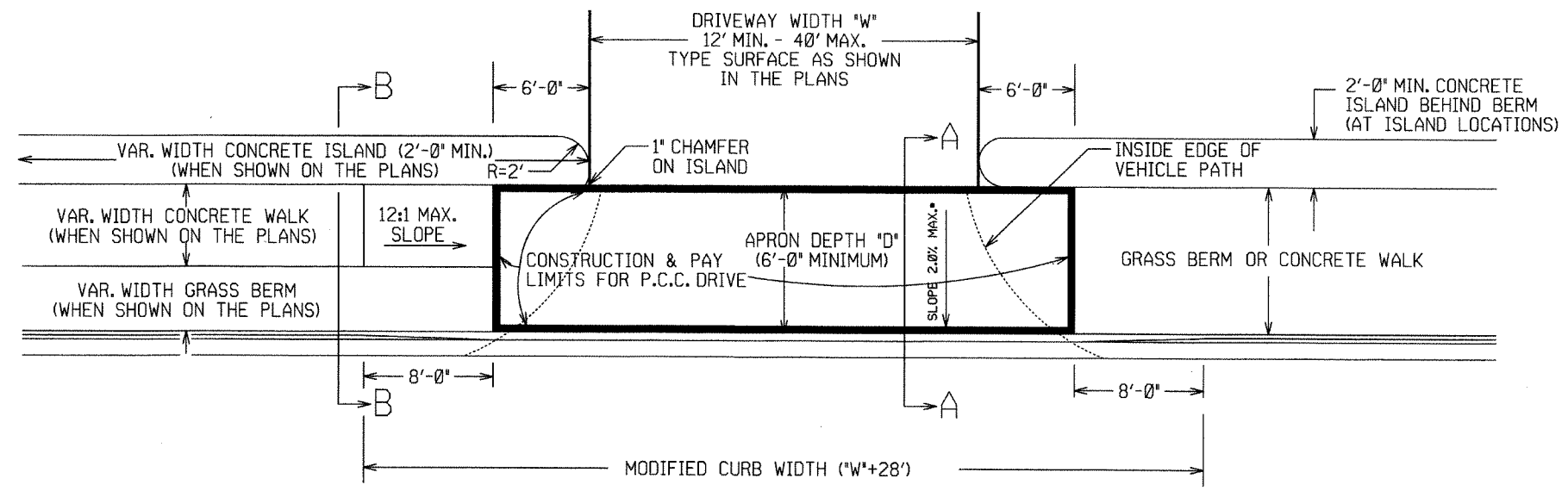
DETAILS OF MODIFIED CURB

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 I	11-30-89
7-15-88	REVISED MODIFIED CURB	630-7-15-88
11-1-73	REVISED MODIFIED CURB	500-11-1-73
10-2-72	REVISED AND REDRAWN	512-10-2-72

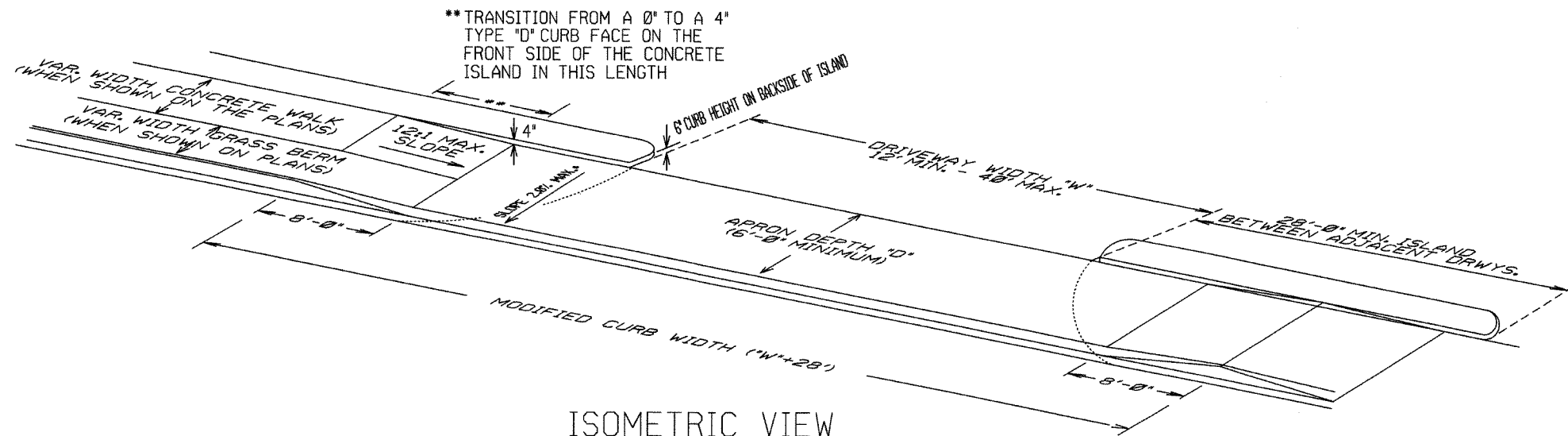
ARKANSAS STATE HIGHWAY COMMISSION

CURBING DETAILS

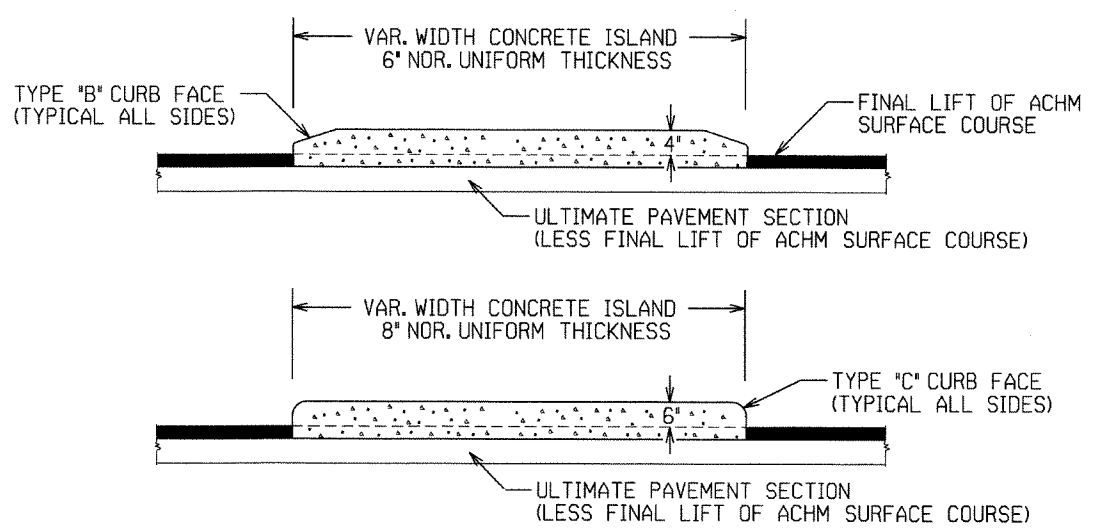
STANDARD DRAWING CG-1



PLAN VIEW

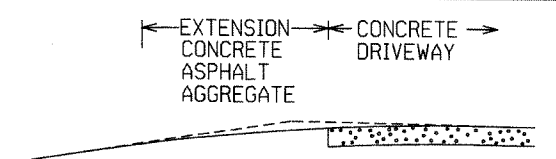


ISOMETRIC VIEW



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".

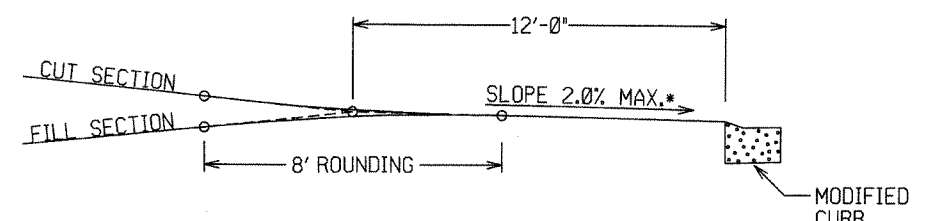


EXTENSION TYPICAL SECTIONS

- 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

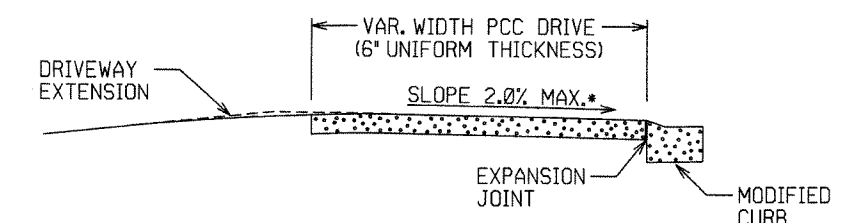
THE TYPE OF EXTENSION SHALL BE AS SHOWN IN THE PLANS.  
THE CONTRACTOR MAY, WITH THE APPROVAL OF THE ENGINEER,  
SUBSTITUTE A LOWER NUMBERED TYPE OF EXTENSION IN LIEU  
OF THE TYPE SPECIFIED IN THE PLANS, BUT AT NO ADDITIONAL  
COST TO THE DEPARTMENT.

DRIVEWAY EXTENSION DETAILS

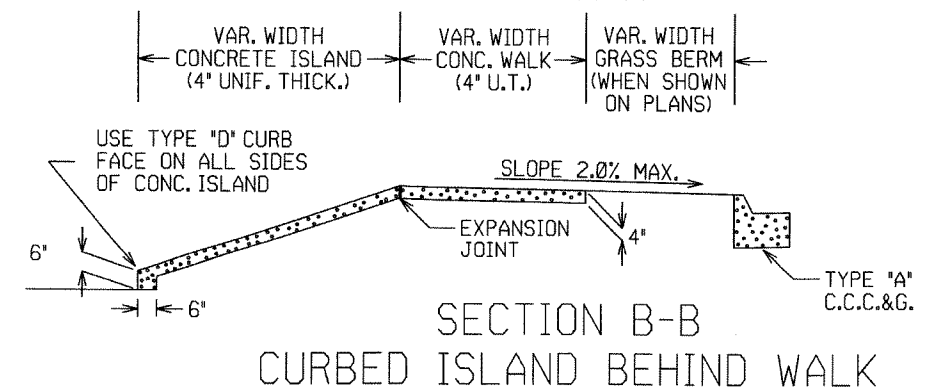


DRIVEWAY VERTICAL ALIGNMENT DETAILS

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



SECTION A-A



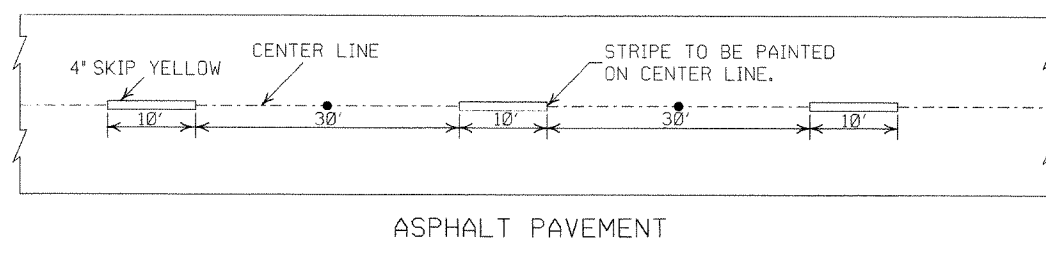
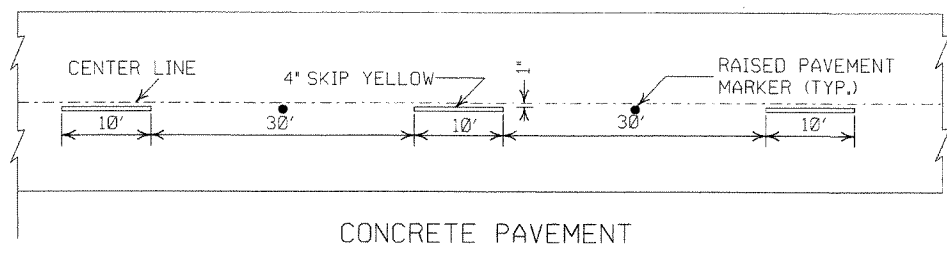
SECTION B-B  
CURBED ISLAND BEHIND WALK

DATE	REV	DATE FILMED	DESCRIPTION
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

ARKANSAS STATE HIGHWAY COMMISSION  
DETAILS OF DRIVEWAYS & ISLANDS  
STANDARD DRAWING DR-1

NOTES:

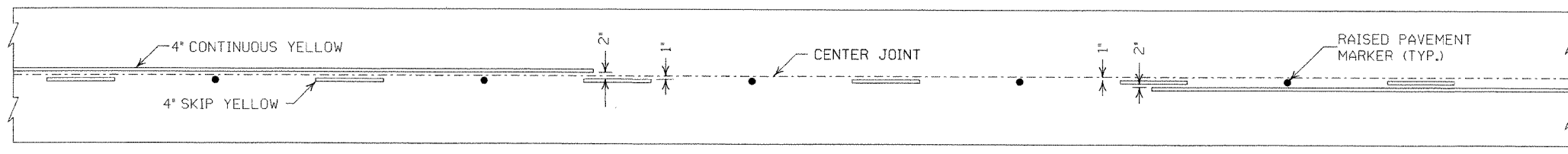
1. ALL LINES SHALL HAVE A WIDTH OF 4 INCHES.
2. THE THICKNESS AND RATE OF PAINT APPLICATION SHALL BE AS SPECIFIED IN SECTION 718 OF THE STANDARD SPECIFICATIONS.
3. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
4. RAISED PAVEMENT MARKERS SHALL BE CENTERED BETWEEN SKIP LINES ON 40 FEET SPACING UNLESS OTHERWISE SHOWN ON THE PLANS.



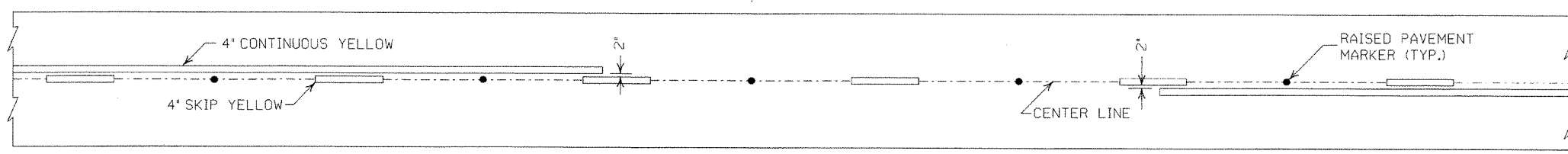
CONCRETE PAVEMENT

ASPHALT PAVEMENT

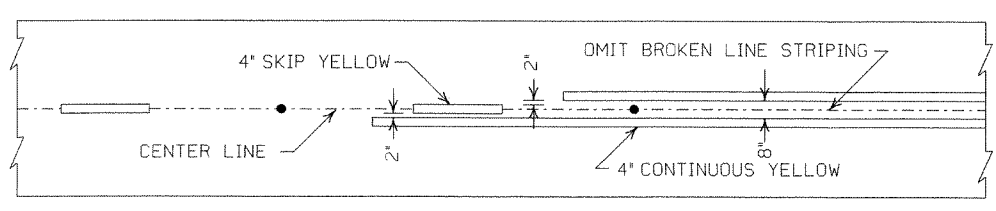
**BROKEN LINE STRIPING**



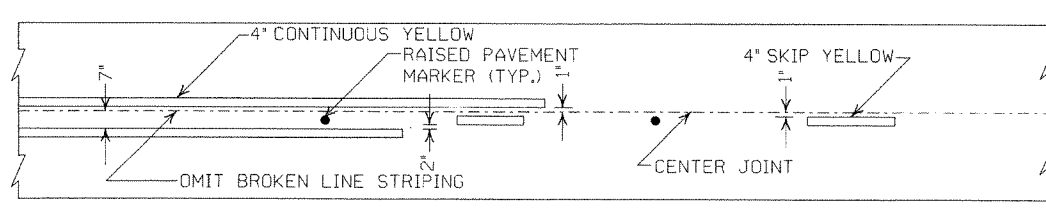
**SOLID LINE STRIPING ON CONCRETE PAVEMENT**



**SOLID LINE STRIPING ON ASPHALT PAVEMENT**

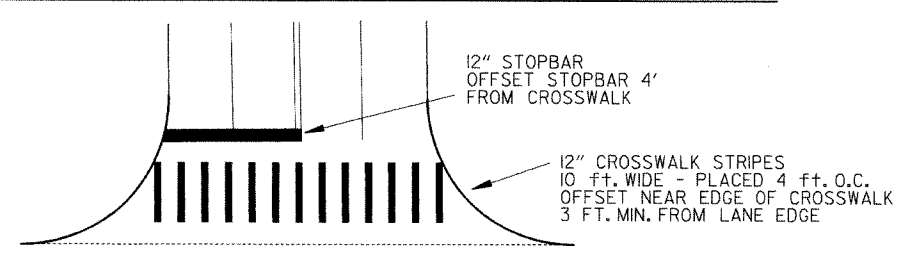


ASPHALT PAVEMENT



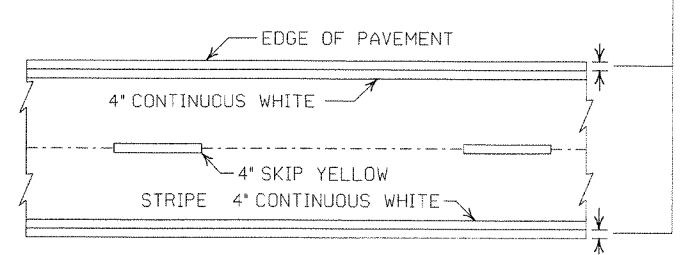
CONCRETE PAVEMENT

**STRIPING AT ADJACENT NO PASSING LANES**

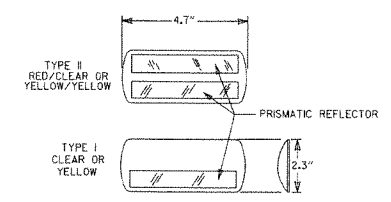


**CROSSWALK AND STOPBAR DETAILS**

2" FOR ASPHALT OR CONCRETE PAVEMENT  
6" FOR BITUMINOUS SURFACE TREATMENT



**PAVEMENT EDGE LINE MARKING**



**DETAIL OF STANDARD RAISED PAVEMENT MARKERS**

GENERAL NOTES:  
THIS DRAWING SHOULD BE CONSIDERED AS TYPICAL ONLY AND THE FINAL LOCATION OF THE STRIPING AND RAISED PAVEMENT MARKERS SHALL BE DETERMINED BY THE ENGINEER.  
  
THIS DRAWING SHOULD BE USED IN CONJUNCTION WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST REVISION.

NOTE:  
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 AHTD QUALIFIED PRODUCTS LIST.


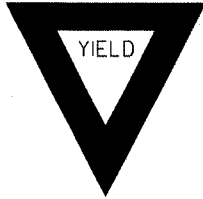
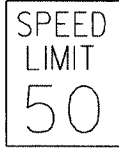


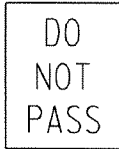



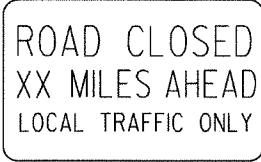
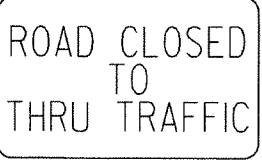
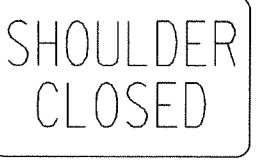
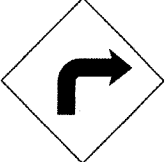



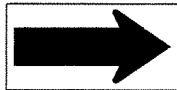

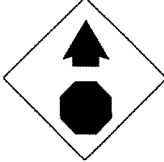
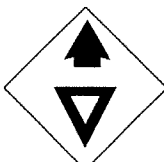
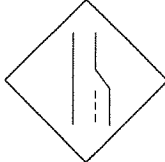



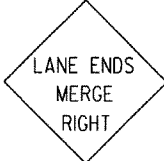



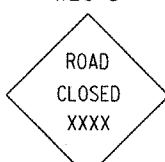

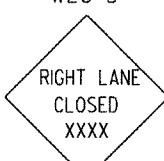


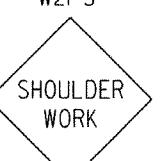
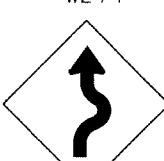



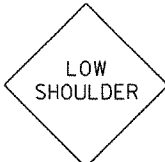
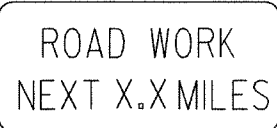
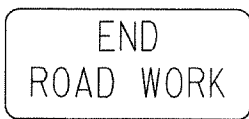
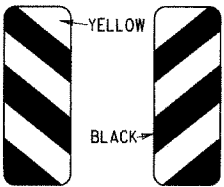


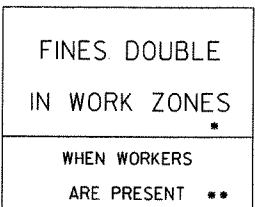
DATE	REVISION	FILMED
11-17-10	REVISED GENERAL NOTES & REMOVED PLOWABLE PVMT MKRS	
11-18-04	REVISED NOTE 2 & GENERAL NOTES	
8-22-02	ADDED CROSSWALK & STOPBAR DTLS.	
7-02-98	ADDED DETAILS OF STD. RAISED PAV'T. MARKERS	
4-26-96	REV. NOTES 3&4; ADDED R.P.M.	
9-30-80	DRAWN	1-9-30-80

ARKANSAS STATE HIGHWAY COMMISSION

**PAVEMENT MARKING DETAILS**

STANDARD DRAWING PM-1



<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>R2-5A</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R2-5C</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</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>RSP-1</p>  <p>48"x30"</p>	<p>W1-1</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W1-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	
<p>W1-3</p>  <p>STD. 48"x48"</p>	<p>W1-4</p>  <p>STD. 48"x48"</p>	<p>W1-6</p>  <p>STD. 48"x24" SPECIAL 60"x30"</p>	<p>W1-8</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>500 FEET 24" W6-2</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>W1-4b</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>WHEN WORKERS ARE PRESENT **</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

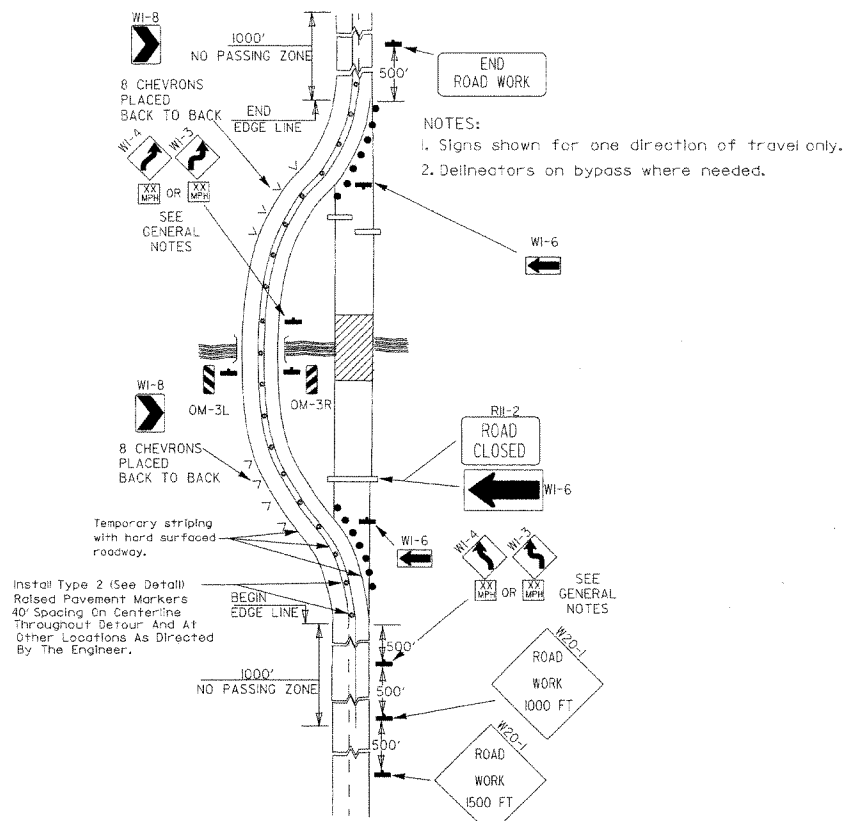
GENERAL NOTES:

- 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.

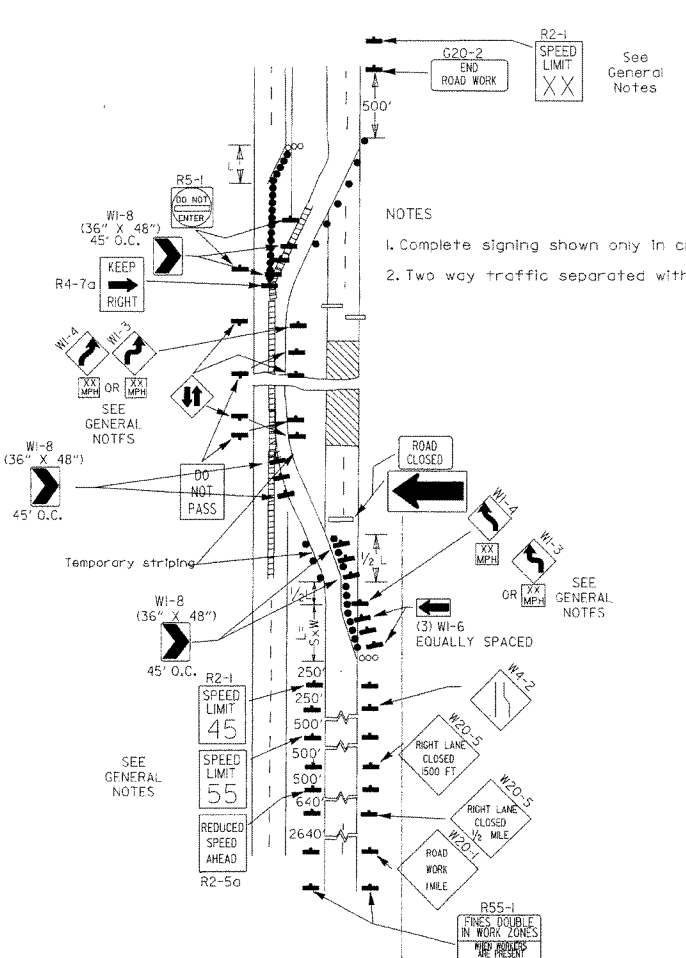
\* NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED FOR ALL PROJECTS.

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	
DATE	REVISION	FILMED

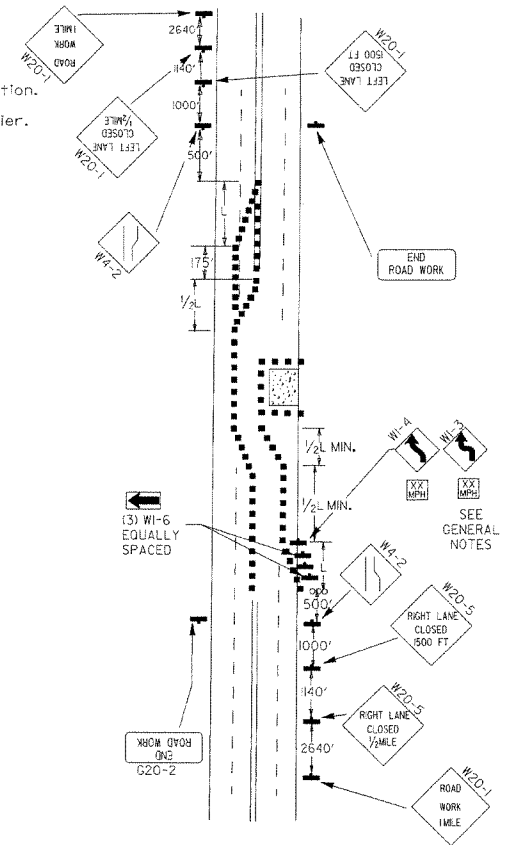
ARKANSAS STATE HIGHWAY COMMISSION  
STANDARD TRAFFIC CONTROLS  
FOR HIGHWAY CONSTRUCTION  
STANDARD DRAWING TC-1



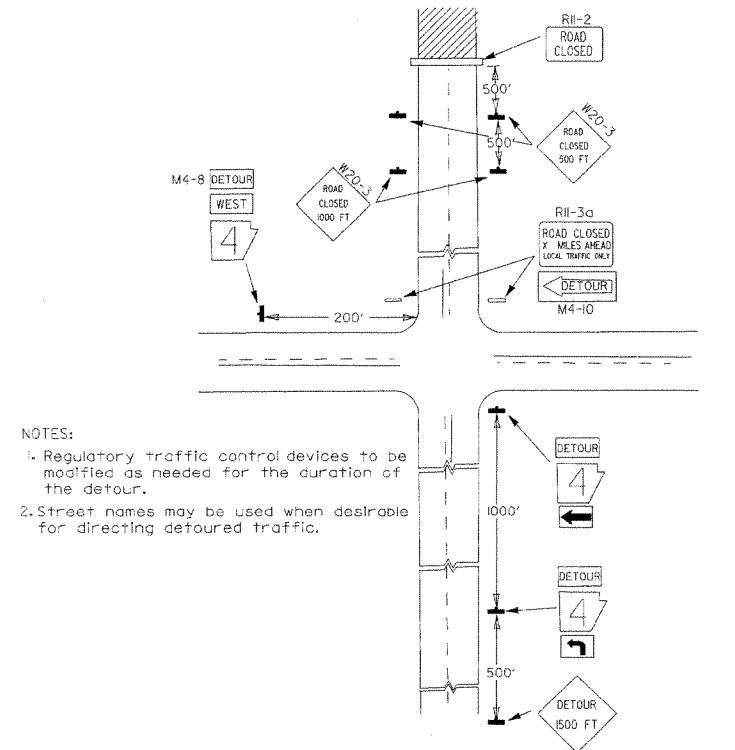
(A) Typical application of traffic control devices on a 2-lane highway where the entire roadway is closed and a bypass detour is provided.



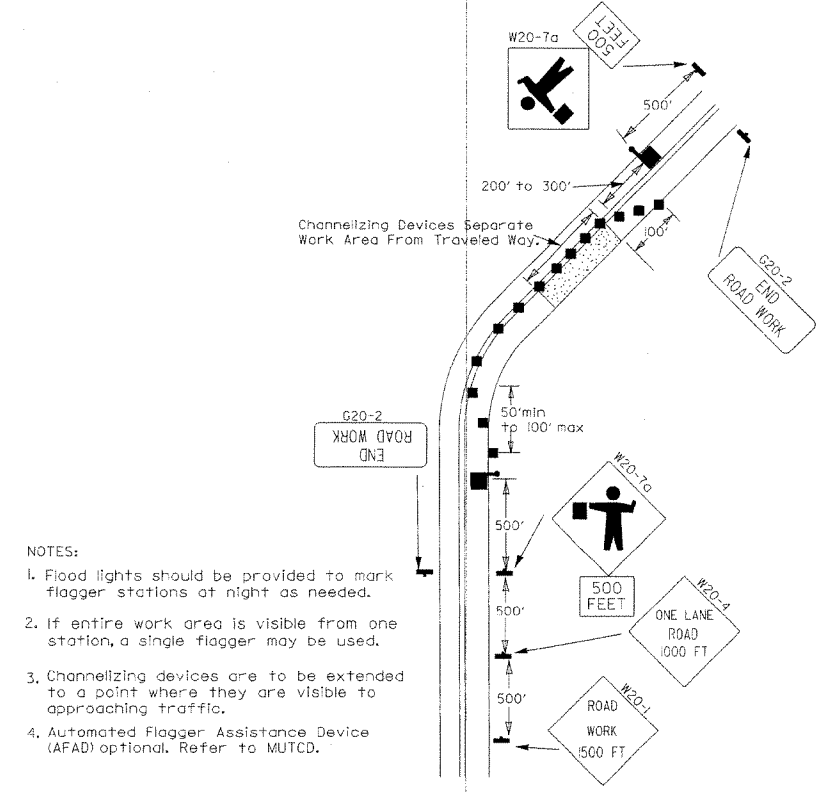
(B) Typical application - 4-lane divided roadway where one roadway is closed.



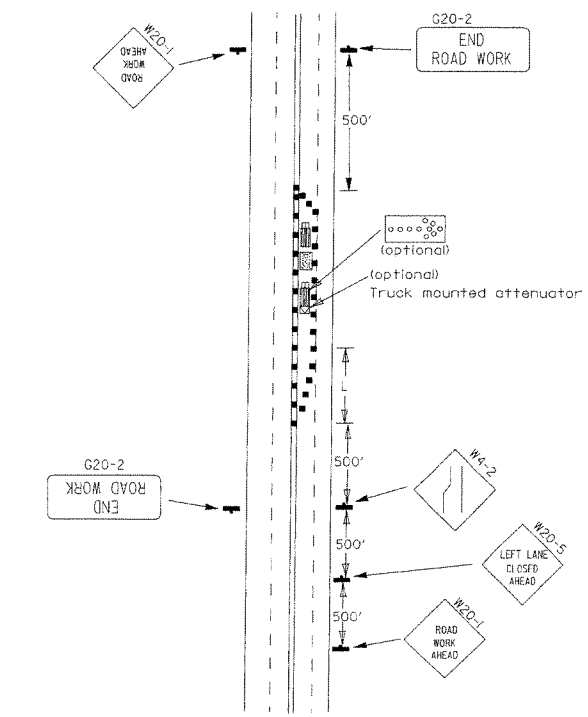
(C) Typical application - 4-lane undivided roadway where half of the roadway is closed.



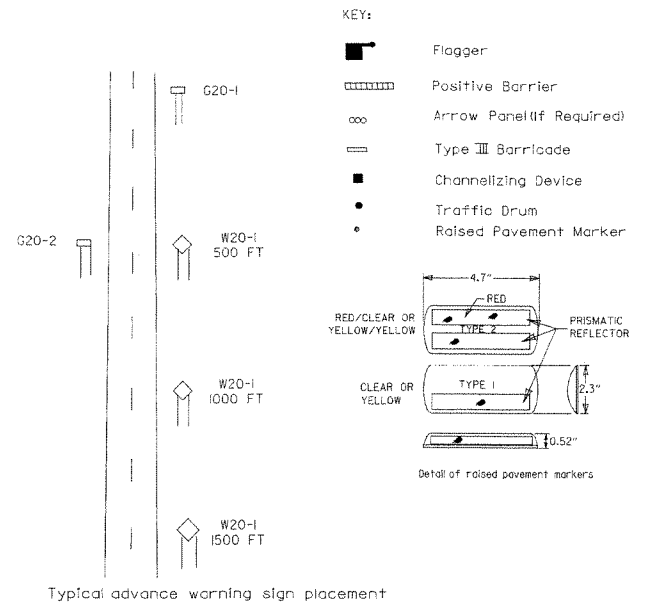
(D) Typical application - roadway closed beyond detour point.



(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.

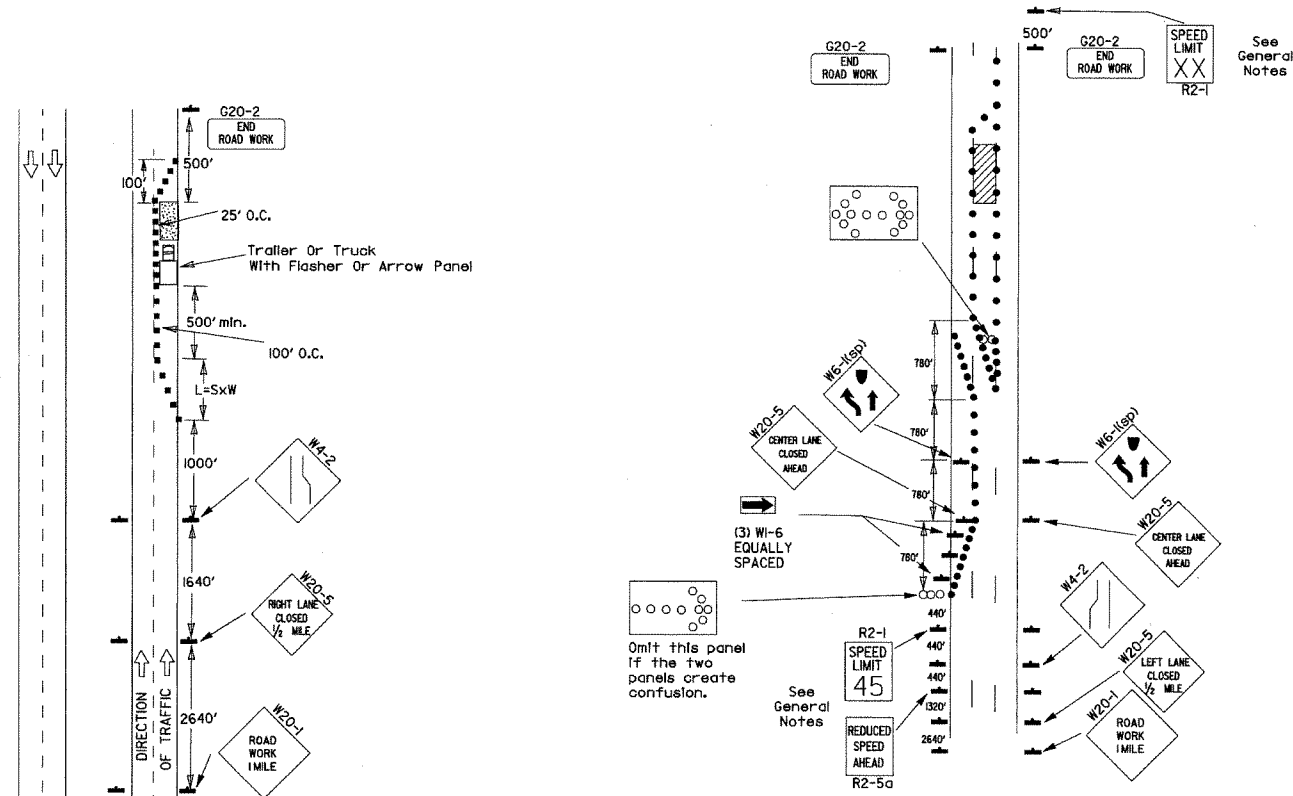


Taper formulae:  
 $L = S \times W$  for speeds of 45mph or more.  
 $L = \frac{WS^2}{60}$  for speeds of 40mph or less.  
 Where:  
 L = Minimum length of taper.  
 S = Numerical value of posted speed limit prior to work or 85th percentile speed.  
 W = Width of offset.

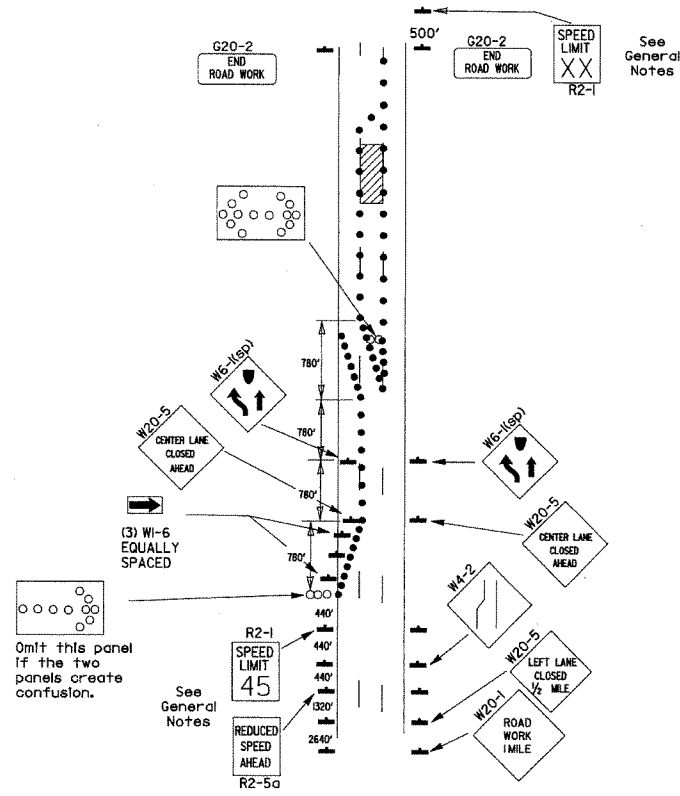
- GENERAL NOTES:
- Advisory speed posted on W1-3 or W1-4 curve warning signs to be determined at site. Use W1-4 when speed is greater than 30mph and W1-3 when 30mph or less.
  - When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-(45) shall be omitted and the R2-5A shall be installed at that location. Additional R2-1 45mph speed limit signs shall be installed at a maximum of 1/2 mile intervals. At the end of the work area a R2-(45) shall be installed to match original speed limit.
  - When the existing speed limit is 65mph and the plans require a speed limit of 55mph, the R2-(45) shall be omitted. Additional R2-1 55mph speed limit signs shall be installed at a maximum of 1/2 mile intervals. At the end of the work area a R2-(45) shall be installed to match original speed limit.
  - 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.
  - Warning lights and/or flags may be mounted to signs or channelizing devices at night as needed.
  - Pavement markings no longer applicable which might create confusion in the minds of vehicle operators shall be removed or obliterated as soon as practicable.
  - 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.

DATE	REVISION	FILMED
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	

Channelizing devices



(A) Typical application - daytime maintenance operations of short duration on a 4-lane divided roadway where half of the roadway is closed.

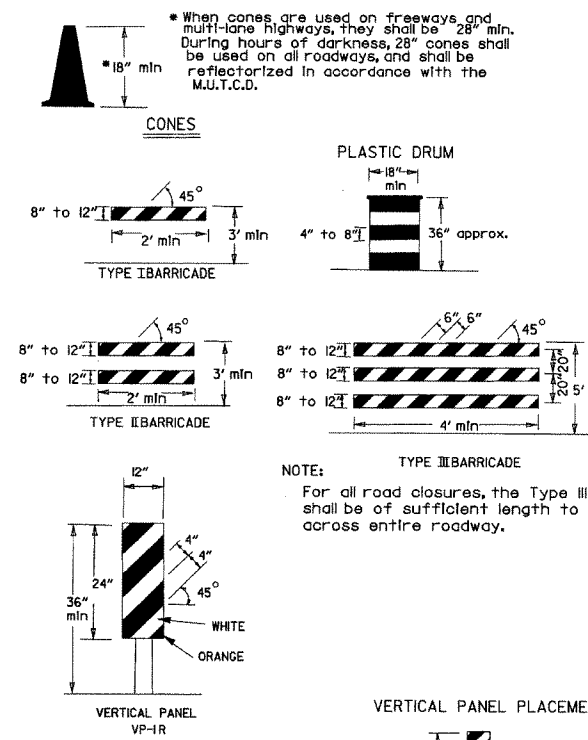


(B) Typical application - 3-lane one-way roadway where center lane is closed.

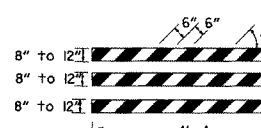
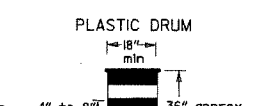
- KEY:
- Arrow Panel (if Required)
  - Channelizing Device
  - Traffic drum

GENERAL NOTES:

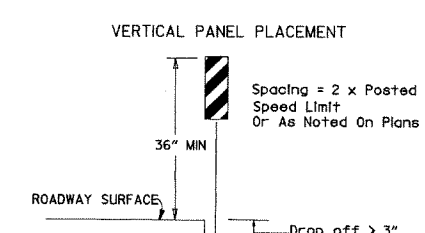
1. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5a shall be installed at that location. Additional R2-1(45) speed limit signs shall be installed at a maximum of 1/2 mile 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) speed limit signs shall be installed at a maximum of 1/2 mile 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. The G20-1 sign will be required on jobs of over two miles in length. When the lane closure is not at the beginning of the project, the G20-1 sign shall be erected 1/2 mile in advance of the job limit. Additional W20-1(1/2 MILE) signs are not required in advance of lane closures that begin inside the project limits.
8. Flaggers shall use STOP/SLOW paddles for controlling traffic through work zones. Flags may be used only for emergency situations.
9. All plastic drums and cones shall meet the requirements of NCHRP-350 or Manual for Assessing Safety Hardware (MASH).
10. 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.



\* When cones are used on freeways and multi-lane highways, they shall be 28" min. During hours of darkness, 28" cones shall be used on all roadways, and shall be reflectorized in accordance with the M.U.T.C.D.



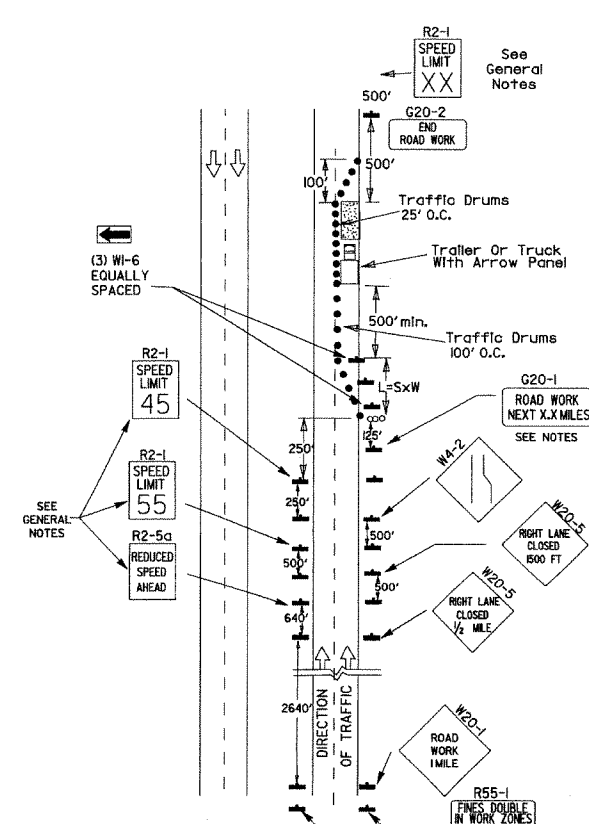
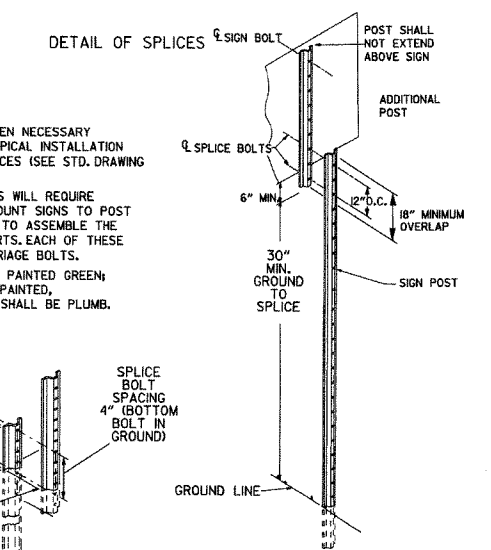
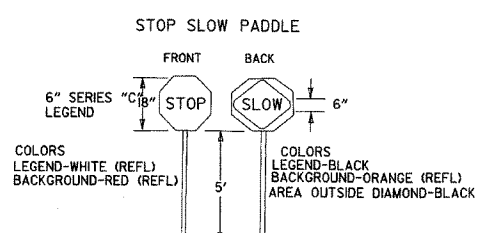
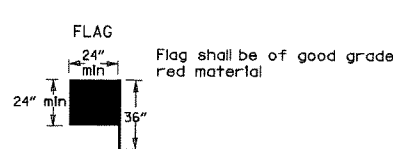
NOTE: For all road closures, the Type III barricades shall be of sufficient length to extend across entire roadway.



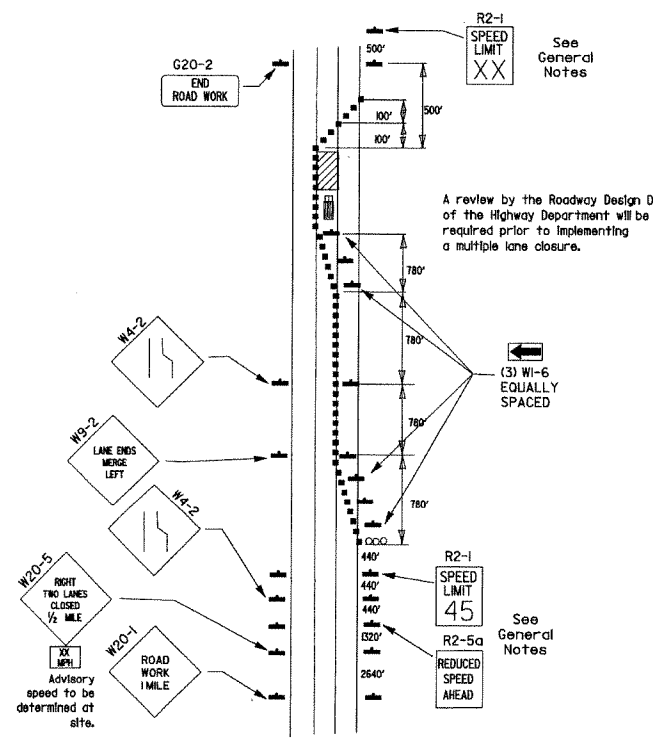
TRAFFIC CONTROL DEVICES FOR VERTICAL PAVEMENT DIFFERENTIALS

VERTICAL DIFFERENTIAL	LOCATIONS	TRAFFIC CONTROL
1" to 3"	Centerline, lane lines	W8-11
1" to 3"	Edge of shoulder	W8-9
Greater than 3"	Lane lines	Standard lane closure required
Greater than 3"	Edge of traveled lane	*RSP-land vertical panels, drums or concrete barrier
Greater than 3"	Edge of shoulder	*Vertical panels, drums or concrete barrier

\* When shown on the plans concrete barrier will be used. When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.

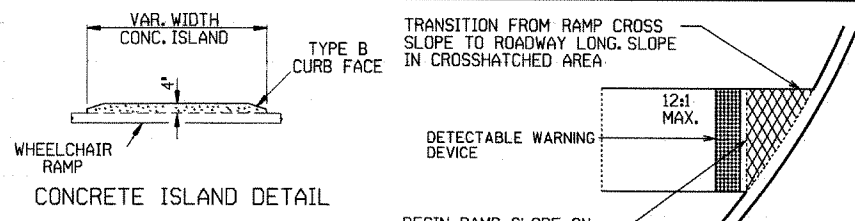


(C) Typical application - construction operations of intermediate to long term duration on a 4-lane divided roadway where half of the roadway is closed.



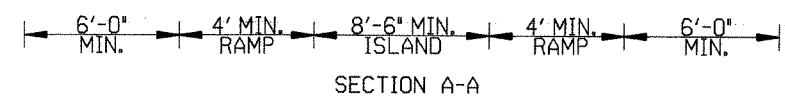
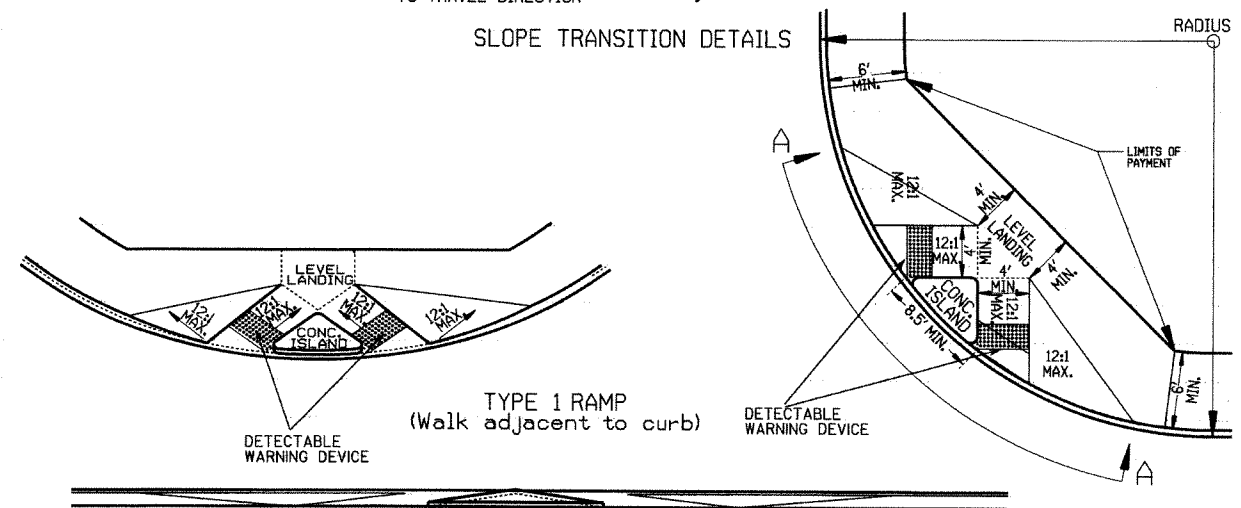
(D) Typical application - closing multiple lanes of a multilane highway.

DATE	REVISION	FILMED
10-15-09	ADDED REFERENCE TO MASH	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED NOTE	
10-1-98	ADDED NOTE	
4-03-97	ADDED (SP) TO W6-1 & REVISED TRAFFIC CONTROL DEVICES NOTE	
10-18-96	ADDED R55-1	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL, TEXT	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	



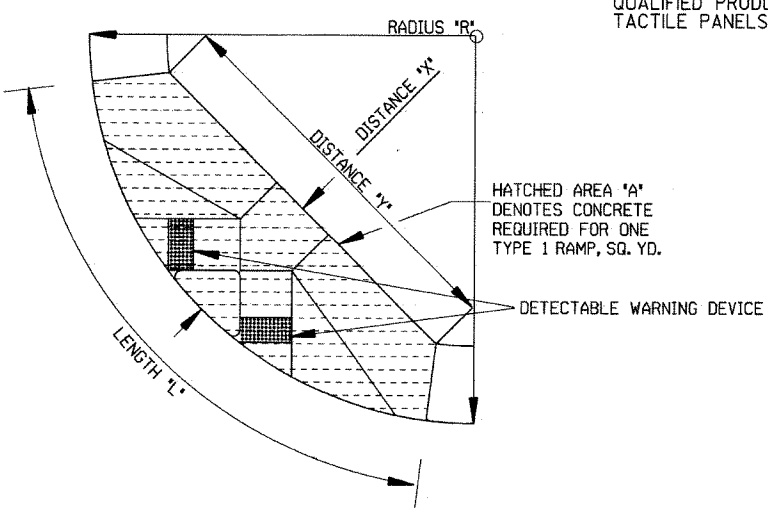
DETECTABLE WARNING DEVICE  
BEGIN RAMP SLOPE ON A LINE PERPENDICULAR TO TRAVEL DIRECTION

SLOPE TRANSITION DETAILS

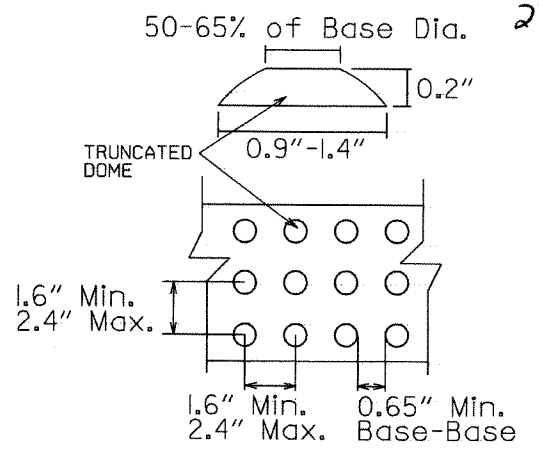


TYPE 1 RAMP DIMENSIONS AND QUANTITIES

RADIUS 'R'	DISTANCE 'X'	DISTANCE 'Y'	LENGTH 'L'	RAMP AREA 'A'
FEET	FEET	FEET	FEET	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 AHTD QUALIFIED PRODUCTS LIST FOR CAST-IN-PLACE TACTILE PANELS (ADA DETECTABLE WARNING).

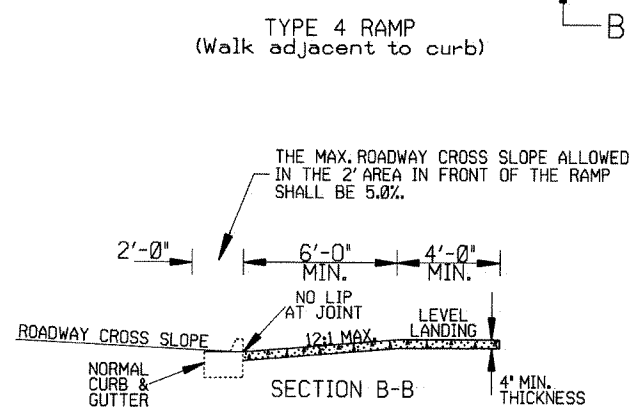
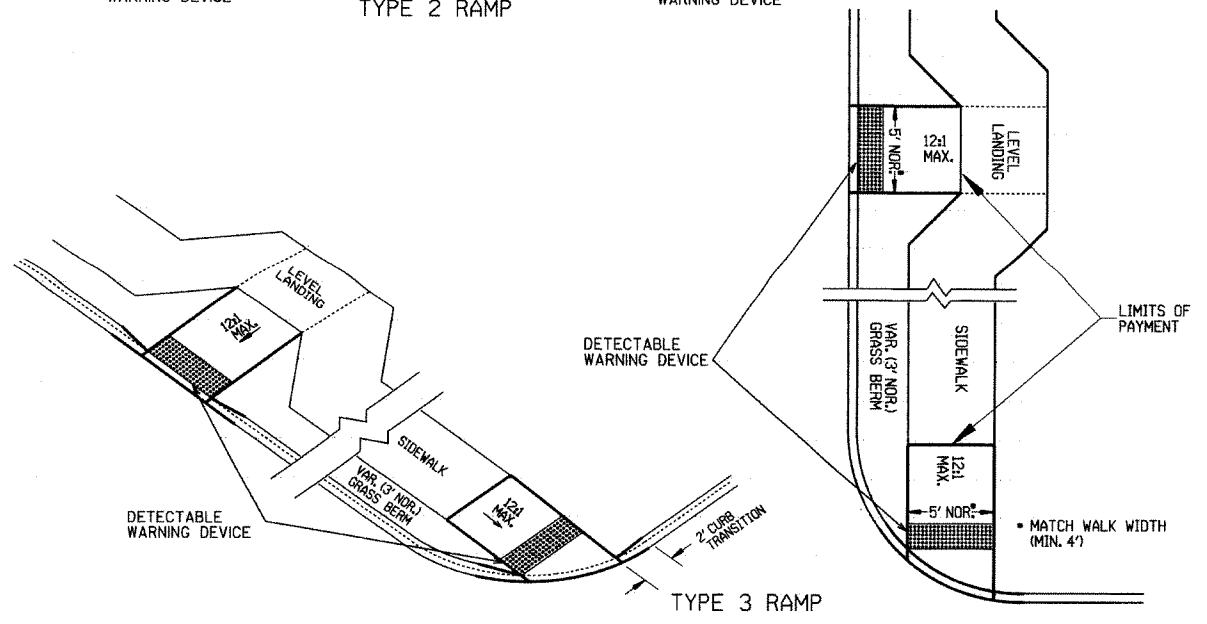
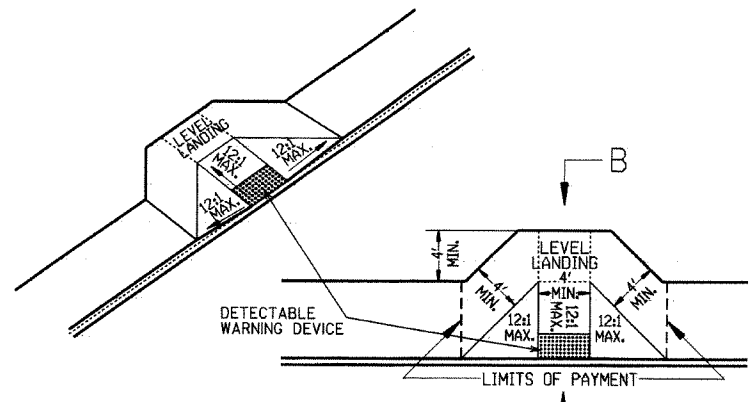
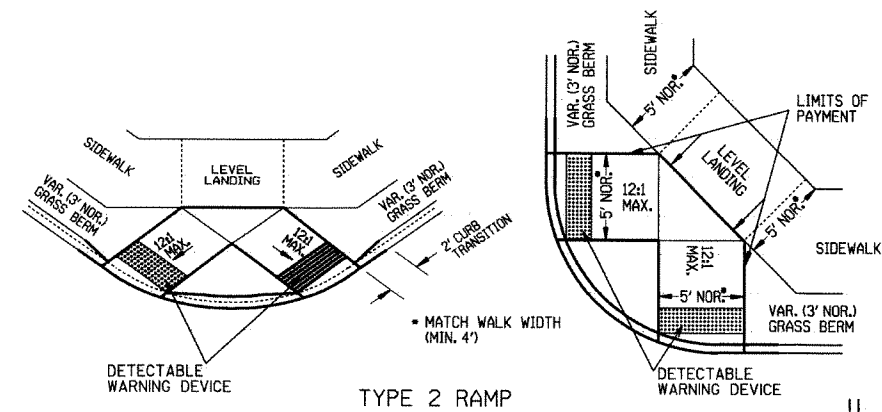


DETECTABLE WARNING DEVICE DETAIL

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 PAVEMENT 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).
THIRD CHOICE	TYPE 5	TANGENT LOCATIONS (ALTERATIONS ONLY).
FOURTH 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.
		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
10-05	REVISED TO NEW SIDEWALK POLICY	
10-03	REVISED GEN. NOTES & ADDED NOTE	
4-03	REV. DETECTABLE WARNING DEVICES	
8-22-02	ADD DETECTABLE WARNING DEVICES	
3-30-00	ADD SLOPE TRANS. & REV. ISL. DIMS.	
11-88	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	652-1-15-88
7-14-88	INCL. "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