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.		040582	1	107

(2) RAZORBACK RD. - GARLAND AVE. (HWY.112) (FAYETTEVILLE) (S)

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

CONSTRUCTION PLANS FOR STATE HIGHWAY

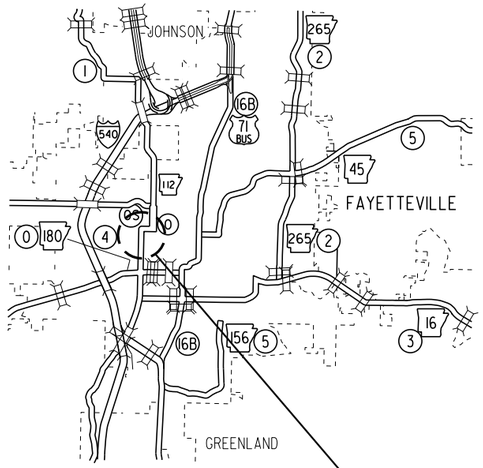
RAZORBACK RD. - GARLAND AVE. (HWY. 112)
(FAYETTEVILLE) (S)

WASHINGTON COUNTY

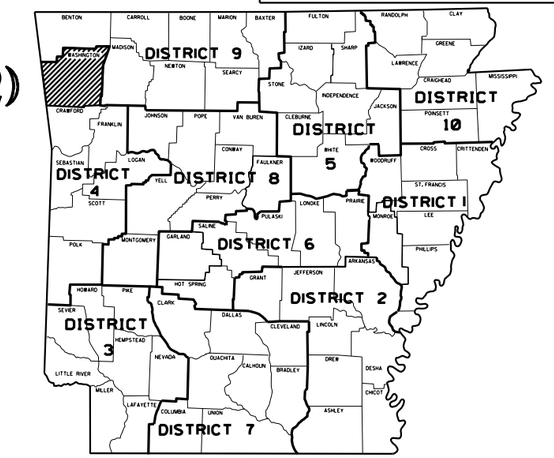
ROUTE 112 SECTION 0

F.A.P. NO. STPU-9142(35)

JOB 040582



VICINITY MAP



ARKANSAS HWY. DIST. 4

NOT TO SCALE

R30W

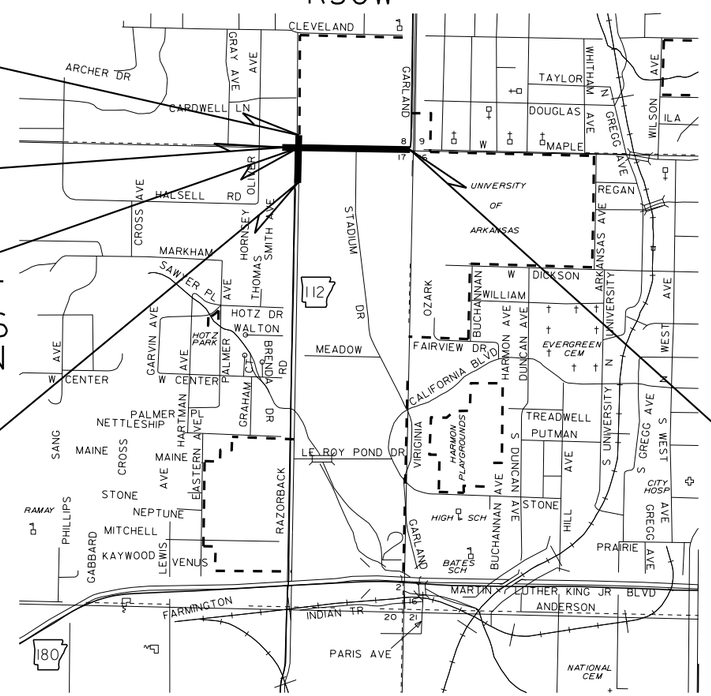
STA. 154+60.00
END RAZORBACK RD.

STA. 201+01.81
BEGIN MAPLE ST.

STA. 152+66.41 RAZORBACK RD. =
STA. 203+67.29 MAPLE ST.
Q = 89°28'53"

T 16 N

STA. 150+00.00
BEGIN JOB 040582
(RAZORBACK ROAD)
LOG MILE = 2.337



STA. 216+17.42
END JOB 040582
(MAPLE STREET)

N

• DESIGN TRAFFIC DATA •

DESIGN YEAR	2015
2015 ADT	18,000
2035 ADT	25,500
2035 DHV	2805
DIRECTIONAL DISTRIBUTION	60%
TRUCKS	3%
DESIGN SPEED	40 MPH

PROJECT COORDINATES:

	BEGIN	MID-POINT	END
LAT.	N36° 04' 11"	N36° 04' 13"	N36° 04' 13"
LON.	W94° 10' 48"	W94° 10' 42"	W94° 10' 33"

GROSS LENGTH OF PROJECT 1516.54 FEET OR 0.287 MILES
NET LENGTH OF ROADWAY 1516.54 FEET OR 0.287 MILES
NET LENGTH OF BRIDGES 0.00 FEET OR 0.000 MILES
NET LENGTH OF PROJECT 1516.54 FEET OR 0.287 MILES

P.E. JOB 040418

APPROVED

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7836
M.E. BANKS

DEPUTY DIRECTOR
AND CHIEF ENGINEER

040582

r040582.dgn 1/12/2015

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.		040582	2	107

(2) INDEX OF SHEETS, GOV. SPECS., & GEN. NOTES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

INDEX OF SHEETS

SHEET NO.	TITLE	DRWG.NO.	DATE
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2	INDEX OF SHEETS, GOVERNING SPECIFICATIONS, AND GENERAL NOTES		
3 - 4	TYPICAL SECTIONS OF IMPROVEMENT		
5 - 11	SPECIAL DETAILS		
12 - 15	TEMPORARY EROSION CONTROL DETAILS		
16 - 21	MAINTENANCE OF TRAFFIC DETAILS		
22	PERMANENT PAVEMENT MARKING DETAIL		
23 - 26	QUANTITIES		
27	SUMMARY OF QUANTITIES AND REVISIONS		
28 - 30	SURVEY CONTROL DETAILS		
31 - 36	PLAN AND PROFILE SHEETS		
37	SUMMARY OF TRAFFIC SIGNAL QUANTITIES		
38	TRAFFIC SIGNAL NOTES		
39	TRAFFIC SIGNAL QUANTITIES (RAZORBACK RD./ MAPLE STREET)		
40 - 43	SIGNALIZATION PLAN SHEET		
44	TRAFFIC SIGNAL QUANTITIES (MAPLE ST./ STADIUM DRIVE)		
45 - 48	SIGNALIZATION PLAN SHEET		
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50	DETAILS OF DRIVEWAYS & ISLANDS	DR-1	2-27-14
51	FLARED END SECTION	FES-1	10-18-96
52	FLARED END SECTION	FES-2	10-18-96
53	DETAILS OF DROP INLETS & JUNCTION BOXES	FPC-9	11-16-01
54	DETAILS OF DROP INLETS (TYPE C)	FPC-9E	8-22-02
55	DETAILS OF DROP INLET (TYPE MO)	FPC-9M	8-22-02
56	DETAILS OF DROP INLET & JUNCTION BOX (TYPE ST)	FPC-9S	7-26-12
57	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING	PCC-1	2-27-14
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63	HEAVY DUTY PULL BOX	SD-6	9-12-13
64	SIGNAL HEAD PLACEMENT	SD-8	9-12-13
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75	WHEELCHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS	WR-1	11-10-05
76 - 107	CROSS SECTIONS		

NOTE: CROSS SECTIONS NOT NORMALLY INCLUDED IN PLANS SOLD TO PROSPECTIVE BIDDERS, BUT MAY BE HAD UPON REQUEST.

GENERAL NOTES

1. GRADE LINE DENOTES FINISHED GRADE WHERE SHOWN ON PLANS.
2. ALL PIPE LINES, POWER, TELEPHONE, AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
3. 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.
4. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
5. 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.
6. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
7. THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE OF THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

GOVERNING SPECIFICATIONS

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

NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
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
108-1	LIQUIDATED DAMAGES
410-1	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
606-1	PIPE CULVERTS FOR SIDE DRAINS
620-1	MULCH COVER
JOB 040582__	ARCHEOLOGICAL MONITORING
JOB 040582__	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 040582__	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 040582__	CABINET DRAWER ASSEMBLY
JOB 040582__	COMPACTED EMBANKMENT
JOB 040582__	DISADVANTAGED BUSINESS ENTERPRISES BIDDER'S RESPONSIBILITIES
JOB 040582__	EDGE CARD VIDEO PROCESSOR
JOB 040582__	ELECTRICAL CONDUCTORS FOR LUMINAIRES
JOB 040582__	ELECTRICAL CONDUCTORS-IN-CONDUIT
JOB 040582__	FIBER OPTIC BLANK OUT SIGN
JOB 040582__	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 040582__	LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
JOB 040582__	LED TRAFFIC SIGNAL HEAD
JOB 040582__	LUMINAIRE ASSEMBLY (CUTOFF TYPE)
JOB 040582__	MAINTENANCE OF TRAFFIC
JOB 040582__	MANDATORY USE OF INTERNET BIDDING
JOB 040582__	MODIFYING UTILITY TUNNEL ACCESS
JOB 040582__	PARTNERING REQUIREMENTS
JOB 040582__	PIPE CULVERTS
JOB 040582__	PROSECUTION AND PROGRESS
JOB 040582__	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT
JOB 040582__	SELECT GRANULAR FILL
JOB 040582__	SERVICE POINT ASSEMBLY (TRAFFIC CONTROL DEVICES)
JOB 040582__	SHORING
JOB 040582__	SHORING FOR CULVERTS
JOB 040582__	SITE USE (A+C METHOD)
JOB 040582__	STORM WATER POLLUTION PREVENTION PLAN
JOB 040582__	STREET NAME SIGN (MAST ARM MOUNTED)
JOB 040582__	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 040582__	SYSTEM LOCAL CONTROLLER
JOB 040582__	TRAFFIC SIGNAL CONTROLLER (MODIFICATION)
JOB 040582__	UTILITY ADJUSTMENTS
JOB 040582__	VALUE ENGINEERING
JOB 040582__	VIDEO DETECTOR (COLOR)
JOB 040582__	WARM MIX ASPHALT

8/11/2014

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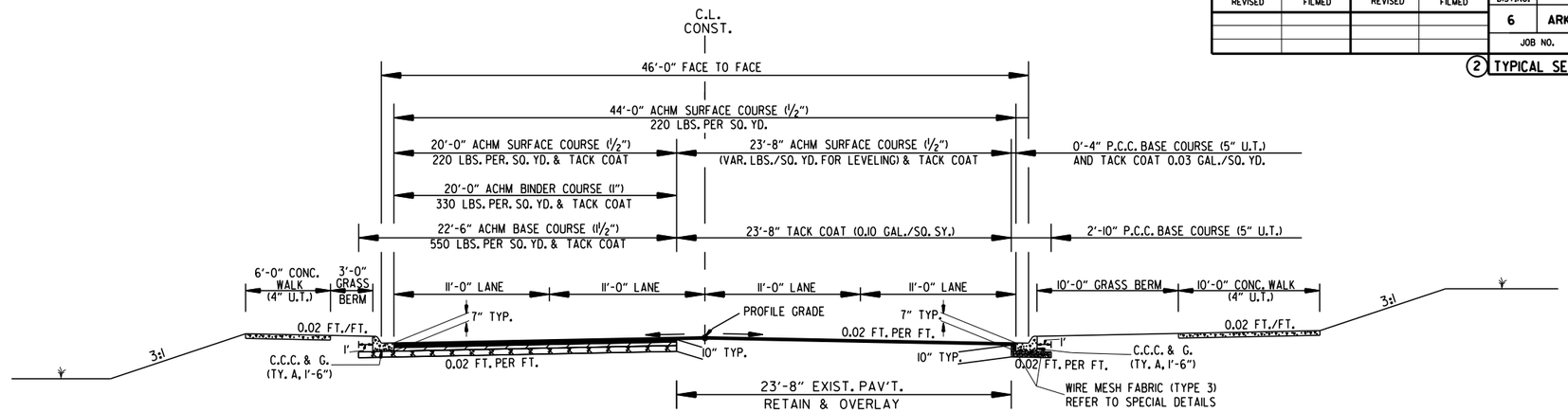
				6	ARK.			
				JOB NO.		040582	3	107

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH



TYPICAL SECTION OF IMPROVEMENT

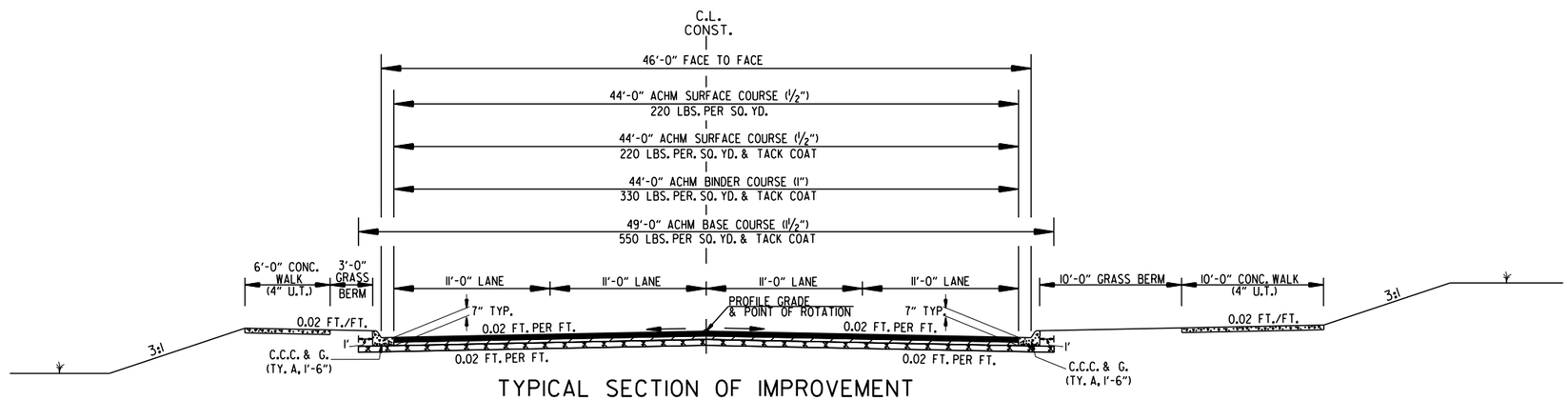
STA. 150+00 - STA. 151+94.95

NOTES:
PRIOR TO AND DURING PLACEMENT OF PAVEMENT IN FRONT OF THE CURB AND GUTTER, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AT ALL TIMES. THE METHOD(S) USED SHALL BE APPROVED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

REFER TO CROSS SECTIONS FOR DEVIATIONS FROM NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.

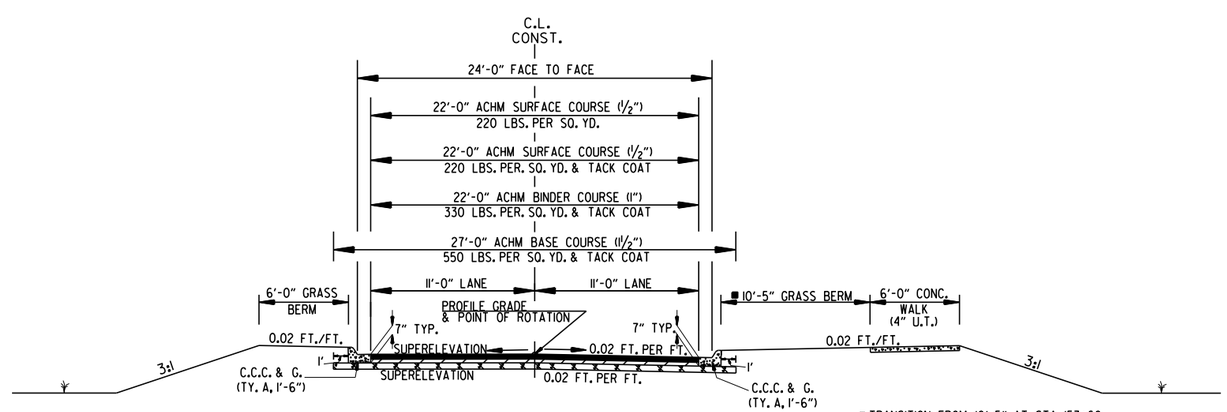
THE FINAL 2 INCHES OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT THE LANE LINES.

ASPHALT FOR LEVELING OF EXISTING PAVEMENT SHALL BE PLACED IF AND WHERE DIRECTED BY THE ENGINEER. CALCULATIONS FOR THE AMOUNT OF LEVELING AND/OR LEVELING OPERATIONS SHALL BE PERFORMED BEFORE CONSTRUCTING NOTCH AND WIDENING. CALCULATIONS WILL NOT BE PAID FOR DIRECTLY, BUT PAYMENT WILL BE CONSIDERED INCLUDED IN THE VARIOUS PAY ITEMS.



TYPICAL SECTION OF IMPROVEMENT

STA. 151+94.95 - STA. 152+53.25



TYPICAL SECTION OF IMPROVEMENT

STA. 152+87.12 - STA. 153+20

■ TRANSITION FROM 10'-5" AT STA. 153+60 TO 5'-8" AT STA. 154+60

TYPICAL SECTIONS OF IMPROVEMENT

4/28/2014

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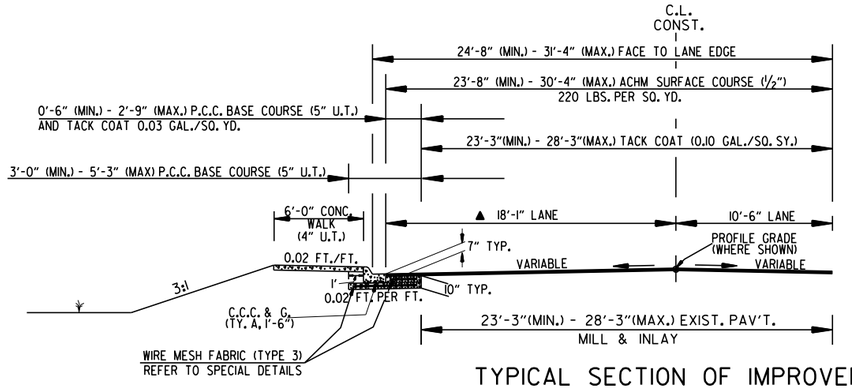
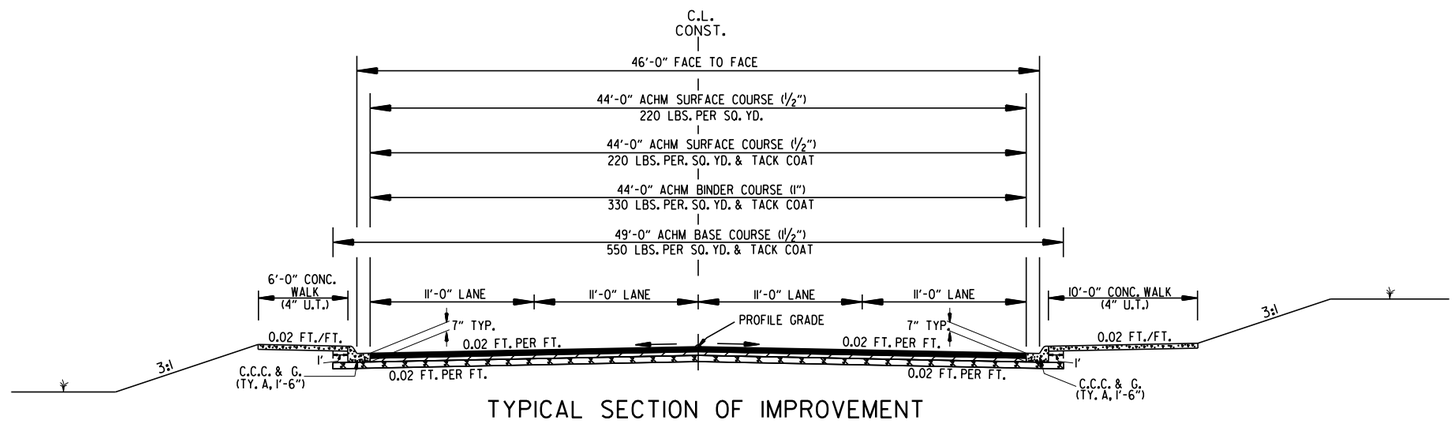
(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

▲ TRANSITION FROM 19'-5" LANE AT STATION 203+24.61 TO 13'-2" LANE AT STATION 201+08.81



TYPICAL SECTION OF IMPROVEMENT
STA. 201+08.81 - STA. 202+75



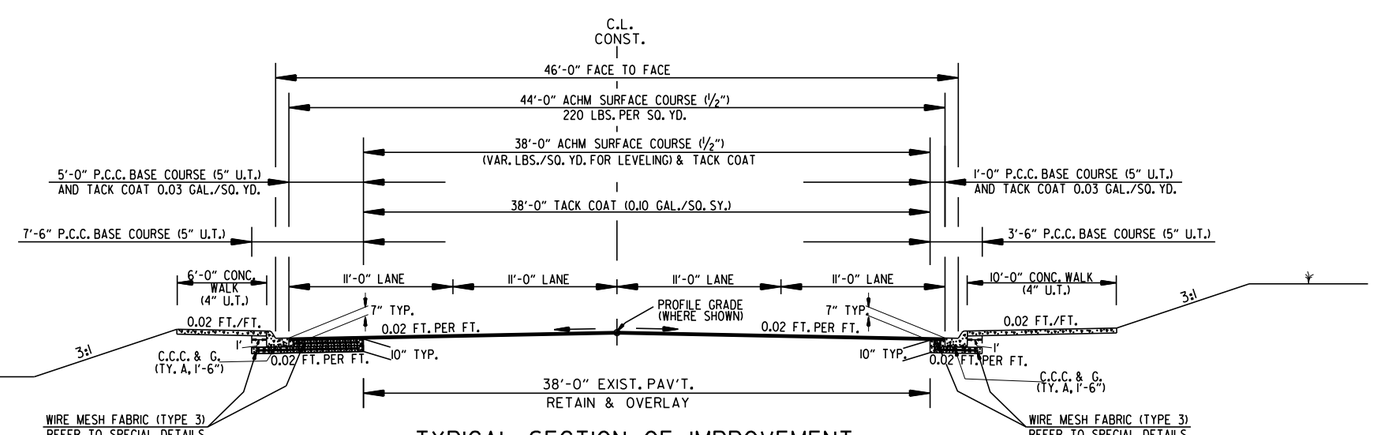
TYPICAL SECTION OF IMPROVEMENT
STA. 204+91.44 - STA. 206+49.92

NOTES:
PRIOR TO AND DURING PLACEMENT OF PAVEMENT IN FRONT OF THE CURB AND GUTTER, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AT ALL TIMES. THE METHOD(S) USED SHALL BE APPROVED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

REFER TO CROSS SECTIONS FOR DEVIATIONS FROM NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.

THE FINAL 2 INCHES OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT THE LANE LINES.

ASPHALT FOR LEVELING OF EXISTING PAVEMENT SHALL BE PLACED IF AND WHERE DIRECTED BY THE ENGINEER. CALCULATIONS FOR THE AMOUNT OF LEVELING AND/OR LEVELING OPERATIONS SHALL BE PERFORMED BEFORE CONSTRUCTING NOTCH AND WIDENING. CALCULATIONS WILL NOT BE PAID FOR DIRECTLY, BUT PAYMENT WILL BE CONSIDERED INCLUDED IN THE VARIOUS PAY ITEMS.



TYPICAL SECTION OF IMPROVEMENT
STA. 206+49.92 - STA. 216+17.42

TYPICAL SECTIONS OF IMPROVEMENT

8/11/2014

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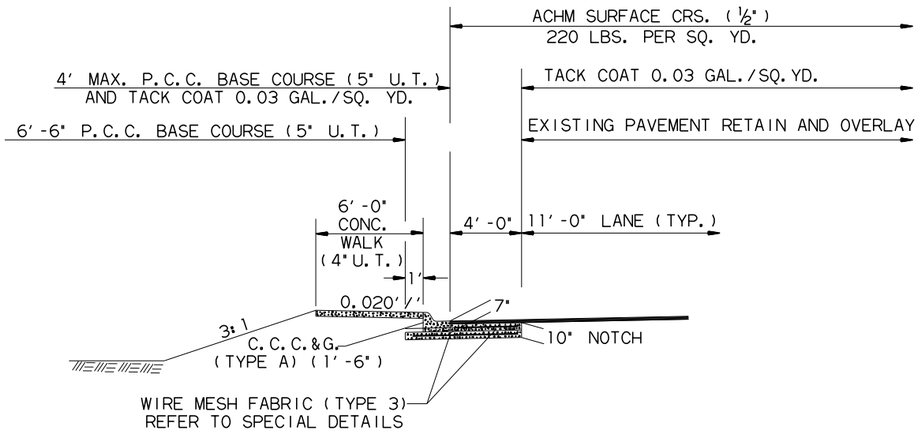
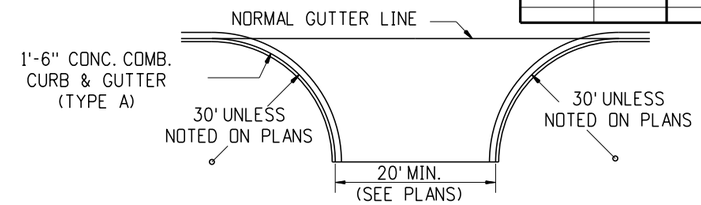
(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

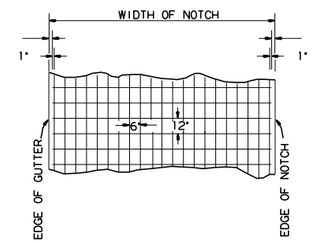


P.C.C. BASE WIDENING DETAIL



DETAIL OF TURNOUTS ASPHALT STREETS

NOTE: THE TYPICAL SECTION FOR THE CITY STREET CONNECTIONS IN THE CURB & GUTTER SECTION SHALL MATCH THE PROPOSED WIDENING SECTION SHOWN FOR THE MAIN LANES. UNLESS OTHERWISE NOTED ON THE PLANS, ALL CITY STREET RADII WILL BE 30'.



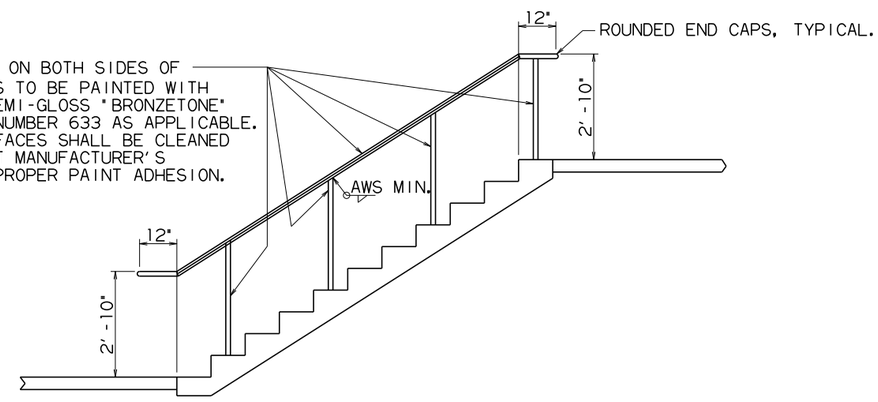
DETAIL OF REINFORCING STEEL FOR P.C.C. BASE PAVEMENT (WIRE MESH TYPE 3)

6" X 12" MESH FABRIC (TYPE 3) (W5.5 x W2.9) = 4.26 LBS./SQ.YD.

NOTES:

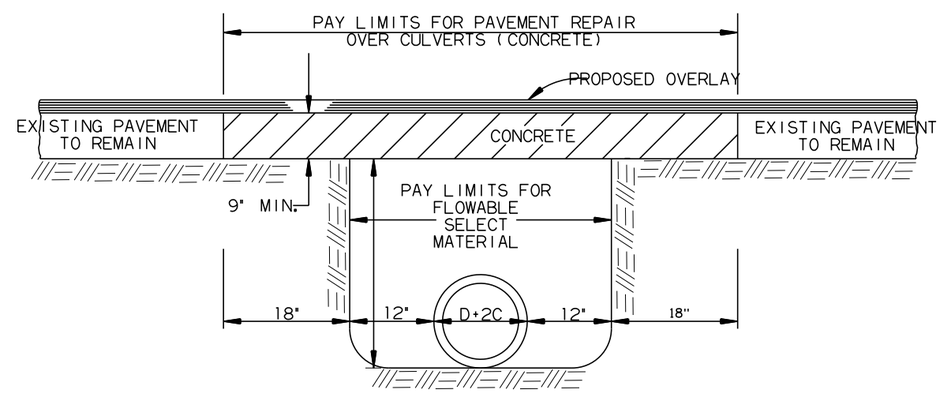
1. LAP MESH FABRIC MIN. 12" LONGITUDINALLY AND MIN. 6' TRANSVERSELY.
2. MESH FABRIC IS NOT REQUIRED WHEN THE WIDTH OF PORTLAND CEMENT CONCRETE BASE IS LESS THAN 12".
3. MESH FABRIC (TYPE 3) WILL NOT BE PAID FOR DIRECTLY, BUT FULL COMPENSATION THEREFORE WILL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE BID PER SQ. YD. FOR PORTLAND CEMENT CONCRETE BASE (5" U.T.).

1½" O.D. STEEL PIPE PLACED ON BOTH SIDES OF STEPS. ALL STEEL COMPONENTS TO BE PAINTED WITH BENJAMIN MOORE DTM ALKYD SEMI-GLOSS "BRONZETONE" SHALL BE INCLUDED IN ITEM NUMBER 633 AS APPLICABLE. ALL EXPOSED GALVANIZED SURFACES SHALL BE CLEANED PRIOR TO PAINTING PER PAINT MANUFACTURER'S RECOMMENDATIONS TO ENSURE PROPER PAINT ADHESION.



DETAILS OF CONCRETE STAIRS STA. 210+01.69 - STA. 210+06.73 HWY. 112 (MAPLE STREET) ON RIGHT

NOTES: SEE STANDARD DRAWING SI-1 FOR ADDITIONAL DETAILS OF STEP DIMENSIONS AND HAND RAIL CONNECTIONS TO STEPS. ALL PAYMENT FOR MISCELLANEOUS ITEMS OF HAND RAIL FABRICATION AND INSTALLATION (END CAPS, WELDING, PAINTING, ANCHOR BOLTS, ETC.) SHALL BE SUBSIDIARY TO THE ITEM "HAND RAILING".



PAVEMENT REPAIR OVER CULVERTS (CONCRETE)

8/11/2014

R040582.DGN

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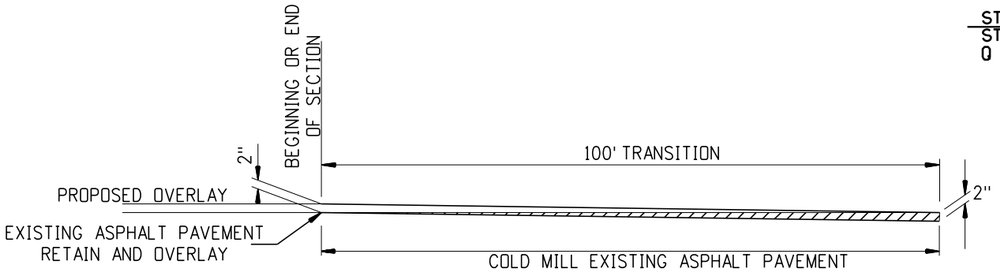
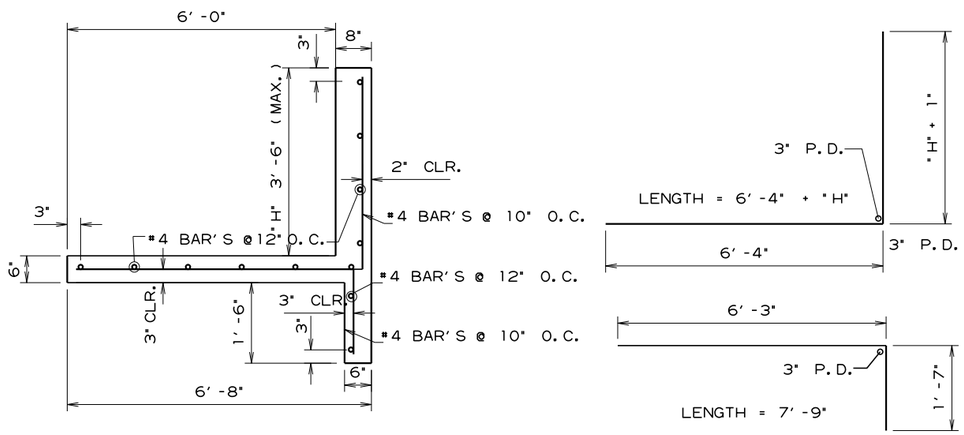
(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

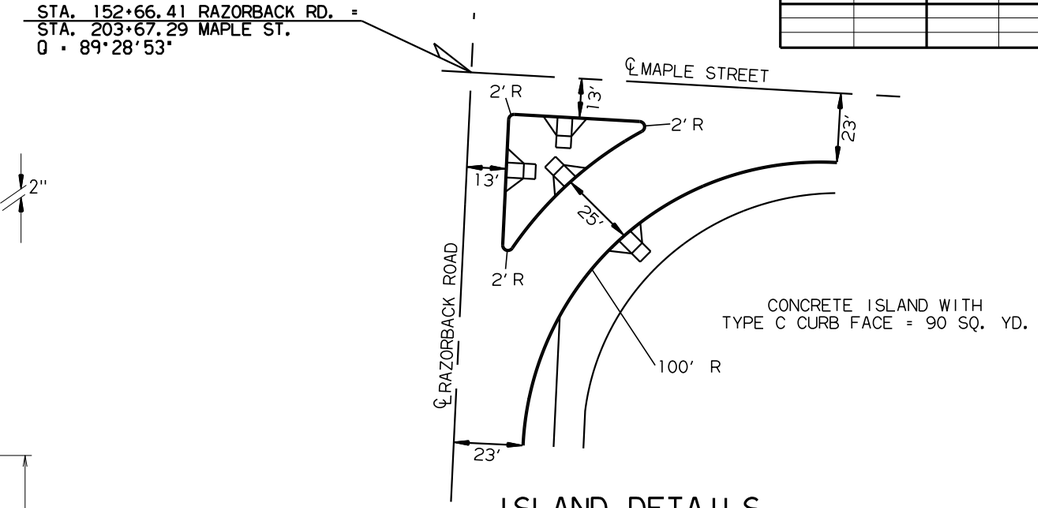


COLD MILLING DETAIL AT EXISTING PAVEMENT TIE-INS

NOTE: 50' PER 1" OF OVERLAY FOR MAIN LANES

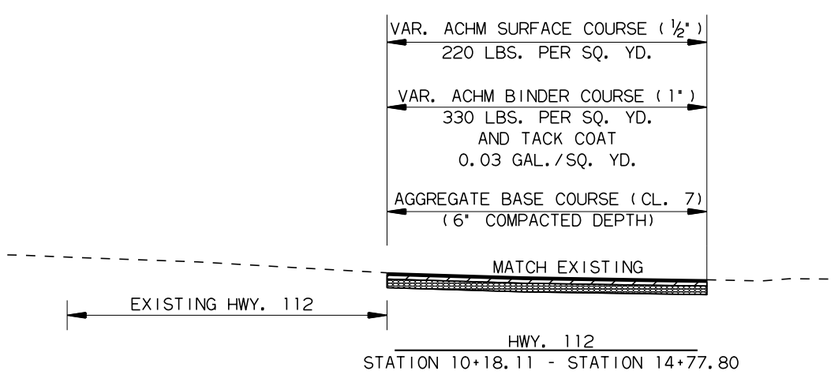


CONCRETE WALK (TYPE SPECIAL) DETAILS MAX HEIGHT 3' -6"

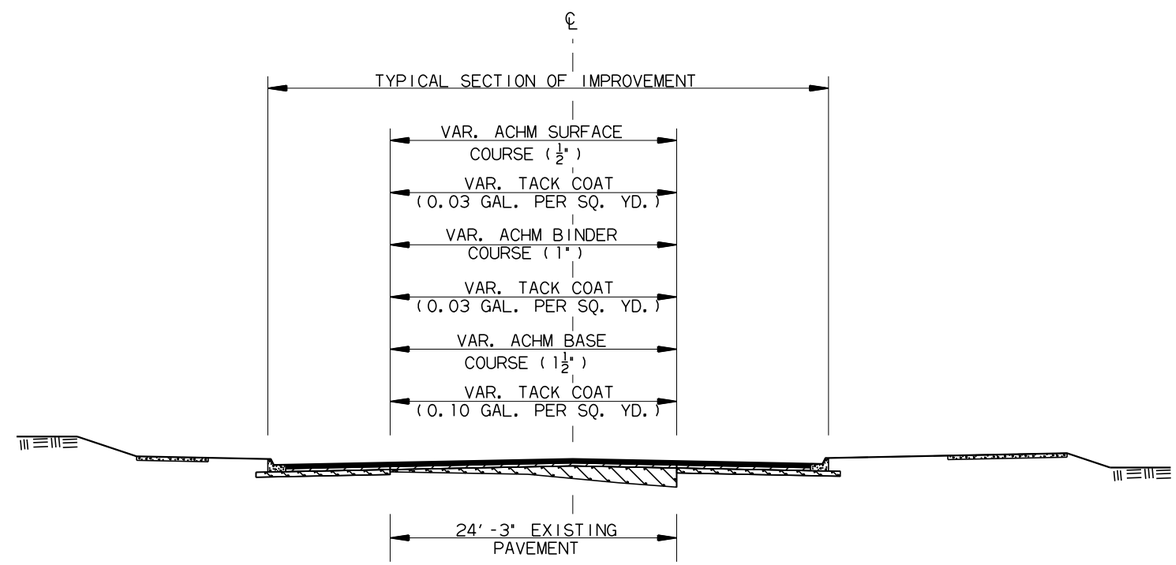


ISLAND DETAILS

TYPE C CURB FACE



TEMPORARY WIDEN DETAILS



METHOD OF RAISING GRADE

NOTES:

(1) THIS DETAIL TO BE USED ONLY WHERE DIRECTED BY THE ENGINEER.

(2) QUANTITIES FOR METHOD OF GRADE RAISE USING ASPHALT WERE CALCULATED ON THIS PROJECT AT LOCATIONS WHERE THE DISTANCE BETWEEN THE EXISTING ASPHALT ROADWAY AND THE PROPOSED SUBGRADE WAS ONE FOOT OR LESS.

(3) IN LOCATIONS WHERE THE DISTANCE BETWEEN THE PROPOSED SUBGRADE AND THE EXISTING ASPHALT ROADWAY IS MORE THAN ONE FOOT, SCARIFICATION OF THE EXISTING ASPHALT ROADWAY WILL BE REQUIRED AS STATED IN SECTION 210, SUBSECTION 210.09 OF THE STANDARD SPECIFICATIONS, EDITION OF 2014.

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11425 TRINITY D. SMITH

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1	STAGE 2	STAGE 3	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		VERTICAL PANELS	TRAFFIC DRUMS	BARRICADES (TYPE III)	
											RIGHT	LEFT
			LIN. FT. - EACH				NO.	SQ. FT.	EACH		LIN. FT.	
W20-1	ROAD WORK 1500 FT.	48"x48"	2	2	2	2	2	32.0				
W20-1	ROAD WORK 1000 FT.	48"x48"	2	2	2	2	2	32.0				
W20-1	ROAD WORK 500 FT.	48"x48"	2	2	2	2	2	32.0				
W20-1	ROAD WORK AHEAD	48"x48"	5	5	5	5	5	80.0				
G20-2	END ROAD WORK	48"x24"	7	7	7	7	7	56.0				
R11-2	ROAD CLOSED	48"x30"		4	3	4	4	40.0				
W1-6	LARGE ARROW	48"x24"		2	3	3	3	24.0				
R4-1	DO NOT PASS	24"x30"	4	4	4	4	4	20.0				
W20-3	ROAD CLOSED AHEAD	48"x48"		2		2	2	32.0				
	VERTICAL PANELS		15	16	31	31			31			
	TRAFFIC DRUMS		6	68	129	129				129		
	TYPE III BARRICADE-RT. (8')			2	2	2					16	
	TYPE III BARRICADE-LT. (8')			6	4	6						48
TOTALS:								**348.0**	**31**	**129**	**16**	**48**

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

SOIL LOG

STATION	LOCATION	DEPTH FEET	LIQUID LIMIT	PLASTICITY INDEX	AASHTO CLASSIFICATION	COLOR
152+00	28'RT	0-5'	34	22	A-6(11)	BROWN
152+00	8'RT	0-5'	30	18	A-6(5)	BROWN
201+00	10'RT	0-3.7Z'	34	21	A-6(9)	BROWN
209+00	8'LT	0-5'	38	23	A-6(22)	BROWN

SOIL CHARACTERISTICS TABULATED ABOVE ARE REPRESENTATIVE AT THE LOCATION OF THE SAMPLE, AND FROM SURFACE INDICATIONS ARE TYPICAL FOR THE LIMITS SHOWN. THESE DATA ARE SHOWN FOR INFORMATION ONLY. THE STATE WILL NOT BE RESPONSIBLE FOR VARIATIONS IN THE SOIL CHARACTERISTICS AND/OR EXTENT OF SAME DIFFERING FROM THE ABOVE TABULATIONS.
Z- AUGER REFUSAL

EROSION CONTROL

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL		TEMPORARY EROSION CONTROL										
			WATER	SOLID SODDING	TEMPORARY SEEDING	MULCH COVER	WATER	WATTLE (20") (E-1)	SAND BAG DITCH CHECKS (E-5)	ROCK DITCH CHECKS (E-6)	DROP INLET SILT FENCE (E-7)	SILT FENCE (E-11)	*SEDIMENT BASIN (E-14)	*OBLITERATION OF SEDIMENT BASIN	*SEDIMENT REMOVAL & DISPOSAL
			M.GAL.	SQ.YD.	ACRE	ACRE	M.GAL.	LIN. FT.	BAG	CU.YD.	LIN. FT.	LIN. FT.	CU.YD.	CU.YD.	CU. YD.
ENTIRE	PROJECT	STAGE 1										442			16
ENTIRE	PROJECT	STAGE 2	23.2	1845	1.68	1.68	34.3		22	9	650	943			59
ENTIRE	PROJECT	STAGE 3	40.8	3235	1.52	1.52	31.0			3	225	1206			53
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.					3.20	3.20	65.3	45	110	15	200	100	32	32	58
TOTALS:			**64.0**	**5080**	**6.40**	**6.40**	**130.6**	**45**	**132**	**27**	**1075**	**2691**	**32**	**32**	**186**

BASIS OF ESTIMATE:
WATER.....20.4 M.G. / ACRE OF TEMPORARY SEEDING.
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING.
WATTLE DITCH CHECKS.....9 LIN. FT. / LOCATION
SAND BAG DITCH CHECKS.....22 BAGS / LOCATION
ROCK DITCH CHECKS.....3 CU.YD./LOCATION

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

*QUANTITIES ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	END OF JOB	REMOVAL OF PERMANENT PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS	REMOVAL OF PERMANENT PAVEMENT MARKINGS		CONSTRUCTION PAVEMENT MARKINGS		REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS		RAISED PAVEMENT MARKERS		THERMOPLASTIC PAVEMENT MARKING						REFLECTORIZED PAINT PAVEMENT MARKING
														TYPE II (WHITE/RED)	TYPE II (YEL/YEL)	4" WHITE	4" YELLOW	8" WHITE	12" WHITE	WORDS	ARROWS	10" WHITE
							WORDS	ARROWS	WORDS	ARROWS		WORDS	ARROWS									
	LIN. FT. - EACH				LIN. FT.		EACH		EACH		LIN. FT.	EACH		EACH		LIN. FT.				EACH		LIN. FT.
REMOVAL OF PERMANENT PAVEMENT MARKINGS	267			198	465																	
REMOVAL OF PERMANENT PAVEMENT MARKINGS (WORDS)				2			2															
REMOVAL OF PERMANENT PAVEMENT MARKINGS (ARROWS)				2				2														
CONSTRUCTION PAVEMENT MARKINGS	4815	3377	7776			15968																
CONSTRUCTION PAVEMENT MARKINGS (WORDS)	6		2						8													
CONSTRUCTION PAVEMENT MARKINGS (ARROWS)	4		3							7												
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS		1854	2788								4642											
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS (WORDS)			2									2										
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS (ARROWS)			3										3									
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)				40										40								
RAISED PAVEMENT MARKERS TYPE II (YEL/YEL)				18											18							
THERMOPLASTIC PAVEMENT MARKING WHITE (4")				2249												2249						
THERMOPLASTIC PAVEMENT MARKING YELLOW (4")				4243													4243					
THERMOPLASTIC PAVEMENT MARKING WHITE (8")				202														202				
THERMOPLASTIC PAVEMENT MARKING WHITE (12")				1139															1139			
THERMOPLASTIC PAVEMENT MARKING WORDS				13																13		
THERMOPLASTIC PAVEMENT MARKING ARROWS				13																	13	
REFLECTORIZED PAINT PAVEMENT MARKING WHITE (10")				157																		157
TOTALS:					**465**	**15968**	**2**	**2**	**8**	**7**	**4642**	**2**	**3**	**40**	**18**	**2249**	**4243**	**202**	**1139**	**13**	**13**	**157**

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

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.		040582	24	107

(2) QUANTITIES

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11425 TRINITY D. SMITH

REMOVAL AND DISPOSAL OF ITEMS

STATION	STATION	LOCATION	CURB AND GUTTER	RETAINING WALLS	STEPS	WALKS	CONCRETE DITCH PAVING	HANDRAIL
			LIN. FT.	LIN. FT.	SQ. YD.	SQ. YD.	SQ. YD.	LIN. FT.
149+96	150+77	HWY. 112 (RAZORBACK ROAD) ON LEFT				78		
149+96	150+17	HWY. 112 (RAZORBACK ROAD) ON LEFT	55					
149+98	150+36	HWY. 112 (RAZORBACK ROAD) ON LEFT		48				
150+00	152+39	HWY. 112 (RAZORBACK ROAD) ON RIGHT	267					
150+12	150+30	HWY. 112 (RAZORBACK ROAD) ON RIGHT - PARKING LOT	60					
150+71	150+89	HWY. 112 (RAZORBACK ROAD) ON RIGHT - PARKING LOT	62					
151+00	151+18	HWY. 112 (RAZORBACK ROAD) ON RIGHT - PARKING LOT	61					
151+58	151+76	HWY. 112 (RAZORBACK ROAD) ON RIGHT - PARKING LOT	62					
151+86	151+98	HWY. 112 (RAZORBACK ROAD) ON RIGHT - PARKING LOT	75					
152+79	154+60	RAZORBACK ROAD ON RIGHT	193					
152+80	154+60	RAZORBACK ROAD ON RIGHT				121		
152+84	153+11	RAZORBACK ROAD ON LEFT				22		
152+84	154+60	RAZORBACK ROAD ON LEFT	193					
201+08.81	203+24	MAPLE STREET ON LEFT				128		
201+08.81	203+24	MAPLE STREET ON LEFT	215					
203+45	203+54	MAPLE STREET ON RIGHT					3	
204+77	210+31	HWY. 112 (MAPLE STREET) ON RIGHT	535					
204+80	206+73	HWY. 112 (MAPLE STREET) ON LEFT	193					
206+81	206+86	HWY. 112 (MAPLE STREET) ON LEFT				13		
206+91	210+37	HWY. 112 (MAPLE STREET) ON LEFT	385					
208+94	210+42	HWY. 112 (MAPLE STREET) ON RIGHT		242				
209+19	210+43	HWY. 112 (MAPLE STREET) ON RIGHT				109		
209+47	209+56	HWY. 112 (MAPLE STREET) ON LEFT			6			
209+47	209+56	HWY. 112 (MAPLE STREET) ON LEFT						18
209+76	209+87	HWY. 112 (MAPLE STREET) ON LEFT			8			
209+76	209+87	HWY. 112 (MAPLE STREET) ON LEFT						24
210+06	210+15	HWY. 112 (MAPLE STREET) ON LEFT			7			
210+06	210+15	HWY. 112 (MAPLE STREET) ON LEFT						20
210+10	210+22	HWY. 112 (MAPLE STREET) ON LEFT			12			
210+10	210+22	HWY. 112 (MAPLE STREET) ON LEFT						36
210+27	210+38	HWY. 112 (MAPLE STREET) ON LEFT			6			
210+27	210+38	HWY. 112 (MAPLE STREET) ON LEFT						18
210+53	210+59	HWY. 112 (MAPLE STREET) ON LEFT	57					
210+72	212+49	HWY. 112 (MAPLE STREET) ON RIGHT				130		
210+73	212+49	HWY. 112 (MAPLE STREET) ON RIGHT	190					
210+75	214+60	HWY. 112 (MAPLE STREET) ON LEFT				391		
210+75	214+64	HWY. 112 (MAPLE STREET) ON LEFT	427					
214+15	216+17	HWY. 112 (MAPLE STREET) ON RIGHT	212					
214+17	216+08	HWY. 112 (MAPLE STREET) ON RIGHT				214		
214+84	216+08	HWY. 112 (MAPLE STREET) ON LEFT	149					
214+88	215+89	HWY. 112 (MAPLE STREET) ON LEFT				67		
		STADIUM DRIVE ON RIGHT				130		
		STADIUM DRIVE ON RIGHT	206					
		STADIUM DRIVE ON LEFT	188					
TOTALS:			3785	290	39	1403	3	116

EARTHWORK

STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT
			CU. YD.	
ENTIRE	PROJECT	STAGE 1-TEMPORARY WIDENING	191	
ENTIRE	PROJECT	STAGE 2-MAIN LANES	1134	1319
ENTIRE	PROJECT	STAGE 3-MAIN LANES	290	3003
ENTIRE	PROJECT	APPROACHES	35	30
150+00.28	152+45.55	RETAINING WALLS		415
210+58.59		STADIUM DRIVE ON LEFT	101	1
210+58.59		STADIUM DRIVE ON RIGHT	130	336
212+51.00	213+80.00	REMOVAL OF ASPHALT PAVEMENT ON RT.	90	
* ENTIRE	PROJECT	UNDERCUT TO BE USED IF AND WHERE	500	500
		DIRECTED BY THE ENGINEER		
TOTALS:			2471	5604

* QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

NOTE: EARTHWORK QUANTITIES SHOWN ABOVE SHALL BE PAID AS PLAN QUANTITY.

SELECTED PIPE BEDDING

LOCATION	SELECTED PIPE BEDDING
	CU.YD.
ENTIRE PROJECT TO BE USED IF	
AND WHERE DIRECTED BY THE	200
ENGINEER	
TOTAL:	200

NOTE: QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

CONCRETE WALKS

STATION	STATION	LOCATION	LENGTH	CONCRETE WALKS
			LIN. FT.	SQ.YD.
150+00	152+44.51	HWY. 112 (RAZORBACK ROAD) ON LEFT	248	167
150+00	152+41.78	HWY. 112 (RAZORBACK ROAD) ON RIGHT	298	359
152+87.54	153+22.04	RAZORBACK ROAD ON LEFT	64	44
152+89.53	154+60	RAZORBACK ROAD ON RIGHT	187	121
201+08.81	202+04	MAPLE STREET ON LEFT	95	61
203+12.02	203+24	MAPLE STREET ON RIGHT	13	19
204+08.81	210+32.95	HWY. 112 (MAPLE STREET) ON LEFT	624	413
204+91.40	210+14.40	HWY. 112 (MAPLE STREET) ON RIGHT	523	523
210+01.69	210+17.48	HWY. 112 (MAPLE STREET) ON RIGHT	16	21
210+73.60	210+79.60	HWY. 112 (MAPLE STREET) ON RIGHT		109
210+73.60	216+17.42	HWY. 112 (MAPLE STREET) ON RIGHT	544	940
210+75.48	216+08.14	HWY. 112 (MAPLE STREET) ON LEFT	533	358
TOTAL:				3135

ACHM PATCHING OF EXISTING ROADWAY

DESCRIPTION	TON
ENTIRE PROJECT - TO BE USED IF AND WHERE	25
DIRECTED BY THE ENGINEER	
TOTAL:	25

NOTE: QUANTITY ESTIMATED
SEE SECTION 104.03 OF THE STD. SPECS.

PAVEMENT REPAIR OVER CULVERTS (CONCRETE)

STATION	LOCATION	WIDTH	LENGTH	CU.YD.
		FEET		
212+51	HWY. 112 (MAPLE STREET)	7.92	38.65	8.5
TOTAL:				8.5

AVG. DEPTH = 9"

FLOWABLE SELECT MATERIAL

STATION	LOCATION	CU. YD.
212+51	HWY. 112 (MAPLE STREET)	55
TOTAL:		55

WHEELCHAIR RAMPS

STATION	LOCATION	TYPE 1	TYPE 3	TYPE 4
		SQ.YD.		
152+10.17	HWY. 112 (RAZORBACK ROAD) ON RIGHT			9.0
152+34.23	HWY. 112 (RAZORBACK ROAD) ON RIGHT			9.0
152+35.02	HWY. 112 (RAZORBACK ROAD) ON RIGHT			8.5
152+34.23	HWY. 112 (RAZORBACK ROAD) ON LEFT		4.1	
153+08.63	RAZORBACK ROAD ON LEFT			17.9
153+08.93	RAZORBACK ROAD ON RIGHT		4.9	
203+20	MAPLE STREET ON LEFT			10.6
203+20	MAPLE STREET ON RIGHT			16.0
203+99.50	HWY. 112 (MAPLE STREET) ON LEFT		3.8	
203+99.50	HWY. 112 (MAPLE STREET) ON RIGHT			9.4
206+83.51	HWY. 112 (MAPLE STREET) ON LEFT			21.1
206+83.51	HWY. 112 (MAPLE STREET) ON RIGHT			9.4
210+11.52	HWY. 112 (MAPLE STREET) ON RIGHT			7.9
210+28.71	HWY. 112 (MAPLE STREET) ON LEFT			7.2
210+83.27	HWY. 112 (MAPLE STREET) ON LEFT		3.8	
210+91.60	HWY. 112 (MAPLE STREET) ON RIGHT	85.8		
210+94.04	HWY. 112 (MAPLE STREET) ON LEFT		3.9	
TOTALS:		85.8	20.5	126.0

4" PIPE UNDERDRAIN

STATION	STATION	LOCATIONS	4" PIPE UNDERDRAINS
			LIN. FT.
* ENTIRE PROJECT TO BE USED IF AND			400
WHERE DIRECTED BY THE ENGINEER			
TOTAL:			400

* NOTE: QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

UNDERDRAINS SHALL BE STUBBED INTO THE PROPOSED DROP INLET IF AND WHERE DIRECTED BY THE ENGINEER. PAYMENT FOR THIS TO BE INCLUDED IN THE UNIT PRICE BID FOR 4" PIPE UNDERDRAIN.

CONCRETE CURB

STATION	STATION	LOCATION	TYPE D
			LIN. FT.
150+00	151+88.78	RIGHT OF MAIN LANES (PARKING LOT)	215
155+54.55	155+73.85	LEFT OF RAZORBACK ROAD (DRIVEWAY)	57
209+44.02	209+82.01	RIGHT OF MAIN LANES (PARKING LOT)	38
210+27.31		RIGHT OF MAIN LANES (PARKING LOT)	121
212+49.44	213+80.48	RIGHT OF MAIN LANES (PARKING LOT)	137
214+04.48	214+15.39	RIGHT OF MAIN LANES (PARKING LOT)	16
TOTAL:			584

CONCRETE WALKS (TYPE SPECIAL)

STATION	STATION	LOCATION	LENGTH	CONCRETE WALKS (TYPE SPECIAL)
			LIN. FT.	SQ.YD.
202+04	203+09.40	MAPLE STREET ON LEFT	105	78
152+87.54	153+09.62	RAZORBACK ROAD ON LEFT	36	28
TOTAL:				106

8/11/2014

R040582.DGN

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.		040582	25	107

(2) QUANTITIES

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11425 TRINITY D. SMITH

STRUCTURES

STATION	DESCRIPTION	REINFORCED CONCRETE PIPE CULVERT (CLASS III) 18"	24"	36"	(CLASS V) 18"	SIDE DRAIN 12"	PIPE CULVERT STORM DRAIN ALTERNATES 1 & 2 18"	24"	30"	FLARED END SECTIONS FOR R.C. PIPE CULVERTS 24"	36"	DROP INLETS TYPE C	E	MO	ST	EXT. 4'	8'	JUNCT. BOXES (TYPE E)	YARD DRAIN	SOLID SODDING	WATER	STD. DWG. NOS.
		LIN. FT.								EACH		EACH								SQ.YD.	M.GAL	
146+08	CONSTRUCT 4' x 4' TYPE E JUNCTION BOX ON LT.								8									1				FPC-9, PCC-1, PCM-1
150+19	CONSTRUCT 4' x 4' TYPE E DROP INLET ON LT.						8						1									FPC-9, PCC-1, PCM-1
150+19	CONSTRUCT 4' x 7' TYPE C DROP INLET ON LT.								407			1				1						FPC-9E, PCC-1, PCM-1
150+80	CONSTRUCT 4' x 7' TYPE E JUNCTION BOX ON LT.								57									1				FPC-9, PCC-1, PCM-1
151+06.91	CONSTRUCT DROP INLET ON RT.						7							1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
151+06.91	CONSTRUCT 4' x 4' TYPE E JUNCTION BOX ON RT.																	1				FPC-9
151+56.38	CONSTRUCT 4' x 2' TYPE E DROP INLET ON LT.							7					1									FPC-9, PCC-1, PCM-1
151+56.38	CONSTRUCT4' x 7' TYPE C DROP INLET ON LT.								72			1				1						FPC-9E, PCC-1, PCM-1
152+17.66	CONSTRUCT4' x 7' TYPE C DROP INLET ON LT.								57			1										FPC-9E, PCC-1, PCM-1
152+96.64	CONSTRUCT DROP INLET ON LT.		42											1								FPC-9E, FPC-9M, PCC-1
152+96.64	CONSTRUCT 4' x 4' TYPE E JUNCTION BOX ON RT.							112										1				FPC-9, PCC-1, PCM-1
153+19	CONSTRUCT DROP INLET ON LT.						18							1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
153+19	CONSTRUCT DROP INLET ON RT.						19							1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
154+57	CONSTRUCT DROP INLET ON LT.						134							1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
154+57	CONSTRUCT DROP INLET ON RT.						134							1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
201+24	CONSTRUCT DROP INLET ON LT.						72							1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
202+00	CONSTRUCT DROP INLET ON LT.		4					107		1				1		1				8	0.10	FPC-9E, FPC-9M, PCC-1, PCM-1, FES-1, FES-2
202+98	CONSTRUCT DROP INLET ON RT.								26					1			1					FPC-9E, FPC-9M, PCC-1, PCM-1
203+11	CONSTRUCT DROP INLET ON LT.							31						1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
203+29.51	CONSTRUCT 5' x 5' TYPE E JUNCTION BOX ON RT.								20									1				FPC-9, PCC-1, PCM-1
205+07	CONSTRUCT DROP INLET ON LT.							96						1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
205+07	CONSTRUCT DROP INLET ON RT.						96							1								FPC-9E, FPC-9M, PCC-1, PCM-1
206+07	CONSTRUCT DROP INLET ON RT.						11							1								FPC-9E, FPC-9M, PCC-1, PCM-1
206+12	CONSTRUCT 14' x 5' TYPE C DROP INLET ON LT.			4							2	1								18	0.23	FPC-9E, PCC-1, FES-1, FES-2
207+07	CONSTRUCT DROP INLET ON LT.						86							1			1					FPC-9E, FPC-9M, PCC-1, PCM-1
207+50	CONSTRUCT DROP INLET ON RT.						126							1								FPC-9E, FPC-9M, PCC-1, PCM-1
208+00	CONSTRUCT 4' x 4' TYPE E JUNCTION BOX ON RT.						47											1				FPC-9, PCC-1, PCM-1
210+00	CONSTRUCT DROP INLET ON LT.						289							1			1					FPC-9E, FPC-9M, PCC-1, PCM-1
211+23	CONSTRUCT DROP INLET ON LT.						118							1			1					FPC-9E, FPC-9M, PCC-1, PCM-1
211+23	CONSTRUCT 5' x 5' TYPE E JUNCTION BOX ON LT.						8											1				FPC-9, PCC-1, PCM-1
211+50	CONSTRUCT DROP INLET ON RT.						13							1			1					FPC-9E, FPC-9M, PCC-1, PCM-1
211+50	CONSTRUCT 4' x 4' TYPE E JUNCTION BOX ON RT. (PIPE JACKING)				347													1				FPC-9, PCC-1
212+51	CONSTRUCT 4' x 4' TYPE ST DROP INLET ON LT.	41													1							FPC-9S, PCC-1
212+51	CONSTRUCT DROP INLET ON RT.						97							1								FPC-9E, FPC-9M, PCC-1, PCM-1
213+17	CONSTRUCT 4' x 4' TYPE ST DROP INLET ON LT.	62													1							FPC-9S, PCC-1
	ENTIRE PROJECT IF AND WHERE DIRECTED BY THE ENGINEER					600													6			FPC-9, PCC-1, PCM-1
TOTALS:		**103**	**46**	**4**	**347**	**600**	**1283**	**353**	**647**	**1**	**2**	**4**	**2**	**19**	**2**	**11**	**5**	**8**	**6**	**26**	**0.33**	

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

NOTE: FOR R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.

NOTE: FOR C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

DRIVEWAYS & TURNOUTS

STATION	SIDE	LOCATION	WIDTH	**MODIFIED CURB STATION	STATION	PORTLAND CEMENT CONCRETE DRIVEWAY	ACHM SURFACE COURSE (1/2") 220 LBS. PER SQ. YD. (PG 64-22)		AGGREGATE BASE COURSE (CLASS 7)
			FEET	STATION	STATION	SQ. YD.	SQ. YD.	TON	TON
149+88.59	LT.	HWY. 112 (RAZORBACK ROAD)	18				173.50	19.09	70.85
207+20	RT.	HWY. 112 (MAPLE STREET)	24	206+94	207+46	57.80	89.00	9.79	36.34
213+92	RT.	HWY. 112 (MAPLE STREET)	24	213+66	214+18	57.80	84.00	9.24	34.30
214+74	LT.	HWY. 112 (MAPLE STREET)	18	214+51	214+97	30.70	51.00	5.61	20.83
* ENTIRE PROJECT TEMPORARY DRIVES									40.00
TOTALS:						**146.30**	**397.50**	**43.73**	**202.32**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....95.0% MIN. AGGR.....5.0% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22

* QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.
TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

** FOR INFORMATION ONLY

THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, WILL BE ALLOWED TO SUBSTITUTE A HIGHER PERFORMANCE GRADE ASPHALT SURFACE COURSE FOR DRIVEWAYS AND MINOR SIDE STREET CONSTRUCTION AT NO ADDITIONAL COST TO THE DEPARTMENT.

COLD MILLING ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
			FEET	SQ. YD.
148+63.90	149+63.90	HWY. 112 (RAZORBACK ROAD)	23	255.56
153+60	154+60	RAZORBACK ROAD	23.5	261.11
201+08.81	203+14	MAPLE STREET	25	569.97
215+50	216+17.42	HWY. 112 (MAPLE STREET)	43	322.12
TOTAL:				**1408.76**

NOTE: AVERAGE MILLING DEPTH 1".

ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

LOCATION	TON	TACK COAT GALLON
ENTIRE PROJECT - TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	7	14
TOTALS:	**7**	**14**

BASIS OF ESTIMATE:
ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC...25 TON/MILE
TACK COAT FOR MAINTENANCE OF TRAFFIC.....50 GAL./MILE

MODIFYING UTILITY TUNNEL ACCESS

STATION	LOCATION	MODIFYING UTILITY TUNNEL ACCESS EACH
210+75.43	HWY. 112 (MAPLE STREET) ON RIGHT (STADIUM DRIVE)	1
211+21.65	HWY. 112 (MAPLE STREET) ON RIGHT	1
212+53.45	HWY. 112 (MAPLE STREET) ON LEFT	1
214+42.22	HWY. 112 (MAPLE STREET) ON LEFT	1
TOTAL:		**4**

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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.		040582	26	107

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

CONCRETE BASE

STATION	STATION	LOCATION	LENGTH	PORTLAND CEMENT CONCRETE BASE	
				AVG. WID.	5" U.T.
			FEET	FEET	SQ. YD.
150+00.00	151+42.29	HWY. 112 (RAZORBACK ROAD) - RIGHT NOTCH IN FRONT OF CURB	142.29	0.13	2.06
150+00.00	151+42.29	HWY. 112 (RAZORBACK ROAD) - RIGHT NOTCH UNDER CURB	142.29	2.63	41.58
151+42.29	151+70.66	HWY. 112 (RAZORBACK ROAD) - RIGHT NOTCH IN FRONT OF CURB	28.37	1.38	4.35
151+42.29	151+70.66	HWY. 112 (RAZORBACK ROAD) - RIGHT NOTCH UNDER CURB	28.37	3.88	12.23
153+20.00	154+60.00	RAZORBACK ROAD - LEFT NOTCH IN FRONT OF CURB	140.00	0.58	9.02
153+20.00	154+60.00	RAZORBACK ROAD - LEFT NOTCH UNDER CURB	140.00	3.08	47.91
153+20.00	154+60.00	RAZORBACK ROAD - RIGHT NOTCH UNDER CURB	140.00	2.50	38.89
201+08.81	203+20.16	MAPLE STREET - LEFT NOTCH IN FRONT OF CURB	211.35	2.34	54.95
201+08.81	203+20.16	MAPLE STREET - LEFT NOTCH UNDER CURB	211.35	4.84	113.66
203+20.16	203+35.13	MAPLE STREET - LEFT NOTCH IN FRONT OF CURB	14.97	VAR.	5.03
203+20.16	203+35.13	MAPLE STREET - LEFT NOTCH UNDER CURB	14.97	VAR.	9.25
202+75.00	203+01.15	MAPLE STREET - RIGHT NOTCH IN FRONT OF CURB	26.15	0.24	0.70
202+75.00	203+01.15	MAPLE STREET - RIGHT NOTCH UNDER CURB	26.15	2.74	7.96
203+01.15	203+19.69	MAPLE STREET - RIGHT NOTCH IN FRONT OF CURB	18.54	VAR.	2.87
203+01.15	203+19.69	MAPLE STREET - RIGHT NOTCH UNDER CURB	18.54	VAR.	7.54
206+49.92	209+29.77	HWY. 112 (MAPLE STREET) - RIGHT NOTCH IN FRONT OF CURB	279.85	1.00	31.09
206+49.92	209+29.77	HWY. 112 (MAPLE STREET) - RIGHT NOTCH UNDER CURB	279.85	3.50	108.83
209+29.77	209+74.77	HWY. 112 (MAPLE STREET) - RIGHT NOTCH IN FRONT OF CURB	45.00	2.50	12.50
209+29.77	209+74.77	HWY. 112 (MAPLE STREET) - RIGHT NOTCH UNDER CURB	45.00	5.00	25.00
206+49.92	211+24.20	HWY. 112 (MAPLE STREET) - LEFT NOTCH IN FRONT OF CURB	474.28	6.38	336.21
206+49.92	211+24.20	HWY. 112 (MAPLE STREET) - LEFT NOTCH UNDER CURB	474.28	8.88	467.96
211+23.09	216+17.42	HWY. 112 (MAPLE STREET) - RIGHT NOTCH IN FRONT OF CURB	494.33	1.00	54.93
211+23.09	216+17.42	HWY. 112 (MAPLE STREET) - RIGHT NOTCH UNDER CURB	494.33	3.50	192.24
211+24.20	216+08.14	HWY. 112 (MAPLE STREET) - LEFT NOTCH IN FRONT OF CURB	483.94	VAR.	205.34
211+24.20	216+08.14	HWY. 112 (MAPLE STREET) - LEFT NOTCH UNDER CURB	483.94	VAR.	339.73
TOTAL:					2131.83

HAND RAILING

STATION	STATION	LOCATION	HAND RAILING
			LIN. FT.
150+00.28	152+45.55	HWY. 112 (RAZORBACK ROAD) ON LEFT	26
210+01.69	210+06.73	HWY. 112 (MAPLE STREET) ON RIGHT	20
TOTAL:			46

NOTE: ALL STEEL COMPONENTS TO BE PAINTED WITH BENJAMIN MOORE DTM ALKYD SEMI-GLOSS "BRONZETONE" SHALL BE INCLUDED IN ITEM NUMBER 633 AS APPLICABLE.

CONCRETE STEPS

STATION	STATION	LOCATION	CONCRETE STEPS
			SQ.YD.
150+00.28	152+45.55	HWY. 112 (RAZORBACK ROAD) ON LEFT	5.6
210+01.69	210+06.73	HWY. 112 (MAPLE STREET) ON RIGHT	7.1
TOTAL:			12.7

RETAINING WALLS

STATION	STATION	LOCATION	CLASS S CONCRETE-ROADWAY	REINF. STEEL-ROADWAY (GRADE 60)	UNCL.EXC. FOR STR.-ROADWAY	SHORING	SELECT GRANULAR FILL
			CU.YDS.	POUNDS	CU.YDS.	LUMP SUM	CU. YDS.
150+00.28	152+45.55	LEFT OF MAIN LANES	398.00	41120	1935	1.00	830
TOTALS:			398.00	41120	1935	1.00	830

BASE AND SURFACING

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT				ACHM BASE COURSE (1 1/2")				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")			
				TON / STATION	TON	AVG. WID.	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 64-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 64-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 70-22
			FEET			FEET				FEET			TON	FEET			TON	FEET			TON
MAIN LANES																					
150+00.00	151+75.16	HWY. 112 (RAZORBACK ROAD) - LEFT NOTCH	175.16			40.02	778.88	0.03	23.37	22.51	438.09	550.00	120.47	20.01	389.44	330.00	64.26	20.01	389.44	220.00	42.84
151+70.66	151+94.95	HWY. 112 (RAZORBACK ROAD) - RIGHT NOTCH	24.29			VAR.	47.46	0.03	1.42	VAR.	31.15	550.00	8.57	VAR.	23.73	330.00	3.92	VAR.	23.73	220.00	2.61
151+75.16	151+94.95	HWY. 112 (RAZORBACK ROAD) - LEFT NOTCH	19.79			40.58	89.23	0.03	2.68	22.79	50.11	550.00	13.78	20.29	44.62	330.00	7.36	20.29	44.62	220.00	4.91
151+94.95	153+20.00	HWY. 112 (RAZORBACK ROAD/ MAPLE STREET INTERSECTION) - FULL DEPTH	125.05			VAR.	2664.94	0.03	79.95	VAR.	1433.25	550.00	394.14	VAR.	1332.47	330.00	219.86	VAR.	1332.47	220.00	146.57
203+19.69	203+35.13	MAPLE STREET - RIGHT NOTCH	15.44			VAR.	35.72	0.03	1.07	VAR.	24.63	550.00	6.77	VAR.	17.86	330.00	2.95	VAR.	17.86	220.00	1.96
203+35.13	203+41.29	MAPLE STREET - FULL DEPTH	6.16			VAR.	81.66	0.03	2.45	VAR.	48.37	550.00	13.30	VAR.	40.83	330.00	6.74	VAR.	40.83	220.00	4.49
204+91.44	206+49.92	HWY. 112 (MAPLE STREET) - FULL DEPTH	158.48			88.00	1549.58	0.03	46.49	49.00	862.84	550.00	237.28	44.00	774.79	330.00	127.84	44.00	774.79	220.00	85.23
148+63.90	150+00.00	FINAL 2" - HWY. 112 (RAZORBACK RCAD) - TRANSITION	136.10			23.00	347.81	0.03	10.43									23.00	347.81	220.00	38.26
150+00.00	151+42.69	FINAL 2" - HWY. 112 (RAZORBACK RCAD)	142.69			44.00	697.60	0.03	20.93									44.00	697.60	220.00	76.74
151+42.69	151+75.16	FINAL 2" - HWY. 112 (RAZORBACK RCAD)	32.47			46.73	168.59	0.03	5.06									46.73	168.59	220.00	18.54
151+75.16	151+94.95	FINAL 2" - HWY. 112 (RAZORBACK RCAD)	19.79			55.11	121.18	0.03	3.64									55.11	121.18	220.00	13.33
151+94.95	153+20.00	FINAL 2" - HWY. 112 (RAZORBACK RCAD/ MAPLE STREET INTERSECTION)	125.05			VAR.	1215.78	0.03	36.47									VAR.	1215.78	220.00	133.74
153+20.00	153+60.00	FINAL 2" - RAZORBACK ROAD	40.00			22.00	97.78	0.03	2.93									22.00	97.78	220.00	10.76
153+60.00	154+60.00	FINAL 2" - RAZORBACK ROAD - TRANSITION	100.00			23.92	265.78	0.10	26.58									23.92	265.78	220.00	29.24
201+08.81	203+01.15	FINAL 2" - MAPLE STREET - TRANSITION & COLD MILLING	192.34			26.66	569.75	0.10	56.98									26.66	569.75	220.00	62.67
203+01.15	203+41.29	FINAL 2" - MAPLE STREET	40.14			VAR.	176.31	0.03	5.29									VAR.	176.31	220.00	19.39
204+91.44	209+29.77	FINAL 2" - HWY. 112 (MAPLE STREET)	438.33			44.00	2142.95	0.03	64.29									44.00	2142.95	220.00	235.72
209+29.77	209+74.77	FINAL 2" - HWY. 112 (MAPLE STREET)	45.00			46.00	230.00	0.03	6.90									46.00	230.00	220.00	25.30
209+74.77	216+00.00	FINAL 2" - HWY. 112 (MAPLE STREET)	625.23			44.00	3056.68	0.03	91.70									44.00	3056.68	220.00	336.23
216+00.00	216+17.42	FINAL 2" - HWY. 112 (MAPLE STREET) - TRANSITION	17.42			44.00	85.16	0.10	8.52									44.00	85.16	220.00	9.37
ADDITIONAL FOR LEVELING & GRADE RAISE																					
148+63.90	151+94.95	HWY. 112 (RAZORBACK ROAD) - LEVELING	331.05			23.43	861.83	0.10	86.18									23.43	861.83	220.00	94.80
148+63.90	150+00.00	HWY. 112 (RAZORBACK ROAD) - GRADE RAISE	136.10			23.10	349.32	0.03	10.48									23.10	349.32	VAR.	64.00
150+00.00	151+94.95	HWY. 112 (RAZORBACK ROAD) - GRADE RAISE	194.95			47.34	1025.44	0.03	30.76	23.67	512.72	VAR.	99.00	23.67	512.72	VAR.	83.00				
153+20.00	153+60.00	RAZORBACK ROAD - LEVELING	40.00			22.00	97.78	0.10	9.78									22.00	97.78	220.00	10.76
153+20.00	153+60.00	RAZORBACK ROAD - GRADE RAISE	40.00			42.40	188.44	0.03	5.65	21.20	94.22	VAR.	14.00	21.20	94.22	VAR.	13.00				
203+19.69	203+35.13	MAPLE STREET - LEVELING	15.44			23.39	40.13	0.10	4.01									23.39	40.13	220.00	4.41
203+19.69	203+35.13	MAPLE STREET - GRADE RAISE	15.44			35.48	60.87	0.03	1.83	17.74	30.43	VAR.	6.00	17.74	30.43	VAR.	4.00				
206+49.92	216+00.00	HWY. 112 (MAPLE STREET) - LEVELING	950.08			38.35	4048.40	0.10	404.84									38.35	4048.40	220.00	445.32
206+49.92	207+07.00	HWY. 112 (MAPLE STREET) - GRADE RAISE	57.08			71.59	454.04	0.03	13.62	35.79	226.99	VAR.	49.00	35.80	227.05	VAR.	38.00				
207+07.00	207+90.00	HWY. 112 (MAPLE STREET) - GRADE RAISE	83.00			36.47	336.33	0.03	10.09					36.47	336.33	VAR.	49.00				
211+00.00	211+50.00	HWY. 112 (MAPLE STREET) - GRADE RAISE	50.00			38.29	212.72	0.03	6.38									38.29	212.72	VAR.	6.00
212+50.00	215+50.00	HWY. 112 (MAPLE STREET) - GRADE RAISE	300.00			38.82	1294.00	0.03	38.82					38.82	1294.00	VAR.	298.00				
TEMPORARY WIDENING																					
10+18.11	11+12.81	HWY. 112 ON RIGHT	94.70	VAR.	20.47	VAR.	50.14	0.03	1.50					VAR.	50.14	330.00	8.27	VAR.	50.14	220.00	5.52
11+12.81	12+01.31	HWY. 112 ON RIGHT	88.50	VAR.	72.36	VAR.	177.21	0.03	5.32					VAR.	177.21	330.00	29.24	VAR.	177.21	220.00	19.49
12+01.31	12+49.93	HWY. 112 ON RIGHT	48.62	VAR.	52.94	VAR.	129.65	0.03	3.89					VAR.	129.65	330.00	21.39	VAR.	129.65	220.00	14.26
12+49.93	13+05.95	HWY. 112 ON RIGHT	56.02	VAR.	42.78	VAR.	104.76	0.03	3.14					VAR.	104.76	330.00	17.29	VAR.	104.76	220.00	11.52
13+05.95	14+77.80	HWY. 112 ON RIGHT	171.85	VAR.	46.31	VAR.	113.42	0.03	3.40					VAR.	113.42	330.00	18.71	VAR.	113.42	220.00	12.48
SIDE STREETS																					
210+58.59		STADIUM DRIVE ON LEFT				VAR.	615.45	0.03	18.46	VAR.	236.82	550.00	65.13	VAR.	205.15	330.00	33.85	VAR.	205.15	440.00	45.13
210+58.59		STADIUM DRIVE ON RIGHT				VAR.	2518.89	0.03	75.57	VAR.	975.84	550.00	268.36	VAR.	839.63	330.00	138.54	VAR.	839.63	440.00	184.72
TOTALS:					**234.86**		**27101.66**		**1230.87**		**4965.46**		**1295.80**		**6738.45**		**1185.22**		**19029.25**		**2216.31**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....95.0% MIN. AGGR.....5.0% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.8% MIN. AGGR.....4.2% ASPHALT BINDER
ACHM BASE COURSE (1 1/2").....96.0% MIN. AGGR.....4.0% ASPHALT BINDER

MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22
MAXIMUM NUMBER OF GYRATIONS = 160 FOR PG 70-22

8/11/2014

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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.		040582	27	107

(2) SUMMARY OF QUANTITIES AND REVISIONS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

SUMMARY OF QUANTITIES (BOX 1 OF 2)

ITEM NUMBER	ITEM	QUANTITY	UNIT
201	CLEARING	11	STATION
201	GRUBBING	11	STATION
202	REMOVAL AND DISPOSAL OF CURB AND GUTTER	3785	LIN. FT.
202	REMOVAL AND DISPOSAL OF RETAINING WALLS	290	LIN. FT.
202	REMOVAL AND DISPOSAL OF STEPS	39	SQ. YD.
202	REMOVAL AND DISPOSAL OF WALKS	1403	SQ. YD.
202	REMOVAL AND DISPOSAL OF JUNCTION BOXES	1	EACH
202	REMOVAL AND DISPOSAL OF DROP INLETS	12	EACH
202	REMOVAL AND DISPOSAL OF PIPE CULVERTS	11	EACH
202	REMOVAL AND DISPOSAL OF CONCRETE DITCH PAVING	3	SQ. YD.
202	REMOVAL AND DISPOSAL OF HANDRAIL	116	LIN. FT.
206	FLOWABLE SELECT MATERIAL	55	CU. YD.
210	UNCLASSIFIED EXCAVATION	2471	CU. YD.
SP	SELECT GRANULAR FILL	830	CU. YD.
SP & 210	COMPACTED EMBANKMENT	5604	CU. YD.
303	AGGREGATE BASE COURSE (CLASS 7)	437	TON
309	PORTLAND CEMENT CONCRETE BASE (5" UNIFORM THICKNESS)	2132	SQ. YD.
401	TACK COAT	1245	GAL.
SP & 405	MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2")	1244	TON
SP & 405	ASPHALT BINDER (PG 64-22) IN ACHM BASE COURSE (1 1/2")	52	TON
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")	1135	TON
SP, SS, & 406	ASPHALT BINDER (PG 64-22) IN ACHM BINDER COURSE (1")	50	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")	2147	TON
SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")	2	TON
SP, SS, & 407	ASPHALT BINDER (PG 70-22) IN ACHM SURFACE COURSE (1/2")	111	TON
412	COLD MILLING ASPHALT PAVEMENT	1409	SQ. YD.
SP & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC	7	TON
SP & 415	ACHM PATCHING OF EXISTING ROADWAY	25	TON
505	PORTLAND CEMENT CONCRETE DRIVEWAY	146.30	SQ. YD.
601	MOBILIZATION	1.00	LUMP SUM
SP & 602	FURNISHING FIELD OFFICE	1	EACH
SP & 603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
SS & 604	SIGNS	348	SQ. FT.
SS & 604	BARRICADES	64	LIN. FT.
SS & 604	TRAFFIC DRUMS	129	EACH
604	CONSTRUCTION PAVEMENT MARKINGS	15968	LIN. FT.
604	CONSTRUCTION PAVEMENT MARKINGS (WORDS)	8	EACH
604	CONSTRUCTION PAVEMENT MARKINGS (ARROWS)	7	EACH
604	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS	4642	LIN. FT.
604	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS (WORDS)	2	EACH
604	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS (ARROWS)	3	EACH
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS	465	LIN. FT.
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS (WORDS)	2	EACH
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS (ARROWS)	2	EACH
SS & 604	VERTICAL PANELS	31	EACH
606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	103	LIN. FT.
* 606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	1283	LIN. FT.
* 606	18" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	1283	LIN. FT.
SP & 606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)	347	LIN. FT.
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	46	LIN. FT.
* 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	353	LIN. FT.
* 606	24" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	353	LIN. FT.
* 606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	647	LIN. FT.
* 606	30" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	647	LIN. FT.
606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	4	LIN. FT.
SS & 606	12" SIDE DRAIN	600	LIN. FT.
606	24" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	1	EACH
606	36" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	2	EACH
606	SELECTED PIPE BEDDING	200	CU. YD.
609	DROP INLETS (TYPE C)	4	EACH
609	DROP INLETS (TYPE E)	2	EACH
609	DROP INLETS (TYPE MO)	19	EACH
609	DROP INLETS (TYPE ST)	2	EACH
609	JUNCTION BOXES (TYPE E)	8	EACH
609	DROP INLET EXTENSIONS (4')	11	EACH
609	DROP INLET EXTENSIONS (8')	5	EACH
609	YARD DRAINS	6	EACH
611	4" PIPE UNDERDRAINS	400	LIN. FT.
615	PAVEMENT REPAIR OVER CULVERTS (CONCRETE)	8.5	CU. YD.
SS & 620	MULCH COVER	6.40	ACRE
620	WATER	194.9	M.GAL.
621	TEMPORARY SEEDING	6.40	ACRE
621	SILT FENCE	2691	LIN. FT.
621	SAND BAG DITCH CHECKS	132	BAG
621	DROP INLET SILT FENCE	1075	LIN. FT.
621	SEDIMENT BASIN	32	CU. YD.
621	OBLITERATION OF SEDIMENT BASIN	32	CU. YD.
621	SEDIMENT REMOVAL AND DISPOSAL	186	CU. YD.
621	ROCK DITCH CHECKS	27	CU. YD.
621	WATTLE (20")	45	LIN. FT.
624	SOLID SODDING	5106	SQ. YD.
632	CONCRETE ISLAND	90	SQ. YD.
633	CONCRETE WALKS	3135	SQ. YD.
633	CONCRETE STEPS	13	SQ. YD.
633	CONCRETE WALKS (TYPE SPECIAL)	106	SQ. YD.
633	HAND RAILING	46	LIN. FT.
634	CONCRETE CURB (TYPE D)	584	LIN. FT.
634	CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (1' 6")	3505	LIN. FT.
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM
641	WHEELCHAIR RAMPS (TYPE 1)	86	SQ. YD.
641	WHEELCHAIR RAMPS (TYPE 3)	21	SQ. YD.
641	WHEELCHAIR RAMPS (TYPE 4)	126	SQ. YD.

* DENOTES ALTERNATE BID ITEMS.

SUMMARY OF QUANTITIES (BOX 2 OF 2)

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 701	SYSTEM LOCAL CONTROLLER TS 2-TYPE 2, E-NET (2 PHASES)	1	EACH
SP & 701	SYSTEM LOCAL CONTROLLER TS 2-TYPE 2, E-NET (8 PHASES)	2	EACH
SP	TRAFFIC SIGNAL CONTROLLER (MODIFICATION)	1	EACH
SP	LOCAL RADIO (E-NET 5.8) WITH ANTENNA	5	EACH
SP	E-NET CABLE (EXTERIOR CAT 5)	422	LIN. FT.
SP	FIBER OPTIC BLANK OUT SIGN	3	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	18	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	3	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	16	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	2405	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	279	LIN. FT.
708	TRAFFIC SIGNAL CABLE (12C/14 A.W.G.)	360	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	652	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., EGC)	999	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., EGC)	505	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	60	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	1582	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	60	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	60	LIN. FT.
710	NON-METALLIC CONDUIT (2")	60	LIN. FT.
710	NON-METALLIC CONDUIT (3")	727	LIN. FT.
711	CONCRETE PULL BOX (TYPE 2)	3	EACH
711	CONCRETE PULL BOX (TYPE 2 HD)	7	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (26')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (30')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (34')	2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (36')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (38')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (40')	2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (46')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (50')	1	EACH
715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	1	EACH
SP	LUMINAIRE ASSEMBLY	10	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	1.00	LUMP SUM
718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (10")	157	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (4")	2249	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (8")	202	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (12")	1139	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING YELLOW (4")	4243	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING (WORDS)	13	EACH
719	THERMOPLASTIC PAVEMENT MARKING (ARROWS)	13	EACH
721	RAISED PAVEMENT MARKERS (TYPE II)	58	EACH
SP	18" STREET NAME SIGN	8	EACH
SP & 733	VIDEO DETECTOR (CLR)	9	EACH
733	VIDEO CABLE	1349	LIN. FT.
733	VIDEO MONITOR (CLR)	2	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	5	EACH
SP & 733	VIDEO EDGE CARD EXTENDER	3	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	2	EACH
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-ROADWAY	1935	CU. YD.
802	CLASS S CONCRETE-ROADWAY	398.00	CU. YD.
804	REINFORCING STEEL-ROADWAY (GRADE 60)	41120	POUND
SP	SHORING	1.00	LUMP SUM
SP	ETHERNET SWITCH, T100 HARDENED (4 PORT)	4	EACH
SP	MODIFYING UTILITY TUNNEL ACCESS	4	EACH

REVISIONS

DATE	REVISION	SHEET NUMBER

8/11/2014

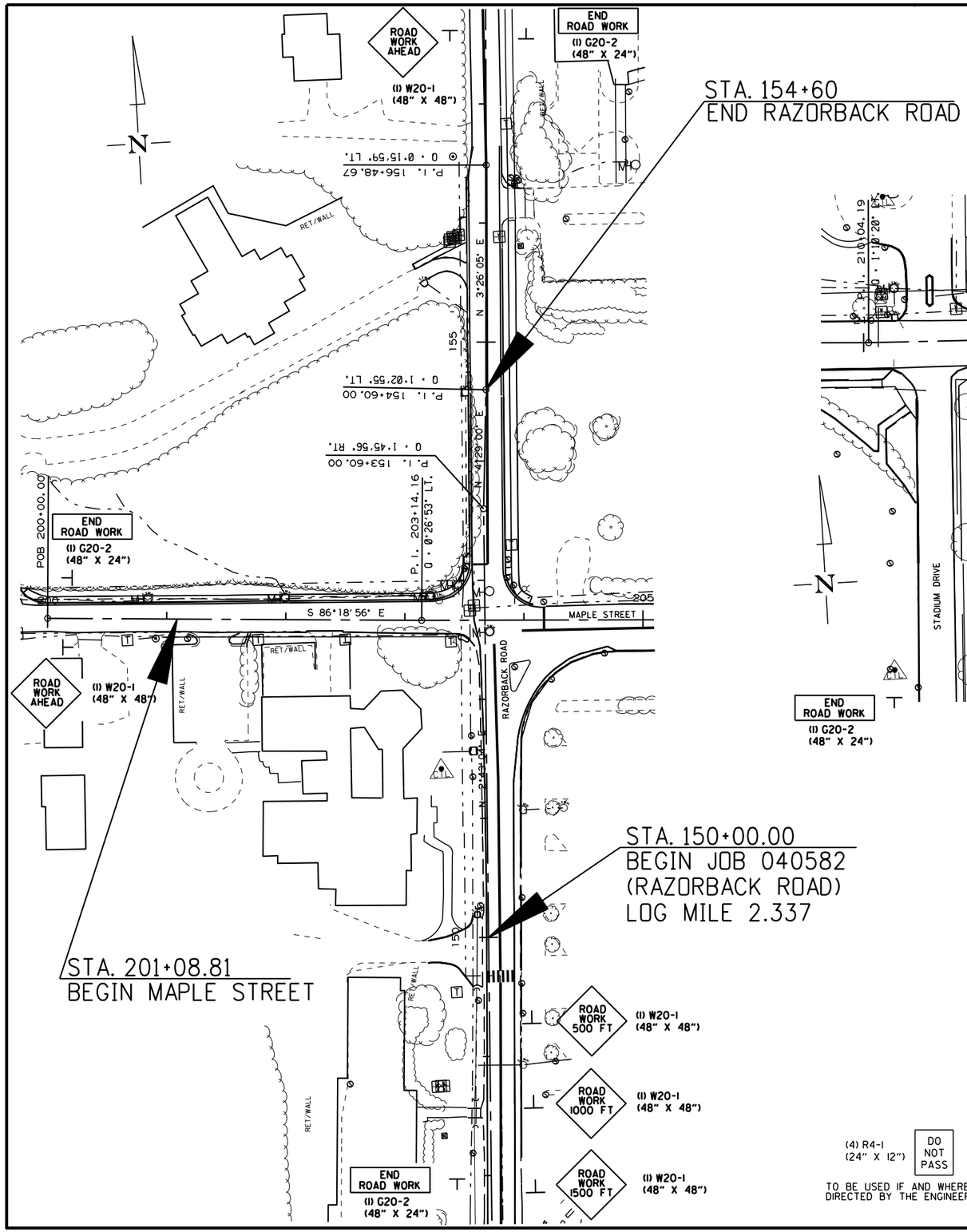
R040582.DGN

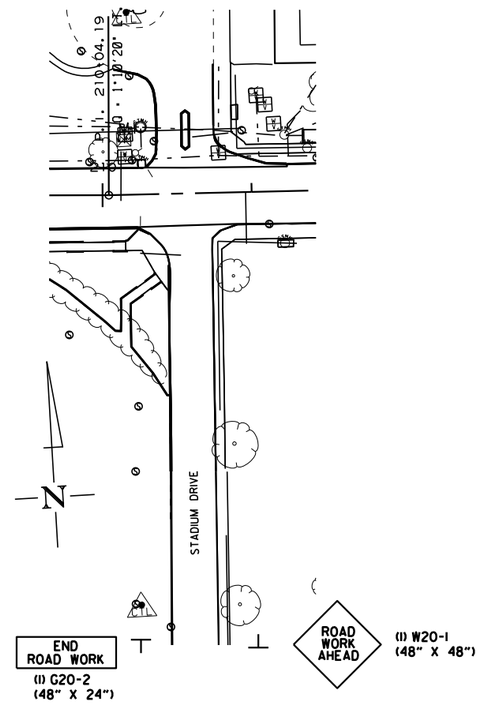
SUMMARY OF QUANTITIES AND REVISIONS

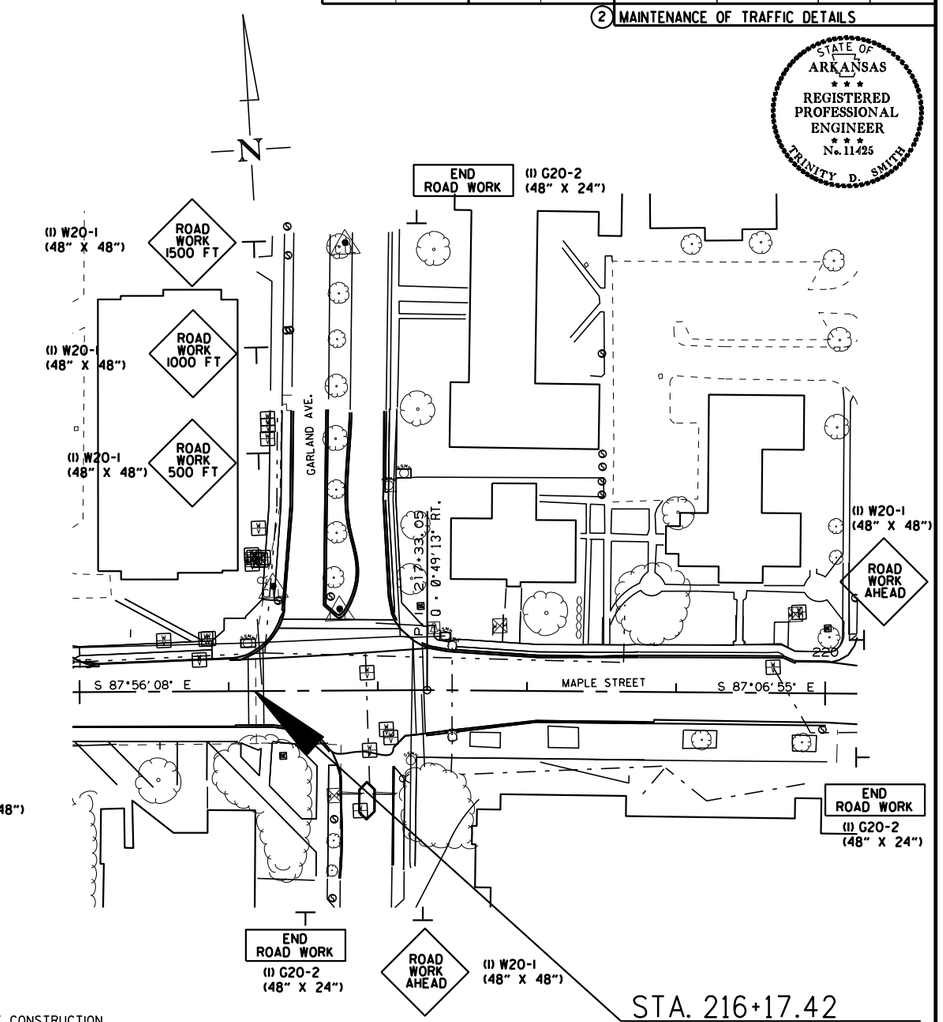
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		040582	16	107

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH







SEQUENCE OF CONSTRUCTION

STAGE 1:
CONSTRUCT TEMPORARY WIDENING ON RIGHT
OF RAZORBACK RD. AND MAPLE ST.

STAGE 2:
SHIFT TRAFFIC TO TEMPORARY WIDENING
CLOSE RAZORBACK RD. (STA. 152+66.41 - STA. 154+60.00) &
MAPLE ST. (STA. 201+08.81 - STA. 203+79.21)
CONSTRUCT LEFT SIDE OF ROADWAY:
RAZORBACK RD. FROM STA. 150+00.00 - STA. 152+66.41
MAPLE ST. FROM STA. 203+67.29 - STA. 216+17.42
CONSTRUCT STORM DRAIN ON LEFT
CONSTRUCT DRIVES ON LEFT
CONSTRUCT RETAINING WALL ON LEFT OF RAZORBACK RD.
CONSTRUCT ALL OF MAPLE ST.:
FROM STA. 201+08.81 - STA. 203+67.29
CONSTRUCT ALL OF RAZORBACK RD.:
FROM STA. 152+66.41 - STA. 154+60.00

STAGE 3:
SHIFT TRAFFIC TO LEFT SIDE
REMOVE TEMPORARY WIDENING ON RIGHT
CONSTRUCT RIGHT SIDE OF ROADWAY:
RAZORBACK RD. FROM STA. 150+00.00 - STA. 152+66.48
MAPLE ST. FROM STA. 203+79.21 - STA. 216+17.42
CONSTRUCT STORM DRAIN ON RIGHT
CONSTRUCT DRIVES ON RIGHT

STAGE 4:
PLACE FINAL 2" OF SURFACE COURSE
INSTALL PERMANENT PAVEMENT MARKINGS

(4) R4-1 (24" X 12") — DO NOT PASS

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

ALL STAGES
MAINTENANCE OF TRAFFIC DETAILS

3/4/2015

R040582.DGN

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.		040582	17	107

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

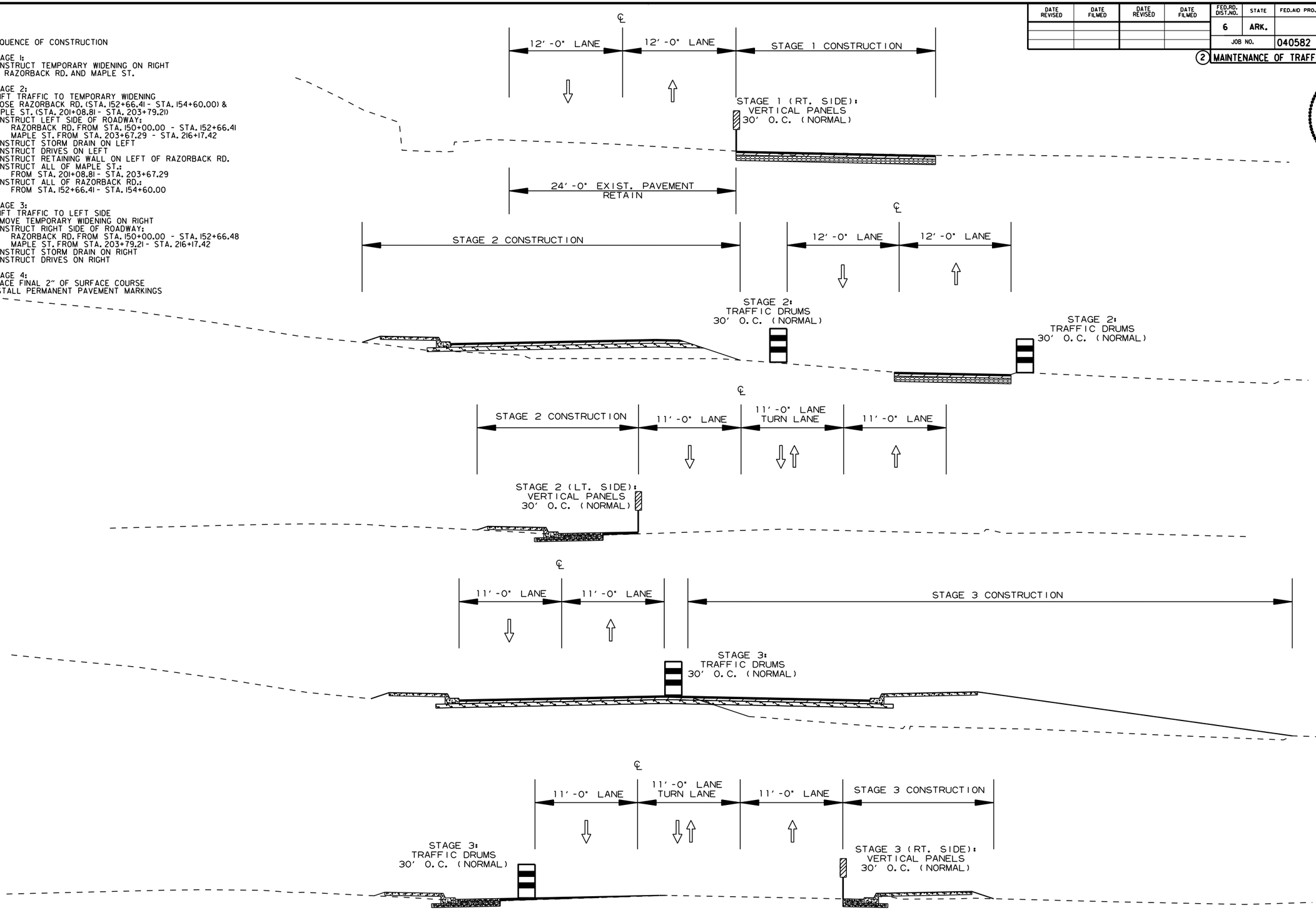
SEQUENCE OF CONSTRUCTION

STAGE 1:
CONSTRUCT TEMPORARY WIDENING ON RIGHT
OF RAZORBACK RD. AND MAPLE ST.

STAGE 2:
SHIFT TRAFFIC TO TEMPORARY WIDENING
CLOSE RAZORBACK RD. (STA. 152+66.41 - STA. 154+60.00) &
MAPLE ST. (STA. 201+08.81 - STA. 203+79.21)
CONSTRUCT LEFT SIDE OF ROADWAY:
RAZORBACK RD. FROM STA. 150+00.00 - STA. 152+66.41
MAPLE ST. FROM STA. 203+67.29 - STA. 216+17.42
CONSTRUCT STORM DRAIN ON LEFT
CONSTRUCT DRIVES ON LEFT
CONSTRUCT RETAINING WALL ON LEFT OF RAZORBACK RD.
CONSTRUCT ALL OF MAPLE ST.:
FROM STA. 201+08.81 - STA. 203+67.29
CONSTRUCT ALL OF RAZORBACK RD.:
FROM STA. 152+66.41 - STA. 154+60.00

STAGE 3:
SHIFT TRAFFIC TO LEFT SIDE
REMOVE TEMPORARY WIDENING ON RIGHT
CONSTRUCT RIGHT SIDE OF ROADWAY:
RAZORBACK RD. FROM STA. 150+00.00 - STA. 152+66.48
MAPLE ST. FROM STA. 203+79.21 - STA. 216+17.42
CONSTRUCT STORM DRAIN ON RIGHT
CONSTRUCT DRIVES ON RIGHT

STAGE 4:
PLACE FINAL 2" OF SURFACE COURSE
INSTALL PERMANENT PAVEMENT MARKINGS



ALL STAGES
MAINTENANCE OF TRAFFIC DETAILS

3/4/2015

R040582.DGN

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.		040582	18	107

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

CONSTRUCTION PAVEMENT MARKINGS:

4" DOUBLE YELLOW CENTERLINE:
RAZORBACK ROAD
STA. 150+00-152+46 = 492 LIN. FT.
STA. 153+13-154+60 = 294 LIN. FT.
MAPLE STREET
STA. 203+98-206+80 = 564 LIN. FT.
STA. 206+95-207+02 = 14 LIN. FT.
STA. 207+30-209+77 = 494 LIN. FT.
STA. 209+77-210+31 = 216 LIN. FT. (2 DBL. YELLOWS)
STA. 210+88-212+51 = 326 LIN. FT.
STA. 214+17-216+12 = 390 LIN. FT.

4" YELLOW CENTER TURN LANE:
MAPLE STREET
STA. 212+51-213+80 = 323 LIN. FT.

4" WHITE SOLID EDGE LINE ON LT.:
RAZORBACK ROAD
STA. 150+17-152+45 = 228 LIN. FT.
MAPLE STREET
STA. 206+93-210+24 = 331 LIN. FT.
STA. 211+09-212+04 = 95 LIN. FT.

4" WHITE SOLID EDGE LINE ON RT.:
RAZORBACK ROAD
STA. 150+00-150+38 = 38 LIN. FT.
STA. 150+58-152+36 = 202 LIN. FT.

CONSTRUCTION PAVEMENT MARKINGS (CONT.):

4" WHITE SOLID FOR TURN LANE LINES:
MAPLE STREET
STA. 207+58-210+28 = 270 LIN. FT.
STA. 210+88-212+09 = 121 LIN. FT.
STA. 214+27-216+12 = 185 LIN. FT.

12" WHITE STOP BARS:
RAZORBACK ROAD
STA. 153+13 = 13 LIN. FT.
MAPLE STREET
STA. 204+17 = 19 LIN. FT.

12" WHITE CROSSWALK:
MAPLE STREET
STA. 206+87 = 90 LIN. FT.
STA. 210+80 = 110 LIN. FT.

ARROWS = 6 EACH
WORDS = 4 EACH

REMOVAL OF PERMANENT MARKINGS:

4" WHITE SOLID LINE ON RT.:
RAZORBACK ROAD
STA. 150+18-152+39 = 267 LIN. FT.

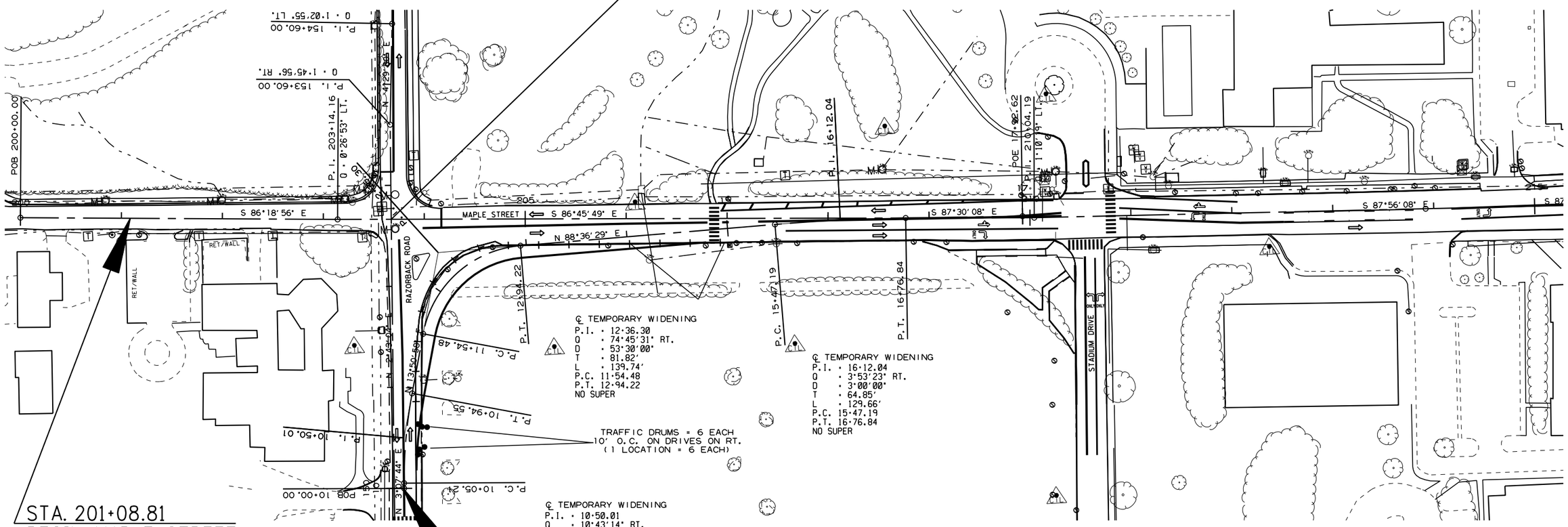
SEQUENCE OF CONSTRUCTION

STAGE 1:
CONSTRUCT TEMPORARY WIDENING ON RIGHT
OF RAZORBACK RD. AND MAPLE ST.

STAGE 2:
SHIFT TRAFFIC TO TEMPORARY WIDENING
CLOSE RAZORBACK RD. (STA. 152+66.41 - STA. 154+60.00) &
MAPLE ST. (STA. 201+08.81 - STA. 203+79.21)
CONSTRUCT LEFT SIDE OF ROADWAY:
RAZORBACK RD. FROM STA. 150+00.00 - STA. 152+66.41
MAPLE ST. FROM STA. 203+67.29 - STA. 216+17.42
CONSTRUCT STORM DRAIN ON LEFT
CONSTRUCT DRIVES ON LEFT
CONSTRUCT RETAINING WALL ON LEFT OF RAZORBACK RD.
CONSTRUCT ALL OF MAPLE ST.:
FROM STA. 201+08.81 - STA. 203+67.29
CONSTRUCT ALL OF RAZORBACK RD.:
FROM STA. 152+66.41 - STA. 154+60.00

STAGE 3:
SHIFT TRAFFIC TO LEFT SIDE
REMOVE TEMPORARY WIDENING ON RIGHT
CONSTRUCT RIGHT SIDE OF ROADWAY:
RAZORBACK RD. FROM STA. 150+00.00 - STA. 152+66.48
MAPLE ST. FROM STA. 203+79.21 - STA. 216+17.42
CONSTRUCT STORM DRAIN ON RIGHT
CONSTRUCT DRIVES ON RIGHT

STAGE 4:
PLACE FINAL 2" OF SURFACE COURSE
INSTALL PERMANENT PAVEMENT MARKINGS



STAGE 1
MAINTENANCE OF TRAFFIC DETAILS

3/4/2015

R040582.DGN

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.		040582	19	107

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

SEQUENCE OF CONSTRUCTION

STAGE 1:
CONSTRUCT TEMPORARY WIDENING ON RIGHT
OF RAZORBACK RD. AND MAPLE ST.

STAGE 2:
SHIFT TRAFFIC TO TEMPORARY WIDENING
CLOSE RAZORBACK RD. (STA. 152+66.41 - STA. 154+60.00) &
MAPLE ST. (STA. 201+08.81 - STA. 203+79.21)
CONSTRUCT LEFT SIDE OF ROADWAY:
RAZORBACK RD. FROM STA. 150+00.00 - STA. 152+66.41
MAPLE ST. FROM STA. 203+67.29 - STA. 216+17.42
CONSTRUCT STORM DRAIN ON LEFT
CONSTRUCT DRIVES ON LEFT
CONSTRUCT RETAINING WALL ON LEFT OF RAZORBACK RD.
CONSTRUCT ALL OF MAPLE ST.:
FROM STA. 201+08.81 - STA. 203+67.29
CONSTRUCT ALL OF RAZORBACK RD.:
FROM STA. 152+66.41 - STA. 154+60.00

STAGE 3:
SHIFT TRAFFIC TO LEFT SIDE
REMOVE TEMPORARY WIDENING ON RIGHT
CONSTRUCT RIGHT SIDE OF ROADWAY:
RAZORBACK RD. FROM STA. 150+00.00 - STA. 152+66.48
MAPLE ST. FROM STA. 203+79.21 - STA. 216+17.42
CONSTRUCT STORM DRAIN ON RIGHT
CONSTRUCT DRIVES ON RIGHT

STAGE 4:
PLACE FINAL 2" OF SURFACE COURSE
INSTALL PERMANENT PAVEMENT MARKINGS

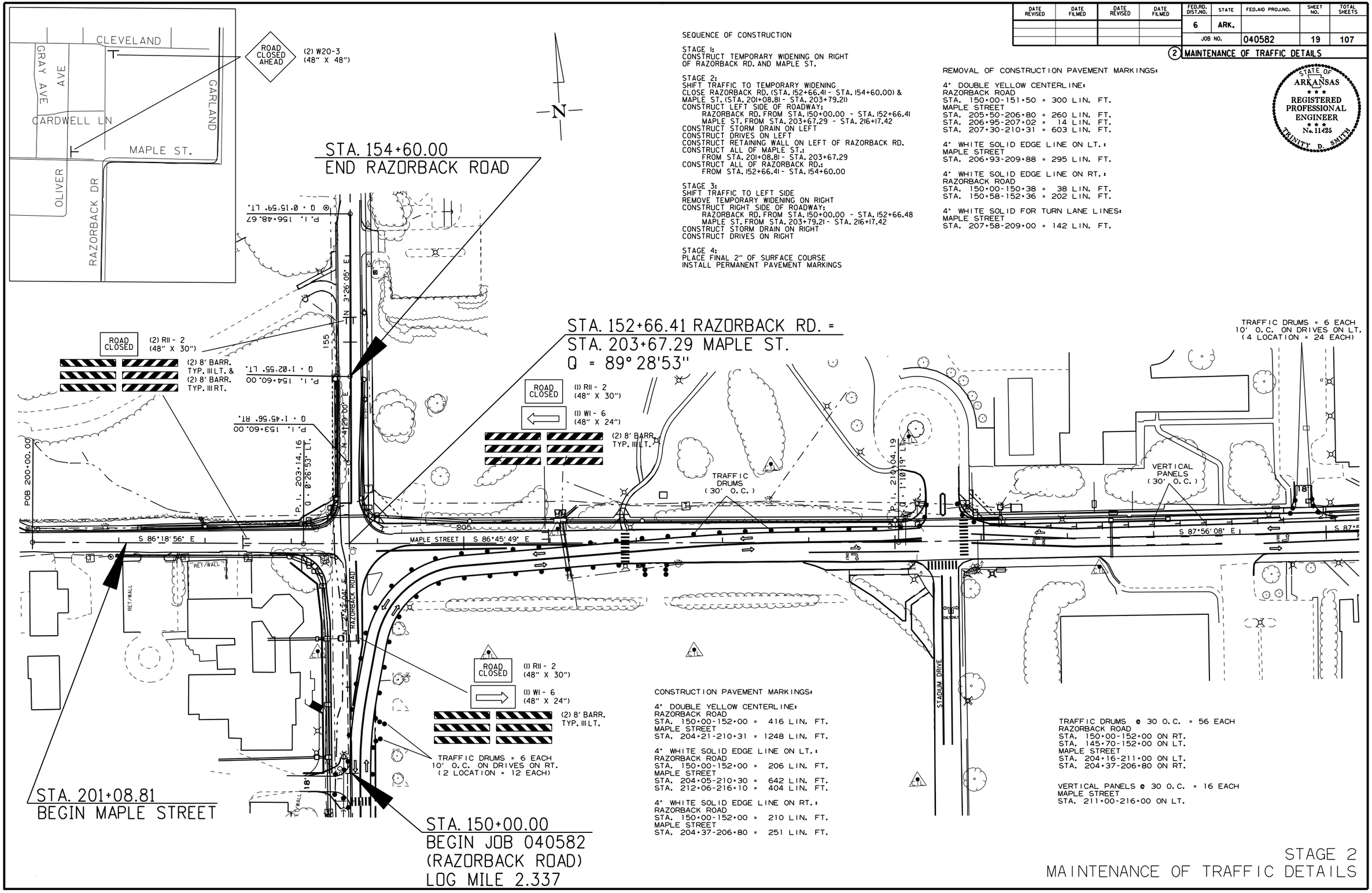
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS:

4" DOUBLE YELLOW CENTERLINE:
RAZORBACK ROAD
STA. 150+00-151+50 = 300 LIN. FT.
MAPLE STREET
STA. 205+50-206+80 = 260 LIN. FT.
STA. 206+95-207+02 = 14 LIN. FT.
STA. 207+30-210+31 = 603 LIN. FT.

4" WHITE SOLID EDGE LINE ON LT.:
MAPLE STREET
STA. 206+93-209+88 = 295 LIN. FT.

4" WHITE SOLID EDGE LINE ON RT.:
RAZORBACK ROAD
STA. 150+00-150+38 = 38 LIN. FT.
STA. 150+58-152+36 = 202 LIN. FT.

4" WHITE SOLID FOR TURN LANE LINES:
MAPLE STREET
STA. 207+58-209+00 = 142 LIN. FT.



CONSTRUCTION PAVEMENT MARKINGS:

4" DOUBLE YELLOW CENTERLINE:
RAZORBACK ROAD
STA. 150+00-152+00 = 416 LIN. FT.
MAPLE STREET
STA. 204+21-210+31 = 1248 LIN. FT.

4" WHITE SOLID EDGE LINE ON LT.:
RAZORBACK ROAD
STA. 150+00-152+00 = 206 LIN. FT.
MAPLE STREET
STA. 204+05-210+30 = 642 LIN. FT.
STA. 212+06-216+10 = 404 LIN. FT.

4" WHITE SOLID EDGE LINE ON RT.:
RAZORBACK ROAD
STA. 150+00-152+00 = 210 LIN. FT.
MAPLE STREET
STA. 204+37-206+80 = 251 LIN. FT.

TRAFFIC DRUMS @ 30 O.C. = 56 EACH
RAZORBACK ROAD
STA. 150+00-152+00 ON RT.
STA. 145+70-152+00 ON LT.
MAPLE STREET
STA. 204+16-211+00 ON LT.
STA. 204+37-206+80 ON RT.

VERTICAL PANELS @ 30 O.C. = 16 EACH
MAPLE STREET
STA. 211+00-216+00 ON LT.

STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

3/4/2015

R040582.DGN

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.		040582	20	107

2 MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

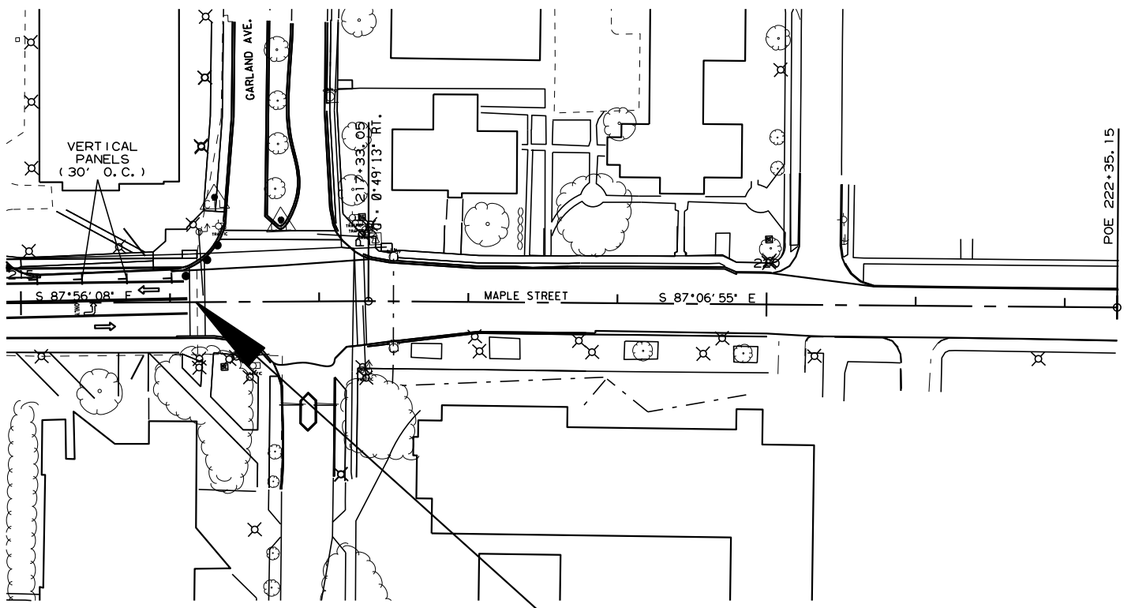
SEQUENCE OF CONSTRUCTION

STAGE 1:
CONSTRUCT TEMPORARY WIDENING ON RIGHT
OF RAZORBACK RD. AND MAPLE ST.

STAGE 2:
SHIFT TRAFFIC TO TEMPORARY WIDENING
CLOSE RAZORBACK RD. (STA. 152+66.41 - STA. 154+60.00) &
MAPLE ST. (STA. 201+08.81 - STA. 203+79.21)
CONSTRUCT LEFT SIDE OF ROADWAY:
RAZORBACK RD. FROM STA. 150+00.00 - STA. 152+66.41
MAPLE ST. FROM STA. 203+67.29 - STA. 216+17.42
CONSTRUCT STORM DRAIN ON LEFT
CONSTRUCT DRIVES ON LEFT
CONSTRUCT RETAINING WALL ON LEFT OF RAZORBACK RD.
CONSTRUCT ALL OF MAPLE ST.:
FROM STA. 201+08.81 - STA. 203+67.29
CONSTRUCT ALL OF RAZORBACK RD.:
FROM STA. 152+66.41 - STA. 154+60.00

STAGE 3:
SHIFT TRAFFIC TO LEFT SIDE
REMOVE TEMPORARY WIDENING ON RIGHT
CONSTRUCT RIGHT SIDE OF ROADWAY:
RAZORBACK RD. FROM STA. 150+00.00 - STA. 152+66.48
MAPLE ST. FROM STA. 203+79.21 - STA. 216+17.42
CONSTRUCT STORM DRAIN ON RIGHT
CONSTRUCT DRIVES ON RIGHT

STAGE 4:
PLACE FINAL 2" OF SURFACE COURSE
INSTALL PERMANENT PAVEMENT MARKINGS



STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

3/4/2015

R040582.DGN

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.		040582	21	107

(2) MAINTENANCE OF TRAFFIC DETAILS

REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS:

4" DOUBLE YELLOW CENTERLINE:
RAZORBACK ROAD
STA. 150+00-151+00 = 200 LIN. FT.
MAPLE STREET
STA. 207+25-209+87 = 524 LIN. FT.
STA. 209+87-210+31 = 176 LIN. FT. (2 DBL. YELLOWS)
STA. 210+88-212+51 = 326 LIN. FT.
STA. 214+17-215+00 = 166 LIN. FT.

4" YELLOW CENTER TURN LANE:
MAPLE STREET
STA. 212+51-213+80 = 323 LIN. FT.

4" WHITE SOLID EDGE LINE ON LT.:
RAZORBACK ROAD
STA. 150+00-151+50 = 150 LIN. FT.
MAPLE STREET
STA. 206+48-209+86 = 338 LIN. FT.
STA. 211+10-215+00 = 391 LIN. FT.

4" WHITE SOLID FOR TURN LANE LINES:
MAPLE STREET
STA. 210+88-212+09 = 121 LIN. FT.
STA. 214+27-215+00 = 73 LIN. FT.

ARROWS = 3 EACH
WORDS = 2 EACH

CONSTRUCTION PAVEMENT MARKINGS:

4" DOUBLE YELLOW CENTERLINE:
RAZORBACK ROAD
STA. 150+00-152+48 = 496 LIN. FT.
STA. 153+18-154+60 = 284 LIN. FT.
MAPLE STREET
STA. 201+21-203+31 = 420 LIN. FT.
STA. 204+00-207+00 = 600 LIN. FT.
STA. 207+00-210+28 = 2620 LIN. FT. (2 DBL. YELLOWS)
STA. 211+03-212+51 = 298 LIN. FT.
STA. 213+79-215+00 = 242 LIN. FT.

4" YELLOW BETWEEN 2 DBL. YELLOWS:
MAPLE STREET
STA. 207+00-210+28 = 310 LIN. FT.

4" YELLOW CENTER TURN LANE:
MAPLE STREET
STA. 212+51-213+79 = 320 LIN. FT.

4" WHITE SOLID EDGE LINE ON LT.:
RAZORBACK ROAD
STA. 150+00-152+63 = 292 LIN. FT.
MAPLE STREET
STA. 211+03-215+00 = 397 LIN. FT.

4" WHITE SOLID EDGE LINE ON RT.:
RAZORBACK ROAD
STA. 150+00-152+66 = 296 LIN. FT.
MAPLE STREET
STA. 202+00-203+04 = 104 LIN. FT.
STA. 204+30-208+99 = 470 LIN. FT.
STA. 210+72-215+00 = 434 LIN. FT.

CONSTRUCTION PAVEMENT MARKINGS (CONT.):

4" WHITE SOLID FOR TURN LANE LINES:
MAPLE STREET
STA. 211+03-212+06 = 103 LIN. FT.
STA. 214+10-215+00 = 90 LIN. FT.

ARROWS = 3 EACH
WORDS = 2 EACH

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

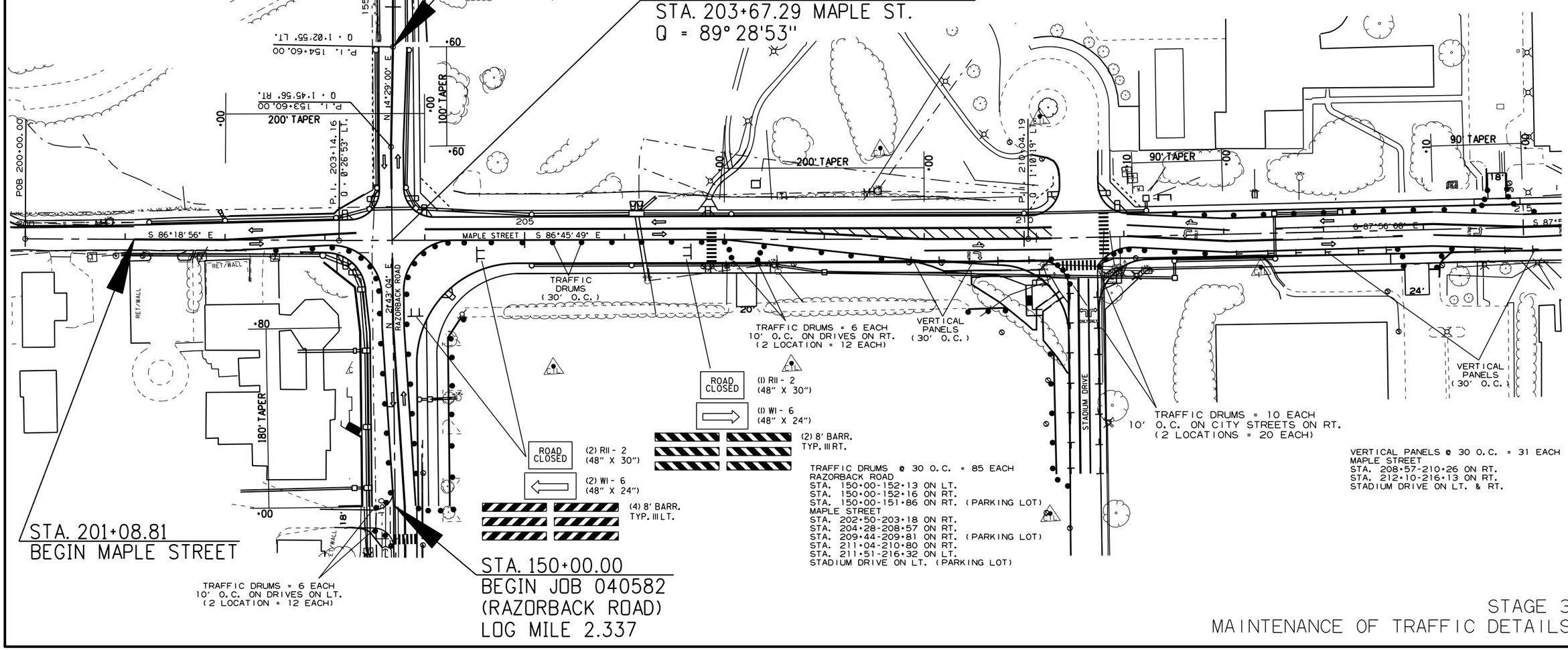
SEQUENCE OF CONSTRUCTION

STAGE 1:
CONSTRUCT TEMPORARY WIDENING ON RIGHT OF RAZORBACK RD. AND MAPLE ST.

STAGE 2:
SHIFT TRAFFIC TO TEMPORARY WIDENING
CLOSE RAZORBACK RD. (STA. 152+66.41 - STA. 154+60.00) & MAPLE ST. (STA. 201+08.81 - STA. 203+79.21)
CONSTRUCT LEFT SIDE OF ROADWAY:
RAZORBACK RD. FROM STA. 150+00.00 - STA. 152+66.41
MAPLE ST. FROM STA. 203+67.29 - STA. 216+17.42
CONSTRUCT STORM DRAIN ON LEFT
CONSTRUCT DRIVES ON LEFT
CONSTRUCT RETAINING WALL ON LEFT OF RAZORBACK RD.
CONSTRUCT ALL OF MAPLE ST.:
FROM STA. 201+08.81 - STA. 203+67.29
CONSTRUCT ALL OF RAZORBACK RD.:
FROM STA. 152+66.41 - STA. 154+60.00

STAGE 3:
SHIFT TRAFFIC TO LEFT SIDE
REMOVE TEMPORARY WIDENING ON RIGHT
CONSTRUCT RIGHT SIDE OF ROADWAY:
RAZORBACK RD. FROM STA. 150+00.00 - STA. 152+66.48
MAPLE ST. FROM STA. 203+79.21 - STA. 216+17.42
CONSTRUCT STORM DRAIN ON RIGHT
CONSTRUCT DRIVES ON RIGHT

STAGE 4:
PLACE FINAL 2" OF SURFACE COURSE
INSTALL PERMANENT PAVEMENT MARKINGS



TRAFFIC DRUMS @ 30 O.C. = 85 EACH
RAZORBACK ROAD
STA. 150+00-152+13 ON LT.
STA. 150+00-152+16 ON RT.
STA. 150+00-151+86 ON RT. (PARKING LOT)
MAPLE STREET
STA. 202+50-203+18 ON RT.
STA. 204+28-208+57 ON RT.
STA. 209+44-209+81 ON RT. (PARKING LOT)
STA. 211+04-210+80 ON RT.
STA. 211+51-216+32 ON LT.
STADIUM DRIVE ON LT. (PARKING LOT)

STAGE 3
MAINTENANCE OF TRAFFIC DETAILS

3/4/2015

R040582.DGN

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.		040582	12	107

(2) TEMPORARY EROSION CONTROL DETAILS

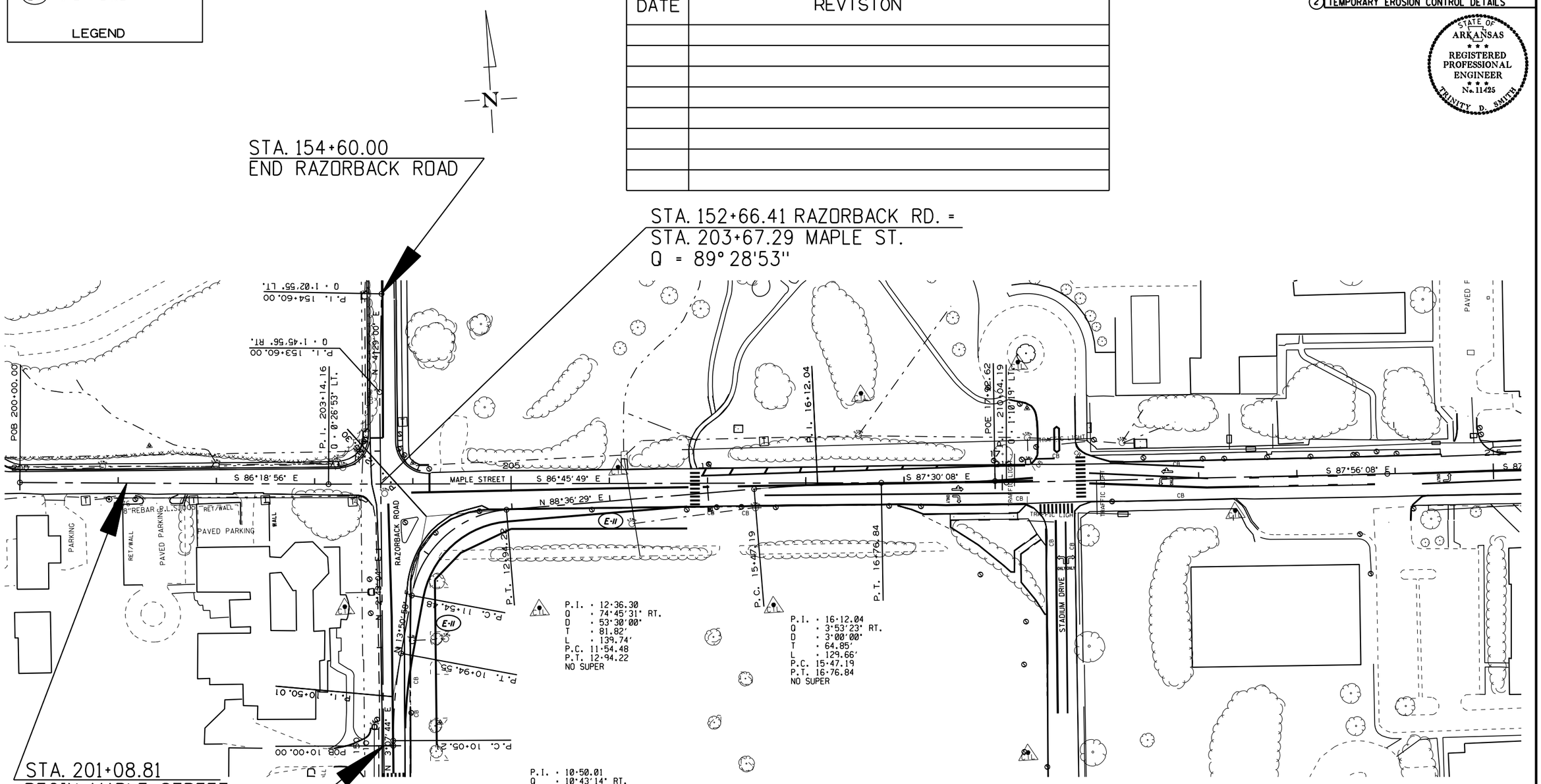
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

(E-II) SILT FENCE

LEGEND

REVISIONS

DATE	REVISION



(E-II) SILT FENCE ON RT.

RAZORBACK ROAD:
STA. 150+00 - STA. 152+19 = 263 LIN. FT.
MAPLE STREET:
STA. 205+00 - STA. 206+79 = 179 LIN. FT.

STAGE 1
TEMPORARY EROSION CONTROL DETAILS

3/4/2015

R040582.DGN

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.		040582	13	107

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

(E-5) SAND BAG DITCH CHECKS
(E-6) ROCK DITCH CHECKS
(E-7) DROP INLET SILT FENCE
(E-11) SILT FENCE

LEGEND

REVISIONS

DATE	REVISION

(E-7) DROP INLET SILT FENCE ON RT.

STA. 146+08 = 25 LIN. FT.
STA. 146+08 = 25 LIN. FT.
STA. 150+19 = 25 LIN. FT.
STA. 150+19 = 25 LIN. FT.
STA. 151+56.38 = 25 LIN. FT.
STA. 151+56.38 = 25 LIN. FT.
STA. 152+17.66 = 25 LIN. FT.
STA. 152+96.64 = 25 LIN. FT.
STA. 153+19 = 25 LIN. FT.
STA. 154+57 = 25 LIN. FT.

(E-5) SAND BAG DITCH CHECKS ON LT.

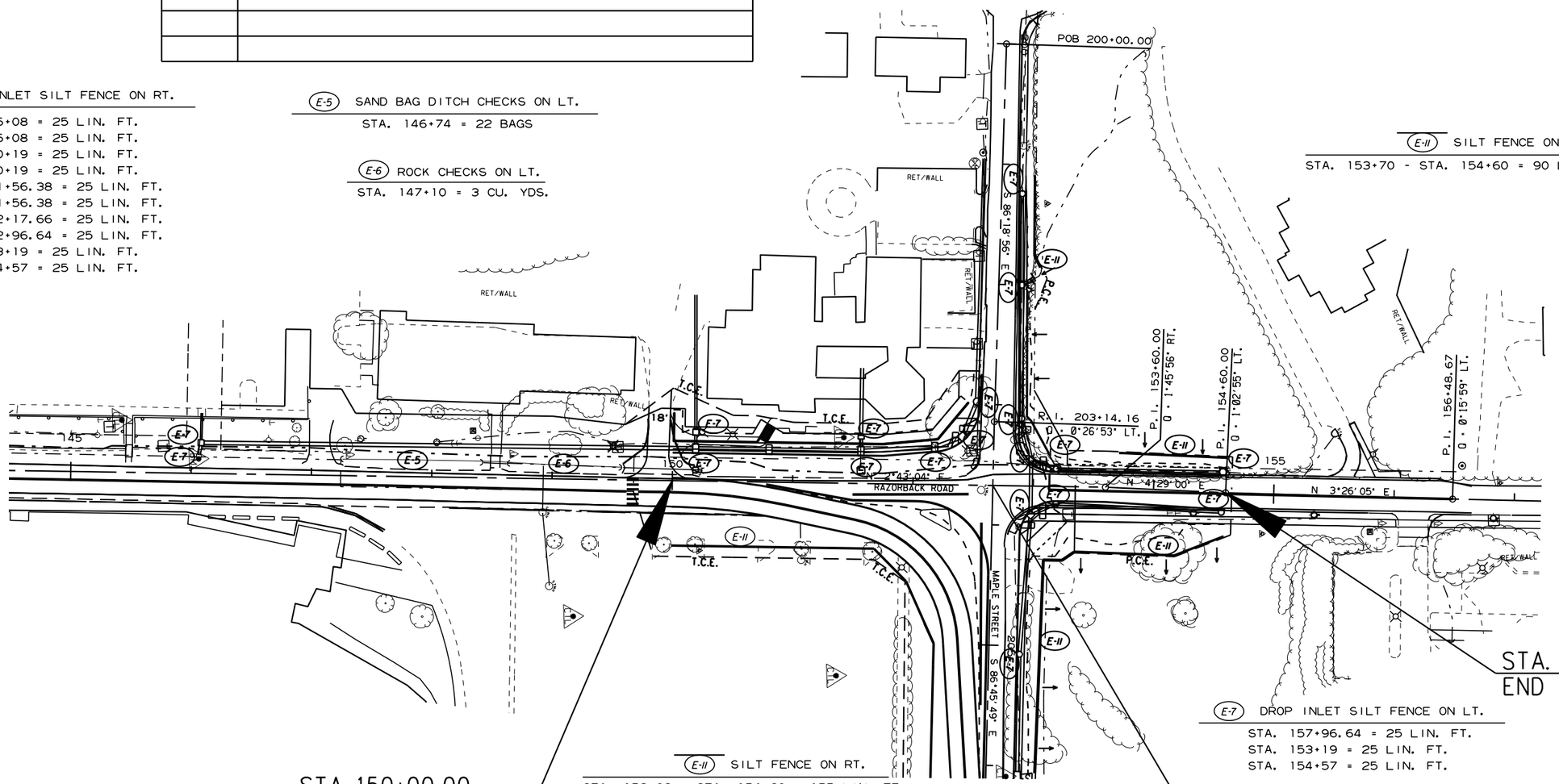
STA. 146+74 = 22 BAGS

(E-6) ROCK CHECKS ON LT.

STA. 147+10 = 3 CU. YDS.

(E-11) SILT FENCE ON LT.

STA. 153+70 - STA. 154+60 = 90 LIN. FT.



(E-11) SILT FENCE ON RT.

STA. 153+09 - STA. 154+60 = 155 LIN. FT.

(E-7) DROP INLET SILT FENCE ON LT.

STA. 157+96.64 = 25 LIN. FT.
STA. 153+19 = 25 LIN. FT.
STA. 154+57 = 25 LIN. FT.

STA. 150+00.00
BEGIN JOB 040582
(RAZORBACK ROAD)
LOG MILE 2.337

STA. 152+66.41 RAZORBACK RD. =
STA. 203+67.29 MAPLE ST.
Δ = 89° 28'53"

STA. 154+60.00
END RAZORBACK ROAD

STAGE 2
TEMPORARY EROSION CONTROL DETAILS

3/4/2015

R040582.DGN

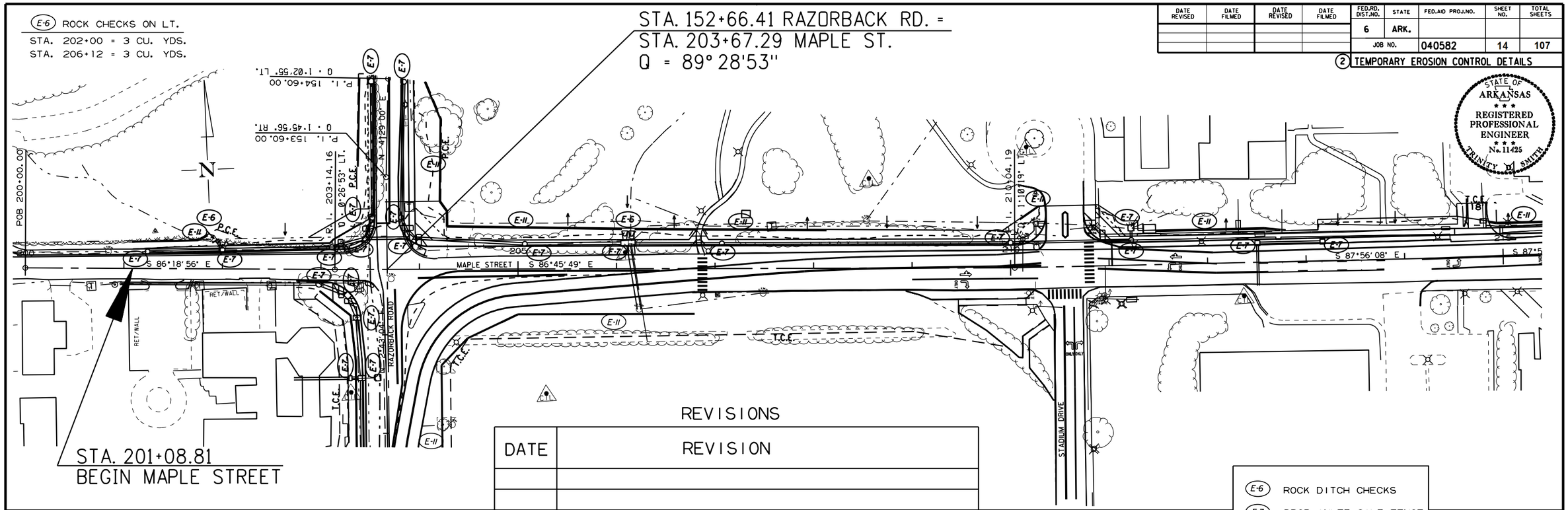
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		040582	14	107

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY M. SMITH

(E-6) ROCK CHECKS ON LT.
STA. 202+00 = 3 CU. YDS.
STA. 206+12 = 3 CU. YDS.



REVISIONS

DATE	REVISION

(E-6) ROCK DITCH CHECKS
(E-7) DROP INLET SILT FENCE
(E-11) SILT FENCE

LEGEND

(E-11) SILT FENCE ON LT.

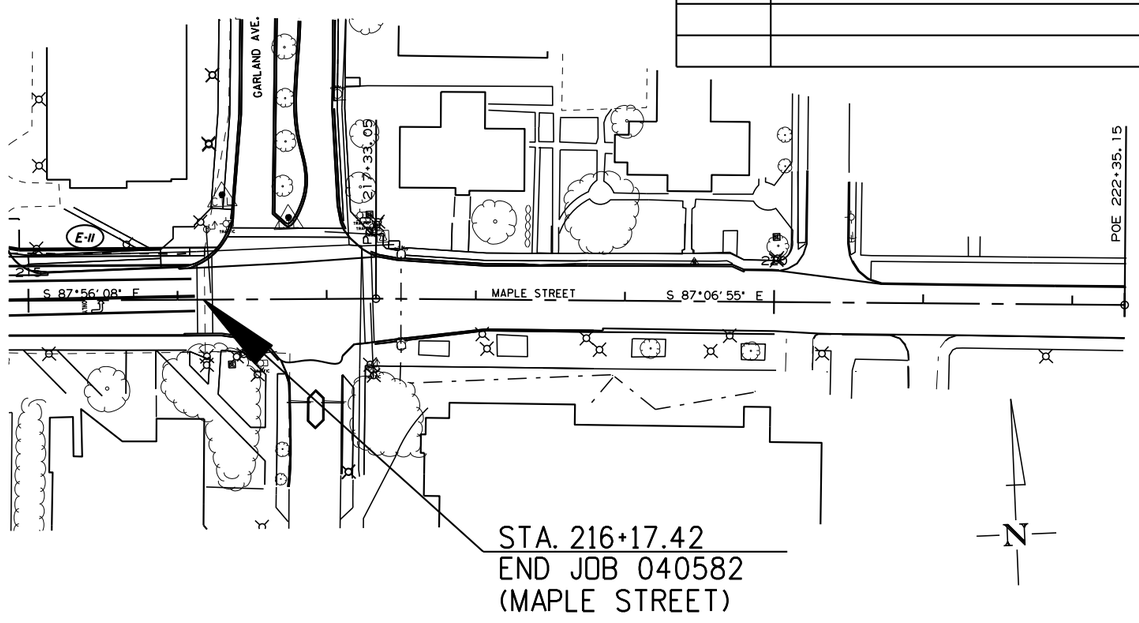
STA. 201+09 - STA. 201+85 = 78 LIN. FT.
STA. 204+25 - STA. 206+05 = 180 LIN. FT.
STA. 206+18 - STA. 206+82 = 64 LIN. FT.
STA. 206+87 - STA. 208+13 = 126 LIN. FT.
STA. 210+10 - STA. 210+29 = 24 LIN. FT.
STA. 211+48 - STA. 212+71 = 123 LIN. FT.
STA. 214+86 - STA. 215+89 = 103 LIN. FT.

(E-7) DROP INLET SILT FENCE ON LT.

STA. 201+24 = 25 LIN. FT.
STA. 202+00 = 25 LIN. FT.
STA. 203+11 = 25 LIN. FT.
STA. 205+07 = 25 LIN. FT.
STA. 206+12 = 25 LIN. FT.
STA. 207+07 = 25 LIN. FT.
STA. 210+00 = 25 LIN. FT.
STA. 211+23 = 25 LIN. FT.
STA. 211+23 = 25 LIN. FT.
STA. 212+51 = 25 LIN. FT.
STA. 213+17 = 25 LIN. FT.

(E-7) DROP INLET SILT FENCE ON RT.

STA. 202+98 = 25 LIN. FT.
STA. 203+29.51 = 25 LIN. FT.



STAGE 2
TEMPORARY EROSION CONTROL DETAILS

3/4/2015

R040582.DGN

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.		040582	15	107

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

(E-6) ROCK DITCH CHECKS
(E-7) DROP INLET SILT FENCE
(E-11) SILT FENCE

LEGEND

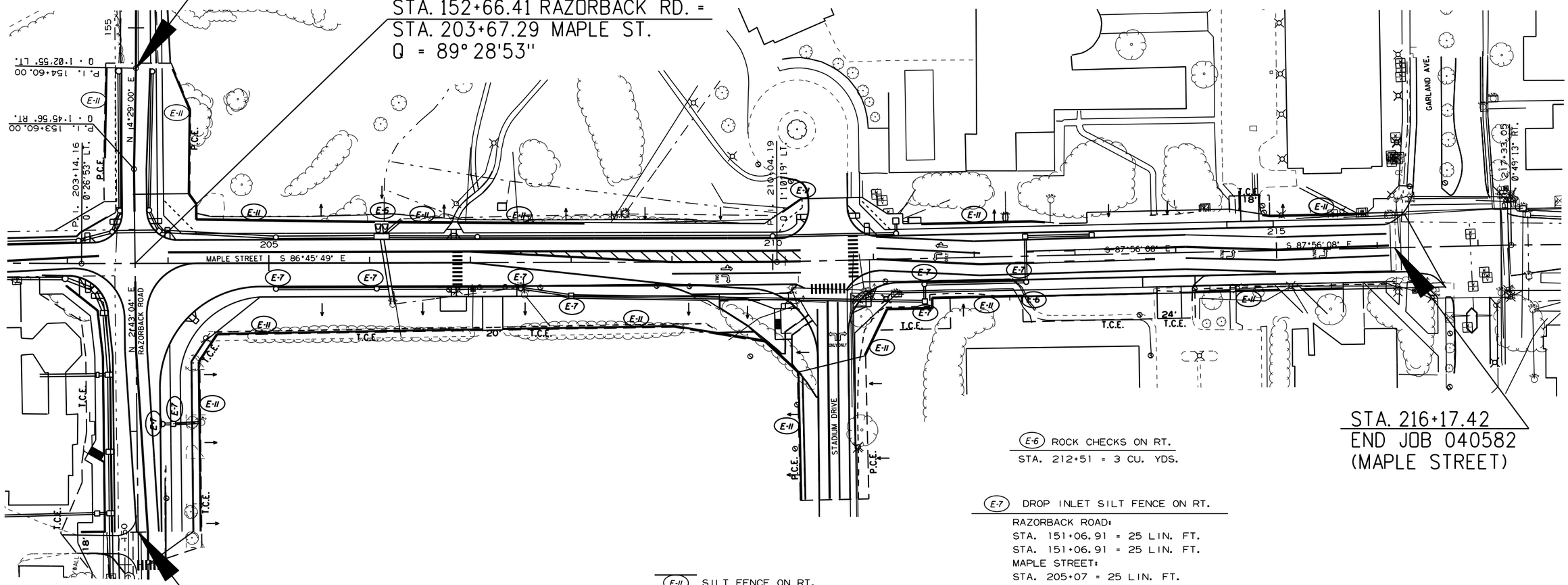
REVISIONS

DATE	REVISION

N

STA. 154+60.00
END RAZORBACK ROAD

STA. 152+66.41 RAZORBACK RD. =
STA. 203+67.29 MAPLE ST.
Q = 89° 28'53"



STA. 150+00.00
BEGIN JOB 040582
(RAZORBACK ROAD)
LOG MILE 2.337

STA. 216+17.42
END JOB 040582
(MAPLE STREET)

(E-11) SILT FENCE ON RT.

RAZORBACK ROAD:
STA. 150+00 - STA. 151+96 = 201 LIN. FT.
MAPLE STREET:
STA. 204+48 - STA. 207+12 = 264 LIN. FT.
STA. 207+32 - STA. 210+23 = 434 LIN. FT.
STA. 210+89 - STA. 212+47 = 196 LIN. FT.
STA. 214+18 - STA. 214+53 = 36 LIN. FT.
STA. 214+58 - STA. 215+02 = 44 LIN. FT.
STA. 215+24 - STA. 215+65 = 31 LIN. FT.

(E-6) ROCK CHECKS ON RT.

STA. 212+51 = 3 CU. YDS.

(E-7) DROP INLET SILT FENCE ON RT.

RAZORBACK ROAD:
STA. 151+06.91 = 25 LIN. FT.
STA. 151+06.91 = 25 LIN. FT.
MAPLE STREET:
STA. 205+07 = 25 LIN. FT.
STA. 206+07 = 25 LIN. FT.
STA. 207+50 = 25 LIN. FT.
STA. 208+00 = 25 LIN. FT.
STA. 211+50 = 25 LIN. FT.
STA. 211+50 = 25 LIN. FT.
STA. 212+51 = 25 LIN. FT.

STAGE 3
TEMPORARY EROSION CONTROL DETAILS

3/4/2015

R040582.DGN

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.		040582	22	107

RAISED PAVEMENT MARKERS (TYPE II)(YELLOW/YELLOW) ARE TO BE PLACED ON THE DOUBLE YELLOW AT 80' INTERVALS.

RAISED PAVEMENT MARKERS (TYPE II)(WHITE/RED) ARE TO BE PLACED ON THE LANE LINES AT 80' INTERVALS.

REFER TO THE PERMANENT PAVEMENT MARKING DETAILS, STD. DRWG. PM-1, AND THE LATEST EDITION OF THE MUTCD FOR ADDITIONAL PAVEMENT MARKING DETAILS.

SEQUENCE OF CONSTRUCTION

STAGE 1:
CONSTRUCT TEMPORARY WIDENING ON RIGHT OF RAZORBACK RD. AND MAPLE ST.

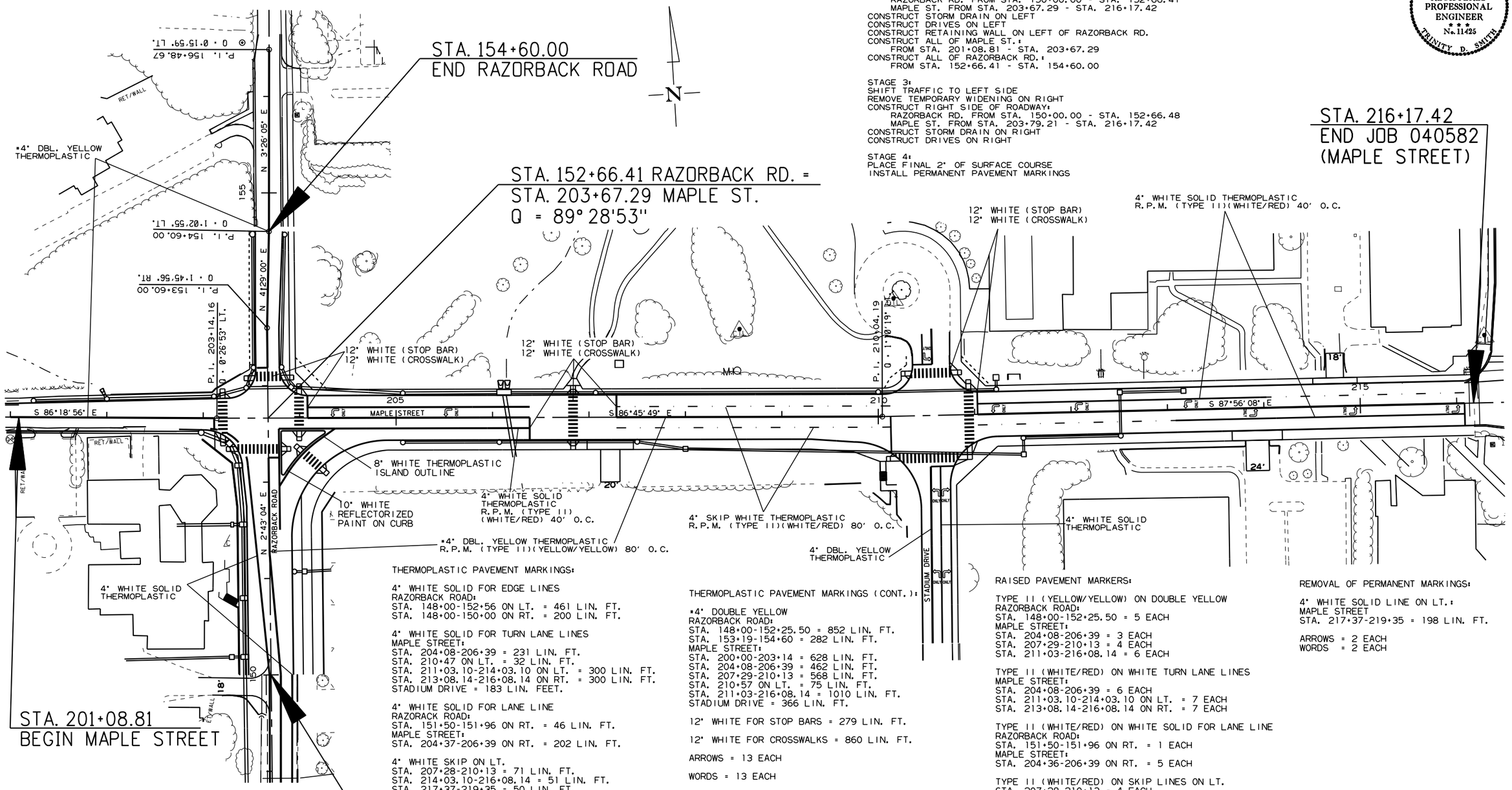
STAGE 2:
SHIFT TRAFFIC TO TEMPORARY WIDENING
CLOSE RAZORBACK RD. (STA. 152+66.41 - STA. 154+60.00) &
MAPLE ST. (STA. 201+08.81 - STA. 203+79.21)
CONSTRUCT LEFT SIDE OF ROADWAY:
RAZORBACK RD. FROM STA. 150+00.00 - STA. 152+66.41
MAPLE ST. FROM STA. 203+67.29 - STA. 216+17.42
CONSTRUCT STORM DRAIN ON LEFT
CONSTRUCT DRIVES ON LEFT
CONSTRUCT RETAINING WALL ON LEFT OF RAZORBACK RD.
CONSTRUCT ALL OF MAPLE ST.:
FROM STA. 201+08.81 - STA. 203+67.29
CONSTRUCT ALL OF RAZORBACK RD.:
FROM STA. 152+66.41 - STA. 154+60.00

STAGE 3:
SHIFT TRAFFIC TO LEFT SIDE
REMOVE TEMPORARY WIDENING ON RIGHT
CONSTRUCT RIGHT SIDE OF ROADWAY:
RAZORBACK RD. FROM STA. 150+00.00 - STA. 152+66.48
MAPLE ST. FROM STA. 203+79.21 - STA. 216+17.42
CONSTRUCT STORM DRAIN ON RIGHT
CONSTRUCT DRIVES ON RIGHT

STAGE 4:
PLACE FINAL 2" OF SURFACE COURSE
INSTALL PERMANENT PAVEMENT MARKINGS

(2) PERMANENT PAVEMENT MARKING DETAIL

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH



THERMOPLASTIC PAVEMENT MARKINGS:

4" WHITE SOLID FOR EDGE LINES
RAZORBACK ROAD:
STA. 148+00-152+56 ON LT. = 461 LIN. FT.
STA. 148+00-150+00 ON RT. = 200 LIN. FT.

4" WHITE SOLID FOR TURN LANE LINES
MAPLE STREET:
STA. 204+08-206+39 = 231 LIN. FT.
STA. 210+47 ON LT. = 32 LIN. FT.
STA. 211+03.10-214+03.10 ON LT. = 300 LIN. FT.
STA. 213+08.14-216+08.14 ON RT. = 300 LIN. FT.
STADIUM DRIVE = 183 LIN. FEET.

4" WHITE SOLID FOR LANE LINE
RAZORACK ROAD:
STA. 151+50-151+96 ON RT. = 46 LIN. FT.
MAPLE STREET:
STA. 204+37-206+39 ON RT. = 202 LIN. FT.

4" WHITE SKIP ON LT.
STA. 207+28-210+13 = 71 LIN. FT.
STA. 214+03.10-216+08.14 = 51 LIN. FT.
STA. 217+37-219+35 = 50 LIN. FT.

4" WHITE SKIP ON RT.
STA. 207+28-210+13 = 71 LIN. FT.
STA. 211+03.10-213+08.14 = 51 LIN. FT.

8" WHITE FOR ISLANDS
STA. 203+90-204+53 = 202 LIN. FT.

THERMOPLASTIC PAVEMENT MARKINGS (CONT.):

*4" DOUBLE YELLOW
RAZORBACK ROAD:
STA. 148+00-152+25.50 = 852 LIN. FT.
STA. 153+19-154+60 = 282 LIN. FT.
MAPLE STREET:
STA. 200+00-203+14 = 628 LIN. FT.
STA. 204+08-206+39 = 462 LIN. FT.
STA. 207+29-210+13 = 568 LIN. FT.
STA. 210+57 ON LT. = 75 LIN. FT.
STA. 211+03-216+08.14 = 1010 LIN. FT.
STADIUM DRIVE = 366 LIN. FT.

12" WHITE FOR STOP BARS = 279 LIN. FT.

12" WHITE FOR CROSSWALKS = 860 LIN. FT.

ARROWS = 13 EACH

WORDS = 13 EACH

REFLECTORIZED PAINT PAVEMENT MARKINGS:

10" WHITE REFLECTORIZED (ISLAND)
STA. 151+96-152+55 = 157 LIN. FT.

RAISED PAVEMENT MARKERS:

TYPE II (YELLOW/YELLOW) ON DOUBLE YELLOW
RAZORBACK ROAD:
STA. 148+00-152+25.50 = 5 EACH
MAPLE STREET:
STA. 204+08-206+39 = 3 EACH
STA. 207+29-210+13 = 4 EACH
STA. 211+03-216+08.14 = 6 EACH

TYPE II (WHITE/RED) ON WHITE TURN LANE LINES
MAPLE STREET:
STA. 204+08-206+39 = 6 EACH
STA. 211+03.10-214+03.10 ON LT. = 7 EACH
STA. 213+08.14-216+08.14 ON RT. = 7 EACH

TYPE II (WHITE/RED) ON WHITE SOLID FOR LANE LINE
RAZORBACK ROAD:
STA. 151+50-151+96 ON RT. = 1 EACH
MAPLE STREET:
STA. 204+36-206+39 ON RT. = 5 EACH

TYPE II (WHITE/RED) ON SKIP LINES ON LT.
STA. 207+28-210+13 = 4 EACH
STA. 214+03.10-216+08.14 = 3 EACH

TYPE II (WHITE/RED) ON SKIP LINES ON RT.
STA. 207+28-210+13 = 4 EACH
STA. 211+03.10-213+08.14 = 3 EACH

REMOVAL OF PERMANENT MARKINGS:

4" WHITE SOLID LINE ON LT.:
MAPLE STREET
STA. 217+37-219+35 = 198 LIN. FT.

ARROWS = 2 EACH
WORDS = 2 EACH

PERMANENT PAVEMENT MARKING DETAIL

3/4/2015

R040582.DGN

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

SURVEY CONTROL COORDINATES

Project Name: s040418
Date: 1/29/2009
Coordinate System: ARKANSAS STATE PLANE - NORTH ZONE BASED ON GPS CONTROL, PROJECTED TO GROUND.
Units: U.S. SURVEY FOOT

Point Name	Northing	Easting	Elev	Feature	Description
1	640640.4398	669476.8355	1443.95	CTL	T-1 3" BRASS CAP U OF A PN#1
2	639481.5405	669422.3461	1443.65	CTL	T-2 3" BRASS CAP U OF A PN#2
7	639347.3811	668114.4531	1400.16	CTL	T-7 3" BRASS CAP U OF A PN#7
8	638367.3332	668142.4270	1359.31	CTL	T-8 3" BRASS CAP U OF A PN#8
9	635952.2544	668054.5672	1273.24	CTL	T-9 3" BRASS CAP U OF A PN#9
10	634550.9097	667882.9340	1265.14	CTL	T-10 3" BRASS CAP SET IN CONC. AT INTERSECTION
11	632744.5222	667966.0518	1252.08	CTL	T-11 3" BRASS CAP U OF A PN#11
12	631695.8340	667888.4380	1246.70	CTL	T-12 3" BRASS CAP U OF A PN#12
13	635165.8758	667979.0434	1266.61	CTL	T-13 5*" REBAR 2" ALUM. CAP
14	635871.3819	668011.8395	1272.47	CTL	T-14 5*" REBAR 2" ALUM. CAP
15	636432.3748	668048.6375	1280.47	CTL	T-15 5*" REBAR 2" ALUM. CAP
16	637167.5910	668079.8748	1295.16	CTL	T-16 5*" REBAR 2" ALUM. CAP
17	637773.8357	668065.7634	1320.36	CTL	T-17 5*" REBAR 2" ALUM. CAP
18	638225.5008	668128.0175	1349.51	CTL	T-18 5*" REBAR 2" ALUM. CAP
19	638748.1166	668080.7274	1390.84	CTL	T-19 5*" REBAR 2" ALUM. CAP
20	639472.7967	668400.4398	1385.82	CTL	T-20 5*" REBAR 2" ALUM. CAP
21	639391.7178	669024.9639	1426.94	CTL	T-21 5*" REBAR 2" ALUM. CAP
22	639464.4720	669466.2650	1444.54	CTL	T-22 5*" REBAR 2" ALUM. CAP
23	640314.4706	669547.7937	1434.44	CTL	T-23 5*" REBAR 2" ALUM. CAP
100	633343.1786	667880.7033	1259.23	GPS	AHTD GPS 720032
101	646579.6854	669777.9556	1276.03	GPS	AHTD GPS 720033
903	632342.5239	667760.8629	1244.24	BM	TBM-903 SQUARE CUT IN HEADWALL EAST SIDE HWY. 112
904	630627.4078	667558.5756	1225.14	BM	TBM-904 STD AHTD CAP ON R.C. BOX OF HWY. 112 AHTD DISK 720044
909	632342.5239	667760.8629	1241.40	BM	909=Q 310 GOVT. BM Q 310 STAINLESS STEEL ROD
910	631542.7949	667332.4261	1231.72	BM	TBM-910 CORPS ENG. BRASS RC BOX ON SOUTH SIDE OF 15TH STREET
912	636453.2656	667989.4398	1281.30	BM	TBM-912 SQUARE CUT IN HEADWALL WEST SIDE HWY. 112
913	638810.7778	668114.9319	1379.26	BM	CHISELED SQUARE OF EAST EDGE DROP INLET
914	640354.5682	669549.6952	1434.87	BM	TBM-914 AHTD CAP SOUTHEAST OF CATCH BASIN
1500	639709.7880	669480.2566	1440.83	CTL	8 SPIKE ON GARLAND AVE.
1501	639937.8255	669493.6225	1437.95	CTL	8 SPIKE ON GARLAND AVE.
1502	639555.5792	668812.9828	1418.32	CTL	8" SPIKE IN FLOWER BED
1503	639533.2207	668651.7298	1399.90	CTL	8" SPIKE 7.5 S. OF 36" OAK TREE
1504	639334.5686	668312.1434	1381.04	CTL	CPS IN CENTER OF PK
1505	639323.5531	668550.2498	1381.55	CTL	CPS IN CENTER OF PK
1506	639158.2293	668799.9659	1381.74	CTL	CPS IN CROSS HATCHED
1507	638836.8555	667977.6466	1398.01	CTL	CPS IN IN UPPER PK W.
1508	639117.7652	668255.7625	1373.28	CTL	CPS IN DRIVING LANE
1509	638470.4648	667918.2489	1393.91	CTL	CPS IN EDGE OF CITY STREET

*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).
USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT
A PROJECT CAF OF 0.9999141647 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 S040418GI.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 BEARING:
ARKANSAS STATE PLANE GRID BEARINGS - 0301-NORTH ZONE
DETERMINED FROM GPS CONTROL POINTS: 720032-720033
CONVERGENCE ANGLE: 01-16-07.0 RIGHT AT POINT NO. 16
GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

CONST-RAZORBACK ROAD

POINT NO.	TYPE	STATION	NORTHING	EASTING
8000	POB	100+00.00	634209.1476	667911.3953
8001	PI	103+00.45	634509.1358	667928.0268
8002	PI	107+00.00	634908.2683	667946.3786
8003	PI	108+00.00	635008.1780	667950.6387
8004	PI	122+00.00	636406.7004	668014.9418
8005	PI	123+50.00	636556.6151	668020.0008
8006	PI	153+60.00	639563.2260	668162.7242
8007	PI	154+60.00	639662.9175	668170.5408
8008	PI	156+48.67	639851.2493	668181.8448
8009	POE	159+99.99	640202.0347	668201.2627

CONST-MAPLE STREET

POINT NO.	TYPE	STATION	NORTHING	EASTING
8011	POB	200+00.00	639492.9252	667791.7332
8012	PI	203+14.16	639472.7376	668105.2433
8013	PI	210+04.19	639433.7801	668794.1737
8014	PI	217+33.05	639407.5244	669522.5612
8015	POE	222+35.15	639382.2556	670024.0287

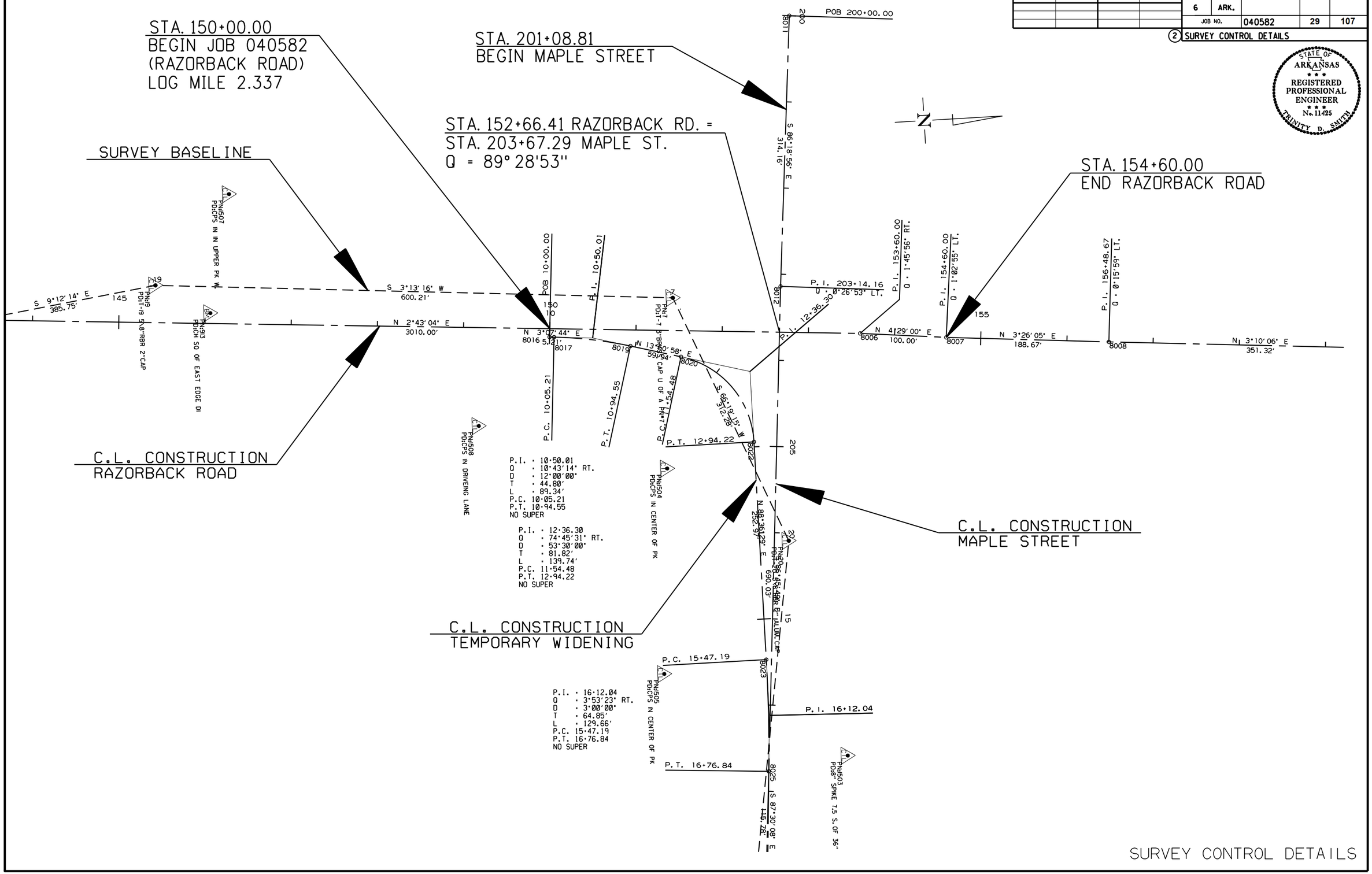
TEMPORARY WIDENING

POINT NO.	TYPE	STATION	NORTHING	EASTING
8016	POB	10+00.00	639203.0382	668155.3351
8017	PC	10+05.21	639208.2387	668155.6194
8019	PT	10+94.55	639296.4687	668168.7886
8020	PC	11+54.48	639354.6621	668183.1356
8022	PT	12+94.22	639436.0898	668284.5155
8023	PC	15+47.19	639442.2349	668537.4089
8025	PT	16+76.84	639440.9840	668667.0354
8026	POE	17+92.62	639435.9385	668782.7018

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.		040582	29	107

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH



SURVEY CONTROL DETAILS

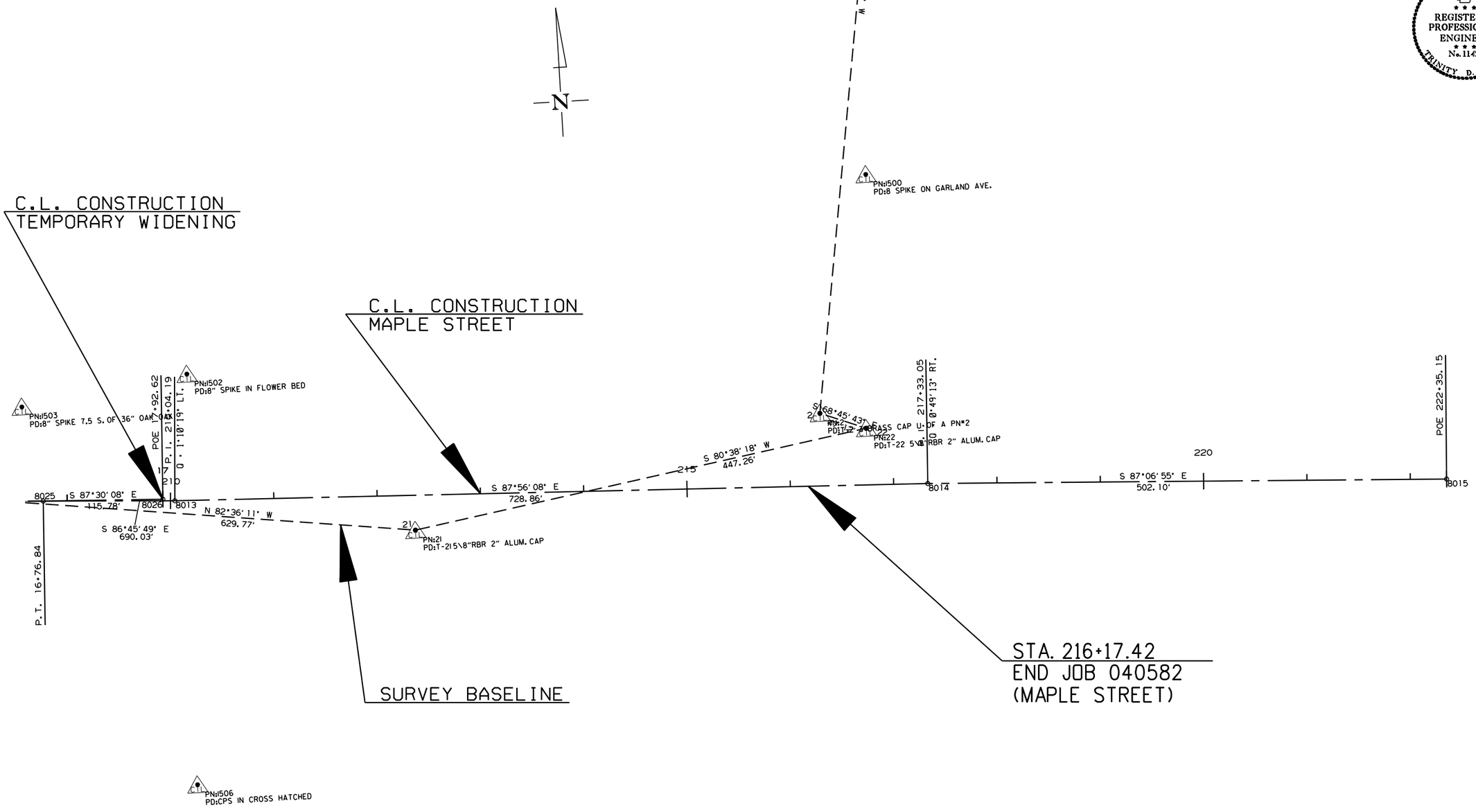
3/4/2015

R040582.DGN

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.		040582	30	107

2 SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH



SURVEY CONTROL DETAILS

3/4/2015

R040582.DGN

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.		040582	31	107

(2) PLAN AND PROFILE SHEETS (RZRBK RD.)

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11425 TRINITY D. SMITH

STA. 146+08 CONSTRUCT
JUNCTION BOX ON LT.
WITH 30" x 8' PIPE CULVERT
CONNECT TO EXISTING DROP INLET ON
LT. @ STA. 146+06.20
TYPE E = 4' x 4'
H = 6'-7"

STA. 149+88.59 CONSTRUCT
APPROACH ON LT.
UNCLASSIFIED EXCAVATION = 35 CU. YDS.

STA. 150+19 CONSTRUCT
DROP INLET ON LT.
CONNECT TO EXISTING 18" PIPE INLET
WITH 18" x 8' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 150+19
TYPE E = 4' x 4'
H = 9'-5"

STA. 150+19 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
& 30" x 407' PIPE CULVERT
CONNECT TO JUNCTION BOX ON
LT. @ STA. 146+08
TYPE C = 4' x 7'
H = 5'-0"

STA. 150+80 CONSTRUCT
JUNCTION BOX ON LT.
& 30" x 57' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 150+19
TYPE E = 4' x 7'
H = 4'-11"

STA. 151+56.38 CONSTRUCT
DROP INLET ON LT.
CONNECT TO EXISTING 24" PIPE INLET
WITH 24" x 7' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 151+56.38
TYPE E = 4' x 2'
H = 13'-6"

STA. 151+56.38 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
& 30" x 72' PIPE CULVERT
CONNECT TO JUNCTION BOX ON
LT. @ STA. 150+80
TYPE C = 4' x 7'
H = 5'-6"

STA. 152+17.66 CONSTRUCT
DROP INLET ON LT.
WITH 30" x 57' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 151+56.38
TYPE C = 4' x 7'
H = 5'-0"

STA. 152+96.64 CONSTRUCT
DROP INLET ON LT.
& 24" x 42' R.C. PIPE CULVERT
CONNECT TO JUNCTION BOX ON
RT. @ STA. 152+96.64
TYPE MO = 4'
TYPE C = 4' x 4'
H = 6'-6"

STA. 153+08.63 ON LT. CONSTRUCT
TYPE 4 WHEELCHAIR RAMP = 17.9 SQ. YDS.

STA. 152+34.23 ON LT. CONSTRUCT
TYPE 3 WHEELCHAIR RAMP = 4.1 SQ. YDS.

STA. 153+19 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
& 18" x 18' PIPE CULVERT
CONNECT TO JUNCTION BOX ON
LT. @ STA. 152+96.64
TYPE MO = 4'
TYPE C = 4' x 4'
H = 5'-0"

STA. 154+57 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
& CONNECT TO EXISTING 18" PIPE INLET
& 18" x 134' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 153+19
TYPE MO = 5'
TYPE C = 4' x 5'
H = 5'-0"

STA. 150+00.00
BEGIN JOB 040582
(RAZORBACK ROAD)
LOG MILE 2.337

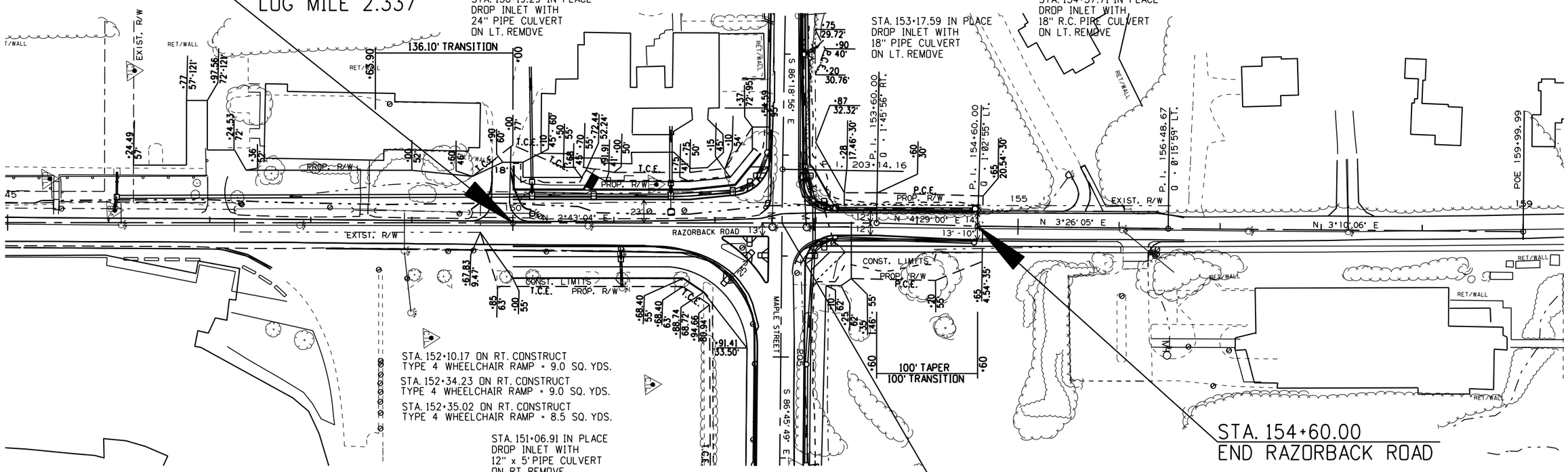
STA. 151+56.38 IN PLACE
24" R.C. PIPE CULVERT
ON LT. REMOVE

STA. 152+96.63 IN PLACE
DROP INLET WITH
24" R.C. PIPE CULVERT
ON LT. REMOVE

STA. 150+19.29 IN PLACE
DROP INLET WITH
24" PIPE CULVERT
ON LT. REMOVE

STA. 153+17.59 IN PLACE
DROP INLET WITH
18" PIPE CULVERT
ON LT. REMOVE

STA. 154+57.71 IN PLACE
DROP INLET WITH
18" R.C. PIPE CULVERT
ON LT. REMOVE



STA. 151+06.91 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
& 18" x 7' PIPE CULVERT
CONNECT TO JUNCTION BOX ON
RT. @ STA. 151+06.91
TYPE MO = 4'
TYPE C = 4' x 4'
H = 4'-0"

STA. 152+96.64 CONSTRUCT
JUNCTION BOX ON RT.
WITH 24" x 112' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 205+07 (MAPLE ST.)
TYPE E = 4' x 4'
H = 7'-0"

STA. 153+08.63 ON RT. CONSTRUCT
TYPE 3 WHEELCHAIR RAMP = 4.9 SQ. YDS.

STA. 151+06.91 CONSTRUCT
JUNCTION BOX ON RT.
CONNECT TO EXISTING
12" PIPE OUTLET
TYPE E = 4' x 4'
H = 6'-2"

STA. 153+19 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
& 18" x 19' PIPE CULVERT
CONNECT TO JUNCTION BOX ON
RT. @ STA. 152+96.64
TYPE MO = 4'
TYPE C = 4' x 4'
H = 5'-0"

STA. 154+57 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
& 18" x 134' PIPE CULVERT
CONNECT TO DROP INLET ON
RT. @ STA. 153+19
TYPE MO = 4'
TYPE C = 4' x 4'
H = 4'-0"

ALL R.C. PIPE CULVERTS SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED. FOR ALL R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED. FOR ALL C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

3/4/2015

R040582.DGN

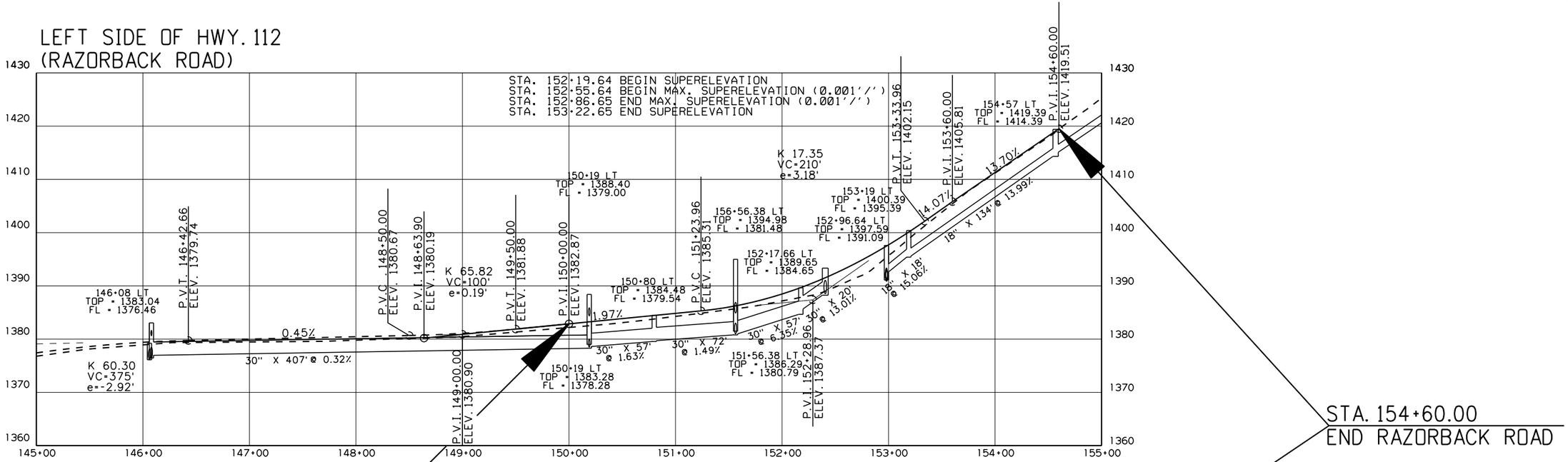
ALL R.C. PIPE CULVERTS SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED. FOR ALL R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED. FOR ALL C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

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.		040582	32	107

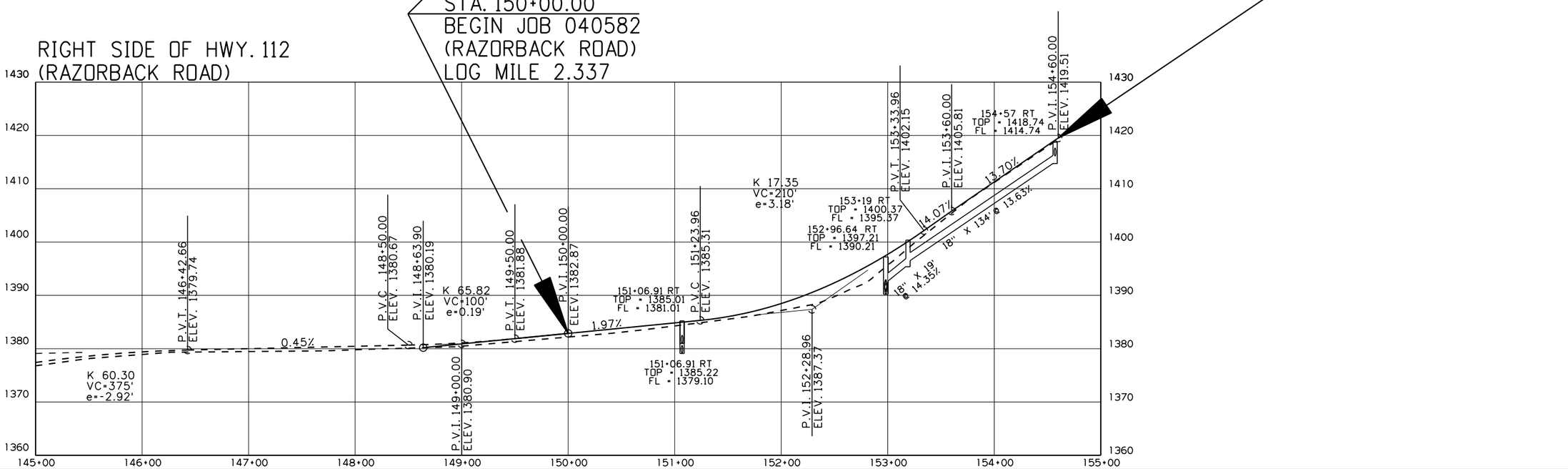
(2) PLAN AND PROFILE SHEETS (RZRBK RD.)

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11425 TRINITY D. SMITH



STA. 150+00.00
BEGIN JOB 040582
(RAZORBACK ROAD)
LOG MILE 2.337

STA. 154+60.00
END RAZORBACK ROAD



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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.		040582	33	107

(2) PLAN AND PROFILE SHEETS (MAPLE ST.)

PRELIMINARY
SUBJECT TO REVISION

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11425 TRINITY D. SMITH

STA. 201+24 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
CONNECT TO EXISTING 18" PIPE INLET
& 18" x 72' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 202+00
TYPE MO = 4'
TYPE C = 4' x 4'
H = 5'-0"

STA. 202+00 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
& 24" x 4' R.C PIPE CULVERT
WITH FES
& 24" x 107' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 203+11
TYPE MO = 4'
TYPE C = 4' x 4'
H = 5'-0"

STA. 202+00 IN PLACE
DROP INLET WITH
18" x 73' R.C. PIPE CULVERT INLET
AND 18" R.C. PIPE CULVERT OUTET
ON LT. REMOVE

STA. 203+11 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
& 24" x 31' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 152+96.64 (RAZORBACK RD.)
TYPE MO = 4'
TYPE C = 4' x 4'
H = 5'-0"

STA. 203+29 IN PLACE
JUNCTION BOX WITH
18" R.C. PIPE CULVERT
ON LT. REMOVE

STA. 203+22 IN PLACE
DROP INLET WITH
18" R.C. PIPE CULVERT
ON LT. REMOVE

STA. 205+07 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
& 24" x 96' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 206+12
TYPE MO = 4'
TYPE C = 4' x 4'
H = 5'-0"

STA. 206+83.51 ON LT. CONSTRUCT
TYPE 4 WHEELCHAIR RAMP = 21.1 SQ. YDS.

STA. 206+12 CONSTRUCT
DROP INLET ON LT.
WITH DBL. 36" x 2' R.C. PIPE CULVERT WITH FES
& CONNECT 24" PIPE INLET
& CONNECT TO 3' x 3' R.C. BOX CULVERT OUTLET
TYPE C = 14' x 5'
H = 8'-4"

STA. 203+99.50 ON LT. CONSTRUCT
TYPE 3 WHEELCHAIR RAMP = 3.8 SQ. YDS.

STA. 207+07 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
& 18" x 86' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 206+12
TYPE MO = 4'
TYPE C = 4' x 4'
H = 5'-0"

STA. 206+33
JUNCTION BOX ON LT.
WITH 24" PIPE OUTLET
RETAIN

STA. 208+54
JUNCTION BOX ON LT.
WITH 24" PIPE OUTLET
RETAIN

STA. 210+27 IN PLACE
DROP INLET WITH
18" R.C. PIPE CULVERT
ON LT. REMOVE

STA. 209+40
24" PIPE OUTLET ON LT.
PLUG AND ABANDON

STA. 210+28.71 ON LT. CONSTRUCT
TYPE 4 WHEELCHAIR RAMP = 7.2 SQ. YDS.

STA. 210+00 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
& 18" x 289' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 207+07
TYPE MO = 4'
TYPE C = 4' x 4'
H = 5'-0"

STA. 210+27 IN PLACE
DROP INLET WITH
24" x 19' PIPE CULVERT
ON LT. REMOVE

STA. 211+23 IN PLACE
DROP INLET WITH
24" x 94' PIPE CULVERT
ON LT. REMOVE

STA. 210+83.27 ON LT. CONSTRUCT
TYPE 3 WHEELCHAIR RAMP = 3.8 SQ. YDS.

STA. 211+23 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
& 18" x 118' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 210+00
TYPE MO = 4'
TYPE C = 4' x 4'
H = 5'-0"

STA. 210+94.04 ON LT. CONSTRUCT
TYPE 3 WHEELCHAIR RAMP = 3.9 SQ. YDS.

STA. 212+51 CONSTRUCT
DROP INLET ON LT.
WITH 18" x 41' R.C. PIPE CULVERT
CONNECT TO DROP INLET ON
RT. @ STA. 212+51
TYPE ST = 4' x 4'
H = 4'-7"

STA. 213+17 CONSTRUCT
DROP INLET ON LT.
WITH 18" x 62' R.C. PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 212+51
TYPE ST = 4' x 4'
H = 4'-7"

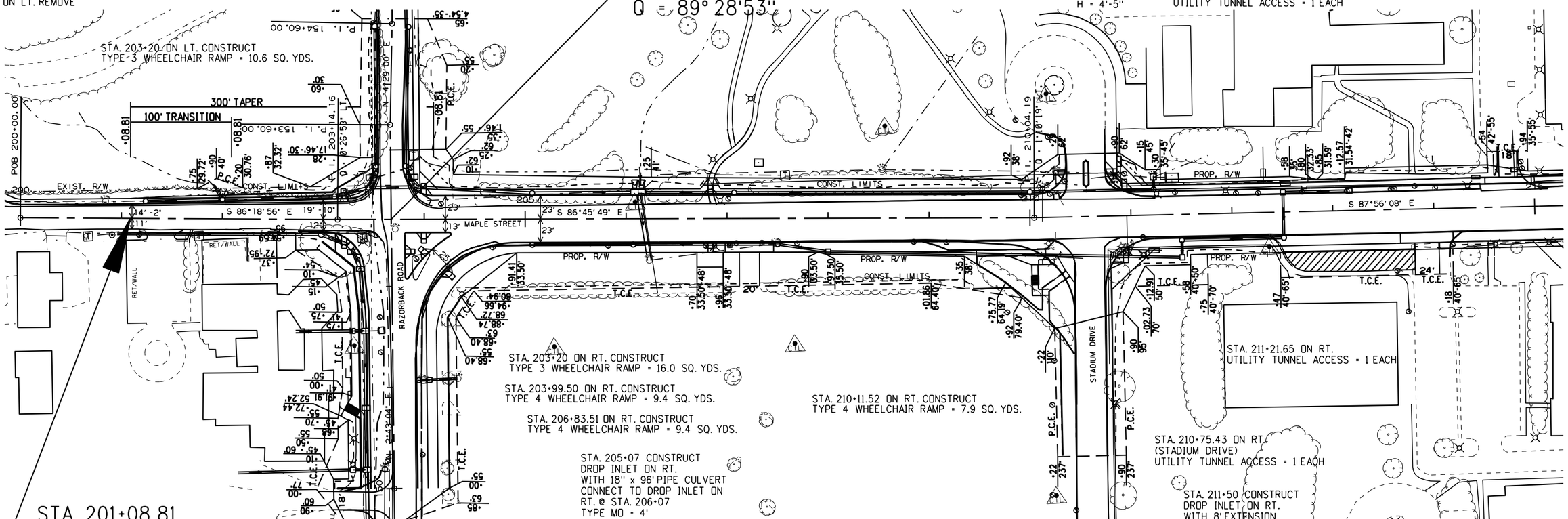
STA. 211+23 CONSTRUCT
JUNCTION BOX ON LT.
CONNECT EXISTING PIPE CULVERTS
& 18" x 8' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 211+23
TYPE E = 5' x 5'
H = 4'-5"

STA. 212+53.45 ON LT.
UTILITY TUNNEL ACCESS = 1 EACH

STA. 214+42.22 ON LT.
UTILITY TUNNEL ACCESS = 1 EACH

STA. 214+74 CONSTRUCT
APPROACH ON LT. = 10 CU. YDS.

STA. 152+66.41 RAZORBACK RD. =
STA. 203+67.29 MAPLE ST.
Q = 89° 28'53"



STA. 201+08.81
BEGIN MAPLE STREET

STA. 202+98 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
& CONNECT TO EXISTING 24" PIPE CULVERT
WITH 30" x 26' PIPE CULVERT
CONNECT TO JUNCTION BOX ON
RT. @ STA. 203+29.51
TYPE MO = 5'
TYPE C = 5' x 5'
H = 5'-0"

STA. 203+29.51 CONSTRUCT
JUNCTION BOX ON RT.
WITH 30" x 20' PIPE CULVERT
CONNECT TO DROP INLET ON
LT. @ STA. 152+17.66 (RAZORBACK RD.)
TYPE E = 5' x 5'
H = 5'-0"

STA. 207+20 CONSTRUCT
APPROACH ON RT.

STA. 206+07 CONSTRUCT
DROP INLET ON RT.
WITH 18" x 11' PIPE CULVERT
CONNECT TO EXISTING
3' x 3' R.C. BOX CULVERT ON RT.
TYPE MO = 4'
TYPE C = 4' x 4'
H = 7'-0"

STA. 207+50 CONSTRUCT
DROP INLET ON RT.
WITH 18" x 126' PIPE CULVERT
CONNECT TO EXISTING
3' x 3' R.C. BOX CULVERT ON RT.
TYPE MO = 4'
TYPE C = 4' x 4'
H = 6'-0"

STA. 208+00 CONSTRUCT
JUNCTION BOX ON RT.
WITH 18" x 47' PIPE CULVERT
CONNECT TO DROP INLET ON
RT. @ STA. 207+50
TYPE E = 4' x 4'
H = 5'-3"

STA. 211+50 CONSTRUCT
JUNCTION BOX ON RT.
WITH 18" x 347' R.C. PIPE CULVERT
(CLASS V) (TYPE 3 BEDDING)
(PIPE JACKING)
CONNECT TO JUNCTION BOX ON
RT. @ STA. 208+00
TYPE E = 4' x 4'
H = 20'-6"

STA. 212+51 CONSTRUCT
DROP INLET ON RT.
WITH OPENING IN BACK
& 18" x 97' PIPE CULVERT
CONNECT TO DROP INLET ON
RT. @ STA. 211+50
TYPE MO = 4'
TYPE C = 4' x 4'
H = 6'-1"

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REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

3/4/2015

R040582.DGN

ALL R.C. PIPE CULVERTS SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED. FOR ALL R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED. FOR ALL C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

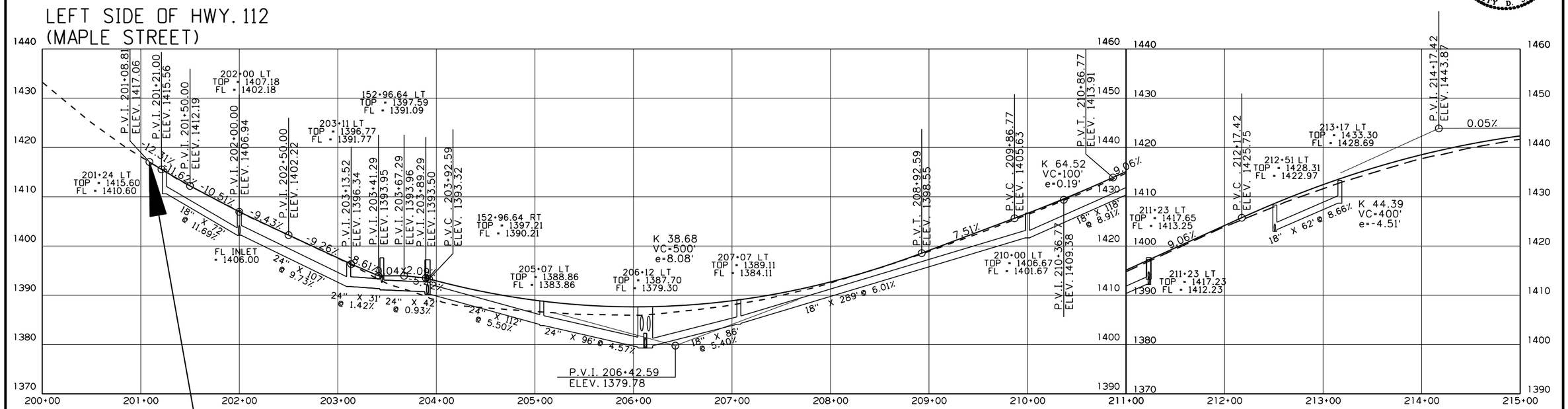
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

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.		040582	34	107

(2) PLAN AND PROFILE SHEETS (MAPLE ST.)

PRELIMINARY
SUBJECT TO REVISION

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11425 TRINITY D. SMITH



3/4/2015

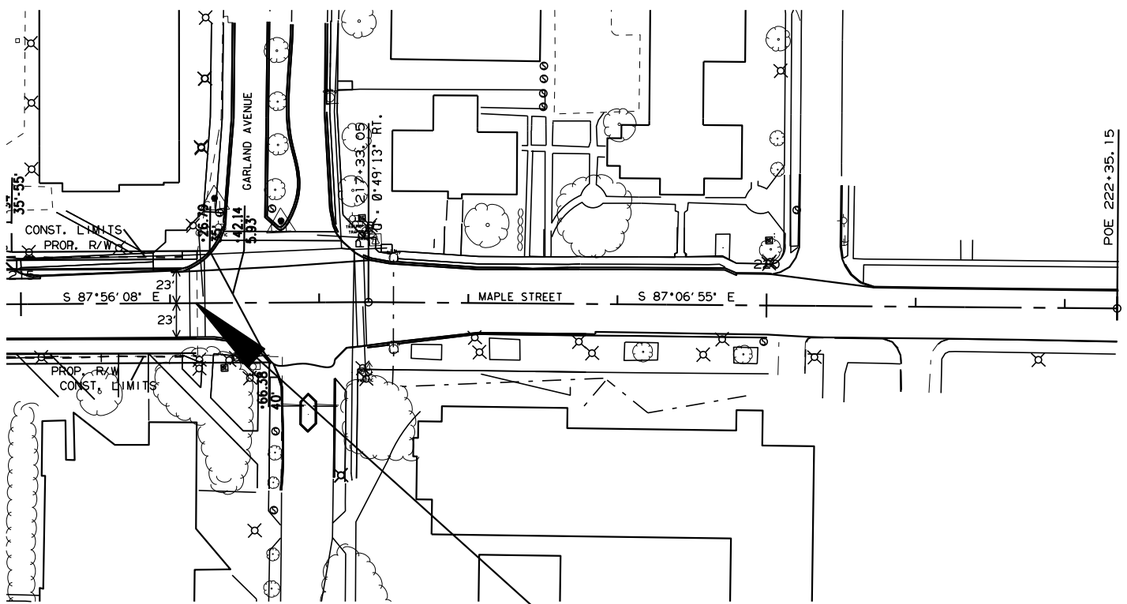
R040582.DGN

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.		040582	35	107

(2) PLAN AND PROFILE SHEETS (MAPLE ST.)

PRELIMINARY
SUBJECT TO REVISION

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH



STA. 216+17.42
END JOB 040582
(MAPLE STREET)

ALL R.C. PIPE CULVERTS SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED. FOR ALL R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED. FOR ALL C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

3/4/2015

R040582.DGN

ALL R.C. PIPE CULVERTS SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED. FOR ALL R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED. FOR ALL C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

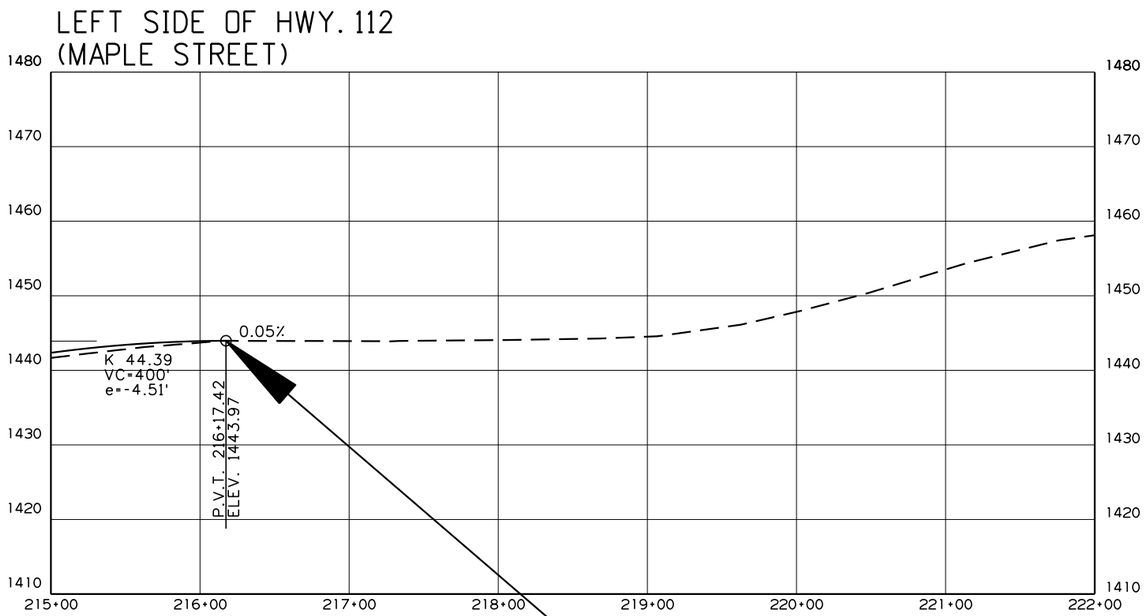
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

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.		040582	36	107

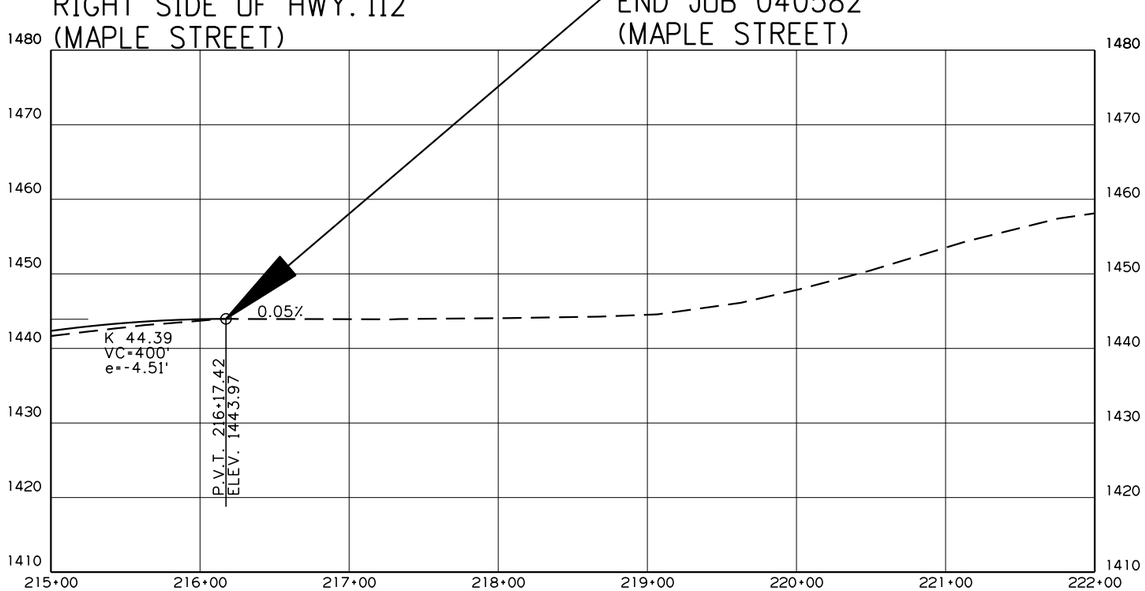
(2) PLAN AND PROFILE SHEETS (MAPLE ST.)

PRELIMINARY
SUBJECT TO REVISION

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH



STA. 216+17.42
END JOB 040582
(MAPLE STREET)



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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.		040582	37	107

(2) SUMMARY OF TRAFFIC SIGNAL QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

SUMMARY OF TRAFFIC SIGNAL QUANTITIES

ITEM NO.	ITEM	HWY. 180 AT HWY. 112	HWY. 112 AT MAPLE ST.	HWY. 112 AT STADIUM DR.	QUANTITY	UNIT
SP&701	SYSTEM LOCAL CONTROLLER TS 2-TYPE 2, E-NET (2 PHASES)		1		1	EACH
SP&701	SYSTEM LOCAL CONTROLLER TS 2-TYPE 2, E-NET (8 PHASES)		1	1	2	EACH
SP&706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)		10	8	18	EACH
SP&706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)		2	1	3	EACH
SP&707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED		10	6	16	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)		1322	1083	2405	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)		220	59	279	LIN. FT.
708	TRAFFIC SIGNAL CABLE (12C/14 A.W.G.)		331	29	360	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)		197	455	652	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")		40	20	60	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")		40	20	60	LIN. FT.
710	NON-METALLIC CONDUIT (2")		40	20	60	LIN. FT.
710	NON-METALLIC CONDUIT (3")		392	335	727	LIN. FT.
711	CONCRETE PULL BOX (TYPE 2 HD)		2	5	7	EACH
711	CONCRETE PULL BOX (TYPE 2)		3		3	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (26')		1		1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (30')		1		1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (34')		2		2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (36')		1		1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (38')			1	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (40')			2	2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (46')		1		1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (50')			1	1	EACH
715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION		1		1	EACH
733	VIDEO CABLE		613	736	1349	LIN. FT.
SP&733	VIDEO DETECTOR (CLR)		* 5	4	9	EACH
SP&733	VIDEO EDGE CARD EXTENDER		1	2	3	EACH
733	VIDEO MONITOR (CLR)		1	1	2	EACH
SP&733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)		* 3	2	5	EACH
SP&733	VEHICLE DETECTOR RACK (16 CHANNEL)		1	1	2	EACH
SP	E-NET CABLE (EXTERIOR CAT 5)	90	242	90	422	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES		893	689	1582	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., EGC)		557	442	999	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., EGC)		300	205	505	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)		40	20	60	LIN. FT.
SP	ETHERNET SWITCH, T100 HARDENED (4 PORT)	1	2	1	4	EACH
SP	FIBER OPTIC BLANK OUT SIGN			3	3	EACH
SP	LOCAL RADIO (E-NET 5.8) WITH ANTENNA	1	3	1	5	EACH
SP	LUMINAIRE ASSEMBLY		6	4	10	EACH
SP	18" STREET NAME SIGN		4	4	8	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)		1		1	EACH
SP	TRAFFIC SIGNAL CONTROLLER (MODIFICATION)	1			1	EACH

* QUANTITIES INCLUDE ONE SPARE VIDEO DETECTOR AND ONE SPARE VIDEO PROCESSOR.

NOTE TO CONTRACTOR:

THE TRAFFIC SIGNAL AT THE INTERSECTION OF HWY. 180/HWY. 112 IN THE CITY OF FAYETTEVILLE SHALL BE MODIFIED TO UPGRADE THE RADIO EQUIPMENT UTILIZING THE ITEMS PROVIDED ABOVE.

DATE: 01-12-15 FILE NAME: t040582_job.dgn

LOCATION: RAZORBACK RD.-GARLAND AVE. (HWY. 112)
CITY: FAYETTEVILLE
COUNTY: WASHINGTON
DISTRICT: 4 SCALE: N/A DRAWN BY: GWE

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.		040582	38	107

(2) TRAFFIC SIGNAL NOTES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

TRAFFIC SIGNAL NOTES:

1. PERFORM ELECTRICAL WORK IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE NFPA 70 (2014) NATIONAL ELECTRICAL CODE, NFPA 101(2012) LIFE SAFETY CODE, STATE ELECTRICAL CODE AND LOCAL ELECTRICAL CODE.
2. 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.
3. 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, ARE NEEDED 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.
4. CONTRACTOR SHALL CONNECT A SEPARATE NEUTRAL FOR EACH LOAD SWITCH REPRESENTED ON EACH SIGNAL POLE.
5. TRAFFIC CONTROLLER CABINET SHALL HAVE 16 LOAD BAYS 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.
6. CONTROLLER CABINET SHALL BE WIRED SUCH THAT DURING FLASH OPERATIONS POWER TO THE LOAD SWITCHES CANNOT BACKFEED TO LOAD SWITCH POWER BUSS.
7. ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARDS AND DETAILS, AND WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITIONS.
8. 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 MAY BE USED.
9. TRAFFIC SIGNAL POLES SHALL BE GALVANIZED AND POWER COATED. THE STANDARD COLOR FOR SIGNAL POLES FOR THE CITY OF FAYETTEVILLE IS MATTHEWS PAINT MP30225 UMBRA GRAY SATIN FINISH. PRICE BID FOR GALVANIZING AND POWER COATING SHALL BE INCLUDED IN ITEM NUMBER 714 OR 715 AS APPLICABLE. BACKPLATES SHALL BE SUPPLIED FOR ALL SIGNAL HEADS.
10. PAVEMENT MARKING SHOWN FOR REFERENCE ONLY. SEE PAVEMENT MARKING PLAN SHEETS.
11. 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.
12. ALL BOXES SHALL BE (TYPE 2 HD) UNLESS OTHERWISE INDICATED. ALL CONDUIT SHALL BE 3" DIAMETER UNLESS SPECIFIED ON PLANS.
13. CONTRACTOR SHALL NOTIFY ALL EXISTING UTILITY OWNERS BEFORE BEGINNING WORK ON THIS PROJECT.
14. LUMINAIRE ASSEMBLIES SHALL BE OF THE FULL CUTOFF TYPE.
15. 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.
16. 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.
17. 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.
18. 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.
19. 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 POLE COVER IS MISSING. PAYMENT FOR TERMINAL STRIPS SHALL BE INCLUDED IN ITEM 714-TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION.
20. CONTROLLER CABINET LAYOUT AND ORIENTATION SHALL CONFORM TO ISMA STANDARDS.
21. 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.
22. 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.
23. 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.

DATE: 01-12-15 FILE NAME: t040582.dgn

LOCATION: RAZORBACK RD.-GARLAND AVE. (HWY. 112)
CITY: FAYETTEVILLE
COUNTY: WASHINGTON
DISTRICT: 4 SCALE: N/A DRAWN BY: GWE

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.		040582	39	107

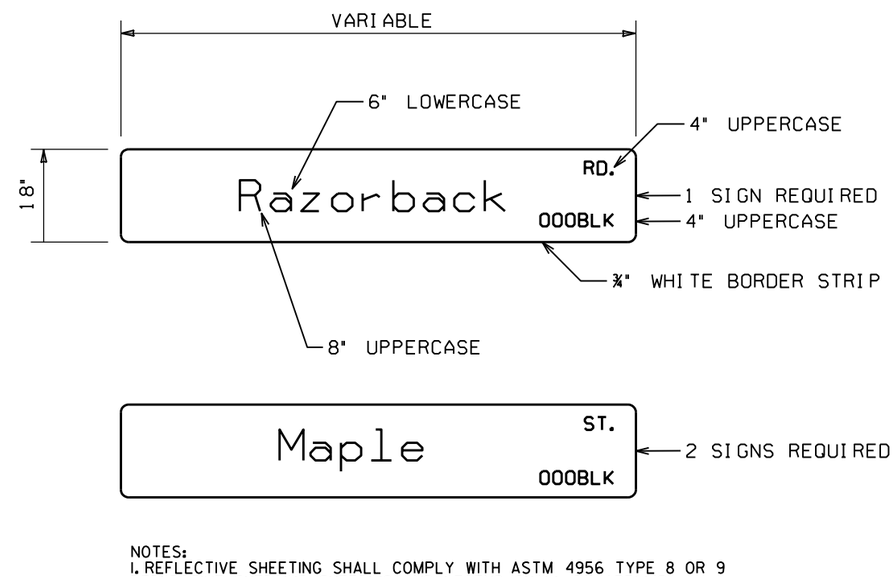
(2) TRAFFIC SIGNAL QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

TRAFFIC SIGNAL QUANTITIES

ITEM NO.	ITEM	QUANTITY	UNIT
SP&701	SYSTEM LOCAL CONTROLLER TS 2-TYPE 2, E-NET (2 PHASES)	1	EACH
SP&701	SYSTEM LOCAL CONTROLLER TS 2-TYPE 2, E-NET (8 PHASES)	1	EACH
SP&706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	10	EACH
SP&706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	2	EACH
SP&707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	10	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	1322	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	220	LIN. FT.
708	TRAFFIC SIGNAL CABLE (12C/14 A.W.G.)	331	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	197	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	40	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	40	LIN. FT.
710	NON-METALLIC CONDUIT (2")	40	LIN. FT.
710	NON-METALLIC CONDUIT (3")	392	LIN. FT.
711	CONCRETE PULL BOX (TYPE 2 HD)	2	EACH
711	CONCRETE PULL BOX (TYPE 2)	3	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (26')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (30')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (34')	2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (36')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (46')	1	EACH
715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	1	EACH
733	VIDEO CABLE	613	LIN. FT.
• SP&733	VIDEO DETECTOR (CLR)	5	EACH
SP&733	VIDEO EDGE CARD EXTENDER	1	EACH
733	VIDEO MONITOR (CLR)	1	EACH
• SP&733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	3	EACH
SP&733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH
SP	E-NET CABLE (EXTERIOR CAT 5)	242	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	893	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., EGC)	557	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., EGC)	300	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	40	LIN. FT.
SP	ETHERNET SWITCH, TI00 HARDENED (4 PORT)	2	EACH
SP	LOCAL RADIO (E-NET 5.8) WITH ANTENNA	3	EACH
SP	LUMINAIRE ASSEMBLY	6	EACH
SP	18" STREET NAME SIGN	4	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH

• QUANTITIES INCLUDE ONE SPARE VIDEO DETECTOR AND ONE SPARE VIDEO PROCESSOR.



NOTES:

1. REFLECTIVE SHEETING SHALL COMPLY WITH ASTM 4956 TYPE 8 OR 9 REFLECTIVE SHEETING. SHEETING AND LEGEND SHALL BE APPLIED IN SUCH A MANNER TO PROVIDE WRINKLE AND BUBBLE FREE SURFACES. APPLICATION OF SHEETING IS CAUSE FOR REJECTION OF MATERIALS DUE TO WORKMANSHIP.

2. ALUMINUM SIGN BLANK SHALL BE ALLOY 6061-T6 OR 5052-H38. THE ALUMINUM SIGN SHALL ALSO BE ANODIZED. THE ALUMINUM SHEETING SHALL BE 0.100 INCH NOMINAL THICKNESS AND OF THE SIZE SHOWN WITH 1.5" CORNER RADII. PRIOR TO FABRICATION OF THE SIGNS, THE LAYOUT SHALL FIRST BE APPROVED BY AN AGENT OF THE CITY.

3. WHEN CROSSROAD HAS TWO NAMES, THE SIGN FOR THE CROSSROAD TO THE LEFT MAY BE INSTALLED ON THE BACKSIDE OF THE MAST ARM OF THE NEARSIDE LEFT POLE.
SEE STD. DETAIL SHEET FOR MORE INFORMATION FOR MOUNTING ON MAST ARM ASSEMBLY.

4. THE CLEARVIEW 5-W-R FONT SHALL BE USED FOR ALL LETTERS.

DATE: 01-12-15 FILE NAME: t040582.dgn

LOCATION: HWY. 112 (RAZORBACK RD.)/MAPLE STREET
CITY: FAYETTEVILLE
COUNTY: WASHINGTON
DISTRICT: 4 SCALE: N/A DRAWN BY: GWE

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.		040582	40	107

(2) SIGNALIZATION PLAN SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

PHASING DIAGRAM

SIGNAL FACES

12" LENSES

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISIONS FOR DETAILS ON NEW REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.

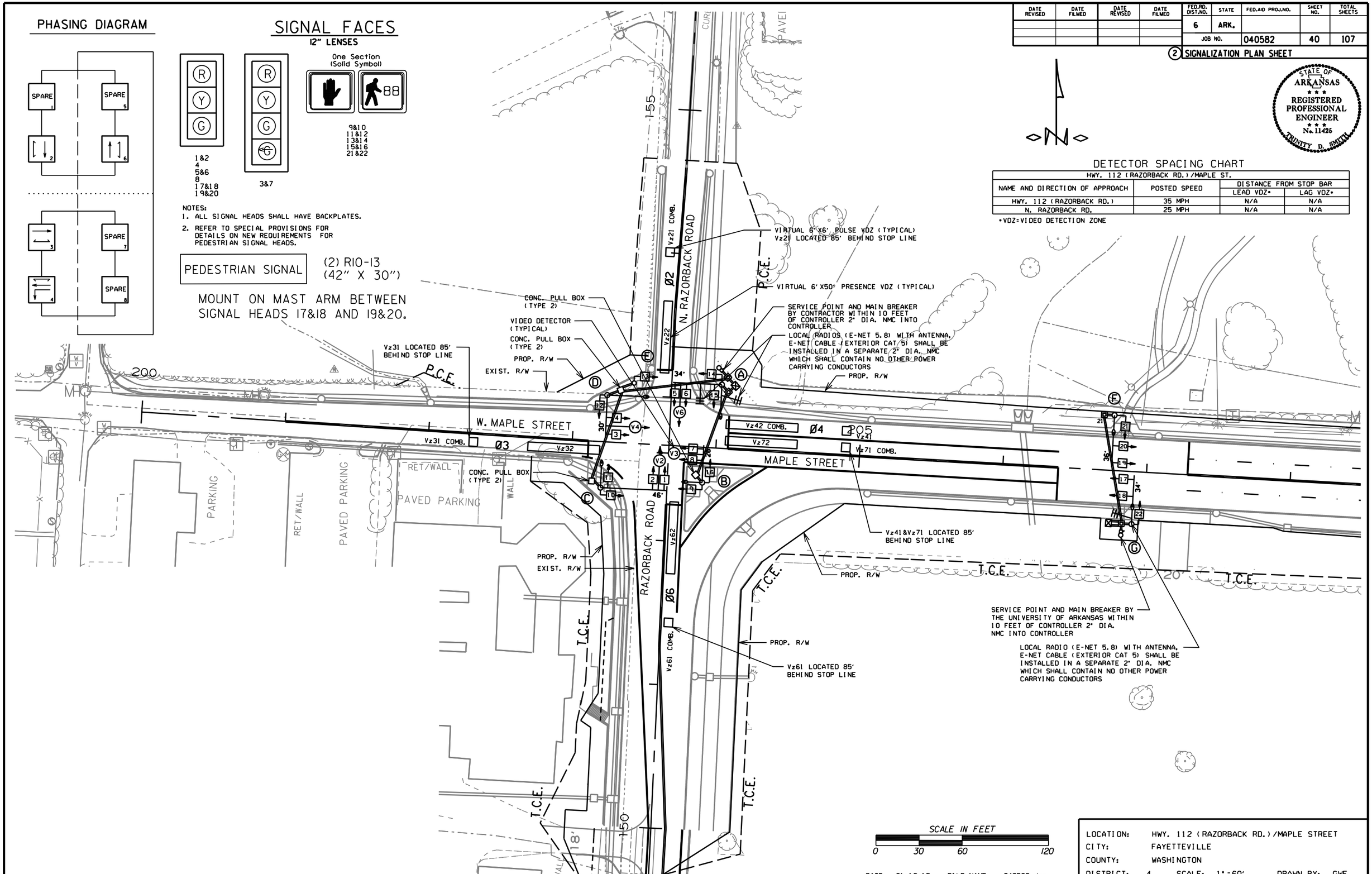
PEDESTRIAN SIGNAL (2) R10-13 (42" X 30")

MOUNT ON MAST ARM BETWEEN SIGNAL HEADS 17&18 AND 19&20.

DETECTOR SPACING CHART

HWY. 112 (RAZORBACK RD.)/MAPLE ST.			
NAME AND DIRECTION OF APPROACH	POSTED SPEED	DISTANCE FROM STOP BAR	
		LEAD VDZ*	LAG VDZ*
HWY. 112 (RAZORBACK RD.)	35 MPH	N/A	N/A
N. RAZORBACK RD.	25 MPH	N/A	N/A

*VDZ=VIDEO DETECTION ZONE



SCALE IN FEET
0 30 60 120

DATE: 01-12-15 FILE NAME: t040582.dgn

LOCATION: HWY. 112 (RAZORBACK RD.)/MAPLE STREET
CITY: FAYETTEVILLE
COUNTY: WASHINGTON
DISTRICT: 4 SCALE: 1"=60' DRAWN BY: GWE

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.		040582	41	107

(2) SIGNALIZATION PLAN SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

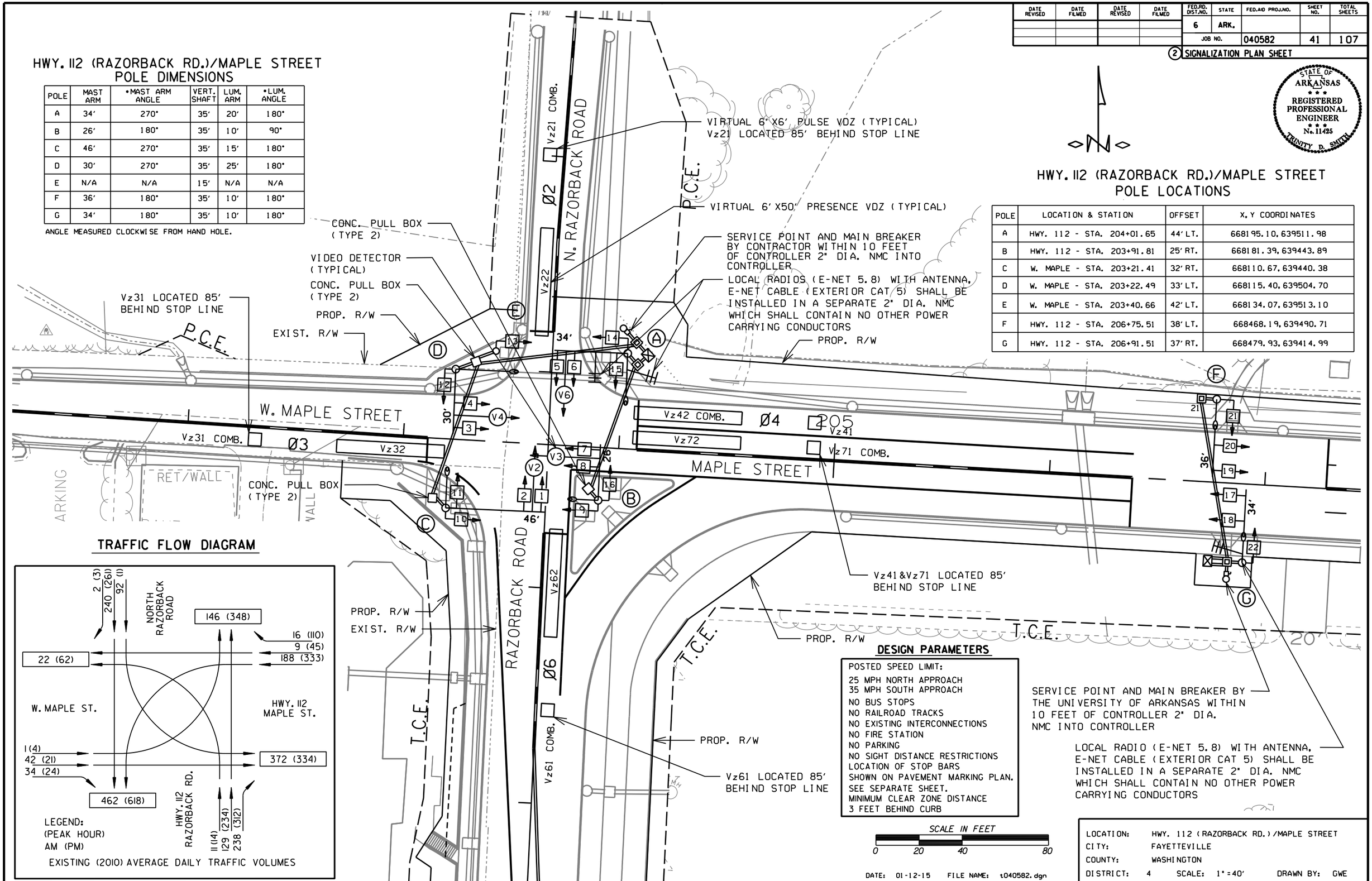
HWY. 112 (RAZORBACK RD.)/MAPLE STREET POLE DIMENSIONS

POLE	MAST ARM	•MAST ARM ANGLE	VERT. SHAFT	LUM. ARM	•LUM. ANGLE
A	34′	270°	35′	20′	180°
B	26′	180°	35′	10′	90°
C	46′	270°	35′	15′	180°
D	30′	270°	35′	25′	180°
E	N/A	N/A	15′	N/A	N/A
F	36′	180°	35′	10′	180°
G	34′	180°	35′	10′	180°

ANGLE MEASURED CLOCKWISE FROM HAND HOLE.

HWY. 112 (RAZORBACK RD.)/MAPLE STREET POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	HWY. 112 - STA. 204+01.65	44′ LT.	668195.10, 639511.98
B	HWY. 112 - STA. 203+91.81	25′ RT.	668181.39, 639443.89
C	W. MAPLE - STA. 203+21.41	32′ RT.	668110.67, 639440.38
D	W. MAPLE - STA. 203+22.49	33′ LT.	668115.40, 639504.70
E	W. MAPLE - STA. 203+40.66	42′ LT.	668134.07, 639513.10
F	HWY. 112 - STA. 206+75.51	38′ LT.	668468.19, 639490.71
G	HWY. 112 - STA. 206+91.51	37′ RT.	668479.93, 639414.99



TRAFFIC FLOW DIAGRAM

EXISTING (2010) AVERAGE DAILY TRAFFIC VOLUMES

DESIGN PARAMETERS

POSTED SPEED LIMIT:
25 MPH NORTH APPROACH
35 MPH SOUTH APPROACH
NO BUS STOPS
NO RAILROAD TRACKS
NO EXISTING INTERCONNECTIONS
NO FIRE STATION
NO PARKING
NO SIGHT DISTANCE RESTRICTIONS
LOCATION OF STOP BARS SHOWN ON PAVEMENT MARKING PLAN. SEE SEPARATE SHEET.
MINIMUM CLEAR ZONE DISTANCE 3 FEET BEHIND CURB

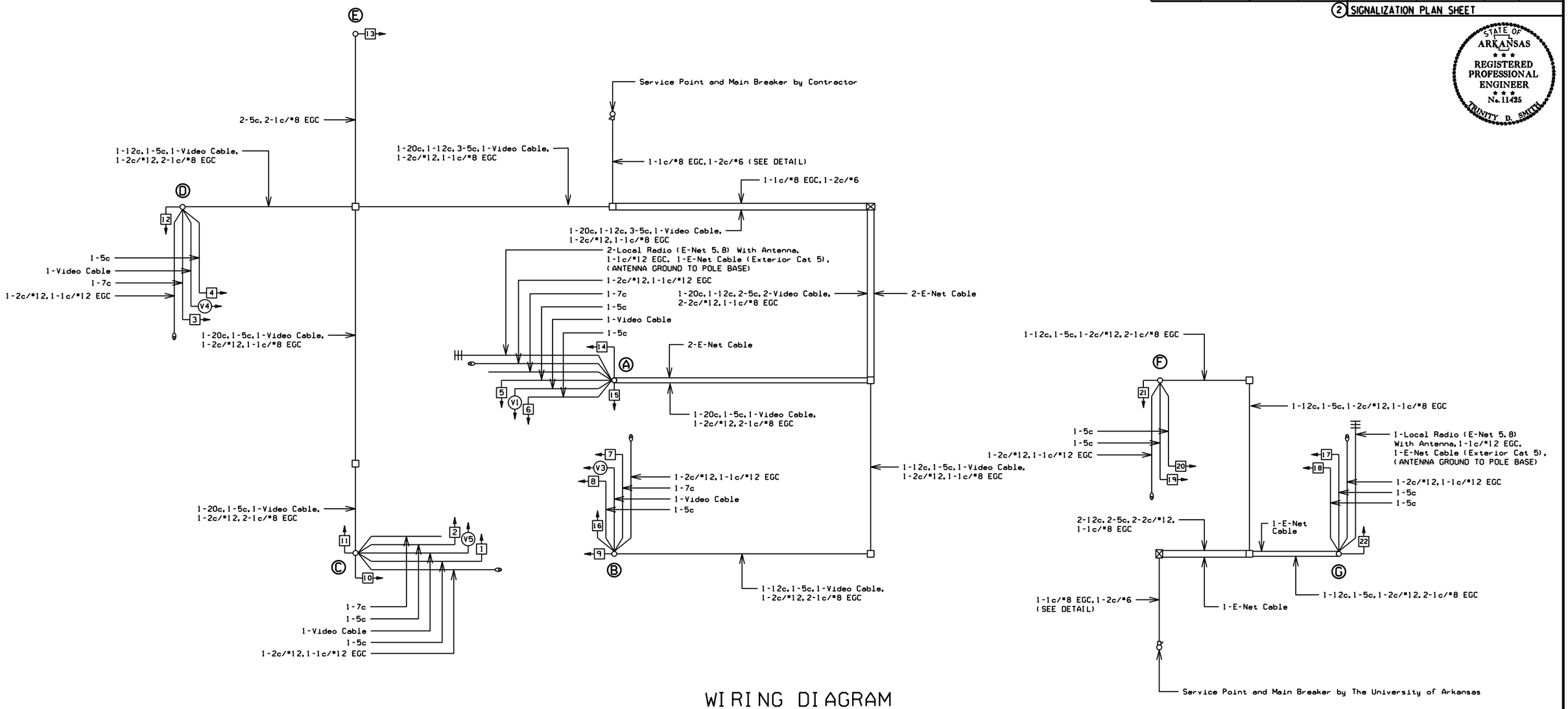
DATE: 01-12-15 FILE NAME: t040582.dgn

LOCATION:	HWY. 112 (RAZORBACK RD.)/MAPLE STREET		
CITY:	FAYETTEVILLE		
COUNTY:	WASHINGTON		
DISTRICT: 4	SCALE: 1"=40′	DRAWN BY: GWE	

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.		040582	42	107

(2) SIGNALIZATION PLAN SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH



WIRING DIAGRAM

NOTES TO CONTRACTOR:

1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTON.
2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.

DATE: 01-12-15 FILE NAME: t040582.dgn

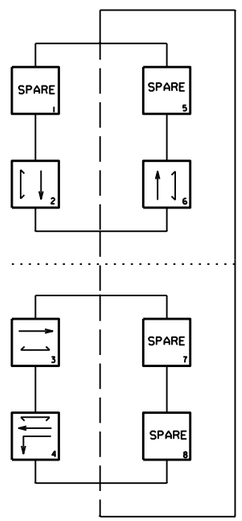
LOCATION: HWY. 112 (RAZORBACK RD.)/MAPLE STREET
CITY: FAYETTEVILLE
COUNTY: WASHINGTON
DISTRICT: 4 SCALE: N/A DRAWN BY: GWE

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.		040582	43	107

(2) SIGNALIZATION PLAN SHEET

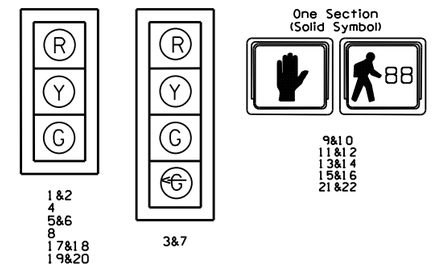
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

PHASING DIAGRAM



SIGNAL FACES

12" LENSES



NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISIONS FOR DETAILS ON NEW REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS

PEDESTRIAN SIGNAL (2) R10-13 (42" X 30")

BESIDE SIGNAL HEADS 16-19

DETECTOR SYSTEM DESCRIPTION: JOB 040582

HWY. 112 (RAZORBACK RD.)/MAPLE STREET DETECTOR ASSIGNMENTS				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS LOCAL		MASTER SYSTEM DETECTOR NUMBERS	COMMENTS	TUBE LENGTHS
DET. ID*	LOCATION DIRECTION	TYPE	DET. *	CAB. TRM *	AMP CHN. *	CON. INP.*	PHS	SYSTEM DET. *			
Vz21	SB ADVANCE	COMB.			5	V2	2			CAMERA V2	23'
Vz22	SB NEAR	LOCAL			6	V10	2	2		CAMERA V2	23'
Vz31	EB ADVANCE	COMB.			9	V11	3	3		CAMERA V3	23'
Vz32	EB NEAR	LOCAL			10	V3	3			CAMERA V3	23'
Vz41	WB ADVANCE	COMB.			13	V12	4	4		CAMERA V4	23'
Vz42	WB NEAR	LOCAL			14	V4	4			CAMERA V4	23'
Vz61	NB ADVANCE	LOCAL			3	V6	6			CAMERA V6	23'
Vz62	NB NEAR	COMB.			4	V14	6	6		CAMERA V6	23'
Vz71	WB LT. TURN ADVANCE	COMB.			15	V15	7	7		CAMERA V4	23'
Vz72	WB LT. TURN NEAR	LOCAL			16	V7	7			CAMERA V4	23'
PB2A&B	W. MAPLE W. LEG	PED.					2				
PB3A&B	RAZORBACK S. LEG	PED.					3				
PB4A&B	MAPLE ST. E. LEG	PED.					4				
PB6A&B	N. RAZORBACK N. LEG	PED.					6				
					SPARE 1, 2, 7, 8, 11&12						

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

INTERVAL CHART

SIGNAL FACES	HWY. 112 (RAZORBACK RD.)/MAPLE ST.								FLASH SEQ.
		2+6	CLR.	3	CLR.	4	CLR.		
1&2		G	••	R	R	R	R		R
3		R	R	R	R	G/G	••/•		R
4		R	R	R	R	G	••		R
5&6		G	••	R	R	R	R		R
7		R	R	G/G	••/•	R	R		R
8		R	R	G	••	R	R		R
9&10		DW	DW	W	FDW	DW	DW		BLK
11&12		W	FDW	DW	DW	DW	DW		BLK
13&14		DW	DW	DW	DW	W	FDW		BLK
15&16		W	FDW	DW	DW	DW	DW		BLK

• 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

DATE: 01-12-15 FILE NAME: t040582.dgn

LOCATION: HWY. 112 (RAZORBACK RD.)/MAPLE STREET
CITY: FAYETTEVILLE
COUNTY: WASHINGTON
DISTRICT: 4 SCALE: N/A DRAWN BY: GWE

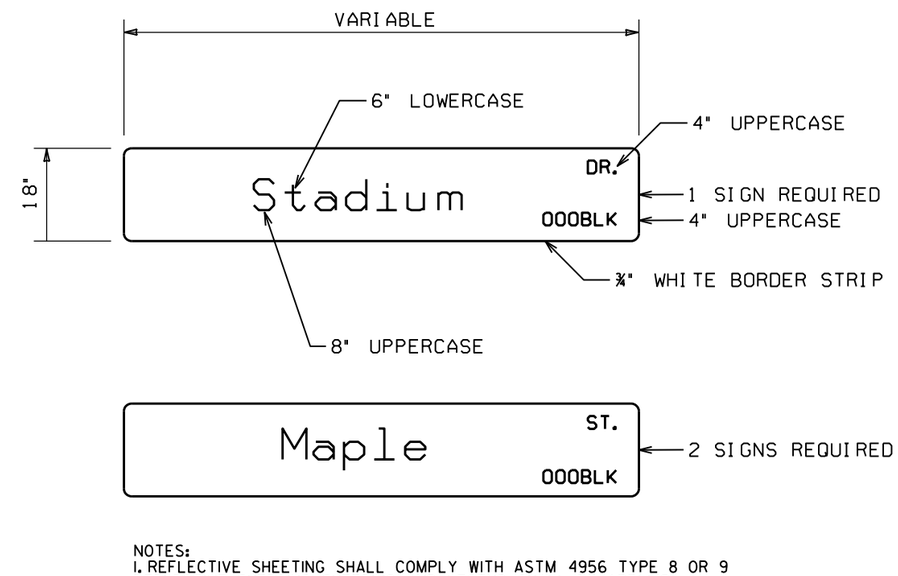
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		040582	44	107

(2) TRAFFIC SIGNAL QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

TRAFFIC SIGNAL QUANTITIES

ITEM NO.	ITEM	QUANTITY	UNIT
SP&701	SYSTEM LOCAL CONTROLLER TS 2-TYPE 2, E-NET (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.)	1083	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	59	LIN. FT.
708	TRAFFIC SIGNAL CABLE (12C/14 A.W.G.)	29	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	455	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	20	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	20	LIN. FT.
710	NON-METALLIC CONDUIT (2")	20	LIN. FT.
710	NON-METALLIC CONDUIT (3")	335	LIN. FT.
711	CONCRETE PULL BOX (TYPE 2 HD)	5	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (38')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (40')	2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (50')	1	EACH
733	VIDEO CABLE	736	LIN. FT.
SP&733	VIDEO DETECTOR (CLR)	4	EACH
SP&733	VIDEO EDGE CARD EXTENDER	2	EACH
733	VIDEO MONITOR (CLR)	1	EACH
SP&733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	2	EACH
SP&733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH
SP	E-NET CABLE (EXTERIOR CAT 5)	90	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	689	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., EGC)	442	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., EGC)	205	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	20	LIN. FT.
SP	ETHERNET SWITCH, TI00 HARDENED (4 PORT)	1	EACH
SP	FIBER OPTIC BLANK OUT SIGN	3	EACH
SP	LOCAL RADIO (E-NET 5.8) WITH ANTENNA	1	EACH
SP	LUMINAIRE ASSEMBLY	4	EACH
SP	18" STREET NAME SIGN	4	EACH



NOTES:

1. REFLECTIVE SHEETING SHALL COMPLY WITH ASTM 4956 TYPE 8 OR 9 REFLECTIVE SHEETING. SHEETING AND LEGEND SHALL BE APPLIED IN SUCH A MANNER TO PROVIDE WRINKLE AND BUBBLE FREE SURFACES. APPLICATION OF SHEETING IS CAUSE FOR REJECTION OF MATERIALS DUE TO WORKMANSHIP.

2. ALUMINUM SIGN BLANK SHALL BE ALLOY 6061-T6 OR 5052-H38. THE ALUMINUM SIGN SHALL ALSO BE ANODIZED. THE ALUMINUM SHEETING SHALL BE 0.100 INCH NOMINAL THICKNESS AND OF THE SIZE SHOWN WITH 1.5" CORNER RADII. PRIOR TO FABRICATION OF THE SIGNS, THE LAYOUT SHALL FIRST BE APPROVED BY AN AGENT OF THE CITY.

3. WHEN CROSSROAD HAS TWO NAMES, THE SIGN FOR THE CROSSROAD TO THE LEFT MAY BE INSTALLED ON THE BACKSIDE OF THE MAST ARM OF THE NEARSIDE LEFT POLE.
SEE STD. DETAIL SHEET FOR MORE INFORMATION FOR MOUNTING ON MAST ARM ASSEMBLY.

4. THE CLEARVIEW 5-W-R FONT SHALL BE USED FOR ALL LETTERS.

DATE: 01-12-15 FILE NAME: t040582.dgn

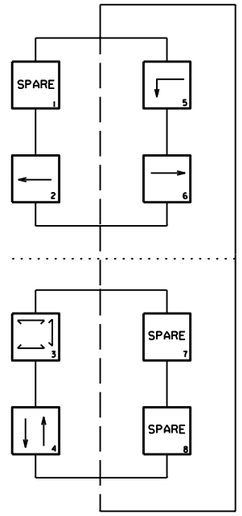
LOCATION: HWY. 112 (MAPLE ST.)/STADIUM DRIVE
CITY: FAYETTEVILLE
COUNTY: WASHINGTON
DISTRICT: 4 SCALE: N/A DRAWN BY: GWE

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.		040582	45	107

(2) SIGNALIZATION PLAN SHEET

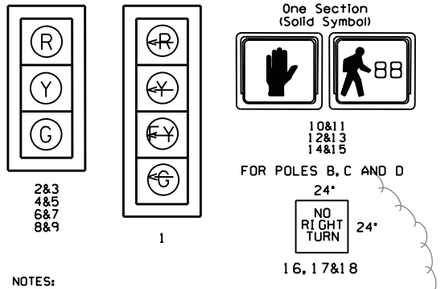
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

PHASING DIAGRAM



SIGNAL FACES

12" LENSES

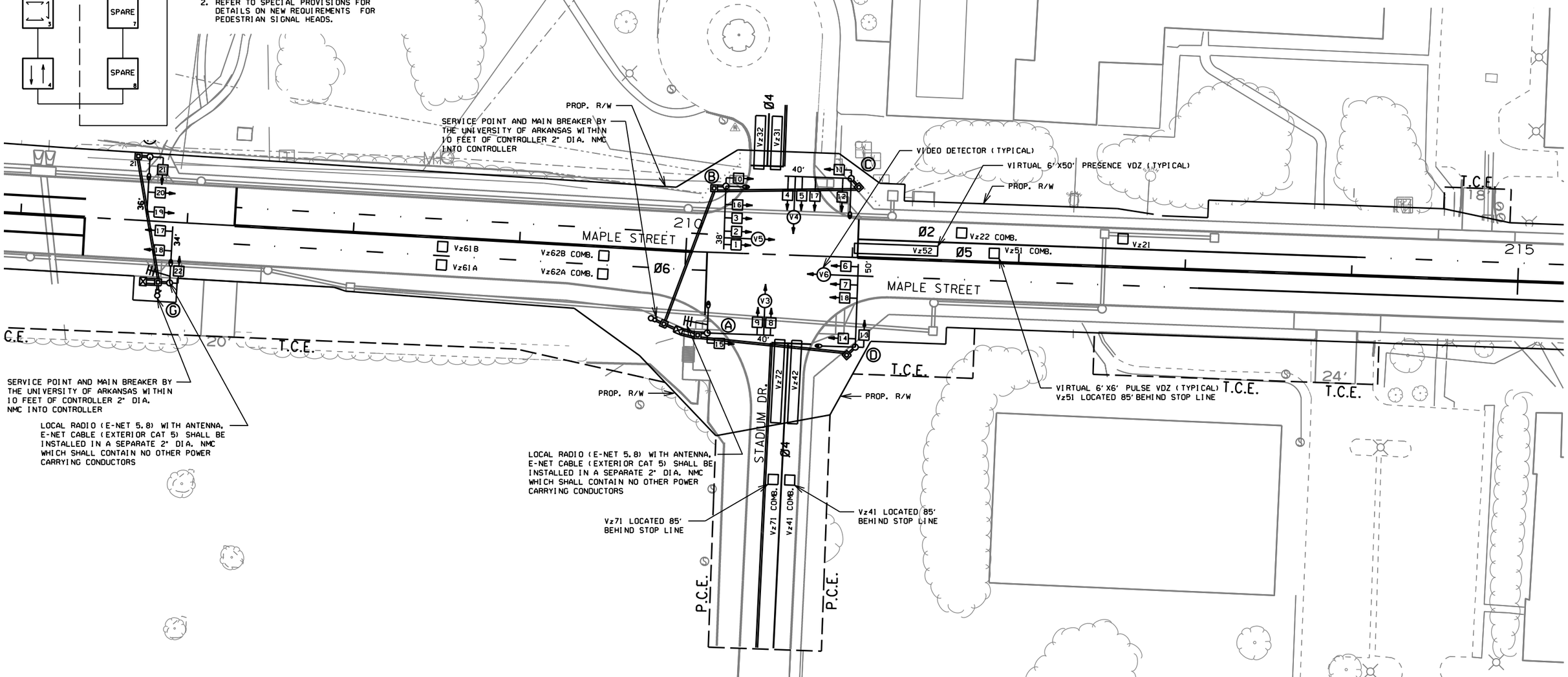


NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISIONS FOR DETAILS ON NEW REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.

DETECTOR SPACING CHART

HWY. 112 (MAPLE ST.)/STADIUM DR.			
NAME AND DIRECTION OF APPROACH	POSTED SPEED	DISTANCE FROM STOP BAR	
		LEAD VDZ*	LAG VDZ*
HWY. 112 (MAPLE ST.)	30 MPH	162'	65'
STADIUM DR.	20 MPH	N/A	N/A

*VDZ=VIDEO DETECTION ZONE



DATE: 01-12-15 FILE NAME: t040582.dgn

LOCATION: HWY. 112 (MAPLE ST.)/STADIUM DRIVE
CITY: FAYETTEVILLE
COUNTY: WASHINGTON
DISTRICT: 4 SCALE: 1"=60' DRAWN BY: GWE

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.		040582	46	107

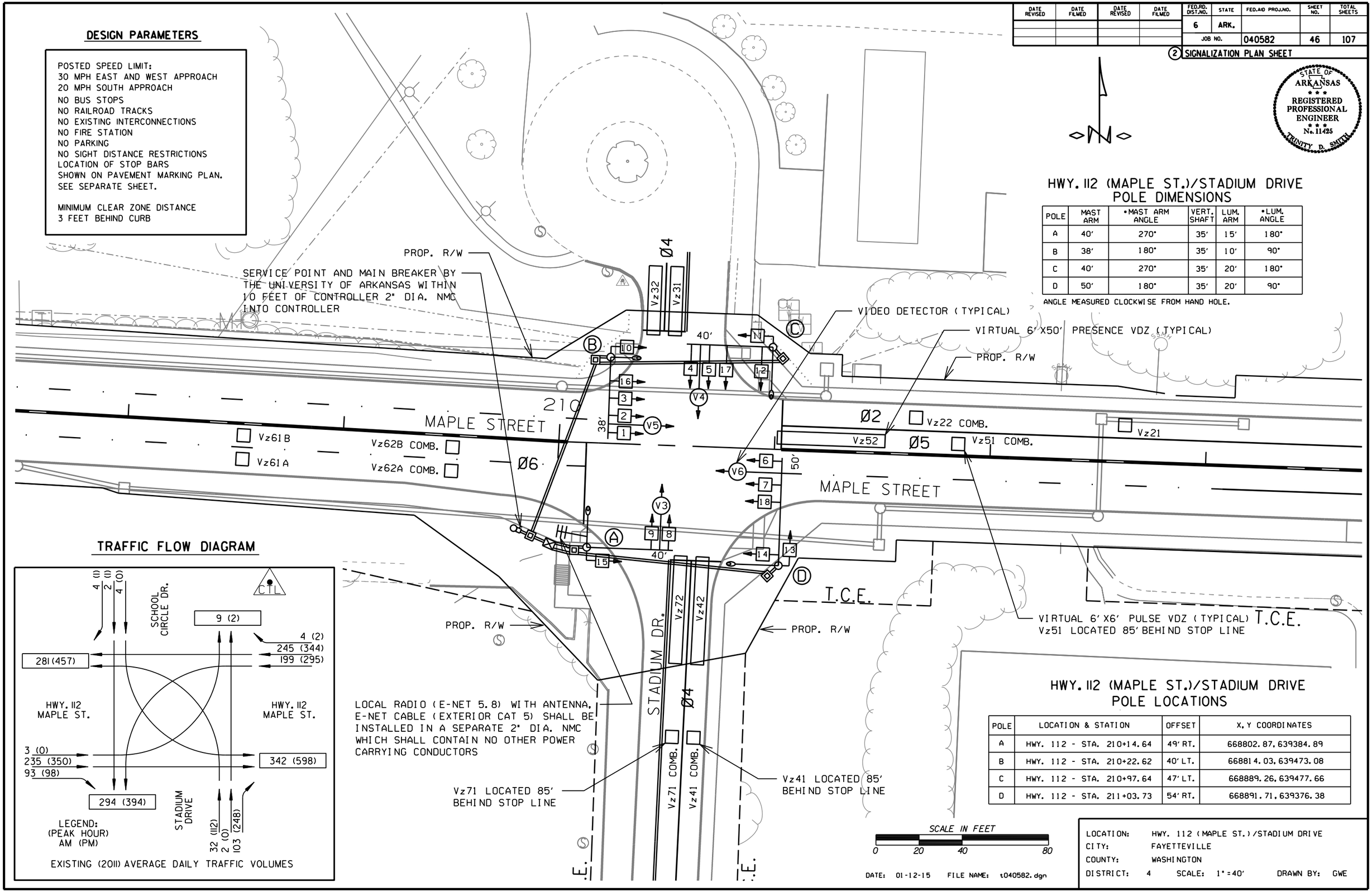
(2) SIGNALIZATION PLAN SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

DESIGN PARAMETERS

POSTED SPEED LIMIT:
30 MPH EAST AND WEST APPROACH
20 MPH SOUTH APPROACH
NO BUS STOPS
NO RAILROAD TRACKS
NO EXISTING INTERCONNECTIONS
NO FIRE STATION
NO PARKING
NO SIGHT DISTANCE RESTRICTIONS
LOCATION OF STOP BARS
SHOWN ON PAVEMENT MARKING PLAN.
SEE SEPARATE SHEET.

MINIMUM CLEAR ZONE DISTANCE
3 FEET BEHIND CURB



HWY. 112 (MAPLE ST.)/STADIUM DRIVE POLE DIMENSIONS

POLE	MAST ARM	•MAST ARM ANGLE	VERT. SHAFT	LUM. ARM	•LUM. ANGLE
A	40'	270°	35'	15'	180°
B	38'	180°	35'	10'	90°
C	40'	270°	35'	20'	180°
D	50'	180°	35'	20'	90°

ANGLE MEASURED CLOCKWISE FROM HAND HOLE.

TRAFFIC FLOW DIAGRAM

EXISTING (2011) AVERAGE DAILY TRAFFIC VOLUMES

HWY. 112 (MAPLE ST.)/STADIUM DRIVE POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	HWY. 112 - STA. 210+14.64	49' RT.	668802.87, 639384.89
B	HWY. 112 - STA. 210+22.62	40' LT.	668814.03, 639473.08
C	HWY. 112 - STA. 210+97.64	47' LT.	668889.26, 639477.66
D	HWY. 112 - STA. 211+03.73	54' RT.	668891.71, 639376.38

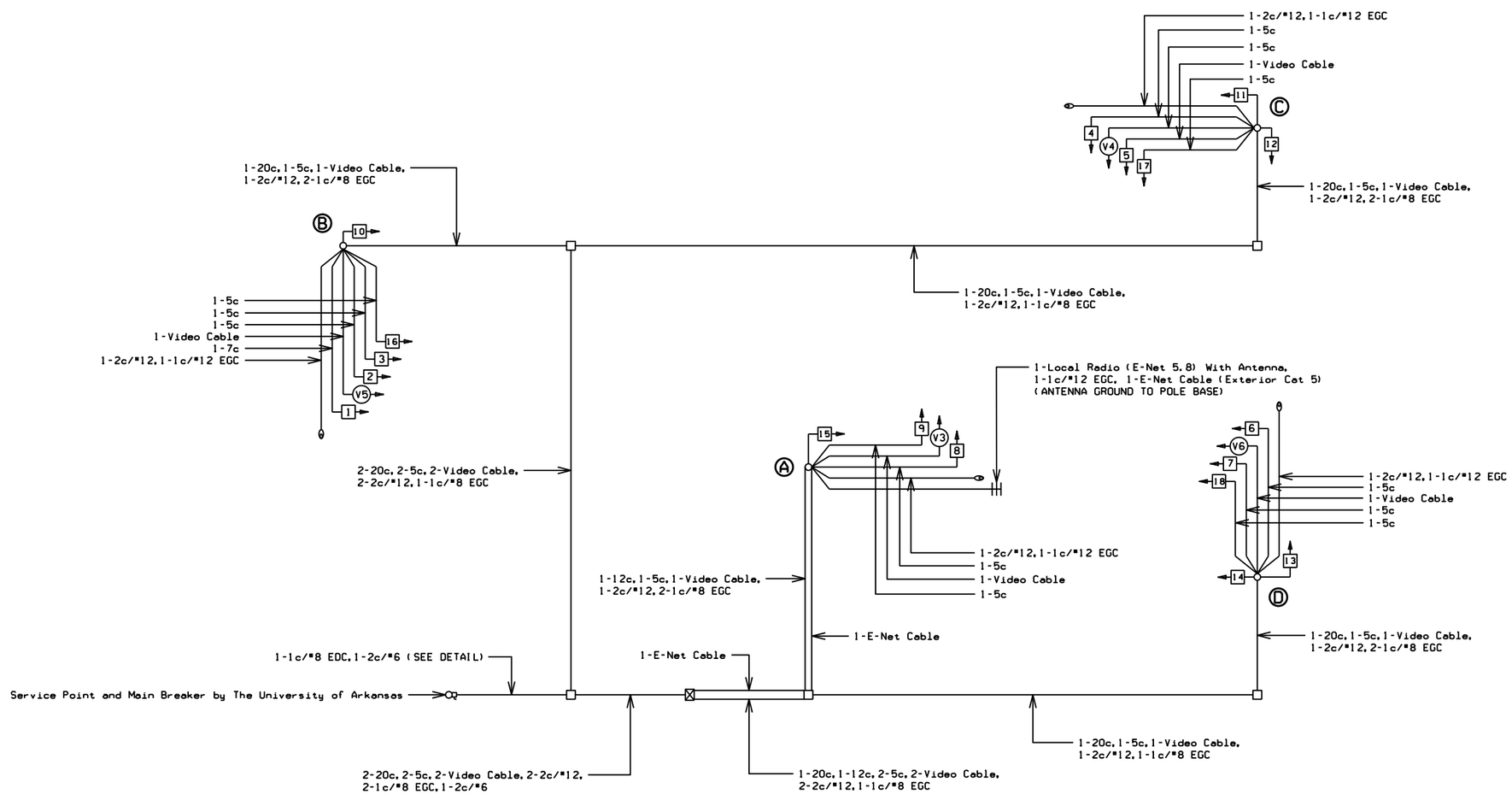
DATE: 01-12-15 FILE NAME: t040582.dgn

LOCATION: HWY. 112 (MAPLE ST.)/STADIUM DRIVE
CITY: FAYETTEVILLE
COUNTY: WASHINGTON
DISTRICT: 4 SCALE: 1"=40' DRAWN BY: GWE

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.		040582	47	107

(2) SIGNALIZATION PLAN SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH



WIRING DIAGRAM

NOTES TO CONTRACTOR:

1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTON.
2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.

DATE: 01-12-15 FILE NAME: t040582.dgn

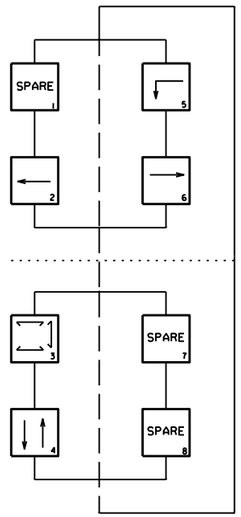
LOCATION: HWY. 112 (MAPLE ST.)/STADIUM DRIVE
CITY: FAYETTEVILLE
COUNTY: WASHINGTON
DISTRICT: 4 SCALE: N/A DRAWN BY: GWE

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.		040582	48	107

(2) SIGNALIZATION PLAN SHEET

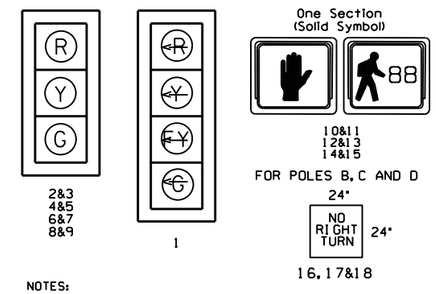
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

PHASING DIAGRAM



SIGNAL FACES

12" LENSES



NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISIONS FOR DETAILS ON NEW REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS

DETECTOR SYSTEM DESCRIPTION: JOB 040582

HWY. 112 (MAPLE ST.)/STADIUM DRIVE DETECTOR ASSIGNMENTS				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS			COMMENTS	TUBE LENGTHS
							LOCAL		MASTER SYSTEM DETECTOR NUMBERS		
DET. ID*	LOCATION DIRECTION	TYPE	DET. *	CAB. TRM *	AMP CHN. *	CON. INP.*	PHS	SYSTEM DET. *			
Vz21	WB ADVANCE	LOCAL			5	V2	2			CAMERA V5	74'
Vz22	WB NEAR	COMB.			6	V10	2	2		CAMERA V5	74'
Vz31	SB ADVANCE	COMB.			9	V11	4	3		CAMERA V3	23'
Vz32	SB NEAR	LOCAL			10	V3	4			CAMERA V3	23'
Vz41	NB ADVANCE	COMB.			13	V12	4	4		CAMERA V4	74'
Vz42	NB NEAR	LOCAL			14	V4	4			CAMERA V4	74'
Vz51	WB LEFT TURN FAR	COMB.			7	V13	5	5		CAMERA V5	74'
Vz52	WB LEFT TURN	LOCAL			8	V5	5			CAMERA V5	74'
Vz61	EB ADVANCE	LOCAL			3	V6	6			CAMERA V6	74'
Vz62	EB NEAR	COMB.			4	V14	6	6		CAMERA V6	74'
Vz71	NB LT. TURN ADVANCE	COMB.			15	V15	7	7		CAMERA V4	74'
Vz72	NB LT. TURN NEAR	LOCAL			16	V7	7			CAMERA V4	74'
PB2A&B	CIRCLE DR. N. LEG	PED.					3				
PB4A&B	HWY. 112 E. LEG	PED.					3				
PB6A&B	STADIUM DR. S. LEG	PED.					3				
					SPARE 1, 2, 11&12						

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

INTERVAL CHART

SIGNAL FACES	HWY. 112/STADIUM DRIVE NORMAL CYCLE 2+5	CLR.	2+6	CLR.	4	CLR.	PED PHASE 3	CLR.		FLASH SEQ.
1	~~G~~	•	~~FY~~	•••	~~R~~	~~R~~	~~R~~	~~R~~	RESUME NORMAL	~~R~~
2&3	G	••	G	••	R	R	R	R		R
4	R	R	R	R	G	••	R	R		R
5	R	R	R	R	G	••	R	R		R
6&7	R	R	G	••	R	R	R	R		R
8	R	R	R	R	G	••	R	R		R
9	R	R	R	R	G	••	R	R		R
10&11	DW	DW	DW	DW	DW	DW	W	FDW		BLK
12&13	DW	DW	DW	DW	DW	DW	W	FDW		BLK
14&15	DW	DW	DW	DW	DW	DW	W	FDW		BLK
16,17&18	BLK	BLK	BLK	BLK	BLK	BLK	NRT	NRT		BLK

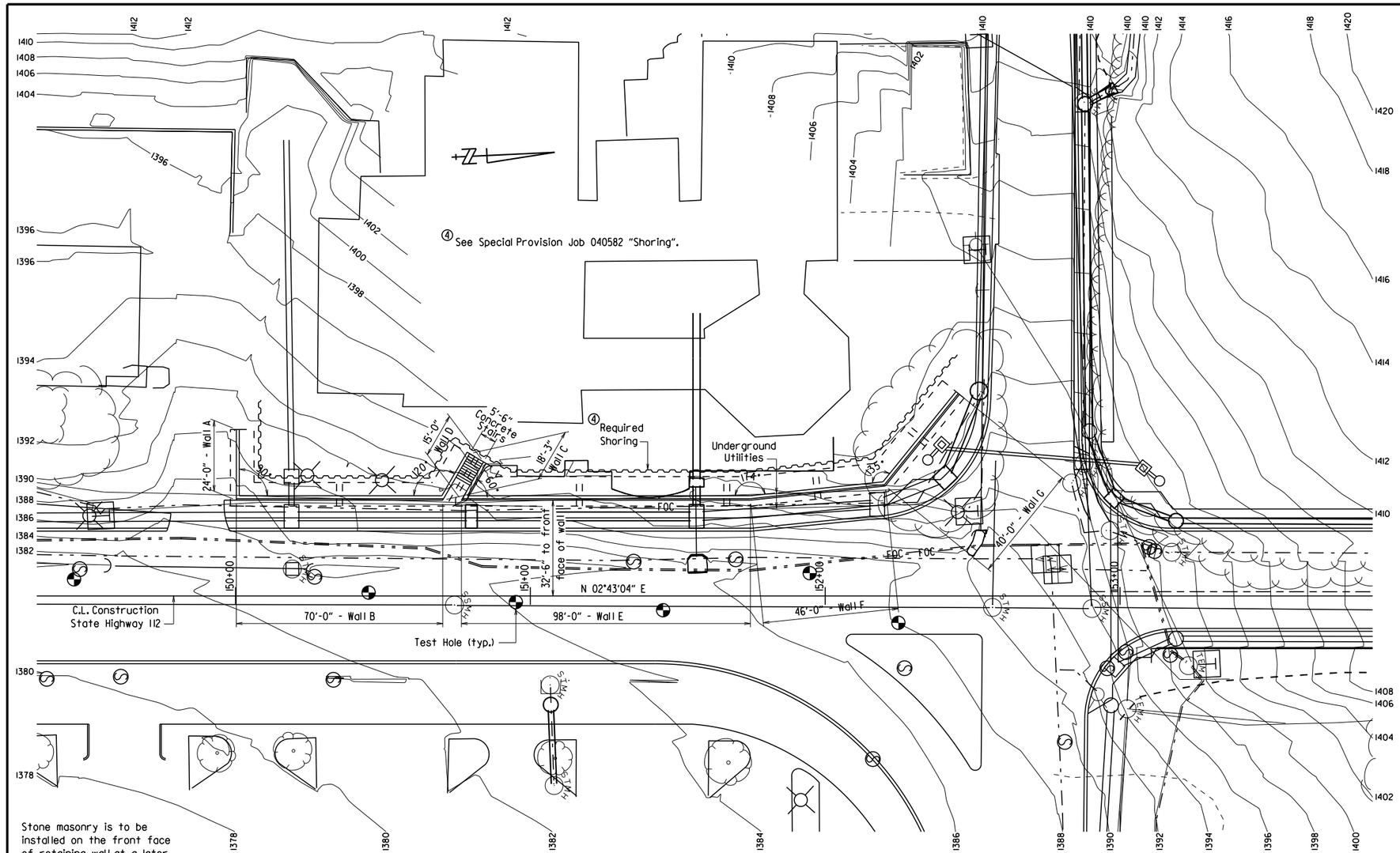
• DENOTES GREEN OR YELLOW ARROW DEPENDING ON NEXT PHASE
•• DENOTES GREEN OR YELLOW BALL DEPENDING ON NEXT PHASE
••• DENOTES FLASHING YELLOW ARROW OR YELLOW ARROW DEPENDING ON NEXT PHASE

DATE: 01-12-15 FILE NAME: t040582.dgn

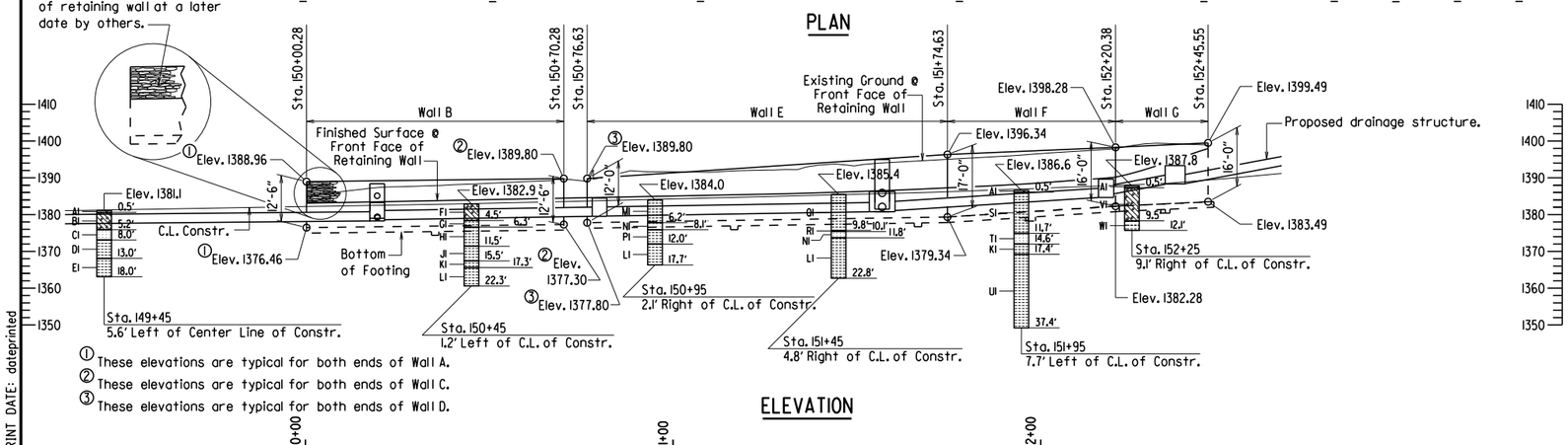
LOCATION: HWY. 112 (MAPLE ST.)/STADIUM DRIVE
CITY: FAYETTEVILLE
COUNTY: WASHINGTON
DISTRICT: 4 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		7	107
				JOB NO.		040582		

① SPECIAL DETAILS



PLAN



① These elevations are typical for both ends of Wall A.
② These elevations are typical for both ends of Wall C.
③ These elevations are typical for both ends of Wall D.

ELEVATION

BORING LEGEND

A1-Asphalt Pavement (6")
B1-Dense, Calcareous Sandstone Fragments with Brown Clay
C1-SANDSTONE - Brown and Light Gray, Thin Bedded, Vuggy, Calcareous, Weathered, Cemented, with Slight Dip
D1-SHALE - Brown and Dark Gray, Laminated, Highly Weathered, Medium Hard, with Slight Dip
E1-SHALE - Dark Gray, Laminated, Slightly Weathered, Slightly Calcareous, Medium Hard, with Slight Dip
F1-Moist, Stiff, Gray and Light Brown Clay with Gravel(Shale Fragments)
G1-SHALE - Brown and Gray, Highly Weathered, Soft
H1-SHALE - Reddish Brown and Gray, Highly Weathered, Soft
J1-SHALE - Gray, Laminated, Highly Weathered, Medium Hard, with Slight Dip
K1-SHALE WITH WEATHERED SHALE LAYERS - Dark Gray, Laminated, Medium Hard, with Slight Dip
L1-SHALE WITH WEATHERED SHALE LAYERS - Dark Gray, Laminated, Slightly Calcareous, Medium Hard, with Slight Dip
M1-SHALE - Brown and Gray, Highly Weathered, Medium Hard
N1-SANDSTONE - Light Gray, Medium Bedded, Calcareous, Slightly Weathered, Cemented, with Slight Dip
P1-SHALE - Dark Gray, Laminated, Weathered, Medium Hard, with Slight Dip
Q1-SHALE - Brown, Highly Weathered, Soft
R1-SHALE - Gray, Highly Weathered, Medium Hard
S1-SHALE - Gray to Gray and Brown, Highly Weathered, Soft
T1-SANDSTONE WITH OCCASIONAL DARK GRAY SHALE SEAMS - Gray, Medium Bedded, Slightly Weathered, Calcareous, Cemented, with Slight Dip
U1-SHALE WITH OCCASIONAL GRAY SANDSTONE SEAMS - Dark Gray, Laminated, Slightly Weathered, Medium Hard, with Slight Dip
V1-Moist, Stiff, Gray and Light Brown Clay with Highly Weathered Shale Fragments
W1-SHALE - Gray, Highly Weathered, Soft

"N" VALUES

Sta. 149+45 - 13' Left of Center Line of Construction
4.8- 5.2, N=15(5")

Sta. 150+45 - 11' Left of Center Line of Construction
5.0- 6.0, N=30
10.0- 11.0, N=38

Sta. 150+95 - 9' Left of Center Line of Construction
5.4- 6.2, N=73(9")

Sta. 151+45 - 7.5' Left of Center Line of Construction
5.3- 6.3, N=14
9.8- 10.1, N=60(4")

Sta. 151+95 - 20' Left of Center Line of Construction
5.2- 6.2, N=21
10.2- 11.2, N=43

Sta. 152+25 - 3' Left of Center Line of Construction
5.0- 6.0, N=11
10.0- 11.0, N=41

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

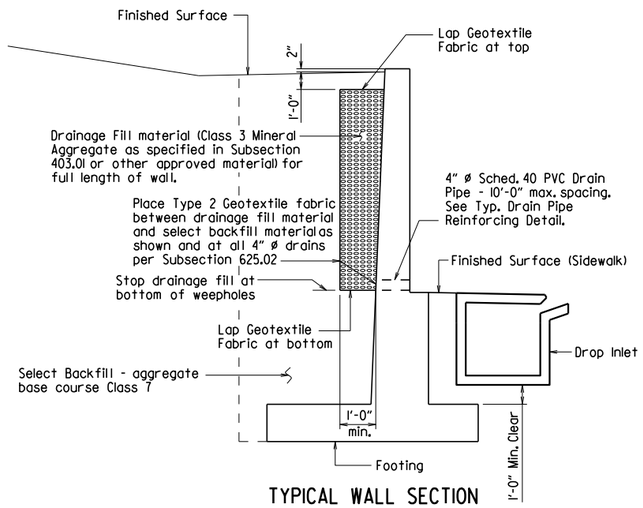
SHEET 1 OF 5
DETAILS OF REINFORCED CONCRETE RETAINING WALLS
STA. 150+00.28 TO STA. 152+45.55

SPECIAL DETAILS

PRINT DATE: dateprinted

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		040582		

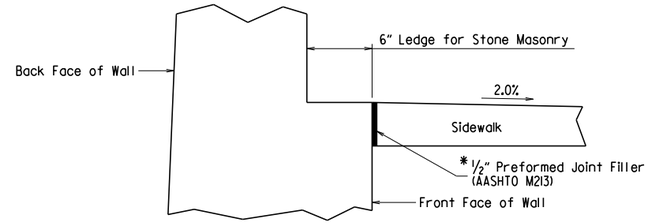
1 SPECIAL DETAILS



TYPICAL WALL SECTION

No Scale

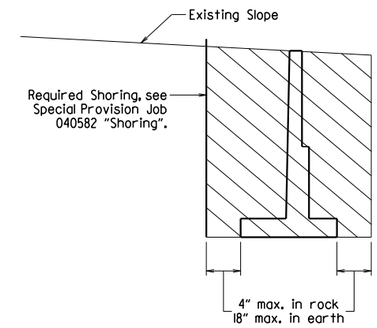
NOTE: No drain pipes are required for Walls A, C & D.



DETAILS OF SIDEWALK JOINT

No Scale

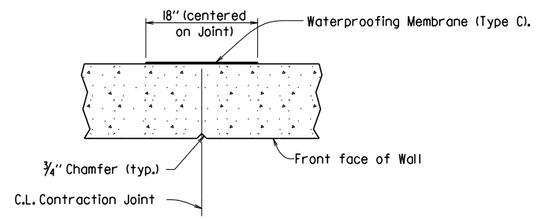
* Preformed Joint Filler shall also be placed between retaining walls and concrete steps.



DETAILS OF EXCAVATION

No Scale

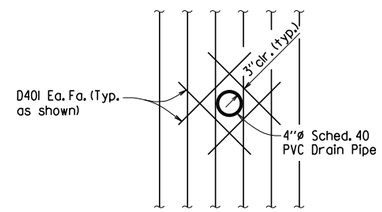
NOTE: Hatched area denotes maximum limits of pay excavation.



TYPICAL CONTRACTION JOINT DETAIL

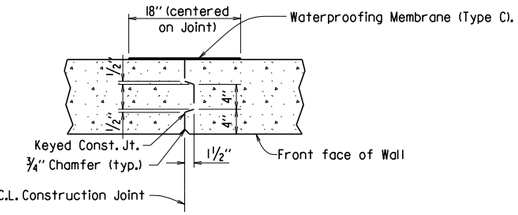
No Scale

NOTE: 20'-0" maximum spacing between Contraction Joints.



TYPICAL DRAIN PIPE REINFORCING DETAIL

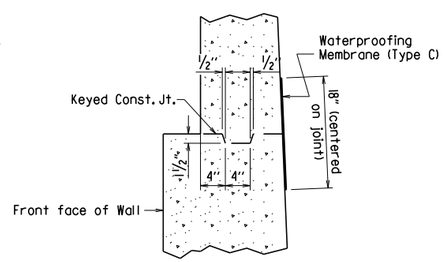
No Scale



VERTICAL OPTIONAL CONSTRUCTION JOINT DETAIL

No Scale

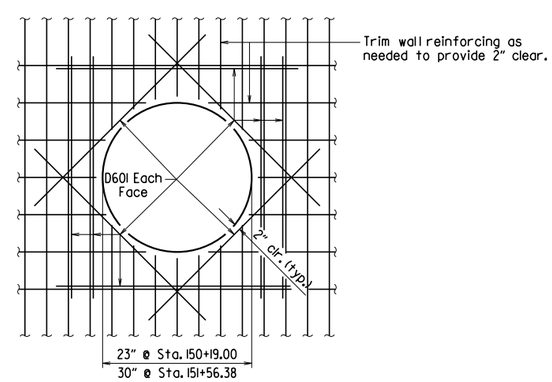
NOTE: Horizontal reinforcement shall be continuous through Joints.



HORIZONTAL OPTIONAL CONSTRUCTION JOINT DETAIL

No Scale

NOTE: Vertical reinforcement shall be continuous through Joints.



R.C. PIPE PROTRUSION DETAIL

No Scale

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, 2014 Edition, with applicable supplemental specifications and special provisions.

DESIGN SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications, Seventh Edition (2014).

SEISMIC ZONE: 1

CONCRETE: All concrete shall be Class "S" with a minimum 28 day compressive strength f'c = 3,500 psi. Exposed corners to be chamfered 3/4" unless otherwise noted.

REINFORCING STEEL: Reinforcing steel shall conform to AASHTO M31 or M322, Grade 60 (fy = 60,000 psi), Type A, with mill test reports.

RUBBED FINISH: All exposed surfaces of the concrete retaining wall shall be given a Class 2, rubbed finish, in accordance with Subsection 802.19(2).

FOOTINGS: Top of footings for retaining walls shall be a minimum of 1'-0" below bottom of drop inlets. Footings shall be keyed a minimum of 1'-0" into material designated as shale or sandstone on the borings legend. Foundations for footings shall be prepared in accordance with Section 801.04 concrete footings. Care shall be exercised to avoid shattering of rock faces by excessive blasting.

BACKFILL: Granular backfill for retaining wall shall consist of Class 7 Aggregate Base Course and shall be paid for as Aggregate Base Course (Class 7).

MISCELLANEOUS ITEMS: Geotextile fabric, preformed joint material, waterproofing membrane and the drain pipes shall not be paid for directly, but shall be considered subsidiary to other items of the contract.

BORING LOGS: Boring logs, including laboratory results, may be obtained from the Construction Contract Procurement Section of the Program Management Division.

See Sheets 1 - 5 for retaining wall details, elevation views and additional information.

The Engineer shall be notified if changes in footing elevations result in a total wall height greater than 18'-6".

APPROXIMATE QUANTITIES FOR RETAINING WALL

(FOR INFORMATION ONLY)

	ITEM NO.	633	633	801	802	804	SP
WALL SECTION	ITEM	CONCRETE STEPS	HAND RAILING	UNCLASSIFIED EXCAVATION FOR STRUCTURES - ROADWAY	CLASS S CONCRETE - ROADWAY	REINFORCING STEEL - ROADWAY (GR. 60)	SHORING
	UNIT	SQUARE YARD	LIN. FEET	CU. YARDS	CU. YARDS	LBS.	LUMP SUM
RETAINING WALLS		-	-	** 1,635 Cu. Yds.	398 Cu. Yds.	30,745 lbs.	1
STAIRS		5.6	24	-	-	-	-

Tabular Data By: KWY Date: 11/18/14

Checked By: _____ Date: _____

** Includes 635 cubic yards of rock excavation.

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SHEET 2 OF 5

DETAILS OF REINFORCED CONCRETE RETAINING WALLS

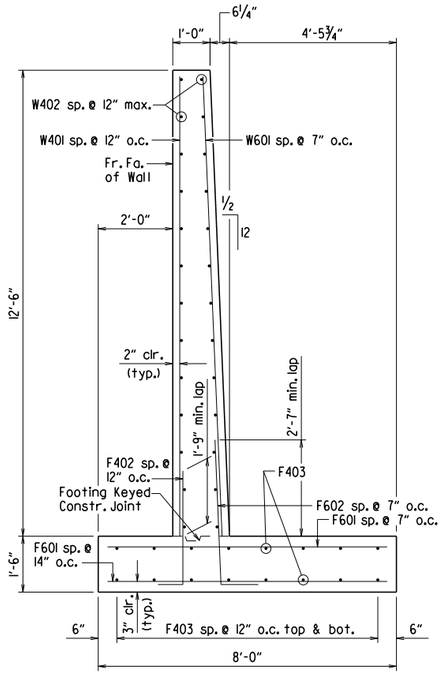
STA. 150+00.28 TO STA. 152+45.55

SPECIAL DETAILS

PRINT DATE: dateprinted

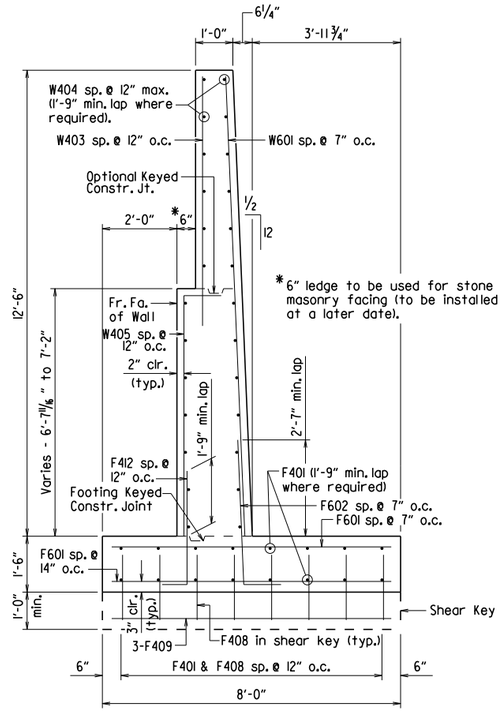
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		040582		

1 SPECIAL DETAILS



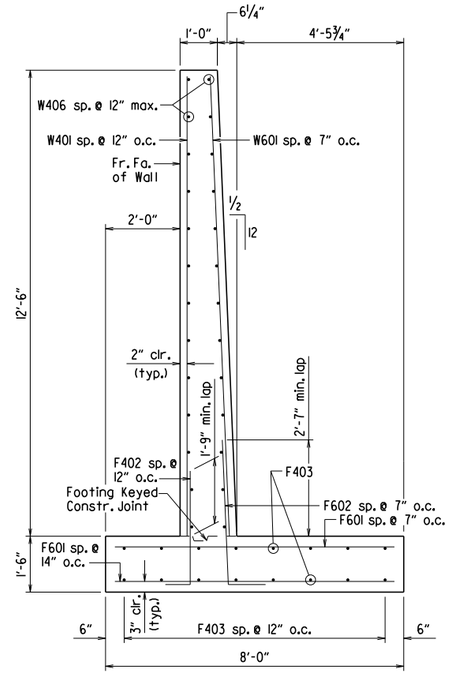
WALL A CROSS SECTION

½" = 1'-0"



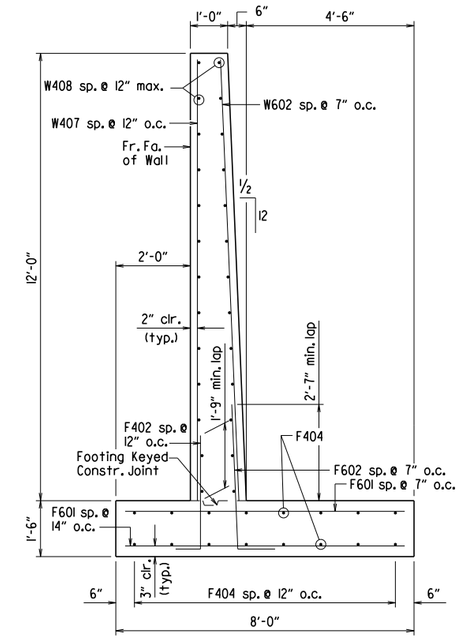
WALL B CROSS SECTION

½" = 1'-0"



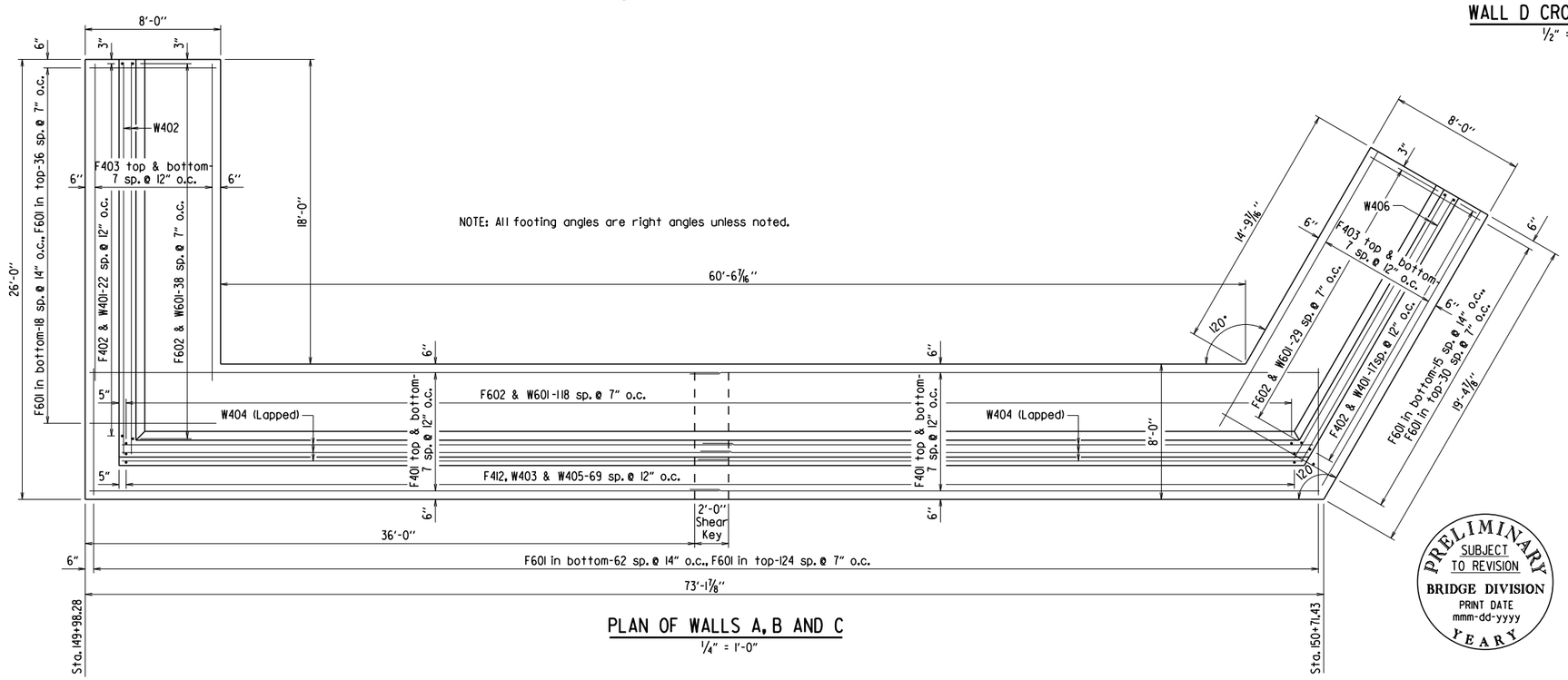
WALL C CROSS SECTION

½" = 1'-0"



WALL D CROSS SECTION

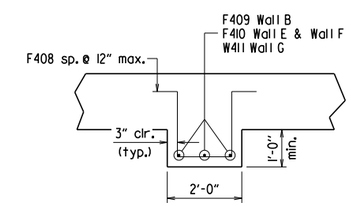
½" = 1'-0"



PLAN OF WALLS A, B AND C

¼" = 1'-0"

NOTES:
For cross sections of Wall E, Wall F and Wall G, see Sheet 4 of 5.
For "Footing Keyed Construction Joint Detail", see Sheet 4 of 5.



DETAILS OF TYPICAL SHEAR KEY

No Scale

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YEARY

SHEET 3 OF 5
DETAILS OF REINFORCED CONCRETE RETAINING WALLS
STA. 150+00.28 TO STA. 152+45.55

SPECIAL DETAILS

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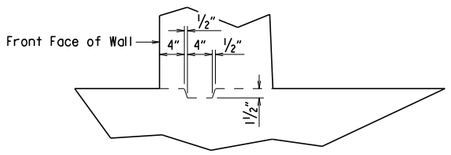
				6	ARK.			
				JOB NO.		040582		

(1) SPECIAL DETAILS



FOOTING KEYED CONSTRUCTION JOINT DETAIL

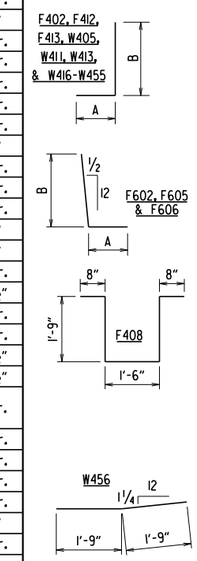
1" = 1'-0"

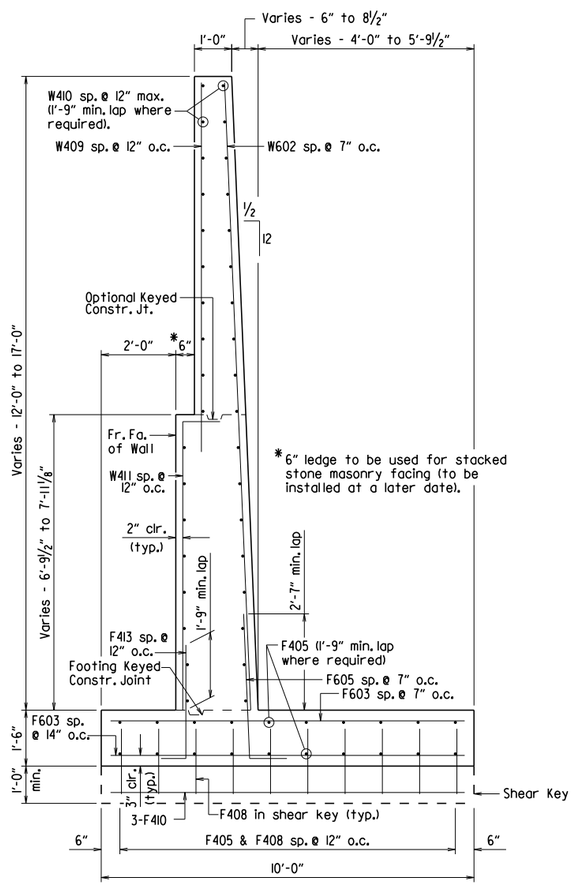
BAR LIST

MARK	NO. REQ'D.	LENGTH	A	B	P.D.
D401	104	2'-6"			Str.
D601	40	5'-6"			Str.
F401	32	37'-3"			Str.
F402	140	3'-7"	8"	3'-0"	3"
F403	32	18'-9"			Str.
F404	16	12'-2"			Str.
F405	60	34'-2"			Str.
F406	40	24'-4"			Str.
F407	40	21'-2"			Str.
F408	48	6'-0"			3"
F409	3	7'-6"			Str.
F410	9	9'-6"			Str.
F411	3	9'-0"			Str.
F412	70	4'-1"	8"	3'-6"	3"
F413	98	4'-9"	8"	4'-2"	3"
F601	323	7'-6"			Str.
F602	277	4'-8"	1'-0"	3'-10"	4 1/2"
F603	364	9'-6"			Str.
F604	104	9'-0"			Str.
F605	166	9'-8"	1'-0"	8'-10"	4 1/2"
F606	79	5'-8"	1'-0"	4'-10"	4 1/2"
F607-F610	2 ea.	Var. 2'-6"-8'-7"			Str.
W401	41	12'-4"			Str.
W402	26	23'-2"			Str.
W403	70	6'-10"			Str.
W404	52	36'-1"			Str.
W405	70	7'-5"	1'-0"	6'-6"	3"
W406	26	17'-11"			Str.
W407	13	11'-10"			Str.
W408	26	13'-7"			Str.
W409	144	9'-11"			Str.
W410	108	33'-6"			Str.
W411	98	7'-6"	1'-0"	6'-7"	3"
W412	72	23'-11"			Str.
W413	46	8'-8"	1'-0"	7'-9"	3"
W414	40	9'-1"			Str.
W415	34	39'-10"			Str.
W416-W455	1 ea.	Var. 8'-8"-15'-2"	1'-0"	Var. 7'-9"-14'-3"	3"
W456	36	3'-6"			3"
W601	188	12'-4"			Str.
W602	188	11'-10"			Str.
W603	78	15'-8"			Str.
W604	67	15'-10"			Str.

BENDING DIAGRAMS

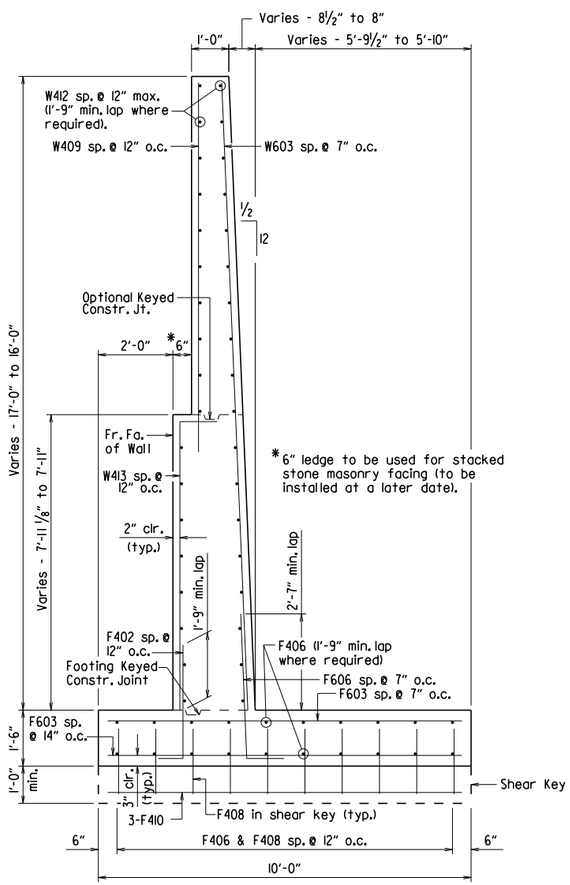
Dimensions are out to out of bars.





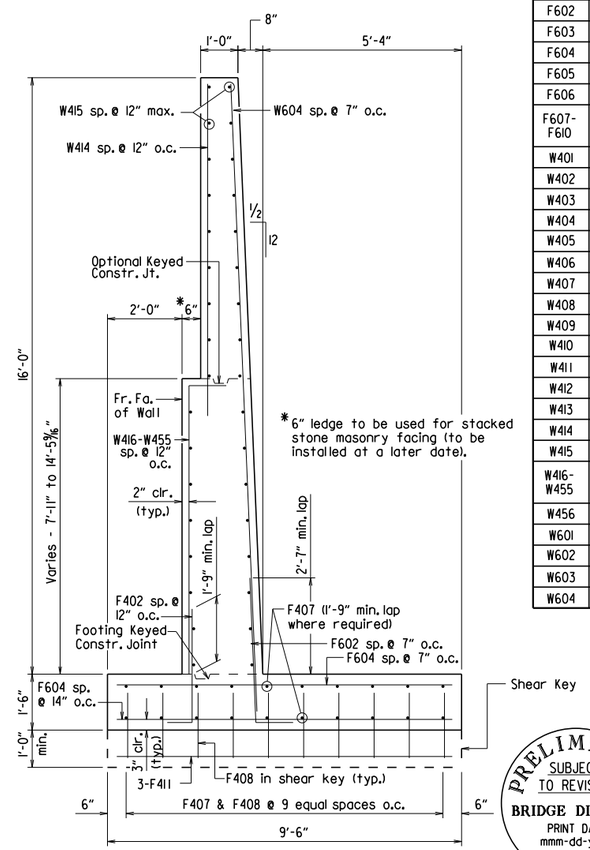
WALL E CROSS SECTION

1/2" = 1'-0"



WALL F CROSS SECTION

1/2" = 1'-0"



WALL G CROSS SECTION

1/2" = 1'-0"

NOTE: For cross sections of Wall A, Wall B, Wall C and Wall D, see Sheet 3 of 5.

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SHEET 4 OF 5
DETAILS OF REINFORCED CONCRETE RETAINING WALLS
STA. 150+00.28 TO STA. 152+45.55

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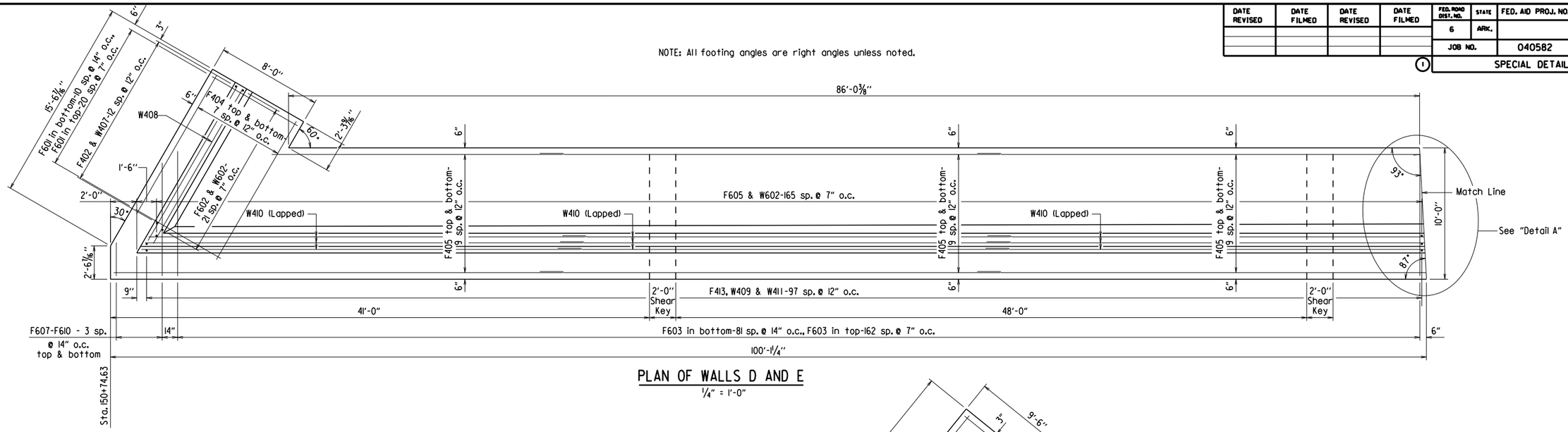
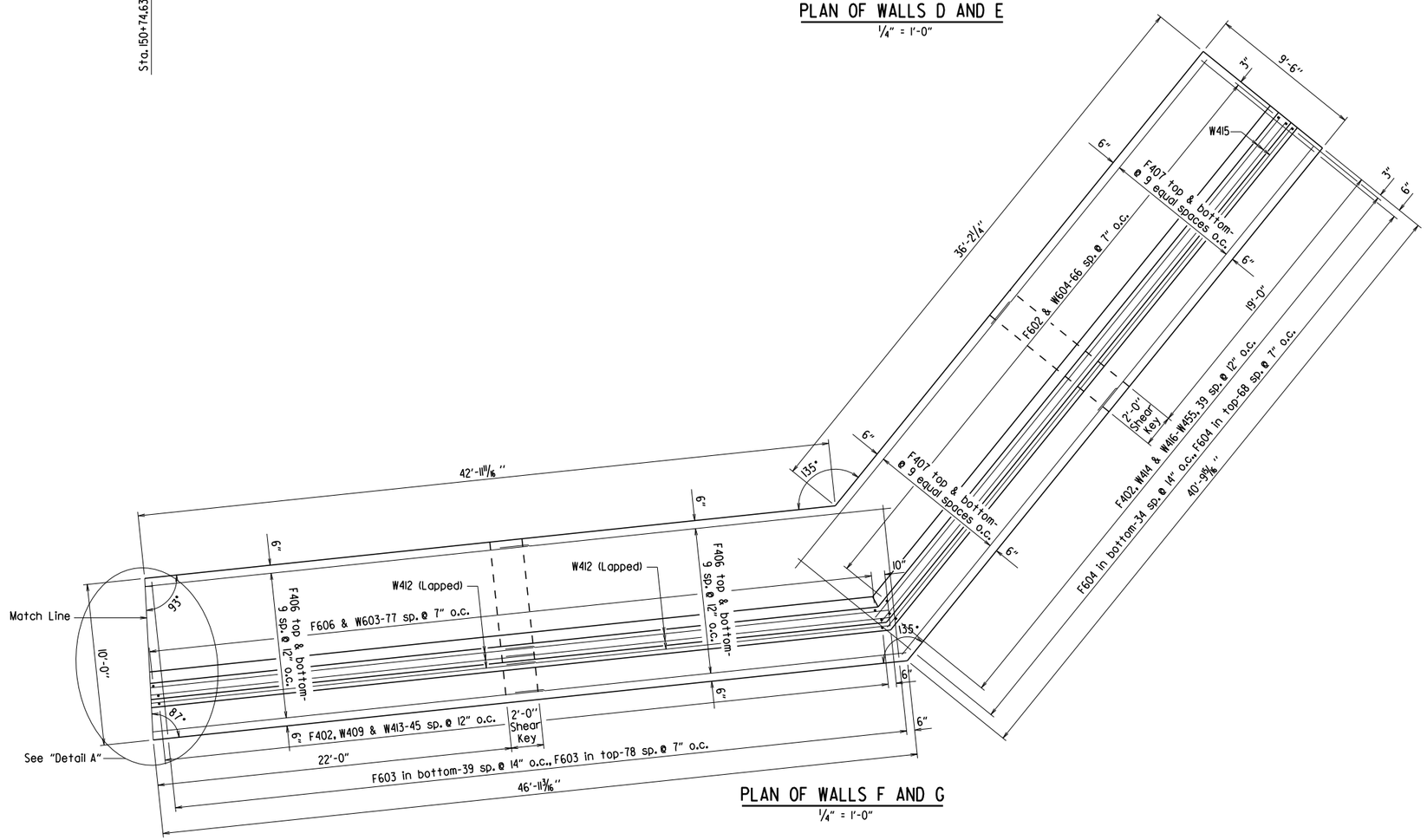
1 SPECIAL DETAILS

NOTE: All footing angles are right angles unless noted.



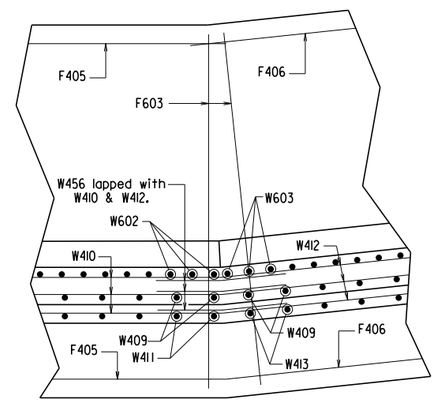
PLAN OF WALLS D AND E

1/4" = 1'-0"



PLAN OF WALLS F AND G

1/4" = 1'-0"



DETAIL A

1/2" = 1'-0"

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SHEET 5 OF 5
DETAILS OF REINFORCED CONCRETE RETAINING WALLS
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