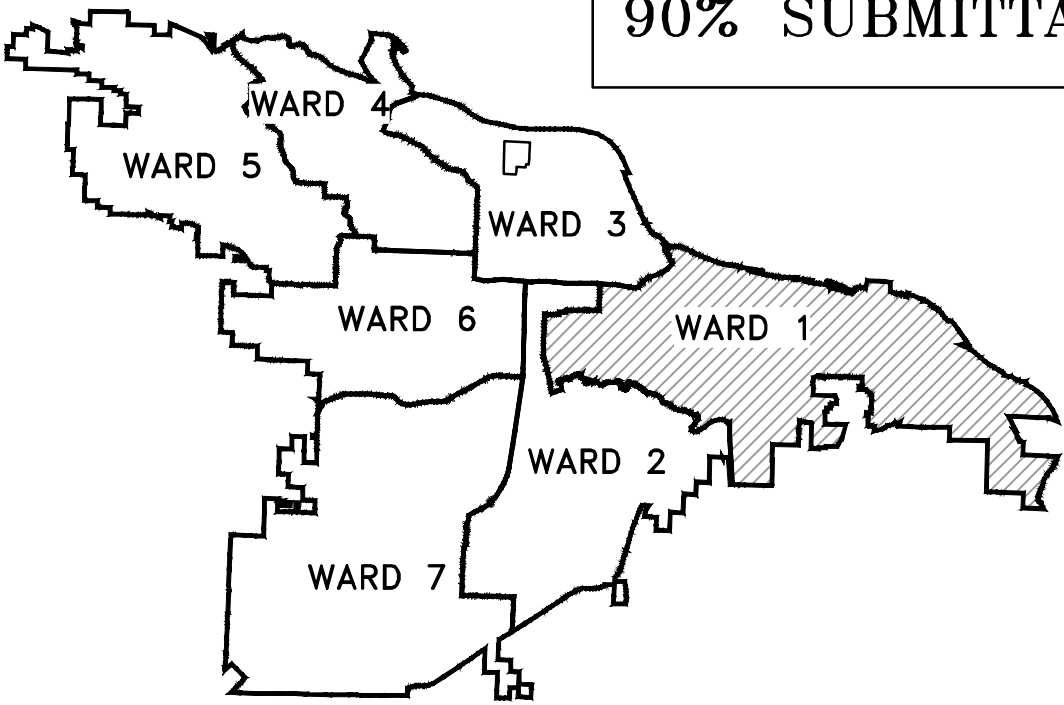


# FOURCHE DAM PIKE IMPROVEMENTS (NEAR I-440)



90% SUBMITTAL

PROJECT LOCATION – WARD 1



PROJECT START  
STATION 10+00

PROJECT END  
STATION 18+00

PROJECT END  
STATION 20+00

PROJECT END  
STATION 6+45

PROJECT START  
STATION 1+00

PROJECT START  
STATION 10+00

PROJECT  
LOCATION

Sheet List Table	
Sheet Number	Sheet Title
C1	COVER SHEET
C2	QUANTITIES AND LEGENDS
C3 & C4	TYPICAL SECTION SHEETS
C5–C10	MAINTENANCE OF TRAFFIC SHEETS
C11–C13	STRIPING REMOVAL SHEETS
C14–C16	STRIPING AND SIGNAGE SHEETS
C17–C20	EROSION CONTROL SHEETS
C21–C23	CENTERLINE TIES SHEETS
C24	CURBING DETAILS (CG–1)
C25	DETAILS OF TERMINAL JOINTS (CPCR–3)
C26	PAVEMENT MARKING DETAILS (PM–1)
C27	STANDARD DRAWING (SHS–8)
T–01	INDEX OF SHEETS AND GOVERNING SPECIFICATIONS
T–02	TRAFFIC SIGNAL NOTES
T–03	FOURCHE DAM PIKE AND I–440 WB RAMPS TRAFFIC SIGNAL SUMMARY OF QUANTITIES
T–04	FOURCHE DAM PIKE AND I–440 WB RAMPS TRAFFIC SIGNAL PLAN, MAST ARMS AND CONDUIT
T–05	FOURCHE DAM PIKE AND I–440 WB RAMPS TRAFFIC SIGNAL WIRING PLAN
T–06	FOURCHE DAM PIKE AND I–440 WB RAMPS TRAFFIC SIGNAL CHARTS
T–07	FOURCHE DAM PIKE AND I–440 EB RAMPS TRAFFIC SIGNAL SUMMARY OF QUANTITIES
T–08	FOURCHE DAM PIKE AND I–440 EB RAMPS TRAFFIC SIGNAL PLAN, MAST ARMS AND CONDUIT
T–09	FOURCHE DAM PIKE AND I–440 EB RAMPS TRAFFIC SIGNAL WIRING PLAN
T–10	FOURCHE DAM PIKE AND I–440 EB RAMPS TRAFFIC SIGNAL CHARTS
T–11	CONDUIT DETAILS IN RAILROAD ROW
T–12	CONTROLLER CABINET UTILITY DRAWER (SD–5)
T–13	HEAVY DUTY PULL BOX (SD–6)
T–14	SIGNAL HEAD PLACEMENT (SD–8)
T–15	SERVICE POINT (SD–9)
T–16	STEEL POLE WITH MAST ARM (SD–11)
T–17	TESCO CABINET (27–22–BBS)

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS

COVER SHEET

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM



LITTLE ROCK, ARKANSAS 72201

DRAWN BY AT
DESIGNED TDF
CHECKED BAP
DATE 09-18-2020
SCALE NO SCALE
PROJECT NO.
SHEET NO. C1

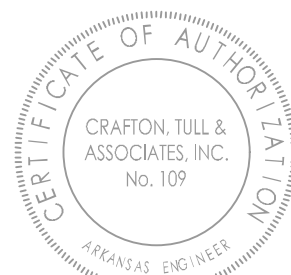


Know what's below.  
Call before you dig.

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 WEST MARKHAM STREET  
LITTLE ROCK, ARKANSAS 72201

10825 Financial Center Parkway, Suite 300  
Little Rock, Arkansas 72211  
**Crafton Tull**  
engineering | surveying  
501.664.3245 | 501.664.6704 f  
www.craftontull.com

CERTIFICATE OF AUTHORIZATION:  
JOB : 198002106







REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS

FOURCHE DAM PIKE IMPROVEMENTS

TYPICAL SECTION SHEET 1

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201

DRAWN BY

AT

DESIGNED

TDF

CHECKED

BAP

DATE

08-28-2030

SCALE

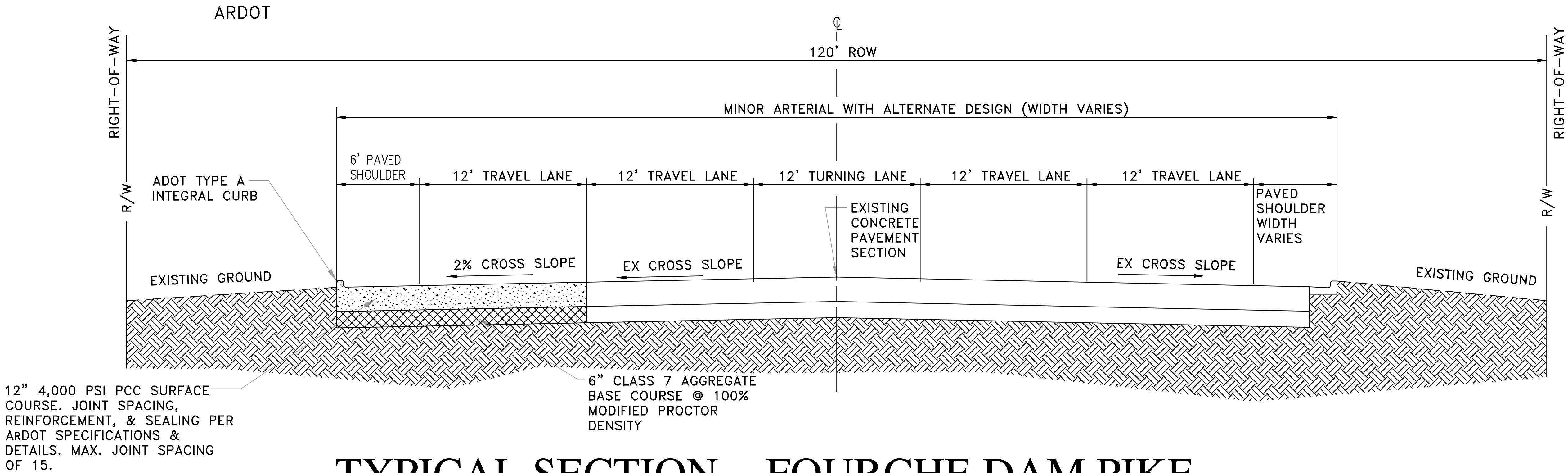
NO SCALE

PROJECT NO.

SHEET NO.

C3

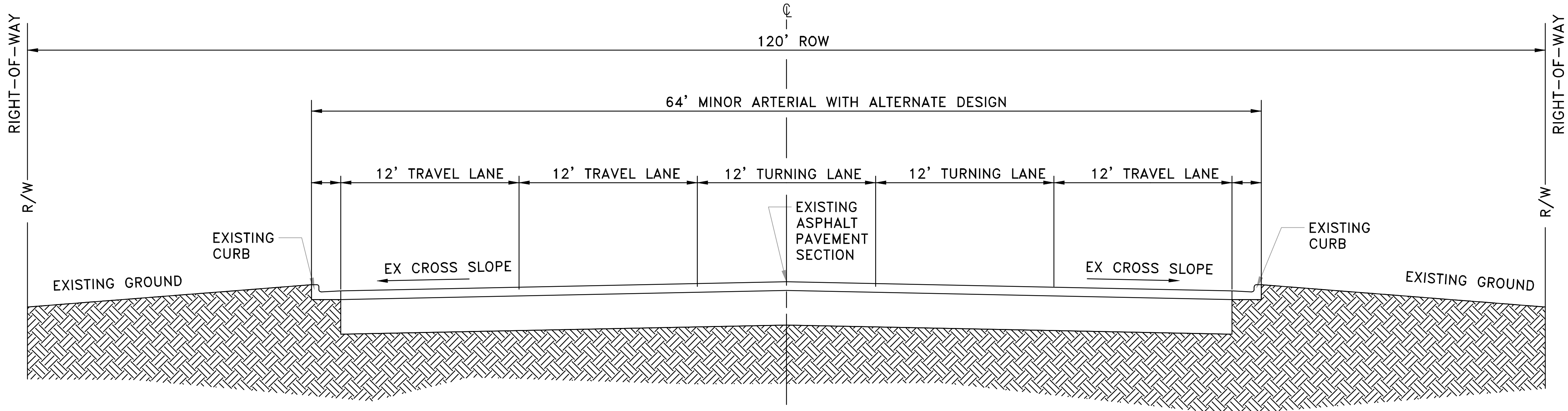
90% SUBMITTAL



## TYPICAL SECTION - FOURCHE DAM PIKE

NTS

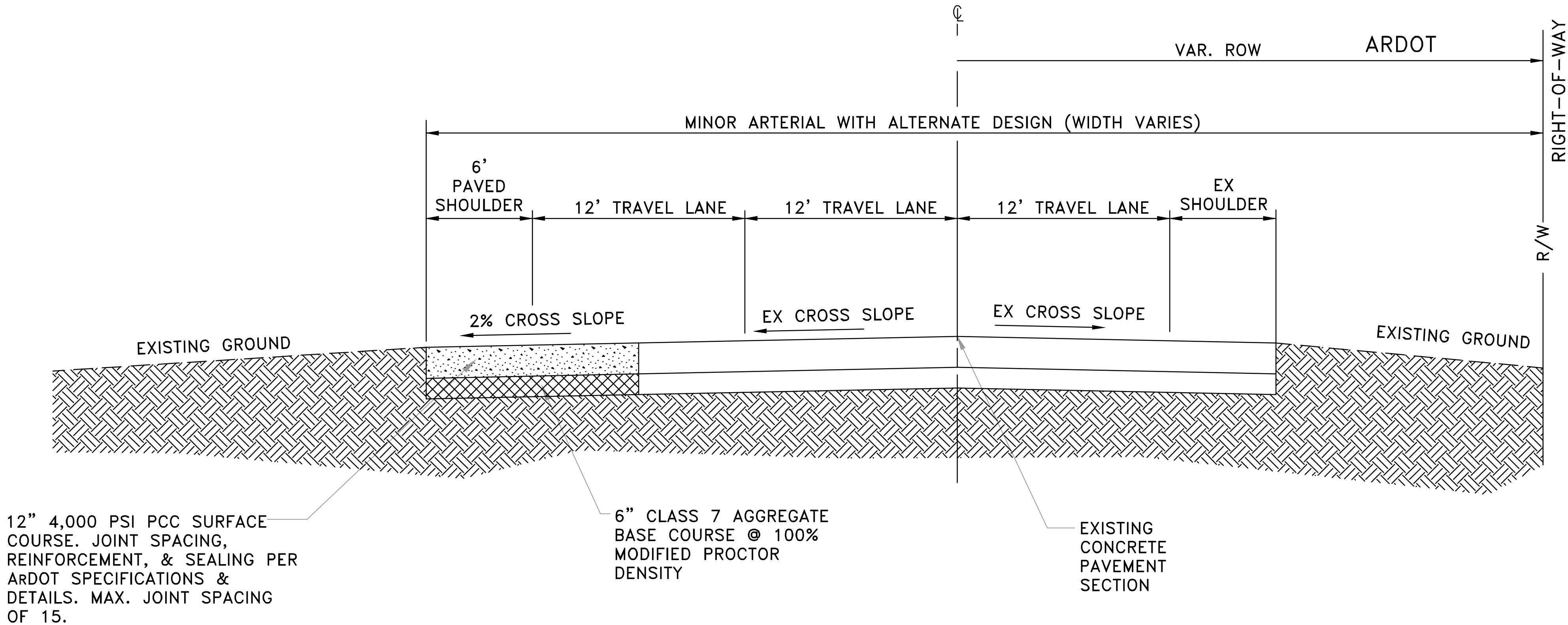
STA. 11+10.00 TO STA. 12+00.00



## TYPICAL SECTION - FOURCHE DAM PIKE

NTS

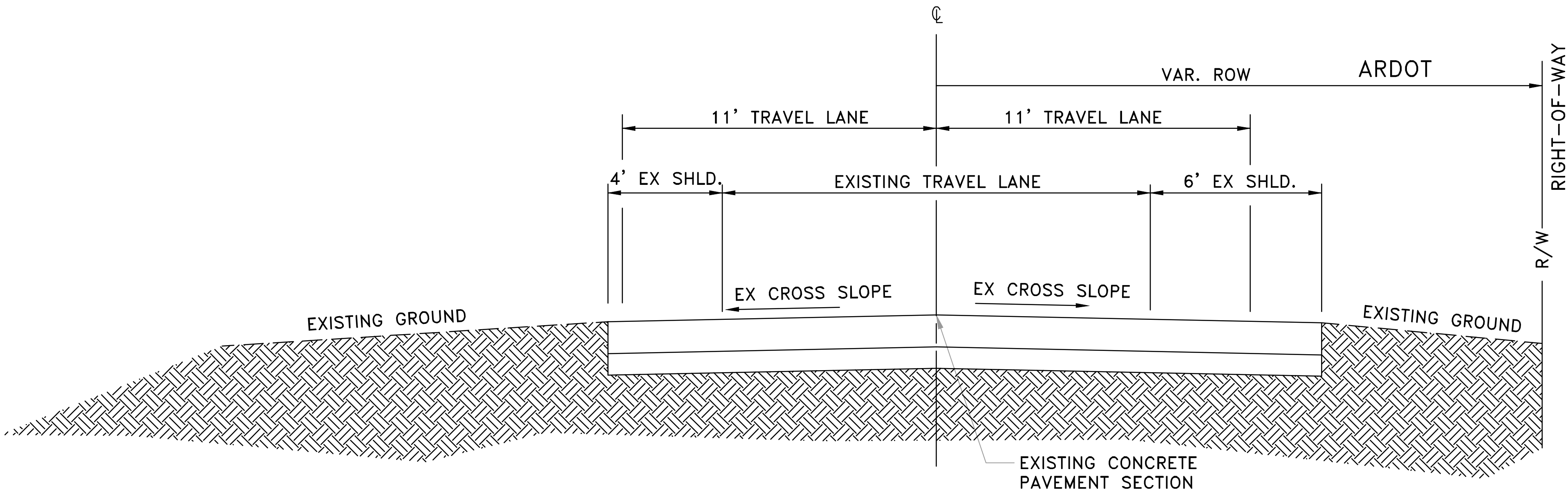
STA. 12+81.75 TO STA. 17+98.88



# TYPICAL SECTION - I-440 W. OFF RAMP

NTS

STA. 1+00.00 TO STA. 6+45.00



# TYPICAL SECTION - I-440 W. ON RAMP

NTS

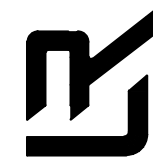
STA. 10+00.00 TO STA. 18+00.00

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS

TYPICAL SECTION SHEET 2

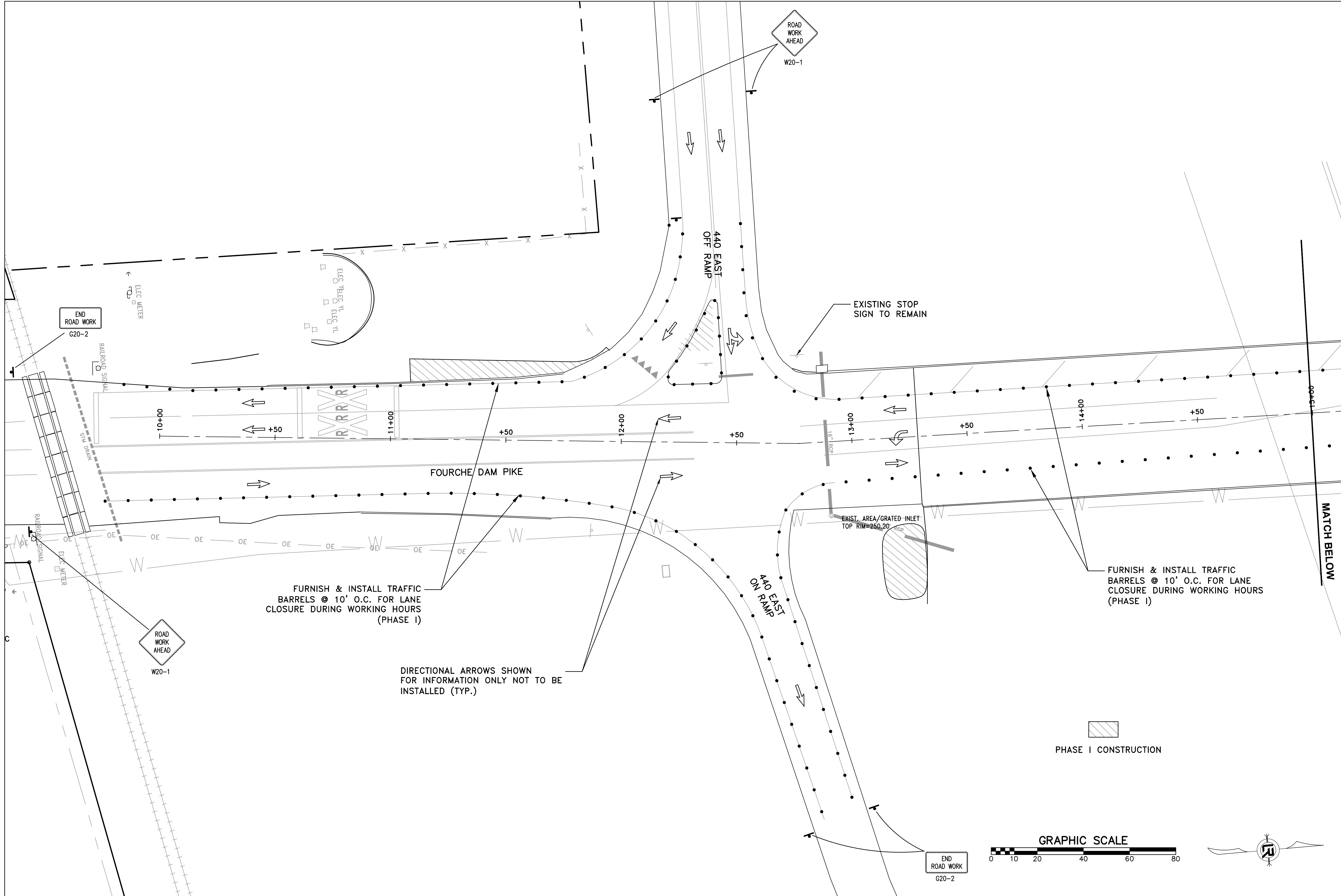
DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201



DRAWN BY
AT
DESIGNED
TDF
CHECKED
BAP
DATE
08-28-2030
SCALE
NO SCALE
PROJECT NO.

SHEET NO.  
C4





REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
MAINTENANCE OF TRAFFIC PH 1 - SHEET 1

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201



DRAWN BY  
AT  
DESIGNED  
TDF  
CHECKED  
BAP  
DATE  
08-28-2030  
SCALE  
H: 1"=20'  
V: 1"=5'  
PROJECT NO.

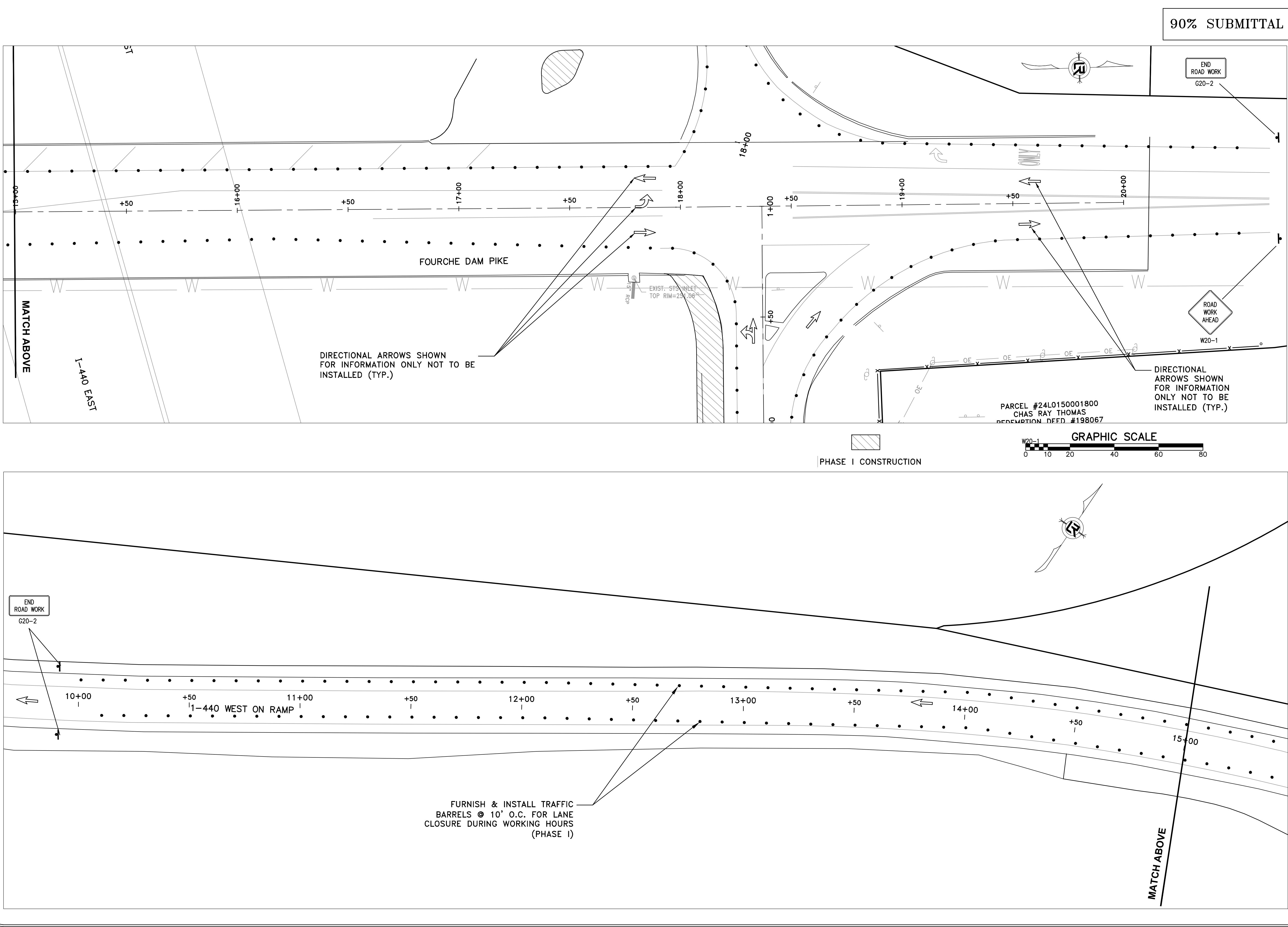
SHEET NO.  
C5

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
MAINTENANCE OF TRAFFIC PH 1 - SHEET 2

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201

DRAWN BY	AT
DESIGNED	TDF
CHECKED	BAP
DATE	08-28-2030
SCALE	H: 1"=20' V: 1"=5'
PROJECT NO.	
SHEET NO.	C6





REVISIONS    DATE

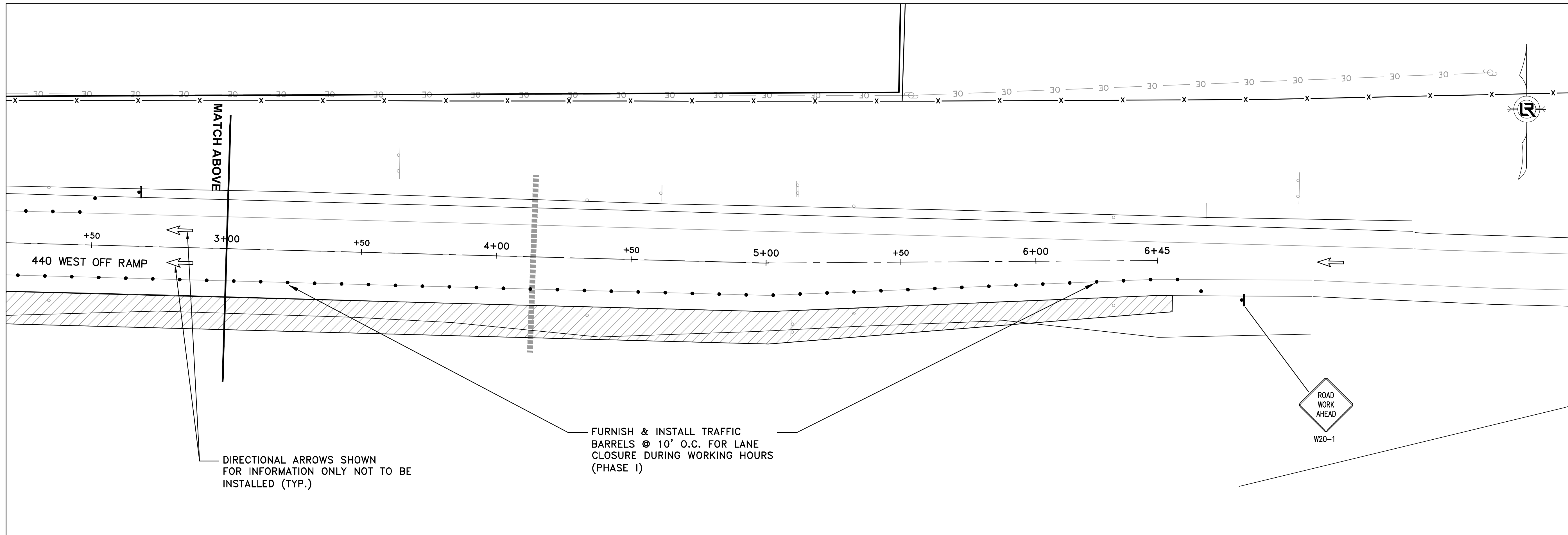
CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
MAINTENANCE OF TRAFFIC PH 1 - SHEET 3

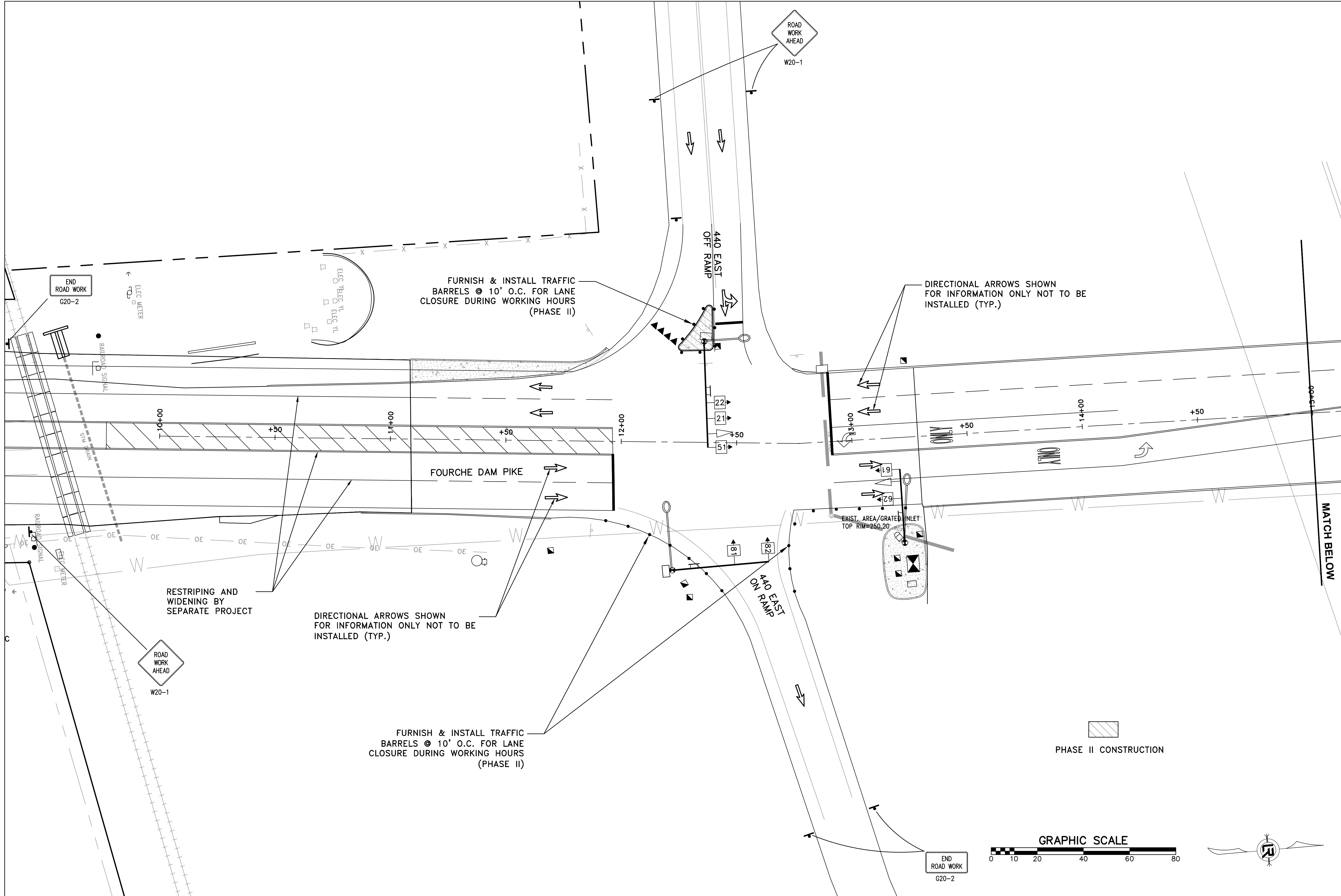
DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201

DRAWN BY  
AT  
DESIGNED  
TDF  
CHECKED  
BAP  
DATE  
08-28-2030  
SCALE  
H: 1"=20'  
V: 1"=5'  
PROJECT NO.

SHEET NO.  
C7

90% SUBMITTAL





REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
MAINTENANCE OF TRAFFIC PH 2 - SHEET 1

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201



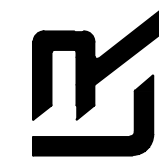
DRAWN BY	AT
DESIGNED	TDF
CHECKED	BAP
DATE	08-28-2030
SCALE	H: 1"=20' V: 1"=5'
PROJECT NO.	C8



REVISIONS      DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
MAINTENANCE OF TRAFFIC PH 2 - SHEET 2

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201

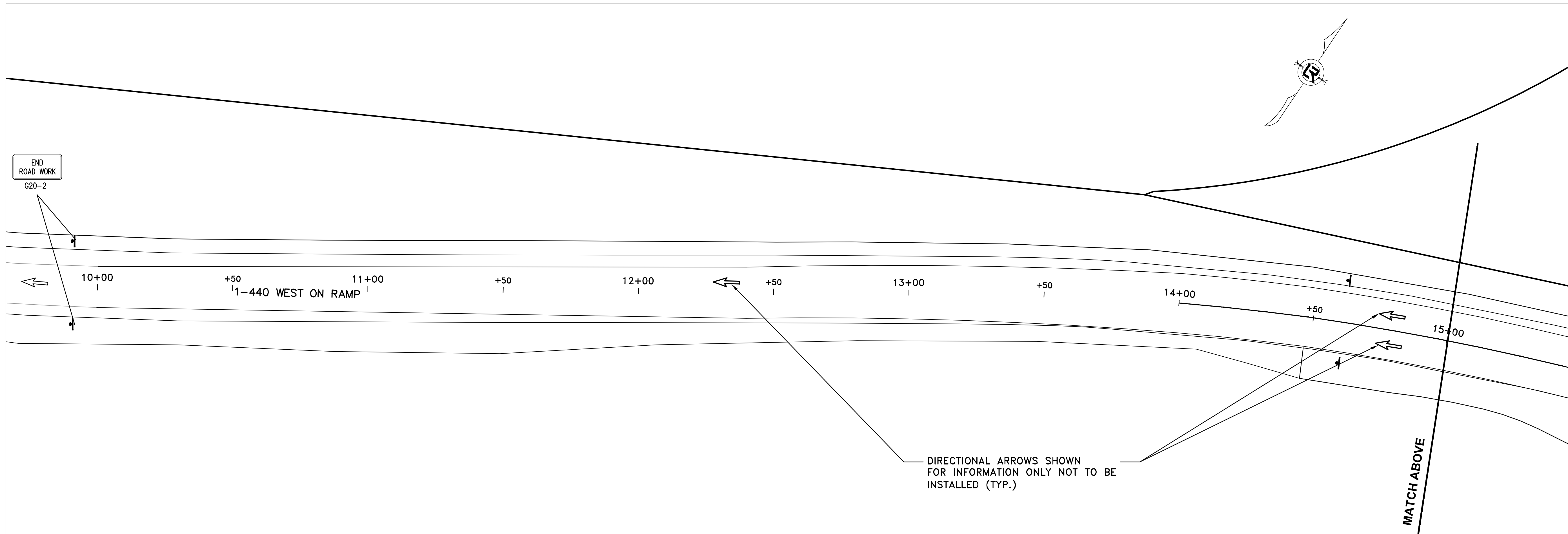
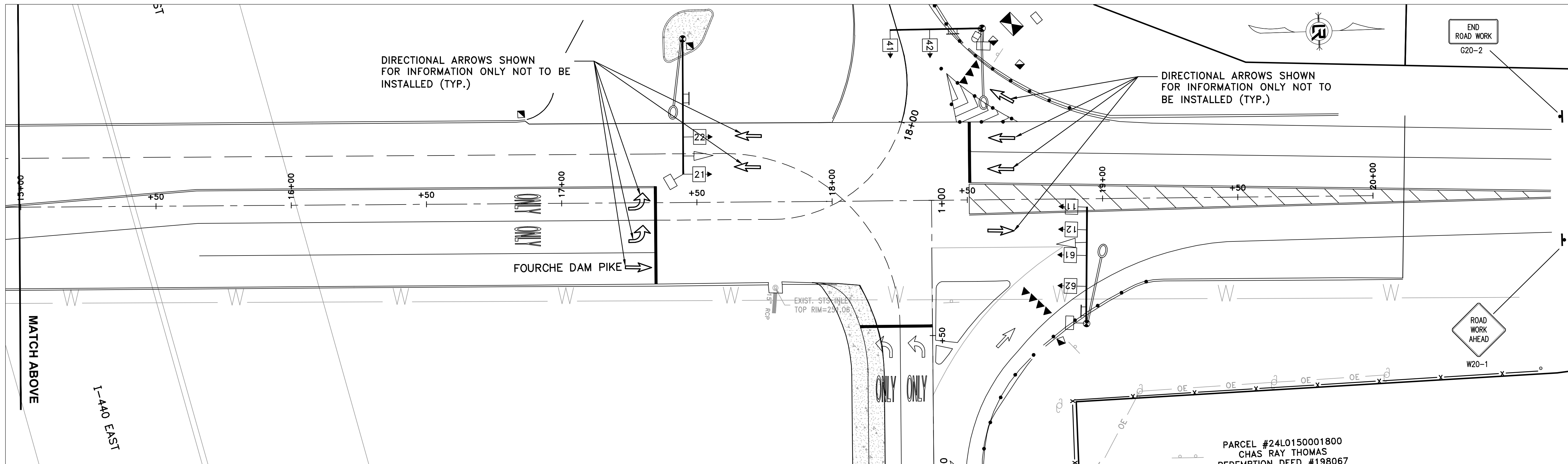


DRAWN BY  
AT  
DESIGNED  
TDF  
CHECKED  
BAP  
DATE  
08-28-2030  
SCALE  
H: 1"=20'  
V: 1"=5'  
PROJECT NO.

SHEET NO.

C9

90% SUBMITTAL



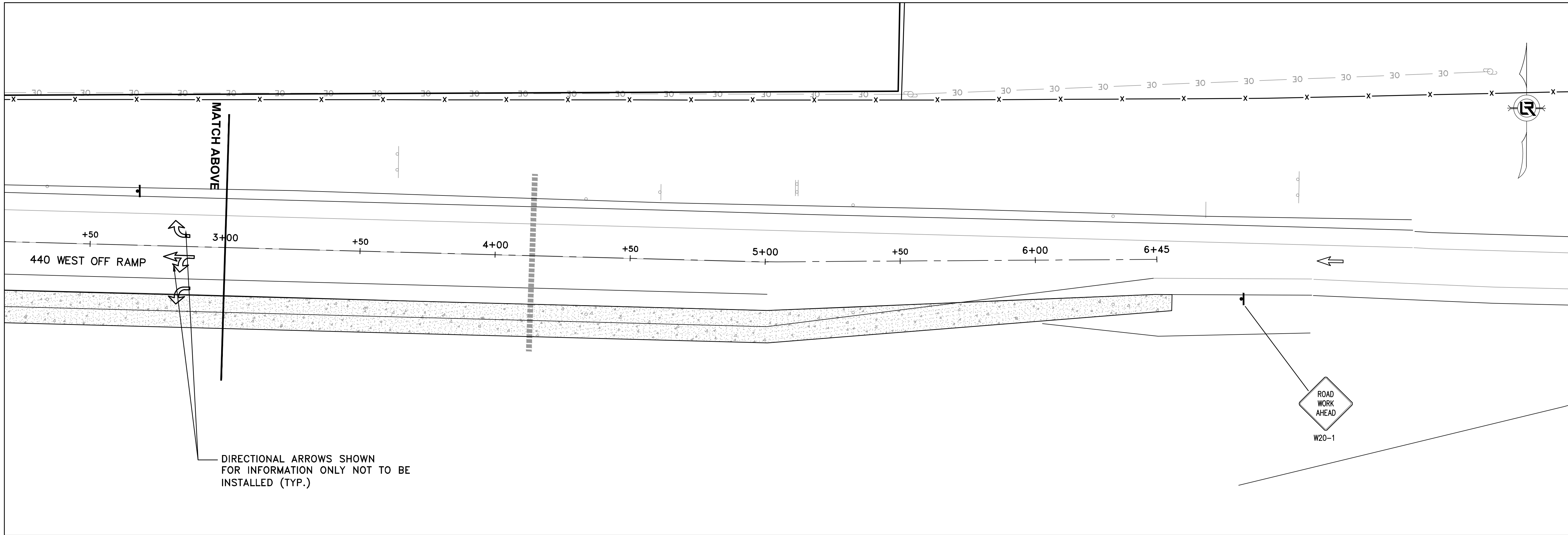
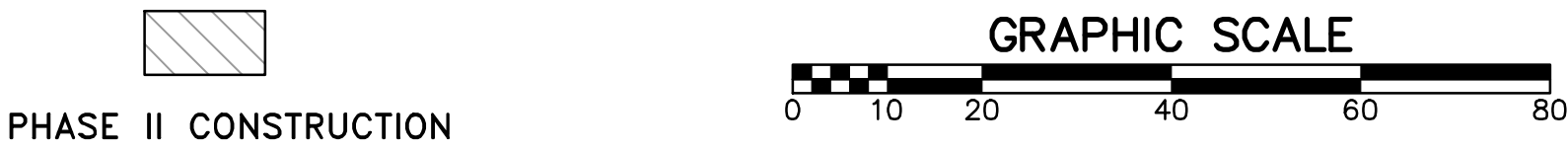
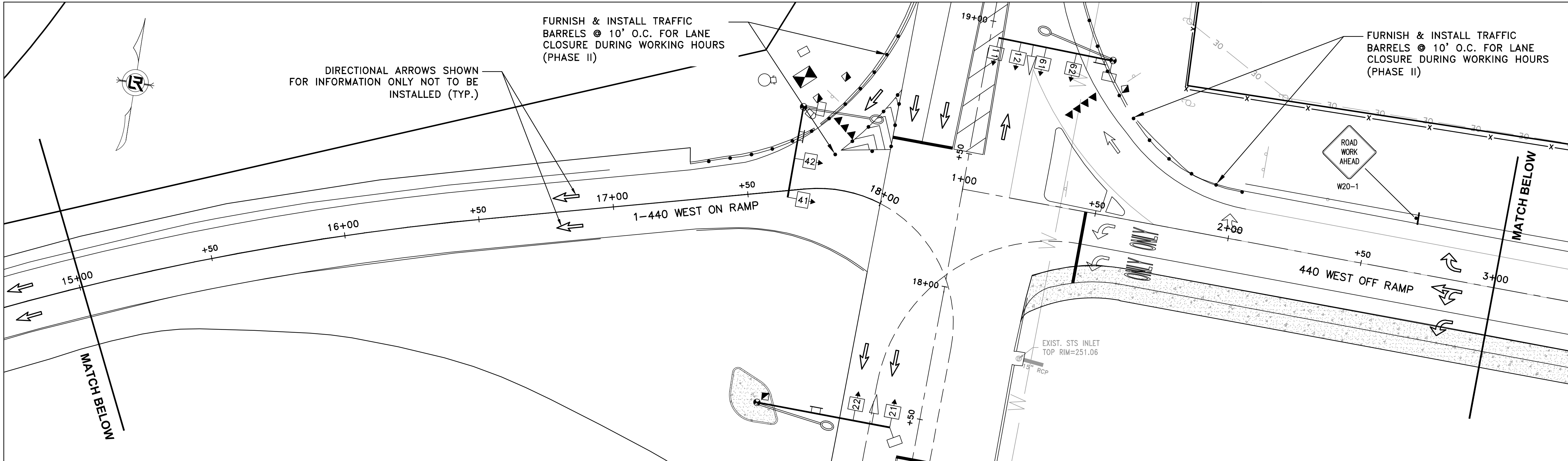
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
MAINTENANCE OF TRAFFIC PH 2 - SHEET 3

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201

DRAWN BY	AT
DESIGNED	TDF
CHECKED	BAP
DATE	08-28-2030
SCALE	H: 1"=20' V: 1"=5'
PROJECT NO.	
SHEET NO.	C10

90% SUBMITTAL

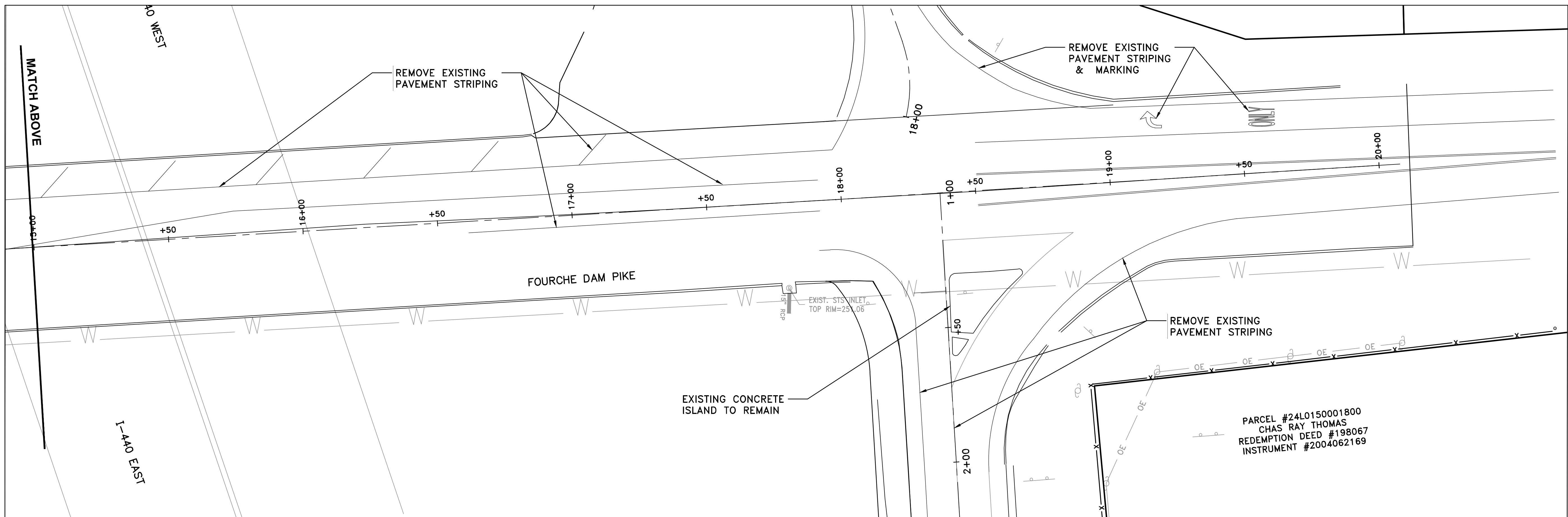
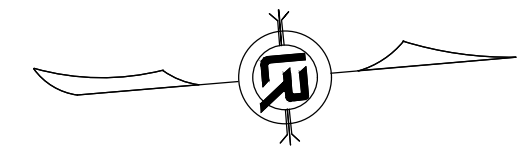
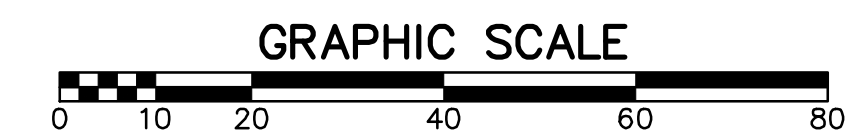




REVISIONS	DATE

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201

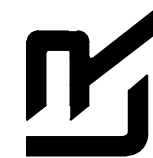
SHEET NO.  
C11



REVISIONS    DATE


CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
STRIPING REMOVAL SHEET 2

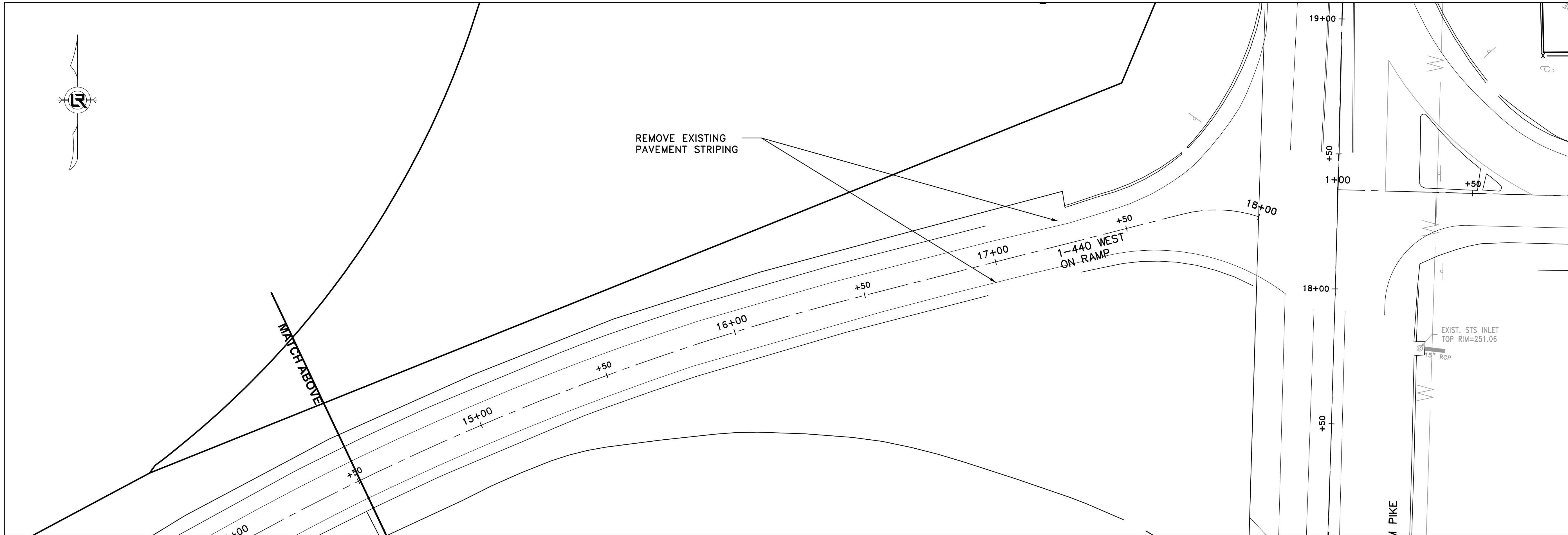
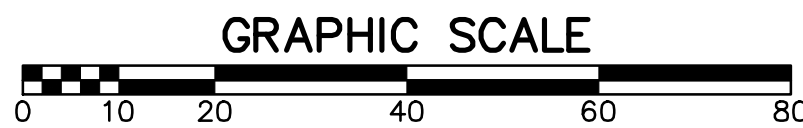
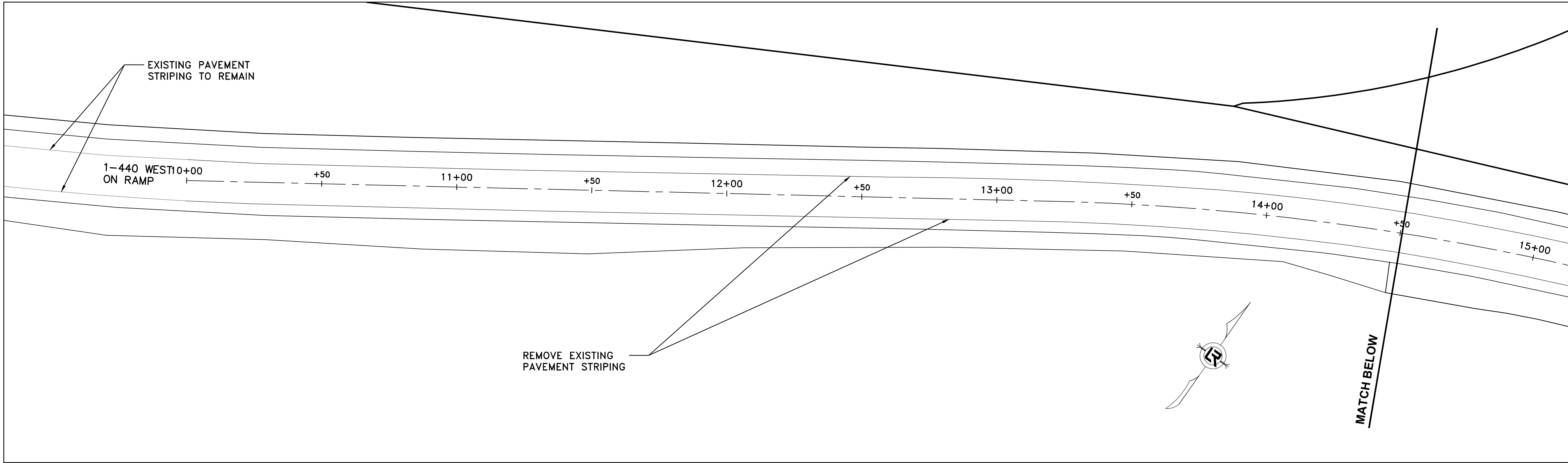
DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201



DRAWN BY  
AT  
DESIGNED  
TDF  
CHECKED  
BAP  
DATE  
08-28-2030  
SCALE  
H: 1"=20'  
V: 1"=5'

SHEET NO.  
C12

90% SUBMITTAL




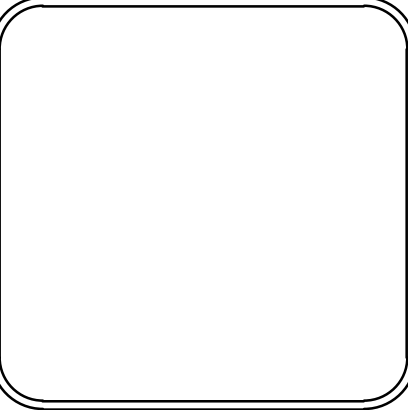


REVISIONS	DATE

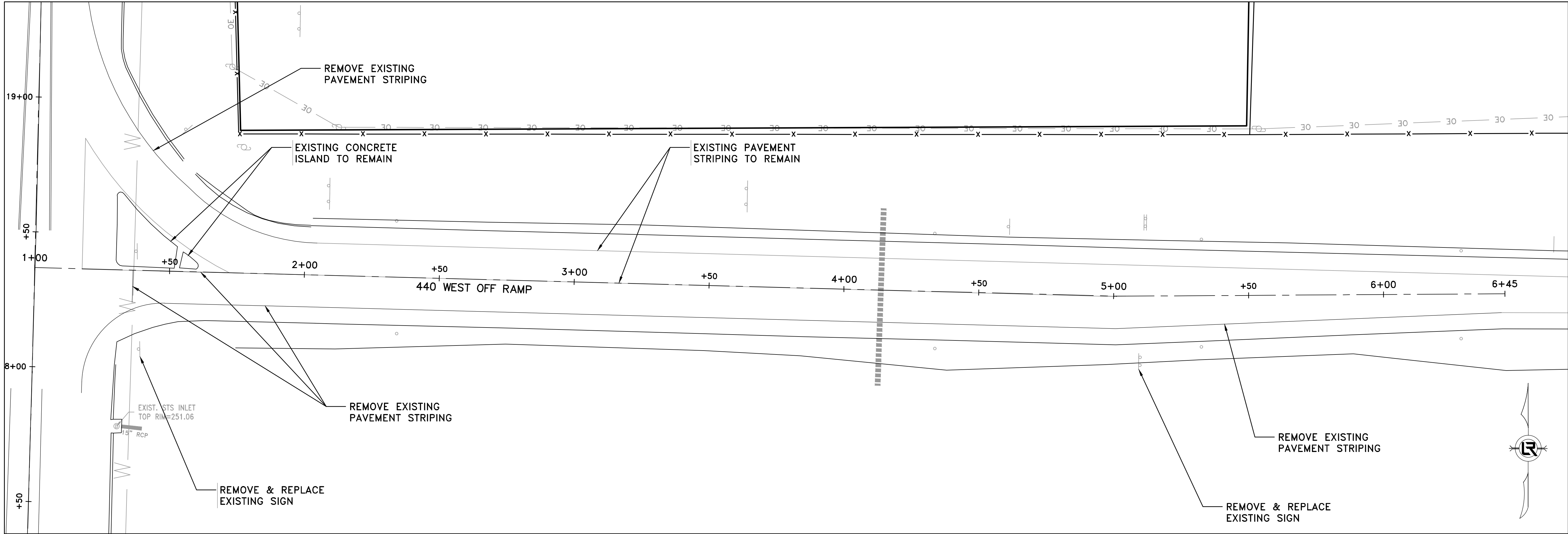
CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
STRIPING REMOVAL SHEET 3

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201





DRAWN BY AT
DESIGNED TDF
CHECKED BAP
DATE 08-28-2030
SCALE H: 1"=20' V: 1"=5'
PROJECT NO.
SHEET NO. C13



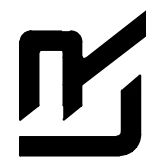




REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
WEST BOUND ON RAMP

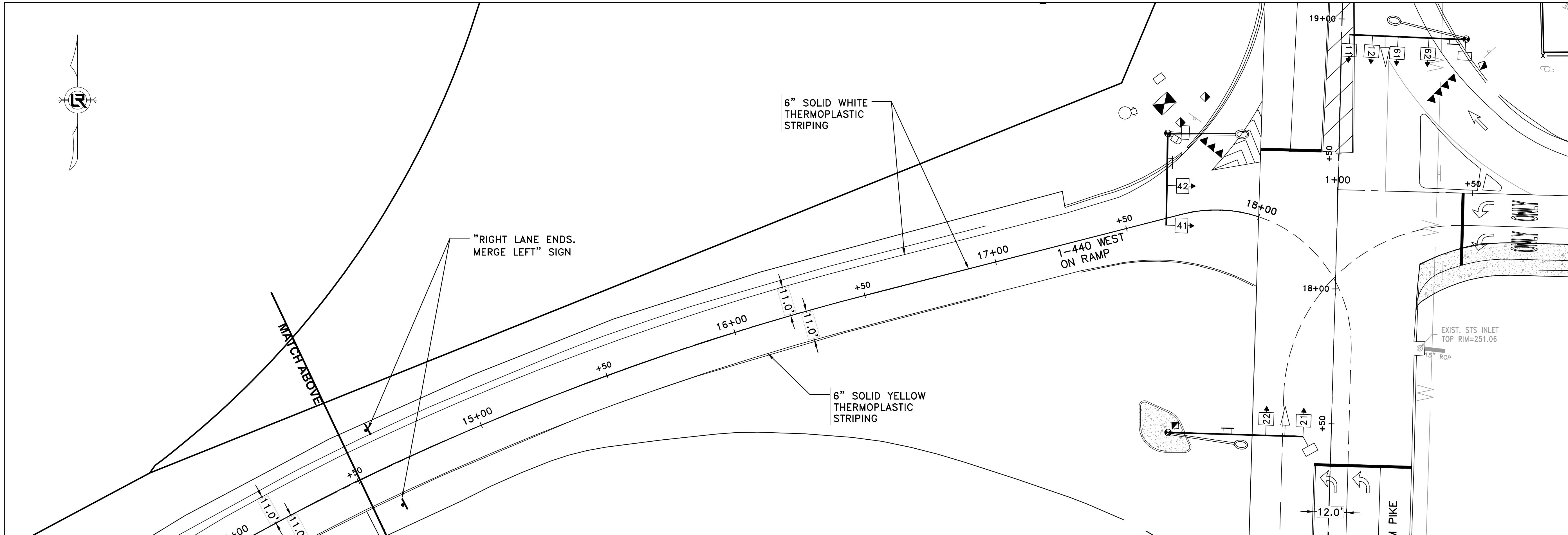
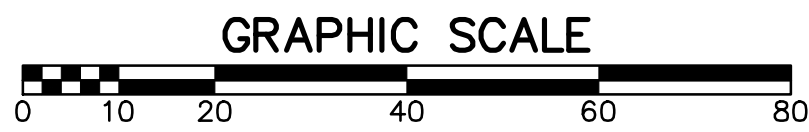
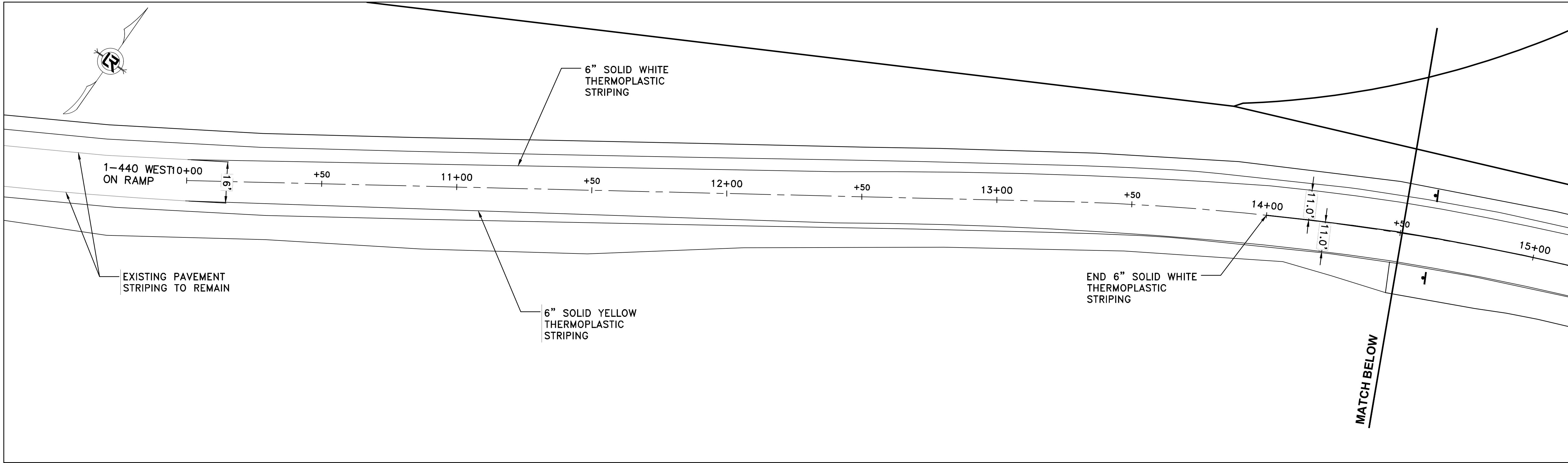
DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201



DRAWN BY  
AT  
DESIGNED  
TDF  
CHECKED  
BAP  
DATE  
08-28-2030  
SCALE  
H: 1"=20'  
V: 1"=5'  
PROJECT NO.

SHEET NO.  
C15

90% SUBMITTAL



REVISIONS	DATE

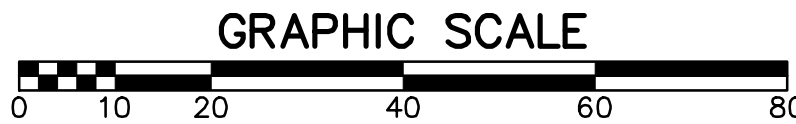
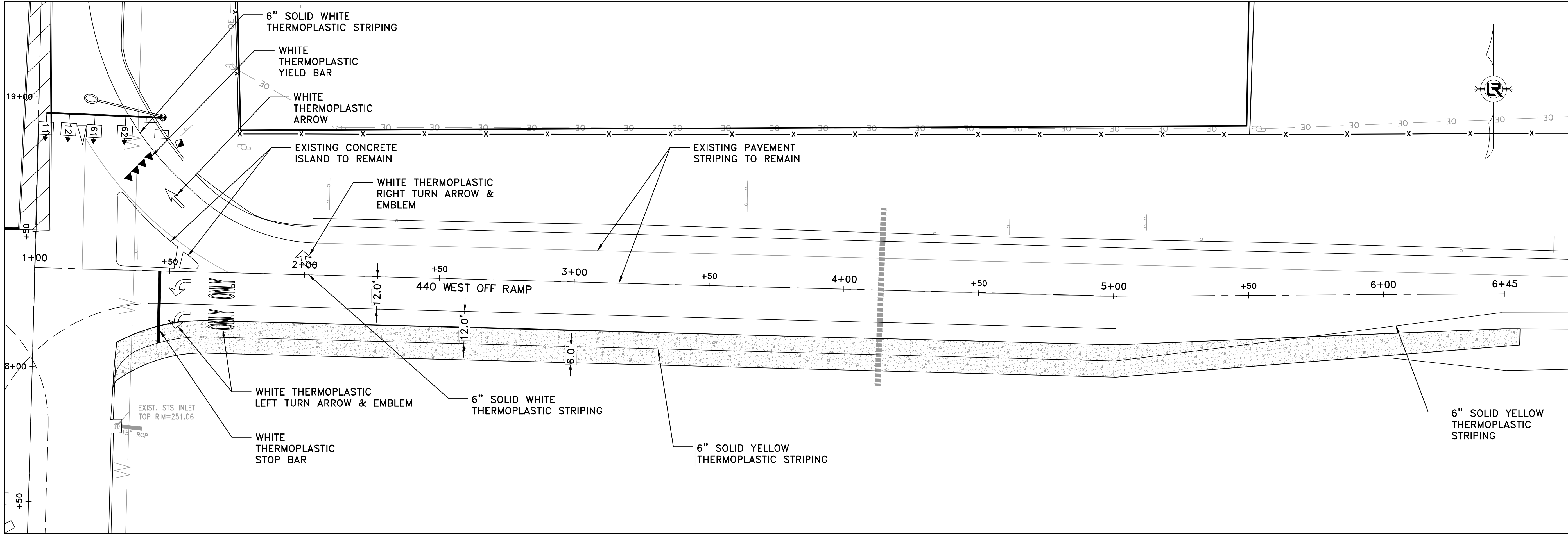
CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
WEST BOUND OFF RAMP

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201

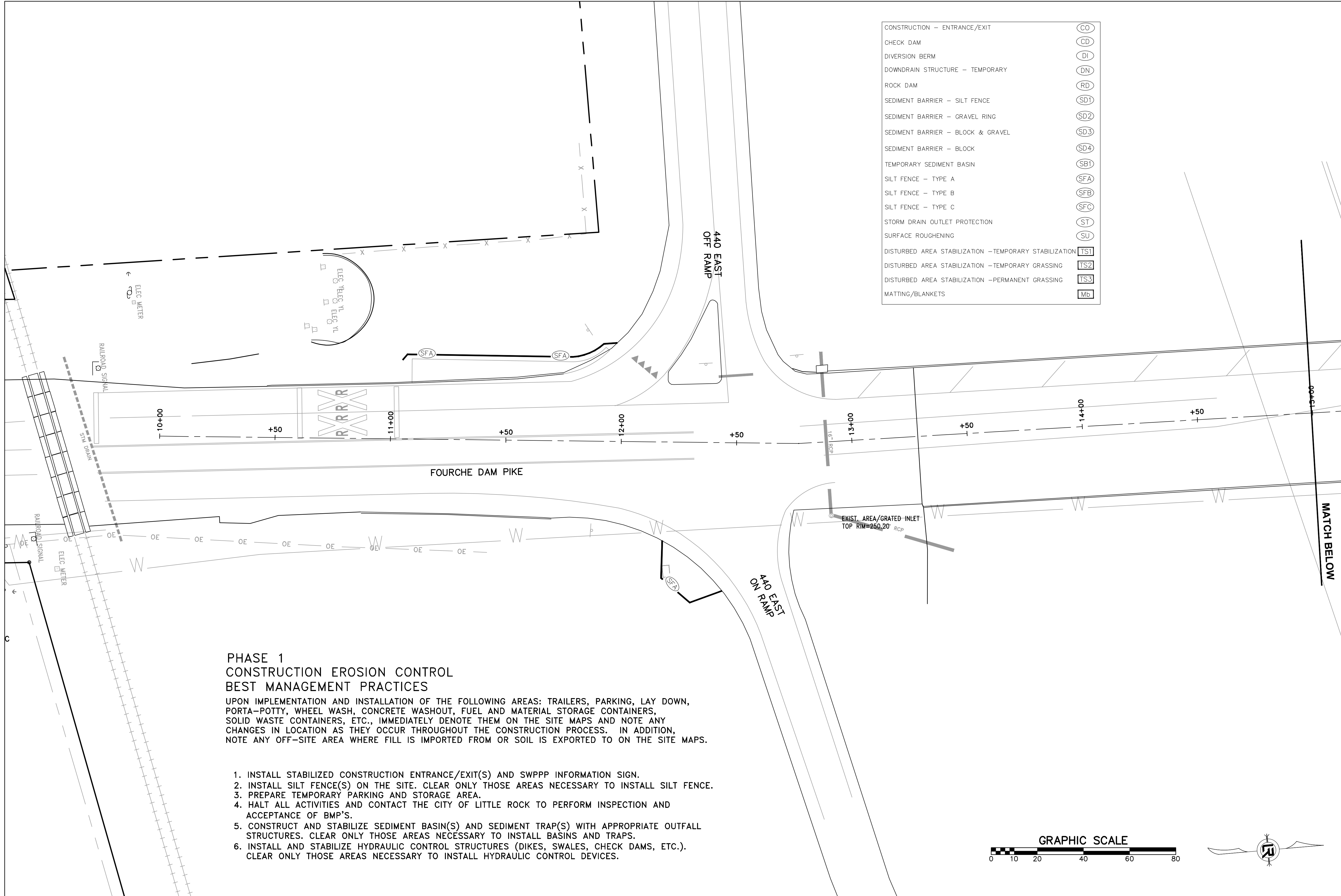


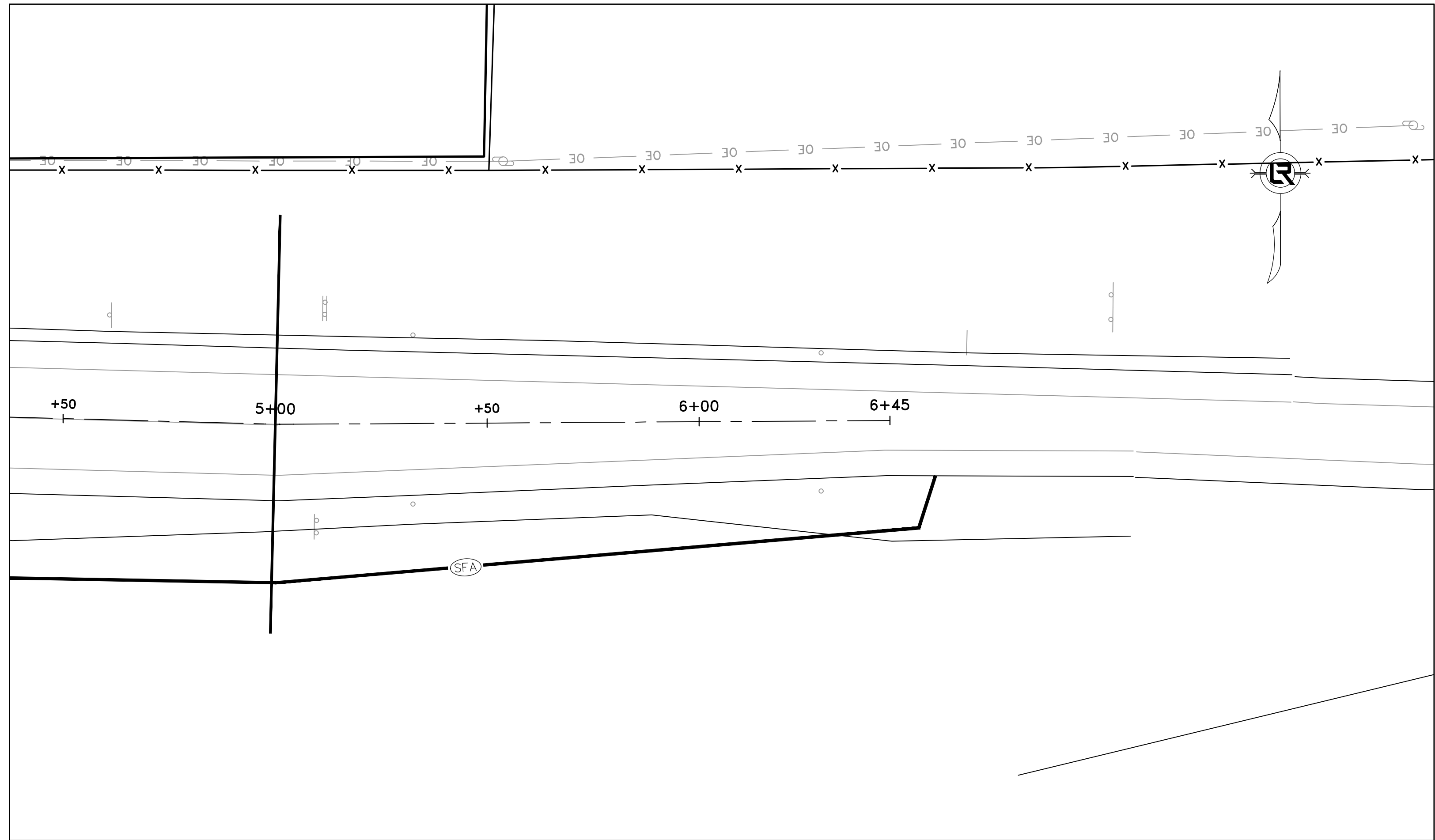
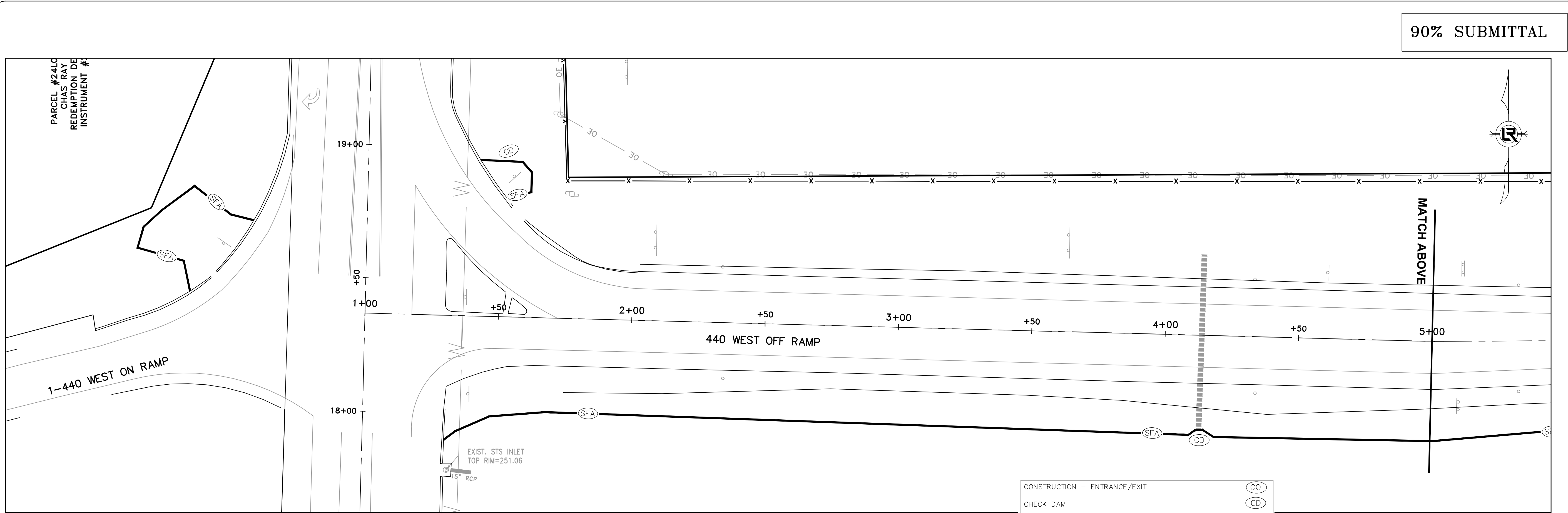
DRAWN BY  
AT  
DESIGNED  
TDF  
CHECKED  
BAP  
DATE  
08-28-2030  
SCALE  
H: 1"=20'  
V: 1"=5'  
PROJECT NO.

SHEET NO.  
C16









CONSTRUCTION - ENTRANCE/EXIT	(CO)
CHECK DAM	(CD)
DIVERSION BERM	(DI)
DOWNDRAIN STRUCTURE - TEMPORARY	(DN)
ROCK DAM	(RD)
SEDIMENT BARRIER - SILT FENCE	(SD1)
SEDIMENT BARRIER - GRAVEL RING	(SD2)
SEDIMENT BARRIER - BLOCK & GRAVEL	(SD3)
SEDIMENT BARRIER - BLOCK	(SD4)
TEMPORARY SEDIMENT BASIN	(SB1)
SILT FENCE - TYPE A	(SFA)
SILT FENCE - TYPE B	(SFB)
SILT FENCE - TYPE C	(SFC)
STORM DRAIN OUTLET PROTECTION	(ST)
SURFACE ROUGHENING	(SU)
DISTURBED AREA STABILIZATION -TEMPORARY STABILIZATION	(TS1)
DISTURBED AREA STABILIZATION -TEMPORARY GRASSING	(TS2)
DISTURBED AREA STABILIZATION -PERMANENT GRASSING	(TS3)
MATTING/BLANKETS	(Mb)

### PHASE 1 CONSTRUCTION EROSION CONTROL BEST MANAGEMENT PRACTICES

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILERS, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ANY OFF-SITE AREA WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE/EXIT(S) AND SWPPP INFORMATION SIGN.
2. INSTALL SILT FENCE(S) ON THE SITE. CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL SILT FENCE.
3. PREPARE TEMPORARY PARKING AND STORAGE AREA.
4. HALT ALL ACTIVITIES AND CONTACT THE CITY OF LITTLE ROCK TO PERFORM INSPECTION AND ACCEPTANCE OF BMP'S.
5. CONSTRUCT AND STABILIZE SEDIMENT BASIN(S) AND SEDIMENT TRAP(S) WITH APPROPRIATE OUTFALL STRUCTURES. CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL BASINS AND TRAPS.
6. INSTALL AND STABILIZE HYDRAULIC CONTROL STRUCTURES (DIKES, SWALES, CHECK DAMS, ETC.). CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL HYDRAULIC CONTROL DEVICES.

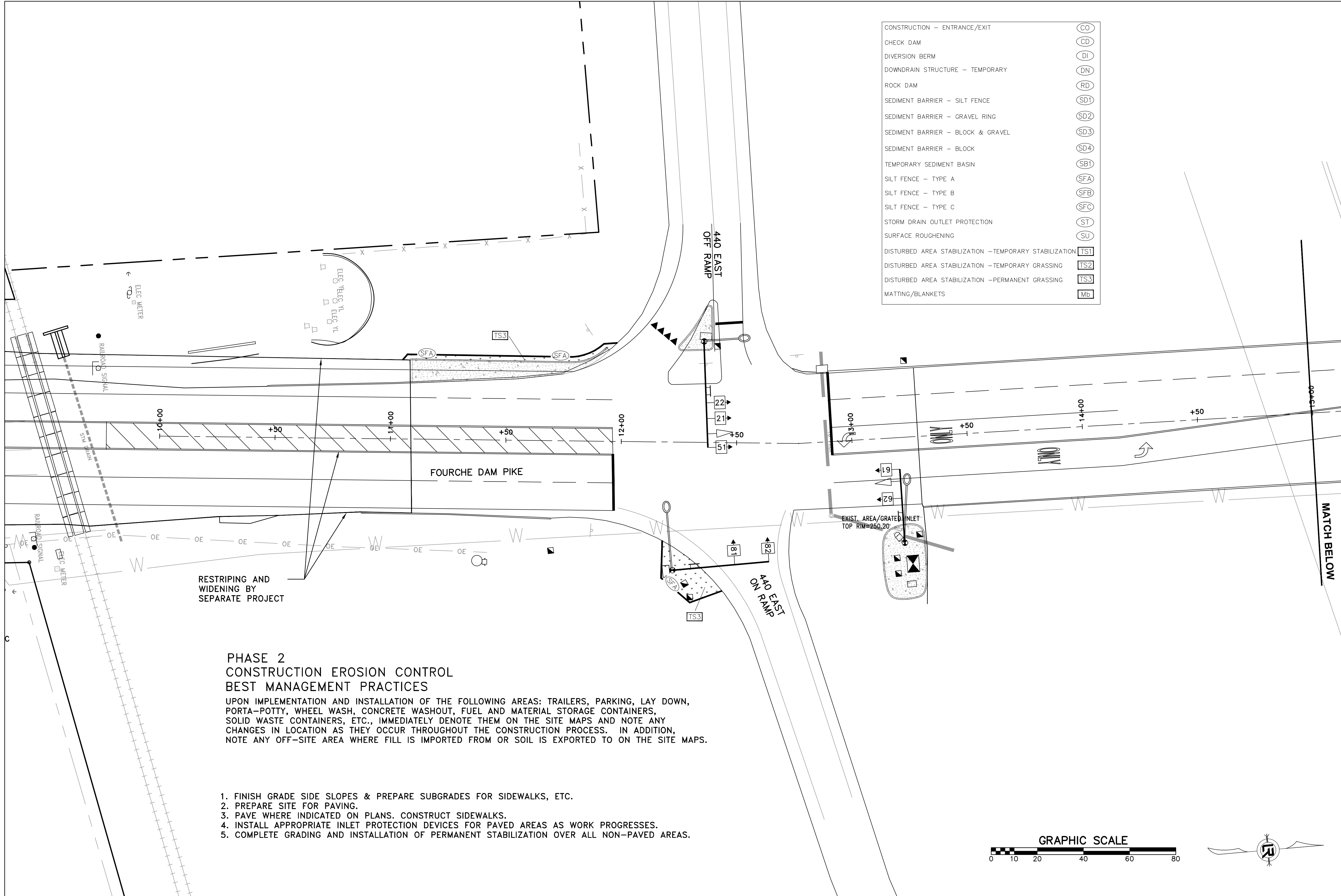
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
EROSION CONTROL PH 1 - SHEET 2

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201

DRAWN BY  
AT  
DESIGNED  
TDF  
CHECKED  
BAP  
DATE  
08-28-2030  
SCALE  
H: 1"=20'  
V: 1"=5'  
PROJECT NO.

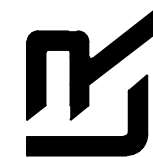
SHEET NO.  
C18



REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
EROSION CONTROL PH 2 - SHEET 1

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201



DRAWN BY  
AT  
DESIGNED  
TDF  
CHECKED  
BAP  
DATE  
08-28-2030  
SCALE  
H: 1"=20'  
V: 1"=5'  
PROJECT NO.

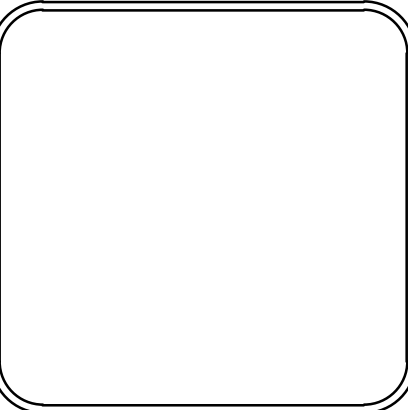
SHEET NO.  
C19



REVISIONS	DATE

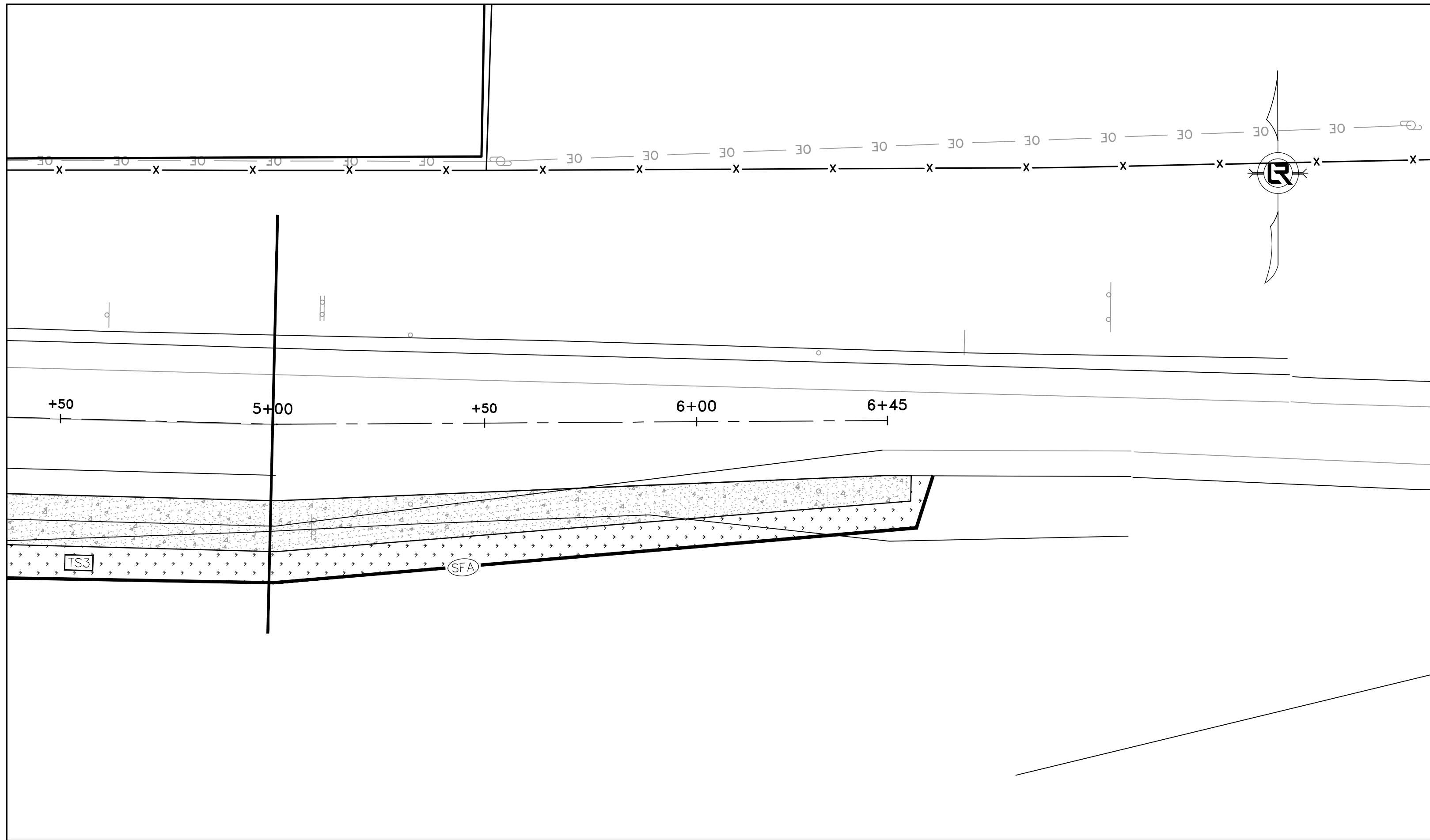
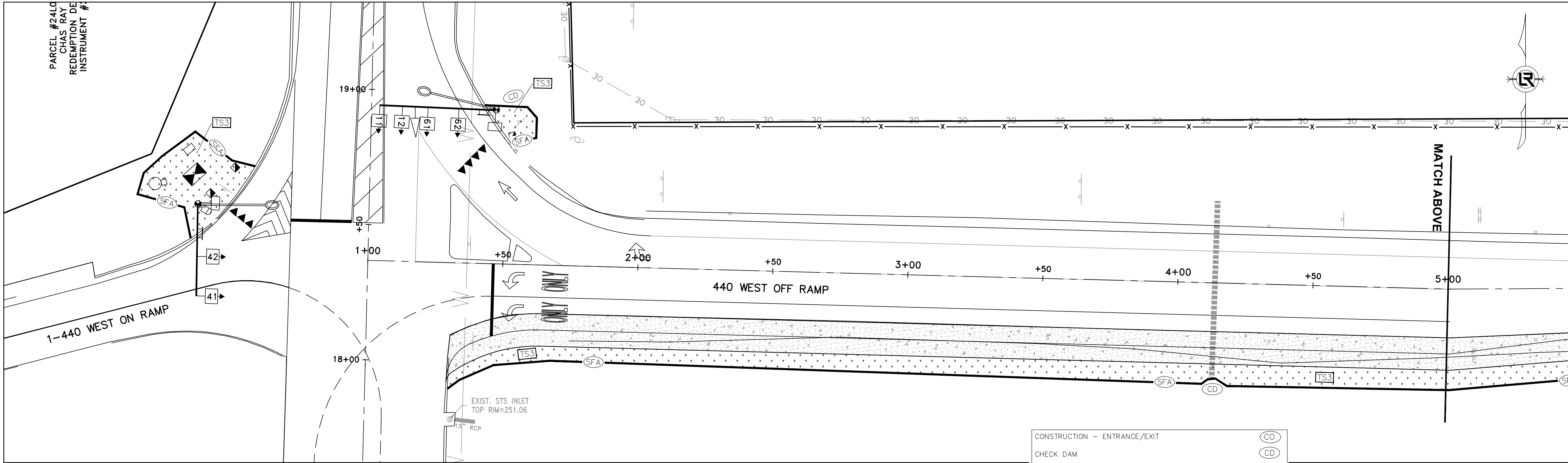
CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
EROSION CONTROL PH 2 - SHEET 2

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201

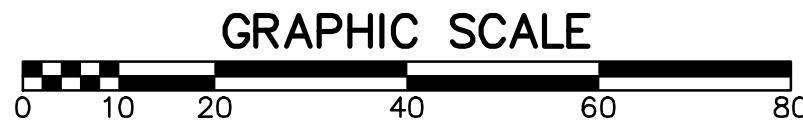


DRAWN BY AT
DESIGNED TDF
CHECKED BAP
DATE 08-28-2030
SCALE H: 1"=20' V: 1"=5'
PROJECT NO.
SHEET NO. C20

90% SUBMITTAL



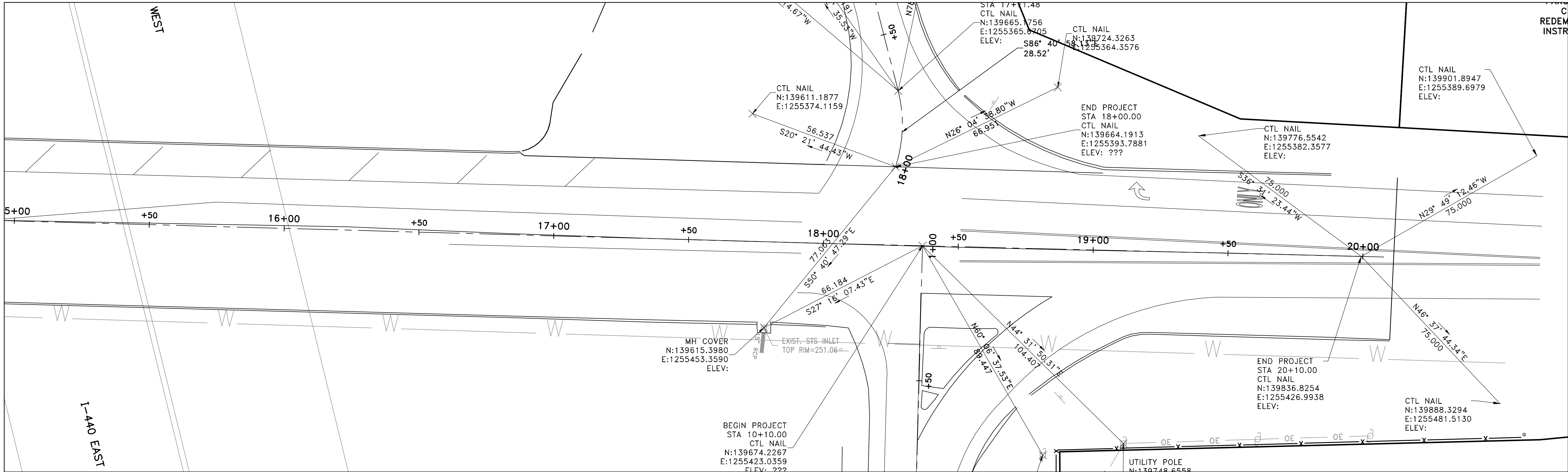
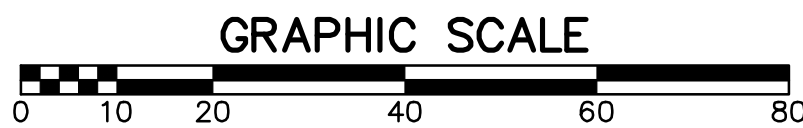
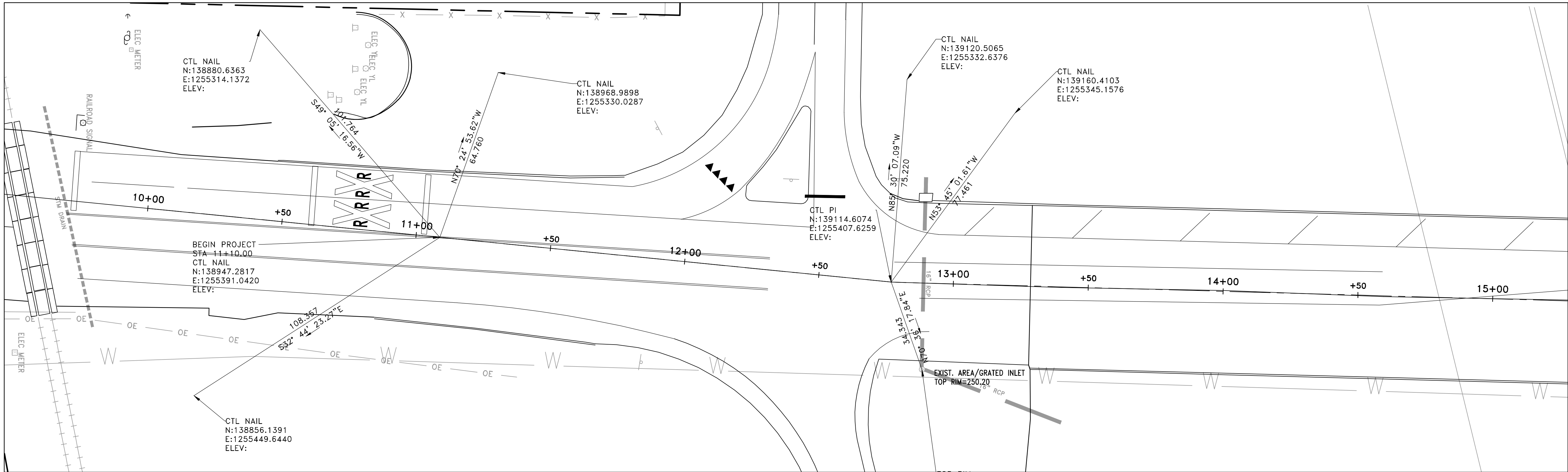
CONSTRUCTION - ENTRANCE/EXIT	(CO)
CHECK DAM	(CD)
DIVERSION BERM	(DI)
DOWNDRAIN STRUCTURE - TEMPORARY	(DN)
ROCK DAM	(RD)
SEDIMENT BARRIER - SILT FENCE	(SD1)
SEDIMENT BARRIER - GRAVEL RING	(SD2)
SEDIMENT BARRIER - BLOCK & GRAVEL	(SD3)
SEDIMENT BARRIER - BLOCK	(SD4)
TEMPORARY SEDIMENT BASIN	(SB1)
SILT FENCE - TYPE A	(SFA)
SILT FENCE - TYPE B	(SFB)
SILT FENCE - TYPE C	(SFC)
STORM DRAIN OUTLET PROTECTION	(ST)
SURFACE ROUGHENING	(SU)
DISTURBED AREA STABILIZATION -TEMPORARY STABILIZATION	(TS1)
DISTURBED AREA STABILIZATION -TEMPORARY GRASSING	(TS2)
DISTURBED AREA STABILIZATION -PERMANENT GRASSING	(TS3)
MATTING/BLANKETS	(Mb)



## PHASE 2 CONSTRUCTION EROSION CONTROL BEST MANAGEMENT PRACTICES

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILERS, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ANY OFF-SITE AREA WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

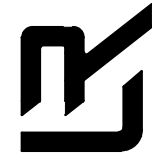
1. FINISH GRADE SIDE SLOPES & PREPARE SUBGRADES FOR SIDEWALKS, ETC.
2. PREPARE SITE FOR PAVING.
3. PAVE WHERE INDICATED ON PLANS. CONSTRUCT SIDEWALKS.
4. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
5. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL NON-PAVED AREAS.



REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
CENTERLINE TIES SHEET 1

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201



DRAWN BY  
AT  
DESIGNED  
TDF  
CHECKED  
BAP  
DATE  
08-28-2030  
SCALE  
H: 1"=20'  
V: 1"=5'  
PROJECT NO.

SHEET NO.  
C21

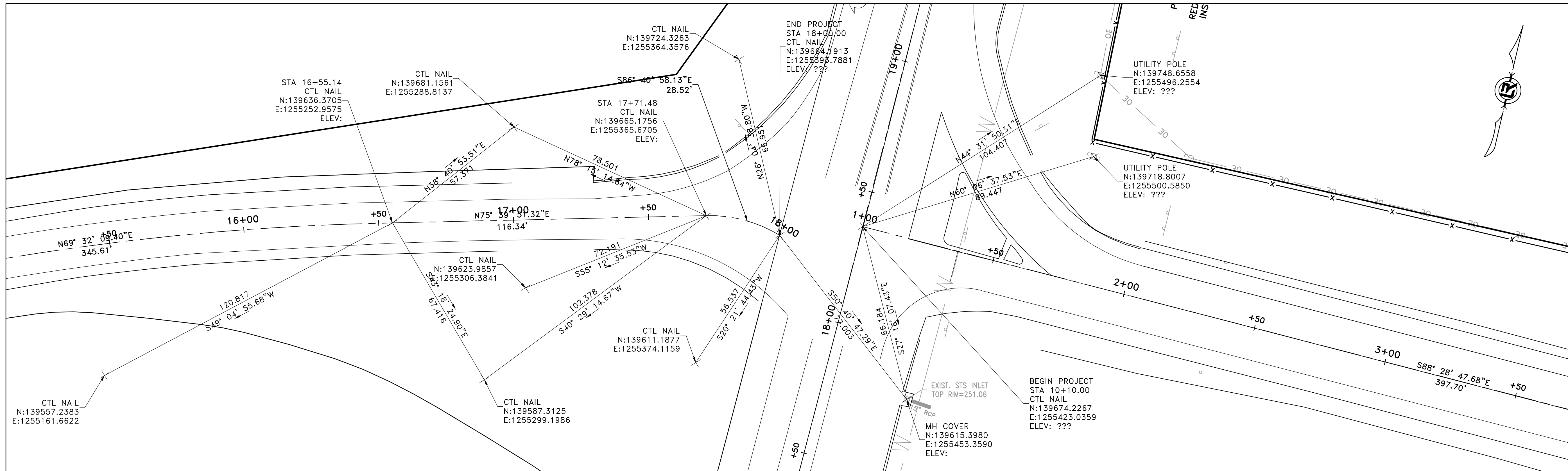
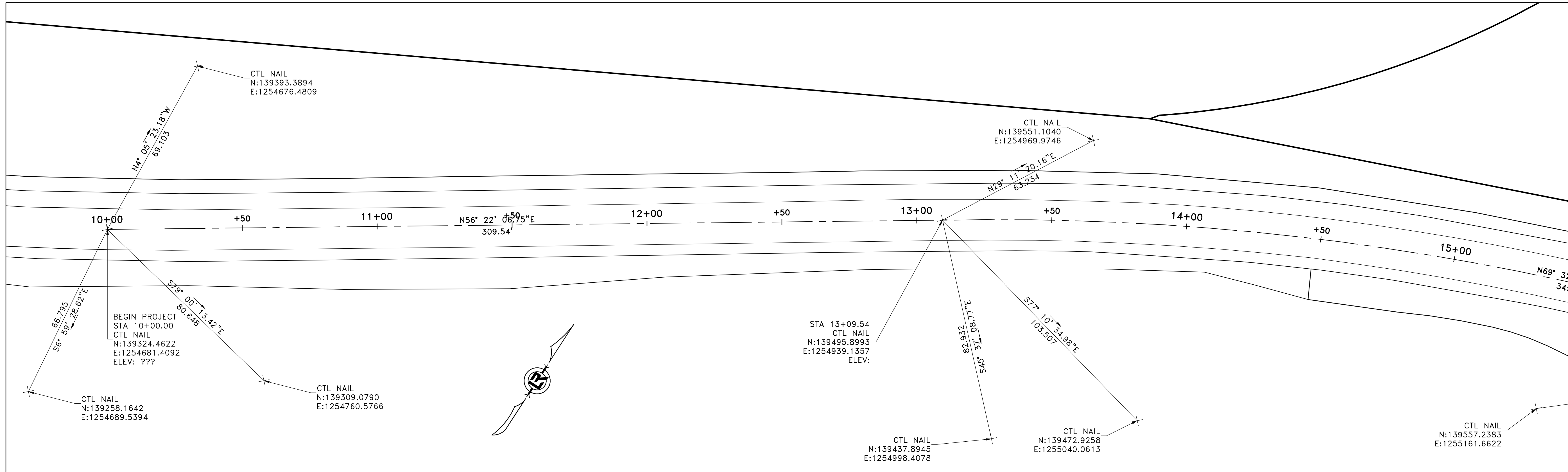
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
CENTERLINE TIES SHEET 2

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201

DRAWN BY AT
DESIGNED TDF
CHECKED BAP
DATE 08-28-2030
SCALE H: 1"=20' V: 1"=5'
PROJECT NO.
SHEET NO. C22

90% SUBMITTAL





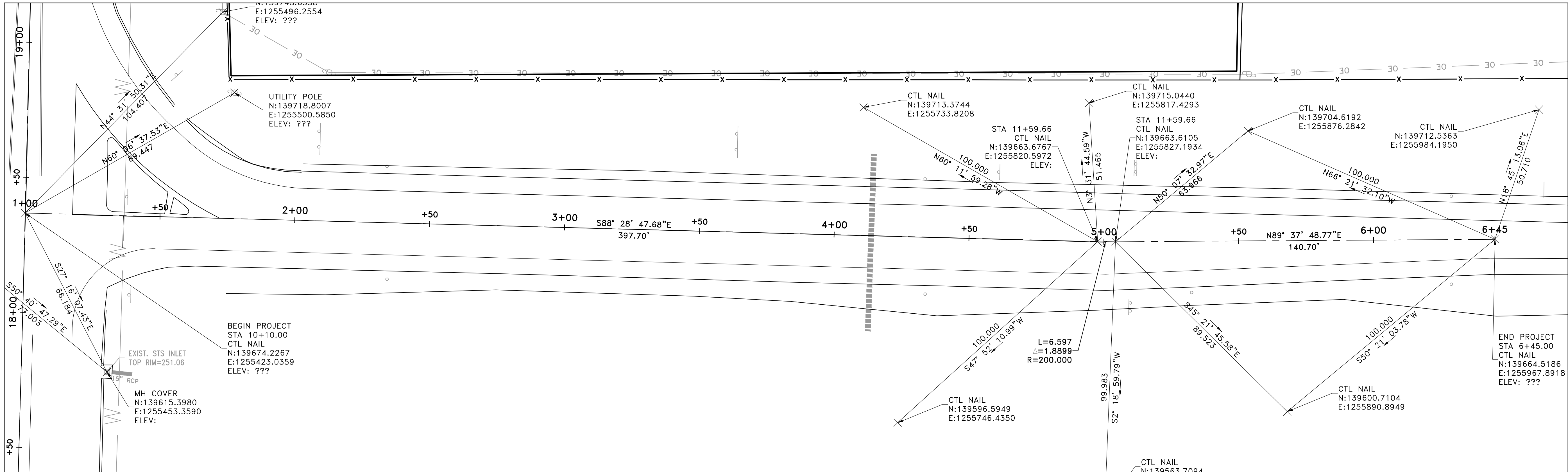
90% SUBMITTAL

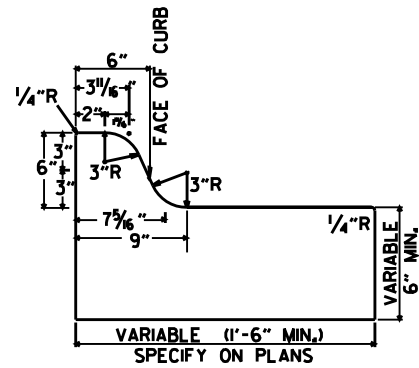
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE IMPROVEMENTS  
CENTERLINE TIES SHEET 3

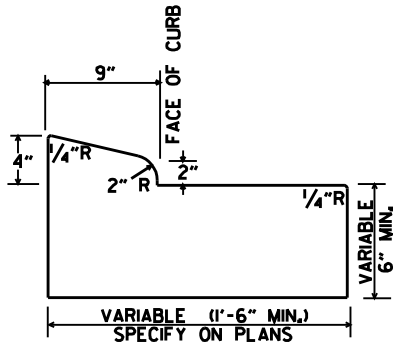
DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201

DRAWN BY AT
DESIGNED TDF
CHECKED BAP
DATE 08-28-2030
SCALE H: 1"=20' V: 1"=5'
PROJECT NO.
SHEET NO. C23

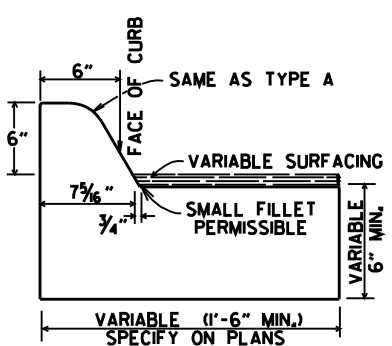




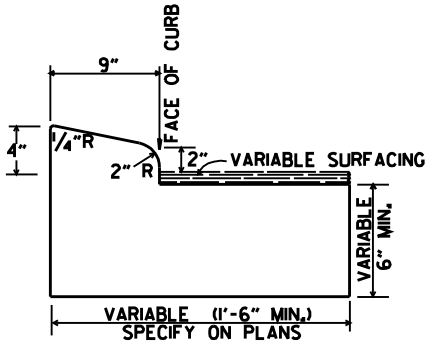
TYPE A



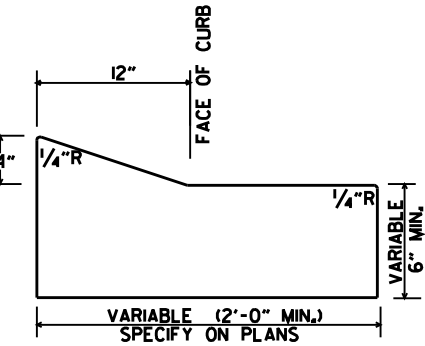
TYPE B-1



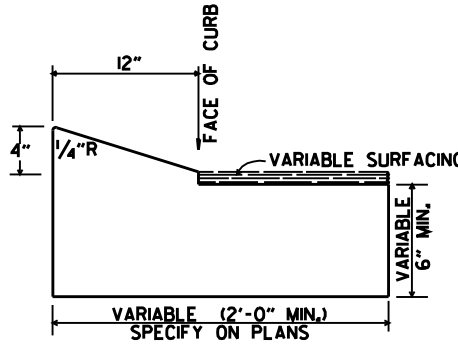
TYPE C



TYPE B-2

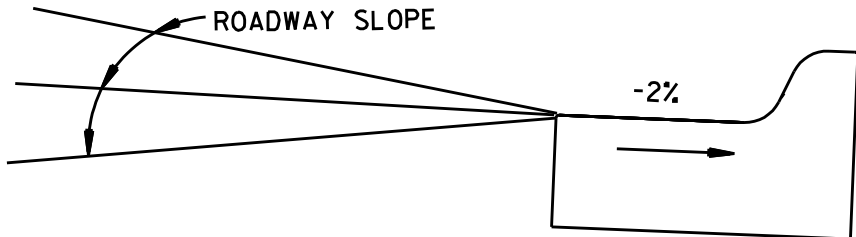


TYPE E-1

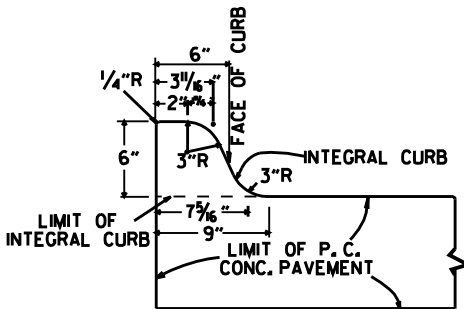


TYPE E-2

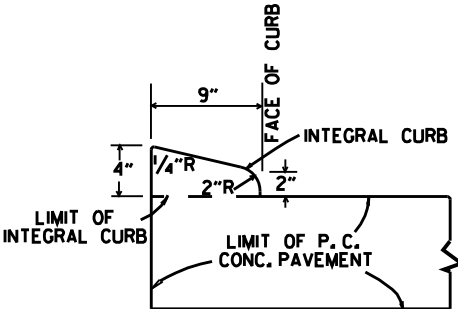
CONCRETE COMBINATION CURB AND GUTTER



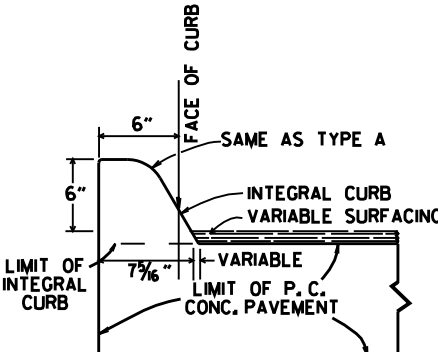
DETAIL OF GUTTER SLOPE  
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

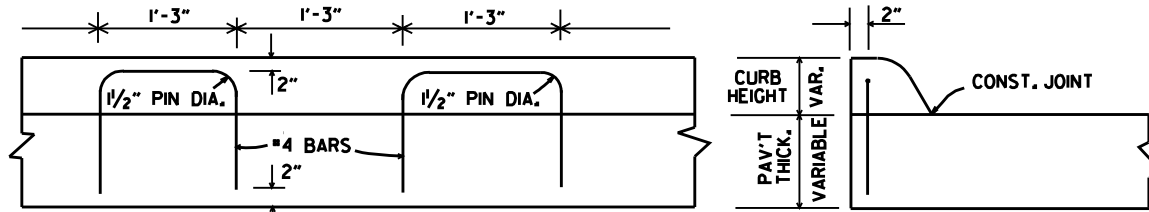


TYPE B



TYPE C

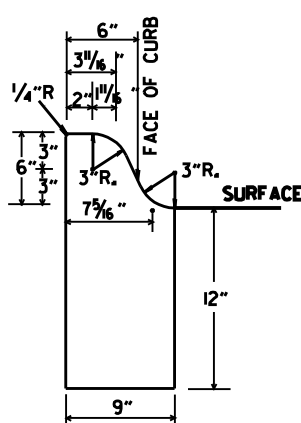
INTEGRAL CURB



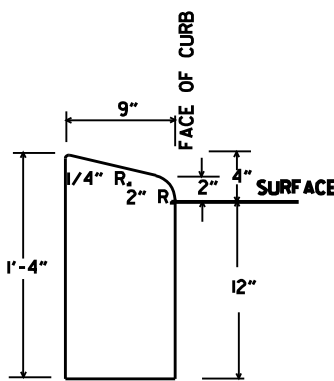
LONGITUDINAL SECTION

ELEVATION

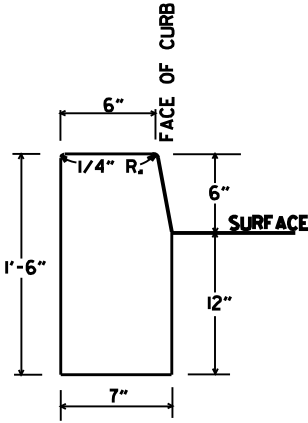
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



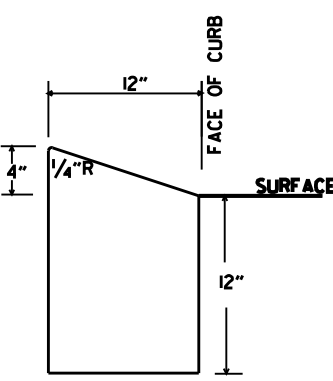
TYPE A



TYPE B

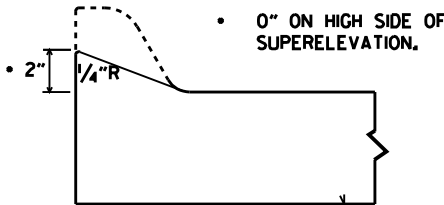


TYPE D



TYPE E

CONCRETE CURB



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

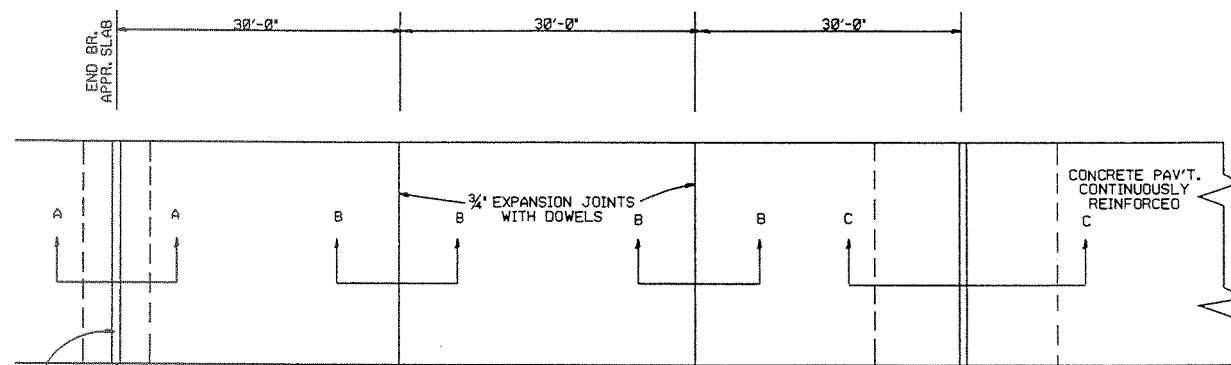
DETAILS OF MODIFIED CURB

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

ARKANSAS STATE HIGHWAY COMMISSION

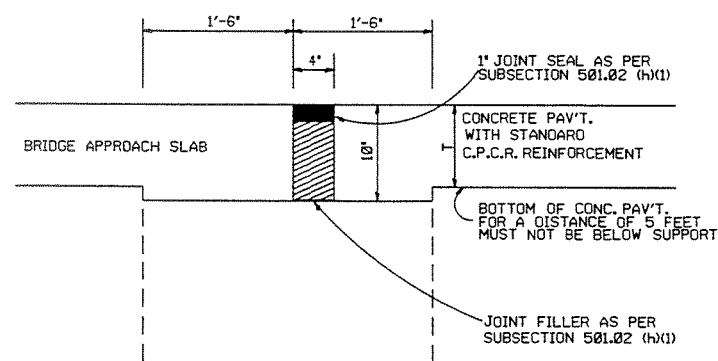
CURBING DETAILS

STANDARD DRAWING CG-1

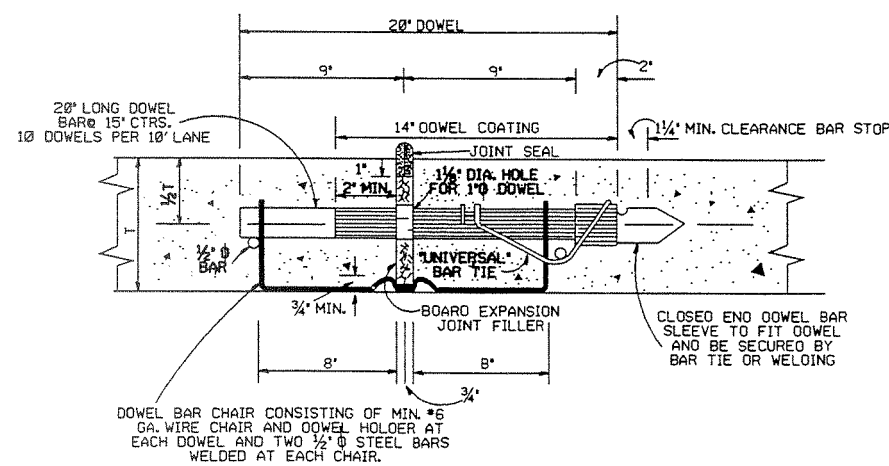


PLAN

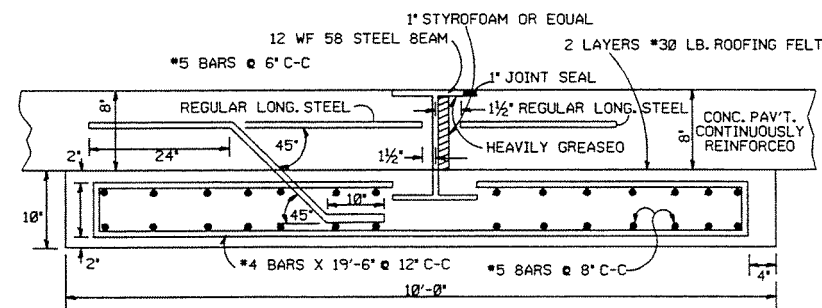
WHEN THIS JOINT CONNECTS TO CONVENTIONAL PAVEMENT  
USE STANDARD CONSTRUCTION JOINT  
REFER TO STD. DWG. NOS. CPCR-1 OR CPCR-2



SECTION A-A

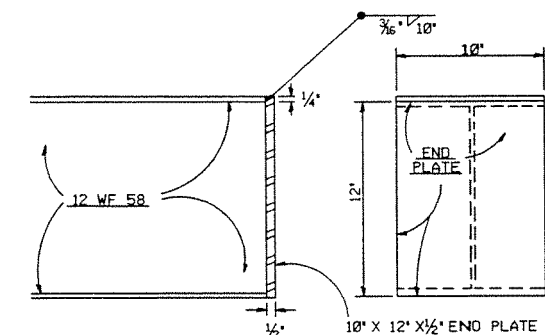


SECTION B-B  
DETAIL OF EXPANSION JOINT



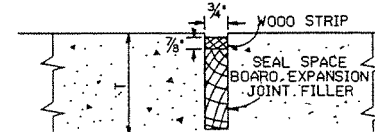
SECTION C-C

NOTE: WELD 12" X 10" X 1/2" STEEL PLATE TO ENDS OF BEAM  
AFTER PLACEMENT OF CONCRETE PAVEMENT.



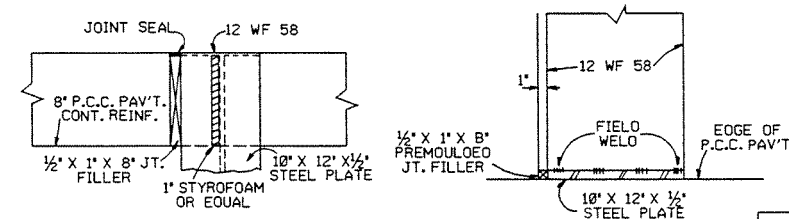
DETAIL OF END PLATE ATTACHMENT  
TO WIDE FLANGE BEAM

STRUCT- URAL EXCA- VATION	CLASS A CON- CRETE	REINF- ORCING STEEL	STRUCT- URAL STEEL
CU. YD.	LB.	LB.	LB.
0.31	0.31	46.2	58.0



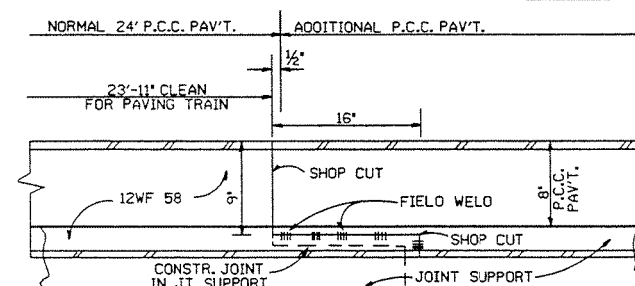
SEAL SPACE FOR EXPANSION JOINT

NOTE: BOARD JOINT FILLER OF SPECIFIED TYPE SHALL BE SECURED  
ON SUBGRADE IN EXACT POSITION AND LINE AS ILLUSTRATED OR  
BY OTHER APPROVED DEVICE.  
JOINT ASSEMBLY SHALL BE SECURELY FASTENED INTO PLACE PRIOR TO  
PLACING CONCRETE.  
AFTER SECOND PASSAGE OF FINISHING MACHINE REMOVE CONCRETE  
TO 1" BELOW TOP OF BOARD AND NAIL 3/4" X 1/2" WOOD STRIP TO TOP  
OF BOARD FILLER TO FORM JOINT SEAL SPACE.  
REPLACE CONCRETE AND FINISH WITH LONGITUDINAL FLOAT.  
THE WOOD STRIP SHALL NOT BE REMOVED UNTIL IMMEDIATELY  
PRIOR TO POURING JOINT SEAL.



ELEVATION

PLAN



TRANSVERSE SECTION THROUGH WF BEAM  
AND JOINT SUPPORT

GENERAL NOTES

OTHER TYPES OF EXPANSION JOINTS MAY BE CONSTRUCTED AT THE OPTION  
OF THE CONTRACTOR AFTER APPROVAL BY THE ENGINEER.

LOAD TRANSMISSION UNITS AND DOWELS SHALL BE SECURED PARALLEL TO  
THE PAVEMENT SURFACE AND CENTERLINE.

ALL EXPANSION JOINTS, INCLUDING ALL MATERIALS, DEVICES, AND WORK  
REQUIRED SHALL BE CONSIDERED AS SUBSIDIARY WORK AND SHALL BE  
INCLUDED IN THE UNIT PRICE BID FOR PORTLAND CEMENT CONCRETE  
PAVEMENT. NO DIRECT PAYMENT WILL BE MADE FOR ANY MATERIAL, BAR  
CHAIR, STEEL OR ANY OTHER DEVICE SHOWN NOR FOR ITS INSTALLATION.

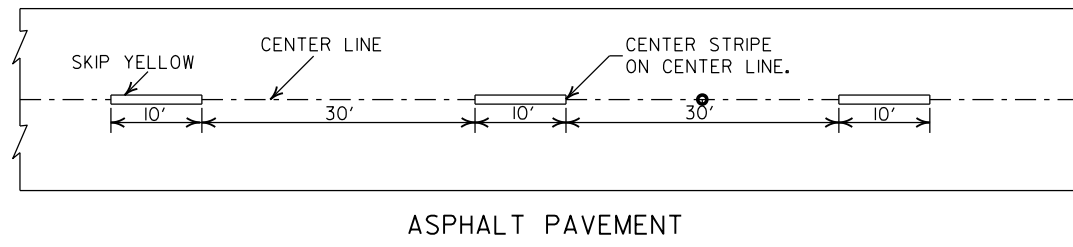
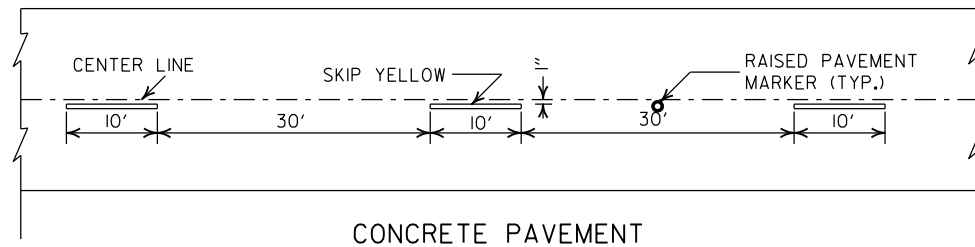
\*T\* DENOTES THICKNESS OF SLAB.

DATE	REVISION	DATE FILM'D
10-18-96	CORRECTED SUBSECTION AND SPELLING	
4-26-96	DELETE DOWEL BAR NOTE	
7-15-88	SUB-SECT. 501.03 (F)(1) TO 501.03 (h)(1)	
8-22-75	REVISED 4" EXP. JOINT MAT'L	
11-1-73	REVISED JOINT SEAL A-A	
10-2-72	REVISED AND REDRAWN	

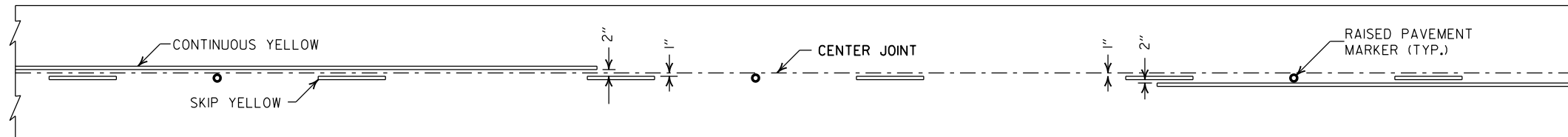
ARKANSAS STATE HIGHWAY COMMISSION  
DETAILS OF TERMINAL JOINTS  
FOR CONCRETE PAVEMENT

CONTINUOUSLY REINFORCED  
STANDARD DRAWING CPCR-3

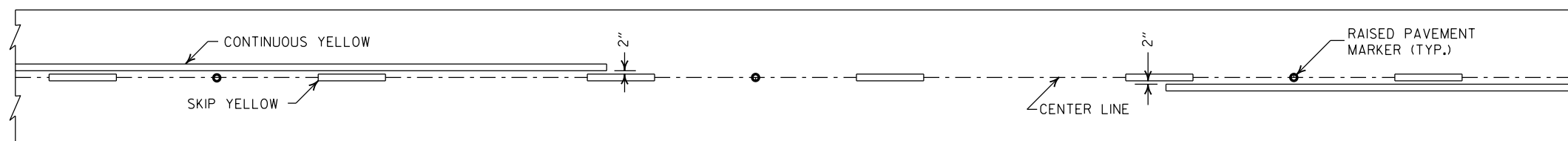




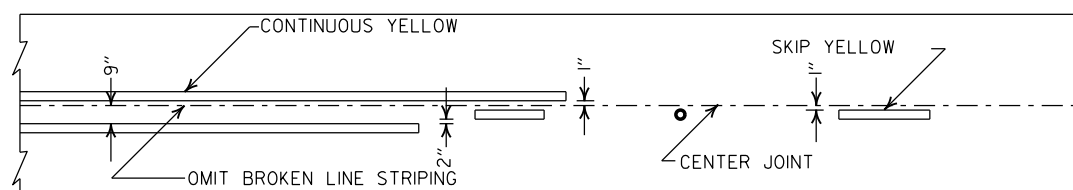
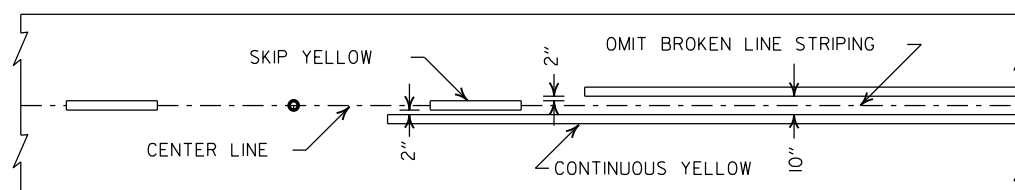
## BROKEN LINE STRIPING



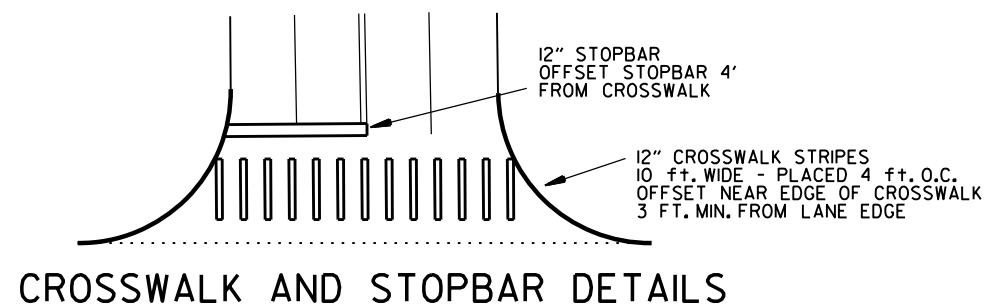
## SOLID LINE STRIPING ON CONCRETE PAVEMENT



## SOLID LINE STRIPING ON ASPHALT PAVEMENT



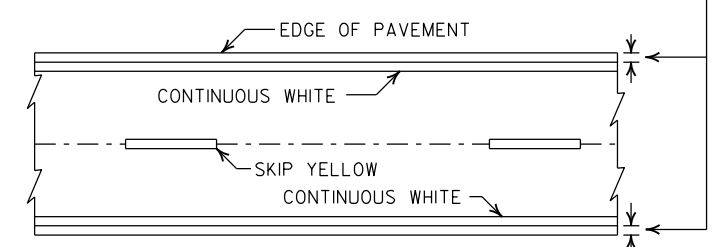
## STRIPING AT ADJACENT NO PASSING LANES



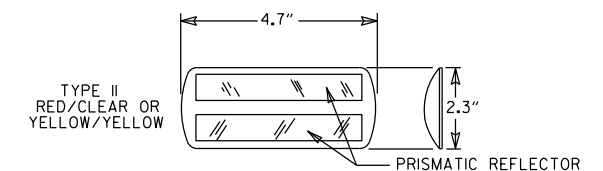
### NOTES:

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

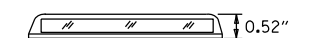
2" FOR ASPHALT OR CONCRETE PAVEMENT  
6" FOR BITUMINOUS SURFACE TREATMENT



## PAVEMENT EDGE LINE MARKING



NOTE:  
THE RED LENS OF THE  
TYPE II R.P.M. SHALL  
FACE THE INCORRECT  
TRAFFIC MOVEMENT.



## DETAIL OF STANDARD RAISED PAVEMENT MARKERS

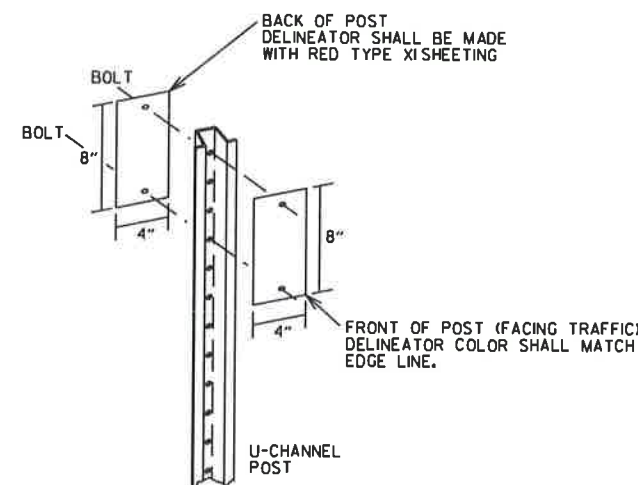
NOTE:  
DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE  
TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR  
MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING  
APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING  
TO THE AHTD QUALIFIED PRODUCTS LIST.

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

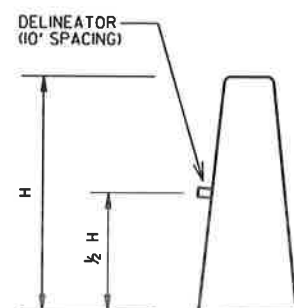
## ARKANSAS STATE HIGHWAY COMMISSION

## PAVEMENT MARKING DETAILS

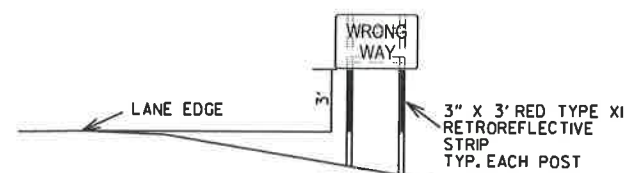
## STANDARD DRAWING PM-1



TYPE 2 DELINEATOR DETAILS

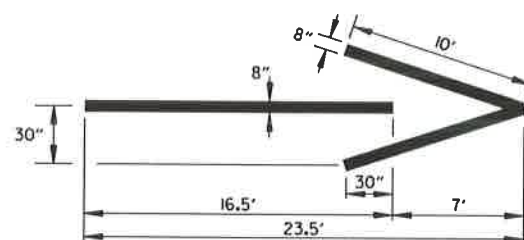


PERMANENT BARRIER WALL DELINEATOR DETAIL



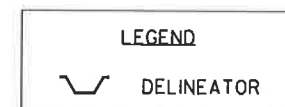
WRONG-WAY SIGN ASSEMBLY DETAILS

- NOTES
1. WRONG-WAY SIGNS MAY BE MOUNTED ON THE BACK SIDE OF EXISTING SIGN SUPPORTS WHERE POSSIBLE.
  2. WRONG-WAY SIGNS ARE NORMALLY GATED, BUT MAY BE OFFSET WHEN BARRIER WALLS ARE PRESENT ON THE INSIDE SHOULDER. IN SUCH CASES, THE SIGN ON THE INSIDE SHOULDER SIDE MAY BE LOCATED PAST THE END OF THE BARRIER WALL. IN RARE CASES WHERE THE BARRIER WALL EXTENDS TO OR NEAR THE MAIN LANES, BOTH SIGNS MAY BE LOCATED ON THE OUTSIDE SHOULDER SIDE OF THE RAMP, WITH APPROXIMATELY 300' SPACING BETWEEN THE SIGNS.

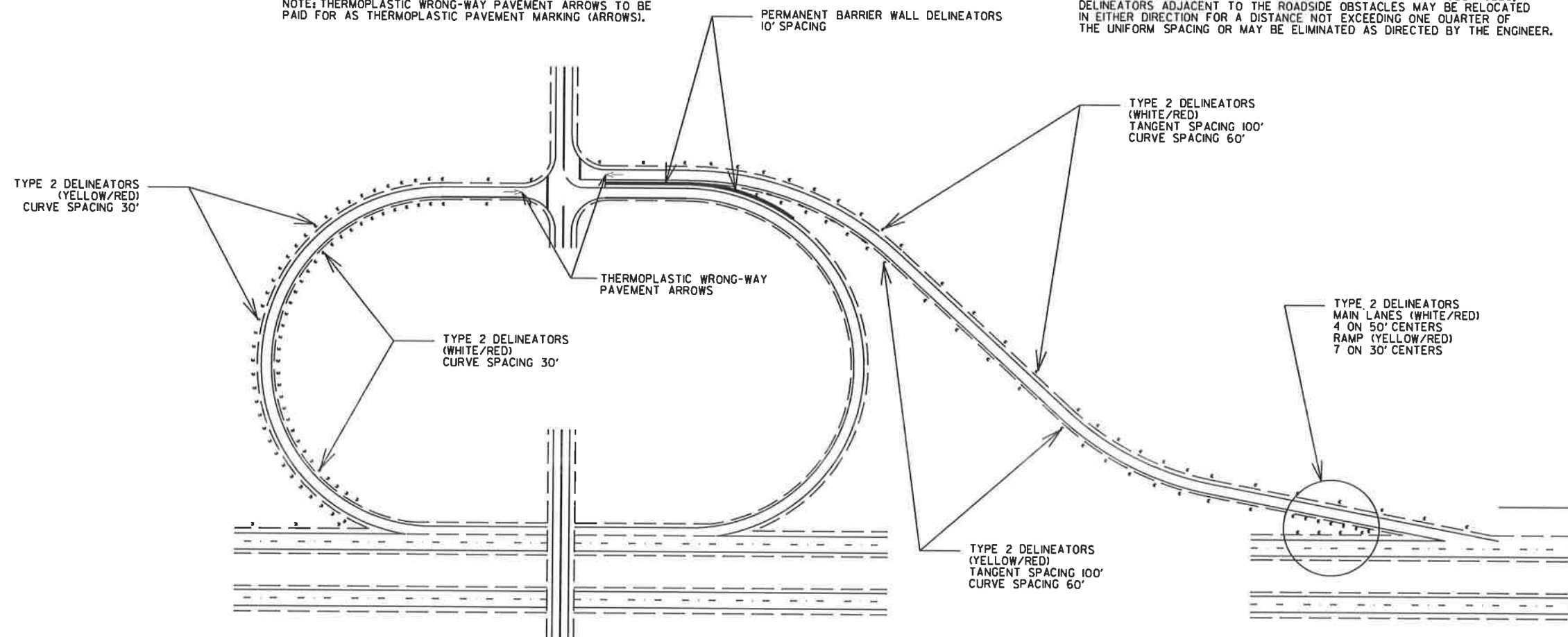


THERMOPLASTIC WRONG-WAY PAVEMENT ARROWS

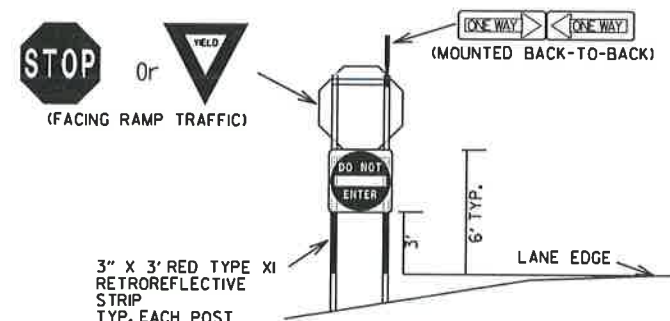
NOTE: THERMOPLASTIC WRONG-WAY PAVEMENT ARROWS TO BE PAID FOR AS THERMOPLASTIC PAVEMENT MARKING (ARROWS).



NOTE: WHEN UNIFORM SPACING IS INTERRUPTED BY ROADSIDE OBSTACLES, DELINEATORS ADJACENT TO THE ROADSIDE OBSTACLES MAY BE RELOCATED IN EITHER DIRECTION FOR A DISTANCE NOT EXCEEDING ONE QUARTER OF THE UNIFORM SPACING OR MAY BE ELIMINATED AS DIRECTED BY THE ENGINEER.



TYPICAL EXIT RAMP DELINEATOR PLACEMENT



RAMP INTERSECTION SIGN ASSEMBLY DETAILS

THE DELINEATORS SHALL BE PLACED AT A 4' HEIGHT MEASURED FROM THE PAVEMENT EDGE TO THE BOTTOM OF THE DELINEATOR. DELINEATOR POSTS SHALL BE PLACED 2 TO 8 FT. OUTSIDE THE OUTER EDGE OF THE SHOULDER, OR IF APPROPRIATE, IN LINE WITH THE ROADSIDE BARRIER THAT IS 8 FT. OR LESS OUTSIDE THE OUTER EDGE OF THE SHOULDER.

DELINEATOR SPACING IN CURVES SHALL BE REDUCED TO 30' WHEN THE RAMP ADVISORY SPEED IS 30 MPH OR LESS.

IF MULTIPLE LANES EXIST AT THE RAMP TERMINAL, THE THERMOPLASTIC WRONG-WAY ARROW SHALL BE PLACED AS CLOSE TO THE RAMP TERMINAL TURNOUT AS POSSIBLE.

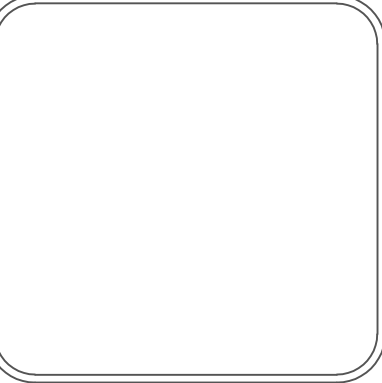
ARKANSAS STATE HIGHWAY COMMISSION		
TYPICAL EXIT RAMP SIGN AND DELINEATOR DETAILS		
STANDARD DRAWING SHS-8		
8-16-17	ADDED NOTES	
06-01-17	RE-DRAWN	
09-12-13	ISSUED AS STANDARD DRAWING	
DATE	REVISION	FILMED

90% SUBMITTAL

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS FOURCHE DAM PIKE AND I-440 RAMPS	INDEX OF SHEETS FOURCHE DAM PIKE AND I-440 EASTBOUND AND WESTBOUND RAMPS
---	--

DEPARTMENT OF PUBLIC WORKS CIVIL ENGINEERING 701 W. MARKHAM LITTLE ROCK, ARKANSAS 72201
--



DRAWN BY RMT
DESIGNED EJP
CHECKED EJP
DATE 9-1-2020
SCALE 1"=20'
PROJECT NO. P2025 (P&A#) 19800105 (CTA#)
SHEET NO. T-01

GENERAL NOTES

1. WORK ON STATE HIGHWAYS MUST CONFORM TO STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014.
2. THERE ARE NUMEROUS PUBLIC AND PRIVATE UTILITIES WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. SOME EXISTING UTILITIES MAY NOT BE SHOWN ON THE PLANS. PRIOR TO BEGINNING ANY TYPE OF EXCAVATION, THE CONTRACTOR SHALL CONTACT THE VARIOUS UTILITY COMPANIES AND MAKE ARRANGEMENTS FOR THE LOCATION OF THE UTILITY ON THE GROUND. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE UTILITY MARKINGS UNTIL THEY ARE NO LONGER NEEDED. CONTRACTOR WILL BE RESPONSIBLE FOR ALL DAMAGES AND/OR REPAIR OF THE UTILITIES.
3. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION 2014.
4. ALL TREES AND OTHER LANDSCAPE MATERIALS 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 REMOVED SHALL BE PROTECTED DURING THE CONSTRUCTION OPERATIONS.
5. CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH ALL UTILITY LINES AND APPURTENANCES REQUIRING ADJUSTMENTS BECAUSE OF THIS CONSTRUCTION. CONTRACTOR SHALL FULLY COORDINATE SUCH ADJUSTMENTS WITH THE INVOLVED UTILITIES AS TO WHO SHALL ADJUST. NO SEPARATE PAYMENT SHALL BE MADE AS A RESULT OF ANY ADJUSTMENTS REQUIRED.
6. ALL EXISTING PAVEMENT AND CURB AND GUTTER OR OTHER EXISTING PHYSICAL FEATURES WHICH CONFLICT WITH THE NEW CONSTRUCTION, SHALL BE REMOVED. NO SEPARATE PAYMENT WILL BE MADE FOR REMOVALS, WHICH WILL BE CONSIDERED SUBSIDIARY TO SITE PREPARATION.
7. EXISTING UTILITY LOCATIONS ARE FROM UTILITY COMPANIES' RECORDS AND/OR ABOVE GROUND INSPECTION.
8. P.E. CERTIFIED SHOP DRAWINGS MUST BE SUBMITTED FOR APPROVAL. CERTIFICATION SHALL ALSO INDICATE COMPLIANCE WITH ARKANSAS DEPARTMENT OF TRANSPORTATION MATERIAL SPECIFICATION REQUIREMENTS AND CONFORMANCE TO AASHTO DESIGN REQUIREMENTS FOR 90 MPH WIND LOADING FOR SIGNALS, MASTS AND SIGNS AS INDICATED.
9. ALL TRAFFIC SIGNAL EQUIPMENT SHALL COMPLY WITH THE LATEST EDITION OF THE THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014, AND APPLICABLE SPECIAL PROVISIONS.

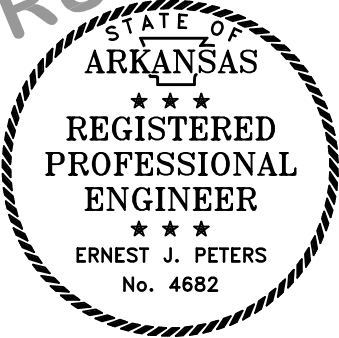
INDEX OF SHEETS

SHEET	TITLE
T-01	INDEX OF SHEETS AND GOVERNING SPECIFICATIONS
T-02	TRAFFIC SIGNAL NOTES
T-03	FOURCHE DAM PIKE AND I-440 WB RAMPS TRAFFIC SIGNAL SUMMARY OF QUANTITIES
T-04	FOURCHE DAM PIKE AND I-440 WB RAMPS TRAFFIC SIGNAL PLAN, MAST ARMS AND CONDUIT
T-05	FOURCHE DAM PIKE AND I-440 WB RAMPS TRAFFIC SIGNAL WIRING PLAN
T-06	FOURCHE DAM PIKE AND I-440 WB RAMPS TRAFFIC SIGNAL CHARTS
T-07	FOURCHE DAM PIKE AND I-440 EB RAMPS TRAFFIC SIGNAL SUMMARY OF QUANTITIES
T-08	FOURCHE DAM PIKE AND I-440 EB RAMPS TRAFFIC SIGNAL PLAN, MAST ARMS AND CONDUIT
T-09	FOURCHE DAM PIKE AND I-440 EB RAMPS TRAFFIC SIGNAL WIRING PLAN
T-10	FOURCHE DAM PIKE AND I-440 EB RAMPS TRAFFIC SIGNAL CHARTS
T-11	CONDUIT DETAILS IN RAILROAD ROW
T-12	CONTROLLER CABINET UTILITY DRAWER (SD-5)
T-13	HEAVY DUTY PULL BOX (SD-6)
T-14	SIGNAL HEAD PLACEMENT (SD-8)
T-15	SERVICE POINT (SD-9)
T-16	STEEL POLE WITH MAST ARM (SD-11)
T-17	TESCO CABINET (27-22-BBS)

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 STANDARDS SPECIFICATIONS
SP	CABINET DRAWER ASSEMBLY
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT
SP	LED TRAFFIC SIGNAL HEAD
SP	LED LUMINAIRE ASSEMBLY (BUG UO TYPE)
SP	SERVICE POINT ASSEMBLY (TRAFFIC-CONTROL DEVICES)
SP	STREET NAME SIGN (MAST ARM MOUNTED)
SP	CLOSED LOOP TRAFFIC SIGNAL SYSTEM
SP	EMERGENCY BATTERY BACKUP SYSTEM INSTALLATION



PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS SIGNED AND DATED. CONTRACTORS ARE CAUTIONED AGAINST ORDERING EQUIPMENT BASED ON PRELIMINARY PLANS.

9-1-2020



TRAFFIC SIGNAL NOTES

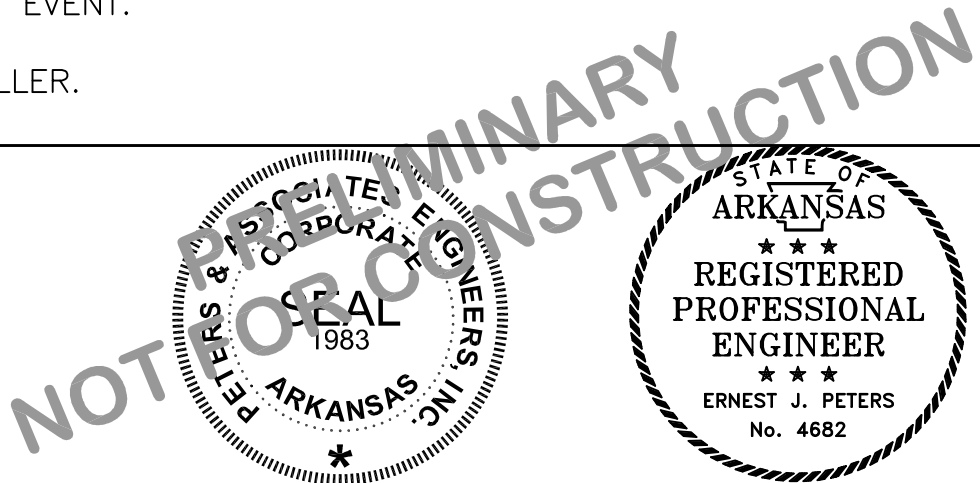
1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE NFPA 70 (CURRENT EDITION) NATIONAL ELECTRICAL CODE, NFPA 101 (CURRENT EDITION) LIFE SAFETY CODE, STATE ELECTRICAL CODE AND LOCAL ELECTRICAL CODE.
2. EXTEND GREEN EQUIPMENT GROUNDING CONDUCTOR (E.G.C.) FROM GROUND BAR AT MAIN BREAKER TO CONTROL PANEL AND TO FIRST POLE. SOLIDLY BOND E.G.C. 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/COUNTY TO A SERVICE POLE WITH EXTERNAL RAINLIGHT 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 A.W.G. USE RATED, WITH GROUND TYPICAL), AND PERFORM WIRING TO TAP INTO THE CITY'S/COUNTY'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 A.W.G. 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 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 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, STANDARD DRAWINGS AND WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
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 AS SHOWN IN THE STANDARD DRAWINGS MAY BE USED.
9. TRAFFIC SIGNAL POLES SHALL BE GALVANIZED. BACKPLATES SHALL BE SUPPLIED FOR ALL SIGNAL HEADS.
10. PAVEMENT MARKINGS SHOWN FOR REFERENCE ONLY. SEE PERMANENT PAVEMENT MARKING DETAILS.
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 STANDARD DRAWING). PAYMENT WILL BE INCLUDED IN SECTION 714 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.
12. ALL CONCRETE PULL BOXES SHALL BE (TYPE 2 HD) UNLESS OTHERWISE INDICATED. ALL CONDUIT SHALL BE THREE (3") INCH DIAMETER UNLESS SPECIFIED ON PLANS.
13. CONTRACTOR SHALL NOTIFY ALL EXISTING UTILITY OWNERS BEFORE BEGINNING WORK ON THIS PROJECT.
14. LED LUMINAIRE ASSEMBLIES SHALL HAVE A BUG RATING OF U0.
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. THE LOCAL RADIO WITH ANTENNA SHALL BE COMPATIBLE WITH THE EXISTING CLOSED LOOP COORDINATION SYSTEM IN THE CITY/COUNTY.
17. 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, THIRTY-EIGHT (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 TWENTY-ONE (21') FEET SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE TRAFFIC SIGNAL MAST ARM. AN ADDITIONAL SIX (6') FEET SHOULD BE USED DIRECTLY ABOVE "VIDEO DETECTOR" AT LOCATIONS SHOWN ON THE SIGNAL PLANS.
18. THE DESIRABLE MINIMUM DISTANCE FROM THE FACE OF ROADWAY CURB OR SHOULDER EDGE TO THE FACE OF NON-BREAKAWAY POLE OR OBSTRUCTION IS SIX (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.
19. 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.
20. 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 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.
21. CONTROLLER CABINET LAYOUT AND ORIENTATION SHALL CONFORM TO IMSA STANDARDS.
- ~~22. 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.~~
23. TRAFFIC SIGNAL CONTRACTOR SHALL NOTIFY THE 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.
24. 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.
25. DOOR PANEL TEST PUSH BUTTONS SHALL ACTUATE INDICATED PHASES. DETECTOR ASSIGNMENTS AND/OR SIDE PANEL JUMPERS MAY REQUIRE MODIFICATION.
26. ALL SYSTEM DETECTOR RACKS AND ASSOCIATED EQUIPMENT SHALL BE PROTECTED BY THE MAIN CONTROLLER CABINET POWER SURGE PROTECTION.
27. IN PULL BOXES, POLE BASES, JUNCTION BOXES AND CONTROLLER CABINETS, THE DIRECTION OF EACH CABLE RUN SHALL BE INDICATED BY ATTACHING A PERMANENT TAG OF RIGID PLASTIC OR NON-FERROUS METAL TO THE CONDUIT. TAGS SHALL BE EMBOSSED, STAMPED OR ENGRAVED WITH LETTERS ¼" OR GREATER IN HEIGHT AND SECURED TO THE CONDUIT WITH NYLON OR PLASTIC TIES. IN INSTANCES WHERE THE CONDUIT OR CONDUIT ENTRANCES ARE NOT VISIBLE OR ACCESSIBLE, A DIRECTION TAG SHALL BE ATTACHED TO EACH CABLE.
28. THE CONTRACTOR SHALL PERFORM ALL WORK POSSIBLE THAT WILL MINIMIZE THE TIME THAT THE TRAFFIC SIGNAL IS OUT OF OPERATION. IF, IN THE OPINION OF THE ENGINEER, TRAFFIC CONDITIONS WARRANT THE CONTRACTOR SHALL PROVIDE FLAGMEN TO DIRECT TRAFFIC WHILE THE TRAFFIC SIGNAL IS OUT OF OPERATION.
29. ALL NON-METALLIC CONDUIT RUNS SHALL HAVE BELL RING FITTINGS INSTALLED ON THE TERMINATING ENDS OF THE CONDUIT. THIS INCLUDES PULL BOXES, POLE BASES, AND TRAFFIC SIGNAL CABINETS.
30. ALL CONCRETE PULL BOXES SHALL BE SET ON A GRAVEL OR CRUSHED STONE BEDDING AS SPECIFIED IN SECTION 711, CONCRETE PULL BOX, OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014.

ADDITIONAL SIGNAL NOTES

1. CONTRACTOR TO CALL ONE-CALL TO LOCATE UTILITIES BEFORE CONSTRUCTION.
2. ALL CONDUIT SHOWN ON PLANS IS 3" NON-METALLIC UNLESS NOTED OTHERWISE. ALL BORED CONDUIT MATERIAL SHALL BE POLYETHYLENE WITH NO UNDERGROUND SPLICES.
3. THERE SHALL BE NO DEVIATION FROM THIS PLAN WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER.
4. CONTRACTOR SHALL FIELD VERIFY ALL POLE AND MAST ARM LOCATIONS WITH REGARD TO HORIZONTAL PLACEMENT FOR CLEARANCE FROM UTILITIES AND OTHER APPURTENANCES AND VERIFY VERTICAL CLEARANCE FOR POLE SHAFT AND MAST ARM FOR ABSENCE OF CONFLICT WITH OVERHEAD UTILITIES AND OTHER APPURTENANCES. CONTRACTOR SHALL OBTAIN APPROVAL OF PERMITTING JURISDICTIONS PRIOR TO ORDERING POLES AND MAST ARMS.
5. IF DEVIATION FROM THIS PLAN IS NECESSARY, ENGINEER SHALL BE NOTIFIED AND FINAL REVISED LOCATIONS OF POLES AND MAST ARMS SHALL BE DOCUMENTED.
6. HAND HOLE COVERS TO BE METAL.
7. SURVEY, STREET IMPROVEMENTS AND PAVEMENT MARKINGS SHOWN ON PLANS BY CRAFTON, TULL & ASSOCIATES, INC.
8. ETHERNET SWITCH T100/1000 HARDENED CISCO INDUSTRIAL ETHERNET (IE) 3000 SERIES (SPECIFIC MODEL TO BE APPROVED BY CITY OF LITTLE ROCK) TO BE PROVIDED.
9. DESIGN AND LAYOUT OF 18" STREET NAME SIGNS TO BE MOUNTED ON MAST ARMS SHALL BE PROVIDED TO THE CITY FOR APPROVAL PRIOR TO FABRICATION AND MOUNTING.
10. AN EMERGENCY BATTERY BACKUP SYSTEM (BBS) (MODEL 27-22 BBS TESCO BATTERY BACK-UP SERVICE PEDESTAL COMBINATION UNIT WITH FULL CONDITIONED POWER), FOR A TRAFFIC SIGNAL CONTROL AND COMMUNICATIONS EQUIPMENT WITH BATTERIES, MOUNTED INSIDE A SEPARATE EQUIPMENT CABINET OF THE TYPE AND SIZE CALLED FOR AT THE LOCATION SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER, AND SHALL BE PROVIDED AND CONFORM TO THE PROJECT SPECIAL PROVISION SPECIFICATIONS. BATTERY BACK-UP AND SERVICE PEDESTAL TO BE ONE UNIT.

RAILROAD PREEMPTION NOTES

1. INCLUDE 12C WIRE IN 2" NON-METALLIC CONDUIT TO RAILROAD'S BUNGALOW.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROGRAMMING OF THE SIGNAL CONTROLLER AS NECESSARY FOR THE RAILROAD PREEMPTION.
3. CONTRACTOR MUST THOROUGHLY INSPECT AND TEST THE FUNCTIONALITY OF THE TRAFFIC SIGNAL CONTROLLER AND FIRMWARE SOFTWARE TO ENSURE ADVANCED RAILROAD PREEMPTION FEATURES ARE PROVIDED.
4. CONTRACTOR TO PROVIDE INTERCONNECTION CIRCUITS BETWEEN THE TRAFFIC SIGNAL CONTROLLER AND THE RAILROAD WARNING SYSTEM.
5. CONTRACTOR TO REVIEW THE PREEMPTION OPERATION OF THE TRAFFIC SIGNAL CONTROLLER AND MAKE THE APPROPRIATE MODIFICATIONS TO ENSURE ADEQUATE TRACK CLEARANCE GREEN TIME OF 21.2 SECONDS IS PROVIDED.
6. CONTRACTOR TO VERIFY TIMING AND ENSURE THE THE ACTUAL RIGHT-OF-WAY TRANSFER TIME DURING RAILROAD PREEMPTION DOES NOT EXCEED THE DESIGN VALUE OF 12.5 SECONDS.
7. CONTRACTOR TO PROGRAM THE CONTROLLER FOR RAILROAD PREEMPTION TO HAVE CAPABILITY FOR TRAIN RESTART.
8. CONTRACTOR TO IMPLEMENT A MAXIMUM PREEMPTION TIMER.
9. CONTRACTOR TO INCLUDE THE ELECTRICAL ARRANGEMENT OF THE CIRCUITS AS A PART OF THE INTERCONNECTION. ONE OF THE FOLLOWING OPTIONS WILL BE INCLUDED: 1.) SINGLE BREAK WITH SUPERVISION. 2.) DOUBLE BREAK; 3.) DOUBLE BREAK WITH SUPERVISION.
10. CONTRACTOR TO PROVIDE THE INTERCONNECTION CIRCUITS BETWEEN THE TRAFFIC SIGNAL CONTROLLER AND THE RAILROAD WARNING SYSTEM AND TO ENSURE THE INTERCONNECTION CABLE HAS ADEQUATE NUMBER OF CONDUCTORS FOR THE CIRCUITS REQUESTED. THE TRAFFIC SIGNAL CONTROLLER ADVANCE PREEMPTION CIRCUIT BEGINS THE PREEMPTION SEQUENCE WHEN THE RAILROAD WARNING SYSTEM FIRST NOTIFIES THE TRAFFIC SIGNAL CONTROLLER OF THE APPROACHING TRAIN.
11. CONTRACTOR TO INSTALL A WARNING LABEL AS RECOMMENDED BY THE U.S. DEPARTMENT OF TRANSPORTATION HIGHWAY-RAIL GRADE CROSSING TECHNICAL WORKING GROUP (USDOT TWG) IN THE TRAFFIC SIGNAL CONTROLLER CABINET TO ALERT TRAFFIC SIGNAL TECHNICIANS TO THE PRESENCE OF THE INTERCONNECTION WITH THE RAILROAD CONTROL EQUIPMENT.
12. THE SIGNAL CONTROLLER MANUFACTURER SHALL CONFORM THE TRAFFIC SIGNAL CONTROLLER CAPABILITIES FOR TRAIN RESTART.
13. REVIEW TRAFFIC SIGNAL CONTROLLER CAPABILITIES FOR TRAIN RESTART. DUE TO THE POTENTIAL OF TRAIN STOPPING AND RESTARTING WITHIN THE APPROACH OF THE CROSSING, THE TRAFFIC SIGNAL CONTROLLER MAY NOT BE ABLE TO TRANSITION BACK TO THE TRACK CLEARANCE INTERVAL TO PROVIDE A SUFFICIENT AMOUNT OF TIME TO CLEAR THE DESIGN VEHICLE (WB-67). MODIFICATIONS OR ADDITIONAL LOGIC MAY BE NEEDED FOR THE TRAFFIC SIGNAL CONTROLLER TO PROVIDE THE TRANSITION TO THE TRACK CLEARANCE INTERVAL DURING THE EVENT.
14. TIE INTO 9"x12" ALUMINUM BOX AT THE RAILROAD CONTROLLER.



PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS SIGNED AND DATED. CONTRACTORS ARE CAUTIONED AGAINST ORDERING EQUIPMENT BASED ON PRELIMINARY PLANS.

9-1-2020

90% SUBMITTAL

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS FOURCHE DAM PIKE AND I-440 RAMP	NOTES FOURCHE DAM PIKE AND I-440 EASTBOUND AND WESTBOUND RAMP
--	---

DEPARTMENT OF PUBLIC WORKS CIVIL ENGINEERING 701 W. MARKHAM LITTLE ROCK, ARKANSAS 72201
--

--

DRAWN BY RMT DESIGNED EJP CHECKED EJP DATE 9-1-2020 SCALE 1"=20'	PROJECT NO. P2025 (P&A#) 19800105 (CTA#) SHEET NO. T-02
---	---

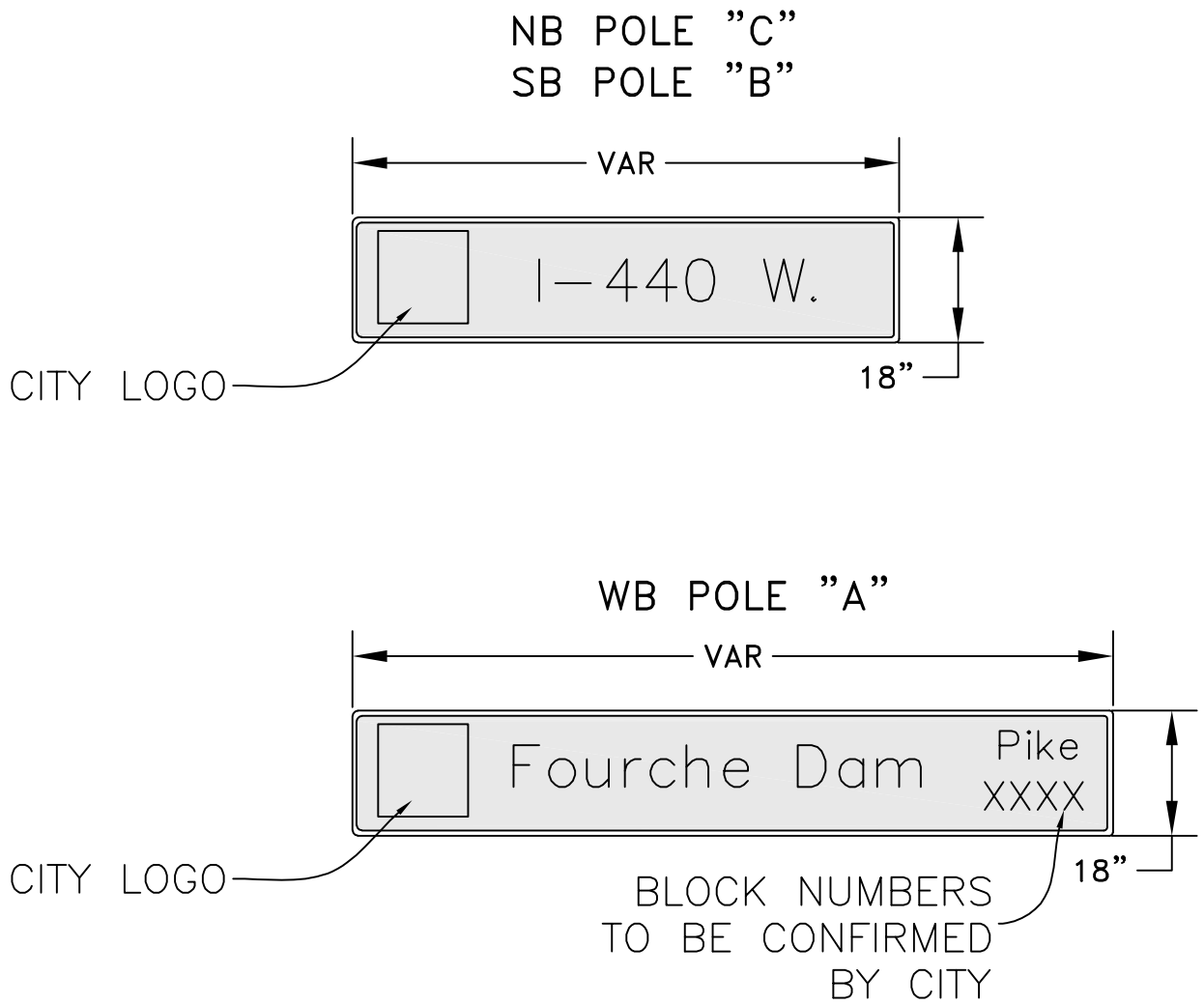


SUMMARY OF QUANTITIES			
ITEM NO.	ITEM	QUANTITY	UNIT
601	MOBILIZATION	1	LUMP SUM
SS & 603	MAINTENANCE OF TRAFFIC	1	LUMP SUM
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2 (8-PHASE)	1	EACH
SP&701	ETHERNET SWTCH, T100/1000 HARDENED CISCO INDUSTRIAL (IE) 3000 SERIES	1	EACH
SP	PTZ CAMERA SYSTEM AND WRING	1	EACH
706	TRAFFIC SIGNAL HEAD LED (3-SECTION, 1-WAY)	8	EACH
708	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G., E.G.C.)	30	LIN. FT.
708	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	380	LIN. FT.
708	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	200	LIN. FT.
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	521	LIN. FT.
708	TRAFFIC SIGNAL CABLE (6C/14 A.W.G.)	708	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	65	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	305	LIN. FT.
710	HDPR NON-METALLIC CONDUIT (3")	260	LIN. FT.
710	HDPR NON-METALLIC CONDUIT (2")	460	LIN. FT.
710	HDPR NON-METALLIC CONDUIT (1.25")	20	LIN. FT.
711	CONCRETE PULL BOX (TYPE 2HD)	5	EACH
SP	FIBER OPTIC SPLICE ENCLOSURE	3	EACH
714	LED LUMINAIRE ASSEMBLY	3	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE W/TH FOUNDATION (34')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE W/TH FOUNDATION (42')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE W/TH FOUNDATION (50')	1	EACH
SP&715	TESCO BATTER BACK-UP SERVICE PEDESTAL COMBINATION UNIT (MODEL 27-22BBS)	1	EACH
715	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH
SP & 726	18" STREET NAME SIGN	3	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH
SP	WAVETRONIX DETECTION SYSTEM (MATRIX AND ADVANCE) (CLICK 656)	1	LUMP SUM
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	455	LIN. FT.
SP	FIBER OPTIC CABLE, 72F	460	LIN. FT.

**QUANTITIES NOTES**  
QUANTITIES SHOWN ARE FOR REVIEW PURPOSES ONLY AND ARE NOT INTENDED TO BE QUANTITIES UPON WHICH CONTRACTOR PRICING TO OWNER TO BE BASED.

ALTHOUGH PLANS ARE SHOWN TO USE WAVETRONICS, WITH CITY OF LITTLE ROCK APPROVAL, CONTRACTOR HAS OPTION TO BID ALL INTERSECTIONS AS WAVETRONICS OR RHYTHM HAWKEYE DETECTION SYSTEM. ALL INTERSECTIONS SHALL BE THE SAME SYSTEM.

STREET SIGN DETAILS



**Font:** Clearview 5WR, 12" uppercase, 9" lowercase, 4" subscript.  
**LR Logo:** 11" wide by 8" tall, White Background.



PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS SIGNED AND DATED. CONTRACTORS ARE CAUTIONED AGAINST ORDERING EQUIPMENT BASED ON PRELIMINARY PLANS.

9-1-2020

REVISIONS    DATE


CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE AND I-440 RAMPS

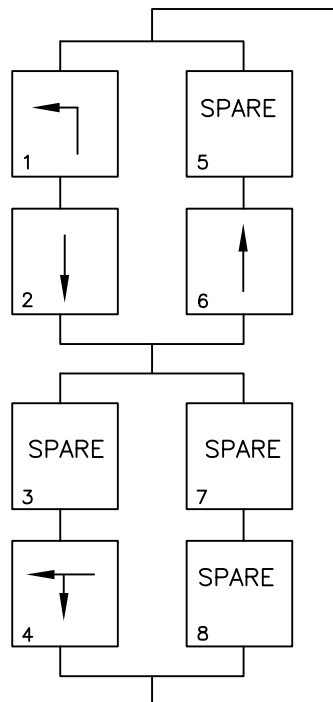
SUMMARY OF QUANTITIES  
FOURCHE DAM PIKE AND I-440 WESTBOUND RAMP

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201

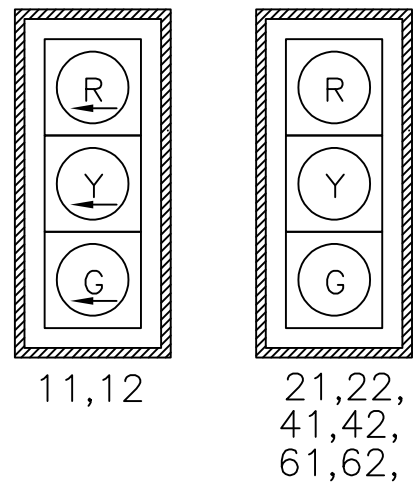
DRAWN BY  
RMT  
DESIGNED  
EJP  
CHECKED  
EJP  
DATE  
9-1-2020  
SCALE  
1"=20'  
PROJECT NO.  
P2025 (P&A#)  
19800105 (CTA#)  
SHEET NO.  
T-03



PHASING  
DIAGRAM



SIGNAL DISPLAY



- NOTES:
1. ALL SIGNAL HEADS SHALL HAVE METAL BACKPLATES.
  2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.

90% SUBMITTAL

TRAFFIC SIGNAL LEGEND

- TRAFFIC SIGNAL CONTROLLER
- PULL BOX
- 3" NON-METALLIC CONDUIT
- 2" NON-METALLIC CONDUIT
- 1.25" NON-METALLIC CONDUIT
- MAST ARM AND POLE
- SIGNAL HEAD
- SIGNAL POLE NUMBER 'n'
- LUMINAIRE
- TRAFFIC SIGN
- WAVETRONIX MATRIX STOP BAR SENSOR
- WAVETRONIX ADVANCED RADAR SENSOR
- PTZ CAMERA

WAVETRONIX NOTE:  
A SITE SURVEY WILL NEED TO BE CONDUCTED BY THE INSTALLATION CREW BEFORE INSTALLING SENSORS TO INSURE NO FIELD CONFLICTS. SENSORS MAY NEED TO BE RELOCATED DEPENDING ON THE ACTUAL FIELD ADJUSTMENT. IF NEEDED, PLEASE CONTACT WAVETRONIX ABOUT ANY NEEDED CONFLICTS WITH PLACEMENT OR RELOCATION.

PAVEMENT MARKING NOTE  
SEE PLANS BY CRAFTON TULL & ASSOCIATES, INC. FOR ROADWAY IMPROVEMENTS AND PAVEMENT MARKINGS.

- EQUIPMENT NOTES
1. THE POSITION OF THE DETECTION ZONES MAY BE FIELD ADJUSTED TO ACHIEVE MAXIMUM EFFICIENCY IN COUNT DATA AND VEHICLE ACTUATION, AS APPROVED BY THE ENGINEER.
  2. ALL CONDUIT 3" NON-METALLIC UNLESS OTHERWISE SPECIFIED ON PLANS.
  3. ALL TRAFFIC SIGNAL HEADS SHALL BE LED WITH THE LATEST ARDOT SPECIFICATION.

POLE - MAST ARM SCHEDULE

POLE	POLE FOUNDATION	MAST ARM LENGTH	POLE HEIGHT	MA DEGREES CW FROM HANDHOLE	LED STREETLIGHT ARM CW FROM HANDHOLE	X-COORD	Y-COORD
A	ARDOT	34'	35'	270°	25' ARM W/ LED @ 180°	1255360.1199	139695.1019
B	ARDOT	50'	35'	270°	25' ARM W/ LED @ 270°	1255360.2030	139584.2788
C	ARDOT	42'	35'	180°	25' ARM W/ LED @ 180°	1255470.5769	139729.9243

DETECTOR SPACING CHART

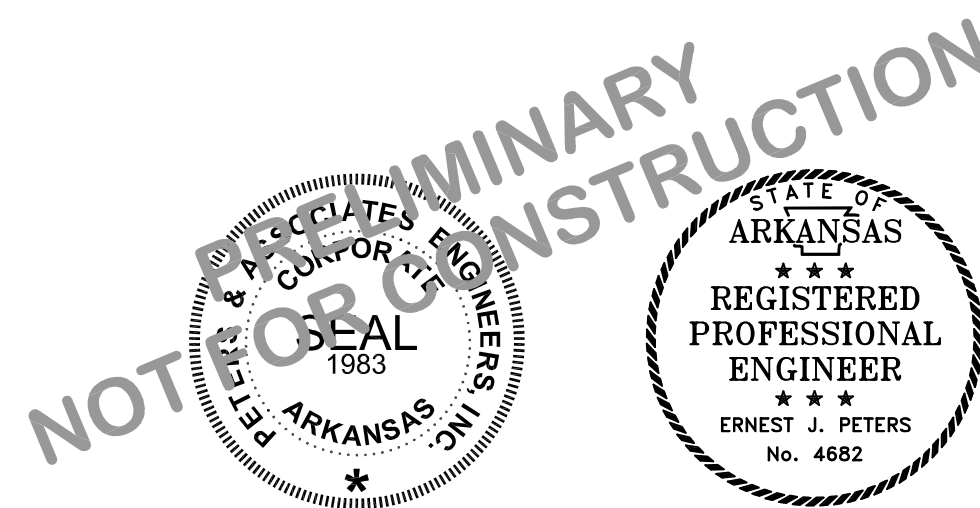
FOURCHE DAM PIKE			
POSTED SPEED	DISTANCE FROM STOP LINE		
40 MPH	LEAD	LAG	
	325'	145'	
I-440 WB OFF-RAMP			
POSTED SPEED	DISTANCE FROM STOP LINE		
25 MPH (assumed)	LEAD	LAG	
	100'	N/A	

DESIGN PARAMETERS  
POSTED SPEED LIMIT:  
40 MPH NORTHBOUND AND SOUTHBOUND APPROACHES  
25 MPH (ASSUMED) WESTBOUND APPROACH

NO RAILROAD TRACKS  
NO BUS STOPS  
NO FIRE STATION  
NO PARKING  
NO SIGHT DISTANCE RESTRICTIONS

MINIMUM CLEAR ZONE DISTANCE:  
4 FEET BEHIND CURB  
6:1 SLOPE OR FLATTER-16 FEET BEHIND LANE LINE WITH SHOULDER.  
4:1 OR 5:1 SLOPE-18 FEET BEHIND LANE LINE WITH SHOULDER.

ALTHOUGH PLANS ARE SHOWN TO USE WAVETRONIX, WITH CITY OF LITTLE ROCK APPROVAL, CONTRACTOR HAS OPTION TO BID ALL INTERSECTIONS AS WAVETRONIX OR RHYTHM HAWKEYE DETECTION SYSTEM. ALL INTERSECTIONS SHALL BE THE SAME SYSTEM.



PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS SIGNED AND DATED. CONTRACTORS ARE CAUTIONED AGAINST ORDERING EQUIPMENT BASED ON PRELIMINARY PLANS.

9-1-2020

REVISIONS DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE AND I-440 RAMPS

TRAFFIC SIGNAL PLAN

FOURCHE DAM PIKE AND I-440 WESTBOUND RAMP

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201

DRAWN BY  
RMT

DESIGNED  
EJP

CHECKED  
EJP

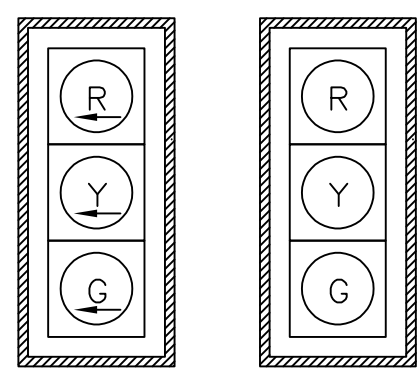
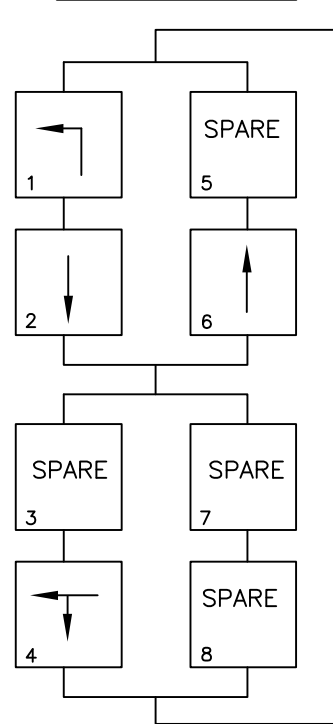
DATE  
9-1-2020

SCALE  
1"=20'

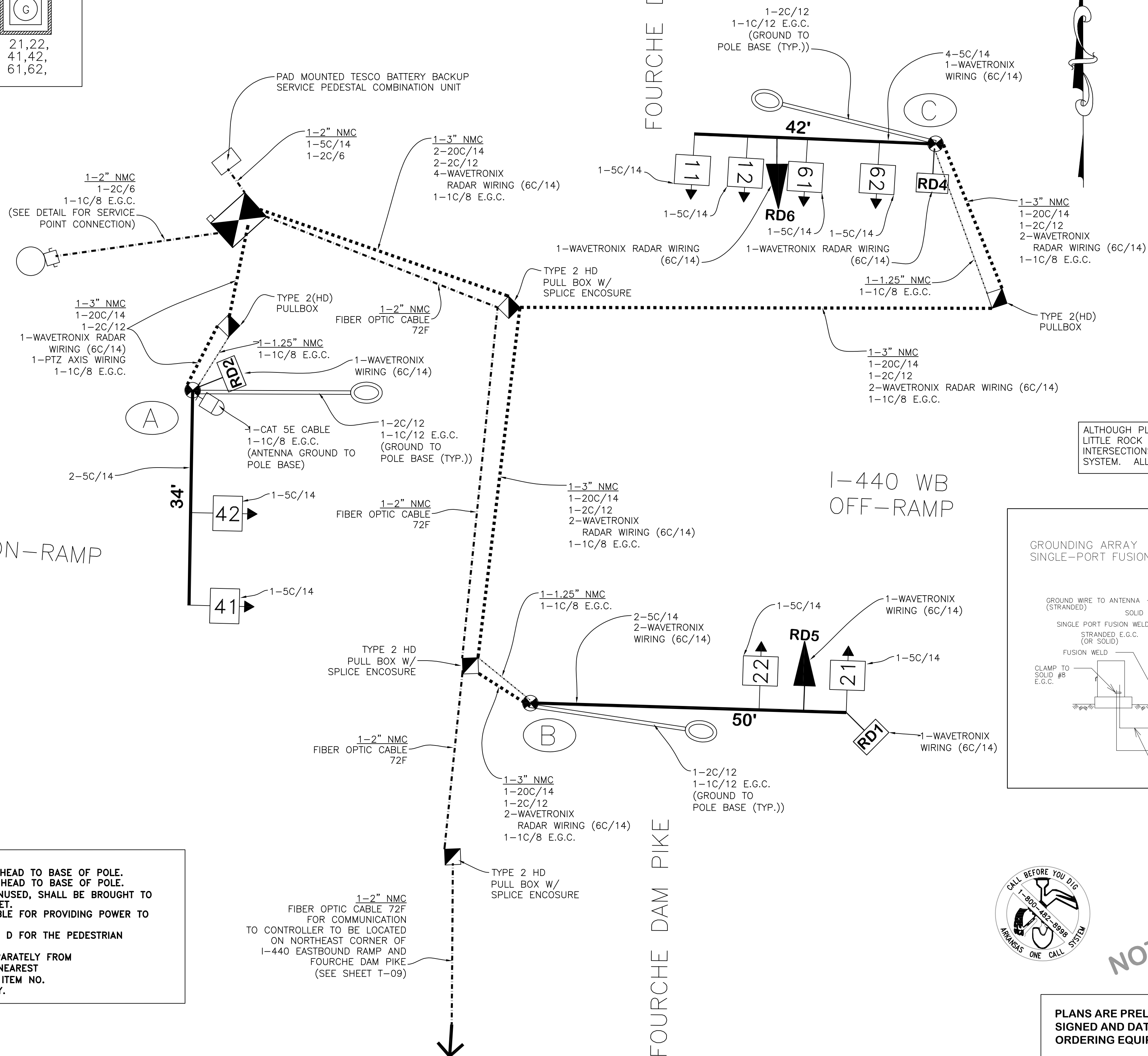
PROJECT NO.  
P2025 (P&A#)  
19800106 (CTA#)

SHEET NO.

T-04







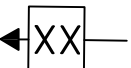

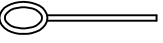






1. ALL SIGNAL HEADS SHALL HAVE METAL BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.

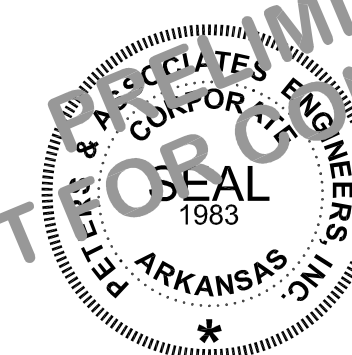
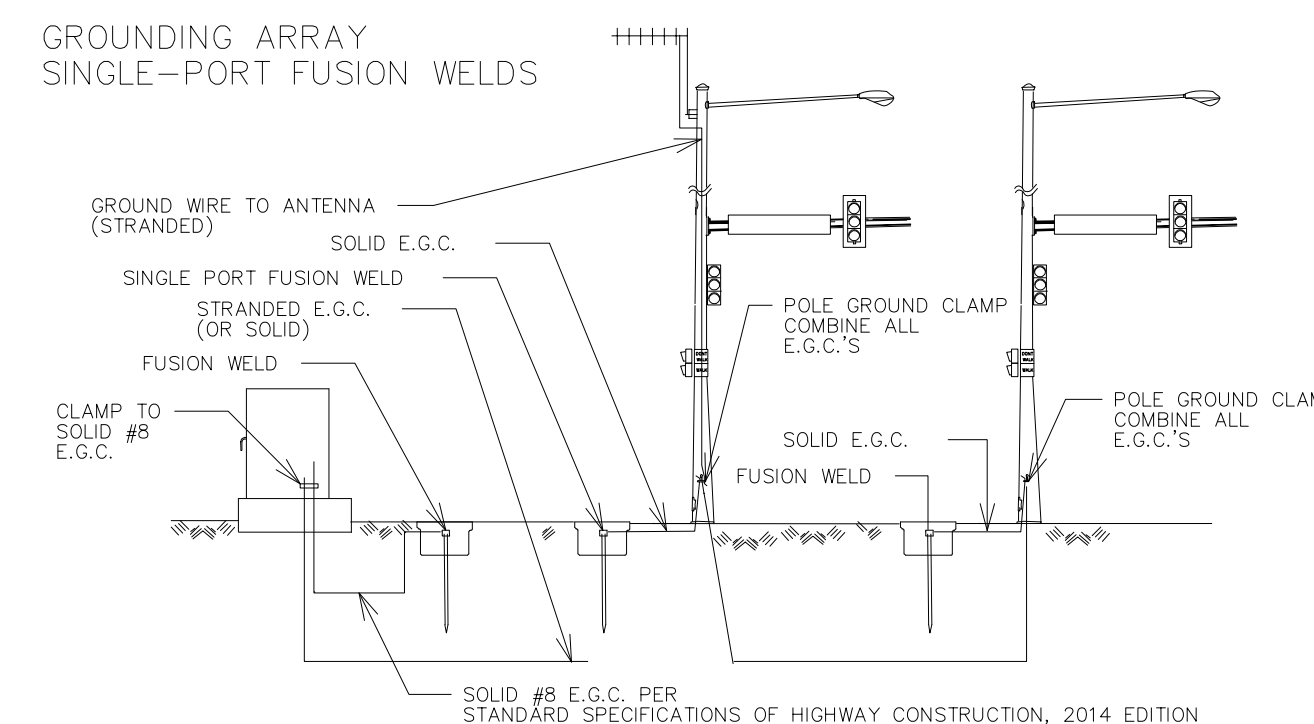


1. SEPARATE 5C/14 FROM EACH 3-SEC SIGNAL HEAD TO BASE OF POLE.
2. SEPARATE 7C/14 FROM EACH 4-SEC SIGNAL HEAD TO BASE OF POLE.
3. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA ON CABINET.
4. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.
5. ONE SEPARATE 1-5C IS RUN TO POLE C AND D FOR THE PEDESTRIAN PUSH BUTTON.

1-1C/8 E.G.C. SHOWN SEPARATELY FROM  
CONTROLLER OR POLE TO NEAREST  
PULL BOX IS INCLUDED IN ITEM NO.  
701 OR 714, RESPECTIVELY.

	TRAFFIC SIGNAL CONTROLLER
	PULL BOX
	3" NON-METALLIC CONDUIT
	2" NON-METALLIC CONDUIT
	1.25" NON-METALLIC CONDUIT
	MAST ARM AND POLE
	SIGNAL HEAD
	SIGNAL POLE NUMBER 'n'
	LUMINAIRE
	TRAFFIC SIGN
	WAVETRONIX MATRIX STOP BAR RADAR SENSOR
	WAVETRONIX ADVANCED RADAR SENSOR
	PTZ CAMERA

ALTHOUGH PLANS ARE SHOWN TO USE WAVETRONICS, WITH CITY OF LITTLE ROCK APPROVAL, CONTRACTOR HAS OPTION TO BID ALL INTERSECTIONS AS WAVETRONICS OR RHYTHM HAWKEYE DETECTION SYSTEM. ALL INTERSECTIONS SHALL BE THE SAME SYSTEM.



**PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS  
SIGNED AND DATED. CONTRACTORS ARE CAUTIONED AGAINST  
ORDERING EQUIPMENT BASED ON PRELIMINARY PLANS.**

9-1-2020

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE AND I-440 RAMPS  
TRAFFIC SIGNAL WIRING PLAN  
FOURCHE DAM PIKE AND I-440 WESTBOUND

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

CIVIL ENGINEERING  
301 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201

DRAWN BY RMT
DESIGNED EJP
CHECKED EJP
DATE 9-1-2020
SCALE NTS

PROJECT NO.  
P2025 (P&A#)  
19800106 (CTA#)

SHEET NO.  
**T-05**



90% SUBMITTAL

REVISIONS	DATE

**CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE AND I-440 RAMPS**

# TRAFFIC SIGNAL CHARTS

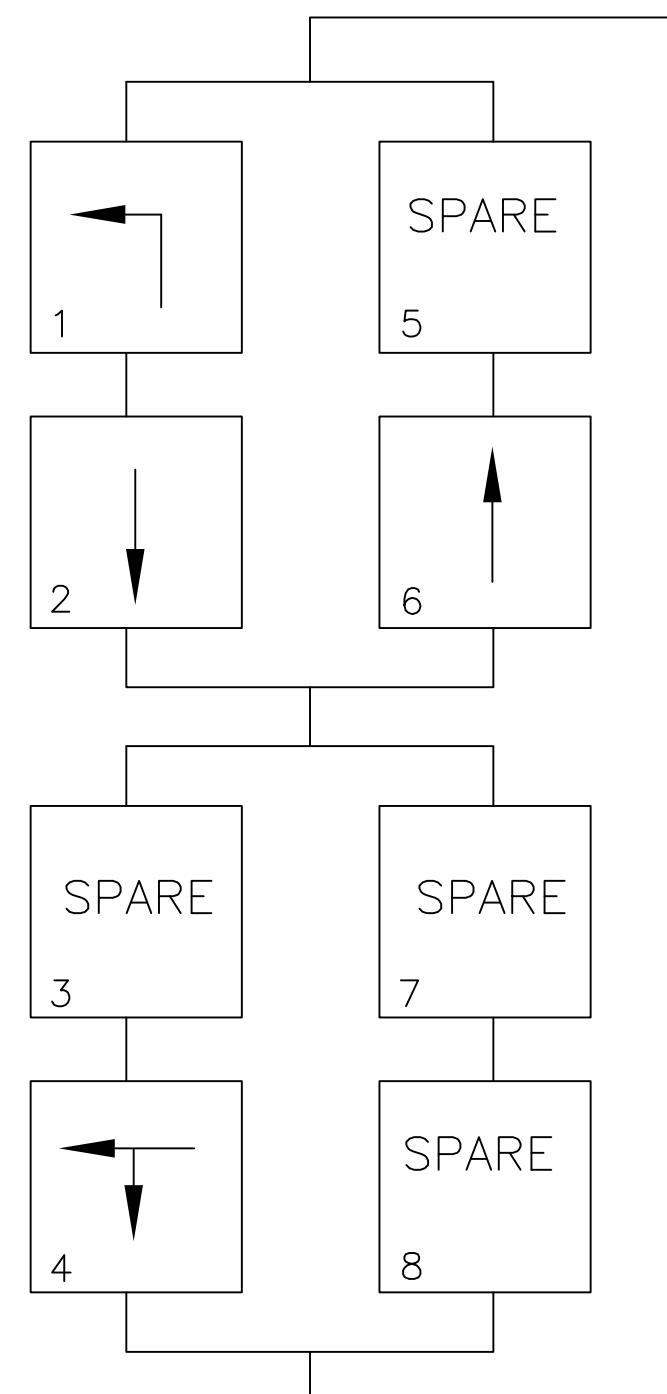
## FOURCHE DAM PIKE AND I-440 WESTBOUND RAMP

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201



LITTLE ROCK, ARKANSAS 72201

## PHASING DIAGRAM



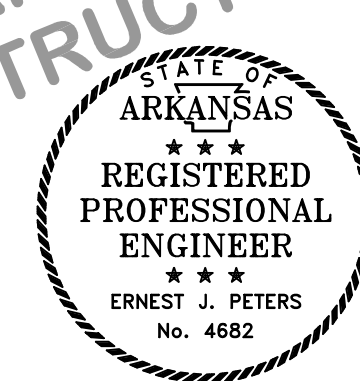
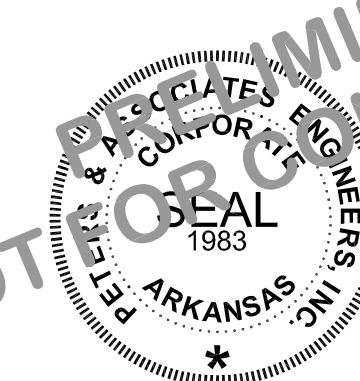
## INTERVAL CHART

SIGNAL FACES	FDP AND I-440 WB RAMPS						FLASH SEQ.
	1+6	CLR.	2+6	CLR.	4	CLR.	
11	←G	←Y	←R	←R	←R	←R	←R
21&22	R	R	G	Y	R	R	R
41&42	R	R	R	R	G	Y	R
61&62	G	**	G	**	R	R	R

\* 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

## DETECTOR CHART

RADAR DETECTOR SYSTEM DESCRIPTION		
FOURCHE DAM PIKE AND I-440 WESTBOUND RAMP		
DETECTOR ASSIGNMENTS CHART		
DET. ZONE ID #	DETECTOR #	ZONE LOCATION
1A & 1B	RD6	NB LEFT TURN FAR
1C & 1D	RD2	NB LEFT TURN STOP LINE
2A	RD5	SB ADVANCE
2B & 2C	RD5	SB NEAR
2E & 2F	RD2	SB STOP LINE
4A & 4B	RD4	WB ADVANCE
4C & 4D	RD4	WB NEAR
6A	RD6	NB ADVANCE
6B	RD6	NB NEAR
6C	RD1	NB STOP LINE



**PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS  
SIGNED AND DATED. CONTRACTORS ARE CAUTIONED AGAINST  
ORDERING EQUIPMENT BASED ON PRELIMINARY PLANS.**

9-1-2020

DRAWN BY RMT
DESIGNED EJP
CHECKED EJP
DATE 9-1-2020
SCALE NTS

PROJECT NO.  
P2025 (P&A#)  
19800106 (CTA#)

SHEET NO.  
**T-06**



90% SUBMITTAL

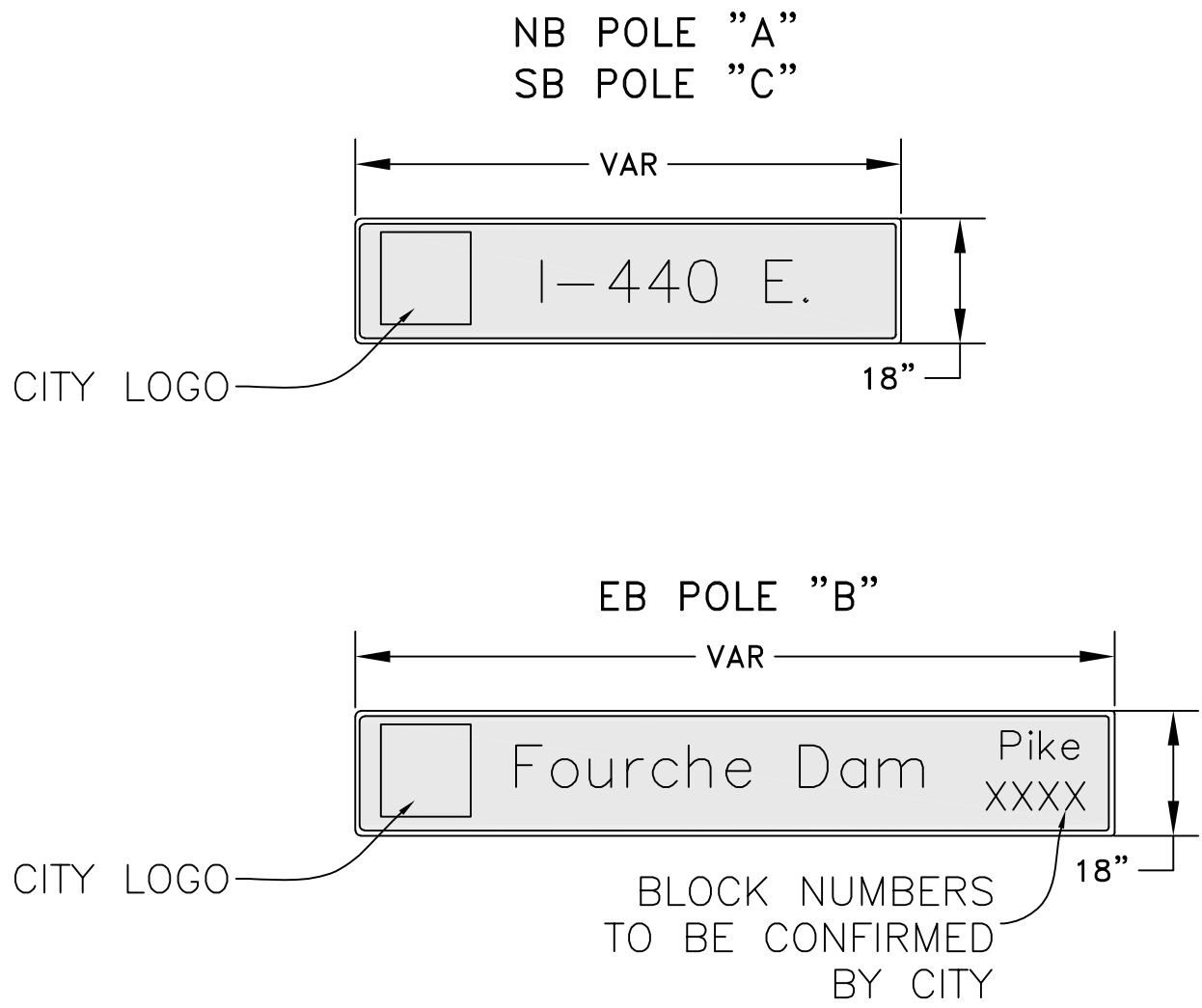
SUMMARY OF QUANTITIES

ITEM NO.	ITEM	QUANTITY	UNIT
601	MOBILIZATION	1	LUMP SUM
SS & 603	MAINTENANCE OF TRAFFIC	1	LUMP SUM
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2 (8-PHASE)	1	EACH
SP&701	ETHERNET SWITCH, T100/1000 HARDENED CISCO INDUSTRIAL (IE) 3000 SERIES	1	EACH
SP	PTZ CAMERA SYSTEM AND WIRING	1	EACH
706	TRAFFIC SIGNAL HEAD LED (3-SECTION, 1-WAY)	6	EACH
706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	1	EACH
708	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G., E.G.C.)	210	LIN. FT.
708	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	590	LIN. FT.
708	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	200	LIN. FT.
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	375	LIN. FT.
708	TRAFFIC SIGNAL CABLE (6C/14 A.W.G.)	905	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	60	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	315	LIN. FT.
710	HDPR NON-METALLIC CONDUIT (3")	280	LIN. FT.
710	HDPR NON-METALLIC CONDUIT (2")	1,610	LIN. FT.
710	HDPR NON-METALLIC CONDUIT (1.25")	20	LIN. FT.
711	CONCRETE PULL BOX (TYPE 2HD)	8	EACH
SP	FIBER OPTIC SPLICE ENCLOSURE	5	EACH
714	LED LUMINAIRE ASSEMBLY	3	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (32')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (42')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (46')	1	EACH
SP&715	TESCO BATTER BACK-UP SERVICE PEDESTAL COMBINATION UNIT (MODEL 27-22BBS)	1	EACH
715	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH
SP & 726	18" STREET NAME SIGN	3	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH
SP	WAVETRONIX DETECTION SYSTEM (MATRIX AND ADVANCE) (CLICK 656)	1	LUMP SUM
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	460	LIN. FT.
SP	RAILROAD PREEMPTION INTERCONNECT SYSTEM AND WIRING	1	LUMP SUM
SP	FIBER OPTIC CABLE, 72F	1,130	LIN. FT.

**QUANTITIES NOTES**  
QUANTITIES SHOWN ARE FOR REVIEW PURPOSES ONLY AND ARE NOT INTENDED TO BE QUANTITIES UPON WHICH CONTRACTOR PRICING TO OWNER TO BE BASED.

ALTHOUGH PLANS ARE SHOWN TO USE WAVETRONICS, WITH CITY OF LITTLE ROCK APPROVAL, CONTRACTOR HAS OPTION TO BID ALL INTERSECTIONS AS WAVETRONICS OR RHYTHM HAWKEYE DETECTION SYSTEM. ALL INTERSECTIONS SHALL BE THE SAME SYSTEM.

STREET SIGN DETAILS



**Font:** Clearview 5WR, 12" uppercase, 9" lowercase, 4" subscript.  
**LR Logo:** 11" wide by 8" tall, White Background.



PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS SIGNED AND DATED. CONTRACTORS ARE CAUTIONED AGAINST ORDERING EQUIPMENT BASED ON PRELIMINARY PLANS.

9-1-2020

REVISIONS	DATE

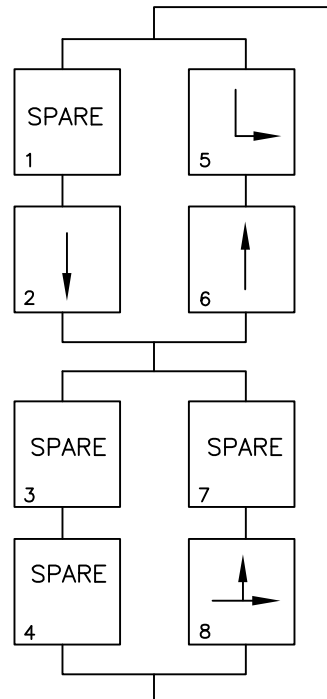
CITY OF LITTLE ROCK, ARKANSAS FOURCHE DAM PIKE AND I-440 RAMPS	SUMMARY OF QUANTITIES FOURCHE DAM PIKE AND I-440 EASTBOUND RAMP
---	--

DEPARTMENT OF PUBLIC WORKS CIVIL ENGINEERING 701 W. MARKHAM LITTLE ROCK, ARKANSAS 72201
--

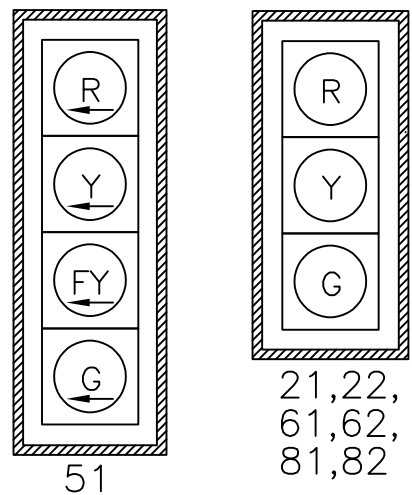


DRAWN BY RMT
DESIGNED EJP
CHECKED EJP
DATE 9-1-2020
SCALE 1"=20'
PROJECT NO. P2025 (P&A#) 19800105 (CTA#)
SHEET NO. <b>T-07</b>



PHASING  
DIAGRAM

## SIGNAL DISPLAY



## NOTES:

1. ALL SIGNAL HEADS SHALL HAVE METAL BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.

INSTALL APPROX. 500' OF 2" NMC WITH FIBER OPTIC COMMUNICATION TO CONTROLLER TO BE LOCATED ON NORTHWEST CORNER OF I-440 WESTBOUND RAMP AND FOURCHE DAM PIKE (SEE SHEET T-04)

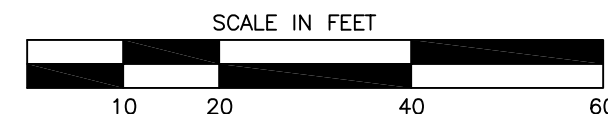
## POLE — MAST ARM SCHEDULE

POLE	TYPE	MAST ARM LENGTH	POLE HEIGHT	MA DEGREES CW FROM HANDHOLE	LED STREETLIGHT ARM CW FROM HANDHOLE	X-COORD	Y-COORD
A	ARDOT	32'	35'	180°	25' ARM W/ LED @ 180°	1255452.5264	139157.9303
B	ARDOT	42'	35'	180°	25' ARM W/ LED @ 180°	1255457.5489	139055.2463
C	ARDOT	46'	35'	270°	15' ARM W/ LED @ 180°	1255360.0173	139077.6338

90% SUBMITTAL

## TRAFFIC SIGNAL LEGEND

- TRAFFIC SIGNAL CONTROLLER
- PULL BOX
- 3" NON-METALLIC CONDUIT
- 2" NON-METALLIC CONDUIT
- 1.25" NON-METALLIC CONDUIT
- MAST ARM AND POLE
- SIGNAL HEAD
- SIGNAL POLE NUMBER 'n'
- LUMINAIRE
- TRAFFIC SIGN
- WAVETRONIX MATRIX STOP BAR RADAR SENSOR
- WAVETRONIX ADVANCED RADAR SENSOR
- PTZ CAMERA

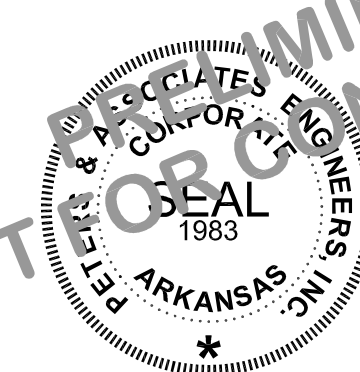


**WAVETRONIX NOTE:**  
A SITE SURVEY WILL NEED TO BE CONDUCTED BY THE INSTALLATION CREW BEFORE INSTALLING SENSORS TO INSURE NO FIELD CONFLICTS. SENSORS MAY NEED TO BE RELOCATED DEPENDING ON THE ACTUAL FIELD ADJUSTMENT. IF NEEDED, PLEASE CONTACT WAVETRONIX ABOUT ANY NEEDED CONFLICTS WITH PLACEMENT OR RELOCATION.

**PAVEMENT MARKING NOTE:**  
SEE PLANS BY CRAFTON TULL & ASSOCIATES, INC. FOR ROADWAY IMPROVEMENTS AND PAVEMENT MARKINGS.

- EQUIPMENT NOTES**
1. THE POSITION OF THE DETECTION ZONES MAY BE FIELD ADJUSTED TO ACHIEVE MAXIMUM EFFICIENCY IN COUNT DATA AND VEHICLE ACTUATION, AS APPROVED BY THE ENGINEER.
  2. ALL CONDUIT 3" NON-METALLIC UNLESS OTHERWISE SPECIFIED ON PLANS.
  3. ALL TRAFFIC SIGNAL HEADS SHALL BE LED WITH THE LATEST ARDOT SPECIFICATION.

ALTHOUGH PLANS ARE SHOWN TO USE WAVETRONIX, WITH CITY OF LITTLE ROCK APPROVAL, CONTRACTOR HAS OPTION TO BID ALL INTERSECTIONS AS WAVETRONIX OR RHYTHM HAWKEYE DETECTION SYSTEM. ALL INTERSECTIONS SHALL BE THE SAME SYSTEM.



PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS SIGNED AND DATED. CONTRACTORS ARE CAUTIONED AGAINST ORDERING EQUIPMENT BASED ON PRELIMINARY PLANS.

9-1-2020

## REVISIONS DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE AND I-440 RAMPS  
TRAFFIC SIGNAL PLAN  
FOURCHE DAM PIKE AND I-440 EASTBOUND RAMP

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201



DRAWN BY  
RMT  
DESIGNED  
EJP  
CHECKED  
EJP  
DATE  
9-1-2020  
SCALE  
1"=20'

PROJECT NO.  
P2025 (P&A#)  
19800106 (CTA#)  
SHEET NO.  
T-08

## DETECTOR SPACING CHART

NB FOURCHE DAM PIKE		
POSTED SPEED	DISTANCE FROM STOP LINE	LAG
40 MPH	325'	145'
SB FOURCHE DAM PIKE		
POSTED SPEED	DISTANCE FROM STOP LINE	LAG
40 MPH	325'	145'
I-440 EB OFF-RAMP		
POSTED SPEED	DISTANCE FROM STOP LINE	LAG
25 MPH (assumed)	100'	N/A

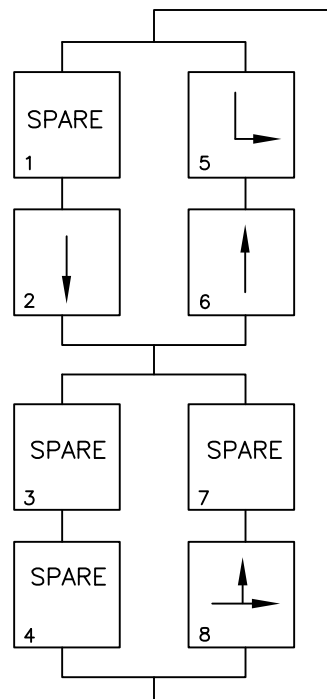
## DESIGN PARAMETERS

POSTED SPEED LIMIT:  
40 MPH NORTHBOUND AND SOUTHBOUND APPROACHES  
25 MPH (ASSUMED) EASTBOUND APPROACH

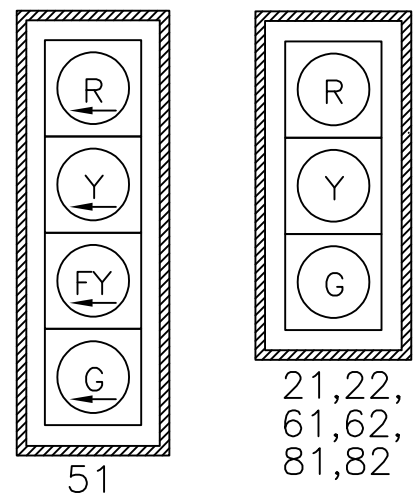
RAILROAD TRACKS  
NO BUS STOPS  
NO FIRE STATION  
NO PARKING  
NO SIGHT DISTANCE RESTRICTIONS

MINIMUM CLEAR ZONE DISTANCE:  
4 FEET BEHIND CURB.  
6:1 SLOPE OR FLATTER—16 FEET BEHIND LANE LINE WITH SHOULDER.  
4:1 OR 5:1 SLOPE—18 FEET BEHIND LANE LINE WITH SHOULDER.

## PHASING DIAGRAM



## SIGNAL DISPLAY



- NOTES:**
1. ALL SIGNAL HEADS SHALL HAVE METAL BACKPLATES.
  2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.

1-2" NMC  
FIBER OPTIC CABLE 72F  
FOR COMMUNICATION  
TO CONTROLLER TO BE LOCATED  
ON NORTHWEST CORNER OF  
I-440 WESTBOUND RAMP AND  
FOURCHE DAM PIKE  
(SEE SHEET T-04)

TYPE 2 HD  
PULL BOX

1-3" NMC  
1-20C/14  
1-2C/12  
2-WAVETRONIX  
RADAR WIRING (6C/14)  
1-1C/8 E.G.C.

1-5C/14  
RD6  
1-5C/14

1-2C/12  
1-1C/12 E.G.C.  
(GROUND TO  
POLE BASE (TYP.))

1-1.25" NMC  
1-1C/8 E.G.C.  
2-5C/14  
1-WAVETRONIX  
WIRING (6C/14)

1-3" NMC  
1-20C/14  
1-2C/12  
1-WAVETRONIX  
RADAR WIRING (6C/14)  
1-PTZ AXIS WIRING  
1-1C/8 E.G.C.

1-3" NMC  
1-20C/14  
1-2C/12  
2-WAVETRONIX  
RADAR WIRING (6C/14)  
1-1C/8 E.G.C.

1-3" NMC  
2-20C/14  
2-2C/12  
3-WAVETRONIX  
RADAR WIRING (6C/14)  
1-PTZ AXIS WIRING  
1-1C/8 E.G.C.

1-2" NMC  
FIBER OPTIC CABLE 72F

TYPE 2 HD  
PULL BOX

1-2" NMC  
1-5C/14  
1-2C/6

PED MOUNTED TESCO  
BATTERY BACK-UP SERVICE  
PEDESTAL COMBINATION  
UNIT

1-2" NMC  
1-2C/6  
1-1C/8 E.G.C.  
(SEE DETAIL FOR SERVICE  
POINT CONNECTION)

1-2" NMC  
RR PREEMPTION CABLE  
1-1C/8 E.G.C.

TYPE 2 HD  
PULL BOX W/  
SPlice ENCLOSURE

## TRAFFIC SIGNAL LEGEND

- TRAFFIC SIGNAL CONTROLLER
- PULL BOX
- 3" NON-METALLIC CONDUIT
- 2" NON-METALLIC CONDUIT
- 1.25" NON-METALLIC CONDUIT
- MAST ARM AND POLE
- SIGNAL HEAD
- SIGNAL POLE NUMBER 'n'
- LUMINAIRE
- TRAFFIC SIGN
- WAVETRONIX MATRIX STOP BAR  
RADAR SENSOR
- WAVETRONIX ADVANCED  
RADAR SENSOR
- PTZ CAMERA

ALTHOUGH PLANS ARE SHOWN TO USE WAVETRONIX, WITH CITY OF  
LITTLE ROCK APPROVAL, CONTRACTOR HAS OPTION TO BID ALL  
INTERSECTIONS AS WAVETRONIX OR RHYTHM HAWKEYE DETECTION  
SYSTEM. ALL INTERSECTIONS SHALL BE THE SAME SYSTEM.

I-440 EB  
OFF-RAMP

1-3" NMC  
1-20C/14  
1-2C/12  
2-WAVETRONIX  
RADAR WIRING (6C/14)  
1-1C/8 E.G.C.

1-WAVETRONIX RADAR WIRING  
(6C/14)

1-2C/12  
1-1C/12 E.G.C.  
(GROUND TO  
POLE BASE (TYP.))

1-1.25" NMC  
1-1C/8 E.G.C.

1-5C/14  
RD2  
1-5C/14

1-7C/14  
RD2  
1-7C/14

22  
21  
51

46'

1-7C/14  
2-5C/14  
1-WAVETRONIX  
WIRING (6C/14)

FOURCHE DAM PIKE

1-WAVETRONIX RADAR WIRING  
(6C/14)

1-5C/14  
RD5  
1-5C/14

82  
RD5  
82

81  
RD5  
81

42'

2-5C/14  
1-WAVETRONIX  
WIRING (6C/14)

1-1.25" NMC  
1-1C/8 E.G.C.

1-2C/12  
1-1C/12 E.G.C.  
(GROUND TO  
POLE BASE (TYP.))

1-WAVETRONIX RADAR WIRING  
(6C/14)

1-3" NMC  
1-20C/14  
1-2C/12  
2-WAVETRONIX  
RADAR WIRING (6C/14)  
1-1C/8 E.G.C.

1-2" NMC  
FIBER OPTIC CABLE 72F

TYPE 2 HD  
PULL BOX

1-2" NMC  
1-2C/6  
1-1C/8 E.G.C.  
(SEE DETAIL FOR SERVICE  
POINT CONNECTION)

1-2" NMC  
RR PREEMPTION CABLE  
1-1C/8 E.G.C.

TYPE 2 HD  
PULL BOX W/  
SPlice ENCLOSURE

1-2" NMC  
1-2C/6  
1-1C/8 E.G.C.  
(SEE DETAIL FOR SERVICE  
POINT CONNECTION)

1-2" NMC  
RR PREEMPTION CABLE  
1-1C/8 E.G.C.

1-2" NMC  
FIBER OPTIC CABLE 72F  
FOR COMMUNICATION  
TO CONTROLLER TO BE LOCATED  
ON SOUTHWEST CORNER OF  
FOURCHE DAM PIKE AND LINDSEY ROAD.

I-440 EB ON-RAMP

1-2" NMC  
1-2C/6  
1-1C/8 E.G.C.  
(SEE DETAIL FOR SERVICE  
POINT CONNECTION)

1-2" NMC  
RR PREEMPTION CABLE  
1-1C/8 E.G.C.

1-2" NMC  
FIBER OPTIC CABLE 72F

TYPE 2 HD  
PULL BOX W/  
SPlice ENCLOSURE

1-2" NMC  
1-2C/6  
1-1C/8 E.G.C.  
(SEE DETAIL FOR SERVICE  
POINT CONNECTION)

1-2" NMC  
RR PREEMPTION CABLE  
1-1C/8 E.G.C.

TYPE 2 HD  
PULL BOX W/  
SPlice ENCLOSURE

1-2" NMC  
1-2C/6  
1-1C/8 E.G.C.  
(SEE DETAIL FOR SERVICE  
POINT CONNECTION)

1-2" NMC  
RR PREEMPTION CABLE  
1-1C/8 E.G.C.

TYPE 2 HD  
PULL BOX W/  
SPlice ENCLOSURE

1-2" NMC  
1-2C/6  
1-1C/8 E.G.C.  
(SEE DETAIL FOR SERVICE  
POINT CONNECTION)

1-2" NMC  
RR PREEMPTION CABLE  
1-1C/8 E.G.C.

TYPE 2 HD  
PULL BOX W/  
SPlice ENCLOSURE

1-2" NMC  
1-2C/6  
1-1C/8 E.G.C.  
(SEE DETAIL FOR SERVICE  
POINT CONNECTION)

1-2" NMC  
RR PREEMPTION CABLE  
1-1C/8 E.G.C.

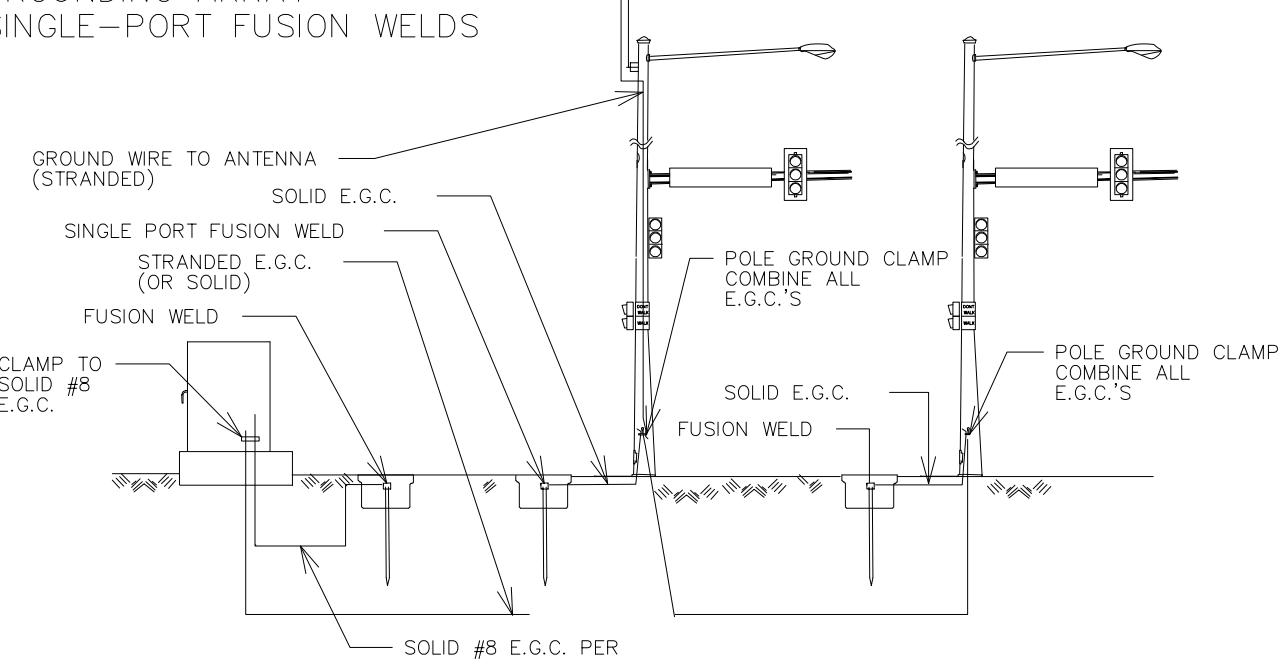
TYPE 2 HD  
PULL BOX W/  
SPlice ENCLOSURE

1-2" NMC  
1-2C/6  
1-1C/8 E.G.C.  
(SEE DETAIL FOR SERVICE  
POINT CONNECTION)

1-2" NMC  
RR PREEMPTION CABLE  
1-1C/8 E.G.C.

1-2" NMC  
FIBER OPTIC CABLE 72F  
FOR COMMUNICATION  
TO CONTROLLER TO BE LOCATED  
ON SE CORNER OF  
FOURCHE DAM PIKE AND  
RAILROAD TRACK

## GROUNDING ARRAY SINGLE-PORT FUSION WELDS



## TYPICAL WIRING INCLUDES:

1. SEPARATE 5C/14 FROM EACH 3-SEC SIGNAL HEAD TO BASE OF POLE.
2. SEPARATE 7C/14 FROM EACH 4-SEC SIGNAL HEAD TO BASE OF POLE.
3. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA ON CABINET.
4. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.
5. ONE SEPARATE 1-5C IS RUN TO POLE C AND D FOR THE PEDESTRIAN PUSH BUTTON.

1-1C/8 E.G.C. SHOWN SEPARATELY FROM  
CONTROLLER OR POLE TO NEAREST  
PULL BOX IS INCLUDED IN ITEM NO.  
701 OR 714, RESPECTIVELY.

90% SUBMITTAL

REVISIONS DATE

CITY OF LITTLE ROCK, ARKANSAS  
FOURCHE DAM PIKE AND I-440 RAMPS

TRAFFIC SIGNAL WIRING PLAN

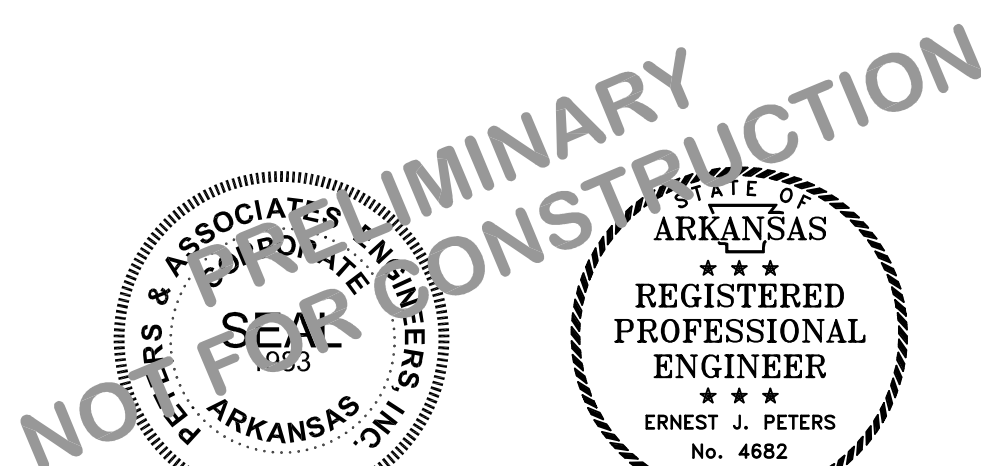
FOURCHE DAM PIKE AND I-440 EASTBOUND RAMP

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201



PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS  
SIGNED AND DATED. CONTRACTORS ARE CAUTIONED AGAINST  
ORDERING EQUIPMENT BASED ON PRELIMINARY PLANS.

9-1-2020

DRAWN BY  
RMT  
DESIGNED  
EJP  
CHECKED  
EJP  
DATE  
9-1-2020

SCALE  
1"=20'

PROJECT NO.  
P2025 (P&A#)  
19800106 (CTA#)

SHEET NO.  
T-09

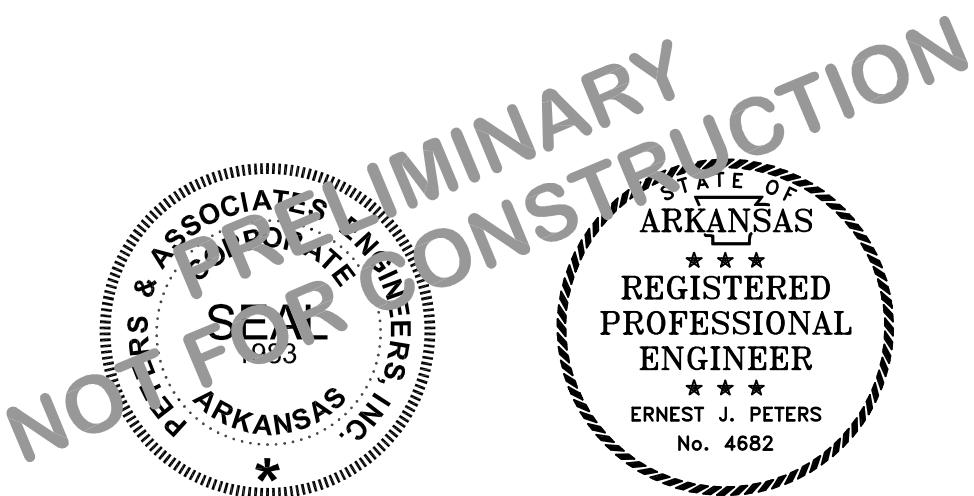


90% SUBMITTAL

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS	TRAFFIC SIGNAL CHARTS
FOURCHE DAM PIKE AND I-440 RAMPS	FOURCHE DAM PIKE AND I-440 EASTBOUND RAMP

DEPARTMENT OF PUBLIC WORKS	LITTLE ROCK, ARKANSAS 72201
CIVIL ENGINEERING	
701 W. MARKHAM	

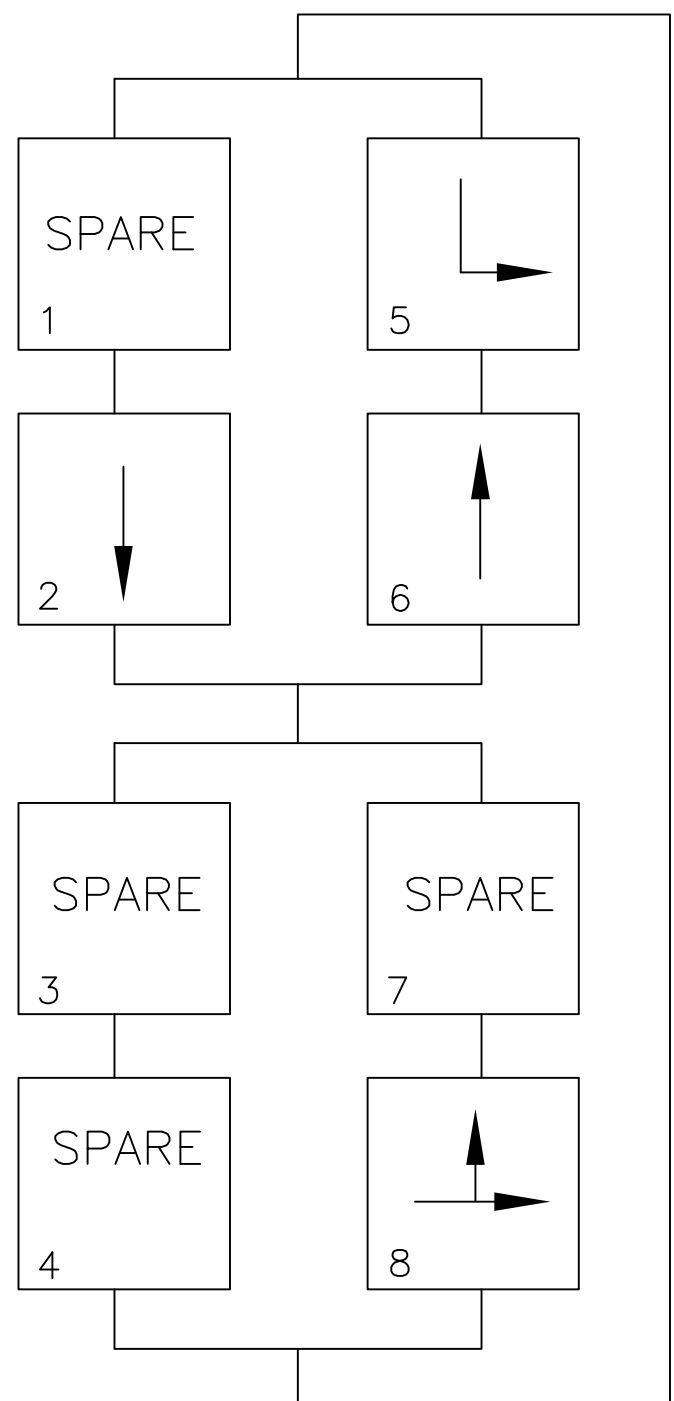


PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS SIGNED AND DATED. CONTRACTORS ARE CAUTIONED AGAINST ORDERING EQUIPMENT BASED ON PRELIMINARY PLANS.

9-1-2020

DRAWN BY	RMT
DESIGNED	EJP
CHECKED	EJP
DATE	9-1-2020
SCALE	1"=20'
PROJECT NO.	P2025 (P&A#)
19800106 (CTA#)	
SHEET NO.	T-10

## PHASING DIAGRAM



## INTERVAL CHART

SIGNAL FACES	FDP AND I-440 EB RAMPS						FLASH SEQ.
	2+5	CLR.	2+6	CLR.	8	CLR.	
21&22	G	**	G	**	R	R	R
51	←G	***	←Y	***	←R	←R	←R
61&62	R	R	G	Y	R	R	R
81&82	R	R	R	R	G	Y	R

- \* 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

## DETECTOR CHART

RADAR DETECTOR SYSTEM DESCRIPTION FOURCHE DAM PIKE AND I-440 EASTBOUND RAMP DETECTOR ASSIGNMENTS CHART		
DET. ZONE ID #	DETECTOR #	ZONE LOCATION
2A & 2B	RD2	SB ADVANCE
2C & 2D	RD2	SB NEAR
2E & 2F	RD5	SB STOP LINE
5A	RD2	SB LEFT TURN FAR
5B	RD5	SB LEFT TURN STOP LINE
6A & B	RD6	NB ADVANCE
6C & D	RD6	NB NEAR
6E & F	RD1	NB STOP LINE
8A	RD8	EB FAR
8B	RD8	EB STOP LINE



RR

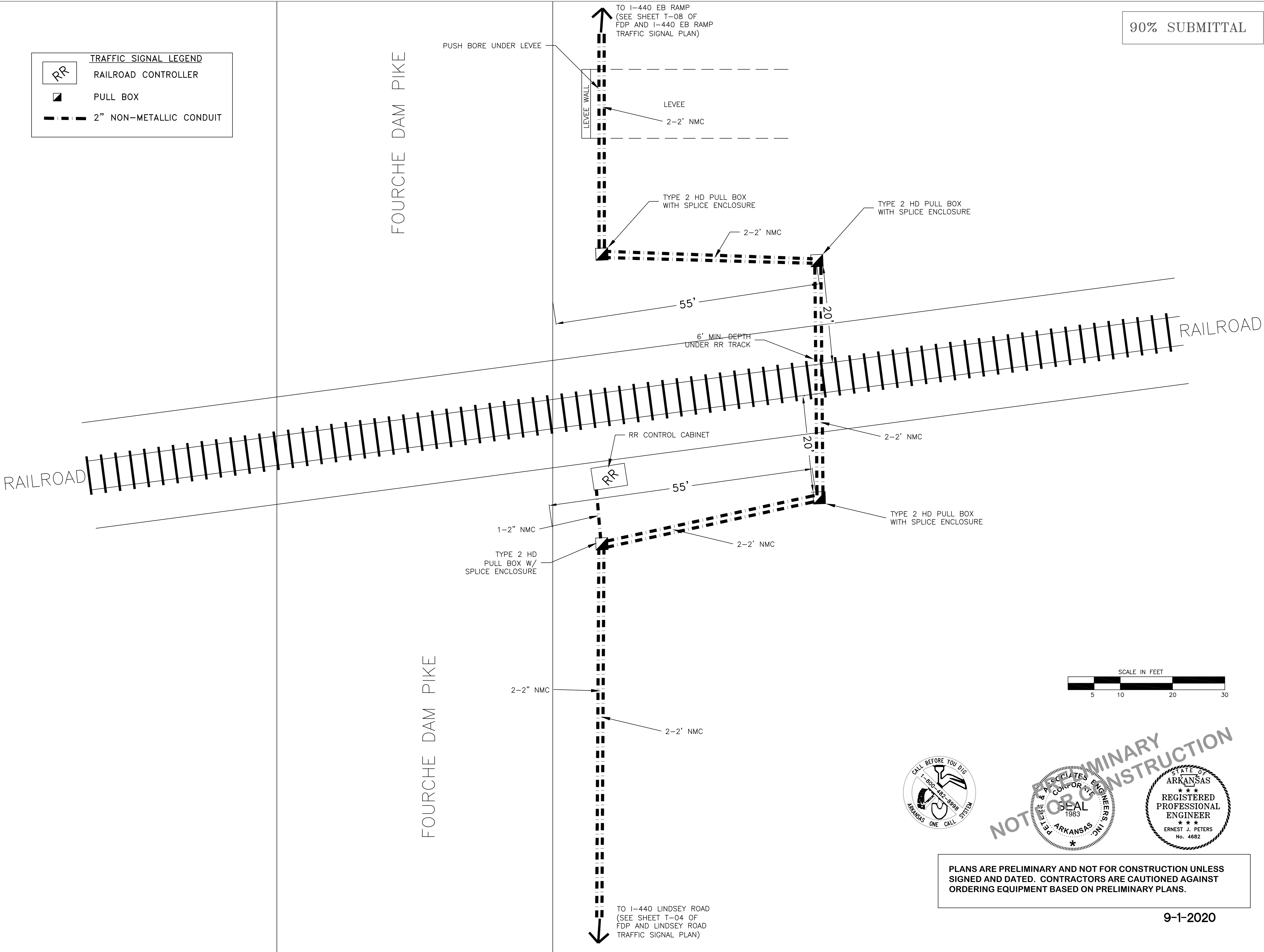
RAILROAD CONTROLLER

■

PULL BOX

---

2" NON-METALLIC CONDUIT



90% SUBMITTAL

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS

FOURCHE DAM PIKE AND I-440 RAMPS

CONDUIT DETAILS AT RAILROAD AREA

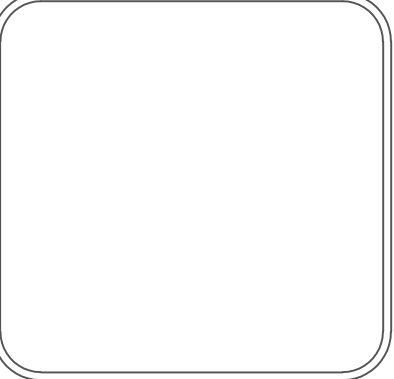
FOURCHE DAM PIKE AT RAILROAD

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201



DRAWN BY

RMT

DESIGNED

EJP

CHECKED

EJP

DATE

9-1-2020

SCALE

1"=10'

PROJECT NO.

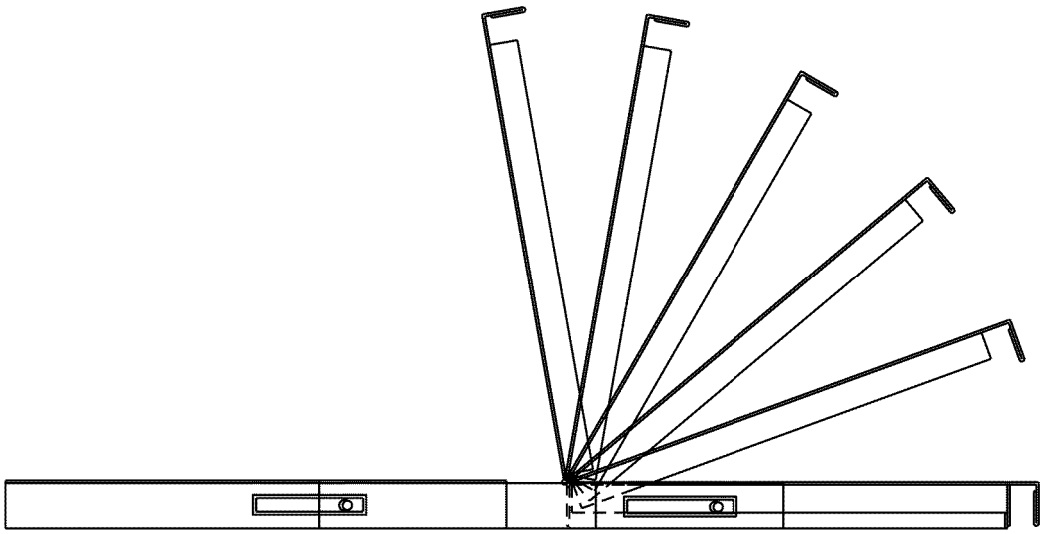
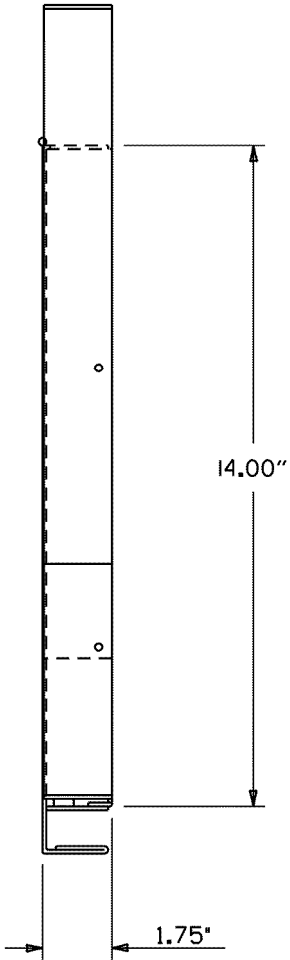
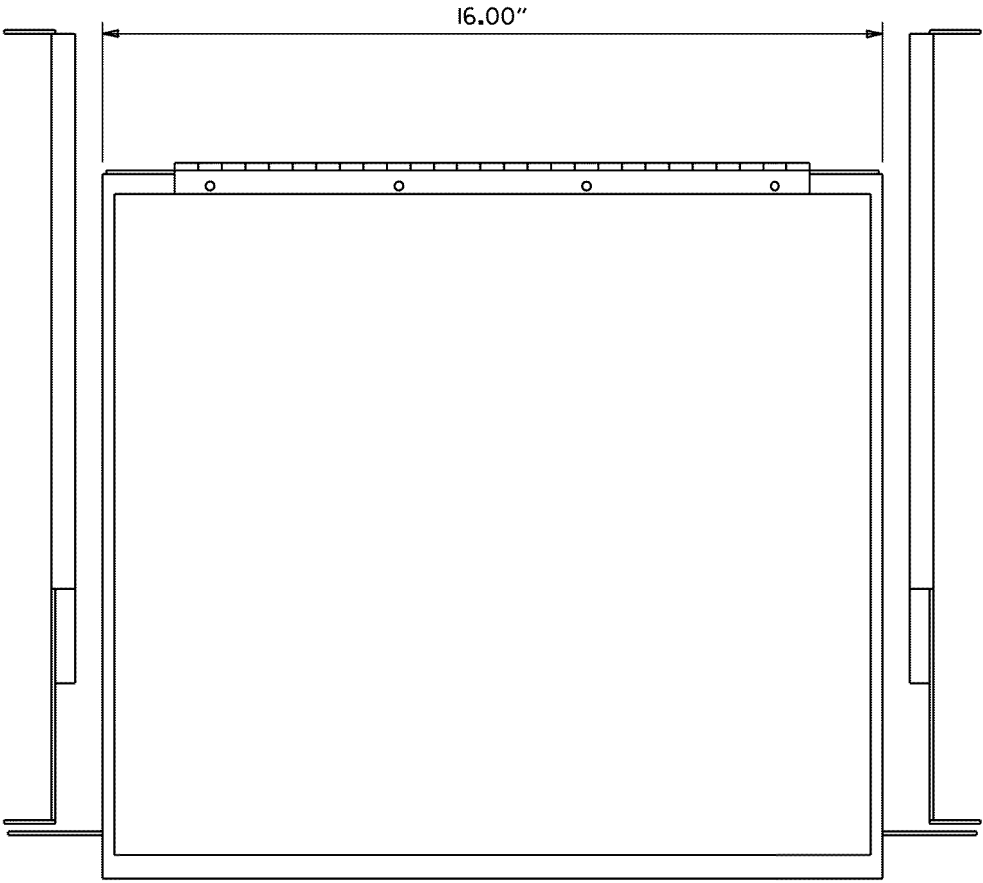
P2025 (P&A#)

19800106 (CTA#)

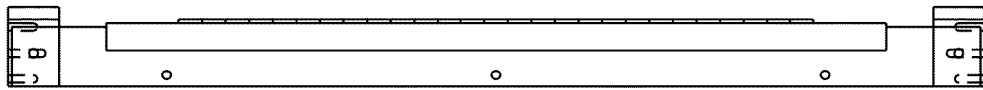
SHEET NO.

T-11

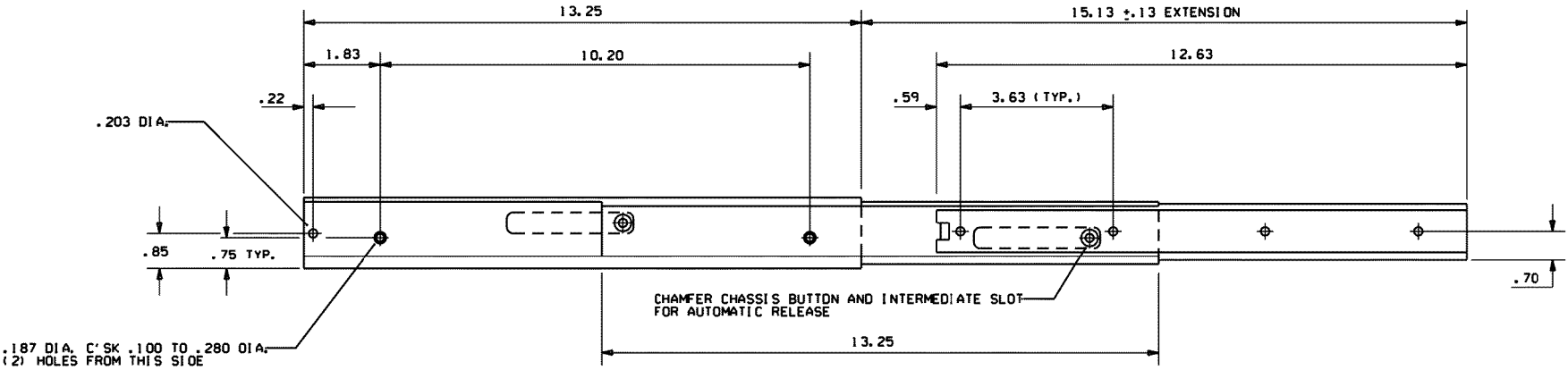
DRAWER PLAN VIEW



NOTES:  
1. RIGHT HAND SLIDE SHOWN, LEFT SLIDE OPPOSITE.  
2. GENERAL DEVICES (CC3DD2-99-D1D2) OR EQUAL AND CONTAINS (1) RIGHT HAND SLIDE ASSEMBLY, (1) LEFT HAND SLIDE ASSEMBLY.  
3. ALL HARDWARE NECESSARY TO FASTEN SLIDE ASSEMBLY TO UNDERSIDE OF CONTROLLER SHELF SHALL BE INCLUDED.



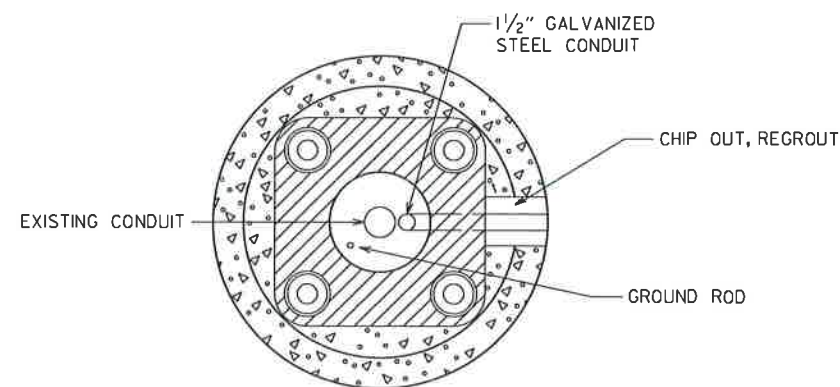
FRONT VIEW



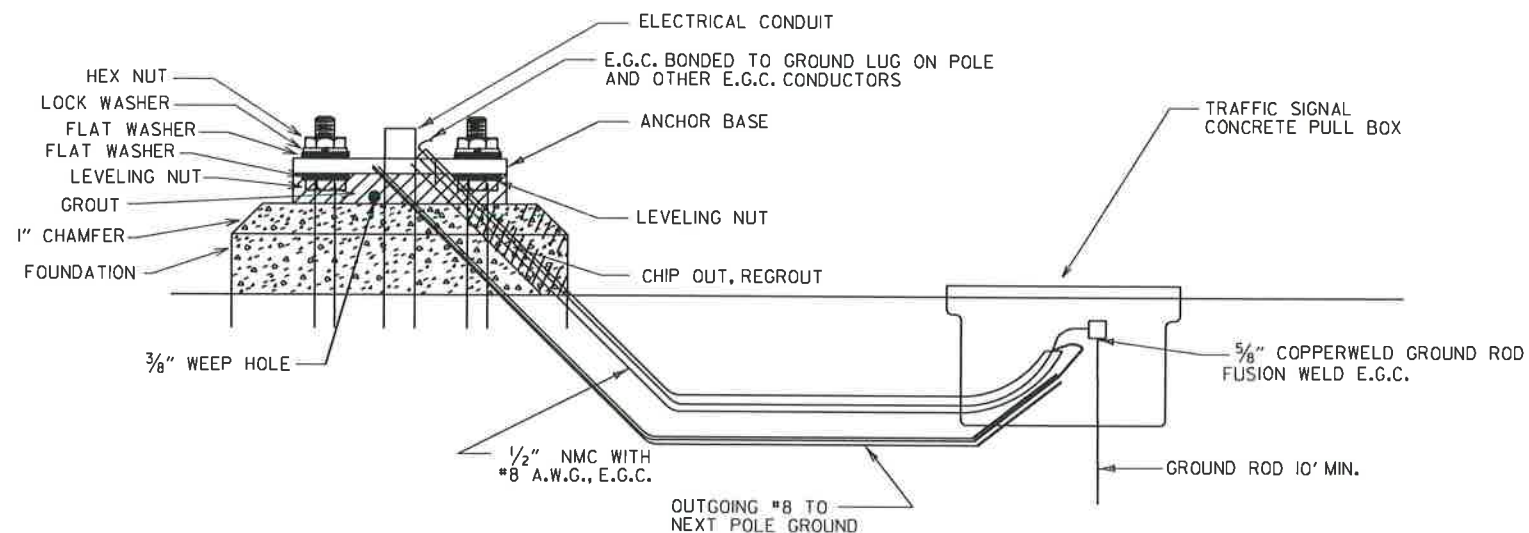
RIGHT SIDE ASSEMBLY

			ARKANSAS STATE HIGHWAY COMMISSION
			CONTROLLER CABINET UTILITY DRAWER
9-12-13	ISSUED AS STANDARD DRAWING		
6-15-05	ISSUED		
DATE	REVISION	DATE FILED	STANDARD DRAWING SD-5

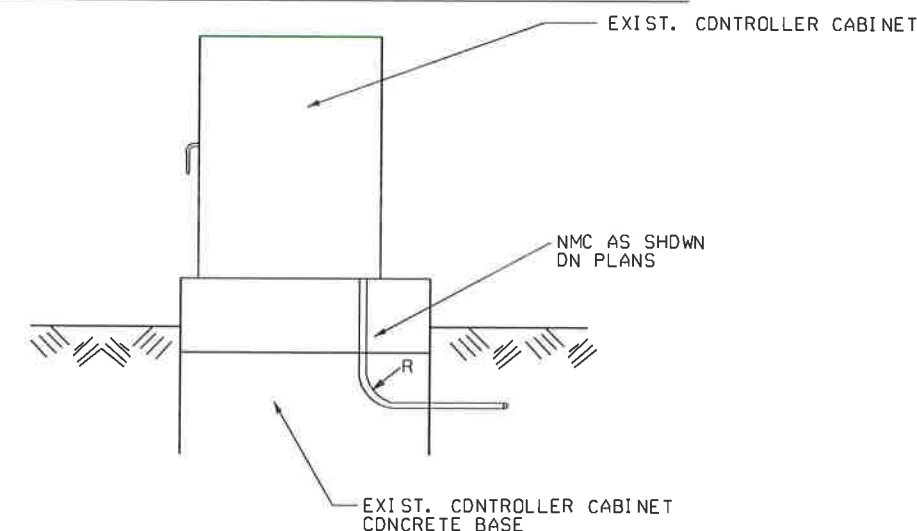
# CONDUIT ENTRY TO EXISTING POLE BASE



# ANCHOR BASE

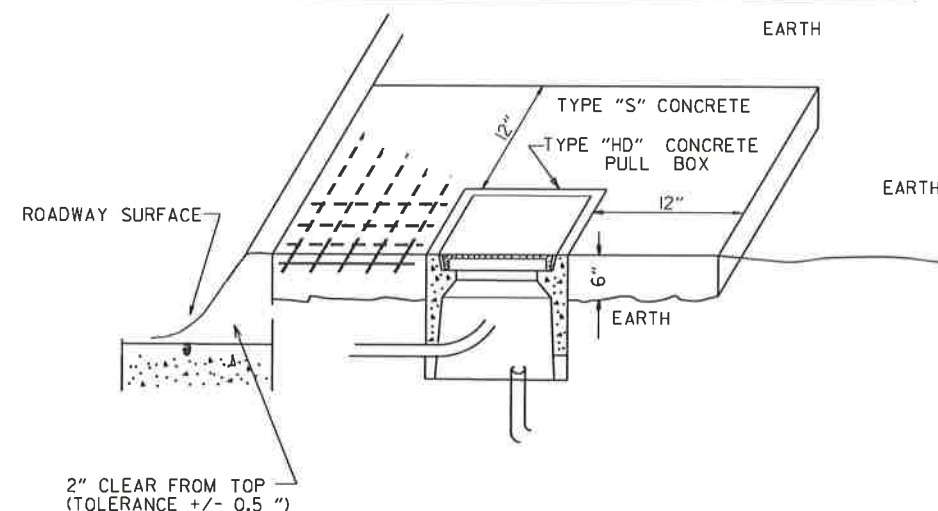


# CONDUIT ENTRY TO EXISTING CONTROLLER CABINET

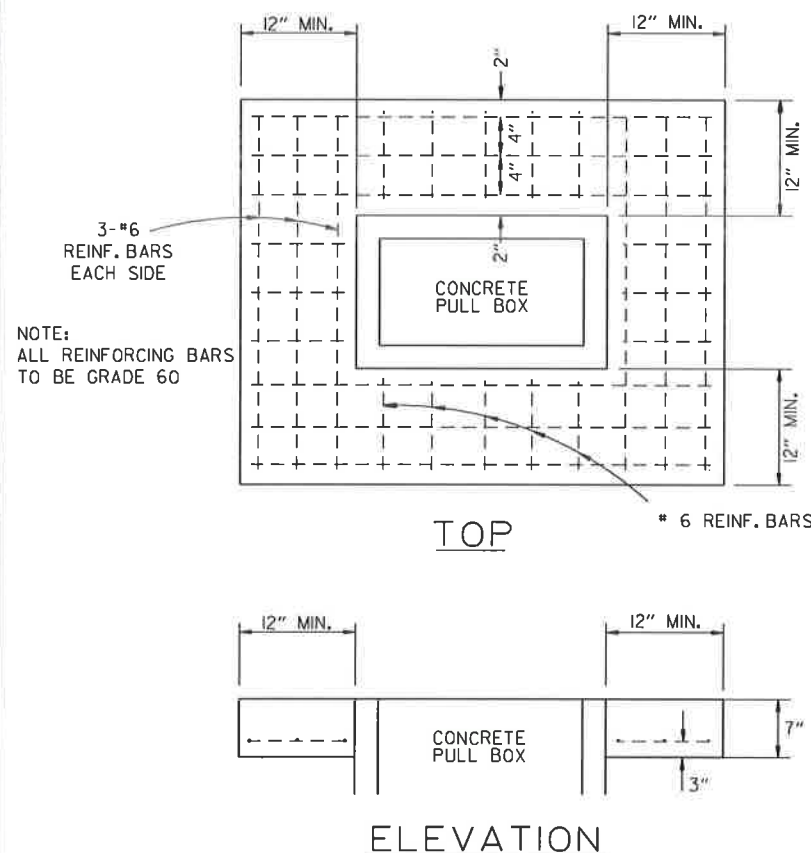


NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.

# TYPE "HD" CONCRETE PULL BOX DETAIL



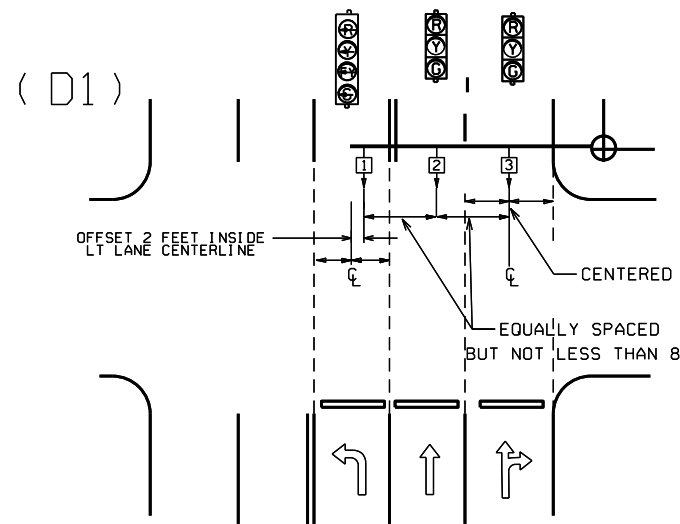
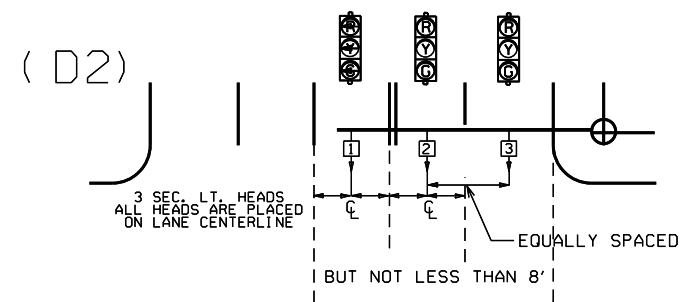
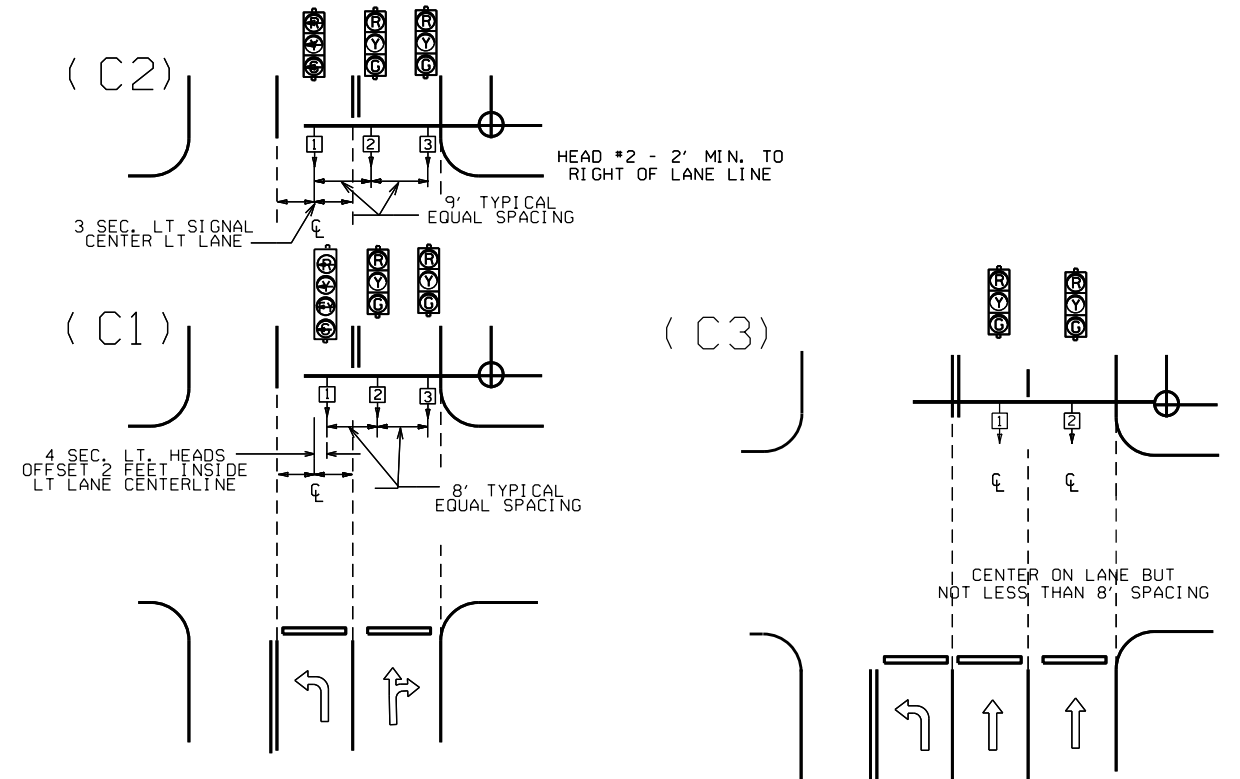
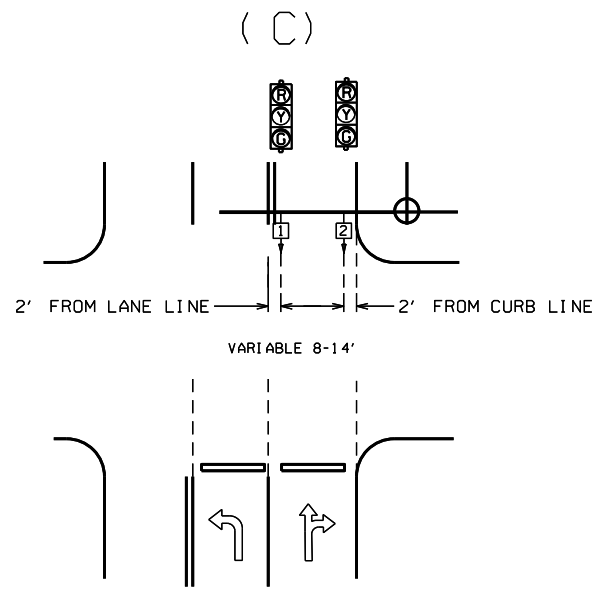
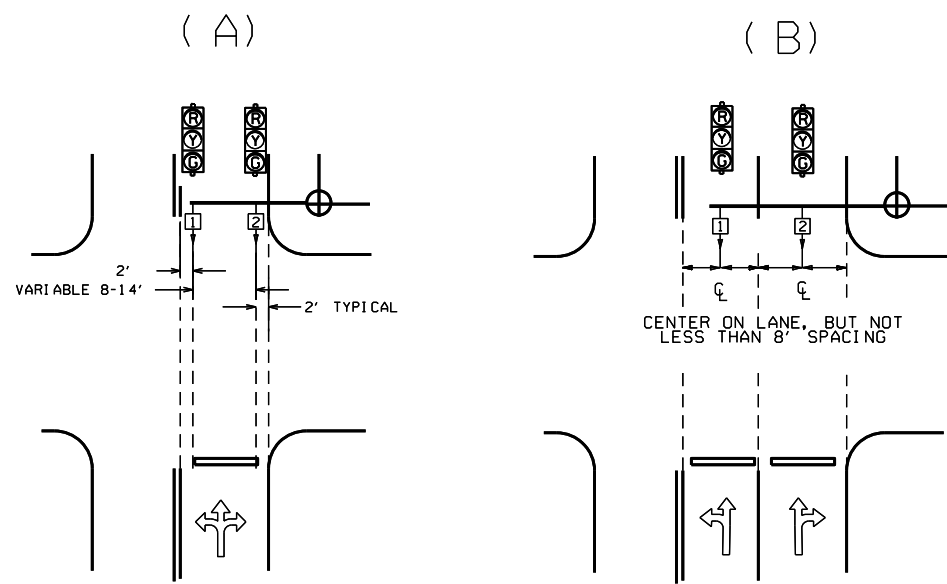
NOTE:  
ALL TYPE 1 AND TYPE 2 HD CONCRETE PULL BOXES ARE INSTALLED WITH AN APRON OF CONCRETE 12" WIDE AND 7" IN DEPTH. ALL PAYMENT SHALL BE INCLUDED IN THE PRICE OF THE TYPE HD CONCRETE PULL BOX. THE CONCRETE PULL BOX SHALL BE INSTALLED FLUSH TO SURROUNDING GRADE UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. THE CONCRETE SHALL BE CLASS "S". THREE #6 REINFORCING BARS IN THE APRON ON ALL SIDES OF THE CONCRETE PULL BOX IS REQUIRED IN CONCRETE.



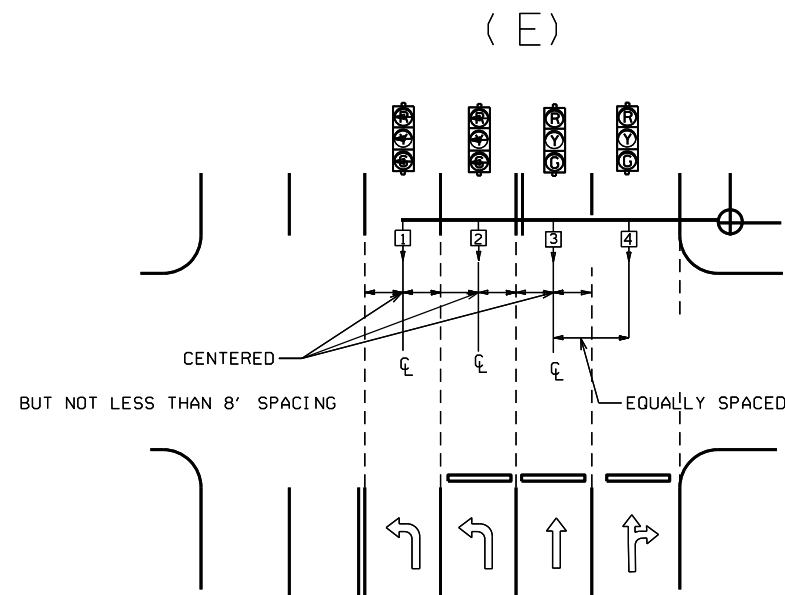
11-16-17	REVISED NOTES	
09-02-15	REVISED PULL BOX DEPTH	
09-12-13	ISSUED AS STANDARD DRAWING	
05-21-09	REVISED GROUNDING	
07-31-08	ADDED & REVISED CONDUIT ENTRY	
06-23-04	REVISED CLEARANCE AT CURB ENTRY	
01-04-02	ADDED REINFORCING TO BOX APRON	
07-02-01	REVISED	
12-27-99	REVISED NOTES	
11-18-98	ISSUED	
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION  
HEAVY DUTY PULL BOX  
STANDARD DRAWING SD-6





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



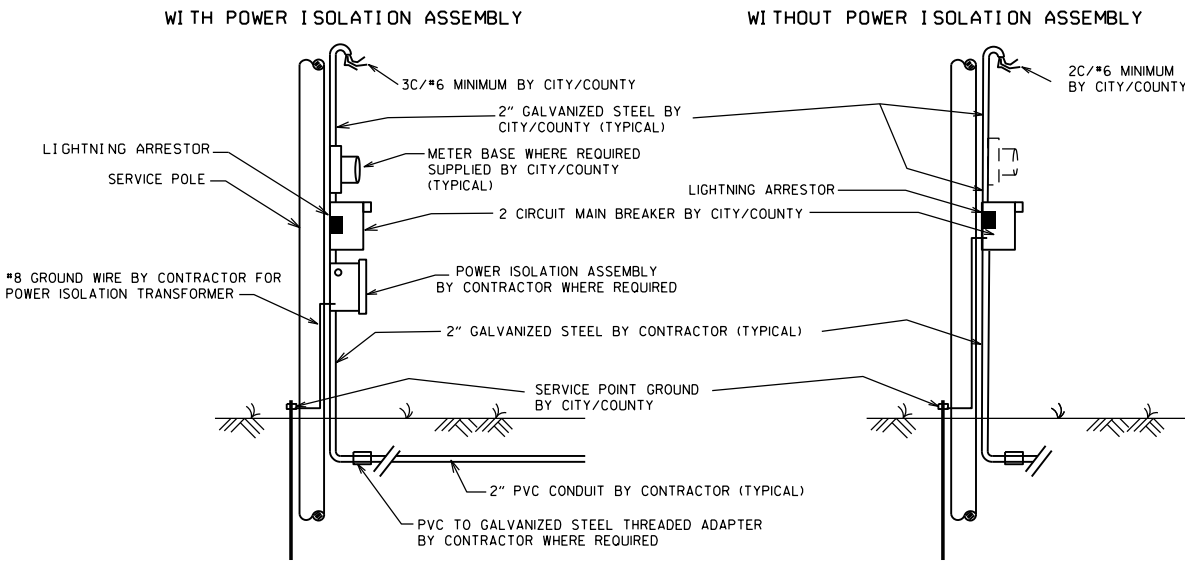
#### GENERAL NOTES:

- FOUR SECTION "PROTECTED/PERMISSIVE" LEFT TURN HEADS SHOULD BE PLACED A MINIMUM OF TWO (2') FEET TO THE RIGHT OF THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.
- THREE SECTION "PROTECTED" LEFT TURN HEADS SHOULD BE PLACED ON THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.
- WHEN IT IS NECESSARY TO PLACE POLES OTHER THAN AS SHOWN ON PLAN SHEET(S) RESULTING IN MAST ARM EXTENDING MORE THAN TWO FEET PAST (TO THE LEFT OF) THE CENTERLINE OF THE APPROACHING LEFT TURN LANE, MAST ARM SHALL BE CUT TO APPROPRIATE LENGTH AS DETERMINED BY THE ENGINEER, AND A NEW END CAP PROVIDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THIS PRIOR TO INSTALLING THE MAST ARM IF ADDITIONAL COMPENSATION IS REQUIRED.
- SIGNAL HEAD SPACING SHALL, IN NO CASE, BE LESS THAN EIGHT (8') FEET BETWEEN HEADS ON CENTER, MEASURED HORIZONTALLY PERPENDICULAR TO THE APPROACH.
- ALL SIGNAL HEADS SHOWN ON THIS DETAIL SHEET SHALL BE LOCATED ACCORDING TO THE DIMENSIONS SHOWN IN RELATION TO THE APPROACH SIDE OF THE INTERSECTION.
- MAXIMUM MOUNTING HEIGHT OF SIGNAL FACES LOCATED BETWEEN 40 FEET AND 53 FEET FROM STOP BAR SHALL BE IN ACCORDANCE WITH FIGURE 4D-5 OF 2009 MUTCD.

℄ = CENTER OF LANE FROM APPROACH SIDE

			ARKANSAS STATE HIGHWAY COMMISSION
12-8-16	REVISED NOTE 6		SIGNAL HEAD PLACEMENT
9-12-13	ISSUED AS STANDARD DRAWING		
3-11-10	2009 MUTCD		
12-9-99	ISSUED		STANDARD DRAWING SD-8
DATE	REVISION	DATE FILM	

MAIN BREAKER NOT NEAR CONTROLLER CABINET  
SECONDARY REQUIRED



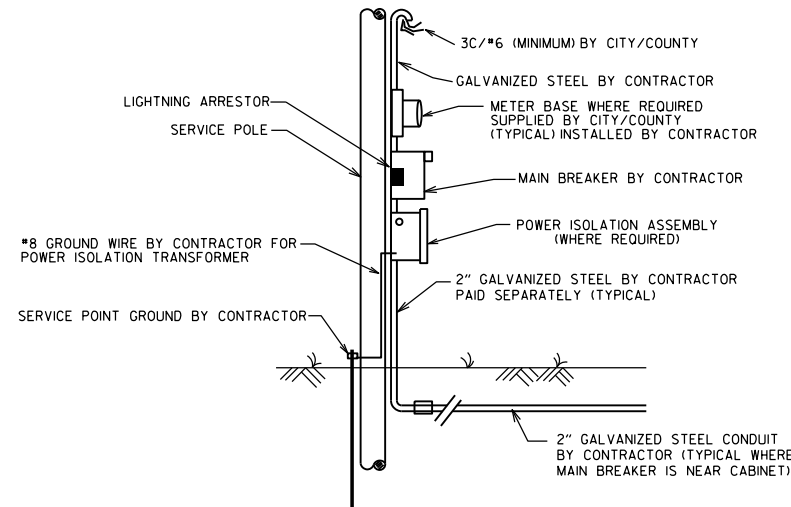
NOTES TO CONTRACTOR AND AGENCY RESPONSIBLE FOR MAINTENANCE OF THE INTERSECTION (CITY/COUNTY):

ELECTRICAL SERVICE TYPICALLY FALLS INTO TWO CATEGORIES:  
MAIN BREAKER NEAR CONTROLLER CABINET; AND MAIN BREAKER NOT NEAR CONTROLLER CABINET. THE CONTRACTOR'S AND THE CITY'S/COUNTY'S RESPONSIBILITY VARIES ACCORDINGLY AS INDICATED ON THESE DETAILS.

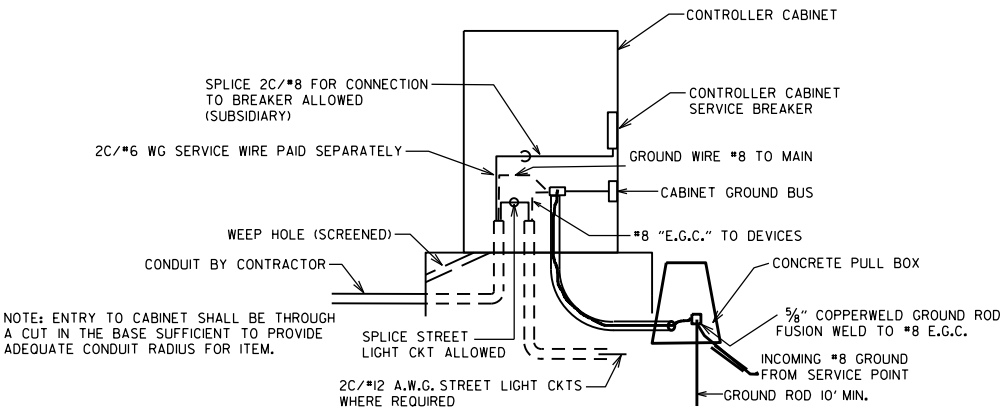
ALL SITUATIONS:  
ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY TO A SERVICE POLE WITH EXTERNAL RAINLIGHT BREAKER (MAIN BREAKER) AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. SERVICE POINT INCLUDES GALVANIZED STEEL CONDUIT TO A POINT 18" BELOW GROUND LINE, TWO CIRCUIT MAIN BREAKER, LIGHTNING ARRESTOR, POWER ISOLATION ASSEMBLY WHERE REQUIRED, METER LOOP IF REQUIRED BY LOCAL UTILITY COMPANY, ELECTRICAL CONDUCTORS AND WEATHERHEAD. WHERE STREET LIGHTING IS INCLUDED AS PART OF SIGNAL INSTALLATION STREET LIGHTING CIRCUIT (2C/#12 A.W.G. UF RATED, TYPICAL) SHALL BE KEPT SEPARATE FROM THE CIRCUIT SERVING TRAFFIC SIGNAL. SERVICE WIRE AND WIRING FROM THE CONTROLLER TO MAIN BREAKER IS PROVIDED BY THE CONTRACTOR AS A PART OF THIS CONTRACT. WIRE AND WIRING FROM MAIN BREAKER, AND CONNECTION TO THE UTILITY IS THE RESPONSIBILITY OF THE CITY/COUNTY.

MAIN BREAKER NOT NEAR CONTROLLER CABINET:  
THE MAIN BREAKER ASSEMBLY, GALVANIZED STEEL CONDUIT, WEATHERHEAD AND WIRE ABOVE MAIN BREAKER AND CONNECTION TO THE UTILITY SHALL BE PROVIDED BY CITY/COUNTY. CONTRACTOR SHALL PROVIDE AS PART OF CONTRACT SECONDARY BREAKER, CONDUIT, WIRE AND WIRING TO THE MAIN BREAKER.

MAIN BREAKER NEAR CONTROLLER CABINET:  
ALL COMPONENTS OF THE SERVICE POINT WITH THE EXCEPTION OF THE WIRE AND WIRING ABOVE THE MAIN BREAKER IS FURNISHED AND INSTALLED BY THE CONTRACTOR. WIRING FROM MAIN BREAKER INCLUDING CONNECTION TO THE UTILITY, IS THE RESPONSIBILITY OF THE CITY/COUNTY. IF METER LOOP IS REQUIRED, METER BASE AND HARDWARE IS PROVIDED BY THE CITY/COUNTY AND INSTALLED BY THE CONTRACTOR.

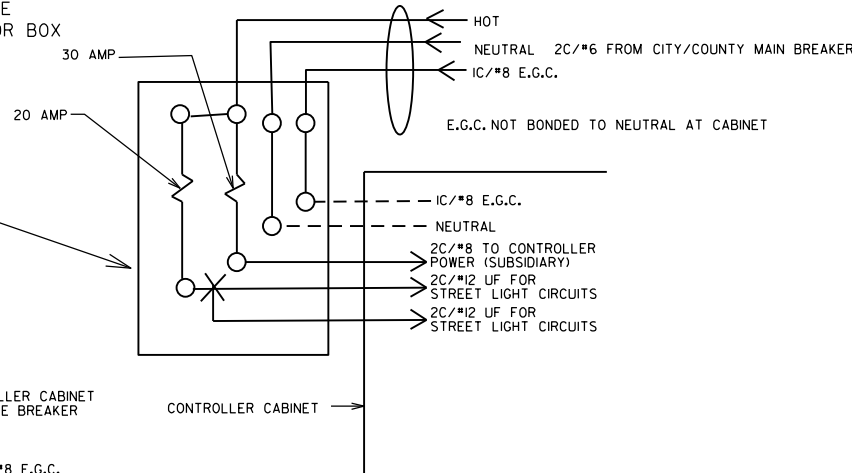
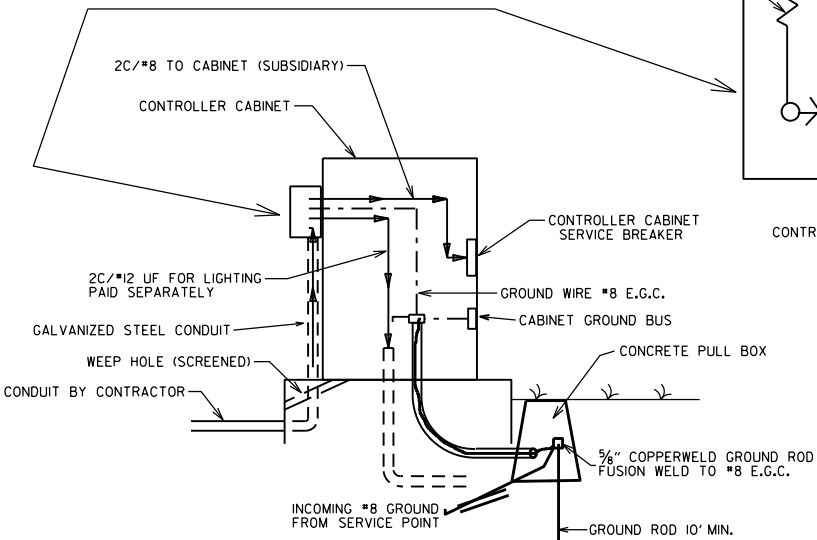


MAIN BREAKER NEAR CONTROLLER CABINET  
SECONDARY NOT REQUIRED



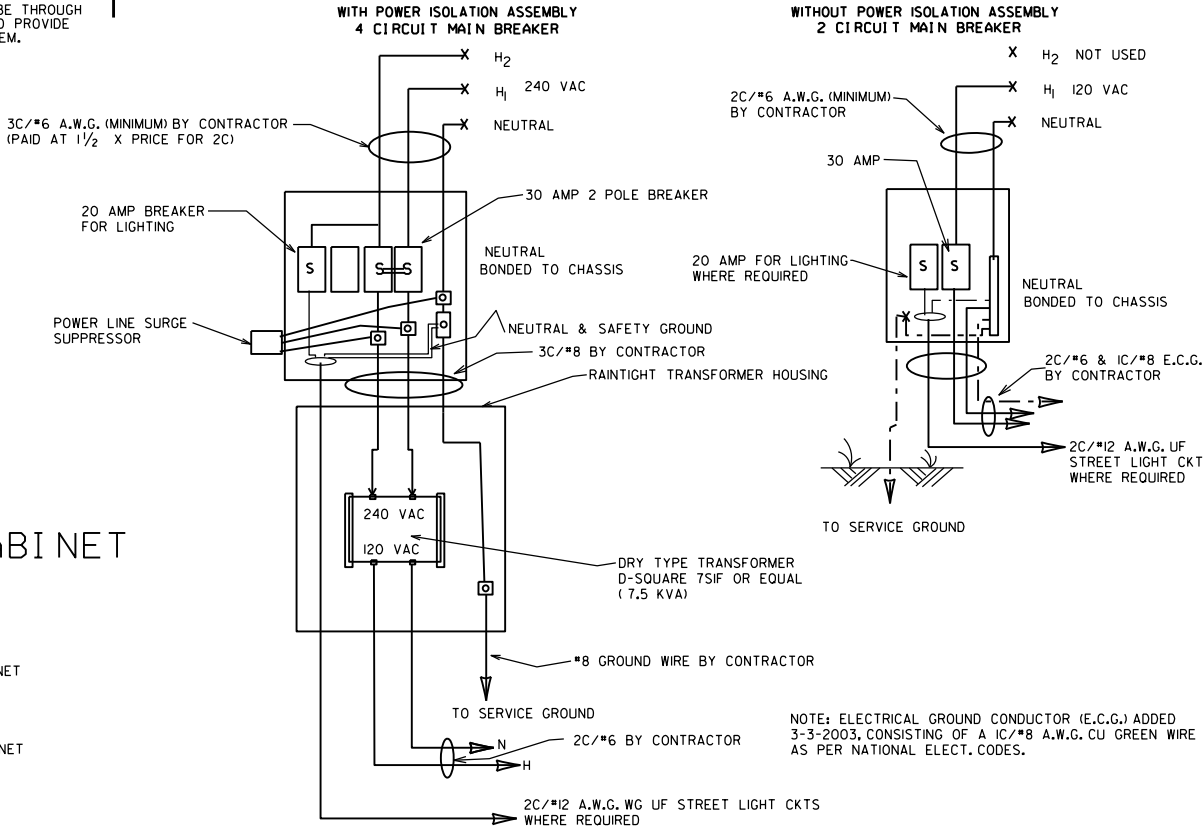
GROUND ROD - A 10' X 5/8" GROUND ROD SHALL BE INSTALLED IN THE CONCRETE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND 1/2" NMC SHALL BE INCLUDED IN ITEM 701. THE CONCRETE PULL BOX AND CONDUCTOR BOX SHALL BE PAID FOR SEPARATELY.

SECONDARY BREAKER BY CONTRACTOR  
(SUBSIDIARY)



MAIN BREAKER WIRING  
(TYPICAL)

SERVICE GROUND IS TYPICALLY TIED TO NEUTRAL AT THE MAIN BREAKER. AS SUCH, CONTROLLER GROUND IS NOT TIED TO NEUTRAL AT SECONDARY BREAKER OR IN CONTROLLER CABINET.



11-07-19	REVISED	
11-16-17	REVISED NOTES	
09-12-13	ISSUED AS STANDARD DRAWING	
04-18-13	ADDED LIGHTNING ARRESTOR	
05-21-09	REVISED GROUNDING	
07-31-08	REVISED GROUNDING	
03-03-03	ADDED EGC NOTE	
09-26-01	REVISED	
12-27-99	REVISED	
07-28-99	REVISED	
02-05-99	ISSUED	
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION

SERVICE POINT

STANDARD DRAWING SD-9

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

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

EACH PEDESTRIAN PUSHBUTTON SHALL HAVE ONE RIO-3E SIGN ATTACHED TO THE POLE ABOVE THE BUTTON. ALL SIGNS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 723 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

ALL SIGN BLANKS SHALL BE CONSTRUCTED OF ALUMINUM ALLOY (ASTM DESIGNATION B-209, ALLOY 5052-H38) WITH THICKNESS OF 0.100 INCH.

GENERAL NOTES:  
1. MAST ARM POLES SHALL BE MOUNTED A MINIMUM OF FOUR (4) FEET BEHIND CURB OR SHOULDER.

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

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

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

USE FATIGUE CATEGORY IIFOR ALL STRUCTURES ON ROUTES WHERE THE SPEED LIMIT IS LESS THAN 65 MPH AND GREATER THAN 45 MPH WITH MAST ARMS LESS THAN 60' AND ON ROUTES WHERE THE SPEED LIMITS OF 45 MPH AND LESS WITH AN MAST ARM OF 60' OR LONGER.

USE FATIGUE CATEGORY IIIFOR ALL STRUCTURES WHERE THE SPEED LIMIT IS 45 MPH AND LESS AND MAST ARMS LESS THAN 60'.

CONSTRUCTION SPECIFICATIONS:  
STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

BASE WIND SPEED: 90 MPH.

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

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

ALL SIGNAL HEADS TO BE ONE WAY, TWELVE (12) INCH AND HAVE FIVE (5) INCH BACK PLATES:

SIGNAL HEADS AT THE END OF MAST ARM - ONE 4 SEC., 85 LB., 14.5 SO. FT., ONE SIGN MOUNTED 3 FEET FROM SIGNAL HEAD (2'-0" X 2'-6" X 20 LB.) REMAINING SIGNAL HEADS SPACED AT 8 FT. (3 SEC., 56 LB., 8.3 SO. FT.);  
DESIGN TO ACCOMMODATE:  
2 SIGNAL HEADS FOR MAST ARMS 10 FT. TO 16 FT.  
3 SIGNAL HEADS FOR MAST ARMS 18 FT. TO 24 FT.  
4 SIGNAL HEADS FOR MAST ARMS OVER 26 FT.

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

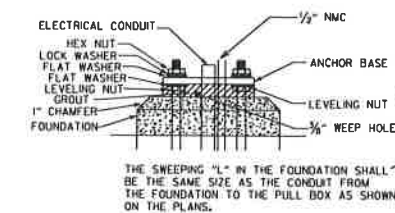
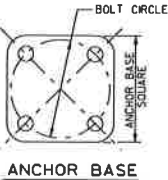
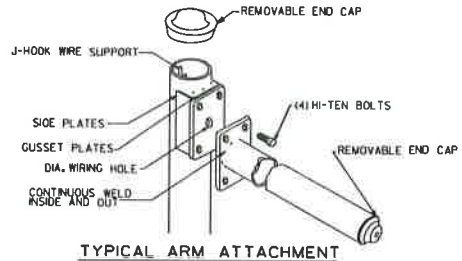
4. POLE/MAST ARM CAP - POLE AND MAST ARM CAPS SHALL BE PROVIDED, FABRICATED OF EITHER STEEL OR CAST ALUMINUM.

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

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

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

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

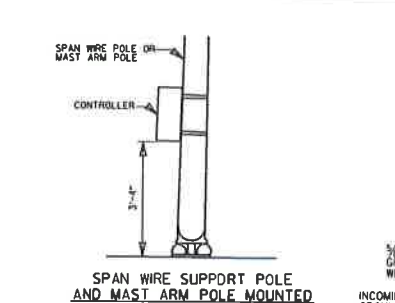


THE SWEEPING "L" IN THE FOUNDATION SHALL BE THE SAME SIZE AS THE CONDUIT FROM THE FOUNDATION TO THE PULL BOX AS SHOWN ON THE PLANS.

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

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

ARM LENGTH	FOUNDATION DIAMETER	DEPTH "L"*	STEEL		
			VERTICAL	HORIZONTAL	O.C.
PEO	30"	7'-0"	12-#7 (6'-6")	10-#4	8.44"
2' TO 12'	30"	10'-6"	12-#7 (10'-0")	15-#4	8.42"
OVER 12' TO 20'	30"	11'-6"	12-#7 (11'-0")	16-#4	8.66"
OVER 20' TO 35'	36"	12'-6"	13-#8 (12'-0")	17-#4	8.88"
OVER 35' TO 50'	36"	13'-6"	13-#8 (13'-0")	19-#4	8.56"
OVER 50' TO 72'	42"	14'-6"	18-#8 (14'-0")	20-#4	8.74"
TWINS TO 20'	30"	16'-0"	12-#6 (15'-6")	22-#4	8.76"
TWINS OVER 20' TO 44'	36"	16'-0"	13-#8 (15'-6")	22-#4	8.76"
TWINS OVER 44' TO 50'	42"	16'-0"	18-#8 (15'-6")	22-#4	8.76"
TWINS OVER 50' TO 72'	42"	16'-6"	18-#8 (16'-0")	23-#4	8.64"



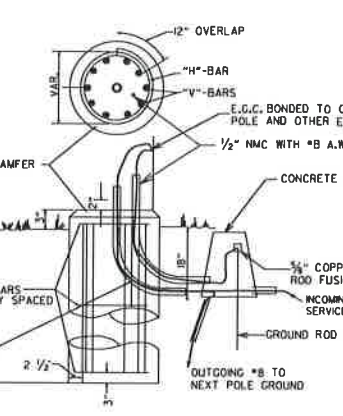
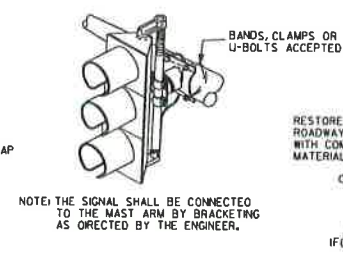
CONCRETE BASE MOUNTED CABINET DETAILS

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

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

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

10. CONCRETE - ALL CONCRETE FOR CONTROLLER CABINET AND POLE FOUNDATIONS SHALL BE CLASS "S" OR GREATER.



RESTORE EXISTING ROADWAY SURFACE WITH COMPATIBLE MATERIAL.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

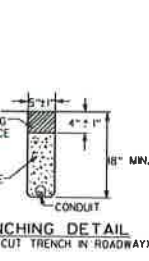
NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.



RESTORE EXISTING ROADWAY SURFACE WITH COMPATIBLE MATERIAL.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

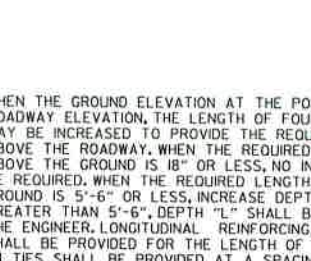
NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.



RESTORE EXISTING ROADWAY SURFACE WITH COMPATIBLE MATERIAL.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

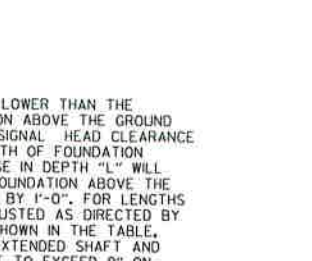
NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.



RESTORE EXISTING ROADWAY SURFACE WITH COMPATIBLE MATERIAL.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

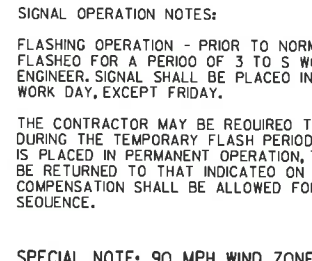
NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.



RESTORE EXISTING ROADWAY SURFACE WITH COMPATIBLE MATERIAL.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

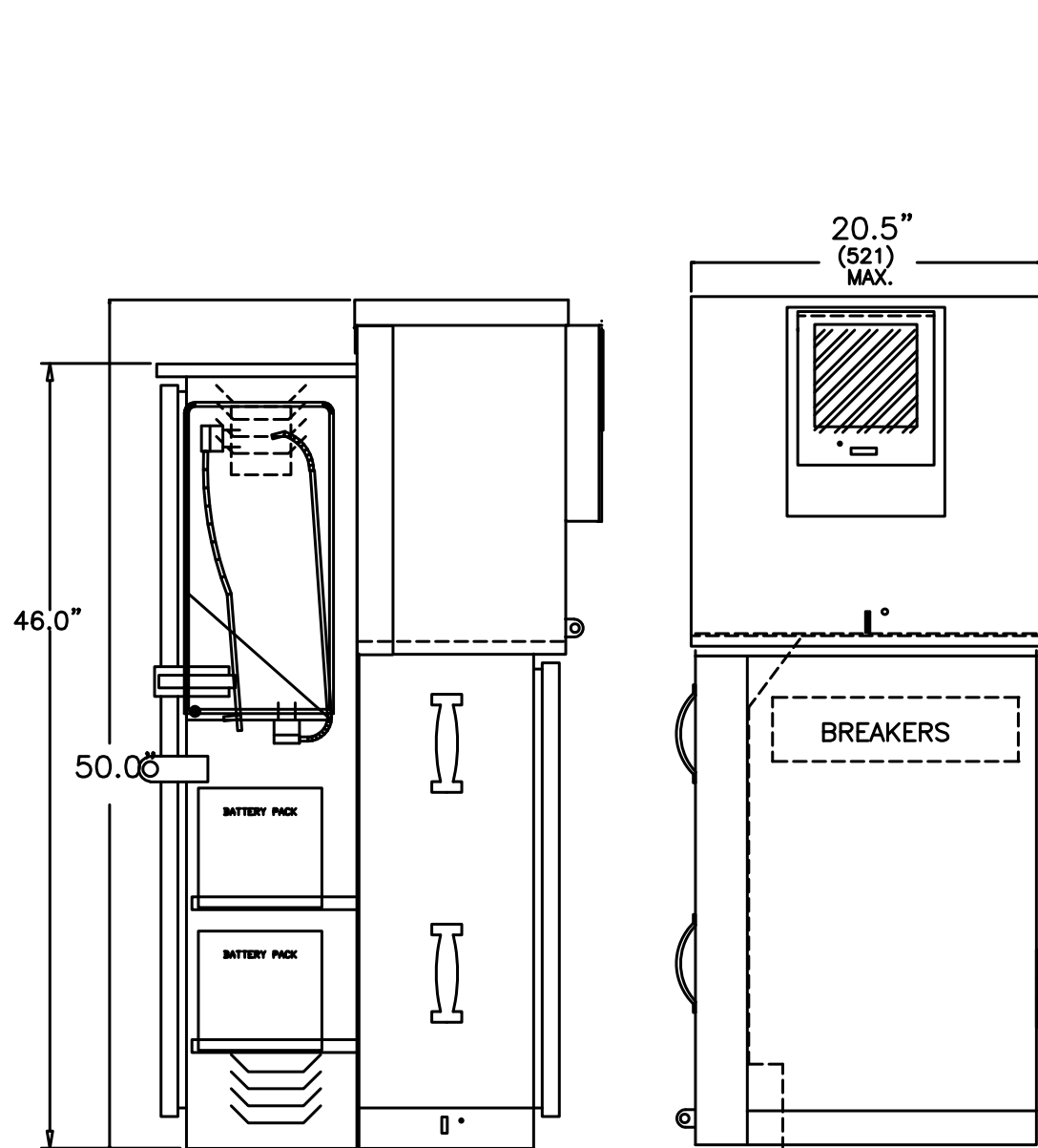
NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

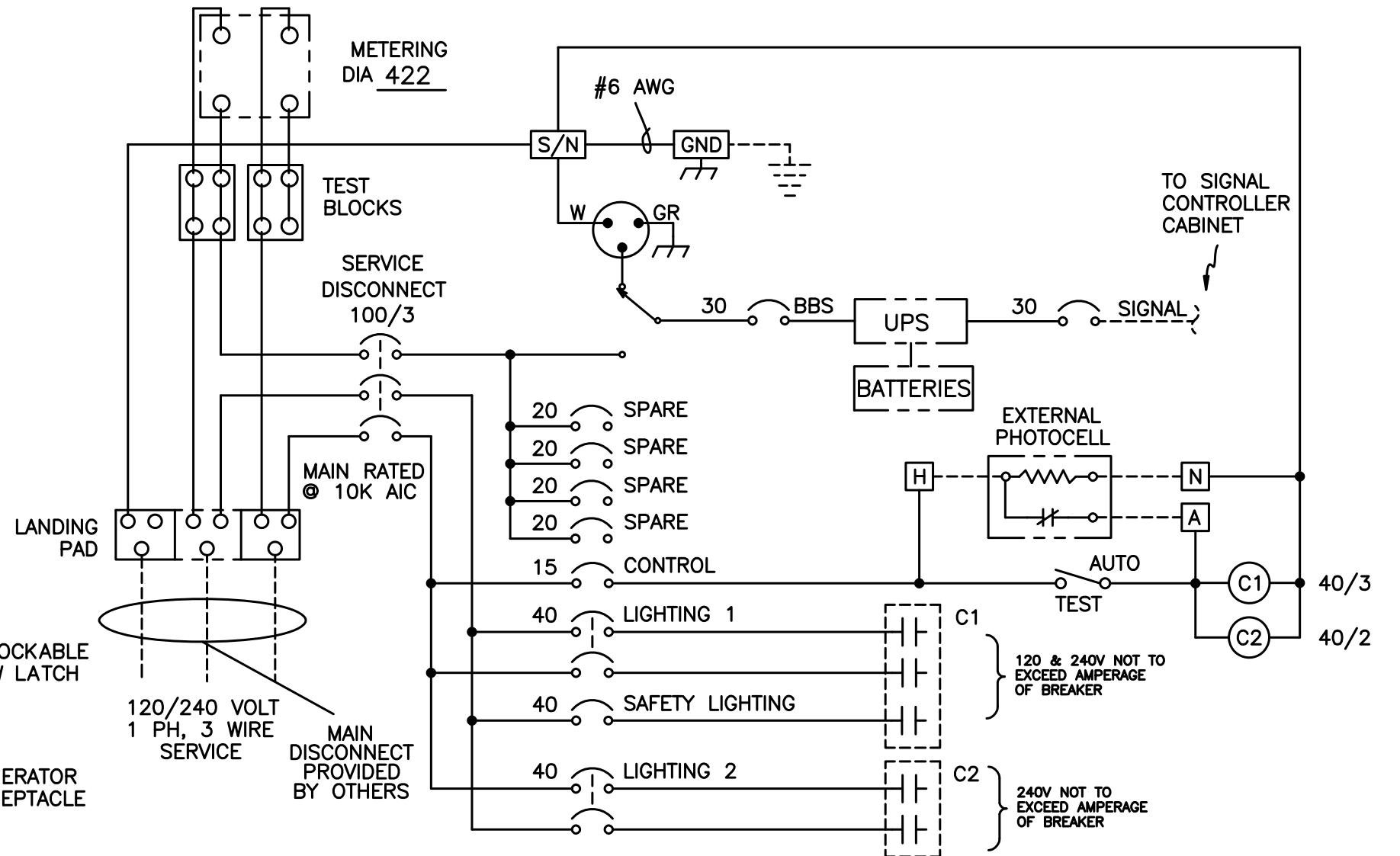
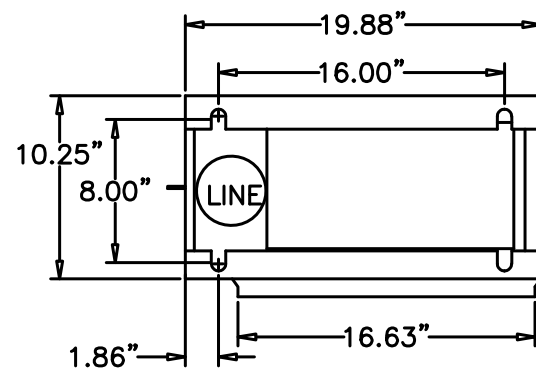
NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST





LEFT SIDE

FRONT VIEW



NOTE: LOAD CURRENT FOR ALL BREAKERS NOT TO EXCEED 80% OF BREAKER AMPERAGE

SERVICE EQUIPMENT WIRING DIAGRAM

**TESCO** TESCO CONTROLS INC.  
919 395-8800  
SACRAMENTO, CA

# T-  
# 27-000

INDUSTRIAL CONTROL PANEL

VOLTAGE	PHASE	WIRES	MAINS AMPERES	HZ
120/240	1	3	100	60

SUITABLE FOR USE ON A CIRCUIT CAPABLE OF DELIVERING NOT MORE THAN

AMPERES	AT	VOLTAGE
10,000	RMS SYM.	240 V

METER SOCKET RATING 100 A. CONT.  
ENCLOSURE TYPE 3R

SUITABLE ONLY FOR USE AS SERVICE EQUIPMENT

### ENCLOSURE CONSTRUCTION NOTES

- EXTERIOR, 1/8" ALUMINUM, AND INTERIOR 14 GA COLD ROLLED STEEL ELECTRICALLY WELDED AND REINFORCED WHERE REQUIRED.
- CONSTRUCTION WILL BE NEMA 3R, RAINLIGHT.
- ALL NUTS, BOLTS AND SCREWS WILL BE STAINLESS STEEL.
- NUTS, BOLTS & SCREWS WILL NOT BE VISIBLE FROM OUTSIDE OF ENCLOSURE.
- NAMEPLATES WILL BE PROVIDED AS REQUIRED.
- CONTROL WIRING WILL BE MARKED AT BOTH ENDS BY PERMANENT WIRE MARKERS.
- A PLASTIC COVERED WIRING DIAGRAM WILL BE ATTACHED TO THE INSIDE OF THE FRONT DOOR.
- ENCLOSURE WILL BE FACTORY WIRED AND CONFORM TO REQUIRED NEMA AND UL 508A STANDARDS.
- ANODIZE AFTER FABRICATION

REV	DATE	BY	DESCRIPTION

**TESCO**  
CONTROLS INC.  
(916) 395-8800  
8440 FLORIN RD.  
SACRAMENTO, CA 95828

LITTLE ROCK 27-22 BBS  
27-000/22-000  
ELEVATION DRAWING

DATE	DESIGN BY	DRAWN BY	CHK'D BY	SHEET #	DRAWING #
7/8/19		TL		1 OF	LITROC27/22