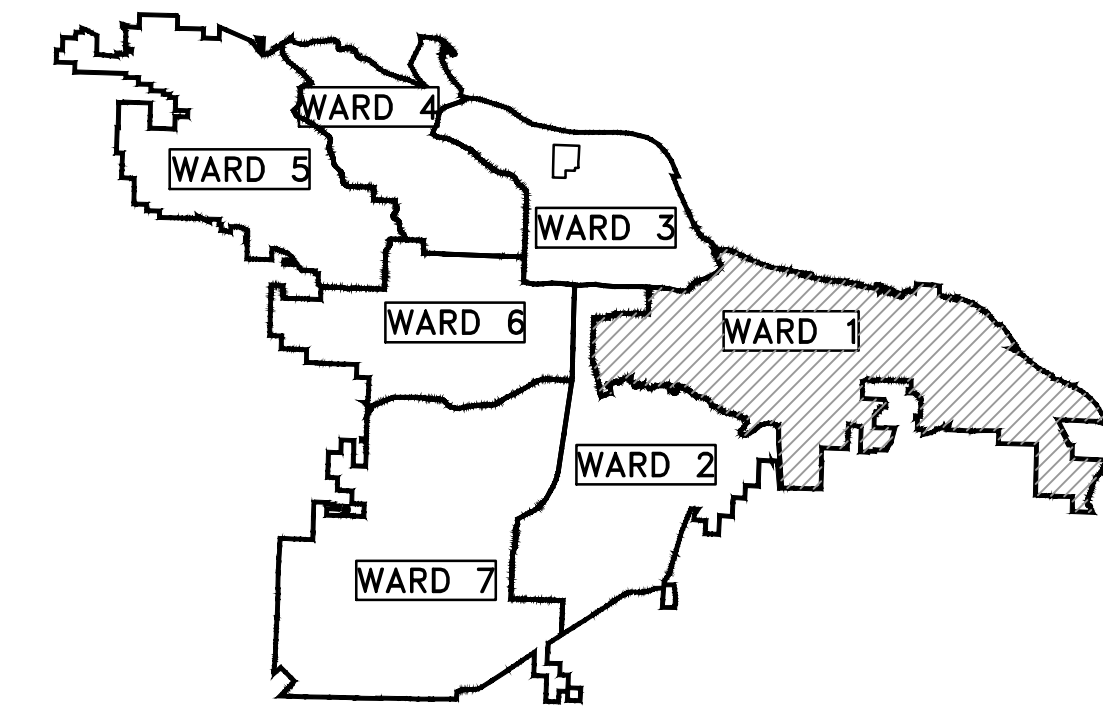
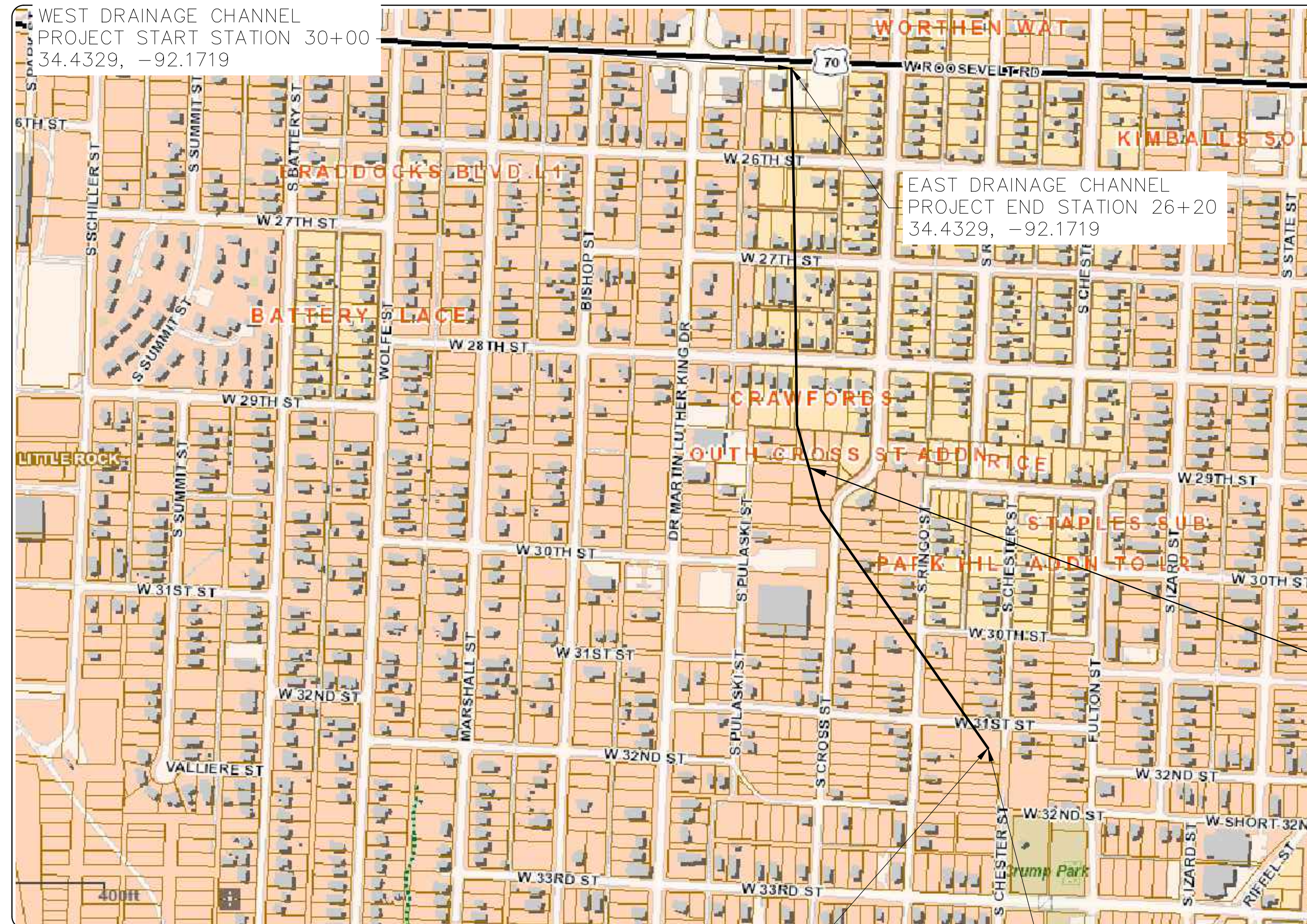


CLR PROJECT #01-17-DR-9 SWAGGERTY BRANCH DRAINAGE REHABILITATION ROOSEVELT ROAD TO SOUTH OF 31ST STREET



PROJECT LOCATION - WARD 1



WEST DRAINAGE CHANNEL
PROJECT START STATION 30+00
34.4329, -92.1719

EAST DRAINAGE CHANNEL
PROJECT END STATION 26+20
34.4329, -92.1719

WEST DRAINAGE CHANNEL
PROJECT END
STATION 56+30
34.4351, -92.1711

EAST DRAINAGE CHANNEL
PROJECT START
STATION 0+00
34.4351, -92.1711

SHEET NO.	TITLE
C1	COVER SHEET
C2	GENERAL NOTES AND QUANTITIES
C3	TYPICAL SECTIONS (1)
C4	TYPICAL SECTIONS (2)
C5	TYPICAL SECTIONS (3)
C6	PLAN AND PROFILE SHEET (1)
C7	PLAN AND PROFILE SHEET (2)
C8	PLAN AND PROFILE SHEET (3)
C9	PLAN AND PROFILE SHEET (4)
C10	PLAN AND PROFILE SHEET (5)
C11	PLAN AND PROFILE SHEET (6)
C12	PLAN AND PROFILE SHEET (7)
C13	PLAN AND PROFILE SHEET (8)
C14	PLAN AND PROFILE SHEET (9)
C15	PLAN AND PROFILE SHEET (10)
C16	PLAN AND PROFILE SHEET (11)
C17	PLAN AND PROFILE SHEET (12)

ISSUED FOR CONSTRUCTION

PROJECT
LOCATION

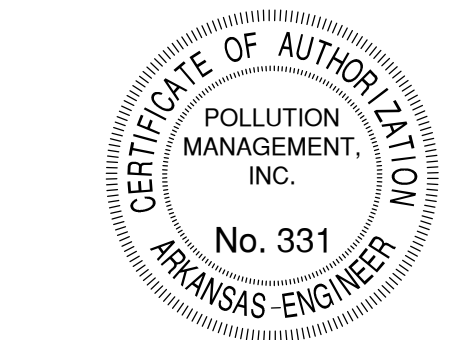


2019-2021 BOND PROGRAM

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



Know what's below.
Call before you dig.

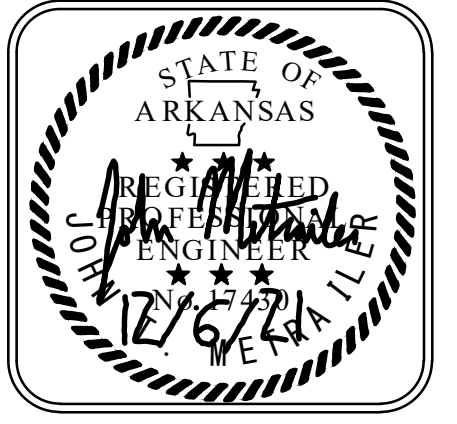


3512 S. SHACKLEFORD RD.
LITTLE ROCK, AR 72205

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
BRECKENRIDGE DRIVE DRAINAGE IMPROVEMENTS
COVER SHEET

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



DRAWN BY	JTM
DESIGNED	JTM
CHECKED	BJW
DATE	12-6-21
SCALE	N.T.S.
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C1

CLR PROJECT #01-17-DR-9			
SWAGGERTY DRAINAGE IMPROVEMENTS			
2-Jan-20			
ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY
2.01	Site Preparation (Incl. Mobilization)	LS	1
4.01	Aggregate Base Course (Class 7)	TON	230
6.01	Asphalt Surface Course	TON	85
8.01	Concrete Curb and Gutter	LF	80
9.01	Sidewalk, 4"	SF	250
10.02	Curb Inlet	EA	1
14.01	Solid Sodding (Bermuda)	SY	1750
16.01	Maintenance of Traffic	LS	1
19.01	Final Clean-Up	LS	1
25.26	Relocate Fence Chain Link (4')	LF	380
26.01	Trench or Excavation Safety Systems	LS	1
SP	108" Corrugated Metal Pipe	LF	260
SP	114" Corrugated Metal Pipe	LF	380
SP	Flush and Clean Existing Culvert	LF	5250
SP	Grout Existing Culvert Invert	CY	565
SP	Equalization Pipe Connections	EA	5
SP	Access Manhole	EA	1
SP	House Demolition and Disposal	EA	1

GENERAL NOTES:

- INVERT OF METAL PIPE SHALL BE GROUTED FOR THE ENTIRE LENGTH OF BOTH PIPES. SEE DETAILS.
- CONTRACTOR SHALL REMOVE ALL TRASH, ROCKS, GRAVEL, SEDIMENT, AND OTHER MATERIALS FROM WITHIN THE 9' AND 9'-6" DRAINAGE PIPES, JUNCTION BOXES, AND ACCESS POINTS BEFORE GROUTING PIPE INVERTS.
- IN AREAS TO RECEIVE BITUMINOUS PAVING, CONCRETE DRIVEWAYS, OR CURB AND GUTTER, SUBGRADE SHALL BE COMPACTED TO A DENSITY LESS THAN 95% OF MAXIMUM DENSITY OBTAINED AT OPTIMUM MOISTURE CONTENT. (AASHTO T-180)
- FOR AREAS OF SUBGRADE PREPARATION TO RECEIVE CONCRETE SIDEWALKS, SUBGRADE SHALL BE COMPACTED TO A DENSITY NOT LESS THAN 90% MAXIMUM. (AASHTO T-180)
- WHERE STREET CUTS ARE REQUIRED FOR CULVERT REPLACEMENT, STREET REPAIR SHALL BE RECONSTRUCTED TO MATCH ADJACENT SECTION OR ROADWAY OR AS DIRECTED BY ENGINEER. CENTERLINE PROFILE WILL REQUIRE HEAD GREATER THAN CURB STREETS TO MAINTAIN 2% CROSS-SLOPE.
- CRUSHED STONE - DENSITY OF COMPACTED MATERIAL IN EACH COURSE SHALL BE COMPACTED TO A DENSITY OF AT LEAST 100% MAXIMUM. (AASHTO T-191)
- CONTRACTOR SHALL LOCATE EQUALIZER PIPES AND RECONNECT THESE PIPES IN AREAS WHERE NEW PIPE SECTIONS ARE INSTALLED, SEE DETAILS.
- PIPE SHALL BE H/C PIPE 3 X 1 PLYGV LS 12GA HALF COATED & PAVED WITH 2 REROLLED ENDS AS MANUFACTURED BY CONTECH ENGINEERED SOLUTIONS OR APPROVED EQUAL.
- PIPE REPLACEMENT SHALL OCCUR IMMEDIATELY FOLLOWING EXISTING PIPE REMOVAL OR AS DIRECTED BY CITY ENGINEER. CONTRACTOR SHALL MONITOR WEATHER FORECASTS CLOSELY. IN NO CASE SHOULD CULVERT SECTIONS BE REMOVED WHEN CULVERT REPLACEMENT CANNOT BE COMPLETED BEFORE STORM FLOWS OCCUR.
- CONTRACTOR SHALL USE SHORING AND SHIELDING WHEN WORKING ADJACENT TO STRUCTURES. FOLLOW ALL OSHA TRENCHING AND EXCAVATION SAFETY STANDARDS.
- MATERIAL REMOVED FOR PIPE INSTALLATION IS INCLUDED IN COST OF PIPE.

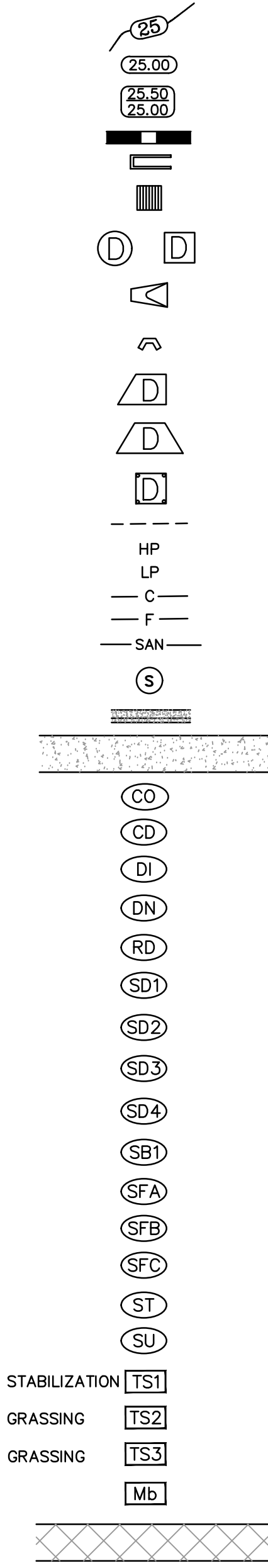
EXISTING

- IRON ROD
- PK NAIL
- R.R. SPIKE
- CONC. MONUMENT
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- GAS METER
- GAS VALVE
- CLEAN-OUT
- GUARD POST (BOLLARD)
- SIGN POST
- BENCHMARK
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- TELEPHONE MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE BOX
- ELECTRIC BOX
- CABLE BOX
- UTILITY POLE
- GUY WIRE
- LIGHT POLE
- POST OR POLE (TYPE AS NOTED)
- MAILBOX
- DECIDUOUS TREE
- EVERGREEN/CONIFEROUS TREE
- BUSH
- PROPERTY LINE
- SETBACK LINE
- EASEMENT LINE
- TEMPORARY EASEMENT LINE
- CURB
- FENCE
- OVERHEAD ELECTRIC
- OVERHEAD TELEPHONE
- OVERHEAD CABLE
- UNDERGROUND TELEPHONE
- UNDERGROUND ELECTRIC
- UNDERGROUND CABLE
- WATER LINE
- SEWER LINE
- GAS LINE
- STORM SEWER/CULVERT
- EDGE OF WOODS
- CONTOUR LINE



PROPOSED

- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED SPOT CURB ELEVATION
- STORM SEWER - PIPE
- STORM SEWER - MITERED END SECTION
- STORM SEWER - GRATE INLET
- STORM SEWER - JUNCTION BOX
- STORM SEWER - FLARED END SECTION
- STORM SEWER - HEADWALL
- STORM SEWER - SINGLE WING
- STORM SEWER - DOUBLE WING
- STORM SEWER - AREA INLET
- GRADE BREAK LINE
- HIGH POINT
- LOW POINT
- CUT LINE
- FILL LINE
- SANITARY SEWER PIPE
- SANITARY SEWER MANHOLE
- PROPOSED CURB
- PROPOSED CONCRETE
- CONSTRUCTION - ENTRANCE/EXIT
- CHECK DAM
- DIVERSION BERM
- DOWNDRAIN STRUCTURE - TEMPORARY
- ROCK DAM
- SEDIMENT BARRIER - SILT FENCE
- SEDIMENT BARRIER - GRAVEL RING
- SEDIMENT BARRIER - BLOCK & GRAVEL
- SEDIMENT BARRIER - BLOCK
- TEMPORARY SEDIMENT BASIN
- SILT FENCE - TYPE A
- SILT FENCE - TYPE B
- SILT FENCE - TYPE C
- STORM DRAIN OUTLET PROTECTION
- SURFACE ROUGHENING
- DISTURBED AREA STABILIZATION - TEMPORARY STABILIZATION
- DISTURBED AREA STABILIZATION - TEMPORARY GRASSING
- DISTURBED AREA STABILIZATION - PERMANENT GRASSING
- MATTING/BLANKETS
- PIPE REPLACEMENT AREAS



ACCESS POINTS STATIONING	
EAST PIPE	WEST PIPE
11+39	33+42
15+90	36+98
17+79	40+16
19+65	40+65
23+35	

REVISIONS	DATE

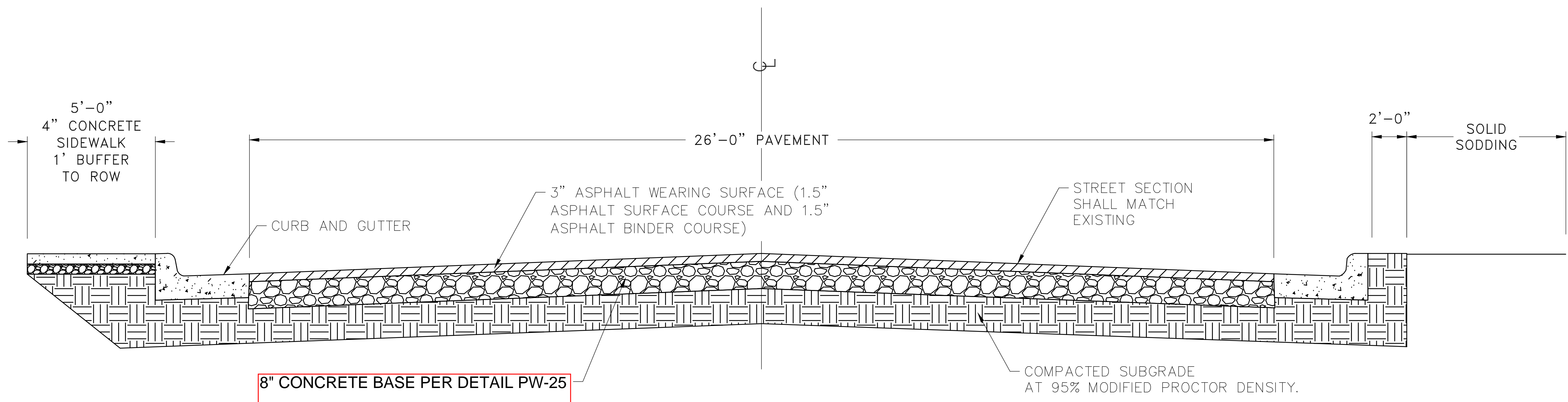
CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS
GENERAL NOTES AND QUANTITIES

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

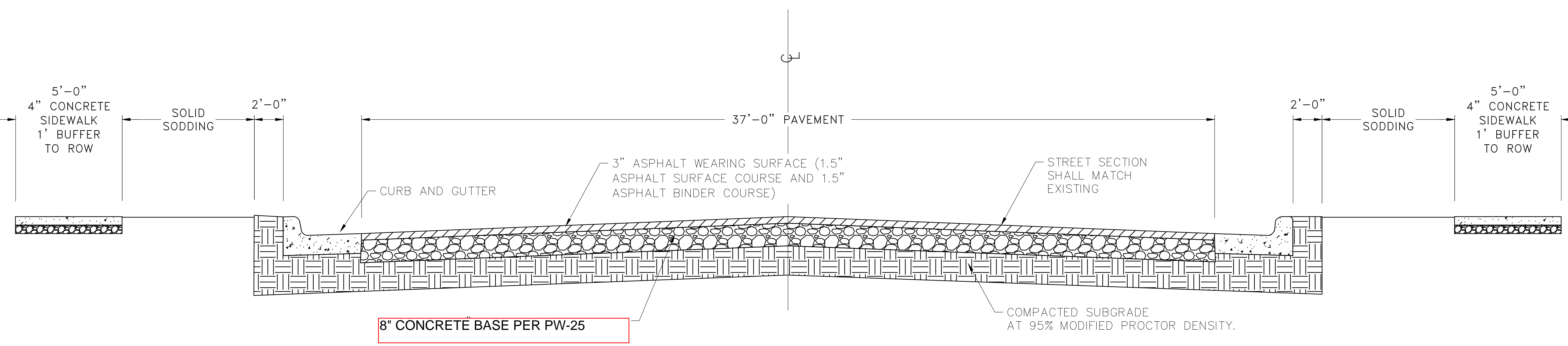


DRAWN BY
JTM
DESIGNED
JTM
CHECKED
BJW
DATE
12-6-21
SCALE
N.T.S.
PROJECT NO.
CLR #01-17-DR-9
SHEET NO.
C2

REVISIONS	DATE



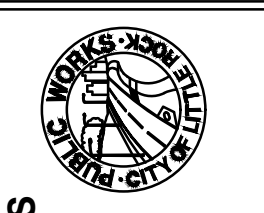
SOUTH RINGO STREET ROAD SECTION
STA. 60+00 TO 60+62



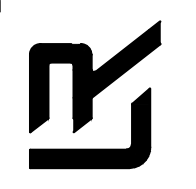
WEST 28TH STREET ROAD SECTION
STA. 70+00 TO 70+50

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS

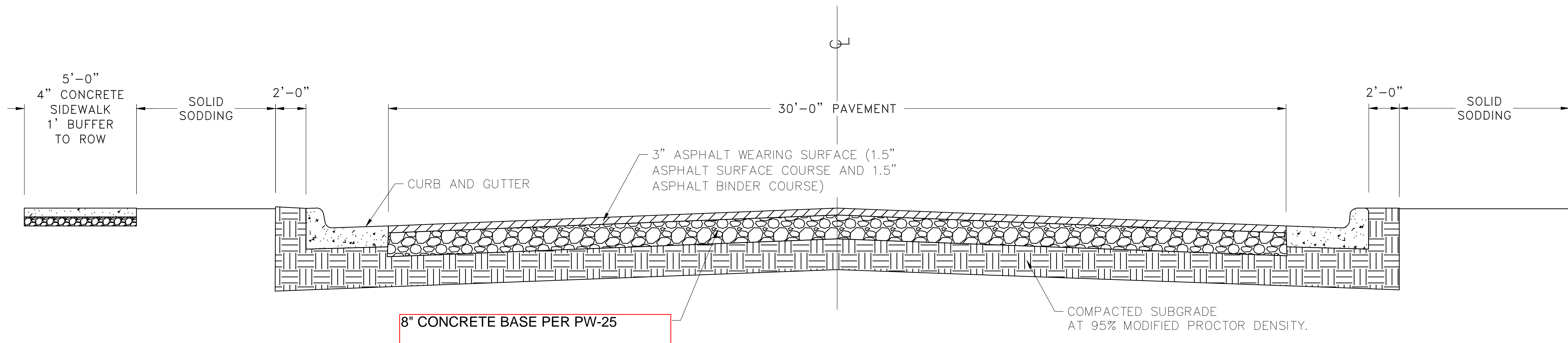
TYPICAL SECTIONS (1)



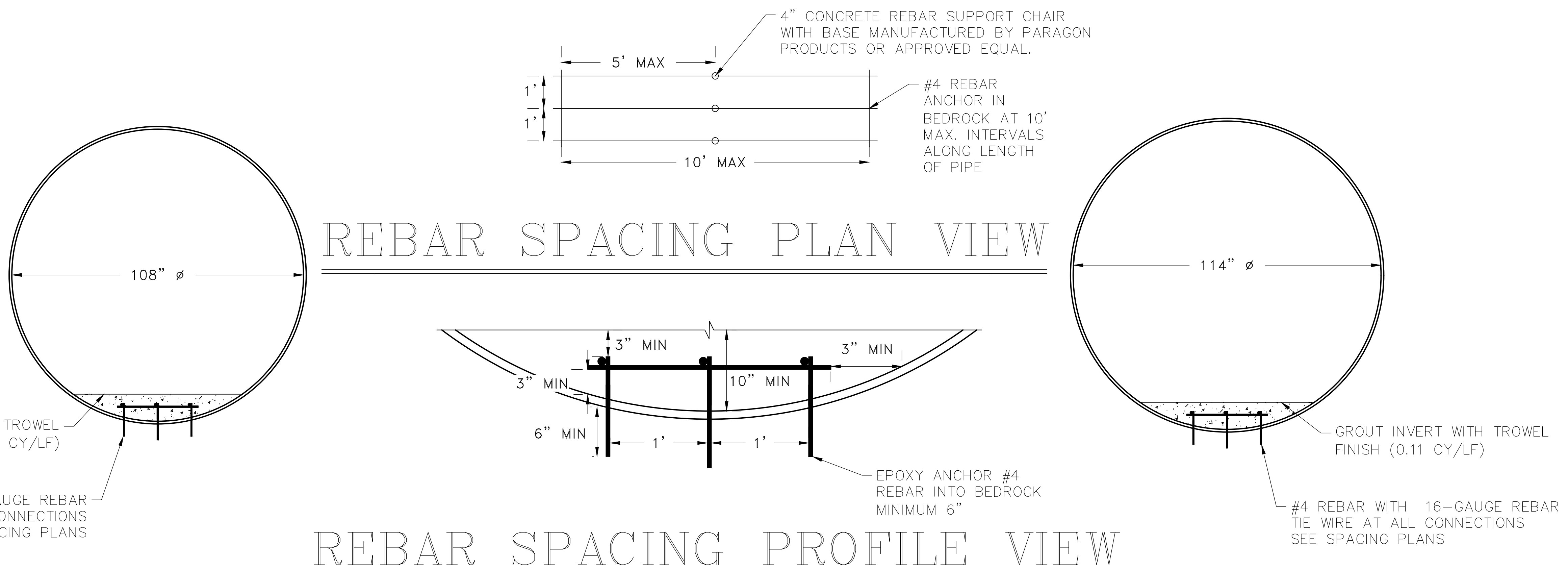
DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201



DRAWN BY	JTM
DESIGNED	JTM
CHECKED	BJW
DATE	12-6-21
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C3



WEST 26TH STREET ROAD SECTION
STA. 80+00 TO 80+47



METAL PIPE SECTION
EAST PIPE STA. 20+10 TO 26+20
WEST PIPE STA. 30+00 TO 36+10

METAL PIPE SECTION
EAST PIPE STA. 0+00 TO 20+10
WEST PIPE STA. 36+10 TO 56+30

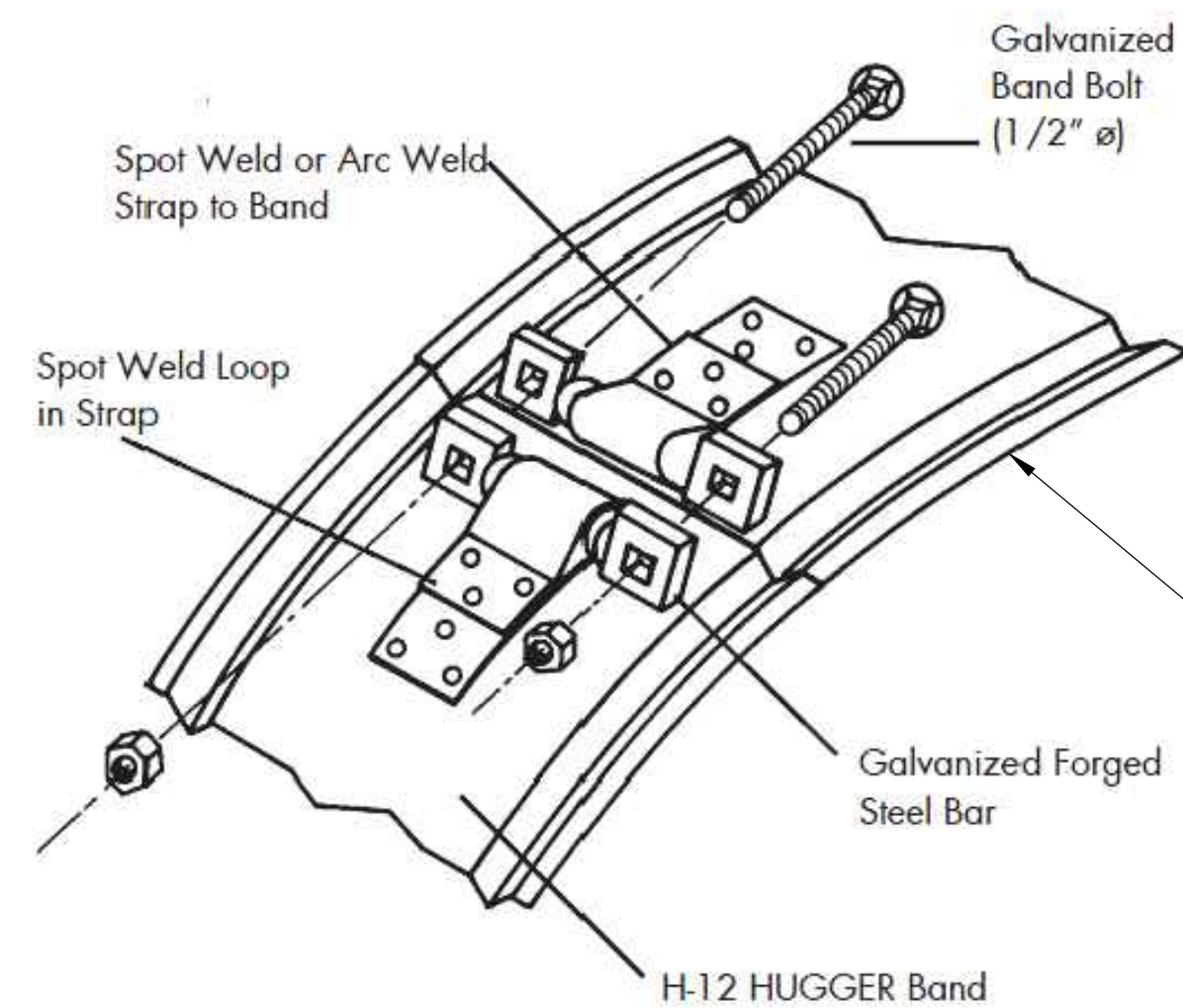
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS
TYPICAL SECTIONS (2)

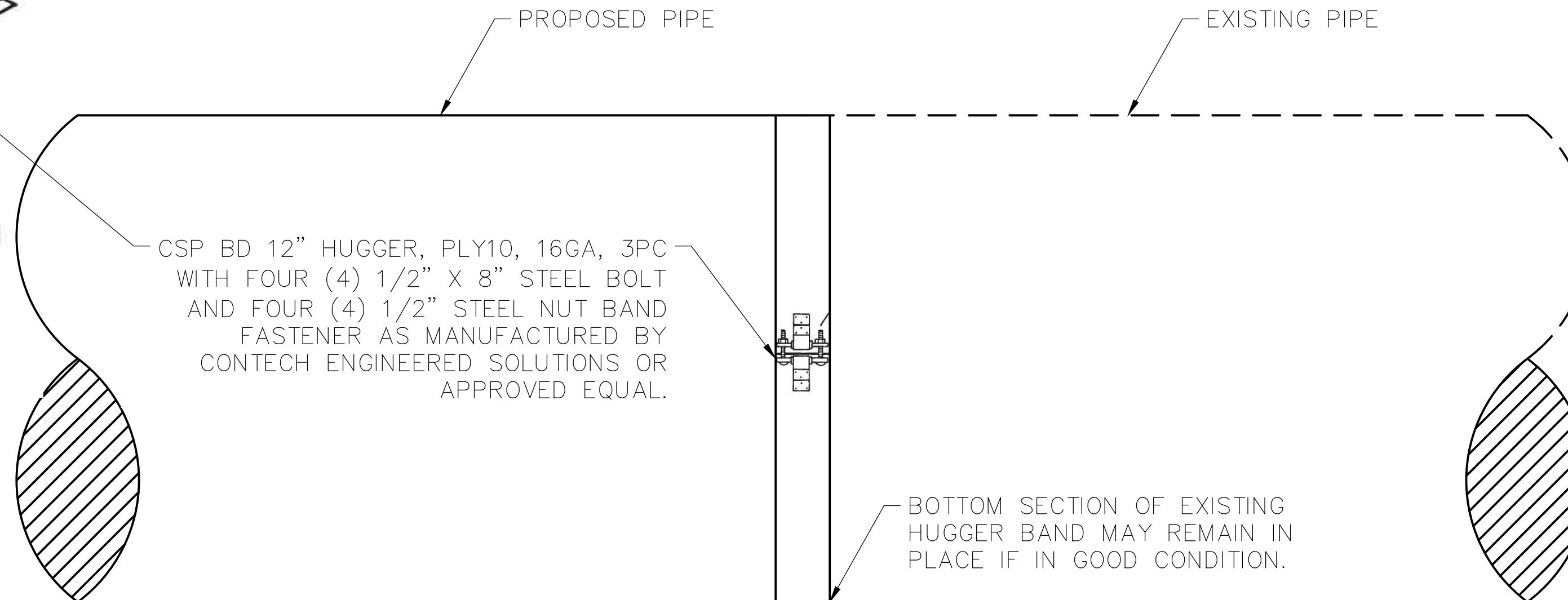
DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NOV 12/2016
J. W. KATZ

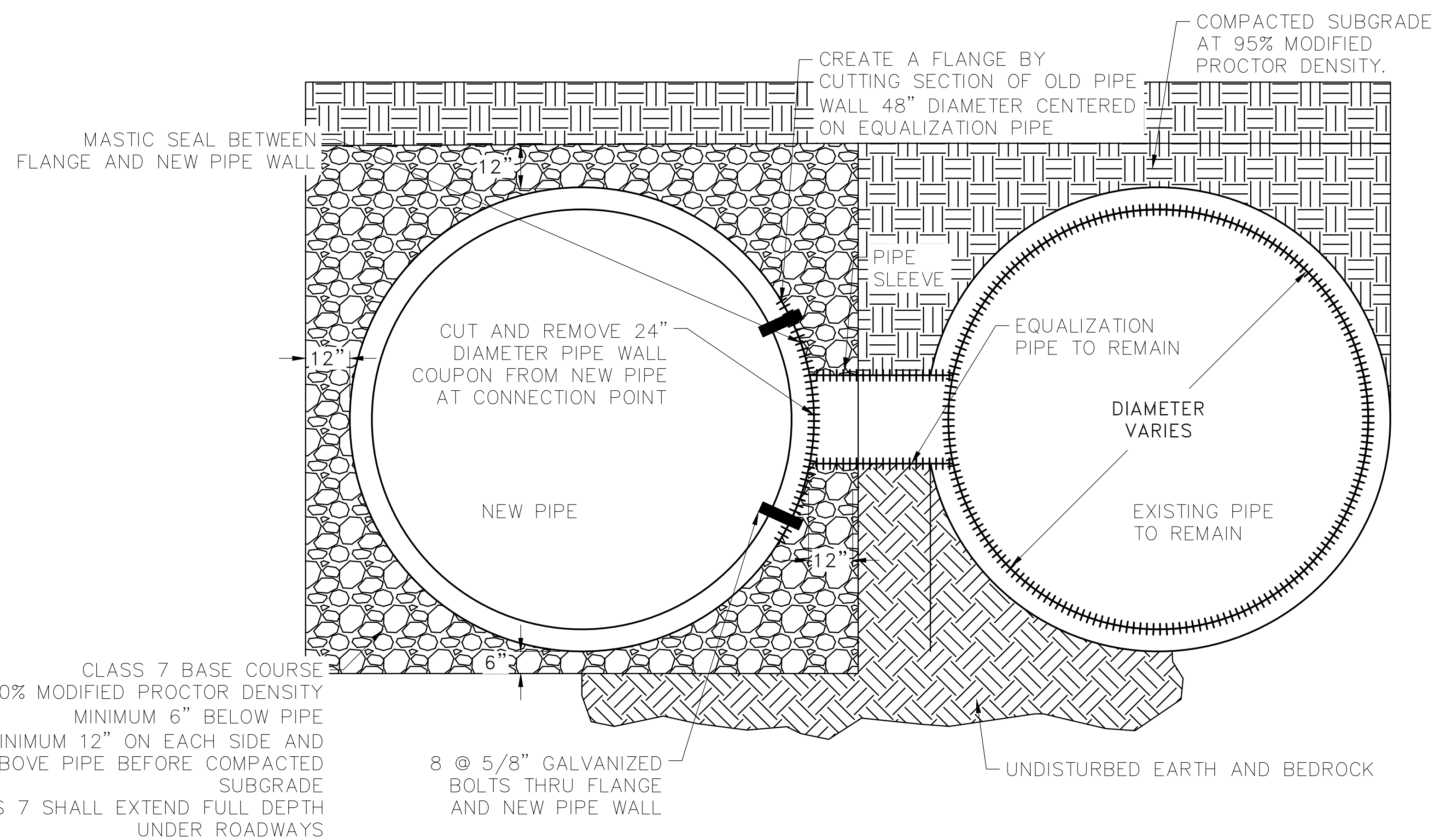
DRAWN BY
JTM
DESIGNED
JTM
CHECKED
BJW
DATE
12-6-21
SCALE
NTS
PROJECT NO.
CLR #01-17-DR-9
SHEET NO.
C4



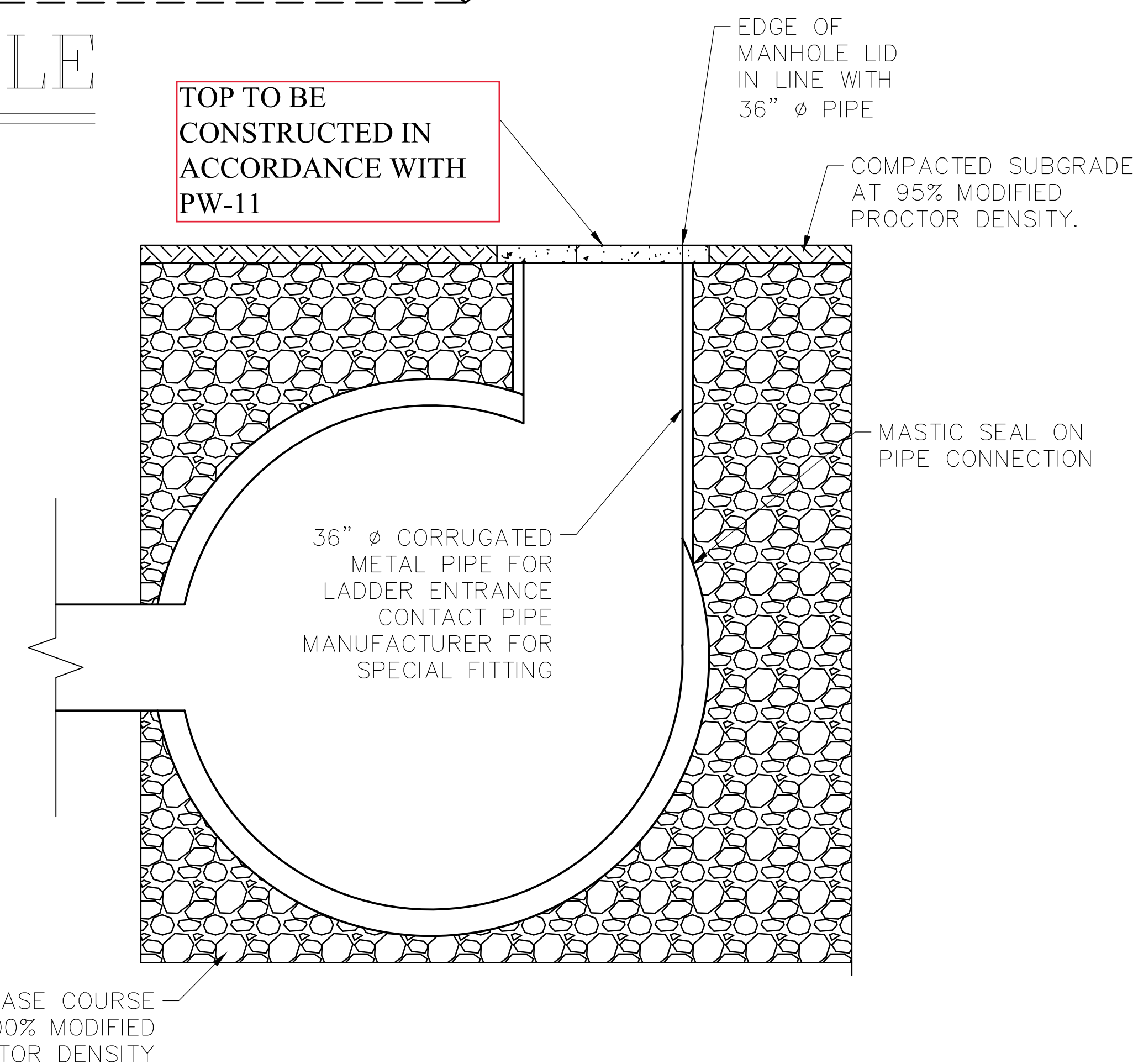
CONTRACTOR IS CAUTIONED THAT EACH SECTION OF PIPE REMOVED SHALL BE IMMEDIATELY REPLACED WITH THE NEW PIPE SECTION.



METAL PIPE CONNECTION PROFILE



EQUALIZATION PIPE CONNECTIONS



ACCESS MANHOLE

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS

TYPICAL SECTIONS (3)

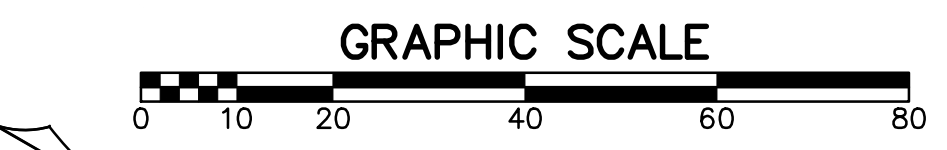
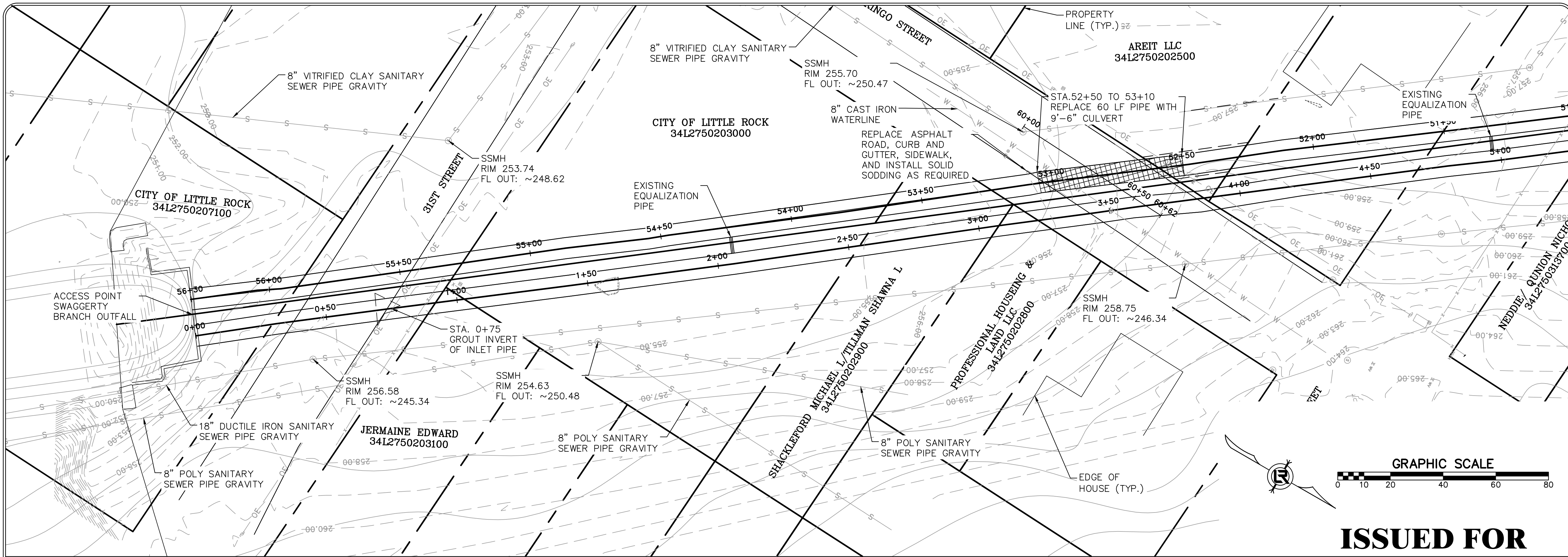


DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201

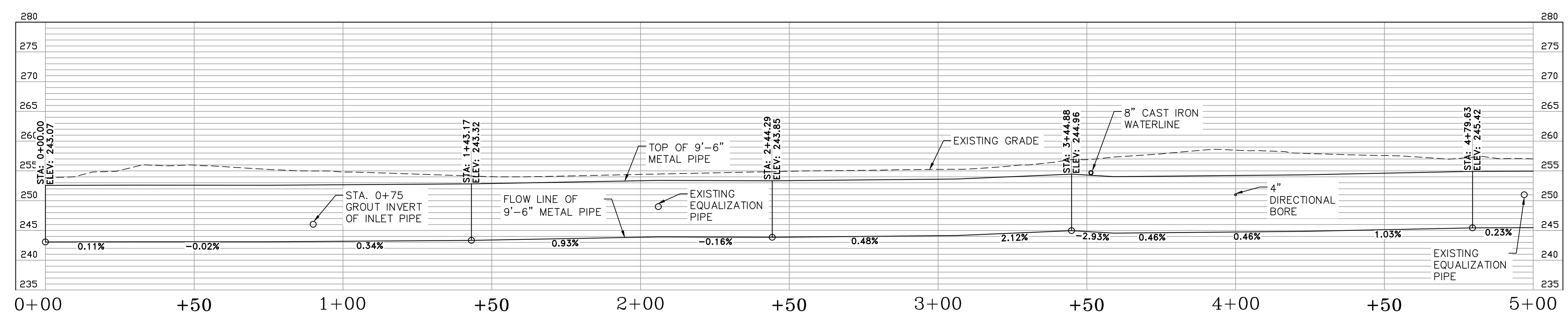


DRAWN BY
JTM
DESIGNED
JTM
CHECKED
BJW
DATE
12-6-21
SCALE
NTS
PROJECT NO.
CLR #01-17-DR-9
SHEET NO.

C5



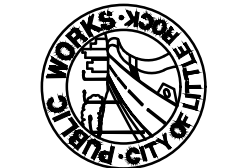
**ISSUED FOR
CONSTRUCTION**



EAST PIPE

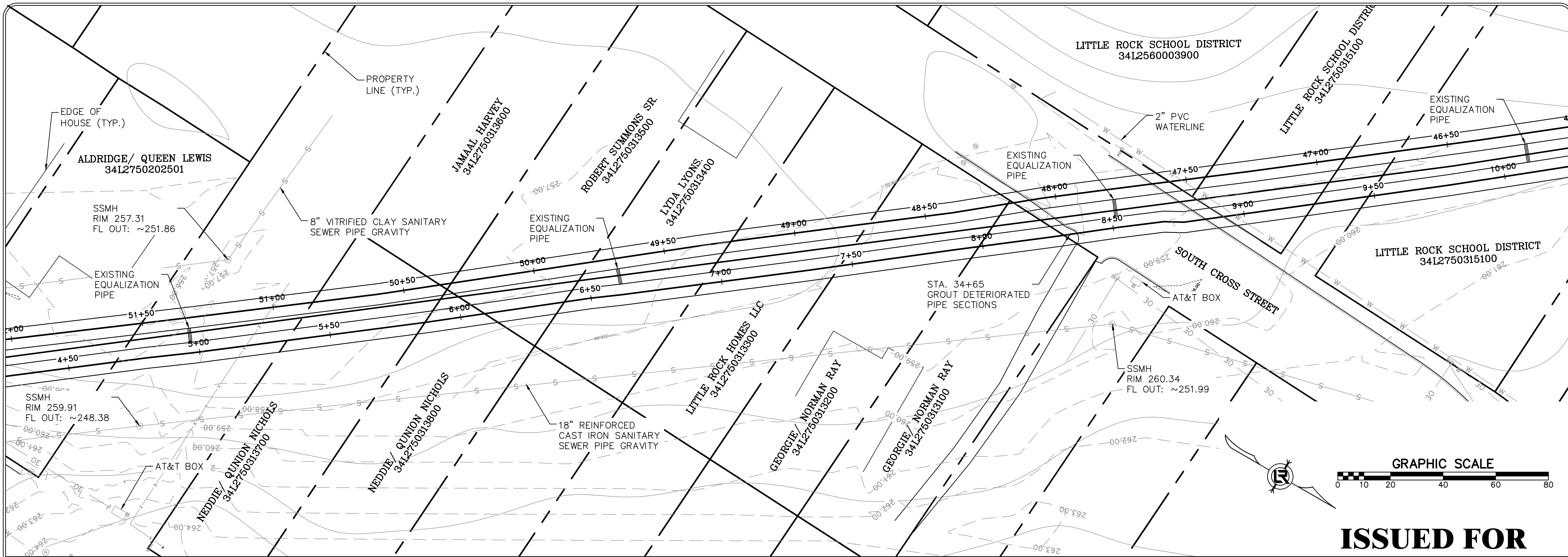
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS
 PLAN AND PROFILE SHEET (1)

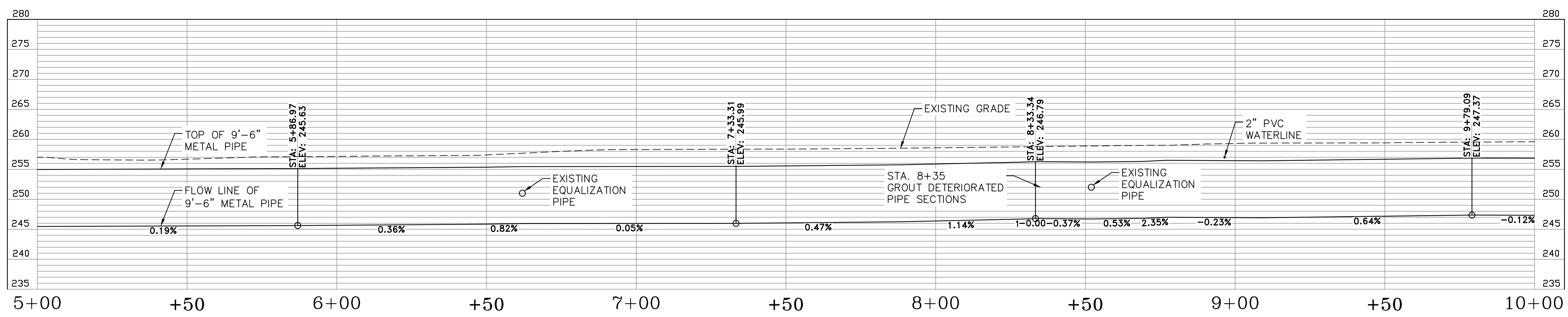

 DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING
 701 W. MARKHAM
 LITTLE ROCK, ARKANSAS 72201



DRAWN BY JTM
DESIGNED JTM
CHECKED BJW
DATE 12-6-21
SCALE NTS
PROJECT NO. CLR #01-17-DR-9
SHEET NO. C6



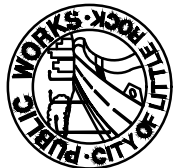
**ISSUED FOR
CONSTRUCTION**




EAST PIPE

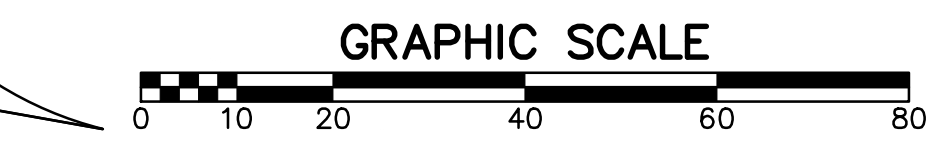
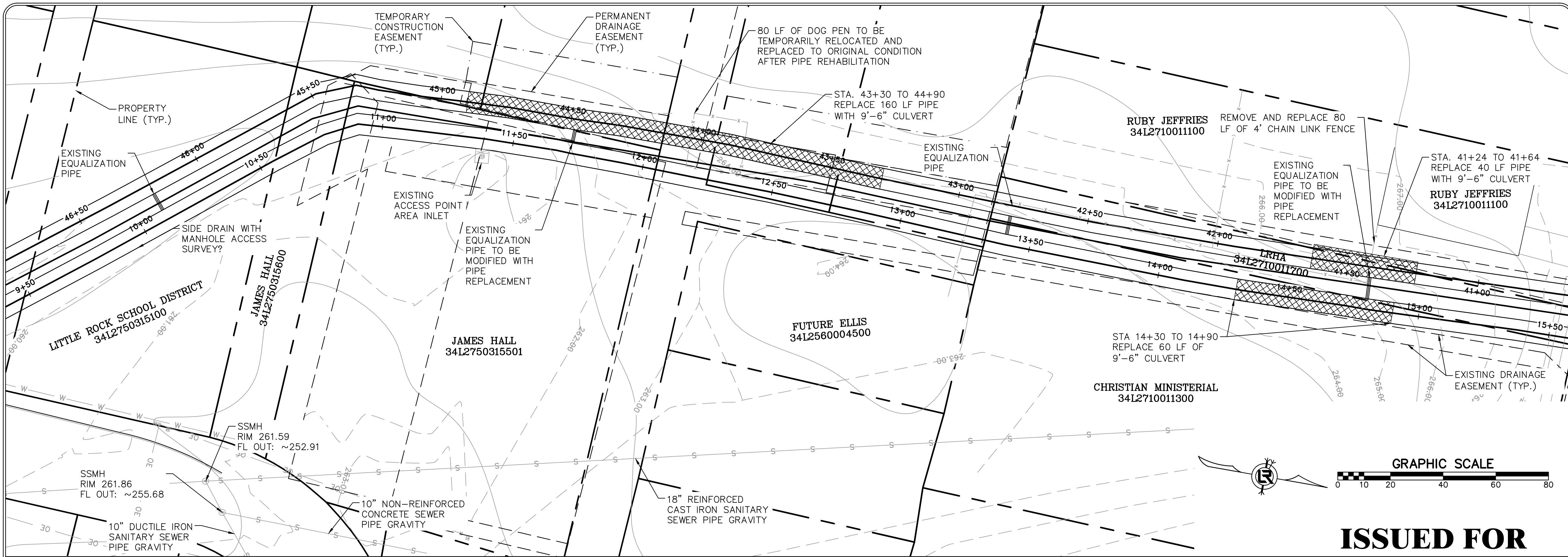
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS
 PLAN AND PROFILE SHEET (2)

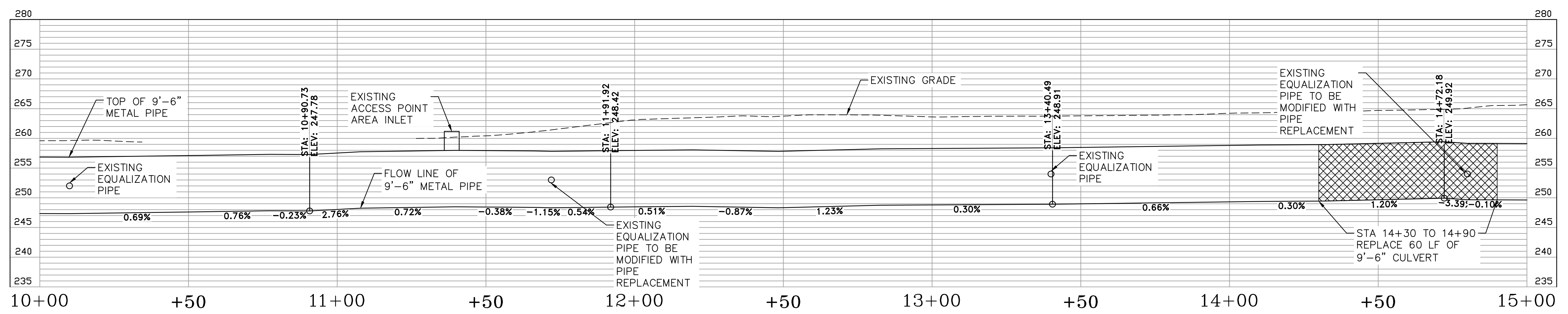

 DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING
 701 W. MARKHAM
 LITTLE ROCK, ARKANSAS 72201


 REGISTERED PROFESSIONAL ENGINEER
 J. T. MARKHAM
 No. 12766

DRAWN BY JTM
DESIGNED JTM
CHECKED BJW
DATE 12-6-21
SCALE NTS
PROJECT NO. CLR #01-17-DR-9
SHEET NO. C7



ISSUED FOR CONSTRUCTION



EAST PIPE

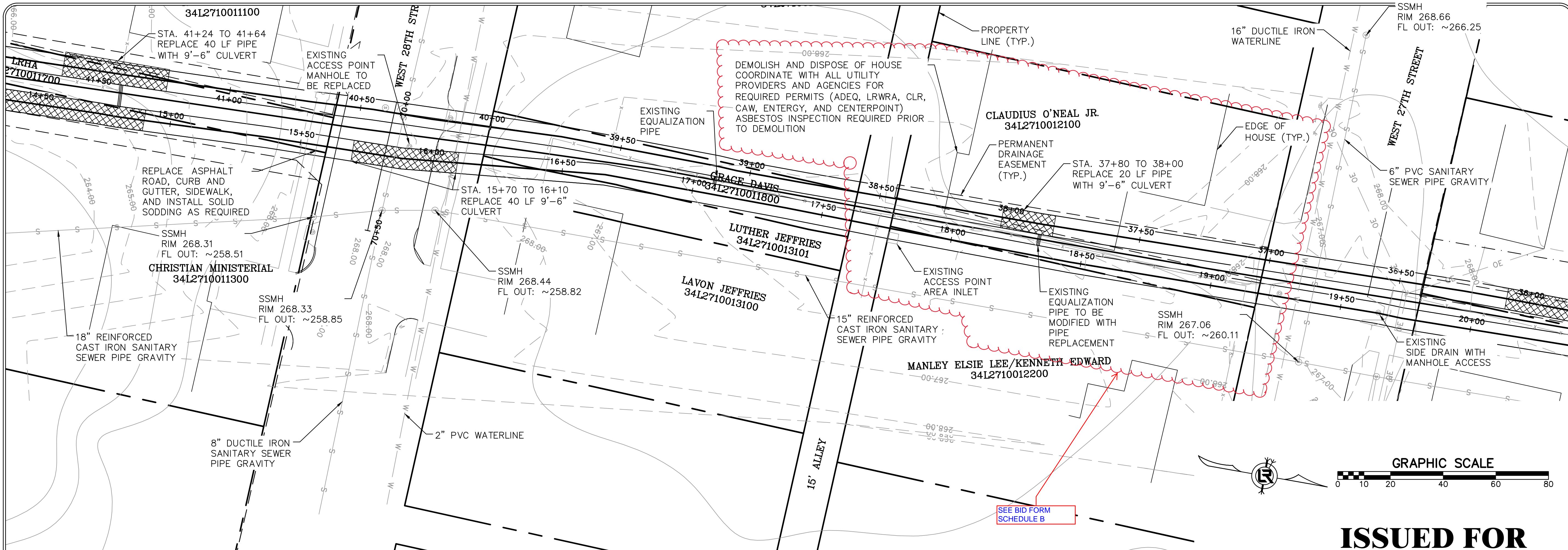
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS
 PLAN AND PROFILE SHEET (3)

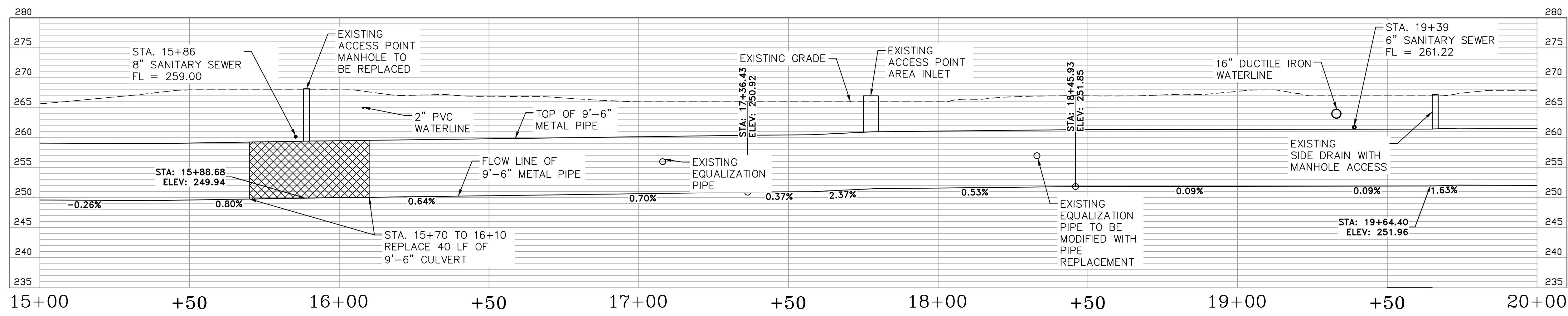
DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING
 701 W. MARKHAM
 LITTLE ROCK, ARKANSAS 72201



DRAWN BY JTM
DESIGNED JTM
CHECKED BJW
DATE 12-6-21
SCALE NTS
PROJECT NO. CLR #01-17-DR-9
SHEET NO. C8



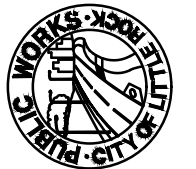
**ISSUED FOR
CONSTRUCTION**




EAST PIPE

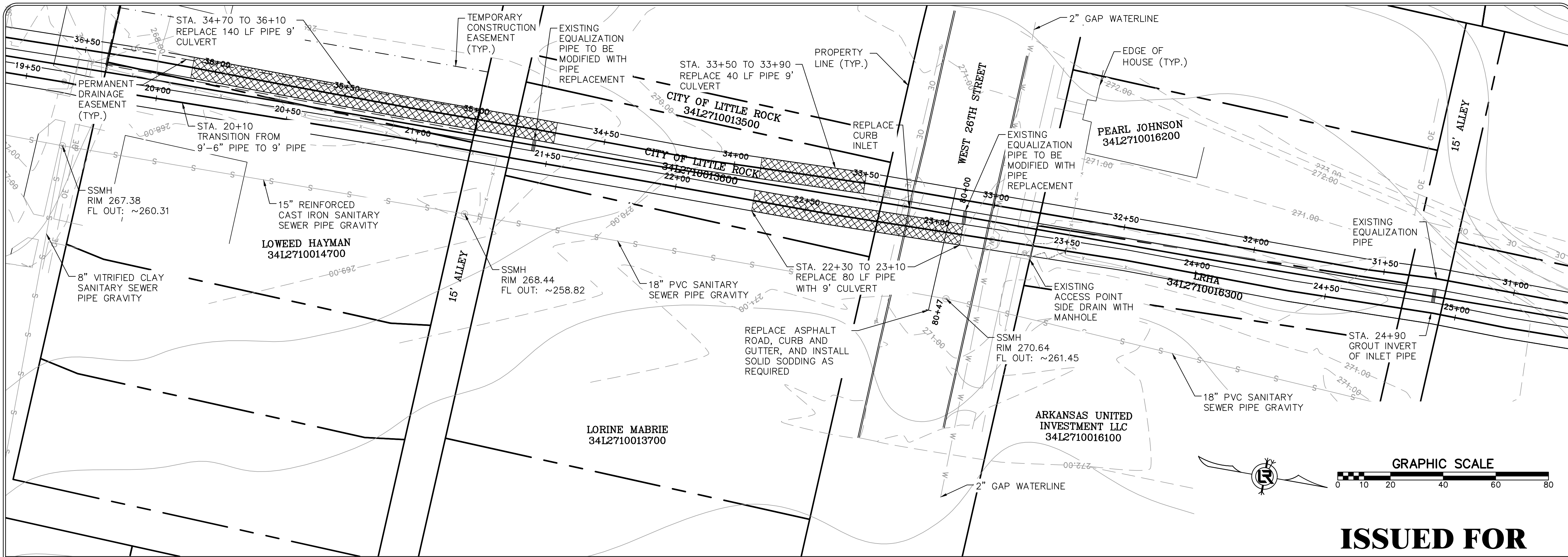
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS
PLAN AND PROFILE SHEET (4)


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


 REGISTERED PROFESSIONAL ENGINEER
 JTM
 12/6/2011

DRAWN BY JTM
DESIGNED JTM
CHECKED BJW
DATE 12-6-21
SCALE NTS
PROJECT NO. CLR #01-17-DR-9
SHEET NO. C9

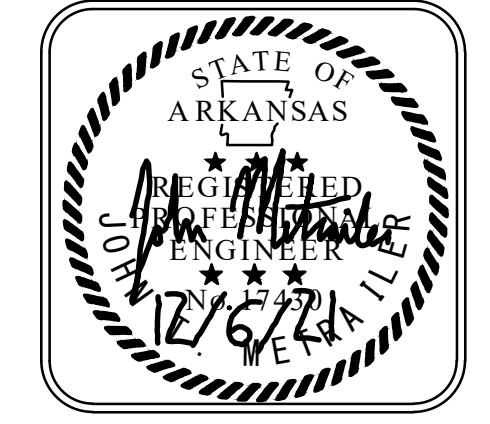


**ISSUED FOR
CONSTRUCTION**

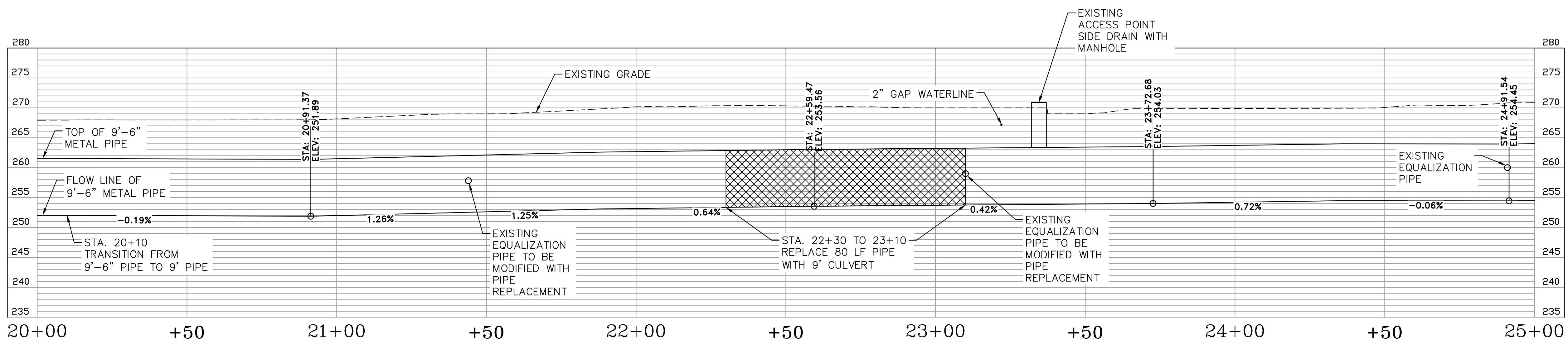
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS
 PLAN AND PROFILE SHEET (5)

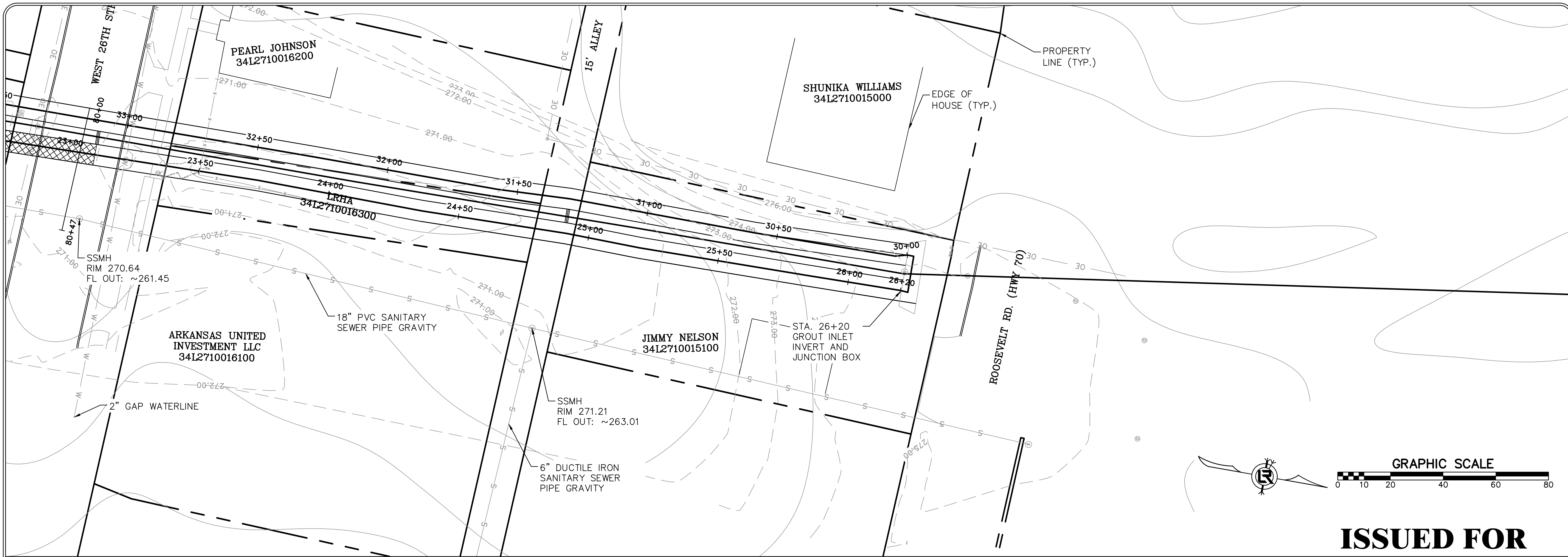
DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING
 701 W. MARKHAM
 LITTLE ROCK, ARKANSAS 72201



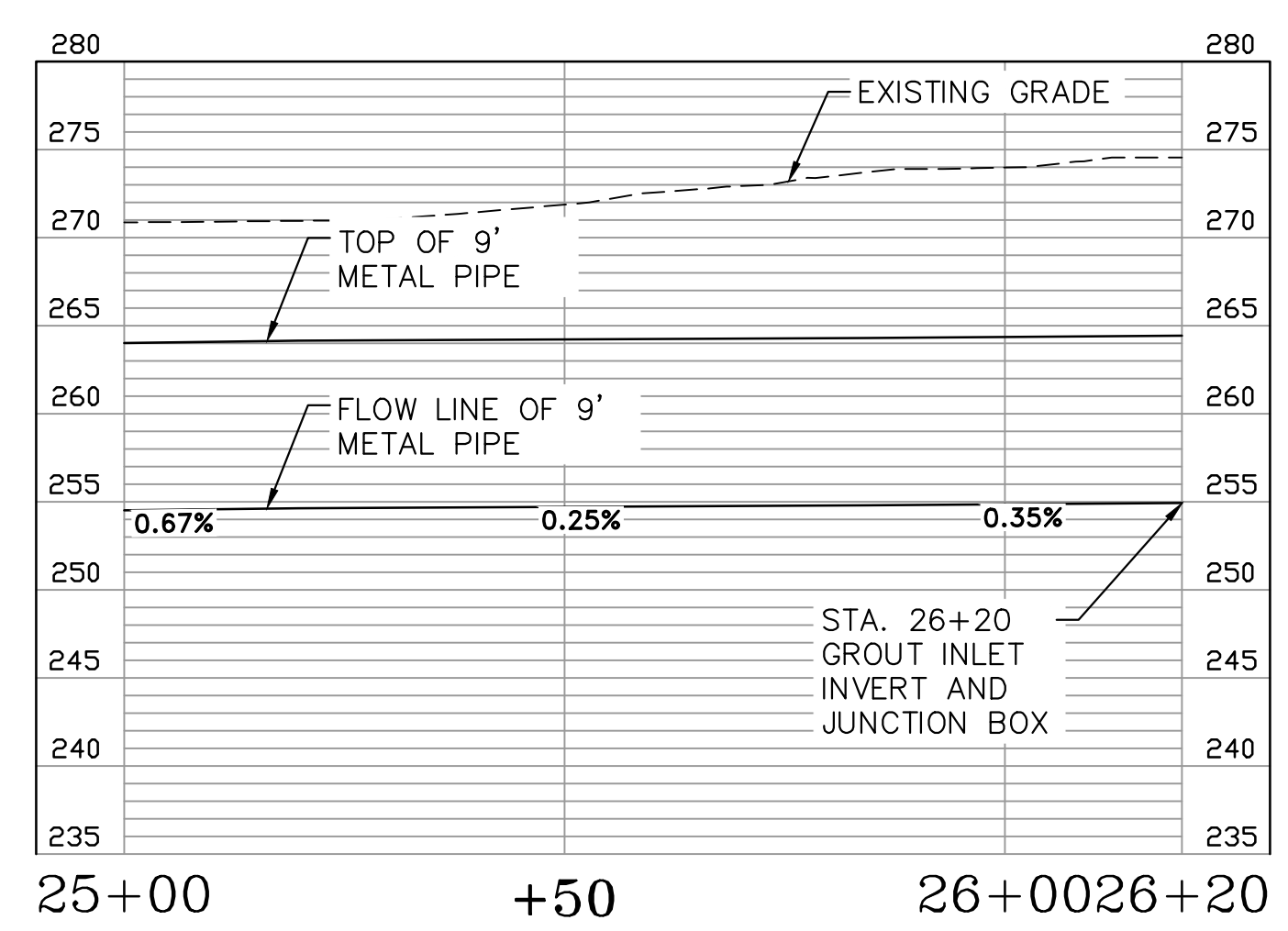
DRAWN BY
JTM
 DESIGNED
JTM
 CHECKED
BJW
 DATE
12-6-21
 SCALE
NTS
 PROJECT NO.
CLR #01-17-DR-9
 SHEET NO.
C10



EAST PIPE




**ISSUED FOR
CONSTRUCTION**

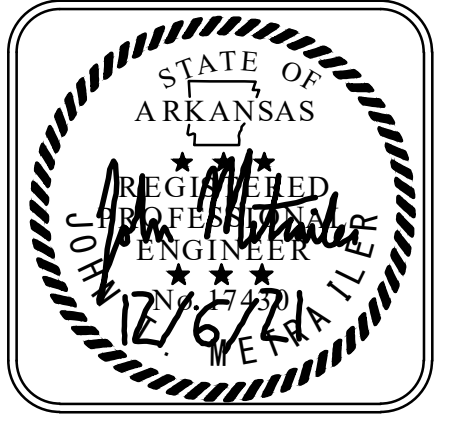


EAST PIPE

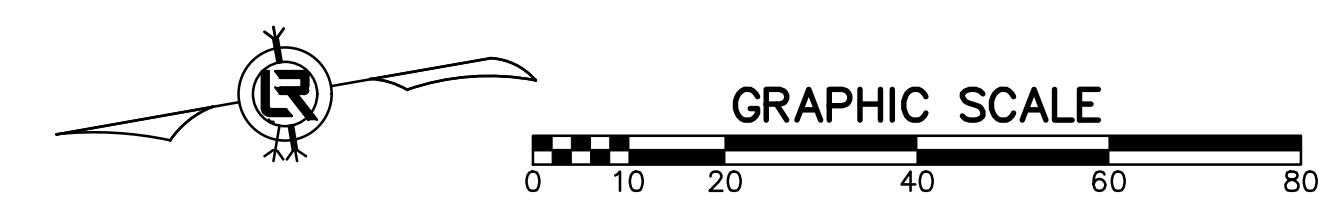
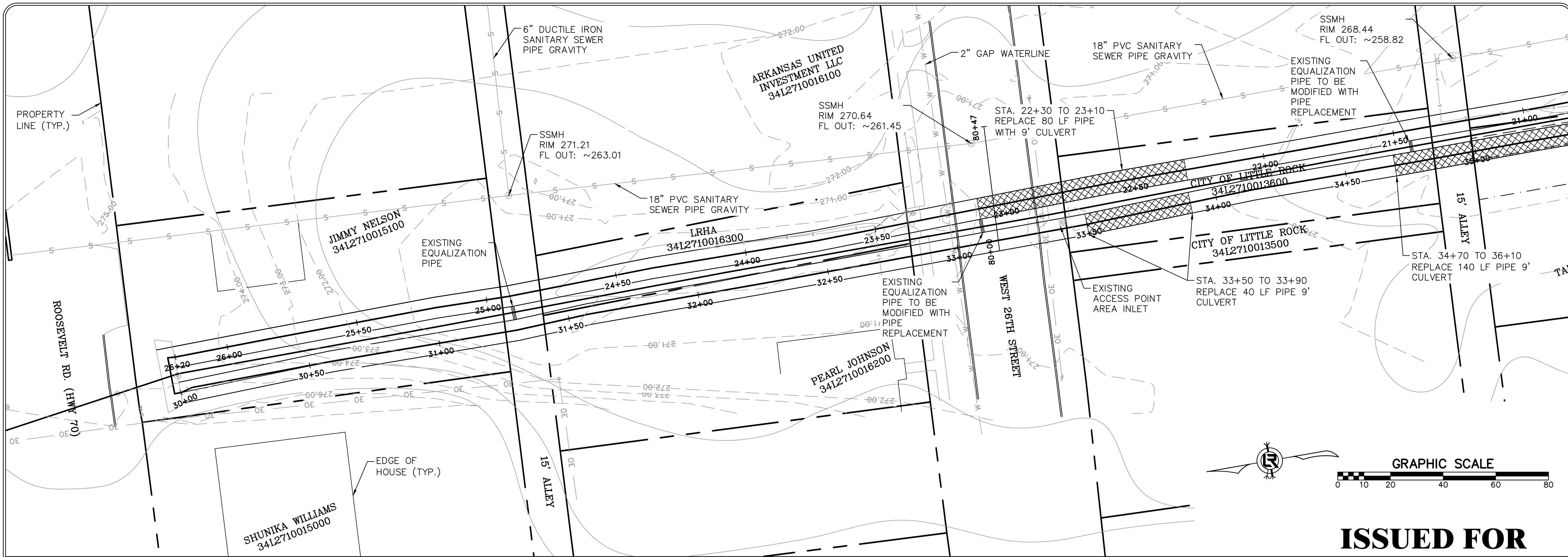
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS
PLAN AND PROFILE SHEET (6)

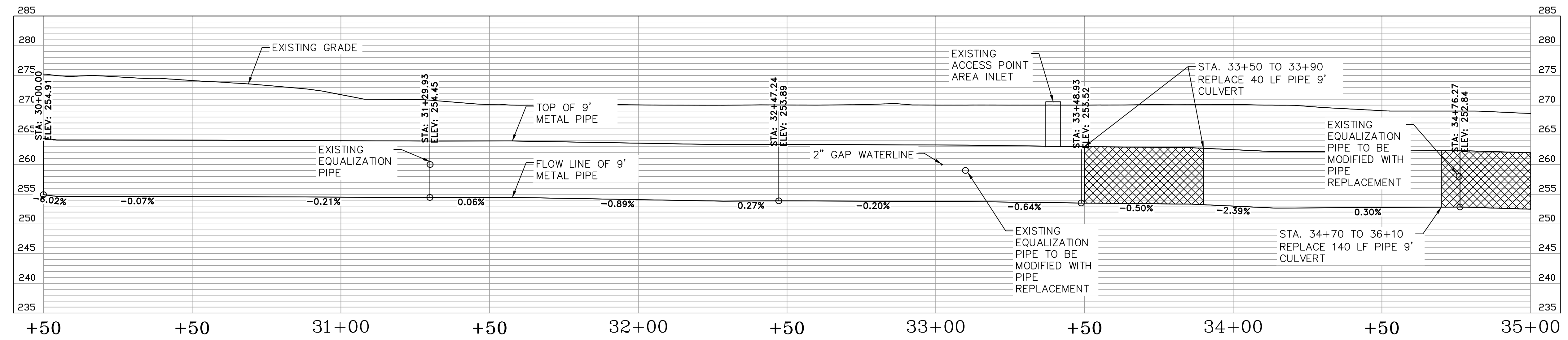

 DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING
 701 W. MARKHAM
 LITTLE ROCK, ARKANSAS 72201



DRAWN BY JTM
DESIGNED JTM
CHECKED BJW
DATE 12-6-21
SCALE NTS
PROJECT NO. CLR #01-17-DR-9
SHEET NO. C11



ISSUED FOR CONSTRUCTION



WEST PIPE

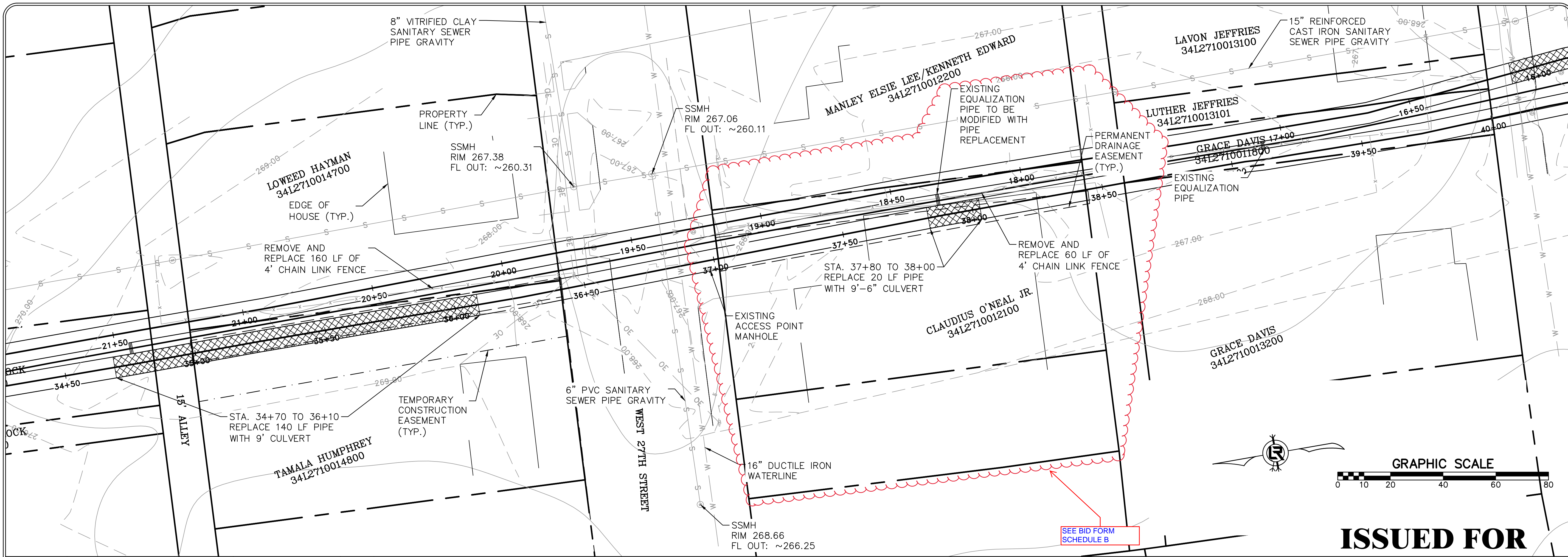
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 SWAGGERTY DRAINAGE IMPROVEMENTS
 PLAN AND PROFILE SHEET (7)

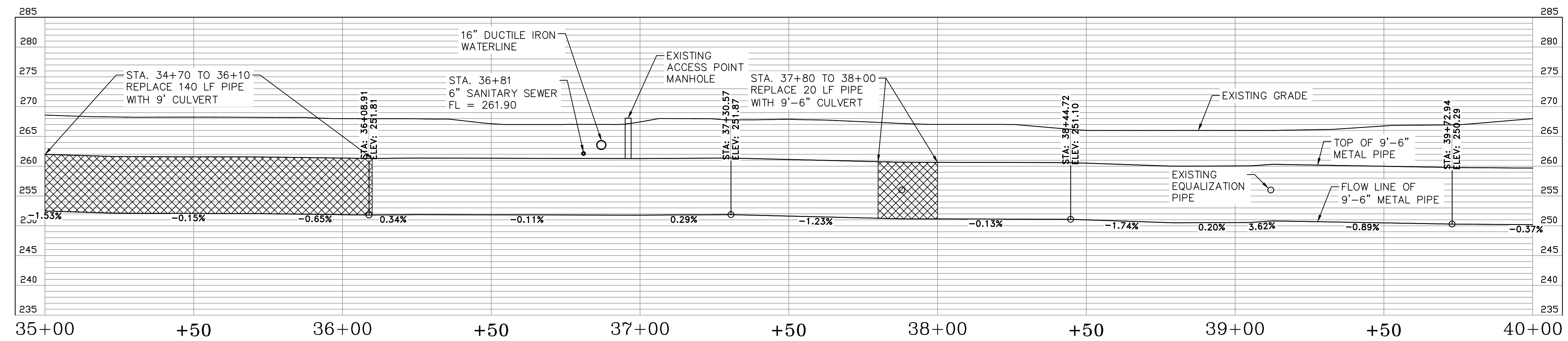
DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING
 701 W. MARKHAM
 LITTLE ROCK, ARKANSAS 72201



DRAWN BY
 JTM
 DESIGNED
 JTM
 CHECKED
 BJW
 DATE
 12-6-21
 SCALE
 NTS
 PROJECT NO.
 CLR #01-17-DR-9
 SHEET NO.
C12



ISSUED FOR CONSTRUCTION



WEST PIPE

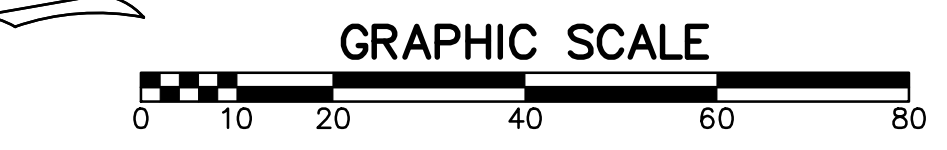
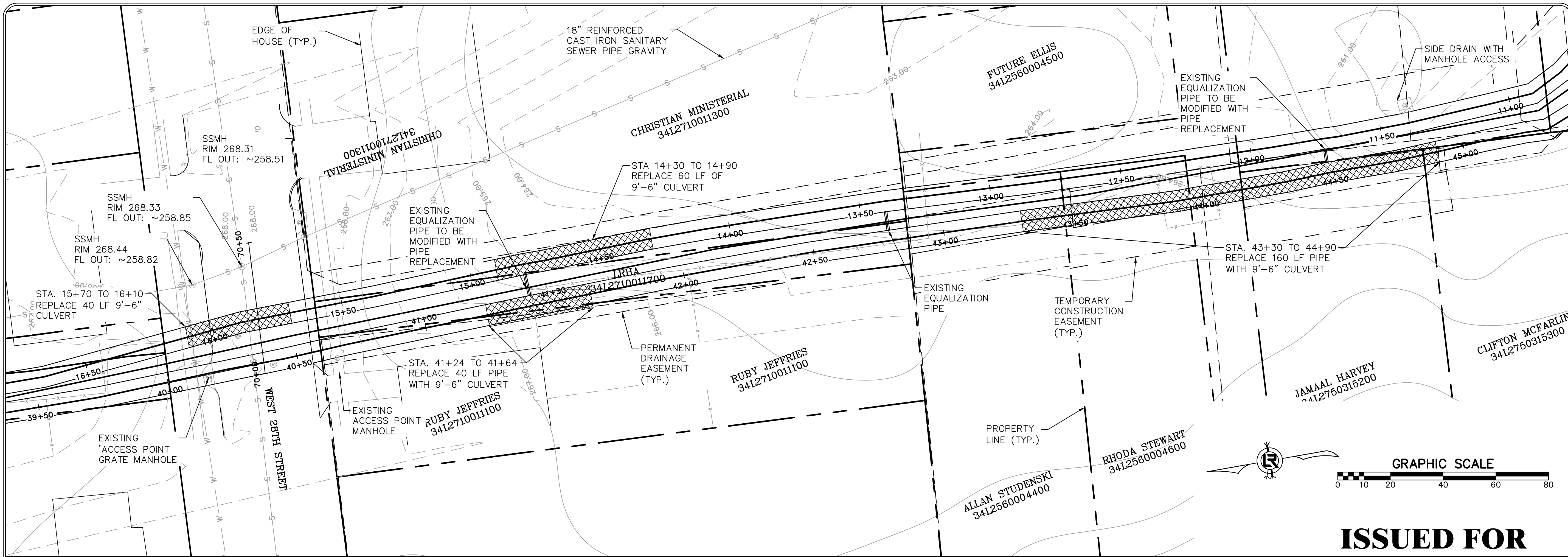
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 SWAGGERTY DRAINAGE IMPROVEMENTS
 PLAN AND PROFILE SHEET (8)

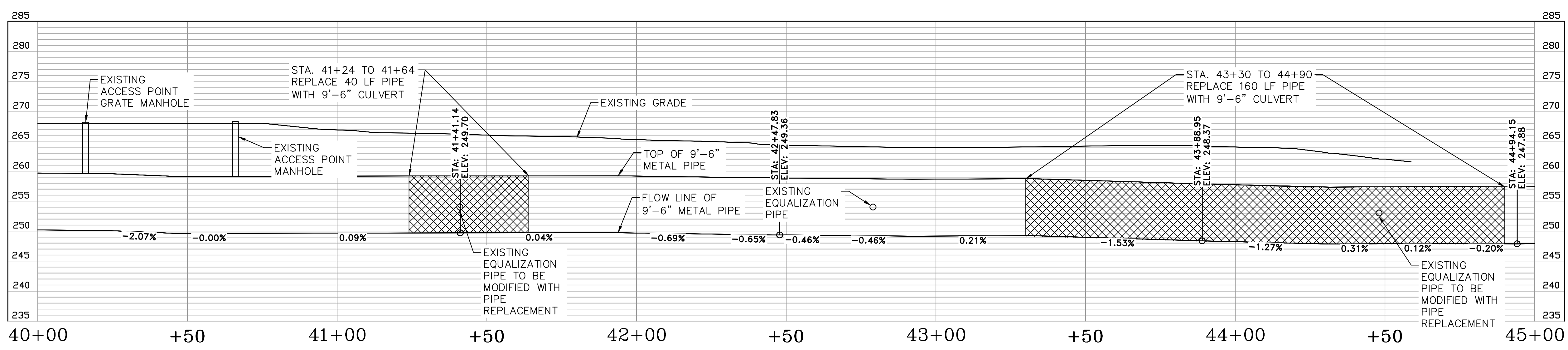
DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING
 701 W. MARKHAM
 LITTLE ROCK, ARKANSAS 72201



DRAWN BY JTM
 DESIGNED JTM
 CHECKED BJW
 DATE 12-6-21
 SCALE NTS
 PROJECT NO. CLR #01-17-DR-9
 SHEET NO. C13



**ISSUED FOR
CONSTRUCTION**

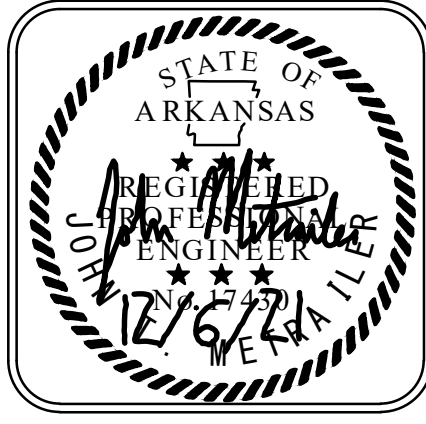


WEST PIPE

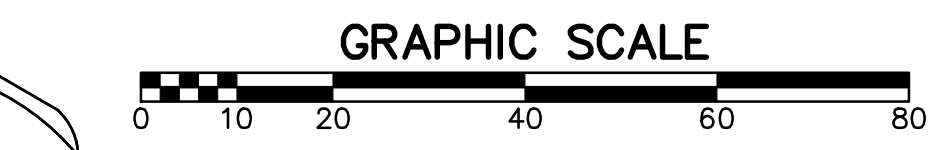
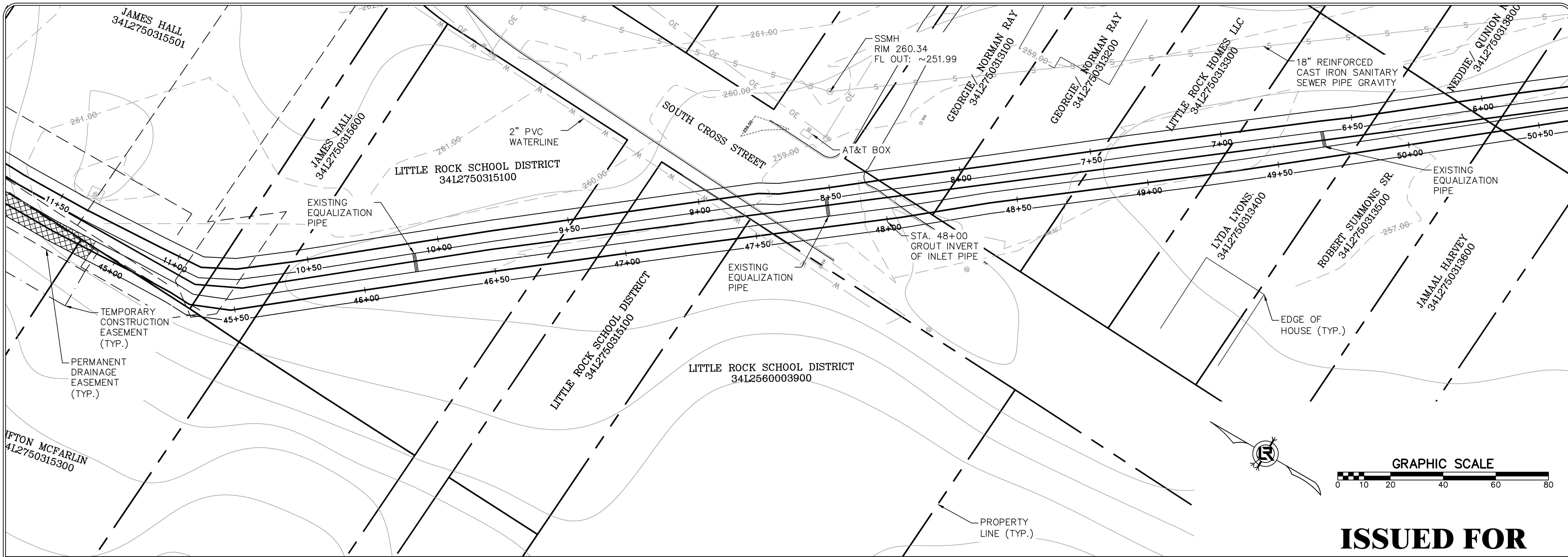
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS
PLAN AND PROFILE SHEET (9)

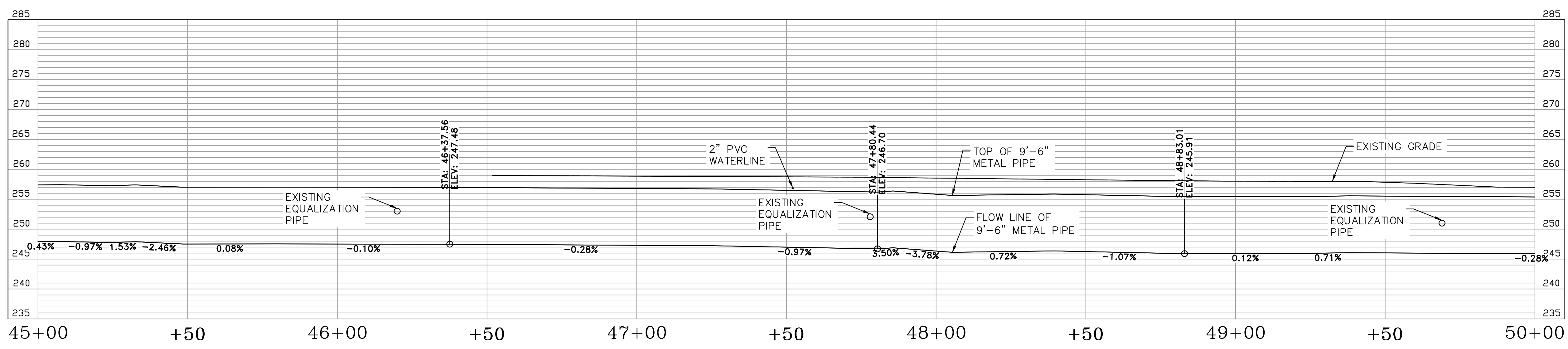
DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201



DRAWN BY
JTM
DESIGNED
JTM
CHECKED
BJW
DATE
12-6-21
SCALE
NTS
PROJECT NO.
CLR #01-17-DR-9
SHEET NO.
C14



**ISSUED FOR
CONSTRUCTION**

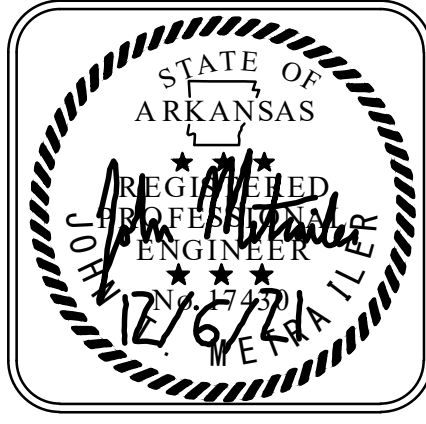


WEST PIPE

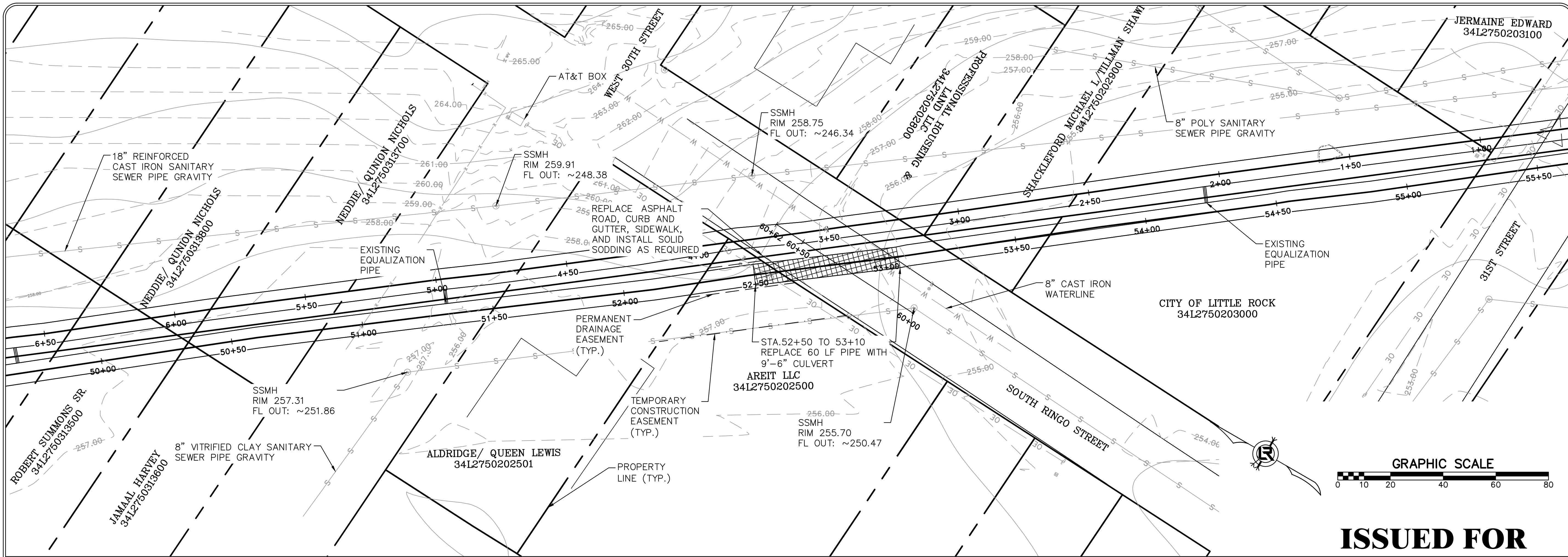
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS
PLAN AND PROFILE SHEET (10)

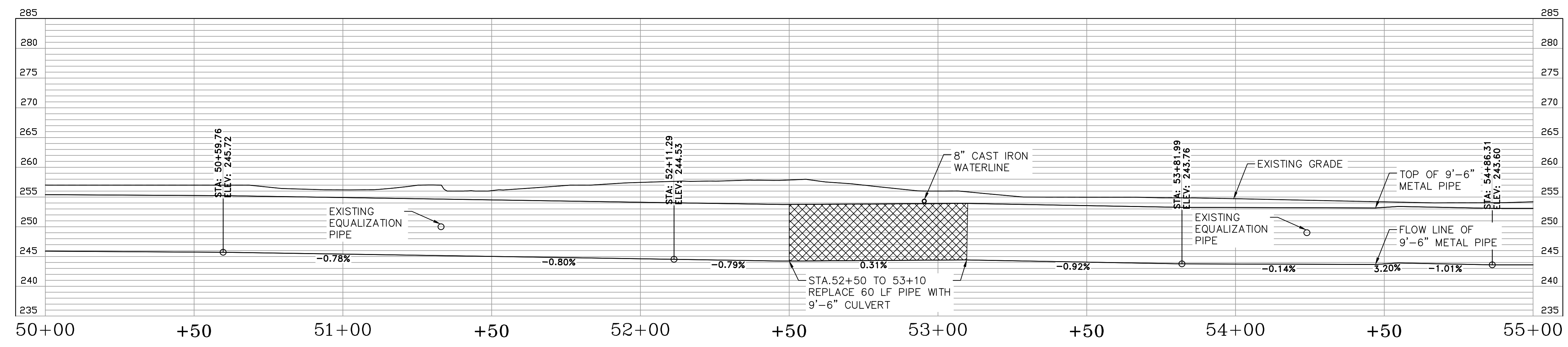
DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201



DRAWN BY JTM
DESIGNED JTM
CHECKED BJW
DATE 12-6-21
SCALE NTS
PROJECT NO. CLR #01-17-DR-9
SHEET NO. C15



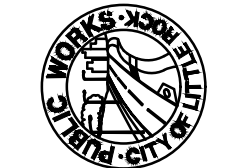
**ISSUED FOR
CONSTRUCTION**

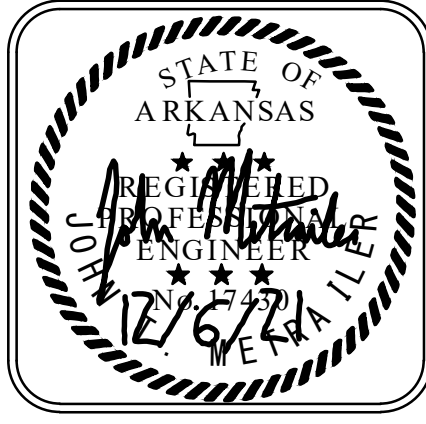


WEST PIPE

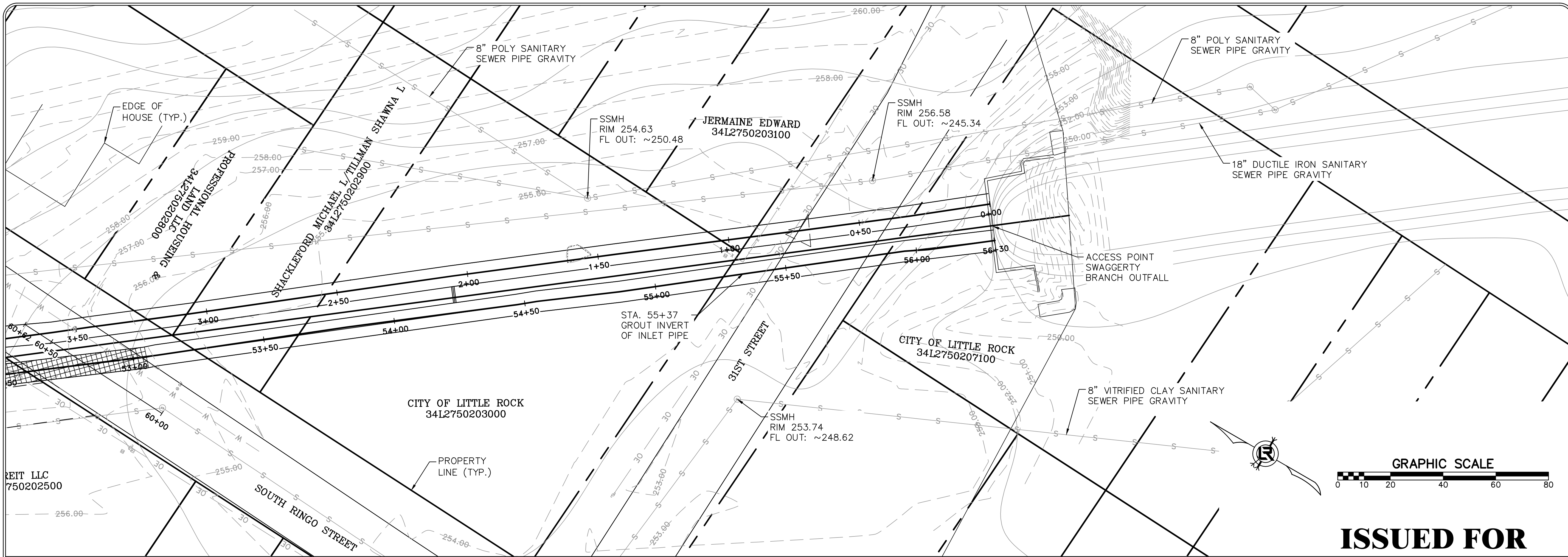
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS
 PLAN AND PROFILE SHEET (11)

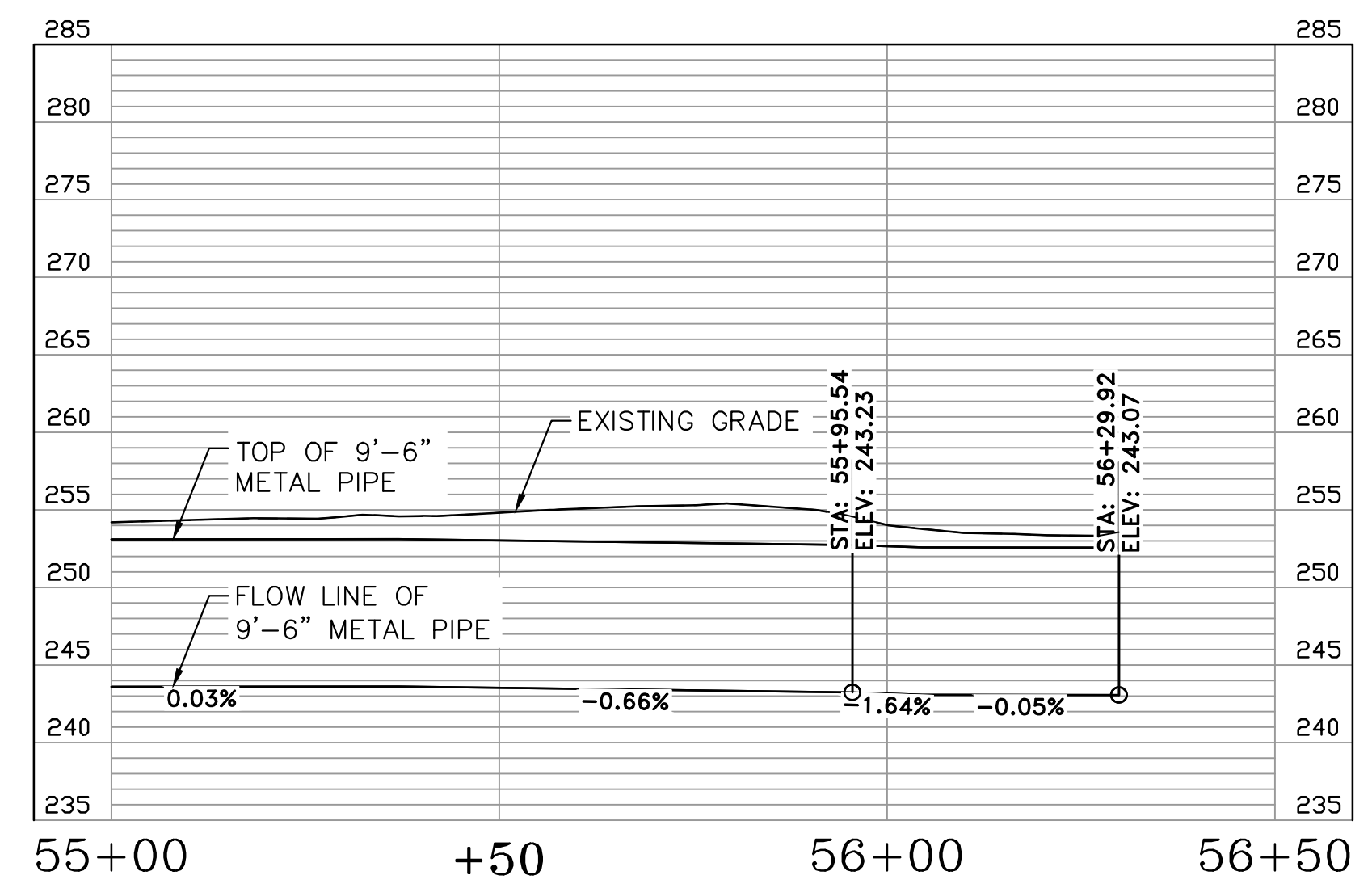

 DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING
 701 W. MARKHAM
 LITTLE ROCK, ARKANSAS 72201



DRAWN BY JTM
DESIGNED JTM
CHECKED BJW
DATE 12-6-21
SCALE NTS
PROJECT NO. CLR #01-17-DR-9
SHEET NO. C16



**ISSUED FOR
CONSTRUCTION**

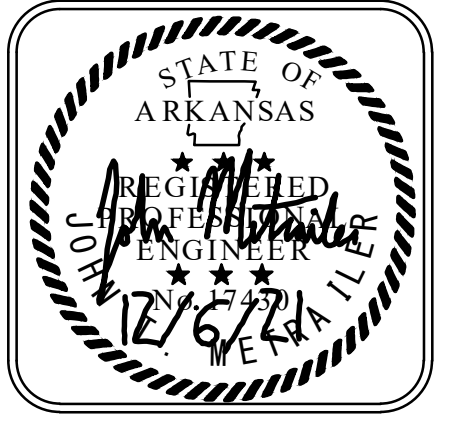


WEST PIPE

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS
 PLAN AND PROFILE SHEET (12)

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



DRAWN BY
 JTM
 DESIGNED
 JTM
 CHECKED
 BJW
 DATE
 12-6-21
 SCALE
 NTS
 PROJECT NO.
 CLR #01-17-DR-9
 SHEET NO.
C17