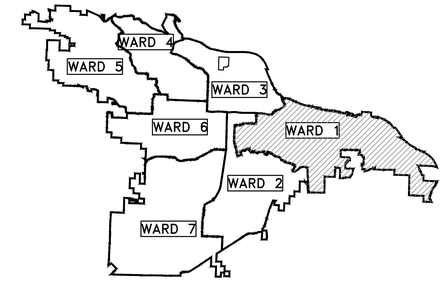
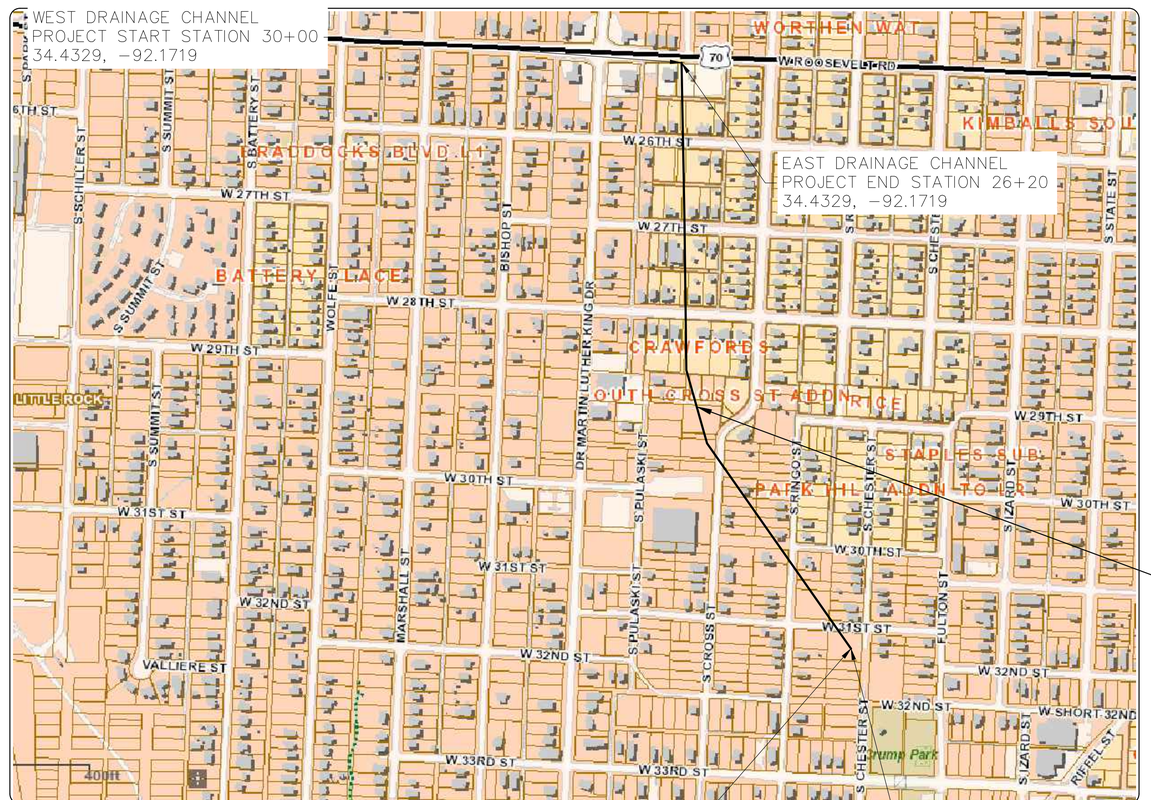
CLR PROJECT #01-17-DR-9
SWAGGERTY BRANCH
DRAINAGE REHABILITATION
ROOSEVELT ROAD TO SOUTH OF 31ST STREET



PROJECT LOCATION – WARD 1



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

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

PROJECT LOCATION

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)

90% SUBMITTAL

PUBLIC WORKS · CITY OF LITTLE ROCK ·

2019-2021
BOND PROGRAM

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

811 Know what's below. Call before you dig.

PMI
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

SEAL

DRAWN BY	JTM
DESIGNED	JTM
CHECKED	BJW
DATE	1-10-20
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	Removal and Disposal of Designated Structures	EA	32
SP	Access Manhole	EA	1
SP	House Demolition and Disposal	EA	1

GENERAL NOTES:

1. INVERT OF METAL PIPE SHALL BE GROUTED FOR THE ENTIRE LENGTH OF BOTH PIPES. SEE DETAILS.
2. 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.
3. 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)
4. FOR AREAS OF SUBGRADE PREPARATION TO RECEIVE CONCRETE SIDEWALKS, SUBGRADE SHALL BE COMPACTED TO A DENSITY NOT LESS THAN 90% MAXIMUM. (AASHTO T–180)
5. 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.
6. CRUSHED STONE – DENSITY OF COMPACTED MATERIAL IN EACH COURSE SHALL BE COMPACTED TO A DENSITY OF AT LEAST 100% MAXIMUM. (AASHTO T–191)
7. CONTRACTOR SHALL LOCATE EQUALIZER PIPES AND RECONNECT THESE PIPES IN AREAS WHERE NEW PIPE SECTIONS ARE INSTALLED, SEE DETAILS.
8. 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.
9. 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.
10. CONTRACTOR SHALL USE SHORING AND SHIELDING WHEN WORKING ADJACENT TO STRUCTURES. FOLLOW ALL OSHA TRENCHING AND EXCAVATION SAFETY STANDARDS.
11. MATERIAL REMOVED FOR PIPE INSTALLATION IS INCLUDED IN COST OF PIPE.

EXISTING

IRON ROD — IR
PK NAIL — PK
R.R. SPIKE — RR(Sp)
CONC. MONUMENT — CM
WATER VALVE — WV
WATER METER — WM
FIRE HYDRANT — FH
GAS METER — GM
GAS VALVE — GV
CLEAN–OUT — CO
GUARD POST (BOLLARD) — GP
SIGN POST
BENCHMARK
STORM SEWER MANHOLE — D
SANITARY SEWER MANHOLE — S
TELEPHONE MANHOLE — T
ELECTRIC MANHOLE — E
TELEPHONE BOX — T
ELECTRIC BOX — E
CABLE BOX — C
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 — X
OVERHEAD ELECTRIC — OE
OVERHEAD TELEPHONE — OT
OVERHEAD CABLE — OC
UNDERGROUND TELEPHONE — UGT
UNDERGROUND ELECTRIC — UGE
UNDERGROUND CABLE — UGC
WATER LINE — 8"W
SEWER LINE — 8"SS
GAS LINE — 4"G
STORM SEWER/CULVERT — 24" CMP/RCP/DIP
EDGE OF WOODS
CONTOUR LINE — 650

PROPOSED

PROPOSED CONTOUR — 25
PROPOSED SPOT ELEVATION — 25.00
PROPOSED SPOT CURB ELEVATION — 25.50 / 25.00
STORM SEWER – PIPE
STORM SEWER – MITERED END SECTION
STORM SEWER – GRATE INLET
STORM SEWER – JUNCTION BOX — D D
STORM SEWER – FLARED END SECTION
STORM SEWER – HEADWALL
STORM SEWER – SINGLE WING — D
STORM SEWER – DOUBLE WING — D
STORM SEWER – AREA INLET — D
GRADE BREAK LINE
HIGH POINT — HP
LOW POINT — LP
CUT LINE — C
FILL LINE — F
SANITARY SEWER PIPE — SAN
SANITARY SEWER MANHOLE — S
PROPOSED CURB
PROPOSED CONCRETE
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
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	

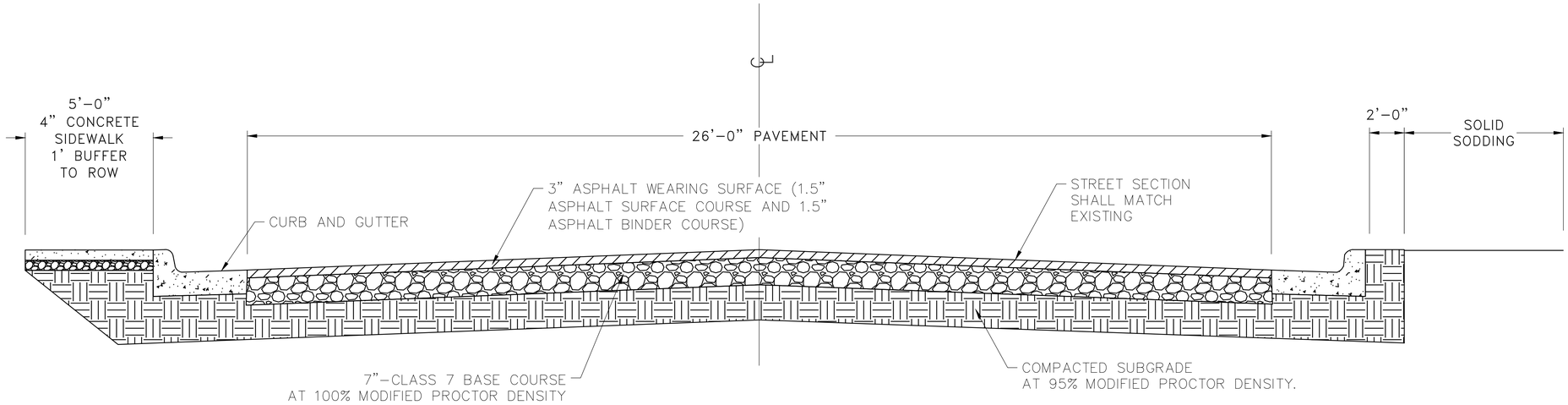
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS

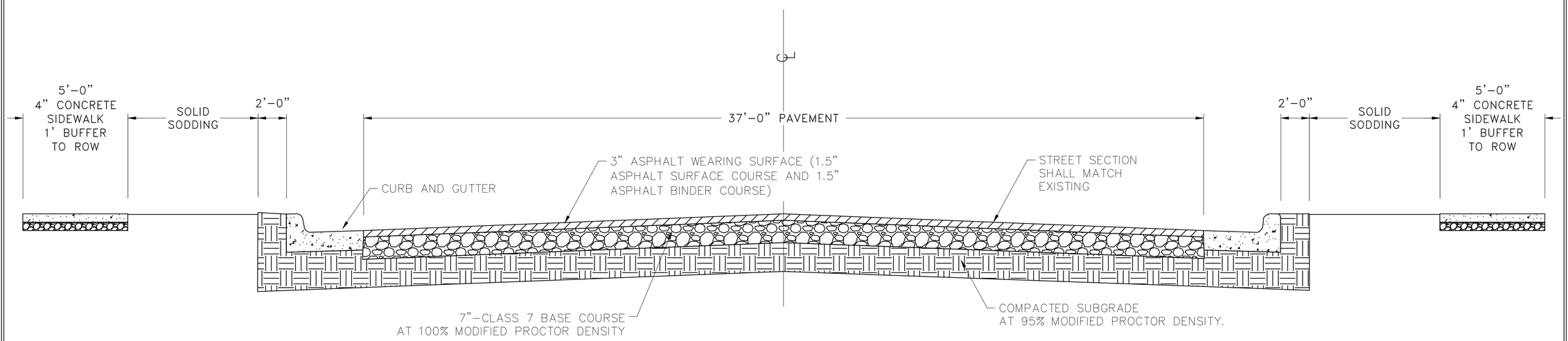
GENERAL NOTES AND QUANTITIES

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

DRAWN BY	JTM
DESIGNED	JTM
CHECKED	BJW
DATE	1-10-20
SCALE	N.T.S.
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C2



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



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

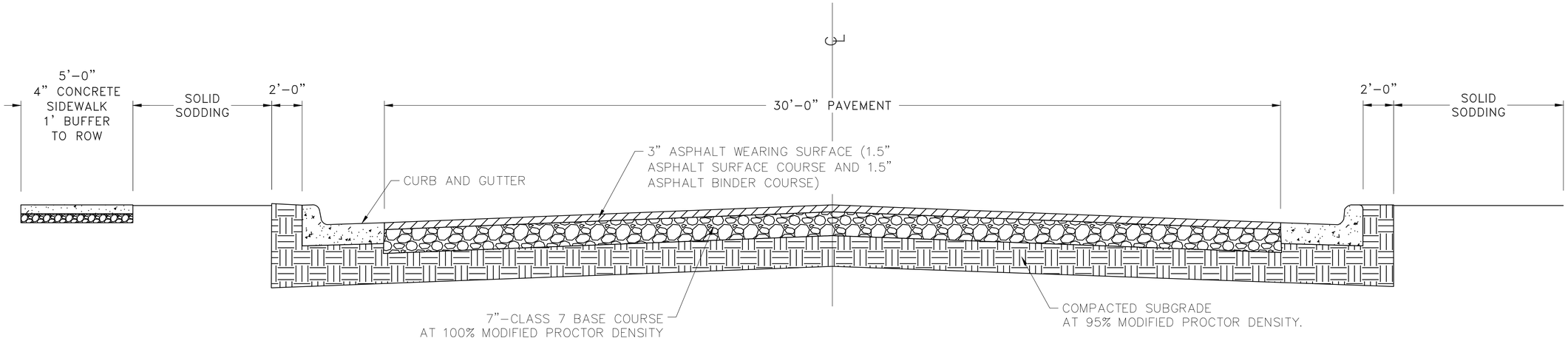
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS

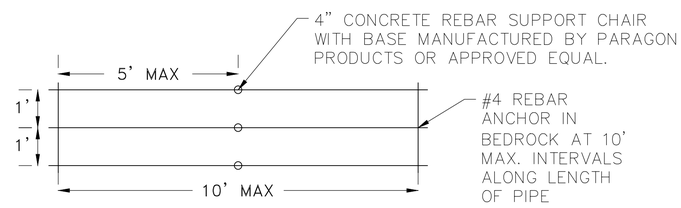
TYPICAL SECTIONS (1)

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

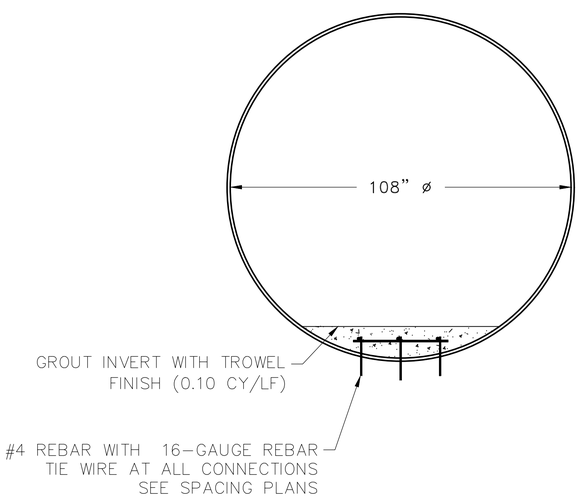
DRAWN BY	JTM
DESIGNED	JTM
CHECKED	BJW
DATE	1-10-20
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C3

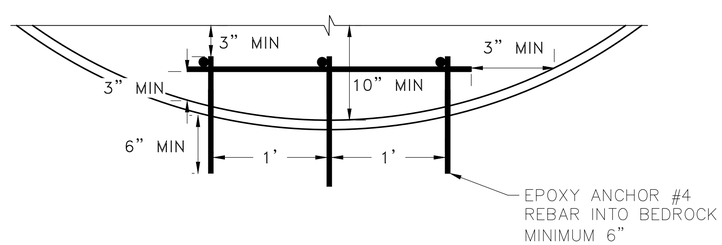


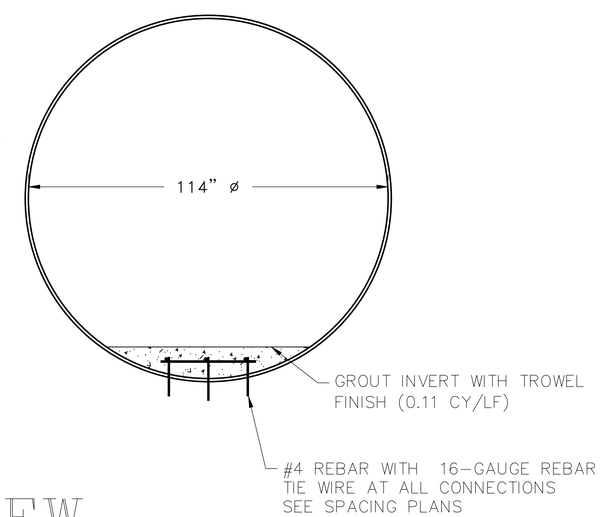
WEST 26TH STREET ROAD SECTION
STA. 80+00 TO 80+47



REBAR SPACING PLAN VIEW







REBAR SPACING PROFILE VIEW

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

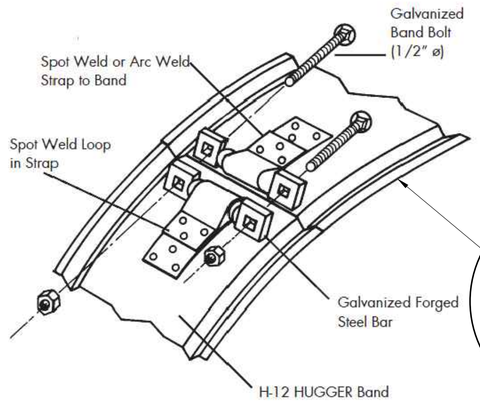
CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS

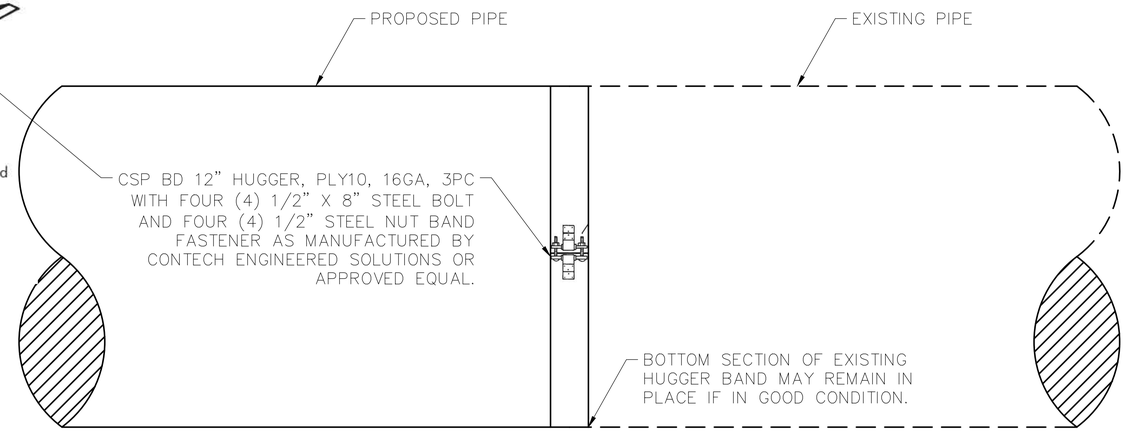
TYPICAL SECTIONS (2)

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

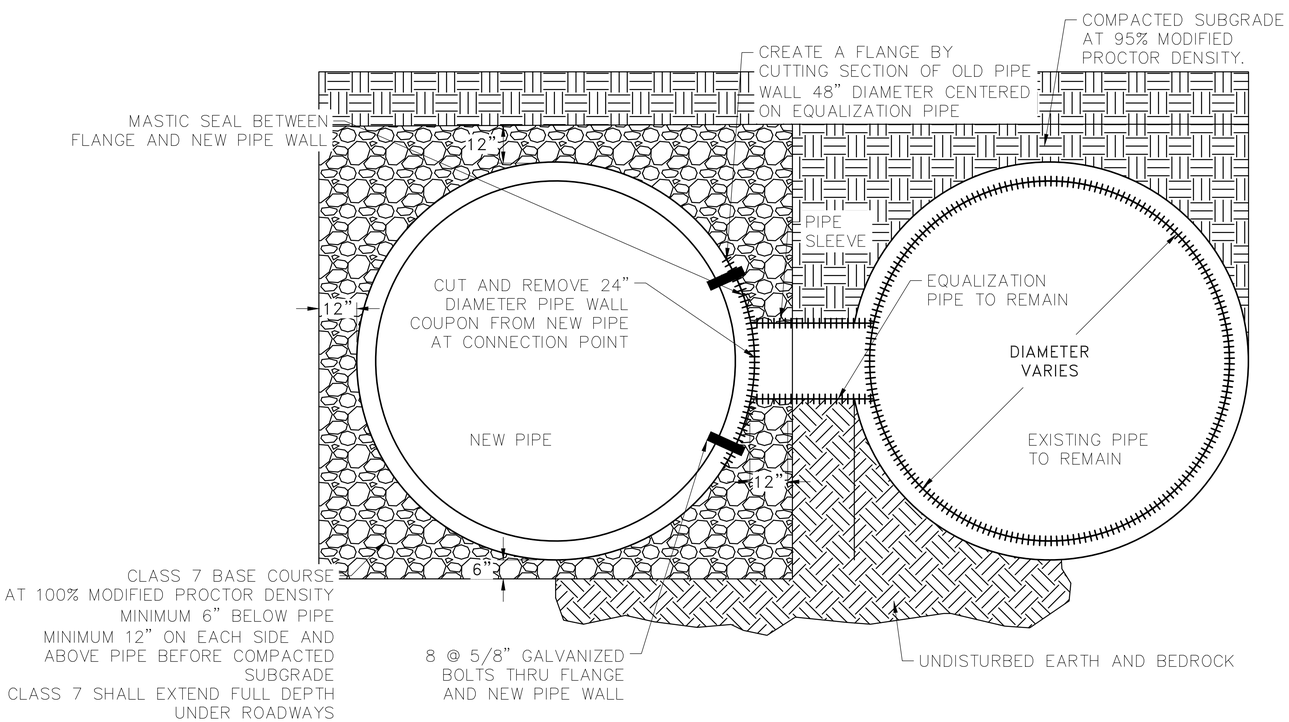
DRAWN BY	JTM
DESIGNED	JTM
CHECKED	BJW
DATE	1-10-20
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C4

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

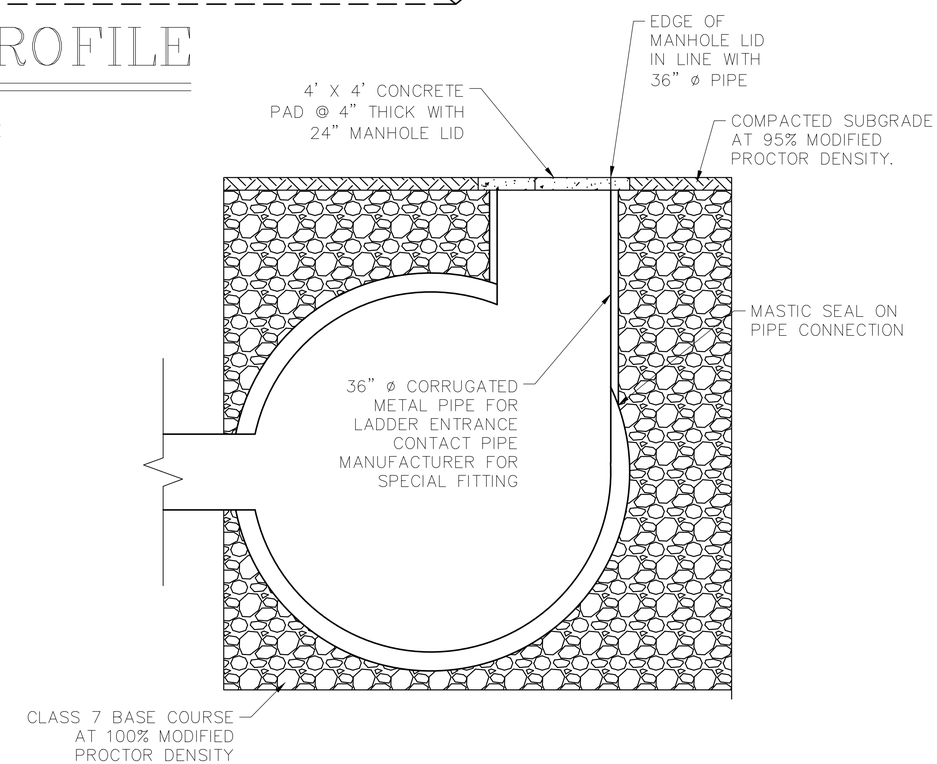




METAL PIPE CONNECTION PROFILE



EQUALIZATION PIPE CONNECTIONS



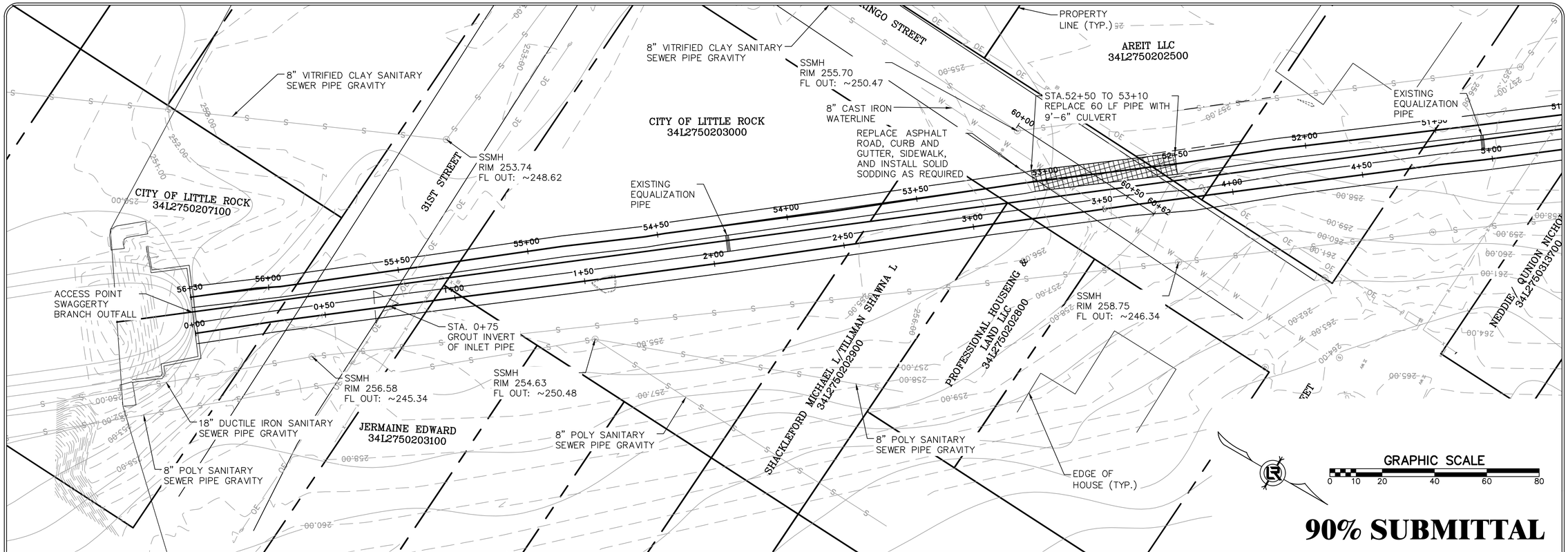
ACCESS MANHOLE

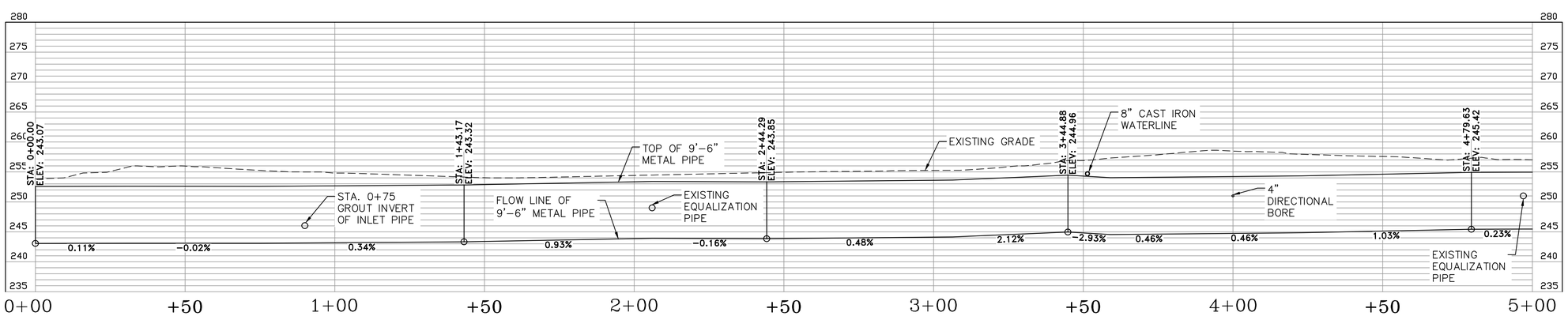
REVISIONS	DATE

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	1-10-20
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C5





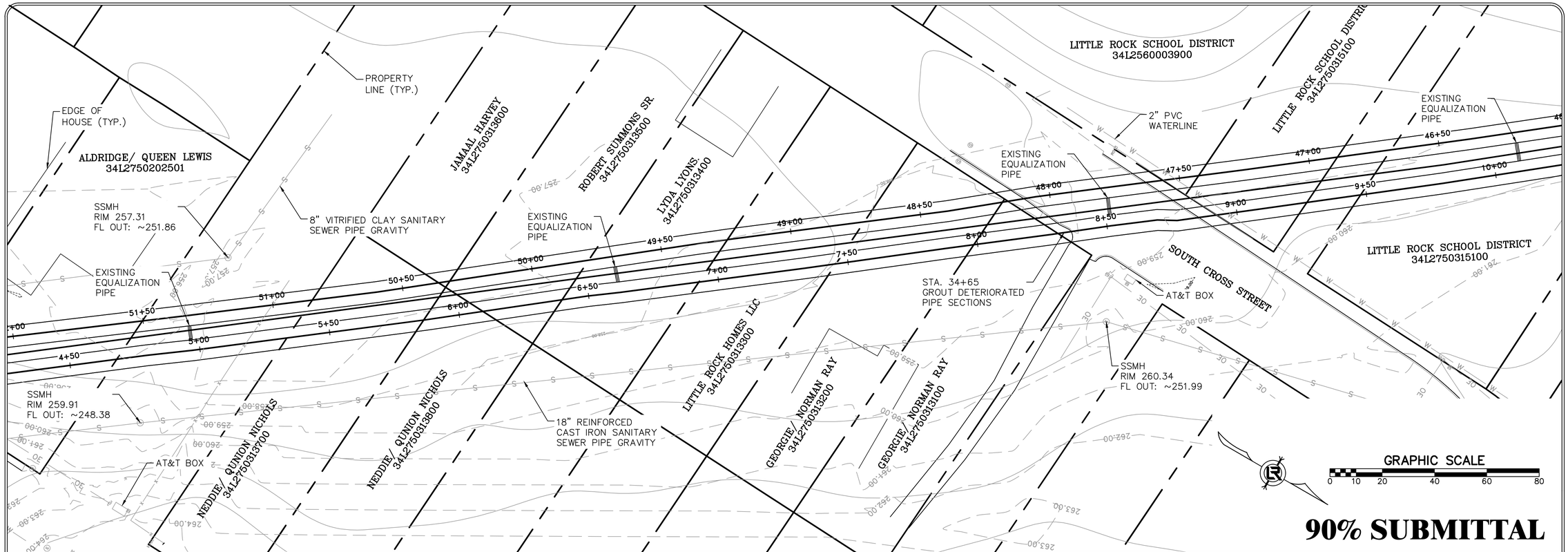
EAST PIPE

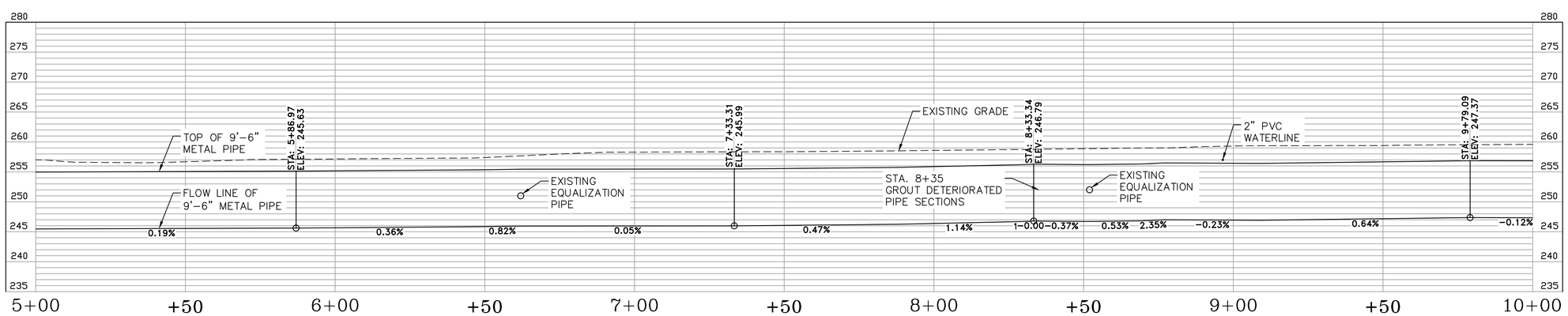
REVISIONS	DATE

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	1-10-20
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C6





EAST PIPE

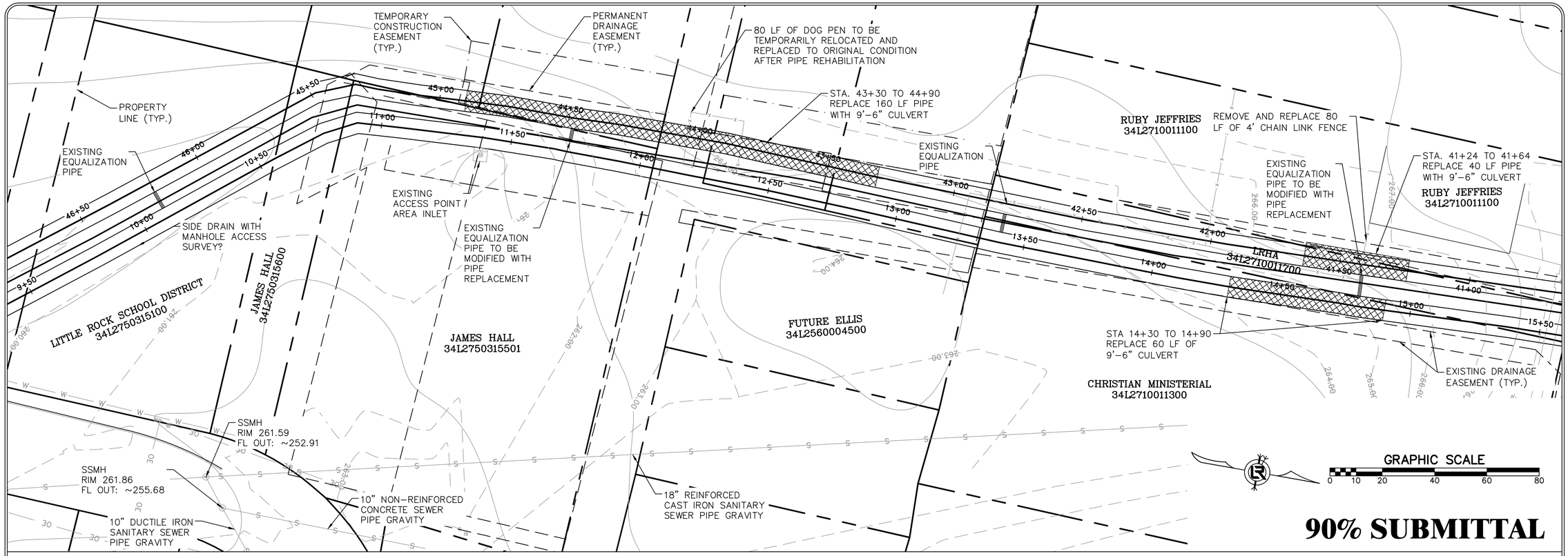
REVISIONS	DATE

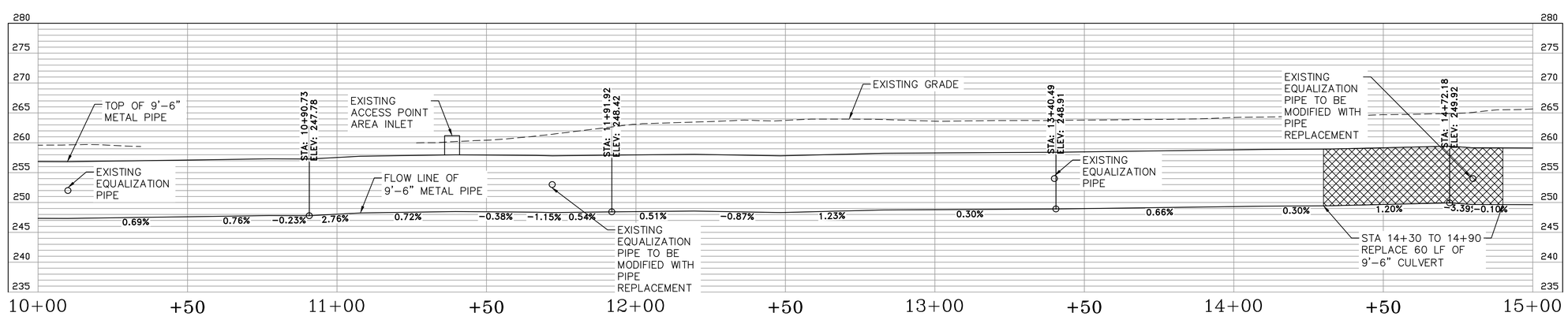
CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS

PLAN AND PROFILE SHEET (2)

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

DRAWN BY	JTM
DESIGNED	JTM
CHECKED	BJW
DATE	1-10-20
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C7





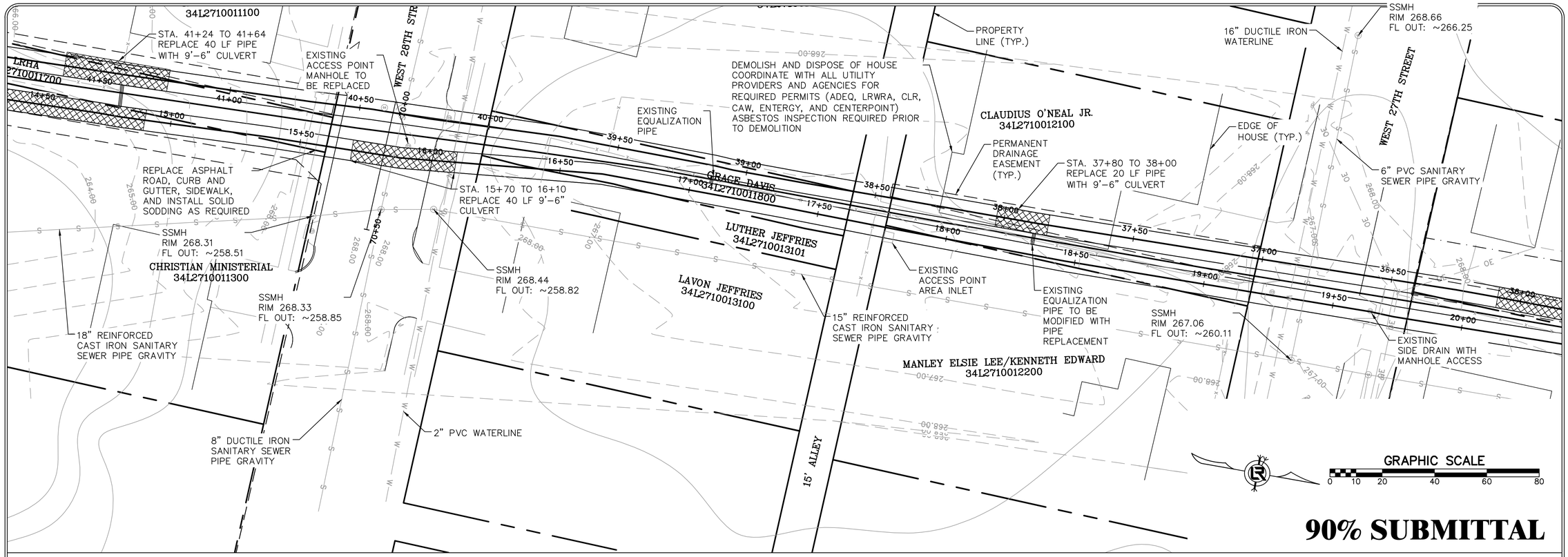
EAST PIPE

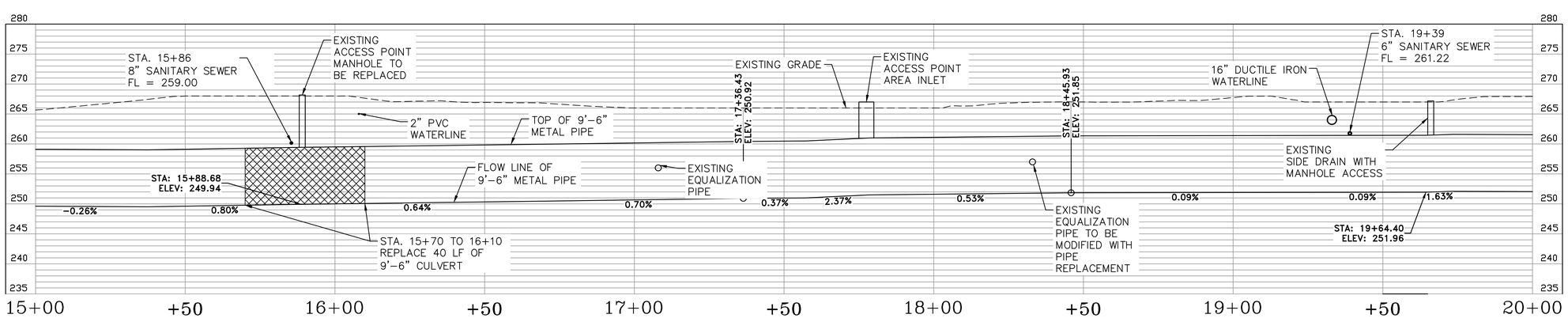
REVISIONS	DATE

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	1-10-20
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C8





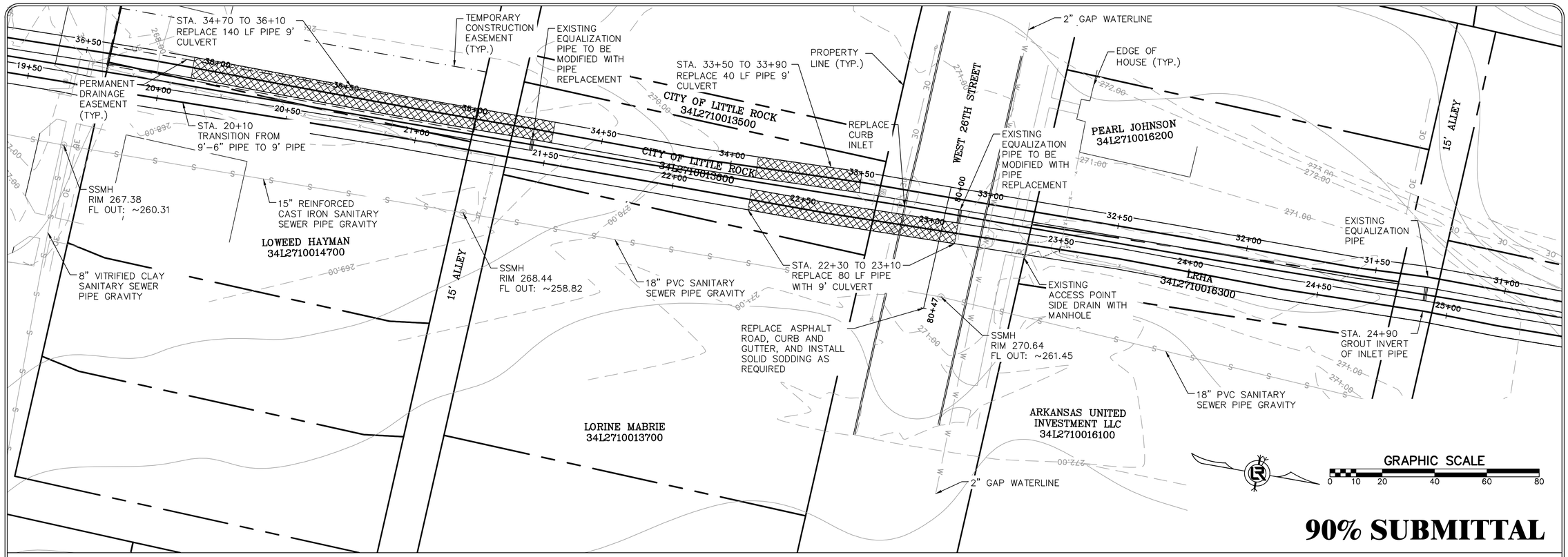
EAST PIPE

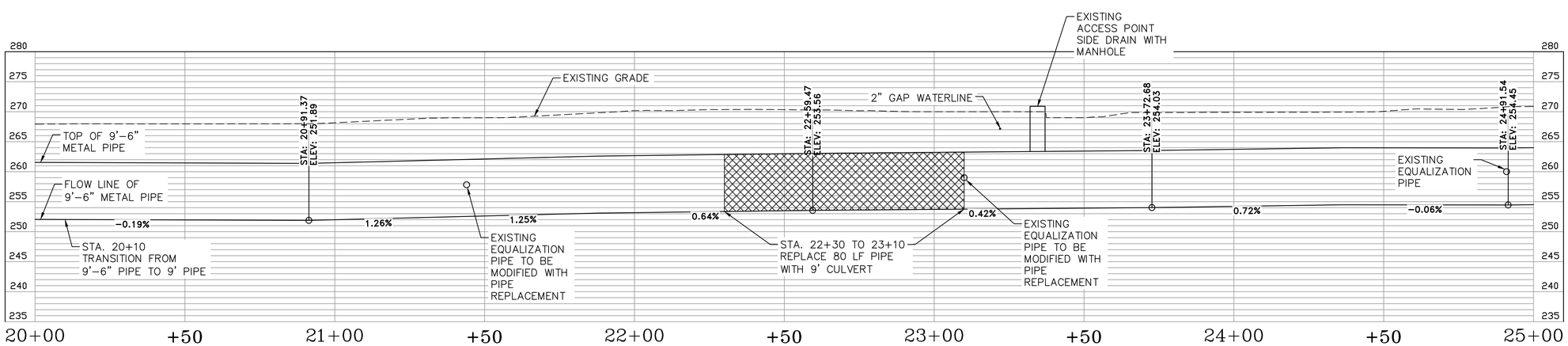
REVISIONS	DATE

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

DRAWN BY	JTM
DESIGNED	JTM
CHECKED	BJW
DATE	1-10-20
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C9





EAST PIPE

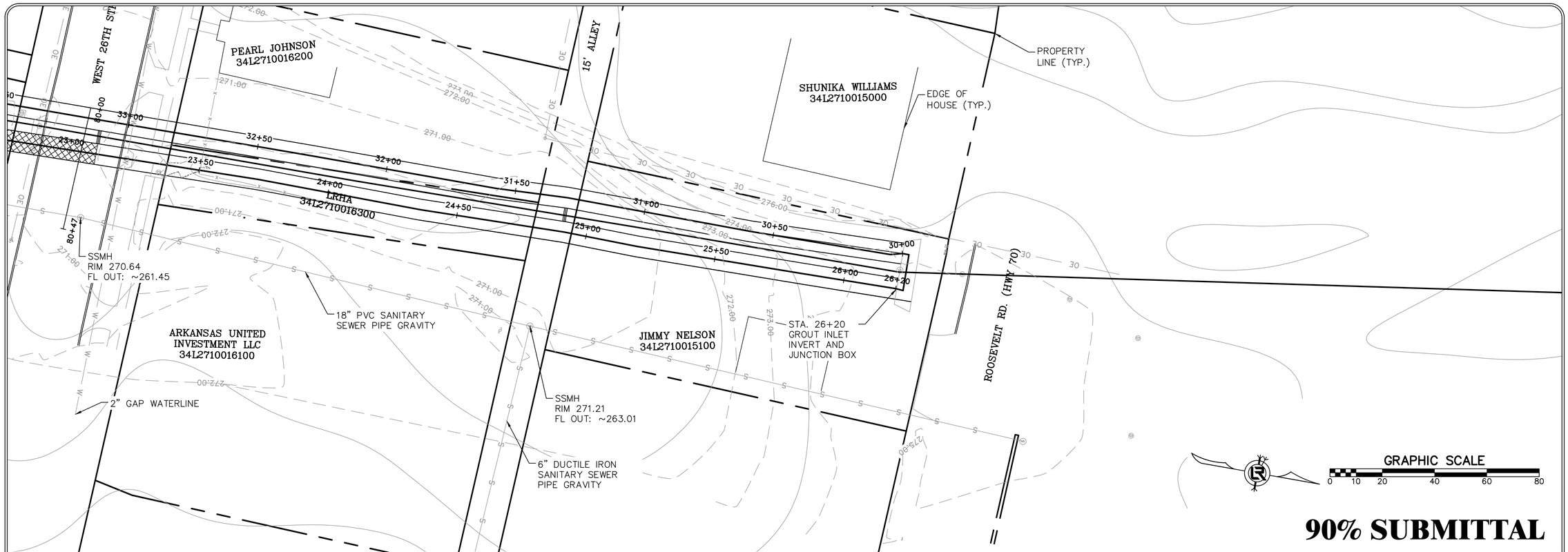
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS

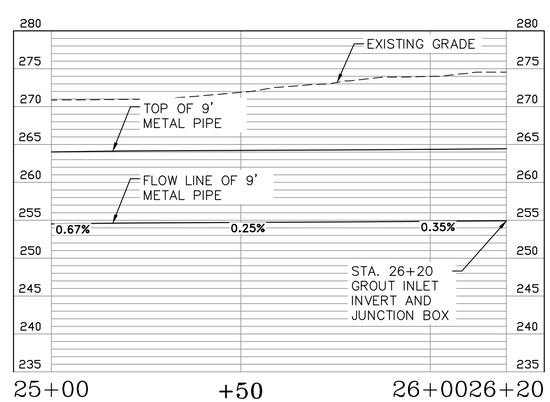
PLAN AND PROFILE SHEET (5)

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

DRAWN BY	JTM
DESIGNED	JTM
CHECKED	BJW
DATE	1-10-20
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C10



90% SUBMITTAL



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	1-10-20
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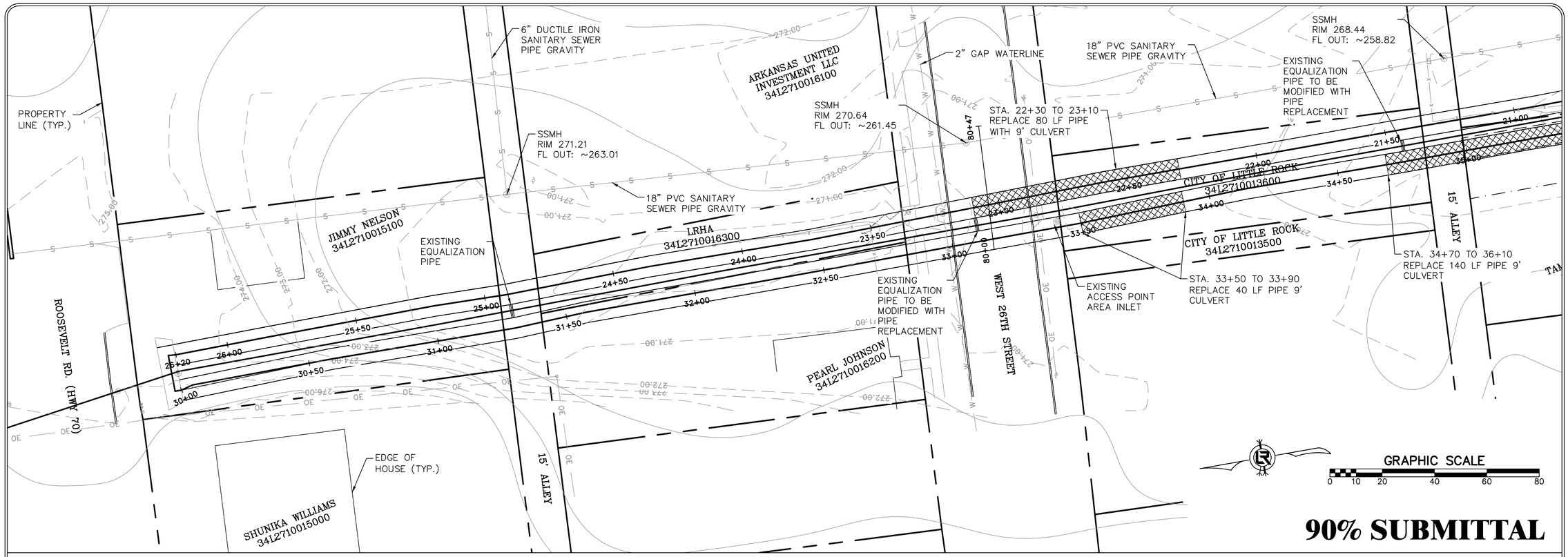
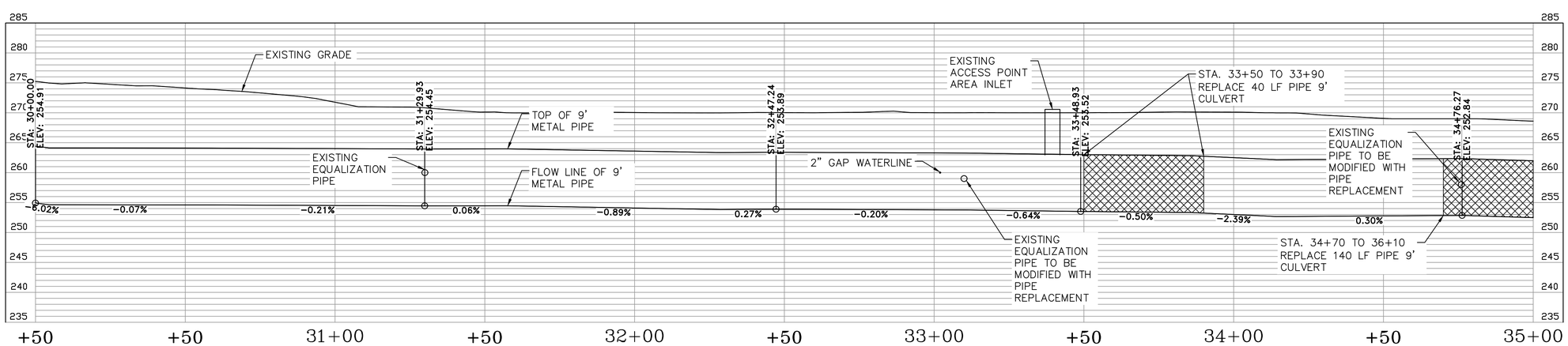
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C11





WEST PIPE

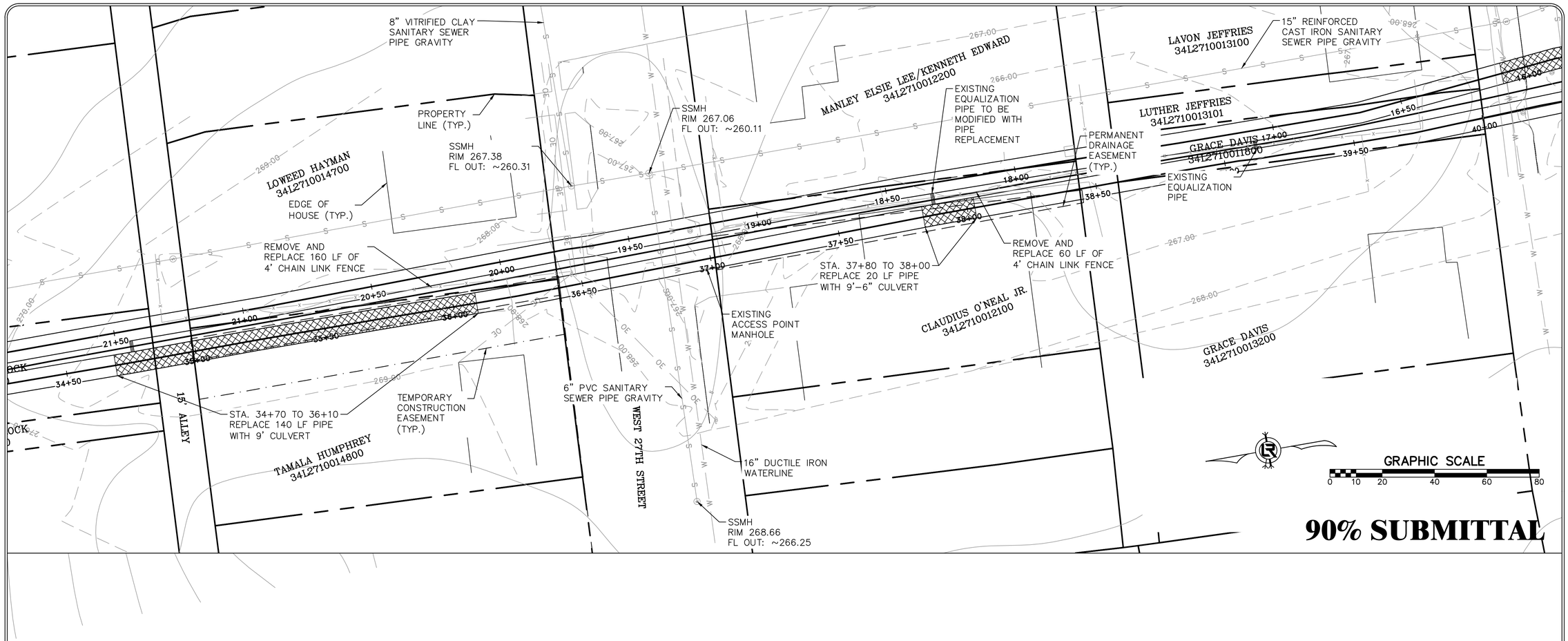
REVISIONS	DATE

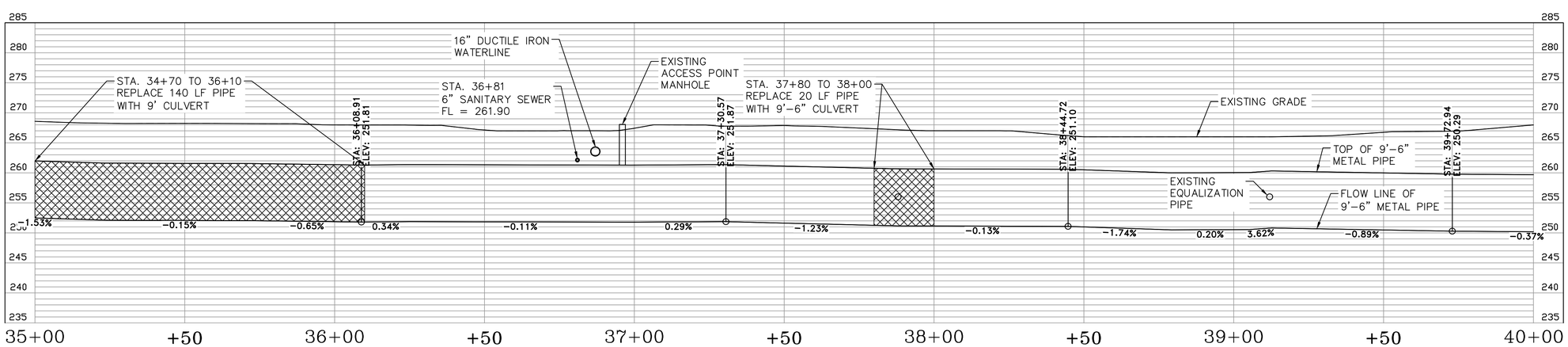
CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS

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	1-10-20
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C12





WEST PIPE

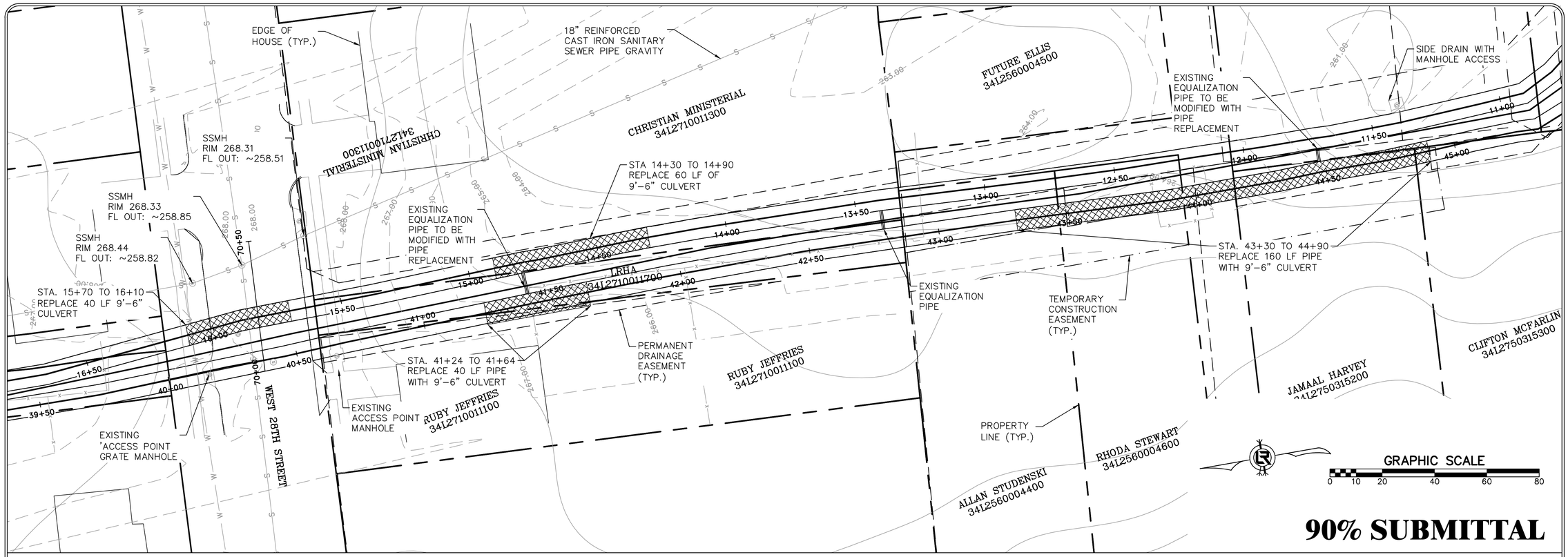
REVISIONS	DATE

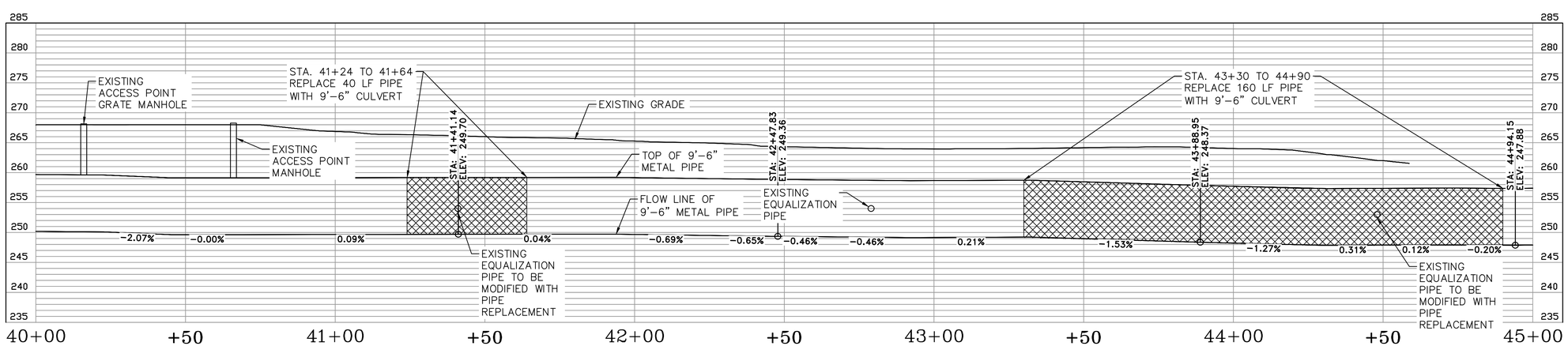
CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS

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	1-10-20
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C13





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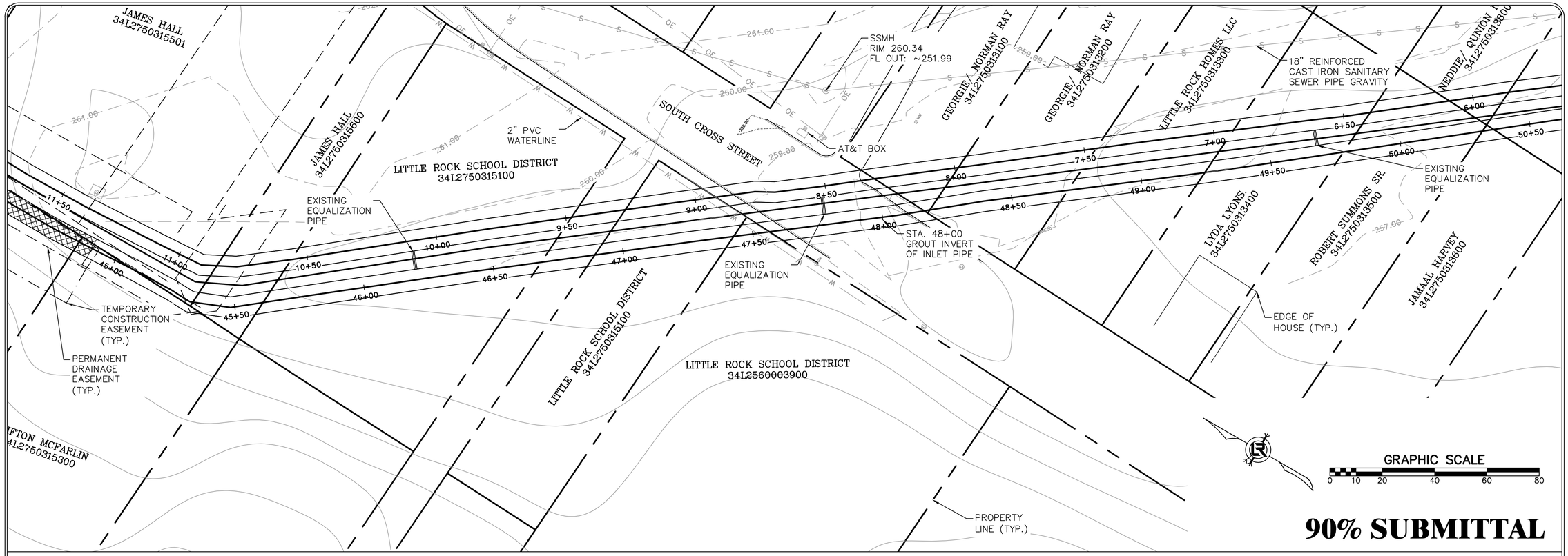
REVISIONS	DATE

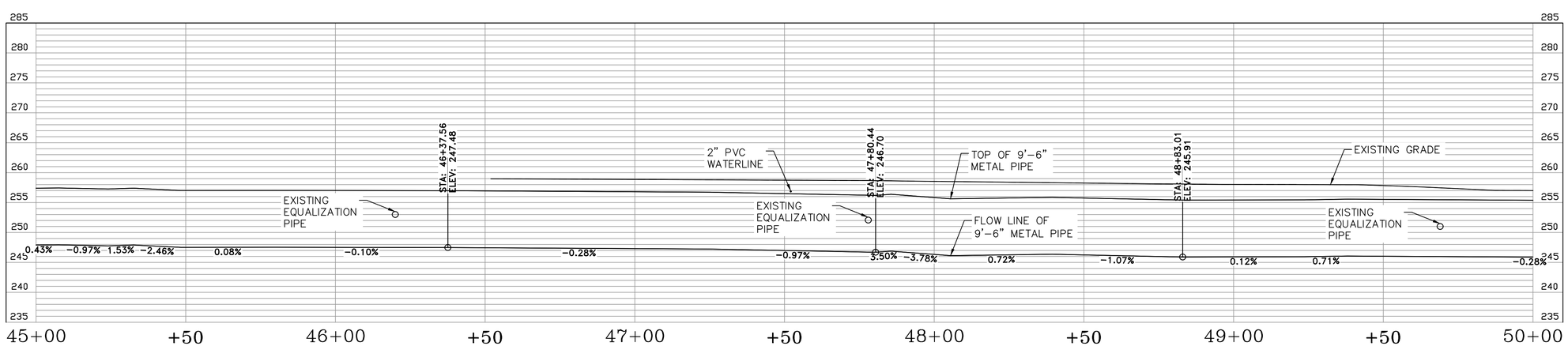
CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS

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	1-10-20
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C14





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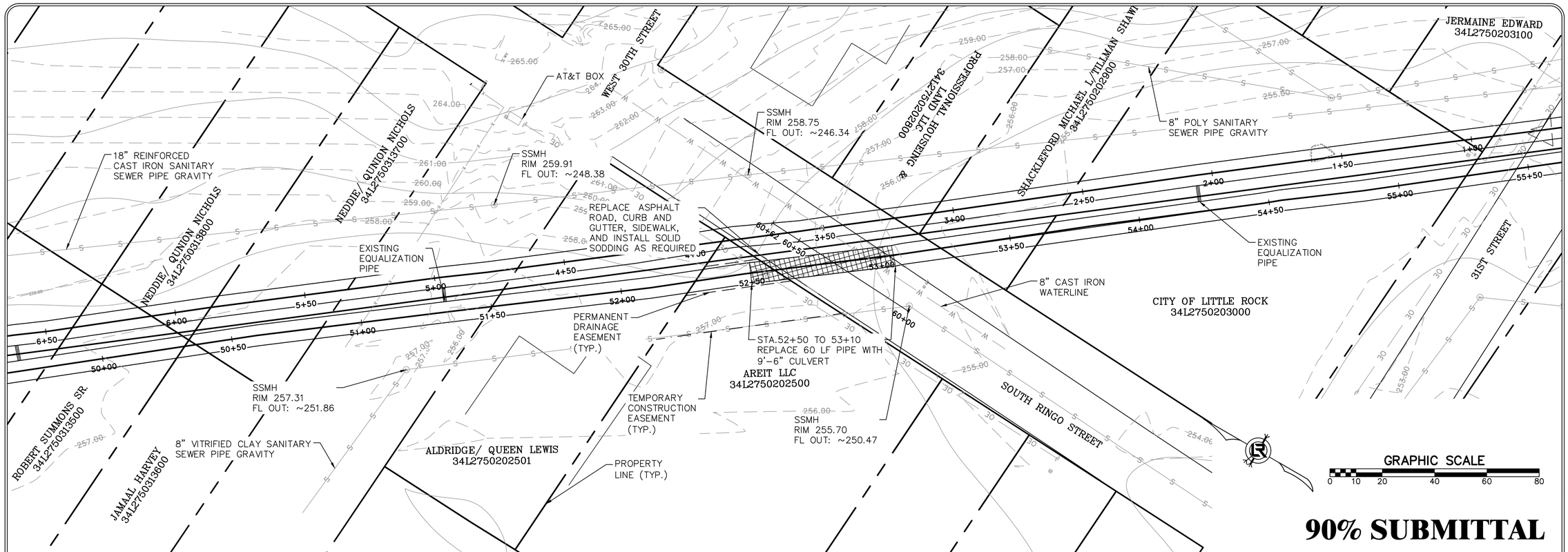
REVISIONS	DATE

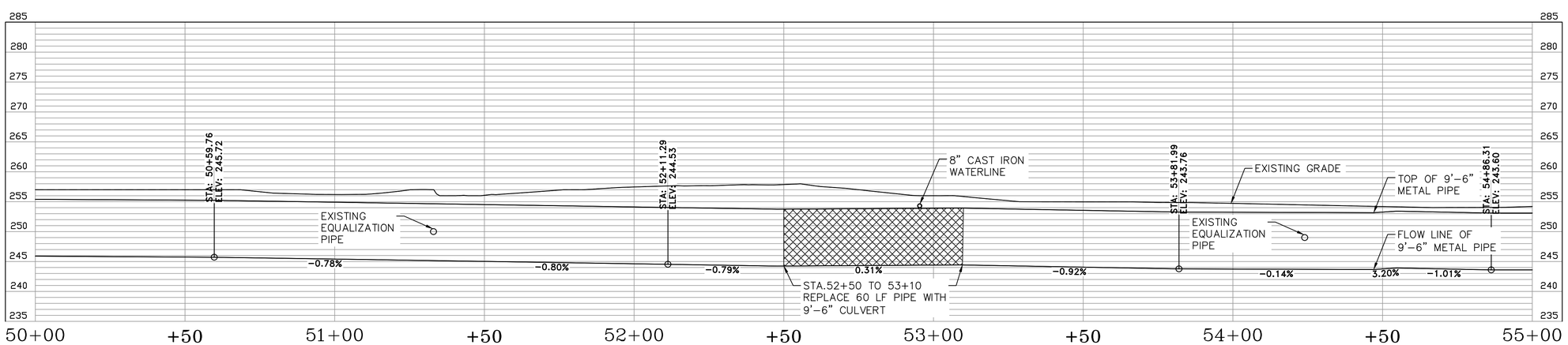
CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS

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	1-10-20
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C15





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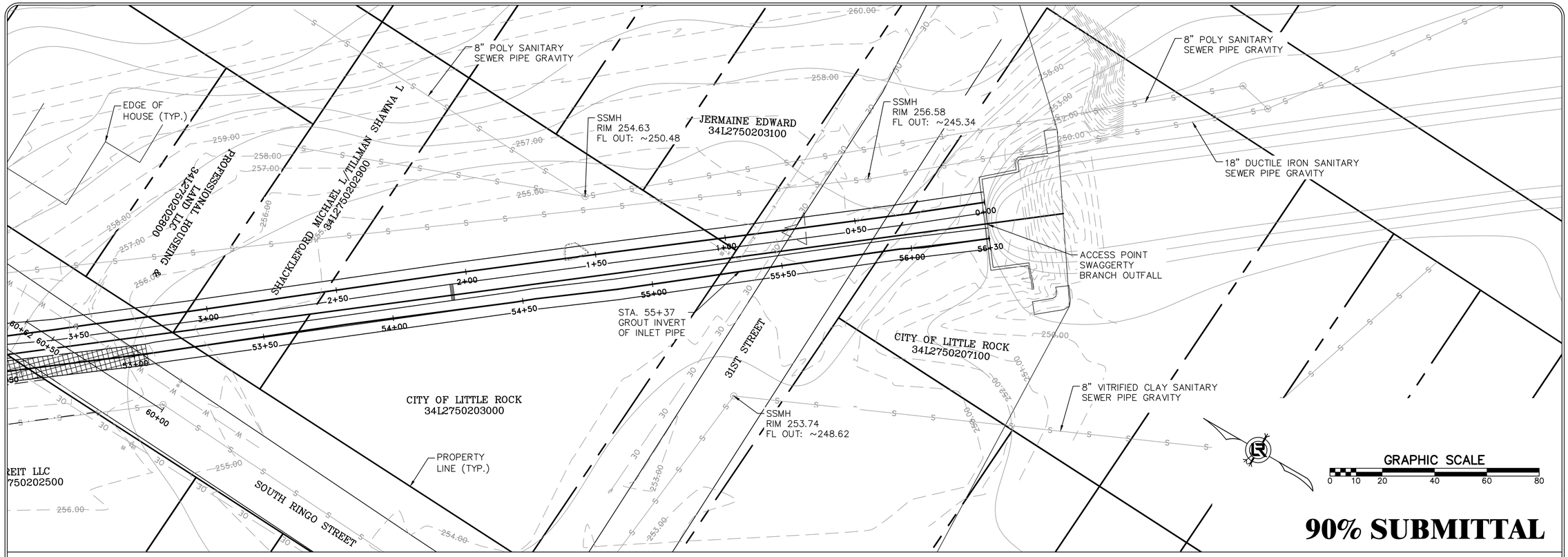
REVISIONS	DATE

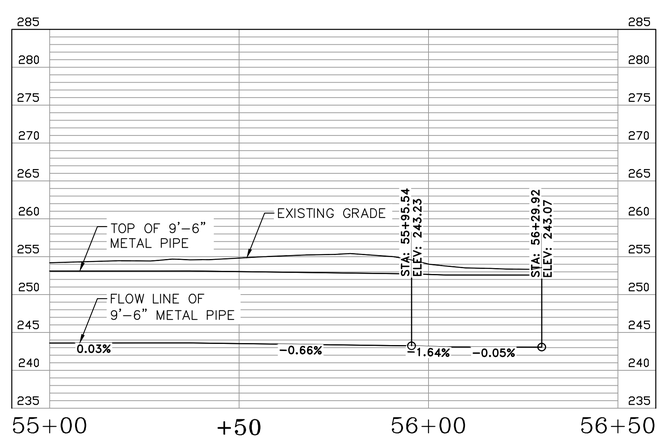
CITY OF LITTLE ROCK, ARKANSAS
SWAGGERTY DRAINAGE IMPROVEMENTS

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	1-10-20
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C16





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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	1-10-20
SCALE	NTS
PROJECT NO.	CLR #01-17-DR-9
SHEET NO.	C17