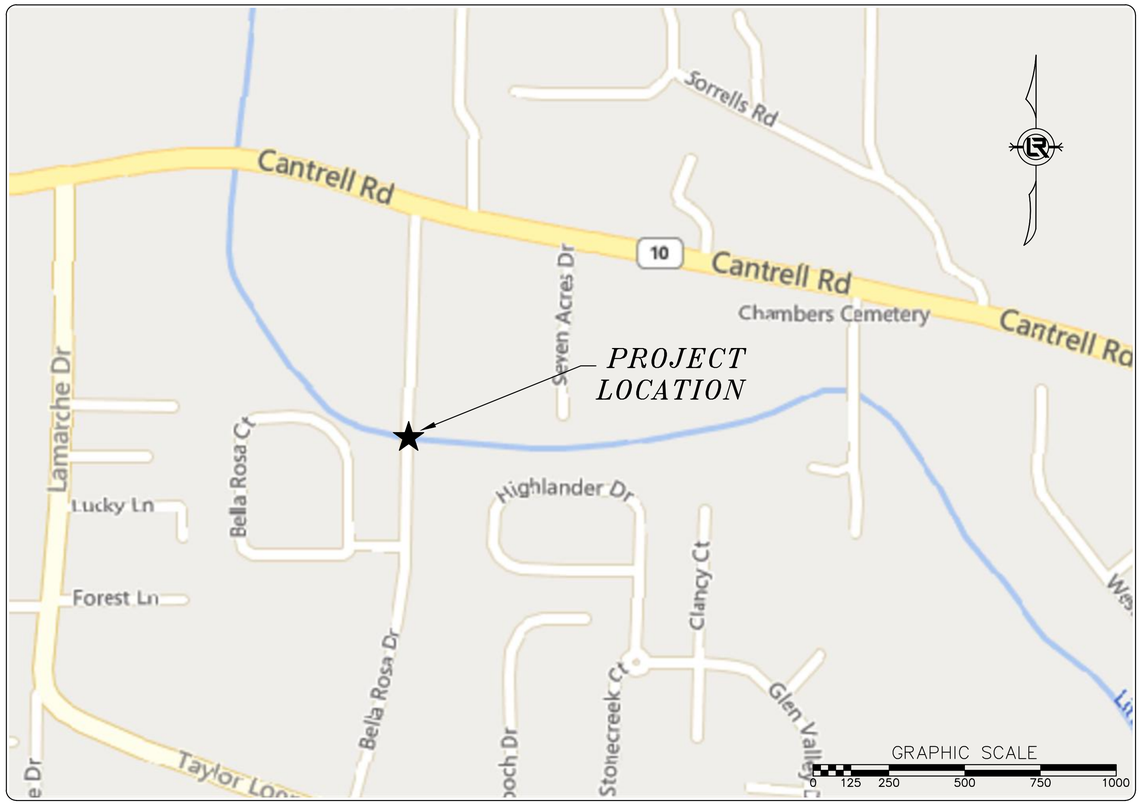
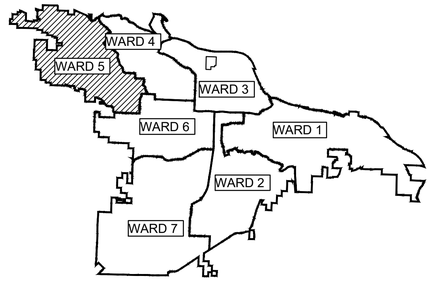
PROJECT NO. 05-17-ST-223B
BELLA ROSA DRIVE
BRIDGE REPLACEMENT
LITTLE ROCK, AR





PROJECT LOCATION - WARD 5

SHEET NO.	TITLE
C1	COVER SHEET
C2	GENERAL NOTES, LEGENDS, AND QUANTITIES
C3	EXISTING CONDITIONS
C4	PLAN AND PROFILE
C5	CULVERT DETAILS
C6	CURB INLET AND BOX DETAILS
C7	GUARD RAIL DETAILS
C8	TRAFFIC CONTROL

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.

REVIEW SUBMITTAL

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
BELLA ROSA DRIVE BRIDGE REPLACEMENT
COVER SHEET

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

DRAWN BY	CKS
DESIGNED	JJG
CHECKED	JJG
DATE	12/10/2024
SCALE	1"=250'
PROJECT NO.	05-17-ST-223B
SHEET NO.	C1

EXISTING

IRON ROD	O IR
PK NAIL	O PK
R.R. SPIKE	O RR(Sp)
CONC. MONUMENT	□ CM
WATER VALVE	WV
WATER METER	WM
EXISTING ELEVATION	×
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	
STORMWATER FLOW DIRECTION	
TRAFFIC FLOW DIRECTION	
PROPERTY LINE	
SETBACK LINE	
EASEMENT LINE	
CURB	
FENCE	X X X
OVERHEAD ELECTRIC	OE OE
OVERHEAD TELEPHONE	OT OT
OVERHEAD CABLE	OC OC
UNDERGROUND TELEPHONE	UGT
UNDERGROUND ELECTRIC	UGE
UNDERGROUND CABLE	UGC
WATER LINE	W
SEWER LINE	85/105
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
GUARD RAIL POST	
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 CURB INLET	D
STORM SEWER – DOUBLE WING CURB INLET	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

REVIEW SUBMITTAL

REVISIONS	DATE

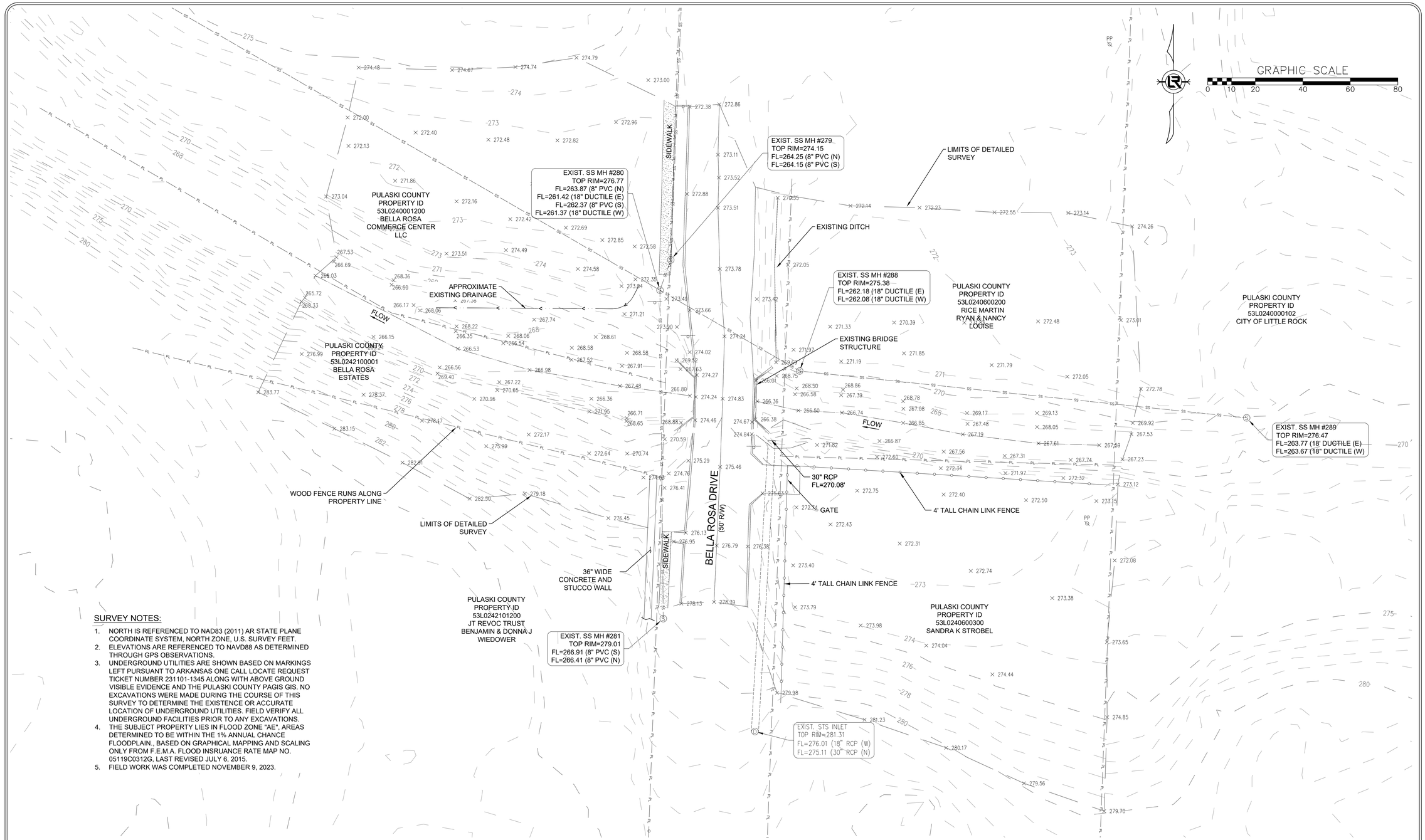
CITY OF LITTLE ROCK, ARKANSAS

BELLA ROSA DRIVE BRIDGE REPLACEMENT

GENERAL NOTES, LEGENDS AND QUANTITIES

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

DRAWN BY	CKS
DESIGNED	JJG
CHECKED	JJG
DATE	12/10/2024
SCALE	
PROJECT NO.	05-17-ST-223B
SHEET NO.	C2



SURVEY NOTES:

1. NORTH IS REFERENCED TO NAD83 (2011) AR STATE PLANE COORDINATE SYSTEM, NORTH ZONE, U.S. SURVEY FEET.
2. ELEVATIONS ARE REFERENCED TO NAVD88 AS DETERMINED THROUGH GPS OBSERVATIONS.
3. UNDERGROUND UTILITIES ARE SHOWN BASED ON MARKINGS LEFT PURSUANT TO ARKANSAS ONE CALL LOCATE REQUEST TICKET NUMBER 231101-1345 ALONG WITH ABOVE GROUND VISIBLE EVIDENCE AND THE PULASKI COUNTY PAGIS GIS. NO EXCAVATIONS WERE MADE DURING THE COURSE OF THIS SURVEY TO DETERMINE THE EXISTENCE OR ACCURATE LOCATION OF UNDERGROUND UTILITIES. FIELD VERIFY ALL UNDERGROUND FACILITIES PRIOR TO ANY EXCAVATIONS.
4. THE SUBJECT PROPERTY LIES IN FLOOD ZONE "AE", AREAS DETERMINED TO BE WITHIN THE 1% ANNUAL CHANCE FLOODPLAIN., BASED ON GRAPHICAL MAPPING AND SCALING ONLY FROM F.E.M.A. FLOOD INSRUANCE RATE MAP NO. 05119C0312G, LAST REVISED JULY 6, 2015.
5. FIELD WORK WAS COMPLETED NOVEMBER 9, 2023.

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

REVIEW SUBMITTAL

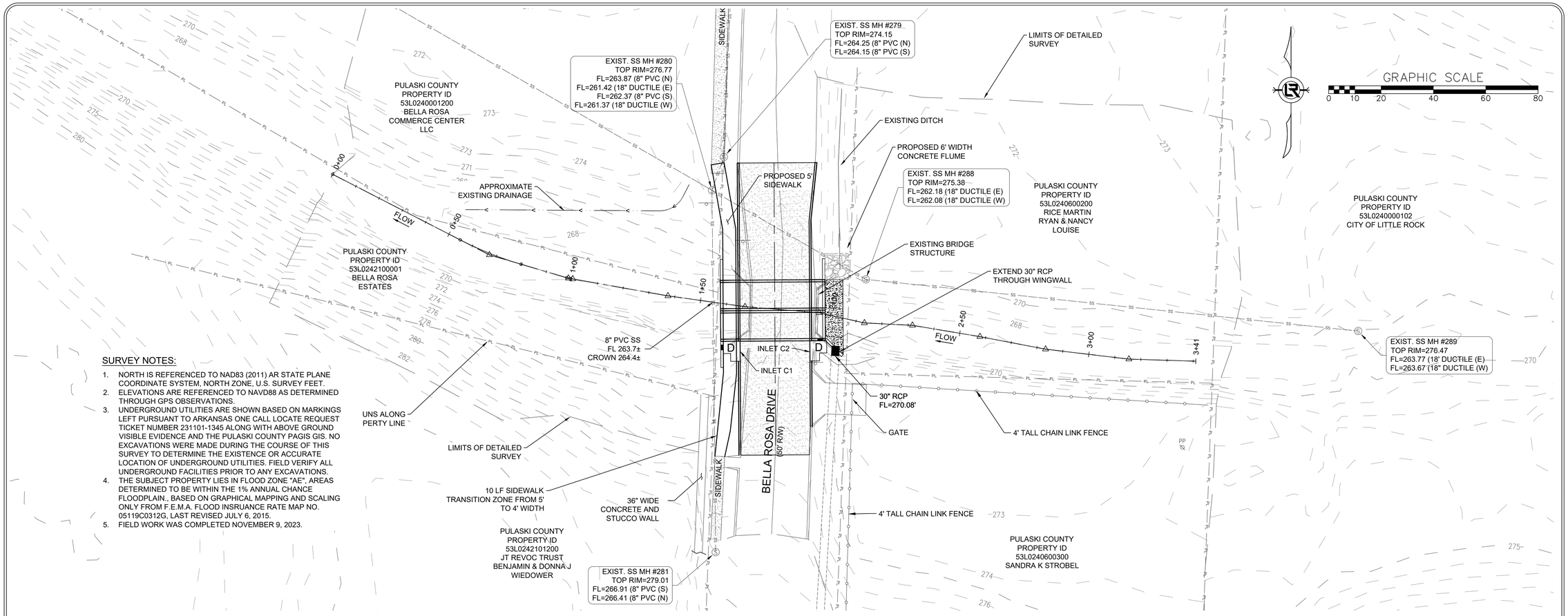
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
BELLA ROSA DRIVE BRIDGE IMPROVEMENTS

EXISTING CONDITIONS

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

DRAWN BY	JJG
DESIGNED	_
CHECKED	_
DATE	12/10/2024
SCALE	1"=20'
PROJECT NO.	05-17-ST-223B
SHEET NO.	C3



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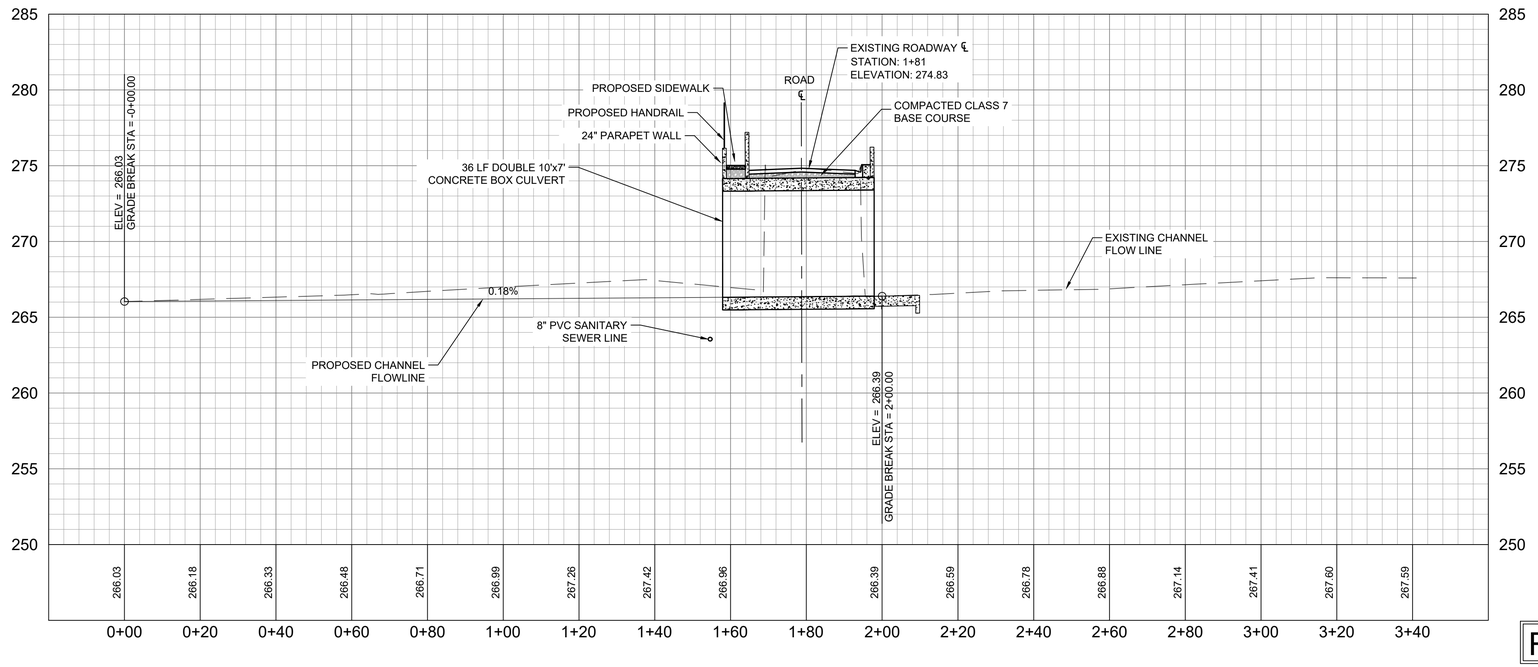


811 Know what's below. Call before you dig.

REVIEW SUBMITTAL

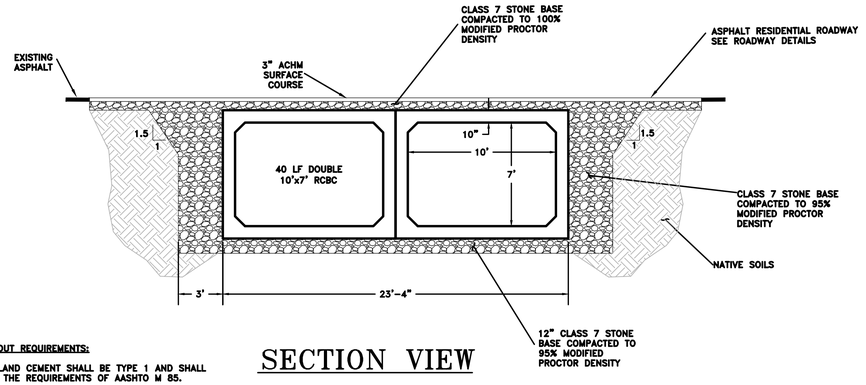
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
BELLA ROSA DRIVE BRIDGE IMPROVEMENTS

PLAN AND PROFILE

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

DRAWN BY	JJG
DESIGNED	_
CHECKED	_
DATE	12/10/2024
SCALE	1"=20'
PROJECT NO.	05-17-ST-223B
SHEET NO.	C1



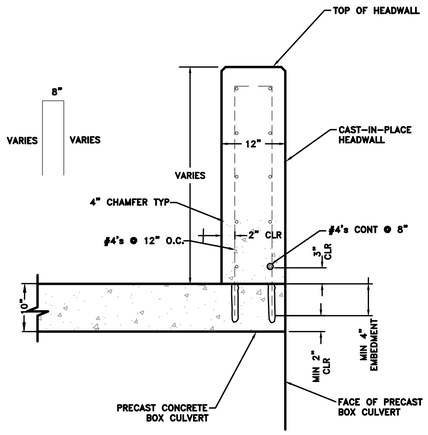
SECTION VIEW

LEAN GROUT REQUIREMENTS:

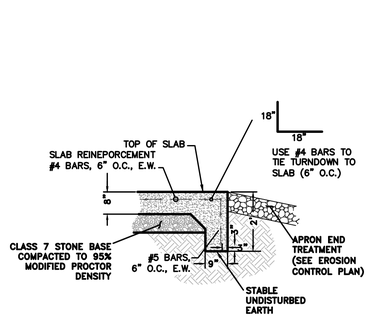
1. PORTLAND CEMENT SHALL BE TYPE 1 AND SHALL MEET THE REQUIREMENTS OF AASHTO M 85.
2. SAND SHALL MEET THE REQUIREMENTS OF ASTM C 33 FINE AGGREGATE.
3. THE SAND CEMENT MIXTURE SHALL CONSIST OF NOT LESS THAN 1.5 SACKS OF PORTLAND CEMENT PER TON OF MATERIAL MIXTURE.
4. THE MIXTURE SHALL CONTAIN SUFFICIENT WATER TO HYDRATE THE CEMENT.
5. THE SAND CEMENT MIXTURE SHALL BE PLACED IN MAXIMUM 8 INCH THICK LIFTS, LOOSE MEASURE, AND RODDED AND TAMPED AROUND BOX TO THOROUGHLY FILL VOIDS.

NOTE:

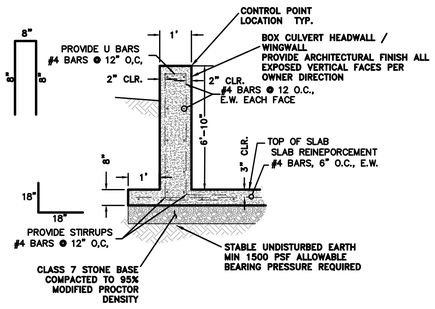
1. PRECAST REINFORCED CONCRETE BOX CULVERTS JOINTS SHALL BE INSTALL WITH PREFORMED FLEXIABLE PLASTIC JOINT MATERIAL. INSTALL PREFORMED FLEXIBLE JOINT SEALANTS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. PLACE THE JOINT SEALER SO THAT NO DIRT OR OTHER DELETERIOUS MATERIALS COME IN CONTACT WITH THE JOINT SEALING MATERIAL. PULL OR PUSH HOME THE CULVERT WITH ENOUGH FORCE TO PROPERLY SEAL THE JOINT. REMOVE ANY JOINT MATERIAL PUSHED OUT INTO THE INTERIOR OF THE PIPE THAT WOULD TEND TO OBSTRUCT THE FLOW. WHEN THE ATMOSPHERIC TEMPERATURE IS BELOW 60°F, STORE PREFORMED FLEXIBLE JOINT SEALANTS IN AN AREA WARMED TO ABOVE 70°F OR ARTIFICIALLY WARM TO THIS TEMPERATURE IN AN APPROVED MANNER. APPLY FLEXIBLE JOINT SEALANTS TO PIPE JOINTS IMMEDIATELY BEFORE PLACING PIPE IN TRENCH, AND THEN CONNECT PIPE TO PREVIOUSLY LAID PIPE. BACKFILL AFTER THE JOINT HAS BEEN INSPECTED AND APPROVED.



HEADWALL ANCHORING



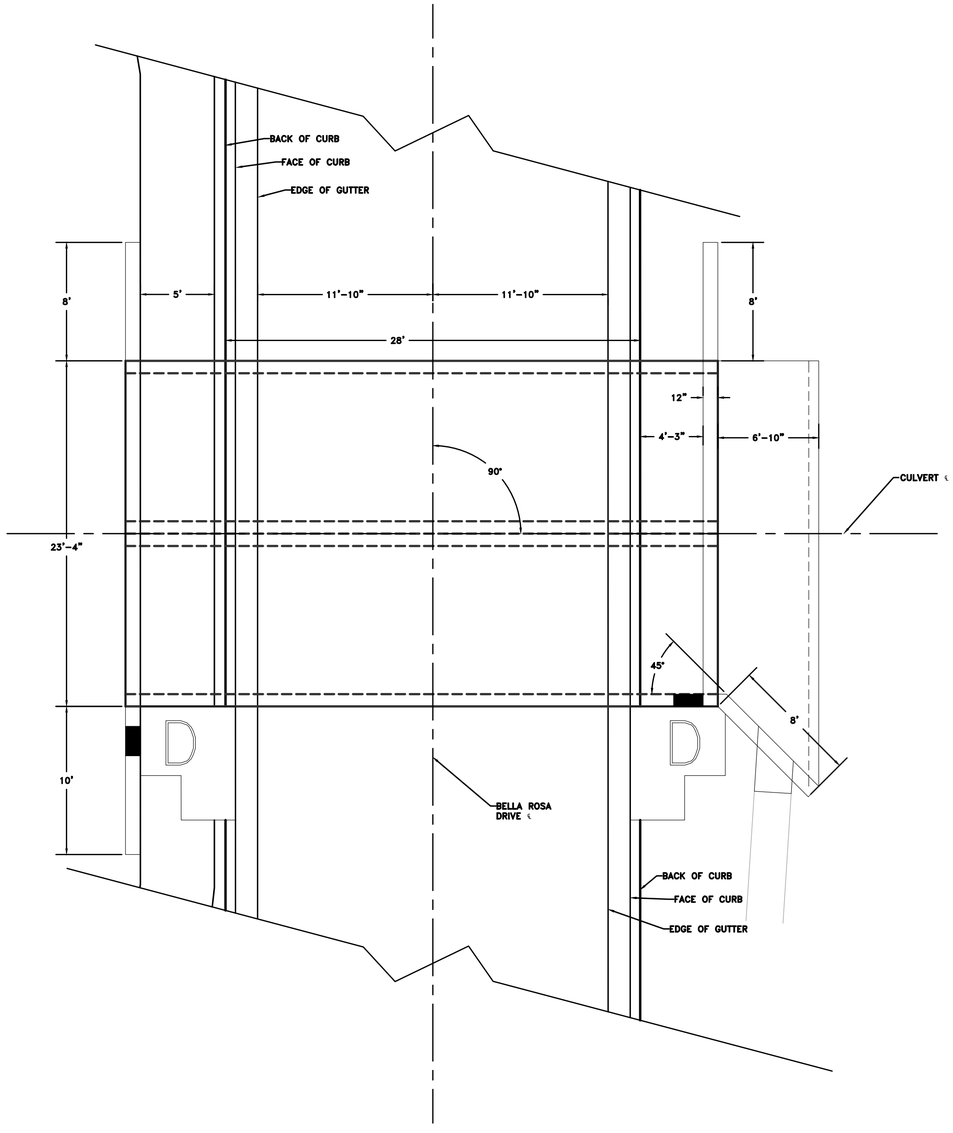
APRON KEYWAY



WINGWALL

GENERAL NOTES:

1. WINGS AND APRONS SHALL BE TIED TO THE PRECAST CULVERT SECTION BY #4 BARS CAST INTO PRECAST BOX CULVERT END SECTIONS AS SHOWN OR BY DOWELING AND GROUTING.
2. ALL EXPOSED CORNERS SHALL HAVE 3/4" CHAMFERS.
3. SEE GENERAL NOTES AND TECHNICAL SPECIFICATIONS FOR CONCRETE AND REINFORCING REQUIREMENTS.
4. PROVIDE ARCHITECTURAL FINISH ALL EXPOSED VERTICAL FACES OF HEADWALLS AND WINGWALLS PER OWNER DIRECTION.



CULVERT LAYOUT

REVIEW SUBMITTAL

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
BELLA ROSA DRIVE BRIDGE REPLACEMENT
CULVERT DETAILS

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

DRAWN BY	CKS
DESIGNED	JJG
CHECKED	JJG
DATE	12/10/2024
SCALE	N.T.S.
PROJECT NO.	05-17-ST-223B
SHEET NO.	C5