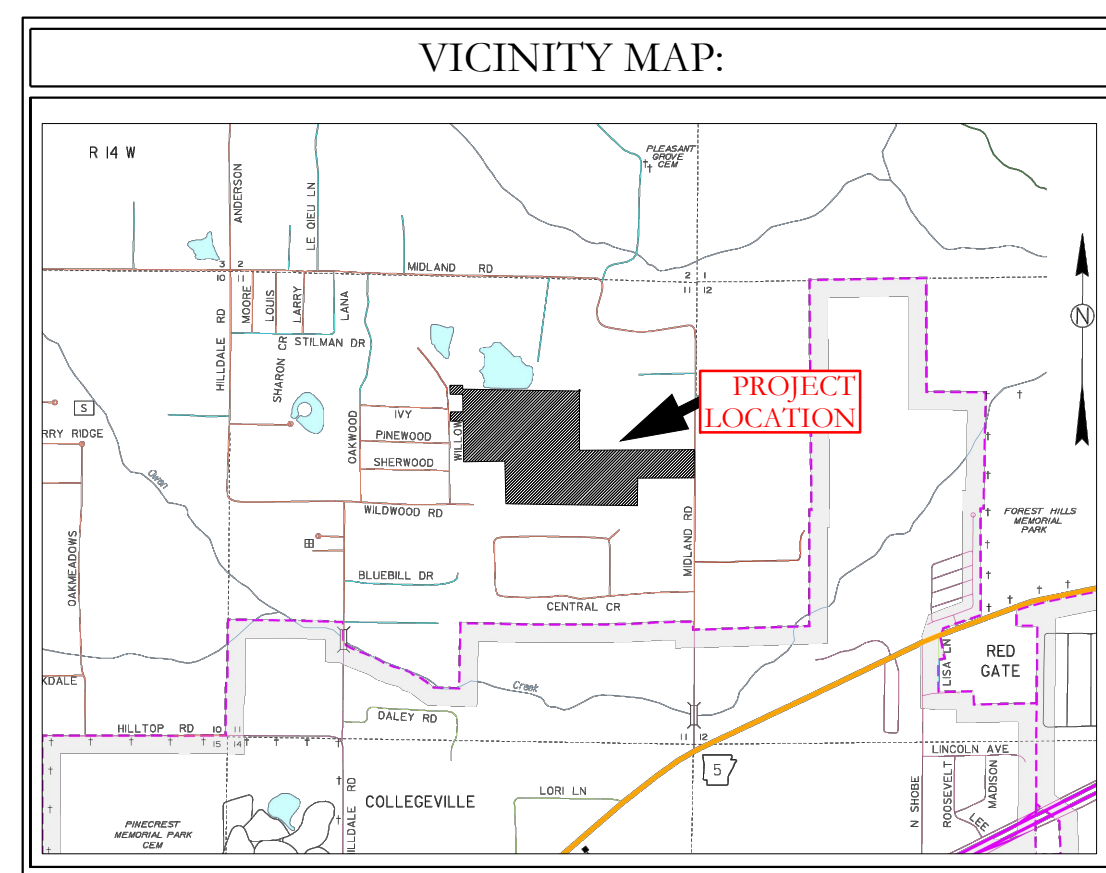


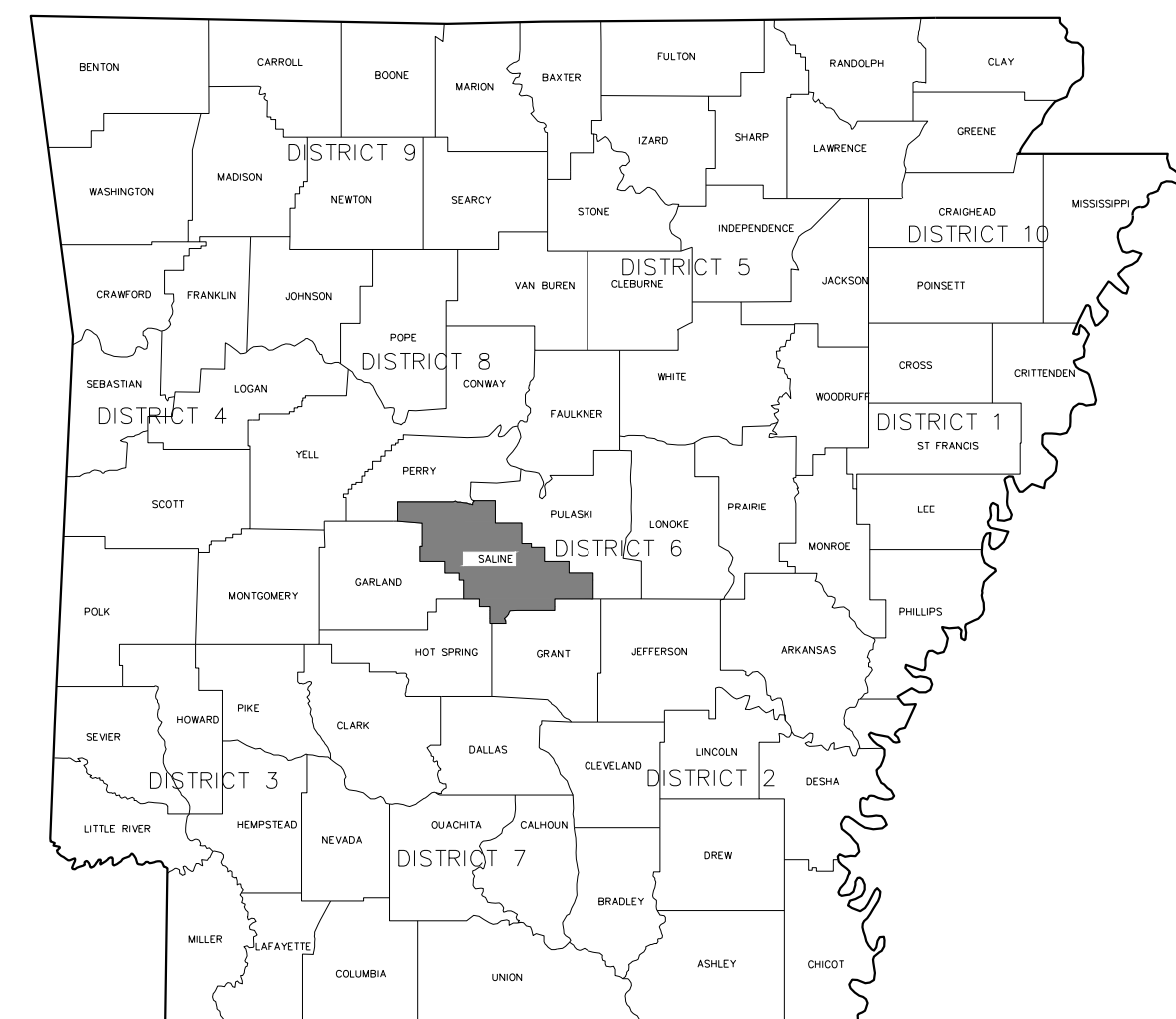
CONSTRUCTION PLANS MIDLAND ROAD BRYANT, AR



PREPARED BY:

HOPE
CONSULTING
ENGINEERS - SURVEYORS

129 North Main St,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com



CIVIL ENGINEER
HOPE CONSULTING INC
129 NORTH MAIN STREET
BENTON, AR 72015

GEOTECHNICAL ENGINEER
MATERIALS TESTING OF ARKANSAS
8001 NATIONAL DRIVE
LITTLE ROCK, AR 72209

DRAWING INDEX

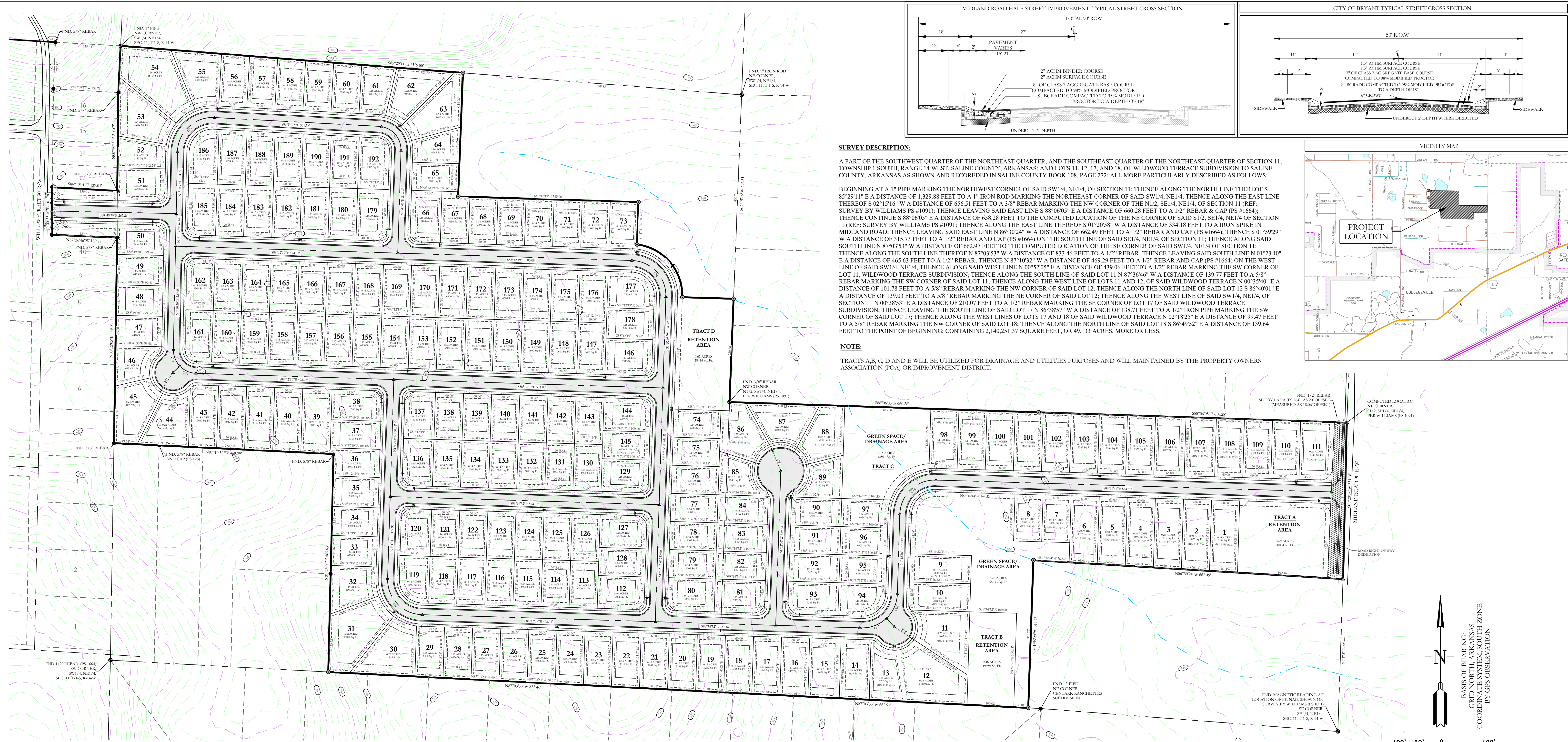
SHEET NO.	TITLE
	PLAT
C-1.0	STREET PLAN
C-2.0	STREET PLAN & PROFILE
C-2.1	STREET PLAN & PROFILE
C-2.2	STREET PLAN & PROFILE
C-2.3	STREET PLAN & PROFILE
C-2.4	STREET PLAN & PROFILE
C-2.5	STREET PLAN & PROFILE
C-3.0	UTILITY PLAN
C-3.1	UTILITY PLAN
C-3.2	SEWER PLAN & PROFILE
C-3.3	SEWER PLAN & PROFILE
C-3.4	SEWER PLAN & PROFILE
C-3.5	SEWER PLAN & PROFILE
C-3.6	SEWER PLAN & PROFILE
C-3.7	SEWER PLAN & PROFILE
C-3.8	SEWER PLAN & PROFILE
C-3.9	SEWER PLAN & PROFILE
C-3.10	SEWER PLAN & PROFILE
C-3.11	SEWER PLAN & PROFILE
C-4.0	TRENCH DETAILS
C-5.0	CIVIL SPECS
C-6.0	DRAINAGE PLAN
C-6.1	DRAINAGE PLAN
C-6.2	DRAINAGE PLAN
C-6.3	DRAINAGE PLAN & PROFILE
C-6.4	DRAINAGE PLAN & PROFILE
C-6.5	DRAINAGE PLAN & PROFILE
C-6.6	DRAINAGE PLAN & PROFILE
C-6.7	DRAINAGE PLAN & PROFILE
C-6.8	DRAINAGE PLAN & PROFILE
C-6.9	DRAINAGE PLAN & PROFILE
C-6.10	DRAINAGE PLAN & PROFILE
C-6.11	DRAINAGE PLAN & PROFILE
C-6.12	DRAINAGE PLAN & PROFILE
C-6.13	DRAINAGE PLAN & PROFILE
C-6.14	RETENTION
C-7.0	EROSION CONTROL PLAN

HOPE 129 North Main St,
CONSULTING Benton, Arkansas 72015
ENGINEERS - SURVEYORS PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
HAVEN'S DEVELOPMENT, LLC

MIDLAND ROAD
BRYANT, SALINE COUNTY, ARKANSAS

DATE:	05/23/2023	C.A.D. BY:		DRAWING NUMBER:
REVISED:		CHECKED BY:		23-0024
SHEET:		SCALE:		



SURVEY DESCRIPTION:

A PART OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER, AND THE SOUTHEAST QUARTER OF SECTION 11, TOWNSHIP 1 SOUTH, RANGE 14 WEST, SALINE COUNTY, ARKANSAS; AND LOTS 11, 12, 17, AND 18, OF WILLOW TERRACE SUBDIVISION TO SALINE COUNTY, ARKANSAS AS SHOWN AND RECORDED IN SALINE COUNTY BOOK 108, PAGE 272; ALL MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 1" PIPE MARKING THE NORTHWEST CORNER OF SAID SW1/4, NE1/4, OF SECTION 11, THENCE ALONG THE NORTH LINE THEREOF S 85°29'11" E A DISTANCE OF 1,329.88 FEET TO A 1" IRON ROD MARKING THE NORTHEAST CORNER OF SAID SW1/4, NE1/4; THENCE ALONG THE EAST LINE THEREOF S 02°15'16" W A DISTANCE OF 656.51 FEET TO A 3/8" REBAR MARKING THE NW CORNER OF THE N1/2, SE1/4, NE1/4, OF SECTION 11 (REF: SURVEY BY WILLIAMS PS #1091); THENCE LEAVING SAID EAST LINE S 88°06'05" E A DISTANCE OF 660.28 FEET TO A 1/2" REBAR & CAP (PS #1664); THENCE CONTINUE S 88°06'05" E A DISTANCE OF 658.28 FEET TO THE COMPUTED LOCATION OF THE NE CORNER OF SAID S1/2, SE1/4, NE1/4 OF SECTION 11 (REF: SURVEY BY WILLIAMS PS #1091); THENCE ALONG THE EAST LINE THEREOF S 01°20'58" W A DISTANCE OF 334.18 FEET TO A IRON SPIKE IN MIDLAND ROAD; THENCE LEAVING SAID EAST LINE N 86°39'24" W A DISTANCE OF 662.49 FEET TO A 1/2" REBAR AND CAP (PS #1664); THENCE S 01°59'29" W A DISTANCE OF 315.73 FEET TO A 1/2" REBAR AND CAP (PS #1664) ON THE SOUTH LINE OF SAID SW1/4, NE1/4, OF SECTION 11; THENCE ALONG SAID SOUTH LINE N 87°03'53" W A DISTANCE OF 662.97 FEET TO THE COMPUTED LOCATION OF THE SE CORNER OF SAID SW1/4, NE1/4 OF SECTION 11; THENCE ALONG THE SOUTH LINE THEREOF N 87°03'53" W A DISTANCE OF 833.46 FEET TO A 1/2" REBAR; THENCE LEAVING SAID SOUTH LINE N 01°23'40" E A DISTANCE OF 465.63 FEET TO A 1/2" REBAR; THENCE N 87°10'52" W A DISTANCE OF 469.29 FEET TO A 1/2" REBAR AND CAP (PS #1664) ON THE WEST LINE OF SAID SW1/4, NE1/4; THENCE ALONG SAID WEST LINE N 09°52'05" E A DISTANCE OF 439.06 FEET TO A 1/2" REBAR MARKING THE SW CORNER OF LOT 11, WILLOW TERRACE SUBDIVISION; THENCE ALONG THE SOUTH LINE OF SAID LOT 11 N 87°36'46" W A DISTANCE OF 139.77 FEET TO A 5/8" REBAR MARKING THE SW CORNER OF SAID LOT 11; THENCE ALONG THE WEST LINE OF LOTS 11 AND 12, OF SAID WILLOW TERRACE N 00°35'40" E A DISTANCE OF 101.78 FEET TO A 5/8" REBAR MARKING THE NW CORNER OF SAID LOT 12; THENCE ALONG THE NORTH LINE OF SAID LOT 12 S 86°40'01" E A DISTANCE OF 139.03 FEET TO A 5/8" REBAR MARKING THE NE CORNER OF SAID LOT 12; THENCE ALONG THE WEST LINE OF SAID SW1/4, NE1/4, OF SECTION 11 N 09°38'53" E A DISTANCE OF 210.07 FEET TO A 1/2" REBAR MARKING THE SE CORNER OF LOT 17 OF SAID WILLOW TERRACE SUBDIVISION; THENCE LEAVING THE SOUTH LINE OF SAID LOT 17 N 86°38'57" W A DISTANCE OF 138.71 FEET TO A 1/2" IRON PIPE MARKING THE SW CORNER OF SAID LOT 17; THENCE ALONG THE WEST LINES OF LOTS 17 AND 18 OF SAID WILLOW TERRACE N 02°18'25" E A DISTANCE OF 99.47 FEET TO A 5/8" REBAR MARKING THE NW CORNER OF SAID LOT 18; THENCE ALONG THE NORTH LINE OF SAID LOT 18 S 86°49'52" E A DISTANCE OF 139.64 FEET TO THE POINT OF BEGINNING; CONTAINING 2,140,251.37 SQUARE FEET, OR 49.133 ACRES, MORE OR LESS.

NOTE:

TRACTS A, B, C, D AND E WILL BE UTILIZED FOR DRAINAGE AND UTILITIES PURPOSES AND WILL MAINTAINED BY THE PROPERTY OWNERS ASSOCIATION (POA) OR IMPROVEMENT DISTRICT.

Curve Table					Curve Table					Curve Table							
Curve #	Length	Radius	Delta	Chord Direction	Chord Length	Curve #	Length	Radius	Delta	Chord Direction	Chord Length	Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	36.44	25.00	83.51	N46°31'18"W	33.30	C27	43.88	100.00	25.14	N80°29'25"E	43.53	C52	78.60	50.00	90.07	S43°14'26"E	70.75
C2	78.54	50.00	90.00	S46°43'28"W	70.71	C28	13.22	75.00	10.10	S81°53'47"E	13.20	C53	39.24	25.00	89.93	S46°45'34"W	35.33
C3	15.74	25.00	36.08	S16°19'00"E	15.48	C29	41.41	75.00	31.63	S01°01'20"E	40.88	C54	39.33	25.00	90.14	N43°12'13"W	35.40
C4	3.29	25.00	7.54	S38°07'47"E	3.29	C30	39.26	75.00	30.00	S30°12'28"E	38.82	C55	39.21	25.00	89.86	N46°47'47"E	35.31
C5	65.64	50.00	75.21	S4°17'44"E	61.02	C31	22.26	75.00	17.00	S6°42'27"E	22.18	C56	39.30	25.00	90.07	S43°14'26"E	35.38
C6	42.15	50.00	48.30	S57°27'40"W	40.91	C32	39.27	25.00	90.00	S43°12'19"E	35.36	C57	39.30	25.00	90.07	N43°10'07"W	35.38
C7	46.94	50.00	53.79	N71°29'33"W	45.24	C33	147.27	100.00	84.38	S40°19'16"E	134.32	C58	39.24	25.00	89.93	N46°47'47"E	35.33
C8	16.26	25.00	37.26	N9°20'12"W	15.97	C34	39.33	25.00	90.14	S43°12'13"E	35.40	C59	39.00	25.00	89.38	S43°30'55"E	35.16
C9	53.12	100.00	30.43	N67°06'45"W	52.59	C35	39.21	25.00	89.86	N46°47'47"E	35.31	C60	39.54	25.00	90.62	S46°29'05"W	35.55
C10	54.85	100.00	31.43	N36°19'54"W	54.17	C36	0.94	25.00	2.15	N0°47'36"E	0.94	C61	78.60	50.00	90.07	N43°10'07"W	70.76
C11	38.86	100.00	22.26	N9°20'12"W	38.61	C37	20.09	25.00	46.04	N23°18'05"W	19.55	C62	39.27	25.00	90.00	N46°47'41"E	35.36
C12	39.27	25.00	90.00	N43°12'19"W	35.36	C38	55.98	50.00	64.14	N14°14'58"W	53.10	C63	39.00	25.00	89.38	S43°30'55"E	35.16
C13	19.69	25.00	45.13	S69°13'41"W	19.19	C39	43.73	50.00	50.11	N42°52'47"E	42.35	C64	80.19	50.00	91.89	S47°07'07"W	71.87
C14	54.47	75.00	50.00	S46°43'28"W	106.07	C40	50.36	50.00	57.71	S83°12'24"E	48.26	C65	38.72	25.00	88.73	N42°34'17"W	34.96
C15	65.54	50.00	72.81	S80°10'34"W	59.35	C41	35.14	50.00	40.26	S34°13'06"E	34.42	C66	58.90	75.00	45.00	N24°13'28"E	57.40
C16	43.81	50.00	50.20	N38°18'56"W	42.42	C42	55.98	50.00	64.14	S17°59'09"W	53.10	C67	61.60	75.00	47.06	N70°15'11"E	59.88
C17	54.47	50.00	62.42	N17°59'35"E	51.81	C43	19.96	25.00	45.75	S27°10'54"W	19.44	C68	117.96	75.00	90.07	S43°14'26"E	106.13
C18	19.69	25.00	45.12	N26°38'19"E	19.18	C44	1.06	25.00	2.44	S3°05'13"W	1.06	C69	39.00	50.00	44.69	S65°51'37"E	38.02
C19	39.27	25.00	90.00	N43°12'19"W	35.36	C45	39.33	25.00	90.14	S43°12'13"E	35.40	C70	39.00	50.00	44.69	S21°10'12"E	38.02
C20	39.40	25.00	90.29	S46°01'44"W	35.45	C46	78.54	50.00	90.00	N46°43'28"E	70.71	C71	120.28	75.00	91.89	S47°07'07"W	107.80
C21	39.02	25.00	89.42	S44°06'55"E	35.18	C47	30.06	100.00	17.22	N10°20'12"E	29.95	C72	77.43	50.00	88.73	N42°34'17"W	69.92
C22	39.27	25.00	90.00	N43°12'19"W	35.36	C48	111.48	100.00	63.87	N50°53'08"E	105.80	C73	77.43	50.00	90.07	N43°10'07"W	106.13
C23	15.42	100.00	8.83	N5°35'30"E	15.40	C49	15.54	100.00	8.90	N87°10'23"E	15.52	C247	39.27	25.00	90.00	S46°47'41"W	35.36
C24	50.54	100.00	28.96	N24°29'09"E	50.00	C50	38.91	25.00	89.18	N47°08'03"E	35.10						
C25	30.54	100.00	28.96	N53°26'27"E	50.00	C51	39.21	25.00	89.86	N46°47'47"E	35.31						

PRELIMINARY PLAT
MIDLAND ROAD ESTATES
 A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS.



By affixing my seal and signature, I, William Cobitt R. Shofner, PLS No. 1762, hereby certify that this drawing correctly depicts a survey completed under my supervision.

NOTE: This survey was based on legal descriptions and title work furnished by others and does not represent a title search.

No portion of the property described hereon lies within the 100 year floodplain, according to the Federal Insurance Rate Map, panel #0125C0365, Dated: 06/05/2020.

CERTIFICATIONS:

OWNER: HAVEN'S DEVELOPMENT, LLC
 Name: HAVEN'S DEVELOPMENT, LLC
 Address: 2615 N. PRICKETT ROAD, SUITE 5 BRYANT, AR 72022

DEVELOPER: HAVEN'S DEVELOPMENT, LLC
 Name: HAVEN'S DEVELOPMENT, LLC
 Address: 2615 N. PRICKETT ROAD, SUITE 5 BRYANT, AR 72022

CERTIFICATE OF PRELIMINARY ENGINEERING ACCURACY:
 I, Kazi Tamzidul Islam, hereby certify that this plat correctly represents a survey and a plan made by me or under my supervision; that all monuments shown hereon actually exist and their location, size, type and material are correctly shown; and that all requirements of the City of Bryant Subdivision Rules and Regulations have been fully complied with.

Date of Execution: _____
 Signature: Kazi Tamzidul Islam, Registered Professional Engineer, No. 20876 Arkansas

CERTIFICATE OF OWNER:
 We, the undersigned, owners of the real estate shown and described herein do hereby certify that we have laid off, platted and subdivided, and do hereby lay off, plat and subdivide said real estate in accordance with the within plat.

Source of Title: 2021-009870

Date of Execution: _____
 Signature: _____

CERTIFICATE OF PRELIMINARY SURVEYING ACCURACY:
 I, Corbett R. Shofner, hereby certify that this proposed preliminary plat correctly represents a survey completed by me or under my supervision on 06/03/2023; that the boundary lines shown hereon correspond with the description in the deeds cited in the above Source Title; and that all monuments which were found or placed on the property are correctly described and located.

Date of Execution: _____
 Signature: Jonathan L. Hope, Registered Professional Land Surveyor No. 1762 Arkansas

CERTIFICATE OF PRELIMINARY PLAT APPROVAL:
 All requirements of the City of Bryant Subdivision Rules and Regulations relative to the preparation and submission of a Preliminary Plat having been fulfilled, approval of this plat is hereby granted, subject to further provisions of said Rules and Regulations.

Date of Execution: _____
 Signature: Rick Johnson, Chairman, Bryant Planning Commission

PROPERTY SPECIFICATIONS:

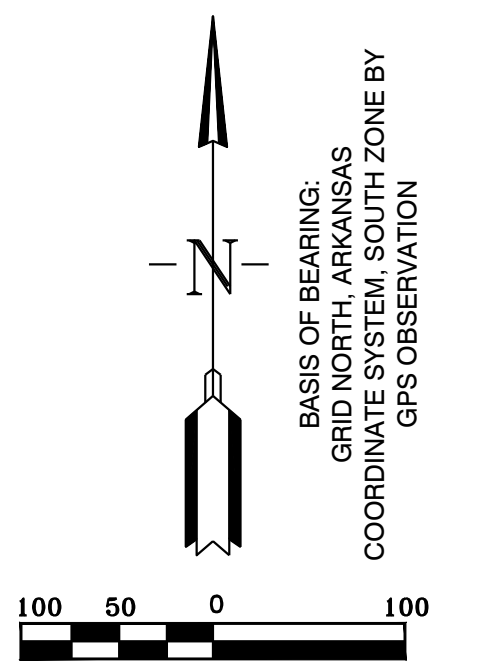
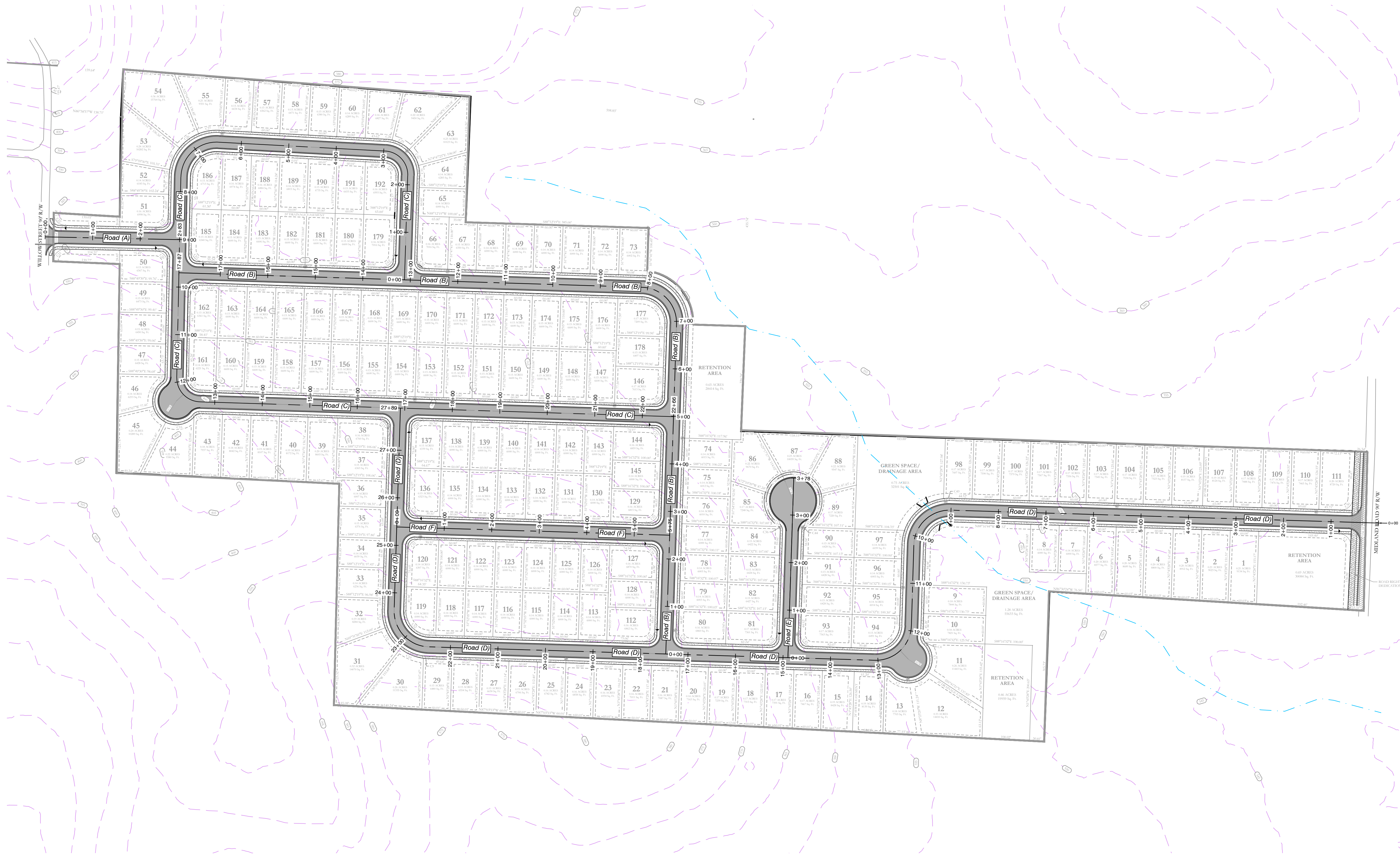
OWNER: HAVEN'S DEVELOPMENT, LLC 2615 N. PRICKETT ROAD, SUITE 5 BRYANT, AR 72022	MIN. LOT SIZE: 6,000 SQ. FT. NUMBER OF LOTS: 192 SOURCE OF WATER: CITY OF BRYANT SOURCE OF SEWER: CITY OF BRYANT SOURCE OF ELECTRIC: FIRST ELECTRIC COOP SOURCE OF GAS: CENTERPOINT ENERGY
DEVELOPER/SUBDIVIDER: HAVEN'S DEVELOPMENT, LLC 2615 N. PRICKETT ROAD, SUITE 5 BRYANT, AR 72022	BUILDING SETBACKS: FRONT - 20' OR AS SHOWN REAR - 20' OR AS SHOWN SIDE - 8' OR AS SHOWN
ENGINEERS: HOPE CONSULTING INC. 129 N. MAIN STREET BENTON, AR 72015	EASEMENTS: UTILITY & DRAINAGE (D.E. & U.E.) FRONT - 10' OR AS SHOWN REAR - 10' OR AS SHOWN SIDE - 5' OR AS SHOWN
NAME OF SUBDIVISION: MIDLAND ROAD ESTATES	STREET RIGHT OF WAYS: 50' OR AS SHOWN STREET WIDTH: 28' BOC TO BOC LOT CORNERS: SET 1/2" REBAR WITH CAP
ZONING CLASSIFICATION: PROPOSED R-1S	SOURCE OF TITLE: SALINE COUNTY DOCUMENT BOOK PAGE

HOPE CONSULTING ENGINEERS - SURVEYORS

FOR USE AND BENEFIT OF:
HAVEN'S DEVELOPMENT, LLC

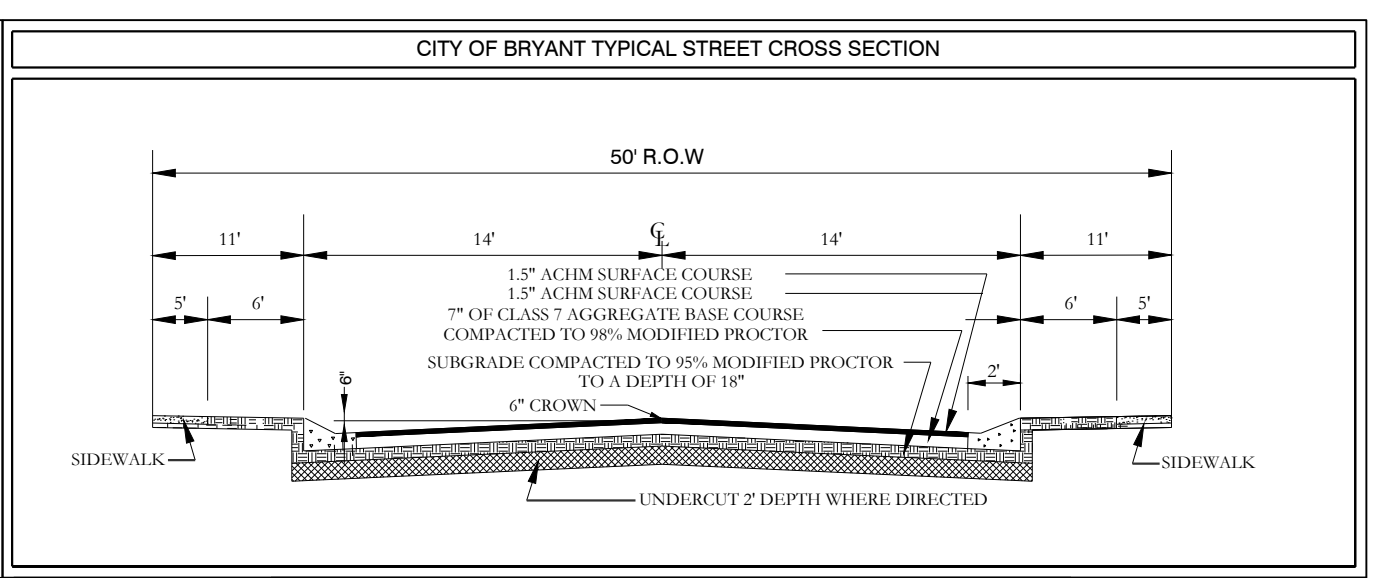
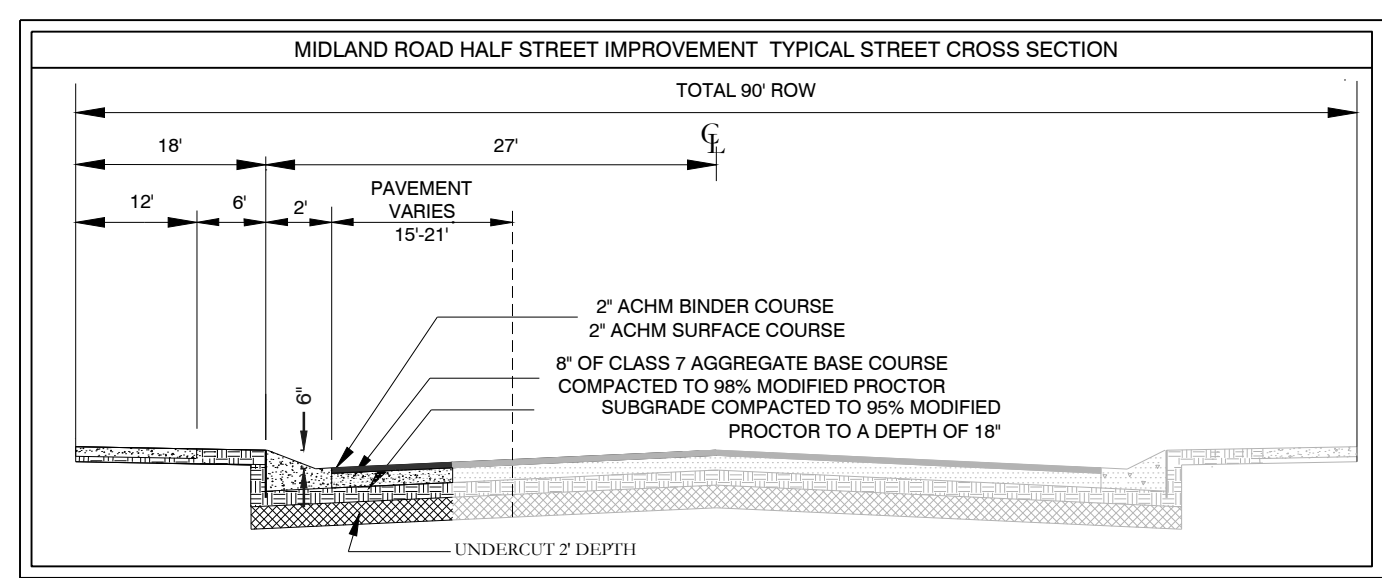
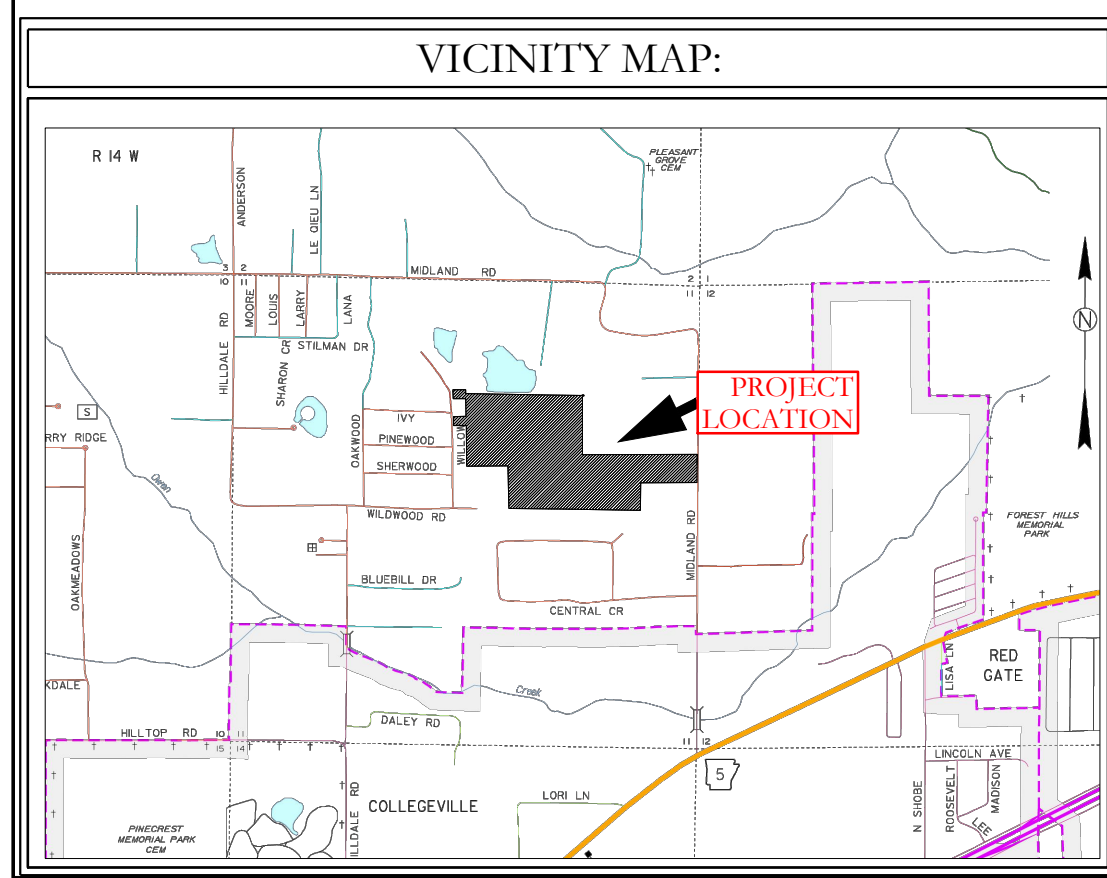
PRELIMINARY PLAT
MIDLAND ROAD ESTATES
 A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS.

DATE: 05/03/2023	C.A.D. BY: BJOHNSON	DRAWING NUMBER:
REVISED:	CHECKED BY:	23-0024
SHEET:	SCALE: 1" = 100'	
500	0	



BASIS OF BEARING:
 GRID NORTH, ARKANSAS
 COORDINATE SYSTEM, SOUTH ZONE BY
 GPS OBSERVATION

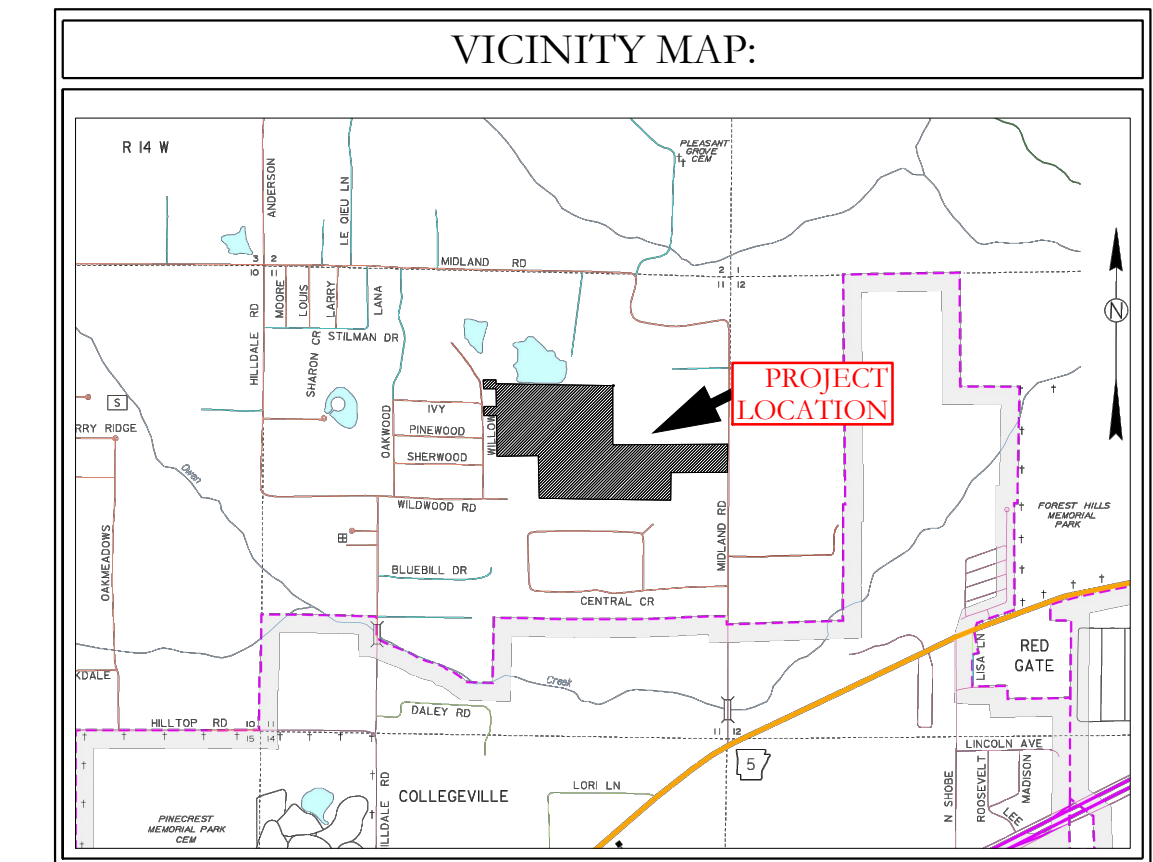
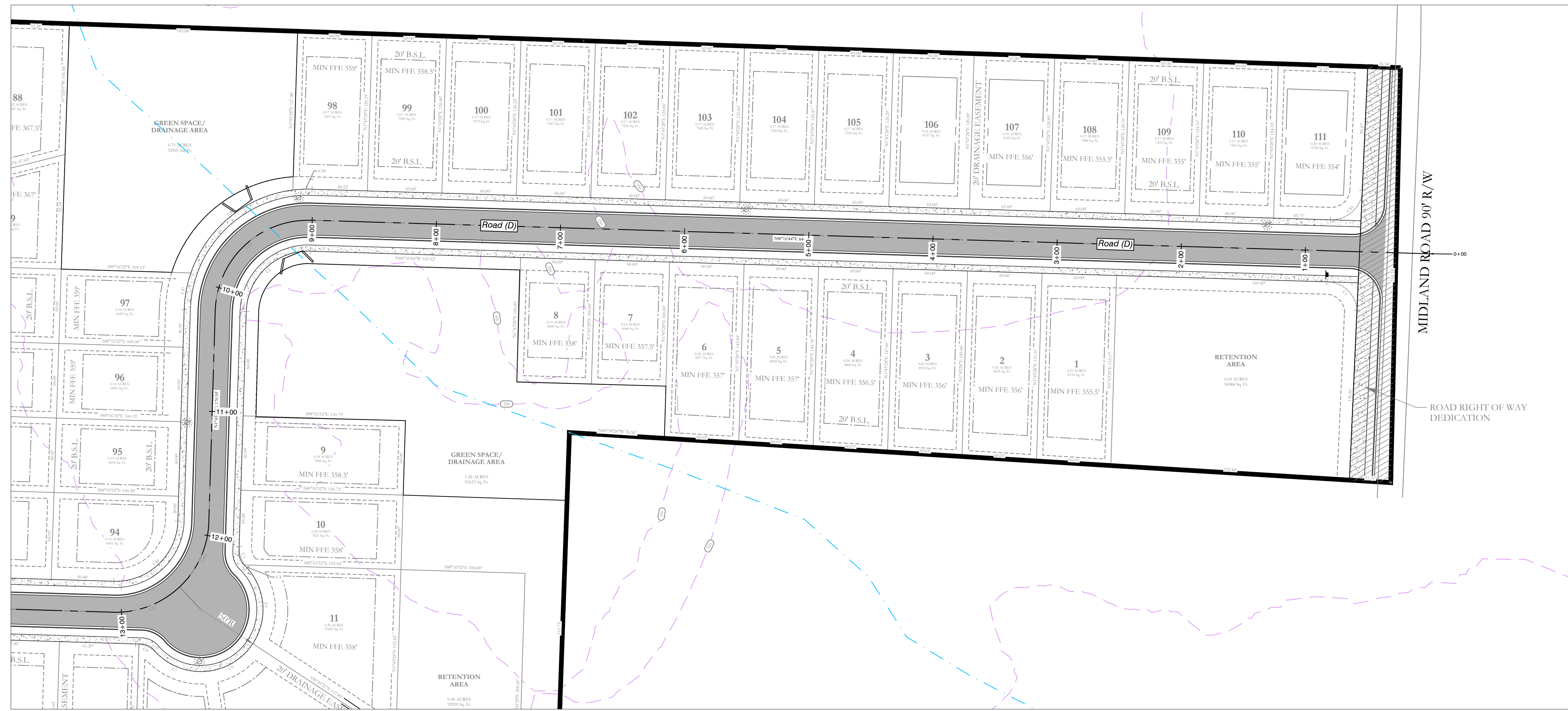
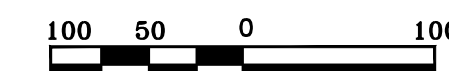
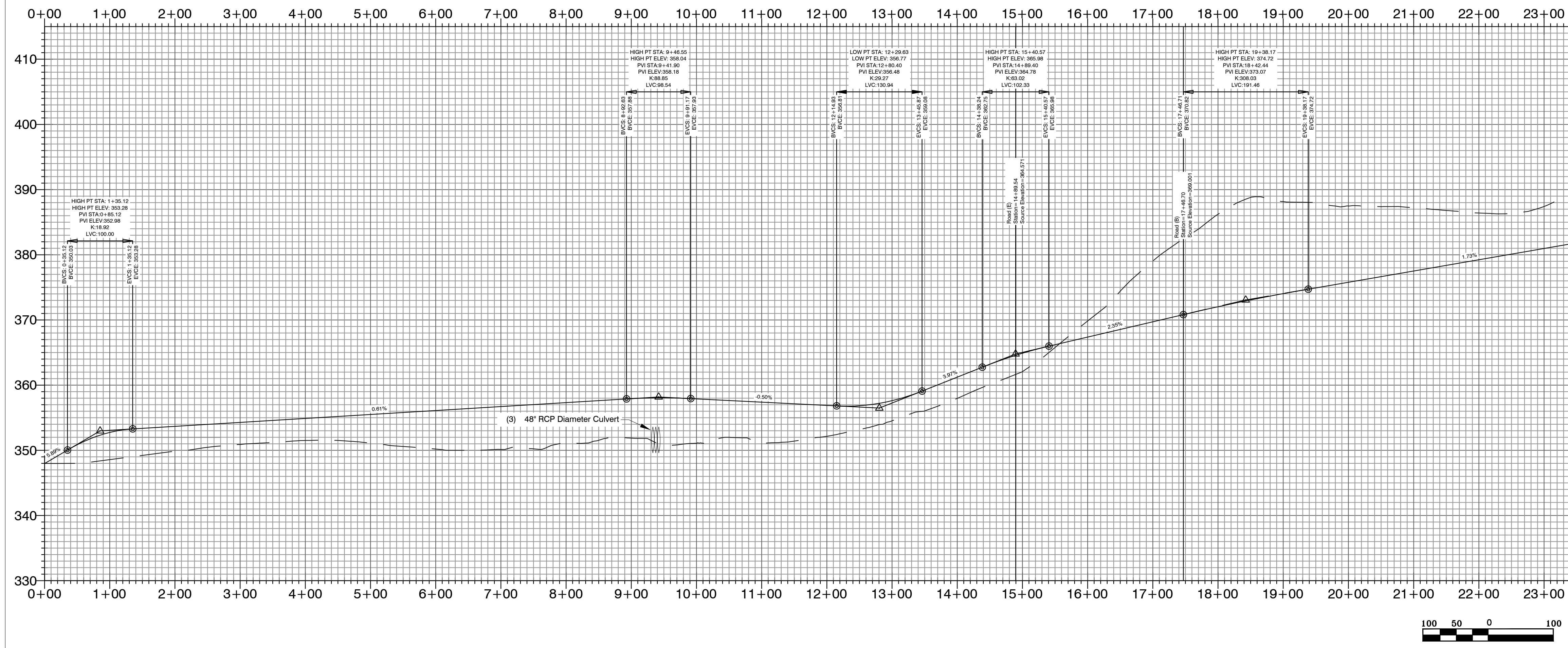
MIDLAND ROAD SUBDIVISION STREET PLAN



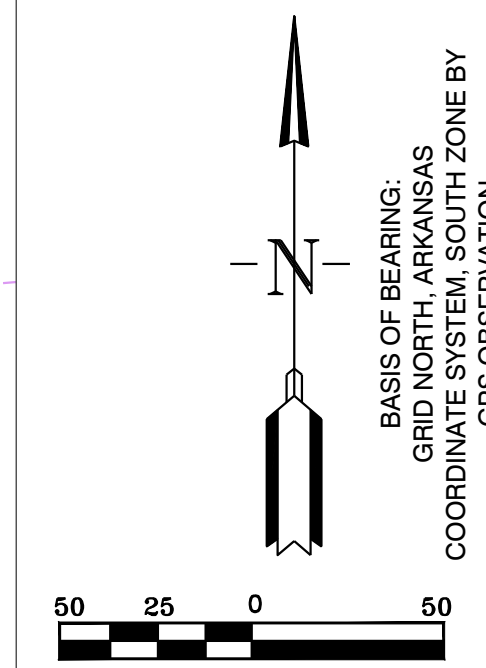
HOPE CONSULTING ENGINEERS - SURVEYORS		129 North Main Street, Benton, Arkansas 72015 PH. (501) 315-2626 FAX (501) 315-0024 www.hopeconsulting.com	
FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC			
MIDLAND ROAD STREET LAYOUT BRYANT, SALINE COUNTY, ARKANSAS			
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:	
REVISION:	CHECKED BY:	23-0024	
SHEET: C-1.0	SCALE:		
500	1S	15W	0 34 230 62 1807

K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S DEVELOPMENT\SUBDIVISION SITE PLAN\RAW\CIVIL\DWG\23-0024 CONSTRUCTION PLAN (FINAL.DWG) (SHEET COVER SHEET) (SCALE: 1/8"=1'-0")

Road (D) PROFILE



**MIDLAND ROAD SUBDIVISION
 STREET PLAN & PROFILES**



HOPE CONSULTING
 ENGINEERS - SURVEYORS
 129 North Main Street,
 Benton, Arkansas 72015
 PH. (501) 315-2626
 FAX (501) 315-0024
 www.hopeconsulting.com

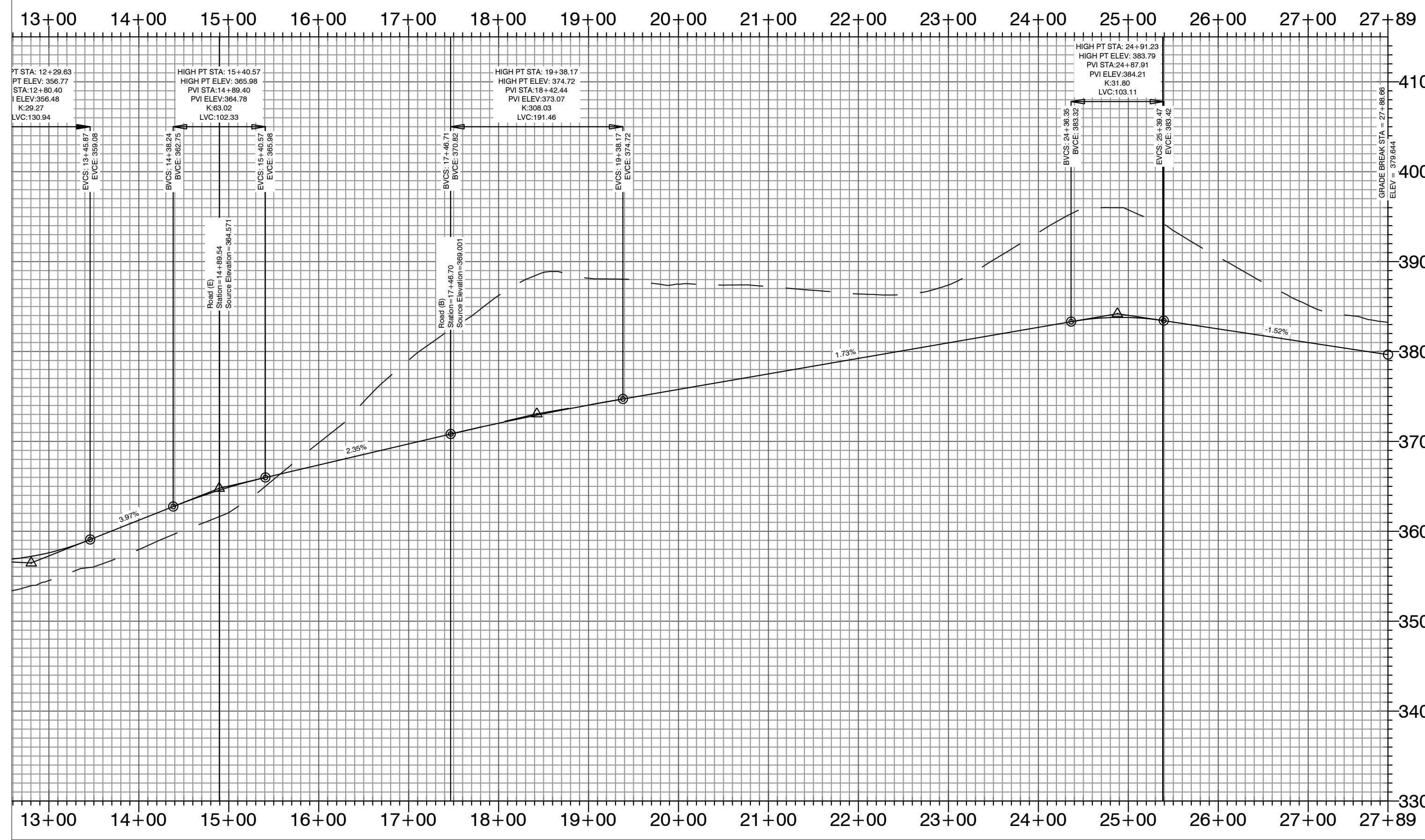
FOR USE AND BENEFIT OF:
HAVEN'S DEVELOPMENT, LLC

**MIDLAND ROAD
 STREET PLAN AND PROFILES**
 BRYANT, SALINE COUNTY, ARKANSAS

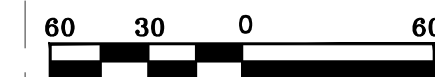
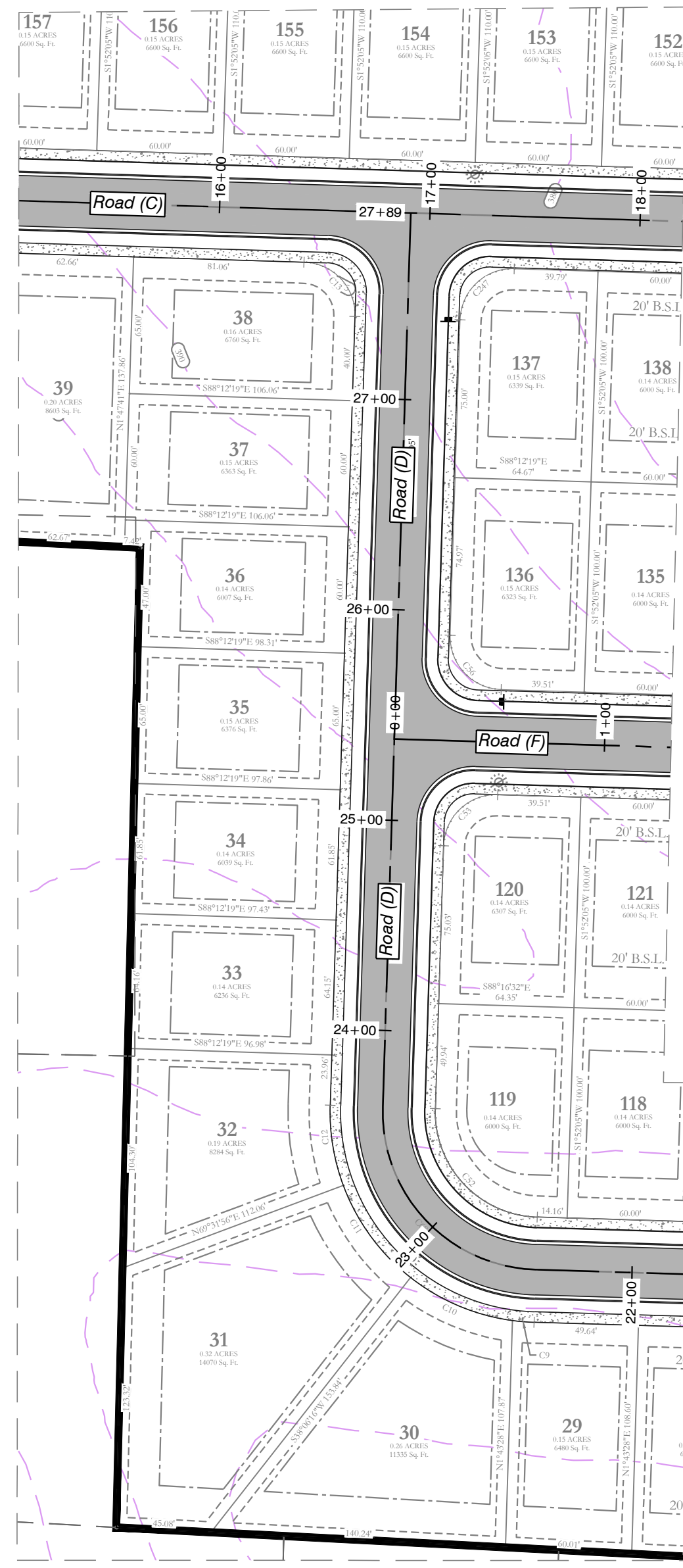
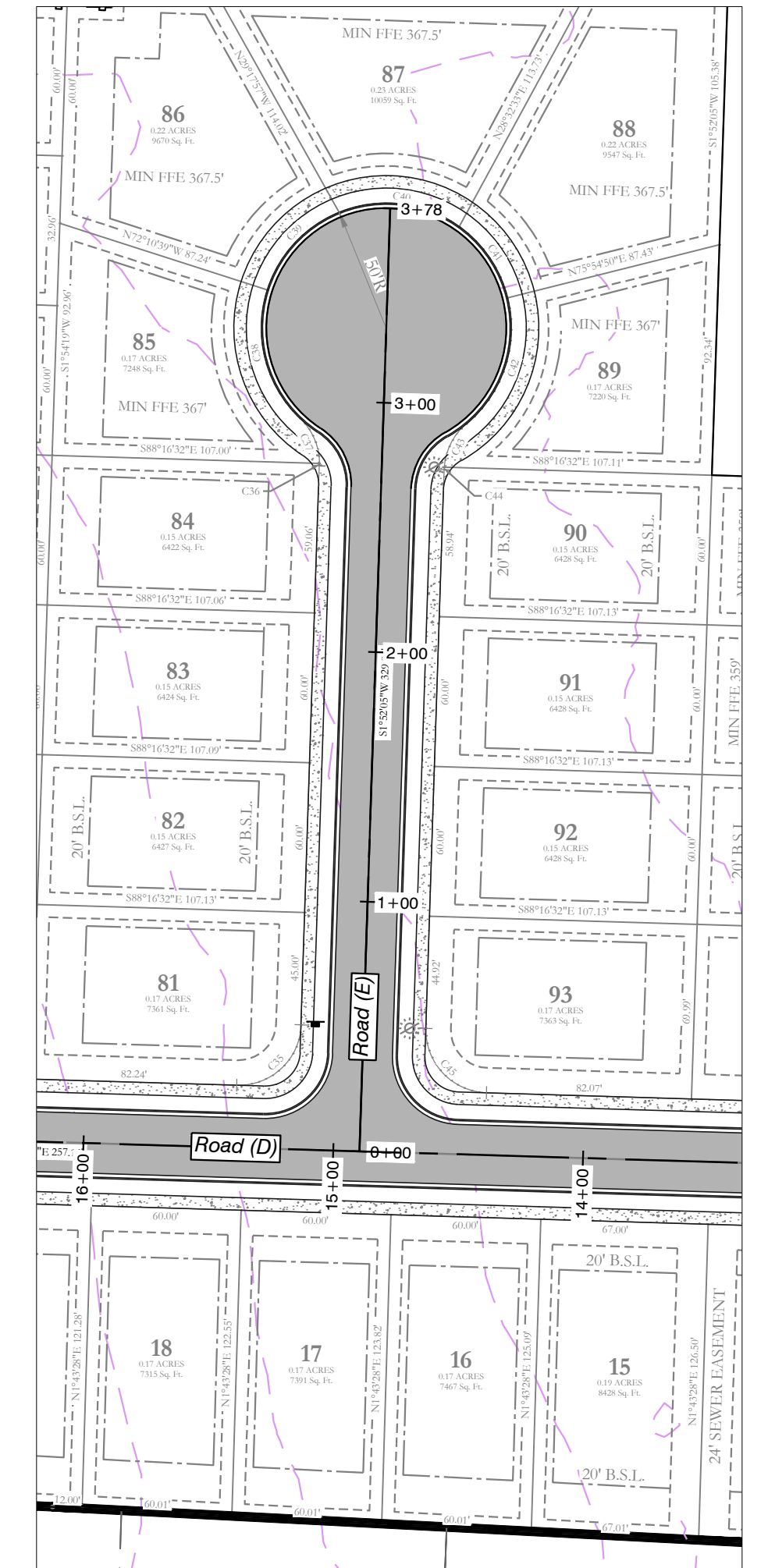
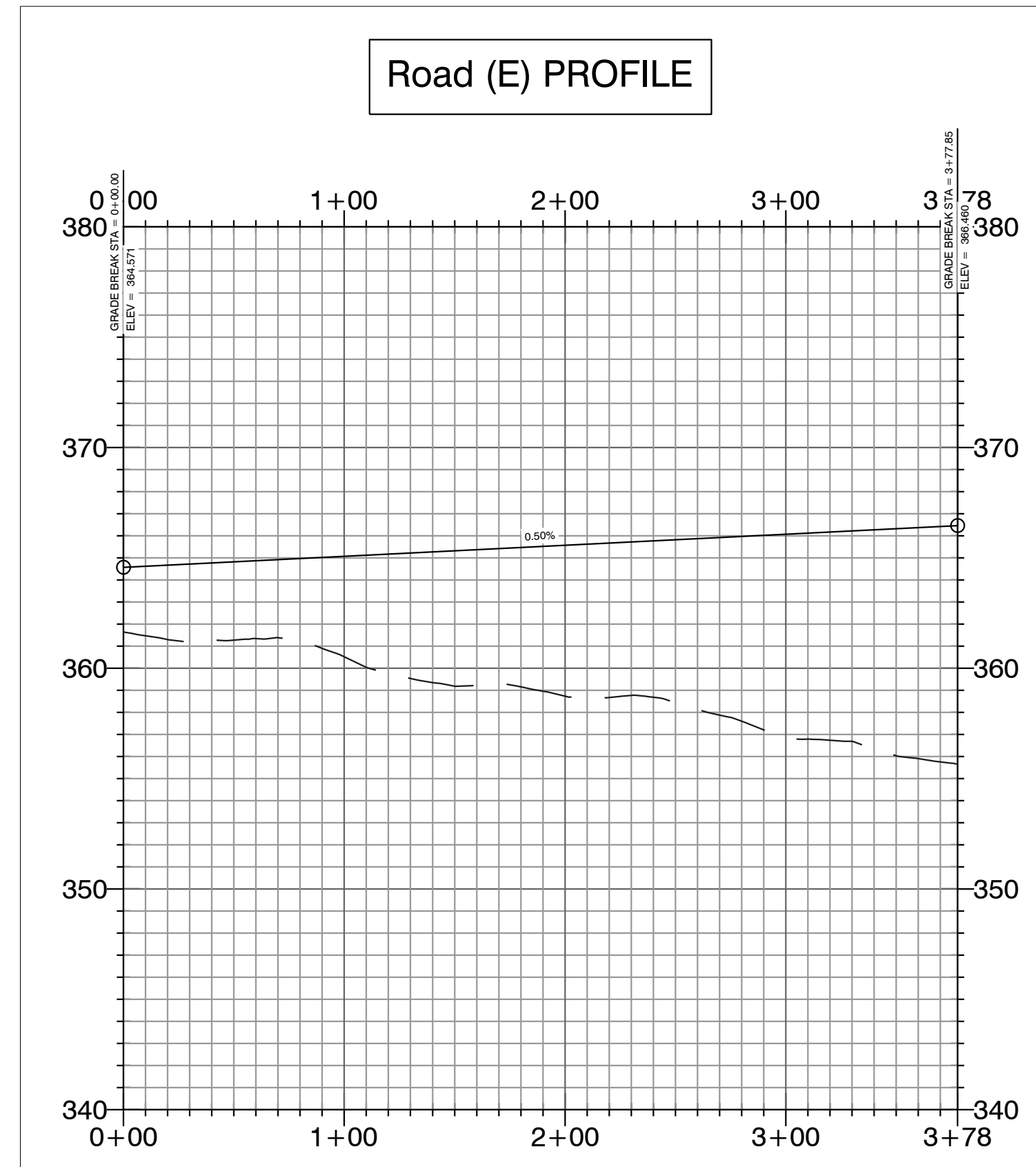
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISIONS:	CHECKED BY:	23-0024
SHEET: C-2-0	SCALE:	
500	01S	15W
0	34	230
62	1807	

ES:LAND PROJECTS 2004 SUBDIVISIONS 2023 23-0024 HAVENS MIDLAND ROAD SUBDIVISION SUTS RAW CIVIL DWG 23-0024 CONSTRUCTION PLAN (FINAL DRAFT) AFTER COMMENTS XXXXXX.DWG

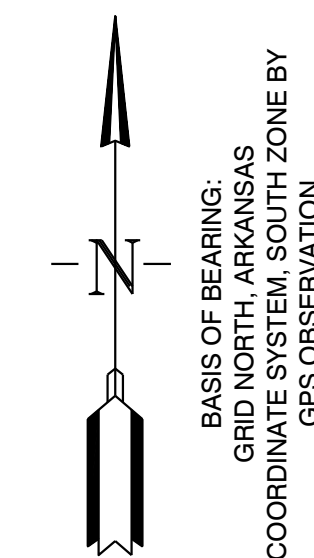
Road (D) PROFILE



Road (E) PROFILE



**MIDLAND ROAD SUBDIVISION
STREET PLAN & PROFILES**

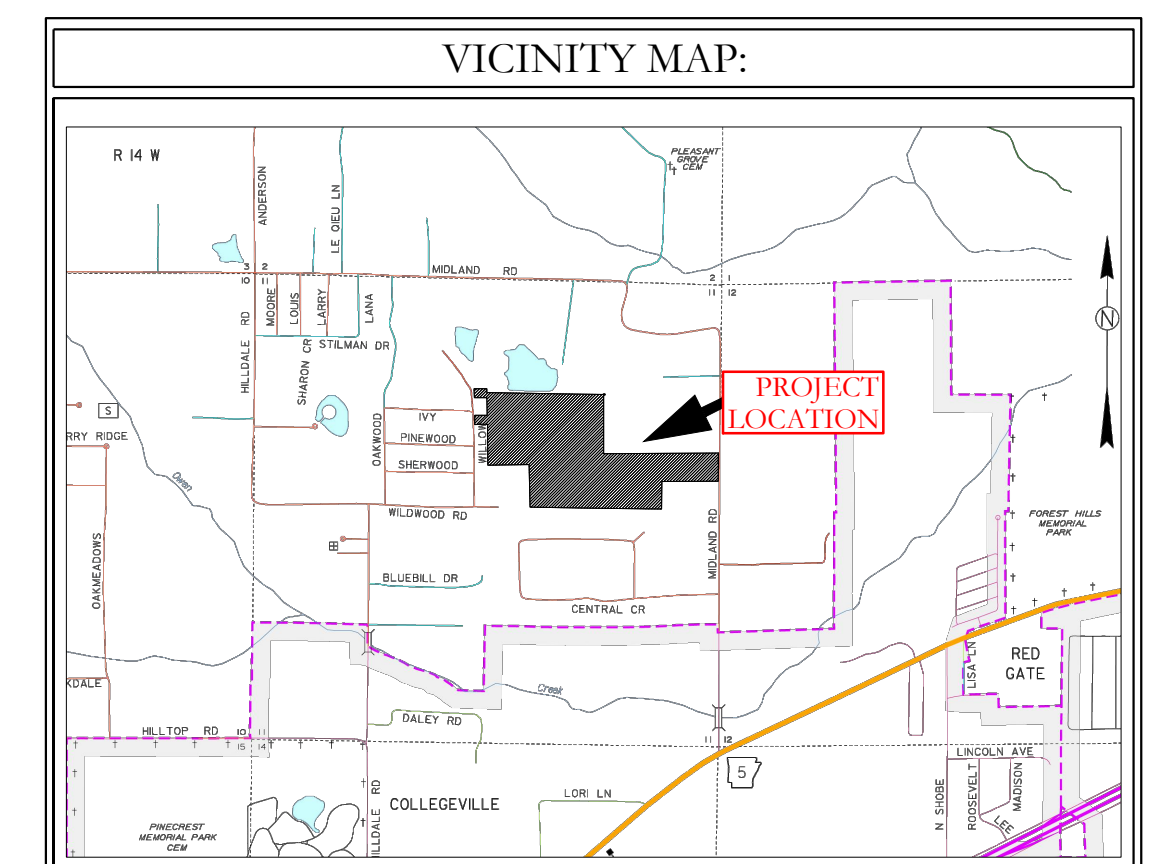


HOPE CONSULTING
ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501) 315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC			
MIDLAND ROAD STREET PLAN AND PROFILES BRYANT, SALINE COUNTY, ARKANSAS			
DATE:	5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISION:		CHECKED BY:	23-0024
SHEET:	C-2.1	SCALE:	
500	01S	15W	0 34 230 62 1807

KS LAND PROJECTS 2004 SUBDIVISIONS 2023 23-0024 HAVEN'S MIDLAND ROAD SUBDIVISION SHEETS RAW/CIVIL.DWG: 23-0024 CONSTRUCTION PLAN (FINAL DRAFT/AFTER COMMENTS) XXXXX.DWG

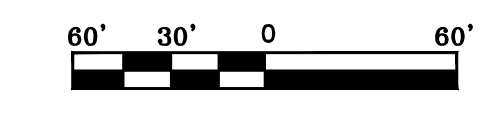
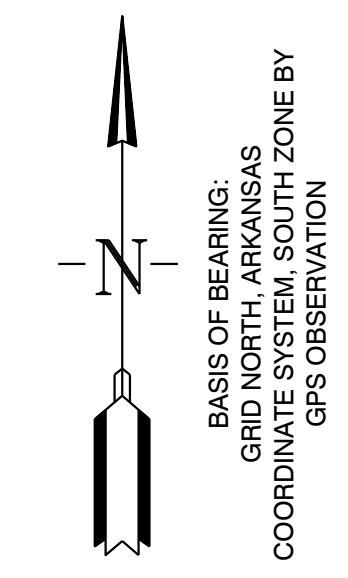


MIDLAND ROAD SUBDIVISION STREET PLAN & PROFILES

HOPE CONSULTING
ENGINEERS - SURVEYORS

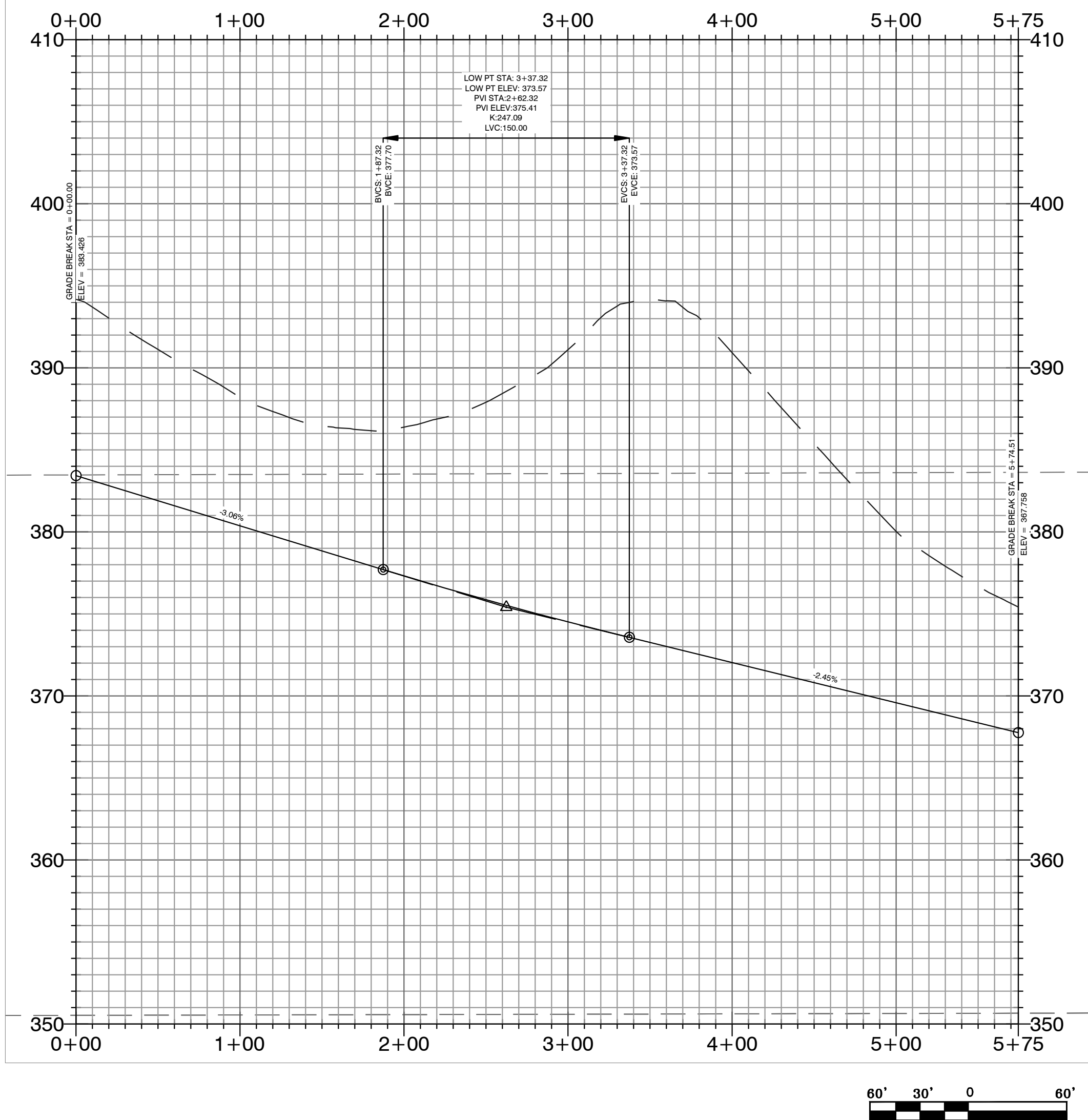
129 North Main Street,
Benton, Arkansas 72015
PH. (501) 315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC			
MIDLAND ROAD STREET PLAN AND PROFILES BRYANT, SALINE COUNTY, ARKANSAS			
DATE:	5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISION:		CHECKED BY:	23-0024
SHEET:	C-22	SCALE:	
500	01S	15W	0 34 230 62 1807

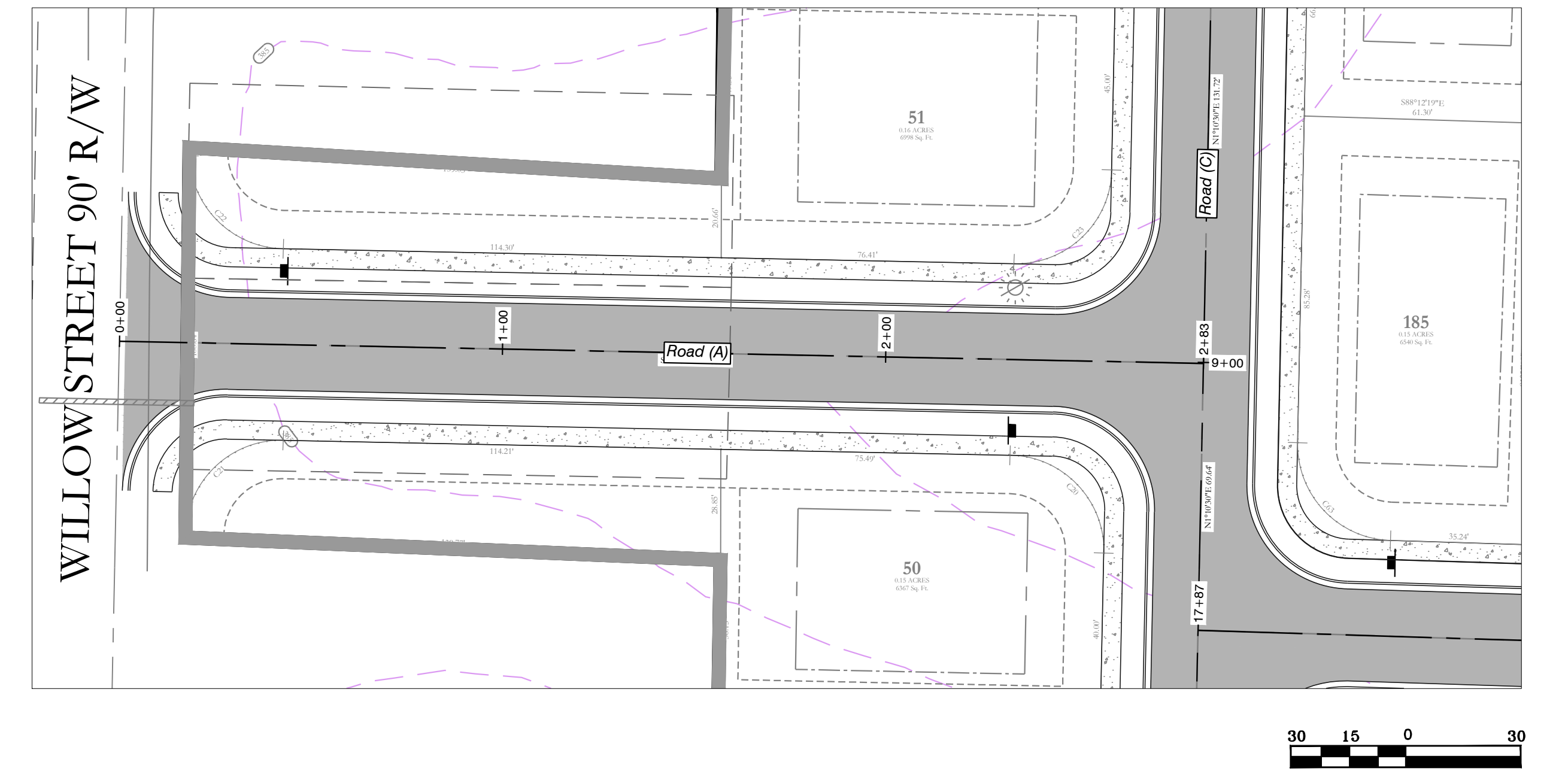
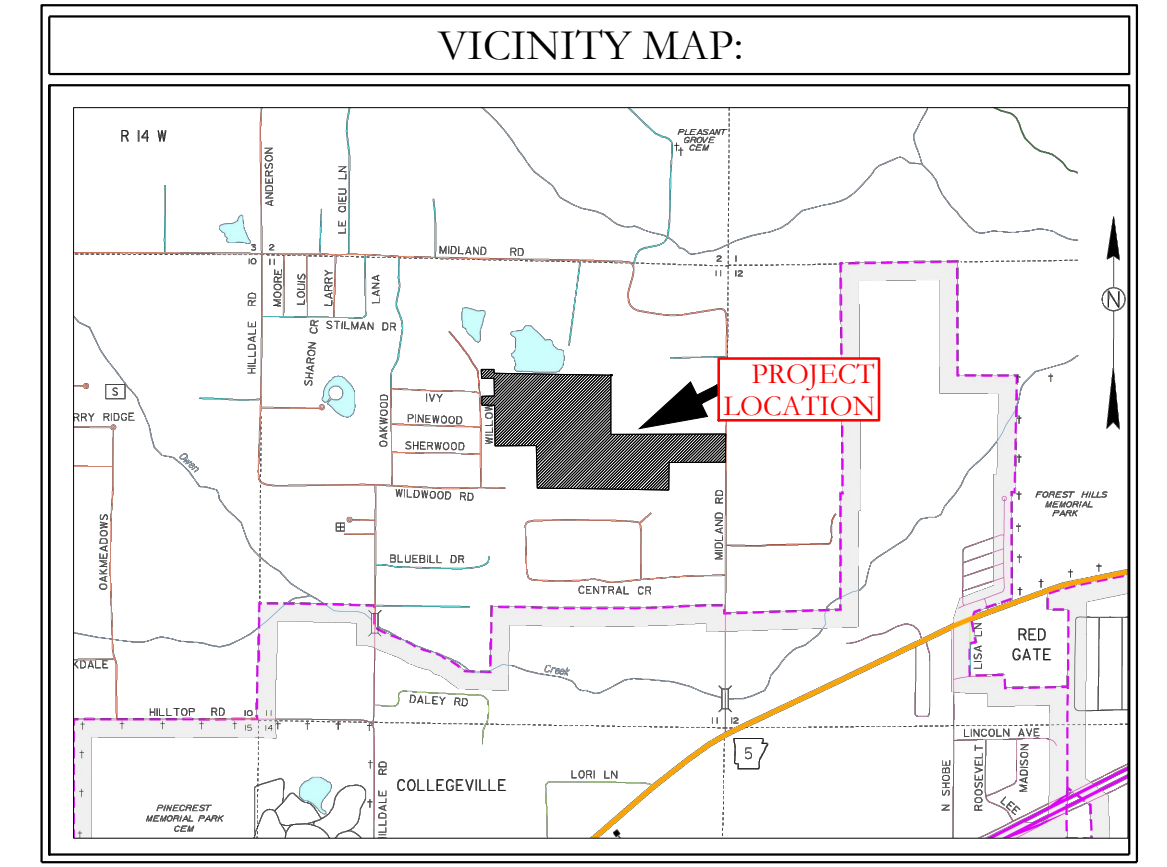
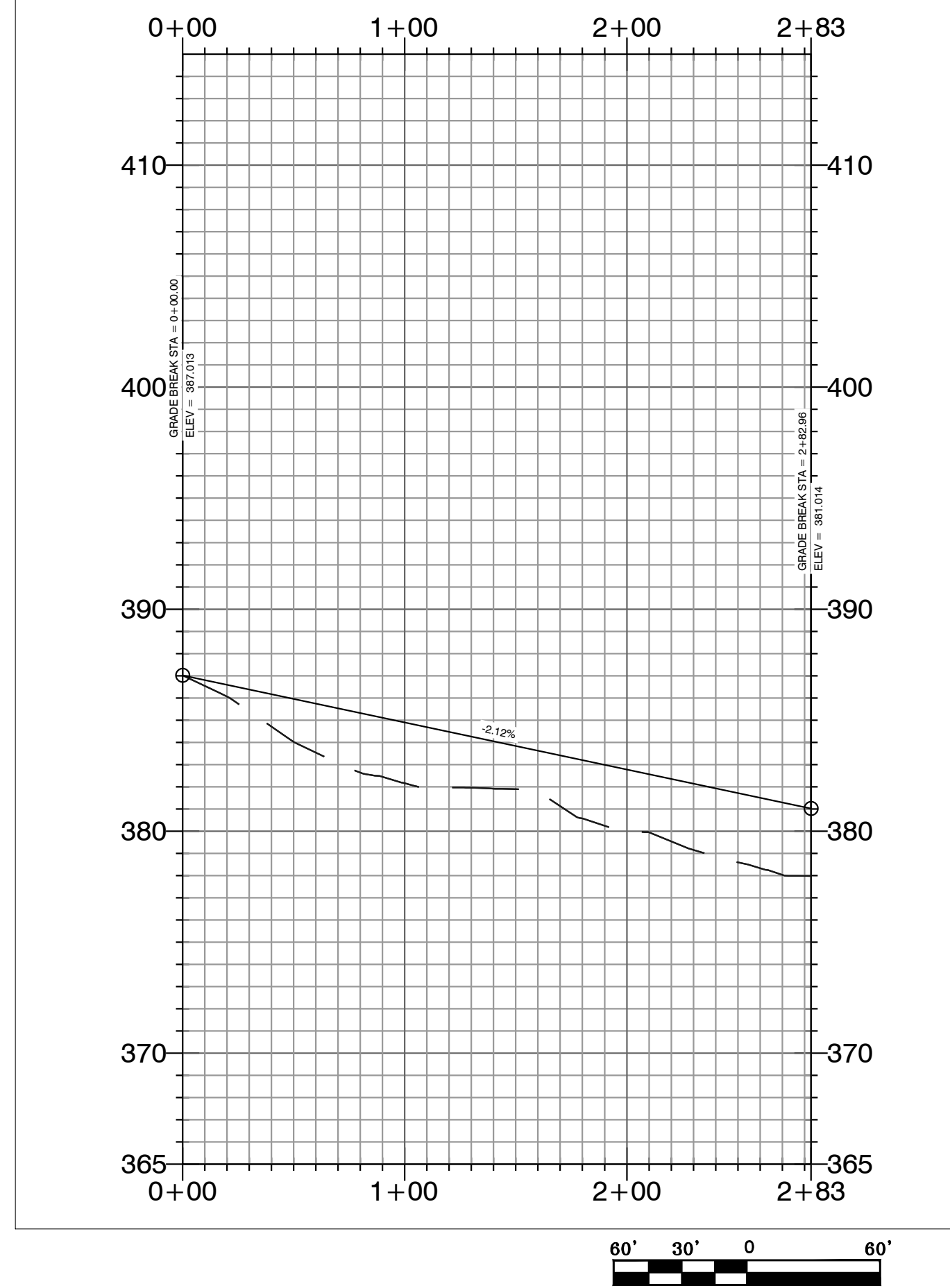


ES:LAND PROJECTS 2004 SUBDIVISIONS 2023 23-0024 HAVEN'S MIDLAND ROAD SUBDIVISION SUTS RAW CIVIL DWG 23-0024 CONSTRUCTION PLAN (FINAL DRAFT) AFTER COMMENTS XXXXXX.DWG

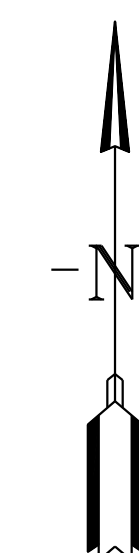
Road (F) PROFILE




Road (A) PROFILE



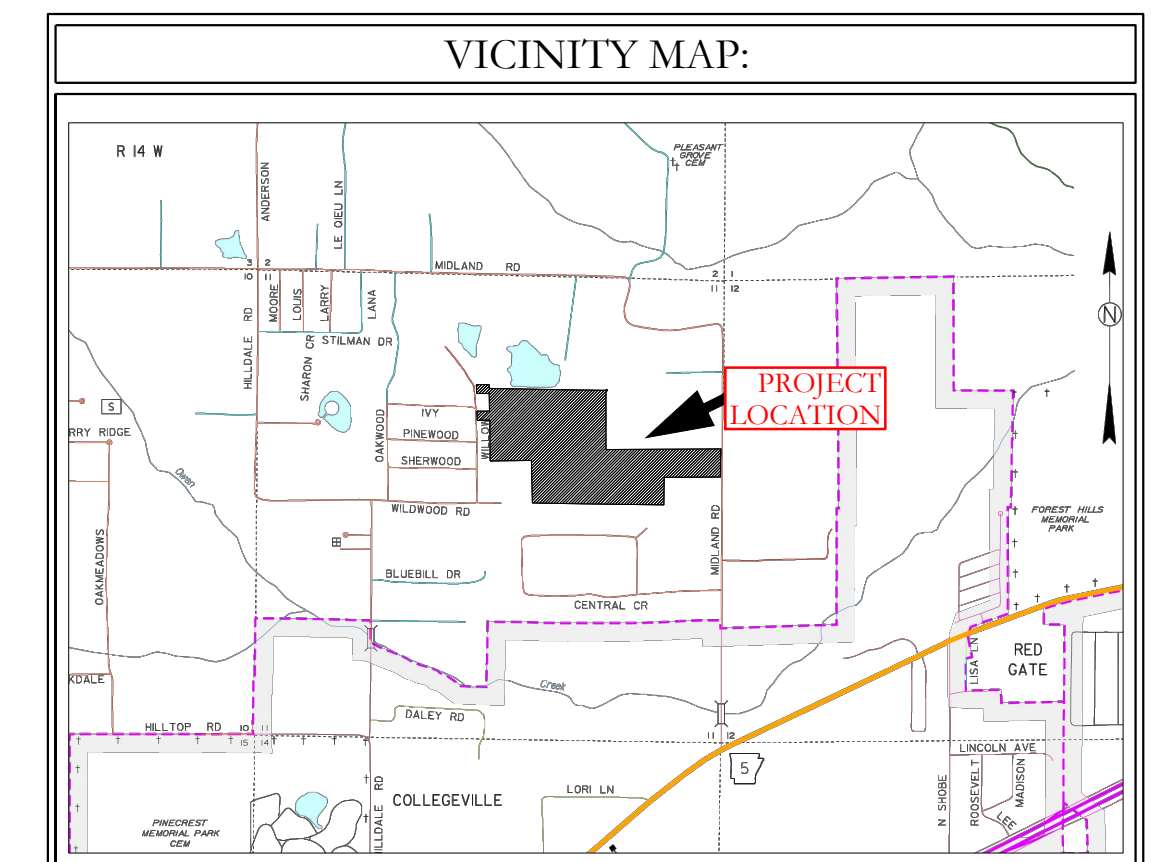
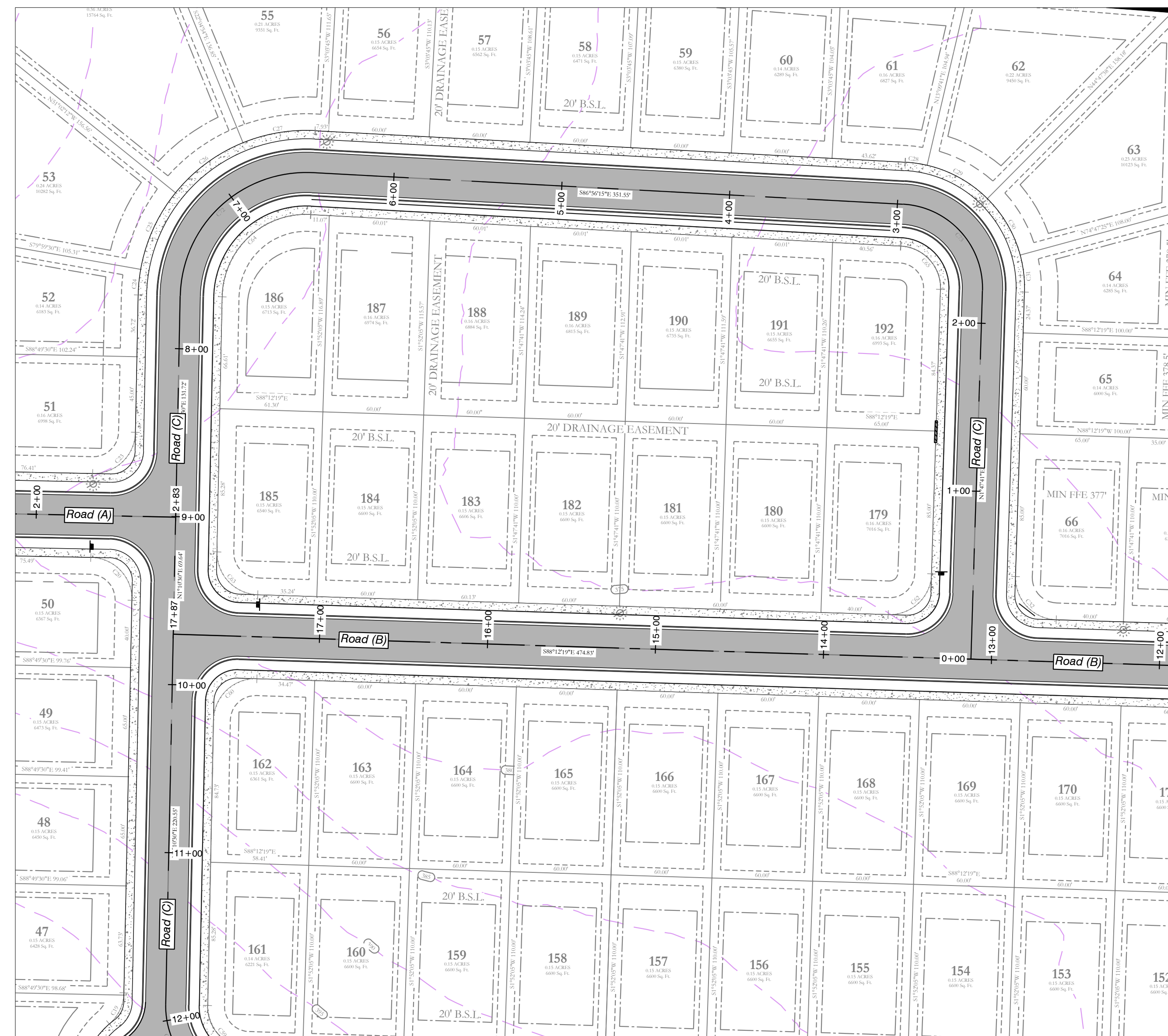
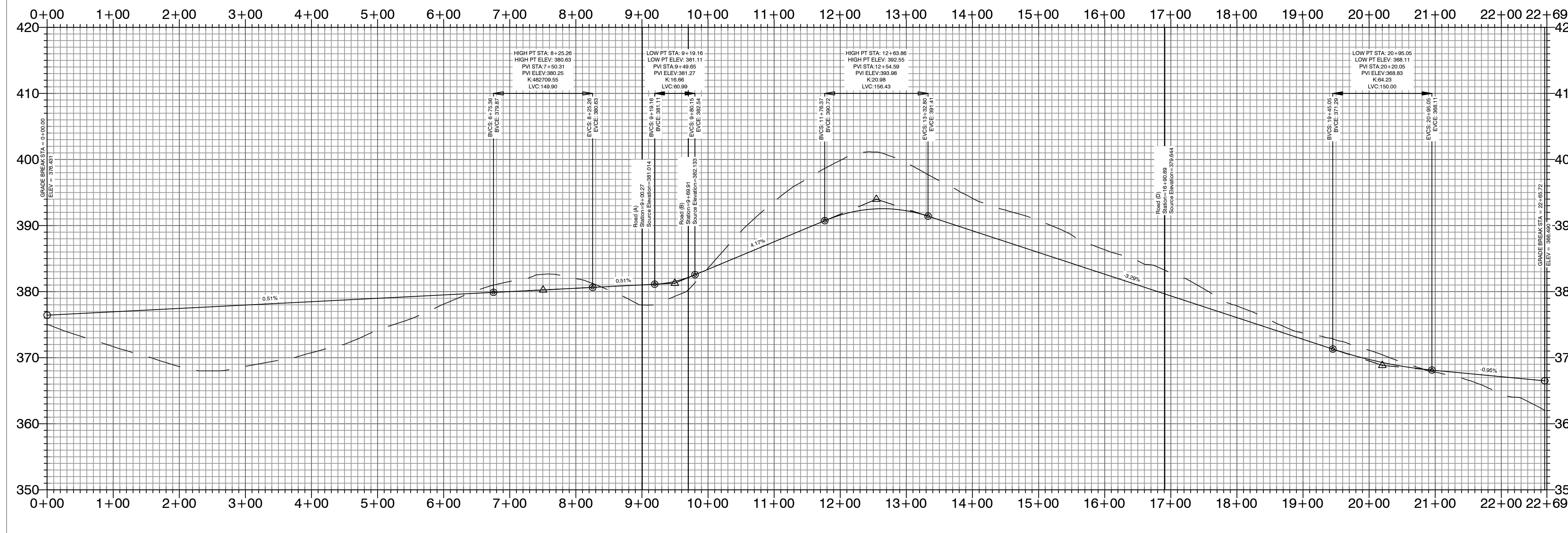
MIDLAND ROAD SUBDIVISION STREET PLAN & PROFILES


 BASIS OF BEARING:
 GREAT BAY AREA
 COORDINATE SYSTEM SOUTH ZONE BY
 GPS OBSERVATION

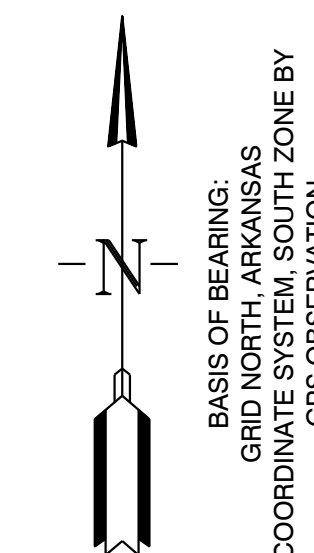
		129 North Main Street, Benton, Arkansas 72015 PH. (501) 315-2626 FAX (501) 315-0024 www.hopeconsulting.com
FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
MIDLAND ROAD STREET PLAN AND PROFILES BRYANT, SALINE COUNTY, ARKANSAS		
DATE:	5/23/2023	C.A.D. BY:
REVISION:		CHECKED BY:
SHEET:	C-23	SCALE:
500		01S
15W		0 34
230		62
1807		

K:\LAND PROJECTS\2004 SUBDIVISIONS\2023\23-0024 HAVEN'S MIDLAND ROAD SUBDIVISION\SET\TSS\RAW\CTM\DWG\23-0024 CONSTRUCTION PLAN (FINAL DRAFT)\AFTER COMMENTS\XXXXXX.DWG

Road (C) PROFILE



MIDLAND ROAD SUBDIVISION
STREET PLAN & PROFILES



HOPE CONSULTING ENGINEERS - SURVEYORS
129 North Main Street, Benton, Arkansas 72015
PH. (501) 315-2626 FAX (501) 315-0024
www.hopeconsulting.com

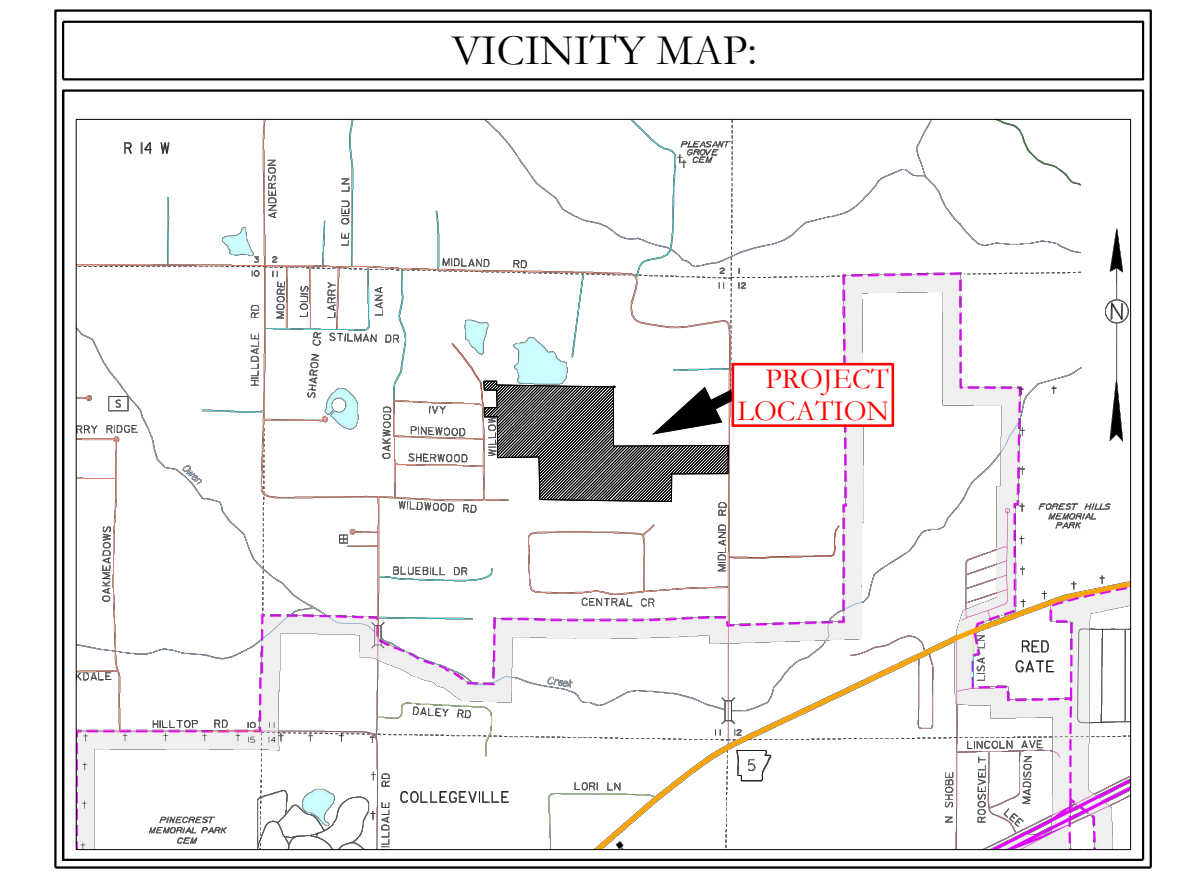
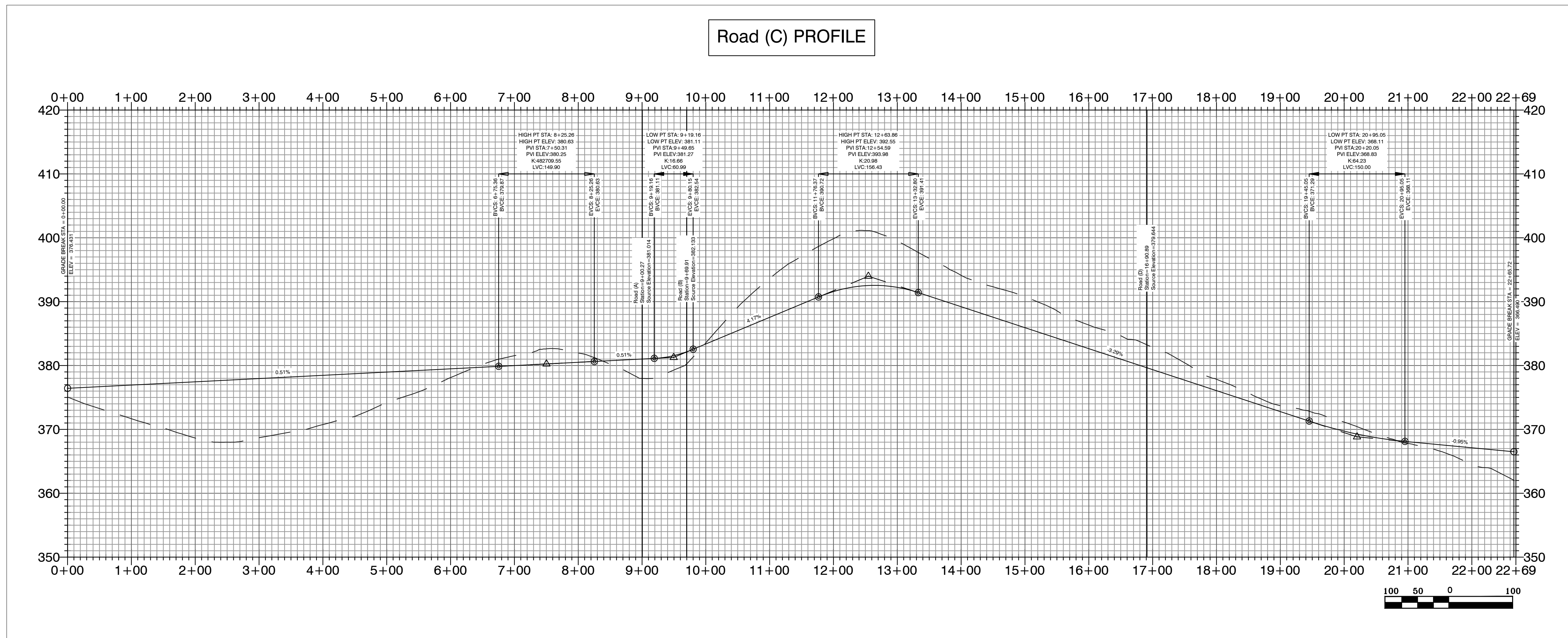
FOR USE AND BENEFIT OF:
HAVEN'S DEVELOPMENT, LLC

MIDLAND ROAD STREET PLAN AND PROFILES
BRYANT, SALINE COUNTY, ARKANSAS

DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISION:	CHECKED BY:	23-0024
SHEET: C-24	SCALE:	

500	01S	15W	0	34	230	62	1807
-----	-----	-----	---	----	-----	----	------

ES:LAND PROJECTS 2004 SUBDIVISIONS 2023 23-0024 MIDLAND ROAD SUBDIVISION SHEETS RAW:CTVIL.DWG:23-0024 CONSTRUCTION PLAN (FINAL DRAFT/AFTER COMMENTS)XXXXXXXXX.DWG

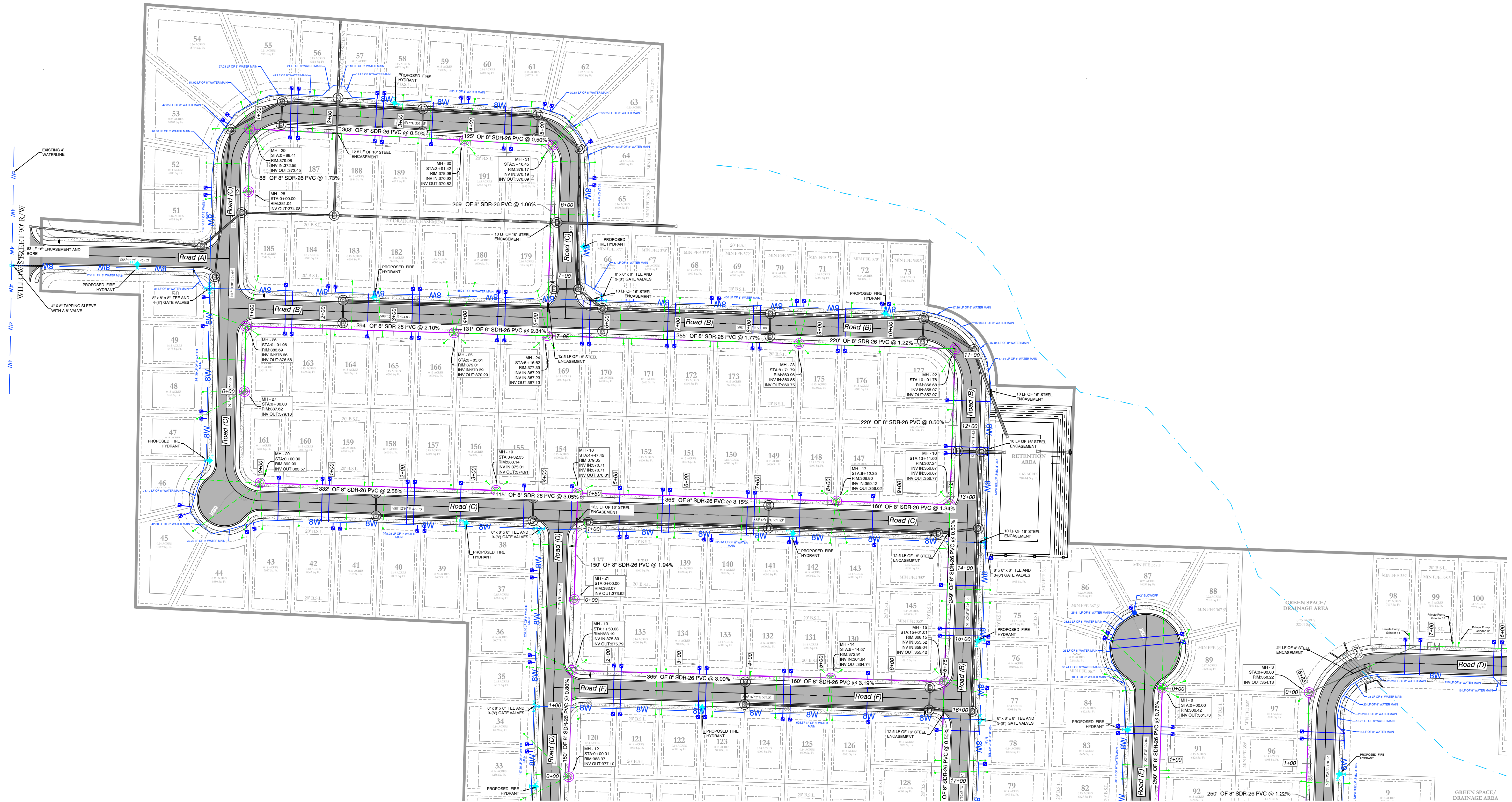


MIDLAND ROAD SUBDIVISION STREET PLAN & PROFILES

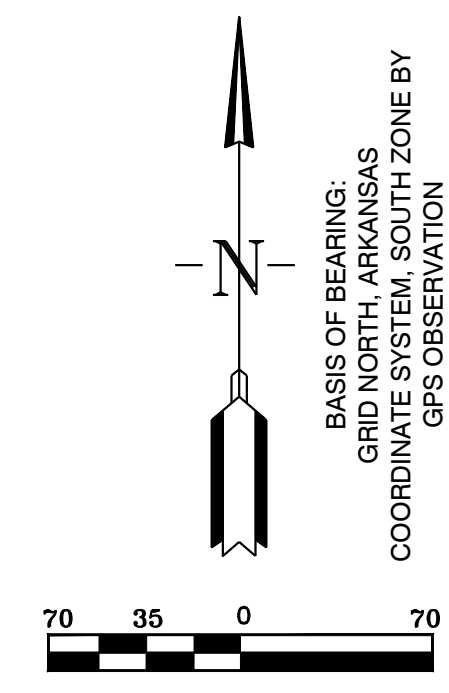
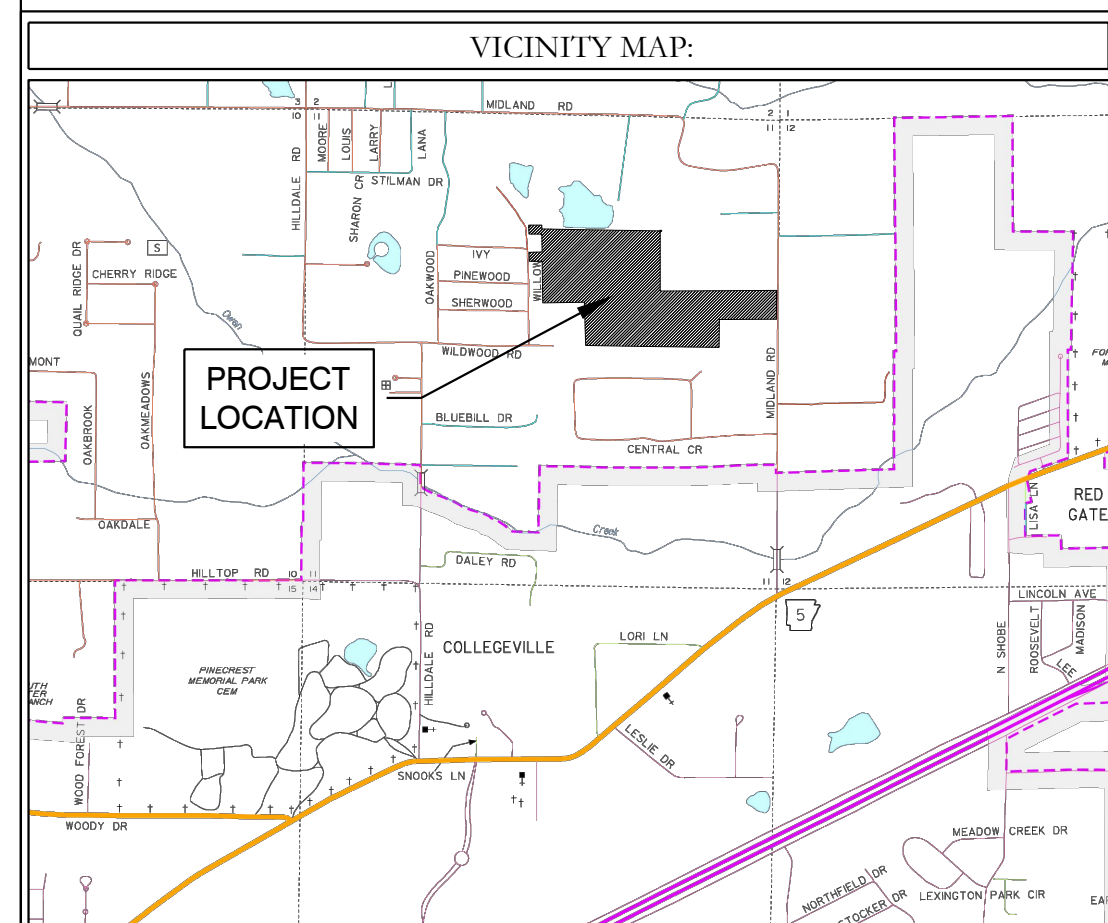
HOPE CONSULTING
ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501) 315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
MIDLAND ROAD STREET PLAN AND PROFILES BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISIONS:	CHECKED BY:	23-0024
SHEET: C-2.5	SCALE:	
500	01S	15W
0	34	230
62	1807	



MIDLAND ROAD SUBDIVISION UTILITY PLAN

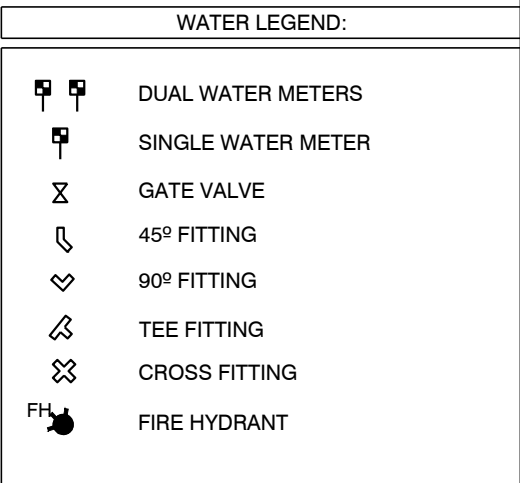
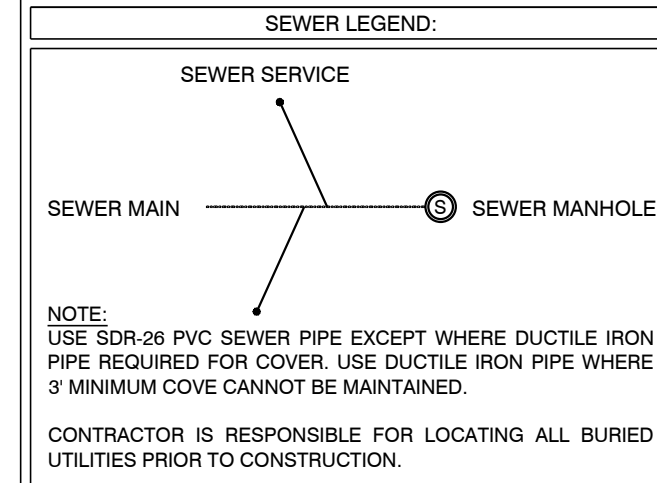


WATER & SEWER UTILITY NOTES:

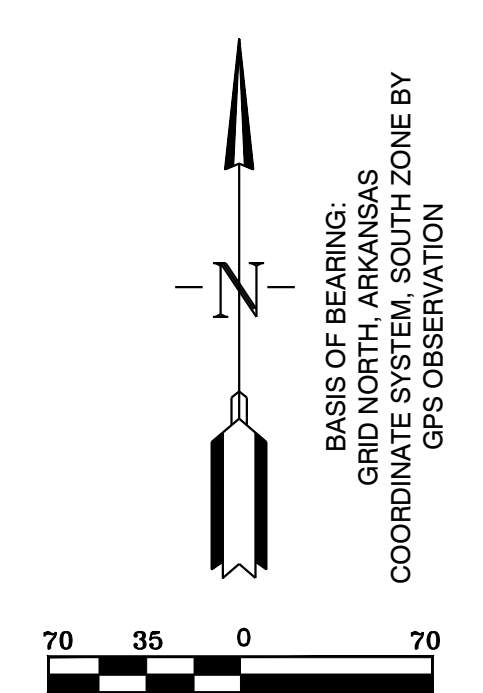
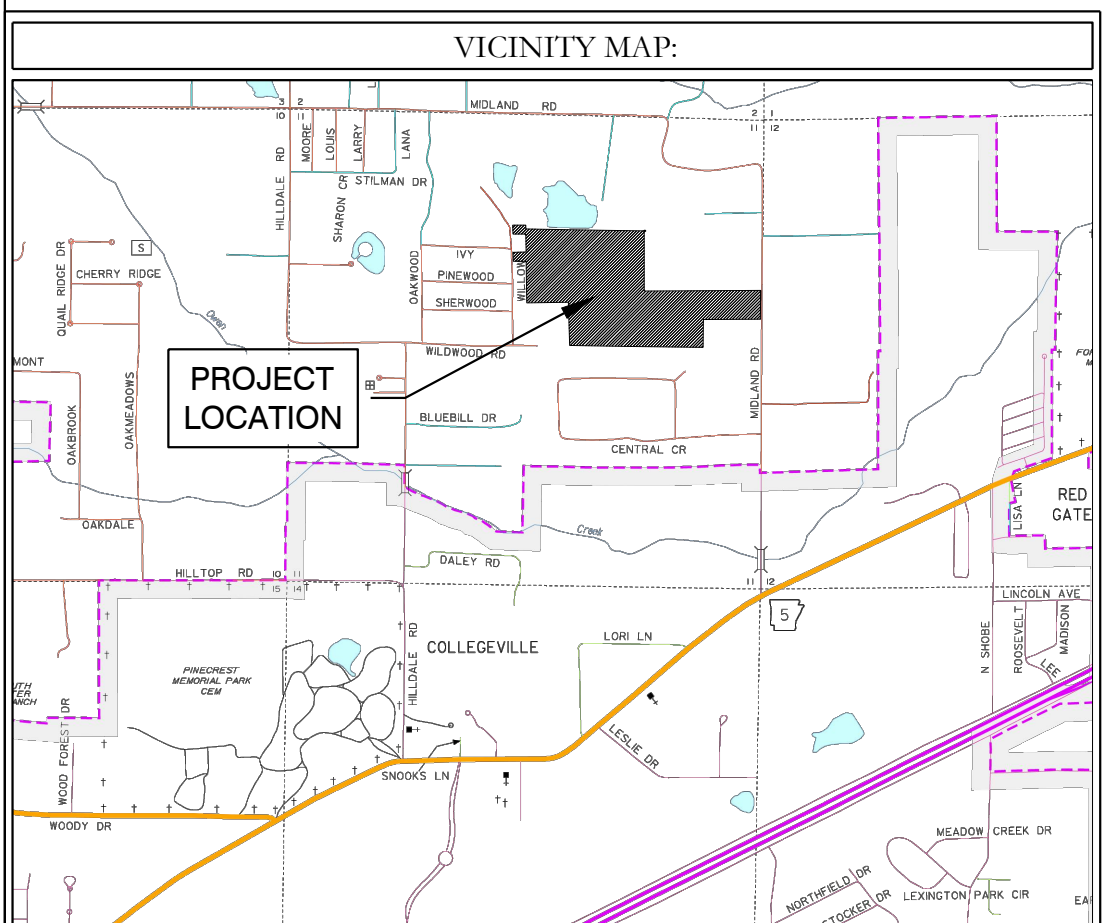
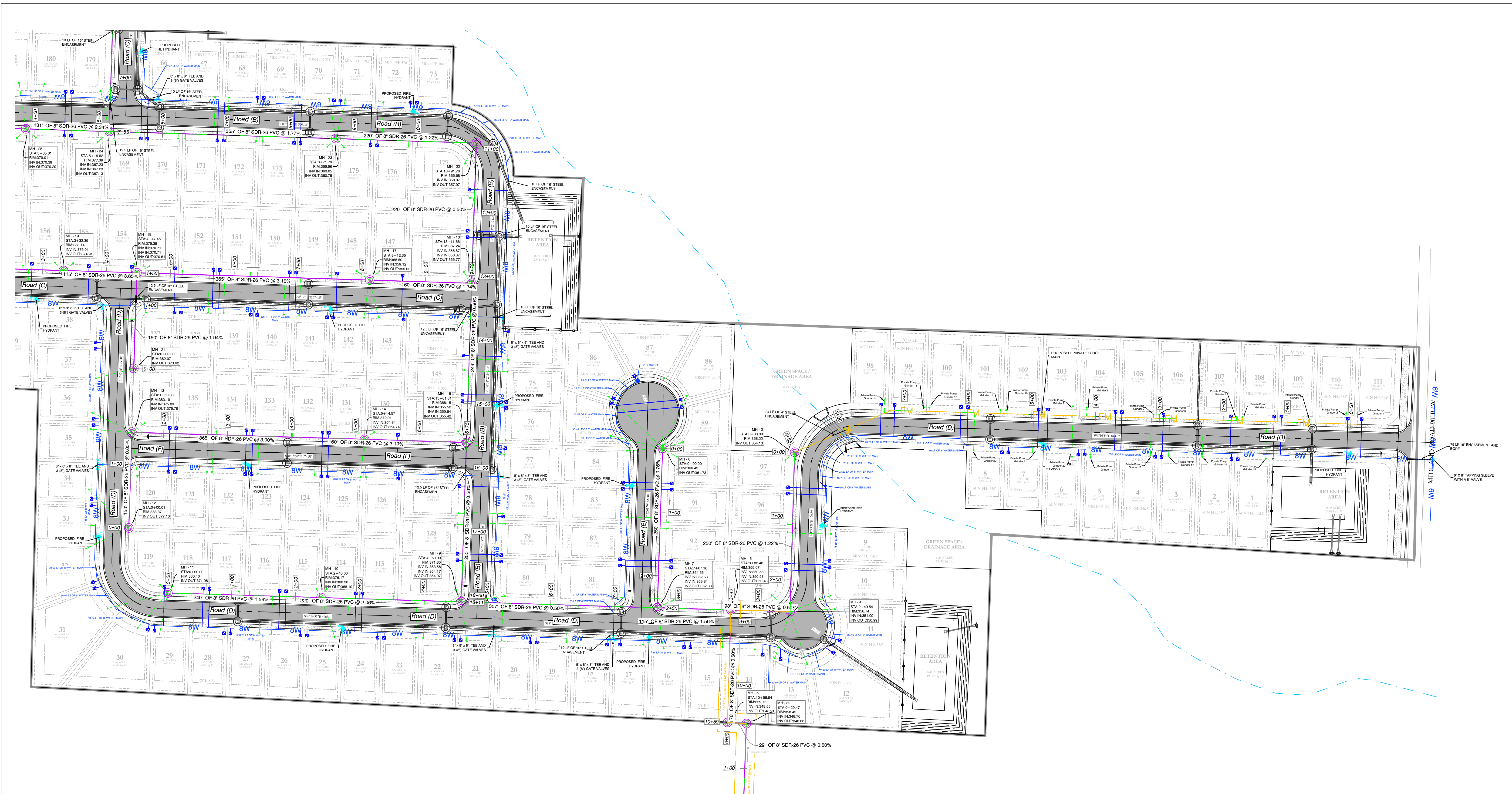
1. ALL NEW 8-INCH WATER MAINS TO BE CLASS 900.
2. ALL WATER MAINS LARGER THAN 8" DIAMETER SHALL BE DUCTILE IRON (250 PSI PRESSURE CLASS).
3. ALL WATER AND SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION."
4. WATER LINES UNDER CULVERTS, CREEKS, CONCRETE CHANNELS, RETAINING WALLS, OR OTHER DIFFICULT AND/OR DANGEROUS TO MAINTAIN AREAS SHALL BE ENCASED IN A SMOOTH STEEL ENCASUREMENT PIPE. THE STEEL ENCASUREMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.
5. EACH WATER SERVICE METER MUST HAVE ITS OWN SERVICE LINE CONNECTION TO THE MAIN (INCLUDES DOUBLE METERS DISPLAYED AS ONE SERVICE LINE ON THE PLAT).
6. CASING SPACERS: SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.

SEWER CONSTRUCTION NOTES:

1. ALL SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION"
2. ALL SEWER LINES CROSSING UNDER ALL CONCRETE STORM DRAINS OR ANY STORM DRAIN 30-INCH DIAMETER AND LARGER, OR ALL STORM DRAINS WITH MULTIPLE PIPE RUNS, SHALL BE STEEL ENCASED A MINIMUM OF 5 FEET EITHER SIDE OF THE STORM DRAIN.
3. CASING SPACERS: SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.



		129 North Main Street, Benton, Arkansas 72015 PH. (501)315-2626 FAX (501) 315-0024 www.hopeconsulting.com	
		FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC	
UTILITY PLAN MIDLAND ROAD IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS			
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:	
REVISED:	CHECKED BY:	23-0024	
SHEET: C-3.0	SCALE: 1" = 70'	500	

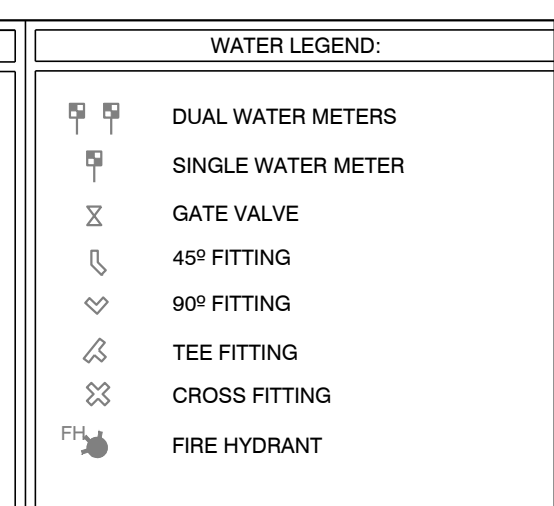
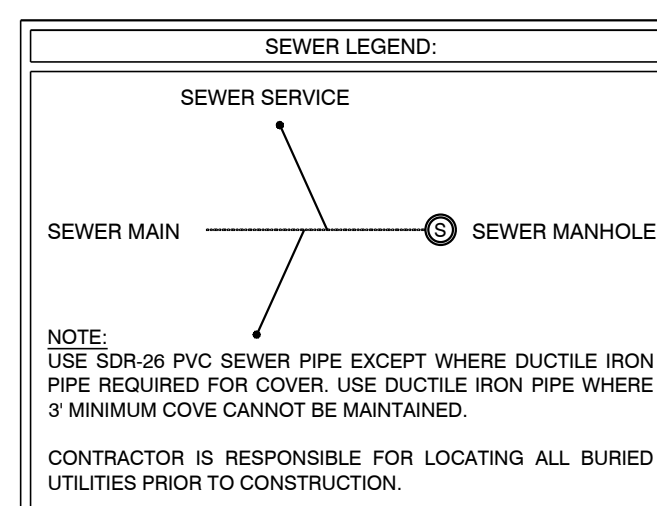


WATER & SEWER UTILITY NOTES:

1. ALL NEW 8-INCH WATER MAINS TO BE CLASS 900.
2. ALL WATER MAINS LARGER THAN 8" DIAMETER SHALL BE DUCTILE IRON (250 PSI PRESSURE CLASS).
3. ALL WATER AND SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
4. WATER LINES UNDER CULVERTS, CREEKS, CONCRETE CHANNELS, RETAINING WALLS, OR OTHER DIFFICULT AND/OR DANGEROUS TO MAINTAIN AREAS SHALL BE ENCASED IN A SMOOTH STEEL ENCASUREMENT PIPE. THE STEEL ENCASUREMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.
5. EACH WATER SERVICE METER MUST HAVE ITS OWN SERVICE LINE CONNECTION TO THE MAIN (INCLUDES DOUBLE METERS DISPLAYED AS ONE SERVICE LINE ON THE PLAN).
6. CASING SPACERS SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.

SEWER CONSTRUCTION NOTES:

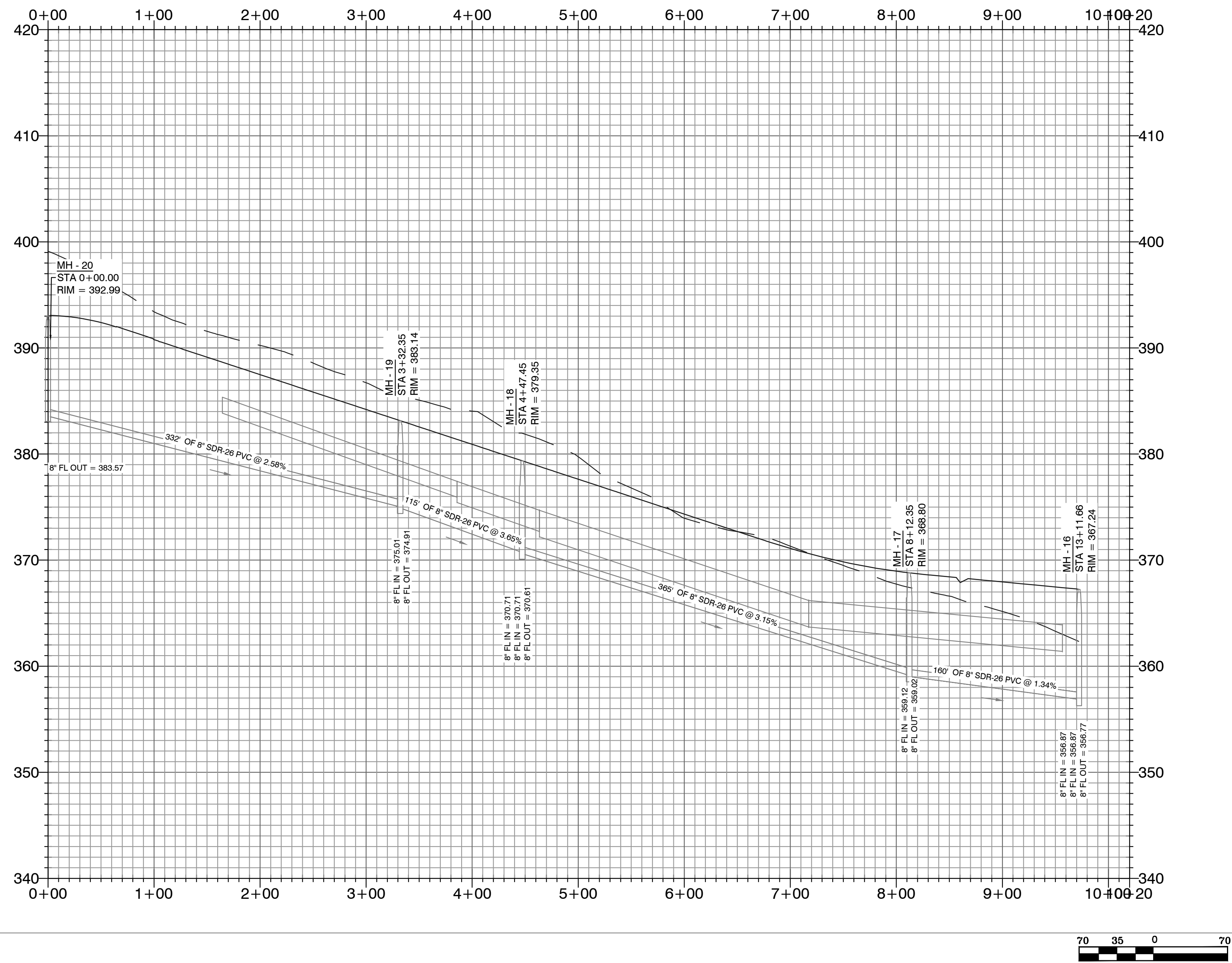
1. ALL SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
2. ALL SEWER LINES CROSSING UNDER ALL CONCRETE STORM DRAINS OR ANY STORM DRAIN 30-INCH DIAMETER AND LARGER, OR ALL STORM DRAINS WITH MULTIPLE PIPE RUNS, SHALL BE STEEL ENCASED A MINIMUM OF 5 FEET EITHER SIDE OF THE STORM DRAIN.
3. CASING SPACERS SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.



MIDLAND ROAD SUBDIVISION UTILITY PLAN

		129 North Main Street, Benton, Arkansas 72015 PH. (501)315-2626 FAX (501) 315-0024 www.hopeconsulting.com	
FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC			
UTILITY PLAN MIDLAND ROAD IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS			
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:	
REVISED:	CHECKED BY:	23-0024	
SHEET: C-3.1	SCALE: 1" = 70'		
500	0		

Sanitary-1 PROFILE



↑
N
BASIS OF BEARING:
GRID NORTH, ARKANSAS
COORDINATE SYSTEM, SOUTH ZONE BY
GPS OBSERVATION

WATER & SEWER UTILITY NOTES:

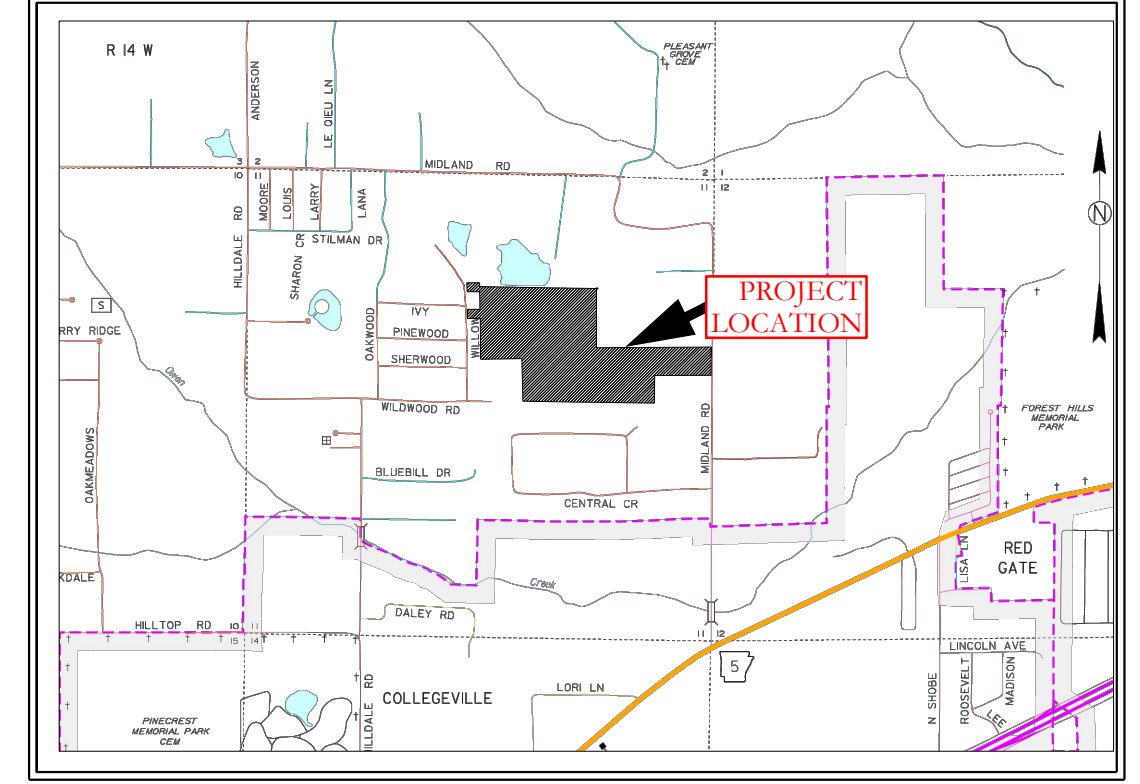
1. ALL NEW 8-INCH WATER MAINS TO BE CLASS 900.
2. ALL WATER MAINS LARGER THAN 8" DIAMETER SHALL BE DUCTILE IRON (250 PSI PRESSURE CLASS).
3. ALL WATER AND SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
4. WATER LINES UNDER CULVERTS, CREEKS, CONCRETE CHANNELS, RETAINING WALLS, OR OTHER DIFFICULT AND/OR DANGEROUS TO MAINTAIN AREAS SHALL BE ENCASED IN A SMOOTH STEEL ENCASUREMENT PIPE. THE STEEL ENCASUREMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.
5. EACH WATER SERVICE METER MUST HAVE ITS OWN SERVICE LINE CONNECTION TO THE MAIN (INCLUDES DOUBLE METERS DISPLAYED AS ONE SERVICE LINE ON THE PLAT).
6. CASING SPACERS: SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.

SEWER CONSTRUCTION NOTES:

1. ALL SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
2. ALL SEWER LINES CROSSING UNDER ALL CONCRETE STORM DRAINS OR ANY STORM DRAIN 30-INCH DIAMETER AND LARGER, OR ALL STORM DRAINS WITH MULTIPLE PIPE RUNS, SHALL BE STEEL ENCASED A MINIMUM OF 5 FEET EITHER SIDE OF THE STORM DRAIN.
3. CASING SPACERS: SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.

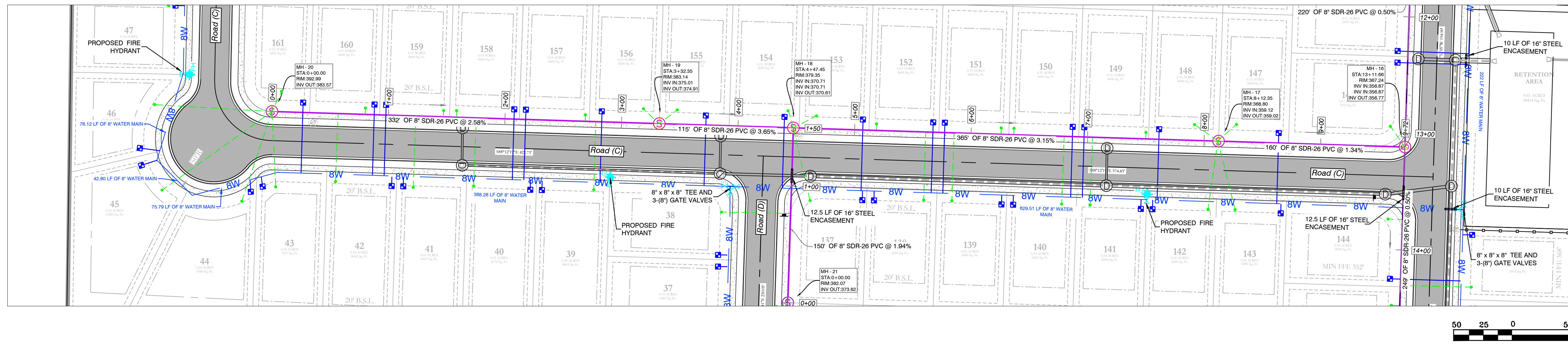


VICINITY MAP:



SEWER LEGEND:		WATER LEGEND:	
SEWER SERVICE	SEWER MAIN	DUAL WATER METERS	SINGLE WATER METER
SEWER MANHOLE		GATE VALVE	45° FITTING
		90° FITTING	TEE FITTING
		CROSS FITTING	FIRE HYDRANT

NOTE:
USE SDR-26 PVC SEWER PIPE EXCEPT WHERE DUCTILE IRON PIPE REQUIRED FOR COVER. USE DUCTILE IRON PIPE WHERE 3' MINIMUM COVE CANNOT BE MAINTAINED.
CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL BURIED UTILITIES PRIOR TO CONSTRUCTION.



MIDLAND ROAD SUBDIVISION
SEWER PLAN & PROFILES

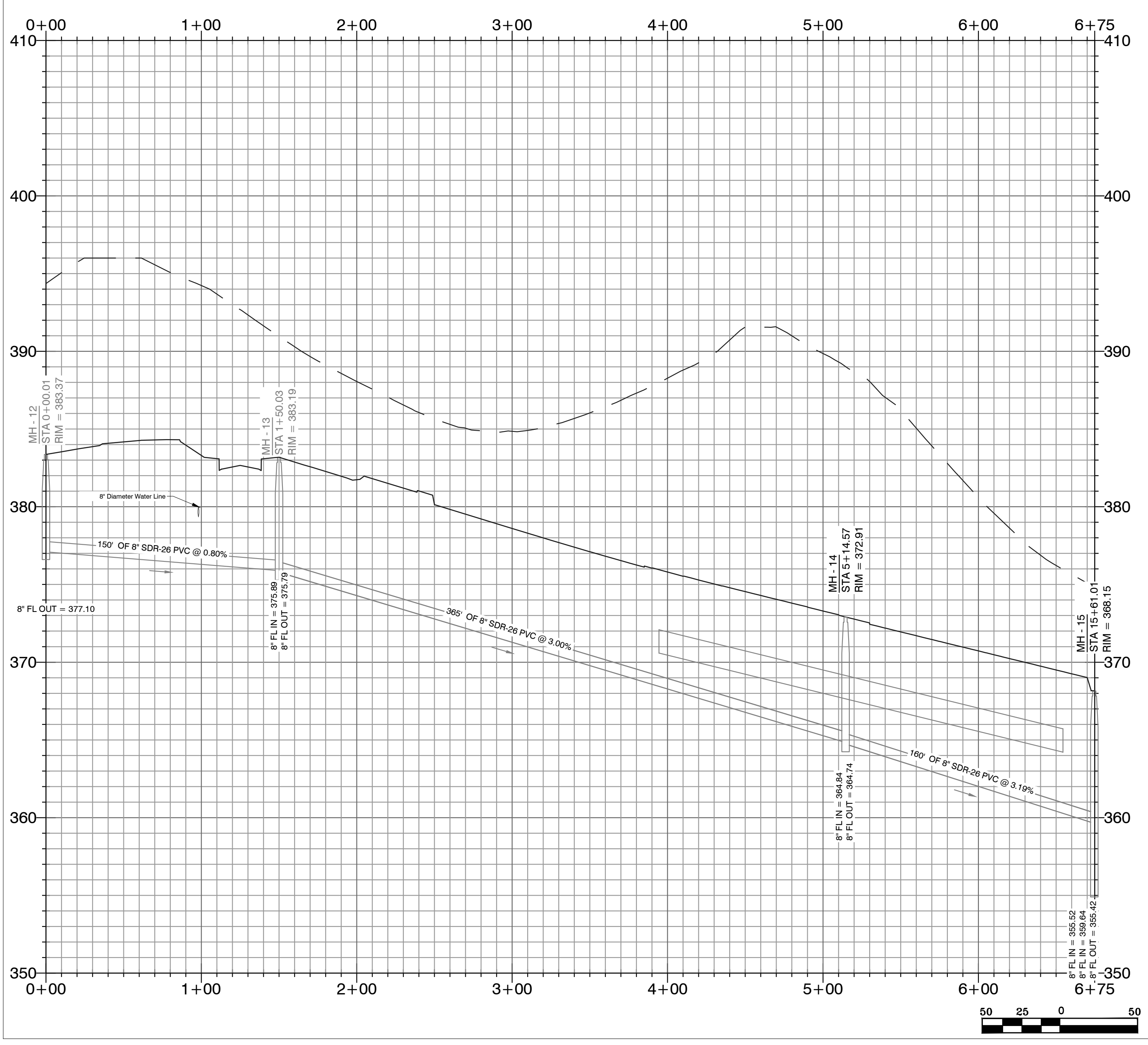
HOPE CONSULTING
ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

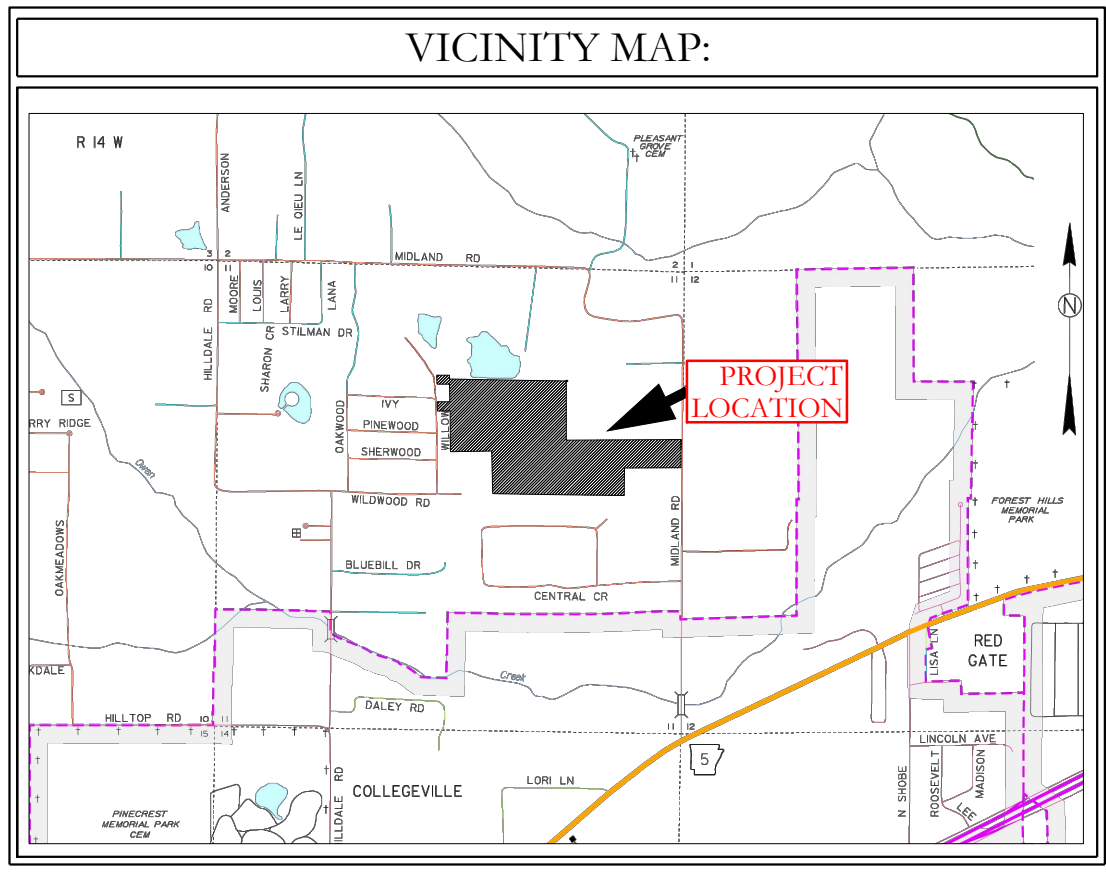
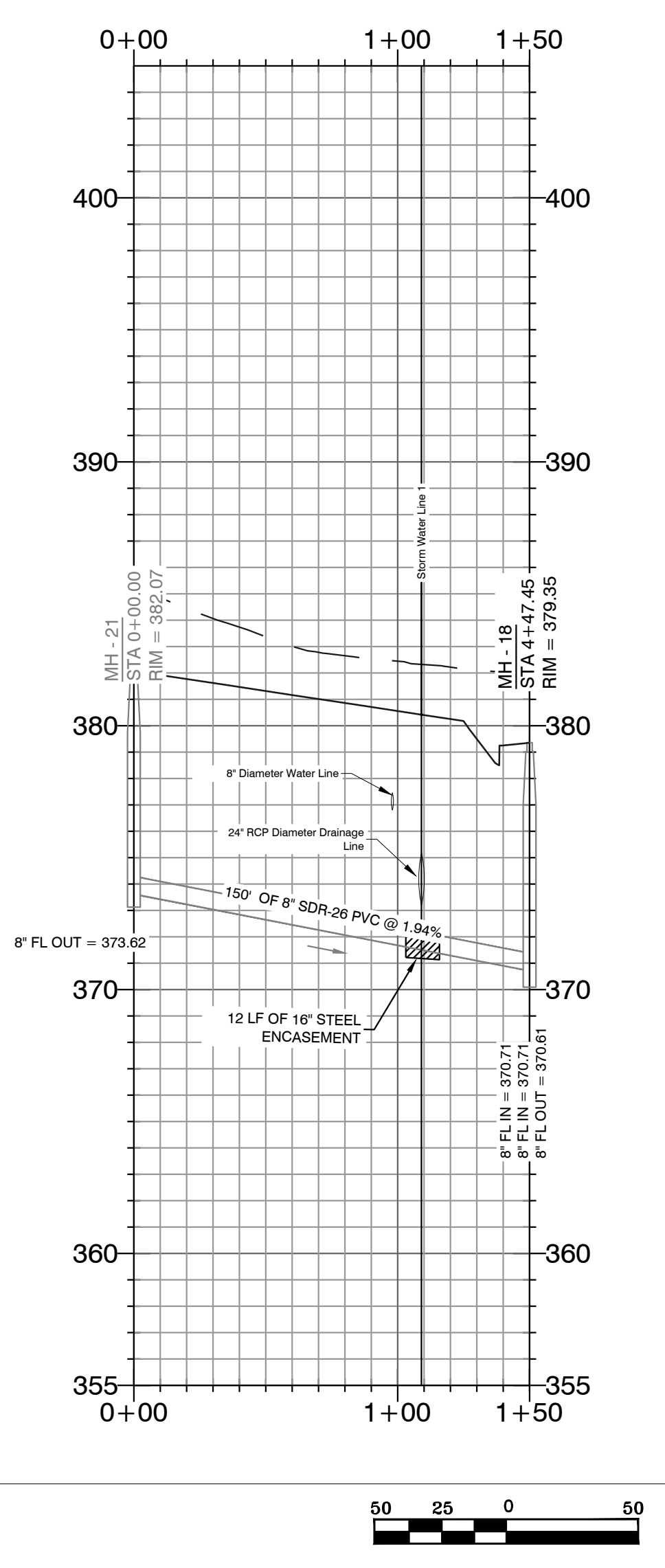
FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
MIDLAND ROAD SEWER PROFILES BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISIONS:	CHECKED BY:	23-0024
SHEET: C-3.2	SCALE:	
500	1S	15W
0	34	230
62	1807	

K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S DEVELOPMENT AND ROAD SUBDIVISION\SET\115\RAW\CIVIL\DWG\23-0024 CONSTRUCTION PLAN (FINAL DRAFT).AFTER COMMENTS\XXXXXXXXX.DWG

Sanitary 3 PROFILE

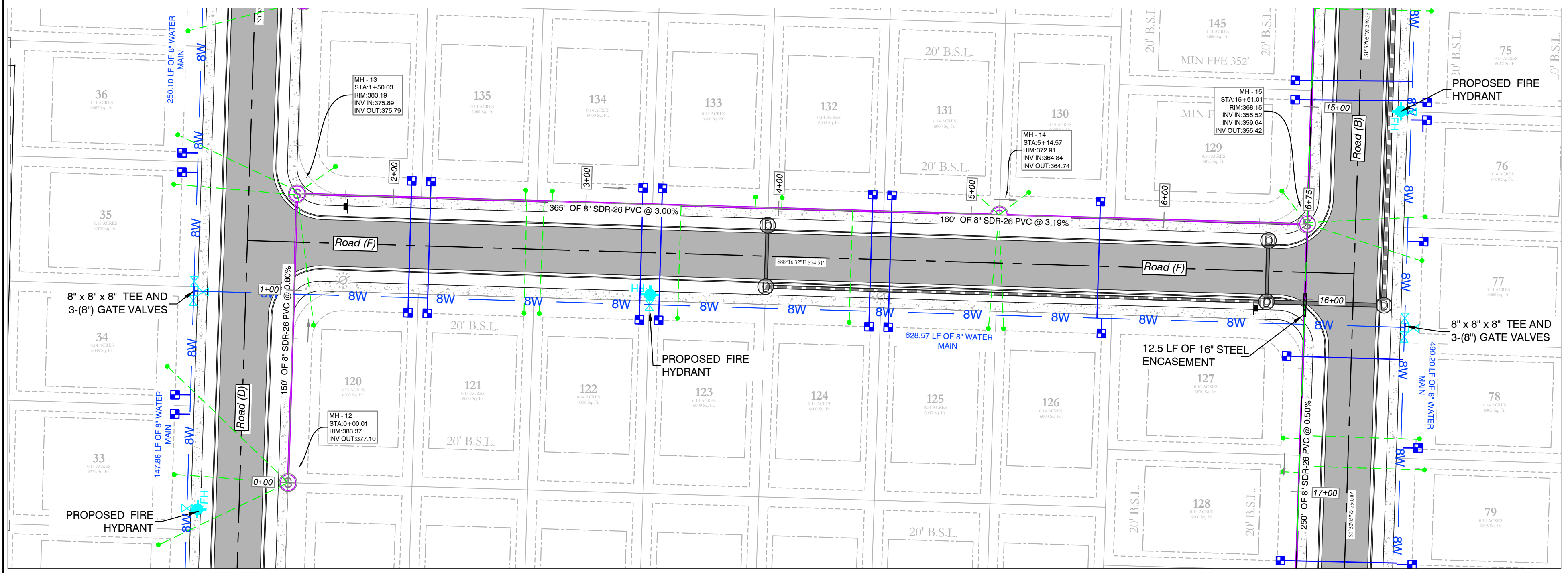
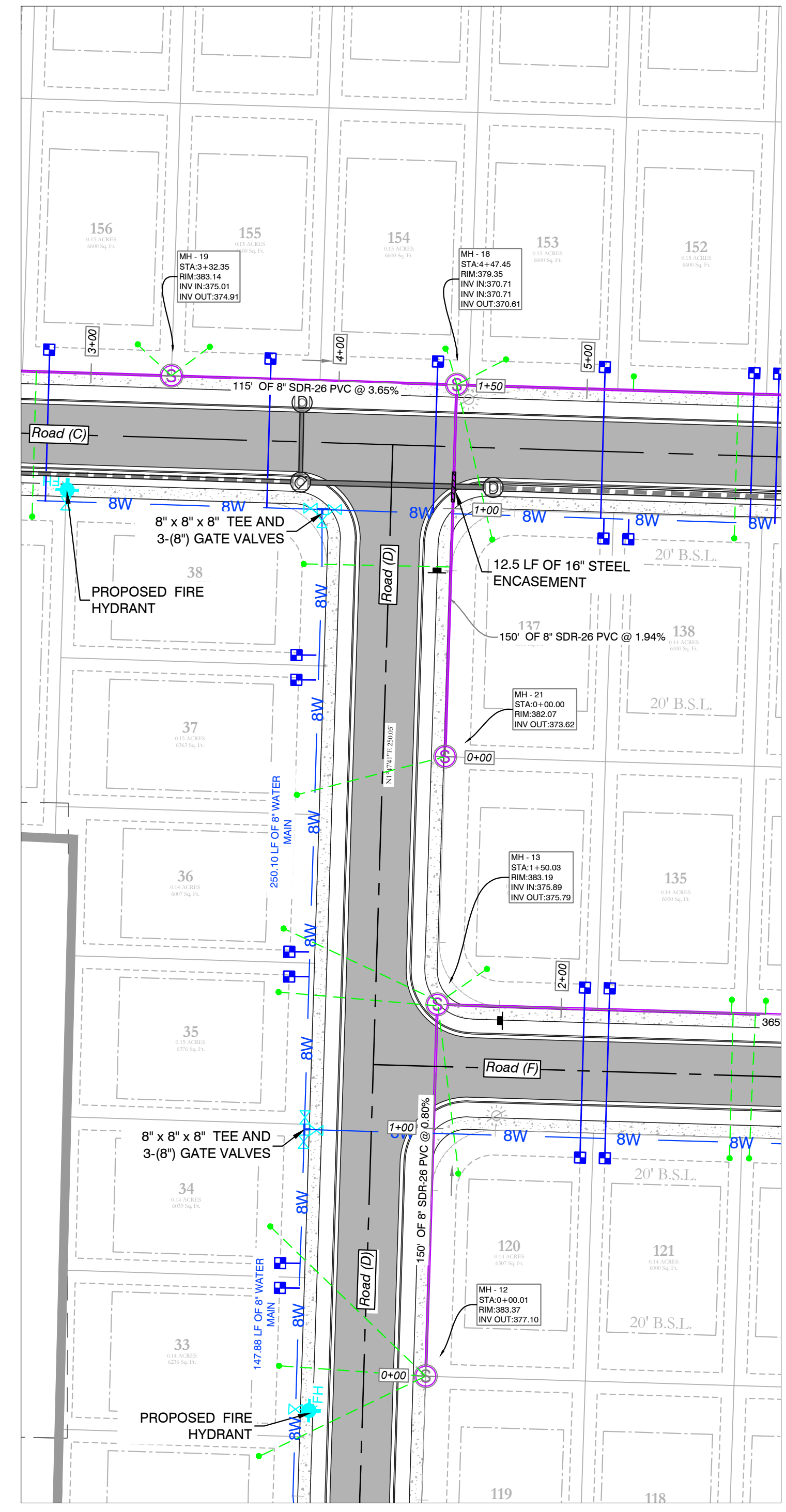
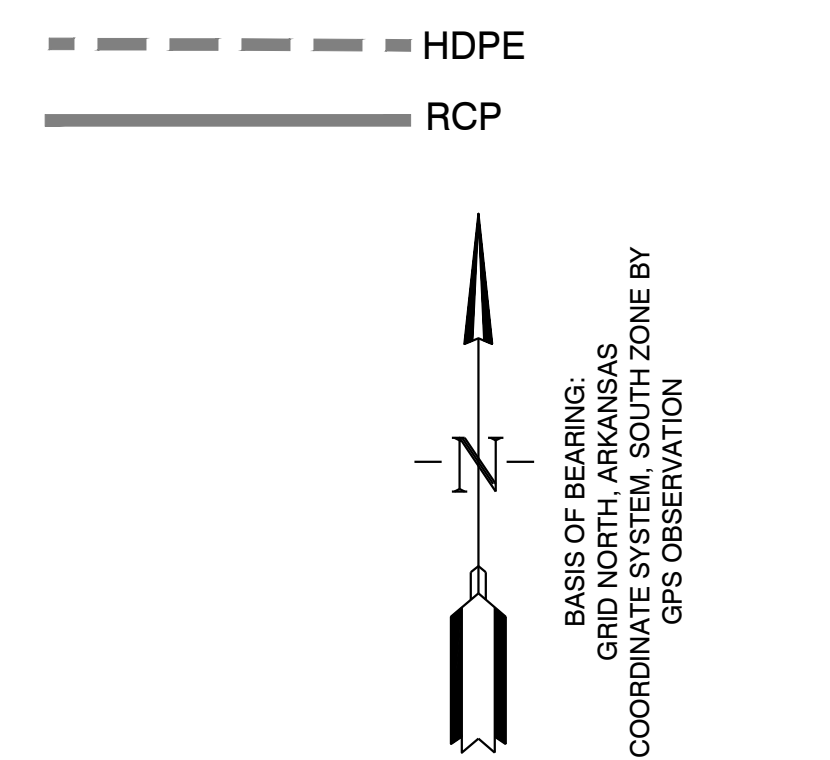


Sanitary-2 PROFILE



- WATER & SEWER UTILITY NOTES:
1. ALL NEW 8-INCH WATER MAINS TO BE CLASS 900.
 2. ALL WATER MAINS LARGER THAN 8" DIAMETER SHALL BE DUCTILE IRON (250 PSI PRESSURE CLASS).
 3. ALL WATER AND SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
 4. WATER LINES UNDER CULVERTS, CREEKS, CONCRETE CHANNELS, RETAINING WALLS, OR OTHER DIFFICULT AND/OR DANGEROUS TO MAINTAIN AREAS SHALL BE ENCASED IN A SMOOTH STEEL ENCASMENT PIPE. THE STEEL ENCASMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.
 5. EACH WATER SERVICE METER MUST HAVE ITS OWN SERVICE LINE CONNECTION TO THE MAIN (INCLUDES DOUBLE METERS DISPLAYED AS ONE SERVICE LINE ON THE PLAT).
 6. CASING SPACERS SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.

- SEWER CONSTRUCTION NOTES:
1. ALL SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
 2. ALL SEWER LINES CROSSING UNDER ALL CONCRETE STORM DRAINS OR ANY STORM DRAIN 30-INCH DIAMETER AND LARGER, OR ALL STORM PIPE WITH MULTIPLE PIPE RUNS, SHALL BE STEEL ENCASED A MINIMUM OF 5 FEET EITHER SIDE OF THE STORM DRAIN.
 3. CASING SPACERS SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.



SEWER SERVICE	WATER LEGEND:

NOTE: USE SDR-26 PVC SEWER PIPE EXCEPT WHERE DUCTILE IRON PIPE REQUIRED FOR COVER. USE DUCTILE IRON PIPE WHERE 3' MINIMUM COVE CANNOT BE MAINTAINED.
CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL BURIED UTILITIES PRIOR TO CONSTRUCTION.

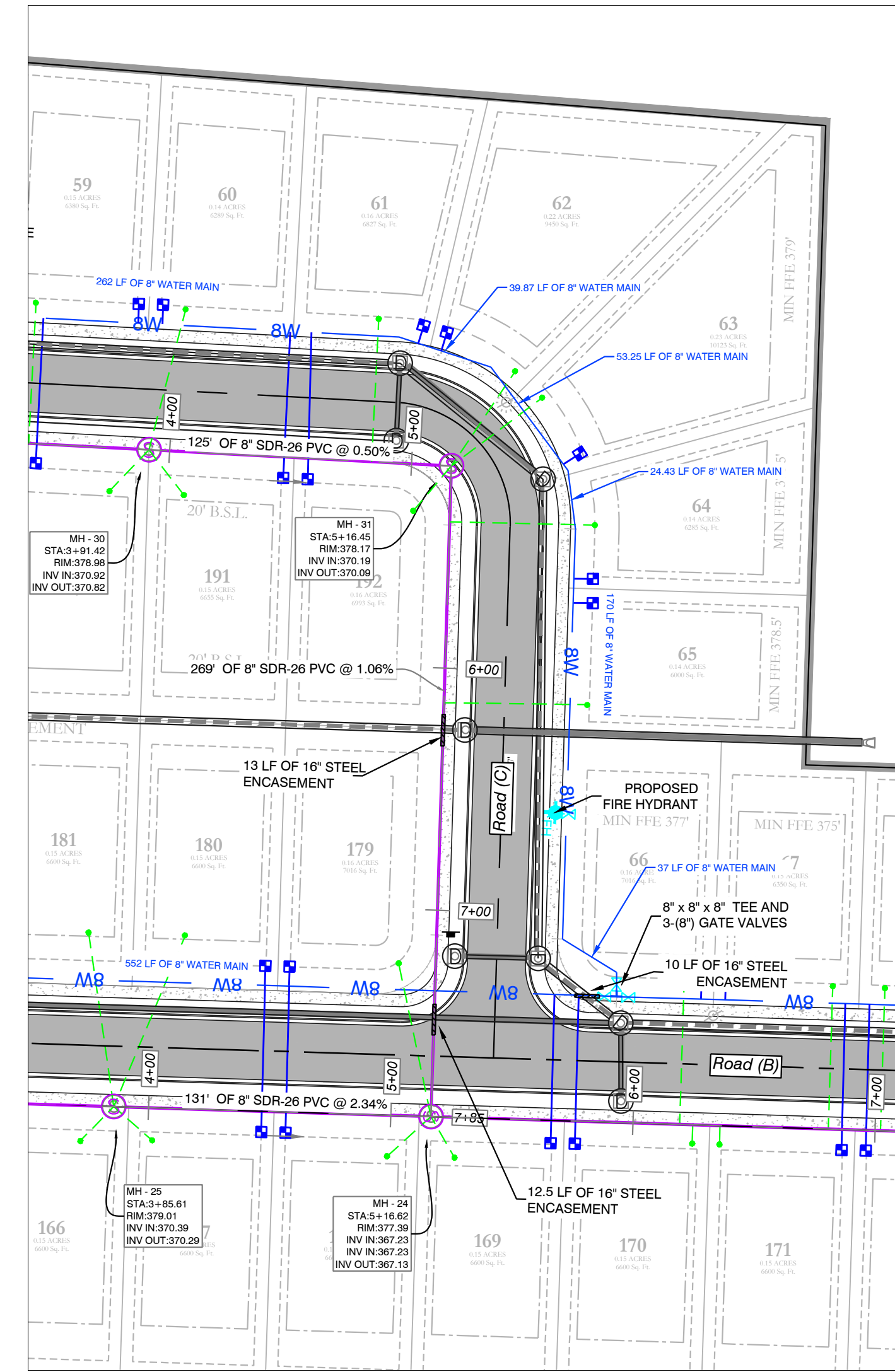
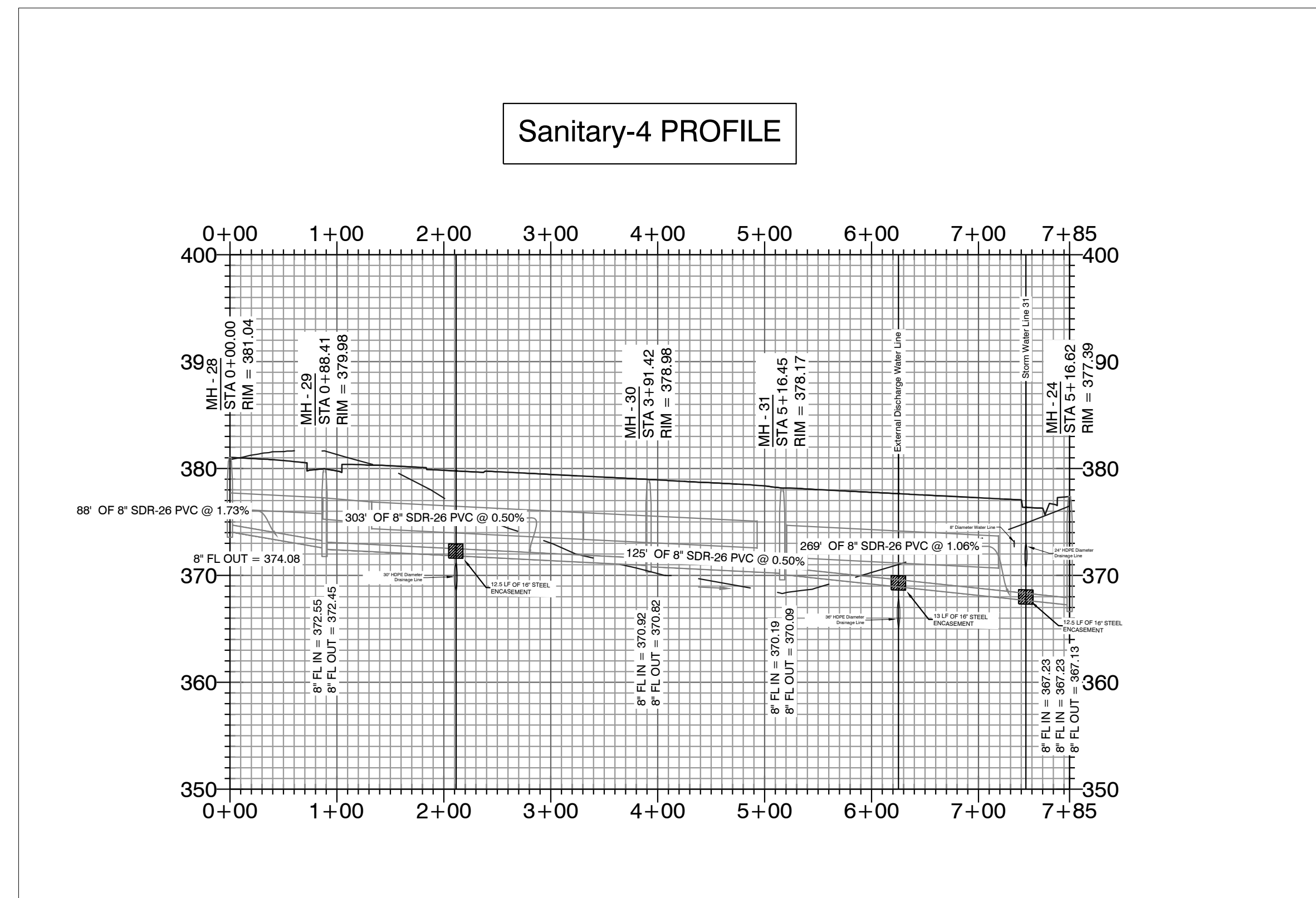
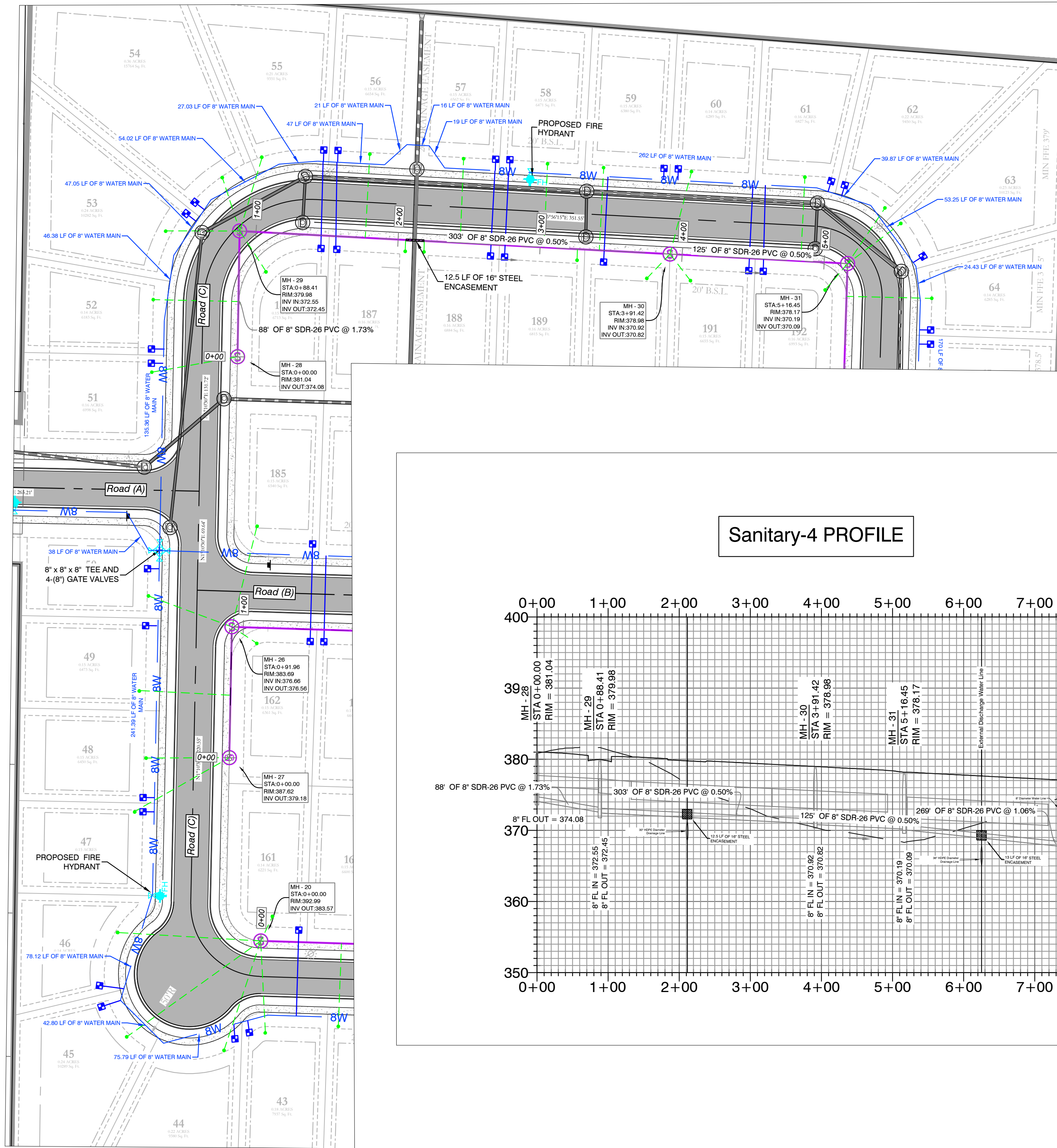
MIDLAND ROAD SUBDIVISION
SEWER PLAN & PROFILES

HOPE CONSULTING
ENGINEERS - SURVEYORS

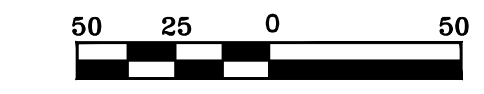
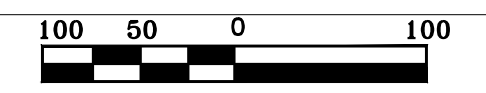
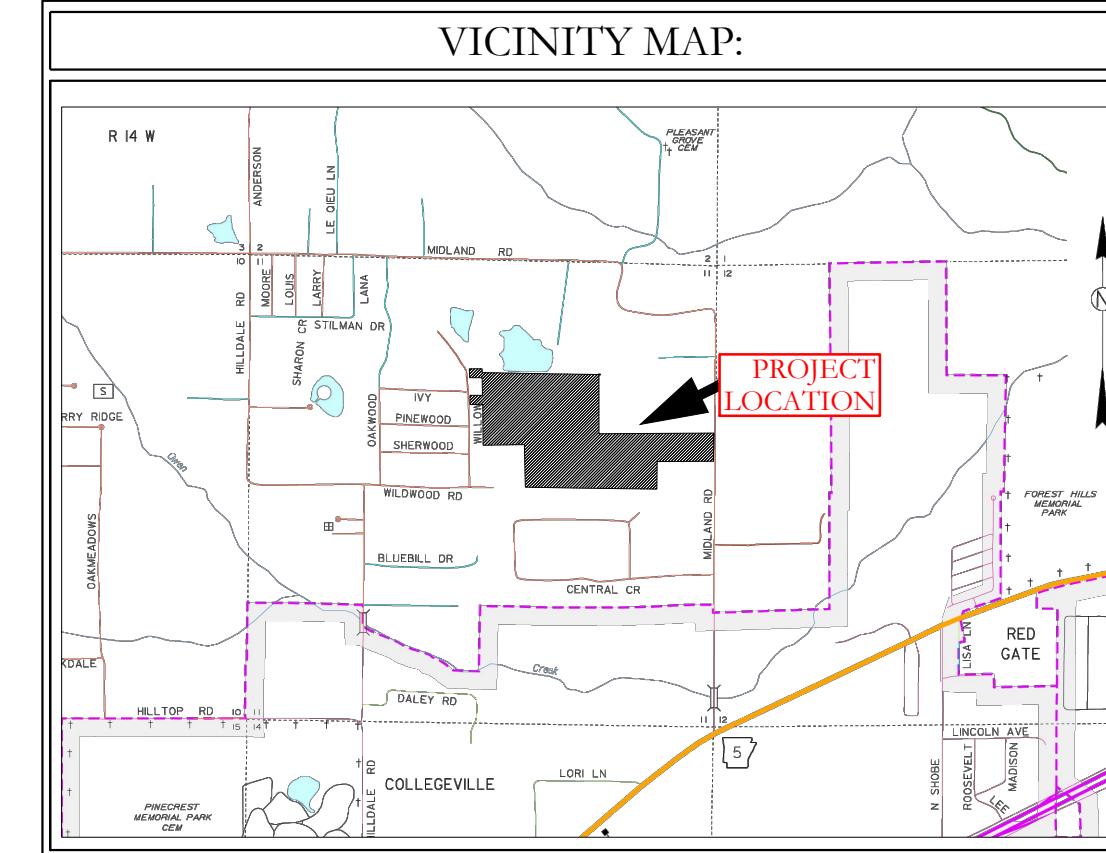
129 North Main Street,
Benton, Arkansas 72015
PH. (501) 315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
MIDLAND ROAD SEWER PROFILES BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISIONS:	CHECKED BY:	23-0024
SHEET: C-3.3	SCALE:	
500	1S	15W
0	34	230
62	1807	

KSLAND PROJECTS 2004/SUBDIVISIONS/2023/23-0024/HAVEN'S DEVELOPMENT AND ROAD SUBDIVISION SITE PLAN/CD/PLDWG/23-0024/CONSTRUCTION PLAN (FINAL DRAFT), AFTER COMMENTS/XXXXXXXXXX.DWG



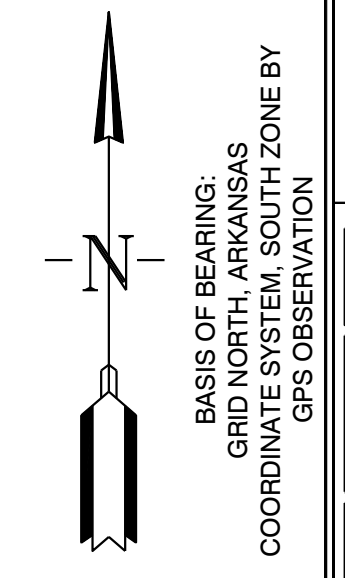
- WATER & SEWER UTILITY NOTES:**
- ALL NEW 8-INCH WATER MAINS TO BE CLASS 900.
 - ALL WATER MAINS LARGER THAN 8" DIAMETER SHALL BE DUCTILE IRON (250 PSI PRESSURE CLASS).
 - ALL WATER AND SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION.
 - WATER LINES UNDER CULVERTS, CREEKS, CONCRETE CHANNELS, RETAINING WALLS, OR OTHER DIFFICULT AND/OR DANGEROUS TO MAINTAIN AREAS SHALL BE ENCASED IN A SMOOTH STEEL ENCASEMENT PIPE. THE STEEL ENCASEMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.
 - EACH WATER SERVICE METER MUST HAVE ITS OWN SERVICE LINE CONNECTION TO THE MAIN (INCLUDES DOUBLE METERS DISPLAYED AS ONE SERVICE LINE ON THE PLAN).
 - CASING SPACERS SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.
- SEWER CONSTRUCTION NOTES:**
- ALL SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION.
 - ALL SEWER LINES CROSSING UNDER ALL CONCRETE STORM DRAINS OR ANY STORM DRAIN 30-INCH DIAMETER AND LARGER, OR ALL STORM DRAINS WITH MULTIPLE PIPE RUNS, SHALL BE STEEL ENCASED A MINIMUM OF 5 FEET EITHER SIDE OF THE STORM DRAIN.
 - CASING SPACERS SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.
- HDPE
 — RCP



MIDLAND ROAD SUBDIVISION SEWER PLAN & PROFILES

SEWER LEGEND:		WATER LEGEND:	
	SEWER SERVICE		DUAL WATER METERS
	SEWER MAIN		SINGLE WATER METER
	SEWER MANHOLE		GATE VALVE
			45° FITTING
			90° FITTING
			TEE FITTING
			CROSS FITTING
			FIRE HYDRANT

NOTE:
 USE SDR-26 PVC SEWER PIPE EXCEPT WHERE DUCTILE IRON PIPE REQUIRED FOR COVER. USE DUCTILE IRON PIPE WHERE 3" MINIMUM COVE CANNOT BE MAINTAINED.
 CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL BURIED UTILITIES PRIOR TO CONSTRUCTION.

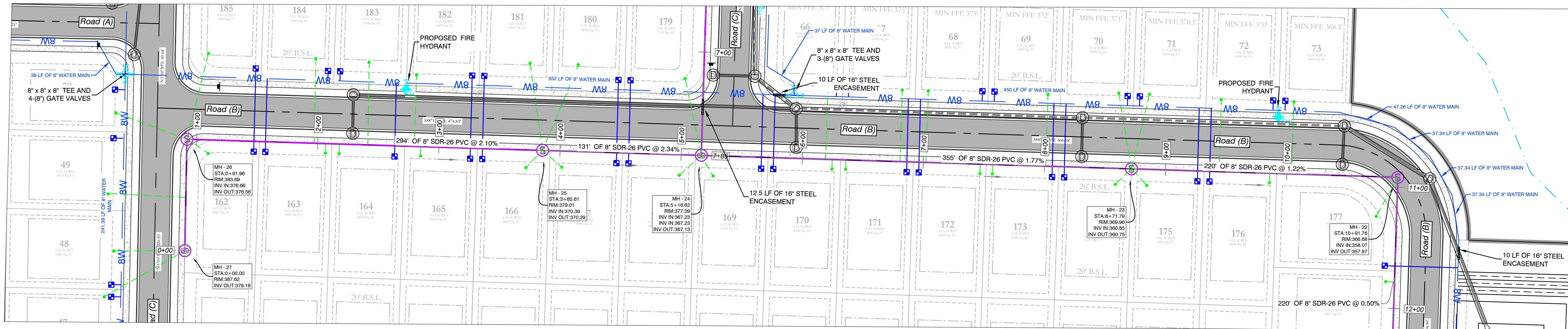


HOPE CONSULTING
 ENGINEERS - SURVEYORS

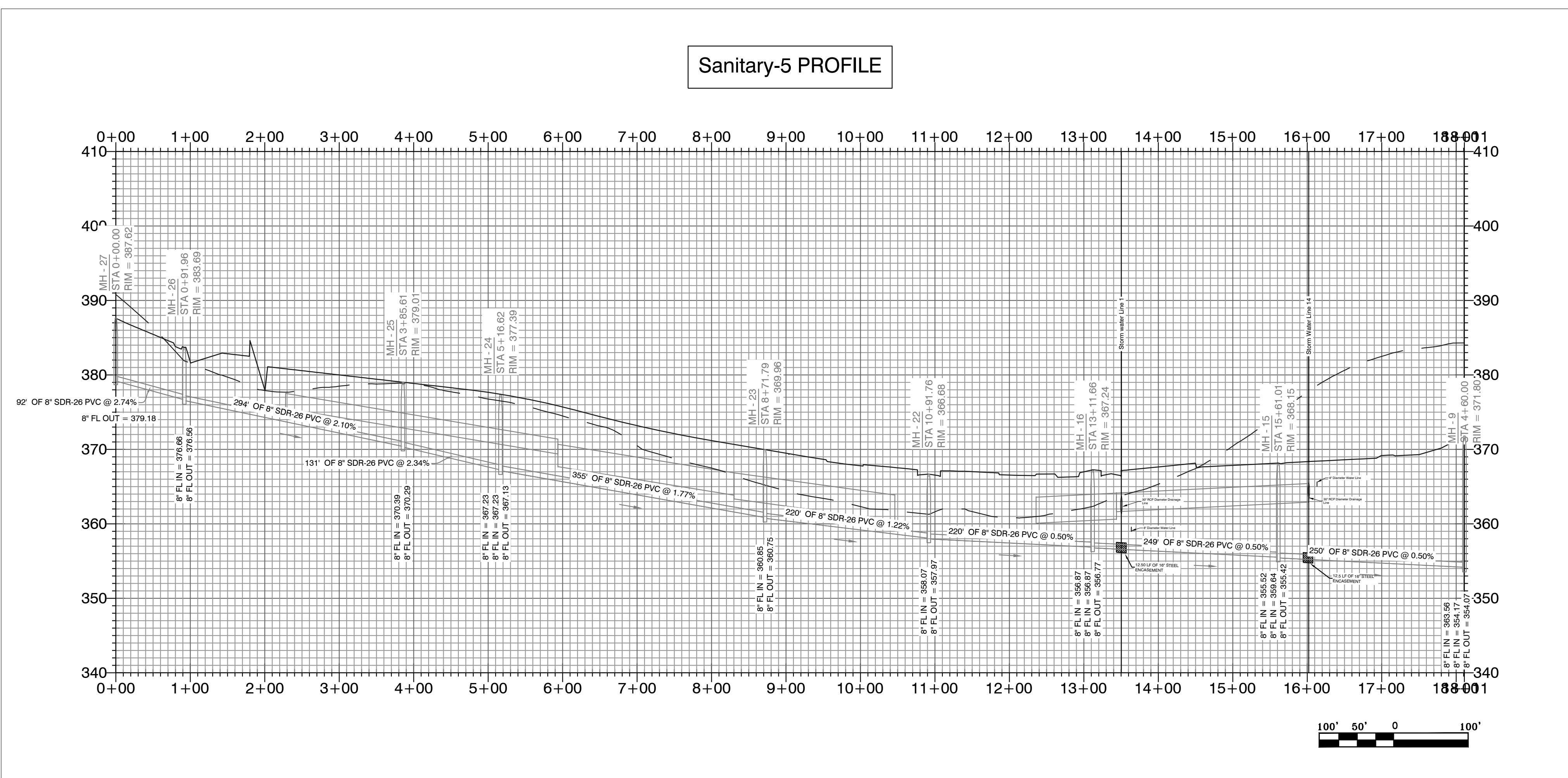
129 North Main Street,
 Benton, Arkansas 72015
 PH. (501)315-2626
 FAX (501) 315-0024
 www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
MIDLAND ROAD SEWER PROFILES BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISION:	CHECKED BY:	23-0024
SHEET: C-3.4	SCALE:	
500	1S	15W 0 34 230 62 1807

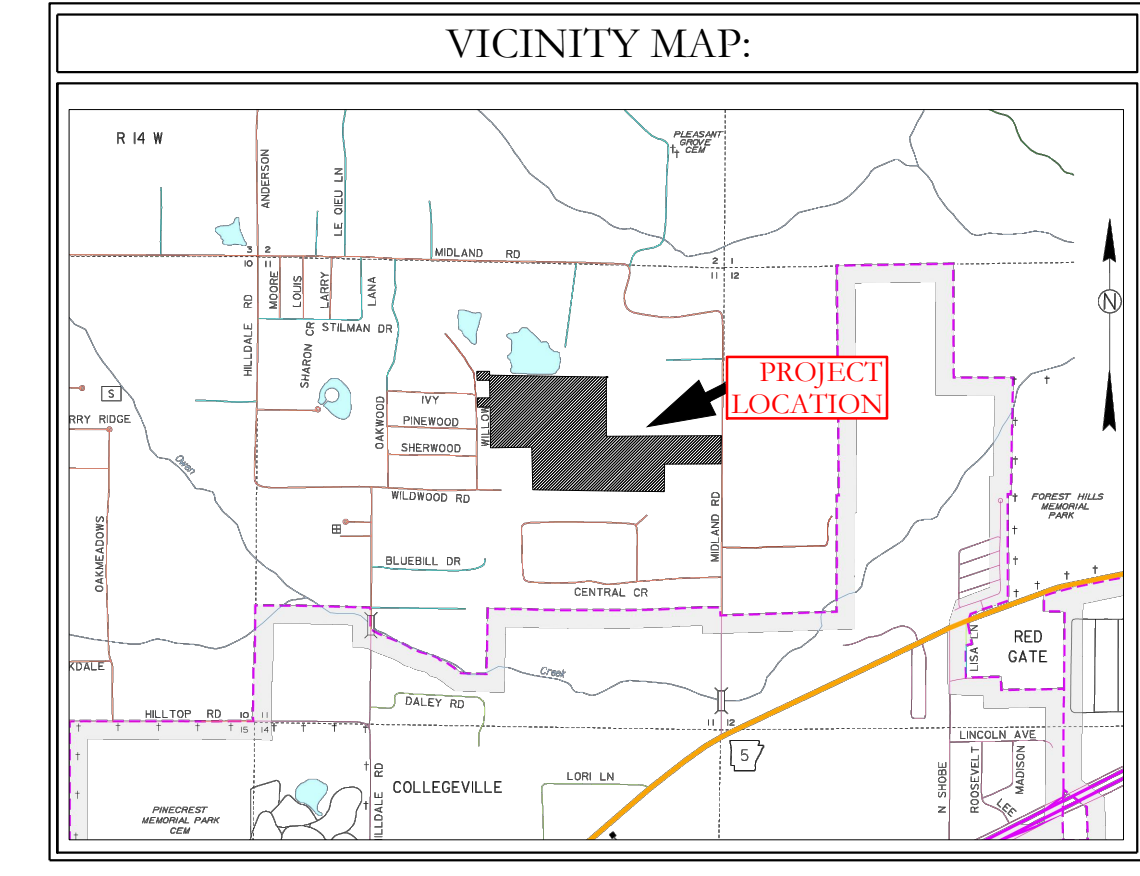
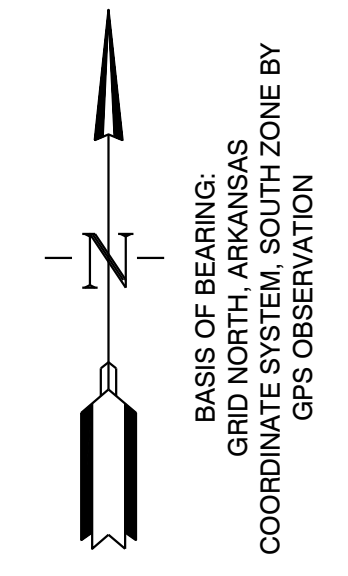
KSLAND PROJECTS 2004 SUBDIVISIONS 2627 24-004 HAVEN'S MIDLAND ROAD SUBDIVISION SITE PLAN (CIVIL DWG 23-0024) CONSTRUCTION PLAN (FINAL DRAFT), AFTER COMMENTS XXXXXX.DWG



Sanitary-5 PROFILE



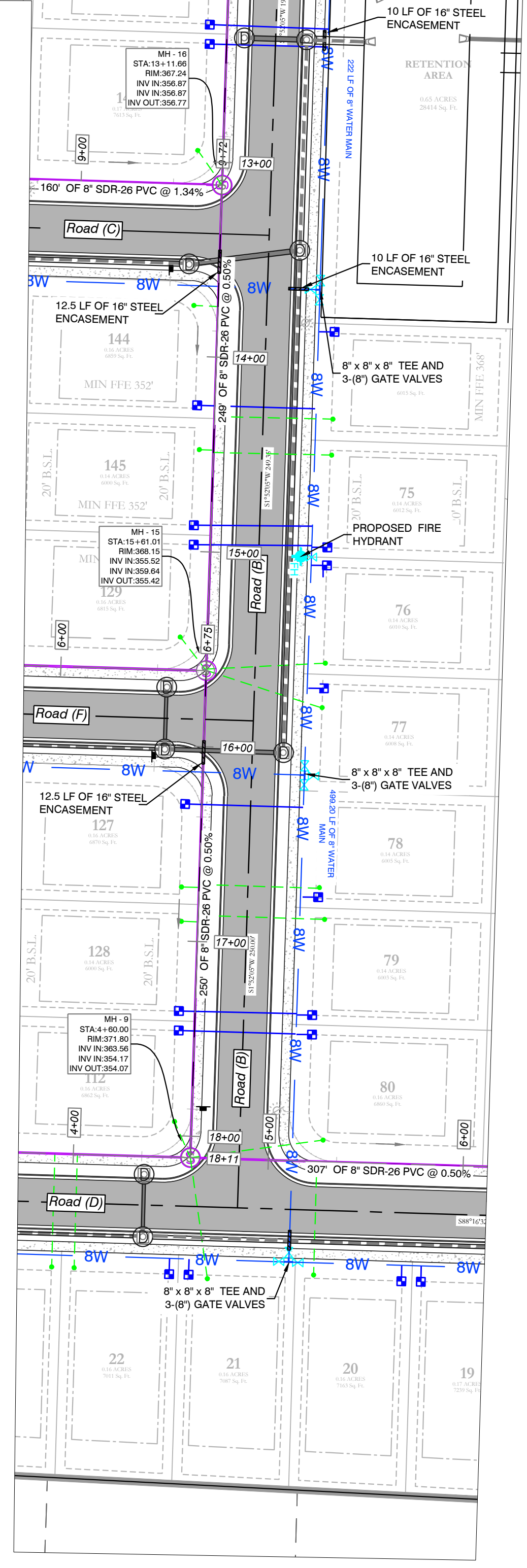
- WATER & SEWER UTILITY NOTES:**
- ALL NEW 8-INCH WATER MAINS TO BE CLASS 900.
 - ALL WATER MAINS LARGER THAN 8" DIAMETER SHALL BE DUCTILE IRON (250 PSI PRESSURE CLASS).
 - ALL WATER AND SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION.
 - WATER LINES UNDER CULVERTS, CREEKS, CONCRETE CHANNELS, RETAINING WALLS, OR OTHER DIFFICULT AND/OR DANGEROUS TO MAINTAIN AREAS SHALL BE ENCASED IN A SMOOTH STEEL ENCASMENT PIPE. THE STEEL ENCASMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.
 - EACH WATER SERVICE METER MUST HAVE ITS OWN SERVICE LINE CONNECTION TO THE MAIN (INCLUDES DOUBLE METERS DISPLAYED AS ONE SERVICE LINE ON THE PLAT).
 - CASING SPACERS SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.
- SEWER CONSTRUCTION NOTES:**
- ALL SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION.
 - ALL SEWER LINES CROSSING UNDER ALL CONCRETE STORM DRAINS OR ANY STORM DRAIN 30-INCH DIAMETER AND LARGER, OR ALL STORM DRAINS WITH MULTIPLE PIPE RUNS, SHALL BE STEEL ENCASED A MINIMUM OF 5 FEET EITHER SIDE OF THE STORM DRAIN.
 - CASING SPACERS SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.



MIDLAND ROAD SUBDIVISION SEWER PLAN & PROFILES

SEWER LEGEND:	WATER LEGEND:
SEWER SERVICE	DUAL WATER METERS
SEWER MAIN	SINGLE WATER METER
SEWER MANHOLE	GATE VALVE
	45° FITTING
	90° FITTING
	TEE FITTING
	CROSS FITTING
	FIRE HYDRANT

NOTE: USE SDR-26 PVC SEWER PIPE EXCEPT WHERE DUCTILE IRON PIPE REQUIRED FOR COVER. USE DUCTILE IRON PIPE WHERE 3" MINIMUM COVER CANNOT BE MAINTAINED.
CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL BURIED UTILITIES PRIOR TO CONSTRUCTION.

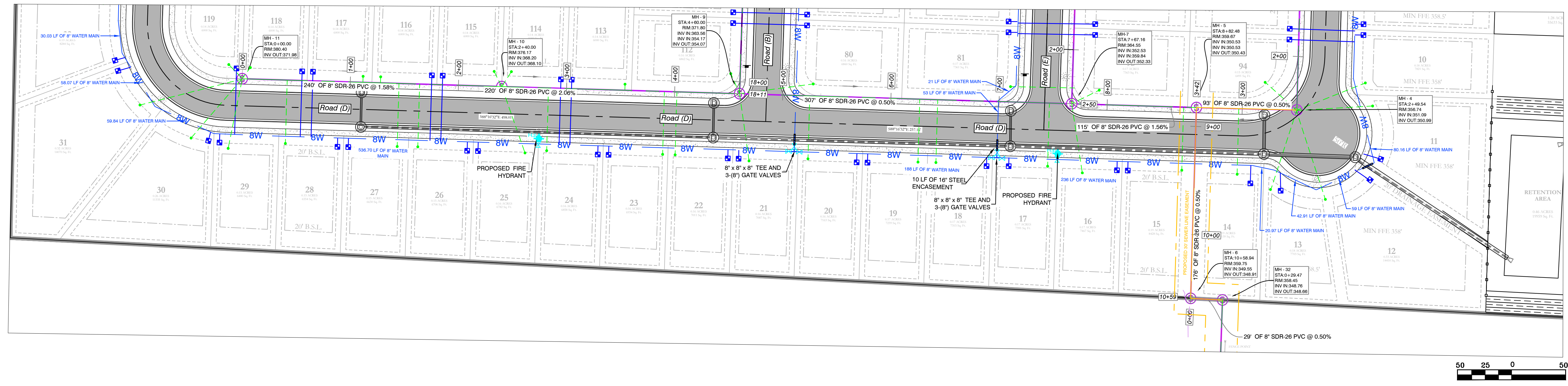


HOPE CONSULTING
ENGINEERS - SURVEYORS

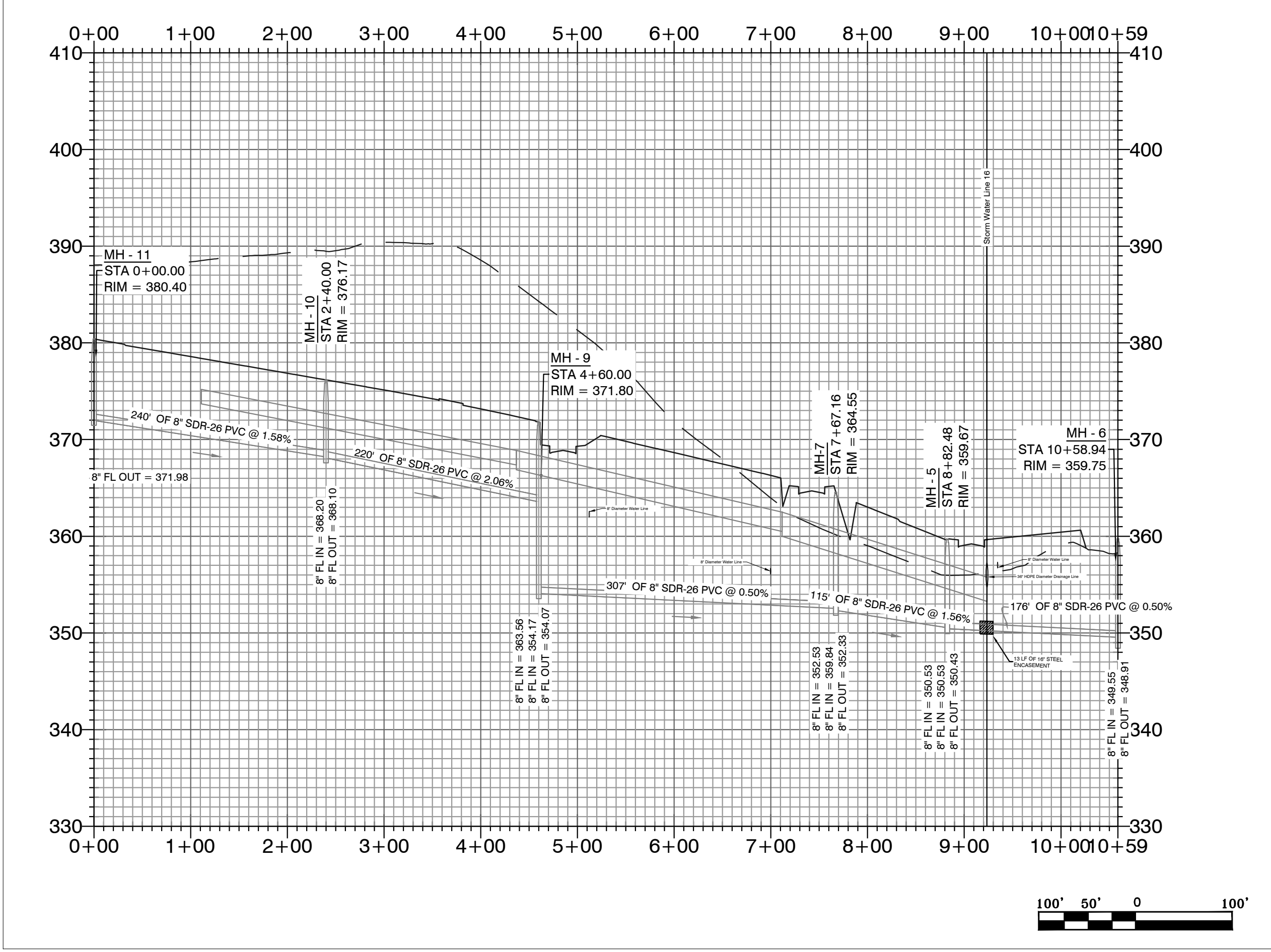
129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
MIDLAND ROAD SEWER PROFILES BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISION:	CHECKED BY:	23-0024
SHEET: C-3.5	SCALE:	
500	1S	15W 0 34 230 62 1807

KSLAND PROJECTS 2004/SUBDIVISIONS/2023/23-0024/HAVEN'S DEVELOPMENT/23-0024/CONSTRUCTION PLAN (FINAL DRAFT), AFTER COMMENTS/XXXXXXXXXX.DWG



Sanitary-6 PROFILE

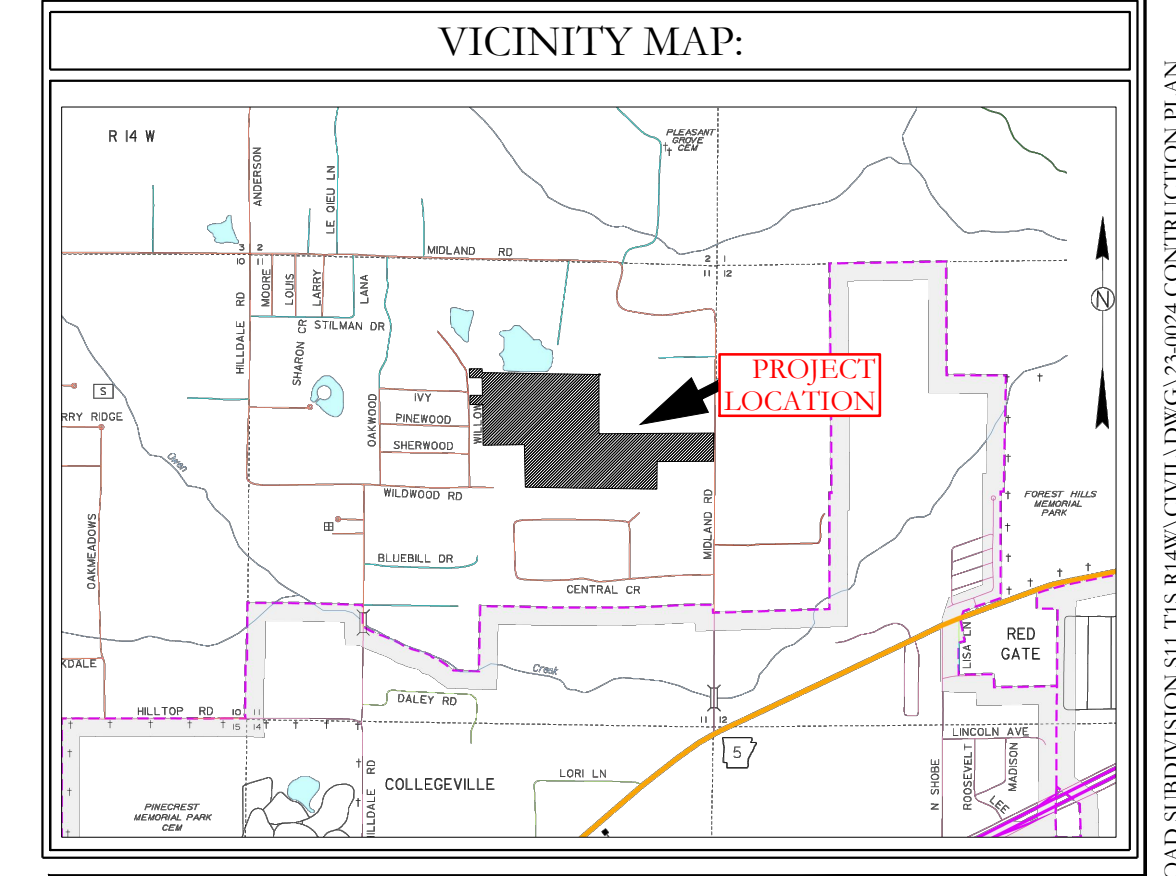


- WATER & SEWER UTILITY NOTES:
- ALL NEW 8-INCH WATER MAINS TO BE CLASS 900.
 - ALL WATER MAINS LARGER THAN 8" DIAMETER SHALL BE DUCTILE IRON (250 PSI PRESSURE CLASS).
 - ALL WATER AND SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT 'STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION'.
 - WATER LINES UNDER CULVERTS, CREEKS, CONCRETE CHANNELS, RETAINING WALLS, OR OTHER DIFFICULT AND/OR DANGEROUS TO MAINTAIN AREAS SHALL BE ENCASED IN A SMOOTH STEEL ENCASEMENT PIPE. THE STEEL ENCASEMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.
 - EACH WATER SERVICE METER MUST HAVE ITS OWN SERVICE LINE CONNECTION TO THE MAIN (INCLUDES DOUBLE METERS DISPLAYED AS ONE SERVICE LINE ON THE PLAT).
 - CASING SPACERS: SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.
- SEWER CONSTRUCTION NOTES:
- ALL SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT 'STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION'.
 - ALL SEWER LINES CROSSING UNDER ALL CONCRETE STORM DRAINS OR ANY STORM DRAIN 30-INCH DIAMETER AND LARGER, OR ALL STORM DRAINS WITH MULTIPLE PIPE RUNS, SHALL BE STEEL ENCASED A MINIMUM OF 5 FEET EITHER SIDE OF THE STORM DRAIN.
 - CASING SPACERS: SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.

SEWER LEGEND:		WATER LEGEND:	
	SEWER SERVICE		DUAL WATER METERS
	SEWER MAIN		SINGLE WATER METER
	SEWER MANHOLE		GATE VALVE
			45° FITTING
			90° FITTING
			TEE FITTING
			CROSS FITTING
			FIRE HYDRANT

NOTE:
USE SDR-26 PVC SEWER PIPE EXCEPT WHERE DUCTILE IRON PIPE REQUIRED FOR COVER. USE DUCTILE IRON PIPE WHERE 3' MINIMUM COVE CANNOT BE MAINTAINED.
CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL BURIED UTILITIES PRIOR TO CONSTRUCTION.

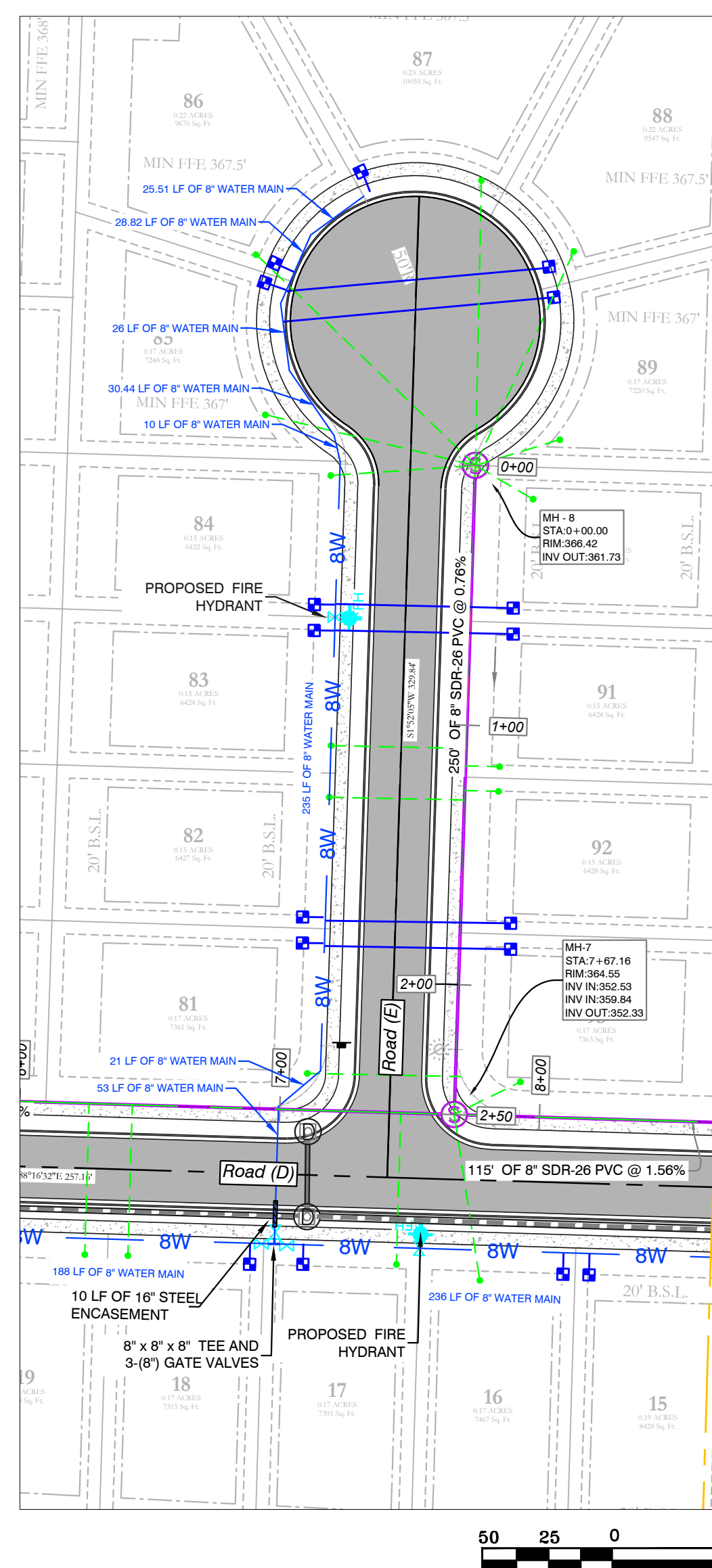
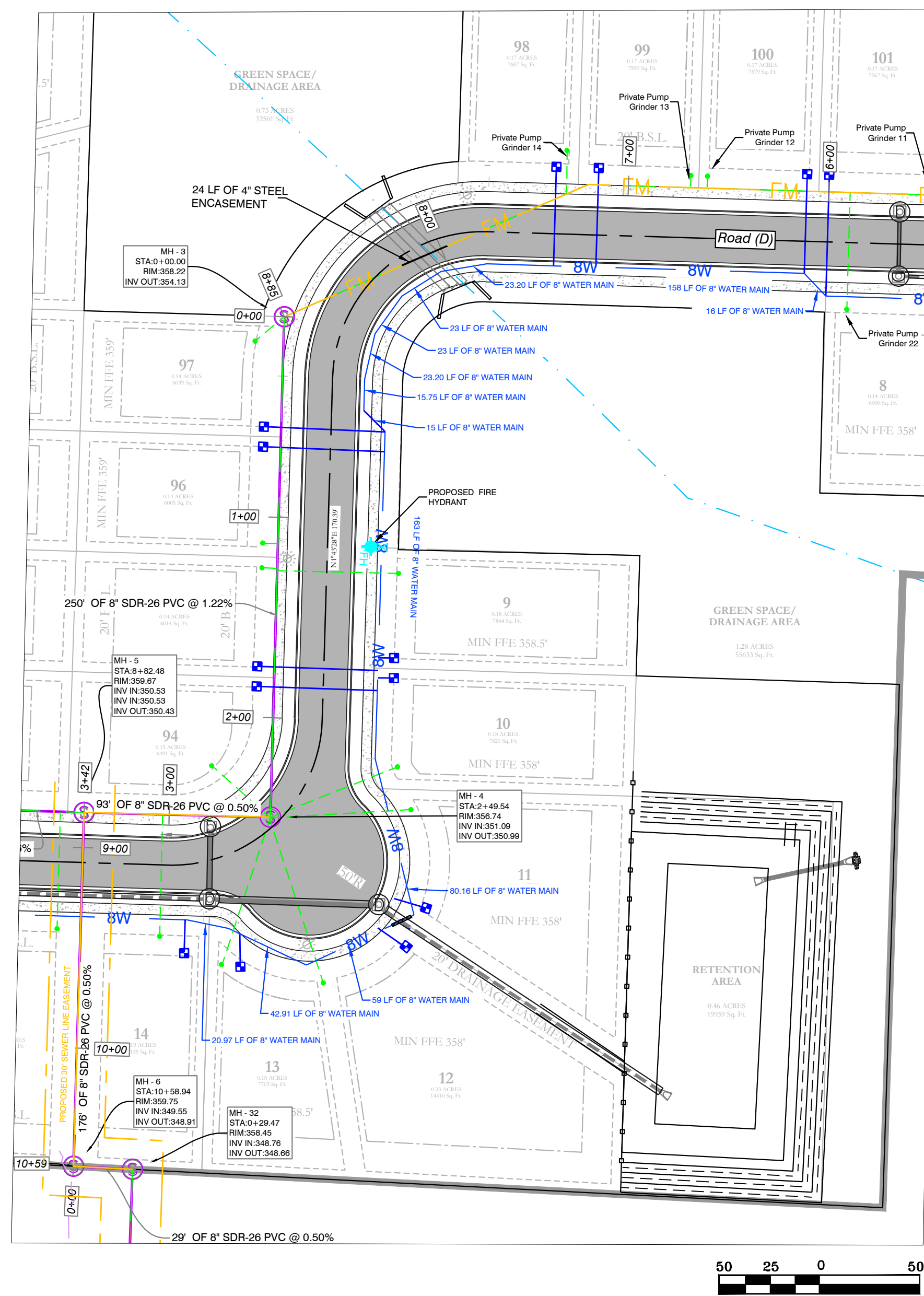
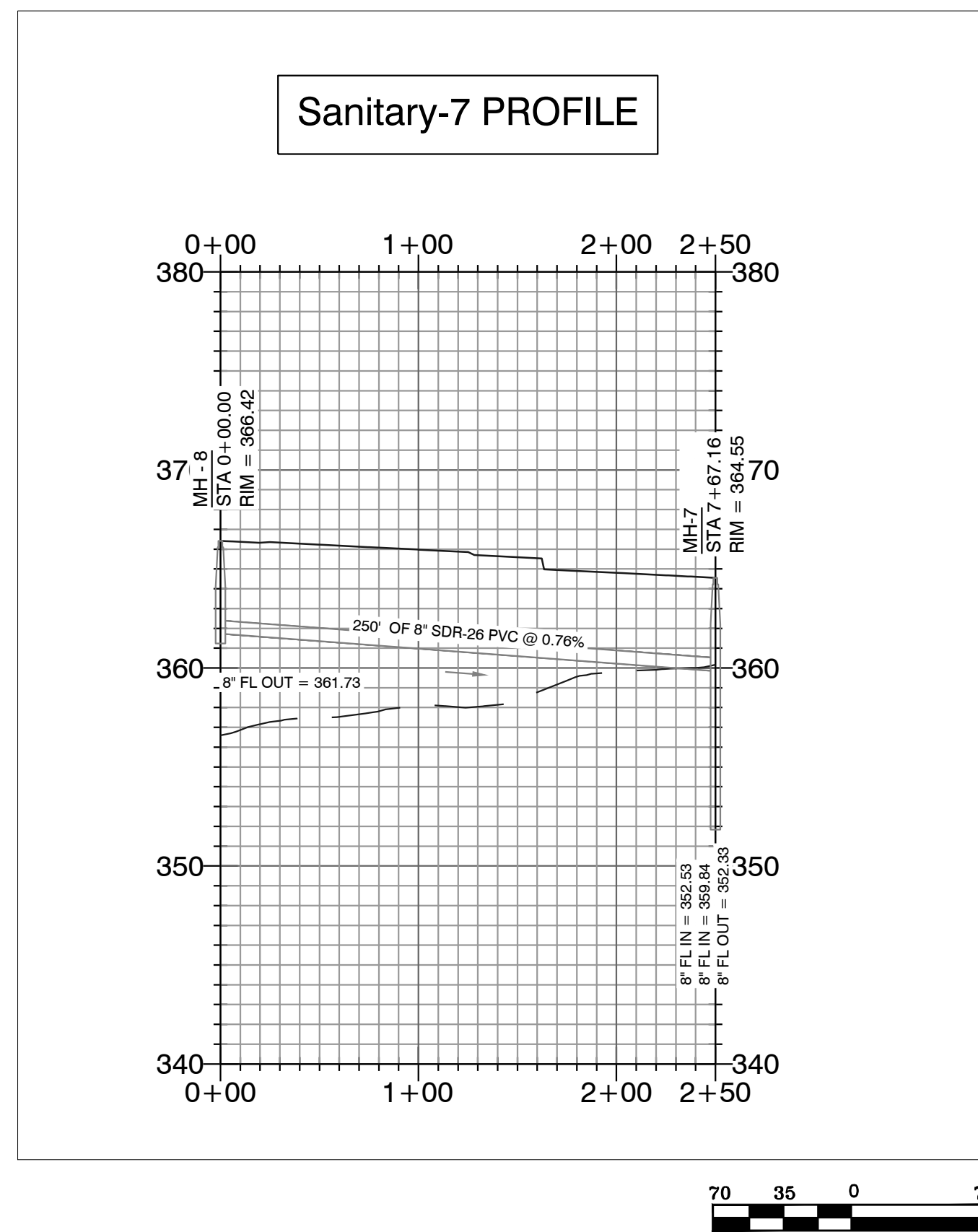
MIDLAND ROAD SUBDIVISION SEWER PLAN & PROFILES



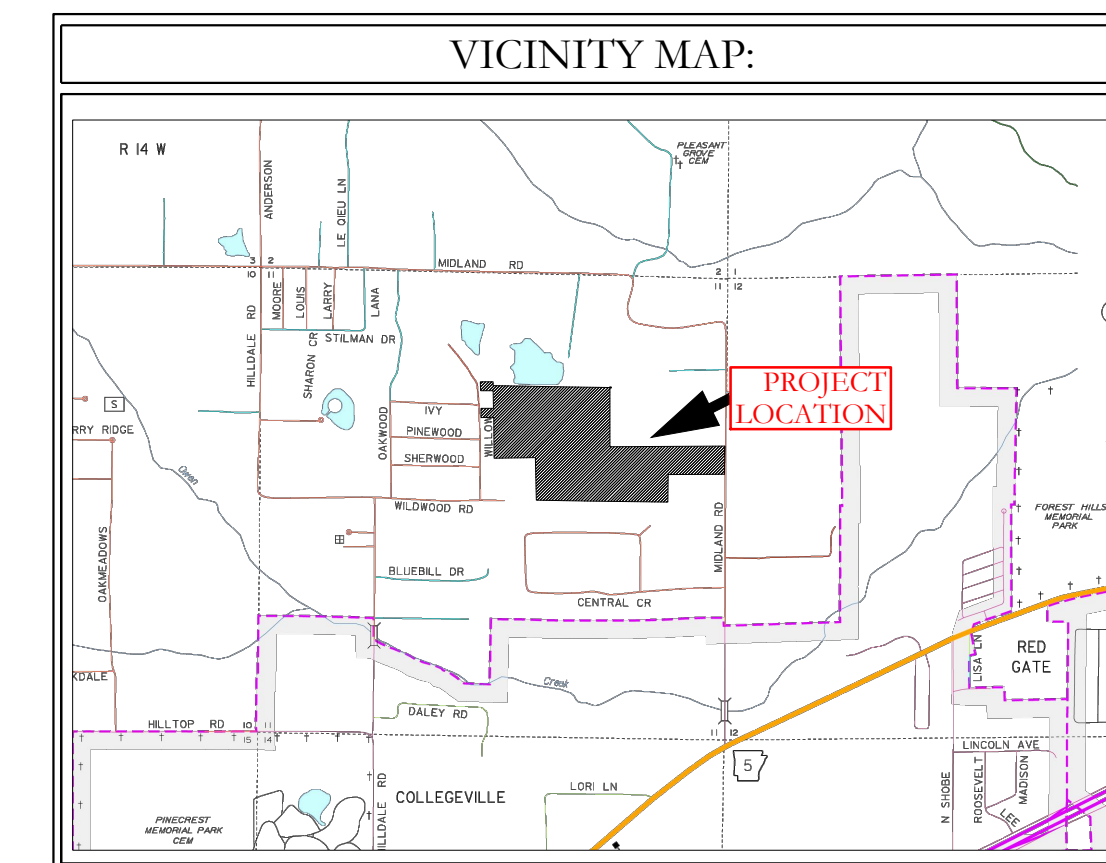
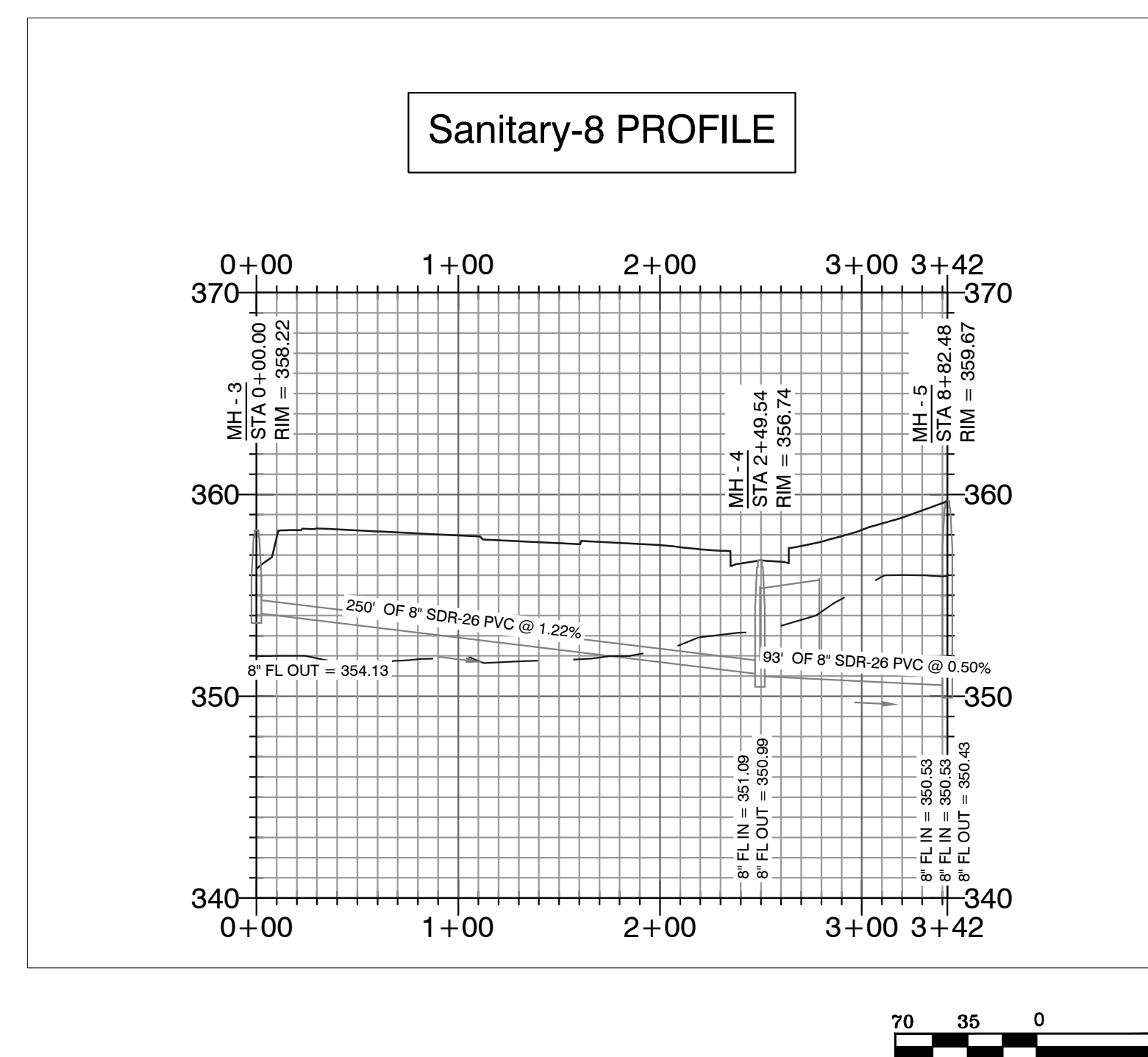
HOPE CONSULTING ENGINEERS - SURVEYORS
 129 North Main Street, Benton, Arkansas 72015
 PH. (501)315-2626 FAX (501) 315-0024
 www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
MIDLAND ROAD SEWER PROFILES BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISIONS:	CHECKED BY:	23-0024
SHEET: C-3.6	SCALE:	
500	1S	15W
0	34	230
62	1807	

KSLAND PROJECTS 2004/SUBDIVISIONS/2023/23-0024/HAVEN'S DEVELOPMENT AND PROPOSAL FOR MIDLAND ROAD SUBDIVISION SITE PLAN, WATER MAINS, AND SEWER CONSTRUCTION PLAN (FINAL DRAFT), AFTER COMMENTS XXXXXXXX.DWG



BASIS OF BEARING:
 GRID NORTH, ARKANSAS
 COORDINATE SYSTEM, SOUTH ZONE BY
 GPS OBSERVATION



WATER & SEWER UTILITY NOTES:

- ALL NEW 8-INCH WATER MAINS TO BE CLASS 900.
- ALL WATER MAINS LARGER THAN 8" DIAMETER SHALL BE DUCTILE IRON (250 PSI PRESSURE CLASS).
- ALL WATER AND SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT * STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION.
- WATER LINES UNDER CULVERTS, CREEKS, CONCRETE CHANNELS, RETAINING WALLS, OR OTHER DIFFICULT AND/OR DANGEROUS TO MAINTAIN AREAS SHALL BE ENCASED IN A SMOOTH STEEL ENCASEMENT PIPE. THE STEEL ENCASEMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.
- EACH WATER SERVICE METER MUST HAVE ITS OWN SERVICE LINE CONNECTION TO THE MAIN (INCLUDES DOUBLE METERS DISPLAYED AS ONE SERVICE LINE ON THE PLAN).
- CASING SPACERS SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.

SEWER CONSTRUCTION NOTES:

- ALL SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT * STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION*
- ALL SEWER LINES CROSSING UNDER ALL CONCRETE STORM DRAINS OR ANY STORM DRAIN 30-INCH DIAMETER AND LARGER, OR ALL STORM DRAINS WITH MULTIPLE PIPE RUNS, SHALL BE STEEL ENCASED A MINIMUM OF 3 FEET EITHER SIDE OF THE STORM DRAIN.
- CASING SPACERS SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.



MIDLAND ROAD SUBDIVISION SEWER PLAN & PROFILES

SEWER SERVICE LEGEND:	WATER LEGEND:
 SEWER MAIN SEWER MANHOLE	 DUAL WATER METERS SINGLE WATER METER GATE VALVE 45° FITTING 90° FITTING TEE FITTING CROSS FITTING FIRE HYDRANT
<small>NOTE: USE SDR-26 PVC SEWER PIPE EXCEPT WHERE DUCTILE IRON PIPE REQUIRED FOR COVER. USE DUCTILE IRON PIPE WHERE 3' MINIMUM COVE CANNOT BE MAINTAINED. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL BURIED UTILITIES PRIOR TO CONSTRUCTION.</small>	

HOPE

CONSULTING

ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
MIDLAND ROAD SEWER PROFILES BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISID:	CHECKED BY:	23-0024
SHEET: C-3.7	SCALE:	
500	1S	15W
0	34	230
62	1807	

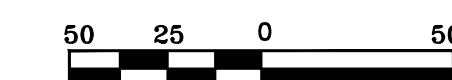
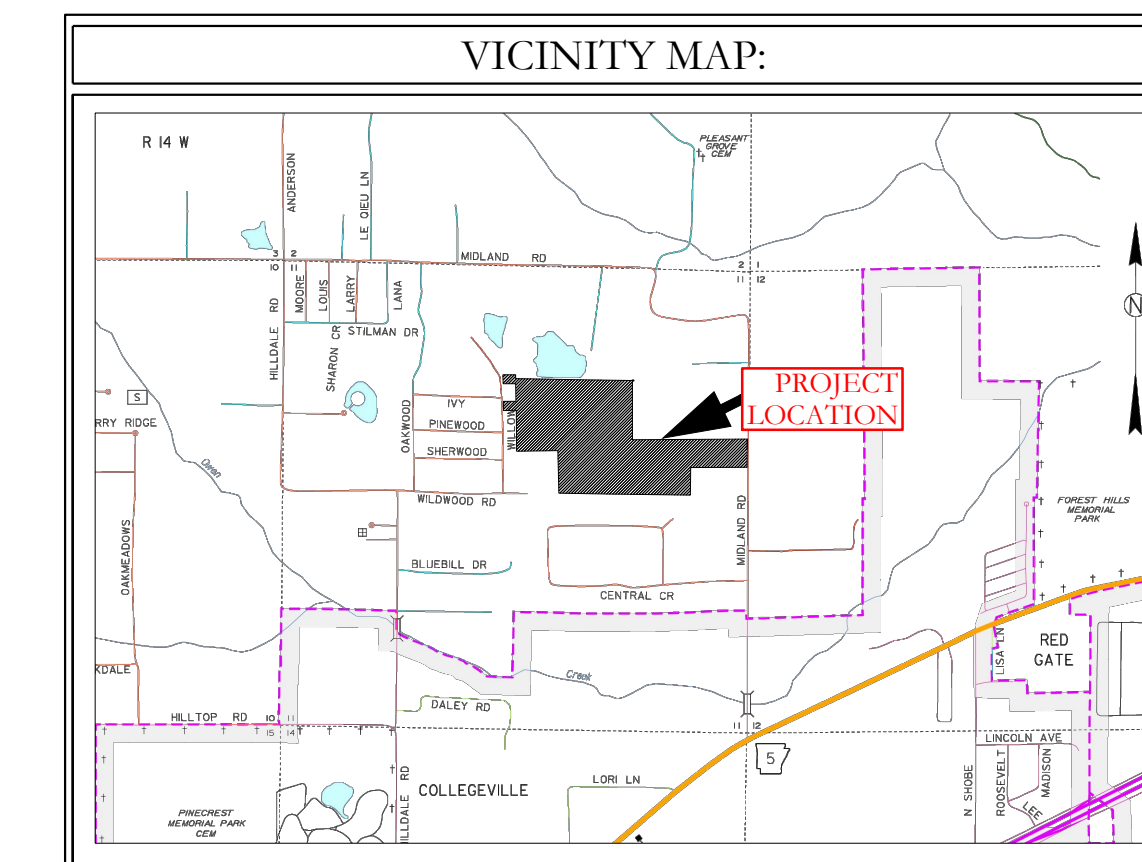
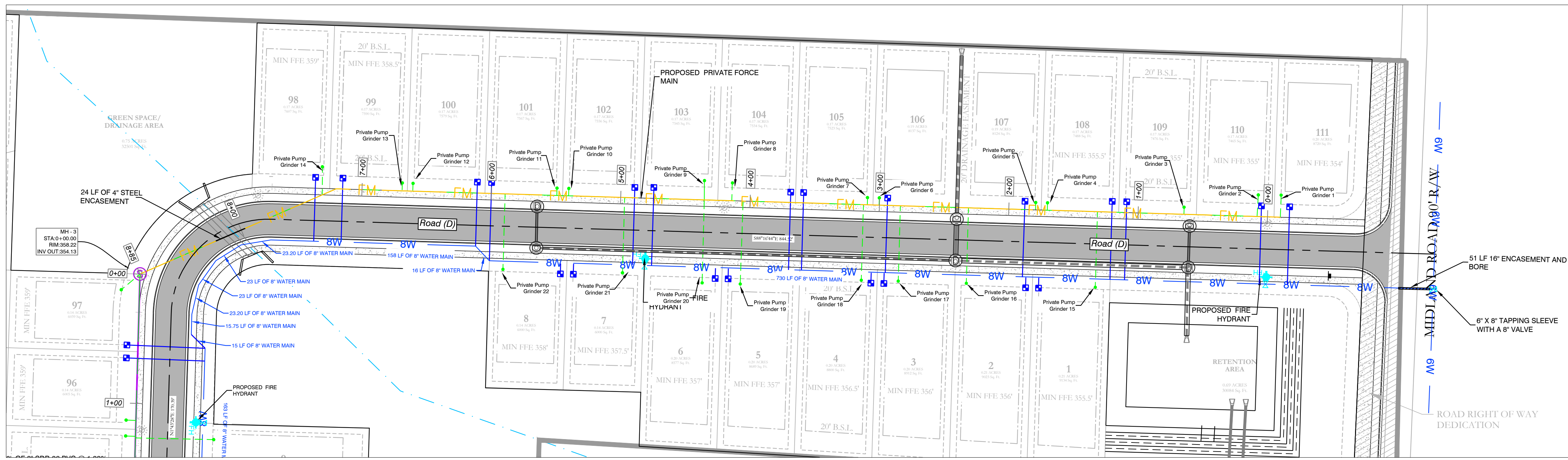
KSLAND PROJECTS 2004 (SUBDIVISIONS) 2023 23-0024 (MIDLAND ROAD AND MIDLAND ROAD SUBDIVISION) SUTS: RAW/CJL/DWG/23-0024 CONSTRUCTION PLAN (FINAL DRAFT), AFTER COMMENTS XXXXXX.DWG

WATER & SEWER UTILITY NOTES:

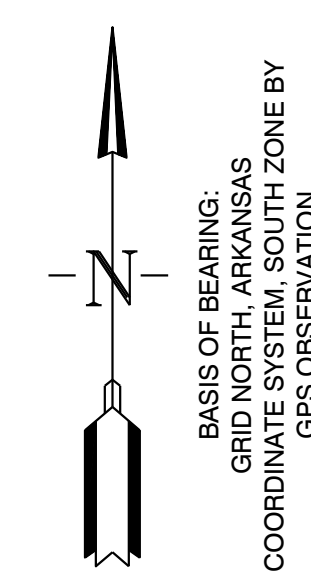
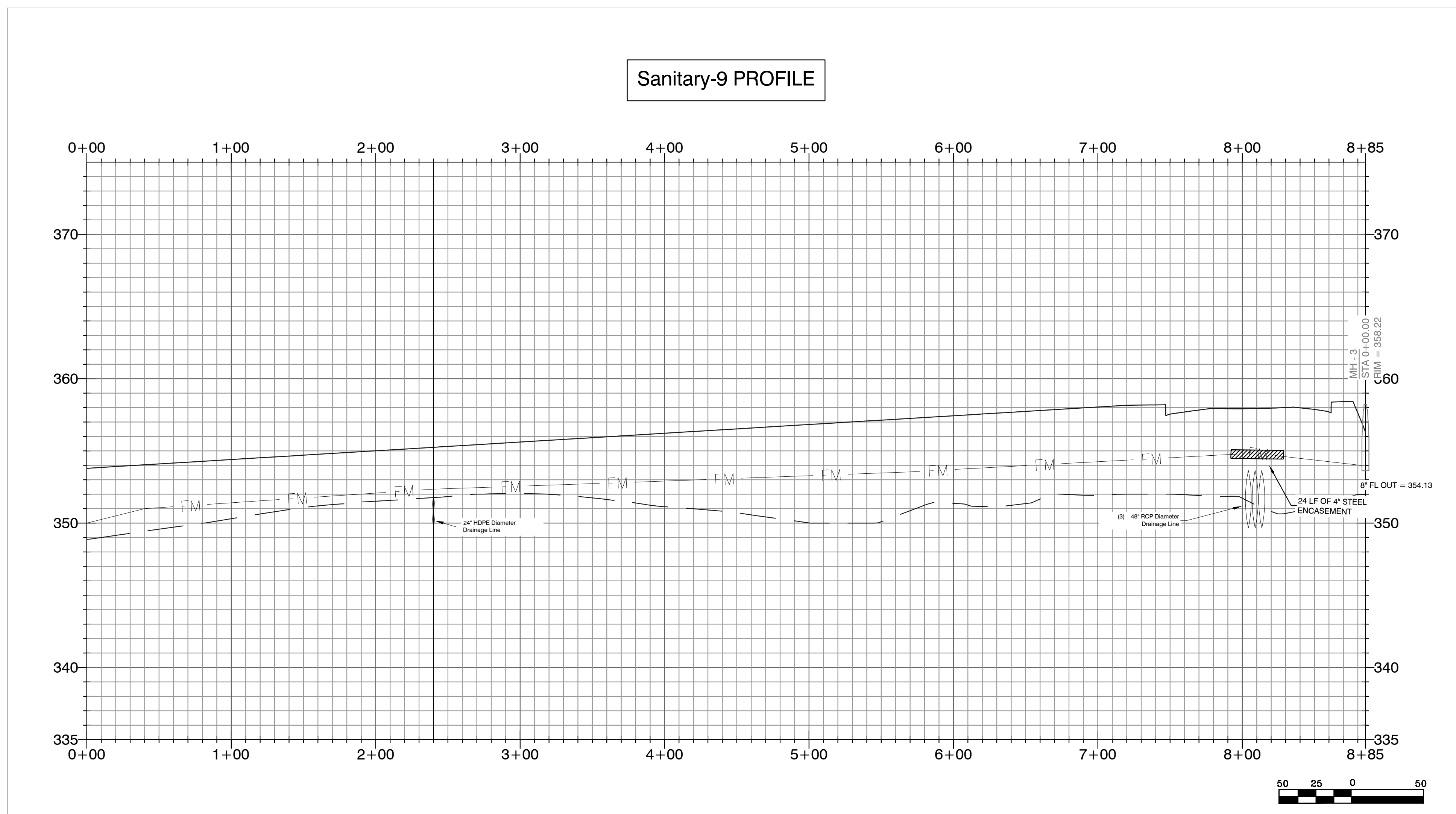
1. ALL NEW 8-INCH WATER MAINS TO BE CLASS 900.
2. ALL WATER MAINS LARGER THAN 8" DIAMETER SHALL BE DUCTILE IRON (250 PSI PRESSURE CLASS).
3. ALL WATER AND SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
4. WATER LINES UNDER CULVERTS, CREEKS, CONCRETE CHANNELS, RETAINING WALLS, OR OTHER DIFFICULT AND/OR DANGEROUS TO MAINTAIN AREAS SHALL BE ENCASED IN A SMOOTH STEEL ENCASUREMENT PIPE. THE STEEL ENCASUREMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.
5. EACH WATER SERVICE METER MUST HAVE ITS OWN SERVICE LINE CONNECTION TO THE MAIN (INCLUDES DOUBLE METERS DISPLAYED AS ONE SERVICE LINE ON THE PLAT).
6. CASING SPACERS: SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.

SEWER CONSTRUCTION NOTES:

1. ALL SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
2. ALL SEWER LINES CROSSING UNDER ALL CONCRETE STORM DRAINS OR ANY STORM DRAIN 30-INCH DIAMETER AND LARGER, OR ALL STORM DRAINS WITH MULTIPLE PIPE RUNS, SHALL BE STEEL ENCASED A MINIMUM OF 5 FEET EITHER SIDE OF THE STORM DRAIN.
3. CASING SPACERS: SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.



Sanitary-9 PROFILE



Sanitary-9 Profile Note:
1. Sanitary-9 pipe network is operated by 2" SDR-21 pipe force main.

SEWER LEGEND:	WATER LEGEND:
SEWER SERVICE	DUAL WATER METERS
SEWER MAIN	SINGLE WATER METER
SEWER MANHOLE	GATE VALVE
	45° FITTING
	90° FITTING
	TEE FITTING
	CROSS FITTING
	FIRE HYDRANT

NOTE: USE SDR-26 PVC SEWER PIPE EXCEPT WHERE DUCTILE IRON PIPE REQUIRED FOR COVER. USE DUCTILE IRON PIPE WHERE 3' MINIMUM COVE CANNOT BE MAINTAINED.
CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL BURIED UTILITIES PRIOR TO CONSTRUCTION.

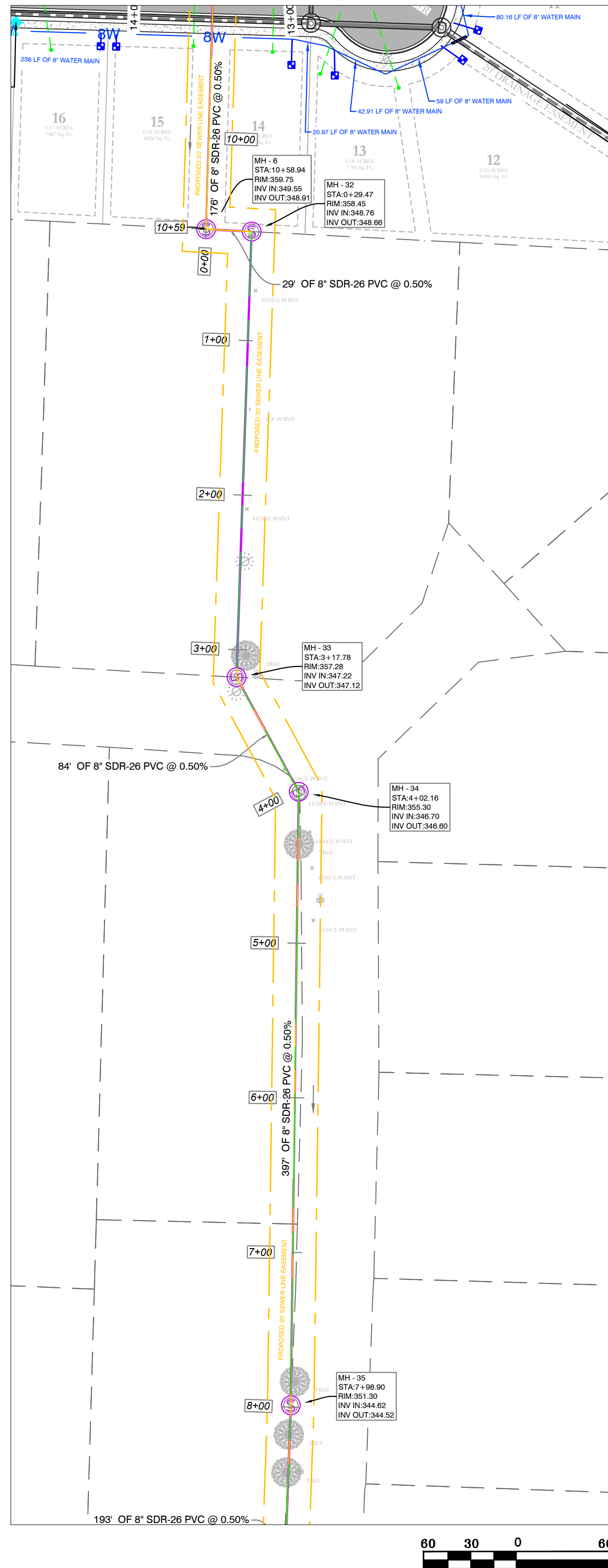
HOPE CONSULTING
ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

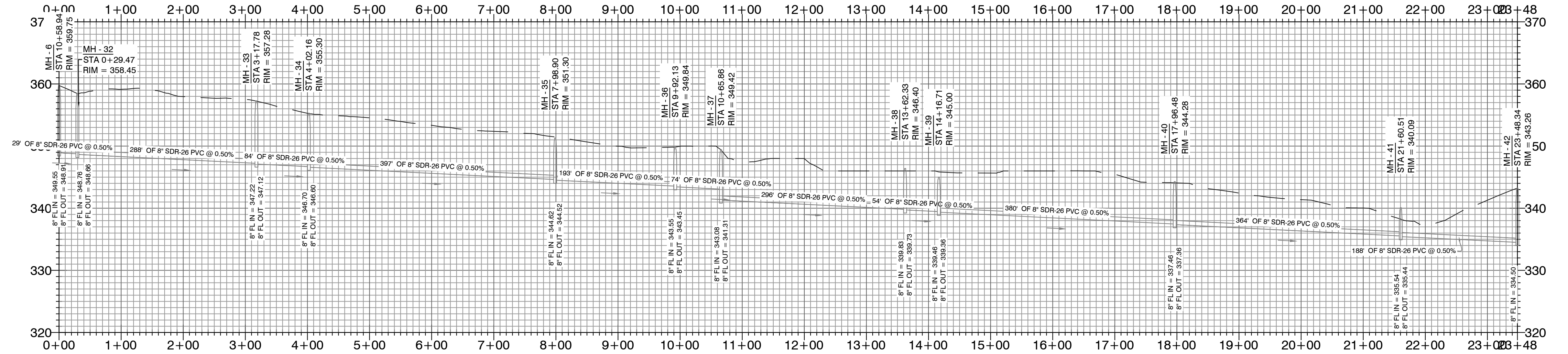
FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
MIDLAND ROAD SEWER PROFILES BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/22/2023	C.A.D. BY:	DRAWING NUMBER:
REVISID:	CHECKED BY:	23-0024
SHEET: C-3.8	SCALE:	
500	1S	15W 0 34 230 62 1807

MIDLAND ROAD SUBDIVISION
SEWER PLAN & PROFILES

K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S DEVELOPMENT\ROADS\SUBDIVISION_S11.PLS:RAW\CVL\DWG\23-0024.CONSTRUCTION.PLAN (FINAL DRAFT), AFTER COMMENTS\XXXXXXXX.DWG



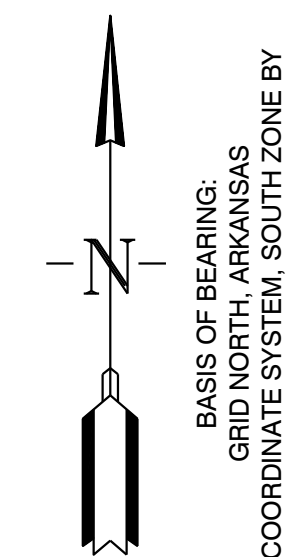
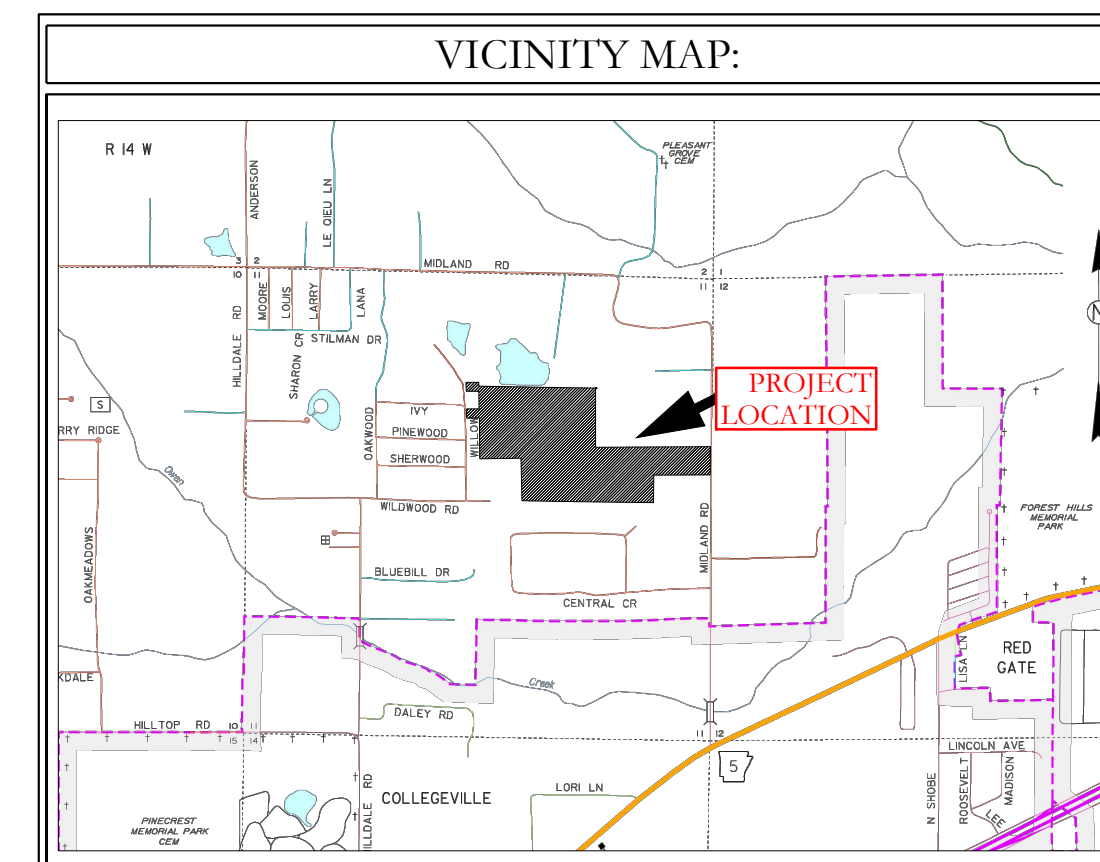
Offset Sewer Line PROFILE



MIDLAND ROAD SUBDIVISION
SEWER PLAN & PROFILES

- WATER & SEWER UTILITY NOTES:
- ALL NEW 8-INCH WATER MAINS TO BE CLASS 900.
 - ALL WATER MAINS LARGER THAN 8" DIAMETER SHALL BE DUCTILE IRON (250 PSI PRESSURE CLASS).
 - ALL WATER AND SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
 - WATER LINES UNDER CULVERTS, CREEKS, CONCRETE CHANNELS, RETAINING WALLS, OR OTHER DIFFICULT AND /OR DANGEROUS TO MAINTAIN AREAS SHALL BE ENCASED IN A SMOOTH STEEL ENCASUREMENT PIPE. THE STEEL ENCASUREMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.
 - EACH WATER SERVICE METER MUST HAVE ITS OWN SERVICE LINE CONNECTION TO THE MAIN (INCLUDES DOUBLE METERS DISPLAYED AS ONE SERVICE LINE ON THE PLAT).
 - CASING SPACERS SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.

- SEWER CONSTRUCTION NOTES:
- ALL SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
 - ALL SEWER LINES CROSSING UNDER ALL CONCRETE STORM DRAINS OR ANY STORM DRAIN 30-INCH DIAMETER AND LARGER, OR ALL STORM DRAINS WITH MULTIPLE PIPE RUNS, SHALL BE STEEL ENCASED A MINIMUM OF 5 FEET EITHER SIDE OF THE STORM DRAIN.
 - CASING SPACERS SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.



HDPE
RCP

SEWER SERVICE	SEWER MANHOLE	WATER LEGEND:
SEWER MAIN		DUAL WATER METERS
		SINGLE WATER METER
		GATE VALVE
		45° FITTING
		90° FITTING
		TEE FITTING
		CROSS FITTING
		FIRE HYDRANT

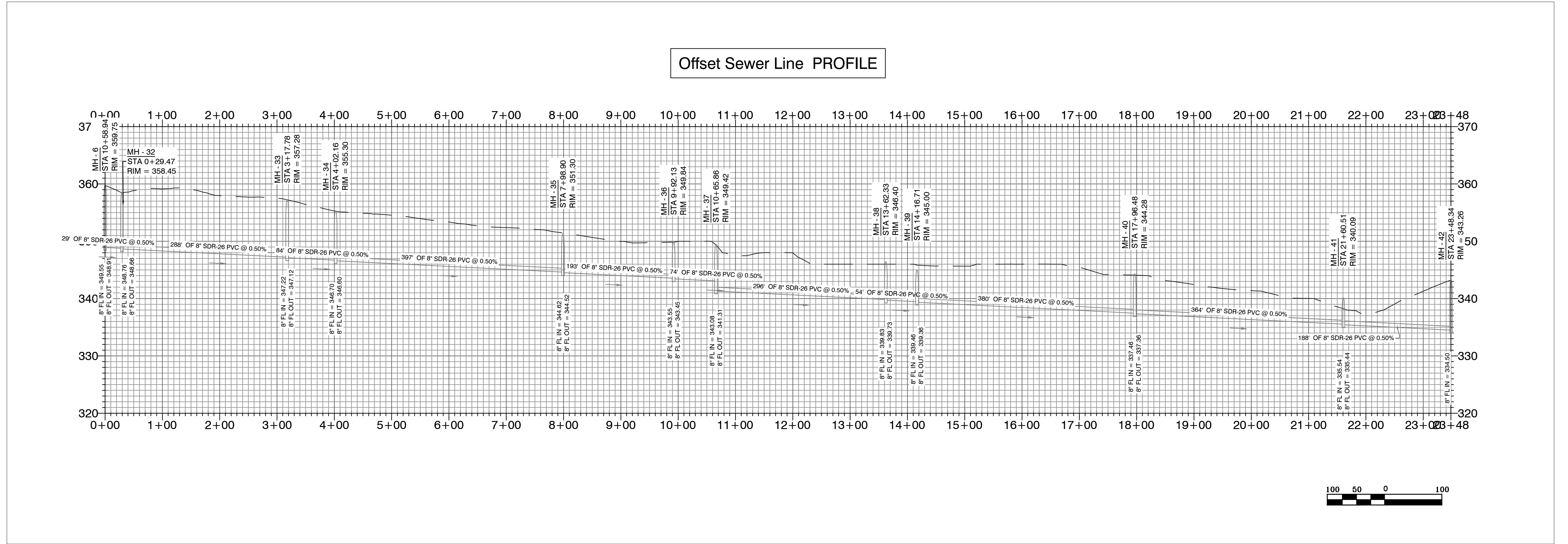
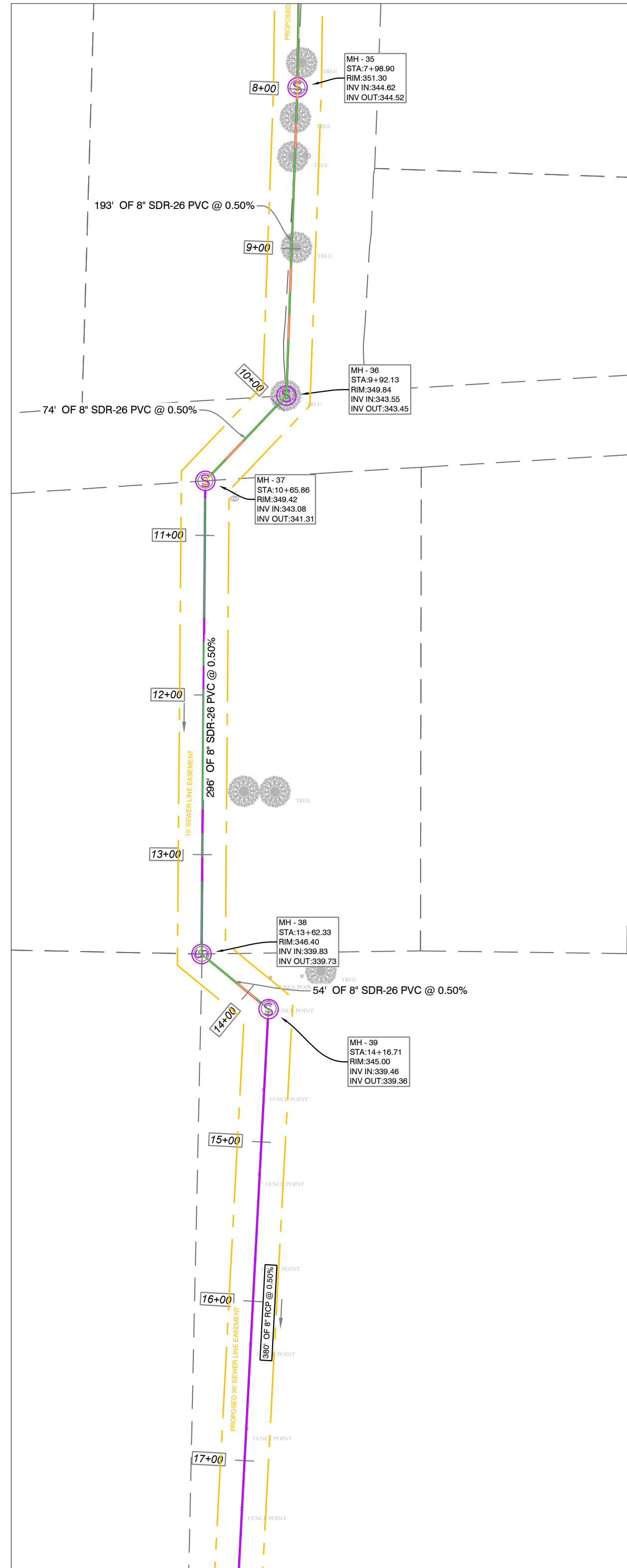
NOTE:
USE SDR-26 PVC SEWER PIPE EXCEPT WHERE DUCTILE IRON PIPE REQUIRED FOR COVER. USE DUCTILE IRON PIPE WHERE 3' MINIMUM COVE CANNOT BE MAINTAINED.
CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL BURIED UTILITIES PRIOR TO CONSTRUCTION.

HOPE CONSULTING
ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

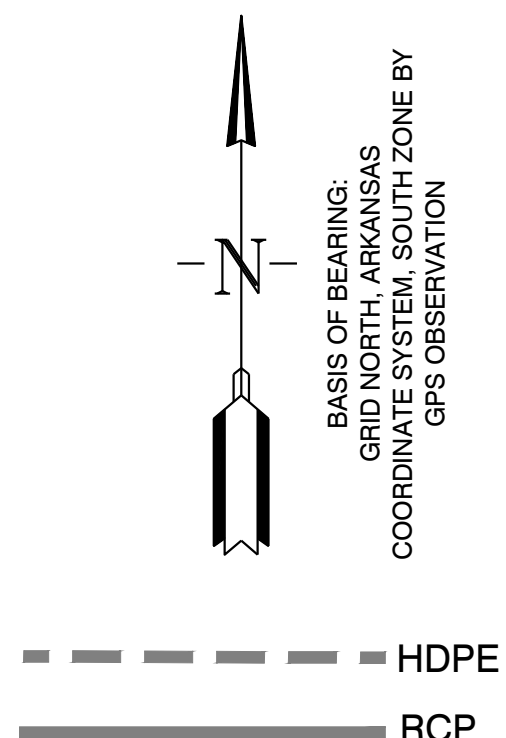
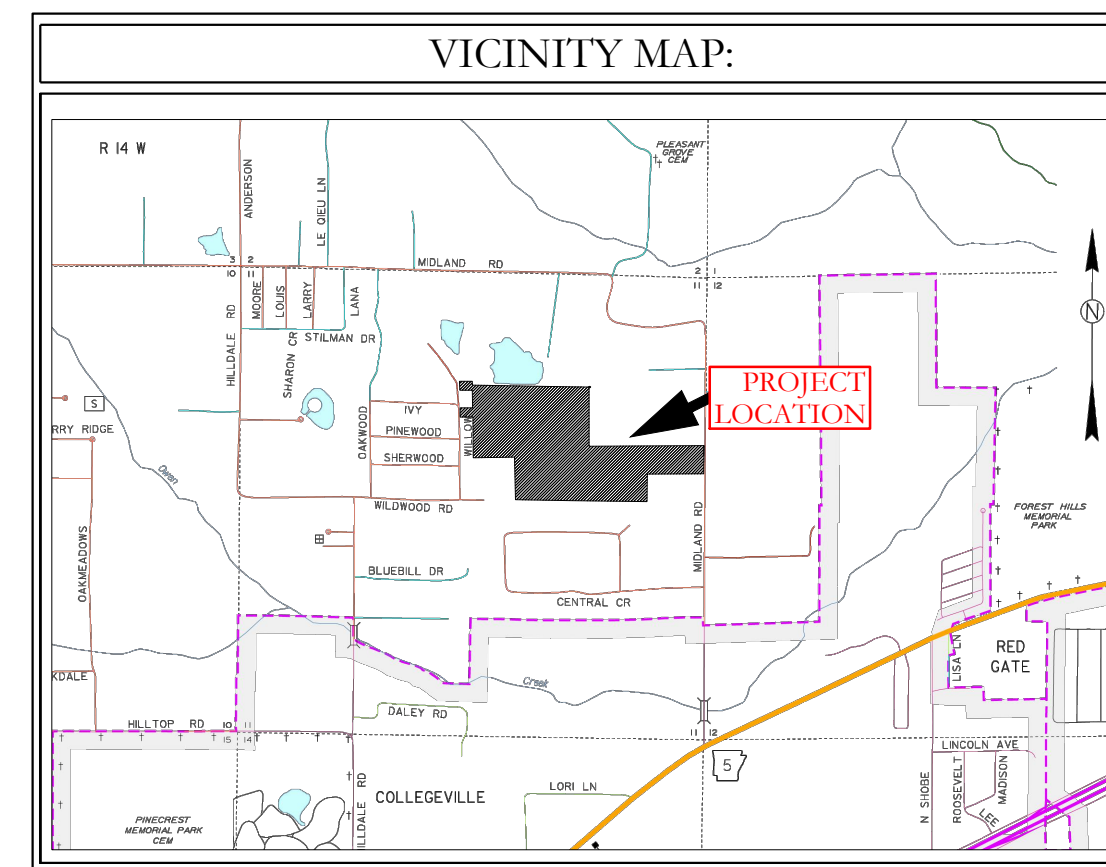
FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
MIDLAND ROAD SEWER PROFILES BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISID:	CHECKED BY:	23-0024
SHEET: C-3.9	SCALE:	
500	1S 15W 0 34 230	62 1807

K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S DEVELOPMENT\ROADS\SUBDIVISION_S11.TB3\RAW\CIVIL\DWG\23-0024.CONSTRUCTION.PLAN (FINAL DRAFT), AFTER COMMENTS\XXXXXXXXX.DWG



- WATER & SEWER UTILITY NOTES:**
- ALL NEW 8-INCH WATER MAINS TO BE CLASS 900.
 - ALL WATER MAINS LARGER THAN 8" DIAMETER SHALL BE DUCTILE IRON (250 PSI PRESSURE CLASS).
 - ALL WATER AND SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION.
 - WATER LINES UNDER CULVERTS, CREEKS, CONCRETE CHANNELS, RETAINING WALLS, OR OTHER DIFFICULT AND/OR DANGEROUS TO MAINTAIN AREAS SHALL BE ENCASED IN A SMOOTH STEEL ENCASEMENT PIPE. THE STEEL ENCASEMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.
 - EACH WATER SERVICE METER MUST HAVE ITS OWN SERVICE LINE CONNECTION TO THE MAIN (INCLUDES DOUBLE METERS DISPLAYED AS ONE SERVICE LINE ON THE PLAN).
 - CASING SPACERS: SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.

- SEWER CONSTRUCTION NOTES:**
- ALL SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION"
 - ALL SEWER LINES CROSSING UNDER ALL CONCRETE STORM DRAINS OR ANY STORM DRAIN 30-INCH DIAMETER AND LARGER, OR ALL STORM DRAINS WITH MULTIPLE PIPE RUNS, SHALL BE STEEL ENCASED A MINIMUM OF 5 FEET EITHER SIDE OF THE STORM DRAIN.
 - CASING SPACERS: SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.



MIDLAND ROAD SUBDIVISION SEWER PLAN & PROFILES

SEWER LEGEND:	WATER LEGEND:
SEWER SERVICE	DUAL WATER METERS
SEWER MAIN	SINGLE WATER METER
SEWER MANHOLE	GATE VALVE
	45° FITTING
	90° FITTING
	TEE FITTING
	CROSS FITTING
	FIRE HYDRANT

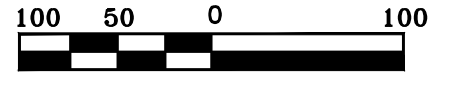
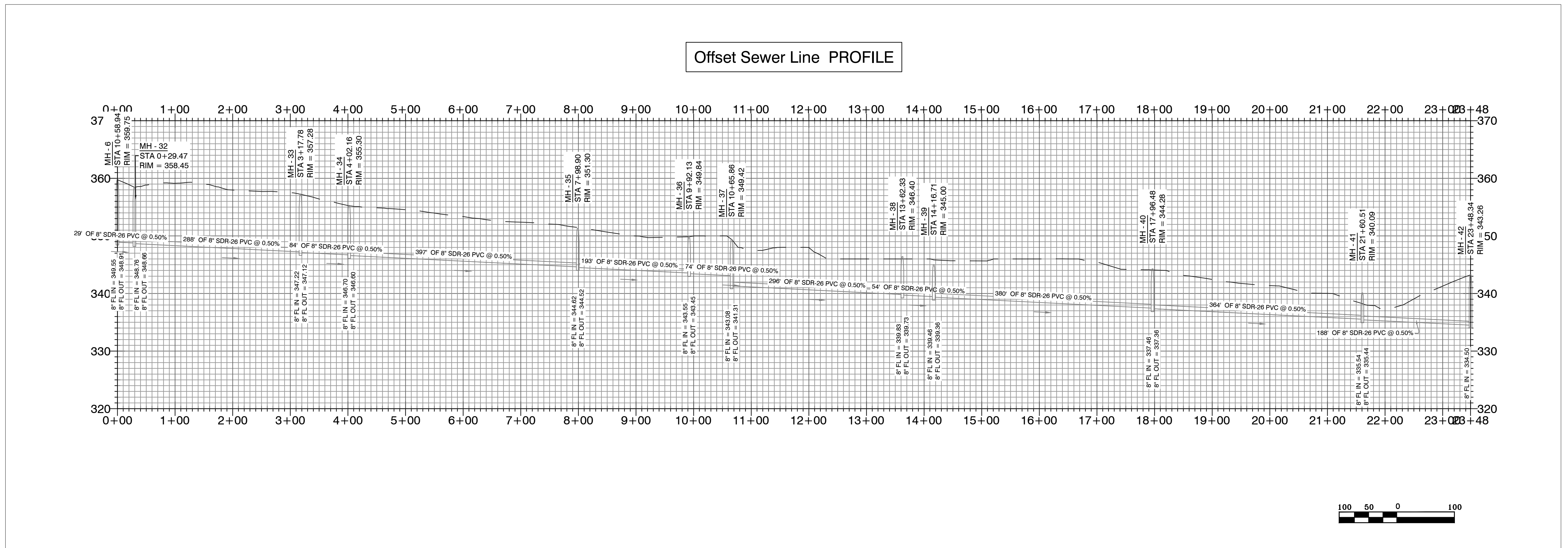
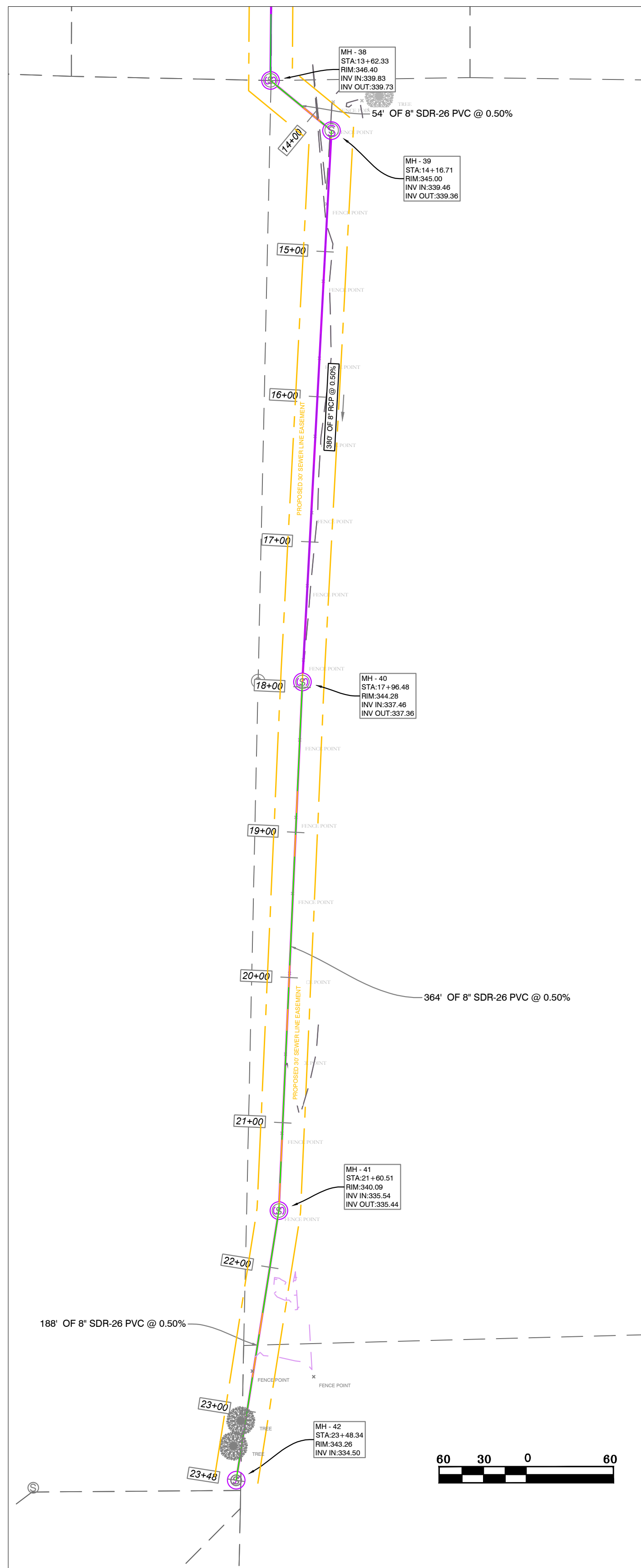
NOTE:
USE SDR-26 PVC SEWER PIPE EXCEPT WHERE DUCTILE IRON PIPE REQUIRED FOR COVER. USE DUCTILE IRON PIPE WHERE 3' MINIMUM COVE CANNOT BE MAINTAINED.
CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL BURIED UTILITIES PRIOR TO CONSTRUCTION.

HOPE CONSULTING
ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

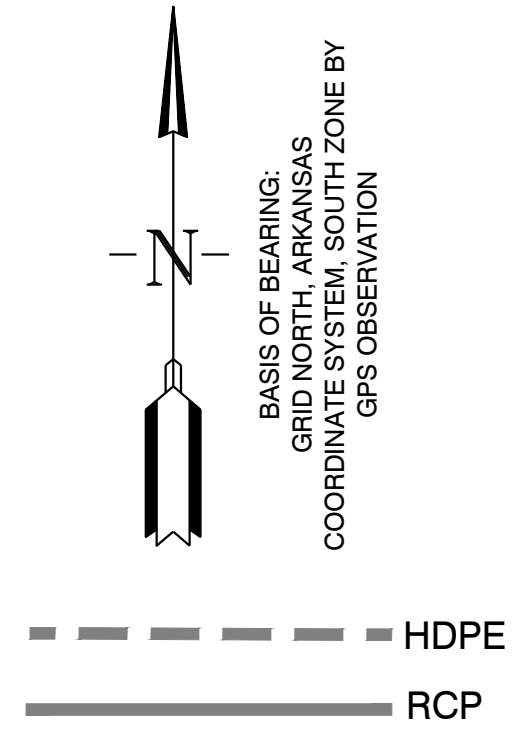
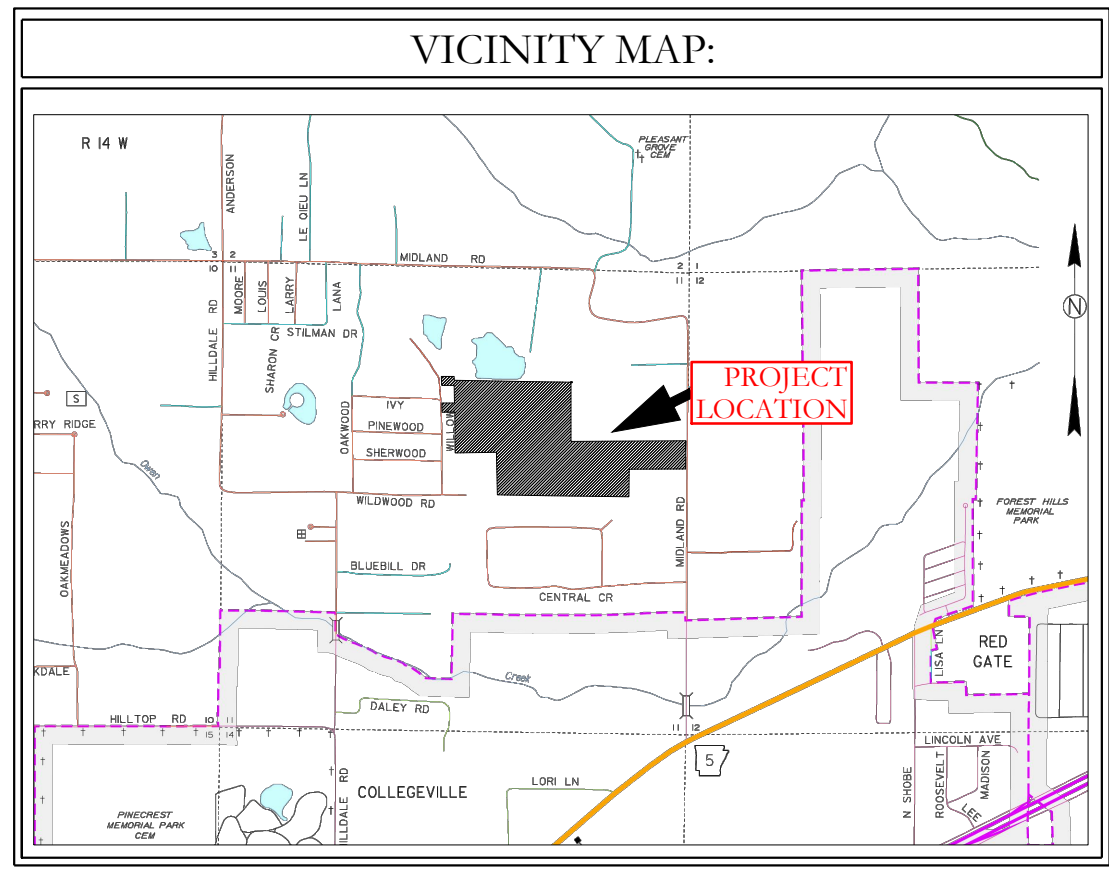
FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC			
MIDLAND ROAD SEWER PROFILES BRYANT, SALINE COUNTY, ARKANSAS			
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:	
REVISID:	CHECKED BY:	23-0024	
SHEET: C-3.10	SCALE:	500	1807

K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\0424\HAVEN'S DEVELOPMENT\ROADS\SUBDIVISION_S11.TB3\RAW\CIVIL\DWG\23-0024.CONSTRUCTION.PLAN (FINAL DRAFT), AFTER COMMENTS\XXXXXXXX.DWG



MIDLAND ROAD SUBDIVISION SEWER PLAN & PROFILES

- WATER & SEWER UTILITY NOTES:**
- ALL NEW 8-INCH WATER MAINS TO BE CLASS 900.
 - ALL WATER MAINS LARGER THAN 8" DIAMETER SHALL BE DUCTILE IRON (250 PSI PRESSURE CLASS).
 - ALL WATER AND SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
 - WATER LINES UNDER CULVERTS, CREEKS, CONCRETE CHANNELS, RETAINING WALLS, OR OTHER DIFFICULT AND/OR DANGEROUS TO MAINTAIN AREAS SHALL BE ENCASED IN A SMOOTH STEEL ENCASUREMENT PIPE. THE STEEL ENCASUREMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.
 - EACH WATER SERVICE METER MUST HAVE ITS OWN SERVICE LINE CONNECTION TO THE MAIN (INCLUDES DOUBLE METERS DISPLAYED AS ONE SERVICE LINE ON THE PLAN).
 - CASING SPACERS: SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.
- SEWER CONSTRUCTION NOTES:**
- ALL SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
 - ALL SEWER LINES CROSSING UNDER ALL CONCRETE STORM DRAINS OR ANY STORM DRAIN 30-INCH DIAMETER AND LARGER, OR ALL STORM DRAINS WITH MULTIPLE PIPE RUNS, SHALL BE STEEL ENCASED A MINIMUM OF 5 FEET EITHER SIDE OF THE STORM DRAIN.
 - CASING SPACERS: SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.



SEWER LEGEND:	WATER LEGEND:
SEWER SERVICE	DUAL WATER METERS
SEWER MAIN	SINGLE WATER METER
SEWER MANHOLE	GATE VALVE
	45° FITTING
	90° FITTING
	TEE FITTING
	CROSS FITTING
	FIRE HYDRANT

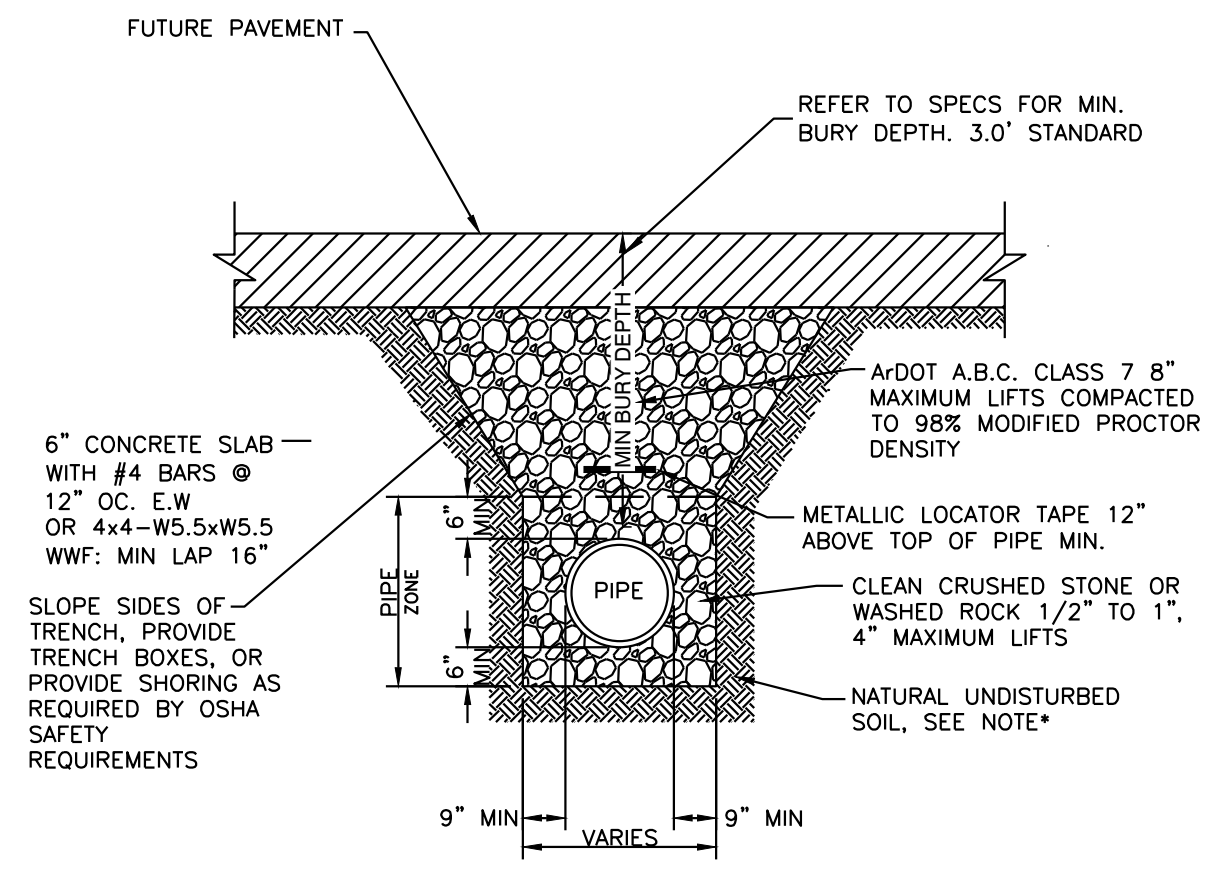
NOTE:
USE SDR-26 PVC SEWER PIPE EXCEPT WHERE DUCTILE IRON PIPE REQUIRED FOR COVER. USE DUCTILE IRON PIPE WHERE 3' MINIMUM COVE CANNOT BE MAINTAINED.
CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL BURIED UTILITIES PRIOR TO CONSTRUCTION.

HOPE CONSULTING
ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC			
MIDLAND ROAD SEWER PROFILES BRYANT, SALINE COUNTY, ARKANSAS			
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:	
REVISID:	CHECKED BY:	23-0024	
SHEET: C-3.11	SCALE:	500	1807

K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S DEVELOPMENT\ROADS\SUBDIVISION_S11.TB3_RAW\CIVIL\DWG\23-0024.CONSTRUCTION.PLAN (FINAL DRAFT), AFTER COMMENTS\XXXXXXXXX.DWG



PVC SEWER TRENCH UNDER FUTURE ASPHALT STREET
N.T.S.

REFER TO SPECS FOR MIN. BURY DEPTH, 3.0' STANDARD

6" CONCRETE SLAB WITH #4 BARS @ 12" OC. E.W. OR 4x4-W5.5xW5.5 WWF. MIN LAP 16"

A-DOT A.B.C. CLASS 7 8" MAXIMUM LIFTS COMPACTED TO 98% MODIFIED PROCTOR DENSITY

METALLIC LOCATOR TAPE 12" ABOVE TOP OF PIPE MIN.

CLEAN CRUSHED STONE OR WASHED ROCK 1/2" TO 1", 4" MAXIMUM LIFTS

NATURAL UNDISTURBED SOIL, SEE NOTE*

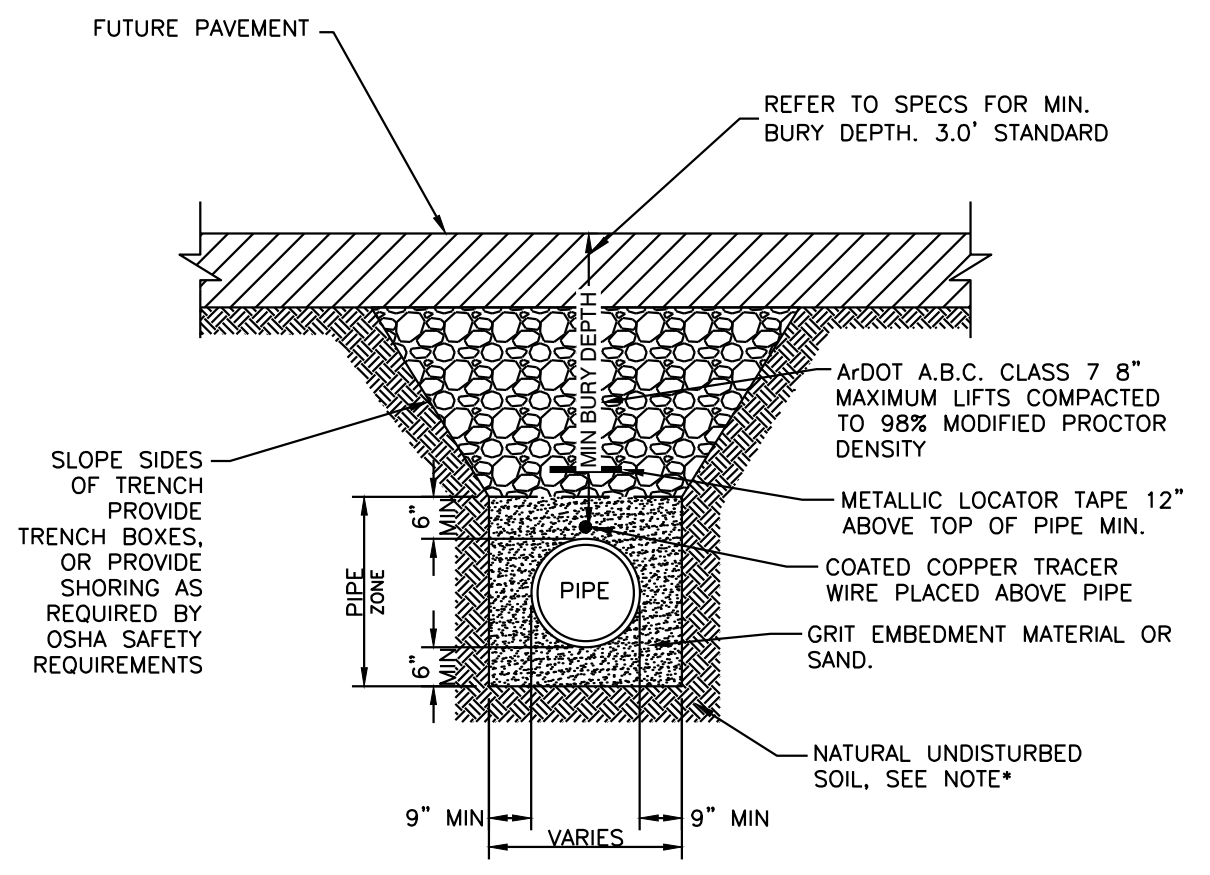
9" MIN VARIES 9" MIN

PIPE ZONE

SLOPE SIDES OF TRENCH, PROVIDE TRENCH BOXES, OR PROVIDE SHORING AS REQUIRED BY OSHA SAFETY REQUIREMENTS

DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

NOTE: * FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.



PVC WATER LINE TRENCH UNDER FUTURE ASPHALT STREET
N.T.S.

REFER TO SPECS FOR MIN. BURY DEPTH, 3.0' STANDARD

6" CONCRETE SLAB WITH #4 BARS @ 12" OC. E.W. OR 4x4-W5.5xW5.5 WWF. MIN LAP 16"

A-DOT A.B.C. CLASS 7 8" MAXIMUM LIFTS COMPACTED TO 98% MODIFIED PROCTOR DENSITY

METALLIC LOCATOR TAPE 12" ABOVE TOP OF PIPE MIN.

COATED COPPER TRACER WIRE PLACED ABOVE PIPE

GRIT EMBEDMENT MATERIAL OR SAND

NATURAL UNDISTURBED SOIL, SEE NOTE*

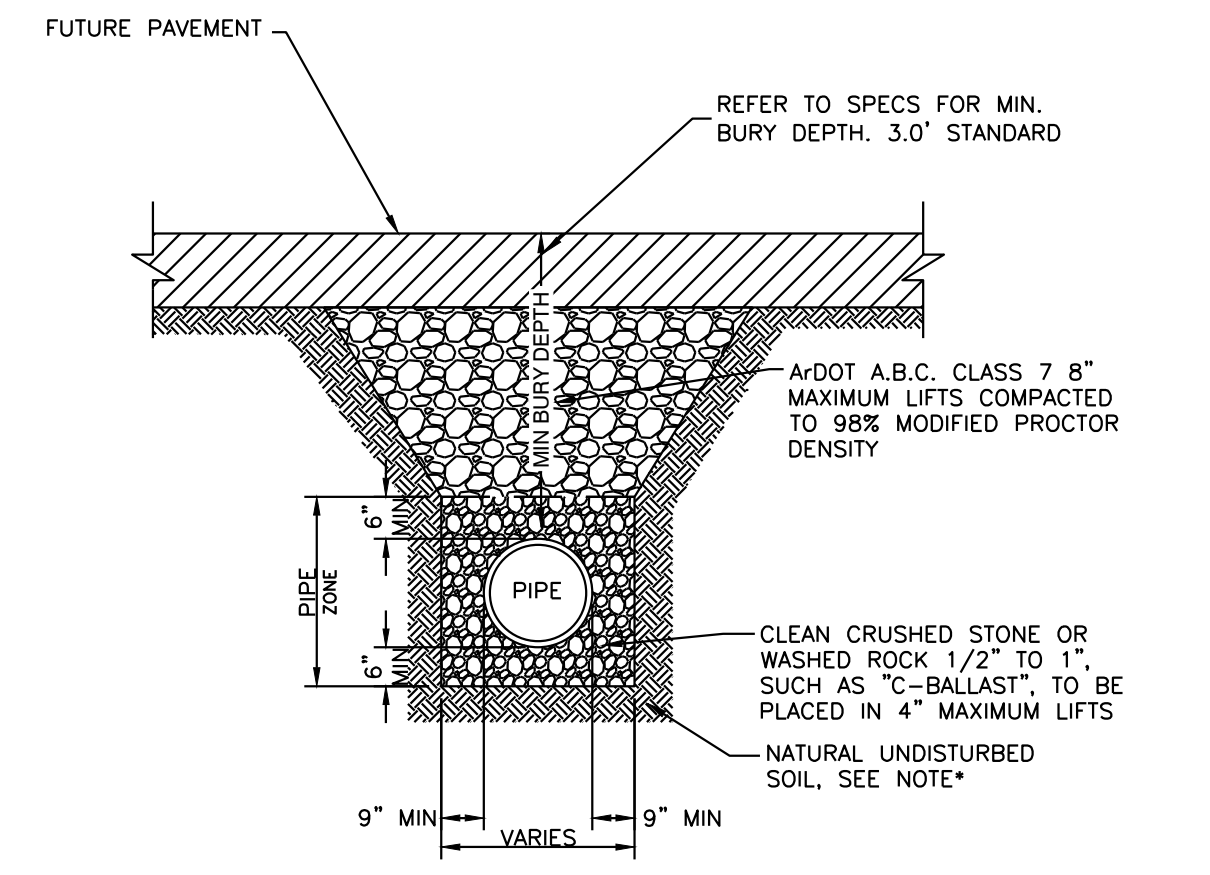
9" MIN VARIES 9" MIN

PIPE ZONE

SLOPE SIDES OF TRENCH, PROVIDE TRENCH BOXES, OR PROVIDE SHORING AS REQUIRED BY OSHA SAFETY REQUIREMENTS

DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

NOTE: * FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.



DRAINAGE PIPE TRENCH UNDER FUTURE ASPHALT STREET
N.T.S.

REFER TO SPECS FOR MIN. BURY DEPTH, 3.0' STANDARD

6" CONCRETE SLAB WITH #4 BARS @ 12" OC. E.W. OR 4x4-W5.5xW5.5 WWF. MIN LAP 16"

A-DOT A.B.C. CLASS 7 8" MAXIMUM LIFTS COMPACTED TO 98% MODIFIED PROCTOR DENSITY

CLEAN CRUSHED STONE OR WASHED ROCK 1/2" TO 1", SUCH AS "C-BALLAST", TO BE PLACED IN 4" MAXIMUM LIFTS

NATURAL UNDISTURBED SOIL, SEE NOTE*

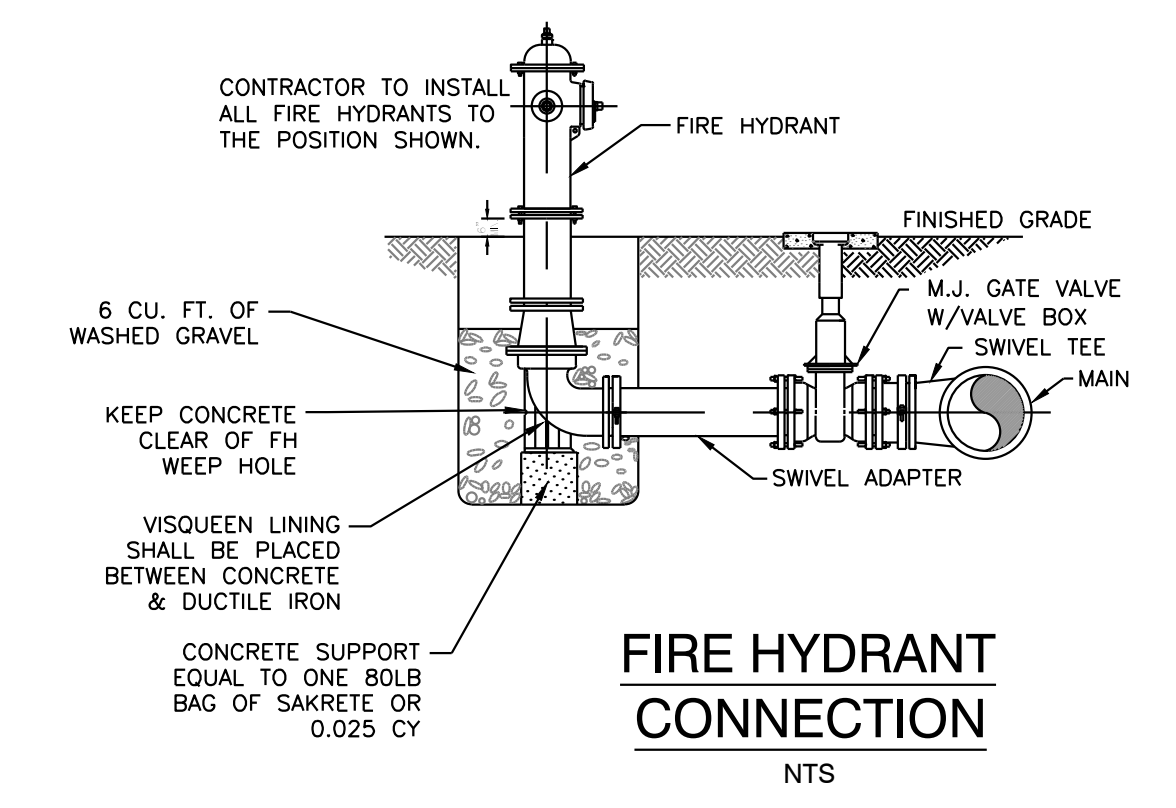
9" MIN VARIES 9" MIN

PIPE ZONE

SLOPE SIDES OF TRENCH, PROVIDE TRENCH BOXES, OR PROVIDE SHORING AS REQUIRED BY OSHA SAFETY REQUIREMENTS

DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

NOTE: * FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.



FIRE HYDRANT CONNECTION
N.T.S.

CONTRACTOR TO INSTALL ALL FIRE HYDRANT TO THE POSITION SHOWN.

FINISHED GRADE

M.J. GATE VALVE W/VALVE BOX

SWIVEL TEE

MAIN

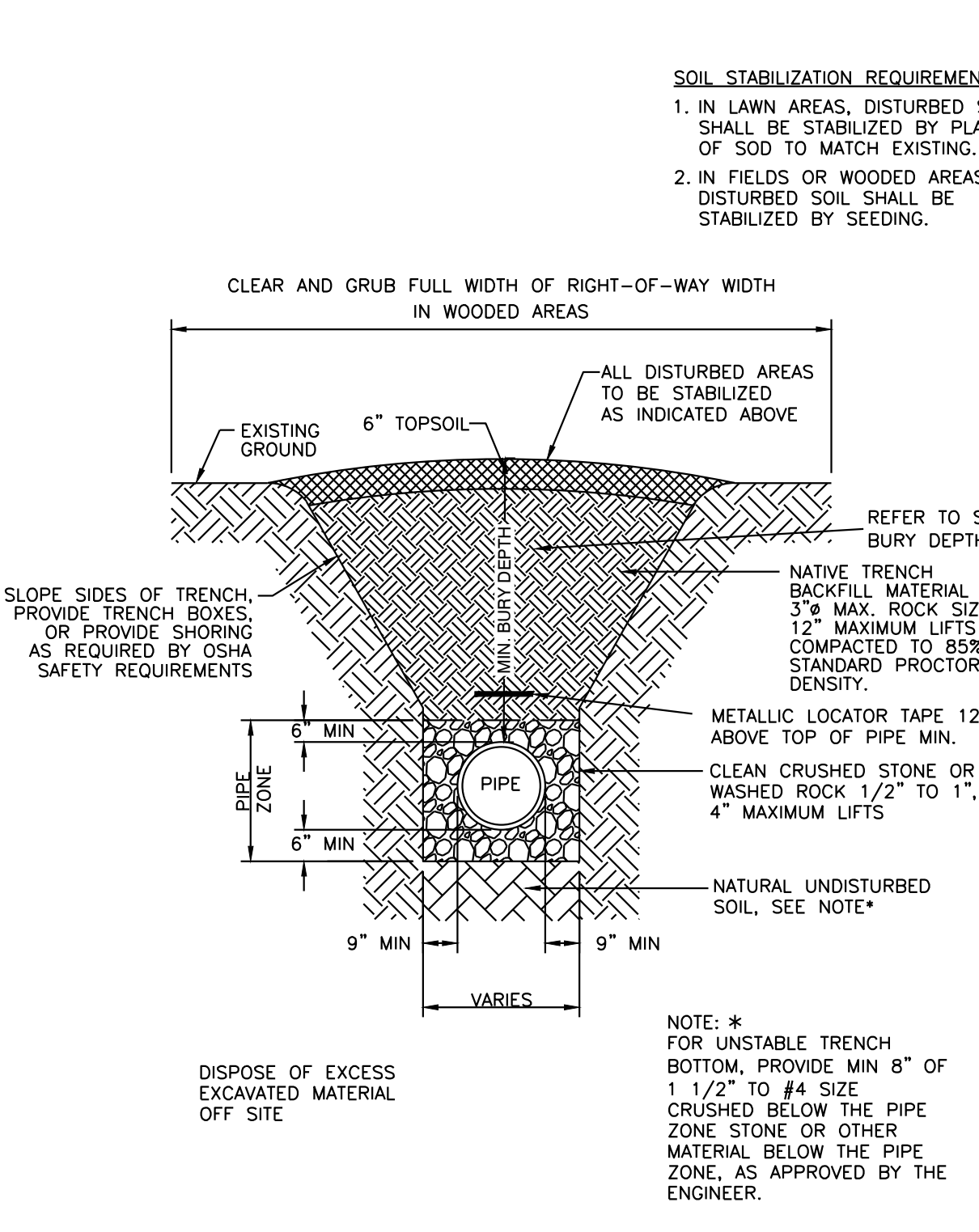
SWIVEL ADAPTER

6 CU. FT. OF WASHED GRAVEL

KEEP CONCRETE CLEAR OF FH WEEP HOLE

VISQUEEN LINING SHALL BE PLACED BETWEEN CONCRETE & DUCTILE IRON

CONCRETE SUPPORT EQUAL TO ONE BOLB BAG OF SAKRETE OR 0.025 CY



PVC SEWER TRENCH IN UNPAVED AREAS
N.T.S.

REFER TO SPECS FOR MIN. BURY DEPTH, 3.0' STANDARD

6" TOPSOIL

NATIVE TRENCH BACKFILL MATERIAL 3" MAX. ROCK SIZE 12" MAXIMUM LIFTS COMPACTED TO 85% STANDARD PROCTOR DENSITY

METALLIC LOCATOR TAPE 12" ABOVE TOP OF PIPE MIN.

CLEAN CRUSHED STONE OR WASHED ROCK 1/2" TO 1", 4" MAXIMUM LIFTS

NATURAL UNDISTURBED SOIL, SEE NOTE*

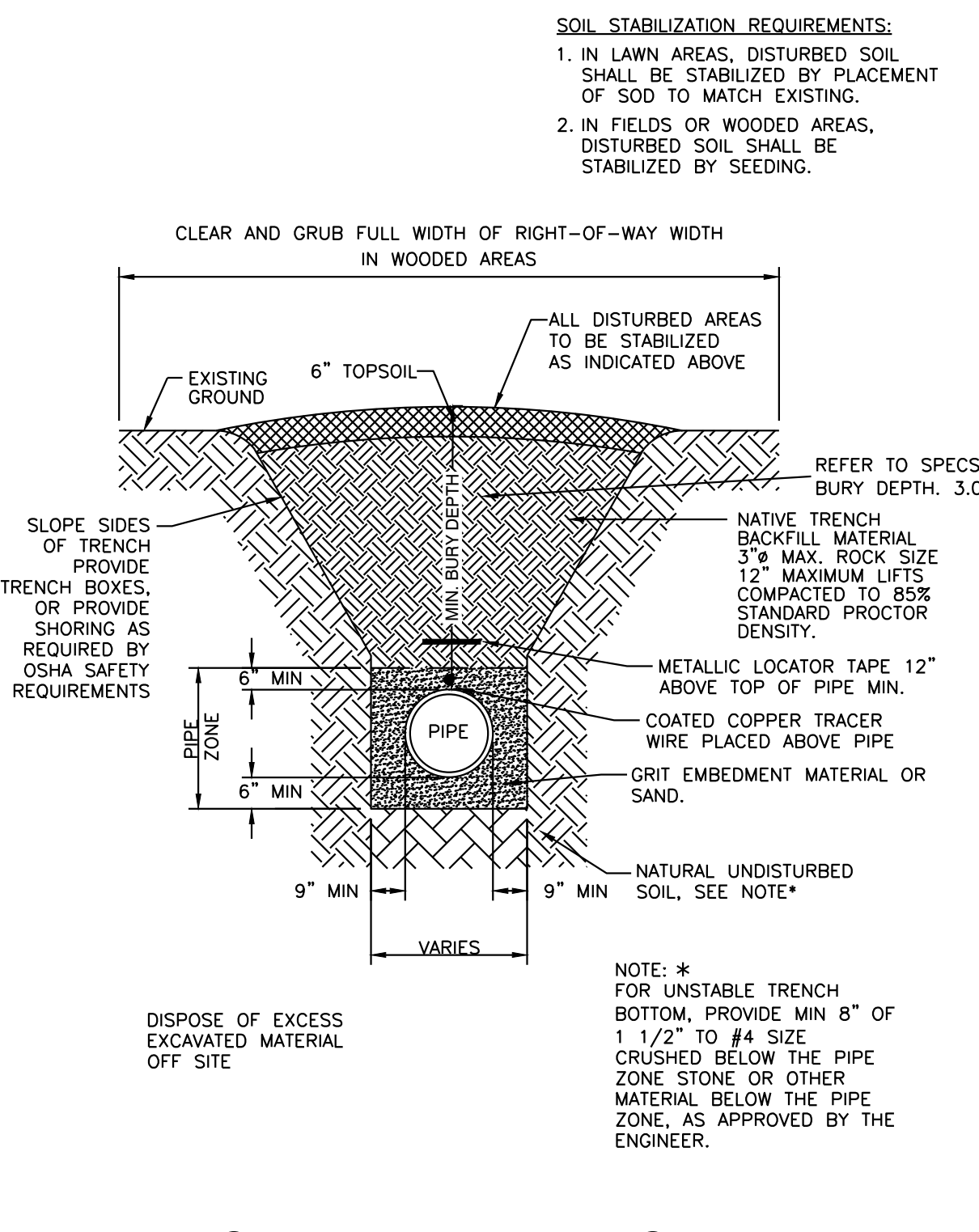
9" MIN VARIES 9" MIN

PIPE ZONE

SLOPE SIDES OF TRENCH, PROVIDE TRENCH BOXES, OR PROVIDE SHORING AS REQUIRED BY OSHA SAFETY REQUIREMENTS

DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

NOTE: * FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.



PVC WATER LINE TRENCH IN UNPAVED AREAS
N.T.S.

REFER TO SPECS FOR MIN. BURY DEPTH, 3.0' STANDARD

6" TOPSOIL

NATIVE TRENCH BACKFILL MATERIAL 3" MAX. ROCK SIZE 12" MAXIMUM LIFTS COMPACTED TO 85% STANDARD PROCTOR DENSITY

METALLIC LOCATOR TAPE 12" ABOVE TOP OF PIPE MIN.

COATED COPPER TRACER WIRE PLACED ABOVE PIPE

GRIT EMBEDMENT MATERIAL OR SAND

NATURAL UNDISTURBED SOIL, SEE NOTE*

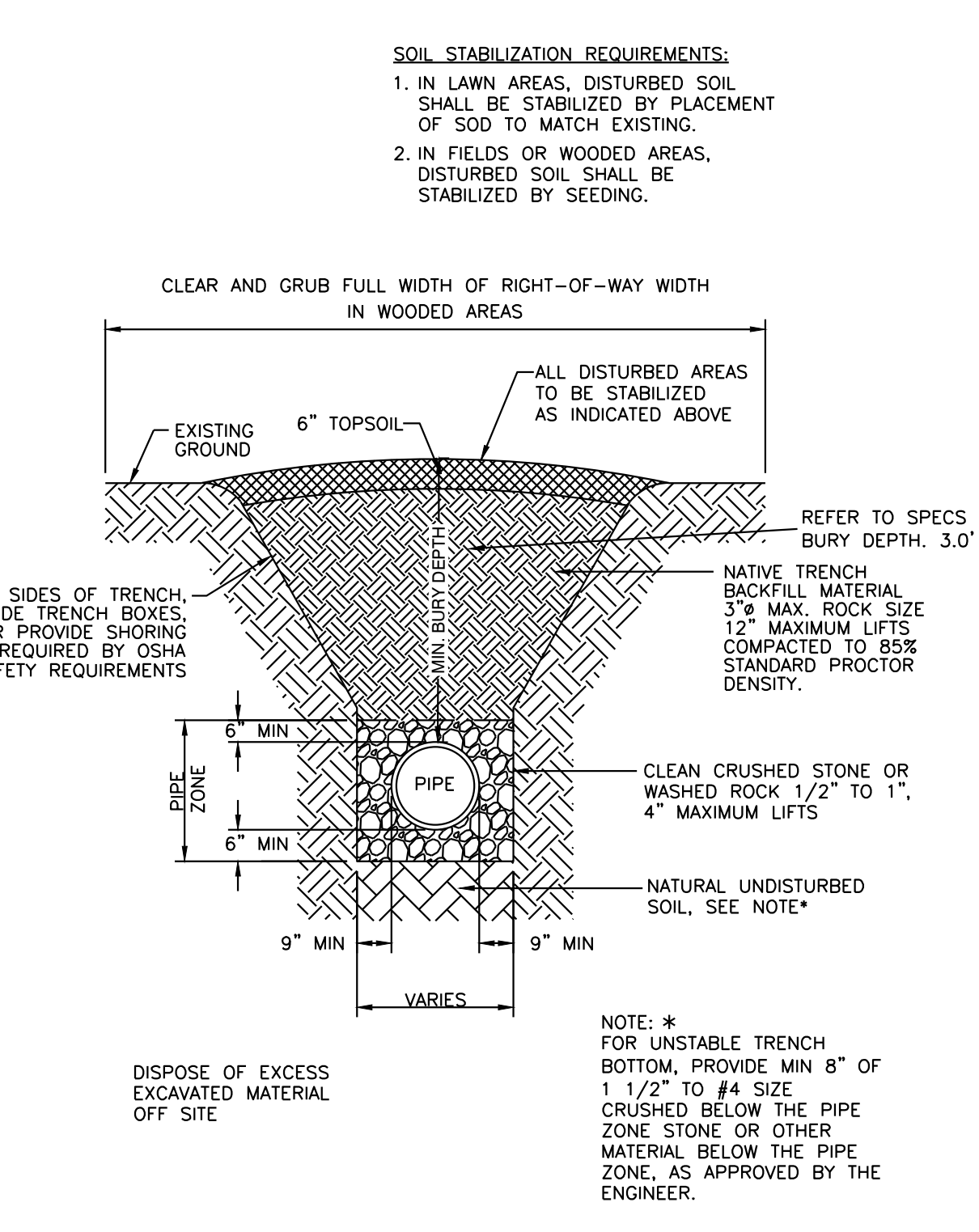
9" MIN VARIES 9" MIN

PIPE ZONE

SLOPE SIDES OF TRENCH, PROVIDE TRENCH BOXES, OR PROVIDE SHORING AS REQUIRED BY OSHA SAFETY REQUIREMENTS

DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

NOTE: * FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.



DRAINAGE PIPES IN UNPAVED AREAS
N.T.S.

REFER TO SPECS FOR MIN. BURY DEPTH, 3.0' STANDARD

6" TOPSOIL

NATIVE TRENCH BACKFILL MATERIAL 3" MAX. ROCK SIZE 12" MAXIMUM LIFTS COMPACTED TO 85% STANDARD PROCTOR DENSITY

CLEAN CRUSHED STONE OR WASHED ROCK 1/2" TO 1", 4" MAXIMUM LIFTS

NATURAL UNDISTURBED SOIL, SEE NOTE*

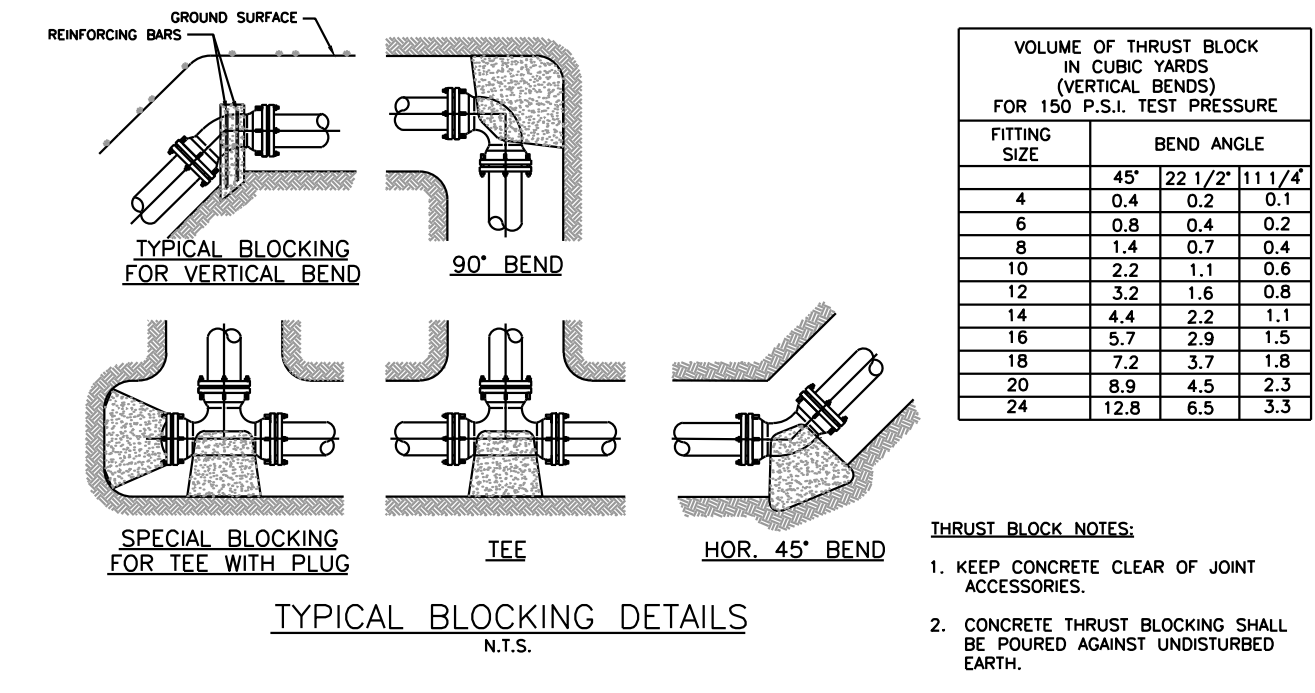
9" MIN VARIES 9" MIN

PIPE ZONE

SLOPE SIDES OF TRENCH, PROVIDE TRENCH BOXES, OR PROVIDE SHORING AS REQUIRED BY OSHA SAFETY REQUIREMENTS

DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

NOTE: * FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.



TYPICAL BLOCKING DETAILS
N.T.S.

BEARING AREA OF THRUST BLOCKS IN SQ. FT. (HORIZONTAL BENDS) FOR 150 P.S.I. TEST PRESSURE

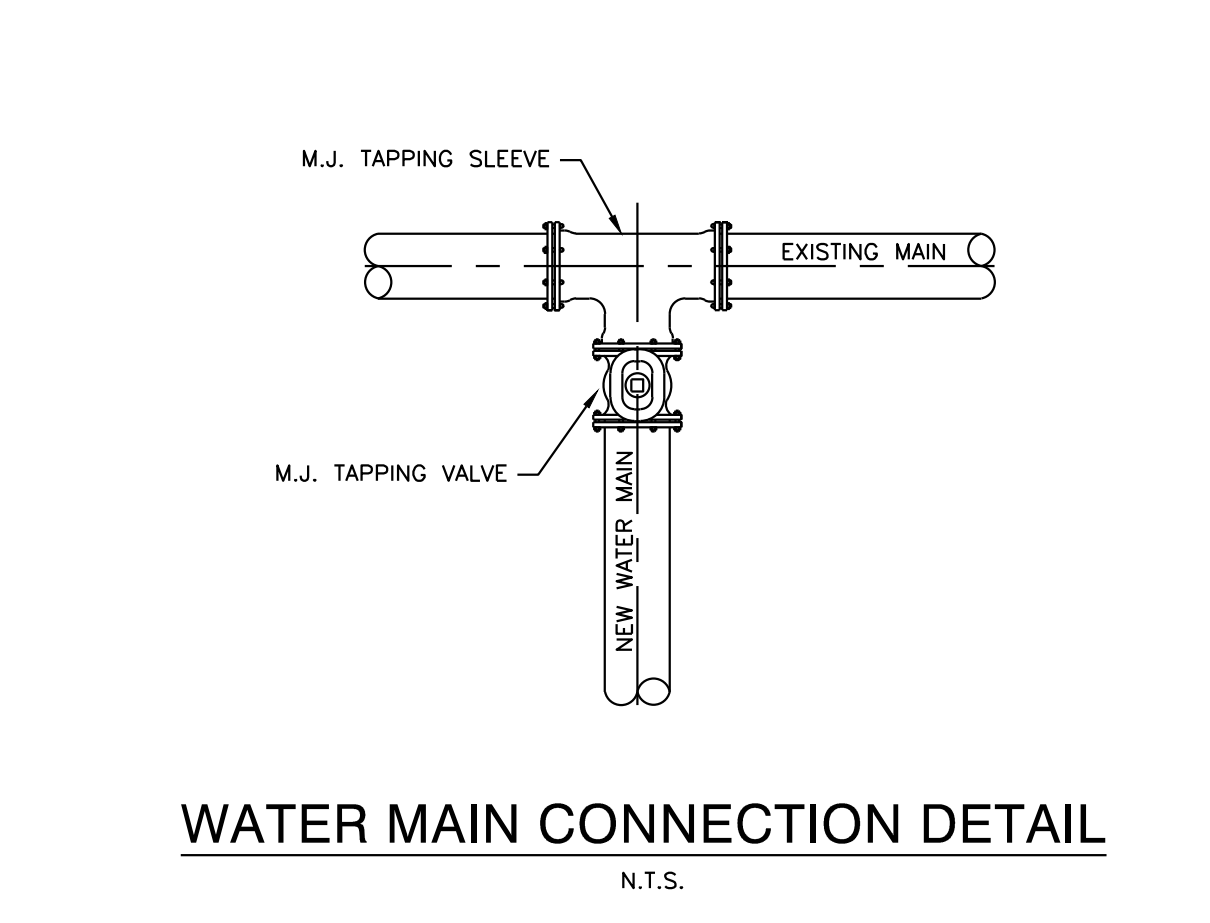
FITTING SIZE	TEE, WYE, PLUG OR CAP	90° BEND, PLUGGED CROSS			45°			22 1/2°			11 1/4°		
		AT	AT	AT	AT	AT	AT	AT	AT	AT	AT	AT	
4	1.0	1.4	1.0	1.4	1.0	-	-	-	-	-	-	-	
6	2.1	3.0	2.1	3.0	1.6	1.0	-	-	-	-	-	-	
8	3.8	5.3	3.8	5.4	2.9	1.5	1.0	-	-	-	-	-	
10	5.9	8.4	5.9	8.4	4.6	2.4	1.2	-	-	-	-	-	
12	8.5	12.0	8.5	12.0	6.6	3.4	1.7	-	-	-	-	-	
14	11.9	16.3	11.5	16.3	8.9	4.6	2.3	-	-	-	-	-	
16	15.0	21.3	15.0	21.3	11.6	6.0	3.0	-	-	-	-	-	
18	19.0	27.0	19.0	27.0	14.6	7.8	3.8	-	-	-	-	-	
20	23.9	33.3	23.0	33.3	18.1	9.4	4.7	-	-	-	-	-	
24	34.0	48.0	34.0	48.0	26.2	13.6	6.8	-	-	-	-	-	

VOLUME OF THRUST BLOCK IN CUBIC YARDS (VERTICAL BENDS) FOR 150 P.S.I. TEST PRESSURE

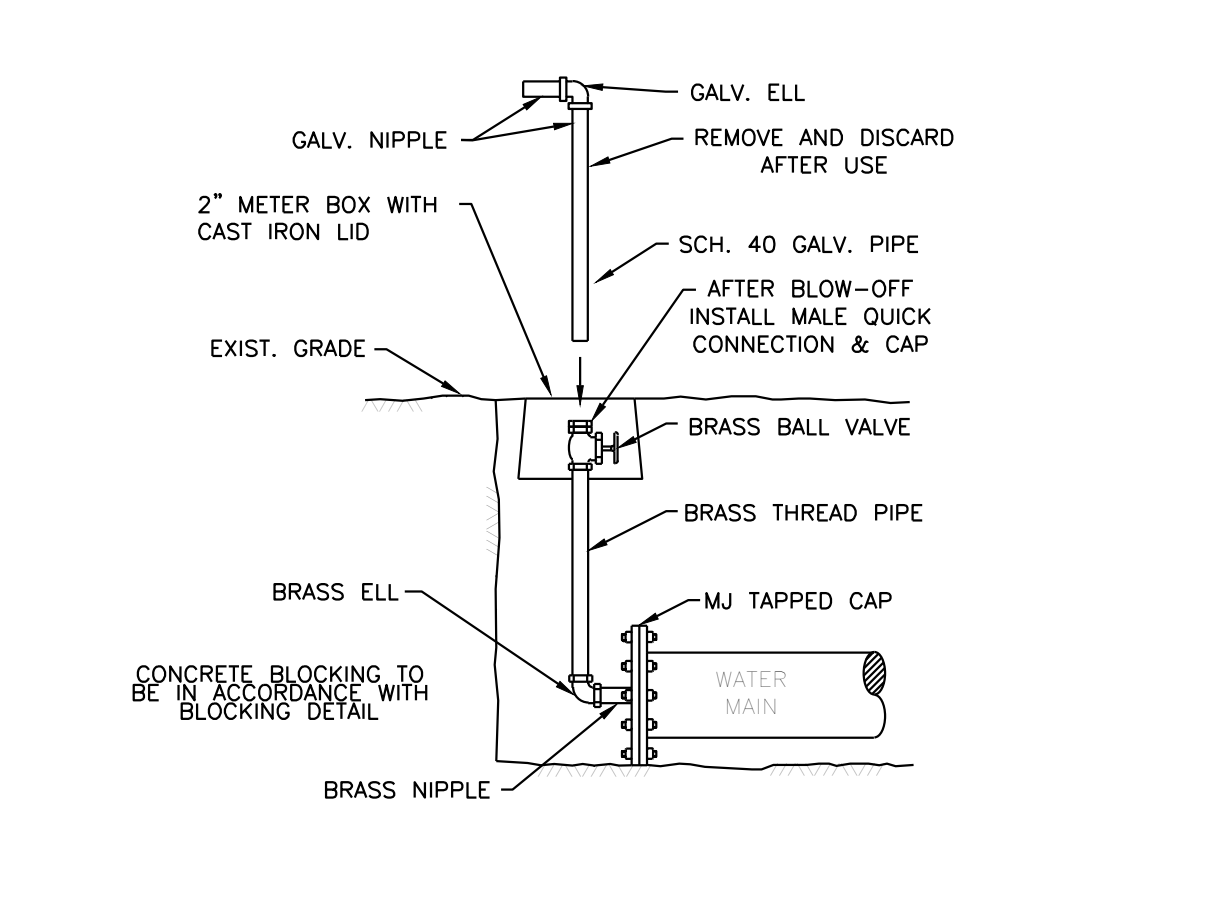
FITTING SIZE	BEND ANGLE		
	45°	22 1/2°	11 1/4°
4	0.4	0.2	0.1
6	0.8	0.4	0.2
8	1.4	0.7	0.4
10	2.2	1.1	0.6
12	3.2	1.6	0.8
14	4.4	2.2	1.1
16	5.7	2.9	1.5
18	7.2	3.7	1.8
20	8.9	4.5	2.3
24	12.8	6.5	3.3

THRUST BLOCK NOTES:

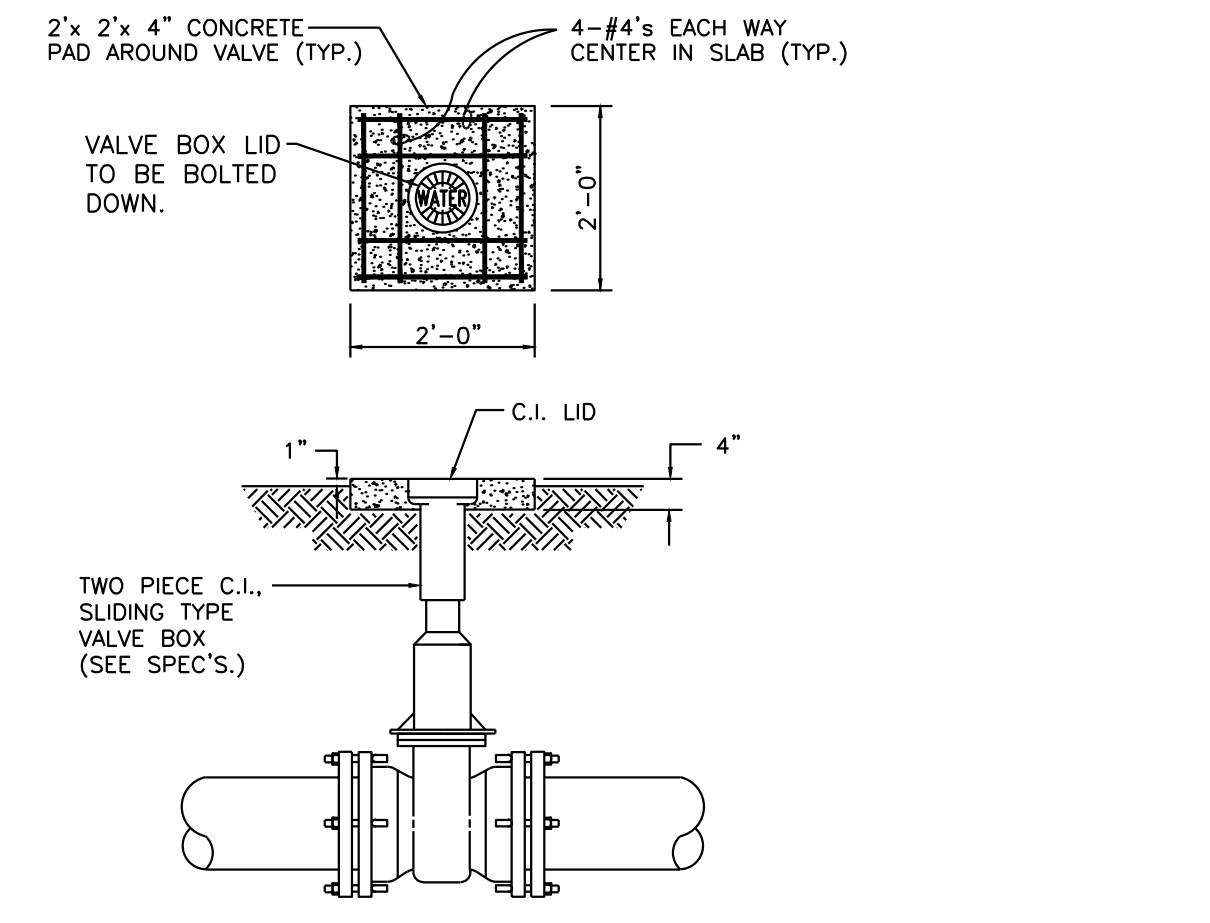
- KEEP CONCRETE CLEAR OF JOINT ACCESSORIES.
- CONCRETE THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH.
- REQUIRED VOLUMES OF BEARING AREAS AT FITTINGS SHALL BE AS INDICATED IN THE TABLES PROVIDED AND ADJUSTED, IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) STATED IN THE SPECIFICATIONS, AND ALLOWABLE SOIL BEARING STRESS(ES) STATED IN THE SPECIFICATIONS.
- THRUST BLOCK VOLUMES FOR VERTICAL BENDS HAVING UPWARD RESULTANT THRUSTS ARE BASED ON TEST PRESSURE OF 150 PSIG AND THE WEIGHT OF CONCRETE (4,050 LB/CY). TO COMPUTE VOLUMES FOR DIFFERENT TEST PRESSURES, USE THE FOLLOWING EQUATION: VOLUME = (TEST PRESSURE / 150) x (TABLE VALUE).
- BEARING AREAS FOR HORIZONTAL BEND THRUST BLOCKS ARE BASED ON TEST PRESSURE OF 150 PSIG AND AN ALLOWABLE SOIL BEARING STRESS OF 2,000 LB/SF TO COMPUTE BEARING STRESS, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE / 150) x (2,000 / SOIL BEARING STRESS) x (TABLE VALUE).
- THRUST BLOCKS FOR VERTICAL BENDS HAVING DOWNWARD RESULTANT THRUST SHALL BE THE SAME AS FOR HORIZONTAL BENDS.
- BEARING AREAS, VOLUMES, AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER THIS STANDARD.
- BEARING AREA OF THRUST BLOCK SHALL NOT BE LESS THAN 1.0 SF.
- VERTICAL BENDS THAT REQUIRE A THRUST BLOCK VOLUME EXCEEDING 5 CY REQUIRE SPECIAL BLOCKING DETAILS. SEE PLANS.



WATER MAIN CONNECTION DETAIL
N.T.S.



2" BLOW-OFF RISER
N.T.S.



DETAIL-VALVE BOX
N.T.S.



TYPICAL BLOCKING DETAILS
N.T.S.

HOPE CONSULTING ENGINEERS - SURVEYORS

129 North Main Street, Benton, Arkansas 72015
PH. (501)315-2626 FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
HAVEN'S DEVELOPMENT, LLC

MIDLAND ROAD TRENCH DETAILS
BRYANT, SALINE COUNTY, ARKANSAS

DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISION:	CHECKED BY:	23-0024
SHEET: C-40	SCALE:	
500	1S	15W 0 34 230 62 1807

KS-LAND PROJECTS 2004 (SUBVERSIONS) 2625/23/2023 11:58:30 AM BY: JAVEN@HOPESURV.COM OF THE RAW/CAD/PLT/IMG/23-0024-CONSTRUCTION PLAN (FINAL DRAFT) AT: P:\PROJECTS\2023\23-0024\23-0024-CONSTRUCTION PLAN

SUBGRADE MATERIAL.

- A. Subgrade soils shall be all materials used for subgrade including in-situ materials and fill materials.
- B. Subgrades for pavement shall be stabilized by mechanical compaction. Stabilization methods such as fabrics and chemical stabilization may be submitted for approval when supported by engineering data and calculations to substantiate the adequacy of the stabilized procedure.
- C. Subgrade shall be compacted to 95 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture unless otherwise supported by the site specific geotechnical data and approved by City.
- D. Subgrade shall be prepared in such a manner that the base course shall be placed on a firm foundation that is stable and free from soft spots, pumping, dust pockets, wheel ruts, or other defects.
- E. The top 24 inches of the subgrade shall be a material not susceptible to frost action unless modified with cement, lime or another method approved specifically by the City to resist frost action. Soils classified as A-4 and A-5 including sandy silts, fine silty sand or lean clays are highly susceptible to frost action.
- F. In-situ soils meeting the requirements outlined in these specifications may be utilized as subgrade material. In-situ soils used as subgrade shall be scarified to a minimum depth of 8-inches below finish subgrade, recompact and tested as described below. Fill material for subgrade shall be placed in lifts not to exceed 8-inches compacted depth.
- G. Methods and procedures for establishing the total depth of soil replacement and/or modification shall be as specified by the design engineer and geotechnical investigations. The adequacy of in-situ soils and fill materials as pavement subgrade shall be evaluated based upon the soils classification, liquid limit, and plasticity index.
- H. Soils with a liquid limit greater than 40, or a plasticity index greater than 15 shall be undercut and removed from the street section or improved by a design method of stabilization approved by the City.
- I. Quality control testing shall be as specified below.
- J. Undercut 24" of soil below finished street base course. Proof roll to verify stability.
- K. Backfill the undercut subgrade with Class 7 aggregate or soil meeting the requirements of this section and compact in lifts not exceeding 8".

BASE COURSE

- A. Base course material shall be crushed stone meeting the requirements of ArDOT Class 7 aggregate base course as specified in the latest edition of ArDOT Standard Specifications.
- B. Base course shall be compacted to 98 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture.

SURFACE COURSE

- A. Surface course for flexible pavement designs shall utilize plant mix bituminous base and binder courses conforming to ArDOT Standard Specifications.

CURB AND GUTTER

- A. Curb and gutter shall be Portland Cement Concrete with a minimum 28-day compressive strength of 4,000 psi. Concrete shall be air-entrained with a maximum of 4-inch slump.
- B. Compaction requirements under curb and gutter shall conform to the requirements for street subgrade materials. Compaction requirements shall extend to a minimum of 1 foot behind the back of curb and gutter removing all soft spots and replacing with suitable material.
- C. Curb and gutter shall conform to the typical detail within these specifications or ArDOT Standard Roadway Drawing Details for curbing.
- D. Expansion joints shall be made with 1/2-inch preformed expansion joint filler of a non-extruding type. Expansion joints shall be placed at intervals not exceeding 195 feet, intersection radii, driveways, stationary structures, and sidewalks.
- E. Contraction joints shall be sawed or formed at intervals not greater than 20 feet. Depth of saw-cut shall be 1 1/2-inch and have a width of 1/4-inch. Contraction joints shall be sealed in accordance with ArDOT Standard Specifications.
- F. Forms shall be made of metal or wood and shall be properly braced. The minimum length of each section of form used shall be 10 feet. Each section of form shall be uniform and free from undesirable bends or warps. Forms shall be of such cross section and strength and so secured as to resist the pressure of the impact and vibration on any equipment which they support without springing or settlement.
- G. Curb and gutter placed with slip form or extruding equipment will be acceptable providing it complies with all of the above requirements.
- H. After curing, the curb shall be immediately backfilled to within 4 inches of the top curb to eliminate the possibility of washing beneath the curb. The remaining 4 inches shall be topsoil.
- I. Cold weather protection shall meet the requirements of the latest edition of ArDOT Standard Specifications.

SIDEWALKS

General

- A. Sidewalks shall be Portland Cement Concrete with a minimum 28-day compressive strength of 4,000 psi.
- B. Sidewalks shall be on both sides of streets in line with sidewalks on opposite corners of roads.
- C. All sidewalks including ramps shall meet all current Federal Americans with Disabilities (ADA) design guidelines or requirements.
- D. Traverse slopes shall not exceed 2 percent.
- E. Subgrade under sidewalks shall be compacted to 90 percent modified proctor density minimum.
- F. Sidewalks shall not be placed upon grassy or organic materials.
- G. Sidewalks which extend or link existing sidewalks shall adjoin the existing sidewalks to form a continuous, even pathway.
- H. Utility poles, utility boxes, mailboxes, fire hydrants, and other similar obstructions shall not be located in sidewalks. Sidewalk location may vary at the discretion of the City to avoid such obstacles.

Minimum thickness and reinforcement

- A. Sidewalks shall have a minimum thickness of 4 inches.
- B. Sidewalks shall be reinforced, at a minimum, with woven wire fabric reinforcement.

Contraction and expansion joints

- A. Contraction joints shall be provided perpendicular to the sidewalk at intervals equal to the sidewalk width.
- B. Expansion joints shall be constructed perpendicular to the sidewalk at intervals equal to five times the sidewalk width. Expansion joints shall be made with 1/2-inch preformed expansion joint filler of a non-extruding type. Expansion joints shall be placed at driveways, drop inlets, and curbs.

Quality control testing and inspection by the City

- A. Subgrade and formwork for sidewalks shall be inspected by the City prior to pouring of the sidewalk.
- B. All testing of materials and construction shall be provided and paid for by the Developer/Owner.
- C. All field tests required for a project shall be witnessed by the City, contractor, or their authorized representatives.
- D. All testing shall be accomplished by a testing firm approved by the City and shall be performed under the supervision of a licensed Professional Engineer.
- E. Sampling and testing locations shall be subject to approval by the City.
- F. Density tests on subgrades shall be taken every 300 feet or portion thereof.
- G. The City shall be notified at least one day in advance of the need to inspect subgrade and formwork of sidewalks.

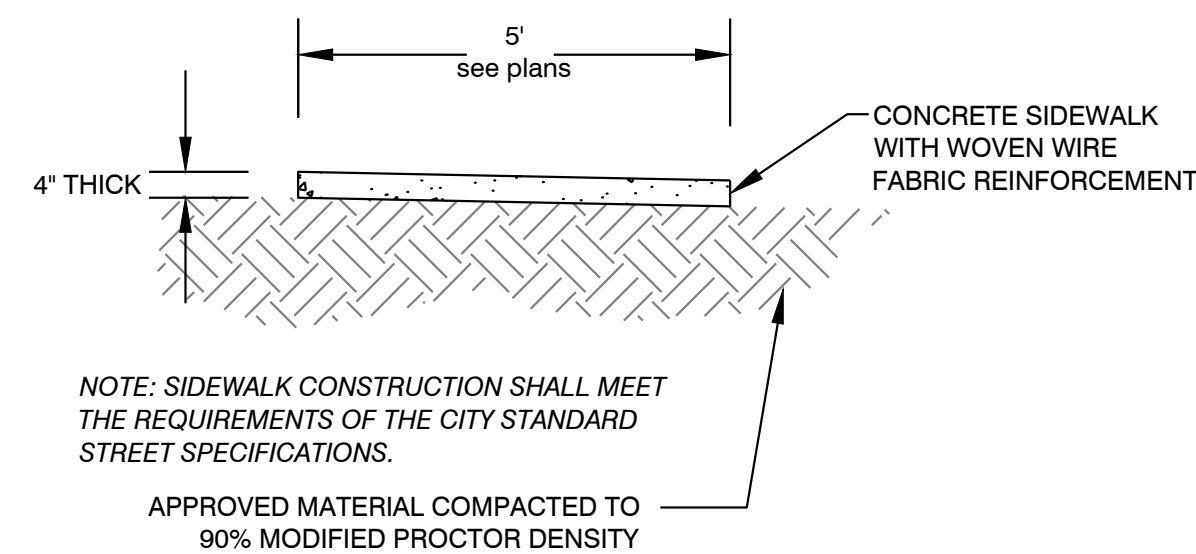
Subgrade

- A. Subgrade soils shall be all materials used for subgrade including in-situ materials and fill materials.
- B. Subgrade shall be compacted to 90 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture unless otherwise supported by the site specific geotechnical data and approved by City.
- C. Subgrade shall be prepared in such a manner that the base course shall be placed on a firm foundation that is stable and free from soft spots, pumping, dust pockets, wheel ruts, or other defects.
- D. The top 24 inches of the subgrade shall be a material not susceptible to frost action unless modified with cement, lime or another method approved specifically by the City to resist frost action. Soils classified as A-4 and A-5 including sandy silts, fine silty sand or lean clays are highly susceptible to frost action.

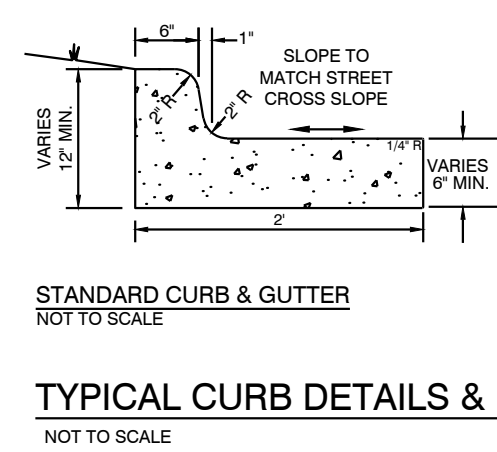
QUALITY CONTROL TESTING AND INSPECTIONS

General

- A. Materials and construction employed in street improvements shall be subject to inspection and quality control testing. All testing of materials and construction shall be provided and paid for by the Developer/Owner.
- B. The Developer/Owner shall provide for inspections of street improvements during construction. The inspections shall be accomplished under the supervision of the Engineer of Record. The Engineer of Record shall provide certification that all materials and construction conform to the approved plans and specifications and with these minimum street standards.
- C. The Engineer of Record shall furnish inspection whenever a critical construction activity is taking place. This means that a representative of the Engineer of Record must be on-site whenever a critical construction activity is taking place.
- D. All field tests required for a project shall be witnessed by the City, Engineer of Record, contractor, or other authorized representatives.
- E. The City shall be notified at least one day in advance of any test(s). It is the responsibility of the contractor to coordinated the scheduling of all tests with the City.



Typical Sidewalk Detail

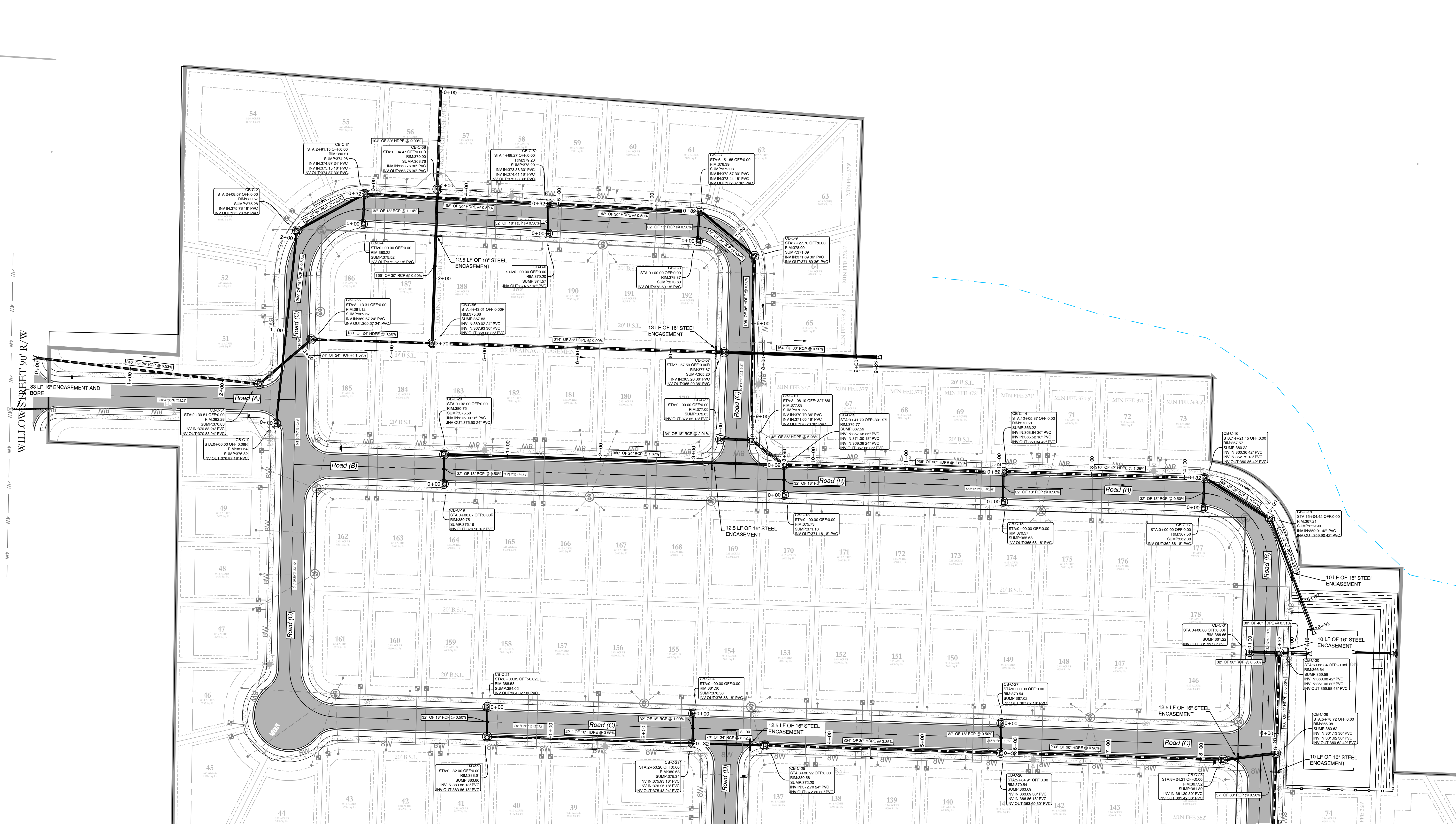


Typical Curb Details & Notes
NOT TO SCALE

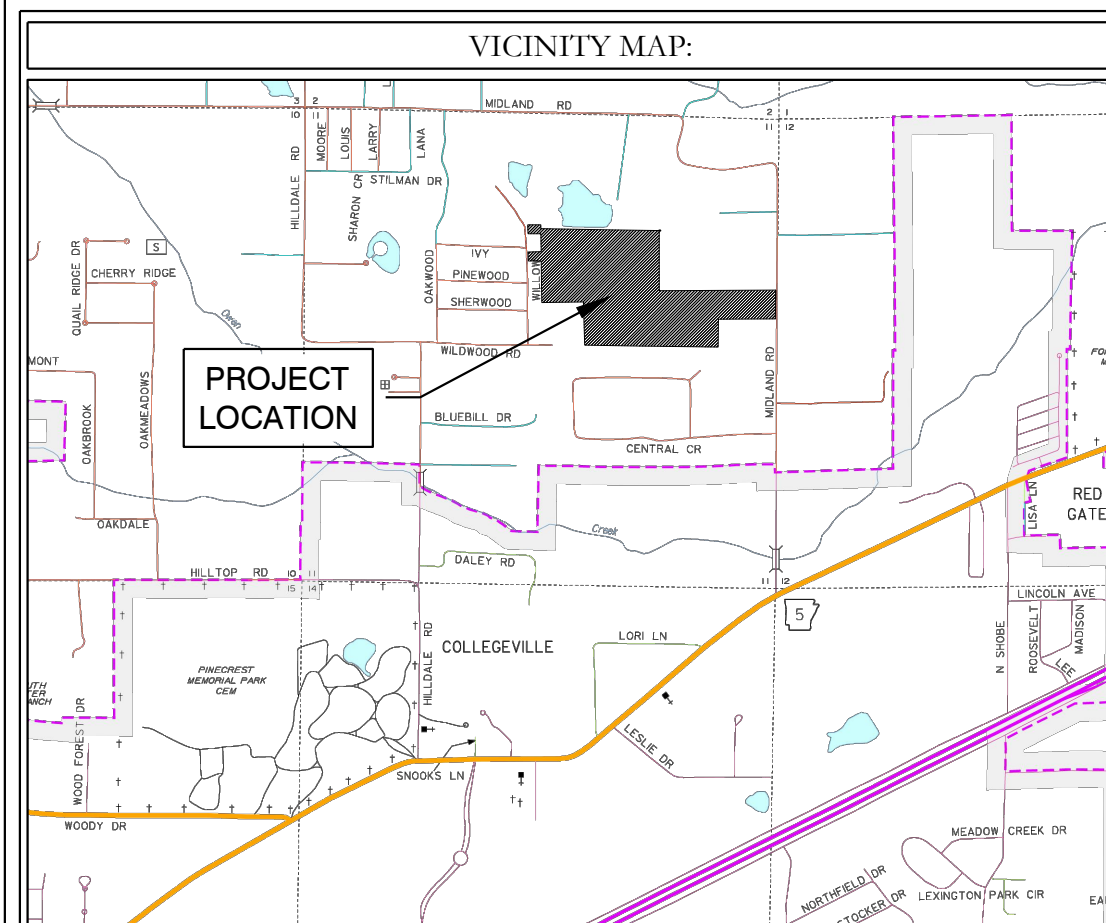
Typical Curb & Gutter Detail
4,000 psi concrete

		129 North Main Street, Benton, Arkansas 72015 PH. (501)315-2626 FAX (501) 315-0024 www.hopeconsulting.com	
FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC			
MIDLAND ROAD CIVIL SPECS BRYANT, SALINE COUNTY, ARKANSAS			
DATE:	5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISION:		CHECKED BY:	23-0024
SHEET:	C-5.0	SCALE:	
500	1S	15W	0 34 230 62 1807

K:\LAND PROJECTS 2004\SUBDIVISIONS\2023\23-0024 HAVEN'S MIDLAND ROAD SUBDIVISION\11 T15 R14W\CIVIL\DWG\23-0024 CONSTRUCTION PLAN (FINAL DRAFT).AFTER COMMENTS\XXXXXX.DWG



MIDLAND ROAD SUBDIVISION DRAINAGE PLAN



DRAINAGE NOTES

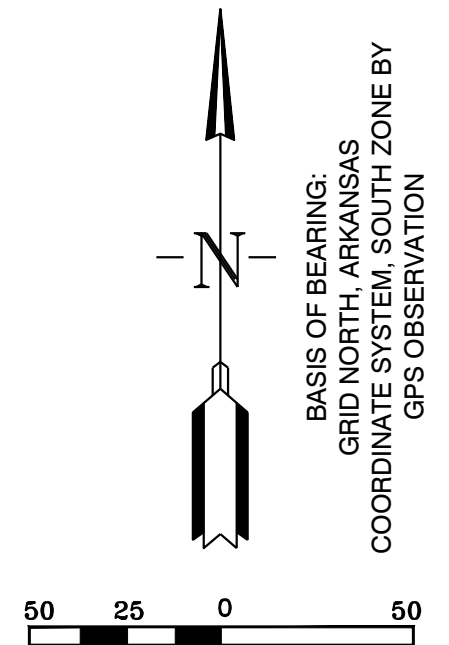
No fences, pools or permanent obstructions may be placed in any access or drainage easements.

Dead Storage of pond will be used as a sediment pond at the time of construction later it will remain as a water feature.

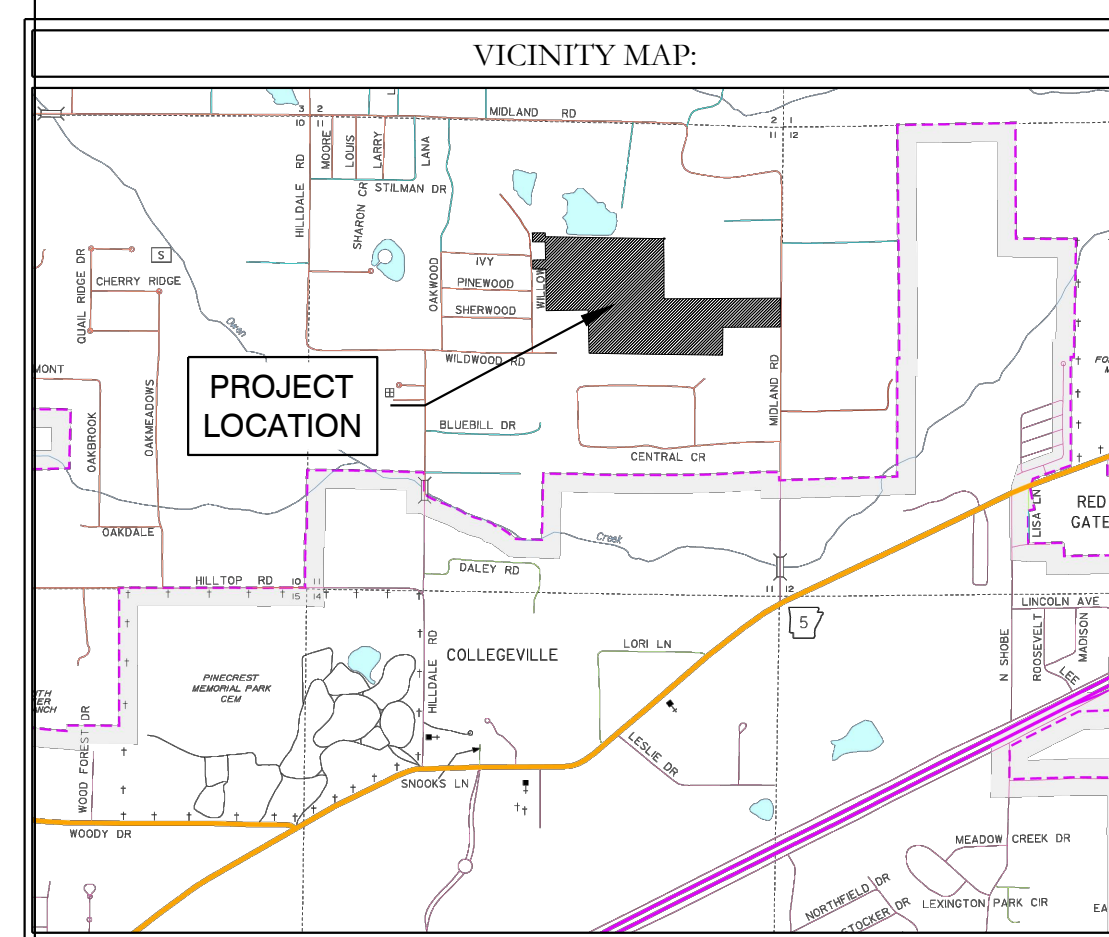
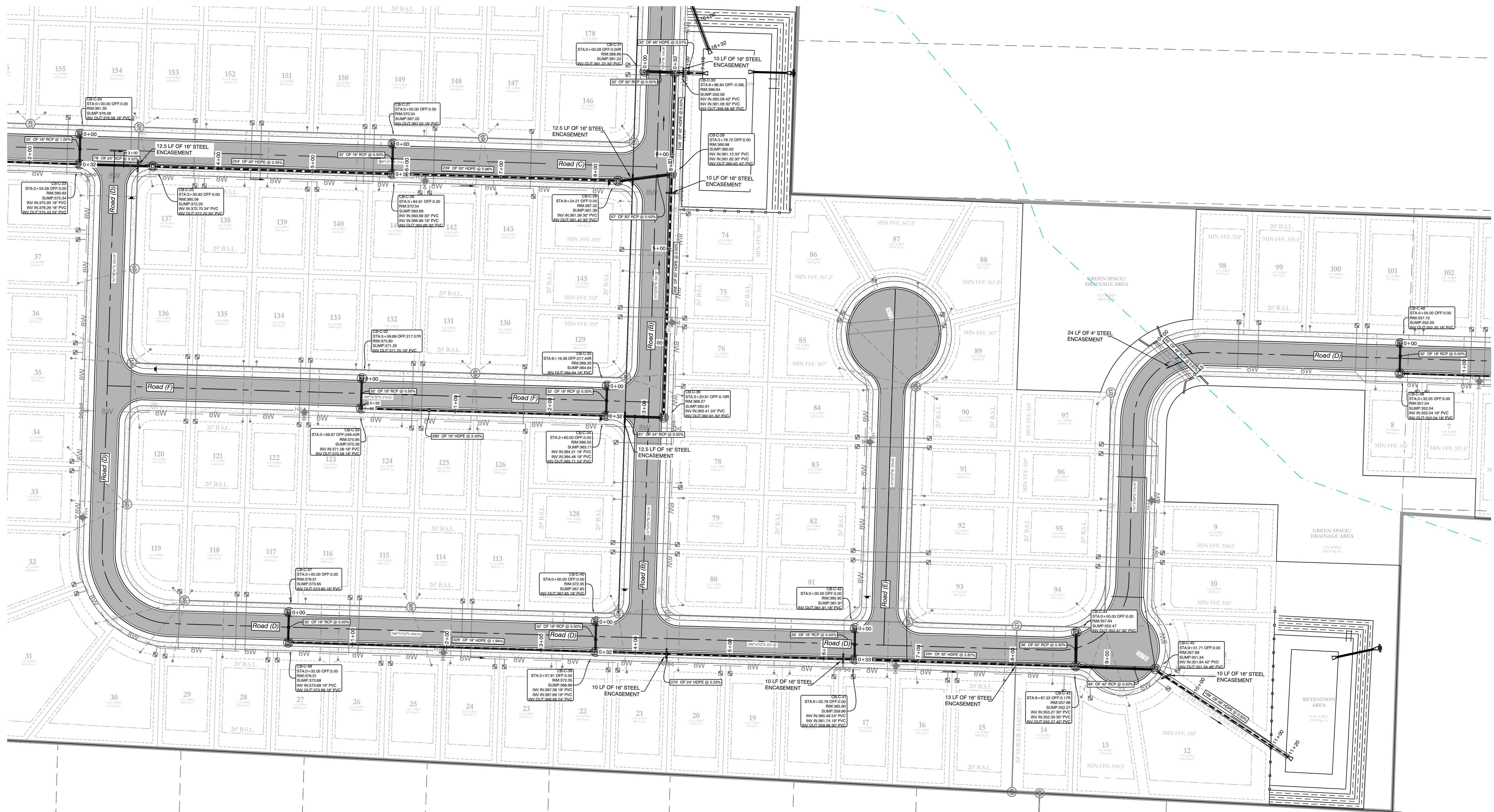
Filter fabric shall be placed under all riprap areas.

All drainage ditches and swales that are not concreted will be required to be stabilized with solid sod stabilization per the Stormwater Management Manual.

Any new drainage ditches or swales, new or that have been disturbed during construction are required to have solid sod stabilization per Section 500.7.2 of the Stormwater management Manual. (This is required to be show in detail on the plans).



HOPE CONSULTING ENGINEERS - SURVEYORS		129 North Main Street, Benton, Arkansas 72015 PH. (501)315-2626 FAX (501) 315-0024 www.hopeconsulting.com	
FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC			
MIDLAND ROAD DRAINAGE PLAN IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS			
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:	
REVISED:	CHECKED BY:	23-0024	
SHEET: C-6.0	SCALE: 1" = 50'		
500	0		



DRAINAGE NOTES

No fences, pools or permanent obstructions may be placed in any access or drainage easements.

Dead Storage of pond will be used as a sediment pond at the time of construction later it will remain as a water feature.

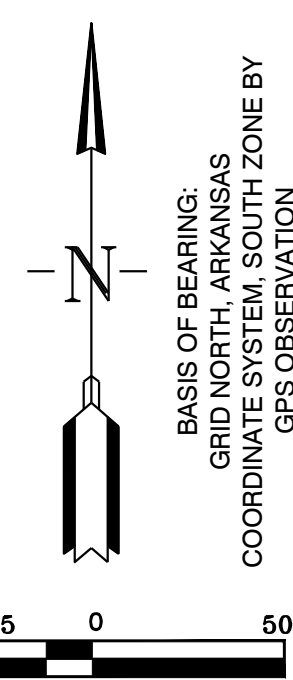
Filter fabric shall be placed under all riprap areas.

All drainage ditches and swales that are not concreted will be required to be stabilized with solid sod stabilization per the Stormwater Management Manual.

Any new drainage ditches or swales, new or that have been disturbed during construction are required to have solid sod stabilization per Section 500.7.2 of the Stormwater management Manual. (This is required to be show in detail on the plans).



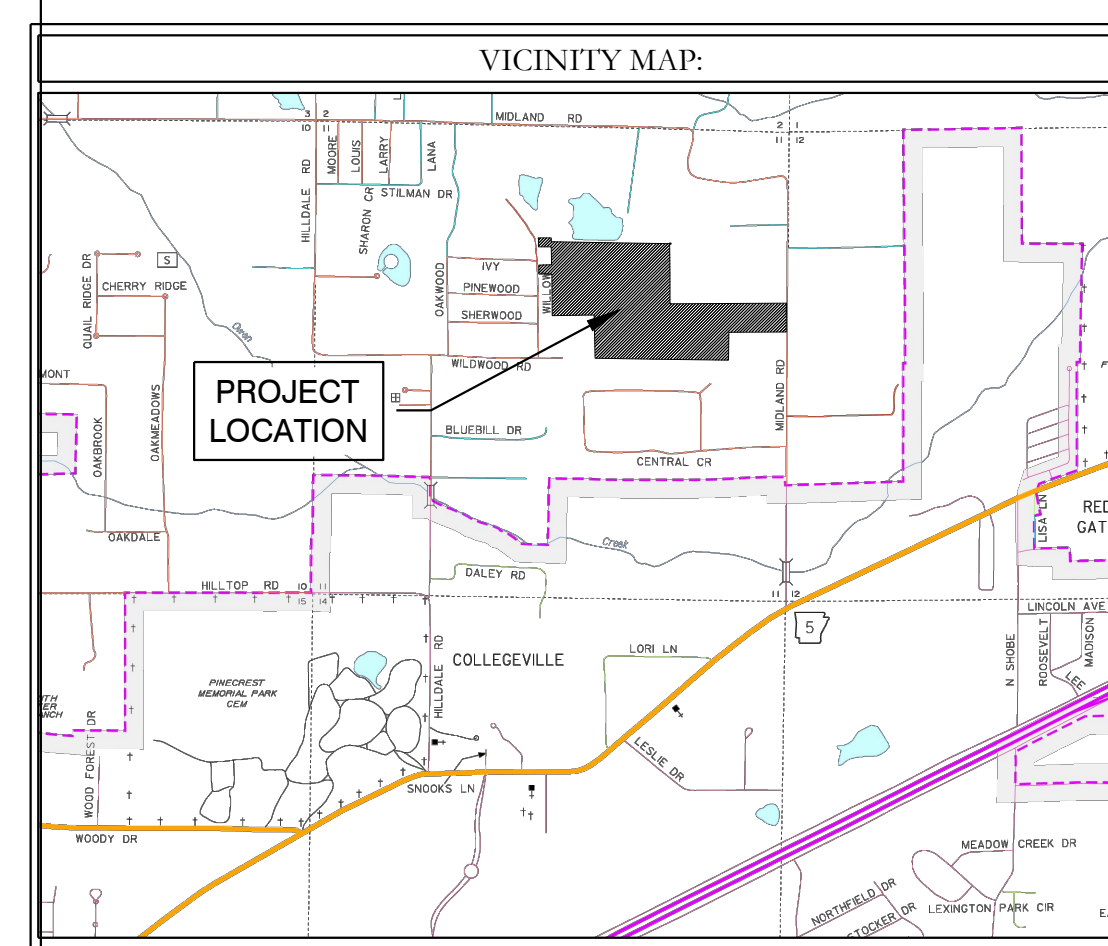
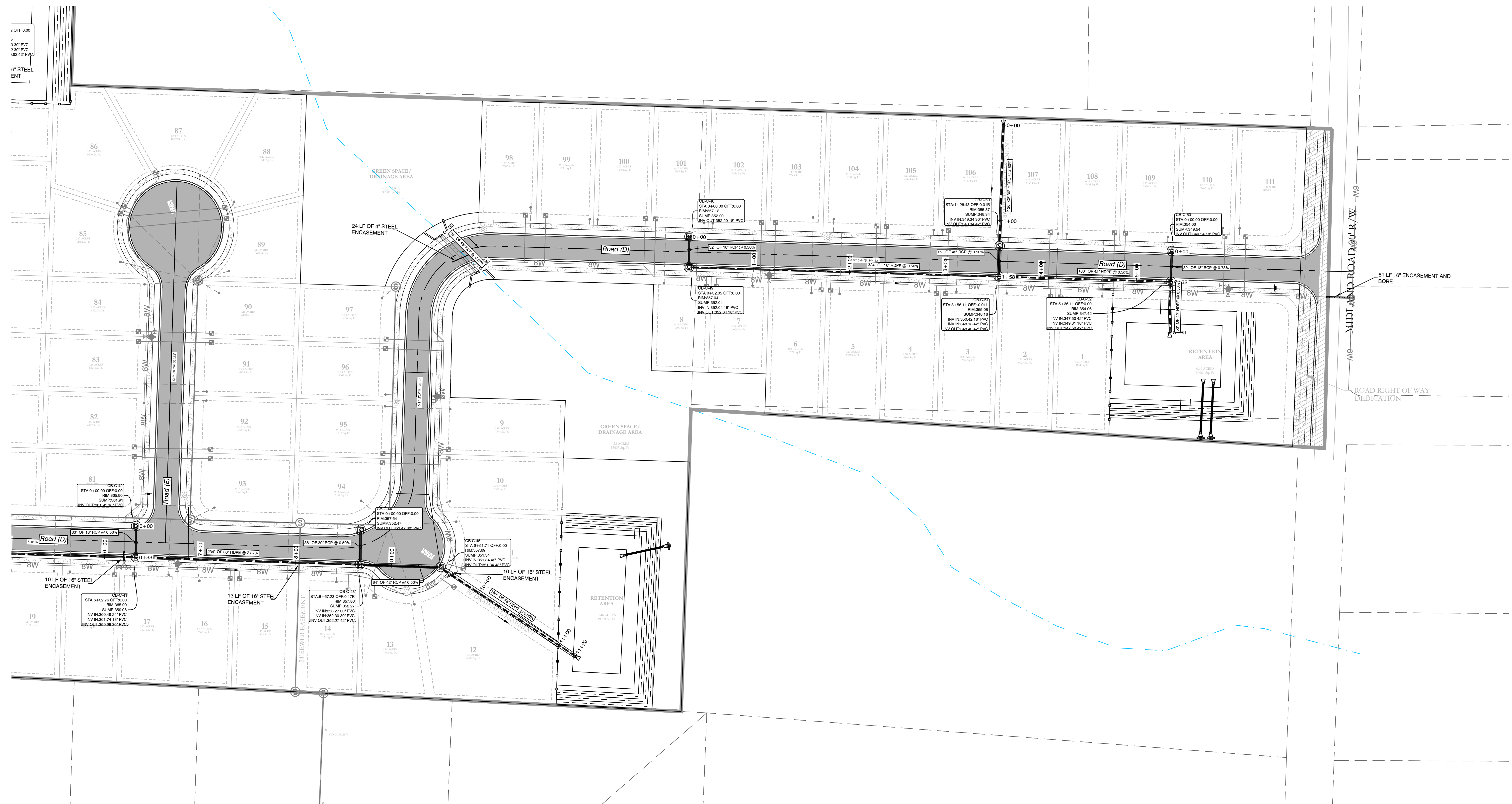
MIDLAND ROAD SUBDIVISION DRAINAGE PLAN



HOPE CONSULTING
ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
MIDLAND ROAD DRAINAGE PLAN IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISED:	CHECKED BY:	23-0024
SHEET: C-6.1	SCALE: 1" = 50'	
500	0	



DRAINAGE NOTES

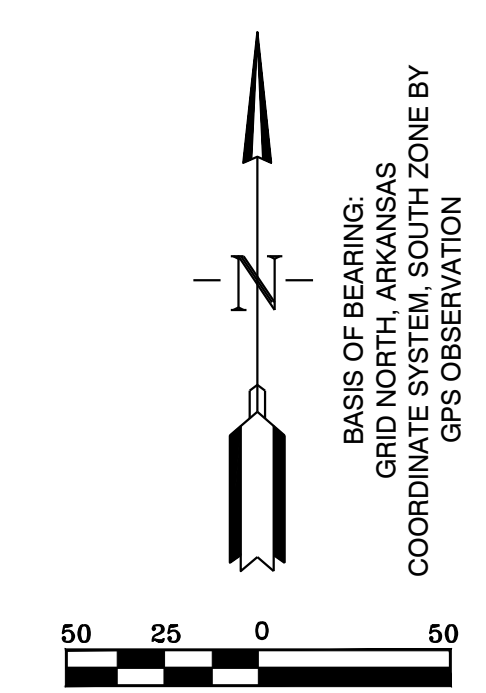
No fences, pools or permanent obstructions may be placed in any access or drainage easements.

Dead Storage of pond will be used as a sediment pond at the time of construction later it will remain as a water feature.

Filter fabric shall be placed under all riprap areas.

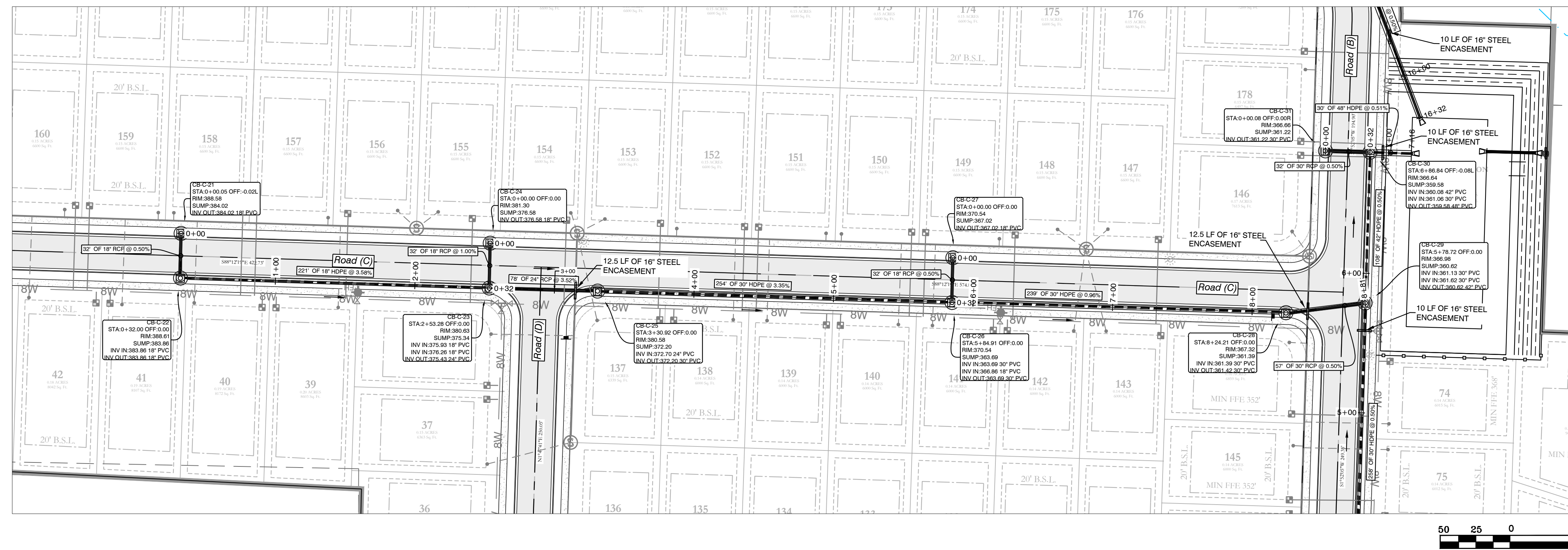
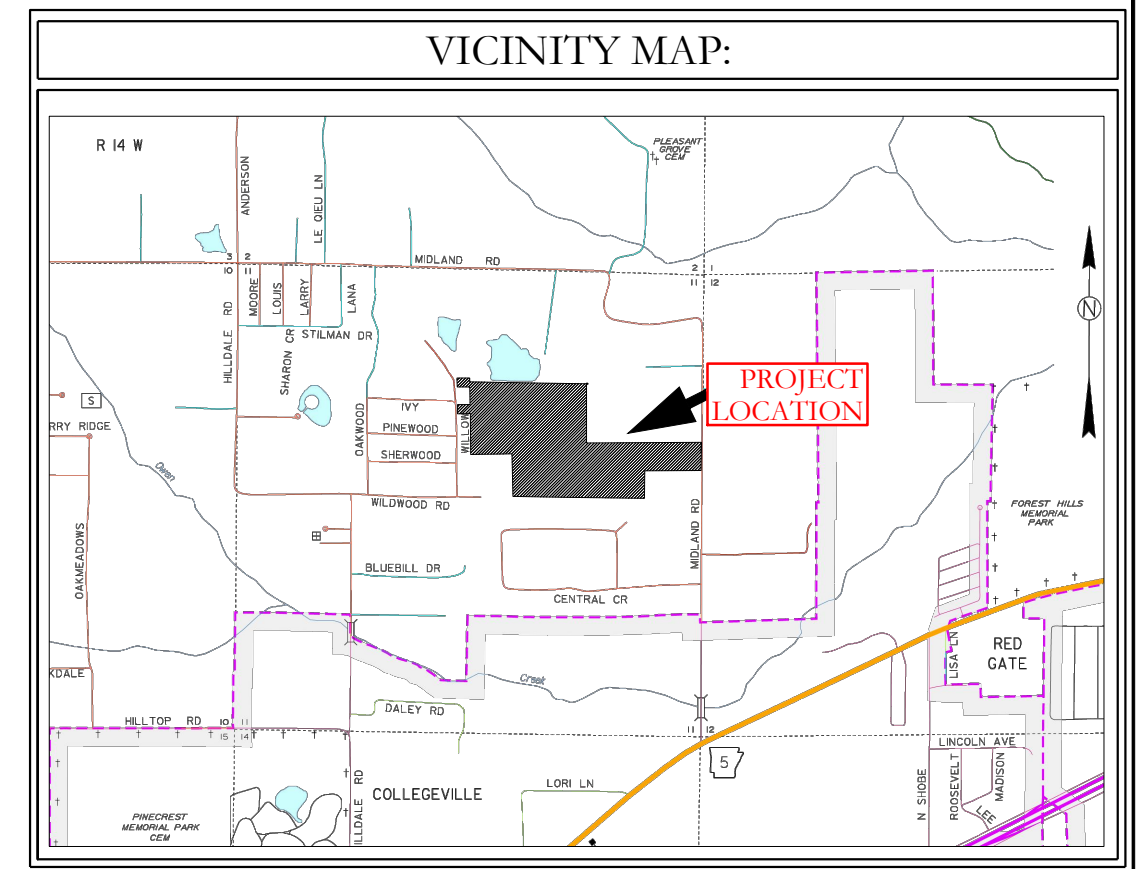
All drainage ditches and swales that are not concreted will be required to be stabilized with solid sod stabilization per the Stormwater Management Manual.

Any new drainage ditches or swales, new or that have been disturbed during construction are required to have solid sod stabilization per Section 500.7.2 of the Stormwater management Manual. (This is required to be show in detail on the plans).

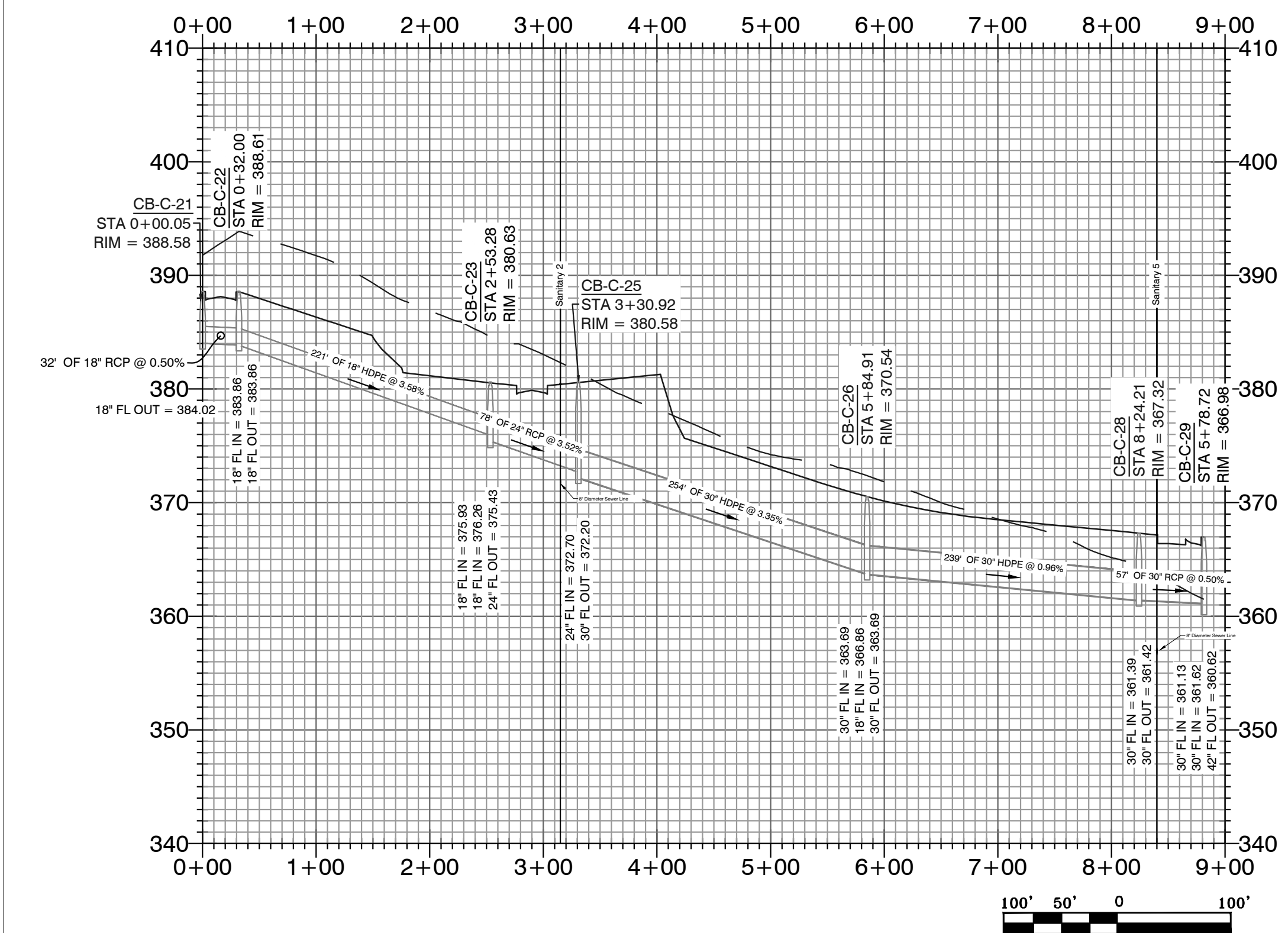


MIDLAND ROAD SUBDIVISION DRAINAGE PLAN

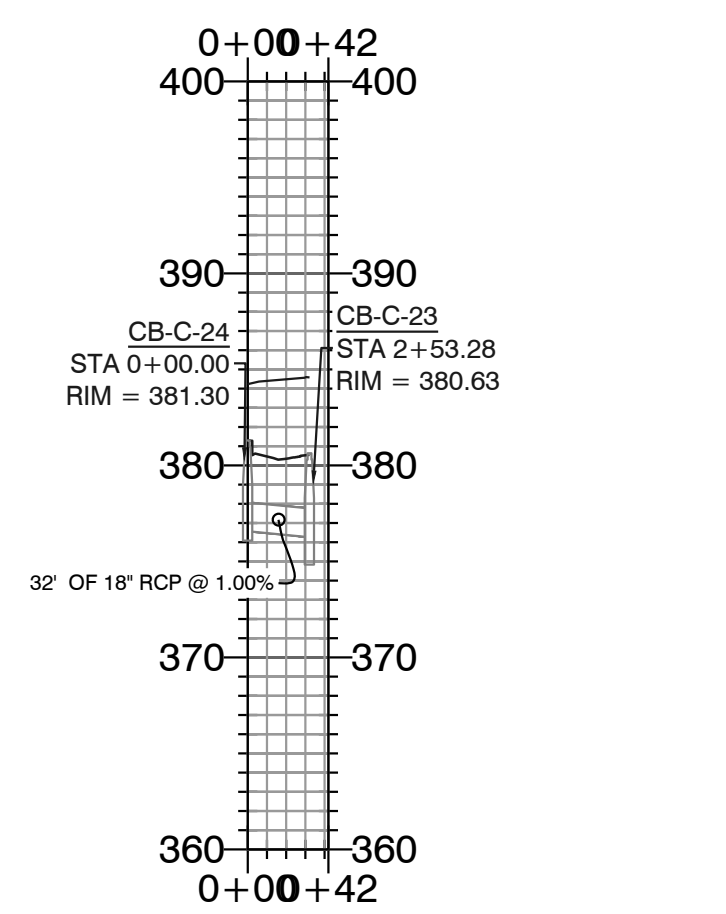
		129 North Main Street, Benton, Arkansas 72015 PH. (501)315-2626 FAX (501) 315-0024 www.hopeconsulting.com
FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
MIDLAND ROAD DRAINAGE PLAN IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISION:	CHECKED BY:	23-0024
SHEET: C-6.2	SCALE: 1" = 50'	
500	0	



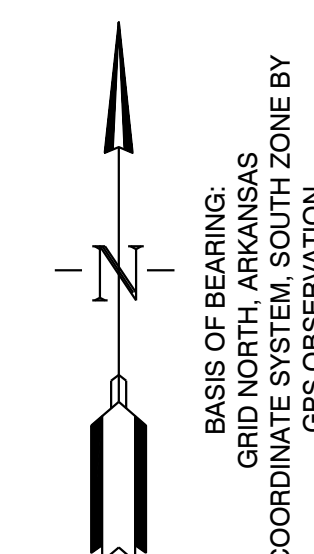
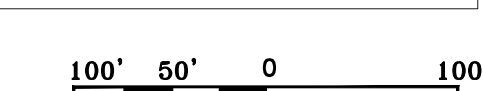
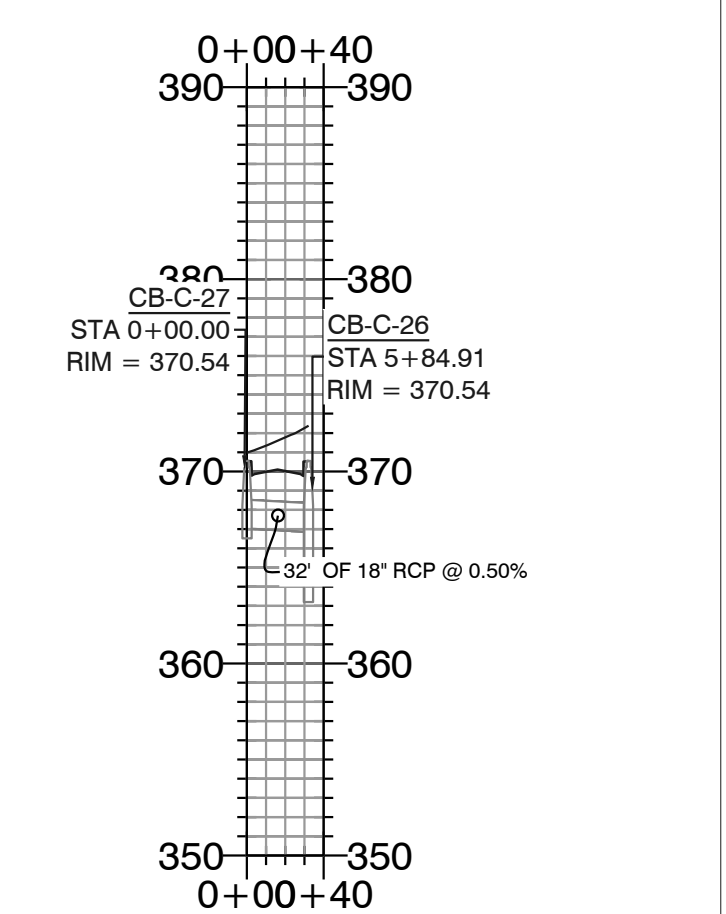
Storm Water Line 1 PROFILE



Storm Water Line 2 PROFILE



Storm Water Line 3 PROFILE

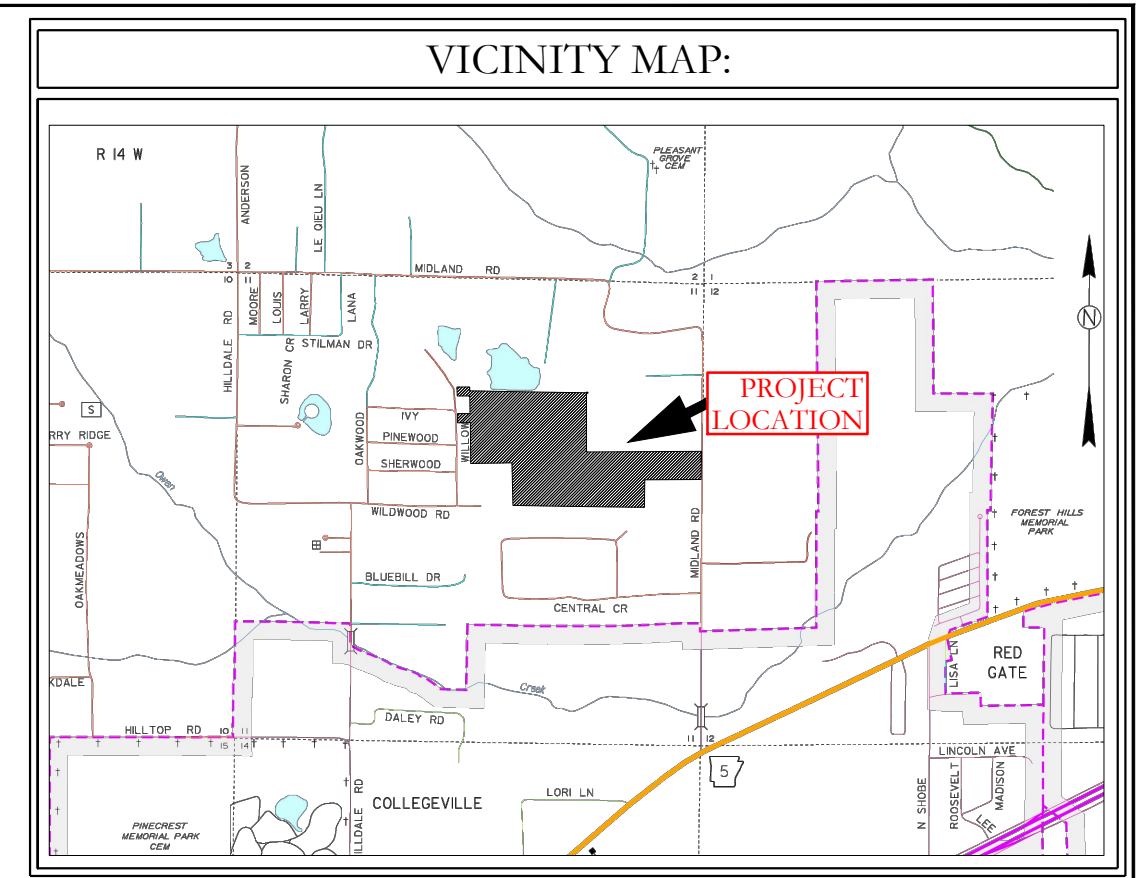
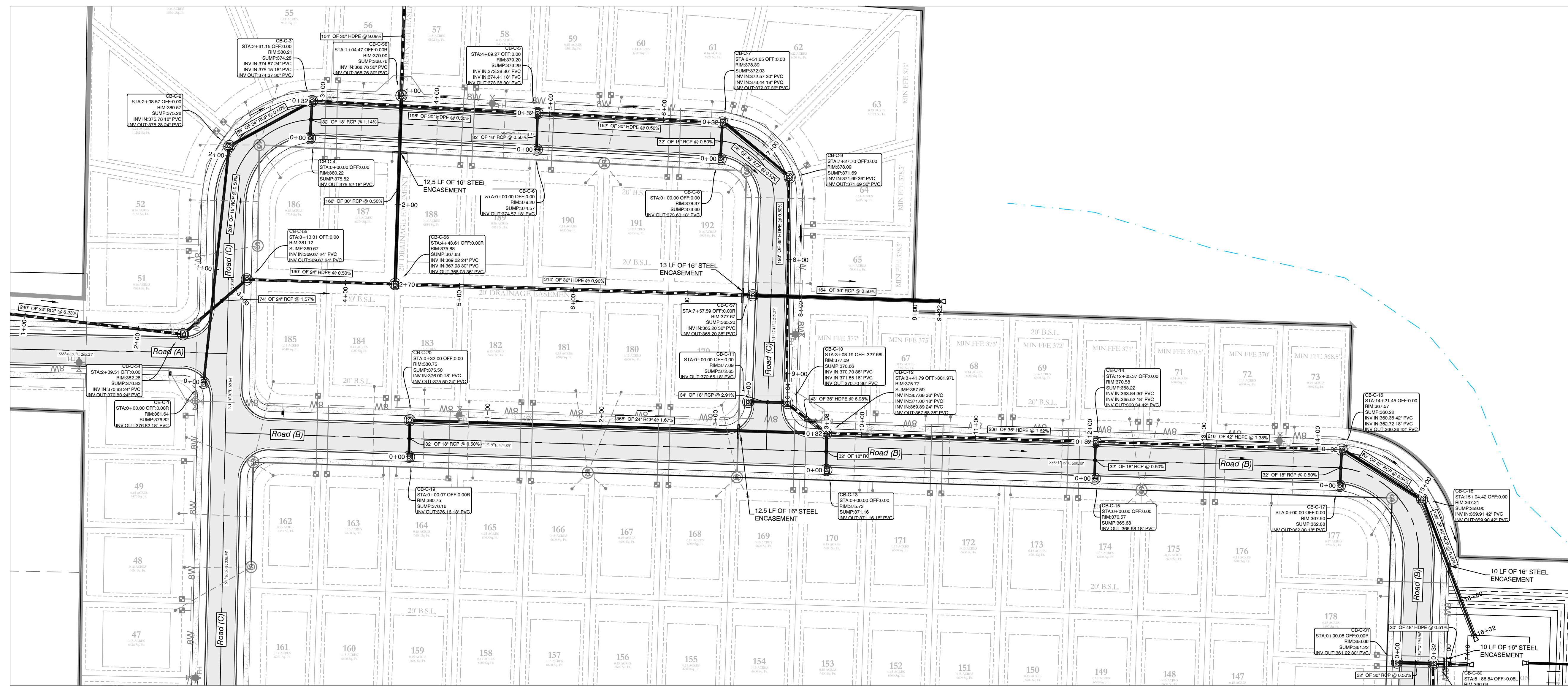


BASIS OF BEARING:
GRID NORTH, ARKANSAS
COORDINATE SYSTEM, SOUTH ZONE BY
GPS OBSERVATION

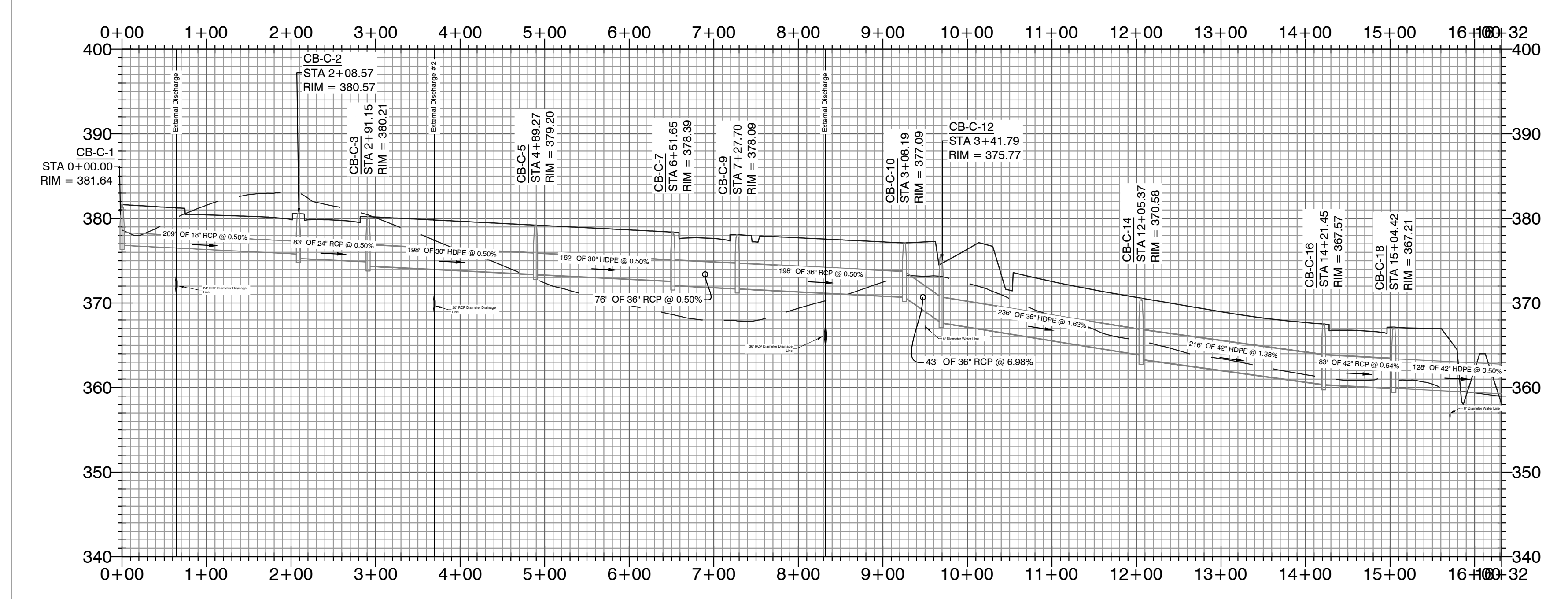
HOPE CONSULTING ENGINEERS - SURVEYORS
129 North Main Street, Benton, Arkansas 72015
PH. (501)315-2626 FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
DRAINAGE PROFILES MIDLAND ROAD BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY: xxxx	DRAWING NUMBER: 23-0024
REVISED:	CHECKED BY:	
SHEET: C-6.3	SCALE: as shown	

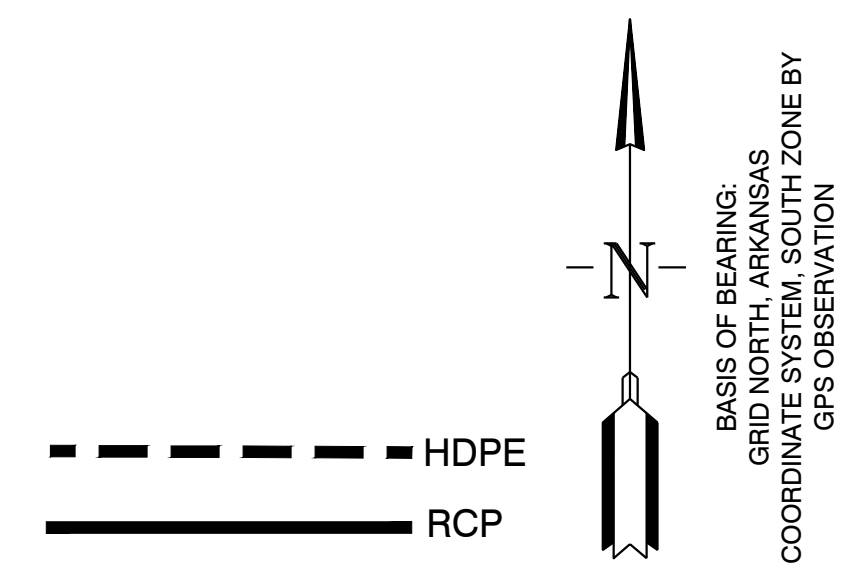
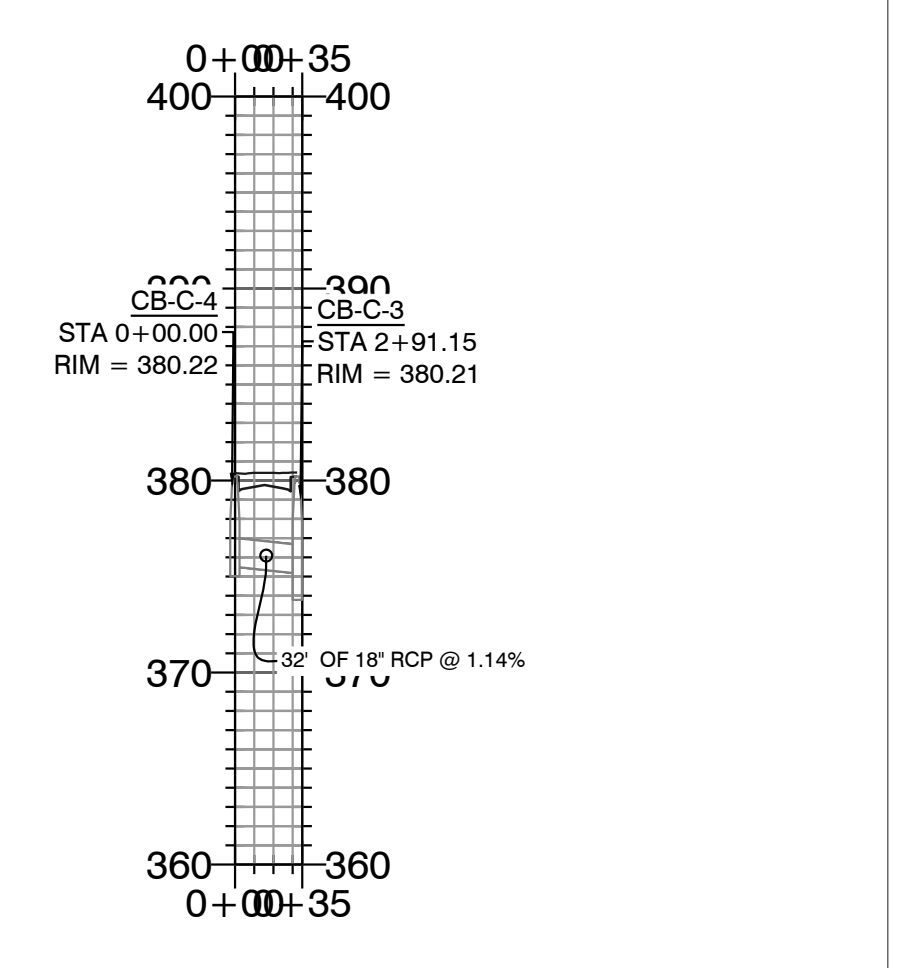
K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S MIDLAND ROAD\SUBDIVISION\11\TFS\RAW\CIVIL\DWG\23-0024.CONSTRUCTION.PLAN (FINAL DRAFT)/AFTER COMMENTS\XXXXXX.DWG



Storm Water Line 6 PROFILE



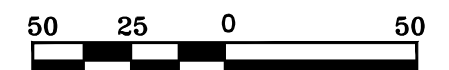
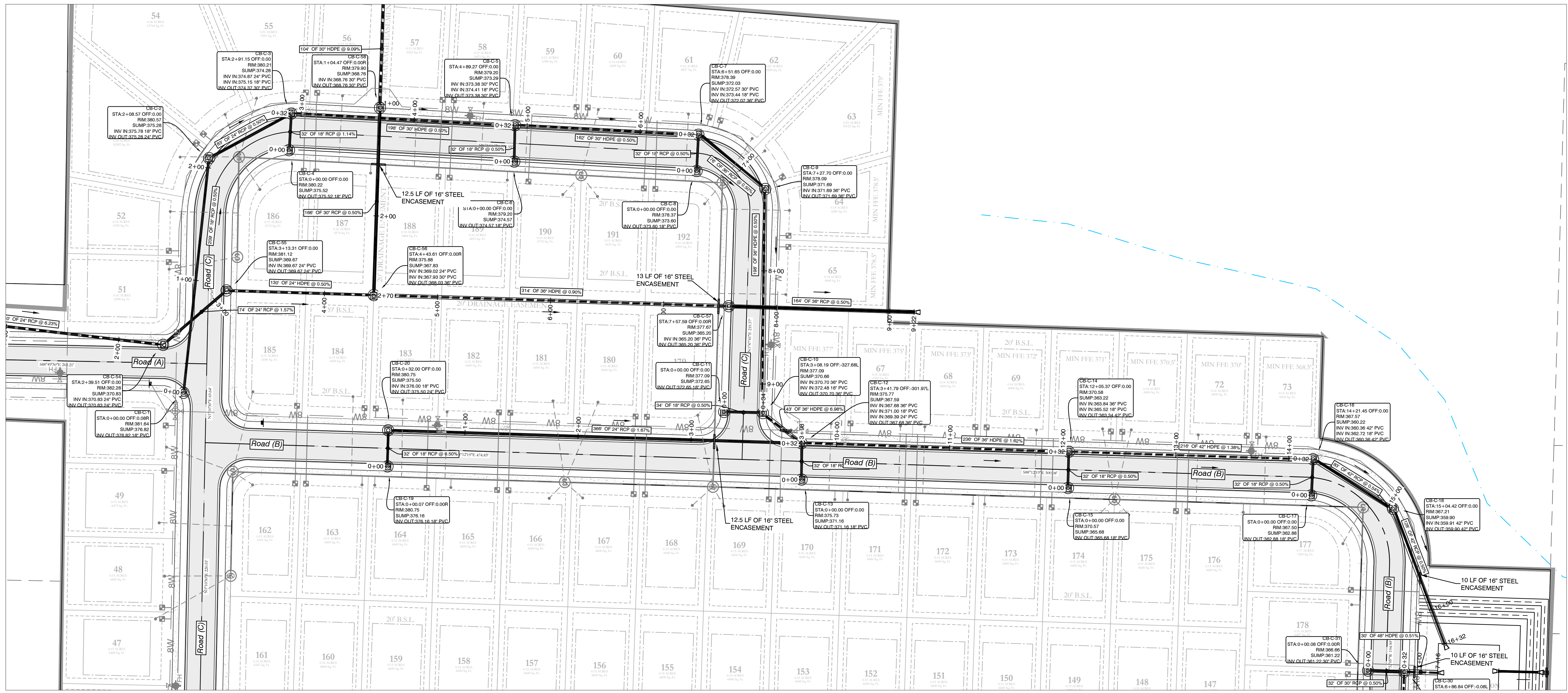
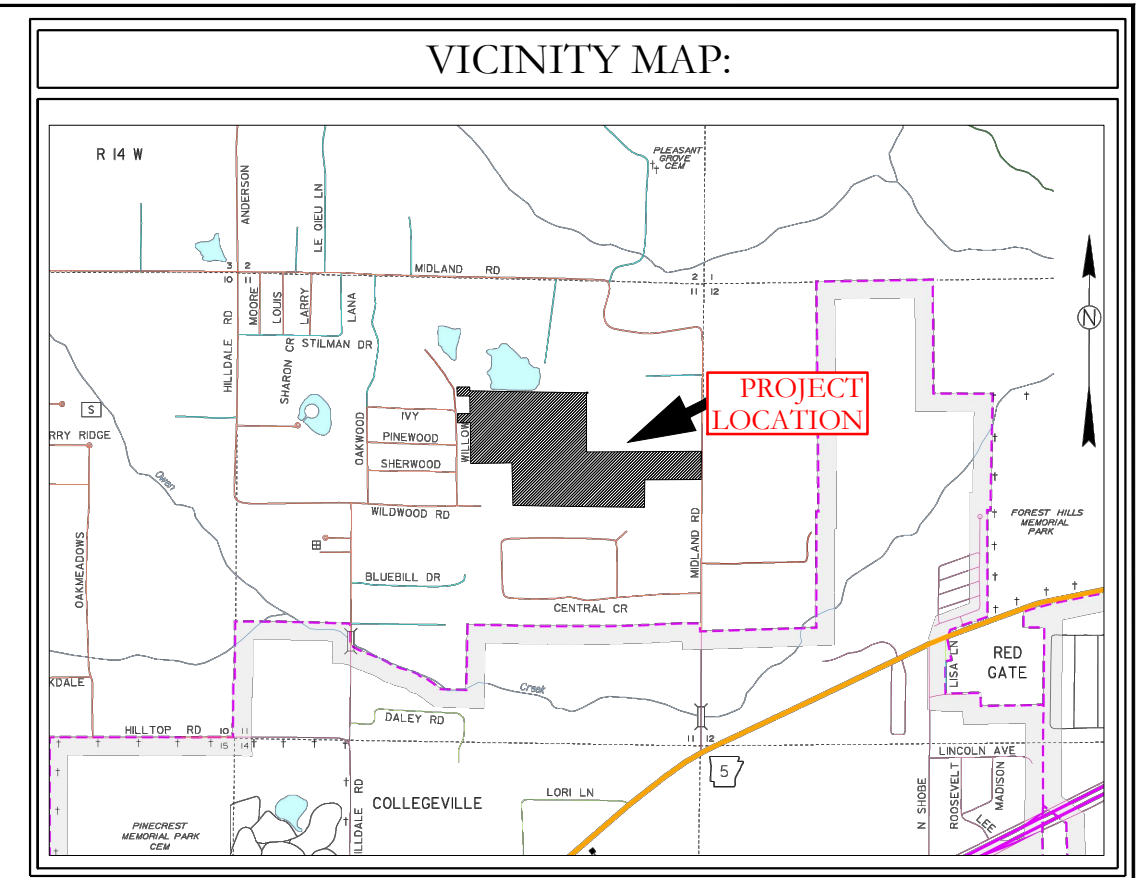
Storm Water Line 7 PROFILE



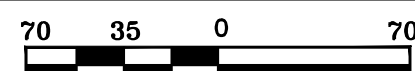
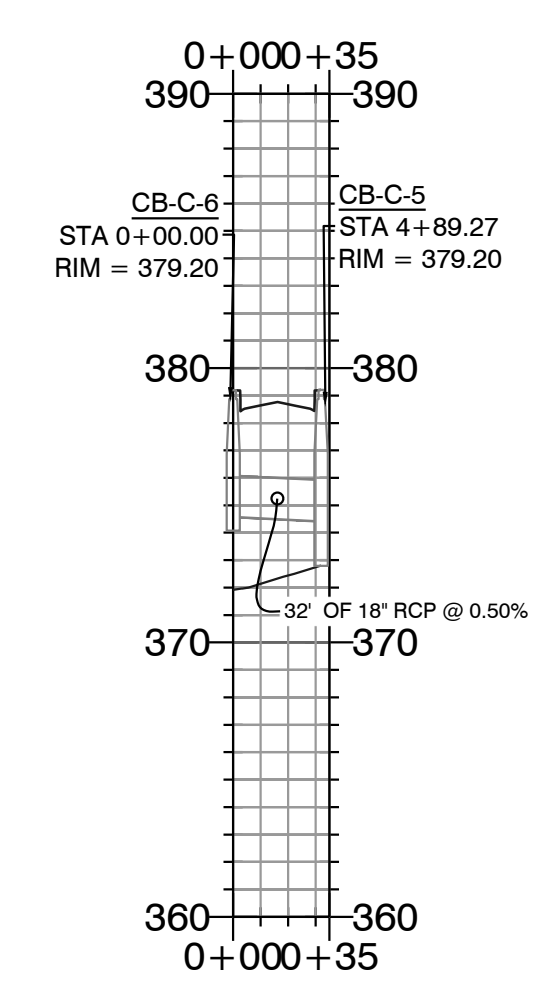
HOPE CONSULTING ENGINEERS - SURVEYORS
 129 North Main Street, Benton, Arkansas 72015
 PH. (501) 315-2626 FAX (501) 315-0024
 www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
DRAINAGE PROFILES MIDLAND ROAD BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY: xxxx	DRAWING NUMBER: 23-0024
REVISED:	CHECKED BY:	
SHEET: C-6.4	SCALE: as shown	

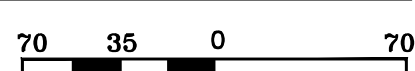
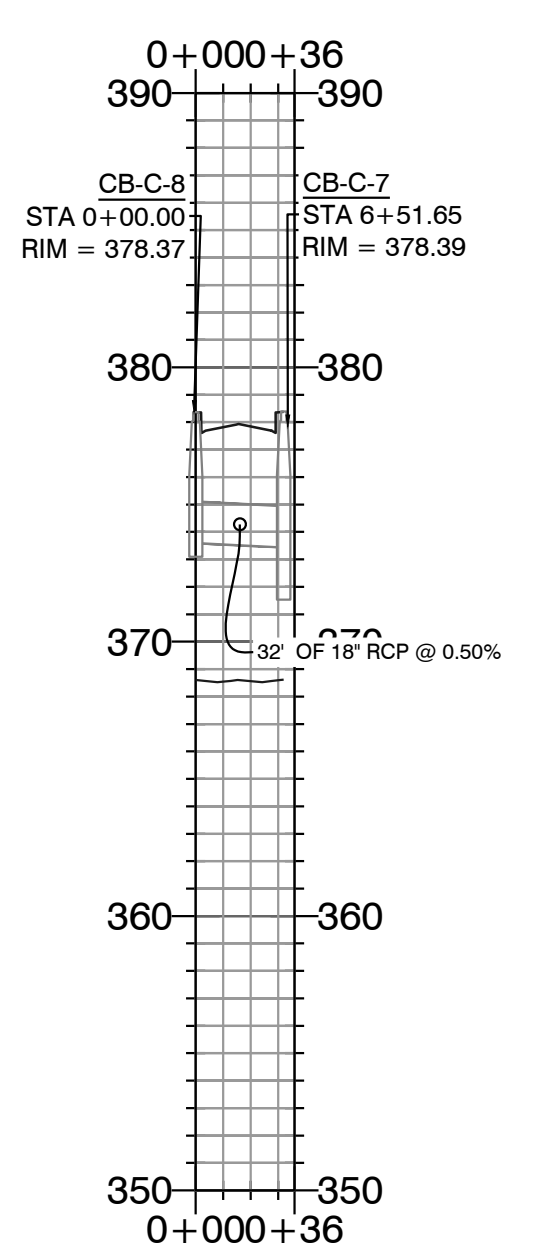
K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S MIDLAND ROAD\SUBDIVISION\11\T.S.RAW\CIVIL\DWG\23-0024.CONSTRUCTION.PLAN (FINAL DRAFT)/AFTER COMMENTS\XXXXXX.DWG



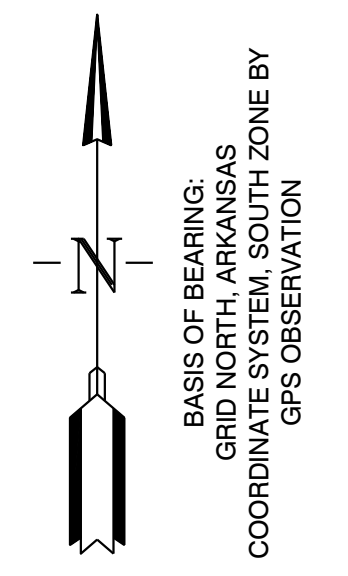
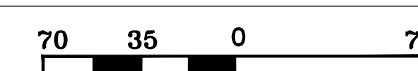
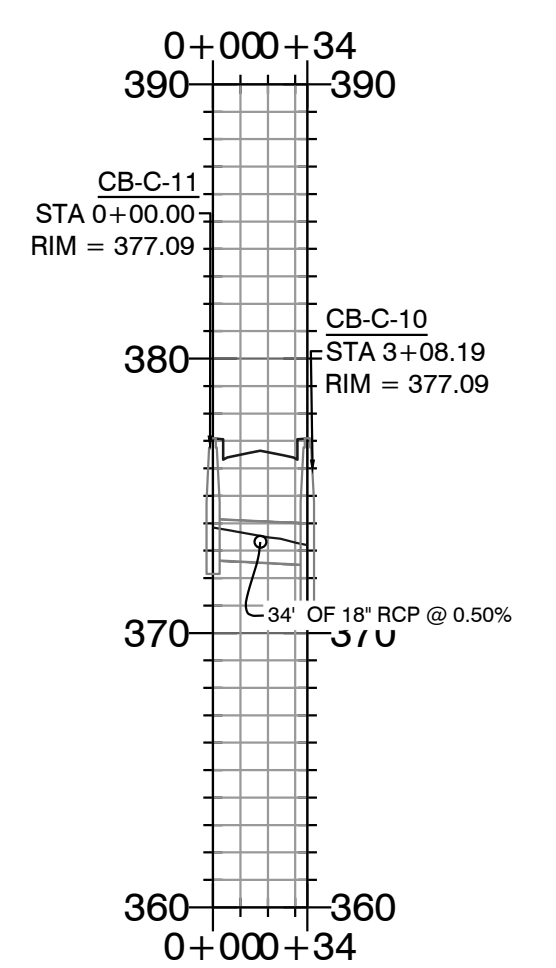
Storm Water Line 8 PROFILE



Storm Water Line 9 PROFILE



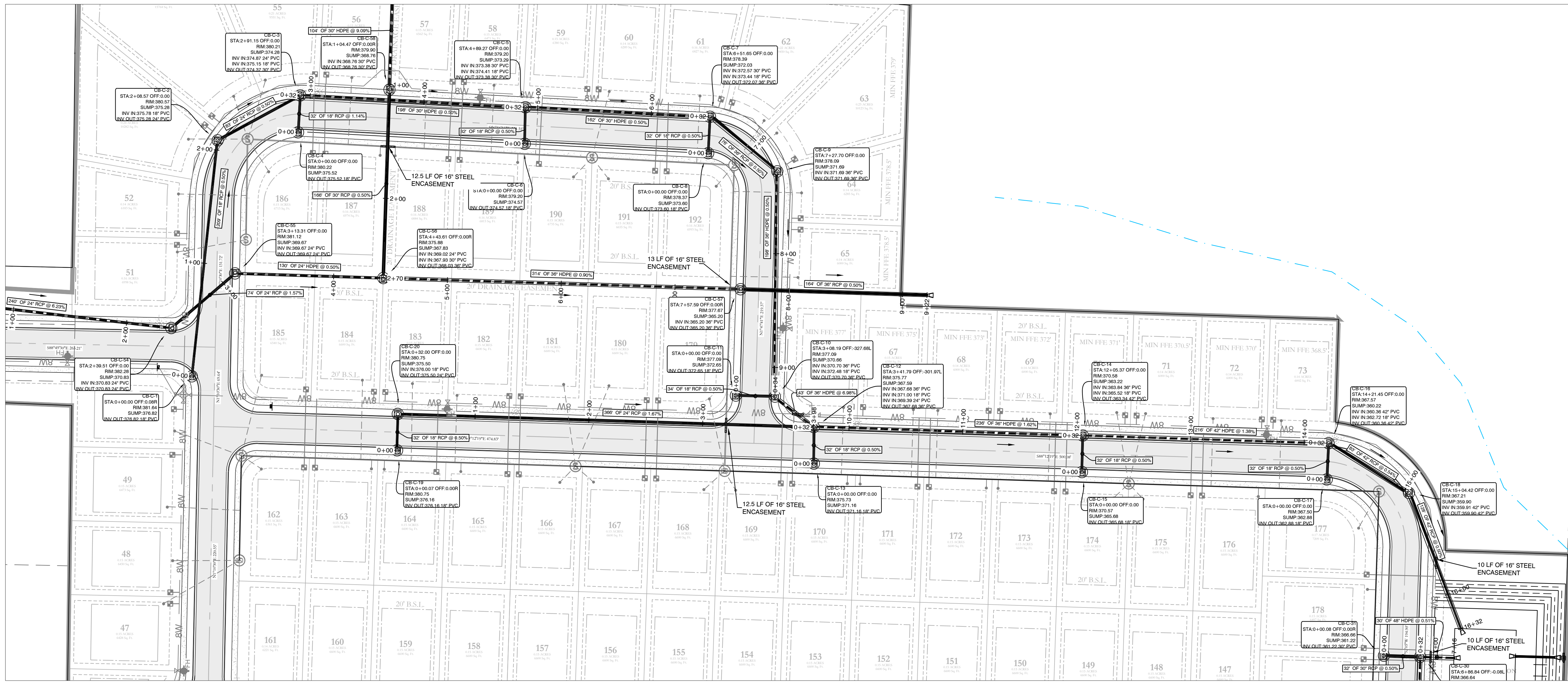
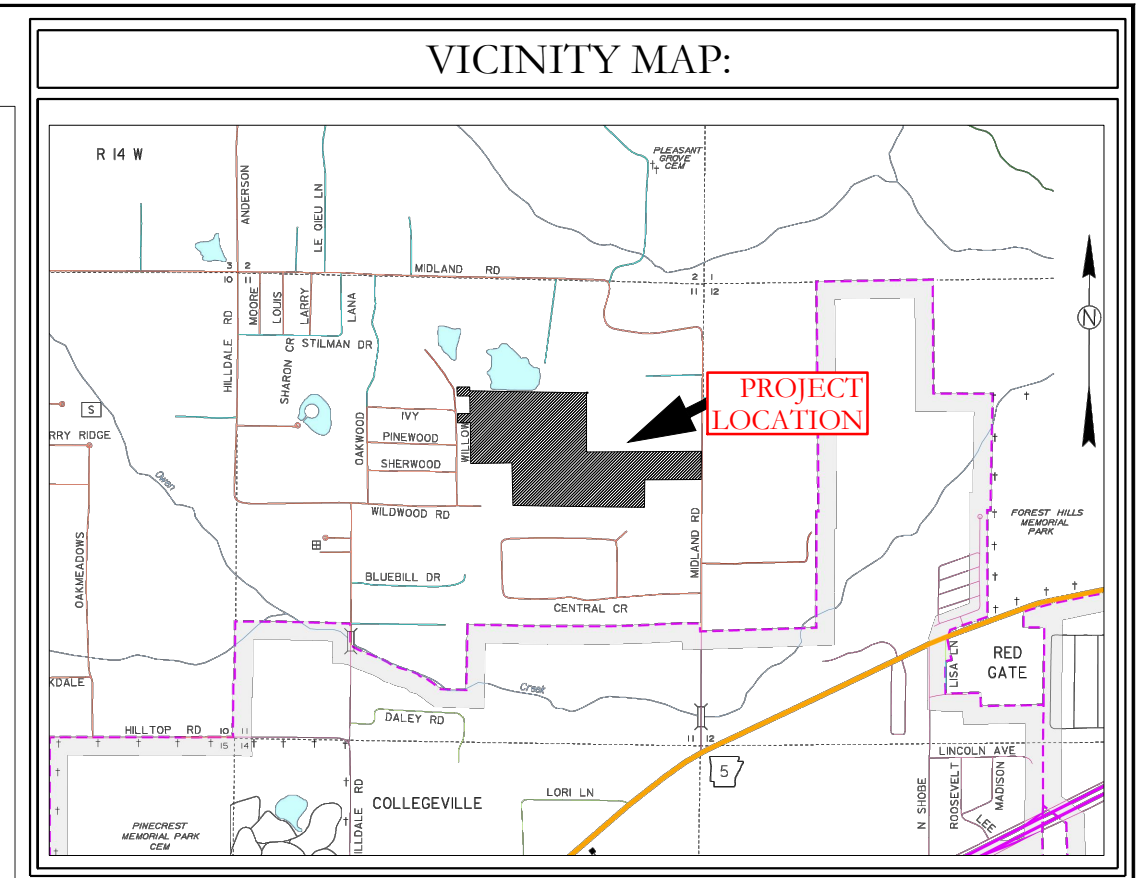
Storm Water Line 10 PROFILE



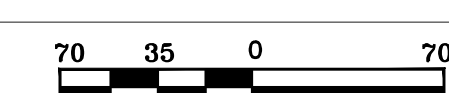
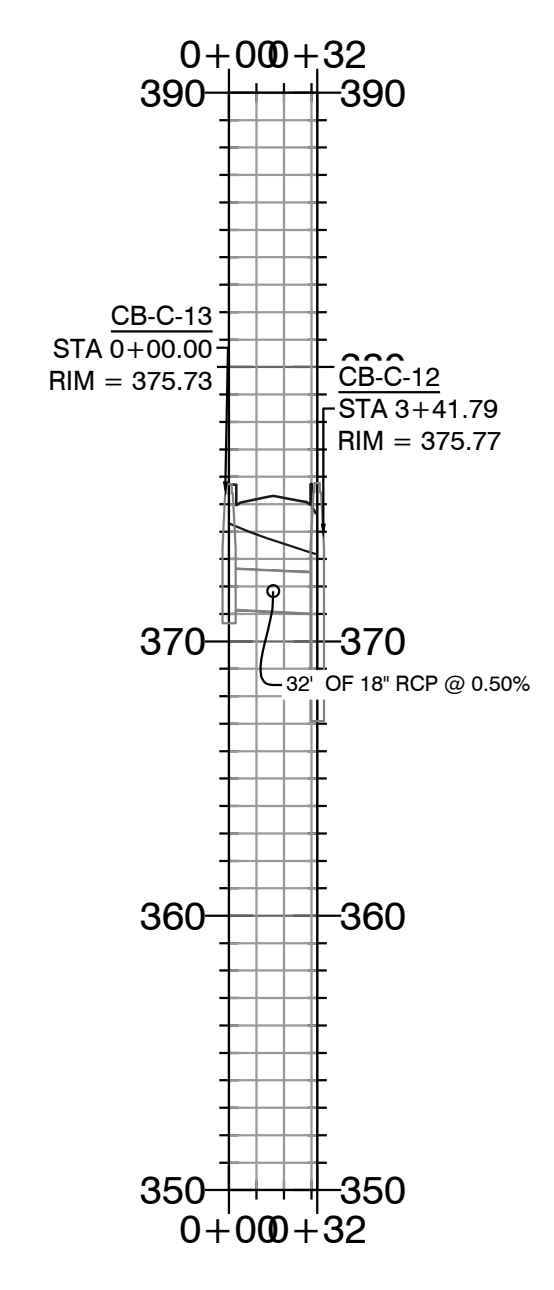
HOPE CONSULTING ENGINEERS - SURVEYORS
 129 North Main Street, Benton, Arkansas 72015
 PH. (501)315-2626 FAX (501) 315-0024
 www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
DRAINAGE PROFILES MIDLAND ROAD BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY: xxxx	DRAWING NUMBER: 23-0024
REVISED:	CHECKED BY:	
SHEET: C-6.5	SCALE: as shown	

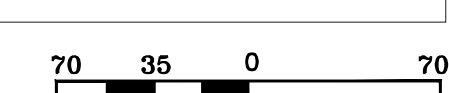
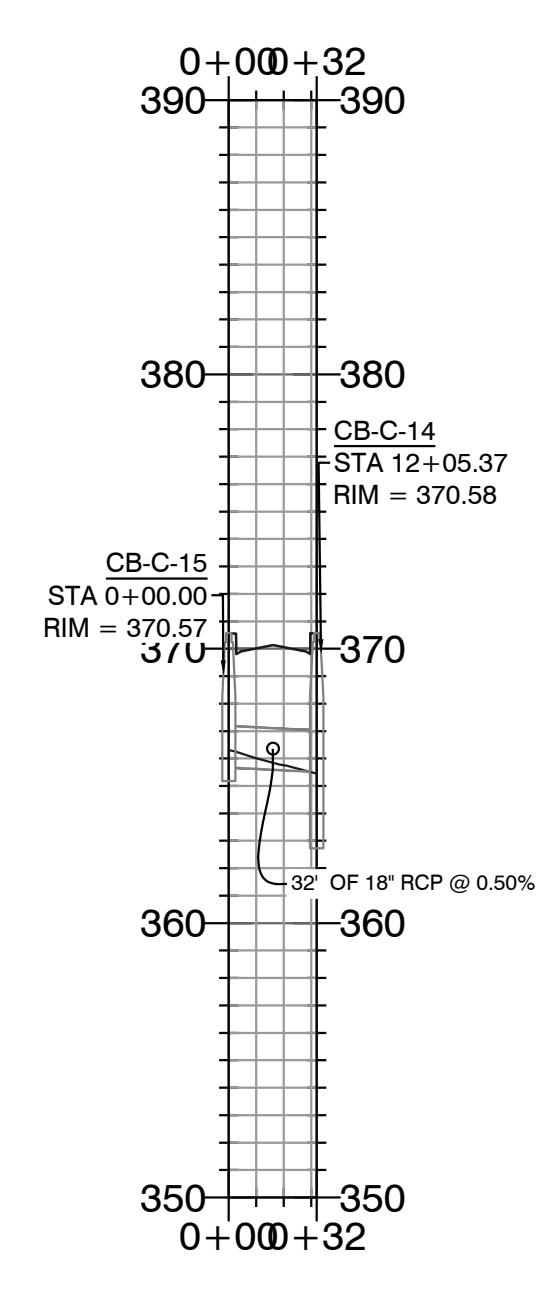
K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S MIDLAND ROAD SUBDIVISION\SET\TITS\RAW\CIVIL\DWG\23-0024.CONSTRUCTION.PLAN (FINAL DRAFT)/AFTER COMMENTS\XXXXXX.DWG



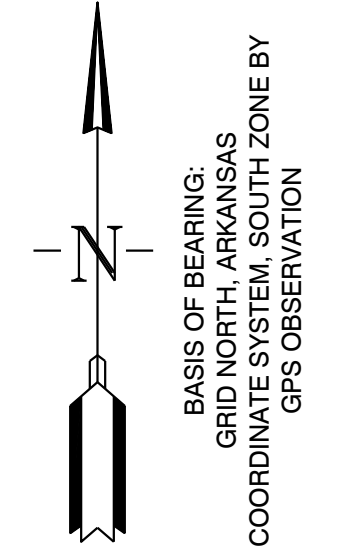
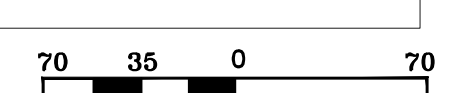
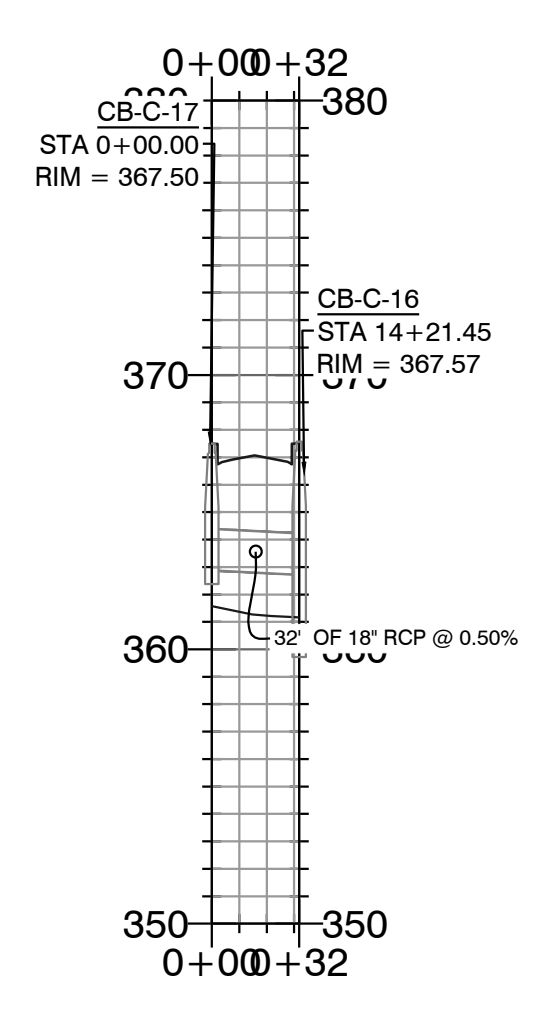
Storm Water Line 11 PROFILE



Storm Water Line 12 PROFILE



Storm Water Line 13 PROFILE

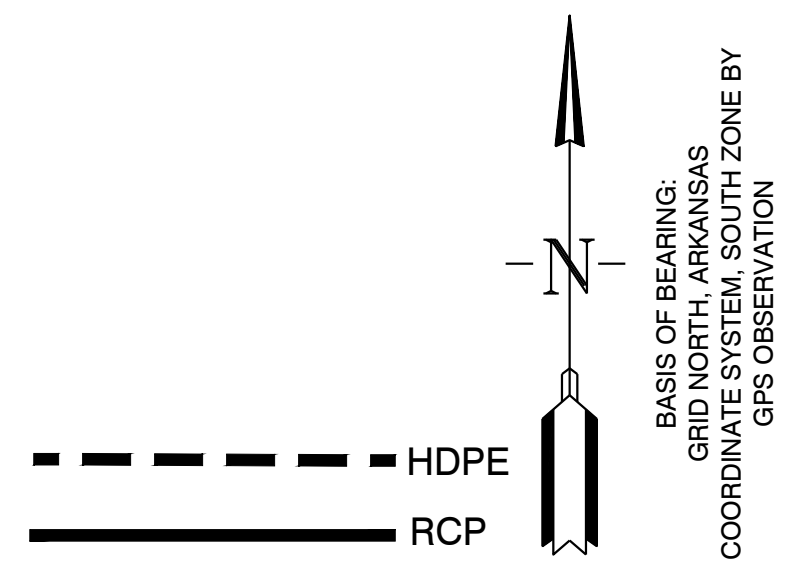
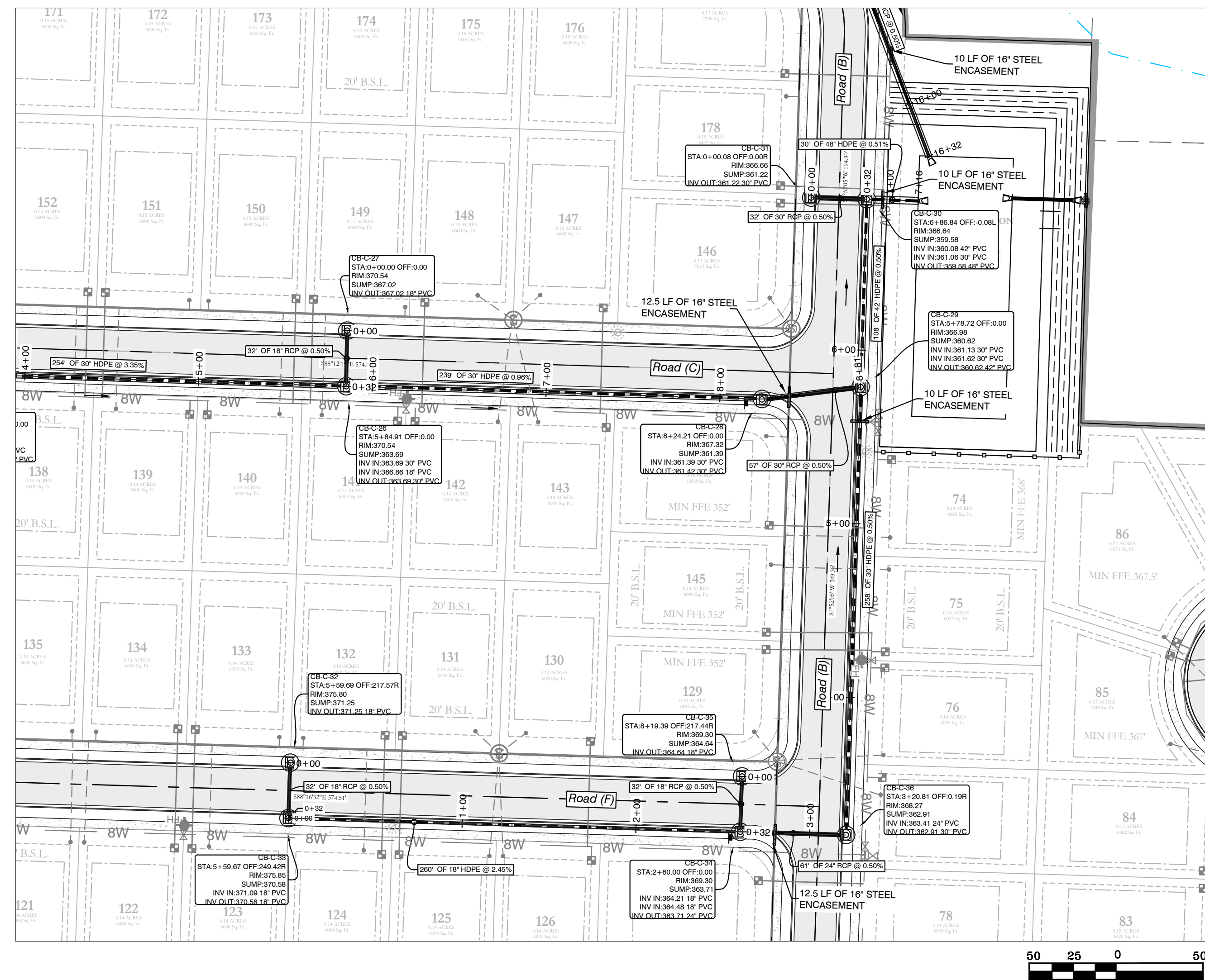
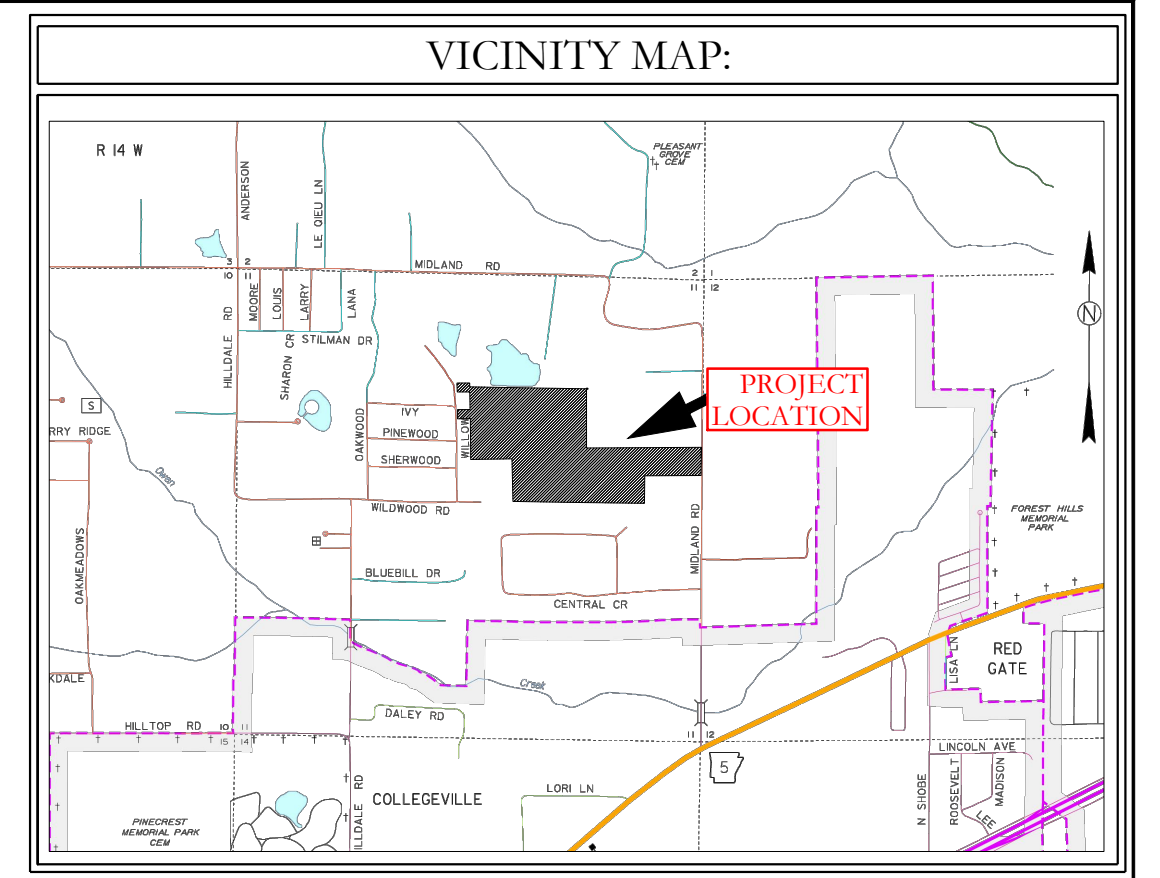


HOPE CONSULTING
ENGINEERS - SURVEYORS

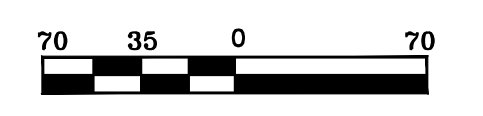
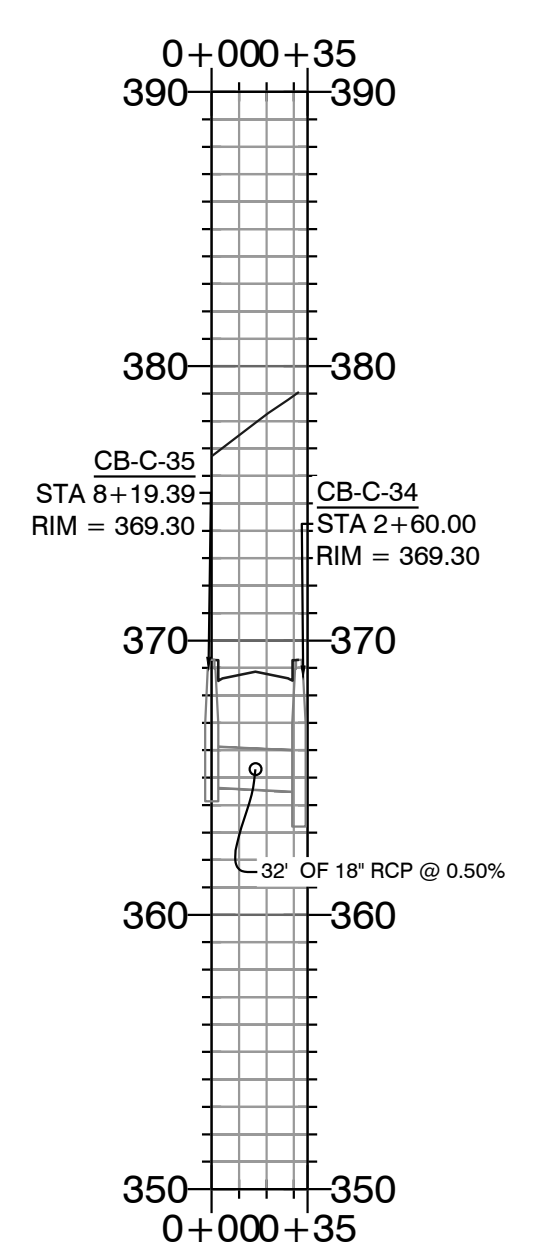
129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT LLC		
DRAINAGE PROFILES MIDLAND ROAD BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY: xxxx	DRAWING NUMBER: 23-0024
REVISED:	CHECKED BY:	
SHEET: C-6.6	SCALE: as shown	

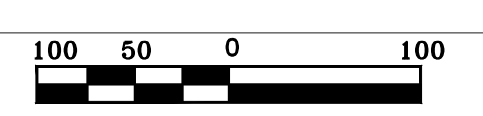
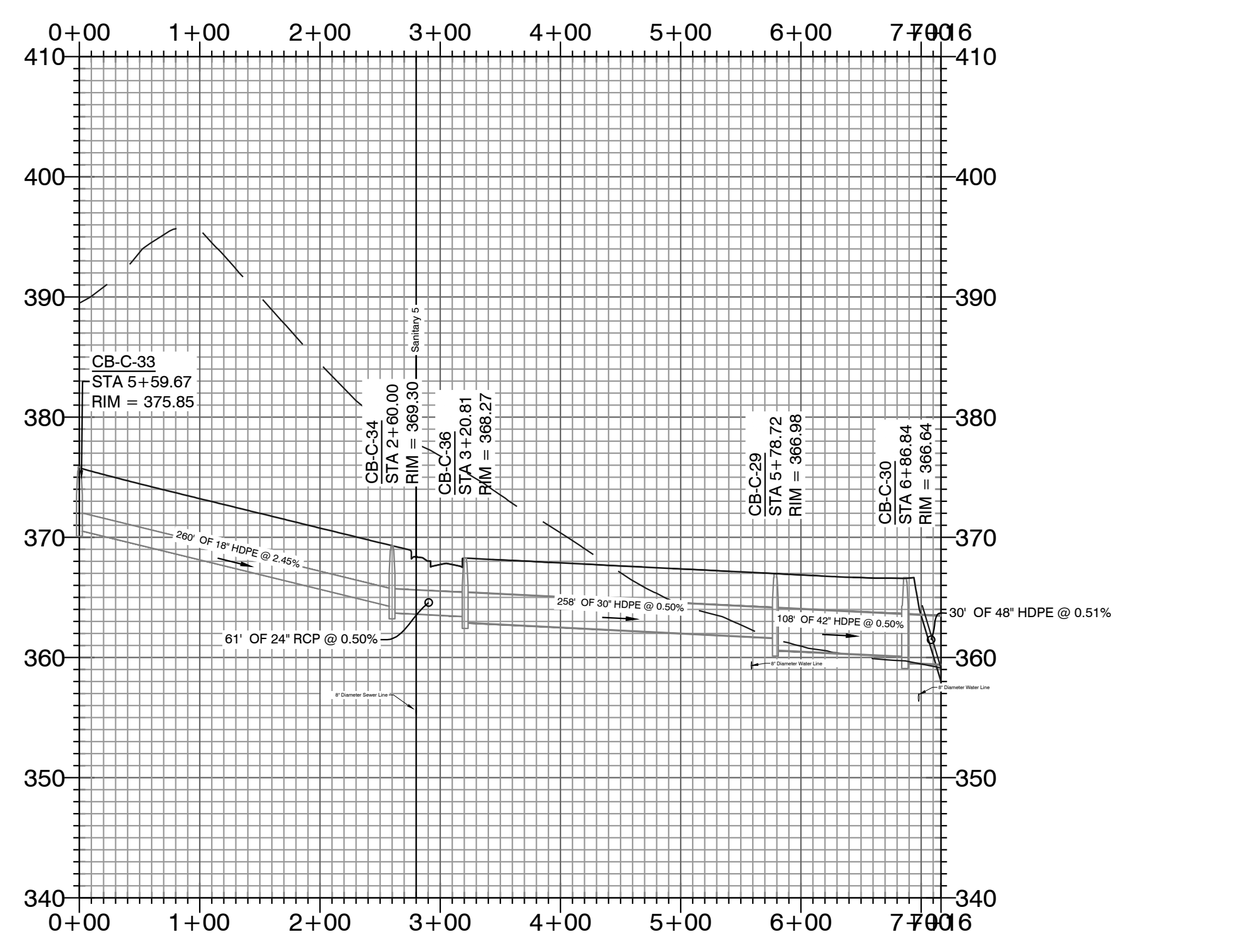
K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S MIDLAND ROAD SUBDIVISION\SET\T.S.\RAW\CIVIL\DWG\23-0024.CONSTRUCTION.PLAN (FINAL DRAFT)\AFTER COMMENTS\XXXXXX.DWG



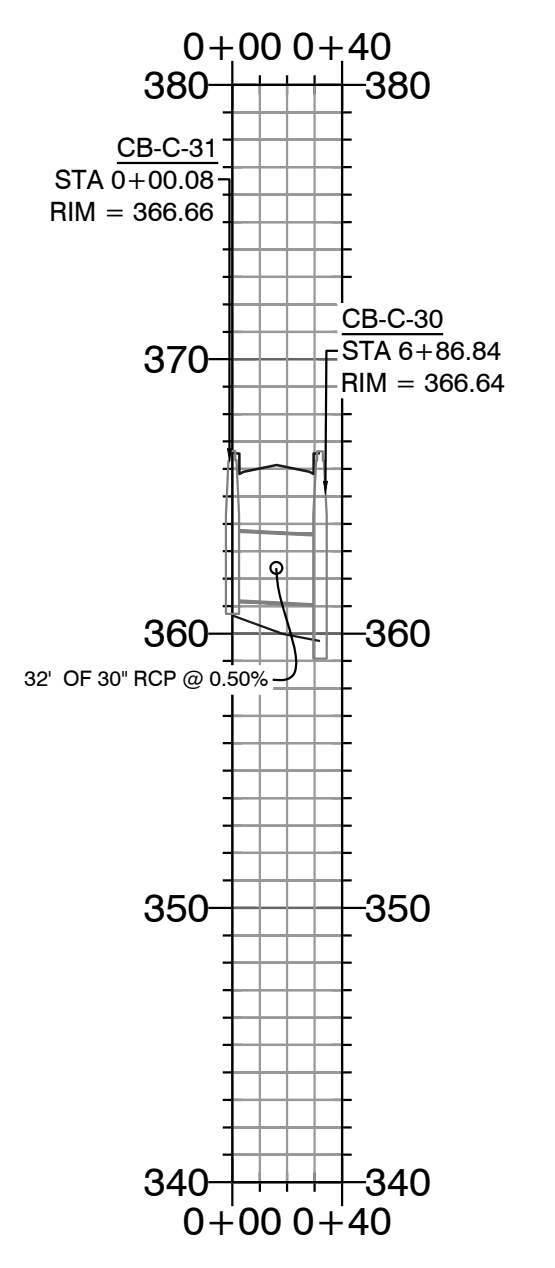
Storm Water Line 29 PROFILE



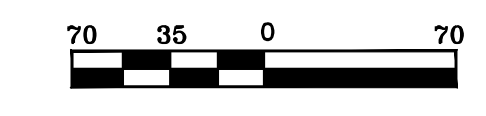
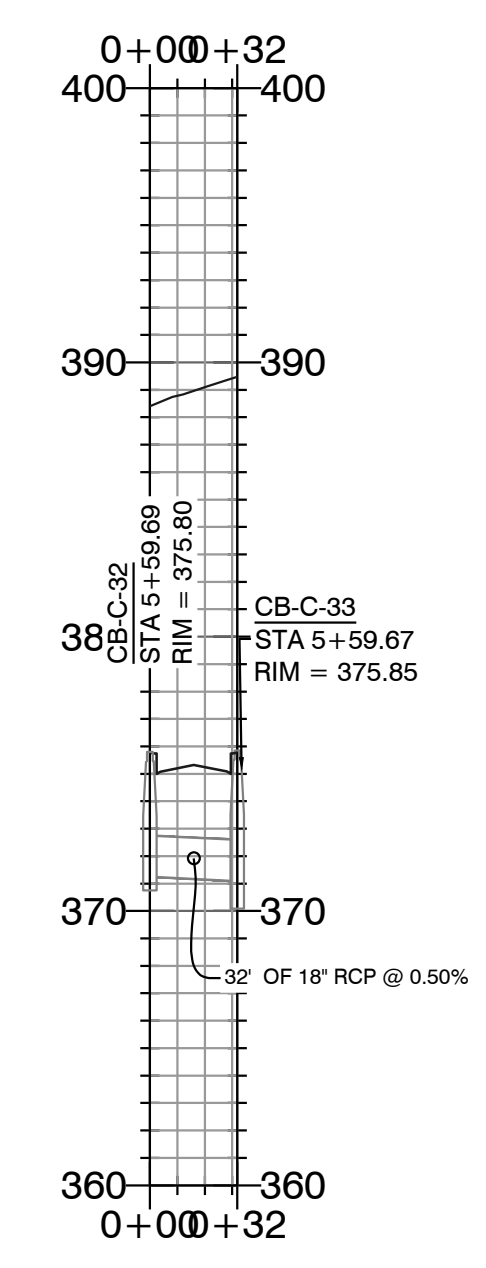
Storm Water Line 14 PROFILE



Storm Water Line 15 PROFILE



Storm Water Line 27 PROFILE



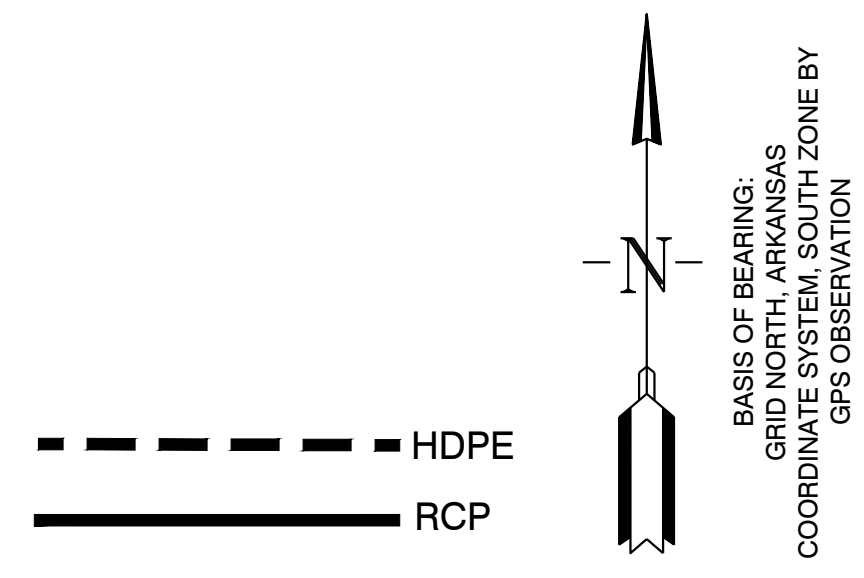
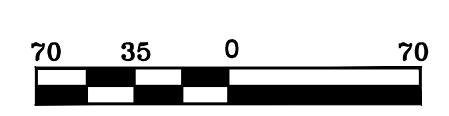
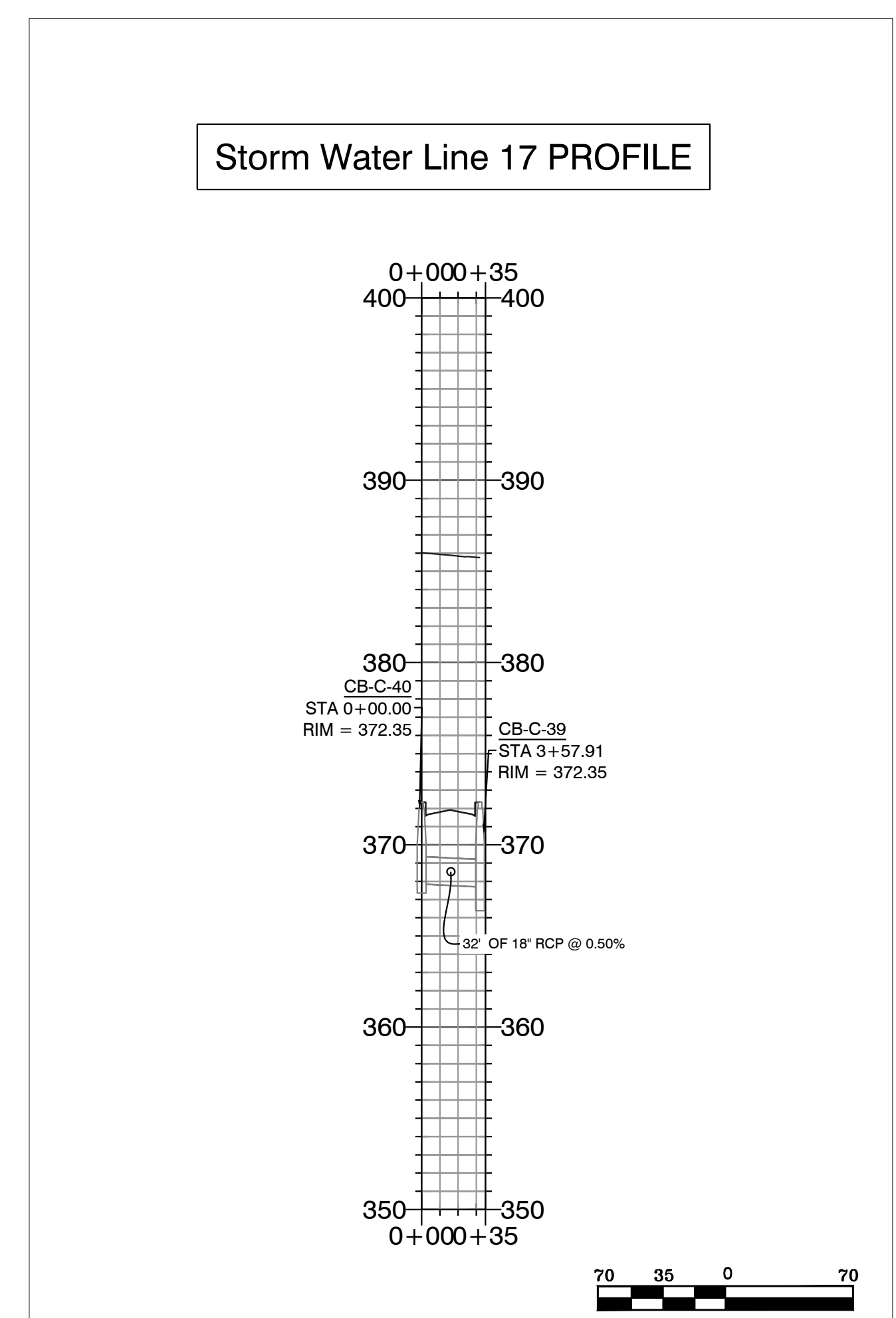
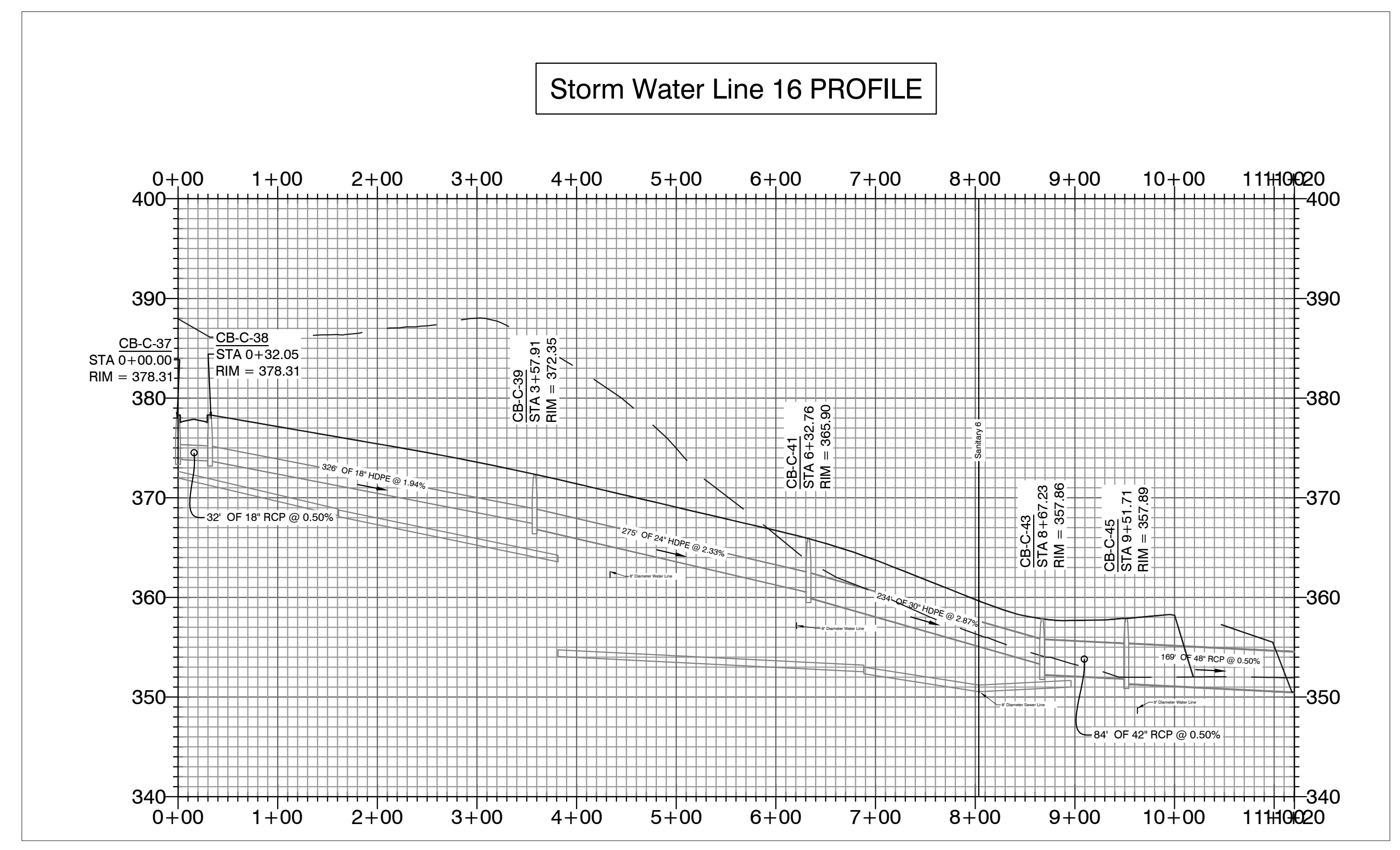
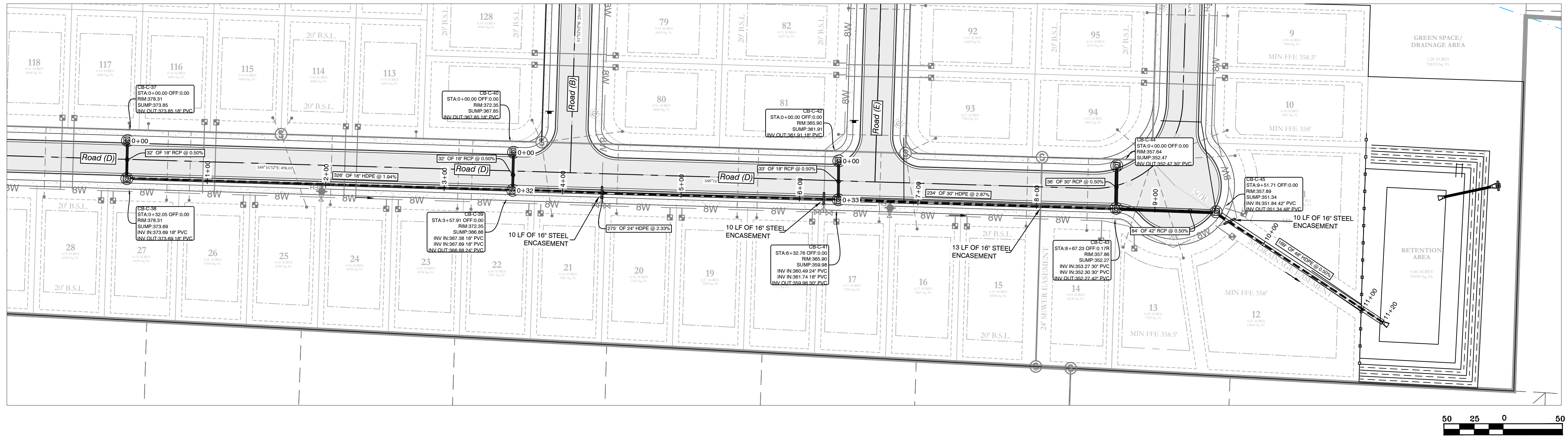
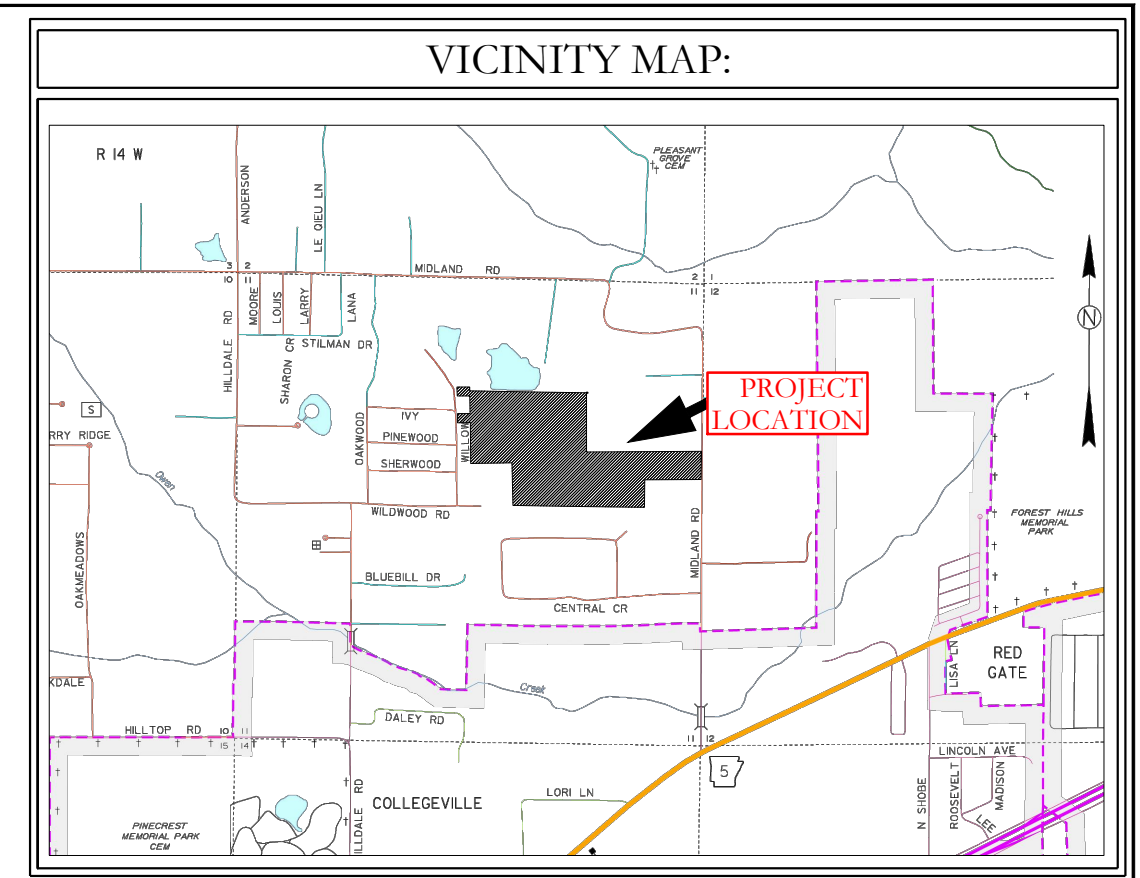
HOPE CONSULTING
ENGINEERS - SURVEYORS
129 North Main Street,
Benton, Arkansas 72015
PH. (501) 315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
HAVEN'S DEVELOPMENT, LLC

DRAINAGE PROFILES
MIDLAND ROAD
BRYANT, SALINE COUNTY, ARKANSAS

DATE: 5/23/2023	C.A.D. BY: xxxx	DRAWING NUMBER: 23-0024
REVISED:	CHECKED BY:	
SHEET: C-6.7	SCALE: as shown	

K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S MIDLAND ROAD\SUBDIVISION\SET\T'S\RAW\CIVIL\DWG\23-0024.CONSTRUCTION.PLAN (FINAL DRAFT)/AFTER COMMENTS\XXXXXX.DWG

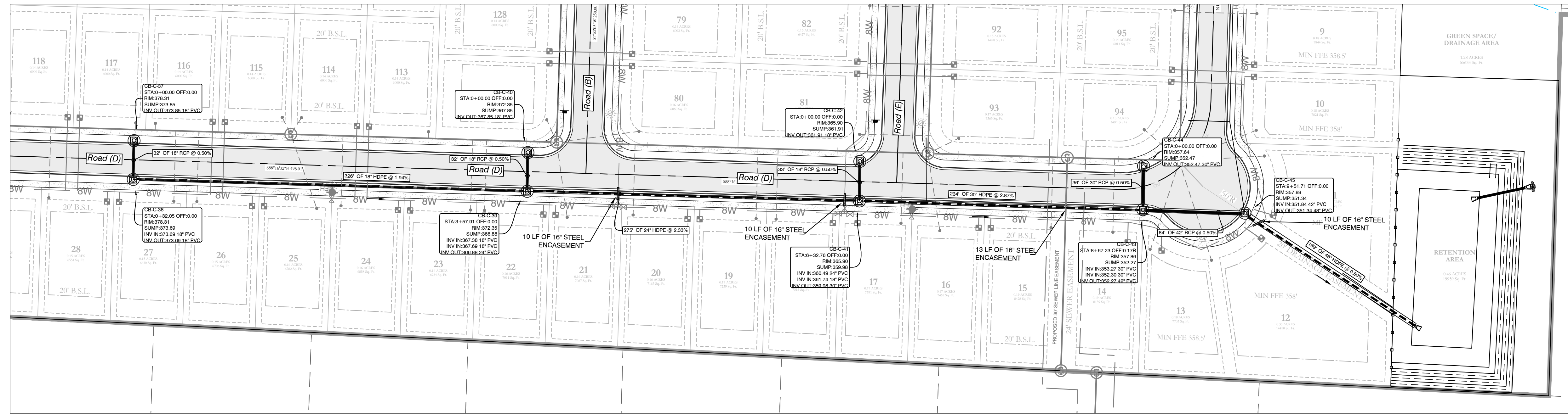
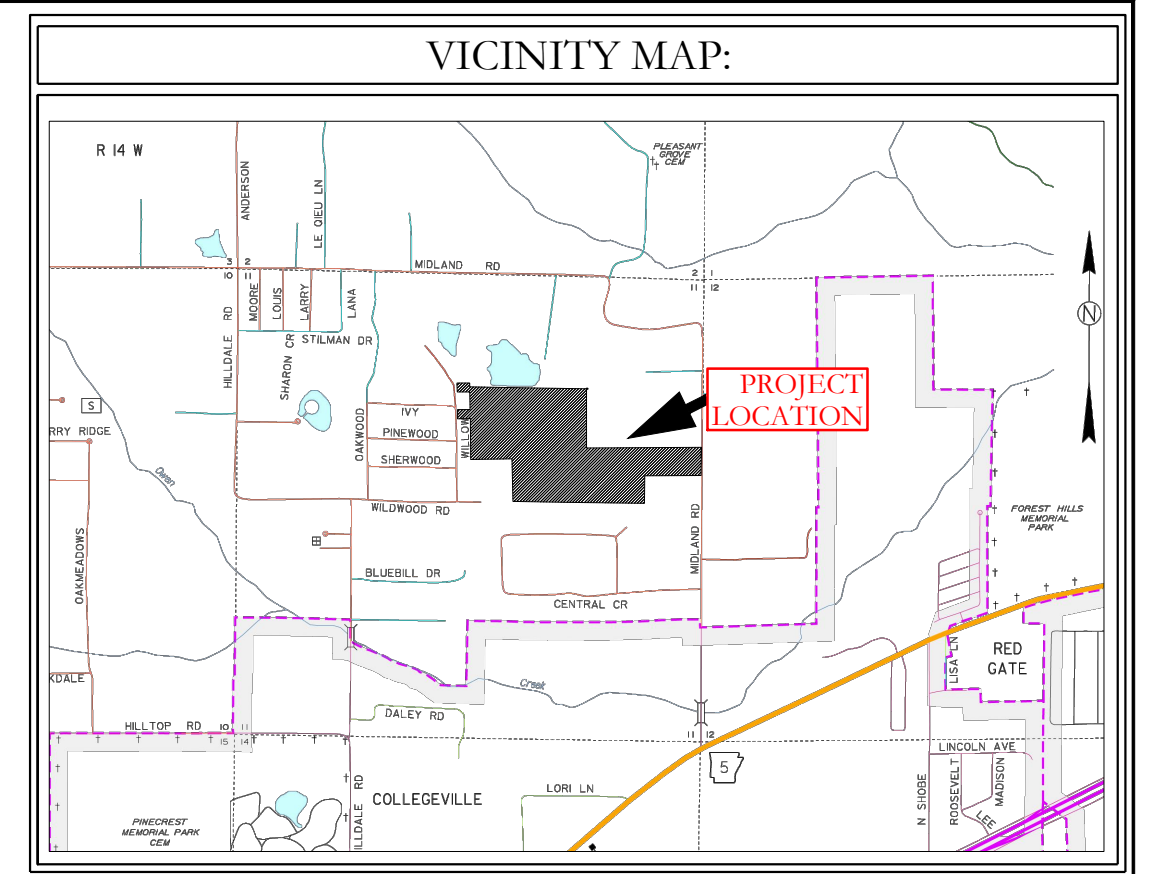


HOPE CONSULTING
ENGINEERS - SURVEYORS

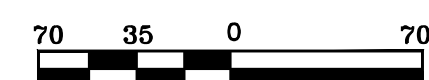
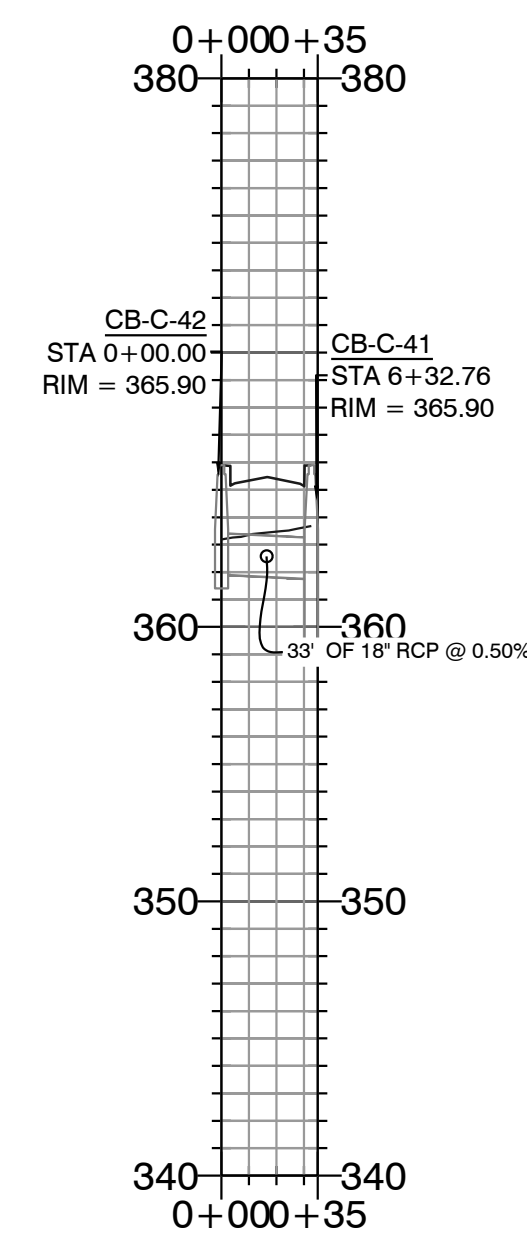
129 North Main Street,
Benton, Arkansas 72015
PH. (501) 315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
DRAINAGE PROFILES MIDLAND ROAD BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY: xxxx	DRAWING NUMBER:
REVISED:	CHECKED BY:	23-0024
SHEET: C-6.8	SCALE: as shown	

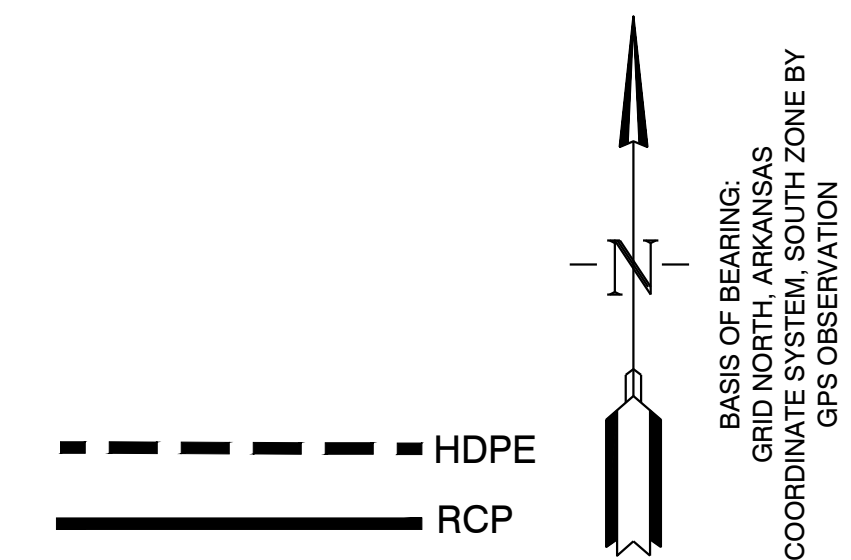
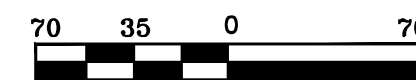
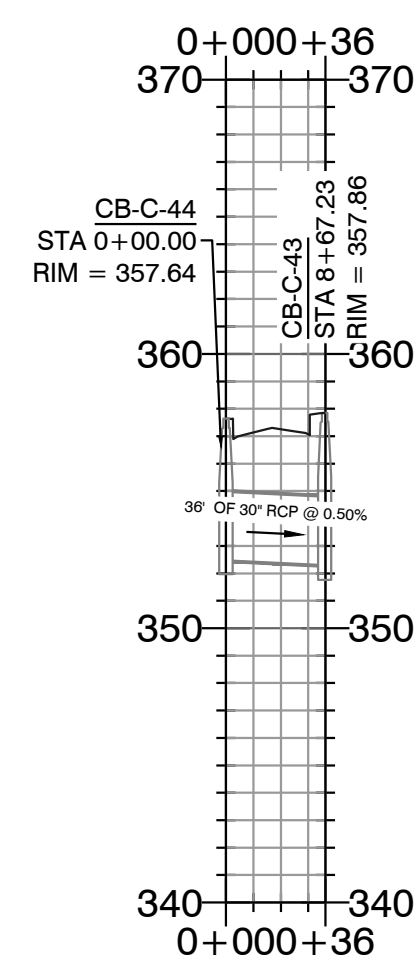
K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S MIDLAND ROAD\SUBDIVISION\11\T'S\RAW\CIVIL\DWG\23-0024.CONSTRUCTION.PLAN (FINAL DRAFT)/AFTER COMMENTS\XXXXXX.DWG



Storm Water Line 18 PROFILE



Storm Water Line 19 PROFILE



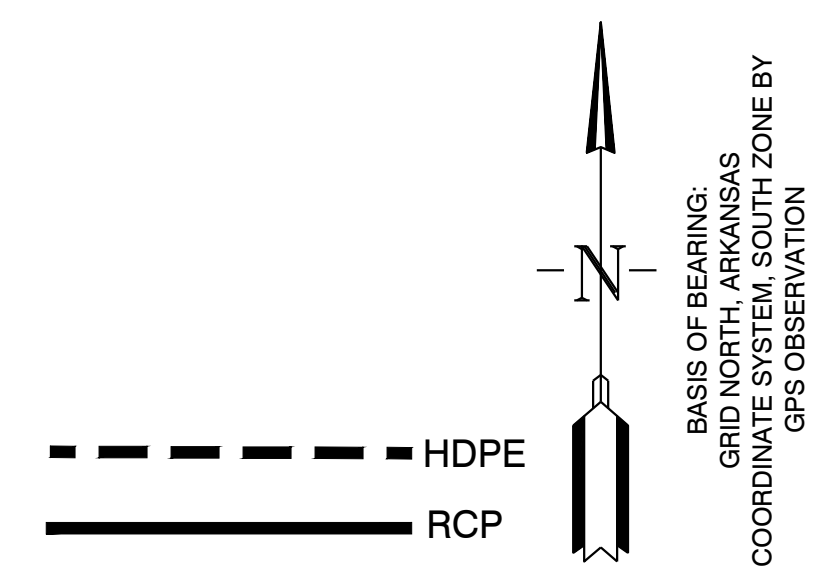
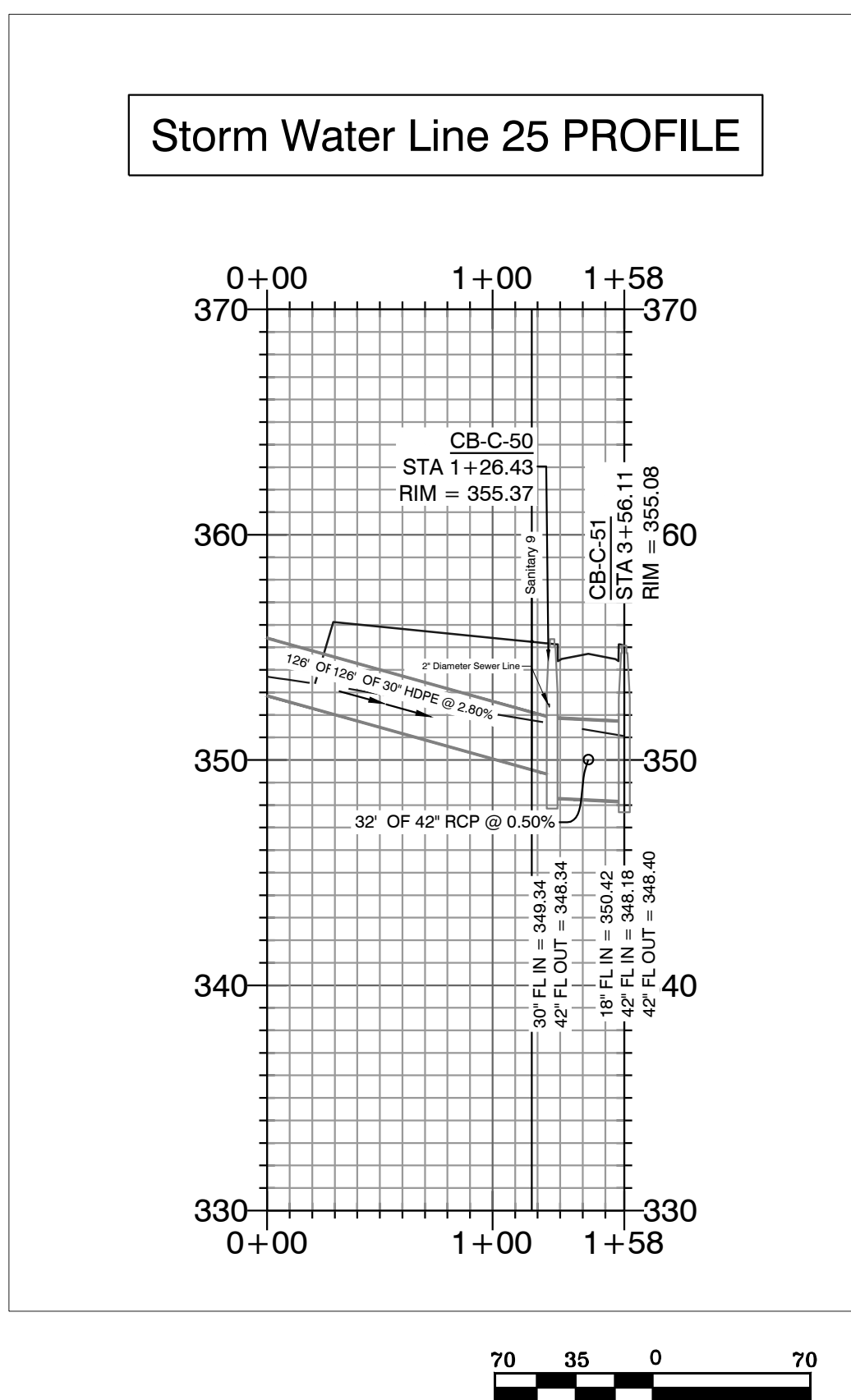
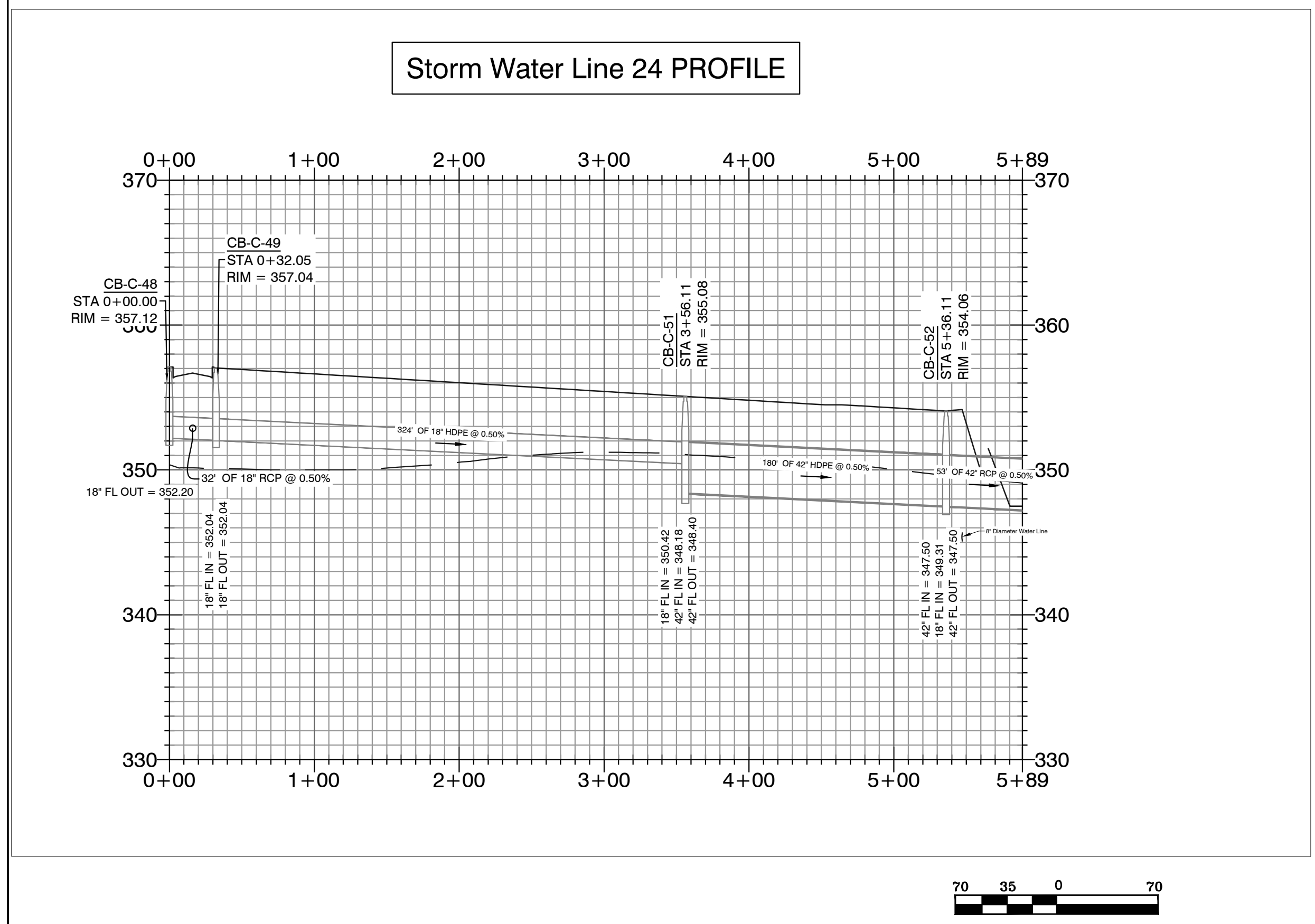
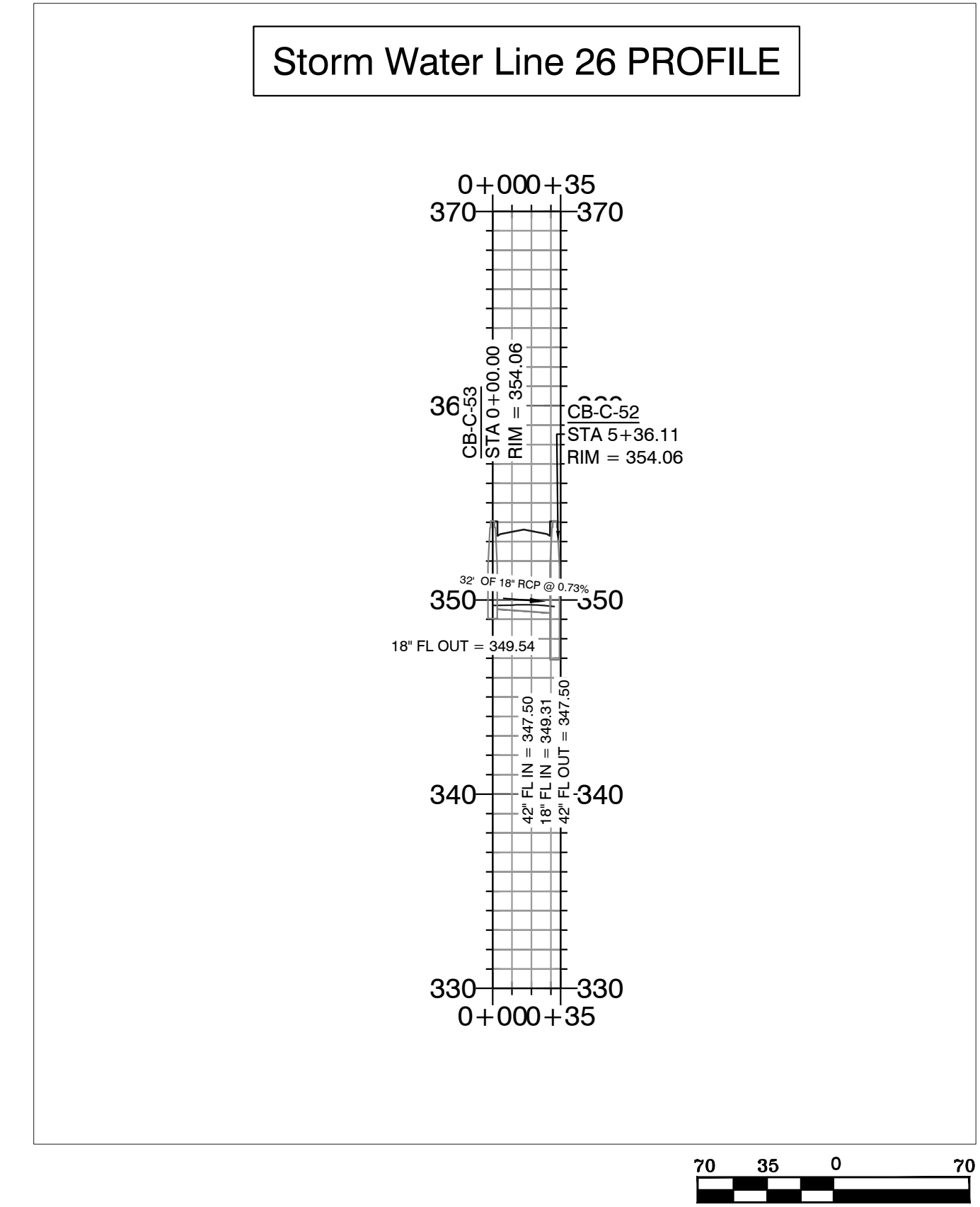
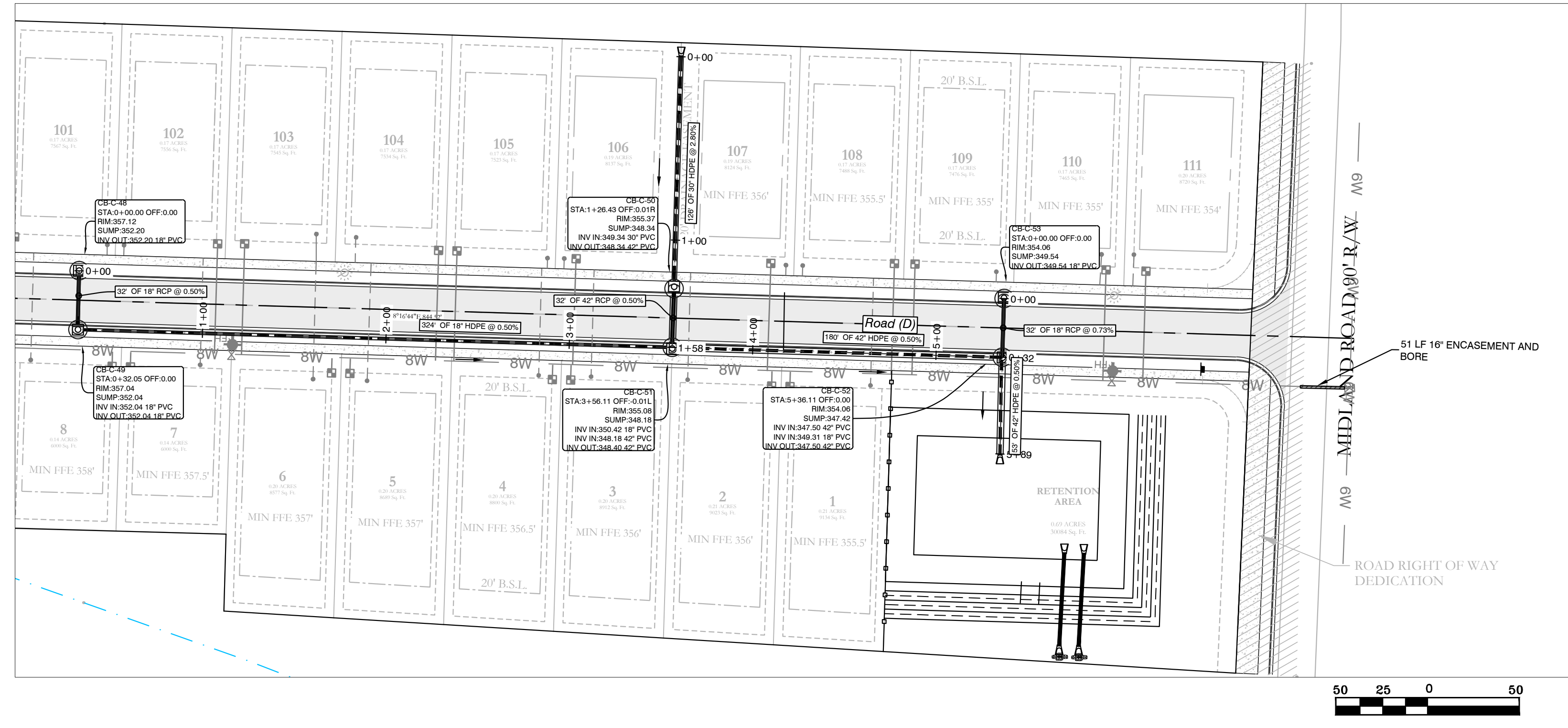
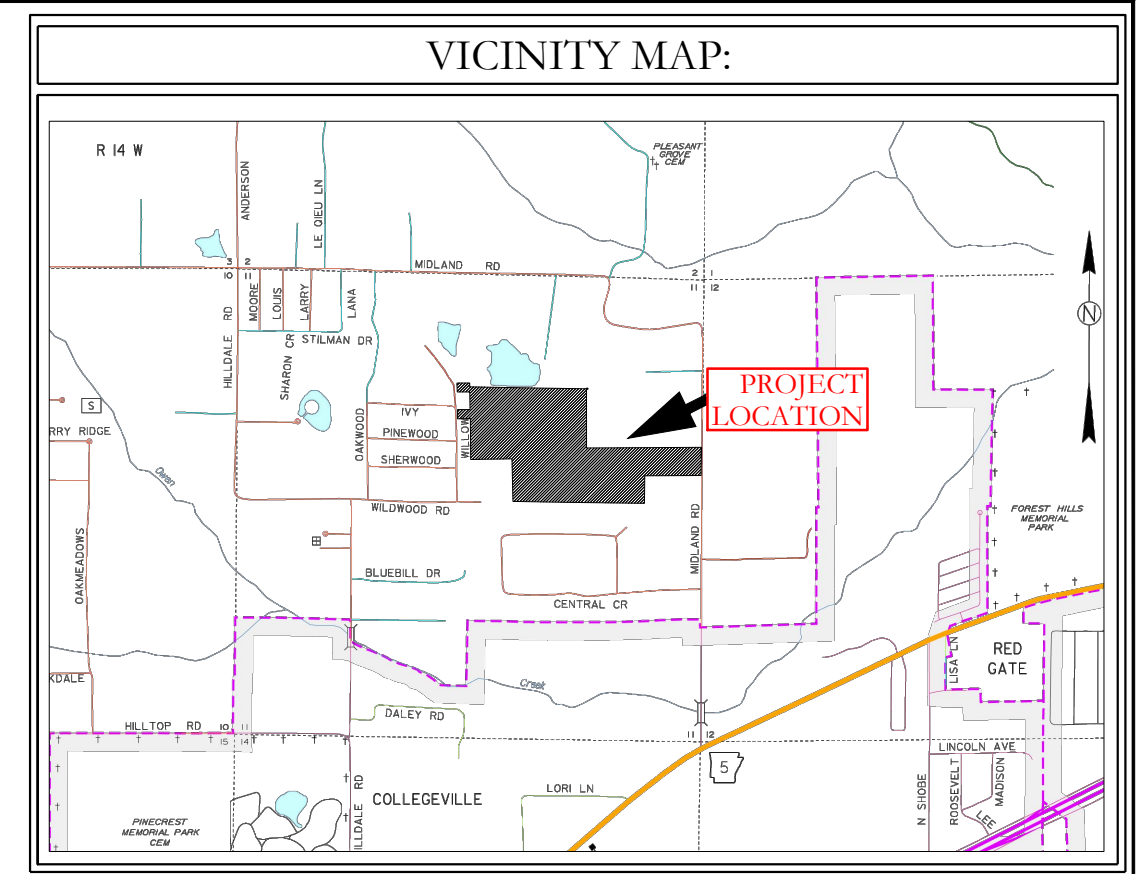
HOPE CONSULTING
ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
HAVEN'S DEVELOPMENT, LLC

DRAINAGE PROFILES
MIDLAND ROAD
BRYANT, SALINE COUNTY, ARKANSAS

DATE:	5/23/2023	C.A.D. BY:	xxxx	DRAWING NUMBER:
REVISED:		CHECKED BY:		23-0024
SHEET:	C-6.9	SCALE:	as shown	

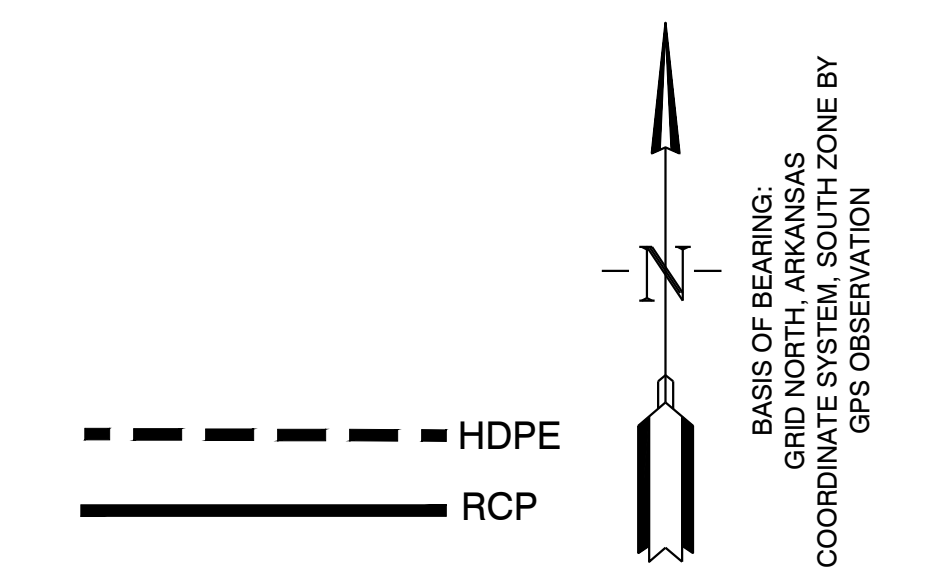
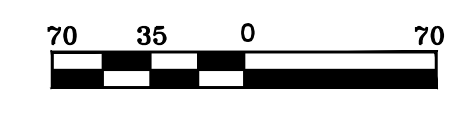
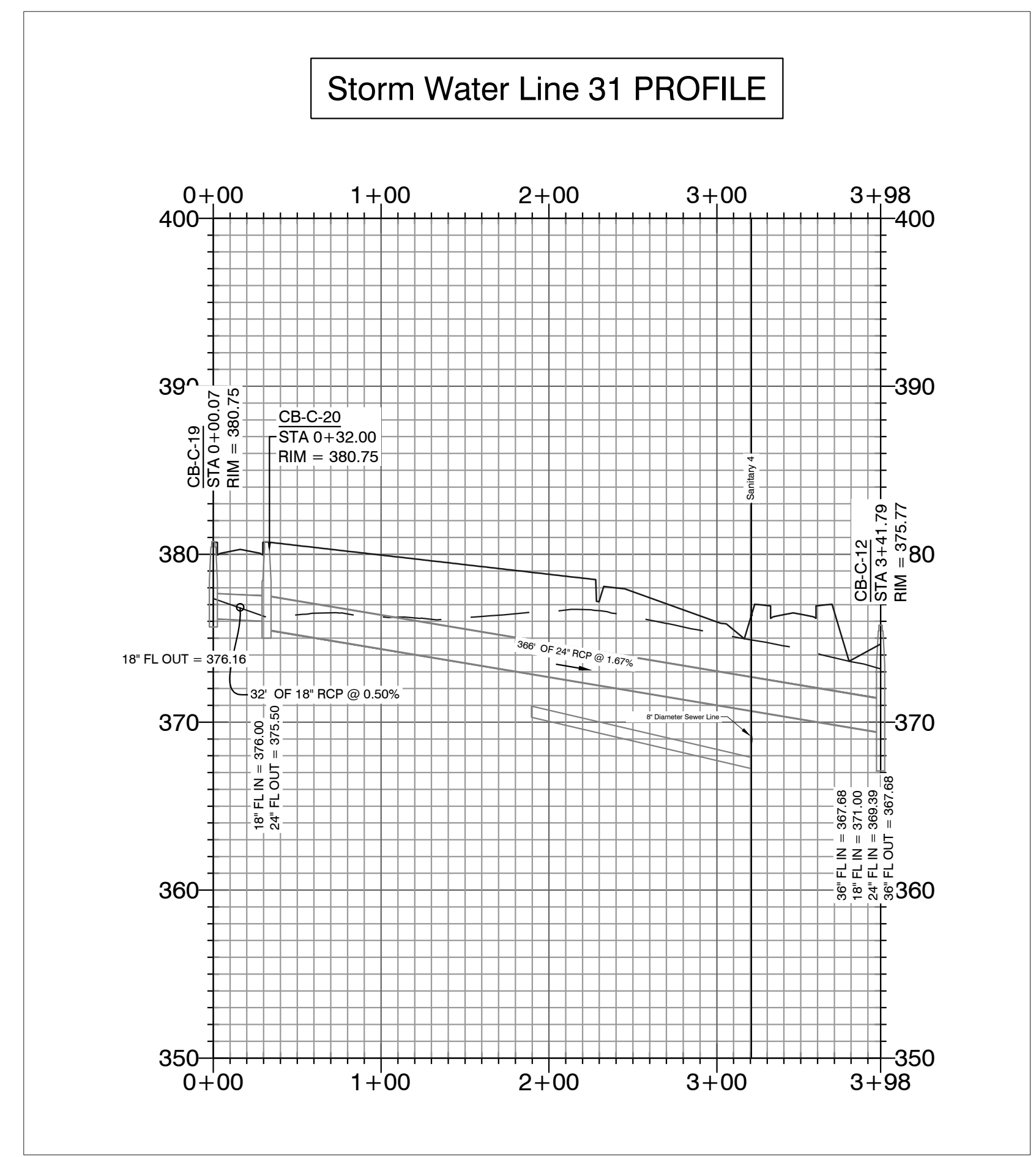
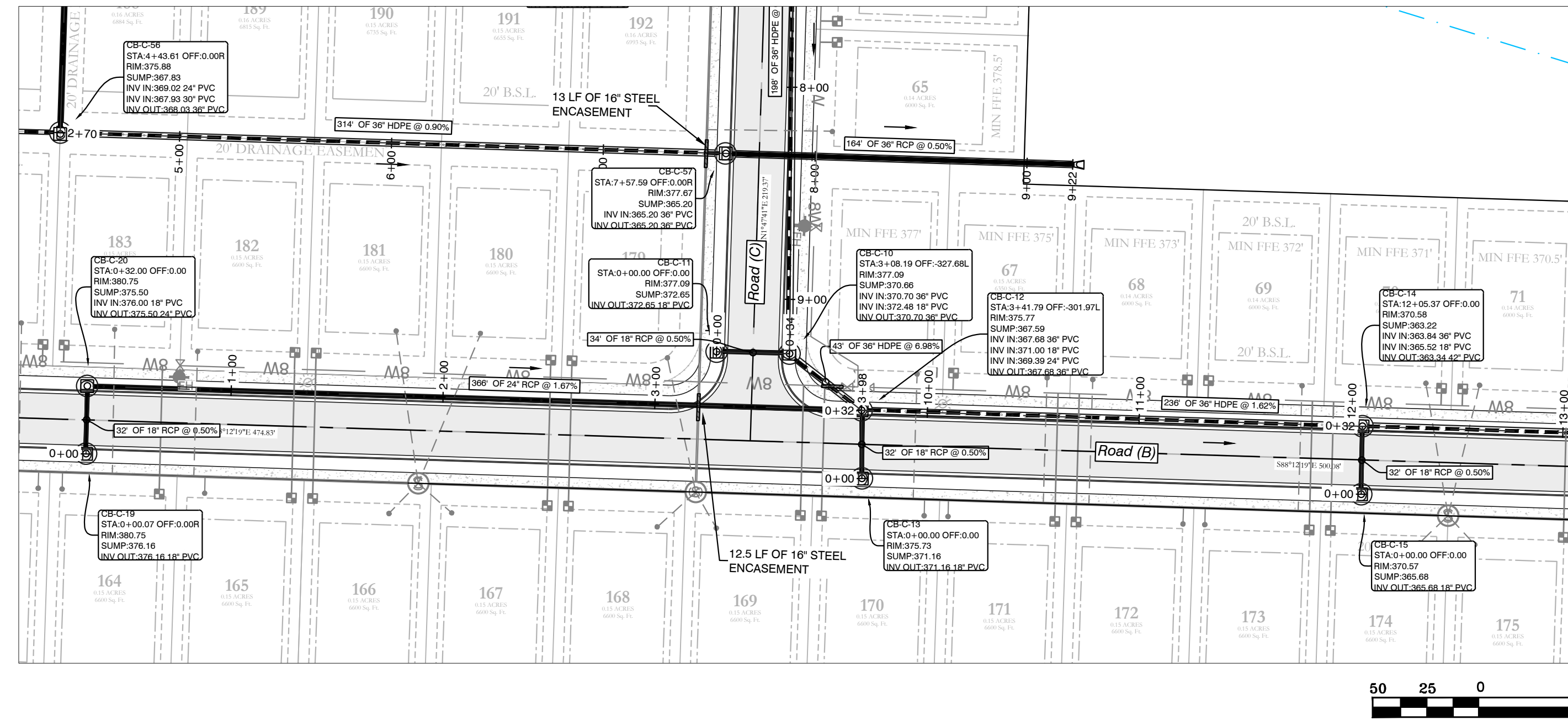
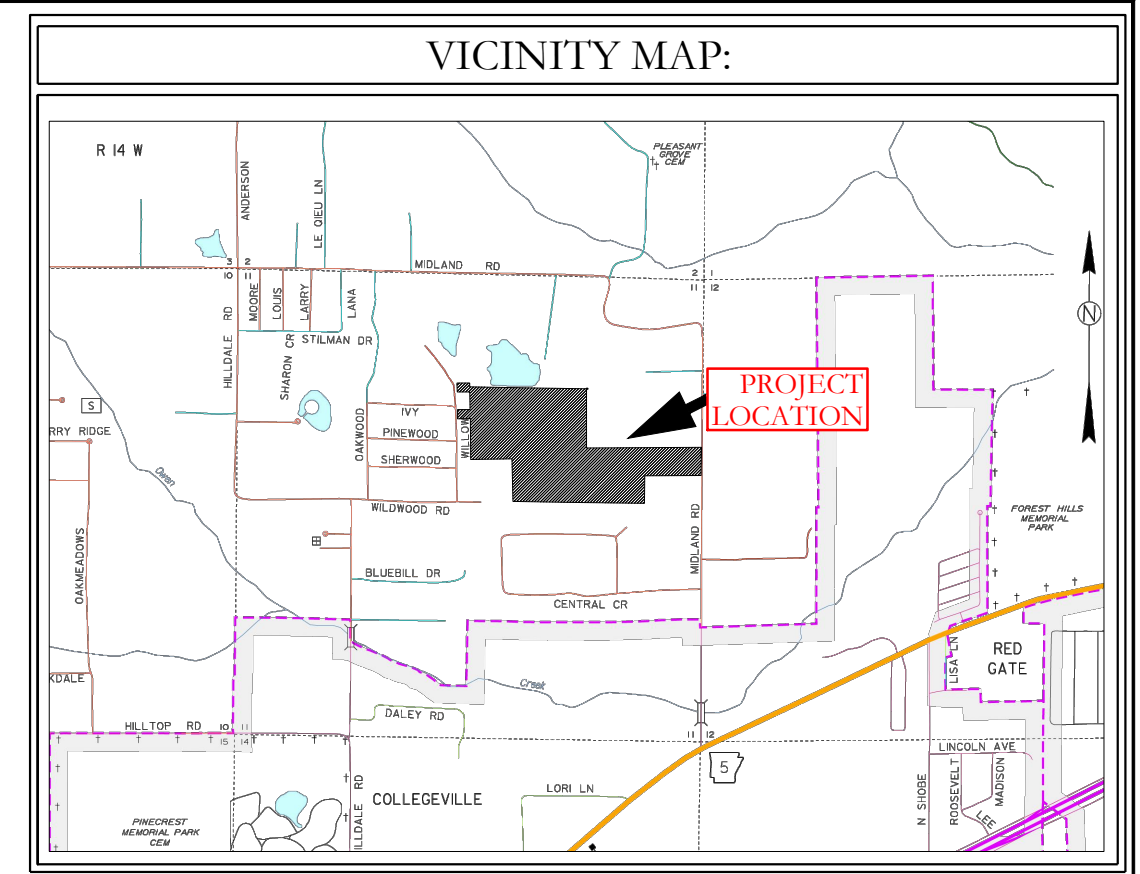


HOPE CONSULTING
ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
DRAINAGE PROFILES MIDLAND ROAD BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY: xxxx	DRAWING NUMBER:
REVISID:	CHECKED BY:	23-0024
SHEET: C-6.10	SCALE: as shown	

K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S MIDLAND ROAD\SUBDIVISION\11\T1'S RAW\CIVIL\DWG\23-0024 CONSTRUCTION PLAN (FINAL DRAFT)/AFTER COMMENTS\XXXXXX.DWG

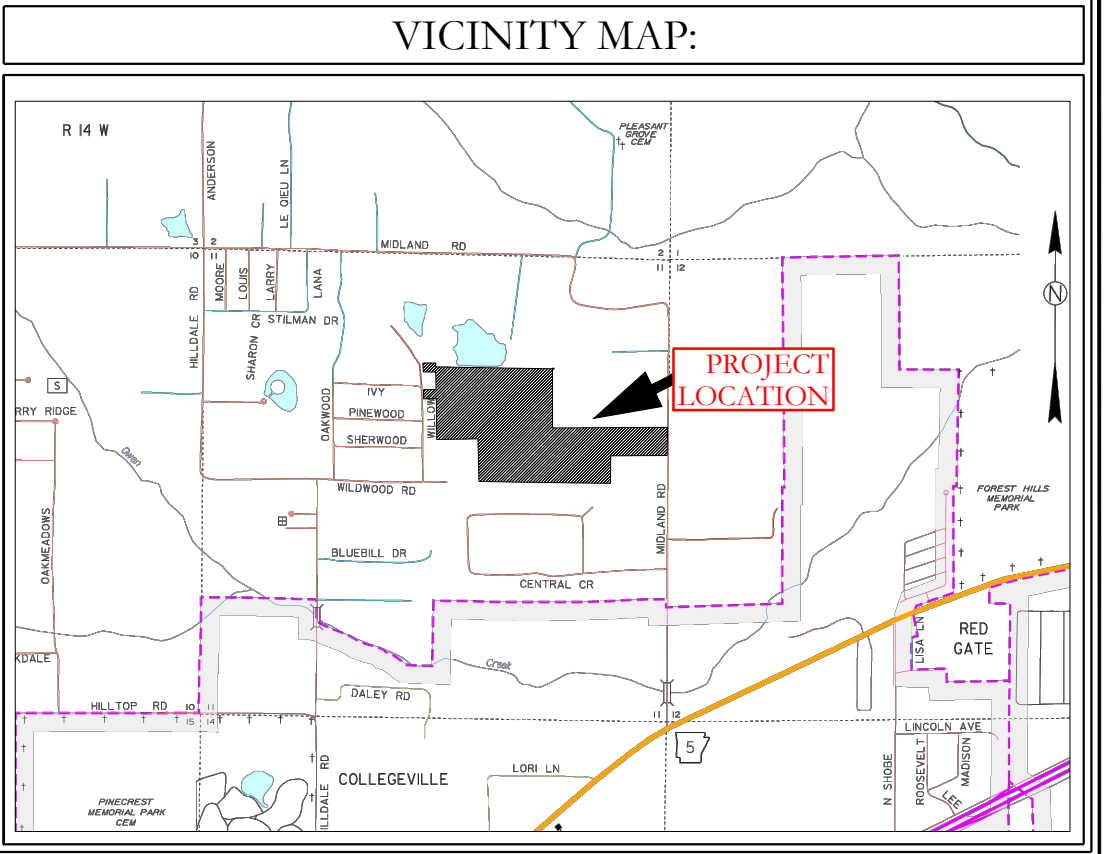
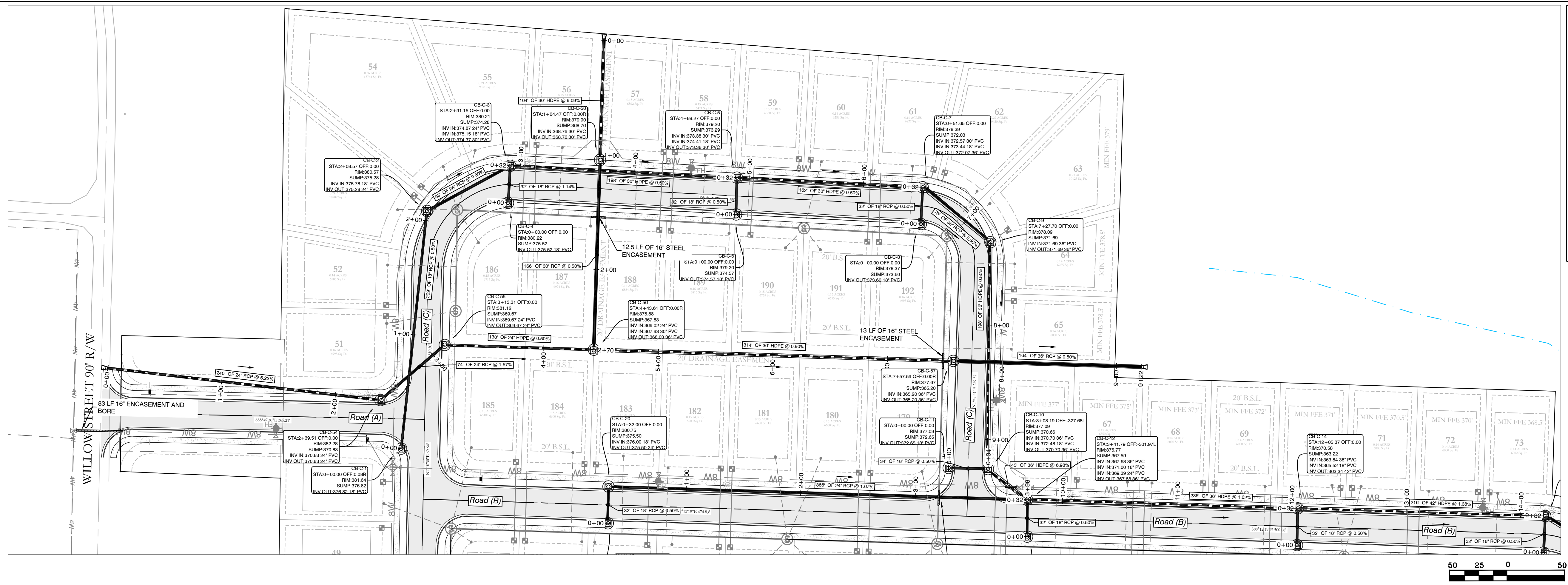


HOPE CONSULTING
ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

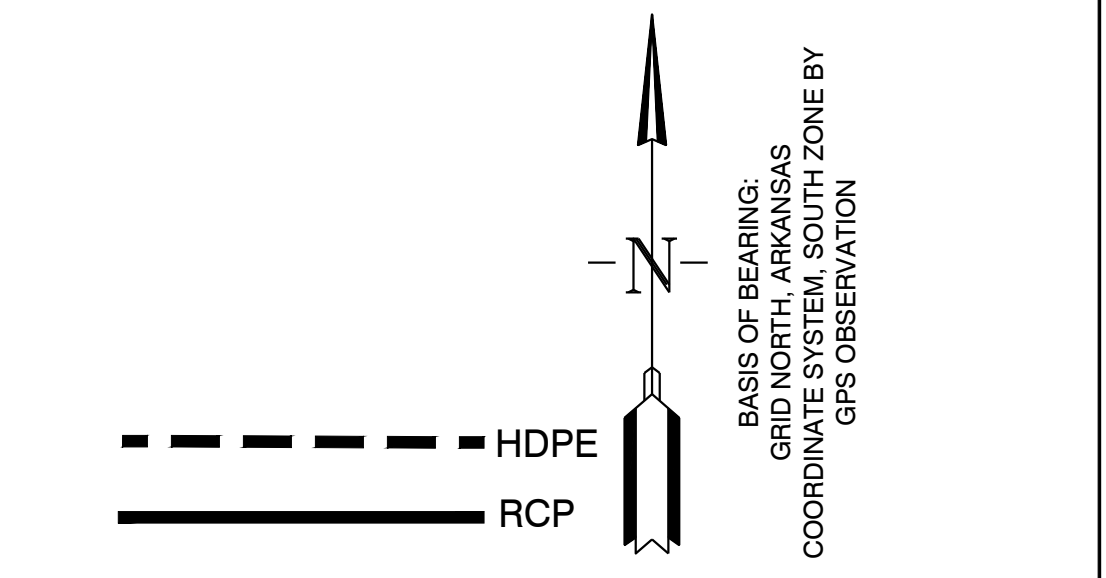
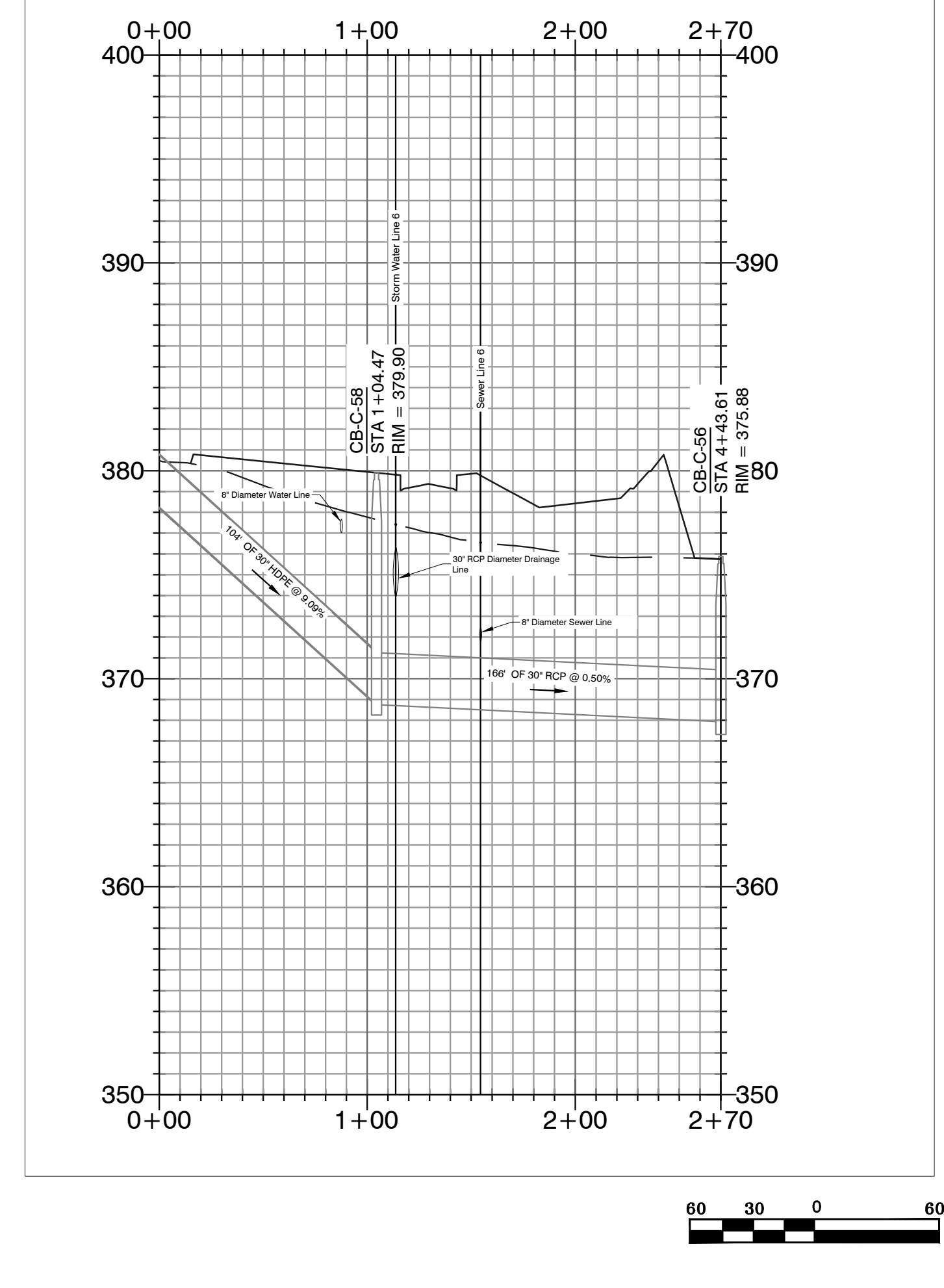
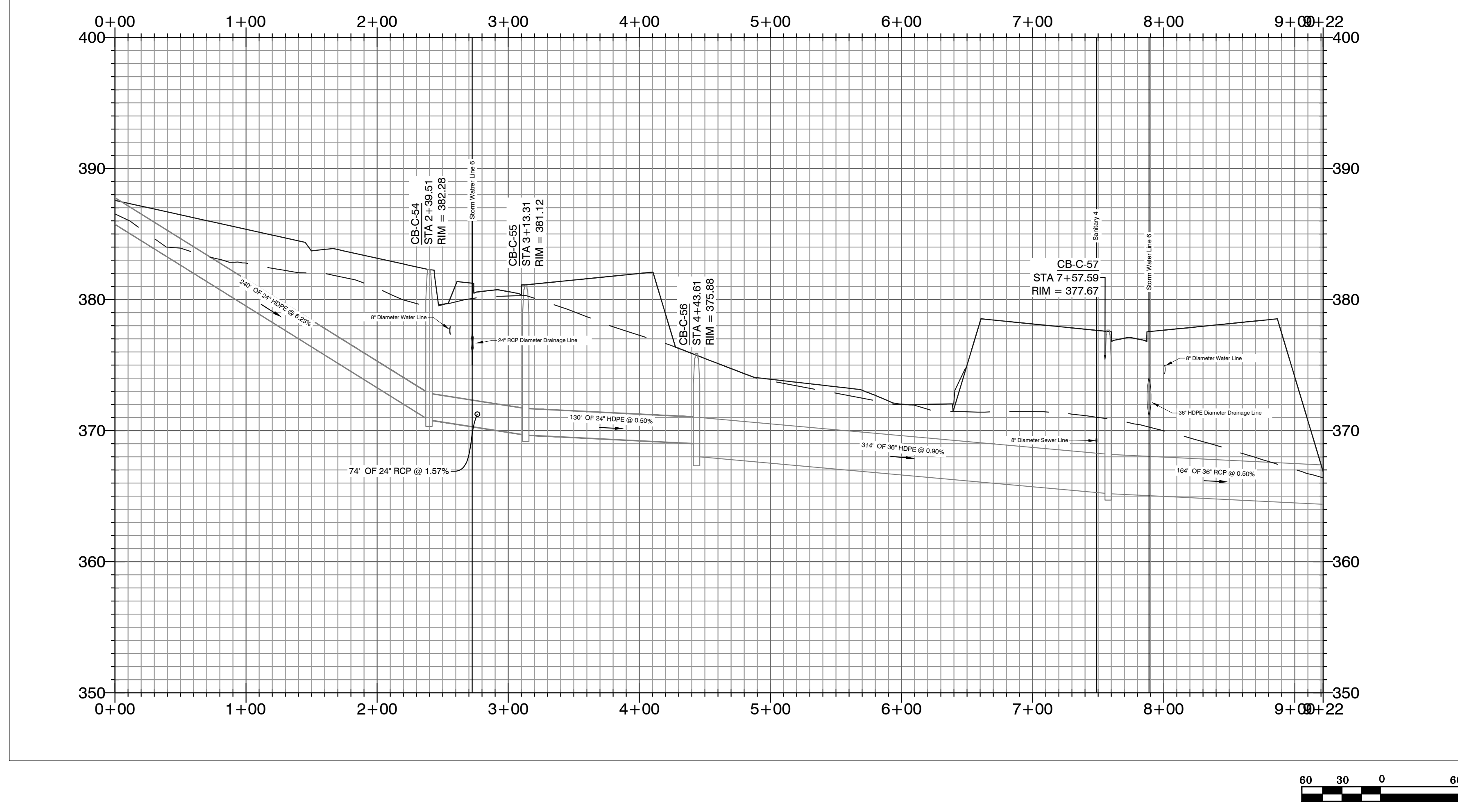
FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
DRAINAGE PROFILES MIDLAND ROAD BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY: xxxx	DRAWING NUMBER:
REVISIONS:	CHECKED BY:	23-0024
SHEET: C-6.11	SCALE: as shown	

K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S MIDLAND ROAD SUBDIVISION\SET\TSS\RAW\CIVIL\DWG\23-0024.CONSTRUCTION.PLAN (FINAL DRAFT)/AFTER COMMENTS\XXXXXX.DWG



External Discharge (Storm Water) PROFILE

External Discharge (Storm Water) #2 PROFILE

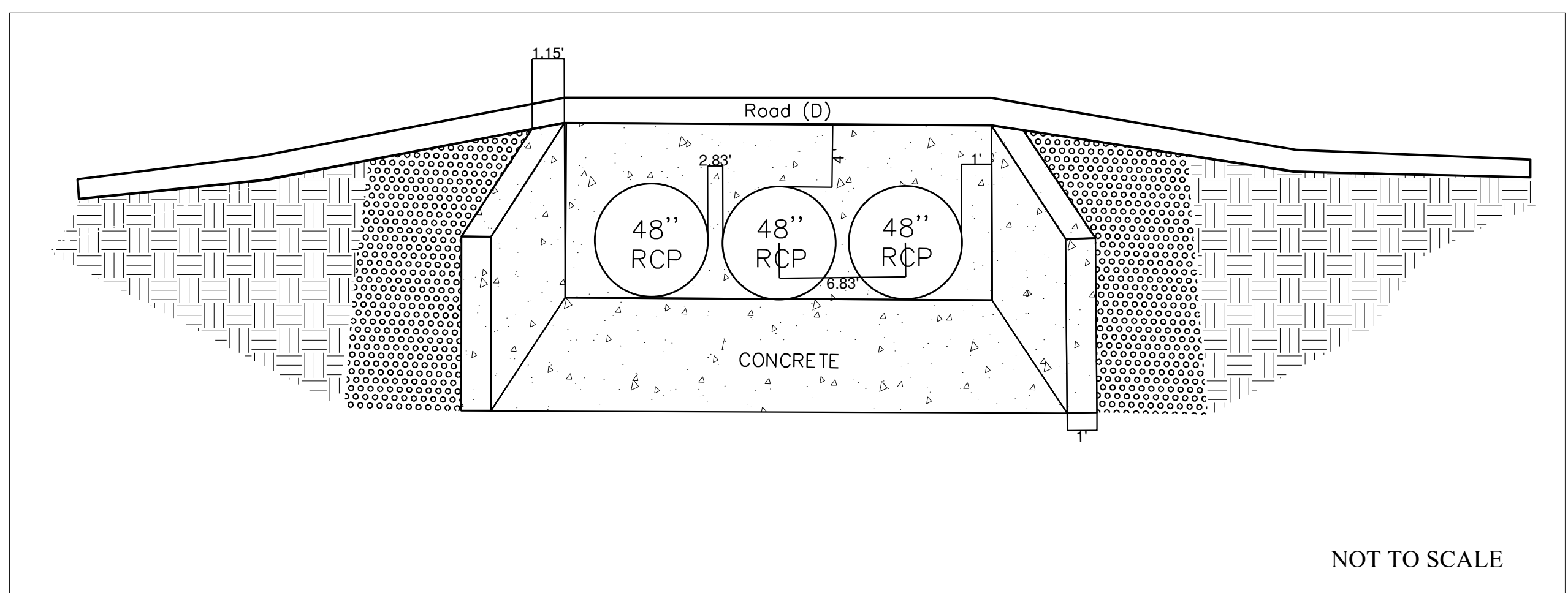
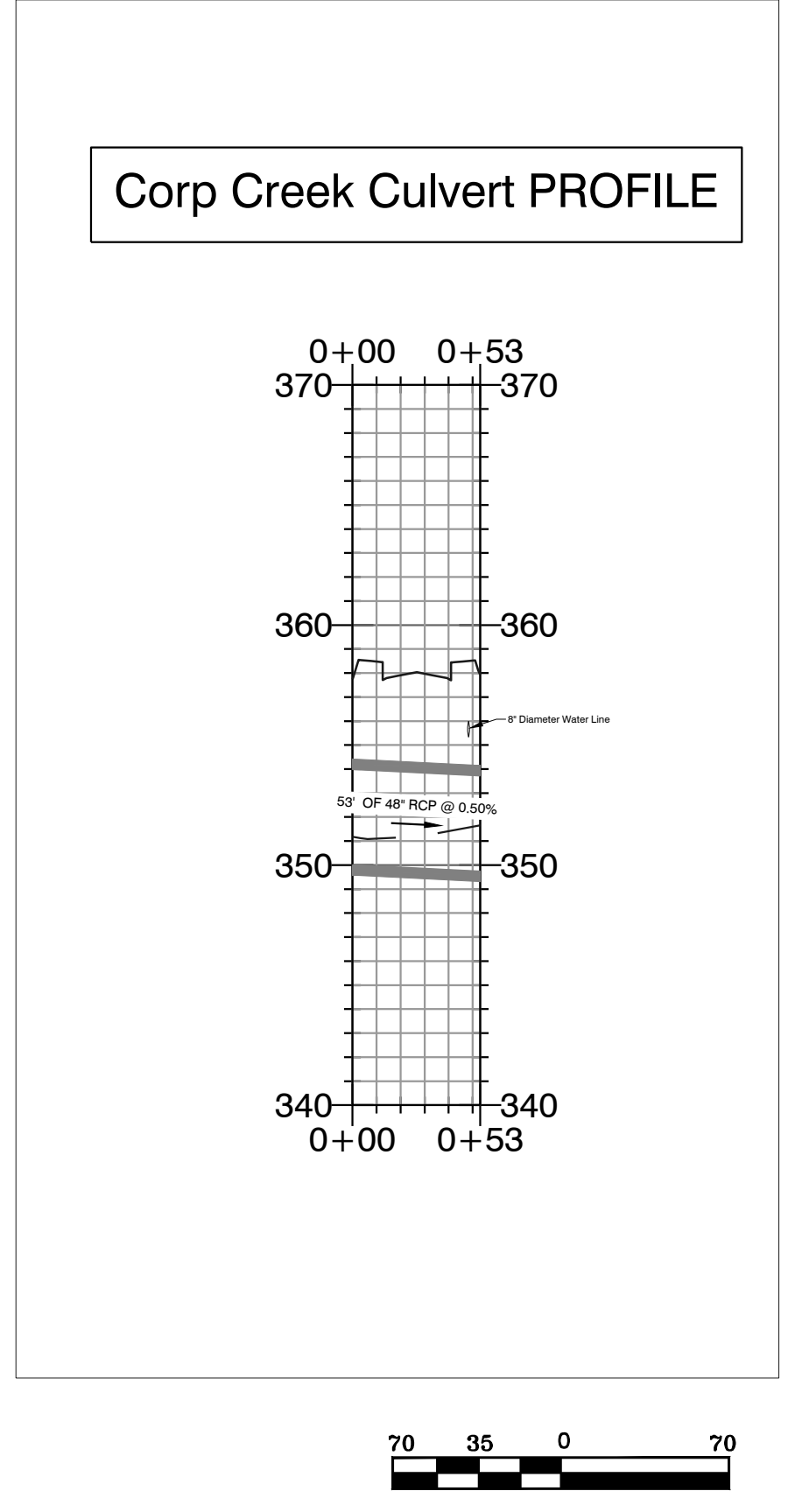
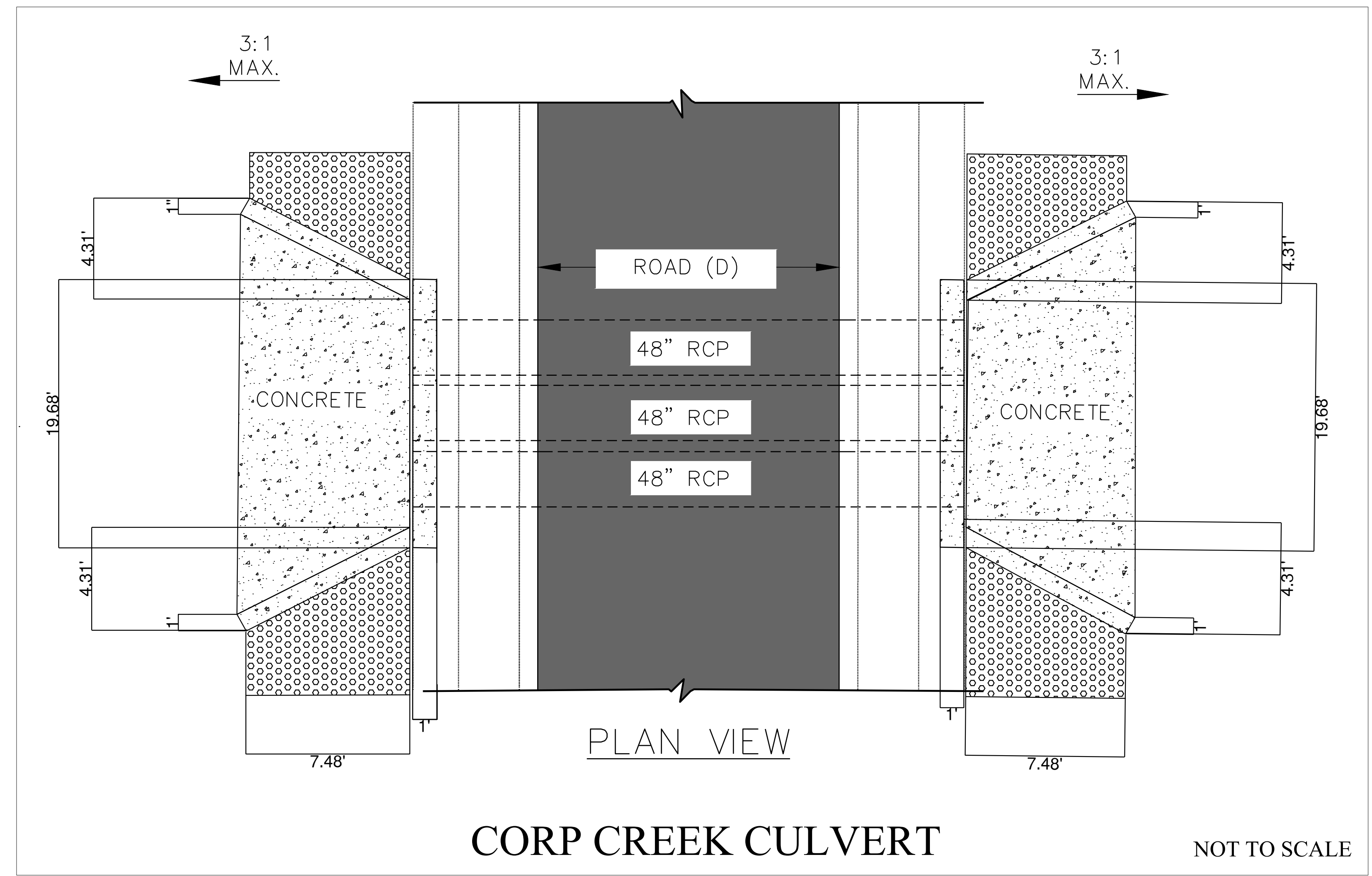
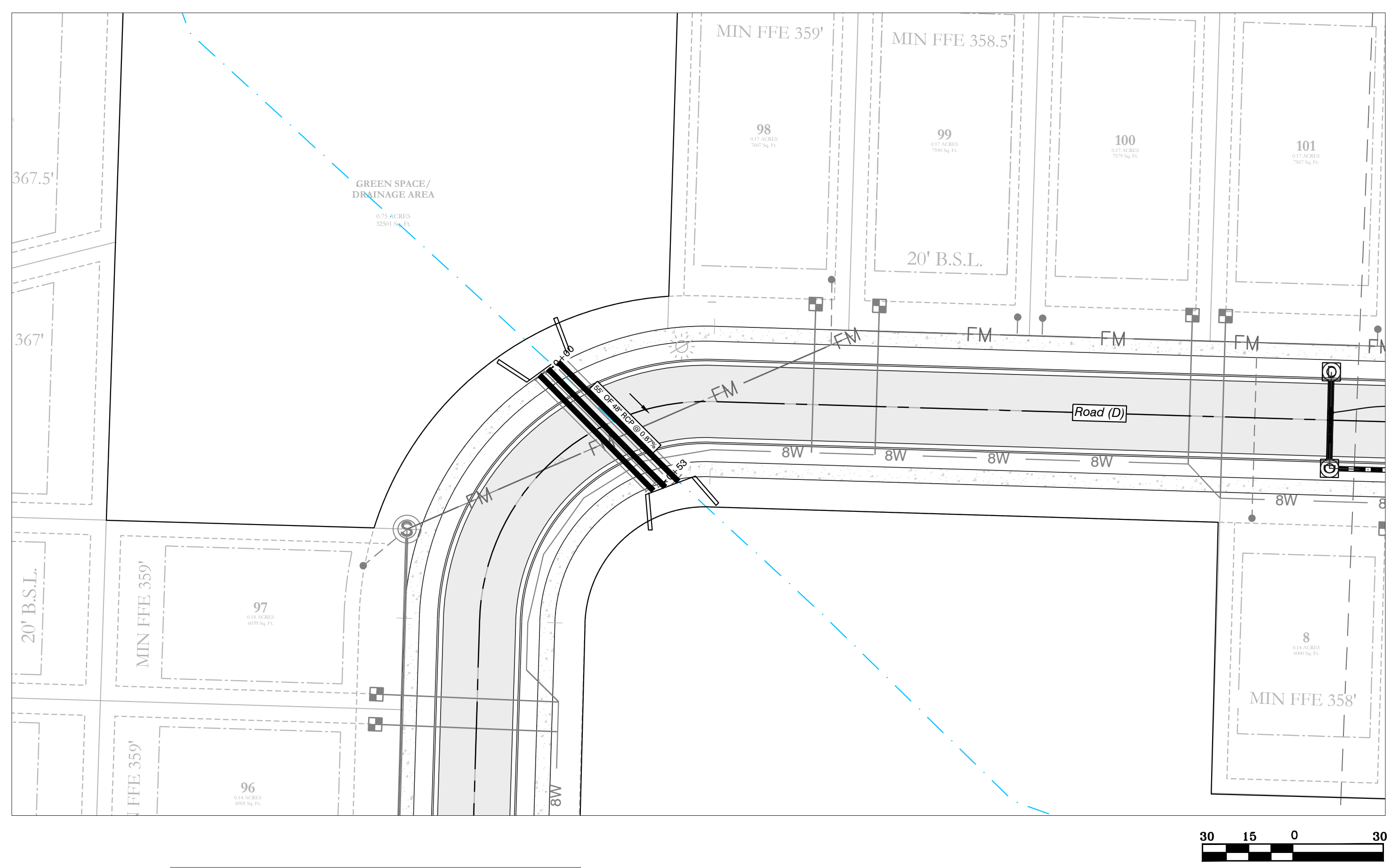
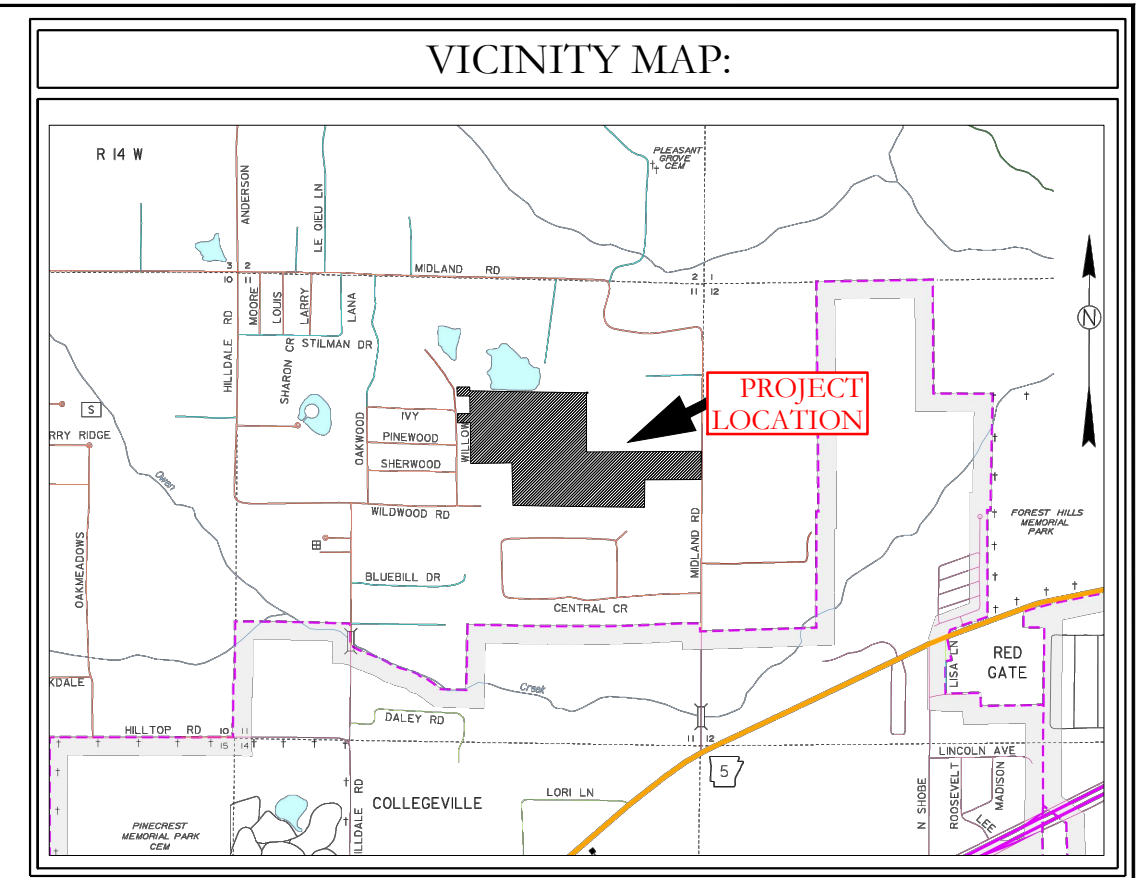


HOPE CONSULTING
ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501) 315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
DRAINAGE PROFILES MIDLAND ROAD BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY: xxxx	DRAWING NUMBER:
REVISED:	CHECKED BY:	23-0024
SHEET: C-6.12	SCALE: as shown	

K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S MIDLAND ROAD\SUBDIVISION\11\T1\T1\RAW\CIVIL\DWG\23-0024.CONSTRUCTION.PLAN (FINAL DRAFT)/AFTER COMMENTS\XXXXXX.DWG



DRAINAGE NOTES

No fences, pools or permanent obstructions may be placed in any access or drainage easements.

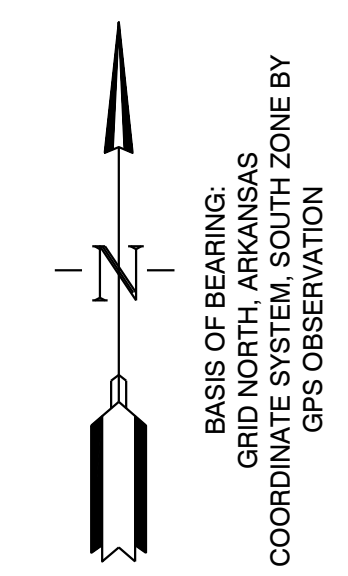
Dead Storage of pond will be used as a sediment pond at the time of construction later it will remain as a water feature.

Filter fabric shall be placed under all riprap areas.

All drainage ditches and swales that are not concreted will be required to be stabilized with solid sod stabilization per the Stormwater Management Manual.

Any new drainage ditches or swales, new or that have been disturbed during construction are required to have solid sod stabilization per Section 500.7.2 of the Stormwater management Manual. (This is required to be show in detail on the plans).

--- HDPE
 ——— RCP



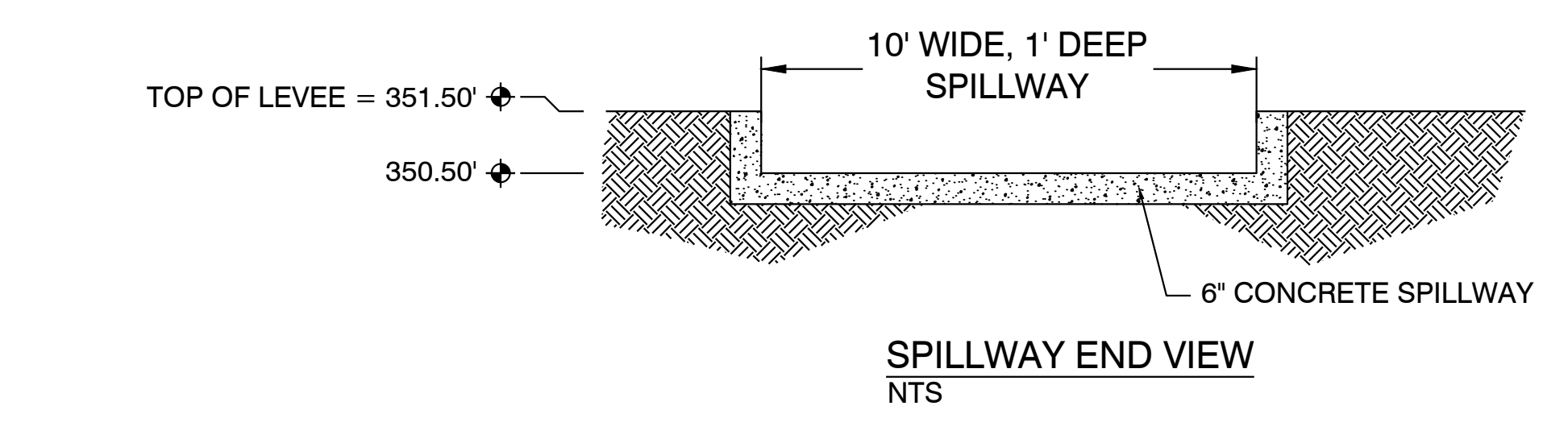
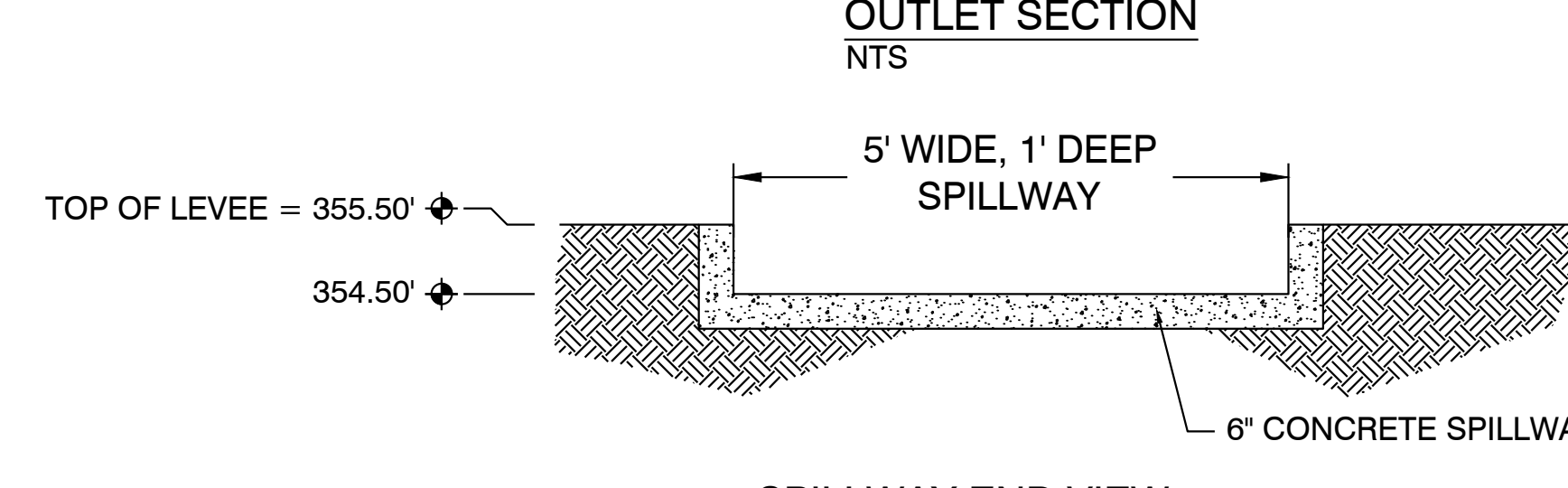
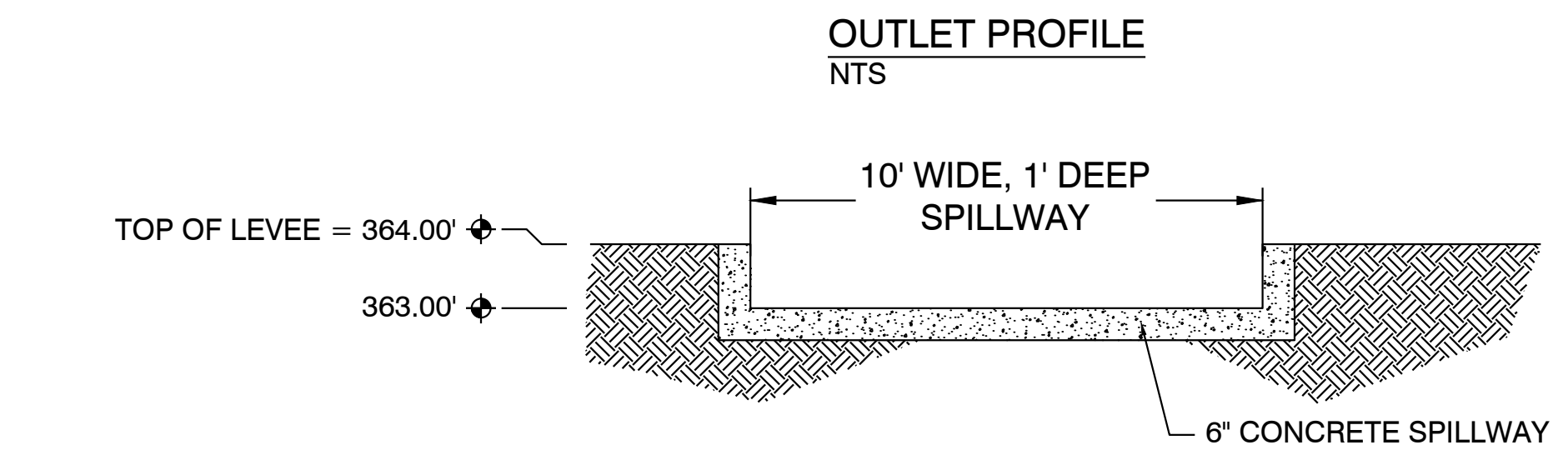
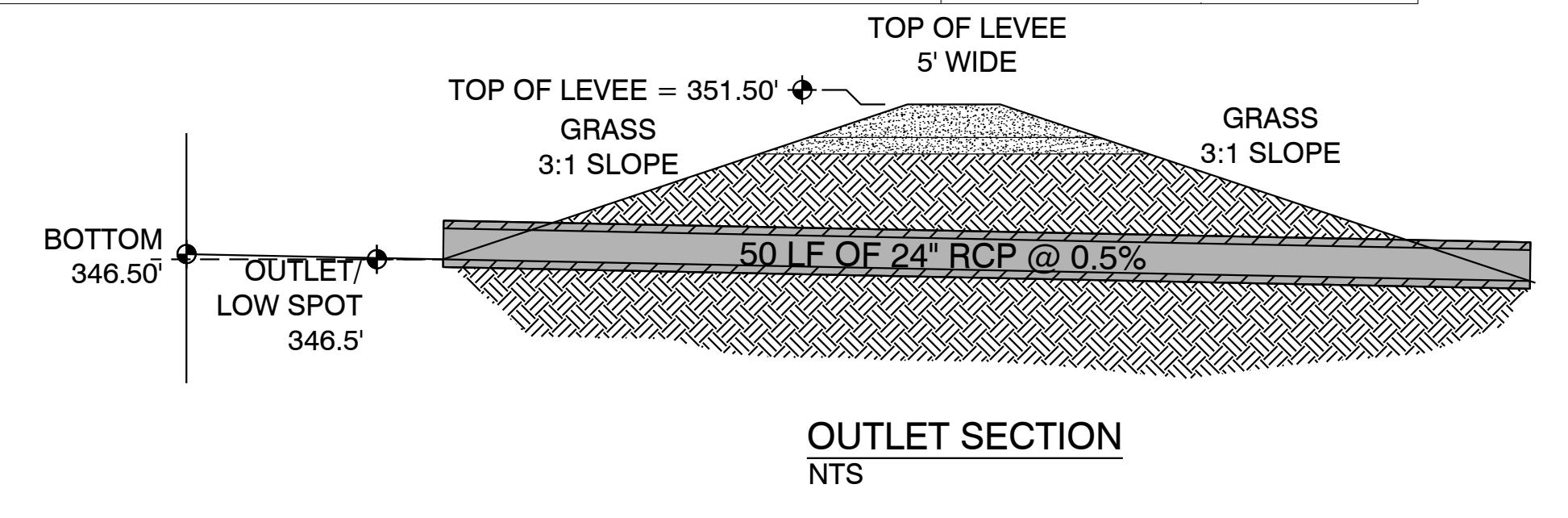
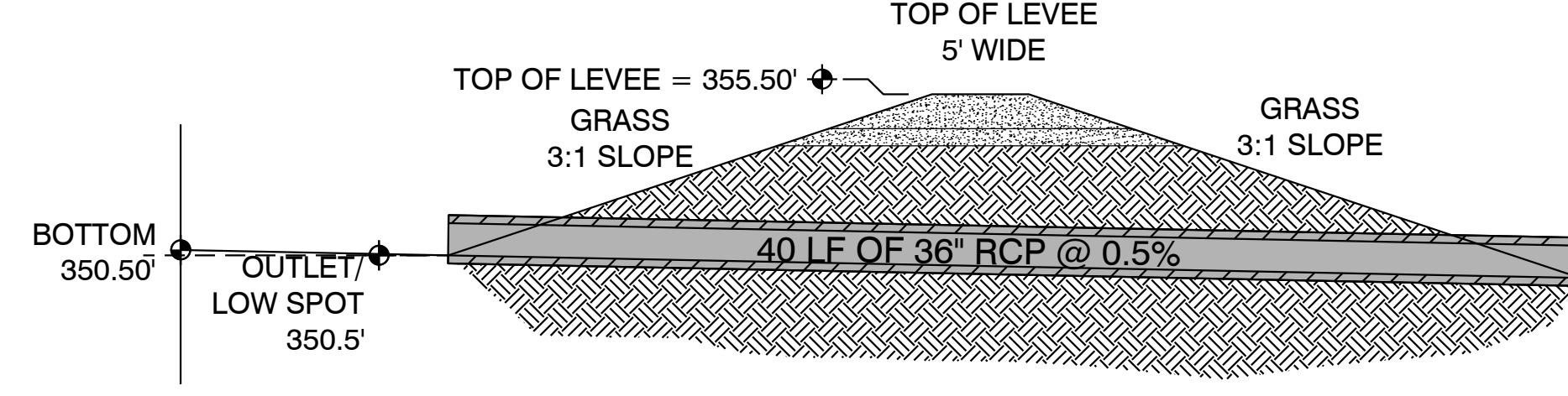
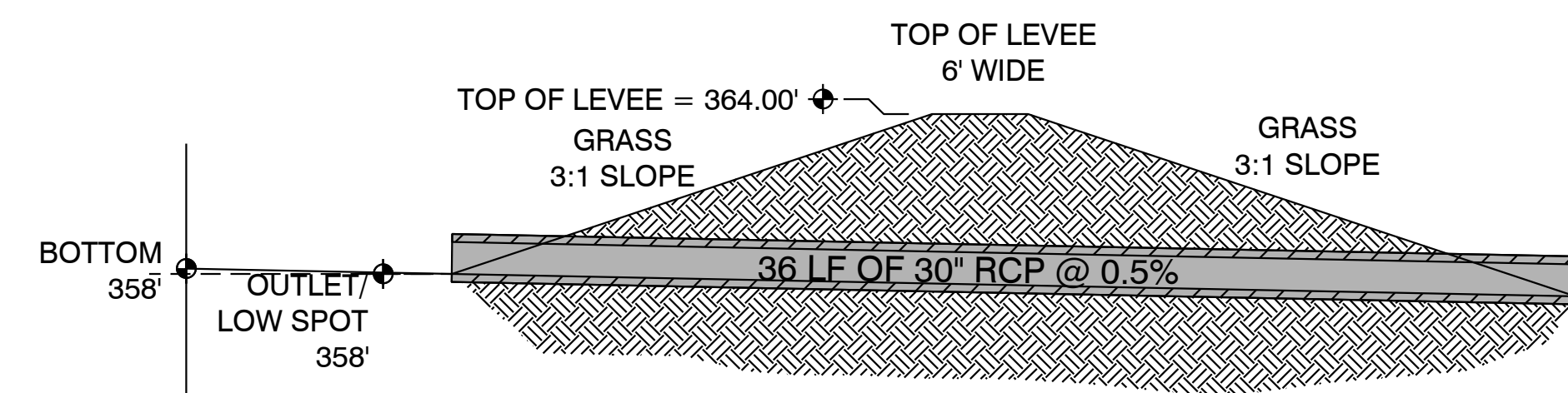
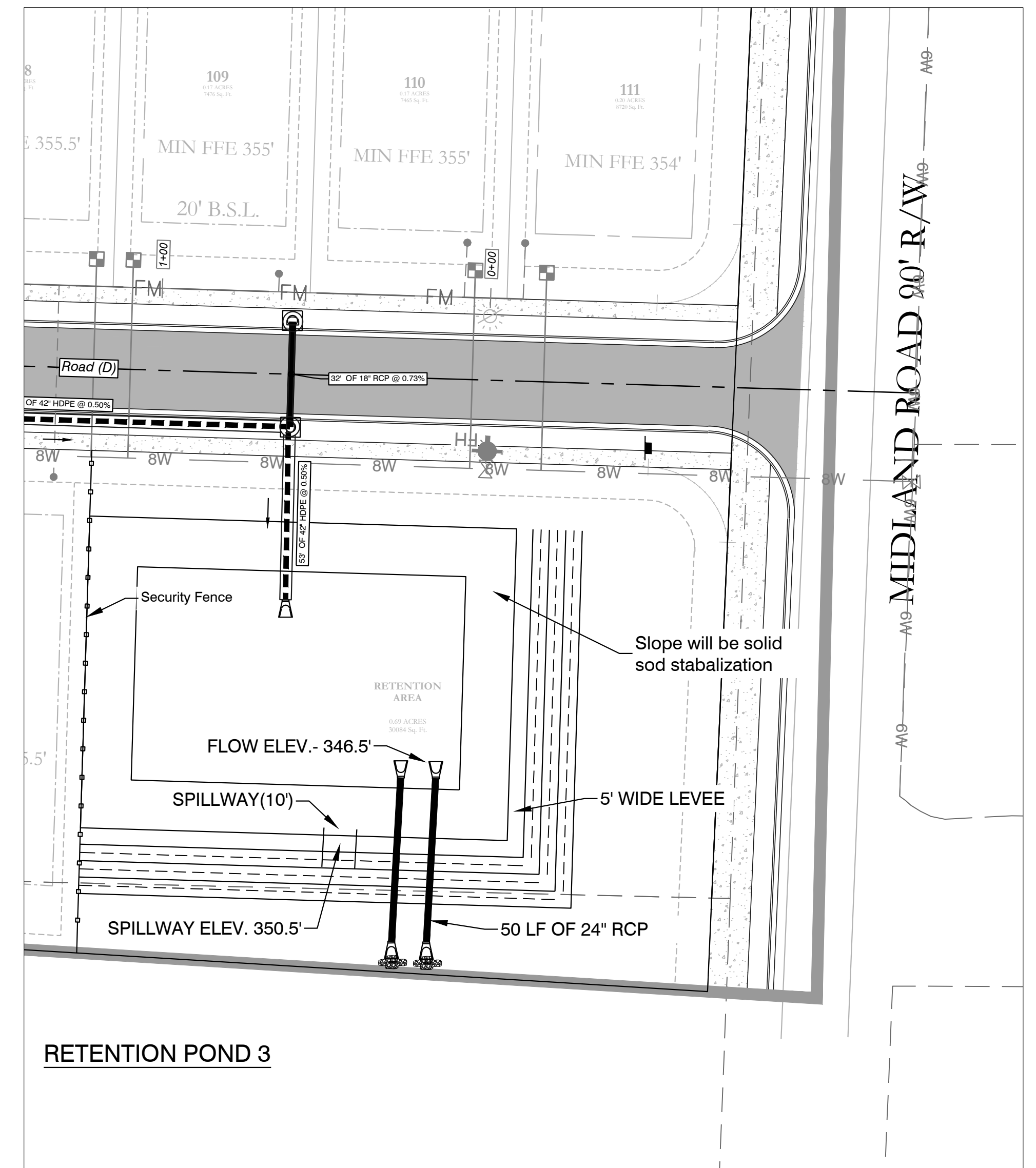
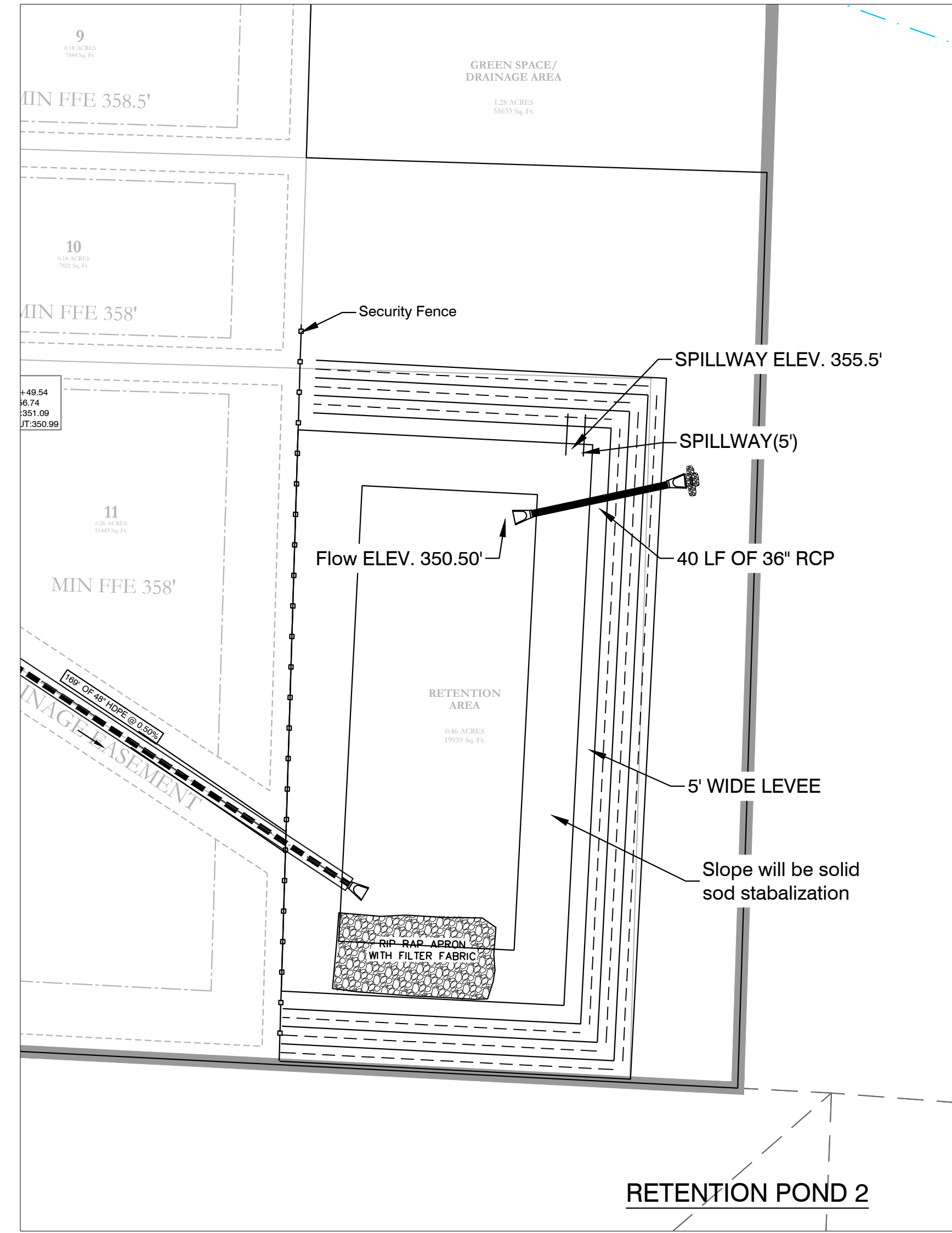
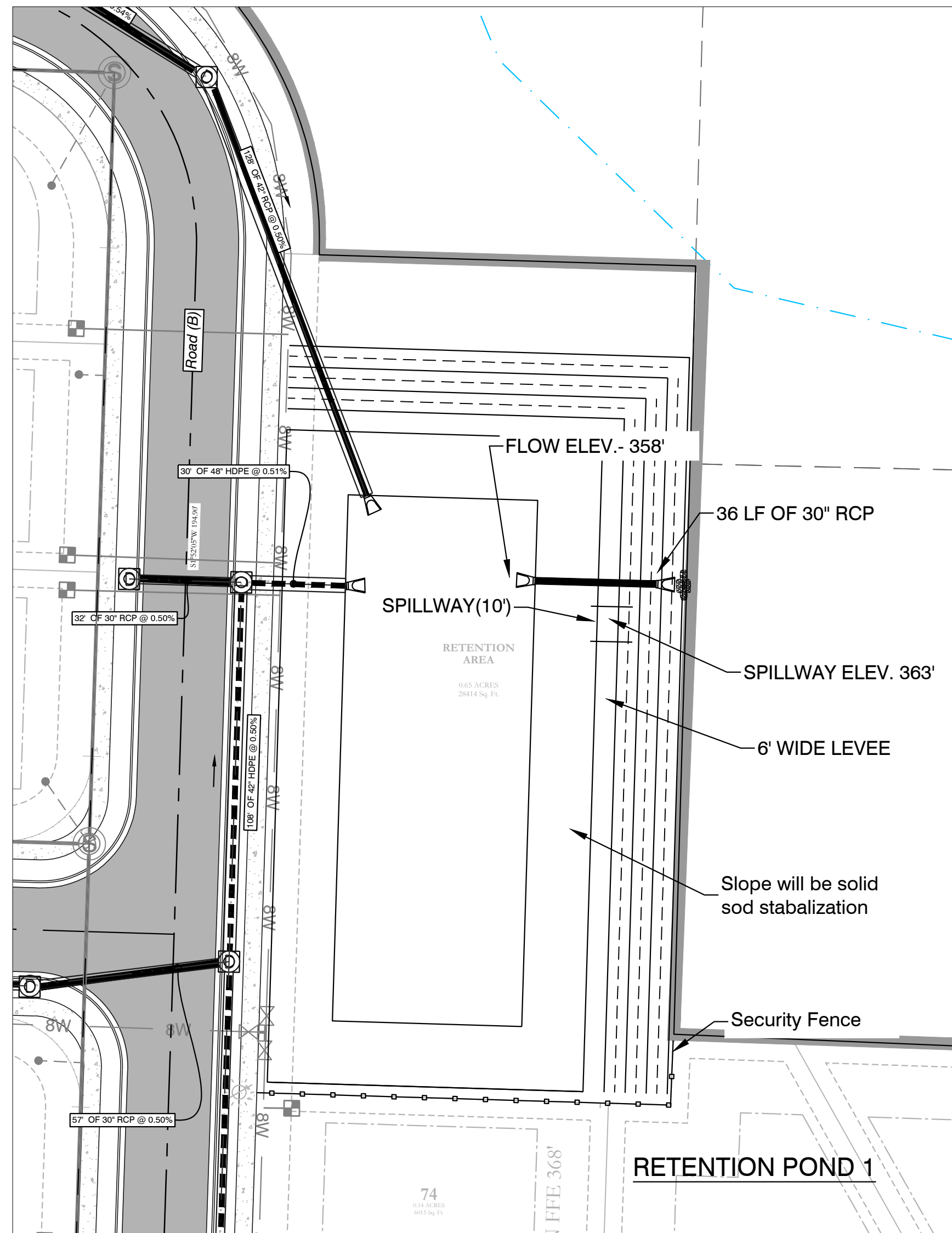
HOPE CONSULTING ENGINEERS - SURVEYORS
 129 North Main Street, Benton, Arkansas 72015
 PH. (501)315-2626 FAX (501) 315-0024
 www.hopeconsulting.com

FOR USE AND BENEFIT OF:
HAVEN'S DEVELOPMENT, LLC

DRAINAGE PROFILES
 MIDLAND ROAD
 BRYANT, SALINE COUNTY, ARKANSAS

DATE: 5/23/2023	C.A.D. BY: xxxx	DRAWING NUMBER: 23-0024
REVISED:	CHECKED BY:	
SHEET: C-6.13	SCALE: as shown	

K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\23-0024\HAVEN'S MIDLAND ROAD SUBDIVISION\SET\TSS\RAW\CIVIL\DWG\23-0024.CONSTRUCTION.PLAN (FINAL.DRAW)/AFTER COMMENTS\XXXXXX.DWG



DETENTION POND MAINTENANCE PLAN

Background
There will be three retention ponds in this project. The retention ponds are located at the NW Corner, SW Corner, and SE Corner of the subject property. It is designed to temporarily detain stormwater to meet water quantity criteria before discharging off the property.

Routine Maintenance
The property owners association will maintain the drainage easements. Routine maintenance will include but not be limited to:
-Mowing of the bank slopes and area around the pond on a monthly basis during the growing season and as needed during the cooler months.

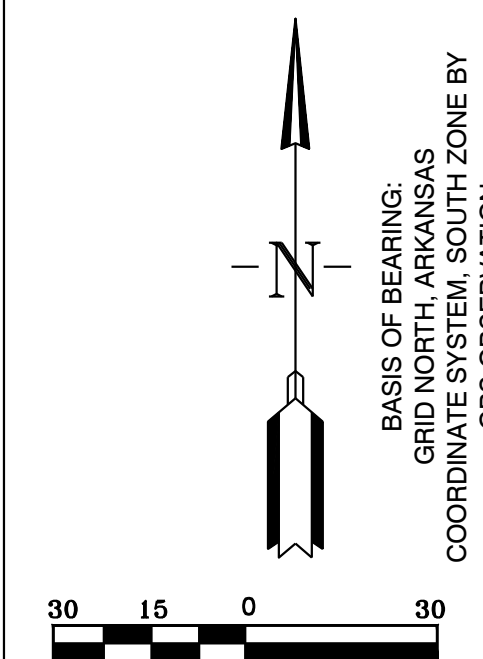
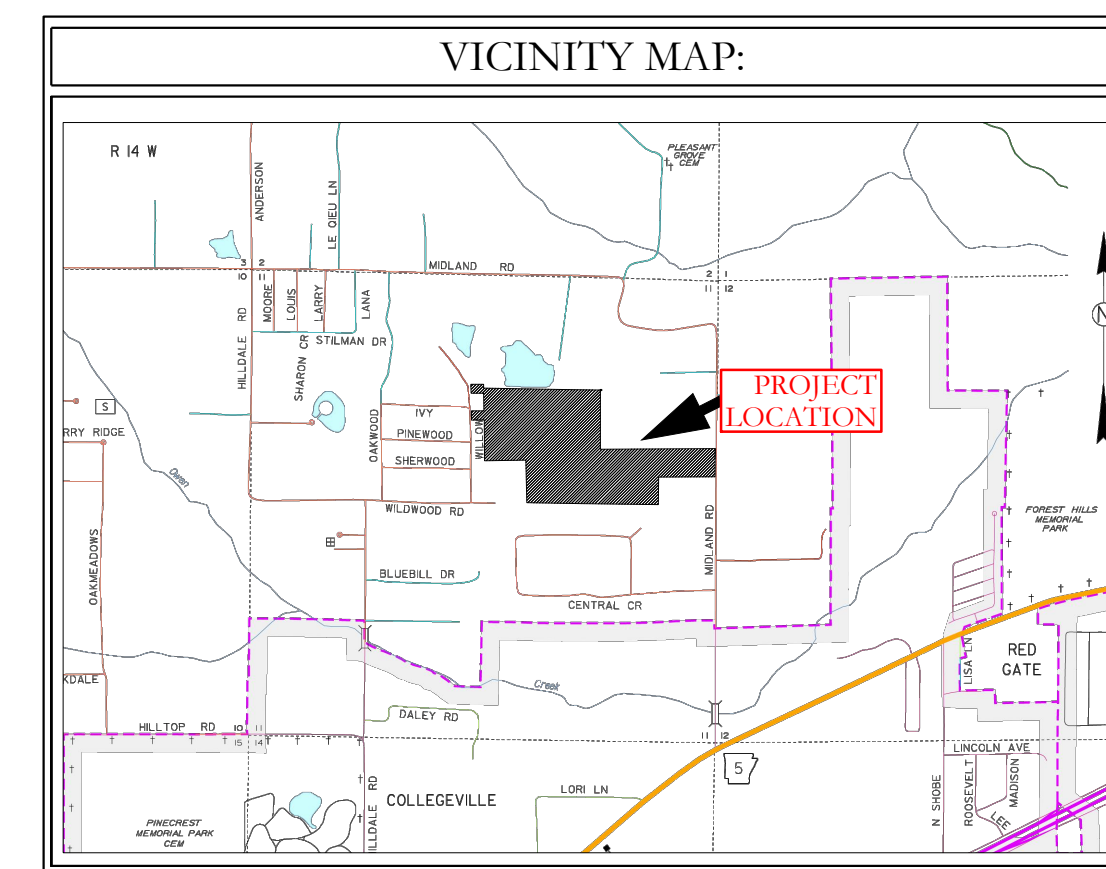
-The outlet pipe from the pond and other areas will be inspected monthly for debris which could inhibit the proper flow of discharge. Any debris will be removed immediately and disposed of or placed in a location to prevent future maintenance and to not cause impact up or downstream of the structure.

-Trash will be removed from around the pond to prevent entering the pond. Generally, the site should be kept free of loose trash which could be carried off site by wind or rain.

-Inspect the pond and outlet pipe for non-routine maintenance need.

Periodic or Non-Routine Maintenance
The routine inspection of the pond area and discharge pipe will identify needed repairs and non-routine maintenance. These items may include but not be limited to:

- Re-growth of trees on or around the pond bank. These should be cut and removed from the pond area.
- Sediment from the site may accumulate in the pond bottom and reduce the pond to below design volume requirements. The pond should be excavated if the pond bottom elevation reached a level that allows excessive aquatic growth or reduces the pond efficiency such, that the sediments are passing the discharge structure and release off site.
- Stabilization or re-grading of side slopes may be required periodically or after excessive rain events. Any disturbance of slopes should be reseeded or may require installation of erosion control materials until seeding can reestablish adequate grasses to prevent future erosion.
- Any other maintenance or repairs which would minimize other maintenance to the pond or outfall structures.

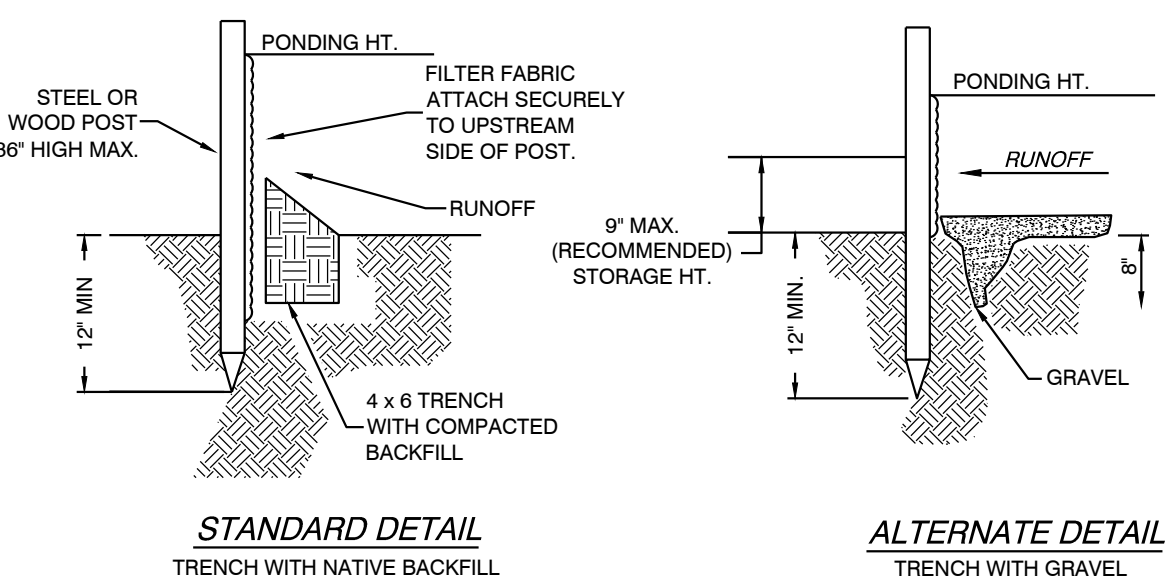
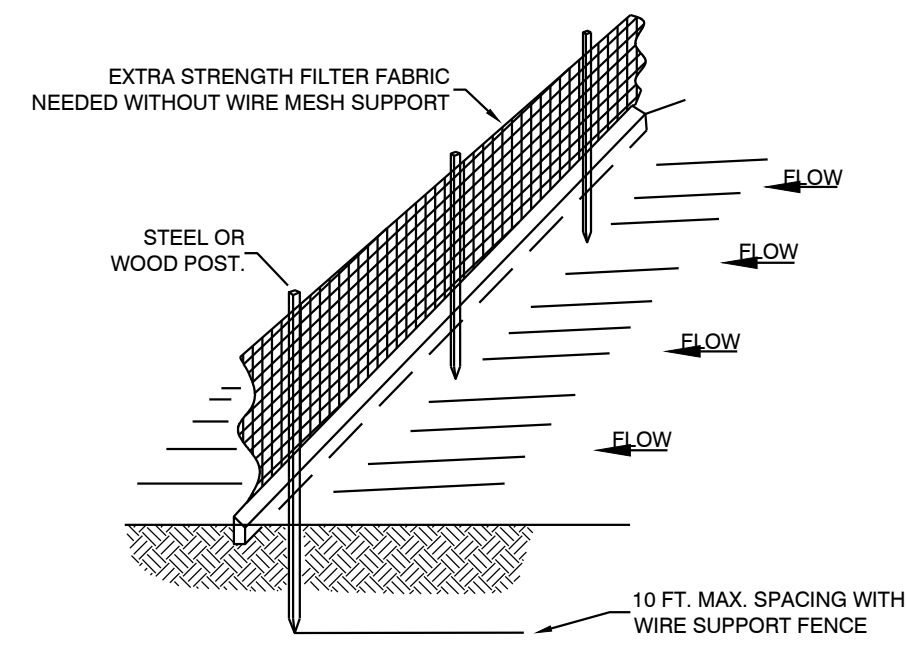


HOPE CONSULTING
ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: HAVEN'S DEVELOPMENT, LLC		
MIDLAND ROAD RETENTION PLAN BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 5/23/2023	C.A.D. BY:	DRAWING NUMBER:
REVISED:	CHECKED BY:	23-0024
SHEET: C-6.14	SCALE:	

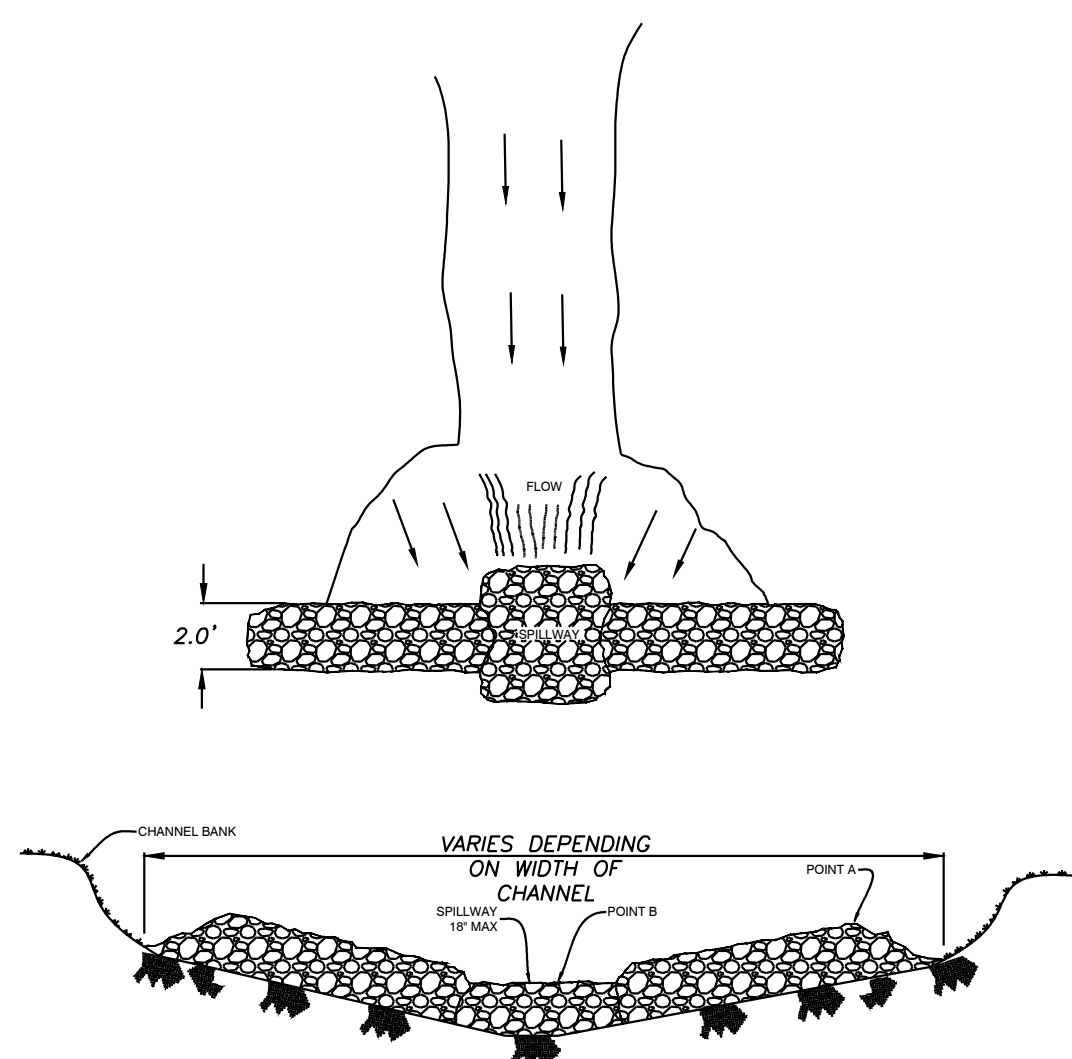
K:\LAND PROJECTS\2004\SUBDIVISIONS\2023\230518 HAVEN'S DEVELOPMENT SUBDIVISION\SET FILE\RAW\CDM\LDWG\23-0024 CONSTRUCTION PLAN (FINAL DRAFT).DWG, LATER COMMENTS\XXXXXXXXXX.DWG



NOTE:

- 1) INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
- 2) REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
- 3) SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

SILT FENCE



NOTES:

- 1) POINT A MUST BE HIGHER THAN POINT B (SPILLWAY HEIGHT)
- 2) PLACE RIP RAP BARRIER PERPENDICULAR TO THE FLOW WITH 10 FT GROUPING. SEE DRAWING NOTES ON OTHER SHEETS FOR GROUPING AND TYPING.
- 3) SPILLWAY HEIGHT SHALL NOT EXCEED 18 IN.
- 4) INSPECT AFTER EACH SIGNIFICANT STORM. MAINTAIN AND REPAIR PROMPTLY.

EROSION CONTROL NOTES

SOD OR SEED DETENTION AREA POST-CONSTRUCTION (IF APPLICABLE)

MAXIMUM SLOPE OF 3H:1V ON DETENTION POND LEVES

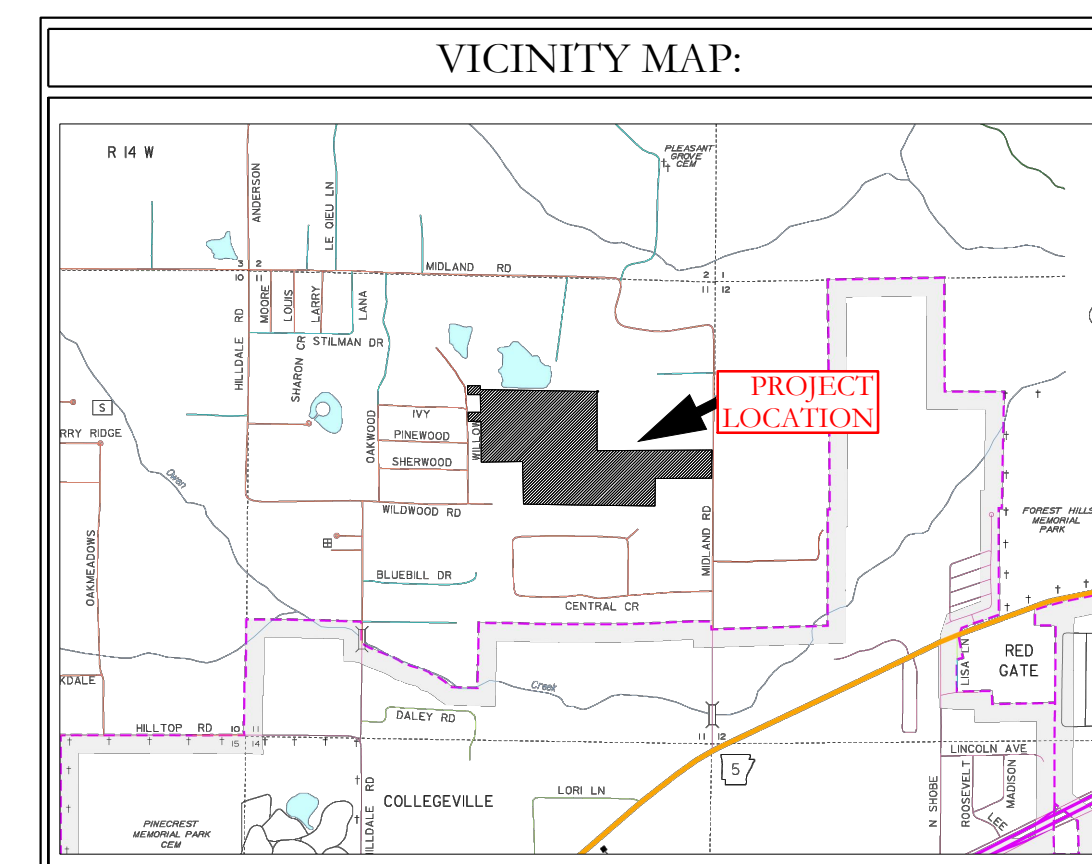
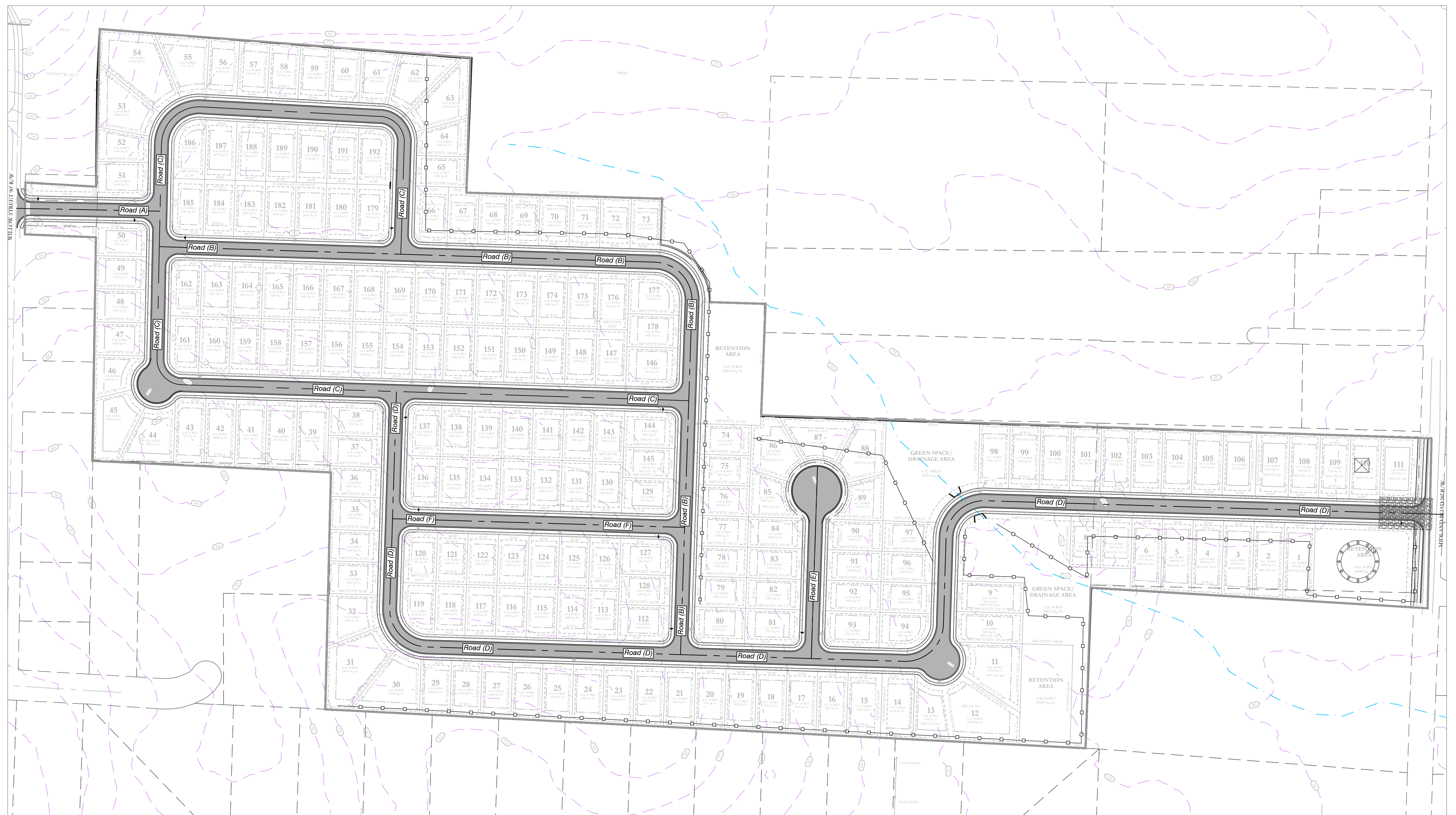
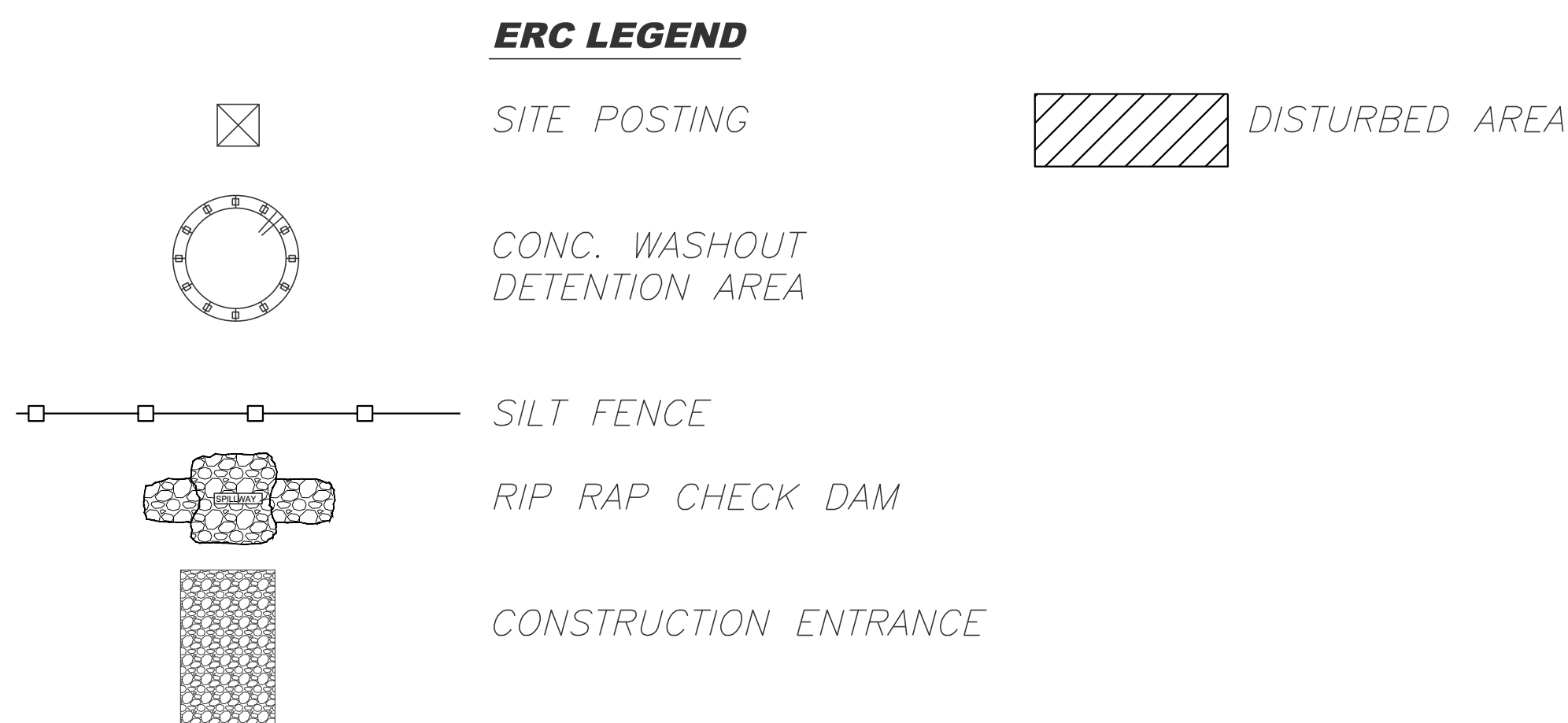
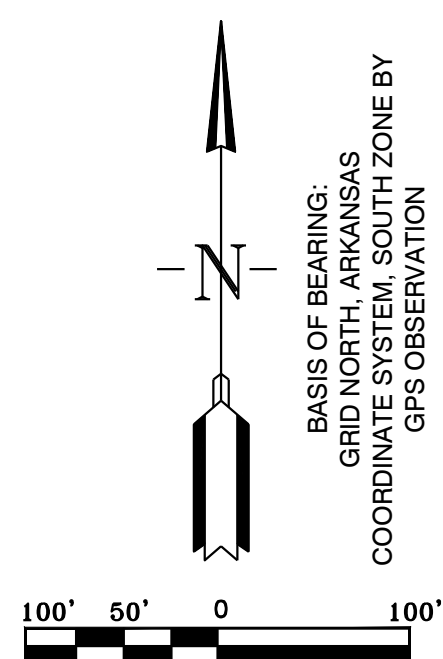
CONTRACTOR MUST HAVE INLET PROTECTION MEASURES INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF DRAINAGE INLETS/STRUCTURES IS COMPLETE. SEDIMENT BARRIERS SHALL BE MAINTAINED THROUGHOUT AND INSPECTED THROUGHOUT CONSTRUCTION PROCESS UNTIL PROJECT IS COMPLETE

RIP RAP SEDIMENT BARRIERS SHALL BE USED AT ALL STORMWATER DISCHARGE POINTS SHOWN ON PLANS ASAP

CONTRACTOR SHOULD WORK WITH ENGINEER TO ESTABLISH EFFECTIVE AND EFFICIENT PLAN TO PREVENT SEDIMENT RUNOFF BY DETERMINING WHERE SILT FENCING OR OTHER TYPES OF CONTROLS ARE NECESSARY

SOME EROSION CONTROL MEASURES, SILT FENCING, OR CHECK DAMS MAY NOT BE NECESSARY DURING INITIAL ROW CLEARING BUT MAY BE NEEDED ONCE LOT CLEARING AND HOME BUILDING BEGINS

EXISTING VEGETATION WILL ONLY BE REMOVED INSIDE ROW AND WITHIN HOUSE FOOTPRINTS AS THEY ARE CONSTRUCTED. ADDITIONAL SILT FENCING WILL BE ADDED TO INDIVIDUAL LOTS AS HOME CONSTRUCTION TAKES PLACE.



HOPE CONSULTING ENGINEERS - SURVEYORS

129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
HAVEN'S DEVELOPMENT, LLC

MIDLAND ROAD
EROSION CONTROL PLAN
BRYANT, SALINE COUNTY, ARKANSAS

DATE: 5/23/23	C.A.D. BY:	DRAWING NUMBER:
REVISIONS:	CHECKED BY:	23-0024
SHEET: C-7.0	SCALE:	
500	1S	15W
0	34	230
62	1807	