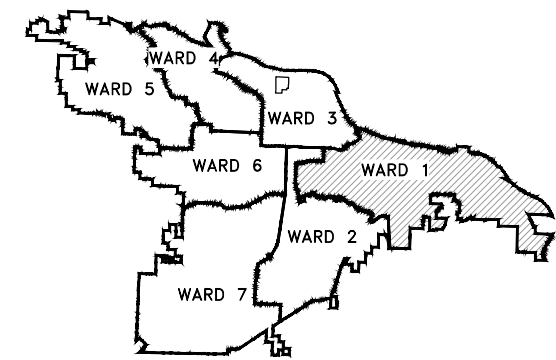


01-15-DR-1

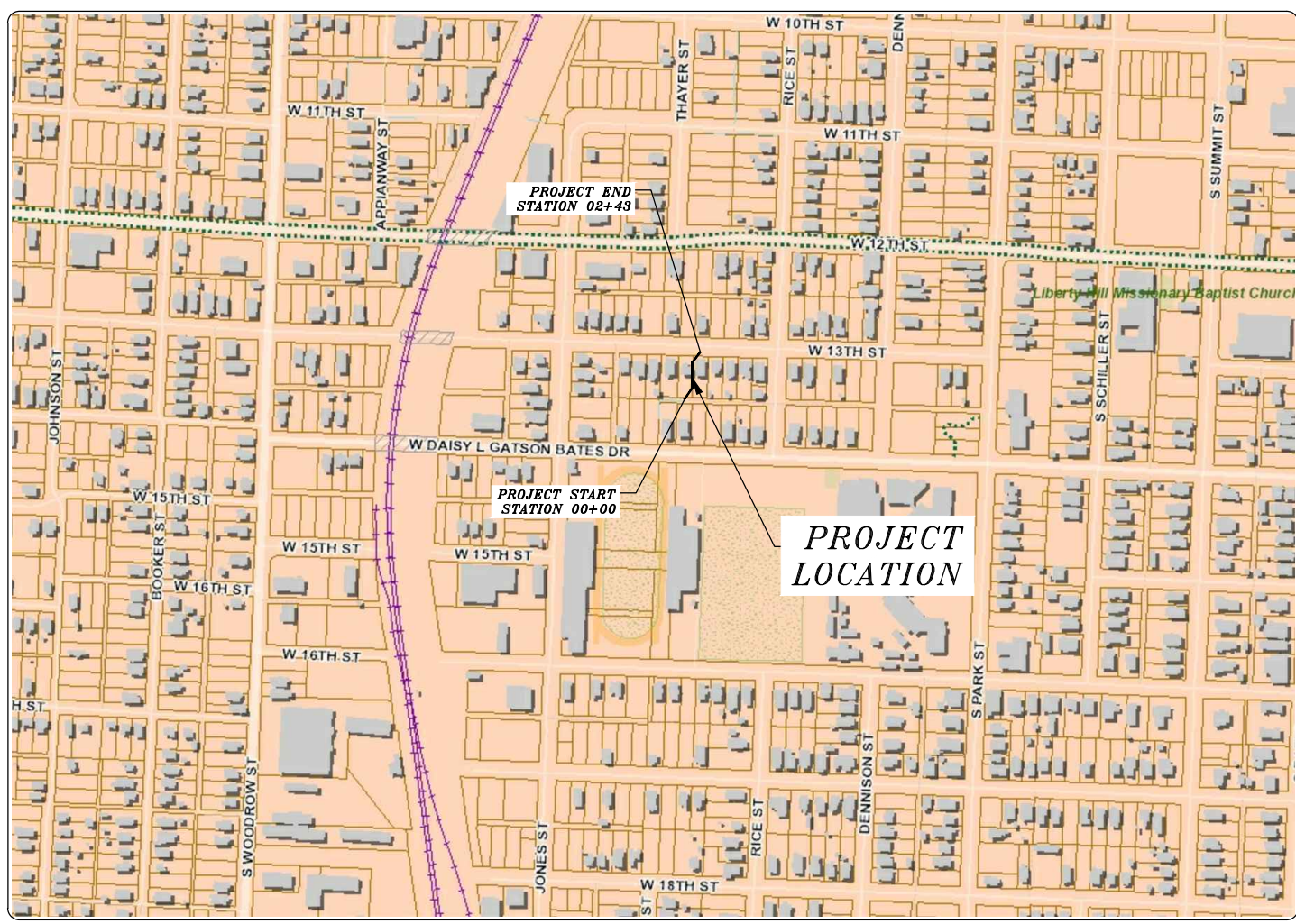
13TH STREET DRAINAGE IMPROVEMENTS

(2400 BLOCK)



PROJECT LOCATION - WARD 1

SHEET NO.	TITLE
C1	COVER SHEET
C2	QUANTITIES, GENERAL NOTES, LEGEND
C3	FIELD TIES/LAYOUT SHEET
C4	DRAINAGE PLAN AND PROFILE
C5	DRIVEWAY DETAIL
C6	EROSION CONTROL PLAN



2019-2021
BOND PROGRAM

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



Harbor
5800 Evergreen Drive
Little Rock, AR 72205
Ph (501) 663-8800
Fax (501) 588-0123
www.harborenv.com

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS

13TH STREET DRAINAGE IMPROVEMENTS

COVER SHEET

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201

STATE OF ARKANSAS

REGISTERED PROFESSIONAL ENGINEER

No. 10452

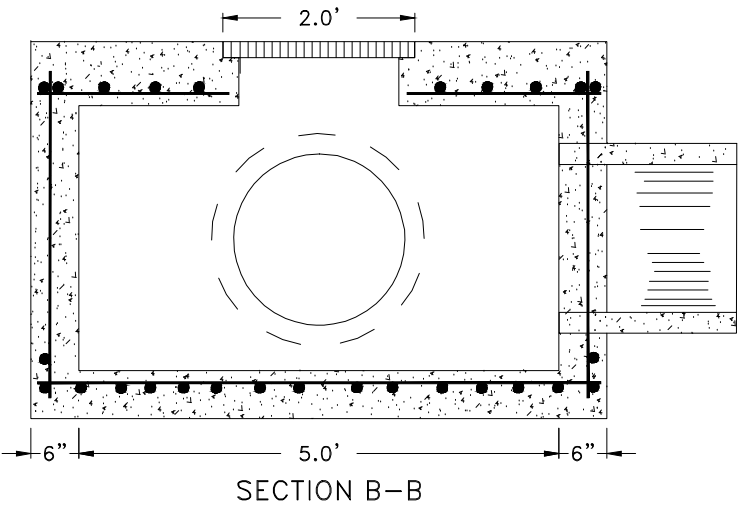
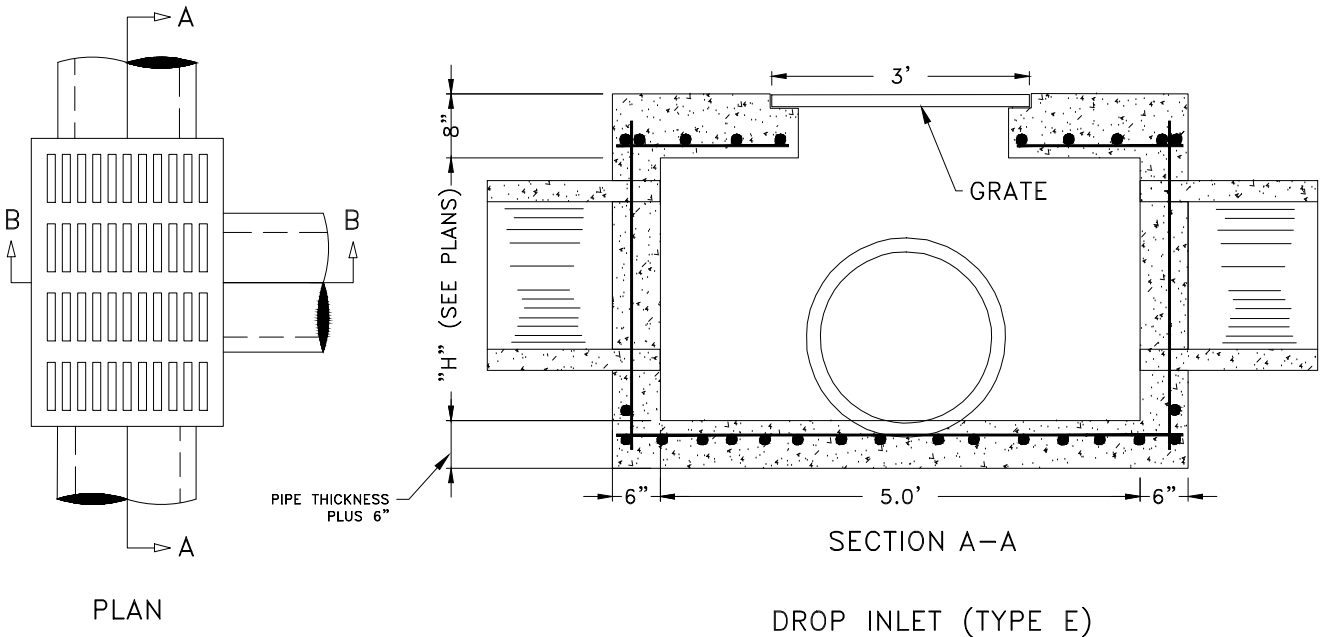
ANDREW H. ROSE

DRAWN BY	AES/HV
DESIGNED	AHR
CHECKED	CJM
DATE	07/12/2019
SCALE	1" = 300'
PROJECT NO.	CLR # 01-15-DR-1
SHEET NO.	C1

CLR PROJECT # 01-15-DR-1			
13TH STREET DRAINAGE IMPROVEMENTS			
4/11/2019			
ITEM NO.	DESCRIPTION OF ITEMS	CONTRACT QUANTITY	UNIT
2.01	SITE PREPARATION	1	L.S.
3.01	UNCLASSIFIED EXCAVATION	85	C.Y.
3.30	BORROW MATERIAL	43	C.Y.
3.40	TOPSOIL	26	C.Y.
4.01	AGGREGATE BASE COURSE	24	TON
7.06	CONCRETE DRIVEWAY (6" THICK), STANDARD FINISH	1500	S.F.
8.03	CONCRETE CURB & GUTTER (CLASS 3)	60	L.F.
9.04	CONCRETE SIDEWALK (4" THICK)	645	S.F.
10.01	JUNCTION BOX - 5' BOX	1	EA
10.05	CURB INLET - 5' BOX	4	EA
10.06	GRATE INLET - 5' BOX (SPECIAL)	1	EA
10.07	WING 3' EXTENSION	1	EA
10.10	WING 6' EXTENSION	6	EA
10.10	STORM DRAIN PIPES, 24" CROSS DRAIN	43	L.F.
10.10	STORM DRAIN PIPES, 24" SIDE DRAIN	79	L.F.
10.10	STORM DRAIN PIPES, 30" SIDE DRAIN	32	L.F.
13.30A	STORM DRAIN PIPE, ARCH 36"X23" SIDE DRAIN	108	L.F.
14.01	SOLID SODDING (BERMUDA)	54	S.Y.
16.01	MAINTENANCE OF TRAFFIC	1	L.S.
17.01	PAVEMENT REPAIRS	23	S.Y.
19.01	FINAL CLEAN UP	1	L.S.
24.01	SILT FENCE, TYPE A (SFA)	500	L.F.
24.03	DIVERSION BERM (DI)	4	C.Y.
24.03	SEDIMENT BARRIER, SILT FENCE (SD1)	5	EA
24.05	SEDIMENT BARRIER, BLOCK & GRAVEL (SD3)	2	EA
24.06	DISTURBED AREA STABILIZATION (TS2)	0.1	AC
26.10	TRENCH & EXCAVATION SAFETY	1	L.S.

NOTES:

THIS AREA IS FOR ANY SPECIAL CONDITIONS OR NOTES THAT NEED TO BE ADDED TO THE PLAN SET THAT ARE NOT COVERED IN THE BID/CONTRACT DOCUMENTS OR STANDARD SPECIFICATIONS.



NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1-1/2" MIN. COVER. THIS TYPE DROP INLET TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.

EXISTING	PROPOSED
IRON ROD	PROPOSED CONTOUR
PK NAIL	PROPOSED SPOT ELEVATION
R.R. SPIKE	PROPOSED SPOT CURB ELEVATION
CONC. MONUMENT	STORM SEWER - PIPE
WATER VALVE	STORM SEWER - MITERED END SECTION
WATER METER	STORM SEWER - GRATE INLET
FIRE HYDRANT	STORM SEWER - JUNCTION BOX
GAS METER	STORM SEWER - FLARED END SECTION
GAS VALVE	STORM SEWER - HEADWALL
CLEAN-OUT	STORM SEWER - SINGLE WING
GUARD POST (BOLLARD)	STORM SEWER - DOUBLE WING
SIGN POST	STORM SEWER - AREA INLET
BENCHMARK	GRADE BREAK LINE
STORM SEWER MANHOLE	HIGH POINT
SANITARY SEWER MANHOLE	LOW POINT
TELEPHONE MANHOLE	CUT LINE
ELECTRIC MANHOLE	FILL LINE
TELEPHONE BOX	SANITARY SEWER PIPE
ELECTRIC BOX	SANITARY SEWER MANHOLE
CABLE BOX	PROPOSED CURB
UTILITY POLE	PROPOSED CONCRETE
GUY WIRE	CONSTRUCTION - ENTRANCE/EXIT
LIGHT POLE	CHECK DAM
POST OR POLE (TYPE AS NOTED)	DIVERSION BERM
MAILBOX	DOWNDRAIN STRUCTURE - TEMPORARY
DECIDUOUS TREE	ROCK DAM
EVERGREEN/CONIFEROUS TREE	SEDIMENT BARRIER - SILT FENCE
BUSH	SEDIMENT BARRIER - GRAVEL RING
PROPERTY LINE	SEDIMENT BARRIER - BLOCK & GRAVEL
SETBACK LINE	SEDIMENT BARRIER - BLOCK
EASEMENT LINE	TEMPORARY SEDIMENT BASIN
CURB	SILT FENCE - TYPE A
FENCE	SILT FENCE - TYPE B
OVERHEAD ELECTRIC	SILT FENCE - TYPE C
OVERHEAD TELEPHONE	STORM DRAIN OUTLET PROTECTION
OVERHEAD CABLE	SURFACE ROUGHENING
UNDERGROUND TELEPHONE	DISTURBED AREA STABILIZATION - TEMPORARY STABILIZATION
UNDERGROUND ELECTRIC	DISTURBED AREA STABILIZATION - TEMPORARY GRASSING
UNDERGROUND CABLE	DISTURBED AREA STABILIZATION - PERMANENT GRASSING
WATER LINE	MATting/BLANKETS
SEWER LINE	
GAS LINE	
STORM SEWER/CULVERT	
EDGE OF WOODS	
CONTOUR LINE	

REVISIONS

DATE

CITY OF LITTLE ROCK, ARKANSAS

13TH STREET DRAINAGE IMPROVEMENTS

GENERAL NOTES, LEGEND AND QUANTITIES

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201

STATE OF ARKANSAS

REGISTERED PROFESSIONAL ENGINEER

No. 10452

ANDREW H. ROSE

DRAWN BY

AES/HV

DESIGNED

AHR

CHECKED

CJM

DATE

07/12/2019

SCALE

N/A

PROJECT NO.

CLR # 01-15-DR-1

SHEET NO.

C2

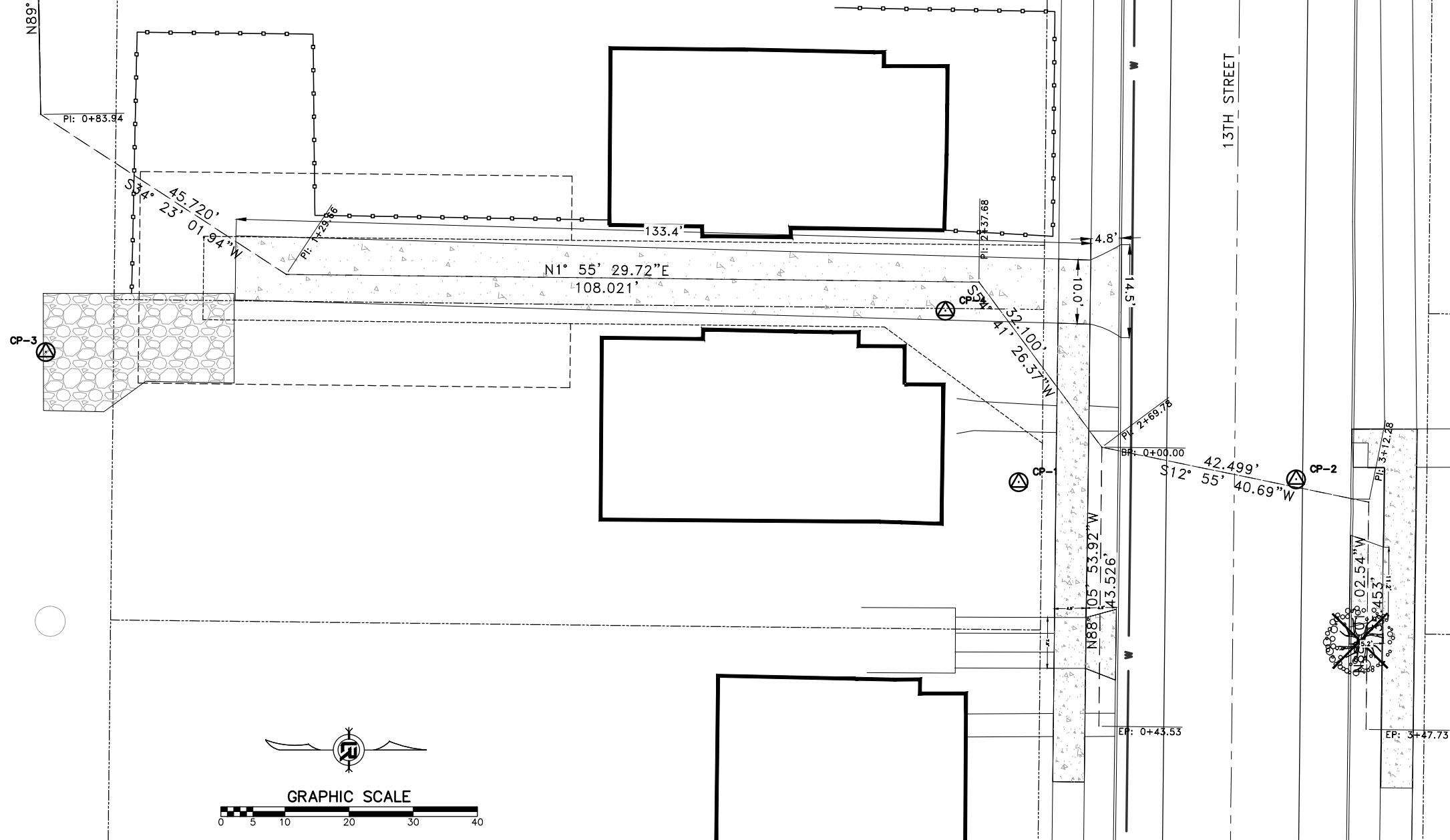
N89° 32' 27.46"W
22.030'
N89° 32' 27.46"W
61.910'

BP: 0+00.00

PI COORDINATES		
STATION	NORTHING	EASTING
0+00.00	147551.29	1221767.72
0+83.94	147550.62	1221851.65
1+29.66	147588.35	1221877.47
2+20.99	147679.65	1221880.08
2+65.50	147714.87	1221907.30
3+08.00	147756.29	1221916.81
3+43.45	147755.06	1221952.24
0+43.53	147713.42	1221950.80

VERTICAL DATUM: NGVD 29
BASIS OF BEARING: ARKANSAS GRID NORTH NAD 83 AS DETERMINE BY GPS
⊕ CONTROL POINT

SURVEY BENCHMARKS				
NO.	DESCRIPTION	NORTHING	EASTING	ELEV.
CP-1	SET NAIL	147701.808	1221912.491	333.648
CP-2	SET NAIL	147745.062	1221913.031	332.847
CP-3	SET NAIL	147690.966	1221885.497	332.827
CP-4	SET NAIL	147550.558	1221888.748	329.532



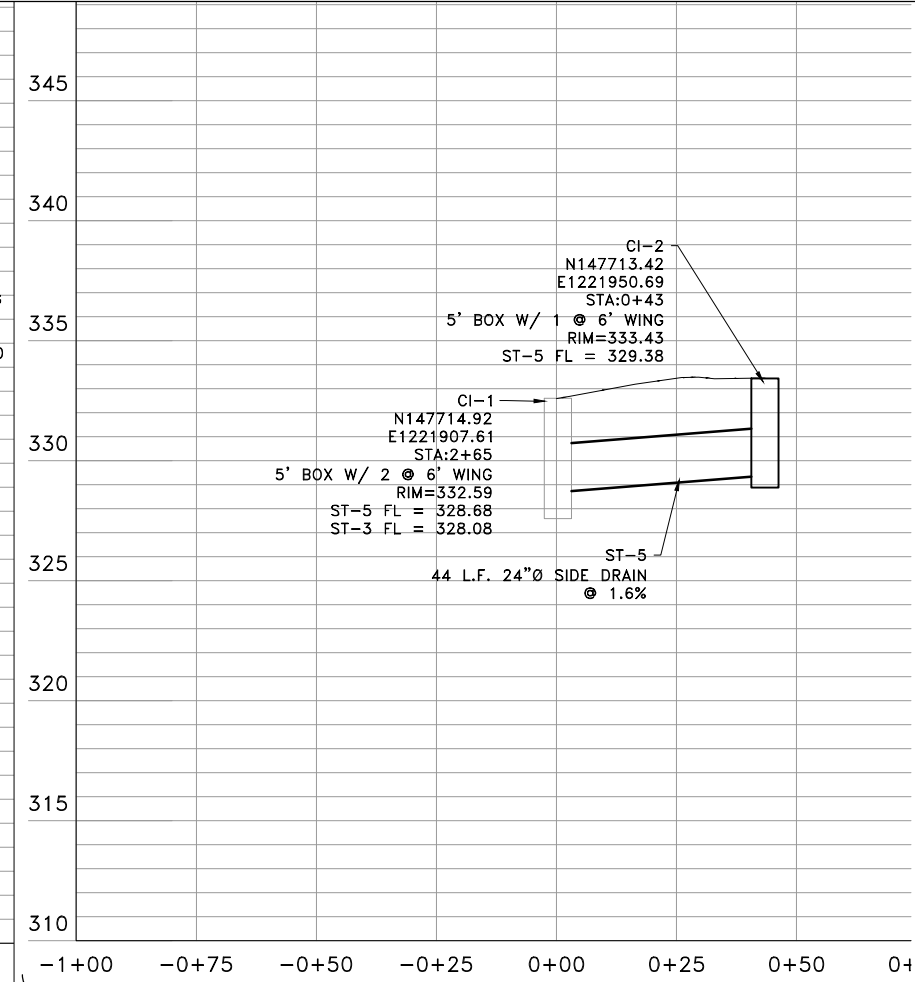
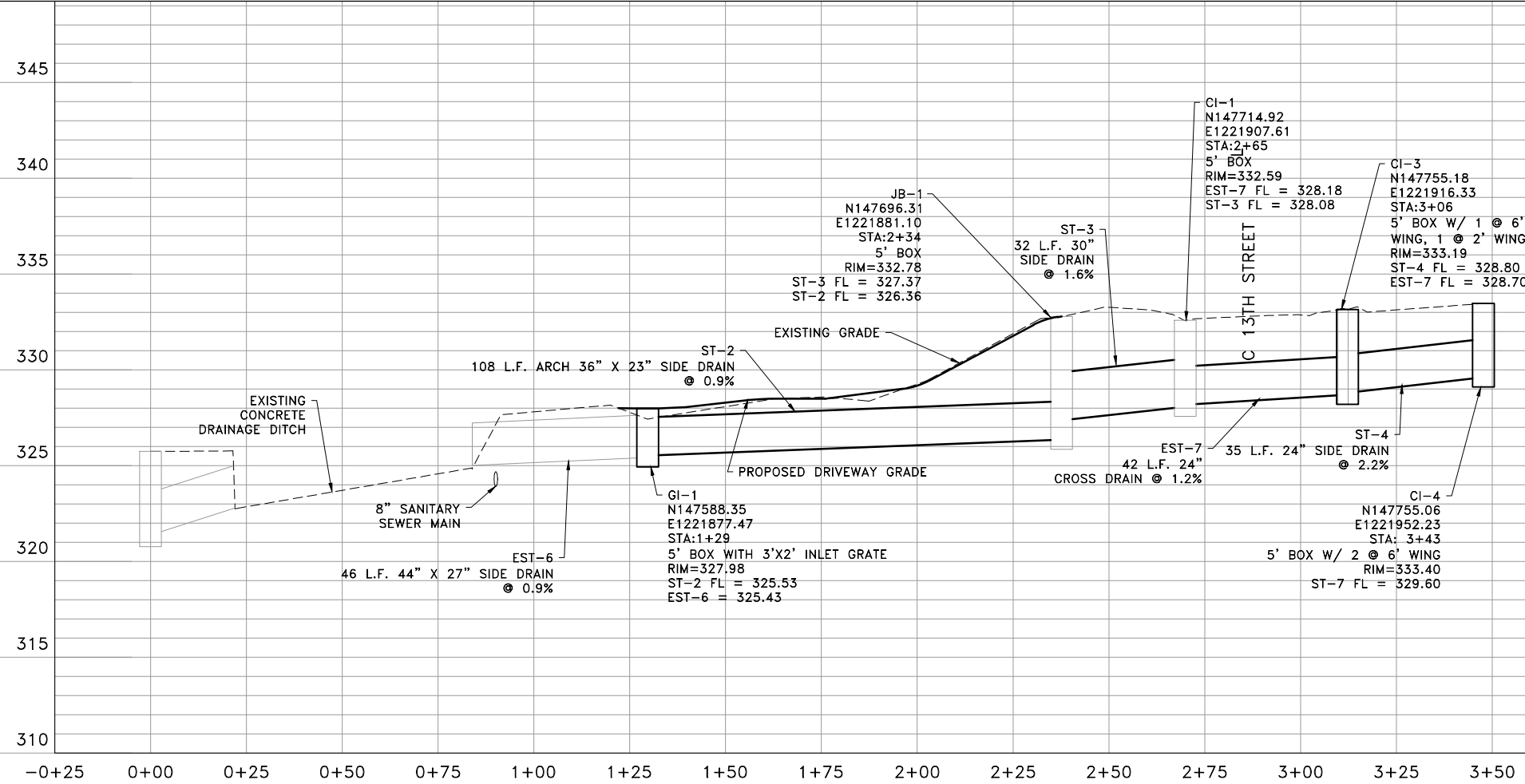
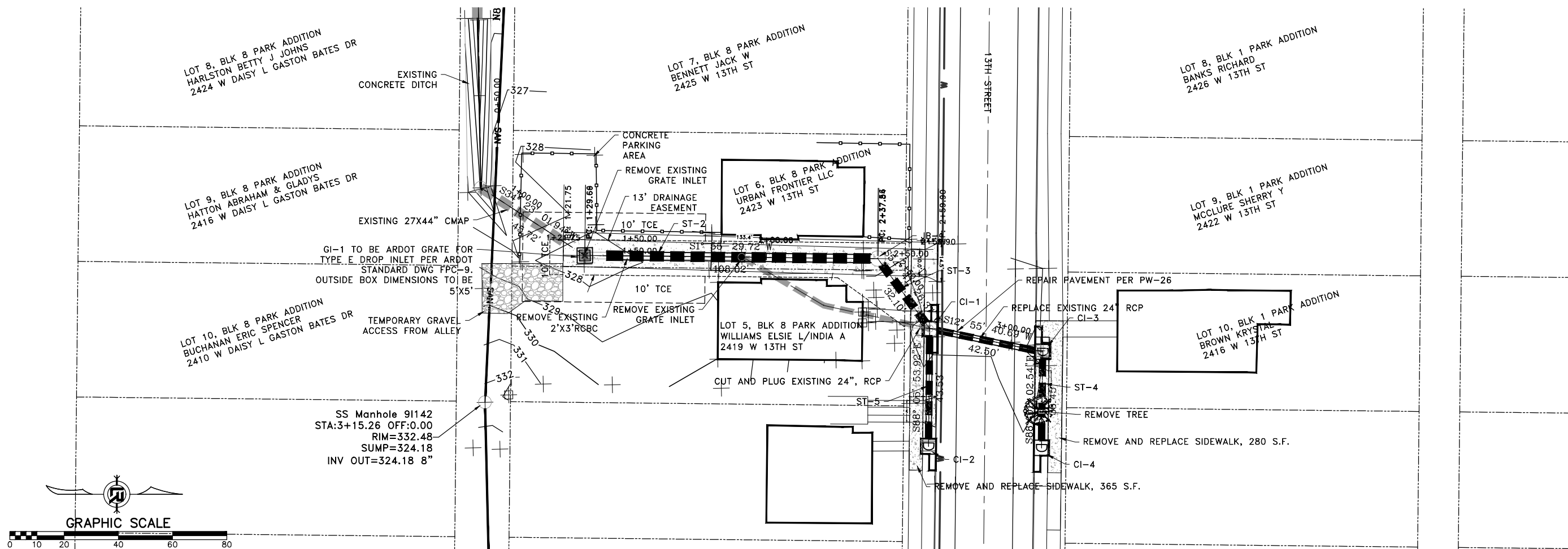
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
13TH STREET DRAINAGE IMPROVEMENTS
FIELD TIES/LAYOUT SHEET

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



DRAWN BY
AES/HV
DESIGNED
AHR
CHECKED
CJM
DATE
07/12/2019
SCALE
1" = 10'
PROJECT NO.
CLR # 01-15-DR-1
SHEET NO.
C3



REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS

13TH STREET DRAINAGE IMPROVEMENTS

DRAINAGE PLAN & PROFILE AND DRIVEWAY DETAIL

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201

REGISTERED PROFESSIONAL ENGINEER

ANDREW H. RINE

DRAWN BY
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DESIGNED
AHR

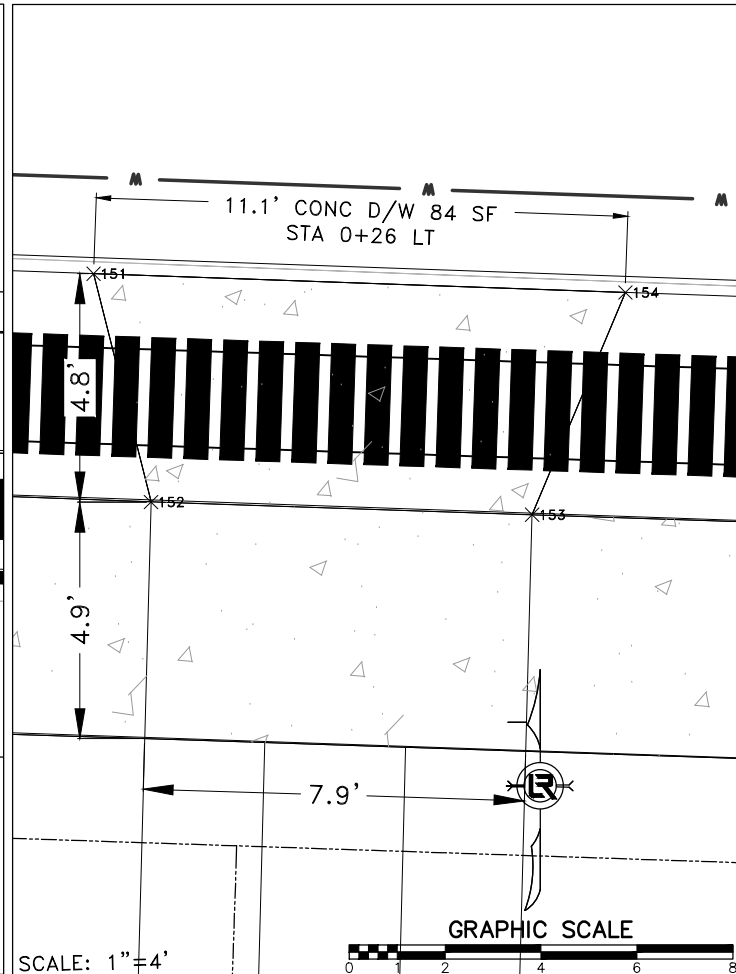
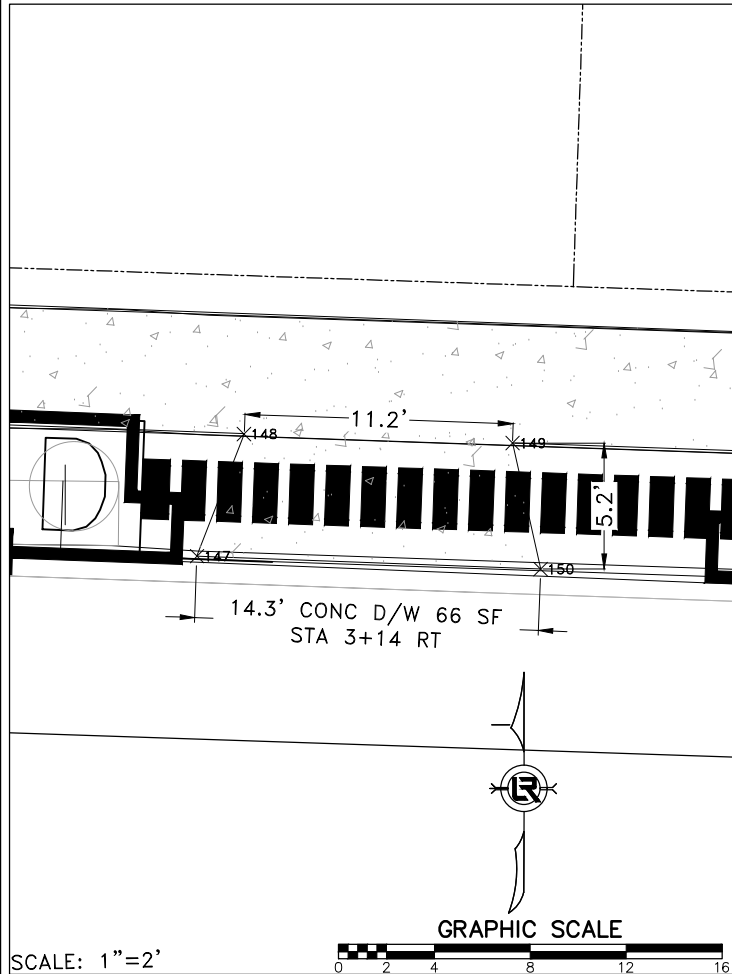
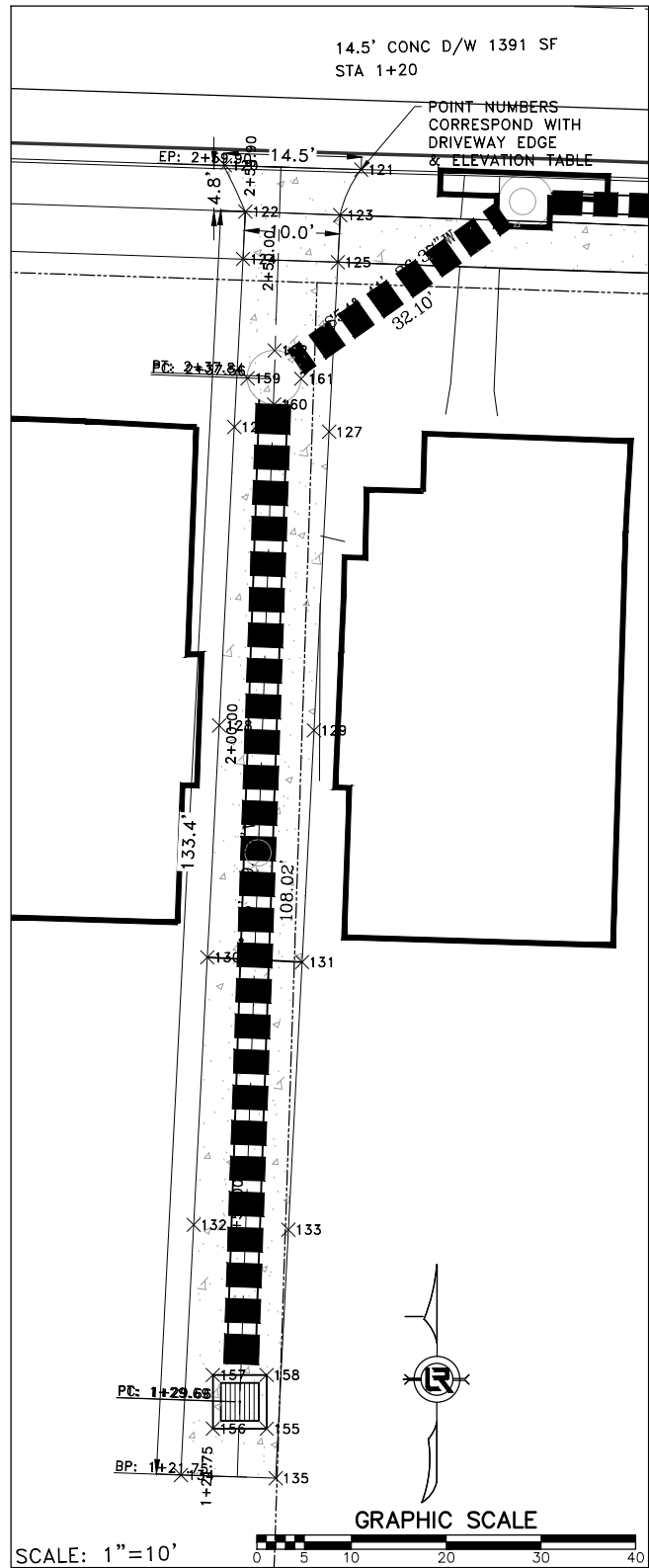
CHECKED
CJM

DATE
07/12/2019

SCALE
H: 1" = 20' V: 1" = 4'

PROJECT NO.
CLR # 01-15-DR-1

SHEET NO.
C4



DRIVEWAY EDGE & ELEVATION				
NO.	DESCRIPTION	NORTHING	EASTING	ELEV.
120	EDGE OF DW	147718.700	1221875.906	332.30
121	EDGE OF DW	147718.240	1221890.266	332.40
122	EDGE OF DW	147713.814	1221878.060	332.83
123	EDGE OF DW	147713.444	1221888.054	332.85
124	EDGE OF DW	147708.816	1221877.805	332.93
125	EDGE OF DW	147708.480	1221887.801	332.95
126	EDGE OF DW	147691.114	1221876.901	332.50
127	EDGE OF DW	147690.604	1221886.888	332.50
128	EDGE OF DW	147659.644	1221875.295	329.20
129	EDGE OF DW	147659.134	1221885.282	329.20
130	EDGE OF DW	147635.210	1221874.048	328.50
131	EDGE OF DW	147634.700	1221884.035	328.50
132	EDGE OF DW	147607.006	1221872.608	328.25
133	EDGE OF DW	147606.496	1221882.595	328.25
134	EDGE OF DW	147580.631	1221871.262	328.00
135	EDGE OF DW	147580.296	1221881.258	328.00
147	EDGE OF DW	147753.690	1221922.390	332.63
148	EDGE OF DW	147758.604	1221923.480	333.17
149	EDGE OF DW	147758.640	1221933.620	333.24
150	EDGE OF DW	147752.990	1221934.450	332.91
151	EDGE OF DW	147716.350	1221933.670	332.26
152	EDGE OF DW	147711.760	1221934.700	333.02
153	EDGE OF DW	147711.610	1221941.900	333.11
154	EDGE OF DW	147716.050	1221943.570	332.57
155	EDGE OF DW	147585.511	1221880.305	327.98
156	EDGE OF DW	147585.523	1221874.622	327.98
157	EDGE OF DW	147591.183	1221874.634	327.98
158	EDGE OF DW	147591.183	1221880.293	327.98
159	EDGE OF DW	147696.247	1221878.299	332.78
160	EDGE OF DW	147693.492	1221881.085	332.78
161	EDGE OF DW	147696.202	1221883.949	332.78
162	EDGE OF DW	147699.179	1221881.136	332.77

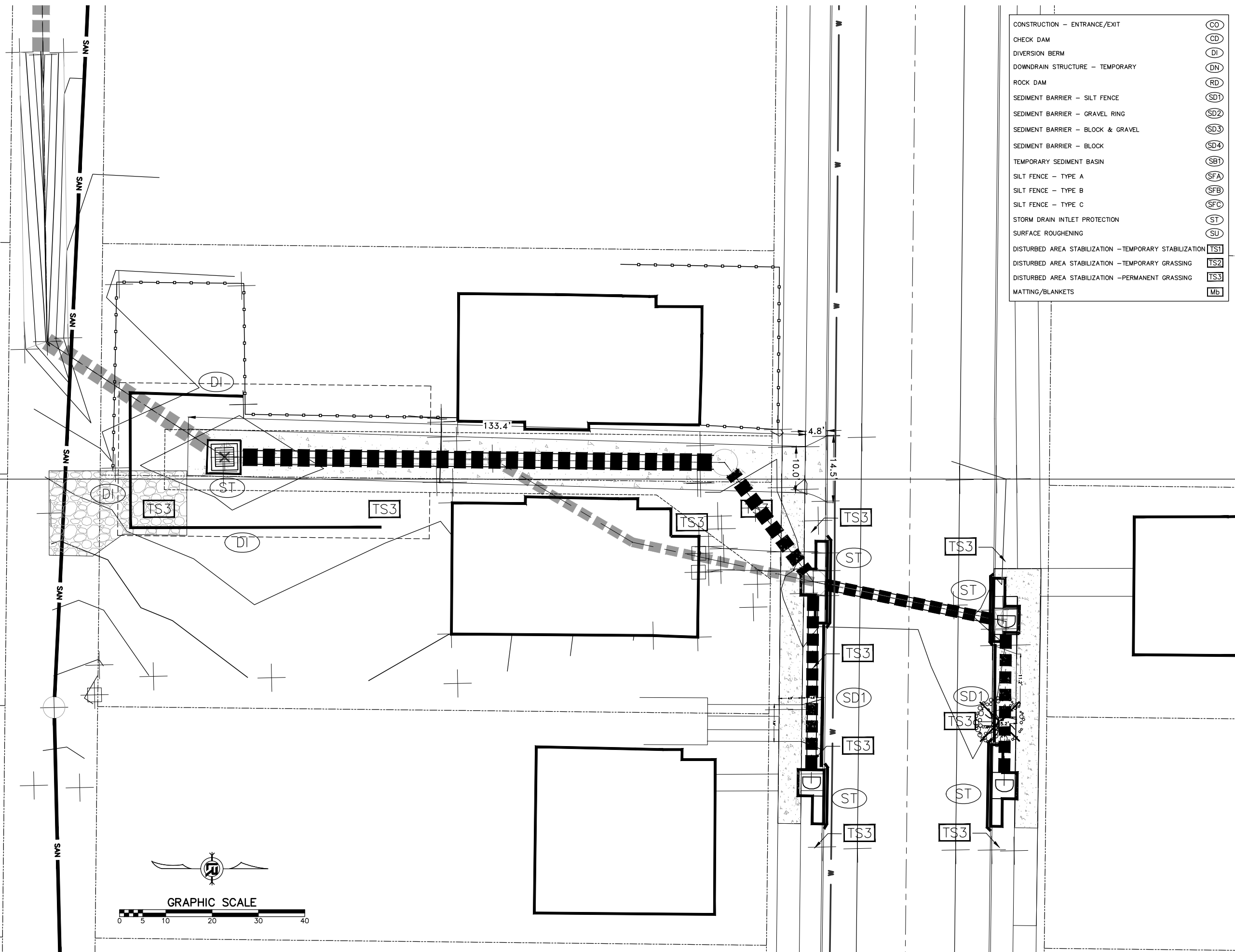
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
13TH STREET DRAINAGE IMPROVEMENTS
DRIVEWAY DETAIL

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



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AES/HV
DESIGNED
AHR
CHECKED
CJM
DATE
07/12/2019
SCALE
NOTED
PROJECT NO.
CLR # 01-15-DR-1
SHEET NO.
C5



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

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS

13TH STREET DRAINAGE IMPROVEMENTS

EROSION CONTROL PLAN

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201

STATE OF ARKANSAS

REGISTERED PROFESSIONAL ENGINEER

No. 10452

ANDREW H. RINE

DRAWN BY

AES/HV

DESIGNED

AHR

CHECKED

CJM

DATE

07/12/2019

SCALE

1" = 10'

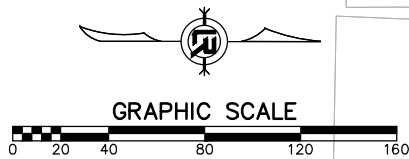
PROJECT NO.

CLR # 01-15-DR-1

SHEET NO.

C6

- CONSTRUCTION SEQUENCE NOTES_
1. INSTALL ADVANCE WARNING SIGNS AND DEVICES AS SHOWN.
 2. CONSTRUCT PROJECT STA. 10+68 TO 13+05

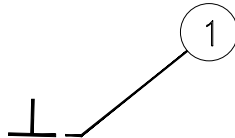
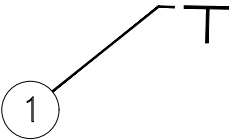


DAISY GATSON BATES DRIVE

JONES STREET

RICE STREET

13TH STREET



(I) W20-1
(48" X 48")

1

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
13TH STREET DRAINAGE IMPROVEMENTS

MAINTENANCE OF TRAFFIC

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201



DRAWN BY
AES/HV
DESIGNED
AHR
CHECKED
CJM
DATE
07/12/2019
SCALE
1" = 40'
PROJECT NO.
CLR # 01-15-DR-1
SHEET NO.
C7