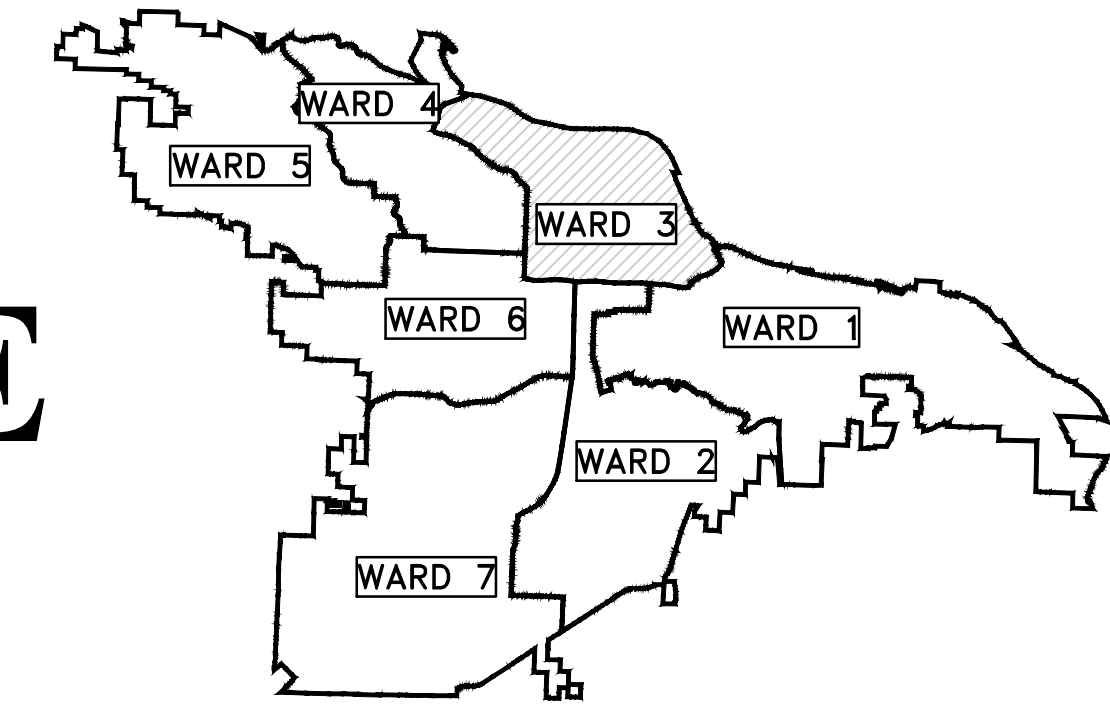
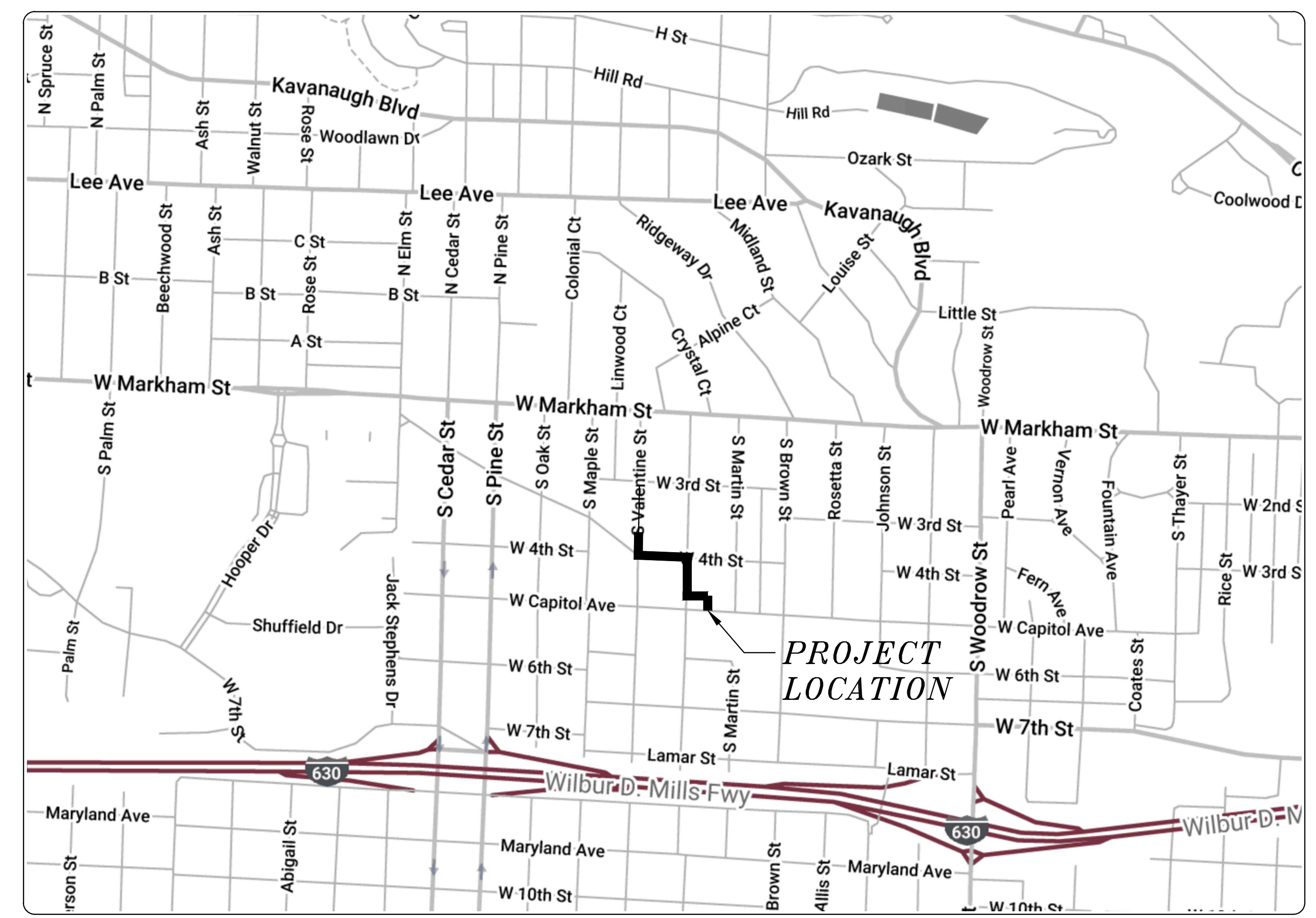


CLR PROJECT 03-17-DR-107 WEST 4TH STREET DRAINAGE AND STREET IMPROVMENTS SOUTH VALENTINE STREET TO WEST CAPITOL AVENUE



PROJECT LOCATION – WARD 3



SHEET NO.	TITLE
C1	COVER SHEET
C2	QUANTITIES & DETAILS
C3 - C4	TYPICAL SECTIONS
C5-C11	SPECIAL DETAILS
C12	GRATE DETAIL
C13	FIELD TIES/LAYOUT
C14-C16	BOX CULVERT AND DRAINAGE CHANNEL
C17	WEST 4TH STREET 1
C18	WEST 4TH STREET 2
C19	SOUTH VALENTINE STREET
C20	VALMAR STREET
C21	EROSION CONTROL
C22	MAINTENANCE OF TRAFFIC
C23-C24	DRIVEWAY DETAILS
C25-C31	CROSS SECTIONS

60% SUBMITTAL



**2019-2021
BOND PROGRAM**

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



4701 Northshore Drive
North Little Rock, AR 72118
501-376-3633

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
WEST 4TH STREET DRAINAGE
AND STREET IMPROVMENTS

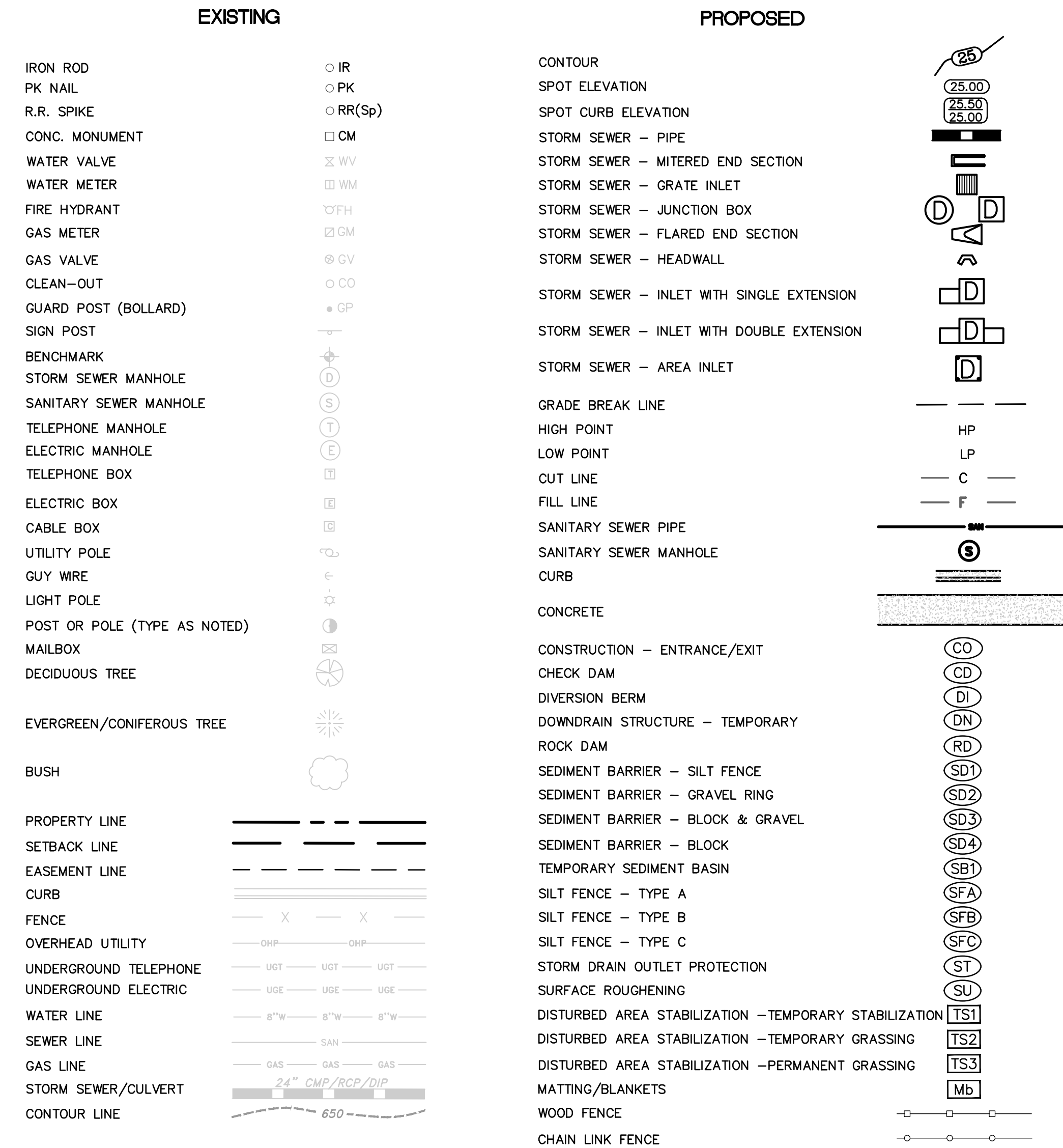
COVER SHEET

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



DRAWN BY TCP
DESIGNED RCC
CHECKED RCC
DATE 12-18-2023
SCALE N.T.S.
PROJECT NO. 03-17-DR-107
SHEET NO. C1

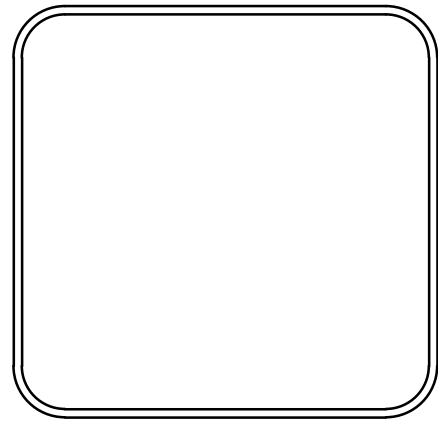
CLR PROJECT# 03-17-DR-107			
WEST 4TH STREET DRAINAGE AND STREET IMPROVEMENTS			
18-Dec-23			
ITEM#	ITEM DESCRIPTION	UNIT	QUANTITY
2.01	SITE PREPARATION	LS	1
3.01	UNCLASSIFIED EXCAVATION	CY	8,134
3.06	BORROW MATERIAL	CY	4,694
3.4	TOPSOIL	CY	156
4.01	AGGREGATE BASE COURSE	TON	1,648
6.01	ACHM SURFACE COURSE	TON	423
7.06	CONCRETE DRIVEWAY (6" THICK), STANDARD FINISH	SF	2,321
8.03	CONCRETE CURB AND GUTTER (CLASS 3)	LF	1,343
9.04	CONCRETE SIDEWALK (4" THICK)	SF	3,732
10.04	CURB INLET - 4' BOX	EA	11
10.04A	CURB INLET - 4' X 6' BOX	EA	1
10.05	CURB INLET - 5' BOX	EA	1
10.04B	CURB INLET - 6' X 4' BOX	EA	1
10.09	CURB INLET - 9' x 4' BOX	EA	2
10.06R	CURB INLET - REVERSE THROAT	EA	1
10.1	WING 6' EXTENSION	EA	10
10.14	WING 10' EXTENSION	EA	6
11.01	REINFORCED CONCRETE PRECAST BOX CULVERT (DBL. 12' X 4')	LF	400
11.1	REINFORCED CONCRETE	CY	242
11.11	CONCRETE PIPE COLLAR	EA	1
11.6	CONCRETE DITCH PAVING	SY	209
13.18S	STORM DRAIN PIPE, 18" SIDE DRAIN	LF	263
13.18X	STORM DRAIN PIPE, 18" CROSS DRAIN	LF	59
13.18X4	STORM DRAIN PIPE, 18" CROSS DRAIN (CLASS IV)	LF	58
13.24S	STORM DRAIN PIPE, 24" SIDE DRAIN	LF	58
13.24X4	STORM DRAIN PIPE, 24" CROSS DRAIN (CLASS IV)	LF	31
13.36S	STORM DRAIN PIPE, 36" SIDE DRAIN	LF	12
13.36X4	STORM DRAIN PIPE, 36" CROSS DRAIN (CLASS IV)	LF	29
13.48S	STORM DRAIN PIPE, 48" SIDE DRAIN	LF	16
13.73S	STORM DRAIN PIPE, ARCH 73"X45" SIDE DRAIN	LF	139
13.73X	STORM DRAIN PIPE, ARCH 73"X45" CROSS DRAIN (CLASS IV)	LF	113
SP	GRATED STREET DRAIN	EA	1
206.01	FLOWABLE FILL	CY	168
14.01	SOLID SODDING, BERMUDA	SY	1,700
16.01	MAINTENANCE OF TRAFFIC	LS	1
17.01	PAVEMENT REPAIRS	SY	15
18.4	HANDRAIL	LF	100
18.45	RIPRAP (NON - GROUTED)	CY	40
18.5	ACCESS RAMP	SF	294
19.01	FINAL CLEANUP	LS	1
23.02	C-BALLAST	TON	421
24.02	CHECK DAM (CD)	CY	20
24.06	SEDIMENT BARRIER, SILT FENCE (SD1)	EA	18
24.09	SEDIMENT BARRIER, BLOCK (SD4)	EA	18
24.12	SILT FENCE - TYPE B (SFB)	LF	1,100
25.04	FENCE CHAIN LINK (4')	LF	448
25.16	FENCE WOOD (6')	LF	71
25.54	FENCE GATE, WOOD DOUBLE SWING (4')	LF	11
25.55	FENCE GATE, WOOD DOUBLE SWING (6')	LF	11
606.36C	FLARED END SECTION 36" RCP	EA	1



REVISIONS	DATE

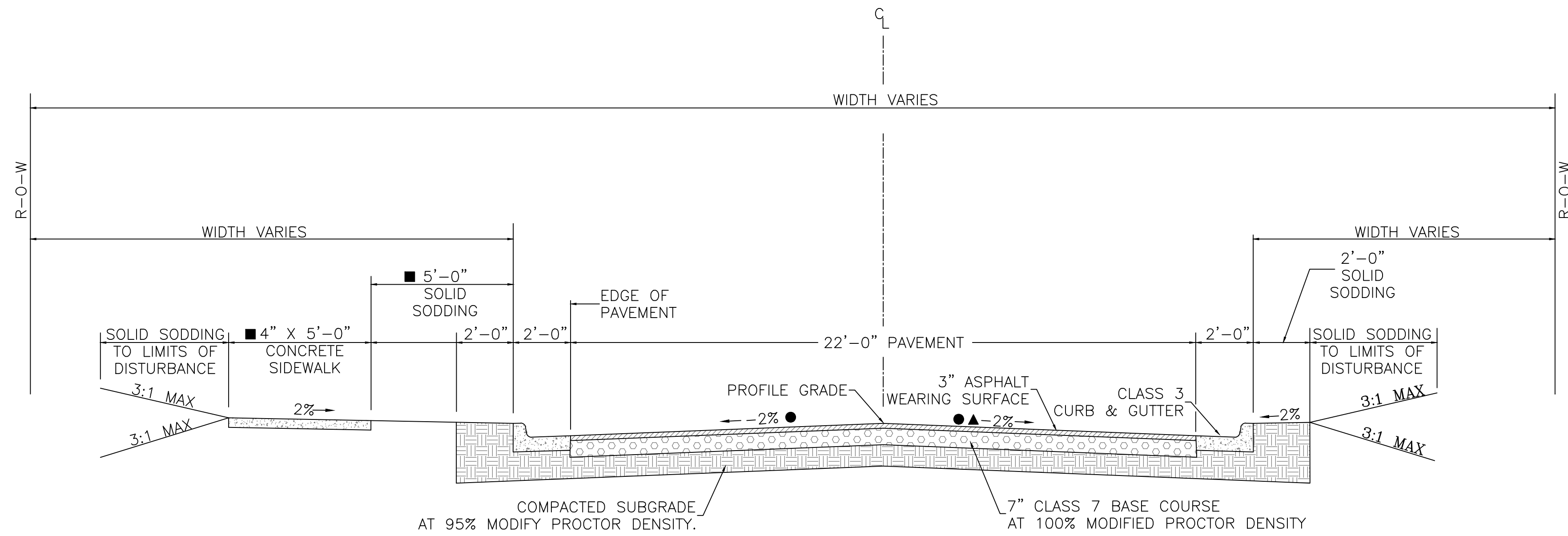
CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS
 QUANTITIES & DETAILS

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



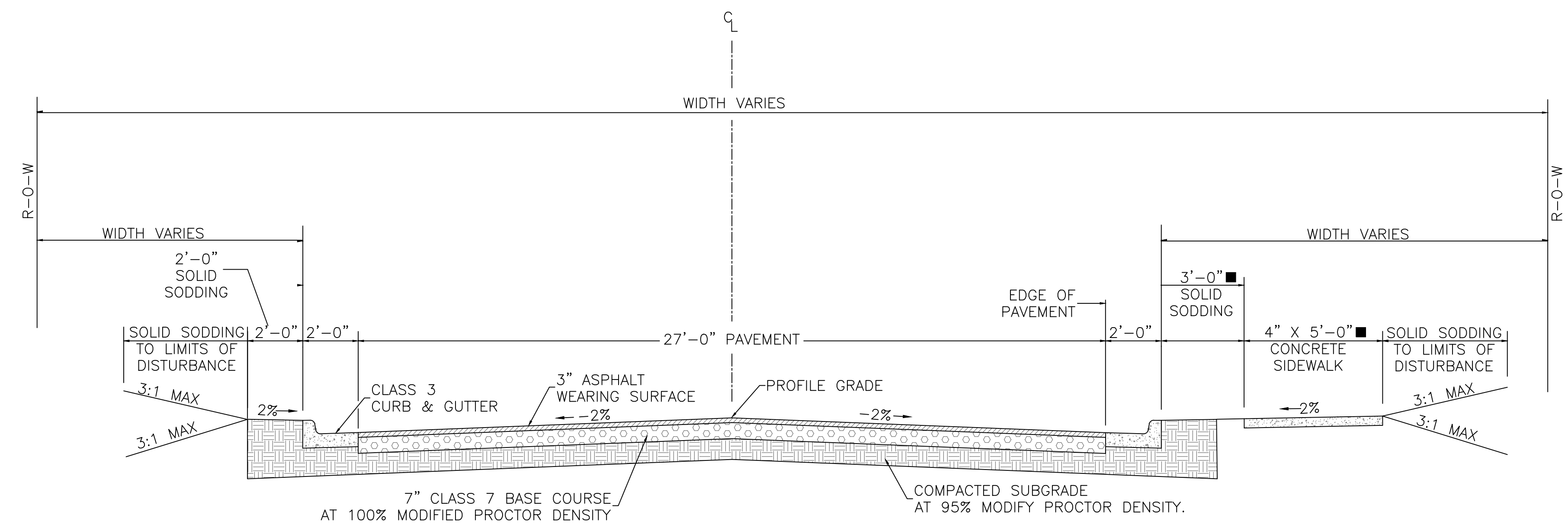
DRAWN BY TCP
DESIGNED RCC
CHECKED RCC
DATE 12-18-2023
SCALE N.T.S
PROJECT NO. 03-17-DR-107
SHEET NO. C2

REVISIONS	DATE



TYPICAL SECTION
WEST 4TH STREET
STA. 10+49.00 TO 14+65.76
STA. 14+93.39 TO STA. 15+55.44

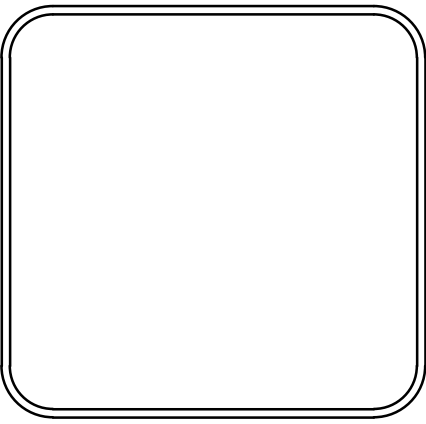
- ▲ TRANSITION CROSS SLOPE FROM -2% TO +2% BETWEEN STA. 10+85 AND STA. 11+25
TRANSITION CROSS SLOPE FROM +2% TO -2% BETWEEN STA. 11+75 AND STA. 12+15
- SEE PLAN AND PROFILE SHEETS FOR VARIATIONS
- TRANSITION CROSS SLOPE OVER A DISTANCE OF 35'-0" TO MATCH PROPOSED SLOPE OF VALMAR STREET



TYPICAL SECTION
VALENTINE STREET
STA. 50+91.00 TO STA. 51+83.36
STA. 52+05.96 TO STA. 52+52.50

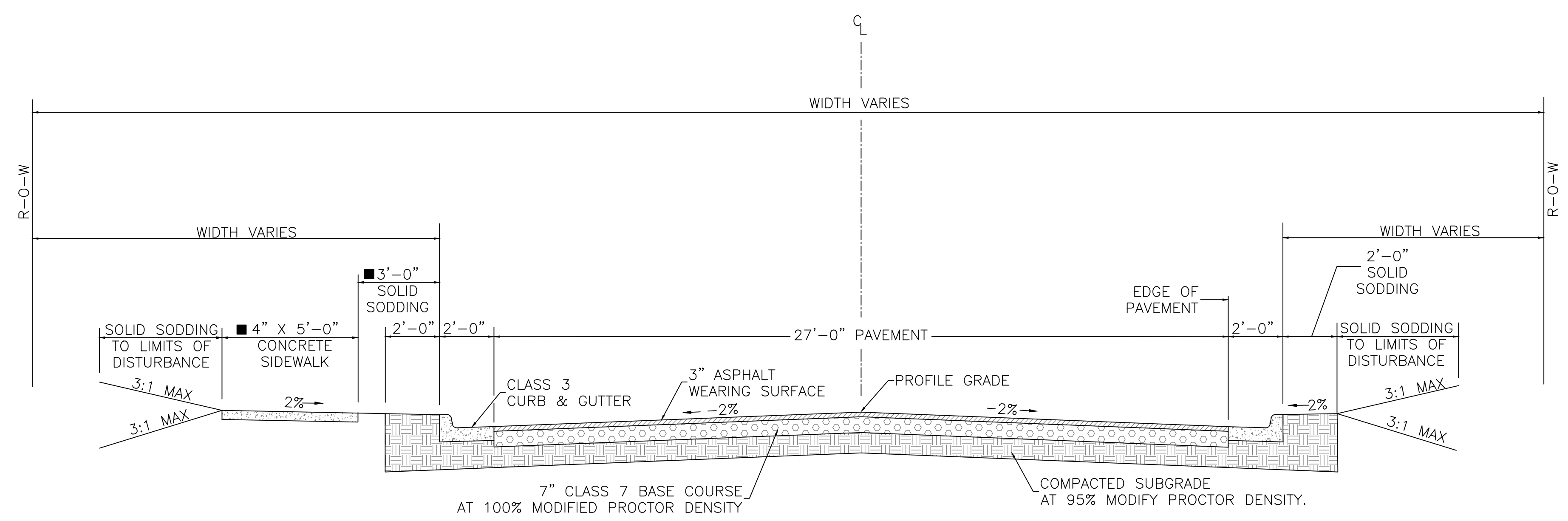
CITY OF LITTLE ROCK, ARKANSAS
WEST 4TH STREET DRAINAGE
AND STREET IMPROVEMENTS
TYPICAL SECTIONS

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



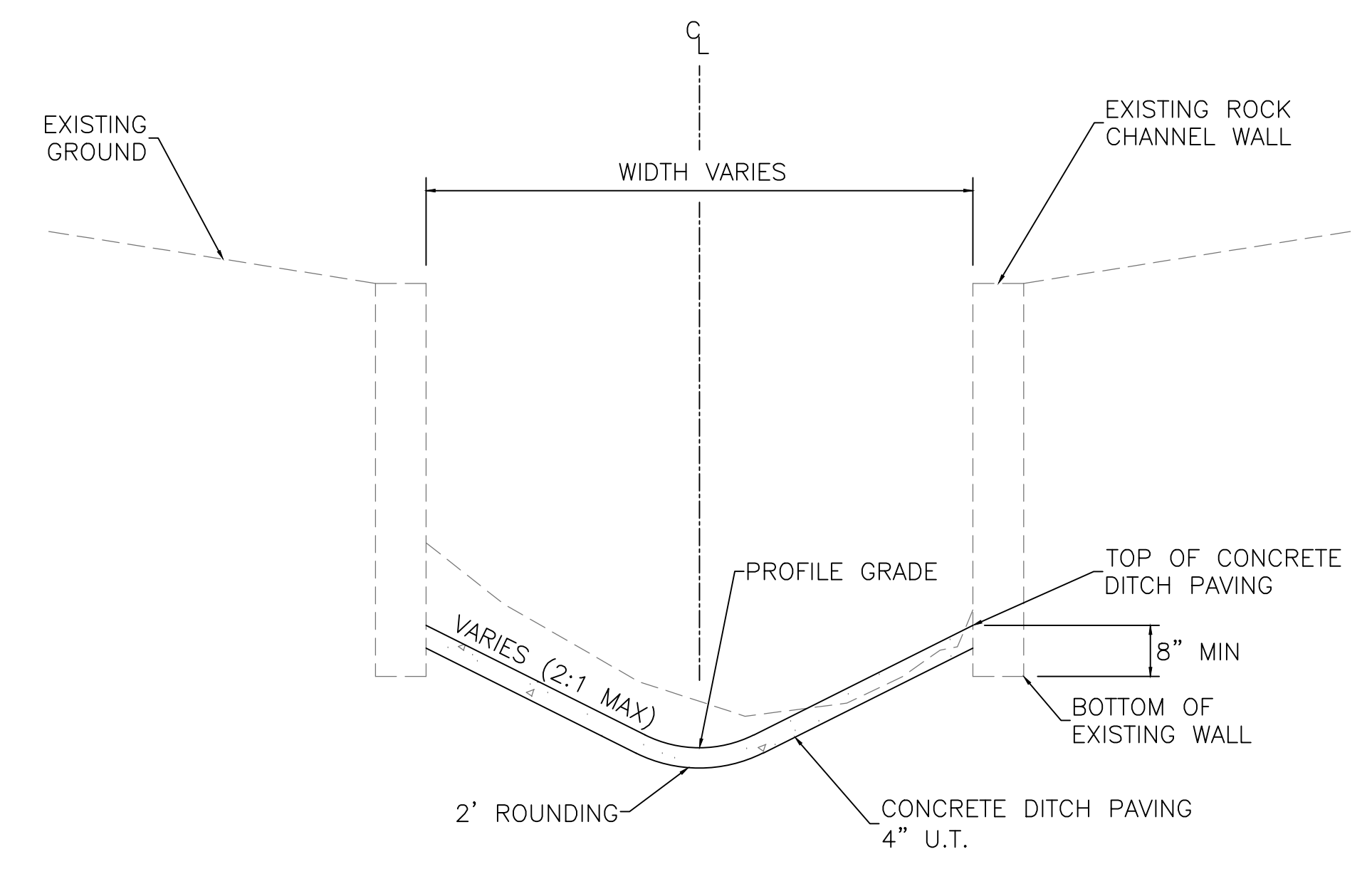
DRAWN BY TCP
DESIGNED RCC
CHECKED RCC
DATE 12-18-2023
SCALE N.T.S
PROJECT NO. 03-17-DR-107
SHEET NO. C3

REVISIONS	DATE



TYPICAL SECTION
VALMAR STREET
STA. 100+50.00 TO STA. 103+50.00

■ SEE PLAN AND PROFILE SHEETS FOR VARIATIONS

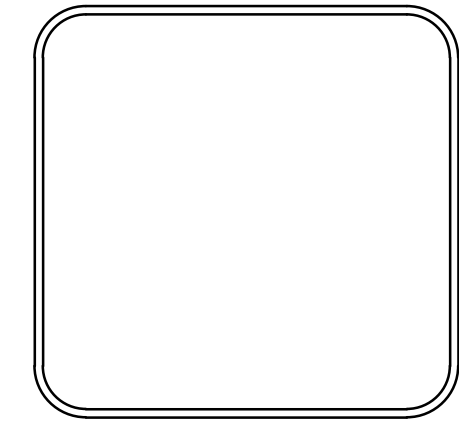


TYPICAL SECTION
CONCRETE DITCH PAVING
STA. 206+56.24 TO STA. 208+36.90

NOTE:
1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

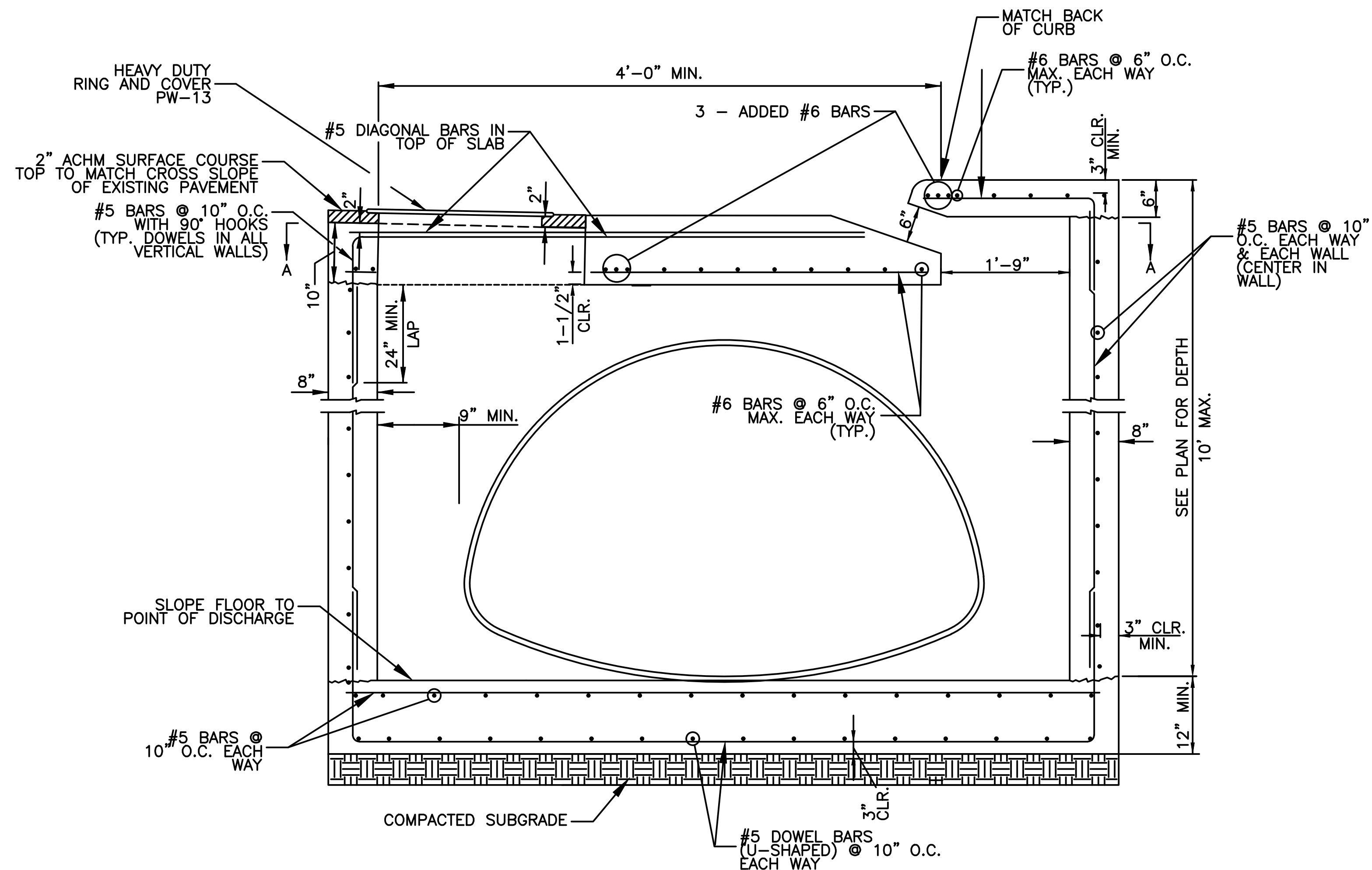
CITY OF LITTLE ROCK, ARKANSAS
WEST 4TH STREET DRAINAGE
AND STREET IMPROVEMENTS
TYPICAL SECTIONS

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



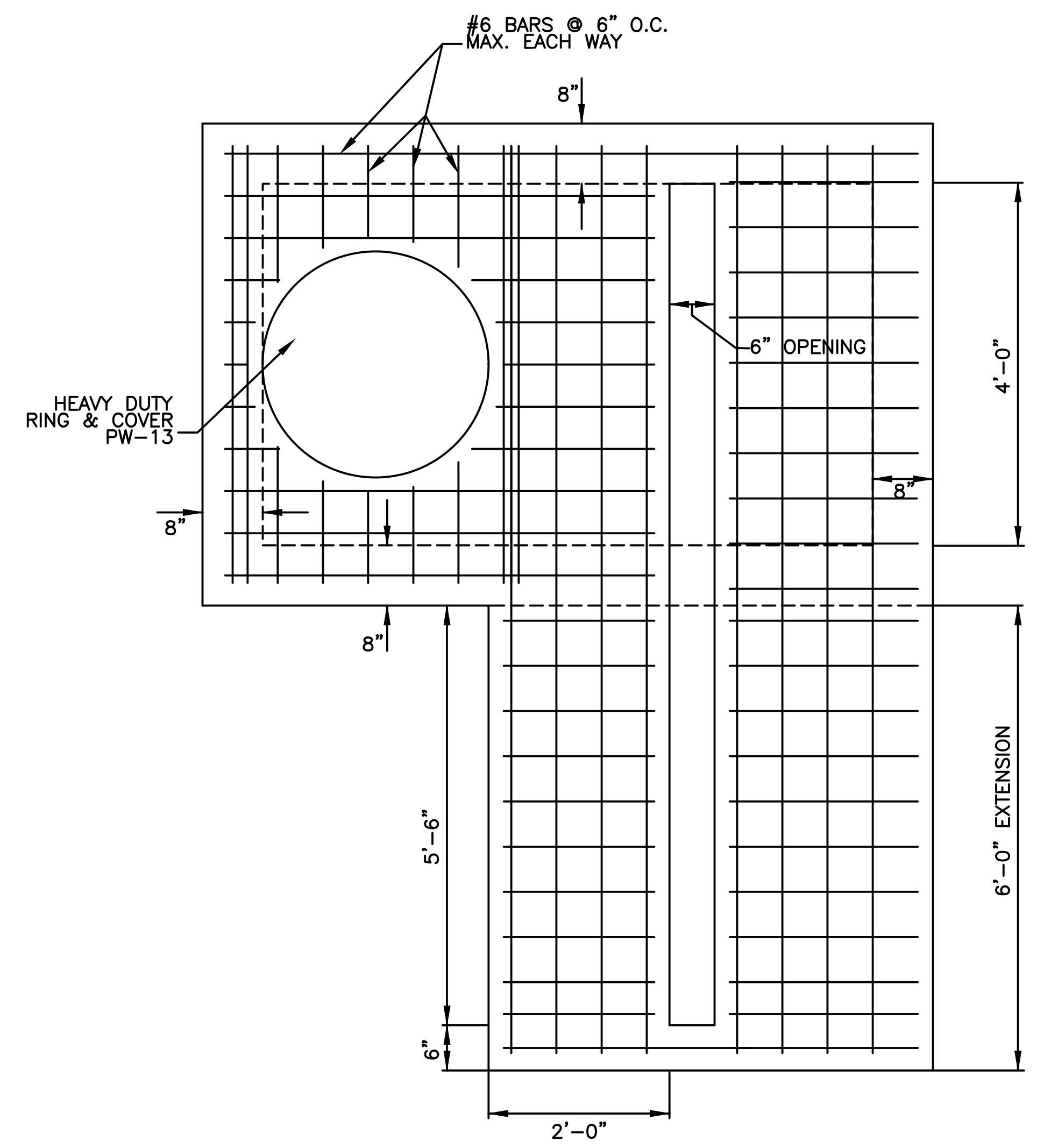
DRAWN BY
TCP
DESIGNED
RCC
CHECKED
RCC
DATE
12-18-2023
SCALE
N.T.S
PROJECT NO.
03-17-DR-107
SHEET NO.
C4

REVISIONS	DATE

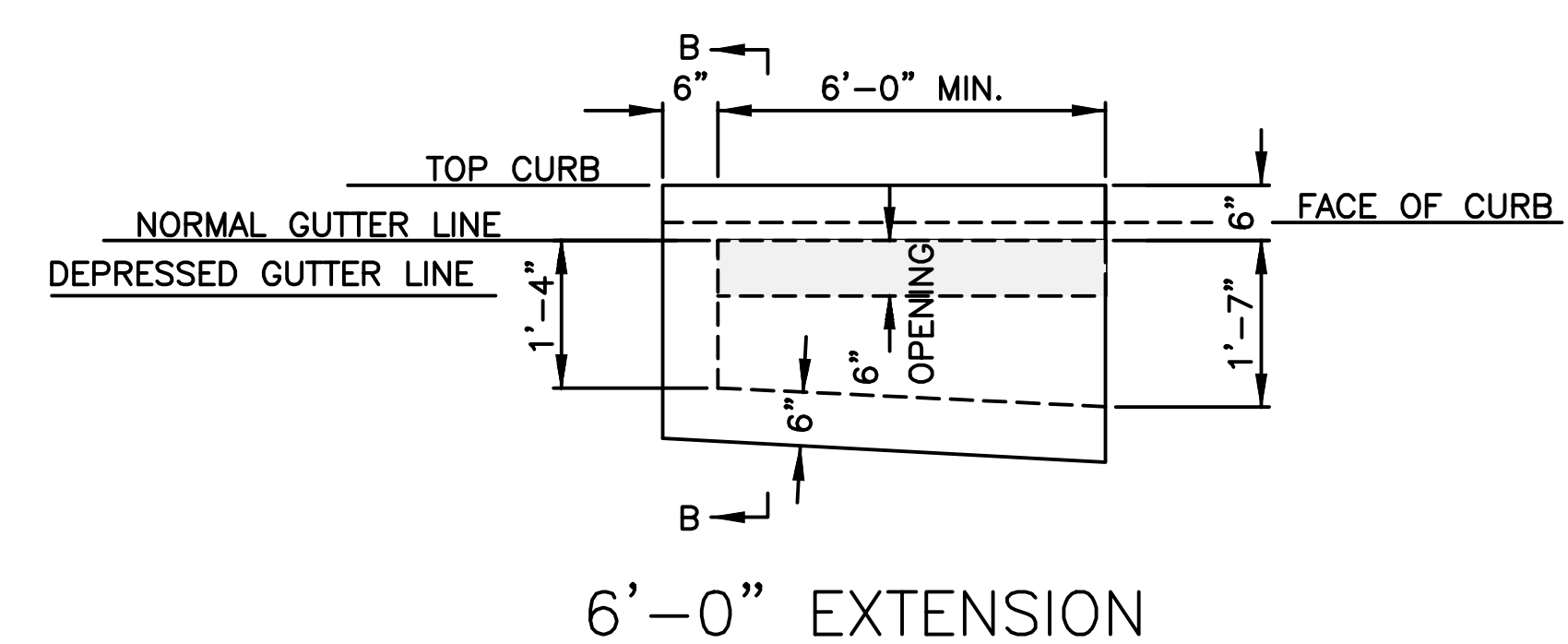


- NOTE:
1. ALL EXPOSED CORNERS SHALL HAVE 3/4" CHAMFER.
 2. ALL REINFORCING BARS SHALL BE GRADE 60.
 3. ALL WORK SHALL COMPLY WITH THE CITY OF LITTLE ROCK CONTRACT CONDITIONS AND SPECIFICATIONS.

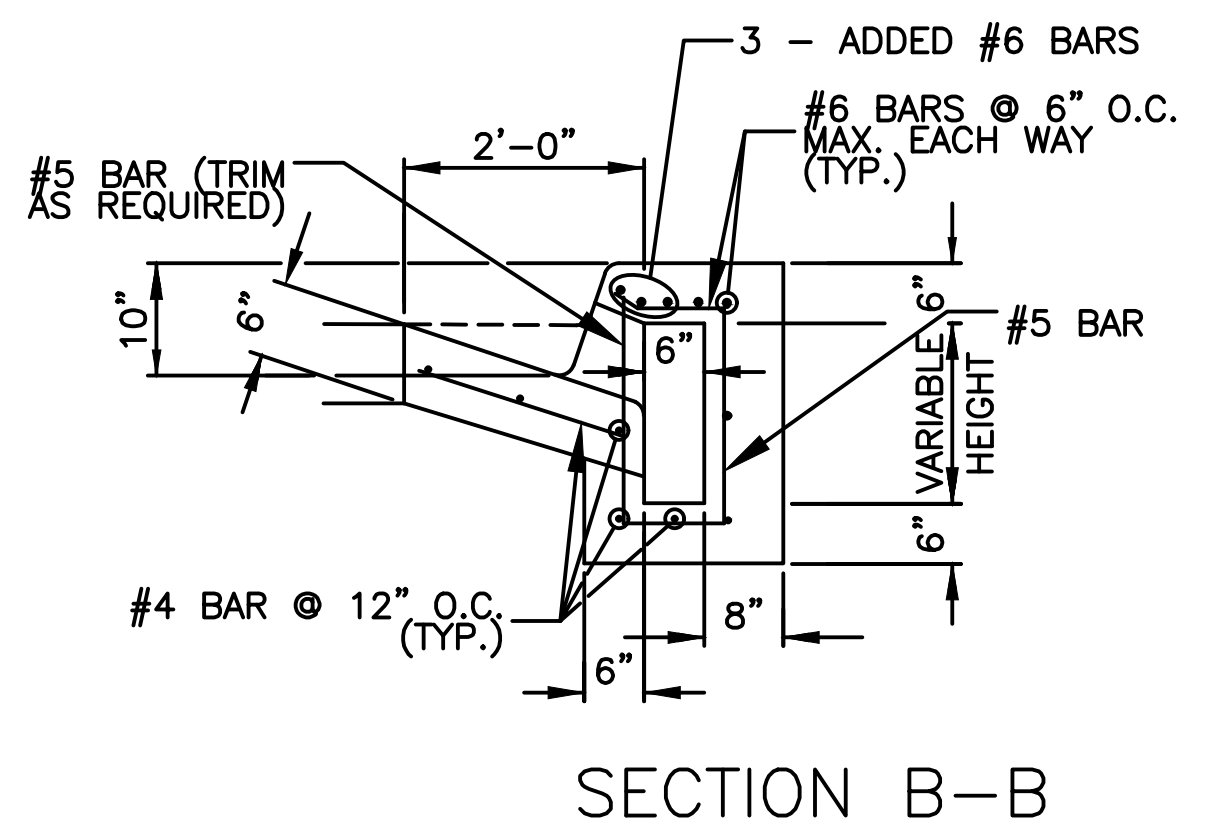
REVERSE THROAT CURB INLET
CI-16



SECTION A-A
(SHOWING BOTTOM MAT OF TOP SLAB)



REVERSE THROAT EXTENSION DETAIL
N.T.S.

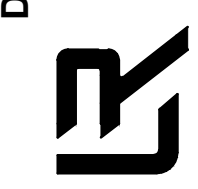


SECTION B-B

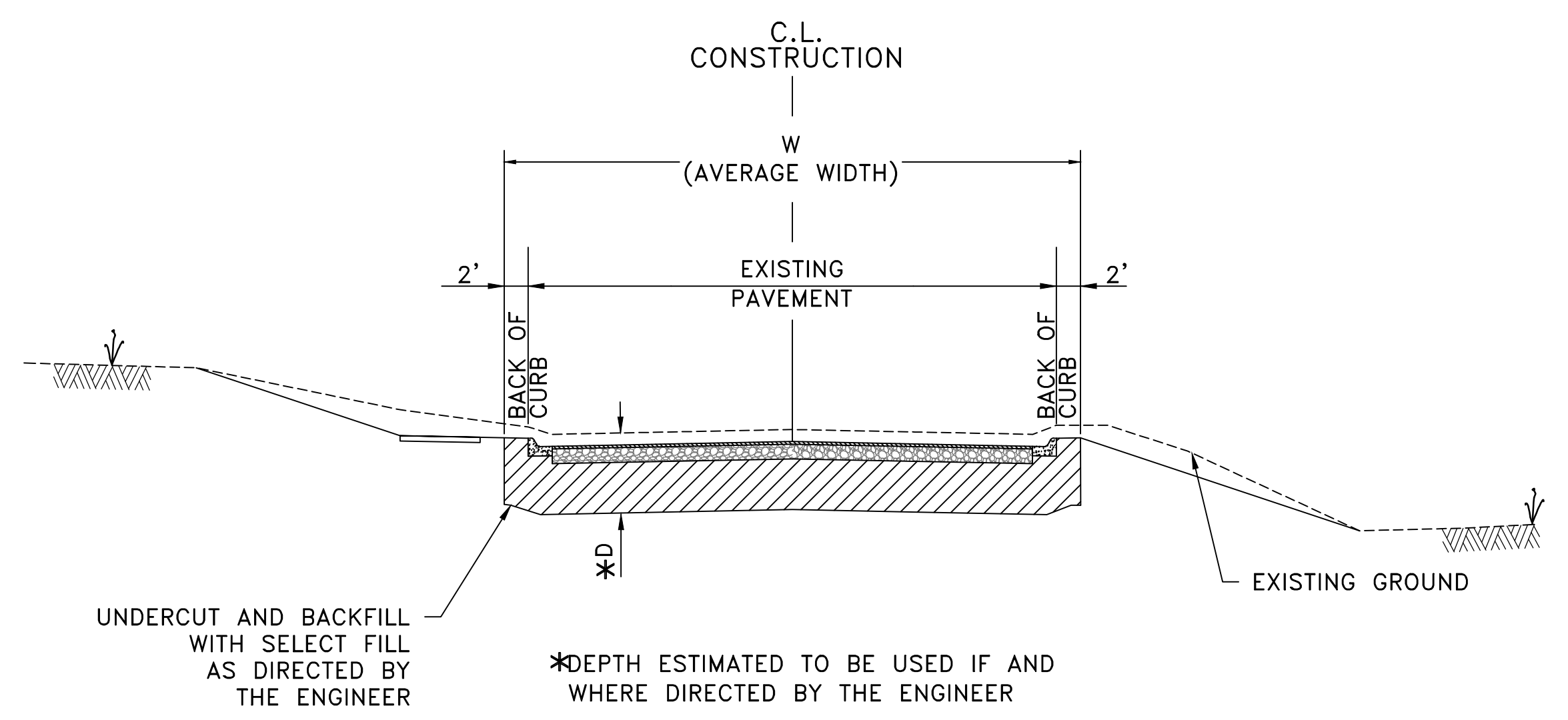
CITY OF LITTLE ROCK, ARKANSAS
WEST 4TH STREET DRAINAGE
AND STREET IMPROVEMENTS

SPECIAL DETAILS

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



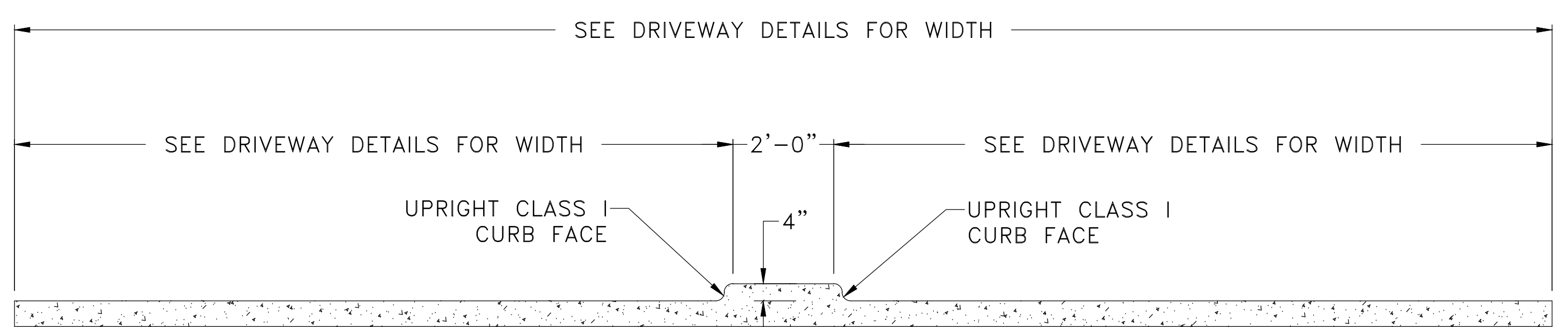
DRAWN BY	TCP
DESIGNED	RCC
CHECKED	RCC
DATE	12-18-2023
SCALE	N.T.S.
PROJECT NO.	03-17-DR-107
SHEET NO.	C5



DETAIL OF UNDERCUT

ALL LOCATIONS OUTSIDE EXCAVATION LIMITS FOR REINFORCED CONCRETE BOX CULVERT.

WEST 4TH STREET	D = 3'-4'	W = 30' (AVG)
SOUTH VALENTINE STREET	D = 3'-4'	W = 35' (AVG)
VALMAR STREET	D = 3'-4'	W = 35' (AVG)

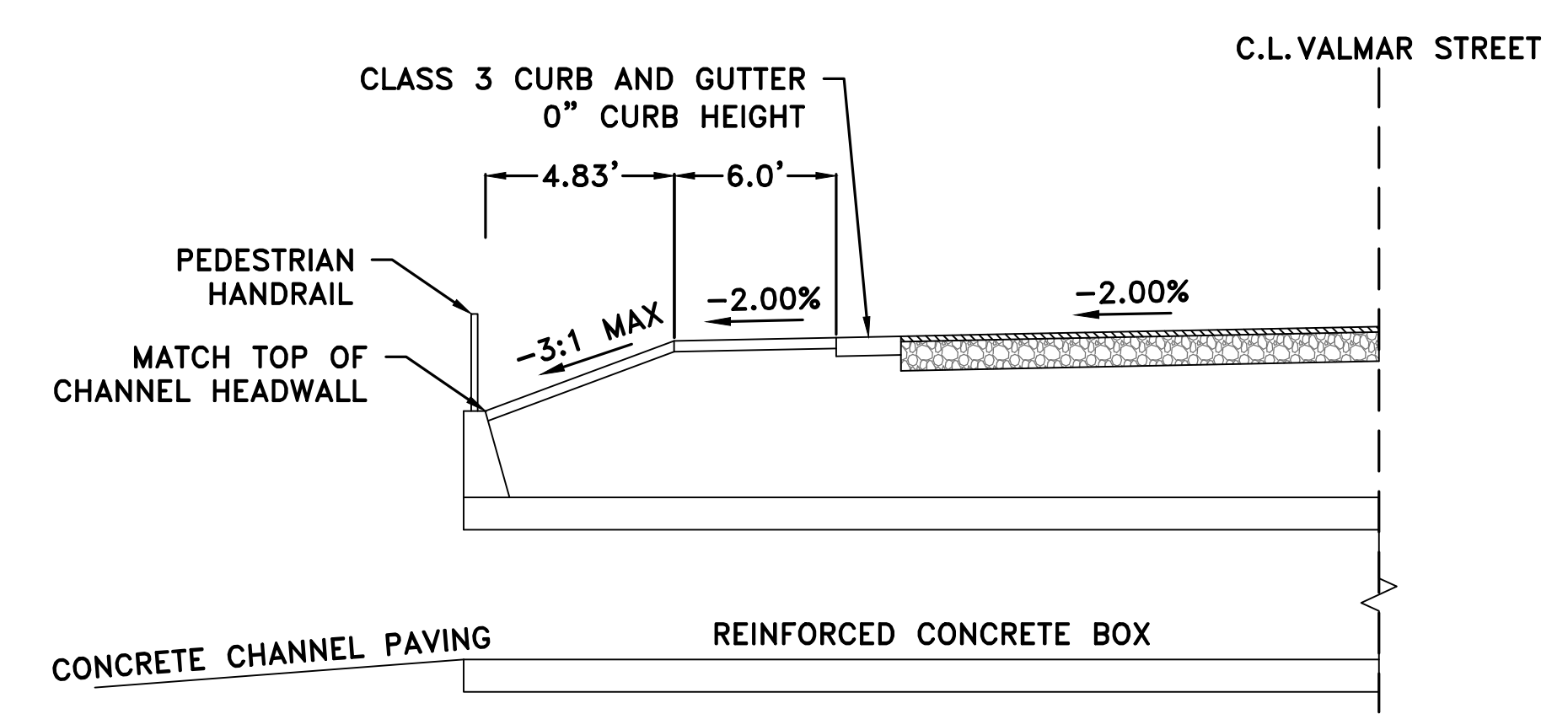
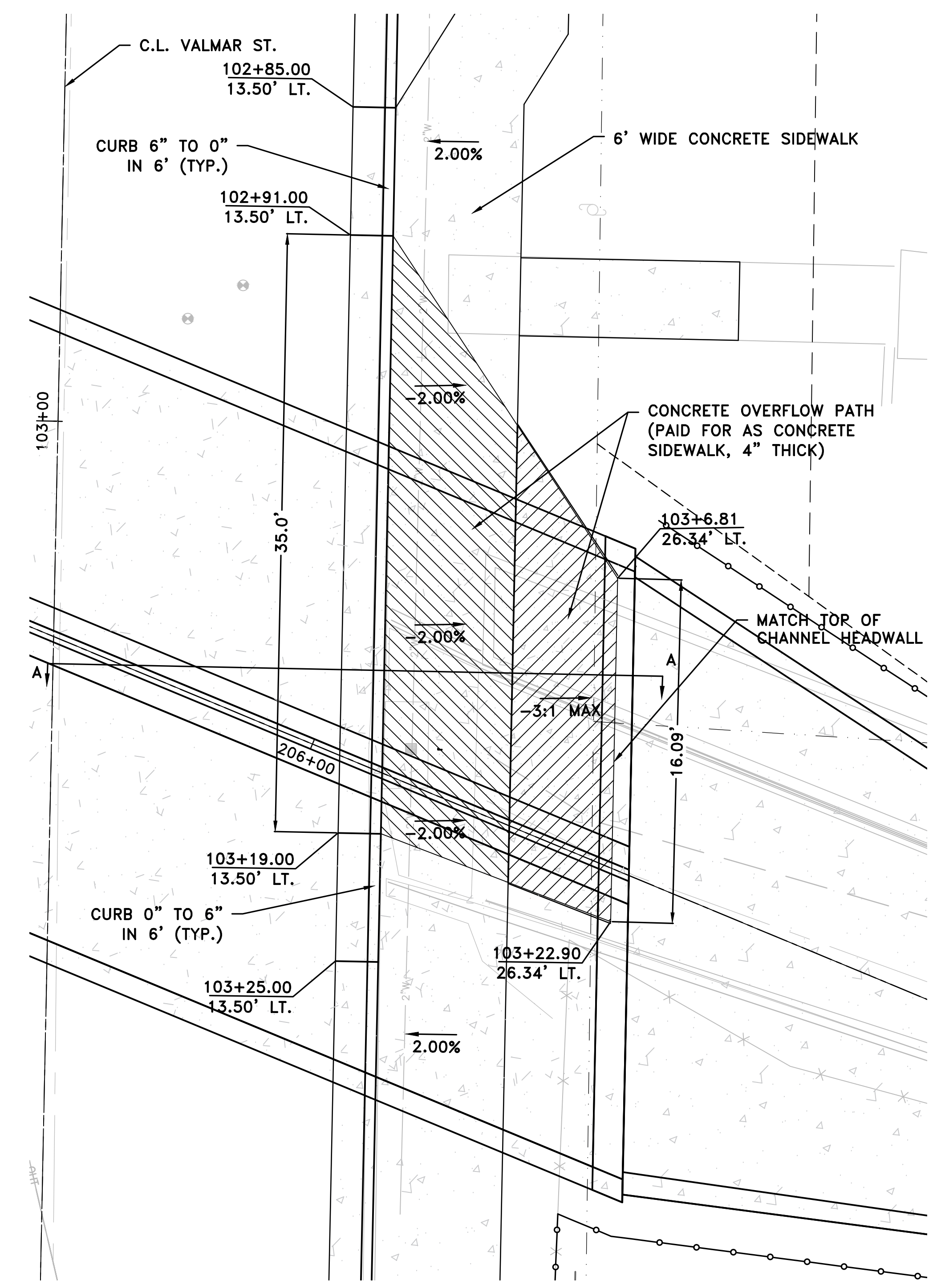


CONCRETE ISLAND IN DRIVEWAY

4TH STREET STA. 13+08.60 LT.
4TH STREET STA. 13+59.85 RT.

NOTE: SEE PW-30, 31, AND 36 FOR ADDITIONAL DETAILS AND GENERAL NOTES

VALMAR STREET OVERFLOW PATH

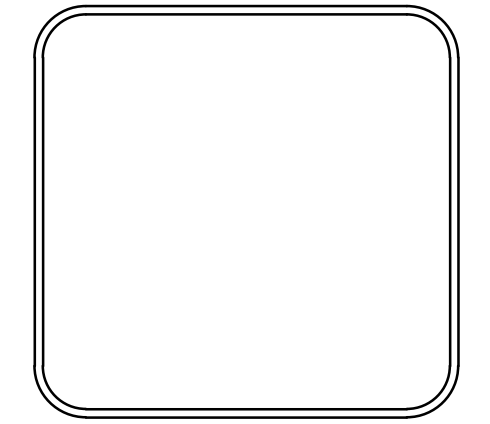


SECTION A-A

REVISIONS	DATE

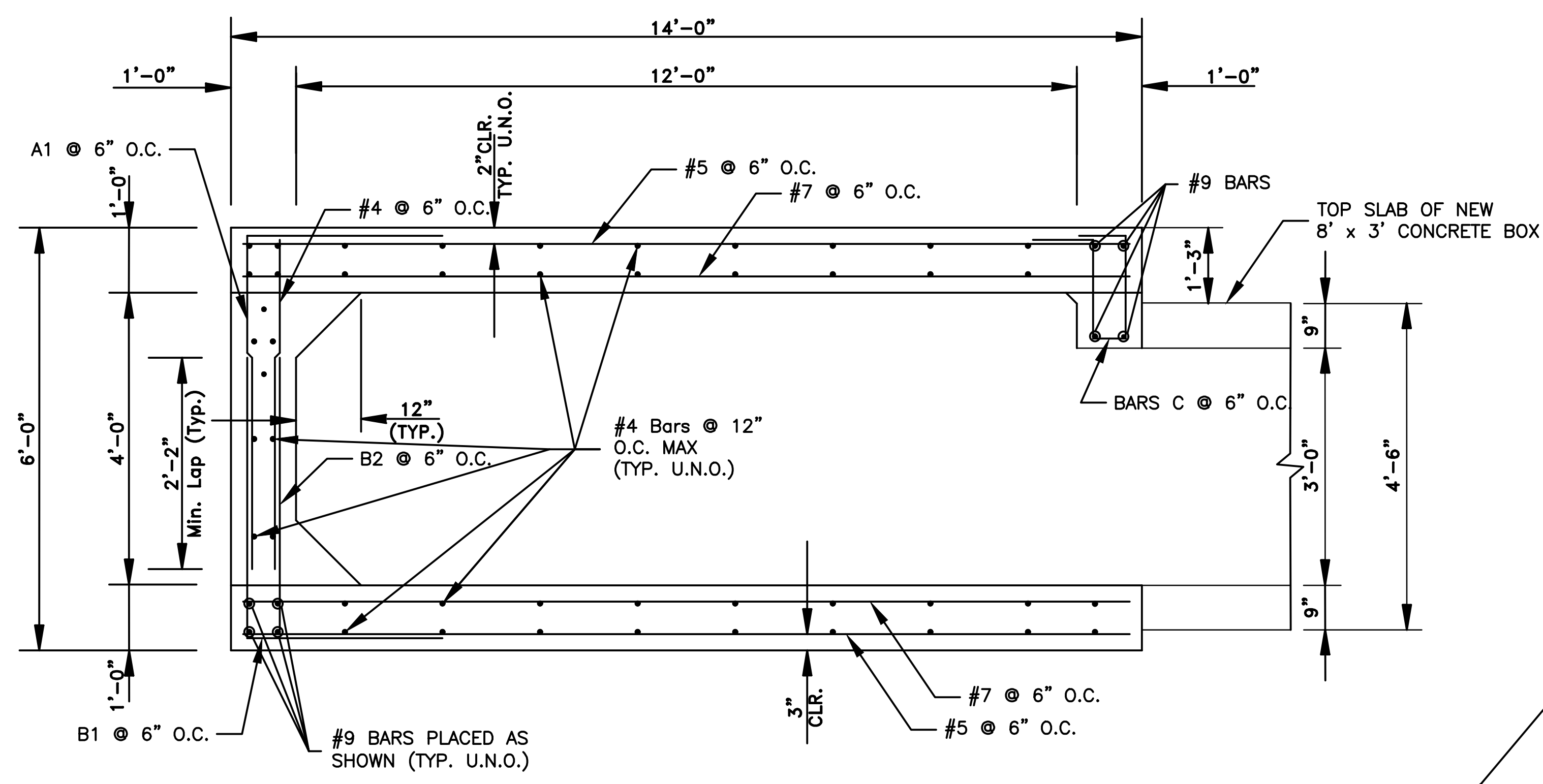
CITY OF LITTLE ROCK, ARKANSAS
WEST 4TH STREET DRAINAGE
AND STREET IMPROVEMENTS
SPECIAL DETAILS

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

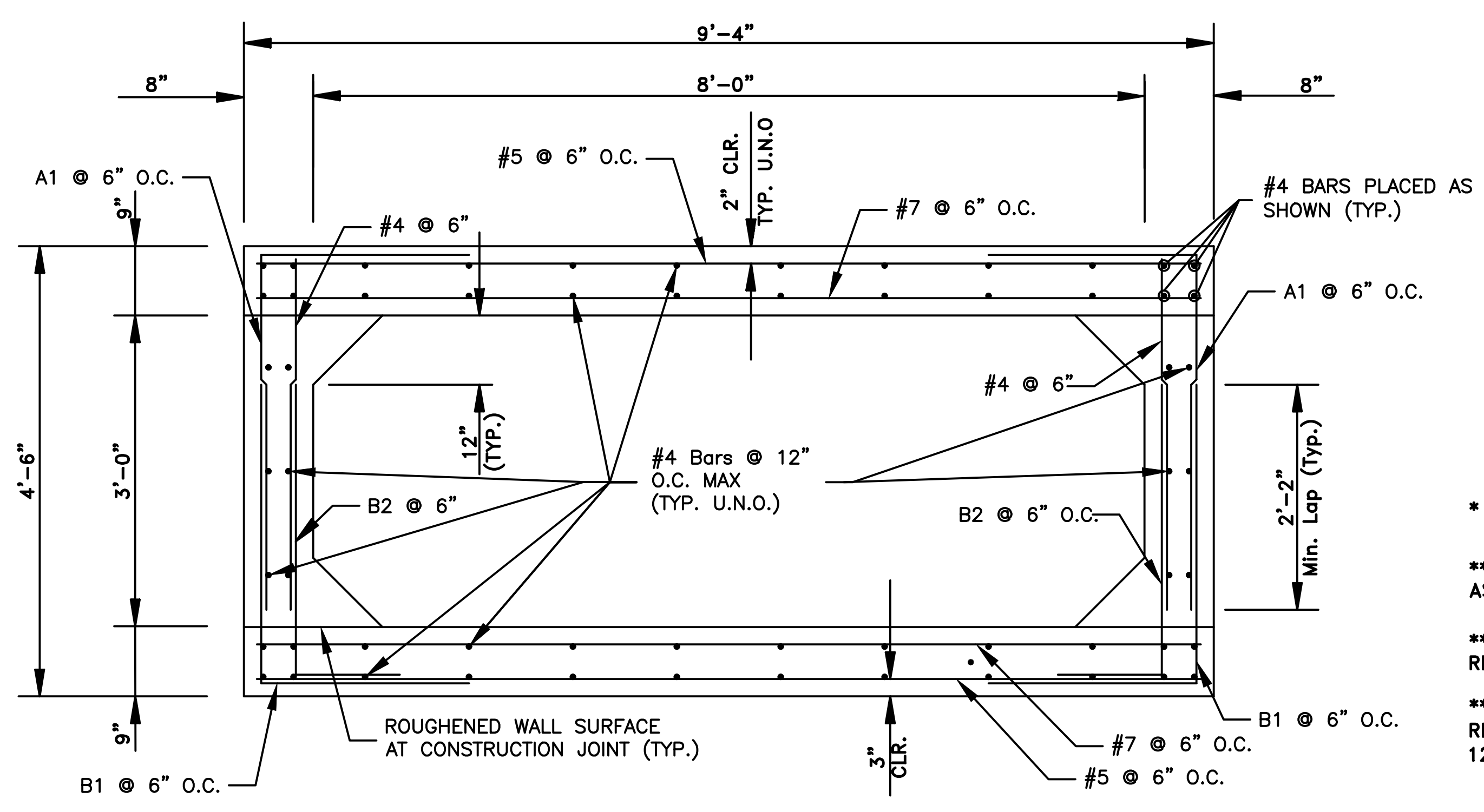


DRAWN BY	TCP
DESIGNED	RCC
CHECKED	RCC
DATE	12-18-2023
SCALE	N.T.S
PROJECT NO.	03-17-DR-107
SHEET NO.	C6

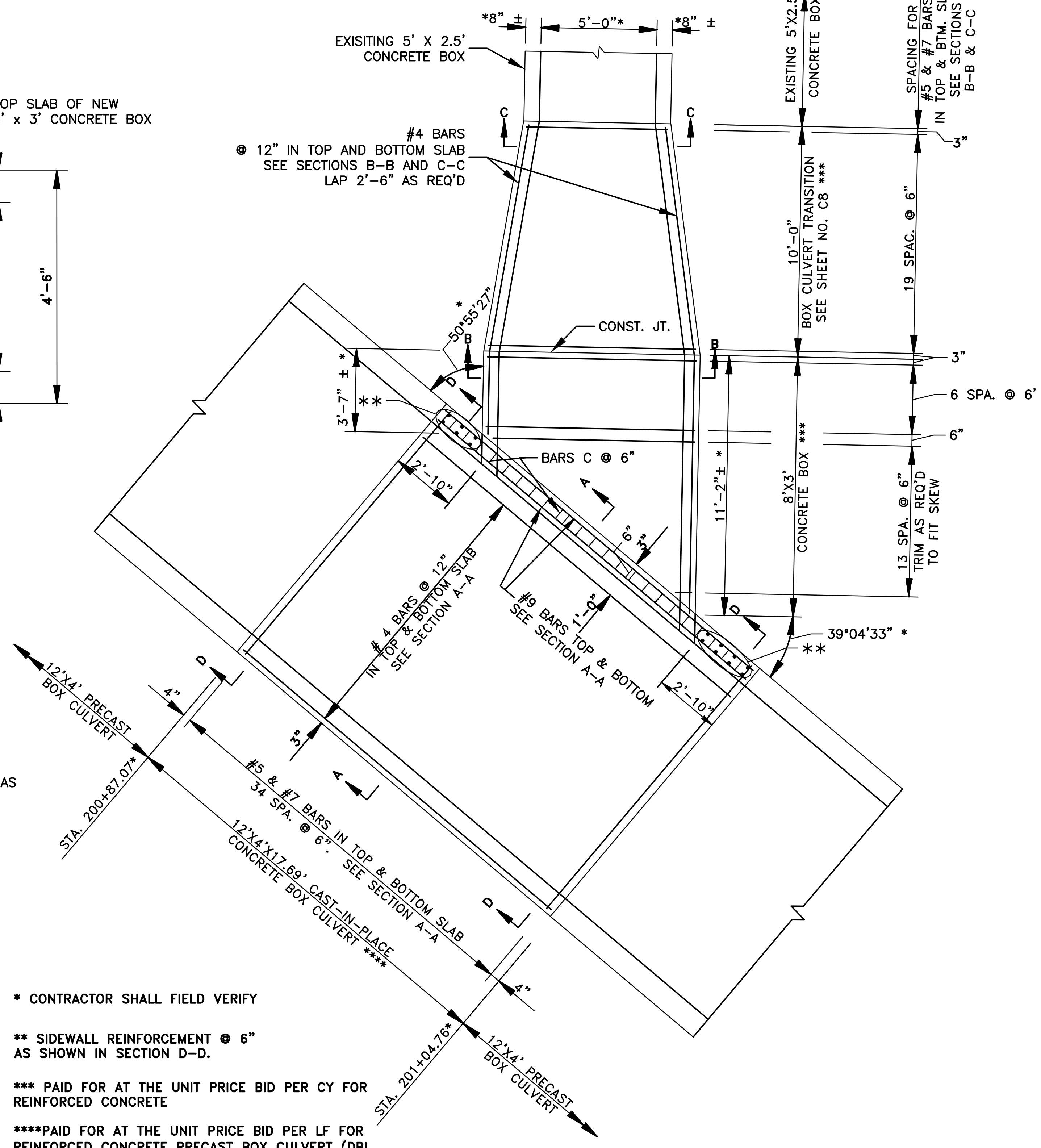
REVISIONS	DATE



SECTION A-A



SECTION B-B



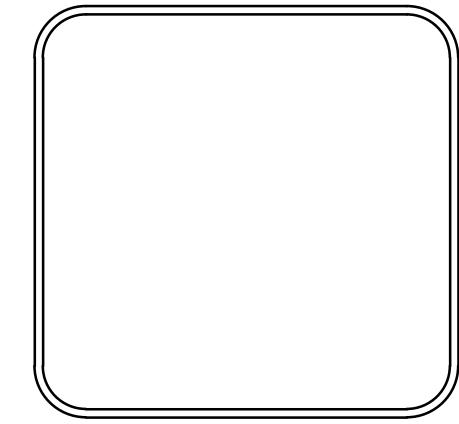
PLAN VIEW
SHOWING DIMENSION & REINFORCEMENT SPACING

- * CONTRACTOR SHALL FIELD VERIFY
- ** SIDEWALL REINFORCEMENT @ 6" AS SHOWN IN SECTION D-D.
- *** PAID FOR AT THE UNIT PRICE BID PER CY FOR REINFORCED CONCRETE
- ****PAID FOR AT THE UNIT PRICE BID PER LF FOR REINFORCED CONCRETE PRECAST BOX CULVERT (DBL. 12' X 4')

CITY OF LITTLE ROCK, ARKANSAS
WEST 4TH STREET DRAINAGE
AND STREET IMPROVEMENTS

SPECIAL DETAILS

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

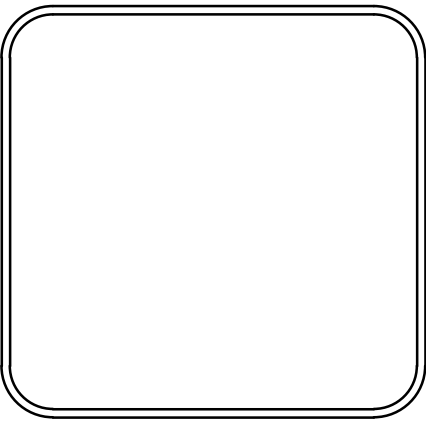


DRAWN BY	TCP
DESIGNED	RCC
CHECKED	RCC
DATE	12-18-2023
SCALE	N.T.S
PROJECT NO.	03-17-DR-107
SHEET NO.	C7

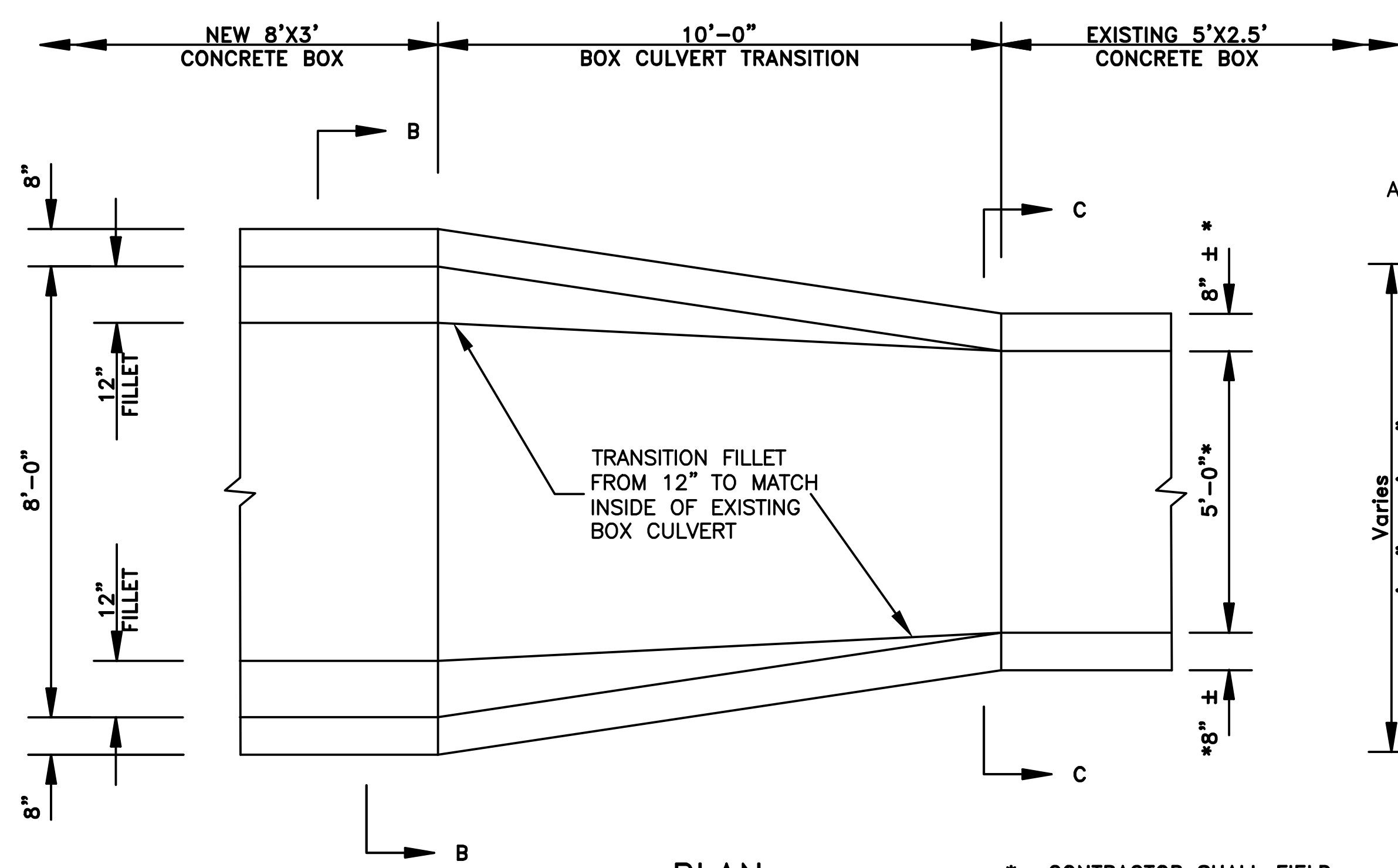
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS
 SPECIAL DETAILS

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

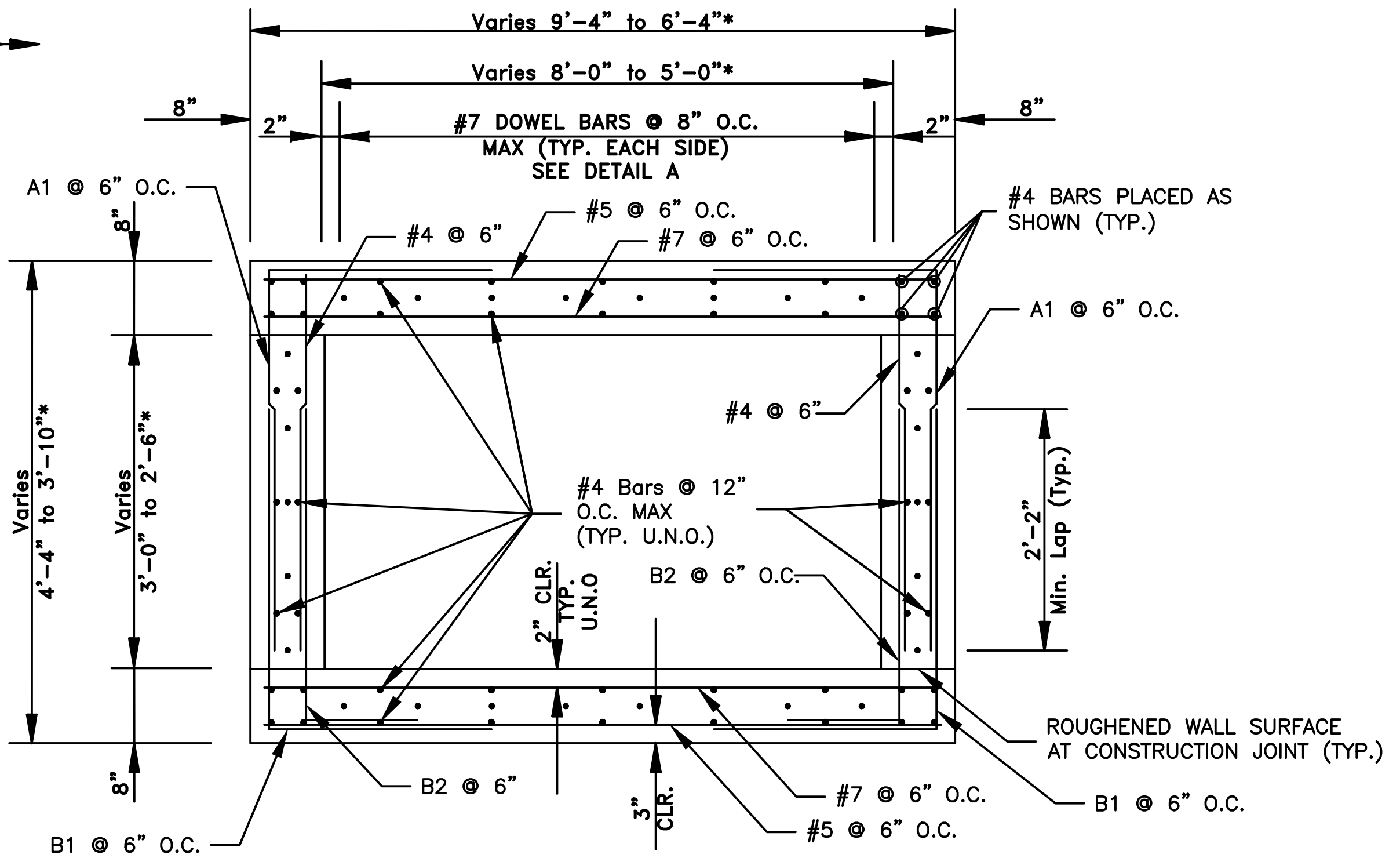


DRAWN BY TCP
DESIGNED RCC
CHECKED RCC
DATE 12-18-2023
SCALE N.T.S
PROJECT NO. 03-17-DR-107
SHEET NO. C8

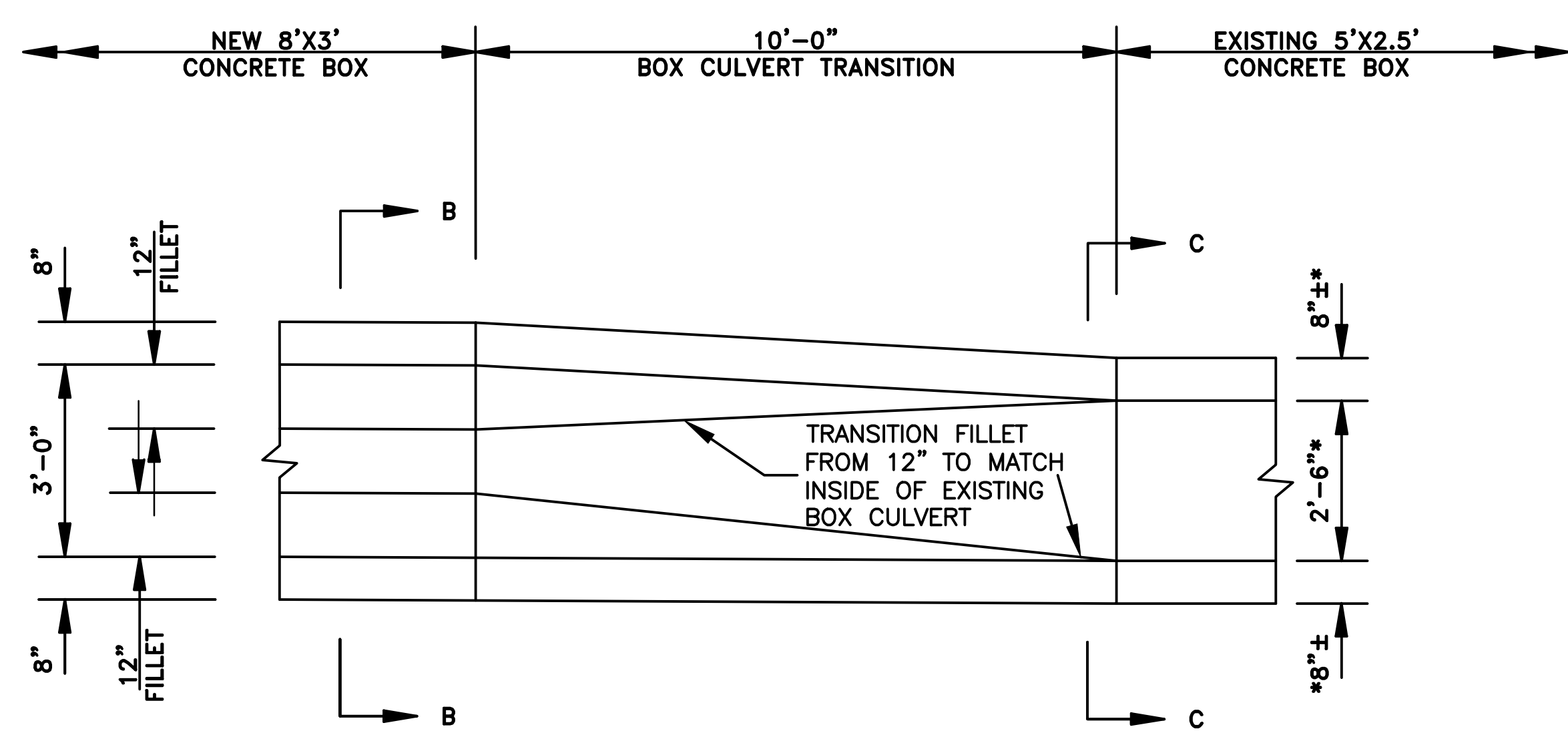


PLAN

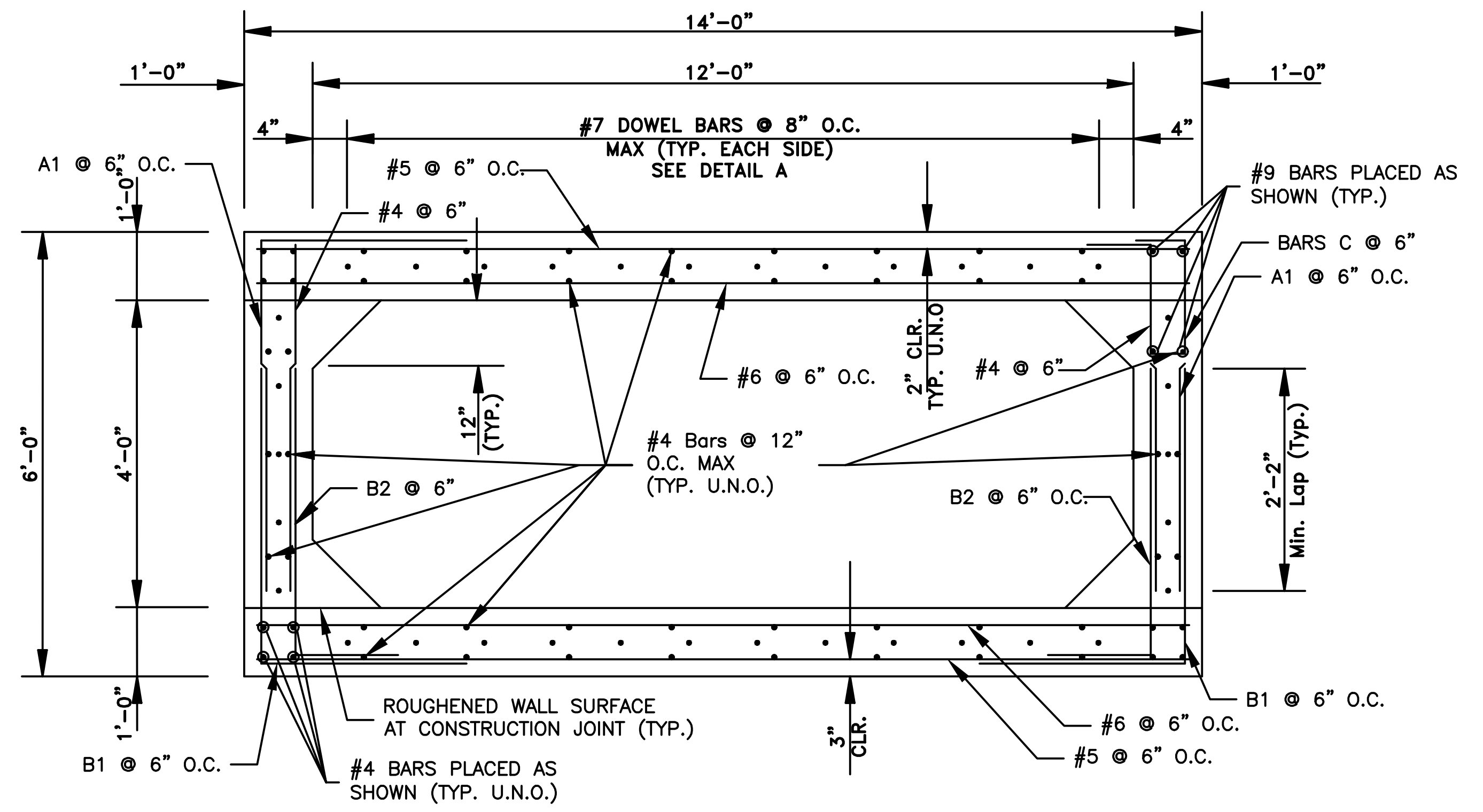
* CONTRACTOR SHALL FIELD VERIFY. NEW BOX CULVERT TRANSITION SHALL MATCH DIMENSIONS OF EXISTING BOX CULVERT



SECTION C-C

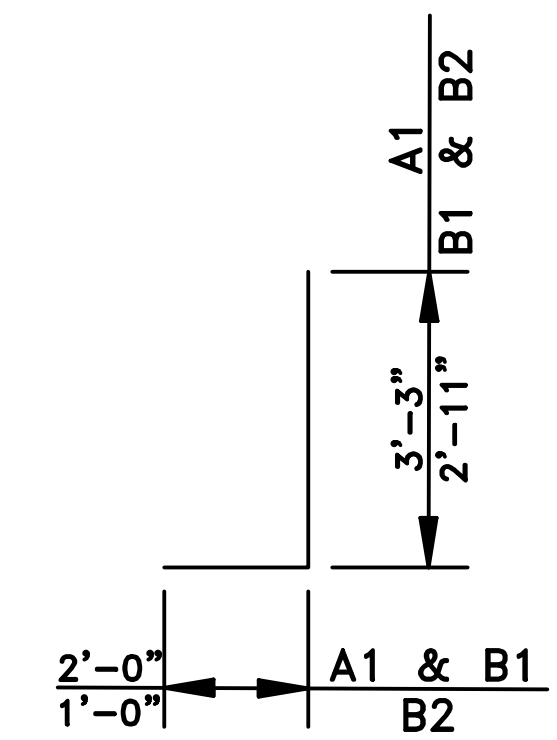


ELEVATION

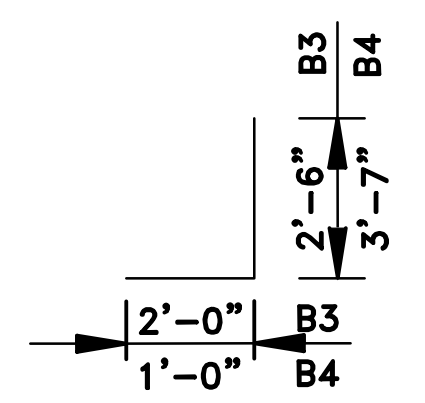


SECTION D-D

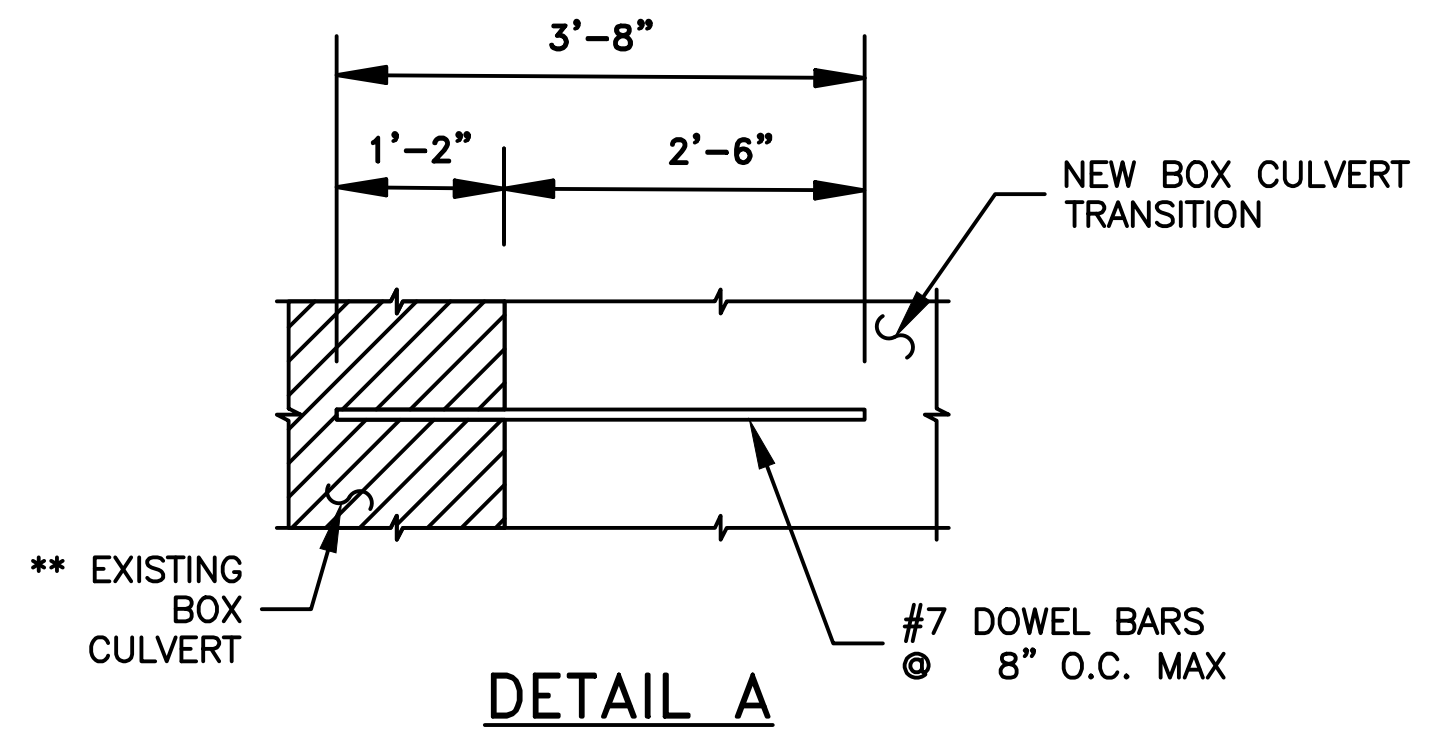
REVISIONS	DATE



A1, B1, & B2 - #5

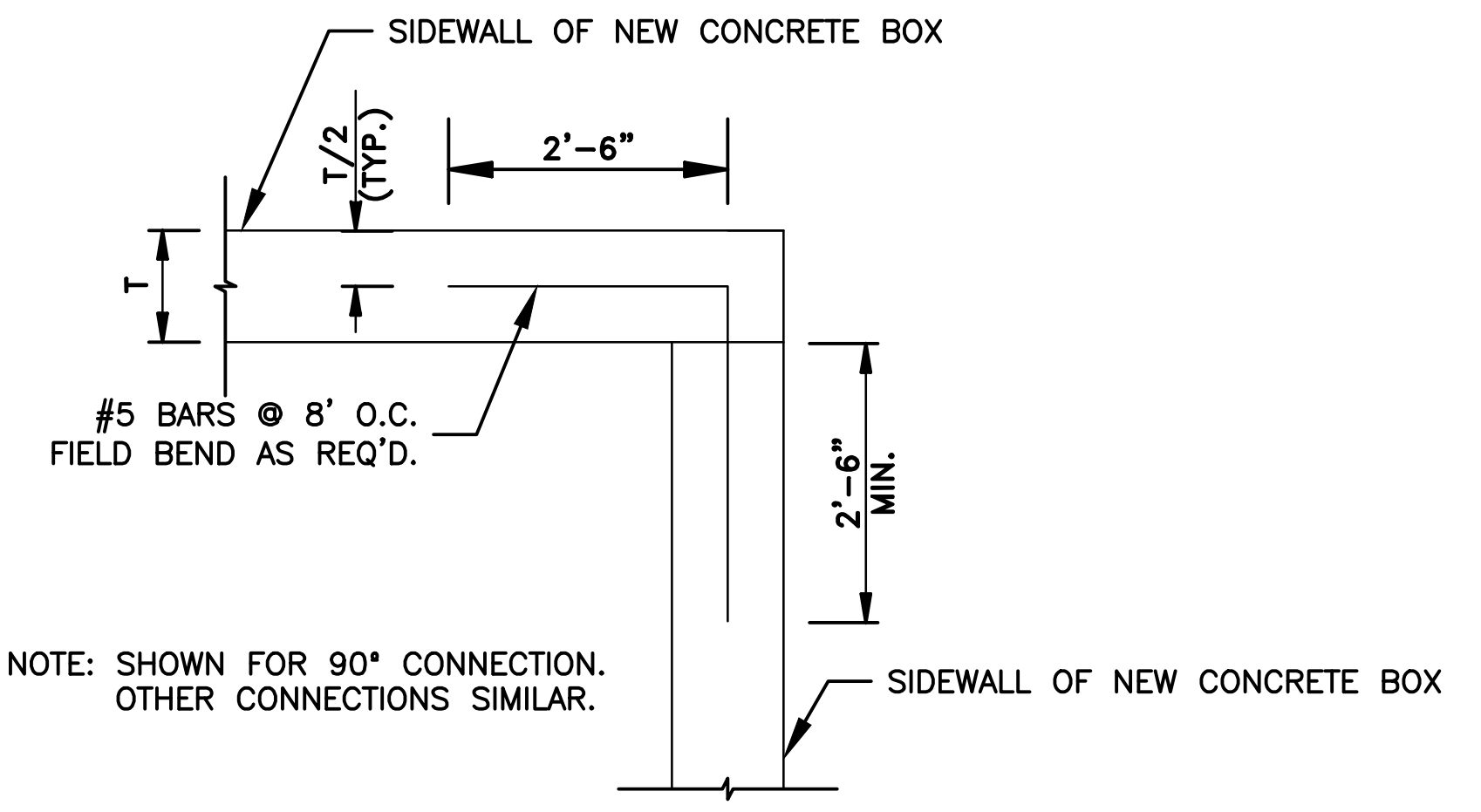


B3 & B4 - #5

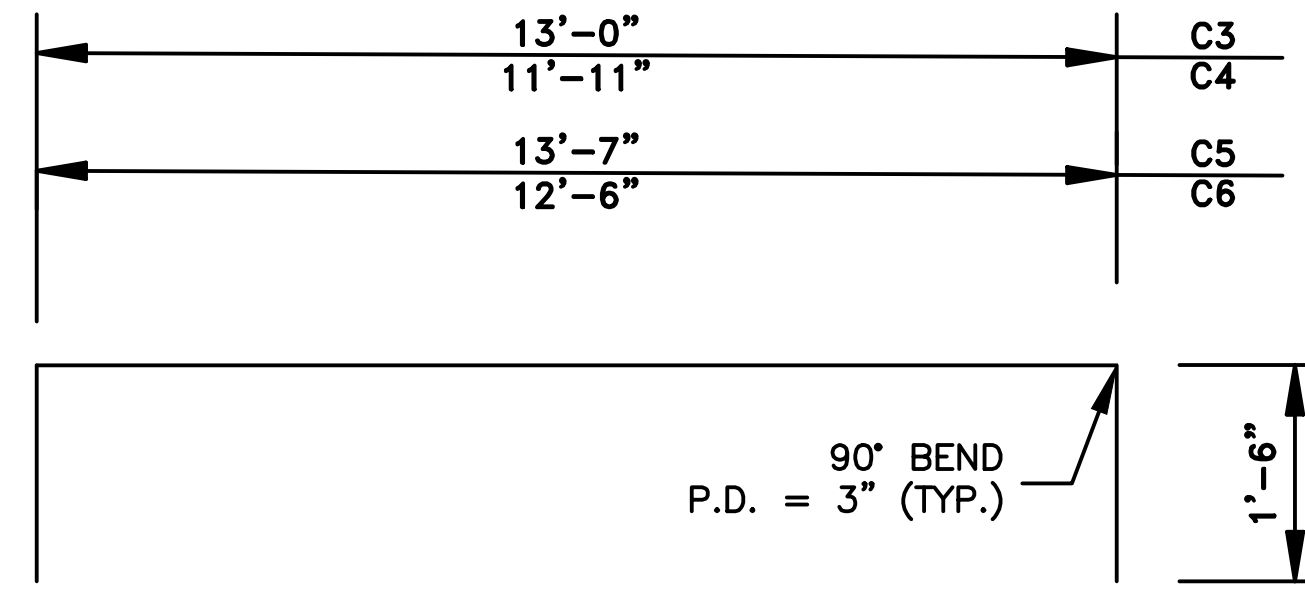


DETAIL A

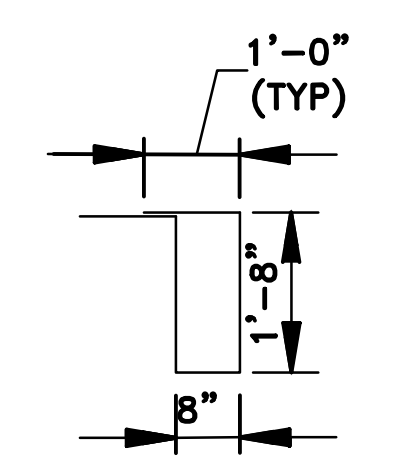
** BARS SHOWN TO BE EMBEDDED INTO EXISTING BOX CULVERT SHALL BE SECURED USING HILTI HIT RE500 EPOXY ANCHOR OR APPROVED EQUAL. ALL BARS SHALL BE EMBEDDED TO DEPTH SHOWN IN DETAIL A IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. HOLES FOR EMBEDDED BARS SHALL BE DRILLED 1/4" LARGER IN DIAMETER THAN THE BAR.



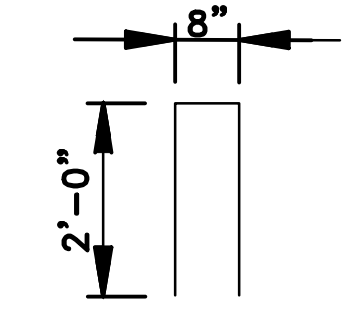
PLAN VIEW - CORNER DETAIL
SHOWING CONNECTIONS AT NEW CAST-IN-PLACE CONCRETE BOXES



C3-C6 BARS - #4



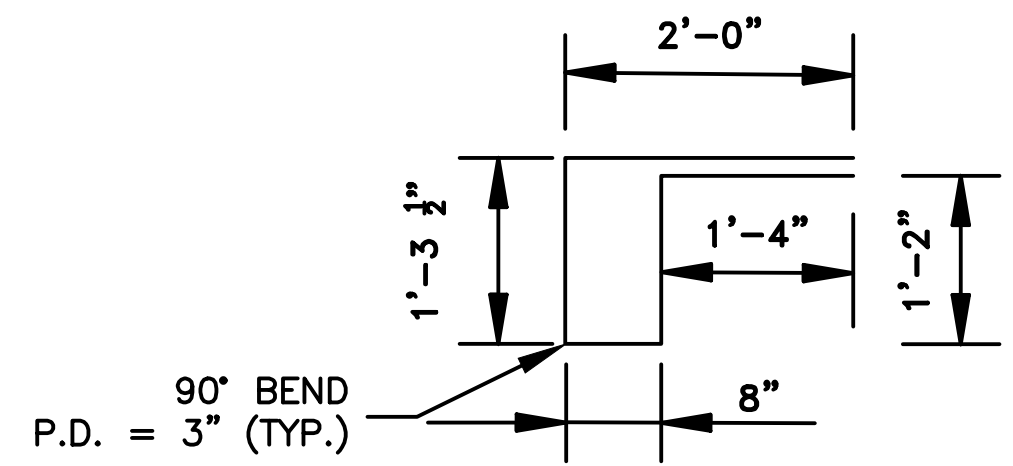
C BARS - #5



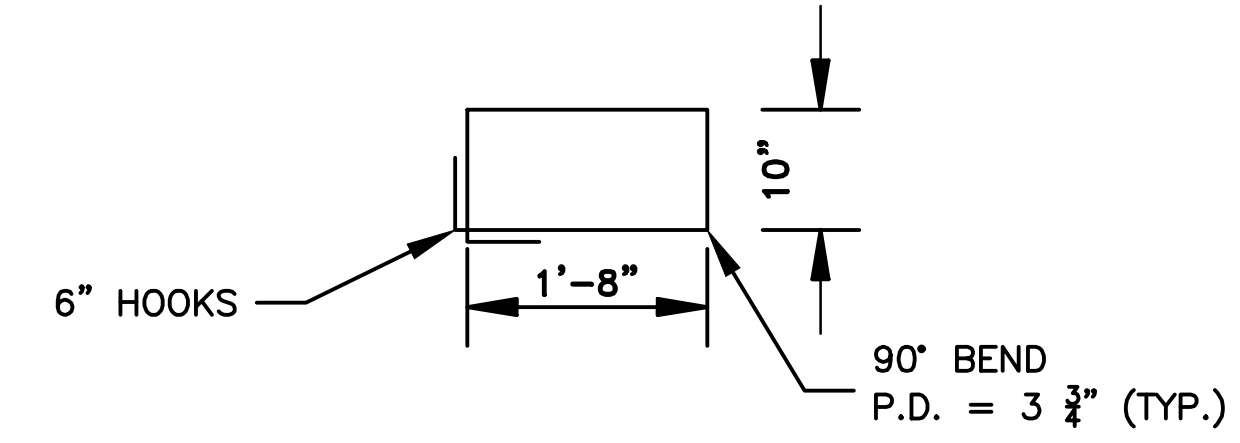
BARS D - #5

GENERAL NOTES:

1. ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CITY OF LITTLE ROCK CONTRACT CONDITIONS AND SPECIFICATIONS.
2. CONCRETE: CONCRETE SHALL BE POURED IN THE DRY AND ALL EXPOSED CORNERS TO BE CHAMFERED 3/4". ALL CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH F'C=3,500 PSI.
3. REINFORCING STEEL: ALL REINFORCING STEEL SHALL CONFORM TO AASHTO M31 OR M53, GRADE 60 AND HAVE A 2" MINIMUM CLEARANCE UNLESS OTHERWISE NOTED ON PLANS.
4. REINFORCING STEEL IN BOTTOM SLAB SHALL BE SUPPORTED ON BAR CHAIRS. CHAIRS SHALL BE SUPPORTED ON TIMBER PLANKS OR CLASS C CONCRETE STRIPS SPACED AT 4.0 FOOT CENTERS. THE TOP CHAIR SUPPORTS SHALL BE AT THE ELEVATION OF THE BOTTOM OF THE FOOTING.
5. REINFORCING STEEL IN THE TOP SLAB SHALL BE SUPPORTED ON SLAB SPACERS.
6. REINFORCING STEEL IN THE WALLS SHALL BE HELD IN PLACE BY METAL CHAIRS. MAXIMUM SPACING OF CHAIRS SHALL BE ON 6.0 FOOT CENTERS.
7. COST OF METAL CHAIRS, WOOD PLANKS OR CONCRETE STRIPS SHALL BE INCLUDED ON OTHER ITEMS OF WORK.
8. EXCAVATION AND BACKFILL REQUIRED TO CONSTRUCT THE BOX CULVERT WILL NOT BE MEASURED FOR SEPARATE PAYMENT, BUT WILL BE CONSIDERED SUBSIDIARY WORK PERTAINING TO THE CONSTRUCTION OF THE BOX CULVERT.



C2 BARS - #4



C1 BARS - #5

CITY OF LITTLE ROCK, ARKANSAS
WEST 4TH STREET DRAINAGE
AND STREET IMPROVEMENTS

SPECIAL DETAILS

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



DRAWN BY
TCP
DESIGNED
RCC
CHECKED
RCC
DATE
12-18-2023
SCALE
N.T.S
PROJECT NO.
03-17-DR-107
SHEET NO.

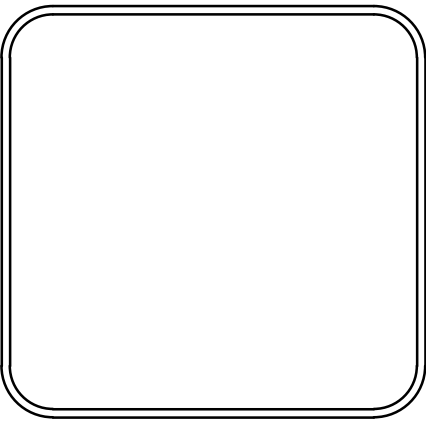
C9

REVISIONS	DATE

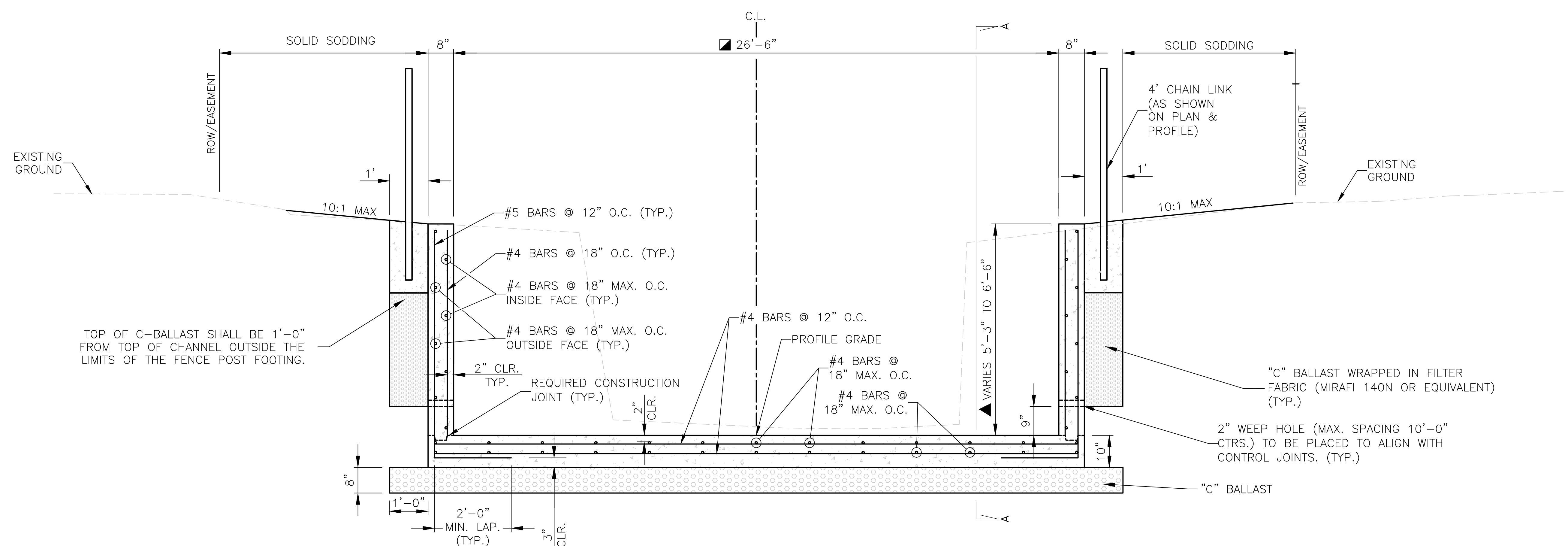
**CITY OF LITTLE ROCK, ARKANSAS
WEST 4TH STREET DRAINAGE
AND STREET IMPROVEMENTS**

SPECIAL DETAILS

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



DRAWN BY TCP
DESIGNED WMM
CHECKED RCC
DATE 12-18-2023
SCALE N.T.S
PROJECT NO. 03-17-DR-107
SHEET NO. C10



GENERAL NOTES:

CONCRETE: CONCRETE SHALL BE POURED IN THE DRY AND ALL EXPOSED CORNERS TO BE CHAMFERED $\frac{3}{4}$ ". ALL CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH $f'c=3,500$ PSI.

REINFORCING STEEL: ALL REINFORCING STEEL SHALL CONFORM TO AASHTO M31 OR M53, GRADE 60.

LONGITUDINAL BARS ON THE INSIDE AND OUTSIDE FACE OF THE CONCRETE CHANNEL WALL SHALL BE STAGGERED.

LAP LENGTH FOR #4 BARS SHALL BE 1'-9" MINIMUM.

TOE WALL TO BE CONSTRUCTED FULL WIDTH AT THE INLET END OF THE CONCRETE CHANNEL AND TO BE POURED MONOLITHICALLY.

ALL EXCAVATION REQUIRED FOR STRIPPING/MUCKING SHALL BE PAID FOR PER THE UNIT PRICE BID FOR "UNCLASSIFIED EXCAVATION". ALL BACKFILL FOR STRIPPING/MUCKING SHALL BE PAID FOR PER THE UNIT PRICE BID FOR "STONE BACKFILL".

ALL ROCK EXCAVATION WILL BE PAID FOR PER THE UNIT PRICE BID FOR "UNCLASSIFIED EXCAVATION".

REMOVAL OF TREES/SHRUBS SHALL NOT BE MEASURED FOR SEPARATE PAYMENT, BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR "SITE PREPARATION."

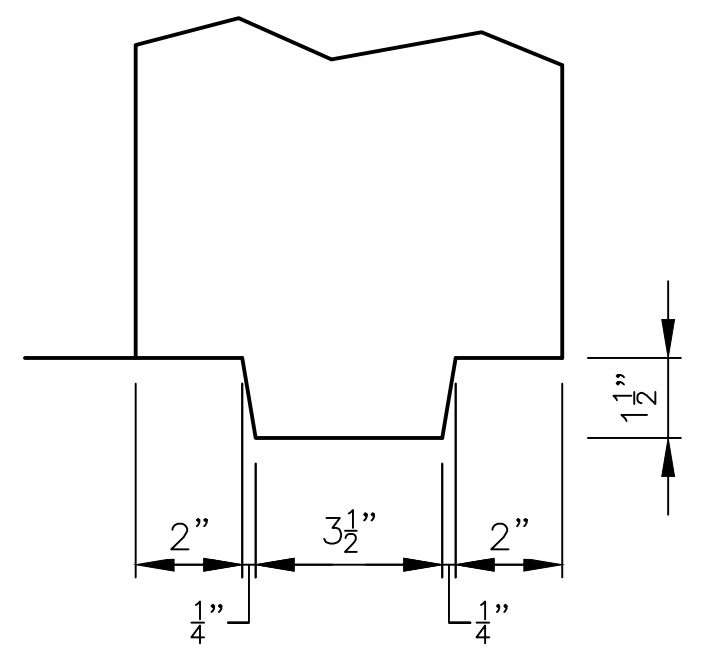
NOTE: PROVIDE KEYWAY AT BASE OF WALLS.
SEE KEYWAY DETAIL.

▲ TRANSITION FROM TO 5'-3" AT STA. 200+59 TO 6'-6" AT STA. 200+79 AND TRANSITION FROM 6'-0" AT STA. 203+40 TO 6'-6" AT STA. 203+60

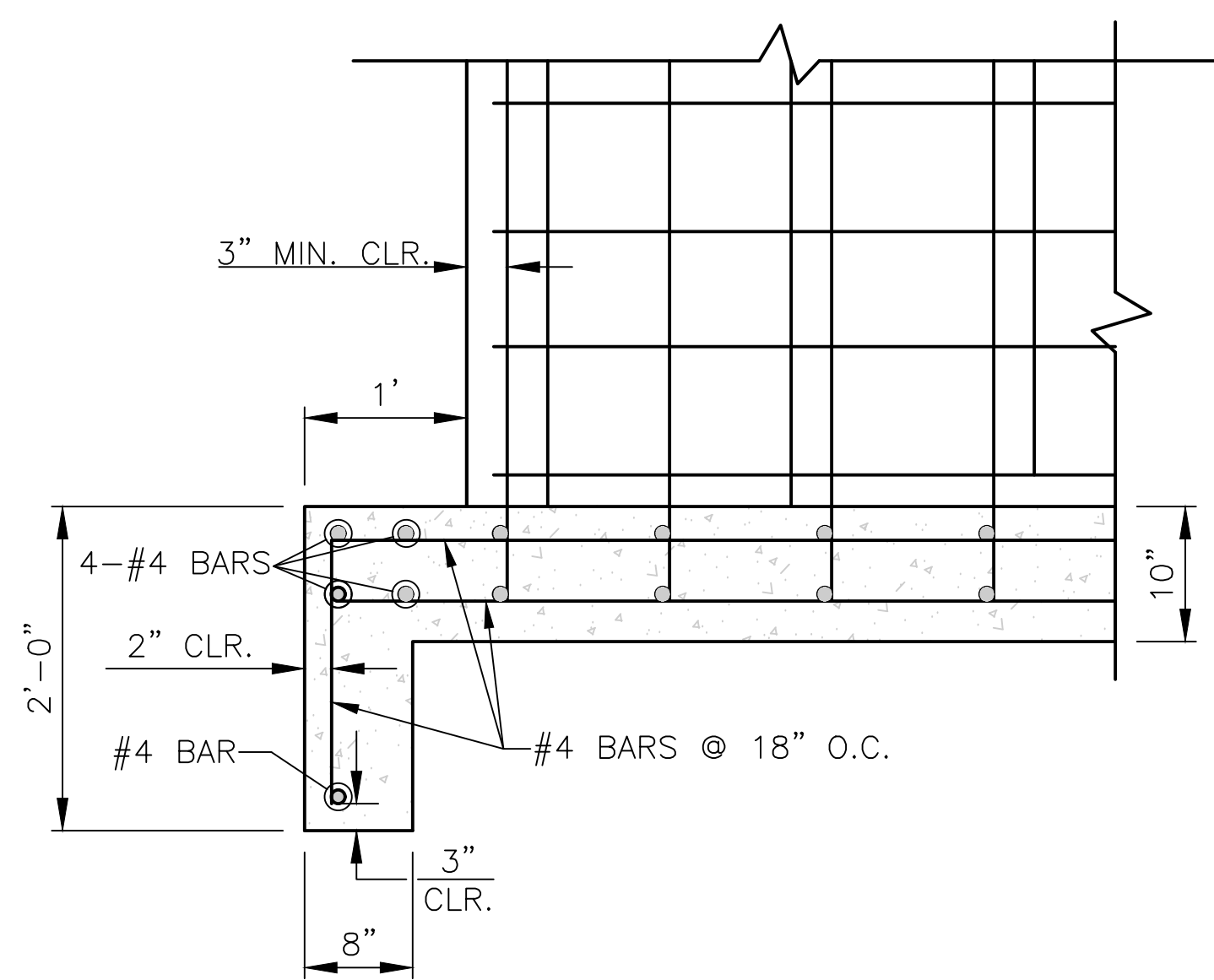
■ CHANNEL WIDTH VARIES FROM STA. 206+16.03 TO STA. 206+56.24. SEE PLAN AND PROFILE FOR ADDITIONAL DETAILS

REINFORCED CONCRETE CHANNEL TYPICAL SECTION

STA. 200+59.00 TO STA. 200+79.00
STA. 202+81.07 TO STA. 204+18.28
STA. 206+16.03 TO STA. 206+56.24



KEYWAY DETAIL



TOE WALL AT INLET
OF CONCRETE CHANNEL
AT STA. 200+59
SECTION A-A

REVISIONS	DATE

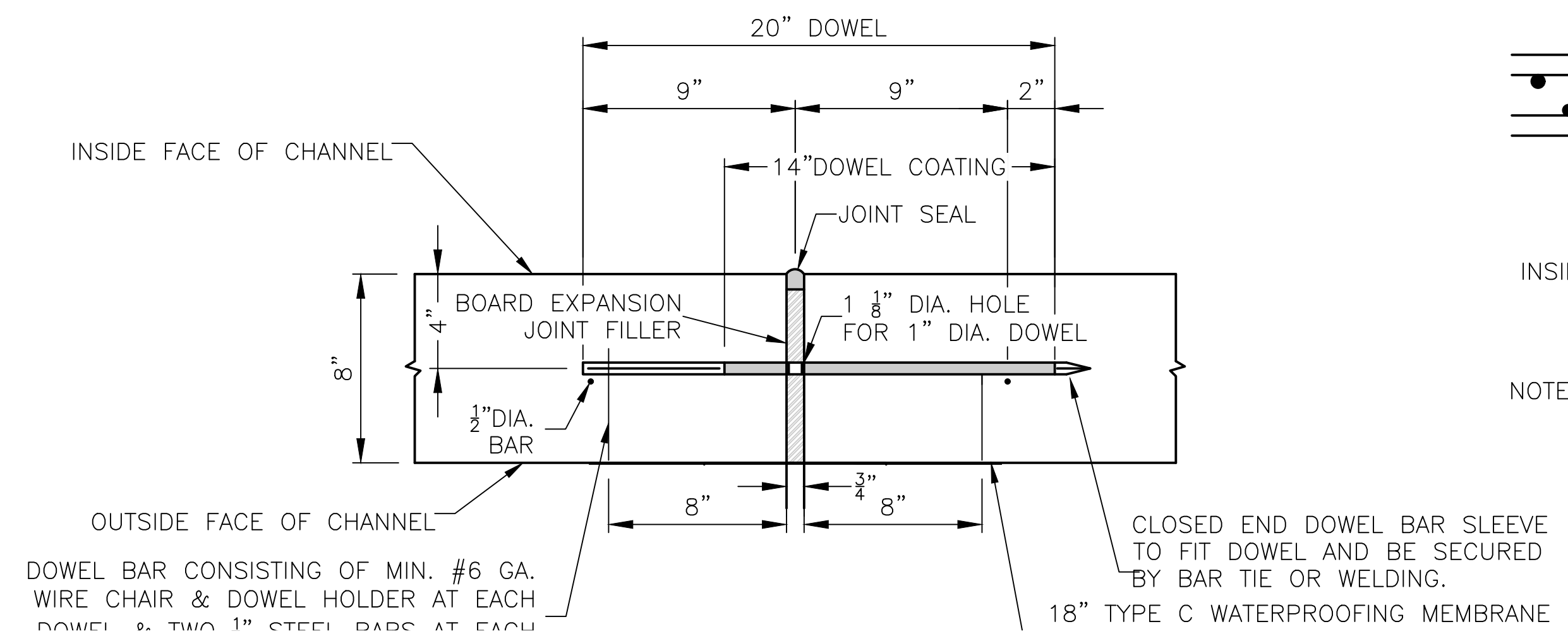
CITY OF LITTLE ROCK, ARKANSAS
WEST 4TH STREET DRAINAGE
AND STREET IMPROVEMENTS

SPECIAL DETAILS

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

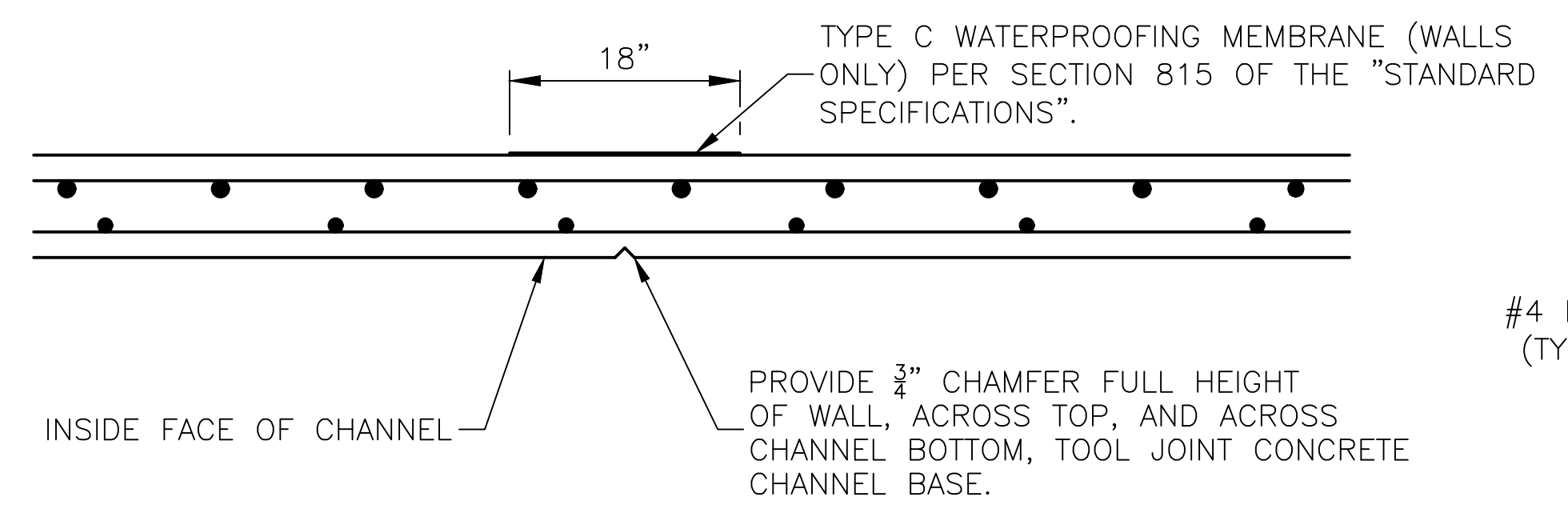


DRAWN BY TCP
DESIGNED WMM
CHECKED RCC
DATE 12-18-2023
SCALE N.T.S
PROJECT NO. 03-17-DR-107
SHEET NO. C11



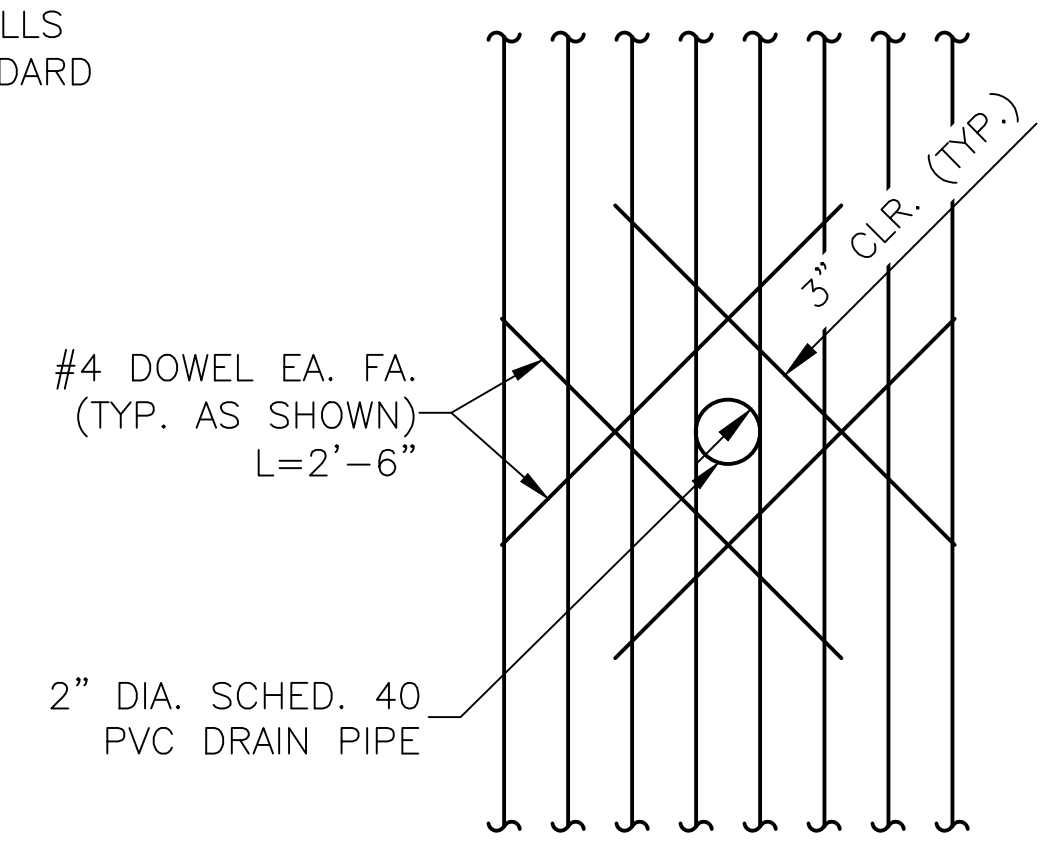
DOWEL BAR CONSISTING OF MIN. #6 GA. WIRE CHAIR & DOWEL HOLDER AT EACH DOWEL & TWO 1" STEEL BARS AT EACH

(DOWEL BARS TO BE 12" O.C.)

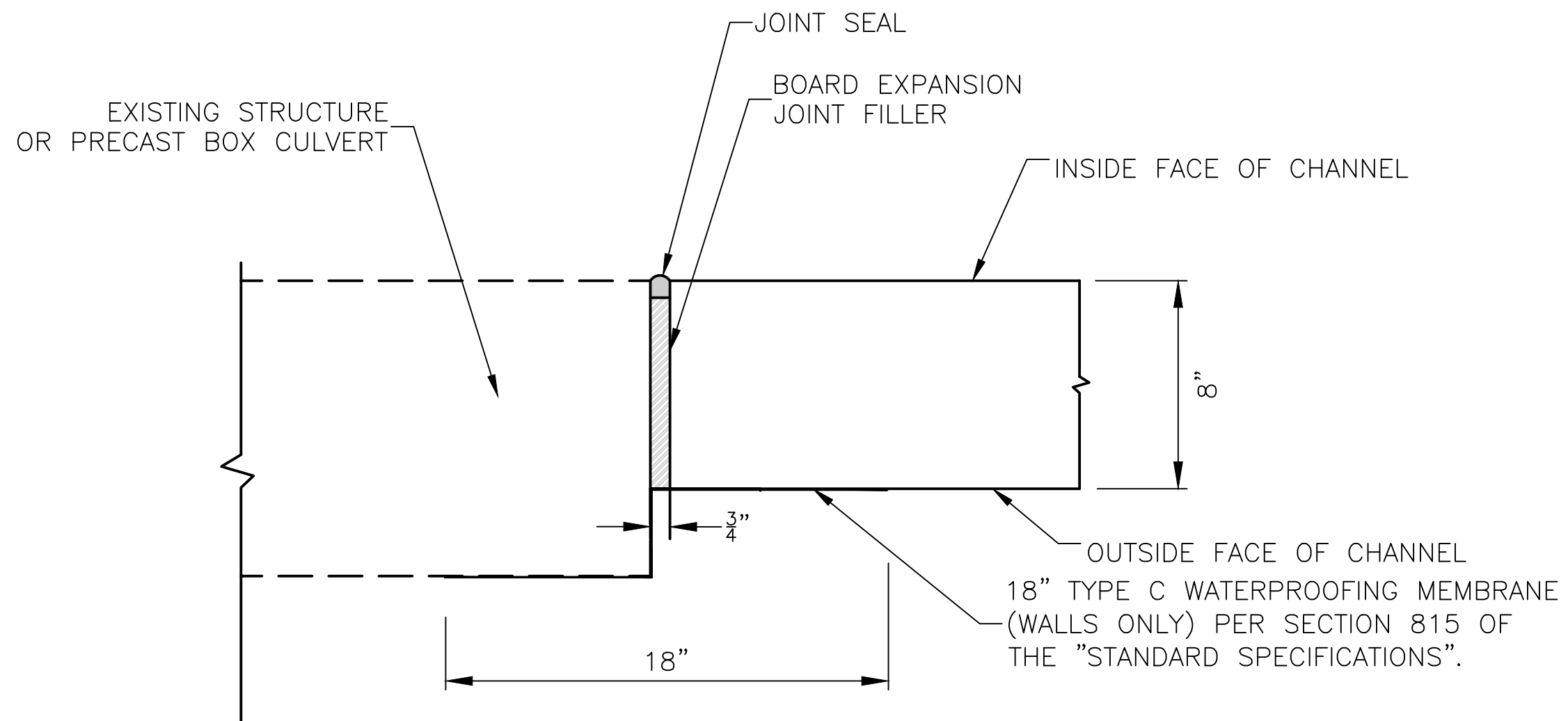


NOTE: 10'-0" MAX. SPACING BETWEEN CONTROL JOINTS. HORIZONTAL REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONTROL JOINTS.

CONTROL JOINT FOR CONCRETE CHANNEL
(USED AT 10' O.C.)



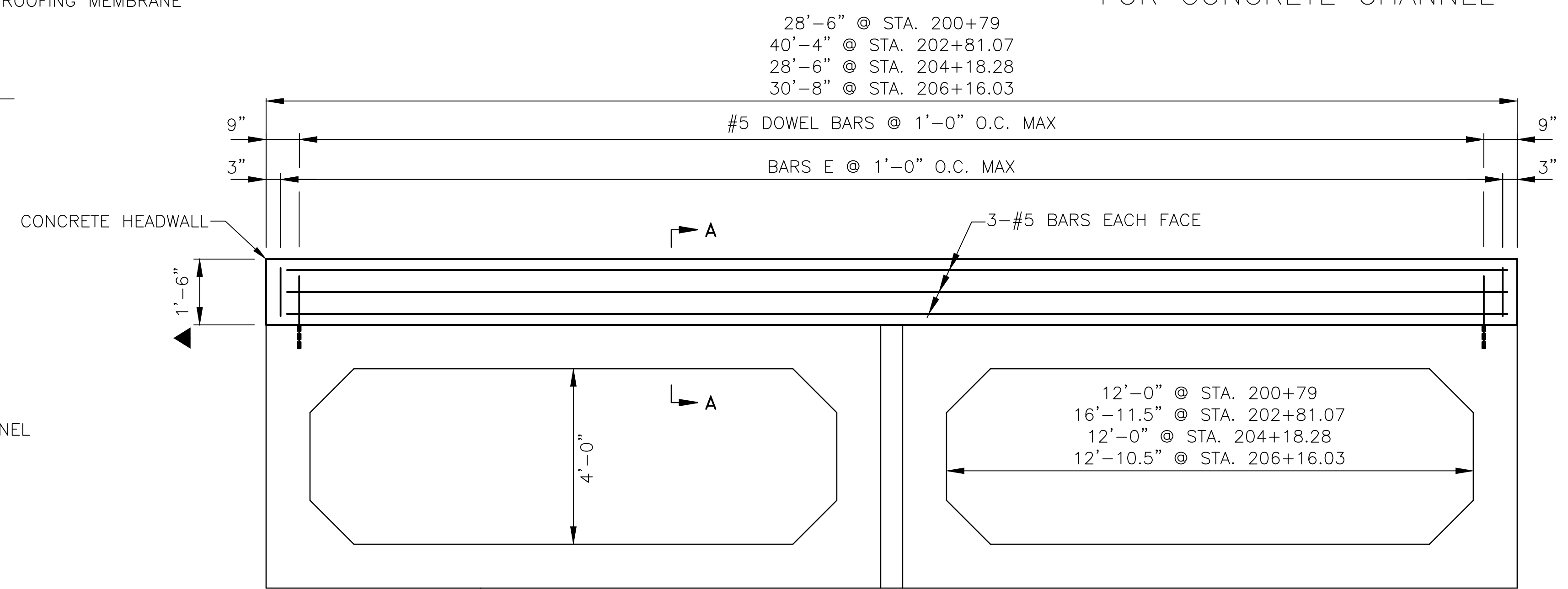
DRAIN PIPE REINFORCING DETAIL
FOR CONCRETE CHANNEL



EXPANSION JOINT FOR CHANNEL
CONNECTION TO STRUCTURES

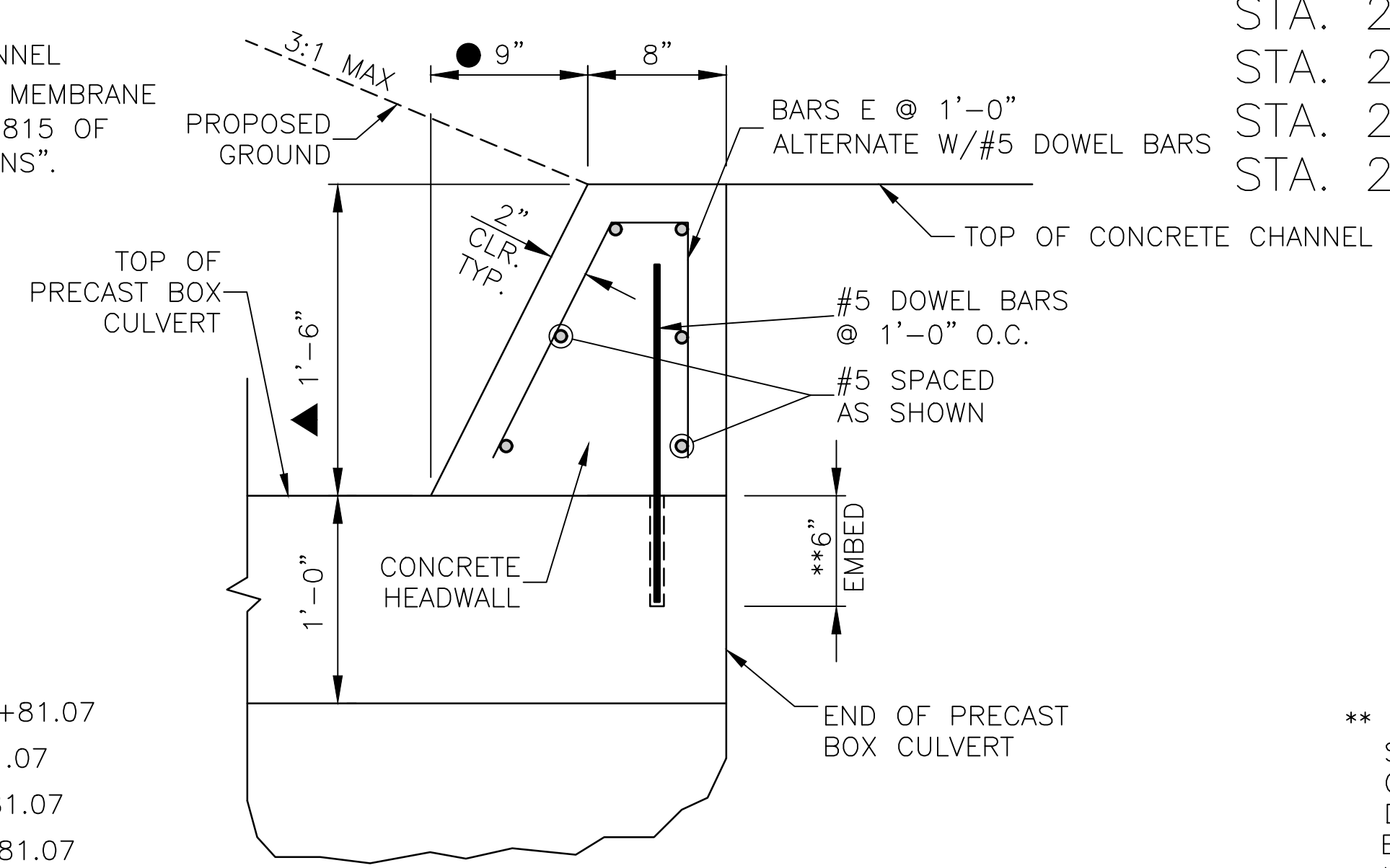
- ▲ STA. 200+79.00
- STA. 202+81.07
- STA. 204+18.28
- STA. 206+16.03
- STA. 206+56.24

- ▲ 1'-0" AT STA. 202+81.07
- 6" AT STA. 202+81.07
- 11" AT STA. 202+81.07
- 9.5" AT STA. 202+81.07

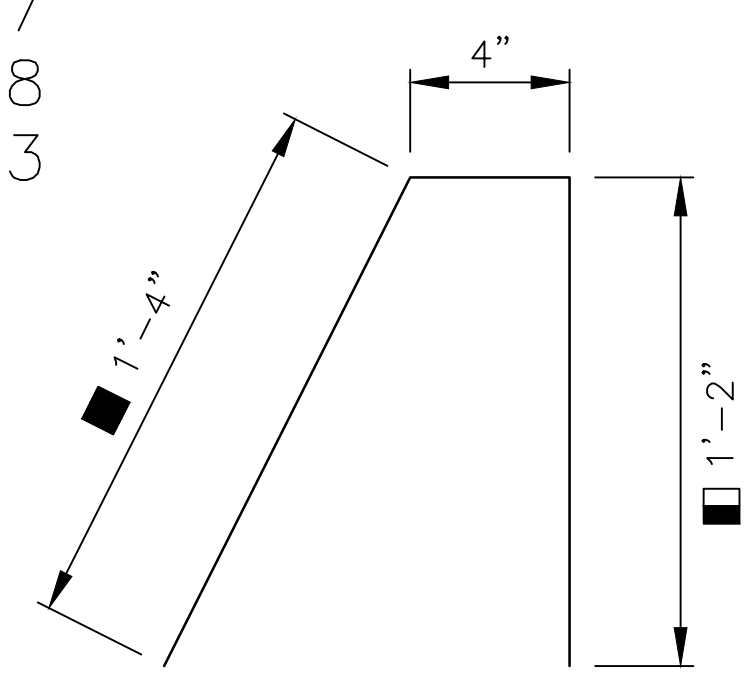


HEADWALL - SECTION VIEW

- 28'-6" @ STA. 200+79
- 40'-4" @ STA. 202+81.07
- 28'-6" @ STA. 204+18.28
- 30'-8" @ STA. 206+16.03



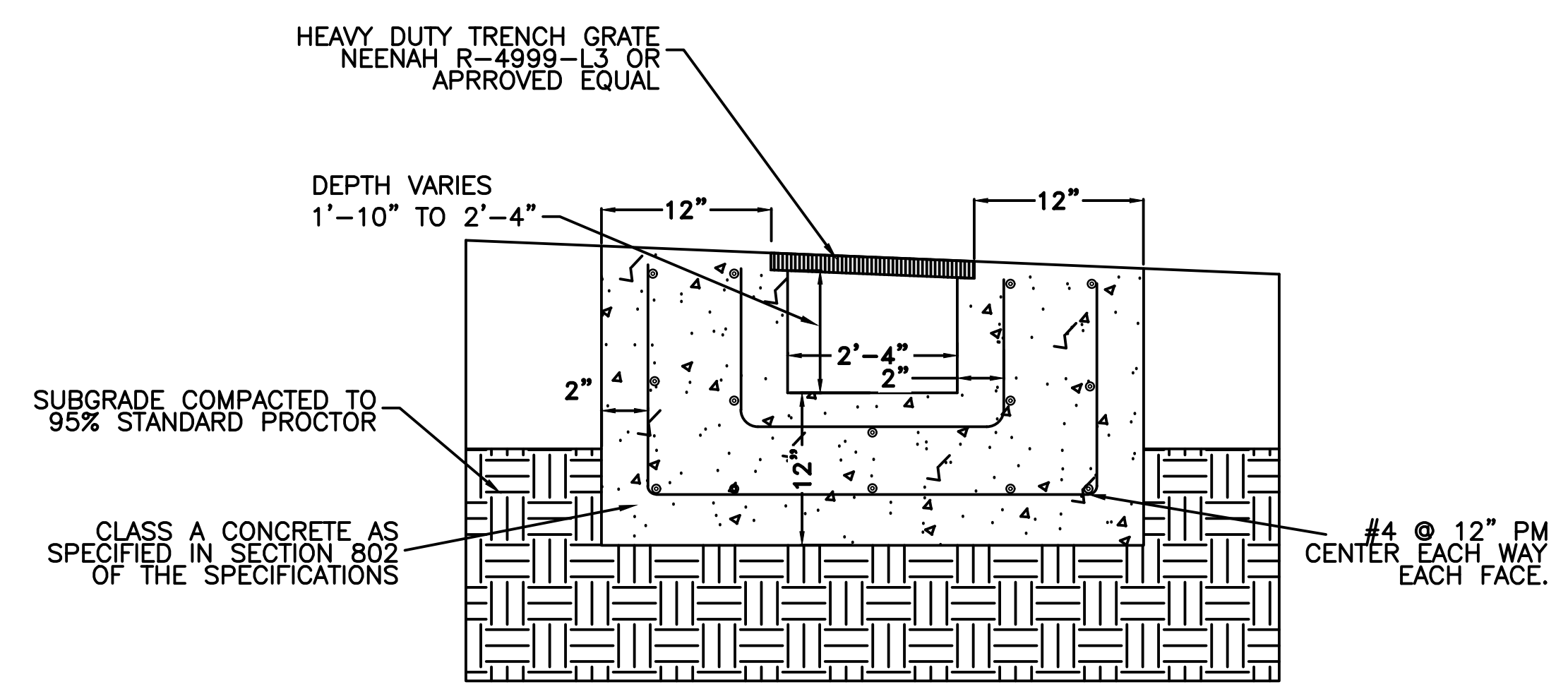
SECTION A-A



BARS E - #5

** BARS SHOWN TO BE EMBEDDED INTO PRECAST BOX CULVERT SHALL BE SECURED USING HILTI HIT RE500 EPOXY ANCHOR OR APPROVED EQUAL. ALL BARS SHALL BE EMBEDDED TO DEPTH SHOWN ON THE DETAILS ON THIS SHEET AND EPOXY EPOXY ANCHOR SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. HOLES FOR EMBEDDED BARS SHALL BE DRILLED 1/4" LARGER IN DIAMETER THAN THE BAR.

REVISIONS	DATE

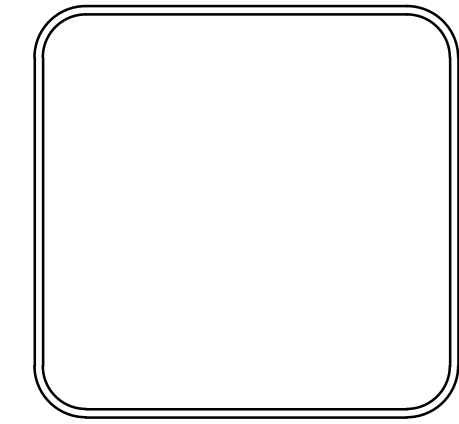


TYPICAL SECTION OF GRATED STREET INLET
N.T.S.

CITY OF LITTLE ROCK, ARKANSAS
WEST 4TH STREET DRAINAGE
AND STREET IMPROVEMENTS

GRATE DETAIL

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



DRAWN BY	TCP
DESIGNED	RCC
CHECKED	RCC
DATE	12-18-2023
SCALE	N.T.S.
PROJECT NO.	03-17-DR-107
SHEET NO.	C12

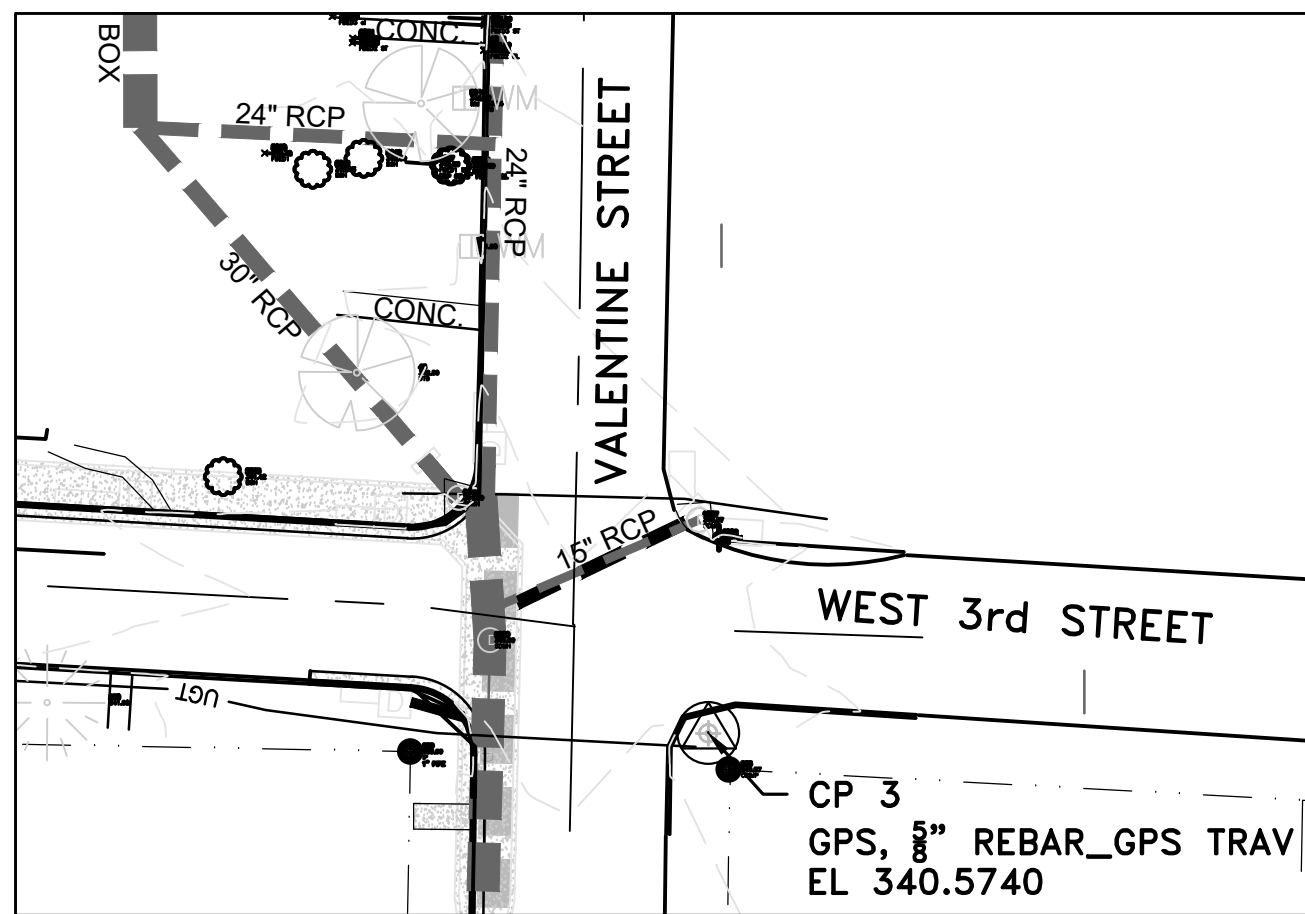
C.L. VALENTINE STREET			
STA.	TYPE	NORTHING	EASTING
50+00.00	BP	151465.2824	1218216.9646
52+00.00	PI	151265.3099	1218213.6510
53+50.00	EP	151115.3605	1218209.7534

C.L. VALMAR STREET			
STA.	TYPE	NORTHING	EASTING
100+00.00	BP	151344.5432	1218551.5530
104+00.00	EP	150944.6272	1218543.3566

C.L. BOX CULVERT COORDINATES			
STA.	TYPE	NORTHING	EASTING
200+00.00	BP	151374.6247	1218119.6053
201+67.45	PI	151266.6012	1218247.5511
202+54.43	PI	151260.2702	1218334.2994
202+98.87	PC	151226.6437	1218363.3515
203+10.51	PI	151217.8367	1218370.9604
203+21.86	PT	151206.8237	1218374.7246
204+18.28	PI	151115.5824	1218405.9109
204+48.52	PI	151087.6290	1218417.4291
206+35.51	PI	151015.8665	1218590.1027
207+43.78	PC	151007.8905	1218698.0918
207+52.80	PI	151007.2271	1218707.0736
207+58.44	PT	150998.2251	1218707.3505
207+84.69	PI	150972.0034	1218708.1571
208+41.59	EP	150915.1066	1218707.3197

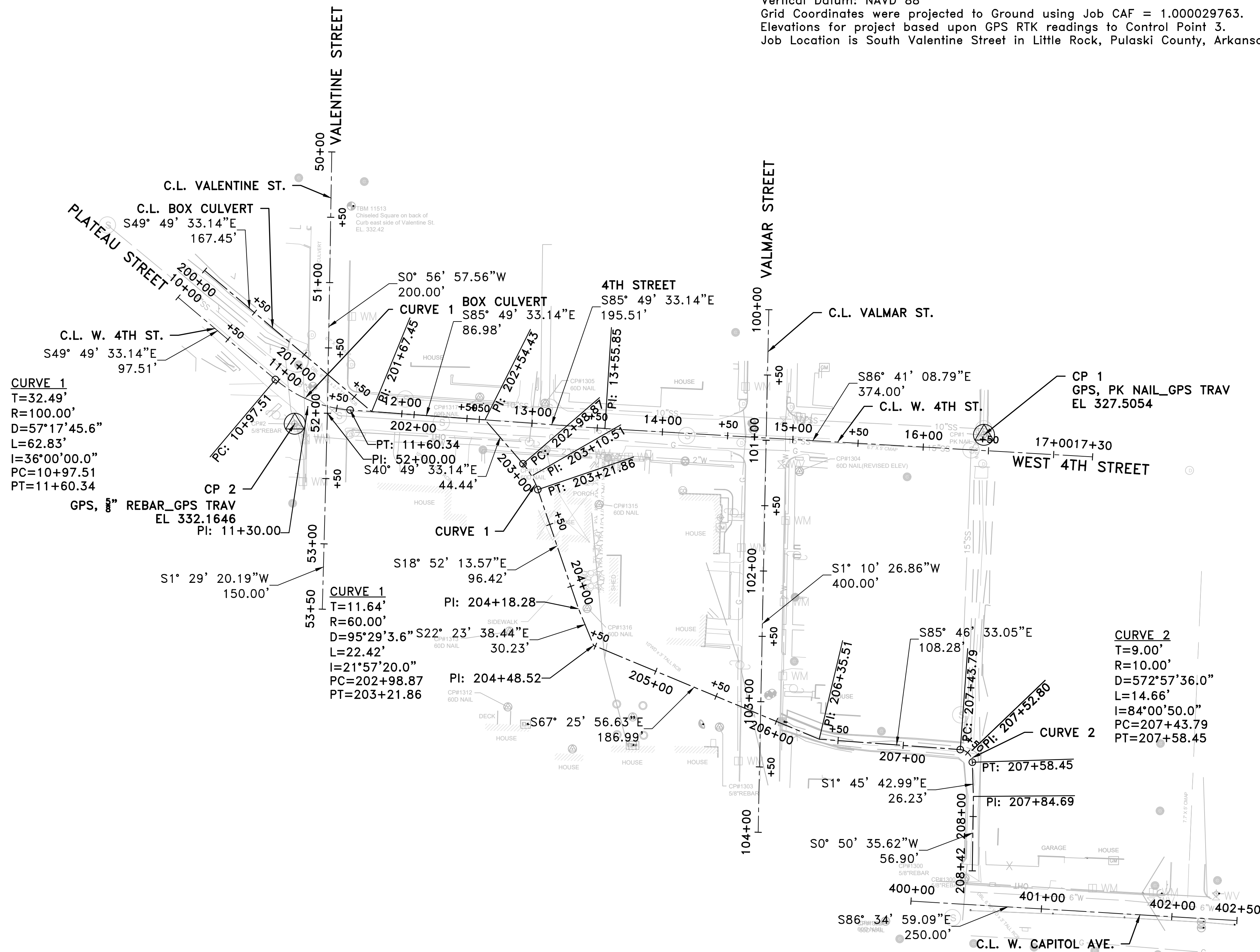
C.L. WEST 4TH STREET			
STA.	TYPE	NORTHING	EASTING
10+00.00	BP	151354.0364	1218099.2957
10+97.51	PC	151291.1327	1218173.8003
11+30.00	PI	151270.1717	1218198.6270
11+60.34	PT	151267.8067	1218231.0328
13+55.85	PI	151253.5761	1218426.0223
17+29.85	EP	151231.9544	1218799.3967

C.L. WEST CAPITOL AVENUE			
STA.	TYPE	NORTHING	EASTING
400+00.00	BP	150891.9374	1218660.3758
402+50.00	EP	150877.0372	1218909.9314



SURVEY BENCHMARKS				
NO.	DESCRIPTION	NORTHING	EASTING	ELEV.
1	GPS, PK NAIL_GPS TRAV	151248.7634	1218716.2452	327.5054
2	GPS, 5/8" REBAR_GPS TRAV	151257.2462	1218188.5595	332.1646
3	GPS, 5/8" REBAR_GPS TRAV	151748.0133	1218244.0700	340.5740

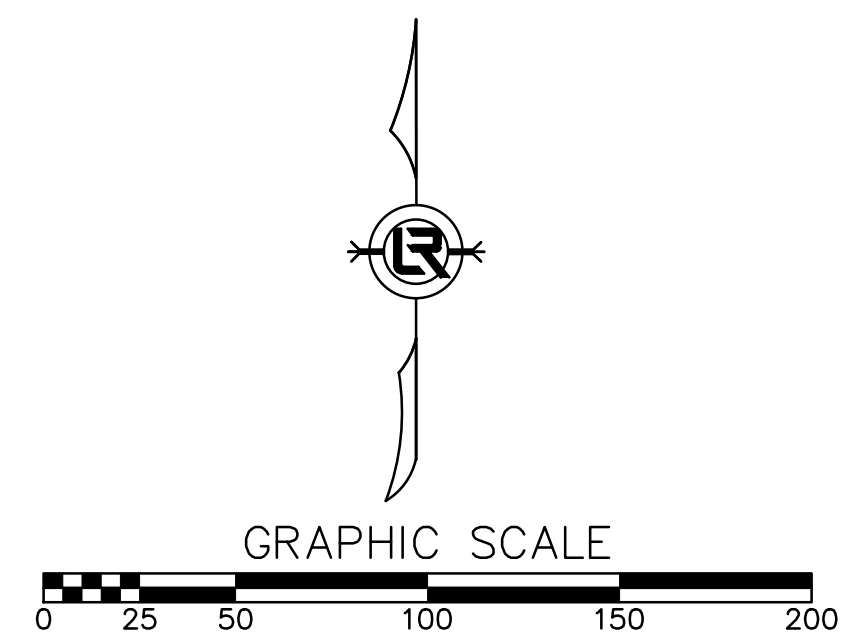
Basis of Bearings:
 All Coordinates are Ground.
 For Stakeout use CF = 1.00000000
 Job CAF = 1.000029763
 Job CAF was established at Control Point 2.
 Convergence Angle at Control Point 2 is 00°10'56.20651" Left.
 To convert back to GRID multiply by Job CAF = 1.000029763
 Point 2 Latitude = N 34°44'54.56684"
 Point 2 Longitude = W 092°18'47.69804"
 Original Grid Coordinates based on Arkansas Grid North Zone 0301
 As determined by GPS RTK readings on February 21, 2019 based upon the PAGIS Dial-Up System.
 Horizontal Datum: NAVD 83
 Vertical Datum: NAVD 88
 Grid Coordinates were projected to Ground using Job CAF = 1.000029763.
 Elevations for project based upon GPS RTK readings to Control Point 3.
 Job Location is South Valentine Street in Little Rock, Pulaski County, Arkansas



CURVE 1
 T=32.49'
 R=100.00'
 D=57°17'45.6"
 L=62.83'
 I=36°00'00.0"
 PC=10+97.51
 PT=11+60.34
 GPS, 5/8" REBAR_GPS TRAV
 EL 332.1646
 PI: 11+30.00

CURVE 1
 T=11.64'
 R=60.00'
 D=95°29'3.6" S22° 23' 38.44"E
 L=22.42'
 I=21°57'20.0"
 PC=202+98.87
 PT=203+21.86
 PI: 204+18.28

CURVE 2
 T=9.00'
 R=10.00'
 D=572°57'36.0"
 L=14.66'
 I=84°00'50.0"
 PC=207+43.79
 PT=207+58.45



REVISIONS DATE

CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS

FIELD TIES / LAYOUT

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

DRAWN BY
 TCP

DESIGNED
 RCC

CHECKED
 RCC

DATE
 12-18-2023

SCALE
 H: 1"=50'
 V: 1"=50'

PROJECT NO.
 03-17-DR-107

SHEET NO.
 C13

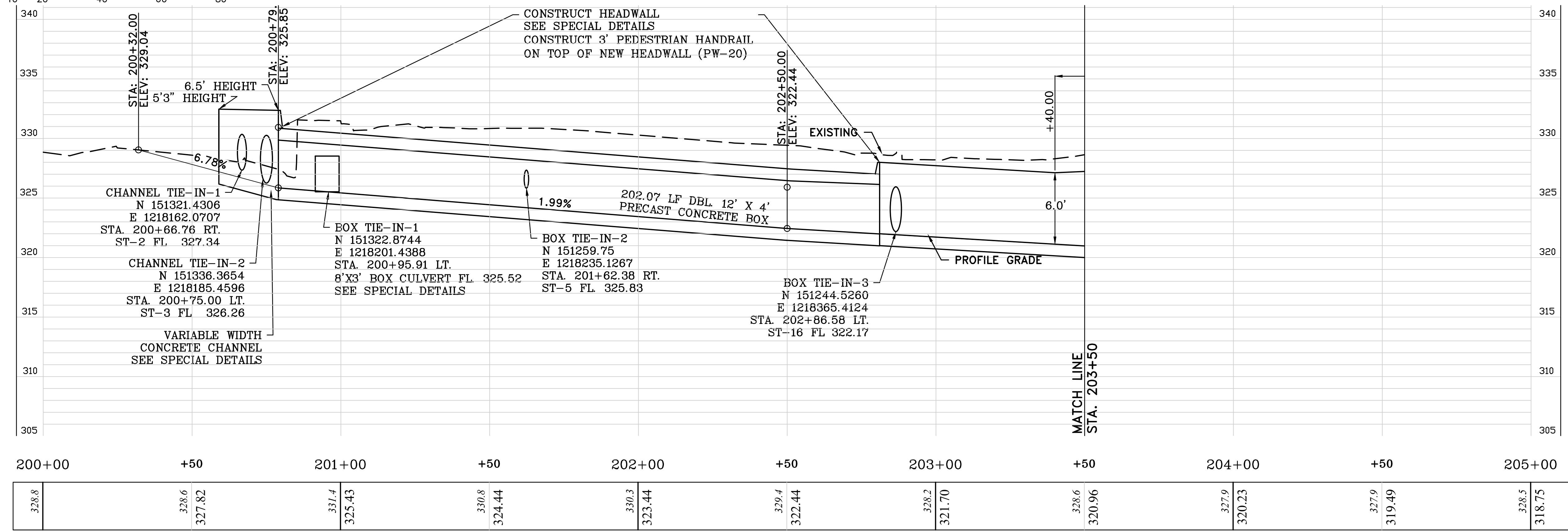
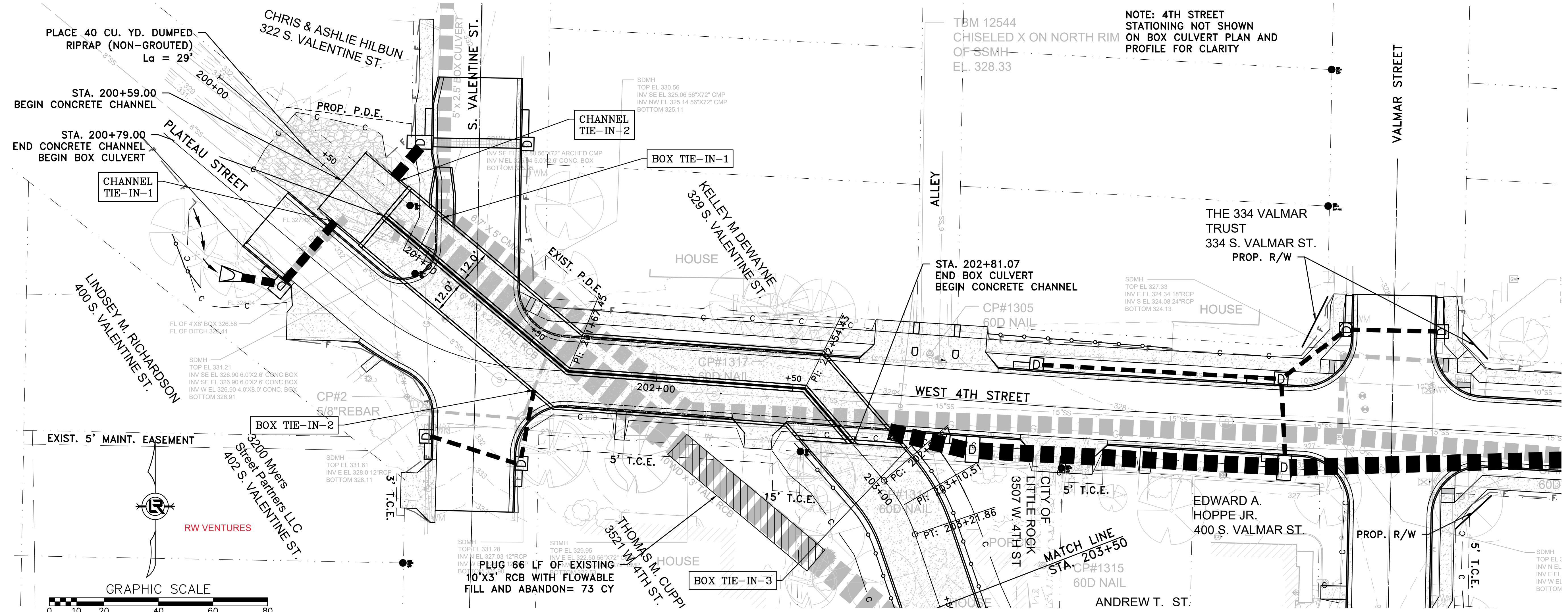
Basis of Bearing: PAGIS Virtual State Plane North reduced to g point No. 2, Geoid 12B

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS
 BOX CULVERT AND DRAINAGE CHANNEL 1
 PLAN & PROFILE - STA 200+00 TO STA 203+50

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

DRAWN BY
 TCP
 DESIGNED
 RCC
 CHECKED
 RCC
 DATE
 12-18-2023
 SCALE
 H: 1"=20'
 V: 1"=5'
 PROJECT NO.
 03-17-DR-107
 SHEET NO.
C14



BOX CULVERT AND DRAINAGE CHANNEL

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
WEST 4TH STREET DRAINAGE
AND STREET IMPROVEMENTS

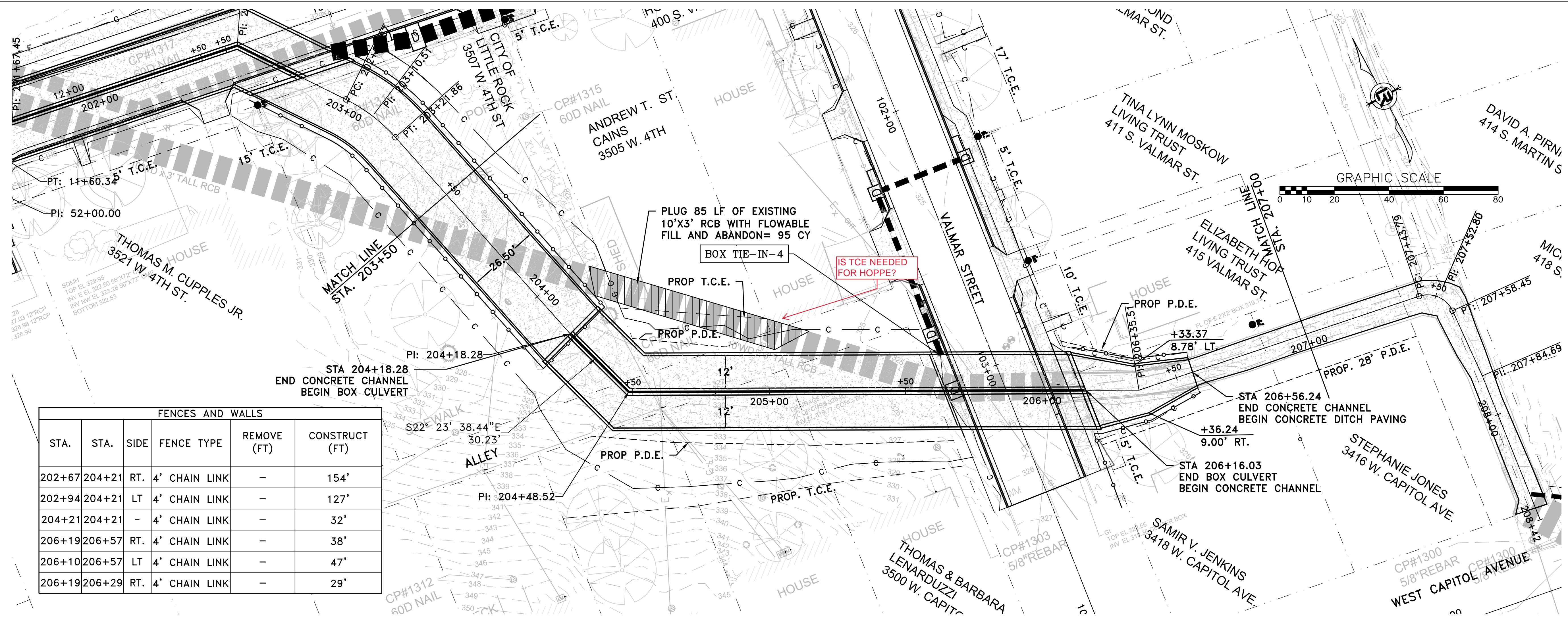
BOX CULVERT AND DRAINAGE CHANNEL 2
PLAN & PROFILE - STA 203+50 TO STA 207+00

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

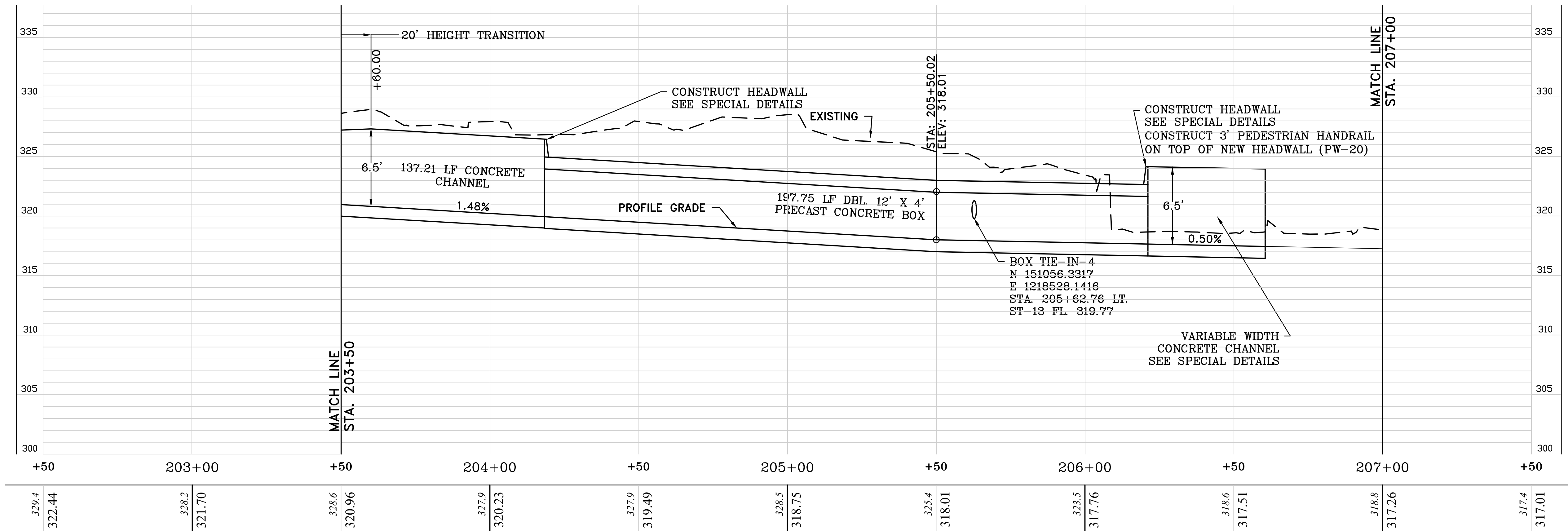


DRAWN BY
TCP
DESIGNED
RCC
CHECKED
RCC
DATE
12-18-2023
SCALE
H: 1"=20'
V: 1"=5'
PROJECT NO.
03-17-DR-107

SHEET NO.
C15



FENCES AND WALLS					
STA.	STA.	SIDE	FENCE TYPE	REMOVE (FT)	CONSTRUCT (FT)
202+67	204+21	RT.	4' CHAIN LINK	-	154'
202+94	204+21	LT	4' CHAIN LINK	-	127'
204+21	204+21	-	4' CHAIN LINK	-	32'
206+19	206+57	RT.	4' CHAIN LINK	-	38'
206+10	206+57	LT	4' CHAIN LINK	-	47'
206+19	206+29	RT.	4' CHAIN LINK	-	29'

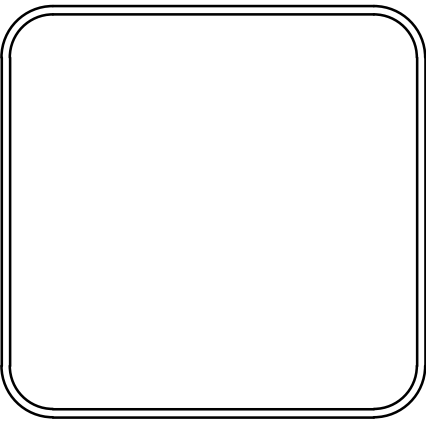


BOX CULVERT AND DRAINAGE CHANNEL

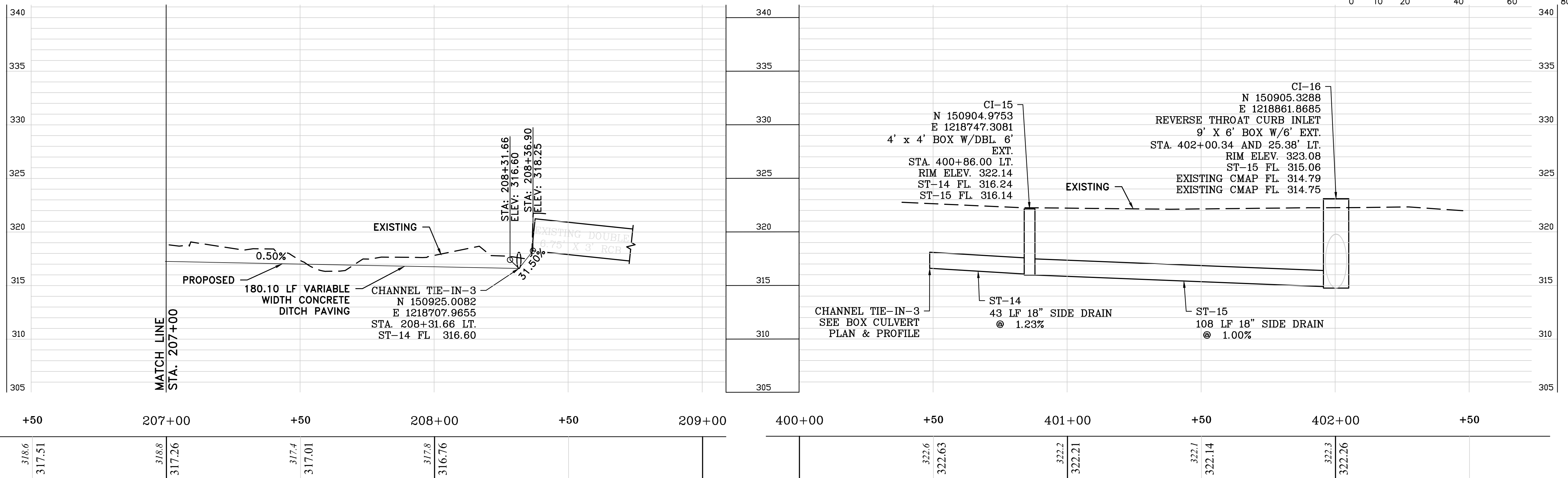
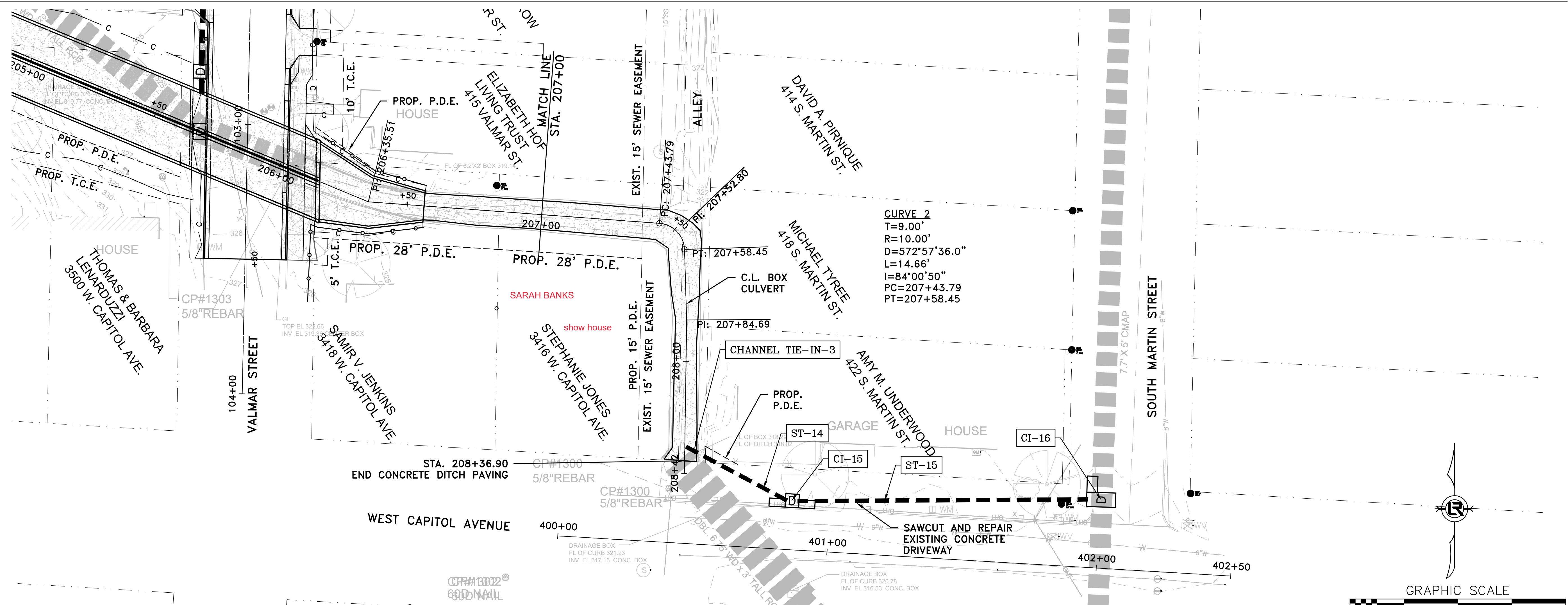
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS
 BOX CULVERT AND DRAINAGE CHANNEL 3
 PLAN & PROFILE - STA 207+00 TO STA 208.42

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



DRAWN BY
 TCP
 DESIGNED
 RCC
 CHECKED
 RCC
 DATE
 12-18-2023
 SCALE
 H: 1"=20'
 V: 1"=5'
 PROJECT NO.
 03-17-DR-107
 SHEET NO.
C16



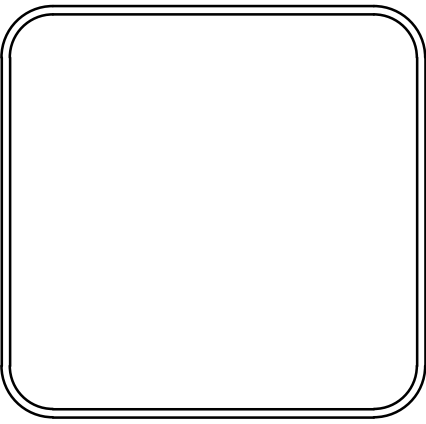
BOX CULVERT AND DRAINAGE CHANNEL

CAPITOL AVENUE

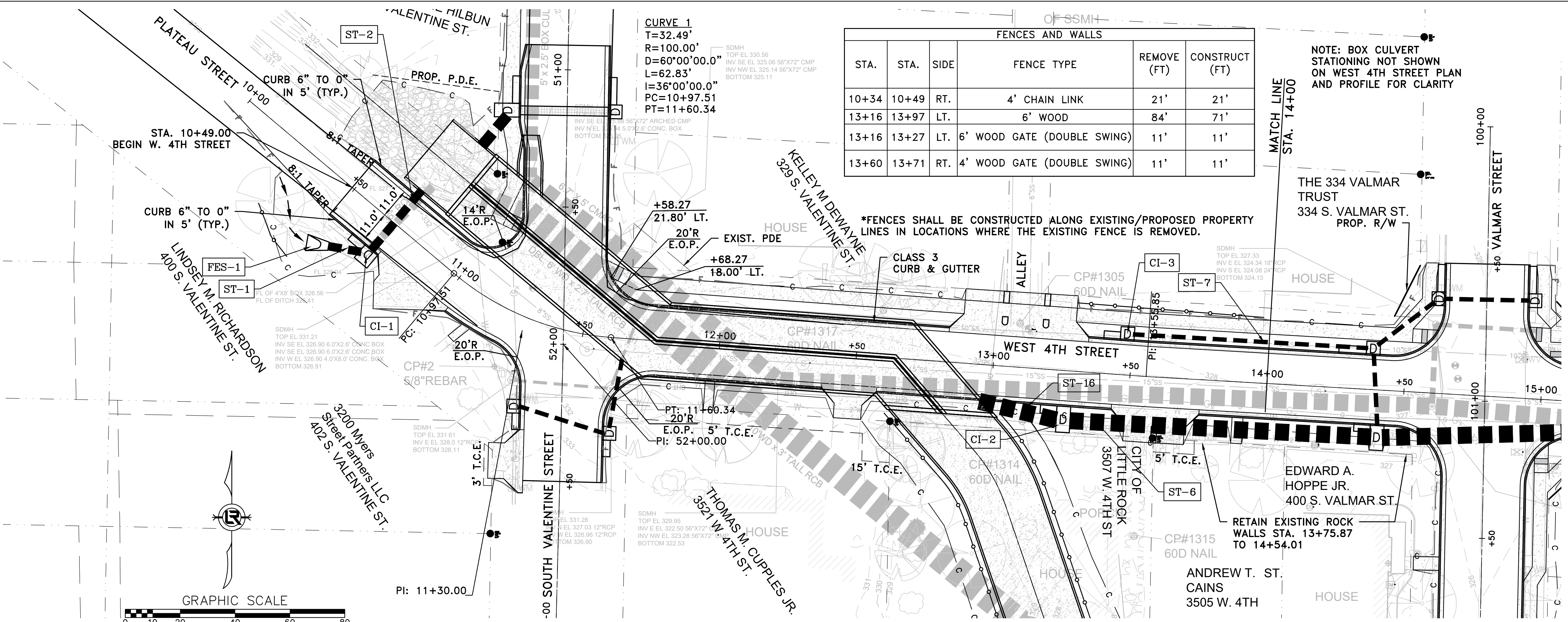
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS
 PLAN & PROFILE - STA 10+00 TO STA 14+00

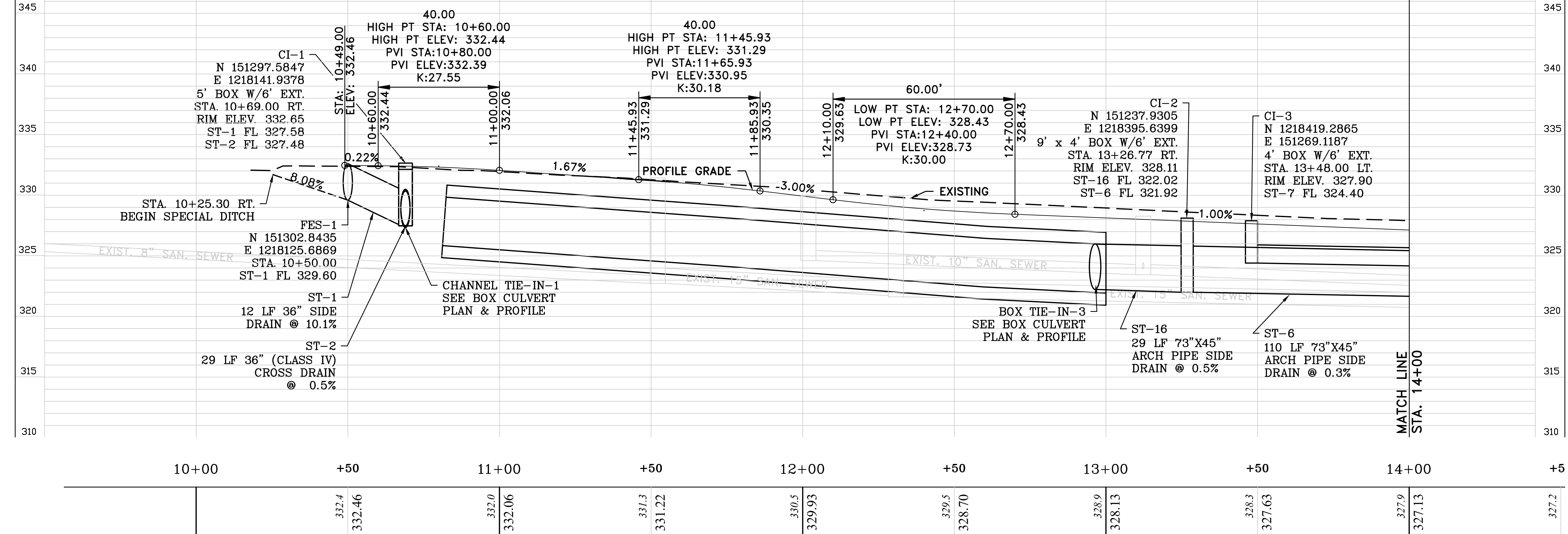
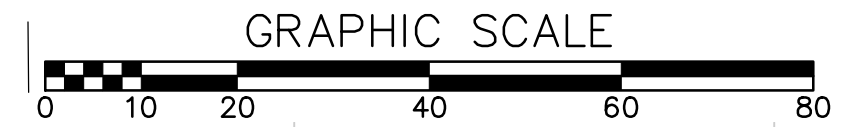
DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING
 701 W. MARKHAM
 LITTLE ROCK, ARKANSAS 72201



DRAWN BY
 TCP
 DESIGNED
 RCC
 CHECKED
 RCC
 DATE
 12-18-2023
 SCALE
 H: 1"=20'
 V: 1"=5'
 PROJECT NO.
 03-17-DR-107
 SHEET NO.
 C17

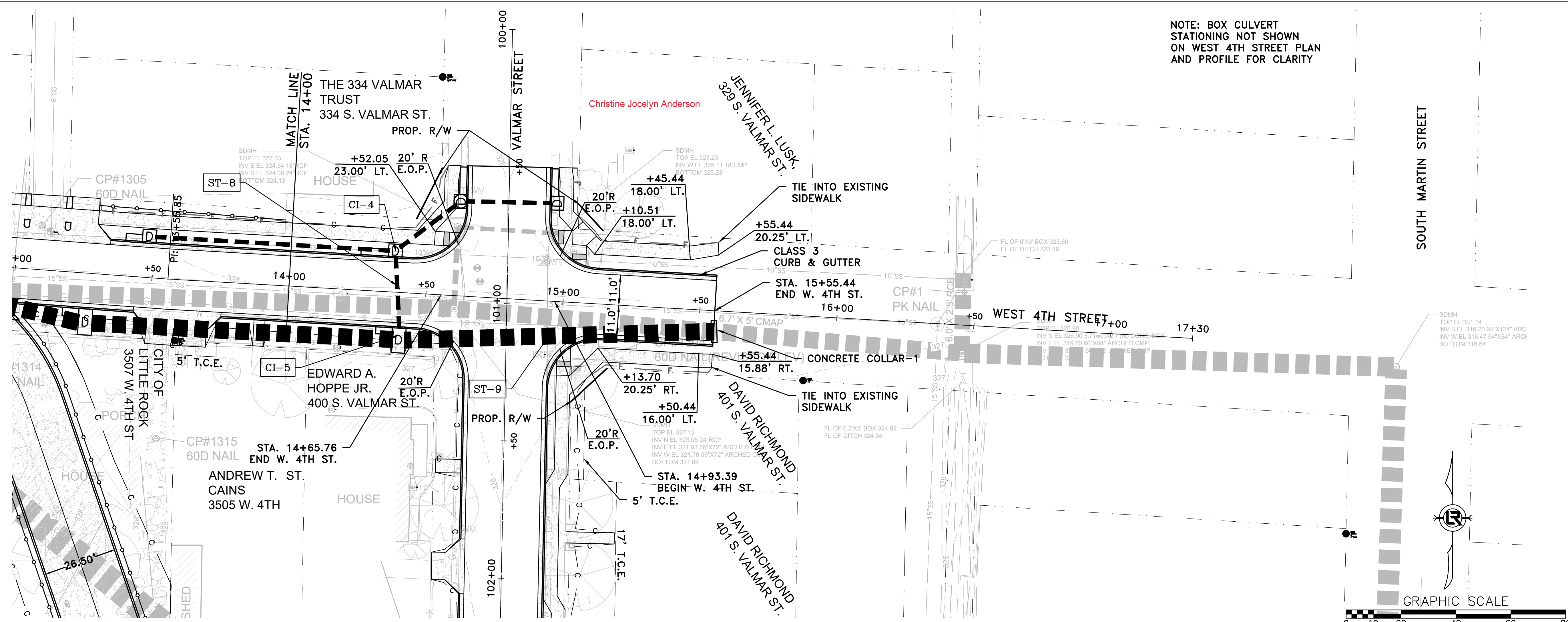


STA.	STA.	SIDE	FENCE TYPE	REMOVE (FT)	CONSTRUCT (FT)
10+34	10+49	RT.	4' CHAIN LINK	21'	21'
13+16	13+97	LT.	6' WOOD	84'	71'
13+16	13+27	LT.	6' WOOD GATE (DOUBLE SWING)	11'	11'
13+60	13+71	RT.	4' WOOD GATE (DOUBLE SWING)	11'	11'

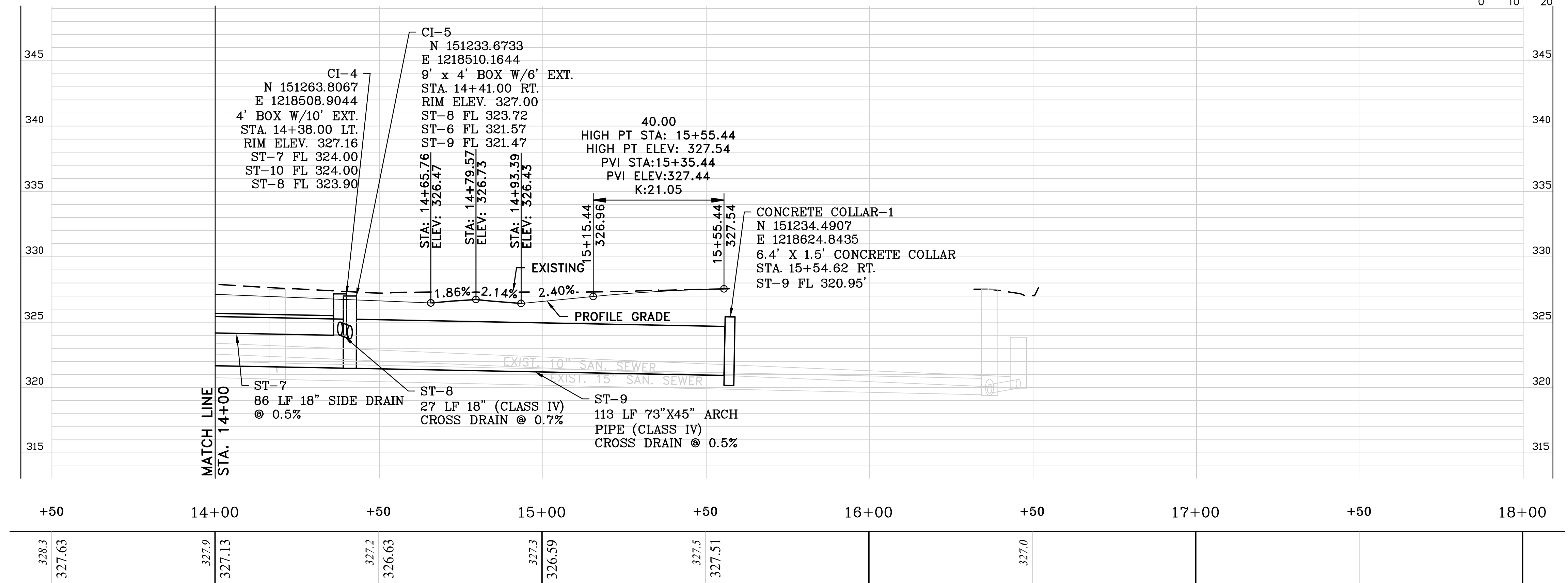
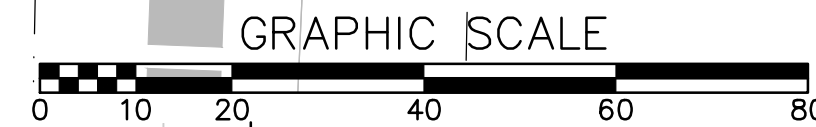


4TH STREET

REVISIONS	DATE



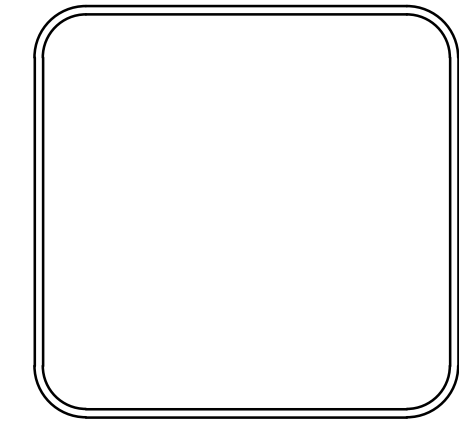
NOTE: BOX CULVERT STATIONING NOT SHOWN ON WEST 4TH STREET PLAN AND PROFILE FOR CLARITY



4TH STREET

CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE AND STREET IMPROVEMENTS
 WEST 4TH STREET 2
 PLAN & PROFILE - STA 14+00 TO STA 17+32

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



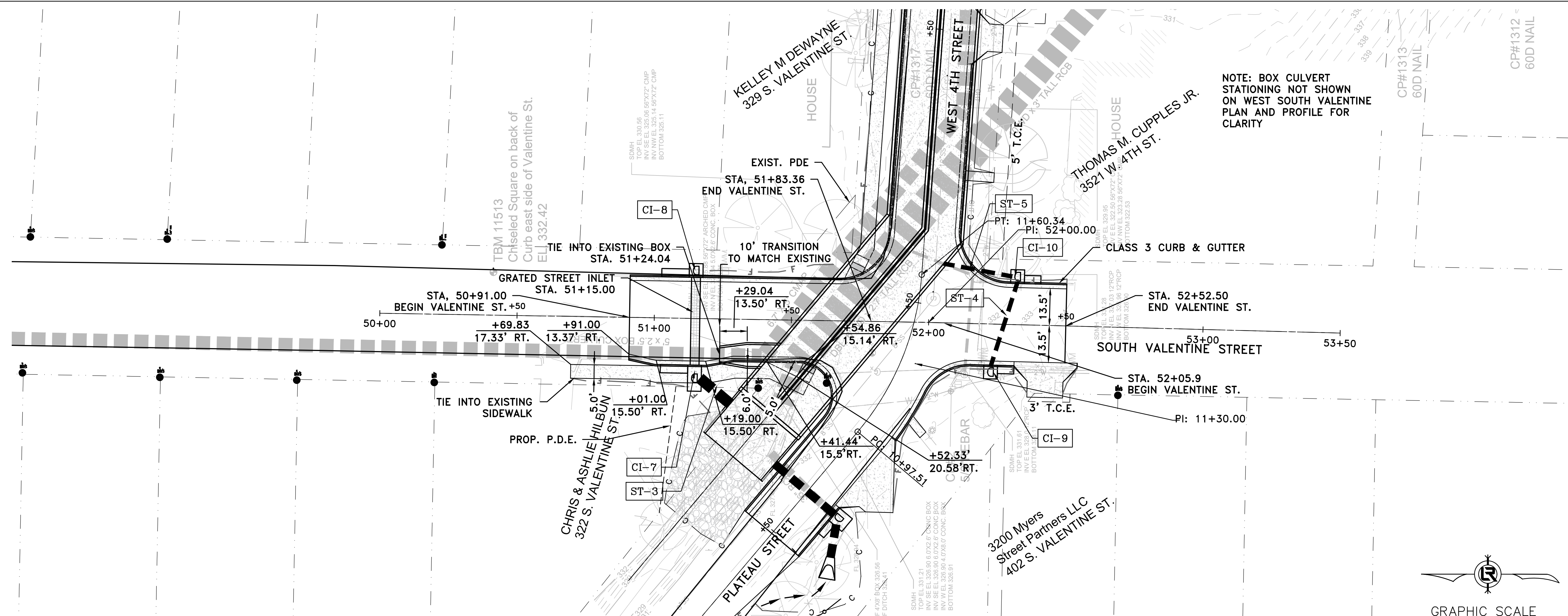
DRAWN BY
 TCP
 DESIGNED
 RCC
 CHECKED
 RCC
 DATE
 12-18-2023
 SCALE
 H: 1"=20'
 V: 1"=5'
 PROJECT NO.
 03-17-DR-107
 SHEET NO.
 C18

REVISIONS	DATE

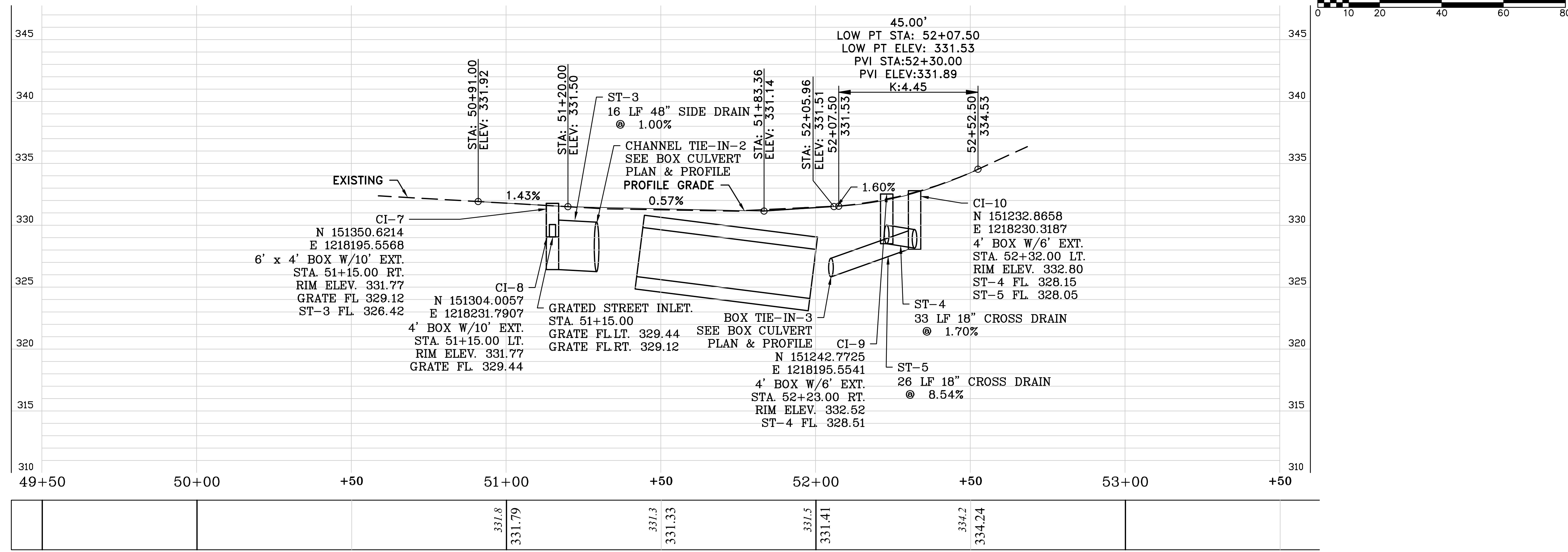
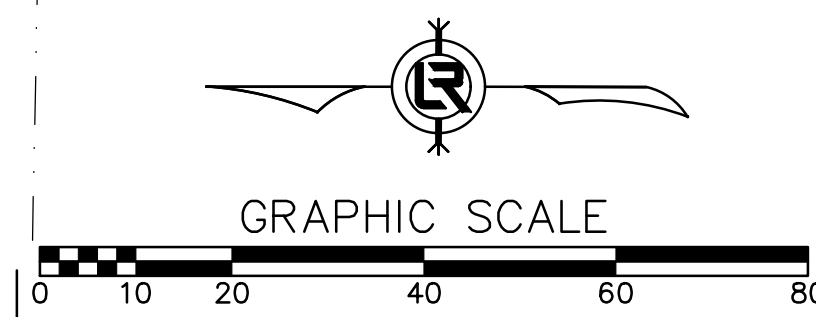
CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS

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

DRAWN BY
 TCP
 DESIGNED
 RCC
 CHECKED
 RCC
 DATE
 12-18-2023
 SCALE
 H: 1"=20'
 V: 1"=5'
 PROJECT NO.
 03-17-DR-107
 SHEET NO.
C19



NOTE: BOX CULVERT
 STATIONING NOT SHOWN
 ON WEST SOUTH VALENTINE
 PLAN AND PROFILE FOR
 CLARITY

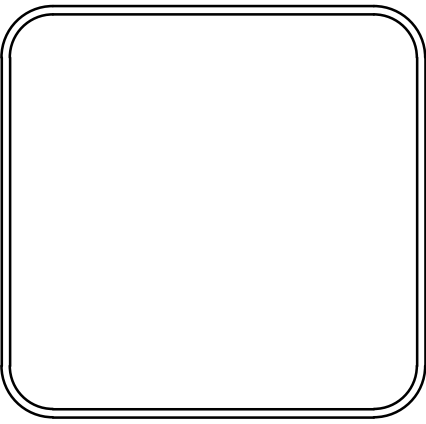


VALENTINE STREET

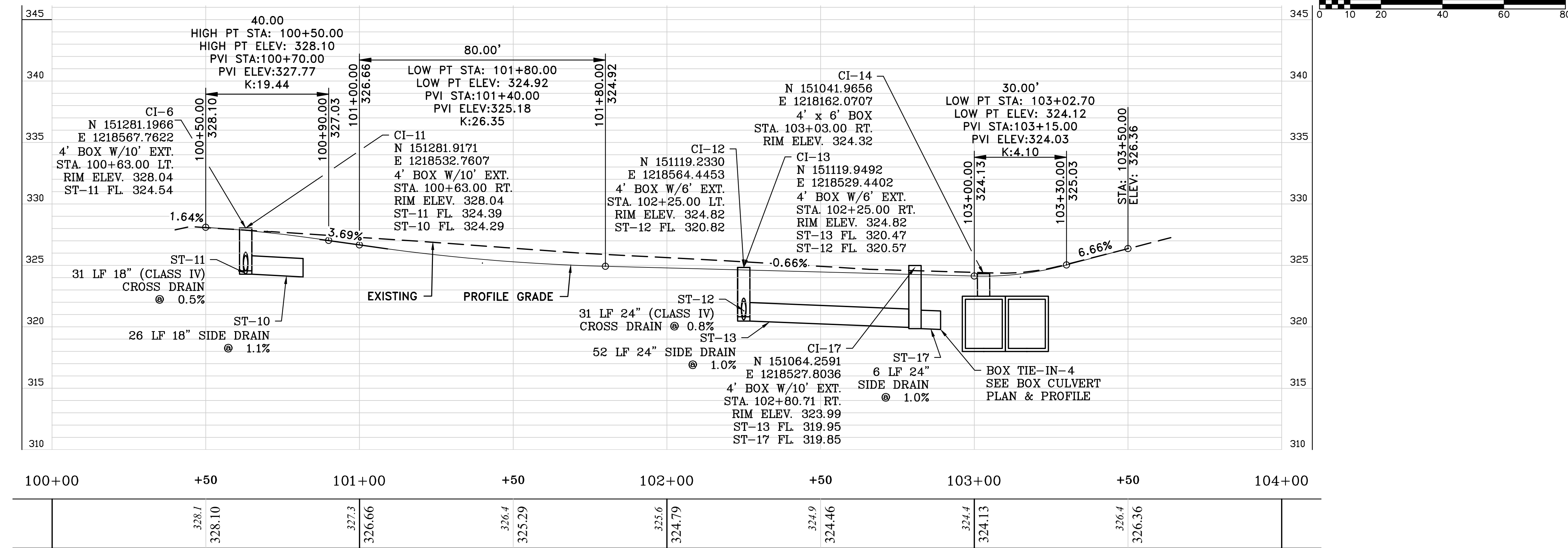
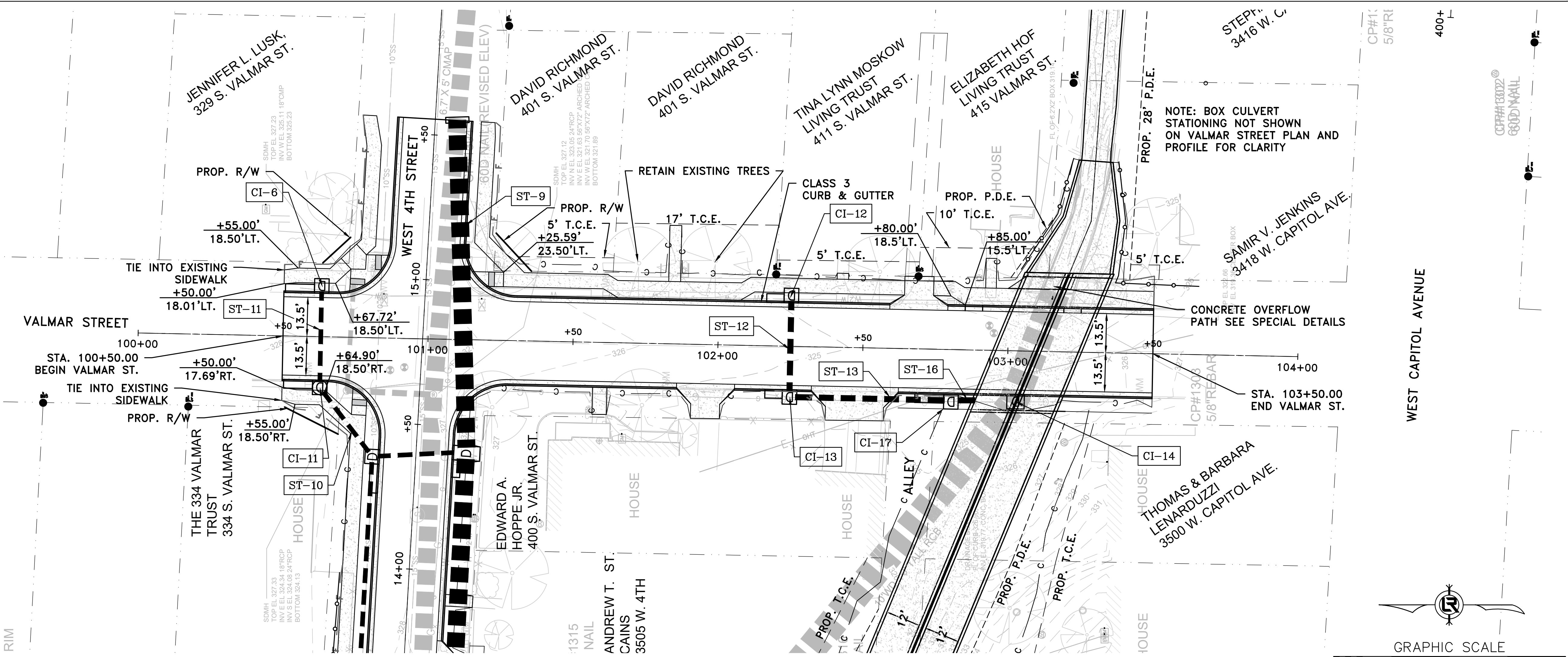
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS
 VALMAR STREET
 PLAN & PROFILE - STA 100+00 TO STA 104+00

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



DRAWN BY
 TCP
 DESIGNED
 RCC
 CHECKED
 RCC
 DATE
 12-18-2023
 SCALE
 H: 1"=20'
 V: 1"=5'
 PROJECT NO.
 03-17-DR-107
 SHEET NO.
C20

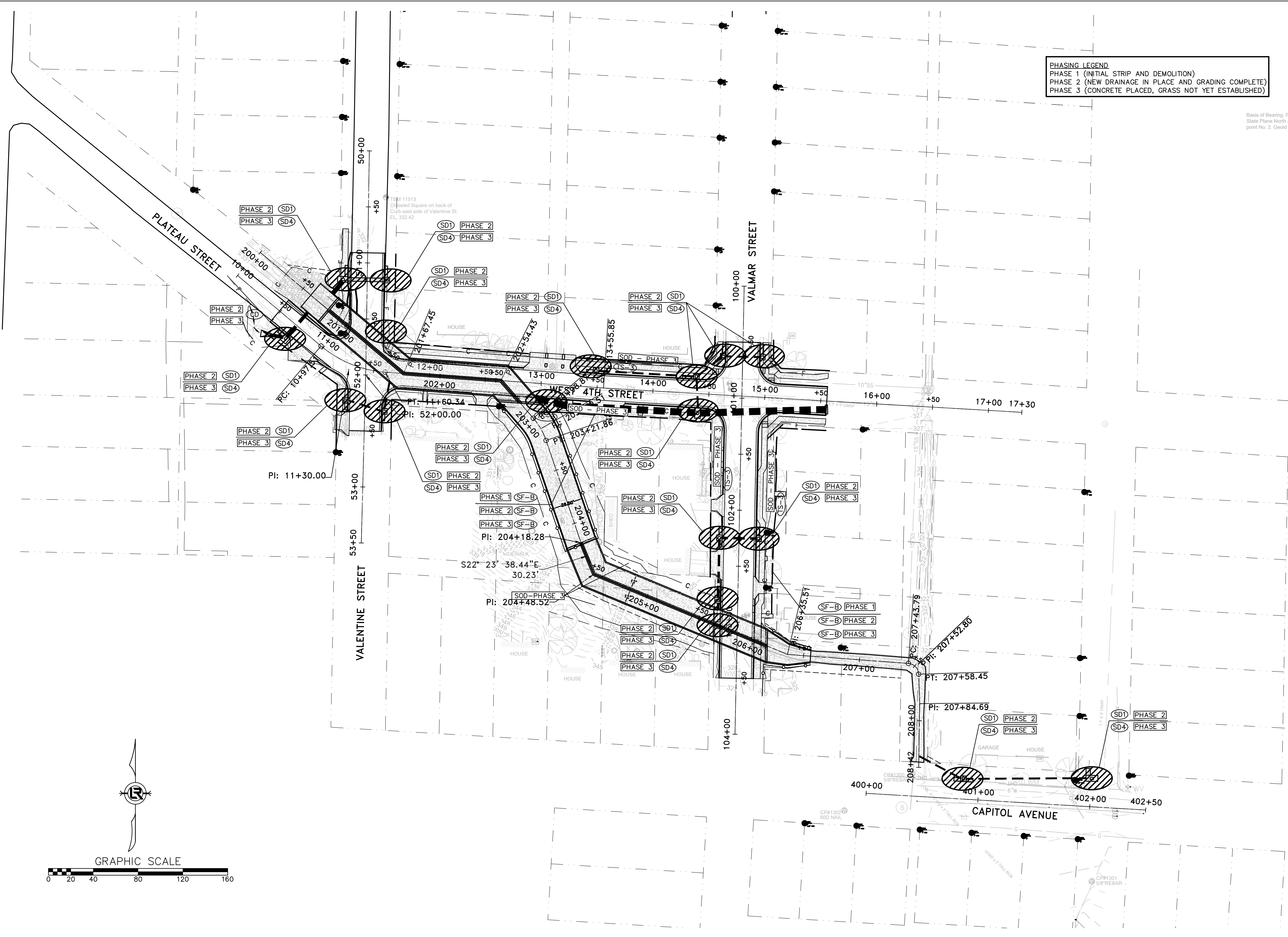


VALMAR STREET

REVISIONS	DATE

PHASING LEGEND
 PHASE 1 (INITIAL STRIP AND DEMOLITION)
 PHASE 2 (NEW DRAINAGE IN PLACE AND GRADING COMPLETE)
 PHASE 3 (CONCRETE PLACED, GRASS NOT YET ESTABLISHED)

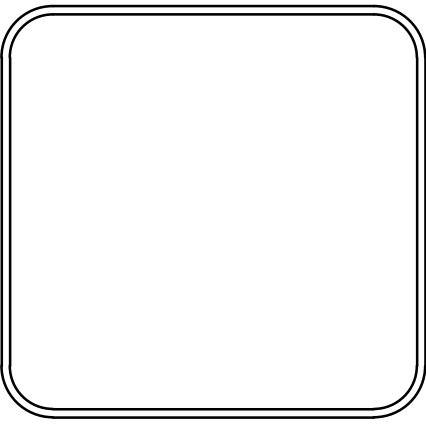
Basis of Bearing: PAGIS Virt
 State Plane North reduced to
 point No. 2, Geoid 12B



CITY OF LITTLE ROCK, ARKANSAS
WEST 4TH STREET DRAINAGE
AND STREET IMPROVEMENTS

EROSION CONTROL

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



DRAWN BY
TCP

DESIGNED
RCC

CHECKED
RCC

DATE
12-18-2023

SCALE
H: 1"=40'
V: 1"=40'

PROJECT NO.
03-17-DR-107

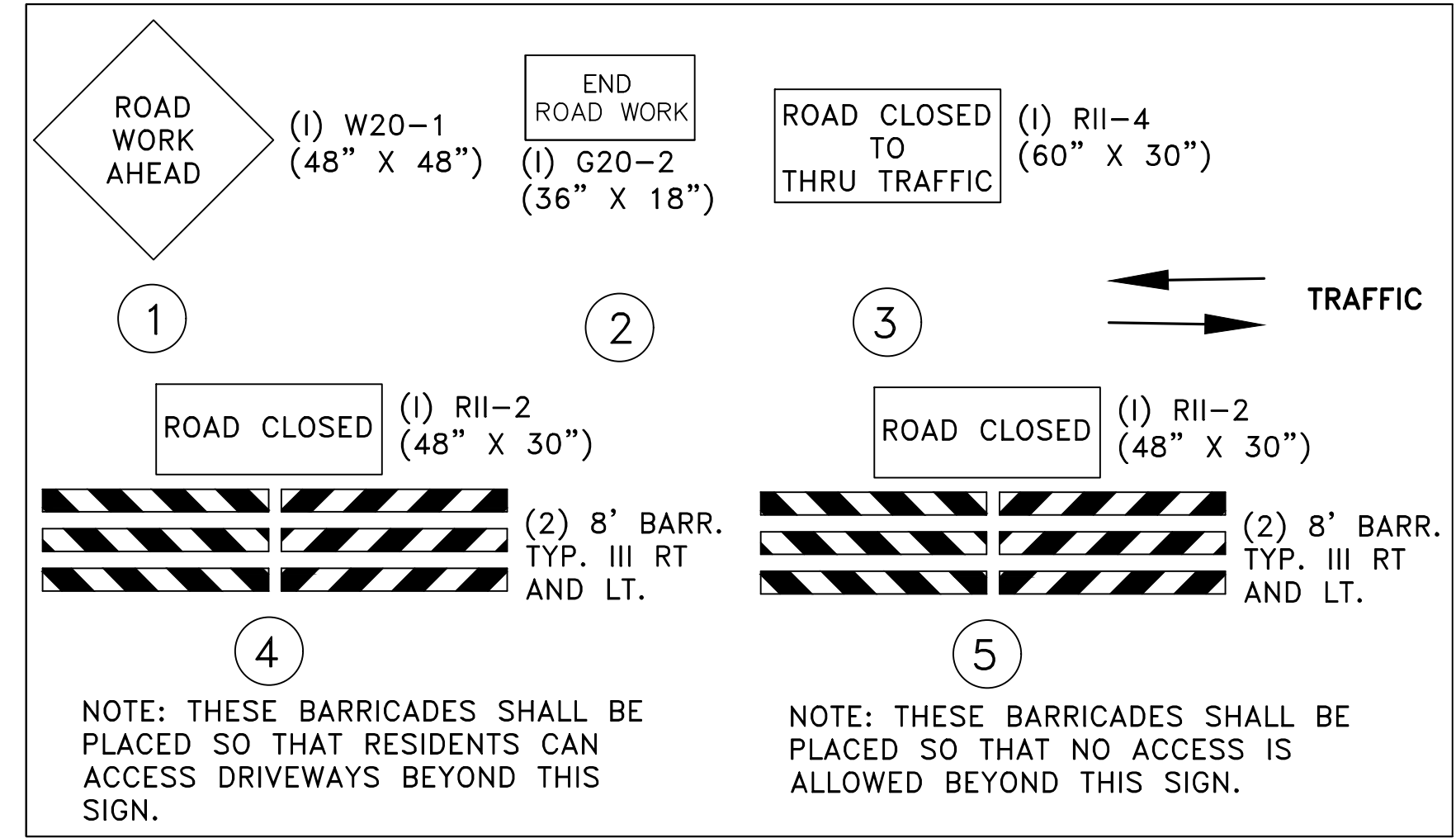
SHEET NO.
C21

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS
 MAINTENANCE OF TRAFFIC

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

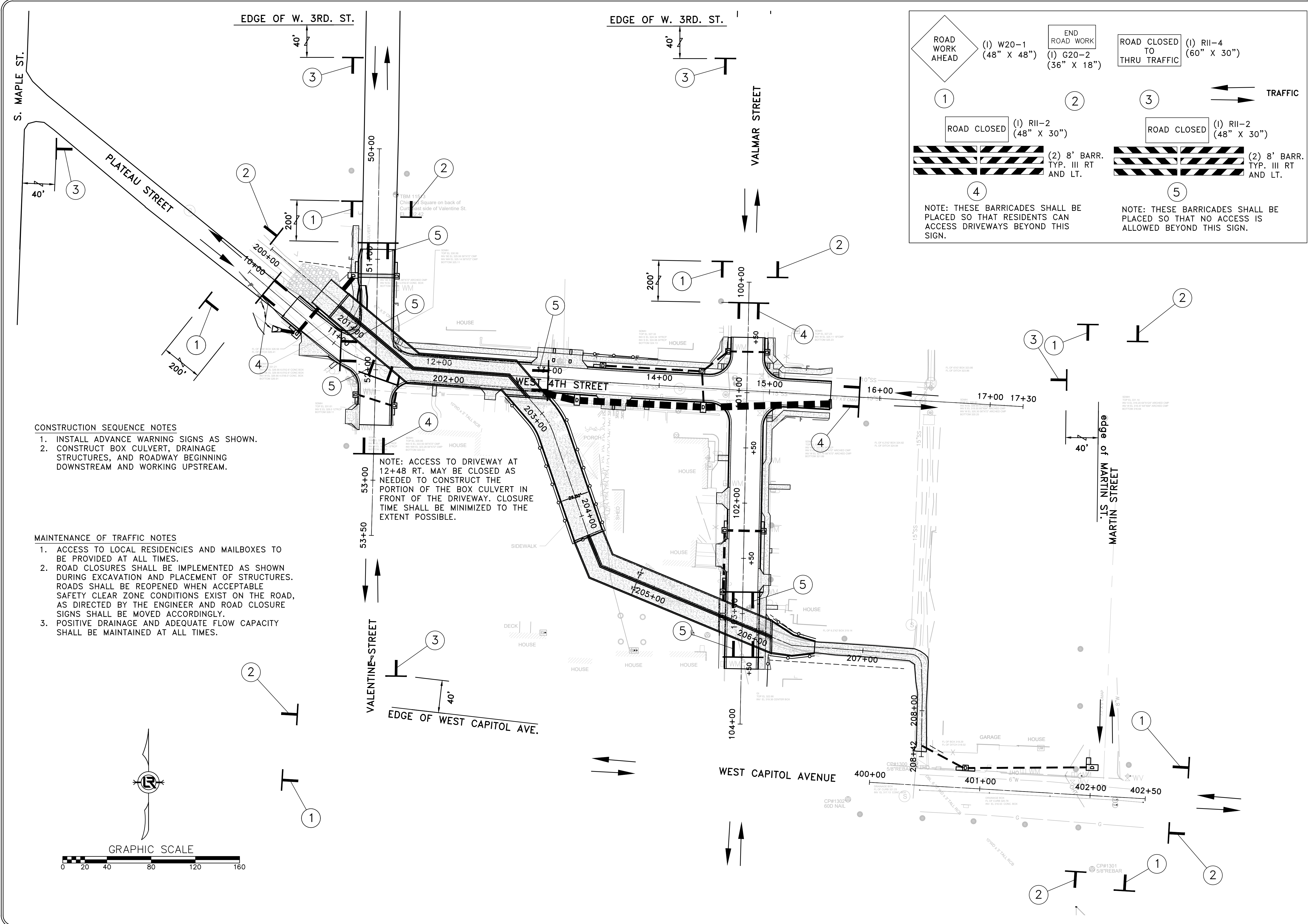
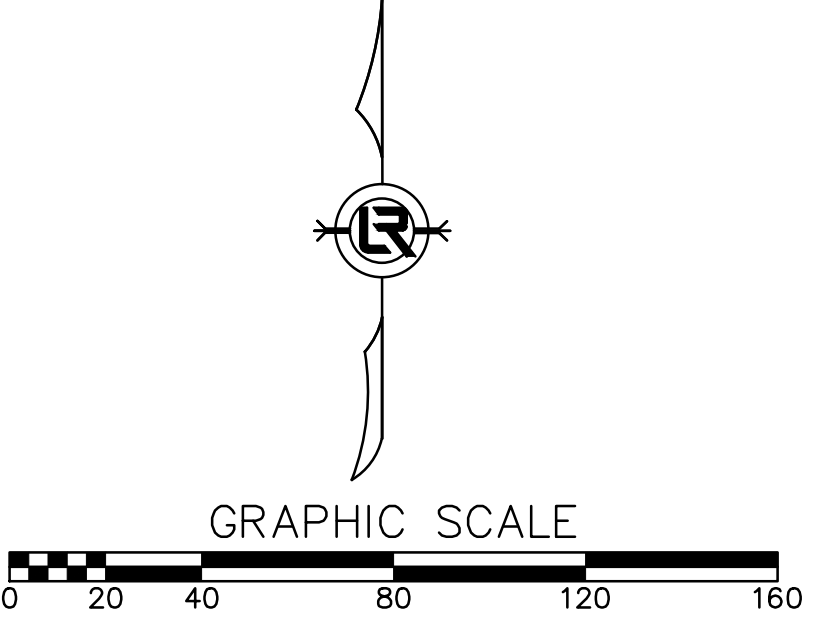
DRAWN BY
 TCP
 DESIGNED
 RCC
 CHECKED
 RCC
 DATE
 12-18-2023
 SCALE
 H: 1"=40'
 V: 1"=40'
 PROJECT NO.
 03-17-DR-107
 SHEET NO.
 C22

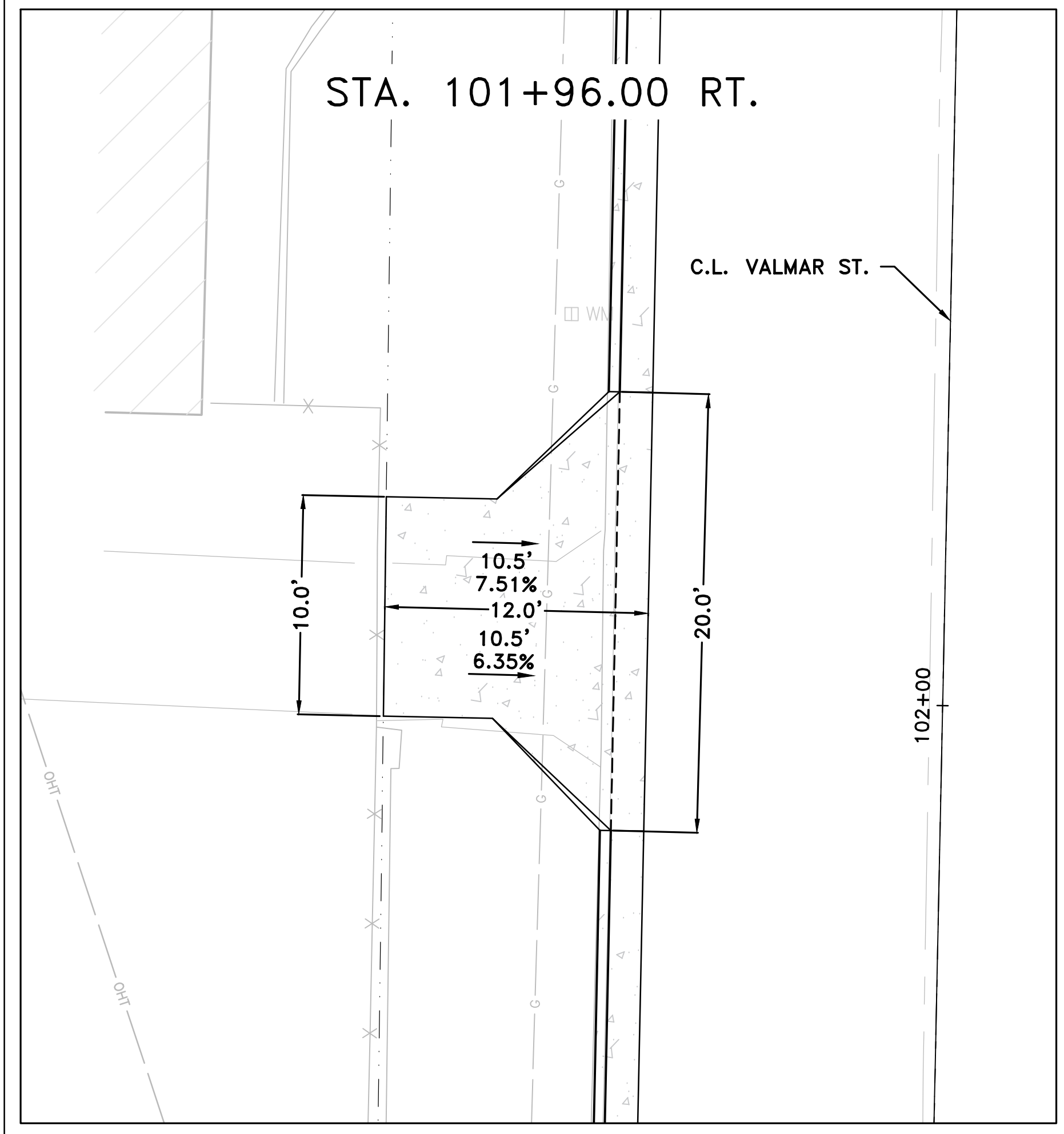
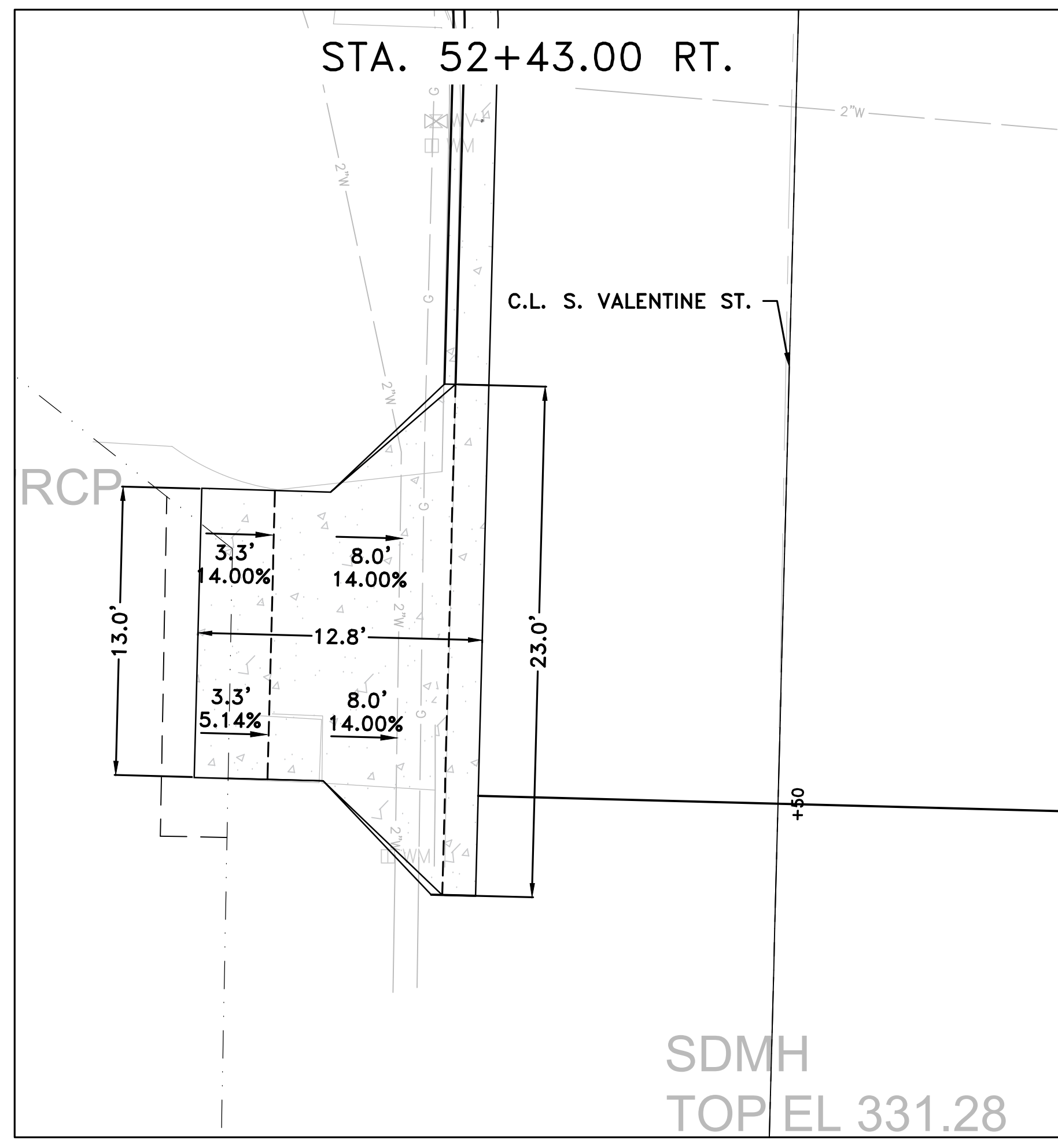
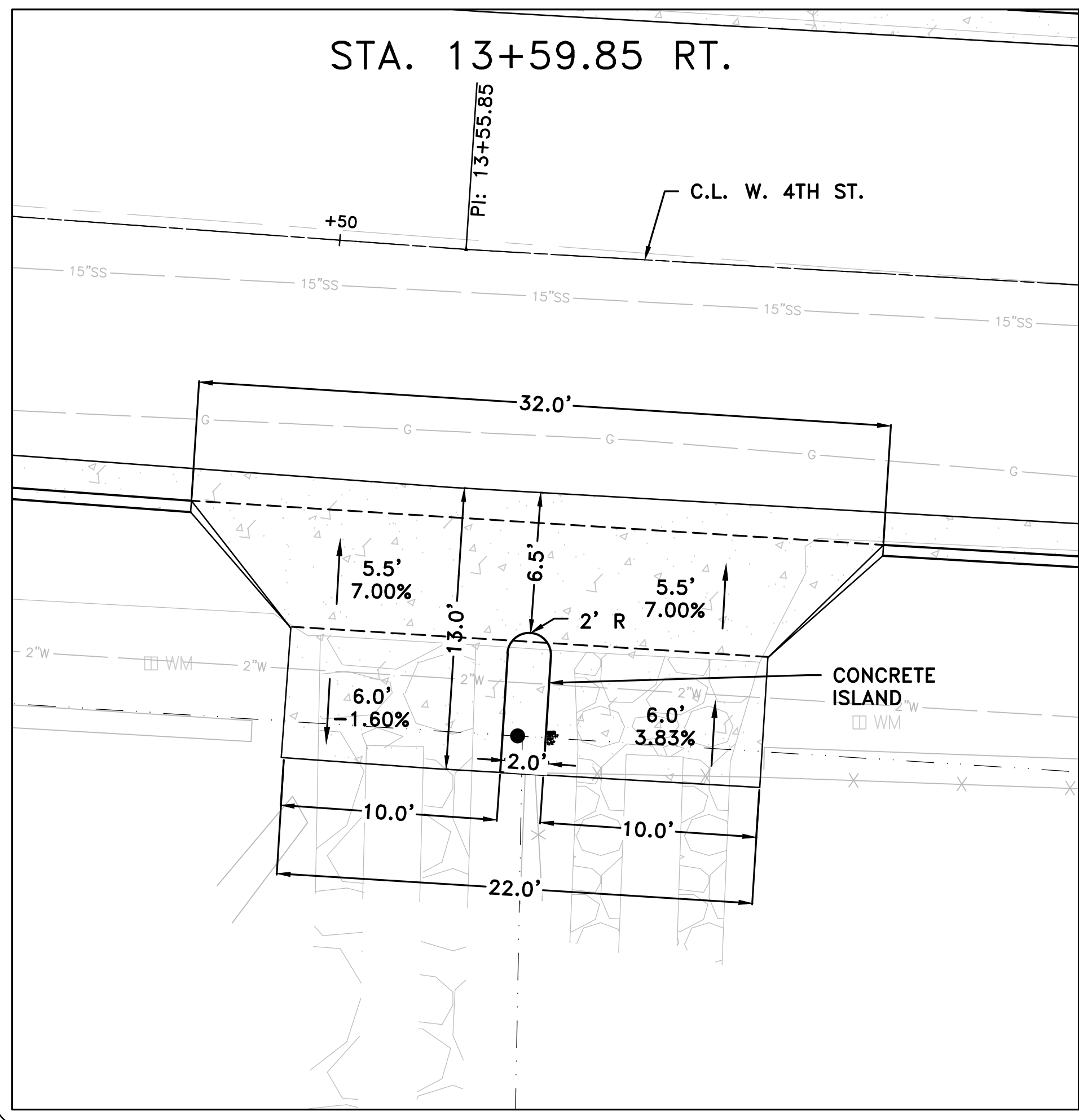
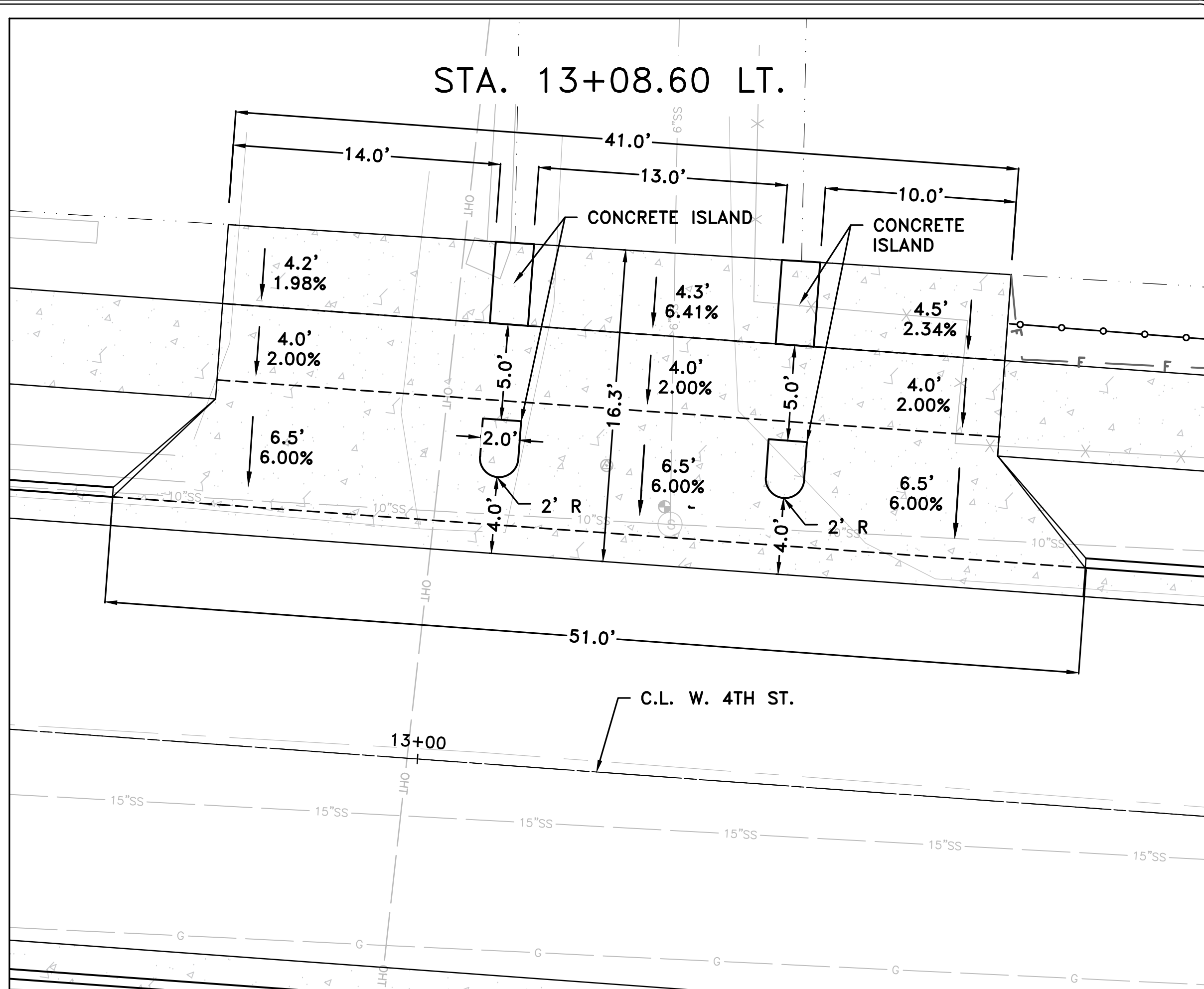
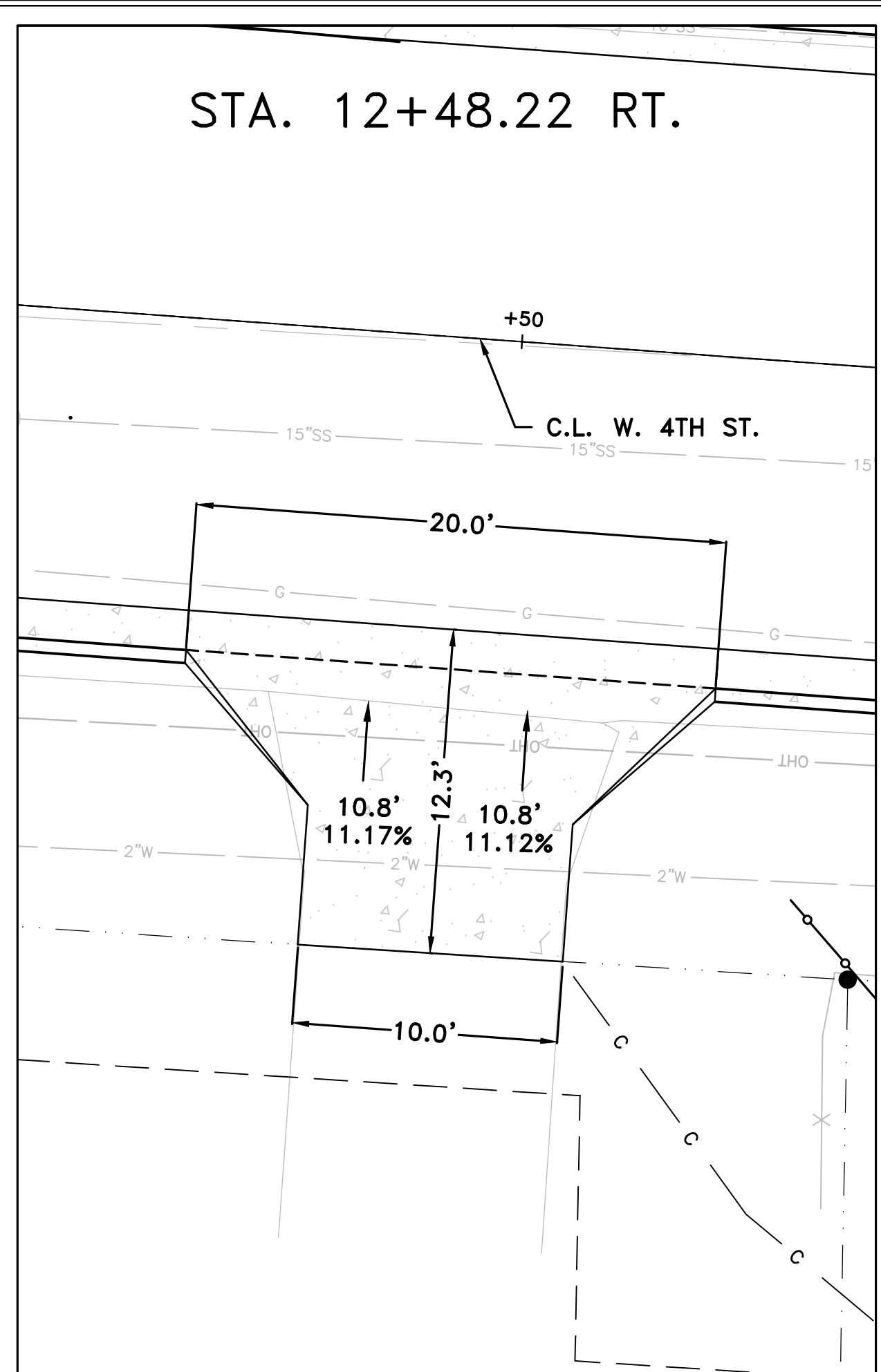
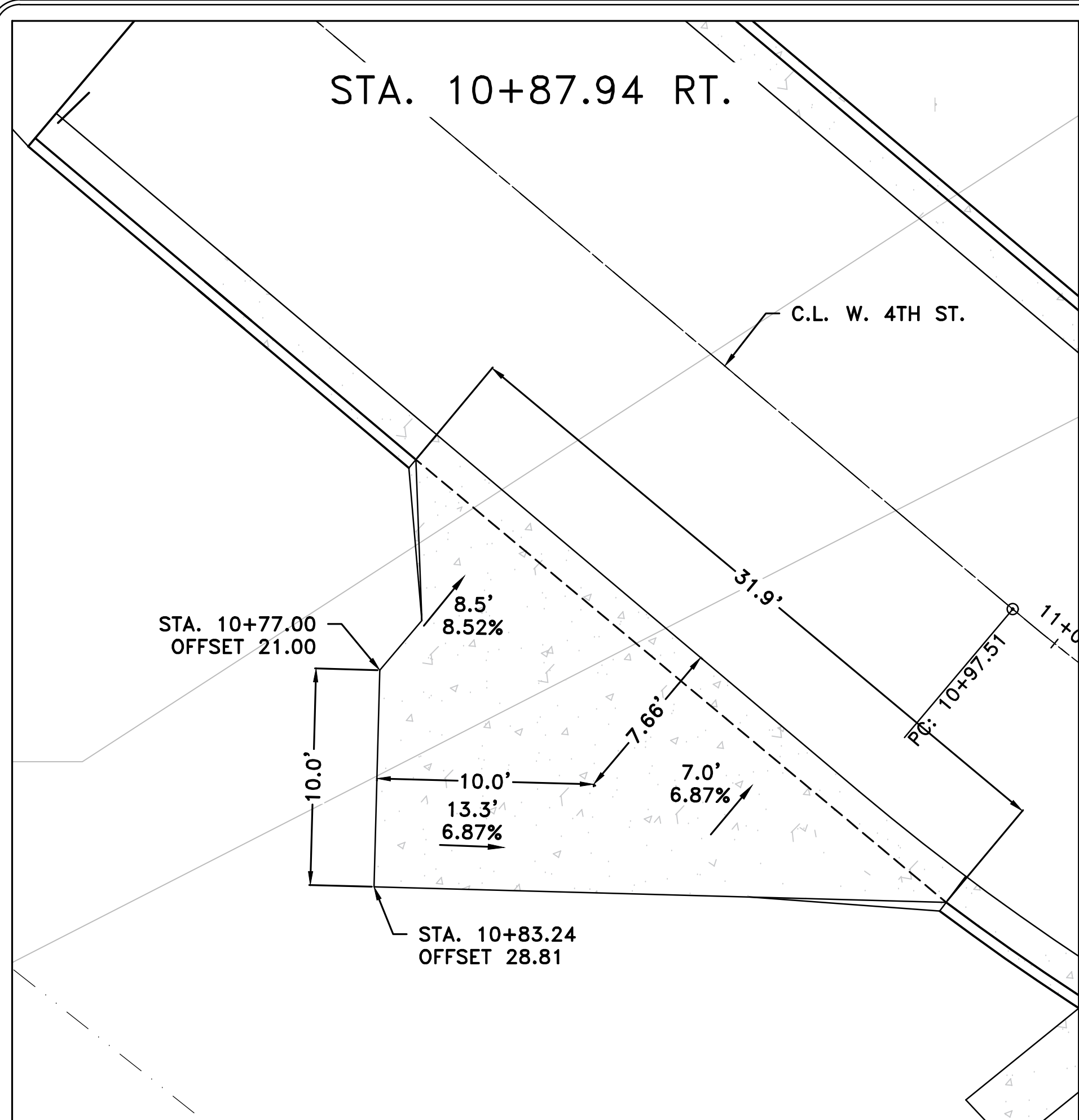


- CONSTRUCTION SEQUENCE NOTES**
1. INSTALL ADVANCE WARNING SIGNS AS SHOWN.
 2. CONSTRUCT BOX CULVERT, DRAINAGE STRUCTURES, AND ROADWAY BEGINNING DOWNSTREAM AND WORKING UPSTREAM.

- MAINTENANCE OF TRAFFIC NOTES**
1. ACCESS TO LOCAL RESIDENCIES AND MAILBOXES TO BE PROVIDED AT ALL TIMES.
 2. ROAD CLOSURES SHALL BE IMPLEMENTED AS SHOWN DURING EXCAVATION AND PLACEMENT OF STRUCTURES. ROADS SHALL BE REOPENED WHEN ACCEPTABLE SAFETY CLEAR ZONE CONDITIONS EXIST ON THE ROAD, AS DIRECTED BY THE ENGINEER AND ROAD CLOSURE SIGNS SHALL BE MOVED ACCORDINGLY.
 3. POSITIVE DRAINAGE AND ADEQUATE FLOW CAPACITY SHALL BE MAINTAINED AT ALL TIMES.

NOTE: ACCESS TO DRIVEWAY AT 12+48 RT. MAY BE CLOSED AS NEEDED TO CONSTRUCT THE PORTION OF THE BOX CULVERT IN FRONT OF THE DRIVEWAY. CLOSURE TIME SHALL BE MINIMIZED TO THE EXTENT POSSIBLE.



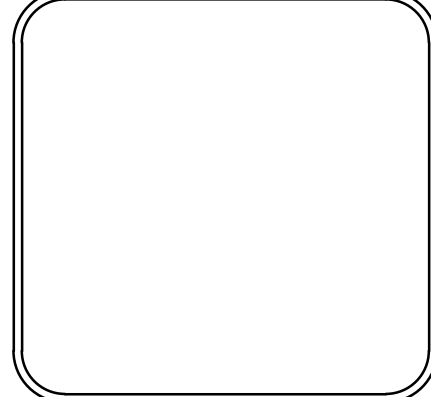


REVISIONS	DATE

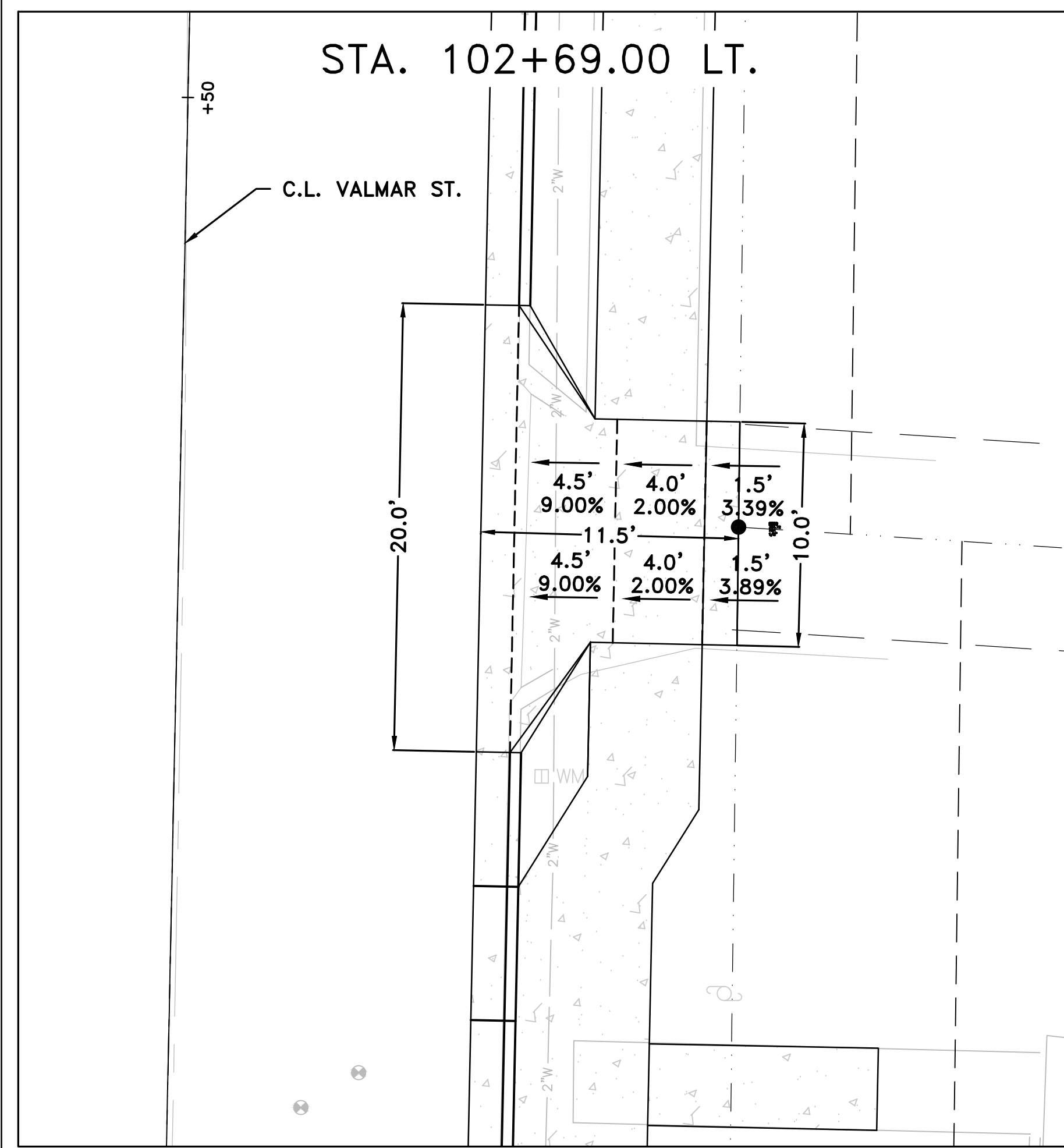
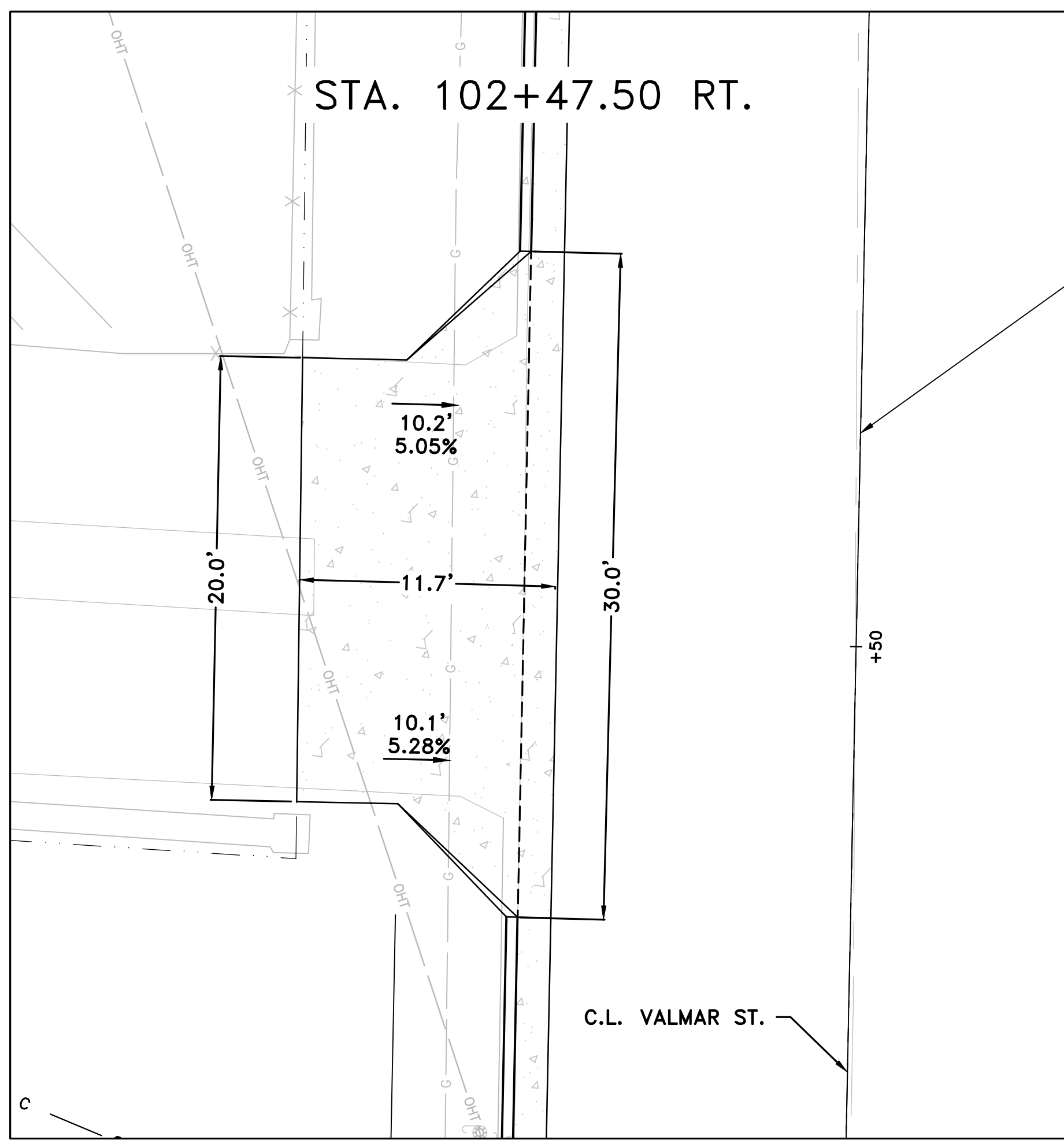
CITY OF LITTLE ROCK, ARKANSAS
WEST 4TH STREET DRAINAGE
AND STREET IMPROVEMENTS

DRIVEWAY DETAILS

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 7201



DRAWN BY TCP
DESIGNED MJM
CHECKED RCC
DATE 12-18-2023
SCALE N.T.S.
PROJECT NO. 03-17-DR-107
SHEET NO. C23

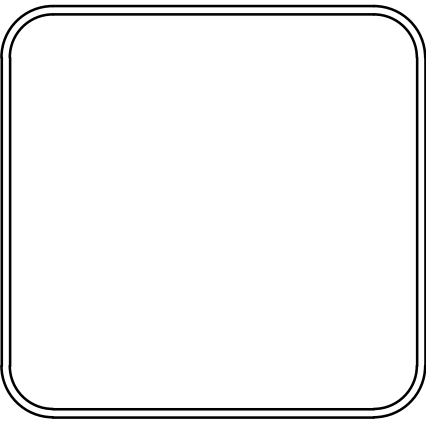


REVISIONS	DATE

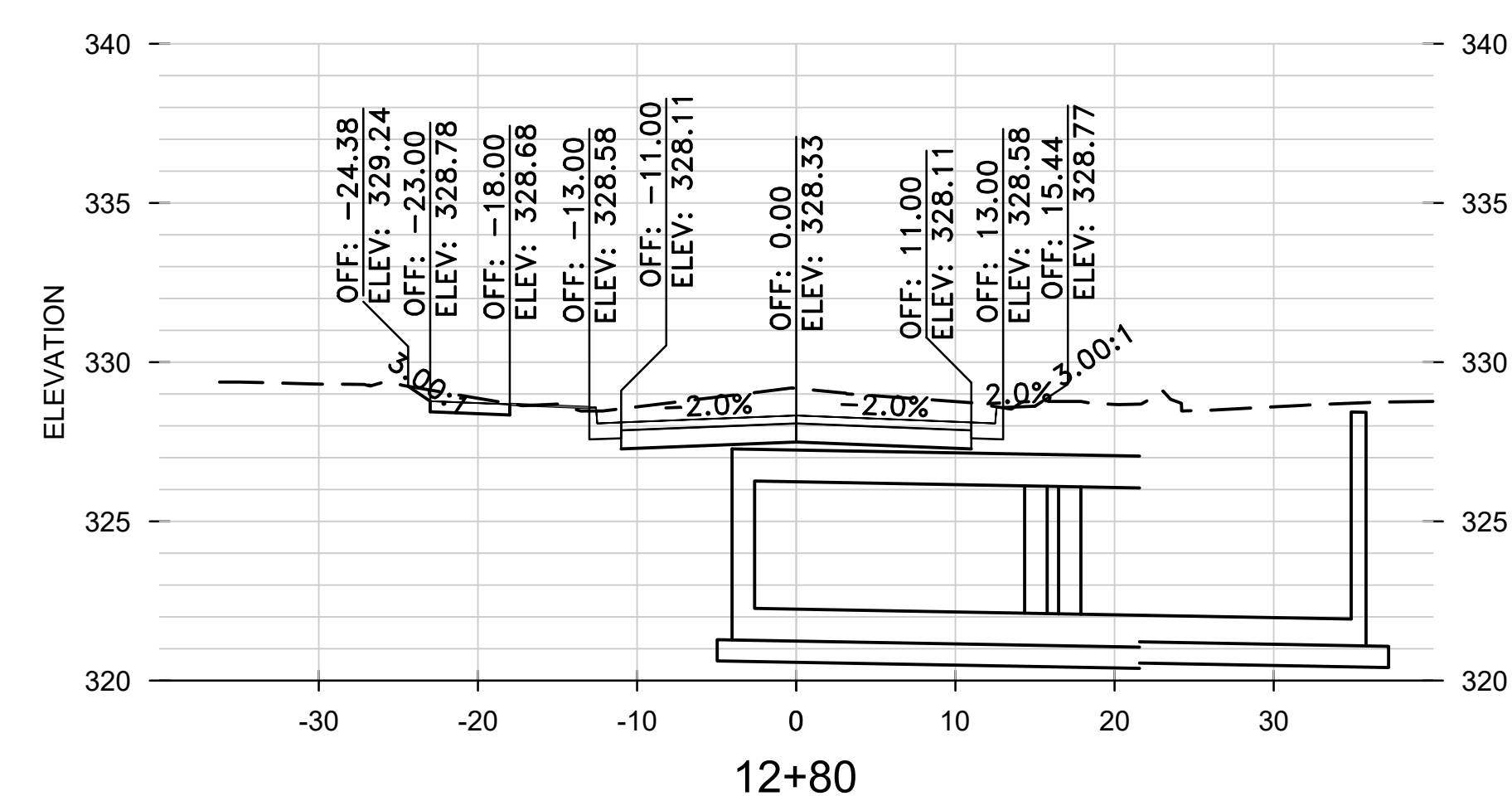
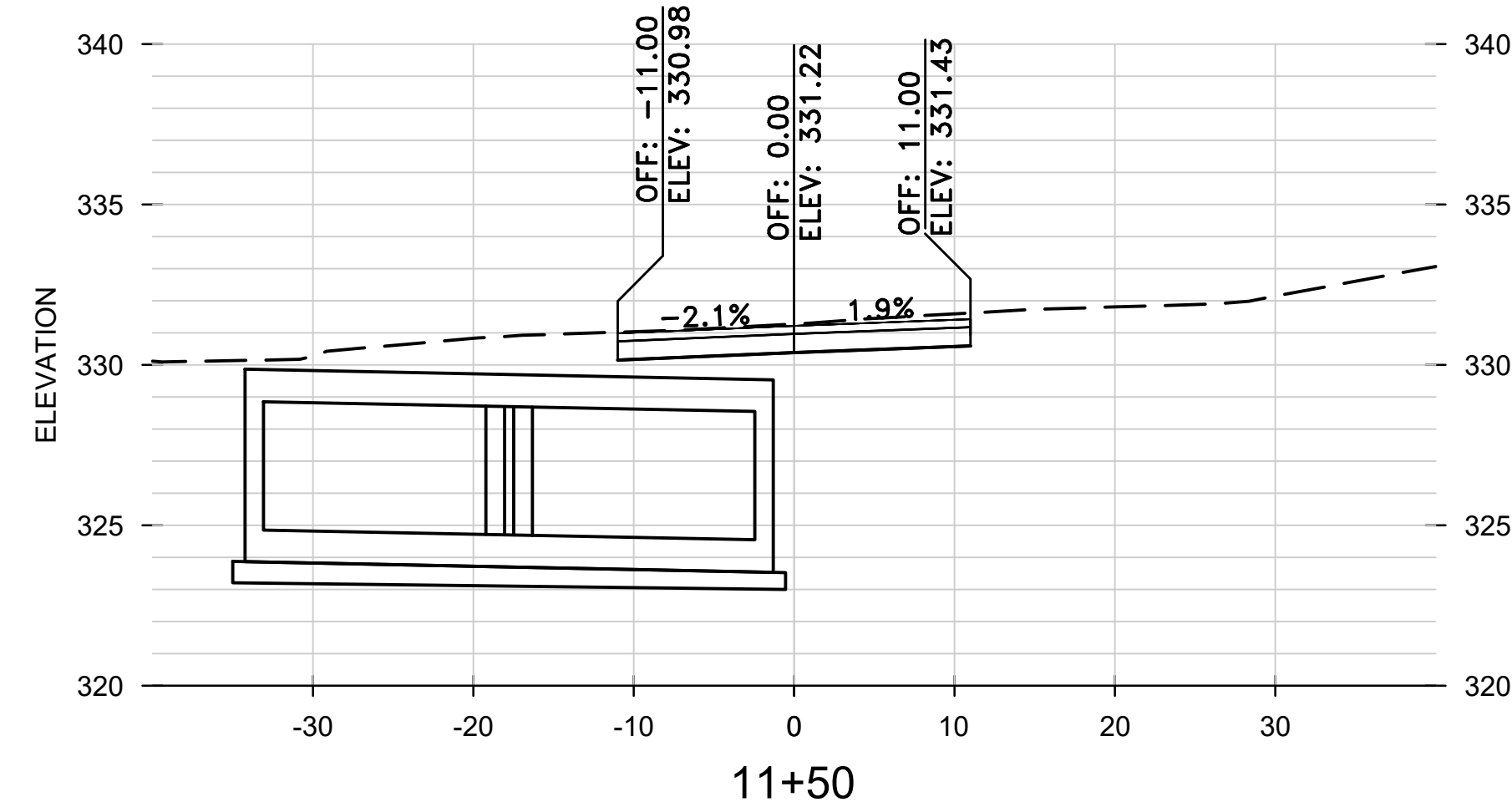
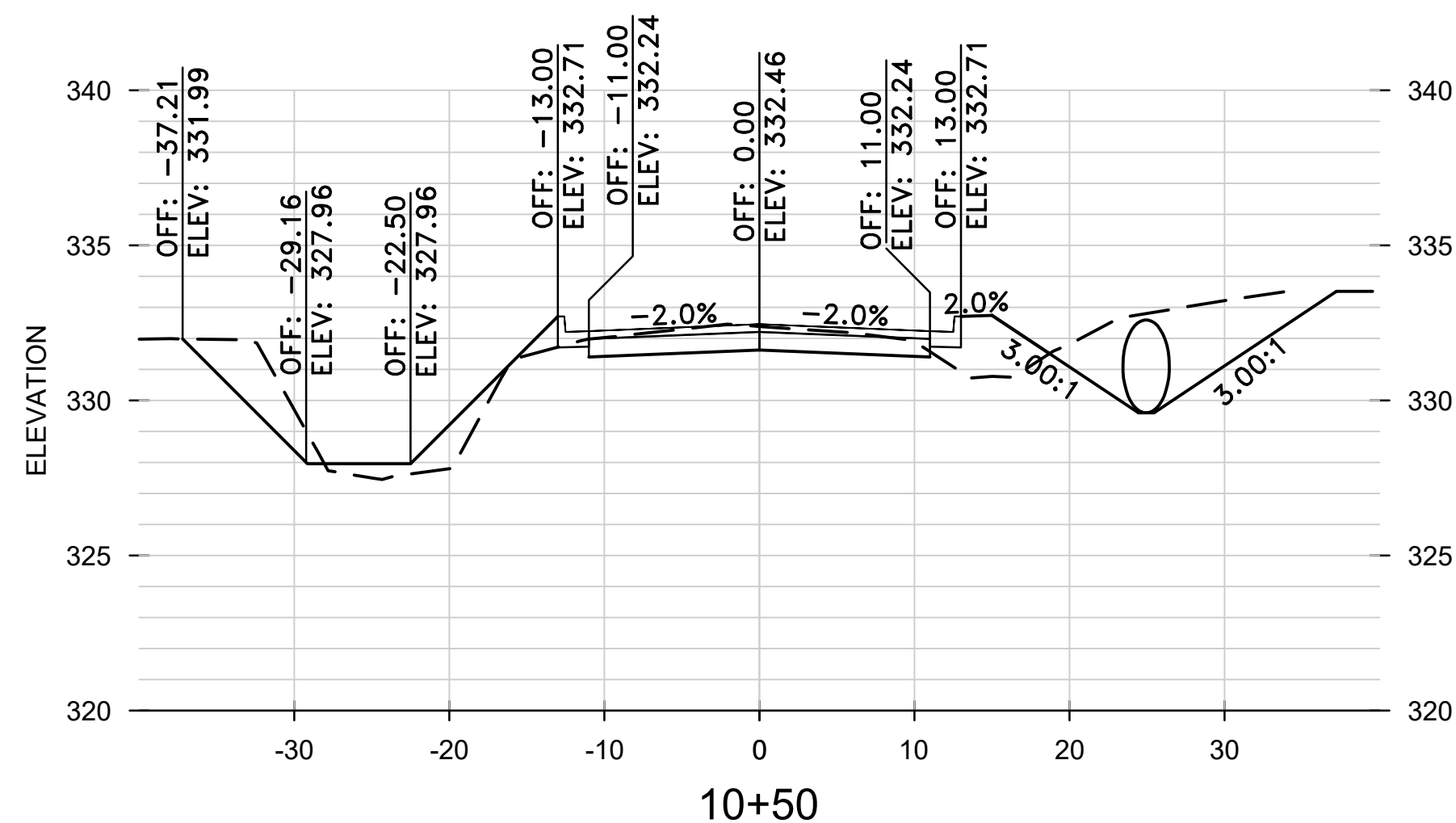
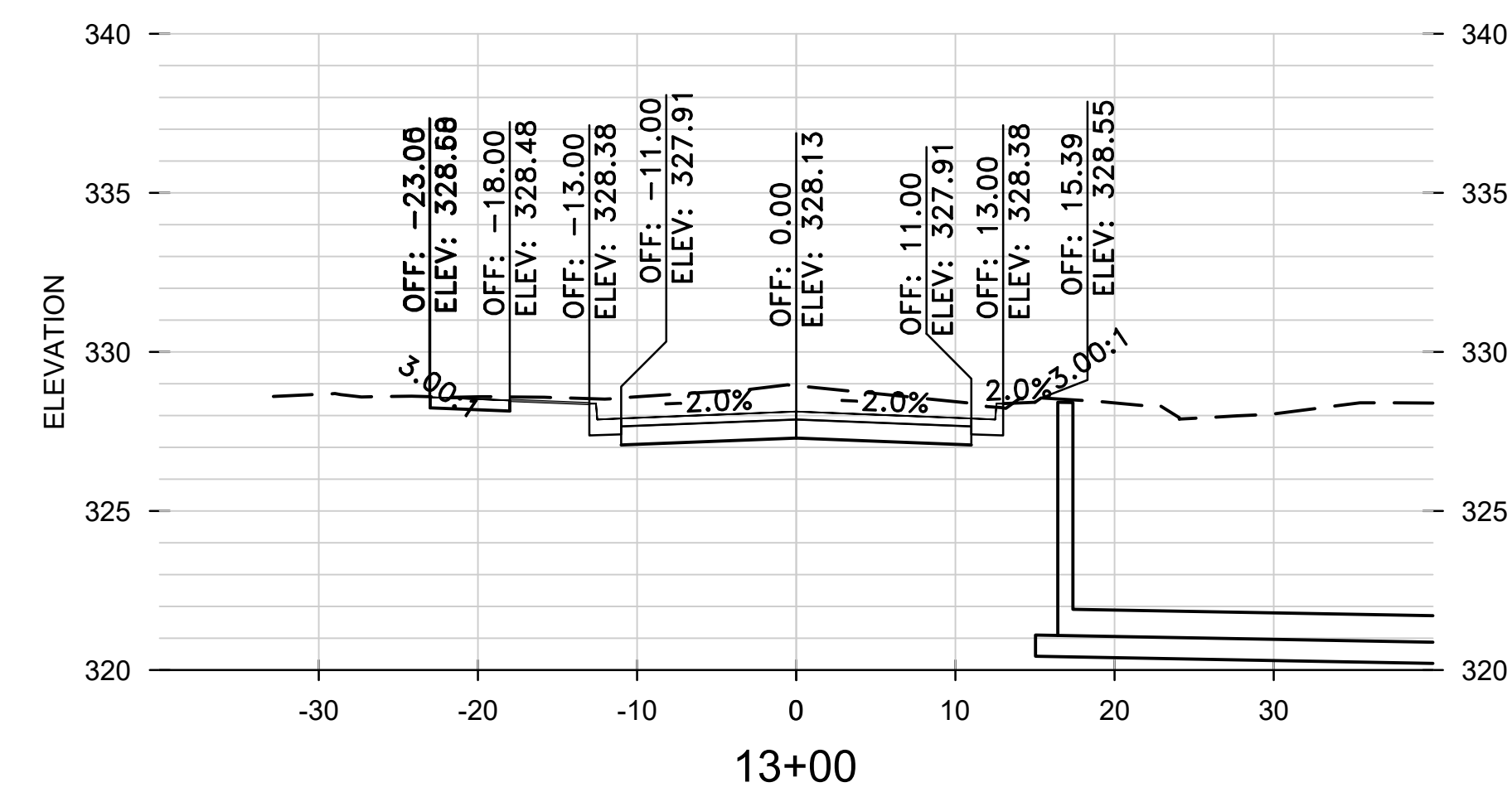
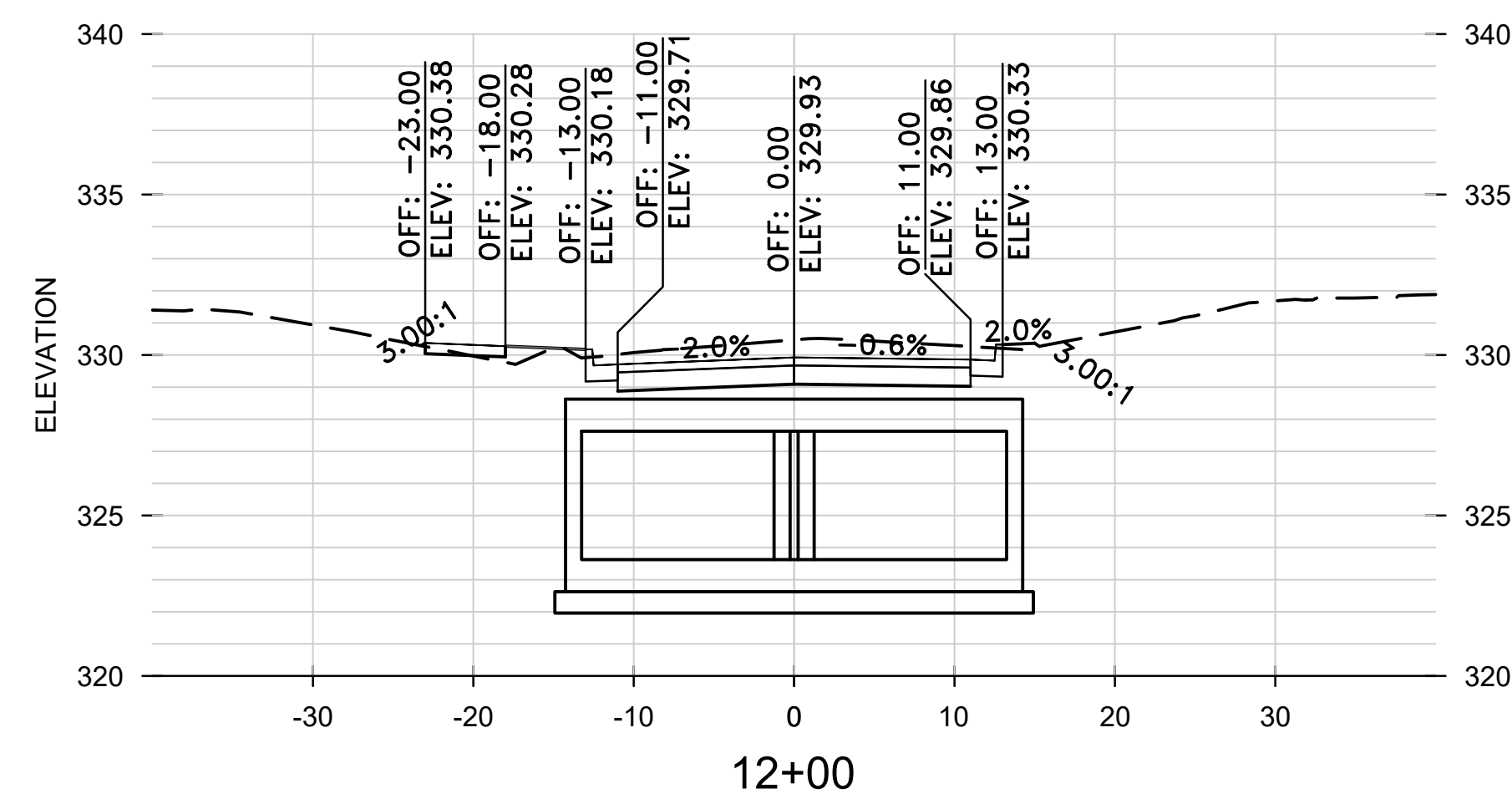
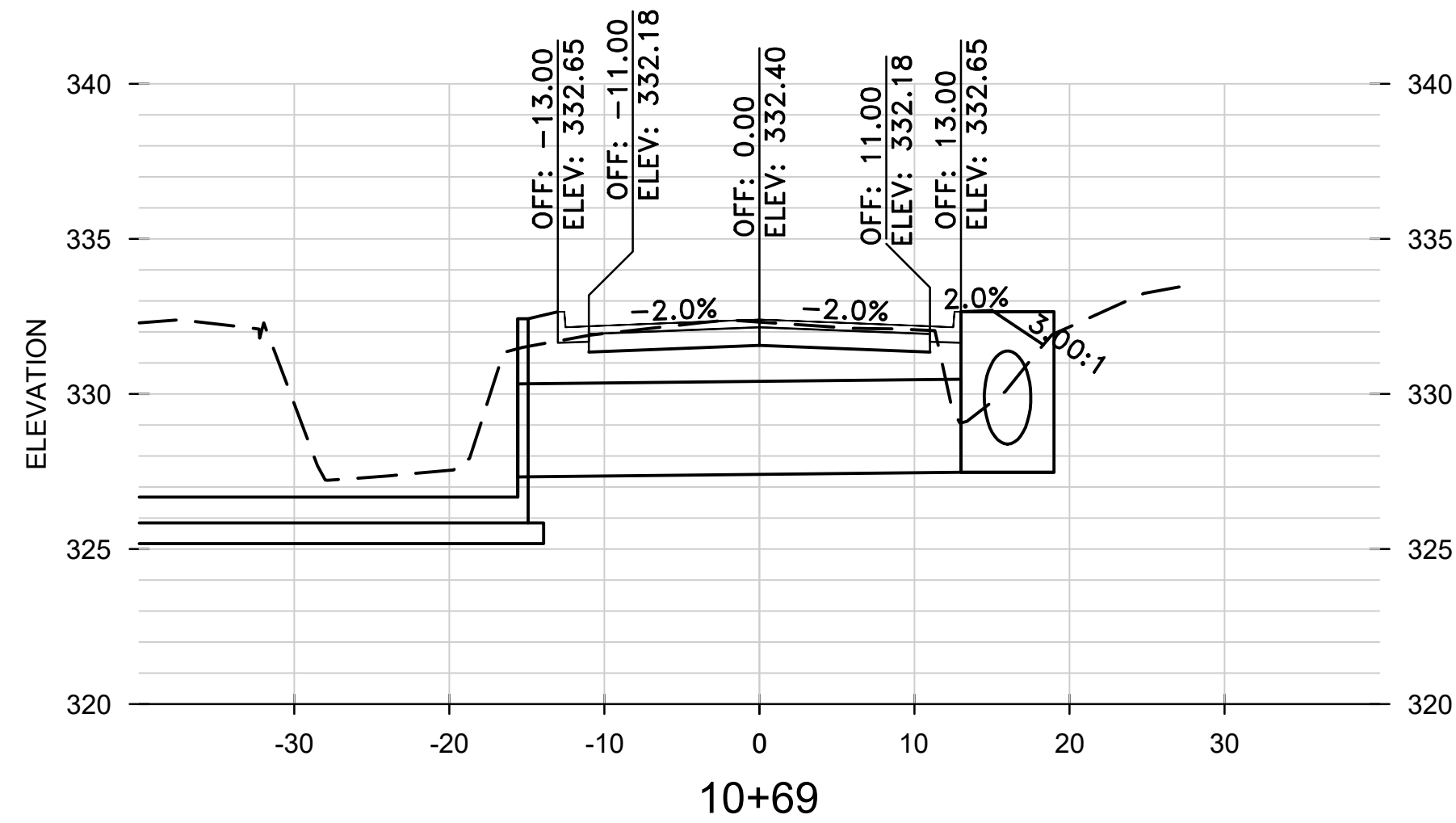
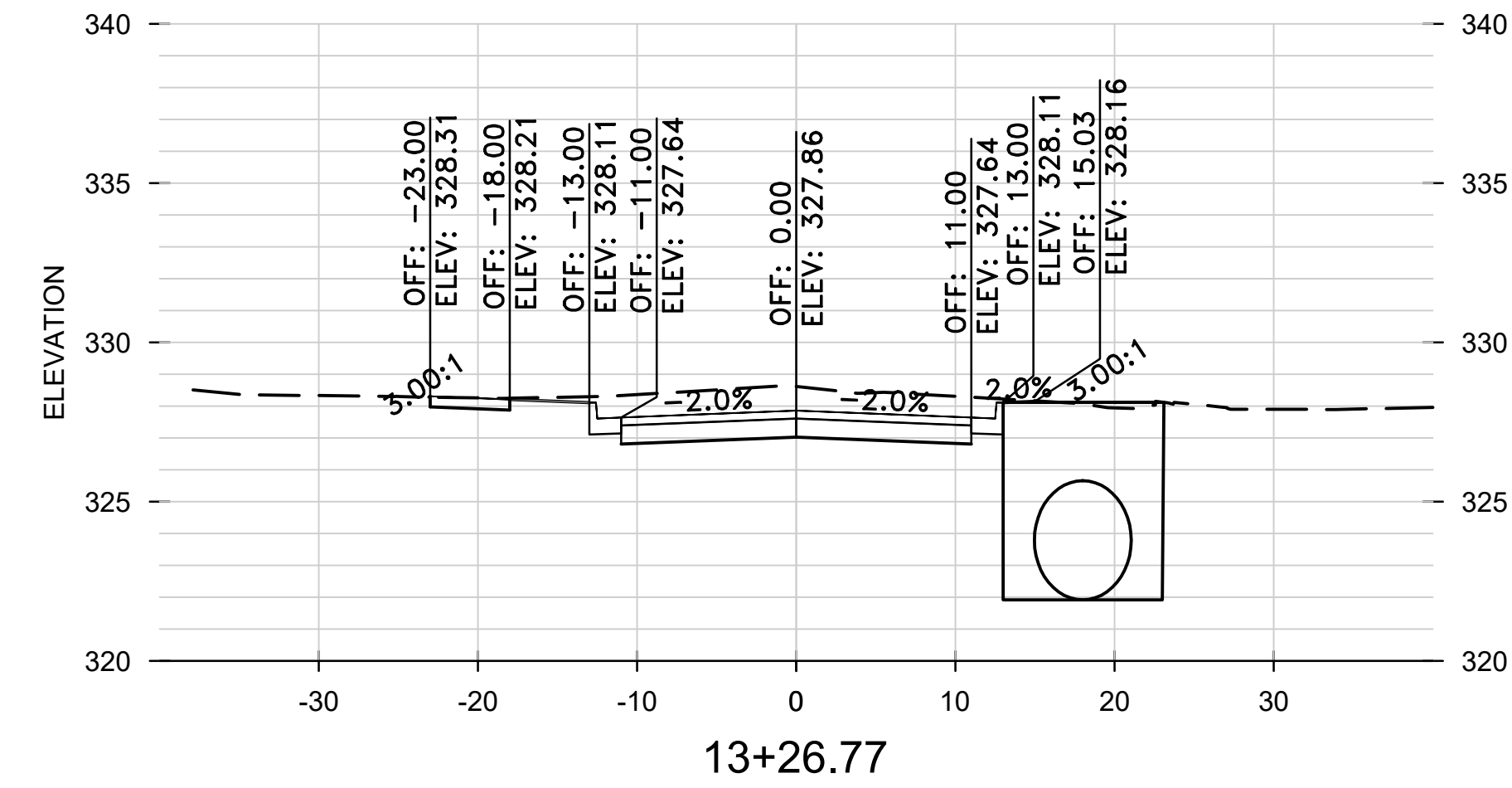
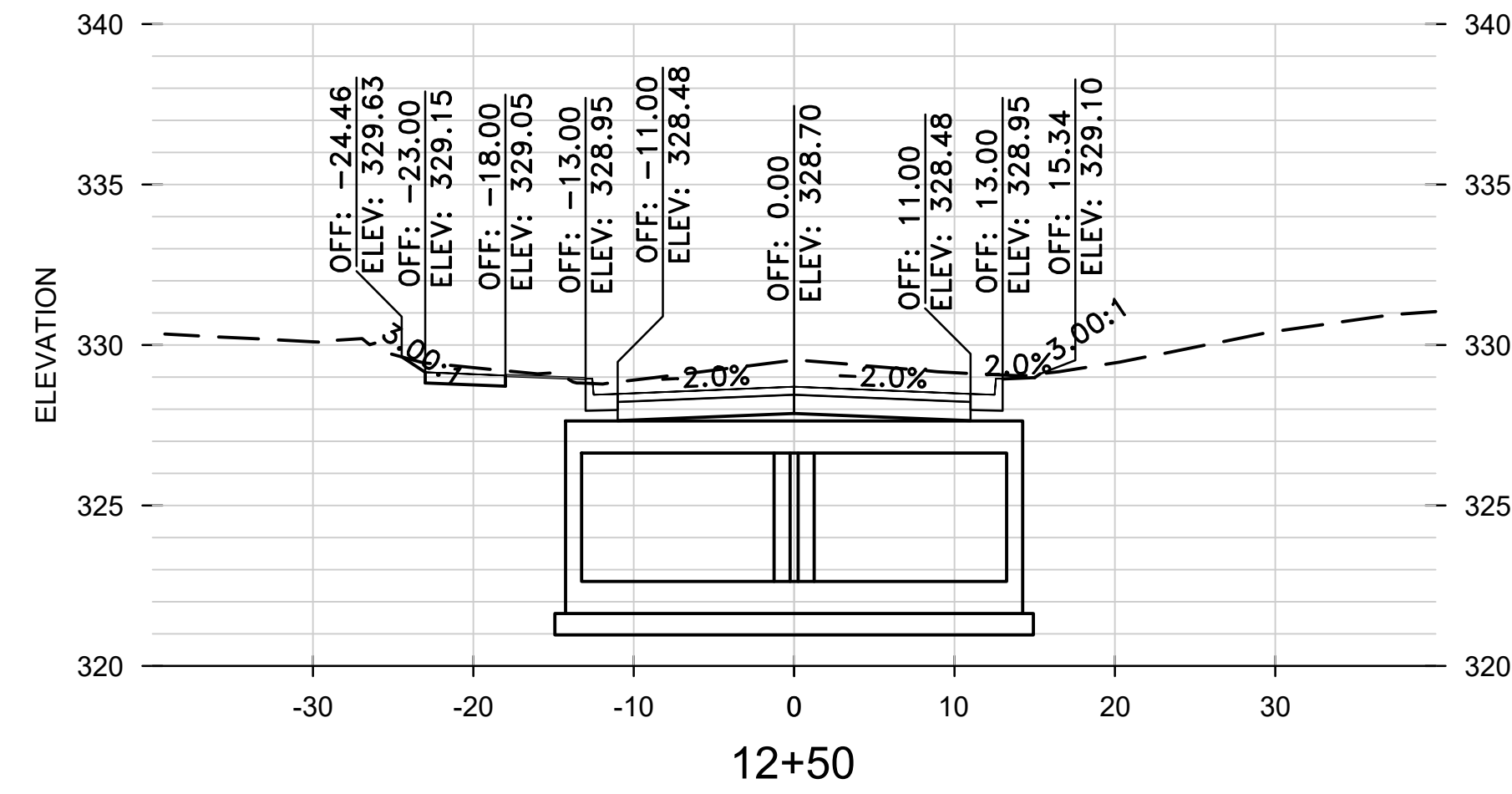
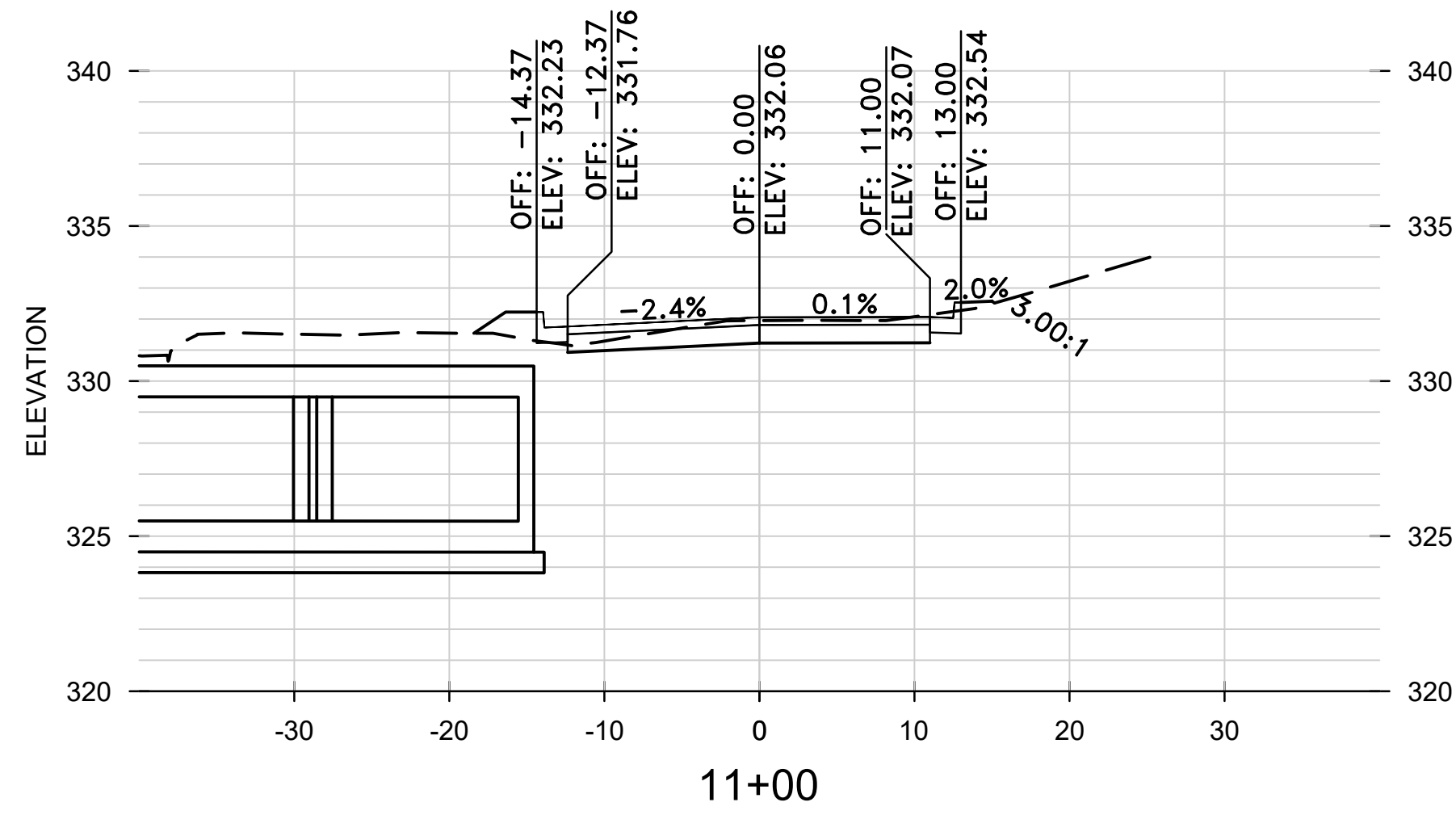
CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS

DRIVEWAY DETAILS

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



DRAWN BY	TCP
DESIGNED	MJM
CHECKED	RCC
DATE	12-18-2023
SCALE	N.T.S.
PROJECT NO.	03-17-DR-107
SHEET NO.	C24



REVISIONS	DATE

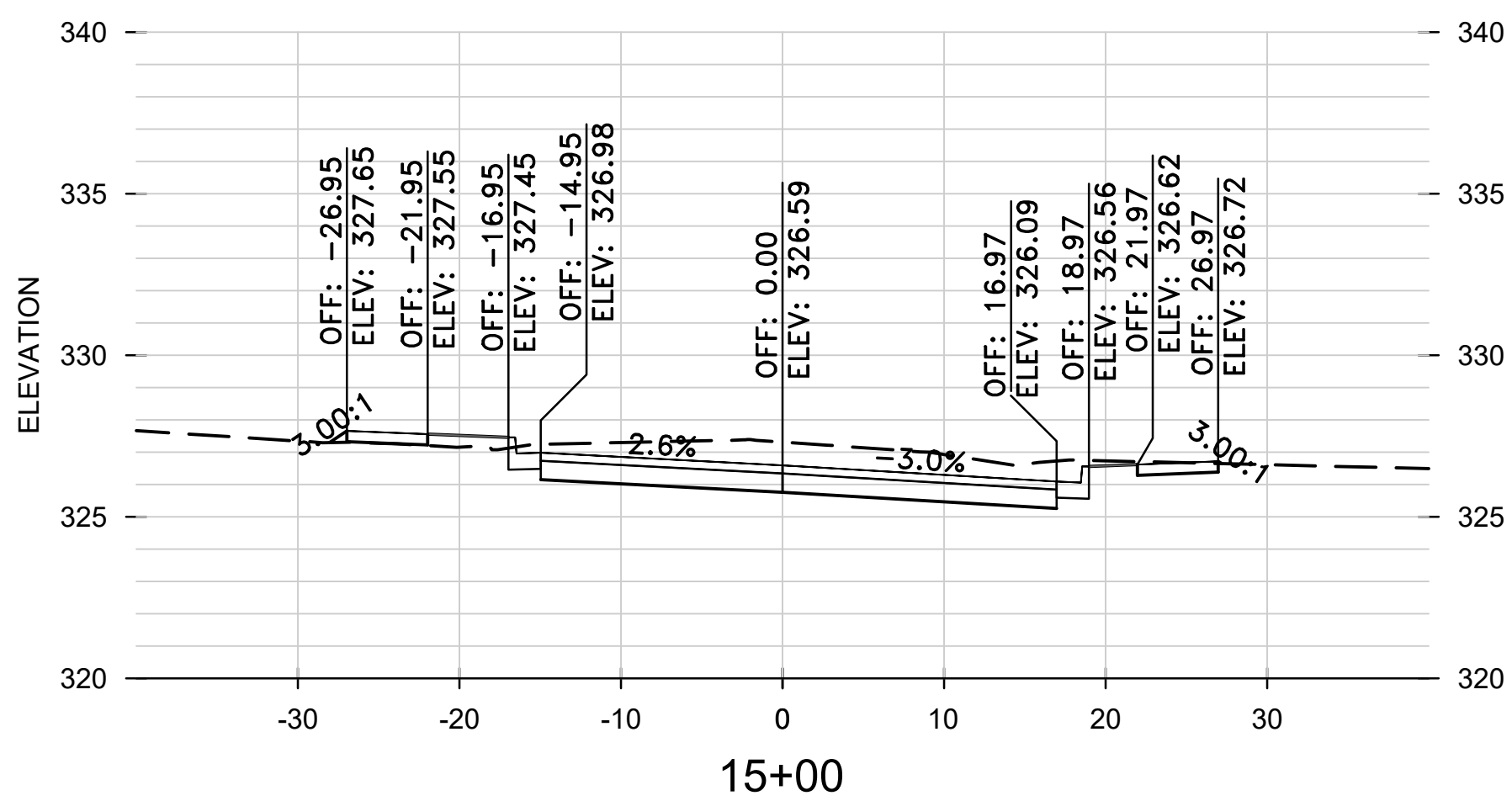
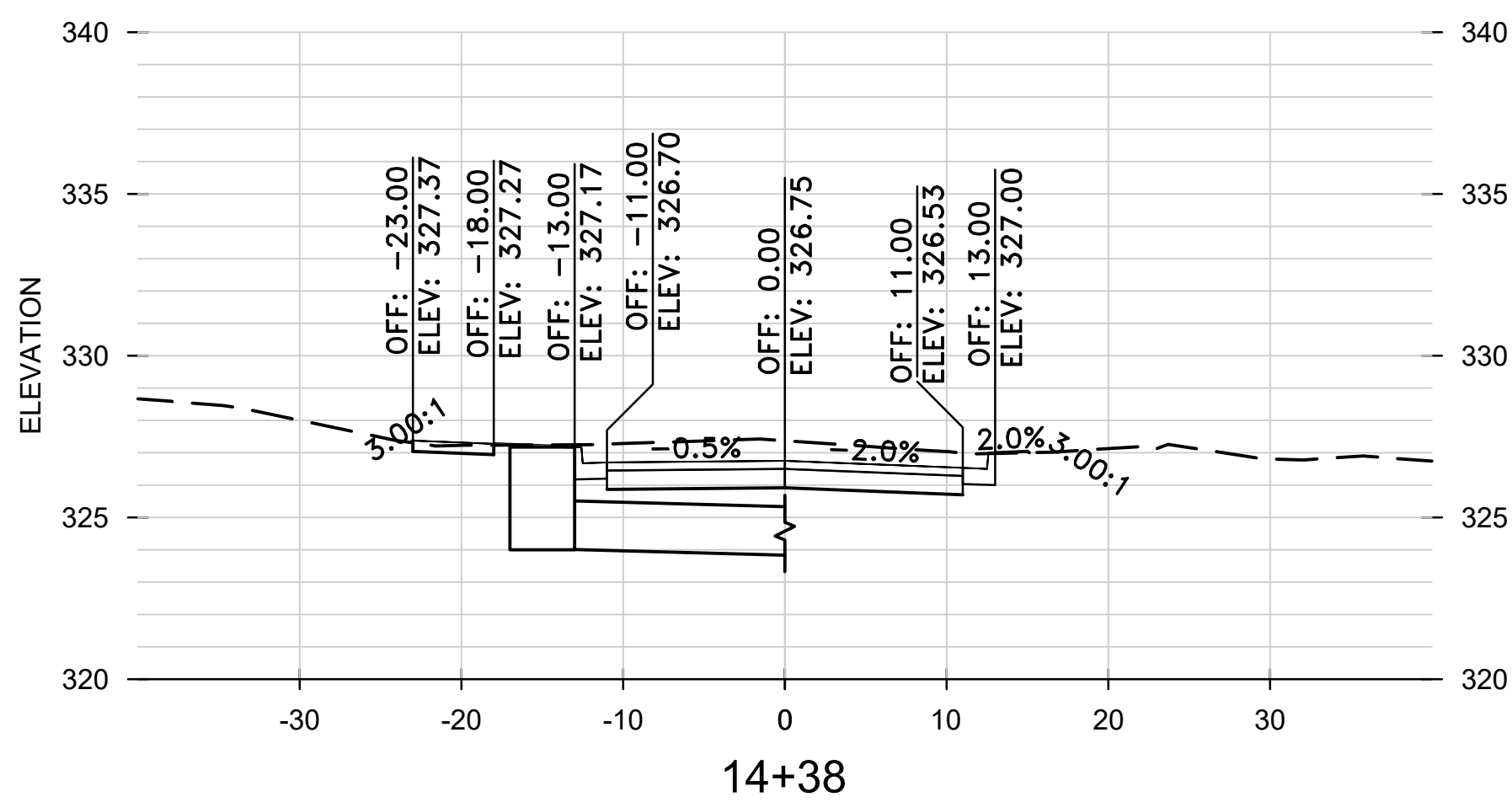
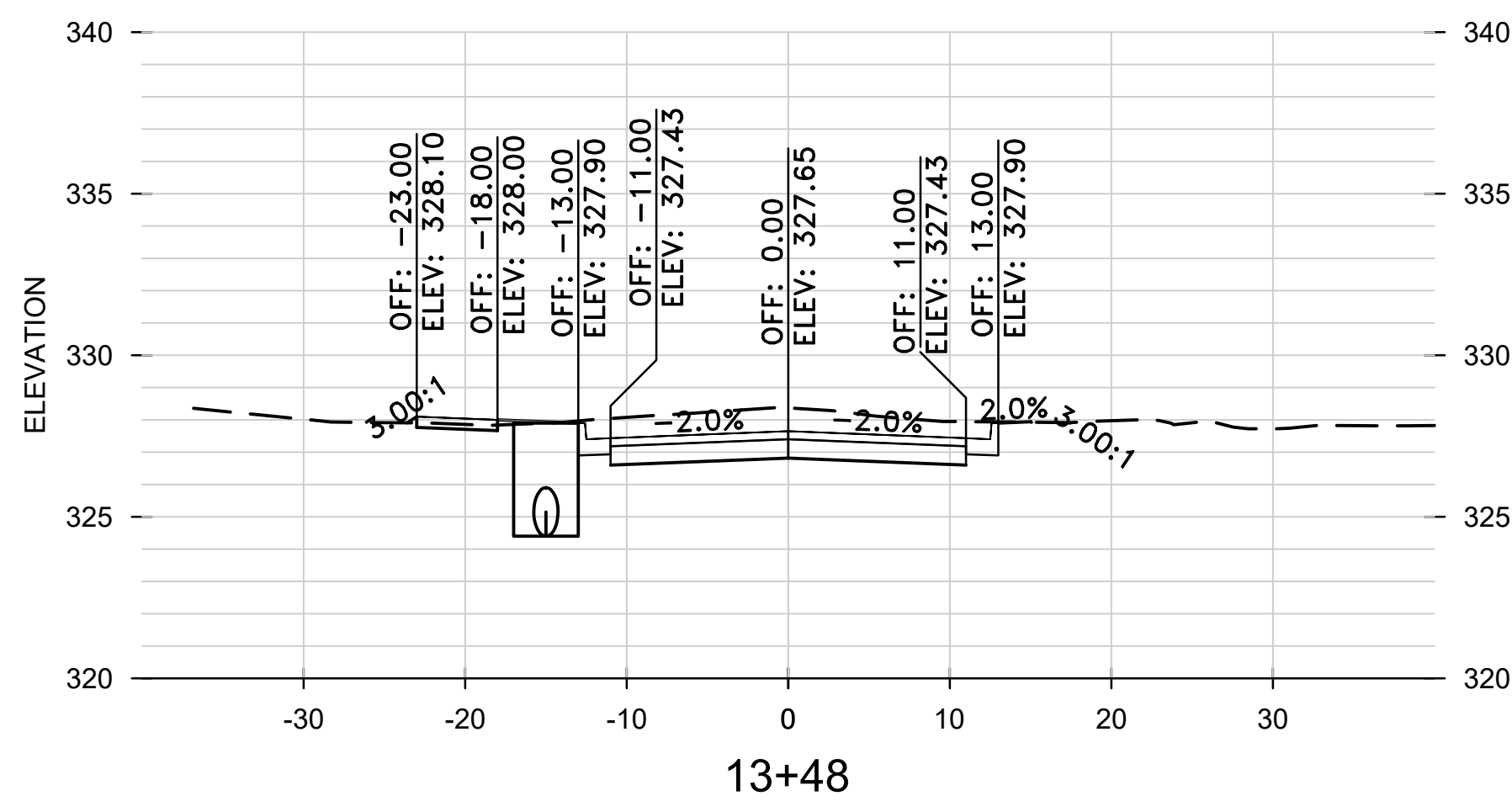
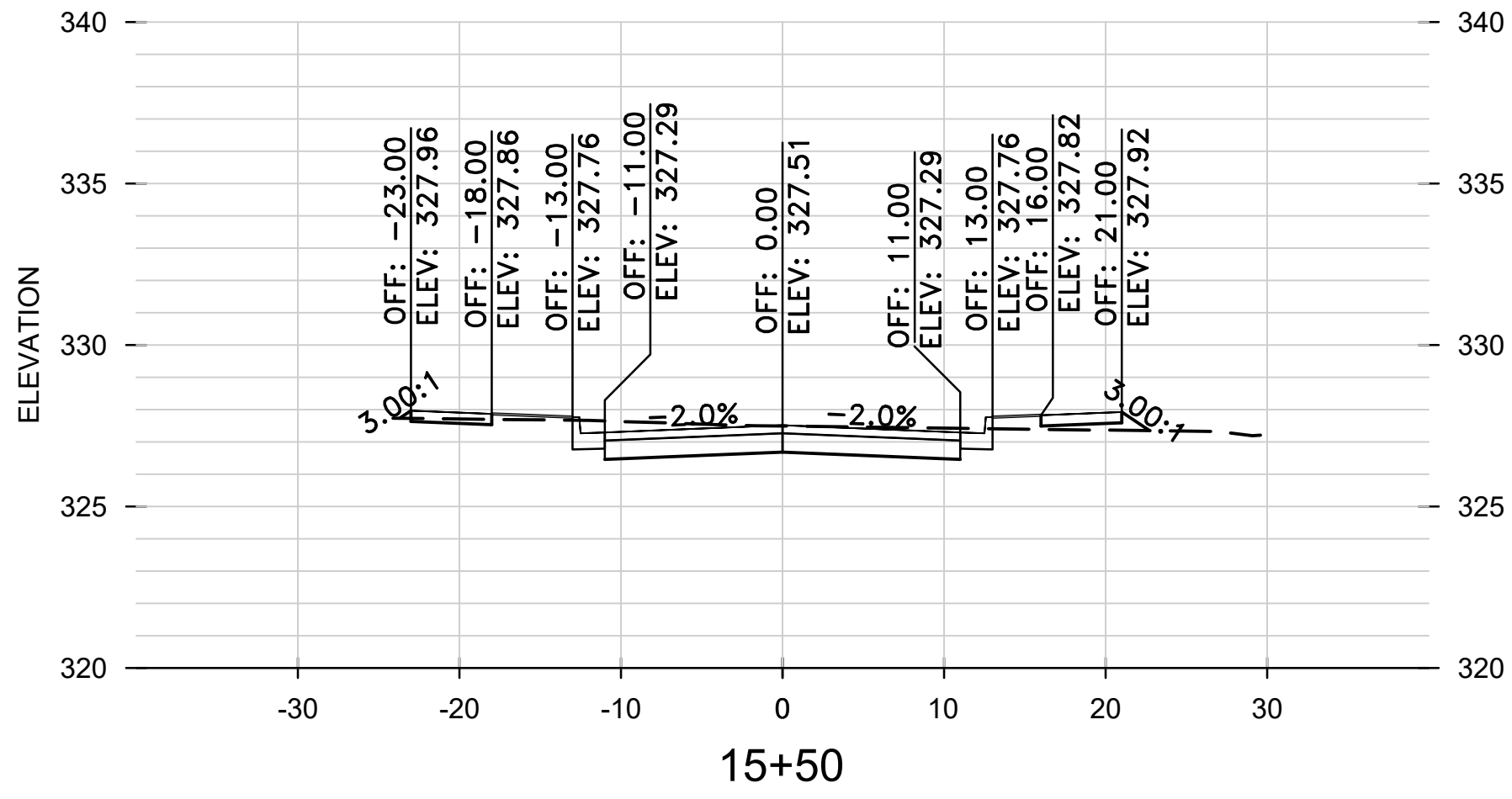
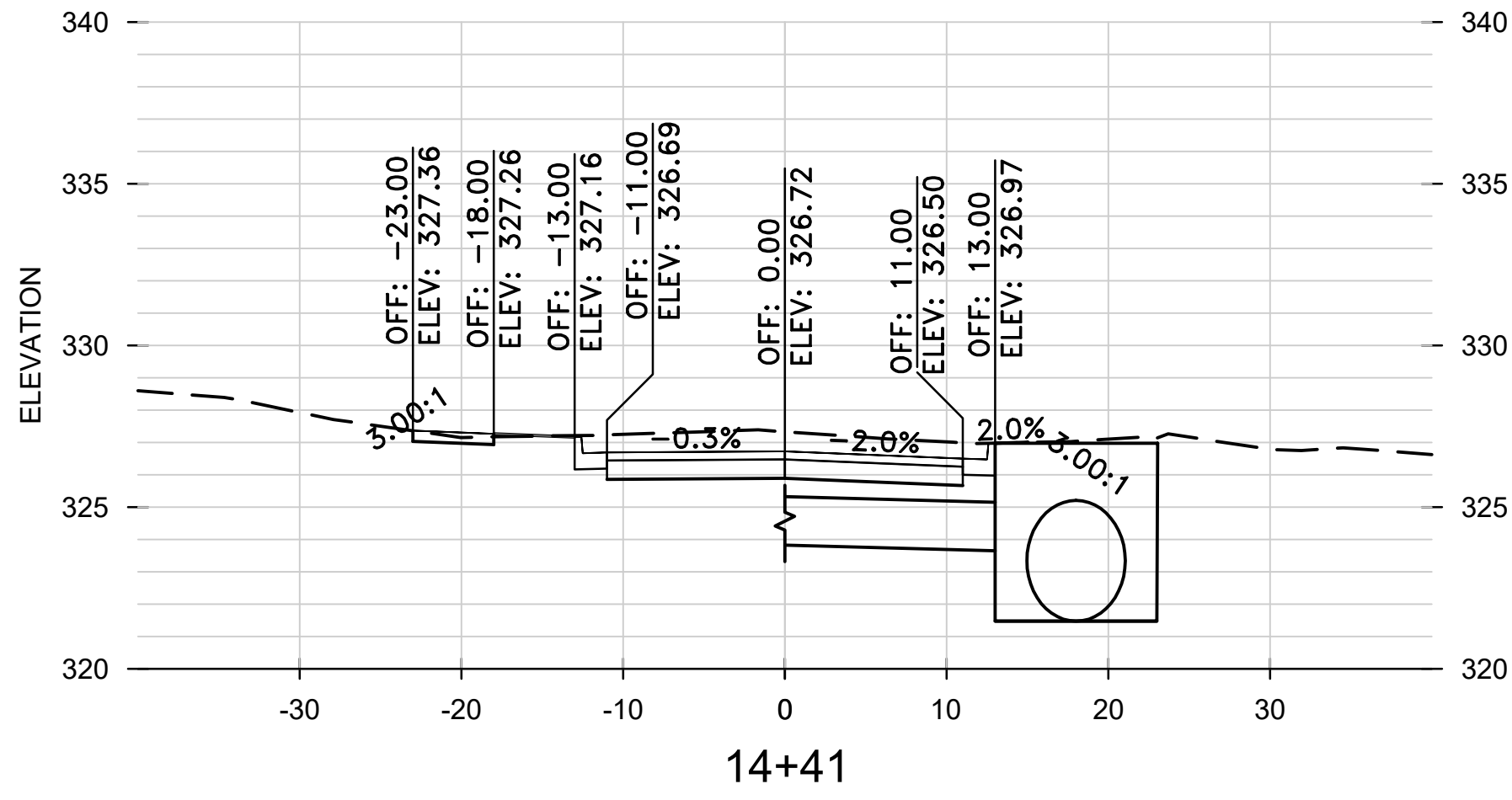
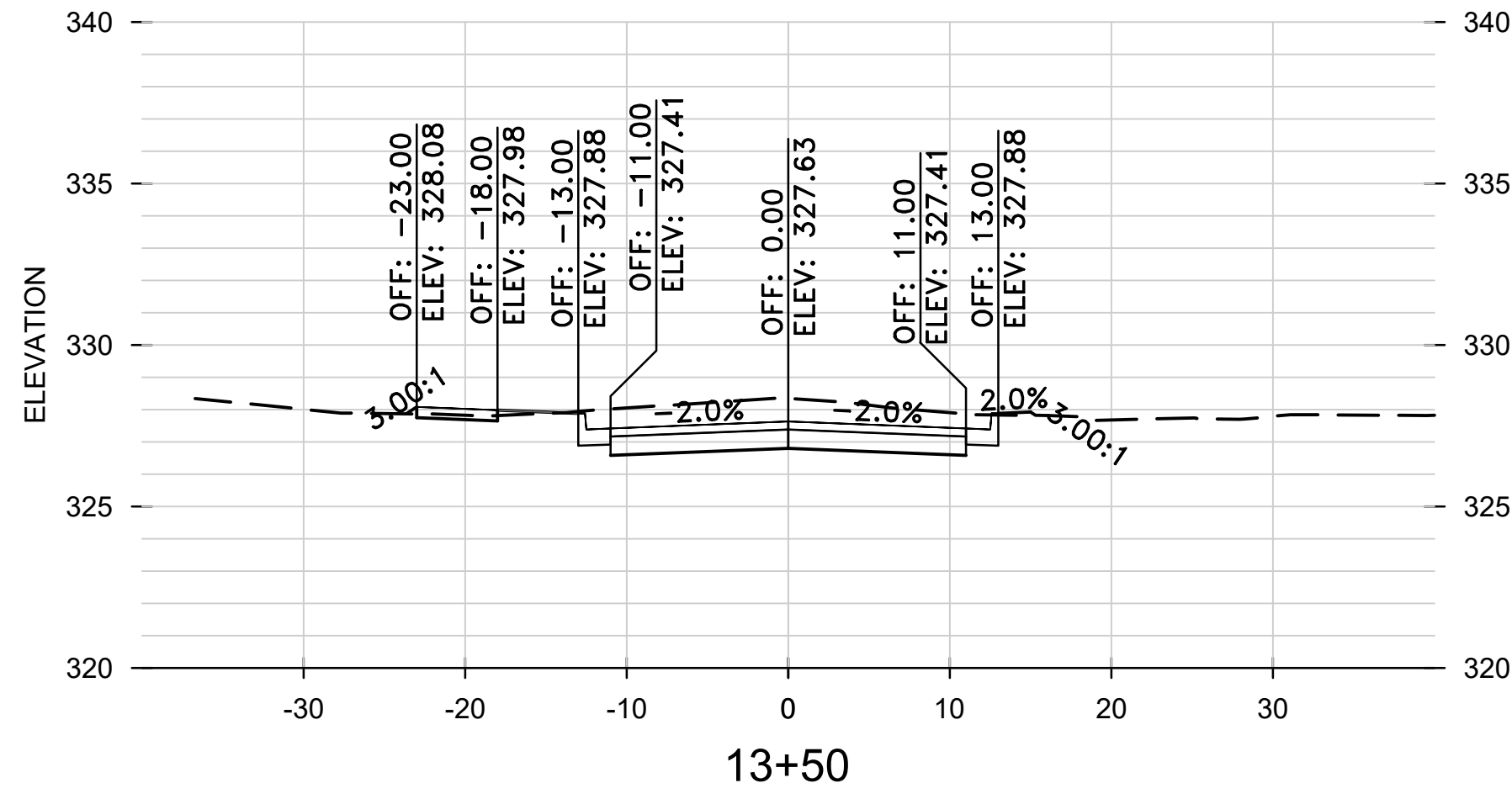
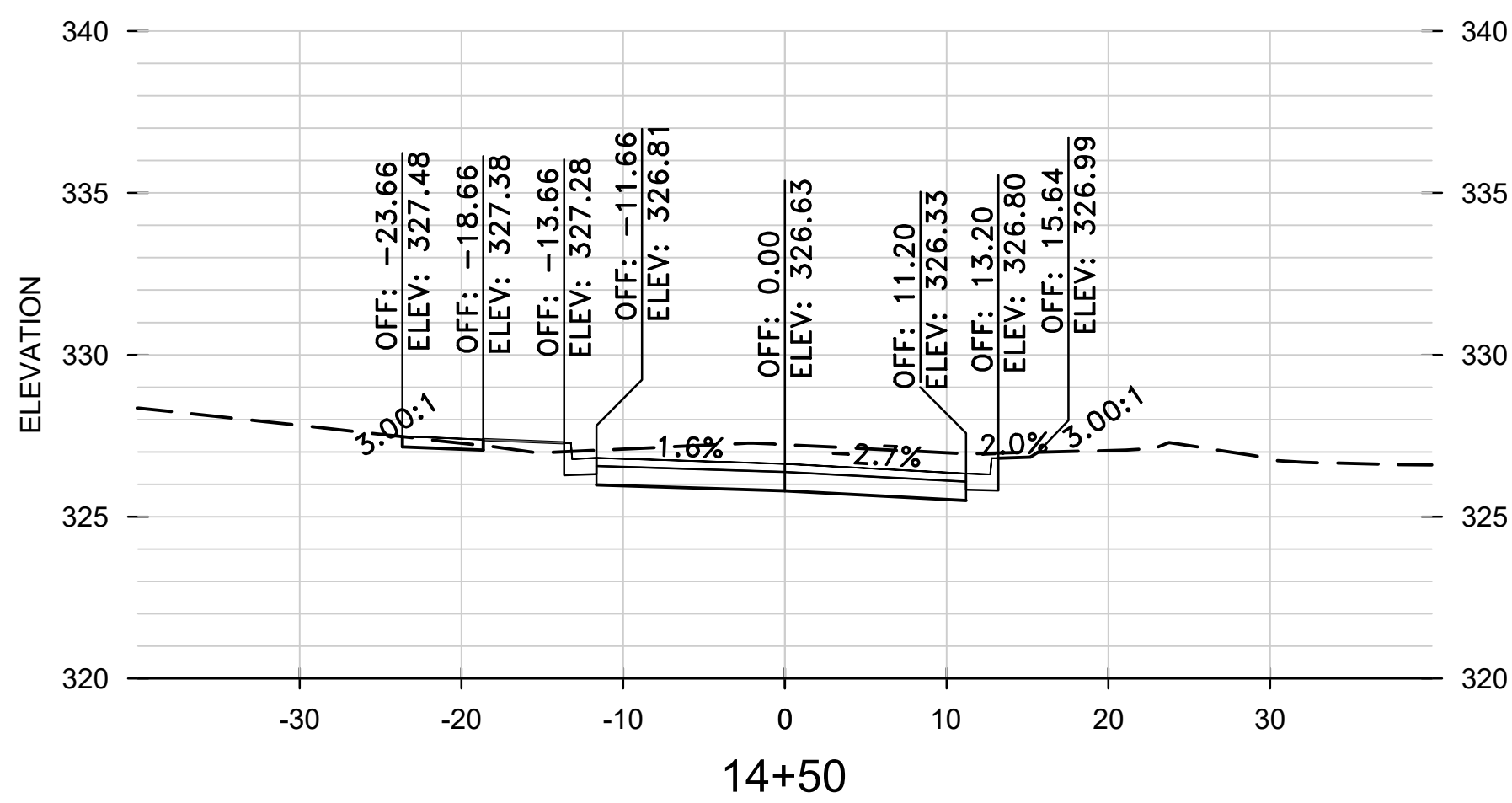
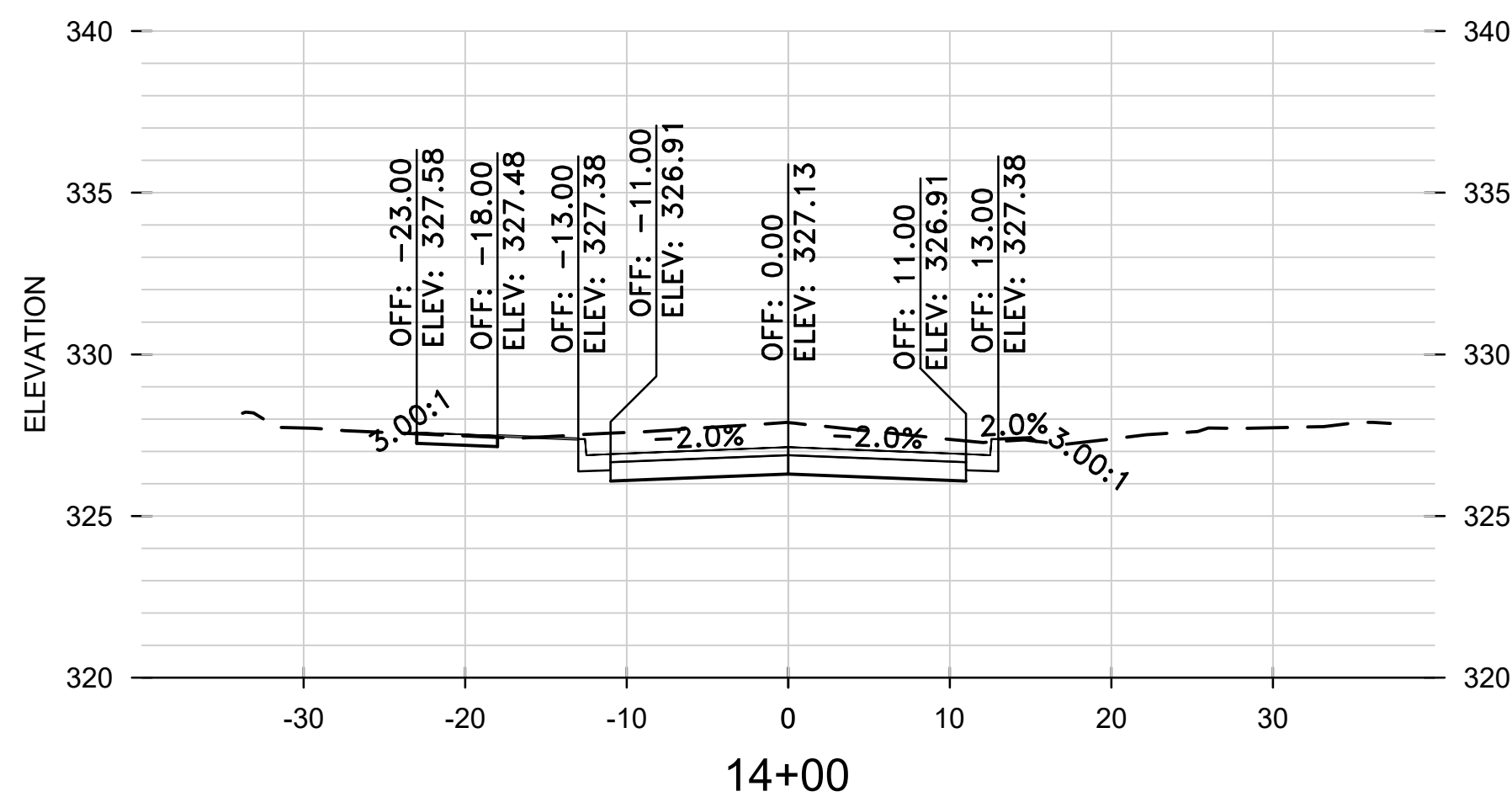
CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS

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



DRAWN BY
 TCP
 DESIGNED
 RCC
 CHECKED
 RCC
 DATE
 12-18-2023
 SCALE
 H: 1"=10'
 V: 1"=5'
 PROJECT NO.
 03-17-DR-107
 SHEET NO.
C25

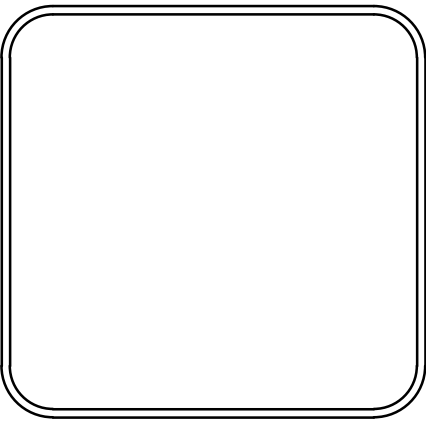
CROSS SECTIONS
 4TH STREET



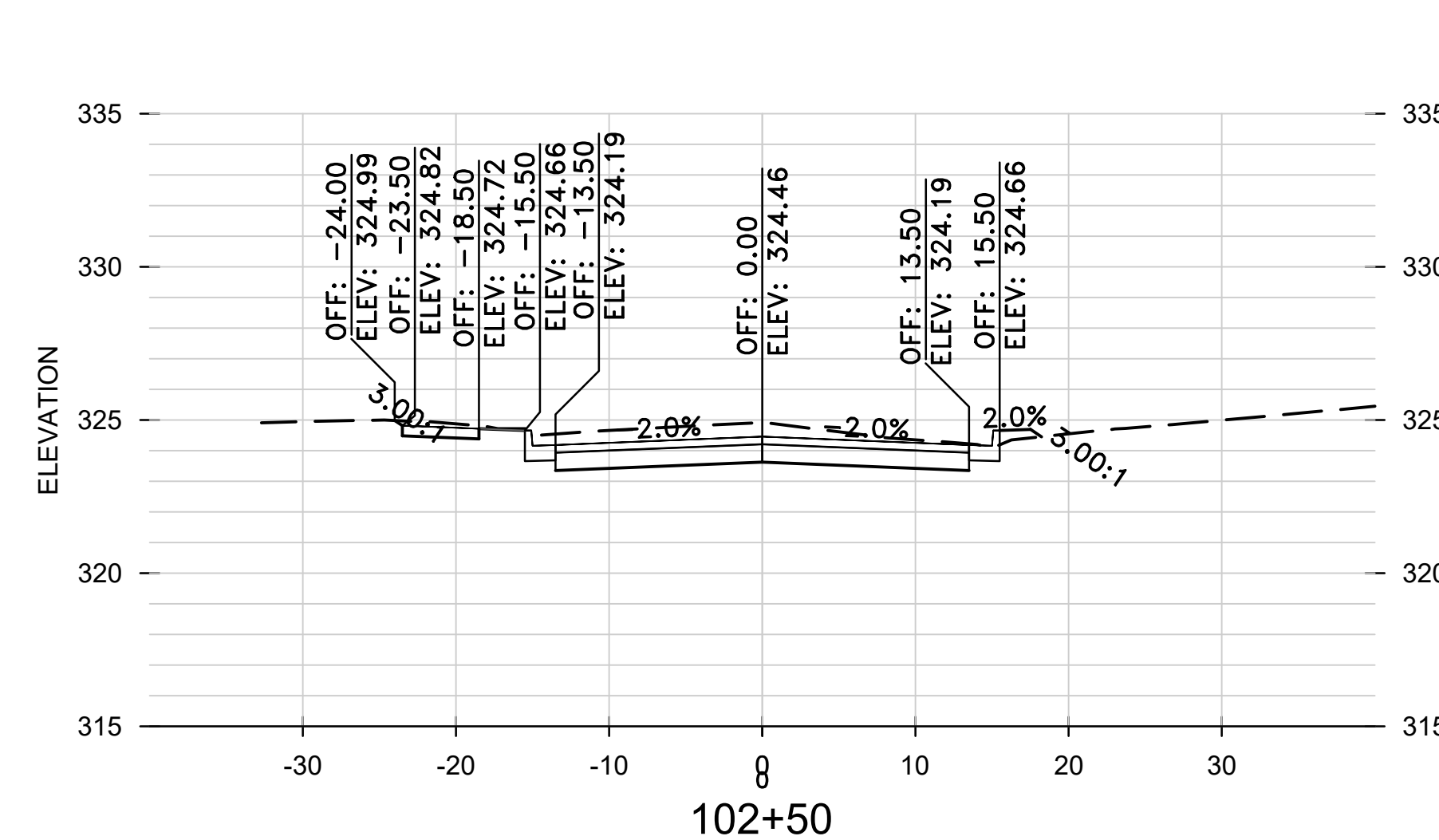
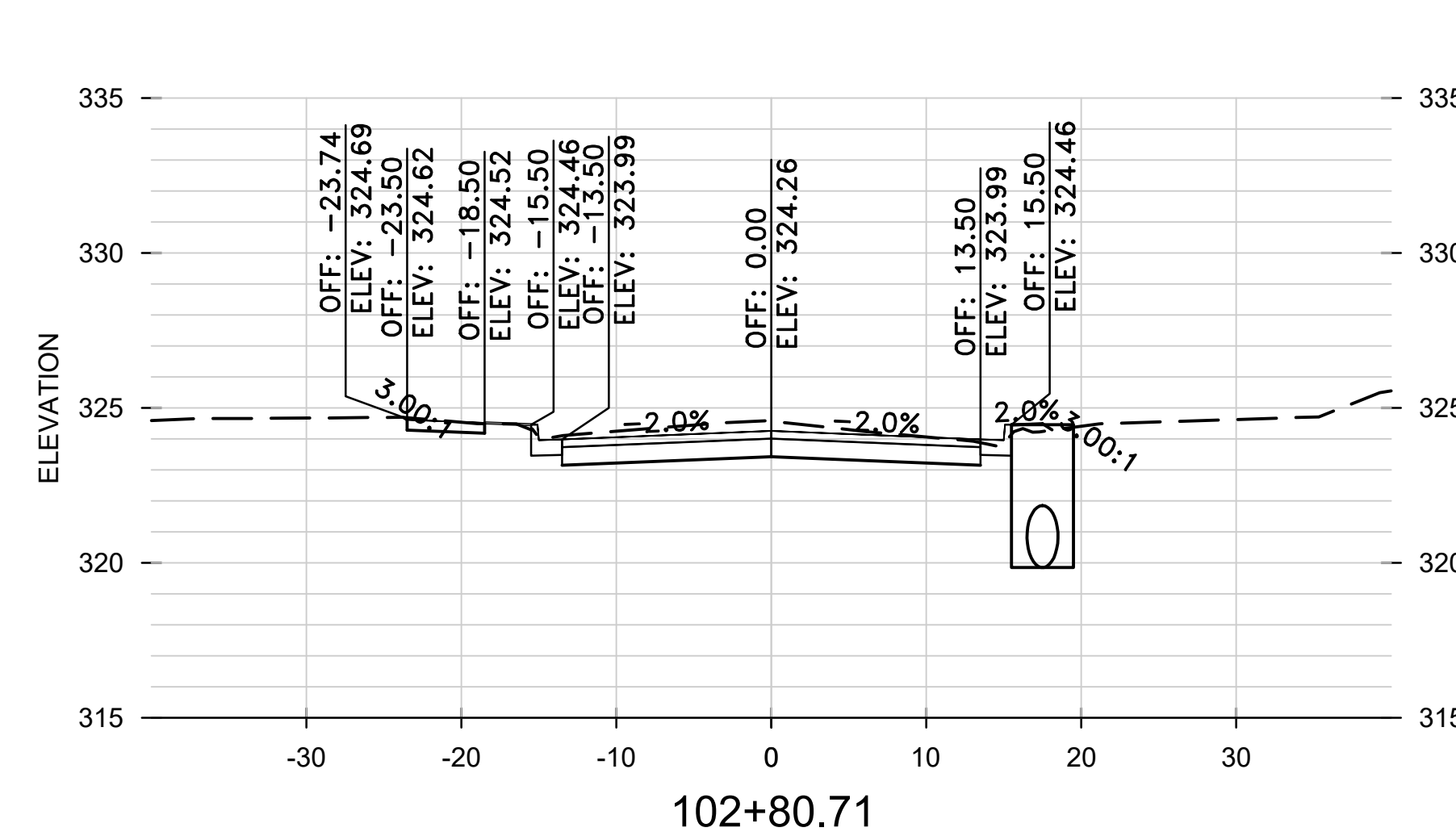
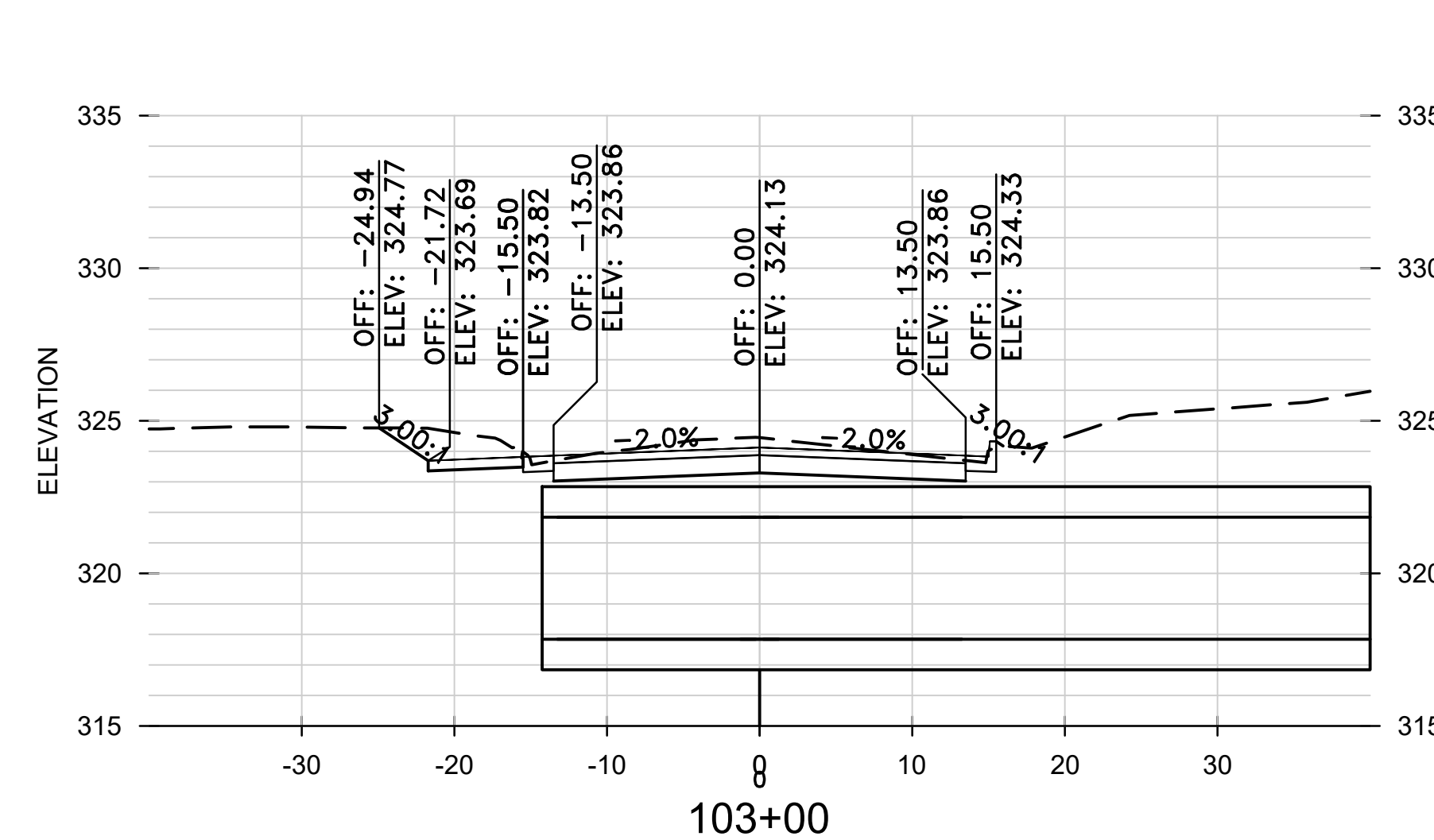
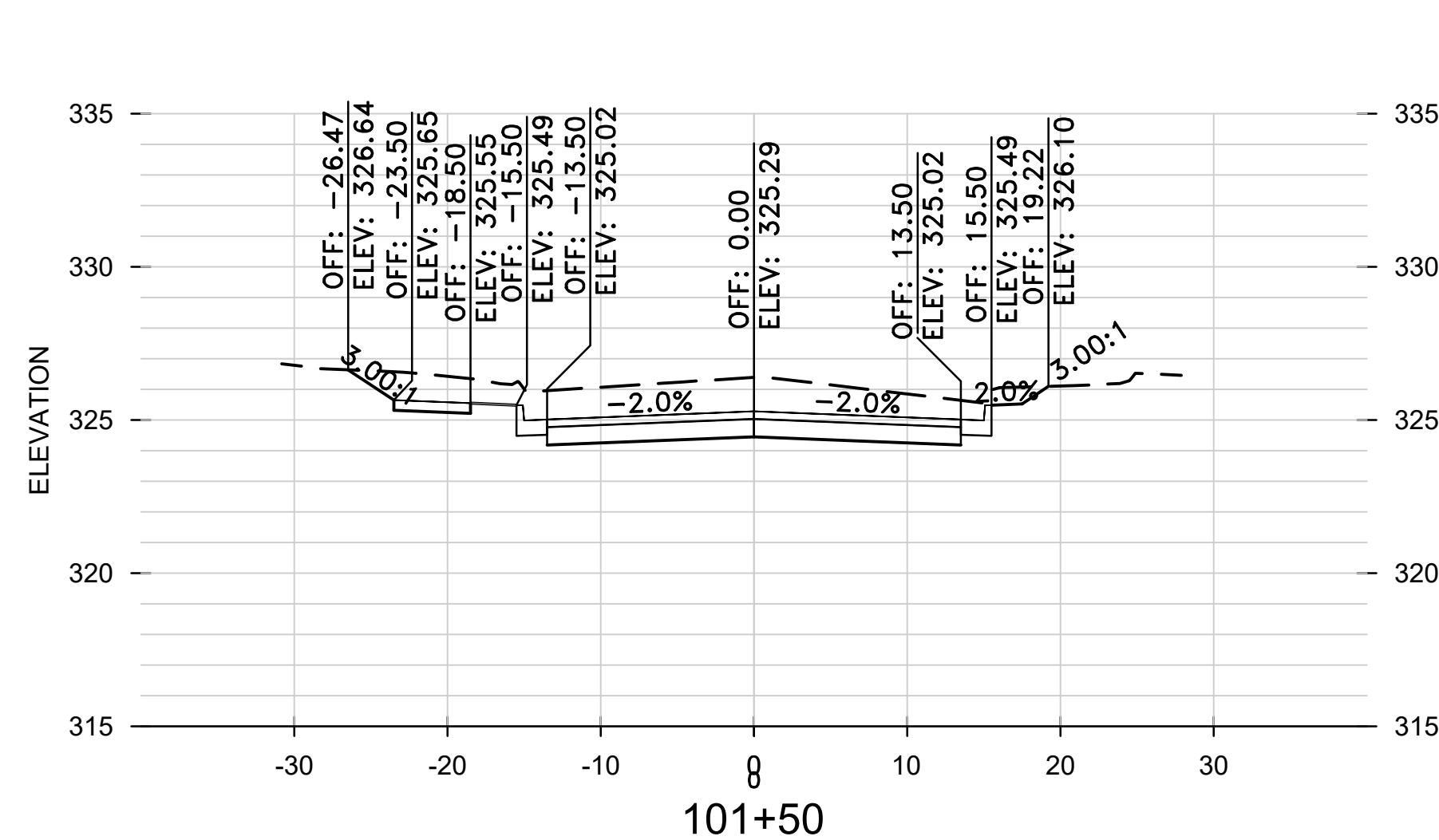
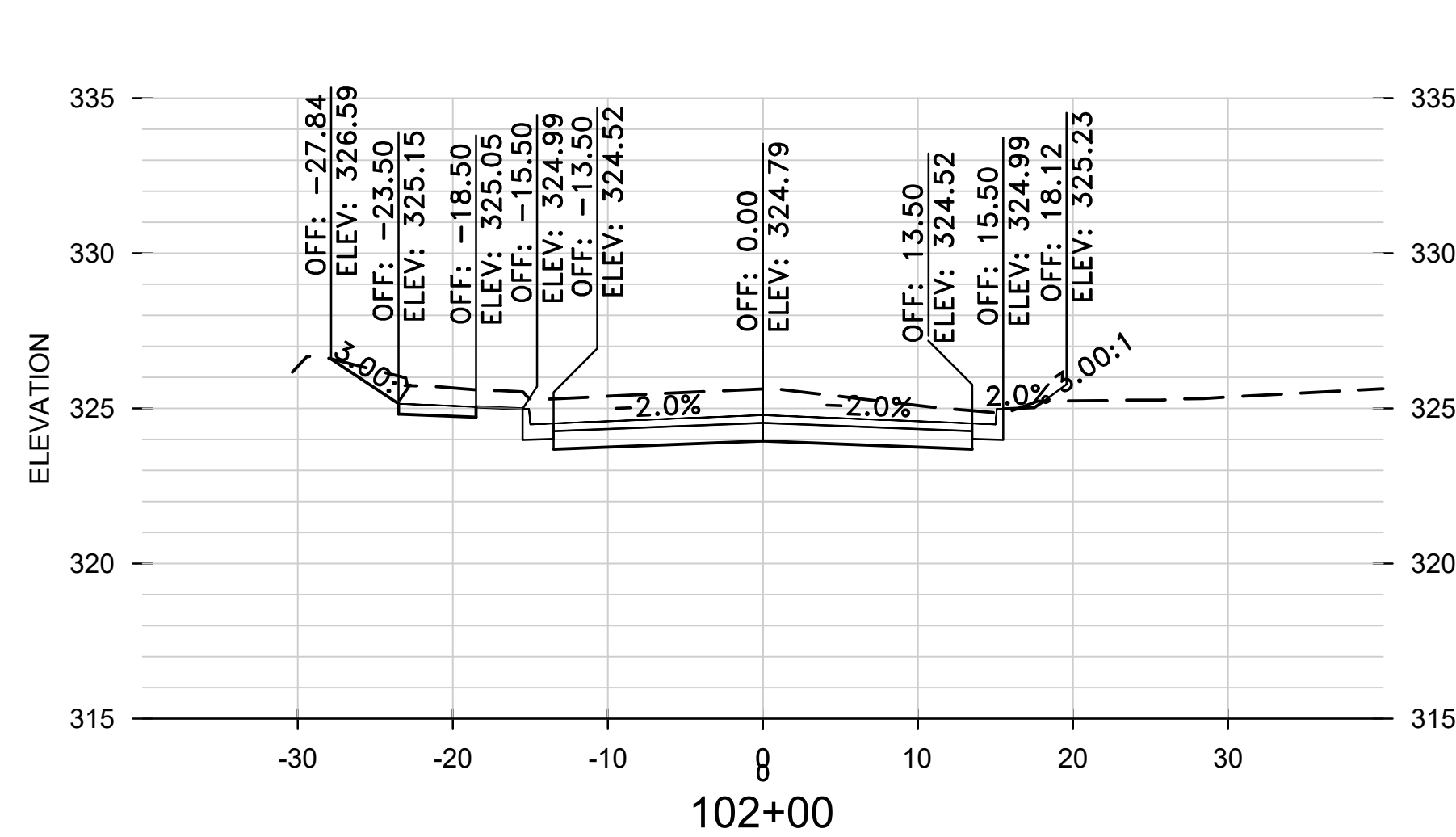
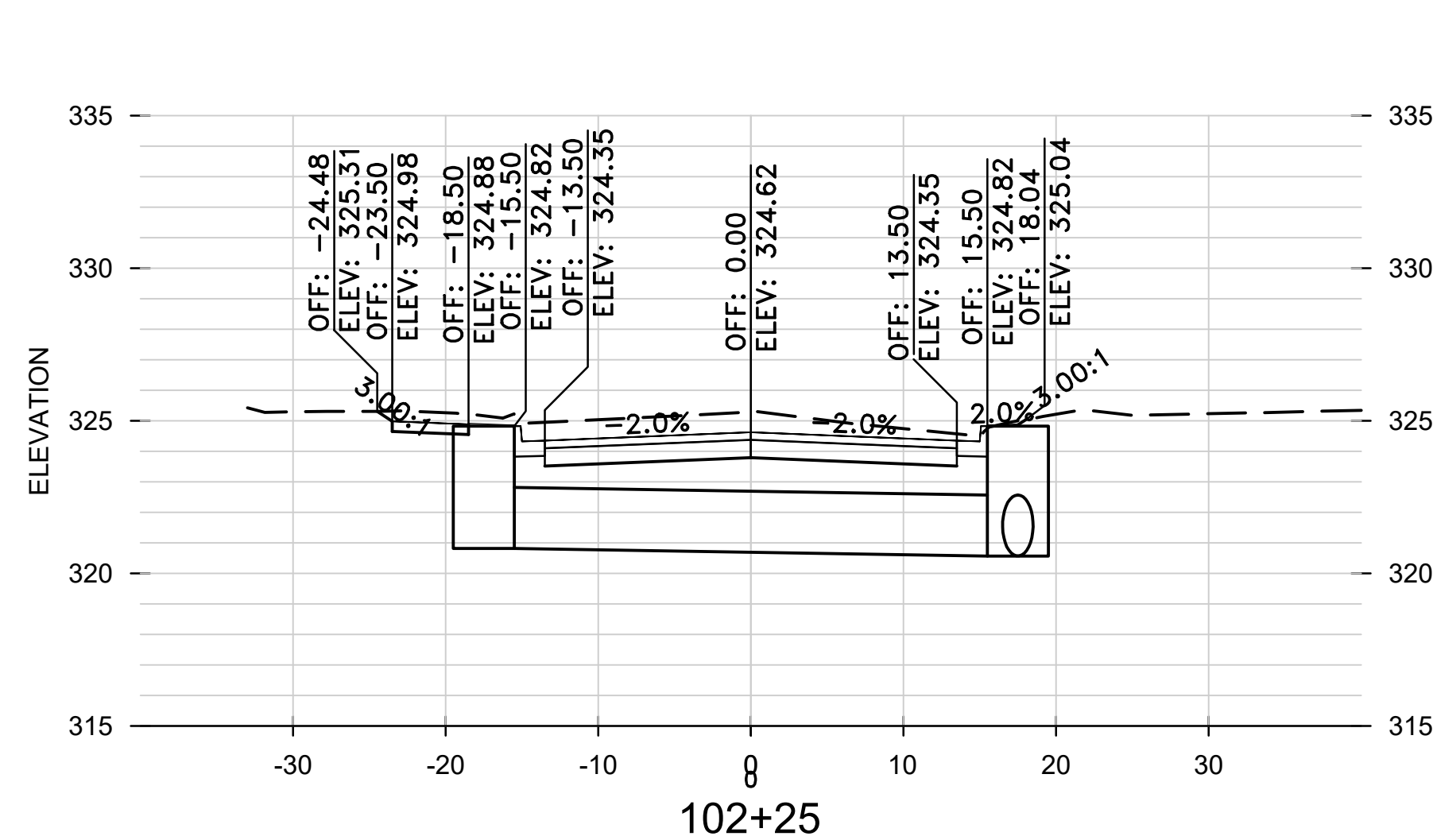
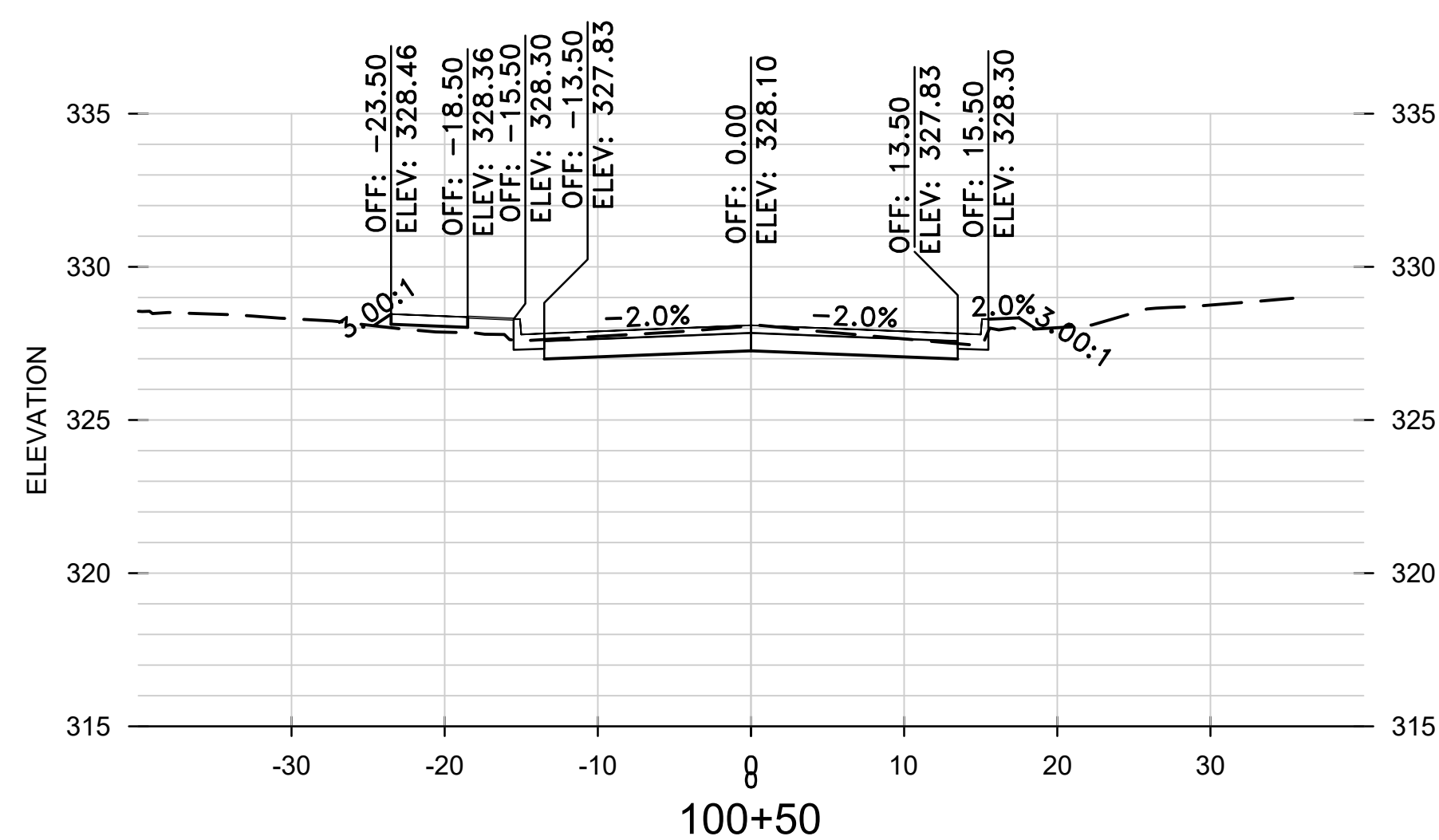
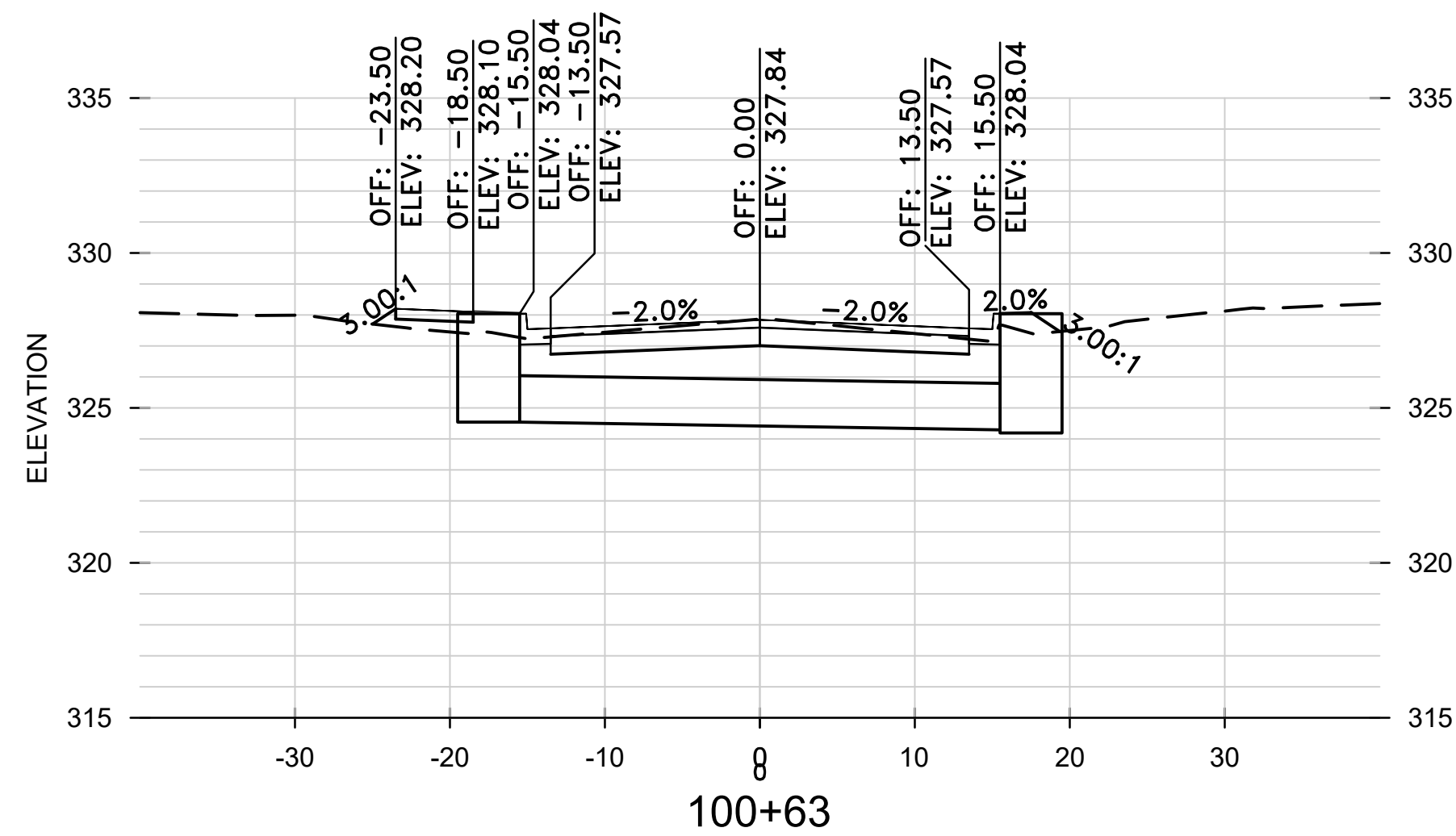
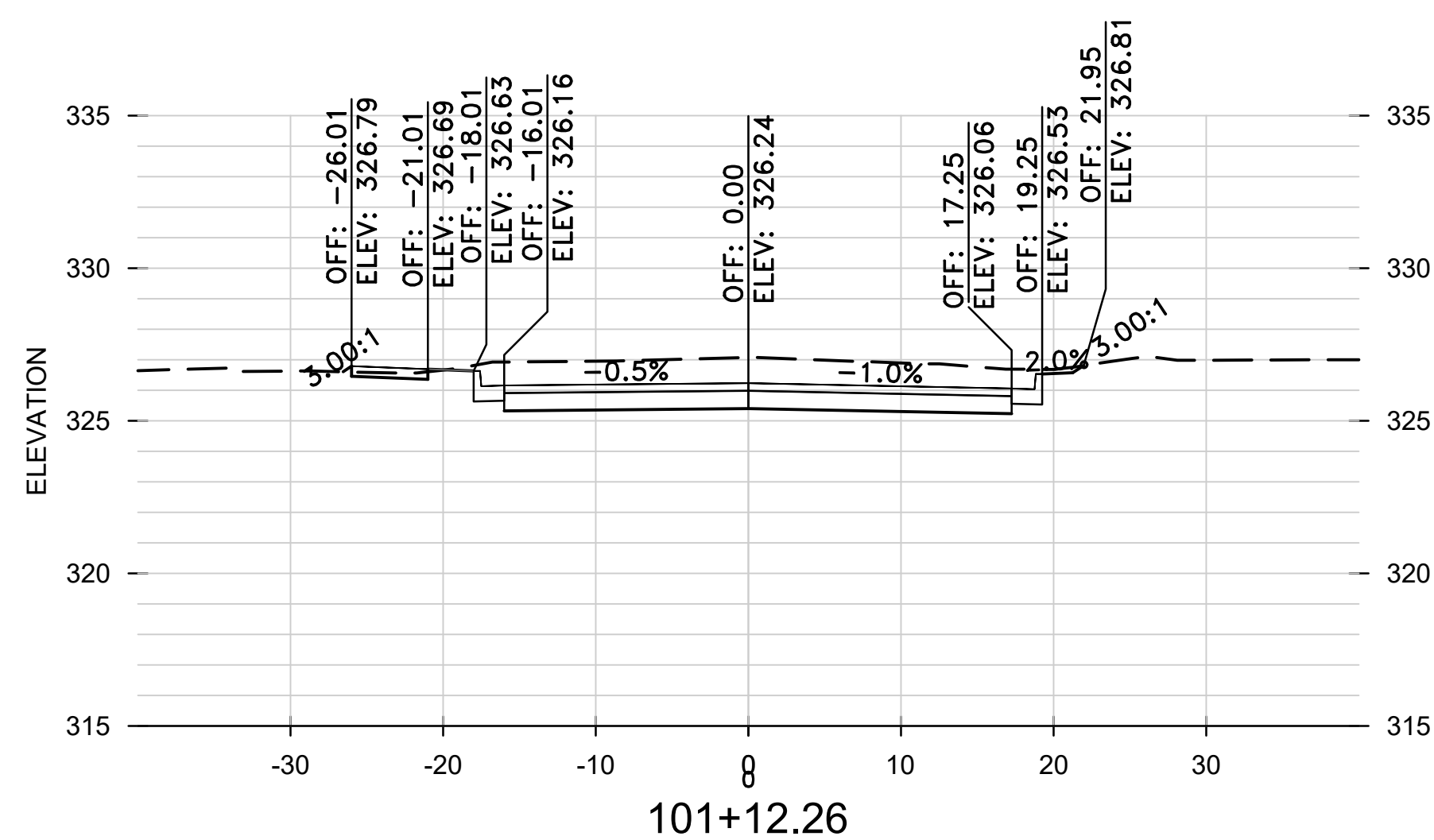
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS
 CROSS SECTIONS
 4TH STREET

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



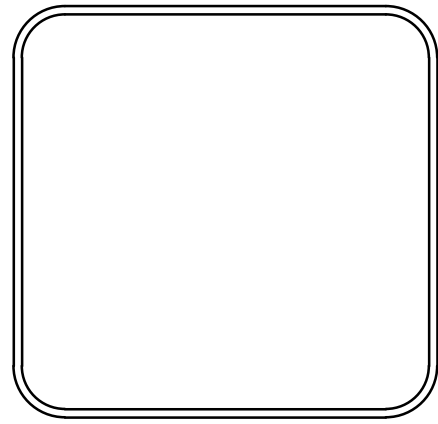
DRAWN BY
 TCP
 DESIGNED
 RCC
 CHECKED
 RCC
 DATE
 12-18-2023
 SCALE
 H: 1"=10'
 V: 1"=5'
 PROJECT NO.
 03-17-DR-107
 SHEET NO.
 C26



REVISIONS	DATE

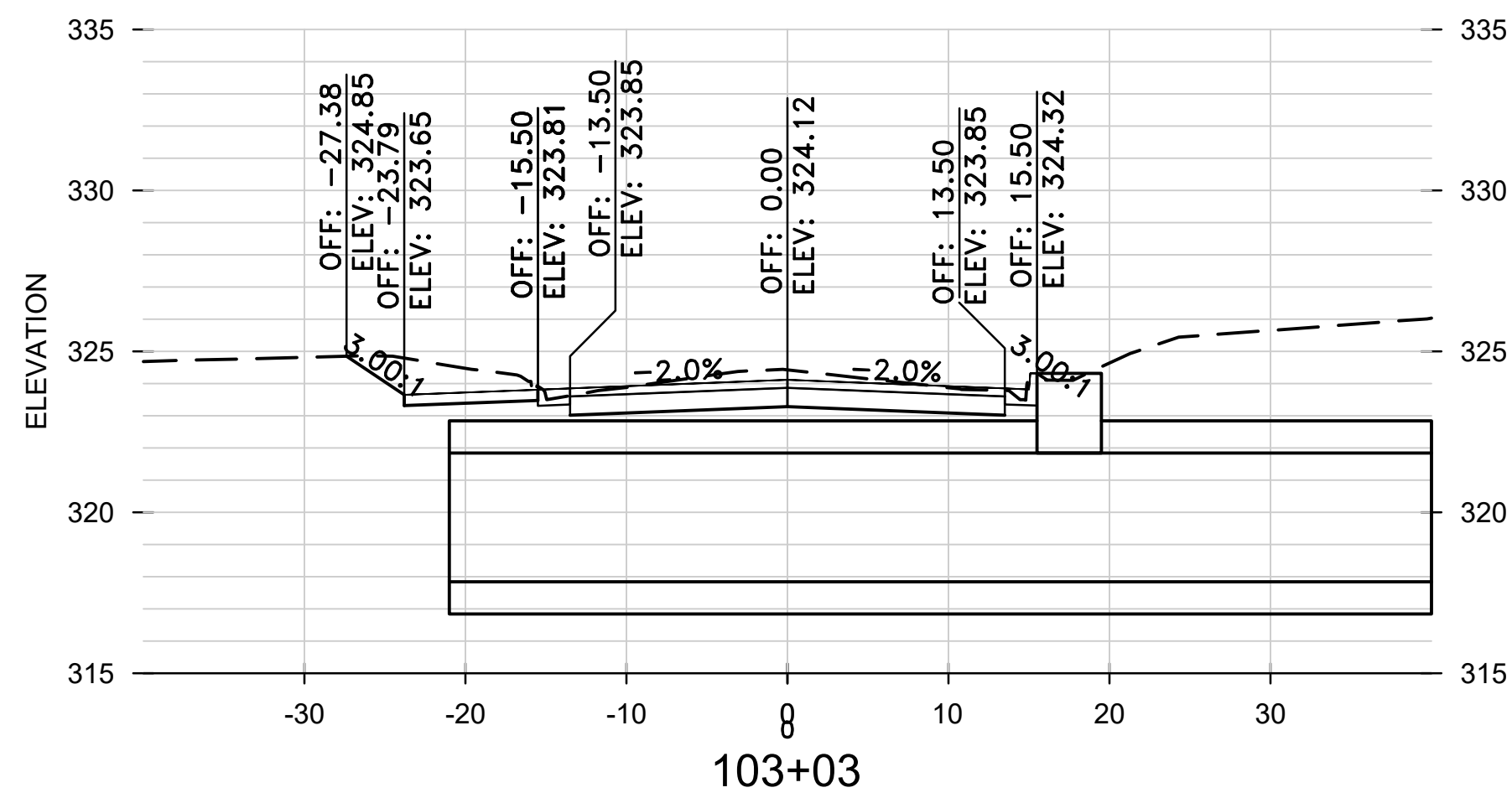
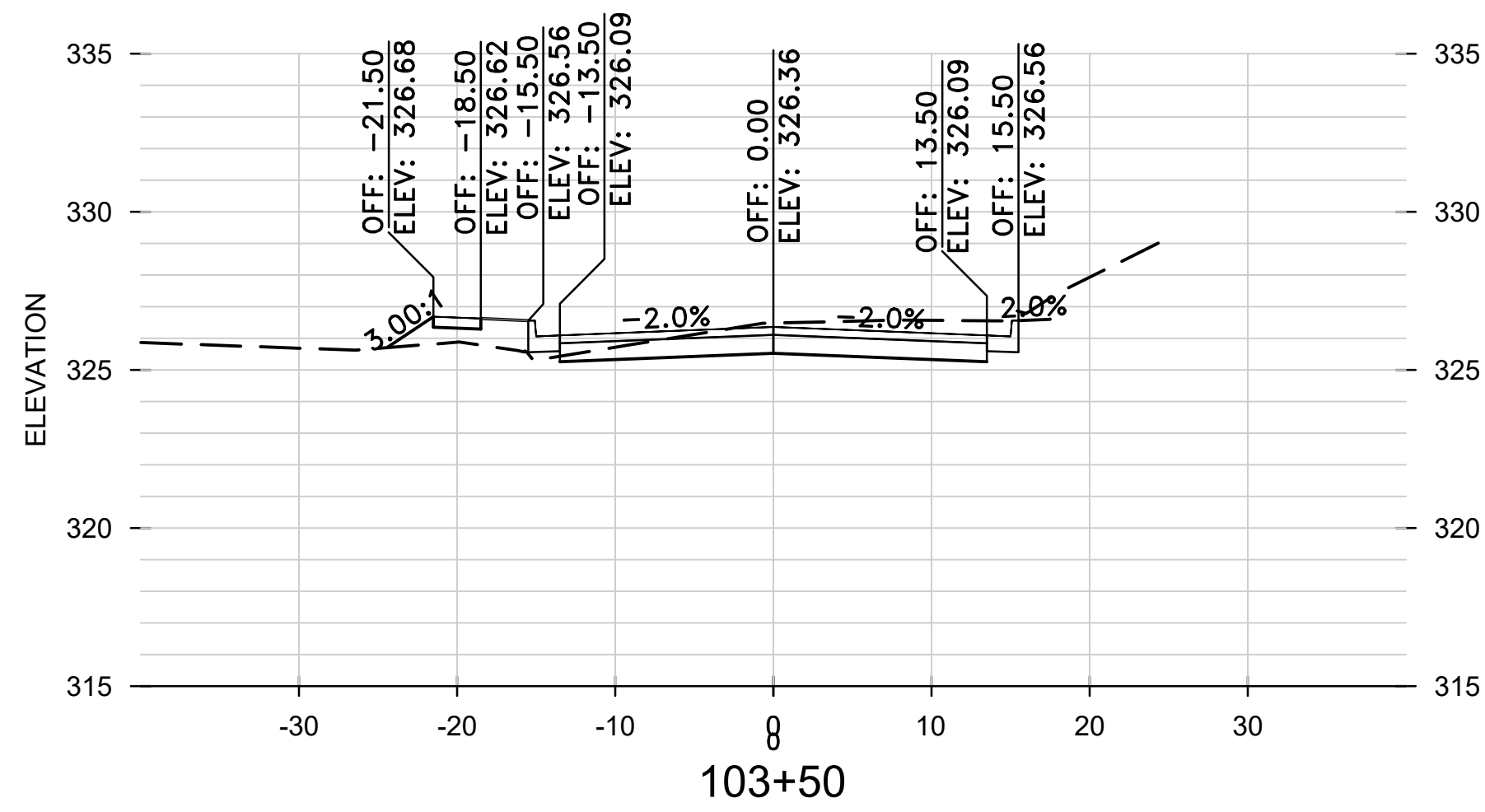
CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS

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



DRAWN BY
 TCP
 DESIGNED
 RCC
 CHECKED
 RCC
 DATE
 12-18-2023
 SCALE
 H: 1"=10'
 V: 1"=5'
 PROJECT NO.
 03-17-DR-107
 SHEET NO.
C27

CROSS SECTIONS
 VALMAR STREET




REVISIONS	DATE

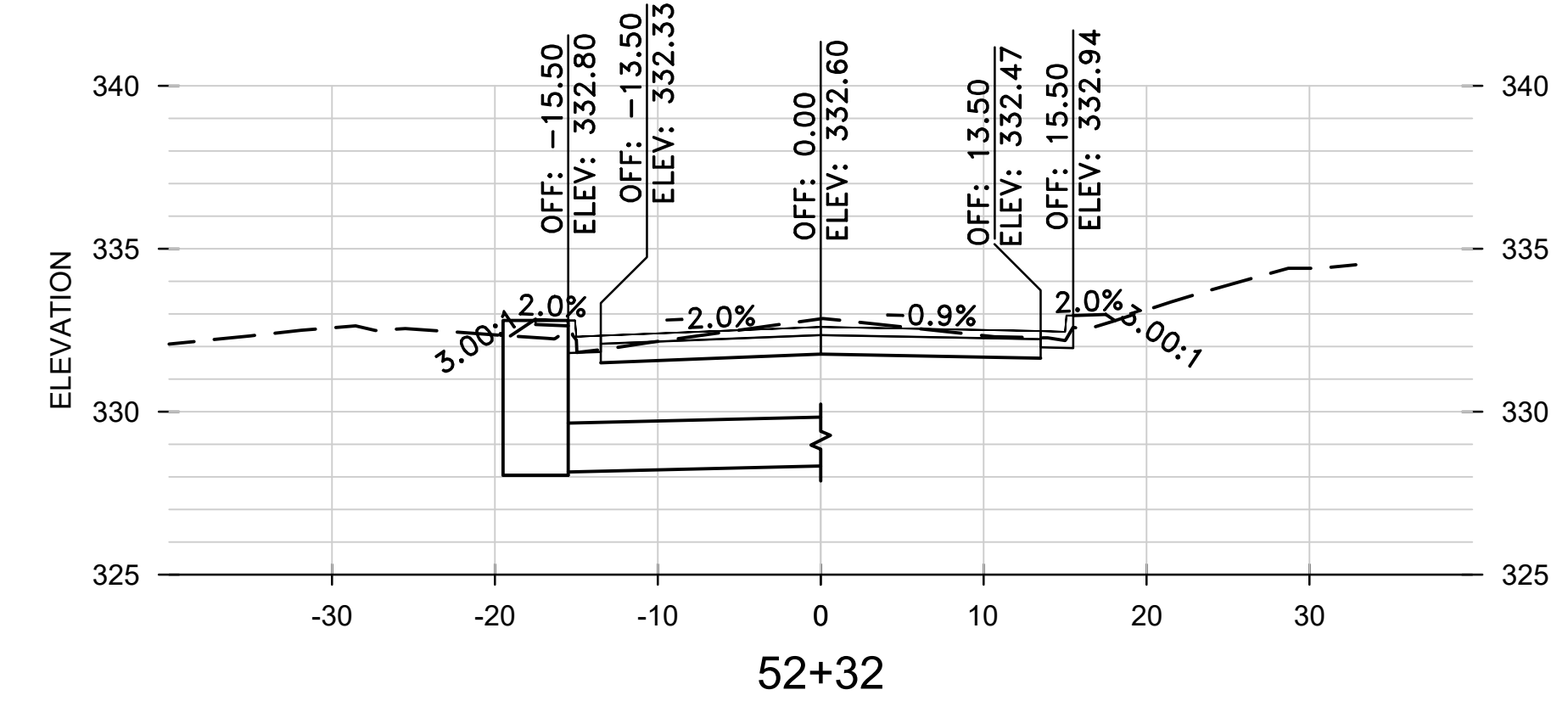
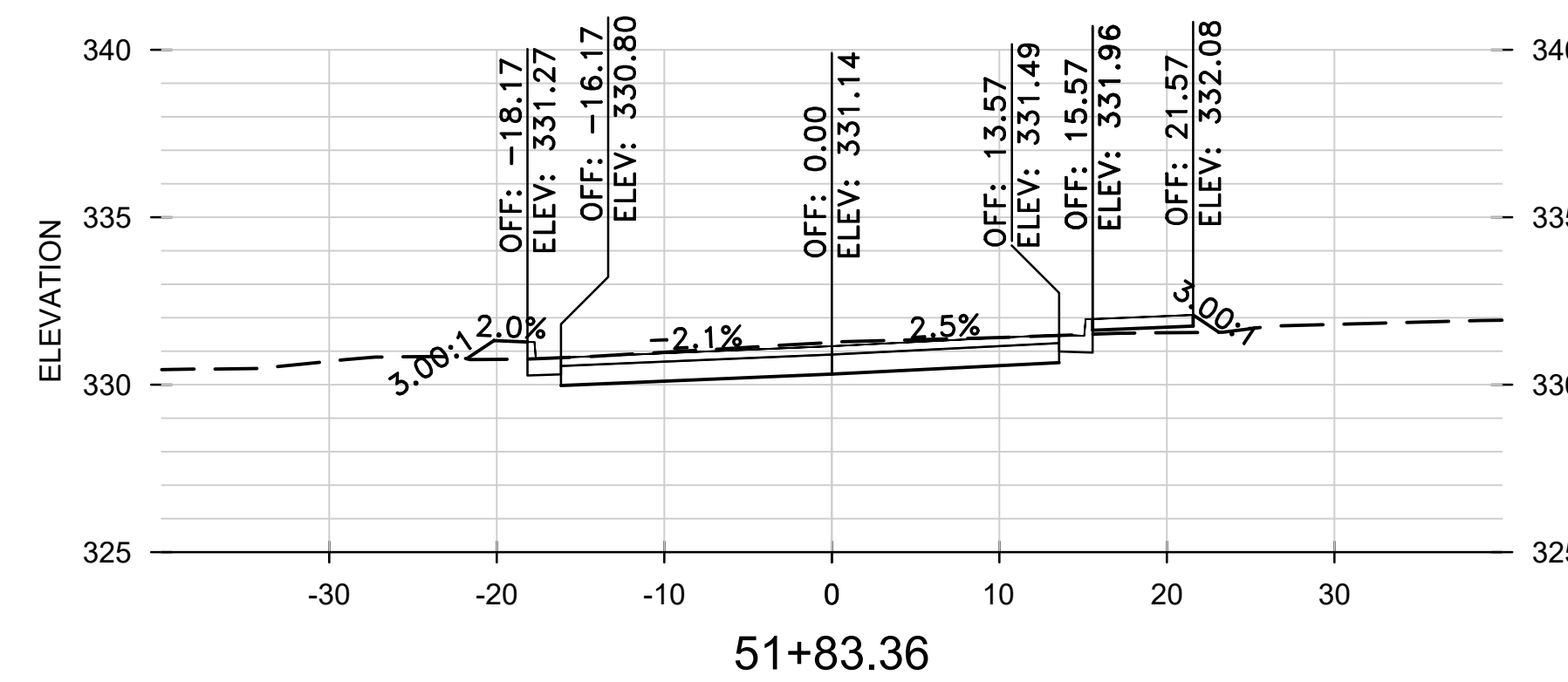
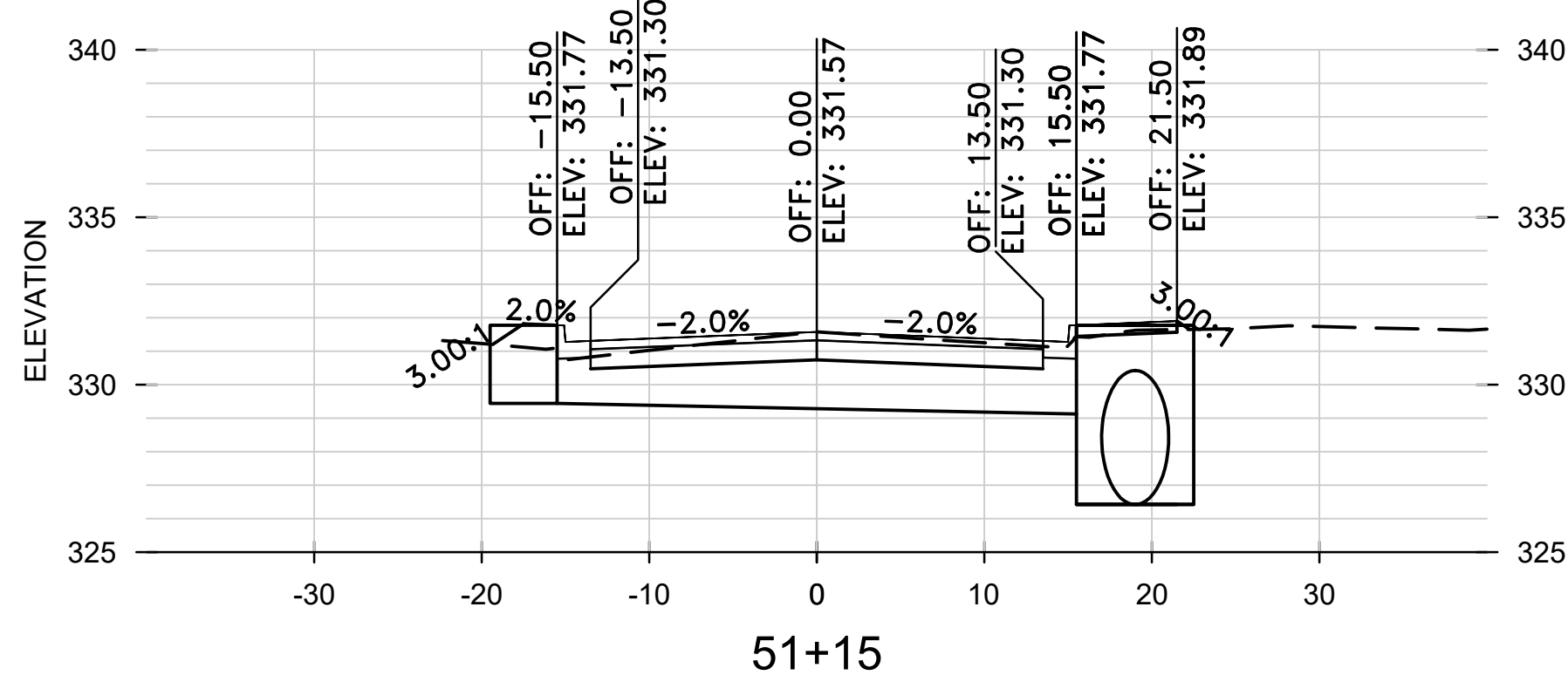
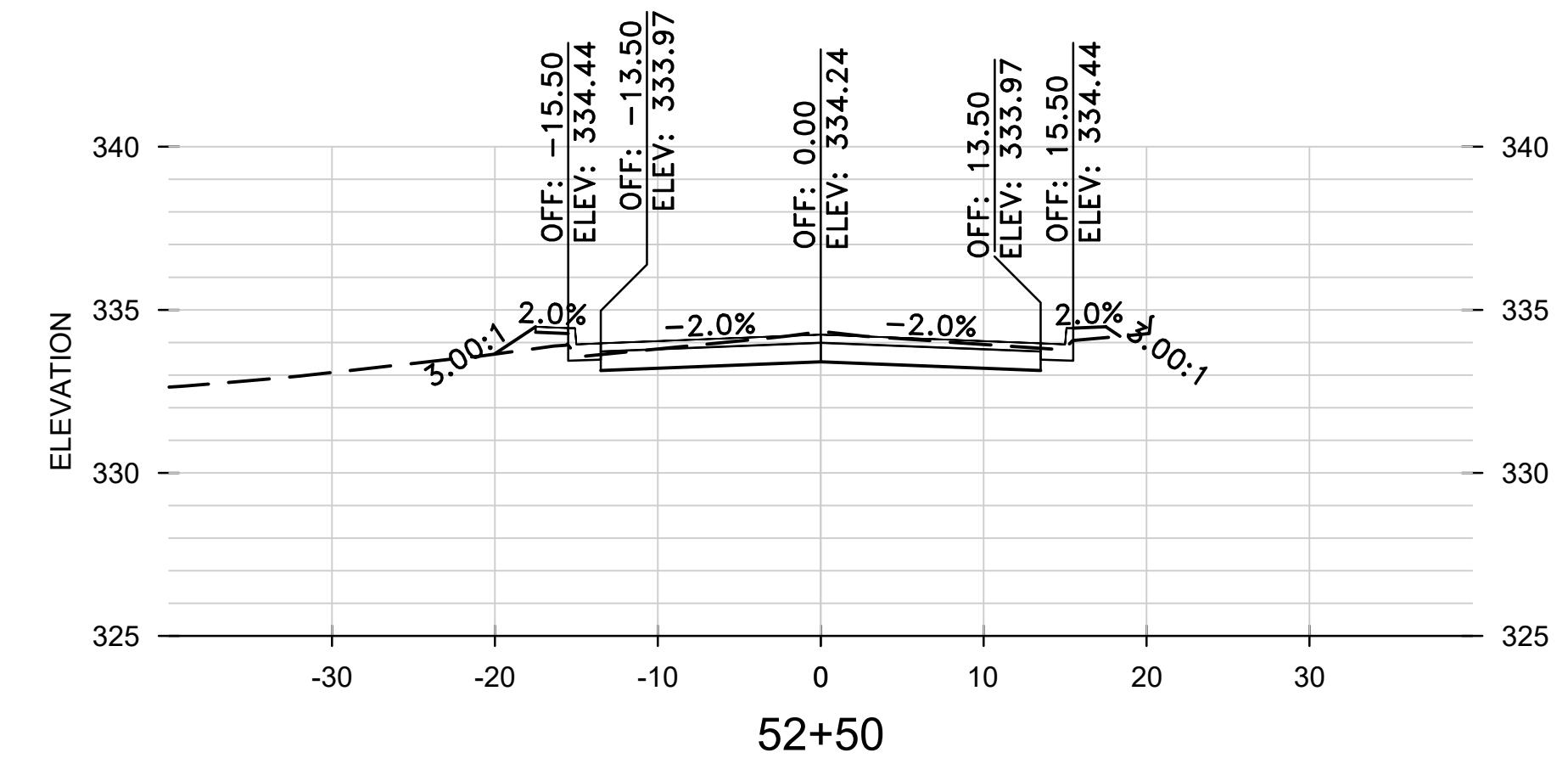
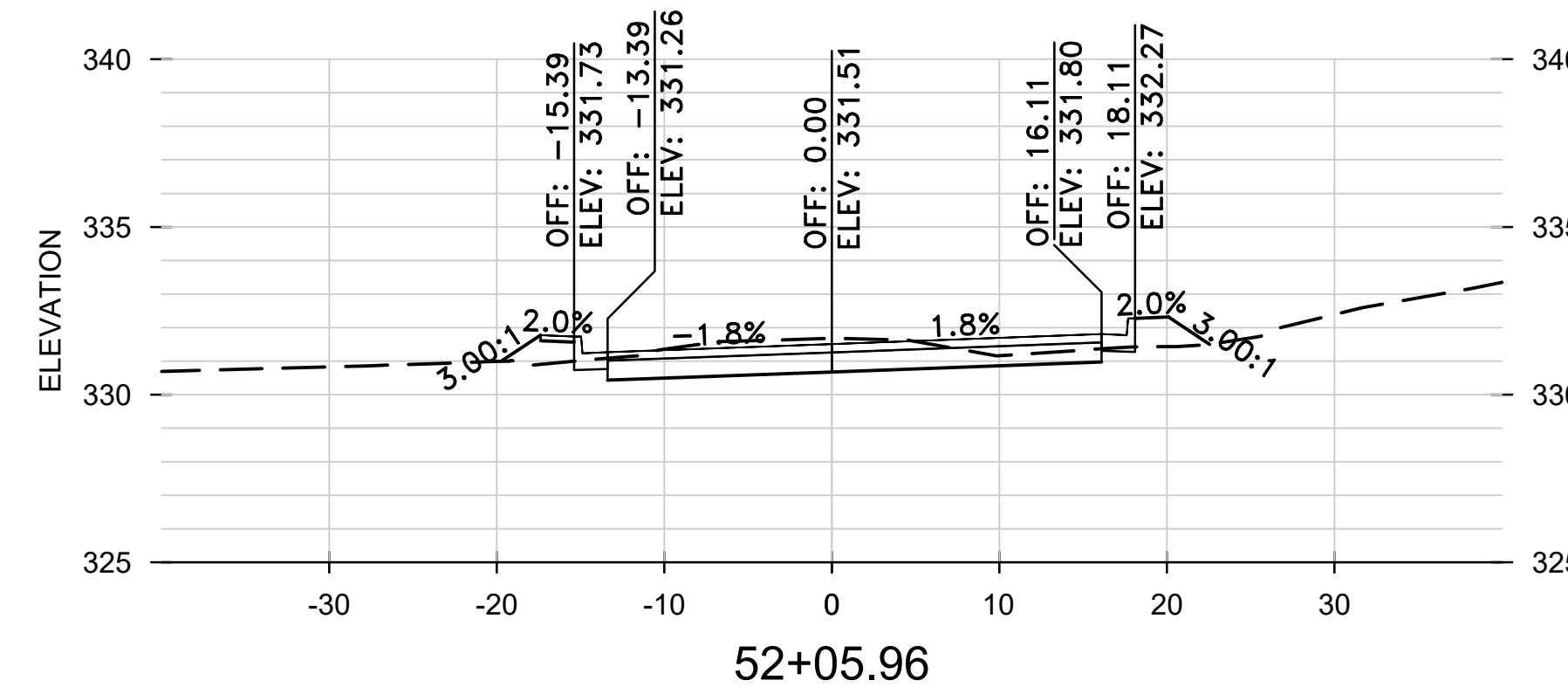
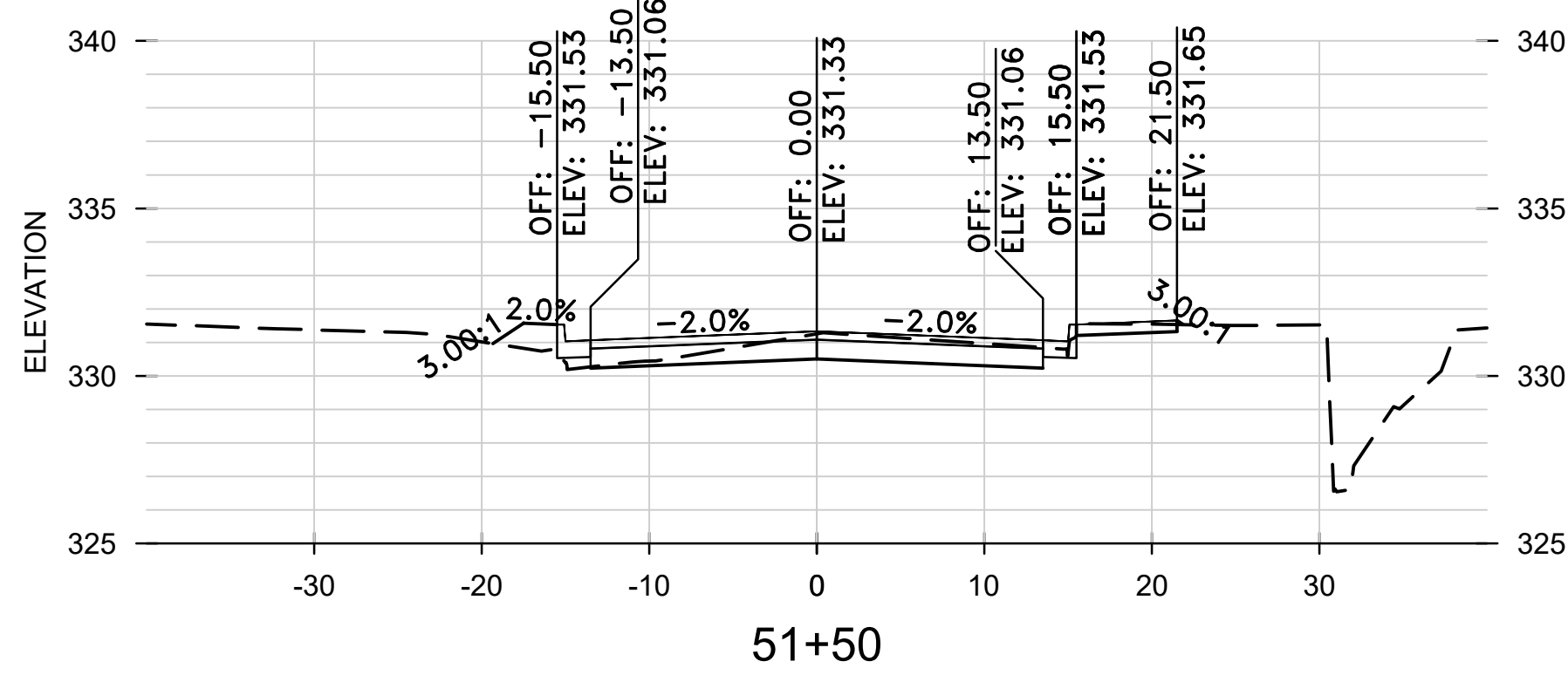
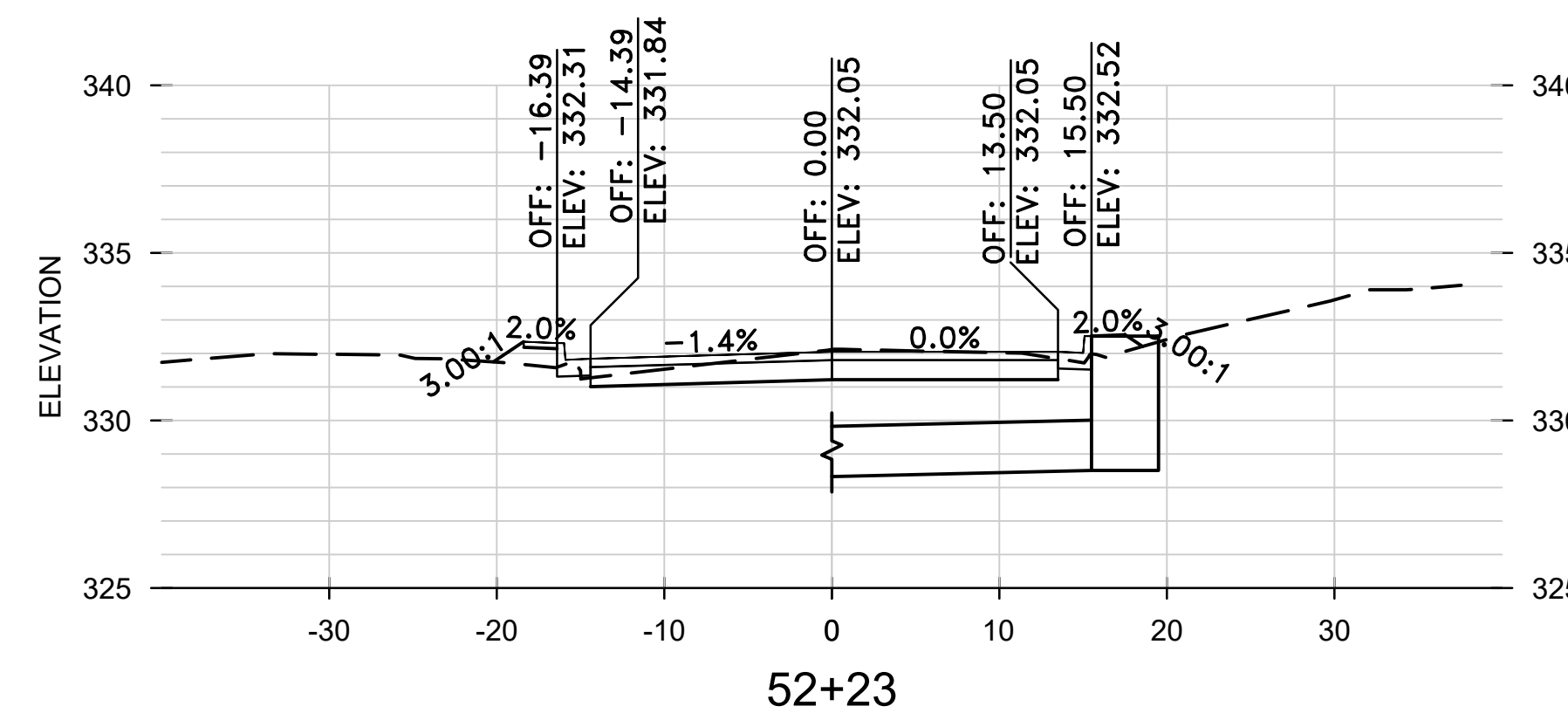
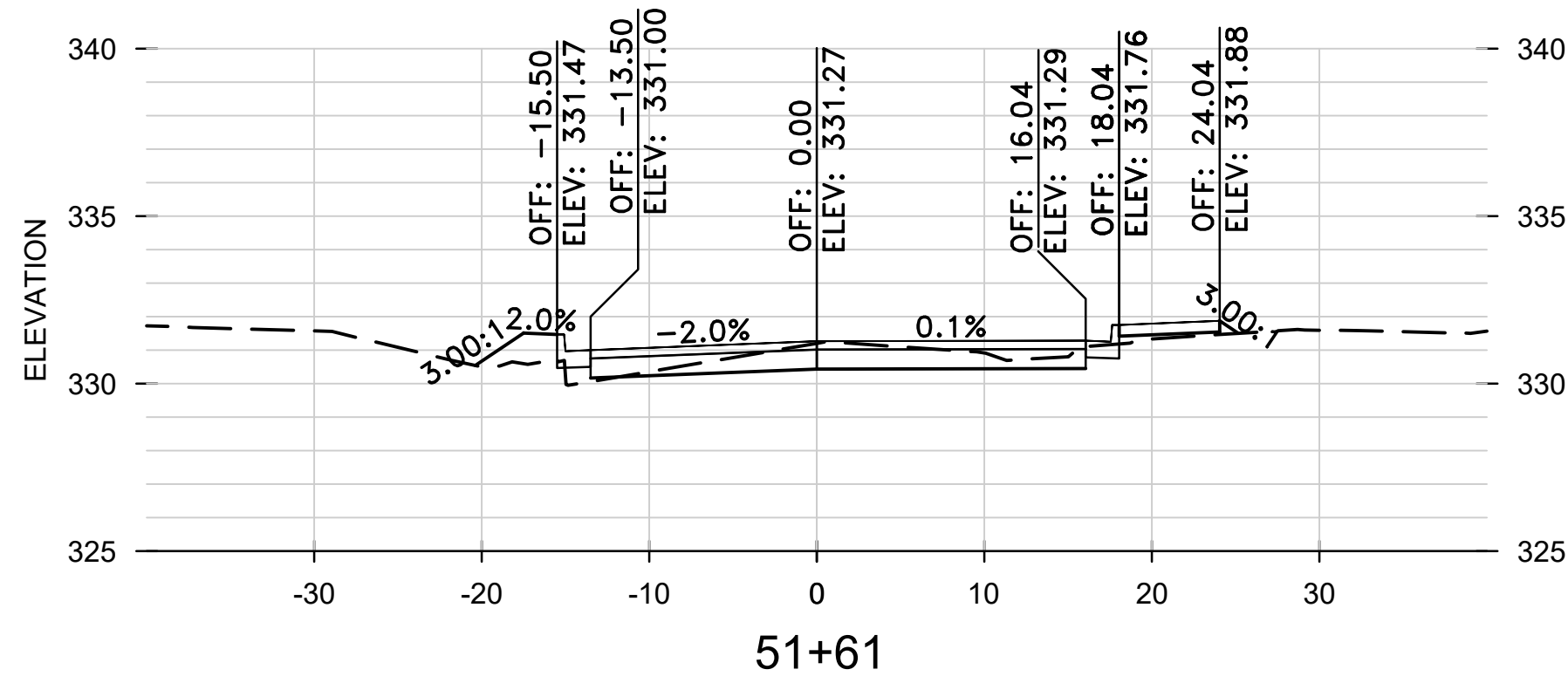
CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS

CROSS SECTIONS
 VALMAR STREET

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



DRAWN BY	TCP
DESIGNED	RCC
CHECKED	RCC
DATE	12-18-2023
SCALE	H: 1"=10' V: 1"=5'
PROJECT NO.	03-17-DR-107
SHEET NO.	C28

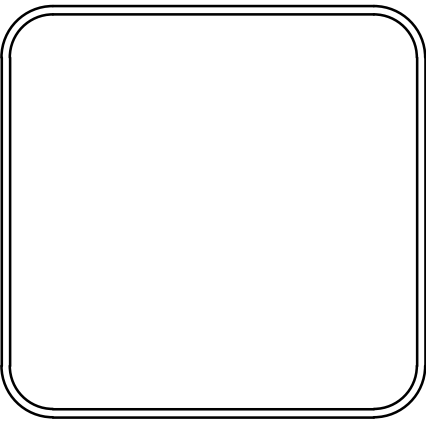


REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS

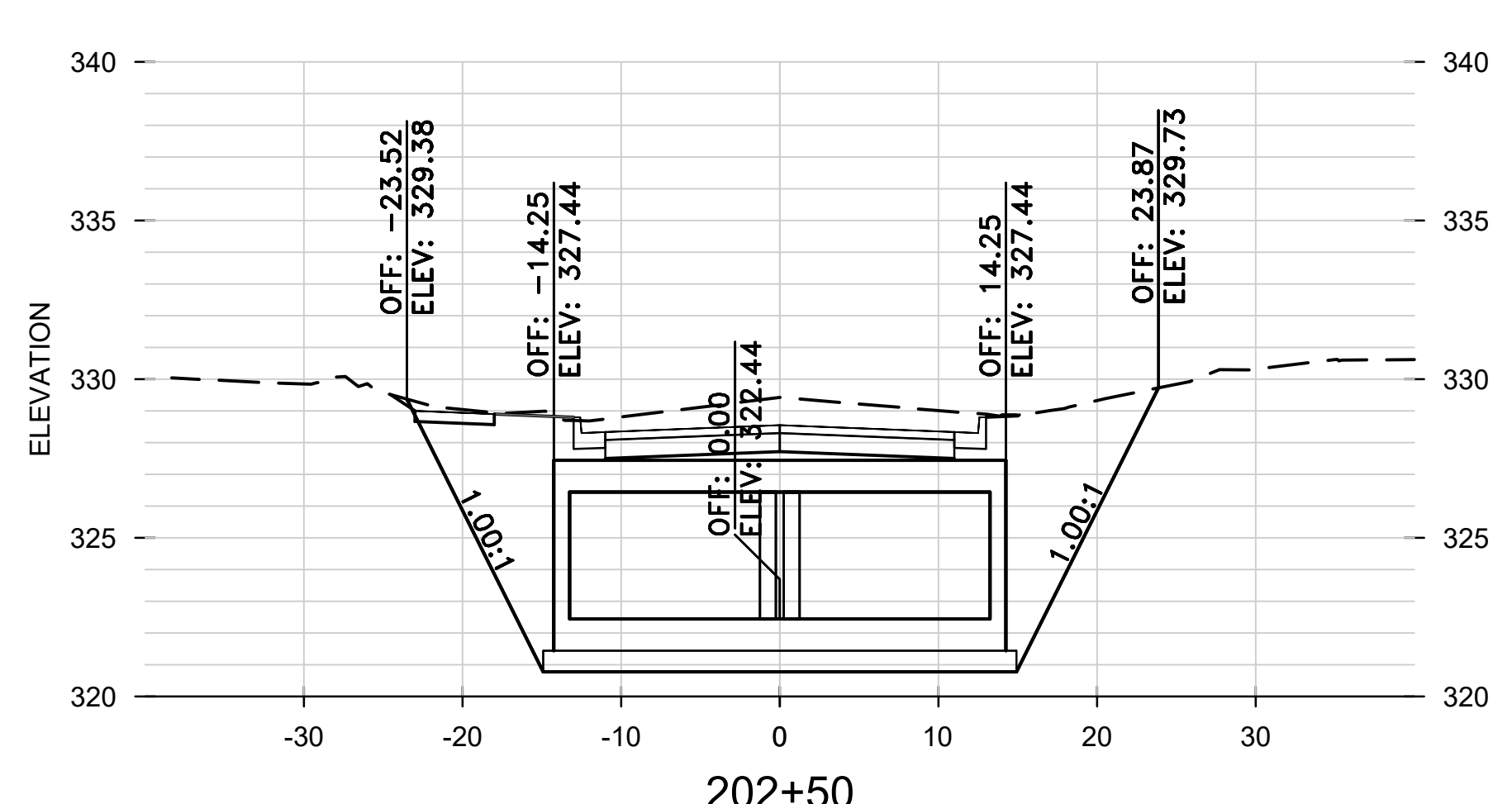
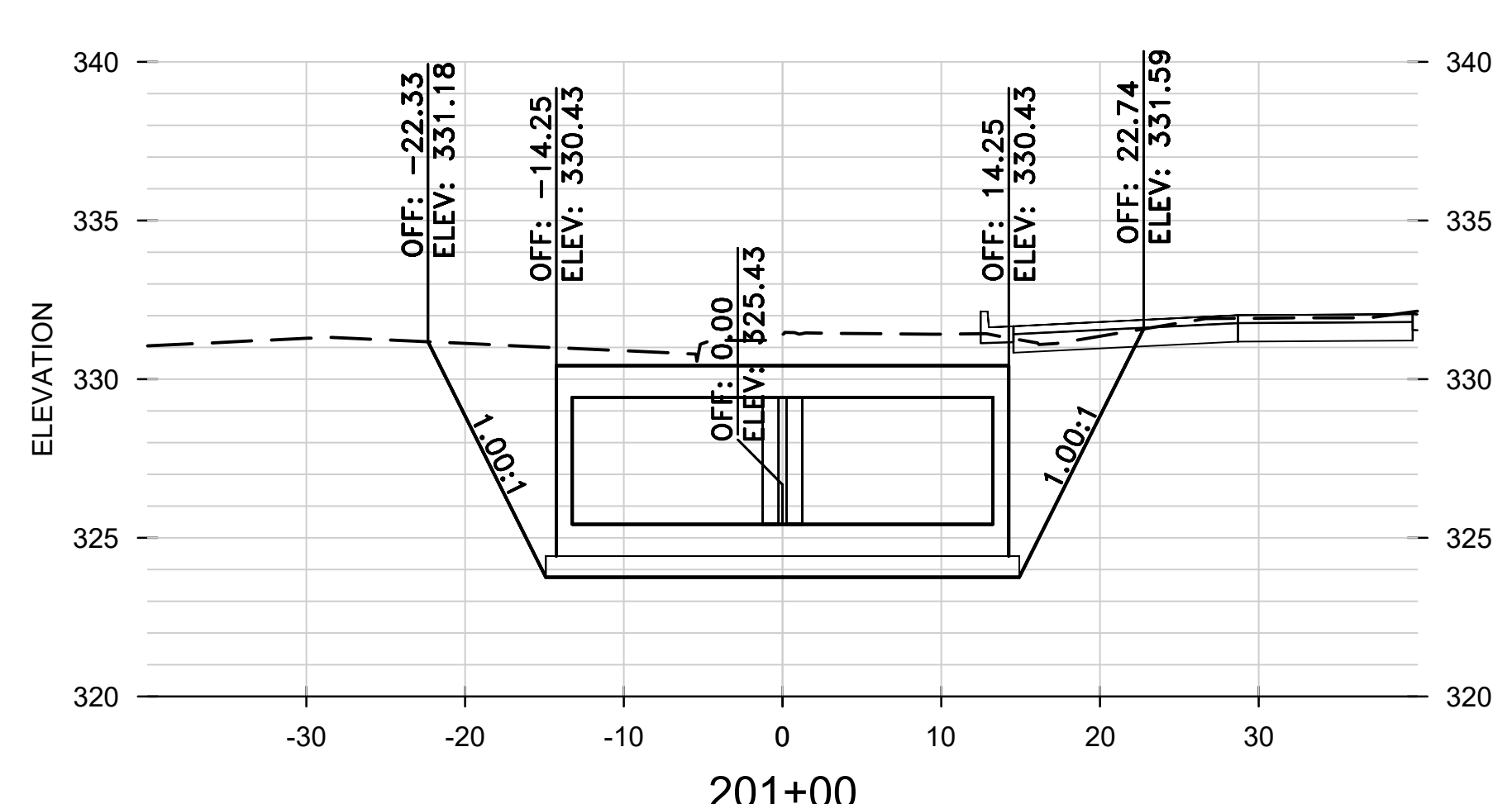
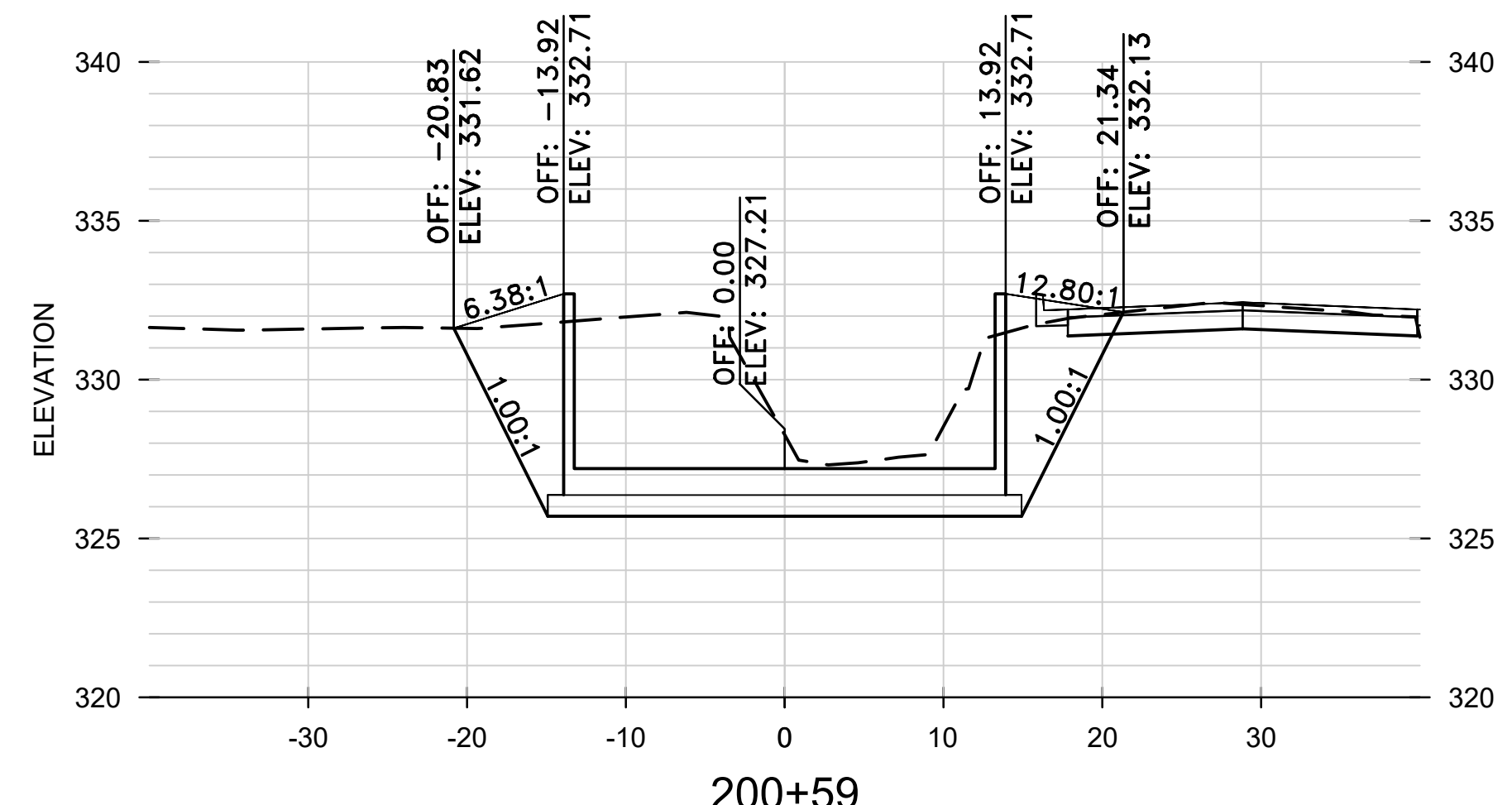
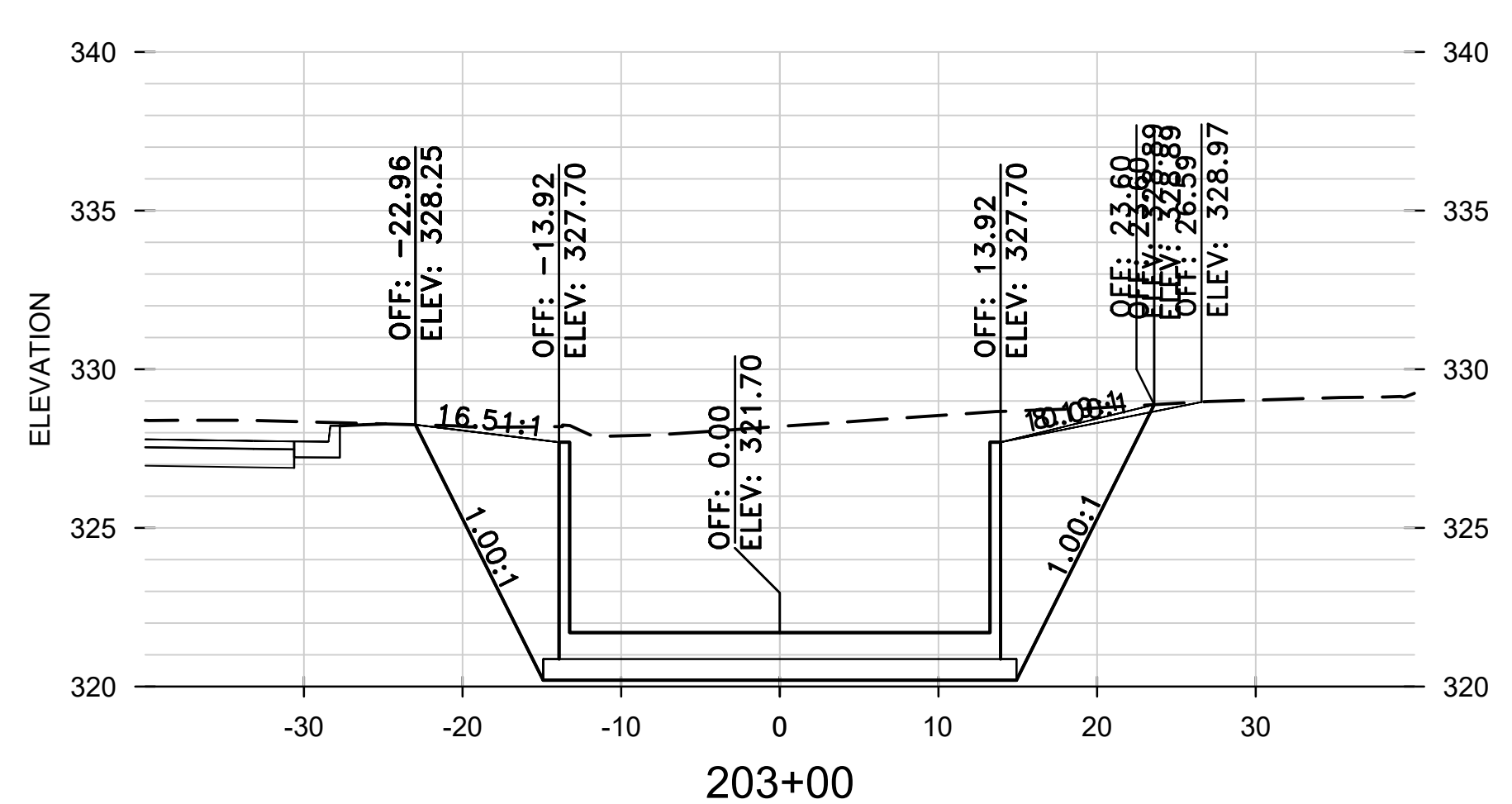
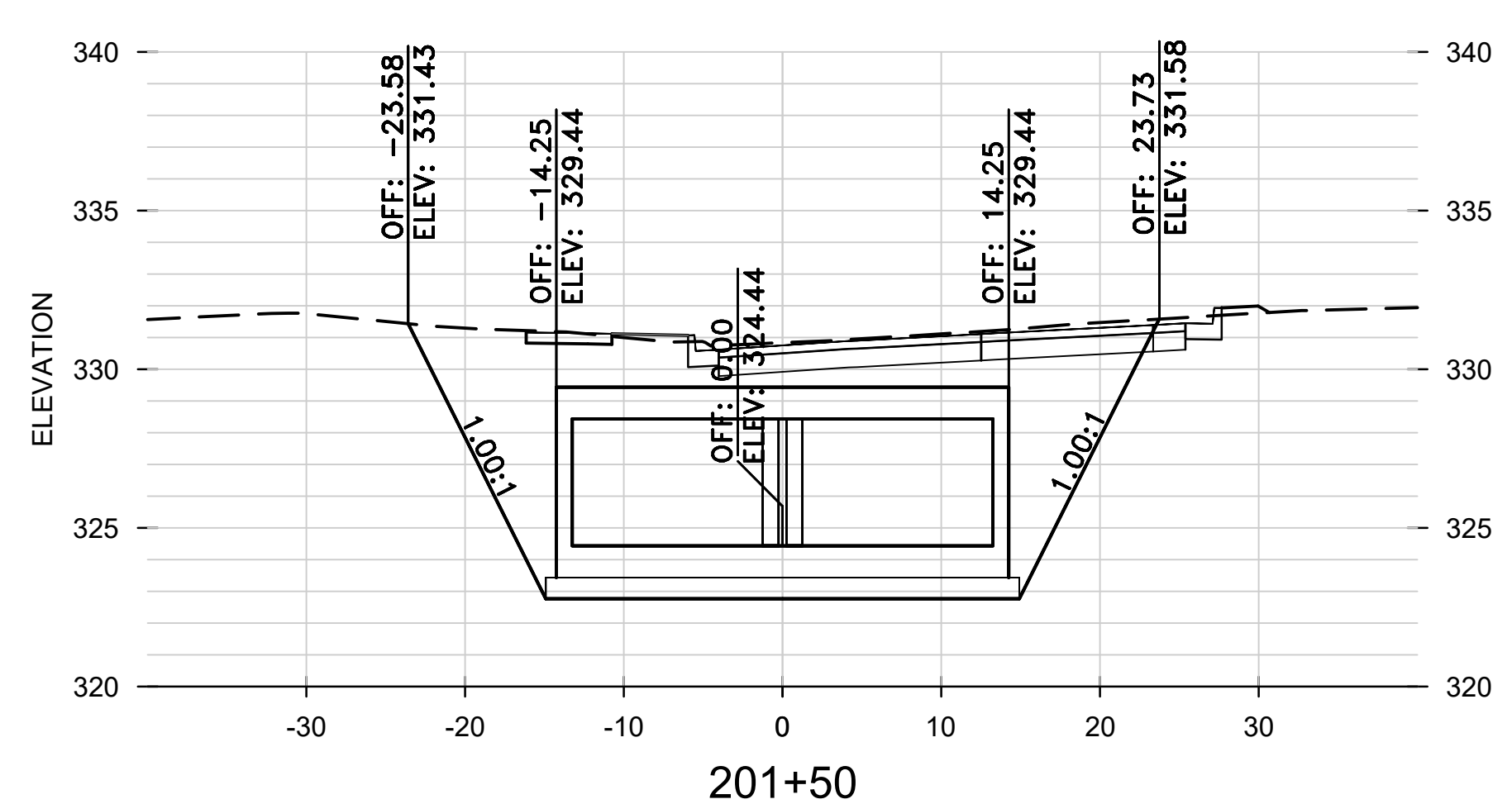
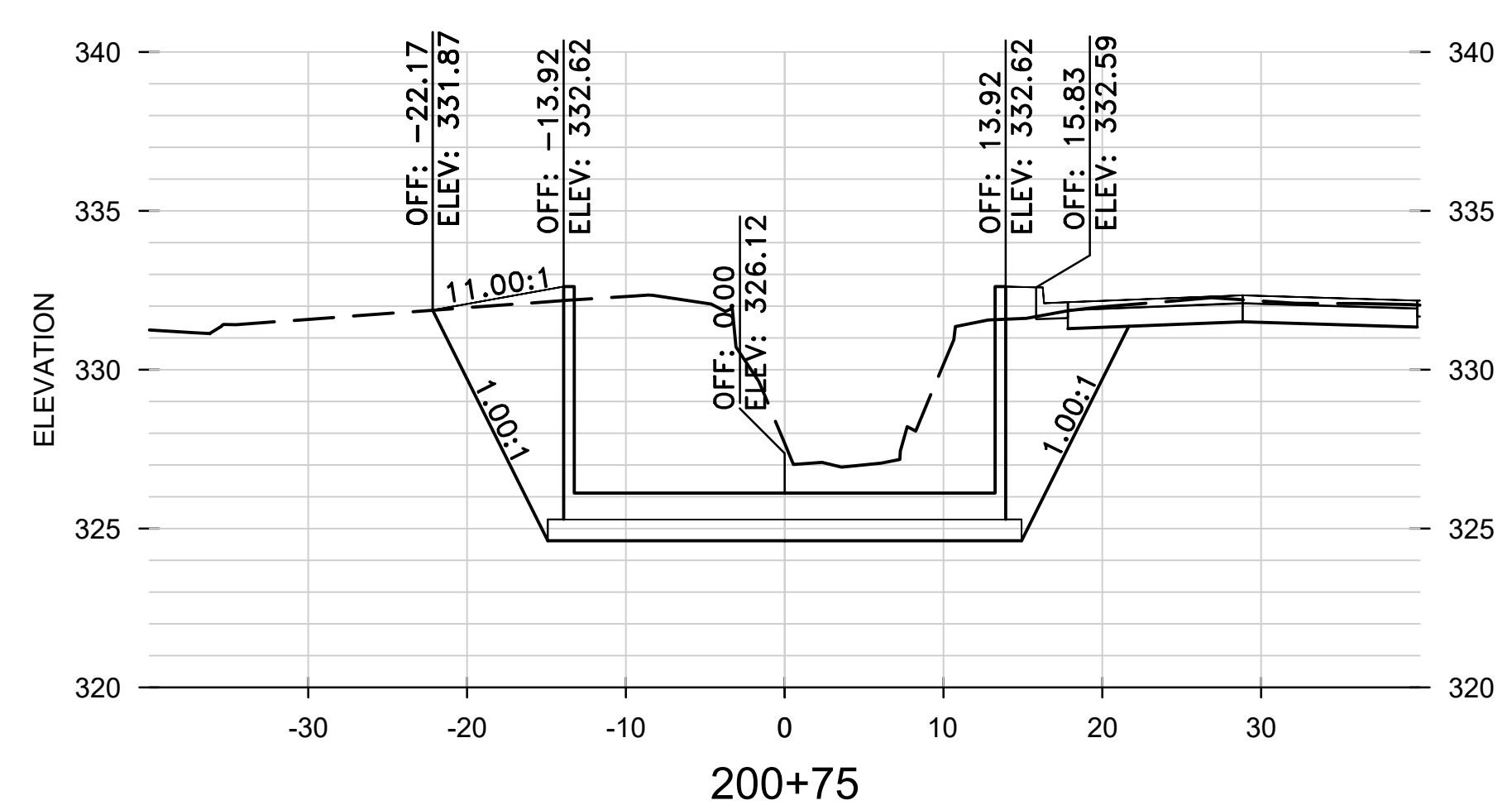
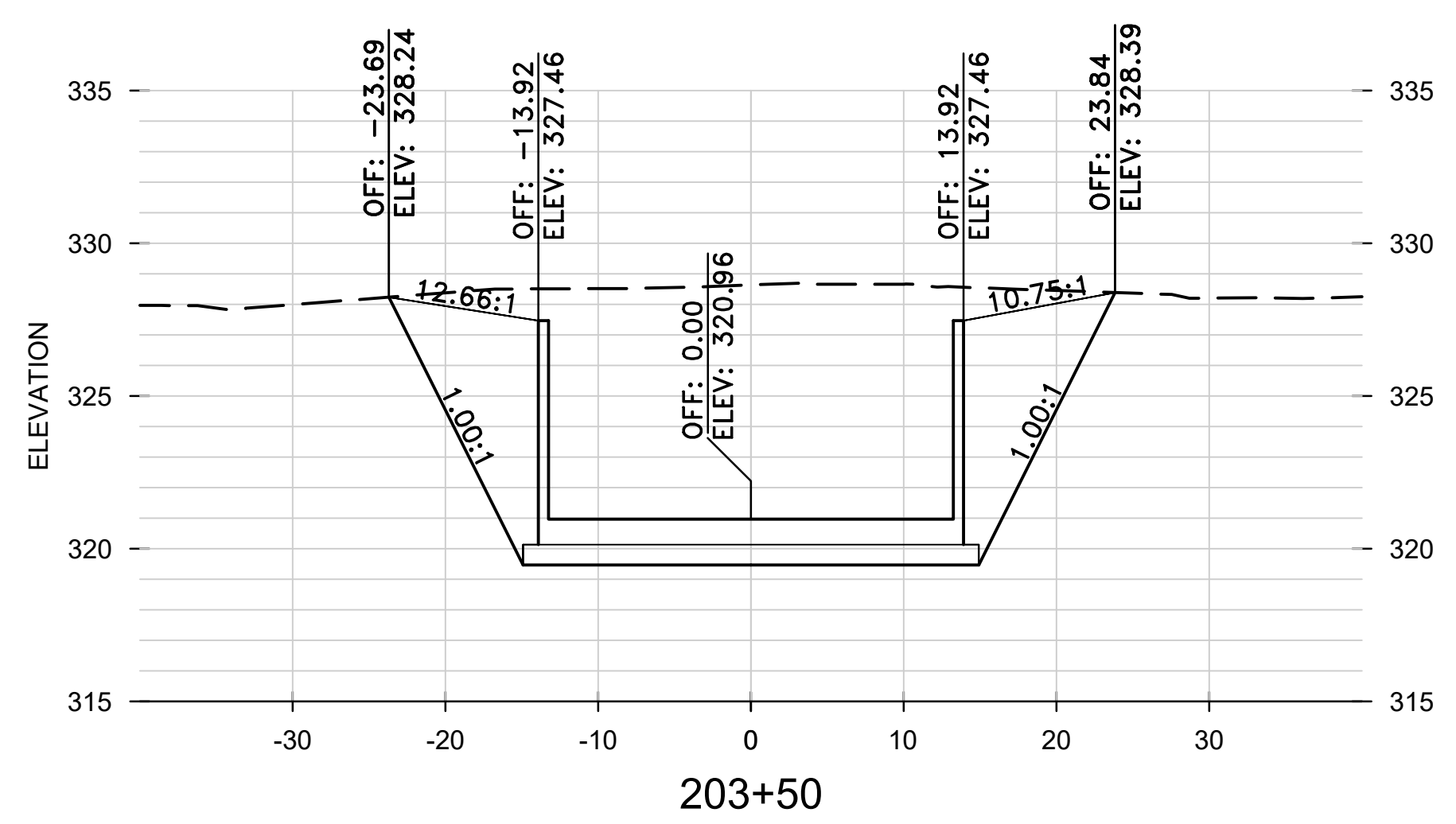
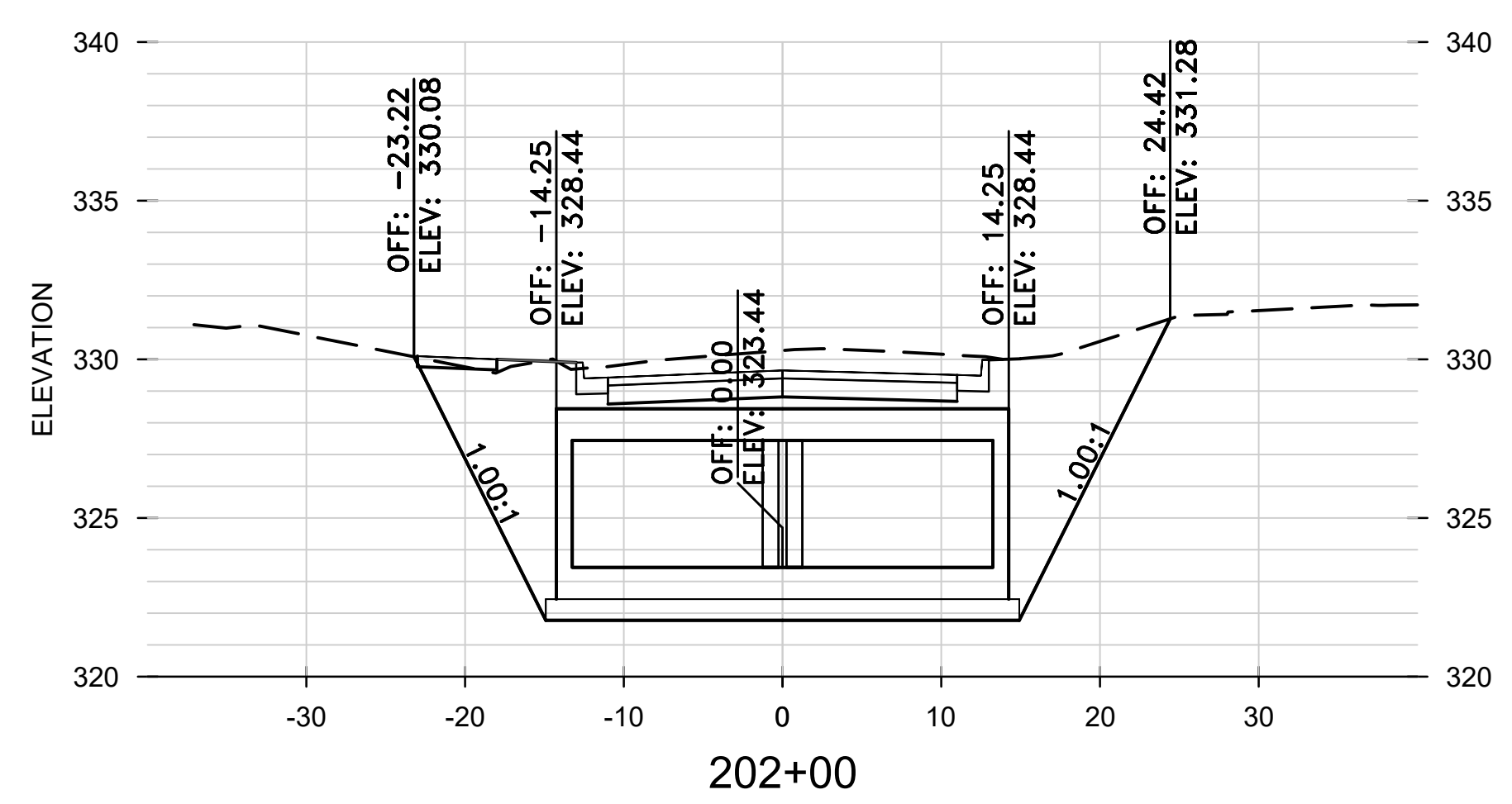
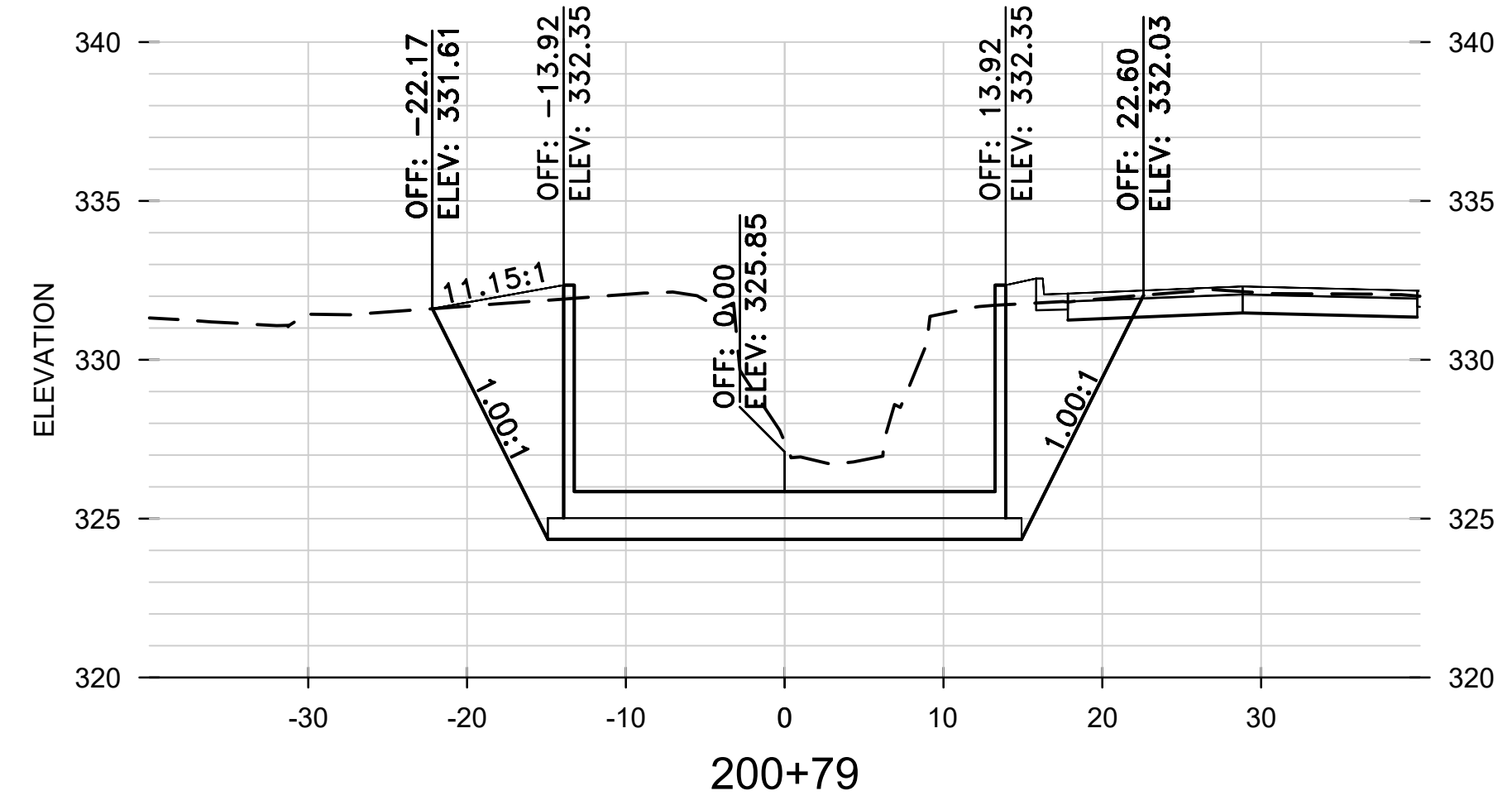
CROSS SECTIONS
 VALENTINE STREET

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



DRAWN BY
 TCP
 DESIGNED
 RCC
 CHECKED
 RCC
 DATE
 12-18-2023
 SCALE
 H: 1"=10'
 V: 1"=5'
 PROJECT NO.
 03-17-DR-107
 SHEET NO.
 C29

REVISIONS	DATE



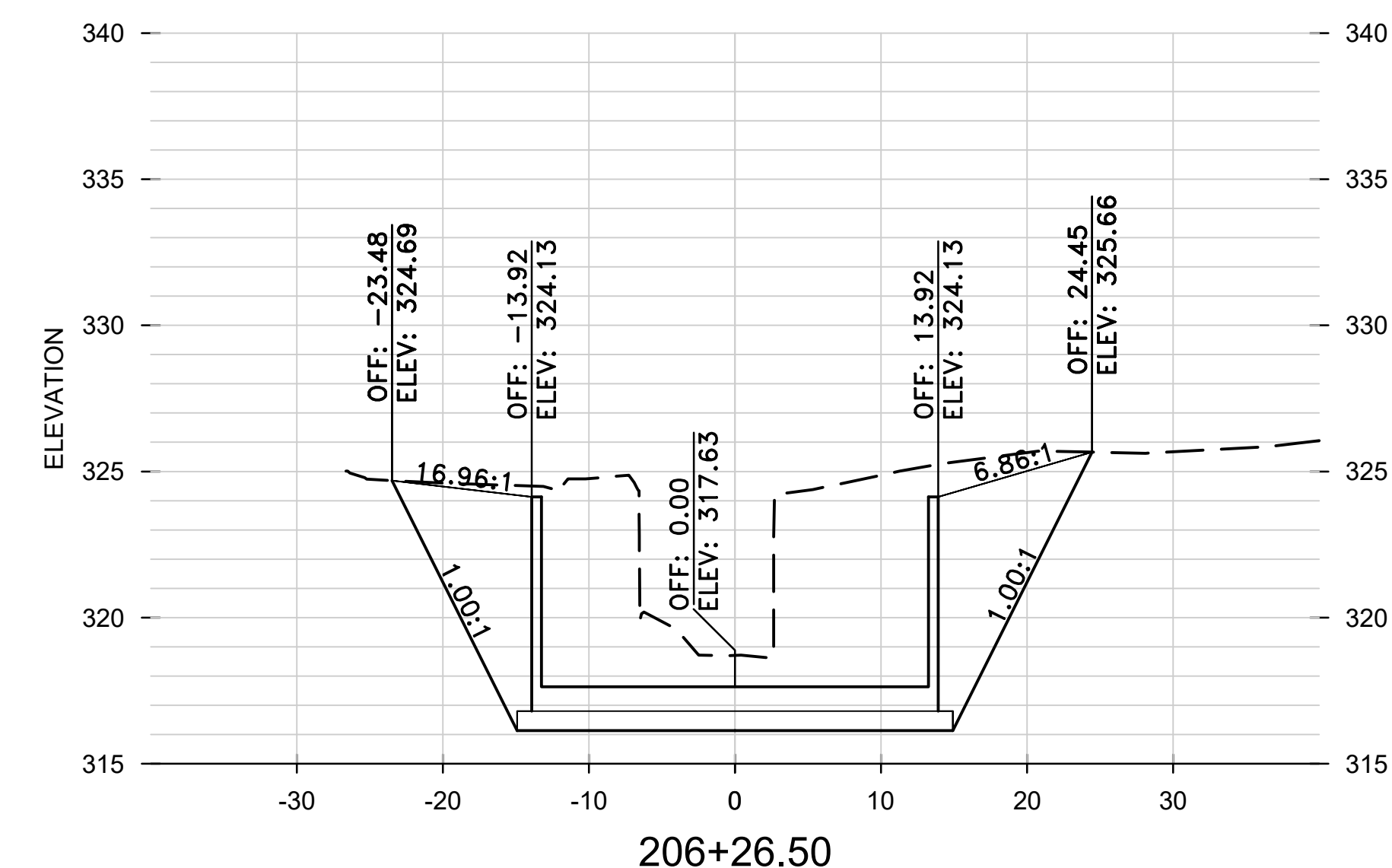
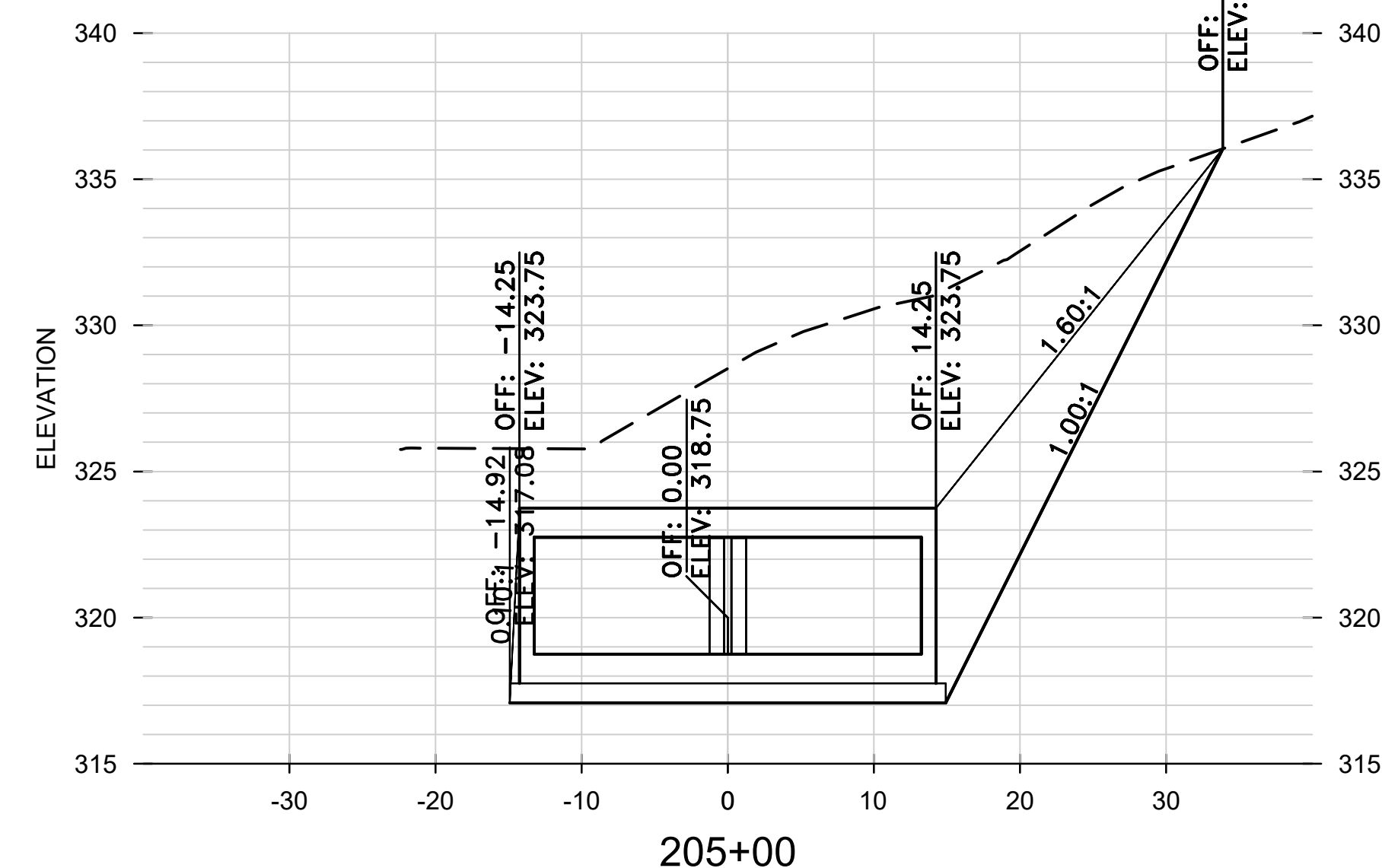
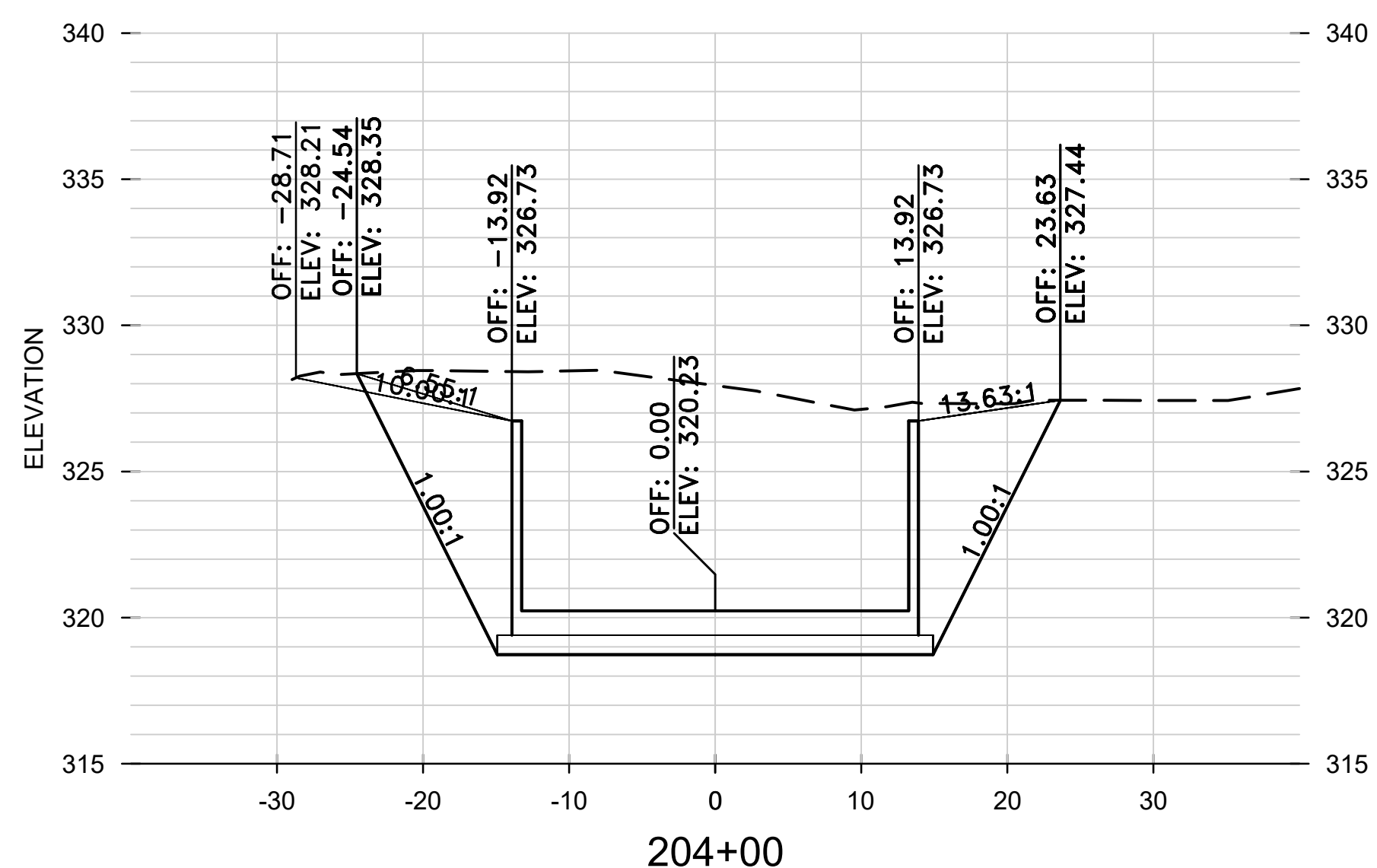
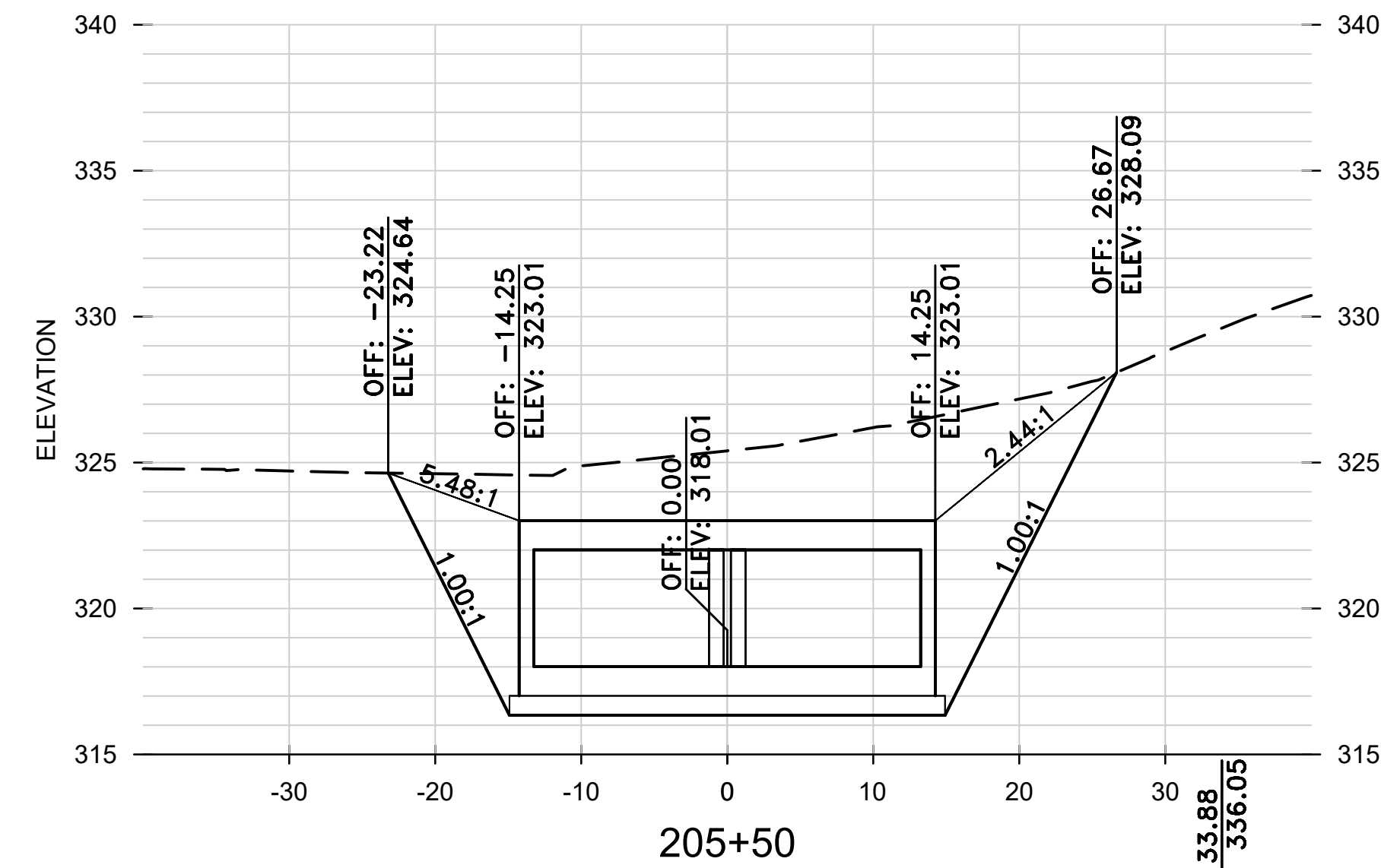
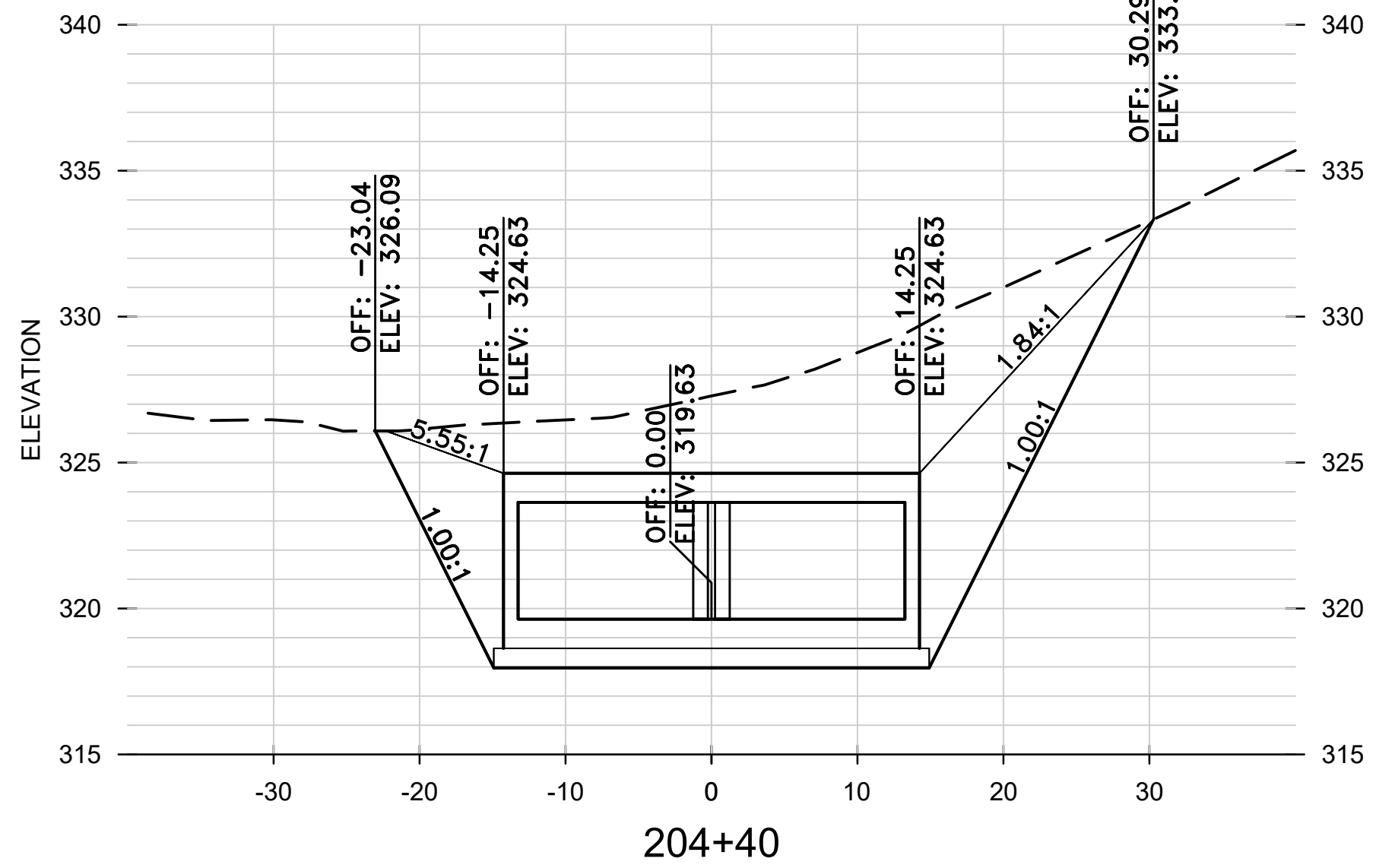
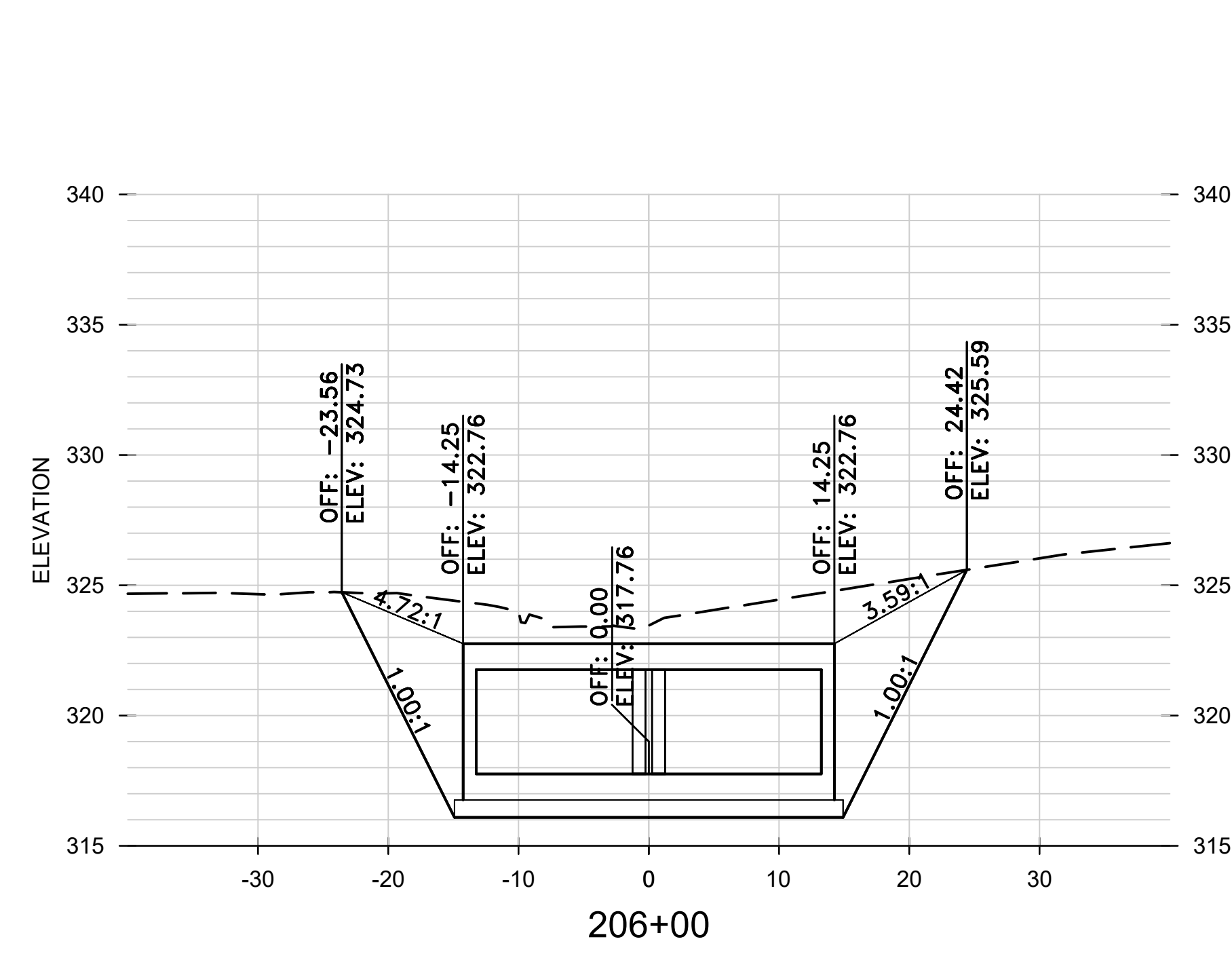
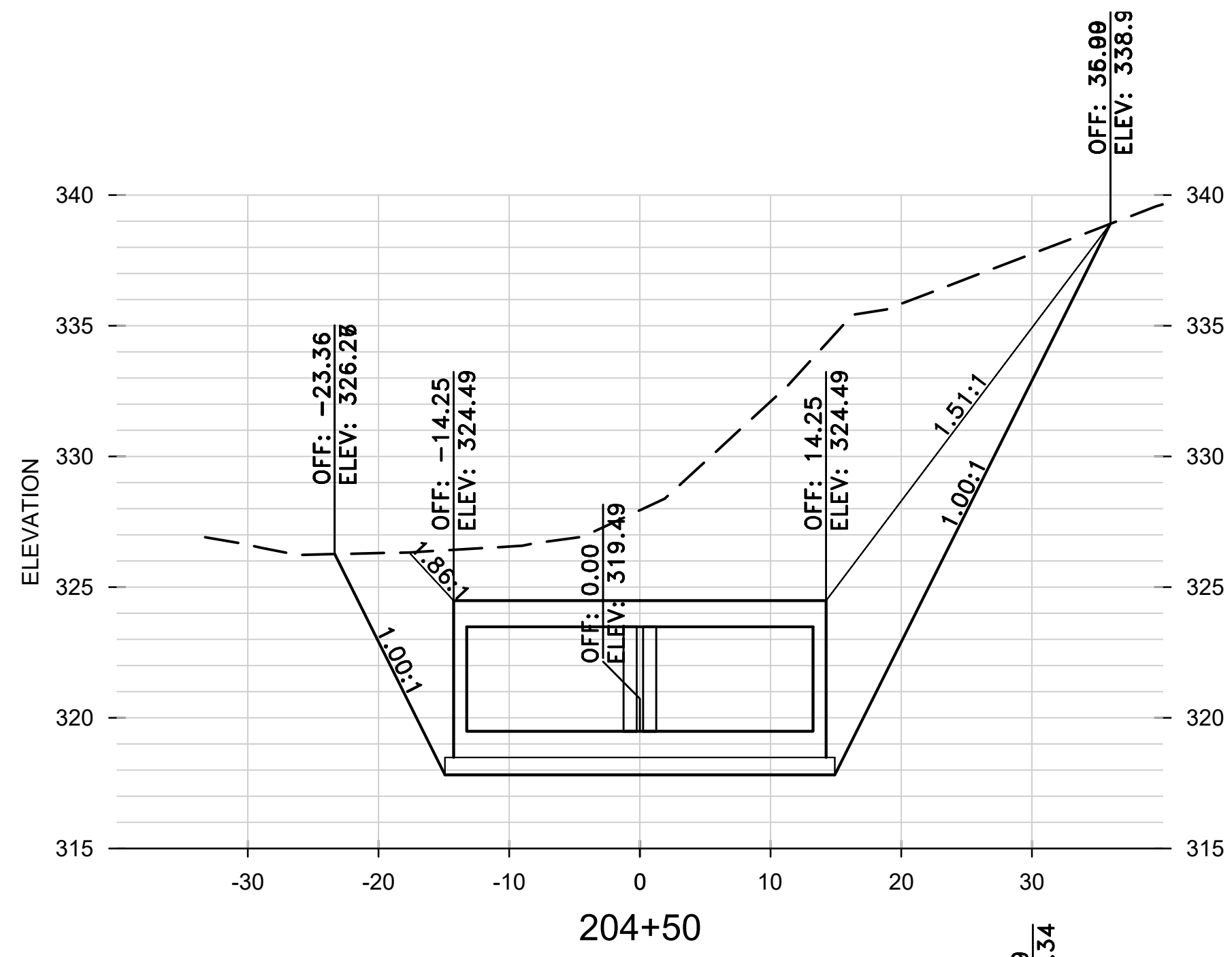
CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS

CROSS SECTIONS
 BOX AND CHANNEL

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



DRAWN BY
 TCP
 DESIGNED
 RCC
 CHECKED
 RCC
 DATE
 12-18-2023
 SCALE
 H: 1"=10'
 V: 1"=5'
 PROJECT NO.
 03-17-DR-107
 SHEET NO.
 C30

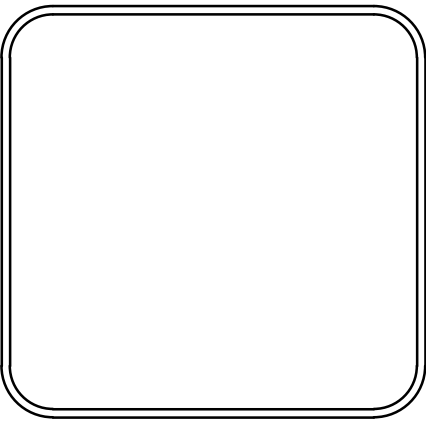


REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 WEST 4TH STREET DRAINAGE
 AND STREET IMPROVEMENTS

CROSS SECTIONS
 BOX AND CHANNEL

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



DRAWN BY
 TCP
 DESIGNED
 RCC
 CHECKED
 RCC
 DATE
 12-18-2023
 SCALE
 H: 1"=10'
 V: 1"=5'
 PROJECT NO.
 03-17-DR-107
 SHEET NO.
 C31