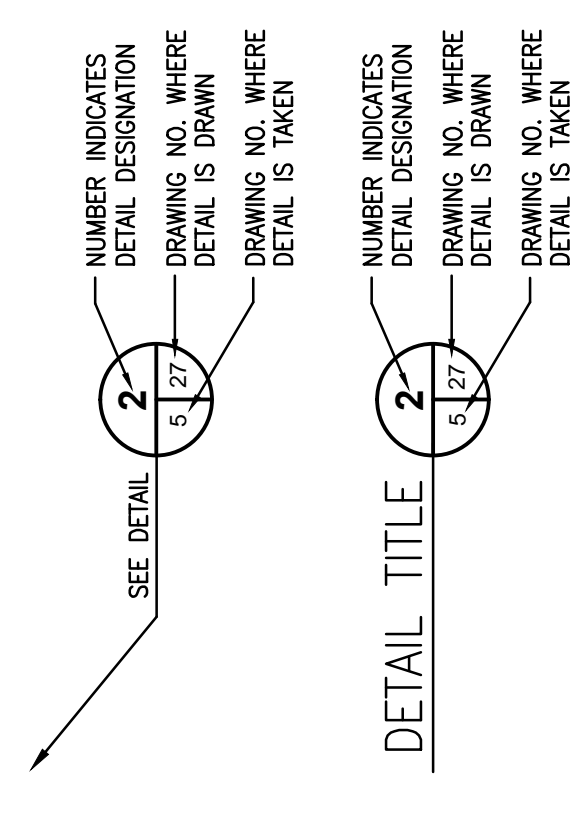


KENTUCKY POWER COMPANY BIG SANDY POWER PLANT ASH POND CLOSURE

LAWRENCE COUNTY, KENTUCKY JUNE 2013

PERMIT DRAWINGS

DETAIL REFERENCE SYMBOLS



DWG. NO.

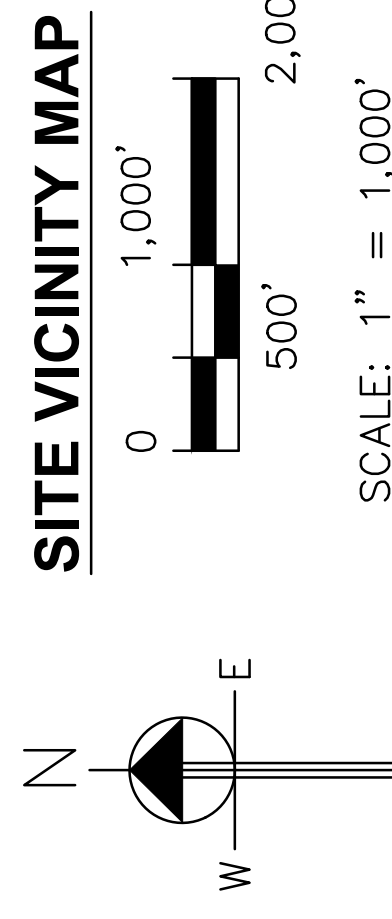
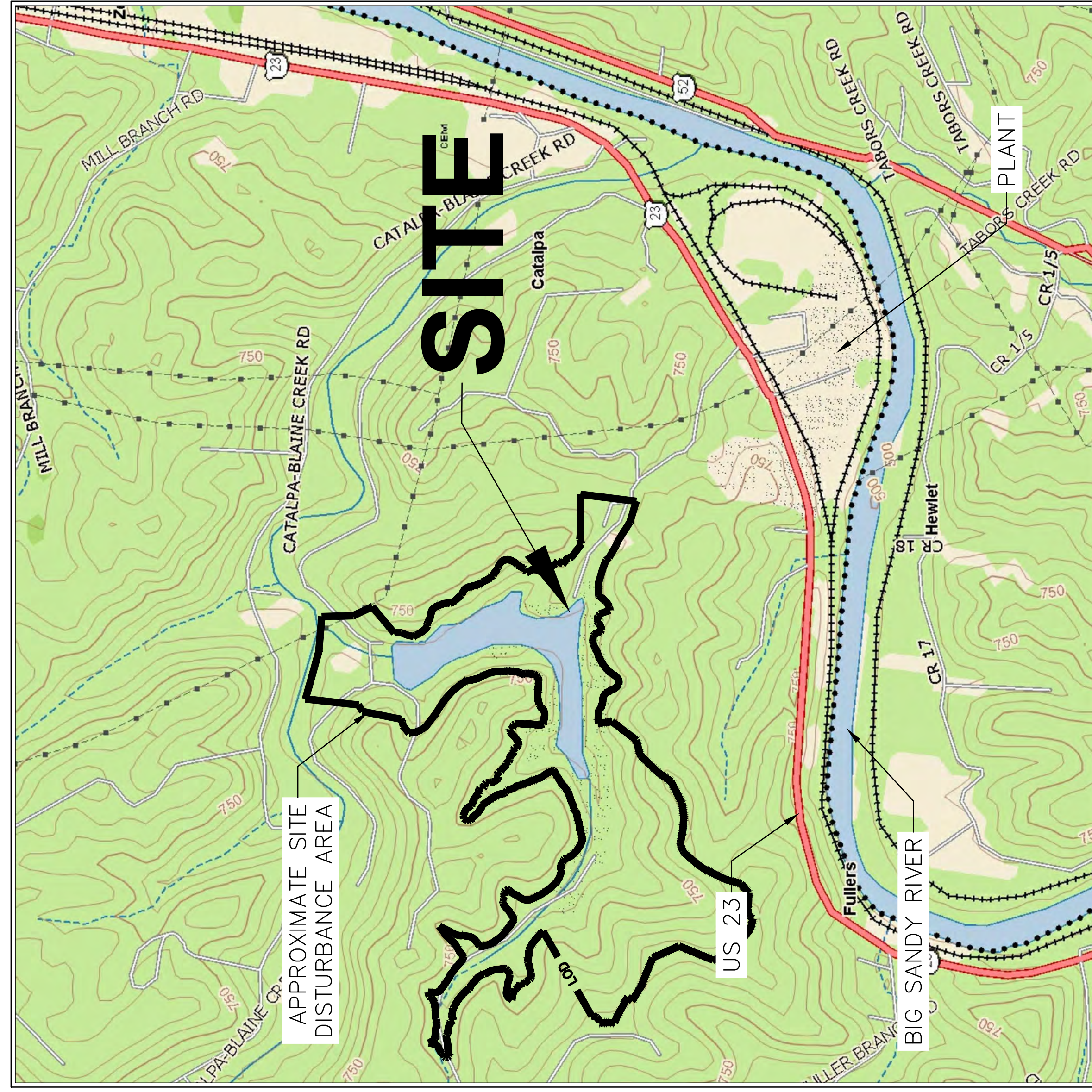
- 13-30160 - A
- 13-30161 - A
- 13-30162 - A
- 13-30163 - A
- 13-30164 - A
- 13-30165 - A
- 13-30166 - A
- 13-30167 - A
- 13-30168 - A
- 13-30169 - A
- 13-30170 - A
- 13-30171 - A
- 13-30172 - A
- 13-30173 - A

DWG. DESCRIPTION

- COVER SHEET
- CURRENT SITE CONDITIONS
- DEVELOPMENT PLAN 1
- DEVELOPMENT PLAN 2
- CROSS-SECTION 1
- CROSS-SECTION 2
- CROSS-SECTION 3
- CROSS-SECTION 4
- CROSS-SECTION 5
- CROSS-SECTION 6
- CROSS-SECTION 7
- BASELINE PROFILES
- SITE DEVELOPMENT
- CONSTRUCTION DETAILS
- ATTACHMENT 20, SHEET 1
- ATTACHMENT 20, SHEET 2A
- ATTACHMENT 20, SHEET 2B
- ATTACHMENT 20, SHEET 3A
- ATTACHMENT 20, SHEET 3B
- ATTACHMENT 20, SHEET 3C
- ATTACHMENT 20, SHEET 3D
- ATTACHMENT 20, SHEET 3E
- ATTACHMENT 20, SHEET 3F
- ATTACHMENT 20, SHEET 3G
- ATTACHMENT 20, SHEET 4
- ATTACHMENT 20, SHEET 5
- ATTACHMENT 20, SHEET 6

ATTACHMENT

- ATTACHMENT 20, SHEET 1
- ATTACHMENT 20, SHEET 2A
- ATTACHMENT 20, SHEET 2B
- ATTACHMENT 20, SHEET 3A
- ATTACHMENT 20, SHEET 3B
- ATTACHMENT 20, SHEET 3C
- ATTACHMENT 20, SHEET 3D
- ATTACHMENT 20, SHEET 3E
- ATTACHMENT 20, SHEET 3F
- ATTACHMENT 20, SHEET 3G
- ATTACHMENT 20, SHEET 4
- ATTACHMENT 20, SHEET 5
- ATTACHMENT 20, SHEET 6



PREPARED FOR:
AMERICAN ELECTRIC POWER
1 RIVERSIDE PLAZA
COLUMBUS, OHIO 43215

PREPARED BY:
URS CORPORATION
1375 EUCLID AVENUE, SUITE 600
CLEVELAND, OH 44115
PHONE (216) 622-2400
ATTN: THOMAS A. KOVACIC, P.E.

DATE	NO.	DESCRIPTION	APPRO.

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR INFORMATION ONLY. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF AMERICAN ELECTRIC POWER SERVICE CORP. FOR ANY PURPOSES OTHER THAN TO YOUR INTEREST, AND IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISA

COVER SHEET

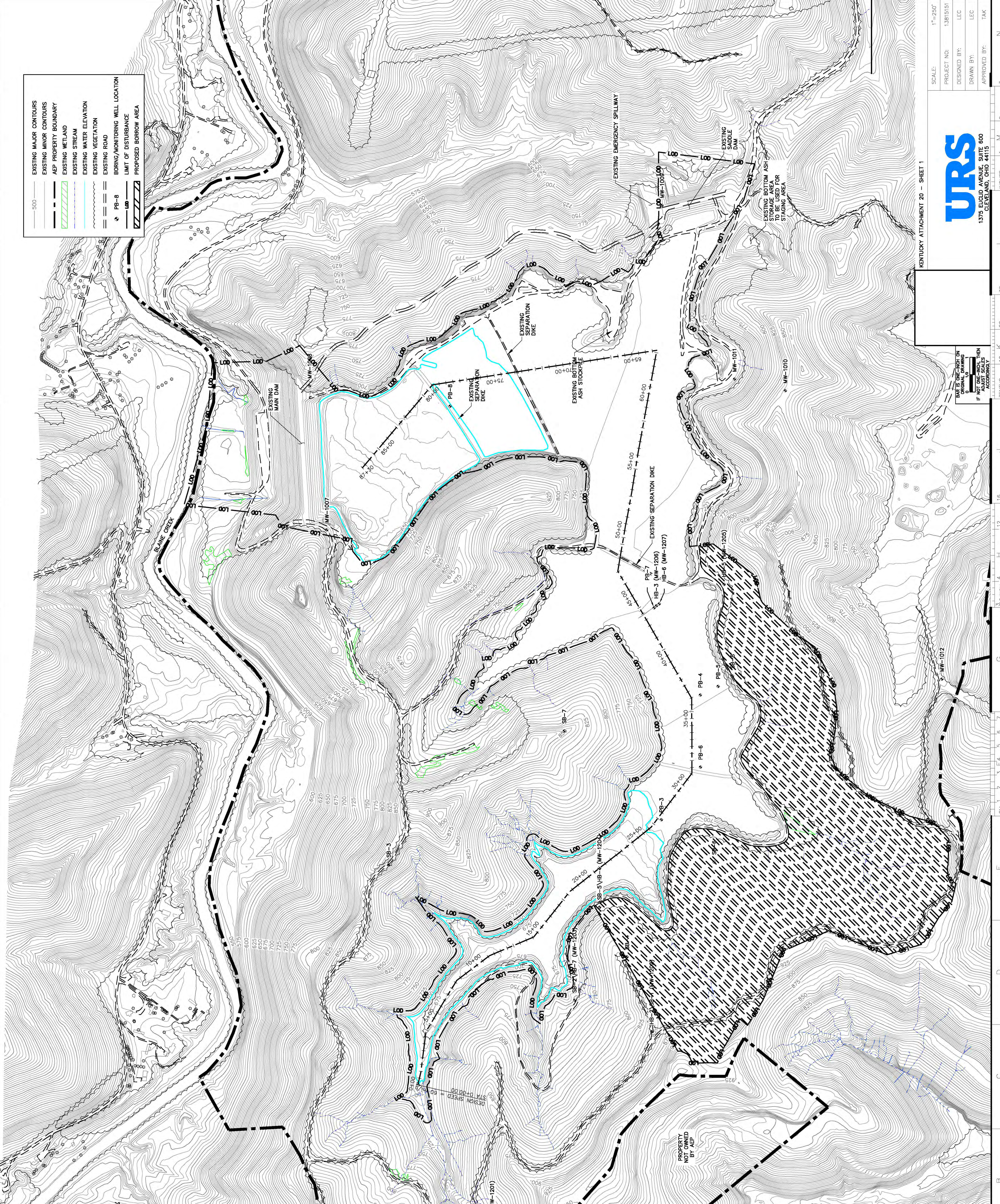
DWG. NO: 13-30160-A

SCALE	DATE	BY	APP'D	CHK'D	DATE
CIVIL ENGINEERING DIVISION					

DESIGNED BY: LEC
DRAWN BY: LEC
CHECKED BY: LEC
APPROVED BY: TAK



SCALE IS ONE-INCH ON DRAWING EQUALS 10 FEET FOR ALL DIMENSIONS UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.



NOTES:

1. TOPOGRAPHY PROVIDED BY HENDERSON AERIAL SURVEYS INC (BROVE CITY, OHIO) SURVEY PERFORMED ON MARCH 9, 2007 WITH CONTOUR INTERVAL OF 2 FT. METRIC SURVEYS PERFORMED BY AEP NEAR THE MAIN DAM ON 8/23/10 AND IN THE BACK SECTION OF THE POND ON 4/12/12. ASH AREAS ESTIMATED BASED ON A SURVEY PERFORMED BY AEP IN APRIL 2013.
2. THE FINAL ELEVATION OF THE CCP MATERIAL AT CLOSURE IS HIGHLY VARIABLE. THIS IS DIRECTLY RELATED TO THE BURIED BENEATH NOW AND THE TIME OF CLOSURE. THIS IS DIRECTLY RELATED TO THE VARIATIONS IN THE LOADS WITH OTHER REGIONAL POWER PLANTS, AND THE ASH CONTENT OF THE MATERIAL. THESE VARIATIONS WILL VARY CONSIDERABLY THROUGHOUT THE REMAINING LIFE OF THE BIG SANDY PLANT.
3. THE CLOSURE GRADES PRESENTED ARE BASED ON ESTIMATES OF THE AMOUNT OF ASH TO BE PRODUCED BETWEEN THE MOST EXTREME CLOSURE GRADES. INTENDED TO REPRESENT THE GENERAL GRADING GRADES FOR PORTIONS OF THE FACILITY FOOTPRINT OR THE ENTIRE FOOTPRINT MAY VARY. THESE GRADES ARE INTENDED TO BE APPROXIMATE GRADES OF APPROXIMATELY 25%.

LEGEND:

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- AEP PROPERTY BOUNDARY
- EXISTING METLAND
- EXISTING STREAM
- EXISTING WATER ELEVATION
- EXISTING VEGETATION
- EXISTING ROAD
- BORING/MONITORING WELL LOCATION
- LIMIT OF DISTURBANCE
- PROPOSED BORROW AREA



URS
1375 EUCLID AVENUE, SUITE 600
GREENVILLE, OHIO 45415

KENTUCKY ATTACHMENT 20 - SHEET 1

SCALE:	1"=250'
PROJECT NO.:	13815151
DESIGNED BY:	LEC
DRAWN BY:	LEC
APPROVED BY:	TAK

KENTUCKY POWER COMPANY
BIG SANDY PLANT
KENTUCKY
CURRENT SITE CONDITIONS
ATTACHMENT 20

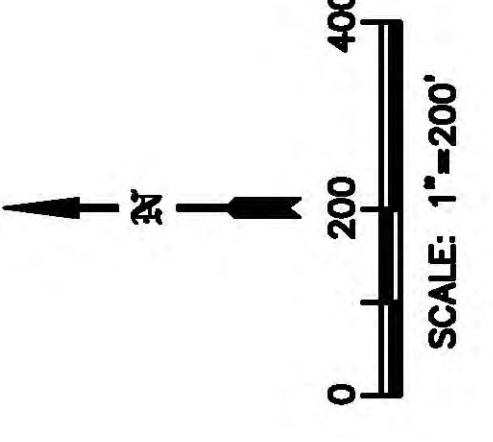
DWG. NO. 13-30161-A
DIME ENGINEERING DIVISION

DATE	NO.	DESCRIPTION	APP'D.

"THE DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR USE ONLY. IT IS NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF THE AEP SERVICE CORP. OR AEP SERVICE CORP. AND IS TO BE RETURNED UPON REQUEST."

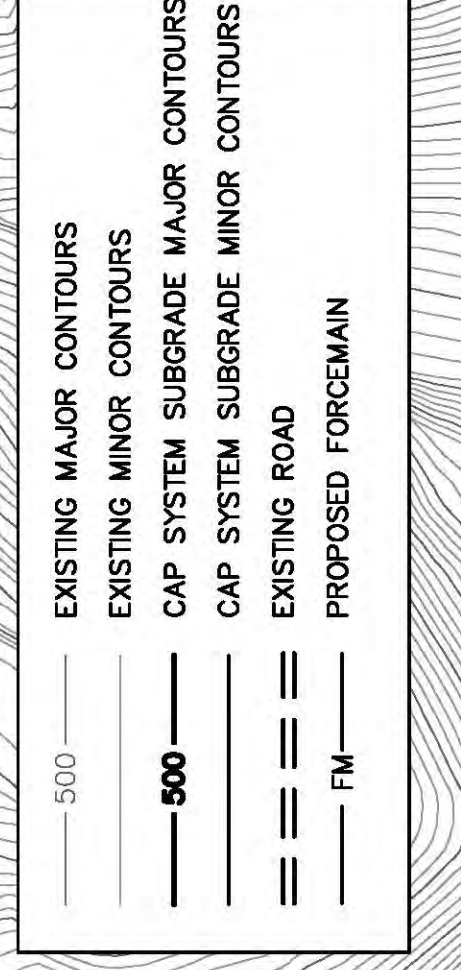
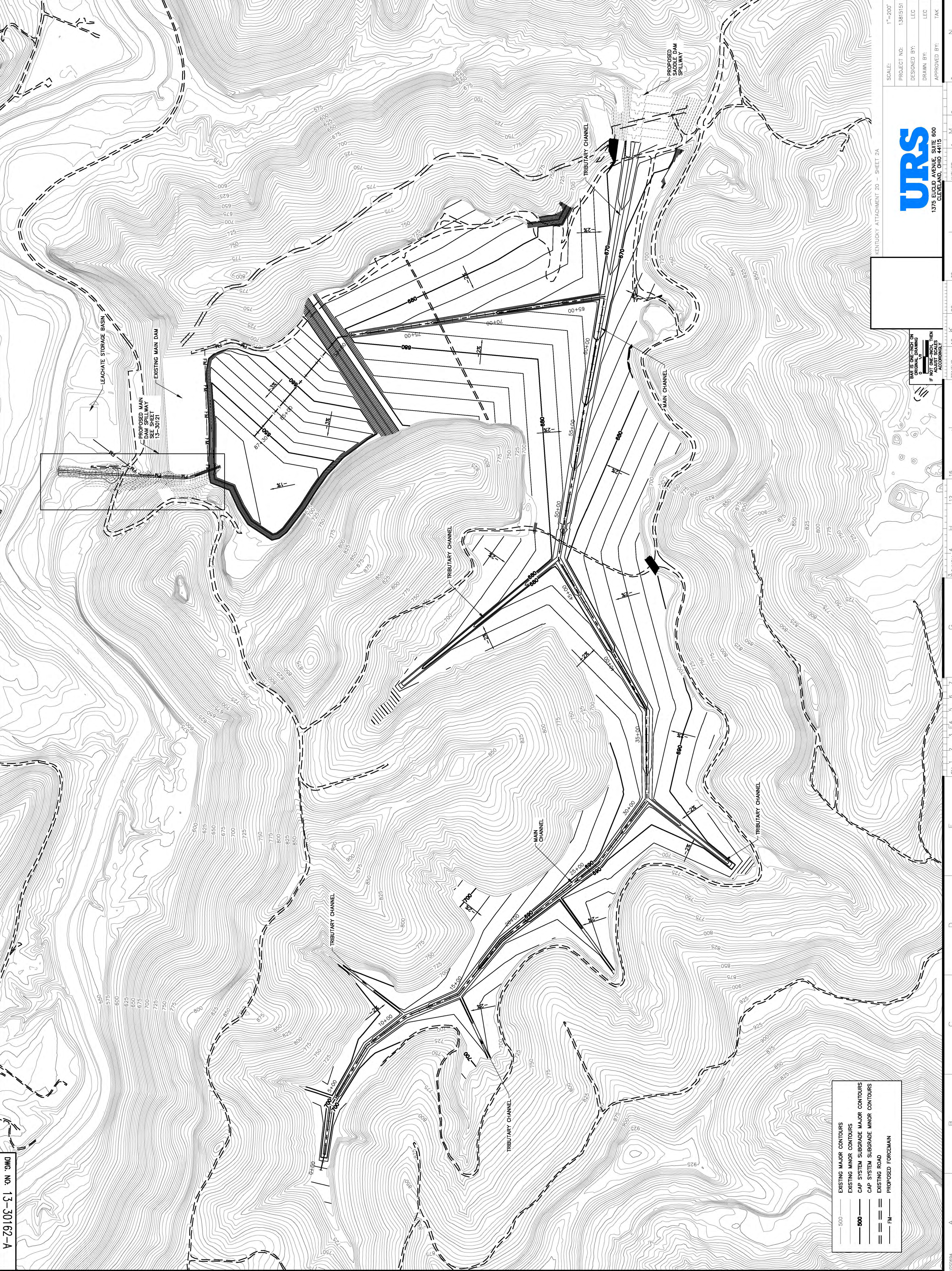
AEP SERVICE CORP.
COLUMBUS, OH 43216

DWG. NO. 13-30162-A



NOTES:

1. TOPOGRAPHY PROVIDED BY HENDERSON AERIAL SURVEYS INC. (GROVE CITY, OHIO) ON 8/23/10 AND IN THE BACK SECTION OF THE POND ON 4/12/12. ASH AREAS ESTIMATED BASED ON A SURVEY PERFORMED BY AEP IN APRIL 2013.
2. THE FINAL ELEVATION OF THE CCP MATERIAL AT CLOSURE IS HIGHLY VARIABLE AND WILL VARY WITH THE TIME OF BURIED BETWEEN NOW AND THE TIME OF CLOSURE. THIS IS DIRECTLY RELATED TO PLANTS, AND THE ASH CONTENT OF THE MATERIAL. THE REMAINING LIFE OF THE PLANT WILL VARY CONSIDERABLY THROUGHOUT THE REMAINING LIFE OF THE BIG SANDY PLANT.
3. THE CLOSURE GRADES PRESENTED ARE BASED ON ESTIMATES OF THE AMOUNT OF CLOSURE GRADES DEPICED ARE INTENDED CONCEPT AT CLOSURE. ACTUAL CLOSURE GRADES FOR PORTIONS OF THE FACILITY WILL VARY 2 TO 10 FEET, AS NEEDED. IT IS INTENDED THAT THE MAJORITY OF THE SITE WILL BE APPROXIMATELY 2% A MINIMUM GRADE OF APPROXIMATELY 25%.



URS
1375 EUCLID AVENUE SUITE 600
GREENWOOD VILLAGE, CO 80120
TEL: 303.733.4700
WWW.URS.COM

DATE IS ONE INCH ON
DRAWING OR
ADJUST SCALES
ACCORDINGLY

KENTUCKY ATTACHMENT 20 - SHEET 2A

SCALE:	1"=200'
PROJECT NO.:	13815151
DESIGNED BY:	LEC
DRAWN BY:	LEC
APPROVED BY:	TAK

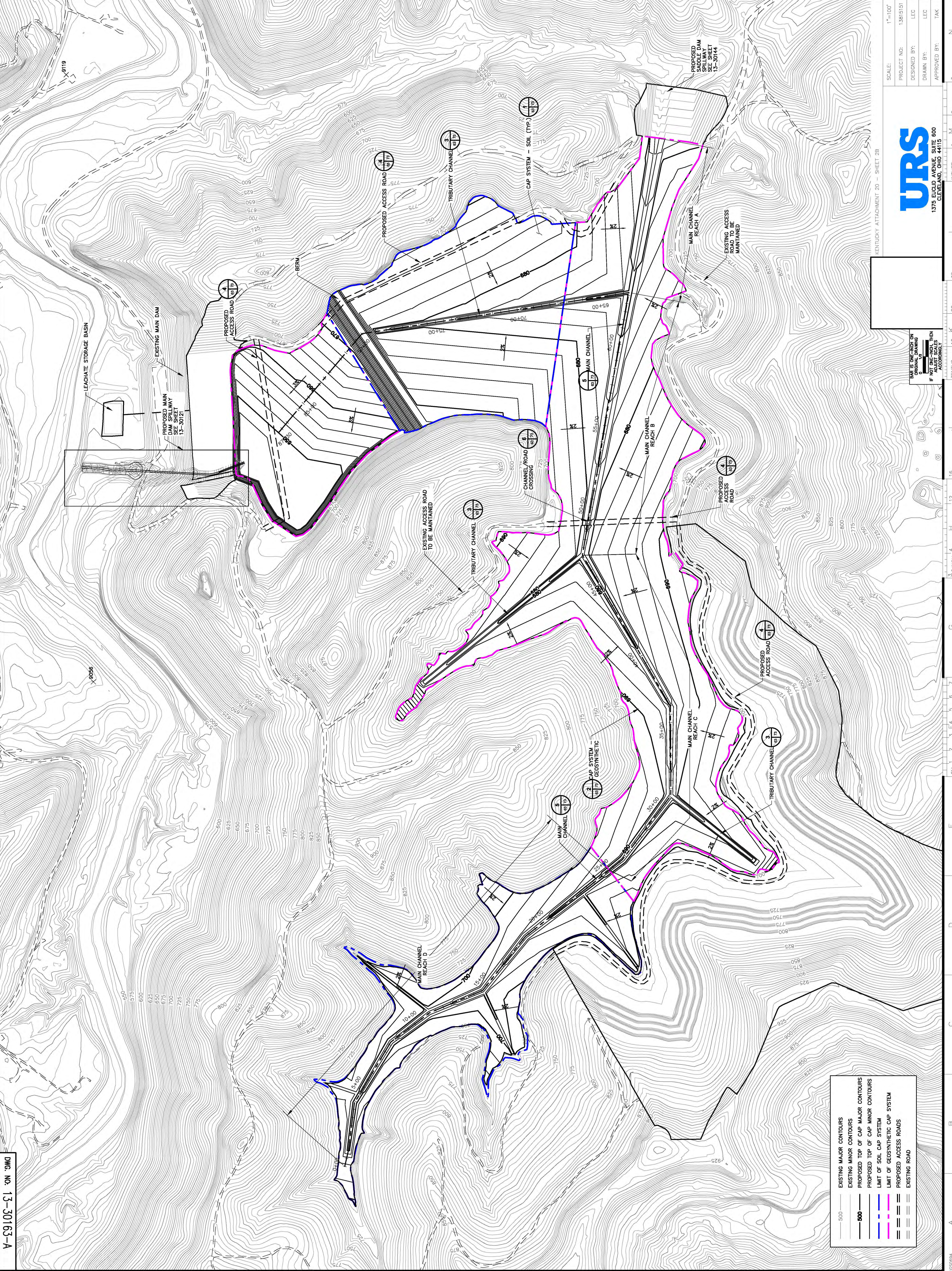
DWG. NO. 13-30162-A

AMERICAN ELECTRIC POWER
BIG SANDY PLANT
LOUISIANA KENTUCKY
DEVELOPMENT PLAN 1
CAP SYSTEM SUBGRADE
ATTACHMENT 20

THE DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED UPON CONDITION THAT IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF THE AEP SERVICE CORP. OR AMERICAN ELECTRIC POWER. THIS DRAWING AND IS TO BE RETURNED UPON REQUEST.

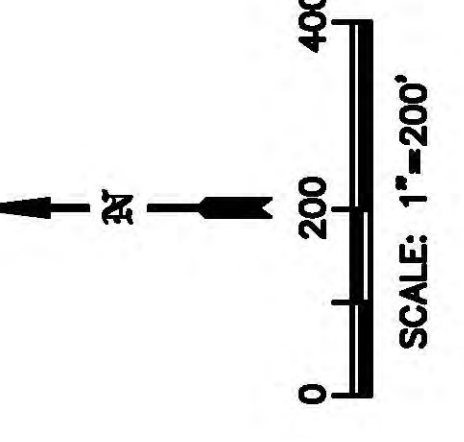
DATE	NO.	DESCRIPTION	APPROV.

A-13-30163-A



NOTES:

1. TOPOGRAPHY PROVIDED BY HENDERSON AERIAL SURVEYS INC (GROVE CITY, OHIO) ON 11/11/10. SURVEY CONDUCTED WITH CONTOUR INTERVAL OF 2 FT. SURVEYS PERFORMED BY AEP NEAR THE MAIN DAM ON 8/23/10 AND IN THE BACK SECTION OF THE DAM ON 4/12/12. ASH AREAS ESTIMATED BASED ON A SURVEY PERFORMED BY AEP IN APRIL 2013.
2. THE FINAL ELEVATION OF THE CCP MATERIAL AT CLOSURE IS HIGHLY VARIABLE AND WILL BE DETERMINED BY THE TYPICAL BURIED BETWEEN NOW AND THE TIME OF CLOSURE. THIS IS DIRECTLY RELATED TO THE VARIATION IN THE AMOUNT OF ASH LOADS WITH OTHER REGIONAL POWER PLANTS, AND THE ASH CONTENT OF THE ASH. THIS VARIATION WILL CAUSE THE REMAINING LIFE OF THE BIG SANDY.
3. THE CLOSURE GRADES PRESENTED ARE BASED ON ESTIMATES OF THE AMOUNT OF ASH TO BE PRODUCED BETWEEN THE MOST AGGRESSIVE CLOSURE SCENARIOS. THESE TO REPRESENT THE GENERAL GRADING GRADES FOR PORTIONS OF THE FACILITY FOOTPRINT OR THE ENTIRE FOOTPRINT MAY VARY. THESE GRADING GRADES WERE INTENDED THAT THE MAJORITY OF THE SITE WILL HAVE A TYPICAL GRADE OF APPROXIMATELY 0.5% AND A MAXIMUM CWP GRADE OF APPROXIMATELY 25%.



DATE	NO.	DESCRIPTION	APPROVED

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED UNDER CONDITION THAT IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF THE AEP SERVICE CORP. OR ANY OF ITS AFFILIATES. THIS DRAWING IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
BIG SANDY PLANT
 LOUISIANA KENTUCKY
DEVELOPMENT PLAN 2
TOP OF CAP GRADES
ATTACHMENT 20
 DWG. NO. 13-30163-A

SCALE:	1"=100'
PROJECT NO.:	13815151
DESIGNED BY:	LEC
DRAWN BY:	LEC
DATE:	
APPROVED BY:	TAK



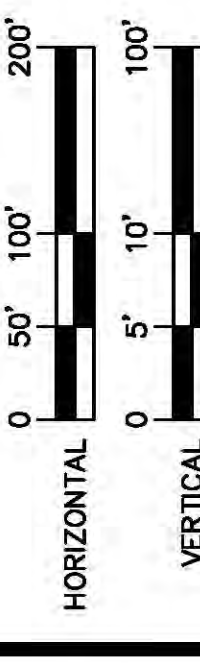
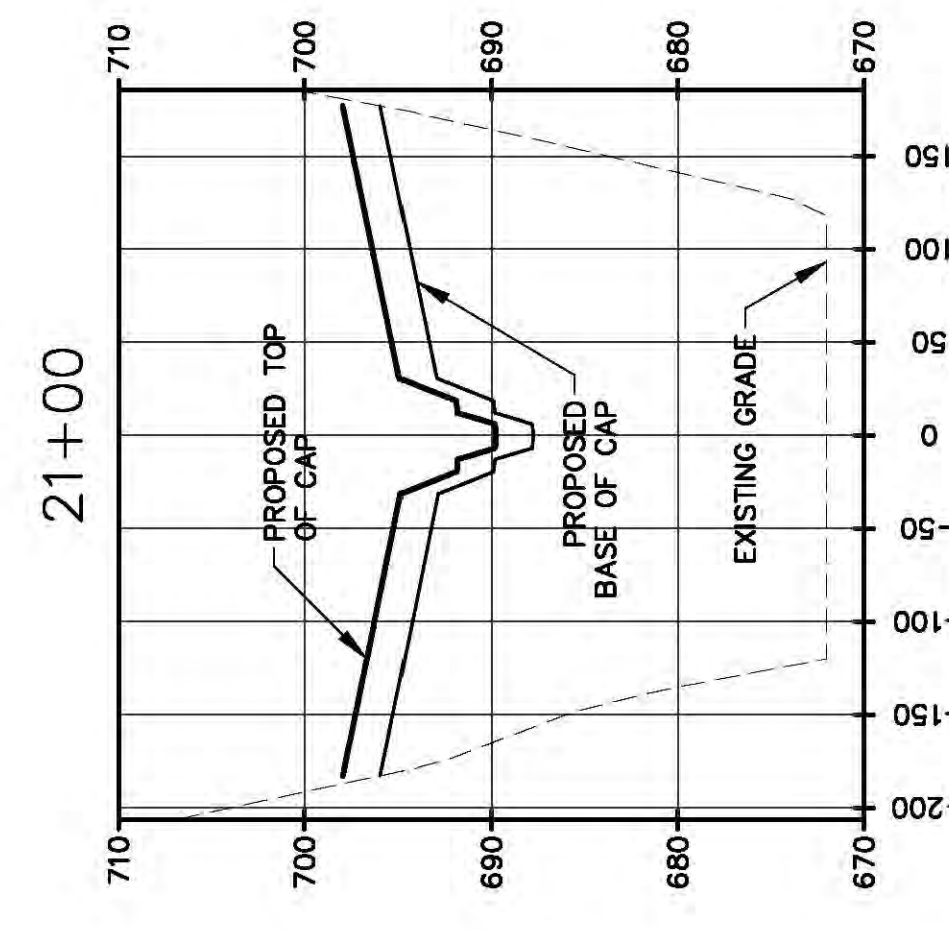
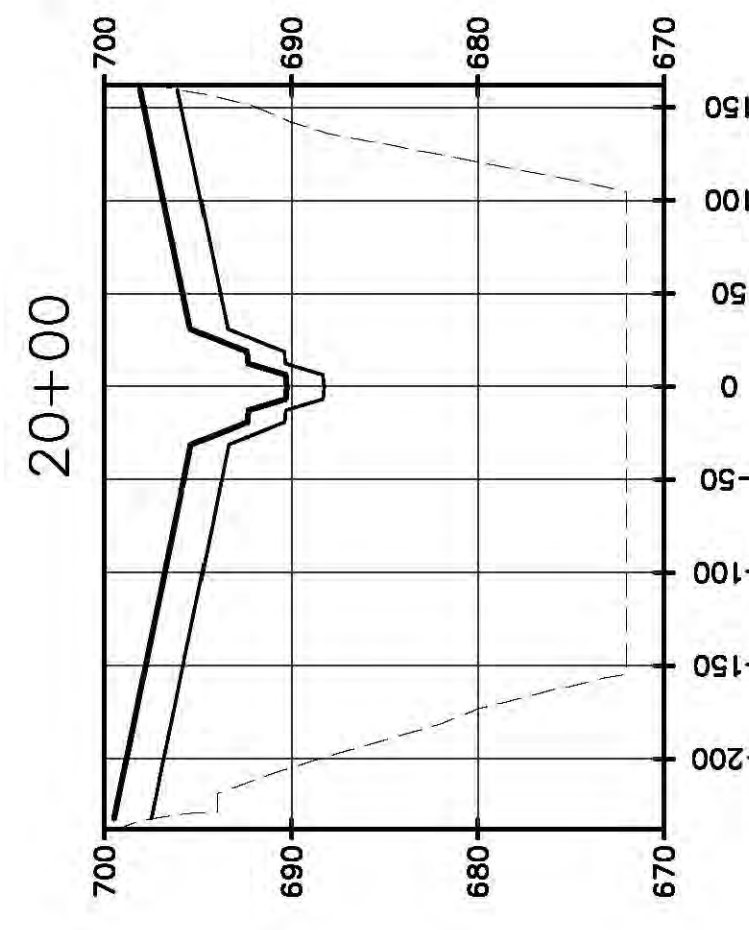
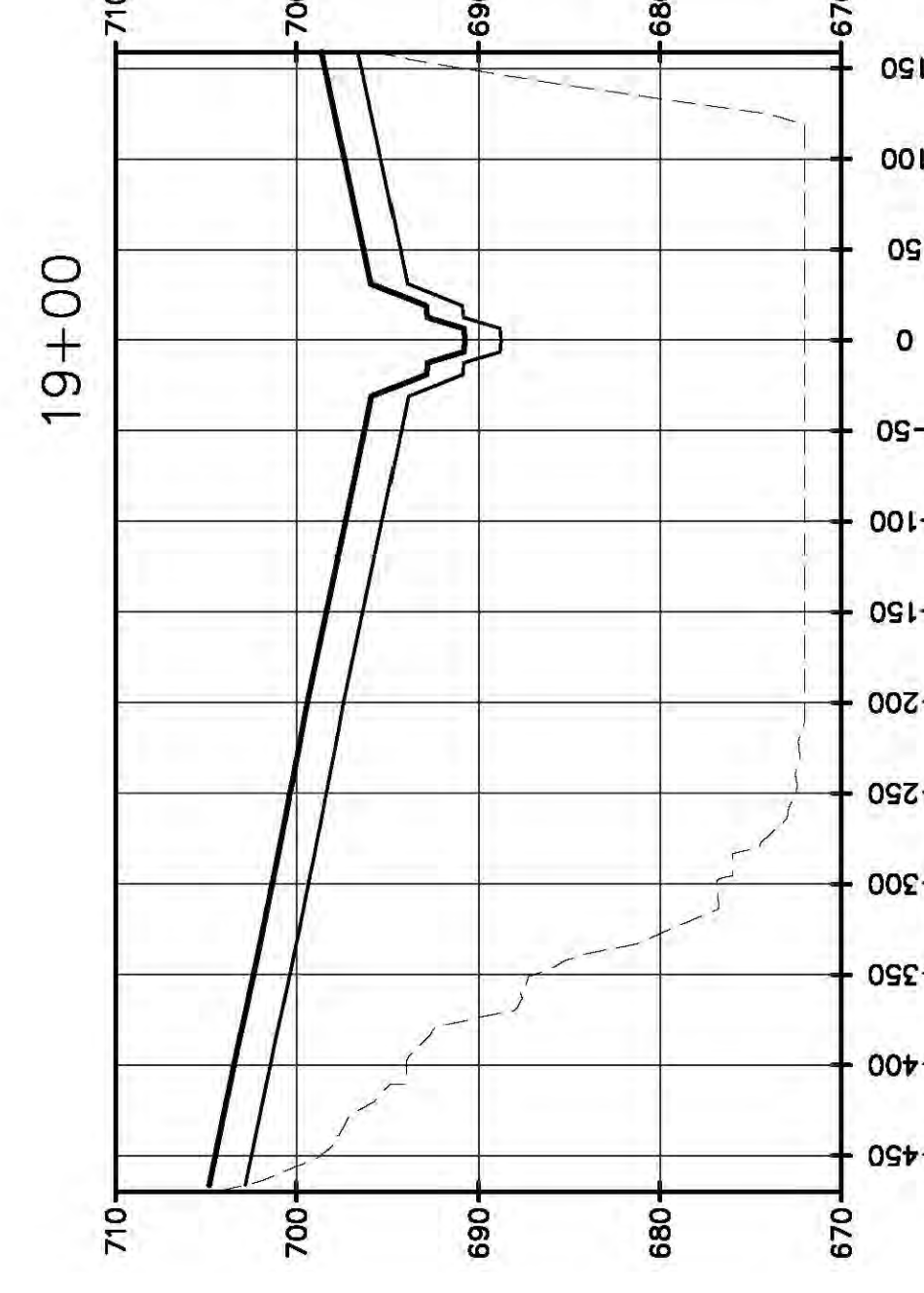
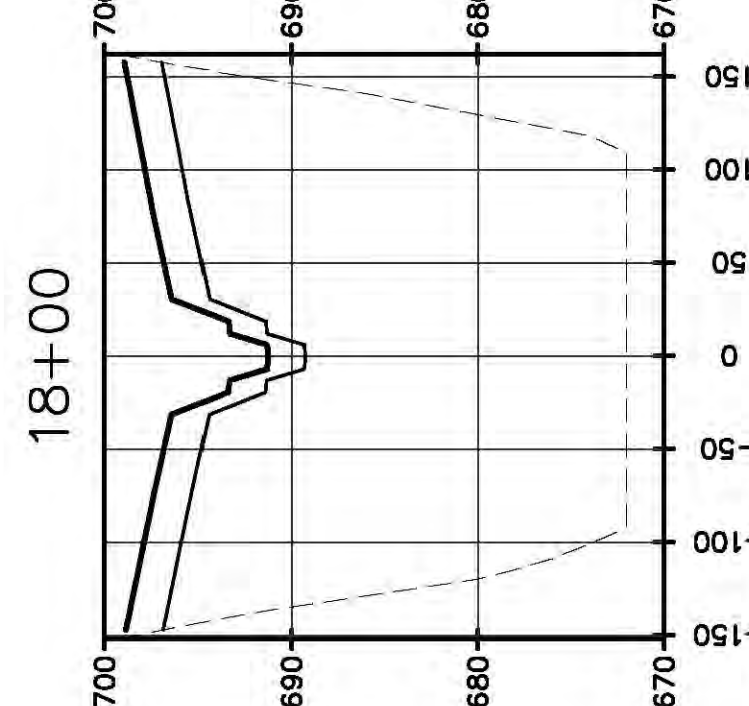
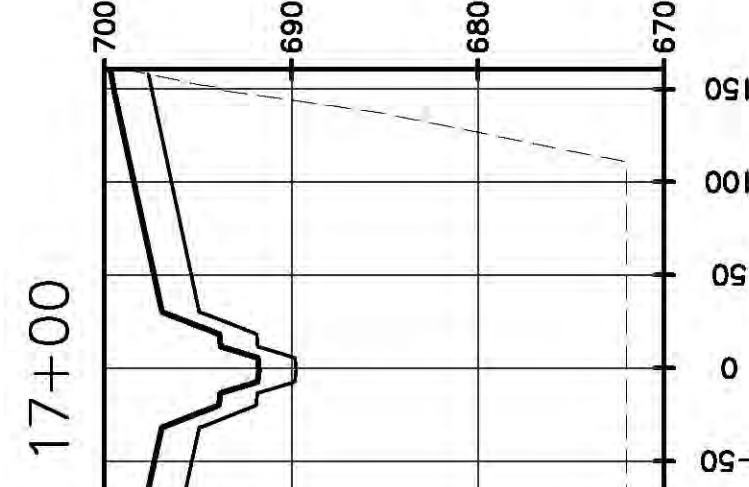
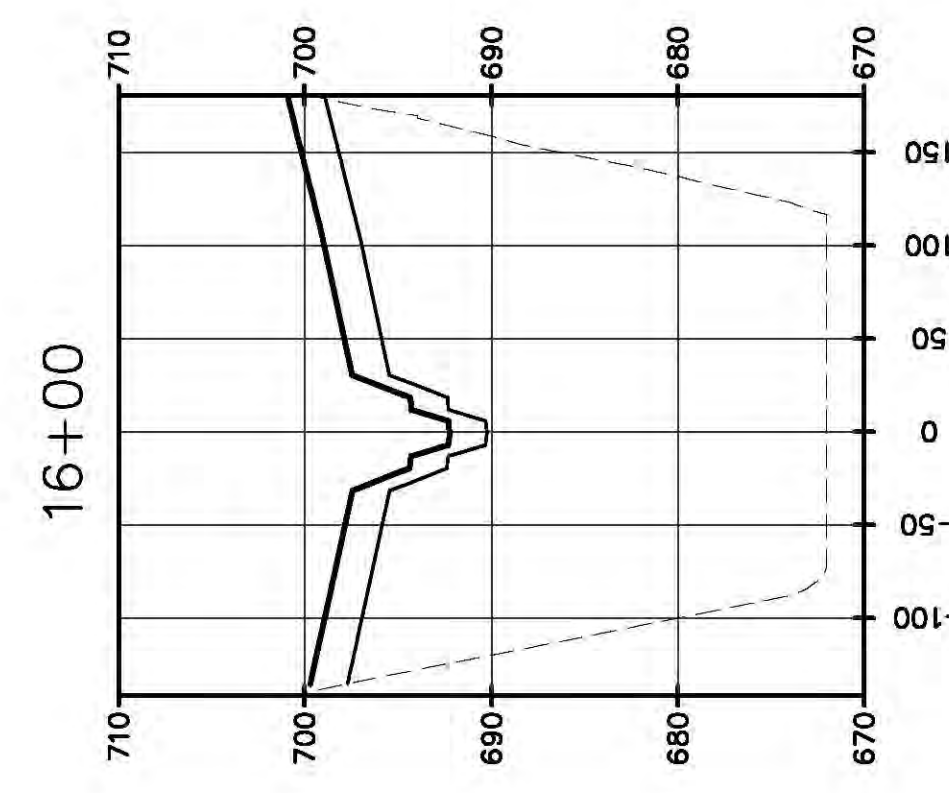
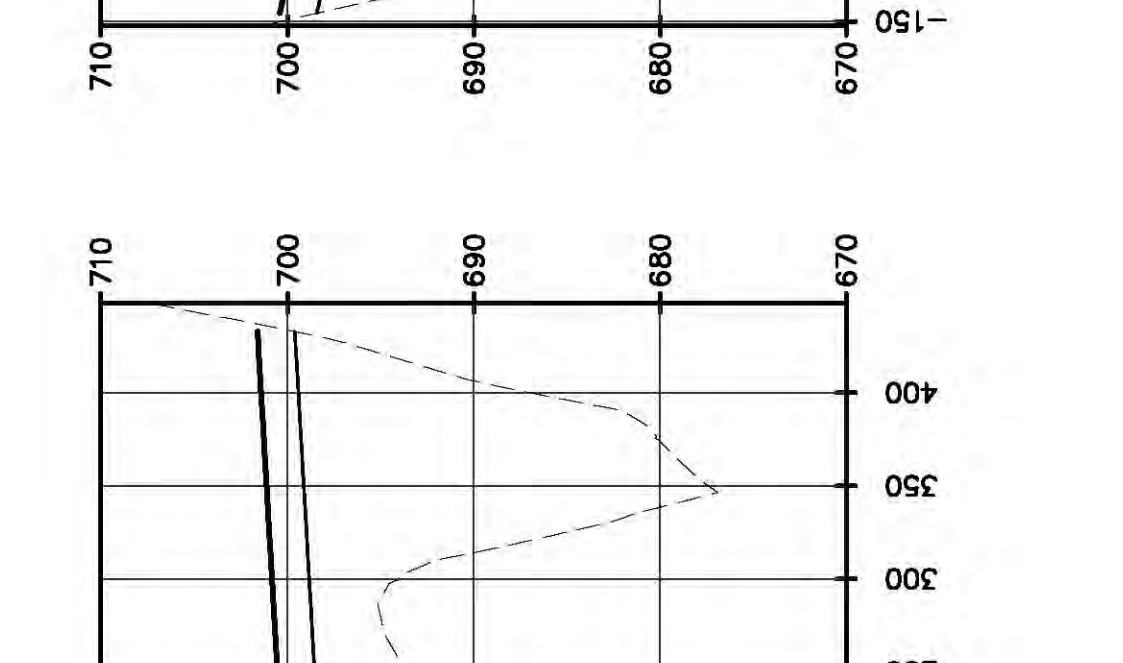
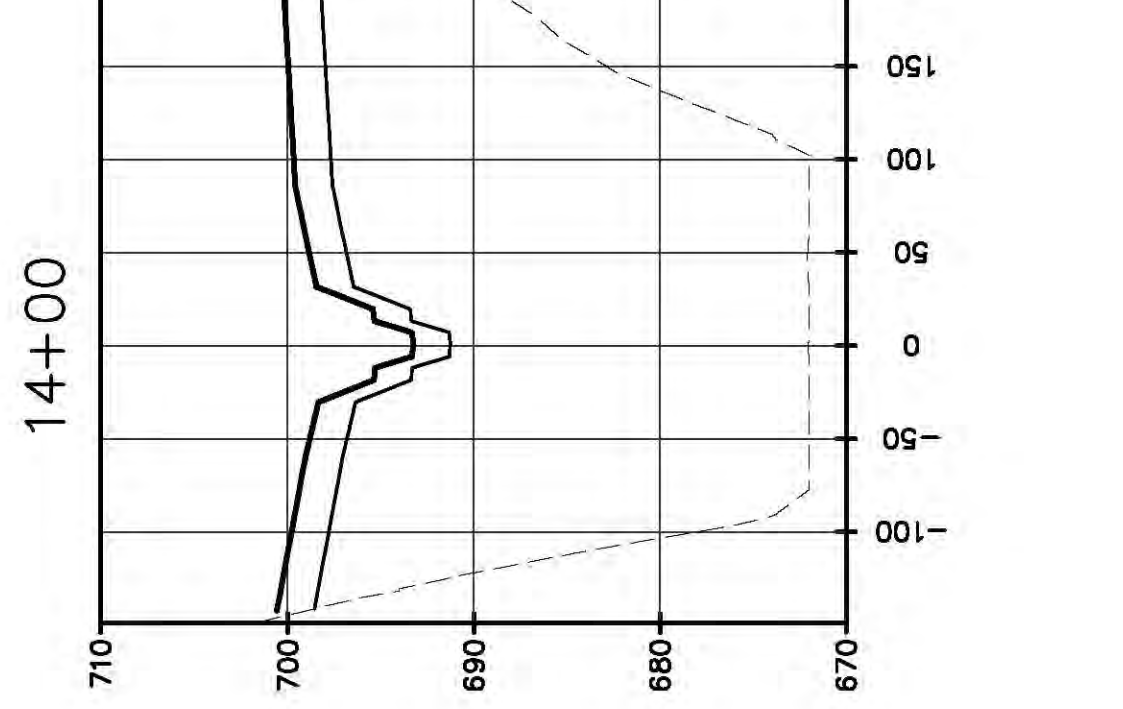
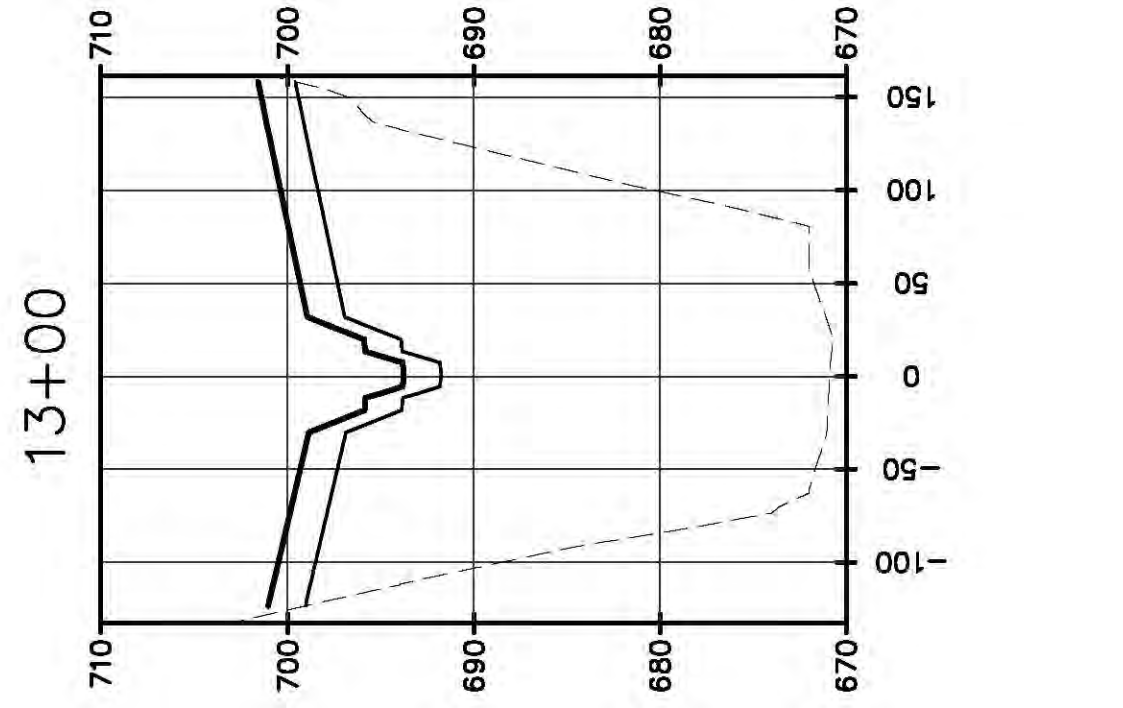
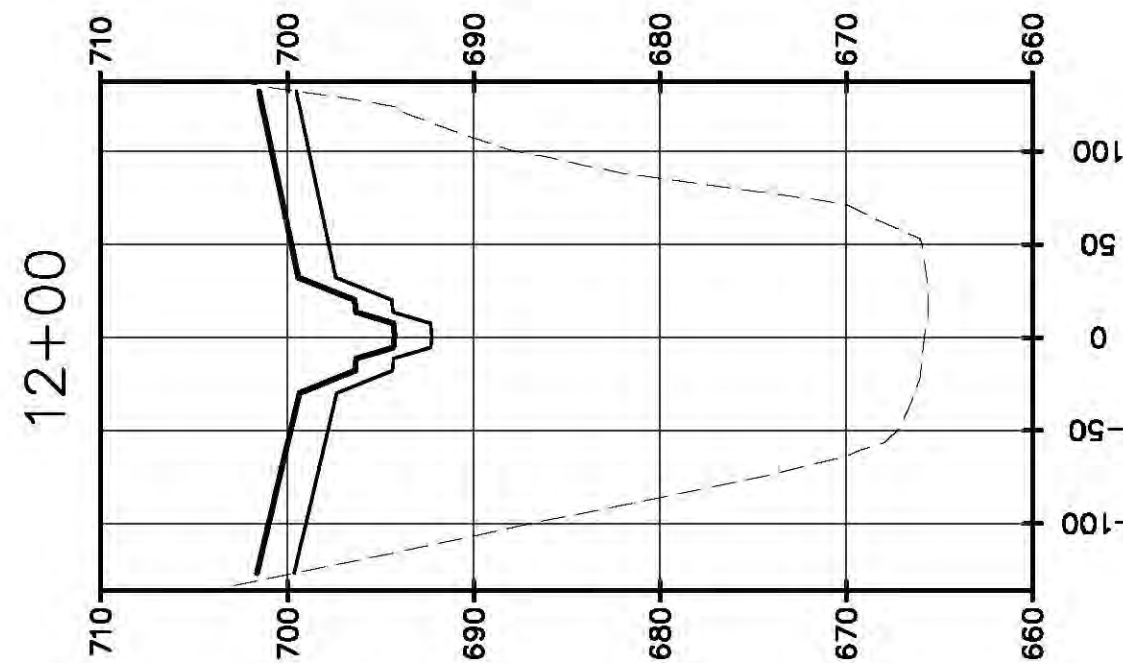
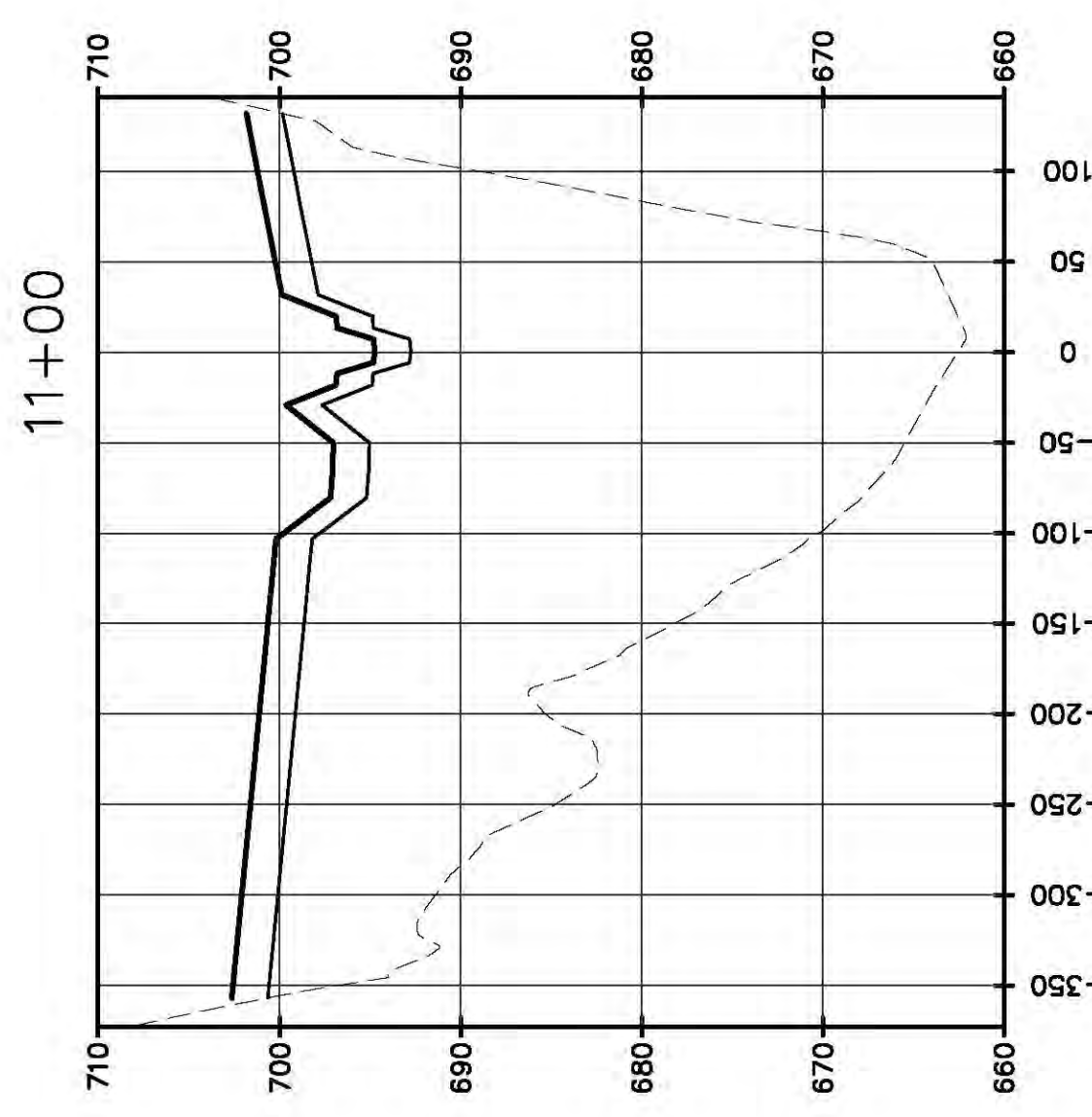
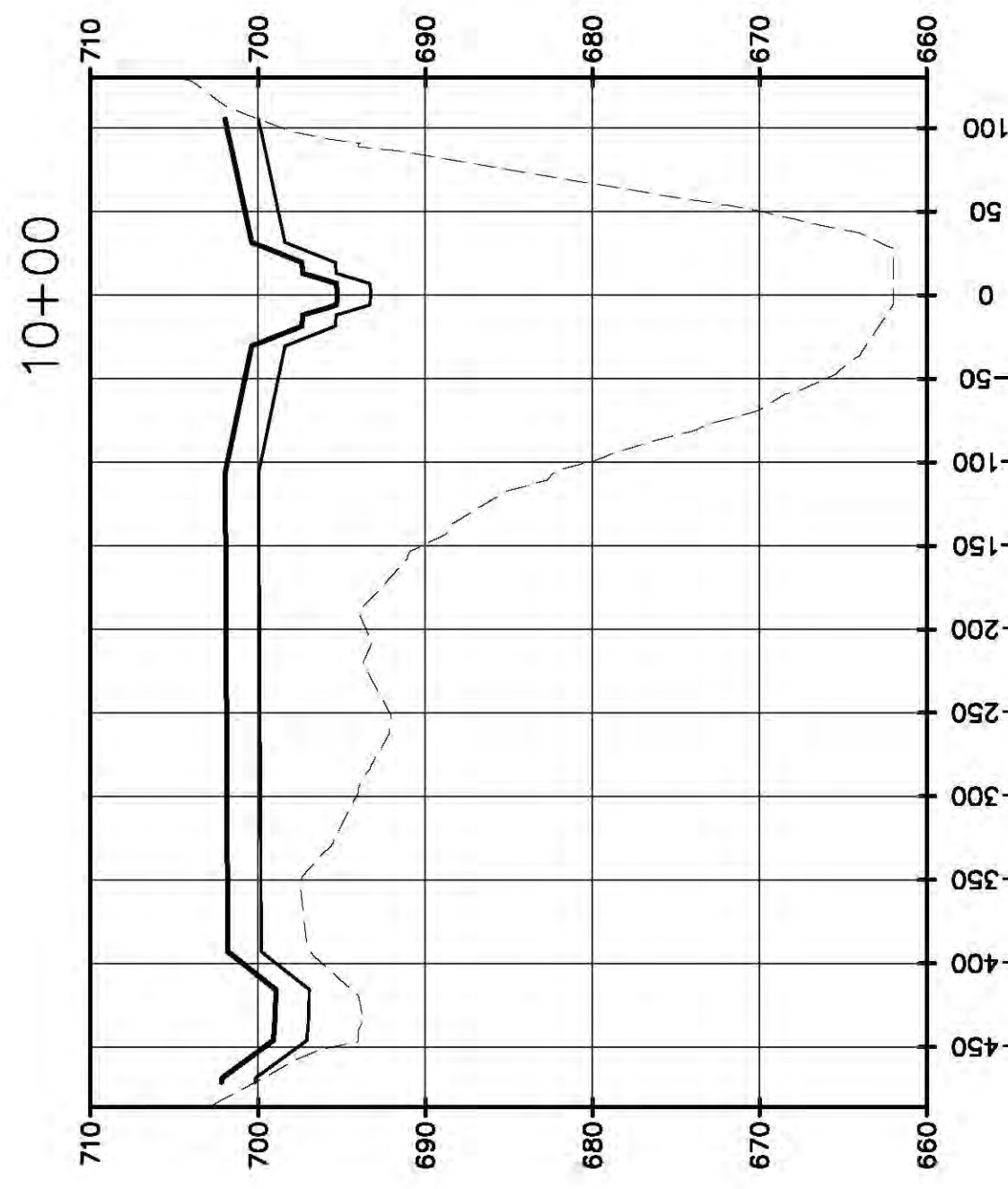
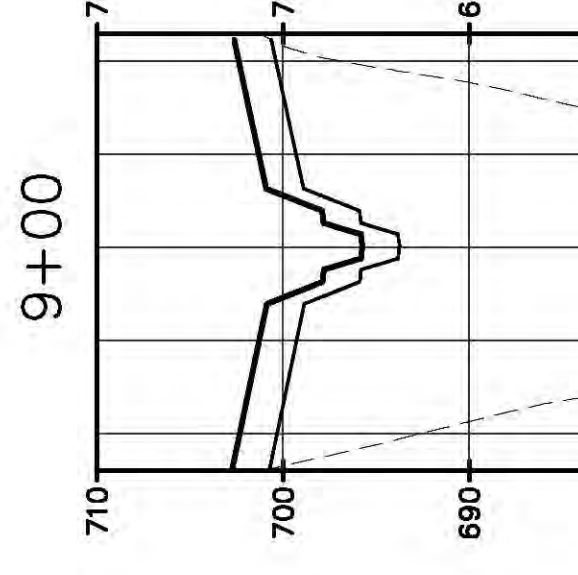
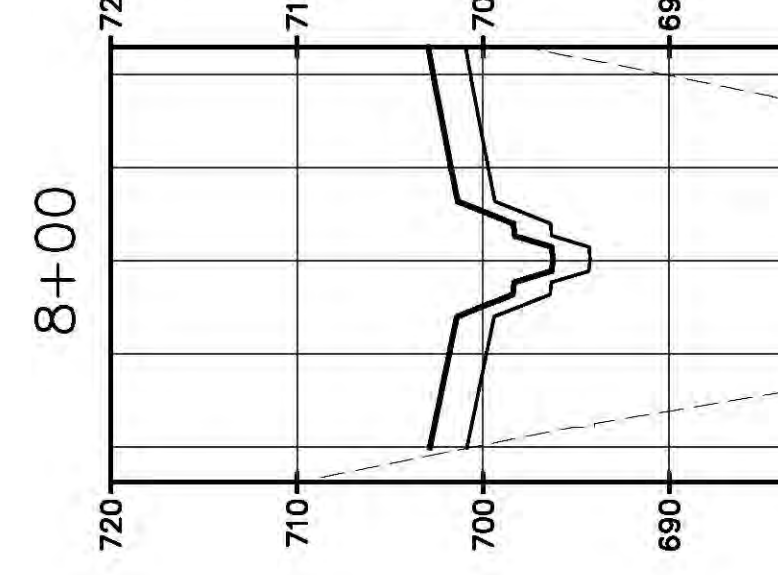
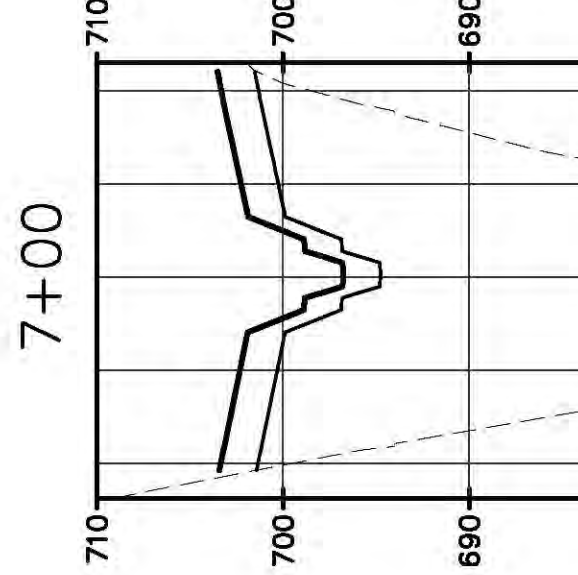
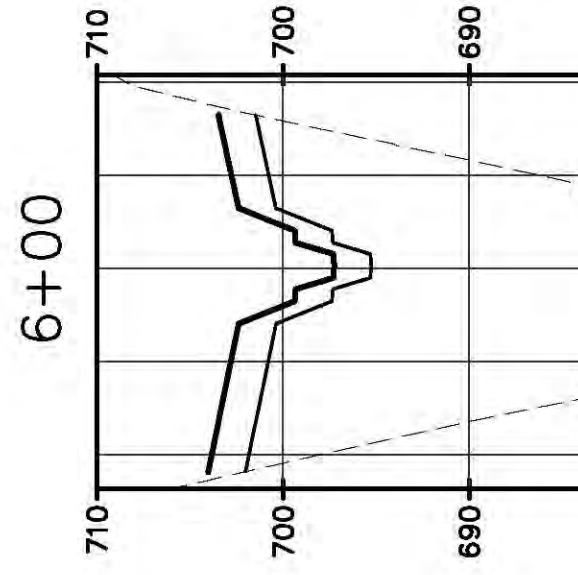
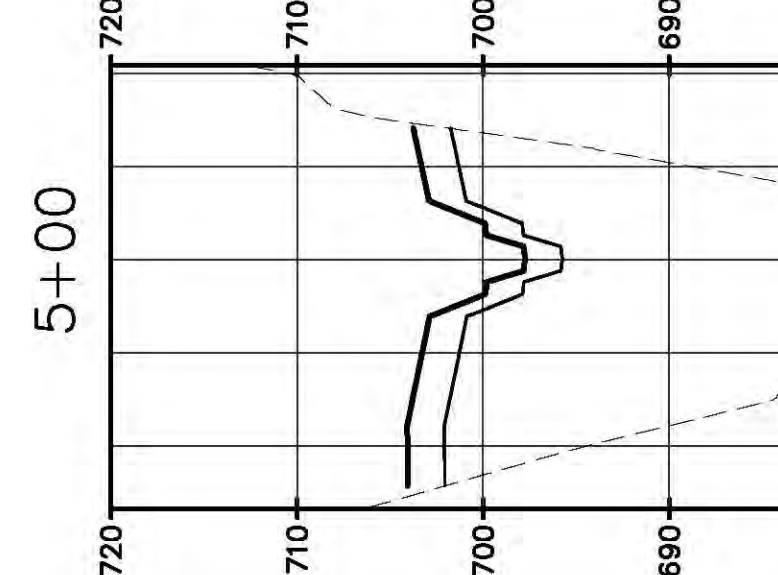
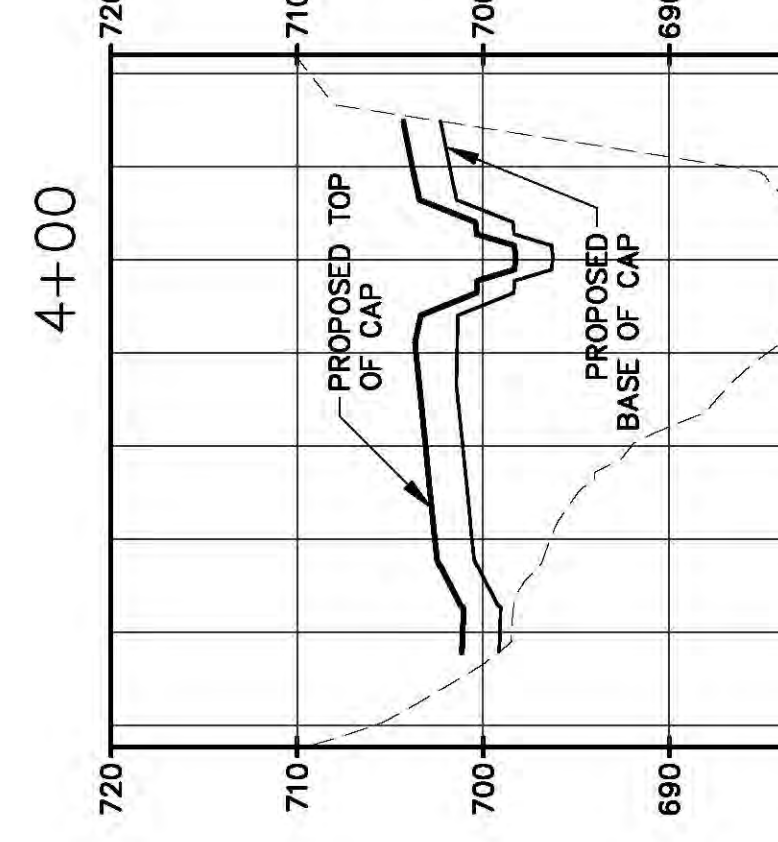
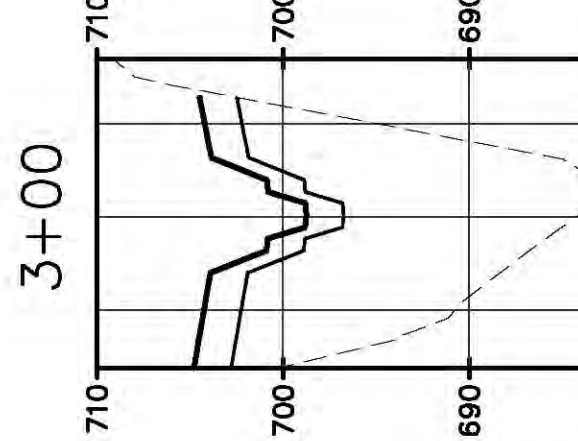
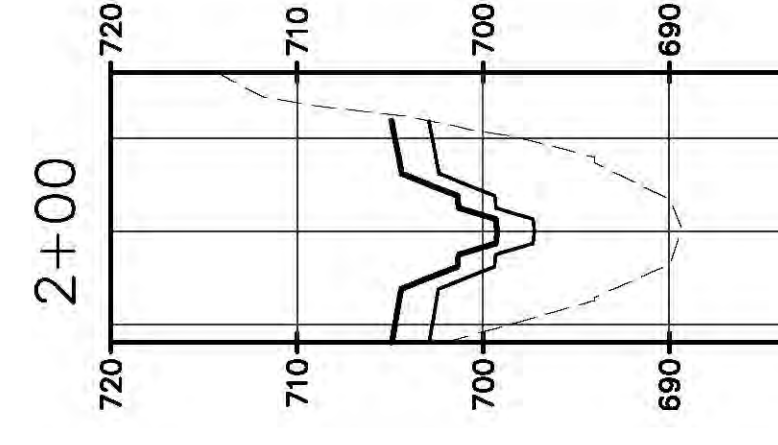
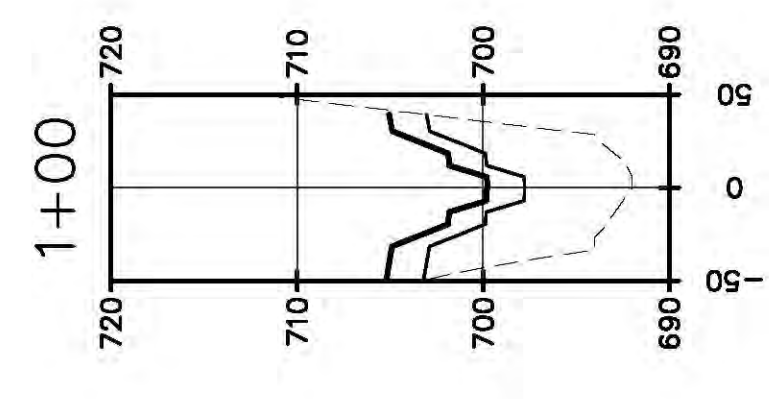
BAR IS ONE-INCH ON ORIGINAL DRAWING. ALL DIMENSIONS SHALL BE ADJUSTED TO FIT DRAWING ACCURATELY.

500	EXISTING MAJOR CONTOURS
600	EXISTING MINOR CONTOURS
---	PROPOSED TOP OF CAP MAJOR CONTOURS
---	PROPOSED TOP OF CAP MINOR CONTOURS
---	LIMIT OF SOIL CAP SYSTEM
---	PROPOSED ACCESS ROADS
---	EXISTING ROAD

KENTUCKY ATTACHMENT 20 - SHEET 2B

1525094

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63



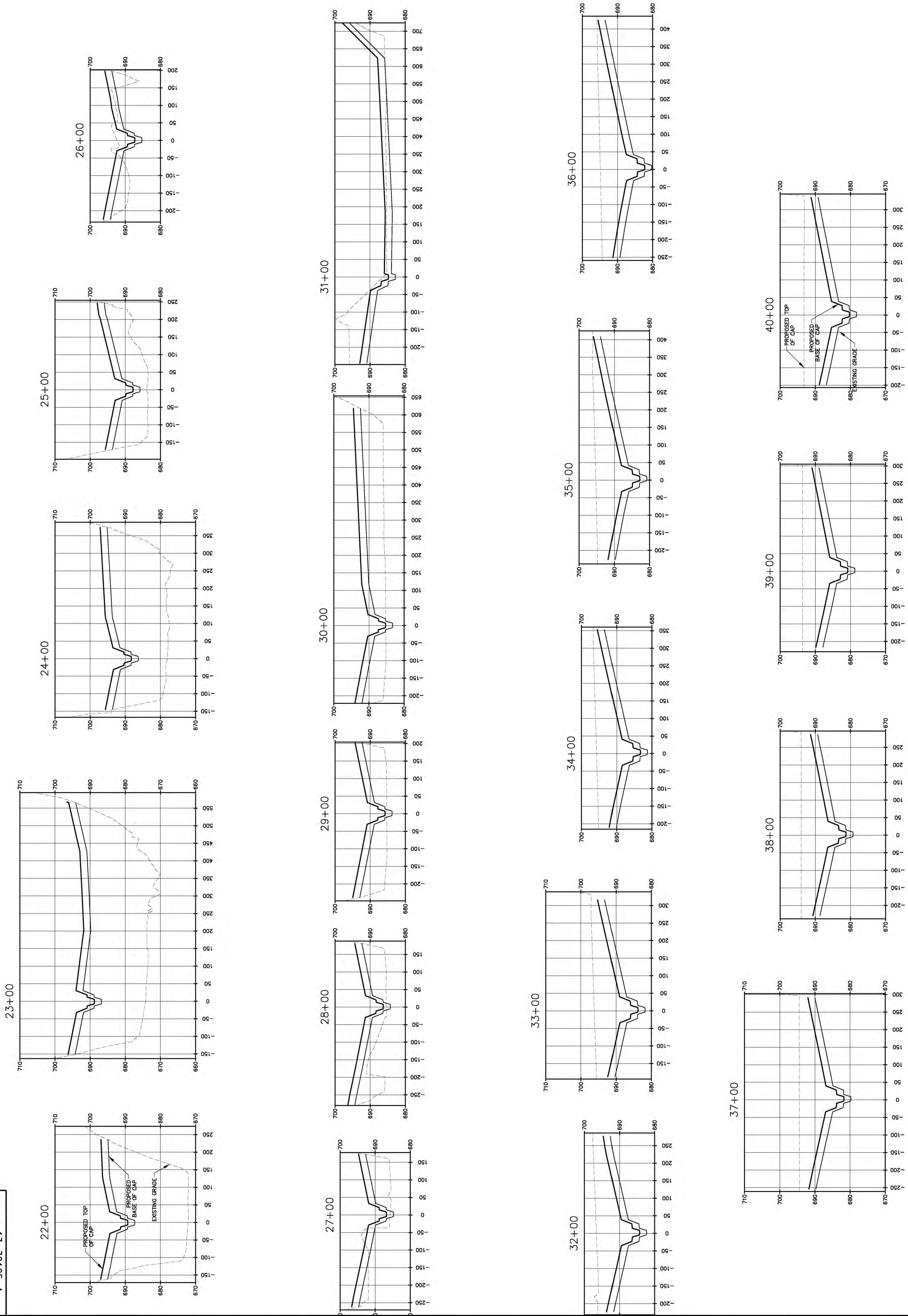
NOTES: 1. TOPOGRAPHY PROVIDED BY HENDERSON AERIAL SURVEYS INC. (GROVE CITY, OHIO) ... 2. THE FINAL ELEVATION OF THE CCP MATERIAL AT CLOSURE IS HIGHLY VARIABLE ... 3. THE CLOSURE GRADES PRESENTED ARE BASED ON ESTIMATES OF THE AMOUNT OF ASH ...

Table with columns: DATE, NO., DESCRIPTION, APPROVED.

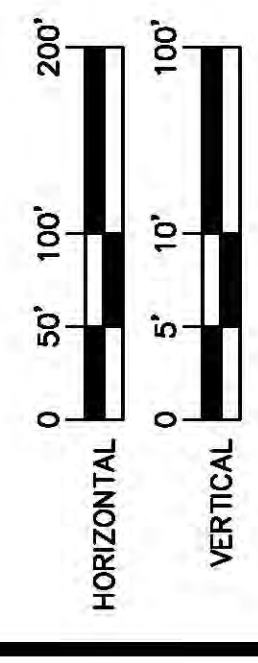
THE DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY ...

KENTUCKY POWER COMPANY KENTUCKY BIG SANDY PLANT CROSS SECTIONS 1 ATTACHMENT 20

Scale: DWG. NO. 13-30164-A. Includes URS logo and project details.



- NOTES:
1. TOPOGRAPHY PROVIDED BY HENDERSON AERIAL SURVEYS INC (GROVE CITY, OHIO) WAS OBTAINED FROM A SURVEY CONDUCTED ON MARCH 9, 2007 WITH A CONTOUR INTERVAL OF 2 FT. SURVEYS PERFORMED BY AEP NEAR THE MAIN DAM ON 8/23/10 AND IN THE BACK SECTION OF THE DAM ON 4/12/12. ASH DAM ELEVATIONS AND SURVEYED AREAS ESTIMATED BASED ON A SURVEY PERFORMED BY AEP IN APRIL 2013.
 2. THE FINAL ELEVATION OF THE CCP MATERIAL AT CLOSURE IS HIGHLY VARIABLE DEPENDING ON THE AMOUNT OF BURIED BETWEEN NOW AND THE TIME OF CLOSURE. THIS IS DIRECTLY RELATED TO THE ASH DAM'S OPERATIONAL LOADS WITH OTHER REGIONAL POWER PLANTS, AND THE ASH CONTENT OF THE ASH DAM. THESE FACTORS WILL VARY CONSIDERABLY THROUGHOUT THE REMAINING LIFE OF THE BIG SANDY PLANT.
 3. THE CLOSURE GRADES PRESENTED ARE BASED ON ESTIMATES OF THE AMOUNT OF ASH DAM BURIED BETWEEN NOW AND THE DATE OF CLOSURE. GRADES DERIVED ARE INTENDED TO PROVIDE A CONCEPTUAL CLOSURE CONCEPT AT CLOSURE. ACTUAL CLOSURE GRADES FOR PORTIONS OF THE FACILITY WILL VARY TO 10 FEET, AS NEEDED. IT IS INTENDED THAT THE MAJORITY OF THE SITE WILL BE AT APPROXIMATELY 2% A MINIMUM CAP GRADE OF APPROXIMATELY 25%.



DATE	NO.	DESCRIPTION	APP'D.

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED UNDER CONDITION THAT IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN CONSENT OF THE AEP SERVICE CORP. OR ANY OF ITS AFFILIATES. IT IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
BIG SANDY PLANT
 LOUISA, KENTUCKY
CROSS SECTIONS 2
ATTACHMENT 20
 DWG. NO. 13-30165-A

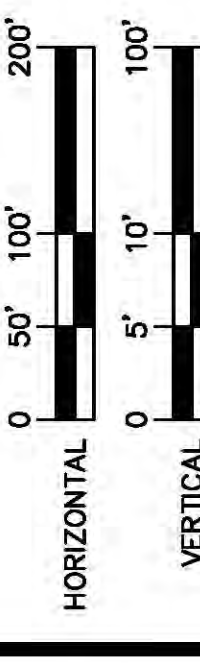
KENTUCKY ATTACHMENT 20 - SHEET 3B

URS
 1375 EUCLID AVENUE, SUITE 600
 CLEVELAND, OHIO 44115
 GREGORY W. BROWN, P.E.
 PROJECT NO. 13B15151
 DESIGNED BY: LEC
 DRAWN BY: LEC
 CHECKED BY: LEC
 APPROVED BY: TAK

SCALE: AS SHOWN
 PROJECT NO. 13B15151
 DESIGNED BY: LEC
 DRAWN BY: LEC
 CHECKED BY: LEC
 APPROVED BY: TAK

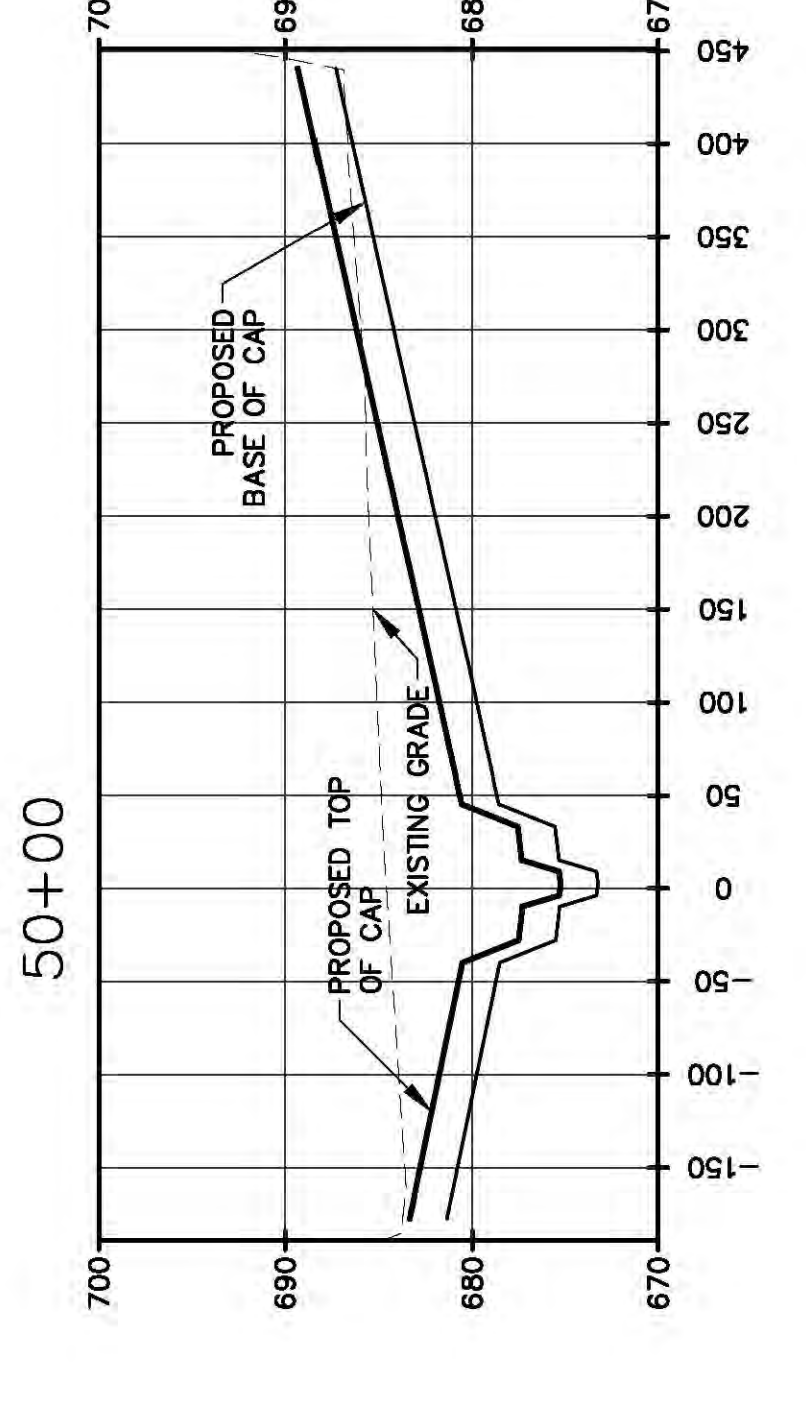
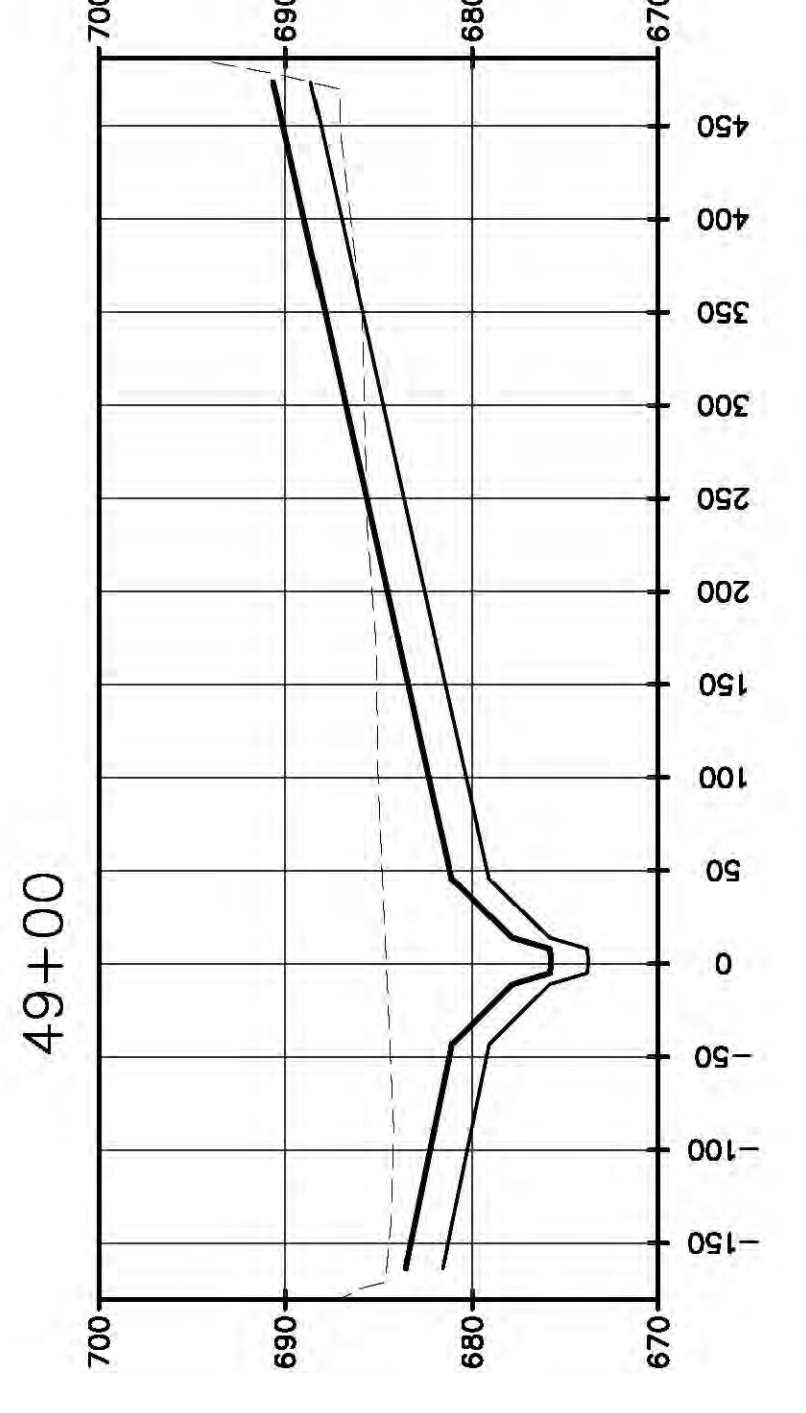
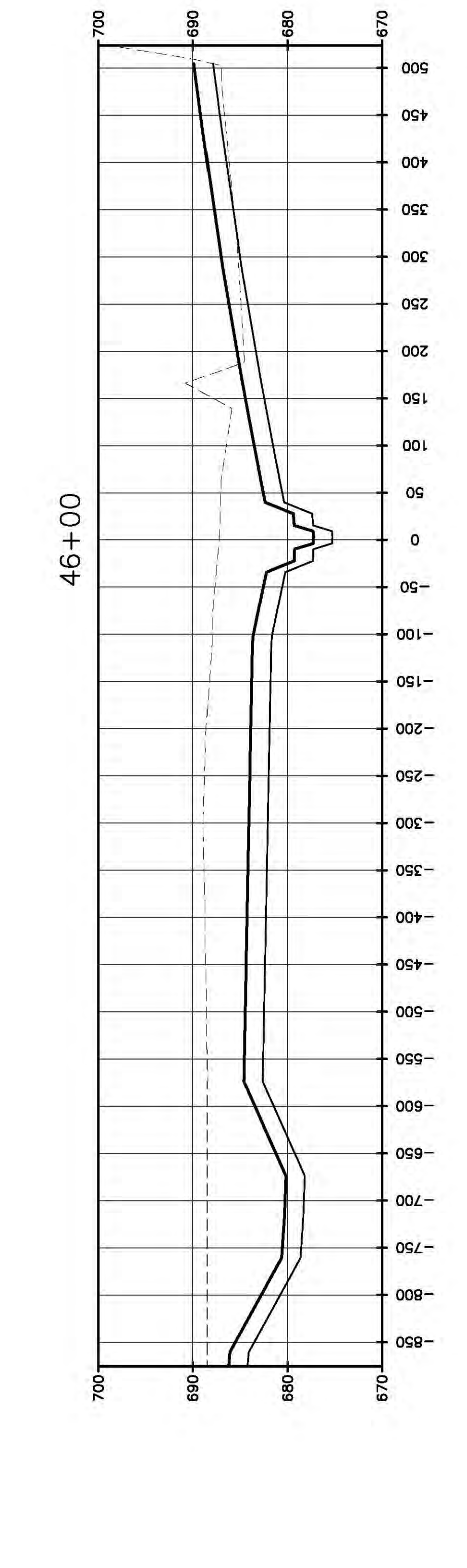
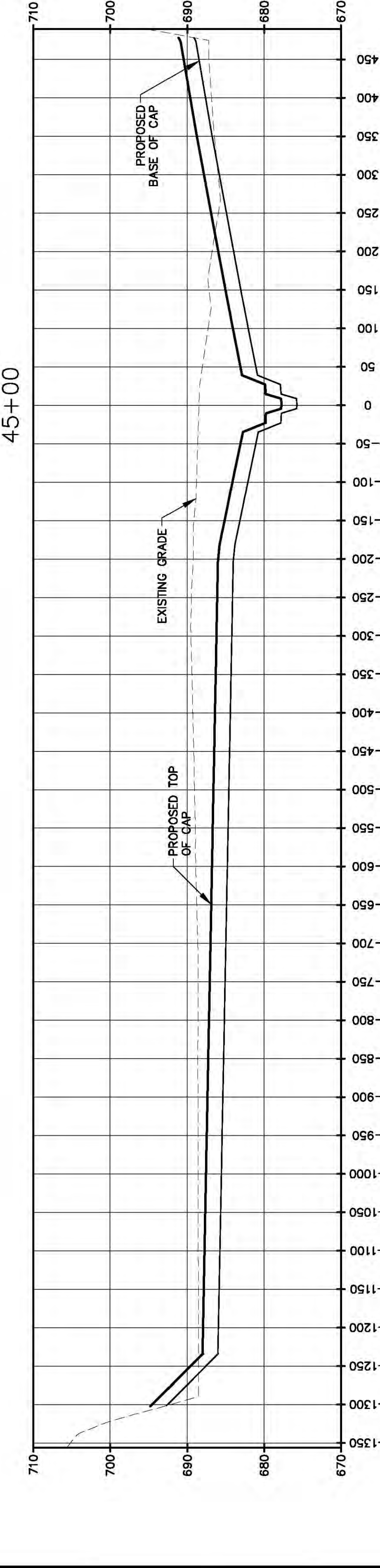
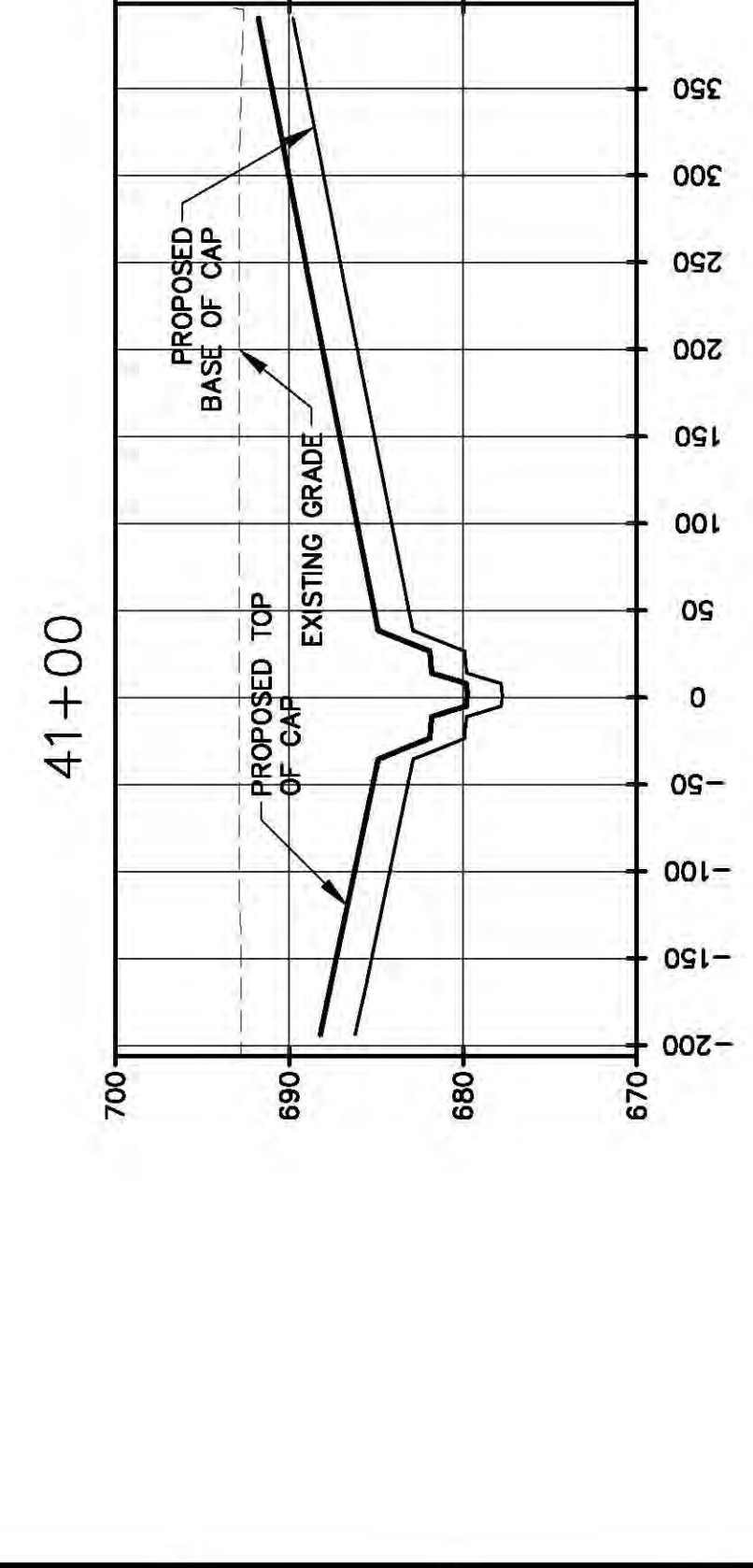
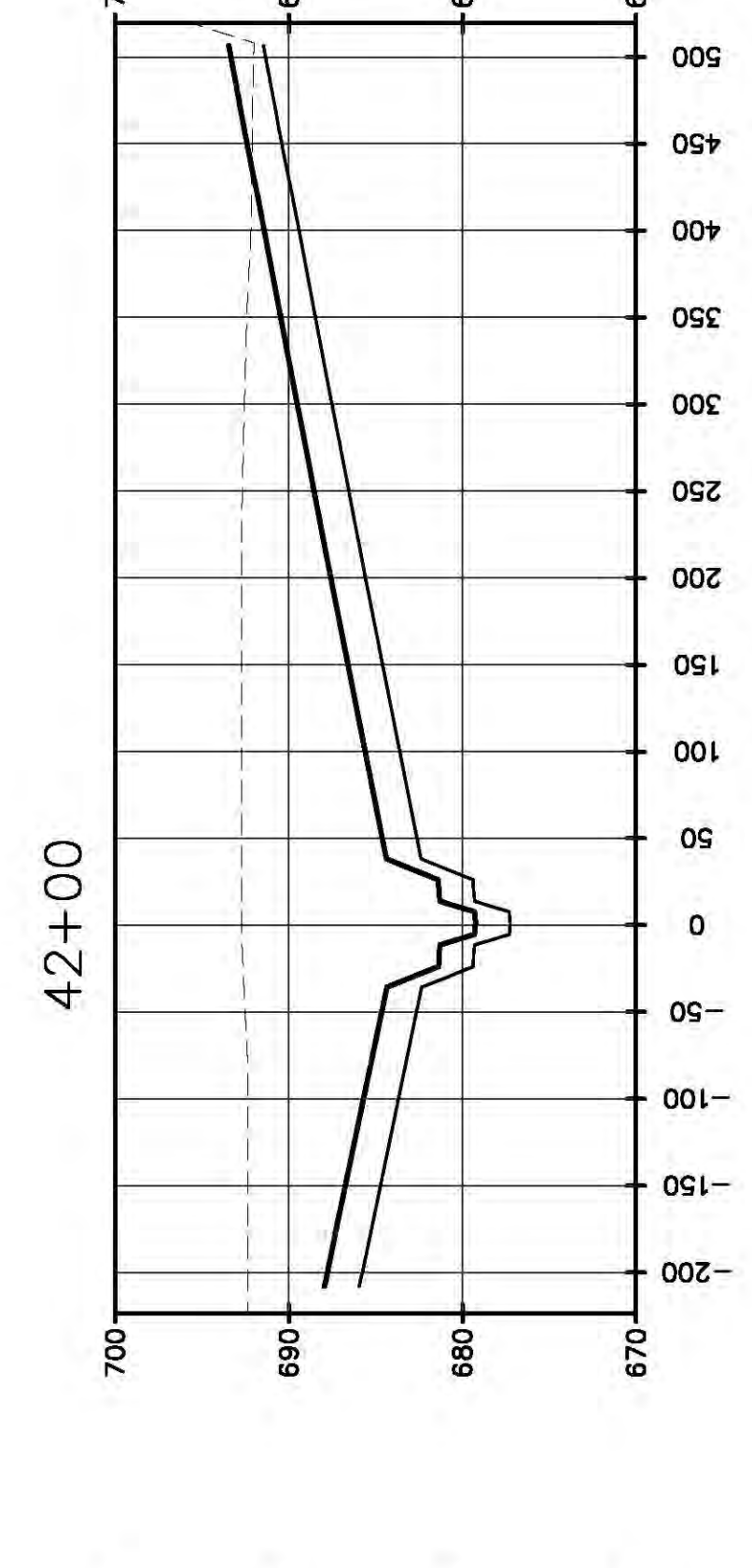
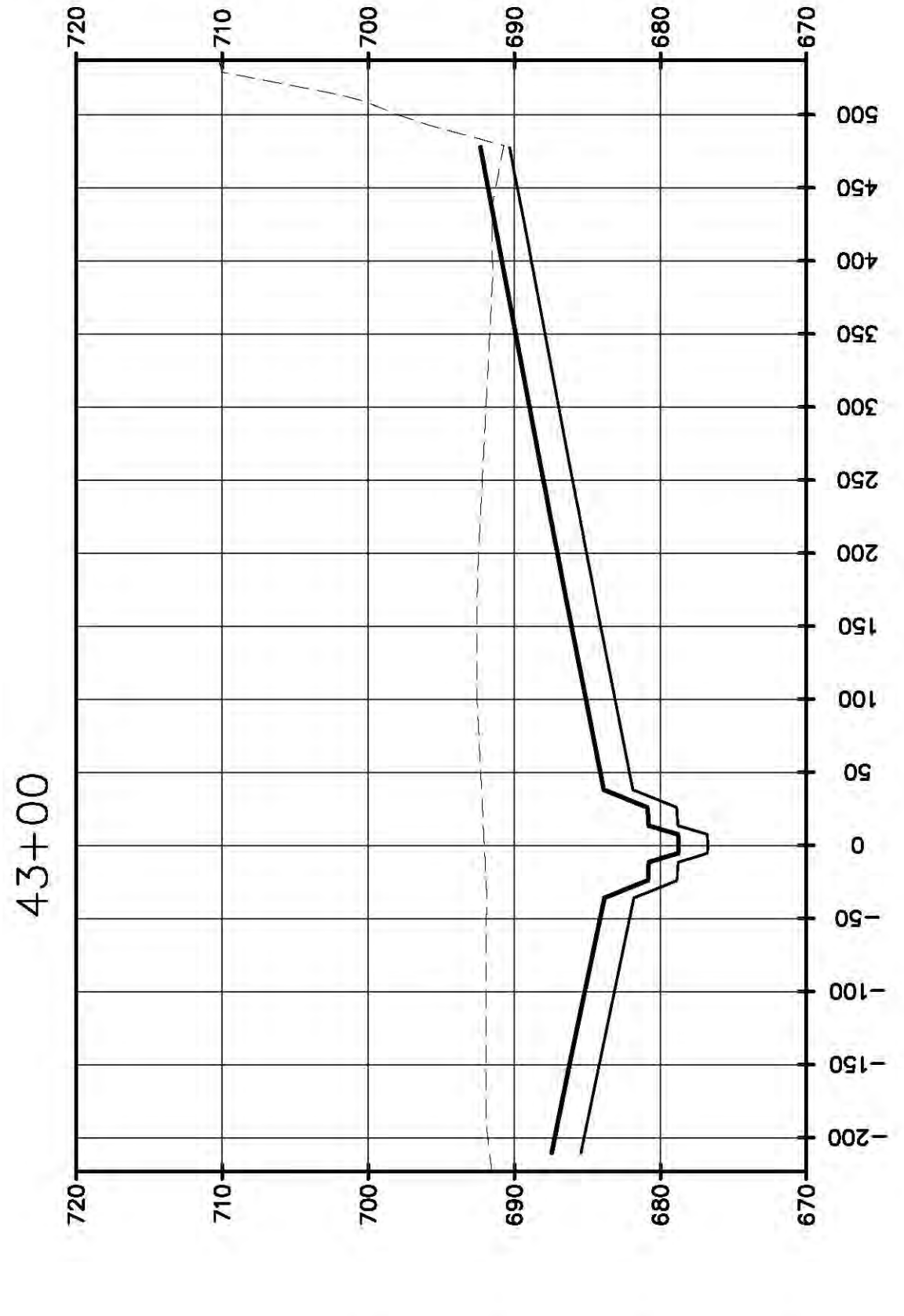
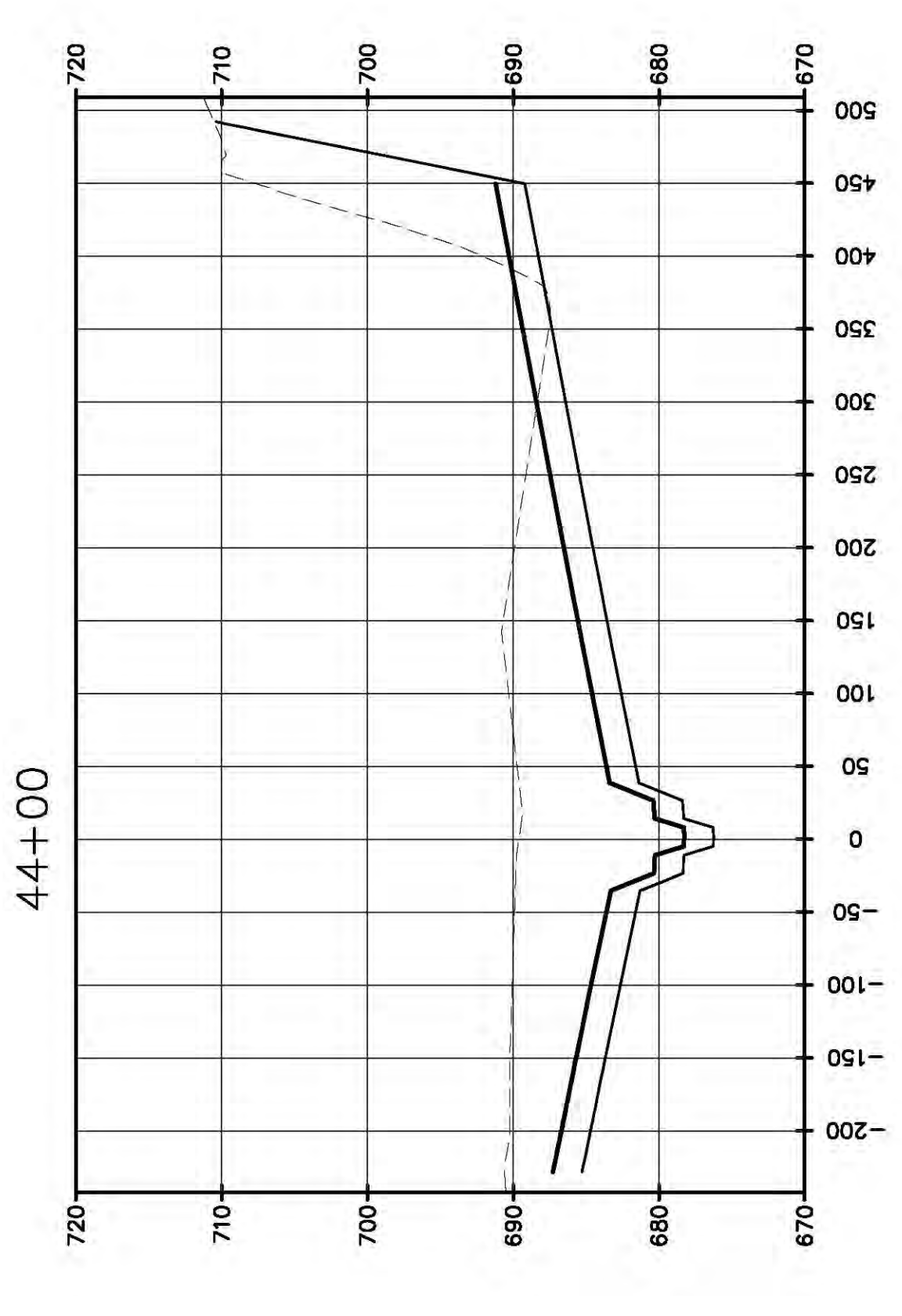
DATE:

SCALE: 1/8"=1'-0"
 1"=10'-0"



NOTES:

- 1. TOPOGRAPHY PROVIDED BY HENDERSON AERIAL SURVEYS INC. (GROVE CITY, OHIO) WAS USED TO DETERMINE THE SURFACE CONTOUR INTERVAL OF 2 FT. SURVEYS PERFORMED BY AEP NEAR THE MAIN DAM ON 8/23/10 AND IN THE BACK SECTION OF THE DAM ON 4/12/12. ASH AREAS ESTIMATED BASED ON A SURVEY PERFORMED BY AEP IN APRIL 2013.
- 2. THE FINAL ELEVATION OF THE CCP MATERIAL AT CLOSURE IS HIGHLY VARIABLE BETWEEN NOW AND THE TIME OF CLOSURE. THIS IS DIRECTLY RELATED TO THE WEIGHT OF ASH, INCREASED LOADS WITH OTHER REGIONAL POWER PLANTS, AND THE ASH CONTENT OF THE ASH. THEREFORE, THE PROPOSED GRADIENTS WILL VARY CONSIDERABLY THROUGHOUT THE REMAINING LIFE OF THE BIG SANDY PLANT.
- 3. THE CLOSURE GRADES PRESENTED ARE BASED ON ESTIMATES OF THE AMOUNT OF ASH TO BE REMOVED AT CLOSURE. THE MOST RECENT SURVEY DATE AND THE DATE OF CLOSURE GRADES DENOTED ARE INTENDED TO SHOW THE PROPOSED CLOSURE CONCEPT AT CLOSURE. ACTUAL CLOSURE GRADES FOR PORTIONS OF THE FACILITY WILL VARY FROM THE PRESENTED GRADES BY UP TO 2 FEET, AS NEEDED. IT IS INTENDED THAT THE MAJORITY OF THE SITE WILL BE BUILT UP TO THE PROPOSED GRADE APPROXIMATELY 2% A MINIMUM CAP GRADE OF APPROXIMATELY 25%.



KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISIANA
CROSS SECTIONS 3
ATTACHMENT 20
DWG. NO. 13-30166-A

DATE	NO.	DESCRIPTION	APPROVED BY

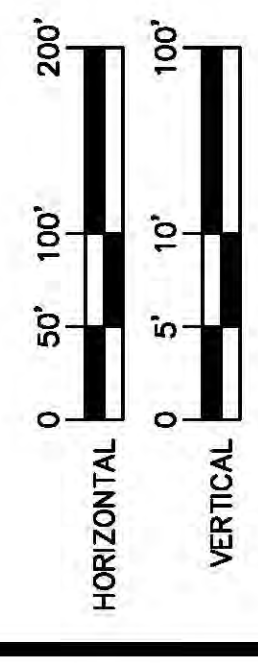
SCALE: AS SHOWN
PROJECT NO.: 13R15151
DESIGNED BY: LEC
DRAWN BY: LEC
APPROVED BY: TAK

SCALE: 1/8"=1'-0"
1"=10'-0"

URS
1375 EUCID AVENUE SUITE 600
GREENVILLE, SC 29615

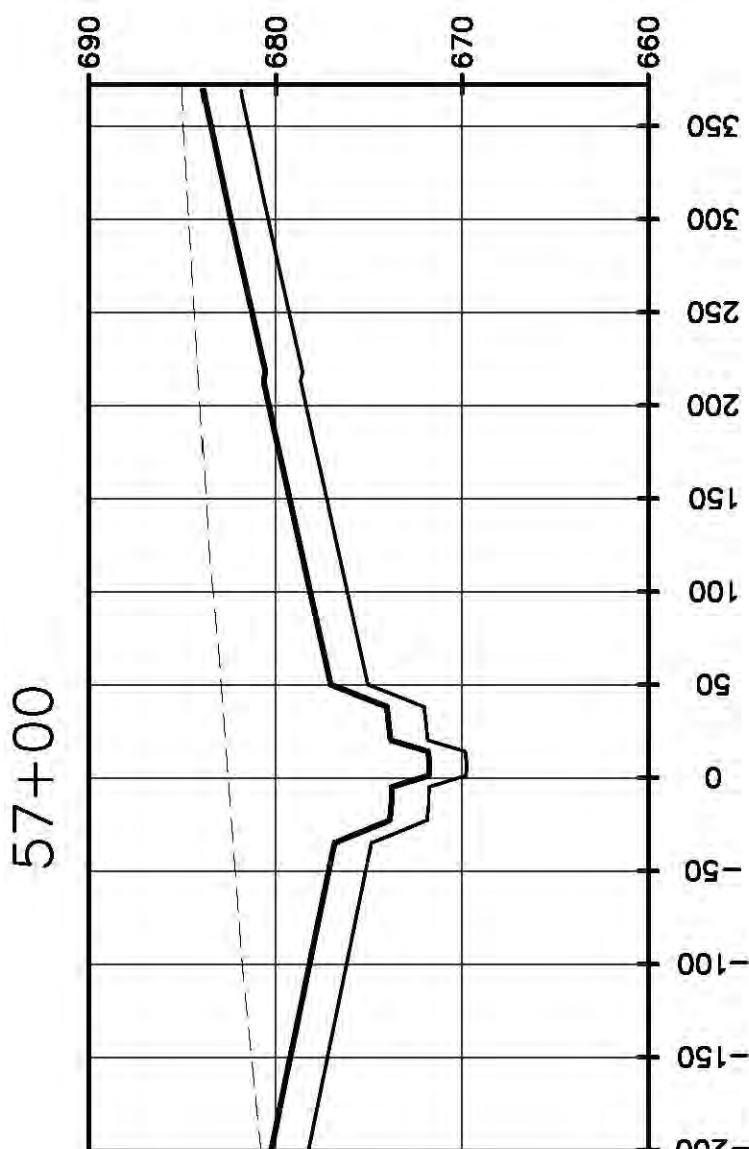
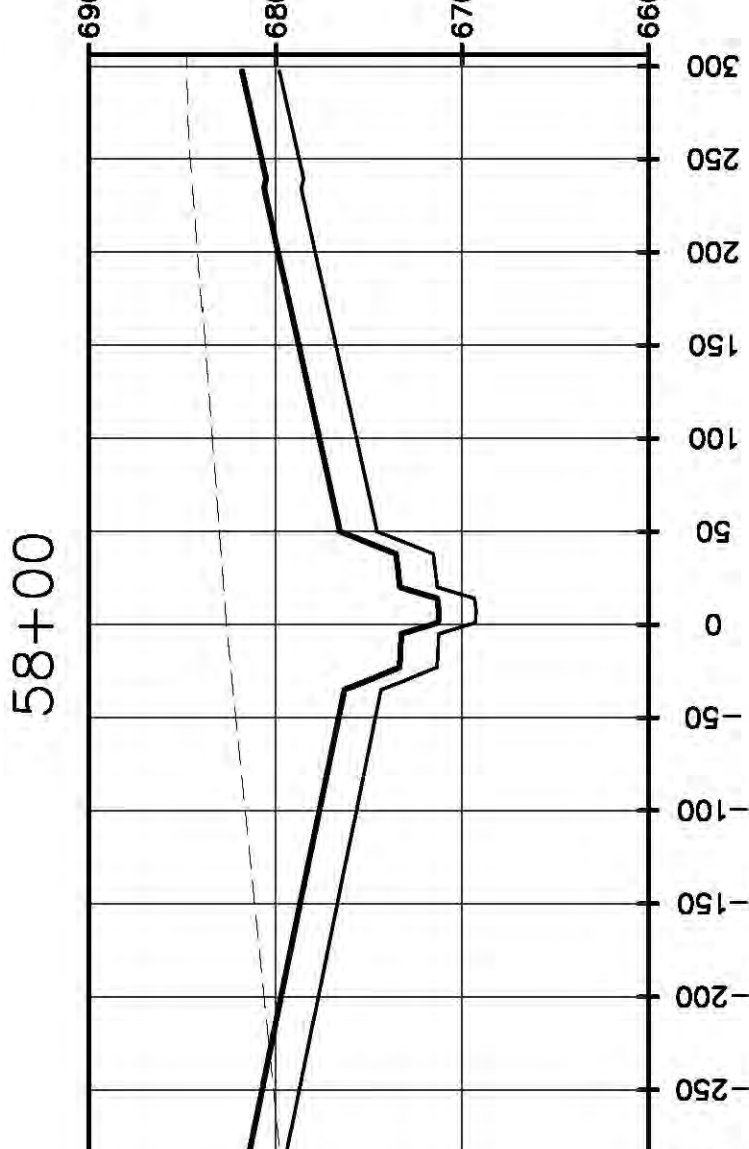
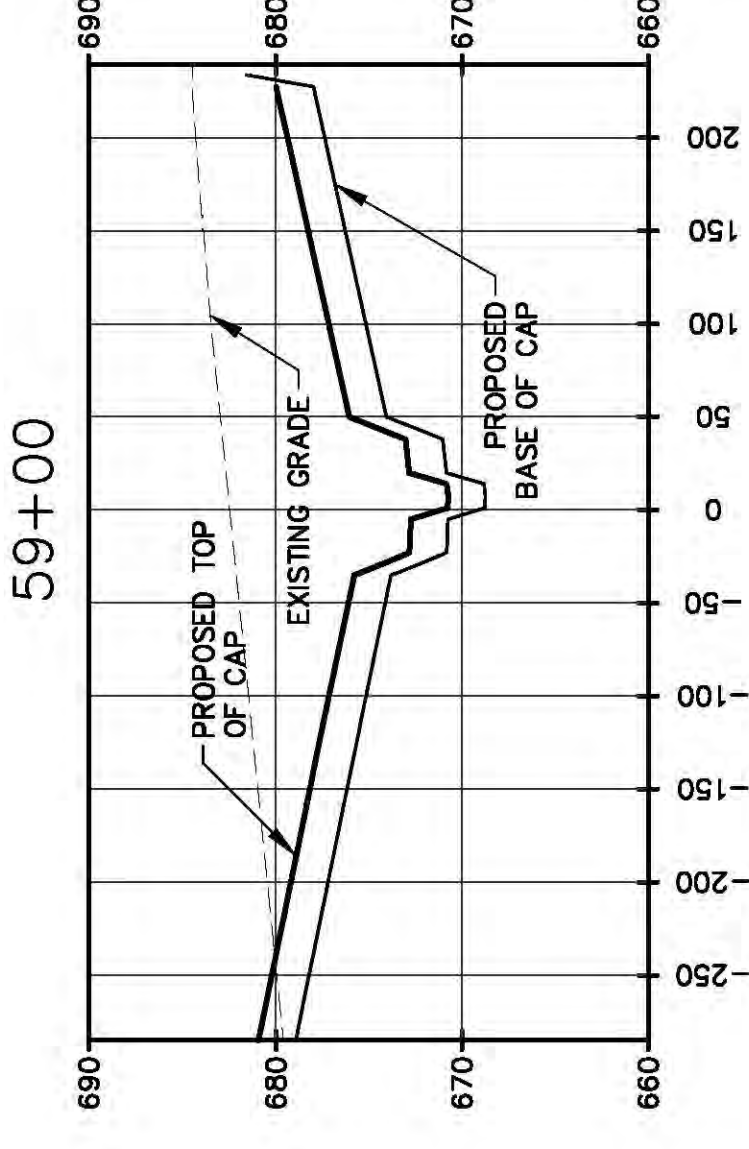
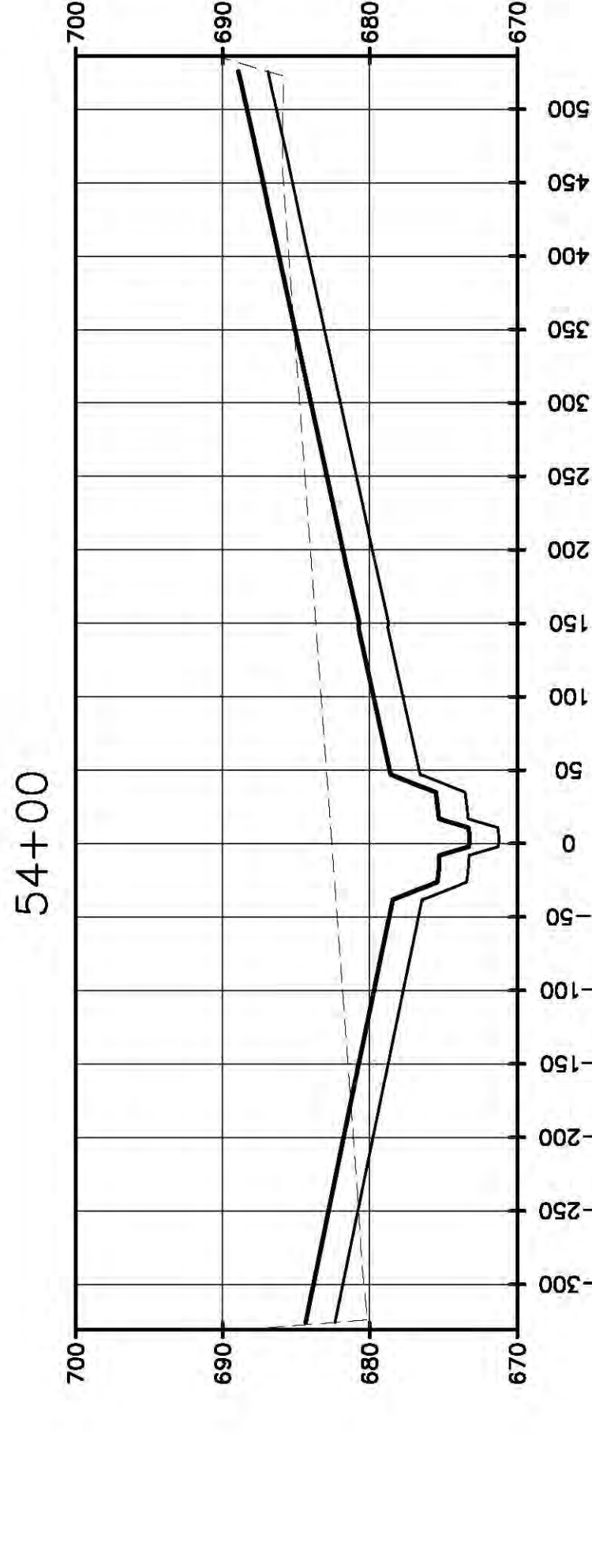
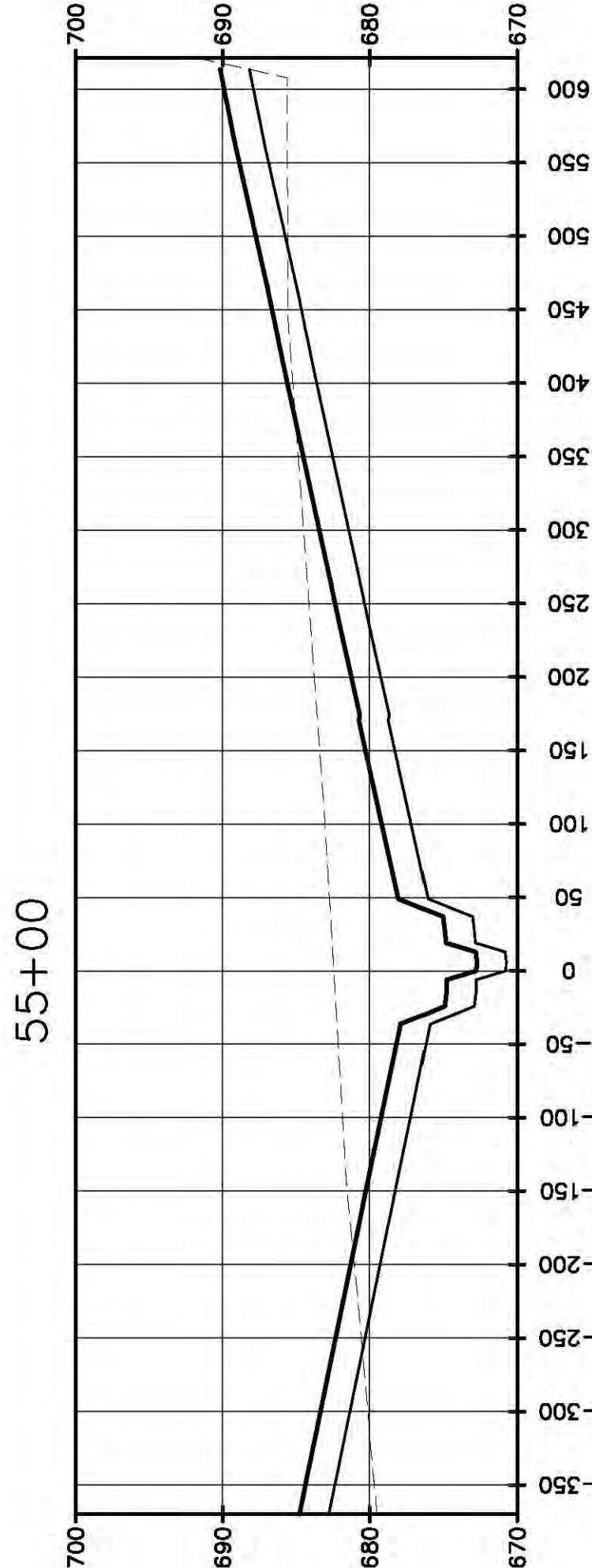
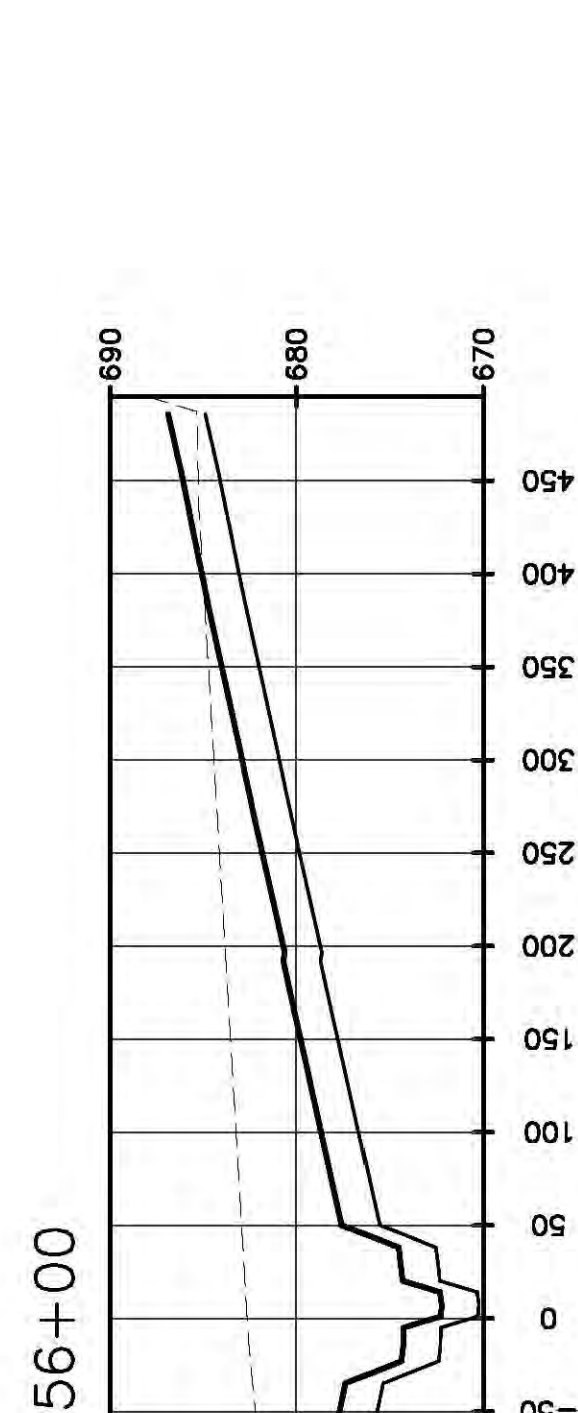
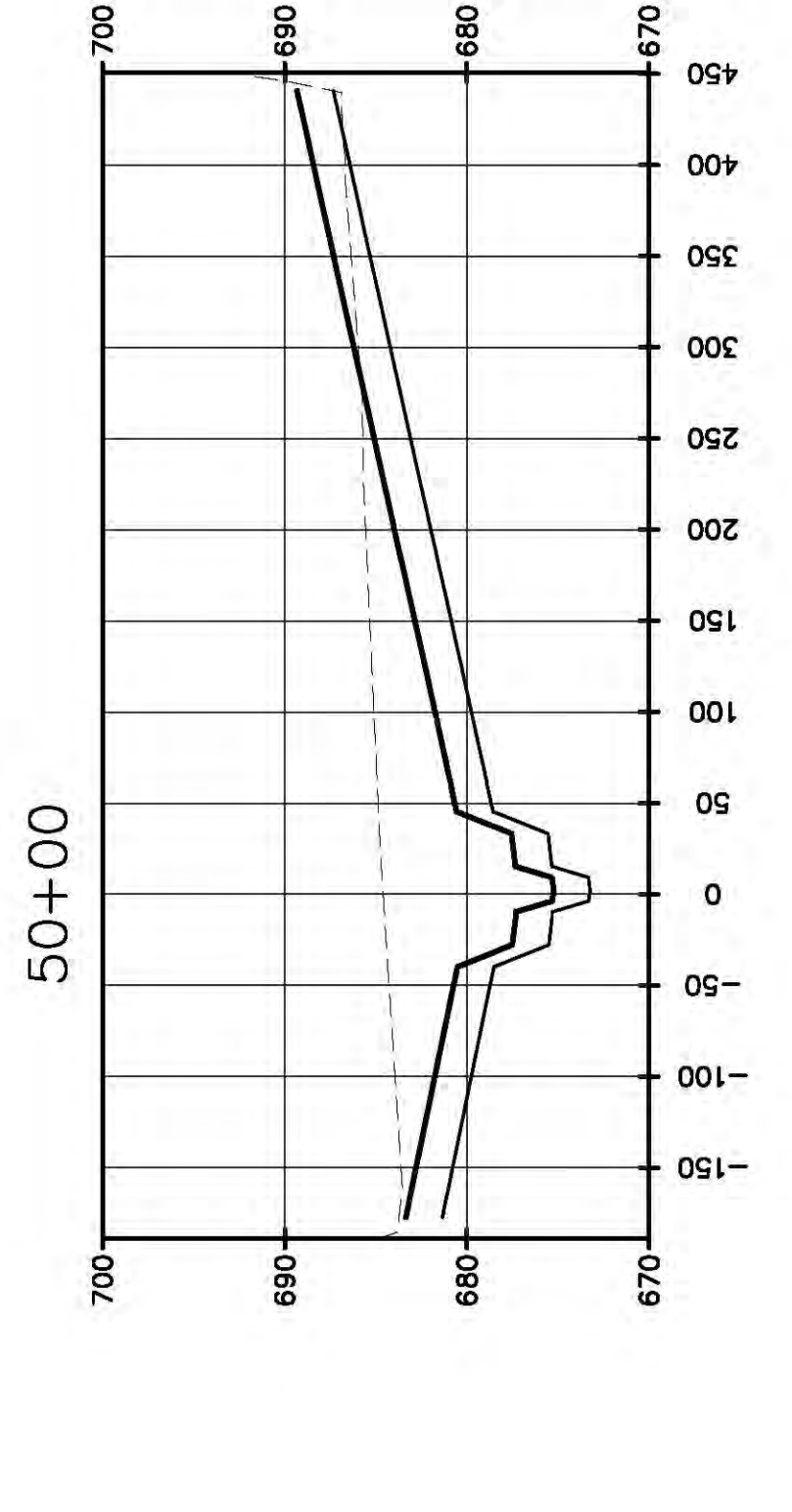
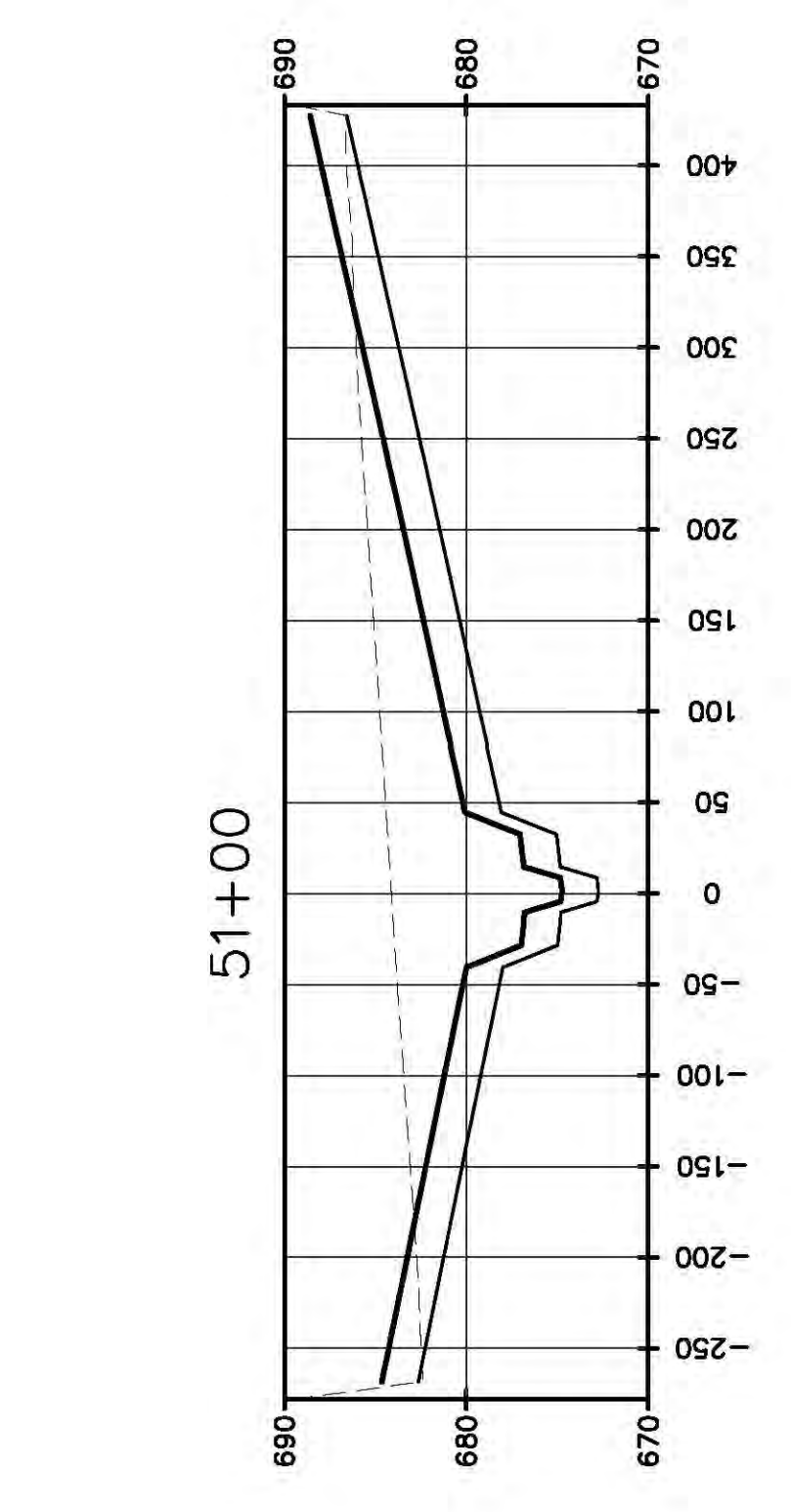
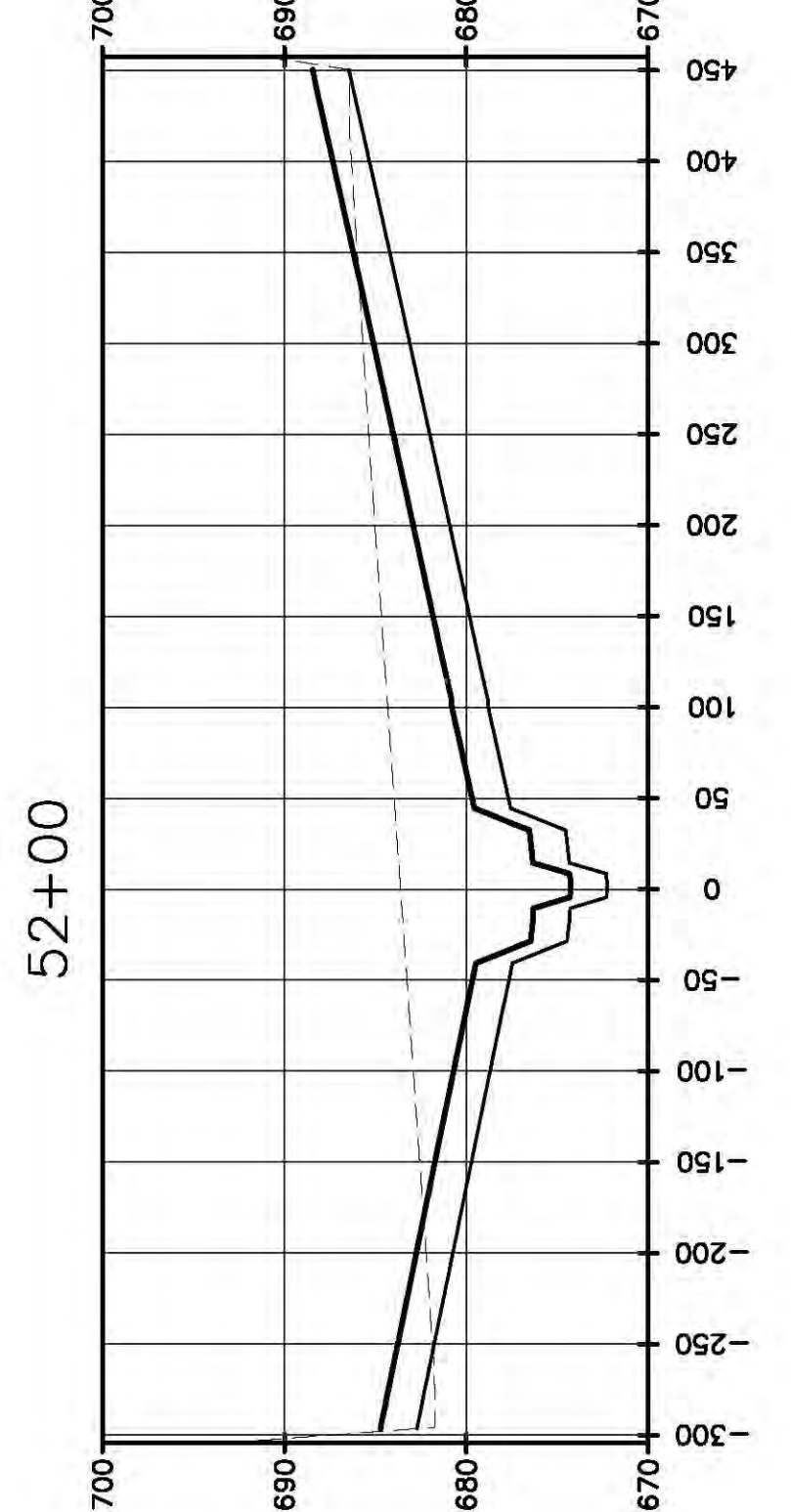
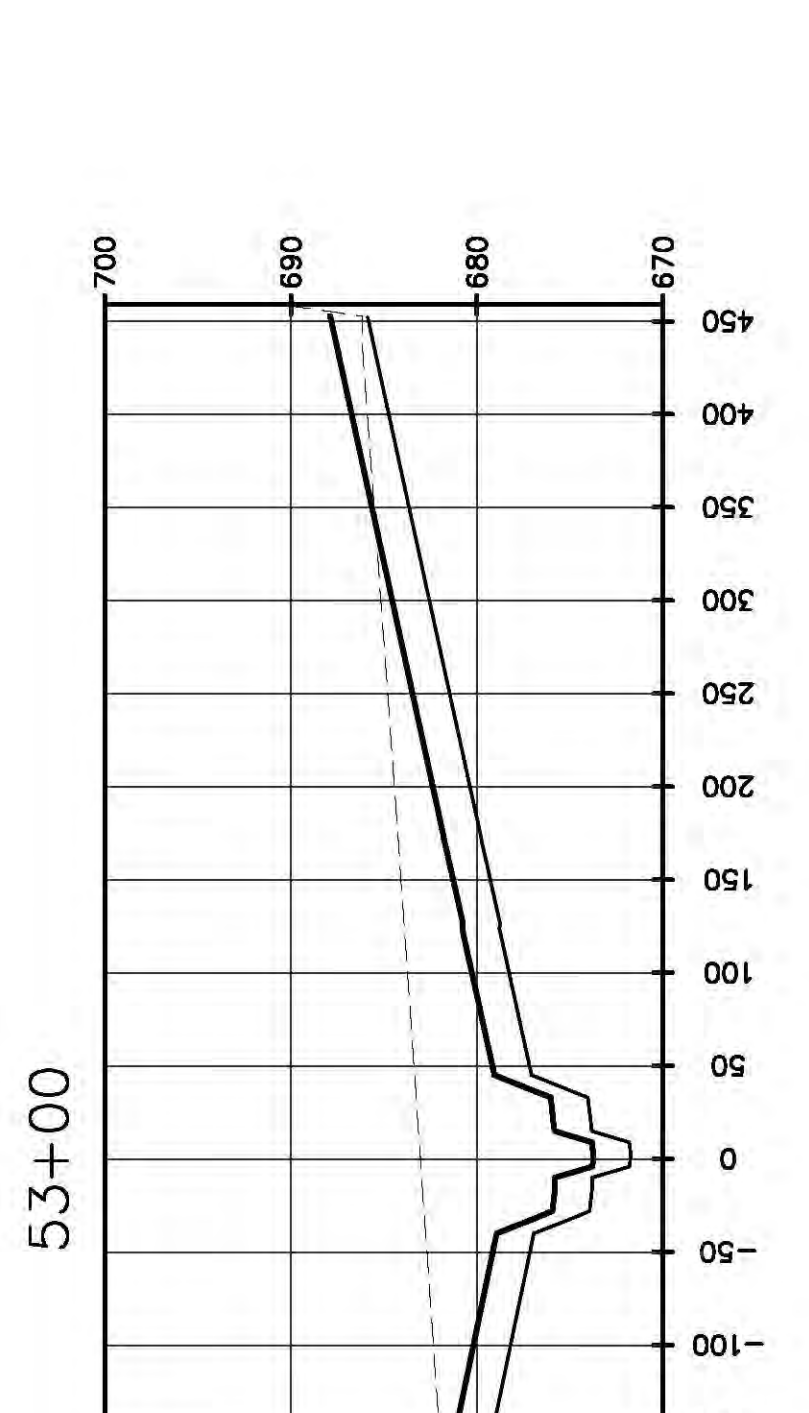
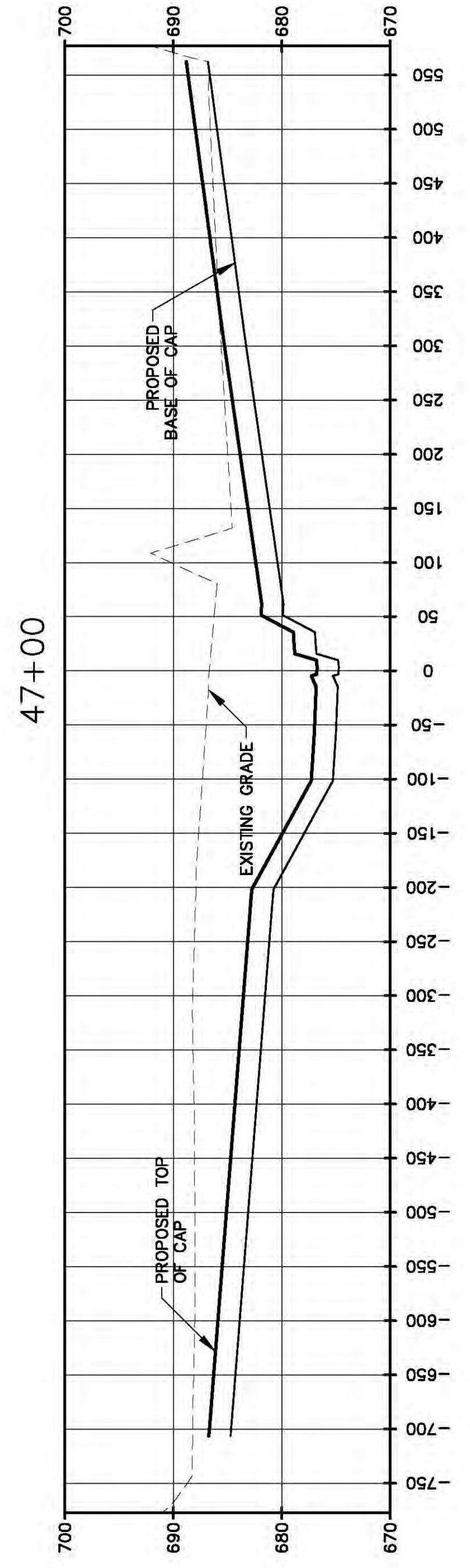
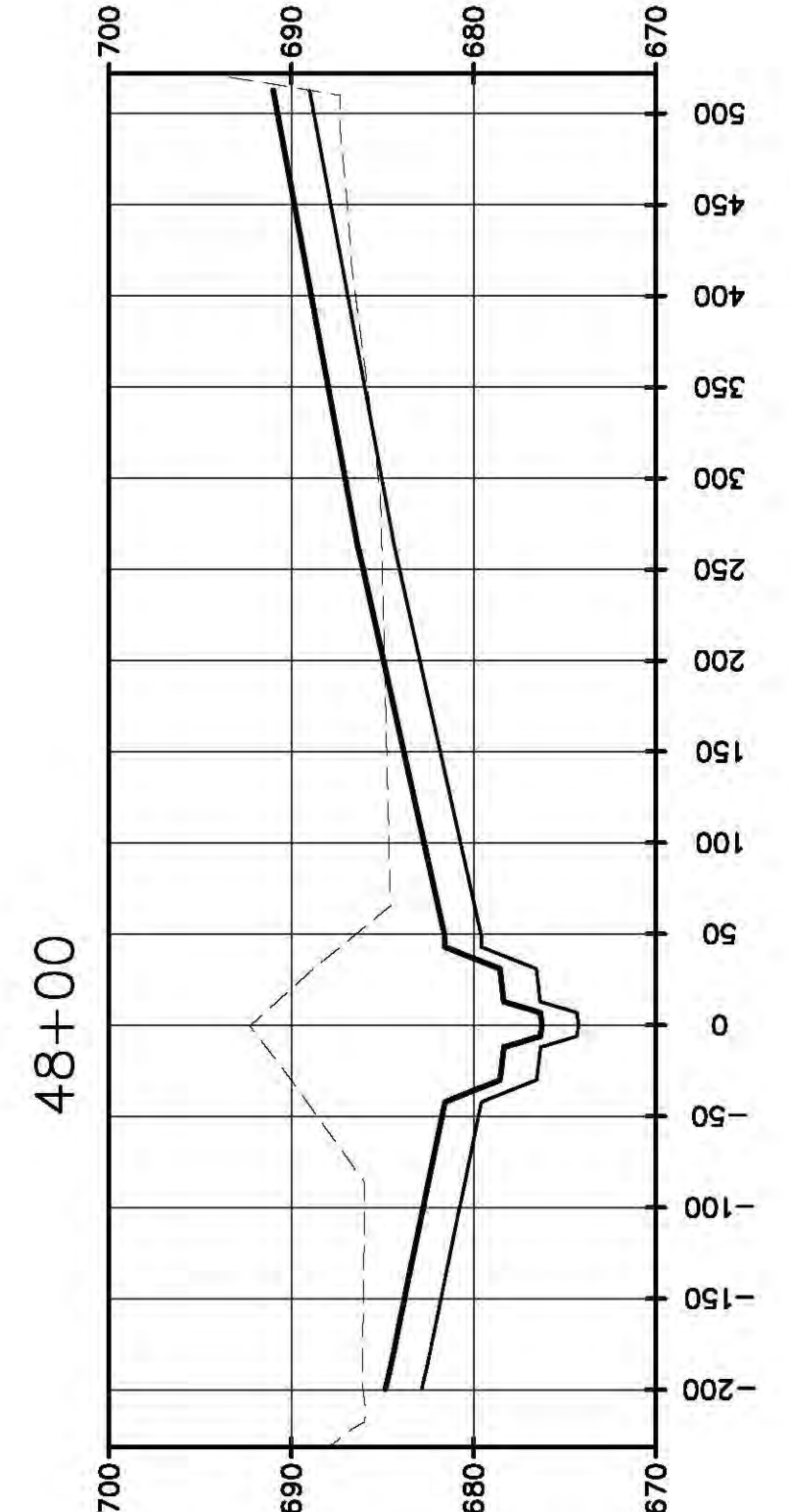
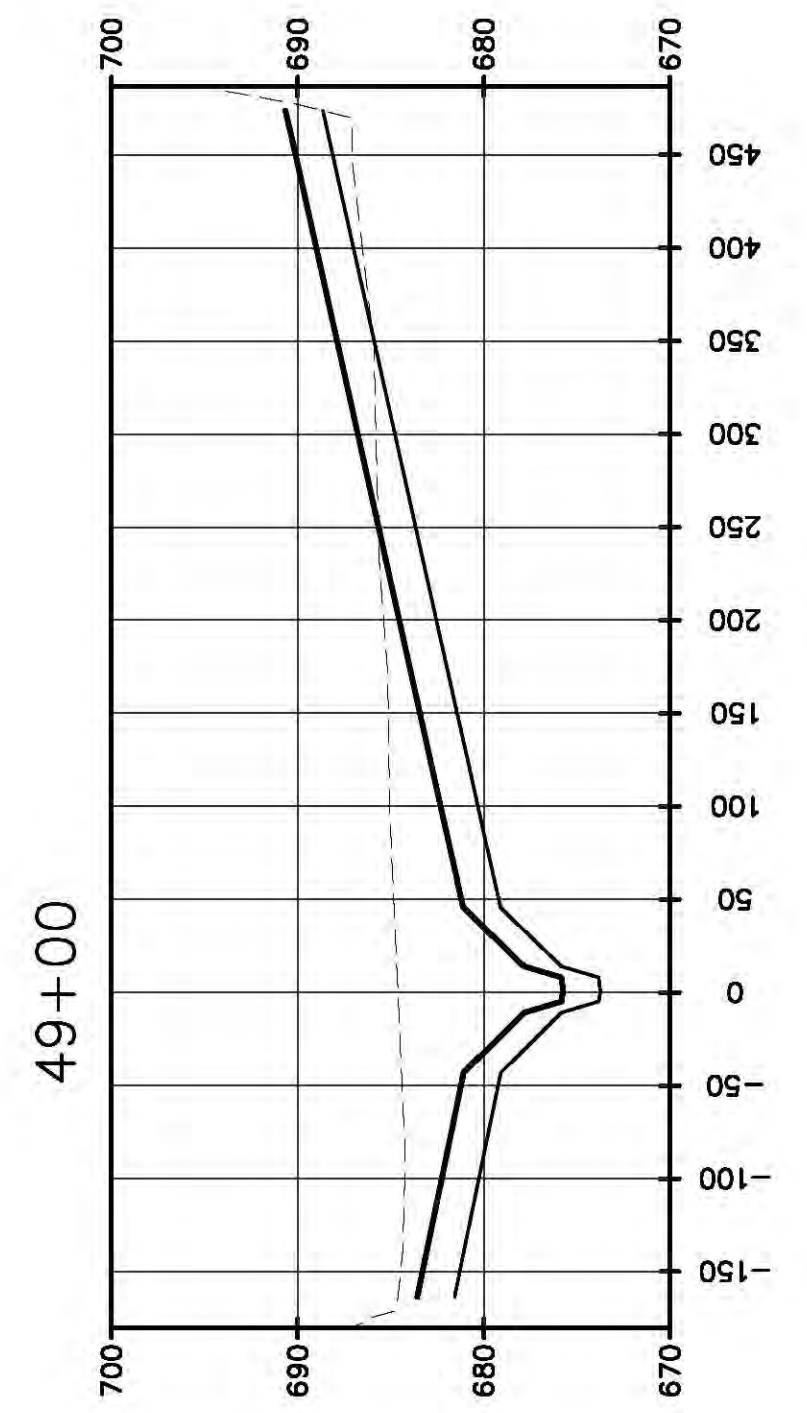
THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR USE ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF THE AEP SERVICE CORP. OR THE AEP SERVICE CORP. WILL NOT BE HELD RESPONSIBLE FOR ANY AND IS TO BE RETAINED UPON REQUEST.

AEP SERVICE CORP.
AMERICAN ELECTRIC
COLUMBUS, OH 43215



NOTES:

1. TOPOGRAPHY PROVIDED BY HENDERSON AERIAL SURVEYS INC (GROVE CITY, OHIO) WAS USED FOR THE SURVEY. THE SURVEY WAS PERFORMED ON MARCH 9, 2007 WITH A CONTOUR INTERVAL OF 2 FT. THE SURVEY WAS PERFORMED BY AEP NEAR THE MAIN DAM ON 8/23/10 AND IN THE BACK SECTION OF THE POND ON 4/12/12. ASH AREAS ESTIMATED BASED ON A SURVEY PERFORMED BY AEP IN APRIL 2013.
2. THE FINAL ELEVATION OF THE CCP MATERIAL AT CLOSURE IS HIGHLY VARIABLE. THIS IS DIRECTLY RELATED TO THE VARIATION IN THE AMOUNT OF COAL BURIED BETWEEN NOW AND THE TIME OF CLOSURE. THIS IS DIRECTLY RELATED TO THE VARIATION IN THE AMOUNT OF COAL LOADS WITH OTHER REGIONAL POWER PLANTS, AND THE ASH CONTENT OF THE MATERIAL. THE VARIATION IN THE AMOUNT OF COAL BURIED THROUGHOUT THE REMAINING LIFE OF THE BIG SANDY PLANT.
3. THE CLOSURE GRADES PRESENTED ARE BASED ON THE ESTIMATES OF THE AMOUNT OF COAL BURIED BETWEEN NOW AND THE TIME OF CLOSURE. SURVEY DATE AND THE DATE OF CLOSURE GRADES DERIVED ARE INTENDED CONCEPT AT CLOSURE. ACTUAL CLOSURE GRADES FOR PORTIONS OF THE FACILITY MAY VARY 2 TO 10 FEET, AS NEEDED. IT IS INTENDED THAT THE MAJORITY OF THE SITE WILL BE COVERED WITH A MINIMUM GRADE OF APPROXIMATELY 2% A MINIMUM CAP GRADE OF APPROXIMATELY 25%.



DATE	NO.	DESCRIPTION	APPROVED
		REVISIONS	

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED UNDER CONDITION THAT IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN CONSENT OF THE AEP SERVICE CORP. OR ANY OF ITS AFFILIATES. IT IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISA, KENTUCKY

CROSS SECTIONS 4

ATTACHMENT 20

DWG. NO. 13-30167-A

SCALE:	AS SHOWN
PROJECT NO.:	13B15151
DESIGNED BY:	LEC
DRAWN BY:	LEC
APPROVED BY:	TAK

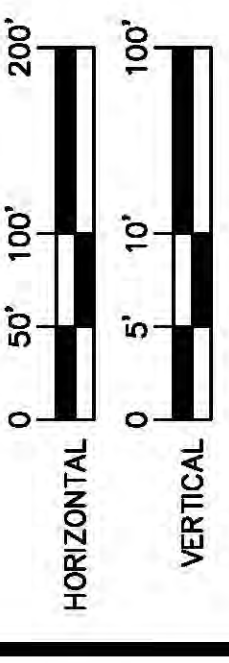
AEP SERVICE CORP.
AMERICAN ELECTRIC POWER
COLUMBUS, OH 43216



1375 EUCLID AVENUE, SUITE 600
CLEVELAND, OH 44115
GREEN #000000

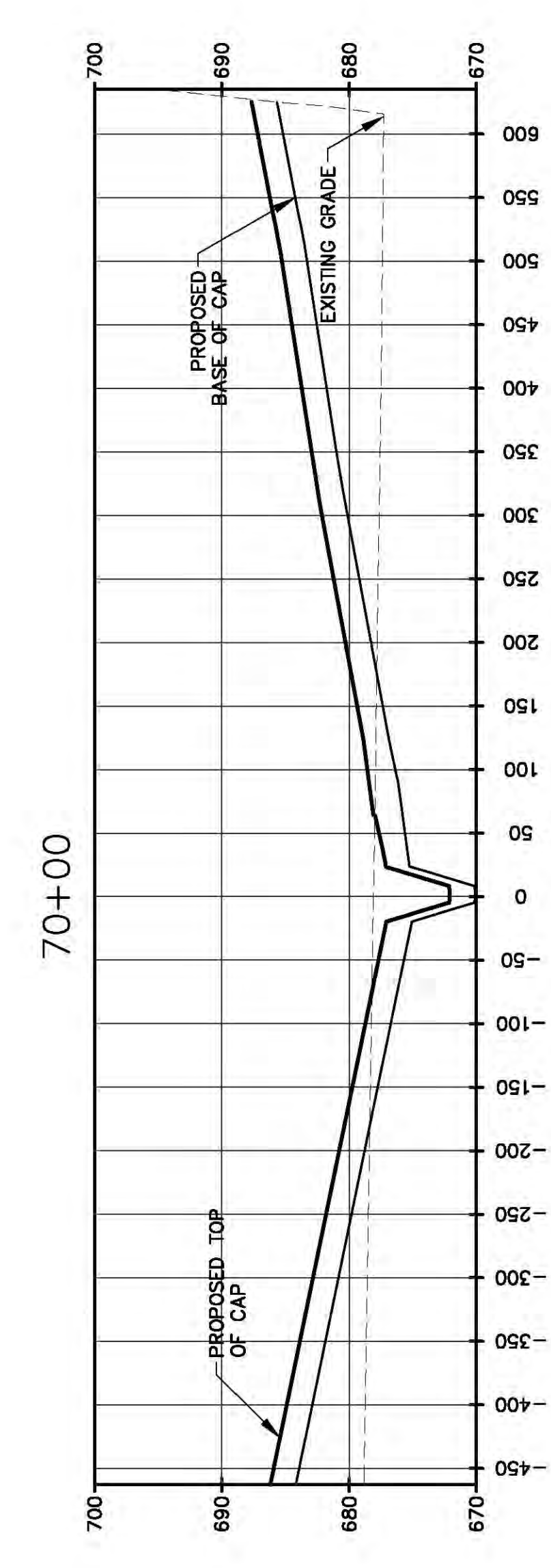
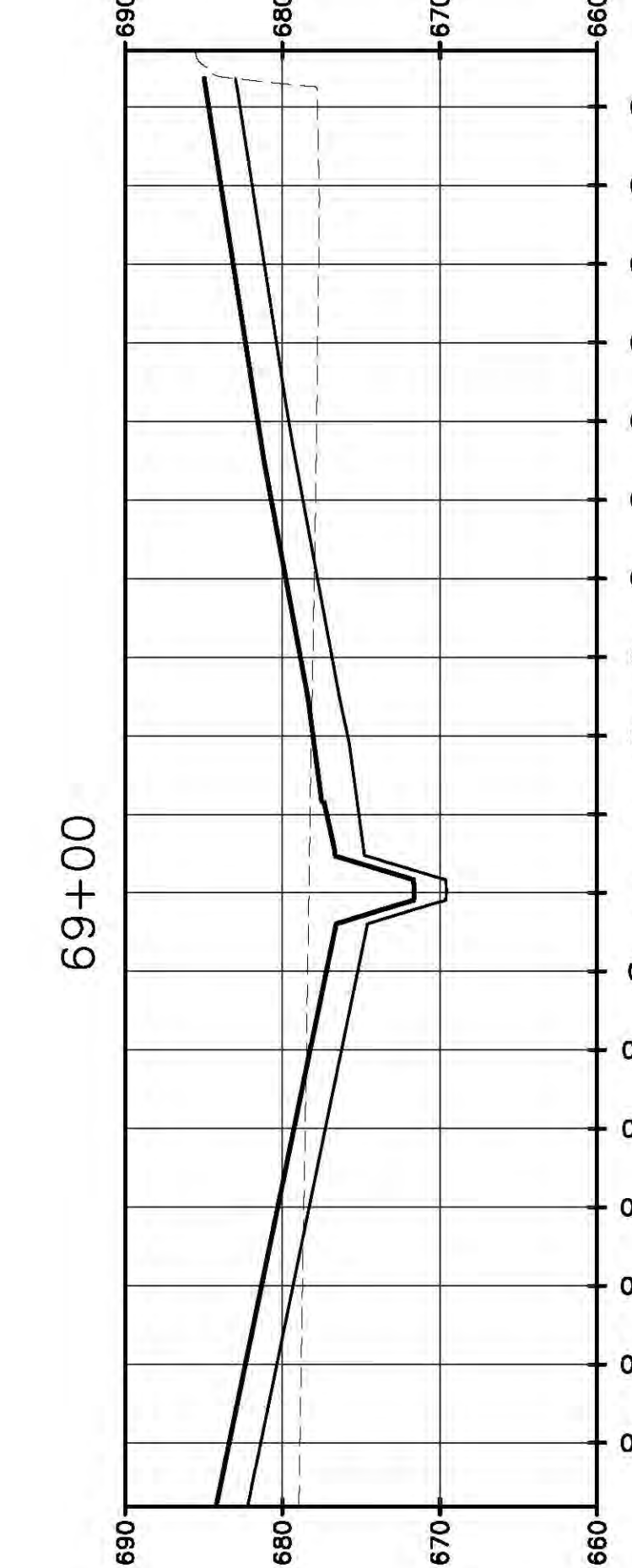
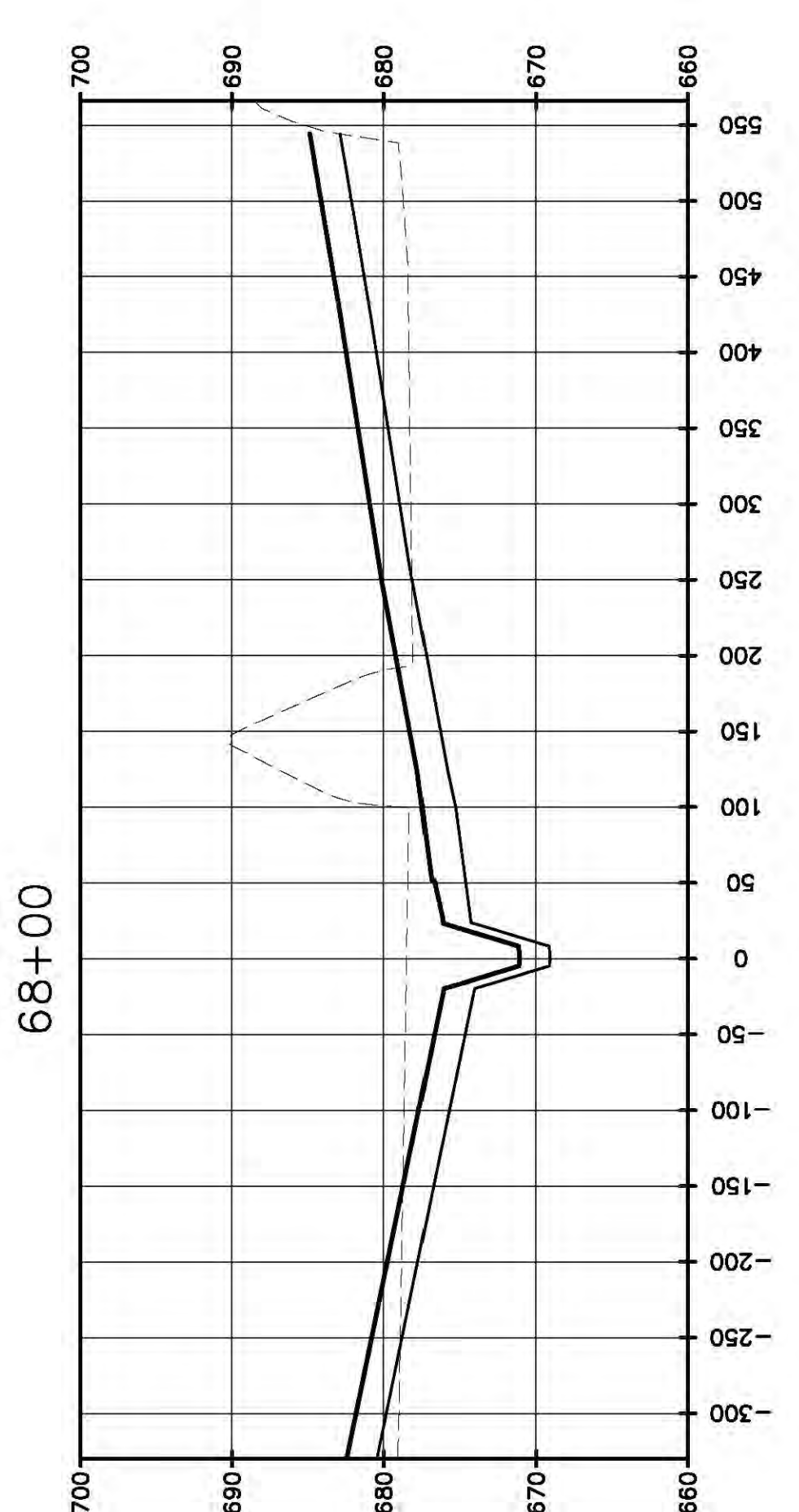
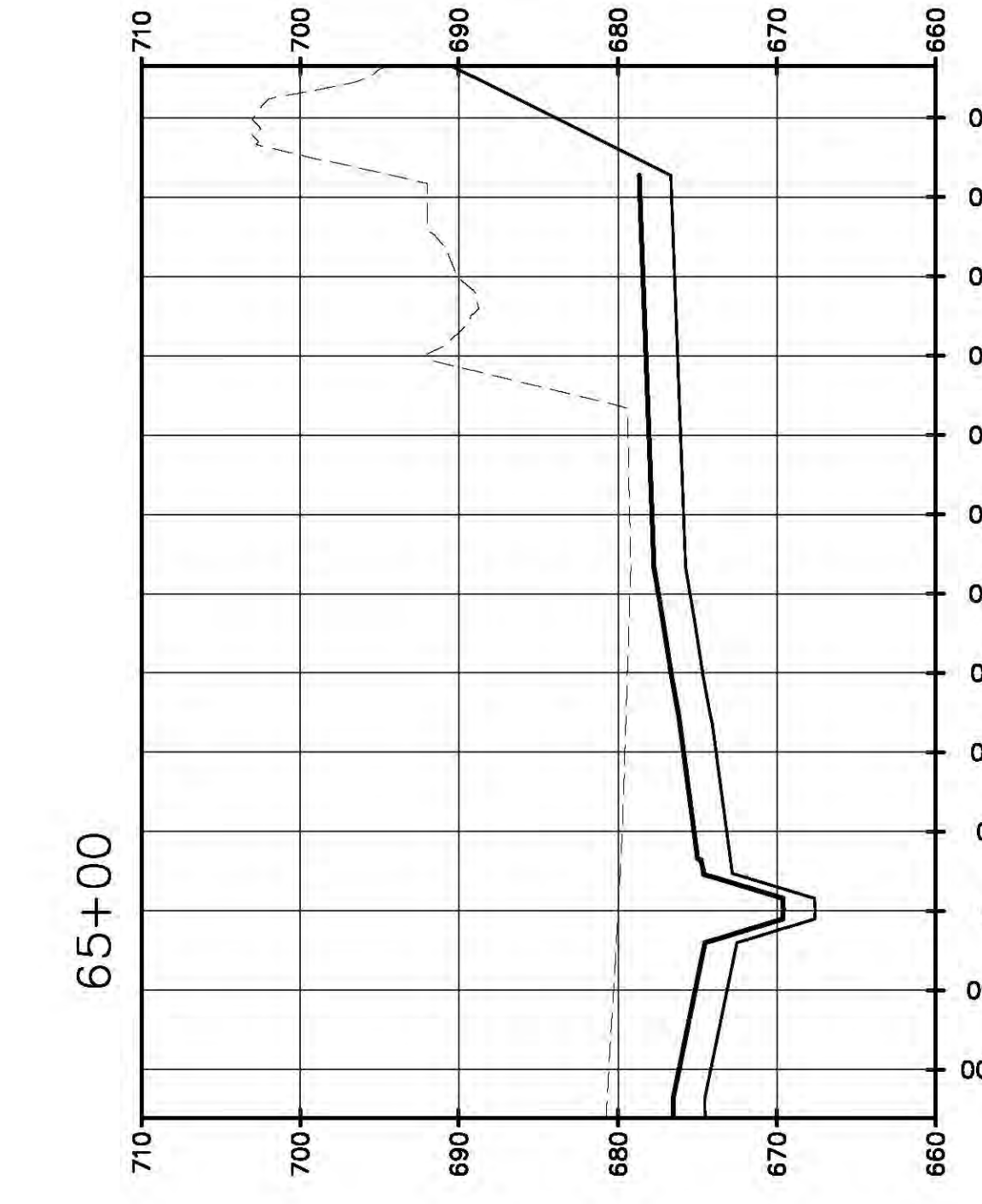
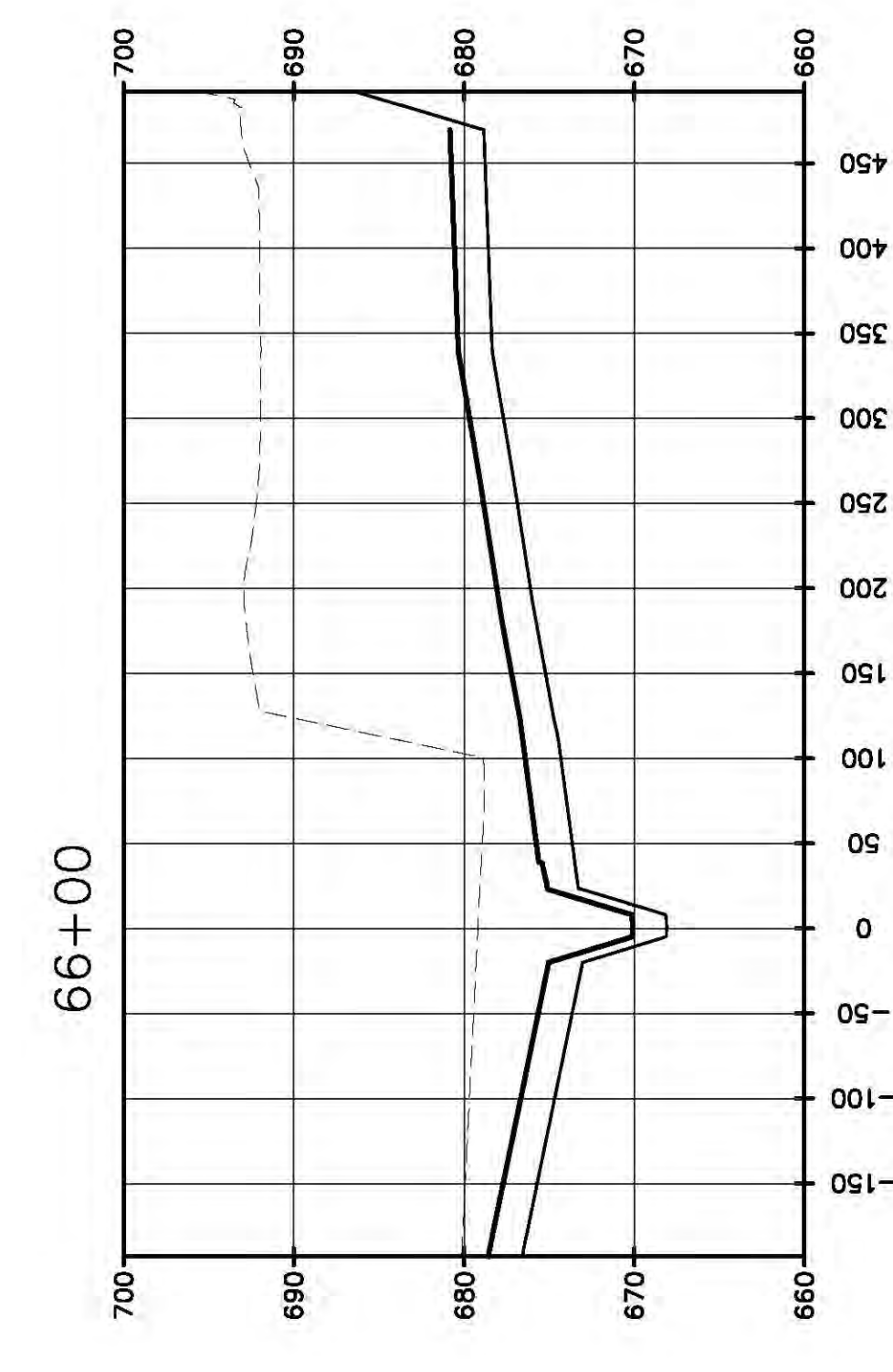
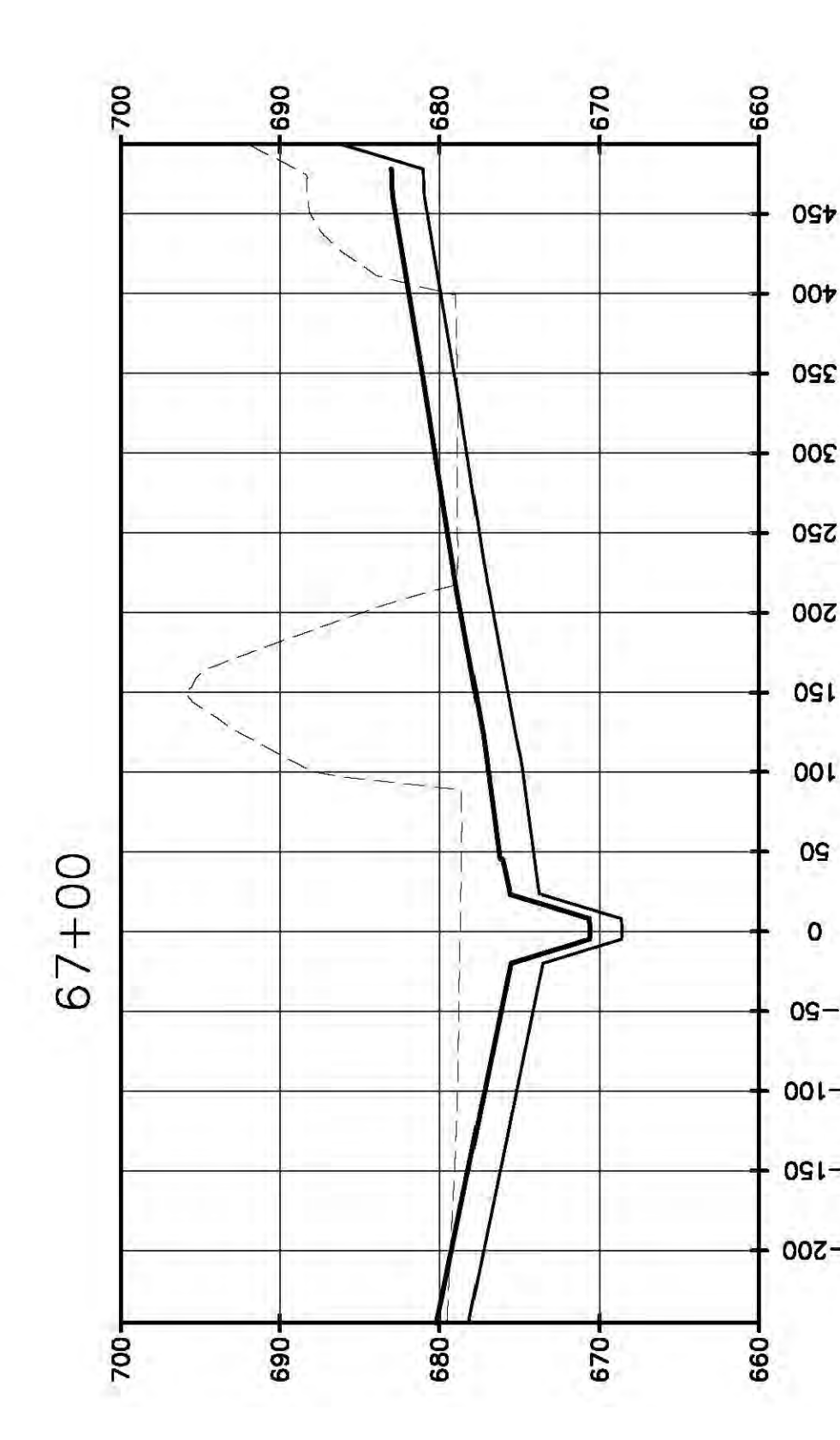
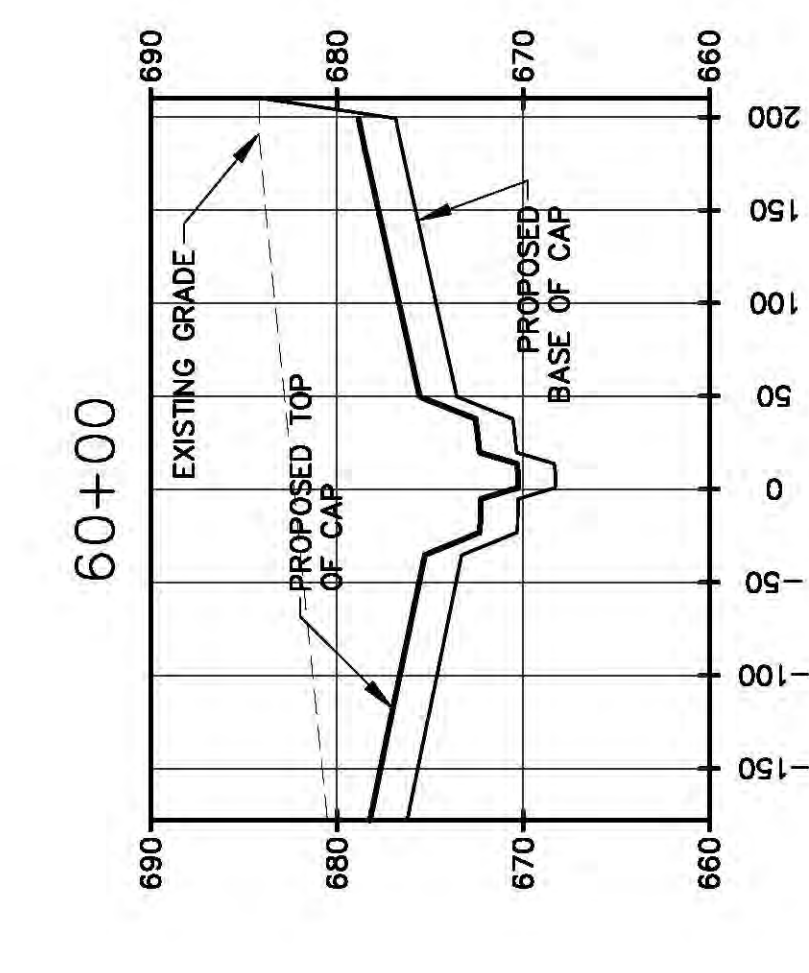
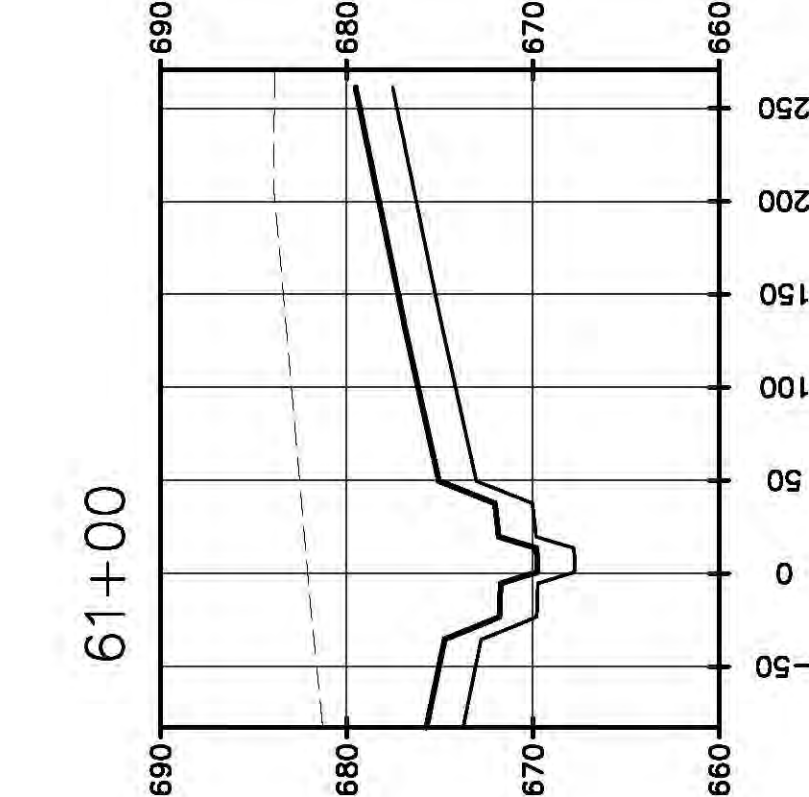
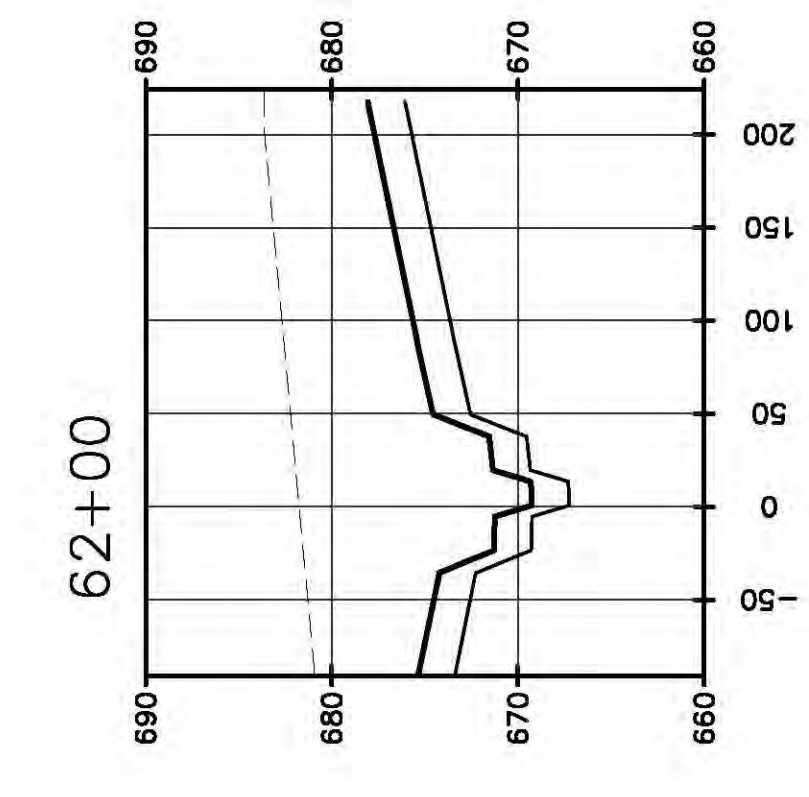
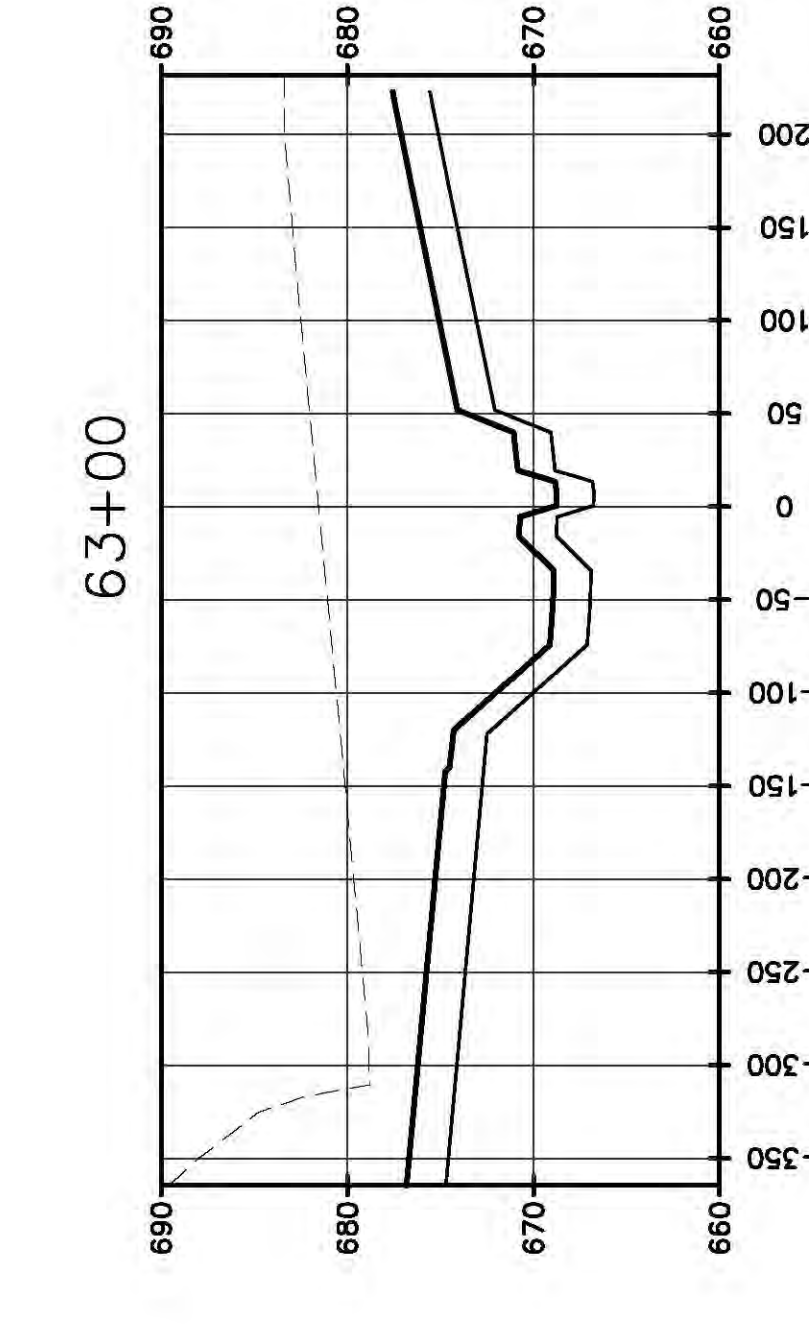
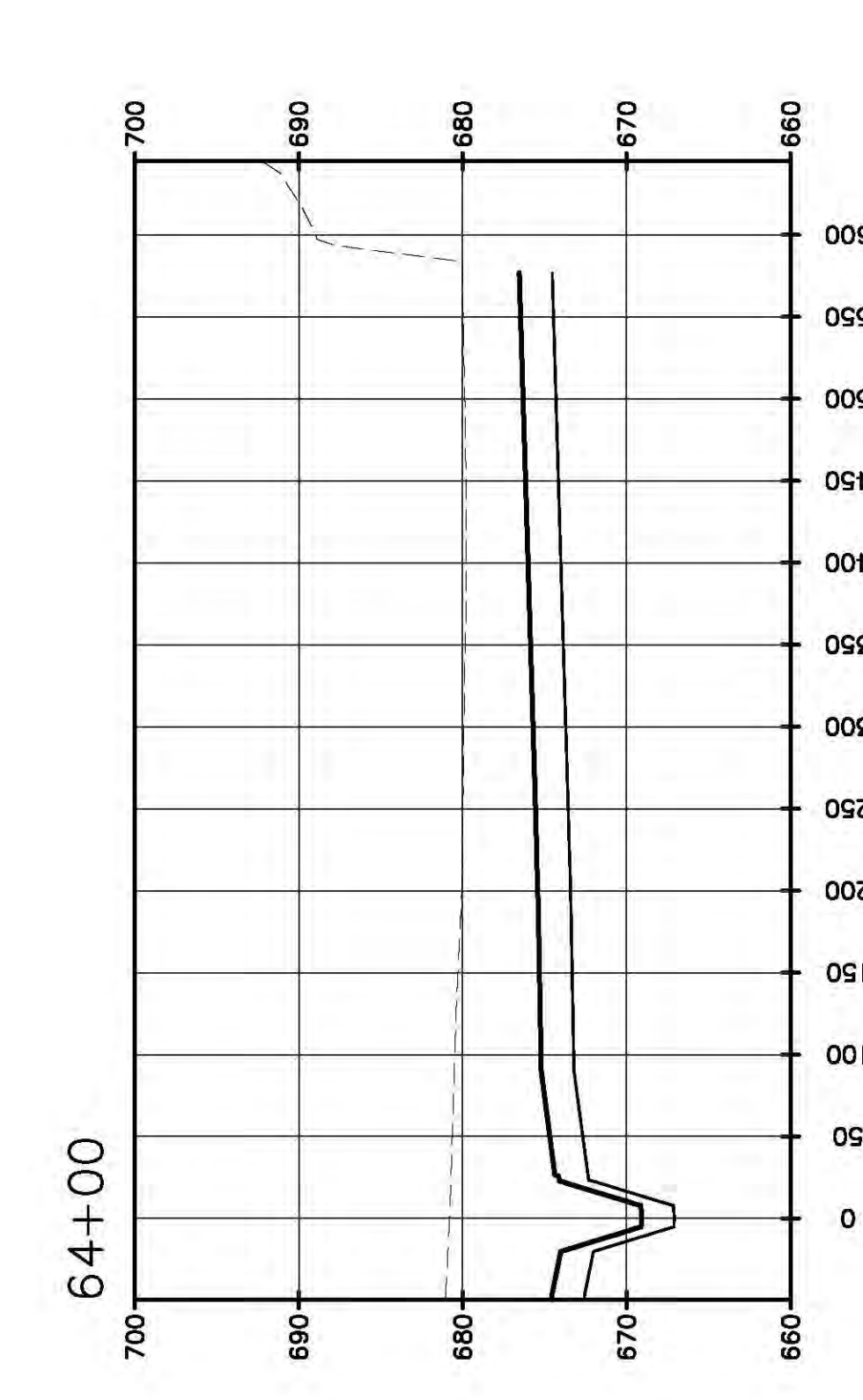
SCALE IS ONE-INCH ON ORIGINAL DRAWING FOR ALL DIMENSIONS UNLESS OTHERWISE NOTED. ADJUST SCALES FOR ALL DIMENSIONS.

KENTUCKY ATTACHMENT 20 - SHEET 3D



NOTES:

1. TOPOGRAPHY PROVIDED BY HENDERSON AERIAL SURVEYS INC. (GROVE CITY, OHIO) WAS USED TO DETERMINE THE EXISTING CONTOUR INTERVAL OF 2 FT WITH SURVEYS PERFORMED BY AEP NEAR THE MAIN DAM ON 8/23/10 AND IN THE BACK SECTION OF THE POND ON 4/12/12. ASH AREAS ESTIMATED BASED ON A SURVEY PERFORMED BY AEP IN APRIL 2013.
2. THE FINAL ELEVATION OF THE CCP MATERIAL AT CLOSURE IS HIGHLY VARIABLE BETWEEN NOW AND THE TIME OF CLOSURE. THIS IS DIRECTLY RELATED TO THE VARIATION IN THE LOADS OF THE DAMS WITH OTHER REGIONAL POWER PLANTS, AND THE ASH CONTENT OF THE ASH. THE ELEVATION OF THE DAMS WILL VARY CONSIDERABLY THROUGHOUT THE REMAINING LIFE OF THE BIG SANDY PLANT.
3. THE CLOSURE GRADES PRESENTED ARE BASED ON ESTIMATES OF THE AMOUNT OF ASH TO BE REMOVED FROM THE DAMS. THE CLOSURE GRADES DERIVED ARE INTENDED TO BE USED AS A CONCEPTUAL DESIGN CONCEPT AT CLOSURE. ACTUAL CLOSURE GRADES FOR PORTIONS OF THE FACILITY WILL VARY 2 TO 10 FEET, AS NEEDED, IT IS INTENDED THAT THE MAJORITY OF THE SITE WILL BE AT A MINIMUM GRADE OF APPROXIMATELY 2% A MINIMUM CAP GRADE OF APPROXIMATELY 25%.



DATE	NO.	DESCRIPTION	APPROVED
		REVISIONS	

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED UNDER CONDITION THAT IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF THE AEP SERVICE CORP. OR ANY OF ITS AFFILIATES. THIS DRAWING AND ITS CONTENTS ARE TO BE RETURNED UPON REQUEST.

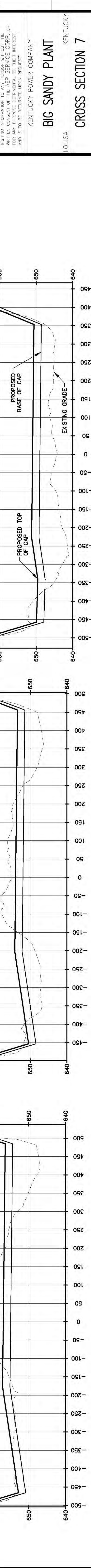
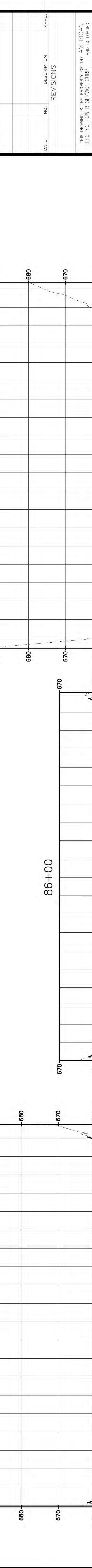
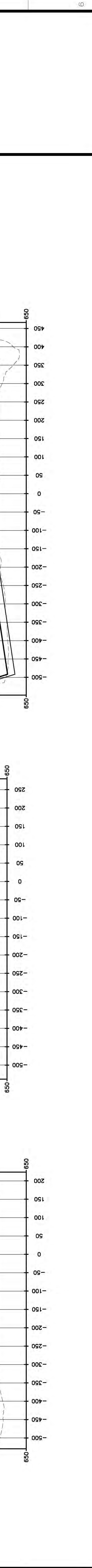
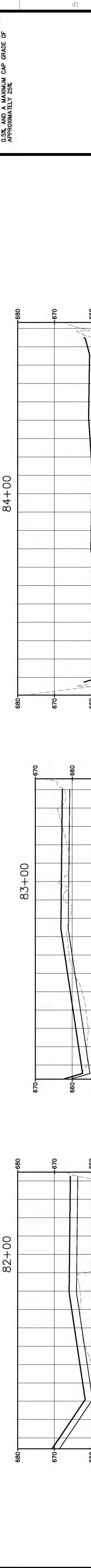
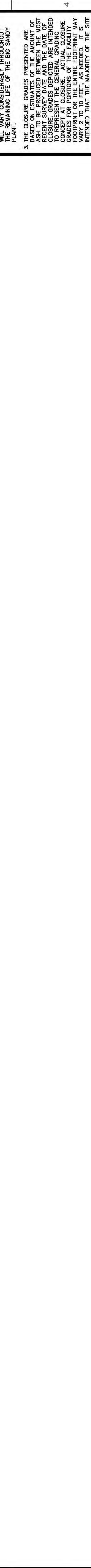
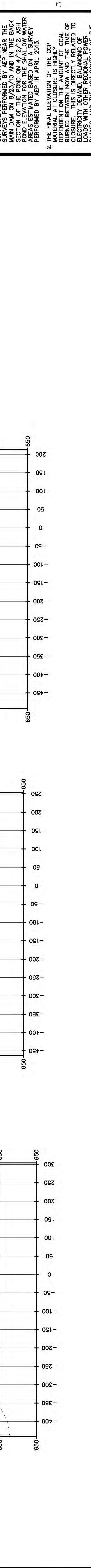
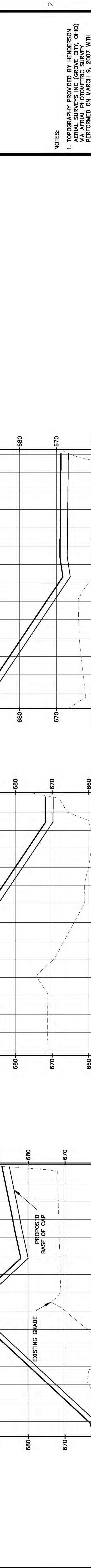
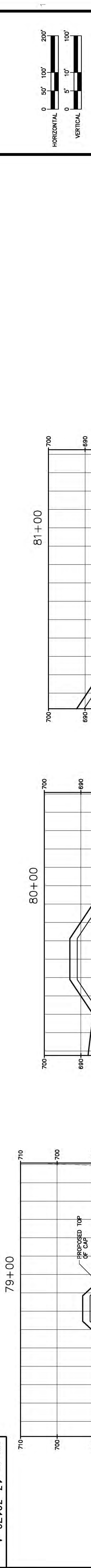
KENTUCKY POWER COMPANY
BIG SANDY PLANT
 LOUISA KENTUCKY
CROSS SECTIONS 5

ATTACHMENT 20
 DWG. NO. 13-30168-A

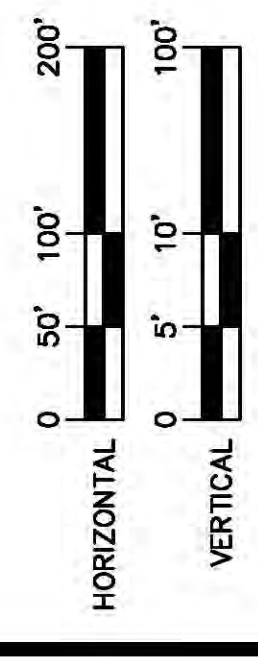
SCALE:	AS SHOWN
PROJECT NO.:	13B15151
DESIGNED BY:	LEC
DRAWN BY:	LEC
APPROVED BY:	TAK



DATE IS ONE-INCH ON ORIGINAL DRAWING. ALL DIMENSIONS SHALL BE ADJUSTED TO MATCH ADJUST SCALES WHEN NECESSARY.



- NOTES:
1. TOPOGRAPHY PROVIDED BY HENDERSON AERIAL SURVEYS INC (GROVE CITY, OHIO) AND CONDUCTED BY AERIAL SURVEYS INC. SURVEY PERFORMED ON MARCH 9, 2007 WITH CONTOUR INTERVAL OF 2 FT. SURVEYS PERFORMED BY AEP NEAR THE MAIN DAM ON 8/23/10 AND IN THE BACK SECTION OF THE POND ON 4/12/12. ASH AREAS ESTIMATED BASED ON A SURVEY PERFORMED BY AEP IN APRIL 2013.
 2. THE FINAL ELEVATION OF THE CCP MATERIAL AT CLOSURE IS HIGHLY VARIABLE BETWEEN NOW AND THE TIME OF CLOSURE. THIS IS DIRECTLY RELATED TO THE ASH CONTENT OF THE COAL ASH LOADS WITH OTHER REGIONAL POWER PLANTS, AND THE ASH CONTENT OF THE ASH LOADS VARYING THROUGHOUT THE REMAINING LIFE OF THE BIG SANDY PLANT.
 3. THE CLOSURE GRADES PRESENTED ARE BASED ON ESTIMATES OF THE AMOUNT OF ASH TO BE CLOSURED. THE AMOUNT OF CLOSURE GRADES DERIVED ARE INTENDED CONCEPT AT CLOSURE. ACTUAL CLOSURE GRADES FOR PORTIONS OF THE FACILITY ARE SUBJECT TO VARIATION. THE GRADES VARY 2 TO 10 FEET, AS NEEDED, IT IS INTENDED THAT THE MAJORITY OF THE SITE WILL BE CLOSURED TO A MINIMUM GRADE OF APPROXIMATELY 2% A MINIMUM GRADE OF 0.5% AND A MAXIMUM CAP GRADE OF APPROXIMATELY 25%.



DATE	NO.	DESCRIPTION	APPROVED

"THE DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED UNDER CONDITION THAT IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN CONSENT OF THE AEP SERVICE CORP. OR ANY OTHER PARTY. IT IS TO BE RETURNED UPON REQUEST."

KENTUCKY POWER COMPANY
BIG SANDY PLANT
 LOUISA KENTUCKY
CROSS SECTION 7
ATTACHMENT 20
 DWG. NO. 13-30170-A

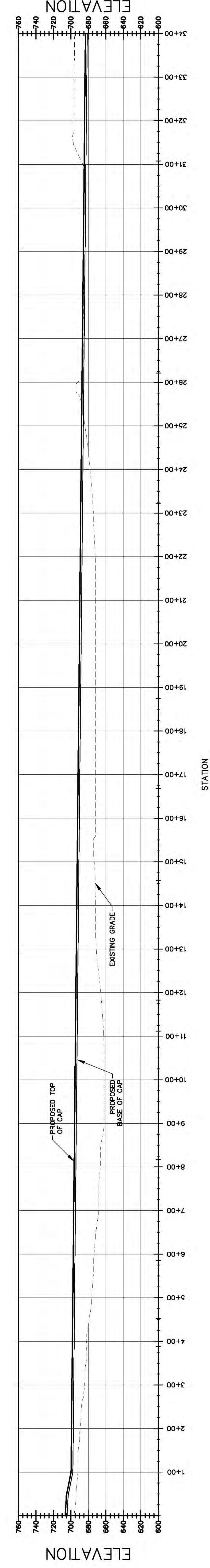
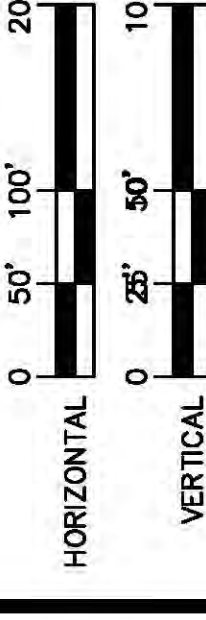
SCALE:	AS SHOWN
PROJECT NO.:	13B15151
DESIGNED BY:	LEC
DRAWN BY:	LEC
APPROVED BY:	TAK

U.S. ENGINEERING DIVISION

URS
 1375 EUCLID AVENUE, SUITE 600
 GREENVILLE, OHIO 45303

BASE IS ONE-INCH ON ORIGINAL DRAWING. ALL DIMENSIONS SHALL BE ADJUSTED TO MATCH APPROXIMATELY.

AEP SERVICE CORP.
 AMERICAN ELECTRIC POWER
 COLUMBUS, OH 43215

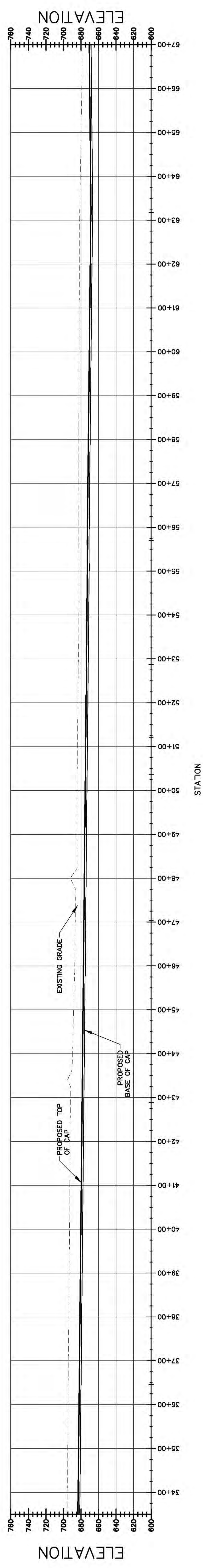


PERMIT BASELINE
0+00.00 TO 34+00.00

STATION

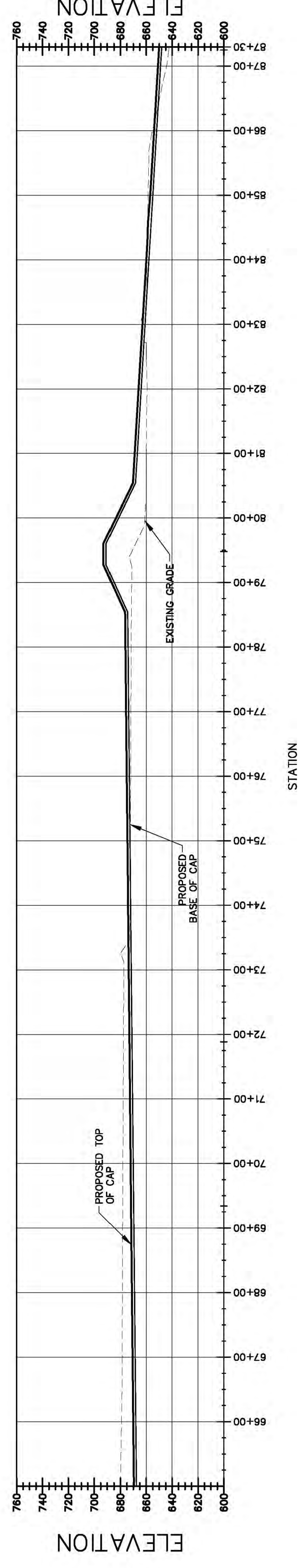
- NOTES:**
1. TOPOGRAPHY PROVIDED BY HENDERSON AERIAL SURVEYS INC (GROVE CITY, OHIO) IN 2007. SURVEY DATED 2007. SURVEY PERFORMED ON MARCH 9, 2007 WITH CONTOUR INTERVAL OF 2 FT. SURVEYS PERFORMED BY AEP NEAR THE MAIN DAM ON 8/23/10 AND IN THE BACK SECTION OF THE POND ON 4/12/12. ASH DEPOSIT GRADES SHOWN ARE FOR THESE AREAS ESTIMATED BASED ON A SURVEY PERFORMED BY AEP IN APRIL 2013.
 2. THE FINAL ELEVATION OF THE CCP MATERIAL AT CLOSURE IS HIGHLY VARIABLE. THIS IS DUE TO THE TIME OF BURIED BETWEEN NOW AND THE TIME OF CLOSURE. THIS IS DIRECTLY RELATED TO THE VARIATION OF THE LOCAL POWER LOADS WITH OTHER REGIONAL POWER PLANTS, AND THE ASH CONTENT OF THE ASH DEPOSIT. THE PROPOSED ELEVATION WILL VARY CONSIDERABLY THROUGHOUT THE REMAINING LIFE OF THE BIG SANDY PLANT.
 3. THE CLOSURE GRADES PRESENTED ARE BASED ON ESTIMATES OF THE AMOUNT OF CLOSURE GRADES DEPENDING ON THE MOST RECENT SURVEY DATE AND THE DATE OF CLOSURE. THE CLOSURE GRADES PRESENTED ARE INTENDED TO PROVIDE A CONCEPTUAL CLOSURE CONCEPT AT CLOSURE. ACTUAL CLOSURE GRADES FOR PORTIONS OF THE FACILITY WILL VARY BY UP TO 10 FEET. THE CLOSURE GRADES WILL VARY BY UP TO 10 FEET. IT IS INTENDED THAT THE MAJORITY OF THE SITE COVERED BY THE CLOSURE GRADES WILL BE APPROXIMATELY 2% A MINIMUM GRADE OF 0.5% AND A MAXIMUM CAP GRADE OF APPROXIMATELY 25%.

PERMIT BASELINE
33+50.00 TO 67+00.00



STATION

PERMIT BASELINE
65+00.00 TO 87+29.55



STATION

URS
1375 EUCLID AVENUE SUITE 600
CLEVELAND, OHIO 44115

SCALE: AS SHOWN
PROJECT NO: 13B15151
DESIGNED BY: LEC
DRAWN BY: LEC
APPROVED BY: TAK

DATE: [Blank]
SCALE: [Blank]
CHECKED BY: [Blank]
DATE: [Blank]

APP. SERVICE CORP.
1375 EUCLID AVENUE SUITE 600
CLEVELAND, OHIO 44115

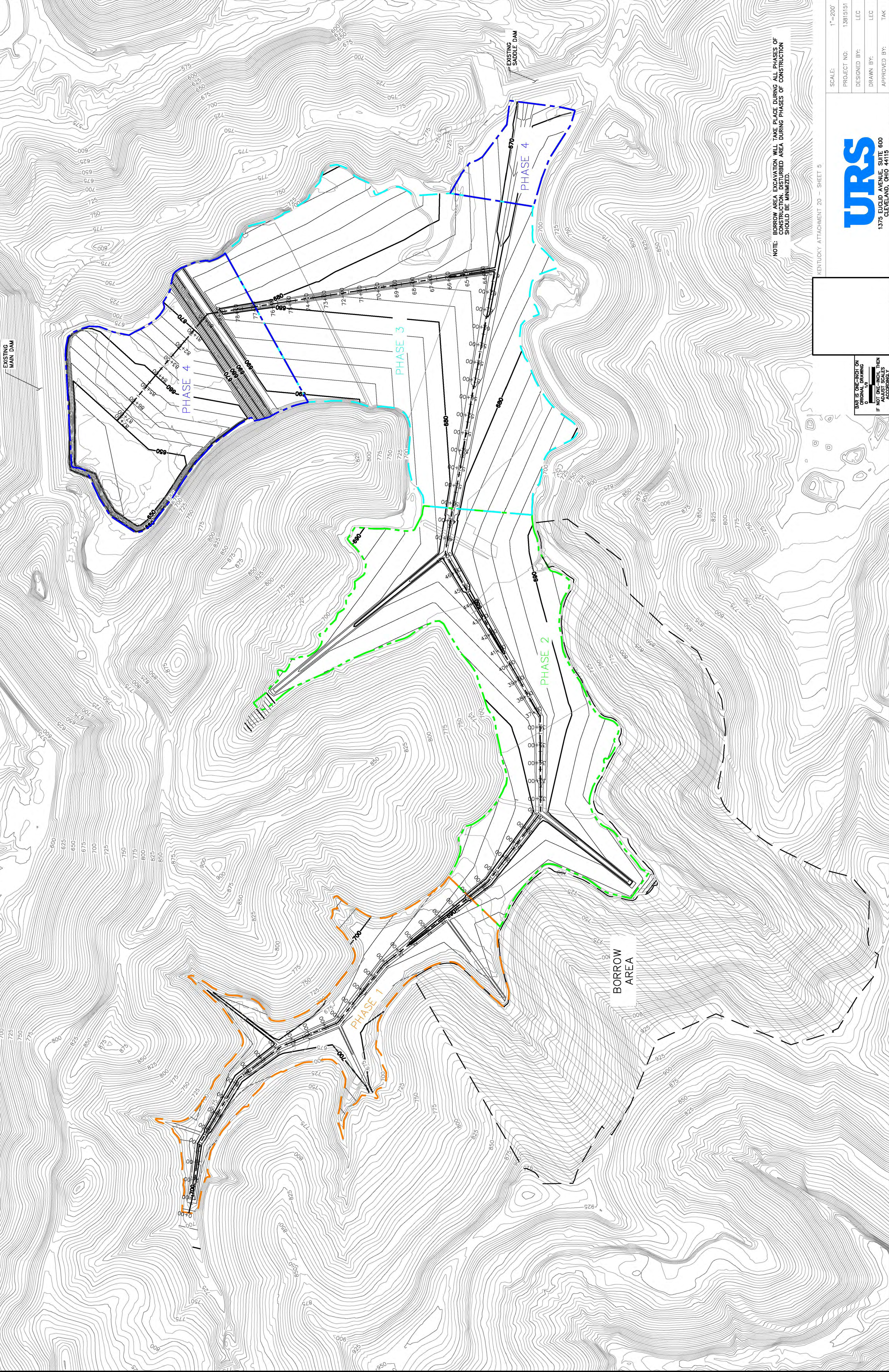
APP. SERVICE CORP.
1375 EUCLID AVENUE SUITE 600
CLEVELAND, OHIO 44115

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISA KENTUCKY
BASELINE PROFILES
ATTACHMENT 20
DWG. NO: 13-30171-A

SCALE: [Blank]
DATE: [Blank]
CHECKED BY: [Blank]
DATE: [Blank]

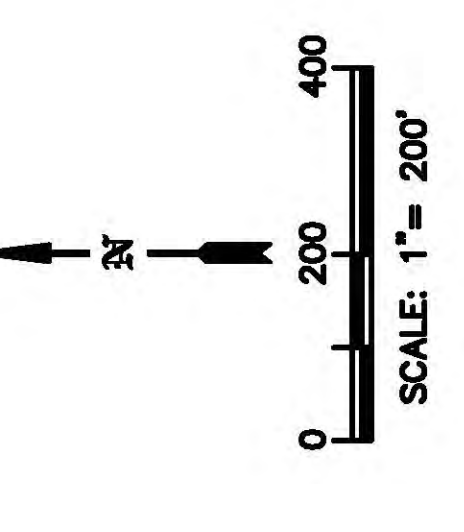
THE DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED UNDER THE CONDITION THAT IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM WITHOUT THE WRITTEN CONSENT OF THE AEP SERVICE CORP. OR ANY OF ITS AFFILIATED COMPANIES. IT IS TO BE RETURNED UPON REQUEST.

EXISTING MAJOR CONTOURS
EXISTING MINOR CONTOURS
PROPOSED TOP OF CAP MAJOR CONTOURS
PHASE 1
PHASE 2
PHASE 3
PHASE 4
BORROW AREA



NOTES:

1. TOPOGRAPHY PROVIDED BY HENDERSON AERIAL SURVEYS INC. (GROVE CITY, OHIO) FOR THE BIG SANDY PLANT. THE SURVEY WAS PERFORMED ON MARCH 9, 2007 WITH A CONTOUR INTERVAL OF 2 FT. THE SURVEY WAS PERFORMED BY AEP NEAR THE MAIN DAM ON 8/23/10 AND IN THE BACK SECTION OF THE POND ON 4/12/12. ASH AREAS WERE IDENTIFIED AND THE PERCENT ASH AREAS ESTIMATED BASED ON A SURVEY PERFORMED BY AEP IN APRIL 2013.
2. THE FINAL ELEVATION OF THE CCP MATERIAL AT CLOSURE IS HIGHLY VARIABLE. THIS IS DUE TO THE VARIATION IN THE BURIED BETWEEN NOW AND THE TIME OF CLOSURE. THIS IS DIRECTLY RELATED TO THE VARIATION IN THE ASH CONTENT OF THE LOADS WITH OTHER REGIONAL POWER PLANTS, AND THE ASH CONTENT OF THE LOADS WITH OTHER REGIONAL POWER PLANTS. THESE VARIATIONS WILL VARY CONSIDERABLY THROUGHOUT THE REMAINING LIFE OF THE BIG SANDY PLANT.
3. THE CLOSURE GRADES PRESENTED ARE BASED ON ESTIMATES OF THE AMOUNT OF ASH THAT WILL BE BURIED. THE AMOUNT OF ASH TO BE BURIED WILL VARY BASED ON RECENT SURVEY DATA AND THE DATE OF CLOSURE. GRADES DERIVED ARE INTENDED TO BE USED FOR CONCEPTUAL DESIGN AND CONCEPT AT CLOSURE. ACTUAL CLOSURE GRADES FOR PORTIONS OF THE FACILITY WILL VARY FROM THE CONCEPT GRADES BY UP TO 2 FEET. AS NEEDED, IT IS INTENDED THAT THE MAJORITY OF THE SITE WILL BE AT APPROXIMATELY 670 TO 680 FEET APPROXIMATELY 2% A MINIMUM CAP GRADE OF APPROXIMATELY 25%.



DATE	NO.	DESCRIPTION	APPROV.

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR USE ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN CONSENT OF THE AEP SERVICE CORP. OR ANY OF ITS SUBSIDIARIES. IT IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISIANA
KENTUCKY
SITE DEVELOPMENT
PHASING PLAN
DWG. NO. 13-30172-A

SCALE	DATE	BY	CHKD.	DATE
1"=200'	13/15/11	LEC		

SCALE	PROJECT NO.	DESIGNED BY:	DRAWN BY:	DATE
1"=200'	13815151	LEC		

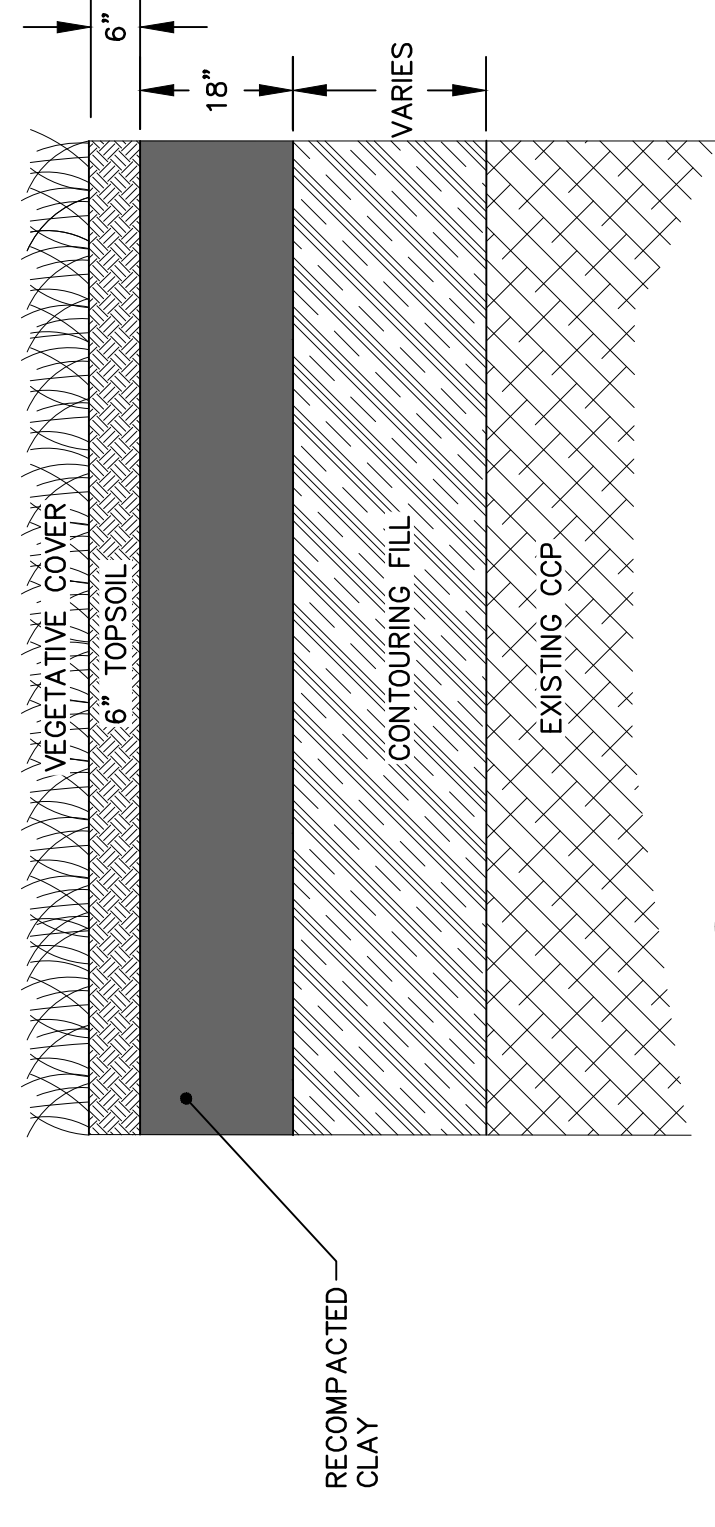
TAK	APPROVED BY:	TAK



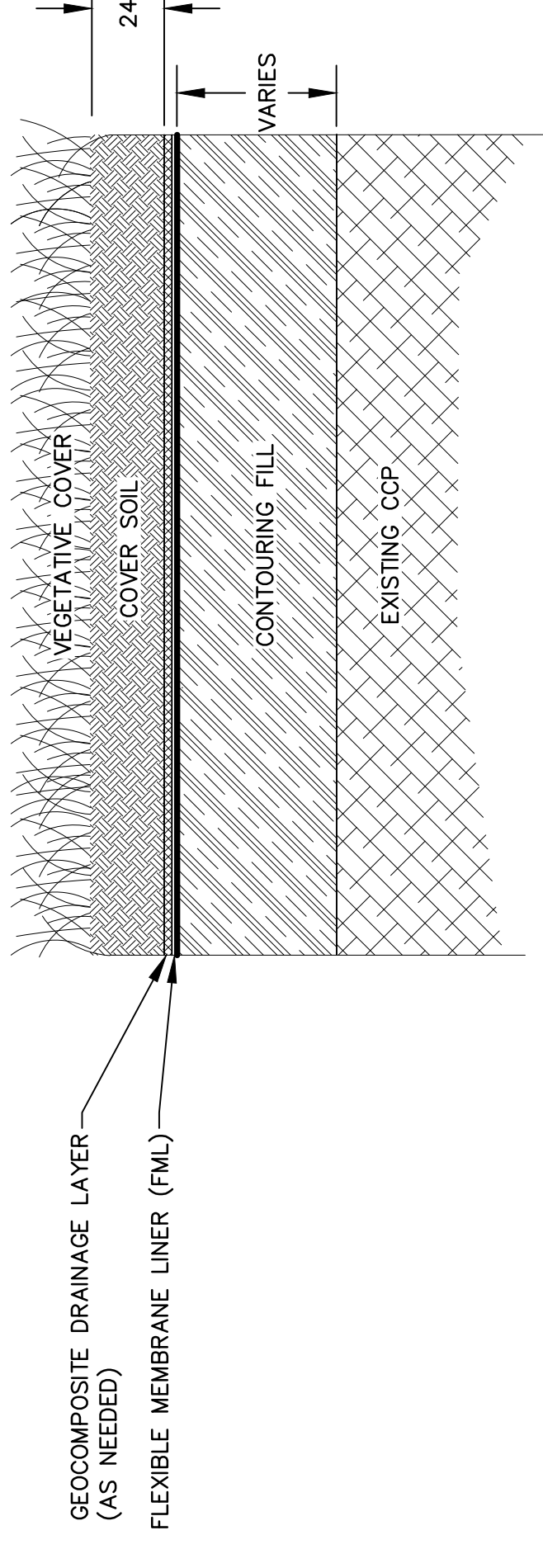
NOTE: BORROW AREA EXCAVATION WILL TAKE PLACE DURING ALL PHASES OF CONSTRUCTION SHOULD BE MINIMIZED.

KENTUCKY ATTACHMENT 20 - SHEET 5

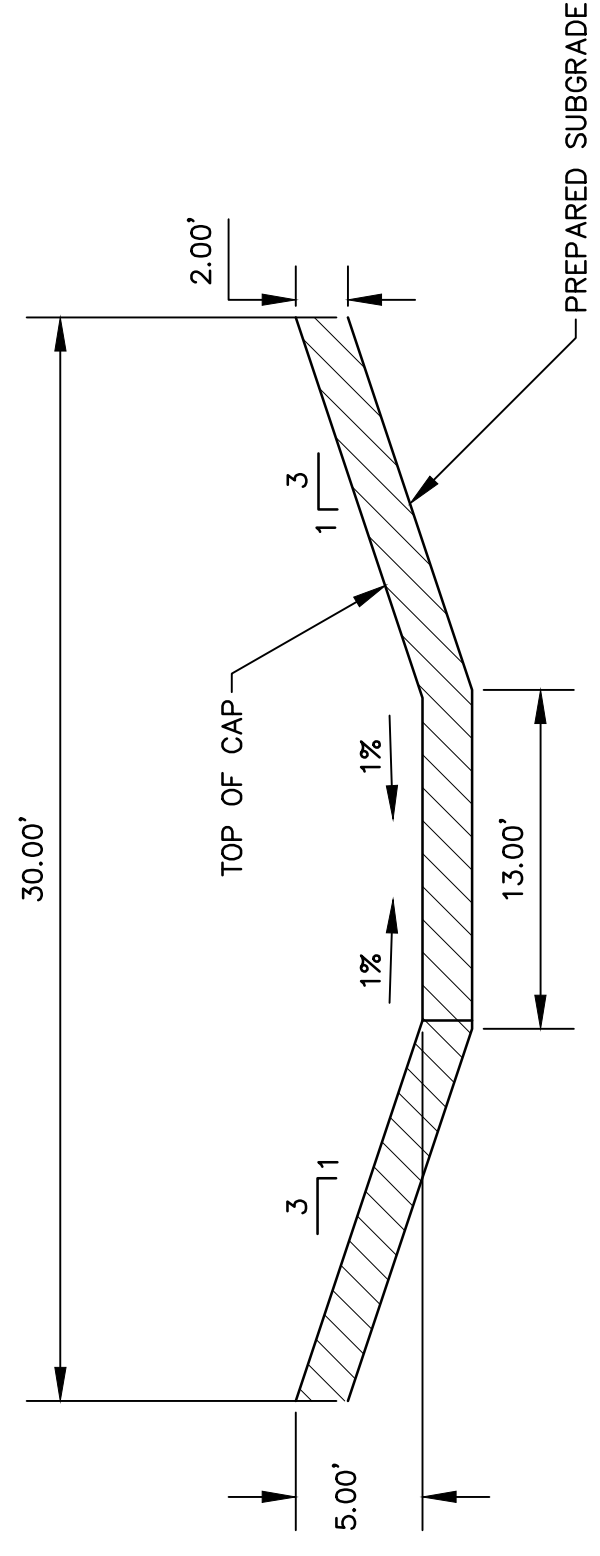
DATE IS ONE-INCH ON ORIGINAL DRAWING. ALL DIMENSIONS SHALL BE ADJUSTED TO MATCH DRAWING DIMENSIONS.



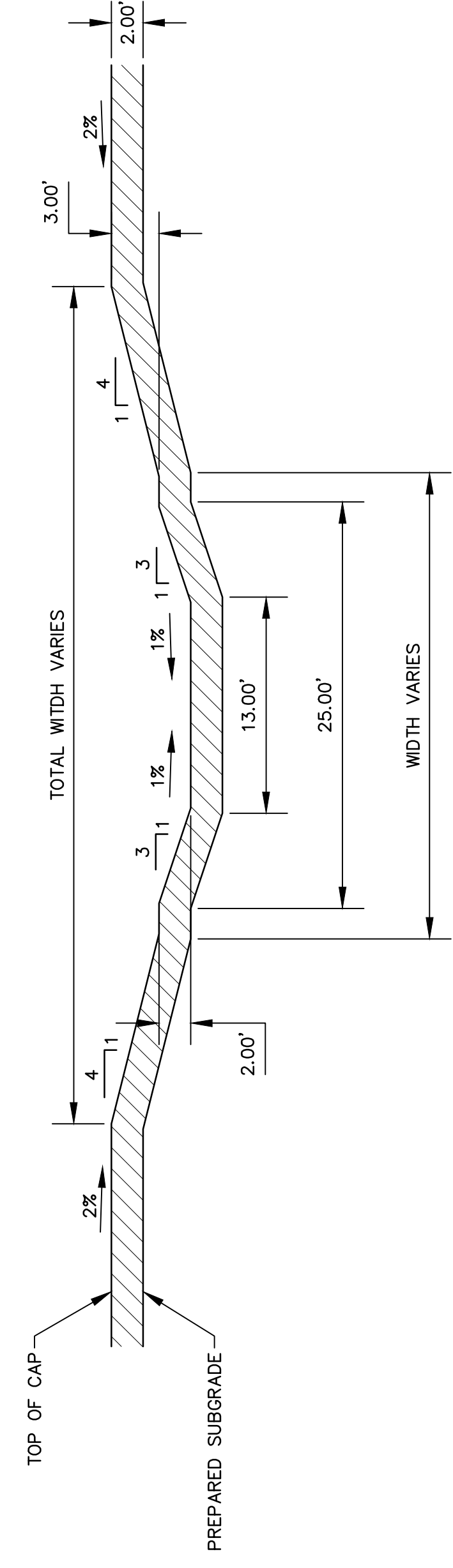
1 CAP SYSTEM - SOIL
NOT TO SCALE
6373



2 CAP SYSTEM - GEOSYNTHETIC
NOT TO SCALE
6373

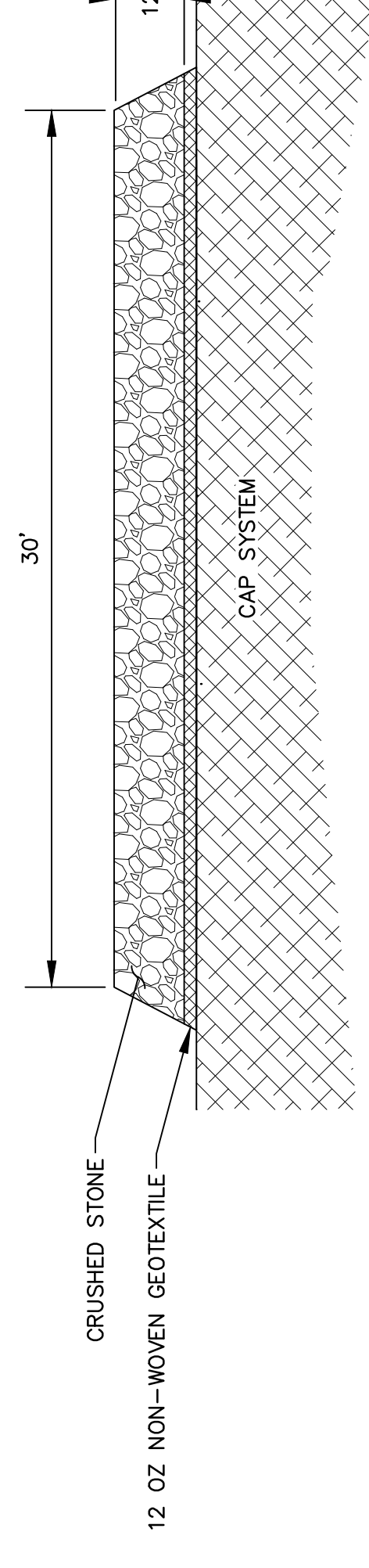


3 TRIBUTARY CHANNEL SECTION
NOT TO SCALE
6373

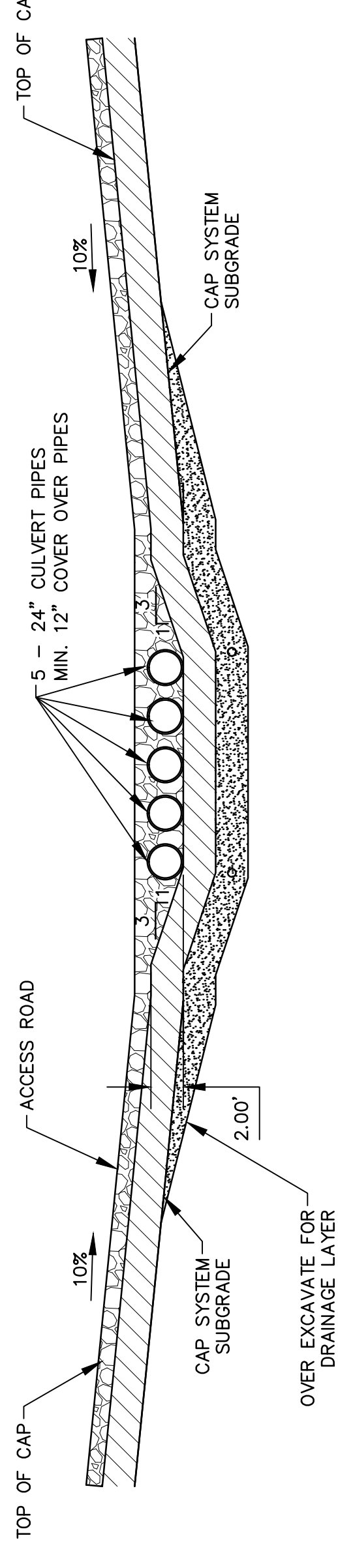


5 MAIN CHANNEL SECTION
NOT TO SCALE
6373

REACH	TOTAL CHANNEL WIDTH	TOTAL CHANNEL DEPTH	2-YEAR FLOW DEPTH	25-YEAR FLOW DEPTH	100-YEAR FLOW DEPTH
REACH A	95	5 FT.	1.1 FT.	3.0 FT.	3.7 FT.
REACH B	85	5 FT.	1.2 FT.	3.2 FT.	3.8 FT.
REACH C	74	5 FT.	1.3 FT.	3.3 FT.	3.8 FT.
REACH D	62	5 FT.	1.4 FT.	3.3 FT.	3.8 FT.



4 ACCESS ROAD
NOT TO SCALE
6373



6 CHANNEL ACCESS ROAD CROSSING
NOT TO SCALE
6373

NOTES:
1. CULVERT PIPES TO BE CORRUGATED HDPE WITH SMOOTH INTERIOR (H=20 LOADING RATED).

DATE	NO.	DESCRIPTION	APPRO.

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. NO PART OF THIS DRAWING IS TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. FOR ANY PURPOSES OTHER THAN TO SERVE YOUR INTERESTS AND IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISIANA KENTUCKY
CONSTRUCTION DETAILS

ATTACHMENT 20
DWG. No. 13-30173-A

SCALE	DATE	BY	CHK	APP	DATE
1/8" = 1'					

SCALE: 1/8" = 1'
PROJECT NO. 13815151
DESIGNED BY: LEC
DRAWN BY: LEC
APPROVED BY: TAK



1375 E. OLD ANCHORAGE SITE
GEORGETOWN, KY 40324

AMERICAN ELECTRIC POWER
APP SERVICE CORP.
COLUMBUS, OH 43216

ISSUE NO. 13815151-01

DATE: 08/20/13

BY: J. BROWN

CHK: J. BROWN

APP: J. BROWN

DATE: 08/20/13

SCALE: 1/8" = 1'

PROJECT NO. 13815151

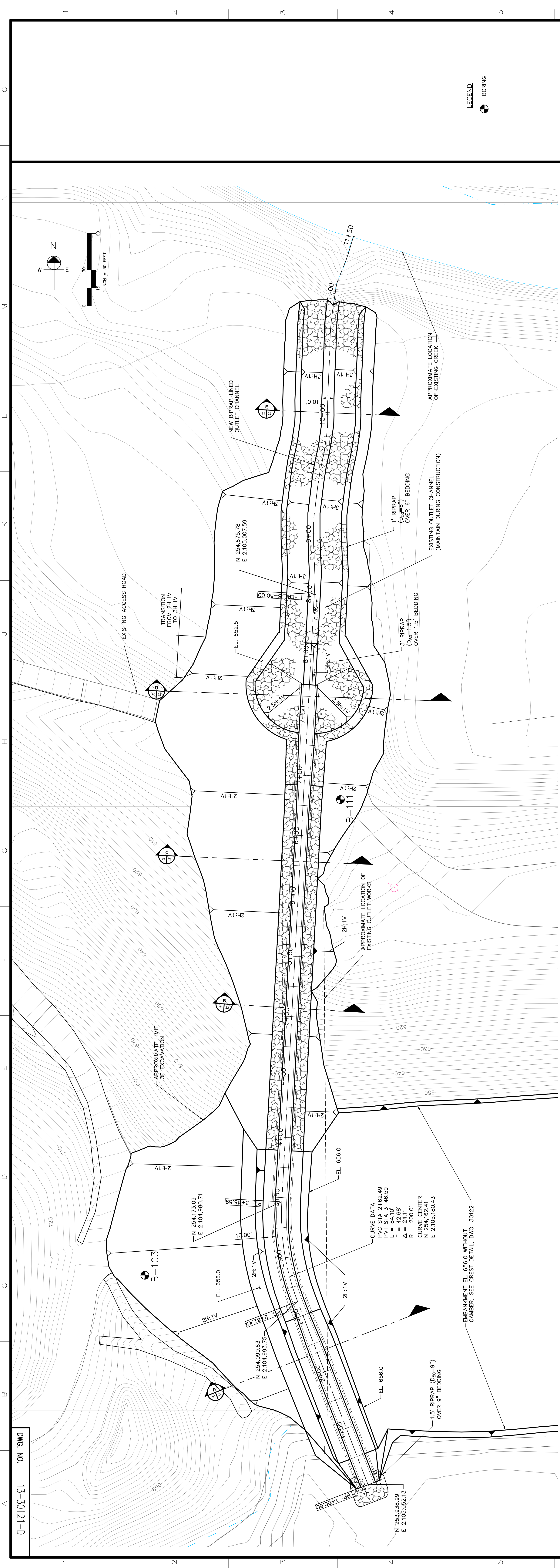
DESIGNED BY: LEC

DRAWN BY: LEC

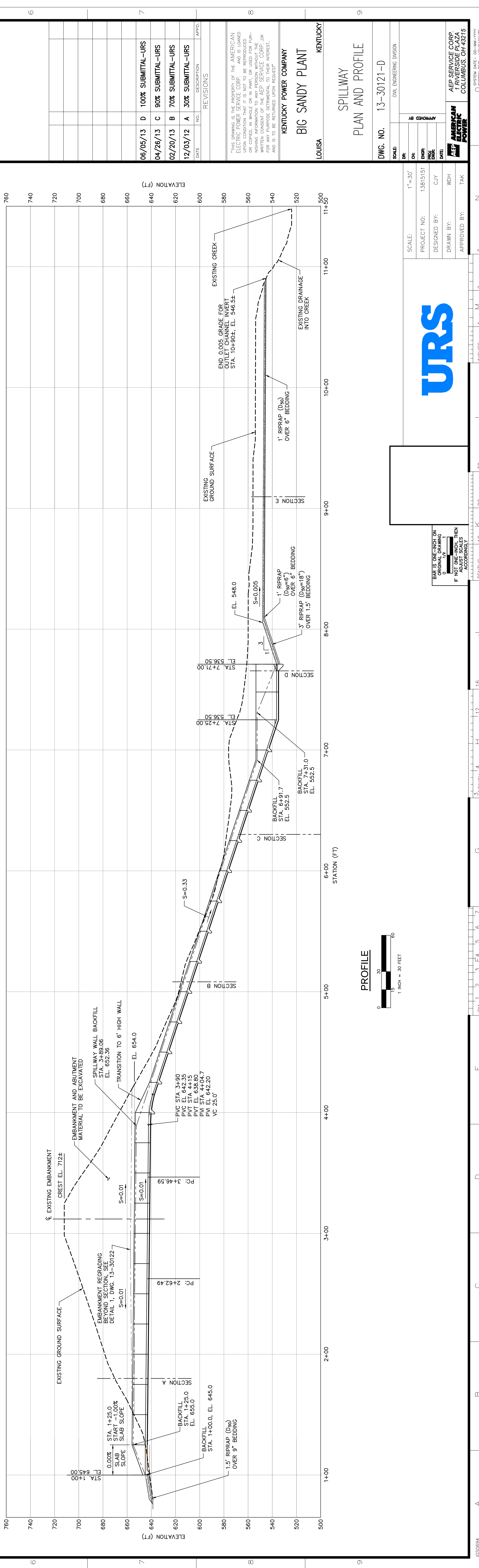
APPROVED BY: TAK

KENTUCKY ATTACHMENT 20 - SHEET 6

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63



PLAN



PROFILE

0-12103-C1 ON 31MD
13-30121-D

LEGEND
BORING

DATE	NO.	DESCRIPTION	APPRO.
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED OR CORRECTED, IN WHOLE OR IN PART, OR USED FOR PURPOSES OTHER THAN THAT AUTHORIZED BY THE ORIGINAL DRAWING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN CONSENT OF THE AMERICAN ELECTRIC POWER SERVICE CORP. ANY REPRODUCTION OR FOR ANY PURPOSE DETERMINED TO BE IN VIOLATION OF THE TERMS OF THIS AGREEMENT AND IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISA KENTUCKY

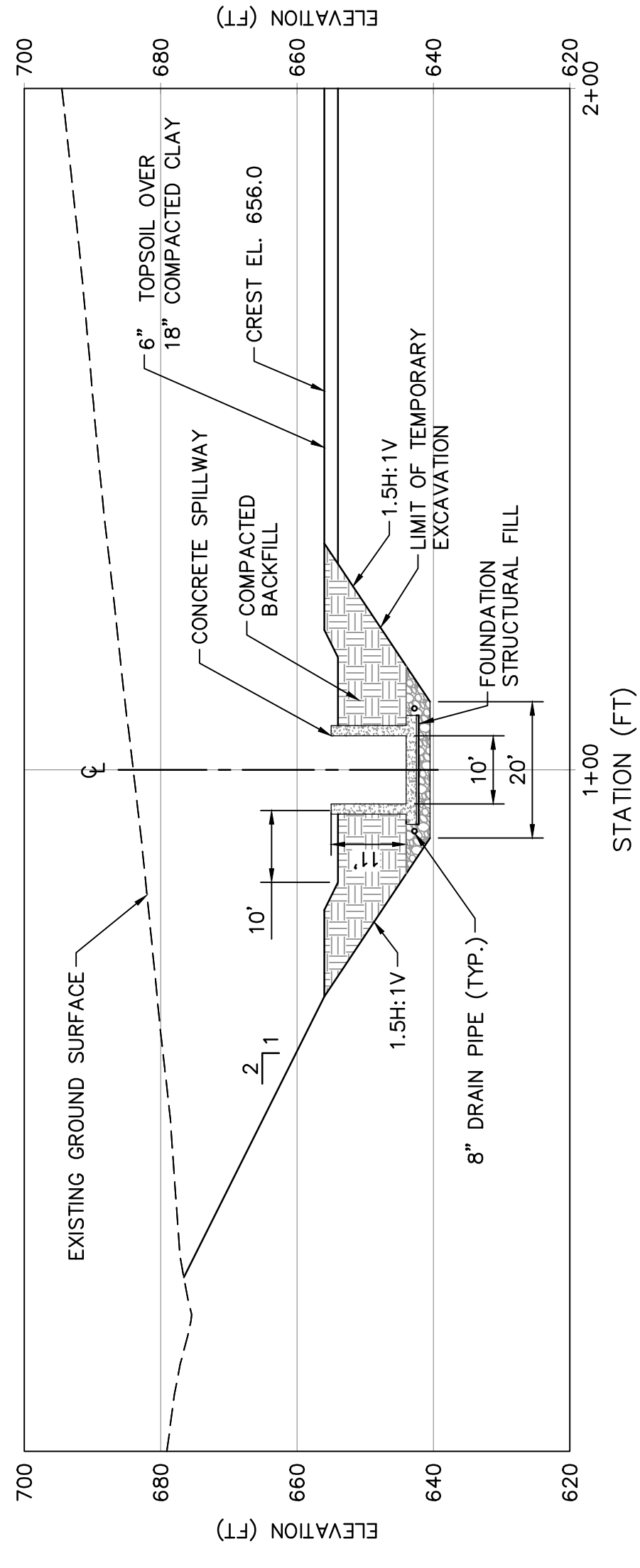
SPILLWAY
PLAN AND PROFILE
DWG. NO. 13-30121-D

SCALE	1"=30'
PROJECT NO.	13815151
DESIGNED BY:	CJT
DRAWN BY:	WDH
APPROVED BY:	TKK

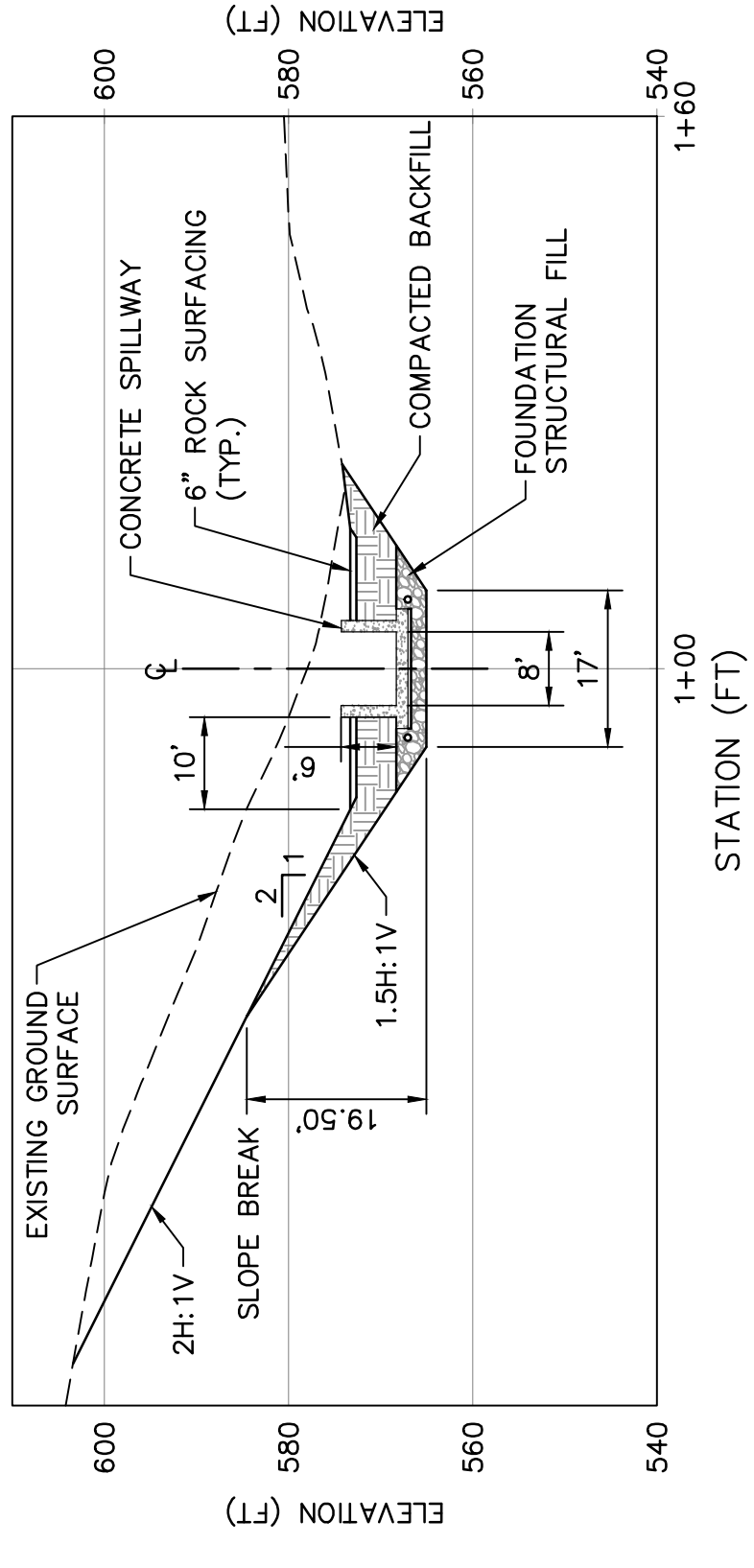


THIS DRAWING IS THE PROPERTY OF URS. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF URS. ANY REPRODUCTION OR FOR ANY PURPOSE DETERMINED TO BE IN VIOLATION OF THE TERMS OF THIS AGREEMENT AND IS TO BE RETURNED UPON REQUEST.

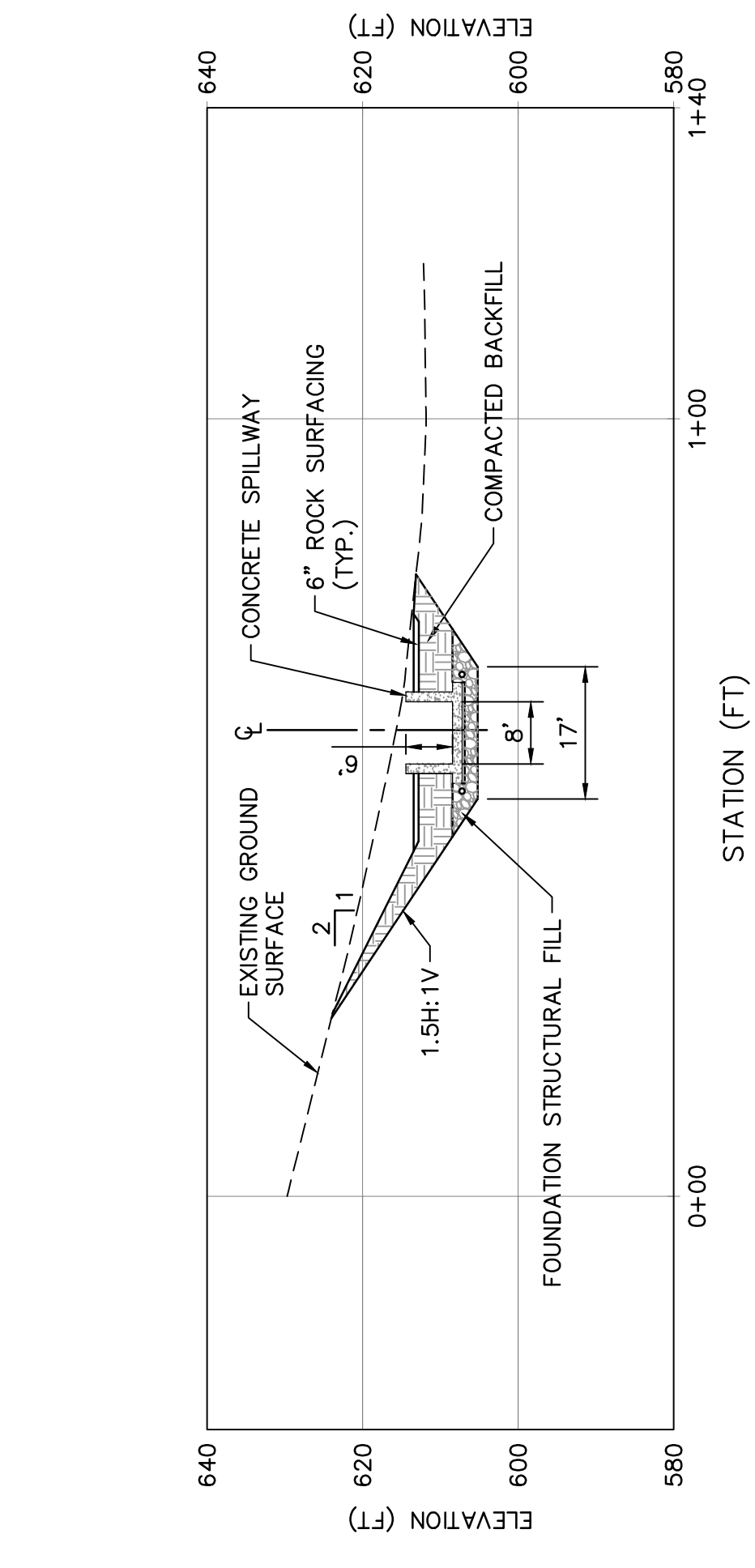
AMERICAN ELECTRIC POWER
AEP SERVICE CORP
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215



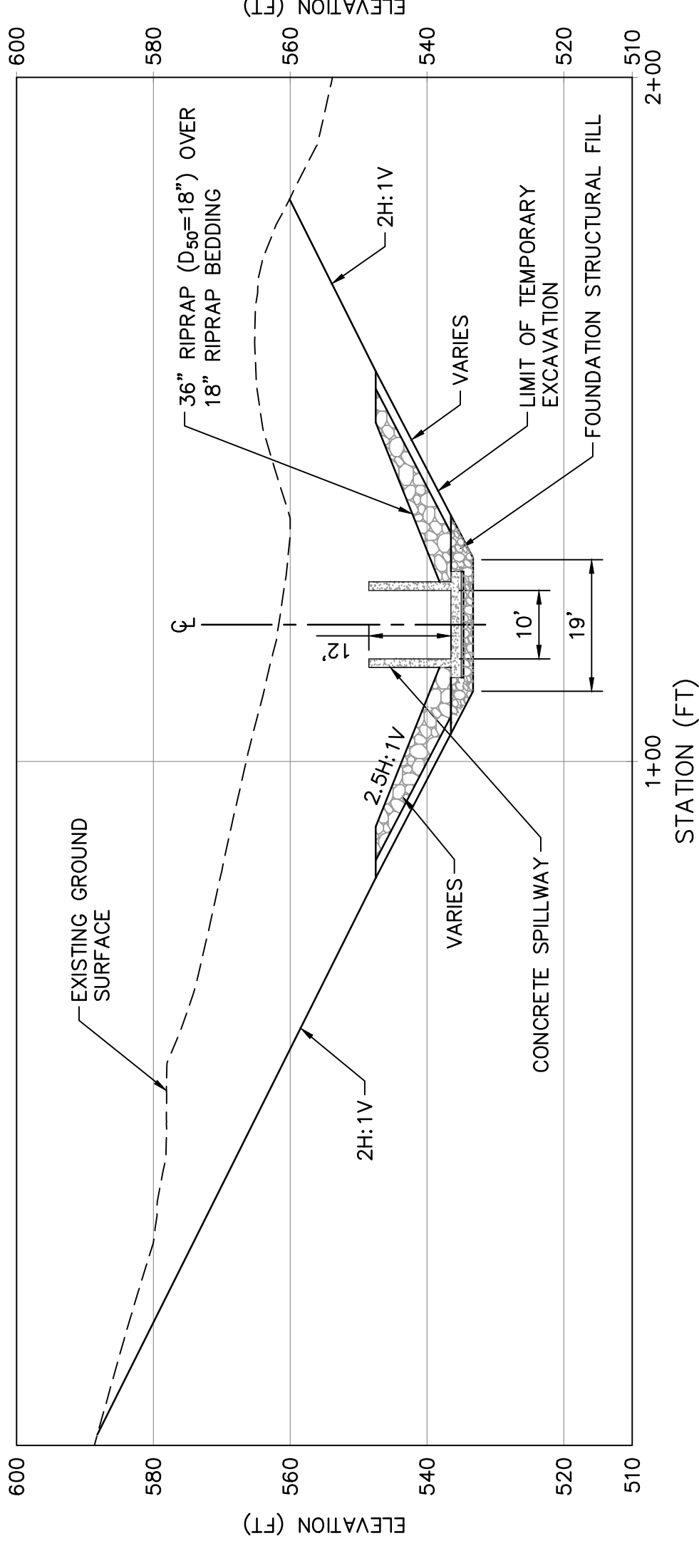
A SECTION
SCALE: 1"=20'
21 22 23



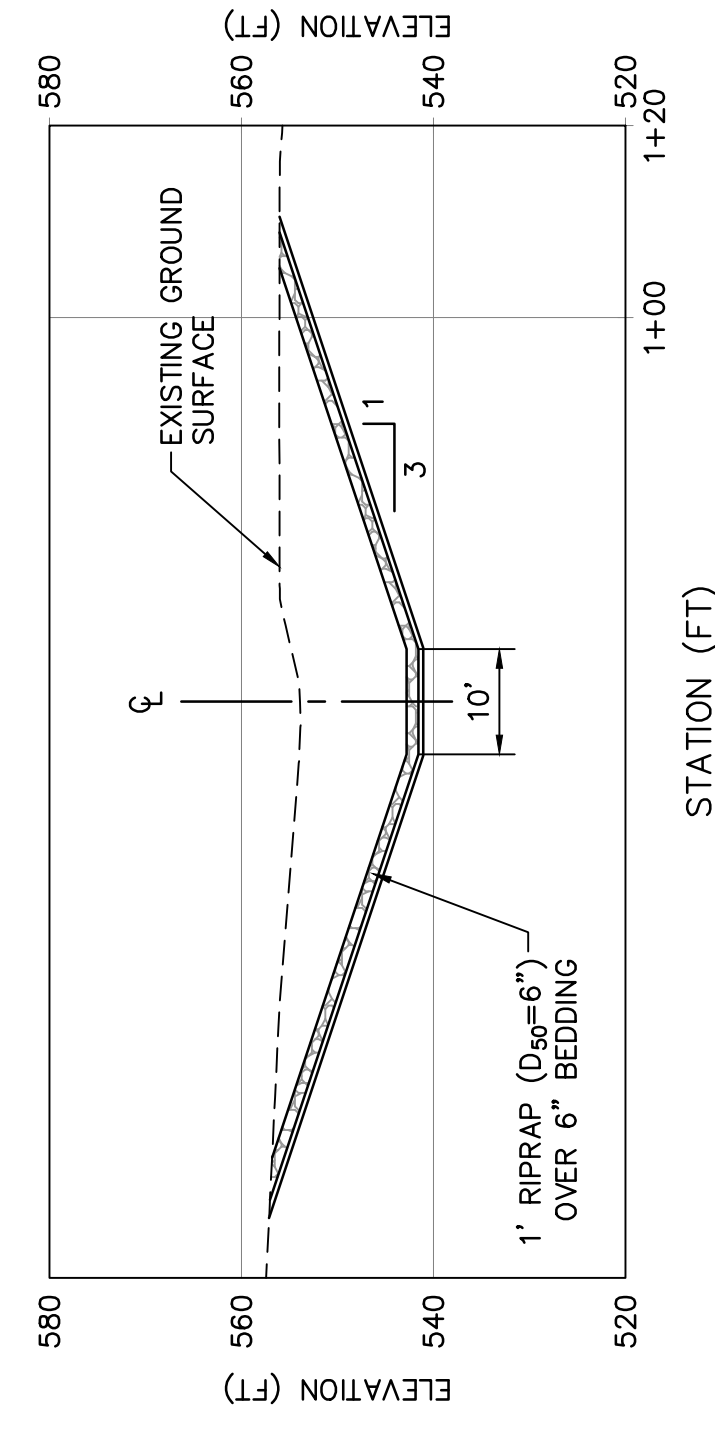
C SECTION
SCALE: 1"=20'
21 22 23



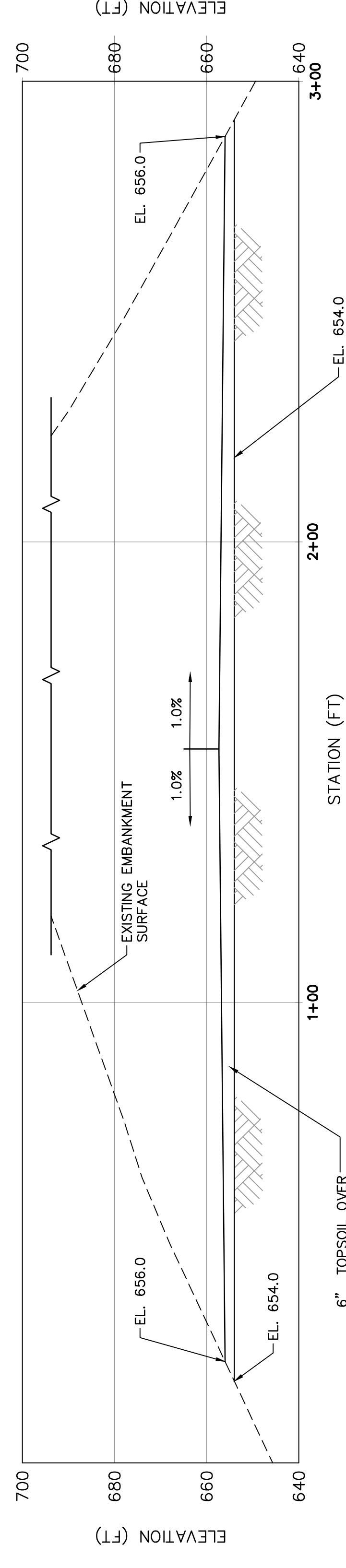
B SECTION
SCALE: 1"=20'
21 22 23



D SECTION
SCALE: 1"=20'
21 22 23



E DETAIL
SCALE: 1"=20'
21 22 23



1 DETAIL
SCALE: 1"=20'
21 22 23

DATE	NO.	DESCRIPTION	APPROVED BY
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR IN ANY MANNER USED FOR PURPOSES OTHER THAN THAT FOR WHICH IT WAS ORIGINALLY PREPARED. ANY REVISIONS TO THIS DRAWING SHALL BE MADE BY THE ORIGINAL DESIGNER OR HIS AUTHORIZED REPRESENTATIVE. THIS DRAWING IS NOT TO BE USED FOR ANY PURPOSE DETERMINED TO BE DETRIMENTAL TO THE INTERESTS OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISA, KENTUCKY

SPILLWAY SECTIONS

DWG. NO. 13-30122-D

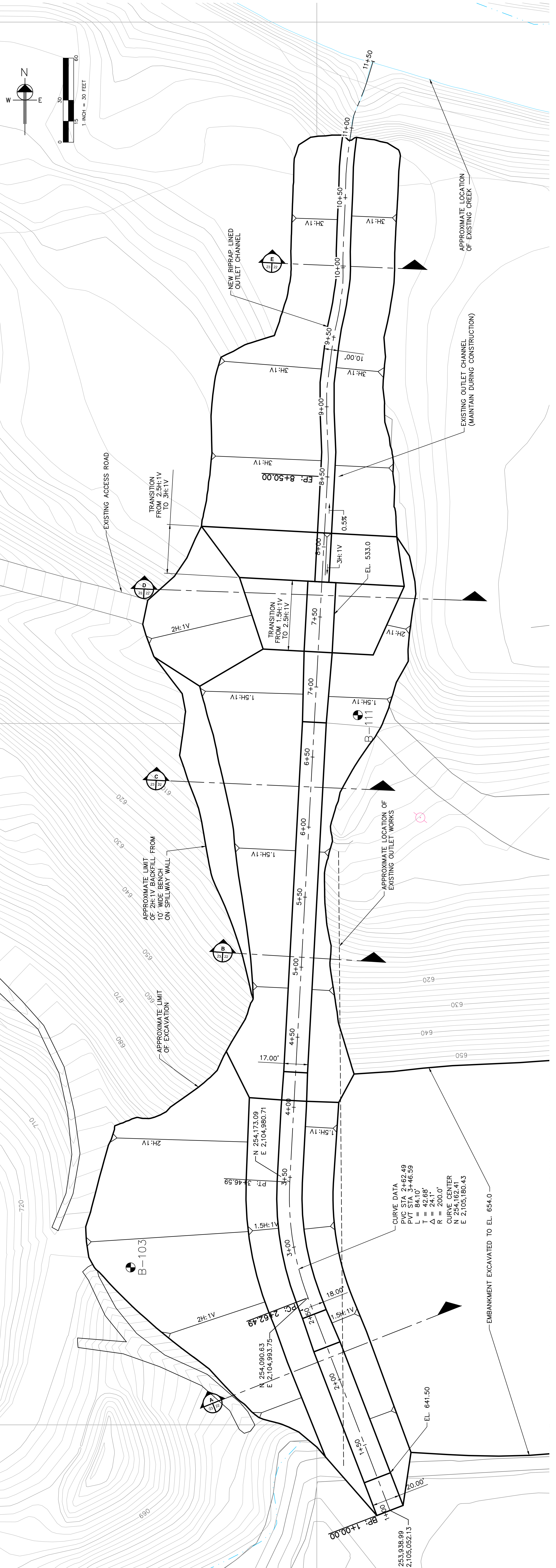
SCALE: CIVIL ENGINEERING DIVISION
DATE: 06/05/13
DESIGNED BY: 13815151
DRAWN BY:
APPROVED BY:



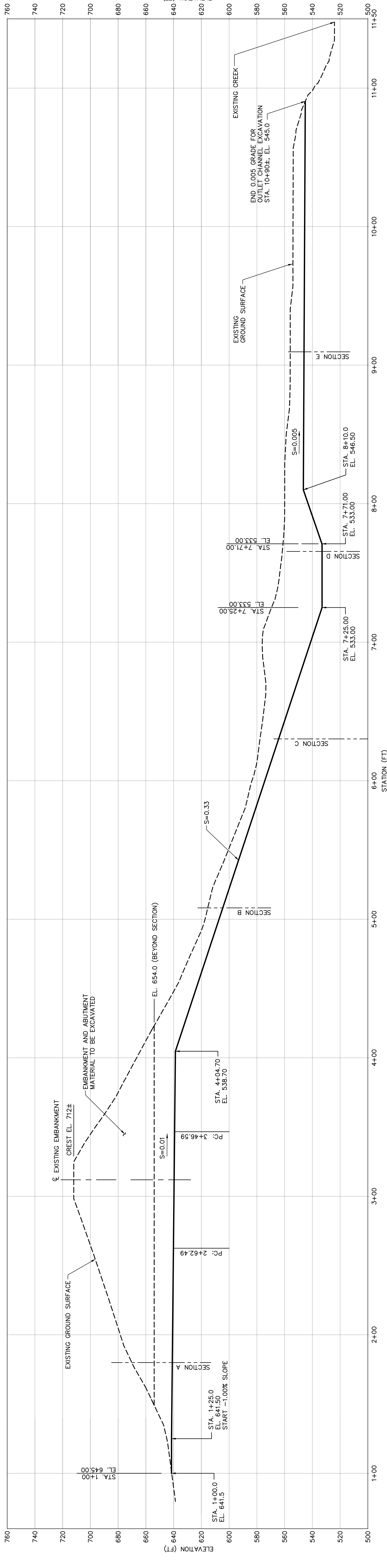
THIS DRAWING IS THE PROPERTY OF URS. IT IS NOT TO BE REPRODUCED, COPIED, OR IN ANY MANNER USED FOR PURPOSES OTHER THAN THAT FOR WHICH IT WAS ORIGINALLY PREPARED. ANY REVISIONS TO THIS DRAWING SHALL BE MADE BY THE ORIGINAL DESIGNER OR HIS AUTHORIZED REPRESENTATIVE. THIS DRAWING IS NOT TO BE USED FOR ANY PURPOSE DETERMINED TO BE DETRIMENTAL TO THE INTERESTS OF URS AND IS TO BE RETURNED UPON REQUEST.

APR SERVICE CORP
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

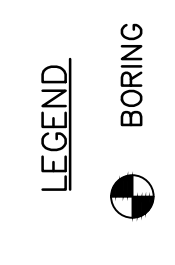
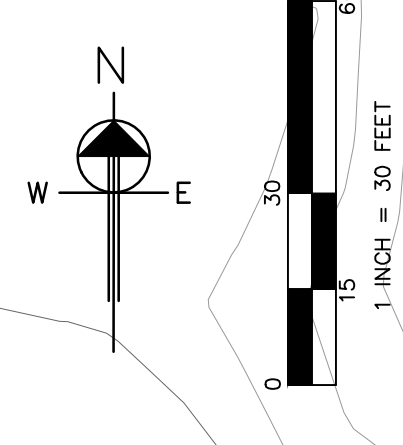
SYSTEM DATE: 06-04-2013
SYSTEM TIME: 10:58:46 AM



PLAN



PROFILE



DATE	NO.	DESCRIPTION	APPROVED BY
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR USE ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR CORRECTED, IN WHOLE OR IN PART OR USED FOR PURPOSES OTHER THAN THAT SPECIFICALLY AUTHORIZED BY THE AMERICAN ELECTRIC POWER SERVICE CORP. FOR ANY PURPOSE DETERMINED BY THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISIA KENTUCKY

SPILLWAY EXCAVATION
PLAN AND PROFILE

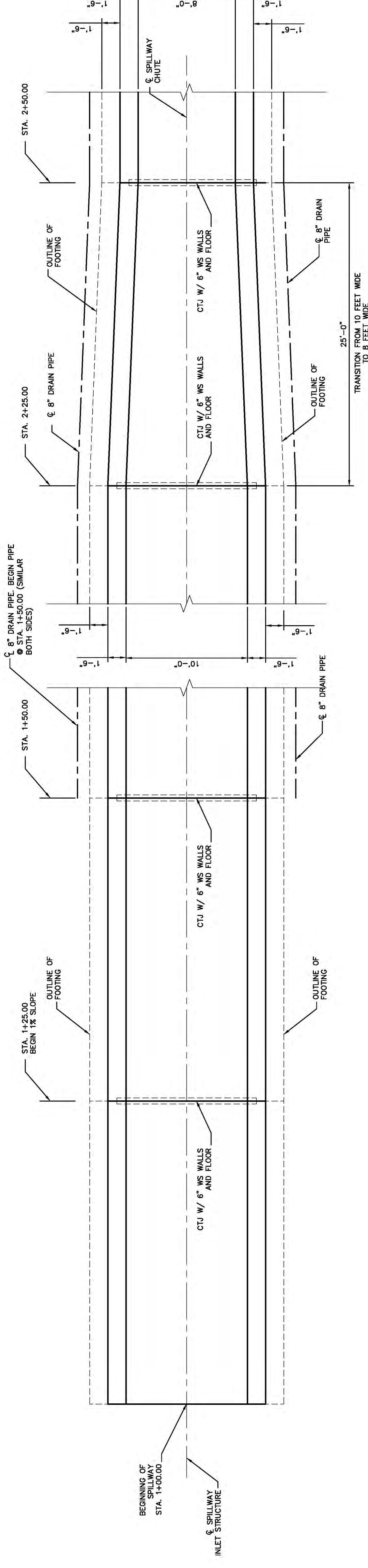
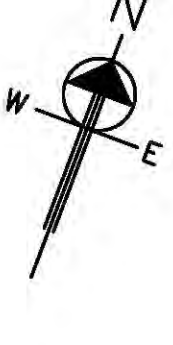
DWG. NO. 13-30123-D
CIVIL ENGINEERING DIVISION

SCALE:	1" = 30'
PROJECT NO.:	13815151
DESIGNED BY:	CAF
DRAWN BY:	WGH
APPROVED BY:	TKK



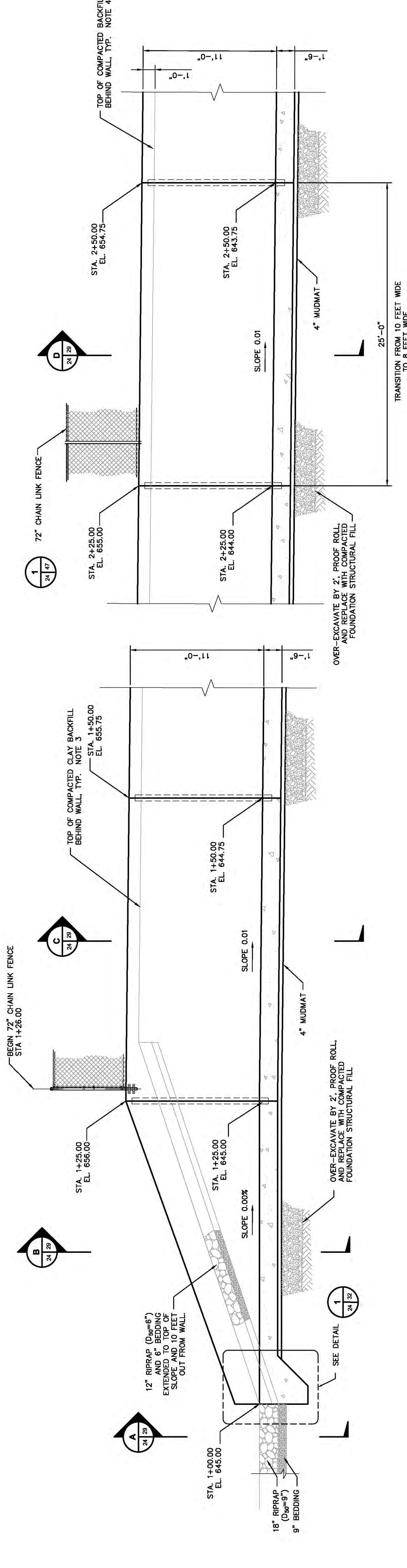
THIS IS ONE-INCH ON ORIGINAL DRAWING. IF NOT ONE-INCH, THEN SCALE ACCORDINGLY.

DWG. NO. 13-30124-D



PLAN

STA. 1+00.00 TO STA. 2+50.00



PROFILE

STA. 1+00.00 TO STA. 2+50.00



NOTES:

1. REINFORCEMENT NOT SHOWN
2. SPILLWAY CONCRETE PLACEMENTS SHALL BEGIN IN THE STILING BASIN AND THEN PROCEED SEQUENTIALLY UP THE SLOPE UNTIL AT LEAST STA. 3+75.
3. PLACE COMPACTED CLAY BACKFILL BEHIND WALLS FROM STA. 1+00.00 TO STA. 1+50.00.
4. PLACE COMPACTED BACKFILL BEHIND WALLS BEGINNING AT STA. 1+50.00.

DATE	NO.	DESCRIPTION	APPROVED
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

REVISIONS

"THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR USE ONLY. IT IS NOT TO BE REPRODUCED OR COPIED, IN WHOLE OR IN PART, OR USED FOR PUBLISHING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. FOR ANY PURPOSE DETERMINED BY THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST"

KENTUCKY POWER COMPANY

BIG SANDY PLANT

LOUISA KENTUCKY

SPILLWAY

PLAN AND PROFILE

STA 1+00 TO STA 2+50

DWG. NO. 13-30124-D

DIVISION

SCALE

AS SHOWN

PROJECT NO. 13815151

DESIGNED BY: SSH

DRAWN BY: WDH

APPROVED BY: THK

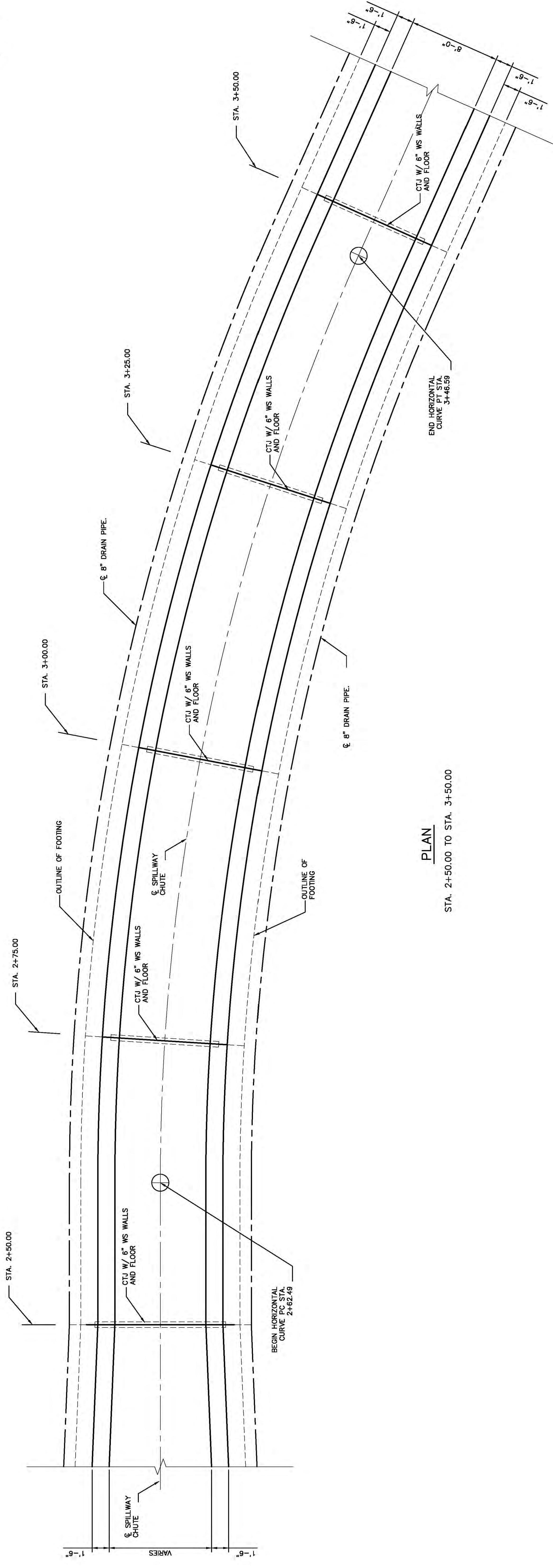
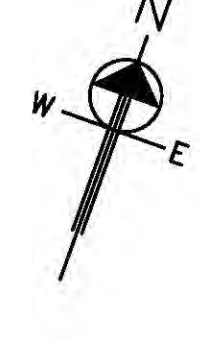
AMERICAN ELECTRIC POWER

AEP SERVICE CORP
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

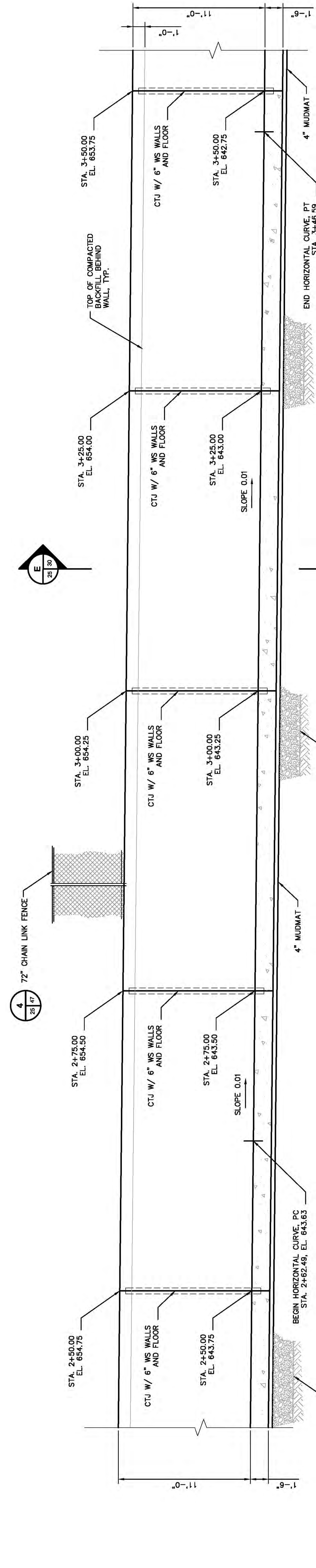


THIS IS THE BEST COPY
OF THE ORIGINAL DRAWING.
IF NOT ONE, MAKE THEM
ACCORDINGLY.

INCHES: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15, 20, 25, 30, 36, 42, 48, 60, 72, 84, 96, 108, 120, 144, 180, 216, 288, 360, 432, 504, 576, 648, 720, 864, 1008, 1152, 1296, 1440, 1584, 1728, 1872, 2016, 2160, 2304, 2448, 2592, 2736, 2880, 3024, 3168, 3312, 3456, 3600, 3744, 3888, 4032, 4176, 4320, 4464, 4608, 4752, 4896, 5040, 5184, 5328, 5472, 5616, 5760, 5904, 6048, 6192, 6336, 6480, 6624, 6768, 6912, 7056, 7200, 7344, 7488, 7632, 7776, 7920, 8064, 8208, 8352, 8496, 8640, 8784, 8928, 9072, 9216, 9360, 9504, 9648, 9792, 9936, 10080

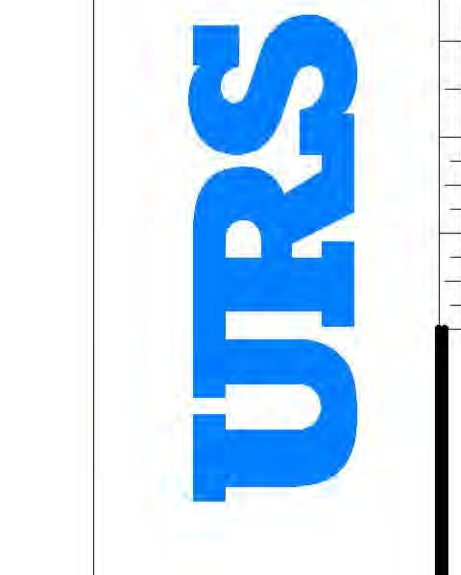
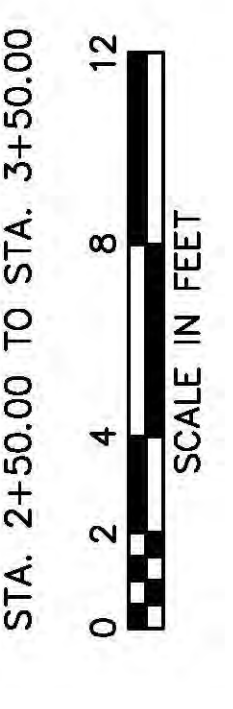


PLAN
STA. 2+50.00 TO STA. 3+50.00



PROFILE
STA. 2+50.00 TO STA. 3+50.00

- NOTES:**
1. REINFORCEMENT NOT SHOWN
 2. STATIONING ALONG CENTERLINE OF CHUTE



THIS IS ONE COPY OF ORIGINAL DRAWING. IF NOT ONE-NOTE, THEN ACCORDINGLY.

SCALE:	AS SHOWN
PROJECT NO.:	1315151
DESIGNED BY:	SSH
DRAWN BY:	WDH
APPROVED BY:	THK

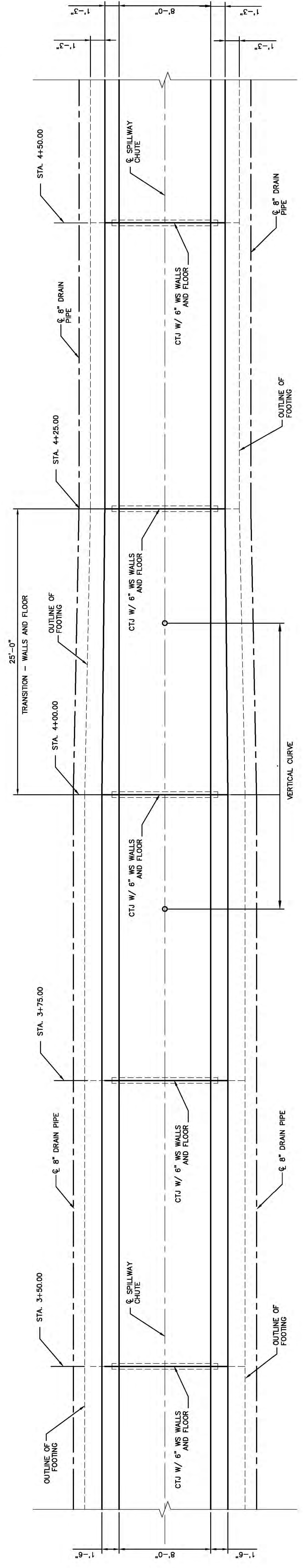
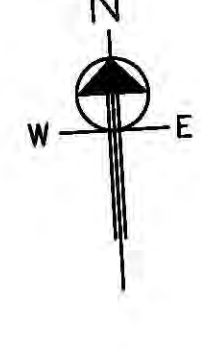
AMERICAN ELECTRIC POWER
AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISA, KENTUCKY

SPILLWAY
PLAN AND PROFILE
STA 2+50 TO STA 3+50
DWG. NO. 13-30125-D

DATE	NO.	DESCRIPTION	APPRO.
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

*THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED OR REPRODUCED IN WHOLE OR IN PART OR USED FOR PUBLISHING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN PERMISSION OF THE COMPANY. IT IS TO BE RETURNED TO THE COMPANY FOR ANY PURPOSE DETERMINED BY THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST.

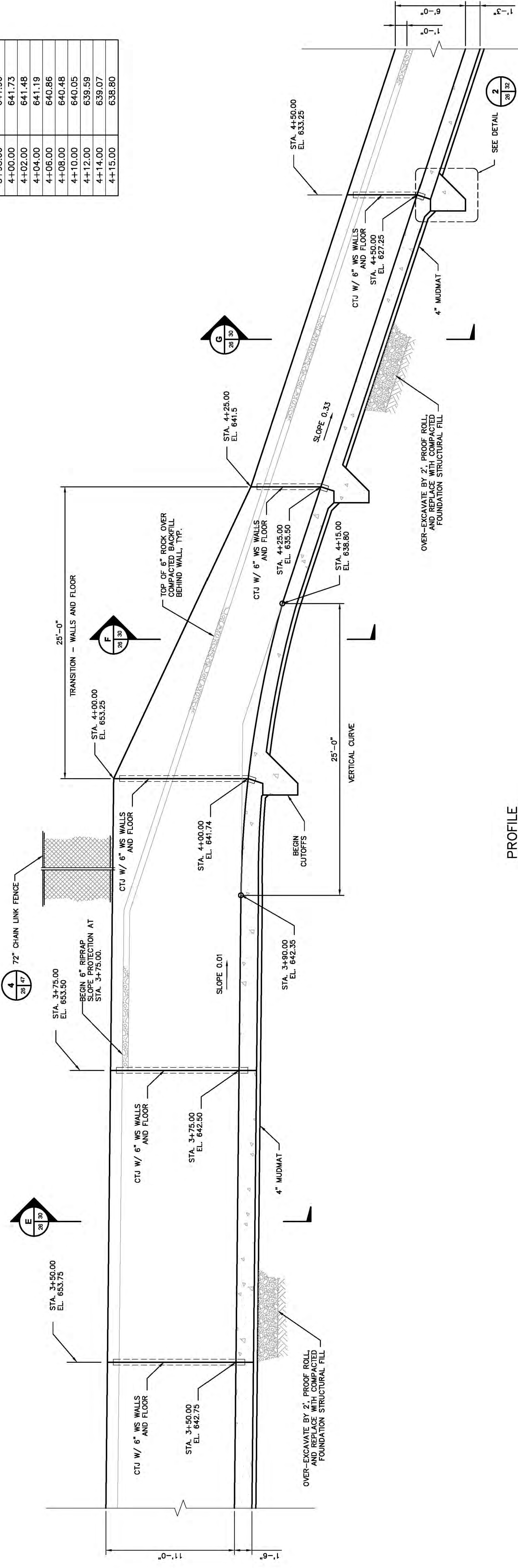


PLAN

STA. 3+50.00 TO STA. 4+50.00

STATION	INVERT ELEVATION
3+90.00	642.35
3+92.00	642.26
3+94.00	642.18
3+96.00	642.09
3+98.00	641.90
4+00.00	641.73
4+02.00	641.46
4+04.00	641.19
4+06.00	640.86
4+08.00	640.48
4+10.00	640.05
4+12.00	639.59
4+14.00	639.07
4+15.00	638.80

VERTICAL CURVE DATA



PROFILE

STA. 3+50.00 TO STA. 4+50.00



NOTES.
1. REINFORCEMENT NOT SHOWN

DATE	NO.	DESCRIPTION	APPRO.
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

KENTUCKY POWER COMPANY
BIG SANDY PLANT
 LOUISA, KENTUCKY
 SPILLWAY
 PLAN AND PROFILE
 STA 3+50 TO STA 4+50
 DWG. NO. 13-30126-D

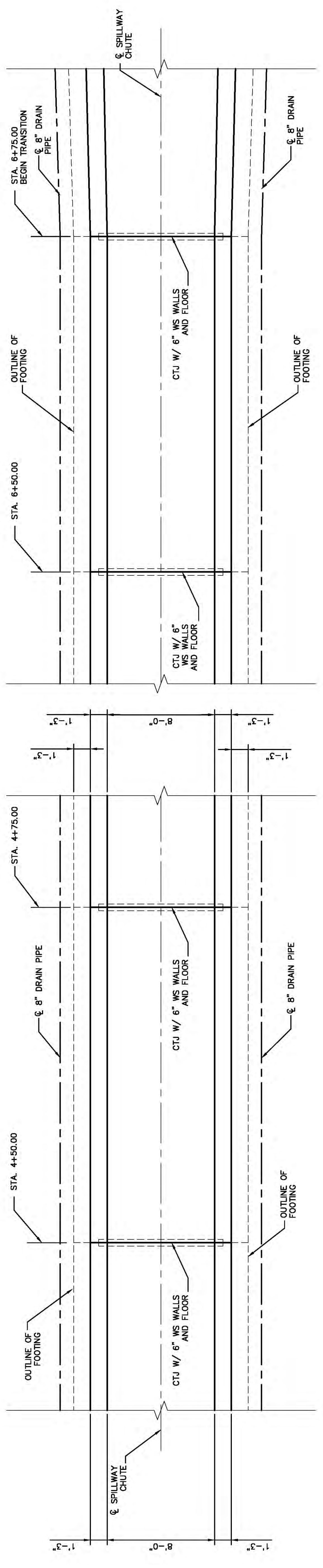
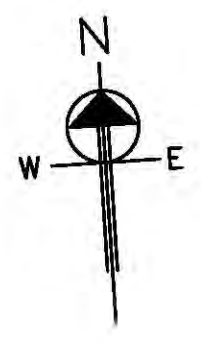
SCALE: AS SHOWN
 PROJECT NO: 13815151
 DESIGNED BY: SSH
 DRAWN BY: WDH
 APPROVED BY: THK

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR USE ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR COPIED, IN WHOLE OR IN PART OR USED FOR PURPOSES OTHER THAN THAT FOR WHICH IT WAS ORIGINALLY PREPARED. ANY INFORMATION CONTAINED HEREIN IS FOR YOUR INFORMATION ONLY AND IS TO BE RETURNED UPON REQUEST.

AEP SERVICE CORP.
 1 RIVERSIDE PLAZA
 COLUMBUS, OH 43215

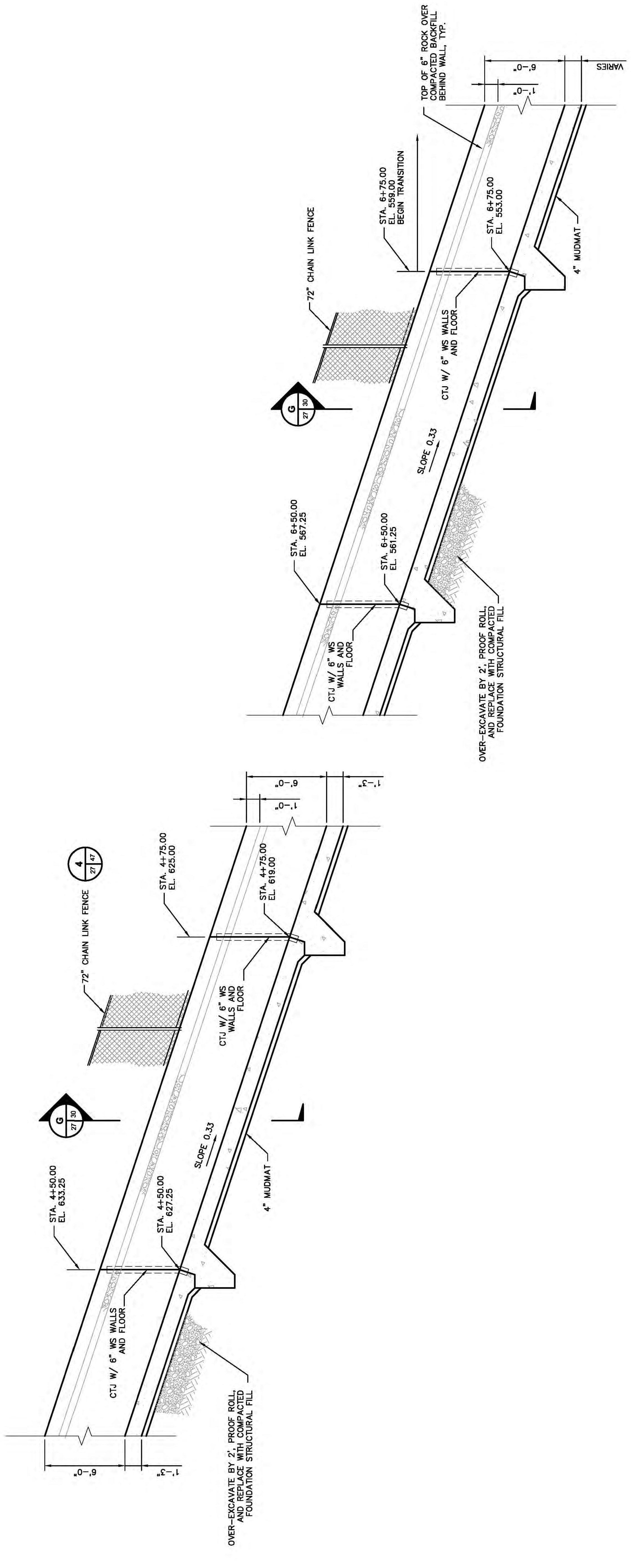


THIS IS ONE COPY OF ORIGINAL DRAWING. IF NOT ONE WORK, THEN ACCORDINGLY.



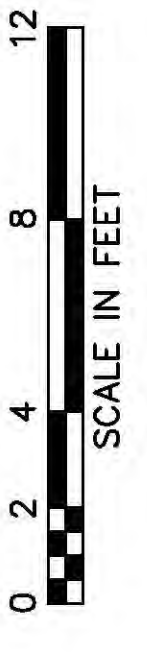
PLAN

STA. 4+50.00 TO STA. 6+75.00



PROFILE

STA. 4+50.00 TO STA. 6+75.00



NOTES:

1. REINFORCEMENT NOT SHOWN.

DATE	NO.	DESCRIPTION	APPRO.
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

"THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR USE ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR COPIED, IN WHOLE OR IN PART OR USED FOR PUBLISHING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. FOR ANY PURPOSE DETERMINED BY THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST"

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISA, KENTUCKY

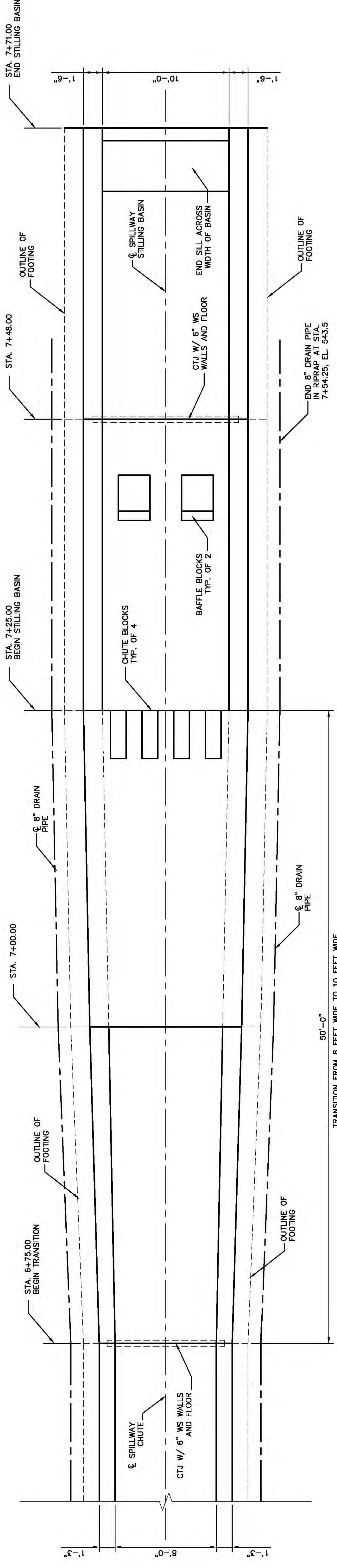
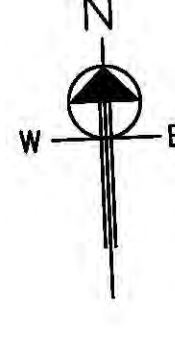
SPILLWAY
PLAN AND PROFILE
STA 4+50 TO STA 6+75
DWG. NO. 13-30127-D

SCALE	AS SHOWN
DR	
OR	
DATE	
DESIGNED BY:	SSH
DRAWN BY:	WDH
APPROVED BY:	THK



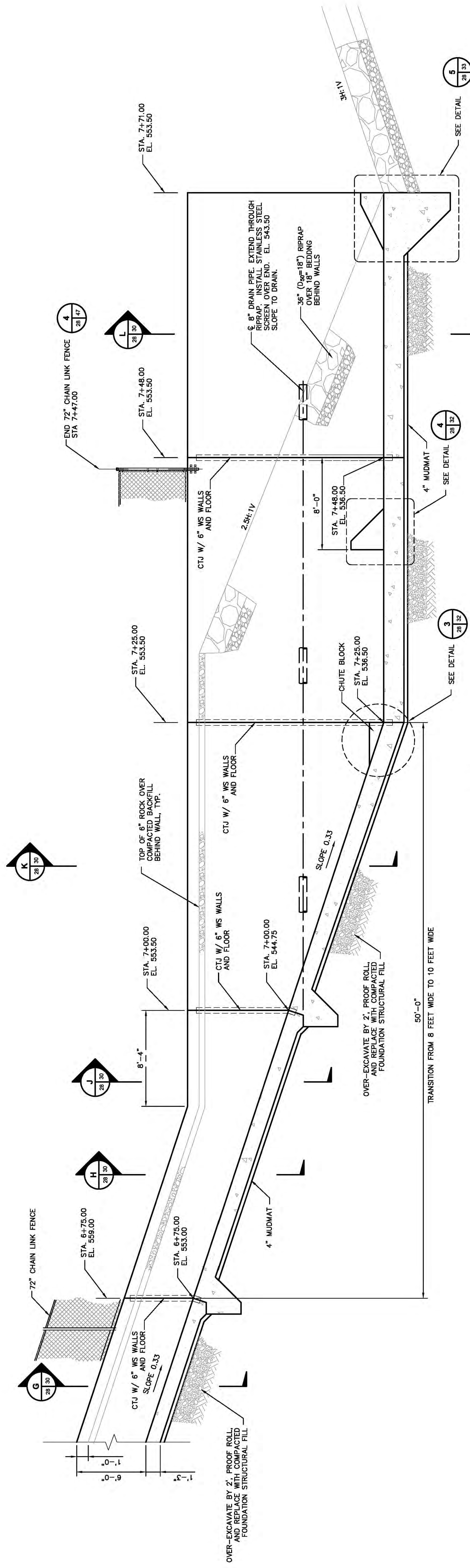
THIS IS THE BEST COPY OF ORIGINAL DRAWING. IF NOT ONE WORK, THEN ACCORDINGLY.

AMERICAN ELECTRIC POWER
AEP SERVICE CORP
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215



PLAN

STA. 6+75.00 TO STA. 7+71.00



PROFILE

STA. 6+75.00 TO STA. 7+71.00



- NOTES:**
1. REINFORCEMENT NOT SHOWN

DATE	NO.	DESCRIPTION	APPRO.
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

"THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED OR COPIED, IN WHOLE OR IN PART, OR USED FOR REPRODUCING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. IS TO BE RETURNED UPON REQUEST"

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISA KENTUCKY

SPILLWAY
PLAN AND PROFILE
STA 6+75 TO STA 7+71

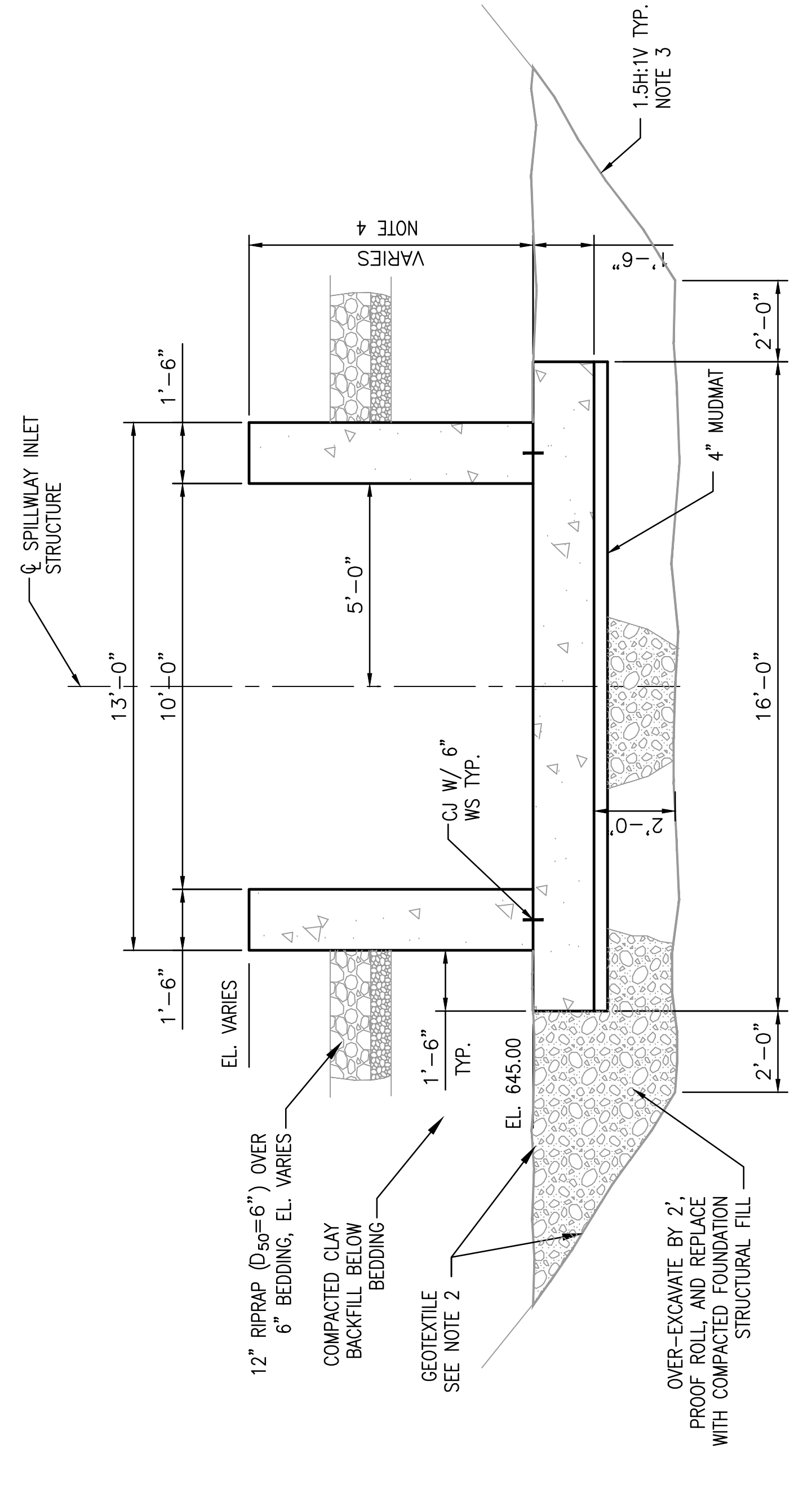
DWG. NO. 13-30128-D

SCALE	AS SHOWN
DR	
OR	
CHK	
APP	
DATE	
DESIGNED BY:	SSH
DRAWN BY:	WDH
APPROVED BY:	THK

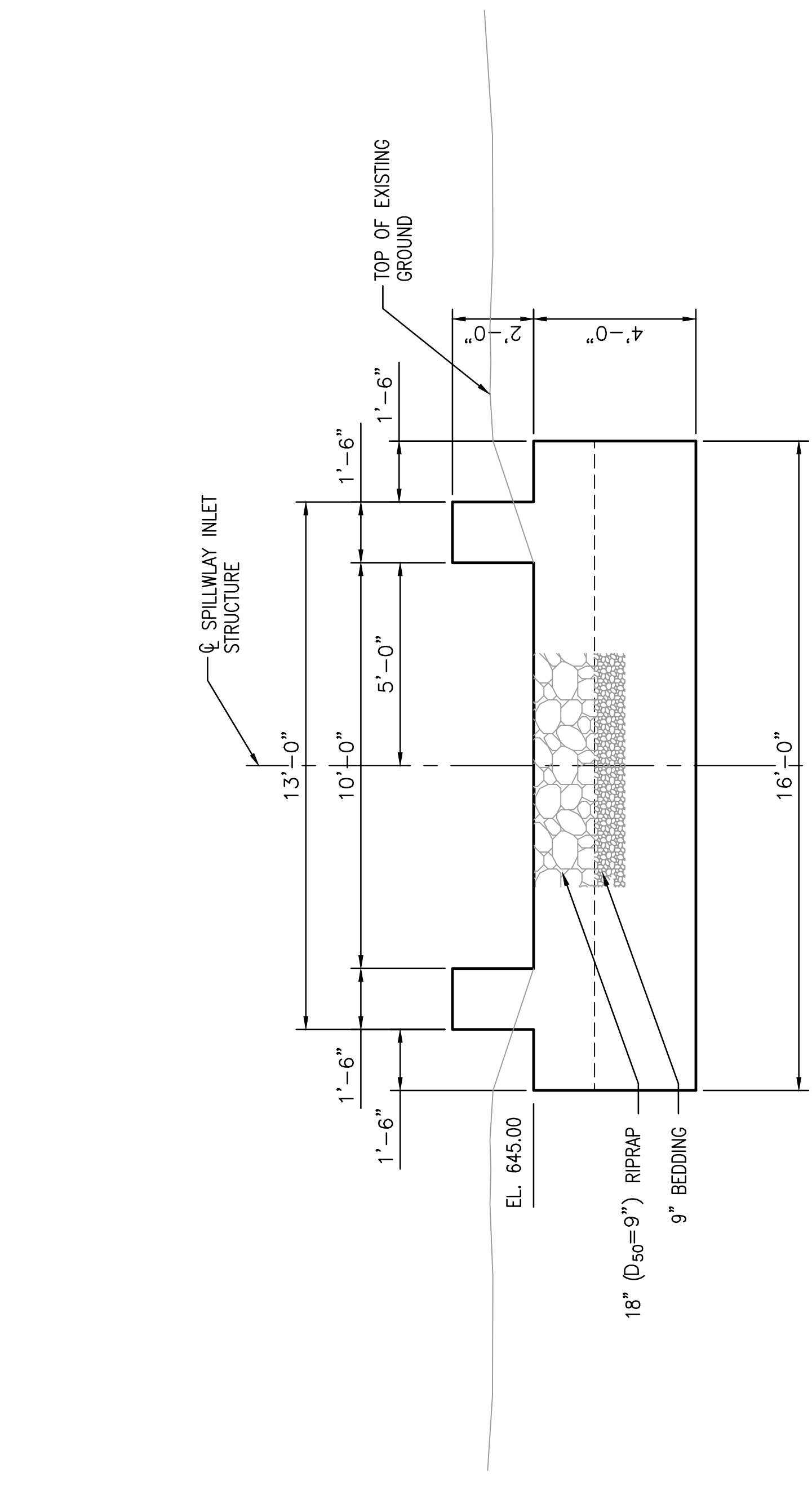


THIS IS THE USER'S ORIGINAL DRAWING. IF NOT ONE-WORK, THEN ACCORDINGLY.

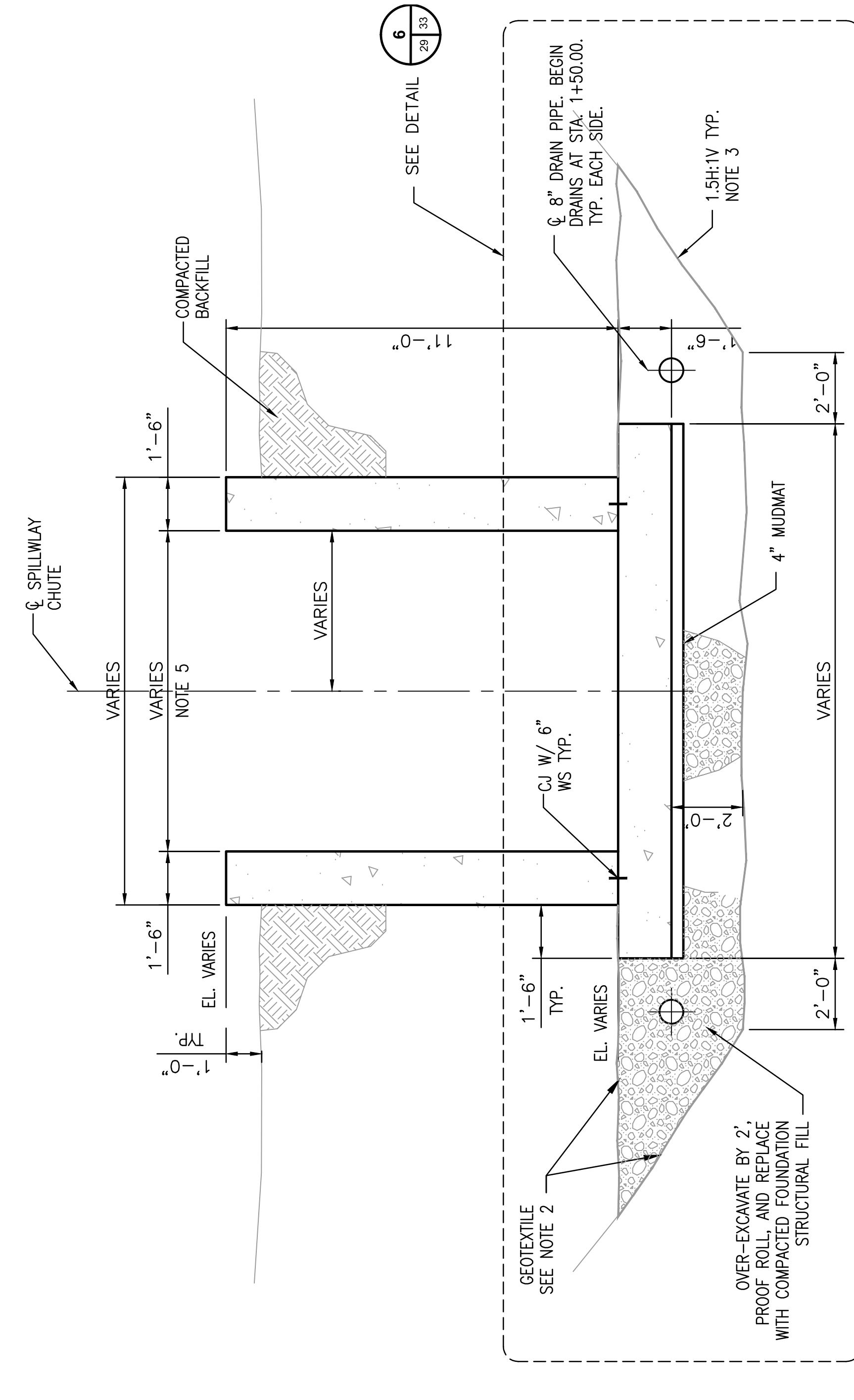
AMP SERVICE CORP
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215



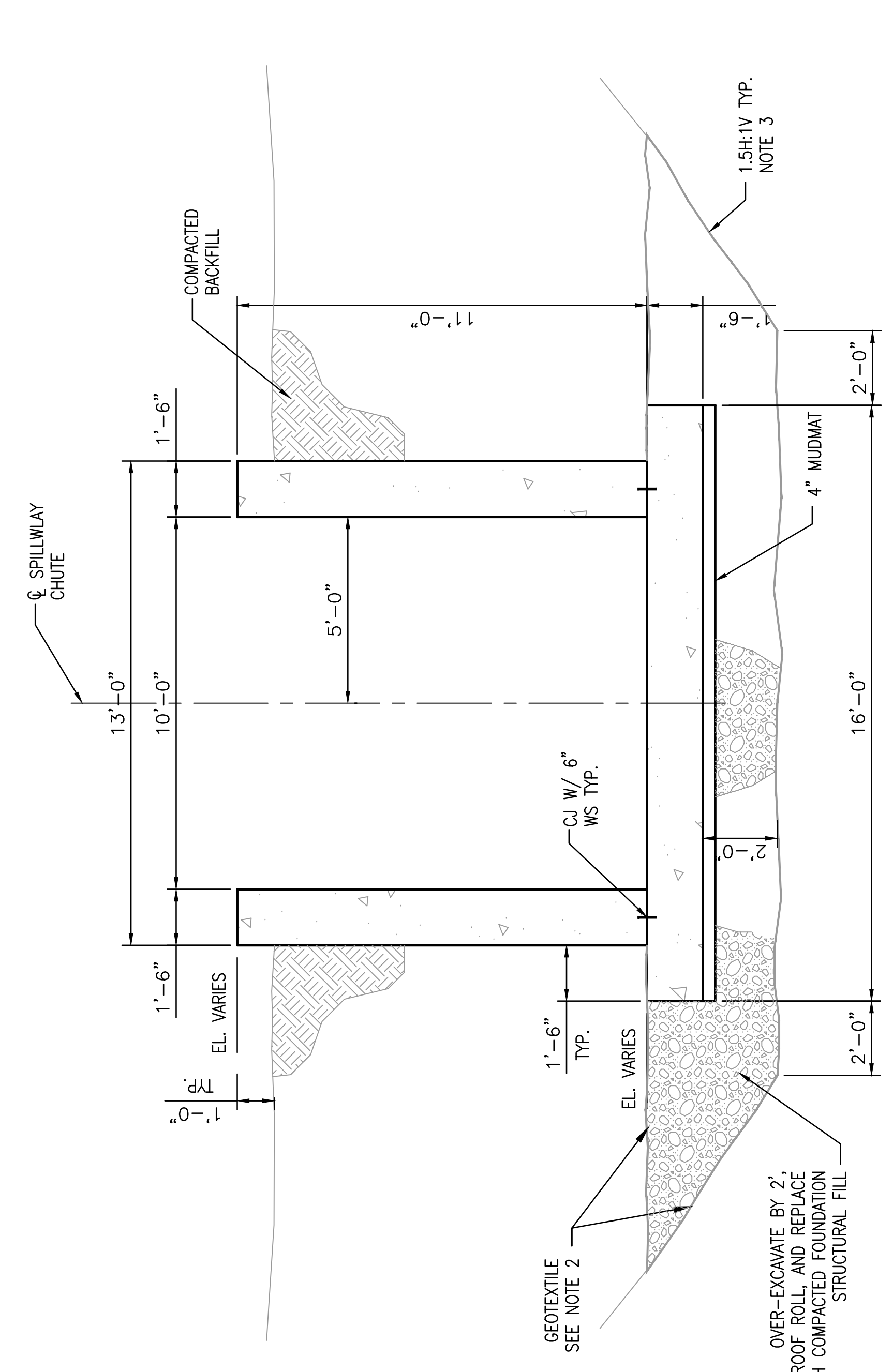
B SECTION
SCALE IN FEET



A SECTION
SCALE IN FEET



D SECTION
SCALE IN FEET



C SECTION
SCALE IN FEET

NOTES:

1. REINFORCEMENT NOT SHOWN.
2. PLACE NON-WOVEN GEOTEXTILE AGAINST ALL EXCAVATED SURFACES AND ACROSS TOP OF COMPACTED FOUNDATION STRUCTURAL FILL AS SHOWN. LAP OVER TOP OF FOOTING.
3. SEE DWG 13-30123 FOR EXCAVATION DETAILS.
4. WALL HEIGHT VARIES UNIFORMLY FROM 2'-0" TO 11'-0" BETWEEN STA. 1+00.00 AND STA. 1+25.00.
5. WIDTH OF SPILLWAY CHUTE VARIES UNIFORMLY FROM 10'-0" TO 8'-0" BETWEEN STA. 2+25.00 AND STA. 2+50.00.
6. CHAIN LINK FENCE NOT SHOWN FOR CLARITY.

DATE	NO.	DESCRIPTION	APPRO.
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR USED FOR ANY PURPOSE WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. ANY REPRODUCTION OR USE FOR ANY PURPOSE DETERMINED TO BE IN VIOLATION OF THESE TERMS AND CONDITIONS SHALL BE SUBJECT TO LEGAL ACTION AND IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISIA KENTUCKY
SPILLWAY STRUCTURAL SECTIONS
1 OF 3

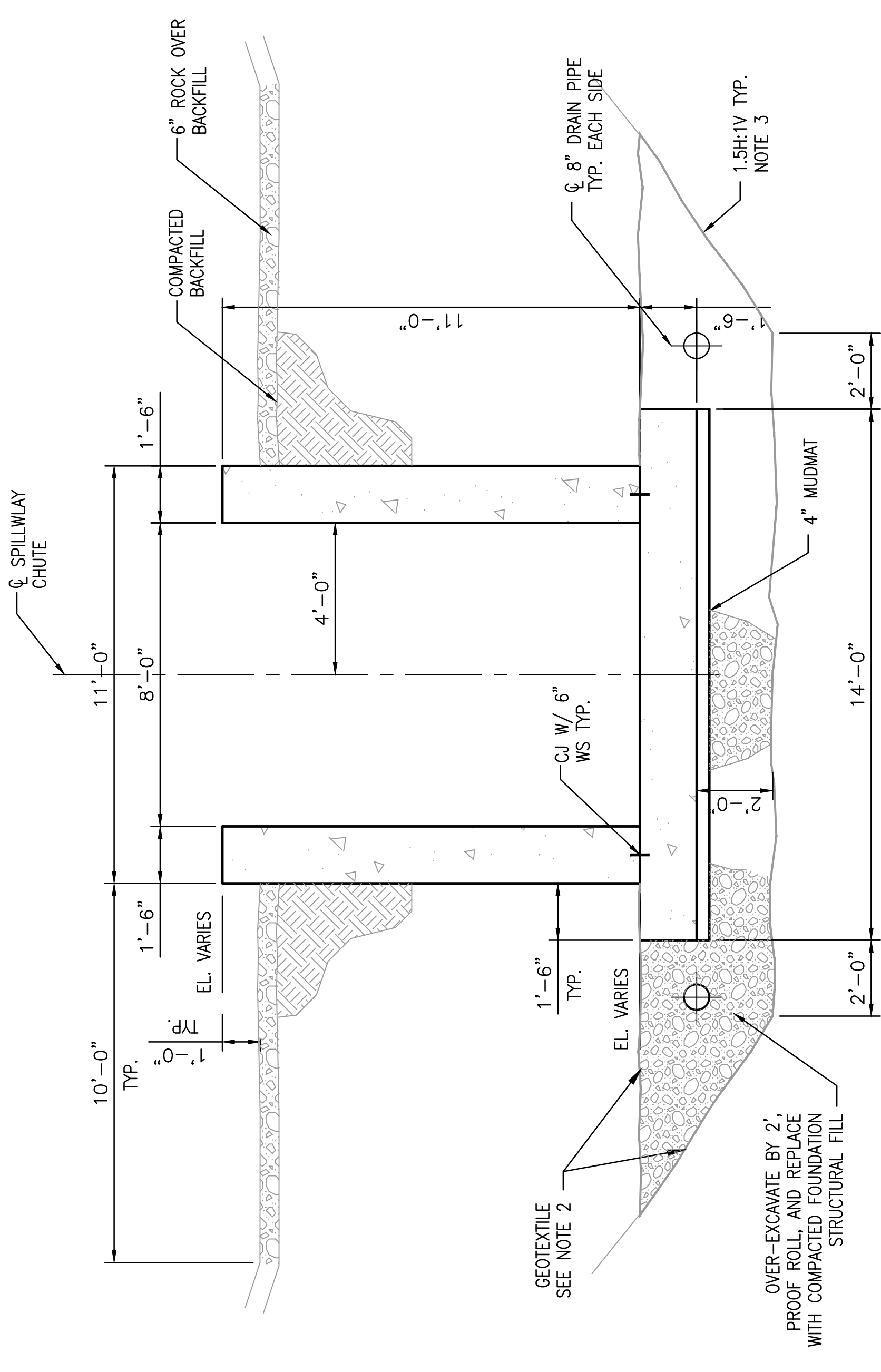
DWG. NO. 13-30129-D
CIVIL ENGINEERING DIVISION

SCALE	AS SHOWN
DR	AS SHOWN
CHK	13815151
ENGR	SSH
DESIGNED BY:	SSH
DRAWN BY:	WDH
APPROVED BY:	THK

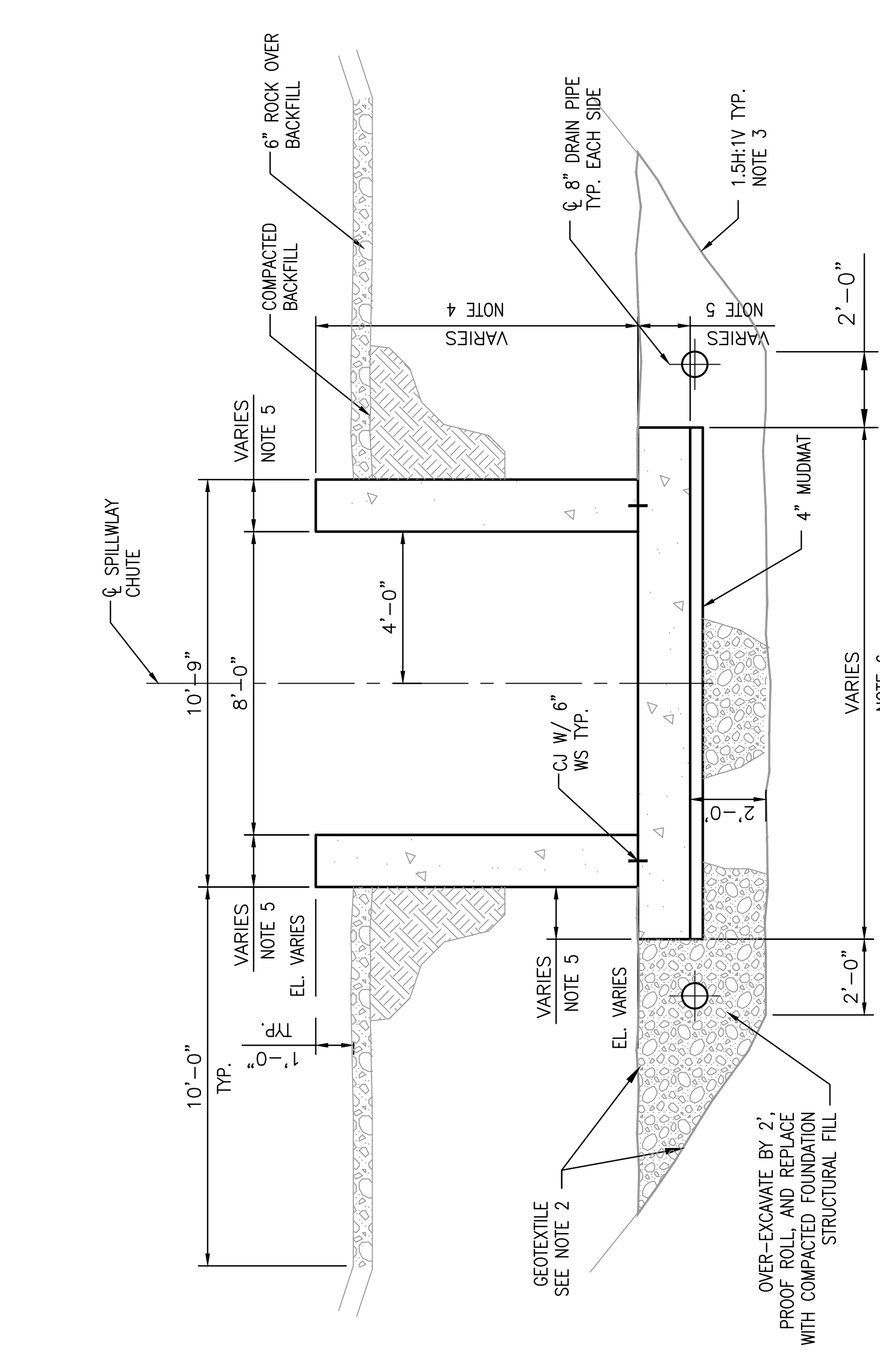
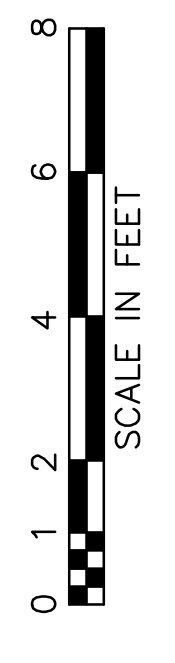


BAR IS ONE-INCH ON ORIGINAL DRAWING. IF NOT ONE-INCH, THEN SCALE ACCORDINGLY.

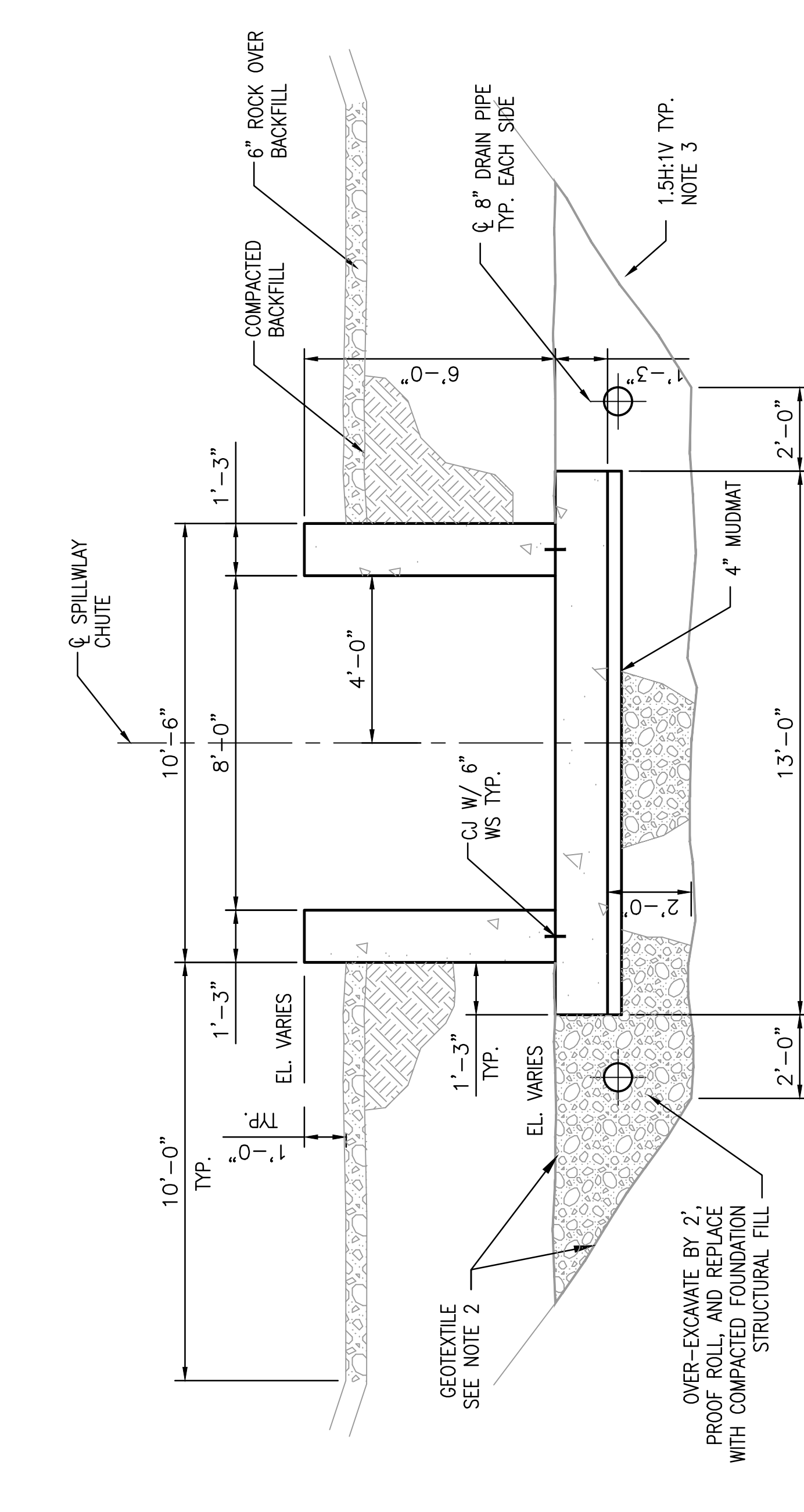
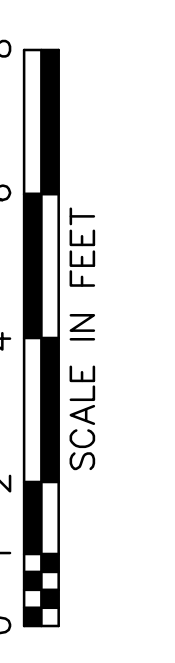
0-00100-31 ON 3WD



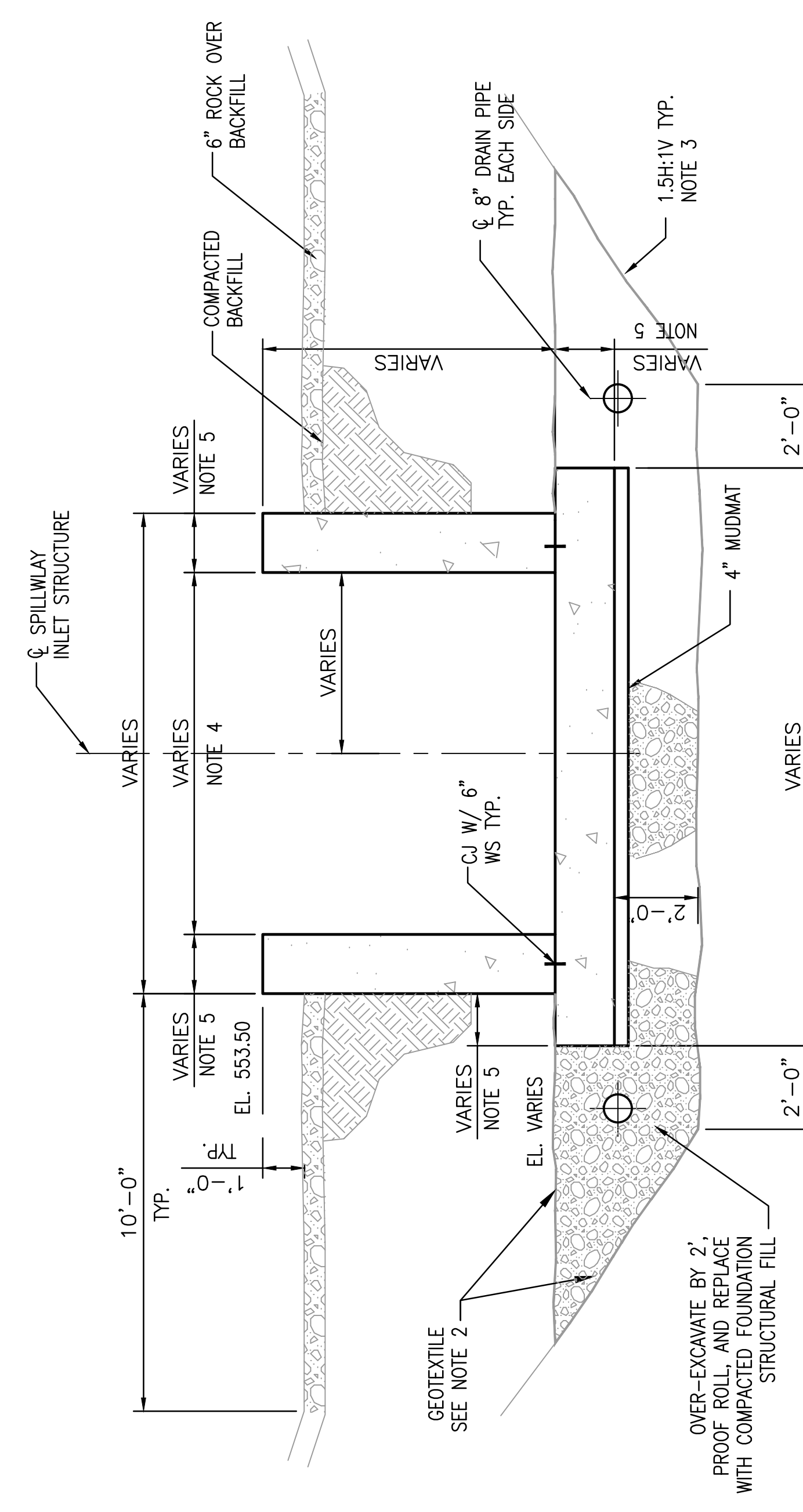
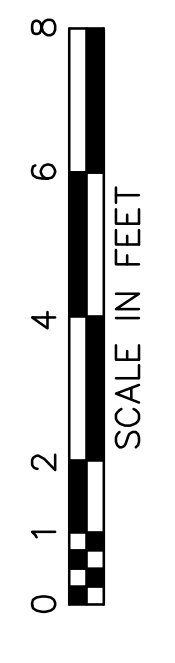
E SECTION



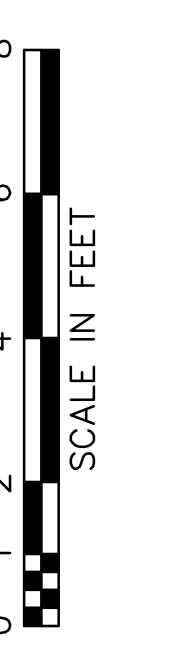
H SECTION



G SECTION



F SECTION



NOTES.

1. REINFORCEMENT NOT SHOWN.
2. PLACE NON-WOVEN GEOTEXTILE AGAINST ALL EXCAVATED SURFACES AND ACROSS FOOTING.
3. SEE DWG. 13-30123 FOR EXCAVATION DETAILS.
4. WALL HEIGHT VARIES UNIFORMLY FROM EL. 653.25 TO EL. 641.50 BETWEEN STA. 4+00.00 AND STA. 4+25.00.
5. VARIES UNIFORMLY FROM 1'-6" TO 1'-3" BETWEEN STA. 4+00.00 AND STA. 4+25.00.
6. WIDTH OF FOOTING VARIES UNIFORMLY FROM 14'-0" TO 13'-0" BETWEEN STA. 4+00.00 AND STA. 4+50.00.
7. WIDTH OF SPILLWAY CHUTE VARIES UNIFORMLY FROM 8'-0" TO 10'-0" BETWEEN STA. 6+75.00 AND STA. 7+25.00.
8. VARIES UNIFORMLY FROM 1'-3" TO 1'-6" BETWEEN STA. 6+75.00 AND STA. 7+00.00.
9. CHAIN LINK FENCE NOT SHOWN FOR CLARITY.

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED OR COPIED, IN WHOLE OR IN PART OR USED FOR PURPOSES OTHER THAN THAT AUTHORIZED BY THE ORIGINAL DRAWING INFORMATION TO WHICH IT REFERS WITHOUT THE WRITTEN PERMISSION OF THE ORIGINAL DRAWING INFORMATION FOR ANY PURPOSE DETERMINED TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY

BIG SANDY PLANT

LOUISA KENTUCKY

SPILLWAY STRUCTURAL SECTIONS 2 OF 3

DWG. NO. 13-30130-D

CIVIL ENGINEERING DIVISION

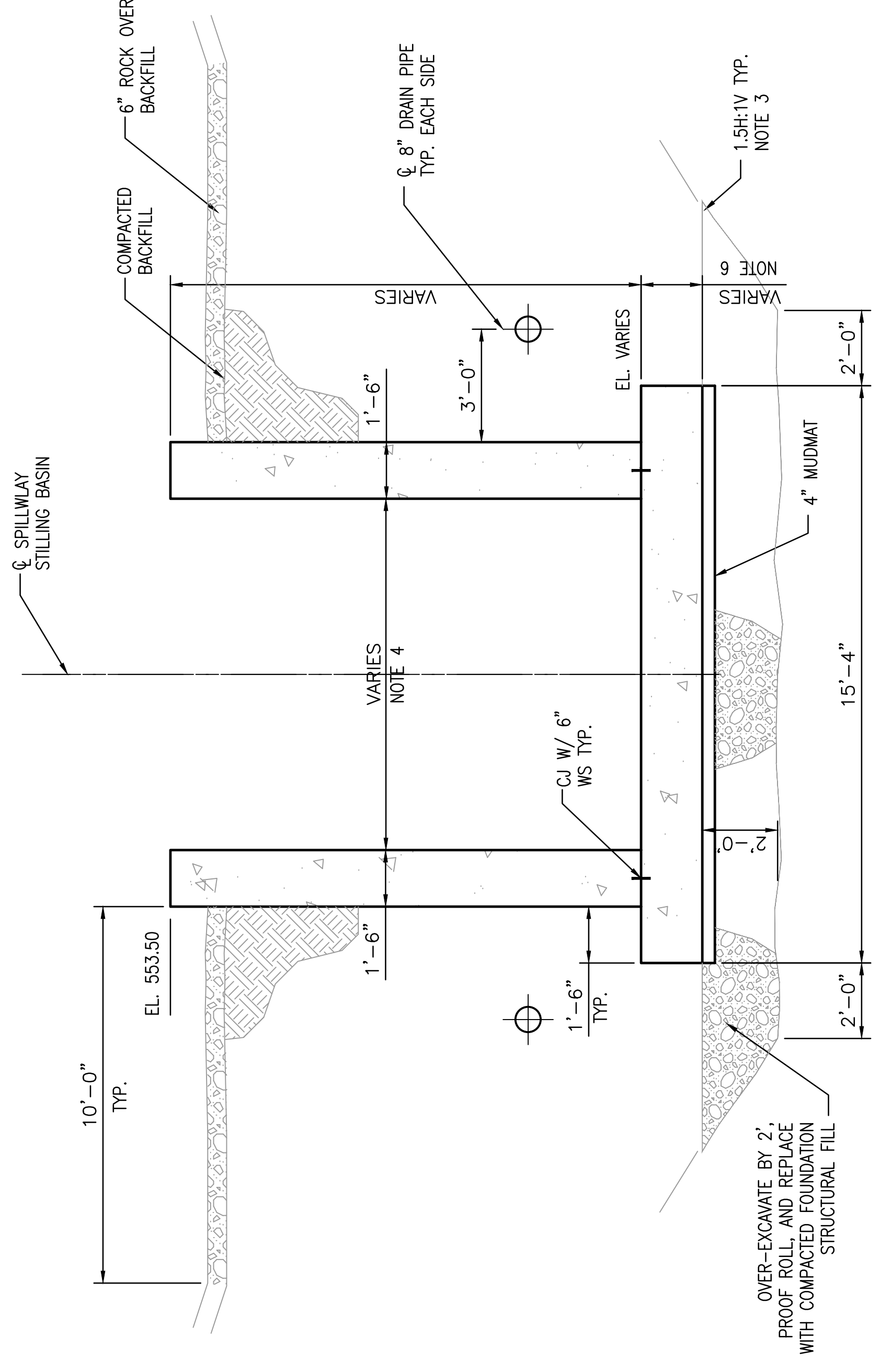
SCALE:	AS SHOWN
PROJECT NO.:	13815151
DESIGNED BY:	SSH
DRAWN BY:	WDH
APPROVED BY:	THK



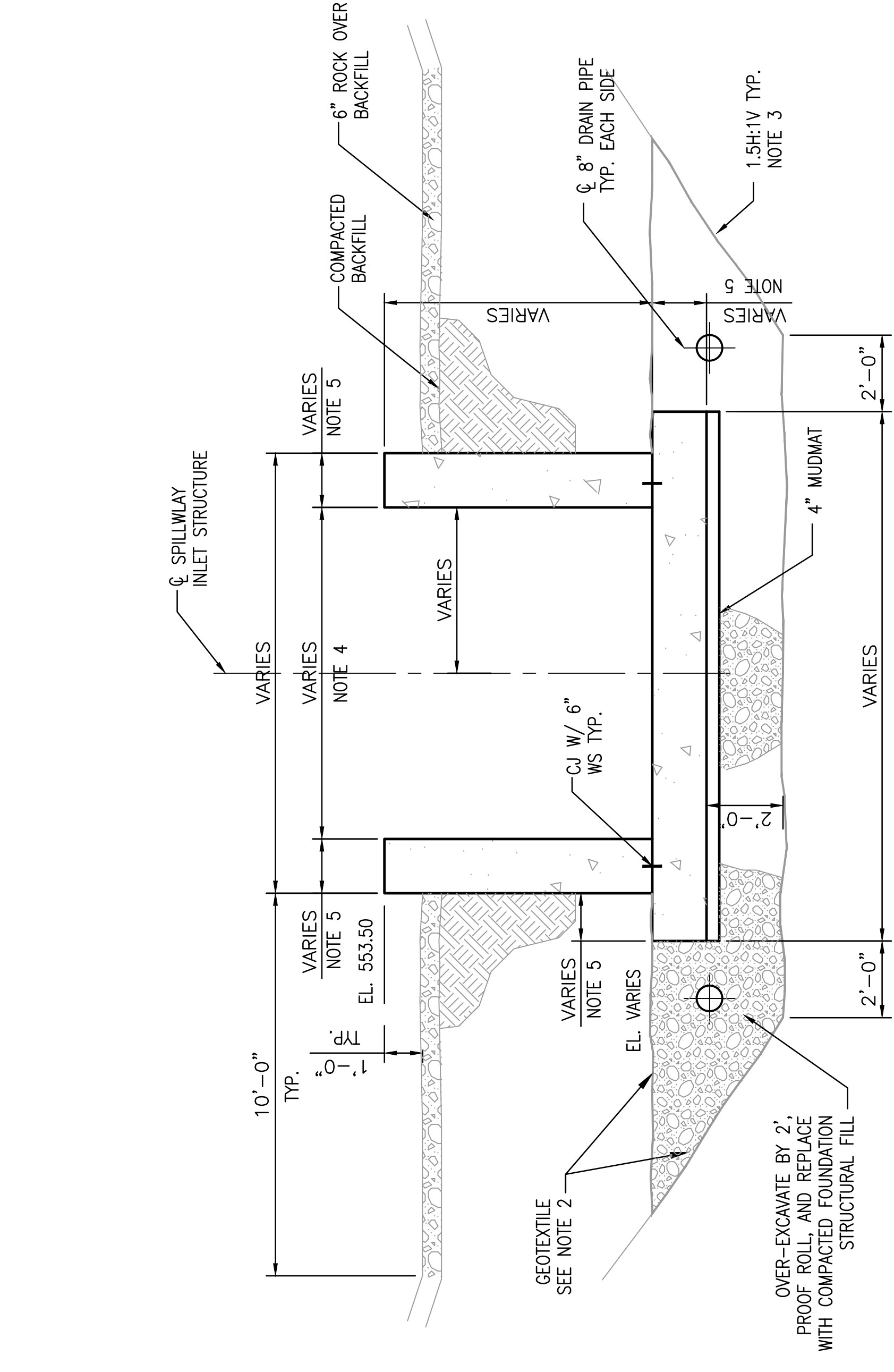
BAR IS ONE-INCH ON ORIGINAL DRAWING
IF NOT ONE-INCH THEN ACCORDINGLY

APP SERVICE CORP
1 RIVERSIDE PLAZA
COLUMBUS OH 43215

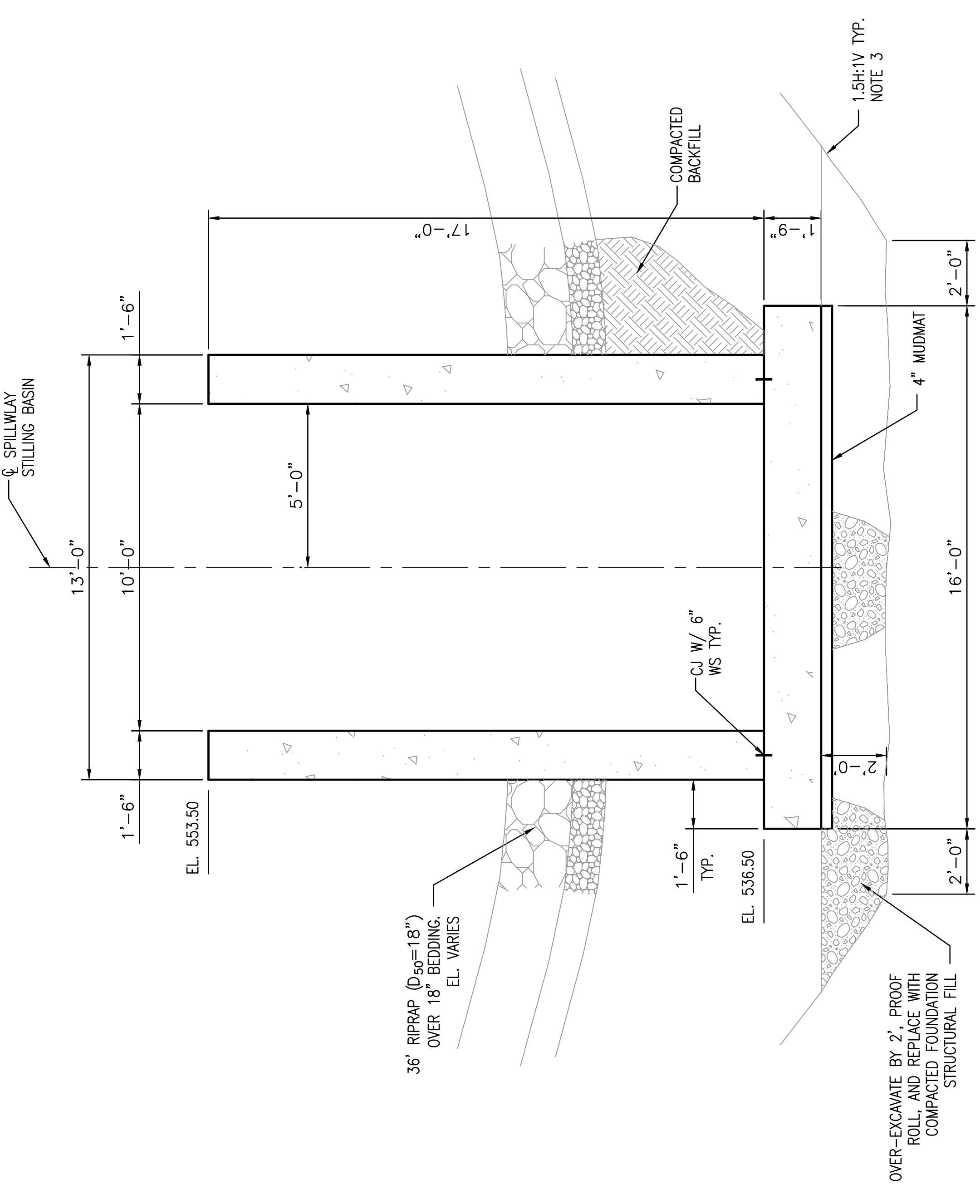
OS SYSTEM DATE: 05-04-2011
OS SYSTEM TIME: 10:05:00 AM



K SECTION
 28 31'
 SCALE IN FEET



J SECTION
 28 31'
 SCALE IN FEET



L SECTION
 28 31'
 SCALE IN FEET

- NOTES:**
1. REINFORCEMENT NOT SHOWN.
 2. PLACE NON-WOVEN GEOTEXTILE AGAINST ALL EXCAVATED SURFACES AND ACROSS TOP OF COMPACTED FOUNDATION STRUCTURAL FILL AS SHOWN. LAP OVER TOP OF FOOTING.
 3. SEE DWG. 13-30123 FOR EXCAVATION DETAILS.
 4. WIDTH OF SPILLWAY CHUTE VARIES UNIFORMLY FROM 8'-0" TO 10'-0" BETWEEN STA. 6+75.00 AND STA. 7+25.00.
 5. VARIES UNIFORMLY FROM 1'-3" TO 1'-9" BETWEEN STA. 6+75.00 AND STA. 7+00.00.
 6. VARIES UNIFORMLY FROM 1'-6" TO 1'-9" BETWEEN STA. 7+00.00 AND STA. 7+25.00.
 7. CHAIN LINK FENCE NOT SHOWN FOR CLARITY.

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS NOT TO BE REPRODUCED OR COPIED, IN WHOLE OR IN PART OR USED FOR PURSUING INFORMATION TO ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. FOR ANY PURPOSE DETERMINED TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
 BIG SANDY PLANT
 LOUISIA
 SPILLWAY STRUCTURAL SECTIONS
 3 OF 3

DWG. NO. 13-30131-D
 CIVIL ENGINEERING DIVISION

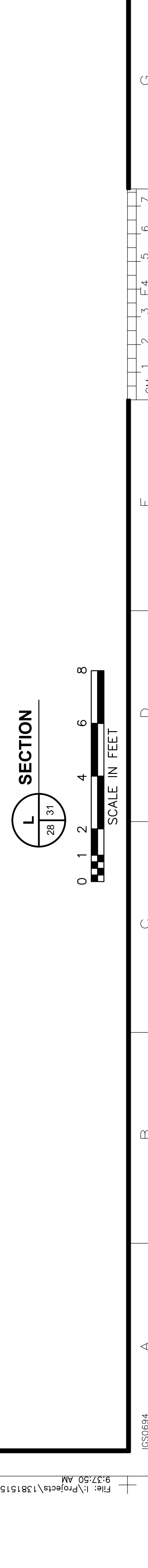
DATE	NO.	DESCRIPTION	APPROVED BY
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

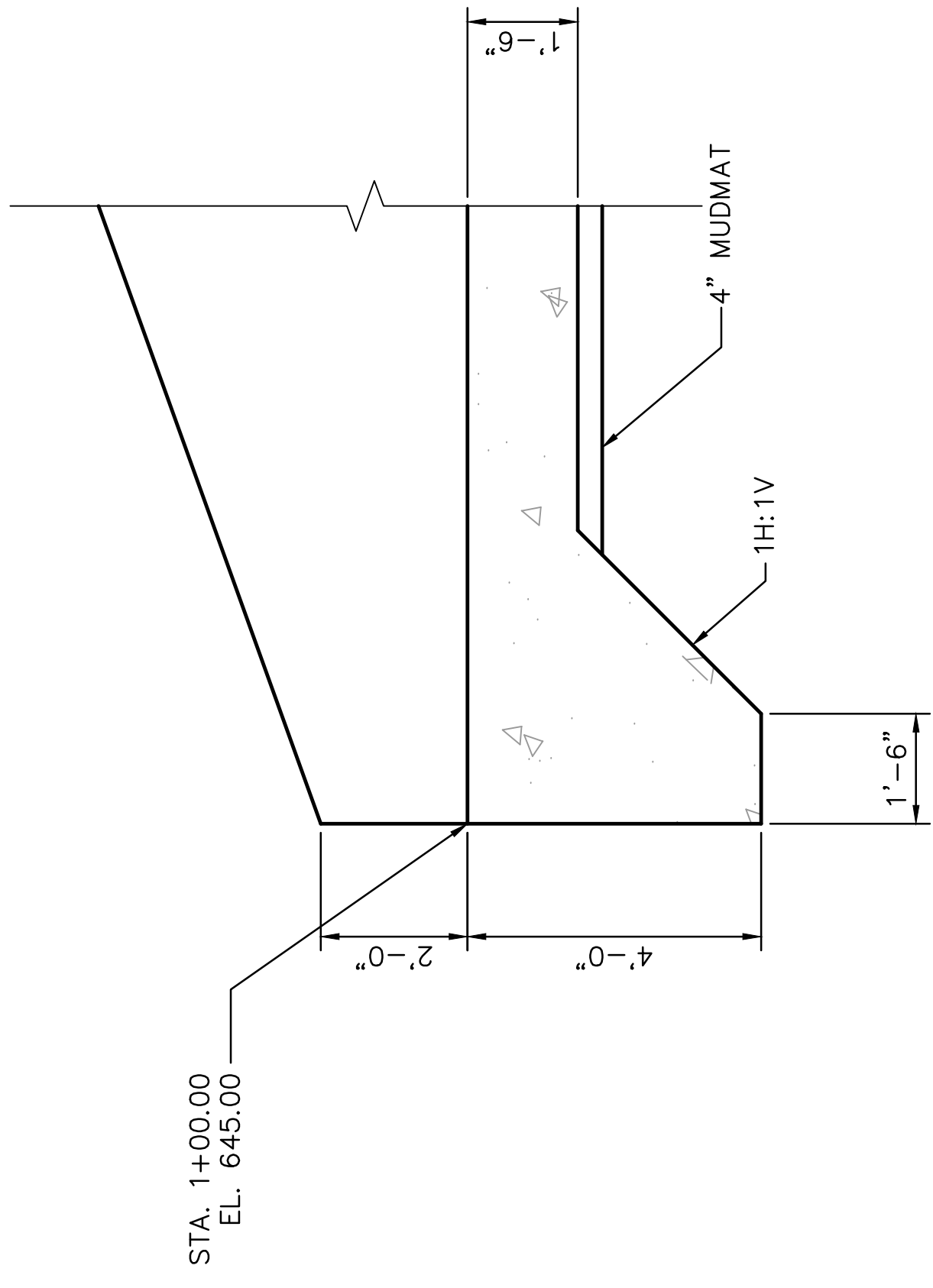
URS
 BAR IS ONE-INCH ON ORIGINAL DRAWING
 IF NOT ONE-INCH THEN ACCORDINGLY

SCALE:	AS SHOWN
PROJECT NO.:	13815151
DESIGNED BY:	SSH
DRAWN BY:	WDH
APPROVED BY:	THK

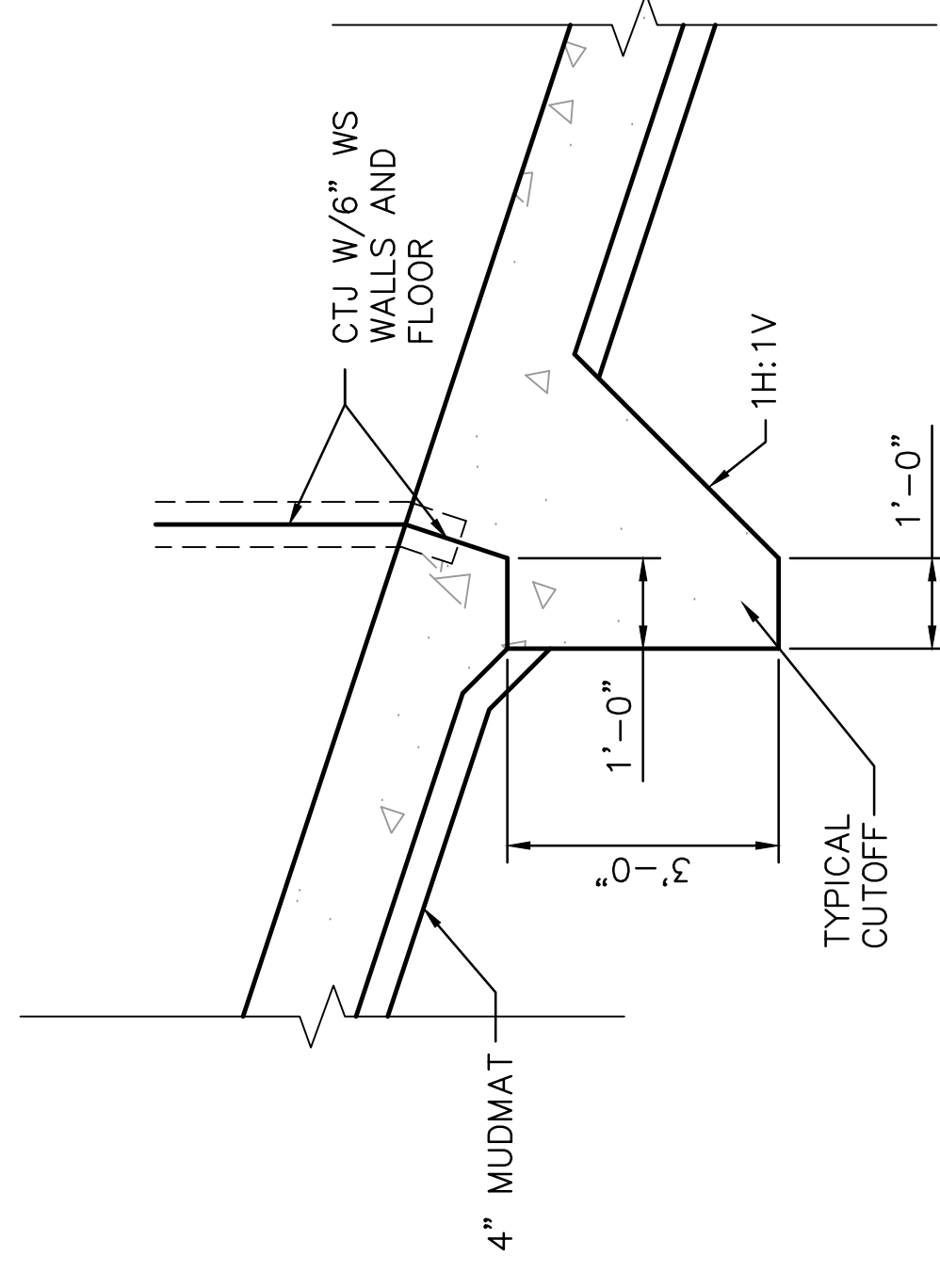
AEP SERVICE CORP.
 RIVERSIDE PLAZA
 COLUMBUS, OH 43215

SYSTEM DATE: 05-04-2013
 SYSTEM TIME: 10:48:56 AM

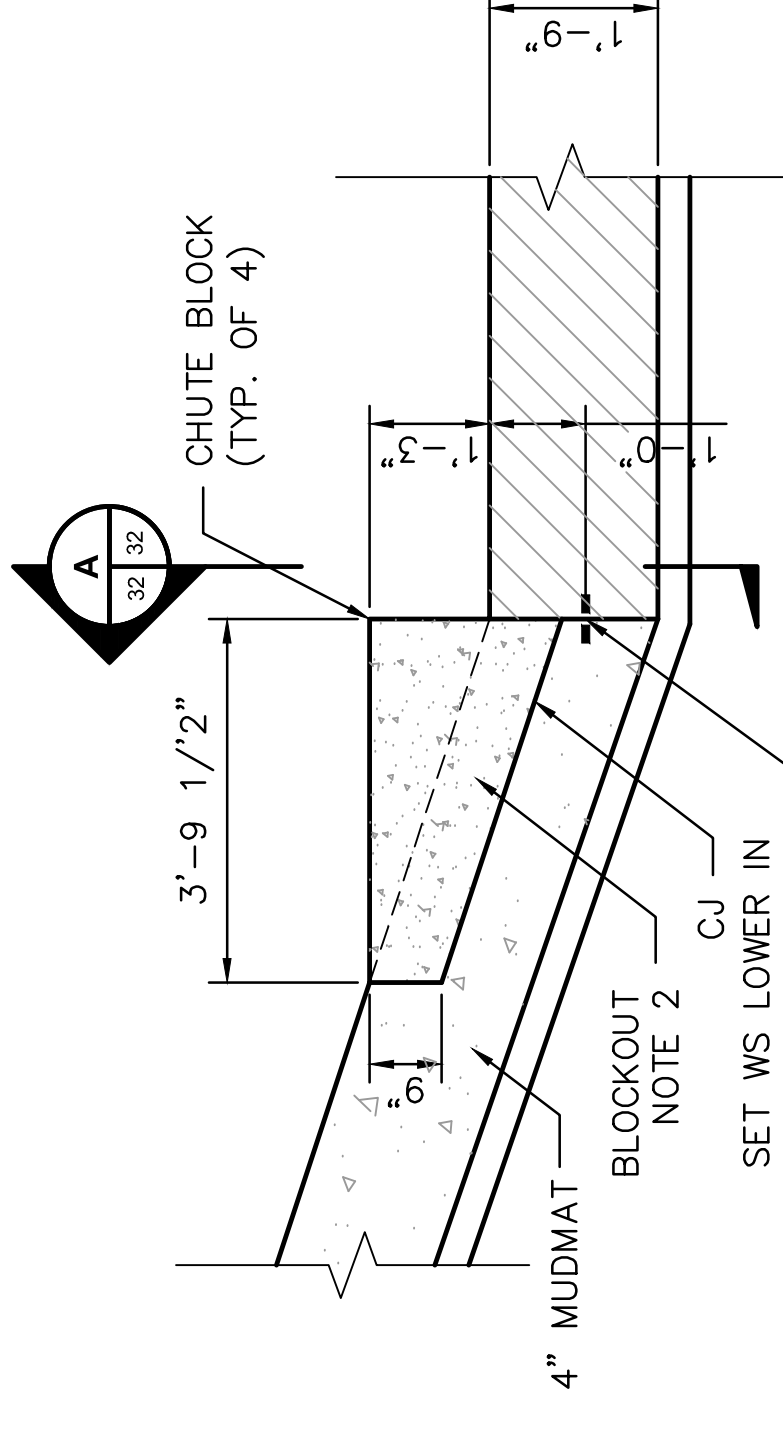




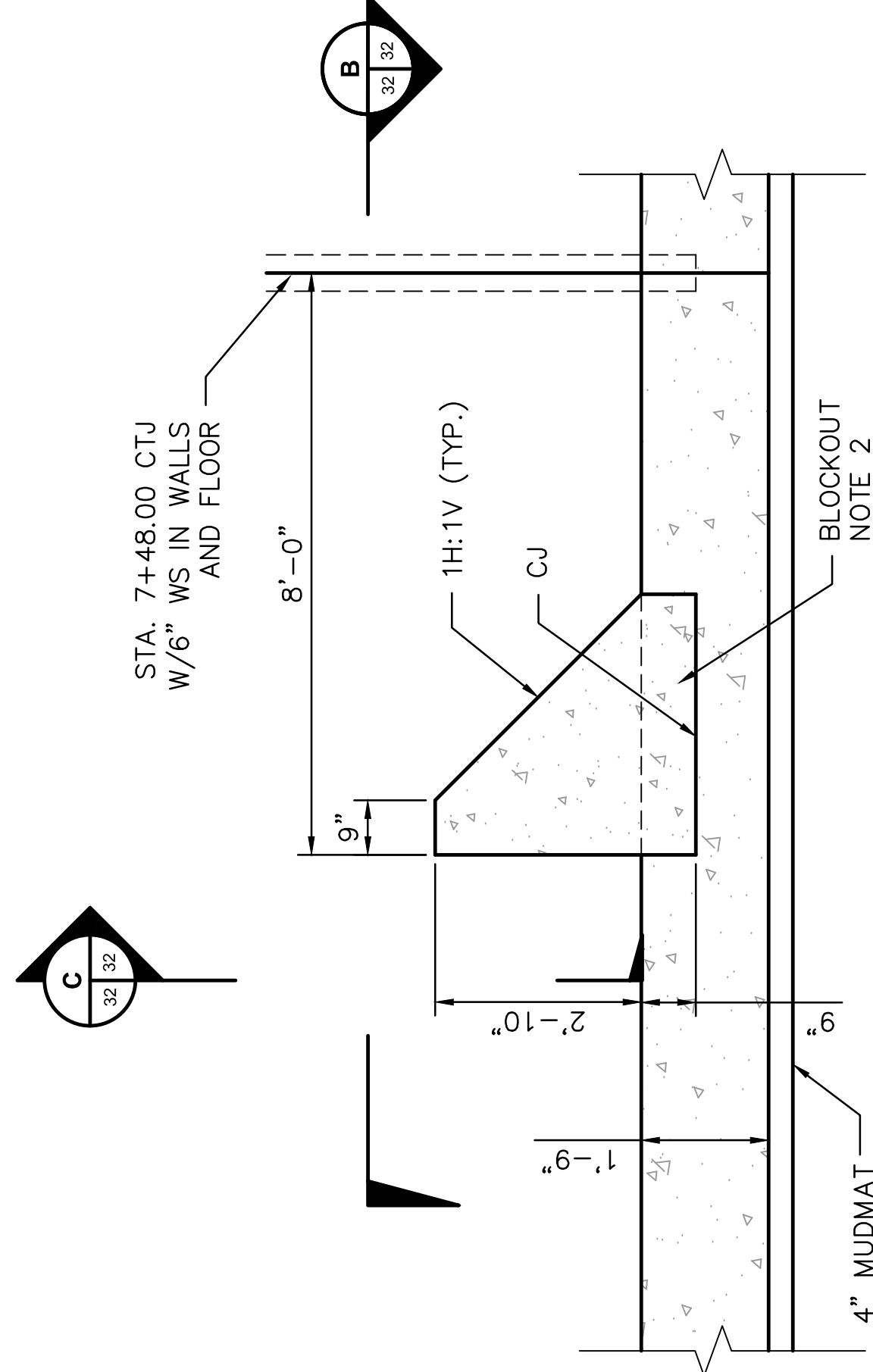
1 DETAIL
SCALE IN FEET



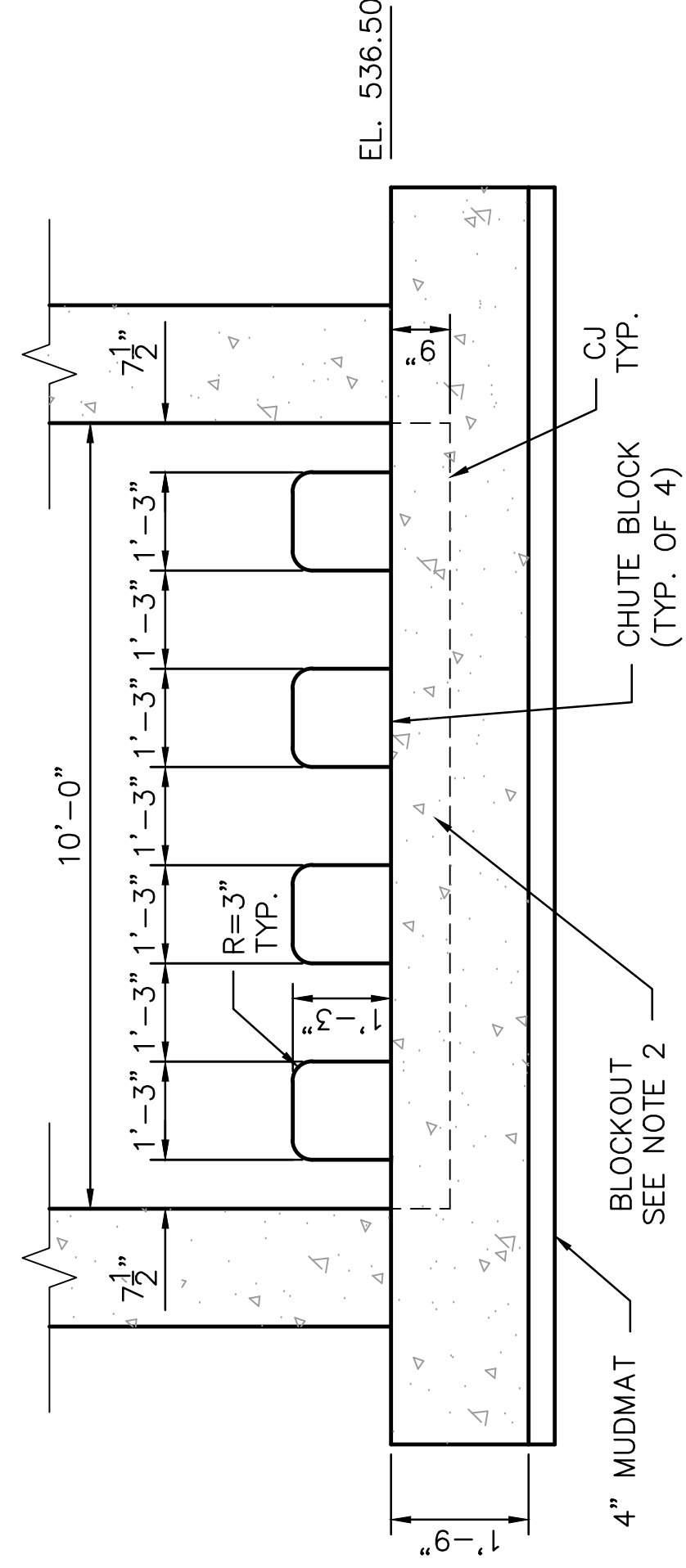
2 DETAIL
SCALE IN FEET



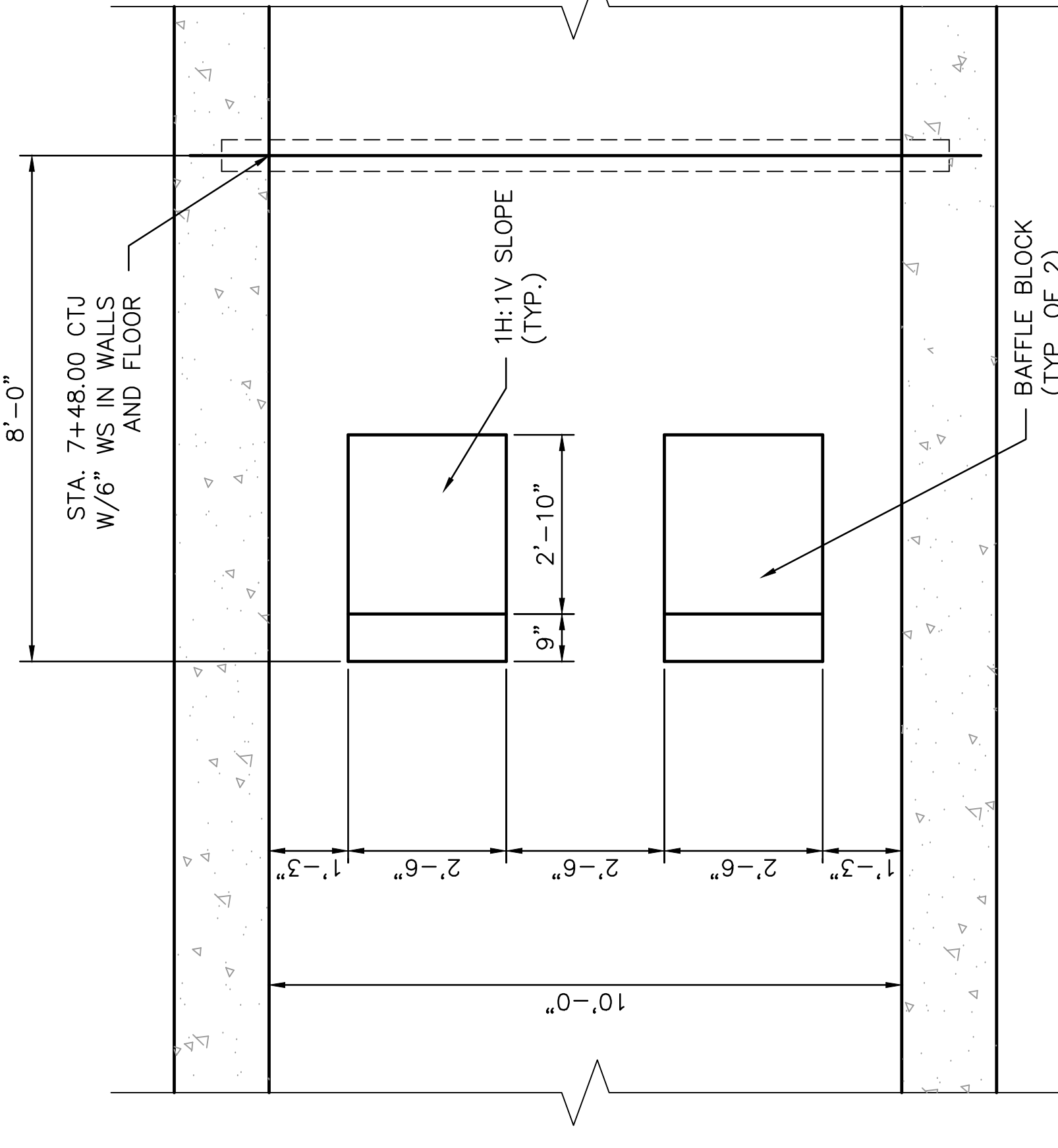
3 DETAIL
SCALE IN FEET



4 DETAIL
SCALE IN FEET



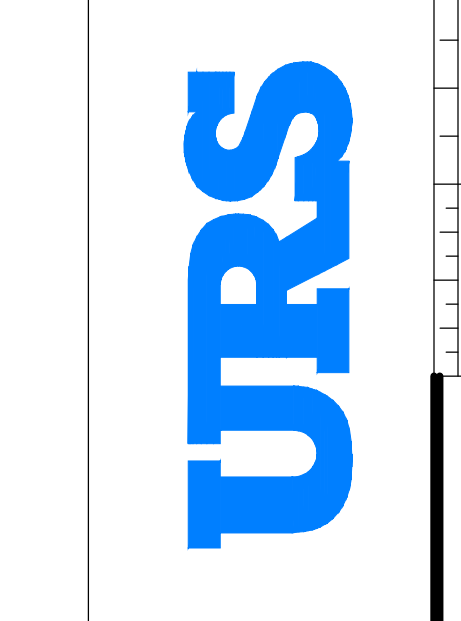
A SECTION
SCALE IN FEET



B SECTION
SCALE IN FEET

- NOTES:**
1. REINFORCEMENT NOT SHOWN.
 2. BLOCKOUT SHALL BE CONTINUOUS ACROSS ENTIRE WIDTH OF CHUTE AND STILLING BASIN.

BAR IS ONE-INCH ON ORIGINAL DRAWING IF NOT ONE-INCH THEN ACCORDINGLY

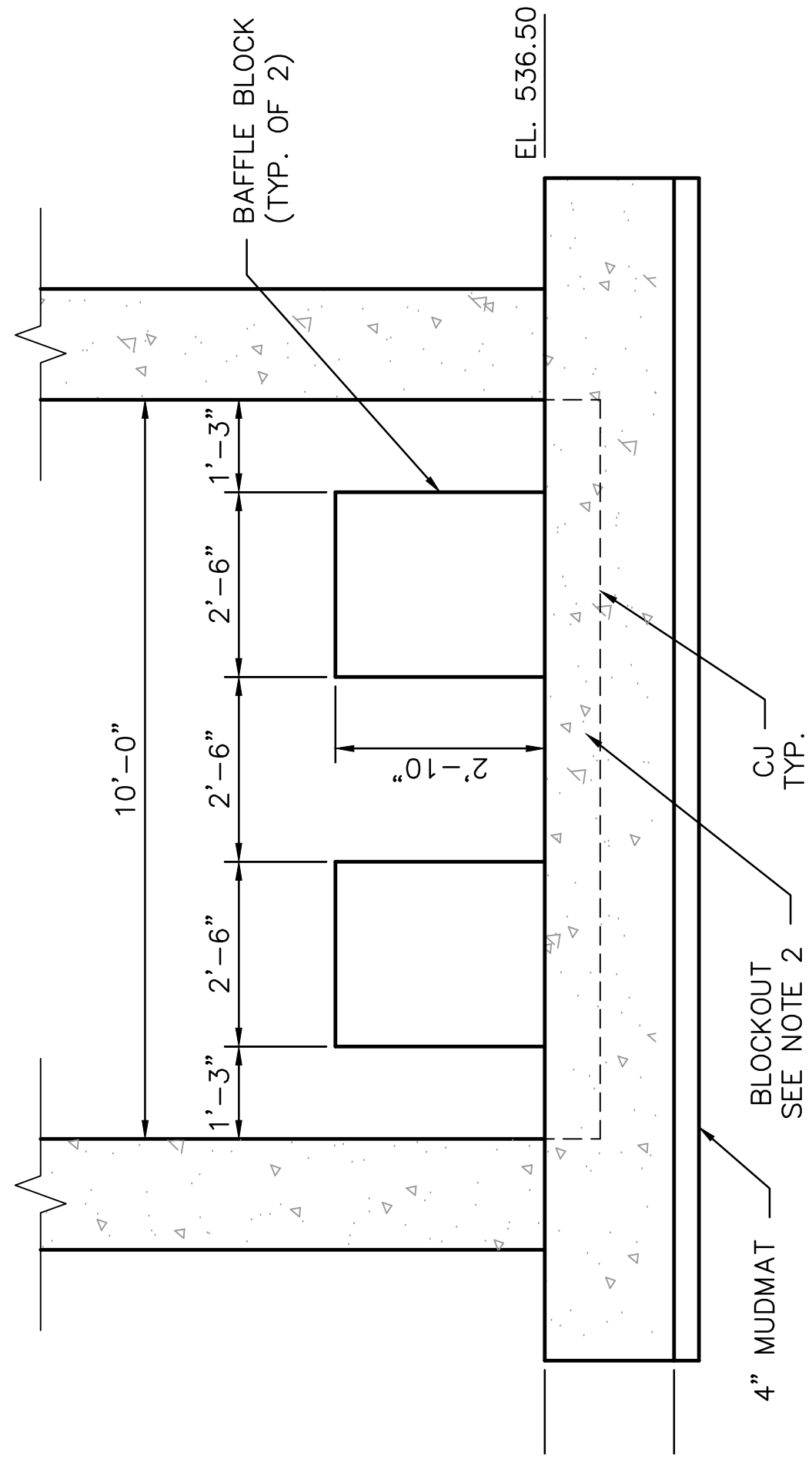


SCALE: AS SHOWN
PROJECT NO: 13815151
DESIGNED BY: SSH
DRAWN BY: WDH
APPROVED BY: THK

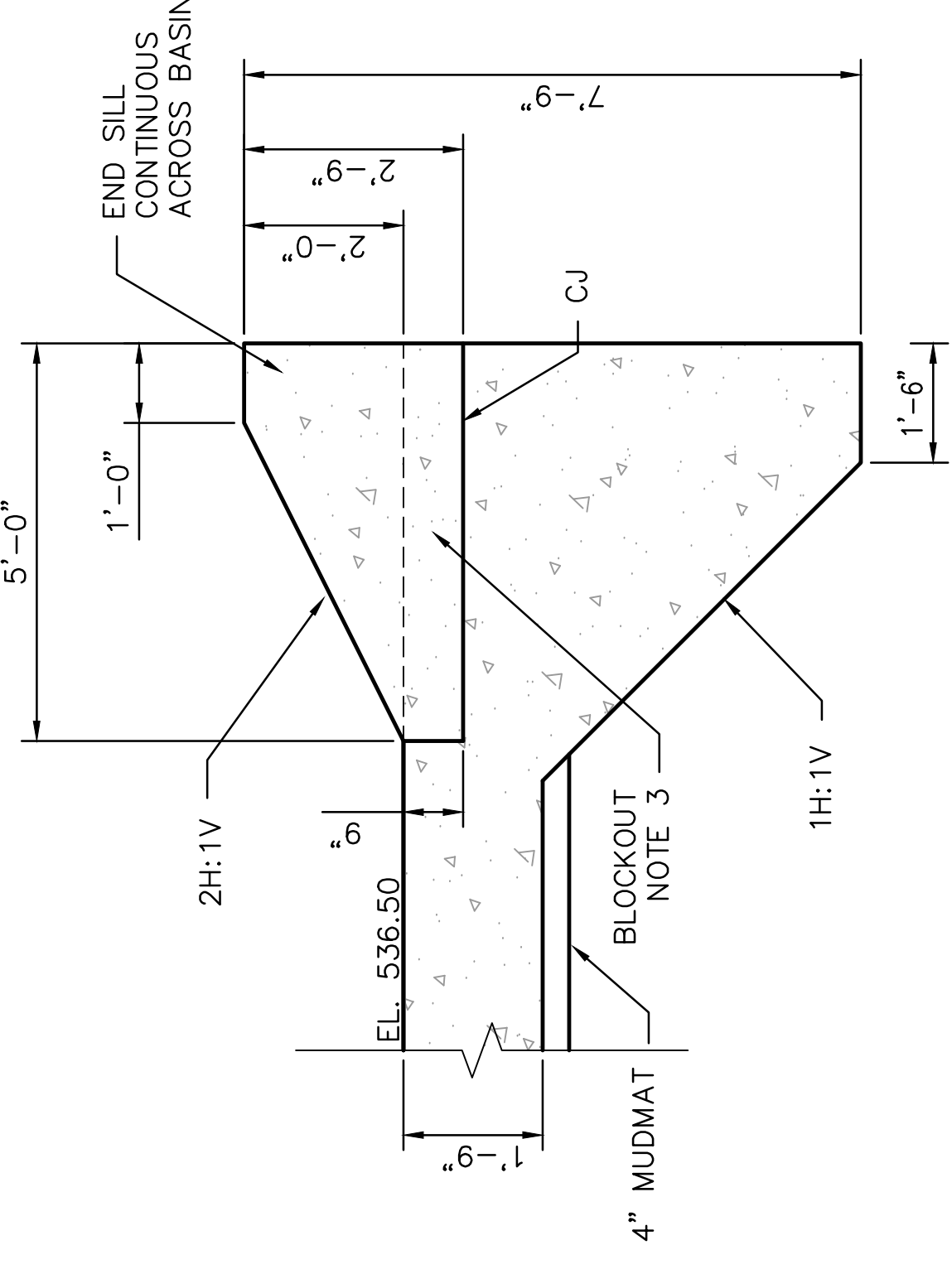
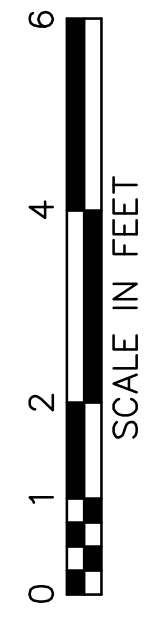
DWG. NO. 13-30132-D
LOUISA KENTUCKY
BIG SANDY PLANT
SPILLWAY STRUCTURAL SECTIONS & DETAILS
1 OF 2
KENNEDY POWER COMPANY
AEP SERVICE CORP
1 RIVERSIDE PLAZA
COLUMBUS OH 43215

DATE	NO.	DESCRIPTION	APPROVED BY
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

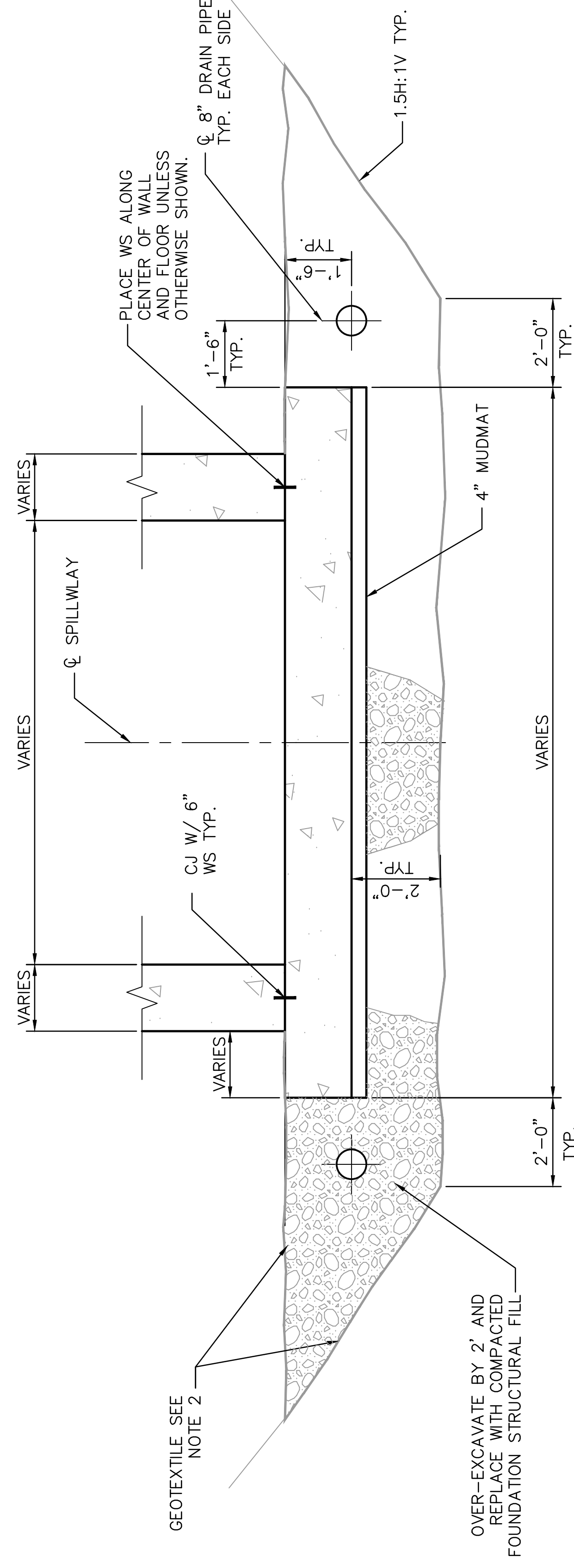
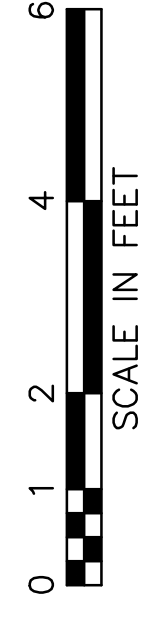
THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR CORRECTED IN WHOLE OR IN PART OR USED FOR PURPOSES OTHER THAN THOSE SPECIFICALLY IDENTIFIED HEREIN. ANY REPRODUCTION OR USE FOR ANY PURPOSE OTHER THAN THOSE IDENTIFIED HEREIN IS STRICTLY PROHIBITED. ANY SUCH REPRODUCTION OR USE IS AT THE USER'S SOLE RISK AND IS TO BE RETURNED UPON REQUEST.



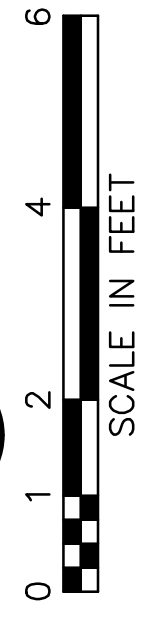
C SECTION
29/33



5 DETAIL
28/33



6 DETAIL
29/33



NOTES:

1. REINFORCEMENT NOT SHOWN.
2. BLOCKOUT SHALL BE CONTINUOUS ACROSS ENTIRE WIDTH OF STILLING BASIN.
3. PLACE NON-WOVEN GEOTEXTILE AGAINST ALL EXCAVATED SURFACES AND ACROSS ALL COMPACTED FOUNDATION STRUCTURAL FILL AS SHOWN. LAP OVER TOP OF FOOTING.

BAR IS ONE-INCH ON ORIGINAL DRAWING
IF NOT ONE-INCH THEN APPROXIMATELY



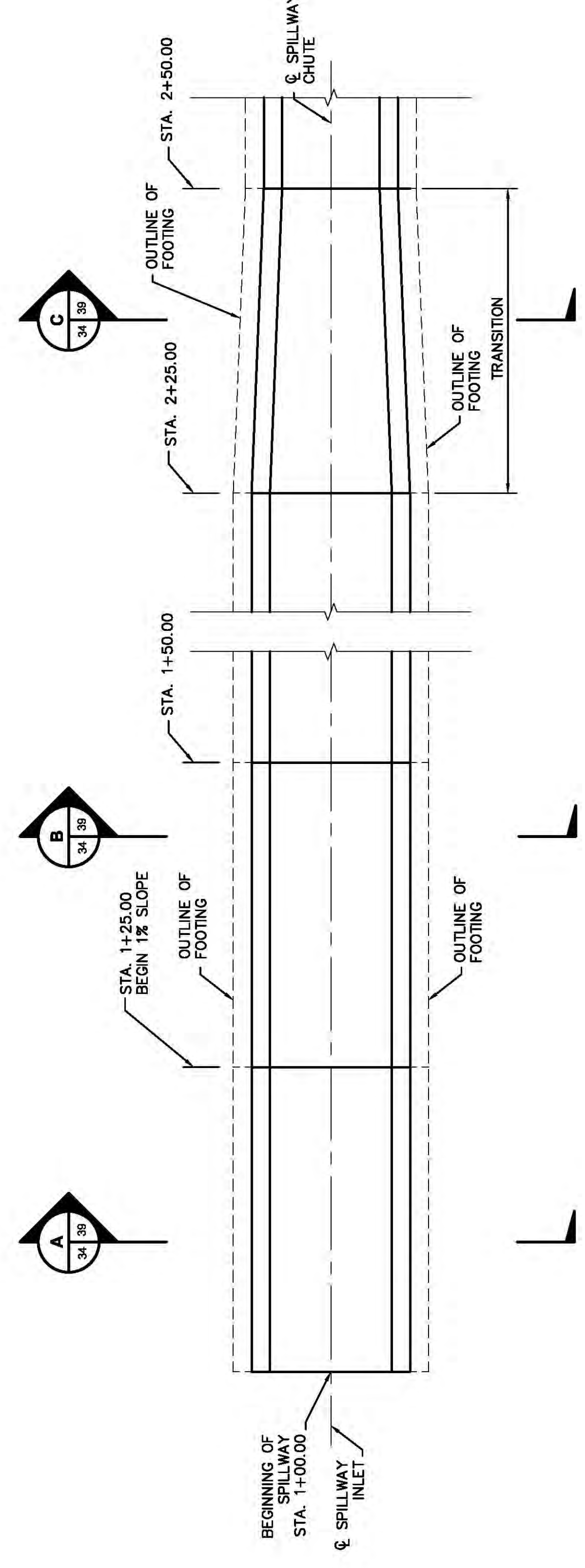
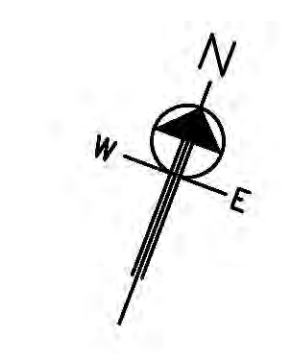
SCALE: AS SHOWN
PROJECT NO: 13815151
DESIGNED BY: SSH
DRAWN BY: WDH
APPROVED BY: THK

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISA KENTUCKY
SPILLWAY STRUCTURAL SECTIONS & DETAILS
2 OF 2

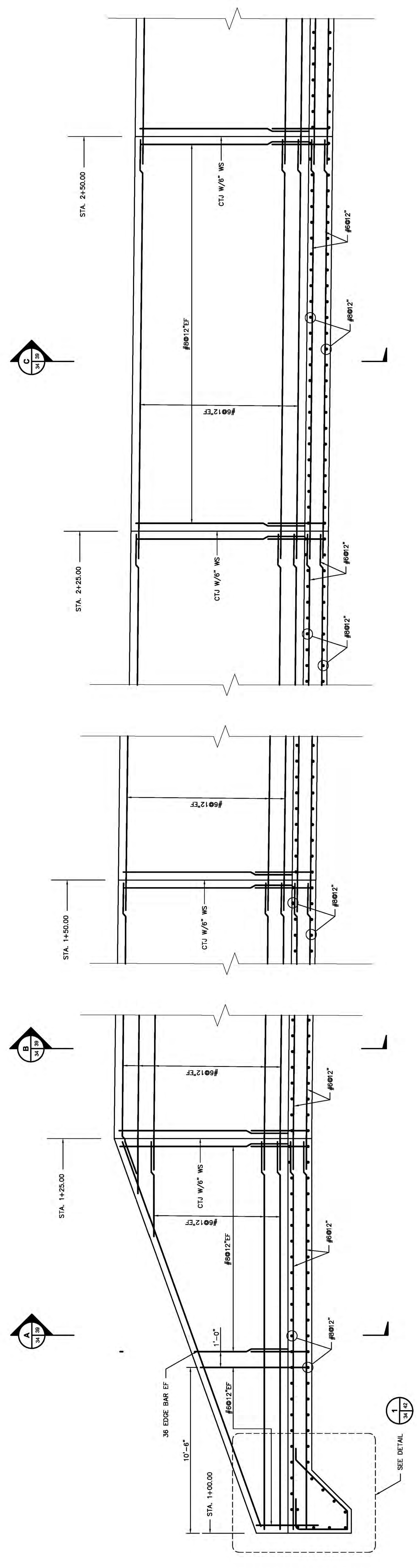
DWG. NO. 13-30133-D
CIVIL ENGINEERING DIVISION

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR CORRECTED IN WHOLE OR IN PART OR USED FOR PURSUING INFORMATION TO ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. FOR ANY PURPOSE DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST.

DATE	NO.	DESCRIPTION	APPRO.
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

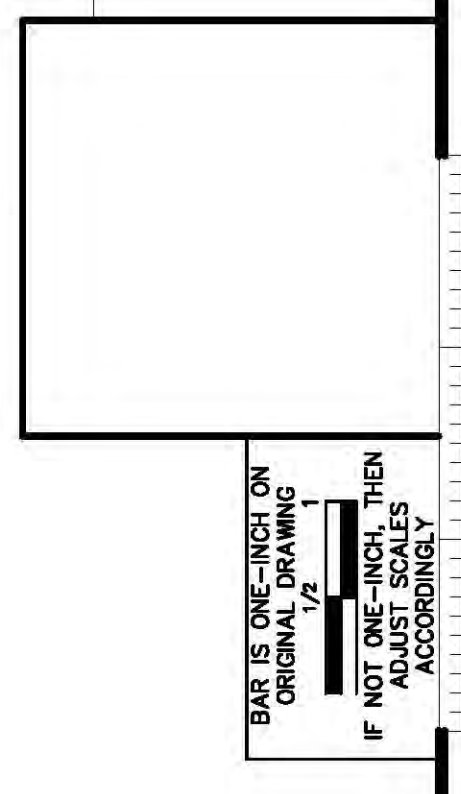


KEY PLAN
 STA. 1+00.00 TO STA. 2+50.00
 0 4 8 16 24
 SCALE IN FEET



PROFILE
 STA. 1+00.00 TO STA. 2+50.00
 0 1 2 4 6 8
 SCALE IN FEET

NOTES:
 1. FOR GENERAL NOTES AND MINIMUM REQUIREMENTS FOR REINFORCEMENT SEE SHEET 13-30134-B.



THIS IS THE BEST COPY OF ORIGINAL DRAWING.
 IF NOT ONE-NOTE, THEN ACCORDINGLY.

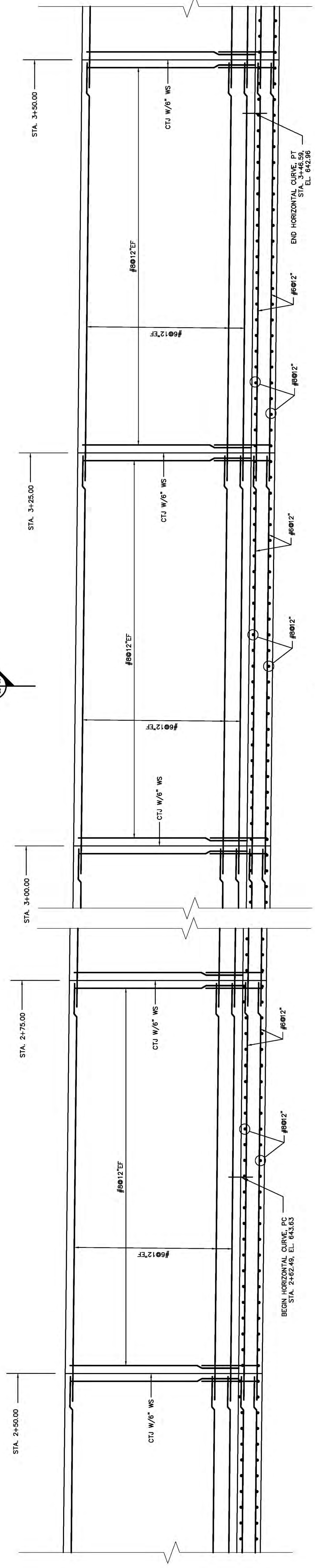
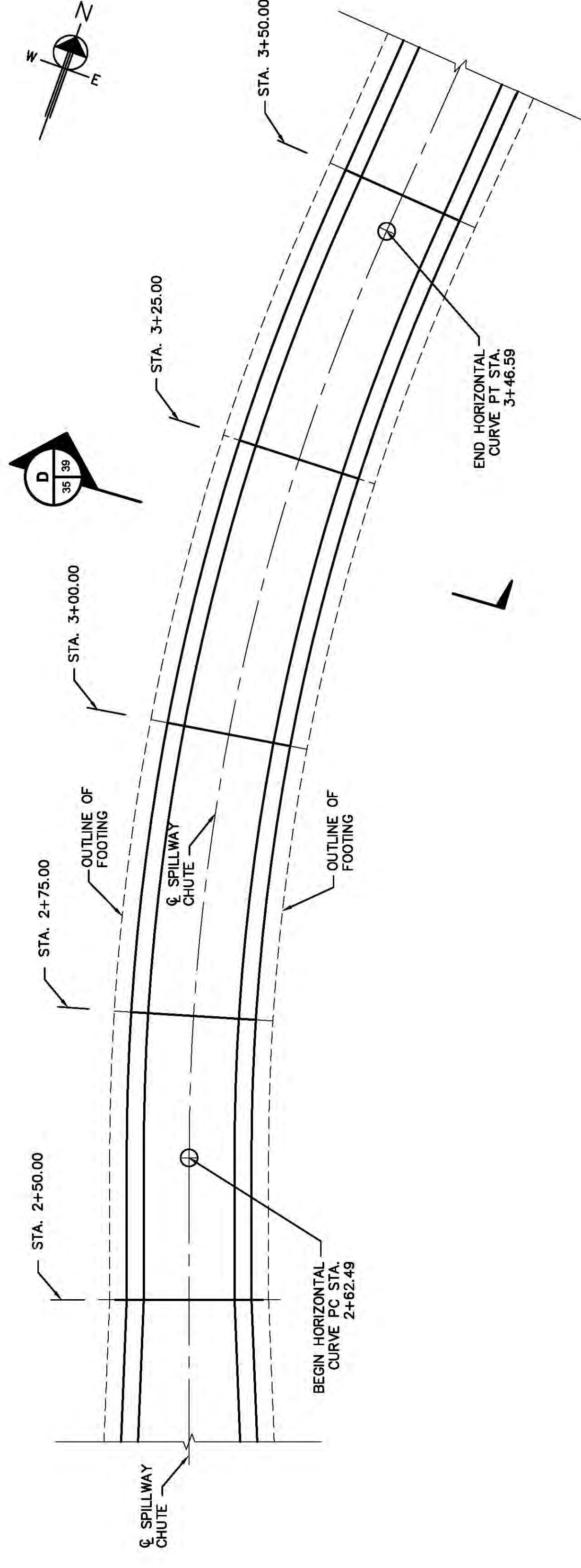
SCALE:	AS SHOWN
DR:	AS SHOWN
OR:	AS SHOWN
PROJECT NO.:	13815151
DESIGNED BY:	SSH
DRAWN BY:	WDH
APPROVED BY:	THK

DATE	NO.	DESCRIPTION	APP'D
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

"THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR USE ONLY. IT IS NOT TO BE REPRODUCED OR COPIED, IN WHOLE OR IN PART, OR USED FOR PURPOSES OTHER THAN THOSE AUTHORIZED BY THE AMERICAN ELECTRIC POWER SERVICE CORP. WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. FOR ANY PURPOSES DETERMINED BY THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST."

KENTUCKY POWER COMPANY
BIG SANDY PLANT
 LOUISIANA KENTUCKY
SPILLWAY REINFORCEMENT
PROFILE
 STA. 1+00 TO STA. 2+50
 DWG. NO. 13-30134-D

AMERICAN ELECTRIC POWER
 AEP SERVICE CORP.
 1 RIVERSIDE PLAZA
 COLUMBUS, OH 43215
 O SYSTEM TIME - HOUSATONIC



DATE	NO.	DESCRIPTION	APPROVED
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. and is loaned OR COPIED, IN WHOLE OR IN PART OR USED FOR REPRODUCING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. FOR ANY PURPOSES DETERMINED TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST.

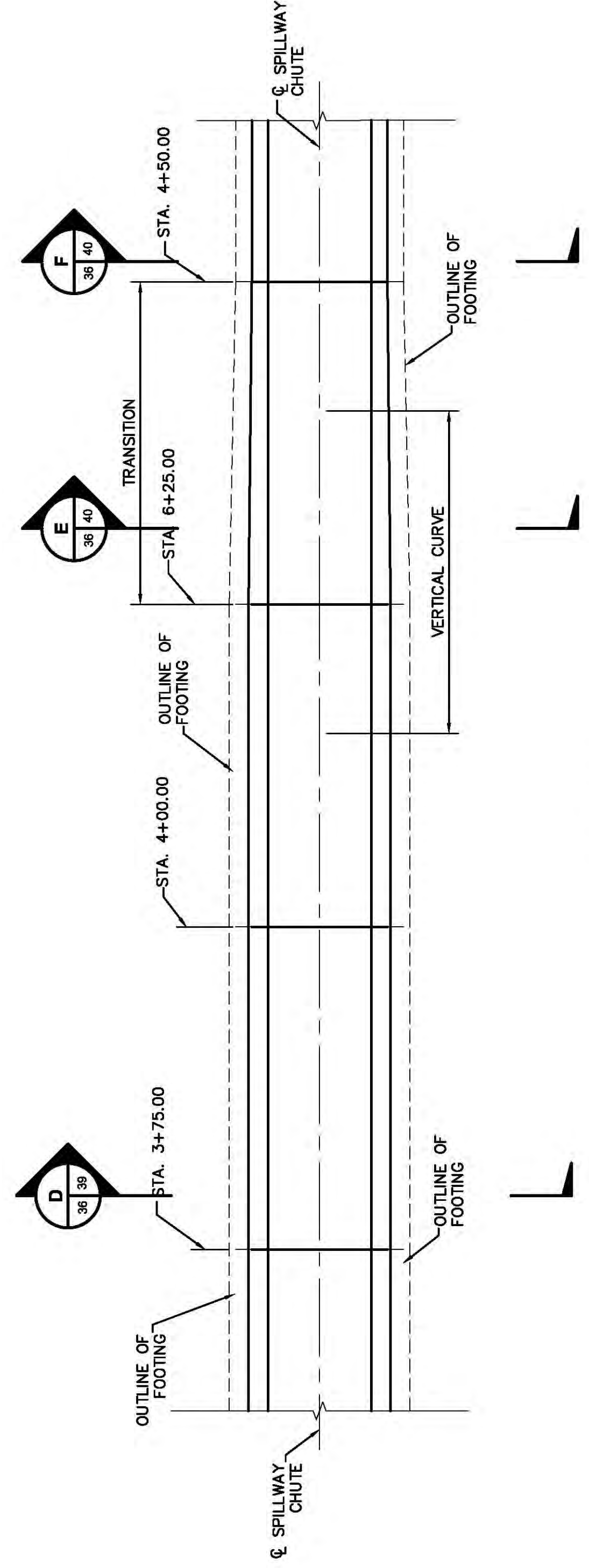
KENTUCKY POWER COMPANY
 BIG SANDY PLANT
 LOUISA KENTUCKY
 SPILLWAY REINFORCEMENT
 PROFILE
 STA 2+50 TO STA 3+50
 DWG. NO. 13-30135-D

SCALE	AS SHOWN
DR	AS SHOWN
OR	AS SHOWN
DESIGNED BY:	SSH
DRAWN BY:	WDH
APPROVED BY:	THK
PROJECT NO:	13815151
DATE:	

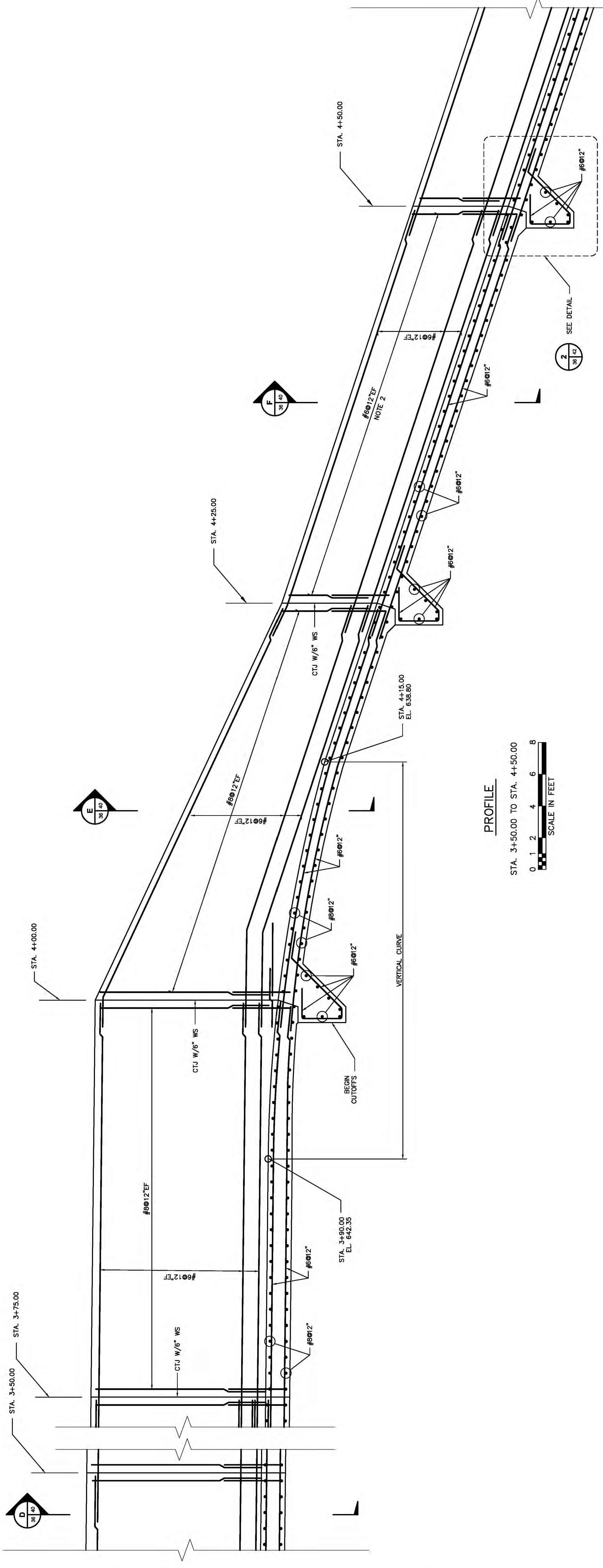


- NOTES:
- FOR GENERAL NOTES AND MINIMUM REINFORCEMENT SEE SHEET 13-3014.

THIS IS THE ORIGINAL DRAWING
 IF NOT ONE, THEN THIS IS A COPY
 ACCORDINGLY



KEY PLAN
STA. 3+50.00 TO STA. 4+50.00
SCALE IN FEET



PROFILE
STA. 3+50.00 TO STA. 4+50.00
SCALE IN FEET

- NOTES:**
1. FOR GENERAL NOTES AND MINIMUM REQUIREMENTS FOR REINFORCEMENT SEE SHEET 13-30136.
 2. SPLICE IN VERTICAL WALL REINFORCEMENT OPTIONAL. WALL REINFORCEMENT NOT REQUIRED.



THIS IS THE USER'S ORIGINAL DRAWING. IF NOT ONE, THEN IT IS A COPY AND SHOULD BE REPRODUCED ACCORDINGLY.

SCALE:	AS SHOWN
PROJECT NO.:	13815151
DESIGNED BY:	SSH
DRAWN BY:	WDH
APPROVED BY:	THK

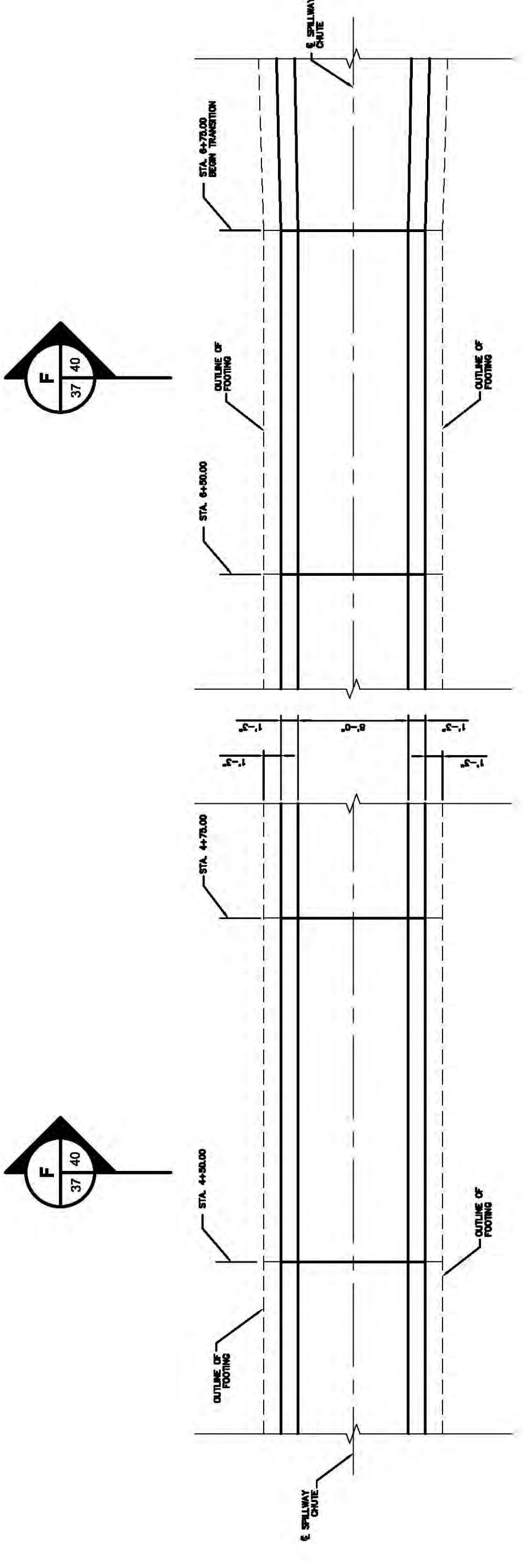
DATE	NO.	DESCRIPTION	APPROVED
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

"THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED OR CHECKED, IN WHOLE OR IN PART, OR USED FOR REPRODUCING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN PERMISSION OF THE COMPANY. IT IS TO BE RETURNED TO THE COMPANY IMMEDIATELY UPON REQUEST."

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISIANA
SPILLWAY REINFORCEMENT PROFILE
STA 3+50 TO STA 4+50
DWG. NO. 13-30136-A

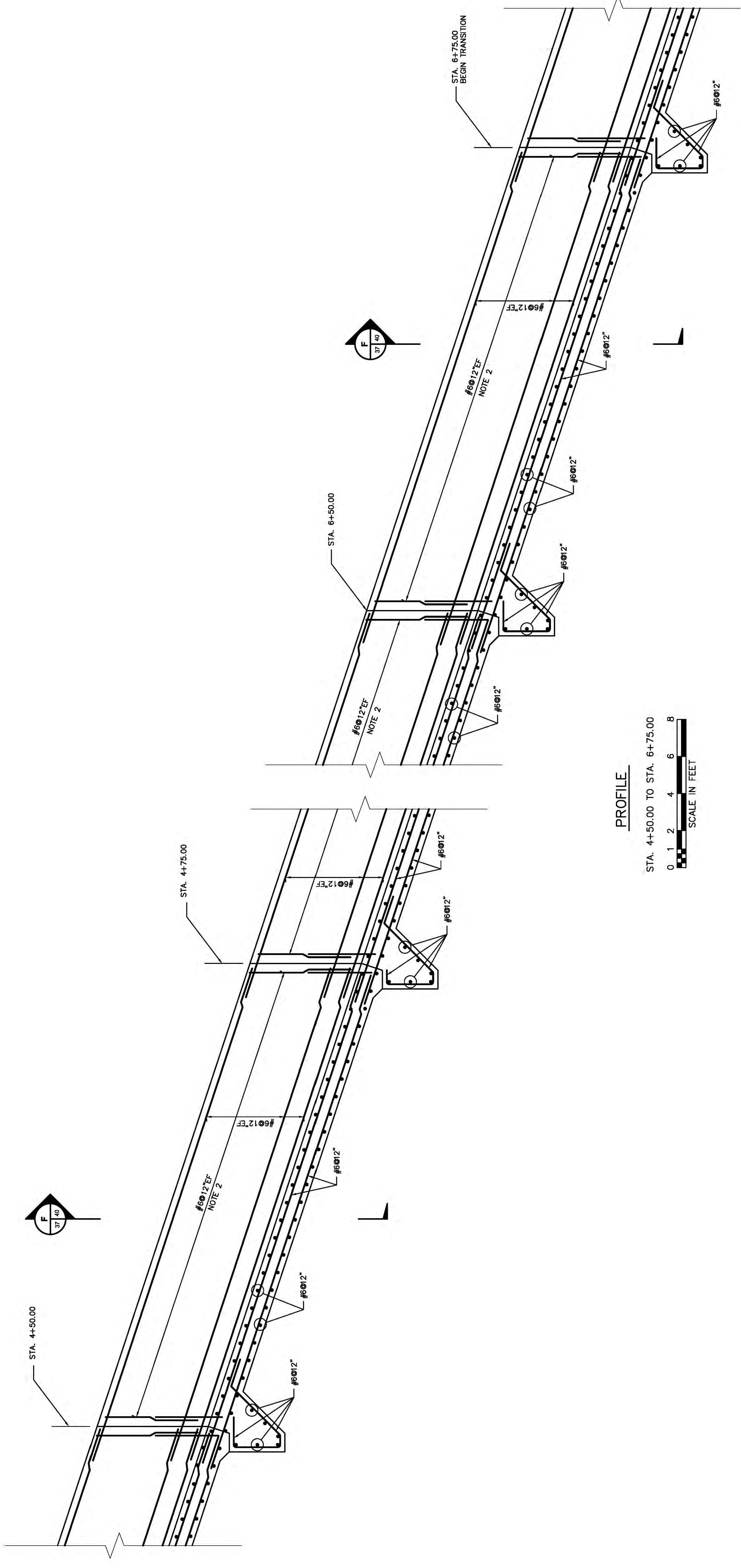
AMERICAN ELECTRIC POWER
AEP SERVICE CORP
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

DWG. NO. 13-30137-D



KEY PLAN

STA. 4+50.00 TO STA. 6+75.00
 0 4 8 16 24
 SCALE IN FEET



PROFILE

STA. 4+50.00 TO STA. 6+75.00
 0 1 2 4 6 8
 SCALE IN FEET

- NOTES:
1. FOR GENERAL NOTES AND MINIMUM REQUIREMENTS FOR REINFORCEMENT SEE SHEET 13-30146.
 2. SPLICE IN VERTICAL WALL REINFORCEMENT OPTIONAL BETWEEN STA. 4+25.00 AND STA. 6+75.00. TOP OF WALL REINFORCEMENT NOT REQUIRED.



THIS IS THE BEST COPY
 OF ORIGINAL DRAWING
 IF NOT ONE, MAKE THEN
 ACCORDINGLY

APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 AS SHOWN
 SCALE: AS SHOWN

APR
 AMERICAN
 POWER

AEP SERVICE CORP
 1 RIVERSIDE PLAZA
 COLUMBUS, OH 43215

DWG. NO. 13-30137-D

STA 4+50 TO STA 6+75

SPILLWAY REINFORCEMENT

LOUISA KENTUCKY

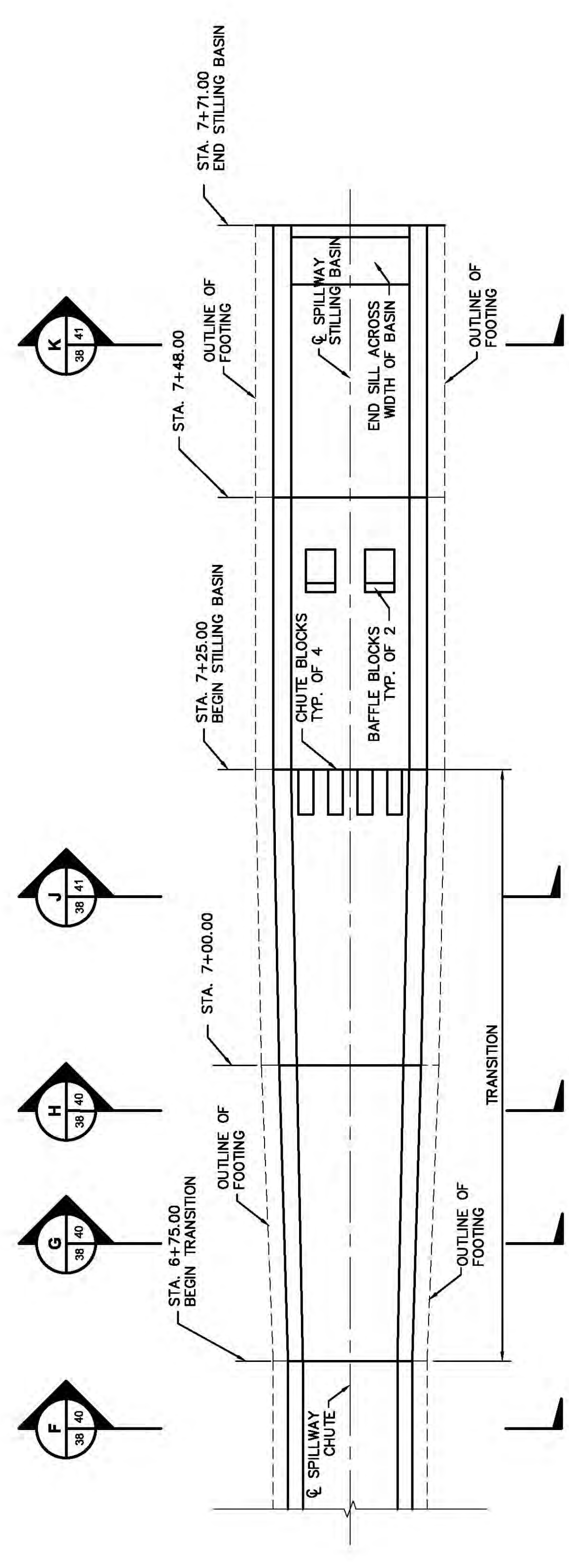
KENTUCKY POWER COMPANY

BIG SANDY PLANT

"THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR COPIED, IN WHOLE OR IN PART OR USED FOR PURPOSES OTHER THAN THAT FOR WHICH IT WAS ISSUED. ANY INFORMATION TO ANY PERSON WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. IS STRICTLY CONFIDENTIAL AND IS TO BE RETURNED UPON REQUEST."

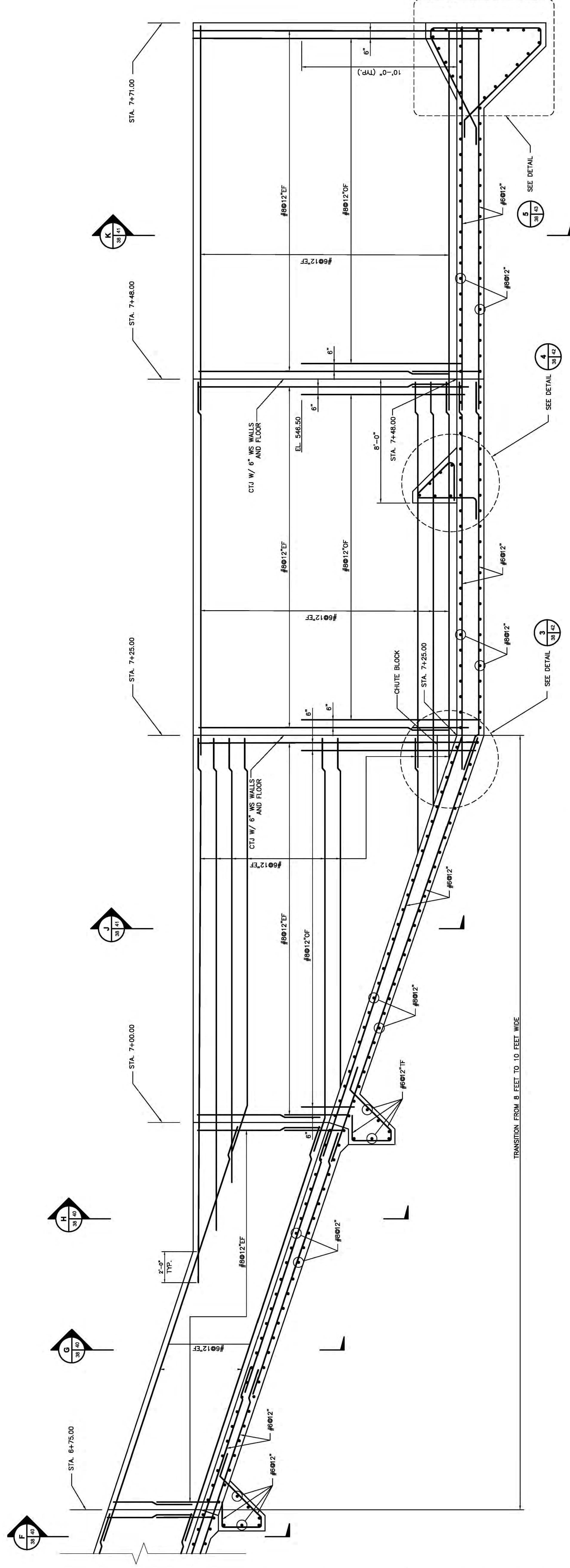
DATE	NO.	DESCRIPTION	APPROVED
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

DATE	NO.	DESCRIPTION	APPROVED



KEY PLAN

STA. 6+75.00 TO STA. 7+71.00
0 4 8 16 24
SCALE IN FEET



PROFILE

STA. 6+75.00 TO STA. 7+71.00
0 1 2 4 6 8
SCALE IN FEET

NOTES:
1. FOR GENERAL NOTES AND MINIMUM REINFORCEMENTS SEE REINFORCEMENT SEE SHEET 13-30138-D

THIS IS THE USER'S ORIGINAL DRAWING. IF NOT ONE-NOTE, THEN ACCORDINGLY.



SCALE: AS SHOWN
PROJECT NO: 13815151
DESIGNED BY: SSH
DRAWN BY: WDH
APPROVED BY: THK

SCALE: CIVIL ENGINEERING DIVISION

DWG. NO. 13-30138-D

STA 6+75 TO STA 7+71

SPILLWAY REINFORCEMENT

LOUISIANA KENTUCKY

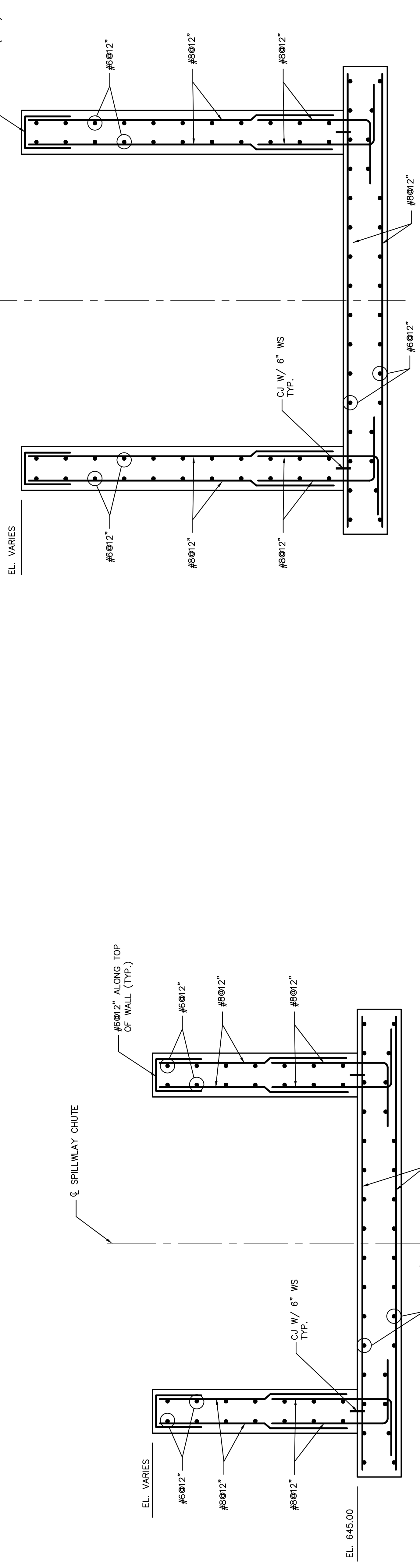
BIG SANDY PLANT

KENTUCKY POWER COMPANY

"THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR USE ONLY. IT IS NOT TO BE REPRODUCED OR COPIED, IN WHOLE OR IN PART, OR USED FOR PUBLISHING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. FOR ANY PURPOSES DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST"

DATE	NO.	DESCRIPTION	APPRO.
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

13-30139-D

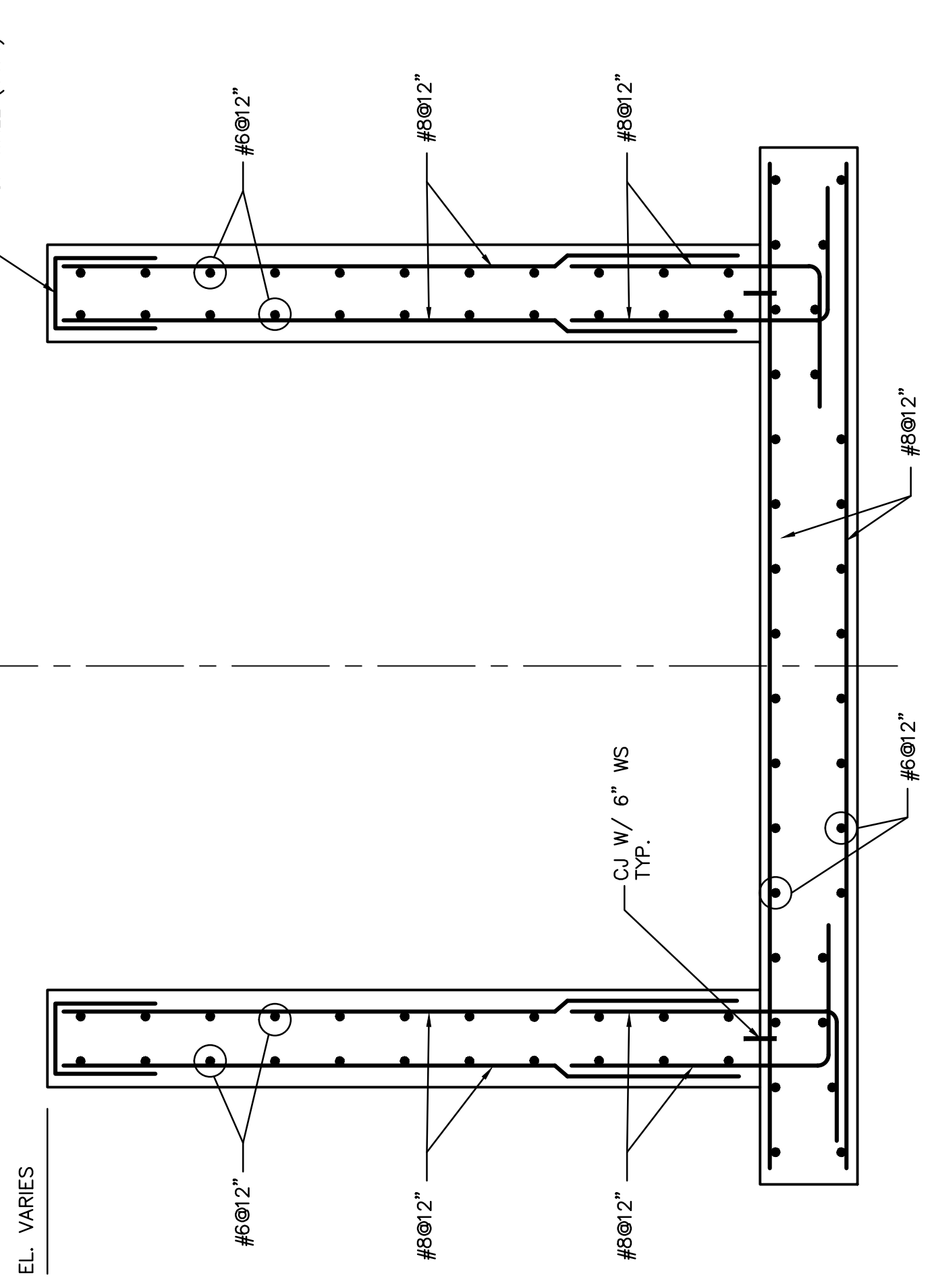


A SECTION

3/4" 3/8"

0 1 2 4 6

SCALE IN FEET

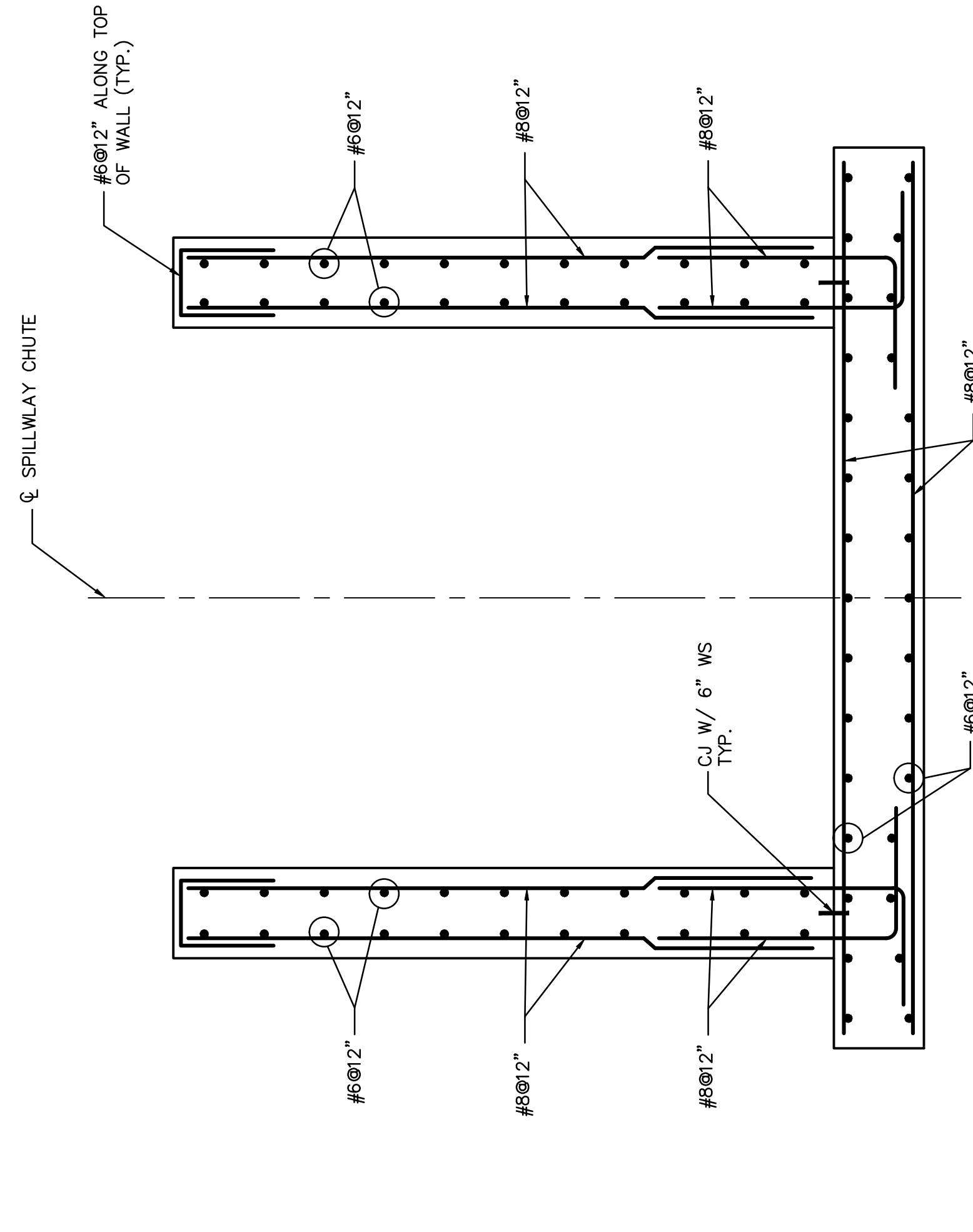


B SECTION

3/4" 3/8"

0 1 2 4 6

SCALE IN FEET

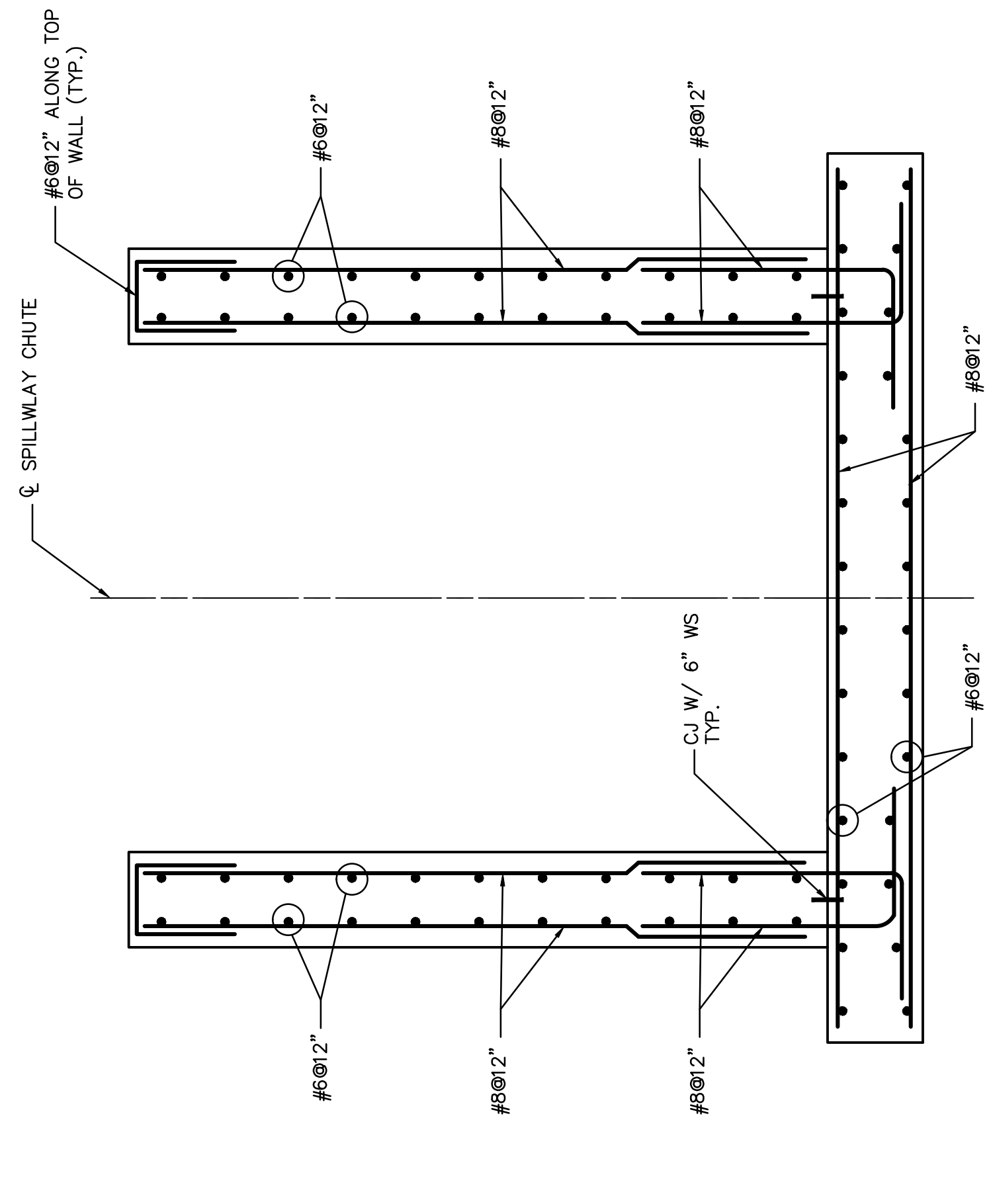


C SECTION

3/4" 3/8"

0 1 2 4 6

SCALE IN FEET



D SECTION

3/4" 3/8"

0 1 2 4 6

SCALE IN FEET

NOTES:

1. FOR GENERAL NOTES AND MINIMUM REQUIREMENTS FOR REINFORCEMENT SEE SHEET 13-30146.

BAR IS ONE-INCH ON ORIGINAL DRAWING IF NOT ONE-INCH THEN ACCORDINGLY



SCALE: AS SHOWN

PROJECT NO: 13815151

DESIGNED BY: SSH

DRAWN BY: WDH

APPROVED BY: THK

DWG. NO. 13-30139-D

CIVIL ENGINEERING DIVISION

APPROVED BY: [Signature]

DATE: [Date]

DESIGNED BY: [Signature]

DATE: [Date]

DRAWN BY: [Signature]

DATE: [Date]

PROJECT NO: 13815151

PROJECT NAME: BIG SANDY PLANT

LOCATION: LOUISA, KENTUCKY

DWG. NO.: 13-30139-D

SECTION: SPILLWAY REINFORCEMENT SECTIONS

OF: 1 OF 3

DATE: 06/05/13

DESCRIPTION: 100% SUBMITTAL-URS

DATE: 04/26/13

DESCRIPTION: 90% SUBMITTAL-URS

DATE: 02/20/13

DESCRIPTION: 70% SUBMITTAL-URS

DATE: 12/03/12

DESCRIPTION: 30% SUBMITTAL-URS

NO. NO. DESCRIPTION APPROV.

REVISIONS

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR USE ONLY. IT IS NOT TO BE REPRODUCED OR COPIED, IN WHOLE OR IN PART OR USED FOR PURSUING INFORMATION TO ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. FOR ANY PURPOSE DETERMINED TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY

BIG SANDY PLANT

LOUISA, KENTUCKY

SPILLWAY REINFORCEMENT SECTIONS

1 OF 3

DWG. NO. 13-30139-D

CIVIL ENGINEERING DIVISION

APPROVED BY: [Signature]

DATE: [Date]

DESIGNED BY: [Signature]

DATE: [Date]

DRAWN BY: [Signature]

DATE: [Date]

PROJECT NO: 13815151

PROJECT NAME: BIG SANDY PLANT

LOCATION: LOUISA, KENTUCKY

DWG. NO.: 13-30139-D

SECTION: SPILLWAY REINFORCEMENT SECTIONS

OF: 1 OF 3

DATE: 06/05/13

DESCRIPTION: 100% SUBMITTAL-URS

DATE: 04/26/13

DESCRIPTION: 90% SUBMITTAL-URS

DATE: 02/20/13

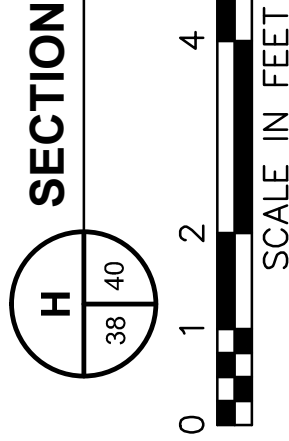
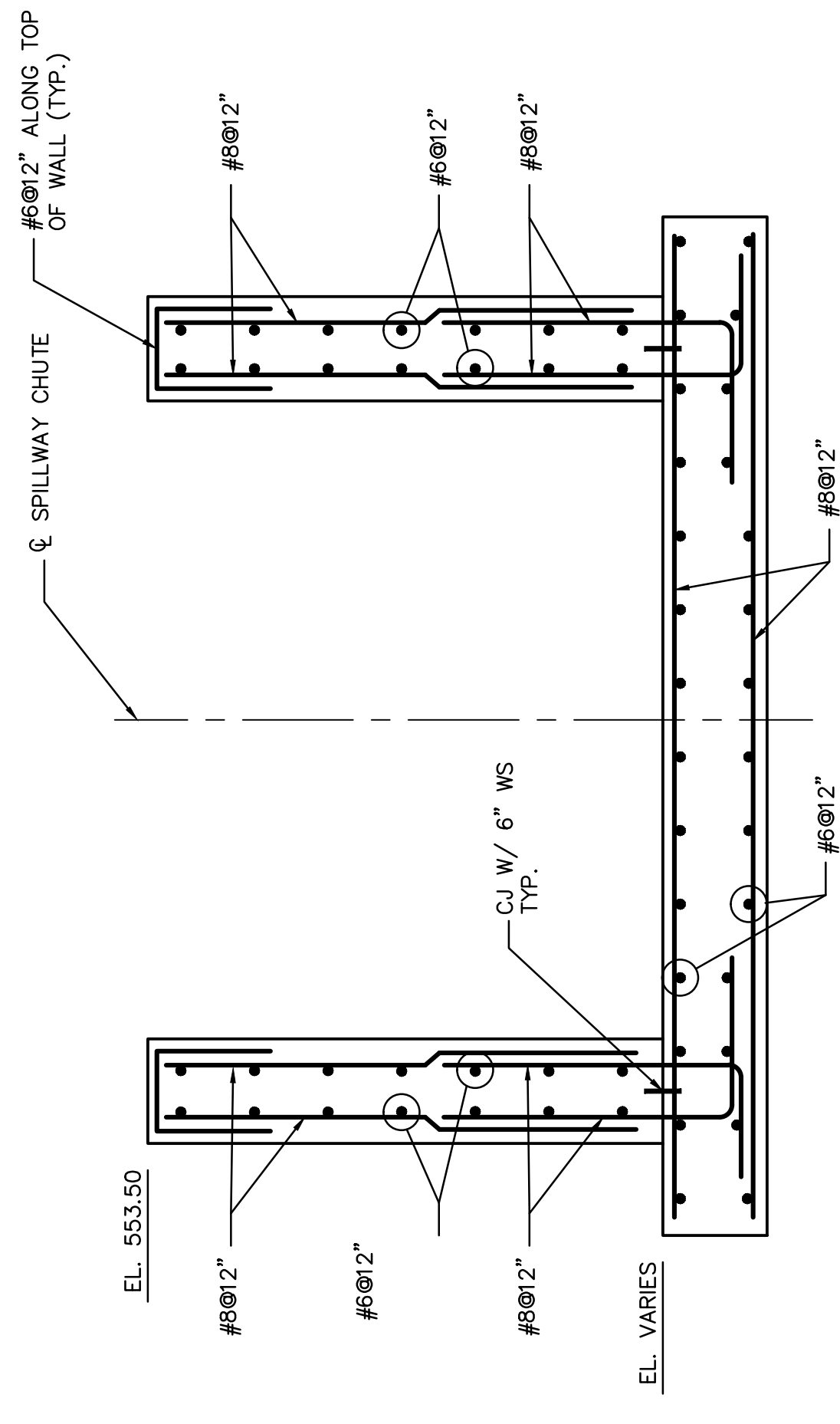
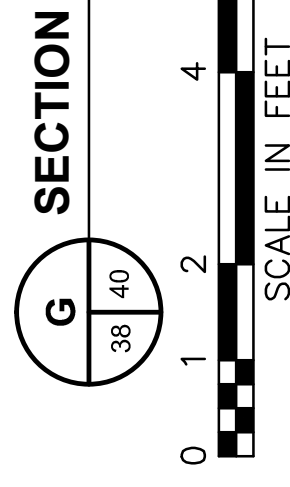
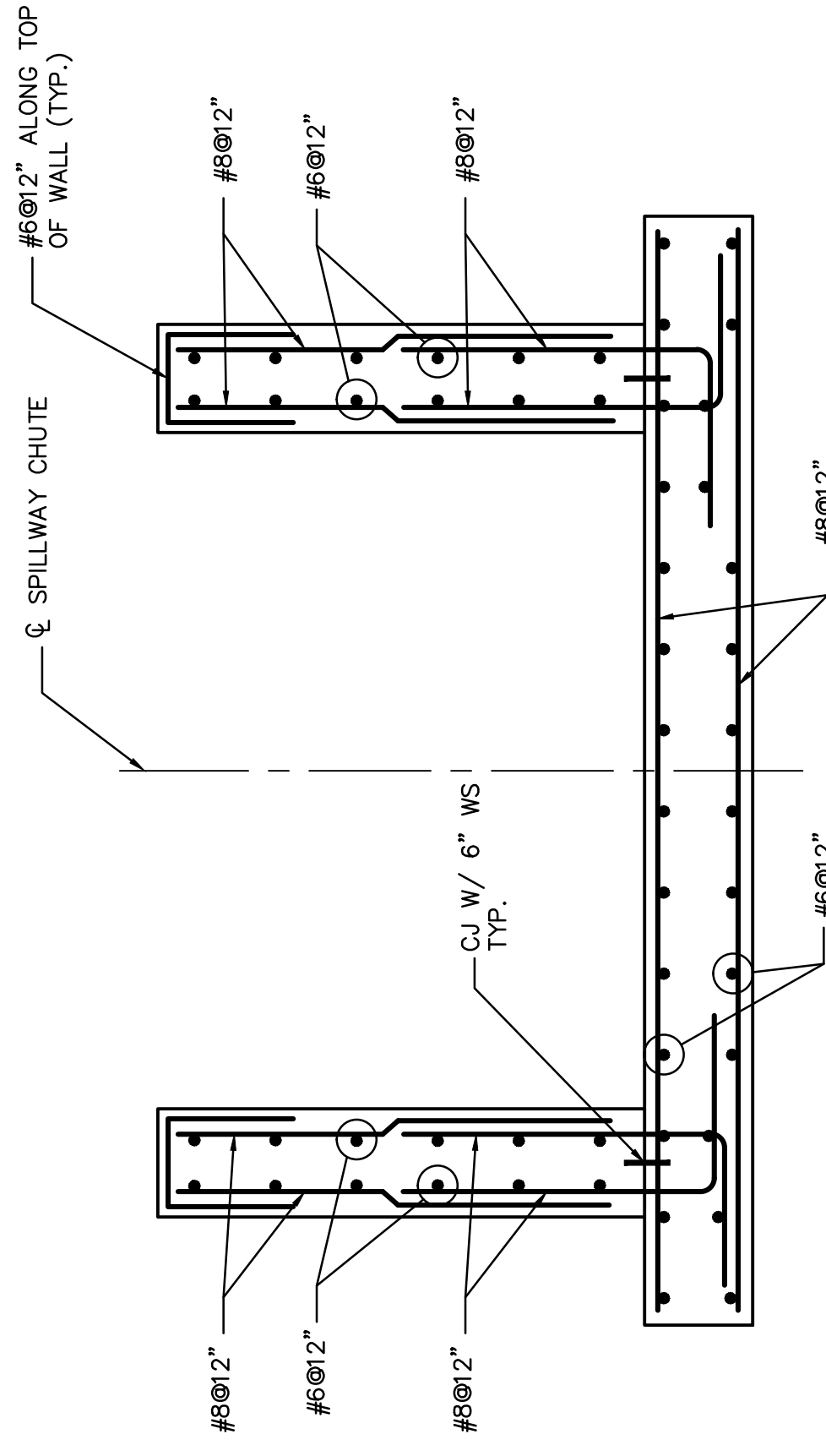
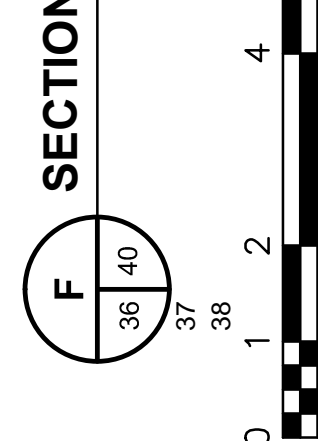
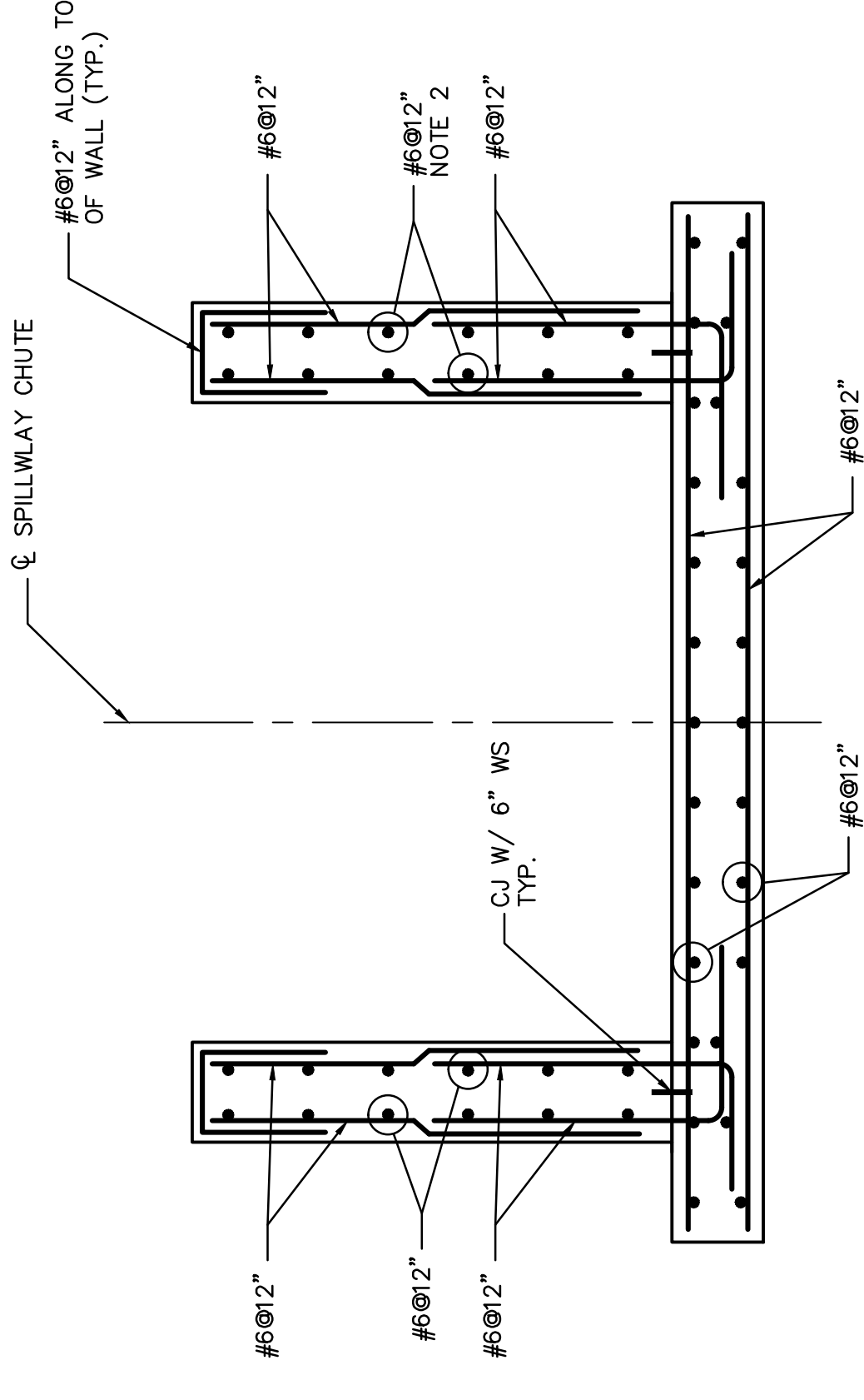
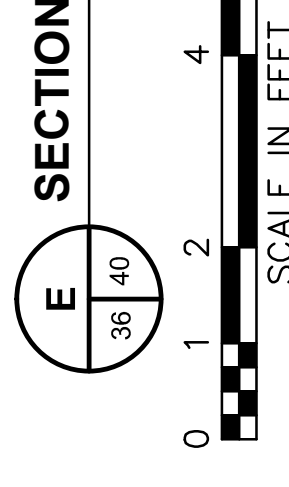
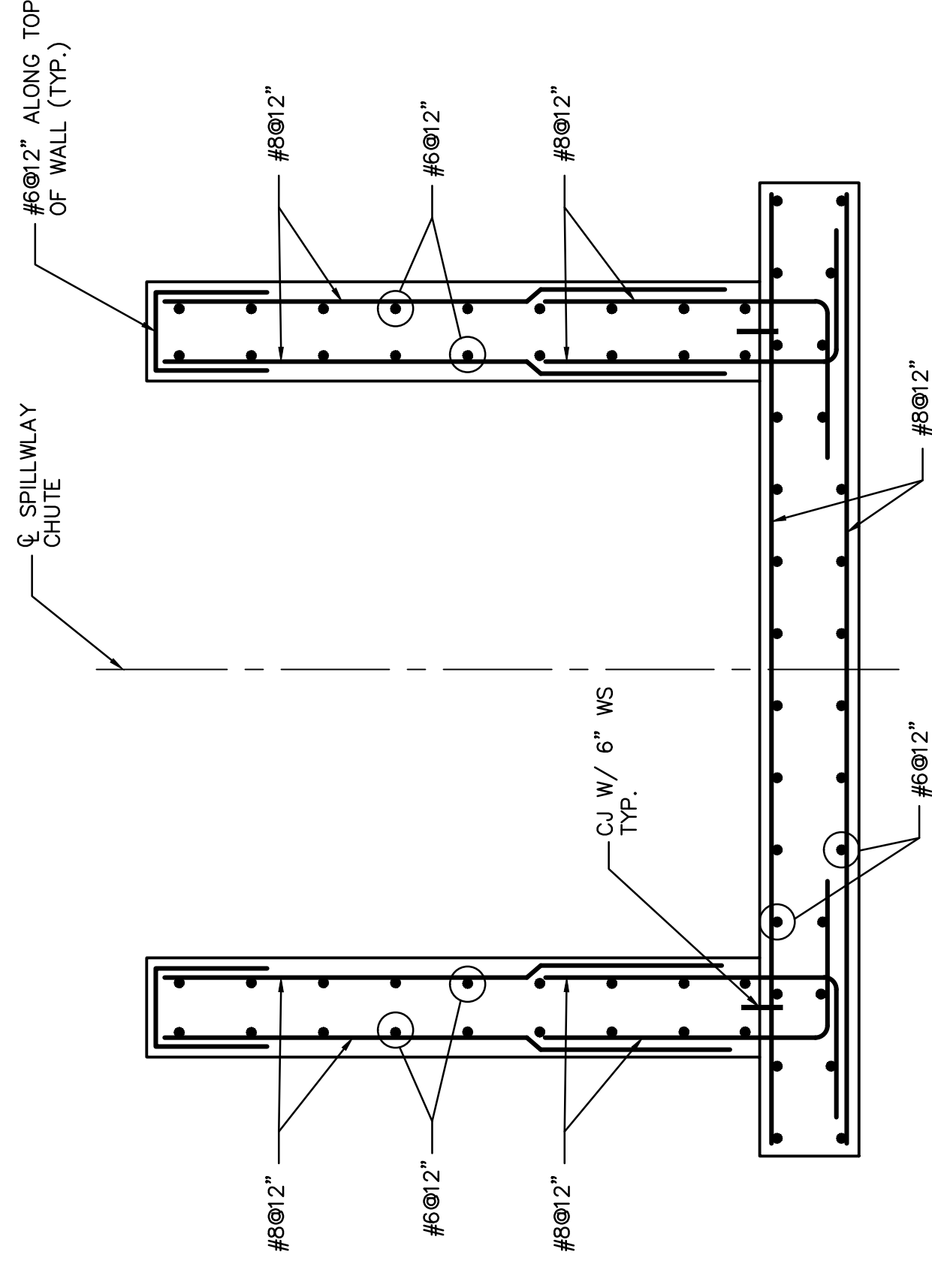
DESCRIPTION: 70% SUBMITTAL-URS

DATE: 12/03/12

DESCRIPTION: 30% SUBMITTAL-URS

NO. NO. DESCRIPTION APPROV.

REVISIONS



- NOTES:**
- FOR GENERAL NOTES AND MINIMUM REQUIREMENTS FOR REINFORCEMENT SEE SHEET 13-30146.
 - SPLICE IN VERTICAL WALL REINFORCEMENT OPTIONAL BETWEEN STA. 44+25.00 AND STA. 6+75.00. TOP OF WALL REINFORCEMENT NOT REQUIRED.

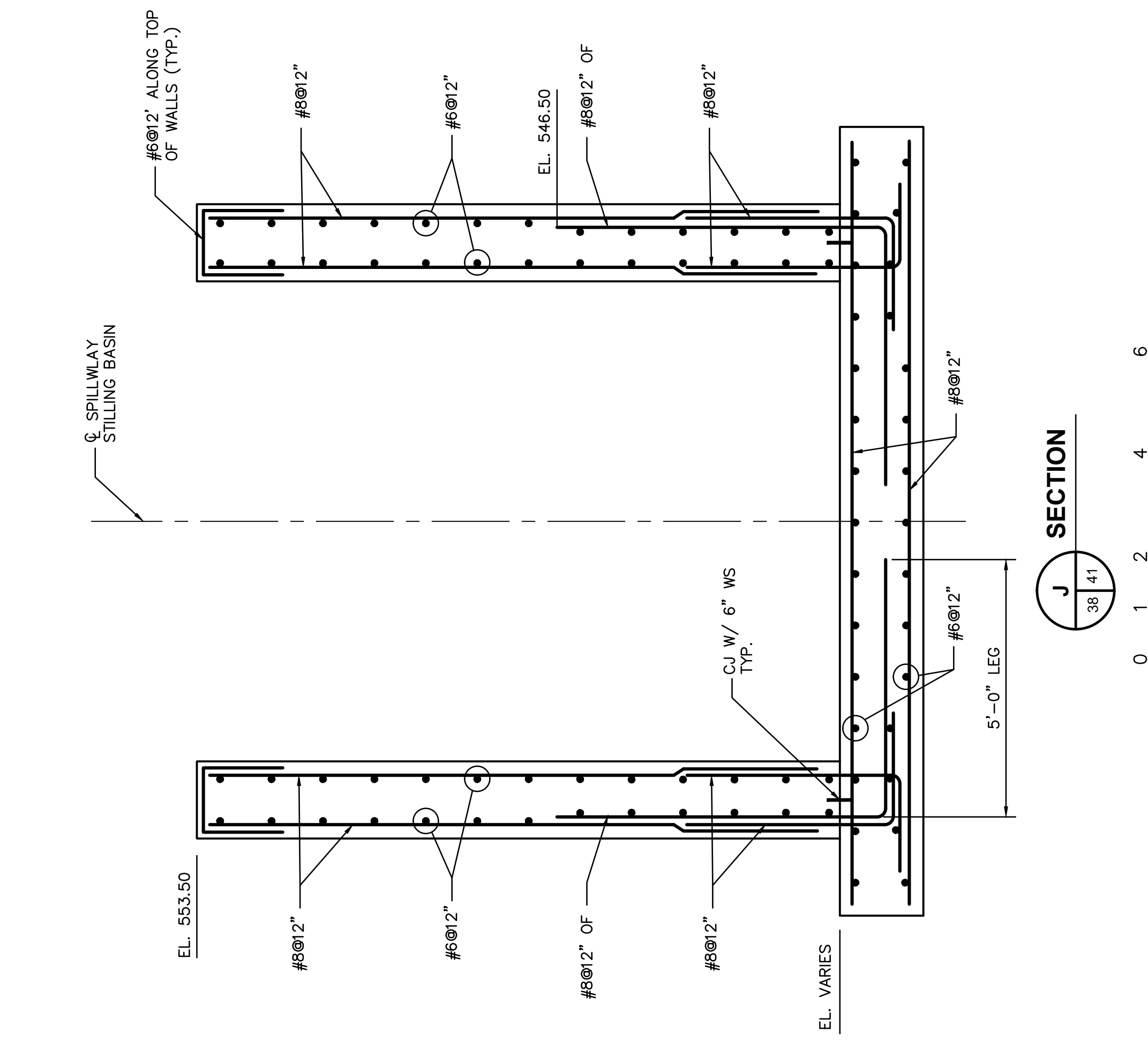
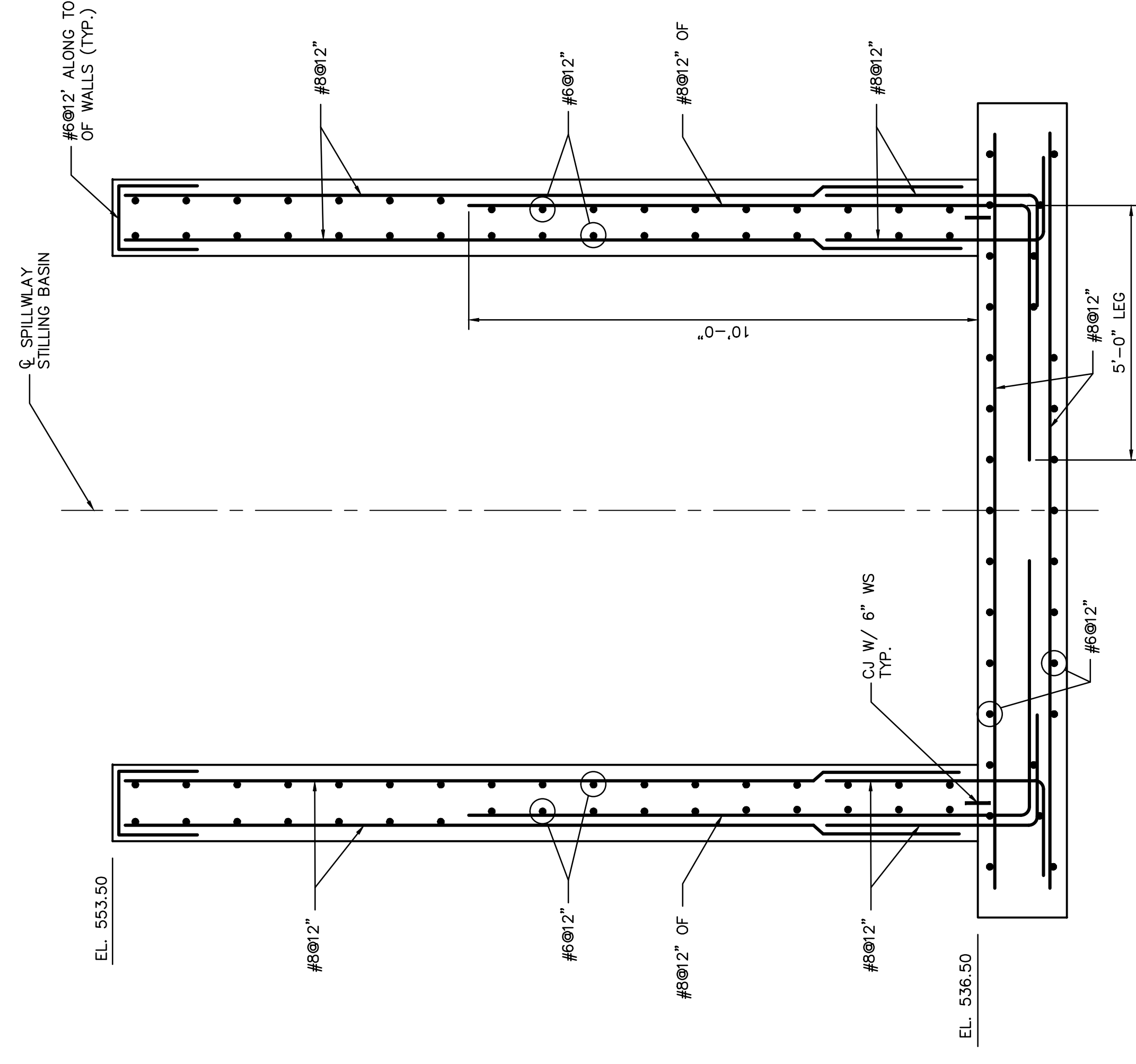
URS
 BAR IS ONE-INCH ON ORIGINAL DRAWING
 IF NOT ONE-INCH THEN ACCORDINGLY

SCALE: AS SHOWN
 PROJECT NO: 13815151
 DESIGNED BY: SSH
 DRAWN BY: WDH
 APPROVED BY: THK

KENTUCKY POWER COMPANY
 BIG SANDY PLANT
 LOUISA KENTUCKY
 SPILLWAY REINFORCEMENT SECTIONS
 2 OF 3
 DWG. NO. 13-30140-D
 CIVIL ENGINEERING DIVISION

DATE	NO.	DESCRIPTION	APPROVED
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. ANY REPRODUCTION OR USE FOR ANY PURPOSE DETERMINED TO BE DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST.



NOTES:
 1. FOR GENERAL NOTES AND MINIMUM REQUIREMENTS FOR REINFORCEMENT SEE SHEET 13-30146.

DATE	NO.	DESCRIPTION	APPROVED BY
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR IN ANY MANNER USED FOR PURPOSES OTHER THAN THAT AUTHORIZED BY THE ORIGINAL DRAWING. ANY REVISIONS TO THIS DRAWING WILL BE INDICATED BY A REVISION TABLE. ANY INFORMATION TO BE OBTAINED FROM THIS DRAWING FOR ANY PURPOSE DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
 BIG SANDY PLANT
 LOUISA KENTUCKY
 SPILLWAY REINFORCEMENT
 SECTIONS
 3 OF 3

DWG. NO. 13-30141-D
 CIVIL ENGINEERING DIVISION

SCALE	AS SHOWN
DR	AS SHOWN
CHK	AS SHOWN
ENGR	13815151
DESIGNED BY:	SSH
DATE:	
DRAWN BY:	WDH
APPROVED BY:	THK

URS
 BAR IS ONE-INCH ON ORIGINAL DRAWING
 IF NOT ONE-INCH THEN ACCORDINGLY

APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 SCALE: AS SHOWN

APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 SCALE: AS SHOWN

APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 SCALE: AS SHOWN

APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 SCALE: AS SHOWN

APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 SCALE: AS SHOWN

APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 SCALE: AS SHOWN

APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 SCALE: AS SHOWN

APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 SCALE: AS SHOWN

APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 SCALE: AS SHOWN

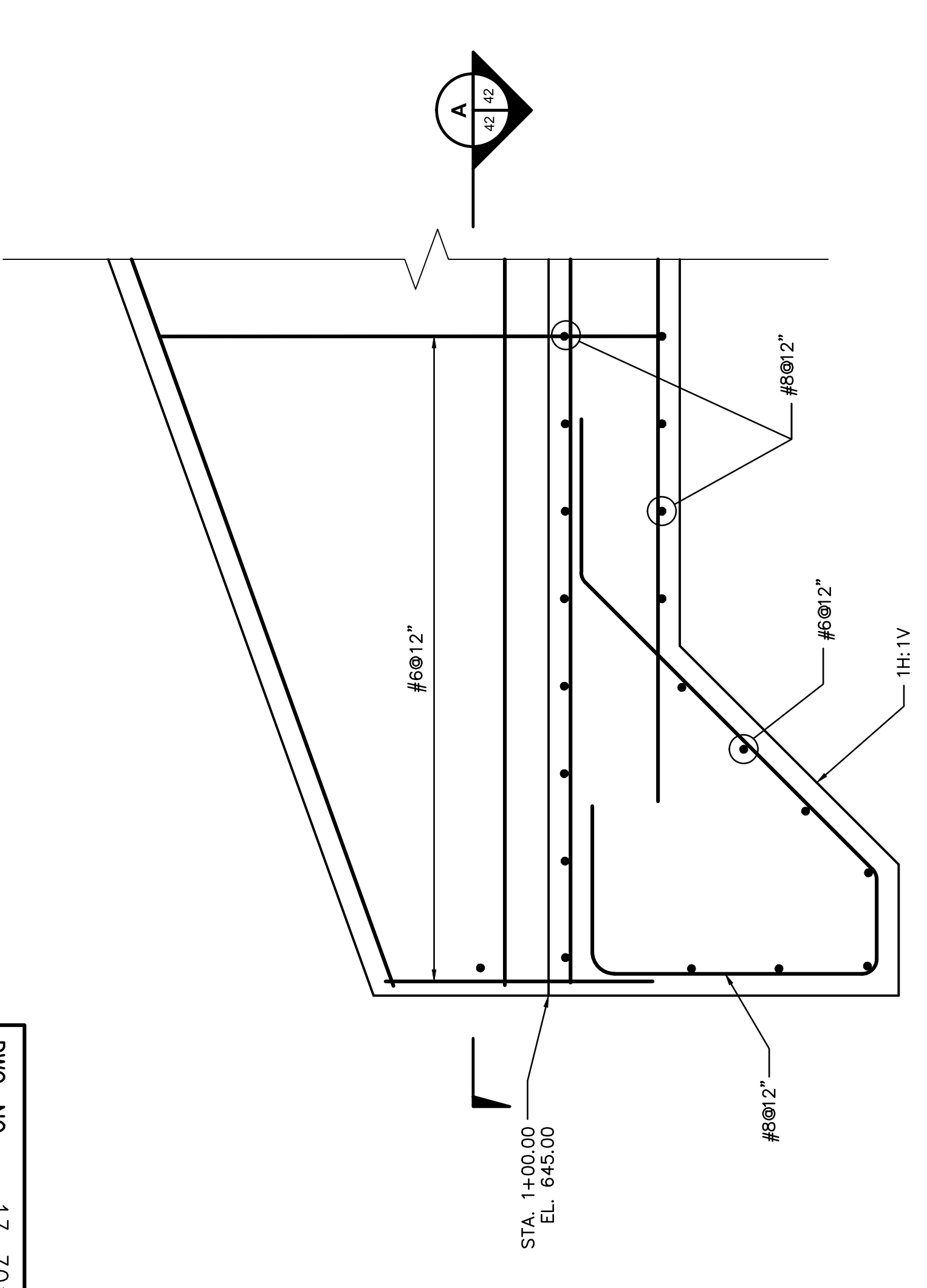
APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 SCALE: AS SHOWN

APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 SCALE: AS SHOWN

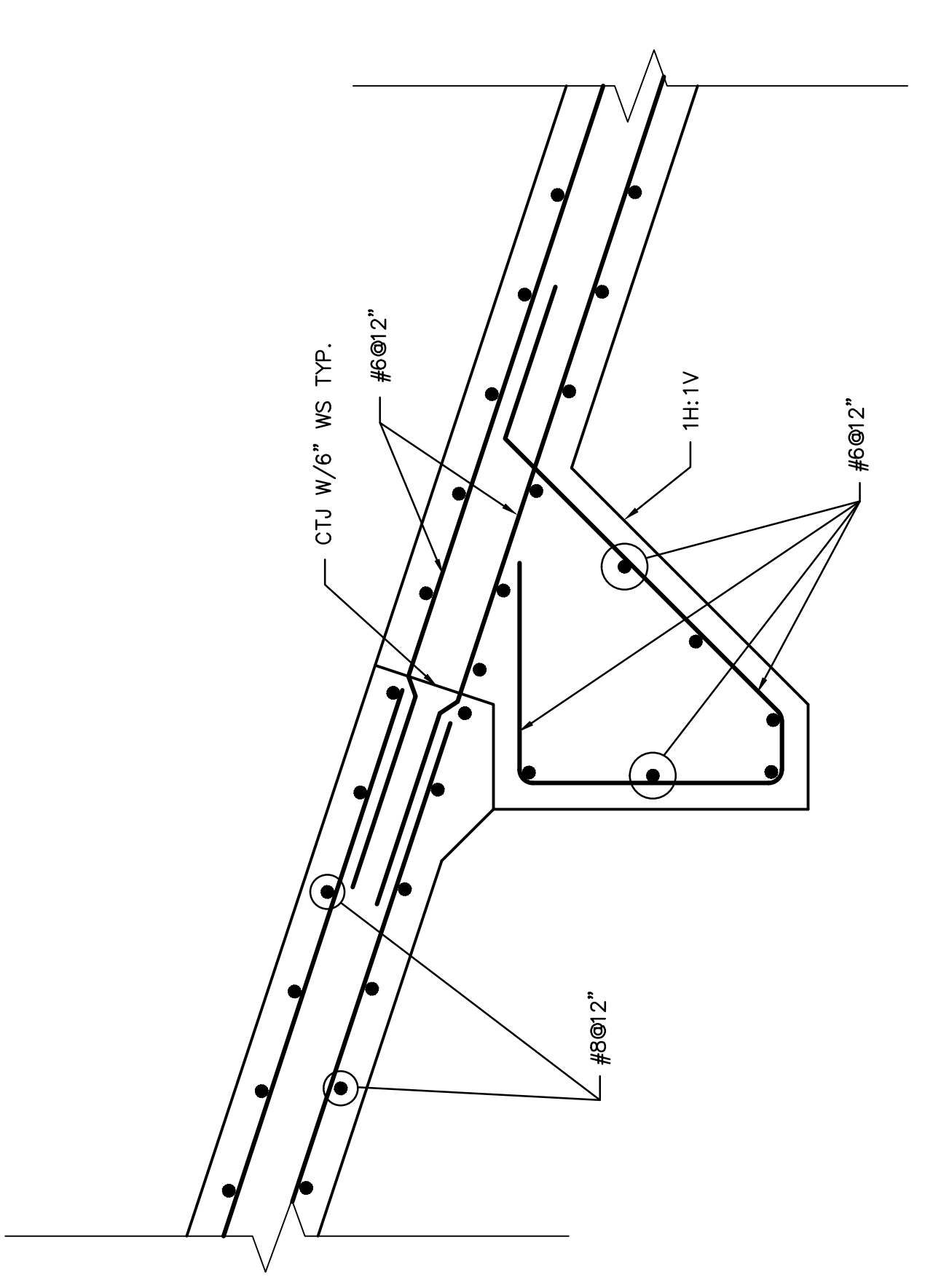
APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 SCALE: AS SHOWN

APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 SCALE: AS SHOWN

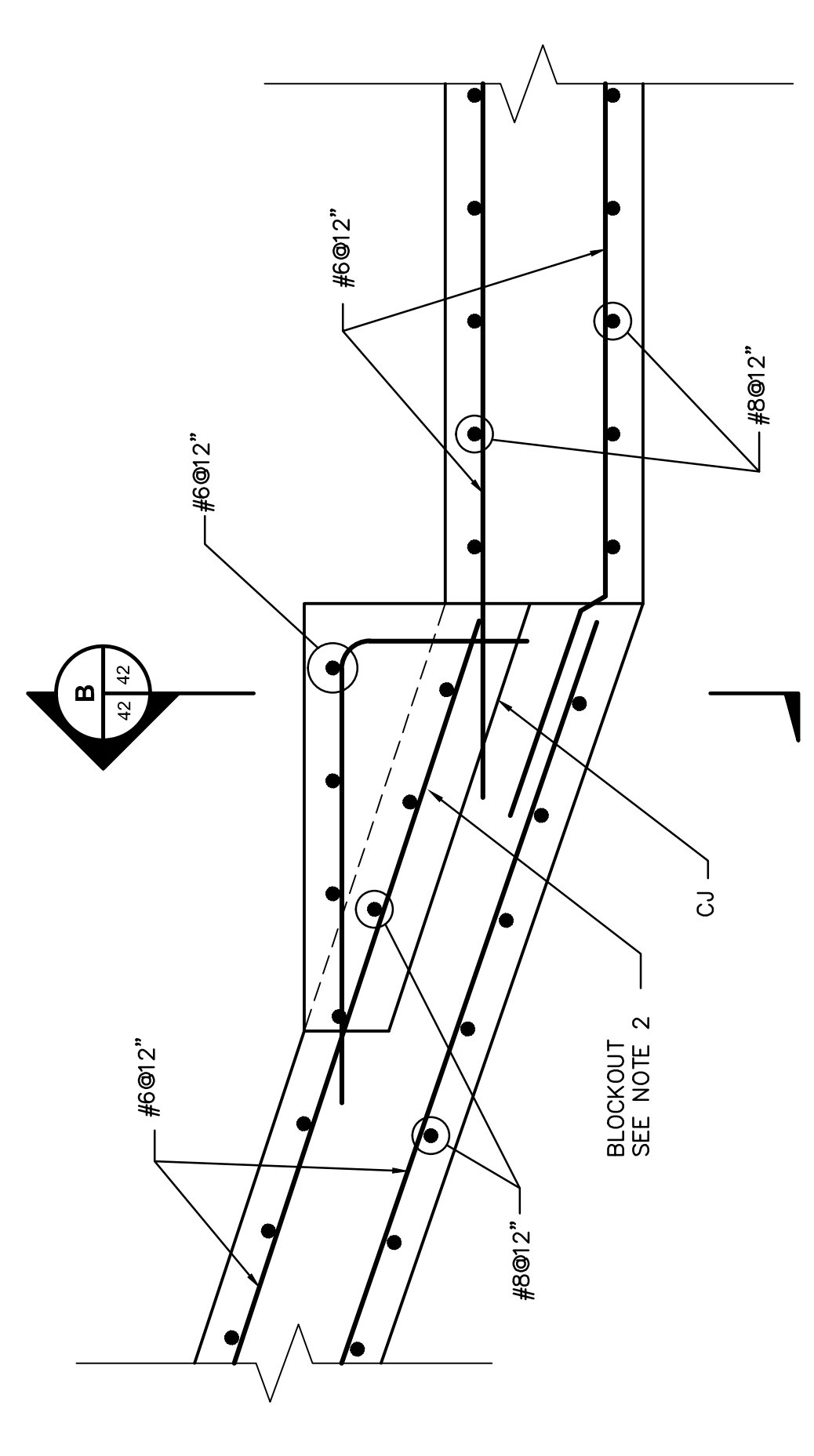
APPROVED BY: THK
 DRAWN BY: WDH
 DESIGNED BY: SSH
 PROJECT NO: 13815151
 SCALE: AS SHOWN



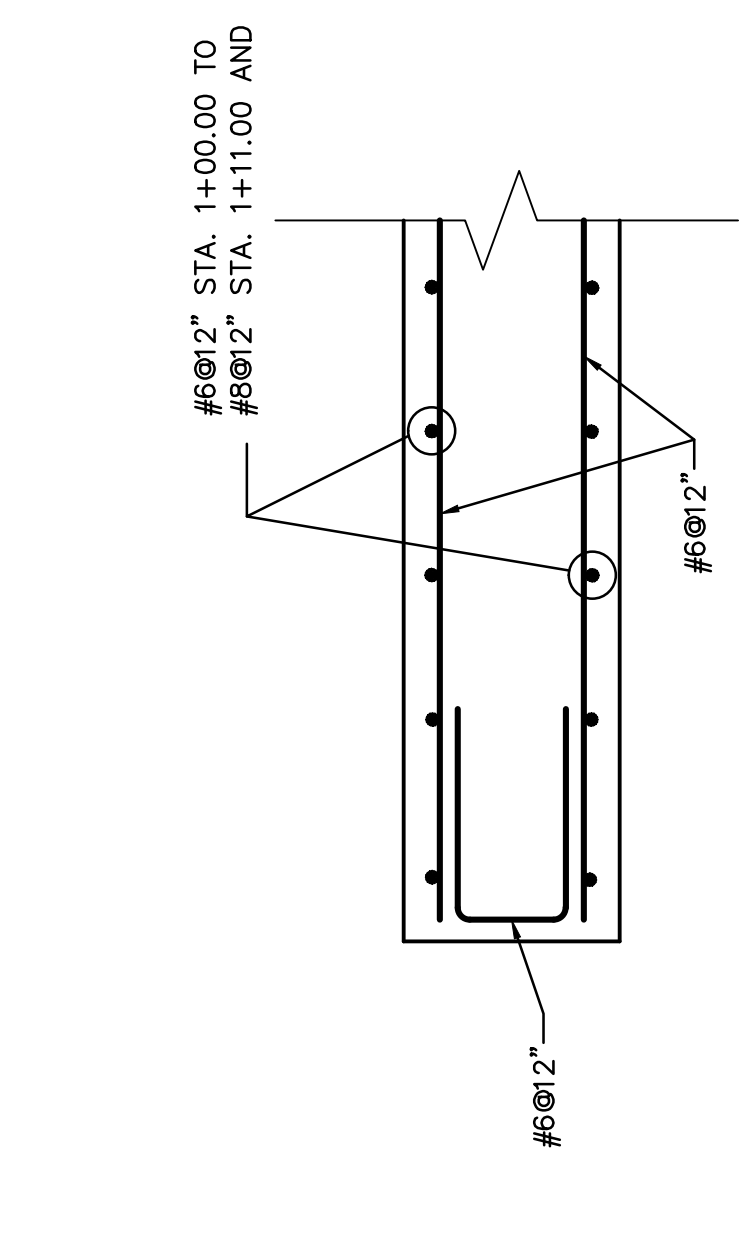
1
38 1/2
SCALE IN FEET



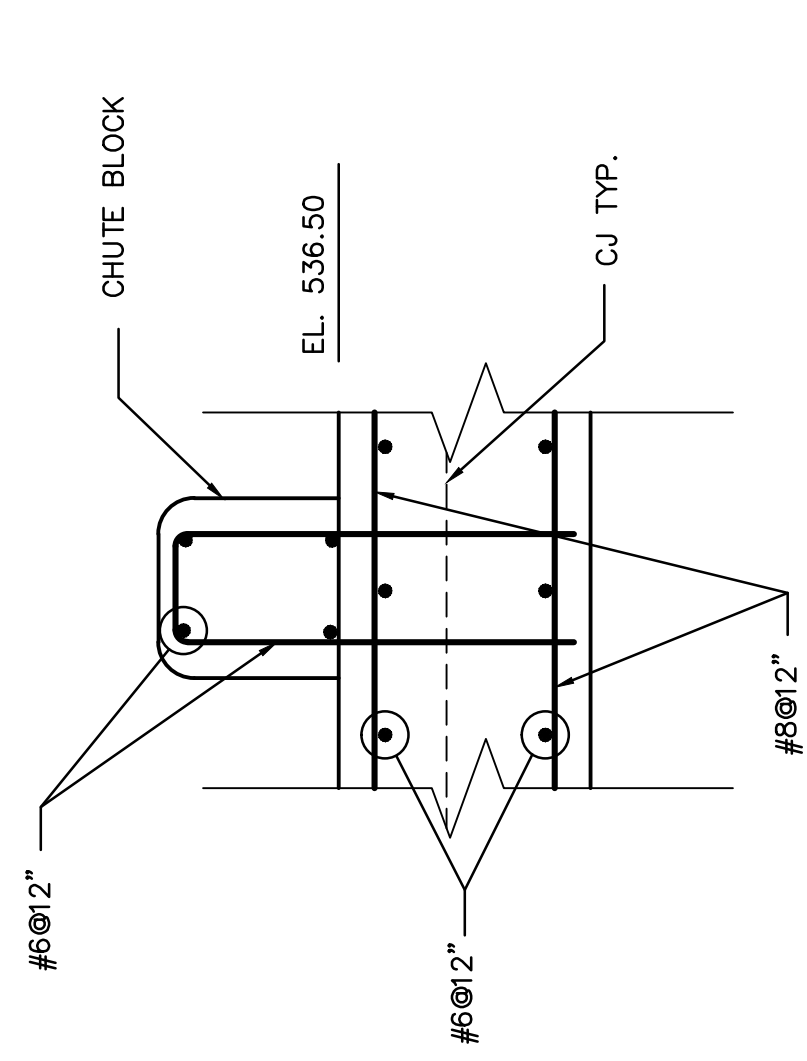
2
38 1/2
SCALE IN FEET



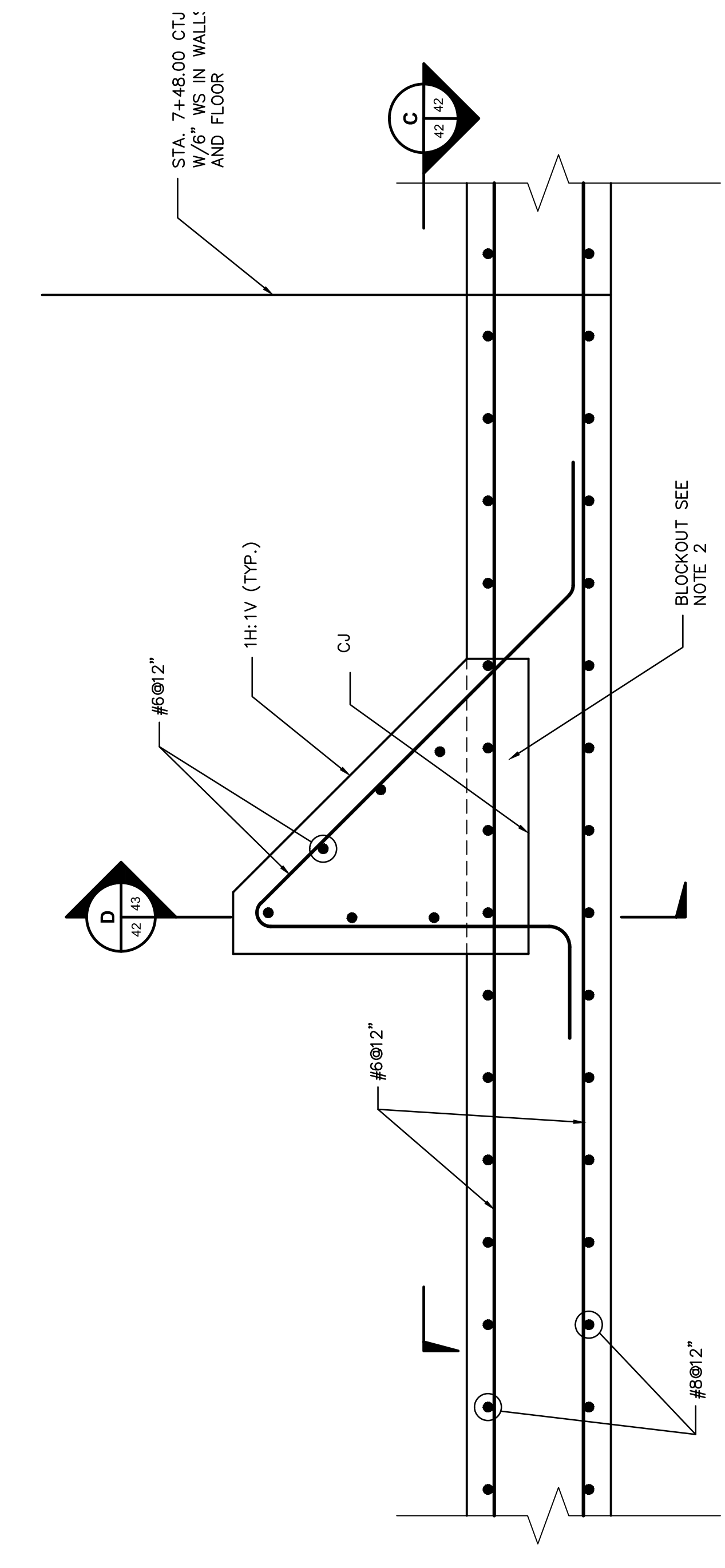
3
38 1/2
SCALE IN FEET



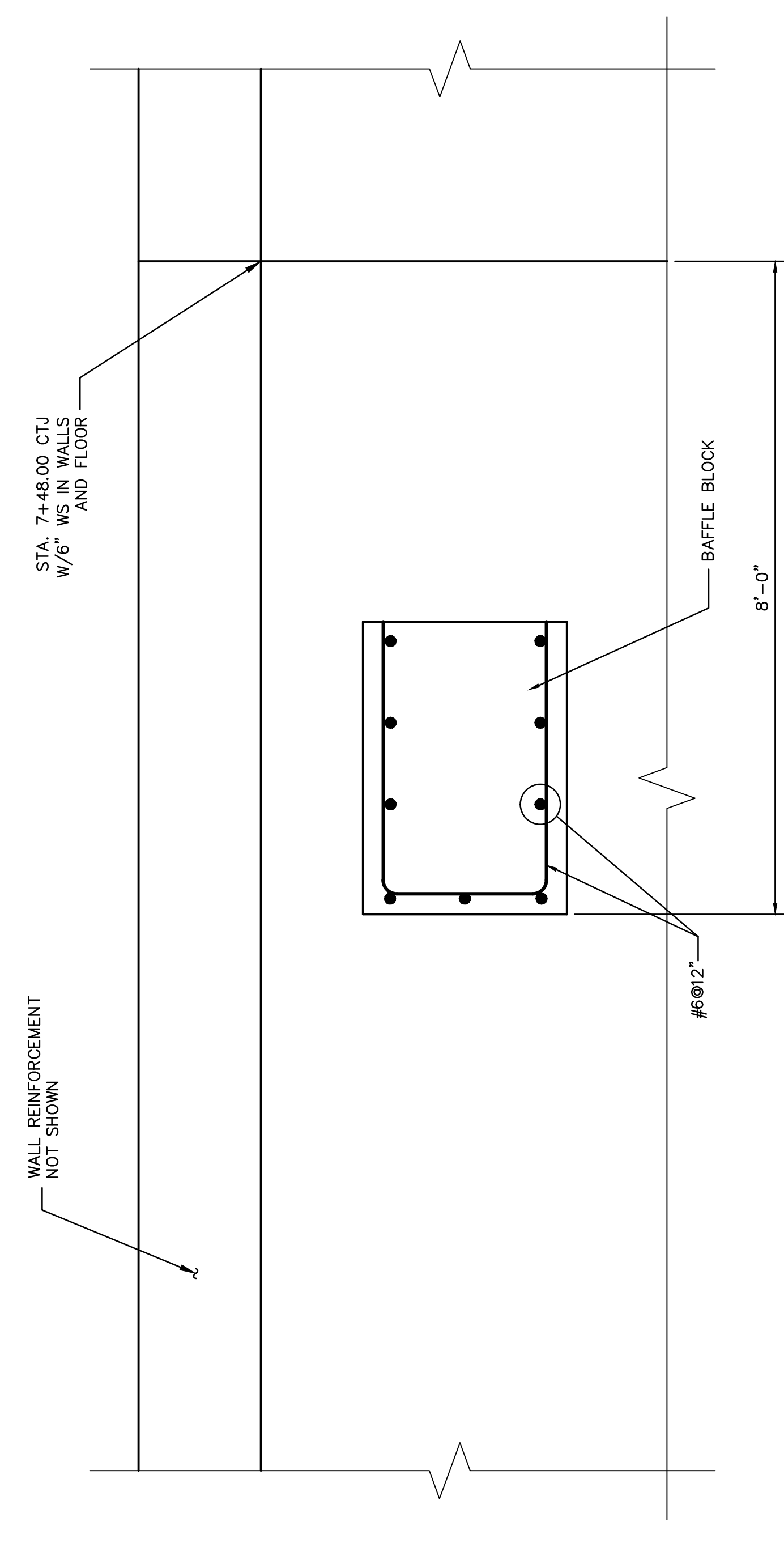
A
42 1/2
SCALE IN FEET



B
42 1/2
SCALE IN FEET



C
42 1/2
SCALE IN FEET



D
42 1/2
SCALE IN FEET

- NOTES:**
- FOR GENERAL NOTES AND MINIMUM REQUIREMENTS FOR REINFORCEMENT SEE SHEET 13-30146.
 - EXTEND LONGITUDINAL AND TRANSVERSE FLOOR REINFORCEMENT THROUGH BLOCKOUT.

DATE	NO.	DESCRIPTION	APPRO.
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR USED FOR ANY PURPOSES WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. ANY REPRODUCTION OR USE FOR ANY PURPOSES OTHER THAN THAT AUTHORIZED BY THE AMERICAN ELECTRIC POWER SERVICE CORP. IS STRICTLY PROHIBITED AND IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
BIG SANDY PLANT
 LOUISA KENTUCKY
SPILLWAY REINFORCEMENT DETAILS
 1 OF 2

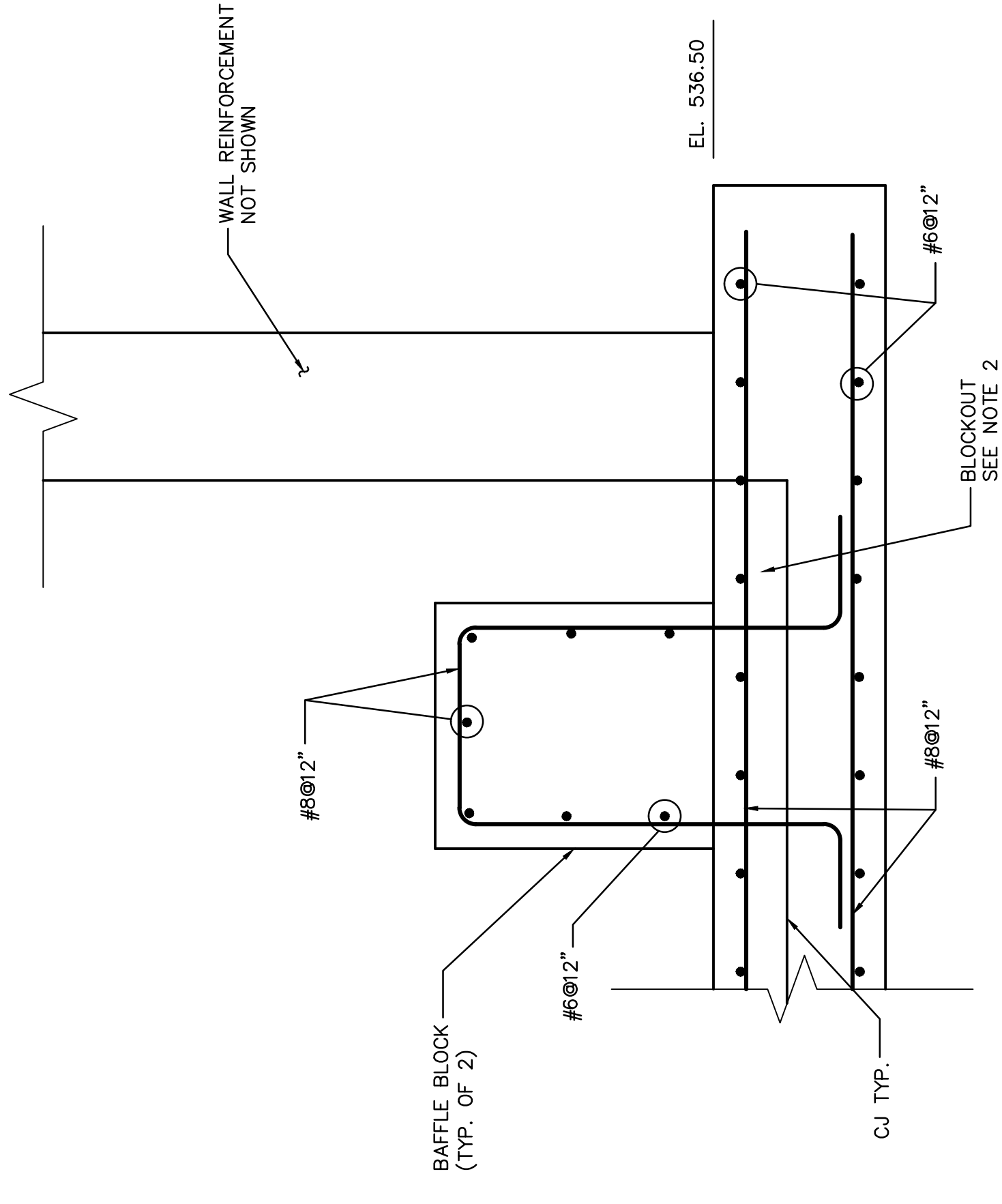
DWG. NO. 13-30142-D
 CIVIL ENGINEERING DIVISION

SCALE	AS SHOWN
DR	1:3815151
ENR	SSH
CHK	WDH
DATE	TRK

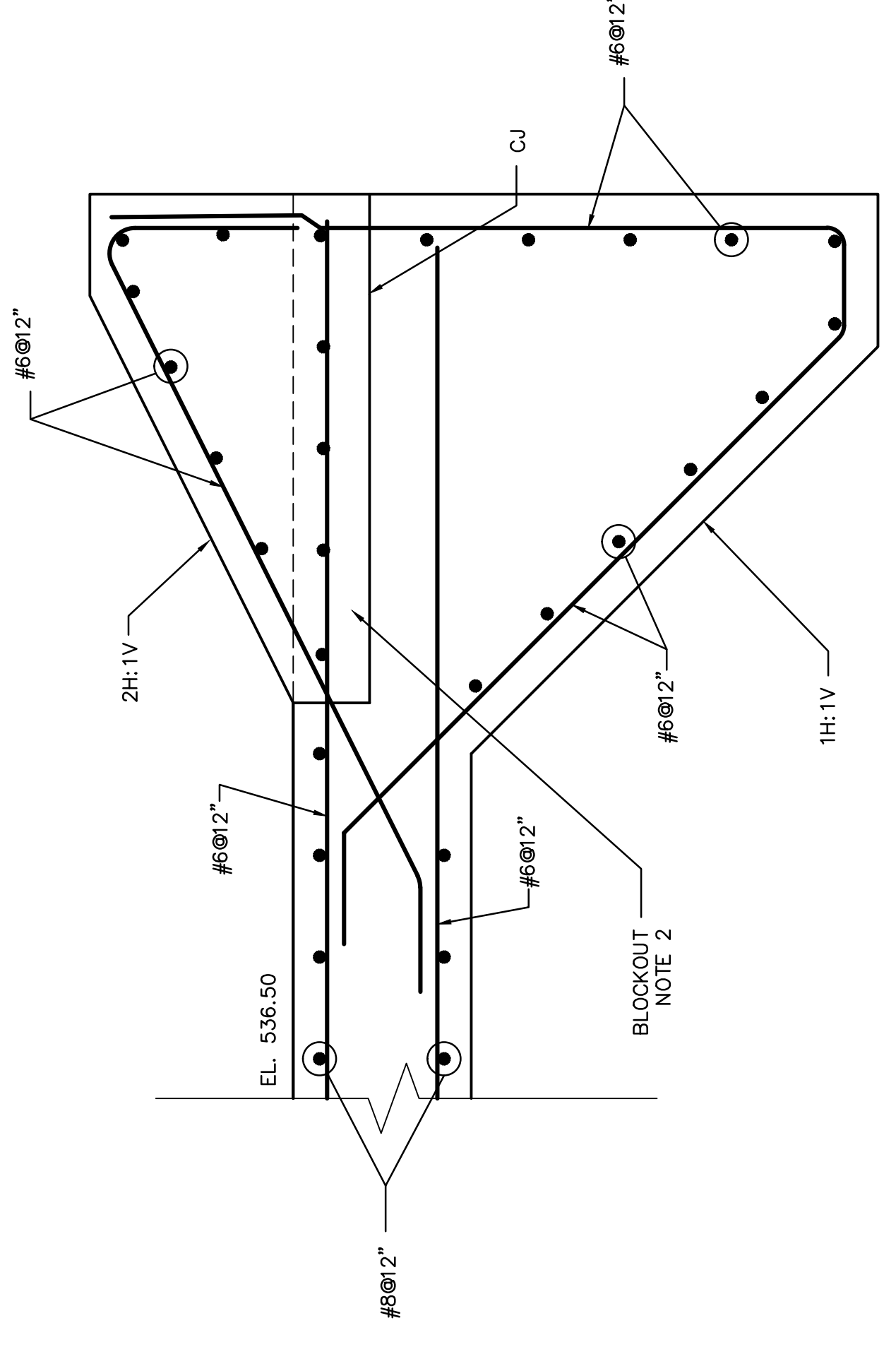
APPROVED BY: _____



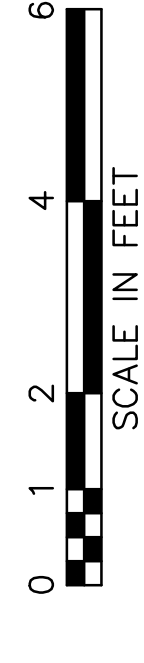
BAR IS ONE-INCH ON ORIGINAL DRAWING. IF NOT ONE-INCH, THEN SCALE ACCORDINGLY.



D SECTION
42 | 45



5 SECTION
38 | 43



- NOTES:**
- FOR GENERAL NOTES AND MINIMUM REQUIREMENTS FOR REINFORCEMENT SEE SHEET 13-30146.
 - EXTEND LONGITUDINAL AND TRANSVERSE FLOOR REINFORCEMENT THROUGH BLOCKOUT.

BAR IS ONE-INCH ON ORIGINAL DRAWING
IF NOT ONE-INCH THEN ACCORDINGLY



SCALE: AS SHOWN
PROJECT NO: 13815151
DESIGNED BY: SSH
DRAWN BY: WDH
APPROVED BY: THK

APR AMERICAN ELECTRIC POWER
AEP SERVICE CORP
1 RIVERSIDE PLAZA
COLUMBUS OH 43215

DWG. NO. 13-30143-D
CIVIL ENGINEERING DIVISION

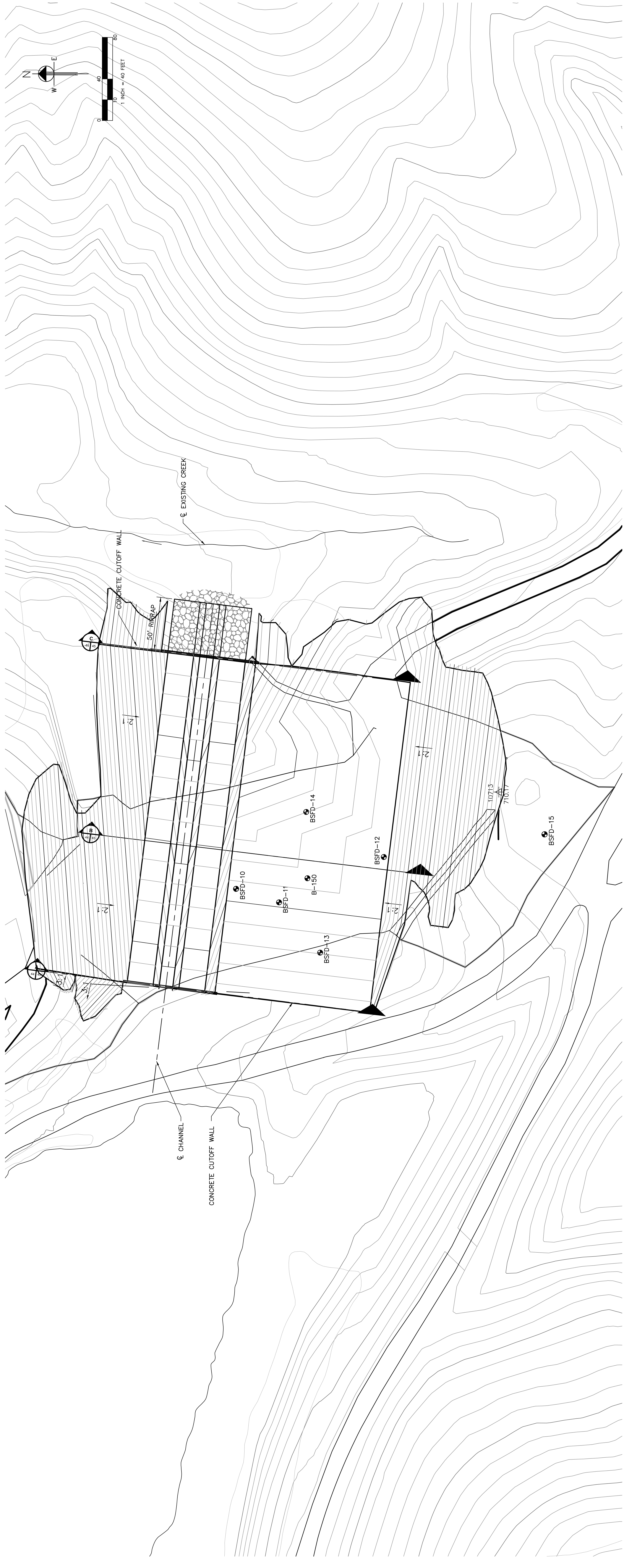
LOUISA KENTUCKY
BIG SANDY PLANT

KENTUCKY POWER COMPANY
STILLING REINFORCEMENT
DETAILS
2 OF 2

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR USED IN WHOLE OR IN PART OR FOR REPRODUCTION IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. ANY REPRODUCTION OR USE FOR ANY PURPOSE DETERMINED TO BE IN THE INTEREST OF THE COMPANY IS TO BE RETURNED UPON REQUEST.

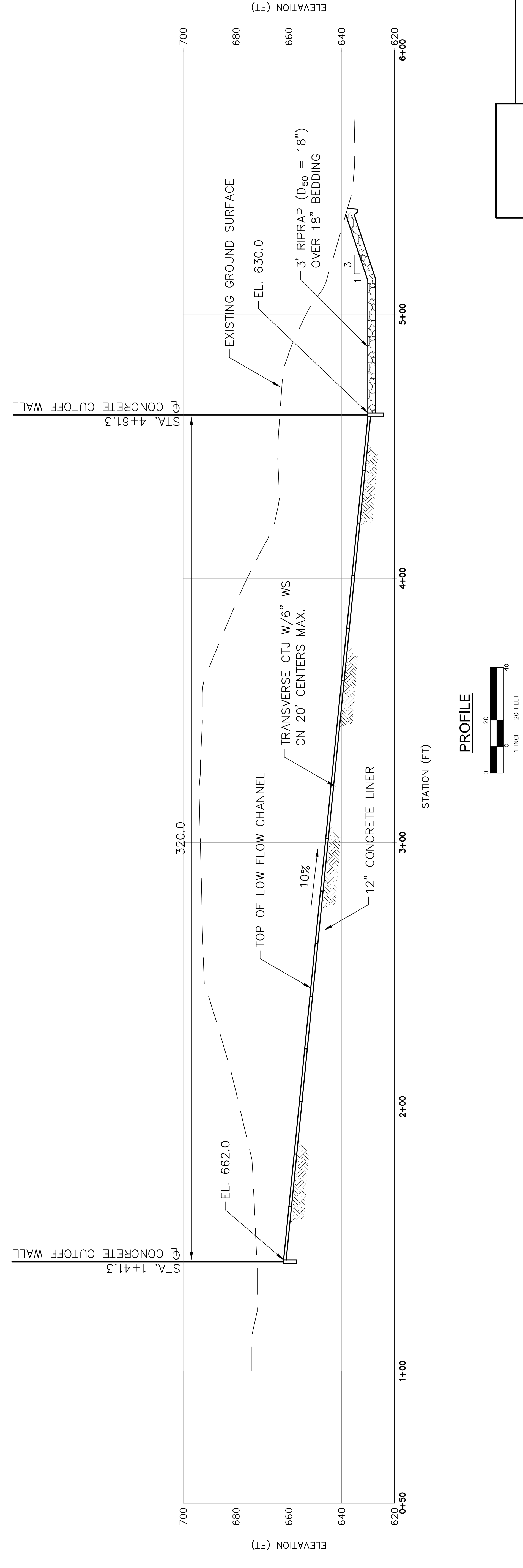
DATE	NO.	DESCRIPTION	APPROVED BY
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

DWG. NO. 13-30144-D



PLAN

LEGEND
BORING



PROFILE

DATE	NO.	DESCRIPTION	APPROVED BY
12/03/12	A	30% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
06/05/13	D	100% SUBMITTAL-URS	

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR USED FOR ANY PURPOSES WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. ANY UNAUTHORIZED USE OR REPRODUCTION OF THIS DRAWING IS STRICTLY PROHIBITED AND IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISA KENTUCKY

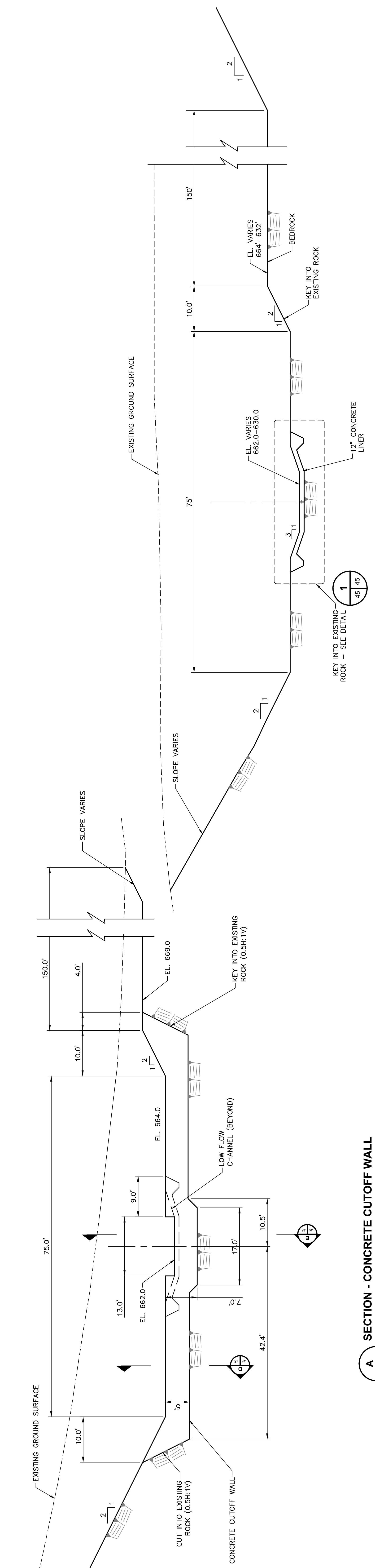
SADDLE DAM OUTLET
PLAN AND PROFILE

DWG. NO. 13-30144-D
CIVIL ENGINEERING DIVISION

SCALE:	1" = 20'
PROJECT NO.:	13815151
DESIGNED BY:	CAF
DRAWN BY:	WCH
APPROVED BY:	TKK

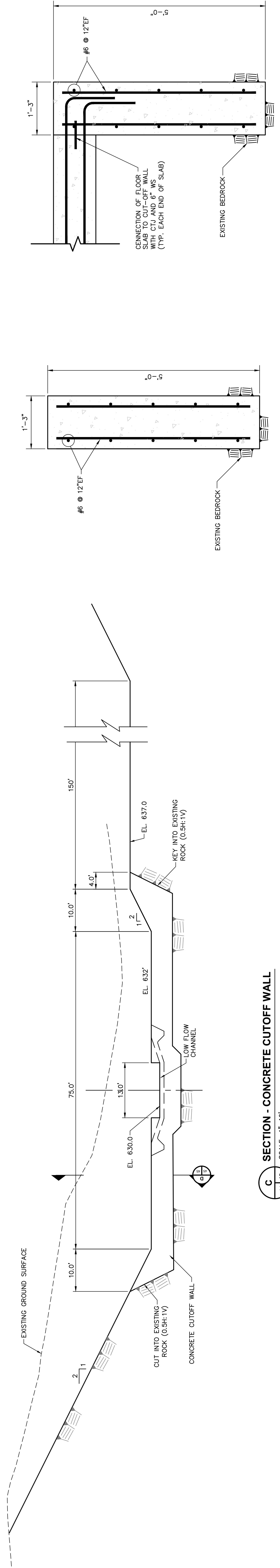


BAR IS ONE-INCH ON ORIGINAL DRAWING
IF NOT ONE-INCH THEN ACCORDINGLY



A SECTION - CONCRETE CUTOFF WALL
SCALE: 1"=10'

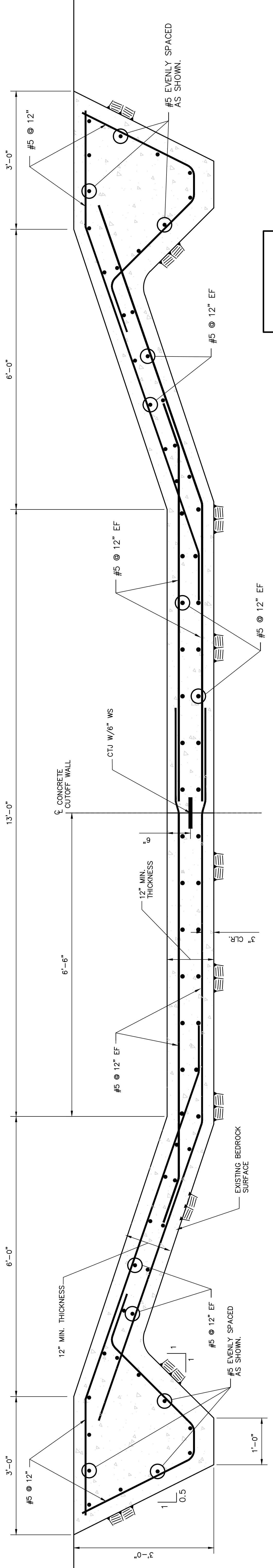
B SECTION - OUTLET CHANNEL
SCALE: 1"=10'



C SECTION - CONCRETE CUTOFF WALL
SCALE: 1"=10'

D SECTION
SCALE: 1"=10'

E SECTION
SCALE: 1"=10'



1 DETAIL
SCALE: 1"=1'

DATE	NO.	DESCRIPTION	APPRO.
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR FOR ANY PURPOSE DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISA, KENTUCKY

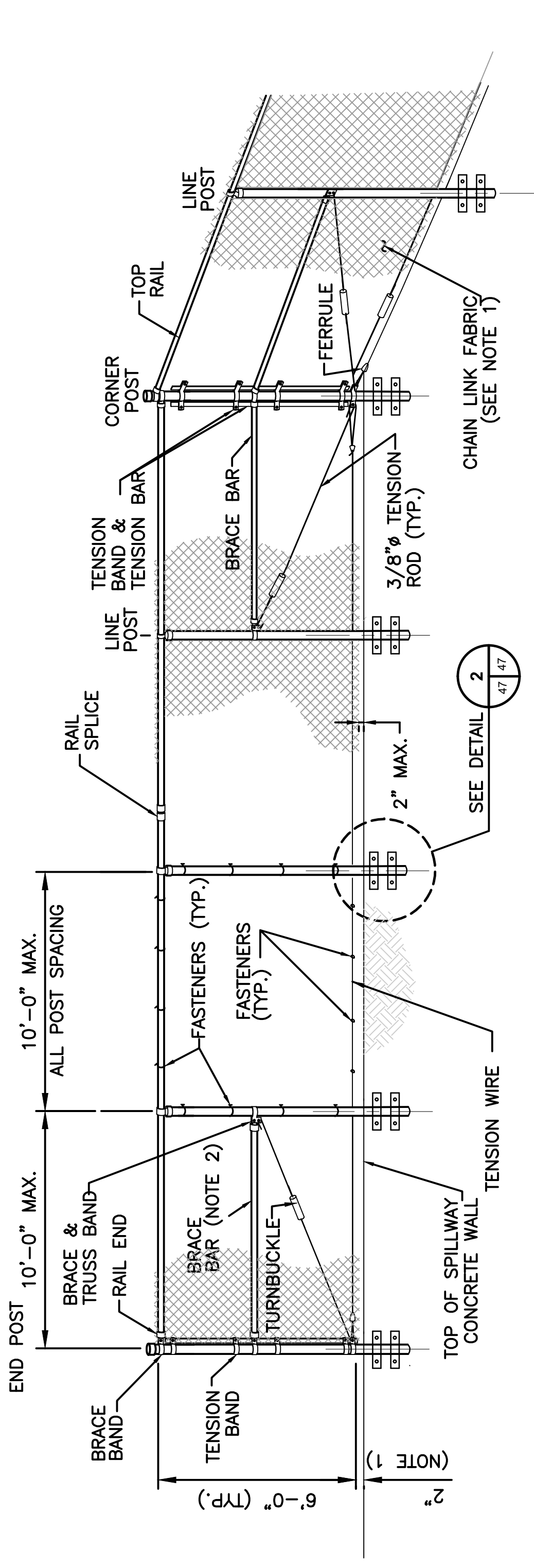
SADDLE DAM OUTLET SECTIONS

DWG. NO. 13-30145-D

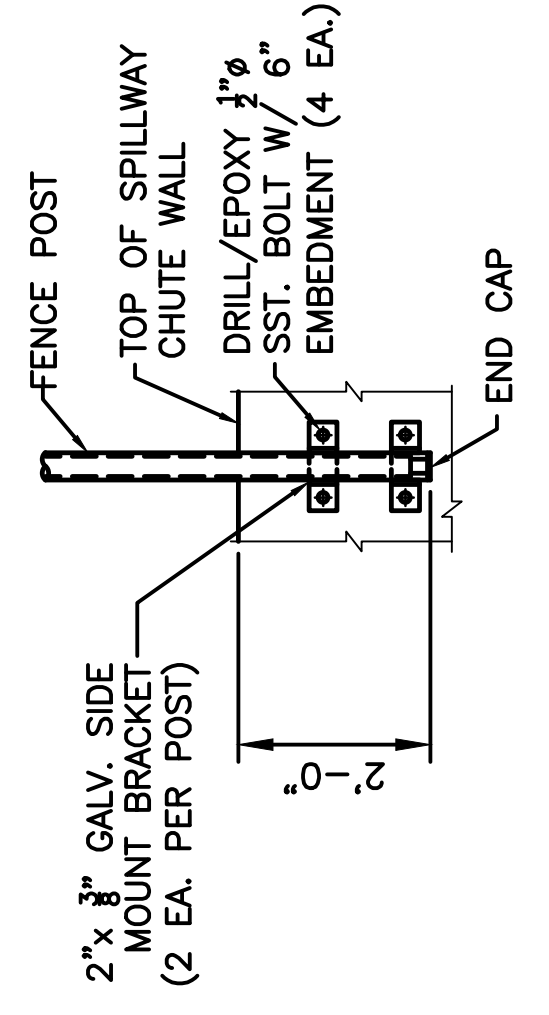
SCALE	AS SHOWN
PROJECT NO.	13815151
DESIGNED BY:	CY
DRAWN BY:	MOH
APPROVED BY:	TAK



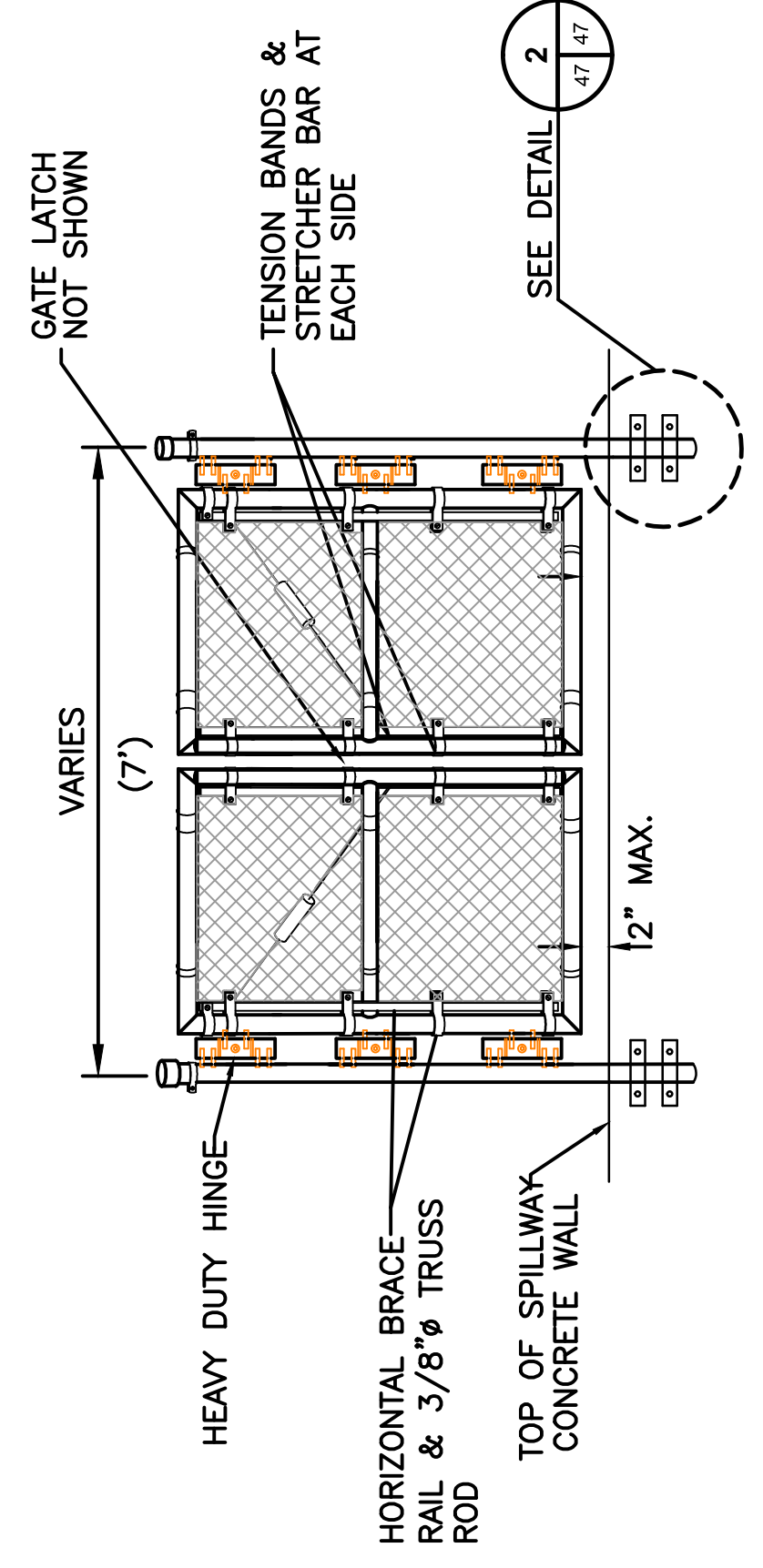
BAR IS ONE-INCH ON ORIGINAL DRAWING. IF NOT ONE-INCH, THEN ACCORDINGLY.



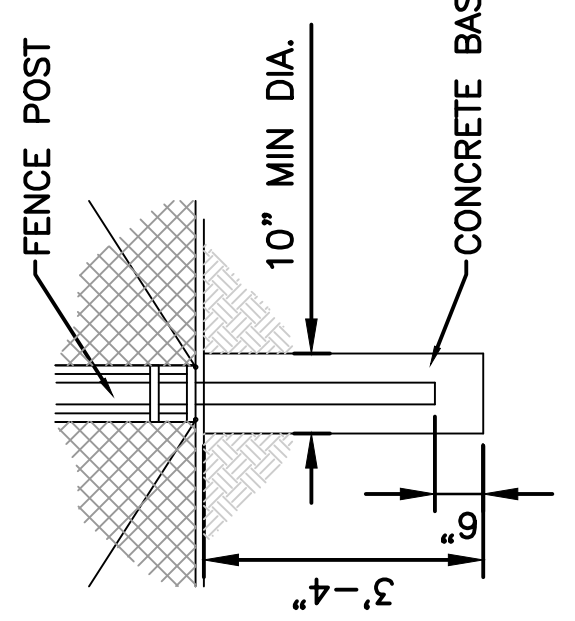
1 TYPICAL CHAIN LINK FENCE DETAIL
NOT TO SCALE



2 FENCE POST WALL BRACKET DETAIL
NOT TO SCALE



3 CHAIN LINK FENCE PEDESTRIAN GATE DETAIL
NOT TO SCALE



4 CHAIN LINK FENCE POST DETAIL
NOT TO SCALE

- NOTES
1. ATTACH FABRIC TO ALL FENCE AND GATE STRUCTURES AT 12" INTERVALS VERTICALLY AND AT 20" HORIZONTALLY.
 2. LOCATE WIRE STAYS HALFWAY BETWEEN LINE POSTS.
 3. PROVIDE ACCESS GATES AT STA. 0+50, 4+00 AND 6+80 ALONG SPILLWAY PROFILE ALIGNMENT.
 4. FENCE TO BE SET BACK FROM SPILLWAY WALL 8'-0" ON BOTH SIDES OF SPILLWAY FROM STA. 1+00 TO STA. 8+50.

DATE	NO.	DESCRIPTION	APPRO.
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR CORRECTED, IN WHOLE OR IN PART OR USED FOR PURSUING INFORMATION TO ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF THE AMERICAN ELECTRIC POWER SERVICE CORP. ANY REPRODUCTION OR USE FOR ANY PURPOSE DETERMINED TO BE IN THE INTEREST OF THE COMPANY IS TO BE RETURNED UPON REQUEST.

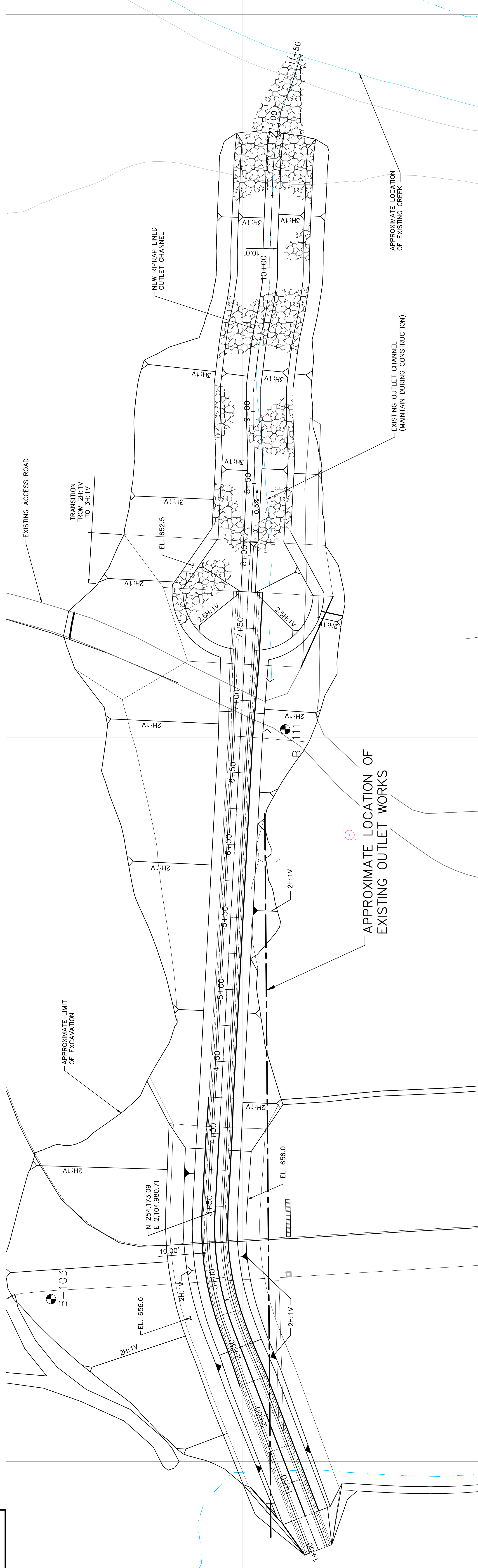
KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISA KENTUCKY

FENCING AND RAILING DETAILS

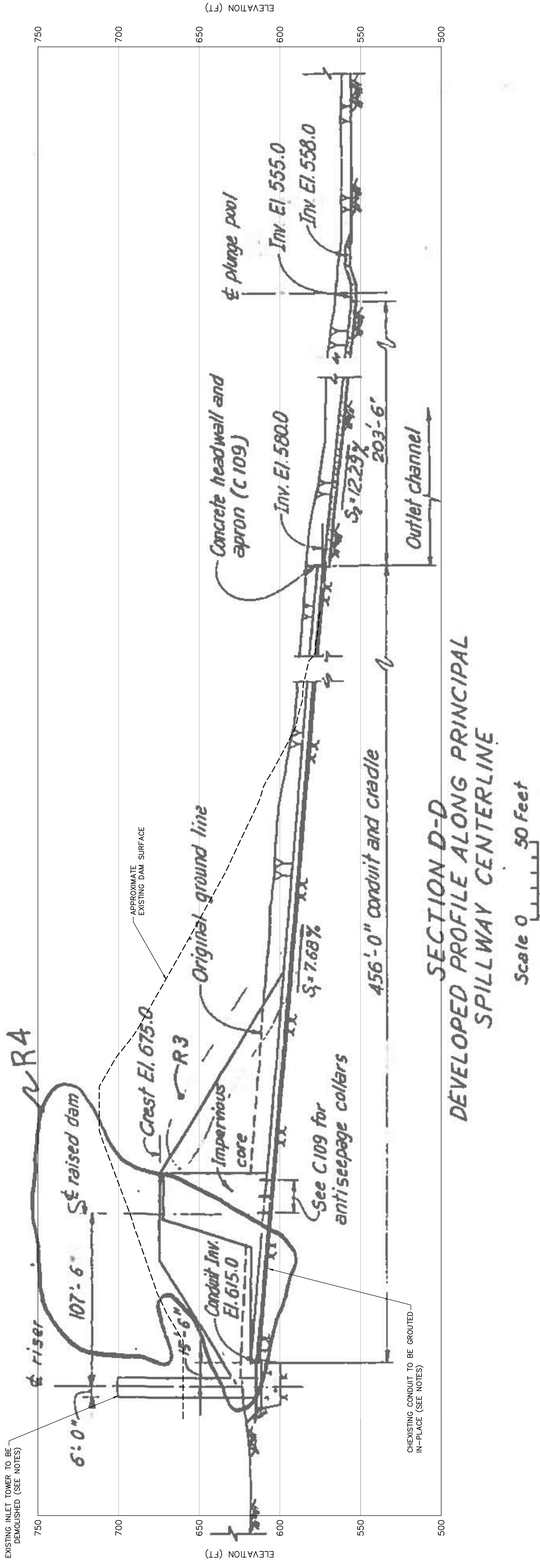
DWG. NO. 13-30147-D
SCALE: AS SHOWN
PROJECT NO: 13815151
DESIGNED BY: CJY
DRAWN BY: WDH
APPROVED BY: THK

URS
AEP SERVICE CORP
1 RIVERSIDE PLAZA
LOUISVILLE, KY 40202
SYSTEM DATE: 05-04-2011
SYSTEM TIME: 10:05:00 AM

BAR IS ONE-INCH ON ORIGINAL DRAWING
IF NOT ONE-INCH THEN ACCORDINGLY

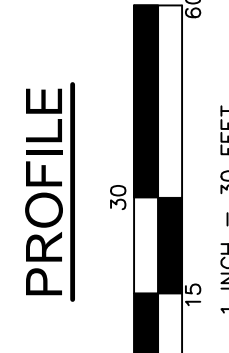


PLAN



SECTION D-D
DEVELOPED PROFILE ALONG PRINCIPAL
SPILLWAY CENTERLINE

Scale 0 50 Feet



NOTES:

1. DRAWING OF EXISTING STRUCTURES WAS DERIVED FROM AS-BUILT DRAWINGS 984-C-10584. AS A RESULT, THE DIMENSIONS AND LOCATION OF EXISTING FACILITIES ARE APPROXIMATE. DIMENSIONS COULD VARY FROM DIMENSIONS AND THICKNESSES SHOWN. CONTRACTOR SHALL FIELD VERIFY ACTUAL DIMENSIONS PRIOR TO THE START OF WORK.
2. REINFORCEMENT AND EMBEDDED METALWORK NOT SHOWN. HOWEVER, AS-BUILT DRAWINGS INDICATE THAT ALL CONCRETE IS REINFORCED.
3. DEMOLITION OF CONCRETE STRUCTURES SHALL INCLUDE REMOVAL AND DISPOSAL OF ALL CONCRETE, MISCELLANEOUS METALWORK, AND EQUIPMENT INCLUDING, BUT NOT LIMITED TO, ALL CONCRETE, REINFORCEMENT, HANDRAIL, BARBED-WIRE FENCE, METAL GRATING, AND TRASHRACKS IN ACCORDANCE WITH THE REQUIREMENTS OF CONSTRUCTION SPECIFICATION CE-036.
4. GROUT EXISTING RCP FOLLOWING DEMOLITION OF EXISTING INLET STRUCTURE. GROUT RCP FROM DOWNSTREAM END OF RCP TO REMAIN IN-PLACE. SEE CONSTRUCTION SPECIFICATION CE-036 FOR REQUIREMENTS REGARDING DEMOLITION OF EXISTING INLET STRUCTURE AND GROUTING OF EXISTING PRINCIPAL SPILLWAY CONDUIT.
5. SEE AS-BUILT DRAWINGS 984-C-10484, 984-C-10584, AND 984-C-10984 FOR EXISTING STRUCTURE DETAILS AND SECTIONS.



THIS IS ONE-INCH ON ORIGINAL DRAWING. IF NOT ONE-INCH, THEN NOT ACCURATELY REPRODUCED.

SCALE: AS SHOWN
PROJECT NO: 13815151
DESIGNED BY: CJY
DRAWN BY: WDH
APPROVED BY: TRK

DATE: 12/03/12
DESCRIPTION: 30% SUBMITTAL-URS
NO. A
REVISIONS

DATE	NO.	DESCRIPTION	APPROVED BY
06/05/13	D	100% SUBMITTAL-URS	
04/26/13	C	90% SUBMITTAL-URS	
02/20/13	B	70% SUBMITTAL-URS	
12/03/12	A	30% SUBMITTAL-URS	

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORPORATION AND IS LOANED OR COPIED, IN WHOLE OR IN PART, OR USED FOR REPRODUCING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN PERMISSION OF THE CORPORATION, OR FOR ANY PURPOSE DETERMINED BY THE CORPORATION, AND IS TO BE RETURNED UPON REQUEST.

KENTUCKY POWER COMPANY
BIG SANDY PLANT
LOUISA
KENTUCKY

EXISTING PRINCIPAL SPILLWAY ABANDONMENT
DWG. NO. 13-30148-D
CIVIL ENGINEERING DIVISION

APP SERVICE CORP
RIVERSIDE PLAZA
COLUMBUS, OH 43215
SYSTEM DATE: 05-04-2011
SYSTEM TIME: 10:00:00 AM