

BERNALILLO COUNTY, NEW MEXICO

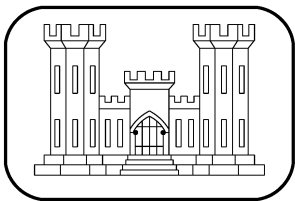
RIO GRANDE FLOODWAY

RECOMMENDED PLAN FOR

2018 BELEN WEST UNIT LEVEE  
100YR WS100 + 5'

SOLICITATION NO. : XXXX

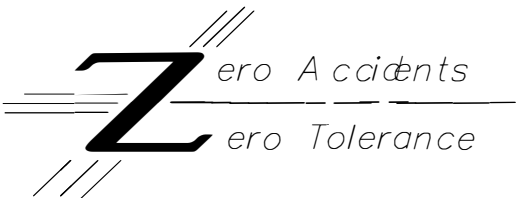
DATED : December 2019



United States Army  
Corps of Engineers

...Serving the Army  
...Serving the Nation

Albuquerque District



THE DESIGN, ASSOCIATED DETAILS, AND PRESENTATION CONCEPTS IN THIS SET OF DRAWINGS WERE ASSEMBLED AND REVIEWED BY THE FOLLOWING ALBUQUERQUE DISTRICT DESIGN TEAM. THIS DOCUMENT MEETS OUR HIGH STANDARDS OF QUALITY AND PROFESSIONALISM.

TEAM MEMBER	SIGNATURE	FUNCTION
CIVIL		
CHRIS VELASQUEZ, P.E.		CHIEF, GEN ENG SECTION
DEBBIE SMITH		CIVIL ENGINEER
RONNIE CASAUS		CIVIL ENGINEER TECH
GEOTECH		
RICHARD HALL, P.E.		CHIEF, GEOTECHNICAL SECTION
MATTHEW BONNER, P.E.		CIVIL ENGINEER-GEOTECH
ENVIRONMENTAL RESOURCES		
GEORGE MACDONELL		CHIEF, ENVIRONMENTAL RESOURCES SECTION
JEREMY DECKER		ARCHAEOLOGIST
MICHAEL PORTER		BIOLOGIST
H & H		
STEPHEN SCISSONS, P.E.		CHIEF, HYDROLOGY AND HYDRAULIC SECTION
STEVE BOBERG, P.E.		HYDRAULIC ENGINEER
JONATHAN AUBUCHON, P.E.		HYDRAULIC ENGINEER
STRUCTURAL		
RICHARD ZARAGOSA, P.E.		STRUCTURAL ENGINEER
COST ENGINEERING		
MICHAEL R. PRUDHOMME, P.E.		CHIEF, COST ENGINEERING SECTION
TIMOTHY TETRICK		ESTIMATOR
PLAN FORMULATION		
MARK DOLES		CHIEF, PLAN FORMULATION SECTION
STACY SAMUELSON		WATER PLANNER RESOURCES
PROJECT MANAGEMENT		
CORINNE O'HARE, P.L.A.		PROJECT MANAGER

SIGNATURES AFFIXED BELOW INDICATE OFFICIAL RECOMMENDATION AND APPROVAL OF ALL DRAWINGS IN THIS SET AS INDEXED.

SUBMITTED:

APPROVED:

CHIEF, DESIGN BRANCH

CHIEF, ENGINEERING AND CONSTRUCTION DIVISION

THIS PROJECT WAS DESIGNED BY THE U.S. ARMY CORPS OF ENGINEERS ALBUQUERQUE DISTRICT. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF GOVERNMENT INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8152.


MIDDLE RIO GRANDE LEVEE, BERNALILLO COUNTY, NEW MEXICO. CONTRACT NO.

# BERNALILLO TO BELEN LEVEE

## INDEX OF DRAWINGS

SEQ	SHT	TITLE	SEQ	SHT	TITLE	SEQ	SHT	TITLE
GENERAL			2018 BELEN WEST UNIT LEVEE 100YR WS+5'			STRUCTURAL		
1	G-001	COVER SHEET	67	C-100A	BELEN WEST UNIT LEVEE 100YR WS100 + 5' HORIZONTAL CONTROL A	-	S-101	GENERAL STRUCTURAL NOTES AND TABLES
2	G-002	INDEX OF DRAWINGS	68	C-100B	BELEN WEST UNIT LEVEE 100YR WS100 + 5' HORIZONTAL CONTROL B	-	S-102	TYPICAL SLAB AND WALL DETAILS
3	G-003	GENERAL PLAN	69	C-100C	BELEN WEST UNIT LEVEE 100YR WS100 + 5' HORIZONTAL CONTROL C	-	S-103	OVERALL SCHEDULE AND MISCELLANEOUS DETAILS
			70	C-100D	BELEN WEST UNIT LEVEE 100YR WS100 + 5' HORIZONTAL CONTROL D	-	S-104	TYPICAL ONE BARREL BOX CULVERT PLAN
			71	C-100E	BELEN WEST UNIT LEVEE 100YR WS100 + 5' HORIZONTAL CONTROL E	-	S-105	CBC SECTIONS
			72	C-100F	BELEN WEST UNIT LEVEE 100YR WS100 + 5' HORIZONTAL CONTROL F	-	S-106	TYPICAL 48" RCP PLAN
			73	C-101	BELEN WEST UNIT LEVEE 100YR WS100 + 5' KEY PLAN	-	S-107	RCP SECTIONS
			74	C-102	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 0+00 TO 28+00			
			75	C-103	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 28+00 TO 56+00			
			76	C-104	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 56+00 TO 84+00			
			77	C-105	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 84+00 TO 112+00			
			78	C-106	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 112+00 TO 140+00			
			79	C-107	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 140+00 TO 168+00			
			80	C-108	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 168+00 TO 196+00			
			81	C-109	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 196+00 TO 224+00			
			82	C-110	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 224+00 TO 252+00			
			83	C-111	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 252+00 TO 280+00			
			84	C-112	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 280+00 TO 308+00			
			85	C-113	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 308+00 TO 336+00			
			86	C-114	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 336+00 TO 364+00			
			87	C-115	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 364+00 TO 392+00			
			88	C-116	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 392+00 TO 420+00			
			89	C-117	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 420+00 TO 448+00			
			90	C-118	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 448+00 TO 476+00			
			91	C-119	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 476+00 TO 504+00			
			92	C-120	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 504+00 TO 532+00			
			93	C-121	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 532+00 TO 560+00			
			94	C-122	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 560+00 TO 588+00			
			95	C-123	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 588+00 TO 616+00			
			96	C-124	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 616+00 TO 644+00			
			97	C-125	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 644+00 TO 672+00			
			98	C-126	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 672+00 TO 700+00			
			99	C-127	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 700+00 TO 728+00			
			100	C-128	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 728+00 TO 756+00			
			101	C-129	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 756+00 TO 784+00			
			102	C-130	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 784+00 TO 812+00			
			103	C-131	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 812+00 TO 840+00			
			104	C-132	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 840+00 TO 868+00			
			105	C-133	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 868+00 TO 896+00			
			106	C-134	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 896+00 TO 924+00			
			107	C-135	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 924+00 TO 952+00			
			108	C-136	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 952+00 TO 980+00			
			109	C-137	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 980+00 TO 1008+00			
			110	C-138	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 1008+00 TO 1036+00			
			111	C-139	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 1036+00 TO 1064+00			
			112	C-140	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 1064+00 TO 1092+00			
			113	C-141	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 1092+00 TO 1120+00			
			114	C-142	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 1120+00 TO 1148+00			
			115	C-143	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE STA. 1148+00 TO 1169+48			
			116	C-144	BELEN WEST UNIT LEVEE 100YR WS100 + 5' PLAN AND PROFILE 8X10 BOX CULVERT			
			117	C-305	BELEN WEST UNIT LEVEE 100YR WS100 + 5' TYPICAL LEVEE SECTION AND DETAILS			

[illegible]

SEE COVER	DRAWN BY:	SEE COVER	REVIEWED BY:	SEE COVER	PROJECT NO.	Rev Date:
					SOLICIT CONTRACT NO.	AUGUST 2015
						
					eno Accidents	
					eno Tolerance	

**MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES**

SHEET NO.  
G-002  
2 OF 3

SEQUENCE NO.  
2















## HORIZONTAL CONTROL PLAN

SCALE 1" = 1000'

## BELEN WEST UNIT HORIZONTAL CONTROL

POB	N=1329374.69	E=1492909.30	STA. 824+00
-----	--------------	--------------	-------------

PI-45	N=1329149.09	E=1492992.41	STA. 826+40.42
-------	--------------	--------------	----------------

DELTA =	08°20'33"R	PC-44 =	STA. 825+67.49
DEGREE =	05°43'46"	PI-44 =	STA. 826+40.42
RADIUS =	1000.00	PT-44 =	STA. 827+13.10
TANGENT =	72.93		
LENGTH =	145.60		

PI-46	N=1328115.22	E=1493209.93	STA. 836+96.67
-------	--------------	--------------	----------------

DELTA =	24°26'53"R	PC-45 =	STA. 835+45.02
DEGREE =	08°11'06"	PI-45 =	STA. 836+96.67
RADIUS =	700.00	PT-45 =	STA. 838+43.70
TANGENT =	151.65		
LENGTH =	298.69		

PI-47	N=1326312.18	E=1492807.99	STA. 855+39.35
-------	--------------	--------------	----------------

DELTA =	18°25'01"R	PC-46 =	STA. 853+44.81
DEGREE =	04°46'29"	PI-46 =	STA. 855+39.35
RADIUS =	1200.00	PT-46 =	STA. 857+30.53
TANGENT =	194.54		
LENGTH =	385.73		

PI-48	N=1322223.36	E=1490352.73	STA. 903+05.34
-------	--------------	--------------	----------------

DELTA =	35°46'14"L	PC-47 =	STA. 902+40.80
DEGREE =	29°38'52"	PI-47 =	STA. 903+05.34
RADIUS =	200.00	PT-47 =	STA. 903+65.66
TANGENT =	64.54		
LENGTH =	124.86		

PI-49	N=1321855.25	E=1490383.55	STA. 906+70.53
-------	--------------	--------------	----------------

DELTA =	35°46'50"R	PC-48 =	STA. 905+73.68
DEGREE =	19°05'55"	PI-48 =	STA. 906+70.53
RADIUS =	300.00	PT-48 =	STA. 907+61.03
TANGENT =	96.84		
LENGTH =	187.35		

POE      N=1321567.39      E=1490210.63      STA. 910+00.00

BENCH MARK DATA			
BM No.	ELEV.	COORDINATE	DESCRIPTION
CP 51	4815.11	N = 1339971.395 E = 1490075.300	SET 2" ALUM. CAP

## GENERAL NOTES

1. COORDINATES ARE NEW MEXICO STATE PLANE COORDINATES, CENTRAL ZONE, NAD83. ELEVATIONS REFERENCE NAVD88.

$$1'' = 1000'$$
[illegible]

File Name: g35bwc-100D.dgn  
 Plot Scale: 1000:1  
 Plot Date: AUGUST 2015  
 SOL/CONTRACT NO.  
 PROJECT NO.  
**Z**ero Accidents  
**Z**ero Tolerance

DESIGN BY:	SEE COVER
DRAWN BY:	SEE COVER
REVIEWED BY:	SEE COVER

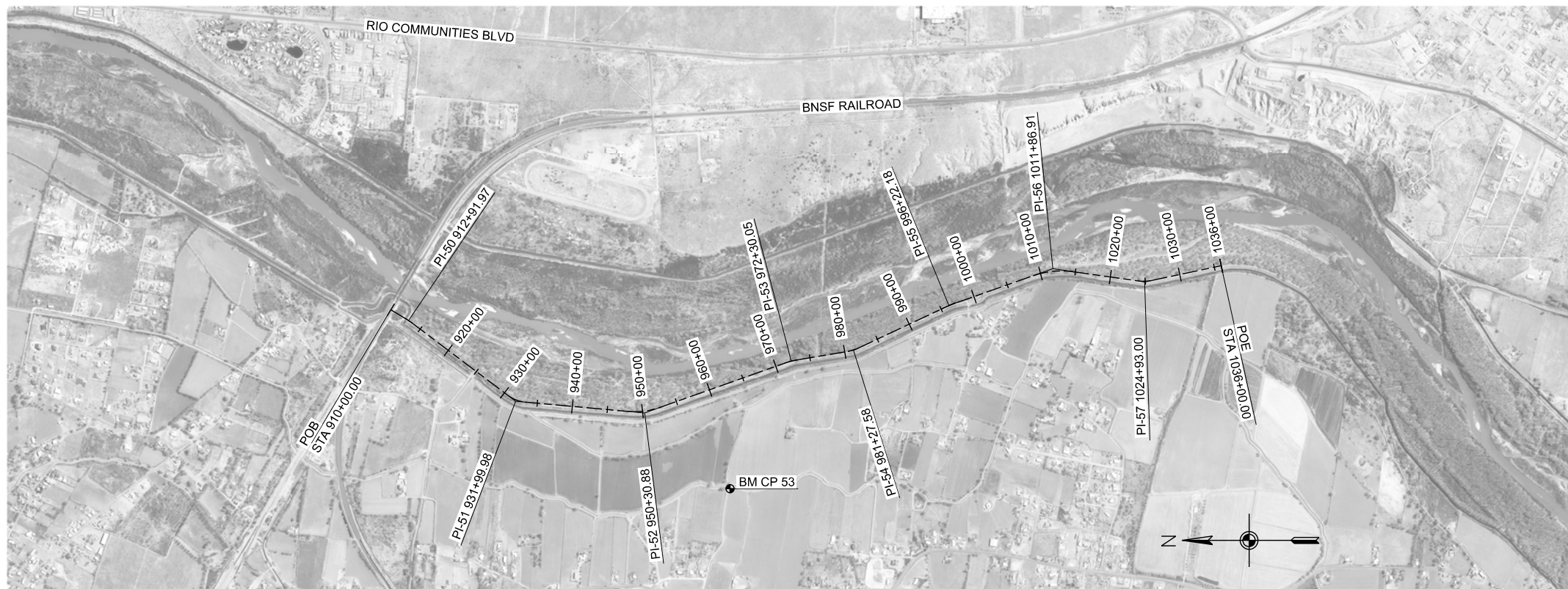
U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE  
100YR WS + 5'  
HORIZONTAL CONTROL D

SHEET NO.  
**C-100D**  
4 OF 51

SEQUENCE NO.  
70





## HORIZONTAL CONTROL PLAN

SCALE 1" = 1000'

## BELEN WEST UNIT HORIZONTAL CONTROL

POB	N=1321567.39	E=1490210.63	STA. 910+00
PI-50	N=1321317.10	E=1490060.27	STA. 912+91.97
DELTA =	06°02'59"R	PC-49 =	STA. 912+12.71
DEGREE =	03°49'11"	PI-49 =	STA. 912+91.97
RADIUS =	1500.00	PT-49 =	STA. 913+71.09
TANGENT =	79.27		
LENGTH =	158.38		
PI-51	N=1319794.06	E=1488910.75	STA. 931+99.98
DELTA =	31°53'09"L	PC-50 =	STA. 930+71.43
DEGREE =	12°43'57"	PI-50 =	STA. 931+99.98
RADIUS =	450.00	PT-50 =	STA. 933+21.86
TANGENT =	128.55		
LENGTH =	250.43		
PI-52	N=1317963.93	E=1488745.54	STA. 950+30.88
DELTA =	24°43'30"L	PC-51 =	STA. 947+89.79
DEGREE =	05°12'31"	PI-51 =	STA. 950+30.88
RADIUS =	1100.00	PT-51 =	STA. 952+64.47
TANGENT =	241.10		
LENGTH =	474.68		
PI-53	N=1315884.69	E=1489484.58	STA. 972+30.05
DELTA =	09°59'31"R	PC-52 =	STA. 971+16.41
DEGREE =	04°24'27"	PI-52 =	STA. 972+30.05
RADIUS =	1300.00	PT-52 =	STA. 973+43.12
TANGENT =	113.64		
LENGTH =	226.42		

PI-54	N=1314999.09	E=1489633.97	STA. 981+27.58
DELTA =	15°39'29"L	PC-53 =	STA. 980+45.08
DEGREE =	09°32'57"	PI-53 =	STA. 981+27.58
RADIUS =	600.00	PT-53 =	STA. 982+09.06
TANGENT =	82.50		
LENGTH =	163.97		
PI-55	N=1313646.18	E=1490271.55	STA. 996+22.18
DELTA =	05°45'16"L	PC-54 =	STA. 994+96.53
DEGREE =	02°17'31"	PI-54 =	STA. 996+22.18
RADIUS =	2500.00	PT-54 =	STA. 997+47.62
TANGENT =	125.65		
LENGTH =	251.09		
PI-56	N=1312170.81	E=1490793.39	STA. 1011+86.91
DELTA =	27°38'36"R	PC-55 =	STA. 1008+91.68
DEGREE =	04°46'29"	PI-55 =	STA. 1011+86.91
RADIUS =	1200.00	PT-55 =	STA. 1014+70.64
TANGENT =	295.23		
LENGTH =	578.96		
PI-57	N=1310866.57	E=1490606.27	STA. 1024+93.00
DELTA =	20°04'59"L	PC-56 =	STA. 1023+86.76
DEGREE =	09°32'57"	PI-56 =	STA. 1024+93.00
RADIUS =	600.00	PT-56 =	STA. 1025+97.07
TANGENT =	106.24		
LENGTH =	210.31		
POE	N=1309781.30	E=1490835.34	STA. 1036+00.00

BENCH MARK DATA			
BM No.	ELEV.	COORDINATE	DESCRIPTION
CP 53	4794.72	N = 1316751.901 E = 1487669.372	SET 2" ALUM. CAP


## GENERAL NOTES

1. COORDINATES ARE NEW MEXICO STATE PLANE COORDINATES, CENTRAL ZONE, NAD83. ELEVATIONS REFERENCE NAVD88.

$$1'' = 1000'$$


US Army Corps  
of Engineers  
Albuquerque District

[illegible]

DESIGN BY: SEE COVER	File Name: 09358w-100E.dgn	
	Plot Scale: 1000:1	Plot Date: AUGUST 2015
DRAWN BY: SEE COVER	SOL/CONTRACT NO.	
REVIEWED BY: SEE COVER	PROJECT NO.	
		

**U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO**

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE  
100YR WS + 5'  
HORIZONTAL CONTROL E

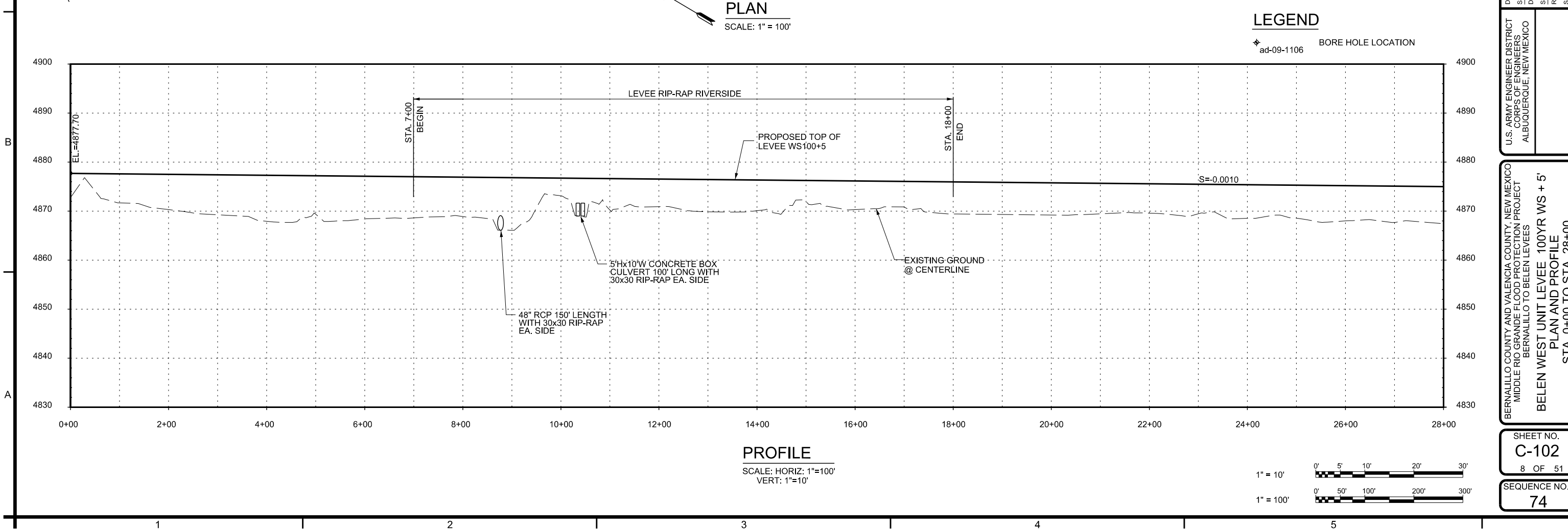
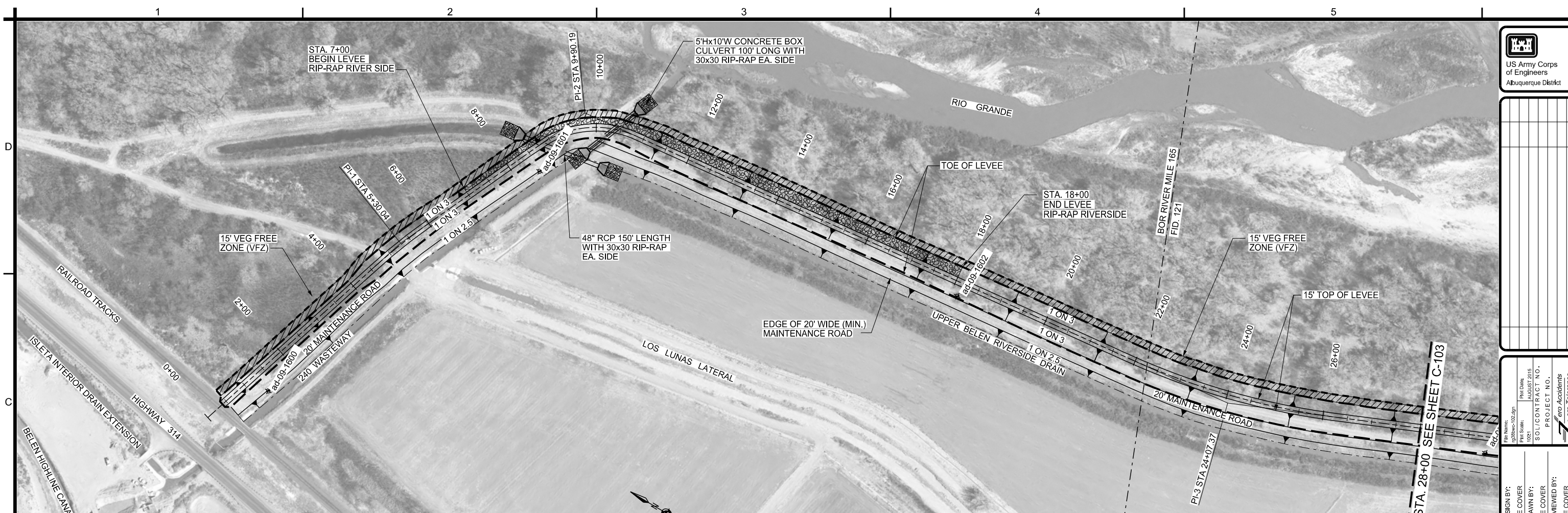
SHEET NO.  
**C-100E**  
5 OF 51

SEQUENCE NO.  
71









US Army Corps of Engineers  
Albuquerque District

Mark	Date	Appr.

DESIGN BY: SEE COVER

DRAWN BY: SEE COVER

REVIEWED BY: SEE COVER

PROJECT NO. 10021

SOL/CONTRACT NO. 10021

PROJECT NO. 10021

PROJECT NO. 10021

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 0+00 TO STA. 28+00

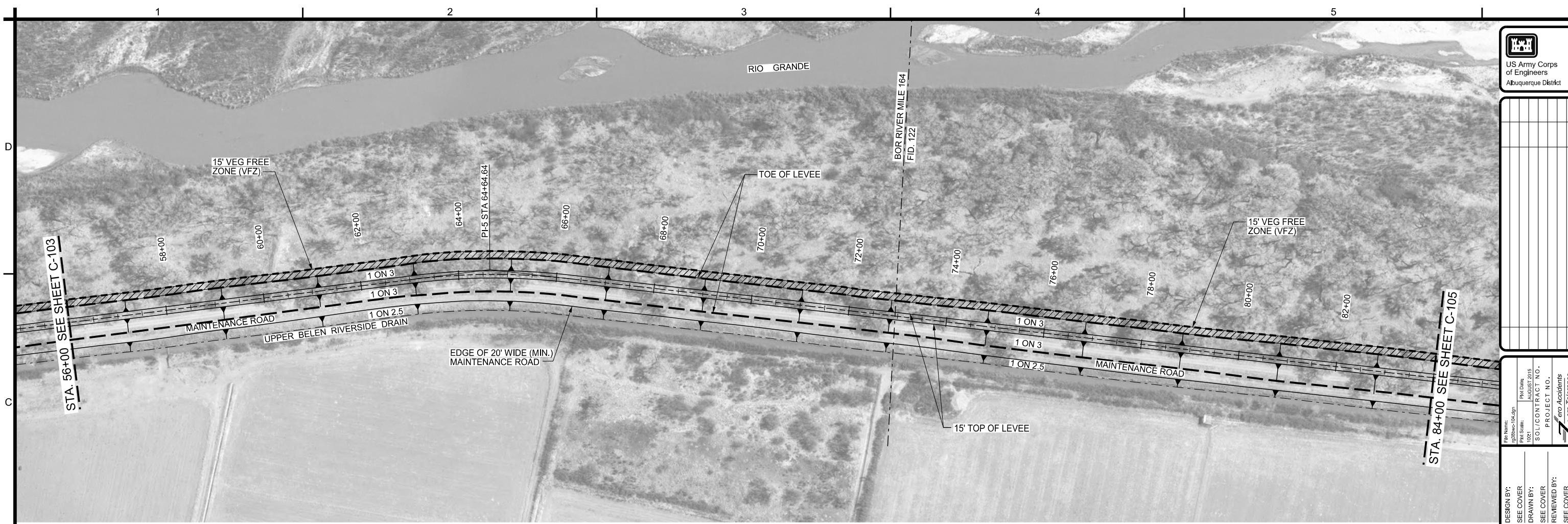
SHEET NO. C-102

8 OF 51

SEQUENCE NO. 74



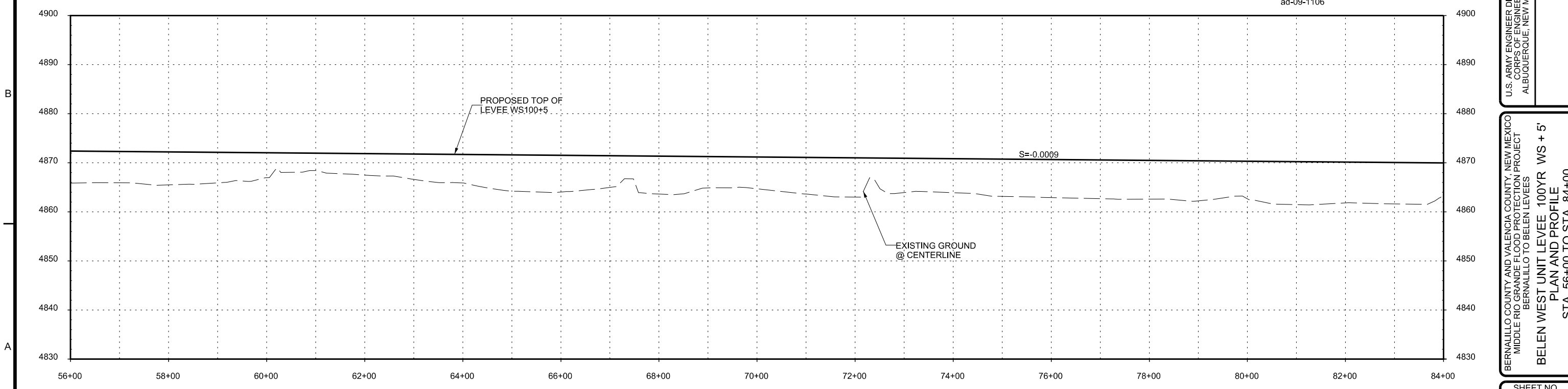




**PLAN**  
SCALE: 1" = 100'

**LEGEND**

◆ ad-09-1106 BORE HOLE LOCATION



**PROFILE**  
SCALE: HORIZ: 1"=100'  
VERT: 1"=10'

1" = 10'  
1" = 100'

0' 5' 10' 20' 30'  
0' 50' 100' 200' 300'

US Army Corps of Engineers  
Albuquerque District

Drawn	Check	Appr.

File Name: c:\browns\104.dgn  
Plot Scale: 100:1  
Plot Date: AUGUST 2015  
SOL/CONTRACT NO.:  
PROJECT NO.:  
ero Accidents  
ero Tolerance

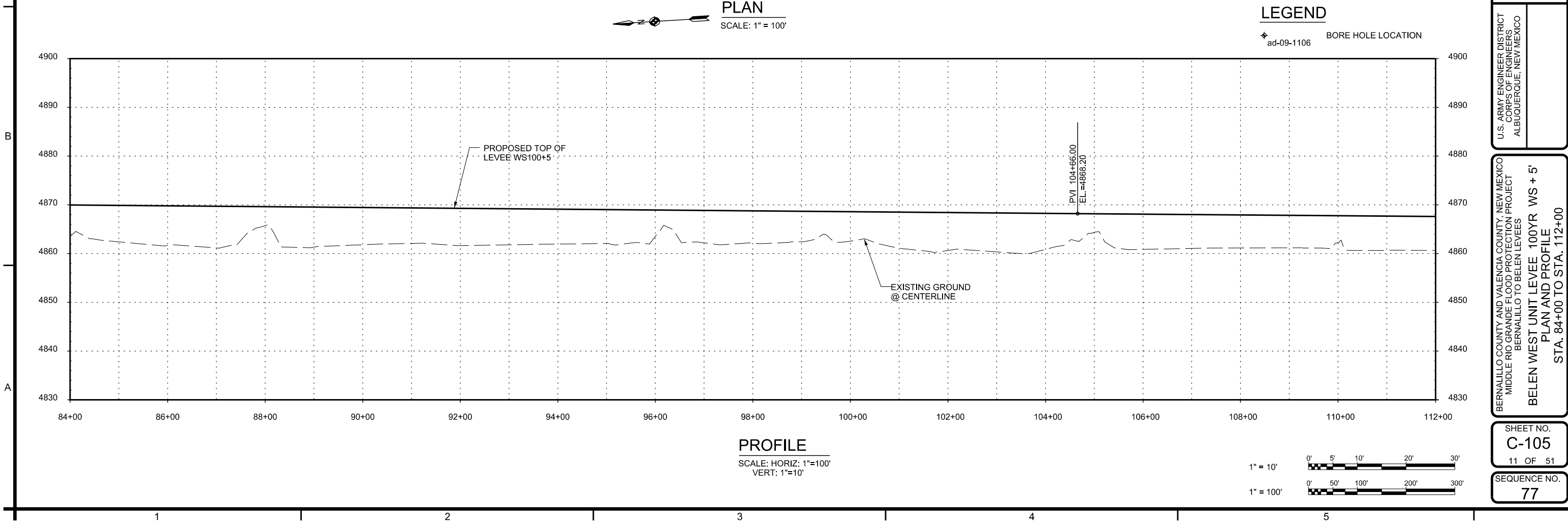
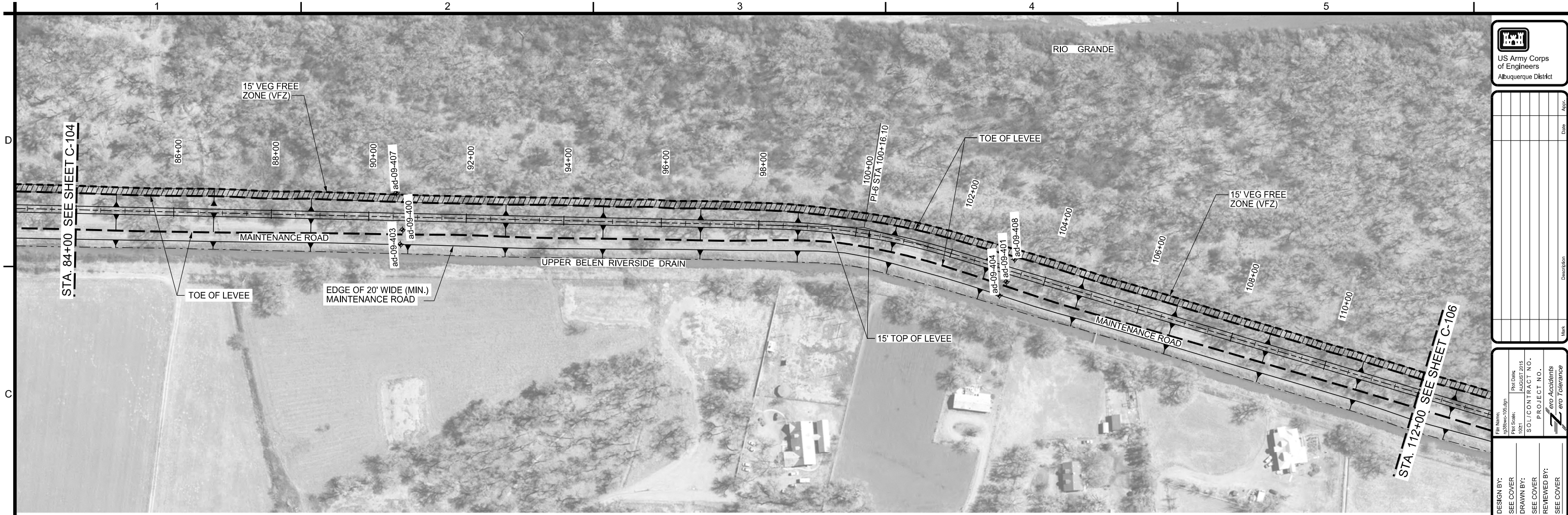
DESIGN BY: SEE COVER  
DRAWN BY: SEE COVER  
REVIEWED BY: SEE COVER

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 56+00 TO STA. 84+00

SHEET NO.  
**C-104**  
10 OF 51

SEQUENCE NO.  
**76**



US Army Corps  
of Engineers  
Albuquerque District

Mark	Description	Date	Appr.

File Name: c:\browns\106.dgn  
Proj Date: AUGUST 2015  
Proj Scale: 100:1  
SOL/CONTRACT NO.:  
PROJECT NO.:  
ero Accidents  
ero Tolerance

DESIGN BY:  
SEE COVER

DRAWN BY:  
SEE COVER

REVIEWED BY:  
SEE COVER

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 84+00 TO STA. 112+00

SHEET NO.  
**C-105**  
11 OF 51

SEQUENCE NO.  
**77**

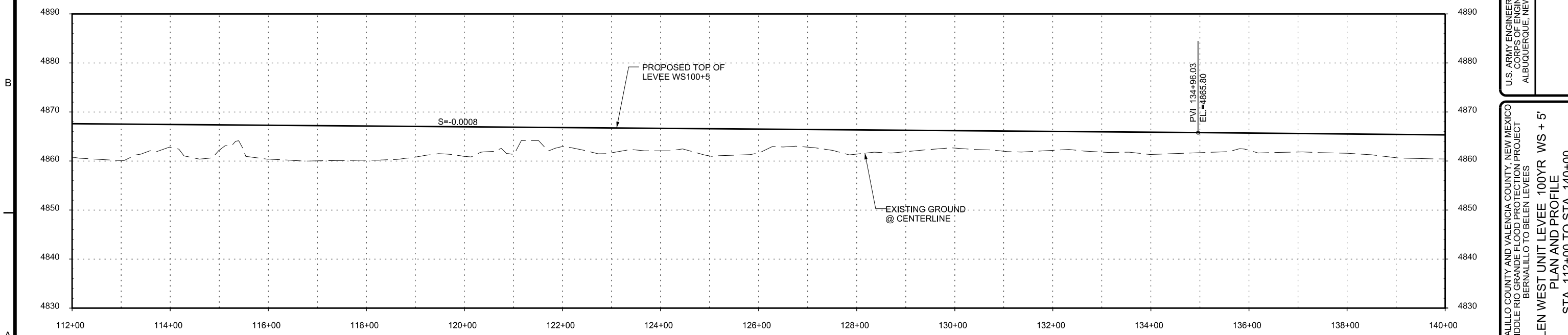




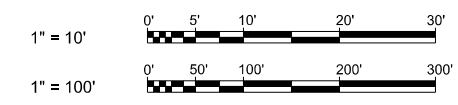
**PLAN**  
SCALE: 1" = 100'

**LEGEND**

◆ ad-09-1106 BORE HOLE LOCATION



**PROFILE**  
SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



US Army Corps  
of Engineers  
Albuquerque District

Mark	Description	Date	Appr.

File Name: c:\b\new\106.dgn  
Plot Date: AUGUST 2015  
Plot Scale: 100:1  
SOL/CONTRACT NO.:  
PROJECT NO.:  
ero Accidents  
ero Tolerance

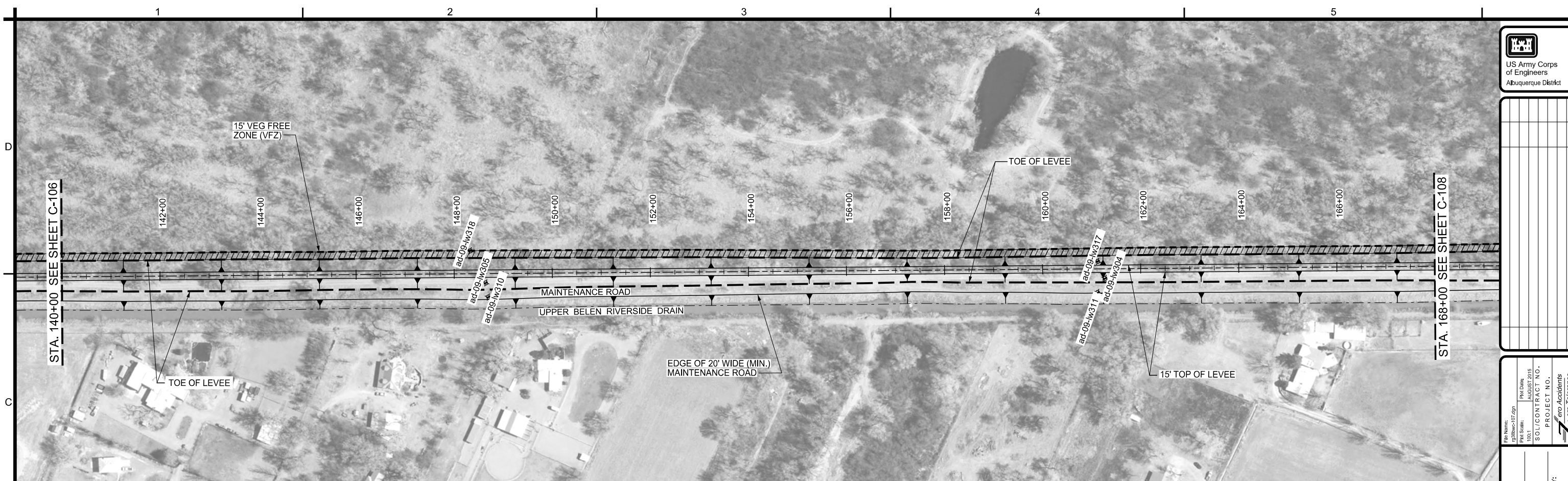
DESIGN BY:  
SEE COVER  
DRAWN BY:  
SEE COVER  
REVIEWED BY:  
SEE COVER

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 112+00 TO STA. 140+00

SHEET NO.  
**C-106**  
12 OF 51

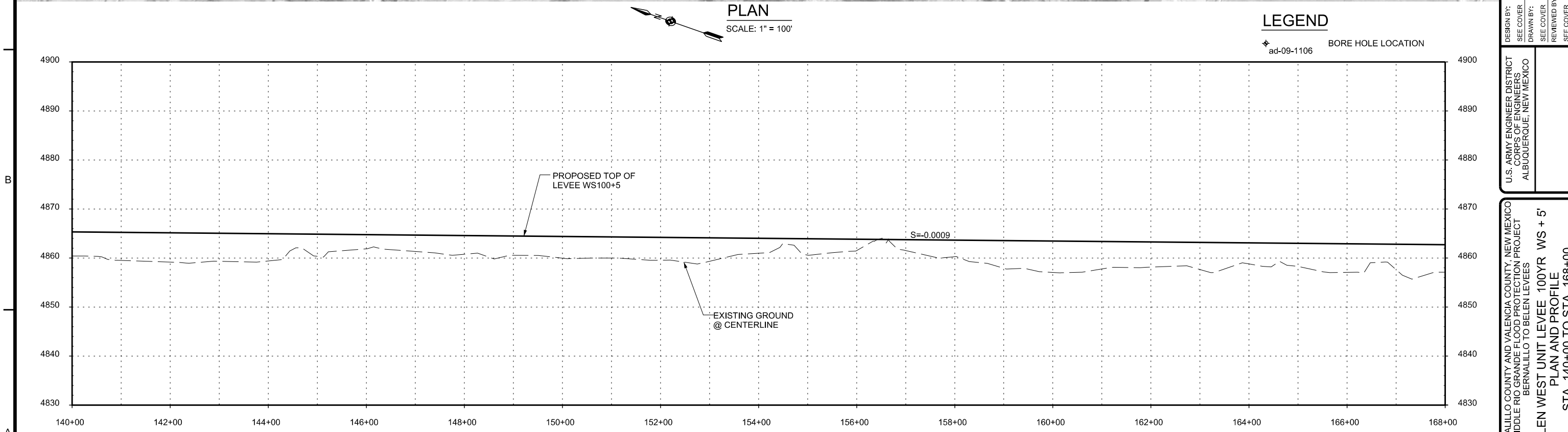
SEQUENCE NO.  
**78**



**PLAN**  
SCALE: 1" = 100'

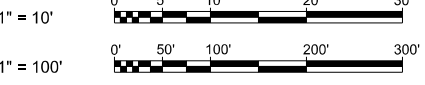
**LEGEND**

◆ ad-09-1106 BORE HOLE LOCATION



**PROFILE**

SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



Mark	Description	Date	Appr.

File Name: cd\Bwse-107.dgn	Proj Date: AUGUST 2015
Proj Scale: 100:1	SOL/CONTRACT NO.: PROJECT NO.
ero Accidents ero Tolerance	

DESIGN BY: SEE COVER	REVIEWED BY: SEE COVER
DRAWN BY: SEE COVER	SEE COVER

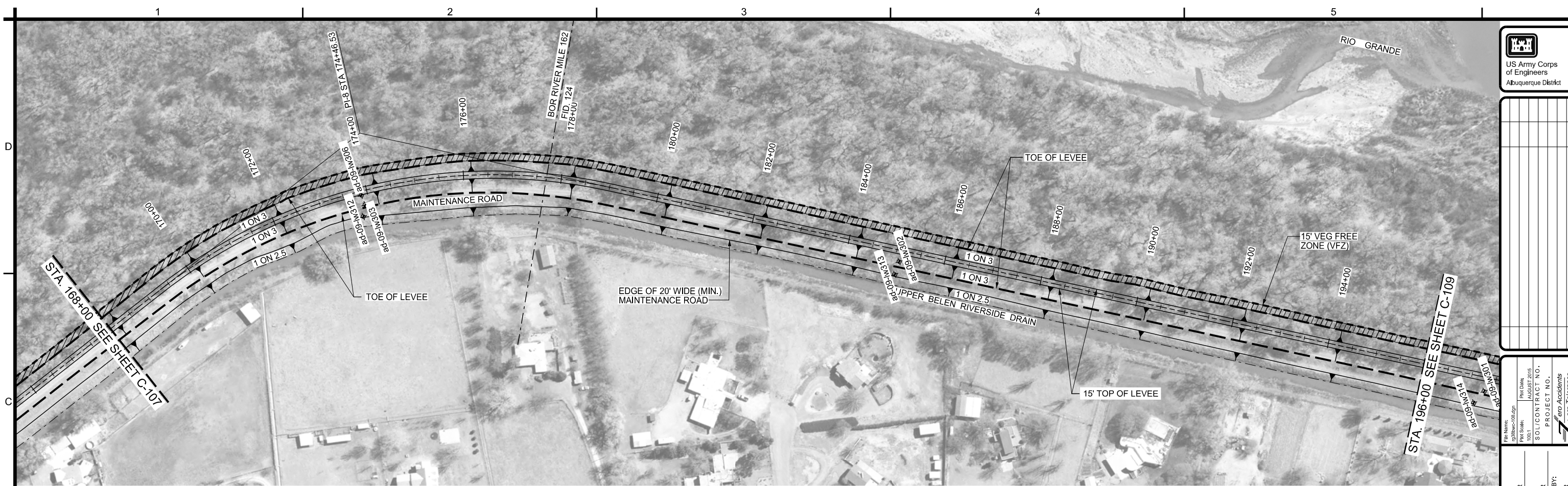
U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 140+00 TO STA. 168+00

SHEET NO.  
**C-107**  
13 OF 51

SEQUENCE NO.  
**79**

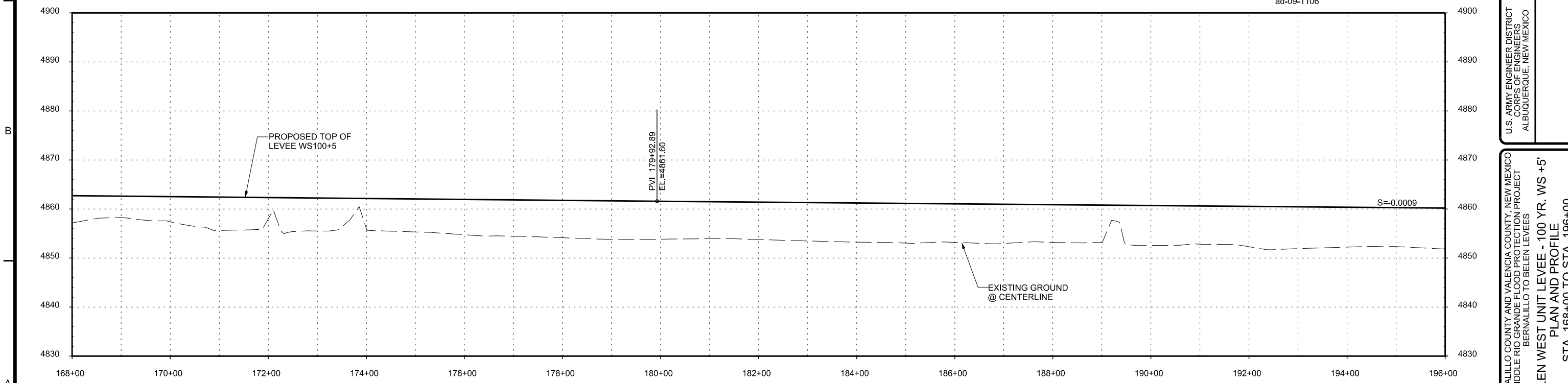




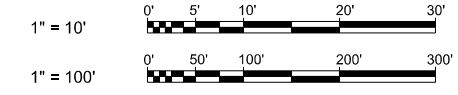
**PLAN**  
SCALE: 1" = 100'

**LEGEND**

◆ ad-09-1106 BORE HOLE LOCATION



**PROFILE**  
SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



Mark	Description	Date	Appr.

File Name: c:\browns\108.dgn	Plot Date: AUGUST 2015
Plot Scale: 100:1	SOL/CONTRACT NO.: PROJECT NO.

DESIGN BY: SEE COVER	
DRAWN BY: SEE COVER	
REVIEWED BY: SEE COVER	

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

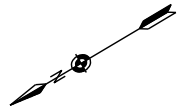
BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE - 100 YR. WS +5'  
PLAN AND PROFILE  
STA. 168+00 TO STA. 196+00

SHEET NO.  
**C-108**  
14 OF 51

SEQUENCE NO.  
**80**



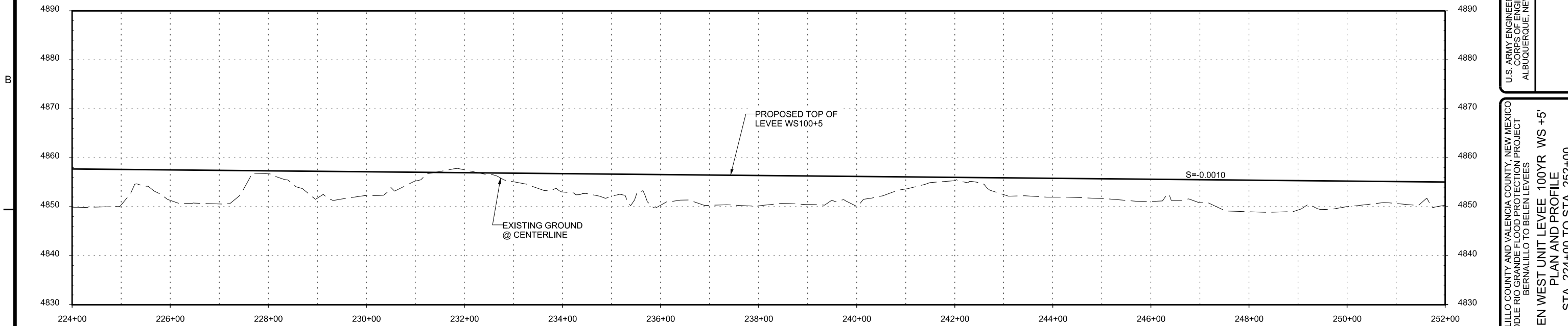




**PLAN**  
SCALE: 1" = 100'

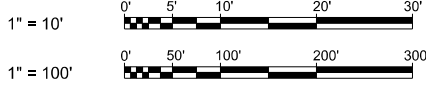
**LEGEND**

 ad-09-1106 BORE HOLE LOCATION



**PROFILE**

SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



Mark	Description	Date	Appr.

File Name: ad-Belen-10.dgn	Plot Date: AUGUST 2015
Plot Scale: 100:1	SOL/CONTRACT NO.: PROJECT NO.

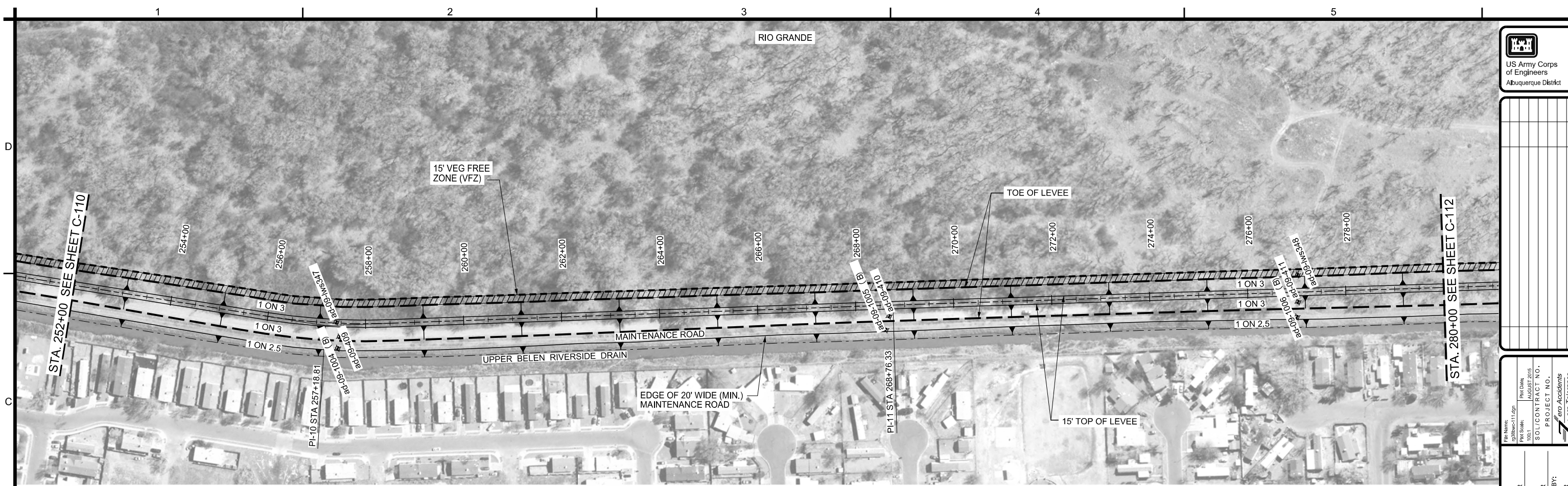
DESIGN BY: SEE COVER	DRAWN BY: SEE COVER	REVIEWED BY: SEE COVER
----------------------	---------------------	------------------------

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS +5'  
PLAN AND PROFILE  
STA. 224+00 TO STA. 252+00

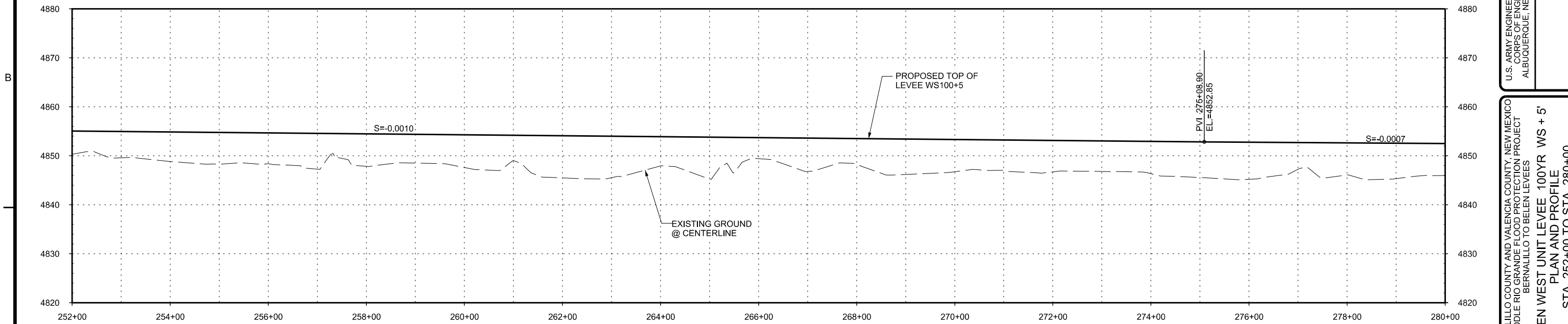
SHEET NO.  
**C-110**  
16 OF 51

SEQUENCE NO.  
**82**

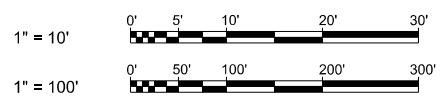


**PLAN**  
SCALE: 1" = 100'

**LEGEND**  
◆ ad-09-1106 BORE HOLE LOCATION



**PROFILE**  
SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



US Army Corps of Engineers  
Albuquerque District

Mark	Description	Date	Appr.

File Name: c:\b\w\c-111.dgn  
Plot Scale: 100:1  
Plot Date: AUGUST 2015  
SOL/CONTRACT NO.:  
PROJECT NO.:  
ero Accidents  
ero Tolerance

DESIGN BY:  
SEE COVER  
DRAWN BY:  
SEE COVER  
REVIEWED BY:  
SEE COVER

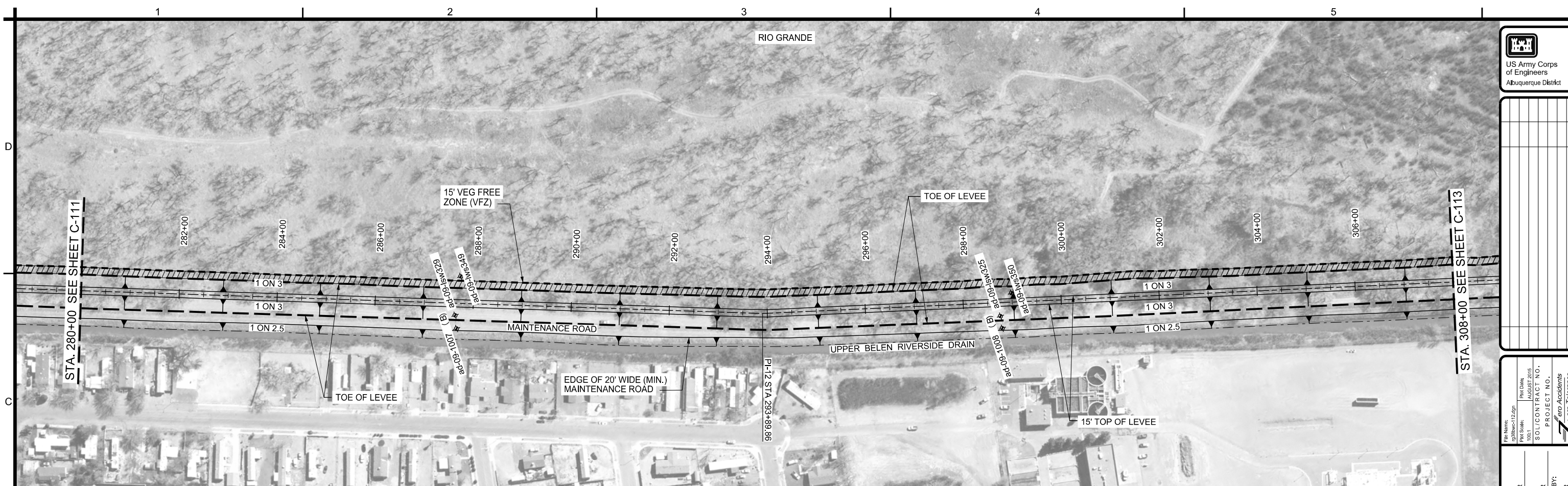
U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 252+00 TO STA. 280+00

SHEET NO.  
**C-111**  
17 OF 51

SEQUENCE NO.  
**83**

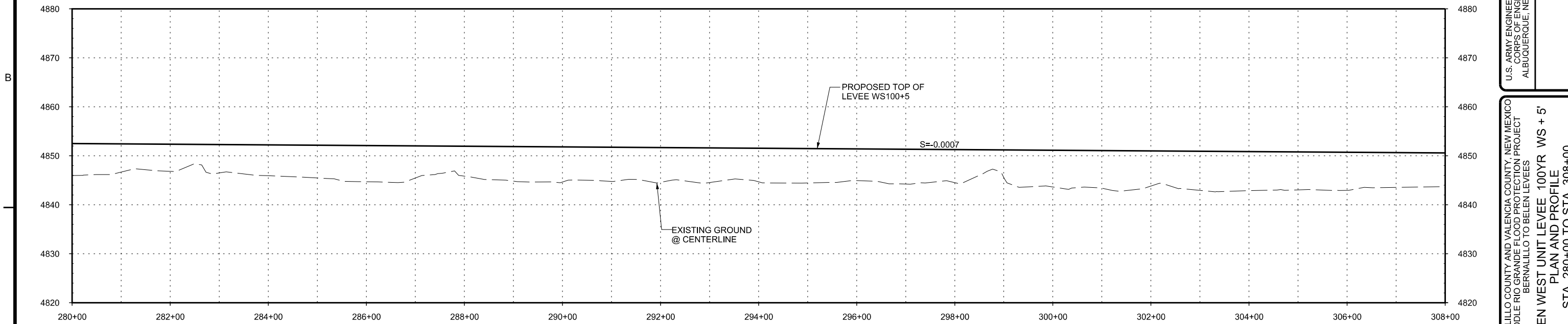




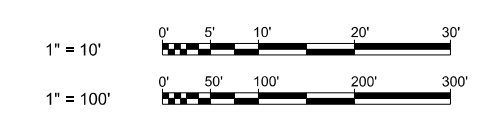
**PLAN**  
SCALE: 1" = 100'


**LEGEND**

 ad-09-1106 BORE HOLE LOCATION



**PROFILE**  
SCALE: HORIZ: 1"=100'  
VERT: 1"=10'





US Army Corps  
of Engineers  
Albuquerque District

Mark	Descriptions	Date	Appr.

File Name: c:\b\mex-12.dgn  
Plot Date: AUGUST 2015  
Plot Scale: 100:1

SOL/CONTRACT NO.:  
PROJECT NO.:  
ero Accidents  
ero Tolerance

DESIGN BY:  
SEE COVER

DRAWN BY:  
SEE COVER

REVIEWED BY:  
SEE COVER

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 280+00 TO STA. 308+00

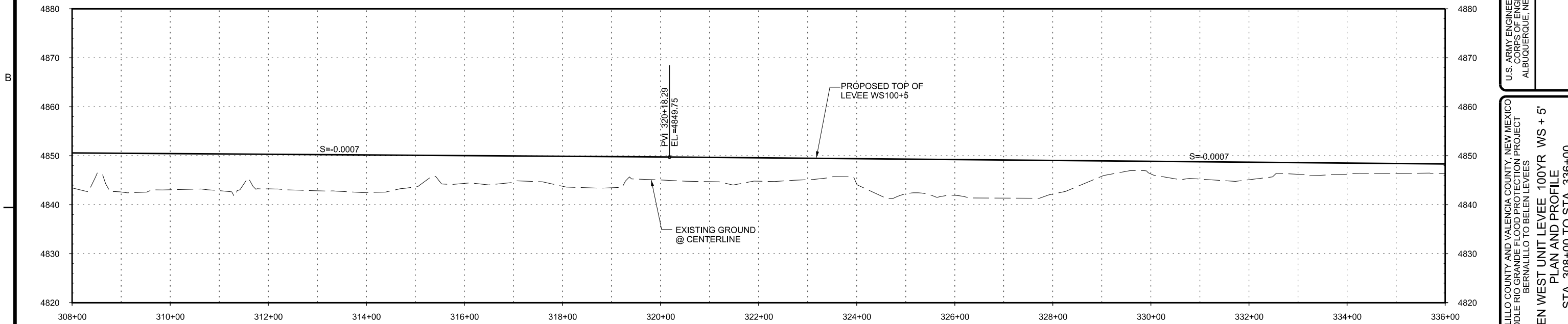
SHEET NO.  
**C-112**  
18 OF 51

SEQUENCE NO.  
**84**

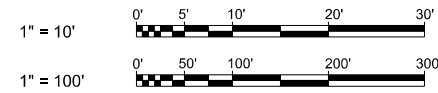


**PLAN**  
SCALE: 1" = 100'

**LEGEND**  
ad-09-1106 BORE HOLE LOCATION



**PROFILE**  
SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



US Army Corps  
of Engineers  
Albuquerque District

Mark	Description	Date	Appr.

File Name: ad-09-1106-13.dgn  
Plot Date: AUGUST 2015  
Plot Scale: 100:1  
SOL/CONTRACT NO.:  
PROJECT NO.:  
ero Accidents  
ero Tolerance

DESIGN BY:  
SEE COVER  
DRAWN BY:  
SEE COVER  
REVIEWED BY:  
SEE COVER

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 308+00 TO STA. 336+00

SHEET NO.  
**C-113**  
19 OF 51

SEQUENCE NO.  
**85**



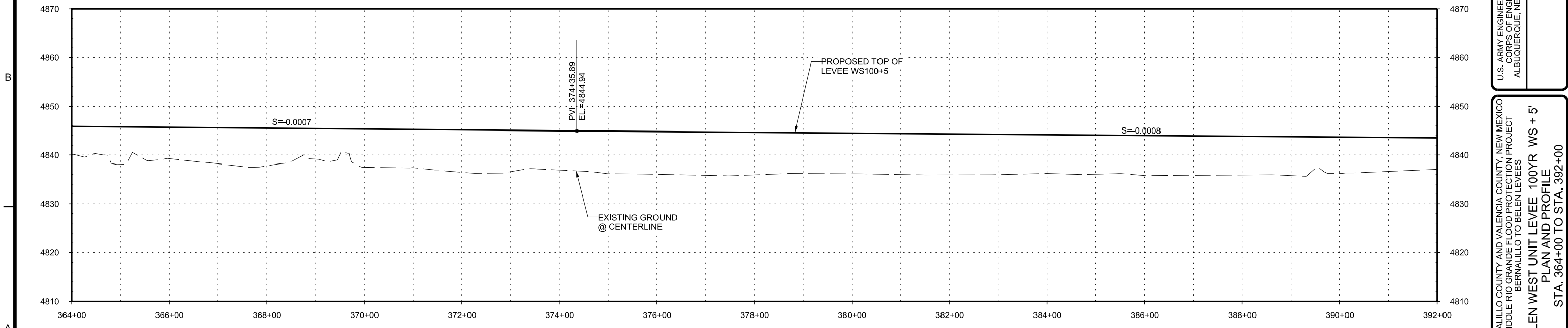




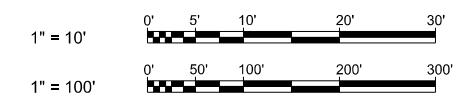
**PLAN**  
SCALE: 1" = 100'

**LEGEND**

ad-09-1106 BORE HOLE LOCATION



**PROFILE**  
SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



US Army Corps  
of Engineers  
Albuquerque District

Mark	Description	Date	Appr.

File Name: ad-09-1106-115.dgn  
Plot Date: AUGUST 2015  
Plot Scale: 100:1  
SOL/CONTRACT NO.:  
PROJECT NO.:  
ero Accidents  
ero Tolerance

DESIGN BY:  
SEE COVER  
DRAWN BY:  
SEE COVER  
REVIEWED BY:  
SEE COVER

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 364+00 TO STA. 392+00

SHEET NO.  
**C-115**  
21 OF 51

SEQUENCE NO.  
**87**



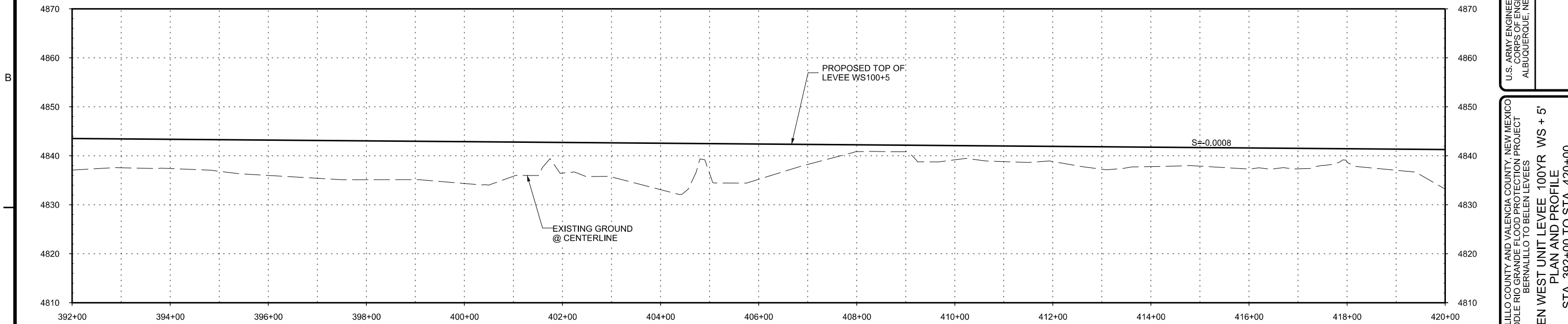


PLAN

SCALE: 1" = 100'

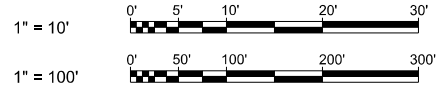
LEGEND

ad-09-1106 BORE HOLE LOCATION



PROFILE

SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



US Army Corps  
of Engineers  
Albuquerque District

Mark	Description	Date	Appr.

File Name: r08bwev-116.dgn  
Plot Scale: 100:1  
Proj Date: AUGUST 2015  
SOL/CONTRACT NO.:  
PROJECT NO.:  
ero Accidents  
ero Tolerance

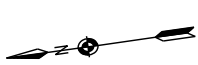
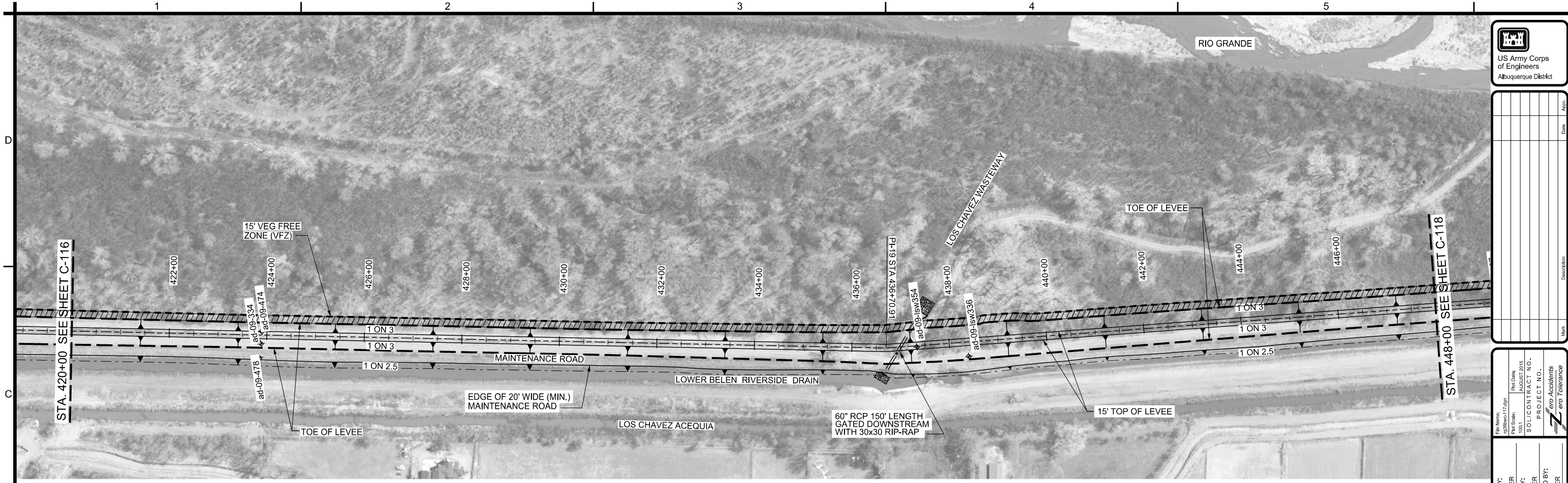
DESIGN BY:  
SEE COVER  
DRAWN BY:  
SEE COVER  
REVIEWED BY:  
SEE COVER

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 392+00 TO STA. 420+00


SHEET NO.  
**C-116**  
22 OF 51

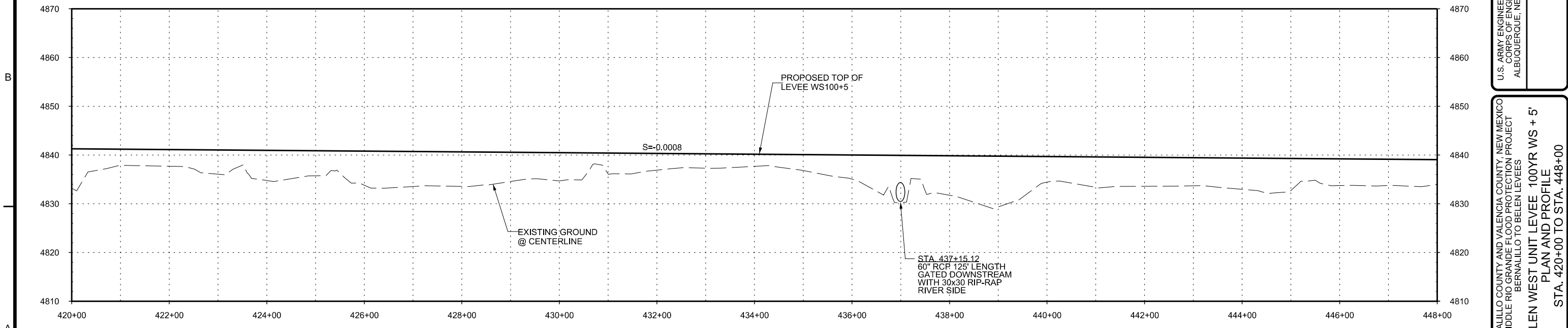
SEQUENCE NO.  
**88**



**PLAN**  
SCALE: 1" = 100'

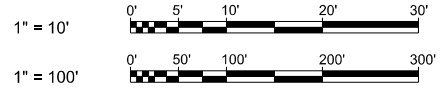
**LEGEND**


 ad-09-1106 BORE HOLE LOCATION



**PROFILE**

SCALE: HORIZ: 1"=100'  
VERT: 1"=10'






US Army Corps  
of Engineers  
Albuquerque District

Mark	Descriptions	Date	Appr.

File Name: c:\b\w\c-117.dgn  
Plot Scale: 100:1  
Plot Date: AUGUST 2015

SOL/CONTRACT NO.:  
PROJECT NO.:  
Reviewed By:   
SEE COVER

DESIGN BY:  
SEE COVER

DRAWN BY:  
SEE COVER

REVIEWED BY:  
SEE COVER

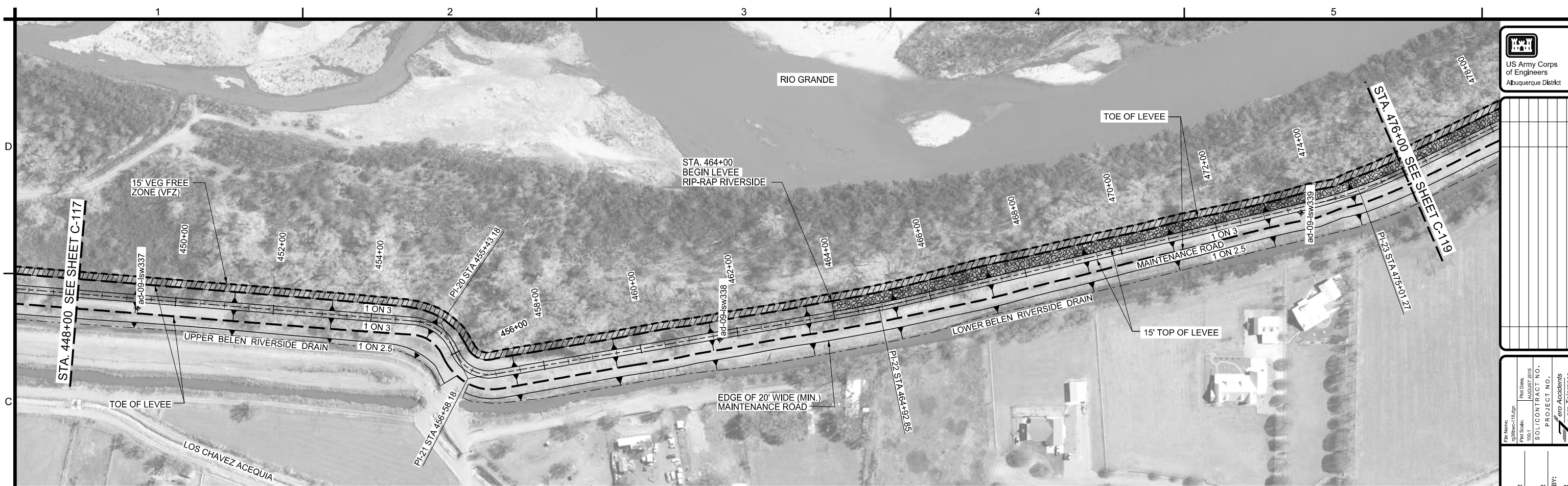
U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 420+00 TO STA. 448+00

SHEET NO.  
**C-117**  
23 OF 51

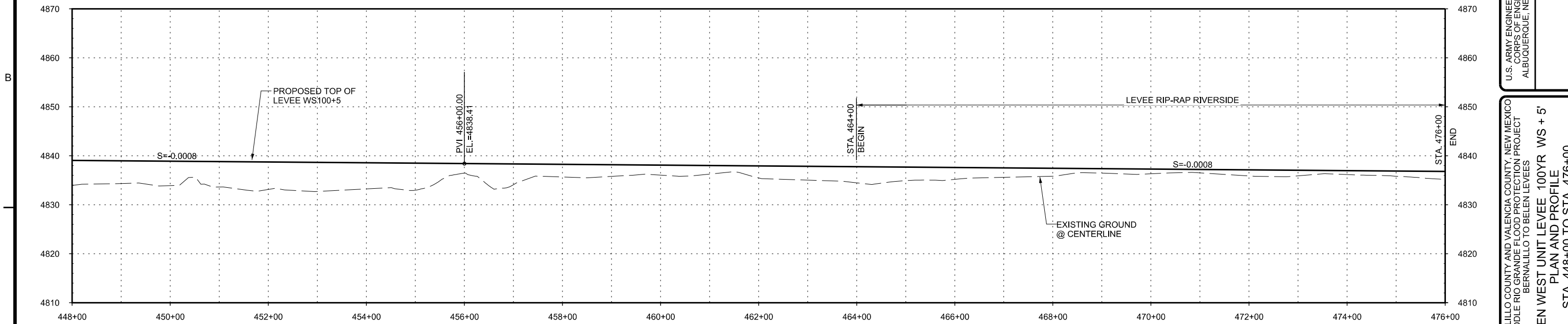
SEQUENCE NO.  
**89**



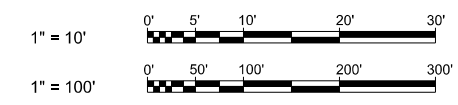


**PLAN**  
SCALE: 1" = 100'

**LEGEND**  
◆ ad-09-1106 BORE HOLE LOCATION



**PROFILE**  
SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



US Army Corps of Engineers  
Albuquerque District

Mark	Description	Date	Appr.

File Name: c:\b\w\c-118.dgn  
Plot Scale: 100:1  
Plot Date: AUGUST 2015  
SOL/CONTRACT NO.:  
PROJECT NO.:  
ero Accidents  
ero Tolerance

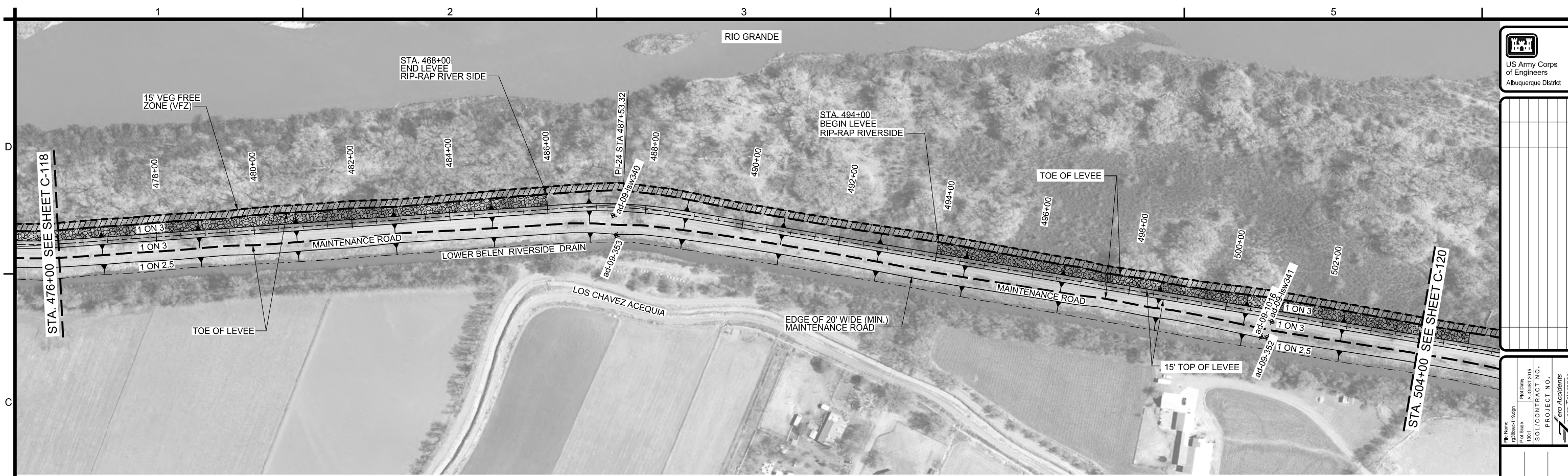
DESIGN BY:  
SEE COVER  
DRAWN BY:  
SEE COVER  
REVIEWED BY:  
SEE COVER

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 448+00 TO STA. 476+00

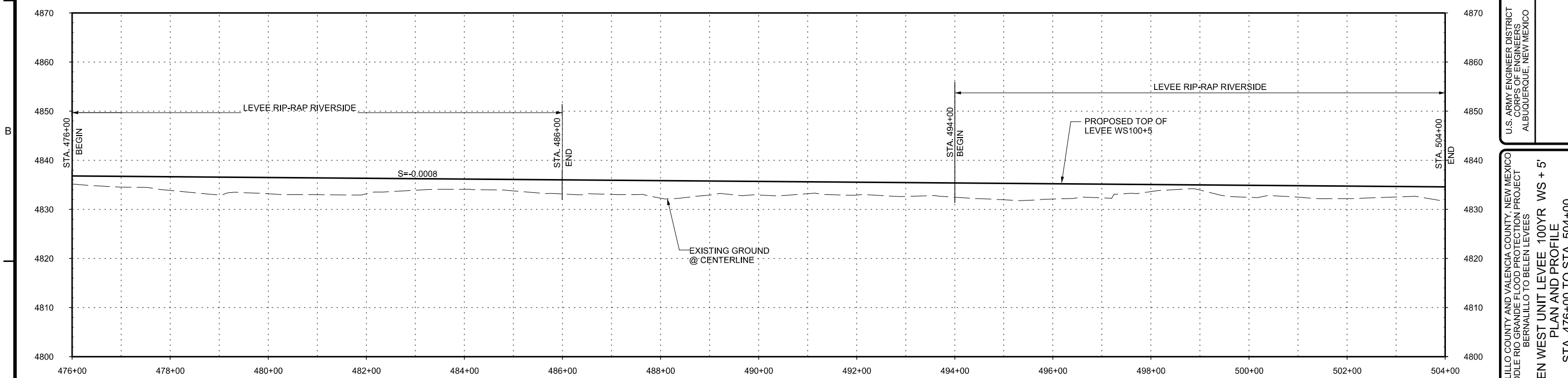
SHEET NO.  
**C-118**  
24 OF 51

SEQUENCE NO.  
**90**

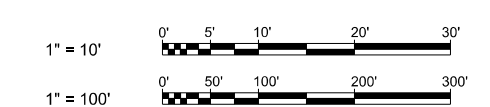


**PLAN**  
SCALE: 1" = 100'

**LEGEND**  
ad-09-1106 BORE HOLE LOCATION



**PROFILE**  
SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



US Army Corps  
of Engineers  
Albuquerque District

Mark	Description	Date	Appr.

File Name: c:\b\wsc-110.dgn  
Plot Scale: 100:1  
Proj Date: AUGUST 2015  
SOL/CONTRACT NO.:  
PROJECT NO.:  
ero Accidents  
ero Tolerance

DESIGN BY:  
SEE COVER  
DRAWN BY:  
SEE COVER  
REVIEWED BY:  
SEE COVER

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 476+00 TO STA. 504+00

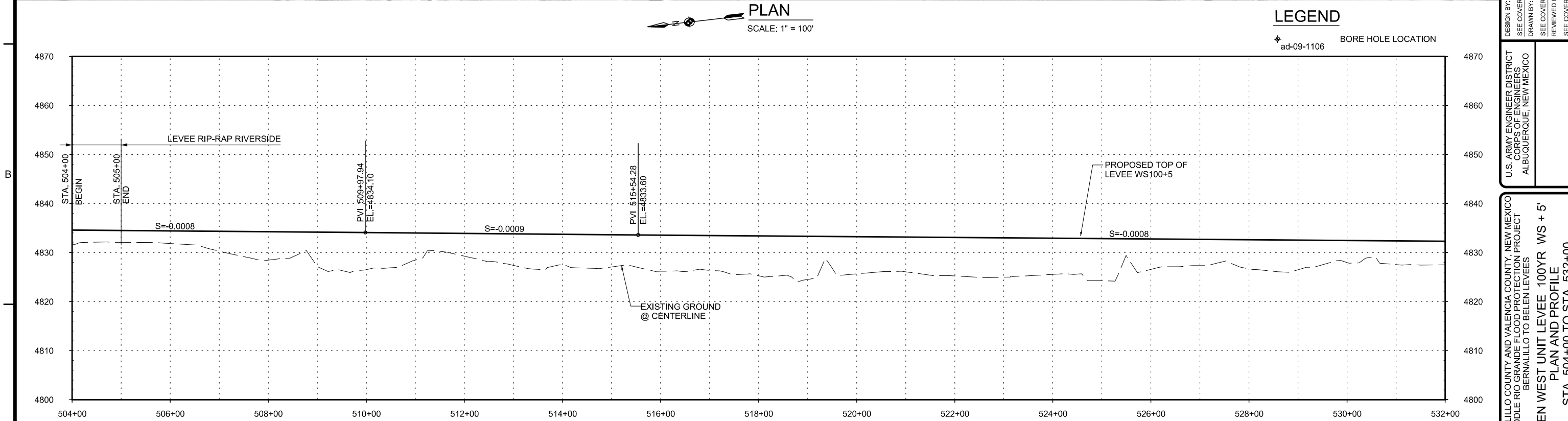
SHEET NO.  
**C-119**  
25 OF 51

SEQUENCE NO.  
**91**

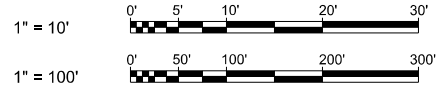




**PLAN**  
SCALE: 1" = 100'



**PROFILE**  
SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



US Army Corps of Engineers  
Albuquerque District

Mark	Description	Date	Appr.

File Name: ad-09-lws358  
Proj Date: AUGUST 2015  
Proj Scale: 100:1  
SOL/CONTRACT NO.: PROJECT NO.  
Reviewed By: ero Accidents  
See Cover: ero Tolerance

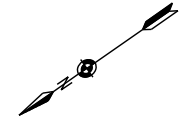
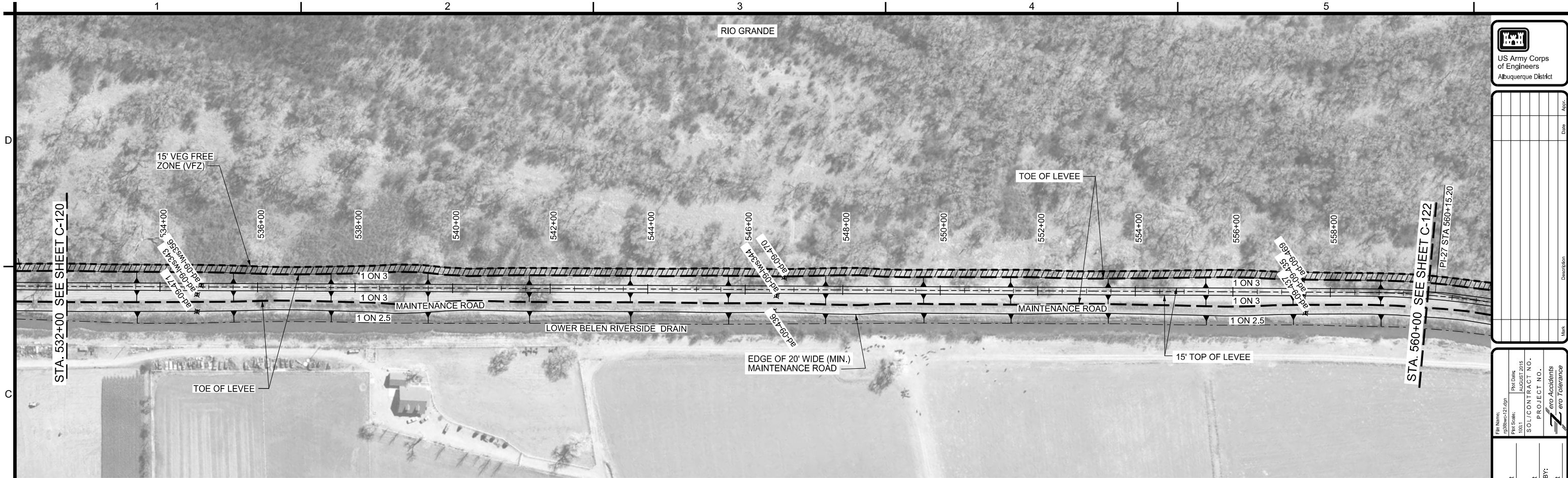
DESIGN BY: SEE COVER  
SEE COVER: SEE COVER  
DRAWN BY: SEE COVER  
REVIEWED BY: SEE COVER

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 504+00 TO STA. 532+00

SHEET NO.  
**C-120**  
26 OF 51

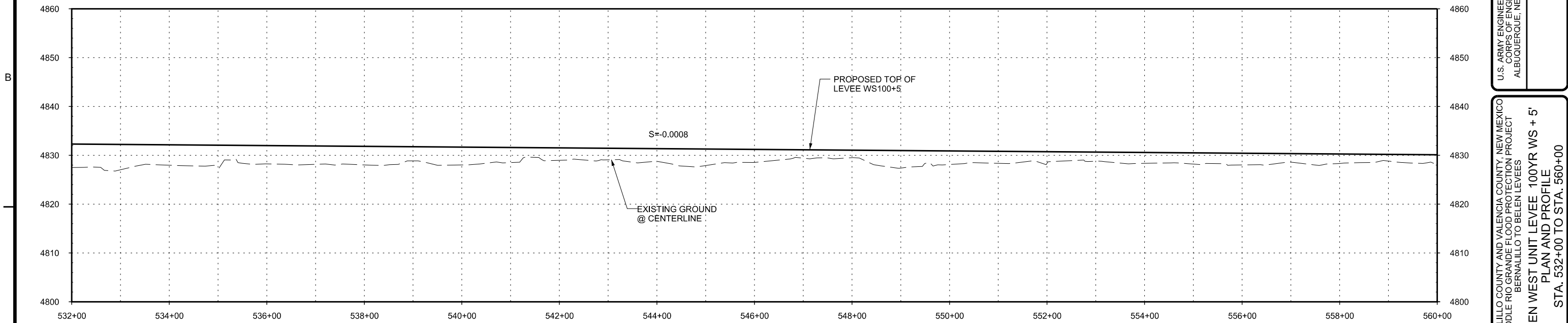
SEQUENCE NO.  
**92**



PLAN  
SCALE: 1" = 100'

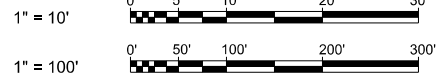
LEGEND

ad-09-1106 BORE HOLE LOCATION



PROFILE

SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



US Army Corps  
of Engineers  
Albuquerque District

Mark	Description	Date	Appr.

File Name: c:\browns\121.dgn  
Plot Date: AUGUST 2015  
Plot Scale: 100:1  
SOL/CONTRACT NO.:  
PROJECT NO.:  
ero Accidents  
ero Tolerance

DESIGN BY:  
SEE COVER  
DRAWN BY:  
SEE COVER  
REVIEWED BY:  
SEE COVER

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
BELEN WEST UNIT LEVEE 100YR WS + 5'  
PLAN AND PROFILE  
STA. 532+00 TO STA. 560+00

SHEET NO.  
**C-121**  
27 OF 51

SEQUENCE NO.  
**93**





