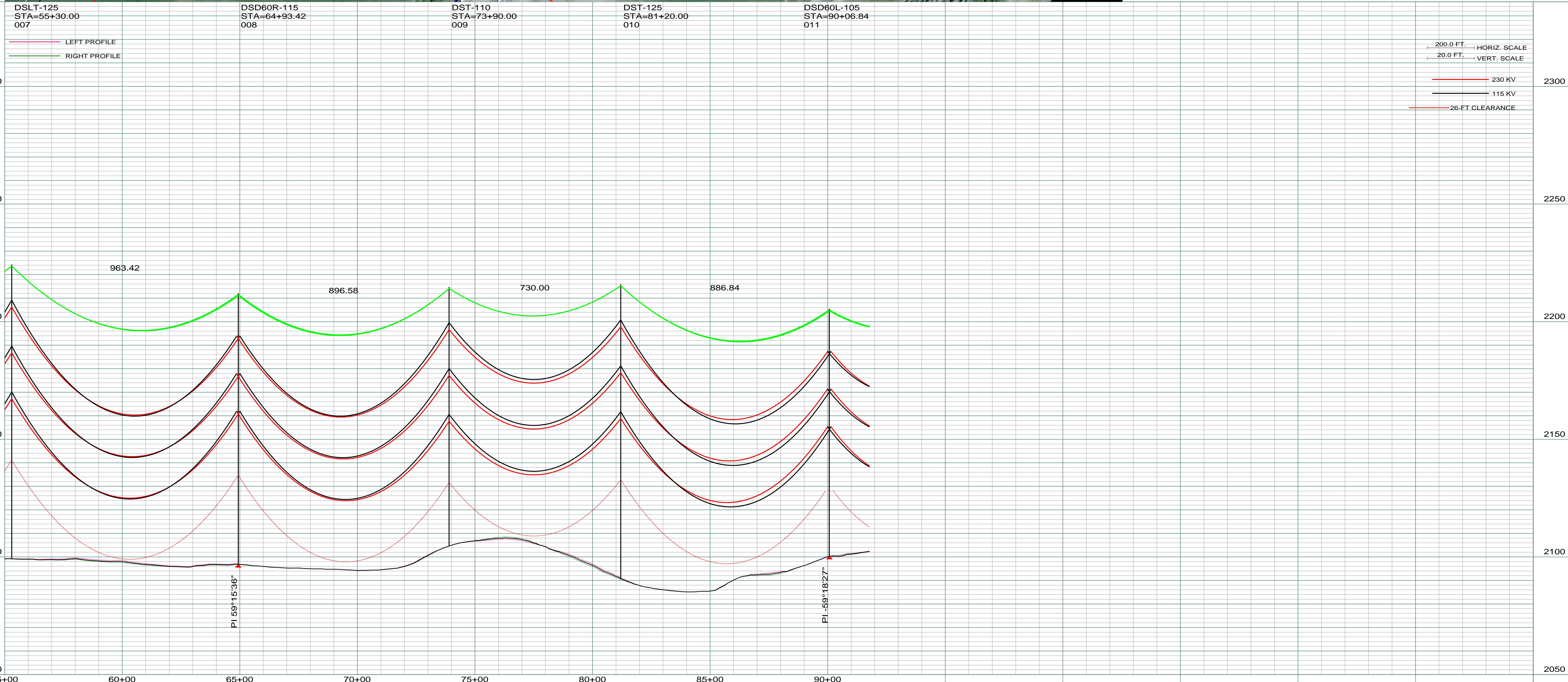


REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUED FOR CONSTRUCTION	CDB	CDB	GCC	05/31/12	5					
2	-	-	-	-	-	-					
3	-	-	-	-	-	-					
4	-	-	-	-	-	-					

STATE NAME: NORTH DAKOTA		ZONE: 3301 NORTH INTL FT NAD83		DESIGN BY: C. BAUER		04/09/12	
CONDUCTOR 230KV		1272 MCM 45/7 ACSR BITTERN	12.617	900	901	DRAWN BY: C. BAUER	
CONDUCTOR 115KV		795 MCM 45/7 ACSR TERN	8.177	900	901	DESIGN CK: G. CHRISTENSON	
OPGW		AC 71/571	6.936	900	901	DRAFT CK:	
						APPROVED:	

FACILITY: TRANSMISSION SYSTEM MAINTENANCE		LOCATION UNIT: 288-230/115KV LINE - JUDSON SUBSTATION TO WILLISTON SUBSTATION	
JUDSON SUB TO WILLISTON SUB		230/115KV TRANSMISSION LINE	
PLAN AND PROFILE		SCALE: AS SHOWN	
BASIN DRAWING NO. 288-090-T3-001		COUNTY NAME: WILLIAMS	
REV. 1			



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUED FOR CONSTRUCTION	CDB	CDB	GCC	05/31/12	5					
2	-	-	-	-							
3	-	-	-	-							
4	-	-	-	-							

STATE NAME:	ZONE:	CONDUCTOR	SIZE	STRINGING TENSION	NESC TENSION	DESIGN R.S.	ACTUAL R.S.
NORTH DAKOTA	3301 NORTH INTL FT NAD83	230KV	1272 MCM 45/7 ACSR BITTERN	-	12,617	800	848
		115KV	795 MCM 45/7 ACSR TERN	-	8,177	800	848
		OPGW	AC 71/571	-	6,936	800	848

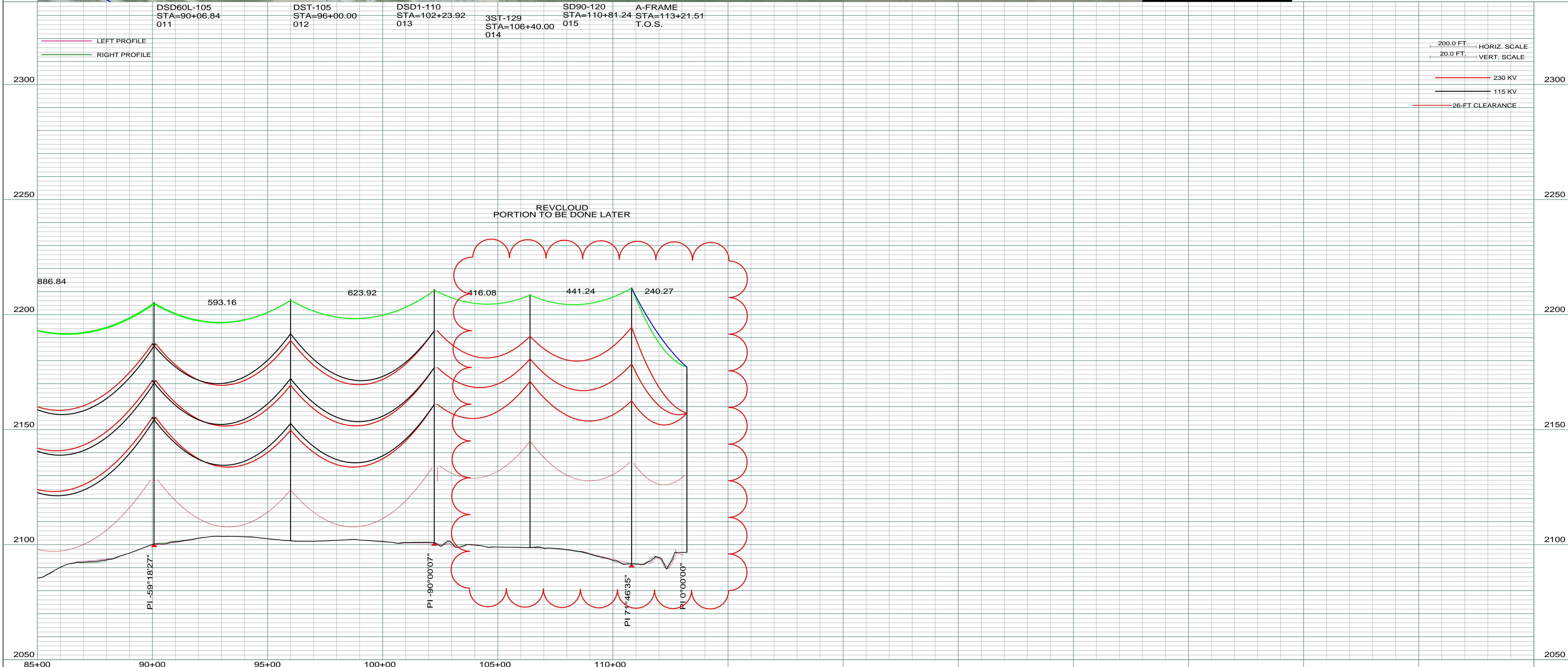
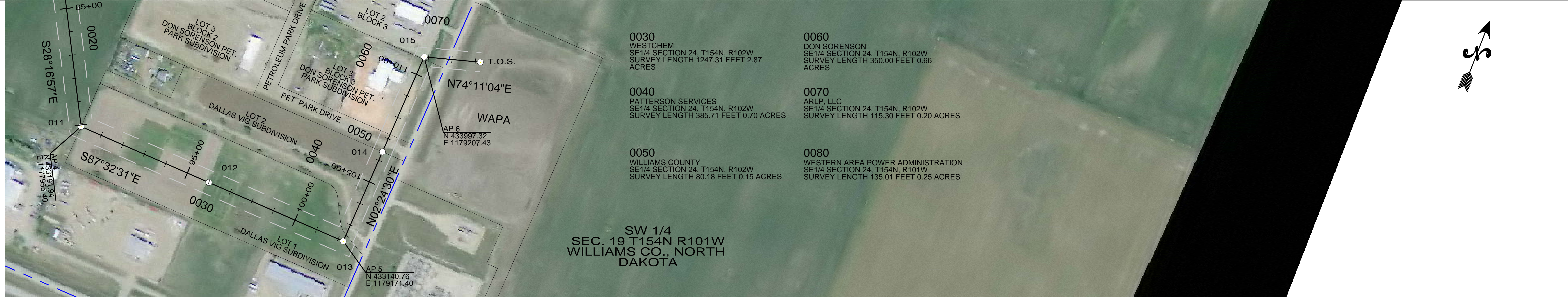
DESIGN BY:	DATE:	DRAWN BY:	DATE:	DESIGN CK:	DATE:	DRAFT CK:	DATE:	APPROVED:
C. BAUER	04/09/12	C. BAUER	04/09/12	G. CHRISTENSON	04/09/12			

FACILITY: TRANSMISSION SYSTEM MAINTENANCE
 LOCATION UNIT: 288-230/115KV LINE - JUDSON SUBSTATION TO WILLISTON SUBSTATION

JUDSON SUB TO WILLISTON SUB
230/115KV TRANSMISSION LINE
PLAN AND PROFILE

SCALE: AS SHOWN COUNTY NAME: WILLIAMS
 BASIN DRAWING NO. 288-090-T3-002 REV. 1

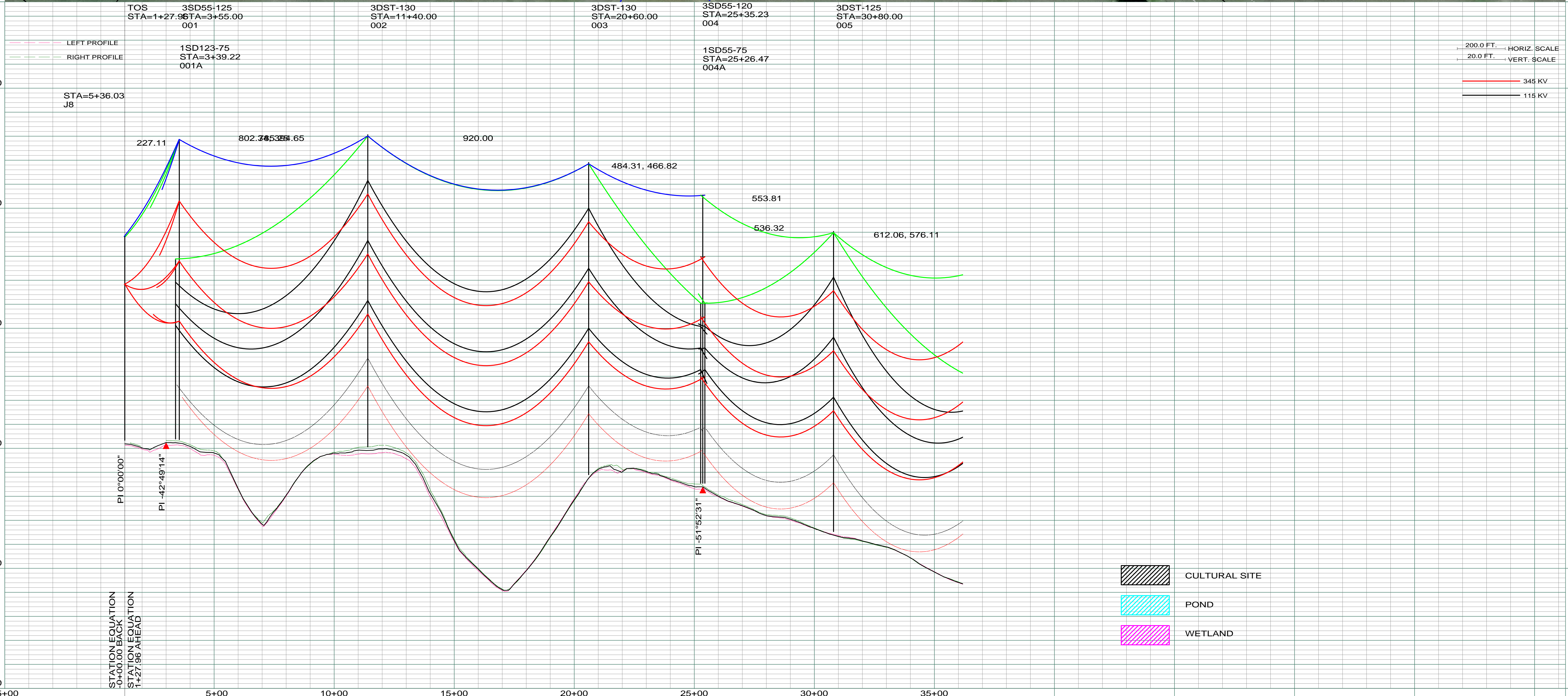
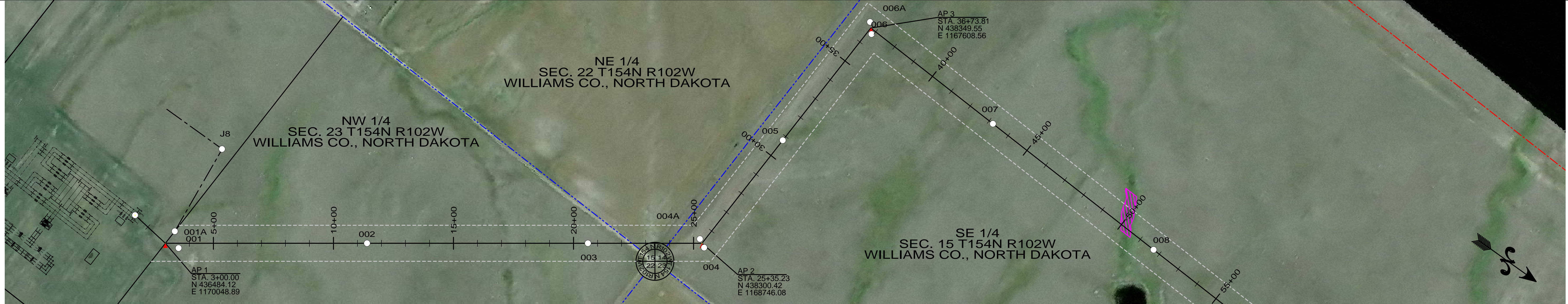
BASIN ELECTRIC POWER COOPERATIVE
 1717 EAST INTERSTATE AVENUE
 BISMARCK, NORTH DAKOTA
 PHONE 701-223-0441



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUED FOR CONSTRUCTION	CDB	CDB	GCC	05/31/12	5					
2	-	-	-	-							
3	-	-	-	-							
4	-	-	-	-							

STATE NAME: NORTH DAKOTA		ZONE: 3301 NORTH INTL FT NAD83		DESIGN BY: C. BAUER		04/09/12	
CONDUCTOR		SIZE	STRINGING TENSION	NESC TENSION	DESIGN R.S.	ACTUAL R.S.	DRAWN BY: C. BAUER
230KV	1272 MCM 45/7 ACSR BITTERN	-	12,617	600	605.7		04/09/12
115KV	795 MCM 45/7 ACSR TERN	-	8,177	600	612.5		
OPGW	AC 71/571	-	6,936	600	607.4		

FACILITY: TRANSMISSION SYSTEM MAINTENANCE		LOCATION UNIT: 288-230/115KV LINE - JUDSON SUBSTATION TO WILLISTON SUBSTATION	
JUDSON SUB TO WILLISTON SUB		230/115KV TRANSMISSION LINE	
PLAN AND PROFILE		SCALE: AS SHOWN	
BASIN DRAWING NO. 288-090-T3-003		COUNTY NAME: WILLIAMS	
REV. 1			



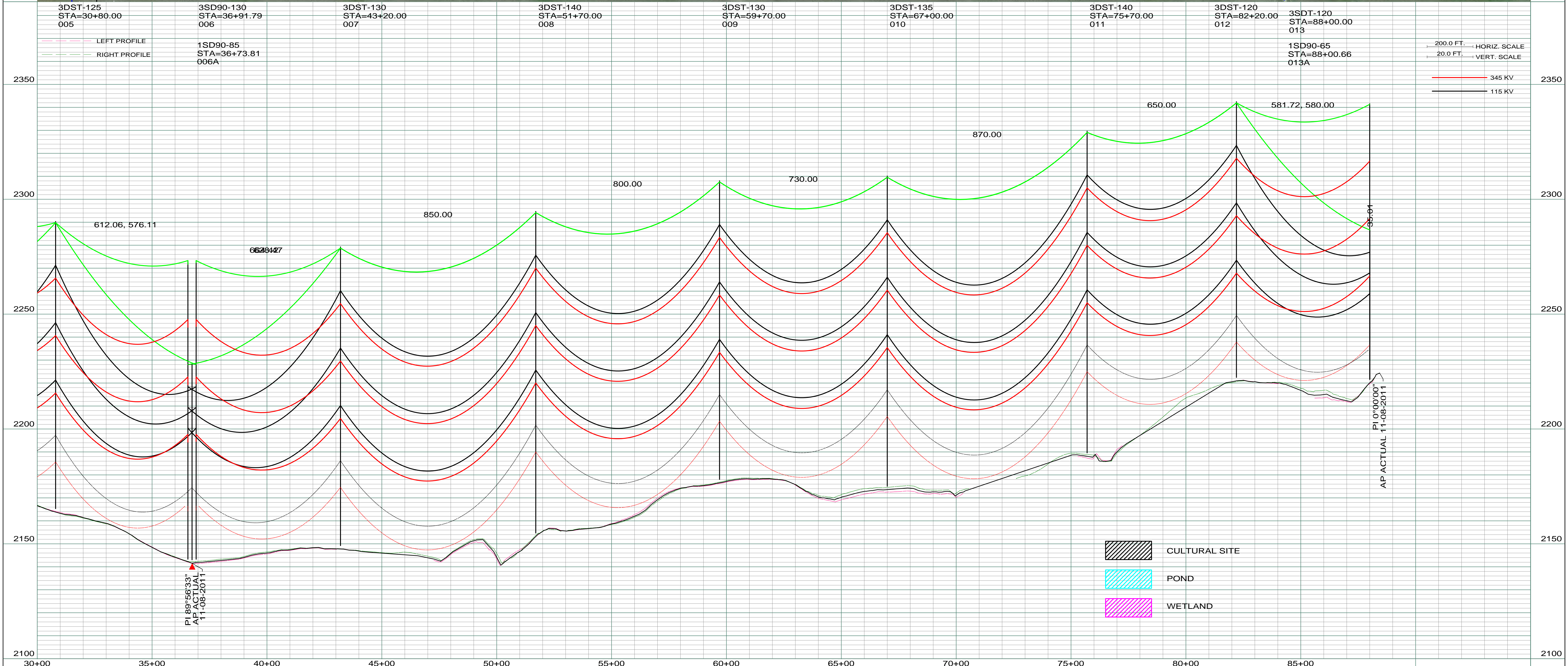
REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUED FOR CONSTRUCTION	CDB	CDB	GCC	05/31/12	5					
2	STRUCTURE 003 MOVED 20-FEET AHEAD TO STA. 20+60	CDB	CDB	GCC	06/04/12						
3											
4											

STATE NAME:	NORTH DAKOTA	ZONE:	3301 NORTH
DESIGN INFORMATION			
CONDUCTOR 345KV	2306.2 MCM 45/7 ACSR	TBD	21,283
CONDUCTOR 115KV	795 MCM 45/7 ACSR TERN	TBD	8,177
OPGW	AC 71/571	TBD	6,936

DESIGN BY:	C. BAUER	04/09/12
DRAWN BY:	C. BAUER	04/09/12
DESIGN CK:	G. CHRISTENSON	04/09/12
DRAFT CK:		
APPROVED:		

FACILITY:	TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT:	291-345/115KV LINE - JUDSON SUBSTATION TO NESET SUBSTATION
JUDSON SUBSTATION TO NESET SUBSTATION	
345/115KV TRANSMISSION LINE	
PLAN AND PROFILE	

SCALE:	AS SHOWN	COUNTY NAME:	WILLIAMS
BASIN DRAWING NO.	291-090-T3-001	REV.	2



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUED FOR CONSTRUCTION	CDB	CDB	GCC	05/31/12	5					
2	STRUCTURE 013 & 013A MOVED 10-FEET AHEAD TO STA. 88+00	CDB	CDB	GCC	06/04/12						
3											
4											

DESIGN INFORMATION					
CONDUCTOR	SIZE	STRINGING TENSION	NESC TENSION	DESIGN R.S.	ACTUAL R.S.
345KV	2306.2 MCM 45/7 ACSR	TBD	21,283	750	752.5
115KV	795 MCM 45/7 ACSR TERN	TBD	8,177	750	755.1
OPGW	AC 71/571	TBD	6,936	750	752.5

DESIGNER		DATE	
DESIGN BY:	C. BAUER	04/09/12	
DRAWN BY:	C. BAUER	04/09/12	
DESIGN CK:	G. CHRISTENSON	04/09/12	
DRAFT CK:			
APPROVED:			

FACILITY:	
TRANSMISSION SYSTEM MAINTENANCE	
LOCATION UNIT:	
291-345/115KV LINE - JUDSON SUBSTATION TO NESET SUBSTATION	
JUDSON SUBSTATION TO NESET SUBSTATION	
345/115KV TRANSMISSION LINE	
PLAN AND PROFILE	

SCALE:		COUNTY NAME:	
AS SHOWN		WILLIAMS	
BASIN DRAWING NO.		REV.	
291-090-T3-002		2	

BASIN ELECTRIC POWER COOPERATIVE
 1717 EAST INTERSTATE AVENUE
 BISMARCK, NORTH DAKOTA
 PHONE 701-223-0441