

CUT-FILL VALUES ON PAD PERIMETER					
Point Label	Station	Offset	Existing Elev.	Graded Elev.	Cut (+) Fill (-)
A	0+00.00	0.00	6099.53	6093.80	5.73
B	0+00.00	-70.00	6102.07	6093.91	8.16
C	0+00.00	-145.00	6104.77	6094.04	10.73
D	0+25.00	-170.00	6104.79	6094.10	10.69
E	2+10.00	-170.00	6102.32	6094.40	7.92
F	3+35.00	-170.00	6099.02	6094.16	4.86
G	5+05.00	-170.00	6093.53	6093.83	-0.30
H	5+30.00	-145.00	6092.34	6093.76	-1.42
I	5+30.00	0.00	6088.62	6093.48	-4.86
J	5+30.00	155.00	6085.66	6093.36	-7.70
K	5+05.00	180.00	6085.71	6093.33	-7.62
L	3+35.00	180.00	6088.86	6093.33	-4.47
M	2+10.00	180.00	6091.82	6093.33	-1.51
N	0+25.00	180.00	6093.75	6093.33	0.42
O	0+00.00	155.00	6094.89	6093.43	1.46



WELL SITE DESIGN AND CONSTRUCTION NOTES:

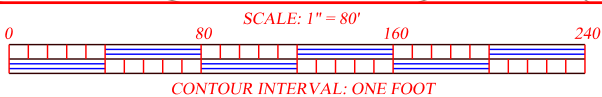
1. The graded well pad elevation was selected to approximate balance of excavation to embankment and to provide a stockpile of earth for the eventual frac pit reclamation.
2. The approximate volume of the frac pit is 3,850 C.Y. Material for frac pit reclamation will be obtained from the waste material stockpile.
3. Within the computed catch lines, the area of the proposed pad is 4.83 acres and the waste material stockpile area is 0.37 acres. This area does not include the area of the topsoil stockpiles nor the small additional area required for grading machine travel. The estimated area of the disturbance limits as shown is 6.27 acres.
4. The area of the road within the computed catch lines is 0.32 acres. The area within the road and pipe line boundary is 0.44 acres. The area within the pipe line boundary is 0.05 acres.
5. Approximately 300 feet of 9" diameter straw wattles is planned for installation.

ESTIMATED EARTHWORK QUANTITIES

PAD TOPSOIL (6" DEPTH)	3,890 C.Y.
ROAD TOPSOIL (3" DPTH)	130 C.Y.
PAD EXCAVATION	18,050 C.Y.
ROAD EXCAVATION	10 C.Y.
PAD EMBANKMENT (10% SHRINK ASSUMED)	12,980 C.Y.
ROAD EMBANKMENT (10% SHRINK ASSUMED)	1,230 C.Y.
WASTE MATERIAL	3,850 C.Y.
TOTAL EARTHWORK VOLUME	22,080 C.Y.

PREPARED BY:
P.E. GROSCH CONSTRUCTION, INC.
SURVEYORS - ENGINEERS - CONSTRUCTORS
P. O. BOX 36 WORLAND, WY 82401 (307)347-3332

SUR:	AMG	7/08/13	PRJ. #:	31A12
DES:	SAG	5/16/15	REC:	lidar / 85-44
DWN:	SAG	5/16/15	FILE:	/GpkData-v8/Client/Black Hills E&P/Colo/Mesa
REV:			DWG:	31a12 WF 10-31-13/Dgn/10-31R7_ex6A-site

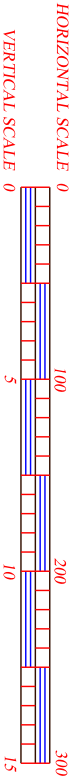
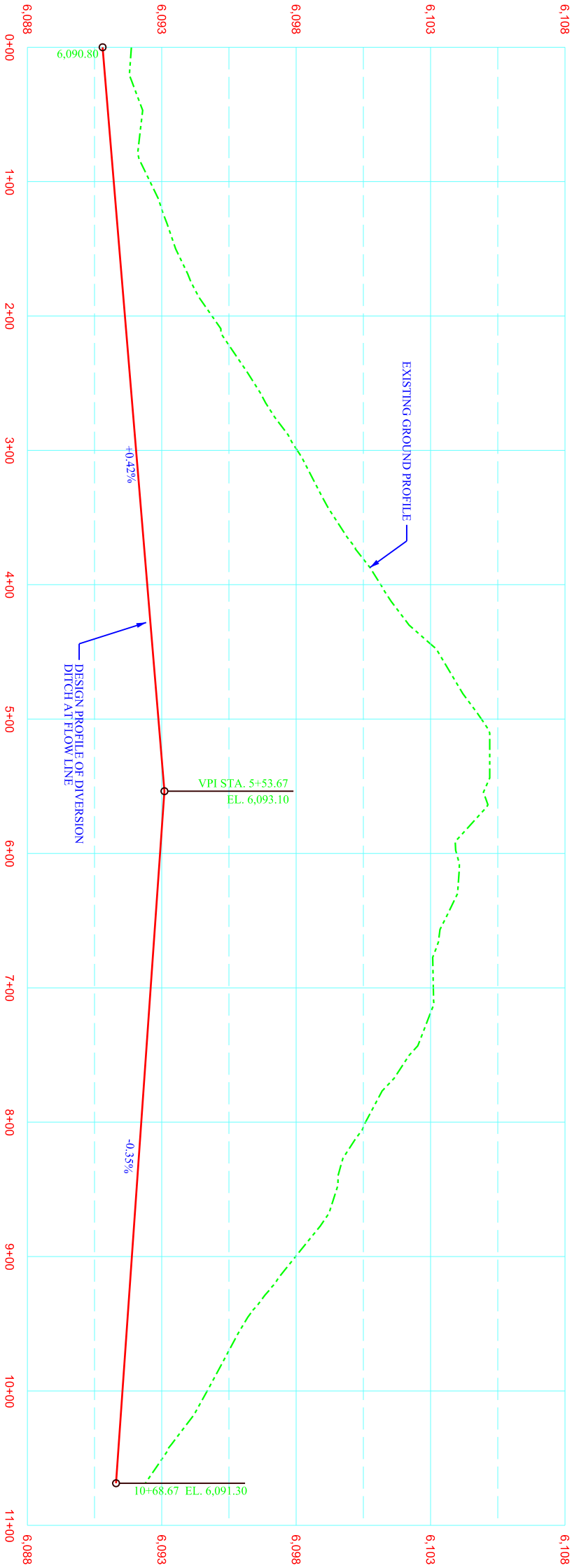


OWNER
**BLACK HILLS PLATEAU
PRODUCTION COMPANY, LLC**
DENVER, COLORADO

PROJECT
WINTER FLATS 10-31-99AH, 10-31-99BH, 10-31-99CH
& WINTER FLATS 10-31-99DH
NW¼ NE¼, SECTION 10, T. 9 S., R. 99 W.
MESA COUNTY, COLORADO

DRAWING TITLE
EXHIBIT VI-A
DRAWING VI-A
WELL SITE GRADING PLAN

Diversion Ditch Stakeout Data						
Station	Hinge Point Offset	Hinge Point Elevation	Catch Point Offset	Catch Point Elevation	Cut (+) Fill (-)	Slope Ratio
0+00.00	-5.00	6090.80	-6.32	6091.68	0.88	1.5:1
0+20.00	-5.00	6090.88	-6.08	6091.60	0.72	1.5:1
0+25.00	0.00	6090.90	-1.96	6091.82	0.92	2.1:1
1+50.00	0.00	6091.42	-3.01	6093.48	2.06	1.5:1
2+01.84	0.00	6091.64	-4.98	6094.96	3.32	1.5:1
3+56.84	0.00	6092.28	-11.29	6102.20	9.92	1.5:1
4+26.84	0.00	6092.57	-14.45	6102.20	9.63	1.5:1
5+01.84	0.00	6092.88	-18.21	6105.02	12.14	1.5:1
5+53.67	0.00	6093.10	-18.64	6105.53	12.43	1.5:1
7+38.67	-5.00	6092.45	-16.11	6103.19	10.74	1.5:1
8+63.67	0.00	6092.02	-11.25	6099.52	7.50	1.5:1
10+33.67	0.00	6091.42	-3.29	6093.61	2.19	1.5:1
10+43.67	0.00	6091.39	-3.96	6093.24	1.85	2.1:1
10+48.67	-5.00	6091.37	-7.69	6093.16	1.79	1.5:1
10+68.67	-5.00	6091.30	-6.74	6092.46	1.16	1.5:1

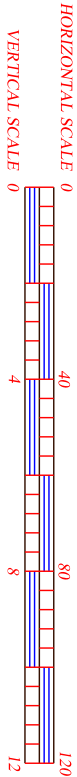
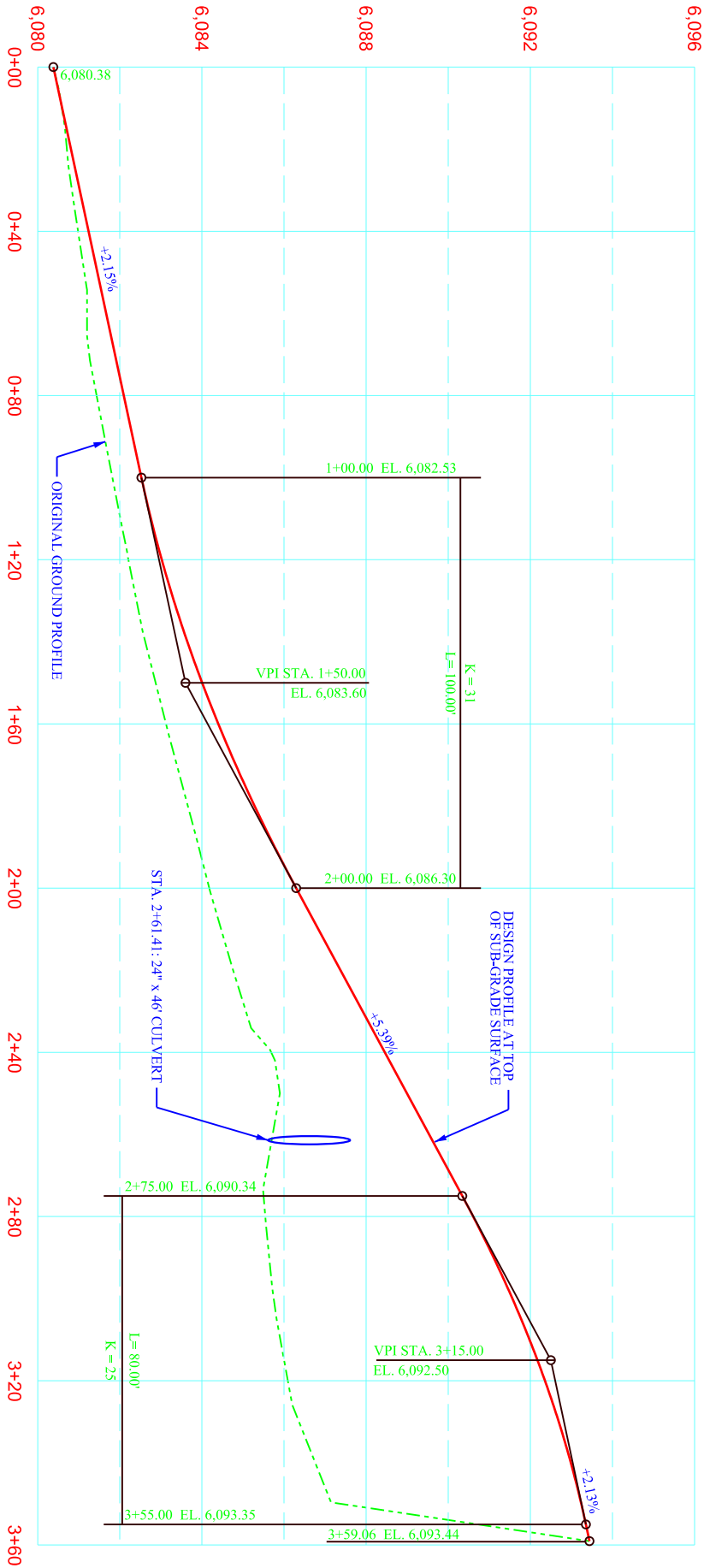


BLACK HILLS PLATEAU
PRODUCTION COMPANY, LLC
DENVER, COLORADO

EXHIBIT VI-B: PROPOSED DITCH PROFILE
WINTER FLATS 10-31-99AH, 10-31-99BH,
WINTER FLATS 10-31-99CH, 10-31-99DH,
NW¼ NE¼, SECTION 10, T 9 S, R 99 W
MESA COUNTY, COLORADO

Prepared By:
P.E. GROSCH CONSTRUCTION, INC.
Surveyors - Engineers - Constructors
P.O. Box 36 1028 Lane 10 1/2
Worland, Wyoming 82401
Ph: 307-347-3332 Fax: 307-347-8589
E-mail: peginc@tribesp.com

PRJ. NO.	31A12	SURVEY		
DWG. NO.	10-31R7_ex6B-dit-pro	DESIGN	SAG	5/15/15
FILE	31a12	DRAWN	SAG	5/15/15
REC.	lidar	REVISION		



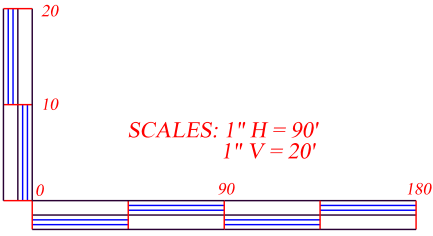
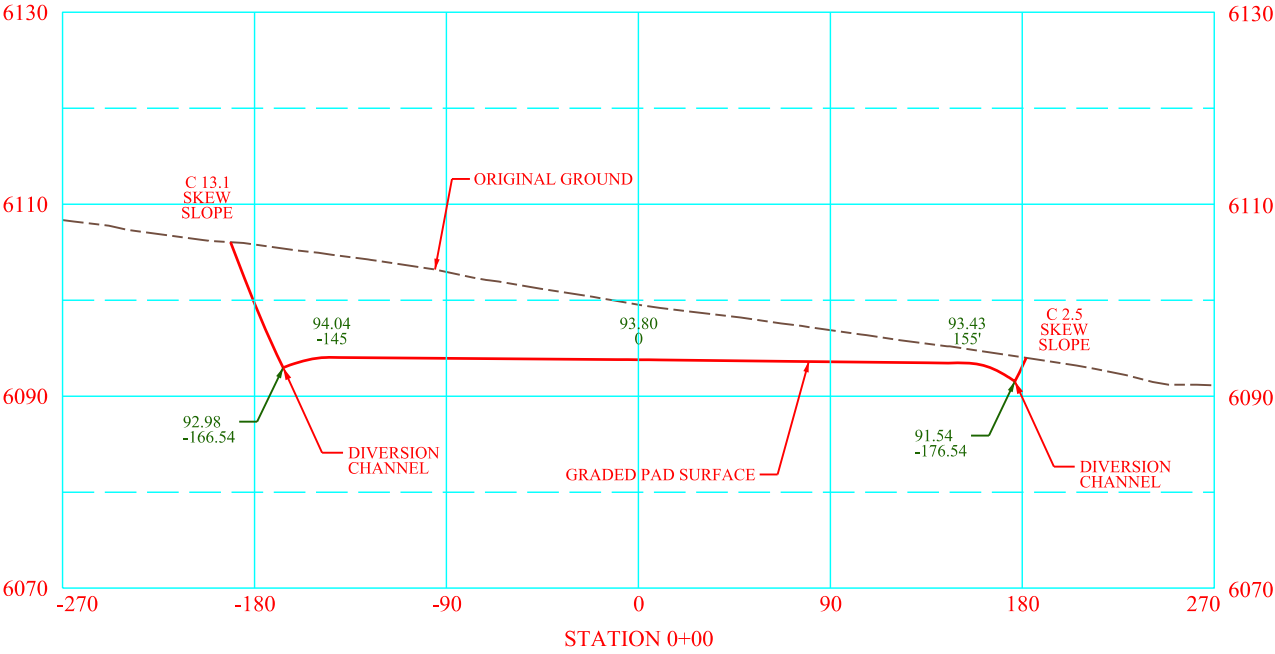
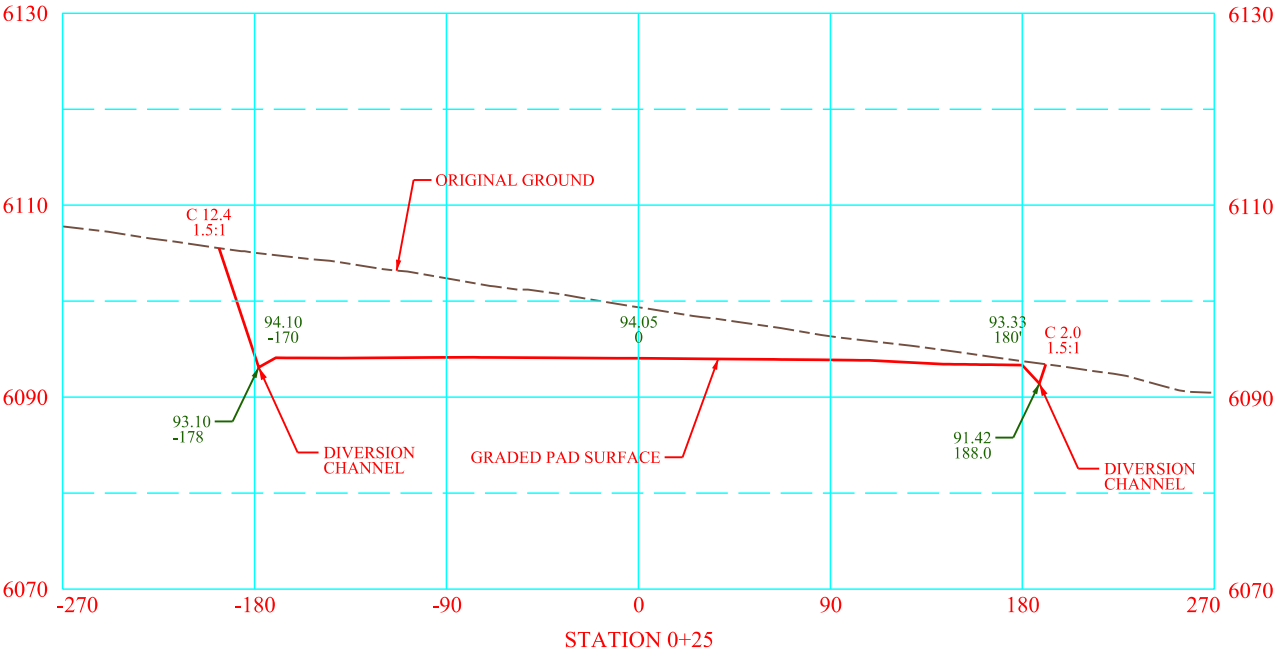
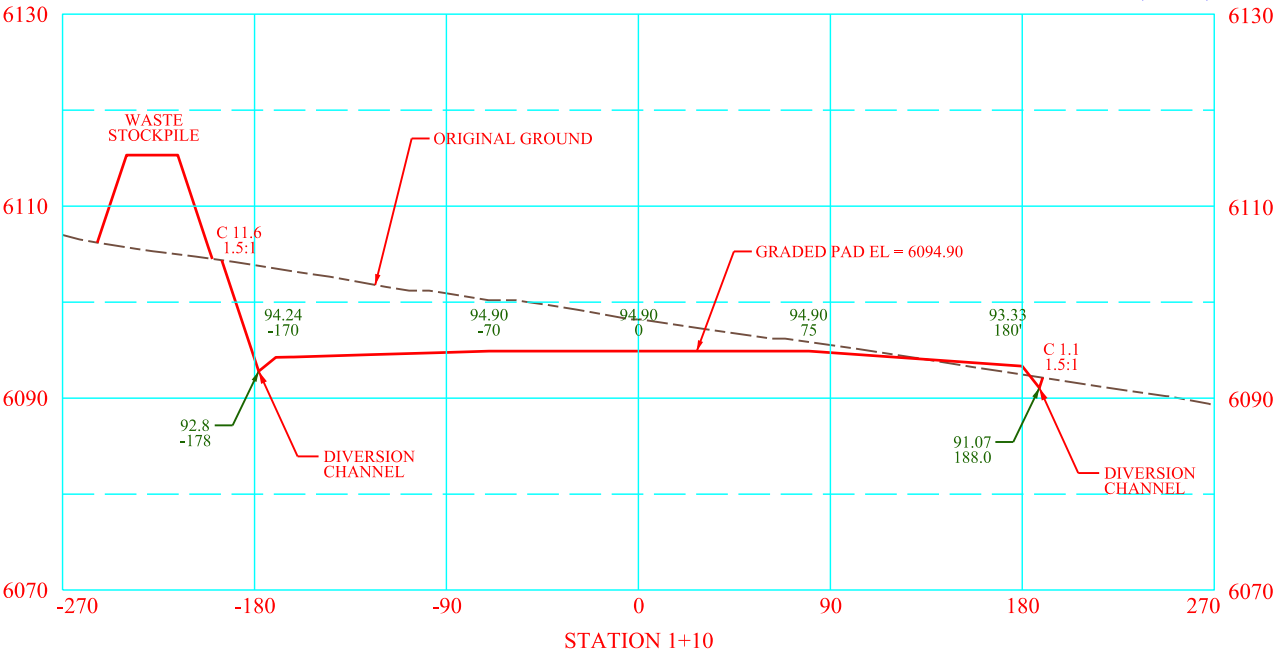
BLACK HILLS PLATEAU
PRODUCTION COMPANY, LLC
DENVER, COLORADO

EXHIBIT VI-C: PROPOSED ROAD PROFILE
WINTER FLATS 10-31-99AH, 10-31-99BH,
WINTER FLATS 10-31-99CH, 10-31-99DH,
NW¼ NE¼, SECTION 10, T 9 S, R 99 W
MESA COUNTY, COLORADO

Prepared By:
P.E. GROSCH CONSTRUCTION, INC.
Surveyors - Engineers - Constructors
P.O. Box 36 1028 Lane 10 1/2
Worland, Wyoming 82401
Ph: 307-347-3332 Fax: 307-347-8589
E-mail: peginc@tribcsp.com

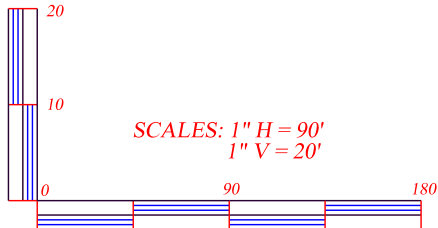
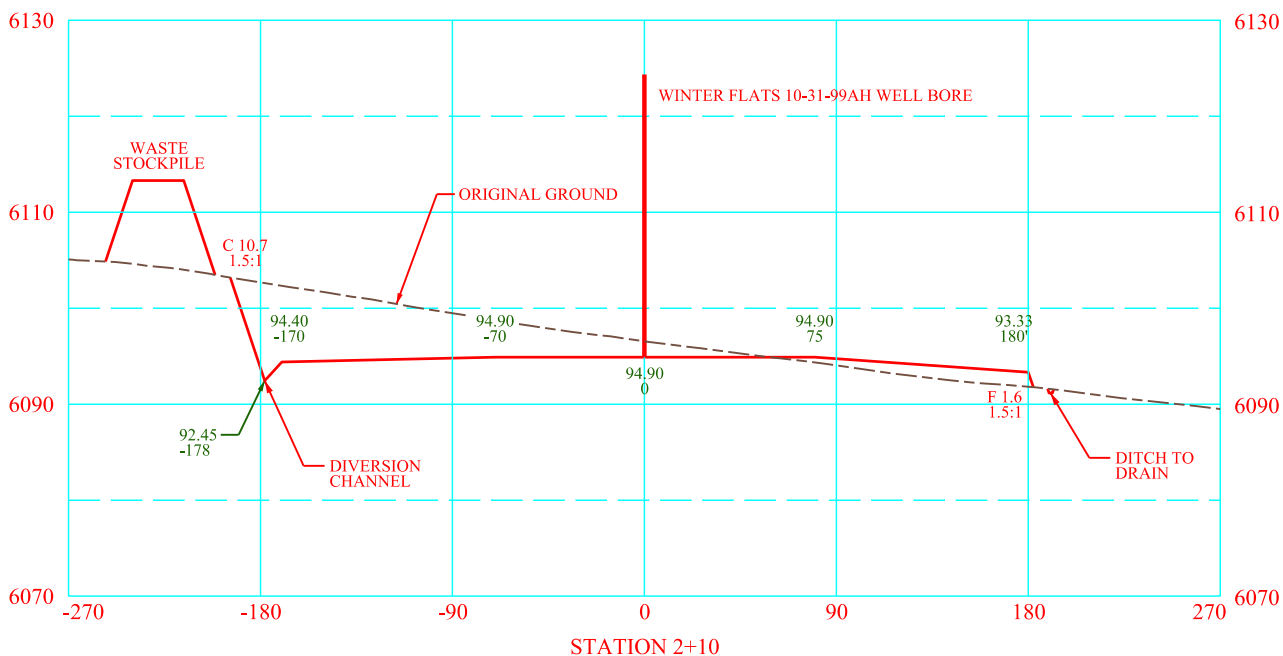
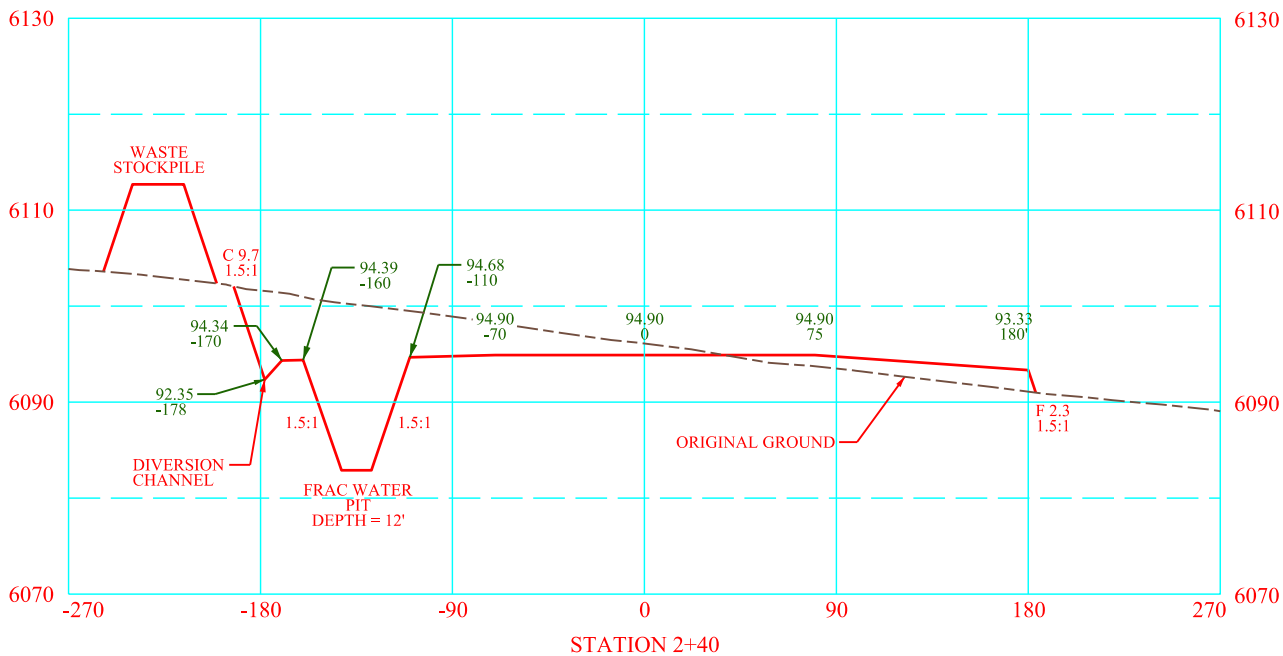
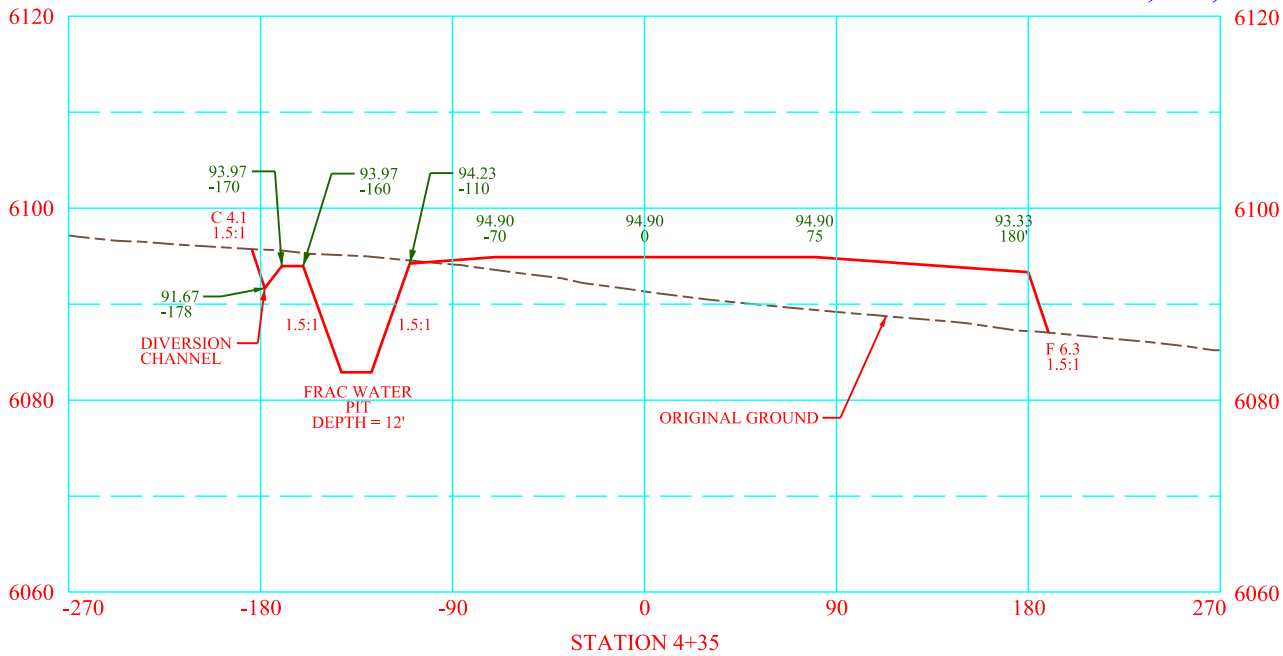
PRJ. NO.	31A12	SURVEY		
DWG. NO.	10-31R7_ex6C-rd-pro	DESIGN	SAG	5/15/15
FILE	31a12	DRAWN	SAG	5/15/15
REC.	lidar	REVISION		

EXHIBIT VII-A: WELL SITE CROSS SECTIONS (1 of 3)
BLACK HILLS PLATEAU PRODUCTION COMPANY, LLC.
WINTER FLATS 10-31-99AH, BH, CH & DH



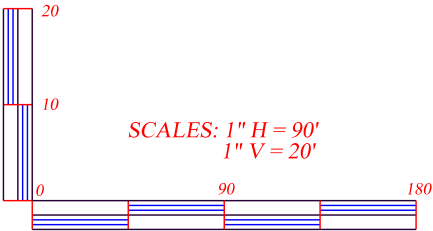
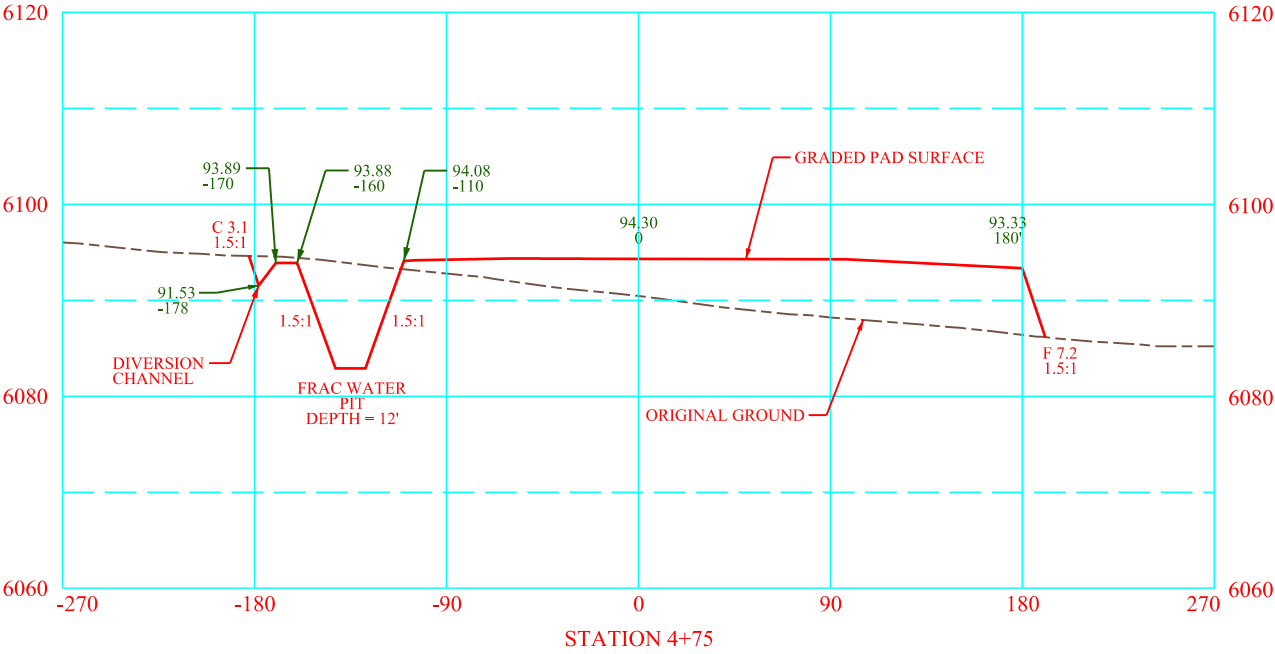
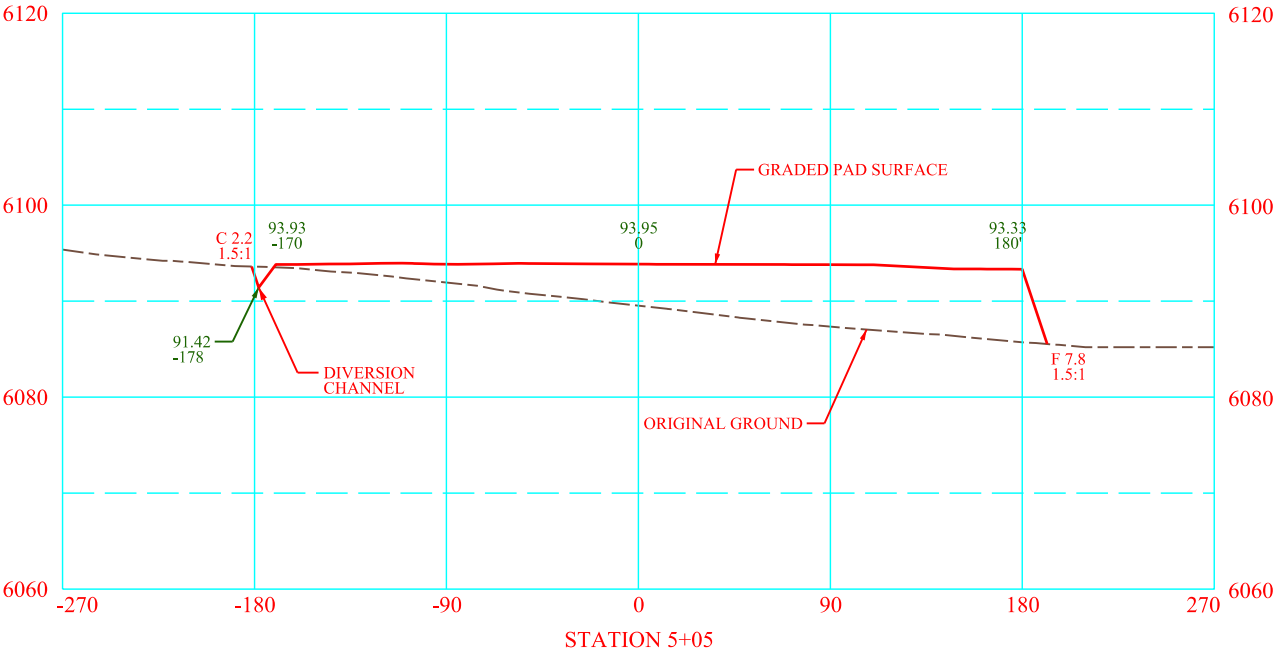
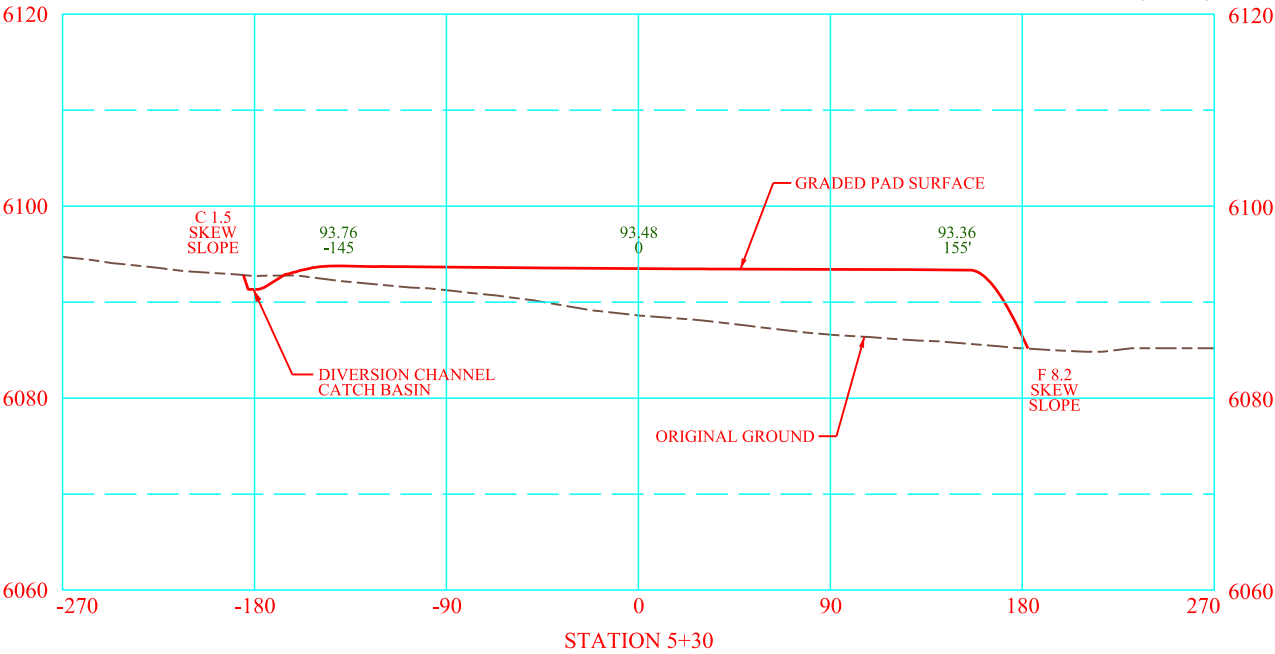
PROJECT:	EXHIBIT VII-A WELL SITE CROSS SECTIONS (1 of 3) WINTER FLATS 10-31-99AH WINTER FLATS 10-31-99BH WINTER FLATS 10-31-99AH WINTER FLATS 10-31-99AH NW¼ NE¼, SECTION 10, T 9 S, R 99 W MESA COUNTY, COLORADO	PRJ. #: 31A12	SUR:	AMG	7/08/13
		REC. #: lidar / 85-44	DES:	SAG	5/16/15
		DWG #: Black Hills E&P/Colo/Mesa	DWN:	SML	5/18/15
		31a12 10-31-99/10-31R7_ex7-xsec	REV:		
OWNER:	BLACK HILLS PLATEAU PRODUCTION COMPANY, LLC DENVER, COLORADO	PREPARED BY: P.E. GROSCH CONSTRUCTION, INC. SURVEYORS - ENGINEERS - CONSTRUCTORS P. O. BOX 36 WORLAND, WY 82401 (307)347-3332			

EXHIBIT VII-B: WELL SITE CROSS SECTIONS (2 of 3)
BLACK HILLS PLATEAU PRODUCTION COMPANY, LLC.
WINTER FLATS 10-31-99AH, BH, CH & DH



PROJECT:	EXHIBIT VII-B WELL SITE CROSS SECTIONS (2 of 3) WINTER FLATS 10-31-99AH WINTER FLATS 10-31-99BH WINTER FLATS 10-31-99AH WINTER FLATS 10-31-99AH NW¼ NE¼, SECTION 10, T 9 S, R 99 W MESA COUNTY, COLORADO	PRJ. #: 31A12	SUR:	AMG	7/08/13
		REC. #: lidar / 85-44	DES:	SAG	5/16/15
		DWG #: Black Hills E&P/Colo/Mesa 31a12 10-31-99/10-31R7_ex7-xsec	DWN:	SML	5/18/15
			REV:		
OWNER:	BLACK HILLS PLATEAU PRODUCTION COMPANY, LLC DENVER, COLORADO	PREPARED BY: P.E. GROSCH CONSTRUCTION, INC. SURVEYORS - ENGINEERS - CONSTRUCTORS P. O. BOX 36 WORLAND, WY 82401 (307)347-3332			

EXHIBIT VII-C: WELL SITE CROSS SECTIONS (3 of 3)
BLACK HILLS PLATEAU PRODUCTION COMPANY, LLC.
WINTER FLATS 10-31-99AH, BH, CH & DH



PROJECT:	EXHIBIT VII-C	PRJ. #:	31A12	SUR:	AMG	7/08/13
	WELL SITE CROSS SECTIONS (3 of 3)	REC. #:	lidar / 85-44	DES:	SAG	5/16/15
	WINTER FLATS 10-31-99AH	DWG #:	Black Hills E&P/Colo/Mesa	DWN:	SML	5/18/15
	WINTER FLATS 10-31-99BH	31a12 10-31-99/10-31R7_ex7-xsec	REV:			
OWNER:	WINTER FLATS 10-31-99AH	PREPARED BY:				
	NW¼ NE¼, SECTION 10, T 9 S, R 99 W					
MESA COUNTY, COLORADO		P.E. GROSCH CONSTRUCTION, INC.				
BLACK HILLS PLATEAU		SURVEYORS - ENGINEERS - CONSTRUCTORS				
PRODUCTION COMPANY, LLC		P. O. BOX 36 WORLAND, WY 82401 (307)347-3332				
DENVER, COLORADO						