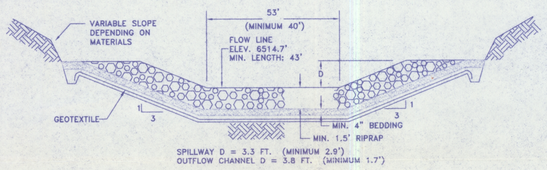
N6-K POND STAGE-CAPACITY

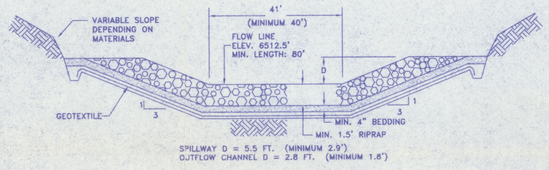
ELEV. (FT.-MSL)	STAGE (FT.)	AREA (AC.)	CAP. (AC.-FT.)	TOT. CAP. (AC.-FT.)	DESCRIPTION
6494.0	0.0	0.00	0.00	0.00	BOTTOM OF POND
6496.0	2.0	0.48	0.48	0.48	
6498.0	4.0	0.58	1.06	1.54	
6500.0	6.0	0.68	1.26	2.80	
6502.0	8.0	0.79	1.47	4.27	
6504.0	10.0	0.90	1.69	5.96	
6506.0	12.0	1.01	1.91	7.87	
6508.0	14.0	1.13	2.14	10.01	
6510.0	16.0	1.26	2.39	12.40	
6511.0	17.0	1.33	1.30	13.70	(INCISED ELEVATION)
6512.0	18.0	1.40	1.37	15.06	
6514.0	20.0	1.55	2.95	18.01	
6514.7	20.7	1.62	1.11	19.12	EMERGENCY SPILLWAY
6516.0	22.0	1.73	2.18	21.30	
6518.0	24.0	1.91	3.64	24.94	TOP OF EMBANKMENT

N6-L POND STAGE-CAPACITY

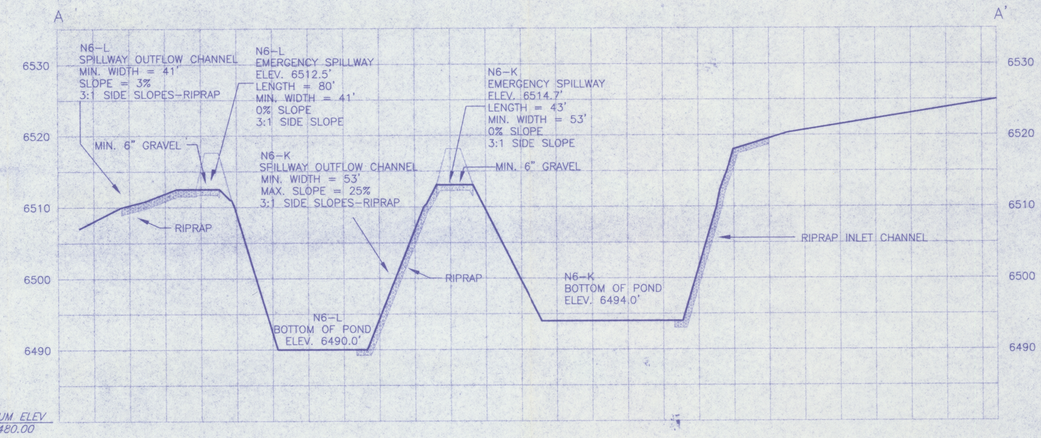
ELEV. (FT.-MSL)	STAGE (FT.)	AREA (AC.)	CAP. (AC.-FT.)	TOT. CAP. (AC.-FT.)	DESCRIPTION
6490.0	0.0	0.10	0.00	0.00	BOTTOM OF POND
6492.0	2.0	0.40	0.50	0.50	
6494.0	4.0	0.51	0.91	1.41	
6496.0	6.0	0.61	1.12	2.53	
6498.0	8.0	0.71	1.32	3.85	
6500.0	10.0	0.82	1.53	5.38	
6502.0	12.0	0.93	1.75	7.13	
6504.0	14.0	1.05	1.98	9.11	
6506.0	16.0	1.17	2.22	11.33	
6508.0	18.0	1.30	2.47	13.80	
6510.0	20.0	1.44	2.74	16.54	
6512.0	22.0	1.58	3.02	19.56	
6512.5	22.5	1.62	0.80	20.36	EMERGENCY SPILLWAY
6514.0	24.0	1.74	2.52	22.88	(INCISED ELEVATION)
6516.0	26.0	1.91	3.65	26.53	
6518.0	28.0	2.10	4.01	30.54	TOP OF EMBANKMENT



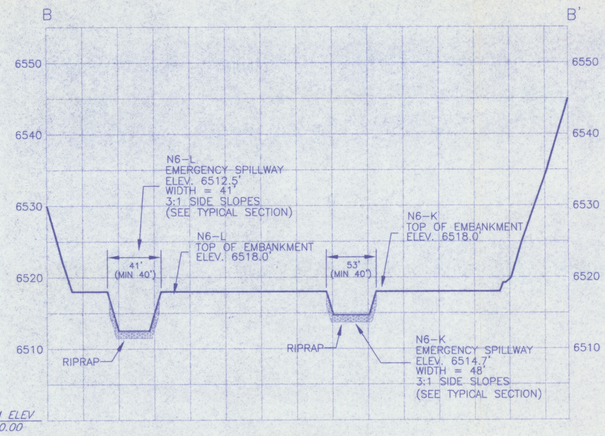
N6-K POND
TYPICAL SECTION OF EMERGENCY SPILLWAY
(NOT DRAWN TO SCALE)



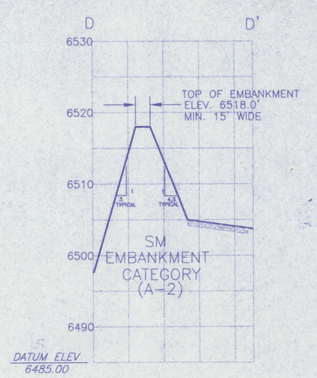
N6-L POND
TYPICAL SECTION OF EMERGENCY SPILLWAY
(NOT DRAWN TO SCALE)



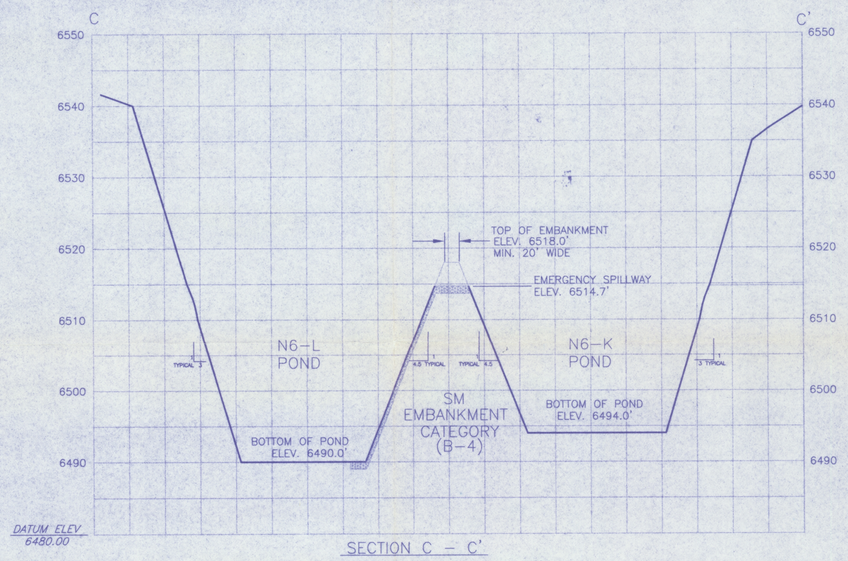
SECTION A - A'
SCALE: HORIZ. 1"=100'
VERT. 1"=10'



SECTION B - B'
SCALE: HORIZ. 1"=100'
VERT. 1"=10'



SECTION D - D'
SCALE: HORIZ. 1"=100'
VERT. 1"=10'



SECTION C - C'
SCALE: HORIZ. 1"=100'
VERT. 1"=10'

ENGINEER'S CERTIFICATION

I CERTIFY THAT THIS SILTATION STRUCTURE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED MINING PERMIT AND THAT THE INFORMATION CONTAINED HEREIN ACCURATELY DESCRIBES THE CONSTRUCTED STRUCTURE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Registered Professional Engineer (Civil) CERTIFICATE NO. 18782 STATE OF ARIZONA

JAMES J. SCHLENKER
Corporate Engr. Mgr.
Peabody Western Coal Company

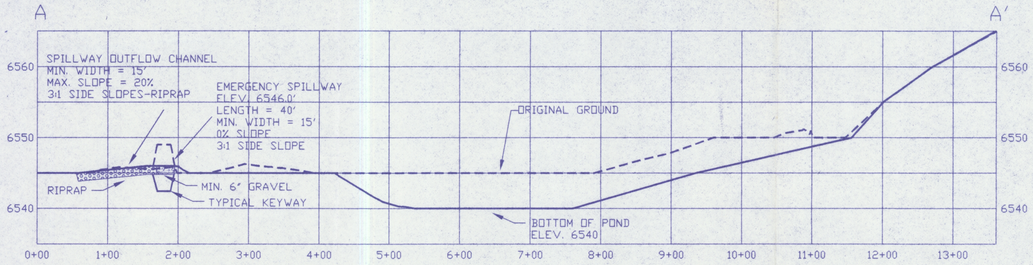
ARIZONA P.E. 18782
Date: JUL 18 1997

REVISIONS		
CHK'D	DATE	DESCRIPTION
JGS	07/18/97	AERIAL MAPPING REVISION

N6-K & N6-L
SEDIMENTATION PONDS AS-BUILT

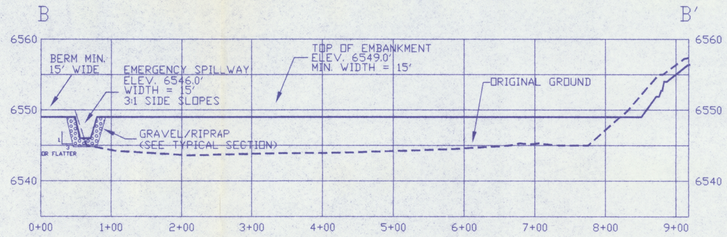
BLACK MESA MINE
PEABODY WESTERN 1300 S. YALE FLAGSTAFF, AZ 86001

DESIGNED BY: PWCC	SCALE: 1"=100'
DRAWN BY: SMM	DRAWING DATE: 07-17-97
CHECKED BY: JGS	PHOTO DATE: 06-27-97
DWG FILE: N6-KAN~1.DWG	CONTOUR INTERVAL: 2'



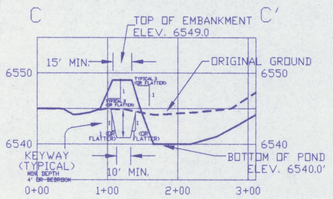
SECTION A - A'

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



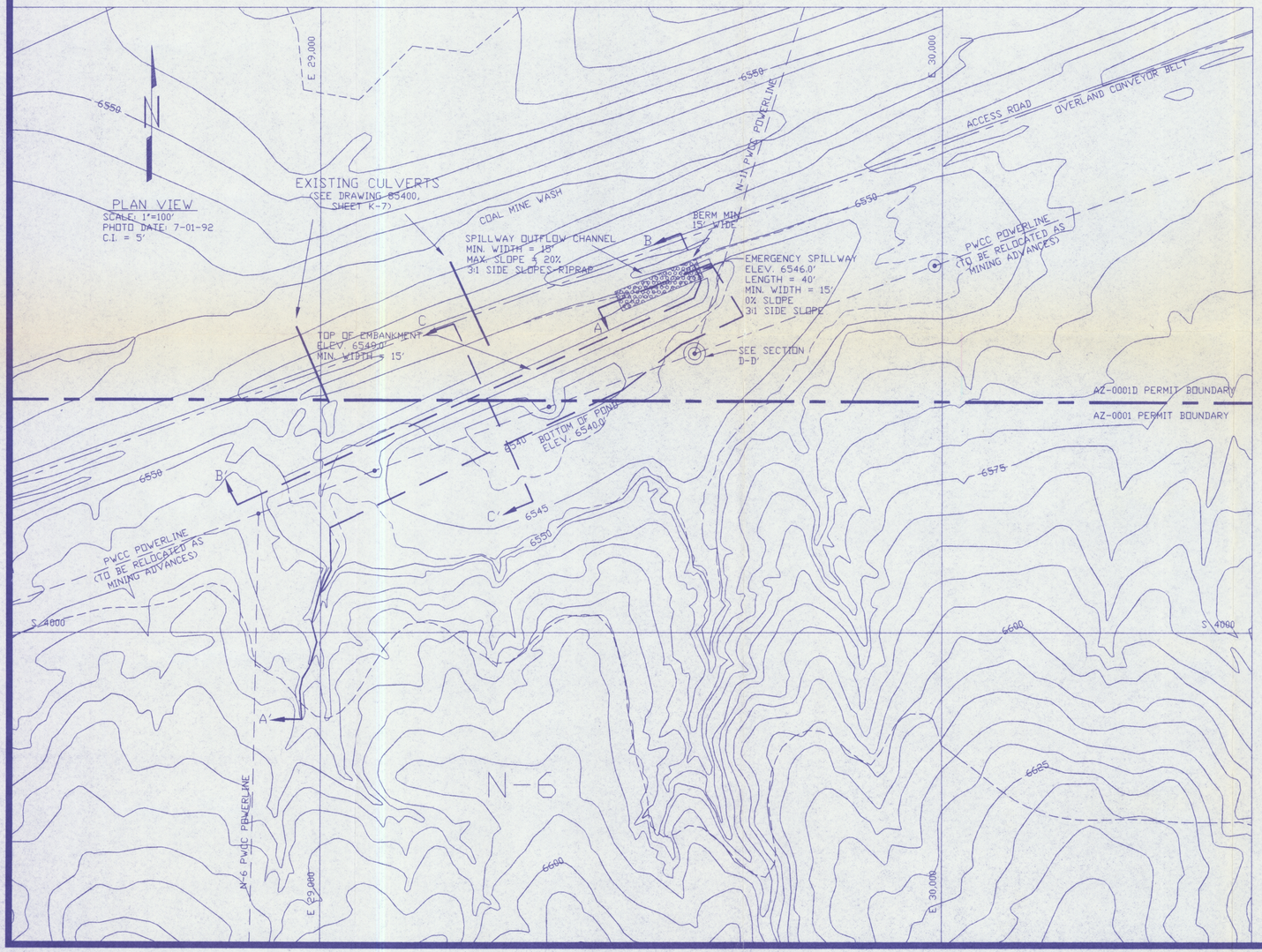
SECTION B - B'

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



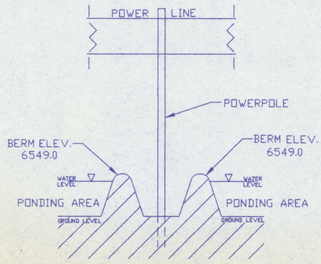
SECTION C - C'

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

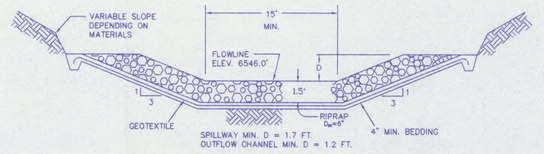


PLAN VIEW

SCALE: 1"=100'
PHOTO DATE: 7-01-92
C.I. = 5'



SECTION D-D'
TYPICAL SECTION OF GUIDE WIRE
AND POWERPOLE PROTECTION
(NOT DRAWN TO SCALE)



PROPOSED N6-M POND
TYPICAL SECTION OF EMERGENCY SPILLWAY
(NOT DRAWN TO SCALE)

N6-M POND STAGE CAPACITY

ELEV. (FT.-MSL)	STAGE (FT.)	AREA (ACRES)	CAP. (AC.-FT.)	TOT. CAP. (AC.-FT.)	DESCRIPTION
6540	0.00	0.25	0.00	0.00	BOTTOM OF POND
6541	1.00	0.58	0.40	0.40	
6542	2.00	1.02	0.79	1.19	
6543	3.00	1.60	1.31	2.50	
6544	4.00	2.31	1.94	4.44	
6545	5.00	3.15	2.72	7.16	
6546	6.00	3.72	3.43	10.59	EMERGENCY SPILLWAY
6547	7.00	4.35	4.03	14.62	
6548	8.00	5.02	4.68	19.30	
6549	9.00	5.74	5.38	24.68	TOP OF EMBANKMENT

DEC 1996
APPROVED

ENGINEER'S CERTIFICATION

18782
JAMES G. SCHLEWADT

JAMES G. SCHLEWADT
COMPLIANCE ENGINEERING MGR.
Peabody Western Coal Company

ARIZONA P.E. 18782
Date: NOV 15 1996

NOTES:
1) General location, see Drawing No. 85400, Sheet K-7 and Drawing No. 85405.
2) See Chapter 6, Black Mesa PAP for Construction Specifications.
3) See Vol. 2, Chapter 6, Attachment D, Sections 1-3 for description of Geotechnical Evaluation.
4) Salvage topsoil in accordance with approved topsoil salvage plan.
5) Reclamation of the disturbed area above the high waterline shall be in accordance with the approved reclamation plan.
6) Ponding area side slopes, typical 3:1 slope or flatter and blend into natural topography.

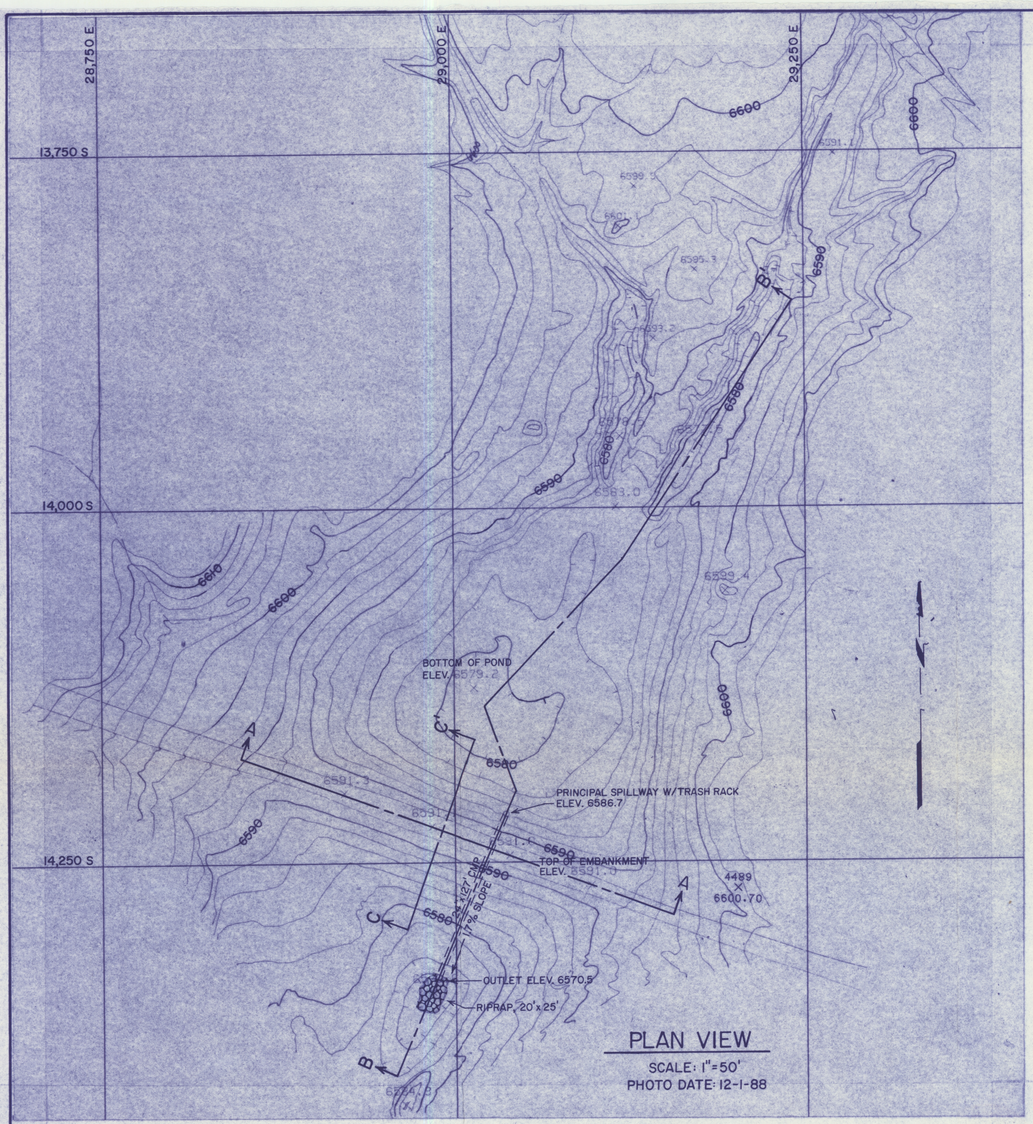
EXHIBIT 1

PROPOSED TEMPORARY N6-M SEDIMENTATION POND DESIGN

BLACK MESA MINE

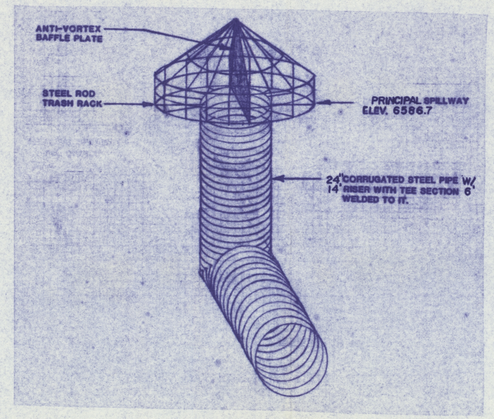
PEABODY WESTERN 1300 S. YALE FLAGSTAFF, AZ 86001

DESIGNED BY: PWCC	SCALE: 1"=100'
DRAWN BY: SMM	DRAWING DATE: 11-15-96
CHECKED BY: JGS	PHOTO DATE: 07-01-92
DWG FILE: N6-MP01.DWG	CONTOUR INTERVAL: 5'



PLAN VIEW

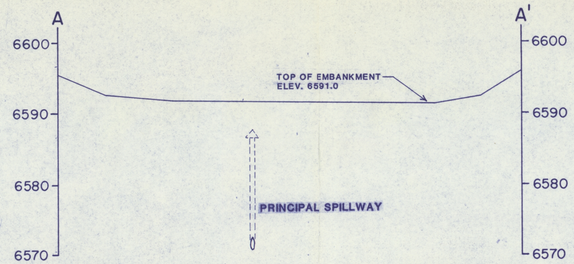
SCALE: 1"=50'
PHOTO DATE: 12-1-88



PRINCIPAL SPILLWAY

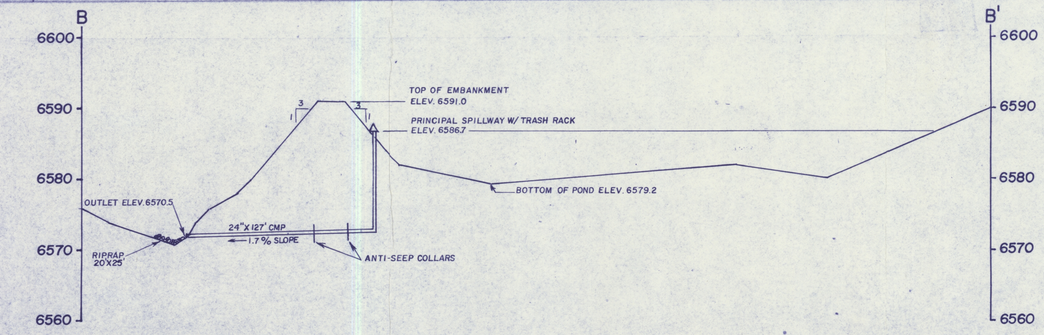
NOT DRAWN TO SCALE

Elevation (ft.-msl)	Stage (ft.)	Area (Acres)	Capacity (Ac.-ft.)	Total Capacity (Ac.-ft.)	Description
6579.2	0	0	0	0	Bottom of Pond
6580	0.8	.15	.06	.06	
6582	2.8	.47	.62	.68	
6584	4.8	.85	1.32	2.00	
6586	6.8	1.04	1.89	3.89	
6586.7	7.5	1.12	.76	4.65	Principal Spillway
6588	8.8	1.27	1.55	6.20	
6590	10.8	1.52	2.79	8.99	
6591.0	11.8	1.76	1.64	10.63	Top of Embankment



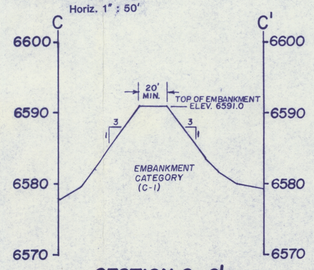
SECTION A-A'

SCALE : Vert. 1" : 10'
Horiz. 1" : 50'



SECTION B-B'

SCALE : Vert. 1" : 10'
Horiz. 1" : 50'



SECTION C-C'

SCALE : Vert. 1" : 10'
Horiz. 1" : 50'

I certify this Siltation Structure was constructed in accordance with the approved mining permit and that the information contained herein accurately describes the constructed structure to the best of my knowledge and belief.

REGISTERED PROFESSIONAL ENGINEER CERTIFICATE NO. 18782 JAMES GARY SCHLENVOGT STATE OF ARIZONA U.S.A.

James G. Schlenvogt
Senior Engineer
Peabody Coal Company

Arizona P.E. #18782

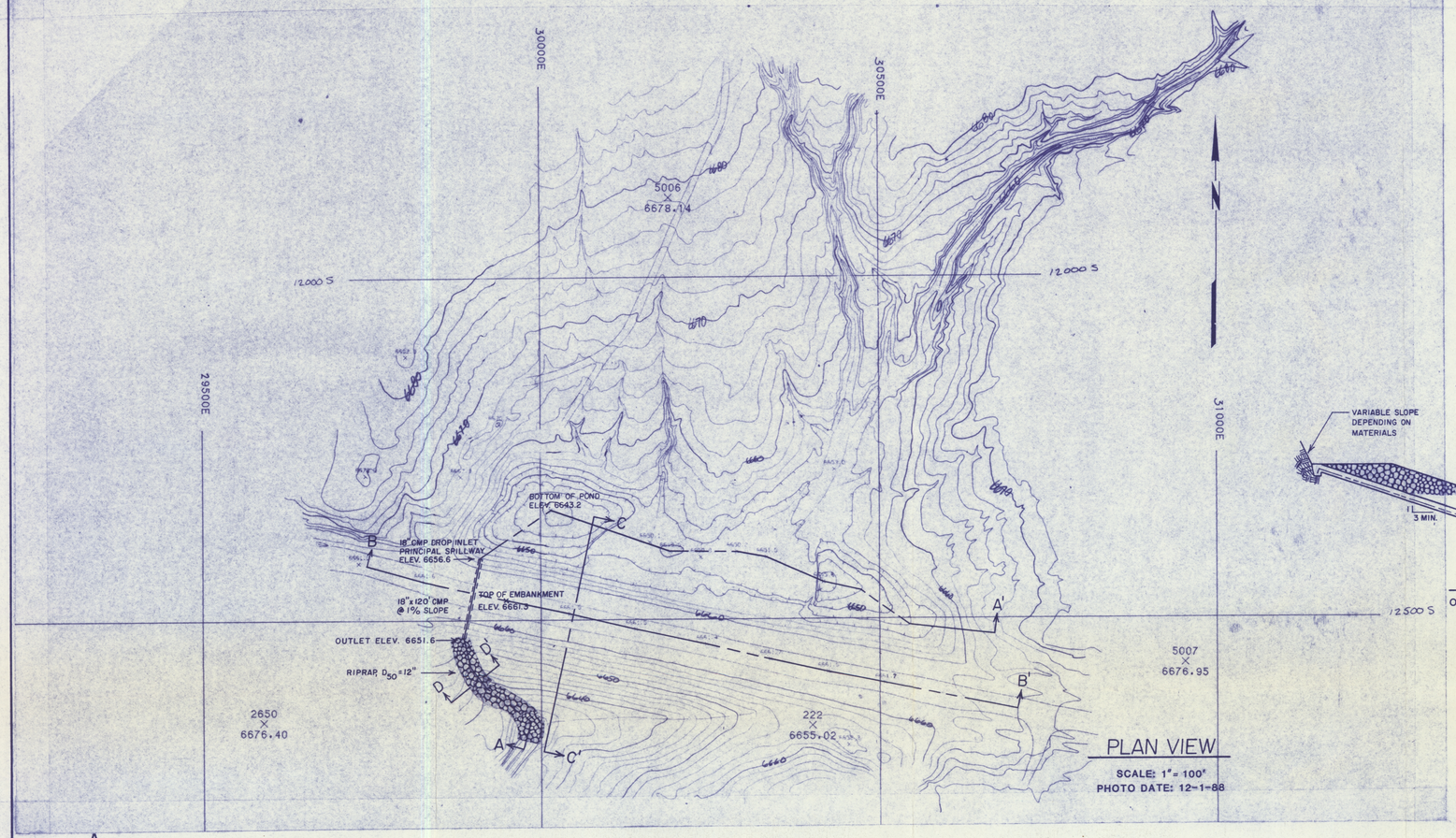
Date: JUN 20 1989

PEABODY COAL COMPANY
BLACK MESA — KAYENTA MINE
1300 SOUTH YALE FLAGSTAFF, AZ. 86001

N6-TI POND

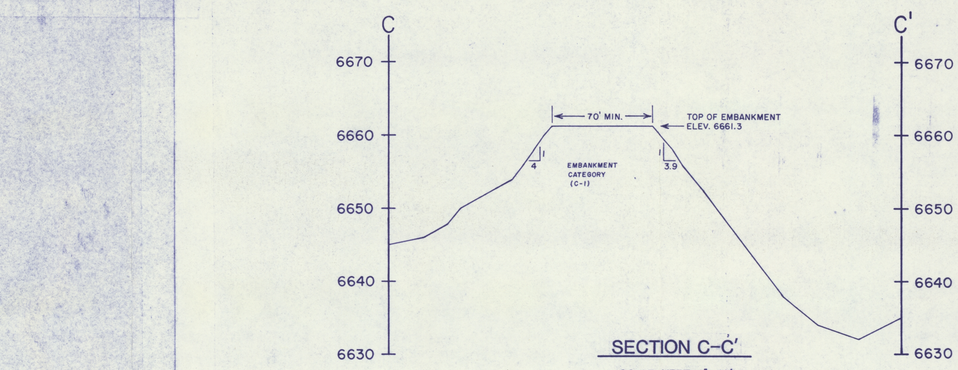
(AS-BUILT)

SCALE: HORIZ. 1"=50' VERT. 1"=10'	DRAWN BY: C.C.H.
DATE: 6-20-89	DRAWING NO:
REVISION:	APPROVED BY: J.G.S.



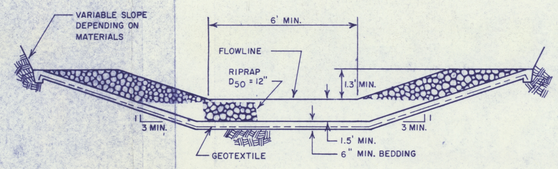
PLAN VIEW

SCALE: 1"= 100'
PHOTO DATE: 12-1-88



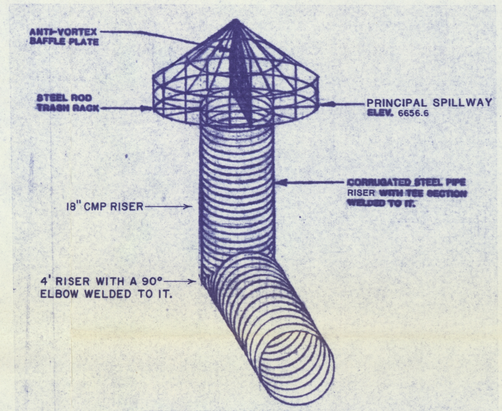
SECTION C-C'

SCALE: VERT. 1"= 10'
HORIZ. 1"= 50'



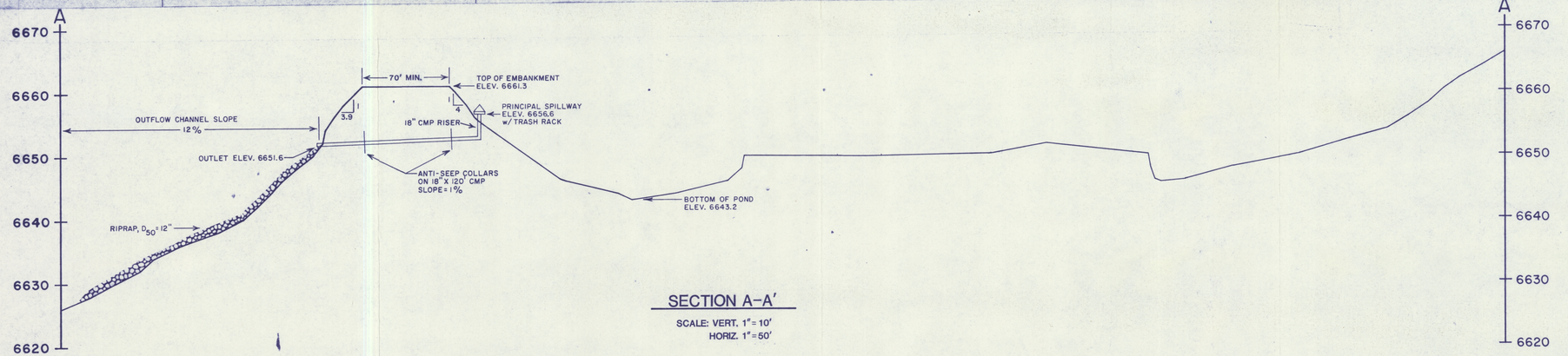
SECTION D-D'

OUTFLOW CHANNEL CROSS SECTION
NOT DRAWN TO SCALE



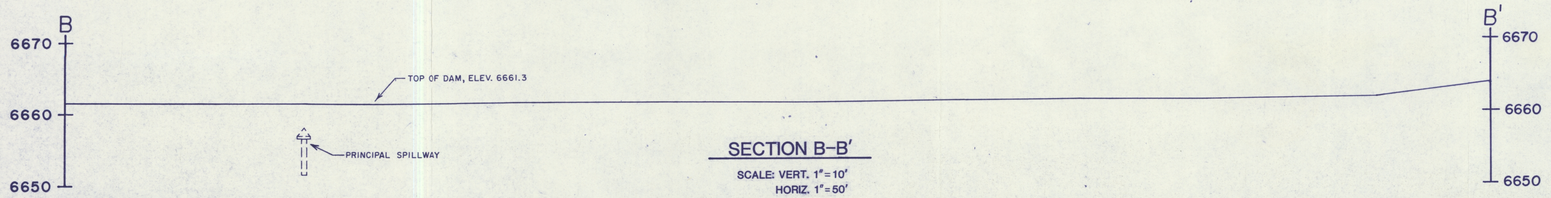
PRINCIPAL SPILLWAY

NOT DRAWN TO SCALE



SECTION A-A'

SCALE: VERT. 1"= 10'
HORIZ. 1"= 50'



SECTION B-B'

SCALE: VERT. 1"= 10'
HORIZ. 1"= 50'

N6-T2

Elevation (ft.-msl)	Stage (ft.)	Area (Acres)	Capacity (Ac.-ft.)	Total Capacity (Ac.-ft.)	Description
6643.2	0	0	0	0	Bottom of Pond
6644.0	.8	.03	.01	.01	
6646.0	2.8	.18	.21	.22	
6648.0	4.8	.35	.53	.75	
6650.0	6.8	.57	.92	1.67	
6652.0	8.8	1.38	1.95	3.62	
6654.0	10.8	2.24	3.62	7.24	
6656.0	12.8	3.06	5.30	12.54	
6656.6	13.4	3.24	1.89	14.43	Principal Spillway
6658.0	14.8	3.84	4.96	19.39	
6660.0	16.8	4.72	8.56	27.95	
6661.3	18.1	5.79	6.83	34.78	Top of Embankment

I certify this Siltation Structure was constructed in accordance with the approved mining permit and that the information contained herein accurately describes the constructed structure to the best of my knowledge and belief.

Registered Professional Engineer
CERTIFICATE
18782
JAMES BARRY SCHLEIHOLT
Engineer
ARIZONA, U.S.A.

James B. Schleiholt
Senior Engineer
Peabody Coal Company

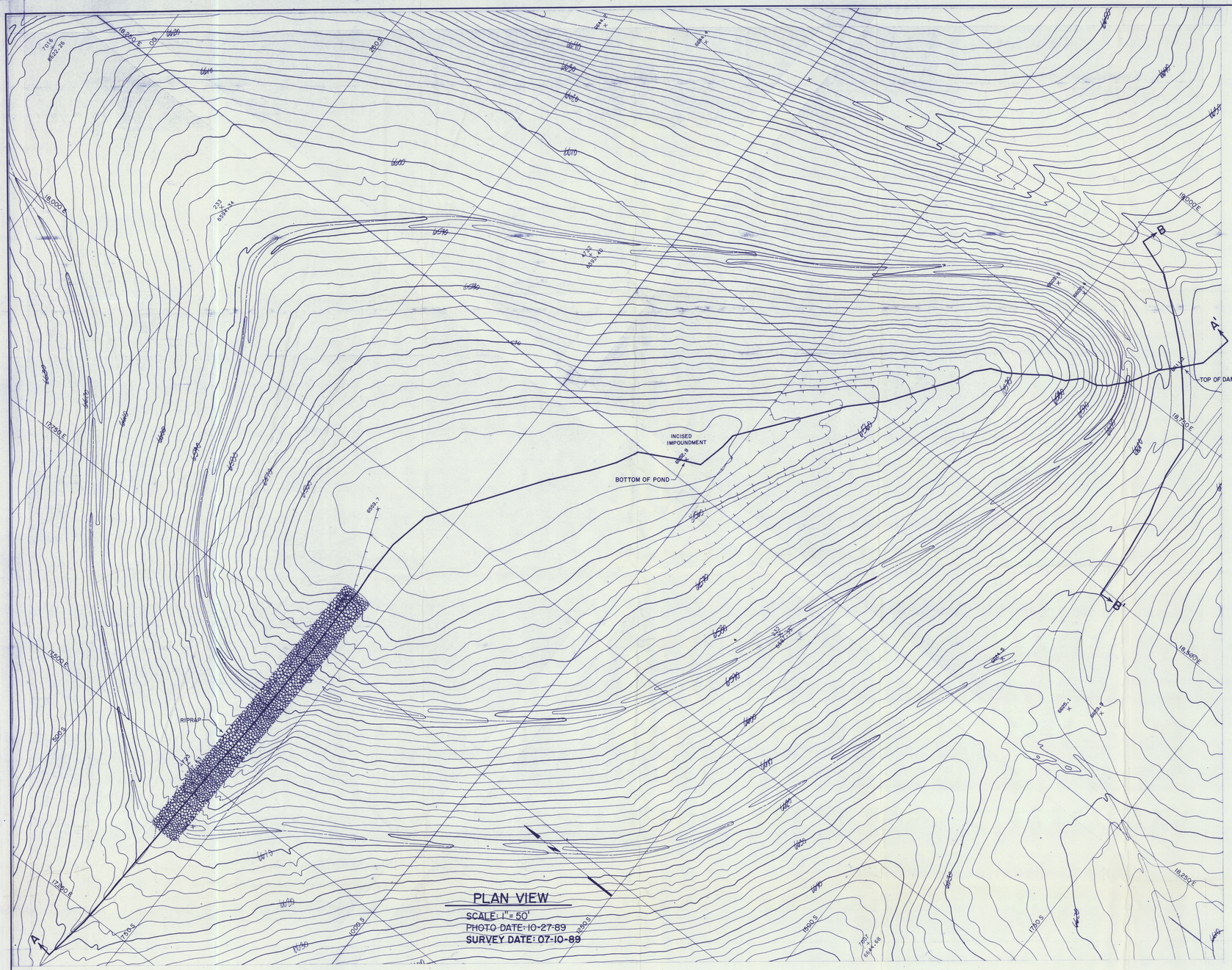
Arizona P.E. #18782

Date: JUN 19 1989

PEABODY COAL COMPANY
BLACK MESA – KAYENTA MINE
1300 SOUTH YALE, FLAGSTAFF, ARIZONA 86001

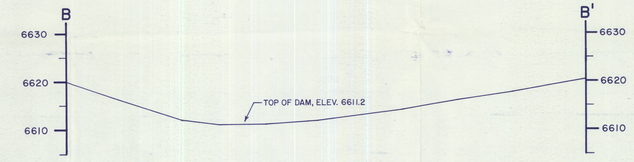
N6-T2
(AS-BUILT)

SCALE: AS SHOWN	DRAWN BY: J.H.J.
DATE: 3-3-89	DRAWING NO:
REVISION:	APPROVED BY:



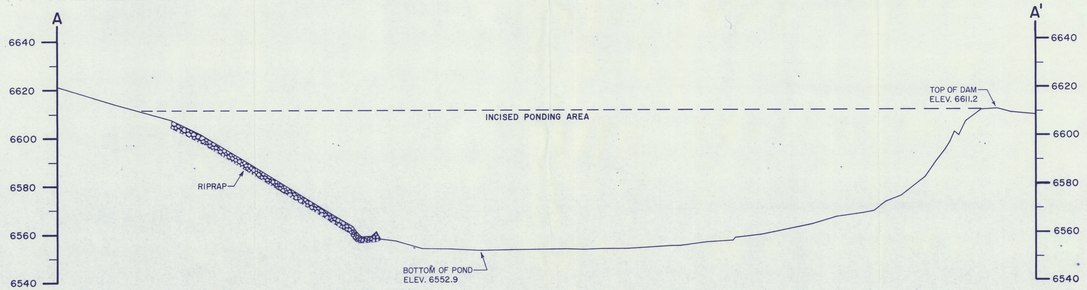
PLAN VIEW

SCALE: 1" = 50'
PHOTO DATE: 10-27-89
SURVEY DATE: 07-10-89



SECTION B-B'

VERT. SCALE: 1" = 10'
HORIZ. SCALE: 1" = 50'



SECTION A-A'

VERT. SCALE: 1" = 20'
HORIZ. SCALE: 1" = 100'

N7-D POND

Elevation (ft-msl)	Stage (ft)	Area (Acres)	Capacity (ac-ft)	Total Capacity (ac-ft)	Description
6552.9	0	0	0	0	Bottom of Pond
6554	1.1	1.08	0.59	0.59	
6556	3.1	1.75	2.83	3.42	
6558	5.1	2.62	4.37	7.79	
6560	7.1	3.55	6.17	13.96	
6562	9.1	4.26	7.81	21.77	
6564	11.1	4.90	9.16	30.93	
6566	13.1	5.63	10.53	41.46	
6568	15.1	6.43	12.06	53.52	
6570	17.1	7.28	13.71	67.23	
6572	19.1	8.09	15.37	82.60	
6574	21.1	8.88	16.97	99.57	
6576	23.1	9.67	18.55	118.12	
6578	25.1	10.52	20.19	138.31	
6580	27.1	11.32	21.84	160.15	
6582	29.1	12.13	23.45	183.60	
6584	31.1	12.94	25.07	208.67	
6586	33.1	13.80	26.74	235.41	
6588	35.1	14.64	28.44	263.85	
6590	37.1	15.62	30.26	294.11	
6592	39.1	16.52	32.14	326.25	
6594	41.1	17.48	34.00	360.25	
6596	43.1	18.50	35.98	396.23	
6598	45.1	19.66	38.16	434.39	
6600	47.1	20.81	40.47	474.86	
6602	49.1	21.97	42.78	517.64	
6604	51.1	23.06	45.03	562.67	
6606	53.1	25.16	48.22	610.89	
6608	55.1	27.59	52.75	663.65	
6610	57.1	29.08	56.67	720.32	
6611.2	58.3	30.18	35.56	755.88	Top of Dam

I certify this Siltation Structure was constructed in accordance with the approved mining permit and that the information contained herein accurately describes the constructed structure to the best of my knowledge and belief.

James H. Schwenker
Senior Engineer
Peabody Coal Company

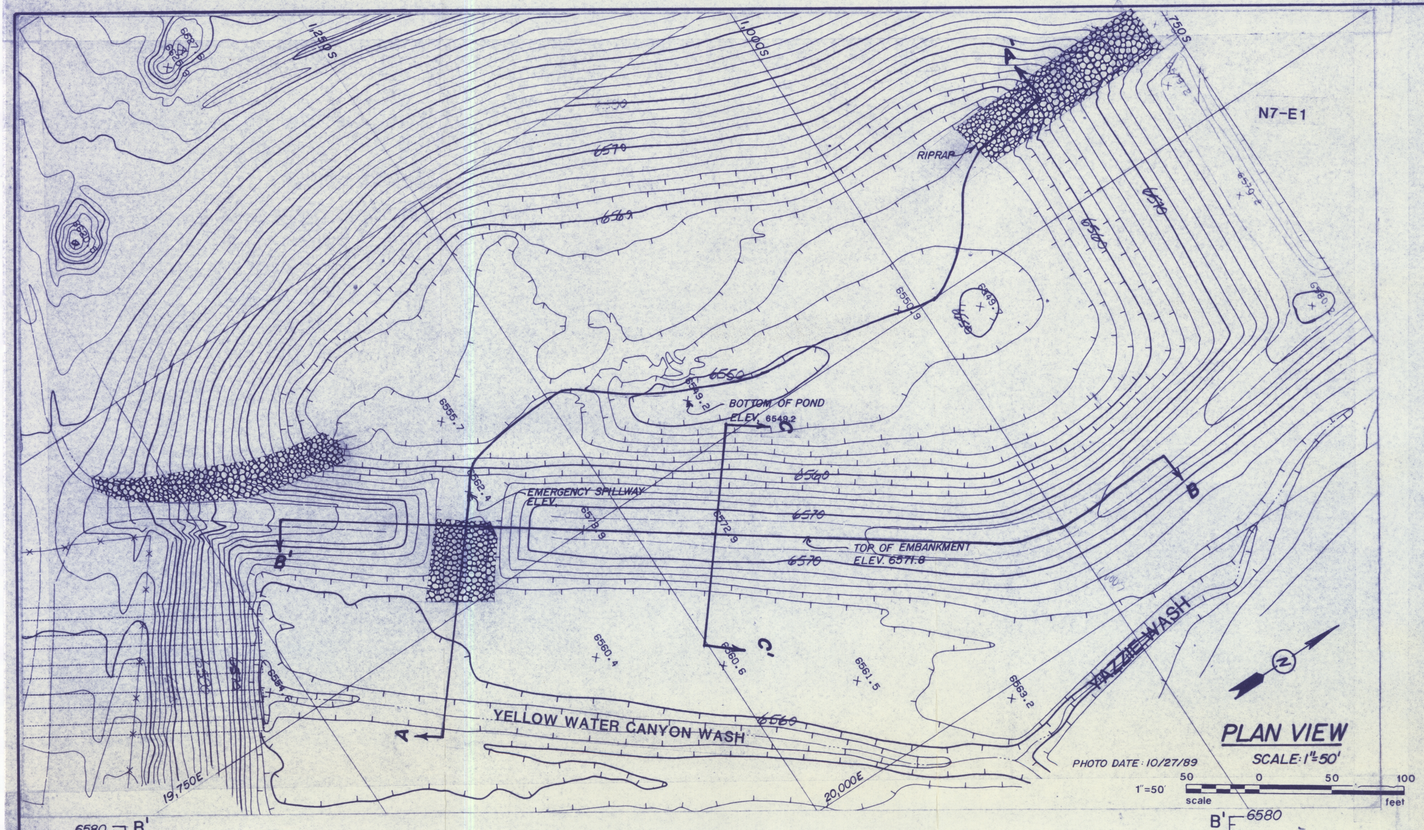
Arizona P.E. #18782

Date: JUN 12 1990

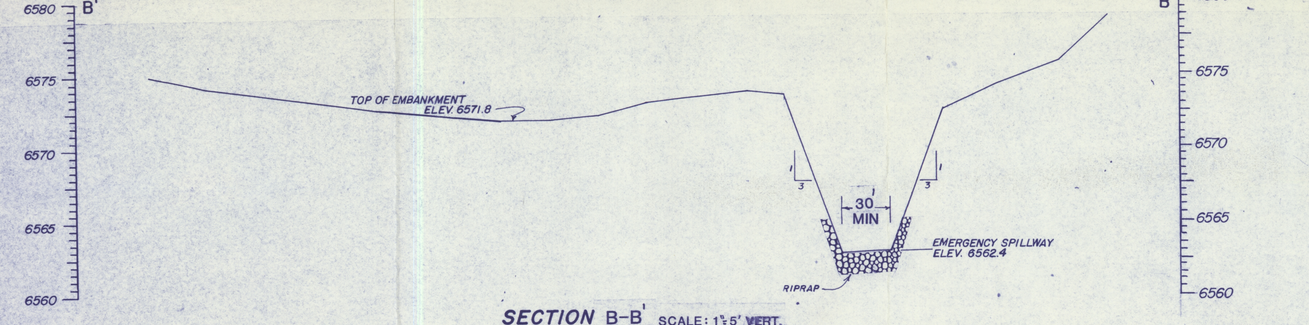
PEABODY COAL COMPANY
BLACK MESA – KAYENTA MINE
1500 SOUTH YALE FLAGSTAFF, AZ. 86001

N7-D POND
(AS-BUILT)

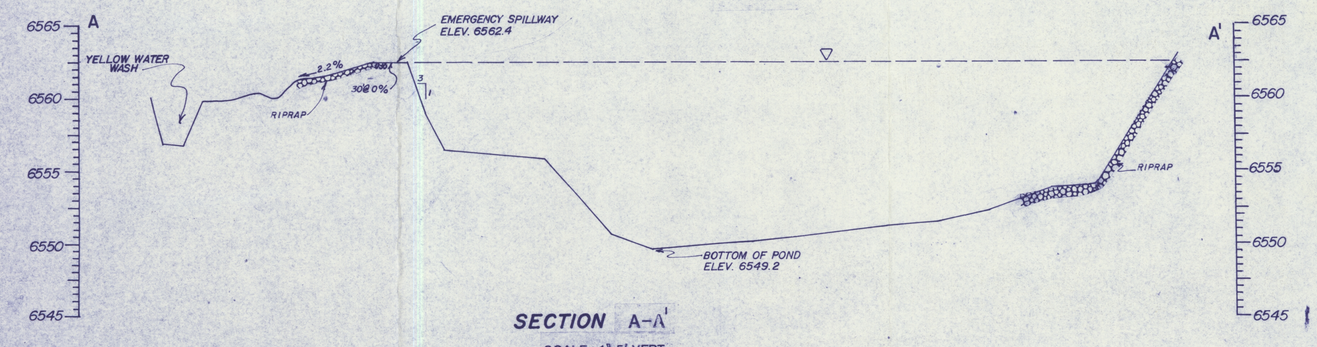
SCALE: AS SHOWN	DRAWN BY: J.H.J.
DATE: 05-30-90	DRAWING NO:
REVISION:	APPROVED BY: J.G.S.



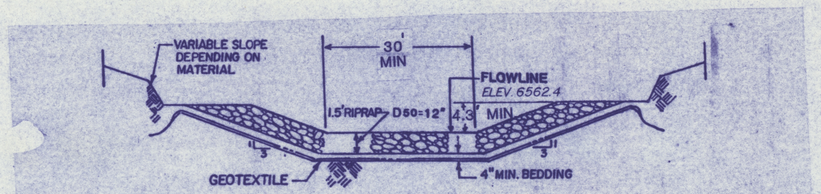
PLAN VIEW
SCALE: 1"=50'



SECTION B-B'
SCALE: 1"=5' VERT.
1"=50' HORIZ.



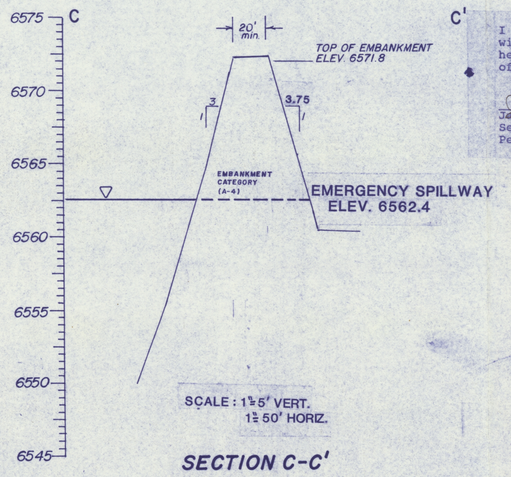
SECTION A-A'
SCALE: 1"=5' VERT.
1"=50' HORIZ.



SECTION OF EMERGENCY SPILLWAY
NOT DRAWN TO SCALE

N7-E POND AS-BUILT

ELEVATION (FT.-msl)	STAGE (FT.)	AREA (ACRES)	CAP. (AC.-FT.)	TOT. CAP. (AC.-FT.)	DESCRIPTION
6549.20	0.00	0.00	0.00	0.00	BOTTOM OF POND
6550.00	0.80	0.09	0.04	0.04	
6552.00	2.80	0.46	0.55	0.59	
6554.00	4.80	0.95	1.41	2.00	
6556.00	6.80	1.50	2.45	4.45	
6558.00	8.80	2.08	3.58	8.03	
6560.00	10.80	2.37	4.45	12.48	
6562.00	12.80	2.60	4.97	17.45	
6562.40	13.20	2.67	1.05	18.50	EMERGENCY SPILLWAY
6564.00	14.80	2.82	4.39	22.89	
6566.00	16.80	3.04	5.86	28.75	
6568.00	18.80	3.26	6.30	35.05	
6570.00	20.80	3.55	6.81	41.86	
6571.80	22.60	3.75	6.57	48.43	TOP OF EMBANKMENT



SCALE: 1"=5' VERT.
1"=50' HORIZ.

SECTION C-C'

I certify this Siltation Structure was constructed in accordance with the approved mining permit and that the information contained herein accurately describes the constructed structure to the best of my knowledge and belief.

James D. Schoenhoff
Senior Engineer
Peabody Coal Company

Arizona P.E. #18782

Date: FEB 16 1990

PEABODY COAL COMPANY
BLACK MESA — KAYENTA MINE
1300 SOUTH YALE FLAGSTAFF, ARIZONA 86001

N7-E POND
(AS-BUILT)

SCALE: HORIZ 1"=50' VERT. 1"=5'	DRAWN BY: P.C.C.
DATE: 2/7/90	DRAWING NO:
REVISION:	APPROVED BY: J.G.S.