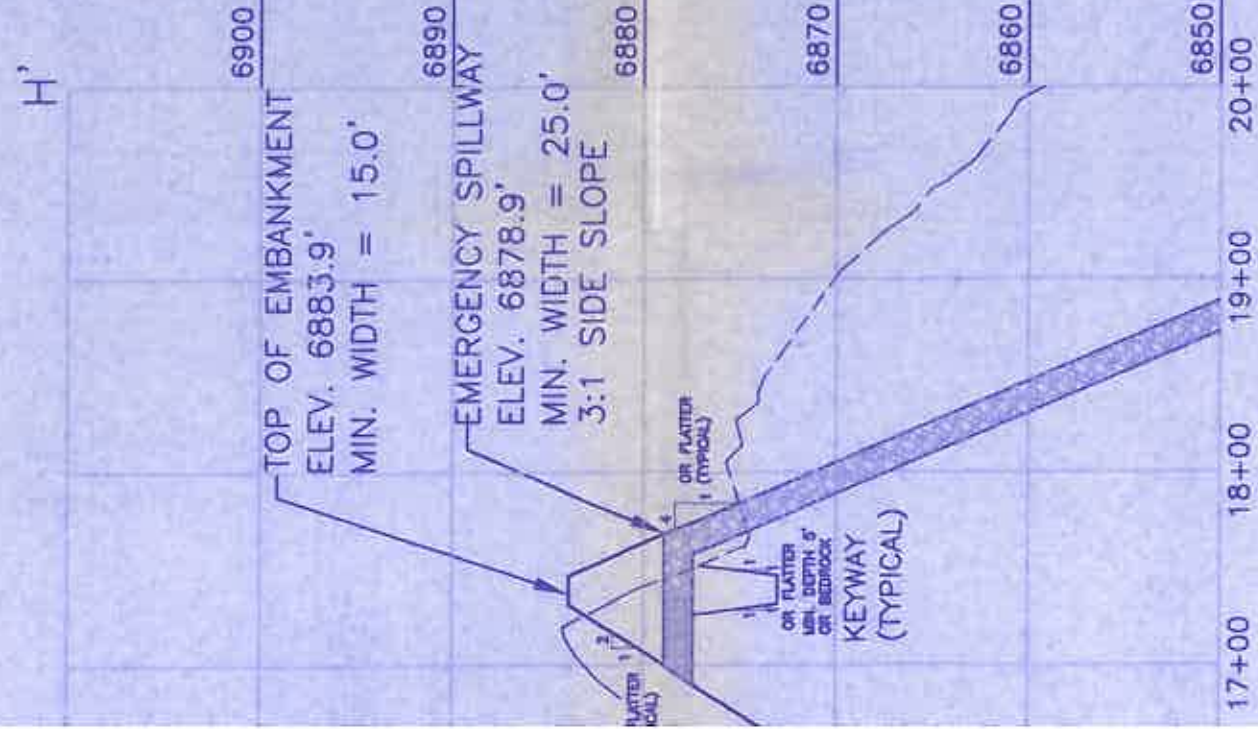


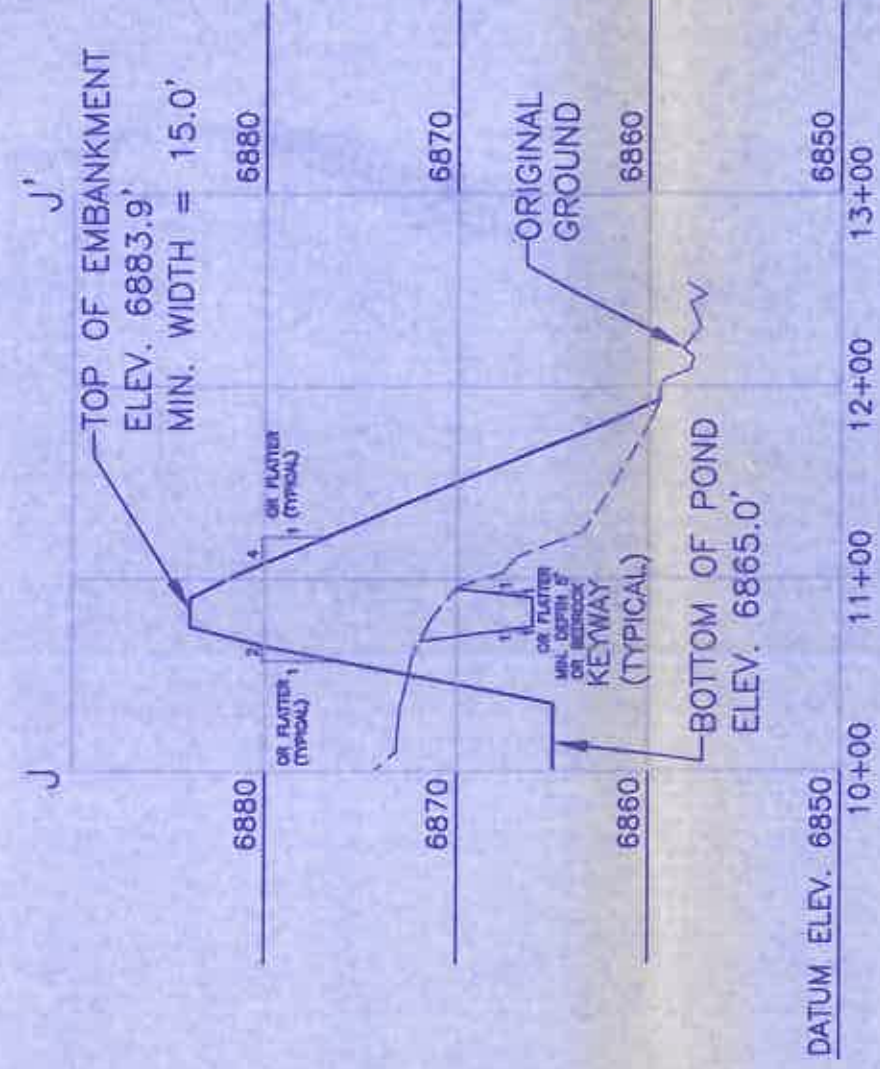
(TYPICAL)

17+00 18+00 19+00 6840



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

10+00 11+00 12+00 13+00



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



ARIZONA P.E. 18782
Date: **DEC 23 2004**

n, see Drawing No. 85400, Sheet K-6 and Drawing No. 85405.
Black Mesa PAP for Construction Specifications.
pter 6, Attachment D, Sections 1-3 for description of
valuation.

In accordance with approved topsoil salvage plan,
the distributed area above the high waterline shall be in
the approved reclamation plan.
ide slopes, typical 3:1 slope or flatter and blend into natural

EXHIBIT # 1
PROPOSED N9-A, A1 & A2
SEDIMENTATION POND DESIGN

KAYENTA MINE

PEABODY WESTERN COAL COMPANY
P. O. BOX 650 KAYENTA, ARIZONA 86033

DESIGNED BY: GA

SCALE: AS NOTED

DRAWN BY: PEK

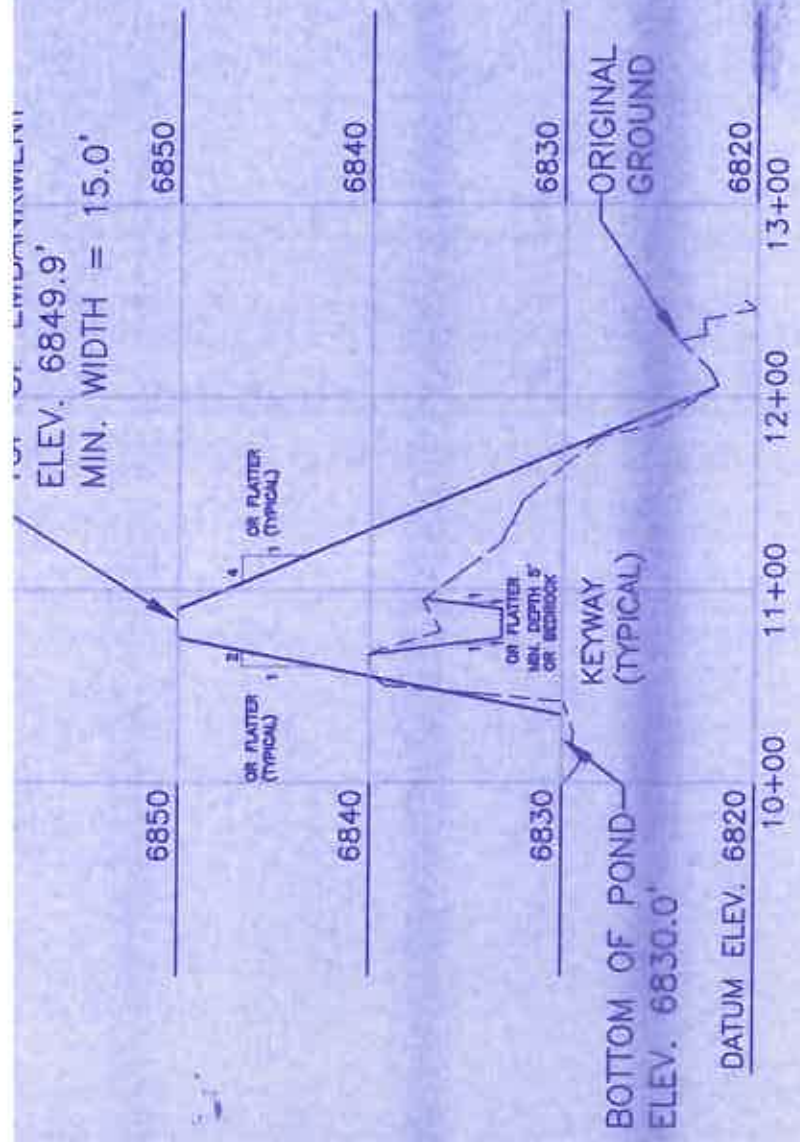
DRAWING DATE: 11-22-04

CHECKED BY: JGS

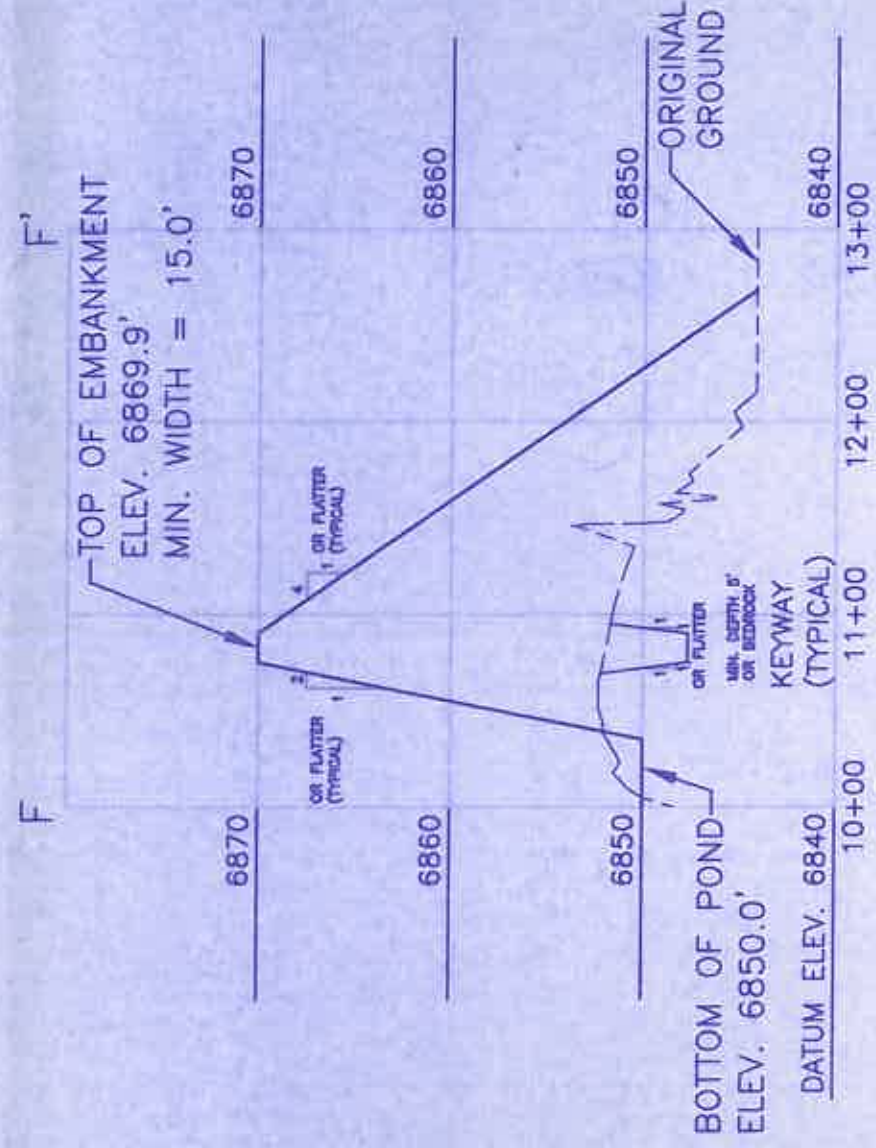
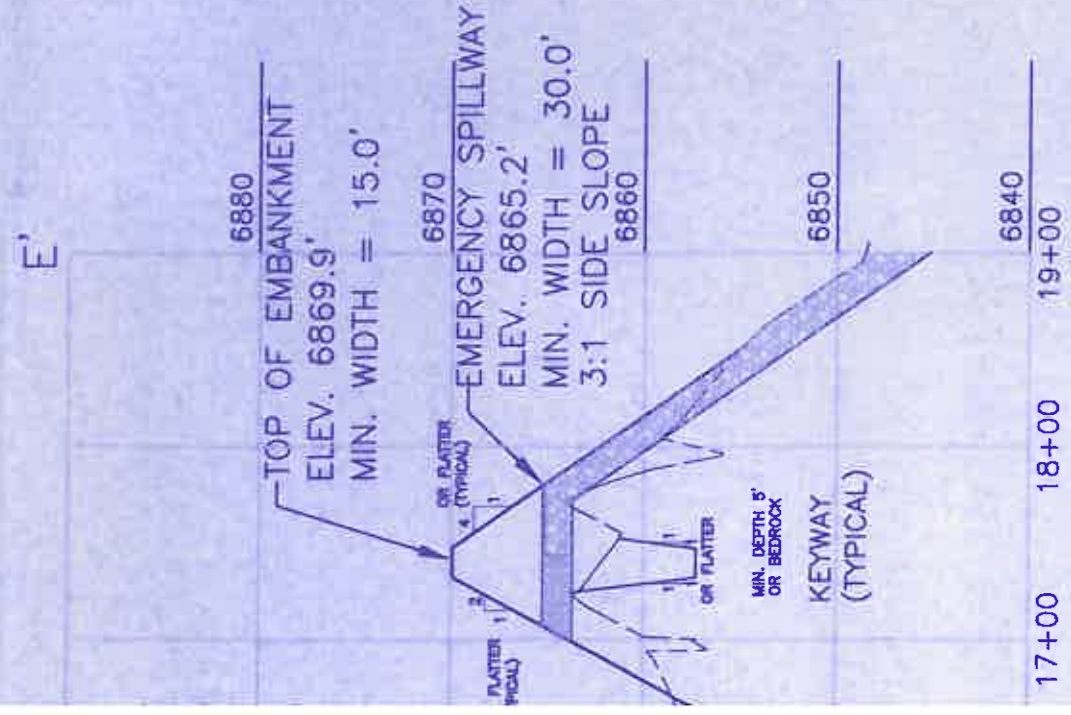
PHOTO DATE: 11-84

CONTOUR INTERVAL: 5 FT.

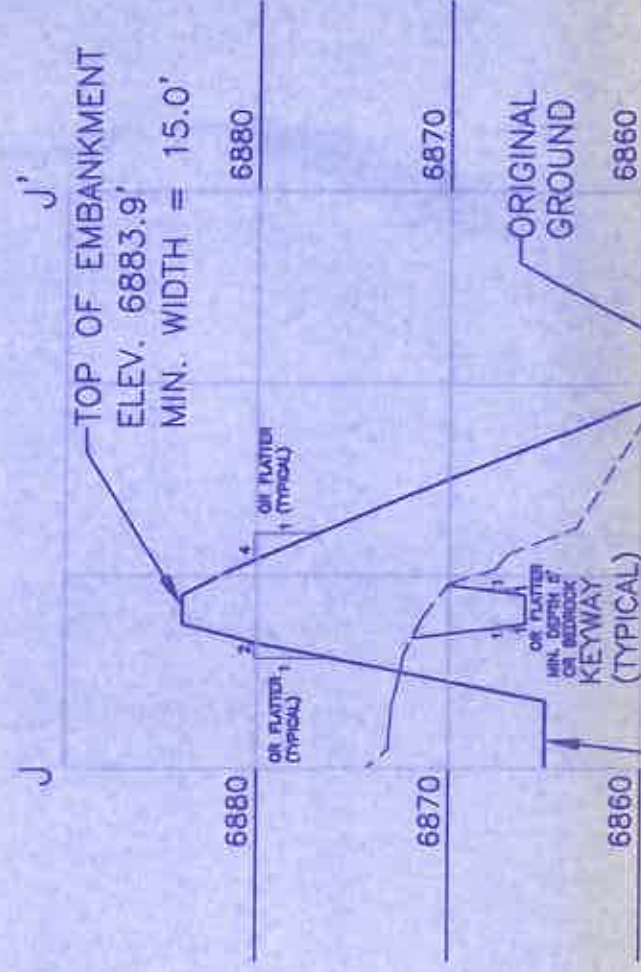
DWG FILE: POND N9-A,A1,A2.DWG



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

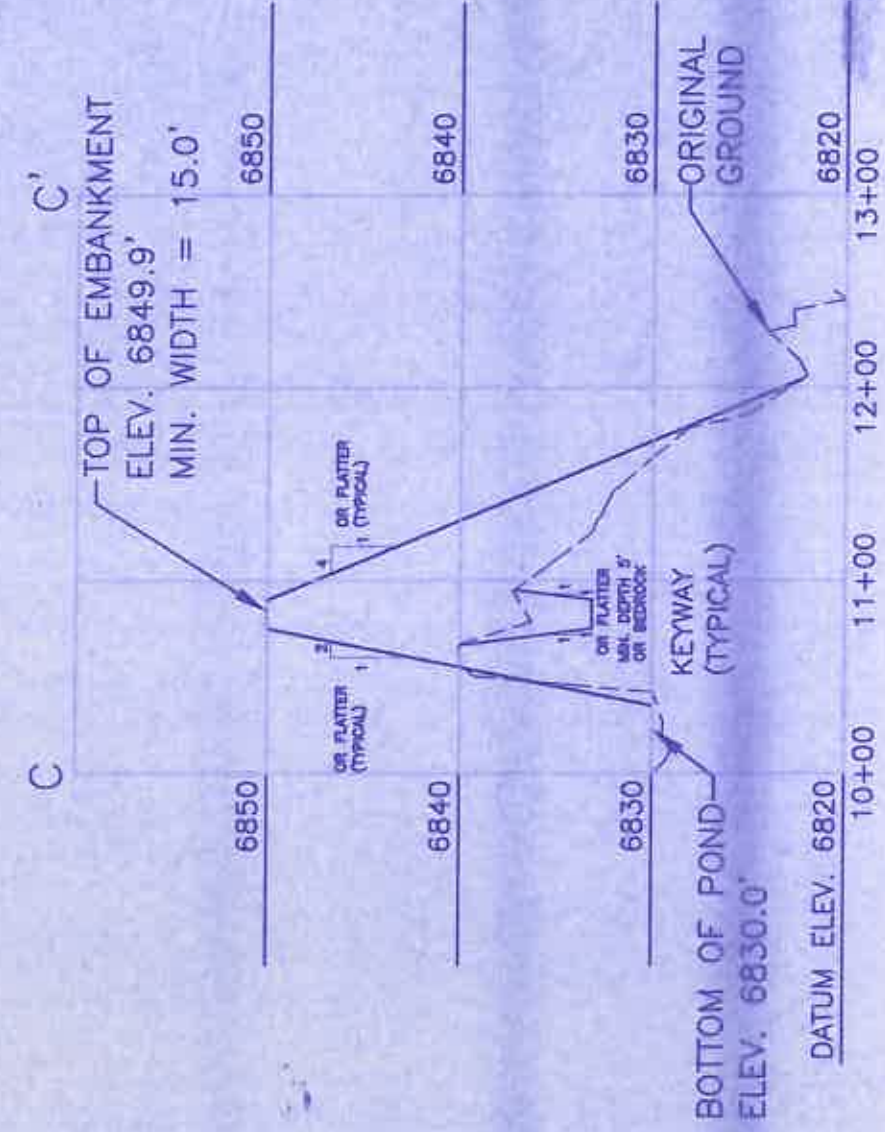


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VERT. 1" = 10'

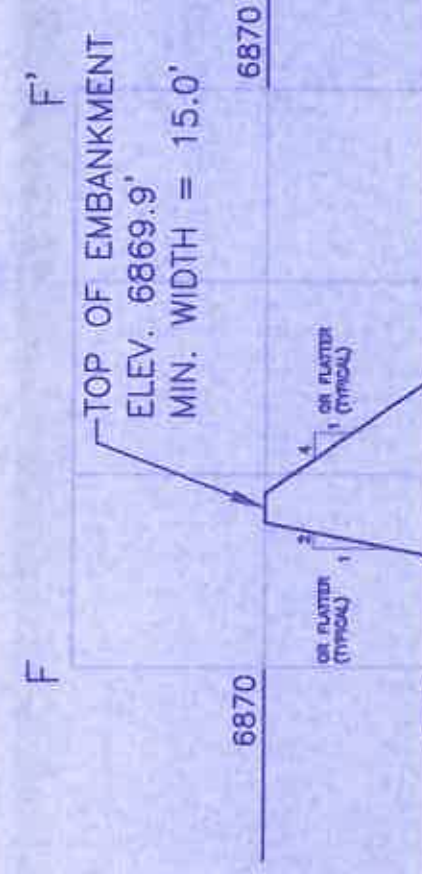


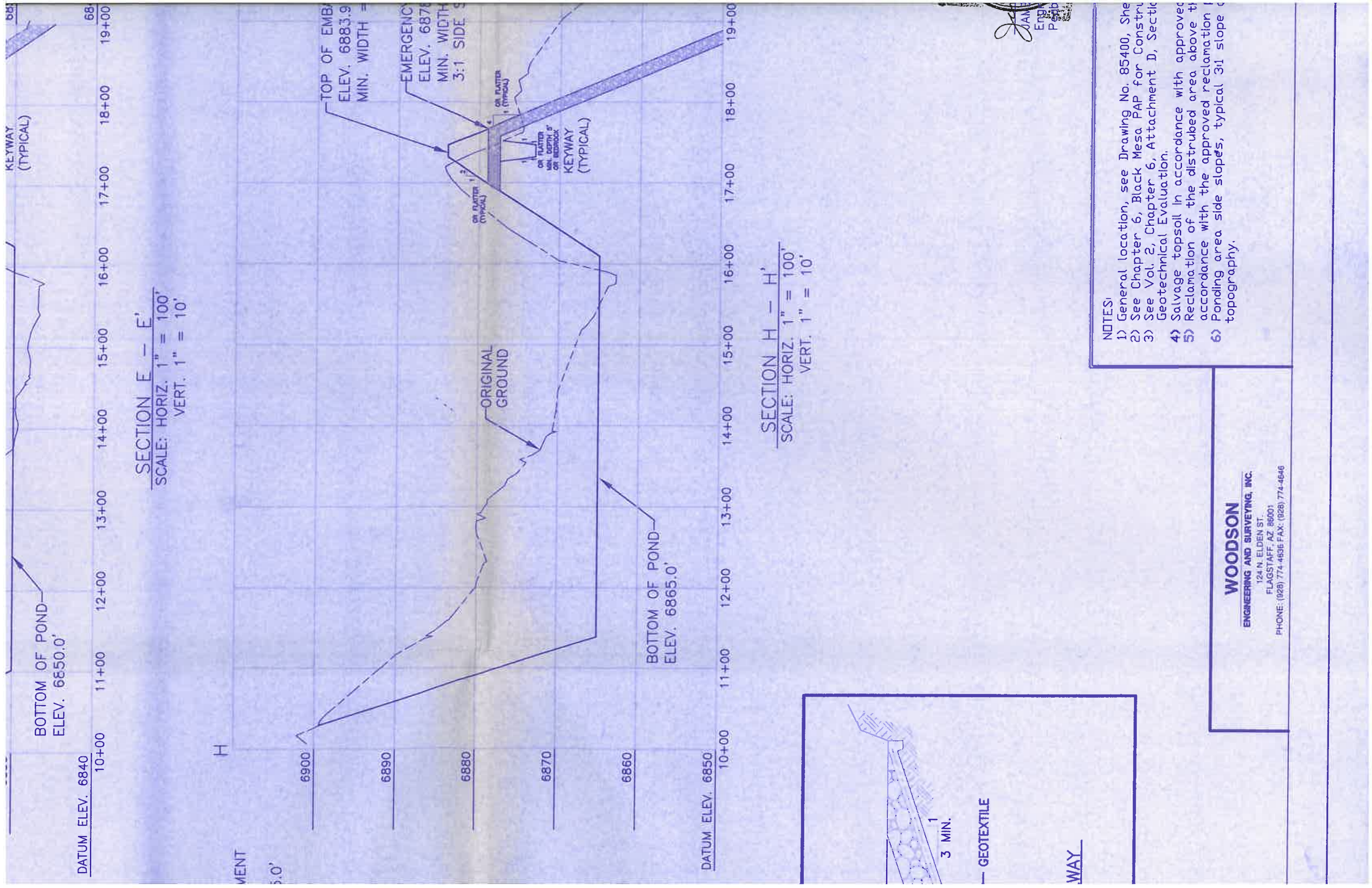
N9-A2 POND STAGE CAPACITY TABLE

ELEVATION (ft-msl)	STAGE (ft)	AREA (acres)	TOTAL CAPACITY (ac-ft)	DESCRIPTION
6865.0	0.0	0.80	0.00	BOTTOM OF POND
6870.0	5.0	1.22	5.04	INCISED ELEV.
6875.0	10.0	1.68	12.27	
6878.9	13.9	2.11	19.65	EMERGENCY SPILLWAY
6880.0	15.0	2.23	22.04	
6883.9	18.9	2.84	31.94	TOP OF EMBANKMENT



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





BOTTOM OF POND
ELEV. 6850.0'

DATUM ELEV. 6840

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

H

5.0'

6900

6890

6880

6870

6860

DATUM ELEV. 6850

BOTTOM OF POND
ELEV. 6865.0'

ORIGINAL
GROUND

TOP OF EMB
ELEV. 6883.9
MIN. WIDTH =

EMERGENCY
ELEV. 6878
MIN. WIDTH
3:1 SIDE S

OR FLATTER
(TYPICAL)

OR FLATTER
MIN. DEPTH 6"
OR BEDROCK

KEYWAY
(TYPICAL)

10+00

11+00

12+00

13+00

14+00

15+00

16+00

17+00

18+00

19+00

3 MIN.

— GEOTEXTILE

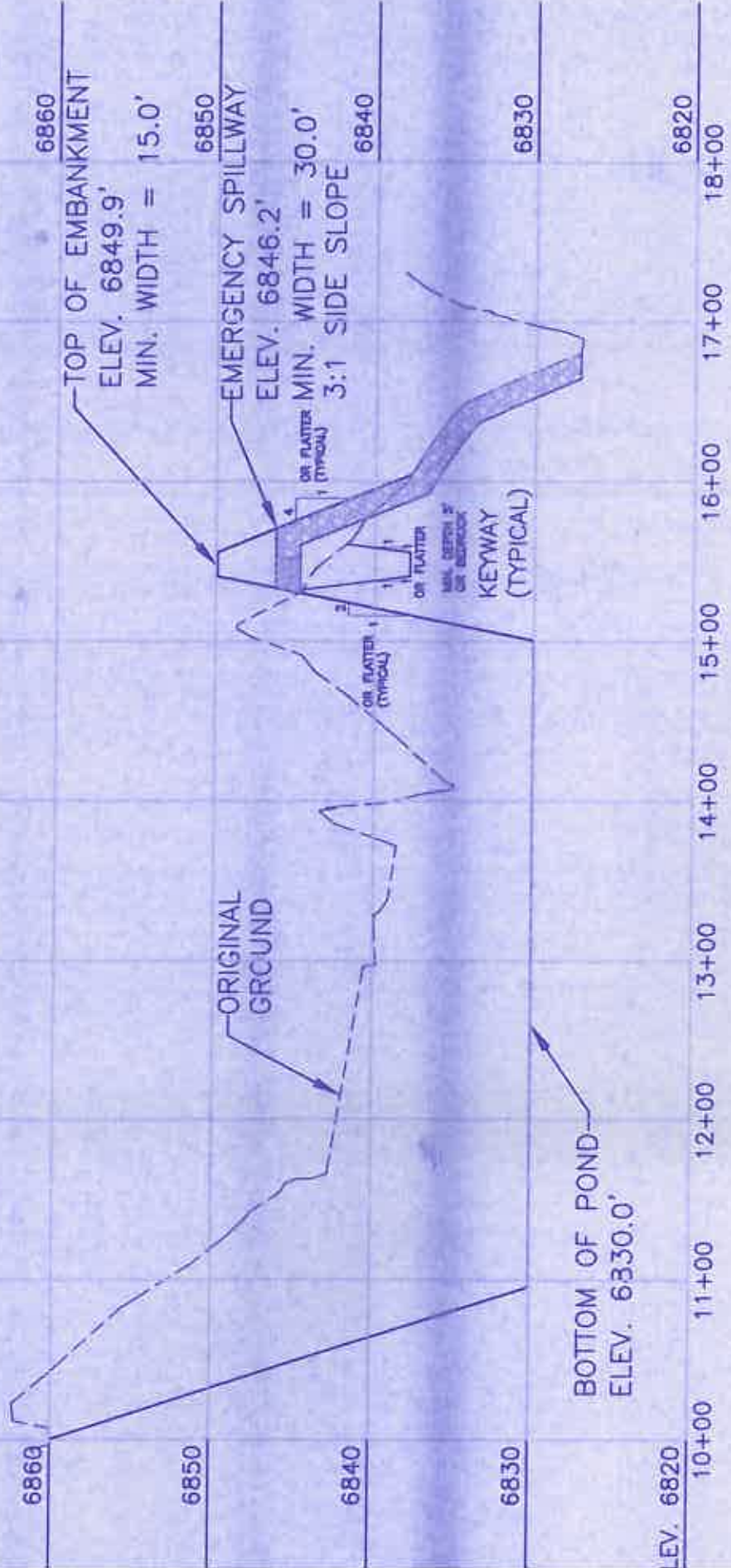
WAY

NOTES:

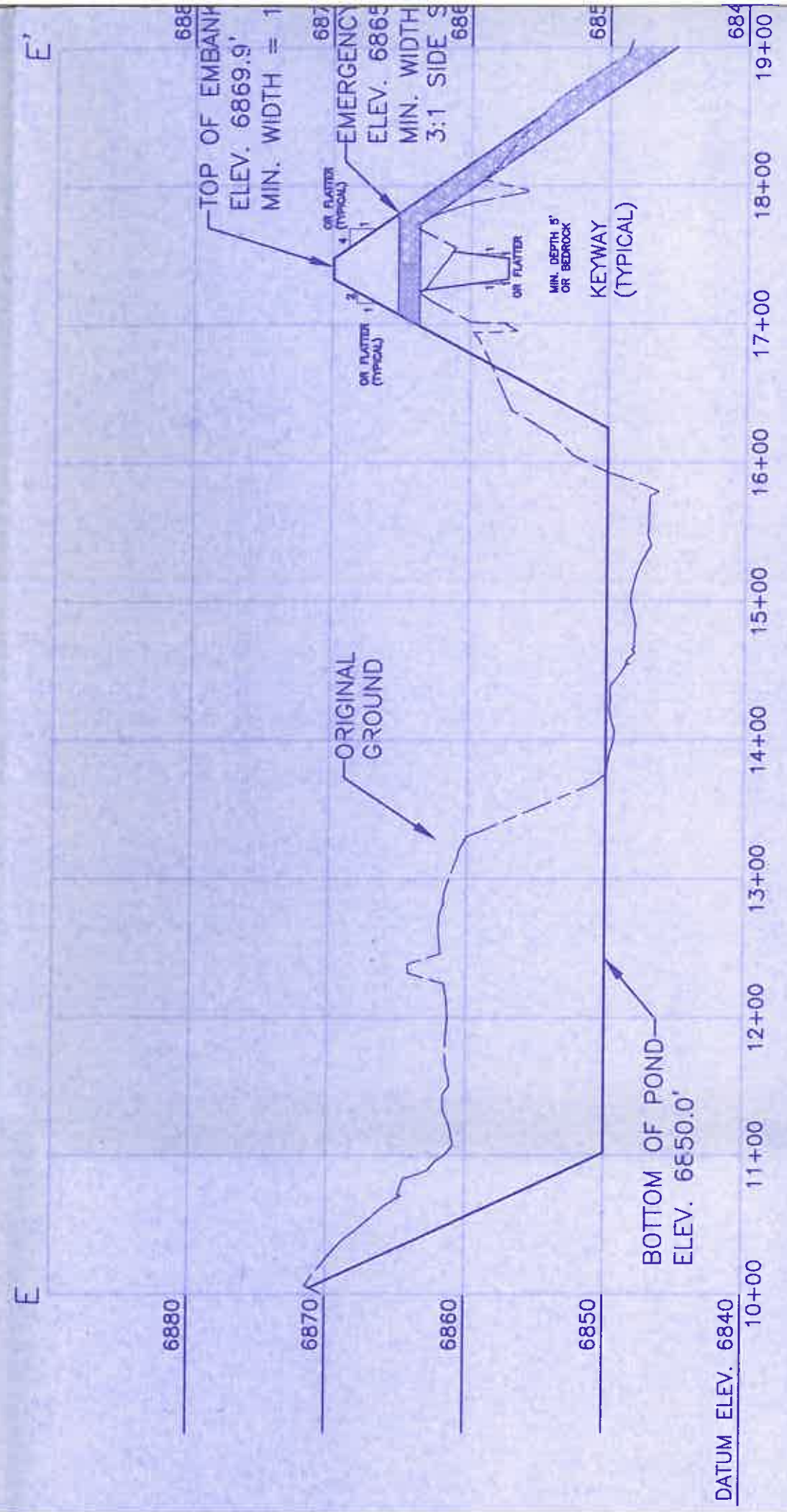
- 1) General location, see Drawing No. 85400, She
- 2) See Chapter 6, Black Mesa PAP for Constru
- 3) See Vol. 2, Chapter 6, Attachment D, Sectio
- 4) Geotechnical Evaluation.
- 5) Salvage topsoil in accordance with approved
- 6) Reclamation of the disturbed area above th
- 7) Ponding area side slopes, typical 3:1 slope c
- 8) topography.

WOODSON
ENGINEERING AND SURVEYING, INC.
124 N. ELDEN ST.
FLAGSTAFF, AZ 86001
PHONE: (928) 774-4836 FAX: (928) 774-4846

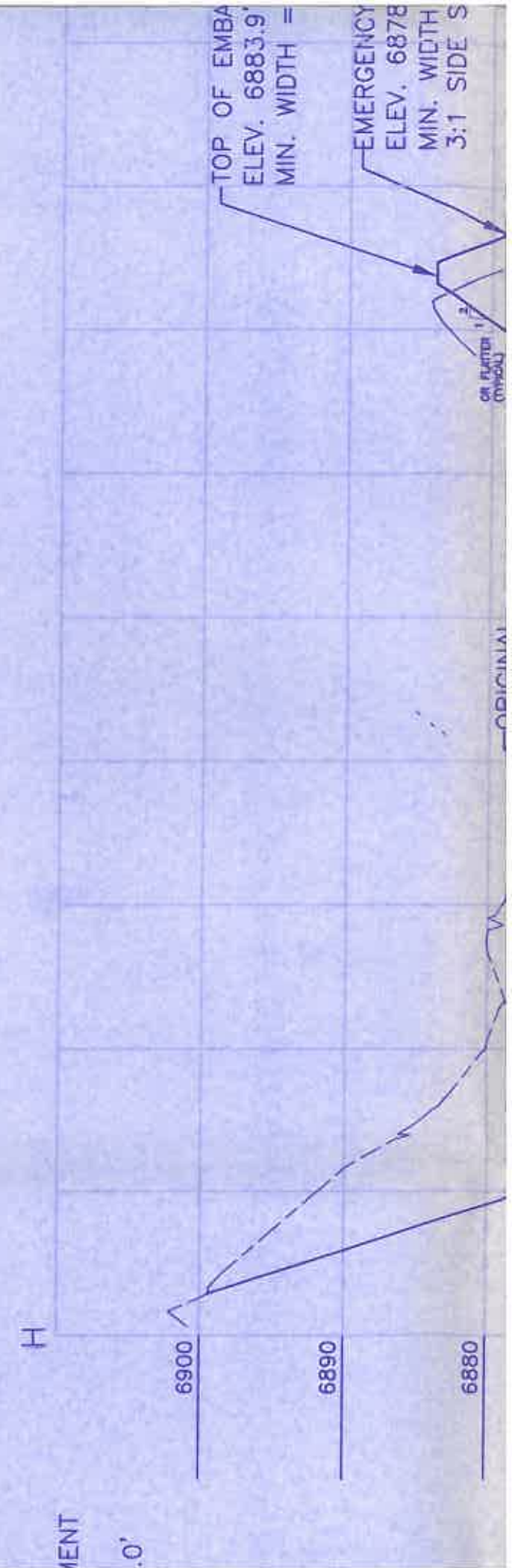
JAMES
Engineer
Professional



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

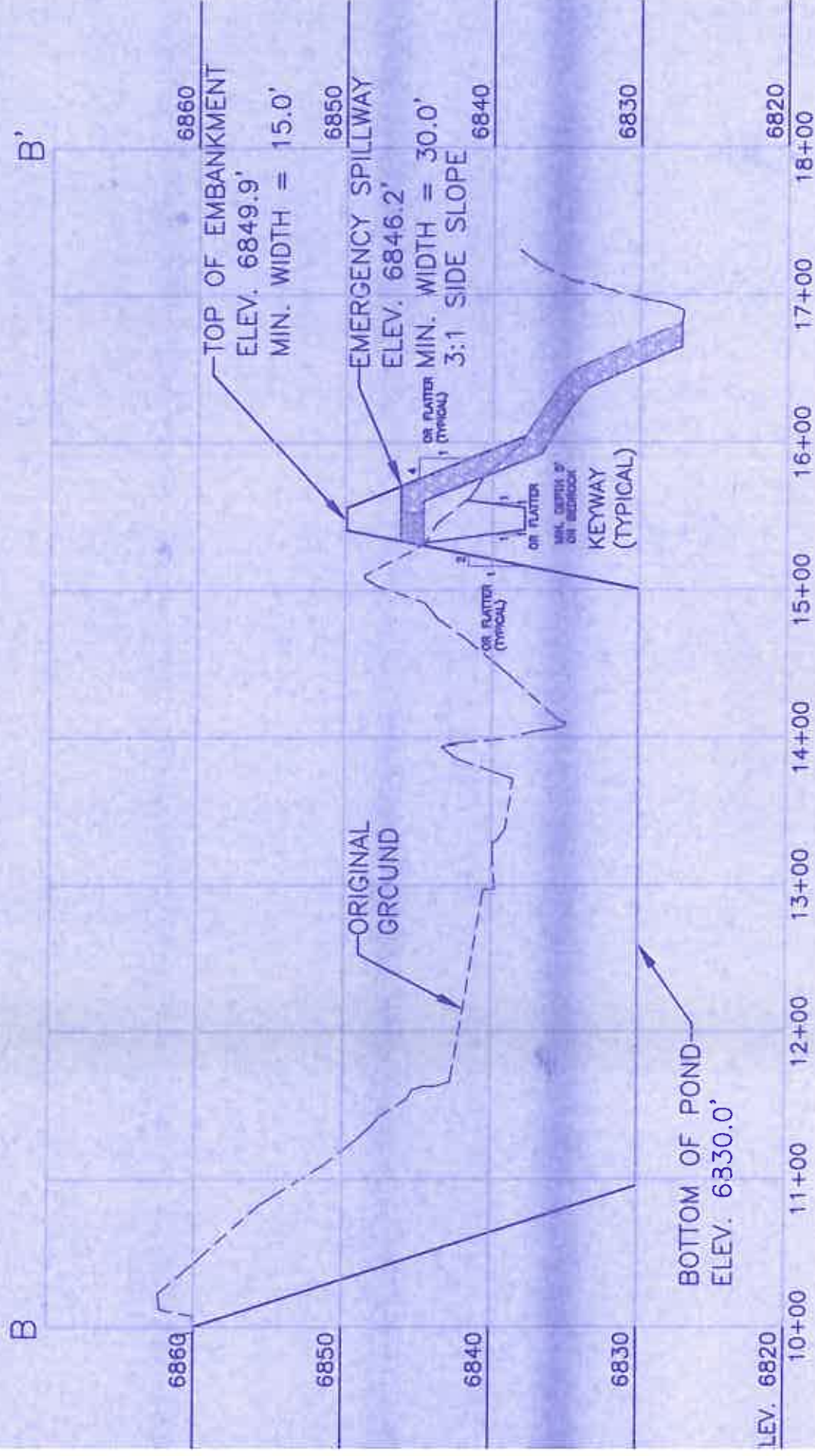


SECTION E - E'
 SCALE: HORIZ. 1" = 100'
 VERT. 1" = 10'



N9-A1 POND STAGE CAPACITY TABLE

ELEVATION (ft-msl)	STAGE (ft)	AREA (acres)	TOTAL CAPACITY (ac-ft)	DESCRIPTION
6850.0	0.0	0.59	0.00	BOTTOM OF POND
6855.0	5.0	1.03	4.05	INCISED ELEV.
6860.0	10.0	1.52	10.42	
6865.0	15.0	2.03	19.28	
6865.2	15.2	2.05	19.69	EMERGENCY SPILLWAY
6869.9	19.9	2.57	30.78	TOP OF EMBANKMENT



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

E

E'

6880

6880
 TOP OF EMBANKMENT
 ELEV. 6869.9'
 MIN. WIDTH = 15.0'

DATUM ELEV. 6840

6840

10+00 11+00 12+00 13+00

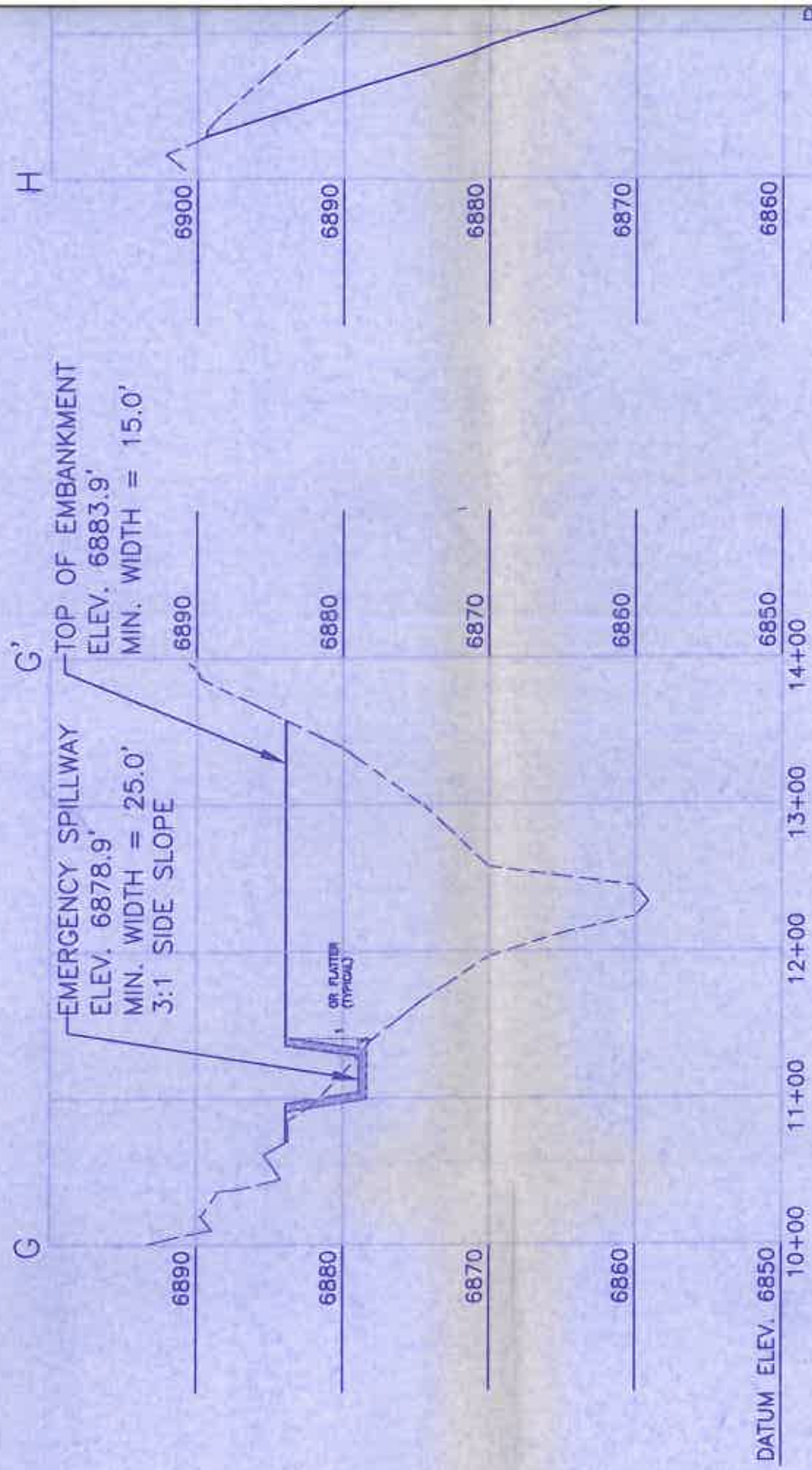
DATUM ELEV. 6840

10+00

11+00

BOTTOM OF
ELEV. 6850

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



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

DATUM ELEV. 6850

10+00

11+00

12+00

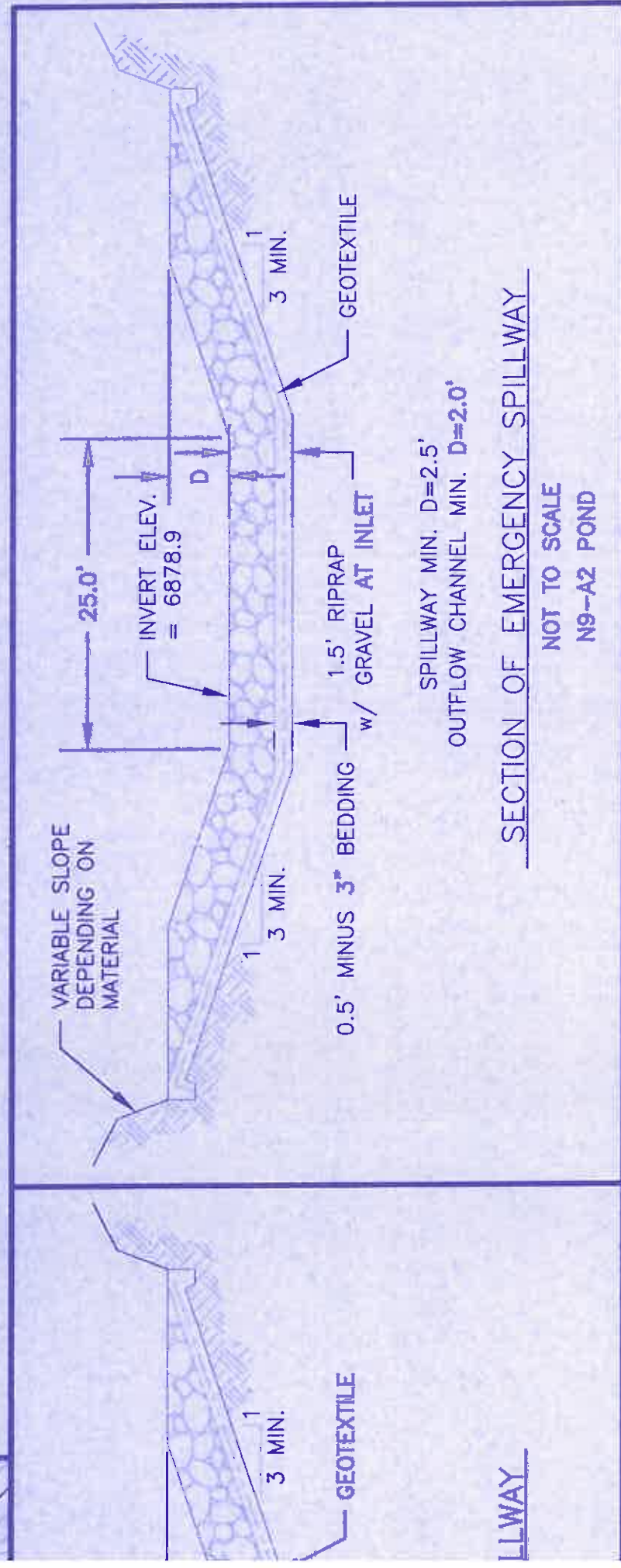
13+00

14+00

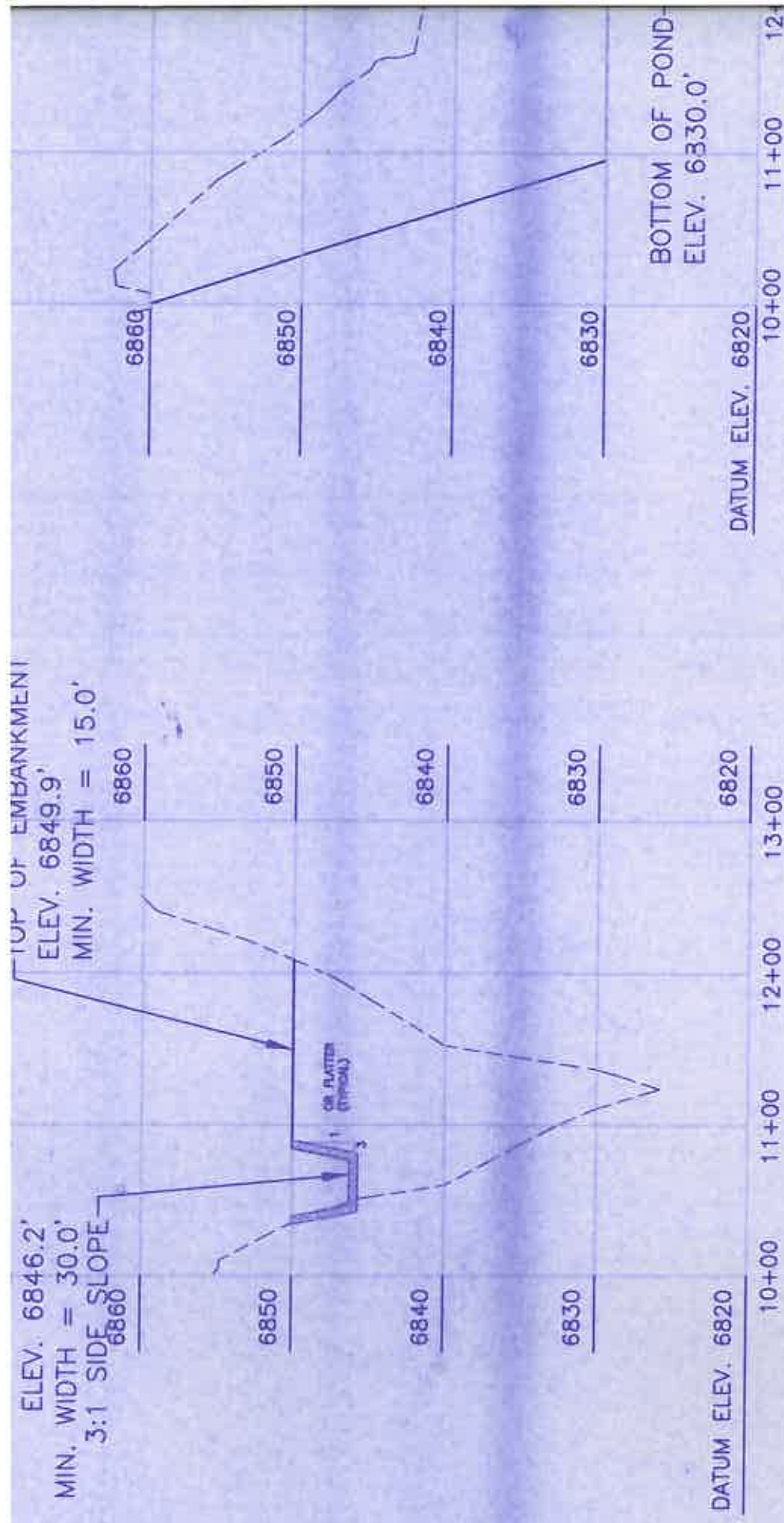
DATUM ELEV. 6850

10+00

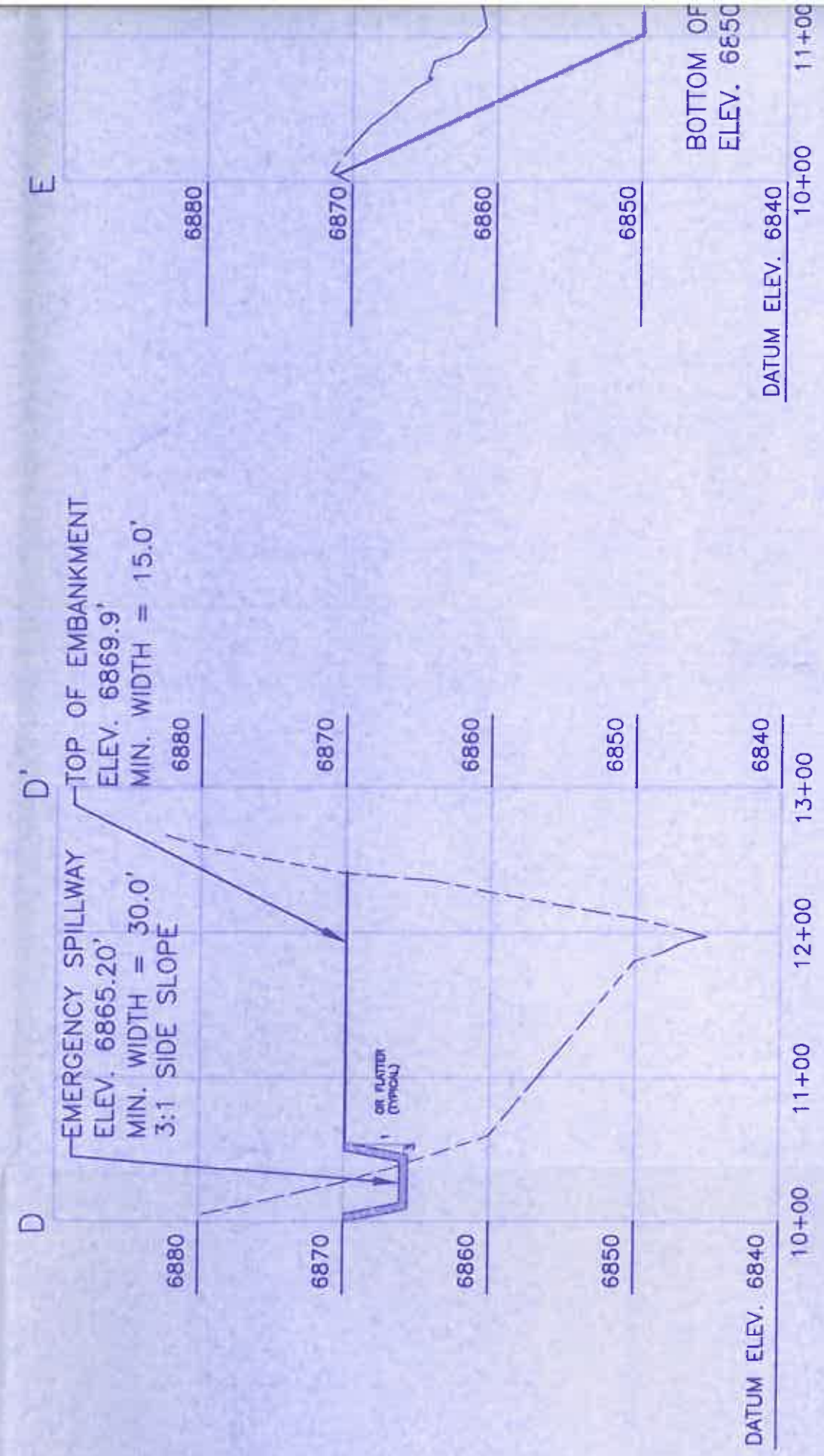
11+00



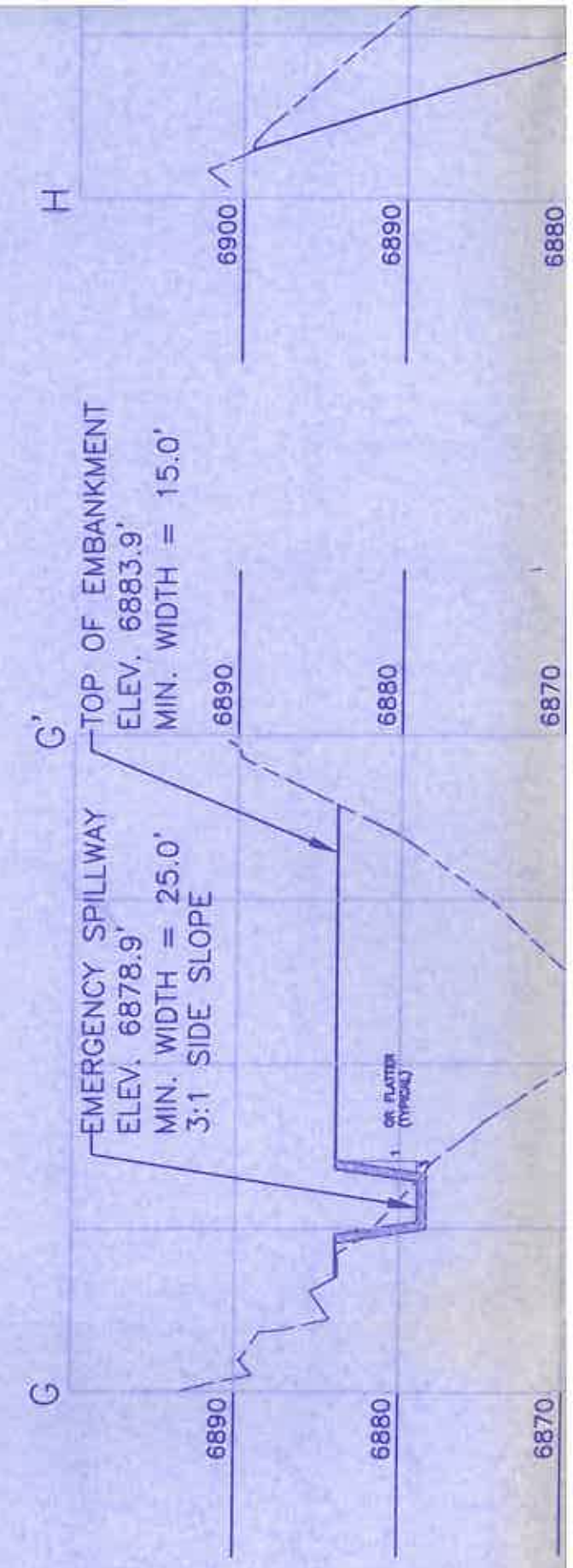
LLWAY



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



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

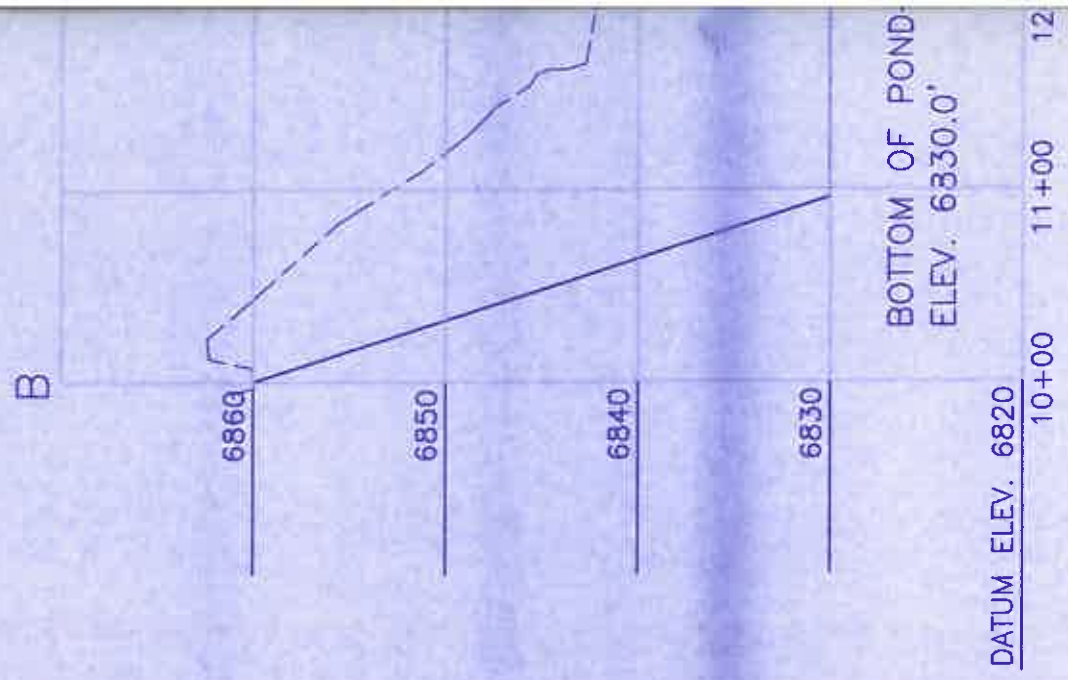
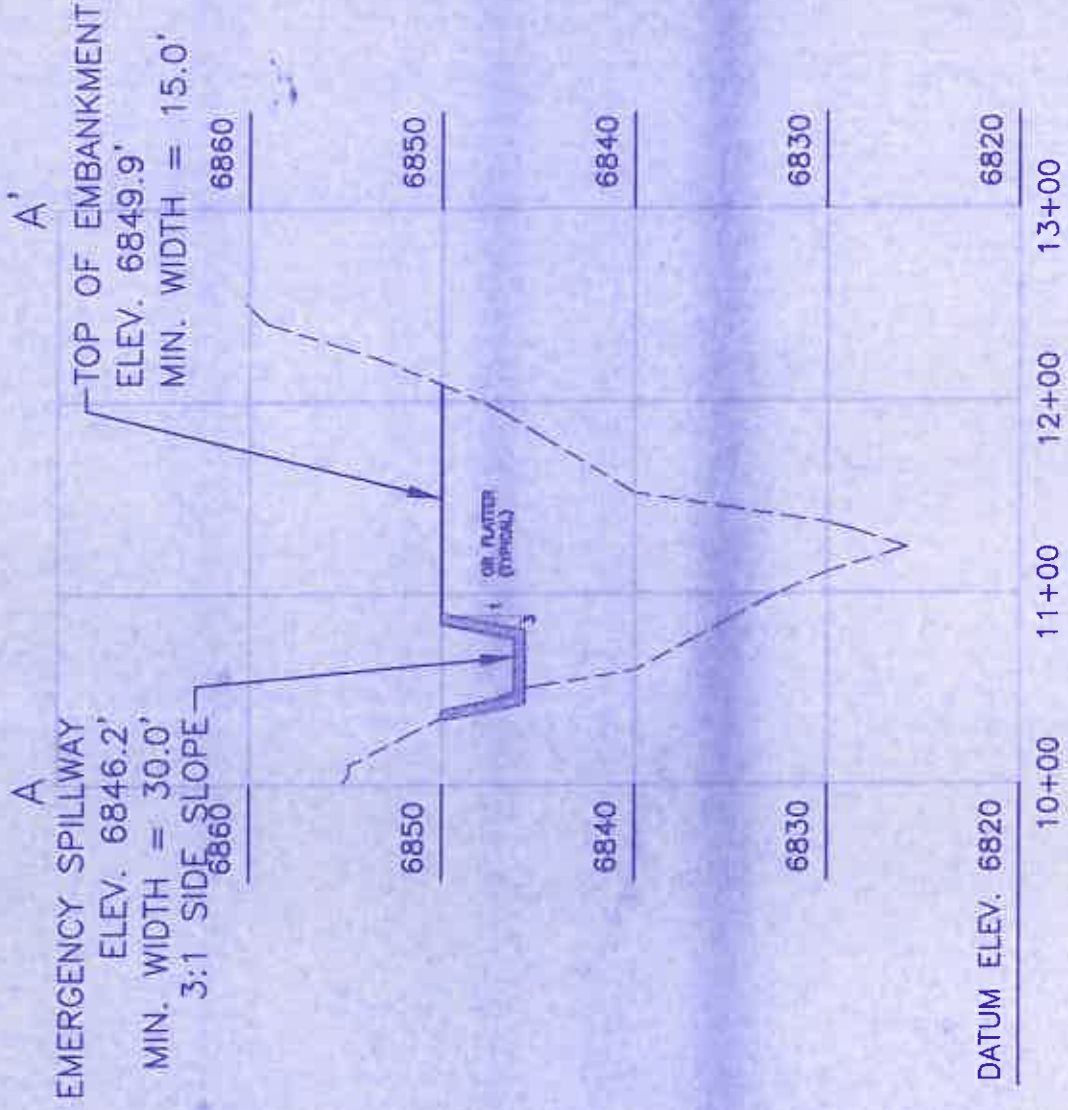


SECTION G - G'

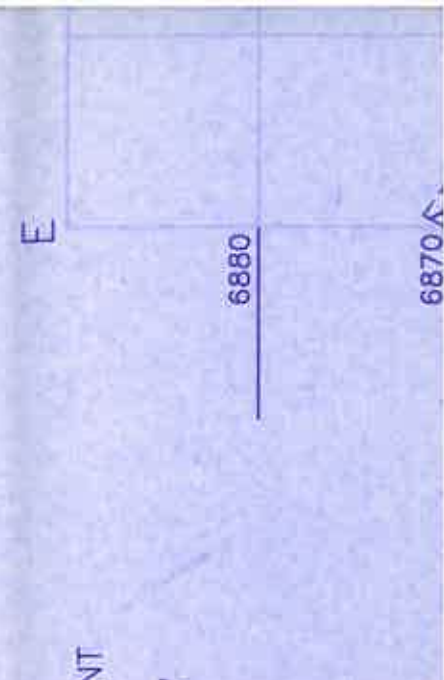
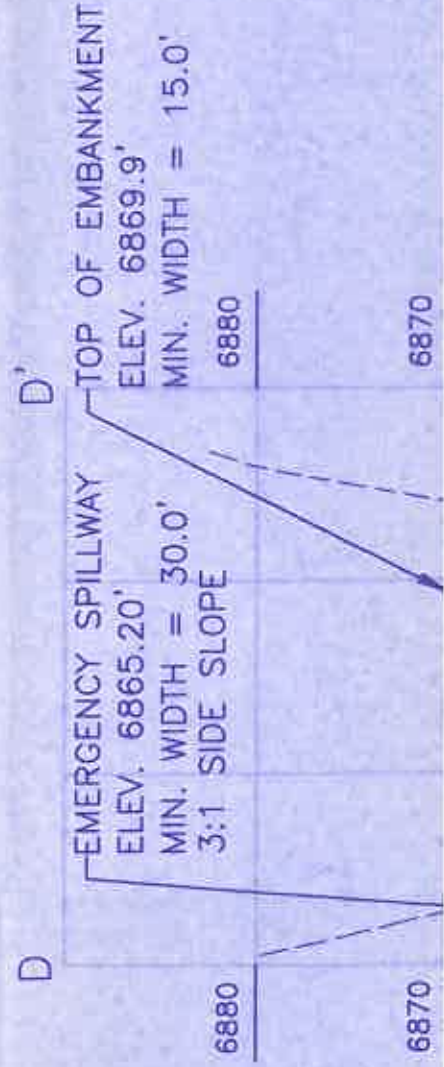
N9-A POND STAGE CAPACITY TABLE

ELEVATION (ft-msl)	STAGE (ft)	AREA (acres)	TOTAL CAPACITY (ac-ft)	DESCRIPTION
6830.0	0.0	0.03	0.00	BOTTOM OF POND
6835.0	5.0	0.10	0.31	INCISED ELEV.
6840.0	10.0	2.02	5.62	
6845.0	15.0	2.43	16.76	
6846.2	16.2	2.54	19.75	EMERGENCY SPILLWAY
6849.9	19.9	2.88	30.05	TOP OF EMBANKMENT

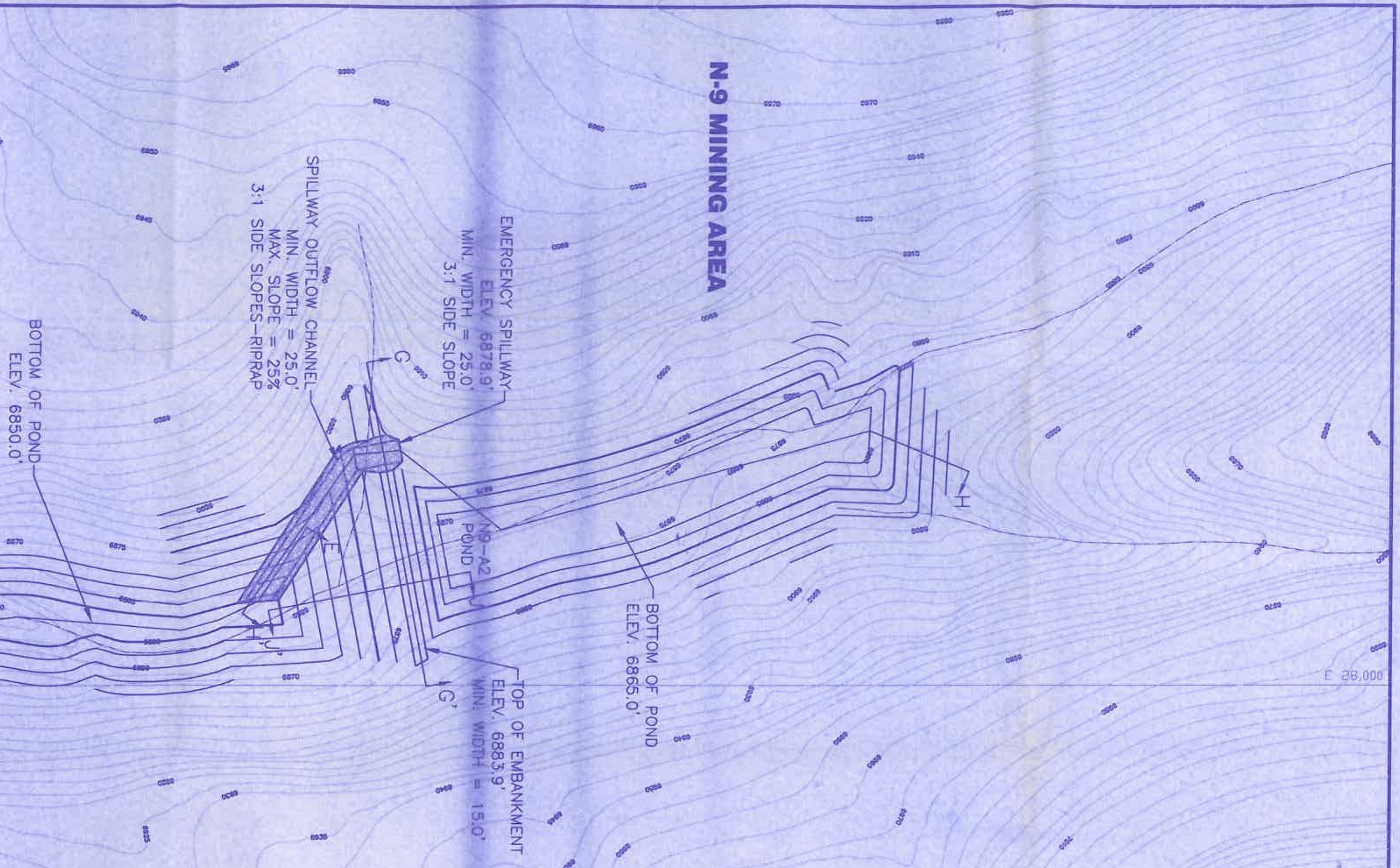
ELF (ft)	6	6	6	6	6	6
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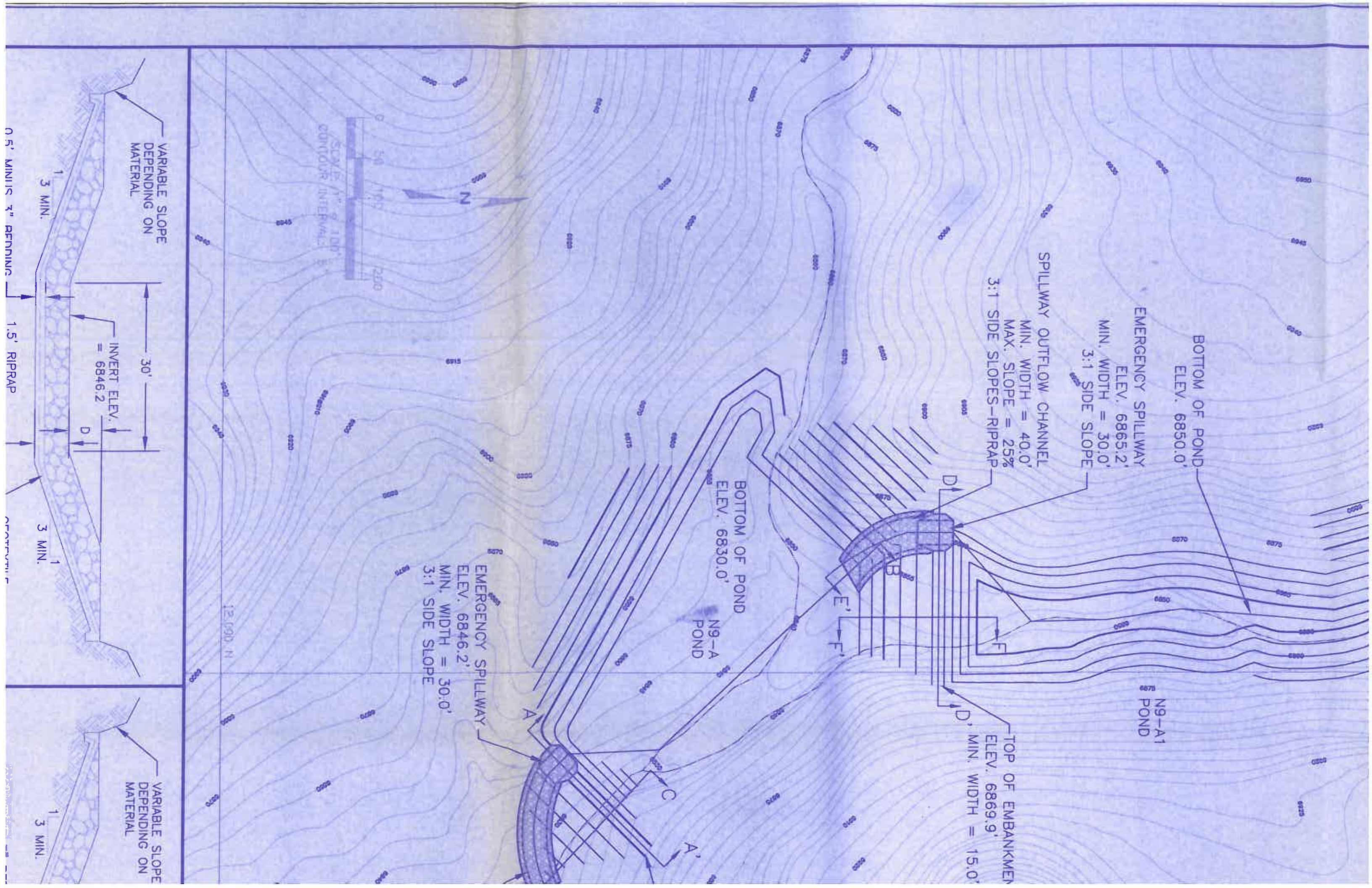


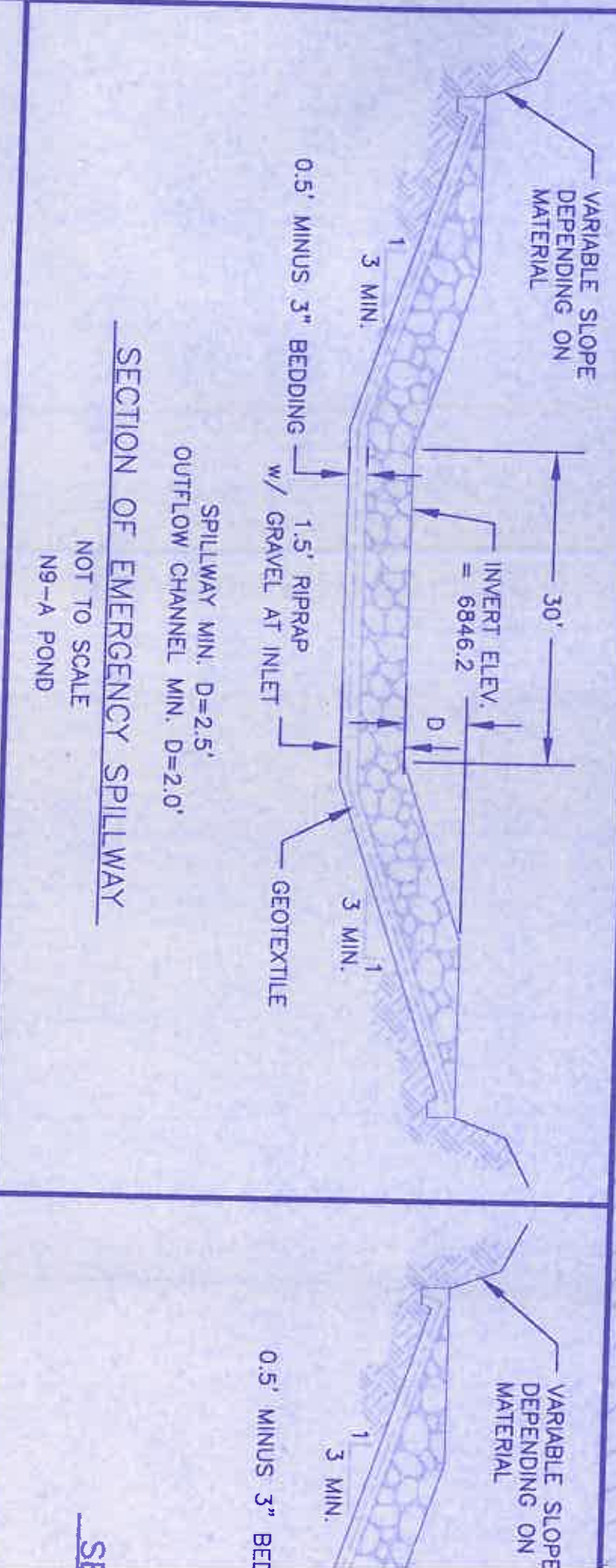
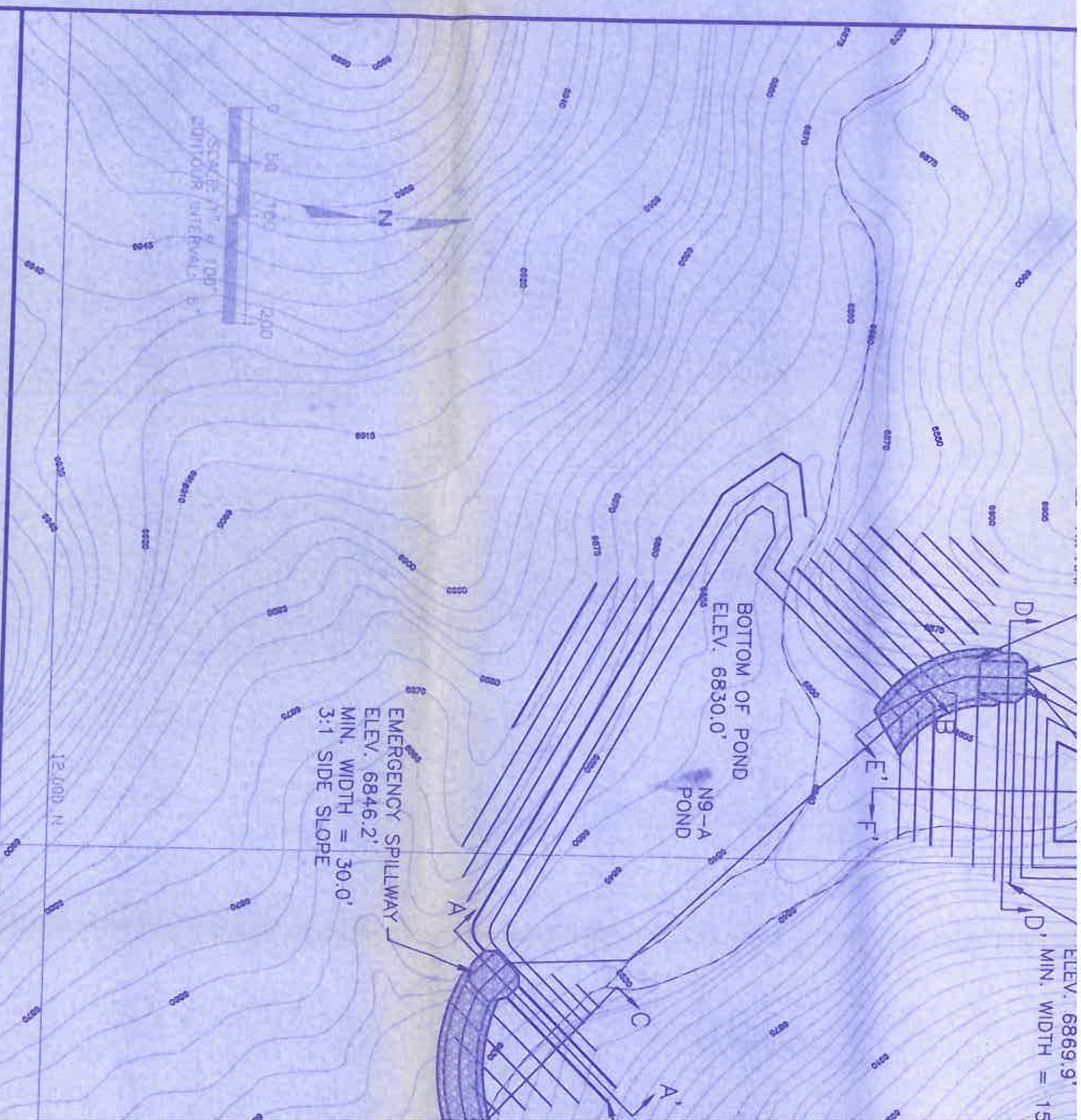
SECTION A - A'
SCALE: HORIZ. 1" = 100'
VERT. 1" = 10'

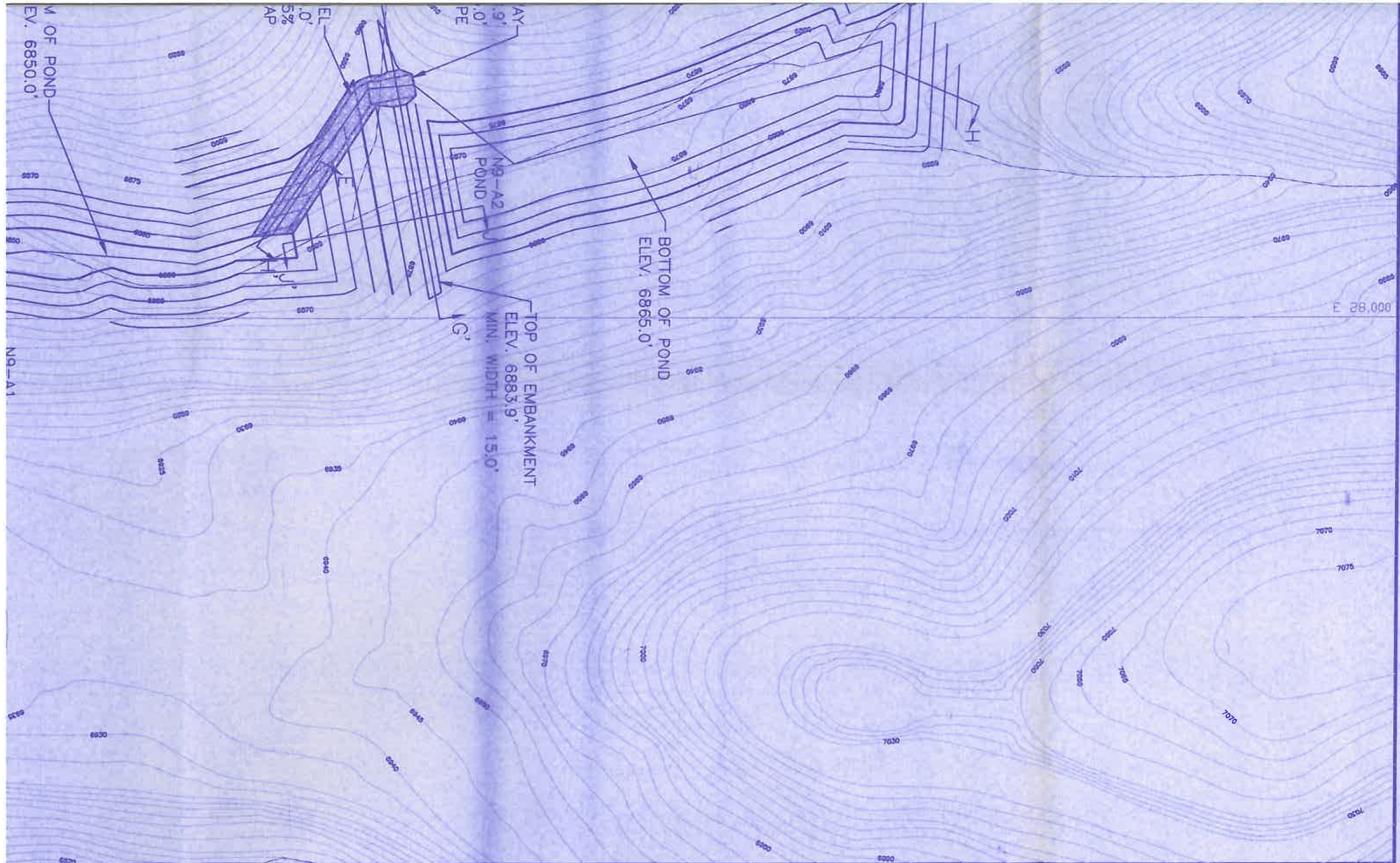


N-9 MINING AREA









M OF POND
EV. 6850.0'

EL. 6850.0'
5% AP

AY 9.0'
PE 10.0'

NG-A2
POND

BOTTOM OF POND
ELEV. 6865.0'

TOP OF EMBANKMENT
ELEV. 6883.9'
MIN. WIDTH = 15.0'

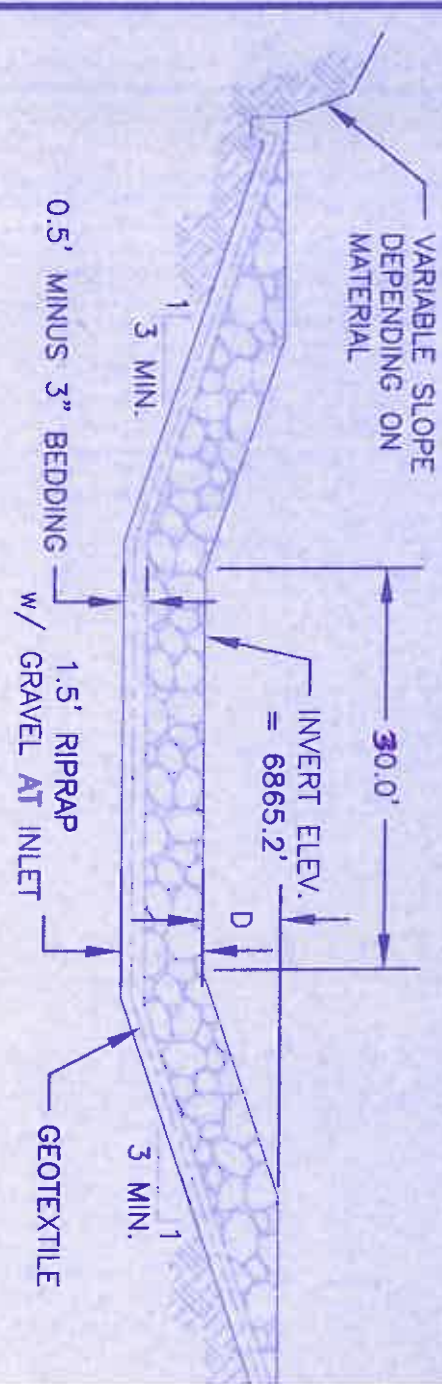
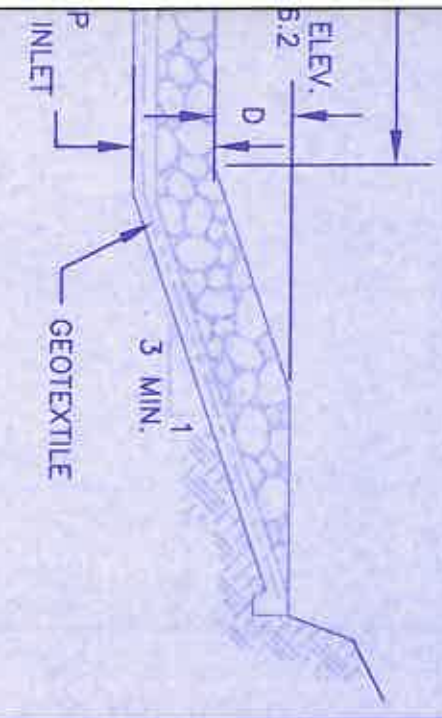
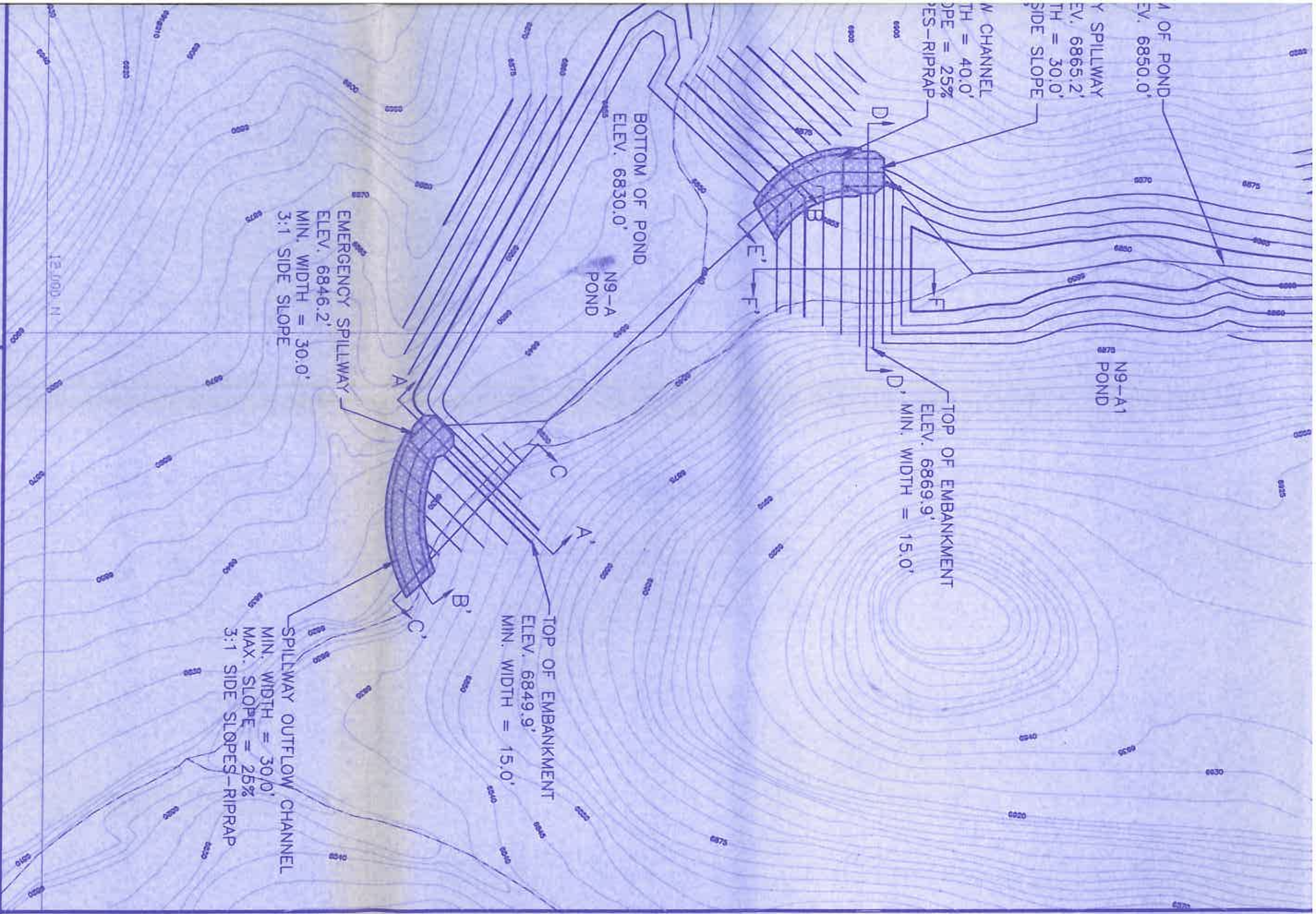
G'

E 28,000

NG-A1

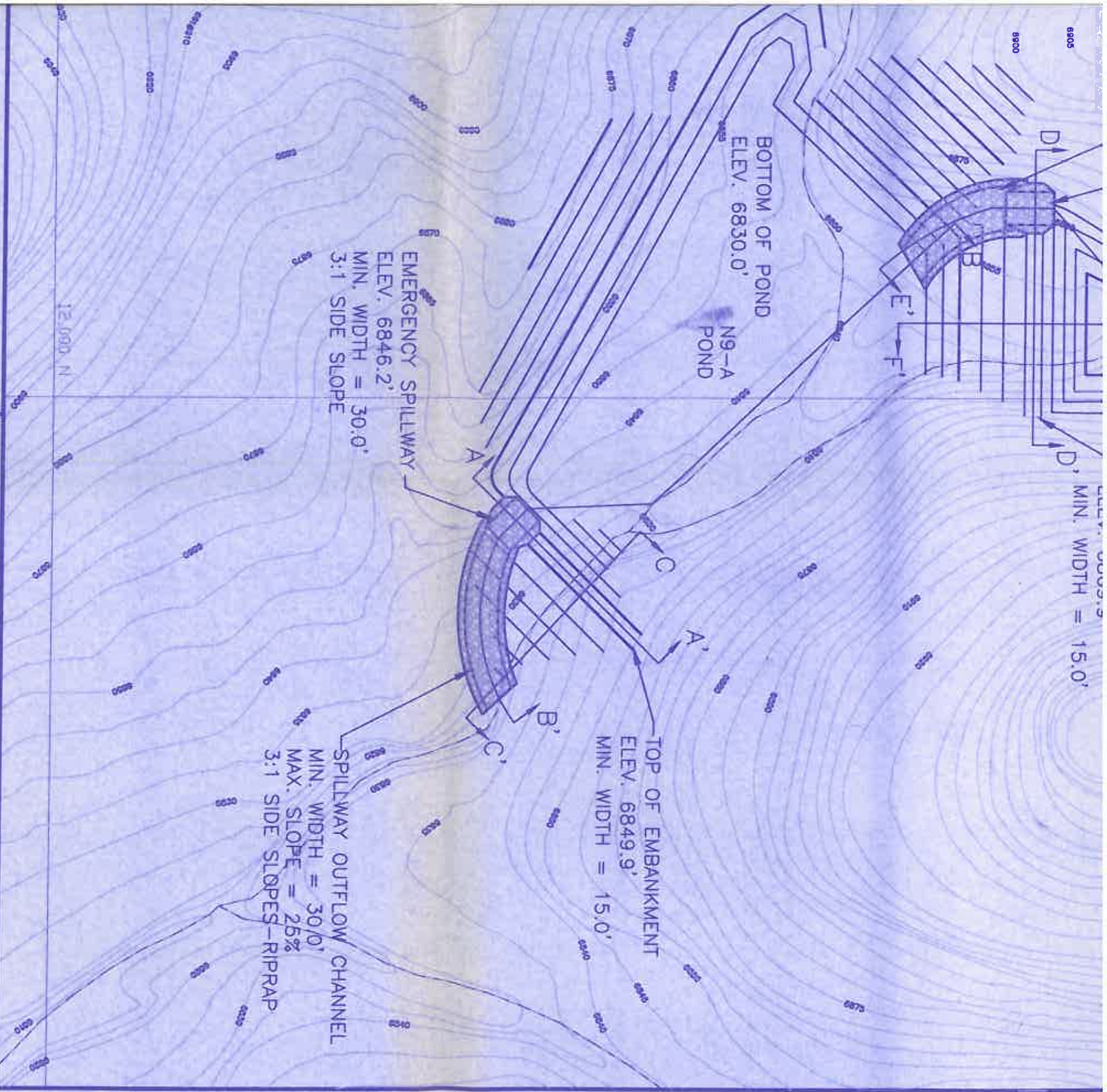
DATUM EL

EMERGEN
E
MIN. WI
3:1



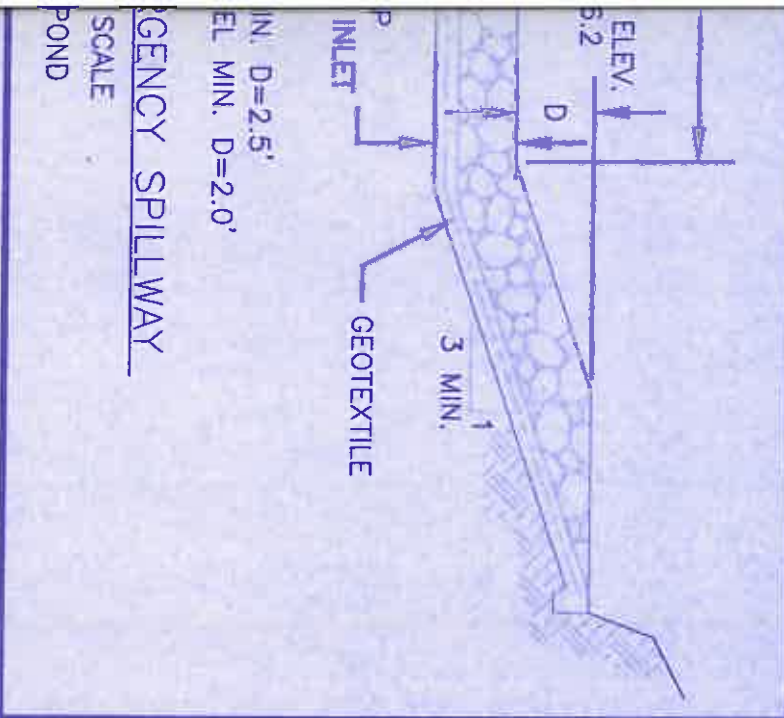
DATUM ELE

DATUM ELE



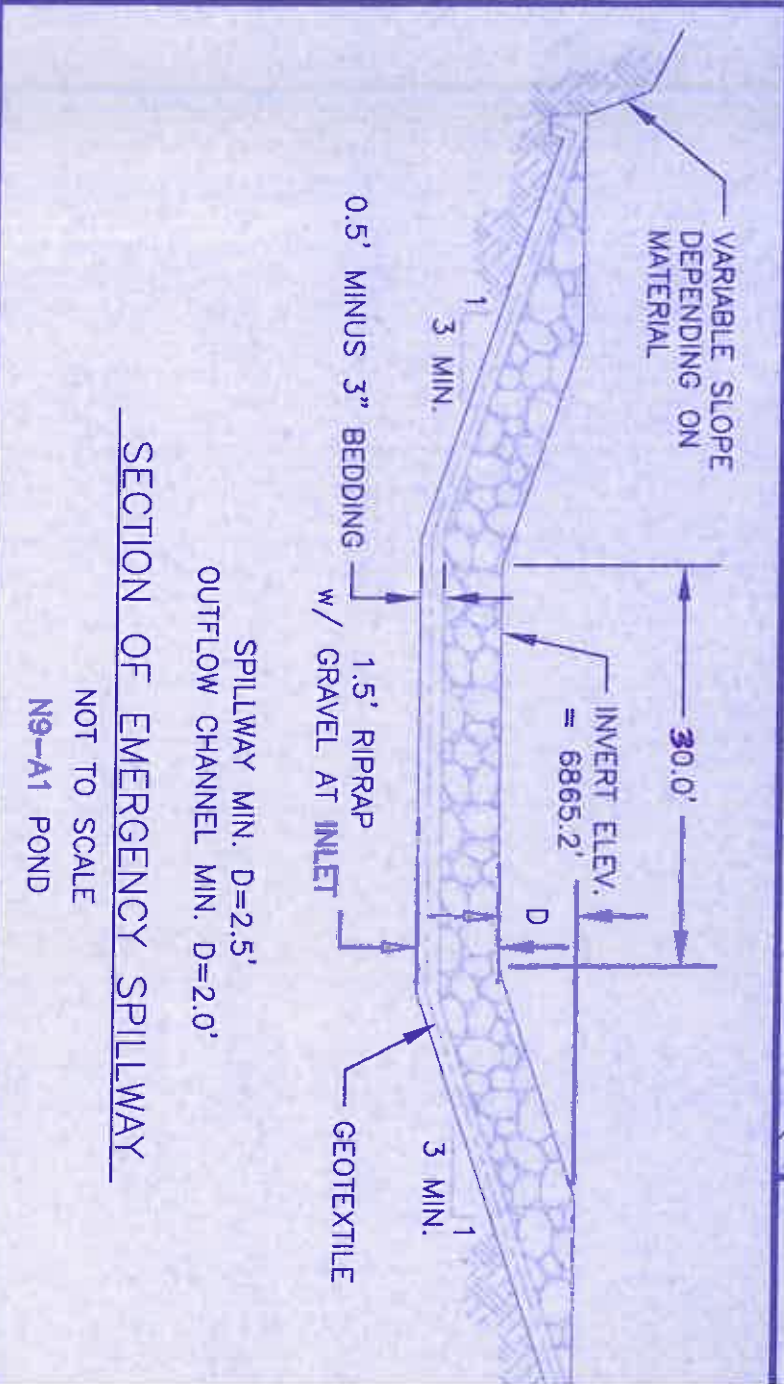
ELEV. 6830.0' MIN. WIDTH = 15.0'

DATUM ELI



MIN. D=2.5'
EL MIN. D=2.0'

EMERGENCY SPILLWAY
SCALE
POND



SPILLWAY MIN. D=2.5'
OUTFLOW CHANNEL MIN. D=2.0'

SECTION OF EMERGENCY SPILLWAY
NOT TO SCALE
N9-A1 POND

DATUM ELI