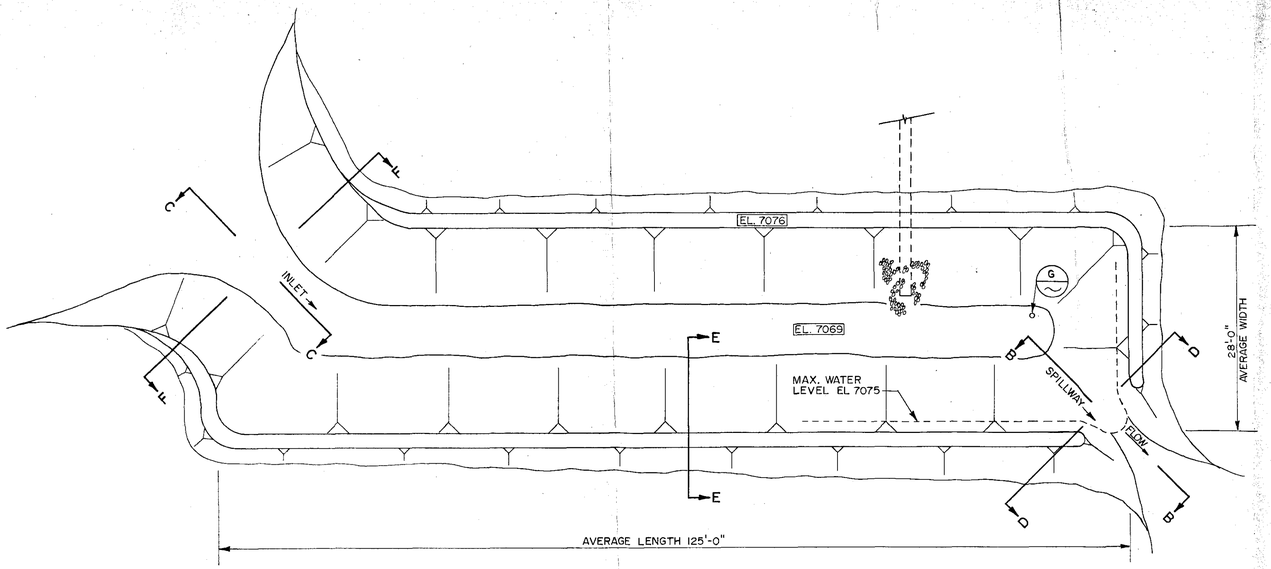
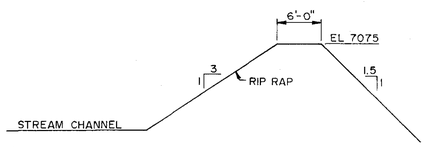
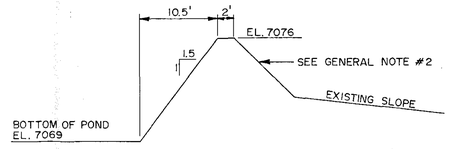


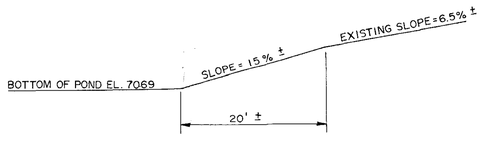
A EXISTING POND
SCALE 1" = 10'-0"



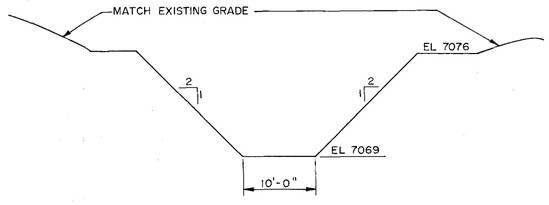
B SPILLWAY SECTION
SCALE: V: 1" = 5'-0" H: 1" = 10'-0"

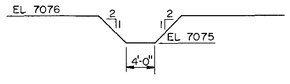


E DIKE SECTION
SCALE: V: 1" = 5'-0" H: 1" = 10'-0"



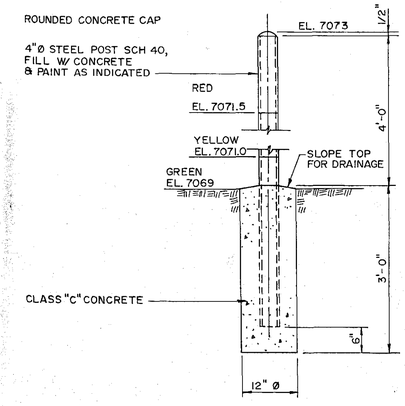
C INLET SECTION
SCALE: V: 1" = 5'-0" H: 1" = 10'-0"





D SPILLWAY SECTION
SCALE: V: 1" = 5'-0" H: 1" = 10'-0"

F INLET SECTION
SCALE: V: 1" = 5'-0" H: 1" = 10'-0"



G SEDIMENT LEVEL INDICATOR
SCALE: NTS

HYDROLOGIC REPORT FOR
CO-OP Mine Disturbed Area
POND DEPTH VS STORAGE PROVIDED

POND IDENTIFIER Sediment Pond "B" - Empty -

ELEV feet	DEPTH feet	AREA sq.ft.	VOLUME cu.ft.	SUM VOL cu.ft.	OUTFLOW c.f.s.
7069.0		728.0		0.0	0.00
	1.0		899.0		
7070.0		1070.0		899.0	0.00
	1.0		1250.0		
7071.0		1430.0		2149.0	0.00
	1.0		1619.0		
7072.0		1808.0		3768.0	0.00
	1.0		2006.0		
7073.0		2204.0		5774.0	0.00
	1.0		2411.0		
7074.0		2618.0		8185.0	0.00
	1.0		2834.0		
7075.0		3050.0		11019.0	0.00
	0.2		619.6		
7075.2		3140.0		11638.6	1.36
	0.2		636.1		
7075.4		3230.0		12274.7	3.85
	0.2		655.6		
7075.6		3320.0		12930.3	7.06
	0.2		672.0		
7075.8		3410.0		13602.3	10.88
	0.2		691.7		
7076.0		3500.0		14294.0	15.20

HYDROLOGIC REPORT FOR
CO-OP Mine Disturbed Area
POND DEPTH VS STORAGE PROVIDED

POND IDENTIFIER Sediment Pond "B" - With 3 years Sediment -

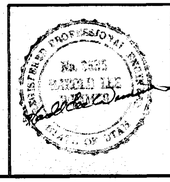
ELEV feet	DEPTH feet	AREA sq.ft.	VOLUME cu.ft.	SUM VOL cu.ft.	OUTFLOW c.f.s.
7071.0		1430.0		0.0	0.00
	1.0		1619.0		
7072.0		1808.0		1619.0	0.00
	1.0		2006.0		
7073.0		2204.0		3625.0	0.00
	1.0		2411.0		
7074.0		2618.0		6036.0	0.00
	1.0		2834.0		
7075.0		3050.0		8870.0	0.00
	0.2		619.6		
7075.2		3140.0		9489.6	1.36
	0.2		636.1		
7075.4		3230.0		10125.7	3.85
	0.2		655.6		
7075.6		3320.0		10781.3	7.06
	0.2		672.0		
7075.8		3410.0		11453.3	10.88
	0.2		691.7		
7076.0		3500.0		12145.0	15.20

NOTES:

1. Pond to be inspected during construction under the supervision of a registered professional engineer.
2. Required angle of exterior slopes on south and east to be determined by stability analysis.
3. Interior slope of 2H:IV to be confirmed by stability analysis.
4. Pond to be constructed in accordance with the requirements of UMC 817.46.

DESIGN CRITERIA:

Drainage Area: 1.82 acres
SCS Curve #82
3-Year Sediment Storage: 2,156 Ft^3
10-year 24-Hour Runoff Storage: 8,182 Ft^3
Total Storage Volume: 10,338 Ft^3
Use Existing Spillway: 4 Foot Wide Broad Crested Weir
Rainfall Data Base: Hiawatha Data by E. Arlo Richardson



HORROCKS / CAROLLO ENGINEERS
1 WEST MAIN STREET
AMERICAN FORK, UTAH 84003

BEAR CREEK CANYON CO-OP MINE

SEDIMENTATION POND "B"

DESIGNED	CHECKED	DATE	SCALE	DRAWING No.	SHEET
EGN	HLW	APR. '84	NOTED		No. OF
DRAWN CEB	TRACED	REVISED			