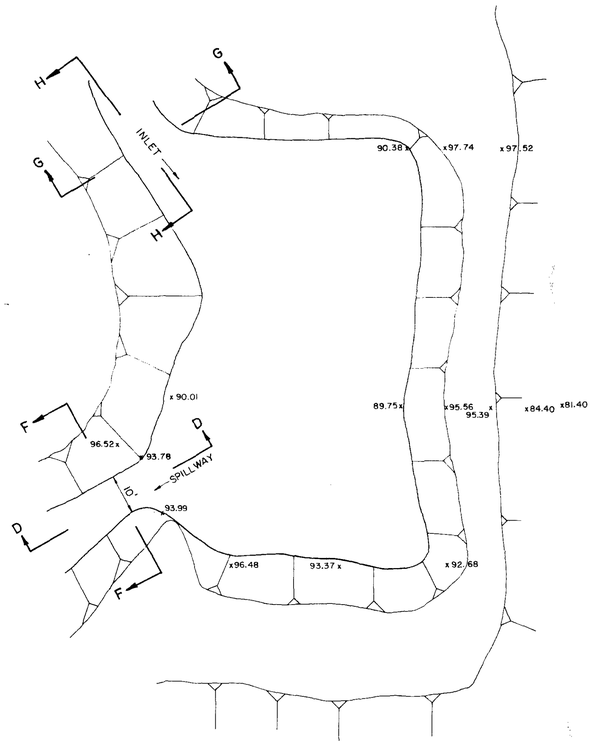
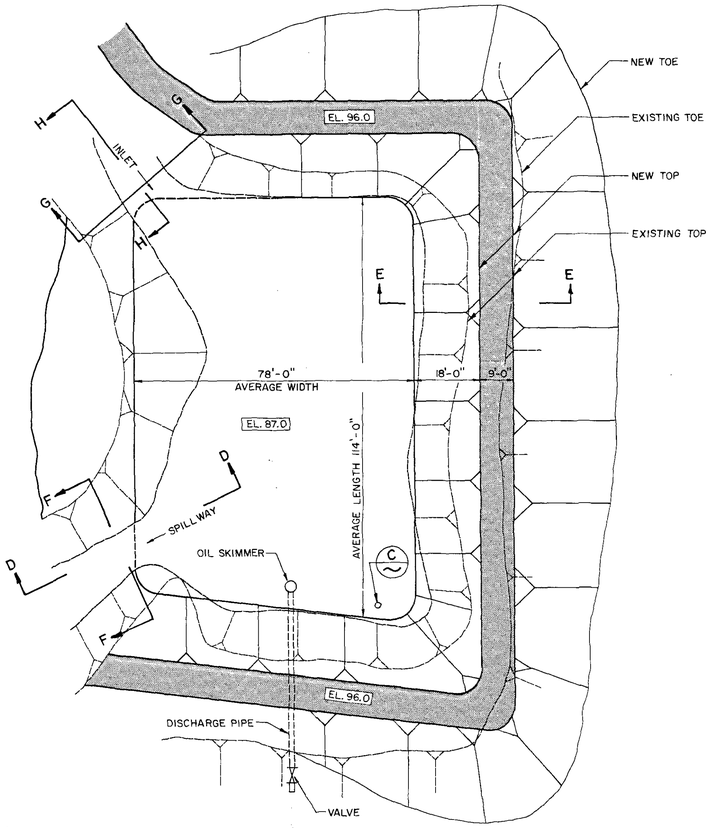


A EXISTING POND
SCALE 1" = 20'-0"



B RECONSTRUCTED POND
SCALE 1" = 20'-0"

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:1V to be confirmed by stability analysis.
4. Pond to be constructed in accordance with the requirements of UMC 817.46.

DESIGN CRITERIA:

Drainage Area 14.35 Acres
SCS Curve #82
3-Year Sediment Storage 41,444 Ft^3
10-Year 24-Hour Runoff Storage 42,714 Ft^3
Use Existing Spillway 10 Foot Wide Broad Crested Weir
Rainfall Data Base Hiawatha Data by E. Arlo Richardson

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

POND IDENTIFIER Reconstructed Sed. Pond "A" - Empty -

ELEV feet	DEPTH feet	AREA sq.ft.	VOLUME cu.ft.	SUM VOL cu.ft.	OUTFLOW c.f.s.
87.0		8892.0		0.0	0.0
	1.0		9284.0		
88.0		9676.0		9284.0	0.0
	1.0		10084.0		
89.0		10492.0		19368.0	0.0
	1.0		10916.0		
90.0		11340.0		30284.0	0.0
	1.0		11780.0		
91.0		12220.0		42064.0	0.0
	1.0		12676.0		
92.0		13132.0		54740.0	0.0
	1.0		13604.0		
93.0		14076.0		68344.0	0.0
	1.0		14564.0		
94.0		15052.0		82908.0	0.0
	0.2		3030.6		
94.2		15254.0		85938.6	0.0
	0.5		7753.0		
94.7		15758.0		93691.6	13.4
	0.5		8006.5		
95.2		16268.0		101698.1	38.0

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

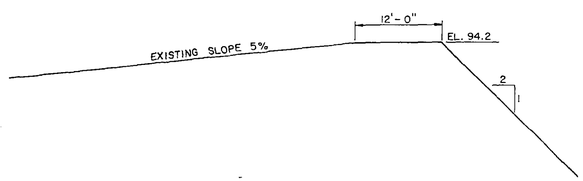
POND IDENTIFIER Reconst. Sed. Pond "A" - with 3 years accumulated sediment

ELEV feet	DEPTH feet	AREA sq.ft.	VOLUME cu.ft.	SUM VOL cu.ft.	OUTFLOW c.f.s.
90.9		12176.0		0.0	0.00
	1.1		13286.7		
92.0		13132.0		13286.7	0.00
	1.0		13604.0		
93.0		14076.0		26890.7	0.00
	1.0		14564.0		
94.0		15052.0		41454.7	0.00
	0.2		3030.6		
94.2		15254.0		44485.3	0.00
	0.5		7753.0		
94.7		15758.0		52238.3	17.44
	0.5		8006.5		
95.2		16268.0		60244.8	35.19

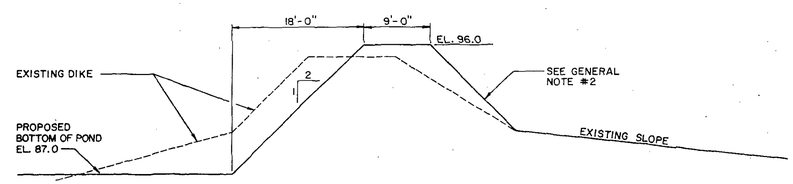
ALL ELEVATIONS RELATE TO THE BENCH MARK SET AT THE SITE AT ELEVATION 100.00

ELEVATION 100.00 BENCH MARK TO BE USED FOR CONSTRUCTION CONTROL

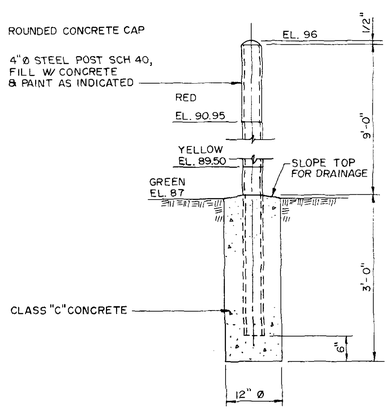
GENERAL NOTES



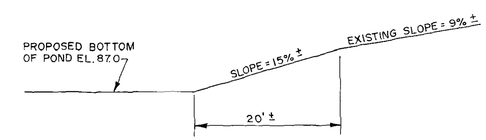
D SPILLWAY SECTION
SCALE: V:1"=5'-0" H:1"=10'-0"



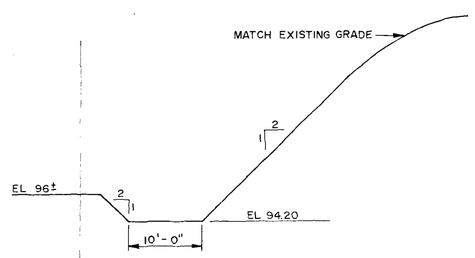
E DIKE SECTION
SCALE: V:1"=5'-0" H:1"=10'-0"



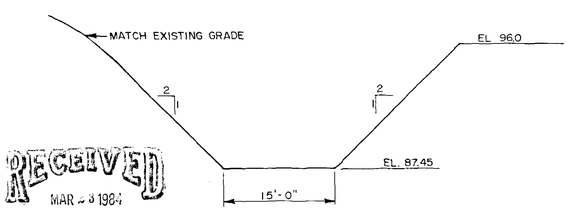
C SEDIMENT LEVEL INDICATOR
SCALE: NTS



H INLET SECTION



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



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

RECEIVED
MAR 23 1984
DIVISION OF
OIL, GAS & MINING

REVISED MARCH 22, 1984

HORROCKS / CAROLLO ENGINEERS
Plaza 2100 Suite 102 140 West 2100 South
Salt Lake City, Utah 84115

BEAR CREEK CANYON CO-OP MINE

SEDIMENTATION POND "A"

DESIGNED	CHECKED	DATE	SCALE	DRAWING No.	SHEET
HLW	HLW	FEB. '84	NOTED		No 1 OF 1
DRAWN DDG	TRACED	REVISED			