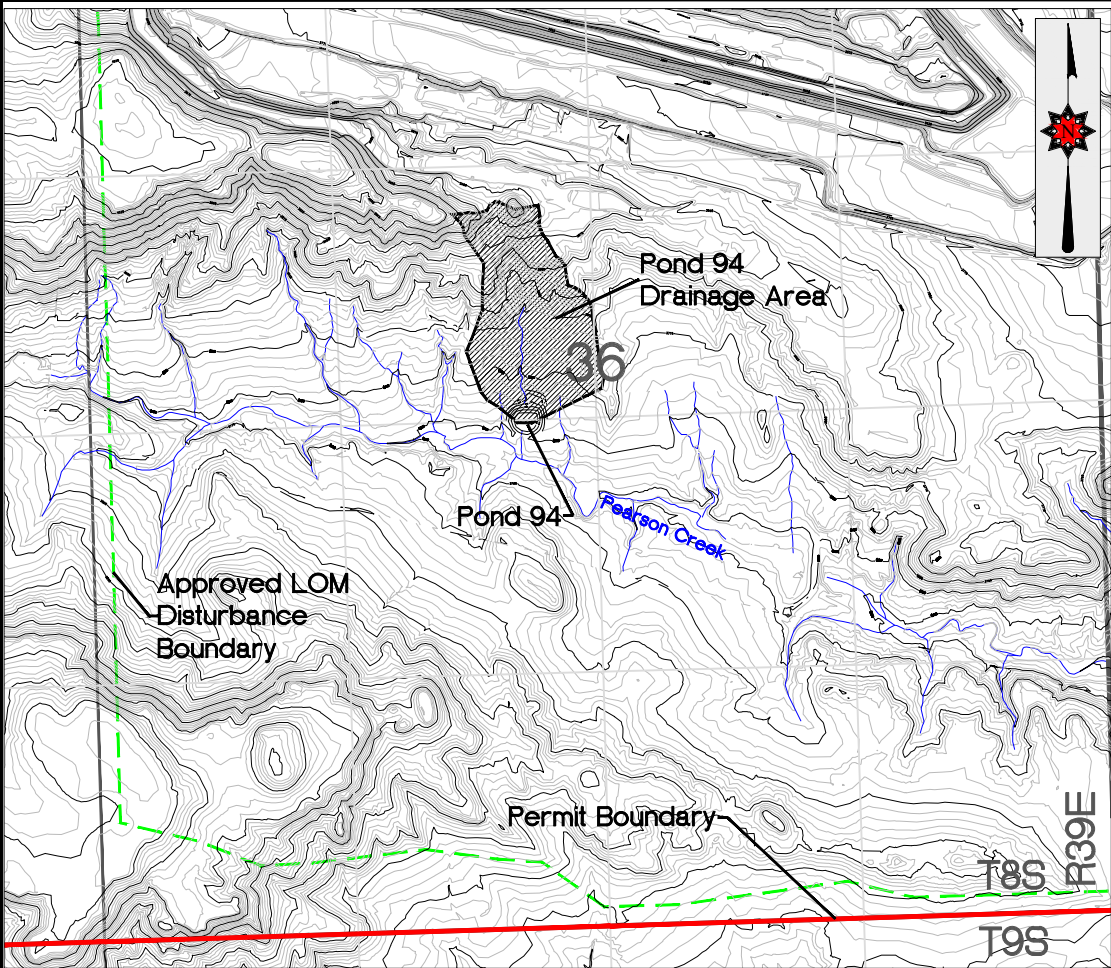
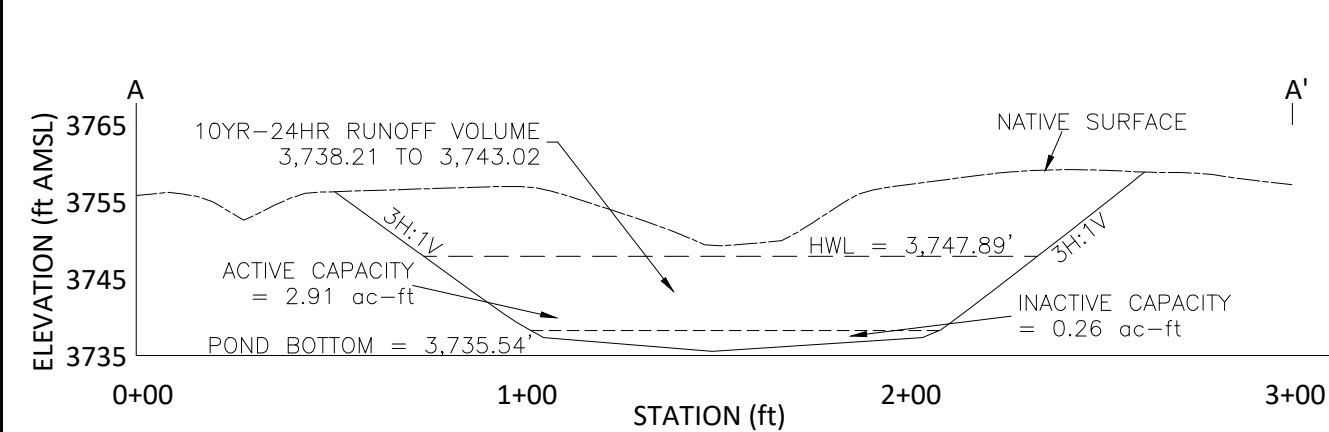




LOCATION MAP

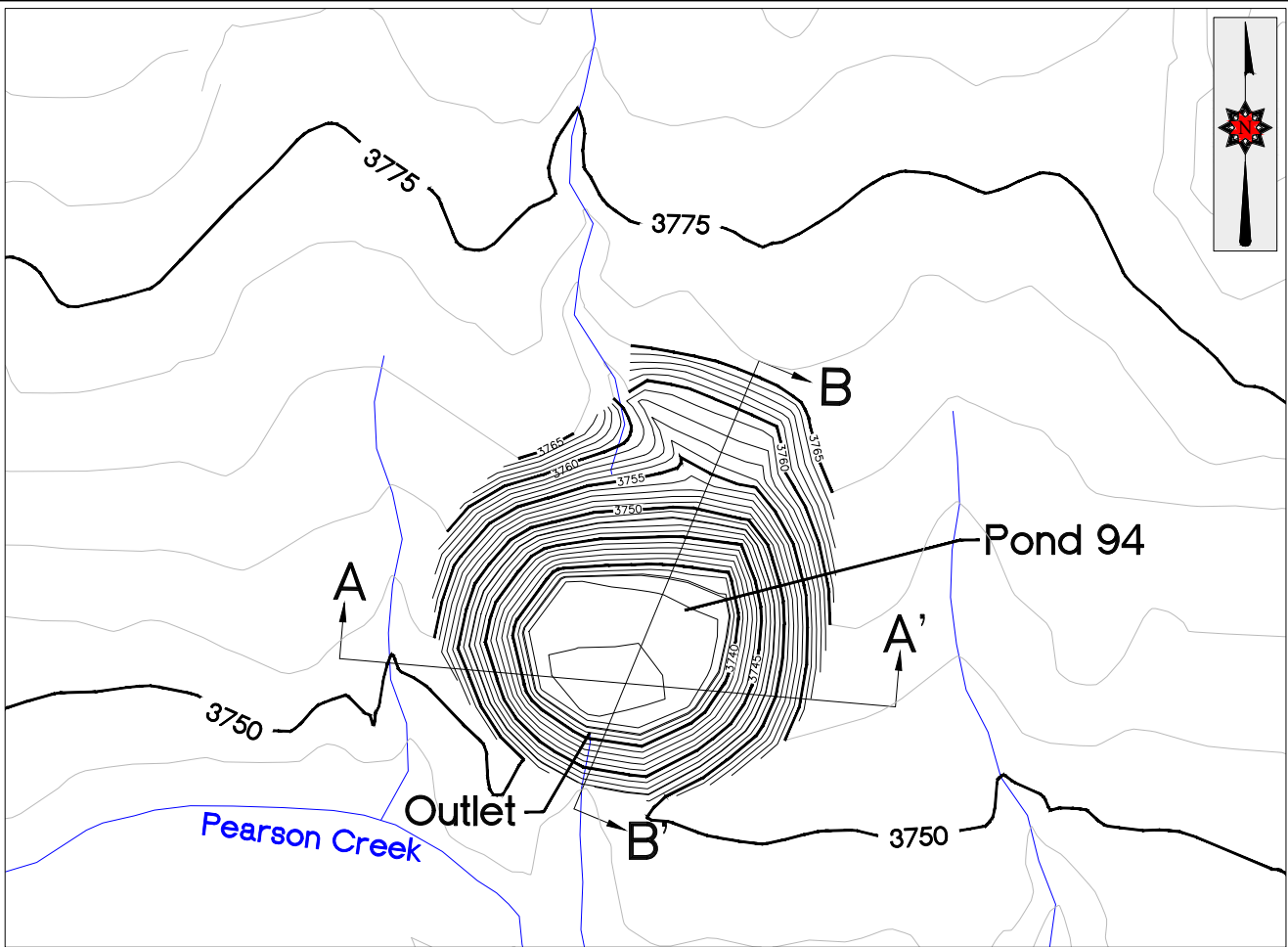
SCALE: 1" = 1,000', C.I. = 5'

POND IS LOCATED PRIMARILY IN SENW OF SECTION 36, T8S, R39E.



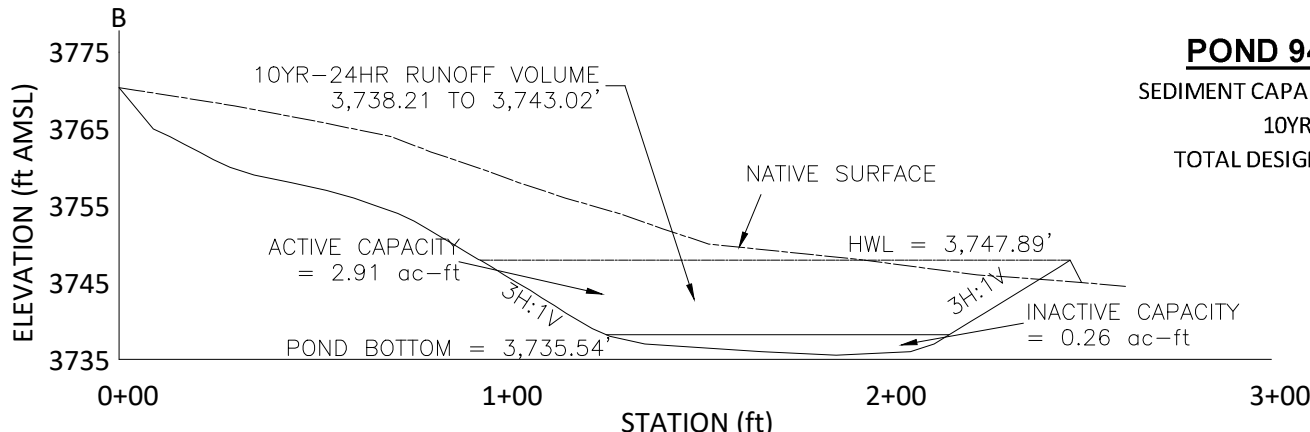
POND PROFILE A-A'

SCALE: H: 1" = 50', V: 1" = 25'



PLAN MAP

SCALE: 1" = 100', POND C.I. = 1', OUTER C.I. = 5'



POND PROFILE B-B'

SCALE: H: 1" = 50', V: 1" = 25'

AREA-ELEVATION-CAPACITY TABLE				
ELEVATION (FT AMSL)	AREA (ACRES)	INCREMENTAL CAPACITY (ACRE-FEET)	CUMULATIVE CAPACITY (ACRE-FEET)	USE
3,735.54	0.00		0.00	INACTIVE CAPACITY VOLUME = 0.26 AC-FT.
3,736.00	0.04	0.01	0.01	
3,738.00	0.17	0.21	0.22	
		0.04		sediment storage
3,738.21	0.18		0.26	
		0.35		
3,740.00	0.22		0.61	ACTIVE CAPACITY VOLUME = 2.91 AC-FT.
		0.49		
3,742.00	0.27	0.59	1.10	
3,744.00	0.32		1.69	10-YEAR / 24-HOUR RUNOFF VOLUME = 1.14 AC-FT.
		0.70		
3,746.00	0.38		2.39	
		0.78		
3,747.89	0.44		3.17	
HIGH WATER LINE = 3,747.89 FT, TOTAL CAPACITY = 3.17 AC-FT.				

POND 94 DRAINAGE AREA DATA

TOTAL DRAINAGE AREA = 13.0 acres
LONGEST WATERCOURSE = 1,215 ft
AVERAGE LAND SLOPE = 20.37%
CURVE NUMBER = 87 (Disturbed Mine Land)
SOILS = Hydrologic Soils Group C
TIME OF CONCENTRATION = 0.108 Hours

RUNOFF ESTIMATE TO POND 94

RAINFALL DISTRIBUTION = SCS TYPE II
PRECIPITATION (10YR-24HR) = 2.19 in
PEAK Q (10YR-24HR) = 20.6 cfs
VOLUME (10YR-24HR) = 1.14 ac-ft
DESIGN METHOD = SCS RUNOFF CURVE NUMBER METHOD AND SCS GRAPHICAL PEAK DISCHARGE METHOD (NRCS TR-55 METHOD)

POND 94 DESIGN CAPACITY

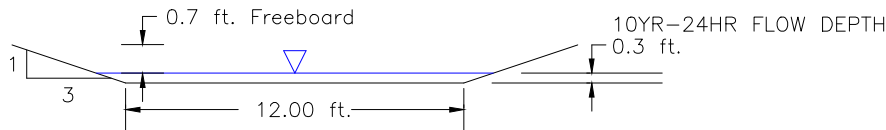
SEDIMENT CAPACITY (0.02 ac-ft per acre) = 0.26 ac-ft
10YR-24HR RUNOFF VOLUME = 1.14 ac-ft
TOTAL DESIGN (MINIMUM) CAPACITY = 1.40 ac-ft

CERTIFICATE OF ENGINEER

I, Owen Lindblom, hereby certify that this map and drawing was prepared by myself or under my direct supervision and that they correctly represent the facilities and conditions described in the accompanying application.



OWEN D. LINDBLOM, P.E. No. 36748PE



Trapezoidal Channel
Equal Side Slopes
Channel Lining: NAG Erosion Control Blanket P300 or Equivalent

INLET CHANNEL AND EROSION PROTECTION

SCALE: AS SHOWN

INLET CHANNEL HYDRAULICS

CHANNEL TYPE	=	TRAPEZOIDAL, EQUAL SIDE SLOPES	RETARDANCE CLASS	=	C
BOTTOM WIDTH	=	12 ft	VEGETATION TYPE	=	BUNCH TYPE
SIDE SLOPES	=	3H:1V	VEGETATION DENSITY	=	FAIR (50-75%)
MAXIMUM SLOPE	=	33% (POND FACE SLOPE)	SOIL TYPE	=	SILT LOAM
10YR-24HR PEAK FLOW	=	20.6 cfs	VELOCITY	=	5.3 ft/s
CHANNEL LINING	=	N.A.G. P300 EROSION CONTROL BLANKET (PERMANENT) WITH VEGETATION	NORMAL DEPTH	=	0.3 ft
			MANNING'S N	=	0.07
			PERMISSIBLE SHEAR STRESS	=	8 lbs/ft ²
			CALCULATED SHEAR STRESS	=	6.2 lbs/ft ²



DESIGN		DRAWN		DATE		SHEET	
DATE	6/04/20	BY	ODL	REVISION	As-Built Conditions	1	OF 1
SCALE				FILE NUMBER			
As Shown				App/b_Pond_94_MR258_20200604.dwg			

SPRING CREEK MINE
P.O. BOX 67, DECKER, MT 59025
PHONE: (406) 757-2581

**Sediment Control
Pond 94 Design**
As-Built