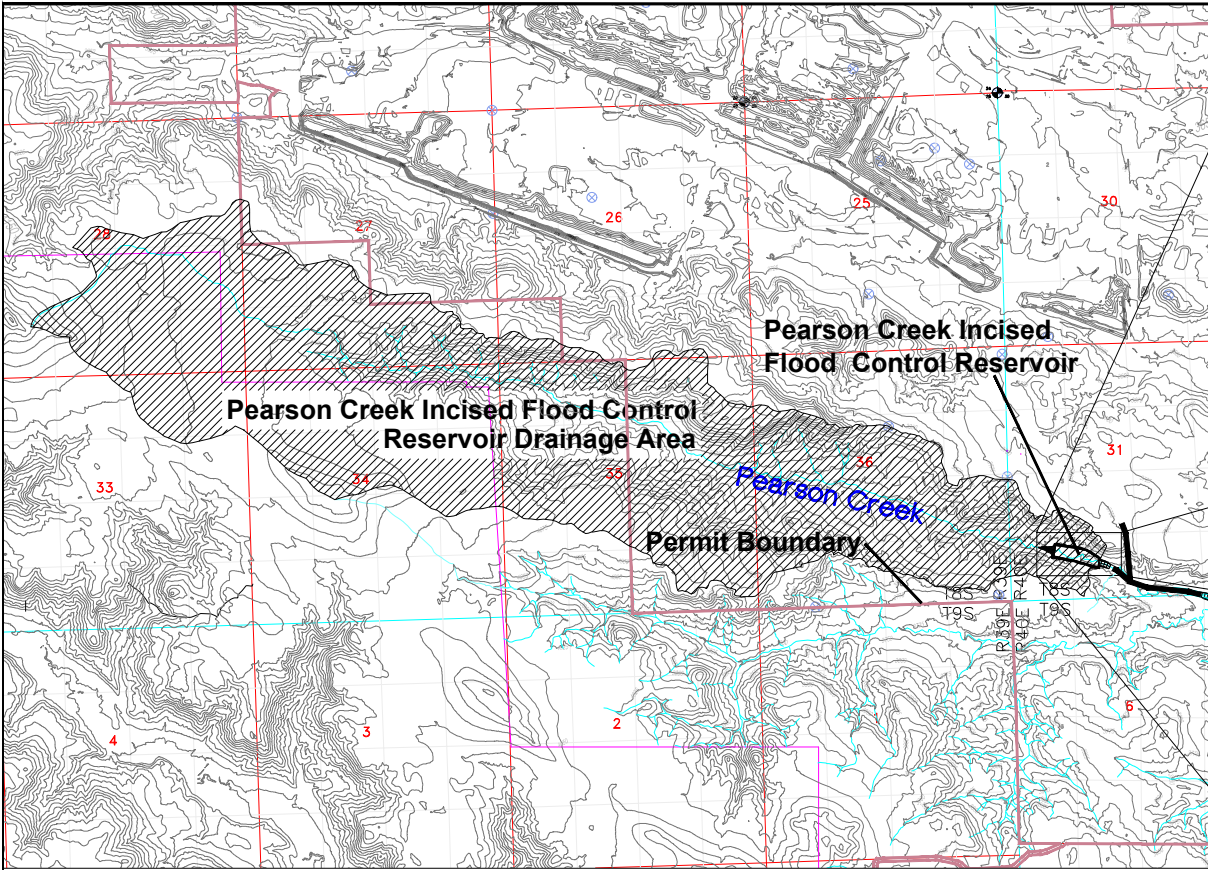
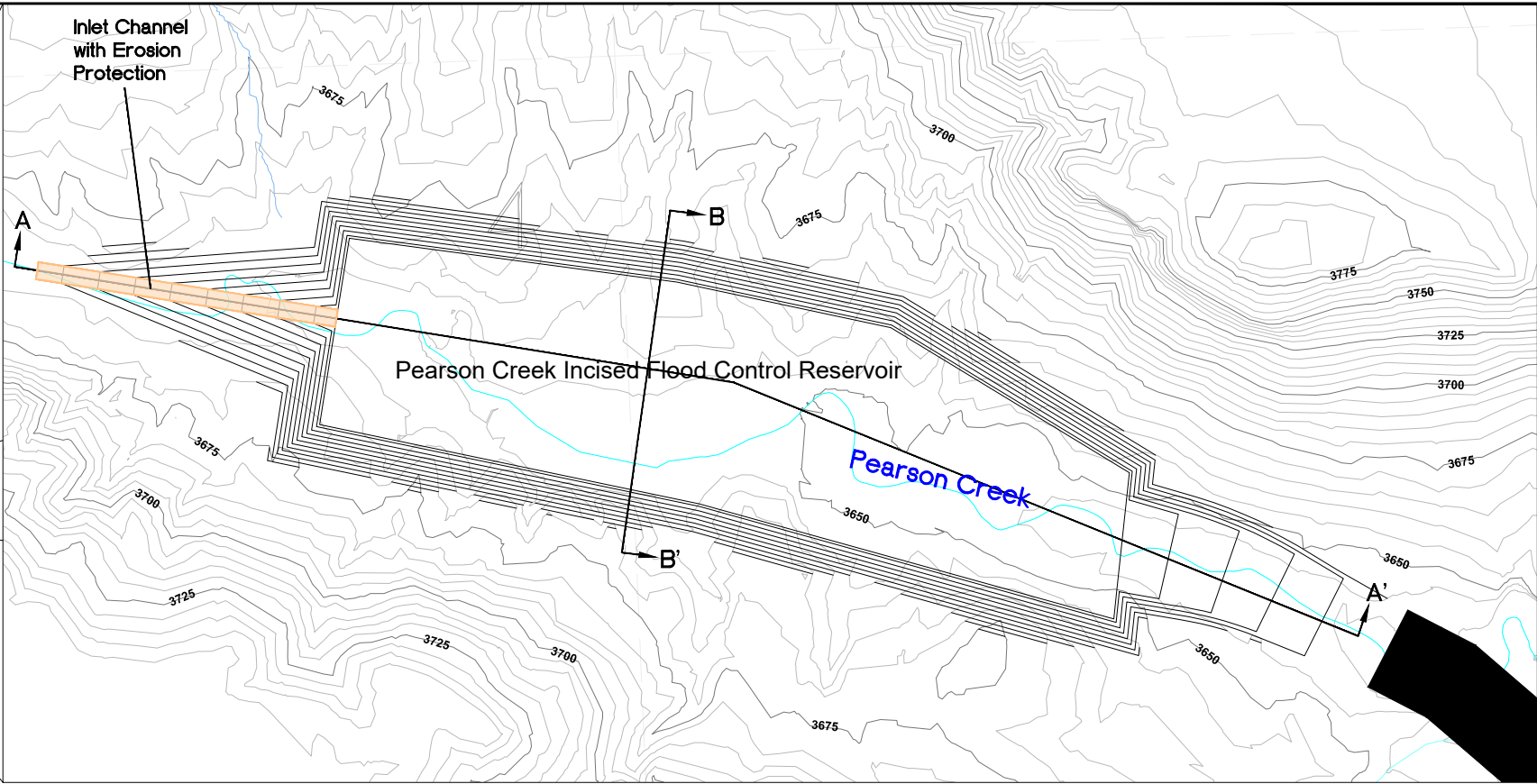




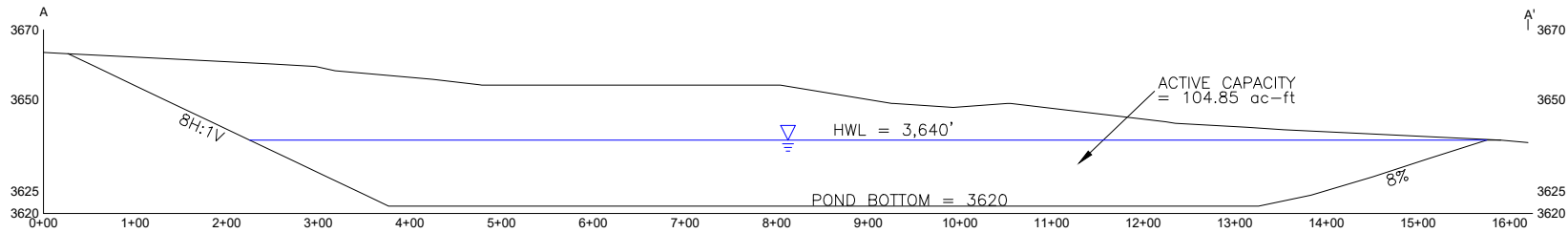
LOCATION MAP
SCALE: 1" = 4,000', C.I. = 25'
POND IS LOCATED IN SESW SECTION 31, T8S, R40E.



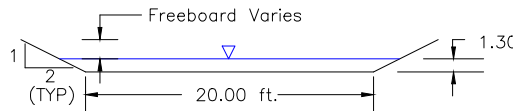
PLAN MAP
SCALE: 1" = 200', C.I. = 5'

INLET CHANNEL HYDRAULICS

CHANNEL TYPE	=	TRAPEZOIDAL, EQUAL SIDE SLOPES	RETARDANCE CLASS	=	C
BOTTOM WIDTH	=	20 ft	VEGETATION TYPE	=	BUNCH TYPE
SIDE SLOPES	=	2H:1V	VEGETATION DENSIT	=	FAIR (50-75%)
MAXIMUM SLOPE	=	12.50%	SOIL TYPE	=	SILT LOAM
100YR-24HR PEAK FLOW	=	861 cfs	VELOCITY	=	29.28 ft/s
CHANNEL LINING	=	N.A.G. C350 EROSION CONTROL BLANKET (PERMANENT) WITH VEGETATION	NORMAL DEPTH	=	1.30 ft
			MANNING'S N	=	0.020
			PERMISSIBLE SHEAR	=	12.0 lbs/ft ²
			CALCULATED SHEAR	=	10.14 lbs/ft ²



PROFILE A-A'
SCALE: H: 1" = 200'
V: 1" = 50'



INLET CHANNEL AND EROSION PROTECTION
NOT TO SCALE

CERTIFICATE OF ENGINEER

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



OWEN LINDBLOM, P.E. No. 36748PE

PEARSON CREEK INCISED FLOOD CONTROL RESERVOIR

DRAINAGE AREA DATA

TOTAL DRAINAGE AREA	=	1738.8 acres
LONGEST WATERCOURSE	=	27,122 ft
AVERAGE LAND SLOPE	=	12.52%
CURVE NUMBER	=	78.3 (Area-Weighted)
SOILS	=	Hydrologic Soils Group C
TIME OF CONCENTRATION	=	1.46 Hours

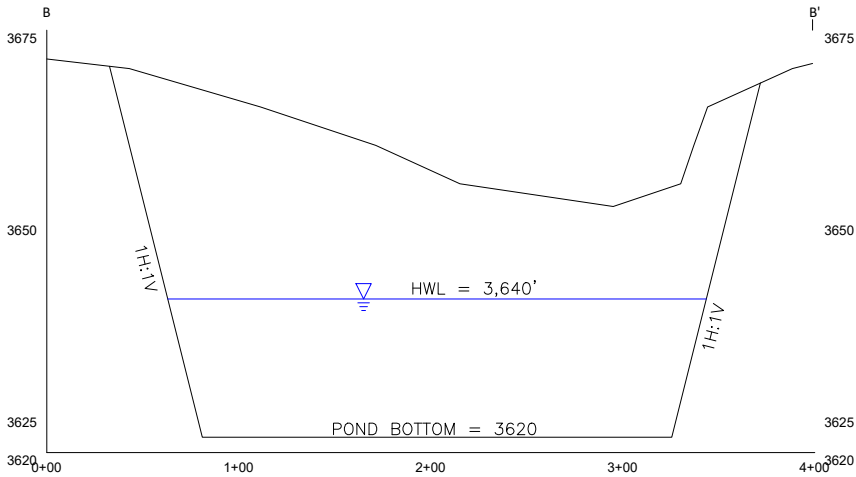
RUNOFF ESTIMATE

RAINFALL DISTRIBUTION	=	SCS TYPE II
PRECIPITATION (100YR-24HR)	=	3.35 in
PEAK Q (100YR-24HR)	=	868.7 cfs
VOLUME (100YR-24HR)	=	103.62 ac-ft
DESIGN METHOD	=	SCS RUNOFF CURVE NUMBER METHOD AND SCS TRIANGULAR HYDROGRAPH METHOD (TRIHYPHRO)

DESIGN CAPACITY

SEDIMENT CAPACITY (0.02 ac-ft per acre)	=	N/A
100YR-24HR RUNOFF VOLUME	=	103.62 ac-ft
SURPLUS VOLUME	=	1.23 ac-ft
TOTAL DESIGN CAPACITY	=	104.85 ac-ft

ELEVATION	Area, ft ²	AREA (ACRES)	AVERAGE AREA (ACRES)	INCREMENTAL CAPACITY (ACRE-FEET)	CUMULATIVE CAPACITY (ACRE-FEET)	USE
3622	215,817	4.954			0	ACTIVE CAPACITY VOLUME = 113.66 AC-FT 100-YEAR, 24-HOUR RUNOFF VOLUME = 103.62 AC-FT
3625	228,749	5.251	5.10	15.31	15.31	
3630	248,942	5.715	5.48	27.42	42.72	
3635	270,035	6.199	5.73	57.25	72.56	
3640	292,515	6.715	6.46	32.29	104.85	
HIGH WATER LINE = 3640 FT, TOTAL CAPACITY = 104.85						



PROFILE A-A'
SCALE: H: 1" = 100'
V: 1" = 25'



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

Pearson Creek Incised Flood Control Reservoir

DATE	REVISION
BY	

DESIGN	ODL	DRAWN	ODL	DATE	01/12/2021	SHEET	1	OF	1
SCALE	As Shown	CONTOUR INTERVAL	As Shown	FILE NUMBER	PCIFCR_MR264_20201230.dwg				