

Ouray Silver Mines, Inc.
1900 Main St. Unit 1
PO Box 564
Ouray, CO 81427



July 5, 2022

Mr. Lucas West
Colorado Division of Reclamation,
Mining and Safety
Room 215
1001 East 62nd Avenue
Denver, CO 80216

**Subject: Inspection Problem Corrective Action
 Atlas TSF – As-Built and Sediment Pond #1 Stormwater Modeling
 DRMS Permit No. M-2012-032
 Revenue Mine, Ouray County, Colorado**

Dear Mr. West,

Ouray Silver Mines, Inc. (OSMI) requested an extension to the July 1, 2022 deadline for providing a professional engineer (P.E.)-certified as-built drawing of the Atlas Tailings Storage Facility (TSF) and stormwater modeling to demonstrate the sediment pond associated with the Atlas TSF (Sediment Pond #1) is designed to contain a 10 year / 24 hour storm event. The Division of Reclamation Mining and Safety (DRMS) approved the extension request to July 8, 2022.

On June 30th, 2022 OSMI retained the services of Merdiam Partners, LLC to develop a P.E.-certified as-built drawing of the Atlas TSF and to model Sediment Pond #1. The following attachments are the result of this effort.

- Atlas TSF As-Built with P.E. Stamp
- SEDCAD model of Atlas TSF Sediment Pond that demonstrates the current configuration of the sediment pond will fully contain the 10 year/24 hour storm event.

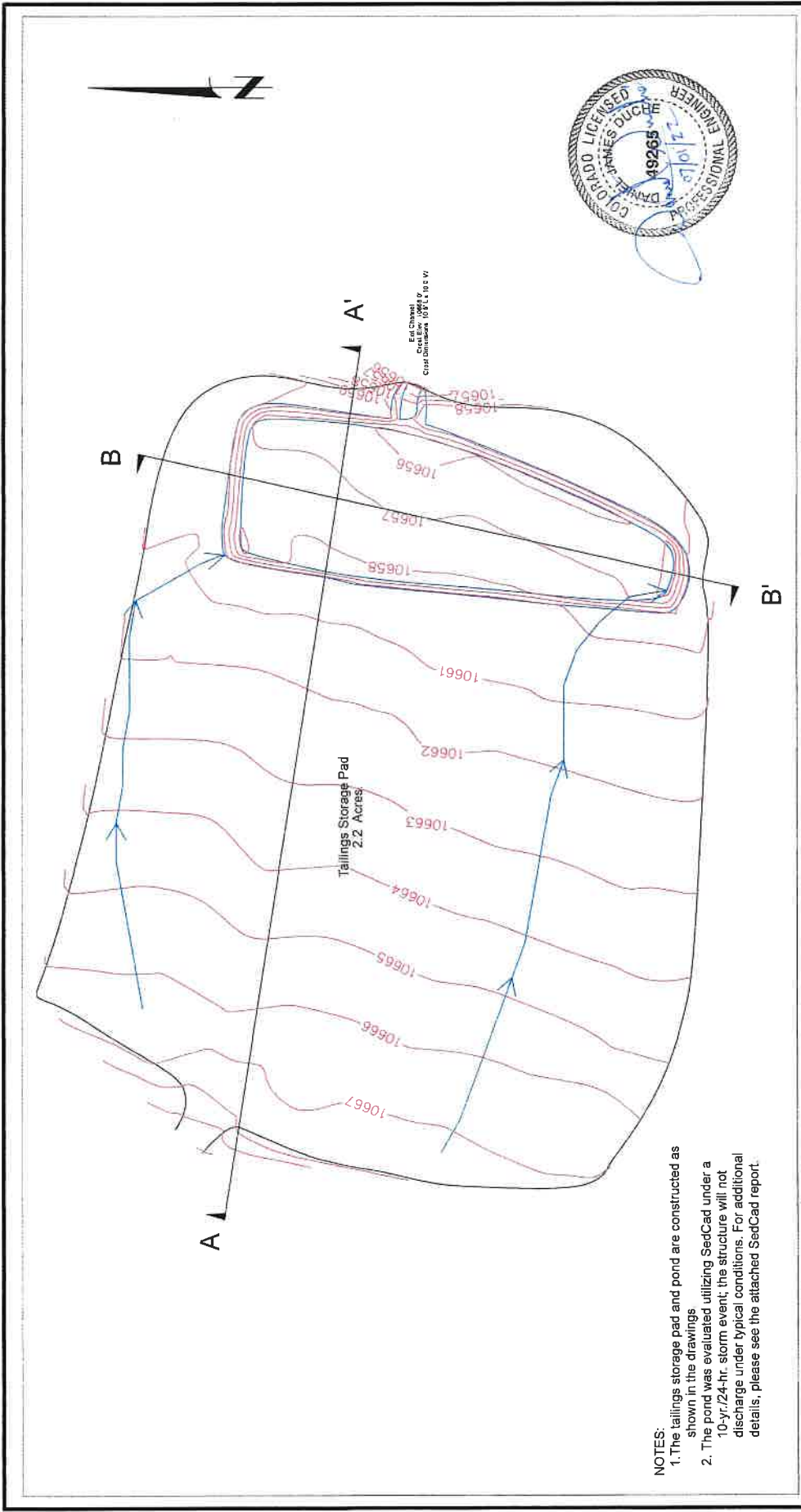
OSMI appreciates DRMS's willingness to work with OSMI on the Atlas TSF documentation. If you have any questions, please contact us at (970) 325-9830.

Sincerely,

Poppy Staub
VP Environment and Government Affairs
Ouray Silver Mine Inc

Cc: Amy Yeldell, DRMS
 Todd Jesse, OSMI

Enc. P.E.-Certified Atlas TSF As-built
 Sed Pond #1 SEDCAD Model Run 10 yr/24 hr Event



		CLIENT Ouray Silver Mines Ouray, Colorado		PROJECT NAME Tailings Storage Facility As-built Certification	
PROJECT NUMBER 20-014		SCALE 1"=50'		SHEET NUMBER 1 of 2	
PROJECT NAME Tailings Storage Facility As-built Certification		CLIENT Ouray Silver Mines Ouray, Colorado		PROJECT NUMBER 20-014	
DATE 07/01/22		BY DJD		REVISION 0	
CHECK REV		DATE 00/00/00		REVISION 0	

MERIDIAN PARTNERS, LLC
 P.O. BOX 102360, DENVER, COLORADO 80210 TEL: 303-815-19245
Planview & General Arrangement
 1 of 2

Section A-A'



Section B-B'



MERIDIAM PARTNERS, LLC P.O. BOX 102380, DENVER, COLORADO 80210 TEL: 303-815-8246		CLIENT Ouray Silver Mines Ouray, Colorado		BY DJD	DATE 07/01/22
		PROJECT NAME Tailings Storage Facility As-built Certification		DRAWN -	CHECK -
Pad & Pond Cross-Sections		PROJECT NUMBER 20-014		REV 0	00/00/00
SCALE 1"=30'		DRAWING NUMBER 2 of 2		REVISION 0	

Ouray Silver Mines **Tailings Storage Facility**

Stormwater Pond
10-Year/24-Hour Storm



Daniel Duche

Meridiam Partners, LLC
1001 W. Arizona Ave.
Denver, CO 80223

Phone: 303-586-4339
Email: dduche@meridiampartners.com

General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	2.530 inches

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Stormwater Pond

#1
Pond

Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)
#1	In	2.200	2.200	0.28	0.03
	Out			0.05	0.03

Structure Detail:

Structure #1 (Pond)

Stormwater Pond

Pond Inputs:

Initial Pool Elev:	10,658.00 ft
Initial Pool:	0.48 ac-ft

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
10,658.00	10.50	1.00:1	1.00:1	10.00

Pond Results:

Peak Elevation:	10,658.01 ft
Dewater Time:	0.51 days

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)
10,656.50	0.300	0.000	0.000	
10,657.00	0.313	0.153	0.000	
10,657.50	0.327	0.313	0.000	
10,658.00	0.341	0.481	0.000	Spillway #1
10,658.01	0.342	0.485	0.050	12.15 Peak Stage
10,658.25	0.348	0.567	1.024	
10,658.50	0.355	0.655	2.048	
10,659.00	0.370	0.836	26.865	
10,659.50	0.385	1.025	55.691	
10,660.00	0.400	1.221	90.939	

Detailed Discharge Table

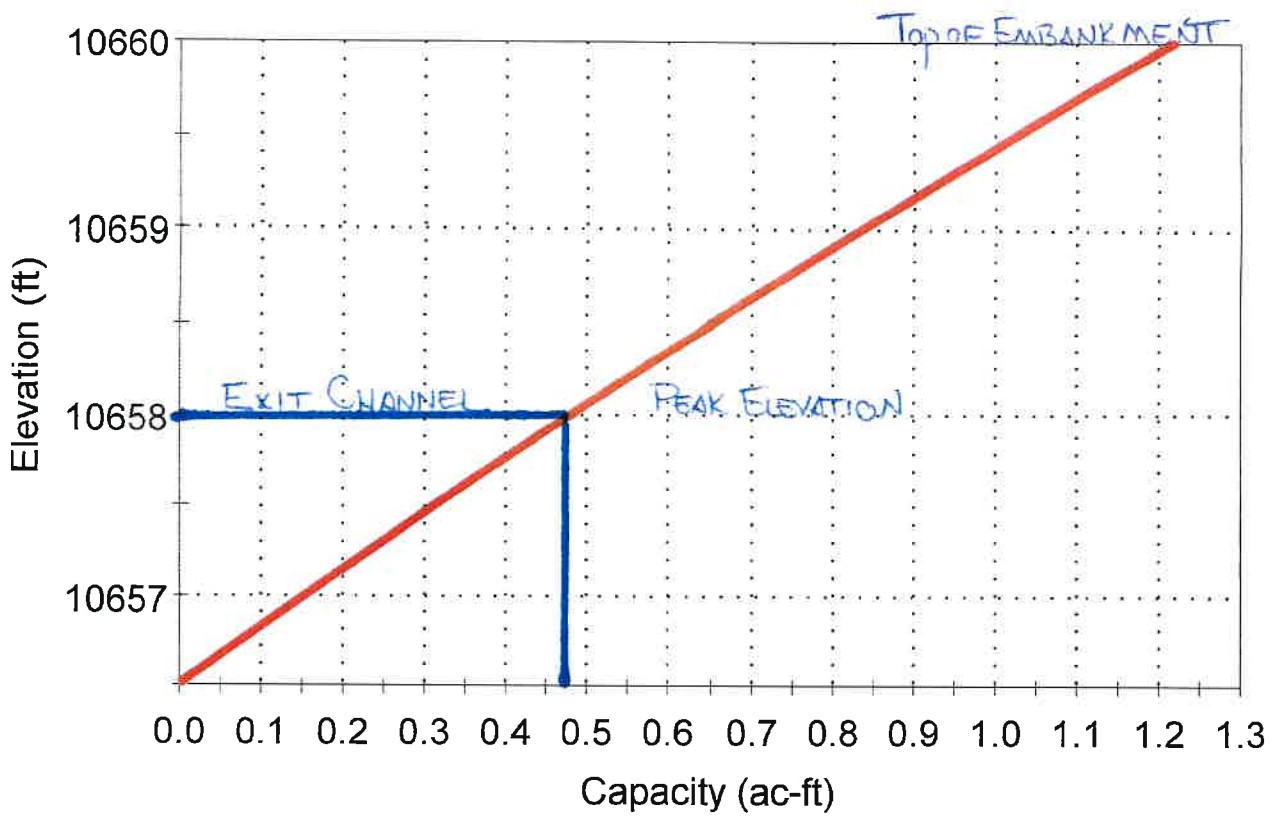
Elevation (ft)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
10,656.50	0.000	0.000
10,657.00	0.000	0.000
10,657.50	0.000	0.000
10,658.00	0.000	0.000
10,658.25	1.024	1.024
10,658.50	2.048	2.048
10,659.00	26.865	26.865
10,659.50	55.691	55.691
10,660.00	90.939	90.939

Subwatershed Hydrology Detail:

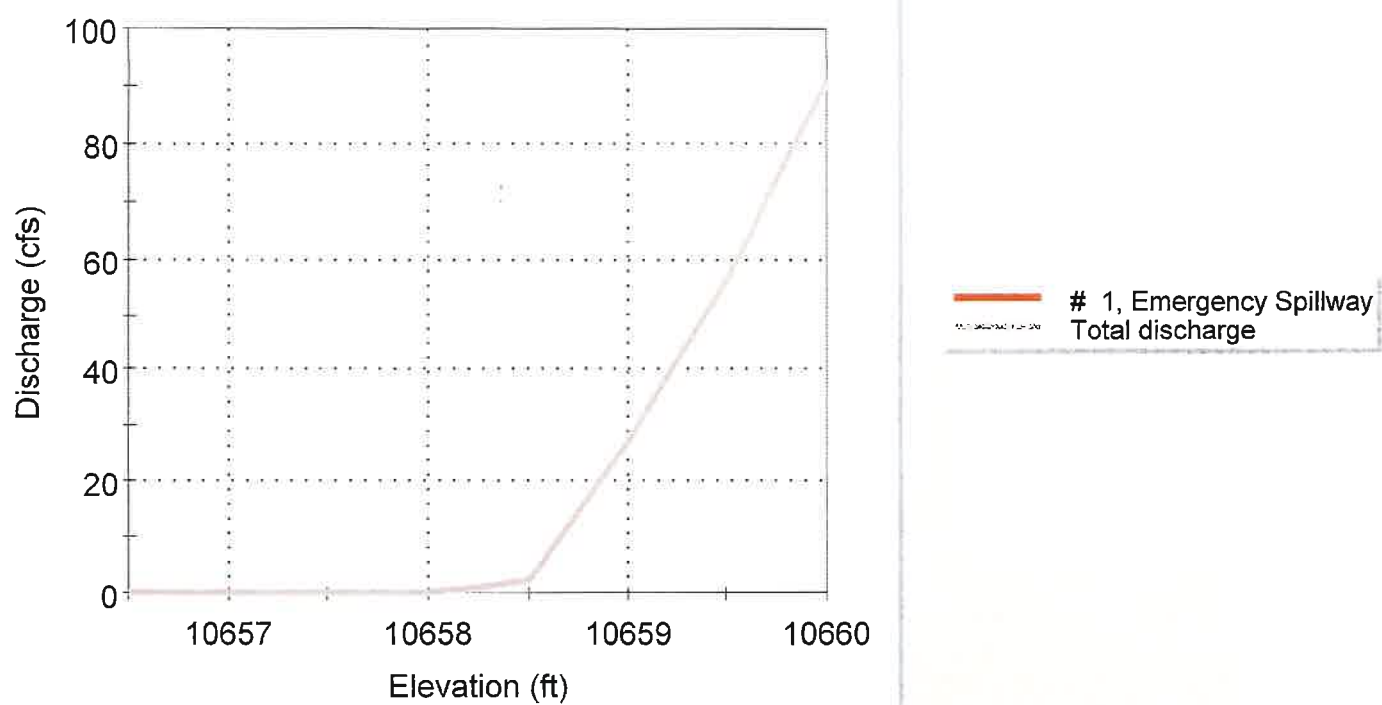
Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	2.200	0.054	0.000	0.000	59.000	TR55	0.28	0.029
Σ		2.200						0.28	0.029

Subwatershed Time of Concentration Details:

Stru #	SWS #	Land Flow Condition	Slope (%)	Vert. Dist. (ft)	Horiz. Dist. (ft)	Velocity (fps)	Time (hrs)
#1	1	5. Nearly bare and untilled, and alluvial valley fans	2.50	7.75	310.00	1.580	0.054
#1	1	Time of Concentration:					0.054



Stage-Discharge Curves for Structure # 1



Inflow/Outflow Hydrographs for Structure # 1

