Dear Hunter Ridley.

On June 3rd, 2024, we received an email with some questions about the recent TR-2 application that Schmidt Construction Company sent in on May 23rd, 2024. Below you will find our responses that hopefully will adequately address the questions and concerns the Division has and I have attached to the body of this email maps and some clarification documents to help answer. If you need any further information, please reach out.

Mine Plan Update

> *"Technical Revision application TR-2 was submitted in response to a problem cited in the February 21, 2024 inspection report for the Menzer Quarry. This problem citation was prompted through review of the site's Annual Report submitted in December of 2023 which indicated a planned expansion into of the southeast corner of the pit, but within the allowed affected acreage boundary. During the inspection, a determination could not be made as to whether the current bond amount accounted for this southeastern expansion or not. Therefore, the Division requested a TR to clarify the mining plan for this area so as to better assess the accuracy of the bond amount."*

The mining activities in the southeast corner are scheduled to commence approximately 10 years from 2024 depending on assumed consistent sales and market demand. Our plan is to ensure that the mining activities remain within the existing affected land boundary for the site. The area will not be excavated to day light as was briefly discussed during our first meeting at the site, but will only be mined up to a natural break in the rock that is shown on the plan submitted prior but is attached again for your review. This timeline allows us to focus on mining the central area of the current pit to create space for a new processing plant and storage area at the 6750' level. The plan involves extending the quarry towards the west to create additional space for the new plant, ensuring it is safely distanced from future blasting activities. Once the new plant is operational, the current processing plant at the 6550' level will be dismantled, and the space will be repurposed for storage of rock piles for shipping. This approach will allow blasting in the southeast corner without disrupting operations or damaging any plant equipment. The current plant site and equipment safety are the primary factors delaying the development of the southeast corner. We have included a map displaying the plan for this area and our permit boundary to illustrate that we will stay within the affected land area. The specific areas are the 110-1100 series of cuts on the southeast corner, as shown on both the map and the spreadsheet. We will mine up to a natural break in the rock formation to ensure a clean cleavage plane, as indicated on the map. The remaining rock to the east of this break will be left in place, as it is not economically feasible to mine due to its steepness.

Blasting Plan

"Pursuant to Rule 6.5(4) an operator who proposes blasting is required to provide an appropriate blasting, vibration, geotechnical and structural engineering analyses that off-site areas will not be adversely affected by blasting. While the Rules do not provide details of the exact type of analysis or demonstration that needs to be conducted, the Division typically follows the protective standards accepted by the Office of Surface Mining, Reclamation and Enforcement and the Colorado Dept. of Labor and Employment, Division of Oil and Public Safety Explosives Regulations (Colorado 7 C.C.R. 1101-9). Therefore, the following adequacy item references requirements from the above sources.

2. Pursuant to Rule 4.08.2(1), At least 30 days before initiation of blasting, the operator shall provide written notification to all residents or owners of dwellings or other structures located within one-half mile of the permit area which explains how to request a preblasting survey. Please provide the Division with a list and simple map of any dwellings or structures located within one-half mile of the permit area. If no structures or dwellings are located within this radius, please state this.

Schmidt Construction hires Southwest Energy to handle the blasting at the Menzer quarry. Southwest Energy is responsible for monitoring the vibration, conducting geotechnical analysis of each blast, and documenting the blasts. If there are any complaints from neighbors, Southwest Energy provides data and analysis to address the issues. They also follow a blasting plan that includes monitoring and electronic documentation of each blast, adhering to Colorado state standards.

We have created a simple map showing the structures and dwellings within half a mile of the affected land boundary. The affected rather than the permit boundary is used because it is the affected land boundary that controls where disturbance may occur, not the permit boundary. Long ago when these boundaries were interpreted differently, the trees between the two boundaries were removed to better identify the affected land boundary. Now that would not be done.

There are 8 non-Schmidt structures and dwellings identified. Schmidt Construction has no issue with notifying the owners of these structures at least 24 hours prior to blasting, either via email or phone, which is a customary and courteous practice along the front range with many of the quarry operators. Quarry blasting is highly variable in timelines due to the size of the operations, and quarries do not have their own blasting crews, relying instead on outside blasting companies to initiate the blasts. Rule 4.08, as pointed out by Mark Heifner and you clarified in the email sent on 6.10.24, pertains to coal standards. It's important to note that coal mining blasting is different from quarry blasting, as coal mining blasts are typically larger in tonnage shot, size of holes, depth of holes, number of holes, amount of explosive material detonated and location from the surface, to remove overburden material. These deposits can vibrate differently than hard, competent rock material found within the Menzer quarry.

Regards,
Jeff Jacoby

Menzer Mine Plan Calculations Page 1

Year 1										
	Area	Length	Width	Depth	Volume	T/Cu Yd	2.1	Tons	Elev Begin	Elev End
Top of NW quarry above haul Road	1	316	100	25	790000		2.1	61444	6974	6949
New Ramp	2				0		2.1	230805	7124	6850
East Ramp Through boneyard	3	120	120	25	360000		2.1	28000	6850	6750
Old Existing Ramp	4	607	75	175	2784375		2.1	216563	6850	6750
Area between old ramp and new short ramp	5	60	50	25	75000		2.1	5833	6747	6722
1st Cut on top	6	75	410	50	1537500		2.1	119583	6974	6924
2nd Cut on top	6A	125	225	50	1406250		2.1	109375	6974	6924
Southwest cut next to 6 south of cut 8	7	100	125	45	562500		2.1	43750	6974	6929
West cut next to 6	8	100	125	45	562500		2.1	43750	6974	6929
Trim cut west uppper section	9	600	70	45	1890000		2.1	147000	7150	7005
							total=	1006104		

Year 2										
	Area	Length	Width	Depth	Volume	T/Cu Yd	2.1	Tons	Elev Begin	Elev End
Front shot to take down hill	X	225	75	45	759375		2.1	59063	6926	6881
West of X	X1	225	50	45	506250		2.1	39375	6926	6881
West of X1	X2	200	100	45	900000		2.1	70000	6885	6840
North and under some of X1 to bench down between ramp and new cut	X3	200	75	40	600000		2.1	46667	6930	6890
North of X	X4	225	75	60	1012500		2.1	78750	6950	6890
East of X	X5	300	75	35	787500		2.1	61250	6945	6910
Far west trim shot against mountain	X6	300	75	45	1012500		2.1	78750	7150	7105
South of X shot take out old ramp	X7	115	70	35	281750		2.1	21914	6990	6955
North of X5	X8	270	70	55	1039500		2.1	80850	6945	6890
Directly under X8	X9	270	70	45	850500		2.1	66150	6890	6845
East of shot X8	X10	225	70	45	708750		2.1	55125	6890	6845
East of shot X5	X11	450	80	45	1620000		2.1	126000	6940	6895
Old internal ramp shot	X13	225	60	45	607500		2.1	47250	7000	6955
Shot west of X2	X14	100	310	45	1395000		2.1	108500	6975	6930
Repeat X13 daylight road to south	Repeat X13	225	100	45	1012500		2.1	78750	6955	6910
							total=	939643		

Year 3										
	Area	Length	Width	Depth	Volume	T/Cu Yd	2.1	Tons	Elev Begin	Elev End
South area trim cut	A	500	70	50	1750000		2.1	136111	6925	6875
South area clean up Benches to straighten out quarry	B	120	225	40	1080000		2.1	84000	6980	6940
Trim shot west in central part of quarry	C	45	75	50	168750		2.1	13125	6790	6740
West cut next to X14	D	425	70	45	1338750		2.1	104125	6975	6930
Cut west of cut D	E	330	70	45	1039500		2.1	80850	6975	6930
Cut west of E cut	F	250	70	45	787500		2.1	61250	7025	6980
Cut west of F cut	G	300	70	45	945000		2.1	73500	7025	6980
Cut west of G cut	H	350	70	50	1225000		2.1	95278	7025	6975
Cut west of H cut	I	450	70	45	1417500		2.1	110250	7050	7005
Take cut 1A to clean old ramp elevations (blue)	1A	600	75	45	2025000		2.1	157500	6890	6845
							total=	915989		

Menzer Mine Plan Calculations Page 2

Year 4

	Area	Length	Width	Depth	Volume	T/Cu Yd	Tons	Elev Begin	Elev End
Take cut east of 1A (brown)	2B	900	70	45	2835000	2.1	220500	6840	6795
East cut of face east of shot 2B (green)	3C	300	70	35	735000	2.1	57167	6890	6855
Repeat X, X5, X4 and X7 (red line)		400	150	45	2700000	2.1	210000	6890	6845
Repeat X, X5, X4 and X7 (red line)		225	75	35	590625	2.1	45938	6845	6810
Repeat X8, X10, X11	X8,X10,X11 Repeat	1000	70	45	3150000	2.1	245000	6845	6800
Repeat taking 1A (blue down)	1A Repeat	600	75	35	1575000	2.1	122500	6845	6810
Repeat taking 2B (brown) down to 3C level	2B Repeat	900	70	35	2205000	2.1	171500	6855	6820
Repeat taking 3C	3C Repeat	300	70	45	945000	2.1	73500	6820	6775
Repeat X13	Repeat X13	225	125	45	1265625	2.1	98438	6955	6910
						total=	1244542		

Year 5

	Area	Length	Width	Depth	Volume	T/Cu Yd	Tons	Elev Begin	Elev End
Repeat X13	Repeat X13	225	125	45	1265625	2.1	98438	6910	6865
Repeat X1	Repeat X1	225	50	45	506250	2.1	39375	6885	6840
Repeat X, X7,X4	Repeat X,X7,X4	700	75	40	2100000	2.1	163333	6810	6770
Repeat X5,X8	Repeat X5, X8	700	70	45	2205000	2.1	171500	6800	6755
Repeat X11, X10	Repeat X11, X10	725	70	45	2283750	2.1	177625	6800	6755
Repeat 1A (blue)	Repeat 1A	600	75	35	1575000	2.1	122500	6810	6775
Repeat 2B	Repeat 2B	900	70	45	2835000	2.1	220500	6820	6775
Repeat 3C	Repeat 3C	300	70	35	735000	2.1	57167	6775	6740
						total=	1050438		0

Year 6

	Area	Length	Width	Depth	Volume	T/Cu Yd	Tons	Elev Begin	Elev End
Repeat X13	Repeat X13	225	125	45	1265625	2.1	98438	6865	6820
Repeat X1	Repeat X1	225	50	40	450000	2.1	35000	6840	6800
Repeat X, X7,X4	Repeat X,X7,X4	700	75	45	2362500	2.1	183750	6770	6725
Repeat X5,X8	Repeat X5, X8	700	70	45	2205000	2.1	171500	6775	6730
Repeat X11, X10	Repeat X11, X10	725	70	45	2283750	2.1	177625	6775	6730
Repeat 1A (blue)	Repeat 1A	600	75	35	1575000	2.1	122500	6775	6740
Repeat 2B	Repeat 2B	900	70	35	2205000	2.1	171500	6775	6740
Repeat X14	Repeat X14	100	310	45	1395000	2.1	108500	6930	6885
Repeat X2	Repeat X2	200	100	45	900000	2.1	70000	6840	6795
						total=	1138813		0

Year 7

	Area	Length	Width	Depth	Volume	T/Cu Yd	Tons	Elev Begin	Elev End
Repeat 3C	Repeat 3C	300	70	35	735000	2.1	57167	6740	6705
West cut next to X14	Repeat D	425	70	45	1338750	2.1	104125	6930	6885
Cut west of cut D	Repeat E	330	70	45	1039500	2.1	80850	6930	6885
Cut west of E cut	Repeat F	250	70	45	787500	2.1	61250	6980	6935
Cut west of F cut	Repeat G	300	70	50	1050000	2.1	81667	6980	6930
Cut west of G cut	Repeat H	350	70	50	1225000	2.1	95278	6975	6925
Cut west of H cut	Repeat I	450	70	45	1417500	2.1	110250	7055	7010
Cut west of H cut	Repeat I	450	70	45	1417500	2.1	110250	7055	7010
Repeat D	Repeat D	425	70	40	1190000	2.1	92556	6885	6845
Repeat E	Repeat E	350	70	40	980000	2.1	76222	6885	6845
Repeat X14	Repeat X14	100	310	45	1395000	2.1	108500	6885	6840
						total=	978114		

Menzer Mine Plan Calculations Page 3

Year 8

	Area	Length	Width	Depth	Volume	T/Cu Yd	Tons	Elev Begin	Elev End
Repeat X, X7,X4	Repeat X,X7,X4	700	75	45	2362500	2.1	183750	6725	6680
Repeat X11, X10	Repeat X11, X10	725	70	35	1776250	2.1	138153	6730	6695
Repeat X1	Repeat X1	225	50	45	506250	2.1	39375	6680	6635
Repeat X5,X8	Repeat X5, X8	700	70	35	1715000	2.1	133389	6730	6695
Repeat X2	Repeat X2	200	100	45	900000	2.1	70000	6795	6750
Repeat 1A (blue)	Repeat 1A	600	75	45	2025000	2.1	157500	6740	6695
Repeat 2B	Repeat 2B	900	70	25	1575000	2.1	122500	6775	6750
Repeat X14	Repeat X14	100	310	45	1395000	2.1	108500	6840	6795
						total=	953167		

Year 9

	Area	Length	Width	Depth	Volume	T/Cu Yd	Tons	Elev Begin	Elev End
Repeat E	Repeat E	330	70	35	808500	2.1	62883	6845	6810
Repeat F	Repeat F	280	70	40	784000	2.1	60978	6935	6895
Repeat G	Repeat G	330	70	55	1270500	2.1	98817	6935	6880
Repeat B minus 50 feet for bench	Repeat B	120	175	45	945000	2.1	73500	6820	6775
Repeat I	Repeat I	450	50	45	1012500	2.1	78750	7010	6965
Repeat H	Repeat H	350	100	45	1575000	2.1	122500	6925	6880
Repeat G	Repeat G	300	100	45	1350000	2.1	105000	6870	6825
Repeat F	Repeat F	250	70	45	787500	2.1	61250	6895	6850
Repeat X2	Repeat X2	200	100	45	900000	2.1	70000	6695	6650
Repeat X1	Repeat X1	225	50	45	506250	2.1	39375	6725	6680
Repeat X14	Repeat X14	100	310	45	1395000	2.1	108500	6795	6750
Repeat D	Repeat D	450	70	45	1417500	2.1	110250	6800	6755
Repeat E	Repeat E	350	70	45	1102500	2.1	85750	6845	6800
						total=	1014669		

Year 10

	Area	Length	Width	Depth	Volume	T/Cu Yd	Tons	Elev Begin	Elev End
Repeat E	Repeat E	330	70	45	1039500	2.1	80850	6800	6755
Repeat H	Repeat H	350	70	45	1102500	2.1	85750	6880	6835
Repeat G	Repeat G	330	50	50	825000	2.1	64167	6825	6775
Repeat E	Repeat E	350	70	40	980000	2.1	76222	6755	6715
Repeat F	Repeat F	300	70	45	945000	2.1	73500	6780	6735
Repeat X5,X8	Repeat X5, X8	700	70	35	1715000	2.1	133389	6765	6730
Repeat X,X7,X4	Repeat X,X7,X4	750	75	45	2531250	2.1	196875	6745	6700
Top of SE quarry above plant	110	300	50	25	375000	2.1	29167	7025	7000
Top of SE quarry above plant	210	300	50	25	375000	2.1	29167	7000	6975
Top of SE quarry above plant	310	220	50	25	275000	2.1	21389	6975	6950
Top of SE quarry above plant	410	250	50	25	312500	2.1	24306	6950	6925
Top of SE quarry above plant	510	300	50	25	375000	2.1	29167	6925	6900
Top of SE quarry above plant	610	300	45	25	337500	2.1	26250	6900	6875
Top of SE quarry above plant	710	300	50	25	375000	2.1	29167	6875	6850
Top of SE quarry above plant	810	300	45	25	337500	2.1	26250	6850	6825
Top of SE quarry above plant	910	350	40	25	350000	2.1	27222	6825	6800
Top of SE quarry above plant	1010	450	40	25	450000	2.1	35000	6800	6775
Top of SE quarry above plant	1110	450	40	50	900000	2.1	70000	6775	6725
Top of SE quarry above plant	1210	125	25	25	78125	2.1	6076	6700	6675
						total=	1063913		

Menzer Mine Plan Calculations Page 4

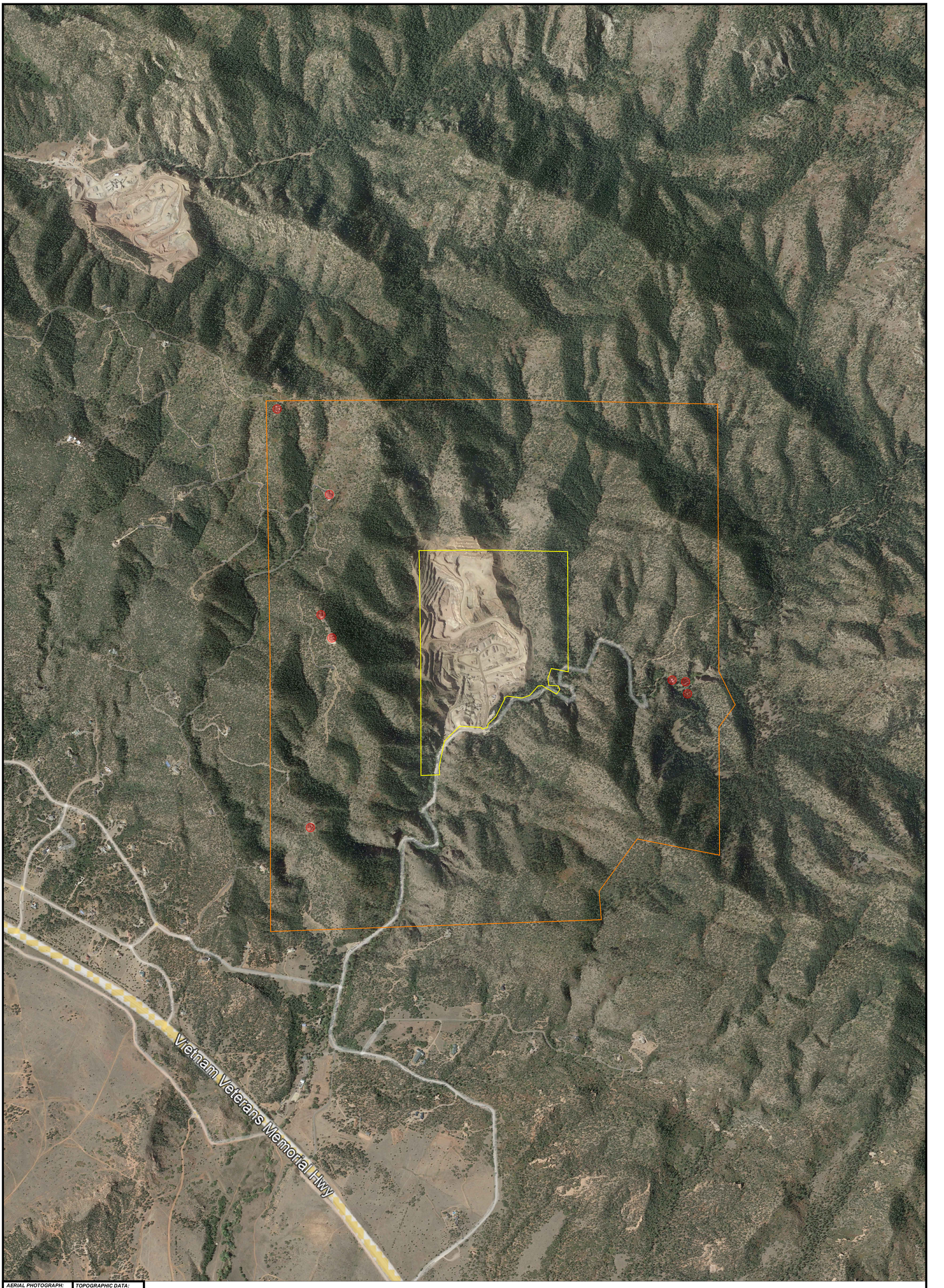
Year 11										
	Area	Length	Width	Depth	Volume	T/Cu Yd	Tons	Elev Begin	Elev End	
Repeat D	Repeat D	425	70	45	1338750	2.1	104125	6755	6710	
Repeat X, X7,X4	Repeat X,X7,X4	700	75	45	2362500	2.1	183750	6700	6655	
Repeat X1	Repeat X1	225	50	45	506250	2.1	39375	6735	6690	
Repeat X2	Repeat X2	200	100	45	900000	2.1	70000	6749	6704	
Repeat X14	Repeat X14	100	310	45	1395000	2.1	108500	6795	6750	
Repeat E	Repeat E	330	70	45	1039500	2.1	80850	6715	6670	
Repeat D	Repeat D	425	70	45	1338750	2.1	104125	6710	6665	
Repeat X2	Repeat X2	200	100	45	900000	2.1	70000	6695	6650	
Repeat X14	Repeat X14	100	310	45	1395000	2.1	108500	6750	6705	
Repeat E	Repeat E	330	70	45	1039500	2.1	80850	6670	6625	
Repeat D	Repeat D	425	70	45	1338750	2.1	104125	6670	6625	
						total=	1054200			

Year 12										
	Area	Length	Width	Depth	Volume	T/Cu Yd	Tons	Elev Begin	Elev End	
SW Corner trim and straightening	1512	360	40	50	720000	2.1	56000	7025	6975	
SW Corner trim and straightening	1612	400	50	50	1000000	2.1	77778	6975	6925	
SW Corner trim and straightening	1712	325	50	45	731250	2.1	56875	7025	6980	
SW Corner trim and straightening	1812	200	40	45	360000	2.1	28000	7000	6955	
SW Corner trim and straightening	1912	550	40	45	990000	2.1	77000	6975	6930	
Straightening and changing direction of mining and blasting S to N	20	800	100	45	3600000	2.1	280000	6875	6830	
Straightening and changing direction of mining and blasting S to N	21	750	60	45	2025000	2.1	157500	6830	6785	
Straightening and changing direction of mining and blasting S to N	22	750	60	45	2025000	2.1	157500	6950	6905	
						total=	890653			

Year 13										
	Area	Length	Width	Depth	Volume	T/Cu Yd	Tons	Elev Begin	Elev End	
Straightening and changing direction of mining and blasting S to N	23	1000	60	45	2700000	2.1	210000	6925	6880	
box cut to new plant floor	24	1200	200	45	10800000	2.1	840000	6830	6785	
						total=	1050000			

Year 13										
	Area	Length	Width	Depth	Volume	T/Cu Yd	Tons	Elev Begin	Elev End	
Mining south to north to ground floor	25	700	80	60	3360000	2.1	261333	6710	6650	
Mining south to north to ground floor	26	700	80	60	3360000	2.1	261333	6710	6650	
Mining south to north to ground floor	27	800	90	60	4320000	2.1	336000	6710	6650	
Mining south to north to ground floor	28	800	100	60	4800000	2.1	373333	6711	6651	
						total=	1232000			

Year 14										
	Area	Length	Width	Depth	Volume	T/Cu Yd	Tons	Elev Begin	Elev End	
Mining south to north to ground floor	29	700	100	60	4200000	2.1	326667	6710	6650	
Mining south to north to ground floor	30	700	100	60	4200000	2.1	326667	6711	6651	
Mining south to north to ground floor	31	600	80	60	2880000	2.1	224000	6712	6652	
Mining south to north to ground floor	32	750	75	60	3375000	2.1	262500	6713	6653	
						total=	1139833			



AERIAL PHOTOGRAPH: 2024	**TOPOGRAPHIC DATA:** **DATE:** 2017 **TYPE:** **SURVEYOR:** **DETAILS:**
BATHYMETRIC DATA:	
CONTROL POINT INFO: **NAME:** N/A	

LEGEND

- Approx. Permit Boundary
- 1/2 Mile Offset

700 350 0 700 2100 4200

SCALE 1" = 700'

N

SHEET NO. 1 of 1	**SCALE:** 1" = 700' **DATE:** 3/27/2024
VERTICAL DATUM: CORS-96	
COORDINATE SYSTEM:	
PROJECT NAME: MENZER	
PROJECT CODE: MEZ	

DRAWING TITLE:

Menzer Quarry Mine Plan

Approximate Mining Areas - Year 1

DRAWING CREATED ON:	LAST MODIFIED BY:	LAST MODIFIED ON:	PLOT DATE:
6/4/2024 1:27 PM	KDECIECHI	6/4/2024 1:36 PM	6/5/2024 9:52 AM

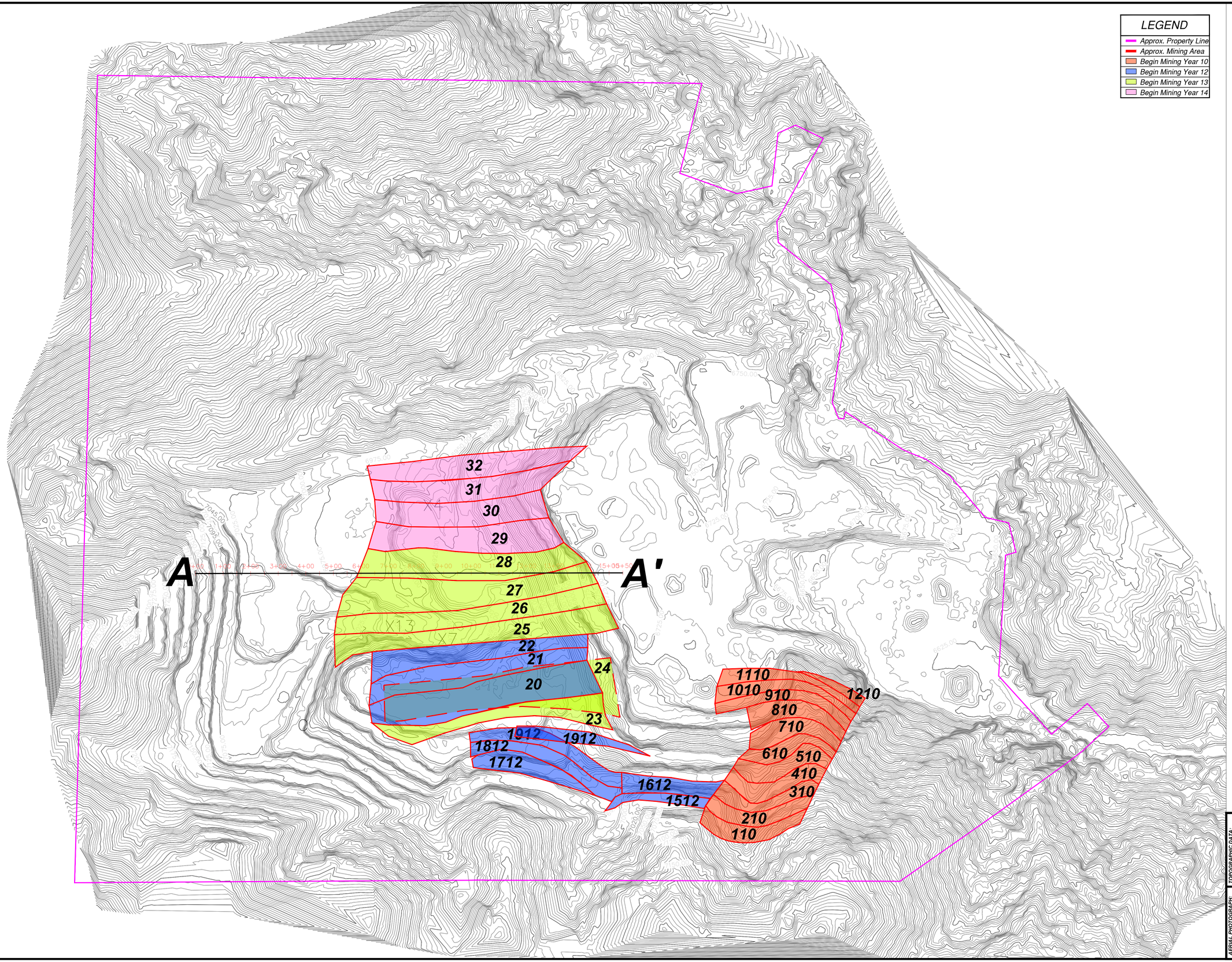
NO.	REVISIONS	BY	DATE

DESIGNED BY: JJ	**DATE:** 3/27/2024
DRAWN BY: KD	**DATE:** 3/27/2024
CHECKED BY: JJ	**DATE:**

NATURAL AGGREGATES DIVISION
51445 WEST 12 MILE ROAD
WIXOM, MICHIGAN 48393
TEL. (248) 348-8511
FAX. (248) 349-9007

THE AGGREGATES COMPANY

DRAWING LOCATION & NAME: z:\geology\colorado\menzer quarry\2024\menzer aerial and topo\mez 24064 menzer aerial and permit boundary.dwg



N

900 450 150 0 75 150

SCALE 1" = 150'

THE AGGREGATES COMPANY

NATURAL AGGREGATES DIVISION
51445 WEST 12 MILE ROAD
WIXOM, MICHIGAN 48393
TEL. (248) 348-8511
FAX. (248) 349-9007

DESIGNED BY:	DATE:
JJ	3/27/2024
DRAWN BY:	**DATE:**
KD	3/27/2024
CHECKED BY:	**DATE:**
JJ	

NO.	REVISIONS	BY	DATE

DRAWING TITLE:

Menzer Quarry Mine Plan

Approximate Mining Areas - Years 10+

DRAWING CREATED ON: 3/27/2024 12:41 PM

LAST MODIFIED BY: DRESCHER

LAST MODIFIED ON: 5/2/2024 12:53 PM

PLOT DATE: 5/2/2024 12:53 PM

TOPOGRAPHIC DATA:
DATE: 2017
TYPE:
SURVEYOR:
DETAILS:

VERTICAL DATUM: CON-S-96

COORDINATE SYSTEM:

PROJECT NAME: MENZER

PROJECT CODE: MEZ

AERIAL PHOTOGRAPH: 2024

BATHYMETRIC DATA:

CONTROL POINT INFO:
NAME:
X:
Y:
Z:

DATE: 3/27/2024

SCALE: 1" = 200'

1 of 1
SHEET NO.

DRAWING LOCATION & NAME: J:\gis\dgn\colorado\menzer quarry\2024\mez 240327\menzer mine plan year 2 +\mez 240133 menzer mine plan year 10 plus.dwg