NEW MEXICO ABANDONDED LAND MINE PROGRAM
BOSTON HILL MINE SAFEGUARD PROJECT (PHASE I)

SILVER CITY, NEW MEXICO

REVISED DECEMBER 2023

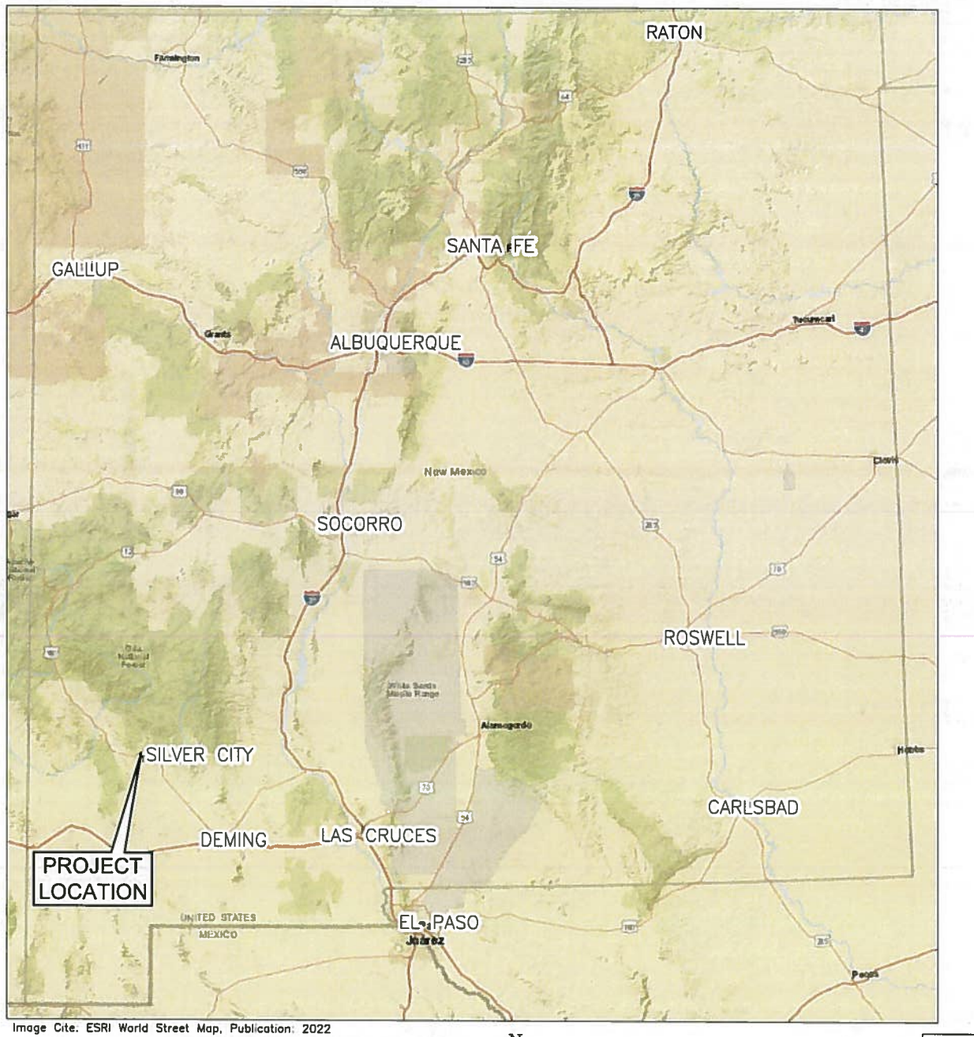
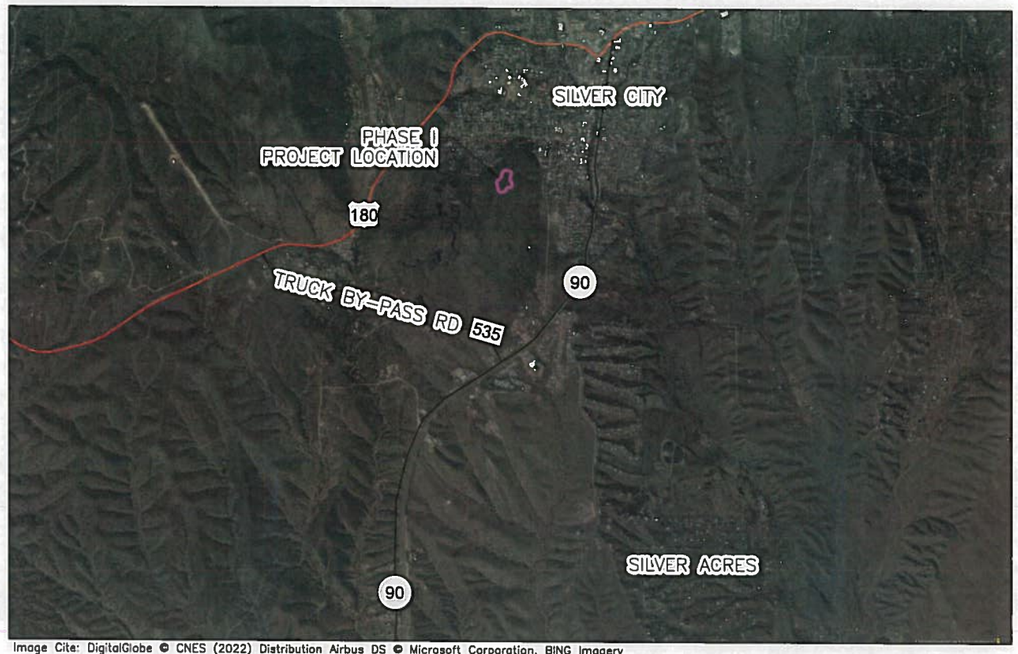


Image Cite: ESRI World Street Map, Publication: 2022

1 **NEW MEXICO STATE MAP**
SCALE: 1" = 60 MILES

N
0 60 MILES



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2 **PROJECT LOCATION MAP**
SCALE: 1" = 1 MILE

N
0 1 MILE

MEGHAN J. McDONALD
NEW MEXICO
21690
PROFESSIONAL ENGINEER

1/23/2024

CERTIFICATE OF ENGINEER

STATE OF NEW MEXICO

I, MEGHAN MCDONALD HEREBY STATE TO THE BEST OF MY KNOWLEDGE AND UNDERSTANDING THAT THIS DESIGN AND ACCOMPANYING DRAWINGS HAVE BEEN PREPARED BY ME OR UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH STANDARD AND GENERALLY ACCEPTED ENGINEERING PRACTICES AND PROCEDURES IN EFFECT AT THE TIME.

NM AML PROGRAM
MINING & MINERALS DIVISION

811
Know what's below.
Call before you dig.

CALL US AT:
800-321-2537
or 811
www.nm811.org

CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE:	COVER SHEET	DRAWN BY: Trihydro
DATE: 12/20/2023		REVISED BY: DMC
	TITLE	
FILE:	BOSTON HILL SAFEGUARD PROJECT PHASE I	FIGURE: 0

EXPLANATION

EXISTING

- SITE ACCESS ROAD
- U.S. HIGHWAY (180)
- STATE HIGHWAY (90)
- COUNTY HIGHWAY (535)
- SURFACE CONTOURS (INTERVAL = 1 FOOT) (7210)
- EXISTING FENCE
- EXISTING TRAILS
- PHASE I BOUNDARY
- APE BOUNDARY
- BUILDING OR OTHER STRUCTURE
- 1/10 — VIEW DESIGNATION / SHEET NUMBER
- 13 — SINGLE VIEW SHEET / SHEET NUMBER

PROPOSED

- UNDERGROUND EXTENTS OF LEGAL TENDER MINE
- TEMPORARY ACCESS ROUTE
- PROPOSED CABLE MESH LAYOUT
- PROPOSED FENCE
- METAL GRATE CLOSURE
- EGRESS ADIT CLOSURE
- WASTE ROCK AND MORTAR CLOSURE
- BACKFILL CLOSURE
- WASTE ROCK BORROW LOCATION
- CABLE MESH CLOSURE
- ADIT STOPE METAL GRATE CLOSURE

- STEEL
- METAL GRATE CLOSURE AREA
- STEEL MESH AREA
- EXISTING GROUND
- ADIT STOPE METAL GRATE AREA
- WASTE ROCK
- PROPOSED STAGING AREA
- CONCRETE
- BACKSTOP

ABBREVIATIONS

APE	AREA OF PROBABLE EFFECT	FT.	FEET
℄	CENTER LINE	LFT.	LINEAR FOOT
CY	CUBIC YARD	HORIZ.	HORIZONTAL
CLR.	CLEARANCE	MAX.	MAXIMUM
∅	DIAMETER	MIN.	MINIMUM
DIM.	DIMENSION	O.C.	ON CENTER
EA.	EACH	SF.	SQUARE FOOT
EG	EXISTING GRADE	SHT.	SHEET
EL./ELEV.	ELEVATION	TYP.	TYPICAL
EX.	EXISTING		

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Index

1 **INDEX OF SHEETS**

REV.	DATE	DESCRIPTION	BY	CHK'D
		REVISIONS		
1	11/20/2023	INDEX OF SHEET REVISION	DMC	---
0	11/29/2023	ISSUE FOR CONSTRUCTION	JD	TH

DRAWN BY: JD
CHECKED BY: TH
DATE: 01/20/2023
SCALE: NONE
FILE: 01A-BOSTON_EXPLANATION

Trihydro CORPORATION
1252 Commerce Drive
Laramie, Wyoming 82070
www.trihydro.com
(P) 307.745.7474 (F) 307.745.7729

INDEX OF SHEETS AND EXPLANATION

BOSTON HILL MINE SAFEGUARD PROJECT (PHASE I)
NEW MEXICO ABANDONDED LAND MINE PROGRAM
SILVER CITY, NEW MEXICO

SHEET 1 1 OF 18

REV: 0

NOTES:

1. GENERAL:
   A. CONTRACTOR SHALL CALL NEW MEXICO “CALL BEFORE YOU DIG” AT (800) 321-2537 OR 811 PRIOR TO INTRUSIVE ACTIVITIES TO LOCATE ON-SITE UTILITIES. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES. THE ENGINEER AND OWNER DO NOT MAKE ANY REPRESENTATIONS AS TO EXISTENCE OR NON-EXISTENCE OF UTILITIES WITHIN THE PROJECT AREA.
   B. THE CONTRACTOR'S PERSONNEL SHALL NOT BE ALLOWED TO MAINTAIN RESIDENCES ON SITE.
   C. THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE PROJECT AREA. THE CONTRACTOR SHALL RECLAIM OR REPAIR ALL DISTURBANCES CREATED OUTSIDE THE PROJECT AREA BY THE CONTRACTOR'S EMPLOYEES OR SUBCONTRACTORS AT THE CONTRACTOR'S EXPENSE. DISTURBANCE OUTSIDE OF THE PROJECT BOUNDARIES SHOWN ON THE SITE PLANS WILL NOT BE ALLOWED.
   D. THE CONTRACTOR SHALL USE EXISTING ACCESS ROADS FOR EQUIPMENT, PERSONNEL, AND MATERIALS TRANSPORTATION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO ACCESS ROADS AND IMPROVEMENTS CAUSED BY THE CONTRACTOR. IF ANY NEW ACCESS OR HAUL ROADS ARE REQUIRED TO COMPLETE THE WORK, THEY SHALL FIRST BE APPROVED BY THE ENGINEER, AND SHALL BE RECLAIMED ACCORDING TO THE SPECIFICATIONS AT THE COMPLETION OF THE PROJECT.
   E. QUANTITIES SHOWN ARE ESTIMATES FOR BIDDING PURPOSES ONLY.
   F. NO OTHER ACCESS TO THE SITE IS ALLOWED WITHOUT PERMISSION IN WRITING FROM THE ENGINEER AND/OR LANDOWNERS.
   G. ALL TRASH AND DEBRIS GENERATED BY THE CONTRACTOR SHALL BE DISPOSED OF IN A LICENSED OFF-SITE LANDFILL. TRASH INCLUDES CIGARETTE BUTTS, BOTTLES, WRAPPERS, AND OTHER MATERIALS. TRASH MAY NOT BE BURIED ON-SITE.
   H. THE CONTRACTOR SHALL DECONTAMINATE ALL EQUIPMENT AND SUPPORT VEHICLES PRIOR TO MOBILIZING TO THE SITE. EQUIPMENT AND SUPPORT VEHICLES SHALL BE FREE OF WEEDS, ORGANIC MATERIAL, AND DIRT. THE ENGINEER WILL INSPECT THE EQUIPMENT AND VEHICLES PRIOR TO ALLOWING THEM ON SITE. ANY EQUIPMENT OR VEHICLES FOUND, IN THE ENGINEER'S JUDGEMENT, TO NOT BE ADEQUATELY DECONTAMINATED SHALL NOT BE ALLOWED ON SITE.
   I. EXISTING SITE TOPOGRAPHY WAS SURVEYED BY TRIHYDRO CORPORATION ON MAY 25, 2021. THE DRAWINGS DO NOT PURPORT TO SHOW ALL OBJECTS EXISTING ON, ABOVE, OR AROUND THE SITE.
   J. PARCEL BOUNDARIES WERE OBTAINED FROM THE GRANT COUNTY ASSESSOR'S OFFICE IN FEBRUARY 2016. PROPERTY LINES SHOULD BE CONSIDERED APPROXIMATE. POTENTIAL RIGHT-OF-WAYS ARE NOT SHOWN ON THESE DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR LOCATING RIGHT-OF-WAYS DURING UTILITY LOCATES.
   K. THE BOSTON HILL PHASE I AREA CONTAINS A LARGE PUBLIC, MULTI-USE TRAIL NETWORK. THE CONTRACTOR SHALL TAKE ADDITIONAL PRECAUTIONS WHEN WORKING AROUND THE TRAIL NETWORK AS TO LIMIT DISTURBANCE TO TRAILS. CONTRACTOR ACCESS ROUTE AND EARTHWORK AREAS THAT FALL ON, CROSSING, OR IMMEDIATELY ADJACENT TO EXISTING TRAILS SHALL BE APPROVED BY THE ENGINEER.
   L. THE ENGINEER WILL PROVIDE LOCATIONS FOR ALL PROPOSED RECLAMATION TASKS TO THE CONTRACTOR.

2. SAFETY:
   A. THIS PROJECT REQUIRES CONSTRUCTION WORK IN THE VICINITY OF HISTORIC AND ACTIVE MINE SITES, HIGHWALLS, AND WATER BODIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INVESTIGATING THE SITE CONDITIONS AND SCHEDULING THEIR EQUIPMENT, OPERATIONS, PERSONNEL, AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES. THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE OSHA REGULATIONS.
   B. THE PROJECT AREA LIES WITHIN A WELL-USED PUBLIC RECREATION AREA KNOWN AS THE BOSTON HILL OPEN SPACE. THIS OPEN SPACE IS OWNED BY THE CITY OF SILVER CITY AS WELL AS THE BUREAU OF LAND MANAGEMENT. THE CONTRACTOR SHALL BE AWARE THAT THERE IS A HEAVY PUBLIC PRESCENSE WITHIN THE PROJECT AREA. THE CONTRACTOR SHALL TAKE EXTRA PRECAUTION AROUND KNOWN PUBLIC AREAS SUCH AS TRAILS. THE CONTRACTOR SHALL MARK ALL ACTIVE WORK ZONES WITH CONES, TEMPORARY FENCING, OR OTHER BARRICADES AS APPROVED BY THE ENGINEER.
   C. THERE ARE SIGNS OF HUMAN HABITATION AT SEVERAL OF THE FEATURES PROPOSED FOR CLOSURE AND RECLAMATION. THE CONTRACTOR SHALL INSPECT EACH CLOSURE BEFORE AND DURING CONSTRUCTION FOR HABITATION AND REPORT ANY SIGNS OF RECENT HABITATION TO THE ENGINEER. IF THE CONTRACTOR DISCOVERS A FEATURE CURRENTY BEING HABITATED, THEY SHALL CONTACT THE LOCAL AUTHORITIES AND THE ENGINEER.

3. CONSTRUCTION:
   A. ALL FENCING REMOVED OR RELOCATED DURING THE WORK SHALL BE REPLACED TO THE INCLUDED FENCE STANDARDS. THE ENGINEER SHALL APPROVE ALL FENCE REMOVAL. TEMPORARY FENCING FOR PUBLIC ACCESS CONTROL SHALL BE INSTALLED WHERE NECESSARY.
   B. THE CONTRACTOR SHALL CONFINE CONSTRUCTION STAGING AREA AND MATERIALS LAY DOWN TO THE AREAS IDENTIFIED ON THE PLANS AND APPROVED BY CULTURAL RESOURCES, THE TOWN OF SILVER CITY, AND THE PRIVATE LANDOWNER. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTRACTOR'S OWN WORK AREA, STORAGE AREA, AND MAINTAINING SECURITY. THE STAGING AREA MAY BE FENCED AT THE CONTRACTOR'S DISCRETION AND IT WILL BE GUARDED AND MAINTAINED BY THE CONTRACTOR TO ADEQUATELY PREVENT LOSS OR DAMAGE TO THE CONTRACTOR'S EQUIPMENT AND MATERIALS
   C. THE CONTRACTOR SHALL BE AWARE THAT HISTORIC MINING AND RECLAMATION DEBRIS SUCH AS CONCRETE, WOOD, METAL, ETC. MAY BE ENCOUNTERED. THE CONTRACTOR SHALL DISPOSE OF THESE MATERIALS AS APPROVED BY THE ENGINEER. DEBRIS SHALL NOT BE DISTURBED WITHOUT THE APPROVAL OF THE ENGINEER. DEBRIS REMOVAL AND DISPOSAL WILL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
   D. THE ENGINEER WILL DETERMINE MATERIALS CLASSIFICATIONS IN THE FIELD. TOPSOIL/COVERSOIL IS ANY MATERIAL SUITABLE FOR PLANT GROWTH MEDIUM AS DETERMINED BY THE ENGINEER. THE REMAINING MATERIAL IS TERMED UNCLASSIFIED, OR ROCK DEPENDING ON MATERIAL AND SOIL CONDITIONS. THESE SOILS ARE NOT SUITABLE MEDIUM FOR PLANT GROWTH. NOTE: COVERSOIL = TOPSOIL IN ALL REFERENCES IN THESE PLANS.
   E. THE CONTRACTOR SHALL NOT REMOVE OR DESTROY ANY SURVEY MONUMENTS WITHOUT PRIOR WRITTEN PERMISSION FROM THE ENGINEER.
   F. SURFACE GRADING AREAS WILL BE FINISH GRADED, TOPSOILED, AND SEEDED AS DIRECTED BY THE SPECIFICATIONS AND THE ENGINEER.
   G. ALL MEASUREMENTS OF AGRICULTURAL ITEMS WILL BE BASED UPON THE ACTUAL SURFACE AREA.
   H. STOCKPILE AREAS WILL BE LOCATED IN THE FIELD AND APPROVED BY ENGINEER.
   I. TOPSOIL STOCKPILE SHALL BE SURVEYED BY ENGINEER PRIOR TO PLACEMENT FOR QUANTITY CALCULATIONS AND TO PROVIDE THE CONTRACTOR WITH PLACEMENT DEPTHS.
   J. IN AREAS WHERE PROPOSED GRADING/BACKFILLING DAYLIGHTS TO EXISTING GROUND, THE CONTRACTOR SHALL CONSTRUCT A SMOOTH TRANSITION BOTH VERTICALLY AND HORIZONTALLY.
   K. CONTRACTOR MAY CLEAR AND GRUB VEGETATION AS NEEDED ON PRIVATE PROPERTY AREAS. FULL REMOVAL OF VEGETATION IS DISCOURAGED, AND TRIMMING OF VEGETATION IS PREFERRED.
   L. STEEL GRATE CLOSURES SHALL BE INSTALLED AT AN ANGLE TO PROMOTE THE SHED OF ROCKFALL WHERE APPROPRIATE.
   M. ANGLED STEEL GRATE AND STEEL GRATE STOPE CLOSURES SHALL BE INSTALLED WITH CROSS-BARS ORIENTED PARALLEL TO THE GROUND TO FACILITATE BAT AND BIRD FLIGHT.
   N. BAT CONSERVATION INTERNATIONAL (BCI) WILL ASSESS ALL "HARD CLOSURE" LOCATIONS FOR WILDLIFE HABITAT BEFORE CONSTRUCTION IS TO COMMENCE ON THE "HARD CLOSURE" FEATURES.
   O. CONTRACTOR SHALL REMOVE TRASH FROM MINING FEATURES BEFORE BEGINNING RECLAMATION WORK. TRASH FROM MINING FEATURES SHALL BE DISPOSED OF AT THE GRAND COUNTY LANDFILL (318 RIDGE ROAD).
   P. CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PRESERVE HACKBERRY TREES WITHIN THE WORK AREA. A REPRESENTATIVE FROM THE AML OR THE ENGINEER WILL PROVIDE TRAINING ON IDENTIFYING HACKBERRY TREES BEFORE CONSTRUCTION BEGINS.

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REV.	DATE	DESCRIPTION	BY	CHK'D
0	11/21/2023	ISSUE FOR CONSTRUCTION	JD	TH

REVISIONS

DRAWN BY: JD
CHECKED BY: TH
DATE: 11/21/2023
SCALE: NONE
FILE: 01A-BOSTON_EXPLANATION

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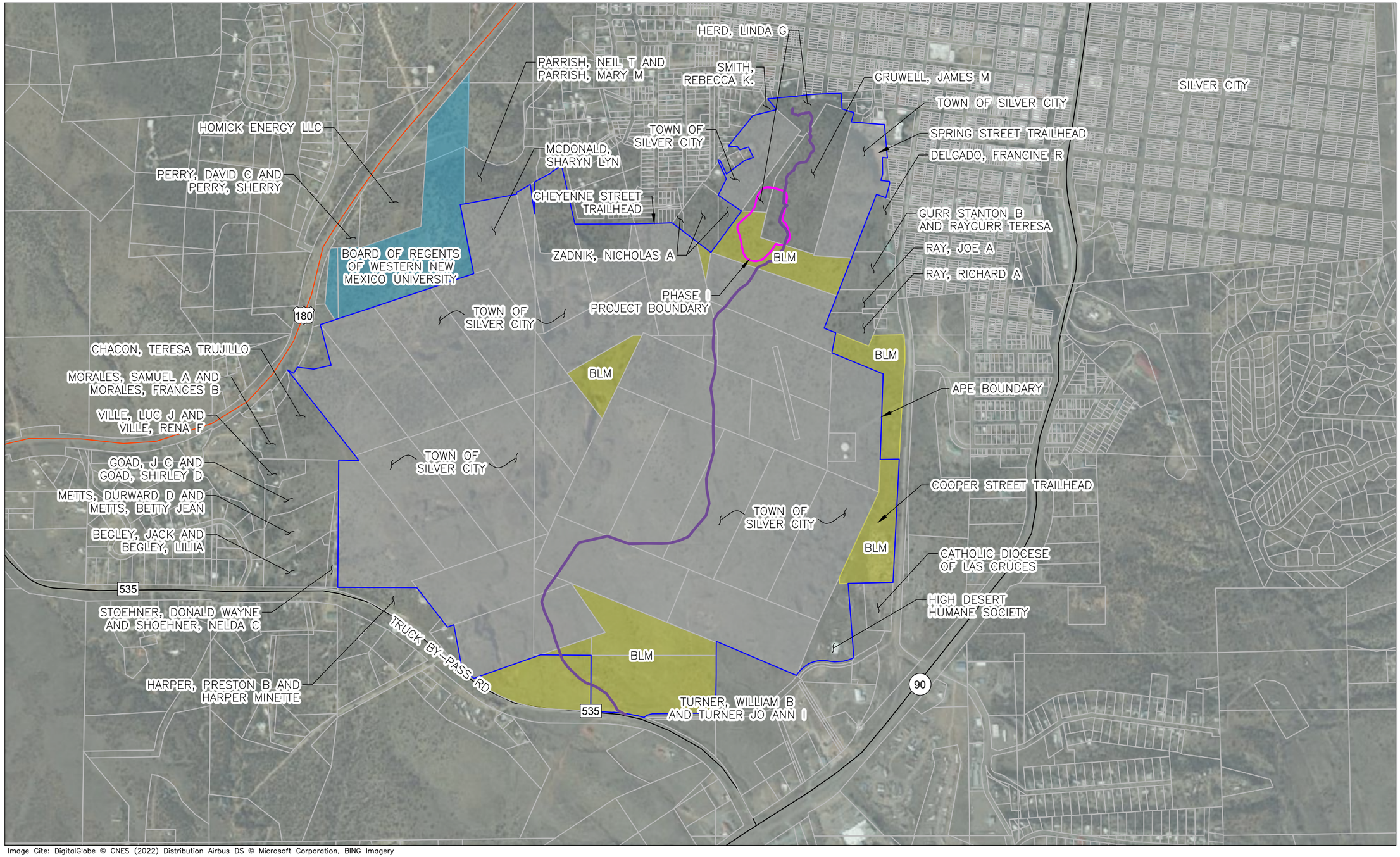
NOTES

BOSTON HILL MINE SAFEGUARD PROJECT (PHASE I)
NEW MEXICO ABANDONED LAND MINE PROGRAM
SILVER CITY, NEW MEXICO



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NOTE:

THE CONTRACTOR SHALL USE THE EXISTING TWO-TRACK ACCESS FROM THE TRUCK BY-PASS ROUTE TRAIL HEAD. THE CONTRACTOR SHALL MAKE AS MINIMAL IMPROVEMENTS AS POSSIBLE TO THE PROPOSED ACCESS TO FACILITATE TO MOVEMENT OF EQUIPMENT AND MATERIALS.

EXPLANATION

- BUREAU OF LAND MANAGEMENT (BLM)
- PROPERTY OF SILVER CITY
- BOARD OF REGENTS OF WESTERN NEW MEXICO UNIVERSITY

N

0 1,000'

REV.	DATE	DESCRIPTION	BY	CHK'D
0	01/19/2023	ISSUE FOR CONSTRUCTION	JD	TH

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DRAWN BY: JD
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DATE: 1/20/2023
SCALE: 1" = 1000'
FILE: BOSTON_HILL_PHASE_I_COMPLETE_PLANSET_SITE_VICINITY

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SITE VICINITY MAP

BOSTON HILL MINE SAFEGUARD PROJECT (PHASE I)
NEW MEXICO ABANDONED LAND MINE PROGRAM
SILVER CITY, NEW MEXICO

SHEET 3 OF 18

REV: 0

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Image Cite: Trihydro Unmanned Aerial System Photogrammetry Survey; October 2021

NOTE:

THE ALTERNATE ACCESS ROUTE FROM THE NORTH PERIPHERY OF THE SITE IS AN ATV-WIDTH, STEEP (20% OR GREATER) TWO-TRACK. CONTRACTOR SHALL RECEIVE APPROVAL FROM ENGINEER AND LANDOWNER BEFORE USING ACCESS ROUTE.

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0	01/19/2023	ISSUE FOR CONSTRUCTION	JD	TH

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SCALE: 1" = 200'
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PHASE I PROJECT LOCATION AND PLAN VIEW INDEX

BOSTON HILL MINE SAFEGUARD PROJECT (PHASE I)
NEW MEXICO ABANDONDED LAND MINE PROGRAM
SILVER CITY, NEW MEXICO

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REV: 0

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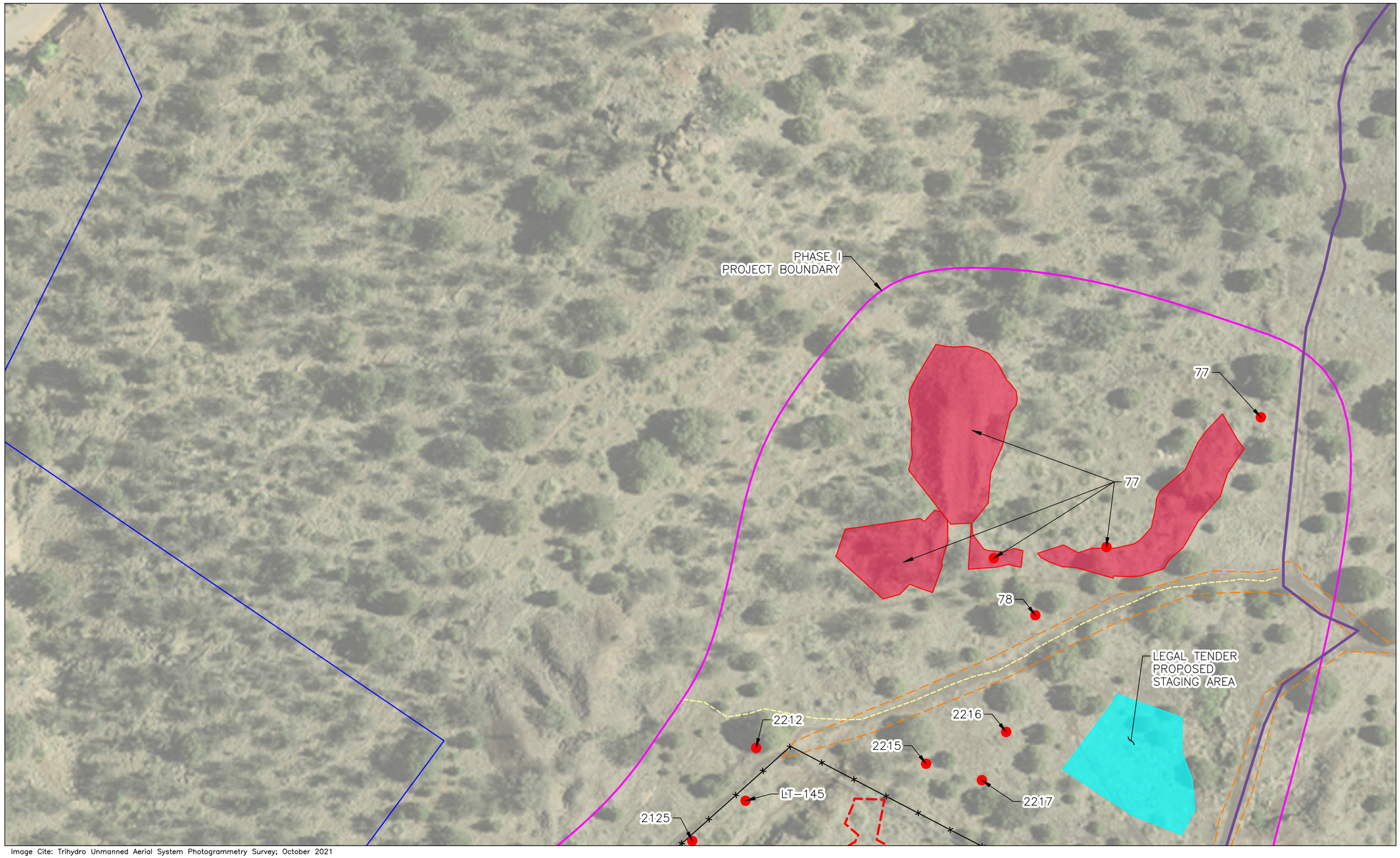

Image Cite: Trihydro Unmanned Aerial System Photogrammetry Survey; October 2021

EXPLANATION

WASTE ROCK BORROW LOCATION 1/7

N

0 50'

REV.	DATE	DESCRIPTION	BY	CHK'D
0	01/19/2023	ISSUE FOR CONSTRUCTION	JD	TH

REVISIONS

DRAWN BY: JD

CHECKED BY: TH

DATE: 01/20/2023

SCALE: 1" = 50'

FILE: BOSTON_HILL_PHASE_I_COMPLETE_PLANSET_MAP

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BOSTON HILL SAFEGUARD FEATURES PLAN VIEW (1 OF 2)

BOSTON HILL MINE SAFEGUARD PROJECT (PHASE I)
NEW MEXICO ABANDONDED LAND MINE PROGRAM
SILVER CITY, NEW MEXICO

SHEET 5 5 OF 18

REV: 0

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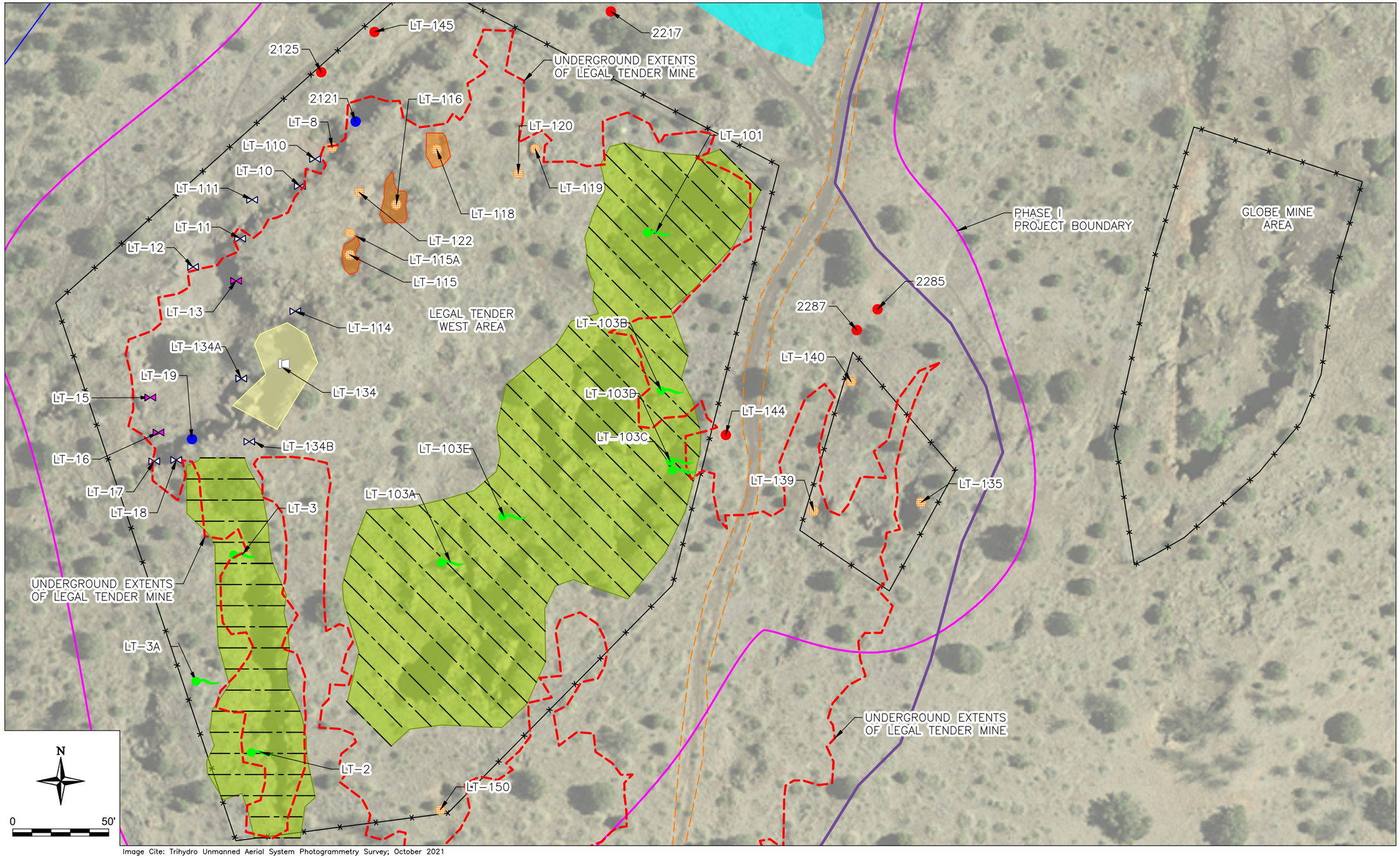

Image Cite: Trihydro Unmanned Aerial System Photogrammetry Survey; October 2021

EXPLANATION

- BACKFILL CLOSURE
- WASTE ROCK AND MORTAR CLOSURE (2/9)
- WASTE ROCK BORROW LOCATION (1/7)
- CABLE MESH CLOSURE (1/10)
- ADIT STOPE METAL GRATE CLOSURE (1/13)
- METAL GRATE CLOSURE (1/11)
- EGRESS ADIT CLOSURE (1/14)

REV.	DATE	DESCRIPTION	BY	CHK'D
1	11/03/2023	REVISED FEATURE CLOSURE TYPE (DMC)	DMC	MJM
0	01/19/2023	ISSUE FOR CONSTRUCTION	JD	TH

REVISIONS

DRAWN BY: JD
CHECKED BY: TH
DATE: 01/20/2023
SCALE: 1" = 50'
FILE: BOSTON_HILL_PHASE_I_COMPLETE_PLANSET_FEATURES_MAP2

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BOSTON HILL SAFEGUARD FEATURES PLAN VIEW (2 OF 2)

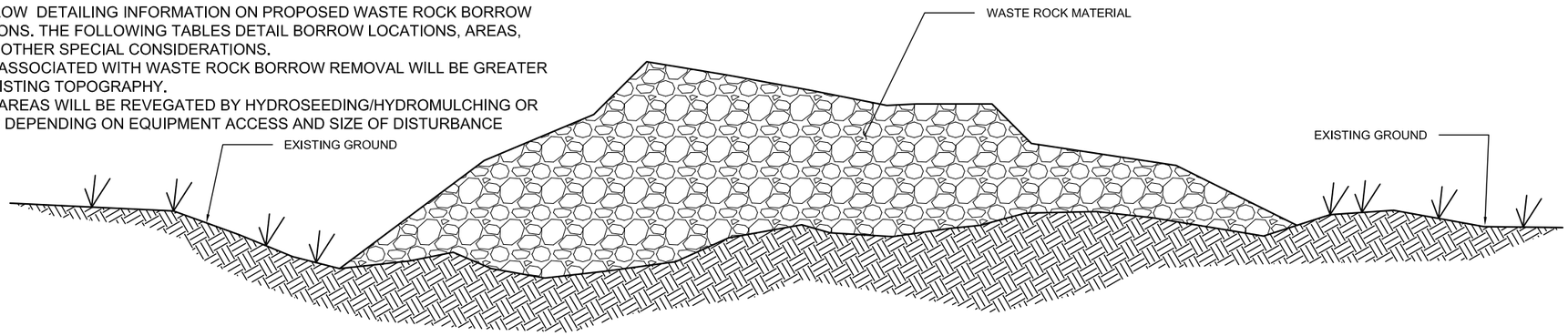
BOSTON HILL MINE SAFEGUARD PROJECT (PHASE I)
NEW MEXICO ABANDONDED LAND MINE PROGRAM
SILVER CITY, NEW MEXICO

SHEET 6
6 OF 18
REV.: 0

G:\MMD\AML\PROJECTS\PROJECT WORK FILES\ACTIVE AML PROJECTS\A – E\B\BOSTON HILL\2) CONST\DRAWINGS\AML DRAWINGS\BOSTON_HILL_PHASE_I_COMPLETE_PLANSET_FEATURES_MAP2

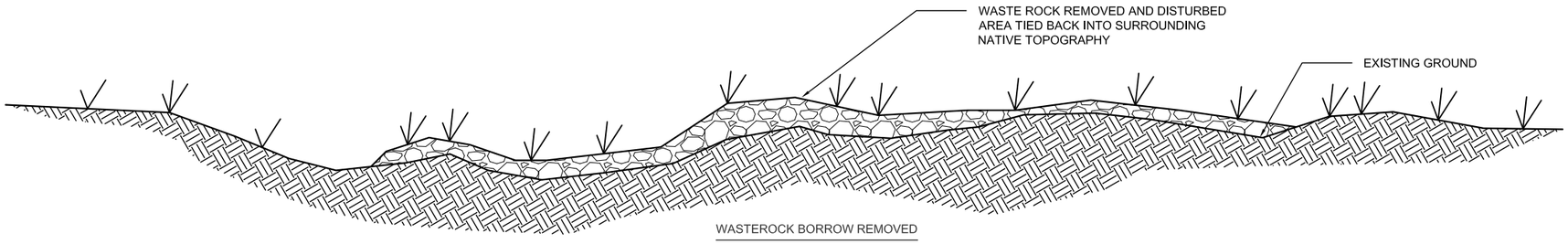
NOTES:

1. SEE TABLE BELOW DETAILING INFORMATION ON PROPOSED WASTE ROCK BORROW AREAS LOCATIONS. THE FOLLOWING TABLES DETAIL BORROW LOCATIONS, AREAS, VOLUMES AND OTHER SPECIAL CONSIDERATIONS.
2. DISTURBANCE ASSOCIATED WITH WASTE ROCK BORROW REMOVAL WILL BE GREATER TO TIE INTO EXISTING TOPOGRAPHY.
3. DISTURBANCE AREAS WILL BE REVEGATED BY HYDROSEEDING/HYDROMULCHING OR HAND SEEDING DEPENDING ON EQUIPMENT ACCESS AND SIZE OF DISTURBANCE



EXISTING WASTEROCK PILE

SCALE: NONE



WASTEROCK BORROW REMOVED

SCALE: NONE

WASTE ROCK BORROW SUMMARY							
FEATURE		**#**		**SF**	**FT**	**CY**	
TRIHYDRO ID	OKUN ID	SHEET	FEATURE TYPE	AREA	AVG. REMOVAL DEPTH	VOLUME	ADDITIONAL NOTES
LT-144		6	WASTE ROCK PILE	126	2	10	BACKFILL AT LEGAL TENDER SITES
LT-145	2124	5	WASTE ROCK PILE	665	1	25	BACKFILL AT LEGAL TENDER SITES
	77	5	WASTE ROCK PILE	3800	11	1548	LARGE WASTE ROCK AREA; BACKFILL AT LEGAL TENDER SITES
	77	5	WASTE ROCK PILE	2400	2.5	220	LARGE WASTE ROCK AREA; BACKFILL AT LEGAL TENDER SITES
	77	5	WASTE ROCK PILE	2080	4	308	2 SMALLER PILES ASSOCIATED WITH FEATURE 77; BACKFILL AT LEGAL TENDER SITES
	78	5	WASTE ROCK PILE	36	1	2	2 SMALLER PILES ASSOCIATED WITH FEATURE 77; BACKFILL AT LEGAL TENDER SITES
	2125	5	WASTE ROCK PILE	412	1	15	BACKFILL AT LEGAL TENDER SITES; LOCATED ON LEGAL TENDER FENCELINE
	2212	5	WASTE ROCK PILE	834	3	93	BACKFILL AT LEGAL TENDER SITES
	2215	5	WASTE ROCK PILE	1149	1	42	BACKFILL AT LEGAL TENDER SITES
	2216	5	WASTE ROCK PILE	36	2	3	BACKFILL AT LEGAL TENDER SITES
	2217	5	WASTE ROCK PILE	20	2	2	BACKFILL AT LEGAL TENDER SITES
	2285	5	WASTE ROCK PILE	362	1	13	BACKFILL AT FEATURE LT-140 AND OTHER ADJACENT FEATURES
	2287	6	WASTE ROCK PILE	145	1.5	8	BACKFILL AT FEATURE LT-140 AND OTHER ADJACENT FEATURES

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ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

DRAWN BY: MWT
REVISED BY: DMC

SCALE: NONE
DATE: 11/15/2023

VARIOUS LOCATIONS

C01–WASTE ROCK AND BORROW AREA DETAILS

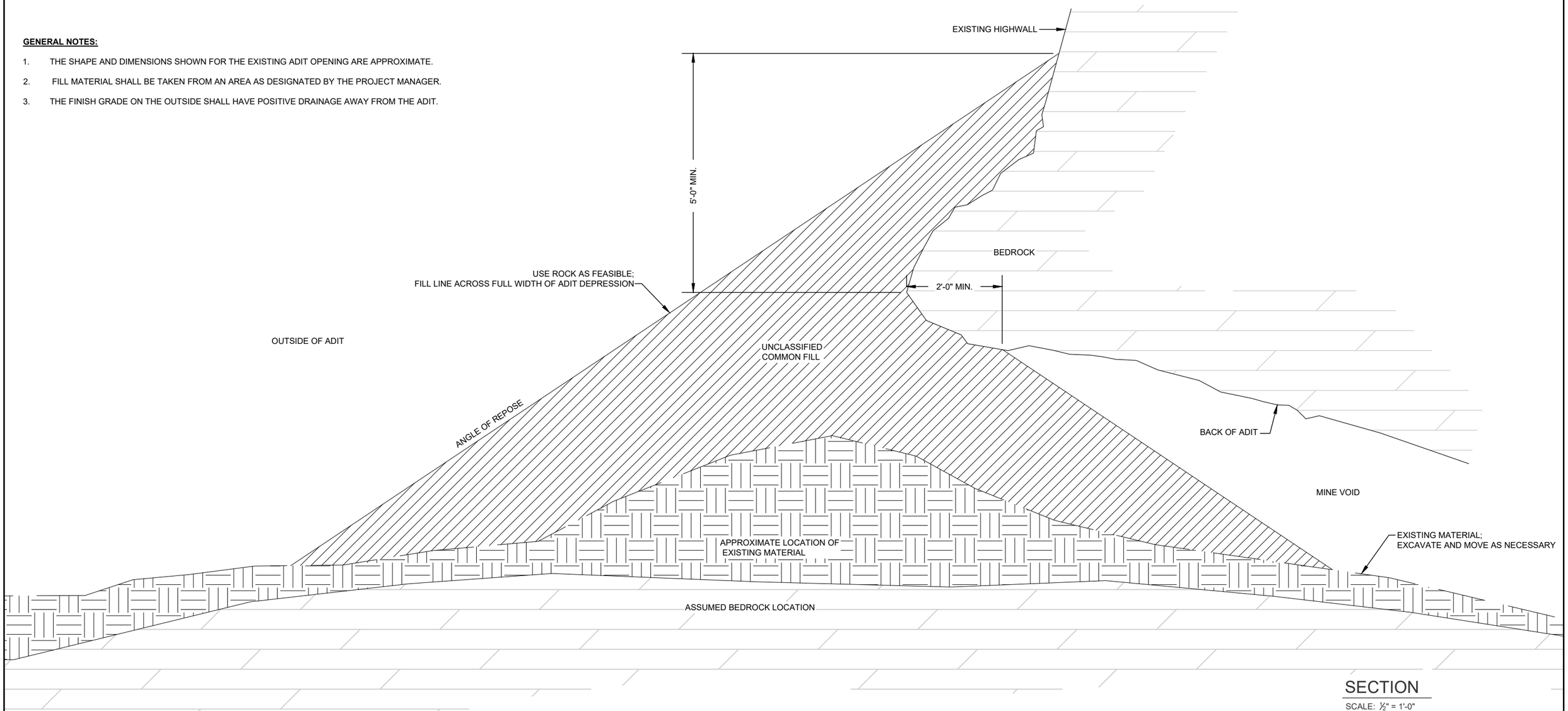
FILE:

BOSTON HILL SAFEGUARD PROJECT PHASE I

FIGURE: 7

GENERAL NOTES:

1. THE SHAPE AND DIMENSIONS SHOWN FOR THE EXISTING ADIT OPENING ARE APPROXIMATE.
2. FILL MATERIAL SHALL BE TAKEN FROM AN AREA AS DESIGNATED BY THE PROJECT MANAGER.
3. THE FINISH GRADE ON THE OUTSIDE SHALL HAVE POSITIVE DRAINAGE AWAY FROM THE ADIT.



SECTION

SCALE: ½" = 1'-0"

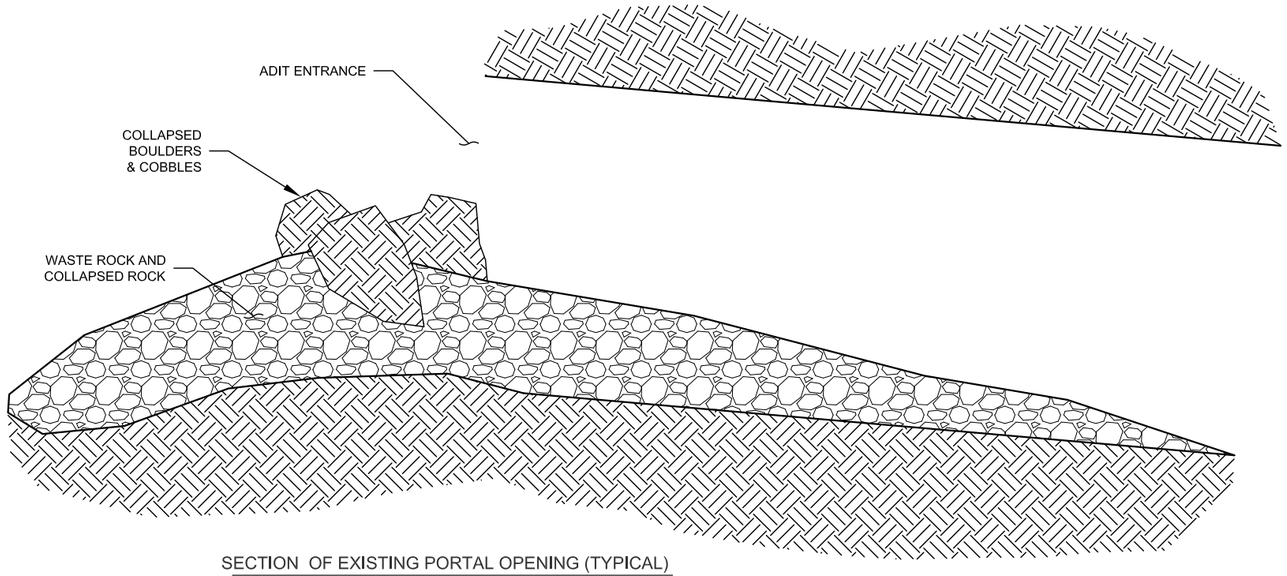
BACKFILL SUMMARY TABLE

FEATURE		#		FT				SF	CF	
TRIHYDRO ID	OKUN ID	SHEET	FEATURE TYPE	WIDTH	LENGTH	HEIGHT	DEPTH	AREA	VOLUME	ADDITIONAL NOTES
LT-13	2134	6	Open Cut	20	18	5		360	1800	Push 5 ft of rock against high wall
LT-15	2144	6	Adit	3	3	4		9	36	Fill Skylight and adit with wasterock
LT-16	2134	6	Open Cut	10	8	4		80	320	Use 4 ft of waste rock to fill

CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

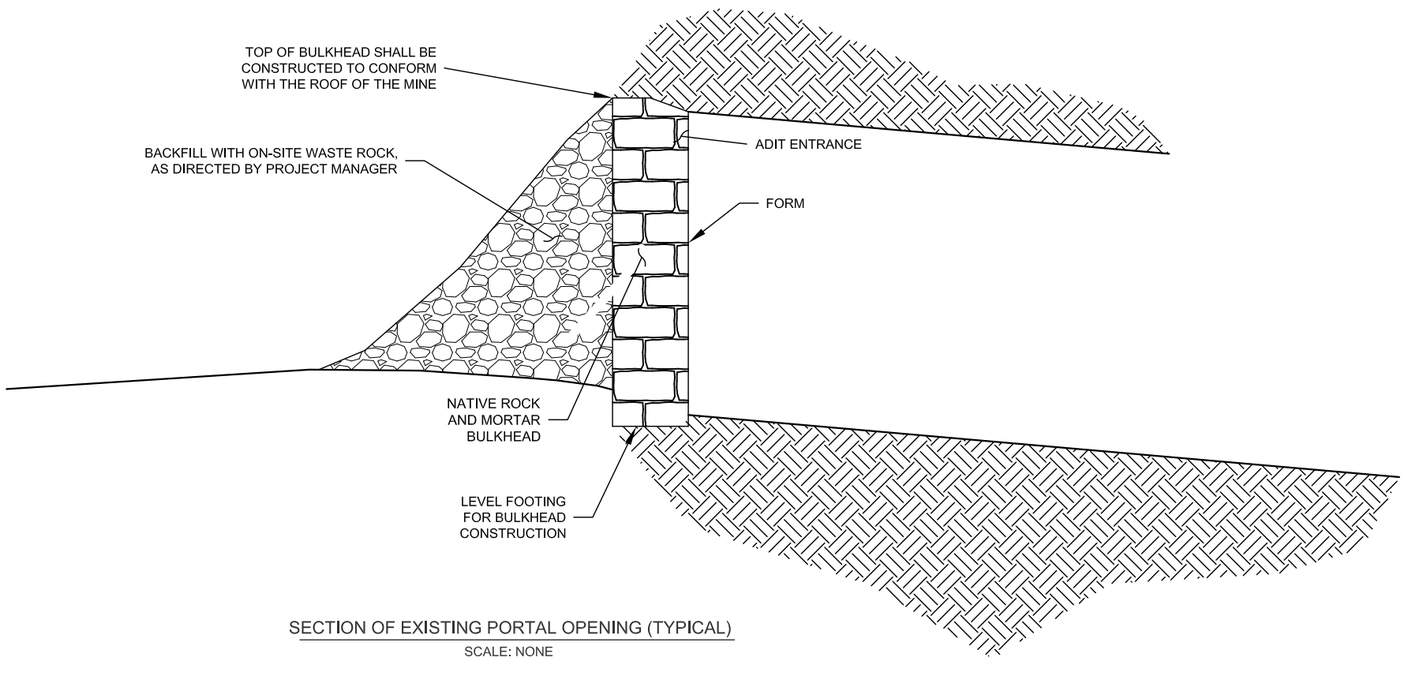
ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE: 1/2"=1'-0"	VARIOUS LOCATIONS	DRAWN BY: MWT
DATE: 11/15/2023		REVISED BY: DMC
CO1–TYPICAL ADIT BACKFILL		
FILE:	BOSTON HILL SAFEGUARD PROJECT PHASE I	FIGURE: 8



SECTION OF EXISTING PORTAL OPENING (TYPICAL)

SCALE: NONE



SECTION OF EXISTING PORTAL OPENING (TYPICAL)

SCALE: NONE

NOTES:

1. THE DEPTH OF COVERSOIL WILL BE DETERMINED IN THE FIELD BY THE PROJECT MANAGER BASED ON FIELD CONDITIONS.
2. REMOVE SOIL, DEBRIS, ETC. FROM THE FRONT OF THE EXISTING PORTAL PRIOR TO INITIATING CLOSURE ACTIVITIES.
3. NATIVE ROCK MUST BE OBTAINED WITHIN THE GENERAL DISTURBANCE AREA, AS DETERMINED IN THE FIELD BY THE PROJECT MANAGER.
4. KEY THE NATIVE ROCK AND MORTAR BULKHEAD INTO THE ADIT FLOOR A MINIMUM OF 8" DEEP AND 18" WIDE.
5. SELECT NATIVE ROCK SHALL BE PLACED AND MORTARED IN A MANNER TO PREVENT VOID SPACES BETWEEN THE ADIT WALLS AND ROOF.
6. AFTER THE PROJECT MANAGER APPROVES THE FINAL GRADE, AMEND, SEED AND MULCH DISTURBED SOILS AS SPECIFIED.

WASTE ROCK AND MORTAR CLOSURE SUMMARY TABLE

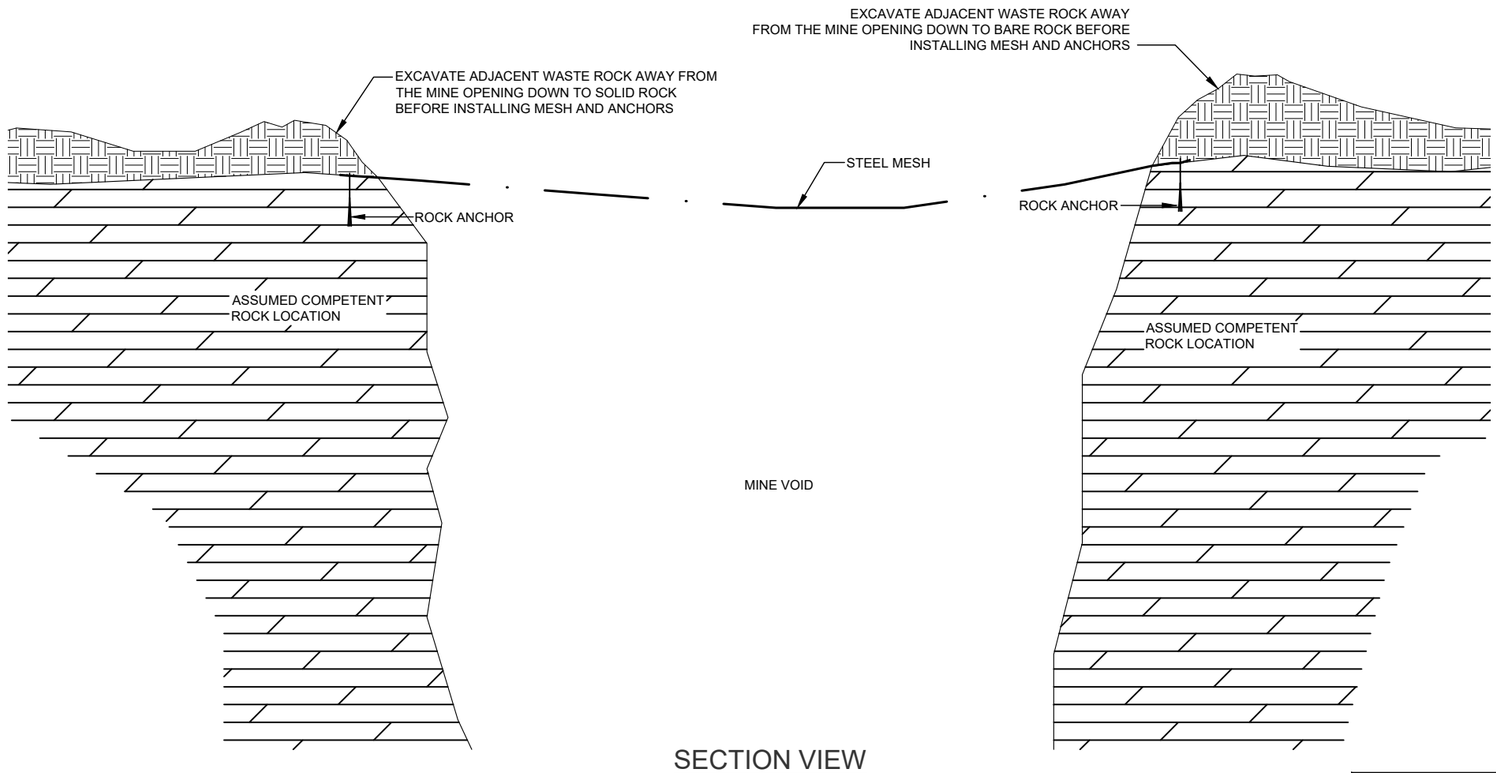
FEATURE		#		FT		CF
TRIHYDRO ID	OKUN ID	SHEET	FEATURE TYPE	OPENING WIDTH	OPENING HEIGHT	WALL VOLUME
LT-10	2130	6	Open Cut	17	3	77
LT-11	2130	6	Open Cut	10	4.5	68
LT-16	2134	6	Open Cut	12	25	450
LT-17	2142	6	Open Cut	14	14	294
LT-18	2142	6	Open Cut	7.5	5	56
LT-110	2131	6	Adit	5	4	30
LT-111	2133	6	Adit	6.5	4	39
LT-114	2147	6	Adit	9	6	81
LT-134A	2146	6	Adit	5	3	23
LT-134B	2146	6	Adit	8	5	60

CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE: NONE	VARIOUS LOCATIONS	DRAWN BY: MWT
DATE: 11/15/2023		REVISED BY: DMC
C01–WASTEROCK AND MORTAR CLOSURE DETAILS		
FILE:	BOSTON HILL SAFEGUARD PROJECT PHASE I	FIGURE: 9

STEEL MESH SUMMARY TABLE													
FEATURE	#		FT			#		FT		SF	FT	#	
TRIHYDRO ID	SHEET	FEATURE TYPE	MINE FEATURE WIDTH	MINE FEATURE LENGTH	MINE FEATURE DEPTH	MESH ROLLS	MESH PANELS	MESH ROLL WIDTH	MESH ROLL LENGTH	MESH PANEL AREA	TOTAL OVERLAP LENGTH	CLIPS	ANCHORS
LT-2	6	Trench/Stope	30	65	50+	7	18	11	98	7500	662	1986	86
LT-3	6	Trench/Stope	20	120	50+								
LT-3A	6	Shaft	3	3	15+								
LT-101	6	Open Stope	50	70	60	28	31	11	98	29200	2734	8202	148
LT-103	6	Stope Complex	55	100	50+								
LT-103A	6	Skylight into Stope	5	6.5	30+								
LT-103B	6	Skylight into Stope	7	7	25+								
LT-103C	6	Blind Adit	10	12	10								
LT-103D	6	Shaft w/ Side Adit	20	15	50+								
LT-103E	6	Shaft	4	4	50+								



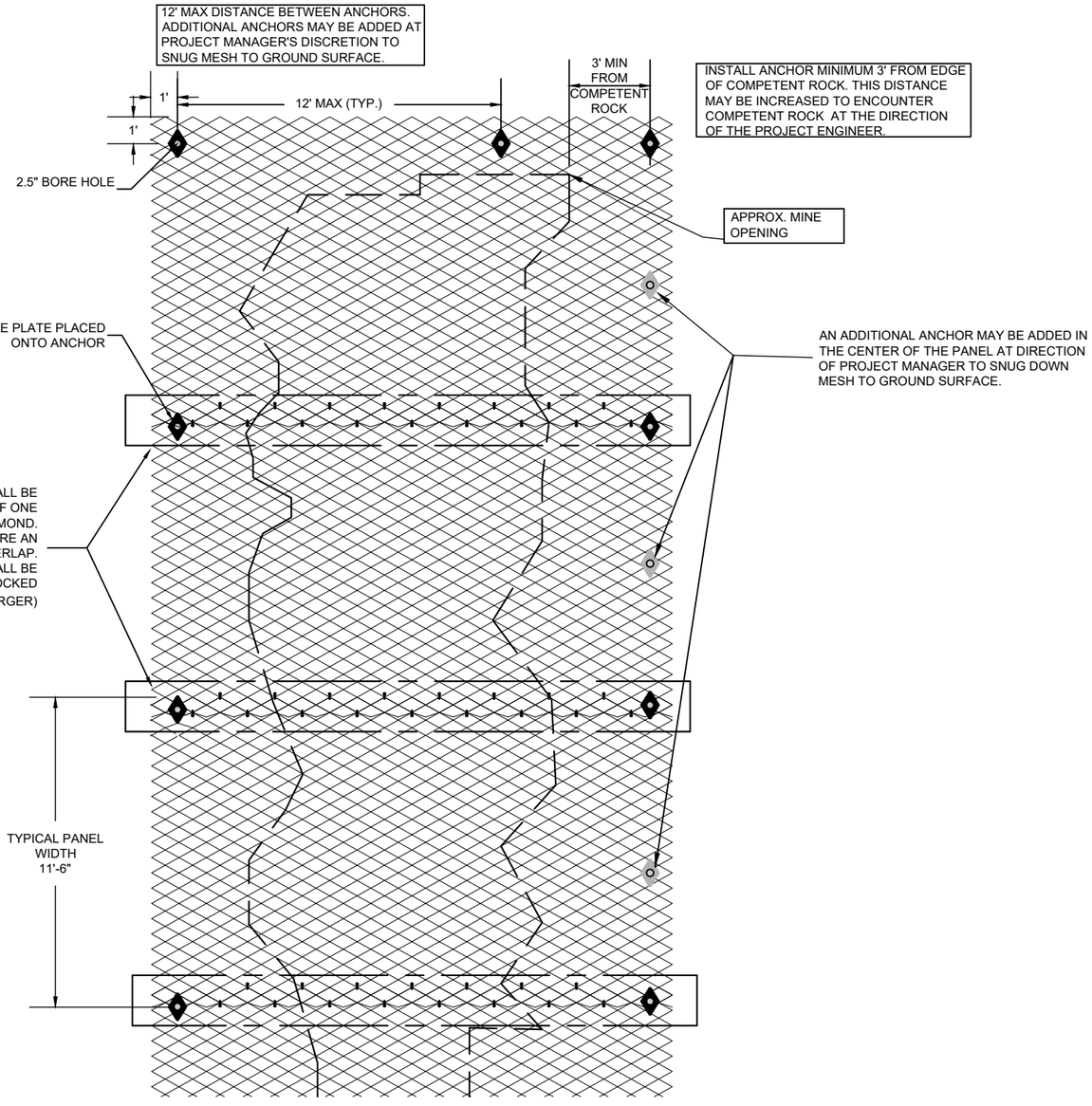
SECTION VIEW

SCALE: 1/16" = 1'-0"

CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

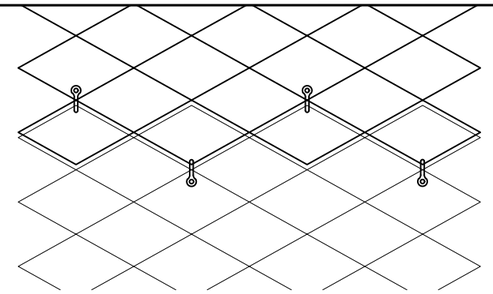
ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE: AS SHOWN	VARIOUS LOCATIONS	DRAWN BY: MWT
DATE: 11/15/2023		REVISED BY: DMC
C01–STEEL MESH CLOSURE		
FILE:	BOSTON HILL MINE SAFEGUARD PROJECT – PH. I	FIGURE: 10



ANCHOR PLACEMENT DETAIL - PLAN VIEW

SCALE: 3/16" = 1'-0"



SHACKLE PLACEMENT DETAIL - PLAN VIEW

SCALE: ¾" = 1'-0"

GENERAL NOTES:

1. THE LOCATION AND DIMENSIONS INDICATED FOR THE STEEL MESH AND MINE OPENING ARE APPROXIMATE. ADJUST THE POSITION AND AREA OF THE MESH FOR FIELD CONDITIONS.

2. THE ROCK ANCHOR LOCATIONS INDICATED ARE PRELIMINARY. ADJUST LOCATIONS AND NUMBER OF ANCHORS TO FIT FIELD CONDITIONS. ANCHORS SHALL BE SPACED NO MORE THAN TWELVE FEET FROM THE NEAREST ANCHOR. LOCATE ANCHORS TO AVOID THIN ROCK BACK OF STOPE OPENING BELOW, AT MESH INSTALLATION CORNERS, ALONG MESH EDGES, AND AS REQUIRED TO SNUG THE MESH ONTO THE GROUND SURFACE.

3. THE MINIMUM DISTANCE FROM THE EDGE OF THE MINE FEATURE TO THE EDGE OF THE MESH PANEL IS 3'-0". THIS DISTANCE MAY BE INCREASED TO ENCOUNTER COMPETENT ROCK AT THE DIRECTION OF THE PROJECT ENGINEER.

4. PULL BACK WASTE PILES FROM THE STOPE PERIMETER AS NEEDED TO ALLOW FOR THE PROPER INSTALLATION OF THE MESH. REGRADE THE MOVED MATERIAL AS DIRECTED BY THE PROJECT MANAGER TO BLEND IN WITH THE EXISTING WASTE PILES. MINIMIZE THE AMOUNT OF MATERIAL THAT FALLS INTO THE STOPE OPENING. DRESS THE SLOPE, REMOVING ALL BRUSH , DEBRIS, SOIL AND LOOSE ROCK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

5. DRILL HOLE DIAMETER SHALL BE 2 ½ INCHES FOR ANCHOR INSTALLATIONS. UTILIZE ONE PVC CENTRALIZER PER ROCK ANCHOR,CENTERED ALONG ANCHOR, TO CENTER THE ANCHOR ASSEMBLY IN THE DRILL HOLE.

6. ANCHORS SHALL BE GRADE 75 ALL- THREADED BARDS WITH NOMINAL THREAD DIAMETER OF 1 IN. THE TOTAL ROCK ANCHOR LENGTH SHALL NOT BE LESS THAN 36". THE BONDED LENGTH IN COMPETENT ROCK SHALL BE A MINIMUM OF 30". REFER TO PROJECT MANUAL, DIVISION 13, IF SOIL CONDITIONS ARE ENCOUNTERED.

7. INSTALL ANCHORS IN DEPRESSIONS AND LOW POINTS IN ORDER TO PULL THE MESH INTO THEM AND AGAINST THE GROUND AND AS INDICATED ON DRAWINGS. ALTERNATELY, THE MESH MAY BE LAID ON THE SLOPE FIRST, FOLLOWED BY SITE CONDITIONS.

8. AFTER ANCHORS ARE INSTALLED, SET AND LOAD TESTED, THE CONTRACTOR SHALL FORM HOLLOWS OF 4 TO 12 INCHES DEEP AT EACH ANCHOR IS PLACED ON WASTE PILES.

9. MESH SHALL BE LAID ON THE SLOPE BY UNROLLING DOWN THE SLOPE. MESH ROLLS CAN BE SHORTENED OR LENGTHENED AS NECESSARY BY REMOVING OR ADDING SECTIONS, RESPECTIVELY.

10. MESH PANELS SHALL BE OVERLAPPED BY MINIMUM OF ONE MESH DIAMOND IN THE SHORT DIRECTION OF THE PANEL. ON THE LONG SECTION , AN OVERLAP IS NO REQUIRED SO LONG AS THERE ARE NO GAPS BETWEEN MESH PANELS. MESH PANELS SHALL BEFASTENED TOGETHER WITH A FORCE LOCKED SHACKLE (⅜" OR LARGER AS DIRECTED BY THE MANUFACTURER.

11. SPIKE PLATES SHALL BE PLACED ONTO ANCHORS. (GEOBRUGG SPIKE PLATE OR EQUIVALENT) USING HYDRAULIC WRENCH, THE NUTS SHALL BE TIGHTENED AND THE SPIKE PLATES AND MESH PUSHED INTO THE HOLLOWS IN ORDER TO TENSION THE MESH BETWEEN 1,125 AND 4,500 LBS (5kN AND 20 kN). THE NUTS SHALL BE TORQUED TO AN ANCHOR PRE-STRESS FORCE OF 1,675 LBS (7.5 kN) AND A TIGHTENING TORQUE OF 125 FT-LBS (0.17kN*m).

12. WHERE THE STEEL MESH IS PLACED OVER THE EXISTING GROUND, COVER THE MESH WITH AT LEAST THREE TO SIX INCHES OF WASTE ROCK MATERIAL AS DIRECTED BY THE PROJECT MANAGER.

13. ESTIMATED LENGTHS DO NOT ACCOUNT FOR SAG OF MESH.

14. INSTALL SURVEY CAP IN ACCORDANCE WITH SECTION 02890.

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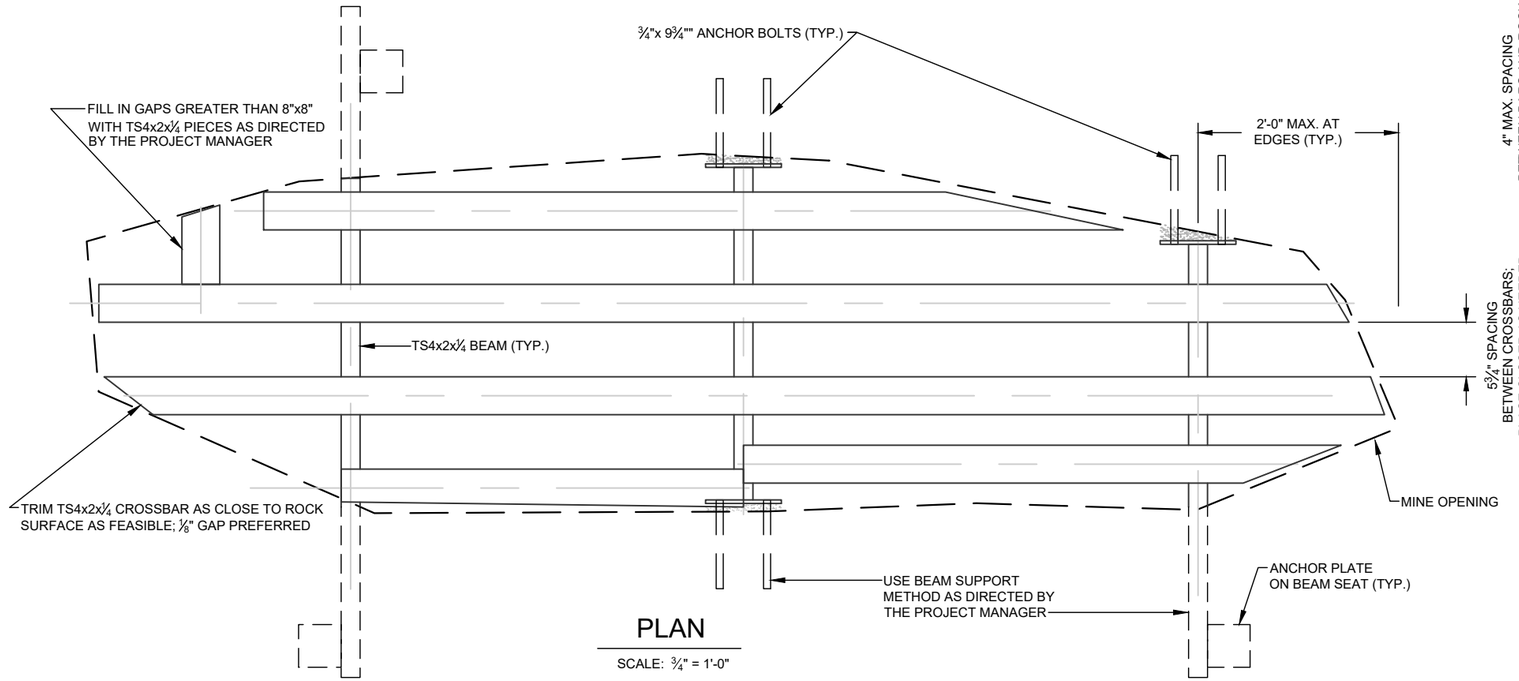
ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

DRAWN BY: DMC
REVISED BY: MJM

SCALE: AS SHOWN
DATE: 12/20/2023

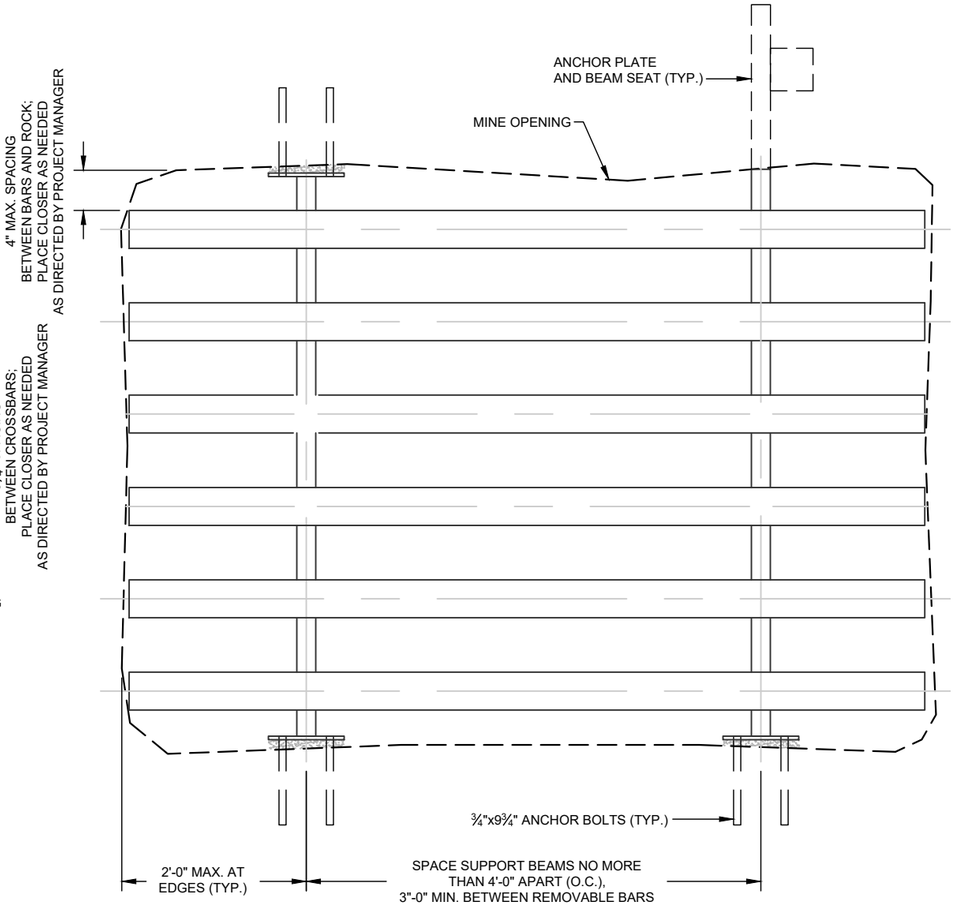
VARIOUS LOCATIONS
C01–STEEL MESH CLOSURE

FILE:
BOSTON HILL MINE SAFEGUARD PROJECT - PH. I
FIGURE: 10A



PLAN

SCALE: ¾" = 1'-0"



PLAN

SCALE: ¾" = 1'-0"

GENERAL NOTES:

1. THIS DRAWING SHOWS TWO EXAMPLE MINE OPENINGS AND THE CORRESPONDING LAYOUTS OF THE STEEL CLOSURE. THE DRAWING SHALL BE USED AS A GUIDE FOR FIELD LAYOUT. DETERMINE THE ACTUAL LAYOUTS AND DIMENSIONS OF THE CLOSURES IN THE FIELD PRIOR TO FABRICATION.

2. INSTALL HORIZONTAL BAT GATES AS CLOSE TO THE TOP OF THE SHAFT OPENINGS AS POSSIBLE, WHERE THE ROCK AT THE GATE LOCATIONS IS FULLY COMPETENT AND THE ANCHORS ARE PLACED AT LEAST 10" BELOW THE TOP OF THE ROCK.

3. REMOVE LOOSE ROCK AT CLOSURES PRIOR TO FABRICATION AND FIELD ERECTION OF THE CLOSURES. MINIMIZE THE AMOUNT OF ROCK AND OTHER DEBRIS THAT FALL INTO THE MINE OPENINGS DURING CONSTRUCTION. PULL LOOSE MATERIAL UP AND AWAY FROM THE MINE AREA.

4. USE BEAM SUPPORTS OR BEAM SEATS, AT CONTRACTOR'S DISCRETION AND APPROVAL FROM THE PROJECT MANAGER, TO FASTEN BEAM ENDS TO COMPETENT ROCK.

5. INSTALL AN ADDITIONAL ANCHOR BEAM SQUARE TO ORIGINAL ANCHOR BEAMS IF THE SPAN OF THE ORIGINAL ANCHOR BEAM(S) EXCEED 15 FT.

6. UNLESS OTHERWISE ACCEPTED BY THE PROJECT ENGINEER, PLACE TS BEAMS ACROSS THE SPAN (WIDTH) OF THE SHAFT OPENING.

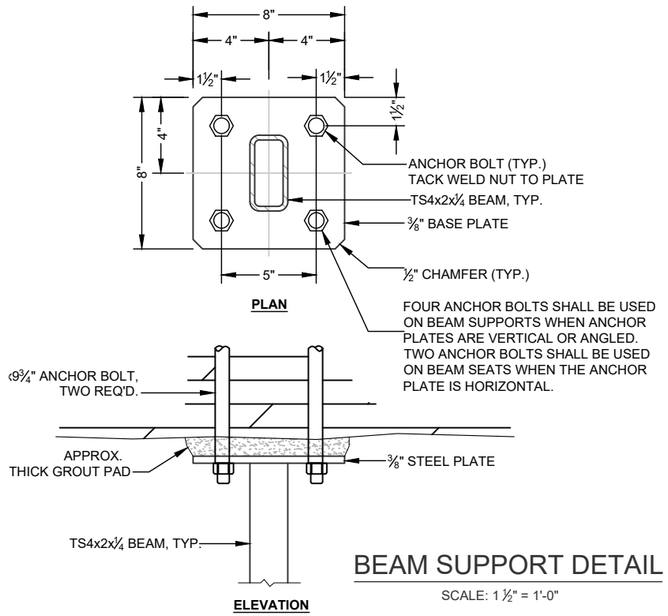
7. GATES SHALL BE HORIZONTAL TO THE MAXIMUM EXTENT PRACTICABLE. GATES MAY BE INSTALLED AT AN ANGLE AT THE DIRECTION OF THE PROJECT ENGINEER.

8. INSTALL SURVEY MARKER (SUPPLIED BY AML PROGRAM) INTO CONCRETE OR ADJACENT COMPETENT ROCK AS DIRECTED BY THE PROJECT MANAGER.

CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

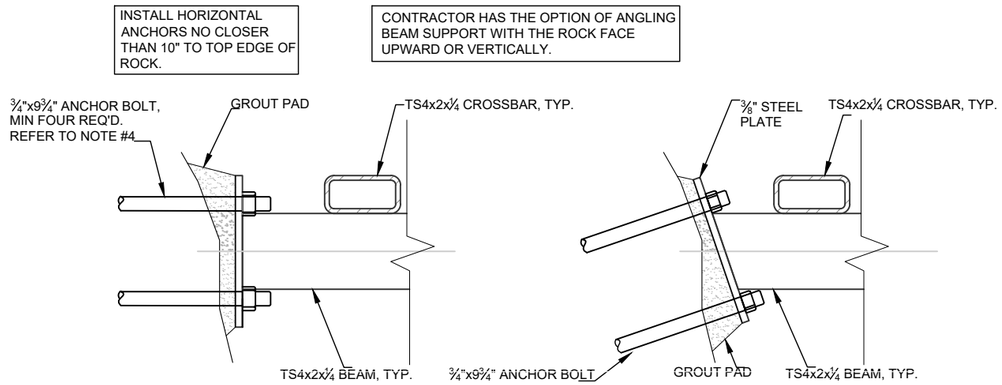
ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE: AS SHOWN	VARIOUS LOCATIONS	DRAWN BY: MWT
DATE: 11/15/2023		REVISED BY: DMC
C01–HORIZONTAL METAL GRATE CLOSURE		
FILE:	BOSTON HILL SAFEGUARD PROJECT PHASE I	FIGURE: 11



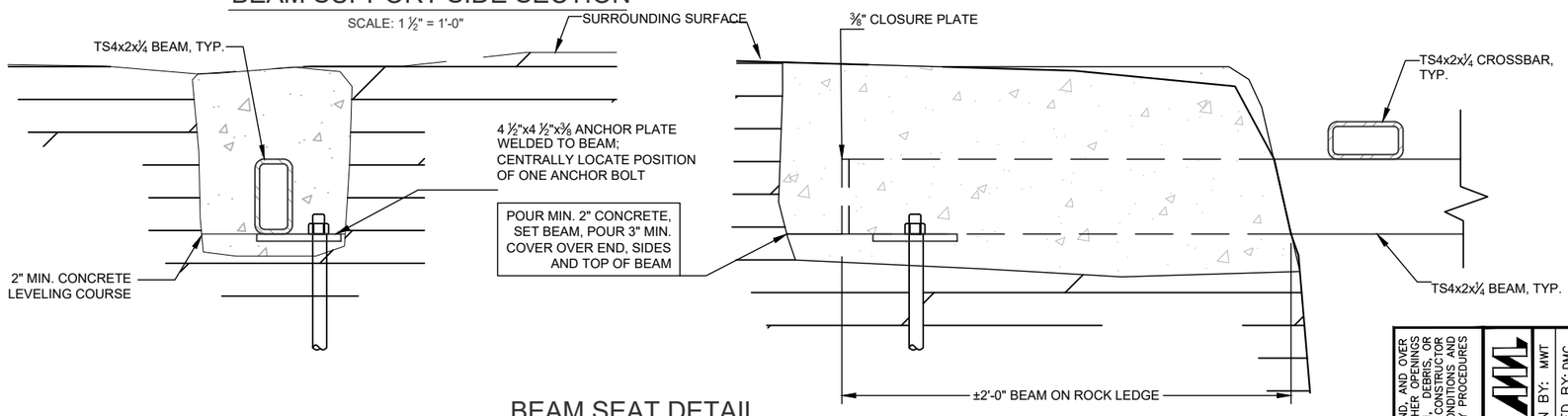
BEAM SUPPORT DETAIL

SCALE: 1 ½" = 1'-0"



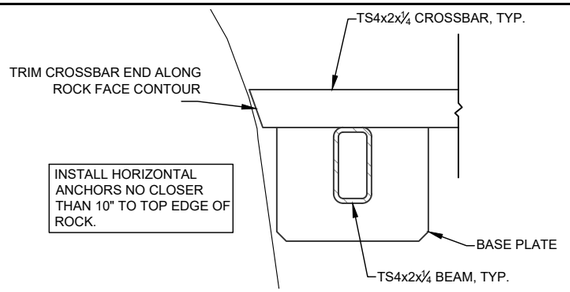
BEAM SUPPORT SIDE SECTION

SCALE: 1 ½" = 1'-0"



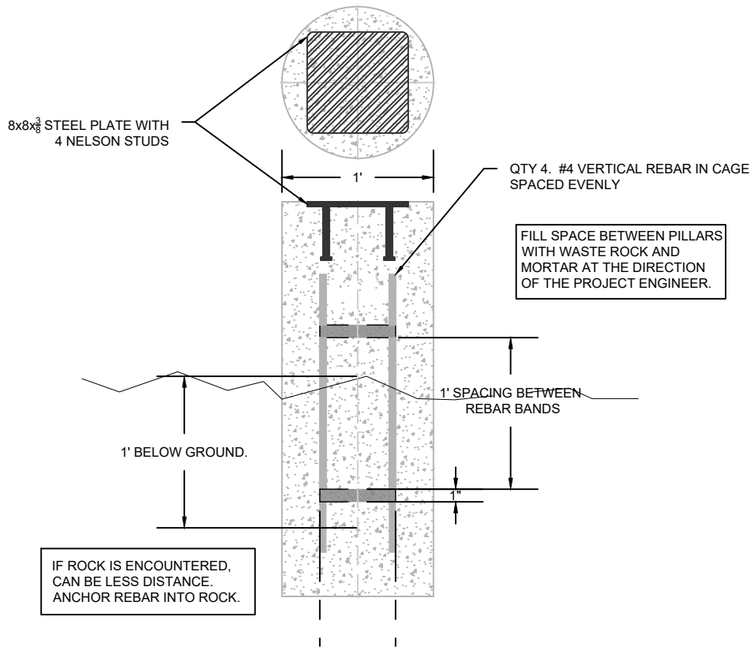
BEAM SEAT DETAIL

SCALE: 1 ½" = 1'-0"



BEAM-CROSSBAR SECTION VIEW

SCALE:1 ½ " = 1'-0"



PILLAR BEAM SEAT DETAIL

SCALE: 1 " = 1'-0"

GENERAL NOTES:

1. POSITION CLOSURE AT THE TOP OF THE SHAFT AT A STABLE LOCATION AS DIRECTED BY THE PROJECT MANAGER. IF THERE IS POTENTIAL FOR ROCK ACCUMULATION FROM ABOVE, STRUCTURE SHOULD BE ANGLED DOWNHILL IF POSSIBLE TO ALLOW THE ROCKS TO SLIDE OFF.

2. MINIMIZE THE AMOUNT OF ROCK AND OTHER DEBRIS THAT FALL INTO THE MINE OPENINGS DURING CONSTRUCTION. PULL LOOSE MATERIAL UP AND AWAY FROM THE MINE AREA.

3. USE BEAM SUPPORTS, BEAM SEATS OR PILLAR BEAM SEATS AT CONTRACTOR'S OPTION WITH CONCURRENCE FROM THE PROJECT MANAGER, TO FASTEN BEAM ENDS TO COMPETENT ROCK.

4. USE 2 ANCHORS BOLTS WHEN SUPPORT BEAMS ARE FIXED ONTO GROUND OUTSIDE OF MINE FEATURE. USE 4 ANCHOR BOLTS WHEN SUPPORT BEAMS ARE FIXED WITHIN THE INTERIOR WALLS OF THE MINE FEATURE.

5. STEEL SHAPES, PLATES AND BARS SHALL BE WEATHER OR STAINLESS STEEL.

6. PUT ¾" CHAMFER ON ANY CONCRETE EDGES.

7. ANCHOR BOLTS SHALL BE ZINC-PLATED HILTI HIT ADHESIVE ANCHORS OR APPROVED EQUIVALENT. FOLLOW MANUFACTURER'S RECOMMENDATIONS REGARDING INSTALLATION.

8. DO NOT FILL BEAMS WITH CONCRETE OR GROUT.

9. INSTALL SURVEY MARKER (SUPPLIED BY AML PROGRAM) INTO ADJACENT COMPETENT ROCK AS DIRECTED BY THE PROJECT MANAGER.

CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

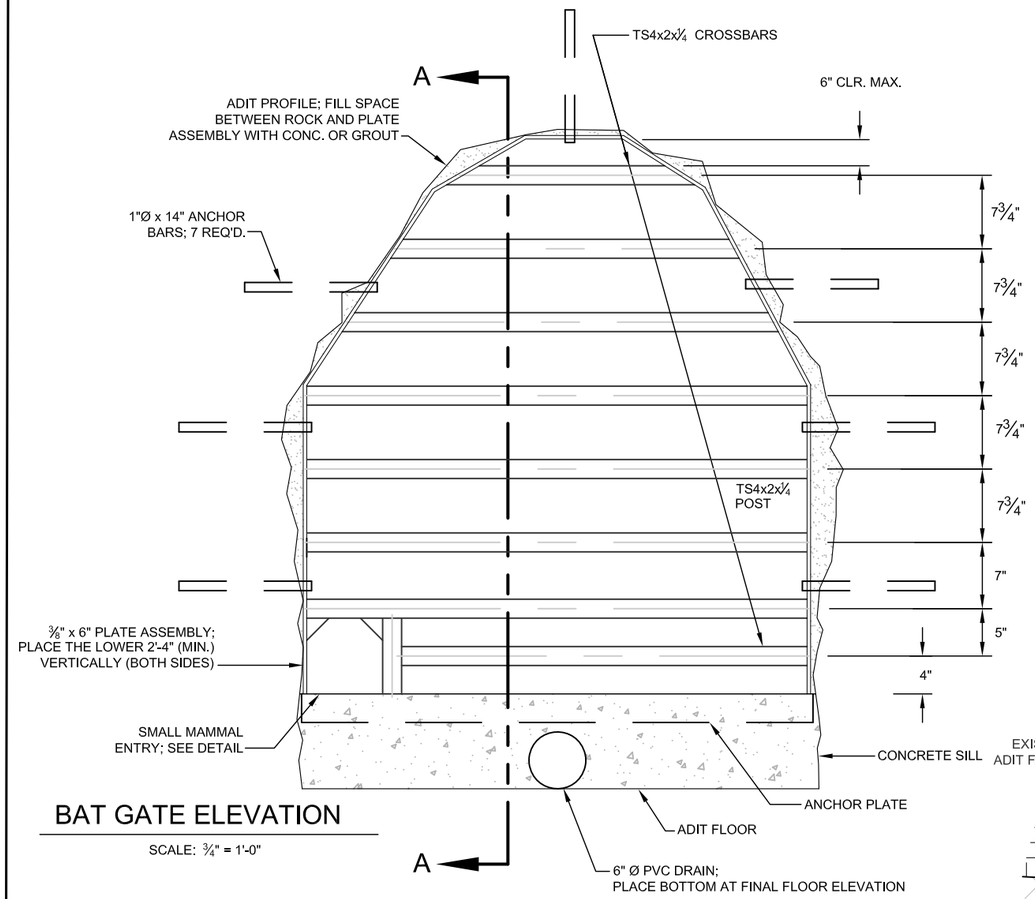
ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE: AS SHOWN
DATE: 12/20/2023
DRAWN BY: MWT
REVISED BY: DMC

VARIOUS LOCATIONS

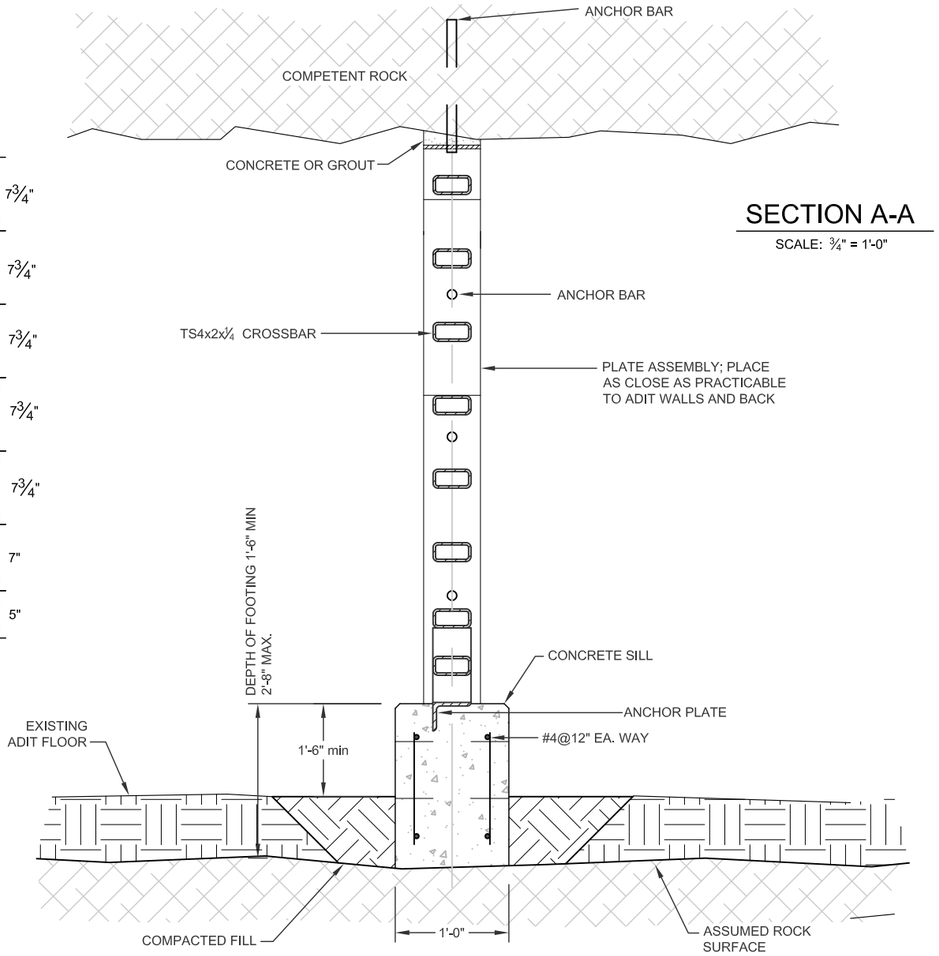
C01–HORIZONTAL METAL GRATE CLOSURE DETAILS

FILE:
BOSTON HILL SAFEGUARD PROJECT PHASE I
FIGURE: 12



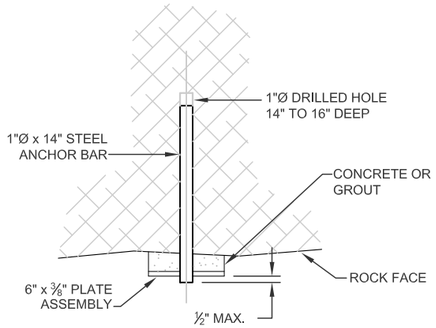
BAT GATE ELEVATION

SCALE: ¾" = 1'-0"



SECTION A-A

SCALE: ¾" = 1'-0"



ANCHOR BAR DETAIL

SCALE: 1" = 1'-0"

GENERAL NOTES:

1. THIS DRAWING SHOWS THE GENERAL SHAPE AND APPROXIMATE PROFILE OF THE ADIT AT THE GATE LOCATION. USE THE DRAWING AS A GUIDE FOR FIELD LAYOUT OF THE CLOSURE. DETERMINE THE ACTUAL LAYOUT AND DIMENSIONS IN THE FIELD PRIOR TO FABRICATION.

2. THE EXACT GATE LOCATION WILL BE DETERMINED BY THE PROJECT MANAGER.

3. REMOVE LOOSE ROCK AT THE CLOSURE LOCATION PRIOR TO CONSTRUCTION.

4. TUBULAR STEEL, STEEL SHAPES, PLATES, AND BARS SHALL BE WEATHERING STEEL AS SPECIFIED. WELD ALL JOINTS. TOLERANCES ON THE CENTER-TO-CENTER DIMENSIONS BETWEEN CROSSBARS IS ±1/16 INCH.

5. PROPORTION AND MIX CONCRETE FOR THE SILL TO PRODUCE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS. CEMENT SHALL CONFORM TO ASTM C150, TYPE II, AND AGGREGATE TO ASTM C33, WITH A MAXIMUM AGGREGATE SIZE OF ¾ INCH. PACKAGED CONCRETE MIX MEETING ASTM C378 MAY BE USED. GROUT SHALL BE CONSTRUCTION GRADE.

6. FOUND THE FOOTING ON ROCK OR, IF ROCK IS DEEPER THAN 1'-6" BELOW THE ADIT FLOOR, TO AT LEAST 1'-6" BELOW THE ADIT FLOOR.

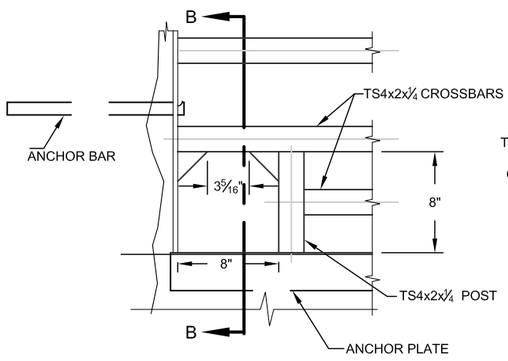
7. FORCE FIT INTO HOLES OF THE SAME DIAMETER THE STEEL ANCHOR BARS THAT ATTACH THE GATE ASSEMBLY TO WALLS AND CEILING. WHERE BARS ARE LOOSE, WHERE ROCK IS FRACTURED OR JOINTED, OR WHERE REQUIRED BY THE PROJECT MANAGER, USE EPOXY GROUT TO SECURE THE BARS.

8. CONSTRUCT AND WELD THE CLOSURE TO ELIMINATE SURFACES ON WHICH MOISTURE ACCUMULATION CAN OCCUR. JOINTS SHALL BE TIGHT SO THAT MOISTURE CANNOT ENTER BETWEEN THE PILES OF MATERIAL. FILL ALL NON-REMOVABLE CROSSBARS AND POSTS WITH CONCRETE OR GROUT.

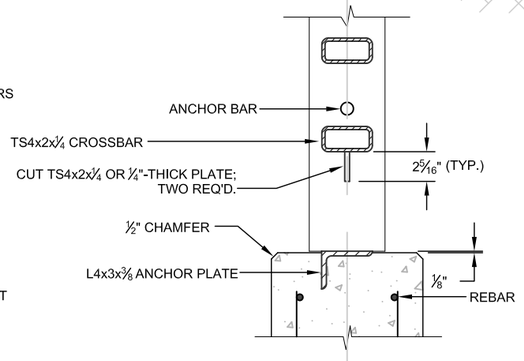
9. PLACE A SURVEY MARKER, PROVIDED BY THE PROJECT MANAGER, INTO THE CONCRETE SILL.

10. IF ADIT FLOOR IS ON LOOSE MATERIAL AND ANGLED, A ROCK AND MORTAR RETAINING WALL MAY BE CONSTRUCTED TO SUPPORT THE FOOTING AT THE DIRECTION OF THE PROJECT ENGINEER. . THE RETAINING WALL SHALL BE A MINIMUM OF 18" THICK WITH THE HEIGHT DETERMINED BY THE PROJECT ENGINEER. WELL-GRADED ROCK FILL SHALL BE PLACED BETWEEN THE FOOTING AND THE RETAINING WALL.

11. MOISTURE CONDITION AND COMPACT SOIL TO SATISFACTION OF PROJECT MANAGER PRIOR TO CONSTRUCTION OF FOOTING AND RETAINING WALL.



ELEVATION



SECTION B-B

SMALL MAMMAL ENTRY DETAIL

SCALE: 1" = 1'-0"

CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE: AS SHOWN	VARIOUS LOCATIONS	DRAWN BY: MWT
DATE: 11/15/2023		REVISED BY: DMC

C01—VERTICAL GRATE CLOSURE SUMMARY TABLE

FILE:	BOSTON HILL SAFEGUARD PROJECT PHASE I	FIGURE: 13

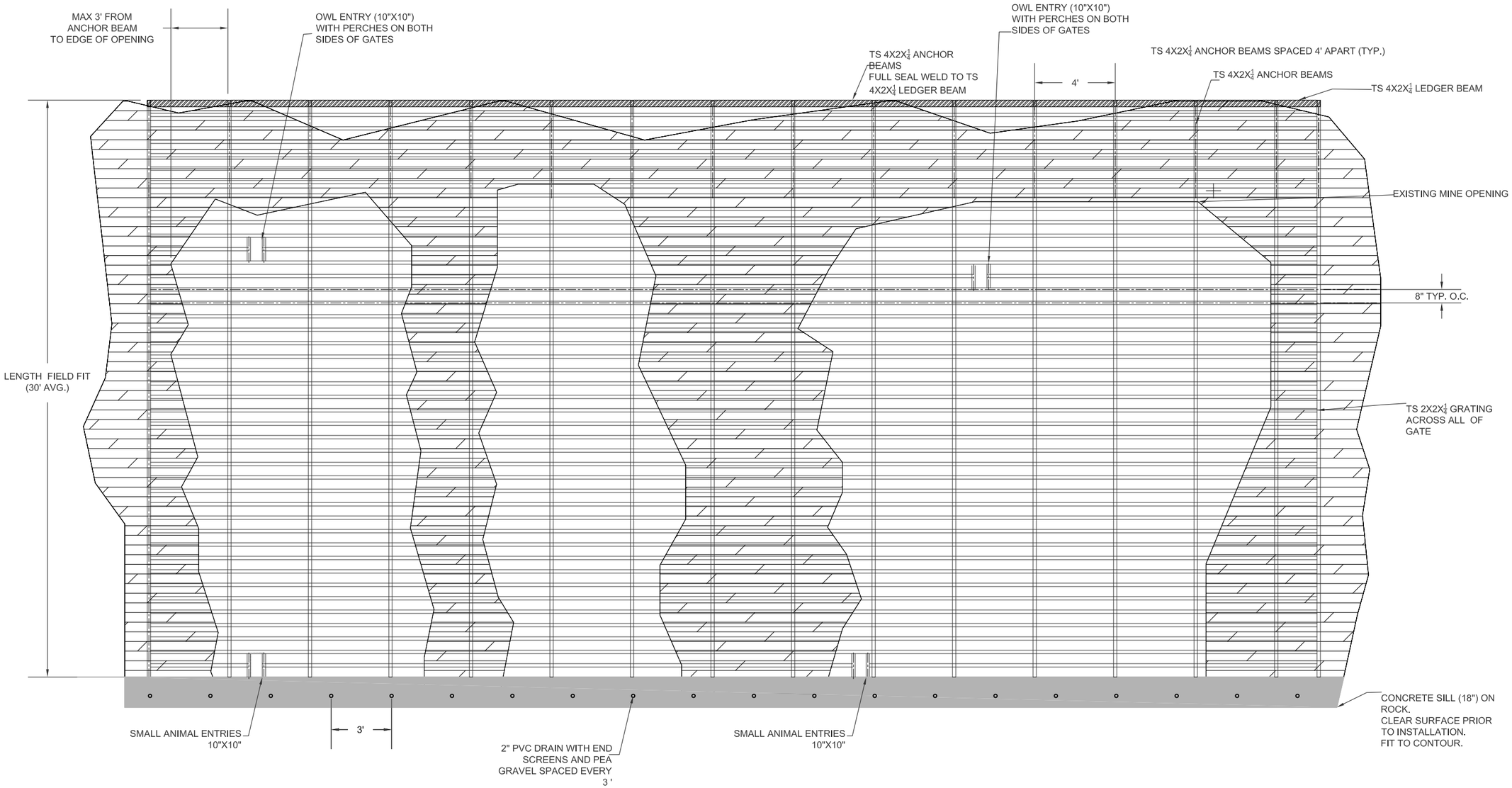
METAL GRATE CLOSURE SUMMARY

FEATURE		#			FT		SF	FT	#	LFT			#		
TRIHYDRO ID	OKUN ID	SHEET	FEATURE TYPE	TYPE OF CLOSURE HORIZONTAL/ VERTICAL/ANGLED	WIDTH AML	HEIGHT AML	GRATE AREA AML	GRATE PERIMETER AML	GRATE BEAM BARS 4X2 AML	GRATE BEAM BARS 4X2 AML	GRATING 4X2 AML	TOTAL 4X2 BARS AML	ANCHORS AML	ANCHOR BOLTS AML	ADDITIONAL NOTES
LT-8	2128	6	ADIT	VERTICAL OR SLIGHTLY ANGLED	12	13	156	50	3	36	182	218	6	24	Design changed from horizontal to vertical (or slightly angled) adit gate with concrete footer.
LT-115	2149	6	OPEN CUT	HORIZONTAL	25	20	500	90	5	100	575	675	10	40	Was 9' x 12' horizontal top of gate; dimensions updated to 20' x 25' to bring gate up toward top of feature . Use concrete at uneven spots to prevent access under gate.
LT-115A	2149	6	PROSPECT PIT	HORIZONTAL	8	8	64	32	2	16	80	96	4	16	
LT-116	2152	6	OPEN CUT	ANGLED FROM HORIZONTAL	20	25	500	90	5	100	575	675	10	40	Was 20' x 12' horizontal gate; changed to 20' x 25' gate angled from horizontal to place gate closer to top of feature.
LT-118	2120	6	SHAFT	HORIZONTAL	5	12	60	34	2	10	60	70	4	16	
LT-119	2120	6	SHAFT	HORIZONTAL	6	3	18	18	2	6	18	24	4	16	
LT-120	2159	6	SHAFT	HORIZONTAL	4	12	48	32	2	8	48	56	4	16	Was 4' x 10' horizontal gate; dimensions updated to 4' x 12' to bring gate up toward top of feature. Use concrete at uneven spots to prevent access under gate.
LT-122	2153	6	SHAFT	HORIZONTAL	3.5	4	14	15	1	3.5	16	19.5	2	8	Was 9' x 6' horizontal gate; dimensions updated to 3.5' x 4'.
LT-135		6	OPEN CUT	ANGLED FROM HORIZONTAL	12	25	300	74	5	60	350	410	10	40	Gate to be angled from horizontal to avoid poor rock.
LT-139		6	OPEN CUT	HORIZONTAL	15	20	300	70	4	60	340	400	8	32	Was 10' x 15' horizontal gate; dimensions updated to 15' x 20' to bring gate up toward top of feature. Use concrete at uneven spots to prevent access under gate.
LT-140		6	STOPE	HORIZONTAL	8	12	96	40	2	16	108	124	4	16	Use concrete at uneven spots to prevent access under gate. Bat Maternity Colony present near fenceline adjcent to feature.
LT-150	2201	6	SHAFT	HORIZONTAL	8	13	104	42	2	16	117	133	4	16	Gate may need to be slightly angled to fit feature.

CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE: AS SHOWN	VARIOUS LOCATIONS	DRAWN BY:
DATE: 11/3/2023		REVISED BY:
C01—METAL GRATE CLOSURE SUMMARY TABLE		
FILE:	BOSTON HILL SAFEGUARD PROJECT PHASE I	FIGURE: 14



ELEVATION VIEW

SCALE: $\frac{3}{16}$" = 1'-0"

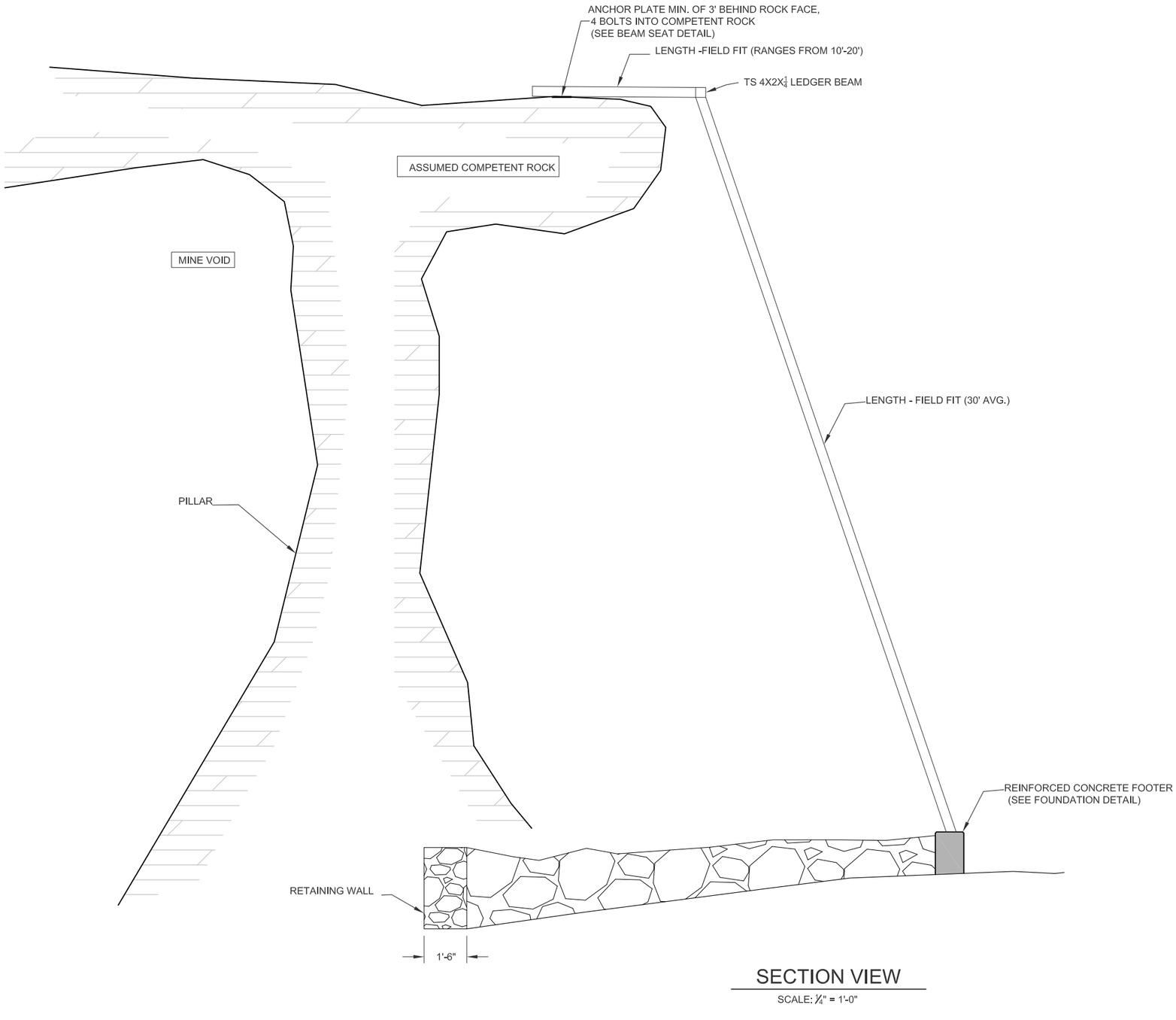
CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

GENERAL NOTES:

1. THIS DRAWING SHOWS TWO EXAMPLE MINE OPENINGS AND THE CORRESPONDING LAYOUTS OF THE STEEL CLOSURE. THE DRAWING SHALL BE USED AS A GUIDE FOR FIELD LAYOUT. DETERMINE THE ACTUAL LAYOUTS AND DIMENSIONS OF THE CLOSURES IN THE FIELD PRIOR TO FABRICATION.
2. INSTALL SURVEY MARKER (SUPPLIED BY AML PROGRAM) INTO CONCRETE OR ADJACENT COMPETENT ROCK AS DIRECTED BY THE PROJECT MANAGER.

ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE: AS SHOWN	LEGAL TENDER LT–134	DRAWN BY: MJM
DATE: 11/21/2023		REVISED BY: MWT
CO1–ANGLED BAT GATE ELEVATION VIEW		
FILE:	BOSTON HILL MINE SAFEGUARD PROJECT–PH.I	FIGURE: 15



SECTION VIEW

SCALE: ¼" = 1'-0"

GENERAL NOTES:

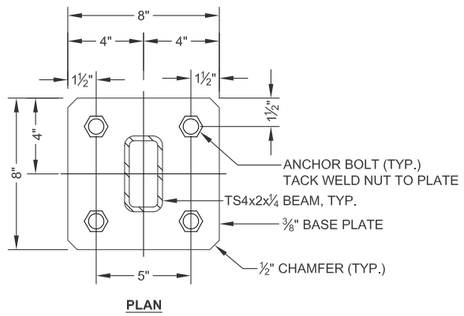
1. THIS DRAWING SHOWS TWO EXAMPLE MINE OPENINGS AND THE CORRESPONDING LAYOUTS OF THE STEEL CLOSURE. THE DRAWING SHALL BE USED AS A GUIDE FOR FIELD LAYOUT. DETERMINE THE ACTUAL LAYOUTS AND DIMENSIONS OF THE CLOSURES IN THE FIELD PRIOR TO FABRICATION.

2. INSTALL SURVEY MARKER (SUPPLIED BY AML PROGRAM) INTO CONCRETE OR ADJACENT COMPETENT ROCK AS DIRECTED BY THE PROJECT MANAGER.

CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

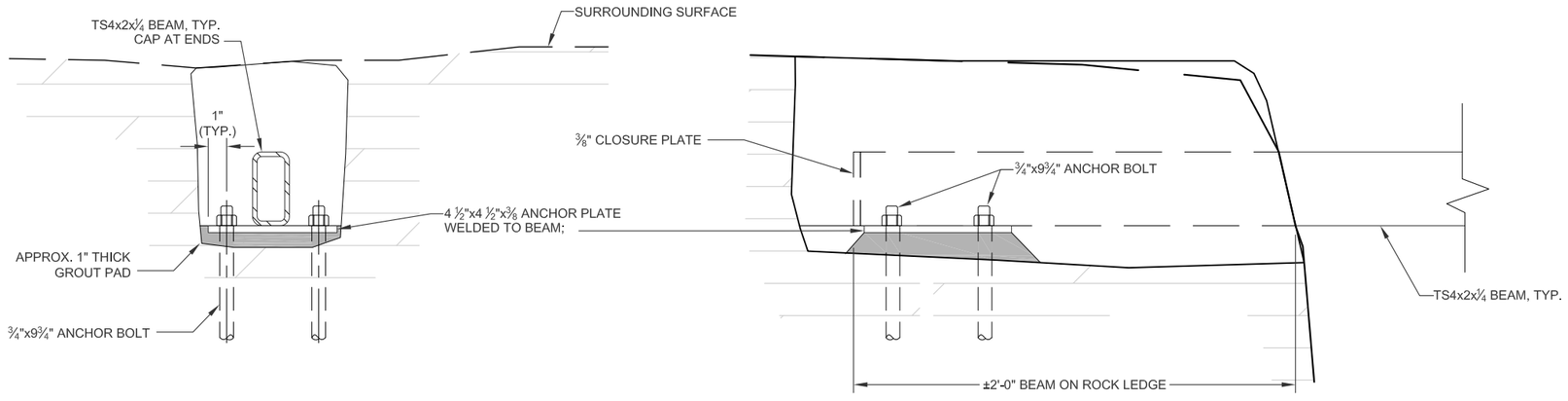
SCALE: AS SHOWN	LT–134	DRAWN BY: MJM
DATE: 11/21/2023		REVISED BY: MWT
C01–ANGLED BAT GATE SECTION VIEW		
FILE:	BOSTON HILL SAFEGUARD PROJECT PHASE I	FIGURE: 16



PLAN

BEAM SUPPORT DETAIL

SCALE: 1½" = 1'-0"



CROSS SECTION

LONGITUDINAL SECTION

BEAM SEAT DETAILS

SCALE: ½" = 1'-0"

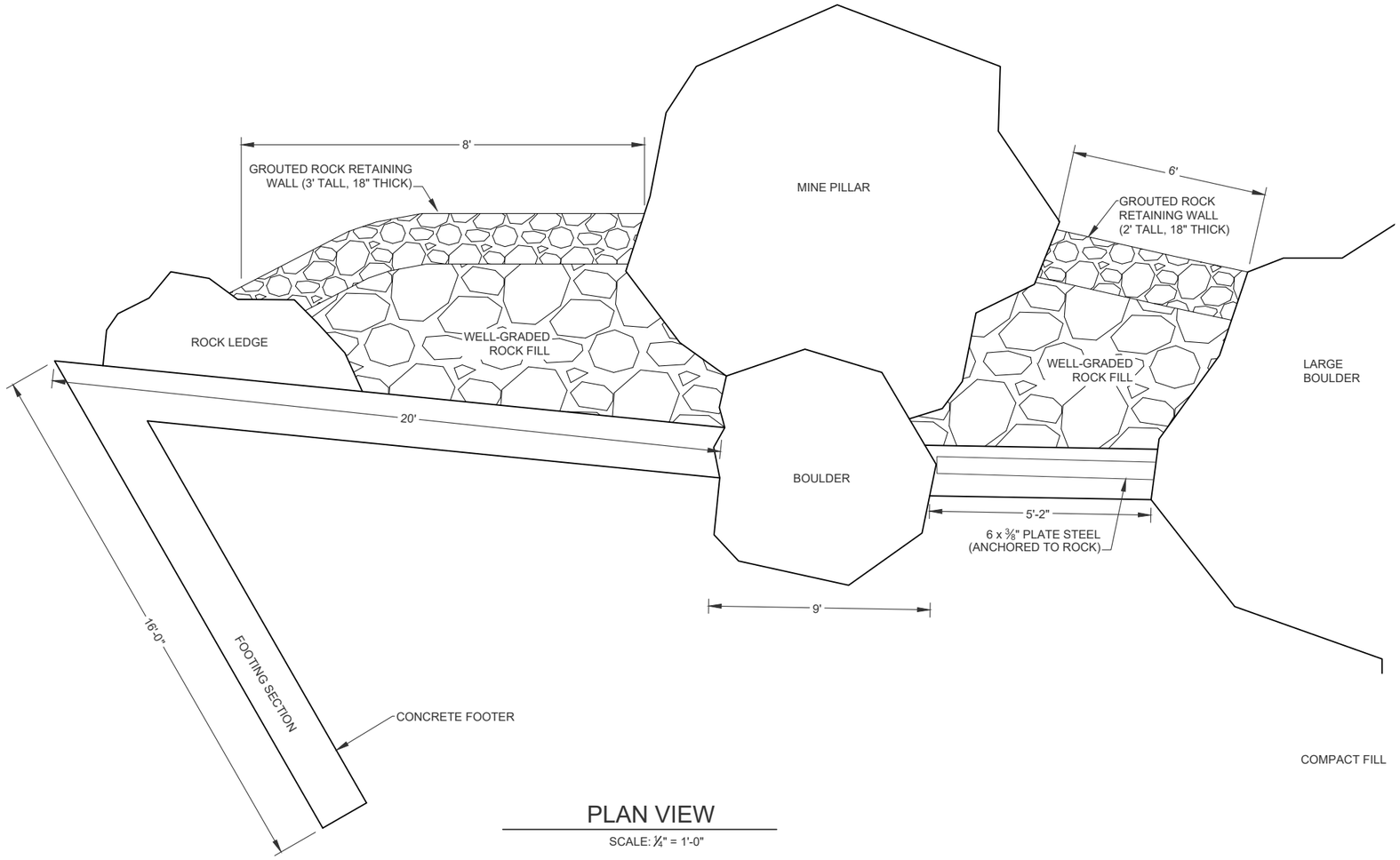
CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

GENERAL NOTES:

1. POSITION CLOSURE AT THE TOP OF THE FEATURE A MINIMUM OF 3' BEHIND EDGE OF ROCK LEDGE AND AT A STABLE LOCATION AS DIRECTED BY THE PROJECT MANAGER.
2. MINIMIZE THE AMOUNT OF ROCK AND OTHER DEBRIS THAT FALL INTO THE MINE OPENINGS DURING CONSTRUCTION. PULL LOOSE MATERIAL UP AND AWAY FROM THE MINE AREA.
3. USE BEAM SEATS TO FASTEN BEAM ENDS TO COMPETENT ROCK. WELD CLOSURE PLATES ONTO ENDS OF CROSS BEAMS INSTALLED ON BEAM SEATS.
4. STEEL SHAPES, PLATES AND BARS SHALL BE WEATHERING OR STAINLESS STEEL.
5. PUT ¾" CHAMFER ON ANY CONCRETE EDGES.
6. THE ANCHOR BOLT SYSTEM SHALL BE 9¾" X ¾" STAINLESS STEEL HILTI HIT-Z-R 316SS ANCHOR BOLTS WITH HILTI HIT-HY 200 EPOXY ADHESIVE, OR APPROVED EQUIVALENT. HOLES SHALL BE DRILLED WITH A ⅞" BIT. ANCHORS SHALL BE INSTALLED WITH A MINIMUM EMBEDMENT OF 6¾" INCHES. TORQUE NUTS TO 110 FT-LB. FOLLOW MANUFACTURER'S RECOMMENDATIONS REGARDING INSTALLATION.
7. CAP ENDS OF BEAM WITH CLOSURE PLATE.
8. INSTALL SURVEY MARKER (SUPPLIED BY AML PROGRAM) INTO CURING CONCRETE OR ADJACENT COMPETENT ROCK AS DIRECTED BY THE PROJECT MANAGER.

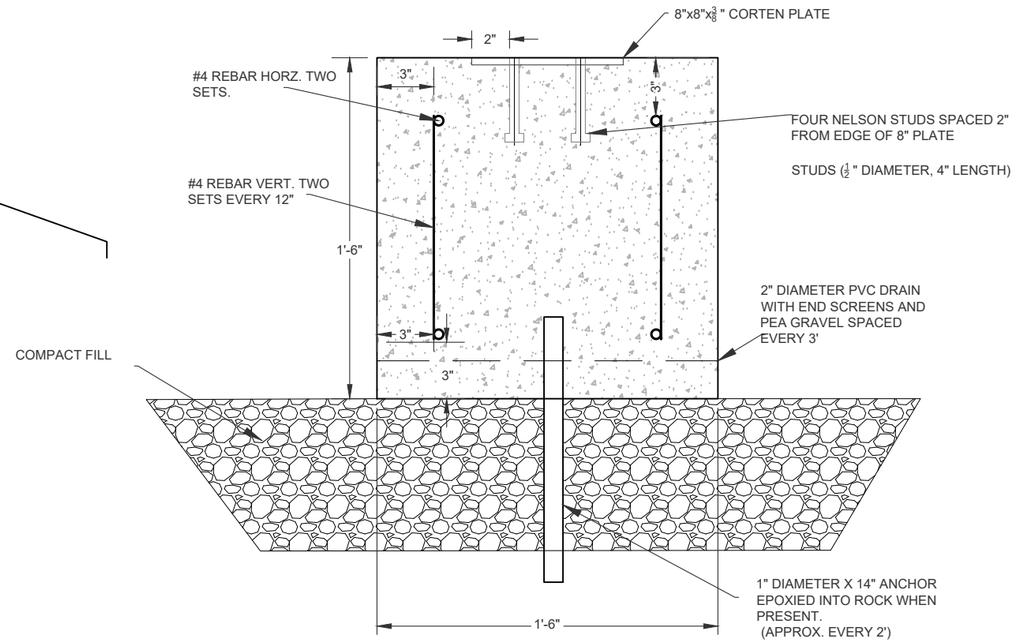
ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE: AS SHOWN	FEATURE LT–134	DRAWN BY: MJM
DATE: 11/21/2023		REVISED BY: MWT
CO1–BEAM SEAT DETAILS		
FILE:	BOSTON HILL MINE SAFEGUARD PROJECT–PH.I	FIGURE: 17



PLAN VIEW

SCALE: 1/4" = 1'-0"



CONCRETE FOOTER SECTION VIEW

SCALE:1 1/2" = 1'-0"

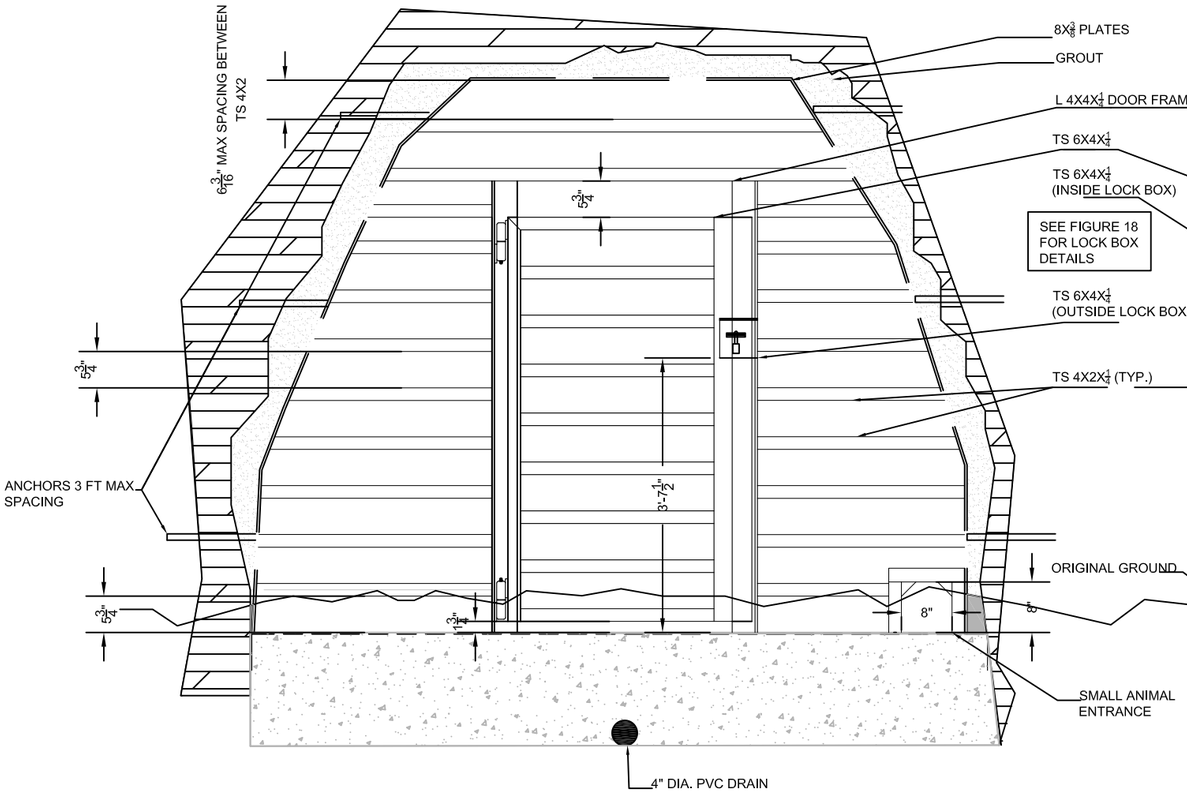
CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

GENERAL NOTES:

1. THIS DRAWING SHOWS TWO EXAMPLE MINE OPENINGS AND THE CORRESPONDING LAYOUTS OF THE STEEL CLOSURE. THE DRAWING SHALL BE USED AS A GUIDE FOR FIELD LAYOUT. DETERMINE THE ACTUAL LAYOUTS AND DIMENSIONS OF THE CLOSURES IN THE FIELD PRIOR TO FABRICATION.
2. INSTALL SURVEY MARKER (SUPPLIED BY AML PROGRAM) INTO CONCRETE OR ADJACENT COMPETENT ROCK AS DIRECTED BY THE PROJECT MANAGER.

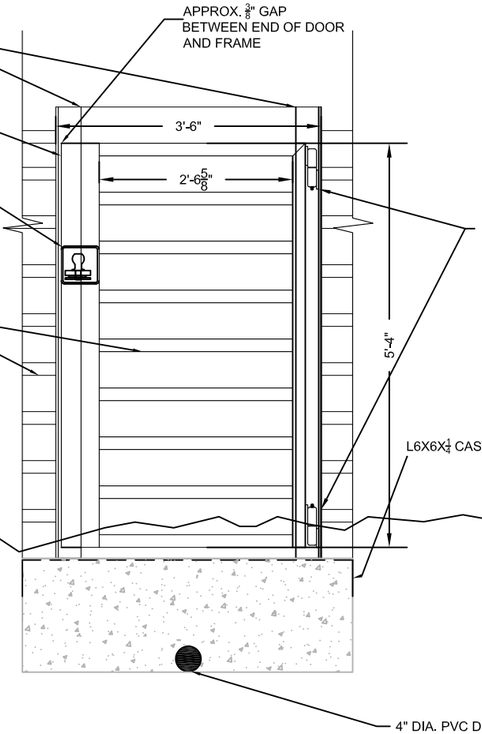
ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE: AS SHOWN	LT–134	DRAWN BY: MJM
DATE: 11/21/2023		REVISED BY: MWT
CO–1 FOUNDATION PLAN AND SECTION VIEW		
FILE:	BOSTON HILL MINE SAFEGUARD PROJECT PHASE I	FIGURE: 18



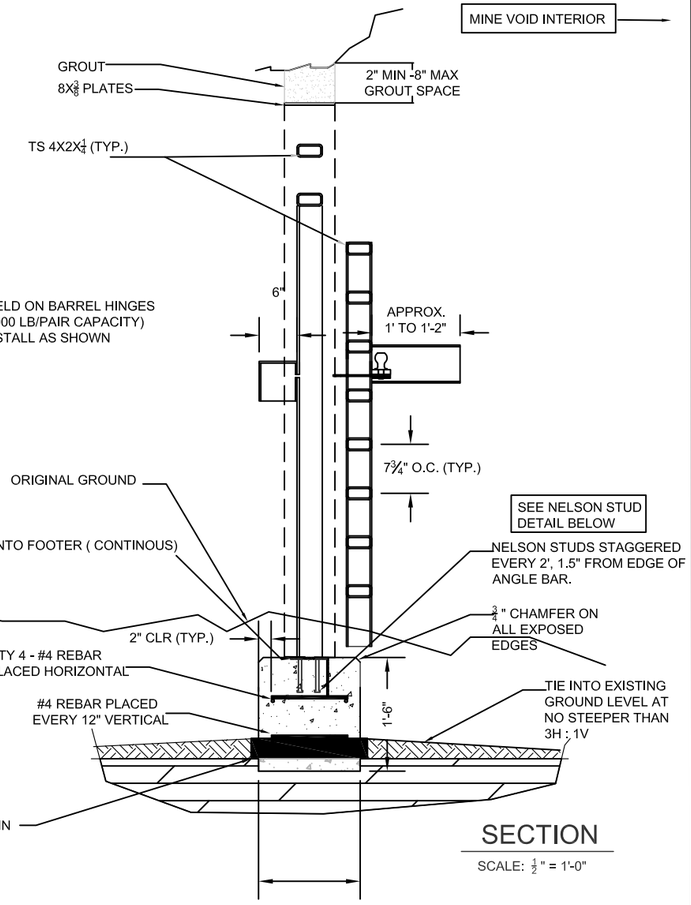
ELEVATION- OUTSIDE LOOKING IN

SCALE: 1/2" = 1'-0"



ELEVATION- INSIDE LOOKING OUT

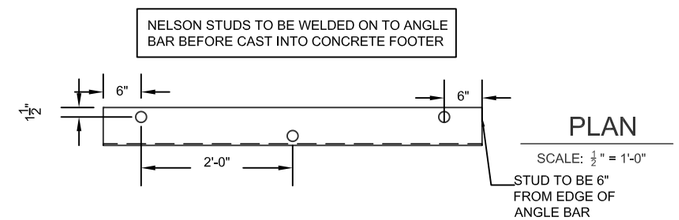
SCALE: 1/2" = 1'-0"



SECTION

SCALE: 1/2" = 1'-0"

APPROX 18"- 24" WIDE



PLAN

SCALE: 1/2" = 1'-0"

GENERAL NOTES;

1. THIS DRAWING SHOWS THE GENERAL SHAPE AND APPROXIMATE PROFILE OF THE EGRESS ADIT AT THE INTENDED LOCATION OF THE CLOSURE. USE THE DRAWING AS A GUIDE FOR FIELD LAYOUT OF THE CLOSURE. FIELD VERIFY DIMENSIONS PRIOR TO FABRICATION.

2. TUBULAR STEEL, STEEL PLATES, AND SHAPES SHALL BE WEATHERING STEEL AS SPECIFIED. WELD ALL JOINTS. JOINTS SHALL BE TIGHT SO THAT MOISTURE CANNOT ENTER BETWEEN PLIES OF MATERIAL. ROUND OR CHAMFER ALL SHARP EDGES AND CORNERS.

3. PRIOR TO CONSTRUCTING THE FOOTER, REMOVE RUBBLE AND LEVEL THE FLOOR IN THE AREA OF THE CLOSURE AS SHOWN IN THE DRAWING AND AS DIRECTED BY THE AML PROJECT MANAGER. COMPACT THE FOOTER BASE TO THE SATISFACTION OF THE PROJECT MANAGER, PRIOR TO POURING CONCRETE FOOTER.

4. INSTALL HEAVY DUTY BARREL WELD-ON PIVOT HINGES (1000 lb/PAIR CAPACITY) AS SHOWN AND AS SPECIFIED. BOTH HINGES SHALL BE INSTALLED TO SUPPORT THE DOOR AND SHALL BE IN-LINE AND OPERATE SMOOTHLY WHEN THE DOOR IS HUNG.

5. CONSTRUCT AND INSTALL THE DOOR AND DOOR FRAME TRUE, SQUARE AND PLUMB. THE DOOR SHALL CLOSE SNUGGLY AGAINST THE FRONT FACE OF THE DOOR FRAME WITH NO MORE THAN A 3/8" GAP AT ANY POINT ALONG THE FRONT FACE OF BOTH SIDES OF THE DOOR AND FRAME WHEN THE DOOR IS CLOSED .

6. GROUT SHALL BE CONSTRUCTION GRADE.

7. PLACE A 3/4" CHAMFER ON ALL EXPOSED EDGES OF CONCRETE FOOTER.

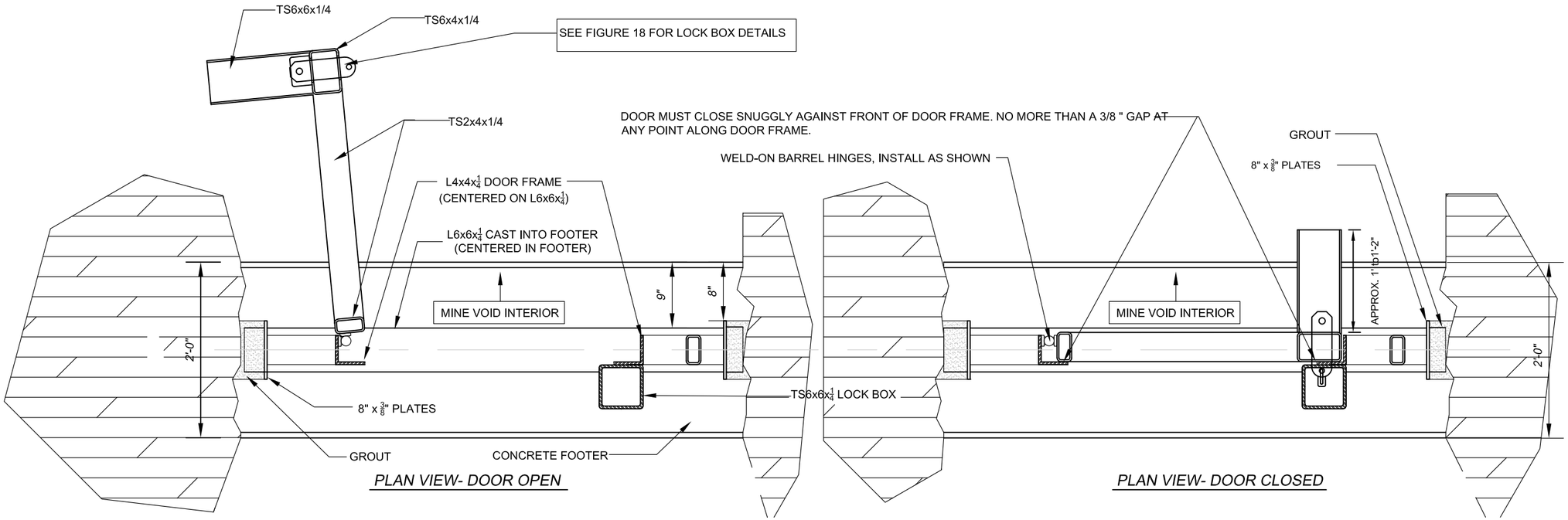
8. TOLERANCES ON THE CENTER--TO-CENTER DIMENSIONS BETWEEN POSTS SHALL BE ±1/16".

9. PLACE A SURVEY MARKER, PROVIDED BY THE PROJECT MANAGER, INTO THE GROUTED LINTEL OR IN NEARBY ROCK.

CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE: AS SHOWN	VARIOUS LOCATIONS	DRAWN BY: MWT
DATE: 11/15/2023		REVISED BY: DMC
C01–EGRESS ADIT GATE CLOSURE		
FILE:	BOSTON HILL SAFEGUARD PROJECT PHASE I	FIGURE: 19



SECTION

SCALE: 3/4" = 1'-0"

GENERAL NOTES;

1. THIS DRAWING SHOWS THE GENERAL SHAPE AND APPROXIMATE PROFILE OF THE EGRESS ADIT AT THE INTENDED LOCATION OF THE CLOSURE. USE THE DRAWING AS A GUIDE FOR FIELD LAYOUT OF THE CLOSURE. FIELD VERIFY DIMENSIONS PRIOR TO FABRICATION.

2. TUBULAR STEEL, STEEL PLATES, AND SHAPES SHALL BE WEATHERING STEEL AS SPECIFIED. WELD ALL JOINTS. JOINTS SHALL BE TIGHT SO THAT MOISTURE CANNOT ENTER BETWEEN PLIES OF MATERIAL. ROUND OR CHAMFER ALL SHARP EDGES AND CORNERS.

3. PRIOR TO CONSTRUCTING THE FOOTER, REMOVE RUBBLE AND LEVEL THE FLOOR IN THE AREA OF THE CLOSURE AS SHOWN IN THE DRAWING AND AS DIRECTED BY THE AML PROJECT MANAGER. COMPACT THE FOOTER BASE TO THE SATISFACTION OF THE PROJECT MANAGER, PRIOR TO POURING CONCRETE FOOTER.

4. INSTALL HEAVY DUTY BARREL WELD-ON PIVOT HINGES (1000 lb/PAIR CAPACITY) AS SHOWN AND AS SPECIFIED. BOTH HINGES SHALL BE INSTALLED TO SUPPORT THE DOOR AND SHALL BE IN-LINE AND OPERATE SMOOTHLY WHEN THE DOOR IS HUNG.

5. CONSTRUCT AND INSTALL THE DOOR AND DOOR FRAME TRUE, SQUARE AND PLUMB. THE DOOR SHALL CLOSE SNUGGLY AGAINST THE FRONT FACE OF THE DOOR FRAME WITH NO MORE THAN A 3/8" GAP AT ANY POINT ALONG THE FRONT FACE OF BOTH SIDES OF THE DOOR AND FRAME WHEN THE DOOR IS CLOSED .

6. GROUT SHALL BE CONSTRUCTION GRADE.

7. PLACE A 3/4" CHAMFER ON ALL EXPOSED EDGES OF CONCRETE FOOTER.

8. TOLERANCES ON THE CENTER–TO-CENTER DIMENSIONS BETWEEN POSTS SHALL BE ±1/16".

9. PLACE A SURVEY MARKER, PROVIDED BY THE PROJECT MANAGER, INTO THE GROUTED LINTEL OR IN NEARBY ROCK.

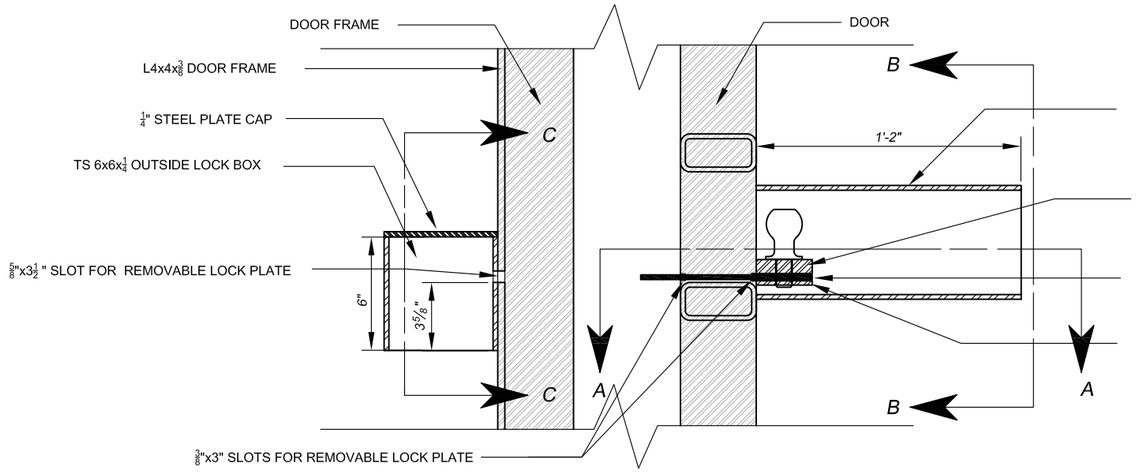
EGRESS ADIT CLOSURE SUMMARY TABLE

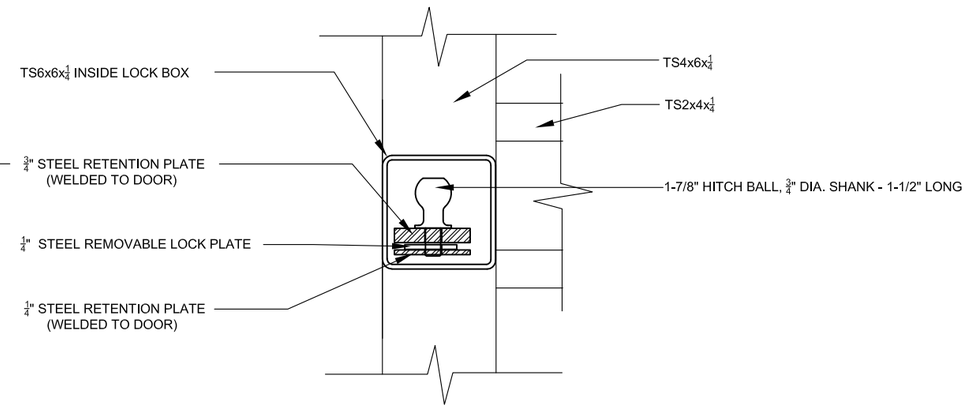
FEATURE		#		#	LFT		SF		LFT	CY
TRIHYDRO ID	OKUN ID	SHEET	FEATURE TYPE	Gates	OPENING WIDTH	OPENING HEIGHT	MASONARY AREA	GATE AREA	PLATE	CONCRETE FOOTER
	2121	6	ADIT	1	11	9	0.5	30	29	0.5
LT-19		6	ADIT	1	8.5	8.5	0.5	30	26	0.5

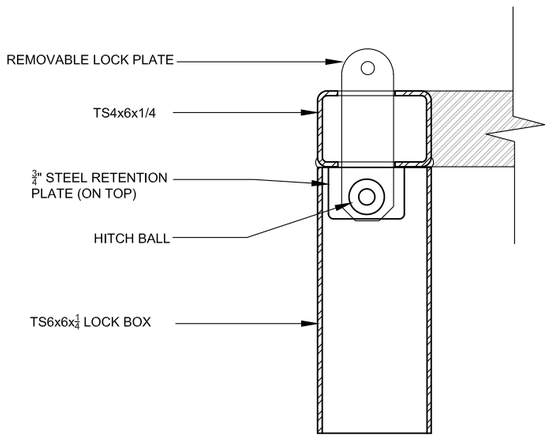
CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

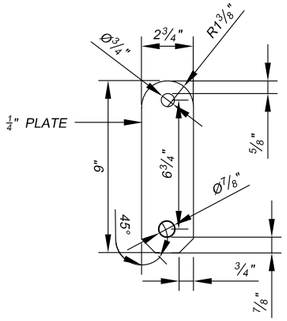
ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

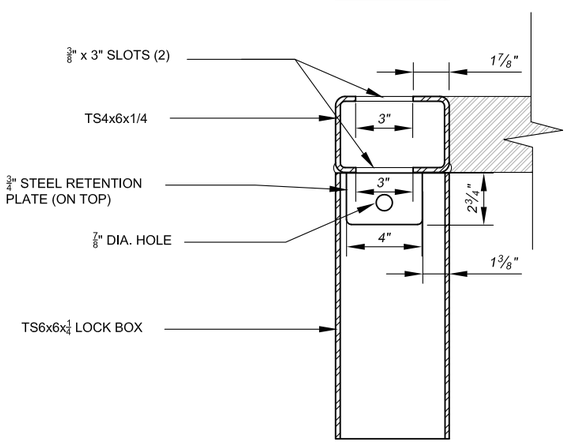
SCALE: AS SHOWN	VARIOUS LOCATIONS	DRAWN BY: MWT
DATE: 11/3/2023		REVISED BY: DMC
CO1–EGRESS ADIT GATE CLOSURE		
FILE:	BOSTON HILL SAFEGUARD PROJECT PHASE I	FIGURE: 20

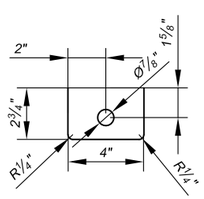




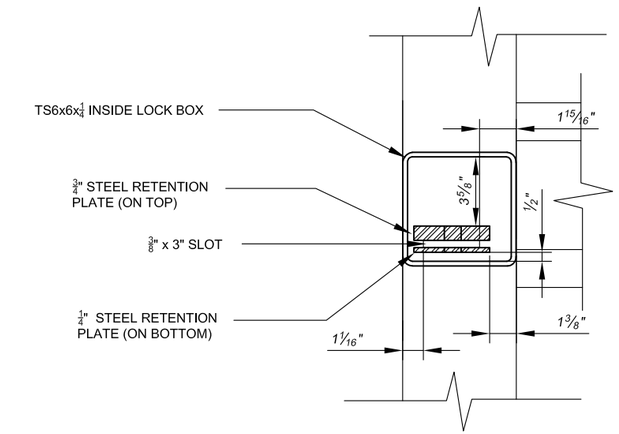


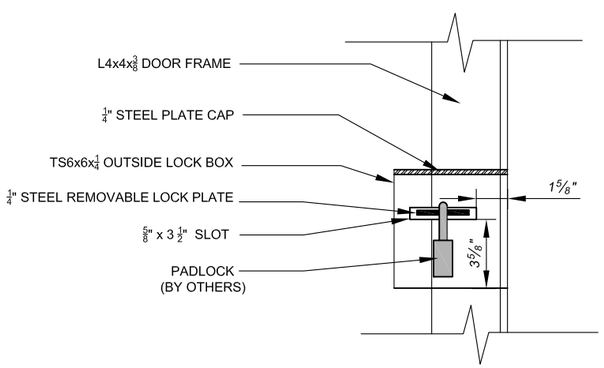






SCALE: 1 1/2" = 1'-0"





GENERAL NOTES:

1. TUBULAR STEEL, STEEL PLATES, AND SHAPES SHALL BE WEATHERING STEEL AS SPECIFIED. WELD ALL JOINTS. JOINTS SHALL BE TIGHT SO THAT MOISTURE CANNOT ENTER BETWEEN PLIES OF MATERIAL. ROUND OR CHAMFER ALL SHARP EDGES AND CORNERS.

2. THE INSIDE LOCK BOX INCORPORATES A 1-7/8" HITCH BALL WITH A 3/4" Ø SHANK CUT TO A 1-1/2" LENGTH. THE HITCH BALL MUST BE INSTALLED PRIOR TO WELDING THE INSIDE LOCK BOX ONTO THE DOOR. THE INSIDE LOCK BOX SHALL BE CONSTRUCTED SO THAT RAISING THE HITCH BALL WILL RELEASE THE REMOVABLE LOCK PLATE BUT NOT ALLOW REMOVAL OF THE HITCH BALL. THIS MECHANISM WILL ACT AS AN EMERGENCY LOCK RELEASE IN THE EVENT THAT SOMEONE IS TRAPPED BEHIND THE LOCKED DOOR. (NOTE: THE UPPER AND LOWER RETENTION PLATES ARE NOT THREADED. THE UPPER AND LOWER RETENTION PLATES SHALL BE DRILLED WITH A 7/8" Ø HOLE WHICH SHALL ALLOW THE HITCH BALL TO BE FREELY MOVED UP AND DOWN.)

3. CONSTRUCT THE LOCKING MECHANISM SO THAT THE EXPOSED EDGES OF ALL PARTS ARE CHAMFERED AND OPERATE SMOOTHLY WITHOUT BINDING. WHEN CLOSING THE DOOR, THE REMOVABLE LOCK PLATE SHALL ENTER THE SLOT IN THE OUTSIDE LOCK BOX WITHOUT HITTING OR RUBBING THE EDGES OF THE SLOT.

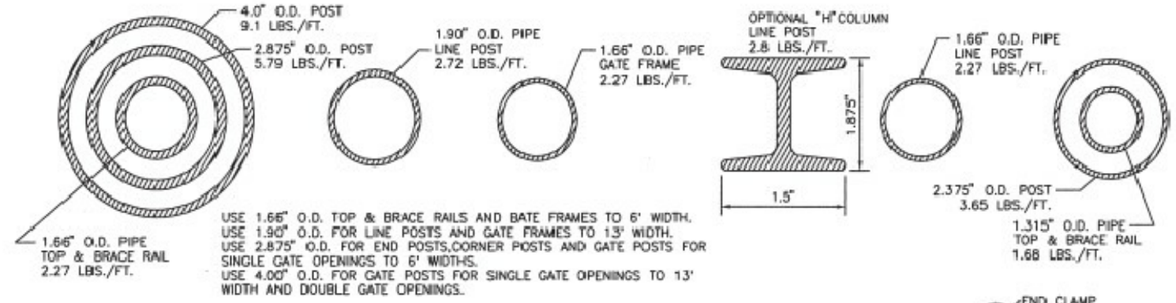
CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE: 1 1/2"=1'-0"	VARIOUS LOCATIONS	DRAWN BY: MWT
DATE: 11/3/23		REVISED BY: DMC

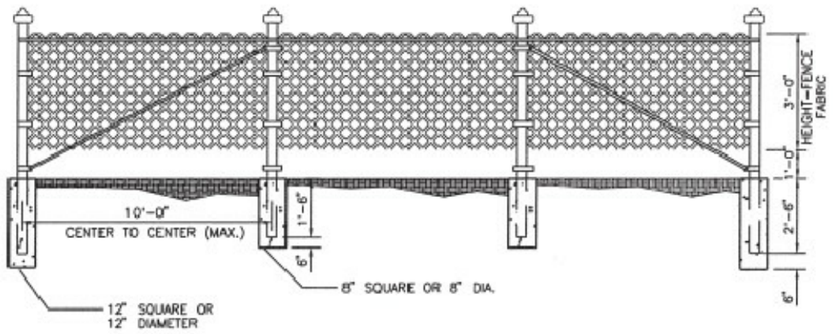
EGRESS ADIT LOCK BOX DETAIL

FILE:	BOSTON HILL SAFEGUARD PROJECT PHASE I	FIGURE: 21



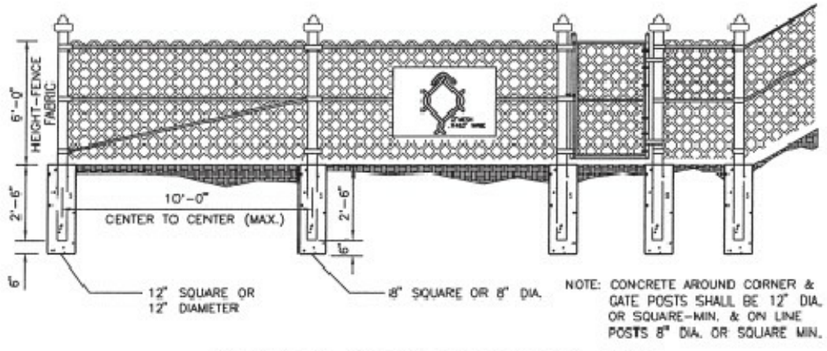
GENERAL NOTES

1. TUBLAR POSTS, BRACES AND TOP RAILS SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION F 1083.
2. CHAIN LINK FABRIC SHALL CONFORM TO AASHTO DESIGNATION M-181.
3. ALL CONCRETE TO BE CLASS "A".
4. KNUCKLED SALVAGE SHALL BE USED.
5. DIAMETER (O.D.) SHOWN HEREON ARE NOMINAL SIZES AS ESTABLISHED BY THE AMERICAN STANDARDS ASSOCIATION.

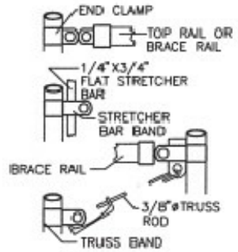


CHAIN LINK 4' ACCESS CONTROL FENCE

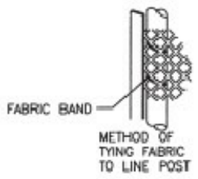
TOP RAIL USE 1.315" O.D.
FOR LINE POSTS USE 1.66" O.D.
FOR END POSTS USE 2.375" O.D.

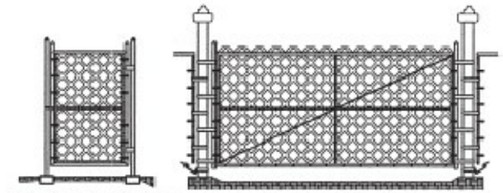


6' CHAIN LINK FENCE WITH GATE



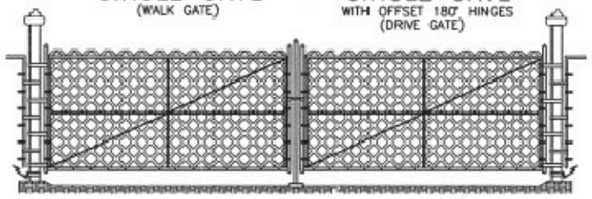
END AND GATE POST CONNECTIONS





SINGLE GATE
(WALK GATE)

SINGLE GATE
WITH OFFSET 180° HINGES
(DRIVE GATE)

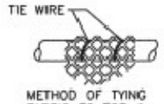


DOUBLE GATE
WITH OFFSET 180° HINGES
(DRIVE GATE)

FITTED GATE CORNER

WELDED GATE CORNER

OPTIONAL GATE CORNER TYPES



METHOD OF TYING FABRIC TO TOP & BRACE RAILS AND LINE POSTS

NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

STANDARD CHAIN LINK FENCES AND GATES

APPROVED _____ DESIGN ENGINEER 11/29/04 DATE

DESIGNED BY___ DRAWN BY ___ CHECKED BY ___

607-04-1/1 SHEET 1 OF 1

CAUTION – THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE:	VARIOUS LOCATIONS	DRAWN BY: NMDOT
DATE: 11/3/23		REVISED BY: ---
CHAINLINK FENCE DETAILS		
FILE:	BOSTON HILL SAFEGUARD PROJECT PHASE I	FIGURE: 22

FEATURE		#				Ft				#		
Trihydro AML ID	OKUN ID	LOCATION SHEET #	DETAIL SHEET #	Mine Hazard Feature Type	Safeguard Type	Width	Height	Length	Depth	Latitude	Longitude	Notes
LT -144		6		Waste Rock Pile	Waste Rock Borrow					32.76719732	-108.2850583	
LT-145	2124	5		Waste Rock Pile	Waste Rock Borrow					32.76777224	-108.2856571	
	77	5		Waste Rock Pile	Waste Rock Borrow					32.76812139	-108.2852378	
	77	5		Waste Rock Pile	Waste Rock Borrow					32.76813797	-108.285047	
	77	5		Waste Rock Pile	Waste Rock Borrow					32.76832501	-108.2847861	
	78	5		Waste Rock Pile	Waste Rock Borrow					32.76803971	-108.2851671	
	2125	5		Waste Rock Pile	Waste Rock Borrow					32.7677144	-108.2856747	
	2212	5		Waste Rock Pile	Waste Rock Borrow					32.76784798	-108.285664	
	2215	5		Waste Rock Pile	Waste Rock Borrow					32.76782636	-108.2853512	
	2216	5		Waste Rock Pile	Waste Rock Borrow					32.76787236	-108.2852157	
	2217	5		Waste Rock Pile	Waste Rock Borrow					32.76780316	-108.2852565	
	2285	6		Prospect Pit	Waste Rock Borrow					32.76737829	-108.284802	
	2287	6		Waste Rock Pile	Waste Rock Borrow					32.76734826	-108.2848372	
LT-10	2130	6	9	Adit	Waste Rock and Mortar Closure	17	3		100+	32.76755123	-108.2857825	
LT-11	2130	6	9	Adit	Waste Rock and Mortar Closure	10	4.5		100+	32.7674756	-108.2858834	Dimensions of feature increased from 9'x4' to 10' x 4.5'
LT-12	2134	6	9	Highwall	Waste Rock and Mortar Closure	14	9			32.76743706	-108.2859631	Was waste rock and mortar closure. No hazard; removed from scope of work.
LT-13	2134	6	9	Highwall	Backfill	20	18			32.76741725	-108.28589	Design changed from waste rock and mortar closure to backfill.
LT-15	2144	6	9	Blind Adit w/ Skylight	Backfill	3	3	4		32.76724743	-108.2860346	Design changed from waste rock and mortar closure to backfill.
LT-16	2134	6	9	Open Cut w/ Highwall	Backfill	10	8		15	32.76719968	-108.2860205	Design changed from waste rock and mortar closure to backfill.
LT-17	2142	6	9	Blind Adit	Waste Rock and Mortar Closure	14	14		15	32.76715621	-108.2860274	
LT-18	2142	6	9	Adit	Waste Rock and Mortar Closure	7.5	5		50+	32.76715822	-108.2859902	
LT-110	2131	6	9	Adit	Waste Rock and Mortar Closure	5	4		100+	32.76758997	-108.285757	
LT-111	2133	6	9	Adit	Waste Rock and Mortar Closure	6.5	4			32.76753133	-108.2858634	
LT-114	2147	6	9	Adit	Waste Rock and Mortar Closure	9	6		50+	32.76737191	-108.2857893	
LT-2		6	10	Trench/Stope	Steel Mesh Closure	30		65	50+	32.76673976	-108.2858608	
LT-3		6	10	Trench/Stope	Steel Mesh Closure	20		120	50+	32.76702256	-108.2858912	
LT-3A		6	10	Shaft	Steel Mesh Closure	3	3		15+	32.766844	-108.285956	Feature added to project. Feature to be enclosed in same mesh used for Feature LT-3. No change in mesh quantity.
LT-101		6	10	Open Stope	Steel Mesh Closure	50		70	60	32.76748669	-108.2851929	Changed rock anchors to grouted rock dowels
LT-103		6	10	Stope Complex	Steel Mesh Closure	55		100	50+	32.767365	-108.285277	
LT-103A		6	10	Skylight into Stope	Steel Mesh Closure	5	6.5		30+	32.76701309	-108.2855397	Feature added to project. Feature to be enclosed in same mesh used for Feature LT-103. No change in mesh quantity.
LT-103B		6		Skylight into Stope	Steel Mesh Closure	7	7		25+	32.767263	-108.28517	Feature added to project. Feature to be enclosed in same mesh used for Feature LT-103. No change in mesh quantity.
LT-103C		6		Blind Adit	Steel Mesh Closure	10	12	10		32.767149	-108.28515	Was previously covered by mesh. Changed to backfill with surrounding waste rock.
LT-103D		6	10	Shaft w/ Side Adit	Steel Mesh Closure	20	15		50+	32.767157	-108.285154	Feature added to project. Feature to be enclosed in same mesh used for Feature LT-103. No change in mesh quantity. Mesh panel to be hung vertically over feature.
LT-103E		6	10	Shaft	Steel Mesh Closure	4	4		50+	32.767082	-108.285437	Feature added to project. Feature to be enclosed in same mesh used for Feature LT-103. No change in mesh quantity.

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ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE: NONE	VARIOUS LOCATIONS	DRAWN BY:
DATE: 11/3/23		REVISED BY:
C01–MASTER FEATURE LIST PT. 1		
FILE:	BOSTON HILL SAFEGUARD PROJECT PHASE I	FIGURE: 23

FEATURE		#				Ft				#		
Trihydro AML ID	OKUN ID	LOCATION SHEET #	DETAIL SHEET #	Mine Hazard Feature Type	Safeguard Type	Width	Height	Length	Depth	Latitude	Longitude	Notes
LT-8	2128	6	13	Adit	Vertical Angled Metal Gate Closure	12	13	15		32.76760661	-108.2857281	Design changed from horizontal to vertical (or slightly angled) adit gate with concrete footer.
LT-115	2149	6	11	Stope	Horizontal Metal Gate Closure	25	20		100+	32.76745304	-108.2856975	Was 9' x 12' horizontal gate; dimensions updated to 20' x 25' to bring gate up toward feature collar. Use concrete at uneven spots to prevent access under gate.
LT-115A	2149	6	11	Stope	Horizontal Metal Gate Closure	8	8		100+	32.76745304	-108.2856975	
LT-116	2152	6	11	Stope	Horizontal Angled Metal Gate Closure	20	25		100+	32.76752546	108.2856188	Was 20' x 12' horizontal gate; changed to 20' x 25' gate angled from horizontal to place gate closer to lip of feature.
LT-118	2120	6	11	Shaft	Horizontal Metal Gate Closure	5	12		100+	32.76760439	-108.2855506	
LT-119	2120	6	11	Shaft	Horizontal Metal Gate Closure	3	6		50+	32.76760597	-108.2853835	
LT-120	2159	6	11	Shaft	Horizontal Metal Gate Closure	4	12		50+	32.76757028	-108.2854123	Was 4' x 10' horizontal gate; dimensions updated to 4' x 12' to bring gate up toward feature collar. Use concrete at uneven spots to prevent access under gate.
LT-122	2153	6	11	Shaft	Horizontal Metal Gate Closure	3.5	4		100+	32.76754167	-10828568333	Was 9' x 6' horizontal gate; dimensions updated to 3.5' x 4'.
LT-134A	2146	6	9	Adit	Waste Rock and Mortar Closure	5	3		10	32.7672396	-108.2858311	Design changed from bat gate to waste rock and mortar closure.
LT-134B	2146	6	9	Adit	Waste Rock and Mortar Closure	8	5		10	32.7672964	-108.2852057	
LT-134	2146	6	15	Adit	Vertical Metal Gate Closure	60	25		100+	32.7672964	-108.2852057	Design changed to field fit bat gate on long concrete footer. See revised Sheet 15-18 for details.
LT-134				Open Cut	Canceled					32.76723961	-108.2855311	LT-134 features deleted from Sheet 11, combined into one feature on revised Sheet 15-18.
LT-134				Open Cut	Canceled					32.76723961	-108.2855311	LT-134 features deleted from Sheet 11, combined into one feature on revised Sheet 15-18.
LT-135	2134	6	11	Stope leading to horizontal drift down to workings	Horizontal Angled Metal Gate Closure	12	25		50+	32.76710211	-108.2847267	Gate to be angled from horizontal to avoid poor rock.
LT-139	2134	6	11	Stope	Horizontal Metal Gate Closure	15	20		50+	32.76708889	-108.2849083	Was 10' x 15' horizontal gate; dimensions updated to 15' x 20' to bring gate up toward feature collar. Use concrete at uneven spots to prevent access under gate.
LT-140		6	11	Stope	Horizontal Metal Gate Closure	8	12		50+	32.767257	-108.284898	Use concrete at uneven spots to prevent access under gate. Bat Maternity Colony present near fenceline adjcent to feature.
LT-150	2201	6	11	Shaft	Horizontal Metal Gate Closure	8	13		50+	32.766658	-108.285539	Gate may need to be slightly angled to fit feature. Use concrete at uneven spots to prevent access under gate.
	2121	6	19	Adit	Egress Adit Closure	11	9		100+	32.76764396	-10828568857	Adit dimensions updated from 8' x 9' to 11' x 9'

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ABANDONED MINE LAND PROGRAM
MINING AND MINERALS DIVISION
NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

SCALE: NONE	VARIOUS LOCATIONS	DRAWN BY:
DATE: 11/3/23		REVISED BY:
C01–MASTER FEATURE LIST PT. 2		
FILE:	BOSTON HILL SAFEGUARD PROJECT PHASE I	FIGURE: 24