

CASTLE MOUNTAIN VENTURE



**CLARK COUNTY, NEVADA
AND
SAN BERNARDINO COUNTY, CALIFORNIA**

ROAD USE AND MAINTENANCE PLAN

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Prepared for

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Submitted to

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**CASTLE MOUNTAIN VENTURE
CASTLE MOUNTAIN MINE
ROAD USE AND MAINTENANCE PLAN**

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**CASTLE MOUNTAIN VENTURE
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ROAD USE AND MAINTENANCE PLAN**

1 INTRODUCTION

This Road Use and Maintenance Plan (Plan) describes the existing authorizations, existing conditions, general usage and operation, maintenance activities, and applicable resource stipulations for the Castle Mountain Mine (CMM) Mitigated Access Route (CMM Access Road), also commonly known as Walking Box Ranch Road (Figure 1).

2 PROJECT BACKGROUND

Notwithstanding the rights granted under the Mining Law of 1872, road access and maintenance was additionally authorized by way of the Bureau of Land Management (BLM)-approved mine plan of operations for the CMM. The original mine plan of operations for the CMM included two potential main entry routes into the CMM: one from the west via Ivanpah and Hart Mine roads, and a second from the north following the path of the historic Barnwell to Searchlight Railroad grade. Both entry options were presented in the 1989 Draft Environmental Impact Statement (EIS) for the CMM project. A 1990 Supplement to the Draft EIS was published and included an environmentally preferred (third) alternative for CMM main access, using other existing road segments that were established during the historic period, including segments of the current main road used to access the CMM from the YKL Ranch, or as it has become known, the Walking Box Ranch. The October 1990 Record of Decision approved the environmentally preferred CMM Access Road as the main access to the CMM. This complete road that exists today, from Walking Box Ranch to the CMM, is a singular result of early permitting of the CMM, which conjoined many pre-existing road segments.

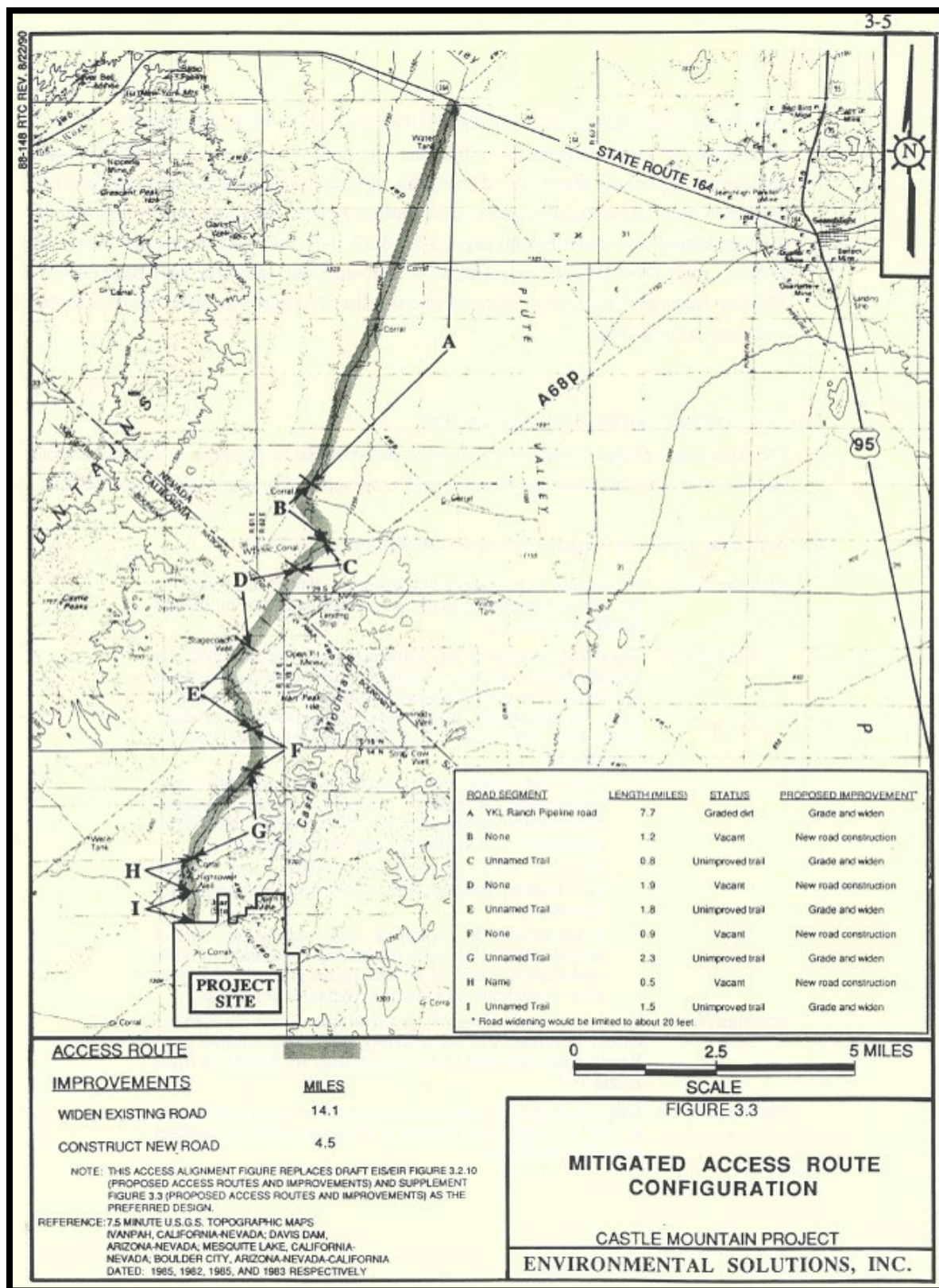
2.1 Existing Authorizations

2.1.1 1990 Draft Environmental Impact Statement (DEIS)

The original DEIS for the CMM project proposed direct mine access from Searchlight, Nevada, by way of an existing Clark County road designated A68P. However, soon after the Mojave desert tortoise was listed to the Endangered Species Act (ESA) in 1989, use of A68P came into question due to the greater abundance of desert tortoise. A DEIS Supplemental report was issued in January 1990; it was required due to a number of events, but primarily focused on two project changes:

1. The 1989 emergency Endangered listing of the Mojave desert tortoise
2. Modified CMM primary access to avoid desert tortoise habitat adjacent to route A68P

The modified CMM primary access presented in the 1990 Supplement to the DEIS is the same CMM access used today and presented on Figure 1 in this plan. The August 1990 Final EIS for the CMM project also proposed this same route. The October 1990 Record of Decision states, "Access to the site will be along the Mitigated Access Route Configuration as described on page 3-3 and Figure 3.3 of the Final EIS. The alignment of this route resulted from the environmental review process...". An insert of FEIS Figure 3.3 is provided below.



3 EXISTING CONDITIONS

Photographs were taken at several points along the CMM Access Road in September 2023 documenting the existing conditions of the CMM Access Road. Figure 1 shows the photo point locations, which correlate with the photographs in Appendix A.

4 ROAD OPERATION

4.1 Road Use and Traffic

Road access to CMM is via an 18-mile gravel road that connects to Nevada State Route 164 at a point seven miles west of Searchlight, Nevada. Site access through this route was chosen as the environmentally preferred alternative developed during the public scoping process for the 1990 FEIS/EIR for the Castle Mountain Mine Project. While most of the Nevada portion of the road existed at the time of the 1990 FEIS/EIR, there were only road segments throughout California. Castle Mountain Venture (CMV) connected these segments to construct the full 18-mile access road originally identified as the Castle Mountain Mitigated Access Route, though is now more generally known as the CMM Access Road or Walking Box Ranch Road. This road continues to be maintained by CMV, though it is a public road under the jurisdiction of the BLM and the local county.

The only exception is a less than 1,000-foot section of road at mile-marker 15 where a section corner of the Mojave National Preserve (MOJA) was located (over the existing authorized road) in 1994. The road was in use prior to the creation of MOJA, the MOJA management plan did not recognize this road and the National Park Service (NPS) did not require a Use Permit or right-of-way for operations conducted through 2012. However, the NPS has recently taken jurisdiction of this section of road. CMV understands this section of road is managed separately by NPS via a Plan of Operations that NPS authorized in 2024. The pending CMM mine plan amendment (“2022 Plan”) proposes to reroute much traffic away from this road section and onto a new road section that would be authorized by the BLM if CMV’s 2022 Plan changes are authorized.

The types and frequency of vehicles expected to use the CMM Access Road are listed in Table 1. Vehicle and equipment maintenance will either be performed at the CMM or off site; no vehicle or equipment maintenance will be performed on the CMM Access Road.

Table 1: Vehicle Types and Frequency

Type	Daily Trips	Weight (approximate)	Fuel	Description
Employee or Contractor Vehicles	30	¾ ton	Gasoline/ Diesel	4x4
Vanpool Van	5	¾ ton	Gasoline	Passenger van
Fuel / Reagent Delivery Trucks	18	20-30 tons	Diesel	Tanker truck

Type	Daily Trips	Weight (approximate)	Fuel	Description
Delivery Truck/ Semi	18	Weight will vary depending on the equipment on transport	Diesel	Transportation of equipment and supplies to the CMM

4.2 Transport of Hazardous Substances

Activities at the CMM require the receipt, storage and handling of chemicals and explosives, and the treatment and disposal of wastes generated at the site. Some of the waste materials are classified as hazardous waste. Hazardous waste is managed on site and waste is shipped off site every 90 days by a third party licensed waste disposal company. All waste is shipped and disposed only at authorized, regulated, disposal sites. Chemical reagents are brought to the site by various suppliers.

All hazardous materials and wastes stored at the CMM and transported to/from the site are listed in the CMM Hazardous Materials Business Plan (HBMP). The HBMP is on file with the San Bernardino County Fire Department, Hazardous Materials Division: it can also be provided on request. The following bulk materials included in Table 2 may be transported on the CMM Access Road.

Table 2: Material Delivery to CMM

Material	Delivery Frequency	Use	Packaging/Container
Diesel Fuel	Daily	Mine Fleet	Tanker truck
Gasoline	Weekly	Light vehicles	Tanker truck
Lime/Cement	Daily	Heap Leach Pad	Bulk dry reagent tanker
Sodium Cyanide	Weekly	Heap Leach Pad	Bulk dry reagent tanker
Small Quantities of Miscellaneous Reagents	Weekly – Monthly	Process Plant	Totes

4.3 Spill Response and Reporting

CMM has prepared a Spill Prevention and Response Plan to provide operating procedures, training, best management practices, and response procedures in the case of a spill. All spills shall be evaluated for cleanup without regard to reporting criteria including any amount of wastewater released outside of containment.

Personnel should not attempt to handle any hazardous materials and hazardous wastes unless they are properly trained in handling chemical spills because of the potential hazards involved. Chemicals can be toxic, corrosive, flammable, explosive or carcinogenic. The nature of a spill, whether minor or major, is determined by the type, volume and location.

Any individual discovering a spill of any material shall **REPORT THE SPILL IMMEDIATELY** to his or her supervisor and when it is safe to do so to the Safety and Environmental departments. The

Environmental Department will then determine whether immediate agency notification is required.

Table 3 lists the contact information for the agencies that require notification of spills in both California and Nevada.

Table 3: Spill Notification List

Agency	Telephone Number
<i>Required Spill Notification Contacts</i>	
National Response Center (NRC)	800-424-8802
Department of Toxic Substances Control	818-551-2800 (24 hr. 800-852-7550)
CMM Security Guard	702-481-2180
<i>California Required Spill Notification Contacts</i>	
Office of Emergency Services (California OES)	800-852-7550 or 916-262-1621
San Bernardino County Fire Department (Hazardous Materials Division)	909-386-8425
Colorado River Basin Regional Water Quality Control Board (Water Board)	760-776-8962 (Zakary Owens)
Bureau of Land Management - California Desert District, Needles Field Office	760-326-7017 (24 hr. 909-383-5651)
Mojave Desert Air Quality Management District	760-245-1661 (Chris Anderson ext. 1846) (24 hr. 800-635-4617)
California Dept. of Fish and Wildlife (Inland Desert Region)	661-285-5867
National Park Service (Danette Woo)	760-252-6107
<i>Nevada Required Spill Notification Contacts</i>	
NDEP, Bureau of Corrective Actions – Emergency Response Hotline	888-331-6337
Nevada State Emergency Response Commission	775-684-7511
Nevada Division of Emergency Management Dispatch Center	775-687-0400
Bureau of Land Management - Southern Nevada District, Las Vegas Field Office	702-515-5000
<i>Nevada Emergency Response Agencies</i>	
Clark County Fire Department Station 75 (and Ambulance)	911/ 702-455-7311
Las Vegas Metropolitan Police	911/ 702-297-1748
Nevada Highway Patrol (Pahrump)	702-727-7090
Boulder City Hospital	702-293-4111

If a spill occurs in California, the following thresholds have been established for agency notification, and regarding a spill outside of secondary containment:

- Any amount of sodium cyanide (reportable to the Water Board within 24 hours)
- More than five gallons of a liquid solvent product or hazardous material
- More than 42 gallons of petroleum product or other liquid
- Freshwater releases (greater than 1,000 gallons) on BLM or NPS land
- More than one ton or one cubic yard of solid material (including product and reagents)
- Any release of materials that exceeds a reportable quantity specified in 40 Code of Federal Regulations (CFR) Part 302.4 or 40 CFR Part 355.a
- More than 500 gallons of non-hazardous wastewater

- Any spill within 500 feet to surface water, water well or domestic water supply
- Any spill that could contaminate ground within five feet of groundwater
- Any spill that enters into a natural or man-made channel

If the spill occurs in Nevada, the following thresholds have been established for agency notification, and regarding a spill outside of secondary containment.

Any release of pollutants, hazardous waste, or contaminants into surface or groundwater that threatens a vulnerable source (i.e., any building used to house or provide services to children, elderly persons or sick persons, an area within 150 feet of a public water system wellhead, or a storm drain), or is a quantity equal to or greater than that which is required to be reported to the NRC, requires verbal notification as soon as practicable to the Nevada Division of Environmental Protection (NDEP), Bureau of Corrective Actions.

The following spills must be reported within one working day to the NDEP, Bureau of Corrective Actions: petroleum product released to the soil or other surfaces of land in a quantity greater than 25 gallons or 200 pounds; releases discovered in at least three cubic yards of soil during any subsurface excavation; releases discovered in or on groundwater; or a confirmed release from an underground storage tank. Smaller releases must be reported quarterly on NDEP Form 0490 or equivalent.

Notifications to NDEP of releases described above must be submitted through the NDEP online Spill Report Form or made verbally no later than the first working day after the release was discovered.

Pursuant to regulations promulgated under Section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, release of a reportable quantity of hazardous substance to the environment in a 24-hour period requires immediate reporting to the NRC (40 CFR Part 302).

Pursuant to the regulations promulgated in the Community Right to Know Act of 1986 (40 CFR Part 355), releases of reportable quantities of hazardous substances, beyond the facility boundary, that may potentially result in exposure to individuals outside of the facility boundary must be reported to the Nevada State Emergency Response Commission.

5 ROAD MAINTENANCE

5.1 Maintenance Activities

CMV will implement routine and non-routine road maintenance that may occur across the full length of the approximate 18-mile long CMM Access Road. Routine maintenance is defined as those standard practices that must occur to preserve safe travel across an improved dirt or gravel road (i.e., road surface grading or dust control). CMM Access Road routine maintenance generally occurs four times per year (once a quarter), depending upon weather conditions. Examples of these activities include:

- Use of a motor grader to repair potholing and knock down wash-boarding.
- Use of a motor grader to re-establish the definition of an aging roadway. This only applies to existing roads; construction of new roads is not proposed. Widening the established width of existing roads is prohibited.
- Application of fresh road aggregate using side or end-dump trucks.
- Use of a water truck and vibratory roller to prepare new road aggregate material.
- Application of dust suppressant. Two dust suppressant products are currently used and will continue to be used on the CMM Access Road:
 - Soil Sement – A non-toxic, synthetic polymer-based suppressant.
 - Terra Lig Pro FS – A non-toxic, lignin-based suppressant. Lignin is derived from plant cellulose, a natural suppressant alternative. This specific product is certified by the Organic Materials Review Institute.

Non-routine road maintenance includes activities that generally only occur once every few years and may include the replacement of an existing culvert that spans one of the many ephemeral drainage crossings. Dust suppressant is generally applied once per year.

CMV will notify BLM within at least ten business days prior to conducting any major road work and five business days prior to any pre-scheduled routine repairs to road segments, and as soon as possible but within 24 hours of having to complete repairs deemed an emergency. Any other activities shall be considered major repairs and require the requisite BLM notification. Major road repair that includes installation of culverts, rip rap rocks, or the like will specifically require prior review and approval by BLM prior to installation.

6 PROJECT STIPULATIONS/TERMS AND CONDITIONS

The following Project stipulations and terms and conditions have been obtained from previous approvals for the CMM and are relevant to the CMM Access Road.

6.1 BLM Project Stipulations

The BLM California Desert District approved the most recent major revision to the CMM Plan of Operations in March 1998. As it pertains to access to the CMM and roadways, applicable stipulations that were listed in the 1998 Record of Decision and are currently being enforced include (and also listed in Appendix G of the proposed Mine Plan of Operations):

- *Project Stipulation #30:* Access to the project site from Nevada State Route 164 will continue to use the existing road, as built.
- *Project Stipulation #36:* The Operator shall locate and flag onsite tortoise burrows before initiating surface-disturbing activities. Flagged areas shall be avoided whenever possible. If occupied burrows are within areas designated for project facilities or activities,

relocations of the tortoises shall be coordinated with BLM and USFWS [United States Fish and Wildlife Service].

- *Project Stipulation #37:* The Operator shall inform project personnel that only authorized personnel shall handle tortoises and of the tortoises' protected status.
- *Project Stipulation #38:* A project sponsored program of bus/van pooling to the project from locations in the Las Vegas valley shall be implemented. At a minimum seventy-five percent (75%) of the work force shall travel to the project by bus/van pool.
- *Project Stipulation #40:* Project waste shall be properly managed, and the site monitored to control refuse that could attract ravens. Prior to landfill disposal, refuse shall be kept in containers designed to exclude wildlife.
- *Project Stipulation #51.b:* Speed restrictions shall be enforced on mine roads to minimize surface disturbance of the roadways.
- *Project Stipulation #51.c:* Unauthorized vehicle travel shall be restricted within the site boundary to minimize surface disturbance of the roadways.
- *Project Stipulation #56:* A program to educate employees about area wildlife shall be implemented by the Operator in connection with the safety program. The Operator shall acquaint personnel with laws protecting vegetation and wildlife, the characteristics of desert wildlife, and proper procedures if wildlife is encountered. Drivers shall be educated about potential hazards of desert road driving, driving at proper speeds, and the importance of not harassing or interfering with the desert tortoise. Employees shall comply with BLM open/closed area designations and road regulations.
- *Project Stipulation #66:* Trucks containing hazardous chemicals shall be properly labeled and equipped to Interstate Commerce Commission specifications.
- *Project Stipulation #67:* Drivers shall receive training in proper handling and spill cleanup measures for hazardous materials.
- *Project Stipulation #69:* The Operator shall provide road improvements and implement a regular maintenance program along the Mitigated Access Route (Walking Box Ranch Road) in a manner acceptable to BLM. A maximum speed of 35 miles per hour will be posted.
- *Project Stipulation #70:* Transport of hazardous materials shall be limited to daylight hours, Monday through Friday.
- *Project Stipulation #98:* All internal combustion engine-driven equipment and vehicles shall be kept tuned according to the manufacturer's specifications and properly maintained. Vehicles and equipment shall not be left idling for prolonged periods.

6.2 USFWS Terms and Conditions

Castle Mountain Venture maintains compliance with the Endangered Species Act by implementing the terms and conditions included in two active USFWS Biological Opinions (#1-6-90-F-24, August 1990, and #1-8-97-F-37, February 1998). Specific mitigations are included as

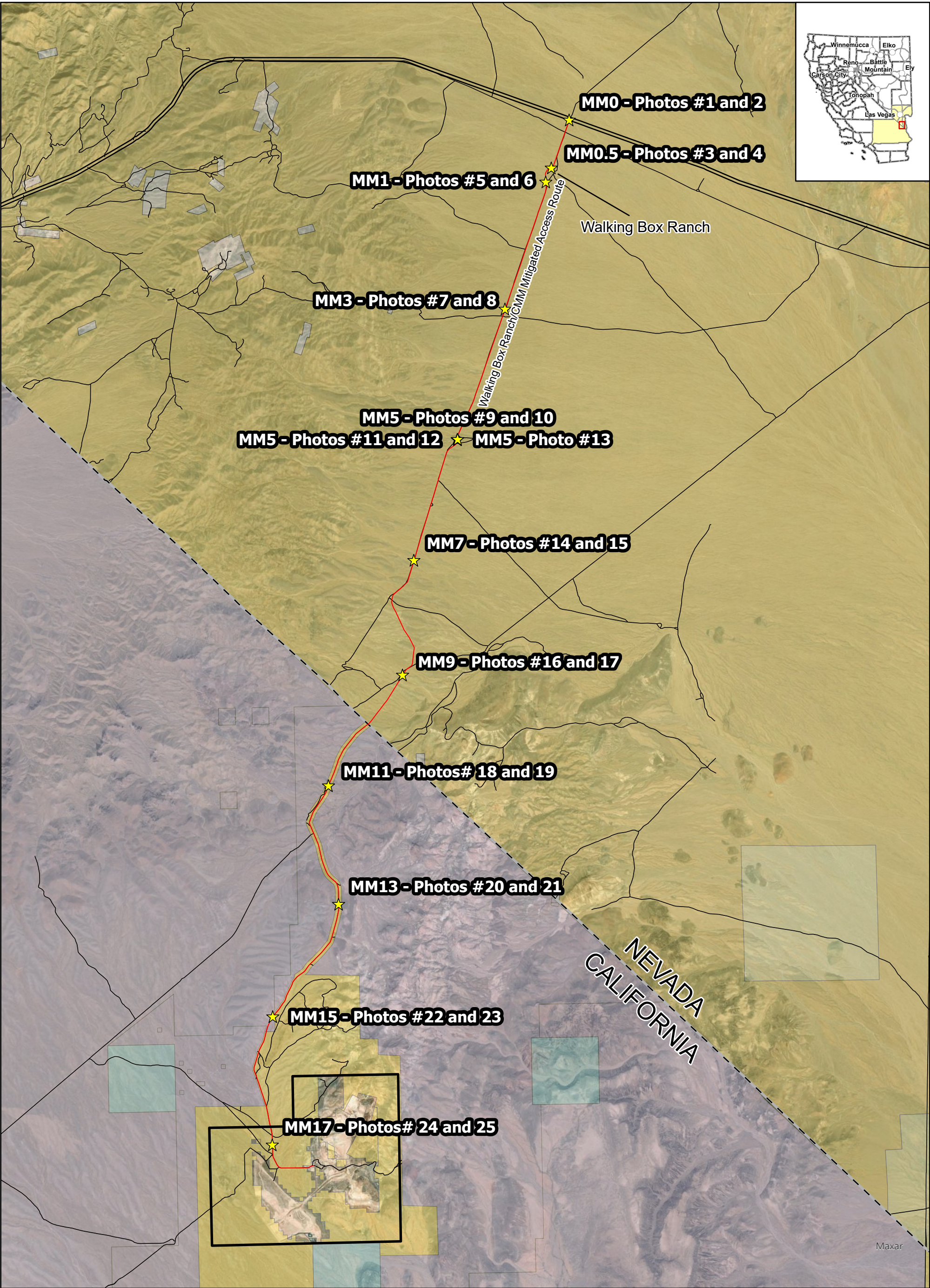
Terms and Conditions found on the *no-jeopardy* Biological Opinion(s) for the only known threatened or endangered species known to the immediate area, the Mojave desert tortoise (*Gopherus agassizii*). These terms and conditions include:

- *Term & Condition 1.c* – Because desert tortoises may seek shade underneath equipment or vehicles, all on-site employees shall be responsible for surveying under parked vehicles prior to moving them. An authorized biologist shall be contacted to remove any desert tortoise found prior to moving a vehicle or the vehicle shall be left in place until the animal moves of its own accord.
- *Term & Condition 1.d* – All open holes shall be inspected at the beginning of the day, middle of the day, and end of the day for trapped desert tortoises. If desert tortoises are trapped, the biological monitor shall be notified immediately. The desert tortoises shall be allowed to escape or shall be carefully removed and relocated by an authorized biologist before work continues in that location.
- *Term & Condition 1.e* – Any activities that may disturb native habitat shall be limited to areas which have already been cleared of desert tortoises by the authorized biologist(s) and enclosed in a fence to exclude desert tortoises. When feasible during the installation of the fence to exclude desert tortoises, vegetation shall be crushed rather than bladed.
- *Term & Condition 1.g* - Fencing to temporarily exclude desert tortoises, if determined by the authorized biologist to be needed, shall consist of one-inch mesh plastic design, maintained at zero ground clearance. It does not need to be buried. The fence shall be supported as necessary to prevent access by desert tortoise to the project site. The fence shall be removed immediately on completion of project activities in the fenced area.
- *Term & Condition 2.b* - If heavy equipment must be used outside the fence built for the long-term exclusion of desert tortoises, the work areas shall be clearly staked, flagged, or temporarily fenced prior to the onset of project activities. If such an area is staked or flagged, the authorized biologist shall be present at all times that activities are being conducted which could result in injury to or mortality of desert tortoises.

CMV produces an annual report, the Mitigation Monitoring & Compliance Program (MMCP) report, that documents how CMV complies with every regulatory stipulation and condition. Evidence of compliance is mostly recently contained in the CMM 2022 MMCP Annual Report and can be provided on request.

APPENDIX A

Photo Location Map and Photo Log



Explanation

Castle Mountain Mine Boundary

CMM Access Road

Existing Road

State Highway

Photo Marker

Land Status

Bureau of Land Management

Bureau of Reclamation

National Park Service

State Land

Private

CASTLE MOUNTAIN VENTURE

CASTLE MOUNTAIN MINE

CMM Access Road and Photo Locations

Label: Figure 1

Date: 11/28/2023

Base Map: Esri World Imagery

File Name: 10102_lvanpah_working.aprx

Drawn By: TJC

Project No.: 10102

WestLand

100% EMPLOYEE OWNED

Engineering & Environmental Services

Appendix A – Photo Log



Photo 1: Mile Marker 0 - Looking South



Photo 2: Mile Marker 0 - Looking North



Photo 3: Mile Marker 0.5 – Looking South toward ranch



Photo 4: Mile Marker 0.5 – Looking North



Photo 5: Mile Marker 1 – Looking North



Photo 6: Mile Marker 1 – Looking South



Photo 7: Mile Marker 3 – Looking North



Photo 8: Mile Marker 3 – Looking South



Photo 9: Mile Marker 5 – Looking North



Photo 10: Mile Marker 5 – Looking South



Photo 11: Mile Marker 5 – Looking West, showing drainage



Photo 12: Mile Marker 5 – Looking West, showing drainage



Photo 13: Mile Marker 5 – Looking East, showing drainage



Photo 14: Mile Marker 7 – Looking North



Photo 15: Mile Marker 7 – Looking South



Photo 16: Mile Marker 9 – Looking North



Photo 17: Mile Marker 9 – Looking South



Photo 18: Mile Marker 11 – Looking North



Photo 19: Mile Marker 11 – Looking South



Photo 20: Mile Marker 13 – Looking North



Photo 21: Mile Marker 13 – Looking South



Photo 22: Mile Marker 15 – Looking North



Photo 23: Mile Marker 15 – Looking South



Photo 24: Mile Marker 17 – Looking North



Photo 25: Mile Marker 17 – Looking South



Photo 26: Mile Marker 18 – Looking North



Photo 27: Mile Marker 18 – Looking South