

AMENDED MINING AND RECLAMATION PLAN

FOR THE

**R. HOVE FORT IRWIN PIT
MINE ID# 91-36-0161**

OF

DAILY TRANSIT MIX, LLC

April 2015

Submitted to:
County of San Bernardino
Planning Department
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I. INTRODUCTION

Daily Transit Mix, LLC (“DTM”, “applicant”, “operator”) is proposing to increase the acreage of an existing permit for a sand and gravel surface mine from 12.2 acres to 14.5 acres on a portion of a 38.43-acre piece of property near Barstow, CA, to mine to a nominal depth of 50 feet (lowest reclaimed elevation at 2072 AMSL), and to extend the mining termination date from 2014 to 2044. The R. Hove Fort Irwin Pit site is located in Section 16, Township 12 North, Range 2 East, SBBM; Assessor Parcel Number 0518-181-13. The site is situated approximately thirty-five (35) miles north of Barstow and is accessed via Fort Irwin Road and Paradise View Road.

The R. Hove Fort Irwin Pit site (“Site”) was formerly known as the Gordon Lint Mine. The historic use of the site has been sand and gravel mining, aggregate production, concrete production, and activities associated with uses and sales of these products, since 2001. Other uses for land in this area have been sand and gravel mining, vacant desert/open space, rural living, and off road vehicles use and recreation.

In the south east corner of the 38.43-acre parcel is an existing residence. While this residence is on the property; it is not within the proposed permit boundaries. The residence is owned by CJR, the owner of the property.

The applicant is proposing to continue mining an estimate of 65,000 tons per year of rock, gravel, and sand as shown on the mining plan, intended for use on construction projects in San Bernardino County over a 30-year life span. This site has been mined for the last thirteen (13) years under County permit # 745/DSN/00010890/SAMR/01 and File Index # SMA1/DN431-489/518-181-13. This renewal of the permit will extend the termination date to May 10, 2044.

The applicant (and operator) proposes to utilize this aggregate product in their Ready-Mix Concrete (RMC) operations. Their RMC operations are on site and are primarily used to service the U. S. Army installation, Fort Irwin. The operator intends to build a future Asphalt Concrete (AC) plant and a Recycle plant at this site, which will also utilize the aggregate product. The operator also proposes to sell the aggregate product to other operators and customers.

The mine will be a surface mining operation. Topsoil, generated by scraping the top 6”-8” of vegetation and overburden, will be used as a berm along the property for storm water drainage control. Finished slopes are designed to not be steeper than 2:1 (horizontal: vertical). At the time of reclamation, the topsoil will be spread over the slopes and pit floor to promote vegetation and reclamation of the mine site.

The process of the mining operation will include extraction of the raw material from the pit area, feeding the material into a screening plant for sorting and sizing, crushing any over-sized rock, stockpiling the finished materials by size (sand, crushed sand, 3/8” gravel, 1/2” gravel, 3/4” gravel, etc.) and product (i.e. Class 2 Aggregate Base, etc.). The rock and sand can be trucked to a given construction site, trucked to a RMC operation, trucked to an AC operation, or used in the on-site RMC plant or possible future on-site AC plant. The necessary equipment for mining will be dozers, loaders, haul trucks, conveyors, and a processing plant. This site will be SMARA (and AB 3098) approved to insure marketability.

In the event a continuous mining operation is not maintained during the entire mine permit time frame, the applicant/operator proposes an idle period management plan that will be implemented during those periods when the mine is not operational. The idle period management plan is also referred to as the “Interim Management Plan” (see page 15).

The site will be fully reclaimed within three years of the end of mining operation (2044) or sooner. The mine is expected to be utilized continuously, but may be left in an idle state in conformance with Public Resources Code Section 2770(h)(1). An Interim Management Plan will be submitted upon changes in operational status.

All mining operations shall comply with the Mining and Reclamation Plans provided herein, as well as comply with the Conditions of Approval prepared for this project by the County of San Bernardino Agencies and Departments.

The Reclamation Objectives of the R. Hove Fort Irwin Pit site are:

- To revegetate the site.
- To mitigate and reduce the visual impacts as a result of the changes of landform and revegetation.
- To mitigate runoff impacts and restoration of flows of runoff storm waters to natural/ existing conditions.

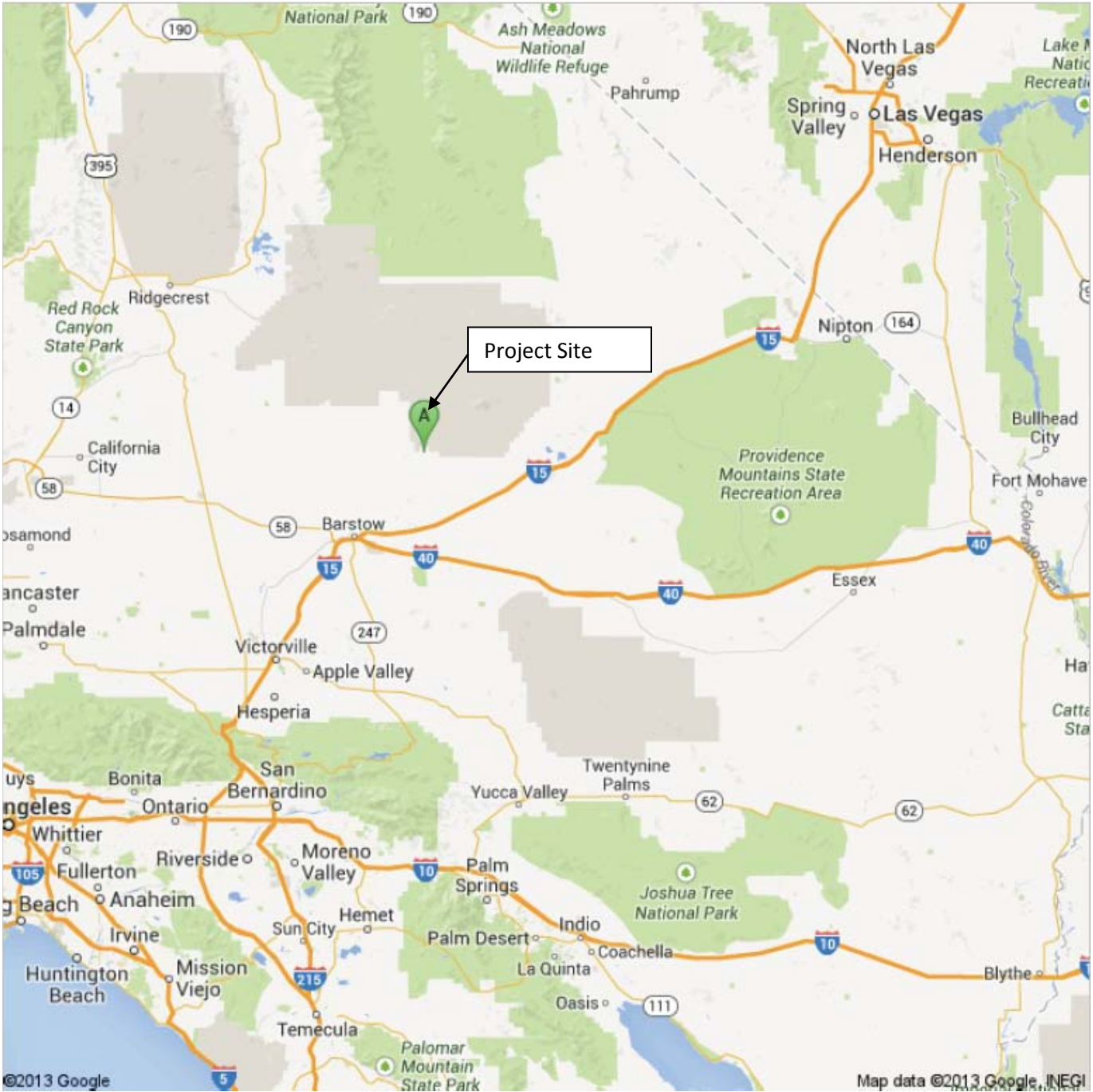


Figure 1 – General Location Map

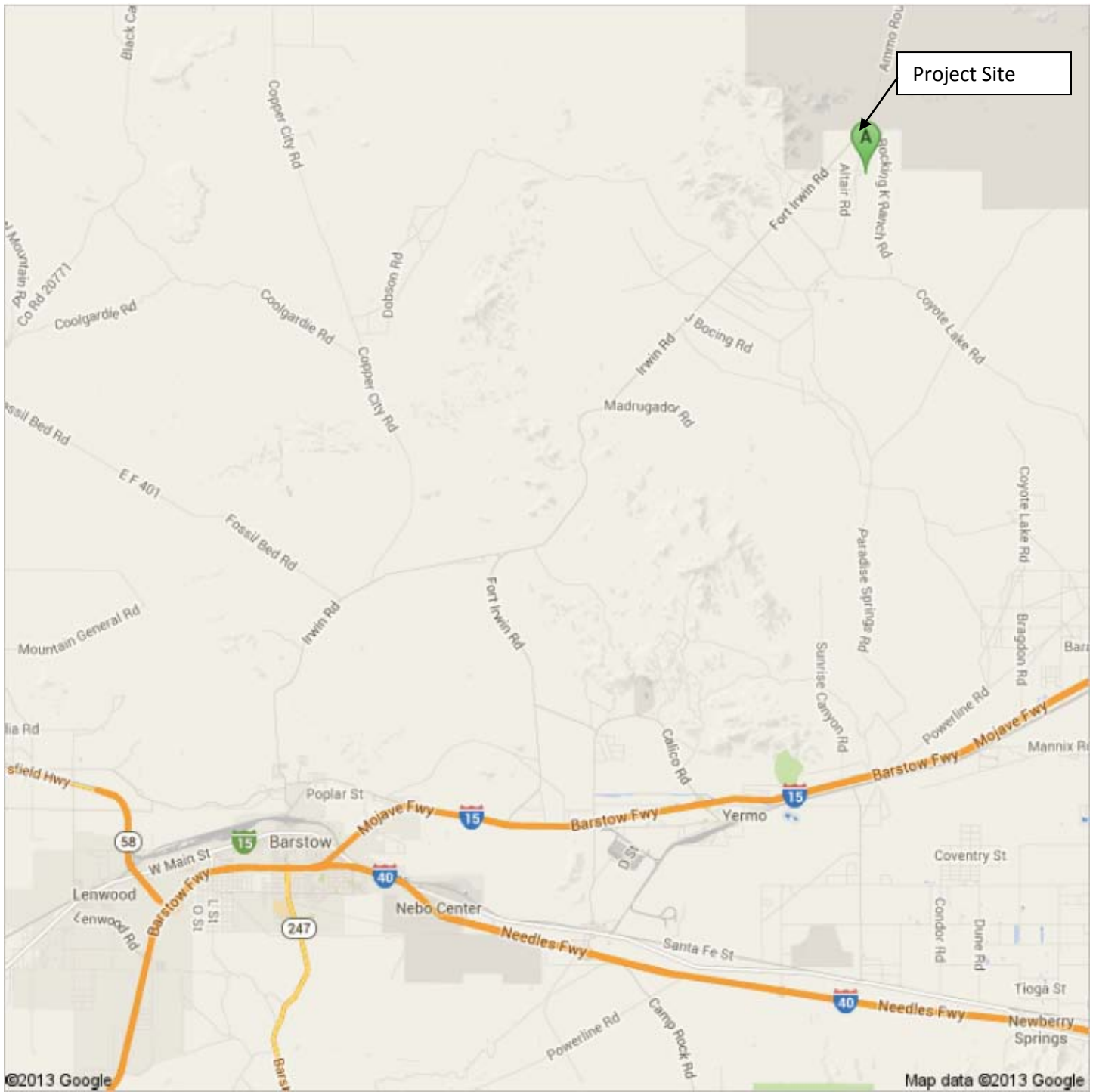


Figure 2 - Vicinity Map

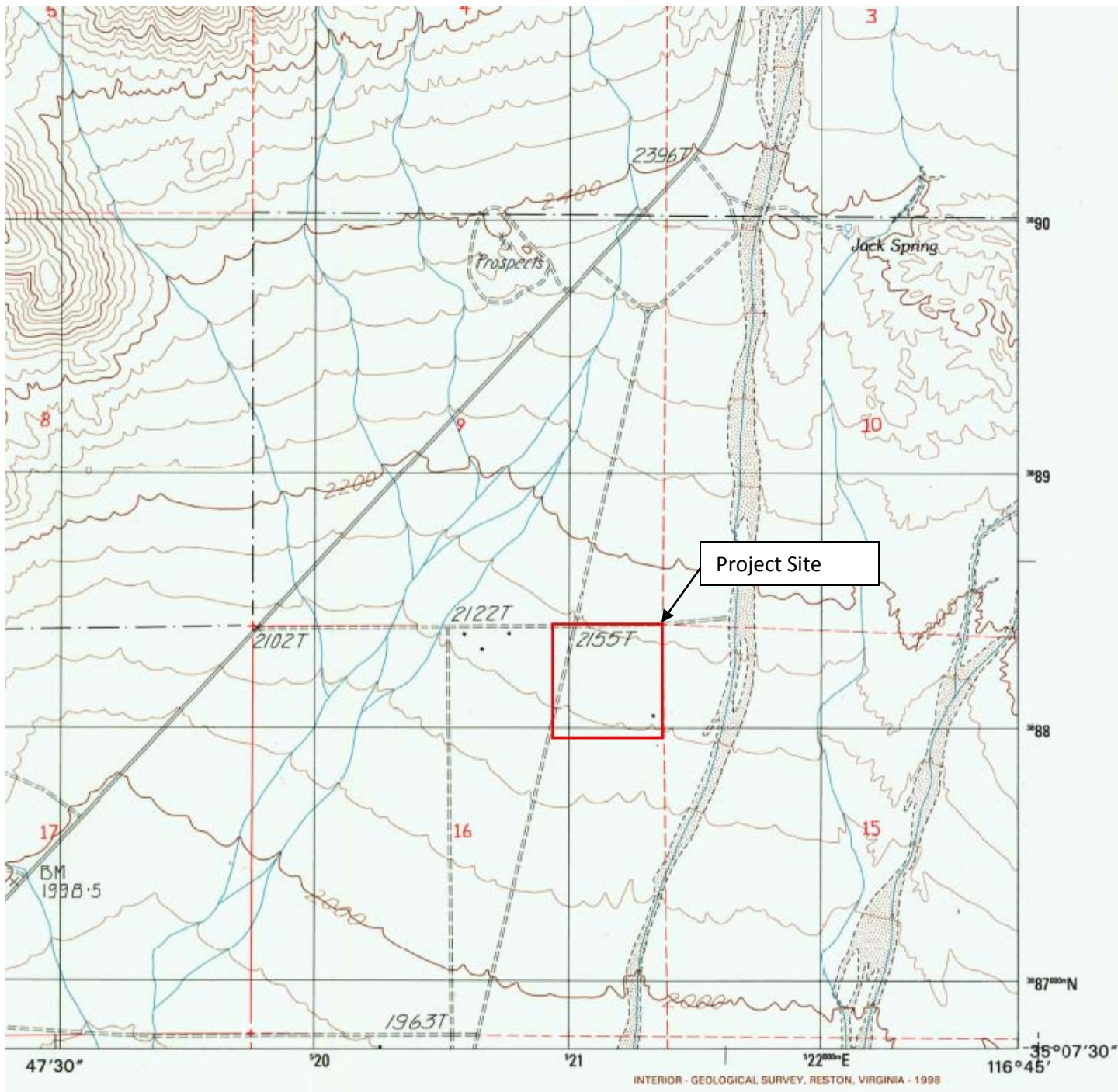


Figure 3 - Extent of Holdings Map (USGS – Paradise Range)

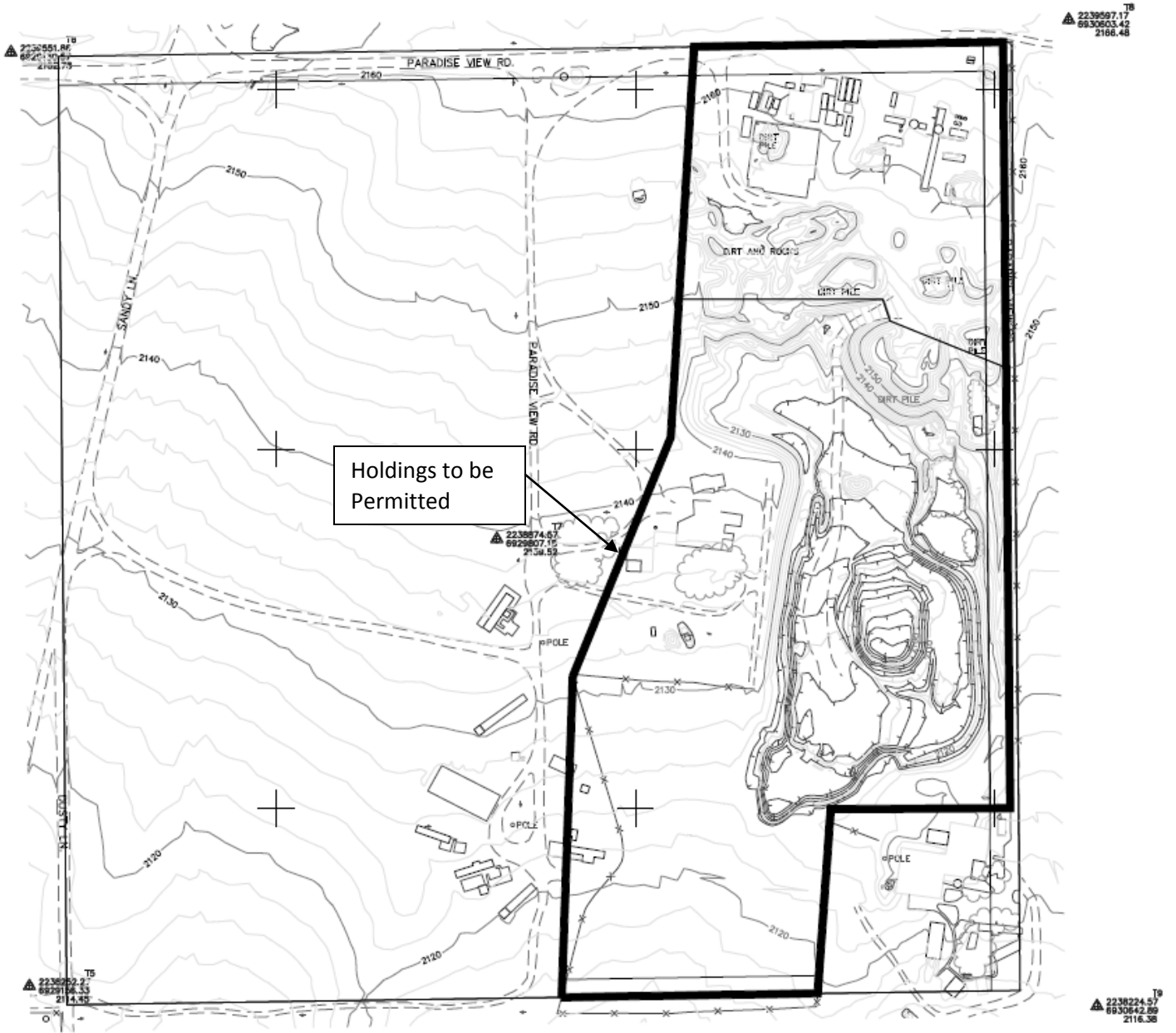


Figure 4 - Location Map

II. SITE AND AREA CHARACTERISTICS

1. Location

The R. Hove Fort Irwin Pit site is located approximately thirty-five (35) miles north of the Barstow and is accessed via Fort Irwin Road and Paradise View Road (see Vicinity Map). The mine currently occupies approximately 12.2 acres. Under this proposal, it would occupy approximately 14.5 acres of a 38.43-acre property.

The R. Hove Fort Irwin Pit site is located in Section 16, Township 12 North, Range 2 East, SBBM; Assessor Parcel Number 0518-181-13. Copies of the parcel maps, assessor's parcel maps and legal descriptions for the site are included within the application package.

2. Access

Access to the mine site is provided by Fort Irwin Road and Paradise View Road. Paradise View Road intersects Fort Irwin Road approximately twenty-one (21) miles north of Interstate 15. Paradise View Road is a dirt road which provides direct access to the site.

Fort Irwin Road provides access to Fort Irwin and Barstow, and San Bernardino Valley via Interstate 15 (see Figure 2).

3. Site History and Land Use

A. Historical Source Information

DTM has operated the sand and gravel mine since 2001 under County permit # 745/DSN/00010890/SAMR/01.

An existing well is located within the 38.43-acre site, just west of the 14.5-acre mining area. During reclamation, the well shall be abandoned pursuant to applicable regulations.

B. Owner and Operator Information

The owner of the land is CJR, which is an affiliate of Daily Transit Mix, LLC. The operator and applicant are Daily Transit Mix, LLC. DTM has been a major producer of aggregates and ready mixed concrete used on highway, road construction projects and other construction projects from this site since 2001.

C. Land Use Information

The property is approximately 38.43 total acres. 14.5 acres of the 38.43-acre property is or will be disturbed. 10.3 acres of the disturbed area will be mined under Phase I. The additional 4.2 acres will be used for various facilities or utilities to process the sand and gravel products.

One easement runs through the property. The easement is for power lines from Cal. Elec. Corp., which runs along Powerline Road. A 40-foot roadway easement has been dedicated to the County of San Bernardino along the north and east sides of the property.

No other easements for utilities are present on the property. An existing well west of the disturbed area supplies water to the rock plant and to future processing plants. Drinking water is delivered in bottles. Sewer service for the maintenance/office building is by septic tank and portable toilets.

D. Surrounding Properties/Uses

Adjacent properties are predominantly undisturbed desert land. Specifically, the surrounding properties and uses are:

To the north is vacant open space, BLM lands. Further north is Fort Irwin.

To the east is vacant open space, BLM lands.

To the south is single family residence and vacant open space.

To the west are scattered single family residences and vacant open space.

The surrounding areas to the site are open space/vacant desert area with few residential homes (rural living). Also, there are existing commercial and industrial uses along Ft. Irwin Road.

4. Project Description

The project consists of an excavation for the extraction of sand and gravels, a screening and crushing plant, a concrete batching plant, a future asphaltic concrete batch plant, and a future recycle plant. Ancillary uses commonly found in conjunction with the mine excavation and plant site, such as equipment service area, fueling stations, office and construction materials storage area are included with this proposal with the submittal of an approved plot plan with the Lead Agency.

Mining operations will proceed as one phase, which consists of mining the southern 10.3-acre portion of the site to the full depth of 50 feet and will continue until the pit has been mined completely (approximately 2044). Maximum Anticipated Depth shall be 92 feet below (Elev. 2072 ft AMSL) the project benchmark elevation of 2164 feet AMSL, located at the northeast corner of the project site.

The northern 4.2-acre portion of the disturbed area will be used for the aggregate processing, RMC plant, AC plant, Recycle plant, and for stockpiling material.

Reclamation will commence after all mining operations have completed. Completion of reclamation will occur within 3 years of completion of mining operation (approximately 2047).

Mining of the pit may be done at 2:1 slopes or may be mined vertically with 20' benches, at 40' horizontal spacings. This will help facilitate reaching the bottom of the pit quickly. As the pit nears the end of mining, the finish slopes will be mined at 2:1 slopes (horizontal: vertical). Over-excavation will be avoided and any over-excavation will be backfilled at 2:1 slopes (horizontal: vertical). Any backfill will be un-engineered.

A 25-foot minimum setback shall be maintained along any and all property lines. The setback is planned for security and safety of the mine site, reclamation of the site, and to provide a significant mitigation from all possible erosion and head cutting concerns.

The 38.43-acre lot will be surrounded with tortoise fencing and the perimeter of the site will be posted with "No Trespassing" signs at 400' spacing.

5. Visibility

The mine site is currently permitted under County permit # 745/DSN/00010890/SAMR/01 and File Index # SMA1/DN431-489/518-181-13. The renewal of the existing permits presented in this report will not significantly change the viewshed of the mine site.

6. Geology

A. Geology of the Site

The site is located within the Mojave Desert Geomorphic Province. The Mojave Desert is bounded on the southwest by the San Andreas Fault and the Transverse Ranges, and on the northeast by the Garlock faults. The Mojave Desert is an ancient feature in response to movements related to the San Andreas and Garlock faults. The region is characterized by broad alleviated basins receiving non-marine continental deposits from ancient uplands that are burying the old topography, which was previously more mountainous (Norris and Webb, 1990).

B. Special Geologic Conditions, Faults, etc.

The site is situated on alluvial fans. The nearest major fault is the Coyote Lake Fault located within 1 mile of the project site to the north and to the west (California Geological Survey, Geologic Atlas of California Map No. 023, 1962).

C. Mitigation

Mitigation of possible earthquake concerns shall be an element of the Emergency Business Plan. Ground Shaking, earthquake concerns, landslides, etc. are not conditions considered at risk for the site, mine, plant equipment or safety of the work force due to the stability of the site, type of geologic formation and the equipment planned for operation on the site.

Mudflows, liquefaction, hydro consolidation, collapsible or expansive soils are not factors of concern at this location.

7. Hydrology

Annual rainfall is estimated at 2"-5", with average rainfall at an estimated 2". The site is not within a recognized floodway, 100-year-old flood plain, nor considered subject to flash flooding. The annual temperature extremes range between an average low of 35°F in December and an average high of 104°F in July.

A. Surface Water

Drainage Patterns within the project will not be shifted as mining progresses. Storm water runoff will be accepted onto the site at the northern portion of the excavation. Storm water that is accepted onto the site will be allowed to percolate into the groundwater. Overburden or topsoil will be used to divert water from entering the site from the east.

Implementation of an Industrial Stormwater Pollution Prevention Plan, as required by the Regional Water Control Board and the Federal (NPDES) National Pollution Discharge Elimination System, will provide additional instructions to the site maintenance plan, as well as added protection from possible spills and contamination from fuel, oils or other substances that may occur during normal operating and maintenance periods.

The tributary area immediately affecting the mine area, in sheet flow conditions, is considered unlikely to generate a concentrated flow which would cause erosion to the designated mine area.

The proposed mine project will not affect groundwater recharging.

B. Groundwater

An existing well west of the disturbed area supplies water to the rock plant and to future processing plants. The operations will not introduce any toxic substances, contaminate, or otherwise degrade the quality of stream runoff or groundwater from the site.

During reclamation, the well shall be abandoned pursuant to applicable regulations.

III. MINING

1. Mining Operation Introduction

Please refer to the project introduction and site characteristics section of this report for the site history and overview.

A. Mineral Commodity

Sand, Gravel and Rock

B. Project Life

DTM is proposing to extend the life of the mine site until 2044. This would extend the life of the mine site to a total of 30 years. The extension is to allow DTM adequate time to mine the property.

C. Project Size

The project is a 14.5-acre surface mine on a 38.43-acre property.

D. Annual Production

The applicant is proposing to continue mining an estimate of 65,000 tons per year of rock, gravel, and sand as shown on the mining plan, intended for use on construction projects in San Bernardino County over a total 30-year life span.

E. Hours of Operation

The applicant is proposing to continue mining and other operations typically six days a week, Monday to Saturday, from 5:00 am to 5:00 pm, with maintenance occurring in the evening hours, prior to 10:00 pm. Occasionally, construction projects demand night-time operations, especially in the hot summer months and with the military as one of our primary customers. During these demand periods, the operator will continue processing and batching operations through the night.

2. Operation

A. Overview

The site shall be permitted for mining and the operation of onsite crushing, screening and processing plants necessary to accommodate public works and private construction projects in the area. The site shall also be permitted for the installation and operation of a RMC plant, an AC plant, and a recycle plant. The materials are to be trucked to the jobsite(s) from this location.

B. Move-on, Site Preparation and Initial Operation

Upon receiving approvals for the mine and processing equipment, the operator cleared off the mine area and prepared the sand and rock processing plant area.

Further clearing of the vegetation shall be performed by scraping the existing vegetation and topsoil off the area and stockpiling the remains of the cleared vegetation and topsoil outside the excavation area and outside of potential drainage courses. The scraped material will be used to create a berm along the sides of the excavation area. At the conclusion of mining operation, the operator shall spread the vegetative materials back over the reclaimed area per direction of the project biologist.

The operator shall scrape the top 6" to 8" of topsoil off the surface area(s) to be mined and the material is to be stockpiled (saved) until the mine area is prepared for reclamation when topsoil shall be spread over the disturbed areas in compliance with the report and the reclamation plan.

C. Mine Excavation Scheduling

The applicant (and operator), DTM, proposes to market this aggregate product to/for use on construction projects, to be used in their RMC operations, and to be used in their AC operations.

Mining operations will proceed as one phase, which consists of mining the southern 10.3-acre portion of the site to the full depth of 50 feet and will continue until the pit has been mined completely (approximately 2044).

The northern 4.2-acre portion of the disturbed area will be used for the aggregate processing, RMC plant, AC plant, Recycle plant, and for stockpiling material.

Reclamation will commence after all mining operations have completed. Completion of reclamation will occur within 3 years of completion of mining operation (approximately 2047).

Mining of the pit may be done at 2:1 slopes or may be mined vertically with 20' benches, at 40' horizontal spacings. This will help facilitate reaching the bottom of the pit quickly. As the pit nears the end of mining, the finish slopes will be mined at 2:1 slopes (horizontal: vertical). Over-excavation will be avoided and any over-excavation will be backfill at 2:1 slopes (horizontal: vertical). Any backfill will be un-engineered.

A 25-foot minimum setback shall be maintained along any and all property lines. The setback is planned for security and safety of the mine site, reclamation of the site, and to provide a significant mitigation from all possible erosion and head cutting concerns.

3. Excavation

Blasting is not proposed for this operation. Blasting will not occur at this site.

Bulldozers and front-end loaders shall perform the excavation of the quarry and slopes. Conveyors and haul trucks will transfer the aggregate from the mine to the sand and gravel processing plant.

Although the operator's overall goal is to mine finished slopes with 2:1 gradient, it is more efficient to mine with vertical faces. Therefore, interior mining slopes will be vertical; but finish slopes shall be mined at 2:1 and over excavation of these finished slopes will be avoided. Should finished slopes accidentally be over-excavated, the operator shall backfill such over-excavation to the desired 2:1 slopes. Un-engineered backfilling with by-product sand shall occur with 2:1 slopes. A California licensed engineer or geologist shall determine the stability of the slopes following mining to determine whether the slopes require additional slope treatment at that time. Survey markers will be set, to help avoid over-excavation, that clearly delineate the excavation limits and that take into account the vertical mining method and subsequent final grading of the slope.

Overburden is that material that normally lies above the raw product and is usually considered a waste by-product. The overburden at R. Hove Fort Irwin Pit is primarily in the form of topsoil and will be pushed over into berms on the perimeter of the mine and saved for re-spreading in reclamation

The unpaved roads shall be maintained with loaders and with motorgraders ("blades") grading the roads.

Water trucks shall control dust in the mine and on the haul roads. Crusher fed conveyors shall be equipped with spray racks and water reservoirs to lower dust emissions from the materials conveyed by these belts.

4. Wind-Down of Operations, Clean up & Equipment Removal

Upon completion of mining, aggregate screening, and crushing the operator will dismantle the sand and gravel processing plant and demobilize the equipment to another location for security, safety or for use on another

project. When the plant is dismantled and shipped offsite, the entire crushing plant area is cleaned; all non-native materials are picked up and removed from the site.

The RMC plant, AC plant, recycle plant, mobile equipment (dozers, loaders, etc), and support equipment and structures (office, trailers) will follow a similar process for winding down, unless a CUP is applied for and approved prior to final reclamation.

Domestic garbage, scrap materials, construction debris, chemicals, oils, grease, etc. are collected and removed from the site on a periodic basis and when needed.

Domestic garbage is disposed by a contracted waste hauler or by the operator's forces at the County dump.

Scrap metals is removed by steel or metal salvagers.

Chemicals, oil, greases, etc. are a contracted waste and will be collected for disposal by a licensed hauler.

5. Mine Overburden, Fines and Waste

The types of waste to be produced are by-product sand, domestic garbage, oil, and grease. The domestic garbage, oil, and grease will be stored and removed per local, state, and federal regulations. The by-product sand will be backfilled into the pits until surface grade is reached.

Topsoil and, separately, overburden will be used as a berm along the perimeter of the mine site for storm water drainage control. The operator shall take appropriate measures to protect the topsoil berms from erosion by promoting plant life. Once finish slopes are obtained, the overburden berms, and then topsoil, will be spread over the slopes and pit floor to promote vegetation and reclamation.

6. Ore Processing Methods and Equipment

The equipment required for mining this site and processing the raw material is as follows: the sand and gravel processing plant, the RMC plant, the future AC plant, the future recycle plant, bulldozer(s), water truck(s), front-end loader(s), motorgrader (to grade haul roads and finish grade following each move-out), haul truck(s), supervisory pick-up trucks and cars, street legal trucks (either double bottom dump type or end-dump types). Other equipment to be used onsite includes maintenance/office building and fuel storage tank(s).

Power lines provide power to the mine site. Other public utilities are not available to the plant site; therefore, drinking water will be delivered to the site, portable toilets are located at or near the office, and two-way radios and cellular telephones are used.

An existing well is located on the 38.43-acre lot. A pipeline delivers water to storage tanks then to the processing plant. This water will be used for material processing, dust control, and other non-potable uses.

A. Sand and Gravel Processing Plant

The sand and gravel processing plant consists of conveyors, a feeder, screening decks, and crushers (also referred to as cones). Raw material is fed into the feeder by front-end loader. The feeder evenly loads a conveyor belt with raw material, which then conveys that material to a screening deck (which is a large shaker box with several graduated steel screens inside).

As material passes through the graduated screens it is sorted and conveyed to predetermined stockpiles. Raw material, which is too large to pass through the first screen, is collected and conveyed to a crusher cone, which crushes the large rock into smaller pieces. The smaller pieces are again conveyed to a screen deck for sorting.

This process is repeated until the material has cycled through enough times to finally find its way to a stockpile. The repetitive crushing of rock produces a product called crusher dust, which is collected and, along with sand, rock and emulsion, is used in the production of asphalt.

Refer to Figure 5 for an illustration of a typical sand and gravel processing plant.

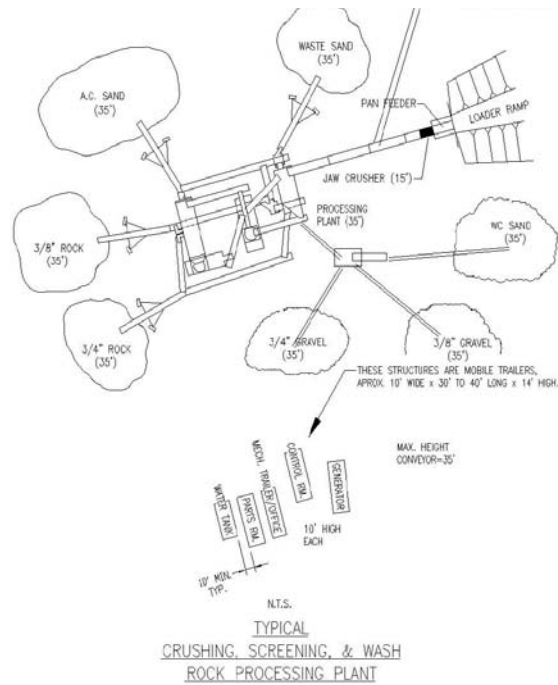


Figure 5 - Typical Processing Plant

All materials are used in the production of marketable materials. There will be some material which will not be clean enough or of too large a quantity to be used. This material is by-product sand and will be placed back in the mine as fill material.

B. Ready Mixed Concrete Plant

The RMC plant will be used to combine sand, gravel, cement and water, and possibly some additives to produce concrete which will be used in paving and structures. A typical RMC plant include conveyors, aggregate storage hoppers, cement silo(s), water tanks and a batching mechanism. Please refer to Figure 6.

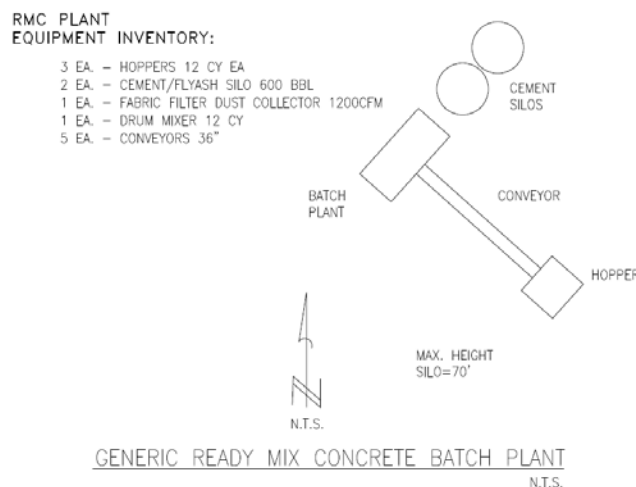


Figure 6 - Typical Ready Mix Concrete Plant

C. Asphalt Concrete Plant

An AC plant consists of the following components: a feeder bin, conveyor, drum dryer, stacker conveyor, storage silo for finished material, dust control devices (“bag house”), asphalt oil storage tanks, maintenance and control trailers, fuel storage tank(s), scale and scale controller shack.

Refer to Figure 7 for a schematic layout of the AC plant layout.

Rock products are loaded into the pre-determined feeder compartments within the feeder bin. A fixed amount of each rock product from the feeder bin (3/4”, 1/2”, 3/8”, sand or crusher dust) is measured and dropped into a conveyor, which conveys the aggregate mix to the dryer drum. The dryer drum is equipped with a large burner at one end. The burning removes nearly all moisture from the rock and sand mixture as the mixture is conveyed towards the flame. Pre-heated asphalt oil is injected into the drum and mixed with the rock and sand, which is then elevated by the slat conveyor into a storage silo located directly above the truck scale. The weigh master in control of the scale and silo can fill each truck to street legal limits as they pass beneath the silo. The trucks then leave the plant for the jobsite.

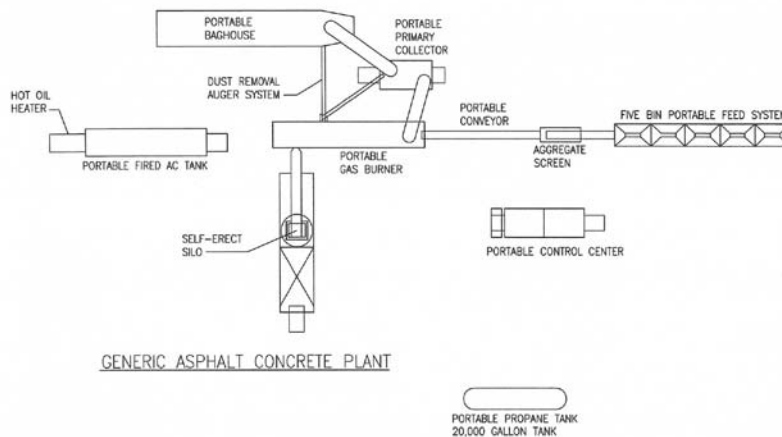


Figure 7 - Typical Asphalt Concrete Plant

D. Recycle Plant

DTM will accept inert material and recycle it to be used as construction quality materials. A recycle typically included a “breaker”, a magnet, and a processing plant. The “breaker” will break the material so that metal can be easily extracted from the material. The magnet will separate the metal from the inert material. Then the processing plant will crush and separate the material by size and product.

E. Dozers and Loaders:

These are used in the excavation area. The dozer will also be used to push raw material from the compacted slope towards a waiting loader, which then scoops up the loosened material and transport the material to the crusher feeder.

F. Loaders

An extra loader is often used to clean up around the crusher site and re-stockpile material which, at times, encroaches on another stockpile nearby. The added loader also serves to load trucks in the event a jobsite requires base material or other products straight from the stockpile. In addition, it serves as a back up in the event there is an equipment breakdown or malfunction with the other loader. High aggregate production may also require a second loader to feed raw material into the processing plant.

Finally, in the event the project is large, it is often possible for the raw material source to eventually be so far away from the feeder that the feeder must be moved closer to the raw material by adding another conveyor extension or adding another loader to the operation.

G. Water Trucks

Water trucks are used for the following: dust control, watering the haul road and slopes.

7. Annual Water Usage and Water Source

A. Overview

Groundwater in this area is adjudicated and managed by the Mojave Basin Area Watermaster.

Water consumption could be estimated as high as 8,000 gallons per day. Using an average calendar year having approximately 300 working days, the annual water consumption can be estimated at 2,400,000 gal per year (= 7.37 ac-ft. per year).

Water will be pumped to the processing site through pipes. As an alternative, DTM can haul the water to the processing site by way of a 20,000-gallon water truck.

B. Fresh Water

Drinking water shall be imported to the site. Bottle water shall be the source for fresh, potable water. All drinking, and hand washing water source will be this fresh water supply.

C. Wastewater

There is no waste water generated in this operation.

8. Power Usage and Power Source

Power lines provide power to the mine site. Fuel will be used in the burner of the future AC plant. Fuel type is controlled by the Mojave Desert Air Quality Management District and by equipment availability.

9. Drainage, Erosion and Sedimentation Control

The climatic conditions (specifically the lack of rainfall, 2" to 5" annually), the mine design, the existing sloping topography, and the chosen mine location within the 38.43-acre subject property holdings, all combine to reduce erosion and the sediment erosion from the site.

Because product and by-product stockpiles tend to rise above the natural terrain, they have added exposure to wind. Water-spraying the stockpiles in times of heavy winds will control erosion and fugitive dust.

Reclamation and reseeded of the disturbed areas will also assist possible wind erosion affects within the limits of this project.

In addition to the above, excavation, stockpiles, and erosion control follow the mining plans enclosed within the Mining and Reclamation information package and shall be subject to the site's Storm Water Pollution Prevention Plan (SWPPP) required by Regional Water Quality Control Board.

Specifically, the following design criteria was implemented for erosion control and for drainage control.

- Set back from property lines of 25' and greater
- Finished slopes designed at 2:1
- Implementation of erosion control measures in accordance with the SWPPP.
- Excavation (mining) area is outside of wash and area(s) determined to be subject to high storm water drainage patterns.
- Construction of protective berms (topsoil stockpile) on the outside of the excavation area.

10. Trucking and Traffic Routes

Anticipated truck trips the site at the highest production period for the facility is estimated at 20 trips daily (entering and leaving).

Routing of the trucking portion of the mine activity for the haul is both north or south on Fort Irwin Road. Trucks will deliver the product, then return to the mine. Fuel deliveries or emulsion deliveries are routed by the distributors of the products.

A. General Trucking

Class-2 Aggregate Base product, crushed rock and sand, fill materials and asphalt are hauled with material haul trucks, either legal doubles or single trailers pulled by tractors.

B. Employees and Supervision

The Aggregate Screening and Crushing Plant requires at least 2 individuals to operate the plant and maintain the equipment. In the event none of these employees carpool together, 2 one-way trips to the site each operating day (4 trips per day with return trips) will result.

11. Interim Management Plan

Per the State of California Surface Mine and Reclamation Act (SMARA) Section 2770(h) an Interim Management Plan (IMP) is required for idle periods. An IMP will be submitted and approved by the County at a specific future date when and if idle status is triggered.

Simply stated, the interim plan will be in place during those periods when mining is not in operation, and is intended to maintain the site security by maintaining tortoise fences and "No Trespassing" signs and by maintenance of site drainage devices.

The intent of a Surface Mining Permit is for the production and availability of rock, sand, and gravel for the use and sale by DTM, and / or its successor(s). DTM requires varying quantities of rock products for the numerous construction projects in the desert region. DTM has a long-term vested interest in San Bernardino County, the subject site, and the proper management and reclamation of the property.

The Interim Management Plan will include the following:

- Notification will be sent to the Lead Agency of the start and ending of all idle periods.
- Annual inspections of the site will occur during idle periods.
- Dust Control will be maintained during the idle periods, which may include approved dust palliative applications over specific exposed areas within the mine area.
- Financial Assurance will be maintained.
- Mobile equipment will be removed from the site, except that which is required to maintain the site during idle periods.
- Product stockpiles will be removed or will be seeded to help control erosion and fugitive dust.

12. Public Safety

Throughout mining and reclamation processes of this mine, including idle periods in which the IMP applies, safety for the onsite work force and for the public will be an ongoing concern and process. The following measures have been planned for the protection of the public regarding this project:

- Tortoise fencing surrounds the property and “No Trespassing” signs along the property line at 400’ o/c to minimize the off-road traffic and vehicles from entering the site.
- The tortoise fencing and signs shall also serve to keep trespassers and vehicles from entering the immediate mining and plant areas.
- Any materials considered hazardous or a danger to trespassers or the public shall be removed during “idle” mining/operation periods.

IV. RECLAMATION

1. Current Land Use

Currently the site is an operating mine under County Permit # 745/DSN/00010890/SAMR/01. Adjacent properties are predominantly undisturbed desert land. Specifically, the surrounding properties and uses are:

- To the north is vacant open space, BLM lands. Further north is Fort Irwin.
- To the east is vacant open space, BLM lands.
- To the south is single family residence and vacant open space.
- To the west are scattered single family residences and vacant open space.

The surrounding areas to the site are open space/vacant desert area with few residential homes (rural living).

2. Visibility

The mine site is currently permitted under County permit # 745/DSN/00010890/SAMR/01 and File Index # SMA1/DN431-489/518-181-13. The renewal of the existing permits presented in this report will not significantly change the viewshed of the mine site.

3. Vegetation

Botanical surveys were conducted on May 6, 2001 and December 19, 2002 by Circle Mountain Biological Consultants for the R. Hove Fort Irwin Pit, formerly known as Gordon Lint Mine. Plant communities on the site were evaluated and quantitative baseline sampling were conducted for the 38.43-acre project area.

The native vegetation of the R. Hove Fort Irwin Pit can best be described as creosote bush-white bursage series, according to Sawyer's and Keeler-Wolfs (1995) classification system, or Mojave creosote bush scrub based on Holland's (1986) system. Dominant perennials include burro bush (*Ambrosia dumosa*), creosote bush (*Larrea tridentata*), senna (*Cassia armata*), and Mormon tea (*Ephedra californica*).

The site slopes moderately from north to south. Evidence of concentrated sheet flow in the form of several shallow gullies pass through the R. Hove Fort Irwin Pit, from north to south, but these do not support a separate plant community. A total of 18 perennial plant species and 40 annuals were found during surveys, indicating a relatively high level of diversity on the site. Of these, only seven were not native species.

Landscape plants were not included in this total. Although several California desert natives (Joshua tree, paloverde, mesquite) have been used in landscaping near the residences, athel (*Tamarix aphylla*), an exotic species of tamarisk (fortunately not an invasive type) is also present.

A supplemental baseline study was conducted on March 5, 2015 by RCA Associates, LLC. for the R. Hove Fort Irwin Pit to meet current requirements. Plant communities on the site were evaluated and quantitative baseline sampling were conducted for the 38.43-acre project area.

Perennials observed during the field March 5, 2015 investigations included burrow bush (*Ambrosia dumosa*), creosote bush (*Larrea tridentata*), ephedra (*Ephedra nevadensis*), cheesebush (*Hymenoclea salsola*), senna (*Senna armata*), and lycium (*Lycium cooperi*). These perennials were observed along each of the 15 step-point transects and the data for each species is provided in the table below.

SPECIES	COVER (%)	DENSITY (Number per sq. meter)	SPECIES COMPOSITION	FREQUENCY
Burrow Bush (<i>Ambrosia dumosa</i>)	39.8	1.2	44	44.9
Creosote Bush (<i>Larrea tridentata</i>)	22.8	1.3	7.9	8.1
Cheesebush (<i>Hymenoclera salsola</i>)	14.2	2.6	11.9	12.2
Senna (<i>Senna armata</i>)	5.9	2.9	11.7	11.8
Lycium (<i>Lycium cooperi</i>)	1.8	0.9	4.5	4.6
Ephedra (<i>Ephedra nevadensis</i>)	16.7	1.1	20	20.4

Source: Data from field investigations conducted on March 5, 2015.

Twenty-seven beavertail cactus (*Opuntia basilaris*) and three silver cholla (*O. echinocarpa*) plants were identified on the project site. Each plant was flagged and the GPS coordinates were recorded. These plants will be relocated in the manner outlined in the Revegetation and Monitoring Plan (Circle Mountain Biological Consultants, March 2003). The cactus plants will be collected in such a manner as to minimize stress to the plant, and will be transplanted to an area of the project site where the cactus will be protected from any disturbance. Once mining activities have been completed, the cacti will be transplanted back to their original locations.

4. Wildlife

Wildlife surveys were conducted on May 6, 2001 and December 19, 2002 by Circle Mountain Biological Consultants for the R. Hove Fort Irwin Pit, formerly known as Gordon Lint Mine. RCA Associates, LLC also performed focused surveys on October 17, 2013 for desert tortoise and burrowing owl.

A total of nine bird species, five reptiles, and five mammals was detected on the R. Hove Fort Irwin Pit and on zone-of-influence transects. A majority of the bird species is typically associated with human habitation or disturbance, including natives such as northern mockingbird, common raven, house finch, and mourning dove, and two non-native species, the house sparrow and European starling. Of the two remaining species, the verdin is a desert species usually associated with wash habitats and in this case utilizing the paloverde and mesquite in the landscaping, and the turkey vulture is a spring migrant. Reptiles found in the area are common Mojave species, including western whiptail, desert iguana, leopard lizard, and side-blotched lizards. Mammals detected were also common species of the California desert: coyote, black-tailed hares, Audubon cottontail, bobcat, and kangaroo rat species.

The site does support suitable habitat for the burrowing owl based on the field investigations conducted on October 17, 2013; however, no owls, owl sign or suitable burrows were observed. The species has been documented in the region and the nearest observation is about 6-miles west of the site (CNDDDB, 2013). There is a low probability that the species will move on to the site in the future based on the absence of any suitable burrows within the area proposed for the mine expansion.

The site does not support prime suitable habitat for the desert tortoise based on past human activities; furthermore, no tortoises or tortoise sign (burrows, scats, carcasses, etc.) were observed on the site or in the zone of influence. The species has been documented in the region and tortoises were observed near the site in

2001 (Circle Mountain Biological Consultants, May 2001). Additional populations have been documented about one mile southwest of the site (CNDDDB, 2013). There is a low probability that the species will move on to the site in the future; however, various measures specified in the Mining and Reclamation Plan (dated 2001 and amended August 17, 2012) will be implemented which will prevent tortoises from moving onto the site.

5. Reclamation and Reclamation Schedule

A. Reclamation

Reclamation shall follow mining once areas of the mine that are of substantial size are not subject to further disturbance. As mining limits are reached and slopes contoured to their final repose, revegetation will begin immediately. Reclamation is expected to conclude within 3 year of final mining, or 2047.

As the surface mining operation progresses and ultimate slope grades are achieved along with installation of appropriate erosion protection (slope walking-stabilizing, seeding etc.), revegetation of the slopes and the mine floor shall commence on an incremental basis. An effort will be made not to re-disturb reclaimed area of the mine, which has been reseeded during any prior reclamation periods.

Final reclamation shall be ongoing with respect to grading and shaping the mine area. Reseeding the area and spreading any remaining sand over the site, and applying the remaining vegetation from earlier clearing processes, shall be completed at the time of conclusion of the last mining operation (or within 12 months of the termination of the mining period, at the election of the operator).

Test plot areas for the reseeded program shall be located within the area of previous disturbance as shown on the reclamation plan. Test plots will allow observation of the revegetation program's effectiveness, whereby modifications can be made if necessary.

The Reclamation Objectives of the R. Hove Fort Irwin Pit are:

- To revegetated the site.
- To mitigate and reduce the visual impacts as a result of the changes of land form and revegetation.
- To mitigate runoff impacts and restore the flows of runoff storm waters to natural/existing conditions.

B. Reclamation Schedule

Mining operations will proceed as one phase, which consists of mining the southern 10.3-acre portion of the site to the full depth of 50 feet and will continue until the pit has been mined completely (approximately 2044).

The northern 4.2-acre portion of the disturbed area will be used for the aggregate processing, RMC plant, AC plant, Recycle plant, and for stockpiling material.

Reclamation will commence after all mining operations have completed. Completion of reclamation will occur within 3 years of completion of mining operation (approximately 2047).

Mining of the pit may be done at 2:1 slopes or may be mined vertically with 20' benches, at 40' horizontal spacings. This will help facilitate reaching the bottom of the pit quickly. As the pit nears the end of mining, the finish slopes will be mined at 2:1 slopes (horizontal: vertical). Over-excavation will be avoided and any over-excavation will be backfill at 2:1 slopes (horizontal: vertical). Any backfill will be un-engineered.

A 25-foot minimum setback shall be maintained along any and all property lines. The setback is planned for security and safety of the mine site, reclamation of the site, and to provide a significant mitigation from all possible erosion and head cutting concerns.

Berms composed of topsoil and overburden will be spread over the backfilled surface grade, slopes, and pit floors. This will facilitate in reclamation and vegetation. Seed mixes, recommended by the project biologist, will be spread to help the vegetation of the reclaimed land.

6. Revegetation

The following plant species seed palate will be used to revegetate the disturbed mine area.

Perennials

<i>Ambrosia dumosa</i> (burro bush):	2.5 lbs./acre
<i>Ephedra californica</i> (desert tea):	2.0 lbs./acre
<i>Larrea tridentata</i> (creosote bush):	2.5 lbs./acre
<i>Lycium cooperi</i> (peach thorn):	2.0 lbs./acre
<i>Senna armata</i> (senna):	2.0 lbs./acre

Annuals & Early Successional Species

<i>Hymenoclea salsola</i> (cheesebush):	2.5 lbs./acre
<i>Desert plantain</i> (plantago ovata):	2.5 lbs./acre
<i>Baileya multiradiata</i> (desert marigold):	2.0 lbs./acre
<i>Phacelia tanacetifolia</i> (phacelia):	2.0 lbs./acre
<i>Salvia columbariae</i> (chia):	1.0 lbs./acre
<i>Vulpia octoflora</i> (fescue):	<u>4.0 lbs./acre</u>

TOTAL = 25 lbs./acre

Four test plots of 100 by 100 feet will be established in the winter months following completion of mining activities in the northern part of the site. Two plots will be established on sloped areas and two will be established on flat areas. One plot in each area will be planted using mining and construction equipment and one plot will be planted using a specialized imprinter. All of the plots will be monitored for seed germination success at 6 and 9 months intervals following seeding to determine which seeding technique will be used for the reclamation activities throughout the rest of the site.

Revegetation criteria prior to completion of a specific area of the mine, will be a field check of the slope area to determine stability to wind and storm water erosion. If determined that the area in question is not stable, or an event is witnessed which confirms that the area is not stable, “cat-walking” the slope with a dozer, or seeding the area, or both, may be implemented.

Following the mining of an area where slopes are deemed complete, reclamation efforts described herein will commence.

7. Success Criteria

Success Criteria to be reviewed and revised by approved project biologist in accordance with San Bernardino County approved Conditions of Approval.

Cover	35% cover of native perennials per 50 meter x 1 meter transect.
Density	6 native perennials per 50 meter x 1 meter transect.
Species Richness	3 species native perennials per 5 meter x 1 meter transects.
Total Cactus Plants (30)	Minimum 70 % survival rate (21 cacti plants)

Once all restoration activities have been completed, monitoring will be carried out annually until the success criteria summarized above has been achieved regardless of the number of years required. Reclamation will be initiated and completed in 2044 and monitoring will begin in 2045.

8. Cleanup, Wind-Down of Operations & Equipment Removal

Upon completion of mining, aggregate screening, and crushing the operator will dismantle the sand and gravel processing plant and demobilize the equipment to another location for security, safety or for use on another project. When the plant is dismantled and shipped offsite, the entire crushing plant area is cleaned; all non-native materials are picked up and removed from the site.

The RMC plant, AC plant, recycle plant, mobile equipment (dozers, loaders, etc), and support equipment and structures (office, trailers) will follow a similar process for winding down, unless a CUP is applied for and approved prior to final reclamation.

Domestic garbage, scrap materials, construction debris, chemicals, oils, grease, etc. are collected and removed from the site on a periodic basis and when needed.

Domestic garbage is disposed by a contracted waste hauler or by the operator’s forces at the County dump.

Scrap metals is removed by steel or metal salvagers.

Chemicals, oil, greases, etc. are a contracted waste and will be collected for disposal by a licensed hauler.

During reclamation, the well shall be abandoned pursuant to applicable regulations.

9. Post-Reclamation and Future Mining

The reclaimed mine site will become Vacant Open Space.

The RMC plant, AC plant, recycle plant, mobile equipment (dozers, loaders, etc), and support equipment and structures (office, trailers) will be removed, unless a CUP is applied for and approved prior to final reclamation.

The projected completion of surface mining of the subject property is 30 years hence (2044).

After Reclamation, the entire site will not be completely mined out and the site will have the potential for future mining. A revised Mining Plan and Reclamation Plan will be submitted and approved by the County if future mining is desired.

10. Slope and Slope Treatments

The primary erosion protection will consist of slope seeding and supplemental wattles, bails, and sand bagging.

11. Ponds, Reservoirs, Tailings, and Waste

During reclamation, and after sand and gravel processing, any settling ponds will be filled and covered with by-product sand and seeded.

12. Soils and Fine Textured Waste

Overburden and topsoil will be cleared and used to create berms along the property boundary to control storm water drainage. Once mining has completed, the overburden and topsoil will be spread on the slopes and pit floor to promote revegetation.

13. Drainage and Erosion Controls

The climatic conditions (specifically the lack of rainfall, 2" to 5" annually), the mine design, the existing sloping topography, and the chosen mine location within the 38.43-acre subject property holdings, all combine to reduce erosion and the sediment erosion from the site.

Reclamation and reseeding of the disturbed areas will assist possible wind erosion affects within the limits of this project.

In addition to the above, erosion control follow the mining plans enclosed within the Mining and Reclamation information package and shall be subject to the site's Storm Water Pollution Prevention Plan (SWPPP) required by Regional Water Quality Control Board.

Specifically, the following design criteria was implemented for erosion control and for drainage control.

- Set back from property lines of 25' and greater
- Finished slopes designed at 2:1
- Install energy dissipation devices if deemed necessary
- Implementation of erosion control measures in accordance with the SWPPP.
- Excavation (mining) area is outside of wash and area(s) determined to be subject to high storm water drainage patterns.
- Slopes are to be stabilized, if needed, by walking the unstabilized area with a dozer "cat-walk" to create compaction, and at the same time creating seed traps or "pockets" to hold seed and help promote plant re-establishment.

14. Public Safety

Throughout mining and reclamation processes of this mine, including idle periods in which the IMP applies, safety for the onsite work force and for the public will be an ongoing concern and process. The following measures have been planned for the protection of the public regarding this project:

- Tortoise fencing surrounds the property and "No Trespassing" signs along the property line at 400' o/c to minimize the off-road traffic and vehicles from entering the site.
- The tortoise fencing and signs shall also serve to keep trespassers and vehicles from entering the immediate mining and plant areas.

- Any materials considered hazardous or a danger to trespassers or the public shall be removed.

15. Monitoring and Maintenance

The operator will provide onsite review, during the years the site is in operation, of the following:

- Storm Water Pollution Prevention Plan per the NPDES plan required by State and Federal rules. Erosion control will be reviewed and addressed within the NPDES (SWPPP) permit and plans.
- Dust and Air Pollution.
- Noise.
- Trucking Operations.
- Test plot areas, to determine the success rate of the planned seed mix for reclamation.
- Revegetation of the mine area following operations. The mine floor and slopes which are scheduled for the initial seeding treatment shall be monitored for success rate per the goals established for the seed mix versus the natural vegetation and density of the area.
- During “idle” periods when the mine has temporarily stopped operations, the site shall be monitored in conformance with the “Interim Management Plan” (see page 15).
- Following the Reclamation of the site for the next five years, the site shall be monitored by the operator for success of reclamation and revegetation as well as for its maintenance. This monitoring shall be conducted by the operator, and also, by the independent monitoring (inspection) of the Lead Agency.

16. Reclamation Assurance

Per SMARA and as approved by the County Planning Department, a Reclamation Bond shall be posted and the original bond, for an approved amount, shall be held by the County of San Bernardino. The State of California shall also be named on the financial assurance instrument.

To estimate the reclamation costs, please note the enclosed cost breakdown summary located within the appendix.

The cost estimates for reclamation are the respective cost to reclaim the existing site, as it presently exists. Upon the commencement of mining operations, the reclamation assurances estimate shall be revised to account for expanded limits and area.