Powerflex Solar Project
Vehicle Miles Traveled
Screening Assessment

Prepared for:

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1.0 PROJECT INTRODUCTION

The purpose of this report is to evaluate the Poweflex Solar Project's Vehicle Miles Traveled (VMT) analysis requirements and compliance with Senate Bill 743 (SB 743) and the California Environmental Quality Act (CEQA).

1.1 PROJECT DESCRIPTION

Omya Incorporated (OMYA) operates a calcium carbonate mining and processing operation on Crystal Creek Road approximately 4 miles south of State Highway 18 south of the unincorporated town of Lucerne Valley. The proposed OMYA Solar project is a 5-megawatt solar PV electricity generation facility on 38.95 acres of vacant land (Proposed Project) adjacent to the OMYA facility that it is designed to serve. The projected yearly output of the solar facility is 14.5 million kWh, while the mining and processing operation consumes 15.6 million kWh of electrical energy annually. The Proposed Project will interconnect to an existing Southern California Edison (SCE) 115 kilovolt (kV) substation located on the Project Site via an underground line extension. Once constructed, the facility would produce enough electricity to serve 93 percent of the mine's needs. Implementation of the project requires the approval of a Conditional Use Permit (CUP) to permit a renewable energy facility.

Attachment 1 includes the Project site plan.

1.2 SENATE BILL 743

On September 27, 2013, SB 743 was signed into State law and started a process intended to fundamentally change transportation impact analysis as part of the CEQA compliance. The California Natural Resource Agency updated the CEQA transportation analysis guidelines in 2018. In this update automobile delay and LOS metrics are no longer to be used in determining transportation impacts. Instead VMT metrics will serve as the basis in determining impacts. Furthermore, the guidelines stated that after July 1, 2020, transportation analysis under CEQA must use VMT to determine impacts for land use projects.

1.3 GUIDANCE DOCUMENTS

The project is within the jurisdiction of the County of San Bernardino. The County has adopted guidance on evaluating VMT for transportation impacts under CEQA. For this project the San Bernardino County Transportation Authority (SBCTA) *Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment*, February 2020, hereafter referred to as "Guidelines", will be used for this analysis.

2.0 ANALYSIS METHODOLGY

2.1 SCREENING CRITERIA ASSESMENT

2.1.1 SBCTA Guidelines

The Guidelines detail the requirements for the project's VMT analysis consistent with CEQA including three (3) types of screening to determine if a project could be screened out from conducting a detailed project level VMT analysis.

- Transit Priority Area (TPA) Screening: Projects located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary.
- Low VMT Area Screening: Residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area.
- Project Type Screening:
    a. Local serving retail projects less than 50,000 square feet may be presumed to have a less than significant impact absent substantial evidence to the contrary. Local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel.
    b. In addition to local serving retail, the following uses can also be presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature:
        i. Local-serving K-12 schools
        ii. Local parks
        iii. Day care centers
        iv. Local-serving gas stations
        v. Local-serving banks
        vi. Local-serving hotels (e.g. non-destination hotels)
        vii. Student housing projects on or adjacent to college campuses
        viii. Local-serving assembly uses (places of worship, community organizations)
        ix. Community institutions (Public libraries, fire stations, local government)
        x. Local serving community colleges that are consistent with the assumptions noted in the RTP/SCS
        xi. Affordable or supportive housing
        xii. Assisted living facilities
        xiii. Senior housing (as defined by HUD)
        xiv. Projects generating less than 110 daily vehicle trips. This generally corresponds to the following "typical" development potentials:
            - 11 single family housing units
            - 16 multi-family, condominiums, or townhouse housing units
            - 10,000 sq. ft. of office
            - 15,000 sq. ft. of light industrial

- 63,000 sq. ft. of warehousing
- 79,000 sq. ft. of high cube transload and short-term storage warehouse

2.2 VMT ASSESSMENT FOR NON-SCREENED DEVELOPMENT

Per the Guidelines, projects that do not meet any of the screening criteria identified would need to perform a VMT analysis. The project would need to evaluate the appropriate VMT metrics and compare them to the identified thresholds to determine the level of significance as defined per the Guidelines.

3.0 PROJECT VMT ASSESSMENT

The project is proposing the construction of a 5-megawatt solar PV electricity generation facility on 38.95 acres of vacant land which will be serving the adjacent OMYA facility that currently is operating a calcium carbonate mining and processing operation.

3.1 SCREENING CRITERIA ASSESSMENT

TPA and Low VMT Area

The project location is neither in a TPA nor in a low VMT generating area. Therefore, **the VMT impact of the project would not be presumed less than significant for being within a TPA or low VMT generating area.**

Project Type

The project is proposing the construction of a solar facility servicing the adjacent OMYA facility which operates a calcium carbonate mining and processing operation. No offices or operation space will be constructed on the site. Once the facility is constructed it would not generate additional daily VMT as an origin or destination for the public and will be monitored remotely. Trips to and from the completed facility would be from maintenance workers who will access the facility periodically but not daily. This is not a typical land use development project that would fall into either a residential, retail or employment category.

As stated above the project does not fit in any of the Guideline's specific categories of the project land use except under the category of projects generating less than 110 daily vehicle trips.

Project Trip Generation Forecast

For the purposes of this analysis, the forecasted trips generated by the project assume that trips will occur during the construction phase only since the project, once constructed and in operation, will be unmanned with no office or operation space constructed on site. The operation of the site will be monitored remotely not requiring any employees to be present on site. Site routine maintenance and inspections will be performed consistent with an established maintenance schedule and time of need.

Trip generation for the construction phase of the facility has been provided in **Table 1**.

Table 1: Powerflex Solar Trip Generation

Use	Total # of Units	Vehicle Conversion Rate	Multiplying Factor	Daily Trips	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Construction Worker (single occupancy)	25	1	2	50	25	25	0	25	0	25
Construction Worker (carpooling 2+)[1]	15	0.5		16	8	8	0	8	0	8
Construction Equipment Site Delivery - Truck Trips[2]	10	1		20	2	1	1	2	1	1
Subtotal - NET Project Trips				***86***	***35***	***34***	***1***	***35***	***1***	***34***
Construction Equipment Site Delivery - Truck Trips (PCE)[3]	10	3	2	60	6	3	3	6	3	3
Total - NET Project Trips (PCEs)				**126**	**39**	**36**	**3**	**39**	**3**	**36**

Notes:
[1] Carpooling two employees per vehicle.
[2] Majority of site deliveries are done outside the peak hours
[3] Passenger car equivalent factor of 3.0; 4+ Axle Trucks (worst case scenario)

As shown in **Table 1,** the calculated total Project daily trips is 126 ADT, including implementation of the appropriate Passenger Car Equivalent (PCE) adjustment factor for heavy vehicles. However, the following should be noted:

- The intent of SB 743 and VMT analysis per CEQA is the analysis of VMT generated by automobiles in which OPR defines as "on-road passenger vehicles, specifically cars and light trucks." [1] The total daily trips from passenger vehicles, excluding construction truck trips, is 66 ADT (per Table 1: 50+16=66 excluding Truck trips).
- The project construction total daily trips is 86 ADT without applying the 3.0 PCE conversion rate to project construction truck trips. The implementation of the PCE factor is to equalize the size difference between passenger vehicles and heavy vehicles. In this case of VMT analysis, it is not appropriate to apply the PCE factor since the VMT generated by the trucks is, in fact, not 3 times the VMT generated by a passenger vehicle making the same trip.
- Trip generation during the construction phase of the project represents the worst-case scenario of traffic generated by the project under normal conditions. Once the facility is constructed, the site will be operated remotely with intermittent routine maintenance and inspection trips that will be performed consistent with an established monthly maintenance schedule.

The proposed project would generate 86 ADT (without PCE factors) under the construction phase of the project. This would be a conservative analysis as this is the period where the site would generate the most traffic and VMT. Once the project is constructed it would not generate

[1] OPR Technical Advisory (December, 2018) Page 4 – "Vehicle Types"

additional VMT on a daily basis and would not be an origin or destination for the public; therefore, **the project would be screened out since it does qualify for small project screening**.

3.2 VMT IMPACT ASSESSMENT CONCLUSION

As concluded in Section 3.1 of this report, the proposed project is presumed to be less than significant for VMT impacts due to the proposed use meeting at least one of the County's screening criteria outlined in Section 2.1. The project's VMT impact assessment for the proposed use is summarized in **Table 2:**

Table 2: Summary of VMT Impacts

Proposed Uses	Impact	Commentary
Solar facility	Presumed to be less than significant	Meets County's Screening Criteria for Small Projects by temporarily generating 86 ADT at most during project construction phases.

Additionally, it should be noted that construction worker VMT is not a newly generated VMT; instead, it is redistributed throughout the regional roadway network based on the different work sites in which construction workers travel to each day. Therefore, construction workers are not generating new VMT each day, only redistributing it. This redistribution is considered to have a nominal and momentary effect on the regional and County daily VMT.

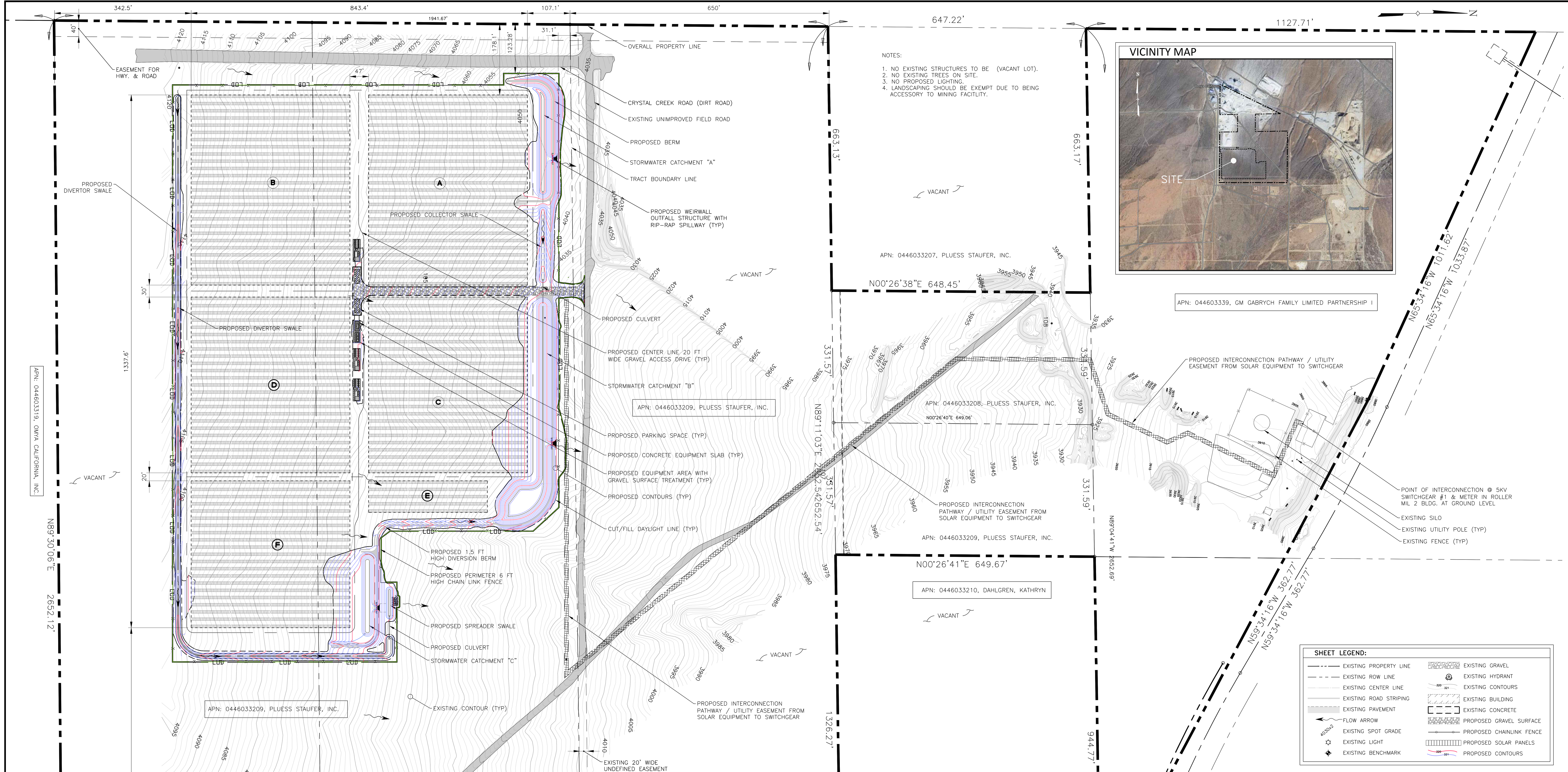
It is our recommendation that the project be approved with no additional project-level VMT analysis.

Should you have any questions, please feel free to contact George Ghossain at:

Email: george@intenggroup.com
Phone: (951) 239-1546
Address: 23905 Clinton Keith Road 114-280
Wildomar CA, 92595

Attachment 1 – Project Site Plan

Attachment 1 – Project Site Plan



NOTES:

1. NO EXISTING STRUCTURES TO BE (VACANT LOT).
2. NO EXISTING TREES ON SITE.
3. NO PROPOSED LIGHTING.
4. LANDSCAPING SHOULD BE EXEMPT DUE TO BEING ACCESSORY TO MINING FACITLITY.

SHEET LEGEND:

EXISTING PROPERTY LINE
EXISTING ROW LINE
EXISTING CENTER LINE
EXISTING ROAD STRIPING
EXISTING PAVEMENT
FLOW ARROW
EXISTNG SPOT GRADE
EXISTING LIGHT
EXISTING BENCHMARK
EXISTING GRAVEL
EXISTING HYDRANT
EXISTING CONTOURS
EXISTING BUILDING
EXISTING CONCRETE
PROPOSED GRAVEL SURFACE
PROPOSED CHAINLINK FENCE
PROPOSED SOLAR PANELS
PROPOSED CONTOURS

LEGAL DESCRIPTION:

REAL PROPERTY IN THE CITY OF LUCERNE VALLEY, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

TRACT: I (0446-033-39)

GOVERNMENT LOTS 3 AND 4 OF THE NORTHWEST 1/4 OF SECTION 1, TOWNSHIP 3 NORTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN ACCORDING TO THE OFFICIAL PLAT THEREOF AND LYING SOUTHWEST OF THE RAILROAD.

EXCEPTING THEREFROM THAT PORTION AS CONVEYED TO THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY, A KANSAS CORPORATION, BY DEED RECORDED MAY 10, 1956 IN BOOK 3934, PAGE 484 OFFICIAL RECORDS.

TRACT: II (0446-033-08)

THE WEST 1/2 OF THE EAST 1/2 OF THE NORTH 1/2 OF GOVERNMENT LOT 5 OF THE NORTHWEST 1/4 OF SECTION 1, TOWNSHIP 3 NORTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO GOVERNMENT SURVEY.

EXCEPTING 3% OF ALL OIL AND MINERAL RIGHTS AS RESERVED IN DEED FROM LOUIS L. BARR, ET UX, TO PRESTON H. PORTER, ET UX, RECORDED APRIL 8, 1955, IN BOOK 3615, PAGE 271, OFFICIAL RECORDS.

TRACT: III (0446-033-09)

THE EAST 1/2 OF THE EAST 1/2 OF THE NORTH 1/2 OF LOT 5 OF THE NORTHWEST 1/4 OF SECTION 1, TOWNSHIP 3 NORTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN, OFFICIAL RECORDS OF SAID COUNTY APPROVED BY THE SURVEYOR GENERAL JULY 20, 1896.

TRACT: IV (0446-033-17)

THE SOUTH 1/2 OF LOT 5 AND THE SOUTH 1/2 OF LOT 6 OF THE NORTHWEST 1/4 OF SECTION 1, TOWNSHIP 3 NORTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO GOVERNMENT SURVEY. EXCEPTING THEREFROM THE EAST 1/2 OF THE SOUTH 1/2 OF LOT 6.

TRACT: V (0446-033-18)

THE NORTH ONE-HALF OF LOT 11 AND THE NORTH ONE-HALF OF LOT 12, OF THE NORTHWEST ONE-QUARTER OF SECTION 1, TOWNSHIP 3 NORTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF ON FILE IN THE OFFICE OF THE SAN BERNARDINO COUNTY RECORDER.

TRACT: VI (0446-033-19)

THE SOUTH 1/2 OF LOTS 11 AND 12, SECTION 1, TOWNSHIP 3 NORTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND ON FILE IN THE DISTRICT LAND OFFICE.

APN: 0446-033-39 AND 0446-033-08 AND 0446-033-09 AND 0446-033-17 AND 0446-033-18 AND 0446-033-19

SITE DATA:

ZONING: LV/CI
(LUCERNE VALLEY COMMUNITY INDUSTRIAL)
APN# 044603318
PROPERTY OWNER: PLUESS-STAUFFER, INC.
JURISDICTION: COUNTY OF SAN BERNADINO
FLOOD ZONE: 'D' PANEL #06071C6575H (08/28/2008)

SURVEYOR: PBLA SURVEYING, INC.
SURVEY FIELD WORK COMPLETED ON 04/01/2024.
SITE ADDRESS: 7225 CRYSTAL CREEK ROAD, LUCERNE, CA 95458
TOTAL PARCEL AREA 6,889,000.72 SF (±158.149 AC)
GENERAL PLAN/LUC: LIMITED INDUSTRIAL (LI)
REGION: LUCERNE VALLEY-DESERT
SUPERVIORIAL DIST: 3rd

BULK AREA TABLE: LV/CI ZONING CLASSIFICATION

	REQUIRED	EXISTING	PROPOSED
BUILDING LOT COVERAGE	UNLIMITED	0.00 SF	0.00 SF
SOLAR ARRAY SYSTEM IMPERVIOUS COVERAGE	NA	NA	301,721.64 SF/7.28 AC
PROJECT AREA	NA	NA	1,280,244.91 SF/29.39 AC
PERCENT OF IMPERVIOUS COVERAGE	–	0.00%	23.56%
MINIMUM LOT WIDTH	60 FT	2,652 FT	2,652 FT
REQUIRED FRONT YARD: ZONE LV/CI	25 FT	NA	25 FT
REQUIRED SIDE YARD: ZONE LV/CI	25 FT	NA	25 FT
REQUIRED REAR YARD: ZONE LV/CI	NA	NA	N/A
MAXIMUM PANEL TIP HEIGHT	50 FT	NA	18'-0"±
MAXIMUM BUILDING HEIGHT	NA	NA	NA
SUBJECT PROJECT AREA IS CURRENTLY VACANT			

SPECIAL USE PERMIT PLAN
SCALE: 1" = 120'

DATE	REVISION DESCRIPTION	PM	ENG	CHK
05/22/24	FOR COMMENT	–	JMP	GB
07/24/24	PER COMMENTS	–	JMP	GB

SEAL

ENGINEER:
Tectonic
PRACTICAL SOLUTIONS. EXCEPTIONAL SERVICE.
Tectonic Engineering Consultants
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Phone: (949) 502-8555
(800) 829-6531
www.tectonicengineering.com

DEVELOPER:
powerflex
EDF Renewables
805 THIRD AVENUE
NEW YORK, NEW YORK 10022
WWW.POWERFLEX.COM

PAGE SIZE
36" x 24"

PROJECT
SOLAR GROUND MOUNT SYSTEM AT
OMYA
7225 CRYSTAL CREEK ROAD
LUCERNE VALLEY, CA 92356

SYSTEM
DC SYSTEM SIZE: 6.49 MW
AC SYSTEM SIZE: 5.00 MW
MODULE TYPE: CSI SOLAR, CS3W-450MB-AG
MODULE QUANTITY: 14,420
ORIENTATION: 25° TILT, 180° AZIMUTH

WORK ORDER # 11550.07

DRAWING TITLE
SPECIAL USE PERMIT PLAN

SHEET NO. C1