Imperial County Planning & Development Services
Planning / Building

February 17, 2021

Jim Minnick
DIRECTOR

UPDATED ORNI 30 RFP REPLACING PREVIOUSLY SENT RFP DATED FEBRUARY 3, 2021

Subject: **Request for Proposal – Environmental Impact Report (EIR) for the Brawley Solar Energy Facility, ORNI 30 LLC. CUP 20-0030/IS20-0041, APN 037-140-006-000 Project**
Project Applicant(s): ORNI 30, LLC

- Conditional Use Permit CUP (#20-0030)
- Water Supply Assessment (WSA)

Dear Consultant:

The Imperial County Planning & Development Services Department is soliciting proposals for the preparation of a comprehensive Environmental Impact Report (EIR) for the attached project: Conditional Use Permit (CUP #20-0030). **The Planning & Development Services Department** will act as the "Lead Agency" for the preparation of the EIR pursuant to the California Environmental Quality Act (CEQA). The successful consultant will work directly for the County Planning & Development Services Director in the preparation of the Draft and Final EIR.

The* Brawley Solar Energy Facility *project includes:

Conditional Use Permit #20-0030 which will allow for the development and operation of a 40 Megawatt (MW)/160 Megawatt hour (MWh) photovoltaic (PV) solar farm and 40 MW/160 Megawatt hour (MWh) battery energy storage system (BESS) on approximately 225 acres in Brawley, Imperial County (Project).

I. **The County hereby requests the following information; for each item (as appropriate), the hourly rate and estimated total hours for the specific task must be documented**.

a. Identified milestones representing specific tangible work products (tasks) to which payments by the County would be linked and become part of the legal contract. (Please note that all subsequent bills/invoices will be required to include both the identified milestones and percent completed).

b. All potential subcontractor(s) that will be utilized along with their estimated staff time and cost breakdown;

c. An estimated "not to exceed cost" to prepare the Drafts (DEIR) and Final Environmental (FEIR) documents;

d. Review the attached proposed Conditional Use Permit and make findings of consistency on the EIR,

e. Review and comment on the submittal of studies prepared by applicant and their consultant, and

f. Submittal of 1 CD and three (3) hard copies of proposal.

The only exception to the "not to exceed" cost shall be the response to public comments received as a result of the joint environmental document's circulation. If the County receives excessive comments on the draft document, then the costs will be determined on a "negotiated basis" when the draft document and comments on the project become available. Excessive comments are generally considered to be more than twenty (20) commenting agencies/individuals and/or over 150 comments that require answers other than "comment noted."

Also, proposals must incorporate the cost estimate for the printing of the Draft (DEIR) and Final environmental documents (EIR) for a minimum of copies. The first three (3) hard copies of DEIR & FEIR with Appendices and 1 CD are to be included within your estimate. Any additional copies, greater than (3), shall be prepared by you at cost.

801 Main St. El Centro, CA. 92243 (442) 265-1736 Fax (442) 265-1735 planninginfo@co.imperial.ca.us www.icpds.com

The proposal must provide that prior to any cost overruns; the consultant shall discuss **first and then seek written approval from the County Planning and Development Services Director, Jim Minnick** before such costs are incurred. Failure to get prior written approval may result in such costs being disallowed.

II. We request that you provide within your cost estimate for the EIR, a preparation of the following **studies, analysis and or peer reviews of studies** done for this EIR and studies prepared by the applicant and their consultant(s).

- Aesthetics (applicant will provide visualization and glare studies; will be complete in approximately 2-3 months)
- Agricultural Resources (include LESA Model)
- Air Quality & Greenhouse Gas Emissions Studies (applicant will provide AQ/GHG Report; will be complete in approximately 2 months)
- Alternatives
- Cumulative, Growth
- Climate Change/Energy Analysis (applicant will provide Energy Analysis; will be complete in approximately 2 months)
- Hazards, Hazardous Materials
- Hydrology/Water Quality
- Land Use
- Noise Study (applicant will provide; will be complete in approximately 2 months)
- Population and Housing
- Public Health & Safety
- Public Services
- Transportation/Circulation (applicant will provide Traffic Study; will be complete in approximately 1 month)
- Utilities and Service
- Findings for Project
- Mitigation, Monitoring & Reporting Program
- Biological resources (applicant will provide biological resources report and preliminary Jurisdictional Delineation; complete)
- Cultural Resources/Archeological Study (applicant will provide; complete)
- Geology and Soils
- Geotechnical Feasibility Study (applicant will provide; complete).
- Water Supply Assessment (applicant will provide; will be complete in approximately 2 months)
- Wildfire assessment

The EIR consultant will be expected to review studies submitted by applicant/consultants as a third-party review and determine whether or not they are adequate, need to be revised, updated or, in fact, be reproduced.

III. **The following format should be used in preparing the proposal; additional information/items may be used to further bolster your proposal:**

One page cover letter introducing your firm.

1. **Project Understanding**
2. **Project Team**
   - Identify all company and consultant team personnel who will work on the project and short description of their education and work experience.
   - Resumes of the prime and technical consultants should be included and can be attached to the proposal as an appendix.
   - Organization Charts-Elaborate organization charts are not necessary.

3. **Scope of Work**

- Describe the proposed tasks to accomplish the scope of work.
- Include deliverables, when applicable, for each task.
- Include all applicable site visits, scoping meetings, staff meetings and public hearings.
- Be specific regarding your approach to complete the CEQA noticing requirements.

4. **The tasks should be presented as follows:**

a. Project Initiation
Include research, site visit, data collection, CEQA notices, Notice of Preparation and Initial Study (NOP & IS), scoping meetings, EEC meeting, ALUC hearing.

b. Administrative Draft EIR (ADEIR)
Include mandatory CEQA sections, required and technical studies, peer review of applicant-prepared technical studies, number of revisions, meetings and coordination with County Staff;

c. Public Review Draft EIR (DEIR)
Include document preparation, CEQA notice, Scoping meeting, and coordination with County Staff;

d. Final EIR (FEIR)
Include document preparation, Response to Comments, CEQA notice, meetings, coordination with County Staff and attendance at Planning Commission and Board of Supervisors hearing;

e. Mitigation, Monitoring and Reporting Program
Include the preparation per CEQA identification of all mitigation measures, identification of all responsible parties, timing and enforcement;

f. CEQA Findings and Notice of Determination
Include the preparation per CEQA requirements;

g. Assumptions
Please provide a specific section for assumptions. Include your assumptions regarding travel time, mileage, public noticing, or anything else that needs clarification; and

h. Meetings
The number of meetings and hearings that are included in your proposal should be detailed under each task. Must include Planning Commission and Board of Supervisors.

5. **Proposed Schedule**

Provide the number of weeks for each task in tabular form from project initiation to public hearings, Planning Commission, and Board of Supervisors.

6. **Cost Estimate/Milestones**

- Provide a discussion of the proposed cost and any optional costs.
- Include a spread sheet that details your personnel, any subcontractors to be used, their estimated hours, and associated costs per task (can be attached as an appendix).
- A table of project milestones should be included in the Cost Estimate discussion.

7. **Consultant Selection Criteria**

a. **Understanding of the project:** the proposer should demonstrate understanding of key elements of the project and, accordingly, provide the names of personnel and their expertise.

b. **Approach to the project:** The selection process will evaluate the extent to which the proposer has recognized and identified special circumstances on the project and whether the proposer has provided logical approach to tasks and issues of the project.

c. **Professional qualifications necessary for satisfactory performance:** The project manager and key team members should be qualified to perform the work categories on the project; and the proposer's knowledge of standards and procedures will be examined.

d. **Specialized experience and technical competence in the type of work required:** The proposer should provide information about comparable projects they have been involved with and/or successfully accomplished. Past performance on contracts with government agencies and private industry along with past performance evaluations; and the capacity to accomplish this work in the required time will be evaluated.

III. **It is requested that you disclose all conflicts** or potential conflict that you may have if you are submitting a proposal. The conflict by the County envisions, at the very minimum, current/ongoing or previous contracts (within the past year) with the applicant(s); this also includes current technical studies that either are or have been prepared for the applicant(s) within the last year.

IV. **Not providing the extent of information (including hourly rate and total estimated hours per task) may negatively impact the evaluation of your proposal.**

If you are interested in submitting a proposal, please submit it to the Director at Imperial County Planning & Development Services Department, 801 Main Street, El Centro, CA, 92243, **no later than March 20, 2021 at 5:00 p.m.** This must be postmarked on or before this date and time.

Please note that it is **not necessary to present us with voluminous references or individualized background data** on persons or personnel within your organization. We may require this at a later date. We look forward to receiving your submittal.

V. **The previously approved Project ORNI 19 ORMAT NEVADA geothermal project located west of proposed solar project is available for review on the County's web-site at:** https://www.icpds.com/planning/environmental-impact-reports/final-eirs

Should you have any questions or comments, please feel free to contact the assigned Planner for this project, David Black IV (442) 265-1736, extension 1746, or via-email at davidblack@co.imperial.ca.us.

Sincerely,

Jim Minnick, Director
Planning & Development Services Department

Attachments: CUP Project Application, Project Description and Site Plans

cc: Tony Rouhotas, County Executive Officer
Adam Crook, County Counsel
Jim Minnick, Director of Planning and Development Services
Michael Abraham, AICP, Asst. Director of Planning & Development Services
Project File: CUP 20-0008, APN 037-140-006-000

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APPENDIX A – Project Description

glass. Installation of the PV arrays would include installation of mounting posts, module rail assemblies, PV modules, inverters, transformers and buried electrical conductors. Concrete would be required for the footings, foundations and pads for the transformers and substation work. Tracker foundations would be comprised of either driven or vibrated steel posts/pipes, and/or concrete in some places (depending on soil and underground conditions).

All access to the Project site would be located off Best Avenue. Access roads would be constructed with an all-weather surface, to meet the County Fire Department's standards, and lead to a locked gate that can be opened by any emergency responders. An all-weather surface access road, to meet the County's standards, would surround the perimeter of the Project site, as well as around solar blocks no greater than 500 by 500 feet. The Project would be required to conform to all California Public Utilities Commission (CPUC) safety standards. The Project site perimeter would be fenced with a 6-foot high chain link security fence topped with barbed wire, with gates at the access points.

1.3.1 Gen-Tie Line

The Project would connect to a switchyard located in the southwest corner Project site and then routed through the BESS building for energy storage. Power would then be transferred to the North Brawley Geothermal Power Plant substation via a 1.6-mile-long double circuit 13.8 and 92 kV gen-tie line with 66-foot-high poles to interconnect to the Imperial Irrigation District (IID) at the North Brawley 1 substation located at Hovley Road and Andre Road, southwest of the Project site. The transmission line would span the New River. A 12-inch diameter conduit railroad undercrossing would connect the PV arrays from the western side of the railroad tracks to the inverters on the eastern side.

1.3.2 BESS Building

The Project's BESS component will be housed in a 100,800 square-foot BESS building at the southwestern corner of the Project site. The BESS building will consist of 12 banks of racks, each having 40 rack units capable of 372.7 kWh. Each bank of batteries will be supported by an inverter and transformer located on the outside of the building, along the edges. To support liquid cooling of the system, up to two 200-ton air cooled screw chillers may be needed adjacent to the building. All batteries will be lithium-ion based capable of storing 40 MW/160 MWh.

1.3.3 Fiberoptic Cable and Microwave Tower

A proposed fiberoptic line from the Project substation would be connected with the existing North Brawley substation approximately 1.6 miles to the southwest, which is required to connect the Project substation to the region's telecommunications system. Overall, this would provide Supervisory Control and Data Acquisition (SCADA), protective relaying, data transmission, and telephone services for the proposed Project substation and associated facilities. New telecommunications equipment would be installed at the Project substation within the unmanned Mechanical and Electrical Equipment Room (MEER). The proposed fiber optic telecommunications cable, once past the POI, would utilize existing transmission lines to connect to the North Brawley substation. The length of this proposed fiber optic telecommunications cable route would be approximately 1.6 miles. Alternatively, a microwave tower 40 to 100-feet tall could replace the need for a fiberoptic line to transmit data offsite. If selected, this microwave tower would be located within the Project substation footprint.

Equipment	Use
Air compressor	Operate air tools
Air tampers	Compact soil around structure foundations
Concrete trucks	Pour concrete
Dump trucks	Haul excavated materials/import backfill
Fuel and equipment fluid trucks	Refuel and maintain vehicles
Water trucks	Suppress dust and fires

1.4.2 Construction Schedule, Sequence and Phasing

Construction is anticipated to start in quarter four of 2021 and would take approximately 6-9 months to complete. Construction would commence only after all required permits and authorizations have been secured. Construction would generally occur during daylight hours, Monday through Friday. However, non- daylight work hours may be necessary to make up schedule deficiencies, or to complete critical construction activities. For example, during hot weather, it may be necessary to start work earlier to avoid pouring concrete during high ambient temperatures. If construction is to occur outside of the County's specified working hours, permission in writing will be sought at the time. The County's construction equipment operation shall be limited to the hours of 7 a.m. to 7 p.m., Monday through Friday, and 9 a.m. to 5 p.m. Saturday. No commercial construction operations are permitted on Sunday or holidays.

Construction of the Project would occur in phases beginning with site preparation and grading and ending with equipment setup and commencement of commercial operations. Overall, construction would consist of three major phases over a period of approximately 6-9 months:

1. Site Preparation, which includes clearing grubbing, grading, service roads, fences, drainage, and concrete pads; (1 month)
2. PV system installation and testing, which includes installation of mounting posts, assembling the structural components, mounting the PV modules, wiring; (7 months) and
3. Site clean-up and restoration. (1 month)

1.4.2.1 Site Preparation

Project construction would include the renovation of existing dirt roads to all-weather surfaces (to meet the County standards) from Best Avenue to the City of Brawley wastewater treatment plant. Construction of the proposed Project would begin with clearing of existing brush and installation of fencing around the Project boundary.

Fencing will consist of a six-foot chain-link fence topped with barbed wire. A 20-foot road of engineering-approved aggregate will surround the site within the fencing. Approximately 20,000 to 30,000 gallons of water per day would initially be required for grading, dropping to much less for the remainder of the Project construction. Construction water needs would be limited to earthwork, soil conditioning, dust suppression, and compaction efforts. Water would be obtained from a ground storage tank existing onsite which fills from the Best Canal along the eastern property boundary. Material and equipment staging areas would be established on-site within an approximate 4-acre area. The staging area would include an air-conditioned temporary construction office, a first-aid station and other temporary facilities including, but not limited to, sanitary facilities, worker parking, truck loading and unloading, and a designated area

1.4.2.3 Clean-up and Demobilization

After construction is complete, all existing roads would be left in a condition equal to or better than their preconstruction condition. All other areas disturbed by construction activities would be recontoured and decompacted.

Waste materials and debris from construction areas would be collected, hauled away, and disposed of at approved landfill sites. Cleared vegetation would be shredded and distributed over the disturbed site as mulch and erosion control or disposed of offsite, depending on agency agreements. Rocks removed during foundation excavation would be redistributed over the disturbed site to resemble adjacent site conditions. Interim reclamation would include also re-contouring of impacted areas to match the surrounding terrain, and cleaning trash out of gullies. Equipment used could include a blader, front-end loader, tractor, and a dozer with a ripper.

A covered portable dumpster would be kept on site to contain any trash that can be blown away. After completion of the proposed Project, the project engineer would complete a final walk-through and note any waste material left on site and any ruts or terrain damage or vegetation disturbance that has not been repaired. The construction contractor would be given this list and final payment would not be received until all items are completed.

1.5 PROJECT OPERATION AND MAINTENANCE ACTIVITIES

Once fully constructed, the Project would be operated on an unstaffed basis and be monitored remotely, with periodic on-site personnel visitations for security, maintenance and system monitoring. Therefore, no full-time site personnel would be required on-site during operations and employees would only be on-site up to four times per year to wash the panels. As the Project's PV arrays produce electricity passively, maintenance requirements are anticipated to be very minimal. Any required planned maintenance activities would generally consist of equipment inspection and replacement and would be scheduled to avoid peak load periods. Any unplanned maintenance would be responded to as needed, depending on the event.

Estimated annual water consumption for operation and maintenance of the proposed Project, including periodic PV module washing, would be approximately 0.81-acre feet annually (af/y), which would be trucked to the Project site as needed.

1.6 PROJECT DECOMMISSIONING

Solar equipment has a lifespan of approximately 20 to 25 years. At the end of the Project's operation term, the applicant may determine that the Project should be decommissioned and deconstructed. Should the Project be decommissioned, concrete footings, foundations, and pads would be removed using heavy equipment and recycled at an off-site location. All remaining components would be removed, and all disturbed areas would be reclaimed and recontoured.

1.7 REQUIRED PERMITS AND APPROVALS

1.7.1 Lead Agency Approval

Imperial County Planning Department would be the lead agency for the proposed Project.

BESS Technology – Brawley Solar Project

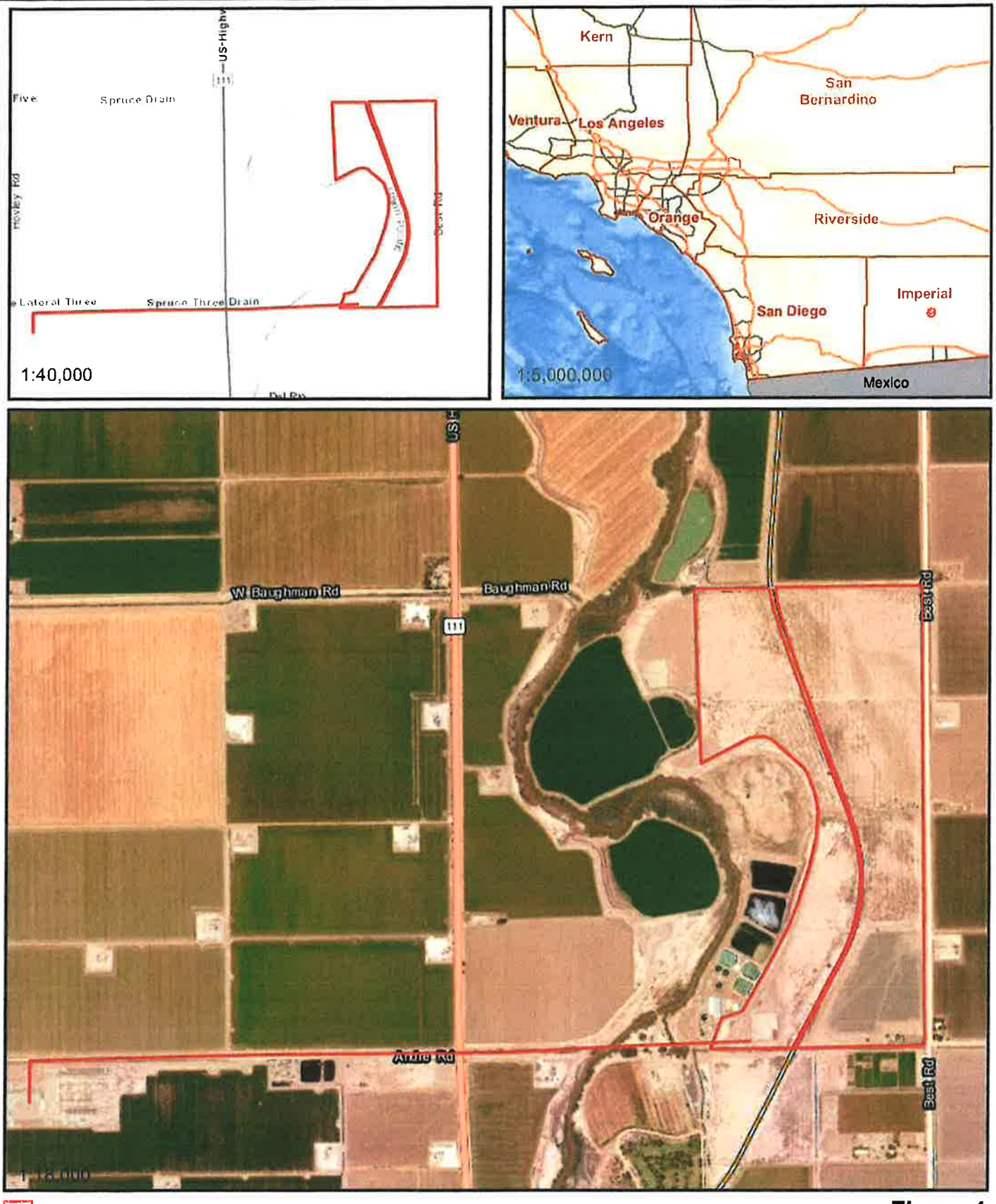
BESS is currently proposed to utilize CATL manufactured indoor equipment, consisting of 280-Ah-LFP liquid cooled racks (Product Name R852280-P). To meet the Project BESS sizing, the building will contain up to 12 banks of racks, each having 40 rack units capable of 372.7 kWh. Each rack unit is approximately 36.5 inches wide, 46.6 inches deep, and 91.7 inches tall.
Each bank of batteries will be supported by an inverter and transformer located on the outside of the building, along the edges. Exact sizing and units are being evaluated at this time.
To support the liquid cooling, up to 2 200-ton air cooled screw chillers may be needed adjacent to the building. Each of the chiller units is approximately 335.7 inches long, 87.8 inches wide, and 98.4 inches tall.

Regarding more specific specs for the equipment itself;

Chillers – With the batteries being liquid cooled, most of the cooling will be via the chillers. These are just focusing on cooling the liquid that flows around the battery modules. Slight correction, now assuming 3 x 200 ton ACRB 200 Chillers from Trane. Email from the rep indicated a meager 70 dBA at 10 meters from center of unit so not the worst.
HVAC – likely need some HVAC for supplemental cooling of the building given high solar loading, but I don't have anything spec'd out yet. Can try to determine rough calculations if needed.
Inverters – the engineering team is currently digging on the SMA Inverter skids attached which are multipurpose units with inverter/transformers on a skid (Model MVPS 4600-S2-US). Assuming need ~26 skids around the building which will be fun to site. Noise is unlisted, but similar items have been reporting around 67 dBA at 10 meters.

Below is the sound data for the 200 and the 250 ACR chillers from 10 meters from the center of the chiller (on the side). The two tables represent 100% and 50% load capacities, respectively to show how different levels are at certain operating points.

	Octaves								
Unit Size	63	125	250	500	1000	2000	4000	8000	dBA
AHRI Rating Point - 100% Load									
150	62	65	62	59	66	60	52	44	68
165	64	66	63	60	68	62	52	45	70
180	64	66	63	60	68	61	53	46	69
200	64	67	64	61	68	61	54	47	70
225	64	67	64	61	67	61	53	49	69
250	64	67	64	61	68	62	54	48	70
275	65	68	64	62	68	62	54	49	70
300	65	68	65	63	69	63	55	49	71
AHRI Rating Point - 50% Load									
150	57	57	53	53	54	48	43	32	57
165	57	53	53	52	54	48	43	32	57
180	57	54	56	52	55	49	43	32	58
200	57	53	53	49	60	49	43	33	61
225	58	58	55	52	54	50	43	47	58
250	59	58	56	57	58	51	44	48	60
275	59	57	55	60	55	52	44	48	61
300	59	55	56	58	57	52	44	46	61



Project Location
Gen-Tie Line

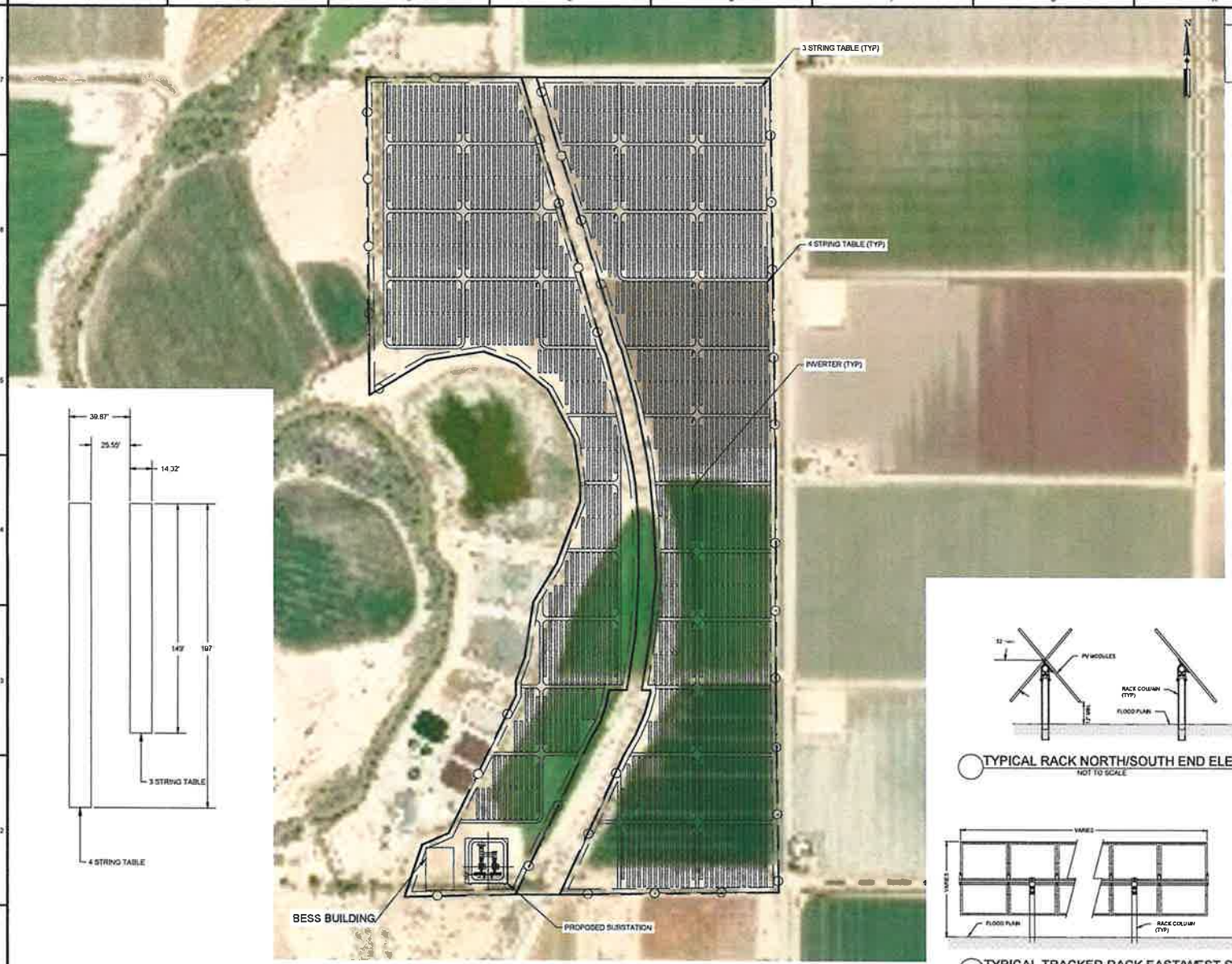
N

0 500 1,000 2,000
Feet

Figure 1
Brawley Solar Project
Project Location & Vicinity

Name: 21267 PLAN Fig 1 Project Location and Vicinity.Mxd
Print Date: 11/9/2020, Author: pcarlos

CHAMBERS GROUP



PV SITE LAYOUT - PLAN VIEW

300' 150' 0 300' 600' 900'

SCALE: 1"=300'

PROPOSED TRACKER LAYOUT

Scale: 1:30

TYPICAL RACK NORTH/SOUTH END ELEVATION

NOT TO SCALE

TYPICAL TRACKER RACK EAST/WEST SIDE ELEVATION

NOT TO SCALE

LEGEND

- BOUNDARY
- SITE FENCE
- 30' OFFSET

ARRAY SUMMARY	
SYSTEM SIZE GROSS (kW AC):	45,448
SYSTEM SIZE NET (kW AC): *	43,812
OVER BUILD %	13.6%
SYSTEM SIZE (kW DC):	46,394
POI VOLTAGE (kV AC):	138
SYSTEM VOLTAGE (VDC):	1,500
DC/AC RATIO:	1.16
INVERTER SPEC #:	SMA 4000 (3496 KVA @ 40°C)
INVERTER TOTAL QUANTITY:	13
MODULE TYPE:	CRYSTALLINE
MODULE SPEC:	CANADIAN SOLAR EH4XU
MODULE WATTAGE (w)	435
MODULE TOTAL QUANTITY:	106,652
MODULES PER STRING:	28
TOTAL # OF STRINGS:	3,809
RACKING TYPE:	FTC
AZIMUTH (deg):	180
ROW SPACING (ft/m):	35.27/10.75
RACKING ROTATION (deg):	+/- 62
GROUND COVER RATIO: %	40.6%
SITE LATITUDE:	33.020034
SITE LONGITUDE:	-115.509479
SITE ACCESS GATES:	
ACREAGE (FENCE):	225
MV CABLE LENGTH (ft)	

* = .95PF, 3% AC LOSS. PLANT CONTROLLER LIMIT TO 40MW

GENERAL NOTES:

1. PROPOSED ROAD SHALL BE 20' WIDE WITH ENGINEERING APPROVED AGGREGATE
2. PROPOSED FENCE SHALL BE 8' TALL WITH 1' OF 3 STRAND BARBED WIRE
3. PROPOSED SITE CONSTRUCTION ENTRANCE SHALL BE 30' WIDE WITH PEDESTRIAN ENTRANCE

INFO USED TO PREPARE THIS DWG:

1. SITE BOUNDARY: ORNI Owned.KMZ
2. TOPO SURVEY: EARTH POINT TOPO MAP (USGS QUADRANGLES)
3. WETLANDS: FWS WETLANDS AND RIPARIAN
4. FEMA: NATIONAL FLOOD HAZARD LAYER (FEMA)
5. AERIAL IMAGERY: VIA GOOGLE EARTH PRO

FastGrid, LLC
225 E Germann Road
Suite 101
Gilbert, AZ 85297

REV	DESCRIPTION	DATE
1	CHANGED TRACKERS, ADDED ROADS	09/18/2020

PROJECT NAME:
BRAWLEY
PV PLANT + BESS40MW/160MWh

PROJECT ADDRESS:
NORTH BEST AVENUE
BRAWLEY, CA
92227

SEAL:

DATE: 09/18/2020

PROJECT #: 200016.05

DRAWN BY: ND

CHECKED BY: EH

SHEET NAME:
OVERALL SITE PLAN

SHEET #:
E-100

PRELIMINARY - NOT FOR CONSTRUCTION

PLOT DATE: Friday, September 18, 2020

PLOT BY: Noah Dabney

SAVED BY: noah.dabney

LOCATION: S:_ORNI_PROJECTS\200016.05 - ORNI37 - BRAWLEY SOLAR\05 ENGINEERING\DWGS\E-100 OVERALL SITE PLAN