GLENN COUNTY Planning & Community Development Services Agency

225 North Tehama Street Willows, CA 95988 530.934.6540 www.countyofglenn.net



Mardy Thomas, Director

CCE Construction, Inc. 668 N Coast Highway #272 Laguna Beach, CA 92651 (949) 632-8894 ben@conceptcleanenergy.com

January 29, 2024

RE: Site Plan Review 2023-010, CCE Construction Inc., Solar APN: 024-100-017

To Whom It May Concern,

On December 27th 2023, the Glenn County Planning & Community Development Services Agency received your application for a Site Plan Review. This project is located in the "AE-40" (Exclusive Agriculture) zoning district and is an allowed use with an approved Site Plan Review.

On January 29, 2024, the Glenn County Planning & Community Development Services Agency approved the Site Plan Review. Included with the Staff Report is a copy of the Compliance Requirements.

<u>Please sign the Compliance Requirements as indicated and return by email, or send to</u> the Glenn County Planning & Community Development Services Agency, at 225 N Tehama Street, Willows, CA 95988.

Please note that this is not a building permit. For information on acquiring a building permit, contact the Glenn County Building Inspection Division at (530) 934-6546.

Sincerely,

Courtney Paget Assistant Planner <u>cpaget@countyofglenn.net</u>

GLENN COUNTY Planning & Community Development Services Agency

225 North Tehama Street Willows, CA 95988 530.934.6540 www.countyofglenn.net



Mardy Thomas, Director

STAFF REPORT

- DATE: January 29, 2024
- TO: Mardy Thomas, Director
- FROM: Courtney Paget, Assistant Planner

RE: Site Plan Review 2023-010, CCE Construction Inc., Solar

Attachments:

- 1. Compliance Requirement(s)
- 2. Agency Comments
- 3. Request for Review
- 4. Application Documents
- 5. Site Plan

1 PROJECT SUMMARY

CCE Construction Inc. has applied for SPR2023-010 to install a 501.43 DC grid tied solar photovoltaic solar array including 1,223 PV modules.

The project is located west of County Road M, north of County Road 30, south of County Road 27, and east of County Road 99 within the unincorporated area of Glenn County, California.

The Assessor's Parcel Number (APN) for the 273.07± acre property is 024-100-017. The site is zoned "AE-40" Exclusive Agricultural Zone (36-acre, minimum parcel size) and is designated "Intensive Agriculture" in the Glenn County General Plan.

1.1 **RECOMMENDATIONS**

Staff recommends that the Director find that this project qualifies as a statutory exemption within section 15268 of the California Environmental Quality Act.

Staff also recommends that the Director approve the Site Plan Review with the Findings as presented in the Staff Report and the Compliance Requirement as attached.

2 <u>ANALYSES</u>

The proposed project is consistent with the land use in this area. This area of Glenn County is agricultural and the proposed project is a permitted use with an approved Site Plan Review. A Site Plan Review is required prior to construction to ensure compliance with all the requirements of the Glenn County Code.

This proposal will not have significant accompanying traffic; the property is used for agriculture and will not be altered with this proposal. Surrounding county roads are reasonably adequate to safely accommodate the proposed project (Finding 5).

2.1 ENVIRONMENTAL DETERMINATION

This project as proposed is not anticipated to introduce potentially significant impacts to the environment.

Site plan reviews are statutorily exempt pursuant to Section 15268, "Ministerial Projects", of the Guidelines of the California Environmental Quality Act (CEQA). Article 18 (Statutory Exemptions), §15268 (a) & (c) (Ministerial Projects).

Site plan reviews, outlined in Section 25.13 of the Glenn County Code, are deemed a ministerial project within Glenn County Title 15, Unified Development Code (Title 15, Division 2, Part 1).

2.2 GENERAL PLAN AND ZONING CONSISTENCY

The site is designated "Intensive Agriculture" in the Glenn County General Plan and is zoned "AE-40" Exclusive Agricultural Zone (36-acre, minimum parcel size). The site is in an area of existing agricultural uses and the proposed solar array is a permitted use within the "AE-40" zone with an approved Site Plan Review (Glenn County Chapter 15.86.030. A.) (Finding 1). The proposal will not adversely affect the surrounding uses in the area and will not adversely affect the General Plan (Finding 4).

2.2.1 "AE" EXCLUSIVE AGRICULTURAL ZONE (Glenn County Code Chapter 15.86):

Permitted Uses (Glenn County Code §15.86.030)

A. Permits Required

The proposed solar array is over $\frac{1}{2}$ acre in size. Solar arrays with a footprint larger than $\frac{1}{2}$ (0.5) acre, but a footprint less than 5 acres (and an accessory use) require a Site Plan Review (§15.86.030.D).

G. General Requirements

All power generation uses allowed in an Agriculture or Williamson Act zoning district, as defined by Section 15.86.030.A, shall comply with Chapter 15.58 of this Title. The applicant has applied for a Site Plan Review as required by Section 15.86.030.A and provided all information necessary to review the proposal.

Maximum Building Height (Glenn County Code §15.33.060):

The peak height of the proposed structure is less than the maximum height requirement for the Exclusive Agriculture Zone of 35 feet per Glenn County Code §15.33.060.A.

Minimum Distance Between Structures (Glenn County Code §15.47.070):

There are other structures on the property but they exceed 100 feet from the project site; in addition, the Building Division reviews the plans to verify compliance with Glenn County Code §15.47.070.B.

Minimum Yard Requirements (Glenn County Code §15.33.080):

The proposed front, side, and rear yards exceed 30 feet; therefore, the minimum yard requirements for the Exclusive Agricultural Zone will be met.

2.3 GENERAL PROVISIONS

Flood Zone Designation:

The project is located within Flood Zone "X" (unshaded). 06021C0400D, dated August 4, 2010 issued by the Federal Emergency Management Agency (FEMA).

Flood Zone "X" (unshaded) consists of areas of minimal risk outside the 1-percent and 0.2-percent annual chance floodplains. No base flood elevations or base flood depths are shown within this zone.

Code Violations:

No records of violations were noted on the property; therefore, the proposed building and Site Plan Review are compliant with Glenn County Code §15.13.050.F (Finding 6).

2.5 AGENCY COMMENTS

Department of Conservation

The California Department of Conservation, Geologic Energy Management Division was provided the application information regarding the proposal and responded with the following:

Comment:

- 1. Our records indicate that there are 1 known oil or gas wells located within the project boundary as identified in the application.
- 2. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements near oil or gas wells, the Division recommends that information regarding the above identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder or inclusion in the title information of the subject real property.
- 3. The Division recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

Environmental Health

The Glenn County Environmental Health Department was provided the application information regarding the proposal and recommended it be found complete for further processing. They also responded with the following:

Comment:

1. Ground mount solar array will be servicing an existing agriculture well pump.

Pacific Gas and Electric Company

Pacific Gas and Electric Company (PG&E) was provided the application information regarding the proposal and responded with the following impact statements.

Comment:

 The proposed project's plan is within the same vicinity of PG&E's existing electric distribution facilities that impact this property. PG&E operates electric distribution facilities on this property. The Company intends to keep rights-of-way clear of all buildings and structures within **15** feet from either side of the pole line that might have an adverse effect on the Company facilities. Your proposed solar structure design may impact PG&E's ability to maintain these facilities.

3 NOTICE TO APPLICANT/AGENT

This site plan review is not a building permit. It is the applicant's responsibility to secure the necessary permits in all affected federal, state, and local agencies and submit copies of such permits to the Planning & Community Development Services Agency.

If upon approval of this site plan review any problem, nuisance, or health hazard arises from the operation allowed by this review, the director shall determine the need to revise or modify the use or require additional Compliance Requirements.

In addition to the staff report and Compliance Requirement, the applicant's and his/her technical or project management representative's attention is directed to the attached memoranda from agencies reflecting their comments on reviewing the application. The items noted are a guide to assist in meeting the requirements of applicable government codes. Memoranda may also note any unusual circumstances that require special attention. The items listed are a guide and not intended to be a comprehensive summary of all codified requirements or site-specific requirements.

3.1 PERMIT ISSUANCE AND APPEAL PERIOD (GLENN COUNTY CODE §15.13.060)

Site plan reviews shall be effective upon issuance, unless within ten (10) calendar days of a decision by the Director, the decision is appealed as provided for in Section 15.05.010. In the case of an appeal being filed, the site plan review permit shall not have any force or effect until a decision is made by the Approving Authority on such an appeal.

Additionally, site plan review permit approvals shall not be valid until the permittee has agreed in writing to each term and requirement thereof.

4 <u>FINDINGS</u>

As described and found in this report, and in accordance with Glenn County Code Section 15.13.050.

Finding 1:

The proposed use is a permitted and allowed use in the "AE-40" zoning district.

Finding 2:

The site for the project is adequate in size, shape, location, and physical characteristics to accommodate the proposed project.

Finding 3:

Based on responsible agency review of the project, there are adequate public or private services, including but not limited to fire protection, water supply, sewage disposal, and storm drainage.

Finding 4:

The project is in conformance with the applicable provisions and policies of Title 15 of the Glenn County Code and the Glenn County General Plan.

Finding 5:

The county roads which serve the project are reasonably adequate to safely accommodate the proposed project.

Finding 6:

After searching county records, no violation of the Glenn County Code currently exists on the property.

COMPLIANCE REQUIREMENTS

Site Plan Review 2023-010, CCE Construction Inc.

Solar Array

APN: 024-100-017

Compliance Requirement: Site Plan

1. That the area of operation shall be confined to those areas as shown on the site plan as submitted and on file at the Glenn County Planning & Community Development Services Agency.

<u>Compliance Requirement: California Department of Conservation, Geologic Energy</u> <u>Management Division</u>

2. That any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. That the appropriate authorities are notified if soil containing significant amounts of hydrocarbons is discovered during development.

Compliance Requirements: Pacific Gas and Electric Company

3. That the project site keeps the right-of-way clear of all buildings and structures within 15 feet of either side of the pole line.

Acknowledgment:

I hereby declare that I have read the foregoing requirements that they are in fact the requirements that were imposed upon the granting of this permit, and that I agree to abide fully by said conditions. Additionally, I have read the staff report and I am aware of codified county, state, and/or federal standards and regulation that shall be met with the granting of this permit.

Signature:		Date:	
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Ben Earl for CCE Construction INC, Applicant



December 27, 2023

Courtney Paget County of Glenn 225 North Tehama St Willows, CA95988

Ref: Gas and Electric Transmission and Distribution

Dear Courtney Paget,

Thank you for submitting SPR2023-10 plans for our review. PG&E will review the submitted plans in relationship to any existing Gas and Electric facilities within the project area. If the proposed project is adjacent/or within PG&E owned property and/or easements, we will be working with you to ensure compatible uses and activities near our facilities.

Attached you will find information and requirements as it relates to Gas facilities (Attachment 1) and Electric facilities (Attachment 2). Please review these in detail, as it is critical to ensure your safety and to protect PG&E's facilities and its existing rights.

Below is additional information for your review:

- 1. This plan review process does not replace the application process for PG&E gas or electric service your project may require. For these requests, please continue to work with PG&E Service Planning: <u>https://www.pge.com/en_US/business/services/building-and-renovation/overview/overview.page</u>.
- If the project being submitted is part of a larger project, please include the entire scope of your project, and not just a portion of it. PG&E's facilities are to be incorporated within any CEQA document. PG&E needs to verify that the CEQA document will identify any required future PG&E services.
- 3. An engineering deposit may be required to review plans for a project depending on the size, scope, and location of the project and as it relates to any rearrangement or new installation of PG&E facilities.

Any proposed uses within the PG&E fee strip and/or easement, may include a California Public Utility Commission (CPUC) Section 851 filing. This requires the CPUC to render approval for a conveyance of rights for specific uses on PG&E's fee strip or easement. PG&E will advise if the necessity to incorporate a CPUC Section 851 filing is required.

This letter does not constitute PG&E's consent to use any portion of its easement for any purpose not previously conveyed. PG&E will provide a project specific response as required.

Sincerely,

Plan Review Team Land Management



Attachment 1 – Gas Facilities

There could be gas transmission pipelines in this area which would be considered critical facilities for PG&E and a high priority subsurface installation under California law. Care must be taken to ensure safety and accessibility. So, please ensure that if PG&E approves work near gas transmission pipelines it is done in adherence with the below stipulations. Additionally, the following link provides additional information regarding legal requirements under California excavation laws: <u>https://www.usanorth811.org/images/pdfs/CA-LAW-2018.pdf</u>

1. Standby Inspection: A PG&E Gas Transmission Standby Inspector must be present during any demolition or construction activity that comes within 10 feet of the gas pipeline. This includes all grading, trenching, substructure depth verifications (potholes), asphalt or concrete demolition/removal, removal of trees, signs, light poles, etc. This inspection can be coordinated through the Underground Service Alert (USA) service at 811. A minimum notice of 48 hours is required. Ensure the USA markings and notifications are maintained throughout the duration of your work.

2. Access: At any time, PG&E may need to access, excavate, and perform work on the gas pipeline. Any construction equipment, materials, or spoils may need to be removed upon notice. Any temporary construction fencing installed within PG&E's easement would also need to be capable of being removed at any time upon notice. Any plans to cut temporary slopes exceeding a 1:4 grade within 10 feet of a gas transmission pipeline need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

3. Wheel Loads: To prevent damage to the buried gas pipeline, there are weight limits that must be enforced whenever any equipment gets within 10 feet of traversing the pipe.

Ensure a list of the axle weights of all equipment being used is available for PG&E's Standby Inspector. To confirm the depth of cover, the pipeline may need to be potholed by hand in a few areas.

Due to the complex variability of tracked equipment, vibratory compaction equipment, and cranes, PG&E must evaluate those items on a case-by-case basis prior to use over the gas pipeline (provide a list of any proposed equipment of this type noting model numbers and specific attachments).

No equipment may be set up over the gas pipeline while operating. Ensure crane outriggers are at least 10 feet from the centerline of the gas pipeline. Transport trucks must not be parked over the gas pipeline while being loaded or unloaded.

4. Grading: PG&E requires a minimum of 36 inches of cover over gas pipelines (or existing grade if less) and a maximum of 7 feet of cover at all locations. The graded surface cannot exceed a cross slope of 1:4.

5. Excavating: Any digging within 2 feet of a gas pipeline must be dug by hand. Note that while the minimum clearance is only 24 inches, any excavation work within 24 inches of the edge of a pipeline must be done with hand tools. So to avoid having to dig a trench entirely with hand tools, the edge of the trench must be over 24 inches away. (Doing the math for a 24 inches



wide trench being dug along a 36 inch pipeline, the centerline of the trench would need to be at least 54 inches [24/2 + 24 + 36/2 = 54] away, or be entirely dug by hand.)

Water jetting to assist vacuum excavating must be limited to 1000 psig and directed at a 40° angle to the pipe. All pile driving must be kept a minimum of 3 feet away.

Any plans to expose and support a PG&E gas transmission pipeline across an open excavation need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

6. Boring/Trenchless Installations: PG&E Pipeline Services must review and approve all plans to bore across or parallel to (within 10 feet) a gas transmission pipeline. There are stringent criteria to pothole the gas transmission facility at regular intervals for all parallel bore installations.

For bore paths that cross gas transmission pipelines perpendicularly, the pipeline must be potholed a minimum of 2 feet in the horizontal direction of the bore path and a minimum of 24 inches in the vertical direction from the bottom of the pipe with minimum clearances measured from the edge of the pipe in both directions. Standby personnel must watch the locator trace (and every ream pass) the path of the bore as it approaches the pipeline and visually monitor the pothole (with the exposed transmission pipe) as the bore traverses the pipeline to ensure adequate clearance with the pipeline. The pothole width must account for the inaccuracy of the locating equipment.

7. Substructures: All utility crossings of a gas pipeline should be made as close to perpendicular as feasible (90° +/- 15°). All utility lines crossing the gas pipeline must have a minimum of 24 inches of separation from the gas pipeline. Parallel utilities, pole bases, water line 'kicker blocks', storm drain inlets, water meters, valves, back pressure devices or other utility substructures are not allowed in the PG&E gas pipeline easement.

If previously retired PG&E facilities are in conflict with proposed substructures, PG&E must verify they are safe prior to removal. This includes verification testing of the contents of the facilities, as well as environmental testing of the coating and internal surfaces. Timelines for PG&E completion of this verification will vary depending on the type and location of facilities in conflict.

8. Structures: No structures are to be built within the PG&E gas pipeline easement. This includes buildings, retaining walls, fences, decks, patios, carports, septic tanks, storage sheds, tanks, loading ramps, or any structure that could limit PG&E's ability to access its facilities.

9. Fencing: Permanent fencing is not allowed within PG&E easements except for perpendicular crossings which must include a 16 foot wide gate for vehicular access. Gates will be secured with PG&E corporation locks.

10. Landscaping: Landscaping must be designed to allow PG&E to access the pipeline for maintenance and not interfere with pipeline coatings or other cathodic protection systems. No trees, shrubs, brush, vines, and other vegetation may be planted within the easement area. Only those plants, ground covers, grasses, flowers, and low-growing plants that grow unsupported to a maximum of four feet (4') in height at maturity may be planted within the easement area.



11. Cathodic Protection: PG&E pipelines are protected from corrosion with an "Impressed Current" cathodic protection system. Any proposed facilities, such as metal conduit, pipes, service lines, ground rods, anodes, wires, etc. that might affect the pipeline cathodic protection system must be reviewed and approved by PG&E Corrosion Engineering.

12. Pipeline Marker Signs: PG&E needs to maintain pipeline marker signs for gas transmission pipelines in order to ensure public awareness of the presence of the pipelines. With prior written approval from PG&E Pipeline Services, an existing PG&E pipeline marker sign that is in direct conflict with proposed developments may be temporarily relocated to accommodate construction work. The pipeline marker must be moved back once construction is complete.

13. PG&E is also the provider of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E's facilities must be reviewed and approved by PG&E to ensure that no impact occurs which may endanger the safe operation of its facilities.



Attachment 2 – Electric Facilities

It is PG&E's policy to permit certain uses on a case by case basis within its electric transmission fee strip(s) and/or easement(s) provided such uses and manner in which they are exercised, will not interfere with PG&E's rights or endanger its facilities. Some examples/restrictions are as follows:

1. Buildings and Other Structures: No buildings or other structures including the foot print and eave of any buildings, swimming pools, wells or similar structures will be permitted within fee strip(s) and/or easement(s) areas. PG&E's transmission easement shall be designated on subdivision/parcel maps as "**RESTRICTED USE AREA – NO BUILDING.**"

2. Grading: Cuts, trenches or excavations may not be made within 25 feet of our towers. Developers must submit grading plans and site development plans (including geotechnical reports if applicable), signed and dated, for PG&E's review. PG&E engineers must review grade changes in the vicinity of our towers. No fills will be allowed which would impair ground-to-conductor clearances. Towers shall not be left on mounds without adequate road access to base of tower or structure.

3. Fences: Walls, fences, and other structures must be installed at locations that do not affect the safe operation of PG&'s facilities. Heavy equipment access to our facilities must be maintained at all times. Metal fences are to be grounded to PG&E specifications. No wall, fence or other like structure is to be installed within 10 feet of tower footings and unrestricted access must be maintained from a tower structure to the nearest street. Walls, fences and other structures proposed along or within the fee strip(s) and/or easement(s) will require PG&E review; submit plans to PG&E Centralized Review Team for review and comment.

4. Landscaping: Vegetation may be allowed; subject to review of plans. On overhead electric transmission fee strip(s) and/or easement(s), trees and shrubs are limited to those varieties that do not exceed 10 feet in height at maturity. PG&E must have access to its facilities at all times, including access by heavy equipment. No planting is to occur within the footprint of the tower legs. Greenbelts are encouraged.

5. Reservoirs, Sumps, Drainage Basins, and Ponds: Prohibited within PG&E's fee strip(s) and/or easement(s) for electric transmission lines.

6. Automobile Parking: Short term parking of movable passenger vehicles and light trucks (pickups, vans, etc.) is allowed. The lighting within these parking areas will need to be reviewed by PG&E; approval will be on a case by case basis. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications. Blocked-up vehicles are not allowed. Carports, canopies, or awnings are not allowed.

7. Storage of Flammable, Explosive or Corrosive Materials: There shall be no storage of fuel or combustibles and no fueling of vehicles within PG&E's easement. No trash bins or incinerators are allowed.



8. Streets and Roads: Access to facilities must be maintained at all times. Street lights may be allowed in the fee strip(s) and/or easement(s) but in all cases must be reviewed by PG&E for proper clearance. Roads and utilities should cross the transmission easement as nearly at right angles as possible. Road intersections will not be allowed within the transmission easement.

9. Pipelines: Pipelines may be allowed provided crossings are held to a minimum and to be as nearly perpendicular as possible. Pipelines within 25 feet of PG&E structures require review by PG&E. Sprinklers systems may be allowed; subject to review. Leach fields and septic tanks are not allowed. Construction plans must be submitted to PG&E for review and approval prior to the commencement of any construction.

10. Signs: Signs are not allowed except in rare cases subject to individual review by PG&E.

11. Recreation Areas: Playgrounds, parks, tennis courts, basketball courts, barbecue and light trucks (pickups, vans, etc.) may be allowed; subject to review of plans. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications.

12. Construction Activity: Since construction activity will take place near PG&E's overhead electric lines, please be advised it is the contractor's responsibility to be aware of, and observe the minimum clearances for both workers and equipment operating near high voltage electric lines set out in the High-Voltage Electrical Safety Orders of the California Division of Industrial Safety (<u>https://www.dir.ca.gov/Title8/sb5g2.html</u>), as well as any other safety regulations. Contractors shall comply with California Public Utilities Commission General Order 95 (<u>http://www.cpuc.ca.gov/gos/GO95/go_95_startup_page.html</u>) and all other safety rules. No construction may occur within 25 feet of PG&E's towers. All excavation activities may only commence after 811 protocols has been followed.

Contractor shall ensure the protection of PG&E's towers and poles from vehicular damage by (installing protective barriers) Plans for protection barriers must be approved by PG&E prior to construction.

13. PG&E is also the owner of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E's facilities must be reviewed and approved by PG&E to ensure that no impact occurs that may endanger the safe and reliable operation of its facilities.

GLENN COUNTY Planning & Community Development Services Agency Environmental Health Department

225 N Tehama St. Willows, CA 95988 Tel: 530.934.6102 Fax: 530.934.6103 www.countyofglenn.net



Mardy Thomas, Director

Date: December 28, 2023

- To: Courtney Paget, Assistant Planner Planning & Community Development Services Agency (PCDSA) (Via Email)
- From: Kevin Backus, REHS Director, PCDSA - Environmental Health Department
- Re: Site Plan Review 2023-010, APN 024-100-017, CCE Construction, (Solar)

We have reviewed the application information for the project noted above and recommend it be found complete for further processing. We have the following comments:

1. Ground mount solar array will be servicing an existing agriculture well pump.

Please contact Environmental Health at 530-934-6102 with any questions on this matter.



12/29/2023

County: Glenn - Glenn County Planning & Community Development Services Agency Courtney Paget 225 North Tehama Street, Willows, CA 95988, USA cpaget@countyofglenn.net

Construction Site Well Review (CSWR) ID: 1012940

Assessor Parcel Number(s): 0241000170

Property Owner(s): Alcatraz Farming

Project Location Address: 6569 County Rd 27 Orland, California 95963

Project Title: SPR2023-010, CCE Construction, Solar

Public Resources Code (PRC) § 3208.1 establishes well reabandonment responsibility when a previously plugged and abandoned well will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near oil, gas, and geothermal wells.

The California Geologic Energy Management Division (CalGEM) has received and reviewed the above referenced project dated 12/27/2023. To assist local permitting agencies, property owners, and developers in making wise land use decisions regarding potential development near oil, gas, or geothermal wells, the Division provides the following well evaluation.

The project is located in Glenn County, within the boundaries of the following fields:

Any Field

Our records indicate there are 1 known oil or gas wells located within the project boundary as identified in the application.

- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 0
- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 1
- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 0
- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 0

The Division categorically advises against building over, or in any way impeding access to, oil, gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure.

There are no guarantees a well abandoned in compliance with current Division requirements as prescribed by law will not start leaking in the future. It always remains a possibility that any well may start to leak oil, gas, and/or water after abandonment, no matter how thoroughly the well was plugged and abandoned. The Division acknowledges wells plugged and abandoned to the most current Division requirements as prescribed by law have a lower probability of leaking in the future, however there is no guarantees that such abandonments will not leak.

The Division advises that all wells identified on the development parcel prior to, or during, development activities be tested for liquid and gas leakage. Surveyed locations should be provided to the Division in Latitude and Longitude, NAD 83 decimal format. The Division expects any wells found leaking to be reported to it immediately.

Failure to plug and reabandon the well may result in enforcement action, including an order to perform reabandonment well work, pursuant to PRC § 3208.1, and 3224.

PRC § 3208.1 give the Division the authority to order or permit the re-abandonment of any well where it has reason to question the integrity of the previous abandonment, or if the well is not accessible or visible. Responsibility for re-abandonment costs may be affected by the choices made by the local

permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for reabandonment as:

1. The property owner - If the well was plugged and abandoned in conformance with Division requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future problem, then the owner of the property on which the well is located shall obtain all rights necessary to reabandon the well and be responsible for the reabandonment.

2. The person or entity causing construction over or near the well - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from the supervisor or district deputy as to whether the previously abandoned well is required to be reabandoned, or to follow the advice of the supervisor or district deputy not to undertake the construction, then the person or entity causing the construction over or near the well shall obtain all rights necessary to reabandon the well and be responsible for the reabandonment.

3. The party or parties responsible for disturbing the integrity of the abandonment - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and after that time someone other than the operator or an affiliate of the operator disturbed the integrity of the abandonment in the course of developing the property, then the party or parties responsible for disturbing the integrity of the abandonment shall be responsible for the reabandonment.

No well work may be performed on any oil, gas, or geothermal well without written approval from the Division. Well work requiring approval includes, but is not limited to, mitigating leaking gas or other fluids from abandoned wells, modifications to well casings, and/or any other re-abandonment work. The Division also regulates the top of a plugged and abandoned well's minimum and maximum depth below final grade. CCR §1723.5 states well casings shall be cut off at least 5 feet but no more than 10 feet below grade. If any well needs to be lowered or raised (i.e. casing cut down or casing riser added) to meet this regulation, a permit from the Division is required before work can start.

The Division makes the following additional recommendations to the local permitting agency, property owner, and developer:

1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements

near oil or gas wells, the Division recommends that information regarding the above identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.

2. The Division recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

As indicated in PRC § 3106, the Division has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to the Division's authority to order work on wells pursuant to PRC §§ 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC §§ 3236, 3236.5, and 3359 for violations within the Division's jurisdictional authority. The Division does not regulate grading, excavations, or other land use issues.

If during development activities, any wells are encountered that were not part of this review, the property owner is expected to immediately notify the Division's construction site well review engineer in the Northern district office, and file for Division review an amended site plan with well casing diagrams. The District office will send a follow-up well evaluation letter to the property owner and local permitting agency.

Should you have any questions, please contact me at (805) 937-7246 or via email at Trey.Powell@conservation.ca.gov.

Sincerely,

Trey Powell Northern District Deputy

cc: Courtney Paget - Plan Checker cc: Alcatraz Farming - Property Owner

Wells Not Abandoned to Current Division Requirements as Prescribed by Law & Not Projected to be Built Over or Have Future Access Impeded

The wells listed below are not abandoned to current Division requirements as prescribed by law, and based upon information provided, are not projected to be built over or have future access impeded.

API	Well Designation	Operator	Well Evaluations
0402120061	Rehse 1	Anacapa Oil Corporation	Well does not meet the
			requirements of §
			1723.2. Plugging for
			Freshwater Protection.



January 4, 2024

Courtney Paget County of Glenn 225 North Tehama St Willows, CA95988

Re: SPR2023-010 CCE Construction Inc. Solar 6569 & 6571 County Road 27, Orland, CA 95963

Dear Courtney Paget,

Thank you for giving us the opportunity to review the subject plans. The proposed SPR2023-10 plan is within the same vicinity of PG&E's existing electric distribution facilities that impact this property.

PG&E operates electric distribution facilities on this property (APN: 024-100-017-000). The Company intends to keep rights-of-way clear of all buildings and structures within **15** feet from either side of the pole line that might have an adverse effect on Company facilities.

Your proposed solar structure design may impact PG&E's ability to maintain these facilities.

Please contact the Building and Renovation Center (BRSC) for facility map requests by calling 1-877-743-7782 and PG&E's Service Planning department at <u>www.pge.com/cco</u> for any modification or relocation requests, or for any additional services you may require.

As a reminder, before any digging or excavation occurs, please contact Underground Service Alert (USA) by dialing 811 a minimum of 2 working days prior to commencing any work. This free and independent service will ensure that all existing underground utilities are identified and marked on-site.

If you have any questions regarding our response, please contact me at Brian.Callaghan@pge.com.

Sincerely,

Bildelaur

Brian Callaghan Land Management (925) 204-4074



PUBLIC WORKS AGENCY

P.O. Box 1070 / 777 N. Colusa Street Willows, CA 95988 Airports Engineering Flood Control Roads & Bridges Solid Waste Surveyor

Donald Rust, Director

January 9, 2024

Glenn County Planning and Community Development Services 225 N. Tehama Street Willows, CA 95988

Attn: Courtney Paget, Assistant Planner

Subject: Site Plan Review 2023-010 - CCE

Comments

None

Conditions

None

Michael Biggs Engineering Technician III Glenn County Public Works

GLENN COUNTY Planning & Community Development Services Agency

225 North Tehama Street Willows, CA 95988 530.934.6540 www.countyofglenn.net



Mardy Thomas, Director

REQUEST FOR REVIEW

COUNTY DEPARTMENTS/DISTRICTS

- Glenn County Agricultural Commissioner
- Glenn County Air Pollution Control District/CUPA
- Glenn County Assessor
- Glenn County Building Inspector
- Glenn County Engineering & Surveying Division
- Glenn County Environmental Health Department
- Glenn County Sheriff's Department
- Glenn County Board of Supervisors
- Glenn County Counsel
- Glenn County Planning Commission
- Glenn LAFCO

FEDERAL AGENCIES

- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- U.S. Department of Agriculture
- U.S. Bureau of Reclamation Willows

<u>OTHER</u>

- Western Area Power Administration
- Sacramento River National Wildlife Refuge
- City of:
- Community Services District:
- Pacific Gas and Electric Company (PG&E)
- Fire Protection District: Artois
- Glenn County Resource Conservation District
- School District:

STATE AGENCIES

- Central Valley Flood Protection Board
- Central Valley Regional Water Quality Control Board (RWQCB)
- State Water Resources Control Board Division of Drinking Water
- Department of Alcoholic Beverage Control (ABC)
- Department of Conservation, Division of Land Resource Protection
- Department of Conservation, Office of Mine Reclamation (OMR)
- Dept. of Conservation, Division of Oil, Gas, and Geothermal Resources
- Department of Fish and Wildlife
- Department of Food and Agriculture
- Department of Forestry and Fire Protection (Cal Fire)
- Department of Housing and Community Development (HCD)
- Department of Public Health
- Department of Toxic Substances Control (DTSC)
- Department of Transportation (Caltrans)
- Department of Water Resources (DWR)
- Office of the State Fire Marshall
- CalRecycle

NE Center of the CA Historical Resources Information System

- Railroad:
- Reclamation District:
 Water//rrigation District
- ☐ Water/Irrigation District:
 ☐ Special District:
- Tehama-Colusa Canal Authority
 - UC Cooperative Extension Office
- DATE: December 27, 2023

PROPOSAL: Site Plan Review 2023-010, CCE Construction, Solar

PLANNER: Courtney Paget, Assistant Planner cpaget@countyofglenn.net

- APPLICANT: CCE Construction, Inc. 668 N Coast Highway #272 Laguna Beach, CA 92651 (949) 632-8894 ben@conceptcleanenergy.com
- LANDOWNER: Alcatraz Farming, Inc. PO Box 875 Kentfield, CA 94914
- ENGINEER: Mayfield Renewables (315) 796-6567 <u>nick@mayfield.energy</u>
- PROPOSAL: Site Plan Review 2023-010, CCE Construction Inc., Solar CCE Construction Inc. has applied for SPR2023-0010 to install a 501.43 DC grid tied solar photovoltaic system at the Violich Farms Inc. This is a ground mount solar array with 1223 PV modules, will be servicing an existing well pump, and be 42,077 square feet in total.
- LOCATION: The project is located west of County Road M, north of County Road 30, south of County Road 27, and east of County Road 99 within the unincorporated area of Glenn County, California.
- APN: 024-100-017; (273.07± Acres)
- ZONING: "AE-40," Exclusive Agricultural Zone
- GENERAL PLAN: "Intensive Agriculture"
- FLOOD ZONE: The project is located within Flood Zone "X" (unshaded). 06021C0400D, dated August 4, 2010 issued by the Federal Emergency Management Agency (FEMA). Flood Zone "X" (unshaded) consists of areas of minimal risk outside the 1-percent and 0.2-percent annual chance floodplains. No base flood elevations or base flood depths are shown within this zone.

The Glenn County Planning Division is requesting comments on this proposal for determination of completeness, potential constraints, and/or proposed Compliance Requirement. If comments are not received by **Tuesday**, **January 9**, **2024**, it is assumed that there are no specific comments to be included in the analysis of the project. Comments submitted by e-mail are acceptable. Thank you for considering this matter.

AGENCY COMMENTS:

Please consider the following:

- 1. Is the information in the application complete enough to analyze impacts and conclude review?
- 2. Comments may include project-specific code requirements unique to the project. Cite code section and document (i.e., General Plan, Subdivision Map Act, etc.).
- 3. What are the recommended Compliance Requirements for this project and justification for each Requirement? When should each Compliance Requirement be accomplished (i.e., prior to any construction at the site, prior to recording the parcel map, filing the Final Map, or issuance of a Certificate of Occupancy, etc.)?

Date Submitted:

GLENN COUNTY PLANNING AND COMMUNITY DEVELOPMENT SERVICES AGENCY 225 North Tehama Street Willows, CA 95988 (530) 934-6540 planning@countyofglenn.net

APPLICATION FOR SITE PLAN REVIEW

NOTE: FAILURE TO ANSWER APPLICABLE QUESTIONS AND REQUIRED ATTACHMENTS COULD DELAY THE PROCESSING OF YOUR APPLICATION.

1. Applicant(s):

Name: CCE CONSTRUCTION INC

Address: 668 N COAST HIGHWAY #272. LAGUNA BEACH, CA 92651

Phone: 949-632-8894 E-Mailben@conceptcleanenergy.com

2. <u>Property Owner(s)</u>:

Name: ALCATRAZ FARMING INC

Address: PO BOX 875 KENTFIELD, CA. 94914

Phone: 949-632-8894 E-Mailben@conceptcleanenergy.com

3. Engineer/Person who Prepared Site Plan (if applicable):

Name: MAYFIELD RENEWABLES. (NICK KIRK & BRIAN BRUGGEMAN)

Address:

Phone: 315-796-5657 E-Mail nick@mayfield.energy

4. Name and address of property owner's duly authorized agent (if applicable) who is to be furnished with notice of hearing (§65091 California Government Code).

Name: CCE CONSTRUCTION INC.

Mailing Address: 668 N COAST HIGHWAY #272. LAGUNA BEACH, CA 92651

Revised 2020

Page 1 of 3

Glenn County Planning & Community Development Services Agency Site Plan Review

- 5. Existing Use of Property: AGRICULTURAL
- 6. Request or Proposal: INSTALLATIO N OF A 501.43 DC GRID TIED SOLAR PHOTOVOLTAIC (PV) SYSTEM AT THE VIOLICH FARMS INC AGRICULTURAL PROPERTY. THIS IS A GROUNDMOUNT SOLAR ARRAY WITH (1223) <u>PV MODULES. THIS SOLAR ARRAY WILL BE SERVICING AN</u> EXISTING WELL PUMP IN THE AG FIELD.
- 7. Address and Location of Project:6569/6571 COUNTY RD 27 ORLAND, CA 95963
- 8. Current Assessor's Parcel Number(s): 024-100-017-000
- 9. Existing Zoning (<u>http://gis.gcppwa.net/zoning/</u>): AG
- 10. Provide any additional information that may be helpful in evaluating your proposal. Example number of employees, hours of operation, number of truck deliveries/loadings per day: THIS IS A PASSIVE SOLAR ARRAY WITH NO EMPLOYEES AND NO TRUCK DELIVERIES.
- 11.Setback Dimensions (Distance from property line to proposed structure):North:North:North:NAft.South:NAft.

East:NA ft.

Other Setback/s:NA ft.

12. Provide the following information:

Size of Assessor Parcel: NA sq.ft. NA acres

West: NA

Mean height of structure: <u>NA</u>ft. Peak height of structure: <u>NA</u>ft.

Dimensions of proposed including overhangs: NA ft. x NA ft.

Total Square Footage (Existing): <u>NA</u>sq.ft.

Total Square Footage (Proposed): NA sq.ft.

Revised 2020

ft.

DECLARATION UNDER PENALTY OF PERJURY

(Must be signed by Applicant(s) and Property Owner(s)) (Additional sheets may be necessary)

The Applicant(s) and/or Property Owner(s), by signing this application, shall be deemed to have agreed to defend, indemnify, release and hold harmless the County, its agents, officers, attorneys, employees, boards and commissions from any claim, action or proceeding brought against the foregoing individuals or entities, the purpose of which is to attack, set aside, void or null the approval of this development entitlement or approval or certification of the environmental document which accompanies it, or to obtain damages relating to such action(s). This indemnification agreement shall include, but not be limited to, damages, costs expenses, attorney fees or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of the entitlement whether or not there is concurrent passive or active negligence on the part of the County.

Applicant(s):

Signed:

Print: BEN EARL FOR CCE CONSTRUCTION INC.

Date: 12-12-23

Property Owner(s):

Address: 668 N COAST HIGHWAY #272 LAGUNA BEACH, CA 92651

I am (We are) the owner(s) of property involved in this application and I (We) have completed this application and all other documents required.

I am (We are) the owner(s) of the property involved in this application and I (We) acknowledge the preparation and submission of this application.

I (We) declare under penalty of perjury that the foregoing is true and correct.

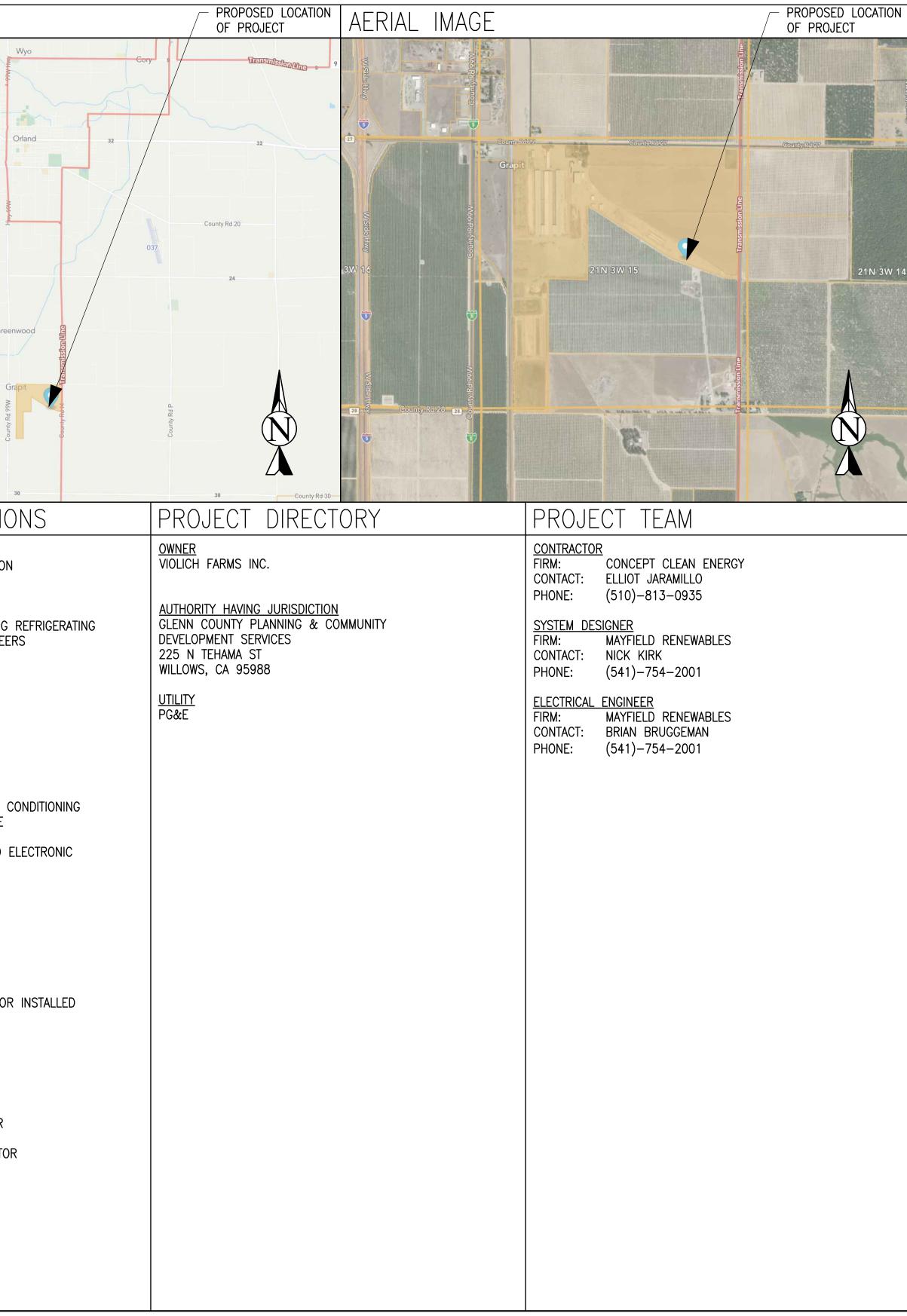
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Date:	
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Revised 2020

Page 3 of 3

VIOLICH FARMS INC. GREENWOOD, NORTHSTATE SERVICE 501.430kW DC GRID-TIE SOLAR ELECTRIC SYS 6545-6540 CO RD 27 ORLAND, CA 95963

		1	
	SCOPE OF WORK	VICIN	NITY MAP
	THE PROJECT SCOPE INCLUDES THE INSTALLATION OF A GRID-TIED SOLAR PHOTOVOLTAIC SYSTEM AT THE VIOLICH FARMS INC. AGRICULTURAL PROPERTY IN ORLAND, CA.		Newville Rd
	THE INSTALLATION CONSISTS OF A TILT UP GROUND MOUNT SOLAR ARRAY, 7 STRING-INVERTER(S), AND RELATED ELECTRICAL METERING AND SAFETY EQUIPMENT. ALL EQUIPMENT WILL BE INSTALLED AS REQUIRED BY APPLICABLE CODES AND THE LOCAL UTILITY COMPANY. DURING DAYLIGHT HOURS THIS PHOTOVOLTAIC SYSTEM (SOLAR ELECTRIC) WILL PROVIDE ELECTRICITY IN PARALLEL WITH THE LOCAL UTILITY SERVICE PROVIDER.	Tensmis	200 Side Hwy
	SYSTEM DESCRIPTION	sionline	A A A A A A A A A A A A A A A A A A A
	FACILITY SERVICE VOLTAGE: 480Y/277V, 3 PHASE, 4 WIRE (1223) AUXIN, AXN10M410W, 410WDC, MONOCRYSTALLINE, CEC PTC RATING: 385.5WDC (7) YASKAWA SOLECTRIA SOLAR, PVI-60TL-480, 60kVA, STRING-INVERTER(S), 480VAC, 36		20 1
	501.430kW DC 420.000kW AC 464.395kW AC CEC		County Rd 25 Greenv
tlePage.dwg		County Rd C	Gra
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T-1_	ALL ELECTRICAL WORK TO BE INSTALLED BY A QUALIFIED AND LICENSED ELECTRICAL CONTRACTOR.	ne le	
working set∖1	ALL SOLAR MODULES SHALL BE UL LISTED 1703 & CEC APPROVED. ALL INVERTERS SHALL BE UL LISTED 1741 CERTIFIED & CEC APPROVED. ALL ELECTRICAL COMPONENTS AND MATERIALS SHALL BE LISTED FOR ITS PURPOSE AND INSTALLED IN A WORKMAN LIKE MANNER. ALL OUTDOOR EQUIPMENT SHALL MEET APPROPRIATE NEMA STANDARDS.	GEN	ERAL ABBREVIATIO
greenwood\woi	THE ELECTRICAL CONTRACTOR IS ADVISED THAT ALL DRAWINGS AND COMPONENT MANUALS ARE TO BE UNDERSTOOD PRIOR TO INSTALLATION. THE CONTRACTOR IS ADVISED TO HAVE ALL SWITCHES IN THE "OFF" POSITION AND FUSES REMOVED PRIOR TO INSTALLATION OF FUSE-BEARING COMPONENTS.	(E) AHJ AL APPROX ARY	EXISTING AUTHORITY HAVING JURISDICTION ALUMINUM APPROXIMATE ARRAY
3-3639c -	THIS SYSTEM IS INTENDED TO BE OPERATED IN PARALLEL WITH THE UTILITY SERVICE PROVIDER. ANTI-ISLANDING PROTECTION IS A REQUIREMENT OF UL 1741 AND IS INTENDED TO PREVENT THE OPERATION OF THE PV SYSTEM WHEN THE UTILITY GRID IS NOT OPERATIONAL.	ASHRAE BLDG CL	AMERICAN SOCIETY OF HEATING F AND AIR CONDITIONING ENGINEER BUILDING CENTERLINE
ı energy\23	PERMISSION TO OPERATE THE SYSTEM IS NOT AUTHORIZED UNTIL FINAL INSPECTIONS AND APPROVALS ARE OBTAINED FROM THE LOCAL AUTHORITY HAVING JURISDICTION AND THE LOCAL UTILITY SERVICE PROVIDER.	DAS DIA DO EW	DATA ACQUISITION SYSTEM DIAMETER DITTO EAST-WEST
ot clean	ALL FASTENERS SHALL BE CORROSION RESISTANT APPROPRIATE FOR SITE CONDITIONS. CONNECTORS SHALL BE TORQUED PER DEVICE LISTING OR ENGINEERING RECOMMENDATIONS.	FBO FF GALV	FURNISHED BY OTHERS FORWARD FACING GALVANIZED
cts\conce	ALL LAYOUT DIMENSIONS ARE SHOWN TO THE NEAREST 1 INCH U.O.N.	HDG HVAC IBC ID	HOT DIP GALVANIZED HEATING VENTILATION AND AIR CO INTERNATIONAL BUILDING CODE INSIDE DIAMETER
gn∖Proje		IEEE	INSIDE DIAMETER INSTITUTE OF ELECTRICAL AND EL ENGINEERS MANUFACTURER
drives\Design\Projects\concept		MOD NEC NS NTS	SOLAR MODULE NATIONAL ELECTRICAL CODE NORTH-SOUTH NOT TO SCALE
-	APPLICABLE CODES	OAE OC	OR APPROVED EQUIVALENT ON CENTER
LOCATION: g:\shared	CALIFORNIA BUILDING CODE, 2022 CALIFORNIA ELECTRICAL CODE, 2022 CALIFORNIA FIRE CODE, 2022	OD OFCI PV PVC	OUTSIDE DIAMETER OWNER FURNISHED CONTRACTOR PHOTOVOLTAIC POLY VINYL CHLORIDE
DWG LOC/		SCH SS SSS STC	SCHEDULE STAINLESS STEEL SOLAR SUPPORT STRUCTURE STANDARD TEST CONDITIONS
ΡM		TBD TOF TP	TO BE DETERMINED TILT AND ORIENTATION FACTOR TAMPER PROOF
2023 12:31		TSRF TYP UL	TOTAL SOLAR RESOURCE FACTOR TYPICAL UNDERWRITERS LABORATORIES
10/27/2023		UON VIF WP	UNLESS OTHERWISE NOTED VERIFY IN FIELD WEATHER PROOF
DATE:			
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			LAGUNA BEACH, CA
			92651
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E-	1.2	PLAN DETAILS	
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E-		ELECTRICAL SPECIFICATIONS	
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1.44	3.0	LABELS & MARKINGS	SYSTEM SYSTEM SERVICE 27 3
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			The drawings, specifications and other documents related to this project are protected under law and contract.
			Reproduction of these documents is authorized for the purpose of constructing, maintaining and using this project. Use of these documents for any other purpose is
			these documents for any other purpose is not permitted without written authorization.
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<u>GENERAL:</u> (GRID-TIE, CEC 2022)

- THIS PROPOSED SOLAR ELECTRIC SYSTEM IS INTENDED TO OPERATE IN PARALLEL WITH POWER RECEIVED FROM THE UTILITY SERVICE PROVIDER.
- THE INVERTER FOR THE PROPOSED SOLAR ELECTRIC SYSTEM SHALL BE IDENTIFIED AND LISTED AS A UTILITY INTERACTIVE INVERTER FOR USE IN SOLAR PHOTOVOLTAIC SYSTEMS.
- THIS SYSTEM IS INTENDED TO CONNECT TO THE EXISTING FACILITY POWER SYSTEM AT <u>GROUNDING</u>: ONE POINT, POINT OF CONNECTION (POC). THIS CONNECTION SHALL BE IN COMPLIANCE WITH EITHER CEC ARTICLE 705.11 "SUPPLY-SIDE SIDE SOURCE
- CONNECTIONS" OR 705.12 "LOAD-SIDE SOURCE CONNECTIONS." ALL SOURCE CIRCUITS SHALL HAVE INDIVIDUAL SOURCE CIRCUIT PROTECTION FOR
- TESTING AND ISOLATION.
- ALL DISCONNECTS AND COMBINERS SHALL BE SECURED FROM
- UNAUTHORIZED/UNQUALIFIED PERSONNEL BY LOCK OR LOCATION.
- ALL DISCONNECTS, COMBINERS, PULL/SPLICE BOXES, AND ENCLOSURES SHALL BE LISTED FOR ITS PURPOSE. EQUIPMENT SHALL BE INSTALLED IN A SECURE AREA. INVERTER PERFORMANCE MAY
- BE AFFECTED IF INSTALLED IN DIRECT SUNLIGHT. THE INVERTER TO POINT OF CONNECTION (POC) HAS BEEN DESIGNED FOR NO MORE
- THAN 2% VOLTAGE RISE BASED ON NOMINAL VOLTAGE AND CURRENT VALUES.

WIRING METHODS:

- ALL WIRING METHODS AND INSTALLATION PRACTICES SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE (CEC), LOCAL STATE CODES, AND OTHER APPLICABLE LOCAL CODES. THE INTERIOR OF RACEWAYS INSTALLED BELOW GRADE AND IN WET LOCATIONS ABOVE GRADE SHALL BE CONSIDERED WET LOCATIONS, CEC 300.5(B) AND 300.9.
- EXPOSED PV SOURCE CIRCUIT WIRING SHALL BE USE-2 OR PV WIRE, 90 DEGREE C, WET RATED AND UV RESISTANT. ALL EXPOSED CABLES, SUCH AS MODULE LEADS SHALL BE SECURED WITH MECHANICAL OR OTHER SUNLIGHT RESISTANT MEANS.
- FOR ALL FUNCTIONALLY GROUNDED PV SYSTEMS, ALL PV SOURCE AND OUTPUT CIRCUIT CONDUCTORS SHALL BE RED FOR POSITIVE, BLACK FOR NEGATIVE AND GREEN FOR GROUND.
- ALL FIELD WIRING THAT IS NOT COLOR CODED SHALL BE MARKED AT BOTH ENDS WITH PERMANENT WIRE MARKERS TO IDENTIFY POLARITY, INVERTER NUMBER AND CIRCUIT IDENTIFICATION. SOURCE CIRCUITS SHALL BE IDENTIFIED AT ALL POINTS OF TERMINATION. CONNECTION AND SPLICES.
- CONDUIT TYPES USED IN THE PV INSTALLATION SHALL BE APPROVED FOR THEIR SPECIFIC APPLICATION AND SUPPORTED PROPERLY PER CEC.
- STRAIGHT CONDUIT RUNS SHALL HAVE EXPANSION FITTINGS PER CEC 300.7, IF EXPOSED TO WEATHER AND MORE THAN $\frac{1}{4}$ " OF EXPANSION AND CONTRACTION IS EXPECTED.
- IF USED, ALL WIRENUTS ARE TO BE INSTALLED PER LOCATION REQUIREMENTS AND MANUFACTURERS SPECIFICATIONS BY A QUALIFIED/CERTIFIED PERSON. WIRENUTS SHALL NOT BE USED ON DC CONDUCTORS.
- FUSES AND WIRES SUBJECT TO TRANSFORMER INRUSH CURRENT SHALL BE SIZED ACCORDINGLY.
- ALL DC MATERIALS SHALL BE LISTED WITH A DC VOLTAGE RATING GREATER THAN OR EQUAL TO THE MAXIMUM PV SYSTEM VOLTAGE.
- ALL INTERCONNECT WIRING AND POWER CONDUCTORS INTERFACING THE UNIT MUST BE IN ACCORDANCE WITH THE CEC ANSI/NFPA 70 AND ANY APPLICABLE LOCAL CODES. CONDUCTORS MUST CONFORM TO THE MINIMUM BEND RADIUS SPECIFIED IN THE SPECIFIC CEC ARTICLE. KEEP ALL WIRE BUNDLES AWAY FROM ANY SHARP EDGES TO AVOID DAMAGE TO WIRE INSULATION. ALL CONDUCTORS SHOULD BE MADE OF COPPER AND RATED FOR 90 DEGREE C MINIMUM UNLESS OTHERWISE NOTED. FOR OUTDOOR INSTALLATIONS, ALL INTERCONNECT CONDUITS AND FITTINGS MUST BE PROPERLY NEMA RATED AS REQUIRED BY THE CEC.
- CONNECTORS TO BE TORQUED PER DEVICE LISTING OR MANUFACTURERS
- **RECOMMENDATIONS.**

- 12. ALL AC WIRING SHALL BE COPPER WIRE, RATED AT 90 DEGREE CELSIUS, AND RATED FOR 600 VAC UNLESS OTHERWISE NOTED. 13. PROPERLY SUPPORT ALL EXPOSED PV SOURCE CIRCUITS TO MAINTAIN THE INTEGRITY
- OF THE CONDUCTOR'S INSULATION. 14. ALL CONDUIT THAT IS MOUNTED ON THE ROOF SHALL BE MOUNTED WITH FLASHED
- CONDUIT SUPPORTS PER CEC 386.30. 15. ALL WIRING MUST BE PROPERLY SUPPORTED BY DEVICES OR MECHANICAL MEANS
- DESIGNATED AND LISTED FOR SUCH USE, AND MUST BE PERMANENTLY AND COMPLETELY HELD OFF OF THE ROOF SURFACE PER CEC 110.2, 110.3(A), 110.3(B) CONDUCTORS SHALL BE SUPPORTED PER CEC 300.19 AS REQUIRED.

RACEWAY LEGEND

- ELECTRICAL SPECIFICATIONS 17. ALL FIELD MADE CONNECTORS FOR PV QUICK CONNECTS SHALL BE THE SAME TYPE GENERAL NOTES FOR TRANSFORMERLESS INVERTERS: AND MANUFACTURER AS THE PV MODULES AND USE THE MANUFACTURER SPECIFIED CRIMPING TOOL. 1. TRANSFORMERLESS (NON-ISOLATED) INVERTERS ARE NOT SUPPLIED WITH AN INTEGRAL 18. WHERE MATING CONNECTORS ARE NOT OF THE IDENTICAL TYPE AND BRAND, THEY
- SHALL BE LISTED AND IDENTIFIED FOR INTERMATEABILITY, AS DESCRIBED IN THE MANUFACTURER'S INSTRUCTIONS.

- ONLY ONE CONNECTION TO DC CIRCUITS AND ONE CONNECTION TO AC CIRCUITS WILL BE USED FOR SYSTEM GROUNDING (REFERENCED TO THE SAME POINT). THIS WILL NORMALLY BE LOCATED AT THE INVERTER.
- EQUIPMENT GROUNDING CONDUCTORS AND SYSTEM GROUNDING CONDUCTORS WILL HAVE AS SHORT A DISTANCE TO GROUND AS POSSIBLE AND A MINIMUM NUMBER OF TURNS.
- NON-CURRENT CARRYING METAL PARTS SHALL BE CHECKED FOR PROPER EQUIPMENT GROUNDING; NOTING THAT TERMINAL LUGS BOLTED ON AN ENCLOSURE'S FINISHED SURFACE MAY BE INSULATED BECAUSE OF PAINT/FINISH. PAINT/FINISH AT POINT OF CONTACT SHALL BE PROPERLY REMOVED.
- MODULES SHALL BE BONDED WITH EQUIPMENT GROUNDING CONDUCTORS BONDED TO A LOCATION APPROVED BY THE MANUFACTURER WITH A MEANS OF BONDING LISTED FOR THIS PURPOSE. RACKING SYSTEMS THAT COMPLY WITH UL2703 SHALL BE USED TO BOND MODULES TO RACKING SYSTEMS.
- GROUNDING SYSTEM COMPONENTS SHALL BE LISTED FOR THEIR PURPOSE, INCLUDING BUT NOT LIMITED TO GROUND RODS, GROUNDING LUGS, GROUNDING CLAMPS, ETC.

GROUND FAULT PROTECTION:

PHOTOVOLTAIC SYSTEM DC CIRCUITS THAT EXCEED 30 VOLTS OR 8 AMPERES SHALL BE PROVIDED WITH DC GROUND FAULT PROTECTION MEETING THE REQUIREMENTS OF 690.41(B)(1) AND (B)(2) TO REDUCE FIRE HAZARDS.

DISCONNECTING MEANS:

- MEANS SHALL BE PROVIDED TO DISCONNECT THE PV SYSTEM FROM ALL WIRING SYSTEMS INCLUDING POWER SYSTEMS, ENERGY STORAGE SYSTEMS, AND UTILIZATION EQUIPMENT AND ITS ASSOCIATED PREMISES WIRING.
- THE DISCONNECTING MEANS SHALL NOT BE REQUIRED TO BE SUITABLE AS SERVICE EQUIPMENT AND SHALL BE RATED IN ACCORDANCE WITH ARTICLE 690 PART III, DISCONNECTING MEANS.
- 3. A SINGLE DISCONNECTING MEANS SHALL BE PERMITTED FOR THE COMBINED AC OUTPUT OF ONE OR MORE INVERTERS IN AN INTERACTIVE SYSTEM.

REQUIRED SAFETY SIGNS AND LABELS:

- THE MARKING SHALL ADEQUATELY WARN OF THE HAZARD USING EFFECTIVE WORDS
- AND/OR COLORS AND/OR SYMBOLS. CEC 110.21
- THE LABEL SHALL BE PERMANENTLY AFFIXED TO THE EQUIPMENT OR WIRING METHOD
- AND SHALL NOT BE HAND WRITTEN. CEC 110.21 THE LABEL SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT
- INVOLVED. CEC 110.21
- LABELS AND MARKINGS SHALL BE APPLIED TO THE APPROPRIATE COMPONENTS IN ACCORDANCE WITH THE CEC.
- SOLAR MODULES AND INVERTERS ARE SUPPLIED FROM THE MANUFACTURER WITH MARKINGS PRE-APPLIED TO MEET THE REQUIREMENTS OF CEC 690.51 & 690.41(B)(1).
- DESIGN REQUIREMENTS FOR CEC REQUIRED LABELS, WHERE COLOR IS INDICATED, ARE SHOWN ON THE LABELS AND MARKINGS SHEET.
- UNLESS OTHERWISE STATED ON LABEL SPECIFIC NOTES (SEE NOTE 6), OSHA 1910.145 AND ANSI Z535 RECOMMENDED SPECIFICATIONS ARE AS FOLLOWS: a. ROUNDED OR BLUNT CORNERS FREE OF SHARP EDGES.
- b. VISIBLE AT A MINIMUM DISTANCE OF 5ft OR GREATER.
- c. "DANGER" HEADER: RED BACKGROUND WITH WHITE LETTERING. d. "WARNING" HEADER; ORANGE BACKGROUND WITH BLACK LETTERING.
- e. "CAUTION" HEADER; YELLOW BACKGROUND WITH BLACK LETTERING.
- f. "NOTICE" LABEL HEADER TO BE IN BLUE WITH WHITE LETTERING.
- a. ALL OTHER TEXT TO BE BLACK ON A WHITE BACKGROUND.

POWER LEGEND

	FIBER CABLE		STRING OF SOLAR MODULES	HH	HANDHOLE
	CAT-5 ETHERNET				CAMERA
	RS-485 DATACOM	\sim	INVERTER	\bigtriangledown	TELEPHONE OR DATA OUTLET DUPLEX CONVENIENCE OUTLET, 120V, 20A, GROUNDING TYPE SPECIFICATION
		DC	DC SIDE OF INVERTER	J	GRADE
D C	DC CONDUCTOR/CONDUIT	ac 🔶	AC SIDE OF INVERTER	-	JUNCTION-BOX
—— M V ——	MEDIUM VOLTAGE	⊕ 	EQUIPMENT GROUNDING LOCATION	0	OMITTED MODULE SPARE MODULE
	CONDUCTOR/CONDUIT	-	GROUND OR GROUNDING ELECTRODE	Ø	NON-ACTIVE MODULE
A C	AC CONDUCTOR/CONDUIT	•	SPLICE OR TAP	DAS	DATA AQUISITION SYSTEM
с в м		・	CIRCUIT BREAKER FUSE	Ē	THERMO COUPLE TEMPERATURE SENSOR
n u v	CONDUCTOR/CONDUIT	•••	SWITCH	Ĥ	PYRANOMETER – SOLAR RADIATION
	OVER HEAD WIRE	 N.O.	RELAY OR CONTACT N.O.	ĥ	CELL/ MODULE TEMPERATURE SENSOR
		N.C.	RELAY OR CONTACT N.C.		ANEMOMETER
		{	CURRENT TRANSFORMER		BAROMETRIC PRESSURE SENSOR
		ulu mm	TRANSFORMER	ĒĒ	HUMIDITY SENSOR
		M	METER	Ψ	RAIN GAUGE

INVERTER MUST BE INSTALLED AND CONNECTED TO THE UNIT AS DESCRIBED IN THE INSTALLATION MANUAL. THE AC AND DC GROUND BUS BARS ARE CONNECTED TO THE MAIN INVERTER ENCLOSURE. THE GROUND FAULT PROTECTION IS MONITORED AND THE INVERTER IS DISCONNECTED FROM THE GRID IN THE EVENT OF A GROUND FAULT. EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED PER CEC 250.122. 3 INVERTER OPERATING CONDITIONS ARE DESIGNED TO BE INSTALLED IN EITHER AN INDOOR OR OUTDOOR ENVIRONMENT. ALLOWABLE OPERATING TEMPERATURE RANGE AND CLEARANCE REQUIREMENTS FOR PROPER AIR FLOW FOR THE UNITS ARE SPECIFIED BY THE MANUFACTURER. **ELECTRICAL SAFETY FEATURES:** THE UNIT HAS ONLY ONE MODE OF OPERATION, LINE LINKAGE MODE (GRID EXPORT MODE). THE OUTPUT VOLTAGES AND CURRENTS ARE SINUSOIDAL WITH LOW TOTAL HARMONIC DISTORTION MEETING IEEE 1547 HARMONIC STANDARDS. THE ANTI-ISLANDING TRIP TIME IS LESS THAN (2) SECONDS AS PER UL 1741 STANDARDS. THE INVERTER UNIT WILL AUTOMATICALLY DISCONNECT FROM THE UTILITY.

HIGH EFFICIENCY ISOLATION TRANSFORMER AS PART OF THE INVERTER ASSEMBLY.

BONDED TO THE EXISTING GROUNDING SYSTEM. A GROUND CONNECTION FOR THE

TRANSFORMERLESS INVERTERS SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR

ABBREVIATIONS

А	AMPERE(S)		CONDITIONING INTERMEDIATE METAL CONDUIT MAXIMUM POWER CURRENT INVERTER SHORT CIRCUIT CURRENT (AVAILABLE) JUNCTION BOX THOUSAND LIGHTNING ARRESTER LOAD BREAK LIQUID-TIGHT FLEXIBLE METAL CONDUIT LOAD INTERRUPTER LIGHTING MILLION MAIN BONDING JUMPER MULTI-CONTACT TYPE 4 (SOLARLINE2) MAIN CIRCUIT BREAKER MULTIPLE DISCONNECT SAFETY SWITCH MANUFACTURER MAIN LUG ONLY MINI POWER CENTER MAXIMUM POWER POINT TRACKING MAIN SERVICE DISCONNECT METER MEDIUM VOLTAGE NEUTRAL NATIONAL ELECTRIC CODE NATIONAL ELECTRIC CODE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION NEUTRAL GROUNDING REACTOR	POC	POINT (
AC	ALTERNATING CURRENT	IMC	INTERMEDIATE METAL CONDUIT	PT	POTENT
ACSW	AC SWITCH	IMP	MAXIMUM POWER CURRENT	PTC	PVUSA
AF	AMPERE FRAME, AMP FUSE	INV	INVERTER	PVCB	PHOTOV
AFCI	ARC FAULT CIRCUIT INTERRUPTER	ISC	SHORT CIRCUIT CURRENT (AVAILABLE)	PWR	POWER
AIC	AMPERE INTERRUPTING CAPACITY	JB	JUNCTION BOX	RCBR	RE-CO
AL	ALUMINUM	K	THOUSAND	RCL	RECLOS
AS	AMPERE SWITCH	LA	LIGHTNING ARRESTER	RECT	RECTIFI
AT	AMP TRIP	LB	LOAD BREAK	RGS	RIGID G
ATS	AUTOMATIC TRANSFER SWITCH	LFMC	LIQUID-TIGHT FLEXIBLE METAL	RMC	RIGID M
AWG	AMERICAN WIRE GAUGE		CONDUIT	RPVT	REMOTE
BOS	BALANCE OF SYSTEM	LI	LOAD INTERRUPTER	RSD	RAPID S
С	CONDUIT	LTG	LIGHTING	rtu	REMOTE
CB	CIRCUIT BREAKER	М	MILLION	SBJ	SYSTEM
CBR	COMBINER BOX	MBJ	MAIN BONDING JUMPER	SCH	SCHEDU
CBSS	CIRCUIT BREAKER SAFETY SWITCH	MC4	MULTI-CONTACT TYPE 4 (SOLARLINE2)	SPD	SURGE
CMIL	CIRCULAR MIL	MCB	MAIN CIRCUIT BREAKER	SS	STAINLE
COM	COMMUNICATIONS	MDSS	MULTIPLE DISCONNECT SAFETY	SSBJ	SUPPLY
CT	CURRENT TRANSFORMER		SWITCH	STR	STRING
CU	COPPER	MFR	MANUFACTURER	SWBD	SWITCH
DC	DIRECT CURRENT	MLO	MAIN LUG ONLY	SWGR	SWITCH
DCCT	DC CONTACTOR	MPC	MINI POWER CENTER	TBD	TO BE
DCSW	DC SWITCH	MPPT	MAXIMUM POWER POINT TRACKING	TEL	TELEPH
EC	ELECTRICAL SUBCONTRACTOR	MSD	MAIN SERVICE DISCONNECT	TP	TAMPER
EGC	EQUIPMENT GROUNDING CONDUCTOR	MTR	METER	TYP	TYPICAL
EMT	ELECTRICAL METALLIC TUBING	MV	MEDIUM VOLTAGE	UON	UNLESS
FMC	FLEXIBLE METAL CONDUIT	Ν	NEUTRAL	UPS	UNINTE
FO	FIBER-OPTIC CABLE	NEC	NATIONAL ELECTRIC CODE	V	VOLT(S)
GE	GROUNDING ELECTRODE	NEMA	NATIONAL ELECTRICAL	VA	VOLT-A
GEC	GROUNDING ELECTRODE CONDUCTOR		MANUFACTURERS ASSOCIATION	VD	VOLTAG
GFDI	GROUND FAULT DETECTION AND		OVER CURRENT PROTECTION DEVICE	VMP	MAXIMU
	INTERRUPTION	P	POLE	VOC	OPEN (
GND	GROUND	PB	PULL BOX	W	WATT(S)
	GROUP OPERATED AIR BREAK	PH	PHASE	WH	WATT-H
HH	HANDHOLE	PME	PAD MOUNTED ENCLOSURE	WP	WEATHE
HVAC	HEATING VENTILATION AND AIR	PNL	PANEL BOARD	XFMR	TRANSF

OF CONNECTION NTIAL TRANSFORMER TEST CONDITIONS OVOLTAIC CIRCUIT BREAKER OMBINER BOX SER FIER GALVANIZED STEEL METAL CONDUIT TE PV TIE SHUTDOWN DEVICE/SWITCH TE TERMINAL UNIT EM SIDE BONDING JUMPER DULE PROTECTIVE DEVICE LESS STEEL LY-SIDE BONDING JUMPER HBOARD HGEAR DETERMINED HONE CABLE ER PROOF SS OTHERWISE NOTED FERRUPTIBLE POWER SUPPLY AMP AGE DROP TY IN FIELD IUM POWER VOLTAGE CIRCUIT VOLTAGE

- HOUR
- HER PROOF
- XFMR TRANSFORMER

C	568	e A N. S GUN	CCC TE A E 926 10	E N 0AS ⁻ 27 8EA(651	ER TH 2 CH,	RG` WY.	Υ ,				
STAMP: PROFESS / OUA BRUGG E24135 Exp.9/30/24 STAMP: BRUGG E24135 Exp.9/30/24 STAMP: BRUGG CLIPPING E24135 Exp.9/30/24 STAMP: CLIPPING STAMP: STAMP: BRUGG CLIPPING E24135 Exp.9/30/24 STAMP: S											
			ICF								
CRID-TIF SOLAR FLECTRIC SYSTEM		VIOLICH FARMS INC.	GREENWOOD, NORTHSTATE SERVICE		6545-6540 CO RD 2/	ODI AND CA DEDEZ	UNLAIND, VA 3J3UJ				
	2		јест — З			С					
	rigi Hee	NAL	SCA NT SIZE	ile TS ZE AI	24'	"X3	6")"				
do R autho main	M cumer cumer protec produ prized taining	© C layfield wings, nts re ted un ted un tor th for th a and	copyrig sopyrig lated nder la of th using s for ithout	ht 20 ewable fication to this aw ar ese of pose this	es, LLO ons an is proj nd cor locum of co projec	C id oth ject a ntract. ents i onstruc ct. Us	re s cting, e of				
REV ISSUED BY ✔ DESCRIPTION	8/17/23 RH BB	6 9/26/23 NK BB CD IFR - ISSUED FOR REVIEW	10/27/23 NK BB CD IFC - ISSUED FOR								
Ē	_		ΓΝΟ. — (RICA	\bigcirc	NAME) NC	С) IS				



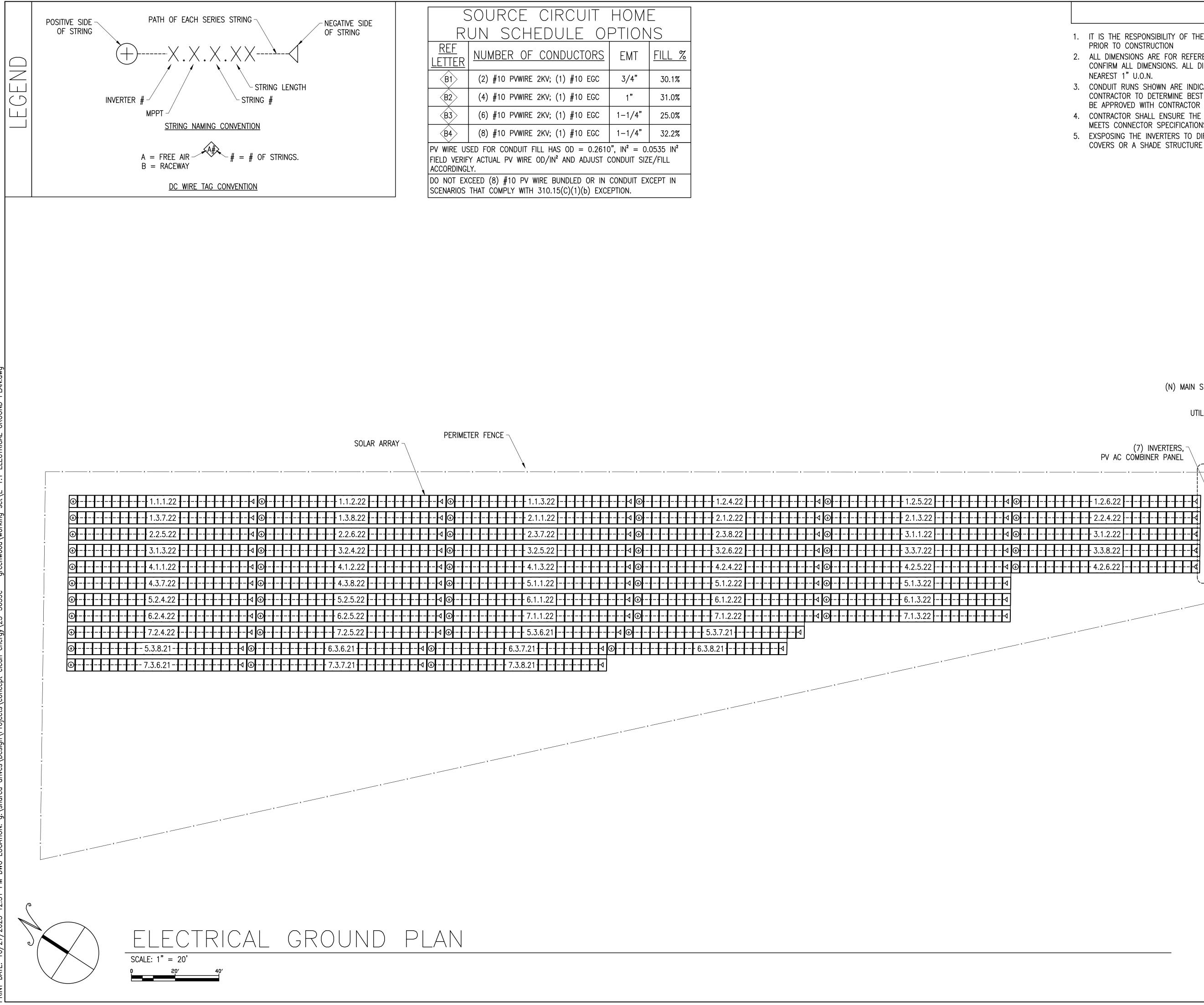
SHEET NOTES

- 1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND UTILITIES MARKED PRIOR TO CONSTRUCTION
- 2. ALL DIMENSIONS ARE FOR REFERENCE ONLY. PLEASE REFER TO MANUFACTURERS DRAWINGS TO CONFIRM ALL DIMENSIONS. ALL DIMENSIONS DISPLAYED ON THIS SHEET ARE ROUNDED TO THE NEAREST 1" U.O.N.

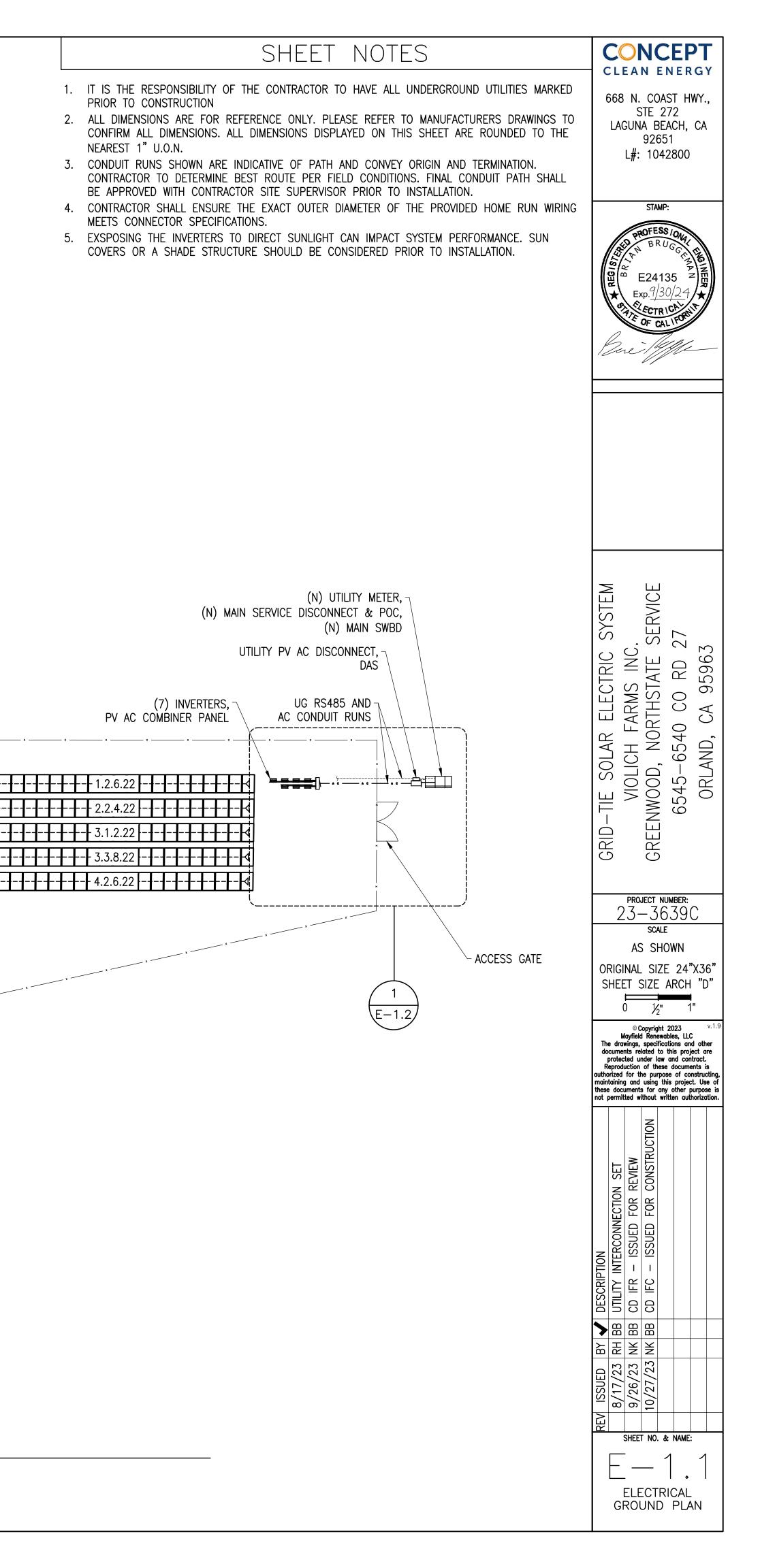


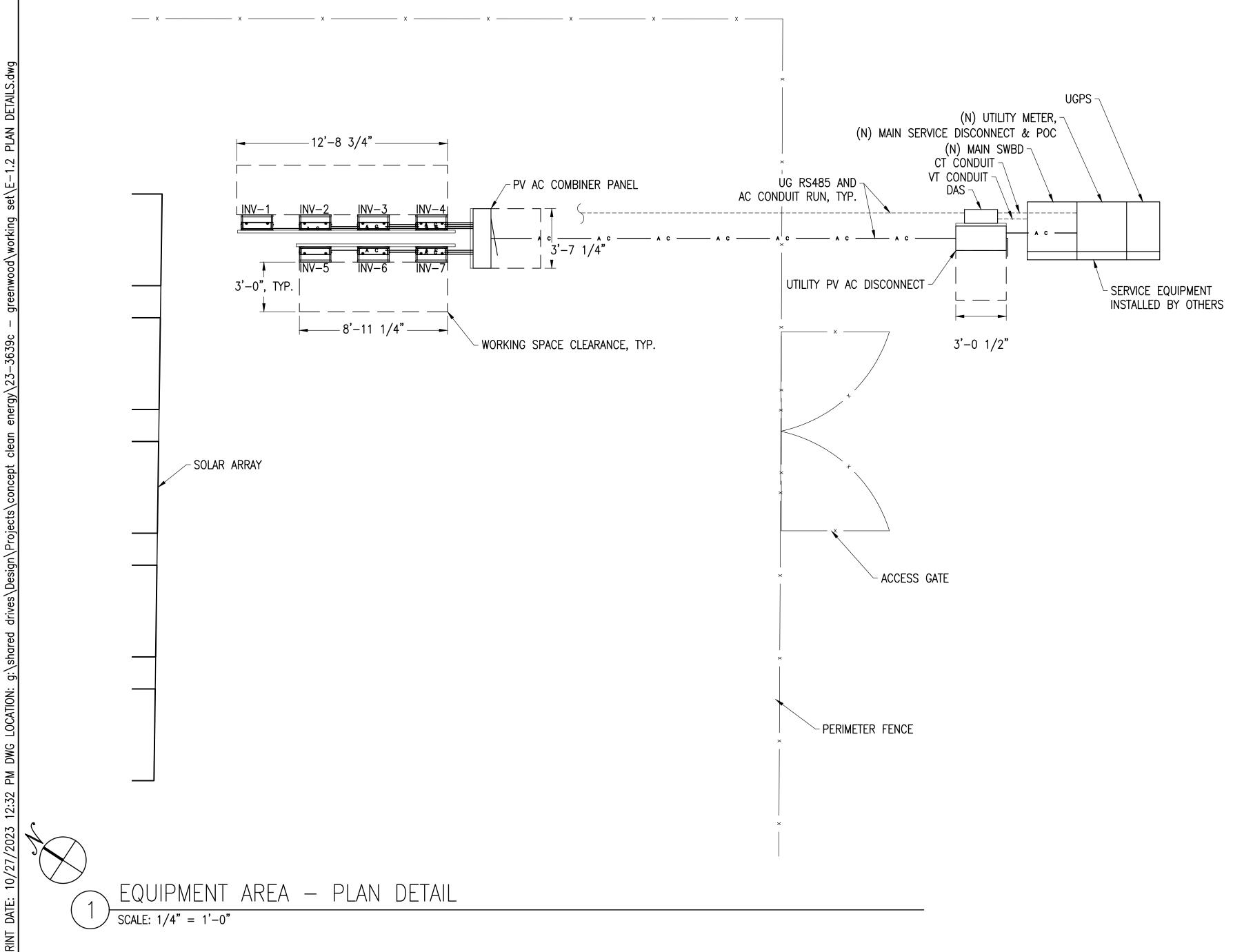
(N) UTILITY METER (NEW SERVICE) – BY OTHERS (N) MAIN SERVICE GEAR – BY OTHERS, & POC UTILITY PV AC DISCONNECT WITHIN 10' OF UTILITY METER, DATA ACQUISITION SYSTEM (DAS)

CONCEPT CLEAN ENERGY 668 N. COAST HWY., STE 272 LAGUNA BEACH, CA 92651 L#: 1042800 STAMP: STAMP: E24135 Exp.9/30/24 Structure Exp.9/30/24
GRID-TIE SOLAR ELECTRIC SYSTEM VIOLICH FARMS INC. GREENWOOD, NORTHSTATE SERVICE 6545-6540 C0 RD 27 0RLAND, CA 95963
project number: 23-3639C
SCALE AS SHOWN ORIGINAL SIZE 24"X36" SHEET SIZE ARCH "D" 0 1/2" 1" © Copyright 2023 V.1.9
Mayfield Renewables, LLC The drawings, specifications and other documents related to this project are protected under law and contract. Reproduction of these documents is authorized for the purpose of constructing, maintaining and using this project. Use of these documents for any other purpose is not permitted without written authorization.
REV ISSUED BY ✓ DESCRIPTION 8/17/23 RH BB UTILITY INTERCONNECTION SET 9/26/23 NK BB CD FR ISSUED FOR REVIEW 10/27/23 NK BB CD FC ISSUED FOR REVIEW 10/27/23 NK BB CD FC ISSUED FOR CONSTRUCTION Inv Inv Inv Inv Inv Inv Inv Inv
ELECTRICAL SITE

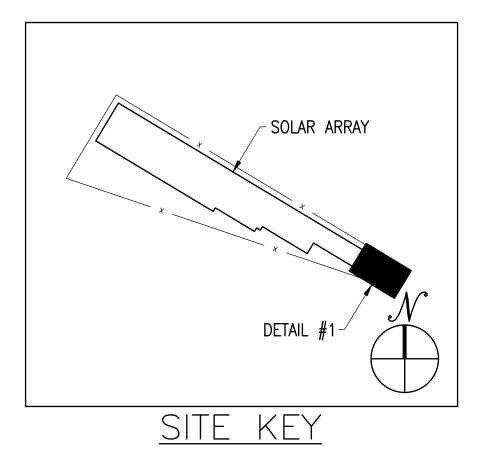


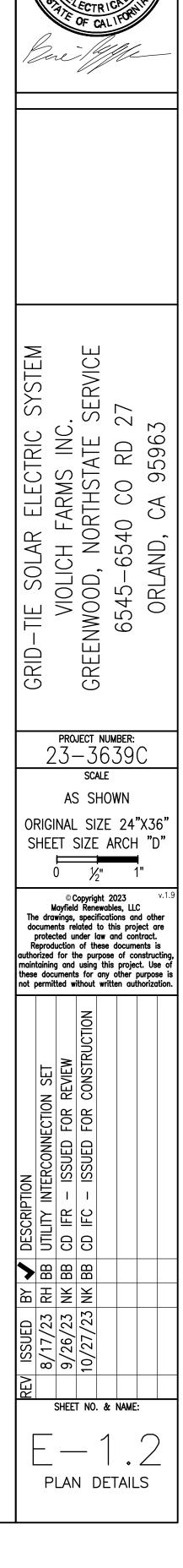
CE CIRCUIT HOME Chedule options										
R OF CONDUCTORS	EMT	<u>FILL %</u>								
PVWIRE 2KV; (1) #10 EGC	3/4"	30.1%								
PVWIRE 2KV; (1) #10 EGC	1"	31.0%								
PVWIRE 2KV; (1) #10 EGC	1-1/4"	25.0%								
PVWIRE 2KV; (1) #10 EGC	1-1/4"	32.2%								
NDUIT FILL HAS OD = 0.2610° , $IN^2 = 0.0535 IN^2$ V WIRE OD/IN ² AND ADJUST CONDUIT SIZE/FILL										
10 PV WIRE BUNDLED OR IN CONDUIT EXCEPT IN _Y WITH 310.15(C)(1)(b) EXCEPTION.										

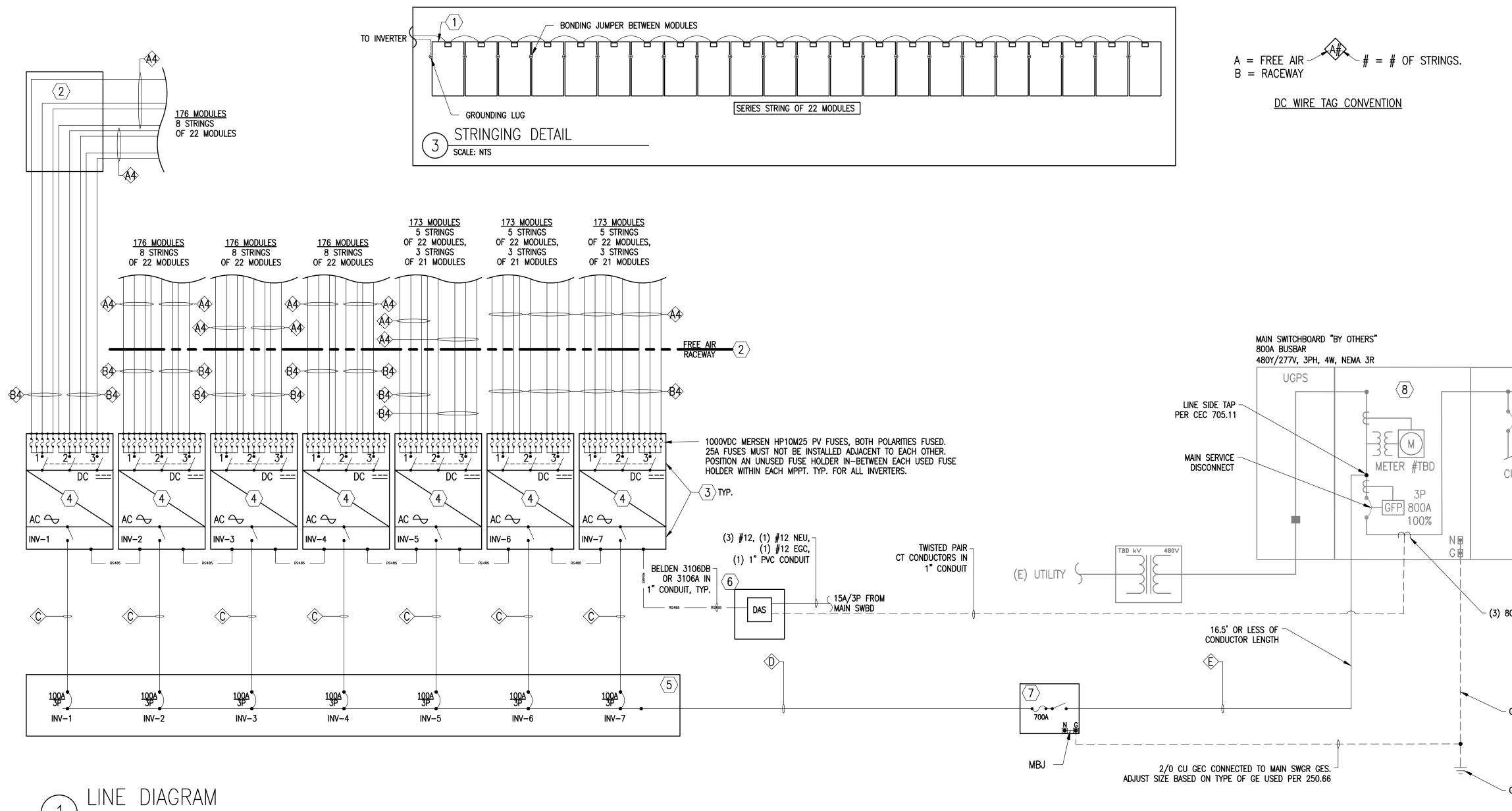




SHEET NOTES	CONCEPT CLEAN ENERGY
1. ALL EQUIPMENT DIMENSIONS ARE APPROXIMATE, VERIFY ALL DIMENSIONS WITH APPROVED EQUIPMENT RECORD DRAWINGS PRIOR TO POURING CONCRETE PADS.	668 N. COAST HWY.,
2. CONDUIT ROUTES SHOWN ARE DIAGRAMMATIC AND DO NOT REFLECT ALL OBSTRUCTIONS. SUBCONTRACTOR TO DETERMINE EXACT ROUTING BASED ON SITE CONDITIONS.	STE 272 LAGUNA BEACH, CA 92651
 CONTRACTOR TO COORDINATE ALL PLANNED CONDUIT ROUTES PRIOR TO INSTALLATION. ALL UNDERGROUND CONDUIT TO BE MARKED PRIOR TO CONSTRUCTION 	L#: 1042800
	STAMP:
	PROFESS / OLY BRUGGC FILE BRUGGC FILE BRUGGC FILE Exp.9/30/24 * ST. SCTRICAL FOR CALIFORNIA
	SOLAR ELECTRIC SYSTEM OLICH FARMS INC. OD, NORTHSTATE SERVICE 15–6540 CO RD 27 RLAND, CA 95963







SCALE: NTS

	CONDUCTOR CALCULATION SUMMARY																		
TAG	DESCRIPTION	VOLTAGE	CIRCUIT AMPERAGE	MIN. OCPD AMPACITY	STD OCPD SIZE	PARALLEL SETS	CCC SIZE	NEU SIZE	EGC SIZE	CONDUCTOR MATERIAL	WIRE TEMP RATING	TYPE	CONDUIT SIZE OR BUNDLED	TYPE	FILL %	AMPACITY (75 DEG C)	LENGTH (FT)	AMPACITY (90 DEG C)	QTY CCC
(A4)	PV SOURCE CIRCUIT	881VDC	13.86	21.62	25	1	#10	N/A	#6	CU	90	PV WIRE	FREE AIR	FREE AIR	-	50	580	55	8
84	PV SOURCE CIRCUIT	881VDC	13.86	21.62	25	1	#10	N/A	# 10	CU	90	PV WIRE	1-1/2"	EMT/PVC	28.15%	35	20	40	8
Ċ	INVERTER OUTPUT CIRCUIT	480VAC	72.2	90.25	100	1	#3	N/A	#8	CU	90	THWN-2	1-1/2"	EMT/PVC	19.20%	100	20	115	3
	COMBINED OUTPUT CIRCUIT	480VAC	505.4	631.75	700	3	300	3/0	3/0	AL	90	XHHW-2	3"	EMT/PVC	29.78%	690	40	780	3
E	PV DISCONNECT OUTPUT CIRCUIT	480VAC	505.4	631.75	700	3	300	300	N/A	AL	90	XHHW-2	3"	EMT/PVC	28.62%	690	10	780	3

	W	/IRING SCHEDULE		
TAG	CIRCUIT TYPE	DESCRIPTION	CONDUIT TYPE	FILL %
A4	PV SOURCE CIRCUIT (DC, CU, 2KV PVWIRE)	(8) #10, (1) #6 EGC, FREE AIR	FREE AIR	-
B 4	PV SOURCE CIRCUIT (DC, CU, 2KV PVWIRE)	(8) #10, (1) #10 EGC, (1) 1-1/2" CONDUIT	PVC	28.15%
Ċ	INVERTER OUTPUT CIRCUIT (AC, CU, THWN-2)	(3) #3, (1) #8 EGC, (1) 1-1/2" CONDUIT	PVC	19.20%
(D)	COMBINED OUTPUT CIRCUIT (AC, AL, XHHW-2)	3X PARALLEL SETS, 1 SET PER RACEWAY: (3) 300, (1) 3/0 NEU, (1) 3/0 EGC, (1) 3" CONDUIT	PVC	29.78%
Ê	PV DISCONNECT OUTPUT CIRCUIT (AC, AL, XHHW-2)	3X PARALLEL SETS, 1 SET PER RACEWAY: (3) 300, (1) 300 NEU, (1) 3" CONDUIT	PVC	28.62%

SCHEDULES \cap SCALE: NTS

SCHE	
ON	TAG QTY
	(1) 1223
	2 VARIE
PER STRING IN	3 7
2.20AAC, 3PH,	4 7
MA 3R, XXkAIC	(5) 1
	6 1
AD-BREAK DIS TER	(7) 1
, 800A, 800A	(8) 1
	$\begin{array}{c c} \hline \hline$

SHEET NOTES CONCEPT **CLEAN ENERGY** 1. CIRCUIT CALCULATIONS ARE SHOWN FOR THE WORST CASE SCENARIO. 668 N. COAST HWY., 2. ALL CONDUCTORS TO BE COPPER (CU) UNLESS NOTED OTHERWISE. STE 272 LAGUNA BEACH, CA 3. ALL CONDUIT TO BE EMT, SCHD 40/80 PVC OR RIGID METAL. EXTERIOR FITTINGS TO BE WATER 92651 TIGHT. L#: 1042800 4. DC & AC VOLTAGE DROP PERCENTAGE IS SHOWN FOR THE WORST CASE SCENARIO. STAMP: ROFES E24135 ____ CUSTOMER LOADS SYSTEM LL C. SERVICE 27 -TIE SOLAR ELECTRIC S VIOLICH FARMS INC. ENWOOD, NORTHSTATE S 6545-6540 CO RD 2 ORLAND, CA 95963 - (3) 800A:5 CT'S $\langle 5 \rangle$ PV COMBINER PANELBOARD SIZE NEC 705.12(B)(3)(3) 125% OCPD MAX AMPS INVERTER 1 72.2A 90.3A 100A 100A **INVERTER 2** 72.2A 90.3A 100A **INVERTER 3** 72.2A 90.3A GEC 100A **INVERTER 4** 72.2A 90.3A 72.2A 100A INVERTER 5 90.3A 72.2A GRID **INVERTER 6** 90.3A 100A GREI INVERTER 72.2A 90.3A 100A - GES SYSTEM 632.1A SUBTOTAL 505.4A 700A 800A MIN. BUS SIZE --___ PROJECT NUMBER: 23-36390 SCALE NTS ORIGINAL SIZE 24"X36" SHEET SIZE ARCH "D" FILL TEMP TY QTY QTY DERATED VOLTAGE 0 <u>1⁄2</u>" 1" DERATE DERATE CC NEU EGC AMPACITY DROP NEC 310.15(C)(1) NEC 310.15(B)(1) © Copyright 2023 v.1.3 Mayfield Renewables, LLC The drawings, specifications and other documents related to this project are protected under law and contract. Reproduction of these documents is authorized for the surpose of construction 2.69% 0 1 0.7 0.91 35.04 0.09% 0.7 0.91 25.48 0 1 authorized for the purpose of constructing maintaining and using this project. Use of these documents for any other purpose is not permitted without written authorization. 0.13% 0.91 0 104.65 0.17% 0.91 1 1 709.8 0.06% 0.91 1 709.8 1 DESCRIPTION UTILITY INTERCONNECTION SET CD IFR - ISSUED FOR REVIEW CD IFC - ISSUED FOR CONSTRI IEDULE INPUT (BOTH +/- POLARITIES) ₩ ₩ ₩ ₩ 3W, NEMA 4X ISSUED 8/17/23 9/26/23 10/27/23 ISCONNECT, 600VAC, HD, 3 POLE, 800A,

MAIN BREAKER, NEMA 3R

SHEET NO. & NAME: \cap _____ \sim POC SINGLE LINE DIAGRAM

SITE SPECIFIC INFORMATION: SITE LOCATION: ORLAND, CA 95963 TEMPERATURE DESIGN LOCATION: OROVILLE ASHRAE 2% HIGH TEMPERATURE: 37.7°C ASHRAE LOWEST EXPECTED TEMPERATURE: -2.2°C MODULE INFORMATION: AUXIN, AXN10M410W, 410WDC (STC) CELL TYPE: MONOCRYSTALLINE WDC (CEC): 385.5WDC Voc: 37.54VDC (40.03VDC AT −2.2°C) Vmp: 31.55VDC (27.25VDC AT 37.7°C) lsc: 13.86ADC Imp: 13.00ADC SERIES FUSE RATING: 30ADC Voc CORRECTION (%/°C): −0.244% Vmp CORRECTION (%/°C): -0.319% MODULE DIMENSIONS: 67.80" X 44.65" X 1.38" INVERTER INFORMATION: YASKAWA SOLECTRIA SOLAR, PVI-60TL-480, STRING-INVERTER, 480V, 30 CEC WEIGHTED EFFICIENCY (PTC): 98.5% START VOLTAGE: 330VDC MPPT MINIMUM VOLTAGE: 540VDC MPPT MAXIMUM VOLTAGE: 850VDC MAXIMUM DC INPUT VOLTAGE: 1000VDC NOMINAL POWER INPUT: 90000WDC MAXIMUM POWER OUTPUT: 60000WAC MAXIMUM CURRENT OUTPUT: 72.20AAC AC NOMINAL VOLTAGE OUTPUT: 480VAC MAX. AC OVERCURRENT PROTECTION ALLOWED: 125AAC ARRAY SPECIFICATIONS MODULES: 1223 INVERTERS: 7 INV-1 THRU INV-4 (8) SOURCE CIRCUITS OF 22 MODULES INV-5 THRU INV-7 (5) SOURCE CIRCUITS OF 22 MODULES & (3) SOURCE CIRCUITS OF 21 MODULES ARRAY ELECTRICAL SPECIFICATIONS (VALUES BASED ON 22 MODULES PER STRING MAX., 1 STRING(S) IN PARALLEL MAX.) MAXIMUM SYSTEM VOLTAGE: 880.69VDC @ -2.2°C RATED MAX POWER POINT VOLTAGE: 694.10VDC ADJ. VMP OF ARRAY AT 37.7°C HIGH TEMP (BASED ON 21 MODULES IN SERIES): 572.30VDC RATED ISC OF ARRAY: 13.86ADC 교 MAXIMUM SHORT CIRCUIT CURRENT: 17.33ADC TRATED MAX POWER POINT CURRENT: 13.00ADC VOLTAGE CALCULATIONS: NEC 690.7 LOW TEMPERATURE FOR DESIGN (ASHRAE LOW TEMP) = -2.2° C 은 ARRAY Voc AT STC: 37.54VDC X 22 MODULE IN SERIES = 825.88VDC TEMPERATURE ADJUSTED Voc: $\begin{bmatrix} 825.88VDC X (1 + ((-2.2^{\circ}C - 25^{\circ}C) X (-0.244\%))) \\ MAX. Voc PER INVERTER MANUFACTURER REQ. = 1000VDC \end{bmatrix} = 880.69VDC$ $880.69VDC \leq 1000VDC (OK)$

1) ELECTRICAL SPECIFICATIONS scale: NTS

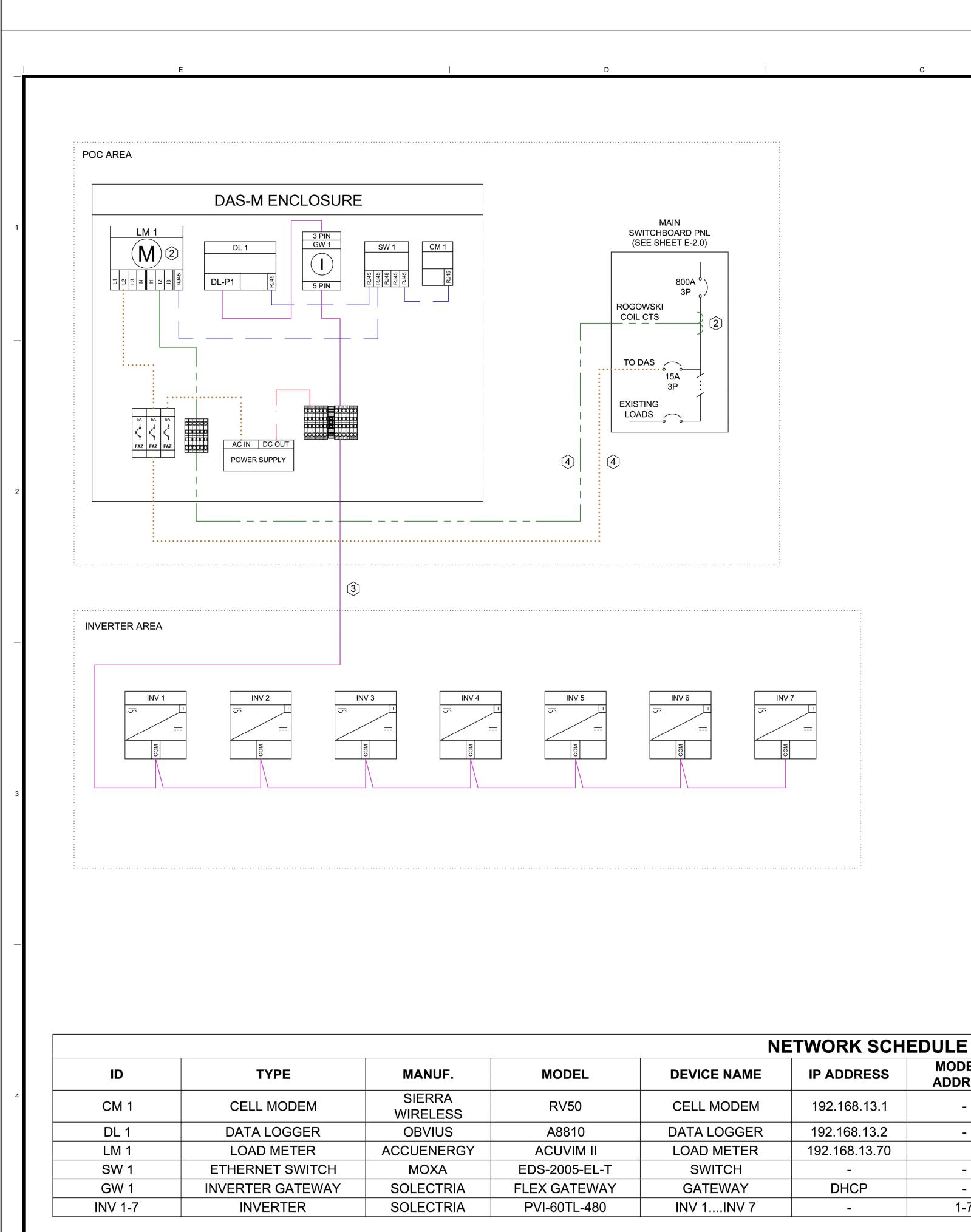
\$\phi A\$ \$\phi B\$ \$\phi C\$ PHASE NO. PHASE \$\phi A\$ \$\phi B\$ \$\phi C\$ INV-1 20 100/3P 7 A 8 20 100/3P 20 1NV-2 INV-1 20 100/3P 9 B 10 100/3P 20 INV-2 INV-3 20 100/3P 13 A 14 20 20 INV-4			
BOOAMP MAIN LOG ONLY (MLO) 480VAC, 30, 4W & GND LOAD DESCRIPTION KVA LOAD CB/ PHASE CKT. NO. CB/ NO. CKT. CB/ NO. KVA LOAD LOAD DESCRIPTION INV-1 20 100/3P 7 A 8 20 100/3P 20 100/3P	PANE		
LOAD DESCRIPTION \$\overline{A} & \overline{B} & \overline{C} & PHASE & NO. \$\verline{V} & NO. PHASE & \$\overline{A} & \$\overline{B} & \$\overline{C} & OD DESCRIPTION\$ INV-1 20 100/3P 9 B 10 100/3P 20 INV-2 INV-1 20 100/3P 9 B 10 100/3P 20 INV-2 INV-3 20 100/3P 13 A 14 20 100/3P 20 INV-4	PANEL,		0) 480VAC, 3¢, 4W & GND
INV-1 Investigation Investigation Investigation Investigation Investigation Investigation INV-1 Investigation Investigation Investigation Investigation Investigation Investigation Investigation INV-3 Investigation Investigation Investigation Investigation Investigation Investigation INV-3 Investigation Investigation Investigation Investigation Investigation			
INV-1 20 100/3P 9 B 10 100/3P 20 INV-2 20 20 11 C 12 20 20 20 20 100/3P 20 100/3P 20 100/3P 20 100/3P 100/3P 20 100/3P			
20 11 C 12 20 100/3P 15 B 16 100/3P 20 INV-4			
INV-3 20 100/3P 15 B 16 100/3P 20 INV-4			
	20	20 13 A	
	20		
		20 17 C	18 20
20 19 A 20 20			
INV-5 20 100/3P 21 B 22 100/3P 20 INV-6			
20 23 C 24 20			
20 25 A 26 Spare INV-7 20 100/3P 27 B 28 Spare			
100/3F 27 B 28 SPARE			
80 80 80 SUB-TOTAL 60 60 60			
PHASE A <u>140</u> KVA			
PHASE B 140 KVA TOTAL LOAD 420 KVA	PHASE B	PHASE B 140 KVA	TOTAL LOAD 420 KVA
PHASE C 140 KVA	PHASE C		

2 ELECTRICAL PANELBOARD/SWITCHBOARD SCHEDULES

INVERTER STRING SCHEDULE							
	PVI-60TL-480			PVI-60TL-480			
	INV-1,2,3,4				INV-	5,6,7	
MPPT #	STR #	MOD QTY	WATTS	MPPT #	STR #	MOD QTY	WATTS
	1	22	9,020		1	22	9,020
	2	0	0		2	0	0
1	3	22	9,020	1	3	22	9,020
	4	0	0		4	0	0
	5	22	9,020		5	22	9,020
MPPT TOTAL	2	66	27,060	MPPT TOTAL	2	66	27,060
	6	22	9,020		6	22	9,020
2	7	0	0		7	0	0
	8	22	9,020	2	8	22	9,020
	9	0	0		9	0	0
	10	22	9,020		10	0	0
MPPT TOTAL	2	66	27,060	MPPT TOTAL	1	44	18,040
	11	22	9,020		11	21	8,610
	12	0	0		12	0	0
3	13	22	9,020	3	13	21	8,610
	14	0	0		14	0	0
	15	0	0		15	21	8,610
MPPT TOTAL	1	44	18,040	MPPT TOTAL	2	63	25,830
	# OF STR	MOD QTY	WATTS/INV		# OF STR	MOD QTY	WATTS/INV
INV TOTALS	5	176	72,160	INV TOTALS	5	173	70,930
			120.27%				118.22%

3 INVERTER STRING SCHEDULE 3 SCALE: NTS

1
CONCEPT CLEAN ENERGY 668 N. COAST HWY., STE 272 LAGUNA BEACH, CA 92651 L#: 1042800
STAMP: PROFESS/OW BRUGGERING E24135 Exp.9/30/24 STAMP Exp.9/30/24 STAMP Exp.9/30/24 STAMP Exp.9/30/24 STAMP
GRID-TIE SOLAR ELECTRIC SYSTEM VIOLICH FARMS INC. GREENWOOD, NORTHSTATE SERVICE 6545-6540 C0 RD 27 ORLAND, CA 95963
project number: 23-3639C
SCALE NTS ORIGINAL SIZE 24"X36" SHEET SIZE ARCH "D" 0 $\frac{1}{2}$ " 1"
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REV ISSUED BY ✓ DESCRIPTION 8/17/23 RH BB UTILITY INTERCONNECTION SET 9/26/23 NK BB CD IFR - 10/27/23 NK BB CD IFC - ISSUED FOR REVIEW 10/27/23 NK BB CD IFC - ISSUED FOR CONSTRUCTION
SHEET NO. & NAME:
ELECTRICAL SPECIFICATIONS



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27

Е

NETWORK SCHEDULE				
DEVICE NAME	IP ADDRESS	MODBUS ADDRESS	RS-485 PORT/TERMINAL	LOCATION
CELL MODEM	192.168.13.1	-	-	DAS-M
DATA LOGGER	192.168.13.2	-	-	DAS-M
LOAD METER	192.168.13.70			DAS-M
SWITCH	-	-	-	DAS-M
GATEWAY	DHCP	-	PORT 1	DAS-M
INV 1INV 7	-	1-7	PORT 1	INVERTER AREA
			•	

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		CONCEPT CLEAN ENERGY 668 N. COAST HWY., STE 272
WIRE LEGEND 1 RS485- CAT5E- 24V DC- 277/480V AC- CTS-	Image: Second state sta	LAGUNA BEACH, CA 92651 L#: 1042800 STAMP: STAMP: BRUGGCTM BRUGGCTM E24135 Exp.9/30/24 STAMP: Exp.9/30/24
 BELDEN 3106DB, ABOVE GROUND USE BELDEN 3106A (2) LOAD METER CTS TO BE CONFIGURED TO MONITOR LOAD CURRENT ONLY (3) 1" CONDUIT MINIMUM, DOWNSIZING TO 3/4" AT INVERTER PENETRATION OK (4) 1" CONDUIT MINIMUM, CT 	2	SYSTEM SERVICE 7
SECONDARIES AND VOLTAGE TAPS TO BE INSTALLED IN SEPERATE CONDUITS	CONCEPT CLEAN ENERGY	GRID-TIE SOLAR ELECTRIC VIOLICH FARMS INC. GREENWOOD, NORTHSTATE 6545-6540 C0 RD 2 ORLAND, CA 95963
	GREENWOOD, CA	PROJECT NUMBER: 23-3639C SCALE NTS ORIGINAL SIZE 24"X36" SHEET SIZE ARCH "D" 0 1/2" 1" © Copyright 2023 v.1.9 Mayfield Renewables, LLC The drawings, specifications and other documents related to this project are protected under law and contract. Reproduction of these documents is authorized for the purpose of constructing, maintaining and using this project. Use of these documents for any other purpose is not permitted without written authorization.
NOTES SUBNET MASK: 255.255.255.0 DHCP RANGE: 192.168.13.225254	4 SHEET NUMBER	ISSUED BY ✓ DESCRIPTION 1/17/23 RH BB UTILITY INTERCONNECTION SET 1/26/23 NK BB CD IFR – ISSUED FOR REVIEW 0/27/23 NK BB CD IFC – ISSUED FOR CONSTRUCTION 0/27/23 NK BB CD IFC – ISSUED FOR CONSTRUCTION
A	001	SHEET NO. & NAME: SHEET NO. & NAME: E - 2.2 NETWORK MONITORING DIAGRAM

WARNING: PHOTOVOLTAIC POWER SOURCE

LABEL SHALL BE LOCATED ON ALL EXPOSED RACEWAYS, CABLE TRAYS, OTHER WIRING METHODS, COVERS OR ENCLOSURES OF PULL BOXES AND JUNCTION BOXES AND ON CONDUIT BODIES IN WHICH ANY OF THE AVAILABLE CONDUIT OPENINGS ARE UNUSED. LABEL SHALL BE REFLECTIVE, AND ALL LETTERS CAPITALIZED AND SHALL BE MINIMUM HEIGHT OF 3/8" IN WHITE ON A RED BACKGROUND. SPACING BETWEEN LABELS OR MARKINGS, OR BETWEEN A LABEL AND MARKING, SHALL NOT BE MORE THAN 10FT.

CEC 2022 690.53

MAXIMUM DC VOLTAGE OF PV SYSTEM

MAXIMUM VOLTAGE: 880.7VDC

LABEL TO BE LOCATED ON COVER OF DC DISCONNECTING MEANS. (7) TOTAL

CEC 2022 705.12(B)(3)(3)



TOTAL RATING OF ALL OVERCURRENT DEVICES, EXCLUDING MAIN SUPPLY OVERCURRENT DEVICE, SHALL NOT EXCEED AMPACITY OF BUSBAR.

PERMANENT WARNING LABEL SHALL BE APPLIED TO DISTRIBUTION EQUIPMENT WHERE THE PV SYSTEM INTERCONNECTS. (1) TOTAL

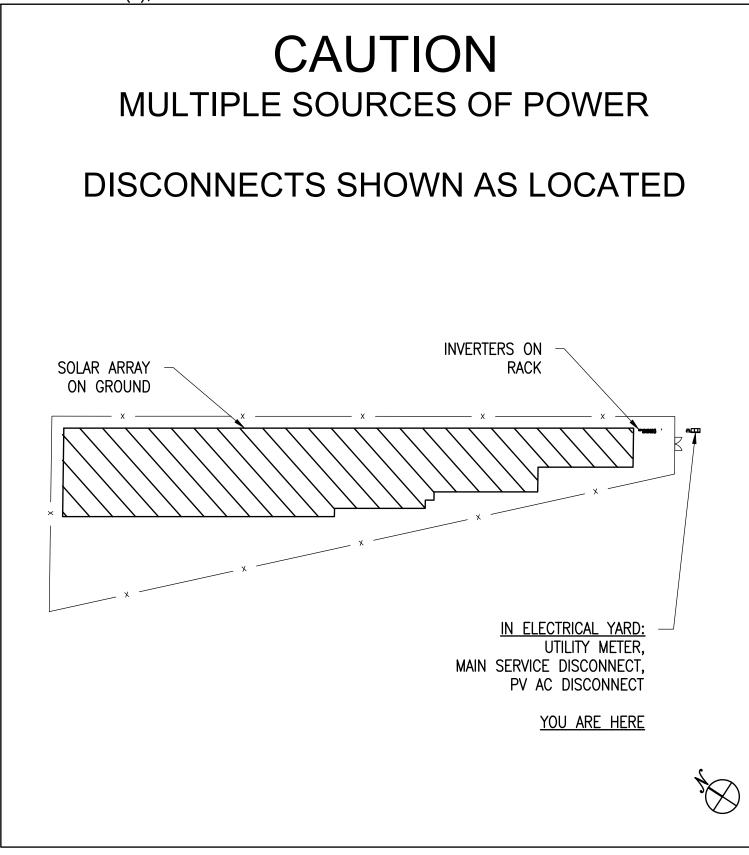
CEC 2022 690.13(B), 690.54

NOTICE	

PHOTOVOLTAIC SYSTEM AC DISCONNECT AND POWER SOURCE RATED OUTPUT CURRENT:<u>505.4AAC</u> NOMINAL OPERATING VOLTAGE:<u>480VAC</u>

LABEL TO BE LOCATED ON THE PV SYSTEM AC DISCONNECT. (1) TOTAL - NW

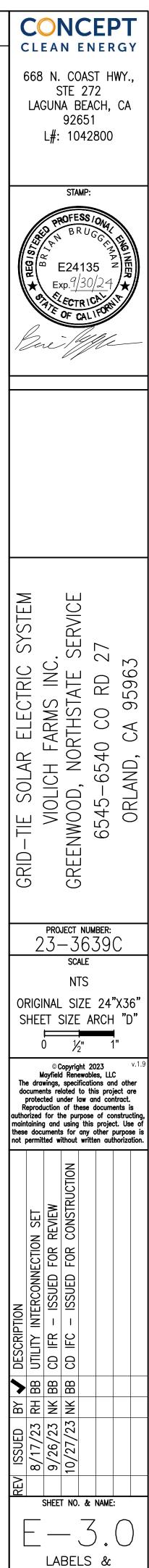
BACK



LABEL TO BE APPLIED AT SERVICE EQUIPMENT LOCATION OR ON ALL POWER PRODUCTION SOURCES CAPABLE OF BEING INTERCONNECTED. LOCATED AT UTILITY METER #30183589 (1) TOTAL

SHEET NOTES

- 1. SEE ELECTRICAL NOTES E-0.0 SHEET "REQUIRED SAFETY SIGNS AND LABELS" FOR ADDITIONAL INFORMATION.
- 2. THE LABELS AND MARKINGS ARE FOR REFERENCE ONLY AND THE FINAL DESIGN AND CONTENT MAY VARY FROM WHAT IS SHOWN. LABELS PROVIDED BY HELERMANNTYTON OR PV LABELS MAY VARY IN DESIGN, CONTENT AND QUANTIITY REQUIRMENTS FROM WHAT IS SHOWN ON THIS SHEET. IT IS UP TO THE CONTRACTOR TO VERIFY FINAL LABEL SELECTION MEETS OR EXCEEDS THE DESIGN AND CONTENT AS SHOWN.
- 3. HELERMANNTYTON AND PV LABELS PART NUMBERS INCLUDING THE WORDS "CUSTOM" INDICATE THAT THEY ARE ONLY PROVIDING THE LABEL MATERIAL BUT NOT THE DESIGN AS SHOWN.
- 4. THE MARKING OR LABEL SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. CEC 110.21(A)
- 5. THE MARKING SHALL ADEQUATELY WARN OF THE HAZARD USING EFFECTIVE WORDS AND/OR COLORS AND/OR SYMBOLS. CEC 110.21(B)(1)
- 6. THE LABEL SHALL BE PERMANENTLY AFFIXED TO THE EQUIPMENT OR WIRING METHOD AND SHALL NOT BE HAND WRITTEN. CEC 110.21(B)(2).
- 7. LABELS AND MARKINGS SHALL BE APPLIED TO THE APPROPRIATE COMPONENTS IN ACCORDANCE WITH THE CEC.
- 8. SOLAR MODULES ARE SUPPLIED FROM THE MANUFACTURER WITH MARKINGS PRE-APPLIED TO MEET THE REQUIREMENTS OF CEC 690.51.
- 9. UNLESS OTHERWISE STATED ON LABEL SPECIFIC NOTES, OSHA 1910.145 AND ANSI Z535 RECOMMENDED SPECIFICATIONS ARE AS FOLLOWS:
 - A. ROUNDED OR BLUNT CORNERS FREE OF SHARP EDGES.
 - B. VISIBLE AT A MINIMUM DISTANCE OF 5FT OR GREATER.C. "DANGER" HEADER: RED BACKGROUND WITH WHITE LETTERING.
 - D. "WARNING" HEADER; ORANGE BACKGROUND WITH WHITE LETTERING.
 - E. "CAUTION" HEADER; YELLOW BACKGROUND WITH BLACK LETTERING.
- F. "NOTICE" LABEL HEADER TO BE IN BLUE WITH WHITE LETTERING.
- G. ALL OTHER TEXT TO BE BLACK ON A WHITE BACKGROUND.



MARKINGS

SOLECTRIA® PVI-50TL-480 / PVI-60TL-480

3-PHASE TRANSFORMERLESS COMMERCIAL STRING INVERTERS

FEATURES

- Wirebox models with built-in SunSpec compliant transmitters for Module-Level Rapid Shutdown for simple,
- safe NEC compliance UL Listed as PV Rapid
- Shutdown Systems with APsmart, Northern Electric Power (NEP), and Tigo Energy
- Dual rated listing allows selection of either 50/60 kVA (factory default) or
- 55/66 kVA (allowing full rated power down to ±0.91 PF) Integrated UL-listed
- Arc-Fault protection 15 - 90° mounting
- angle allows low-profile rooftop installations
- 3 MPPTs with 5 fused inputs each for PV array flexibility
- Industry-leading DC/AC ratios of 1.8 (50TL) and 1.5 (60TL)
- Integrated AC and
- DC disconnects
- Remote firmware upgrades and diagnostics
- NEMA 4X outdoor rated enclosure, with proven
- performance
- Certified to IEEE 1547-2018 and UL 1741SB Compatible with Bifacial PV
- Modules

OPTIONS

- Shade cover DC fuse bypass
- Web-based monitoring

YASKAWA

SOLECTRIA SOLAR

for rooftops, carports and ground-mount **PV** systems

transmitter.

devices.

Standard Wirebox

 20A fuses, both polarities • No built-in PVRSS transmitter



PVI 50TL-480 / PVI 60TL-480 TECHNICAL DATA

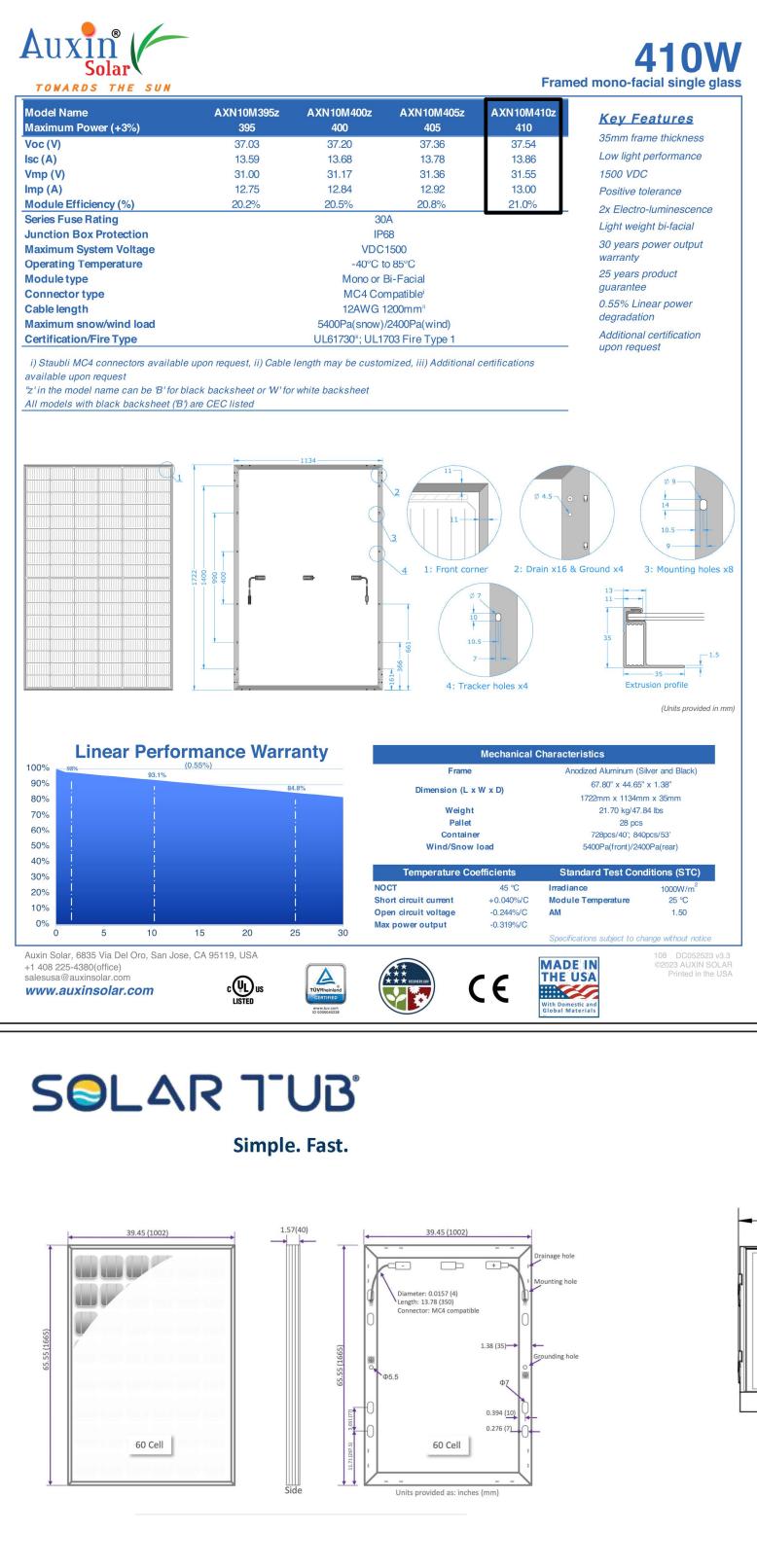
SPECIFICATIONS

Inverter Model		PVI
	Maximum PV Power	90 kW (3
	Maximum Input Voltage	10
	Dc Voltage Ranges: Operating/Max. Power (MPPT)	200-950 V
DC Input	Start-up DC Input Voltage/Power	330
beinpat	Number of MPPT Trackers/Inputs	3 Trackers /
	Maximum Available PV Current (lsc x 1.25)	204 A (6
	Maximum Operating Input Current (clipping point)	108 A (3
	DC Surge Protections	
	Rated AC Real Power/Apparent Power/Output Current	50 kW /
	Overhead Mode: Real Power/Apparent Power/Output Current	50 kW /
	Nominal Output Voltage/Range	480 VAC
	Nominal Output Frequency/Range	60 H
AC Output	Power Factor	Ur (Adjustable 0.8
	Fault Current Contribution (1 Cycle RMS)	
	Total Harmonic Distortion (THD) @ Rated Load	
	Grid Connection Type	3-Ph/PE/N (neut
	Maximum OCPD Device	
	AC Surge Protection	
	Peak Efficiency	
Efficiency	CEC Efficiency	
	Tare Loss	
	Ambient Temperature Range	-22°F to -
Environment	Storage Temperature Range	
Linvironment	Relative Humidity (non-condensing)	
	Operating Altitude	13,12
	Modbus Protocol	
	SolrenView Web-Based Monitoring Service	
Communications	Revenue Grade Metering	
communications	Communication Interface	
	Remote Firmware Upgrades	
	Remote Diagnostics	
	Certifications and Standards	IEEE C!
Safety	Selectable Grid Standards	
	Smart Grid Features	Ve
Warranty	Standard Limited Warranty	
	Acoustic Noise Rating	
	AC/DC Disconnect	
	Mounting Angle*	
Mechanical	Weight	
neenamear	Enclosure Rating and Finish	
		Power
	Dimensions (H x W x D)	Wire
		Over

	Wirebox Specification			
	Wirebox	Fused Inputs		15 Fused Positio
		Standard		PVI-50-60TL-E
		APsmart Transmitter Built-in		PVI-50-60 ⁻ positive p
	Wirebox Versions	NEP Transmitter Built-In		PVI-50-6 (only positiv
		Tigo Transmitter Built-in		PVI-50-601 positive p
		de cover accessory required for install kawa Solectria Solar does not supply o		
1	YASK	AWA	Yaskawa Solectria So	plar 1-978-683

SOLECTRIA SOLAR





HPDE (Base) + BASF Ultra-Mid 19.8 Glass Filled Nylon (Legs) 303.0 US Gallons, Water 50.0 Typical for 60 cell solar panel 372.8
303.0US Gallons, Water50.0Typical for 60 cell solar panel
50.0 Typical for 60 cell solar panel
372.8
110 MPH, Category C
31.5 Gallons of Water Ballast
rees gravel, asphalt, base rock, etc.
3 inches between modules
r

		CCORCEPT CLEAN ENERGY 668 N. COAST HWY., STE 272 LAGUNA BEACH, CA 92651 L#: 1042800 STAMP:
	MODULAR	GRID-TIE SOLAR ELECTRIC SYSTEM VIOLICH FARMS INC. GREENWOOD, NORTHSTATE SERVICE 6545-6540 C0 RD 27 0RLAND, CA 95963
40.270 * [1022.86]	BALLASTED Fixed-Tilt Ground Mount Photovoltaic System www.SolarTub.com	PROJECT NUMBER: 23-3639C SCALE NTS ORIGINAL SIZE 24"X36" SHEET SIZE ARCH "D" 0 $\frac{1}{2}$ " 1"
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65643· [1667.33]	SolarTub LLC. 668 N. Coast Highway, Suite 272 Laguna Beach, CA 92651 Manager: Elliot Jaramillo (510) 183-0935 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SOLARTUB LLC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE EXPRESS WRITTEN PERMISSION OF CONCEPT CLEAN ENERGY INC. IS PROHIBITED.	REV ISSUED BY ✓ DESCRIPTION 8/17/23 RH BB UTILITY INTERCONNECTION 9/26/23 NK BB CD IFR – ISSUED FOR R 10/27/23 NK BB CD IFC – ISSUED FOR C 10/27/23 N BB CD IFC – ISSUED FOR C
	Spec Sheet: 3.2.2023	SHEET NO. & NAME: