

Contract Number

21-206 A1

SAP Number

Board Governed County Service Area

Department Contract Representative	Terry W. Thompson, Director
Telephone Number	(909) 387-5000
Contractor	Los Angeles SMSA Limited Partnership, a California limited partnership dba Verizon Wireless
Contractor Representative	
Telephone Number	
Contract Term	4/1/2021 – 6/30/2031
Original Contract Amount	\$153,602.48
Amendment Amount	\$194,763.12
Total Contract Amount	\$348,365.60
Cost Center	1350004634
GRC/PROJ/JOB No.	52003239
Grant Number (if applicable)	

IT IS HEREBY AGREED AS FOLLOWS:

WHEREAS, County Service Area 70J (“DISTRICT”), as landlord, and Los Angeles SMSA Limited Partnership, a California limited partnership dba Verizon Wireless as (“LICENSEE”), entered into License Agreement, Contract No. 21-206 commencing on April 1, 2021, wherein DISTRICT licenses certain Premises, as more specifically described in the License, the real property located at DISTRICT owned land located 11505 El Centro Road (Assessor Parcel No. 3039-441-19-0000) in Hesperia; and

WHEREAS, the DISTRICT and LICENSEE desire to amend the License Agreement, to reflect a permitted month-to-month holdover from April 1, 2026 to June 30, 2026, with DISTRICT’s express consent, and following said holdover, to reflect LICENSEE’s exercise of the first of two options to extend the term for five (5) years starting July 1, 2026 and expiring June 30, 2031.

NOW, THEREFORE, in consideration of the mutual covenants and conditions, the parties hereto agree that the License is amended as follows:

1. Pursuant to **Paragraph 14, HOLDING OVER**, LICENSEE shall, with DISTRICT’s express consent granted herein, use the Premises on a month-to-month holdover term for the period of April 1, 2026 through June 30, 2026, for the total amount of \$12,326.12.

2. Effective July 1, 2026, DELETE in its entirety the existing **Paragraph 1, USE**, and substitute therefore the following as a new **Paragraph 1, USE**:

1. **USE:** The DISTRICT grants a non-exclusive license for the use of the Premises to LICENSEE for the purpose of installing, operating, repairing and maintaining a wireless communication facility containing the following authorized equipment; a 80' monopole antenna tower with faux water tank exterior covering 12 panel antennas (four per sector), two parabolic microwave antennas, a GPS antenna, six remote radio heads (two per sector), a 192 square foot equipment shelter, a 30 KW generator on a new 5' x 9' concrete pad, and a step-down transformer on a new concrete containment pad, all surrounded by an 8' concrete split face block wall, and approximately 450 linear feet of fiber (collectively, "LICENSEE's Authorized Equipment") which equipment is more particularly described on Exhibit "B" and Exhibit "E" and attached hereto and made a part hereof.

This License and the rights herein granted to LICENSEE shall be subject to the paramount legal duties and obligations of DISTRICT including, but not limited to, the right to cross over and/or occupy the Premises with any and all equipment necessary in the preservation of the surrounding DISTRICT-owned property without liability for any damages to LICENSEE's Authorized Equipment. DISTRICT shall give reasonable advance notice, either verbally or in writing of its intent to enter and cross the Premises

3. Effective July 1, 2026, pursuant to LICENSEE's exercise of the first of two five-year options under **Paragraph 3, OPTION TO EXTEND TERM**, DELETE in its entirety the existing **Paragraph 2, TERM**, and substitute therefore the following as a new **Paragraph 2, TERM**:

2. **TERM:** The extended term of this License shall be five (5) years, commencing July 1, 2026 and ending on June 30, 2031 ("First Extended Term").

3. Effective July 1, 2026, DELETE in its entirety the existing **Paragraph 4, FEES**, and substitute therefore the following as new **Paragraph 4, FEES**

4. **FEES:**

- A. LICENSEE shall pay to DISTRICT an initial annual fee of Thirty-Four Thousand Twenty-One and 00/100 Dollars (\$34,021), which shall be due and payable within sixty (60) days after the Commencement Date. Thereafter, the annual fee, which shall be due and payable on or before each anniversary of the Commencement Date during the extended Term, shall be increased on each anniversary of the Commencement Date during the term in the amount of 3.5%, rounded to the nearest whole dollar, over the immediately preceding annual fee, according to the schedule provided below.

Start Date	End Date	Annual Fee
July 1, 2026	June 30, 2027	\$34,021
July 1, 2027	June 30, 2028	\$35,212
July 1, 2028	June 30, 2029	\$36,444
July 1, 2029	June 30, 2030	\$37,720
July 1, 2030	June 30, 2031	\$39,040

- B. If any annual fee or other amounts are not paid when due and payable, LICENSEE shall pay to DISTRICT an additional amount of fifty and 00/100 Dollars (\$50.00) for each overdue annual fee or other amount as an administrative processing charge. The parties agree that this administrative charge represents a fair and reasonable estimate of the costs that DISTRICT will incur by reason of late payment by LICENSEE. Acceptance of any administrative charge shall not constitute a waiver of LICENSEE's default with respect to the overdue rent or amount or prevent DISTRICT from exercising any of the other rights and remedies available to DISTRICT.

Rent and other amounts not paid when due shall bear simple interest from the date due at the rate of one and one-half percent (1½%) per month until paid in full.

4. Effective July 1, 2026, DELETE in its entirety the existing **Paragraph 5, FEE ADJUSTMENTS**.

5. Effective July 1, 2026, DELETE in its entirety the existing **Paragraph 32, NOTICES**, and substitute therefore the following as new **Paragraph 32, NOTICES**:

32. **NOTICES**: Any notice, demand, request, consent, approval, or communication that either party desires or is required to give to the other party or any other person shall be in writing and either served personally or sent by United States mail, postage prepaid, first-class, certified or registered, return receipt requested. Any notice, demand, request, consent, approval, or communication that either party desires or is required to give to the other party shall be addressed to the other party at the address set forth below. Either party may change its address by notifying the other party of the change of address. Notice shall be deemed delivered and effective upon the earlier of: (i) actual receipt; or (ii) the date of delivery or refusal of the addressee to accept delivery if such notice is sent by postage pre-paid, United States first-class mail, certified or registered, return receipt requested.

COUNTY's address: Real Estate Services Department
385 North Arrowhead Avenue, Third Floor
San Bernardino, CA 92415-0180

DISTRICT's address: County Service Area 70
Water & Sanitation
222 W. Hospitality Ln
San Bernardino, CA 92415

LICENSEE's address: Los Angeles SMSA Limited Partnership,
a California limited Partnership
dba Verizon Wireless
180 Washington Valley Rd
Bedminster, NJ 07921
Attention: Network Real Estate

Copy To: Vertical Bridge, LLC
Attn: General Counsel
22 W. Atlantic Ave. Suite 310
Delray Beach, FL 33444

6. Effective July 1, 2026, ADD in its entirety **Paragraph 42, CONSENT** as follows:

42. **CONSENT**: Pursuant to Paragraph 7 (Assignment) of the License, DISTRICT hereby acknowledges and consents to LICENSEE's entry into a Master Prepaid Lease/Management transaction (the "MPL Transaction") with Vertical Bridge NTCF, LLC (directly or through one or more affiliates, successors or permitted assigns, "VB"), whereby (i) LICENSEE will transfer to VB certain rights related to the operation, management, and administration of LICENSEE's improvements and telecommunications operations at the Premises consistent with the License (the "Transfer"), and (ii) VB (or its designee) will concurrently lease back to LICENSEE, or otherwise grant to LICENSEE, the rights necessary for LICENSEE to continue to operate, maintain, repair and replace LICENSEE's Authorized Equipment at the Premises (the "Lease-Back"). DISTRICT's consent hereunder is limited to the Transfer and Lease-Back contemplated by the MPL Transaction and is provided to the extent that any consent may be required under Paragraph 7 of the License. DISTRICT agrees and confirms that no compensation is due in connection with the MPL Transaction.

7. Effective July 1, 2026, ADD in its entirety Exhibit “E”- Solar Canopy Project attached and incorporated herein.

8. Effective July 1, 2026, ADD in its entirety **Exhibit “F”- Fiber Installation** attached and incorporated herein.

9. Effective as of the date this Amendment is fully executed by the Parties, ADD in its entirety **Paragraph 43, LEVINE ACT CAMPAIGN CONTRIBUTION DISCLOSURE** and **EXHIBIT “D”, Levine Act Campaign Contribution Disclosure** incorporated and attached herein, which new **Paragraph 43** shall read as follows:

43. **LEVINE ACT CAMPAIGN CONTRIBUTION DISCLOSURE:** LICENSEE has disclosed to the District using “Exhibit D” – LEVINE ACT CAMPAIGN CONTRIBUTION DISCLOSURE, whether it has made any campaign contributions of more than \$500 to any member of the Board of Directors Supervisors or other County elected officer [Sheriff, Assessor-Recorder-Clerk, Auditor-Controller/Treasurer/Tax Collector and the District Attorney] within the earlier of: (1) the date of the submission of LICENSEE’s proposal to the DISTRICT, or (2) 12 months before the date this License was approved by the Board of Supervisors. LICENSEE acknowledges that under Government Code section 84308, LICENSEE is prohibited from making campaign contributions of more than \$500 to any member of the Board of Supervisors or other County elected officer for 12 months after the DISTRICT’s consideration of the License.

In the event of a proposed amendment to this License, the LICENSEE will provide the DISTRICT a written statement disclosing any campaign contribution(s) of more than \$500 to any member of the Board of Supervisors or other County elected officer within the preceding 12 months of the date of the proposed amendment.

Campaign contributions include those made by any agent/person/entity on behalf of the LICENSEE or by a parent, subsidiary, or otherwise related business entity of LICENSEE.

10. This First Amendment may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, and such counterparts shall together constitute one and the same First Amendment. The parties shall be entitled to sign and transmit an electronic signature of this First Amendment (whether by facsimile, PDF, or other email transmission), which signature shall be binding on the party whose name is contained therein. Each party providing an electronic signature agrees to promptly execute and deliver to the other party an original signed First Amendment upon request.

11. All other provisions and terms of the License shall remain the same and are hereby incorporated by reference. In the event of conflict between the License and this First Amendment, the provisions and terms of this First Amendment shall control.

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END OF FIRST AMENDMENT

COUNTY SERVICE AREA 70J

LICENSEE: Los Angeles SMSA Limited Partnership, a California limited partnership dba Verizon Wireless
Attorney-in-Fact: Vertical Bridge NTCF, LLC a Delaware limited liability company
(Print or type name of corporation, company, contractor, etc.)

► _____
Dawn Rowe, Chair

Dated: _____
SIGNED AND CERTIFIED THAT A COPY OF THIS DOCUMENT HAS BEEN DELIVERED TO THE CHAIR OF THE BOARD

Lynna Monell
Clerk of the Board

By _____
Deputy

By ► _____
(Authorized signature - sign in blue ink)

Name Adam Ginder
(Print or type name of person signing contract)

Title VP
(Print or Type)

Dated: _____

Address 22 W. Atlantic Ave. Suite 310
Delray Beach, FL 33444

FOR COUNTY USE ONLY

Approved as to Legal Form

Reviewed for Contract Compliance

Reviewed/Approved by Department

► _____
John Tubbs II, Deputy County Counsel

► _____

► _____
John Gomez, Real Property Manager, RESD

Date _____

Date _____

Date _____

EXHIBIT "D"



Levine Act – Campaign Contribution Disclosure (formerly referred to as Senate Bill 1439)

The following is a list of items that are not covered by the Levine Act. A Campaign Contribution Disclosure Form will not be required for the following:

- Contracts that are competitively bid and awarded as required by law or County policy
- Contracts with labor unions regarding employee salaries and benefits
- Personal employment contracts
- Contracts under \$50,000
- Contracts where no party receives financial compensation
- Contracts between two or more public agencies
- The review or renewal of development agreements unless there is a material modification or amendment to the agreement
- The review or renewal of competitively bid contracts unless there is a material modification or amendment to the agreement that is worth more than 10% of the value of the contract or \$50,000, whichever is less
- Any modification or amendment to a matter listed above, except for competitively bid contracts.

DEFINITIONS

Actively supporting or opposing the matter: (a) Communicate directly with a member of the Board of Supervisors or other County elected officer [Sheriff, Assessor-Recorder-Clerk, District Attorney, Auditor-Controller/Treasurer/Tax Collector] for the purpose of influencing the decision on the matter; or (b) testifies or makes an oral statement before the County in a proceeding on the matter for the purpose of influencing the County's decision on the matter; or (c) communicates with County employees, for the purpose of influencing the County's decision on the matter; or (d) when the person/company's agent lobbies in person, testifies in person or otherwise communicates with the Board or County employees for purposes of influencing the County's decision in a matter.

Agent: A third-party individual or firm who, for compensation, is representing a party or a participant in the matter submitted to the Board of Supervisors. If an agent is an employee or member of a third-party law, architectural, engineering or consulting firm, or a similar entity, both the entity and the individual are considered agents.

Otherwise related entity: An otherwise related entity is any for-profit organization/company which does not have a parent-subsidary relationship but meets one of the following criteria:

- (1) One business entity has a controlling ownership interest in the other business entity;
- (2) there is shared management and control between the entities; or
- (3) a controlling owner (50% or greater interest as a shareholder or as a general partner) in one entity also is a controlling owner in the other entity.

For purposes of (2), "shared management and control" can be found when the same person or substantially the same persons own and manage the two entities; there are common or commingled funds or assets; the business entities share the use of the same offices or employees, or otherwise share activities, resources or personnel on a regular basis; or there is otherwise a regular and close working relationship between the entities.

Parent-Subsidiary Relationship: A parent-subsidiary relationship exists when one corporation has more than 50 percent of the voting power of another corporation.

LICENSEE must respond to the questions on the following page. If a question does not apply respond N/A or Not Applicable.

1. Name of LICENSEE: Los Angeles SMSA Limited Partnership, Attorney-in-Fact: Vertical Bridge NTCF, LLC
2. Is the entity listed in Question No.1 a nonprofit organization under Internal Revenue Code section 501(c)(3)?
 Yes If yes, skip Question Nos. 3-4 and go to Question No. 5 No
3. Name of Principal (i.e., CEO/President) of entity listed in Question No. 1, if the individual actively supports the matter and has a financial interest in the decision: _____
4. If the entity identified in Question No.1 is a corporation held by 35 or less shareholders, and not publicly traded ("closed corporation"), identify the major shareholder(s):

5. Name of any parent, subsidiary, or otherwise related entity for the entity listed in Question No. 1 (see definitions above):

Company Name	Relationship
Vertical Bridge NTCF, LLC	Attorney-in-Fact for Los Angeles SMSA Limited Partnership

6. Name of agent(s) of LICENSEE:

Company Name	Agent(s)	Date Agent Retained (if less than 12 months prior)

7. Name of Subcontractor(s) (including Principal and Agent(s)) that will be providing services/work under the awarded contract if the subcontractor (1) actively supports the matter and (2) has a financial interest in the decision and (3) will be possibly identified in the contract with the County or board governed special district.

Company Name	Subcontractor(s):	Principal and/or Agent(s):

8. Name of any known individuals/companies who are not listed in Questions 1-7, but who may (1) actively support or oppose the matter submitted to the Board and (2) have a financial interest in the outcome of the decision:

Company Name	Individual(s) Name

9. Was a campaign contribution, of more than \$500, made to any member of the San Bernardino County Board of Supervisors or other County elected officer involved with this Contract within the prior 12 months, by any of the individuals or entities listed in Question Nos. 1-8?

No

Yes If yes, please provide the contribution information in Question 11.

10. Has an agent of LICENSEE made a campaign contribution of any amount to any member of the San Bernardino County Board of Supervisors or other elected officer involved with this Contract while award of this Contract is being considered?

No If no, please skip question 11.

Yes If yes, please provide the contribution information in Question 11.

11. Name of Board of Supervisor Member or other County elected officer: _____

Name of Contributor: _____

Date(s) of Contribution(s): _____

Amount(s): _____

Please add an additional sheet(s) to identify additional Board Members or other County elected officers to whom anyone listed made campaign contributions.

By signing the Contract, LICENSEE certifies that the statements made herein are true and correct. LICENSEE acknowledges that agents are prohibited from making any campaign contributions, regardless of amount, to any member of the Board of Supervisors or other County elected officer involved with this Contract, while award of this Contract is being considered and for 12 months after a final decision by the District. LICENSEE understands that the other individuals and entities (excluding agents) listed in Question Nos. 1-8 are prohibited from making campaign contributions of more than \$500 to any member of the Board of Supervisors or other County elected officer involved with this Contract, while award of this Contract is being considered and for 12 months after a final decision by the District.

EXHIBIT "E"
Solar Canopy Project
(Following Pages)



SOLAR CANOPY PROJECT DAISY

11505 EL CENTRO ROAD
HESPERIA, CA 92344

verizon
15505 SAND CANYON AVENUE, D1
IRVINE, CALIFORNIA 92618

MOTIVE
INFRASTRUCTURE
SOLUTIONS
17260 Newhope Street
Fountain Valley, California 92708
tel 714.753.4353 | fax 949.755.3931

PROJECT TEAM

REVISIONS			
REV.	DATE	DESCRIPTION	INT.
A	11/20/23	EXHIBIT	ASU
B	06/15/24	PRELIM 90% CD	ASU
C	08/23/24	DEM COMMENTS	ASU
D	09/15/24	DEM COMMENTS (RE DESIGN)	ASU

SITE INFORMATION:

11505 EL CENTRO ROAD
HESPERIA, CA 92344

SHEET TITLE:



SHEET NUMBER:



2022 CALIFORNIA BUILDING CODE.
2022 MECHANICAL CALIFORNIA CODE.
2022 CALIFORNIA PLUMBING CODE.
2022 CALIFORNIA FIRE CODE.
2023 NATIONAL ELECTRICAL CODE, NFPA 70.
2022 CALIFORNIA BUILDING STANDARDS CODE, TITLE 24, OCR
ANSI/TIA-222-H
BUILDING OFFICIALS & CODE ADMINISTRATORS (BOCA).
CITY OF PITTSBURGH ORDINANCES.

ADA COMPLIANCE-- INSTALLATION IS UNMANNED AND NOT FOR HUMAN
HABITATION. HANDICAP ACCESS IS NOT REQUIRED FOR ADA.



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ABBREVIATIONS

A	AMP
AL	ALTERNATING CURRENT
AL	ALUMINUM
ATS	AUTOMATED TRANSFER SWITCH
CB	COMBINER BOX
CIT	CIRCUIT
CU	COPPER
DC	DIRECT CURRENT
DISCO	DISCONNECT
E	EXISTING
EGC	EQUIPMENT GROUNDING CONDUCTOR
FG	FINISH GRADE
G	GENERATOR
SEC	GROUNDING ELECTRODE CONDUCTOR
GRD	GROUND
JBOX	JUNCTION BOX
M	METER
MDB	MAIN DISTRIBUTION BOARD
N	NEW (PROPOSED)
PB	PULL BOX
PE	POSITIVE EARTH
TRMR	TRANSFORMER

SYMBOLS LIBRARY

	NORTH ARROW		EXISTING GENERATOR
	KEYED NOTE		ELEVATION BOX
	DRAWING TITLE		JUNCTION CONTROL
	DETAIL CALLOUT		DETAIL REFERENCE
	SECTION CALLOUT		GRIDLINE REFERENCE
	ELEVATION CALLOUT		BUILDING SECTION
	DISCONNECT		NORTH ARROW
	CIRCUIT BREAKER		COMBINER BOX
	CIRCUIT BREAKER WITH WIRE BUNDLE		DISCONNECT
	FUSED DISCONNECT		FUSE
	DISCONNECT		CIRCUIT BREAKER
	UTILITY METER WITH CIRCUIT TRANSFORMER (275V) METER		
	POWER TRANSFORMER		
	FEEDER SPECIFICATION		
	CONDUIT TURNED DOWN		
	CONDUIT TURNED UP		
	CONDUIT STRIPPED AND CAPPED		
	UTILITY COMPANY PULL SECTION LUGS		
	GROUNDING CONNECTION TO MAIN BUILDING GROUND SYSTEM U.G.N.		
	GROUNDING CONNECTION AT SWITCHGEAR DISTRIBUTION BOARD WITH NEUTRAL BONDING		
	EXISTING UNDERGROUND CONDUIT RUN		
	INDOOR ROOF CONDUIT RUN		
	EXISTING EQUIPMENT		
	NEW EQUIPMENT		

DEBS REQUIRED NOTES

1. ALL PV SYSTEM COMPONENTS SHALL BE LISTED BY CITY RECOGNIZED TESTING AGENCY (I.E. ULTH, ETC.)
2. THE WIRING MATERIAL SHALL BE IDENTIFIED FOR SUN EXPOSURE AND WET LOCATIONS. FIELD APPLIED COATINGS ARE NOT ACCEPTABLE.
3. ALL FIELD INSTALLED JUNCTION, PULL AND OUTLET BOXES LOCATED BEHIND MODULES OR PANELS SHALL BE ACCESSIBLE DIRECTLY OR BY DISPLACEMENT OF A MODULE(S) OR PANEL(S) SECURED BY REMOVABLE FASTENERS.
4. SINGLE-CONDUCTOR CABLE TYPE USE AND PV WIRES THAT ARE APPROVED BY THE HAWAII ELECTRICAL TESTING LABORATORY ARE PERMITTED TO BE USED IN THE SOURCE CIRCUITS.
5. REMOVAL OF A UTILITY INTERACTIVE INVERTER OF OTHER EQUIPMENT SHALL NOT DISCONNECT THE BONDING CONNECTION BETWEEN THE GROUNDING ELECTRODE CONDUCTOR AND THE PV SOURCE.
6. CONDUCTOR TO PROVIDE EXPANSION FITTINGS EVERY 30' ON EXPOSED CONDUITS.

GENERAL NOTES

- GENERAL CONSTRUCTION NOTES:**
1. THE JOBSITE SHALL BE MAINTAINED IN A CLEAN ORDERLY CONDITION FREE OF DEBRIS AND LITTER AND SHALL NOT BE UNREASONABLY ENCUMBERED WITH ANY MATERIALS OR EQUIPMENT AND SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
 2. CONSTRUCTION AND MATERIALS SHALL BE AS SPECIFIED AND AS REQUIRED BY THE LATEST EDITION OF THE BUILDING CODE CURRENTLY ADOPTED BY THE AUI INCLUDING ANY ALL LOCALLY ENFORCED CODES AND AUTHORITIES. ALL ARTS, MATERIALS AND EQUIPMENT SHALL BE INSTALLED AND CONNECTED AS DIRECTED BY THE MANUFACTURER'S LATEST WRITTEN INSTRUCTIONS EXCEPT WHERE OTHERWISE NOTED. MATERIALS NOTED ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE SPECIFICATIONS.
 3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
 4. IT SHALL BE CONTRACTOR'S RESPONSIBILITY TO DESIGN AND PROVIDE ADEQUATE SHORING AND BRACING REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING INSTALLATION.
 5. G.F.P. AND ARC REDUCTION REQUIRED FOR THE MAIN RT SERVICE.

- PHOTOVOLTAIC INSTALLATION:**
1. ALL PV MODULES AND ASSOCIATED EQUIPMENT SHALL BE PROTECTED FROM ANY PHYSICAL DAMAGE.
 2. LIVE PARTS OF PV SOURCE CIRCUITS AND PV OUTPUT CIRCUITS OVER 150V TO GROUND SHALL NOT BE ACCESSIBLE TO OTHER THAN QUALIFIED PERSONS WHILE ENERGIZED.
 3. THE MOUNTED PV MODULES SHALL HAVE THE SAME OR BETTER LISTED FIRE RESISTANCE RATING THAN THAT OF THE BUILDING MATERIAL.
 4. NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN THE DEDICATED SPACE ABOVE THE ELECTRICAL EQUIPMENT.
 5. ALL CONNECTORS AND COUPLERS ARE SET SCREW-TYPE UNLESS OTHERWISE NOTED WHEN RUN INSIDE A BUILDING ALL EXTERIOR CONNECTORS AND COUPLERS SHALL BE RAIN TIGHT.

- GROUNDING:**
1. ALL SERVICES SUPPLYING THE BUILDING SHALL HAVE THE SAME GROUNDING ELECTRODE SYSTEM.
 2. REMOVAL OF A GAS INTERACTIVE INVERTER OR OTHER EQUIPMENT SHALL NOT DISCONNECT THE BONDING CONNECTION BETWEEN THE GROUNDING ELECTRODE CONDUCTOR AND THE PHOTOVOLTAIC SOURCE AND OR OUTPUT CIRCUIT GROUNDED CONDUCTOR.
 3. GROUND BOND CONDUCTOR SHALL NOT BE SPLICED.
 4. USE SOLAR OR APPROVED 1/4" IN W/1/8" O.D. 1/4" WET RATED FOR GROUNDING AND BONDING. HIGH STRENGTH COPPER ALLOY W/ 5% SCRIPWAS NECESSARY.
 5. DC EQUIPMENT GROUND SHALL BE MINIMUM #8 AWG SOLID CU WIRE TO BOND MODULE FRAMES AND RACKING WHEN INTEGRATED OR WEEB GROUNDING IS NOT AVAILABLE.
 6. CONTRACTOR SHALL CONFIRM EXISTING BUILDING AND PANEL GROUNDING PRIOR TO INSTALLATION.

- PV SYSTEM COMPONENTS:**
1. ALL CONDUIT RUNS SHALL BE SPECIFICALLY REVIEWED IN THE FIELD WITH THE ARCHITECT FOR APPROVAL OF MOUNTING ROUTING AND EXPOSURE PRIOR TO INSTALLATION.
 2. ALL PV SYSTEM COMPONENTS SHALL BE LISTED BY A RECOGNIZED TESTING AGENCY (I.A. ULTH, etc.)
 3. INVERTER SHALL BE EQUIPPED WITH INTEGRATED GFD, THUS PROVIDING GROUND FAULT PROTECTION.
 4. ALL ENCLOSURES MOUNTED TO EXTERIOR WALLS SHALL BE MIN. NEMA 3R RATED.
 5. ALL COMBINER BOXES SHALL BE MIN. NEMA 4.
 6. ALL REQUIRED CONDUCTOR SPLICES SHALL BE MADE WITH UL LISTED "POLARIS LUG" IN AN APPROPRIATELY SIZED JUNCTION/GUTTER BOX.
 7. ALL PV MODULES AND INVERTERS SHALL BE RECOGNIZED AND APPROVED BY THE HAWAII ENERGY COMMISSION.
 8. ALL MOUNTING CONDUITS, EXTERIOR AND INTERIOR SHALL BE DRY OR RIGID. PV/F UNDERGROUND UNLESS NOTED OTHERWISE.

CONDUCTORS:

1. ALL CONDUCTORS SHALL BE COPPER UNLESS OTHERWISE NOTED.
2. ALL PROPOSED CONDUCTORS RATED FOR 80% HOWEVER EQUIPMENT RATINGS SHALL BE ASSUMED TO BE 75% FOR ALL BUILDING FEEDERS AND THEREFORE TERMINATIONS PRIOR TO CONNECTION. INTERMEDIATE JUNCTION BOX MAY BE REQUIRED TO CHANGE FROM 80% TO 75% WIRING. MATERIAL SHALL BE COPPER AND 80% RATED, SUITABLE FOR SUN EXPOSURE AND WET LOCATIONS. FIELD APPLIED COATINGS ARE NOT ACCEPTABLE.
2. ALL PROPOSED CONDUCTORS RATED FOR 80% HOWEVER EQUIPMENT RATINGS SHALL BE ASSUMED TO BE 75% FOR ALL BUILDING FEEDERS AND THEREFORE TERMINATIONS PRIOR TO CONNECTION. INTERMEDIATE JUNCTION BOX MAY BE REQUIRED TO CHANGE FROM 80% TO 75% WIRING. MATERIAL SHALL BE COPPER AND 80% RATED, SUITABLE FOR SUN EXPOSURE AND WET LOCATIONS. FIELD APPLIED COATINGS ARE NOT ACCEPTABLE.
3. ALL WIRE INSULATION TYPE SHALL BE PV WIRE FOR DC SOLAR CIRCUITS.
4. EACH SOLAR PHOTOVOLTAIC MODULE HAS A POSITIVE AND NEGATIVE PV WIRE "SUNGLIGHT RESISTANT" QUICK CONNECT PLUG IN LEAD. VERIFY COMPATIBLE EXTENSION WIRING PRIOR TO INSTALLATION.
5. ALL INTER-MODULE SERIES CONNECTIONS TO BE THE STRAPPED (WITH BLACK UV RESISTANT TIE STRAPS) AND/OR PRE-FABRICATED OR SOLAR APPROVED WIRE SOUTING TRAY SOLAS TO BEST CONCEAL AND PROTECT INTER-MODULE HOMOGEN WIRING. ALL WIRING TO BE CONCEALED UNDER ARRAY AND/OR IN CONDUIT.
6. ALL HOMOGEN WIRE RUNS BETWEEN ROWS SHALL BE MADE IN CONDUIT WITH STRAIN RELIEF FITTING OR WIRE COMPRESSION CLAMP AND CONDUIT PUTTY TO ACT AS BARRIER TO MOISTURE.
7. ALL HOMOGEN WIRE RUNS OF LENGTH GREATER THAN 30' SHALL BE MADE FROM NEMA OR MIN. RATED JOUY WITH TRIMING CONDUCTORS IN CONDUIT. CONTRACTOR SHALL VERIFY PROPER VOLTAGE RATINGS OF CONDUCTORS.

FIRE NOTES:

- PHOTOVOLTAIC SYSTEMS (SOLAR POWER) REQUIREMENTS:**
- MAIN SERVICE DISCONNECT:**
- MARKING SHALL BE PLACED ADJACENT TO THE MAIN SERVICE DISCONNECT IN A LOCATION CLEARLY VISIBLE FROM THE LOCATION WHERE THE LEVEL IS OPERATED.

- MARKING CONTENT AND FORMAT:**
- CAUTION: SOLAR ELECTRIC SYSTEM CONNECTED.
 - RED BACKGROUND
 - WHITE LETTERING
 - MINIMUM 3/8" LETTER HEIGHT
 - ALL CAPITAL LETTERS
 - AZIAL OR SIMILAR FONT, NON-BOLD
 - REFLECTIVE, WEATHER RESISTANT MATERIAL, SUITABLE FOR THE ENVIRONMENT

- CAUTION: SOLAR ELECTRIC SYSTEM**
- PV SYSTEM MUST BE MARKED. ALL ELECTRICAL PANELS, SHUT-OFFS SHALL BE DESIGNED TO SHUT OFF ALL POWER (SOLAR AND DOMESTIC) AFTER THE PANEL, ALL INTERIOR AND EXTERIOR DC CONDUIT, RACEWAYS, ENCLOSURES, CABLE ASSEMBLIES AND JUNCTION BOXES TO ALERT THE FIRE SERVICES TO AVOID CUTTING THEM. THESE MARKING SHALL BE PLACED EVERY 10 FEET, ABOVE OR BELOW PENETRATING AND ON ALL DC COMBINER BOXES AND JUNCTION BOXES REQUIRED FOR EACH INVERTER.
- CAUTION: SOLAR ELECTRIC SYSTEM CONNECTED.
 - RED BACKGROUND
 - WHITE LETTERING
 - MINIMUM 3/8" LETTER HEIGHT
 - ALL CAPITAL LETTERS
 - AZIAL OR SIMILAR FONT, NON-BOLD
 - REFLECTIVE, WEATHER RESISTANT MATERIAL, SUITABLE FOR THE ENVIRONMENT

- CAUTION: SOLAR CIRCUIT**
- ACCESS, PATHWAYS AND SMOKE VENTILATION ACCESS AND SPACING REQUIREMENTS SHOULD BE OBSERVED IN ORDER TO:
- ENSURE SOLAR PATHWAY ACCESS
 - PROVIDE PATHWAYS TO SPECIFIC AREAS TO THE SOLAR PANEL STRUCTURE.
 - PROVIDE FOR SMOKE VENTILATION OPPORTUNITIES AREA.
 - PROVIDE EMERGENCY EGRESS.

- EXCEPTIONS TO THESE REQUIREMENTS MAY BE ALLOWED ON CASE BY CASE BASIS. COMMERCIAL BUILDINGS AND RESIDENTIAL HOUSING COMPRISED OF 3 OR MORE UNITS.
- LOCATION OF DIRECT CURRENT (DC) CONDUCTORS**
- CONDUIT, WIRING SYSTEMS AND RACEWAYS FOR PHOTOVOLTAIC CIRCUITS SHOULD BE LOCATED AS CLOSE AS POSSIBLE TO THE RIDGE OF THE HIP OR VALLEY FROM THE HIP OR VALLEY AS DIRECTED AS POSSIBLE TO THE OUTSIDE WALL TO REDUCE TRIP HAZARDS AND MAXIMIZE VENTILATION OPPORTUNITIES.
- CONDUIT RUNS BETWEEN SUB ARRAYS AND TO DC COMBINER BOXES SHOULD USE DESIGN GUIDELINES THAT MINIMIZE TOTAL AMOUNT OF CONDUIT, BY TAKING THE SHORTEST ROUTE PATH FROM THE ARRAY TO THE DC COMBINER BOX. THE DC COMBINER BOXES ARE TO BE LOCATED SUCH THAT THE CONDUIT RUNS ARE MINIMIZED IN THE PATHWAYS BETWEEN ARRAYS.

- MARKINGS AND WARNING LABELS (REQUIREMENTS)**
- A. PURPOSE:** PROVIDES EMERGENCY RESPONDERS WITH APPROPRIATE WARNING AND GUIDANCE WITH RESPECT TO ISOLATING THE SOLAR ELECTRICAL SYSTEM. THIS CAN FACILITATE IDENTIFYING ENERGIZED ELECTRICAL LINES THAT CONNECT THE SOLAR PANELS TO THE INVERTER AS THESE SHOULD NOT BE CUT WHEN VENTING FOR SMOKE REMOVAL.
- B. MAIN SERVICE DISCONNECT:**
1. MARKINGS: VERBAGE, FORMAT AND TYPE OF MATERIAL.
 - a. VERBAGE: CAUTION: SOLAR ELECTRIC SYSTEM CONNECTED.
 - b. FORMAT
 - c. 1. WHITE LETTERING ON A RED BACKGROUND.
 2. MINIMUM 3/8 INCHES LETTER HEIGHT.
 3. ALL LETTERS SHALL BE CAPITALIZED.
 4. AZIAL, OR SIMILAR FONT, NON-BOLD.
 2. MATERIAL:
 1. REFLECTIVE, WEATHER RESISTANT MATERIAL, SUITABLE FOR THE ENVIRONMENT (USE UL-966 AS STANDARD FOR WEATHER RATING).
- REQUIREMENT:**
- C. MARKING REQUIREMENTS ON DC CONDUIT, RACEWAYS, ENCLOSURES, CABLE ASSEMBLIES, DC COMBINERS AND JUNCTION BOXES.**
1. MARKINGS: PLACEMENT, VERBAGE, FORMAT AND TYPE OF MATERIAL.

- D. PLACEMENT: MARKINGS SHALL BE PLACED EVERY 10 FEET ON ALL INTERIOR AND EXTERIOR DC CONDUITS, RACEWAYS, ENCLOSURES AND CABLE ASSEMBLIES AT TURNS ABOVE AND FOR BELOW PENETRATIONS, ALL DC COMBINERS AND JUNCTION BOXES.
- E. VERBAGE: CAUTION: SOLAR CIRCUIT NOTE. THE FORMAT AND TYPE OF MATERIAL SHALL ADHERE TO "A-B-C," O" OF THIS REQUIREMENT.
- F. INVERTERS - ARE NOT REQUIRED TO HAVE CAUTION MARKINGS.

ADDITIONAL NOTES:

1. LABEL: "WARNING: PHOTOVOLTAIC POWER SOURCE" ON ALL EXPOSED CONDUIT, ENCLOSURES, CABLE ASSEMBLIES, JUNCTION BOXES.
2. LABELS SHALL HAVE WHITE LETTERING WITH RED BACKGROUND.
3. LABELS LETTERING SHALL BE IN ALL CAPITAL LETTERS A SERIAL FONT AND MINIMUM OF 3/8" HEIGHT AND SIZE.
4. MINIMUM SIZE FOR LABELS SHALL BE 4"x4".
5. LABELS SHALL BE REFLECTIVE, WEATHER RESISTANT MATERIAL.
6. ALL PV SYSTEM COMPONENTS SHALL BE LISTED BY A RECOGNIZED TESTING AGENCY.
7. SIGNS SHALL BE POSTED ADJACENT TO EACH PV DISCONNECT AND INVERTER TO INDICATE PHOTOVOLTAIC SYSTEM.
8. ALL PV MODULES AND ASSOCIATED EQUIPMENT AND WIRING SHALL BE PROTECTED FROM ANY PHYSICAL DAMAGE.
9. ALL FIELD INSTALLED JUNCTION, PULL AND OUTLET BOXES LOCATED BEHIND MODULES OR PANELS SHALL BE ACCESSIBLE DIRECTLY OR BY THE DISPLACEMENT OF ONE MODULE SECURED BY REMOVABLE FASTENERS.

15505 SAND CANYON AVENUE, DT
IRVINE, CALIFORNIA 92618

MOTIVE INFRASTRUCTURE SOLUTIONS

17200 Newhope Street
Fountain Valley, California 92708
Phone: (951) 384-0186
Tel: 714.752.4283 | Fax: 949.760.3631

PROJECT TEAM

CONSTRUCTION:
MOTIVE INFRASTRUCTURE SOLUTIONS
ADDRESS: 705 TRADEWIND CIRCLE,
CORONA CALIFORNIA 92709
PHONE: (951) 384-0186

REVISIONS			
REV.	DATE	DESCRIPTION	INT.
A	11/20/23	DO-BIDD	ASU
B	06/13/24	PRELIM 90% CD	ASU
C	08/23/24	DRW COMMENTS	ASU
D	09/13/24	DRW COMMENTS (REV. DESIGN)	ASU

SITE INFORMATION:

DAISI
11505 EL CENTRO ROAD
HESPERIA, CA 92344

SHEET TITLE:

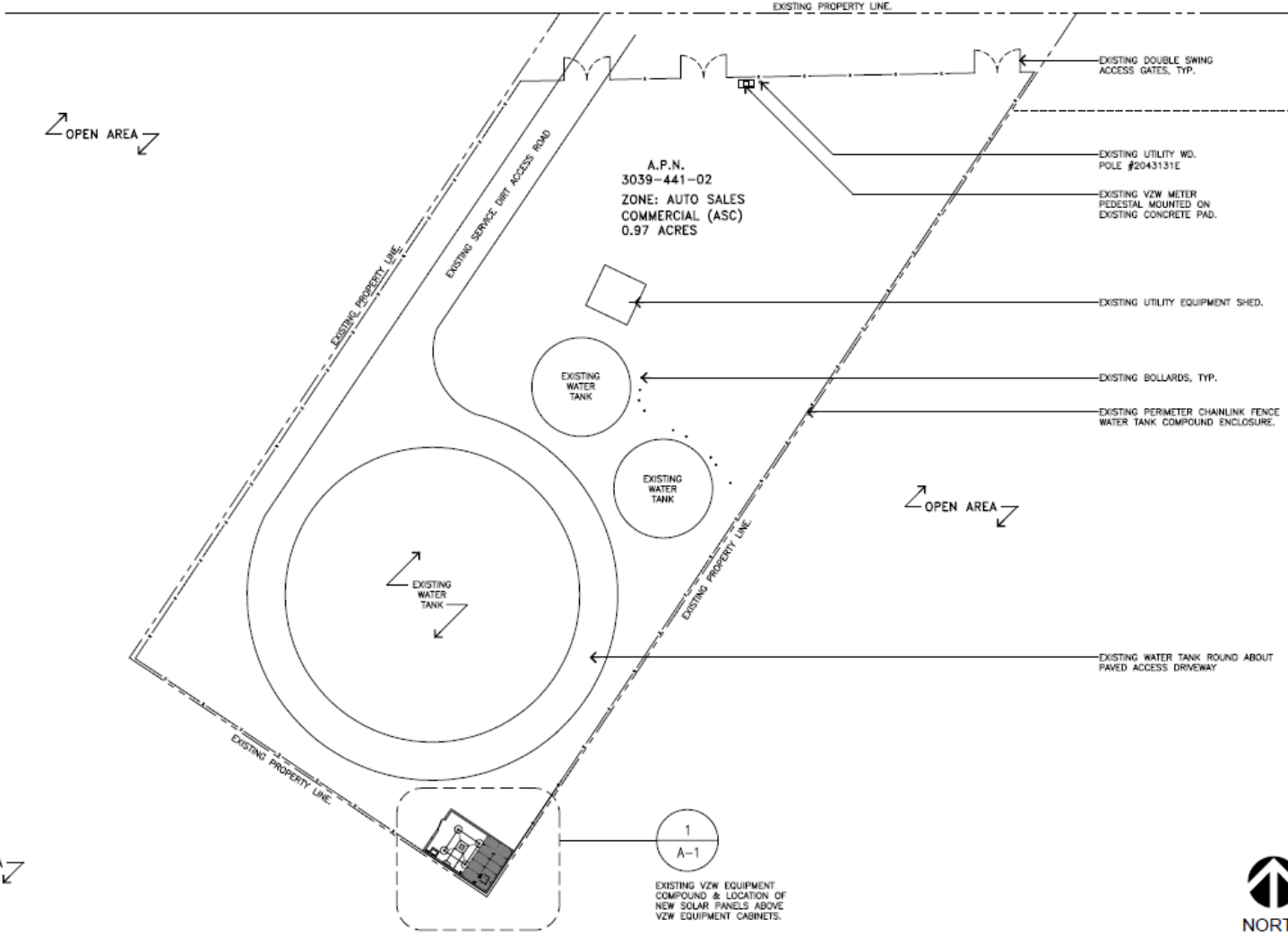
GENERAL NOTES

SHEET NUMBER:

T-2

EL CENTRO

EXISTING PROPERTY LINE.



A.P.N.
3039-441-02
ZONE: AUTO SALES
COMMERCIAL (ASC)
0.97 ACRES

- EXISTING DOUBLE SWING ACCESS GATES, TYP.
- EXISTING UTILITY W.D. POLE #2043131E
- EXISTING V2W METER PEDESTAL MOUNTED ON EXISTING CONCRETE PAD.

- EXISTING UTILITY EQUIPMENT SHED.
- EXISTING BOLLARDS, TYP.
- EXISTING PERIMETER CHAINLINK FENCE WATER TANK COMPOUND ENCLOSURE.

EXISTING WATER TANK ROUND ABOUT PAVED ACCESS DRIVEWAY

1
A-1
EXISTING V2W EQUIPMENT COMPOUND & LOCATION OF NEW SOLAR PANELS ABOVE V2W EQUIPMENT CABINETS.

15505 SAND CANYON AVENUE, D1
IRVINE, CALIFORNIA 92618

17260 Newhope Street
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tel: 714.752.4263 | fax: 949.760.3631

PROJECT TEAM

CONSTRUCTION:
MOTIVE INFRASTRUCTURE SOLUTIONS
ADDRESS: 75 TRUCKWAY CIRCLE,
CORONA CALIFORNIA 92709
PHONE: (951) 264-0136

Local map:

REVISIONS

REV.	DATE	DESCRIPTION	INIT.
A	11/20/23	EXHIBIT	ASU
B	06/13/24	PRELIM SURV. CD.	ASU
C	08/23/24	DIRM COMMENTS	ASU
D	09/13/24	DIRM COMMENTS (RE DESIGN)	ASU

SITE INFORMATION:

DAISY
11555 EL CENTRO ROAD
HESPERIA, CA 92344

SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:

A-0.1

OVERALL SITE PLAN

11X17 SCALE: 1"=40'
24X36 SCALE: 1"=20'

1



EQUIPMENT PLAN KEYNOTES

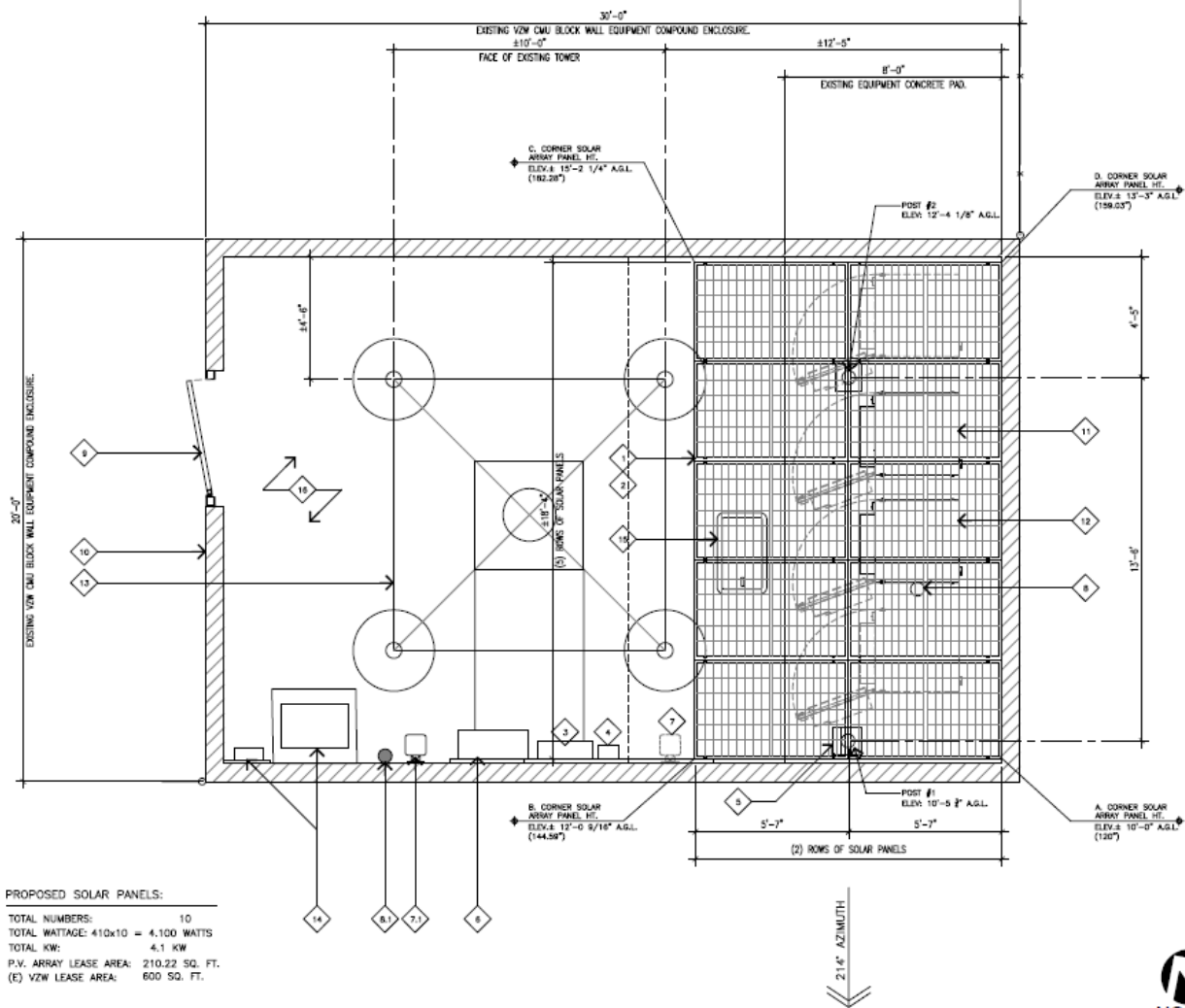
- 1 NEW SOLAR PANELS ABOVE EXISTING VZW EQUIPMENT CABINETS, SEE MANUFACTURER SPECIFICATIONS.
- 2 NEW SOLAR PANEL FRAMING SUPPORT, POST & BRACKETS (BY PREFORMED LINE PRODUCTS) OR APPROVED EQUIVALENT, SEE MANUFACTURER'S SPECIFICATIONS.
- 3 NEW (1) NEMA 3R 24x24x4" DC CABINET WITH DIN MOUNTED DC BREAKERS INSIDE, MOUNTED ON (N) UNISTRUTS MOUNTED ON (E) FENCE POST.
- 4 NEW (1) SOLAR CHARGE CONTROLLER, MOUNTED ON UNISTRUTS ALONGSIDE NEW NEMA 3R CABINETS.
- 5 NEW NEMA 3R CONSUMER (NHPV-6-250) CABINET WITH SURGE SUPPRESSOR MOUNTED ON (E) 31-FRAME; SEE MANUFACTURER'S SPECIFICATIONS.
- 6 EXISTING VZW AC PANEL LOAD CENTER
- 7 NEE LOCATION EXISTING TECH LIGHT
- 7.1 RELOCATED LOCATION OF EXISTING TECH LIGHT
- 8 EXISTING VZW GPS ANTENNA TO BE RELOCATED.
- 8.1 (N) LOCATION OF (E) VZW GPS ANTENNA, MOUNTED ON CMU WALL ON VERT. PIPE AS NEEDED OR REQUIRED.
- 9 EXISTING SINGLE SWING ACCESS GATE.
- 10 EXISTING VZW CMU BLOCK WALL EQUIPMENT COMPOUND ENCLOSURE WITH BARBED WIRE ABOVE.
- 11 EXISTING VZW DC POWER PLANT CABINET MOUNTED ON (E) EQUIPMENT CONCRETE PAD.
- 12 EXISTING VZW BATTERY CABINET MOUNTED ON (E) EQUIPMENT CONCRETE PAD.
- 13 EXISTING (A) LOGGED SELF SUPPORT TOWER WITH VZW FAUX WATER TANK ABOVE, WITH CONCRETE CASSONS.
- 14 EXISTING VZW TRANSFORMER & DISCONNECT.
- 15 EXISTING UTILITY HAND HOLE BELOW GROUND WITH CONC. COVER.
- 16 EXISTING CRUSHED GRAVEL.

NOTES:

- 1. (E) GPS ANTENNA TO BE RELOCATED & TO BE CLEAR OF (N) SOLAR PANELS.
- 2. SOLAR PANEL MOUNTING BRACKETS ARE ONLY GRAPHICAL ILLUSTRATION & FOR REFERENCE ONLY. CONTRACTOR TO REFER TO SOLAR PANEL MANUFACTURER SPECIFICATIONS, BRACKET SUPPORTS & HORIZ. POST WITH CONC. FOOTING TO BE VERIFIED IN FIELD & WITH MANUFACTURER'S RECOMMENDATIONS.
- 3. SOLAR PANEL ARRAY TILT ANGLE TO BE APPROXIMATELY 10 DEG TOWARDS THE SOUTH, + 10 DEG. (MIN) - 15 DEG. (MAX)
- 4. SOLAR PANEL ARRAY TO COMPLETELY COVER ALL OF THE NETWORK EQUIPMENT CABINETS SO AS TO PROTECT THEM FROM WEATHER.
- 5. CONTRACTOR SHALL CHECK FOR DRAINAGE AND SUPPLY AND INSTALL VINYL GUTTER AS NEEDED OR REQUIRED ALONG THE LOWER EDGE OF THE TRANSITION FROM THE HIGHER ARRAY TO THE LOWER ARRAY SO THAT WATER DOES NOT DRIP BETWEEN THE ARRAYS.
- 6. CONTRACTOR SHALL RE-ROUTE GENERATOR EXHAUST SYSTEM, AS REQUIRED, HOSE TO AVOID DIRECT UPWARD EXHAUST TO (N) SOLAR PANELS.
- 7. CONTRACTOR TO VERIFY ALL FIELD DIMENSIONS BEFORE START OF CONSTRUCTION AND MATERIALS FABRICATION.
- 8. CONFIRM BATTERY CABINET AREA HAS PROPER ILLUMINATION PER NEC SECTION 708.10 (E).
- 9. ALL NEW STEEL OR METAL MATERIAL SHALL BE GALVANNEAL.
- 10. A 5 DEG TILT GAP WILL BE USED & COMBINED WITH A 10 DEG MODULE TILT WILL GIVE THE OVERALL AN 15 DEG TILT AND THE WHOLE ARRAY WILL BE WITHIN 8 DEG OF THE 180 DEG AZIMUTH.

PROPOSED SOLAR PANELS:

TOTAL NUMBERS: 10
 TOTAL WATTAGE: 410x10 = 4,100 WATTS
 TOTAL KW: 4.1 KW
 P.V. ARRAY LEASE AREA: 210.22 SQ. FT.
 (E) VZW LEASE AREA: 600 SQ. FT.



ENLARGED SITE PLAN

11X17 SCALE: 1/4"=1'-0"
 24X36 SCALE: 1/2"=1'-0"
 0 1' 2' 4' 1

verizon
 15505 SAND CANYON AVENUE, D1
 IRVINE, CALIFORNIA 92618

MOTIVE
 INFRASTRUCTURE SOLUTIONS
 17260 N. W. H. 2 Pk. S 11111
 FORT WORTH, CALIFORNIA 92718
 TEL: 714.752.4283 | FAX: 949.765.3931

PROJECT TEAM

CONSTRUCTION:
 MOTIVE INFRASTRUCTURE SOLUTIONS
 ADDRESS: 185 TRADEMARK CIRCLE,
 CORONA, CALIFORNIA 92718
 PHONE: (951) 264-0158

OWNER:

REVISIONS

REV	DATE	DESCRIPTION	INT.
A	11/20/23	EXHIBIT	ASU
B	06/13/24	PRELIM BOX CD	ASU
C	08/23/24	DRW COMMENTS	ASU
D	09/13/24	DRW COMMENTS (REV. DESIGN)	ASU

SITE INFORMATION:

DAISY
 11505 EL CENTRO ROAD
 HESPERIA, CA 92344

SHEET TITLE:
ENLARGED SITE PLAN

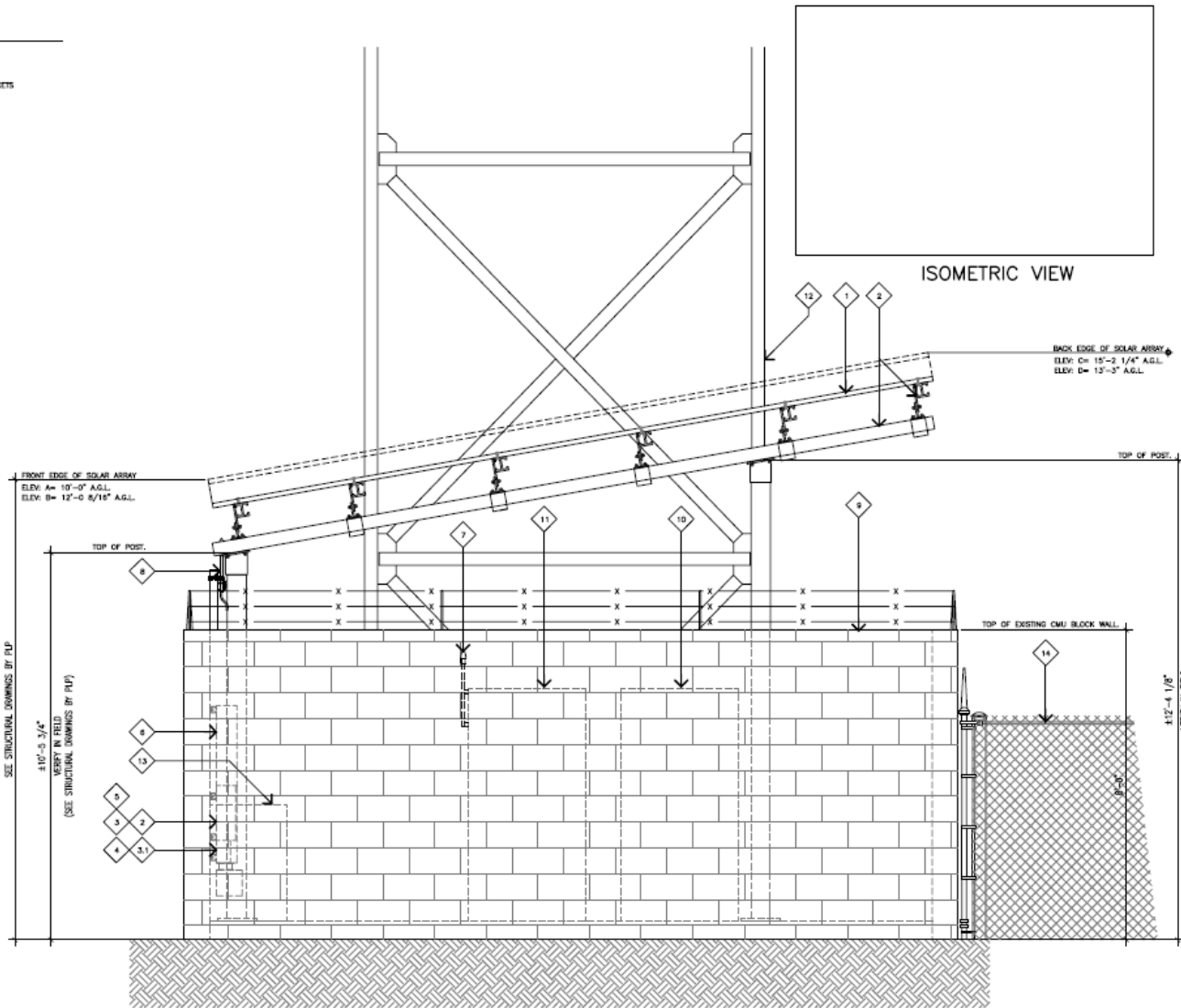
SHEET NUMBER:
A-1

ELEVATION KEYNOTES

- 1 NEW SOLAR PANELS ABOVE EXISTING VZW EQUIPMENT CABINETS; SEE MANUFACTURER SPECIFICATIONS
- 2 NEW SOLAR PANEL TRIMMING SUPPORT POST & BRACKETS (BY PREFORMED LINE PRODUCTS) OR APPROVED EQUIVALENT; SEE MANUFACTURER'S SPECIFICATIONS.
- 3 NEW (1) NEMA 3R 24x24x5" DC CABINET WITH DIN MOUNTED DC BREAKERS INSIDE, MOUNTED ON (N) UNITS/POST MOUNTED ON (E) FENCE POST
- 4 NEW (1) SOLAR CHARGE CONTROLLER, MOUNTED ON UNITS/POST ALONGSIDE NEW NEMA 3R CABINET.
- 5 NEW NEMA 3R COMBNER (MNPV-8-250) CABINET WITH SURGE SUPPRESSOR MOUNTED ON (E) H-FRAME; SEE MANUFACTURERS SPECIFICATIONS
- 6 EXISTING VZW AC PANEL LOAD CENTER
- 7 EXISTING VZW GPS ANTENNA TO BE RELOCATED.
- 8 (N) LOCATION OF (E) VZW GPS ANTENNA, MOUNTED ON CMU WALL ON VERT. PIPE AS NEEDED OR REQUIRED.
- 9 EXISTING VZW CMU BLOCK WALL EQUIPMENT COMPOUND ENCLOSURE WITH BARBED WIRES ABOVE.
- 10 EXISTING VZW DC POWER PLANT CABINET MOUNTED ON (E) EQUIPMENT CONCRETE PAD.
- 11 EXISTING VZW BATTERY CABINET MOUNTED ON (E) EQUIPMENT CONCRETE PAD.
- 12 EXISTING (4) LEGGED SELF SUPPORT TOWER WITH VZW FAUX WATER TANK ABOVE, WITH CONCRETE CASSONETS.
- 13 EXISTING VZW TRANSFORMER & DISCONNECT.
- 14 EXISTING CHAINLINK FENCE WATER TANK COMPOUND ENCLOSURE.

NOTES

1. (E) GPS ANTENNA TO BE RELOCATED & TO BE CLEAR OF (N) SOLAR PANELS.
2. SOLAR PANEL MOUNTING BRACKETS ARE ONLY GRAPHICAL ILLUSTRATION & FOR REFERENCE ONLY. CONTRACTOR TO REFER TO SOLAR PANEL MANUFACTURER SPECIFICATIONS, BRACKET SUPPORTS & HOLE POST WITH CONIC FOOTING TO BE VERIFIED IN FIELD & WITH MANUFACTURER RECOMMENDATIONS.
3. SOLAR PANEL ARRAY TILT ANGLE TO BE APPROXIMATELY 10 DEG TOWARDS THE SOUTH. * 10 DEG. (MIN) * 18 DEG. (MAX)
4. SOLAR PANEL ARRAY TO COMPLETELY COVER ALL OF THE NETWORK EQUIPMENT CABINETS SO AS TO PROTECT THEM FROM WEATHER.
5. CONTRACTOR SHALL CHECK FOR DRAINAGE AND SUPPLY AND INSTALL WIND SHUTTER AS NEEDED OR REQUIRED ALONG THE LOWER EDGE OF THE TRANSITION FROM THE HIGHER ARRAY TO THE LOWER ARRAY SO THAT WATER DOES NOT DRAIN BETWEEN THE ARRAYS.
6. CONTRACTOR SHALL RE-ROUTE GENERATOR EXHAUST SYSTEM, AS REQUIRED, TO AVOID DIRECT UPWARD EXHAUST TO (N) SOLAR PANELS.
7. CONTRACTOR TO VERIFY ALL FIELD DIMENSIONS BEFORE START OF CONSTRUCTION AND MATERIALS FABRICATION.
8. CONFIRM BATTERY CABINET AREA HAS PROPER ILLUMINATION PER NEC SECTION 706.10 (E).
9. ALL NEW STEEL OR METAL MATERIAL SHALL BE GALVANNEZED.
10. A 6 DEG TILT CAP WILL BE USED & COMBINED WITH A 10 DEG MODULE TILT WILL GIVE THE OVERALL AN 11 DEG TILT AND THE WHOLE ARRAY WILL BE WITHIN 6 DEG OF THE 150 DEG AZIMUTH.



EAST ELEVATION

11x17 SCALE: 3/8"=1'-0"
 24x36 SCALE: 3/4"=1'-0"
 0 .5' 1' 2' 3'

15505 SAND CANYON AVENUE, D1
 IRVINE, CALIFORNIA 92618

DESIGN PROVIDED BY:

17260 Newhope Street
 Fontaine Valley, California 92738
 Tel: 714.722.4262 | Fax: 949.765.3531

PROJECT TEAM

CONSTRUCTION:
 MOTIVE INFRASTRUCTURE SOLUTIONS
 ADDRESS: 755 TRADEMARK CIRCLE,
 GORONA CALIFORNIA 9074
 PHONE: (951) 354-0188

REVISIONS

REV.	DATE	DESCRIPTION	INT.
A	11/20/23	EXHIBIT	ASU
B	05/13/24	PRELIM 90% CD	ASU
C	08/23/24	DNV COMMENTS	ASU
D	09/13/24	DNV COMMENTS (RE DESIGN)	ASU

SITE INFORMATION:

DAISY
 11505 EL CENTRO ROAD
 HESPERIA, CA 92344

SHEET TITLE:
ELEVATION

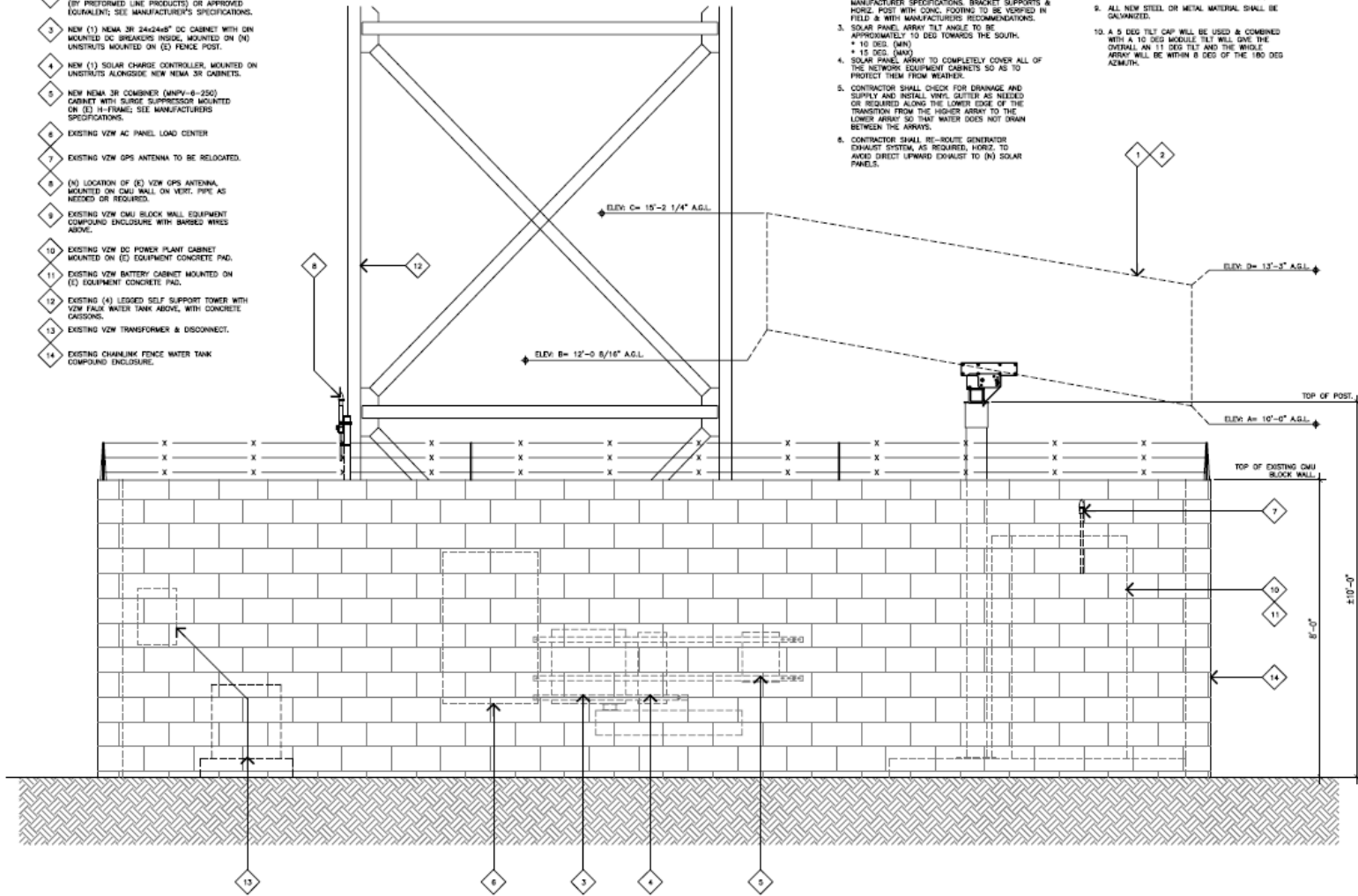
SHEET NUMBER:
A-2

ELEVATION KEYNOTES

- 1 NEW SOLAR PANELS ABOVE EXISTING VZW EQUIPMENT CABINETS; SEE MANUFACTURER SPECIFICATIONS
- 2 NEW SOLAR PANEL FRAMING SUPPORT, POST & BRACKETS (BY PREFORMED LINE PRODUCTS) OR APPROVED EQUIVALENT; SEE MANUFACTURER'S SPECIFICATIONS.
- 3 NEW (1) NEMA 3R 24x24x8" DC CABINET WITH DIN MOUNTED DC BREAKERS INSIDE, MOUNTED ON (N) UNISTRUTS MOUNTED ON (E) FENCE POST.
- 4 NEW (1) SOLAR CHARGE CONTROLLER, MOUNTED ON UNISTRUTS ALONGSIDE NEW NEMA 3R CABINETS.
- 5 NEW NEMA 3R COMBNER (ANPV-6-250) CABINET WITH SURGE SUPPRESSOR MOUNTED ON (E) H-FRAME; SEE MANUFACTURER'S SPECIFICATIONS.
- 6 EXISTING VZW AC PANEL LOAD CENTER
- 7 EXISTING VZW GPS ANTENNA TO BE RELOCATED.
- 8 (N) LOCATION OF (E) VZW GPS ANTENNA, MOUNTED ON CMU WALL ON VERT. PIPE AS NEEDED OR REQUIRED.
- 9 EXISTING VZW CMU BLOCK WALL EQUIPMENT COMPOUND ENCLOSURE WITH BARBED WIRE ABOVE.
- 10 EXISTING VZW DC POWER PLANT CABINET MOUNTED ON (E) EQUIPMENT CONCRETE PAD.
- 11 EXISTING VZW BATTERY CABINET MOUNTED ON (E) EQUIPMENT CONCRETE PAD.
- 12 EXISTING (4) LEGGED SELF SUPPORT TOWER WITH VZW FAUCI WATER TANK ABOVE, WITH CONCRETE CASKONS.
- 13 EXISTING VZW TRANSFORMER & DISCONNECT.
- 14 EXISTING CHAINLINK FENCE WATER TANK COMPOUND ENCLOSURE.

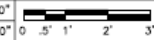
NOTES:

1. (E) GPS ANTENNA TO BE RELOCATED & TO BE CLEAR OF (N) SOLAR PANELS.
2. SOLAR PANEL MOUNTING BRACKETS ARE ONLY GRAPHICAL ILLUSTRATION & FOR REFERENCE ONLY. CONTRACTOR TO REFER TO SOLAR PANEL MANUFACTURER SPECIFICATIONS, BRACKET SUPPORTS & HORIZ. POST WITH CONG. FOOTING TO BE VERIFIED IN FIELD & WITH MANUFACTURER'S RECOMMENDATIONS.
3. SOLAR PANEL ARRAY TILT ANGLE TO BE APPROXIMATELY 10 DEG TOWARDS THE SOUTH.
 - * 10 DEG. (MIN)
 - * 15 DEG. (MAX)
4. SOLAR PANEL ARRAY TO COMPLETELY COVER ALL OF THE NETWORK EQUIPMENT CABINETS SO AS TO PROTECT THEM FROM WEATHER.
5. CONTRACTOR SHALL CHECK FOR DRAINAGE AND SUPPLY AND INSTALL VENT. GLITCH AS NEEDED OR REQUIRED ALONG THE LOWER EDGE OF THE TRANSITION FROM THE HIGHER ARRAY TO THE LOWER ARRAY SO THAT WATER DOES NOT DRAIN BETWEEN THE ARRAYS.
6. CONTRACTOR SHALL RE-ROUTE GENERATOR EXHAUST SYSTEM AS REQUIRED, HORZ. TO AVOID DIRECT UPWARD EXHAUST TO (N) SOLAR PANELS.
7. CONTRACTOR TO VERIFY ALL FIELD DIMENSIONS BEFORE START OF CONSTRUCTION AND MATERIALS FABRICATION.
8. CONFIRM BATTERY CABINET AREA HAS PROPER ILLUMINATION PER IBC SECTION 708.10 (3).
9. ALL NEW STEEL OR METAL MATERIAL SHALL BE GALVANIZED.
10. A 5 DEG TILT CAP WILL BE USED & COMBINED WITH A 10 DEG MODULE TILT WILL GIVE THE OVERALL AN 11 DEG TILT AND THE WHOLE ARRAY WILL BE WITHIN 8 DEG OF THE 100 DEG AZIMUTH.



SOUTH ELEVATION

11x17 SCALE: 3/8"=1'-0"
 24x36 SCALE: 3/4"=1'-0"



1

15505 SAND CANYON AVENUE, D1
 IRVINE, CALIFORNIA 92618

DESIGNED BY

1720 N Newport Street
 Fountain Valley, California 92708
 tel 714.752.4203 | fax 949.765.3931

PROJECT TEAM

CONSTRUCTION:
 MOTIVE INFRASTRUCTURE SOLUTIONS
 ADDRESS: 785 TRACEMARK CIRCLE,
 CORONA CALIFORNIA 92709
 PHONE: (951) 264-0188

DATE: 08/13/24

REVISIONS

REV.	DATE	DESCRIPTION	INT.
A	11/20/23	EXIST	ASU
B	06/13/24	PRELIM WORK CD	ASU
C	08/23/24	DRW COMMENTS	ASU
D	09/13/24	DRW COMMENTS (RE DESIGN)	ASU

SITE INFORMATION:

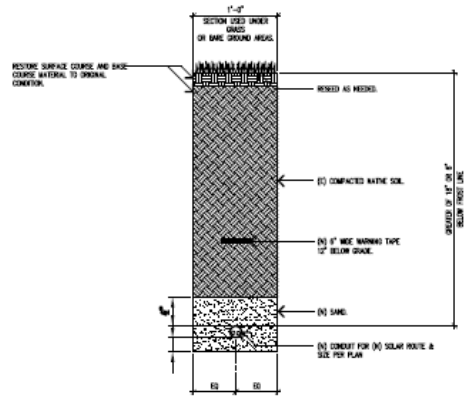
DAISY
 11595 EL CENTRO ROAD
 HESPERIA, CA 92344

SHEET TITLE:

ELEVATION

SHEET NUMBER:

A-3



UNDERGROUND TRENCH DETAIL

3

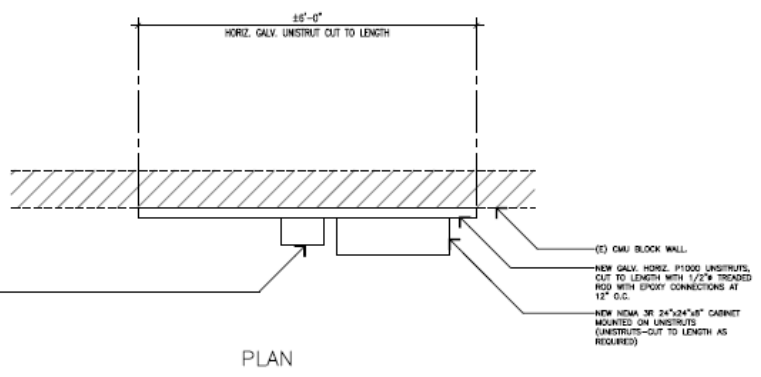
NOTE:
SOLAR CONDUITS ON CONC. SLAB/ OR CONC SURFACE WILL BE ATTACHED WITH ONE HOLE PIPE STRIP WITH CONC. SCREW
RIGID ONE HOLE STRAPS ARE USED TO FASTEN RIGID OR INC CONDUIT TO WOOD/ MASONRY AND OTHER WORKING SURFACES. THEY ARE MANUFACTURED FROM CARBON STEEL AND FEATURE AN INVERTED IBS ON THE BACKSIDE FOR INCREASED RIGIDITY. THEY ARE ZINC PLATED FOR INCREASED CORROSION RESISTANCE. UL LISTED.



CONDUIT MOUNT ON CONC. SLAB

DETAIL

2

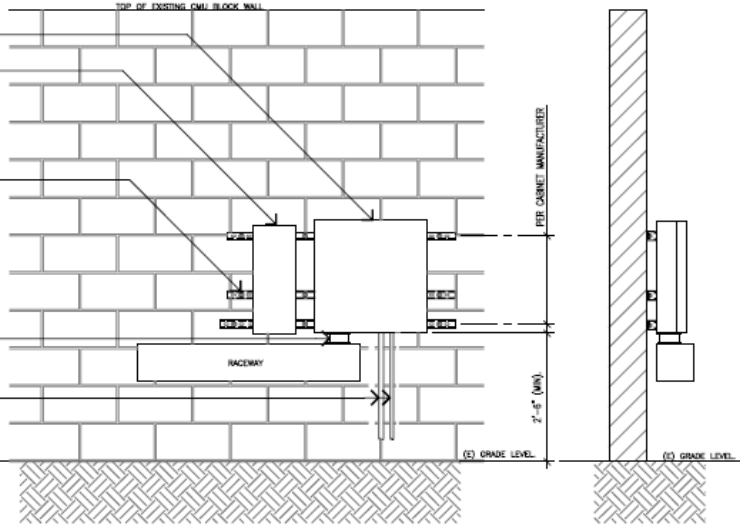


PLAN

NEW NEMA 3R 24"x24"x18" CABINET MOUNTED ON UNISTRUTS (UNISTRUTS—CUT TO LENGTH AS REQUIRED)
NEW (1) SOLAR CHARGE CONTROLLER, MOUNTED ON UNISTRUTS ALONGSIDE NEW NEMA 3R CABINET.

NEW GALV. HORIZ. P1000 UNISTRUTS, CUT TO LENGTH WITH 1/2" TREADED ROD WITH EPOXY CONNECTIONS AT 12" O.C.

4" CONDUIT, TYP.
(N) CONDUITS, REFER TO SHEET E-1 FOR MORE INFORMATION.
(1) 1" CONDUIT TO COMBINERS.
(1) 1" CONDUIT TO (E) DC POWER PLANT.



FRONT ELEVATION

SIDE ELEVATION

CABINET MOUNTING DETAIL

1

verizon
15505 SAND CANYON AVENUE, D1
IRVINE, CALIFORNIA 92618

MOTIVE
INFRASTRUCTURE SOLUTIONS
17200 Newhope Street
Fountain Valley, California 92708
tel 714.752.4252 | fax 949.760.3921

PROJECT TEAM

CONTRACTOR:	MOTIVE INFRASTRUCTURE SOLUTIONS
ADDRESS:	795 TRADEMARK CIRCLE, GORDON CALIFORNIA 92674
PHONE:	(951) 394-0118

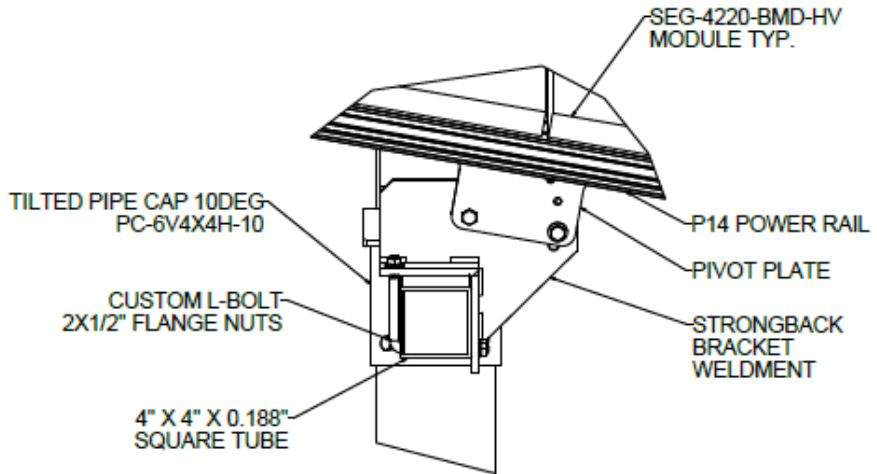
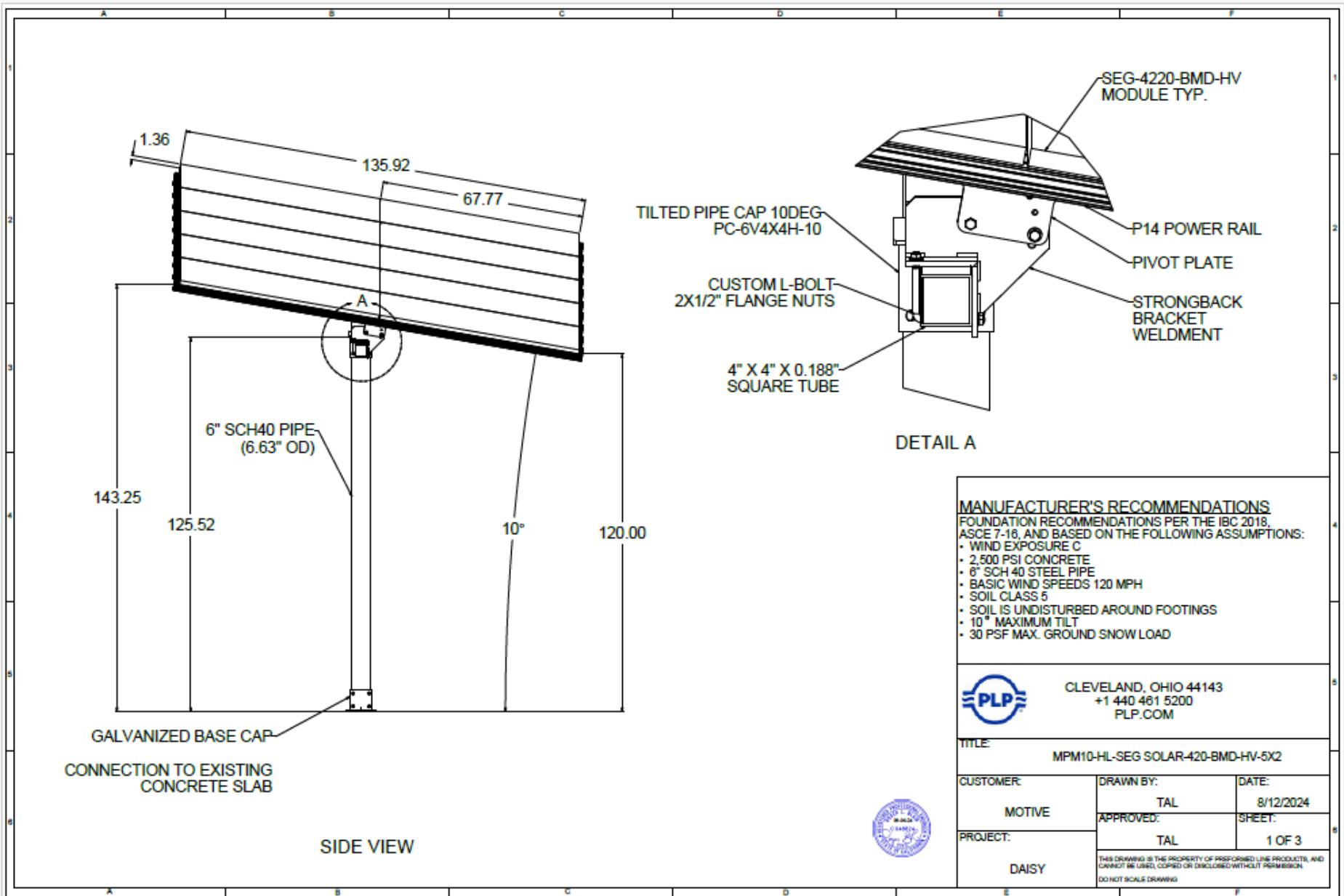
REVISIONS

REV.	DATE	DESCRIPTION	INT.
A	11/20/23	EXHIBIT	ASU
B	06/13/24	PRELIM SOW CD	ASU
C	08/23/24	DRW COMMENTS	ASU
D	09/13/24	DRW COMMENTS (RE DESIGN)	ASU

SITE INFORMATION:
DAISY
11505 EL CENTRO ROAD
HESPERIA, CA 92344

SHEET TITLE:
DETAIL

SHEET NUMBER:
A-4



DETAIL A

MANUFACTURER'S RECOMMENDATIONS
 FOUNDATION RECOMMENDATIONS PER THE IBC 2018, ASCE 7-16, AND BASED ON THE FOLLOWING ASSUMPTIONS:

- WIND EXPOSURE C
- 2,500 PSI CONCRETE
- 6" SCH 40 STEEL PIPE
- BASIC WIND SPEEDS 120 MPH
- SOIL CLASS 5
- SOIL IS UNDISTURBED AROUND FOOTINGS
- 10° MAXIMUM TILT
- 30 PSF MAX. GROUND SNOW LOAD

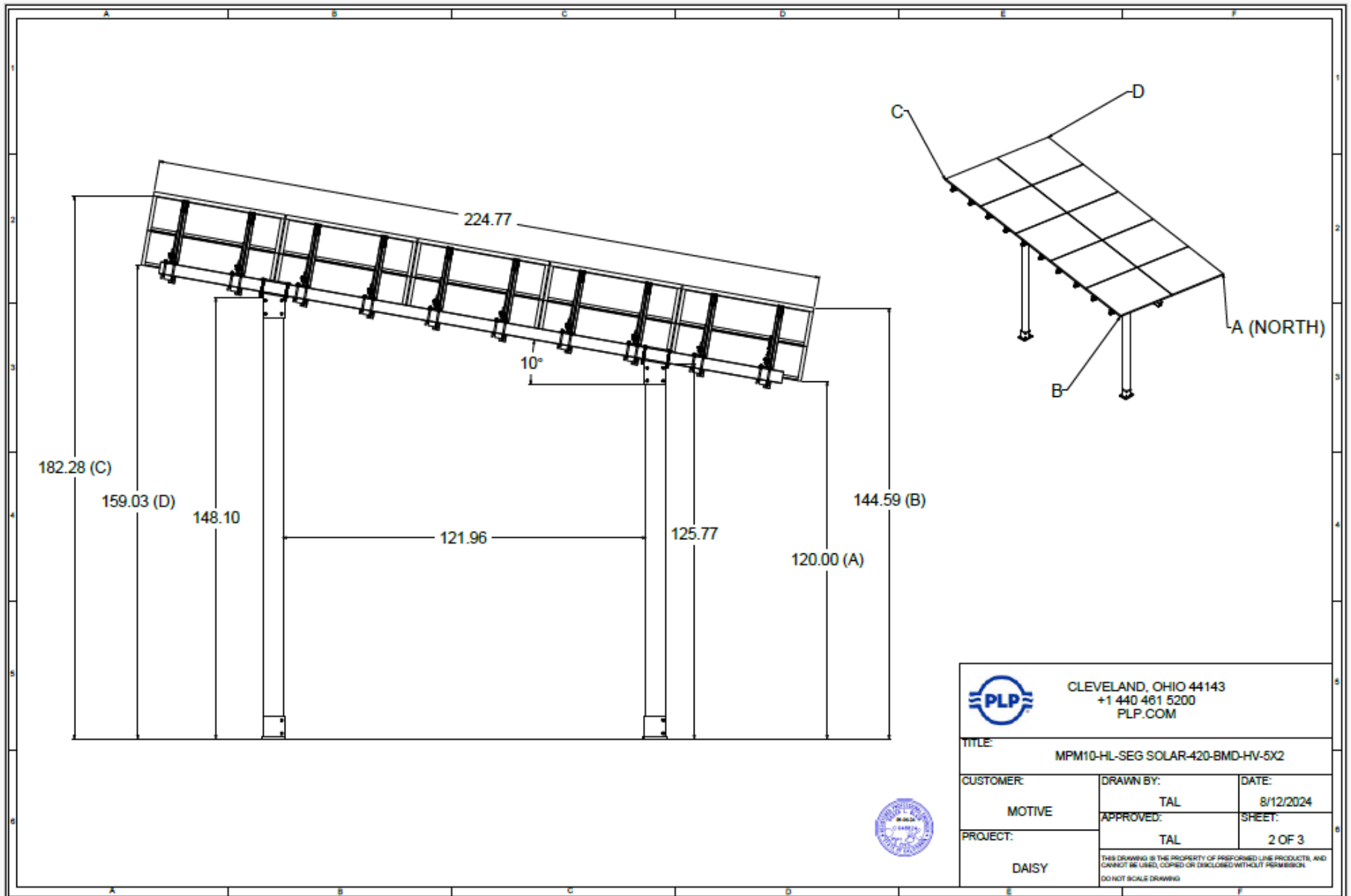
PLP CLEVELAND, OHIO 44143
 +1 440 461 5200
 P.L.P.COM


TITLE: MPM10-HL-SEG SOLAR-420-BMD-HV-5X2

CUSTOMER:	DRAWN BY:	DATE:
MOTIVE	TAL	8/12/2024
PROJECT:	APPROVED:	SHEET:
DAISY	TAL	1 OF 3

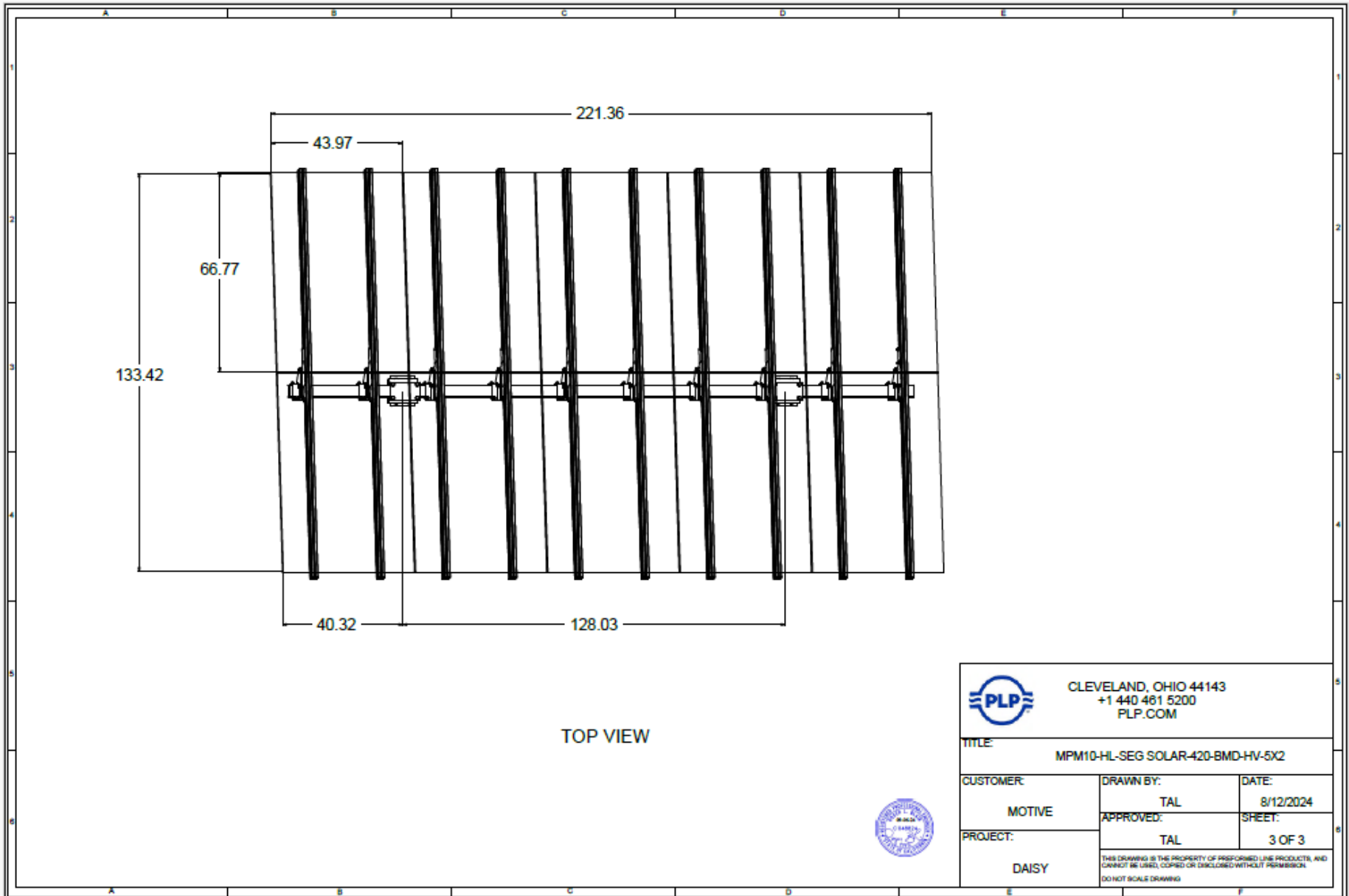
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 DO NOT SCALE DRAWING






 CLEVELAND, OHIO 44143 +1 440 461 5200 PLP.COM		
TITLE: MPM10-HL-SEG SOLAR-420-BMD-HV-5X2		
CUSTOMER:	DRAWN BY:	DATE:
MOTIVE	TAL	8/12/2024
PROJECT:	APPROVED:	SHEET:
DAISY	TAL	2 OF 3
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 CLEVELAND, OHIO 44143 +1 440 461 5200 P.L.P.COM		
TITLE: MPM10-HL-SEG SOLAR-420-BMD-HV-5X2		
CUSTOMER:	DRAWN BY:	DATE:
MOTIVE	TAL	8/12/2024
PROJECT:	APPROVED:	SHEET:
DAISY	TAL	3 OF 3
<small>THIS DRAWING IS THE PROPERTY OF PERFORMED LINE PRODUCTS, AND CANNOT BE USED, COPIED OR DISCLOSED WITHOUT PERMISSION. DO NOT SCALE DRAWING.</small>		



CUSTOMER PROJECT REPORT

Project ID:
Project Title: Daisy
Address: 11505 El Centro Rd
 Hesperia, CA 92344
Customer Name: Motive Infrastructure Solutions

PROJECT SUMMARY

10

Total Modules

4.2

Total Wattage kW

TOTAL BILL OF MATERIALS		
Part Number	Name	Quantity
MPM2-HL-4x4	Strongback Brackets	5
PC-6V4x4H-10	10 DEG Cap for Vertical Poles	2
PA-GMC-28-33-RAD-SS	Mid Clamps	10
PA-EC-30-RAD-SS	End Clamps	20
WEEBL-8.0-KIT-SS	Weeb Grounding Lugs	10
5950061-HGS-VERZ	Concrete Pipe Cap	2

Prices are valid for 30 days from the date of the quotation. Prices are subject to revision after the quote expiration date and/or design changes.

Preformed Line Products Standard Terms and Conditions apply.

Bill of Materials and all attached project parameters and layouts have been reviewed and are approved.

SIGNED: _____

DATE: _____

PRODUCT DESCRIPTIONS

	Part #	Description
	MPM2-HL-4x4	Strongback bracket kit. Includes P14 rails and mounting Hardware.
	PC-6V4x4H-10	Pipe Cap kit. Includes top strap plate for securing horizontal square tube and associated hardware.
	PA-GMC-34-39-RAD-SS	Pre-assembled module clamps for middle modules featuring integrated bonding. The low profile clamp design sets a 3/8" gap between solar modules.
	PA-EC-35-RAD-SS	Pre-assembled module clamps for modules at the end of the arrays. Each clamp includes integrated bonding features.
	WEEBL-8.0-KIT-SS	WEEB Lug grounding kits includes grounding washer, tin plated copper lug, turn bolt and flange nut for mounting to P14 rail.
	Horizontal Tube	4"x4"x.188 Horizontal steel tube needed for assembly. NOT PROVIDED BY PLP SOLAR.
	Vertical Pole	6" Sch 40 Vertical steel pole needed for assembly. NOT PROVIDED BY PLP SOLAR



PREFORMED LINE PRODUCTS

The connection you can count on.

PV MODULE INFORMATION	
Manufacturer	SEG Solar
Model	SEG-420-BMD-HV
Wattage (W)	420
Length (in)	44.65
Width (in)	67.8
Depth (in)	1.38
Weight (lbs)	47.41
Orientation	Landscape

CONFIGURATION PARAMETERS	
Code	ASCE 7-16
Max Wind Speed (mph)	120
Wind Exposure Category	C
Snow Load (psf)	30
Ground Clearance (in)	120
Soil Type	5

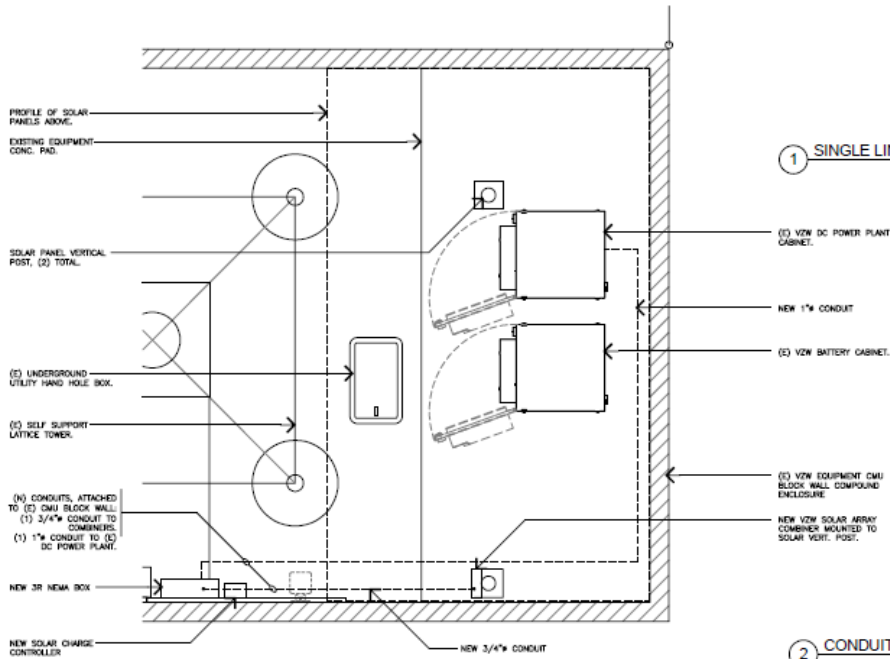
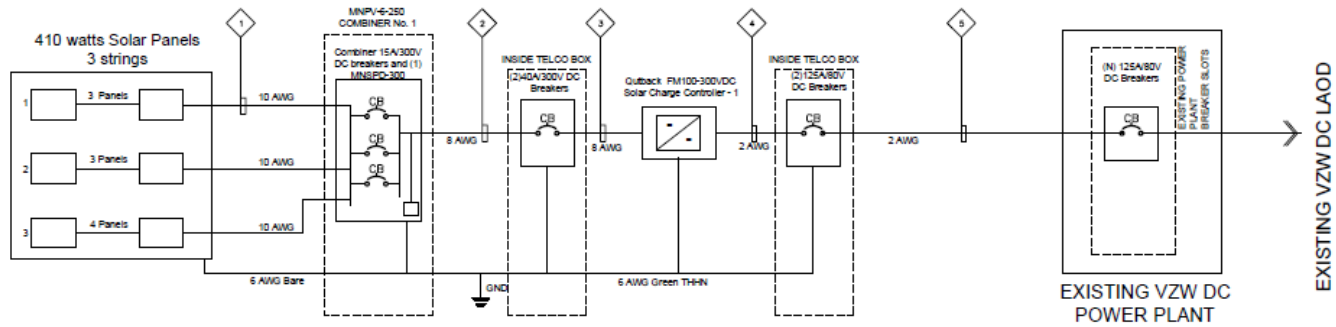
CONFIGURATION DESIGN REVIEW	
Total Number of Modules	10
Total Wattage (kW)	4.2
Tilt Angle (deg)	10
Total Module Weight (lbs)	94.82
Total Module Area (sq. ft)	42.05
Number of Tables	1

NOTE

CUSTOMER SUPPLIED MATERIAL:

- 2 - Vertical Poles - 6" Sch 40 Approximately 196" Long. (2 Per Array)
- 1 - Horizontal End Tubes - 4"x4"x.188 - Approximately 216" Long. (1 Per Array)
- 0 - Horizontal Mid Tubes - 4"x4"x.188 - Approximately 0" Long. (0 Per Array)
- 2 - Concrete Foundations - Approximately 24" Diameter by 66" Deep, East/West spacing between vertical Poles 126" on center. (2 Per Array)

NOTE: (ALSO USE APPROVED EQUAL) IF PRODUCT BELOW IS NOT AVAILABLE:
 125A DIN MOUNT BREAKER INSIDE TELCO BOX:
 MODEL No: (OT18U2125B0)
 125A 2 POLE DC BREAKER INSIDE (E) VZW DC
 POWER PLANT: MODEL No: (4081863F3)



1 SINGLE LINE DIAGRAM

2 CONDUIT DIAGRAM LAYOUT



PROJECT TEAM

CONTRACTOR:
 MOTIVE INFRASTRUCTURE SOLUTIONS
 ADDRESS: 155 TRADEMARK CIRCLE,
 CORONA CALIFORNIA 92709
 PHONE: (951) 384-0118

DATE: 08/13/24

REVISIONS

REV.	DATE	DESCRIPTION	INT.
A	11/20/23	EXHIBIT	ASU
B	06/13/24	PRELIM VOW CO	ASU
C	08/22/24	CFM COMMENTS	ASU
D	09/13/24	CFM COMMENTS (RE DESIGN)	ASU

SITE INFORMATION

DAISY
 11505 EL CENTRO ROAD
 HESPERIA, CA 92344

SHEET TITLE:

SPECIFICATION

SHEET NUMBER:

E-1

SIGNAGE REQUIREMENTS: WARNING LABELS AND PLACARDS

EQUIPMENT MARKING SHALL COMPLY WITH STATE FIRE MARSHALL GUIDELINES & SIZE DECALS TO BE INSTALLED ON THE GENERATING FACILITIES. THE DISTRIBUTION ENGINEER MAY REQUIRE DECALS TO BE INSTALLED AS REQUIREMENTS. SEE ANY VERIFY THE DECAL INSTALLATION DURING THE FINAL TECHNICAL APPROVAL. COMMISSIONING IF REQUIRED.
 A. DECALS THAT WILL BE INSTALLED ON CUSTOMER'S MAIN SERVICE PANEL.
 B. DECALS THAT WILL BE INSTALLED ON AC TO BE USED FOR UTILITY ISOLATION OF THE GENERATOR.

MAIN PHOTOVOLTAIC SYSTEM DISCONNECT

A PV SYSTEM DISCONNECT
PER NEC SECTION 690.13(B)

"WARNING" ELECTRIC SHOCK HAZARD
DO NOT TOUCH TERMINALS. TERMINALS ON BOTH THE LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION.

B WARNING SIGNAGE
PER NEC SECTION 690.5(C)

WARNING: PHOTOVOLTAIC POWER SOURCE

C WARNING SIGNAGE
PER NEC 690.31 (D)(2)

DIRECT CURRENT PHOTOVOLTAIC POWER SOURCE
MAXIMUM VOLTAGE VDC
MAX CIRCUIT CURRENT AMPS

D MAX. DC VOLTAGE SIGN
PER NEC SECTION 690.53

WARNING: PHOTOVOLTAIC DC DISCONNECT

E PV SYSTEM DISCONNECT
PER NEC SECTION 690.15/705.20

1 SIGNAGES

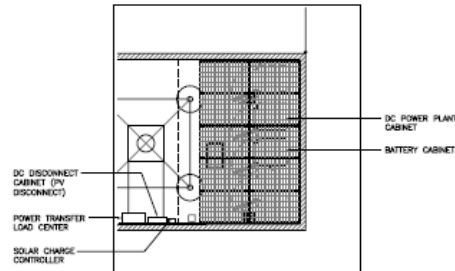
PV Module Ratings@STC		PV Array Information		Solar Charge Controller Ratings		Combiner	
Module Manufacturer	REC	Overall System Power	4,109	SCC Make	Outback	Manufacturer	MidNite Solar
Module Model#	REC410AA PURE-R	Total Number of Solar Panels	19	SCC Model	Flextrak 100	Model	MNPSV-250
Max Power-Point Current (Imp)	8.3A	A-Number of Modules in Series	3	Max PV System Voltage	300VDC	Communications	
Max Power-Point Voltage (Vmp)	49.4V	A-Number of Parallel Circuits	2	Operating Input Voltage Range	30 - 290VDC	Manufacturer	Outback
Open-Circuit Voltage (Voc)	59.2V	B-Number of Modules in Series	4	Max. PV Input Current (Short Circuit)	64A	Model	MATE3s
Short-Circuit Current (Isc)	8.86A	B-Number of Parallel Circuits	1	Nominal Battery Voltage	48V	Model	HUB 4
Max Series Fuse (SCFP)	25A	Total Number of Solar Chargers	1	Max Charge Current	100A	Model	MATE3s Wall Mount
Maximum Power(Pmax)	410W	Lowest Expected Ambient Temp (°C)	-17	Max Charging Power	6000W	Model	
Max System Voltage (25° C)	300V	Highest Continuous Temperature (°C)	45	Max Power Conversion Efficiency	97%		
Vac Temp COEFF. (%/K)	0.24						

Tag ID	Conduit Size	Conduit Schedule		Ground	Approx Length
		Conductor			
1	3/2" EMT or Equiv.	(2) 10AWG PV Wire 1K		(1) 6 AWG Bare Copper	30'
2	3/4" EMT or Equiv.	(2) 8 AWG THWN		(1) 6 AWG Green THWN	30'
3	3/4" EMT or Equiv.	(2) 8 AWG THWN		(1) 6 AWG Green THWN	15'
4	1" EMT or Equiv.	(2) 2 AWG THWN		(1) 6 AWG Green THWN	15'
5	1" EMT or Equiv.	(2) 2 AWG THWN		(1) 6 AWG Green THWN	40'

3 TABLE OF MATERIALS

JOB SITE PLACARDS
LOCATION: MAIN SERVICE PANEL DOOR - QUANTITY: ONE

CAUTION
POWER TO THIS STRUCTURE IS ALSO SUPPLIED FROM THE FOLLOWING SOURCES WITH DISCONNECT(S) LOCATED AS SHOWN. DANGEROUS VOLTAGE MAY BE PRESENT AT ALL TIMES



"WARNING" PHOTOVOLTAIC ARRAY
DISCONNECTION OF NEUTRAL OR GROUNDED CONDUCTORS MAY RESULT IN OVERVOLTAGE ON ARRAY OR INVERTER.

2 JOB SITE PLACARD
PER NEC SECTION 690.56 (B)

NOTES

- ALL PLACARDS SHALL CONSIST OF THE FOLLOWING:
 - UV RESISTANT RIGID PLASTIC, SHEET ALUMINUM OR EQUIVALENT SIGN MATERIAL WITH ENGRAVED OR MACHINE PRINTED LETTERS OR ELECTRO-PLATING
 - RED BACKGROUND COLOR WITH WHITE TEXT AND LINE WORK
 - MIN. FONT SIZE AS SHOWN HEREON
- ALL SIGNS SHALL BE SIZED AS SHOWN HEREON AND PLACED IN THE LOCATIONS SPECIFIED, IN THE QUANTITIES SPECIFIED.
- SIGNS SHALL BE ATTACHED TO THE SERVICE EQUIPMENT USING ADHESIVE BACKED TAPE.

CONDUCTORS

- ALL CONDUCTORS SHALL BE COPPER.
- ALL WIRING TERMINALS WILL ALSO HAVE TO BE TPC. ORIGINAL FEEDER SPECIFICATIONS WAS FOR TPC CABLES FOR ALL BUILDING FEEDERS AND THEREFORE TERMINATIONS PRIOR TO CONNECTION. INTERMEDIATE JUNCTION BOX MAY BE REQUIRED TO CHANGE FROM TPC TO TPC WIRING. MATERIAL SHALL BE COPPER AND 90C RATED, SUITABLE FOR SUN EXPOSURE AND WET LOCATIONS. FIELD APPLIED COATINGS ARE NOT ACCEPTABLE.
- EACH SOLAR PHOTOVOLTAIC MODULE HAS A POSITIVE AND NEGATIVE USE-ORING-2 SUNLIGHT RESISTANT QUICK CONNECT PLUG IN LEAD. VERIFY COMPATIBLE EXTENSION WIRES PRIOR TO INSTALLATION.
- ALL INTER-MODULE SERIES CONNECTIONS TO BE STRAPPED (W/ BLACK UV RESISTANT TIE STRAPS) AND/OR PRE-FABRICATED OR EQUAL APPROVED WIRE ROUTING TRAY ETC AS TO BEST CONCEAL AND PROTECT INTER-MODULE HOMERUN WIRING. ALL WIRING TO BE CONCEALED UNDER ARRAY AND/OR IN CONDUIT.
- ALL HOMERUN WIRE RUNS BETWEEN ROWS SHALL BE MADE IN CONDUIT W/ STRAIN RELIEF FITTING OR WIRE COMPRESSION CLAMP AND CONDUIT PLUTTY TO ACT AS BARRIER TO MOISTURE.
- ALL HOMERUN WIRE RUNS OF LENGTH GREATER THAN 20' SHALL BE MADE FROM NEMA 3R MIN. RATED JBOX WITH THWN-2 CONDUCTORS IN CONDUIT.

CONSTRUCTION NOTES

- ALL PV MODULES AND ASSOCIATED EQUIPMENT SHALL BE PROTECTED FROM ANY PHYSICAL DAMAGE.
- LIVE PARTS OF PV SOURCE CIRCUITS AND PV OUTPUT CIRCUITS OVER 150V TO GROUND SHALL NOT BE ACCESSIBLE TO OTHER THAN QUALIFIED PERSONS WHILE ENERGIZED.
- NO PIPING, DUCTS, OR EQUIPMENT PIPING TO THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN THE DEDICATED SPACE ABOVE THE ELECTRICAL EQUIPMENT.
- ALL CONNECTORS AND COUPLERS ARE SET SCREW TYPE UNLESS OTHERWISE NOTED.

GENERAL

- ALL WORK SHALL CONFORM TO 2019 NEC W/ SPECIAL EMPHASIS ON ARTICLE 690 AND ALL LOCAL CODES.
- INSTALLATION SHALL COMPLY WITH MANUFACTURERS' RECOMMENDATIONS AND INSTRUCTIONS.
- LABELS SHALL BE INSTALLED PER 2013 NEC AND STATE OF CALIFORNIA FIRE DEPARTMENT RECOMMENDATIONS.

GROUNDING

- ALL SERVICES SUPPLYING THE EXISTING COMPOUND SHALL HAVE THE SAME GROUNDING ELECTRODE SYSTEM.
- REMOVAL OF A GRID INTERACTIVE INVERTER OR OTHER EQUIPMENT SHALL NOT DISCONNECT THE BONDING CONNECTION BETWEEN THE GROUNDING ELECTRODE CONDUCTOR AND THE PHOTOVOLTAIC SOURCE AND / OR OUTPUT CIRCUIT GROUNDING CONDUCTOR.
- GROUND BOND CONDUCTOR SHALL NOT BE SPLICED.
- USE EQUAL OR APPROVED L500 TAY IN USE, 1/4" HET RATED FOR GROUNDING AND BONDING. HIGH STRENGTH COPPER ALLOY W/ SS SCREW.
- DC EQUIPMENT GROUNDING SHALL BE MINIMUM #8 AWG SOLID CU WIRE TO BOND BACKING SET.
- CONTRACTOR SHALL CONFIRM EXISTING BUILDING AND PANEL GROUNDING PRIOR TO INSTALLATION.

PV SYSTEM COMPONENTS

- ALL CONDITIONS SHALL BE SPECIFICALLY REVIEWED IN THE FIELD WITH THE ARCHITECT FOR APPROVAL OF MOUNTING, ROUTING, AND EXPOSURE PRIOR TO INSTALLATION.
- ALL PV SYSTEM COMPONENTS SHALL BE LISTED BY A RECOGNIZED TESTING AGENCY (A ULTH, ETC).
- INVERTER SHALL BE EQUIPPED WITH INTEGRATED GFCI, THUS PROVIDING GROUND FAULT PROTECTION.
- ALL ENCLOSURES MOUNTED TO EXTERIOR WALLS SHALL BE MIN. NEMA 3R RATED.
- ALL PIPE WILL BE GALVANIZED RIGID CONDUIT.

15505 SAND CANYON AVENUE, DT
IRVINE, CALIFORNIA 92618

MADE POSSIBLE BY

17200 Newhope Street
Poulsbo Valley, California 92008
Tel: 714.752.4263 | Fax: 949.760.3931

PROJECT TEAM

CONSTRUCTION:
MOTIVE INFRASTRUCTURE SOLUTIONS
ADDRESS: 185 TRADEMARK CIRCLE,
DUBLIN, CALIFORNIA 94568
PHONE: (925) 944-0808

REVISIONS			
REV.	DATE	DESCRIPTION	INT.
A	11/20/23	EXHIBIT	ASU
B	06/13/24	PRELIM. S&W CD	ASU
C	08/23/24	DRW COMMENTS	ASU
D	09/13/24	DRW COMMENTS (RE DESIGN)	ASU

SITE INFORMATION

DAISY
11505 EL CENTRO ROAD
HERSPERIA, CA 92344

SHEET TITLE:

SPECIFICATION

SHEET NUMBER:

E-2

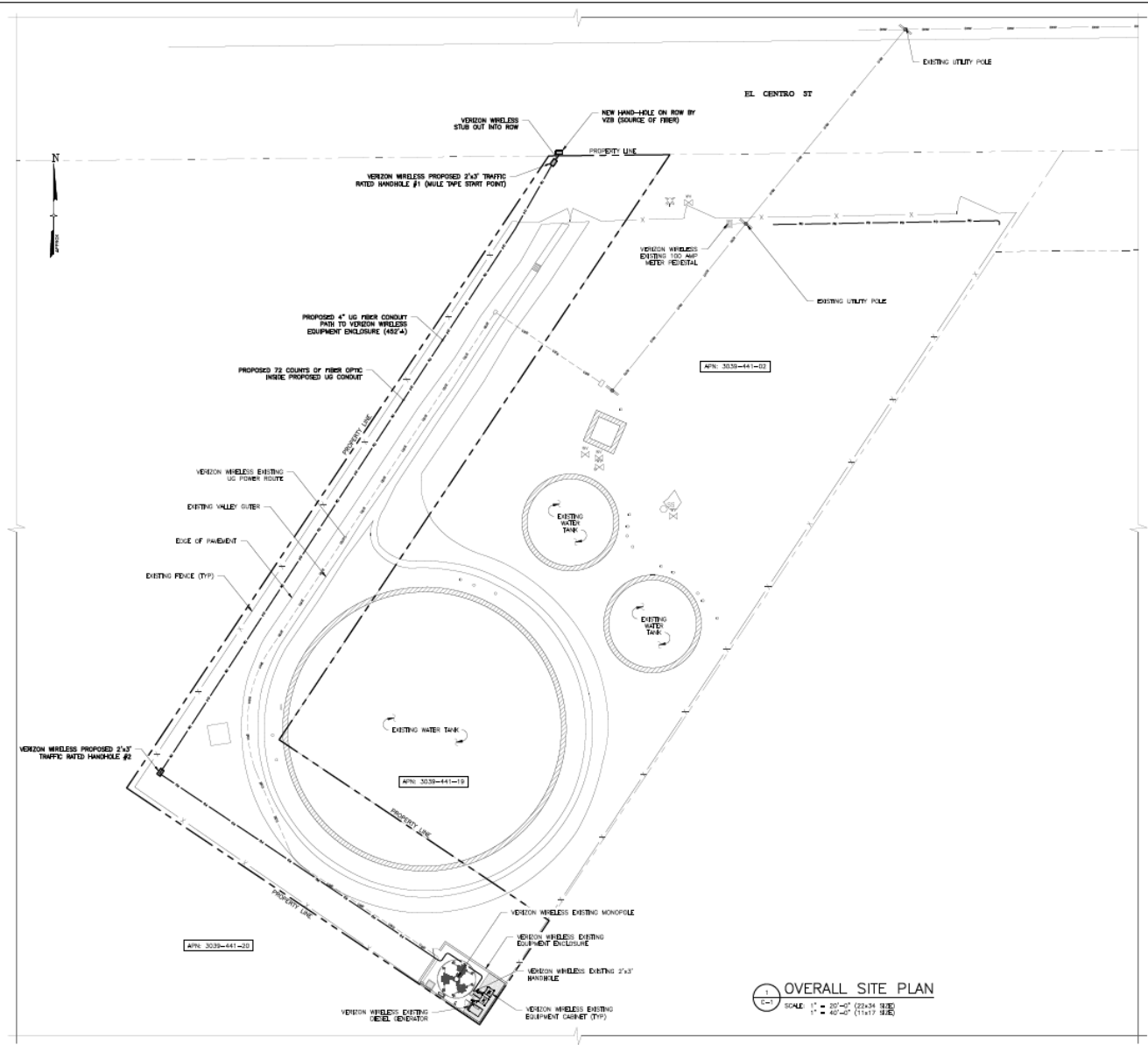
Exhibit "F"
Fiber Installation
(Following Pages)

GENERAL NOTES

1. THIS PROJECT CONCERNS THE INSTALLATION, MAINTENANCE AND OPERATION OF A PUBLIC UTILITY PERSONAL WIRELESS SERVICE.
2. THE PROPOSED UPGRADE IS UNMANNED AND DOES NOT REQUIRE A MANS OF WATER SUPPLY, SEWAGE DISPOSAL OR HANDICAPPED ACCESS.
3. THE PROPOSED UPGRADE IS MINIMAL WILL CREATE NEGLIGIBLE ADDITIONAL STORMWATER RUNOFF AND WILL THEREFORE NOT IMPACT THE EXISTING STORMWATER DRAINAGE SYSTEM.
4. THE PROPOSED UPGRADE DOES NOT INCLUDE OUTDOOR STORAGE, SOLID WASTE RECYCLABLES, OR PAVERS.
5. ADEQUATE PARKING EXITS FOR ONE VEHICLE FOR MAINTENANCE OR EMERGENCY SERVICE ONLY IS A MINOR.
6. THERE ARE NO NEW STREETS, CURBS, SIDEWALKS, OR WALKWAYS PROPOSED.
7. THERE ARE NO COMMERCIAL SIGNS PROPOSED FOR THIS UPGRADE.

SITE NOTES

1. ALL WORK SHALL BE AS INDICATED ON THE DRAWINGS.
2. SIGNS AND OTHER PERMITS SHALL BE OBTAINED FROM THE SITE AND DEPOSITED LEGALLY.
3. CONTRACTOR TO LOCATE AND VERIFY ALL EXISTING UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
4. CONTRACTOR SHALL NOTIFY UNDERGROUND UTILITY MAINTENANCE PROVIDER BY DIALING 811 PRIOR TO EXCAVATION AT THE.
5. ALL EXCAVATION WORK WITHIN 36" OF EITHER SIDE OF UNDERGROUND UTILITIES MUST BE DONE BY HAND EXCAVATION METHODS.



OVERALL SITE PLAN
SCALE: 1" = 30'-0" (24x34 9/16)
1" = 40'-0" (11x17 9/16)



Tectonic
Tectonic Engineering, Inc.
Tectonic Engineering, Inc.
2424 14th St. #404
Hesperia, CA 92315
www.tectonicengineering.com

WORK ORDER NUMBER	12886-036	DRAWN BY	UK
NO.	0	DATE	07/14/23
ISSUE	FOR COMMENT		
NO.	1	DATE	09/03/23
ISSUE	FOR COMMENT		

RELEASED BY: _____ DATE: _____



09/03/25

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DAISY
FUZE ID: 17417273
LC: 274988

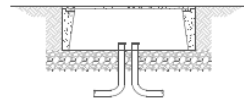
SITE ADDRESS
11505 EL CENTRO ROAD
HESPERIA, CA 92344
SAN BERNARDINO COUNTY

SHEET TITLE
OVERALL SITE PLAN

SHEET NUMBER
C-1



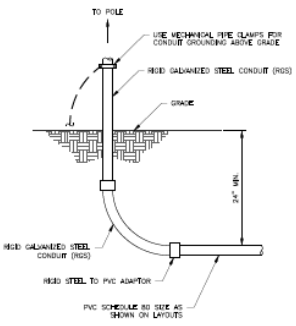
TOP VIEW



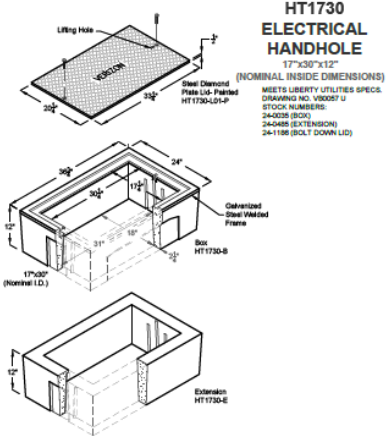
SECTION A-A

- NOTES:
1. CONDUIT ENDS SHALL NOT TERMINATE WITH IN A SHEET SECTION.
 2. ALL METAL COVERS, METAL U-CLAMP FRAME, METAL RINGS OR ANY METALLIC COMPONENT OF A PULL BOX SHALL BE BONDED TO A #8 ANG OR LARGER COPPER EQUIPMENT GROUNDING CONDUCTOR (EQUIPMENT CLAMP) SHALL BE FINISHED COPPER EQUIVALENT TO AN ANG COPPER AND MINIMUM 36" IN LENGTH AND SHALL BE ATTACHED WITH BIOMETALIC WELDING PROCESS IN A MOLECULAR BONDING WITH HIGH COPPER CONTENT ALONG AN EXCESS OF 10% WITH CORROSION RESISTANCE AND HIGH CONDUCTIVITY AND APPROVED GROUNDING.
 3. ALL PULLBOXES WITHIN VEHICULAR AREAS SHALL BE 300 TRAFFIC RATED.

1 HAND-HOLE DETAIL
SCALE: NTS



3 UNDERGROUND CONDUIT STUB OUT
SCALE: NTS



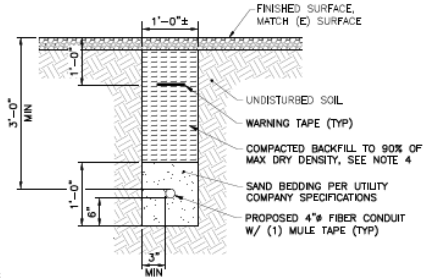
**HT1730
ELECTRICAL
HANDHOLE**

(NOMINAL INSIDE DIMENSIONS)
17"x30"x12"
MEETS LIBERTY UTILITIES SPECS
DRAWING NO. V0807-1
STOCK NUMBERS:
244088 (BOX)
244088 (EXTENSION)
24-1188 (BOLT DOWN LD)

LIBERTY ENGINEER NO.	PART NUMBER	PRODUCT	DESCRIPTION
24-088	HT1730-B	BOX	17"x30"x12" Reinforced Concrete Traffic Rated Box
24-088	HT1730-E	EXTENSION	17"x30"x12" Reinforced Concrete Traffic Rated Extension
24-1188	HT1730-B-LD	LD	Steel Clevered Plate Bolt Down LD
		HOLD DOWN BOLT	SF50-11/2" Panhead Box-2 Top

Design Load Traffic Rating as Indicated per Caltrans 0308
JENSEN PRECAST
JENSENPRECAST.COM

2 PULL BOX DETAIL
SCALE: NTS



- NOTES:
1. BACKFILL SHALL BE CLEAN FILL WITHOUT STONES AND SHALL BE THOROUGHLY COMPACTED IN 12" LAYERS BY TAMING OR APPROVED EQUAL METHOD. NO BELLYING OF TRENCH SHALL BE ALLOWED.
 2. SCH 40 PVC CONDUIT SHALL BE USED BELOW GRADE.
 3. SCH 80 PVC CONDUIT SHALL BE USED UNDER ROADWAY.
 4. BACKFILL AS REQUIRED BY LOCAL CODES IF IN PUBLIC RIGHT-OF-WAY. NATURAL GROUND SHALL CONTAIN ROCKS NO LARGER THAN 3", COMPACTED TO 90% OF MAX DRY DENSITY.

4 UTILITY TRENCH
SCALE: NTS

15005 SAND CANYON AVE BUILDING 107
IRVINE, CA 92618

Tectonic Engineering
Structural Engineering Consultants
10000 Wilshire Blvd, Suite 1000, Beverly Hills, CA 90210
Phone: (310) 850-8900
Fax: (310) 850-8517
www.tectonicengineering.com

WORK ORDER NUMBER	DRAWN BY
12888.030	NR

NO.	DATE	ISSUE
0	07/14/25	FOR COMMENT
1	09/03/25	FOR COMMENT

RELEASED BY

DATE

09/03/25

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ORIGINAL SIZE IN INCHES
SITE INFORMATION

DAISY
FUZE ID: 17417273
LC: 274988

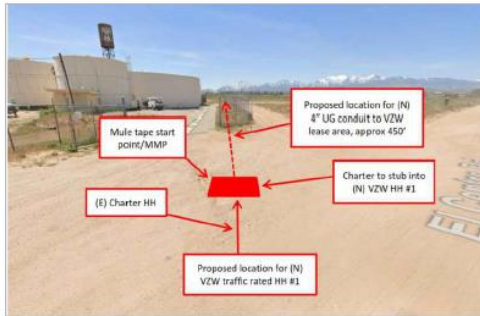
SITE ADDRESS
11505 EL CENTRO ROAD
HESPERIA, CA 92344
SAN BERNARDINO COUNTY

SHEET TITLE
DETAILS

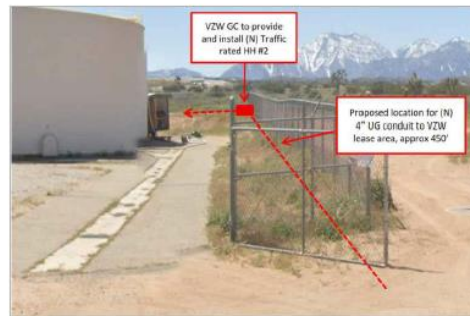
SHEET NUMBER
C-2

1
C-3
OVERALL SITE PLAN
SCALE: N/A

DATA SOURCE:
NEXTRON WIRELESS RISE® OPTIC FIBERABILITY REPORT
PREPARED BY INSTE TELECOM, DATED 08/12/25.



2
C-3
NEW HAND-HOLE AT PROPERTY LINE (MMP)
SCALE: N/A



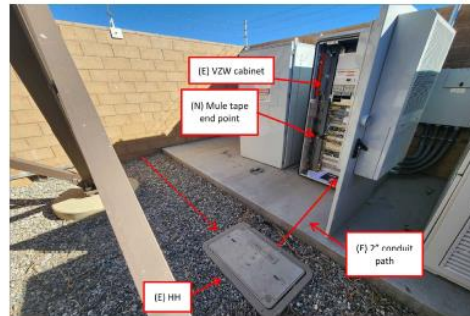
3
C-3
FIBER ROUTE TO VZW EQPT ENCLOSURE
SCALE: N/A



4
C-3
FIBER ROUTE TO VZW EQPT ENCLOSURE
SCALE: N/A



5
C-3
FIBER ROUTE TO VZW EQPT ENCLOSURE
SCALE: N/A



6
C-3
FIBER PATH INSIDE VZW ENCLOSURE
SCALE: N/A



7
C-3
FIBER PANEL POSITION INSIDE EQPT CABINET
SCALE: N/A

verizon
15000 SAND CANYON AVE. BUILDING 101
IRVINE, CA 92618

Tectonic
Tectonic Engineering Corporation
2000 101st St. Suite 200
Irvine, CA 92618
Phone: (949) 952-8500
FAX: (949) 952-8511
www.tectonicengineering.com

WORK ORDER NUMBER: 12886.036 DRAWN BY: MK

NO.	DATE	ISSUE
0	07/14/25	FOR COMMENT
1	08/03/25	FOR COMMENT

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ORIGINAL SIZE IN INCHES
SITE INFORMATION

DAISY
FUZE ID: 17417273
LC: 274988

SITE ADDRESS
11505 EL CENTRO ROAD
HESPERIA, CA 92344
SAN BERNARDINO COUNTY

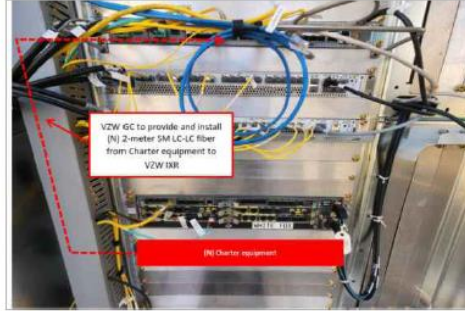
SHEET TITLE
PHOTOS

SHEET NUMBER
C-3



1 VZW EQUIPMENT CABINET FRONT VIEW

C-4 SCALE: N/A



2 2-METER SM FIBER

C-4 SCALE: N/A




3 VZW IXR PANEL INSIDE EQPT CABINET

C-4 SCALE: N/A




4 POWER SUPPLY FOR CHARTER EQPT

C-4 SCALE: N/A




15505 SAND CANYON AVE. BUILDING 707
HESPERIA, CA 92318




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WORK ORDER NUMBER		DRAWN BY	
12886.036		MK	
NO.	DATE	ISSUE	
0	07/14/25	FOR COMMENT	
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ORIGINAL SIZE IN INCHES

SITE INFORMATION

DAISY
FUZE ID: 17417273
LC: 274988

SITE ADDRESS

11505 EL CENTRO ROAD
HESPERIA, CA 92344
SAN BERNARDINO COUNTY

SHEET TITLE

PHOTOS

SHEET NUMBER

C-4