

BVES INC.

ESR

ELECTRIC SERVICE REQUIREMENTS



DATE: JAN-24

REV 05

LINKS AND CONTACT POINTS

**BEAR VALLEY ELECTRIC INC
42020 GARSTIN DR
BIG BEAR LAKE CA 92315
1-800-808-2837**

WEBSITE:

[HTTPS://WWW.BVESINC.COM/](https://www.bvesinc.com/)

PRELIMINARY SERVICE REQUEST

[HTTPS://WWW.BVESINC.COM/CONSTRUCTION/PRELIMINARY-SERVICE-REQUEST](https://www.bvesinc.com/construction/preliminary-service-request)

BILLING APPLICATION

[HTTPS://WWW.BVESINC.COM/CUSTOMER-SERVICE/SIGN-UP-FOR-ELECTRIC-SERVICE](https://www.bvesinc.com/customer-service/sign-up-for-electric-service)

SOLAR INFORMATION

[HTTPS://WWW.BVESINC.COM/EFFICIENCY-ENVIRONMENT/RENEWABLE-ENERGY/DISTRIBUTED-GENERATION-SERVICE-PROGRAM](https://www.bvesinc.com/efficiency-environment/renewable-energy/distributed-generation-service-program)

ELECTRIC SERVICE REQUIREMENTS

[HTTPS://WWW.BVESINC.COM/CONSTRUCTION/SPECIFICATIONS](https://www.bvesinc.com/construction/specifications)

BUILDING AND SAFETY DEPARTMENTS


**SAN BERNARDINO COUNTY
477 SUMMIT BLVD
BIG BEAR LAKE CA 92315
(909) 866-0170**

**CITY OF BIG BEAR LAKE
39707 BIG BEAR BLVD
BIG BEAR LAKE CA 92315
(909) 866 5831**

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REV 05	DRWN: IZ APVL: TC	BEAR VALLEY ELECTRIC SERVICE INC.

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PROCEDURE FOR DISCONNECTION, AND CONNECTION

1. A PRELIMINARY SERVICE REQUEST SUBMISSION MUST BE ON FILE WITH BVES INC.

2. BVES INC ENGINEERING WILL REVIEW THE PROPERTY AND PROVIDE APPROVAL LETTER OR PENDING LETTER.

A PRELIMINARY SERVICE REQUEST RESPONSE MAY TAKE 2-4 WEEKS DEPENDENT ON EXISTING APPLICATIONS, WEATHER, EMERGENCIES, ETC...

3. WITH AN APPROVAL RESPONSE THE CUSTOMER WILL BE ABLE TO UTILIZE THE PROVIDED CONFIRMATION CODE TO CONTACT BVES INC OFFICE AT 1 800 808 2837.

TO COORDINATE A DISCONNECTION DATE. ALL RESPONSE LETTERS WILL HAVE DETAILED NOTES PERTAINING TO YOUR PROJECT.

4. FOR ALL UPGRADES AND NEW CONNECTIONS ELECTRIC SERVICE RELEASE IS REQUIRED TO BE SUBMITTED FROM GOVERNING BUILDING AND SAFETY AGENCY

IT IS A CUSTOMER RESPONSIBILITY TO COORDINATE AN INSPECTION DATE WITH THE PROPER AGENCY TO PROVIDE A RELEASE.

ELECTRIC SERVICE RELEASE MUST BE ON FILE FOR ALL PANEL UPGRADES, PANEL CHANGE OUTS, AND NEW CONSTRUCTION PROJECTS. FAILURE TO RECEIVE THIS RELEASE WILL DELAY ALL CONNECTIONS **NO**

EXCEPTIONS

GOVERNING BUILDING AND SAFETY DEPARTMENTS
SAN BERNARDINO COUNTY
&
CITY OF BIG BEAR LAKE

ALL DISCONNECTION ARE TO BE DONE ONLY BY BVES INC. QUALIFIED PERSONNEL. UNDER NO CIRCUMSTANCES WILL A SERVICE DROP OR METER RING BE CUT OR REMOVED BY ANY OTHER INDIVIDUAL. ANY DISCONNECTION DONE BY NON BVES INC. EMPLOYEES WILL BE VIEWED AS A TAMPERED SERVICE AND A SAFETY HAZARD, THE SERVICE WILL BE DISCONNECTED IMMEDIATELY UNTIL PROPER PROCEDURES ARE FOLLOWED. A SUBMISSION OF AN ELECTRIC SERVICE RELEASE WILL NOT SUPERSEDE BVES INC. SPECIFICATIONS AND PROCEDURES BEING MET.

ALL PRELIMINARY SERVICE REQUEST RESPONSES ARE VALID FOR 6 MONTHS FROM MONTH OF RESPONSE. ALL TEMPORARY POWER RESPONSES ARE VALID FOR 3 MONTHS AND EXTENSIONS WILL BE GRANTED UPON RECEIVING PROPER DOCUMENTATION.

A PENDING REPORT WILL HAVE FURTHER DETAILS AND INSTRUCTIONS FOR COMPLETING A PROJECT REQUEST. PLEASE WORK DIRECTLY WITH YOUR BVES INC ENGINEERING REPRESENTATIVE IN THE EVENT YOU RECEIVE A PENDING REPORT.

THERE MAY BE A DELAY TO BRING IN A SERVICE CONNECTION AFTER RECEIVING ELECTRIC SERVICE RELEASE. ALL FINAL CONNECTIONS ARE TENTATIVE TO WEATHER CONDITIONS, CREW AVAILABILITY, HOURS OF OPERATIONS, EMERGENCIES ETC... CONTACT BVES INC. CUSTOMER SERVICE IN THE EVENT OF A DELAYED CONNECTION SCENARIO TO ESTABLISH A TIMELINE.

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OVERHEAD CONSTRUCTION STANDARD SPECIFICATIONS

THE FOLLOWING SECTION WILL OUTLINE MINIMUM SPECIFICATIONS AND REQUIREMENTS FOR ALL OVERHEAD NEW CONSTRUCTION AND PANEL UPGRADE FROM 100 AMPS TO 200 AMPS

ALL INSTALLATION TYPES MUST HAVE A PRELIMINARY SERVICE REQUEST SUBMISSION AND APPROVAL LETTER FROM BVES INC.

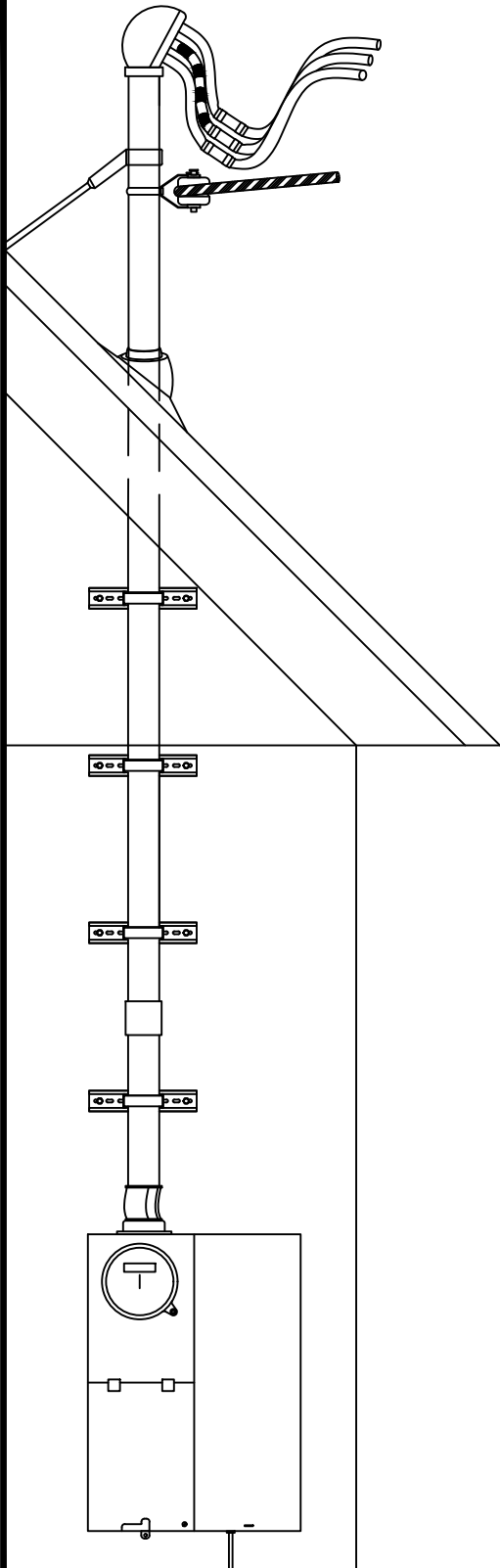
ALL INSTALLATIONS WILL REQUIRE AN ELECTRIC SERVICE RELEASE FROM THE GOVERNING BUILDING AND SAFETY DEPARTMENT.

BOTH PRELIMINARY SERVICE REQUEST AND ELECTRIC SERVICE RELEASE MUST BE ON FILE FOR ANY CONNECTION TO TAKE PLACE.

PLEASE SEE PROCEDURES AND PROCESS FOR DISCONNECTIONS AND FINAL CONNECTIONS

PLEASE USE THE FOLLOWING LINK TO SUBMIT A PRELIMINARY SERVICE REQUEST

<https://www.bvesinc.com/construction/preliminary-service-request>



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OVERHEAD SERVICE SPECIFICATIONS



REV 05

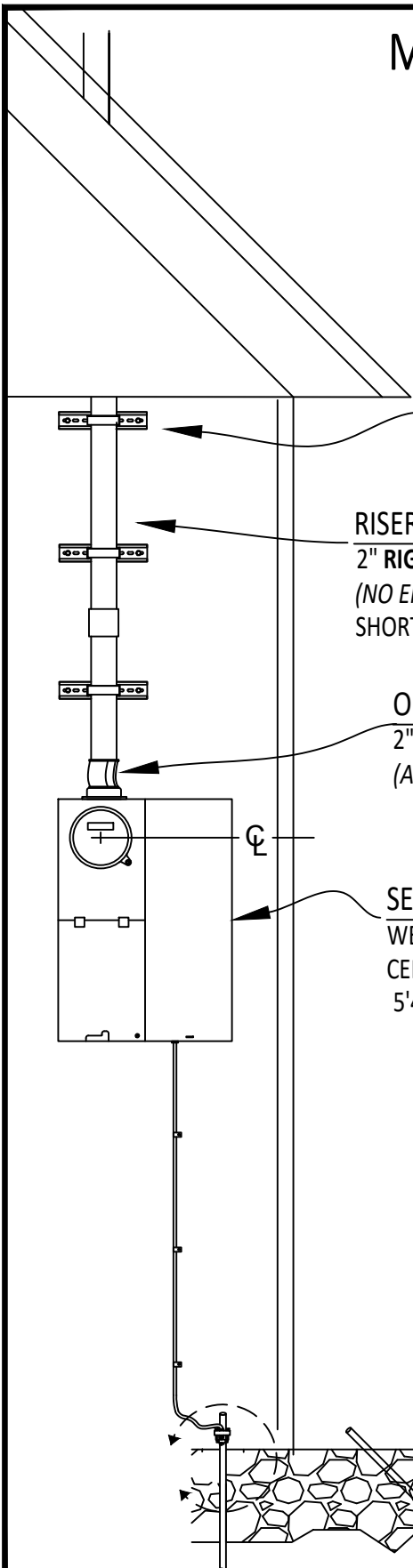
DRWN: IZ
APVL: TC

BVES INC. SPECIFICATIONS

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MINIMUM PANEL SPECIFICATIONS

PANEL INSTALL NOTES



METAL PIPE STRAPS
UNI-STRUT BRACING WITH CLAMPS
MAXIMUM OF 3' OF SEPARATION

RISER RUN CONDUIT
2" RIGID GALVANIZED STEEL
(NO EMT, COMPRESSION FITTING OR IMC)
SHORT END OF RISER TO BE ENTRANCE OF PANEL

OFFSETS
2" RIGID OFFSET CONDUIT NIPPLE
(AS REQUIRED)

SERVICE PANEL
WEATHERPROOF UL & EUSERC APPROVED
CENTERLINE METER HEIGHT BETWEEN
5'4" TO 6'

NOTE

FACILITIES TO BE INSTALLED BY CUSTOMER INCLUDING THE SERVICE PANEL, RISER, RISER ATTACHMENTS, GROUNDING, SERVICE ENTRANCES AND CONDUCTOR.

A. ALL SERVICE PANELS SHALL BE EUSERC COMPLIANT.

B. METER HEIGHT SHALL BE 5'4" TO 6' TO THE CENTER OF THE METER

C. ALL SERVICE PANELS SHALL HAVE A CLEAR, LEVEL, AND UNOBSTRUCTED 3' BY 3' WORK SPACE IN FRONT OF PANEL.

D. ALL METERS SHALL BE LOCATED ON EXTERIOR WALL, FACING, OR AT AN ANGLE TO THE UTILITY POLE LINE. NOT TO EXCEED 3' FROM THE NEAREST FRONT CORNER ON NEW AND EXISTING CONSTRUCTION. 24 HOUR METER ACCESS IS REQUIRED LOCATION IS SUBJECT TO APPROVAL BY A BVES INC. ENGINEERING REPRESENTATIVE

E. BVES INC. PROVIDES A SINGLE SERVICE ATTACHMENT PER APN. FOR MULTIPLE METER REQUEST AND OR ADU REQUEST SCENARIOS ALL METER SECTIONS SHALL BE INSTALLED WITH A SINGLE RISER AT PANEL WITH THE CAPABILITY TO HOUSE ADDITIONAL METERS, PLEASE SPEAK WITH BVES INC. REPRESENTATIVE TO ESTABLISH A SCOPE OF WORK FOR THIS PROJECT TYPE.

F. PROPERTY ADDRESS MUST BE ON STRUCTURE AND CLEARLY VISIBLE FROM ROADWAY.

G. AMPERAGE IN OVERHEAD CONSTRUCTION NOT TO EXCEED 200 AMPS. ANY AMPERAGE OUTSIDE OF THIS RANGE WILL BE REQUIRED TO BE AN UNDERGROUND INSTALLATION.

(SEE UNDERGROUND SPECIFICATIONS)

H. TEMPORARY JUMPER AND METER RINGS MUST BE REMOVED FROM SERVICE PANEL PRIOR TO SERVICE INSTALLATION.

I. PLEASE SEE GROUNDING SPECIFICATIONS PAGE FOR BVES INC. GROUNDING DETAILS

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OVERHEAD SERVICE SPECIFICATIONS

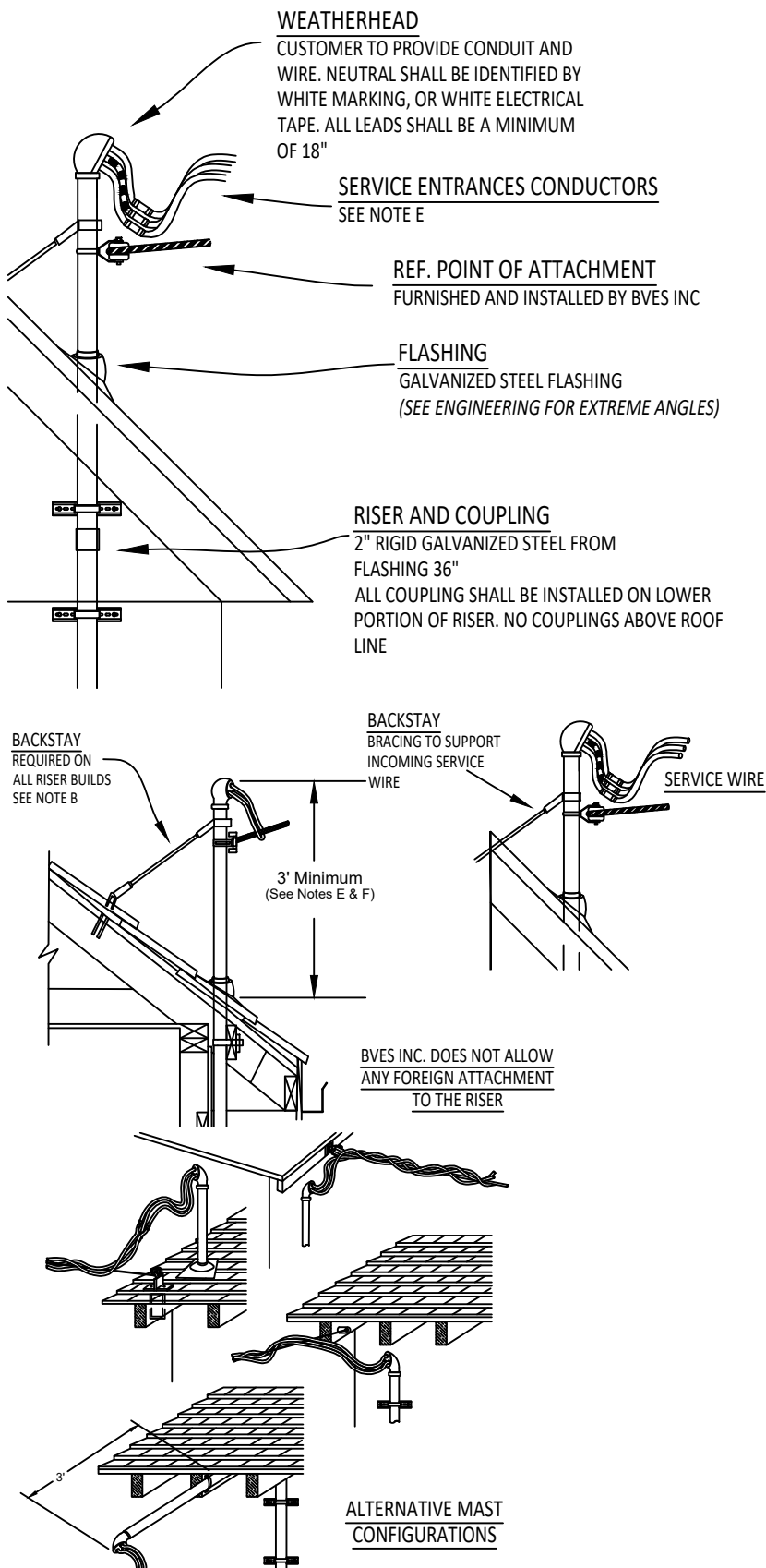


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BVES INC. SPECIFICATIONS

MINIMUM RISER SPECIFICATIONS



RISER INSTALL NOTES

A . ALL RISERS SHALL BE 2" MIN RIGID GALVANIZED STEEL AND SHALL EXTEND A MINIMUM OF 36" FROM FLASHING. DUE TO SNOW LOAD CONDITIONS THIS RISER WILL EXCEED NEC REQUIREMENTS. NO JUNCTION BOXES AND OR PULL SECTIONS WILL BE ALLOWED FOR A RISER INSTALLATION. RISER HEIGHTS CAN EXCEED 36" IN CIRCUMSTANCES DEEMED NECESSARY BY A BVES INC. REPRESENTATIVE. A PRELIMINARY SERVICE REQUEST RESPONSE LETTER WILL SPECIFY RISER HEIGHT ALTERATIONS WHEN NECESSARY.

B . ALL RISERS WILL REQUIRE A BACKSTAY TO BE INSTALLED IN NEW, UPGRADES, AND REPAIR SCENARIOS.

STIFF LEG GUYING IS ACCEPTABLE SUCH AS 3/4" RIGID, EMT, OR UNI-STRUT BRACED FROM RISER TO ROOF. ALL BACKSTAYS TO BE INSTALLED TO BRACE STRAIN FROM SERVICE WIRE

C . WALKABLE ROOFS WILL REQUIRE AN 8' RISER TO BE INSTALLED. WALKABLE ROOFS WILL BE AT 4 AND 12 AS DEFINED IN **NEC 230.24 A**

D . RISERS WILL NOT EXCEED A MAXIMUM HEIGHT OF 23' FROM LEVEL TERRAIN TO TOP OF WEATHER HEAD.

E . SERVICE WIRE CONDUCTOR DETAIL

100A SERVICE PANEL

#4 COPPER OR #2 ALUMINUM
(INSULATED) 600V RATING

200A SERVICE PANEL

#2/0 COPPER OR 4/0 ALUMINUM
(INSULATED) 600V RATING

BVES INC. WILL INSTALL THE SERVICE DROP, METER, AND CONNECTIONS AT WEATHERHEAD.

F . MINIMUM OF 18" CLEARANCE FROM CHIMNEY, HEAT VENTS OR EXHAUST PORTS.

(TOP OF WEATHERHEAD AND CONNECTIONS POINTS)

G . THE SERVICE HEAD WHEREVER PRACTICAL, SHOULD BE LOCATED 1' ABOVE THE LEVEL OF THE POINT PROVIDED FOR THE SERVICE DROP ATTACHMENT.

(SEE ALTERNATIVE MASS CONFIGURATIONS)

H . DRIP LOOPS AND CONNECTIONS SHALL BE FORMED BELOW THE SERVICE ENTRANCE WEATHERHEAD TO PREVENT THE ENTRANCE OF MOISTER INTO SERVICE CONDUCTOR .

BVES INC REQUIRES ACCESS TO THE RISER BE MAINTAINED AT ALL TIMES AND EXCEPTIONS MUST BE APPROVED BY BVES INC. ENGINEERING .

FOR SERVICE REQUIREMENTS THAT EXCEED THESE STANDARDS PLEASE CONTACT BVES INC. ENGINEERING REPRESENTATIVE

NOTE

FACILITIES TO BE INSTALLED BY CUSTOMER INCLUDING THE SERVICE PANEL, RISER, RISER ATTACHMENTS, GROUNDING, SERVICE ENTRANCES AND CONDUCTOR WIRE

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OVERHEAD SERVICE SPECIFICATIONS

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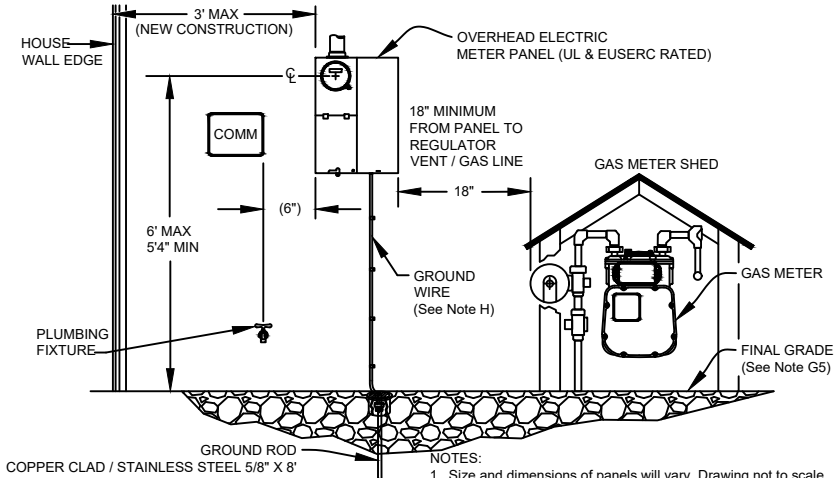
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BVES INC. SPECIFICATIONS



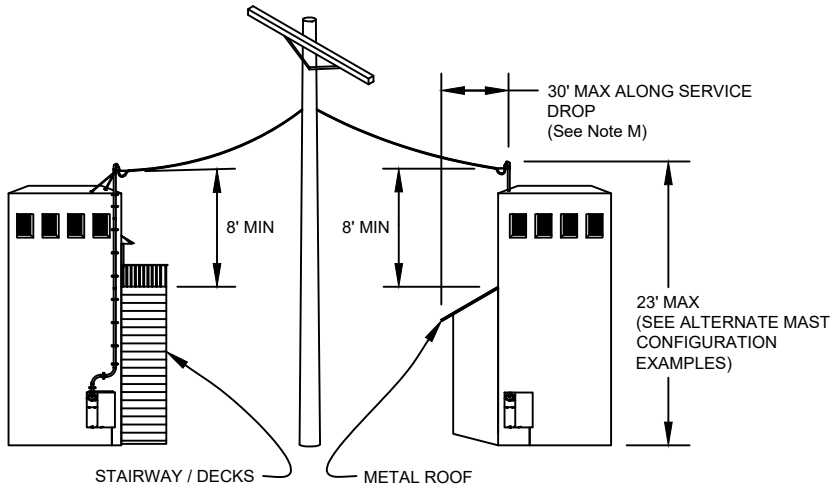
OVERHEAD CLEARANCE SPECIFICATIONS

GAS AND ELECTRICAL METER CONFIGURATION

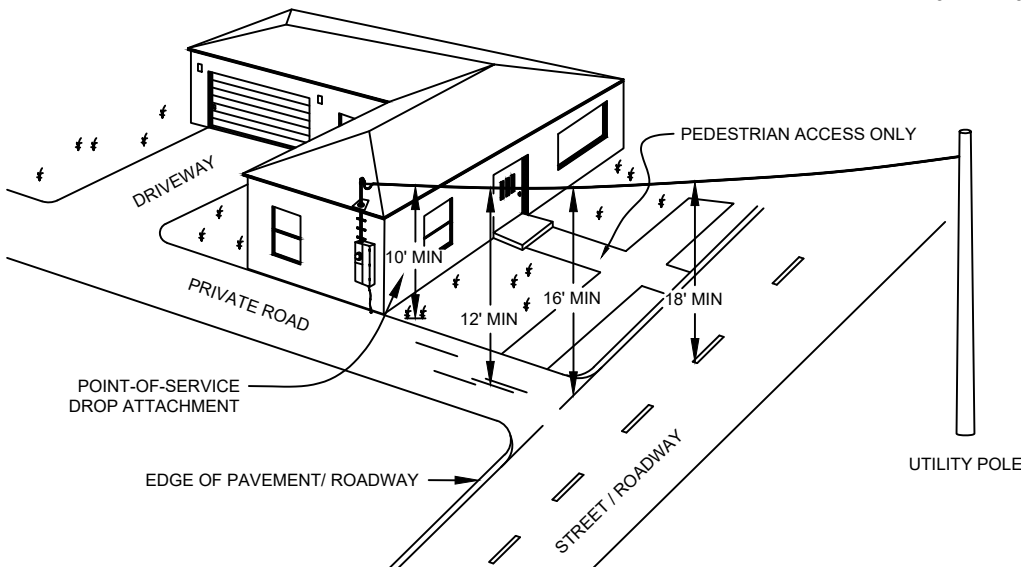


NOTES:
 1. Size and dimensions of panels will vary. Drawing not to scale.
 2. This Drawing Pertains to both overhead and underground electric service applications.

COMMERCIAL MINIMUM SERVICE HEIGHT REQUIREMENTS:

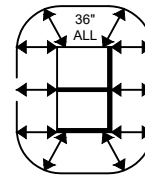


RESIDENTIAL MINIMUM SERVICE HEIGHT REQUIREMENTS:

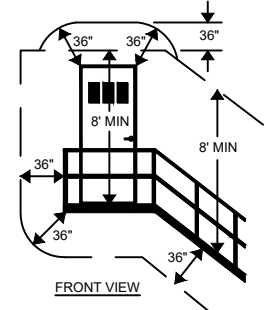


SERVICE CLEARANCE DISTANCE

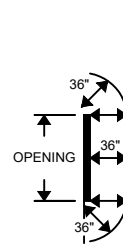
MINIMUMS FOR DOORS, EXITS, WINDOWS, AND FIRE ESCAPES



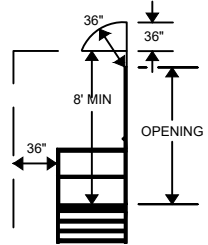
FRONT VIEW



FRONT VIEW



FRONT VIEW



FRONT VIEW

CLEARANCE NOTES

- A .** 36" SERVICE DROP RADIUS CLEARANCE IS REQUIRED AROUND ALL WINDOWS
- B .** ALL SERVICE DROPS MUST MAINTAIN A 3' CLEARANCE FROM BEING REACHABLE BY ANY PEDESTRIAN
- C .** ABOVE ANY WALKABLE SURFACE (PATIOS, DECKS, WALKABLE ROOFS, STAIRWAYS) A MINIMUM OF 8' VERTICAL CLEARANCE IS REQUIRED AND 12' ABOVE DRIVEWAYS

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OVERHEAD SERVICE SPECIFICATIONS



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BVES INC. SPECIFICATIONS

UNDERGROUND CONSTRUCTION STANDARD SPECIFICATIONS

THE FOLLOWING SECTION WILL OUTLINE MINIMUM SPECIFICATIONS AND REQUIREMENTS FOR ALL UNDERGROUND NEW CONSTRUCTION AND PANEL UPGRADE FROM 100 AMPS TO 200AMPS 400AMP INSTALLATION WILL BE REVIEWED WITH A DEDICATED PLANNER

ALL INSTALLATION TYPES MUST HAVE A PRELIMINARY SERVICE REQUEST SUBMISSION AND APPROVAL LETTER FROM BVES INC FOR BOTH PANEL UPGRADES AND PERMANENT CONNECTIONS FOR A NEW CONSTRUCTION PROJECT.

ALL INSTALLATIONS WILL REQUIRE AN ELECTRIC SERVICE RELEASE FROM THE GOVERNING BUILDING AND SAFETY DEPARTMENT.

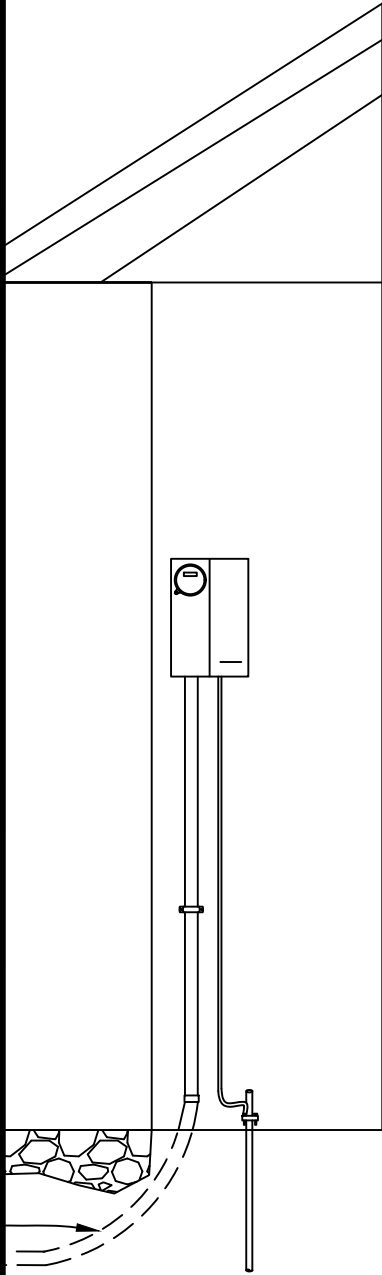
BOTH PRELIMINARY SERVICE REQUEST AND ELECTRIC SERVICE RELEASE MUST BE ON FILE FOR ANY CONNECTION TO TAKE PLACE.


ANY TRENCH AND CONDUIT INSTALLATION WILL REQUIRE A TRENCH INSPECTION TO BE DOCUMENTED BY QUALIFIED BVES INC. PERSONNEL.

PLEASE SEE PROCEDURES AND PROCESS FOR DISCONNECTIONS AND FINAL CONNECTIONS

PLEASE USE THE FOLLOWING LINK TO SUBMIT A PRELIMINARY SERVICE REQUEST

<https://www.bvesinc.com/construction/preliminary-service-request>



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MINIMUM PANEL SPECIFICATIONS

PANEL INSTALL NOTES

A. ALL SERVICE PANELS SHALL BE EUSERC COMPLIANT.

B. METER HEIGHT SHALL BE 5'4" TO 6' TO THE CENTER OF THE METER

C. ALL SERVICE PANELS SHALL HAVE A CLEAR, LEVEL, AND UNOBSTRUCTED 3' BY 3' WORK SPACE IN FRONT OF PANEL.

D. ALL METERS SHALL BE LOCATED ON EXTERIOR WALL , FACING , OR AT AN ANGLE TO THE UTILITY POLE LINE. NOT TO EXCEED 3' FROM THE NEAREST CORNER ON NEW AND EXISTING CONSTRUCTION. 24 HOUR METER ACCESS IS REQUIRED LOCATION IS SUBJECT TO APPROVAL BY A BVES INC. ENGINEERING REPRESENTATIVE

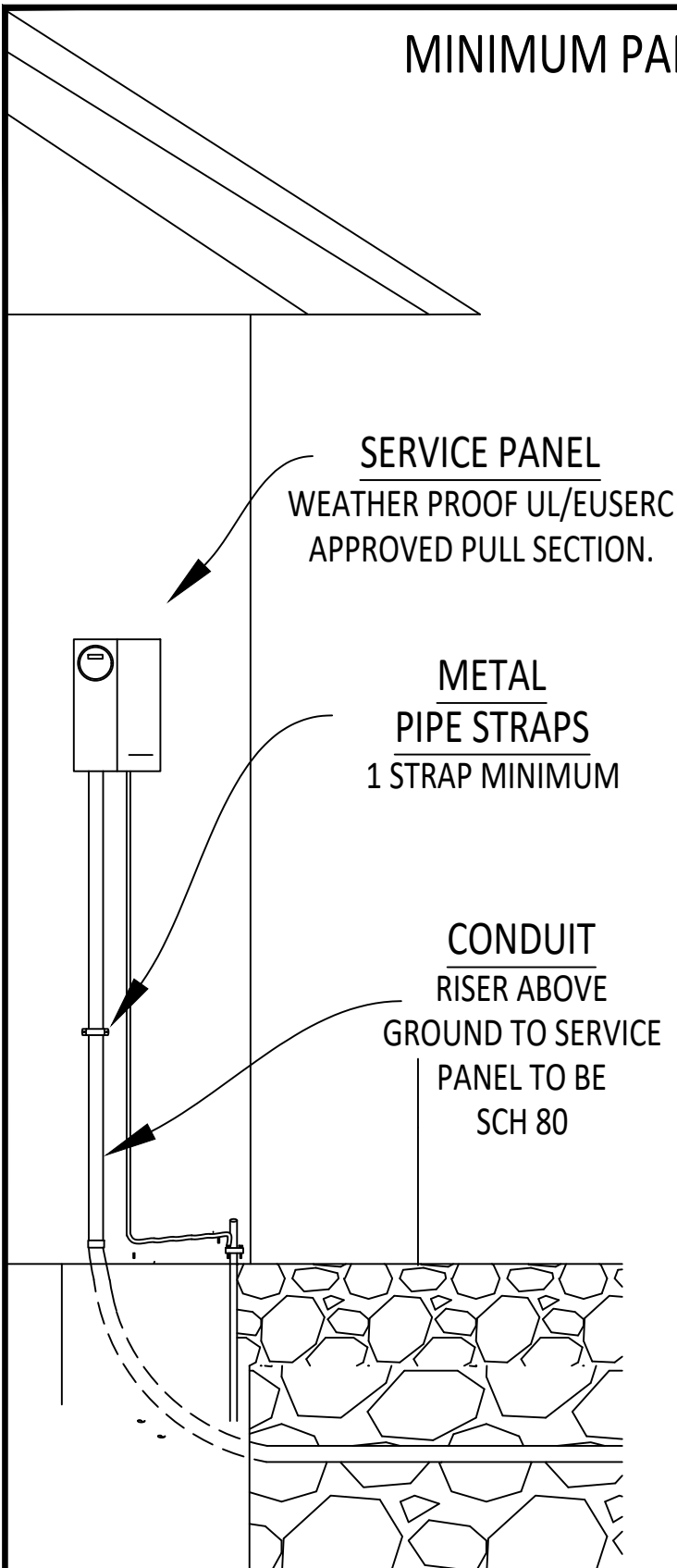
E. BVES INC. PROVIDES A SINGLE SERVICE ATTACHMENT PER A PROPERTIES APN. FOR MULTIPLE METER REQUEST AND OR ADU REQUEST SCENARIOS, ALL METER SECTIONS SHALL BE INSTALLED WITH A SINGLE AT A SINGLE POINT, AT SERVICE PANEL WITH THE CAPABILITY TO HOUSE ADDITIONAL METERS. PLEASE SPEAK WITH BVES INC. REPRESENTATIVE TO ESTABLISH A SCOPE OF WORK FOR THIS PROJECT TYPE.

F. PROPERTY ADDRESS MUST BE ON STRUCTURE AND CLEARLY VISIBLE FROM ROADWAY.

G. ANY PANEL INSTALLATION THAT EXCEEDS 200AMPS WILL REQUIRE FURTHER REVIEW BY BVES INC ENGINEERING REPRESENTATIVE. A SPECIFIC SCOPE OF WORK WILL BE ESTABLISHED WITHIN THE REVIEW PROCESS.

H. TEMPORARY JUMPER AND METER RINGS MUST BE REMOVED FROM SERVICE PANEL PRIOR TO SERVICE INSTALLATION.

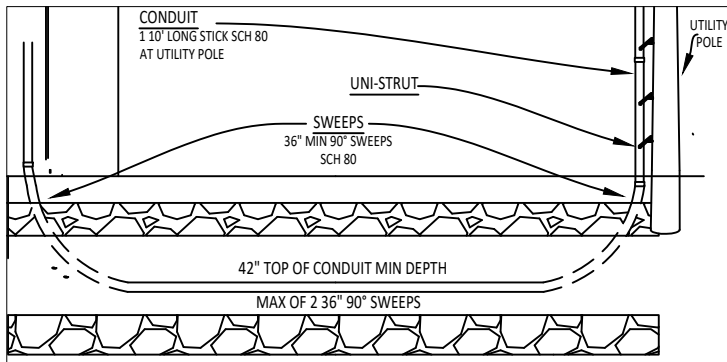
I: PLEASE SEE GROUNDING SPECIFICATIONS PAGE FOR BVES INC. GROUND DETAILS



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MINIMUM PANEL CONSTRUCTION NOTES

EX A UTILITY POLE



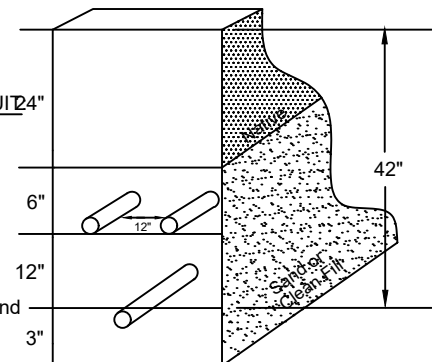
NATIVE SOIL:
Can be used on the last 24" of fill

COMMUNICATION CONDUIT: 24"
12" between conduits

POWER CONDUIT:
Use sand or clean fill for covering the conduit (See note G)

BASE:
Must have a min. of 3" of sand or cleanfill (Required in rocky terrain)

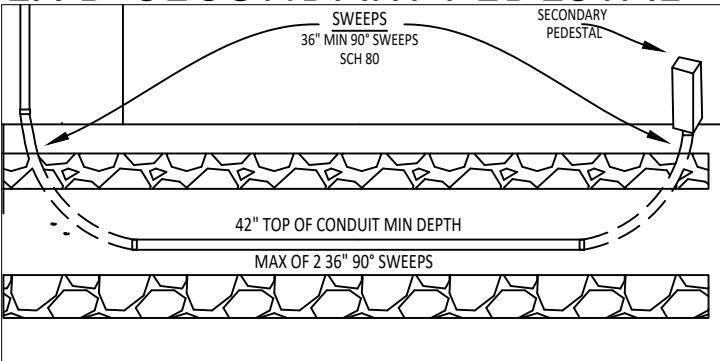
SINGLE SERVICE



NOT TO SCALE

TRENCH INSPECTION MANDATORY PRIOR TO BACKFILL

EX B SECONDARY PEDESTAL



BACKFILL NOTES

- BACKFILL IN TRENCH BOTTOM MUST BE PLACED PRIOR TO CONDUIT PLACEMENT AND COVERING. BACKFILL SHALL BE PLACED AS SOON AS POSSIBLE AFTER PLACEMENT OF CONDUITS AND APPROVAL FROM BVES INC. IN ORDER TO PREVENT DAMAGE TO THE CONDUIT.
- ROCK FREE EARTH AND SAND MUST BE USED TO BACKFILL AROUND FACILITIES AND TO PROVIDE 12" OF COVERING OVER CONDUIT. MATERIALS CAPABLE OF PASSING THROUGH A 1/2" MESH SCREEN SHALL BE CONSIDERED "ROCK-FREE".
- COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE ALL REQUIREMENT OF THE LOCAL GOVERNING AGENCY AND IN A MANNER THAT WILL NOT DAMAGE THE CONDUIT OR CAUSE SETTLING AFTER COMPLETION OF WORK
- RETAINING WALLS SHALL BE PROVIDED BY THE BUILDER TO PROTECT PEDESTALS AND OTHER EQUIPMENT. WALLS ARE REQUIRED IN ALL SLOPES OR AREAS SUBJECT TO EROSION.
- DESIGNS AND INSTALLATIONS MUST COMPLY WITH LOCAL BUILDING ORDINANCES AND BVES INC. REQUIREMENTS.
- PERMITTING TO BE PROVIDED BY CUSTOMER FOR ALL EXCAVATING PROJECTS
- WORK AREAS ALONG BURIED ROUTES SHALL BE CLEARED AND FINISH GRADE PROVIDED PRIOR TO CONDUIT PLACEMENT
- ALL TRENCHES SHALL BE CLEAN FREE OF ROCKS AND DEBRIS. ALL OPEN TRENCHES SHOULD BE BARRICADED.

TRENCH INSTALL NOTES

- ALL FACILITIES INCLUDING, TRENCHING, CONDUITS, AND METER EQUIPMENT ARE TO BE INSTALLED BY CUSTOMER OR CONTRACTOR. BVES INC WILL SUPPLY CONDUCTOR, METER, AND MAKE ELECTRICAL CONNECTIONS OF THE CONDUCTOR UP TO 100'.
- ALL TRENCHES MUST BE INSPECTED BY A BVES INC. QUALIFIED TEAM MEMBER PRIOR TO BEING BACKFILLED. FAILURE TO OBTAIN APPROVAL MAY DELAY SERVICE AND IN SOME CASES EXPOSING CONDUIT FOR PROPER INSPECTION
- CONDUIT WILL BE ONE CONTINUOUS RUN FROM SERVICE PANEL TO POINT OF ATTACHMENT WITHIN BVES INC. GRID. **NO EXCEPTIONS**
- BVES INC ALLOWS A COMMON TRENCH TO BE USED IN PERMANENT UNDERGROUND SERVICE. ONLY PHONE AND CABLE TV ARE ALLOWED IN TRENCH FOR FURTHER DETAILS CONTACT BVES INC. ENGINEERING REPRESENTATIVE.
- ALL TRENCH BACK FILL MUST BE FREE OF ANY LARGE ROCKS WITH A MAX DIAMETER OF 2" OR LESS
- FOR UTILITY SERVICE INVOLVING A UTILITY POLE (EX A) CUSTOMER TO PROVIDE THE FOLLOWING
 - 3- 10' STICKS SCH 40 CONDUIT
 - 1- 10' STICK SCH 80 CONDUIT
 - 2- 10' STICK 1 5/8" UNI-STRUT WITH PROPER PIPE STRAPS
 THERE MUST BE A MINIMUM OFFSET OF 4" TO 6" FROM THE UTILITY POLE.
- FOR SECONDARY PEDESTAL (EX B) CUSTOMER WILL PROVIDE TRENCH PATH TO THIS INSTALLATION POINT AND PROVIDE A 90° SWEEP WHEN REQUIRED. ONLY QUALIFIED BVES INC. PERSONNEL WILL BE ALLOWED ACCESS TO SECONDARY PEDESTALS. WHEN CUSTOMER IS ADDING SWEEP INTO A SECONDARY PEDESTAL INDIVIDUALS SHALL CONTACT BVES INC. AT 1 800 808 2837 TO COORDINATE A QUALIFIED TEAM MEMBER TO BE ON SITE TO MONITOR INSTALLATION.
- ALL TRENCHES SHALL BE A MINIMUM OF 12" WIDE WITH A MINIMUM OF 42" DEEP TO THE TOP OF CONDUIT.
- LOCATIONS AND TRENCH PATHS TO BE ESTABLISHED BY BVES INC. AND CUSTOMER TRENCHES THAT PARALLEL REAR PROPERTY LINES WILL OFFSET 4' TRENCHES ADJACENT TO FRONT PROPERTY LINES, IN PARKWAYS, STREETS, OR ELSE WHERE SHALL BE LOCATED AS SHOWN ON DRAWINGS. NO DEVIATIONS FROM THE PLANNED TRENCH ROUTES WILL BE PERMITTED UNLESS APPROVED BY BVES INC. ENGINEERING. WHEN APPLICABLE ALL GRANTS OF EASEMENTS FOR RIGHT OF WAY REQUIRED ON PRIVATE PROPERTY WILL BE PROVIDED UPON REQUEST BEFORE ANY TRENCHING BEGINS.
- THE BUILDER SHALL PROVIDE SUPERVISION OVER, AND COORDINATION BETWEEN, THE VARIOUS CONTRACTORS IN ORDER TO PREVENT DAMAGE TO ELECTRICAL AND OTHER UTILITIES

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UNDERGROUND SERVICE SPECIFICATIONS



REV 05

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BVES INC. SPECIFICATIONS

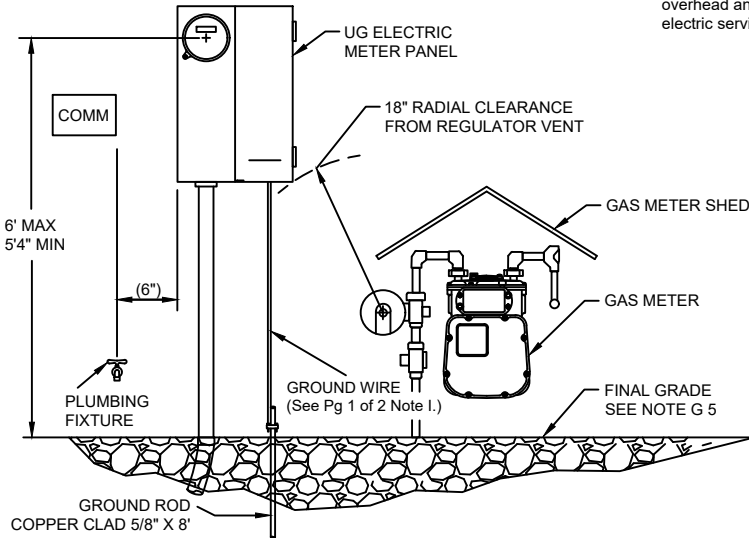
9

MINIMUM PANEL CONSTRUCTION NOTES

CONDUIT DETAIL

GAS AND ELECTRICAL METER CONFIGURATION

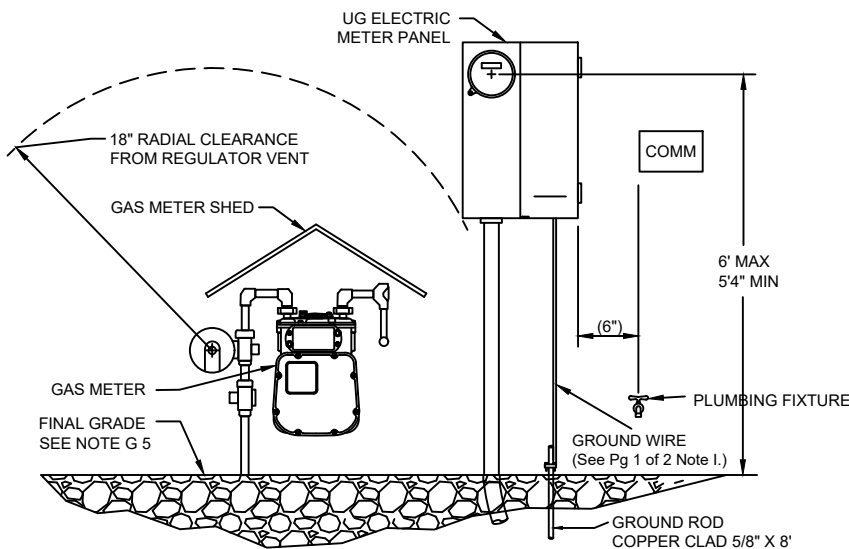
DETAIL 1



NOTES:

1. Size and dimensions of panels will vary. Drawing(s) not to scale.
2. This Drawing Pertains to both overhead and underground electric service applications.

DETAIL 2



A. FOR SERVICE PANELS AT 100 AMPS TO 200AMP A 3" CONDUIT WILL BE USED.
FOR ANY SERVICE AMPERAGE OUTSIDE THIS RANGE SPEAK WITH YOUR BVES INC. REPRESENTATIVE FOR CONDUIT SIZE REQUIREMENTS.
ALL CONDUIT IS TO BE PROVIDED BY THE CUSTOMER

B. THE PROPERTY OWNER WILL CONTINUE TO MAINTAIN , REPAIR, OR REPLACE AS NECESSARY, ALL SERVICE CONDUIT ON THEIR PROPERTY. BVES INC. WILL MAINTAIN SERVICE CONDUCTOR AND METER ONLY.

C. SURVEYING OF STREET IMPROVEMENTS, PROPERTY CORNERS, LOT LINES, FINISHED GRADE, ETC. NECESSARY FOR INSTALLATION OF UNDERGROUND UTILITIES MUST BE COMPLETED AND MARKERS OR STAKES PLACED PRIOR TO THE START OF THE ELECTRICAL INSTALLATION. THIS IS A CUSTOMER RESPONSIBILITY TO COMPLETE AND PROVIDE.

D. A MINIMUM OF A 3/8" NYLON PULL ROPE TO BE INSTALLED BY BUILDER INTO ALL CONDUITS PRIOR TO INSTALLATION OF SERVICE

E. RUNS LONGER THAN 100' MUST BE APPROVED BY BVES INC. ENGINEER, ALONG WITH ANY ADDITIONAL COSTS TO THE BUILDER FOR RUNS OVER 100'

F. DRAWINGS PREPARED FOR JOBS MAY ALSO COVER THE FACILITIES TO BE INSTALLED FOR PHONE AND CABLE TV UTILITIES. ANY QUESTIONS CONCERNING DETAILS OF THEIR INSTALLATIONS SHOULD BE REFERRED TO THE COMPANY CONCERNED

UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS, WHICH FORMS A PART OF THIS SPECIFICATION, THE BUILDER SHALL FURNISH THE PROCEEDING ITEMS AT NO COST TO BVES INC. THIS IS IN ACCORDANCE WITH PROCEDURES AND SCHEDULES WHICH SHALL BE MUTUALLY AGREED UPON BY THE FIELD REPRESENTATIVE OR BUILDER, BVES INC., AND ANY OTHER UTILITIES WHO MAY BE INVOLVED IN THE PROJECT

DATE: JAN-24

TITLE:

UNDERGROUND SERVICE SPECIFICATIONS



REV 05

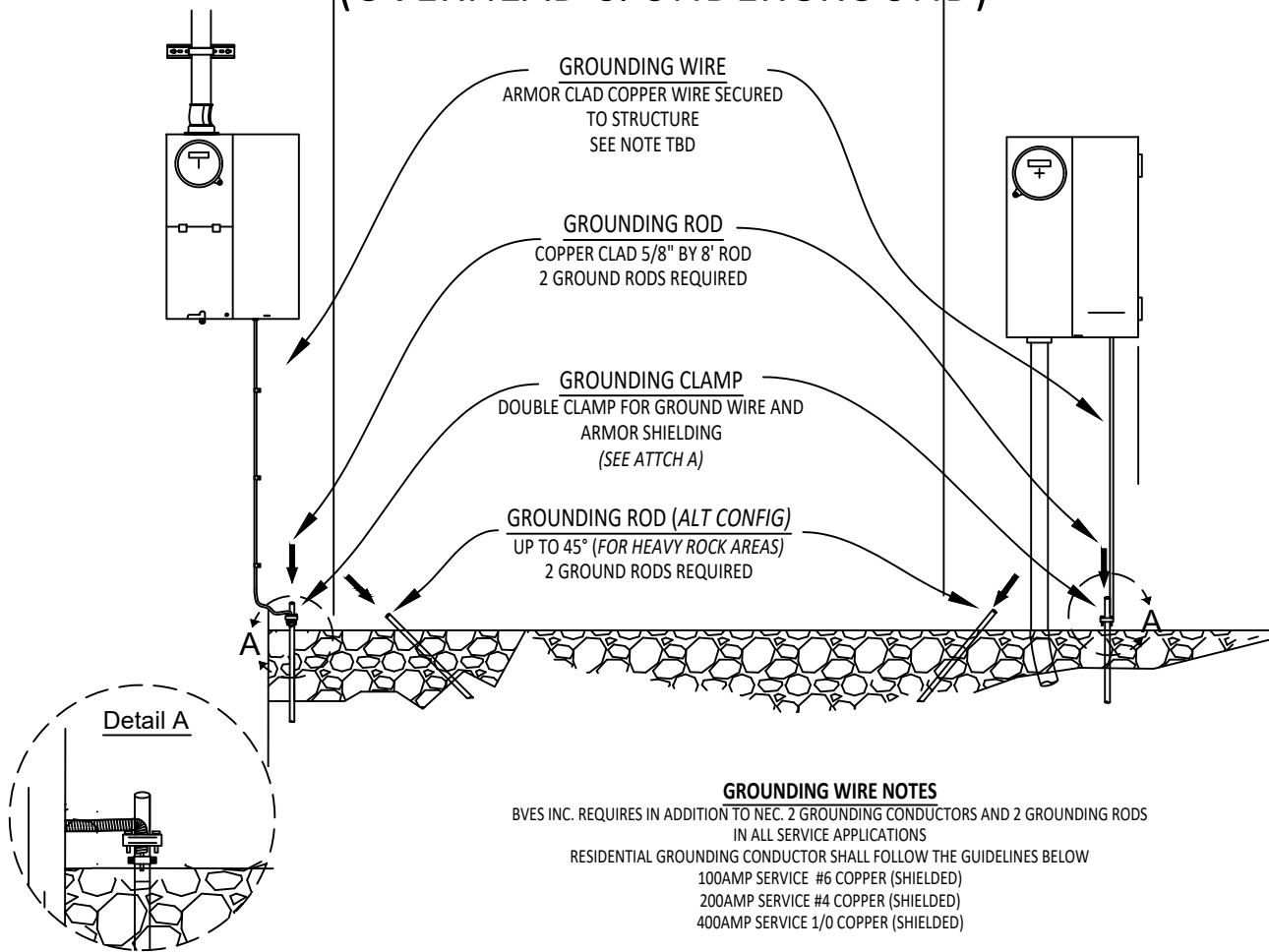
DRWN: IZ

APVL: TC

BVES INC. SPECIFICATIONS

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MINIMUM GROUNDING SPECIFICATIONS (OVERHEAD & UNDERGROUND)



GROUNDING WIRE NOTES

BVES INC. REQUIRES IN ADDITION TO NEC, 2 GROUNDING CONDUCTORS AND 2 GROUNDING RODS IN ALL SERVICE APPLICATIONS
 RESIDENTIAL GROUNDING CONDUCTOR SHALL FOLLOW THE GUIDELINES BELOW
 100AMP SERVICE #6 COPPER (SHIELDED)
 200AMP SERVICE #4 COPPER (SHIELDED)
 400AMP SERVICE 1/0 COPPER (SHIELDED)

FOR ANY PANEL LARGER THAN A 200AMP SHALL BE REQUIRED TO BE AN UNDERGROUND INSTALLATION.
 SPEAK TO YOUR BVES INC. ENGINEERING REPRESENTATIVE FOR FURTHER DETAILS AND REQUIREMENTS.
 BVES INC. FOLLOWS THE COUNTY OF SAN BERNARDINO SPECIFICATIONS FOR ELECTRICAL PANEL INTERRUPTING
 SEE SHORT CIRCUIT CURRENT TABLE FOR DETAILS

SHORT CIRCUIT CURRENT TABLE

SERVICE	PHASE	SERVING VOLTAGE	SERVICE ENTRANCE AMPACITIES	UTILITIES CONTRIBUTION TO FAULT CURRENT WILL NOT EXCEED
Residential	Single	120/240	600 or less	10,000
Commercial	Single	120/240	600 or less	42,000
Commercial	Three	120/208 or 240	800 or less	42,000
Commercial	Three	480	1200 or less	30,000

Exceptional Cases:

When the application of the above fault current limitation appears too restrictive for new installations, the customer may request the utility to provide the available fault currents for a specific case and location.
 All new installations with service voltage or service entrance ampacities larger than those stated above will be handled as individual cases, and BVES Engineering will provide the available fault duty for each installation.

NOTE: Short circuit table for reference only any service over 200 Amps will need to follow the underground specifications guidelines and requirements. Overhead construction not to exceed 200A

DATE: JAN-24

GROUNDING OVERHEAD & UNDERGROUND SPECIFICATIONS



REV 05

DRWN: IZ
APVL: TC

BVES INC. SPECIFICATIONS

PROCEDURE FOR TEMPORARY POWER CONNECTION

1. A PRELIMINARY SERVICE REQUEST SUBMISSION MUST BE ON FILE WITH BVES INC.

2. BVES INC ENGINEERING WILL REVIEW THE PROPERTY AND PROVIDE APPROVAL LETTER OR PENDING LETTER. A TEMPORARY POWER SPOT WILL BE MARKED BY BVES INC. FIELD REPRESENTATIVE. RESPONSE TIMES WILL BE DEPENDANT ON EXISTING SUBMISSIONS . REVIEW TIMELINE CAN RANGE FROM 2 - 4 WEEKS FROM THE DATE OF SUBMISSION

3. WITH APPROVAL RESPONSE THE CUSTOMER WILL BE ABLE TO UTILIZE THE PROVIDED CONFIRMATION CODE TO CONTACT BVES INC OFFICE AT 1 800 808 2837. A BILLING APPLICATION MUST BE SUBMITTED WITH BVES INC. FOR ALL CONNECTIONS DATES TO BE ESTABLISHED IN ADDITION TO THE ELECTRIC SERVICE RELEASE. BVES INC. WILL CHARGE A **\$75.00** FEE FOR TEMPORARY POWER.

4. FOR ALL TEMPORARY POWER CONNECTIONS AN ELECTRIC SERVICE RELEASE IS REQUIRED TO BE SUBMITTED FROM GOVERNING BUILDING AND SAFETY AGENCY
IT IS A CUSTOMER RESPONSIBILITY TO COORDINATE AN INSPECTION DATE WITH THE PROPER AGENCY TO PROVIDE A RELEASE.

ELECTRIC SERVICE RELEASE MUST BE ON FILE FOR ALL TEMPORARY POWER . FAILURE TO RECEIVE THIS RELEASE WILL DELAY ALL CONNECTIONS **NO**

EXCEPTIONS

GOVERNING BUILDING AND SAFETY DEPARTMENTS
SAN BERNARDINO COUNTY
&
CITY OF BIG BEAR LAKE

ALL DISCONNECTION ARE TO BE DONE ONLY BY A BVES INC. QUALIFIED EMPLOYEE. UNDER NO CIRCUMSTANCES WILL A SERVICE DROP OR METER RING BE CUT OR REMOVED BY ANY OTHER INDIVIDUAL. ANY DISCONNECTION DONE BY NON BVES INC. EMPLOYEES WILL BE TREATED AS A TAMPERED SERVICE AND A SAFETY HAZARD, THE SERVICE WILL BE DISCONNECTED IMMEDIATELY UNTIL PROPER PROCEDURES ARE FOLLOWED. A SUBMISSION OF AN ELECTRIC SERVICE RELEASE WILL NOT SUPERSEDE BVES INC. SPECIFICATIONS AND STANDARDS BEING MET.

ALL PRELIMINARY SERVICE REQUEST RESPONSES ARE VALID FOR 6 MONTHS FROM MONTH OF RESPONSE. ALL TEMPORARY POWER RESPONSES ARE VALID FOR 3 MONTHS AND EXTENSIONS WILL BE GRANTED UPON RECEIVING PROPER DOCUMENTATION.

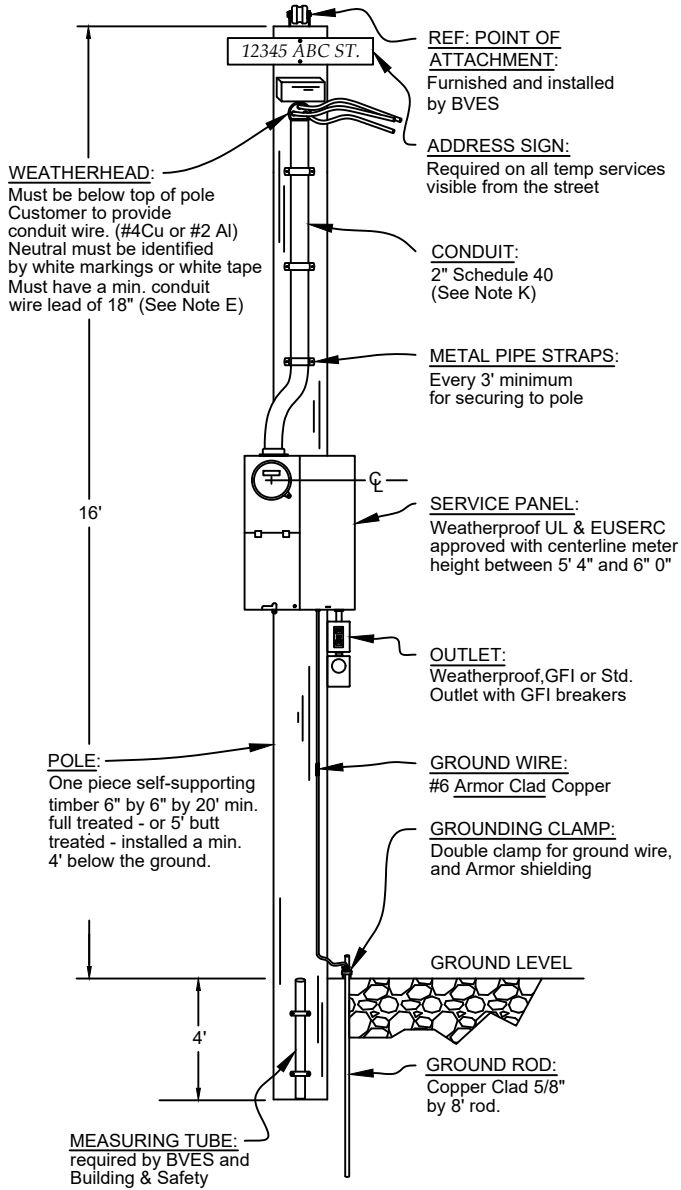
A PENDING REPORT WILL HAVE FURTHER DETAILS AND INSTRUCTIONS FOR COMPLETING A PROJECT REQUEST.
PLEASE WORK DIRECTLY WITH YOUR BVES INC ENGINEERING REPRESENTATIVE IN THE EVENT YOU RECEIVE A PENDING REPORT.

THERE MAY BE A DELAY TO BRING IN A SERVICE CONNECTION AFTER RECEIVING ELECTRIC SERVICE RELEASE. ALL FINAL CONNECTIONS ARE TENTATIVE TO WEATHER CONDITIONS, CREW AVAILABILITY, HOURS OF OPERATIONS, EMERGENCIES ETC... CONTACT BVES INC. CUSTOMER SERVICE IN THE EVENT OF A DELAYED CONNECTION SCENARIO TO ESTABLISH A TIMELINE.

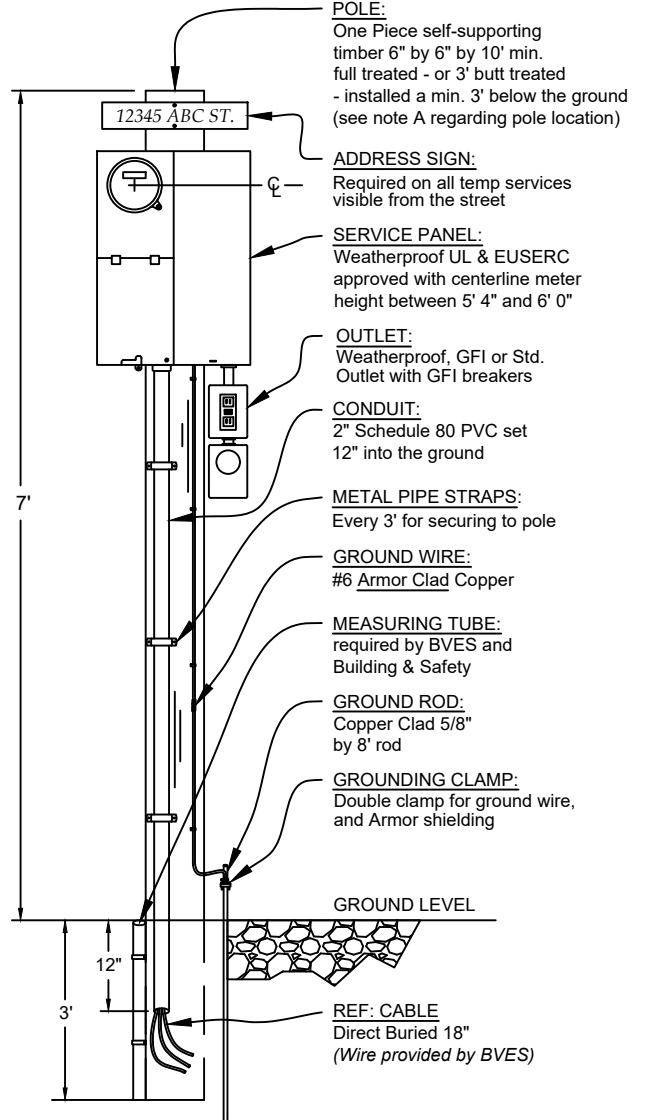
DATE: 11/22/22	TITLE:	TEMP SERVICE PROCEDURES	
	DRWN: IZ	BEAR VALLEY ELECTRIC SERVICE INC.	
	APVL: TC		12

OVERHEAD & UNDERGROUND TEMPORARY POWER SPECIFICATIONS

100 AMP TEMPORARY OVERHEAD SERVICE



100 AMP TEMPORARY UNDERGROUND SERVICE



NOT TO SCALE

DATE: JAN-24

TITLE:

TEMP SERVICE SPECIFICATIONS



REV 05

DRWN: IZ
APVL: TC

BEAR VALLEY ELECTRIC SERVICE INC.

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OVERHEAD & UNDERGROUND TEMPORARY POWER NOTES

A. BVES WILL FURNISH AND INSTALL THE METER, POINT OF ATTACHMENT, AND UP TO 100' OF SERVICE DROP FOR OVERHEAD INSTALLATION, AND 10' OF SERVICE DROP FOR UNDERGROUND INSTALLS. ANY SERVICE DROP THAT EXCEEDS THESE REQUIREMENTS MAY INCUR ADDITIONAL CHARGES, WORK ORDERS, OR ADDITIONAL CONDITIONS. (TO BE DETERMINED BY BVES ENGINEERING DEPT.)

B. MINIMUM SERVICE CABLE CLEARANCE ABOVE GROUND:
 AT CENTERLINE OF STREET.....18'
 AT CURB / PROPERTY LINE.....16'
 FOR ANY AND ALL SPECIAL CONDITIONS, CONSULT A BVES ENGINEERING REPRESENTATIVE.


C. ALL FACILITIES SHALL BE RAIN-TIGHT, BONDED, UL & EUSERC COMPLIANT.
 WIRE MUST HAVE SUITABLE INSULATION,
 MINIMUM #4CU OR #2 AL SHALL BE USED IN 2" CONDUIT FOR 100A SERVICE.

D. THE REQUIRED INSTALLATION SHALL EXCEED THE MINIMUM NEC REQUIREMENTS.

E. FOR ANY SERVICE LARGER THAN 100 AMPS, CONSULT A BVES ENGINEERING REPRESENTATIVE.

UG MINIMUM TRENCHING REQUIREMENTS:
ALWAYS CONTACT DIGALERT 811 PRIOR TO ANY DIG

- MINIMUM DEPTH OF NO LESS THAN 18", AND A 12" WIDTH TO BE PROVIDED BY CUSTOMER. (BVES TO PROVIDE "DIRECT BURY" TEMP WIRE.) NO SWEEP OR ADDED CONDUIT NECESSARY UNLESS NOTED BY BVES INC. ENGINEERING
- BACKFILL NOT TO CONTAIN ANY ROCKS MORE THAN 1/2" IN DIAMETER.
- UG POLES WILL BE INSTALLED 5' TO 10' FROM EXISTING BVES FACILITIES, WITH THE SERVICE ADDRESS POSTED AND VISIBLE FROM THE STREET.
- IF CONDUIT RISER IS METAL, A PVC PIPE MUST COVER ENTIRE RISER FROM THE PANEL TO THE WEATHERHEAD, AND BE SECURED TO THE POLE, ALONG WITH A WOOD BLOCK MOUNTED ABOVE THE WEATHERHEAD.
- FLOODLIGHTS, SIGNS (OTHER THAN AN ADDRESS), ROPES, COMMUNICATION LINES, OR ANY OTHER SIMILAR EQUIPMENT, SHALL NOT BE ATTACHED TO SERVICE OR TEMPORARY POLES.

DATE: JAN-24	TITLE:	TEMP SERVICE SPECIFICATIONS	
REV 05	DRWN: IZ APVL: TC	BEAR VALLEY ELECTRIC SERVICE INC.	14

ELECTRIC VEHICLE METERING PROCEDURES

PROCESS FOR INSTALLING AN ELECTRIC VEHICLE METER FOR BOTH A BVES INC EV METER PROGRAM, OR A 3RD PARTY SUB METER PROGRAM.

1. COMPLETE AND SUBMIT A PRELIMINARY SERVICE REQUEST AT BVES INC. FORM AT [HTTPS://WWW.BVESINC.COM/CONSTRUCTION/PRELIMINARY-SERVICE-REQUEST](https://www.bvesinc.com/construction/preliminary-service-request) (THE PRELIMIANRY SERVICE REQUEST IS VALID FOR ANY ENGINEERING REQUEST)

2. BVES INC. ENGINEERING WILL RESPOND WITHIN 3 TO 4 WEEKS, PROVIDING DETAILS AND SCOPE OF WORK FOR PROJECT. A CONFIRMATION CODE FOR THE PROPERTY ADDRESS WILL BE INCLUDED, THE CODE IS UNIQUE TO THE PROPERTY.

IF A PENDING RESPONSE IS RECEIVED ADDITIONAL REQUIREMENTS MUST BE ADDRESSED WITH BVES INC. ENGINEERING FOR APPROVAL.

ALL PSR RESPONSES ARE VALID FOR 6 MONTHS FROM THE SUBMISSION MONTH

3. CUSTOMER COMPLETES AND ELECTRIC VEHICLE (EV) METER APPLICATION. WITHIN THE APPLICATION , THE CUSTOMER WILL DECIDE ON THE EV INSTALLATION PATH.

FOR 3RD PARTY INSTALLATION, ADDITIONAL DOCUMENTATION IS NEEDED FOR METER DATA AND CONTRACTOR CONTACT.

4. ONCE ALL REQUIRED DOCUMENTS AND CONSTRUCTION STANDARDS HAVE BEEN MET AN APPROVAL LETTER WILL BE SUBMITTED TO THE CUSTOMER. THE LETTER WILL ESTABLISH A SCOPE OF WORK SPECIFIC TO EV METER PROJECT.

FOR BVES INC. EV METER INSTALLATION SEE STEP 5.


FOR 3RD PARTY SUB-METER SEE STEP 6

STEP 5

A QUALIFIED ELECTRICIAN WILL CONTACT BVES INC. ENGINEERING TO COORDINATE A DISCONNECTION DATE. BVES INC. QUALIFIED PERSONNEL WILL DISCONNECT POWER AND REMOVE EXISTING METER (WHEN REQUIRED) INSTALLATION FOLLOWS BVES INC. SPECIFICATIONS, AND POST-INSTALLATION INSPECTION IS SCHEDULED.

STEP 6

QUALIFIED INDIVIDUAL FOLLOWS BVES INC. SPECIFICATIONS FOR THE 3RD PARTY SUB-METER PROGRAM. THE CUSTOMERS SUB-METER IS PLACED ON THE DISTRIBUTION SIDE, MEETING SAFETY CODES AND PROGRAM SPECIFICATIONS

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EV CHARGING STATIONS CONFIGURATIONS
UTILITY MAINTAINED METER

THE FOLLOWING PAGES WILL DETAIL METERING CONFIGURATIONS THAT PROVIDES A UTILITY OWNED METER WHICH IS INSTALLED UPON A CUSTOMER COMPLETING AN INSTALLATION OF A NON TRADITIONAL METER PANEL AS LISTED WITHIN "**ATTACHMENT A**"

THE CUSTOMER SHALL FOLLOW STANDARD PROCEDURES AS LISTED WITHIN A "**EV INSTALLATION PROCEDURES**" THE FOLLOWING DRAWINGS, CALLOUTS, AND INSTRUCTIONS ARE FOR CONSTRUCTION STANDARDS IN REGARDS TO BVES INC EV METER PROGRAM

MINIMUM PANEL STANDARDS


ALL PANELS MUST MEET MINIMUM SAFETY STANDARD TO JOIN THE BVES INC EV METER PROGRAM ANY PANEL THAT DOES NOT MEET THIS REQUIREMENT SHALL BE REQUIRED TO BE UPGRADED. THE SITE ASSESSMENT DONE BY BVES INC ENGINEERING TEAM WILL REVIEW ALL CONDITIONS OF THE PANEL, THE CONDUCTOR SIZES, AND UTILITY INFRASTRUCTURE. AFTER SITE REVIEW A RESPONSE LETTER WILL OUTLINE BVES INC FINDINGS AND SCOPE OF WORK FOR PROJECT FOR DETAILS ON INSPECTION PROCESS PLEASE REVIEW THE "**EV INSTALLATION PROCEDURES**"

PROOF OF CAR CHARGER

PRIOR TO APPROVAL A CAR CHARGER CUT SHEET IS TO BE PROVIDED WITH APPLICATION FOR BVES INC EV METER PROGRAM. THE CUT SHEET SHALL INCLUDE LOAD CHARACTERISTICS OF THE PROPOSED CAR CHARGER. THE EV CHARGER WILL NOT BE ALLOWED TO EXCEED 50 AMPS OF USE IN A SINGLE PHASE 120/240 VOLTAGE ONCE INSTALLATION IS APPROVED PRIOR TO DISCONNECTING SERVICE THE PROPERTY SHALL HAVE INSTALLED THE CAR CHARGER THAT MATCHES THE SAME DOCUMENT THAT WAS PROVIDED TO BVES INC

WITHIN THE BVES INC EV METER PROGRAM BVES INC WILL PROVIDE A UTILITY OWNED METER. THE INSTALLATION OF THE EV METER PANEL, WIRE, AND MATERIAL IS A CUSTOMER RESPONSIBILITY TO INSTALL AND MAINTAIN. ONLY CUSTOMERS WITH AN APPROVED APPLICATION WILL BE ALLOWED TO INSTALL AND JOIN THE BVES INC EV METER PROGRAM. ALL APPLICATIONS WILL RECEIVE AN APPROVAL LETTER WHICH WILL AUTHORIZE STARTING THE PROJECT. ANY INSTALLATION COMPLETED WITHOUT WRITTEN APPROVAL FROM BVES INC. WILL NOT BE ACCEPTED UNTIL ALL GUIDELINES, PROCEDURES AND SPECIFICATIONS ARE MET. ALL APPROVED INSTALLATIONS SHALL BE COMPLETED ON A DE-ENERGIZED PANEL WHICH SHALL BE DISCONNECTED BY QUALIFIED BVES INC. EMPLOYEES.

THE SECOND METER INSTALLATION WILL ONLY BE ACCEPTED WITHIN A EV CHARGER CONFIGURATION. ANY ADDITIONAL METERS FOR STANDARD OVERHEAD, UNDERGROUND AND COMMERCIAL PROJECTS WILL FOLLOW THE GUIDELINES, PROCEDURES AND SPECIFICATIONS THAT PERTAIN TO SAID INSTALLATION REQUEST. ANY EXISTING CUSTOMER ON A SOLAR PROGRAM WITH BVES INC WILL NOT BE ELIGIBLE TO JOIN BOTH EV METER AND SOLAR PROGRAMS FOR MORE INFORMATION REGARDING ADDITIONAL METERS, AND PROGRAM ELIGIBILITY PLEASE SUBMIT A PRELIMINARY SERVICE REQUEST AT <https://www.bvesinc.com/construction/preliminary-service-request>

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EV METER NOTES

ONCE BVES INC HAS REVIEWED THE EXISTING PANEL THROUGH THE PSR SUBMISSION THE FOLLOWING OUTLINE WILL BE FOR EV INSTALL THIS SPECIFICATION WILL PERTAIN TO THE BVES INC EV METER PROGRAM.

- THE EXISTING OVERHEAD PANEL SHALL BE A COMBINATION METER PANEL
- THE CONNECTION POINTS TO THE EV METER LOCATION WILL BE DETERMINED DEPENDING ON MAIN SERVICE ENTRY POINT (*OVERHEAD OR UNDERGROUND*)
- FOR CONFIGURATION DETAILS AND SPECIFICATIONS TO CONNECT FROM THE MULTIPLE POINT PLEASE REVIEW EV1 FOR OVERHEAD AND UNDERGROUND COMBINATIONS
- ALL EV METERS SOCKETS SHALL BE SECURLY PLACED ON THE WALL
- IN EVENT THAT SERVICE PANEL MUST BE UPGRADED THE CUSTOMER MAY CHOOSE TO INSTALL A COMBINATION METER PANEL, A DUAL SOCKET METER PANEL AND OR FOLLOW THIRD PARTY EV METERING OPTIONS. SPEAK WITH BVES INC REPRESENTATIVE TO UNDERSTAND OPTIONS FURTHER

1) EXISTING PANEL OVERHEAD TYPE

EXISTING PANEL IS AN OVERHEAD INSTALLATION THE PANEL SERVICE WIRE WILL BE REVIEWED AND MUST BE ABLE TO SUPPORT THE ADDITIONAL LOAD OF EV METER.

2) BVES INC EV METER

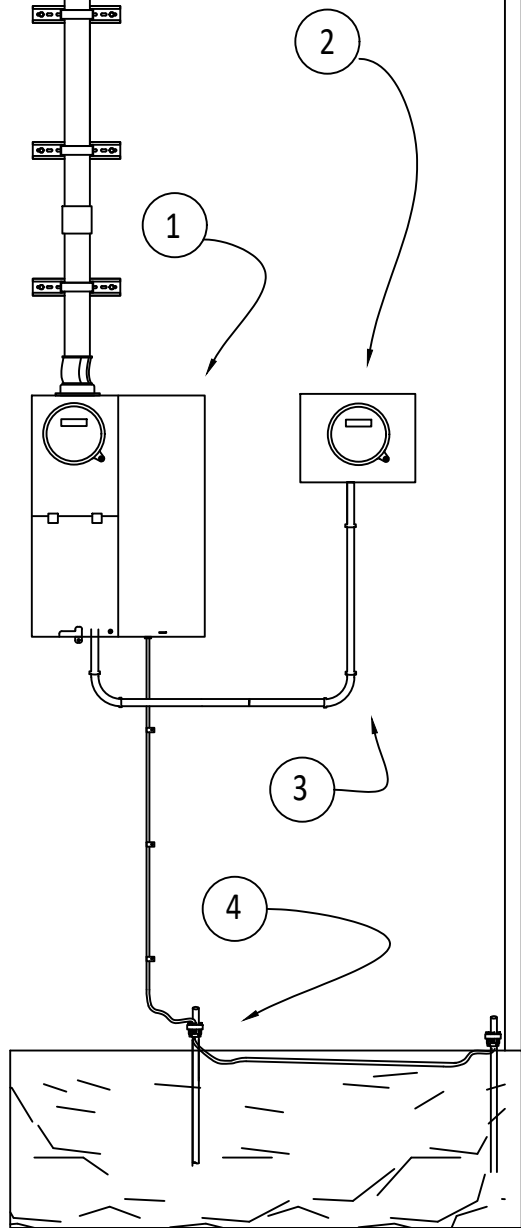
UTILITY METER TO BE PROVIDED BY BVES INC CUSTOMER TO INSTALL AND PROVIDE METER SOCKET FOR UTILITY METER

3) DUCT WAY

SINGLE CONTINUOUS CONDUIT PER NEC STANDARDS BY CUSTOMER. RUN LENGTH SHALL NOT EXCEED 10' FROM EXISTING SERVICE PANEL. DUCT TO BE LABELED "EV ONLY" EVERY 30"

4) GROUNDING & BONDING

GROUNDING AND BONDING TO MEET BVES INC SPECIFICATIONS AND NEC STANDARDS. BONDING CONDUCTOR TO BE INSTALLED WITHIN DUCT WAY



EXISTING OVERHEAD INSTALL
DETAILS

DATE: JAN-24

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ELECTRIC VEHICLE SPECIFICATIONS



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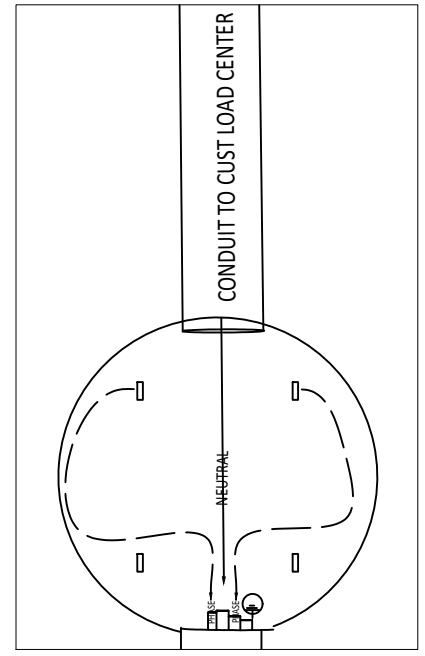
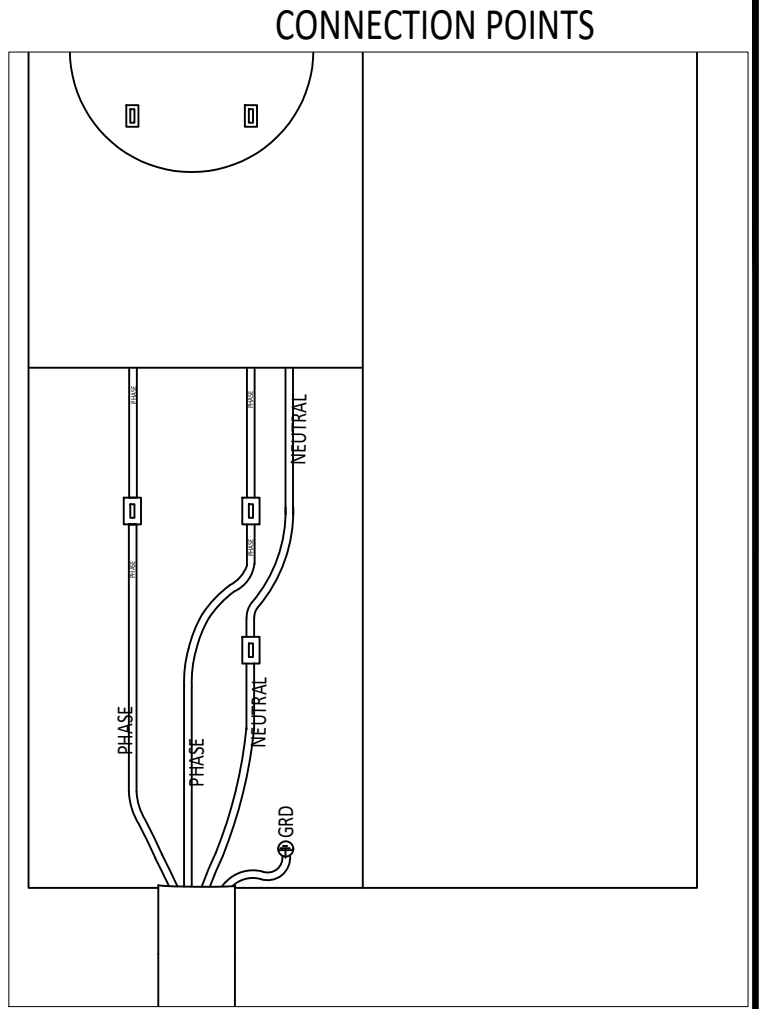
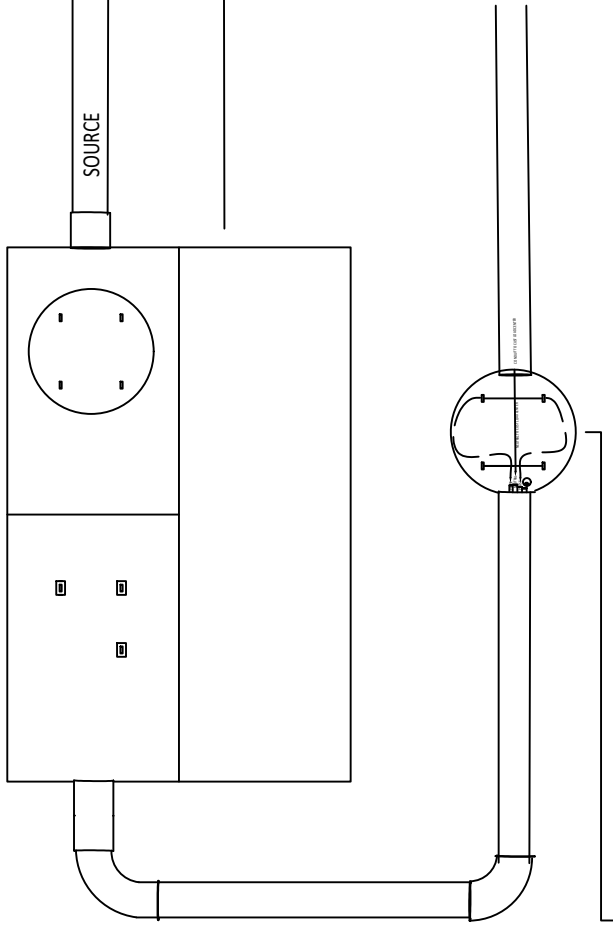
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BEAR VALLEY ELECTRIC SERVICE INC.

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EXISTING OVERHEAD INSTALL DETAILS

CONNECTION POINTS



CONNECTION POINT NOTES

OVERHEAD INSTALLATION WITHIN A COMBINATION METER WILL BE AS FOLLOWS

EV METER SHALL BE WITHIN 10' OF EXISTING SERVICE AND SHALL MEET AND FOLLOW ALL STANDARD NEW CONSTRUCTION UNDERGROUND PANEL SPECIFICATIONS.

EV METER HEIGHT SHALL MAINTAIN A MINIMUM OF 5'4 TO 6'

NEUTRAL WIRE SHALL BE CLEARLY IDENTIFIED WITH WHITE ELECTRICAL TAPE
NEUTRAL WIRE SHALL BE CONTINUOUS TO CUSTOMER LOAD CENTER FOR EV

A GROUNDING WIRE SHALL BE WITHIN DUCT BONDING PERMANENT PANEL TO EV METER PANEL

CONNECTIONS OF WIRE TO LINE SIDE OF METER SHALL BE COMPLETED BY CUSTOMER.

DATE: JAN-24

TITLE:

ELECTRIC VEHICLE SPECIFICATIONS

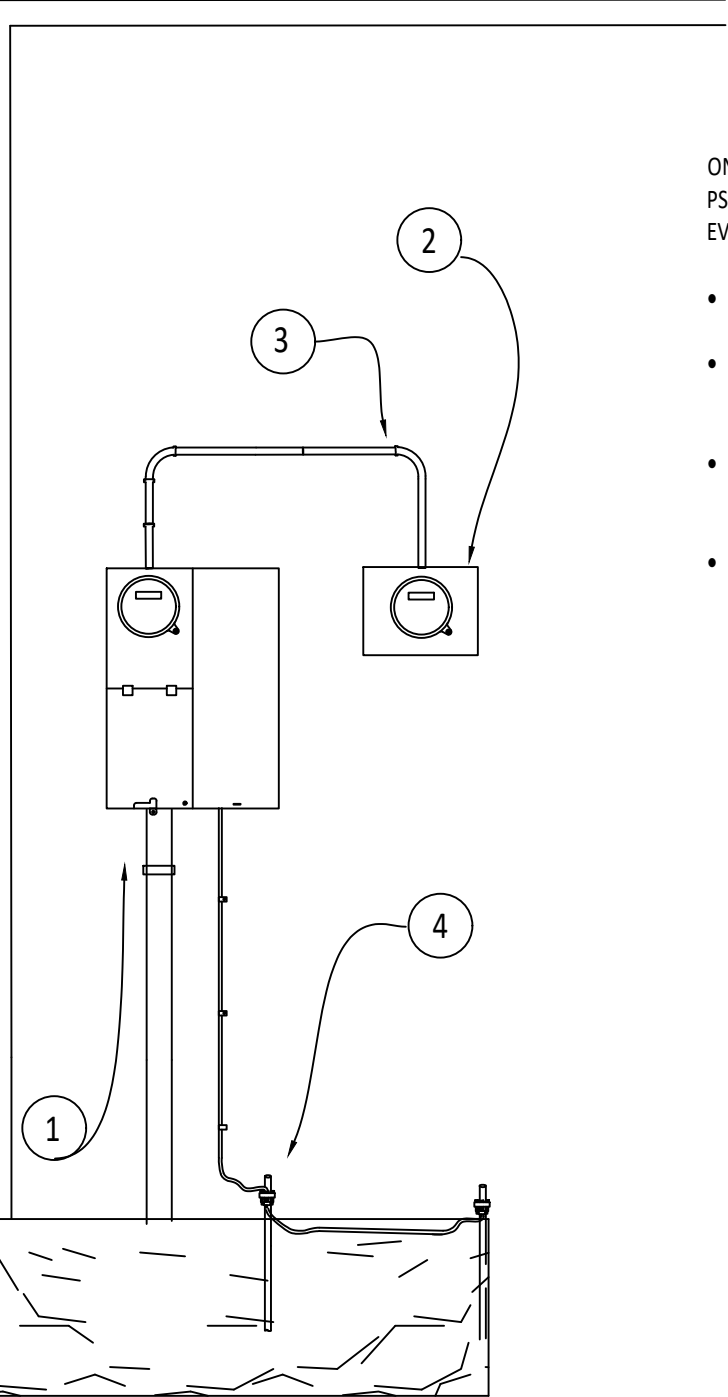


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BEAR VALLEY ELECTRIC SERVICE INC.

EXISTING UNDERGROUND INSTALL DETAILS



EV METER NOTES

ONCE BVES INC HAS REVIEWED THE EXISTING PANEL THROUGH THE PSR SUBMISSION THE FOLLOWING OUTLINE WILL BE FOR BVES INC EV METER PROGRAM INSTALLATION

- THE EXISTING PANEL SHALL BE A COMBINATION METER PANEL.
- THE CONNECTION POINTS TO THE EV METER LOCATION WILL BE DETERMINED DEPENDING ON MAIN SERVICE ENTRY POINT (*OVERHEAD OR UNDERGROUND*)
- FOR CONFIGURATION DETAILS AND SPECIFICATIONS TO CONNECT FROM THE MULTIPLE POINT PLEASE REVIEW EV1 FOR OVERHEAD AND UNDERGROUND COMBINATIONS
- ALL EV METERS SOCKETS SHALL BE SECURLY PLACED ON THE WALL

1) EXISTING PANEL UNDERGROUND TYPE

EXISTING PANEL IS AN UNDERGROUND INSTALLATION THE PANEL SERVICE WIRE WILL BE REVIEWED AND MUST BE ABLE TO SUPPORT THE ADDITIONAL LOAD OF EV METER.

2) BVES INC EV METER

UTILITY METER TO BE PROVIDED BY BVES INC CUSTOMER TO INSTALL AND PROVIDE METER SOCKET FOR UTILITY METER

3) DUCT WAY

SINGLE CONTINUOUS RIGID 2" STEEL DUCT TO BE PROVIDED BY CUSTOMER. RUN LENGTH SHALL NOT EXCEED 10' FROM EXISTING SERVICE PANEL

4) GROUNDING & BONDING

GROUNDING AND BONDING TO MEET BVES INC SPECIFICATIONS AND NEC STANDARDS STANDARD UNDERGROUND SPECIFICATIONS.

DATE: JAN-24

TITLE:

ELECTRIC VEHICLE SPECIFICATIONS



REV 05

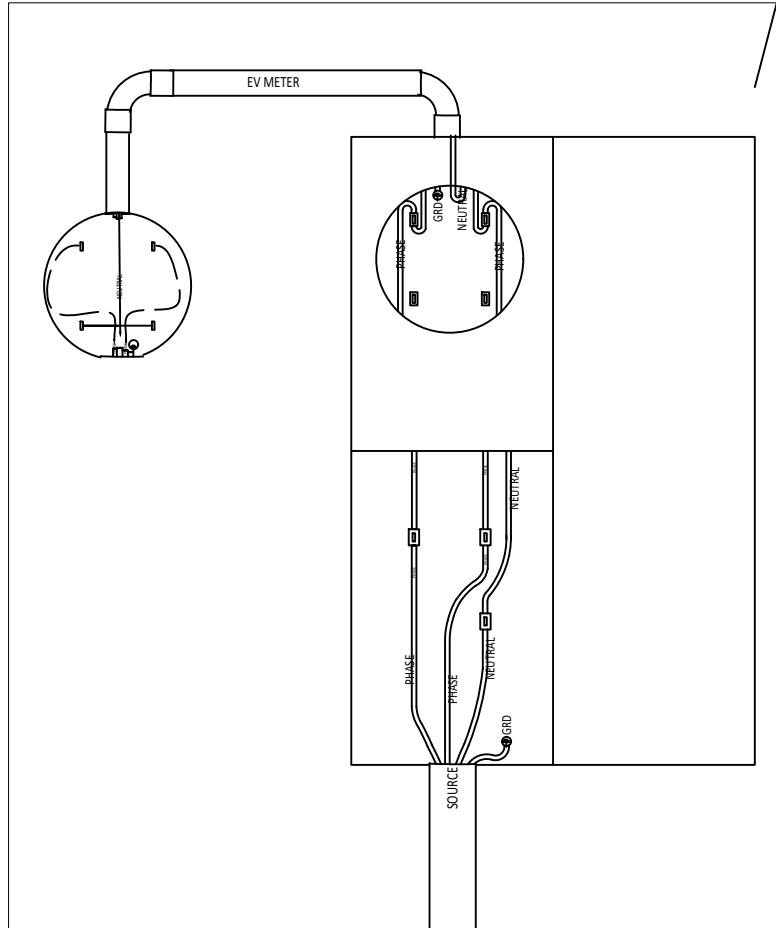
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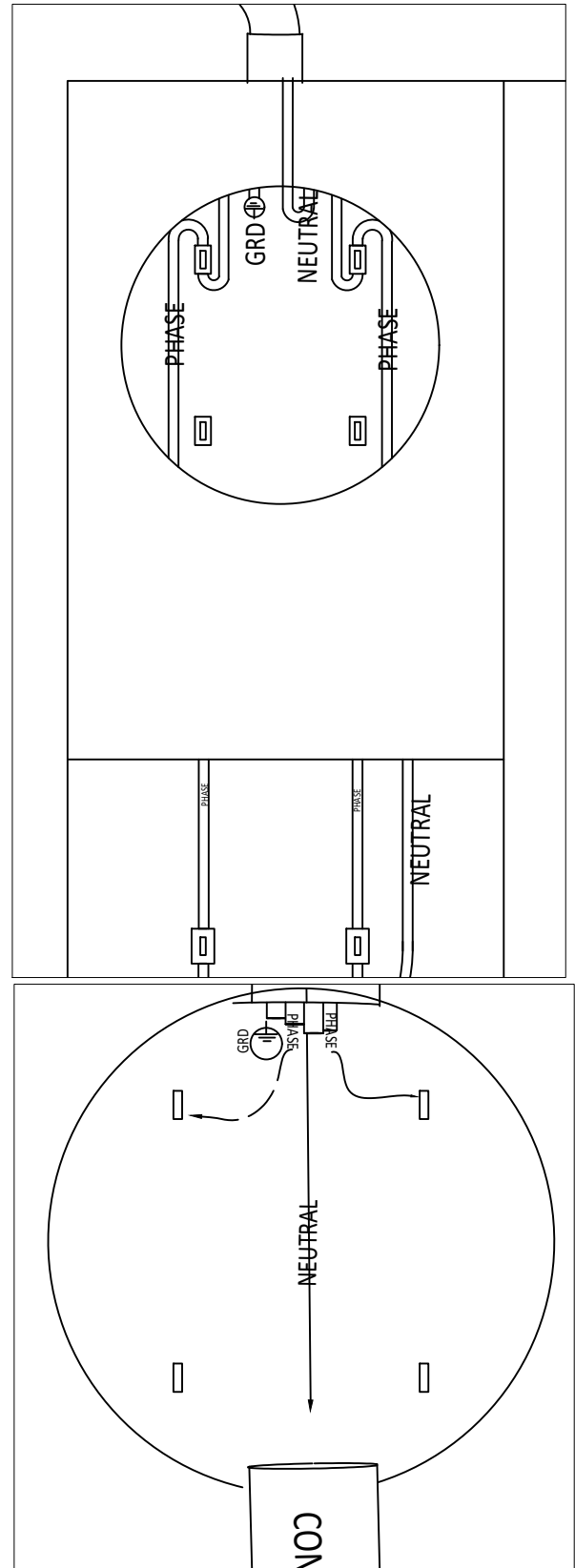
BEAR VALLEY ELECTRIC SERVICE INC.

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EXISTING UNDERGROUND INSTALL DETAILS



CONNECTION POINTS



CONNECTION POINT NOTES

UNDERGROUND WITH A COMBINATION METER WILL BE AS FOLLOWS

EV METER SHALL BE WITHIN 10' OF EXISTING SERVICE AND SHALL MEET AND FOLLOW ALL STANDARD NEW CONSTRUCTION UNDERGROUND PANEL SPECIFICATIONS.

EV METER HEIGHT SHALL MAINTAIN A MINIMUM OF 5'4 TO 6'

NEUTRAL WIRE SHALL BE CLEARLY IDENTIFIED WITH WHITE ELECTRICAL TAPE
 NEUTRAL WIRE SHALL BE CONTINUOUS TO CUSTOMER LOAD CENTER FOR EV

A GROUNDING WIRE SHALL BE WITHIN DUCT BONDING PERMANENT PANEL TO EV METER PANEL

CONNECTIONS OF WIRE TO LINE SIDE OF METER SHALL BE COMPLETED BY CUSTOMER.

DATE: JAN-24

TITLE:

ELECTRIC VEHICLE SPECIFICATIONS



REV 05

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 APVL: TC

BEAR VALLEY ELECTRIC SERVICE INC.

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ALTERNATIVE OVERHEAD INSTALL DETAILS

EV METER NOTES

ONCE BVES INC HAS REVIEWED THE EXISTING PANEL THROUGH THE PSR SUBMISSION THE FOLLOWING OUTLINE WILL BE AN ALTERNATIVE PANEL INSTALL IN LIEU OF A COMBINATION PANEL IN THE EVENT THAT A SERVICE IS REQUIRED TO BE UPGRADED

- DUAL SOCKET METER PANEL ONE METER DEDICATED TO HOME SERVICE AND SECOND METER DEDICATED TO EV INSTALLATION.
- PLEASE PROVIDE CUTSHEET FOR DUAL METER PANEL REVIEW AND APPROVAL BY BVES INC. AND LAOD CALCULATIONS

1) PANEL UPGRADE

PANEL WILL BE UPGRADED AND NEED TO MEET MINIMUM BVES INC OVERHEAD SPECIFICATIONS. FOR OVERHEAD INSTALLATIONS TO REMAIN TOTAL AMPERAGE OF SERVICE NOT TO EXCEED 200 AMPS. ANY SERVICE THAT EXCEED 200 AMPS WILL SHIFT TO AN UNDERGROUND INSTALLATION

2) HOUSE METER

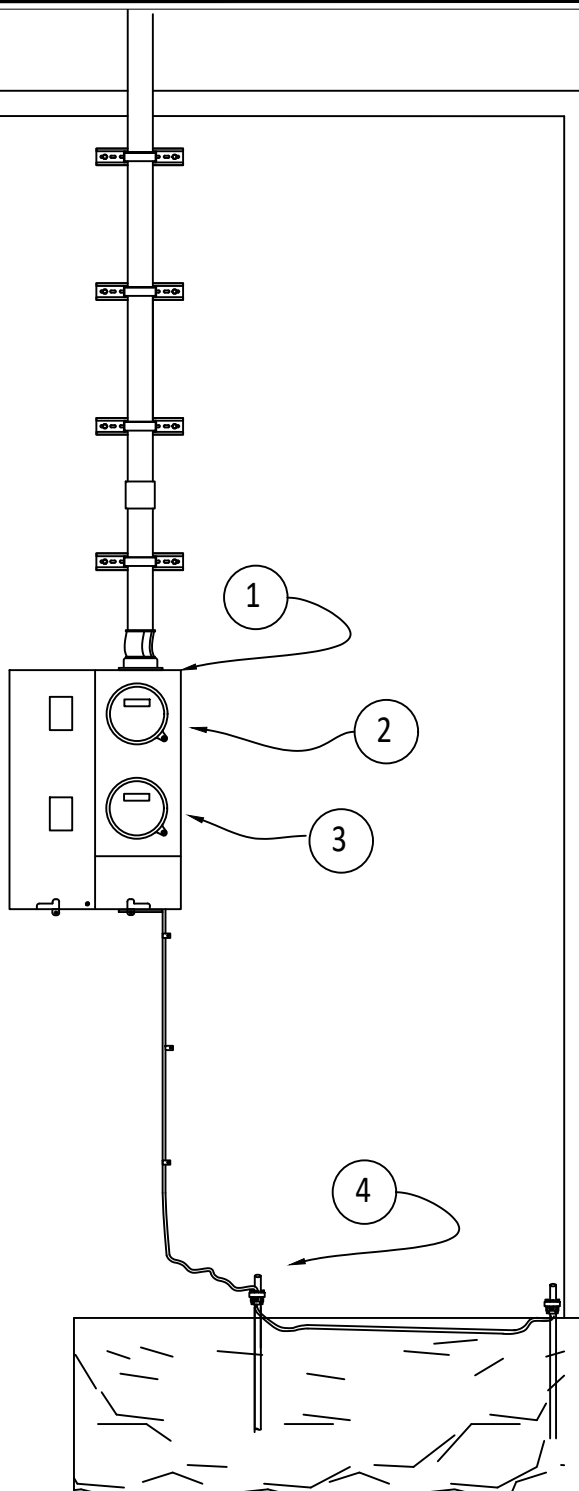
UTILITY METER TO BE PROVIDED BY BVES INC TO MONITOR ALL STANDARD USAGE

3) EV METER

UTILITY PROVIDED METER TO MONITOR ALL EV LOAD

4) GROUNDING & BONDING

GROUNDING AND BONDING TO MEET BVES INC SPECIFICATIONS AND NEC STANDARDS



DATE: JAN-24

TITLE:

ELECTRIC VEHICLE SPECIFICATIONS

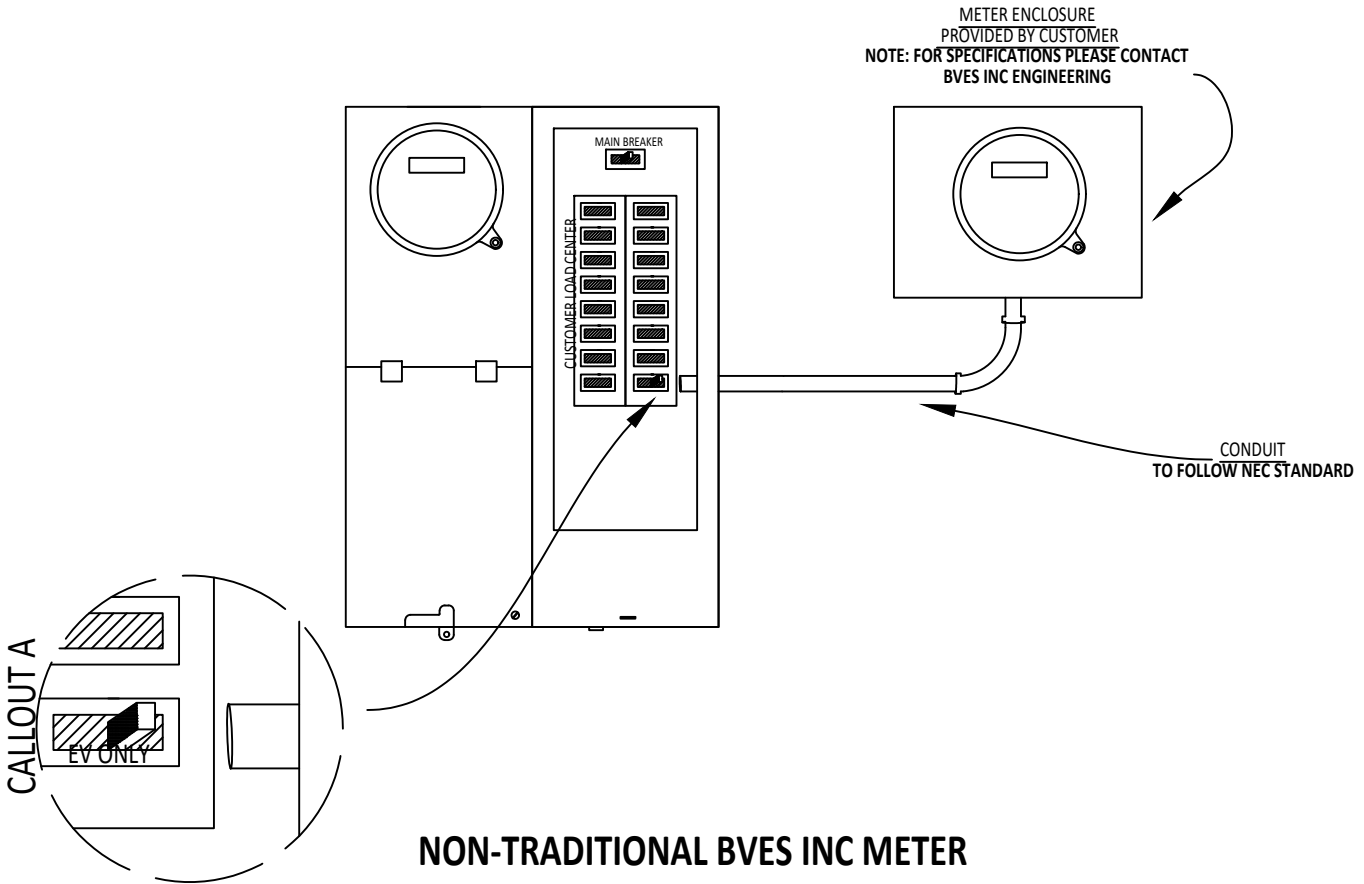


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NON-TRADITIONAL BVES INC METER

ALTERNATIVE UTILITY METER OPTION
AS DEFINED WITHIN "EV SMP ATTACHMENT A"

A NON SOCKET BASED METER THAT IS UTILITY OWNED AND INSTALLED SEPERATE FROM THE EVSE AND READ THROUGH THE UTILITY AMI NETWORK. THIS INSTALLATION MAY BE INSTALLED ELECTRICALLY UPSTREAM FROM EVSE OR BEFORE THE EVSE CHARGING CORD AND DOWNSTREAM FROM THE UTILITY PRIMARY METER

- (1) THE FOLLOWING APPLICATION MAY BE UTILIZED WITHIN BOTH OVERHEAD AND UNDERGROUND SERVICE PANELS, ALL SERVICE PANELS MUST MEET MINIMUM SAFETY CONDITIONS FOR INSTALLATION.
- (2) ALL CUSTOMER LOAD CENTERS MUST BE CAPABLE TO HANDLE ADDITIONAL LOAD OF AN ELECTRIC VEHICLE SERVICE STATION. INSTALLED BREAKER ONLY ALLOTTED TO HAVE THE ELECTRIC VEHICLE SERVICE STATION LOAD. NO OTHER USAGE WILL BE ALLOWED TO BE ATTACHED WITHIN SERVICE POINT. **(CALLOUT A)**
- (3) ALL CONDUIT RUNS TO NON-TRADITIONAL METER SOCKET SHALL BE CONTINUOUS PER NEC STANDARDS. RUN LENGTH NOT TO EXCEED 10' FROM EXISTING SERVICE PANEL. DUCT WAY TO BE LABELED "EV ONLY" EVERY 30".
- (4) BREAKER FOR ELECTRIC VEHICLE SERVICE STATION WILL NOT EXCEED A 50 AMP BREAKER. 50AMP BREAKER TO BE PROVIDED AND INSTALLED BY CUSTOMER. **(CALLOUT A)**
- (5) CONDUCTORS SHALL MEET MINIMUM NEC STANDARDS FOR A 50AMP BREAKER. #6 AWG COPPER AND #4AWG ALUMINUM . CONDUCTOR TO BE PROVIDED BY CUSTOMER AND INSTALLED WITHIN CONDUIT. BVES INC SHALL MAKE CONNECTION AT NON TRADITIONAL METER SOCKET. BVES INC TO PROVIDE AND INSTALL NON TRADITIONAL METER
- (6) ALL INSTALLATIONS WILL REQUIRE PERMITS AND WRITTEN APPROVAL FROM GOVERNING BUILDING AND SAFETY DEPARTMENT PRIOR TO CONNECTION BEING COMPLETED. ALL APPROVALS WILL BE A CUSTOMER RESPONSIBILITY TO PROVIDE TO BVES INC. FAILURE TO PROVIDE WRITTEN APPROVAL WILL DELAY METER INSTALLATION.

DATE: JAN-24

TITLE:

ELECTRIC VEHICLE SPECIFICATIONS



REV 05

DRWN: IZ

APVL: TC

BEAR VALLEY ELECTRIC SERVICE INC.

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ALTERNATIVE UNDERGROUND INSTALL DETAILS

EV METER NOTES

ONCE BVES INC HAS REVIEWED THE EXISTING PANEL THROUGH THE PSR SUBMISSION THE FOLLOWING OUTLINE WILL BE AN ALTERNATIVE PANEL INSTALL IN LIEU OF A COMBINATION PANEL IN THE EVENT THAT A SERVICE IS REQUIRED TO BE UPGRADED

- DUAL SOCKET METER PANEL ONE METER DEDICATED TO HOME SERVICE AND SECOND METER DEDICATED TO EV INSTALLATION.
- PLEASE PROVIDE CUTSHEET FOR DUAL METER PANEL REVIEW AND APPROVAL BY BVES INC. AND LAOD CALCULATIONS

1) PANEL UPGRADE

PANEL WILL BE UPGRADED AND NEED TO MEET MINIMUM BVES INC OVERHEAD SPECIFICATIONS. FOR OVERHEAD INSTALLATIONS TO REMAIN TOTAL AMPERAGE OF SERVICE NOT TO EXCEED 200 AMPS. ANY SERVICE THAT EXCEED 200 AMPS WILL SHIFT TO AN UNDERGROUND INSTALLATION

2) HOUSE METER

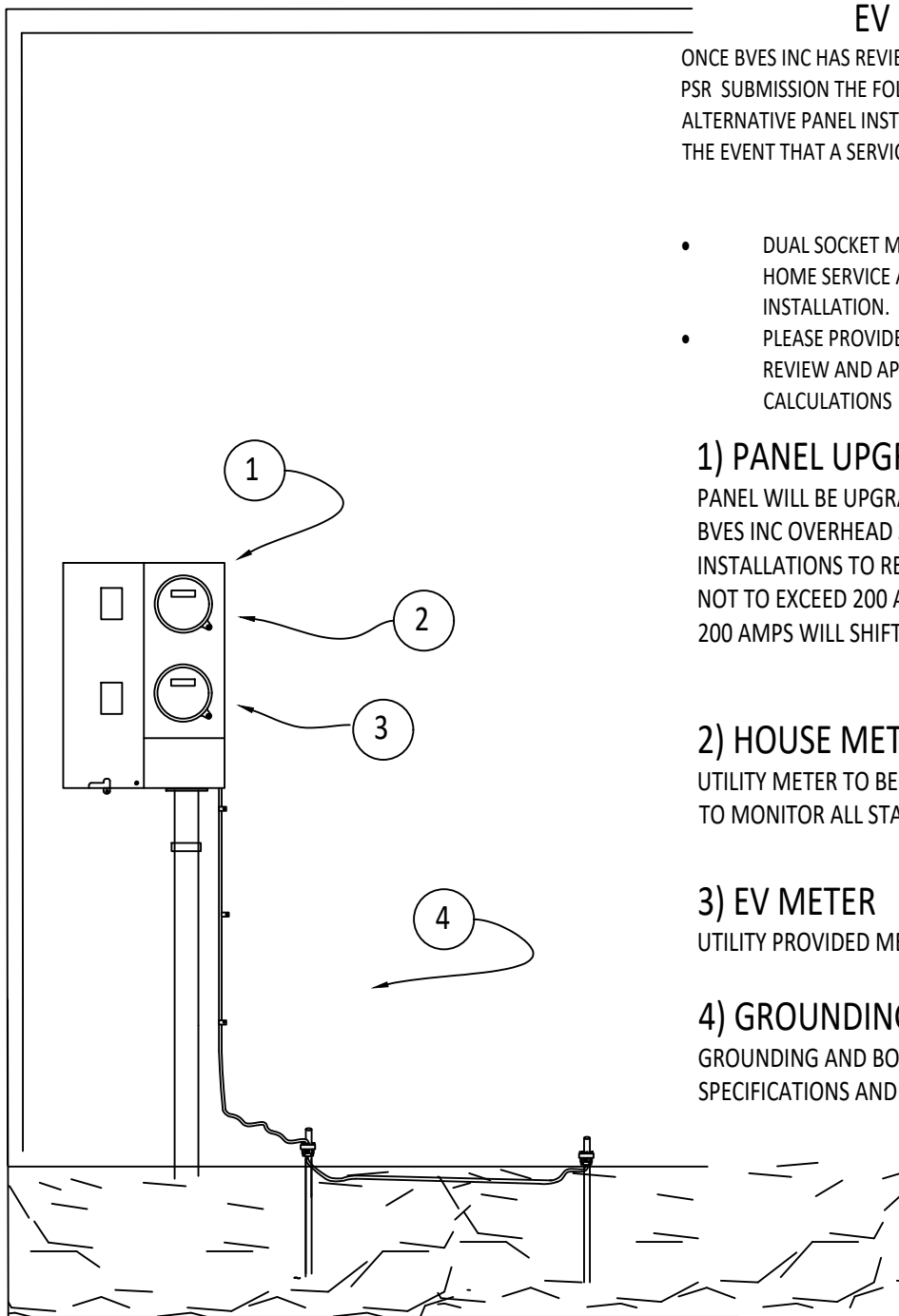
UTILITY METER TO BE PROVIDED BY BVES INC TO MONITOR ALL STANDARD USAGE

3) EV METER

UTILITY PROVIDED METER TO MONITOR ALL EV LOAD

4) GROUNDING & BONDING

GROUNDING AND BONDING TO MEET BVES INC SPECIFICATIONS AND NEC STANDARDS



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SUBMETER INSTALLATION UTILITY MAINTAINED METER

- A. SUBMETER PLACEMENT WILL NEED TO BE PLACED AT EXTERIOR OF HOME NO FURTHER THAN 10' FROM EXISTING ELECTRICAL PANEL.
- B. SUBMETER INSTALLATION WILL NEED TO FOLLOW AND MEET ALL LOCAL BUILDING AND SAFETY CODES AND PROCEDURES WHICH WOULD INCLUDE PERMITTING, BUILDING CODE, AND NEC REGULATIONS. IN A THIRD PARTY INSTALLATION BVES INC. WILL NOT REVIEW AND OR APPROVE ANY INSTALLATION OTHER THAN THE REQUESTED SINGLE RACEWAY (NOTE 2) AND PLACEMENT OF SUBMETER IN RELATION TO EXISTING ELECTRICAL PANEL THE SUBMETER WILL BE VIEWED AS A CUSTOMER LOAD INSTALLATION THEREFORE DOES NOT PERTAIN TO BVES INC JURISDICTION.
- C. UPON RECEIVING AN ELECTRIC SERVICE RELEASE FROM THE GOVERNING BUILDING AND SAFETY DEPARTMENT BVES INC WILL WORK WITH THIRD PARTY INSTALLER TO FINALIZE A READING SCHEDULE AND BILLING DATE..
- C.1 UPON RECEIVING A FINAL INSPECTION FROM GOVERNING BUILDING AND SAFETY DEPARTMENT FOR THE INSTALLATION OF THE SUBMETER AND EV CHARGER, THE CUSTOMER WILL BE READY TO START THE EV METER RATE
- D. BVES INC WILL REQUIRE A SINGLE NON INTERRUPTED RACEWAY USING AN NEC APPROVED INSTALLATION

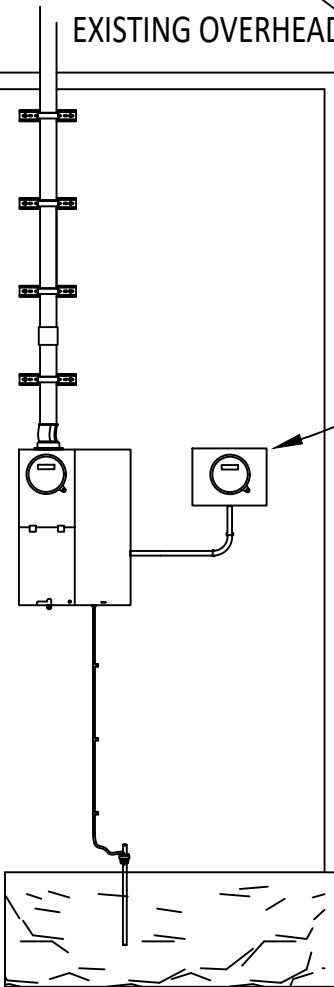
CALLOUT C & C1 WILL BE DECIDED BY CUSTOMER PLEASE REVIEW THE PLUG-IN ELECTRIC VEHICLE SUBMETERING PROTOCOL CHAPTER A I.1 AND REVIEW OPTION 3 & 4. TO UNDERSTAND OPTIONS

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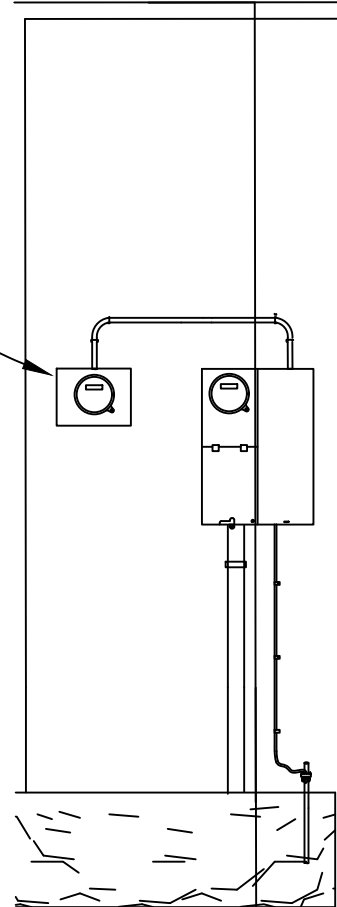
THIRD PARTY SUB-METER INSTALLATION NOTES

EXISTING OVERHEAD INSTALL

EXISTING UNDERGROUND INSTALL



1



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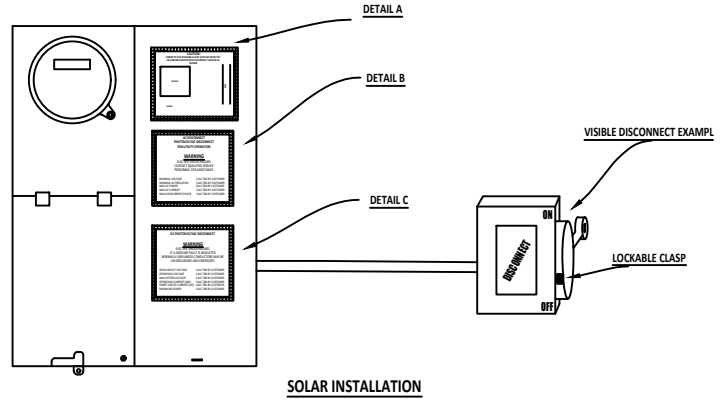
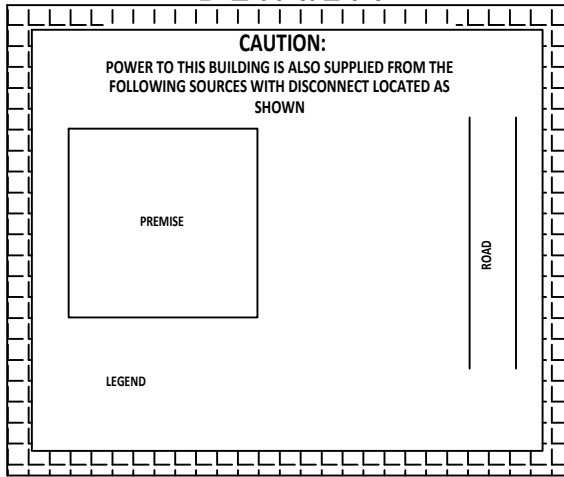
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ALL DETAIL ARE FOR REFERENCE ONLY
 ALL REQUIRED INFORMATION ON
 PLAQUES WILL BE DETERMINED FROM
 CUSTOMER DGS APPLICATION
 ADDITIONAL DETAILS MAY BE REQUIRED
 PER BVES INC. REVIEW

SOLAR INSTALLATION GUIDELINES

DETAIL A



BVES INC. DISTRIBUTED GENERATION SERVICE PROGRAM (DGS PROGRAM)
 THE FOLLOWING SCOPE IS FOR APPLICATIONS THAT HAVE BEEN APPROVED FOR INSTALLATION AND MINIMUM INSTALLATION REQUIREMENTS.

1. A PRELIMINARY SERVICE REQUEST SUBMISSION MUST BE COMPLETED. A BVES INC. ENGINEERING REPRESENTATIVE WILL REVIEW EXISTING SERVICE PANEL. A PRELIMINARY SERVICE REQUEST SUBMISSION MAY TAKE 2-4 WEEKS FOR REVIEW DEPENDENT ON EXISTING APPLICATIONS, WEATHER, EMERGENCIES, ETC...

2. A PRELIMINARY SERVICE REQUEST RESPONSE LETTER WILL BE PROVIDED TO APPLICANTS EMAIL. THIS REPORT WILL BE DETAILED SPECIFIC TO APPLICANTS PROPERTY.

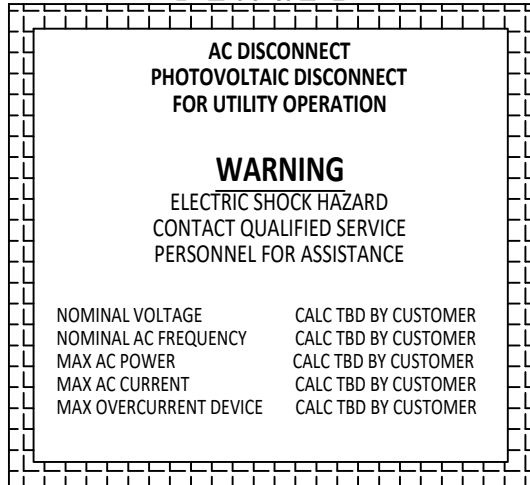
3. ALL EXISTING SERVICE PANELS MUST MEET MINIMUM SAFETY SPECIFICATIONS. ANY EXISTING INSTALLATION THAT DOES NOT MEET MINIMUM SAFETY STANDARD WILL BE REQUIRED TO BE UPGRADED. A PRELIMINARY SERVICE REQUEST RESPONSE LETTER WILL INDICATE NOTES ON A SERVICE PANEL UPGRADE AND DETAILS FOR SPECIFICATIONS AND PROCEDURES TO FOLLOW. ALL PANELS SHALL BE REVIEWED AND MAY BE REQUIRED TO BE UPGRADED REGARDLESS OF SOLAR INSTALLATION BEING COMPLETED.

(IMPORTANT NOTE)
 ALL DISCONNECTIONS ARE TO BE DONE ONLY BY BVES INC. QUALIFIED PERSONNEL. UNDER NO CIRCUMSTANCES WILL A SERVICE DROP, SERVICE PANEL, OR METER RING BE CUT, REMOVED OR REPLACED BY ANY OTHER INDIVIDUAL. ANY DISCONNECTION DONE BY A NON BVES INC. EMPLOYEE WILL BE VIEWED AS A TAMPERED SERVICE AND A SAFETY HAZARD. THE SERVICE WILL BE DISCONNECTED IMMEDIATELY UNTIL PROPER PROCEDURES ARE FOLLOWED. A SUBMISSION OF AN ELECTRIC SERVICE RELEASE WILL NOT SUPERSEDE BVES INC. SPECIFICATIONS AND PROCEDURES BEING MET.

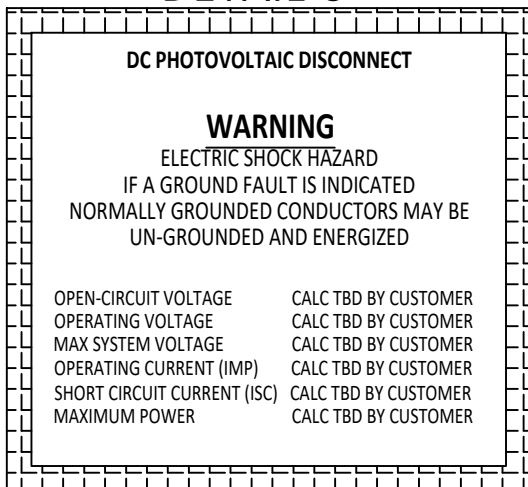
4. IN APPLICATIONS WITH SERVICE PANELS MEETING MINIMUM SAFETY STANDARDS A RESPONSE LETTER WILL NOTE ANY ADDITIONAL REQUIREMENTS THAT MAY BE REQUIRED. ALL APPROVED SERVICE PANELS WILL REQUIRE A VISIBLE DISCONNECT WITH CAPABILITIES OF BEING LOCKED IN AN OPEN POSITION. **(RULE 21 D1.E)** ALL DISCONNECT SWITCHES SHALL BE A MAXIMUM OF 10' FROM SERVICE PANEL. ALL DISCONNECTION SWITCHES SHALL BE ACCESSIBLE AT ALL TIMES. THE INSTALLATION NOTED IN "VISIBLE DISCONNECT SWITCH." DETAILS A STANDARD INSTALLATION TYPE. FOR ALTERNATIVE CONSTRUCTION TYPES PLEASE CONTACT BVES INC. ENGINEERING.

5. ALL APPROVED SERVICE PANELS WILL STILL BE REQUIRED PROPER DOCUMENTATION TO BE SUBMITTED, REVIEWED AND APPROVED. AN APPROVAL PRELIMINARY SERVICE RESPONSE LETTER DOES NOT GUARANTEE APPROVAL FOR A SOLAR INSTALLATION. ALL SOLAR APPLICATIONS AND CONSTRUCTION PROCESS WILL FOLLOW AND MEET THE CPUC RULE 21. FOR FURTHER INFORMATION PLEASE CONTACT BVES INC. CUSTOMER SERVICE

DETAIL B



DETAIL C



ALL SERVICE PANELS WILL BE REQUIRED TO HAVE PROPER PLAQUES THAT MEET THE FOLLOWING OUTLINE SEE (DETAIL A)

- RED HARD PLASTIC PERMANENTLY AFFIXED.
- WHITE ENGRAVING THAT IS CLEARLY LEGIBLE
- CAUTIONARY LANGUAGE
- DIAGRAM OF STRUCTURE ON WHICH THE GENERATION DEVICE IS LOCATED
- LANGUAGE DENOTING ALL ELECTRIC POWER SOURCES ON IN THE PREMISES

FOR AC DISCONNECT A SEPERATED PLAQUE SHALL HAVE FOLLOWING ITEMS LISTED (SEE DETAIL B)

- NOMINAL OPERATING AC VOLTAGE
- NOMINAL OPERATING AC FREQUENCY
- MAXIMUM AC POWER
- MAXIMUM AC CURRENT
- MAXIMUM AC OVERCURRENT DEVICE RATING FOR AC MODULE PROTECTION

FOR DC DISCONNECT A SEPERATED PLAQUE SHALL HAVE FOLLOWING ITEMS LISTED (SEE DETAIL C)

- OPEN CIRCUIT VOLTAGE
- OPERATING VOLTAGE
- MAXIMUM SYSTEM VOLTAGE
- OPERATING CURRENT
- SHORT CIRCUIT CURRENT
- MAXIMUM POWER

DATE: FEB-24

TITLE:

OVERHEAD & UNDERGROUND SOLAR SPECIFICATIONS



REV 05

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BVES INC. SPECIFICATIONS

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