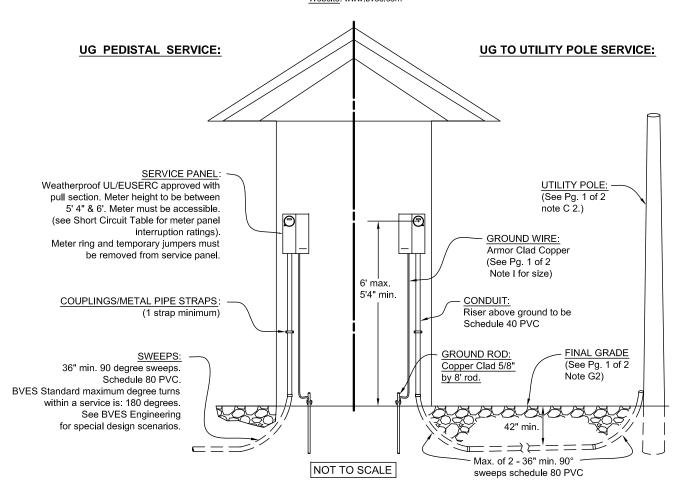
## Bear Valley Electric Service

P.O. BOX 1547 42020 GARSTIN DR BIG BEAR LAKE, CA. 92315 A Division of Golden State Water Company Telephone: (909) 866-4678 Engineering and Trench Inspections: Ext. #141 Service Connection & Scheduling: Ext: #161

Website: www.bves.com



### 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

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#### Minimum Requirements -Permanent Underground Service (Pedestal & Utility Pole)

- A.) A "Preliminary Service Request" is mandatory on all new services, and panel upgrades. A BVES Engineering Representative must pre-approve all meter locations and grounding contingent upon plot plans and field meets. Always contact BVES to arrange for a meter
- B.) Meter shall be located on an exterior wall, facing, or at an angle to the utility pole line. Not to exceed 3' from the nearest corner. Location is subject to approval by a BVES Engineering Representative.
- C.) 1.) All facilities including trenching, conduits, and meter equipment, are to be installed by the customer or their contractor. BVES will supply the conductor, meter, and make the electrical connection of the conductor
  - 2.) For UG Services involving a Utility Pole, Customer to provide and stage: 2 (or 3) -10' schedule 40 PVC; 1 - 10' schedule 80 PVC; 10 - two hole straps. (Preferably a Uni-Strut mounting system) Please reference the conduit requirements on Page 2 Note H for appropriate sized conduit.
- D.) All trenches must be inspected by a BVES Engineering Representative prior to being back-filled. Failure to obtain a trench inspection may result in a delay in service, and removing backfill for inspection.
- E.) Permits must be obtained from the following agencies, depending on service location:

City of Big Bear Lake 39707 Big Bear Blvd Big Bear Lake, CA 92315 (909) 866-5831

County of San Bernardino 477 Summit Blvd Big Bear Lake, CA 92315 (909) 866-0170

It is the customer's responsibility to notify and supply BVES with a "Green-Tag Acceptance Notice" (County) or an "Electric Service Release" (City) before service can be connected. Time frames for all new connections are contingent upon current work loads.

- F.) BVES allows a common trench to be used in a permanent URD service. Only phone and cable TV are allowed in the trench.
- Conduit Requirements:
- 1.) See Page 2 Note H for conduit requirements.
- There will be an additional cost to any service over 100'. 2.) Maintain a 3' clear, level, and unobstructed workspace in front of electric service equipment.
- 3.) Any service panel over 200 amps, requires a review by a BVES Engineering Representative.
- 4.) A Min. of 3/8" nylon pull rope to be installed by builder into all conduits, prior to installation of service.
- 5.) Conduit will be one continuous run from meter panel pull section to the point of attachment to the BVES system NO EXCEPTIONS
- H.) All trench back-fill must be free of any large rocks with a max diameter of 1/2" or less.
- BVES Grounding Requirements: BVES requires, in addition to NEC, a seperate grounding conductor and ground rod. Grounding conductor is to be: 100 Amp - #6 Copper (shielded) 200 Amp - #4 Copper (shielded) 400 Amp - 1/0 Copper (shielded)

### SINGLE SERVICE

NATIVE SOIL: Can be used on the last 24" of fill 24' COMMUNICATION CONDUIT: 12" between conduits 42" POWER CONDUIT: Use sand or clean fill for covering the conduit 12" (See note G) Must have a min. of 3" of sand or cleanfill (Required in rocky terrain) NOT TO SCALE TRENCH INSPECTION MANDITORY

PRIOR TO BACKFILL

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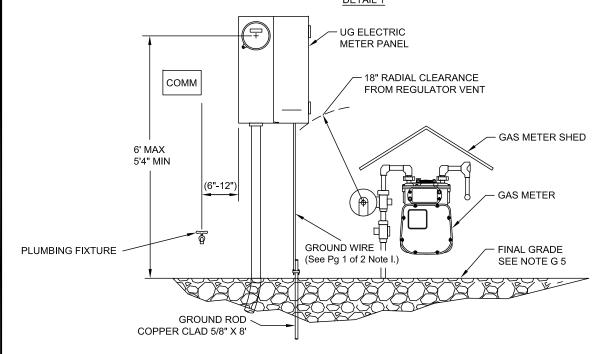
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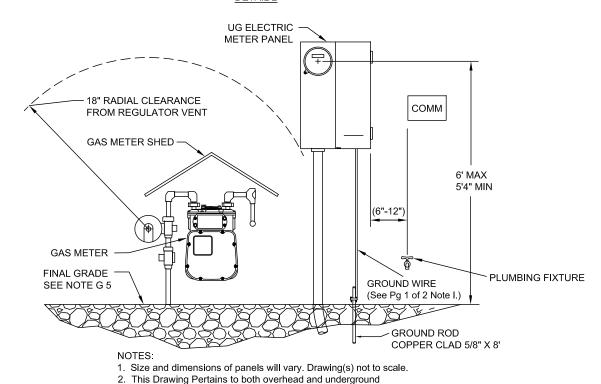
GAS AND ELECTRICAL METER

# DETAIL 1



electric service applications.

# DETAIL 2



# Bear Valley Electric Service

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### GENERAL NOTES FOR UNDERGROUND SERVICE:

- A. Rights of Way- All grants of easement for right of way required on private property will be provided upon request.
- B. Ownership- The property owner will continue to own, repair, or replace as necessary, all service conduits on their property. BVES will own and maintain the service conductor and meter only.
- C. Survey- Surveying of street improvements, property corners, lot lines, finished grade, etc., necessary for the installation of underground utilities must be completed and markers or stakes placed prior to the start of the electric installation. This is the Customers responsibility.
- D. Permits- Where trenching is to be provided by the builder, he or she shall secure all necessary excavating permits.
- E. Grading- Work areas along buried routes shall be cleared and finish grade provided prior to cable placement.
- F. Trenching and Backfilling- (All trenching and backfilling to be provided by builder)
- Trench Requirements
  - a) Width- 12" minimum.
  - b) Depth- Uniform and a minimum of 42" below finished grade.
  - c) Location- Unless otherwise specified, the center line of trenches that parallel rear property lines will be offset 4' from the property line. Trenches adjacent to front property lines, in parkways, streets, or elsewhere shall be located as shown on the drawings.

### No deviation from the planned trench routes will be permitted unless approved by

### A BVES Engineering Representative.

- d) Maintain Clean Trench- The builder should provide sufficient help during the period of conduit installation to maintain a clean trench, free of rocks and other debris. All open trenches should be barricaded.
- 2. Backfilling:
  - a) Scheduling- Backfill in trench bottom must be placed prior to conduit placement and covering. Backfill shall be placed as soon as possible after conduits have been installed in order to prevent damage to the conduit.
  - b) Materials- Rock free earth and sand must be used to backfill around facilities and to provide a covering at least 12" thick above them. Material capable of passing through a ½" mesh screen shall be considered "rock-free." Above this, no rock larger than 3" in diameter is allowed.
  - c) Compaction- Backfill material shall be compacted in accordance with the requirements of the local governing agency and in a manner that will not damage the conduit or cause settling after completion of work.
  - G. Retaining Walls- 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. Design and installation must comply with local building ordinances and BVES requirements.
- H. Conduit- This information is for runs of 100' or less. Runs longer than 100' must be approved by a BVES Engineering Representative, along with additional costs to the builder (for runs over 100').

For service panels:

100 amps- 3" conduit

200 amps- 3" conduit

400 amps- See BVES Engineering Representative

All residential buildings will require entrance conduit sized above. All conduit is to be provided by the builder.

- I. BVES follows The County of San Bernardino's specifications for electrical panel interrupting ratings: (See Short Circuit Table).
- J. Phone and Cable TV Requirements- Drawings prepared for Jobs may also cover the facilities to be installed for phone and cable TV utilities. Any questions concerning details of their installation should be referred to the company concerned.
- K. Coordination and Supervision- The builder shall provide supervision over, and coordination between, the various contractors in order to prevent damage to electrical and other utilities.

Note: Unless otherwise specified on the drawings, which forms a part of this specification, the builder shall furnish the preceding items at no cost to BVES. This is in accordance with the procedures and schedules which shall be mutually agreed upon by the field representative of the builder, BVES, and any other utilities who may be involved in the project.

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