

VILLAGE OF SPRINGVILLE ELECTRIC DIVISION

REQUIREMENTS FOR UNDERGROUND PRIMARY
SERVICES TO

COMMERCIAL/INDUSTRIAL PADMOUNT
TRANSFORMERS USING SECONDARY METERING

Customer Name: _____

Customer Address: _____

PHONE # _____

ELECTRICIAN NAME: _____

PHONE # _____

51 Nason Blvd. Springville, NY 14141—0017
PHONE: 716-592-4936 X1356 FAX: 716-592-0390

CUSTOMER RESPONSIBILITIES

1. All primary cable shall be installed in conduit. No direct burial will be allowed.
2. The customer shall provide and install all conduit required for the primary circuit from the padmount transformer to a point on the pole designated by the Springville Electric Division. The customer shall consult with the Springville Electric Division to determine an approved path for the primary circuit. If other utilities will be installed in the trench, the coordination between utilities will be established by a meeting between the utilities.
3. The customer is responsible for contacting DSNY (1-800-962-7962) prior to digging to avoid any buried utilities.
4. The conduit shall be installed in accordance with the following requirements:
 - Primary conduits shall be supplied and installed by the owner's contractor in accordance with these specifications. All primary conduit installations shall be inspected by the Village of Springville prior to backfilling trenched.
 - The primary conduits shall be 4" Schedule 80PVC with the exception that all 90° and 45° bends shall be long radius. Some installations may allow the use of Schedule 40 PVC and/or conduit less than 4" – consult with the Springville Electric Division to determine whether Schedule 40 and/or conduit less than 4" can be used. The primary conduits shall be installed to the depth required to properly terminate the conduits at the transformer foundation with a minimum depth of 36" below grade as measured from grade to the top surface of the conduit. Bell ends shall be provided at padmount end if primary conduit. A spare identically sized conduit shall be installed parallel to the in-service conduit with a minimum of 4" between the spare conduit and the service conduit. The primary conduit shall be concrete encased.
 - At the riser pole, the spare conduit shall be capped at ground level. The in-service conduit at the riser pole shall be rigid galvanized conduit from below grade to 10' above grade. A conduit ground-bonding clamp shall be installed at the base of the rigid conduit at the pole. A weatherhead and sufficient conduit to reach primary area on pole shall be provided along with two 2-hole straps and 4 lags for each 10-foot length of conduit on the pole. The exact location of the conduit will be specified during the site visit by the owner's contractor with the Village of Springville Electric Division.
 - The maximum change of direction in any plane between lengths of straight conduit without the use of bends shall be limited to 5 degrees.
 - The bottom of trenches shall be undisturbed, tamped or smooth earth. Where the excavation is in rock, the conduit shall be laid on a protective layer of clean tamped backfill. All backfill within 6" of the conduit shall be free of solid material greater than 4" in maximum dimension or with sharp edges likely to damage the conduit. The balance of backfill shall be free of solid material greater than 8" in maximum dimension. Backfill material shall be adequately compacted.

- Trench Inspection: When the trench is ready for backfill, the contractor must call the Springville Electric Division (592-4936 x1356) and request a trench inspection. A minimum of 24 hours' notice must be given to schedule a trench inspection. If the trench is backfilled without inspection by the Springville Electric Division, the service will be rejected and will not be connected until it has been re-trenched and inspected as described above.
 - All conduits shall be joined in a manner sufficient to prevent solid matter from entering the conduit line. Joints shall form a sufficiently continuous smooth interior surface between joining conduit sections so that supply cable will not be damaged when pulled past the joint.
 - Conduit pull lines shall be installed in each primary conduit (spare and in-service). The pull lines shall be poly lines with a minimum average breaking strength of 200 lbs. (Greenlee #430 equivalent).
 - Manholes may be required depending on the details of the installation. The customer shall consult with the Springville Electric Division to determine the need for manholes and the manhole specifications.
5. The transformer ground grid shall be provided and installed in accordance with the following requirements.
- A ground grid shall be supplied and installed by the owner's contractor at the transformer. The ground grid shall consist of four 8' x 5/8" copper-clad ground rods, driven to below grade, with each rod located one foot outside the corners of the foundation, connected with a continuous loop of 1/0 stranded bare copper. All ground grid connections shall be exothermic (e.g. CadWeld and/or wrench lock). Two tails of 1/0 stranded bare copper shall be extended from the ground loop to the transformer cable compartments (one to the high voltage side, and one to the low voltage side) with sufficient length to extend 3 feet above the top surface of the foundation. The ground grid shall be inspected by the Village of Springville Electric Division prior to backfilling over the grounding conductors. If the grounding is backfilled prior to inspection, the service will be rejected and the ground grid must then be uncovered and inspected.
6. The transformer foundation shall be installed in accordance with the following requirements.
- The Village of Springville will supply the transformer foundation. The foundation shall be installed by the owner's contractor. The foundation shall be installed on a 6" thick bed of crushed and compacted stone. The foundation shall be installed such that the top of the foundation is 6" above final grade. Protective bollards may be required depending on the installation details. The customer shall consult with the Springville Electric Division to determine the need for bollards.

7. The following requirements apply to the secondary cables and terminations on both single-phase and three-phase padmount transformers.
 - The secondary cable shall be supplied and installed by the owner's contractor. The Village of Springville will perform the work at the transformer to crimp the terminations and to bolt the terminations to the bushings. The Village of Springville will provide the secondary terminations and hardware and will bill the customer for the hardware costs, unless otherwise specified.
8. The service shall be successfully inspected prior to energizing the service. The Village will supply an acceptable third-party electrical inspectors list.
9. The customer or the customer's contractor must be present at the time the service is energized.
10. The customer shall provide in writing a listing of the electrical loads (including the KW ratings).

NOTE: All disconnects and reconnects will be done by village personnel, unless contractor or property owner has prior approval from the Springville Electric Department.

VILLAGE OF SPRINGVILLE RESPONSIBILITIES

1. The Village will provide and install the meter.
2. The meter channel box is to be supplied and installed by the customer on all metering installations. (MILBANK UC7445-RL)
3. Meter box will be installed on the Transformer by the Village.
4. The Village will provide and install any required metering instrument transformers.
5. The Village will provide, install and terminate the primary high voltage cable; with customer to pay for anything over 300ft.
6. The Village will provide and install the padmount transformer.
7. The Village will supply the transformer foundation to the customer.

8. The Village will terminate the secondary cables at the transformer bushings. The Electrical contractor/owner will provide the two-hole lugs to the Village of Springville.
9. After receipt of documentation showing the successful inspection, the Village of Springville will energize the service.
10. All three-phase installations will be coordinated with the Village Electric Division.

REVISED: September, 2019