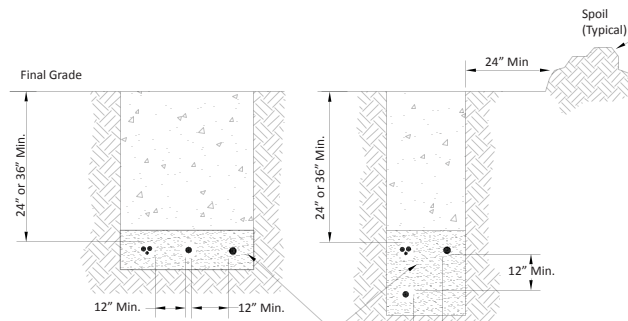


## Trench & Conduit Installation



Conduit/Cable	Minimum Cover	Min. Trench Depth	Max Burial Depth
Primary	36"	42"	48"
Secondary/Service	24"	30"	48"

### NOTES:

1. Where on-site backfill contains rocks larger than 4" and/or fractured rock (with sharp corners), select backfill shall be used. Select backfill shall be placed a minimum of 4" below and 6" above the centerline of the conduit/cable configuration, as shown. Select backfill material shall pass through a 3/4" sieve and contain no sharp or foreign objects. Backfill in the remainder of the trench shall be free of rocks larger than 4" in diameter.

2. The customer is responsible for backfilling trenches and site restoration.

## Overhead Line Safety

To protect those working near overhead power lines from accidental contact, the Oregon Legislature passed into law the High Voltage Overhead Line Safety Act (ORS CH. 757).

The law provides that no work activities take place within 10 feet of a high voltage overhead power line until the following two requirements are met:

1. The responsible party must notify the utility operating the line of the intended work activity.
2. The responsible party and the utility must complete mutually satisfactory precautions for the activity.

## Available Services

Voltages	120/240 1 PH	OH/UG
	120/208 3 PH	OH/UG
	277/480 3 PH	OH/UG

Max size Transformer	<b>Underground</b>		
	1500 KVA	3 PH	277/480
	500 KVA	3 PH	120/208

\*Transformer rental options are available to new and existing three-phase Commercial and Industrial customers adding new load within the MW&L Electric Service Territory.

### Overhead

Less than 300 KVA  
\*Any transformer configuration exceeding 300 KVA will be underground.

**Fault** MW&L will provide fault current based on size and location of transformer.

**Access** MW&L will need unobstructed access to all MW&L owned facilities.

**EUSERC** MW&L follows EUSERC requirements for service entrance (metering).

**Conduit Schedule** MW&L will determine required conduit size.

**Vault Specs** See MW&L vault specs based on transformer size.

## McMinnville Water & Light

855 NE Marsh Lane • PO Box 638  
McMinnville, OR 97128  
Monday - Friday  
Office: 8:00 am - 5:00 pm  
Crews: 8:00 am - 4:30 pm

Phone: (503) 472-6919  
Fax: (503) 472-5211  
Web-site: [www.mc-power.com](http://www.mc-power.com)

## McMinnville Water & Light

# New Construction Commercial Electric Service



## 11 Things You Need to Know Prior to Receiving Service

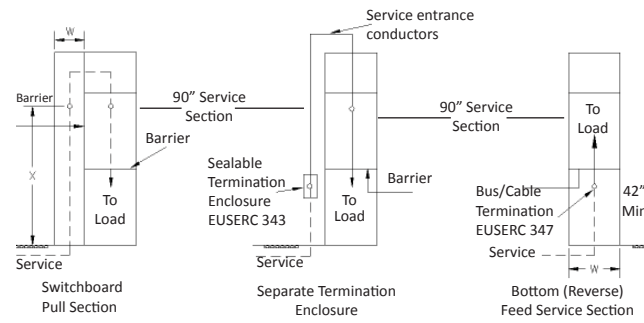
The following information applies to all specifications and electric details included in this brochure. All items must be completed prior to McMinnville Water & Light energizing your service.

1. **Fill out** the MW&L New Construction Commercial Service application.
2. **Pay** \$100 Design Fee for each request if applicable. This will be credited to your account if you proceed with construction within 12 months.
3. **Commercial** construction may require an Extension Agreement contract before construction of MW&L facilities is started.
4. **Contact** MW&L's Field Engineer to schedule an on-site meeting. Please call 503-472-6919.
5. **MW&L** will size secondary conductor and transformer, as required.
6. **Easements** may be required for MW&L facilities depending upon the installation locations.
7. **Overhead** Temporary and Permanent services will be allowed only where underground services are not technically feasible. Contact MW&L's Engineering Department with questions.
8. **Conduit Inspections** must be completed and approved by MW&L prior to backfill. 24 hour notice is required. Please call 503-472-6919.
9. **Call** the Oregon Utility Notification Center before you dig at 1-800-332-2344 or dial "811". Mark with white paint where you want to dig. You must call two working days prior to digging.
10. **Temporary** services are performed Monday-Friday during normal business hours. Please allow 48 hours prior to connection.
11. **Contact** your electrician to set-up temporary service and schedule inspections with the following agency:
  - Obtain an Electrical permit and inspection for service from Yamhill County by calling 503-434-7516. Approved inspection sticker must be displayed on meter base prior to energizing service.

*These are general specifications. Please consult MW&L for your project requirement specifications.*

## Underground Service Termination Switchboard Service Station

400 to 3000 amp, 0-600 volts based upon EUSERC 345



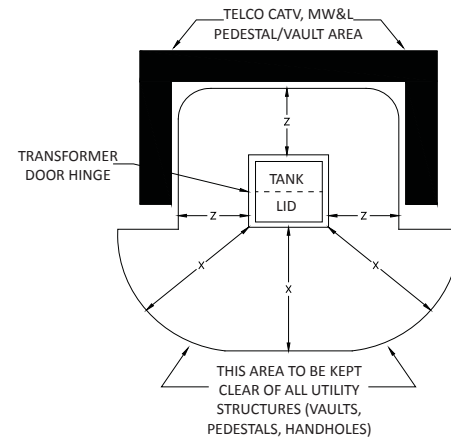
MINIMUM PULL SECTION DIMENSIONS

	Minimum Width "W"		"X" Minimum Dimension
	3-Wire	4-Wire	
200-800	24"	24"	42"
801-1200	24"	30"	42"
1201-2000	30"	35"	42"
2001-3000 See Note 6	-----	42"	60"

### NOTES:

1. A switchboard pull section, a separate termination enclosure, or a bottom feed service section shall be provided for all switchboard underground services.
2. Bus Bars, with provisions for termination lugs per EUSERC 347, are required from the pull section into the service section when the main switch is rated above 800 Amperes, or when multiple metering is to be supplied.
3. Minimum dimensions listed are for vertical entry at the top or bottom only. Side or rear entry of the service cable into the pull section may require a greater dimension than that shown in the table.
4. All pull and termination sections shall have full front access. Cover panels shall be removable, sealable, provided with two lifting handles, and limited to a maximum size of 9 square feet in area.
5. Customer shall provide a drawing with dimensions of proposed service equipment.
6. Consult MW&L for services larger than 2000 amps.

## Padmount Transformer Clearances

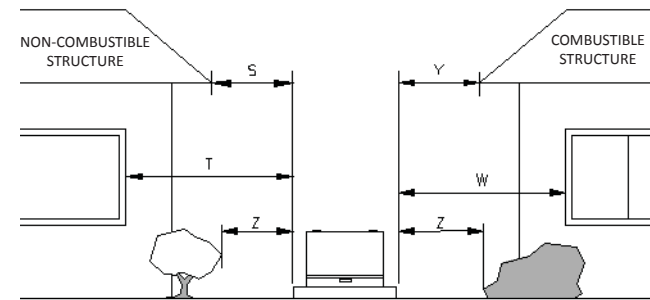


NOTE: SEE TABLE 'A' FOR CLEARANCE DISTANCES.

## Division of Responsibility

	<u>Contractor</u>	<u>Utility</u>
Primary Conduit	✓	
Primary Conductors		✓
Transformer		✓
Transformer Pad	✓	
Vault	✓	
Bollards	✓	
Transformer Connections		✓
Secondary Conduit	✓	
Secondary Conductors		✓
C/T Enclosure/ Switchgear	✓	
C/T's		✓
Meter Base	✓	
Meter		✓

## Padmount Transformer Clearances



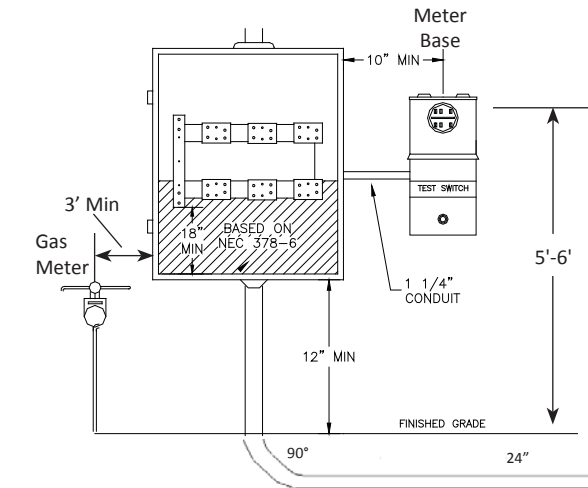
### NOTES:

1. Clearances are the same for submersible transformers.
2. The above distances apply to all single-phase transformers and the smaller three-phase transformers having 499 gallons or less of mineral oil on the MW&L distribution system.
3. Consult MW&L for separation distances for 2500 KVA or larger transformers.
4. Where exposed to motorized vehicles, the customer must install MW&L approved barrier posts to protect padmount transformers.
5. Locate transformers within 10 feet of a maintained drivable surface.

TABLE A- MINIMUM DISTANCES REQUIRED FROM STRUCTURE TO EQUIPMENT PAD/VAULT EDGE

DISTANCE	STRUCTURE FEATURES
Y= 8 FT.	To nearest combustible component (Bldg. wall or overhang) if structure is combustible.
S= 3 FT.	To nearest component if structure is non-combustible & there are no openings closer than 8 ft.
W= 8 FT.	To any opening (i.e. windows which open, doors, upper level fire escapes).
T= 3 FT.	To non-opening window.
Z= 3 FT.	To mature plants, bushes, and trees.
X= 10 FT.	To allow for use of hot sticks.

## Meter Installation



1. Consult MW&L before installing meter equipment to determine: service location, source of electric service, easement requirements and NESC clearances.
2. Customer is responsible to furnish and install: meter base, conduit, elbows, trenching and backfill from meter base to the source of electric service. Customer is to ensure that conduit remains unobstructed.
3. MW&L shall inspect conduit installation prior to backfill. A 24 hour notice is required. Please call 503-472-6919.
4. Acceptable meter bases are manufactured in accordance with EUSERC requirements. Meter base height shall be 5'-6" above finished grade to center of meter socket. Consult MW&L for meter location. A typical service will not exceed 150' from source of electric service to the meter base.
5. Conduit type: Schedule 40 gray PVC. Size of conduit will be determined by service needs. Depth of Bury: Minimum of 24" below finished grade to top of conduit. Elbows: 36" radius PVC. Degree of Bend: 270° maximum.
6. Joint Trench: MW&L requires a minimum of 12" of separation from other utilities (vertical and horizontal).
7. Customer must allow MW&L access to meter base, current transformer, and switchgear at all times.