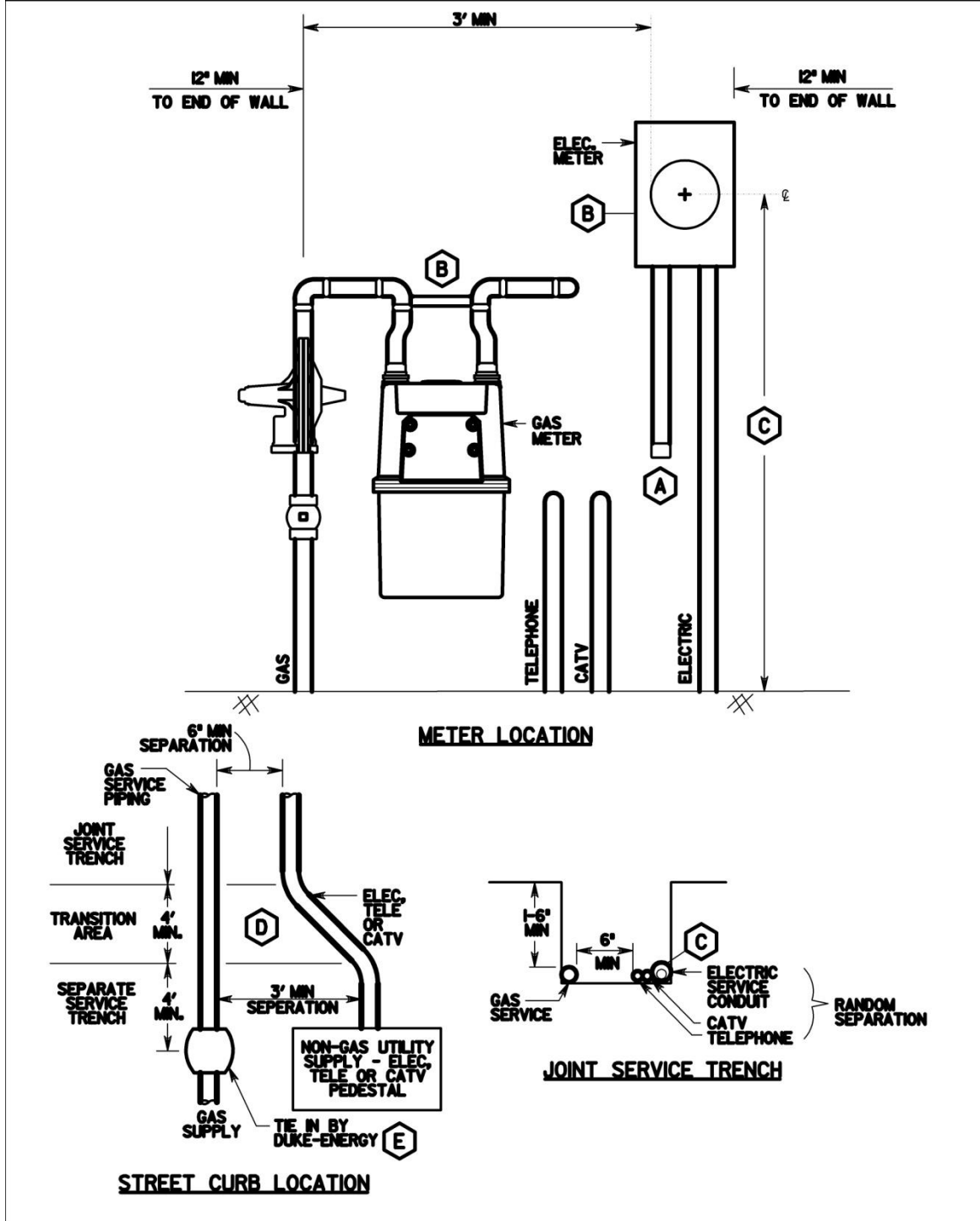


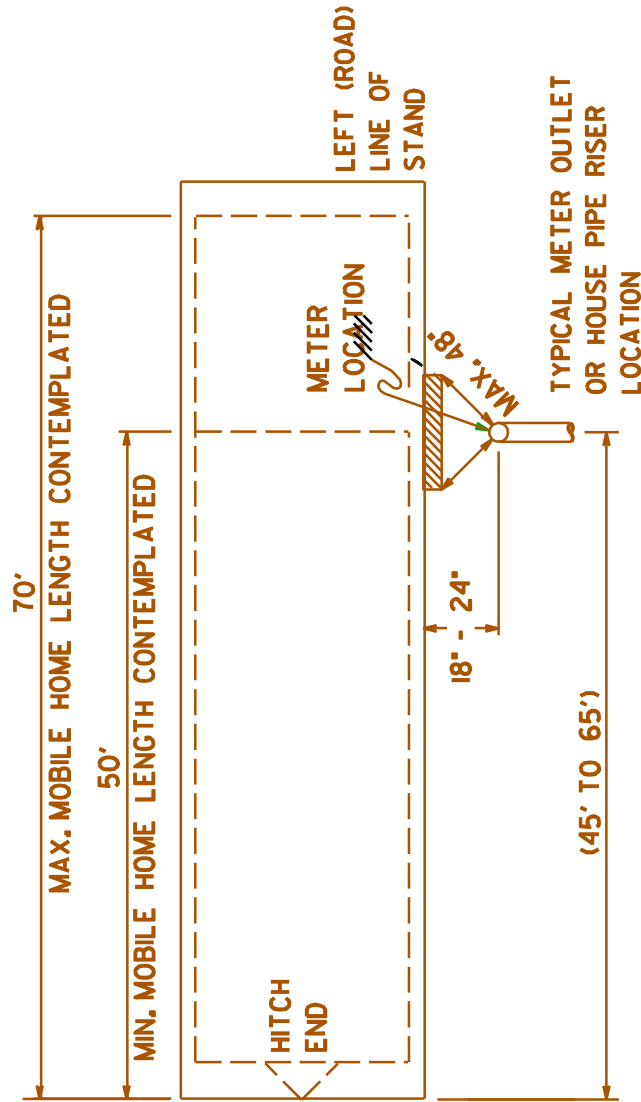
SECTION K  
SKETCH 1  
JOINT SERVICE TRENCH



**SKETCH 1 NOTES**

- A. When telephone, CATV or electric services run in joint trench with gas, all pipe, cable, and conduit entries into building are to be above ground level.
- B. Working clearances for gas and electric meters are 3 feet wide and 4 feet deep. Clear area in front of each meter.
- C. Consult “Information and Requirements for Electric Service” booklet for additional electric details.
- D. Non-Gas utilities are not permitted within 3’-0” of the gas tie-in point. Transition to separate trench must start at least 8’-0” from gas tie-point.
- E. Customer’s portion to terminate within 2’-0” feet of gas tie-in point, above ground, capped, with enough pipe to extend beyond tie-in point. Duke Energy to tie-in gas supply.

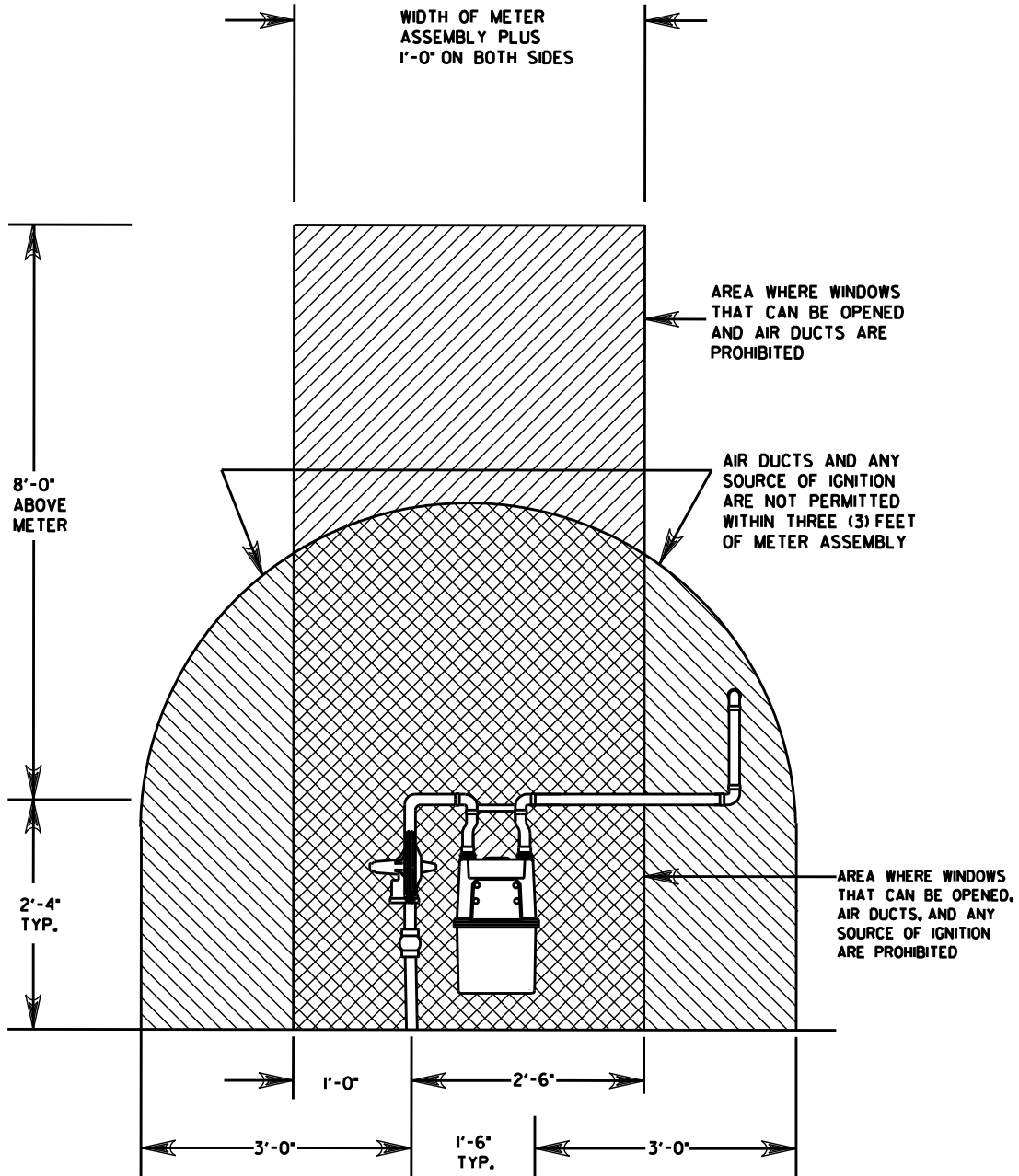
SKETCH 7  
GAS SUPPLY TO MOBILE HOMES



SKETCH 7 NOTES

- A. Typically, meter outlets or separate house pipe risers should be located as above. The meter outlet or house pipe riser should not be more two (2) feet from the mobile home nor closer than eighteen (18) inches.
- B. Service piping shall not be installed underground beneath a mobile home stand or patio slab.

**SKETCH 8  
RESIDENTIAL METER  
LOCATION RESTRICTIONS**

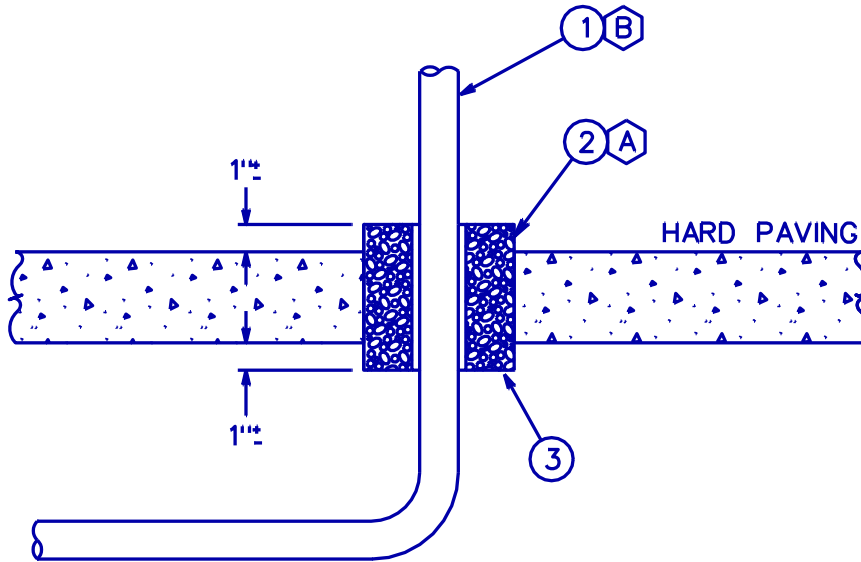


## NOTES FOR SKETCH 8

### RESIDENTIAL METER LOCATION RESTRICTIONS

- A. The service piping shall not be terminated nor the meter set:
- (1) Within thirty (30) inches of the left side of a basement window or twelve (12) inches of the right side of the basement window, as you face the window.
  - (2) Within three (3) feet of any source of ignition.
  - (3) Within three (3) feet of an air duct.
  - (4) Below and within eight (8) feet of an air duct.
  - (5) Below and within eight (8) feet of a window that can be opened.
  - (6) Where it will be subject to damage, or
  - (7) In any location that would require the connection to the main to be made under a driveway, tree or other obstruction.
- B. Conditions such as multiple meter installations may require other restrictions or distances. Large meter installations for commercial or industrial application require ten (10) foot separation from sources of ignition, operable windows and air ducts. Large meters shall not be placed under operable windows and air ducts.

**SKETCH 9  
GAS PIPING  
THROUGH HARD PAVING**

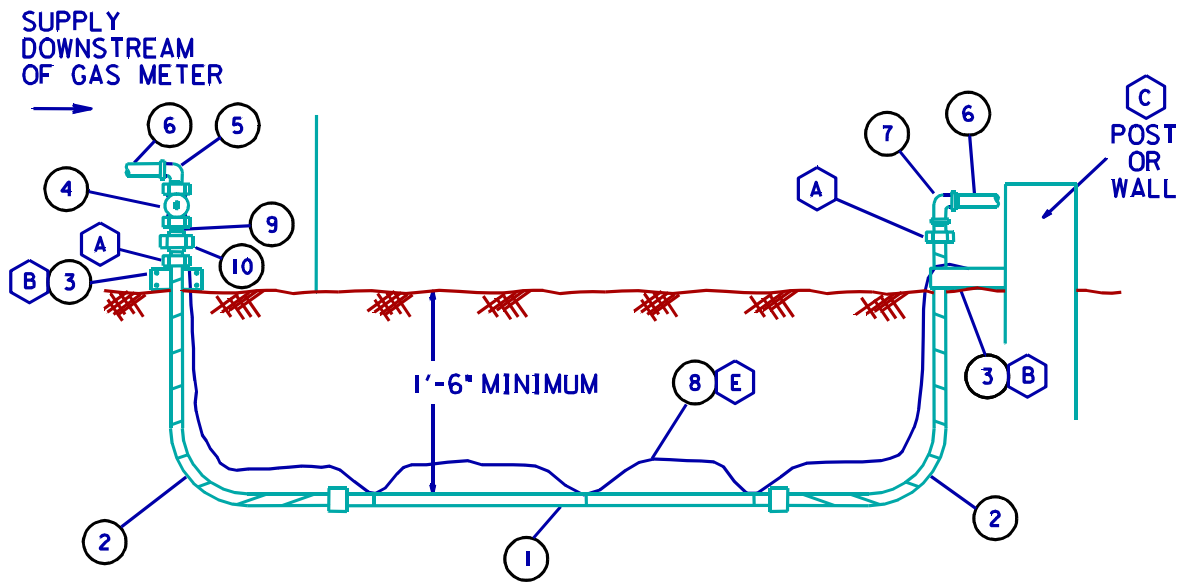


Material	
1.	Service (All Materials).
2.	Sleeve (Plastic Material Preferred).
3.	Gravel

**Sketch 9 Notes**

- A. The Sleeve is to be 2 nominal sizes larger than the service riser. Plastic materials are preferred. Formed openings are acceptable.
- B. Center service in sleeve and backfill with gravel.
- C. A Flexible riser is not an acceptable sleeve for hard paving.

**SKETCH 10**  
**TYPICAL UNDERGROUND PLASTIC HOUSE PIPING INSTALLATION**  
**BY CUSTOMER 1" CTS, 1 ¼" IPS OR 2" IPS POLYETHYLENE**



**SKETCH 10 MATERIALS**

**TYPICAL UNDERGROUND PLASTIC HOUSE PIPING INSTALLATION  
BY CUSTOMER 1" CTS, 1 ¼" AND 2" IPS POLYETHYLENE**

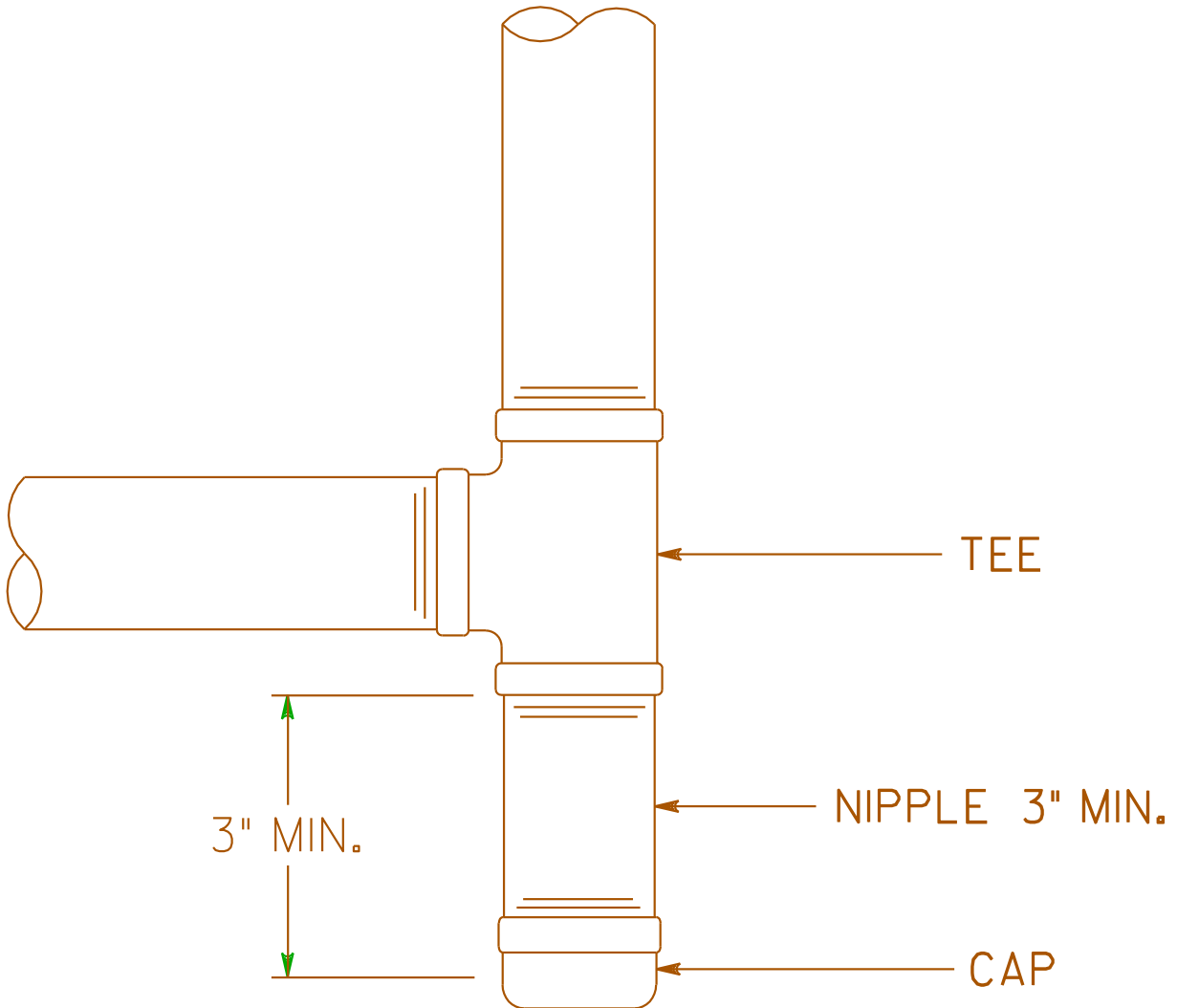
<b>MATERIALS</b>	
1.	Polyethylene Piping-One Continuous Length
2.	Flexible Riser Casing
3.	Riser Bracket
4.	Gas Stopcock
5.	Street Ell
6.	Nipple-Length as Required
7.	Plain Ell
8.	#12 AWG Tracer Wire
9.	Nipple
10.	Union

**NOTES FOR SKETCH 10**

- A. Riser bracket at grade line.
- B. Bracket can also be attached to a treated 4" X 4", or 6" X 6" post installed 24" below grade minimum.
- C. Coat all steel piping with rust resistant paint.
- D. Pressure test by Company.
- E. Tracer wire is to be taped to the plastic pipe at 6' intervals.
- F. Riser includes a blind end stab coupling. Do not attempt to make this connection. Company will connect the plastic pipe to the riser. Customer must provide riser. Pipe

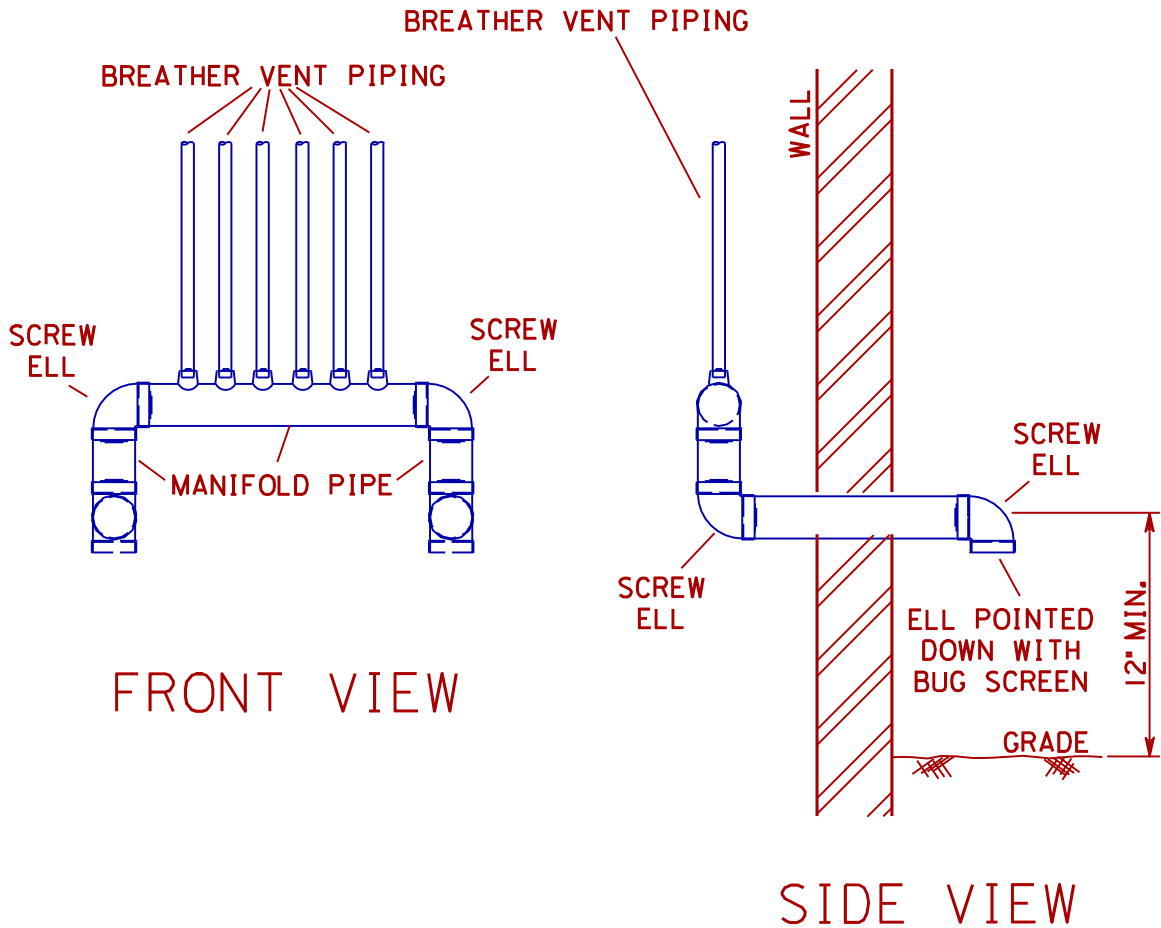
must be capped and extend above ground near riser bracket.

**SKETCH 11**  
**SUGGESTED METHOD OF INSTALLING SEDIMENT TRAP**



**SKETCH 12**  
**MANIFOLD VENTING**

SUGGESTED METHOD OF INSTALLING  
BREATHER VENT MANIFOLD



## NOTES FOR SKETCH 12

### MANIFOLD VENTING

- A. Diaphragm breather vents may be connected to a common manifold for appliance regulators and pressure switches operating with an inlet pressure of 14" W.C. or less. All bleed valves, all pressure relief valves, and any component operating with an inlet pressure greater than 14" W.C. must be vented separately to the outside.
- B. Piping connecting a diaphragm case to the manifold shall be sized as if the vent were routed separately. The sizing procedure shall assume a pipe length measured from the diaphragm case through the manifold to the most distant opening to the outside.
- C. Breather vent piping shall connect to the top or the side of the manifold. Vent piping shall not be connected to the bottom of the manifold.
- D. The manifold pipe size shall be determined by adding the breather vent piping flow areas. The manifold shall have a flow area equal to or larger than the sum. For example: If the six breather vent connections shown in Sketch 12 are  $\frac{3}{4}$ " schedule 40 piping having a flow area of 0.533 square inches each, the manifold shall have at least 3.20 square inches of flow area. A 2" schedule 40 manifold would be acceptable with a flow area of 3.35 square inches.
- E. Both ends of the manifold piping shall be vented to outside locations.
- F. Manifold piping shall slope downward at least 1/4 inch per foot to facilitate drainage to an outside location. Where this method of drainage is not practical, a one (1) inch minimum size drip shall be provided.
- G. Vents shall be designed to prevent the entry of water, insects, or other foreign material that could cause blockage. Vent openings should be inspected regularly for blockage.

