2023

DEVELOPMENT DETAILS

PROVO CITY POWER STANDARDS

DETAILS SUBJECT TO CHANGE WITHOUT NOTIFICATION

ELECTRICAL ENGINEERING

TABLE OF CONTENTS

TABLE OF FIGURES

1. SINGLE PHASE SECTIONALIZER DETAILS:

1.1 General Requirements

1.1.1 Conduit coming into boxes and ground sleeves are to be straight and clear of all box and ground sleeve lips so that pulling equipment can be placed properly in conduit opening.

1.1.2 Provo Power does not allow fiberglass elbows to be cut. If they are too tall the contractor / installer will be required to dig them up and bury them deeper.

1.1.3 95% compaction is required at all box and ground sleeve locations.

1.1.4 95% compaction is required under concrete apron.

1.1.5 Call 801-852-6999 to schedule Provo Power Inspector for trench / pipe inspection and GPS. Do not backfill any portion of trench until it has passed conduit inspection.

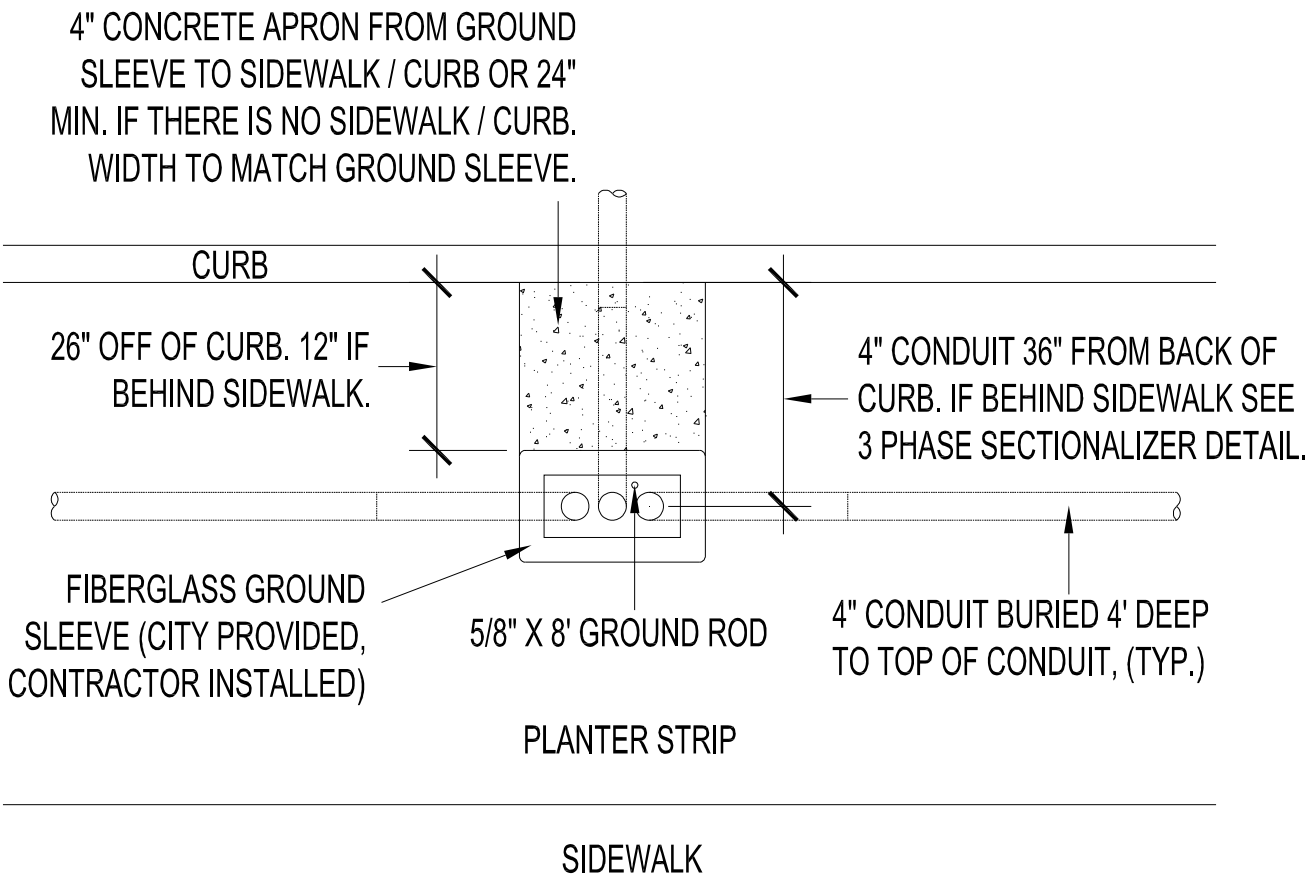

Figure 1.1 Single Phase Sectionalizer Plan View

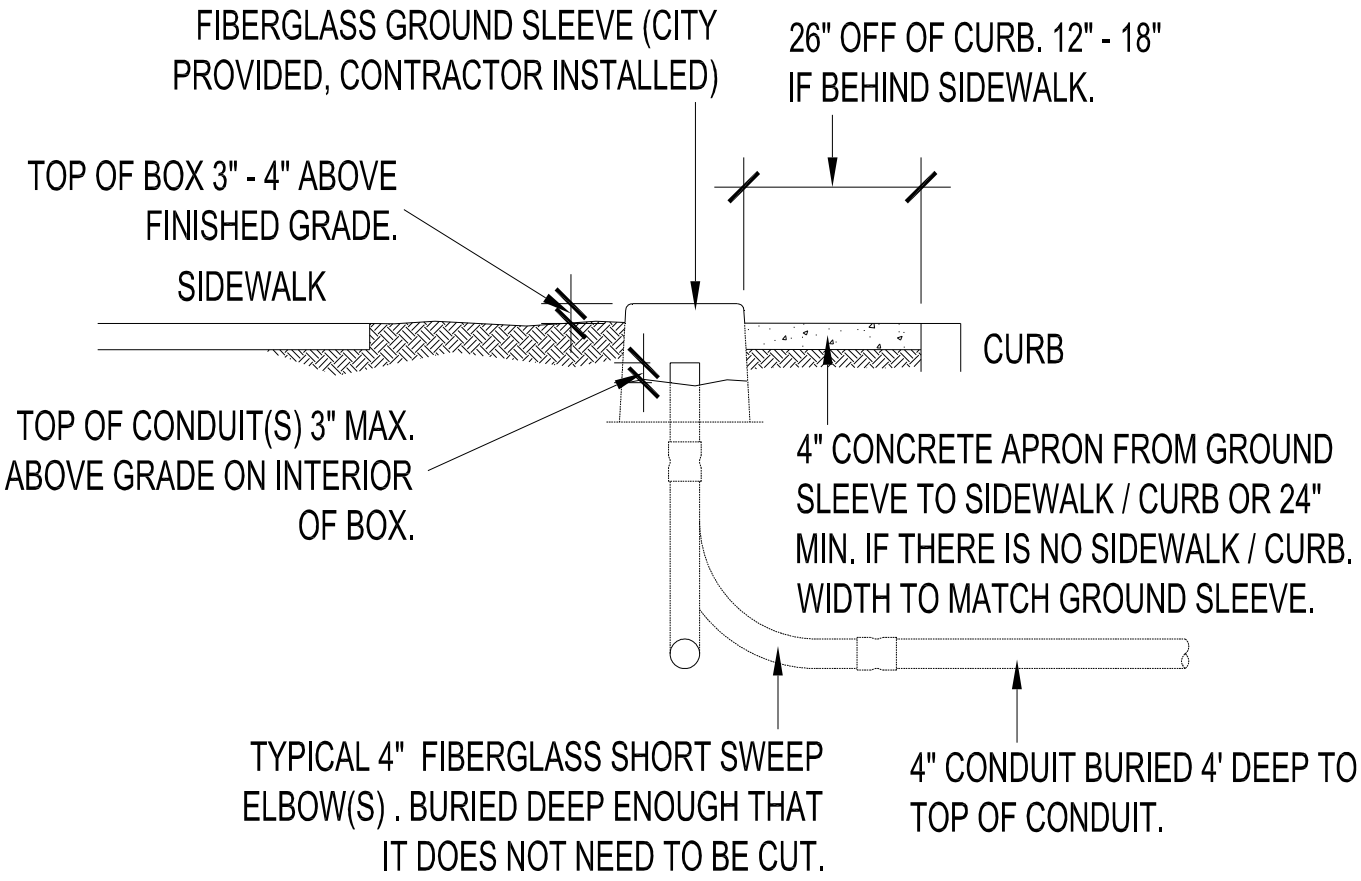

Figure 1.2 Single Phase Sectionalizer Profile View

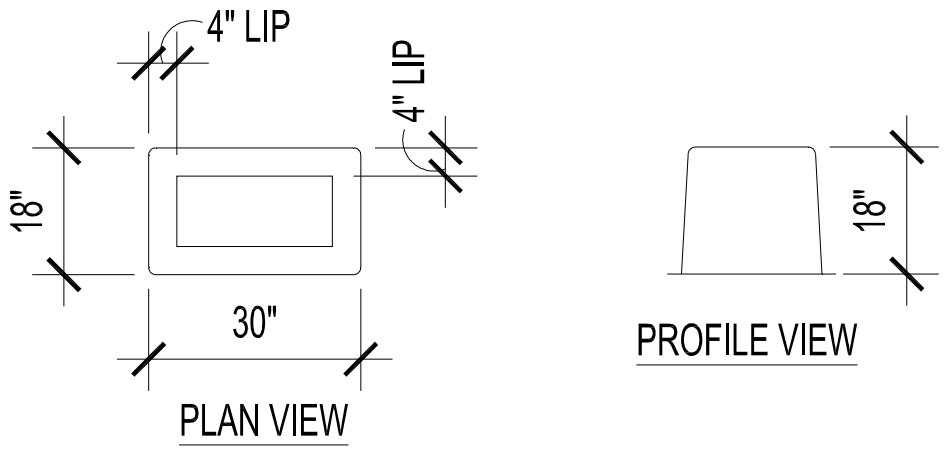

Figure 1.3 Single Phase Sectionalizer Dimensions

2. THREE PHASE 200 AMP SECTIONALIZER DETAILS:

2.1 General Requirements

2.1.1 Conduit coming into boxes and ground sleeves are to be straight and clear of all box and ground sleeve lips so that pulling equipment can be placed properly in conduit opening.

2.1.2 Provo Power does not allow fiberglass elbows to be cut. If they are too tall the contractor / installer will be required to dig them up and bury them deeper.

2.1.3 95% compaction is required at all box and ground sleeve locations.

2.1.4 95% compaction is required under the concrete apron.

2.1.5 Call 801-852-6999 to schedule Provo Power Inspector for trench / pipe inspection and GPS. Do not backfill any portion of trench until it has passed conduit inspection.

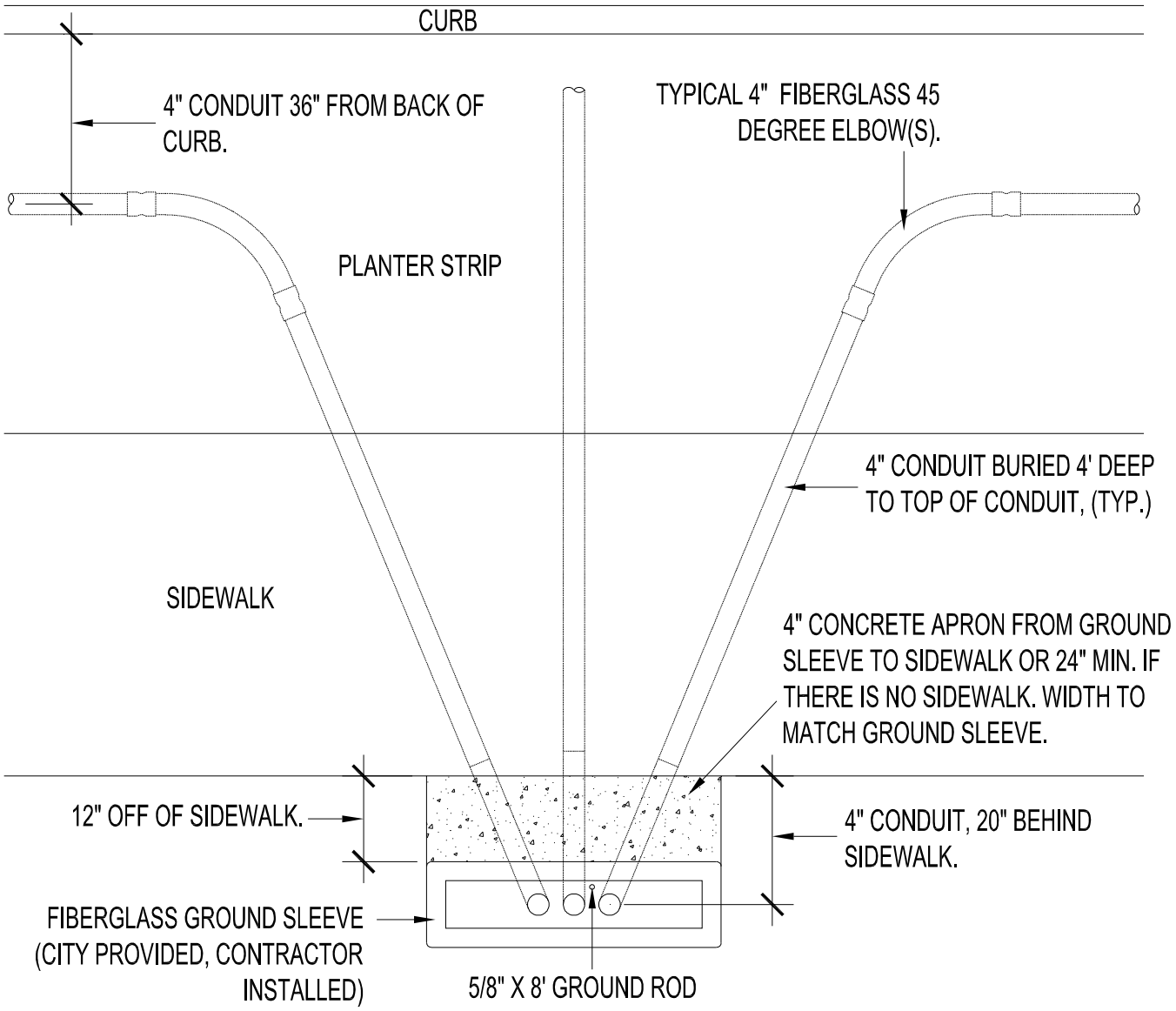

Figure 2.1 Three Phase Sectionalizer Plan View

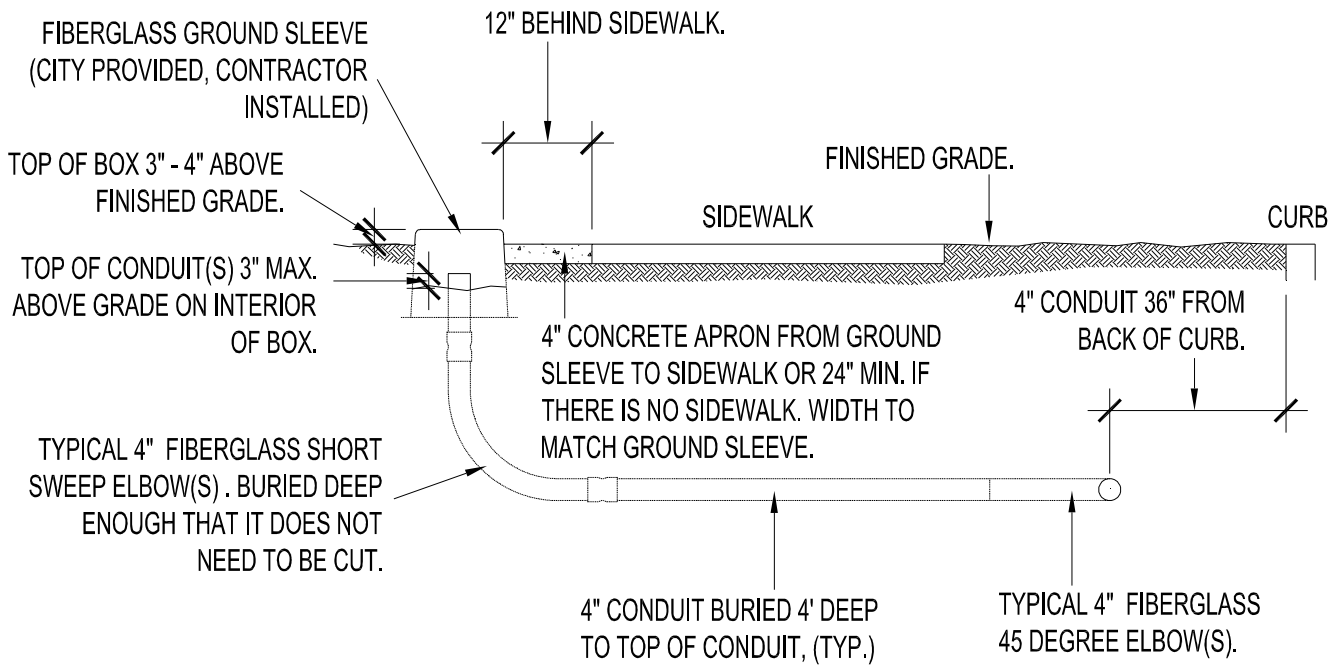

Figure 2.2 Three Phase Sectionalizer Profile View

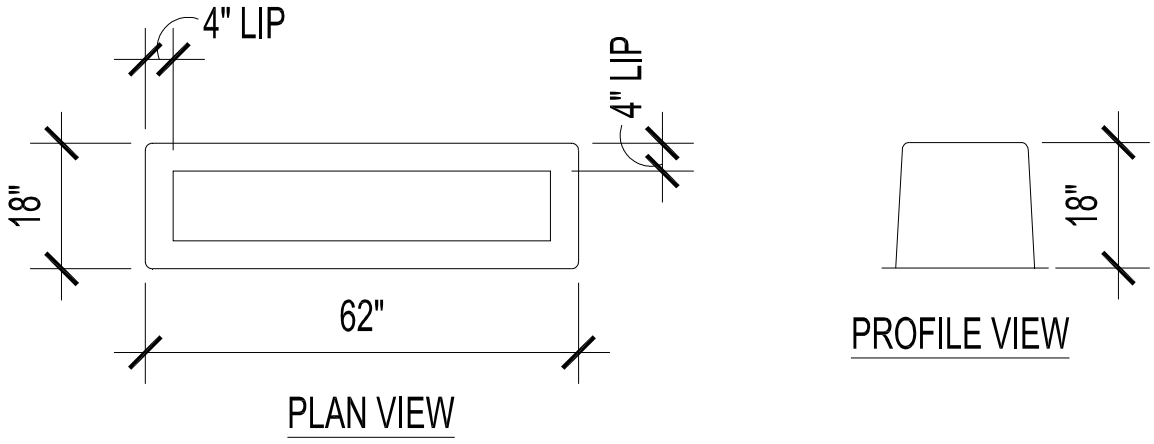

Figure 2.3 Three Phase Sectionalizer Dimensions

3. SINGLE PHASE TRANSFORMER DETAILS:

3.1 General Requirements

3.1.1 Conduit coming into boxes and ground sleeves are to be straight and clear of all box and ground sleeve lips so that pulling equipment can be placed properly in conduit opening.

3.1.2 Provo Power does not allow fiberglass elbows to be cut. If they are too tall the contractor / installer will be required to dig them up and bury them deeper.

3.1.3 95% compaction is required at all box and ground sleeve locations.

3.1.4 95% compaction is required under the concrete apron.

3.1.5 Call 801-852-6999 to schedule Provo Power Inspector for trench / pipe inspection and GPS. Do not backfill any portion of trench until it has passed conduit inspection.

3.1.6 3” elbows used for service can be sch 40 PVC, 3” elbows used between boxes shall be fiberglass.

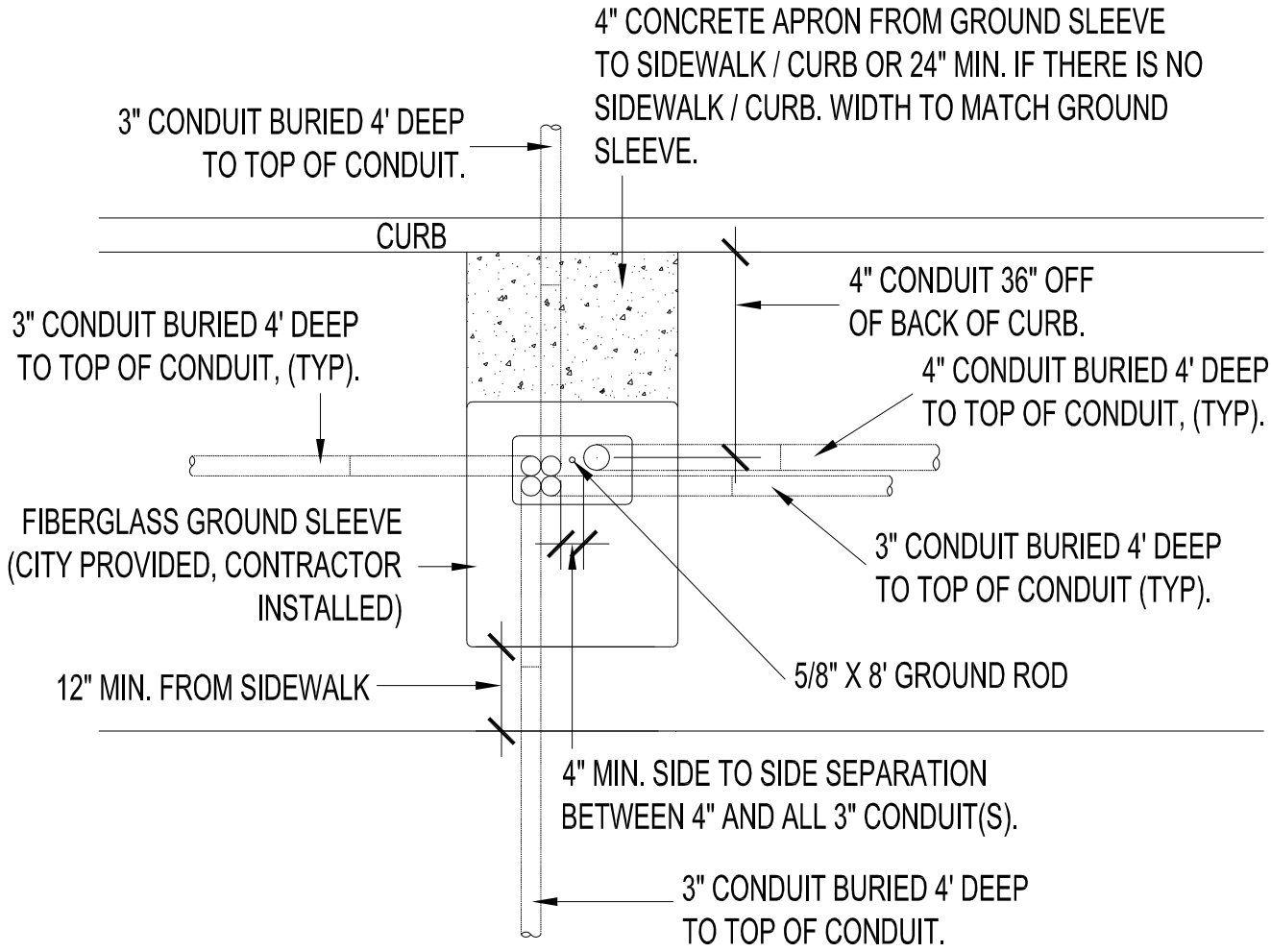

Figure 3.1 Single Phase Transformer Plan View

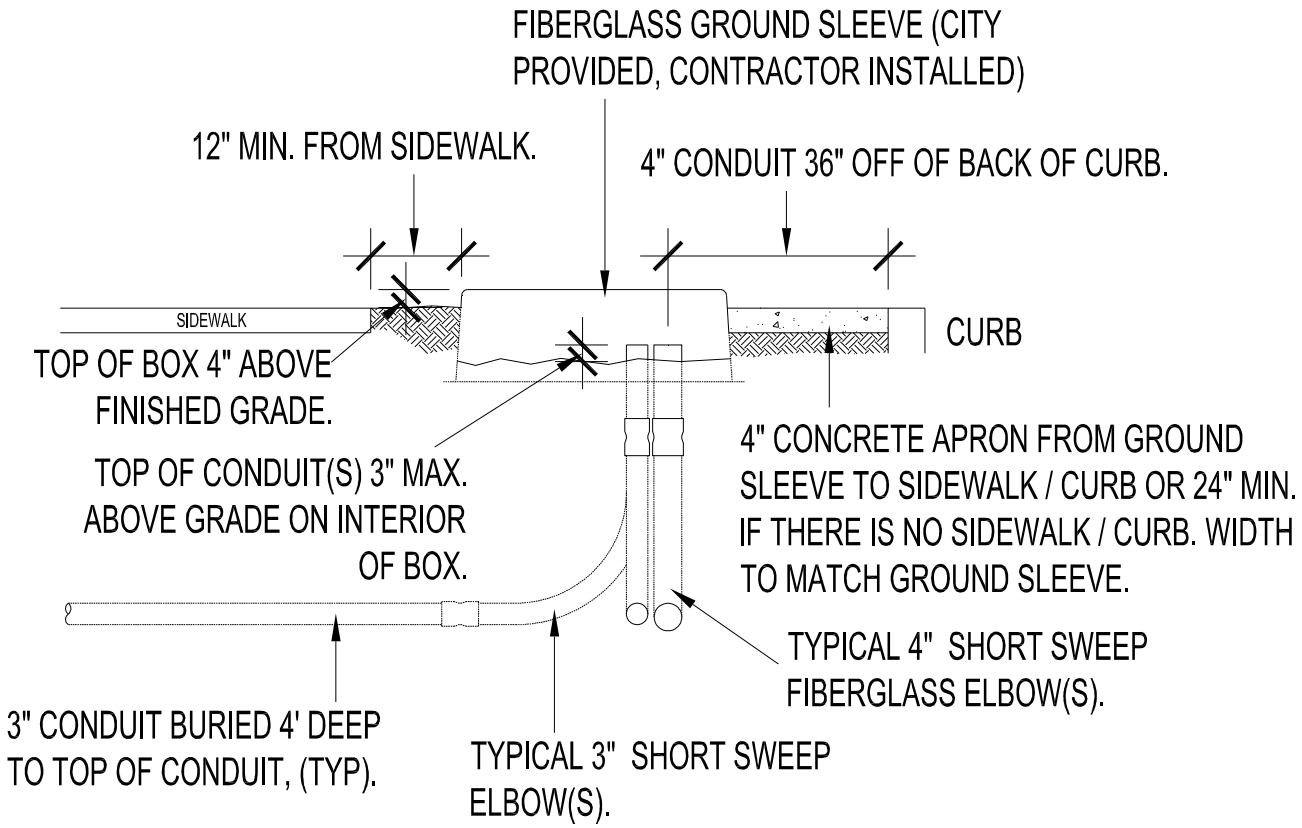

Figure 3.2 Single Phase Transformer Profile View

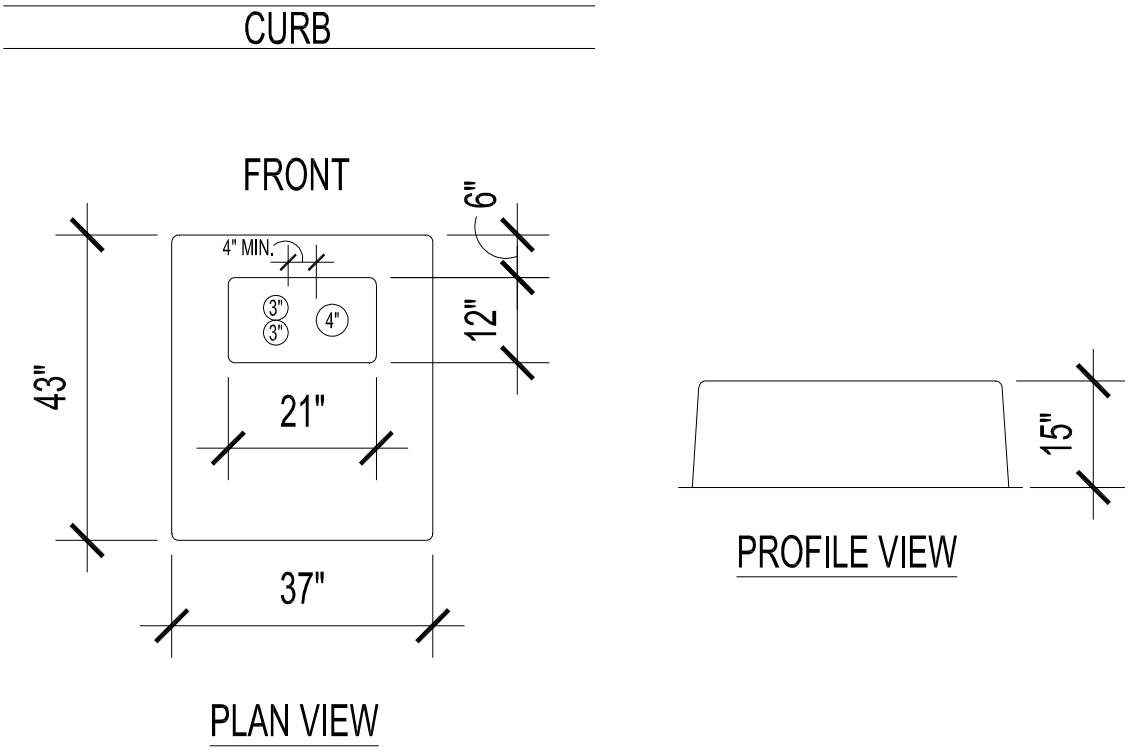

Figure 3.3 Single Phase Transformer Dimensions

4. SECONDARY PULL-BOX DETAILS:

4.1 General Requirements

4.1.1 Conduit coming into boxes and ground sleeves are to be straight and clear of all box and ground sleeve lips so that pulling equipment can be placed properly in conduit opening.

4.1.2 Provo Power does not allow fiberglass elbows to be cut. If they are too tall the contractor / installer will be required to dig them up and bury them deeper.

4.1.3 95% compaction is required at all box and ground sleeve locations.

4.1.4 95% compaction is required under concrete apron.

4.1.5 Call 801-852-6999 to schedule Provo Power Inspector for trench / pipe inspection and GPS. Do not backfill any portion of trench until it has passed conduit inspection.

4.1.6 3” elbows used for service can be sch 40 PVC, 3” elbows used between boxes shall be fiberglass.

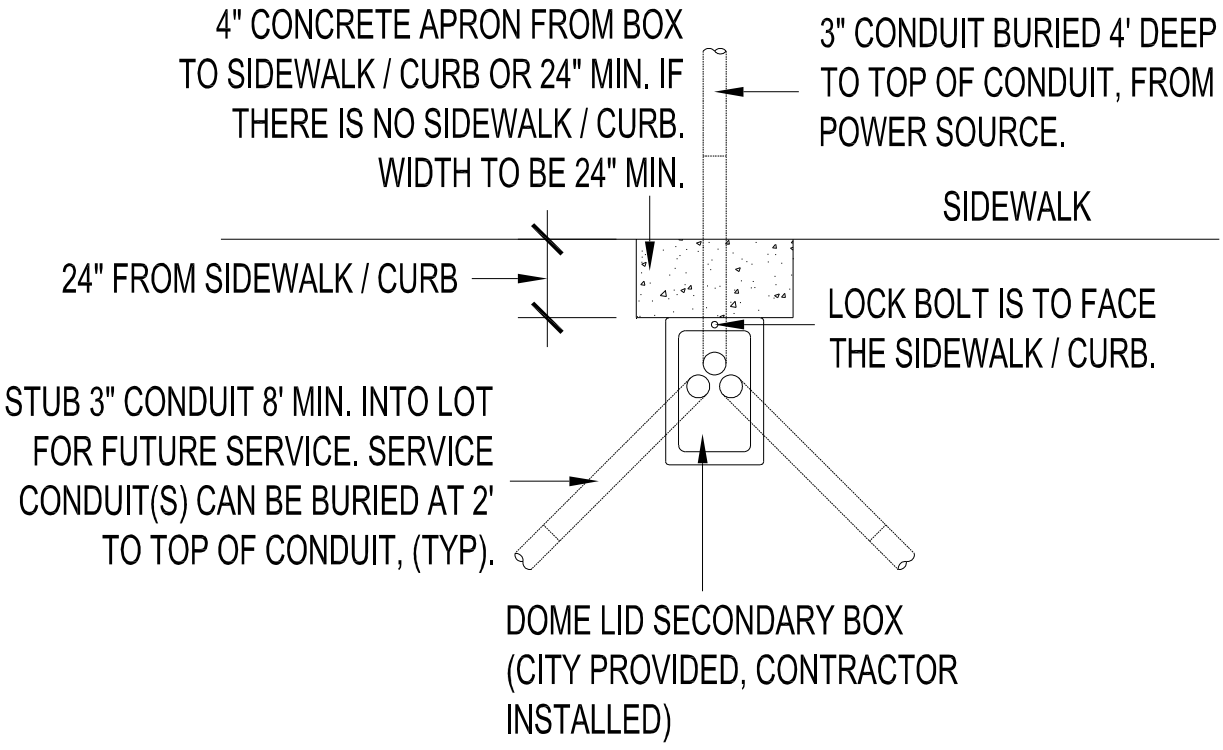

Figure 4.1 Secondary Pull-Box Plan View

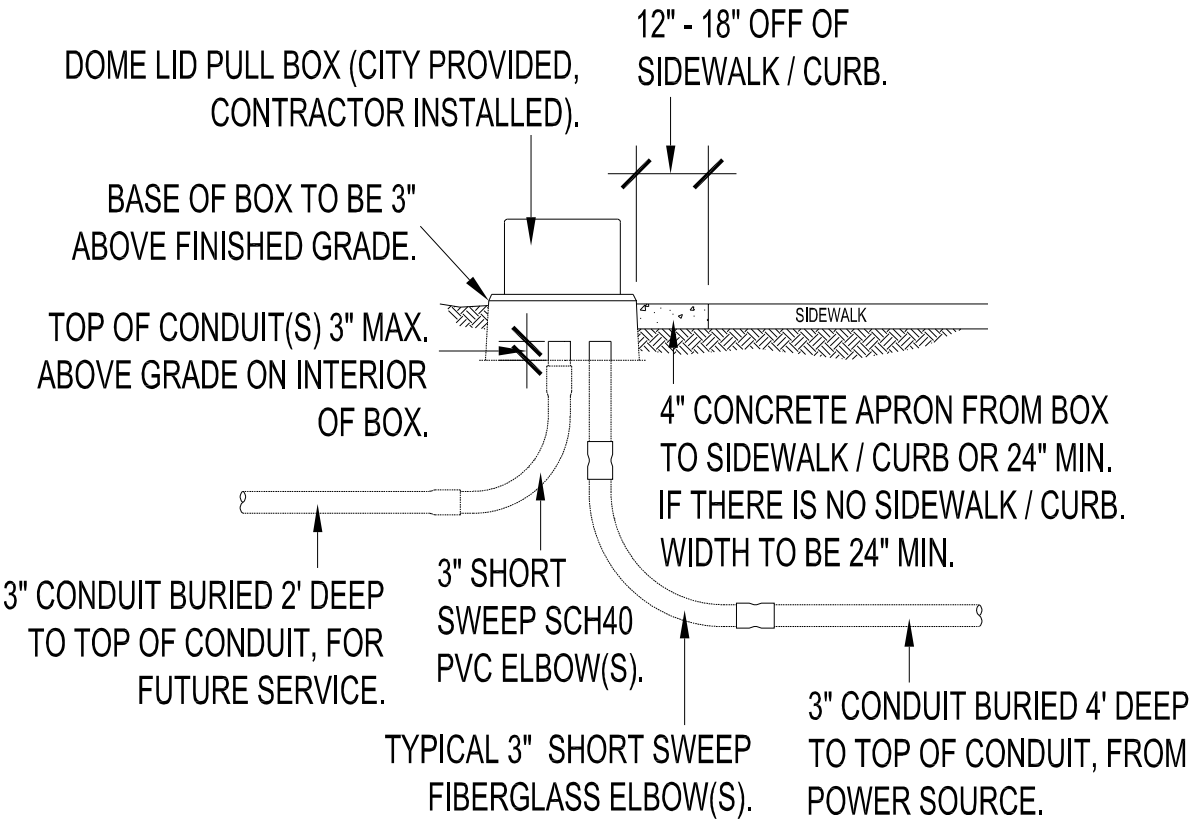

Figure 4.2 Secondary Pull-Box Profile View

5. STREET LIGHT DETAILS:

5.1 General Requirements

5.1.1 Conduit coming into boxes and ground sleeves are to be straight and clear of all box and ground sleeve lips so that pulling equipment can be placed properly in conduit opening.

5.1.2 Provo Power does not allow fiberglass elbows to be cut. If they are too tall the contractor / installer will be required to dig them up and bury them deeper.

5.1.3 95% compaction is required at street light box and base.

5.1.4 Street light bolts shall be flipped so that the nut is on the top of the base and accessible.

5.1.5 Call 801-852-6999 to schedule Provo Power Inspector for trench / pipe inspection and GPS. Do not backfill any portion of trench until it has passed conduit inspection.

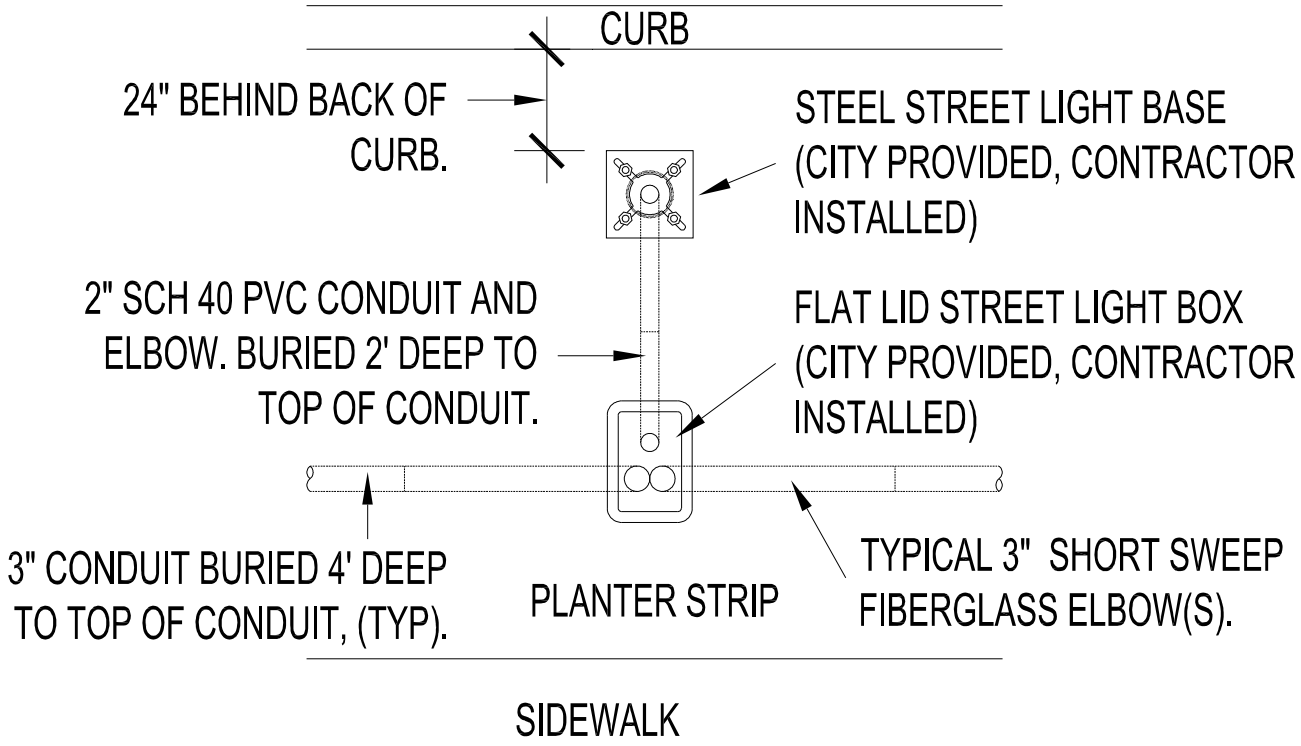

Figure 5.1 Street Light Plan View

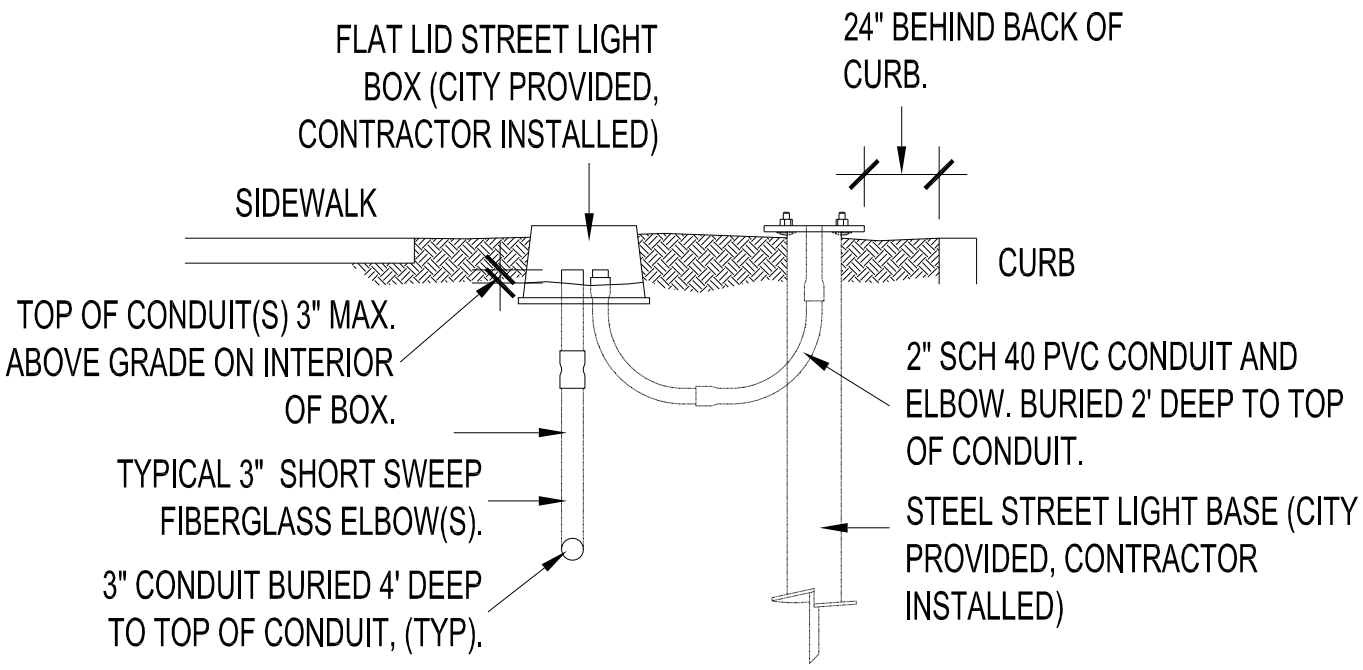

Figure 5.2 Street Light Profile View

6. TYPICAL TRENCH DETAIL:

6.1 General Requirements

6.1.1 Conduit coming into boxes and ground sleeves are to be straight and clear of all box and ground sleeve lips so that pulling equipment can be placed properly in conduit opening.

6.1.2 Provo Power does not allow fiberglass elbows to be cut. If they are too tall the contractor / installer will be required to dig them up and bury them deeper.

6.1.3 95% compaction is required at all box and ground sleeve locations.

6.1.4 12” separation is required between all power conduit and any communication conduit.

6.1.5 Call 801-852-6999 to schedule Provo Power Inspector for trench / pipe inspection and GPS. Do not backfill any portion of trench until it has passed conduit inspection.

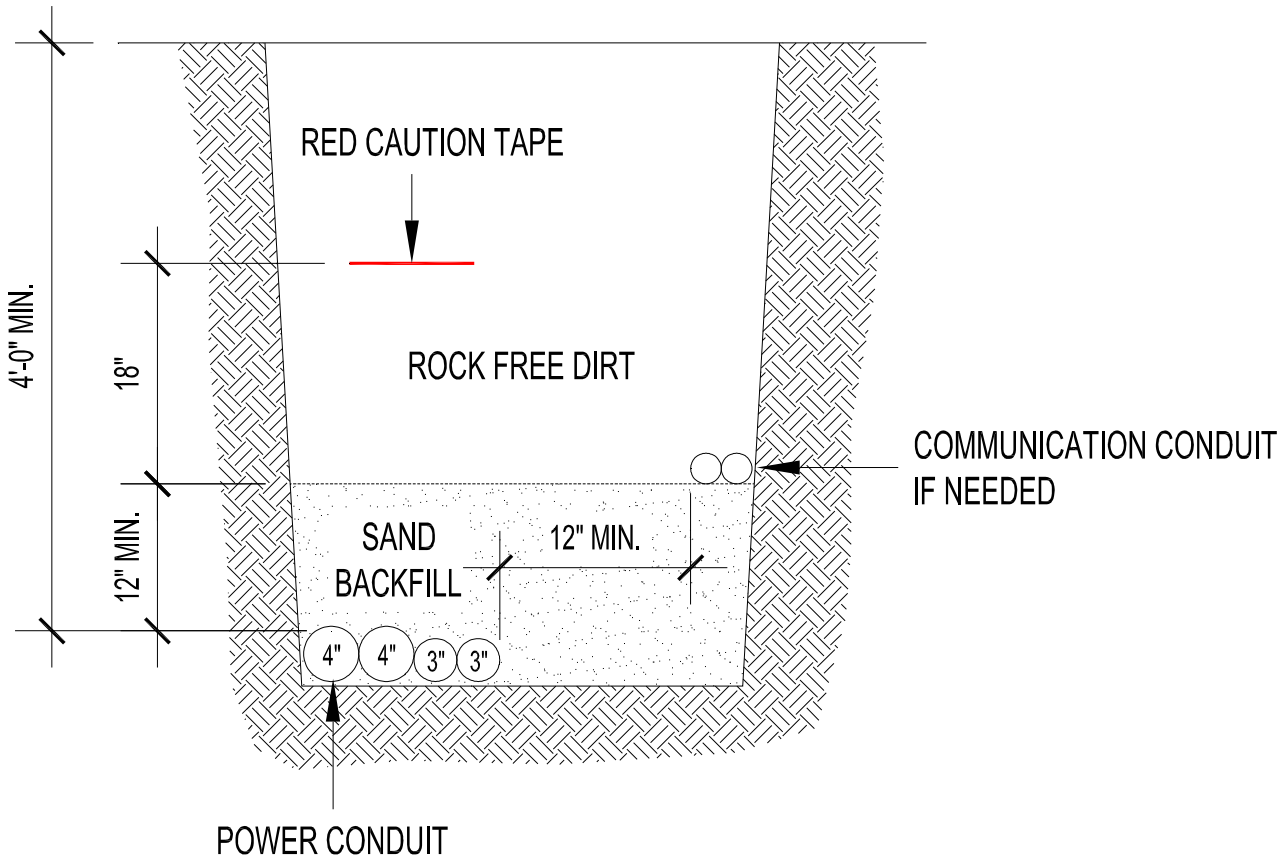

Figure 6.1 Typical Trench Detail

6.2 Main Line Trench Inspections:

6.2.1 Call Provo Power Dispatch (801) 852-6999 to schedule Main Line Trench Inspection.

6.2.2 Call after conduit has been placed in trench and before 12” of sand has been placed.

6.2.3 Trench must be left opened for inspection or you will be asked to re-open trench for inspection and for inspector to GPS location.

6.3 Service Trench Inspections:

6.3.1 Call Provo Power Dispatch (801) 852-6999 to schedule Service Trench Inspection.

6.3.2 Call before doing ANY backfill on trench.

6.3.3 Trench must be left opened for inspection or you will be asked to re-open trench for inspection and for inspector to GPS location.

6.4 Contractor Assist:

6.4.1 Call Provo Power Dispatch (801) 852-6999 to schedule Contractor Assist for help placing elbows into existing energized equipment.

6.4.2 Call after trench has been opened to the base of the power equipment, conduit has been installed and left 2’ short of power equipment, and fiberglass elbow is on site for line crew to assist contractor with placement into power equipment.

6.4.3 NEVER place conduit into live equipment without Provo Power assistance.

6.5 Final Project Inspection:

6.5.1 Call Provo Power Dispatch (801) 852-6999 to schedule Final Project Inspection.

6.5.2 Call after the following requirements have been met:

- All ground sleeves and boxes are at the proper 95% compaction, at the proper height, and leveled.
- All street light bases are in stalled and leveled. (Where required)
- All conduits are at the proper height.
- All ground sleeves (transformers and sectionalizers) have 5/8” x 8’ ground rods installed.
- Mule tape has been installed in all conduits.

7. 200 AMP POLE RISER DETAILS:

7.1 General Requirements

7.1.1 Contractor / Installer shall meet on site with Provo Power Inspector to get the correct location of the riser on the pole.

7.1.2 Call 801-852-6999 to schedule Provo Power Inspector for trench / pipe inspection and GPS. Do not backfill any portion of trench until it has passed conduit inspection.

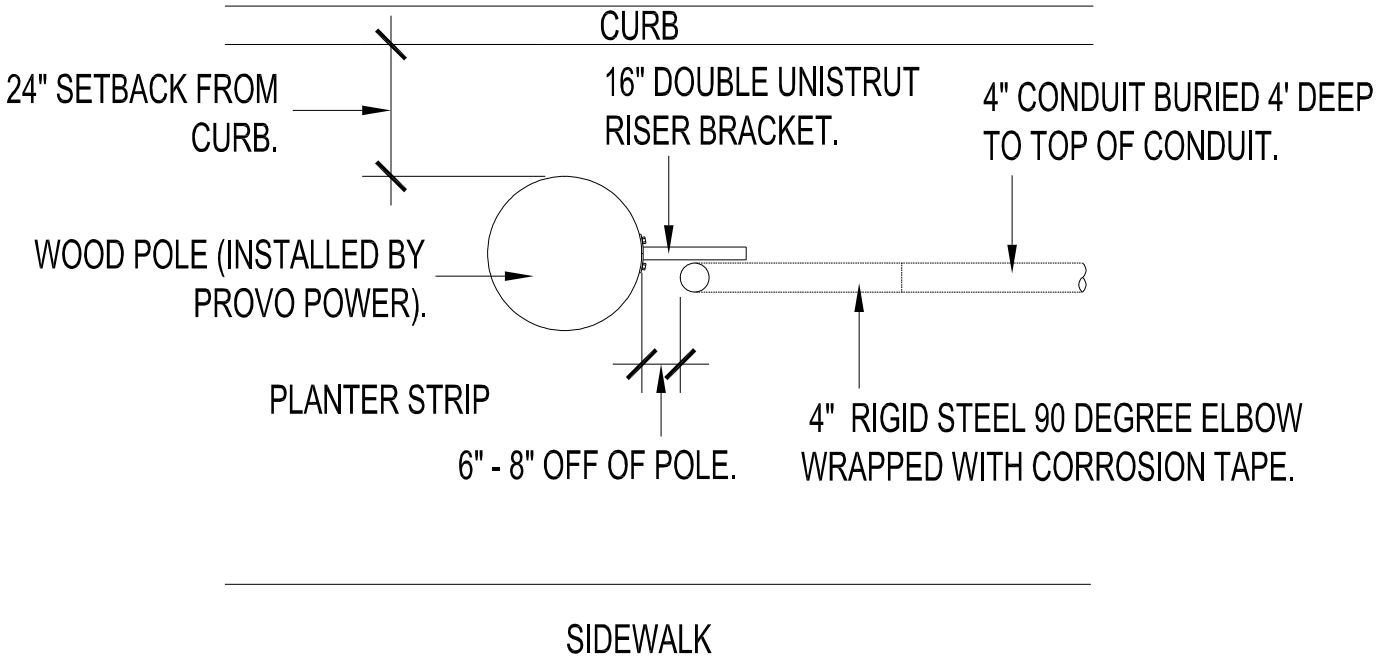

Figure 7.1 Pole Riser Plan View

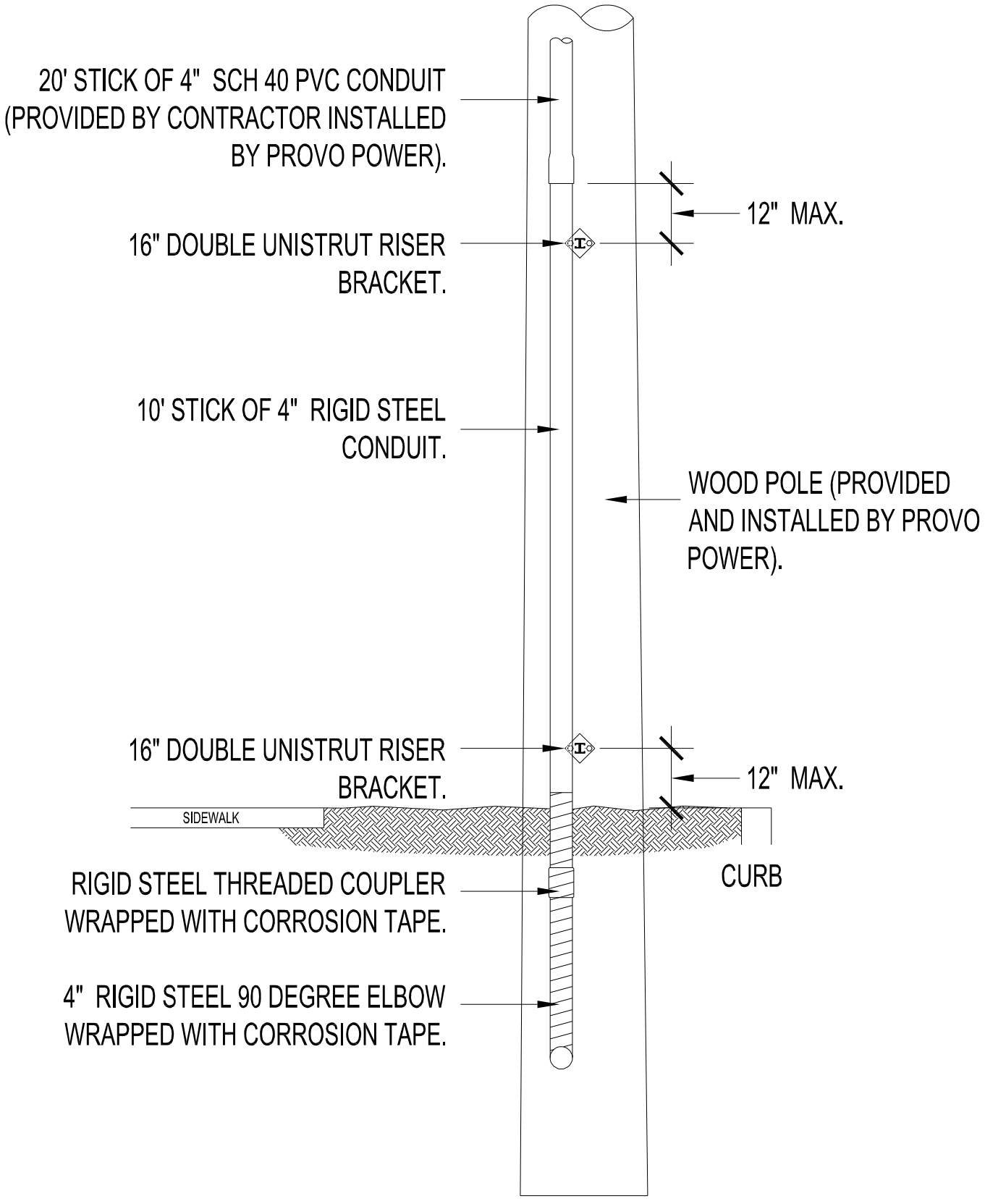

Figure 7.2 Pole Riser Profile View

8. TYPICAL BOLLARD DETAIL:

8.1 General Requirements

8.1.1 Contractor / Installer shall meet on site with Provo Power Inspector to get the correct location of the bollard, so it does not block access to equipment.

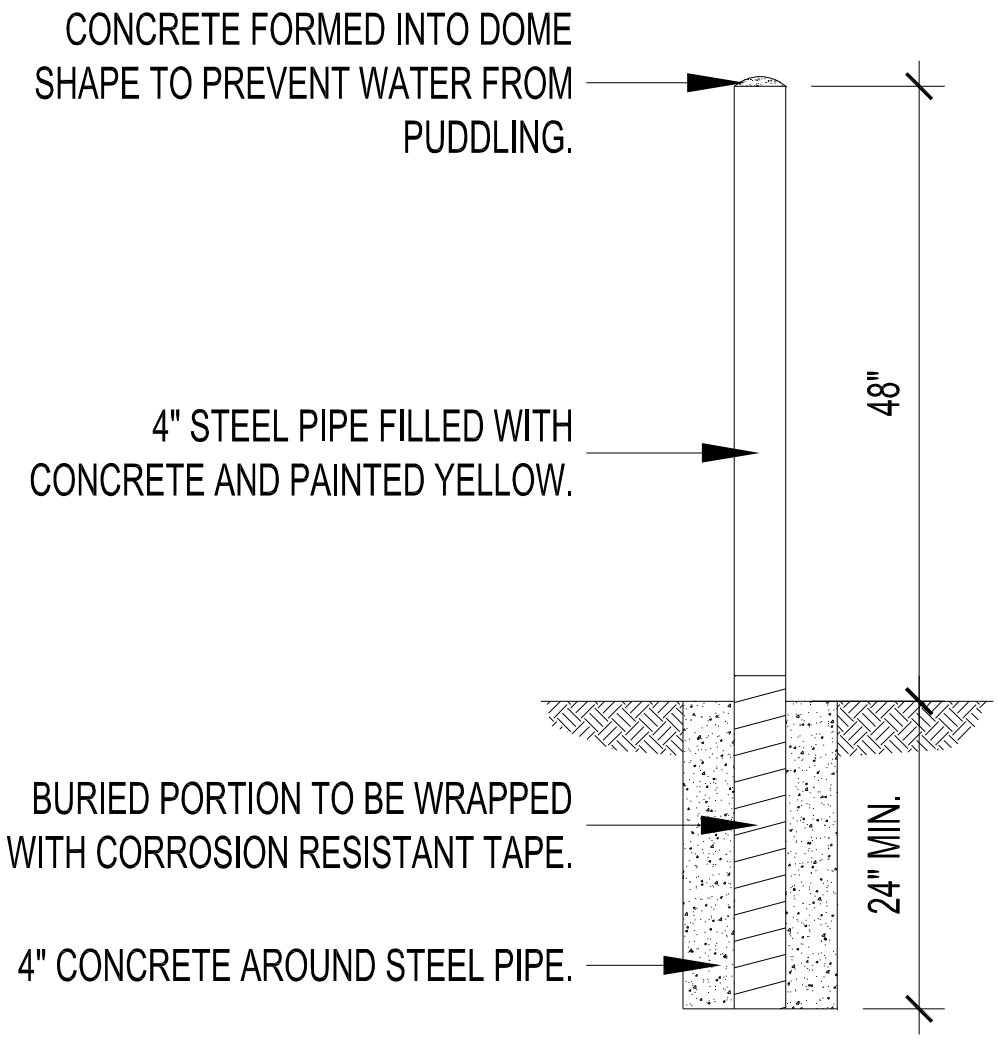

Figure 8.1 Typical Bollard Detail