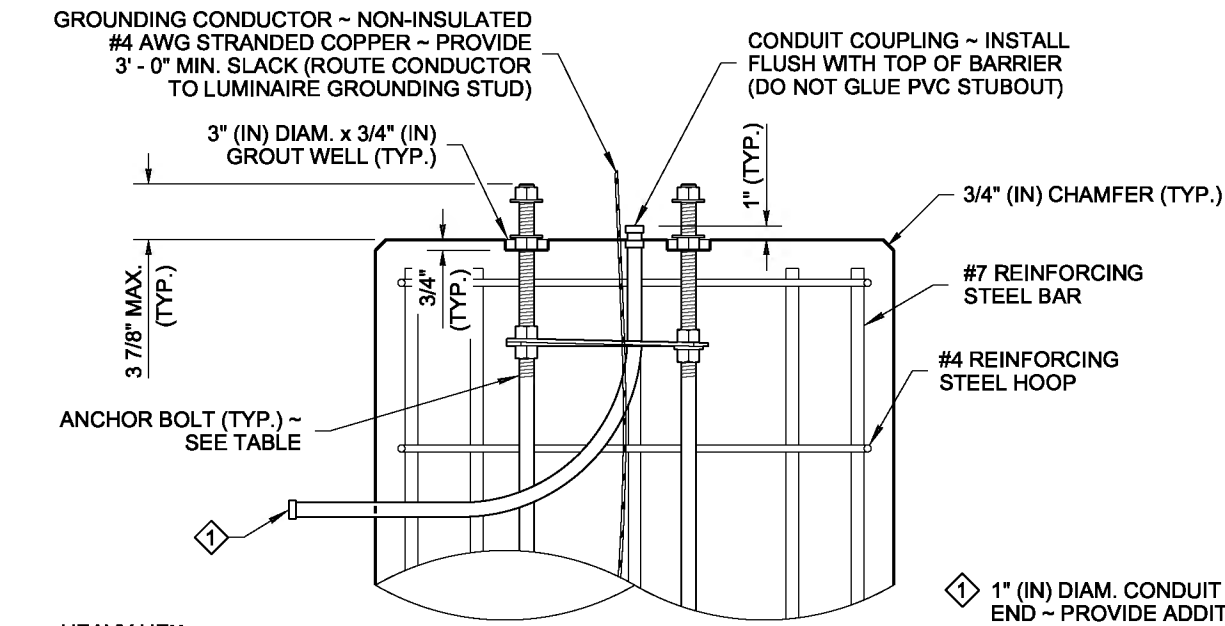


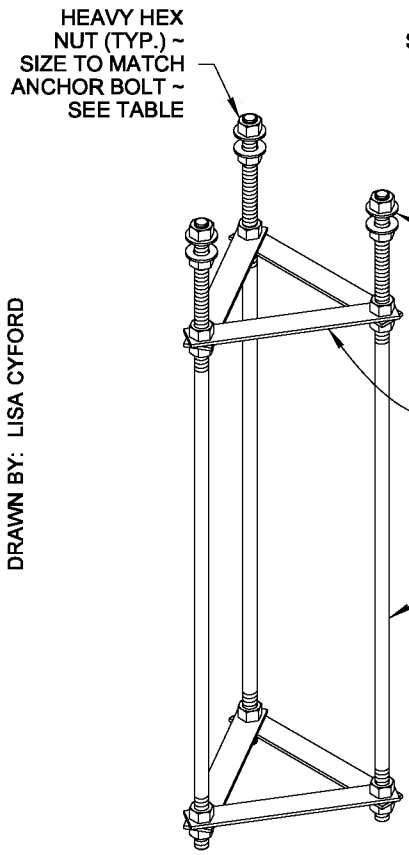
GROUNDING CONDUCTOR ~ NON-INSULATED
#4 AWG STRANDED COPPER ~ PROVIDE
3' - 0" MIN. SLACK (ROUTE CONDUCTOR
TO LUMINAIRE GROUNDING STUD)

CONDUIT COUPLING ~ INSTALL
FLUSH WITH TOP OF BARRIER
(DO NOT GLUE PVC STUBOUT)



SEE FIXED BASE FOR DETAILS NOT SHOWN

PARTIAL ELEVATION VIEW
SLIP BASE



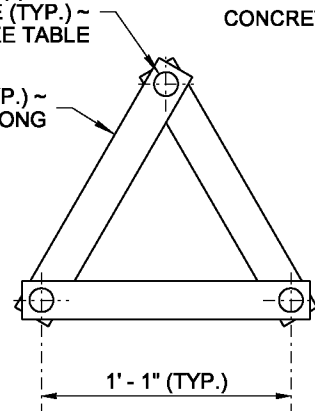
ANCHOR BOLT ASSEMBLY
(SLIP BASE SHOWN)

DRAWN BY: LISA CYFORD

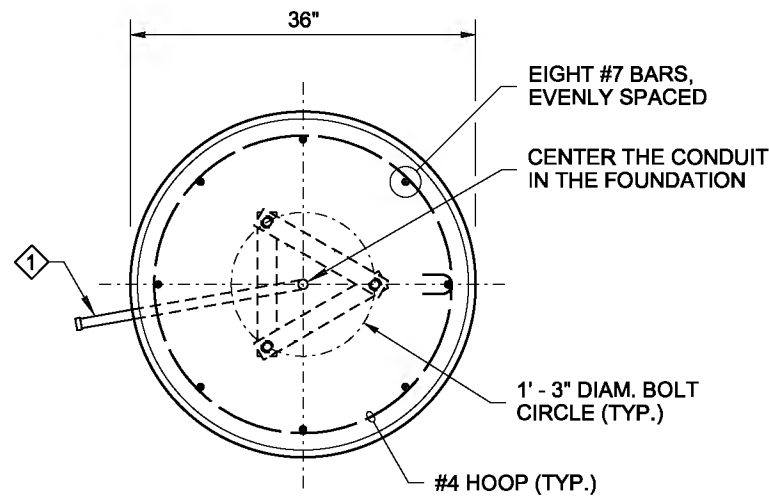
ANCHOR BOLT TABLE			
LUMINAIRE HEIGHT (FT) (H1)	MAST ARM TYPE	MAST ARM LENGTH (FT)	ANCHOR BOLT DIAMETER (IN) "D"
20' TO 50'	SINGLE	6' TO 16'	1"
20' TO 50'	DOUBLE	6' TO 8'	1"
20' TO 45'	DOUBLE	10' TO 16'	1"
46' TO 50'	DOUBLE	10' TO 16'	1 1/8"

(D + 1/16" (IN)) DIAM.
HOLE (TYP.) ~
SEE TABLE

1/4" (IN) STEEL BAR (TYP.) ~
2" (IN) WIDE x 1' - 3" LONG

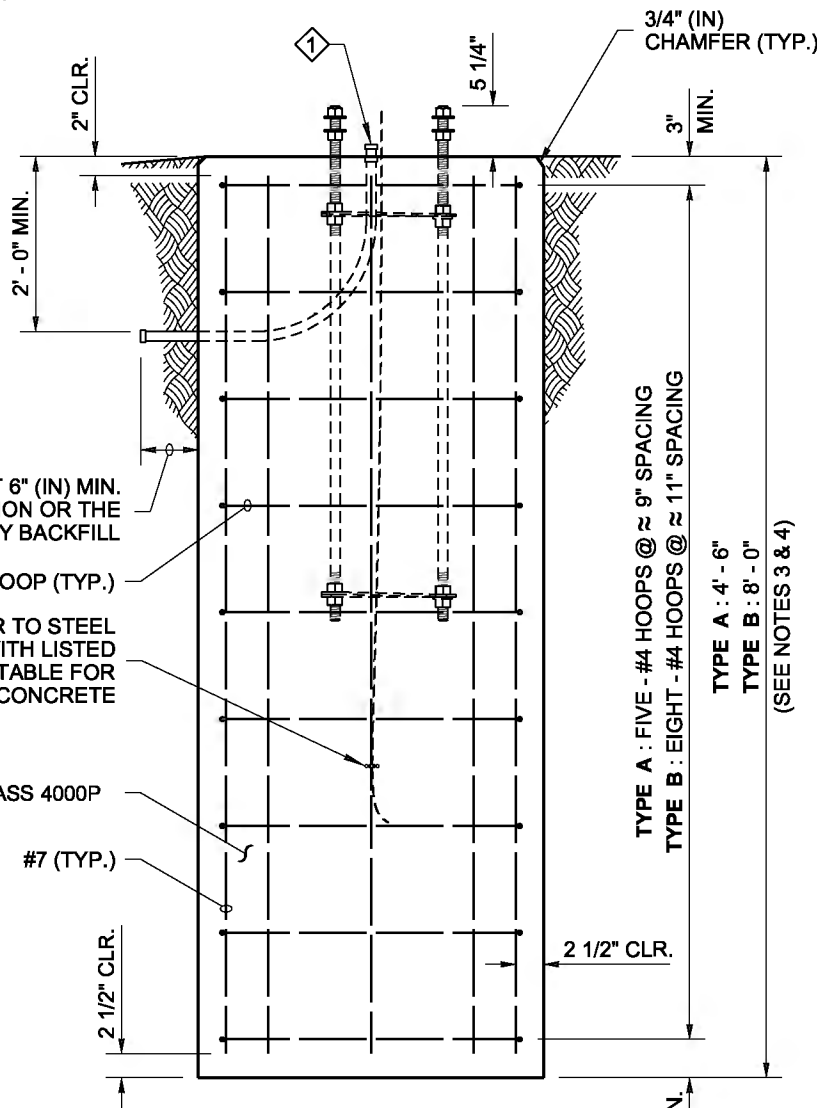


STRAP TEMPLATE ASSEMBLY
TOP VIEW



TOP VIEW
FIXED BASE

1" (IN) DIAM. CONDUIT ~ CAP EACH
END ~ PROVIDE ADDITIONAL CON-
DUIT FOR COMMUNICATION OR
SIGNAL CABLE WHERE SHOWN
IN THE CONTRACT

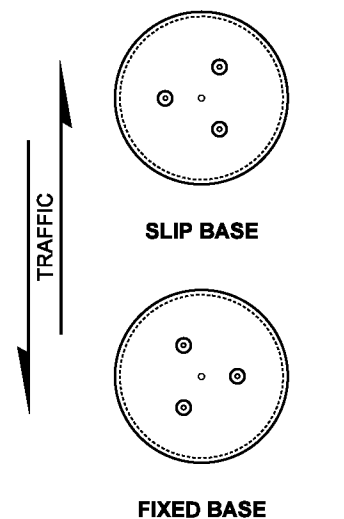


SEE SLIP BASE FOR DETAILS NOT SHOWN

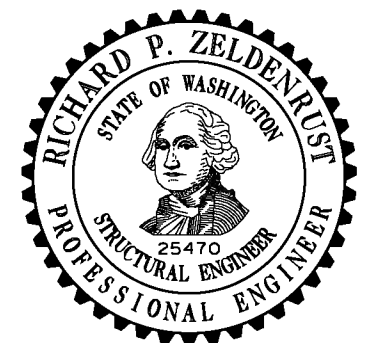
ELEVATION VIEW
FIXED BASE

NOTES

- See **Standard Plan J-28.40** for Luminaire Pole base mounting details.
- The Strap Templates shall be held in place by nuts, 6" (in) from the top of the foundation and 3" (in) from the bottom of the anchor bolts. Eighteen heavy duty hex nuts and six round washers are required for a slip base assembly. Eighteen heavy duty hex nuts and six plate washers are required for a fixed base assembly.
- Use Steel Light Standard Foundation **Type A** on level ground or slopes not exceeding 4H : 1V. Use **Type B** for slopes steeper than 4H : 1V, but not exceeding 2H : 1V. Slopes steeper than 2H : 1V shall require a special design.
- These foundations are designed for a minimum of 2000 PSF (**TYPE A**) or 1500 PSF (**TYPE B**) allowable lateral bearing pressure for the soil. A special foundation shall be required for soil with allowable lateral bearing pressure lower than 1500 PSF.
- The Luminaire Pole height shall not exceed 50' (ft) (H1).
- Slip bases shall not be installed on 50' (ft) (H1) poles with Double Mast Arms, nor on poles weighing more than 1000 lbs.
- Slip bases are required on poles installed inside the Design Clear Zone, and on poles installed behind traffic barrier that are within the traffic barrier deflection zone.
- Foundations constructed within Media Filter Drains shall be increased in depth by the depth of the Media Filter Drain.
- Exposed portions of the foundation shall be formed to create a Class 2 surface finish. All forming shall be removed upon completion of foundation construction.
- For excavation, concrete placement, and backfill options, see METHOD 1 and METHOD 2 on Sheet 2 of 2.
- The anchor bolts shall be high-strength steel, manufactured from ASTM F1554 Grade 105, with heavy hex nuts and hardened washers. Galvanize the anchor bolts according to ASTM F2329.
- The foundation shall be grounded in accordance with the requirements of **Standard Specification 8-20.3(4)**.
- See **Standard Plans C-8b** and **C-85.14** for steel light standards on traffic barrier.



ANCHOR BOLT LAYOUT



**STEEL LIGHT STANDARD
FOUNDATION TYPES A & B**

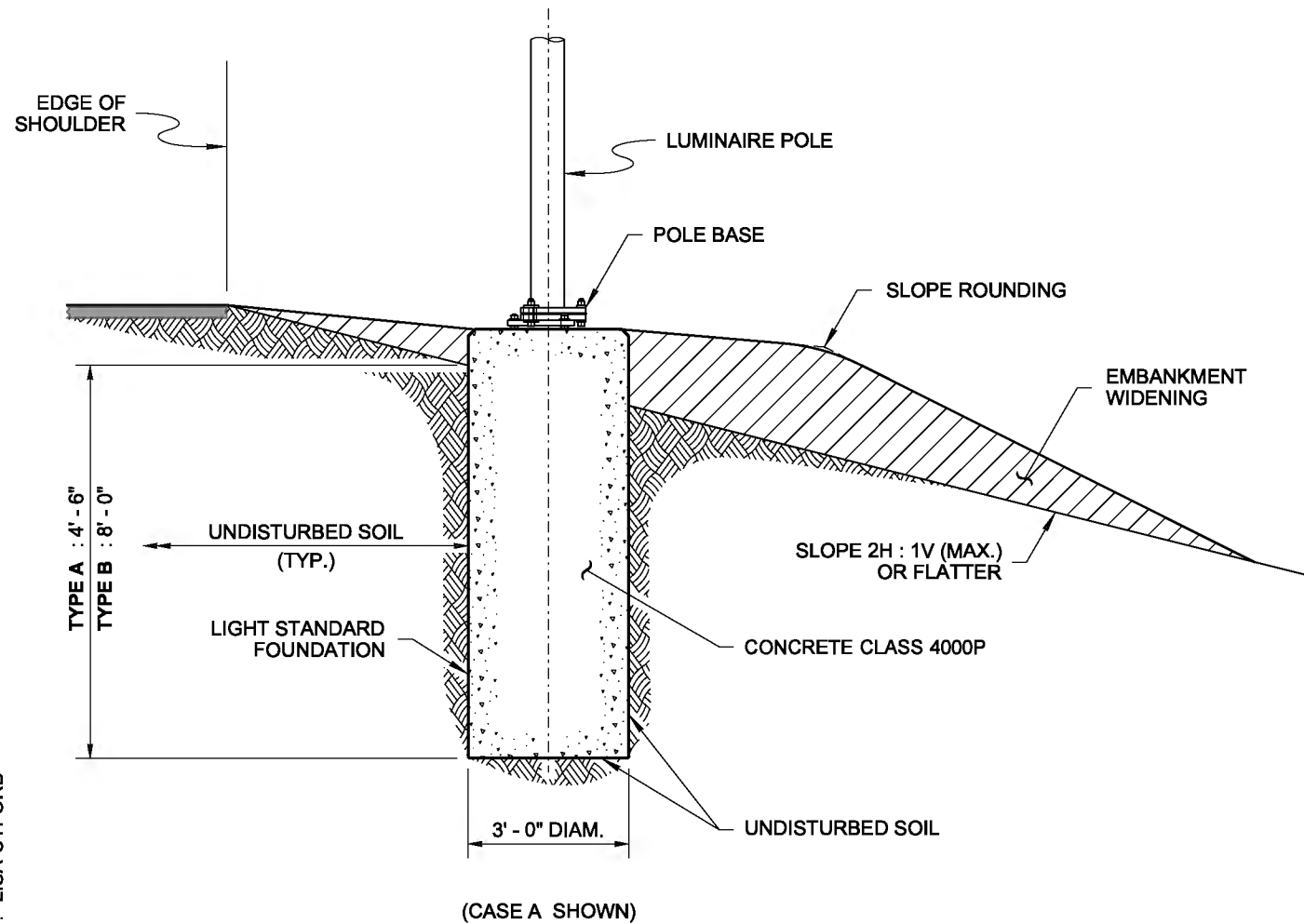
STANDARD PLAN J-28.30-03

SHEET 1 OF 2 SHEETS

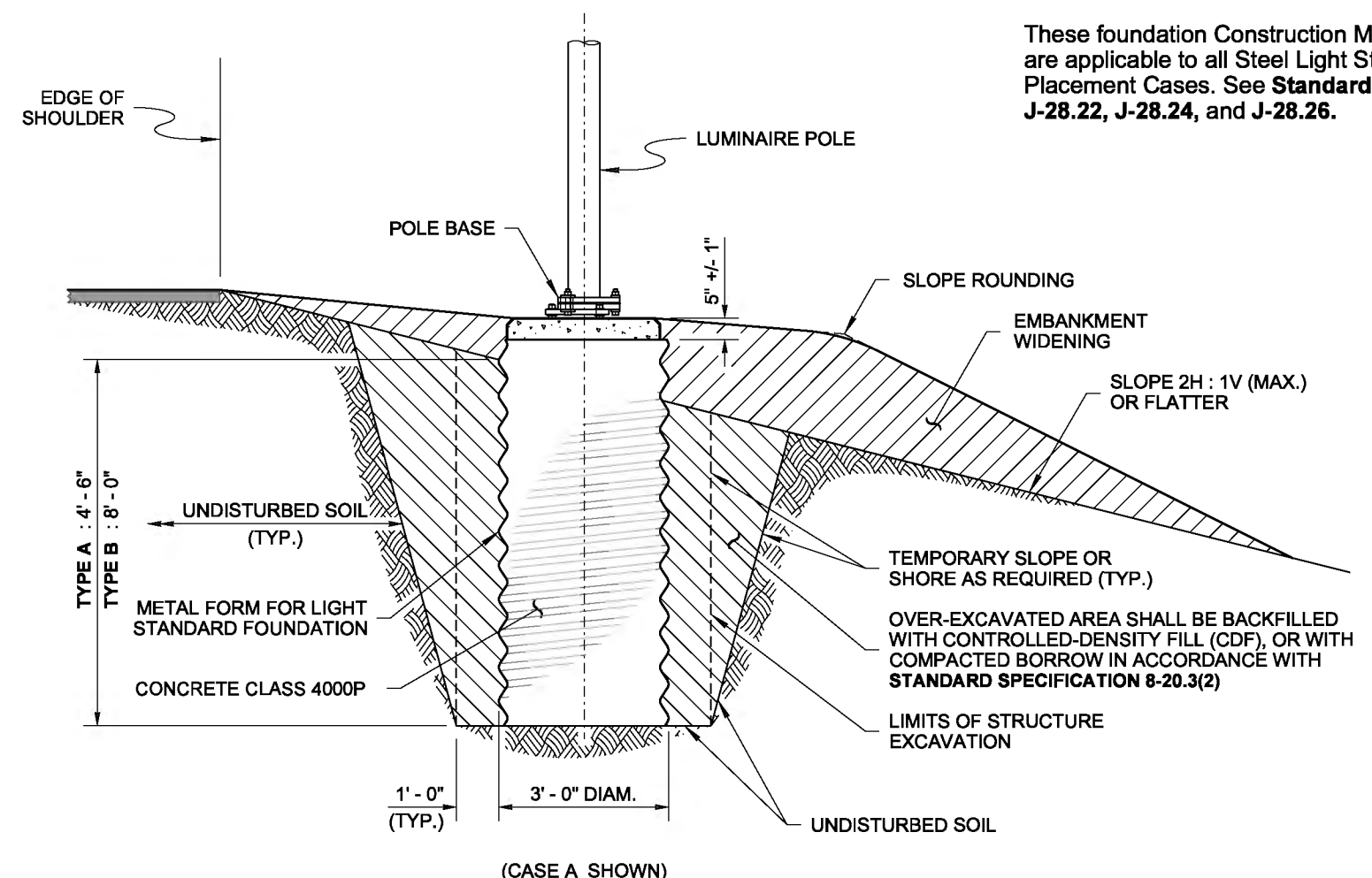
APPROVED FOR PUBLICATION

NOTE

These foundation Construction Methods are applicable to all Steel Light Standard Placement Cases. See **Standard Plans J-28.22, J-28.24, and J-28.26.**



METHOD 1
NO SUBSURFACE FORM



METHOD 2
METAL (SUBSURFACE) FORM REQUIRED

DRAWN BY: LISA CYFORD

This option is used only when the existing soil in the hole will remain standing and the cement concrete can be placed without causing the soil to collapse. Concrete shall be cast directly against undisturbed soil.

Auger the hole for the foundation. Use a paper or cardboard form to achieve a smooth finish on the final exposed cement concrete. Support the form as necessary to remain plumb.

See **Standard Plans J-28.24** and **J-28.26** for maximum heights of exposed foundation when no embankment widening is to be installed.

Place the concrete foundation.

After concrete has cured, remove the paper or cardboard form portion.

Construct the embankment widening (if required).

When the existing soil will not retain a vertical face, over-excavate the foundation area and install a 36" (in) diameter corrugated metal (pipe) form. The corrugated metal form shall not extend more than 5" (in) +/- 1" (in) below any portion of the foundation that will remain exposed upon final grading. Continue forming to full height using a paper or cardboard form to achieve a smooth finish on final exposed cement concrete. Support the form as necessary to remain plumb.

See **Standard Plans J-28.24** and **J-28.26** for maximum heights of exposed foundation when no embankment widening is to be installed.

Place the concrete foundation.

After concrete has cured, remove the paper or cardboard form portion.

Backfill with controlled-density fill or compacted borrow in accordance with **Standard Specification 8-20.3(2)**.

Construct the embankment widening (if required).



STEEL LIGHT STANDARD FOUNDATION TYPES A & B

STANDARD PLAN J-28.30-03

SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

STATE DESIGN ENGINEER
Washington State Department of Transportation

CONSTRUCTION METHODS