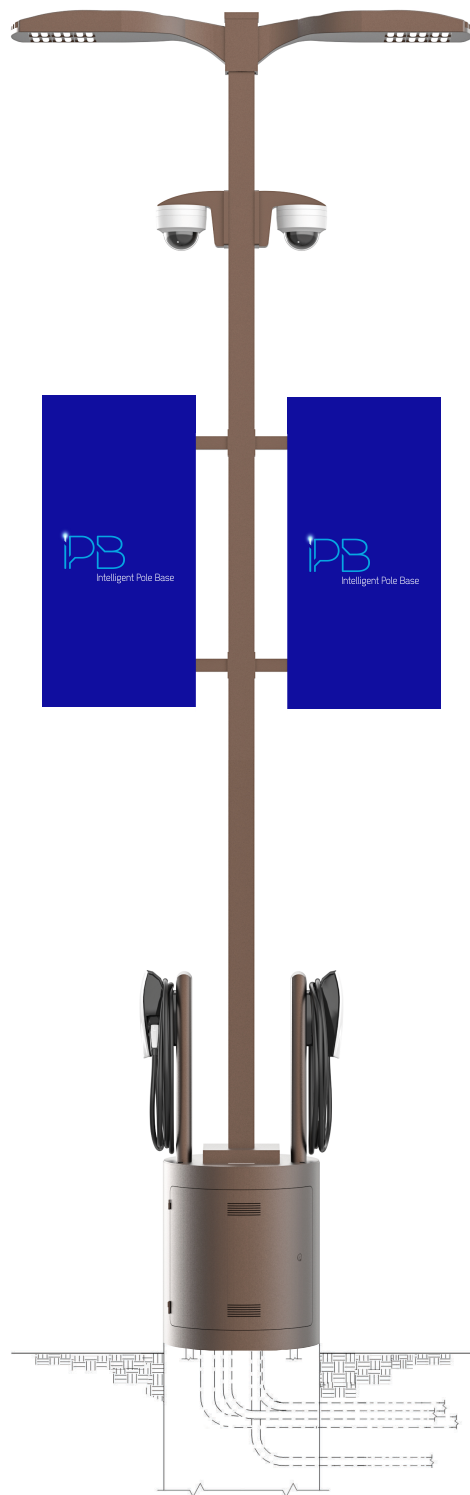


# INTELLIGENT POLE BASE

## 18" IPB INSTALLATION MANUAL



All images in this manual are for representative purposes only and not to be used in place of Engineering Drawings.  
Images & Drawings are Not to Scale



Intelligent Pole Base

IPB Inc. All information privileged and confidential.

US Patents 11,280,461 10,988,954 10,760,753

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## Important Information

This installation manual is for general reference only. Always refer to a set of engineer-approved & signed drawings for all installation details.

It is the sole responsibility of the installer to ensure the correct footing height, depth and diameter, rebar cage, concrete, fasteners, conduit, wire, etc. and all aspects of the installation meet all required building and electrical codes.

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# IN-GROUND FOUNDATION For 18" Diameter IPB



## HOLE PREPARATION:

Always refer to structural details on Engineer-Signed & Sealed Drawings for details.

STEP 1. Determine exact location for IPB install.

STEP 2. Drill an 18" diameter hole to engineer-specified depth.

STEP 3. Set forms and Sonotube. Top of concrete footing should be at grade or slightly above in asphalt or concrete installations. When installing in planters and landscaped areas the footing should be a minimum of 2" above grade.

NOTE: Different regions may have different requirements or installation height requirements due to flood frequency, snow plow activity, etc. Always refer to Engineer Drawings for details on footing height above and below grade.

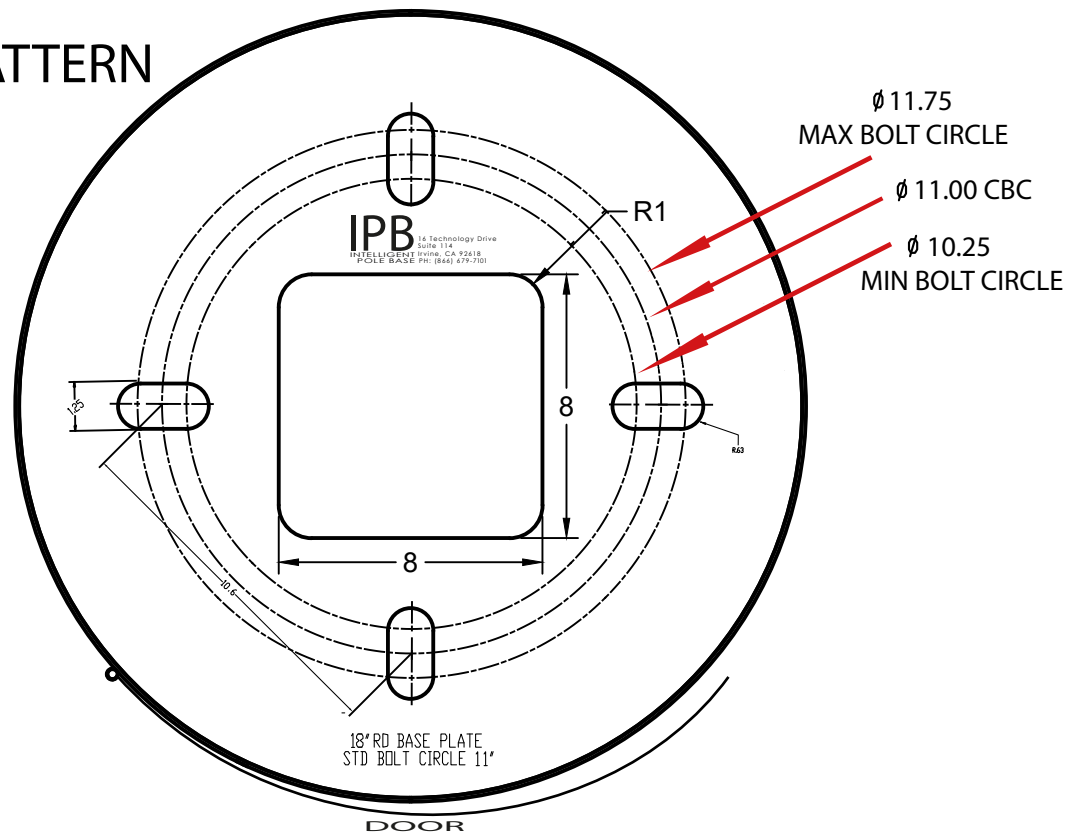
## REBAR CAGE:

STEP 4. Use crane to insert CE-qualified rebar cage into hole

STEP 5. Secure anchor bolts to plywood bolt-spacing template with an 11" bolt pattern diameter.

STEP 6. Rotate the plywood bolt spacing template so "DOOR" is positioned in the desired direction. Refer to IPB Bolt Pattern Template. When properly positioned, secure the template to the Sonotube. The door always centers on a bolt location.

## IPB BOLT-PATTERN TEMPLATE



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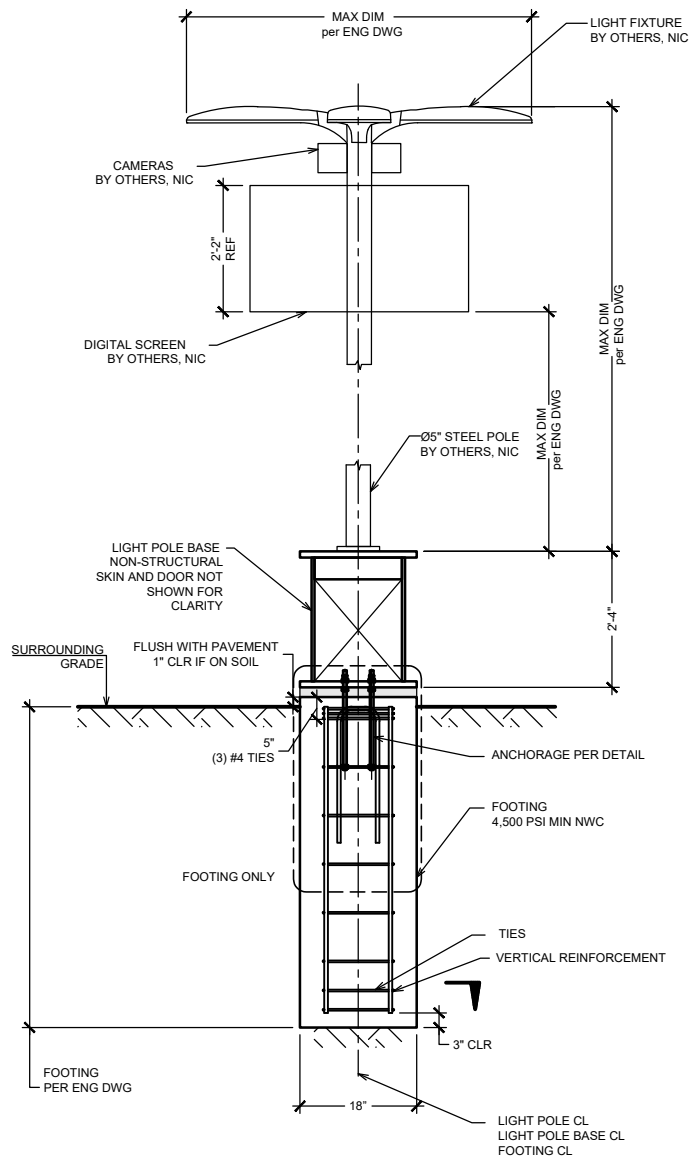
# IN-GROUND FOUNDATION

## For 18" Diameter IPB

### REBAR CAGE: (cont.)

STEP 7. Adjust anchor bolts to allow 6" of thread above the upper edge of the Sonotube/top surface of the concrete foundation for proper mounting of the Intelligent Pole Base (see **A** below).

STEP 8. Center the rebar cage inside the Sonotube by securing it to the plywood bolt pattern template with tie-wire, so that no part of the rebar cage touches the Sonotube.



**A** LIGHT POLE BASE AND FOOTING  
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# IN-GROUND FOUNDATION

## For 24" Diameter IPB

### CONDUITS & WIRING:

STEP 9. Run all conduits & wiring to center of the footing, so they will pass thru the square opening in the base of the IPB.  
Please refer to the IPB Bolt Pattern Template.

STEP10. GROUNDING - If required, refer to details on Engineering Drawings or Local Building Codes.

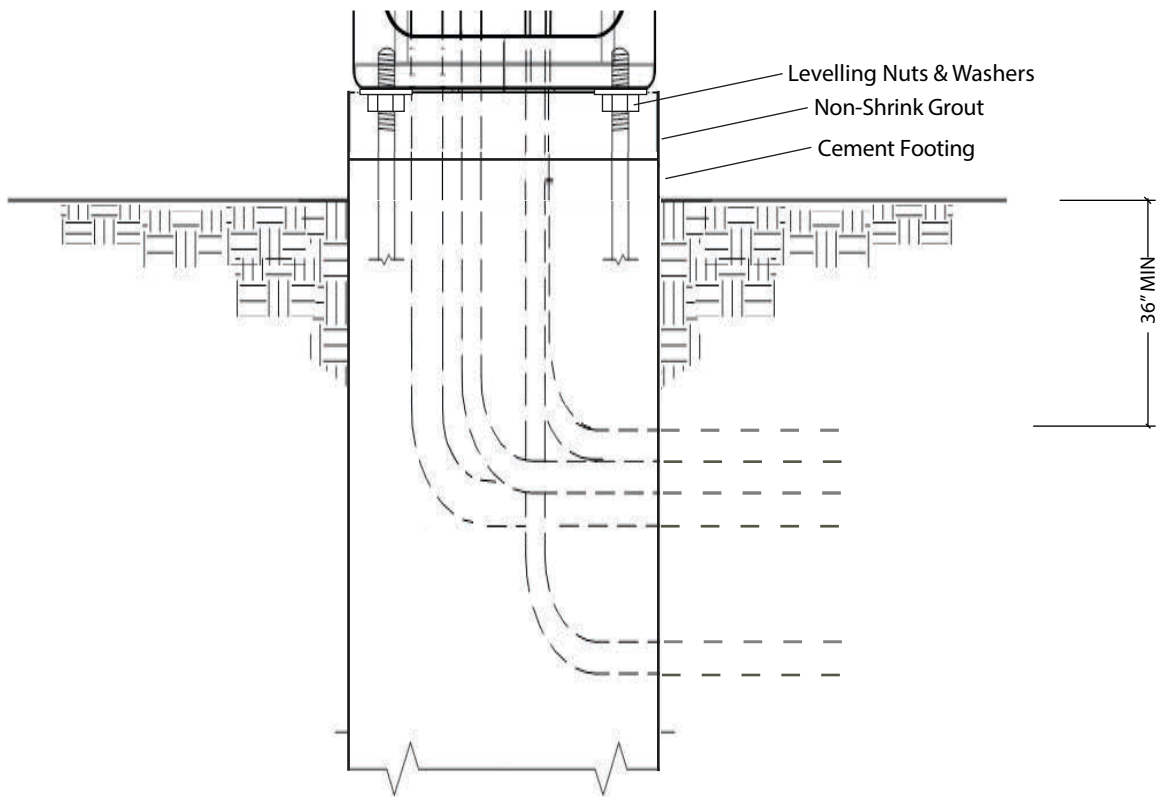
STEP11. Typical Conduit Installation:

- a. Enter thru rebar cage openings a minimum of 36" below grade.
- b. Make 90° sweep-bends up, thru the center of the rebar cage.
- c. Exit thru the center of the bolt-spacing device.
- d. Extend conduit upward a minimum of 12" above the top of the Sonotube

### CONCRETE:

STEP 13. Concrete is poured into Sonotube-rebar assembly and vibrated or rodded as-needed.

STEP 14. After sufficient curing time, the forms are stripped and the Sonotube is peeled.



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# SECURING THE 18" IPB AND LIGHT POLE

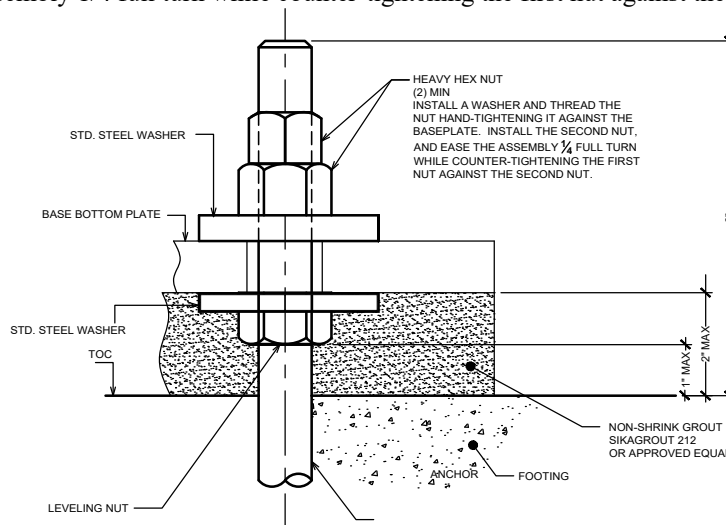
## SECURING IPB TO FOUNDATION:

STEP 15. Once proper curing of the concrete has been confirmed, remove the bolt-spacing template.

STEP 16. Add a leveling nut to each anchor bolt and adjust so the bottom of each nut is no more than 1" above the top surface of the concrete, then add a washer on top of each of the 4 leveling nuts.

STEP 17. With the door of the IPB rotated to face the correct direction, carefully lower the IPB into place, aligning the bolt openings in the bottom of the IPB onto the 4 anchor bolts.

STEP 18. With the IPB resting on top of the 4 anchor bolt washers, adjust the leveling nuts until the IPB is level. Once the IPB is confirmed to be level, install a washer and nut to each anchor bolt, and hand tighten. Then install the second nut and ease the assembly 1/4 full turn while counter-tightening the first nut against the second nut.



**B** LIGHT POLE ANCHORAGE  
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STEP 19. Add dry-pack to fill the gap between bottom of IPB and top of cement foundation.

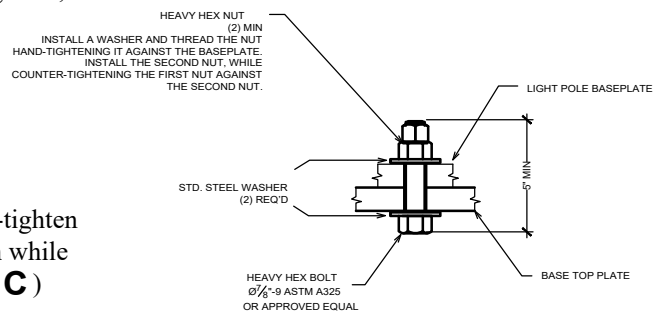
## SECURING LIGHT POLE TO IPB:

STEP 20. To minimize water intrusion, coat the entire bottom surface of the light pole mounting base with a silicone-based sealant or grease, prior to installation of the light pole.

STEP 21. Lower the light pole and align the bolt holes in pole mounting base with holes in IPB. From inside the IPB, add washers to bolts and insert up thru each corner hole of the light pole base.

STEP 22. Add a washer and nut onto each of the four bolts and hand-tighten against the baseplate. Then, install a second nut and tighten while counter-tightening the first nut against the second nut. (See **C**)  
Wipe away excess sealant/grease.

Installation of IPB is now complete and ready for components to be installed.



**C** LIGHT POLE TO BASE CONNECTION  
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