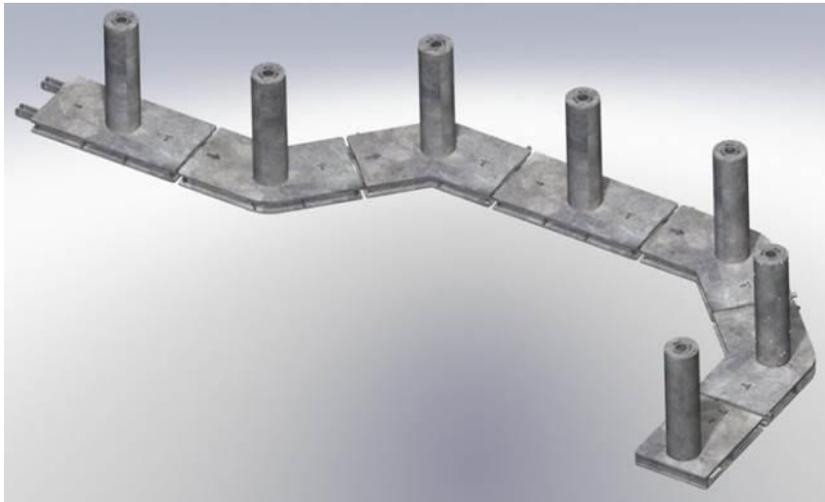


AMERISTAR®

ASSA ABLOY

SHALLOW MOUNT BOLLARD

INSTALLATION DOCUMENT



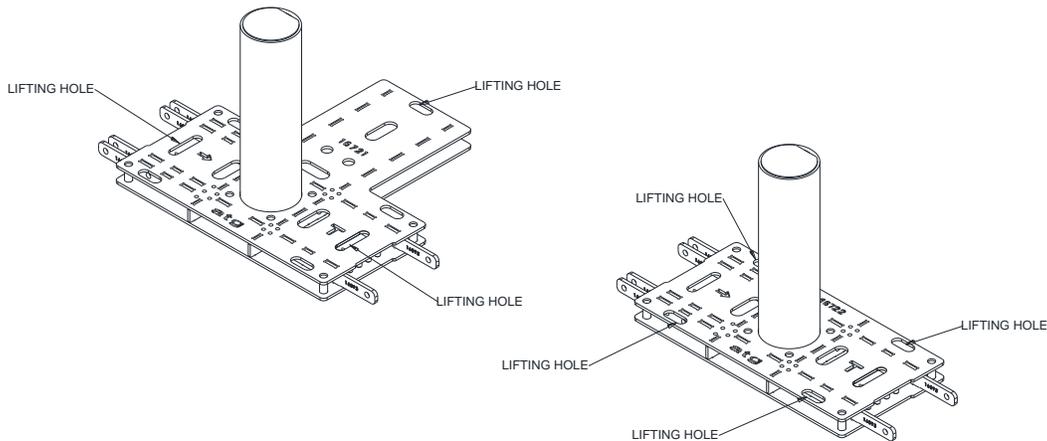
Safety Precautions – in the Excavation of a shallow mount bollard array take all necessary steps to make sure the pit is secured. Follow all OSHA requirements for digging a foundation of this depth and size. Make sure traffic control measures are in place and that caution tape be used around the whole foundation.

Cut out the road surface or remove any pavers/blocks.

Excavate to the depth required per the site drawings, remove all spoil, and ensure that the ground is flat and level ready to place the shallow mount units onto. It is much easier to carry out the installation with a firm level base.



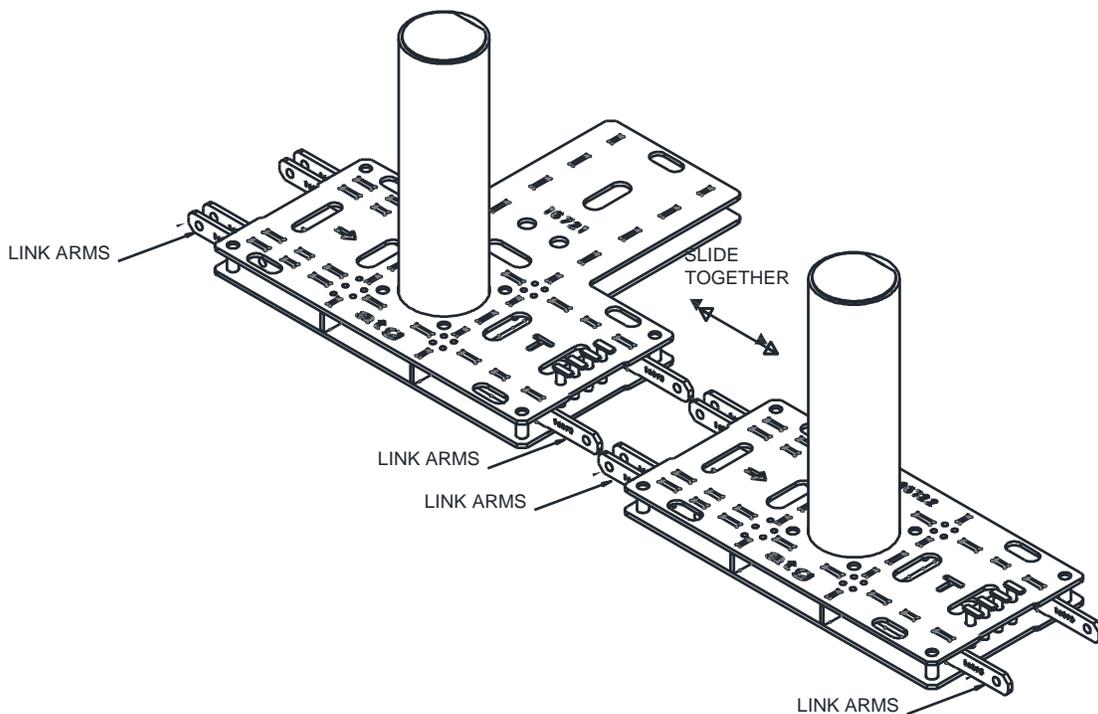
Once the area is clear, lift the bollards into position using appropriate lifting equipment and the cut holes in the top of the plates.

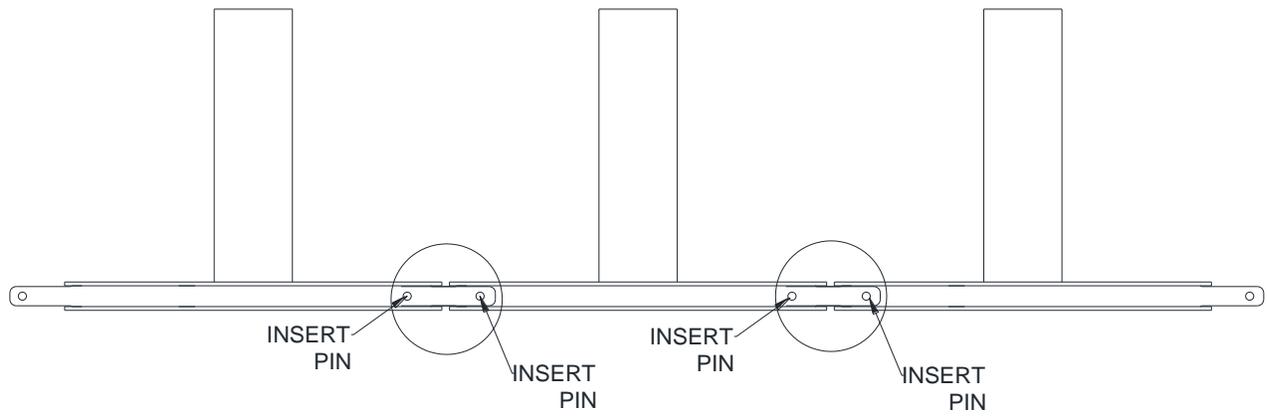




Lift the bollard into position. Ensure it is level and bollard is vertical. This will make it easier to join the next bollard.

Lift the second bollard and position it next to the first on the center line, align the link arms so the two bollards can come together allowing the pins to be inserted. The single link arm to the right (looking from the threat side) should be positioned to slide in between the two link arms on the left (looking from the attack side).





Insert the pins to lock the bollard foundations together



Once installed, check each unit to ensure they are level and make adjustments as required to ensure the bollard is vertical

Once all units have been located in position, pour concrete to back fill all excavated areas. Allow the concrete to flood and penetrate through all of the shallow mount biscuits. The concrete must fill all of the voids within the shallow mount bollard structure and this can be done using a vibrating poker.



The concrete should be poured flush with top plates and biscuits and clear of excess concrete.



Once concrete has cured the sidewalk can be finished with appropriate materials defined by the project specification.



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