


INSTALLATION INSTRUCTIONS FOR:

(HDHB & LPHDHB)

LOW PROFILE HEAVY DUTY HINGED BOLLARD

1. Verify that all Low Profile Heavy Duty Hinged Bollard parts are in the shipment package as shown on the "Bill of Material".
 2. Provide Low Profile Heavy Duty Hinged Bollard Anchor System (see included Anchor System Drawing-BAS) of your choice at a location to suit your specific needs.
 3. Install LPHDHB Base (Item 2) true and level on your selected Anchor System using the flat washers and hex nuts included in your Anchor System Kit. Use S.S. shims to level if needed. Torque hex nuts to Minimum 100 ft-lbs for Anchor Systems CPAS and ESAS. Torque hex nuts for other Anchor Systems to Manufacturers Specification.
 4. Install LPHDHB Post (Item 1) to LPHDHB Base (Item 2) using Hinge Bolt (Item 3), Flat Washer (Item 5), and Hex Nut (Item 4) as shown. Tack Weld Hex Nut to Hinge Bolt or Chisel Hinge Bolt Threads such that Hex Nut cannot be easily removed.
 5. Install Locking Pin thru UP Position Bollard Post, and install Padlock where shown. A Hex Nut (Item 4) is included in case a padlock is not available.
 6. Install the four Labels at the locations shown.
 7. Check the functional operation of the Low Profile Heavy Duty Hinged Bollard.
- * Note: S.S. shims, tools, grease, and padlocks are not provided.

LOW PROFILE HEAVY DUTY HINGED BOLLARD				THIRD ANGLE PROJECTION 		TrafficGuard®	
ASSEMBLY DRAWING				Do not scale from drawing		P.O. Box 201, Geneva, IL 60134	
CONSULTING ENGINEERS				Action by		Toll Free: 877-727-7347 Fax: 800-814-7194	
ZABEL ENGINEERING				Design	MCZ	SEZ	Assembly Shipping Weight
CONSULTING ENGINEERS				Drawn	OLD	D	70.64 Pounds
200 South Woodlawn Ave., Aurora, IL 60506				Checked	MCZ	Scale: 3"=1'	Drawing Date: 9-25-2002
Ph: 800-888-0888 Fax: 800-888-6887				Rev. by	Date	Description	Drawing Number: LPHDHB A2
This Drawing shall not be used nor reproduced except when authorized in writing by TrafficGuard.				Drawing dimension = 34" x 22"		Sheet: 2 of 2	

FILE NAME = ...\\D160F72-shd-details-49-MCCD-01.dgn	USER NAME = okw	DESIGNED M.C.C.D.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	McHENRY COUNTY CONSERVATION DISTRICT	O.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN	REVISIED -	0003			18A-2	MCHENRY	825	394	
PLOT SCALE = 40.0000' / in.	CHECKED	REVISIED -	CONTRACT NO. 60F72							
PLOT DATE = 5/2/2012	DATE -	REVISIED -	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
				SCALE: NONE	SHEET NO. 1 OF 4 SHEETS	STA.	TO STA.			