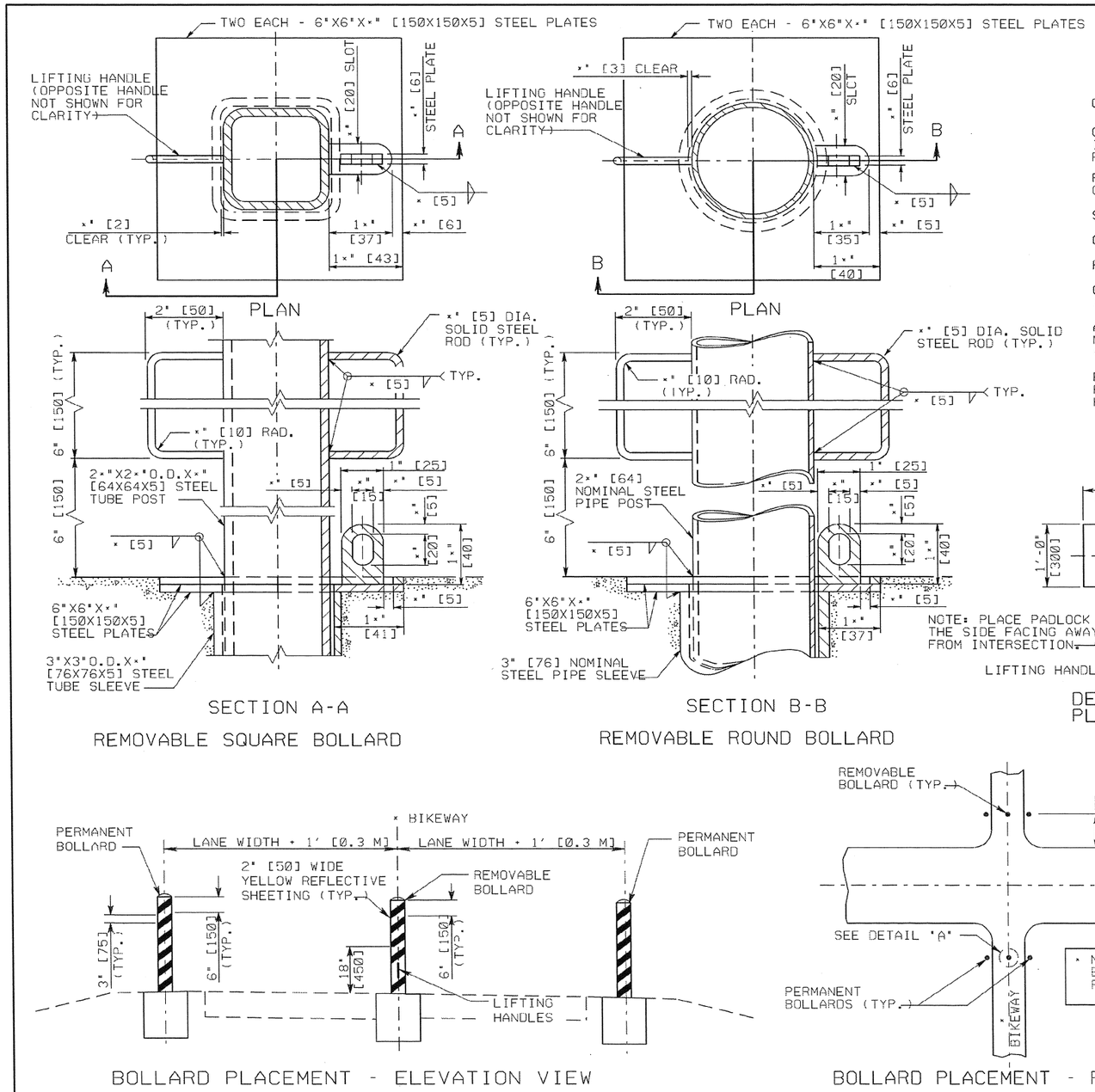
PROJECT REFERENCE NO.	SHEET NO.
SR-5001CB	2-I

Bollard Special Detail Sheet (Page 1 of 2)



NOTES

GENERAL: MOUNT ALL BOLLARD SLEEVES FLUSH WITH THE BIKEWAY PAVEMENT.

CONCRETE ENCASEMENT: SLEEVE ENCASEMENT SHALL BE SQUARE AS SHOWN. IN CONCRETE PAVEMENT, BUT MAY BE SQUARE OR ROUND IN FLEXIBLE PAVEMENT. ROUND ENCASEMENT SHOULD BE 1'-0" [300] DIAMETER.

PREFORMED EXPANSION JOINT FILLER: SHALL MEET THE PROVISIONS OF CMS 705.11, AND IS REQUIRED WHEN BOLLARDS ARE SET IN CONCRETE PAVEMENT.

STEEL PIPE: ASTM A 53 SCHEDULE 40..

CONCRETE: USE CLASS C CONCRETE AS SPECIFIED IN CMS 499 AND CMS 511.

REFLECTIVE SHEETING: SHALL MEET THE PROVISIONS OF CMS 730.19.

GALVANIZING: AFTER FABRICATING, HOT-DIP GALVANIZE ALL STEEL PARTS, INCLUDING STEEL PIPE, AS SPECIFIED IN ASTM A 123.

ALUMINUM: ALL STEEL COMPONENTS MAY BE REPLACED BY ALUMINUM COMPONENTS MEETING THE FOLLOWING ASTM SPECIFICATIONS: B 209 (PLATE), B 210 OR B 241 (DRAWN SEAMLESS TUBES & PLATES), B 211 (RODS), AND F 901 (BOLTS).

PERMANENT BOLLARDS: PERMANENT BOLLARDS SHALL BE THE SAME AS REMOVABLE BOLLARDS, EXCEPT THAT THE STEEL PLATES, SLEEVES AND LIFTING HANDLES SHALL BE OMITTED. ENCASE POSTS DIRECTLY IN CONCRETE.

REVISIONS

OHIO DEPARTMENT OF TRANSPORTATION — 4-18-03 DATE

ROADWAY DESIGN ENGINEER

STDS. ENGR. FOCKE

ALL METRIC DIMENSIONS [IN BRACKETS []] ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

ROADWAY ENGINEERING SERVICES

STANDARD ROADWAY CONSTRUCTION DRAWING

STEEL BOLLARDS

THIS DRAWING REPLACES RM-5.1M DATED 1-3-96.

NUMBER RM-5.1

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