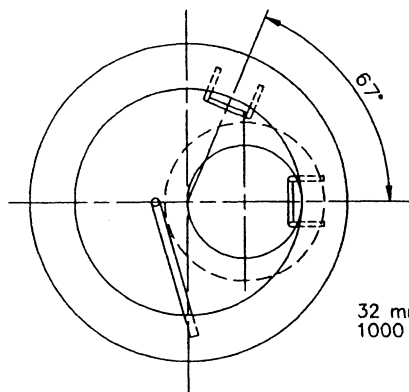
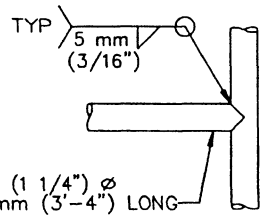


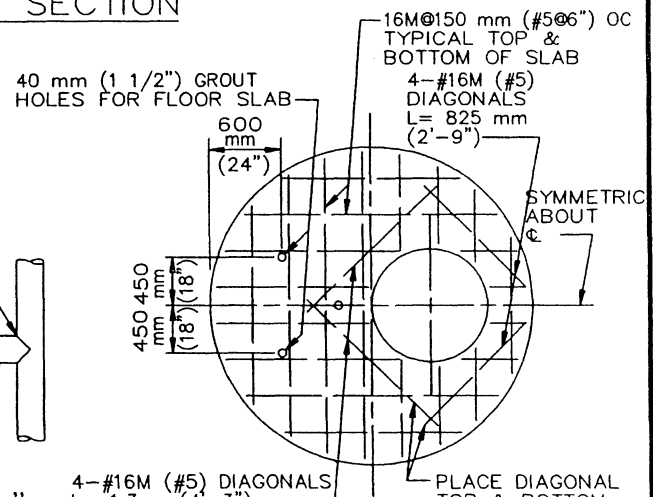
VERTICAL SECTION



SECTION A-A



DETAIL "A"  
ROTATED 90°



SECTION B-B  
REINFORCEMENT DETAILS  
FOR FLOOR AND ROOF SLABS

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

PROMULGATED BY THE  
PUBLIC WORKS STANDARDS INC.  
GREENBOOK COMMITTEE  
1992  
REV. 1996

MANHOLE SHAFT SAFETY LEDGE

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

STANDARD PLAN  
METRIC  
330-1

SHEET 1 OF 2

NOTES

1. MANHOLE SHAFT SAFETY LEDGE WILL BE NOTED ON THE PLANS WHEN REQUIRED. IT IS TO BE CONSTRUCTED WHEN DEPTH OF MANHOLE TO INVERT IS GREATER THAN 6 m (20') AND MANHOLE SHAFT IS GREATER THAN 3 m (10').
2. A SAFETY LEDGE SHALL NOT BE USED IF A PRESSURE MANHOLE IS REQUIRED.
3. STEPS SHALL CONFORM TO SPPWC 635 OR 636 AND SHALL BE ANCHORED 100 mm (4") IN THE WALL OF THE STRUCTURE. STEPS SHALL BE PLACED TO MATCH THE SPACING OF THE MANHOLE SHAFT.
4. REINFORCEMENT SHALL BE PER ASTM A 615M, GRADE 300 (ASTM A 615, GRADE 40) AND SHALL TERMINATE 50 mm (2") CLEAR OF CONCRETE SURFACE UNLESS OTHERWISE SHOWN.
5. GROUT HOLES, PIPE AND FITTINGS SHALL BE PROVIDED IN THE FLOOR SLAB. PRESSURE GROUTING SHALL BE USED TO FILL VOIDS AND TO SECURE UNIFORM BEARING. THE GROUT SHALL BE NEAT CEMENT GROUT AND GROUTING PRESSURES SHALL BE AS DETERMINED IN THE FIELD BY THE ENGINEER.
6. PIPE RAIL SHALL BE FABRICATED OF 32 mm (1 1/4") STANDARD GALVANIZED PIPE COMPOSED OF TWO SECTIONS 2.25 m (7'-6") & 450 mm (18") IN LENGTH JOINED BY A GALVANIZED COUPLING. THE COUPLING SHALL BE THREADED A MINIMUM OF 50 mm (2") ON EACH PIPE LENGTH.
7. ROOF AND FLOOR SLABS SHALL BE PRECAST AND KEYED FOR REINFORCED CONCRETE PIPE SECTIONS AS SHOWN. ALL JOINTS SHALL BE FILLED WITH CLASS C MORTAR AND NEATLY POINTED OR WIPED ON THE INSIDE.
8. 1800 mm (72") RCP SHALL BE PROVIDED WITH TWO CIRCULAR CAGES OF REINFORCEMENT.
9. THE FOLLOWING SPPWC ARE INCORPORATED HEREIN:  
  
324 MANHOLE SHAFT – WITH ECCENTRIC REDUCER  
326 MANHOLE SHAFT – 900mm (36") WITHOUT REDUCER  
635 STEEL STEP  
636 POLYPROPYLENE PLASTIC STEP

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

**MANHOLE SHAFT SAFETY LEDGE**

STANDARD PLAN  
METRIC

**330-1**

SHEET 2 OF 2