1. Proprietary Catch basin handholds and steps are acceptable, provided that they conform to Sec. R, ASTM C478, AASHTO M-199 and meet all WISHA requirements.

2. Catch basin step/handhold legs shall be parallel or approximately radial at the option of the manufacturer, except that all steps in any catch basin shall be similar. Penetration of outer wall by a leg is prohibited.

3. Handholds and steps shall have "drop" rungs as shown on detail or protuberances to prevent sideways slip.

4. Slab opening may be 24" x 20" or 24" diam.

5. Plastic steps shall be polypropylene and conform to ASTM D-4101 with 1/2" ASTM-615 grade 60 steel reinforcing bar, lane P-13938, M.A. PS2-PF, or equal.

6. Steps of ladders or steps shall extend to within 16" of bottom of catch basin.

7. Hinging ladders shall be permanently fastened at top by hanging on step or by bolting or embeding in concrete. Each shall be embeded at bottom in base.

8. Additional safety features may be required in very deep or unusual structures.

9. Square opening allowed only for catch basins designed to collect water.