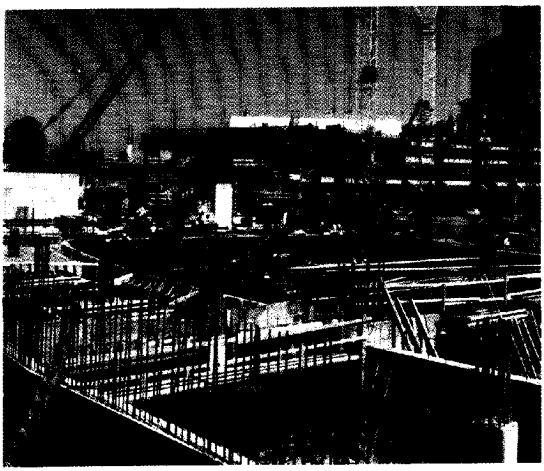

Effective scheduling of work areas was a must. ▲

The ability of cast-in-place concrete to adapt to design changes was tested early. Soon after work on the foundations had begun, a proposal was introduced to endow SkyDome with a 370-room, 12-storey hotel, to be situated at the north end of the stadium. Ideally suited to the design/build method, concrete met the challenge.

Footings and columns in the hotel area were strengthened, while the schedule on the remainder of the footings was maintained simultaneously. Similarly, the concept of a 3-level health club (below grade) on the west side was translated into a reality.

The confined space in which the work was taking place added to the problems that needed answers. Storage yards for rebar were set up outside the site's perimeter and a farm wagon hauled the steel to the site as required - a somewhat unsophisticated solution that nevertheless did the job.

Much of the work in preparation for the pouring of the 48 main frames was completed at ground level. By assembling rebar cages on site and hoisting them by crane, this part of the job took less than half the usual time. In all, about 2,000 self-supporting rebar cages were made, eliminating the cost of scaffolding and the time it would have taken to build it. Since the components of the main frames had been made at ground level, gaining access for placement without the benefit of floors to work from, was another part of the puzzle to solve. The answer was to build 600 mm wide platforms on two opposing sides of the pre-assembled forms, to serve as walkways. It was then relatively simple to drop the rebar cages into place.

Columns and main frames were constructed first, with tie beams coming later. A further factor which helped to speed things up was the use of full tension mechanical connectors employed at the intersection of the tie beams and mainframes.

◄ 48 cast-in-place main frames form the basic structure.