Figure 4 illustrates the placing of a 13 foot by 60 foot floor section. There can be little doubt that this unique method of prefabrication and erection of the floor system will result in economy and speed. After these sections have been placed, the entire concrete floor deck can be poured in one operation without the expense of employing shores. The steel deck also serves as access runways for telephone and power cells. Like-wise, the open web trusses allow complete freedom for horizontal runs of utilities between floor and ceiling throughout 75 per cent of the total floor area. Structurally this floor system acts to support the live and dead floor loads and also serves as a diaphragm, substantially stiffened by composite action, to tie the exterior columns and core at each story level. The floor system at the corners will be reinforced by a two-way truss acting as a double layer grid. This stiffens the corners of the structure by adequately tying the exterior wall sections into the core. The floor plan showing these transverse members is shown in Figure 2. Gravity loads are taken by the exterior and core columns. The exterior walls take all the moments and shear due to wind.

Figure 5 shows a plan and detail of the exterior framing system. The exterior columns illustrated are spaced 3 foot-3 inches on center around the entire periphery of each tower. These columns will run unintermittently from about 80 feet above street level to the roof. Below this 80 foot level loads are to be transferred to larger columns spaced 9 feet-9 inches on center. This provides wider spanning at the lobby level for entrance doors. These columns are to be prefabricated from steel plate using various grades of high strength steel ranging from low alloy heat treated steel with yield points up to 100,000 psi to ASTM Designation A-441 steel with a minimum yield point of 42,000 psi.

At each floor level a spandrel is provided, also fabricated of plate as shown in the elevation section in Figure 5. The spandrel and column sections are to be prefabricated into units as illustrated in the schematic drawing showing the exterior view in Figure 6. The complete unit, shown being placed in the drawing, will be shop welded into three modules measuring 9 feet 9 inches wide, by 24 feet (two stories) high. The columns will be milled simultaneously at both ends on special equipment in order to eliminate inaccuracies due to repositioning the assembly in the milling machine. The milled ends of the columns will be field welded and every third module of the spandrel will be field bolted by a splice plate as illustrated in the exterior section shown in Figure 5. This prefabricated method of construction of the most critical structural elements of the entire structural system provides many advantages:

1. Each unit can be made from a jig as a pre-fabricated or manufactured unit, resulting in greatly increased speed of fabrication.
2. The number of field connections is reduced to a minimum.
3. Close erection tolerances with maximum speed of erection is possible.
4. The units serve not only as the principal load carrying members of the structure but also as a base for the facade of the entire exterior walls. Therefore, individual curtain or load bearing walls are completely eliminated.

The facade will consist of either stainless steel or aluminum.