

GENERAL NOTES

1. Contractor shall verify all existing conditions and dimensions at the site prior to starting construction. Any discrepancies shall be reported to the engineer immediately.
2. Contractor shall coordinate structural plans and sections with Architectural Drawings and report any discrepancies to the Architect prior to starting construction.
3. All STRUCTURAL Shop Drawings shall be submitted to the Structural Engineer for review. The contractor shall submit one set of sepias and one set of blue-line prints of shop drawings for review. The sepias will be returned after review for distribution.

DESIGN CRITERIA

1. Foundation has been designed in accordance with the provision of Uniform Building Code, 1983 Edition, the Building Code. The design live loads in addition to the structure weight and 20 PSF allowance for the partition load at office floors are shown below.

Roof	20 PSF
Corridor	100 PSF
Floor (Tower)	100 PSF
Floor (Garage)	50 PSF

* The allowance of 10 PSF for ceiling, M.E.P. equipment, and sprinkler system is included in the live loads with applicable reduction.

** The floor slab shall also be designed without uniform live load, for two concentrated vehicle wheel loads of 2,000 pounds over 2'-6" x 2'-6" are each at 5 feet apart. The design shall be governed by the uniform load or the concentrated loads whichever produces the greater stresses per Section 2304(c) of the Building Code.

No live load reduction shall be used for the design of roof framing members. Live load reductions on the elevated lease floors have been incorporated in the foundation design and is permissible in the design of the precast elements per the Building Code by the precast supplier.

2. Wind load 70 M.P.H. (100-year occurrence). The exposure "B" resultant pressures per Table 23-H of the Building Code are summarized below.

Wind pressure $P = C_e \times C_q \times X \times q_s \times K_1$ psf Eq. (11-1)

Height	Primary frames		Elements and components		Parapets
	Ce	Cq=1.3	Enclosed Structures	Open Structures	
0'-20'	0.7	1.1	10.0	14.6	11.9
20'-40'	0.8	1.3	11.5	16.7	13.6
40'-60'	1.0	1.6	14.3	20.8	16.9
60'-100'	1.1	1.8	15.8	22.9	18.6

Height	Local area at discontinuities			Minor Structures
	Wall corners	Roof ridge at ends of bldgs.	Eave or rakes w/o overhangs away from building corners	
	Ce	Cq=2.0	Cq=1.1	Cq=3.0
0'-20'	0.7	18.2	10.0	27.3
20'-40'	0.8	20.8	11.5	31.2
40'-60'	1.0	26.0	14.3	39.0
60'-100'	1.1	28.6	15.8	42.9

3. Seismic load Zone 2 with resultant force per Building Code.
4. The precast superstructures shall be designed to be restrained for fire resistance. Such restraints shall be provided by the precast concrete double tees, beams, and spandrels through its connections to the columns and walls and the cast-in-place concrete topping per the Building Code and the fire rating as specified by the Architect.

FOUNDATION

1. The pile foundation system is based on the recommendation of "Geotechnical Investigation, The Keleher Executive Center, Albuquerque, New Mexico" by Fox and Associates of New Mexico, Inc dated December 14, 1987 and supplementary documents.
2. Piles shall be drilled or driven to elevation shown on these drawings by a method approved by the Geotechnical Engineer.

CONCRETE

1. Concrete shall have natural sand fine aggregates and normal weight coarse aggregates conforming to ASTM C33, Type 1 Portland Cement to ASTM C150. All concrete shall have a 28-day compressive test strength of 3,000 PSI unless noted otherwise.

Walls	4000 PSI
Pile Caps and Grade Beams	4000 PSI
Pile (Conform to ASTM C109 Grout Cube)	5000 PSI
Precast inverted tee beams, spandrel beams, columns, and walls	5000 PSI

2. Detailing, fabrication and placing of reinforcing steel shall be in accordance with the ACI Detailing Manual, ACI 315-80.
3. Cover to reinforcing steel shall be as specified in ACI 318-83.
4. Mixing, transporting and placing of concrete shall conform to ACI 304-73.
5. ACI Concrete work shall conform to ACI 318-83.
6. Reinforcing Bars #4 and larger shall conform to ASTM A615, Grade 60, KSI. Reinforcing #3 and smaller may conform to ASTM A615, Grade 40, KSI. If foreign steel is used fabricator shall supply copies of test certificates from an approved USA testing laboratory.
7. Welded wire fabric shall conform to ASTM A185, supplied in flat sheets. Lap at least one mesh plus 2 in.
8. All reinforcing bars marked continuous (CONT.) shall be lapped 36 bar diameters at all changes of direction and splices. Unless noted otherwise, lap top bars in Mid-Span and bottom bars at supports.
9. Reinforcing bars may not be welded without approval of the Structural Engineer.
10. Concrete shall have natural sand and fine aggregates and light weight coarse aggregates conforming to ASTM C330, Type 1 Portland Cement conforming to ASTM 150 with the following 28-day compressive strength and cured unit weight not exceeding 115 pounds per cubic foot.

Precast double tees	5000 PSI
Topping (3" average)	3000 PSI

11. All sand light weight concrete used in the precast double tees in the office tower shall be Grade A concrete. All other normal weight concrete used in the cast-in-place and precast concrete shall be Grade B concrete per Section 4302(d) of the Building Code.