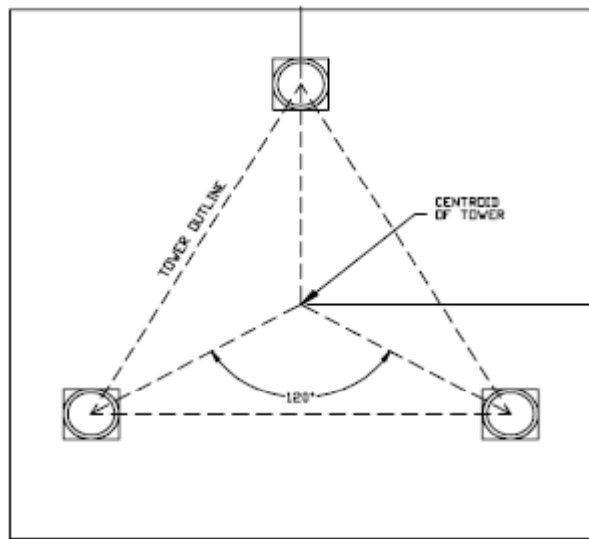




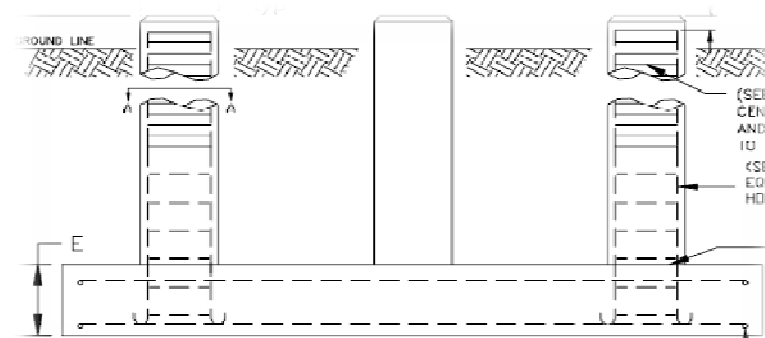
Project: Design of reinforced concrete tower foundations
(communications, electrical, wind power, tanks)

Software: ADAPT-MAT

Solution: Intuitive modeling, analysis and design tool for reinforced concrete or post-tensioned mat foundations of any geometry or with any loading



Typical Plan View

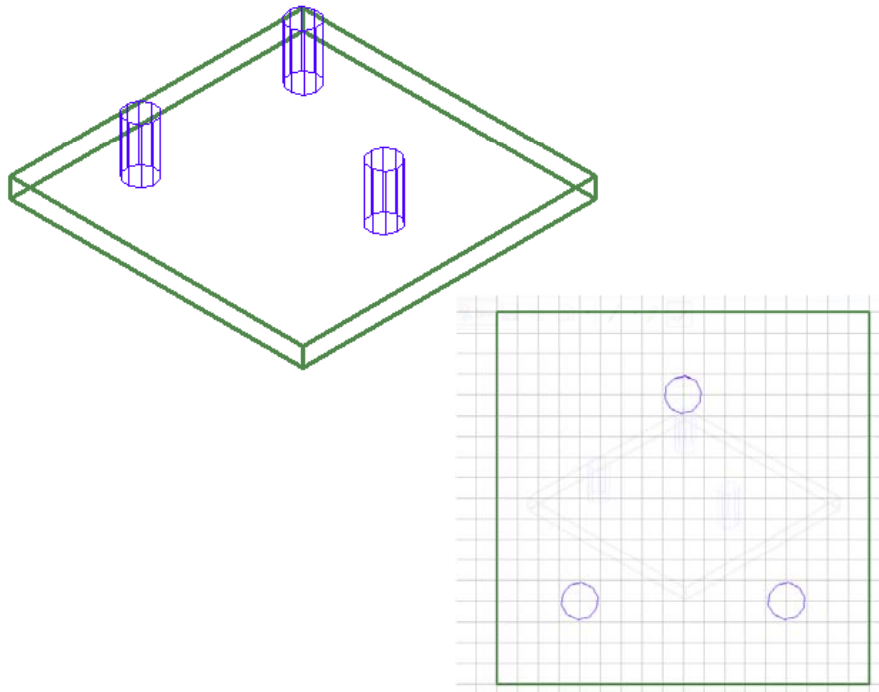


Typical Elevation

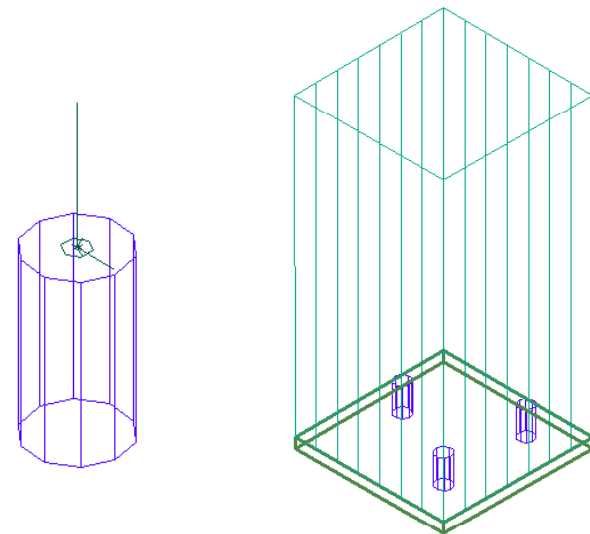


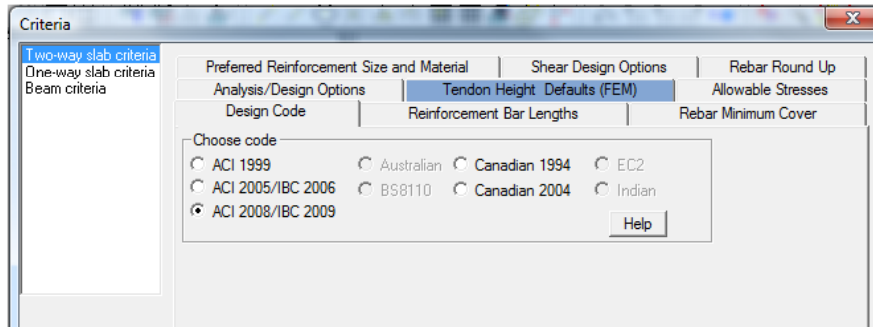


Import CAD file and quickly model true 3D geometry

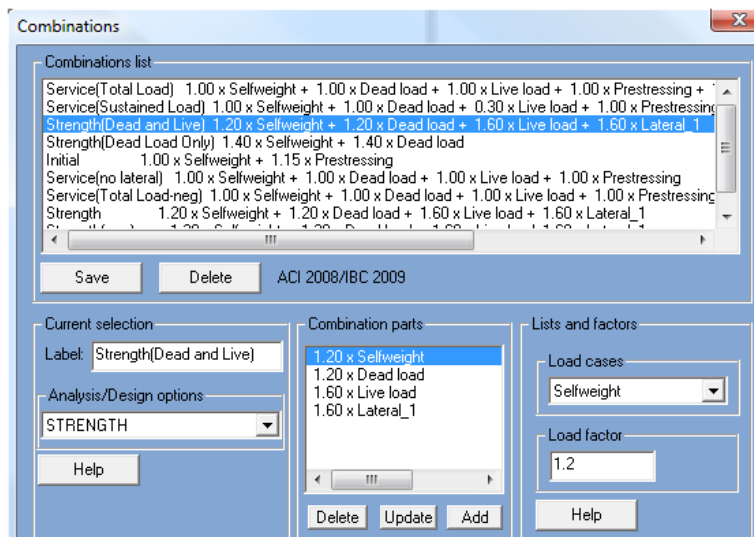


Apply loads to pedestals, columns, and/or slab surface



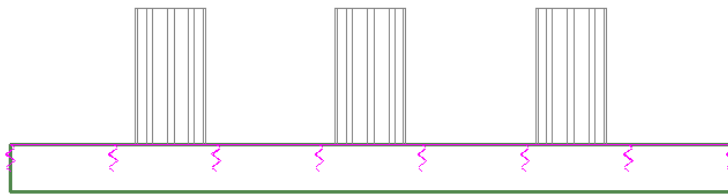


Select from latest design codes and fine-tune project design parameters

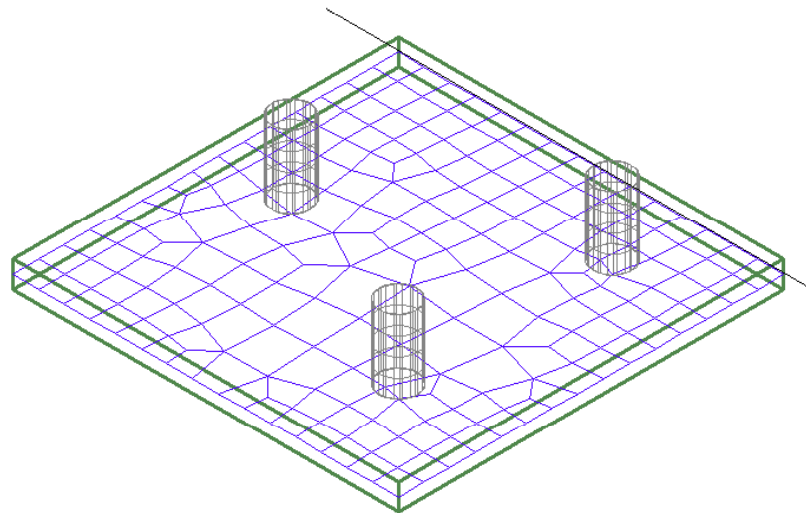


Create load combinations for service and strength conditions

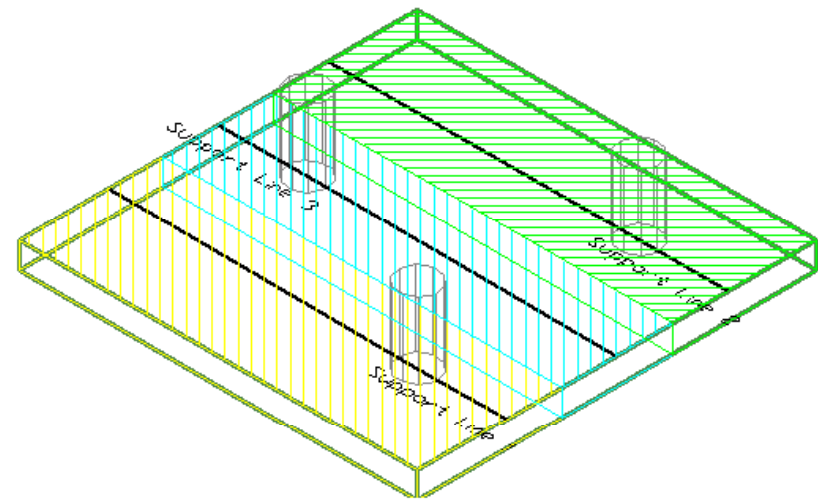




Model any configuration of soil support

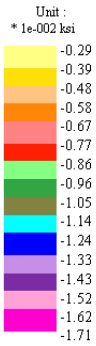


ADAPT-MAT automatically generates accurate Finite Element mesh

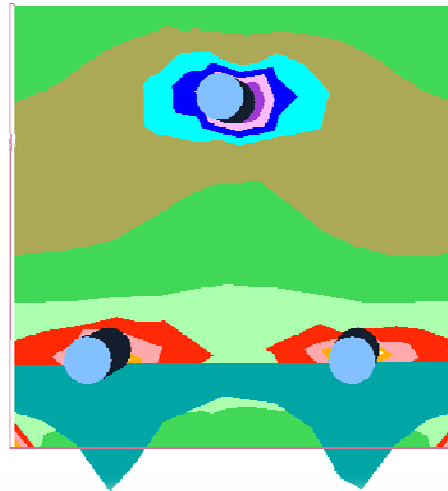


Design strips are used to determine placement of reinforcement

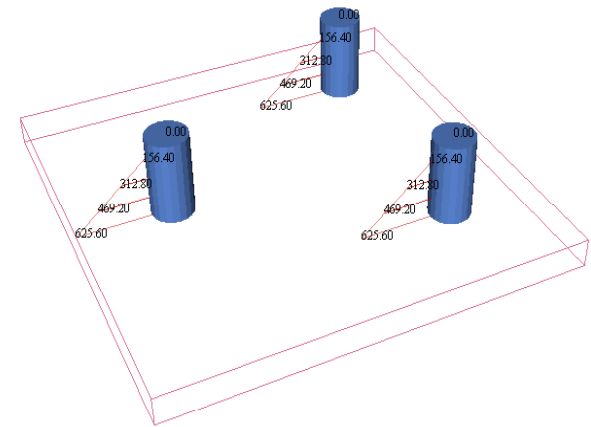




Check soil pressures for different load conditions

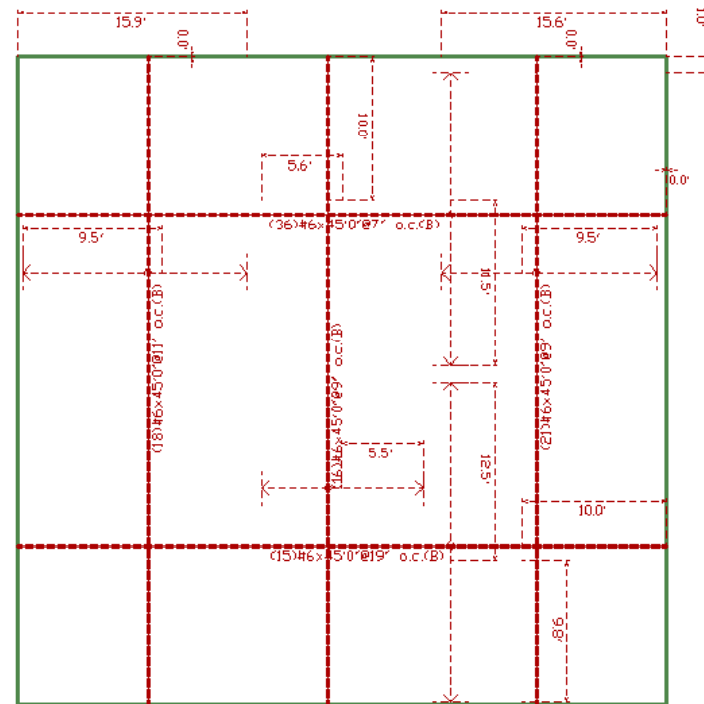
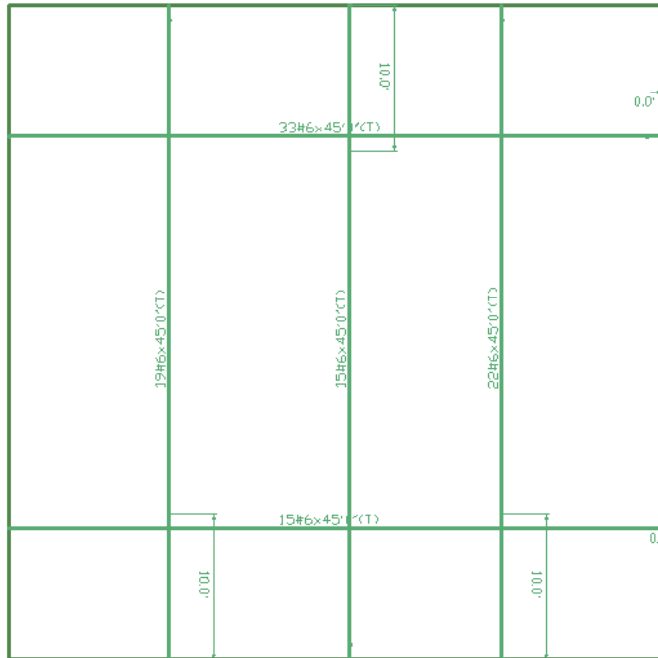


Review moment distributions



Visualize actions in pedestal, columns

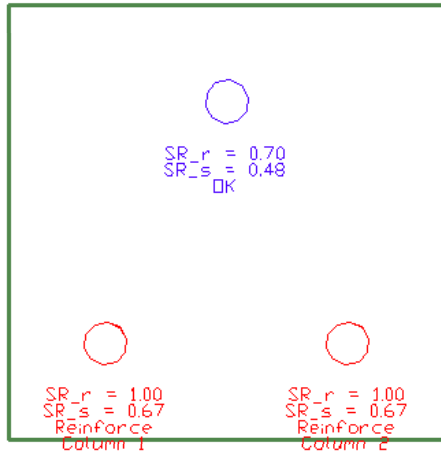




Generate top and bottom reinforcement drawings

- Can specify and check against typical reinforcement in foundation
- Rebar layout exportable as dwg / dxf files





Software automatically generates quantity takeoff

210.00 REBAR TOTALS

Bar Reinforcement (calculated and user defined base reinforcement)

Load combination: Envelope

Group	Quantity	Size	Length/ bar	Length	Weight	Unit cost	Total cost
	bars		ft	ft	lb	\$/lb	\$
1	210	#6	45.00	9450.00	14194.32	3.00	42582.95
Total				9450.00	14194.32		42582.95

Load Combination: Strength(neg)
Number of rails per side: 2

Column ID	Number of studs/rail	Stud diameter (in)	Studs	1	2	3	4	5	6
1	20	0.50	Distance	4.00	8.00	12.00	16.00	20.00	24.00
				(7)28.00	(8)32.00	(9)36.00	(10)40.00	(11)44.00	(12)48.00
				(13)52.00	(14)56.00	(15)60.00	(16)64.00	(17)68.00	(18)72.00
				(19)76.00	(20)80.00				

Total volume of concrete = 6075.00 ft³ (225.00/cu yd)
 Total surface of floor slabs = 2025.00 ft²
 Average rebar usage = 7.01 lb/ft², 2.34 lb/ft³ (0.09 lb/cu yd)
 Total cost of reinforcement = 42582.95 \$

Punching shear check and report of required shear reinforcement

