

Surf Club, Miami Beach Condo-Hotel



The Surf Club, Four Season Private Residences



Project Owner

- Four Seasons

General Contractor

- Coastal Construction

Frame Contractor

- Baker Concrete. Inc

Engineer of Record

- De-Simone Consulting Engineers

Specialty Engineer

- Kline Engineering & Consulting

Post-Tensioning Sub-contractor

- VSL-Florida

The Surf Club, Four Season Private Residences, The History

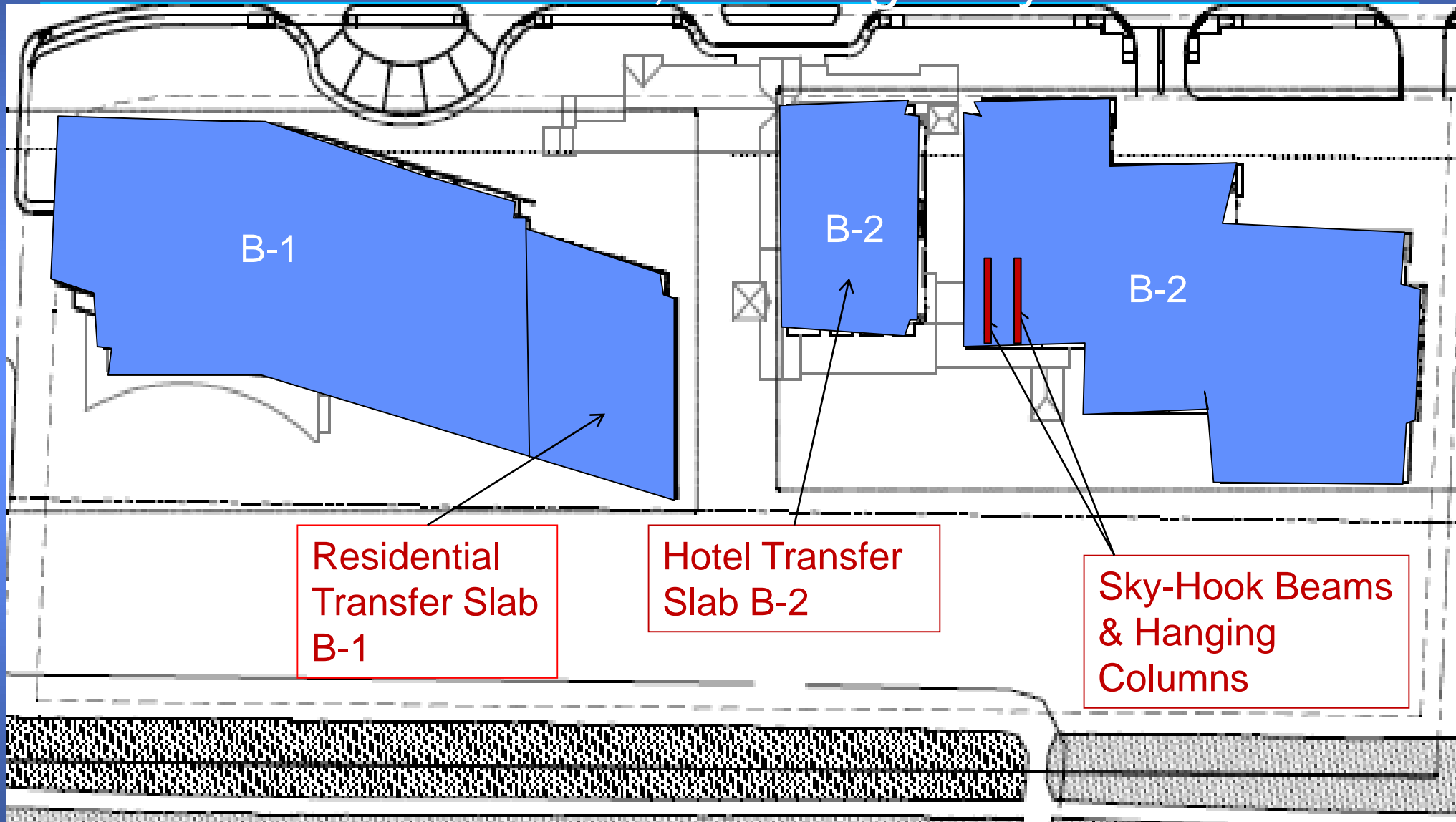
Established in 1930, the celebrated Surf Club has stood the test of time as South Florida's premier private beach club. The Surf-Club has attracted a litany of world-famous personalities including General Douglas Mac Arthur; perhaps the club's most famous guest was Sir Winston Churchill, who visited in 1946 to paint panoramic seascapes from the balcony



- u 6' thick post-tensioned transfer slabs
- u Post-tensioned columns to be supported from roof level
- u Use of both mono-strand and multi-strand to make the designs as efficient as possible.



Surf Club, Four Season Private Residences, Buildings Layout

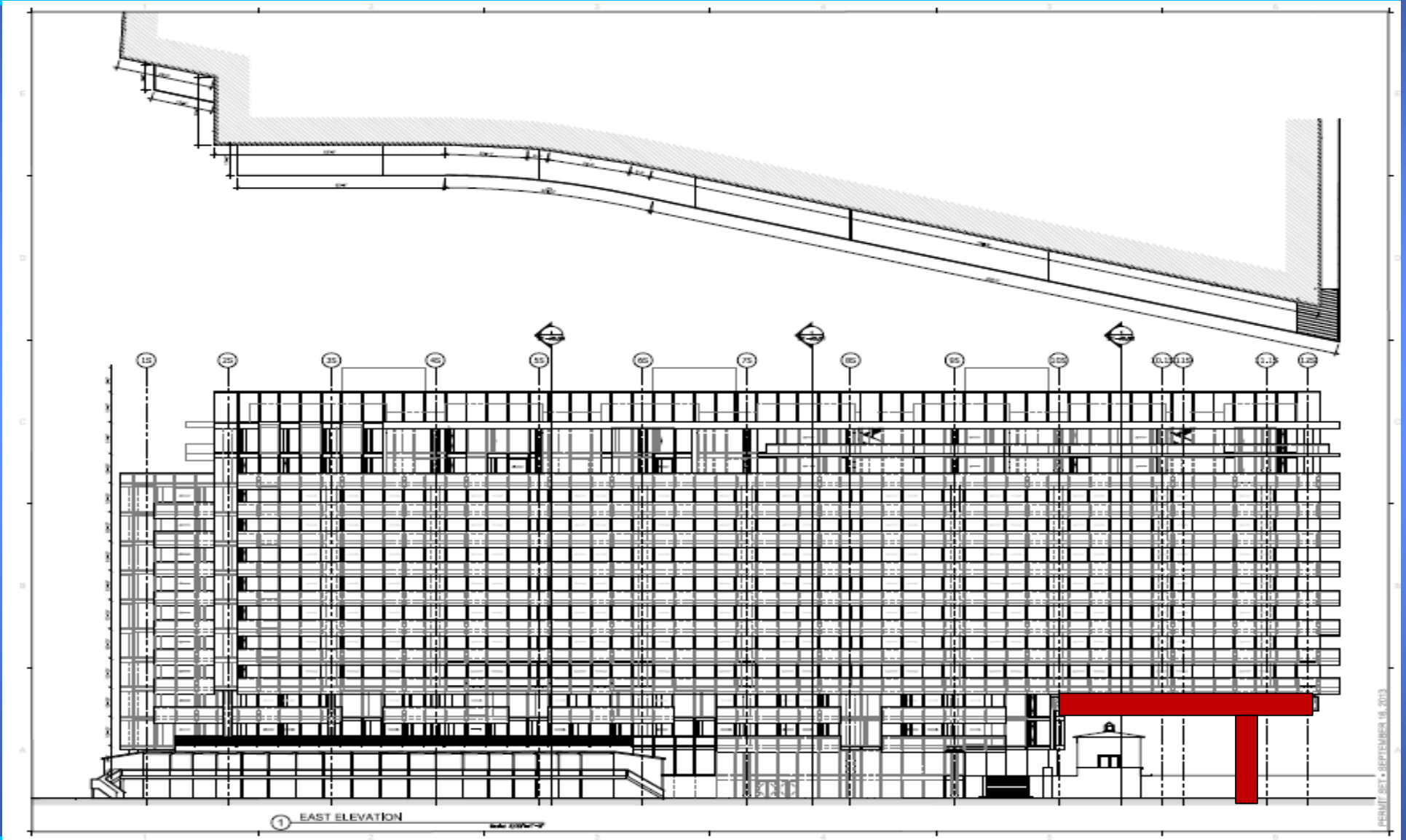


- 80ft x 100 ft
- 40 ft. Cantilever
- 60 ft Span
- Carrying 9 floors above
- 6 ft Thick at the Column
and Tapering to 3ft at edges

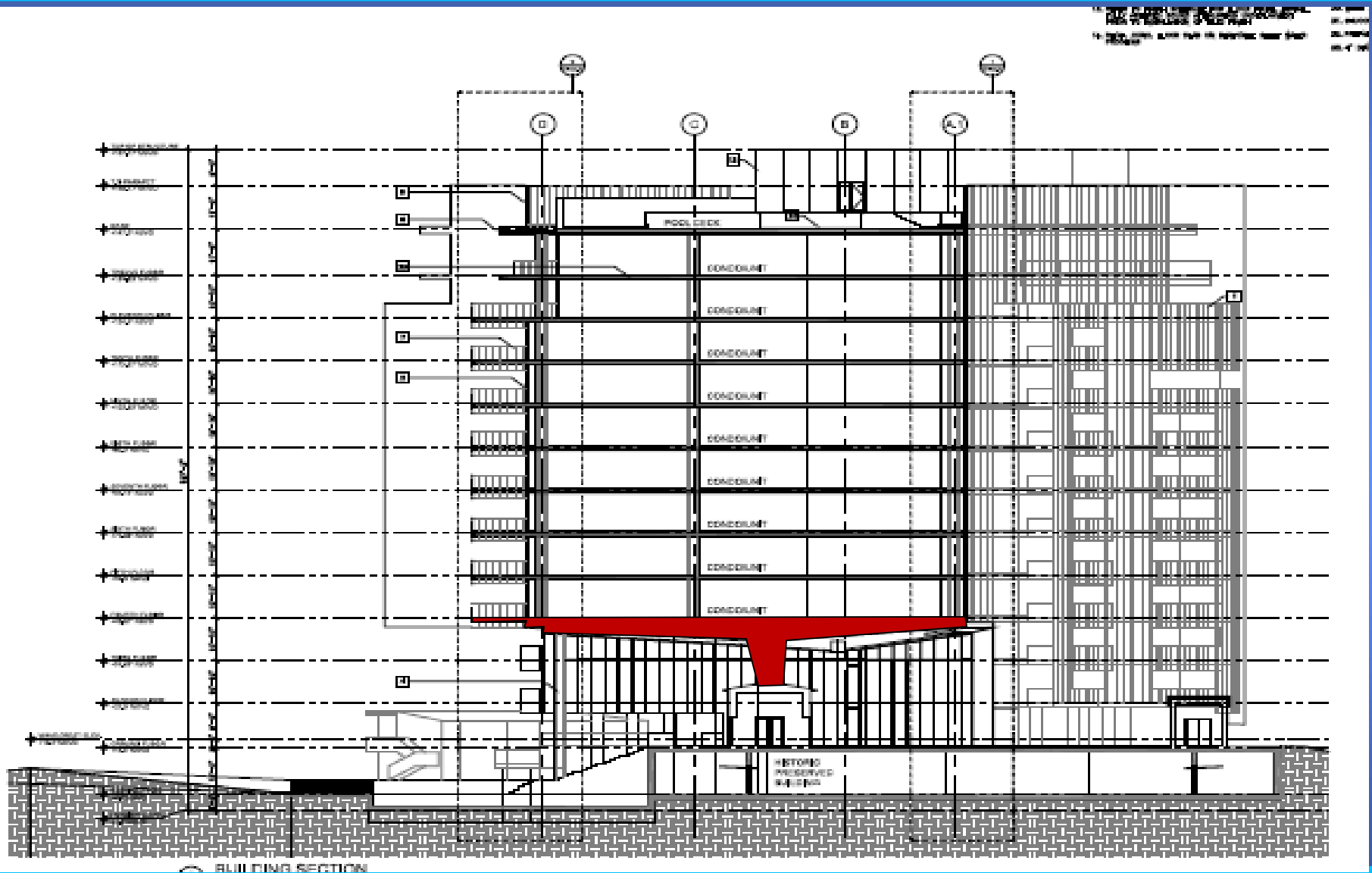


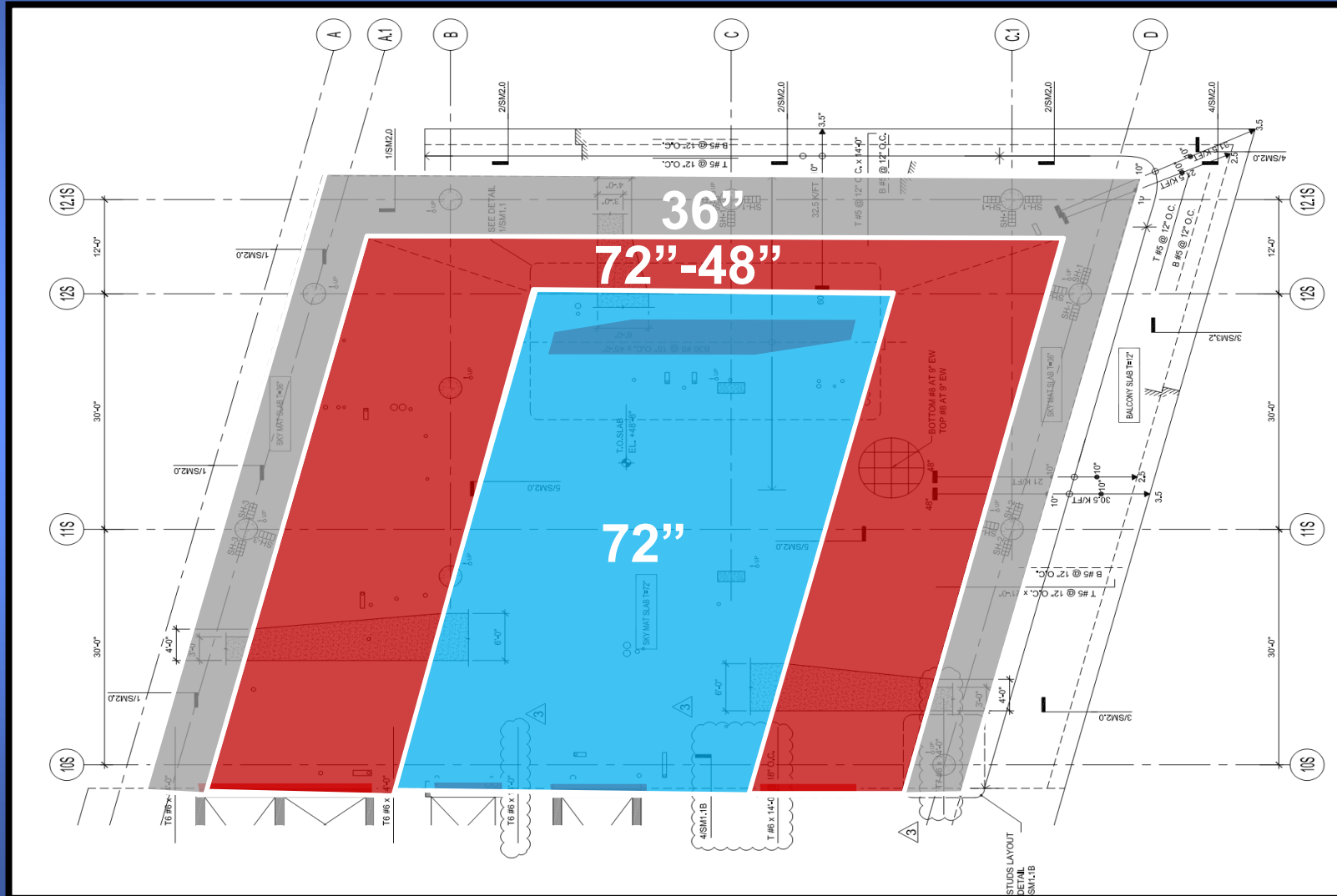
SCALE: 1/8" = 1'-0"

Surf Club, South Tower Building-1



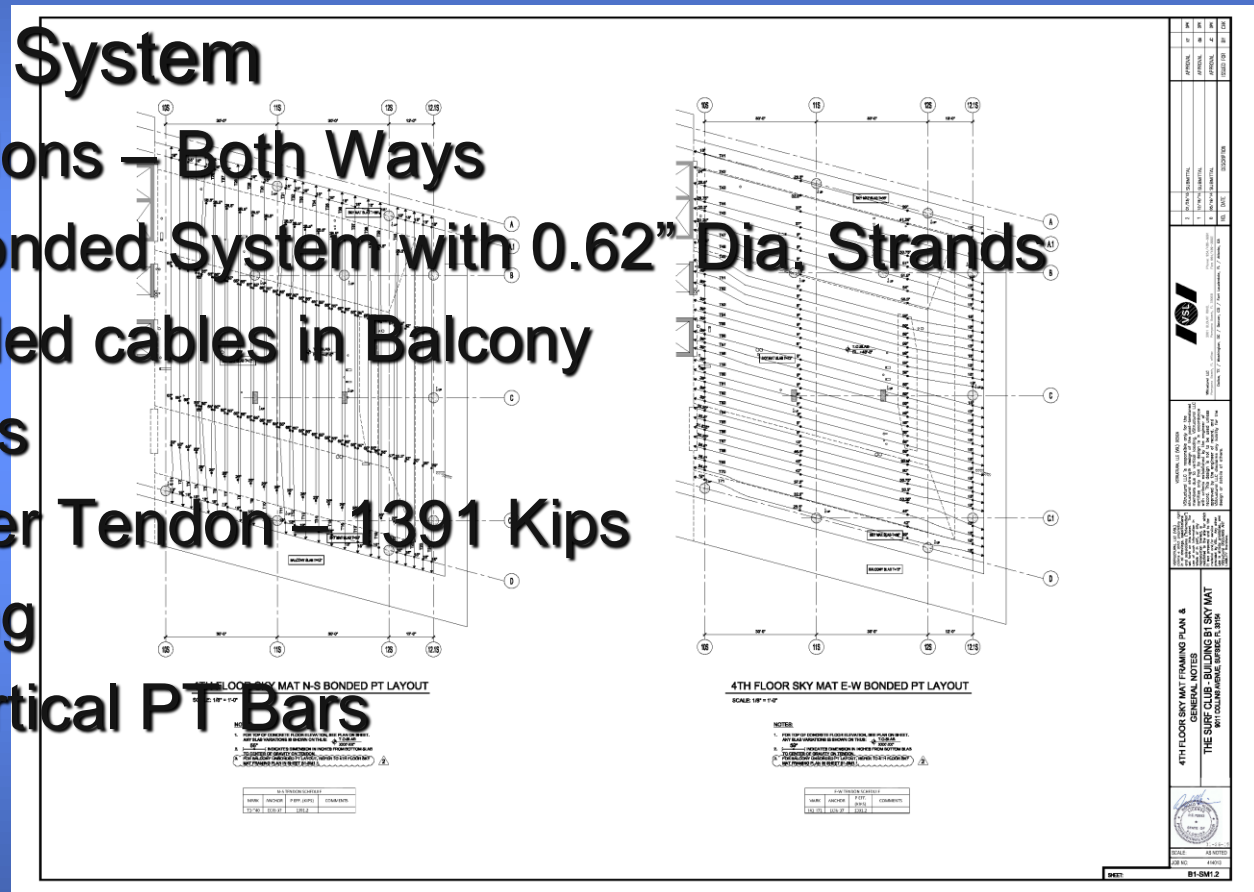
Residential Transfer Slab

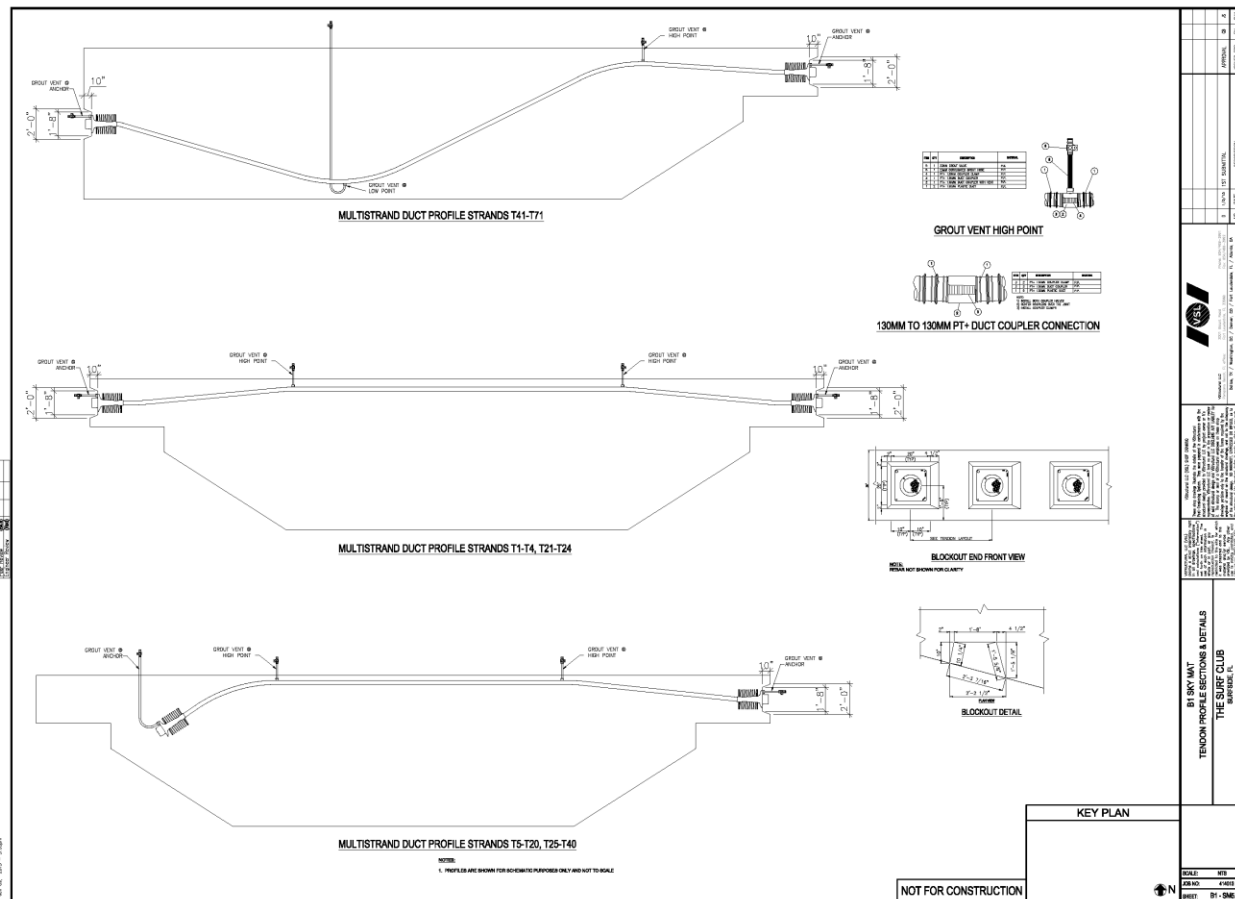




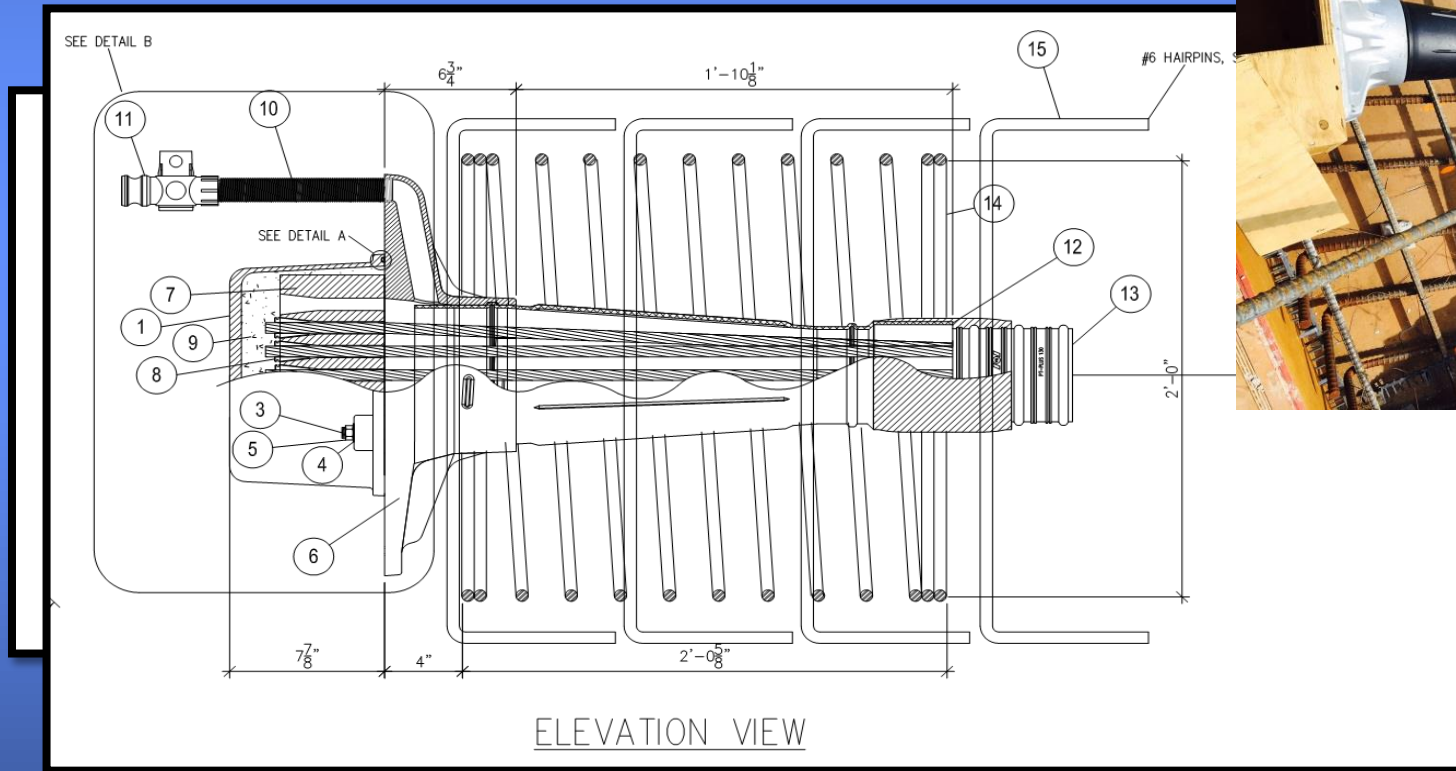
u Post-Tensioning System

- Distributed Tendons – Both Ways
- VSL GC 6-37 Bonded System with 0.62" Dia. Strands
- 0.5" dia. Unbonded cables in Balcony
- Total 72 Tendons
- Jacking Force per Tendon – 1391 Kips
- 2 Stage Stressing
- 234 ea. 1 3/4" Vertical PT Bars to handle Shear





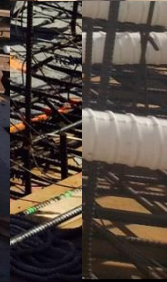
Residential Transfer Slab



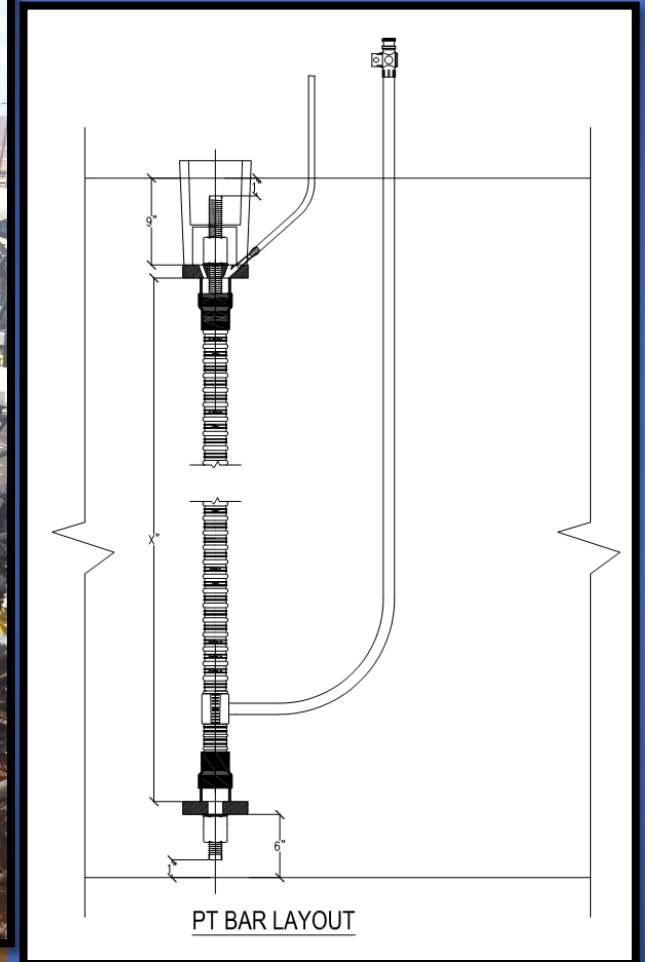
Residential Transfer Slab



Residential Transfer Slab



Residential Transfer Slab



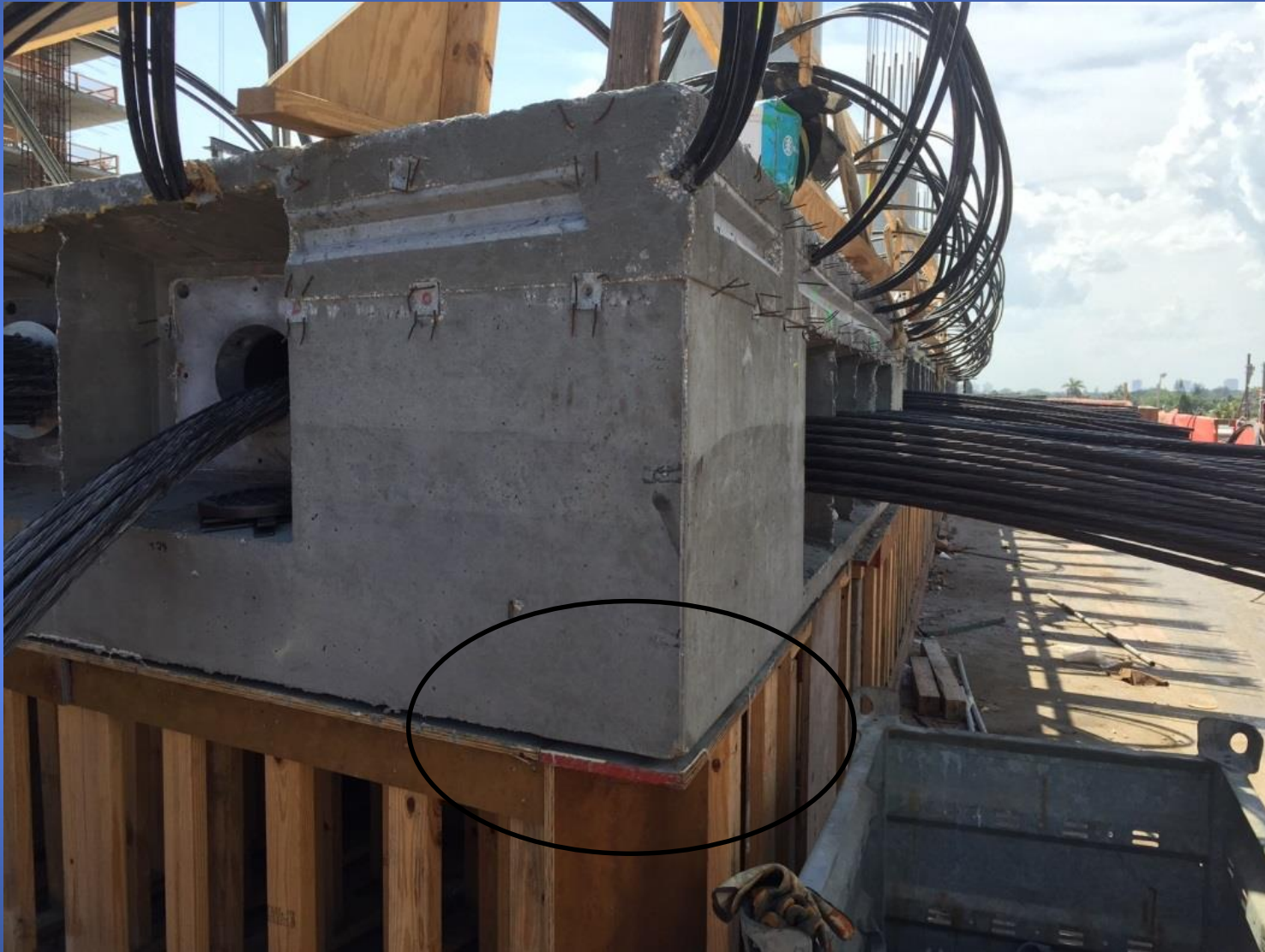
Residential Transfer Slab



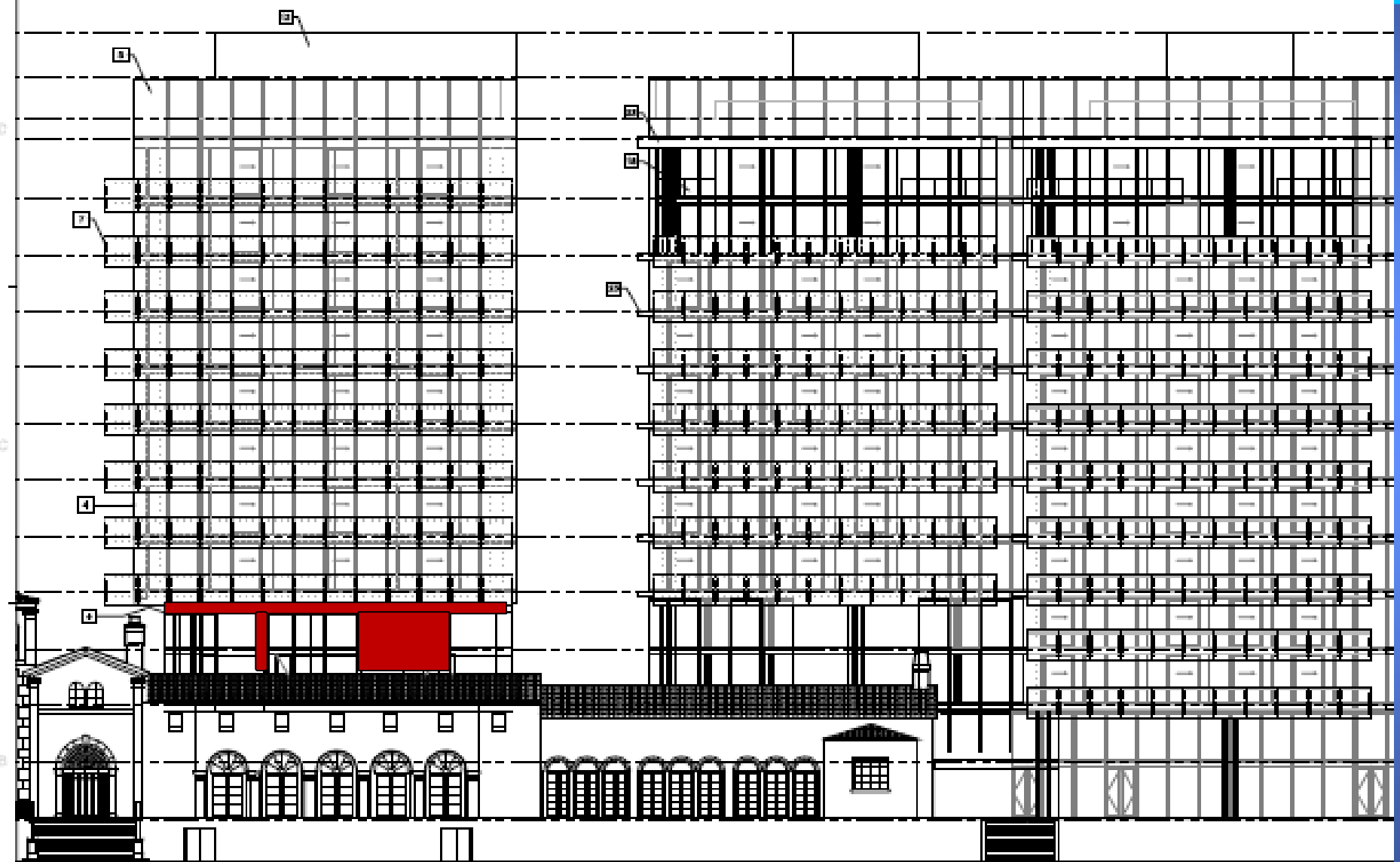
Residential Transfer Slab



Residential Transfer Slab

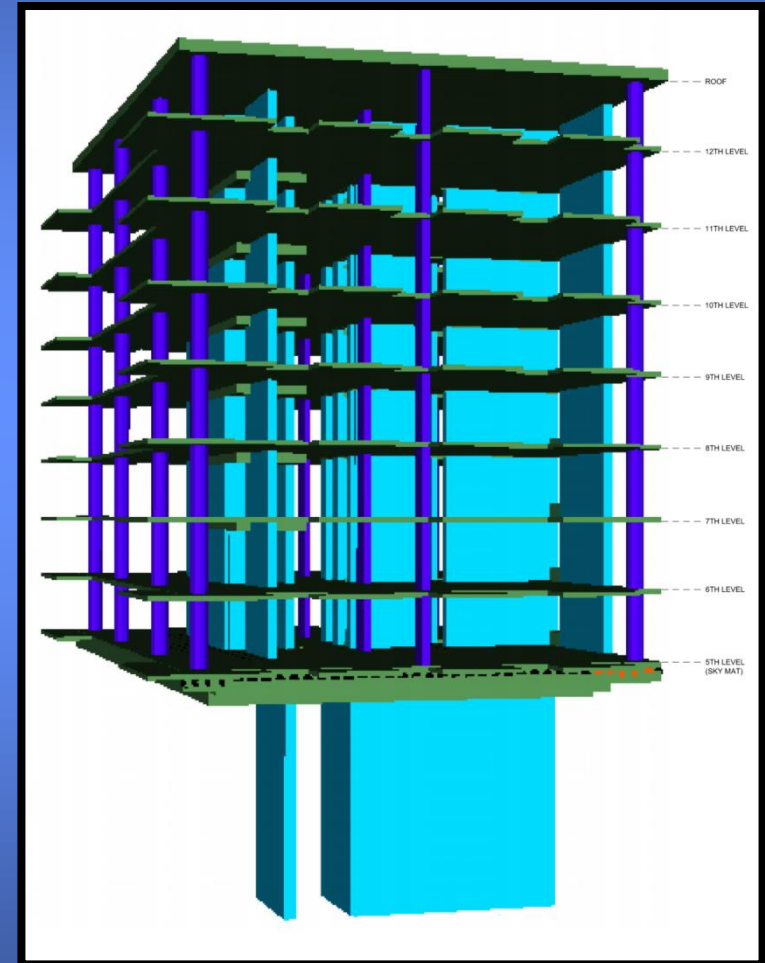


Hotel Transfer Slab



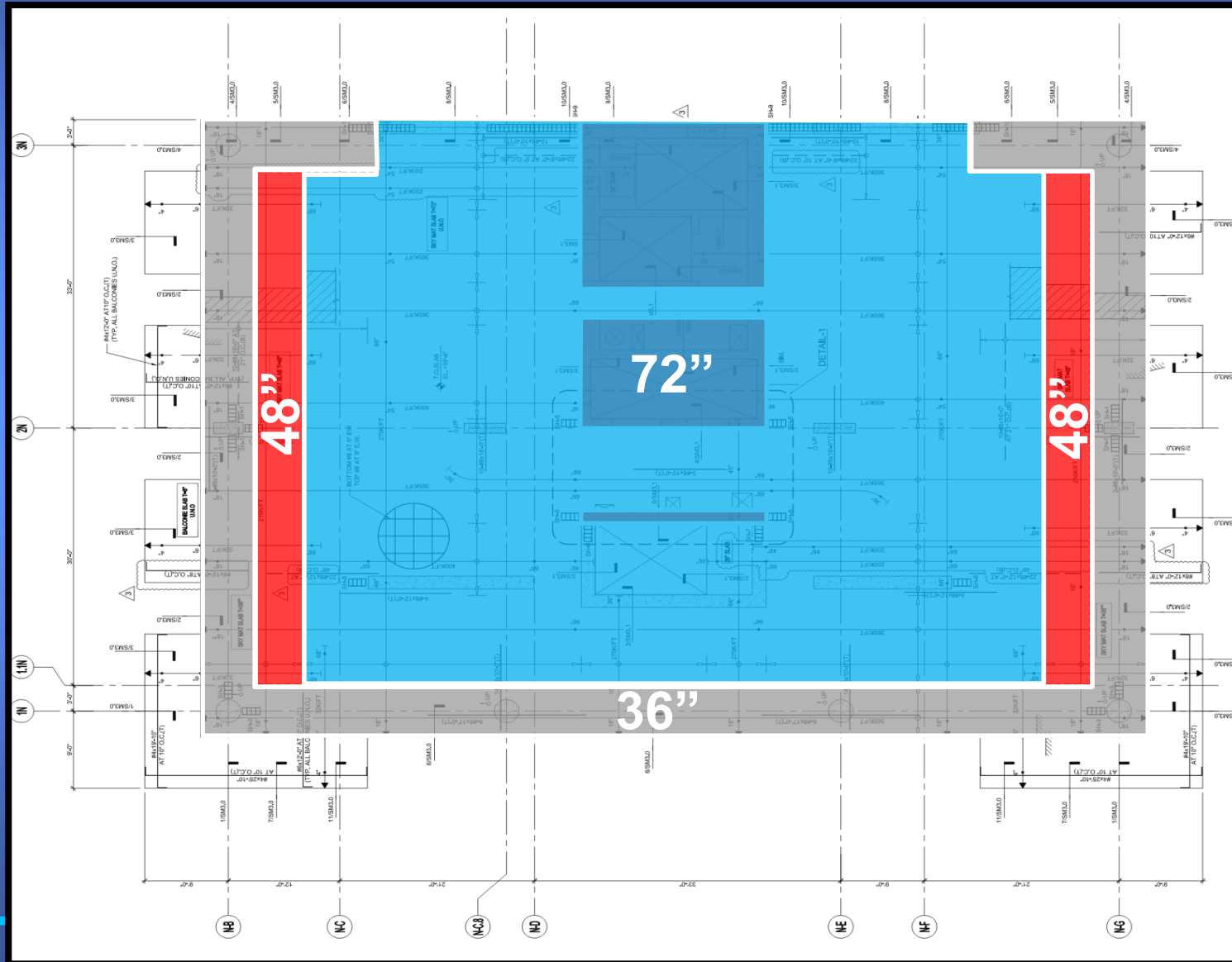
u Slab Geometry

- 6 ft Thick
- 42 ft Cantilever Slab
- Carrying 8 Floors above
- 3D Modelling to Analyze Slab using ADAPT Edge
- 100ft x 72 ft dimension





Hotel Transfer Slab



Hotel Transfer Slab



Hotel Transfer Slab



Hotel Transfer Slab



Hotel Transfer Slab



Hotel Transfer Slab



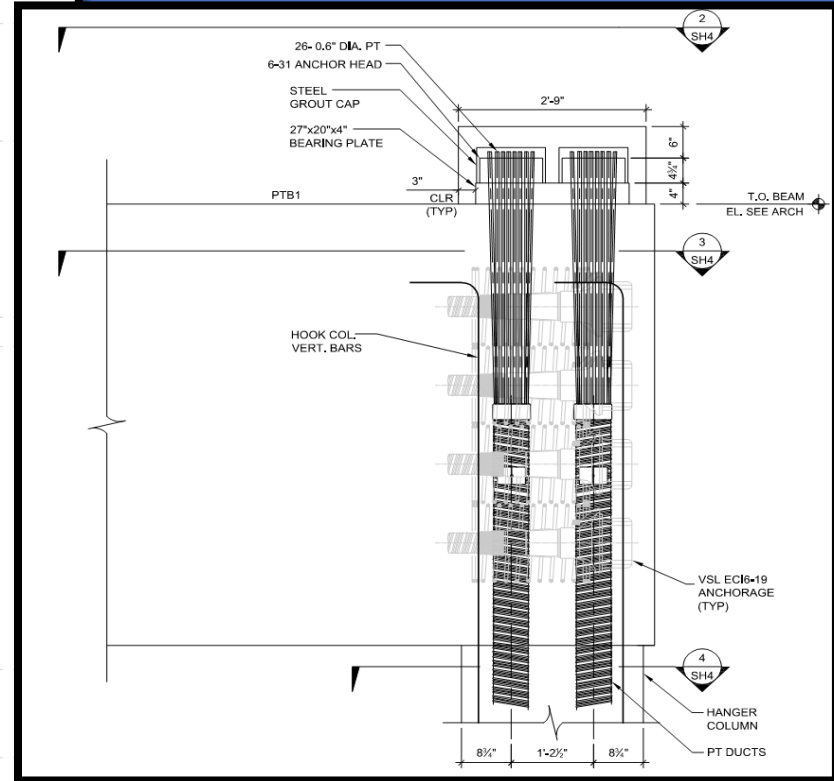
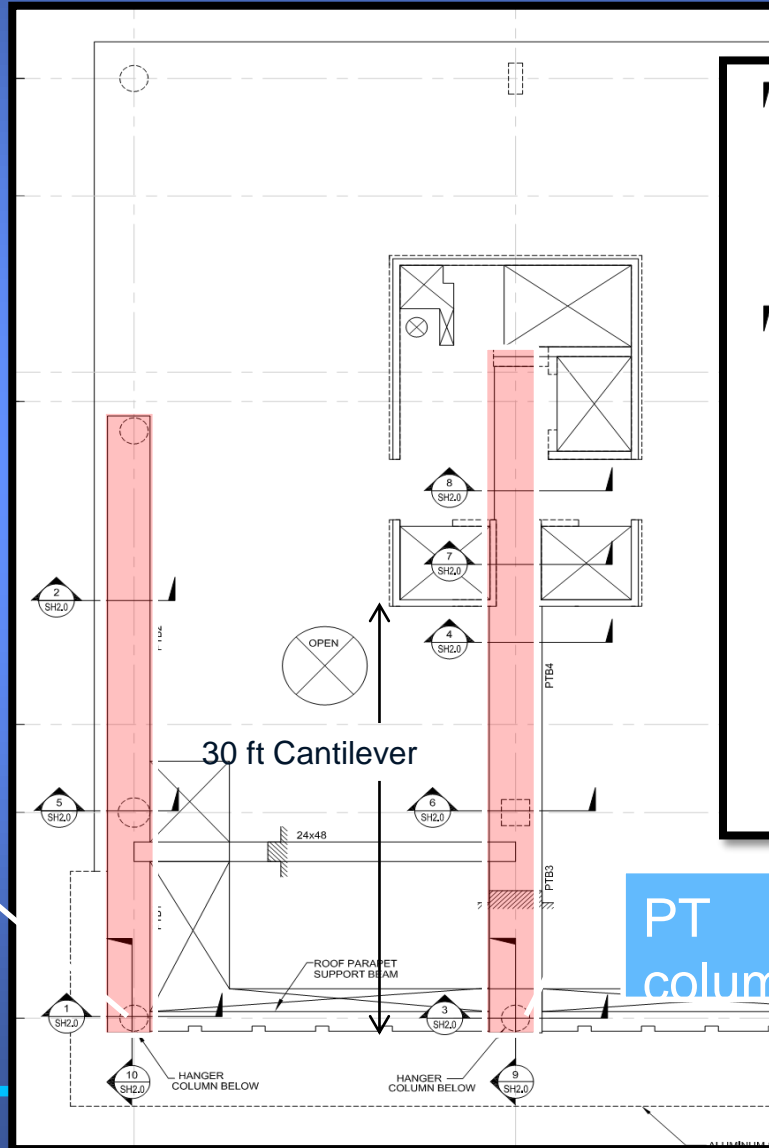
Hotel Transfer Slab



Hanging Column



Hanging Column



PT
column

PT
column

Hanging Column



u QUESTIONS??