BALLASTING APPROACH PROBLEM ASSUMPTIONS

The existing Pacific Plaza Project includes an existing parking garage that extends approximately 28 feet below grade to the mat foundation. Following a detailed analysis, the project's structural engineer has determined that the upward buoyancy forces acting on the structure from the below grade water table will exceed the downward gravitational loads of the building during the construction phase. This is documented in the attached letter from the structural engineer (for reference only).

As specified in the Request for Proposal (RFP), the General Contractor selected for this project will bear full responsibility for devising and implementing the necessary means and methods in a safe manner to effectively mitigate the impacts of buoyancy forces throughout the construction process.

The following assumptions may be used in determining your approach to ballasting the structure:

1) Prior to any structural demolition of Level 4, the building will need to be ballasted.
2) The weight required to ballast the building prior to Level 4 structural demolition is 10,000,000 pounds.
3) Once the 7th floor structural slab has been placed, the building may be de-ballasted.
4) The building shall be completely de-ballasted by the time of placement of the 8th floor structural slab.

Section Cut of Basement for Visual Reference of Water Table

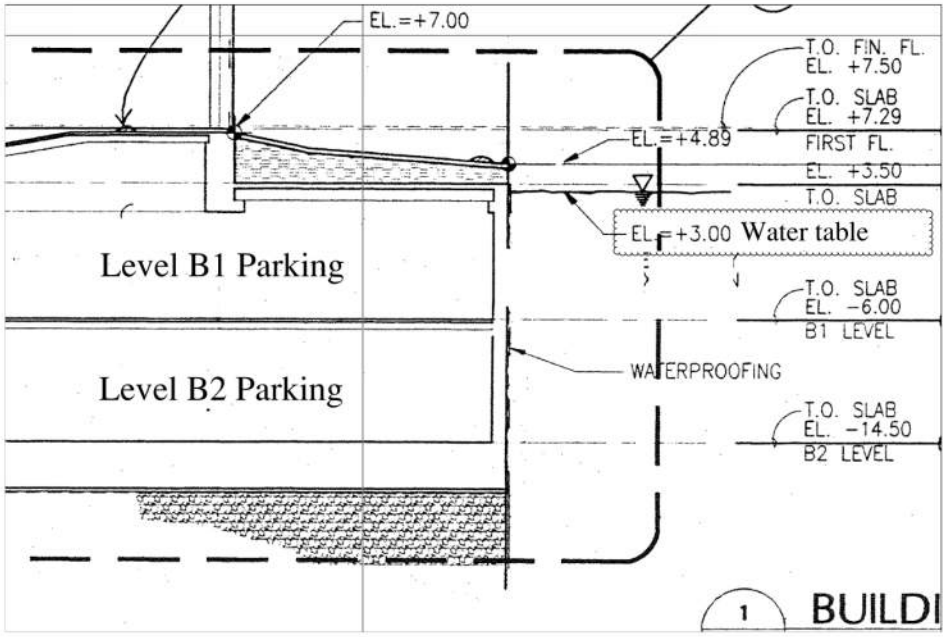

Figure 1 Section Cut of Existing Structure and Water Table - for reference only

ABC Structural Engineering

Pacific Plaza Renovation Buoyancy Analysis

Construction Stage	Estimated Buoyancy Force [3,4]	Estimated Building Weight [1,2]		Ballast	Uplift Safety Factor
	Uniform	Total	Uniform		
Partial Level 4 [6]	1.17 KSF	19720 Kips	1.07 KSF	0 PSF	0.91
				100 PSF	1.00
				200 PSF	1.09
				300 PSF	1.17
Complete Level 5 [5,7]	1.17 KSF	23625 Kips	1.19 KSF	0 PSF	1.01
				100 PSF	1.10
				200 PSF	1.18
				300 PSF	1.27
Complete Level 6 [5,7]	1.17 KSF	24725 Kips	1.22 KSF	0 PSF	1.04
				100 PSF	1.13
				200 PSF	1.21
				300 PSF	1.30
Complete Level 7 [5,7]	1.17 KSF	25825 Kips	1.25 KSF	0 PSF	1.07
				100 PSF	1.15
				200 PSF	1.24
				300 PSF	1.32

The structural drawings represent the finished structure and do not show the method of construction. The contractor is responsible for the means and methods of construction. The buoyancy stability of this structure during construction is also the responsibility of the contractor. The table above is based upon information and assumptions obtained from the record set of existing documents that has been provided to us. We have no means of verifying the accuracy of this information.

Assumptions:

1. Mat Footing Area = 33867 sqft
2. Mat Footing Weight (3'-3" Thick) = 0.49 KSF
3. Mean Sea Level Water table elevation = +1.0'
4. Mean Sea Level Bottom of mat elevation = -17.75'
5. Existing topping slabs removed from Levels 2, 3 and 4.
6. All Demolition at Levels 2 &3 has been complete.
7. "Complete" implies the structural elements for the entire level and levels below have been placed. This does not consider any finishes, partitions, etc.

NOTE: BALLASTING APPROACH ASSUMPTIONS SUPERCEDE THESE ASSUMPTIONS

FOR REFERENCE ONLY