CEBULANDMASTERS

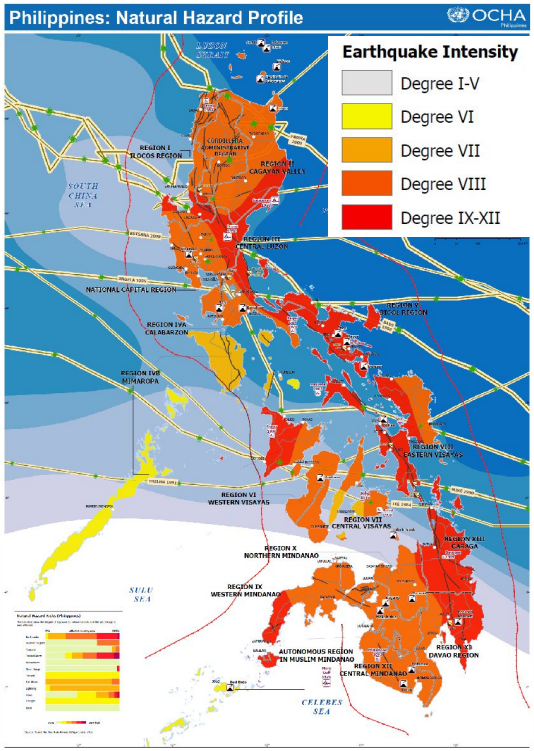
We Build with You in Mind

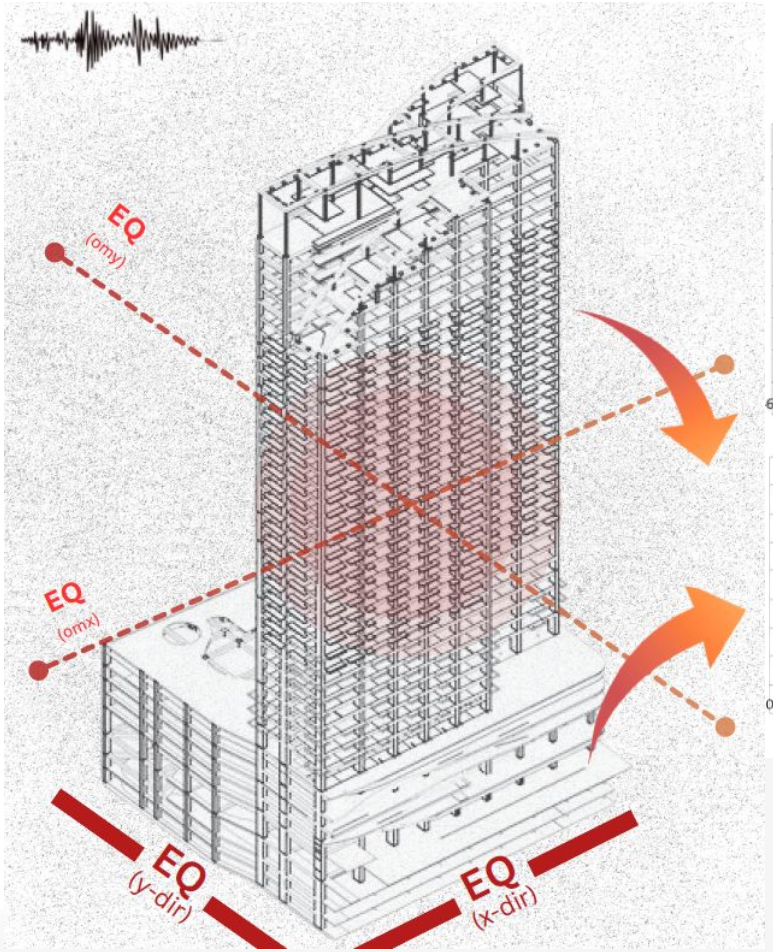
The Wave Towers

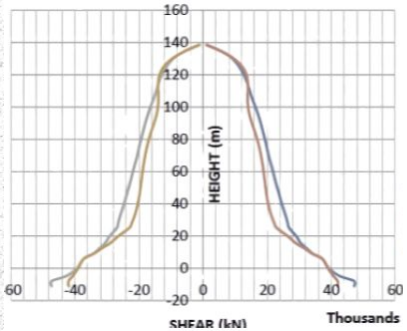
Infographics for Building Stability Design

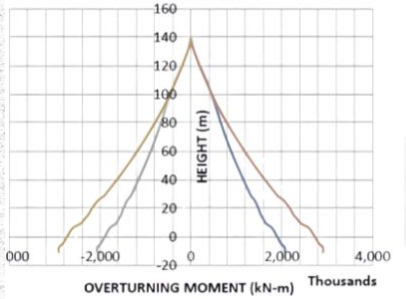
STRUCTURAL DESIGN FLOW

The first step in the Seismic Analysis is to verify the nearest seismic source based on the Seismic Map of the Philippines and to verify the soil profile of the specific project site.









The Nearest Seismic source is the Cebu Fault System which approximately 4.20Km from the site, which is considered Safe for ground rupture and ground shaking can still be felt during earthquakes, but can be mitigated by following the National Building Code of the Philippines.

The Structural System was simulated using the design response spectra and the corresponding seismic demand forces were extracted and used in the detailed design of the structural members

BUILDING CONFIGURATION

THE WAVE TOWERS

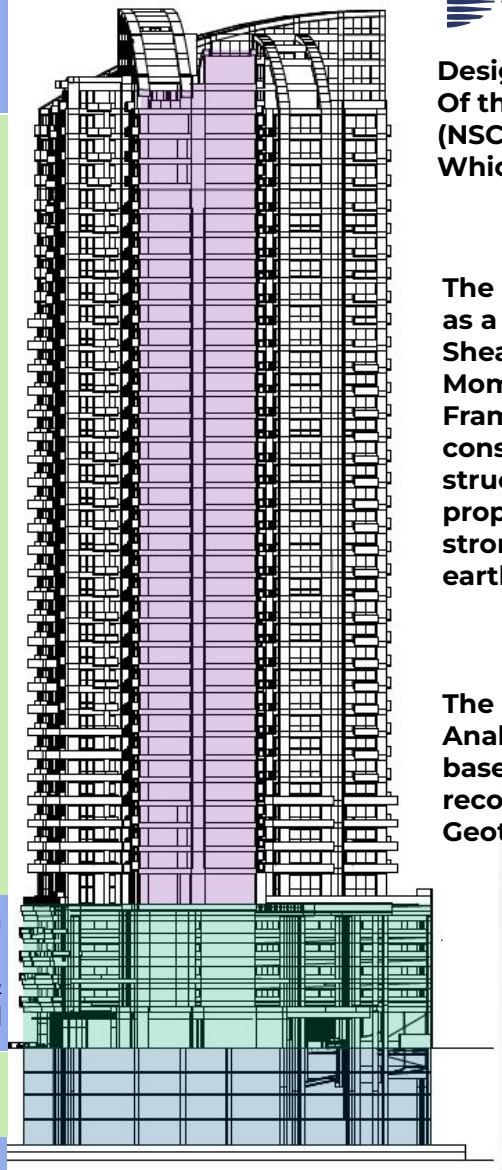
Building crown and Penthouses

35 storey Residential Floors

5 Level Podium Parking Floors and Ground lobby & retail

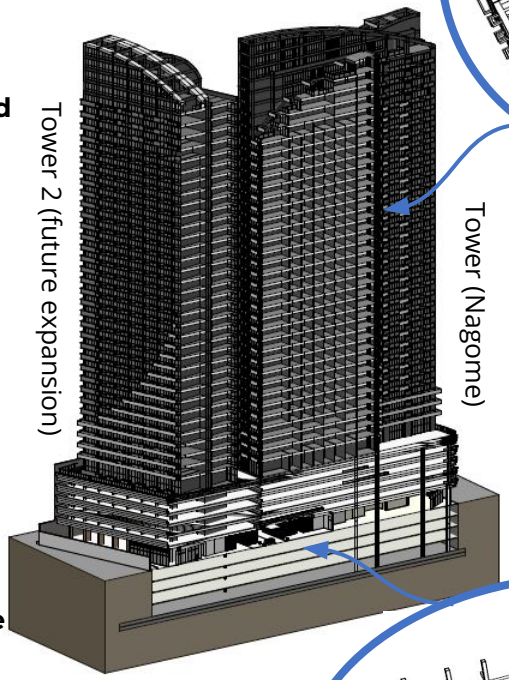
3 Level Basement Parking

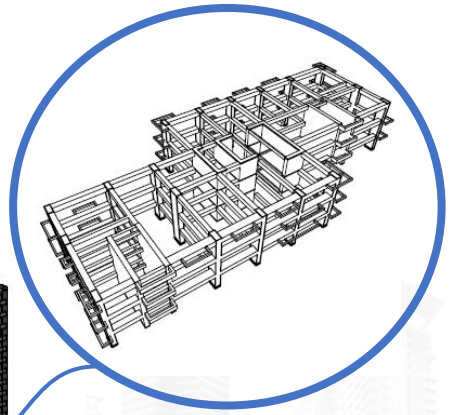
Matt foundation



Designed in conformance with the provision Of the National Structural Code of the Philippines (NSCP 2015) and the International Building Code (IBC), Which is used in California and USA.

The Building is modeled as a 3D Dual System: Shear wall + Special Moment Resisting Frames (SMRF) considering all the structural element properties subjected to strong ground earthquake motion.

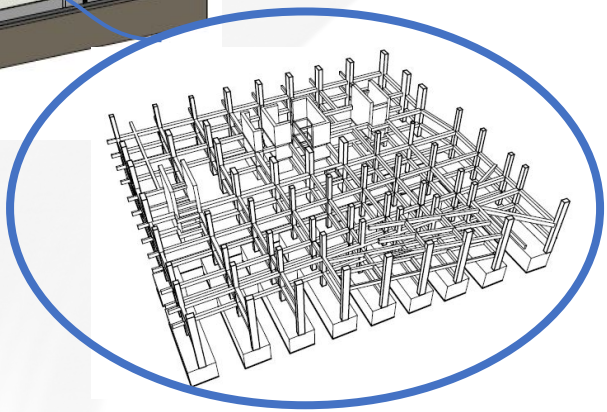




Tower framing system (structural members: beams, column and shear wall)

The Foundation Analysis and Design is based on the recommendation of the Geotechnical Engineer.

The tower is supported by the 3.50m thick Mat Foundation while The podium levels are supported By 1 to 1.10 meter isolated and Combined footing with rigid Tie beams.



Podium Framing and Foundation System