

Challenge exercise**Design a high-rise project in Forma Site Design**

In the United States, 90% of construction is less than five levels and less than 50,000 square feet. However, Forma Site Design is designed to help see projects from small, to massive, and this challenge is going to lean into the massive. Your site is in Chicago, Illinois at 331-335 S. Plymouth Ct. This famous site known as Pritzker Park is real estate royalty and has hosted many speculative high-rise projects. Your project will be to maintain the lower-level park (at least a portion of it), while developing a vertical building between 100-300 feet tall (between 10-25 total levels). The overall building program is simple, commercial on the lower level, a mid-level exterior garden space, and an outdoor roof space on the upper level.

Complete the required activities:

1. Create a new project site and location at: 331-335 S. Plymouth Ct., Chicago, Illinois.

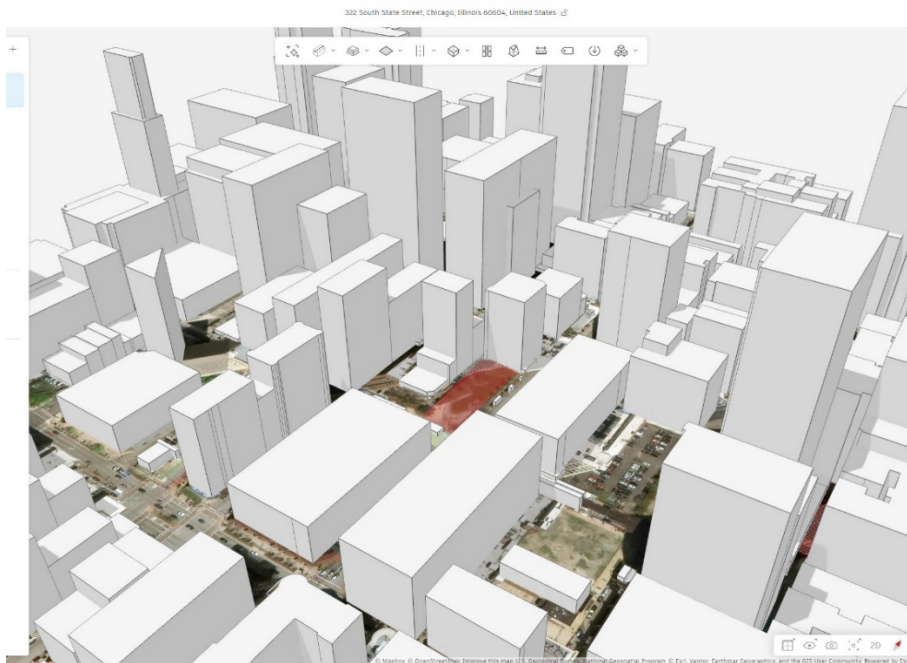


Figure 1. Chicago site at 335 S. Plymouth Ct

2. Build the vertical massing model that leaves an 8,000 (750 m²) square foot park space open to the public on the ground level (this maintains the integrity of what this site has been), and has an open green space between stories 8-14. Provide an explanation of your decision on the location and orientation of open green space. Do not worry too much about the interior and programming logistics on this assignment, this will focus on massing and simulation data.



Figure 2. Construct site in Formasite Design

3. Perform initial site analysis by creating a short report that conveys an understanding of the climate, weather, analytical data, contextual information (describing the surrounding buildings), macro and micro factors that are available prior to running any site simulations in Formasite Design.
 - Define what you believe will be the three most important **Macro** site factors and explain why.
 - Define what you believe will be the three most important **Micro** site factors.
 - Create a second short document noting three key contextual elements relevant to your design: these could include scale and proportion, circulation, materiality, enclosure, albedo, safety, etc., and how your design will address the issue.

Grading rubric:

	Advanced	Proficient	Basic	Emerging
Is the overall written document clear, creative, and concise	Well thought out response connecting design intent with the contextual site issues	Correct answers not implicitly tied to the design ideas	Answers completed, but little to no application to the design	Answers are incomplete and/or incorrect
Are the macro issues clearly explained	Accurate understanding of the primary climatic issues applied to design considerations	Completed, correct	Minor errors or missed interpretations	The data is either not completed, presented, nor available
Are the micro issues clearly explained	Accurate understanding of the immediate adjacent to the site issues applied to design considerations	Completed, correct	Minor errors or missed interpretations	The data is either not completed, presented, nor available
Creativity in the design solution	The site layout is innovative, an appropriate response, and is informed by the data in Forma Site Design	The site layout is appropriate, but the connection to the simulation data is not clear	Quality design, but not connected to the simulation data created by Forma	The site layout design proposal does not meet the design criteria