

# **Functional Beauty:** The Design of Hospitality

East Side of 1st Ave between 41st and  
38th St, New York City, NY

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University for the degree of

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Concrete

# Functional Beauty:

## The Design of Hospitality

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### Abstract

This project explores the use of poured-in-place concrete as a bearing wall structure, in lieu of a column and slab system, in order to permit the formation of multi-story, grand spaces indicative of a luxury hotel. These carved out spaces create a pathway through the building, allowing for the choreographed movement of a traveler from the initial point of arrival to reaching his or her destination at the pinnacle suite.

To my family and friends:

Thank you, for allowing me to follow the road less traveled, for supporting my dreams, and for encouraging me to defeat all odds.

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# Introduction

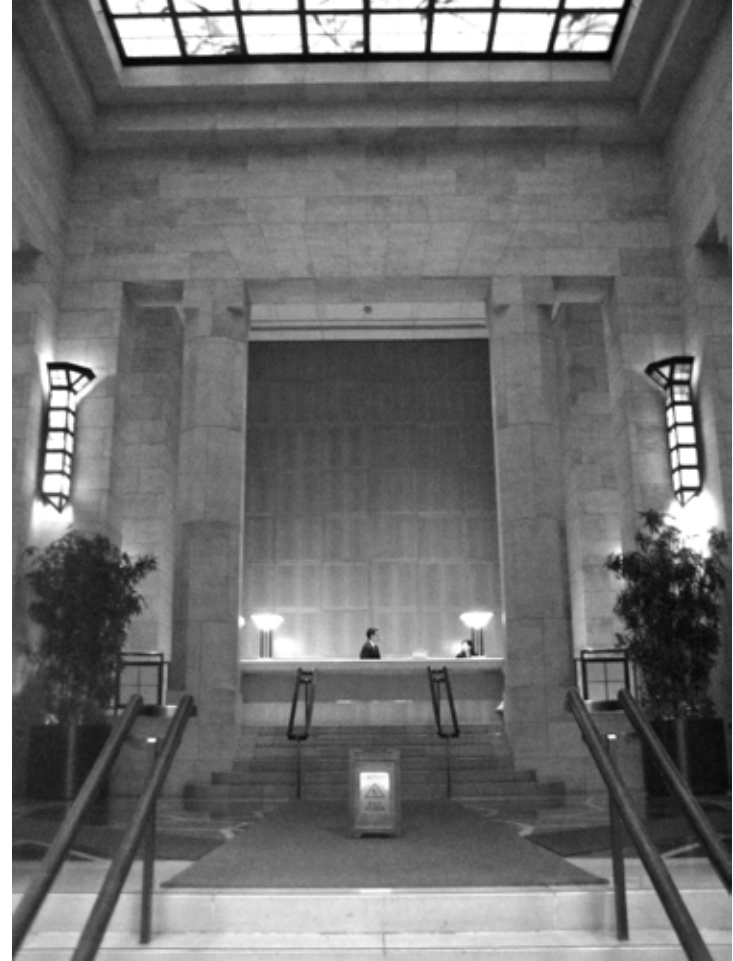
Hospitality is the act of letting in a stranger: a very risky and dangerous profession. Today, hospitality has lost some of its risk by turning itself into a purely service industry: where every human interaction begins with an act and ends with a transaction. In order to provide true hospitality, one must strip away all facades and become exposed, to bear their soul, in order to connect with their fellow human.

This same degradation occurs in contemporary architecture. Current building practices plaster layers upon layers until the outward facades have nothing to do with the structure that holds them. In the same way that humans lose their integrity and their soul by demeaning themselves to a performance, so does a building lose its soul.

This project attempts to design a hotel where the building retains and exposes its soul. Exploring the use of reinforced concrete as an interwoven bearing wall system takes advantage of concrete's multi-directional force distribution capabilities, and allows for the creation of large, grand spaces. This sets the stage for beautiful, functional design at the human level, and opens the door for true hospitality to take place.

This page: The Palm Court, The Plaza Hotel, *left*; The Madison Room, The New York Palace, *right*.  
Opposite page: Ballroom Elevator Lobby, The Plaza Hotel, *left*; Registration Lobby, Waldorf=Astoria Hotel, *middle*; Entry Lobby, The Four Seasons, *right*.







Ballroom Panorama, Walford=Astoria



Exterior, The Plaza Hotel



Entrance, New York Marriott East Side

**Site + Context**

Located just south of the United Nations Complex on 1st Ave, this hotel is meant to capture the demands of the UN and surrounding area visitors to New York City. With a competitive set including hotels like the Waldorf=Astoria, St. Regis Hotel, and Intercontinental, this hotel would provide the advantage and convenience of proximity. Locating guest rooms, suites, and upscale meeting facilities close to the UN would allow for the ease of security and limit the security impact of UN activities on New York as a whole, especially during the annual General Assembly.





Site Plan





Site Panorama



Trump World Tower



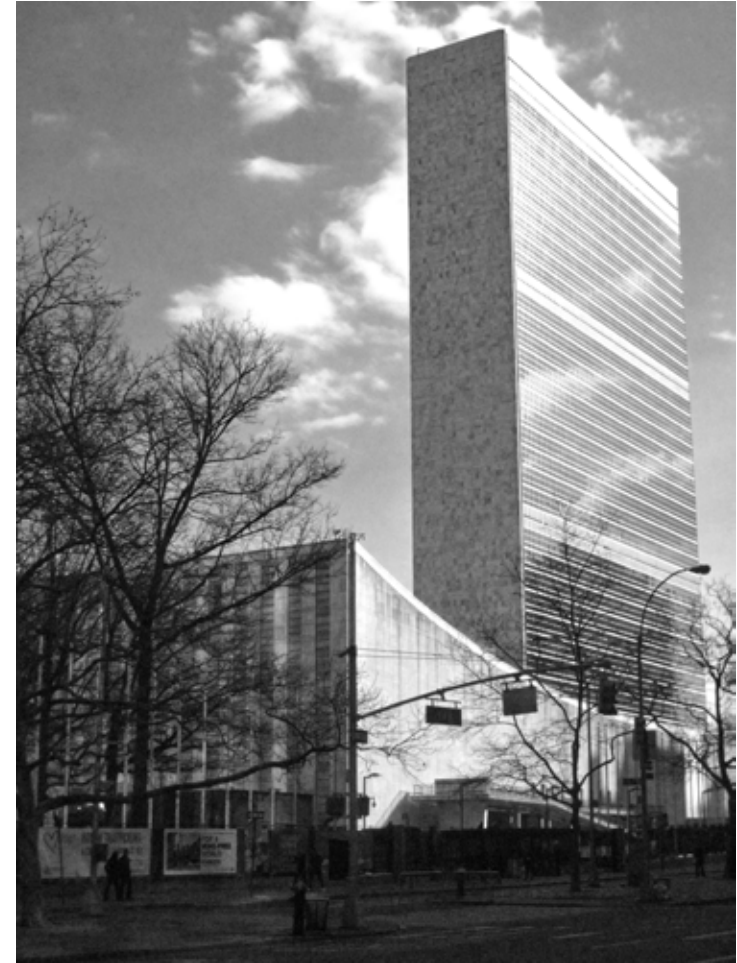
Site: View towards UN Complex



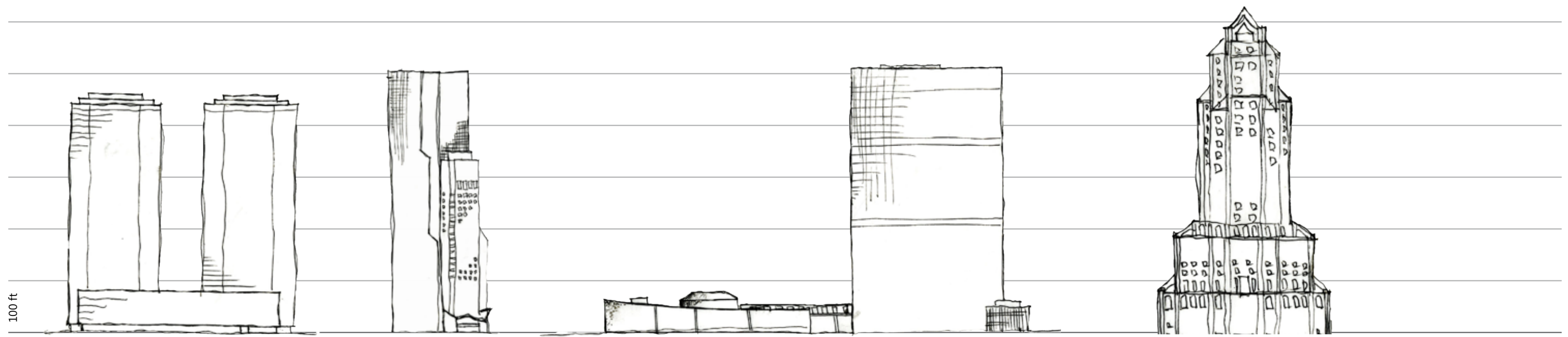
UN Plaza Apartments



One UN Plaza



United Nations



UN Plaza Apartments

One UN Plaza

United Nations

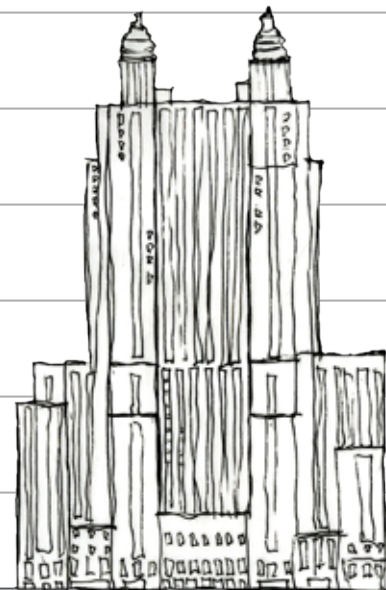
Thesis Building



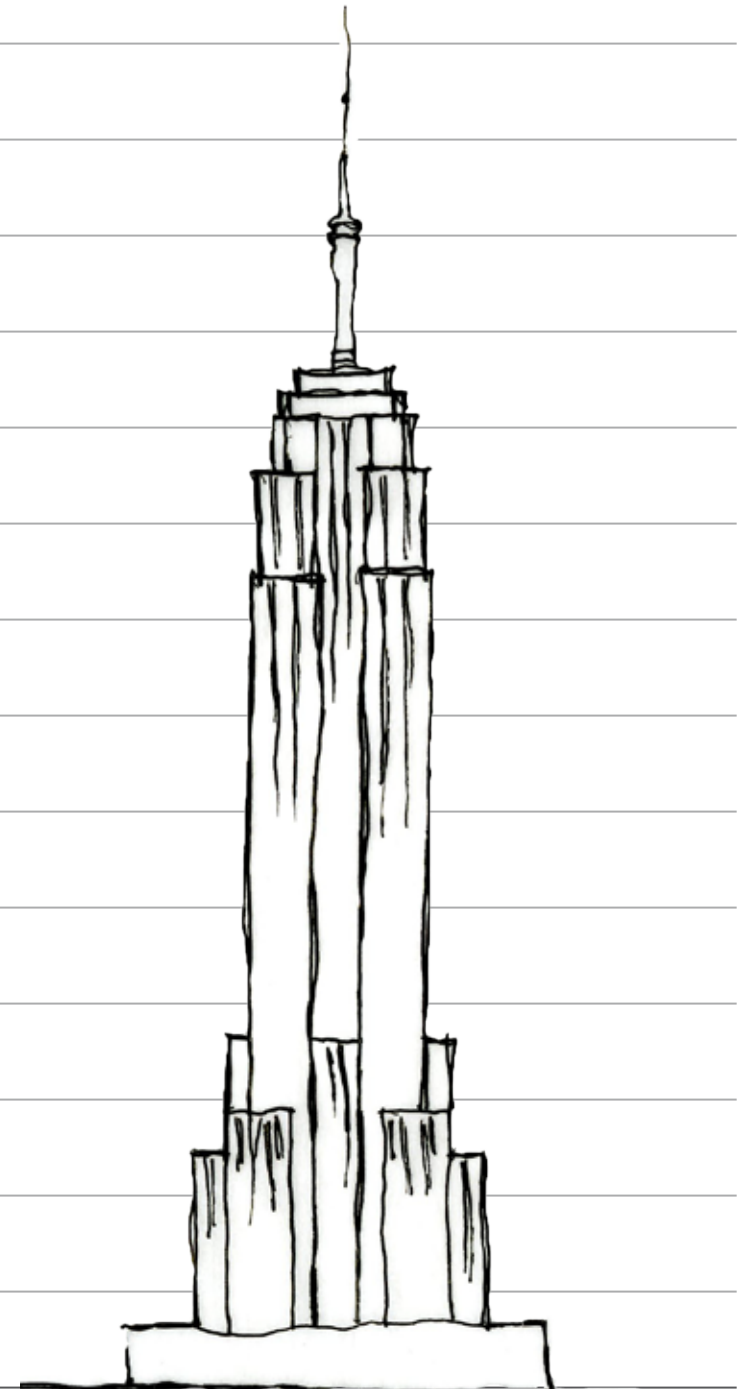
The Plaza Hotel



The Four Seasons



Waldorf=Astoria



The Empire State Building

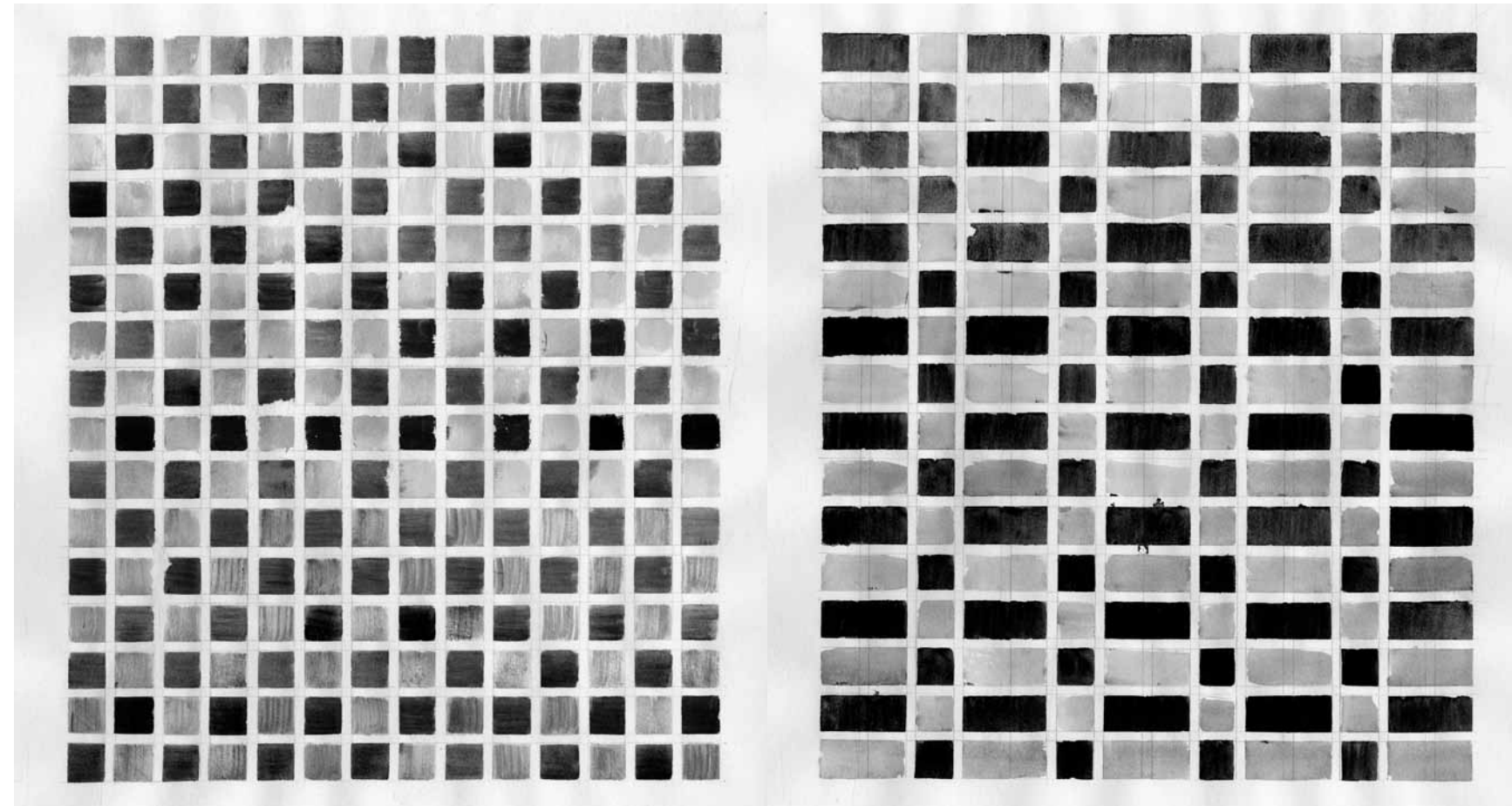
## Structure

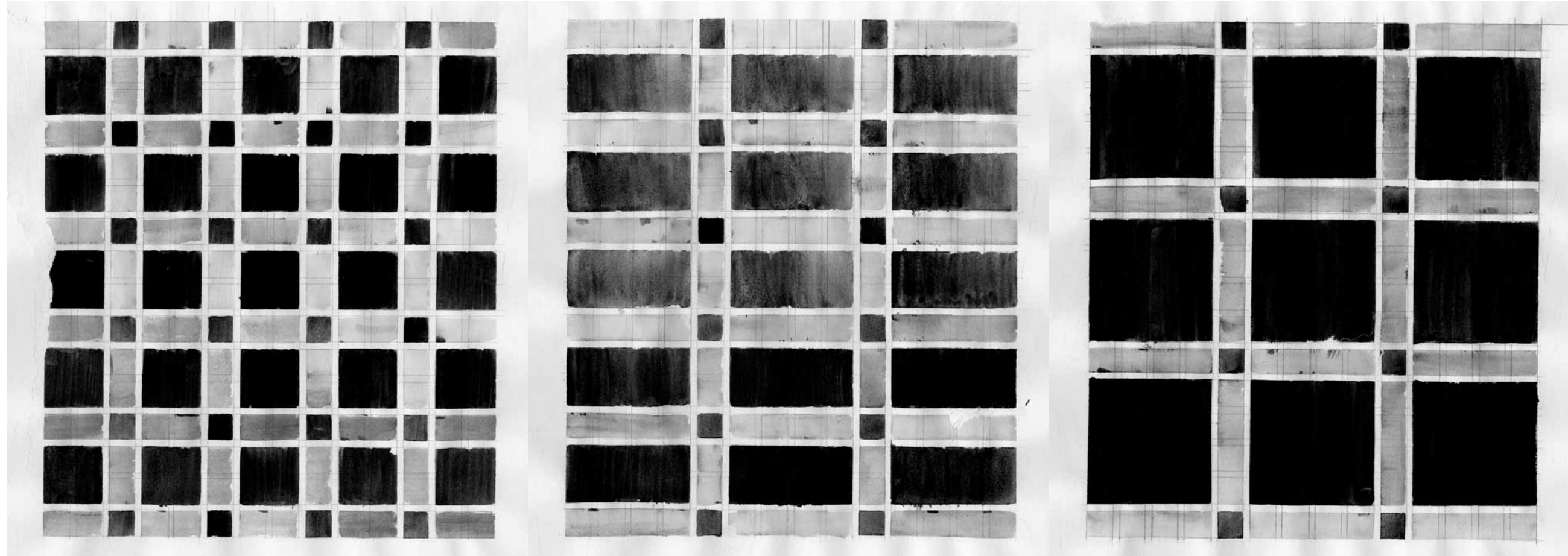


Weaving has repeatedly found its way into architecture. Here, the concept of the interlocking warp and weft sparked the idea of perpendicular reinforced concrete bearing walls. Treating concrete in this manner ensures structural support against shear forces, allows the removal of interior walls to create larger spaces, and diverges resulting load responsibilities to larger exterior members.

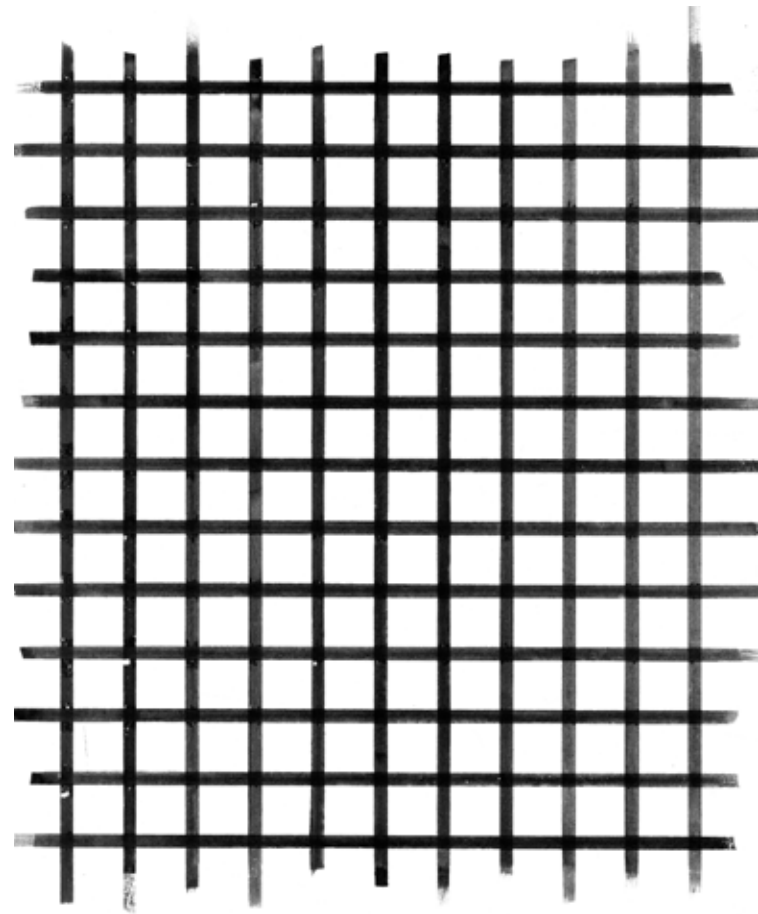
Just as removing a thread from a plain weave leaves that area weaker than the rest of the fabric, so would removing a wall weaken the structure. Therefore, as walls are removed to open up key spaces, their loads are bundled into neighboring walls, protecting the structure against the created weakness and strengthening the fabric as a whole.

This page + Opposite page:  
Study Drawings: Grid Systems, *watercolor*

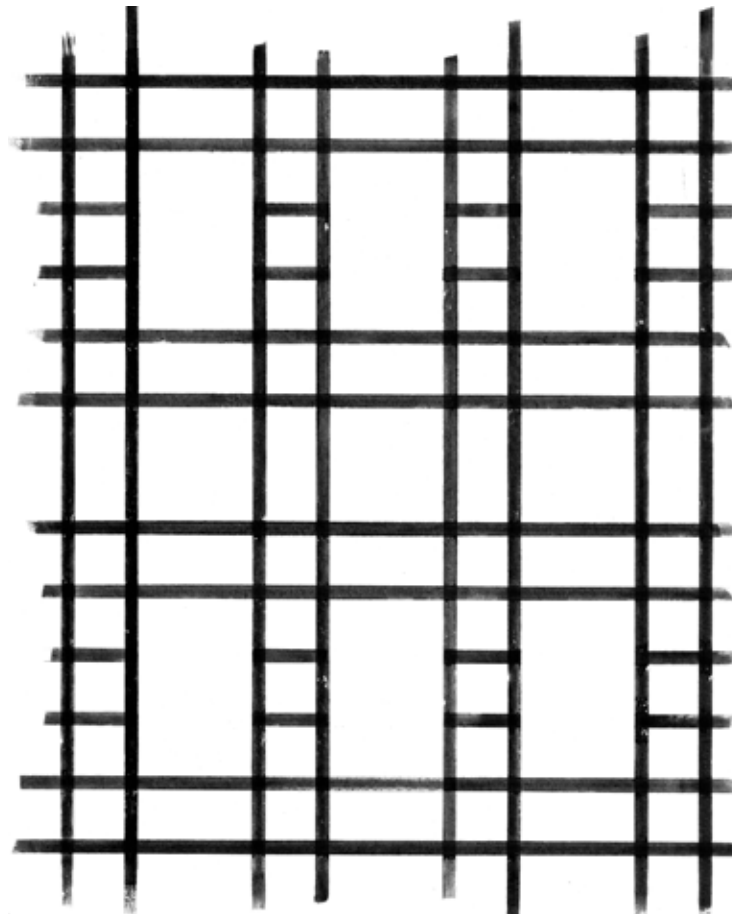




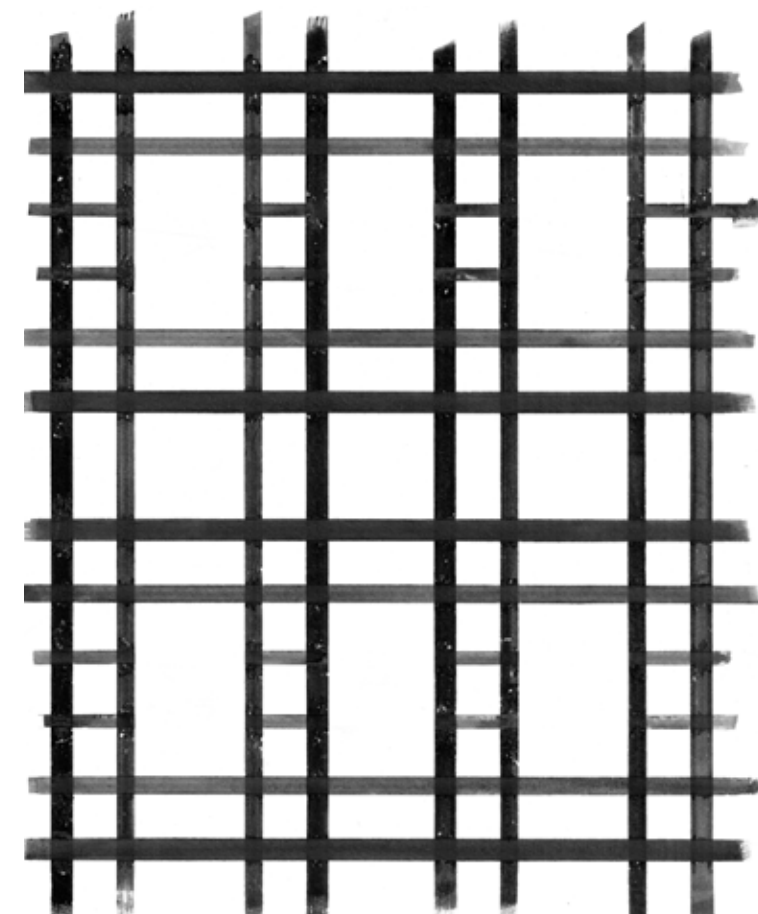




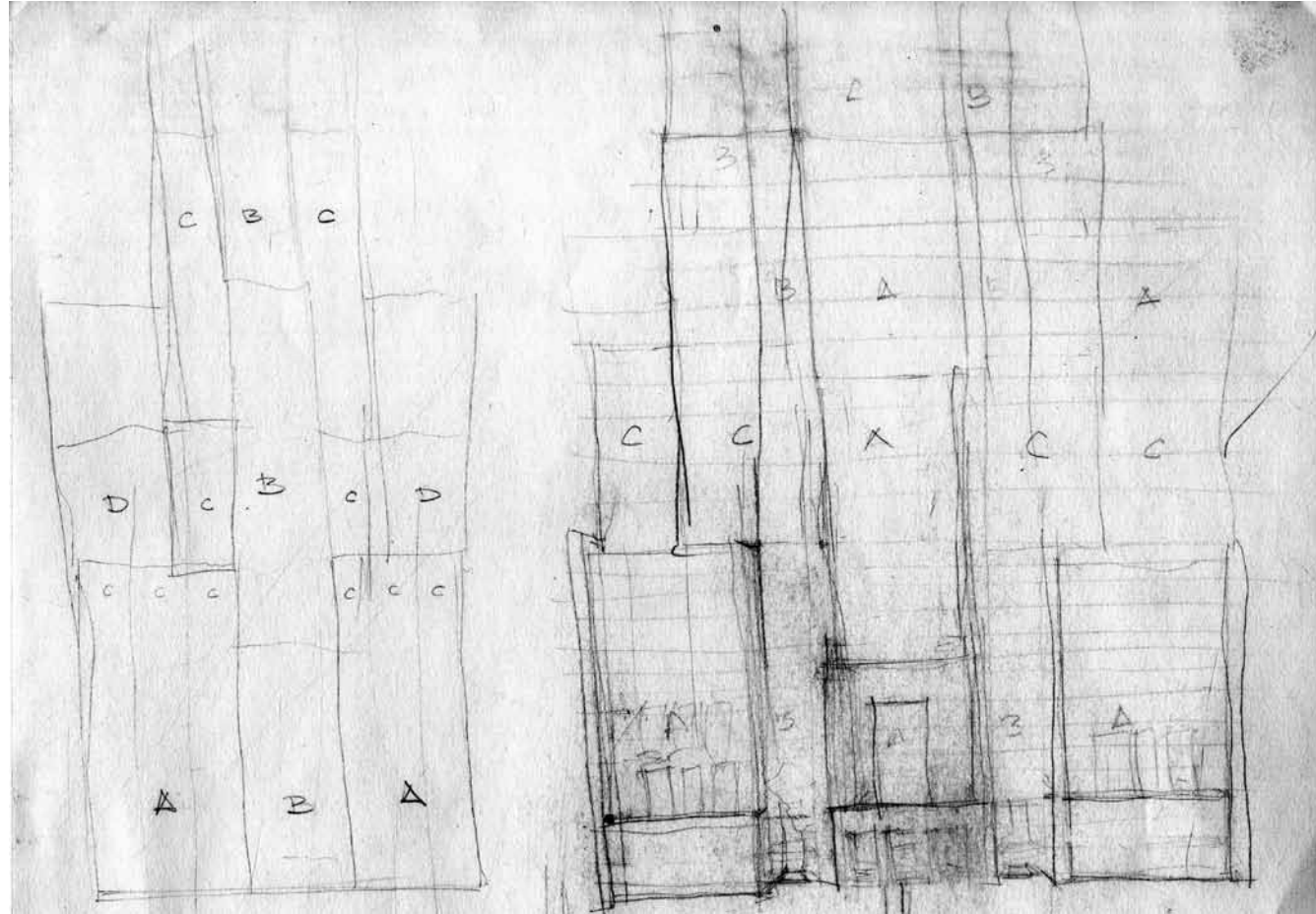
Study Drawing: Building Structure  
All walls included *watercolor*



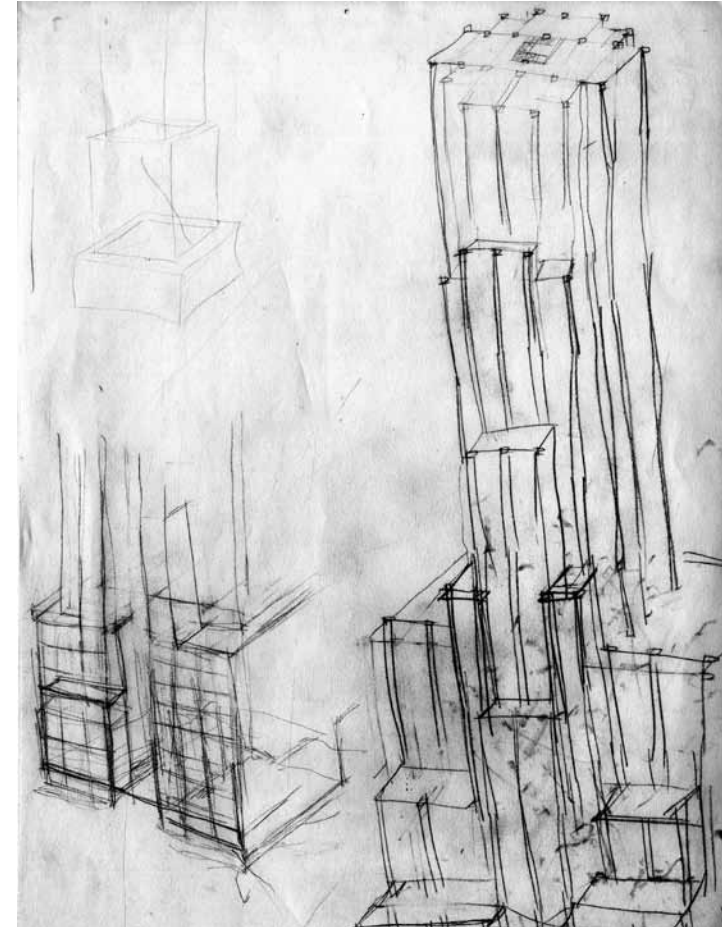
Study Drawing: Building Structure  
Walls removed to create multi-story spaces, *watercolor*



Study Drawing: Building Structure  
Forces diverted to remaining walls, *watercolor*



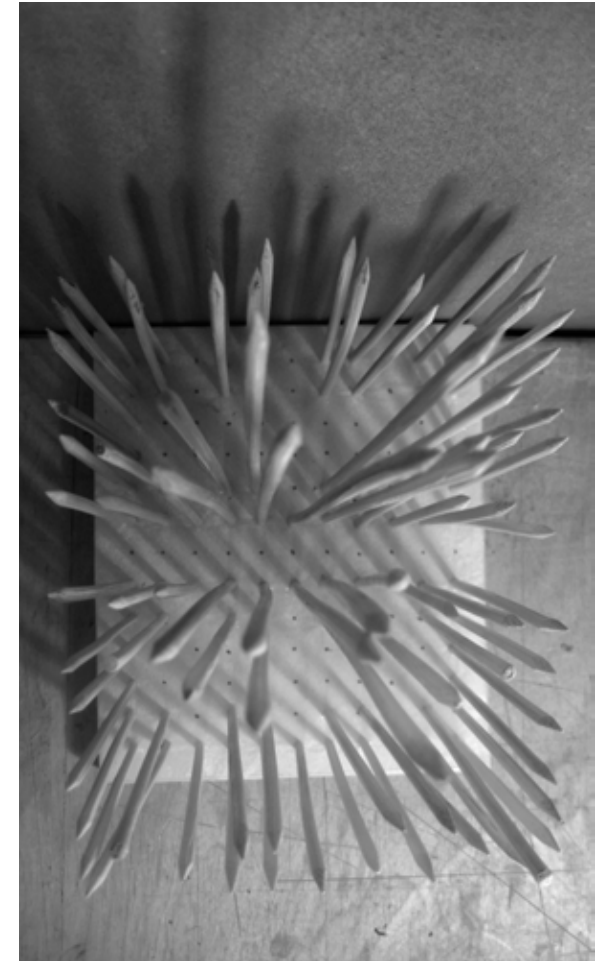
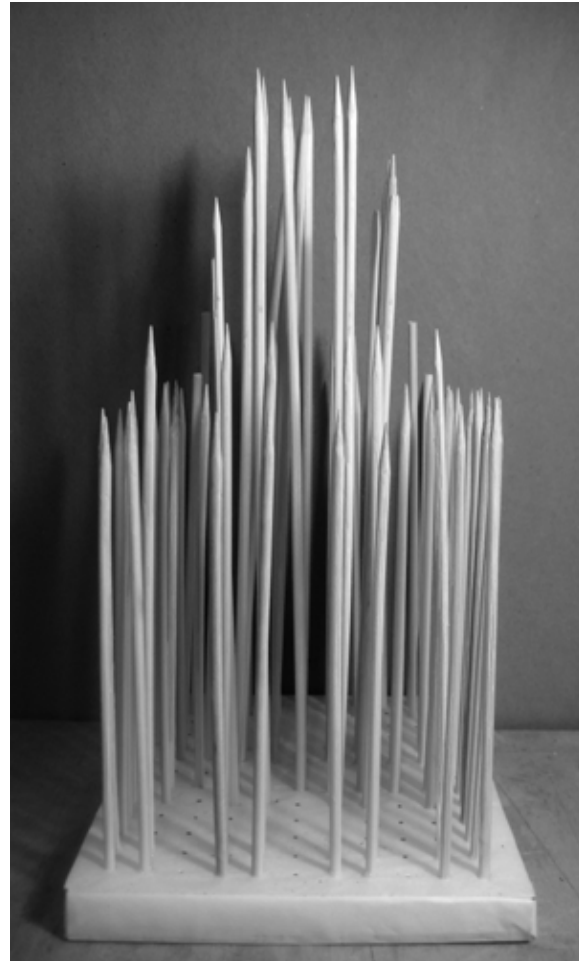
Sketch: Building Massing

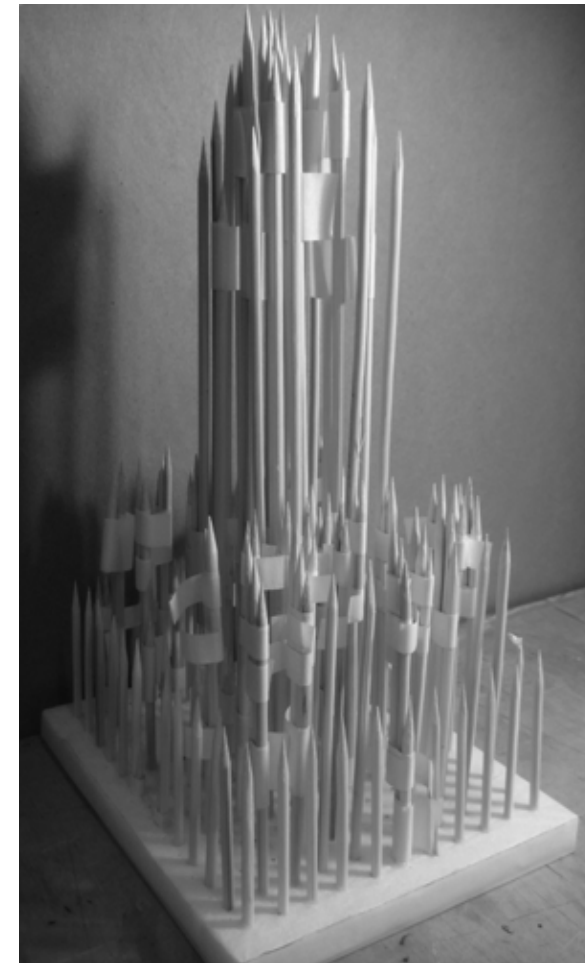
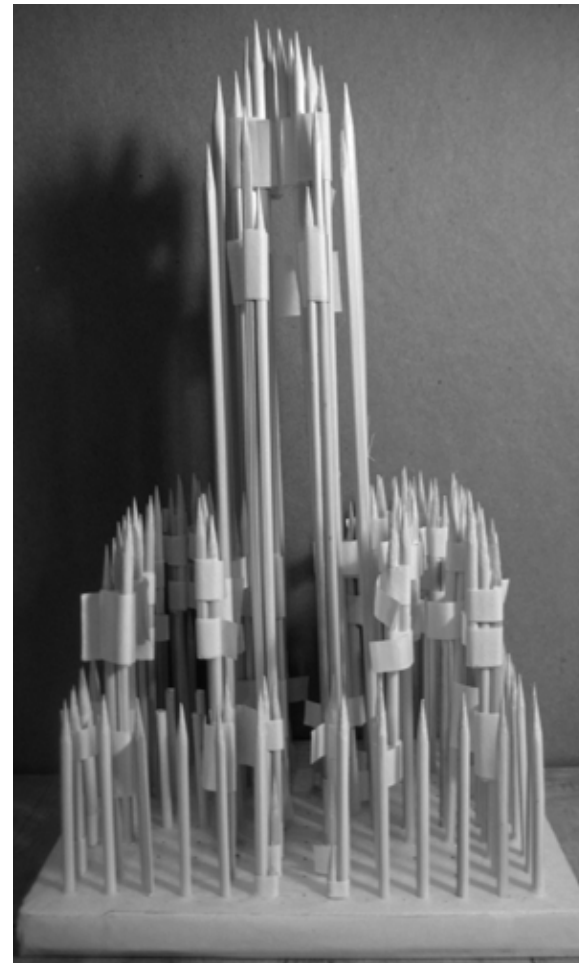
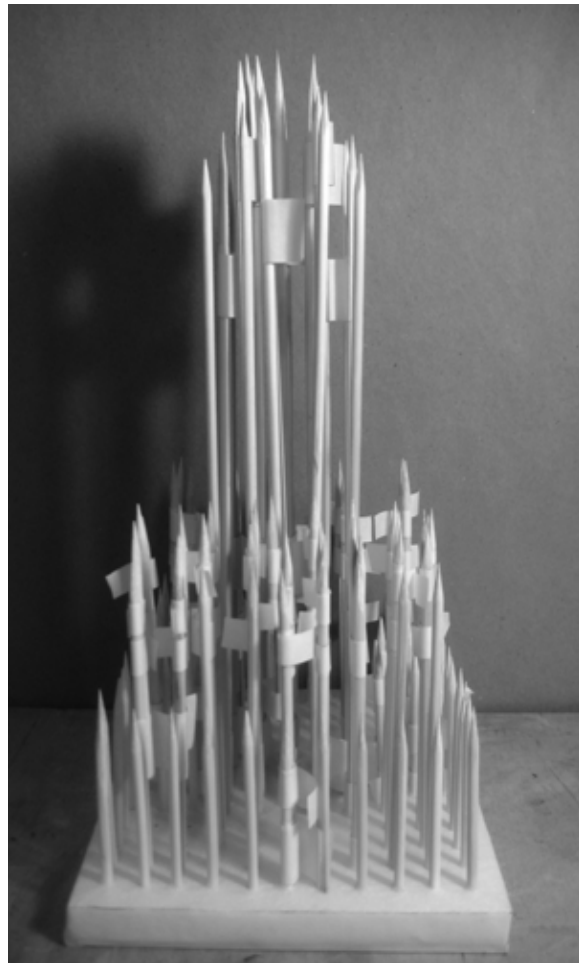


Sketch: Building Massing

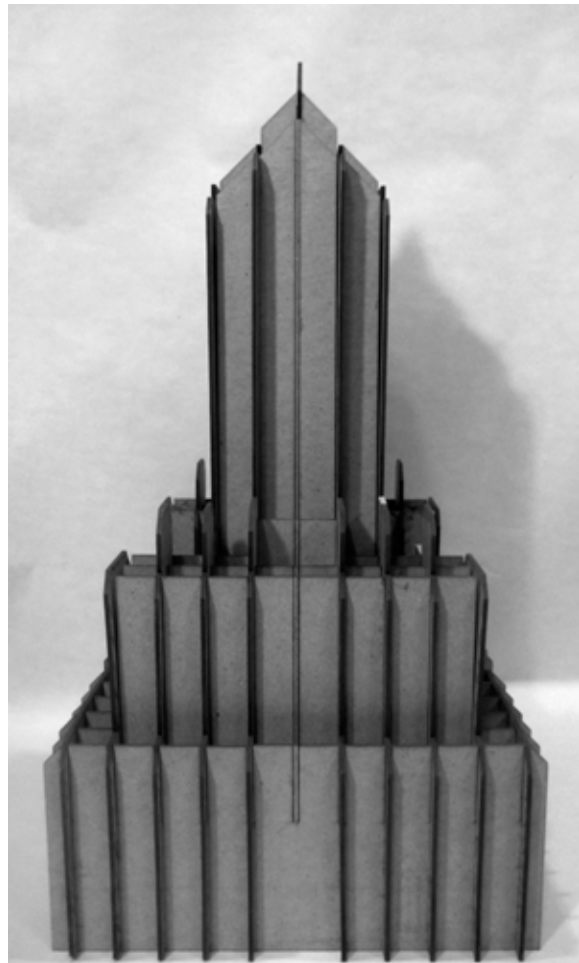


Study Model: Building Structure, Column System

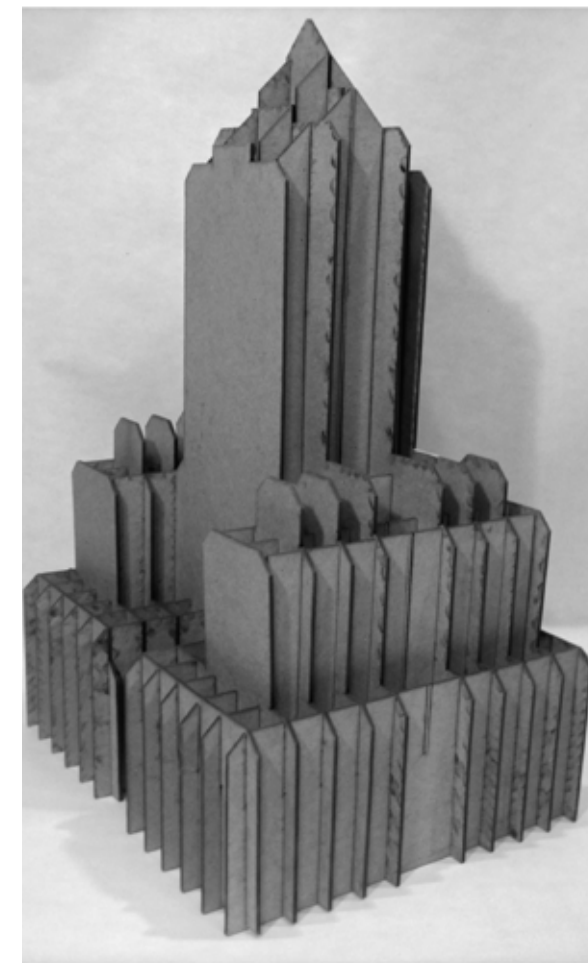
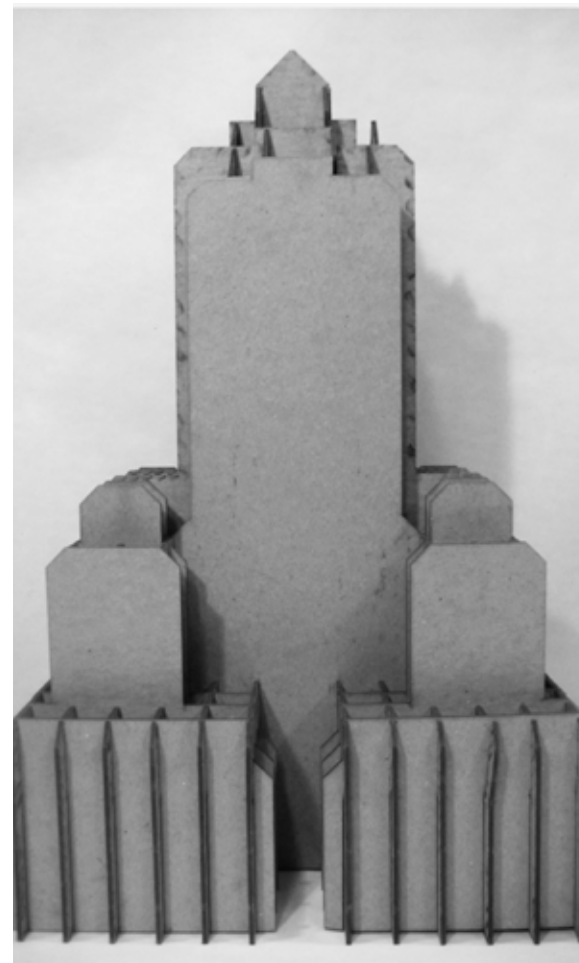


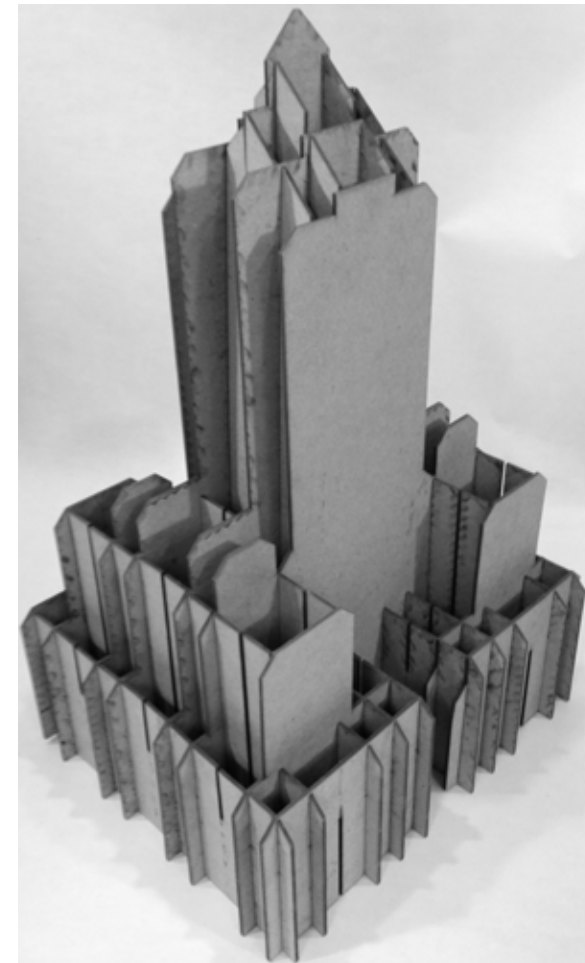
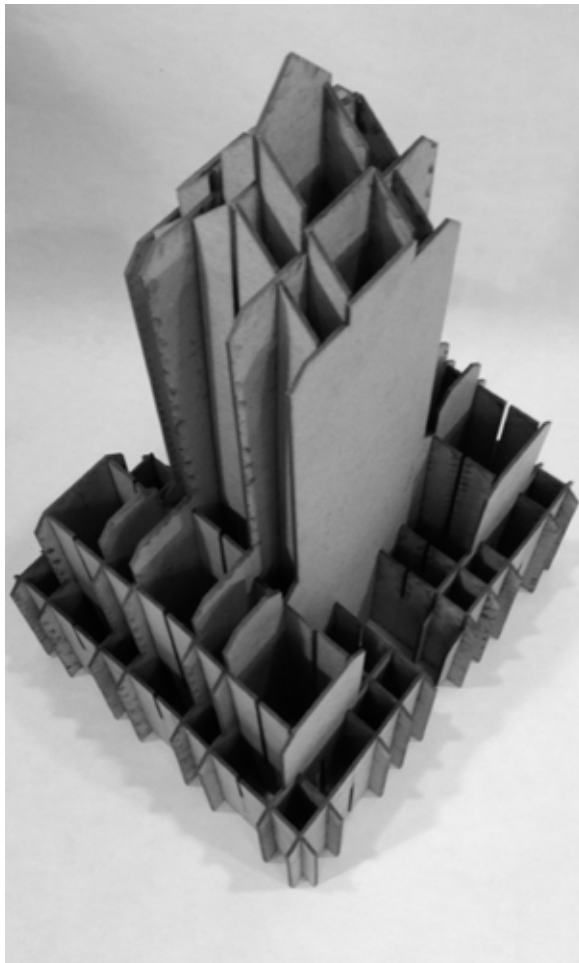


Study Model: Building Structure, Column System with bundled forces from removed columns



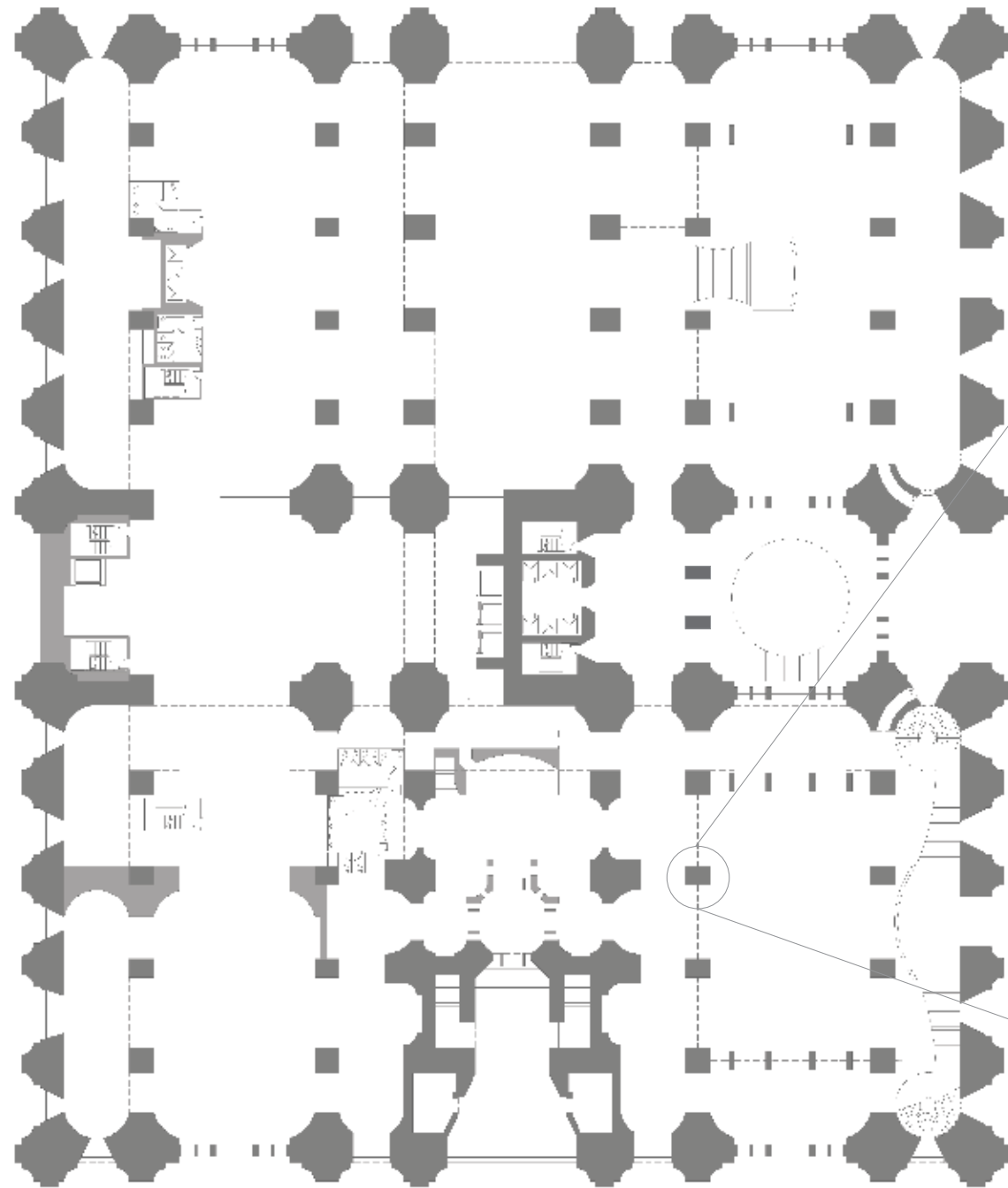
Study Model: Building Structure, Walled system with all walls present



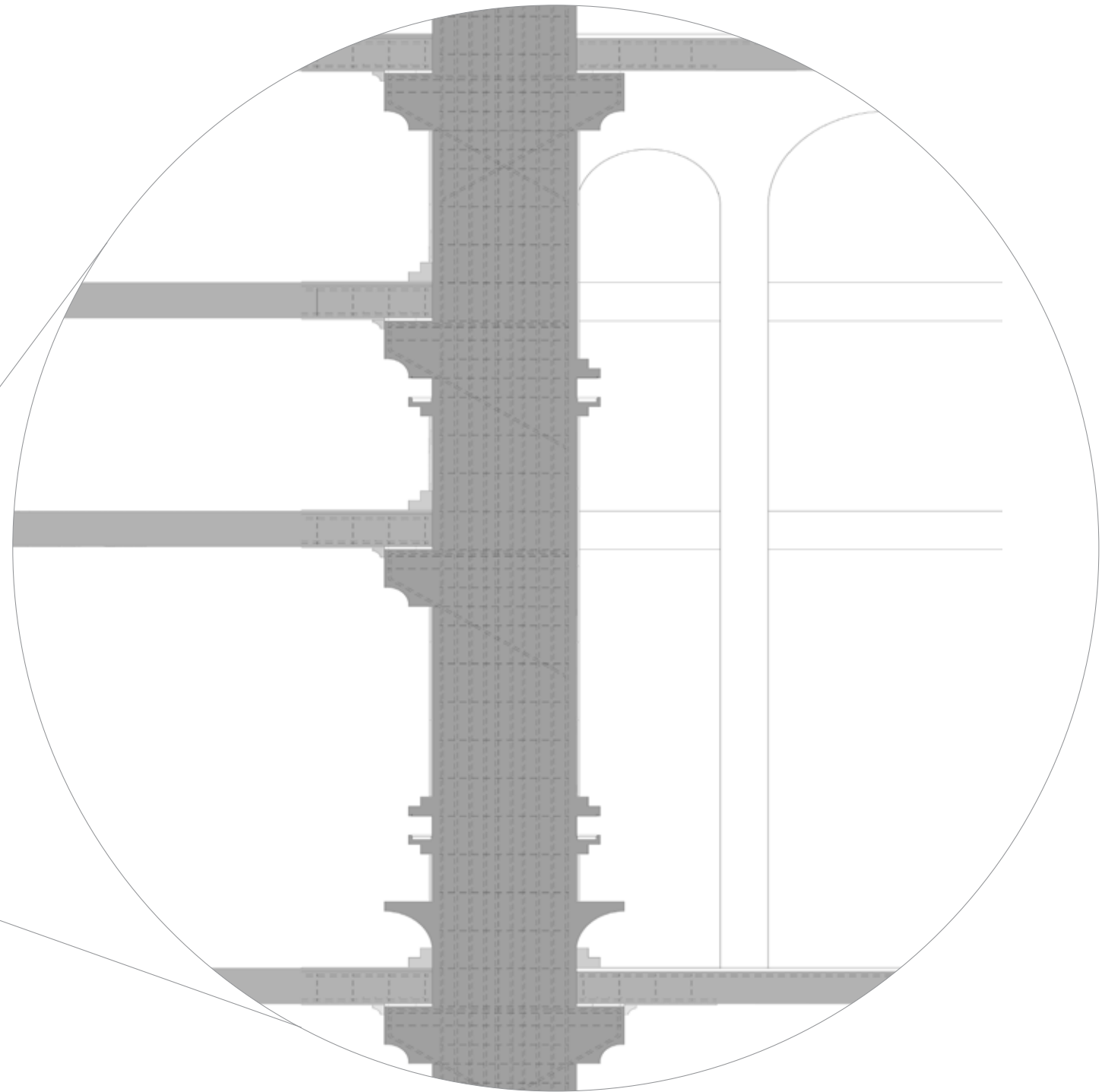


Study Model: Building Structure, Walled system with walls removed to create multi-story spaces





1st Floor: Lobby

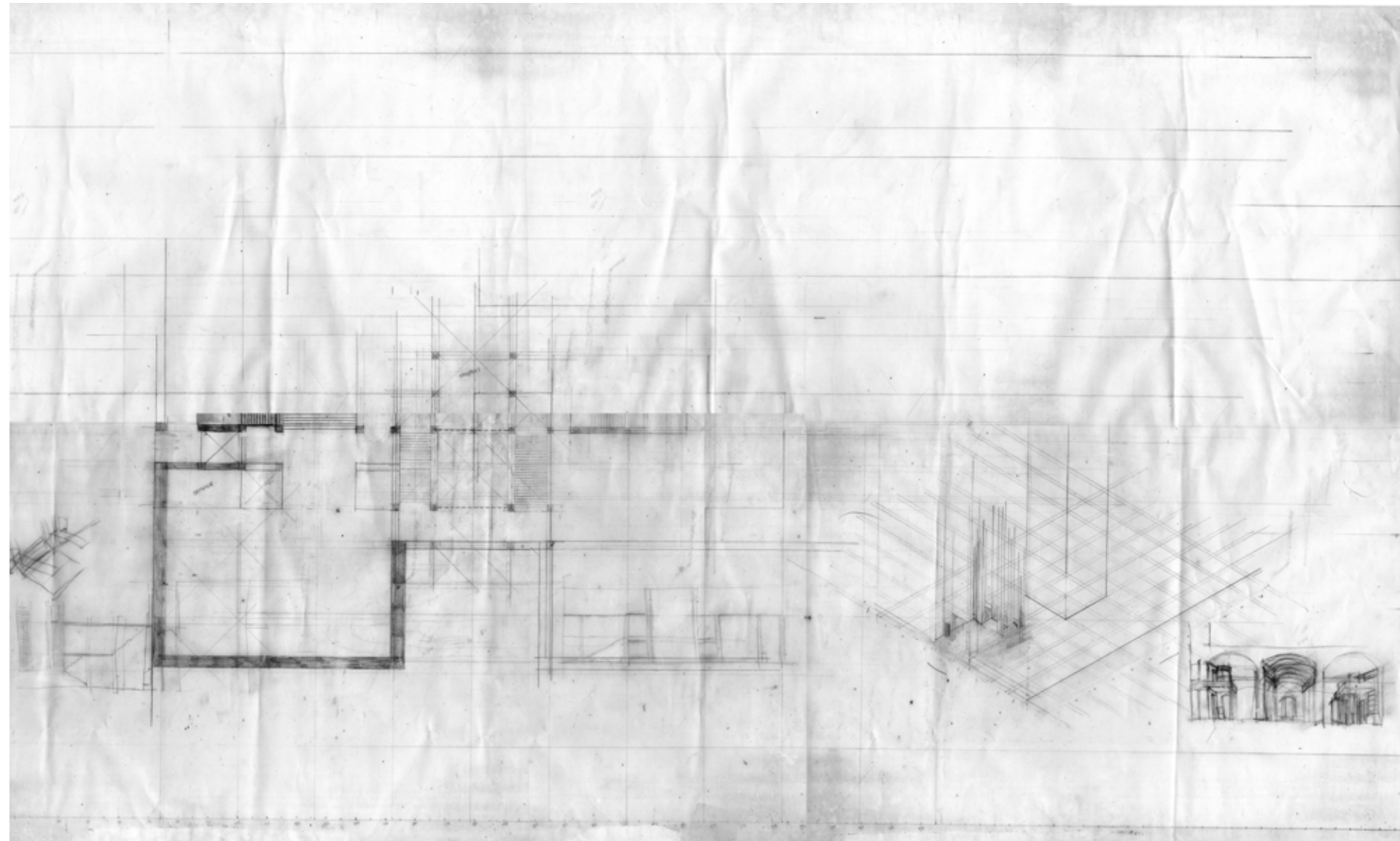


Partial Wall Section

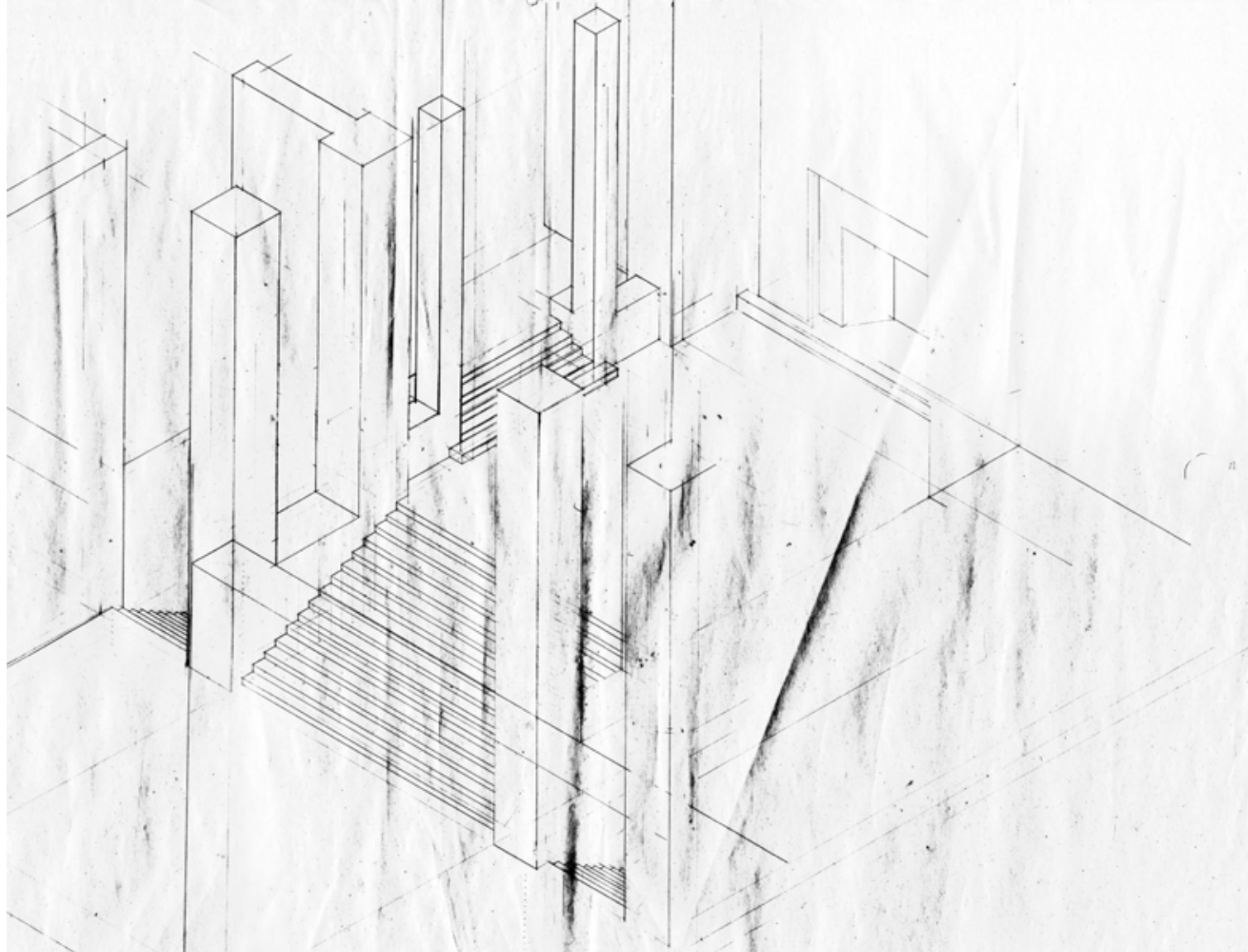
**Program + Organization**



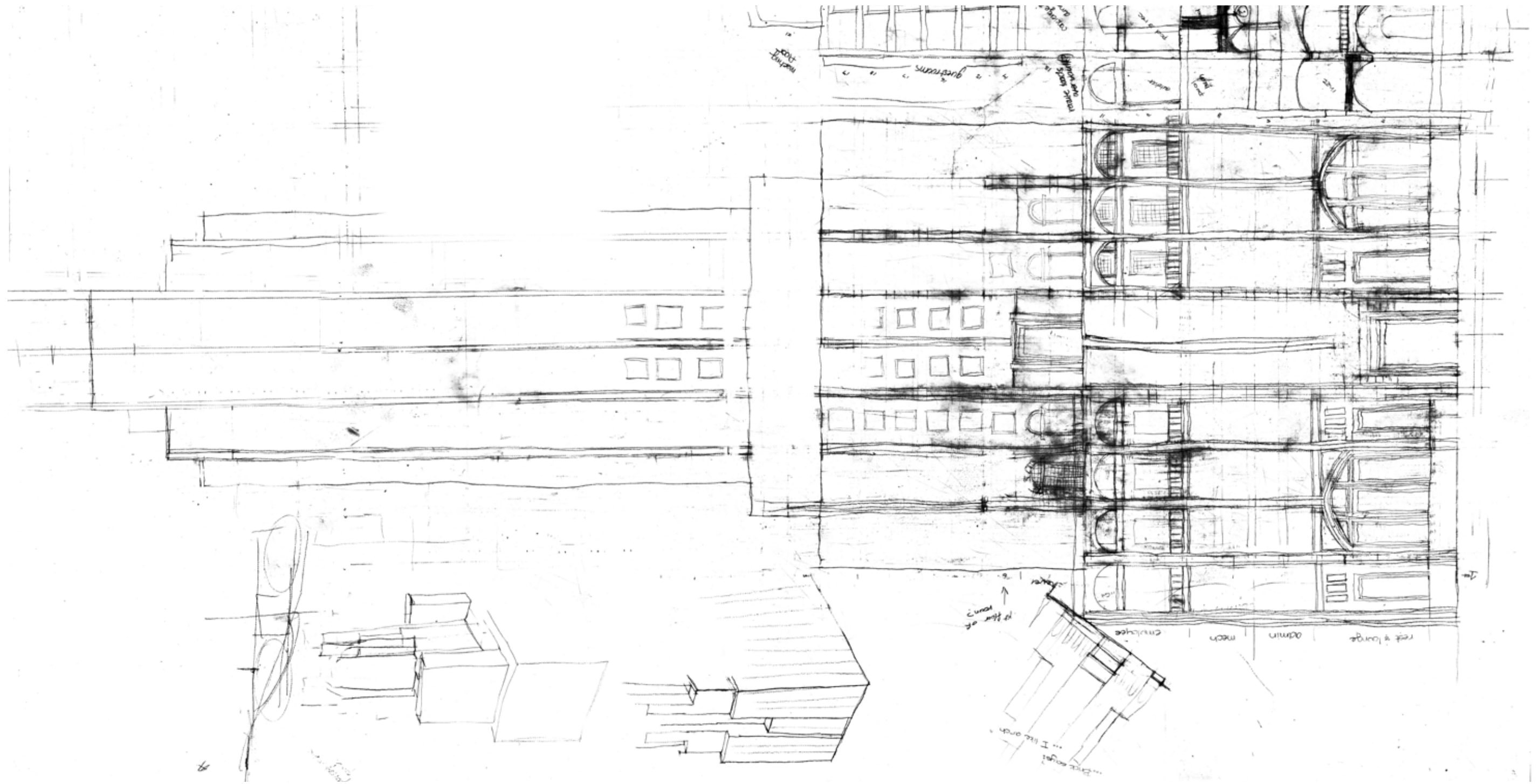
As William Shakespeare wrote in *As You Like It*, "All the world's a stage..." and hotels are no exception. Hotels are microcosms within a city, setting the stage for many functions beyond just a place for travelers to sleep. Within these walls, people work, dine, revitalize, and socialize. With so many responsibilities occurring concurrently, pieces of the program must relate intelligently, and remain connected through a web of service spaces running through the floor plans.



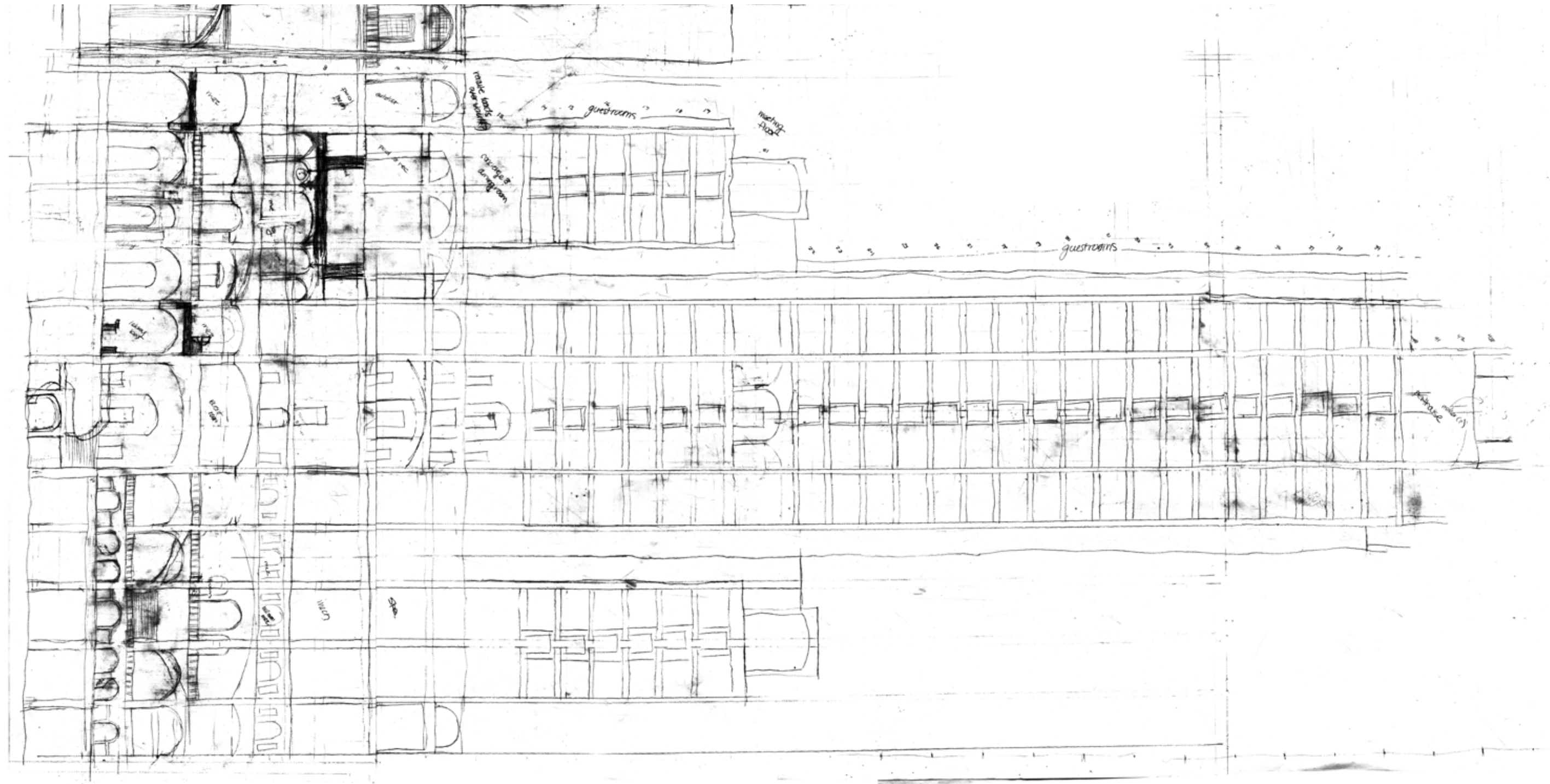
Preliminary Drawing: Drafted 1st Ave Entrance



Preliminary Drawing: Drafted Axon - 1st Ave Entrance

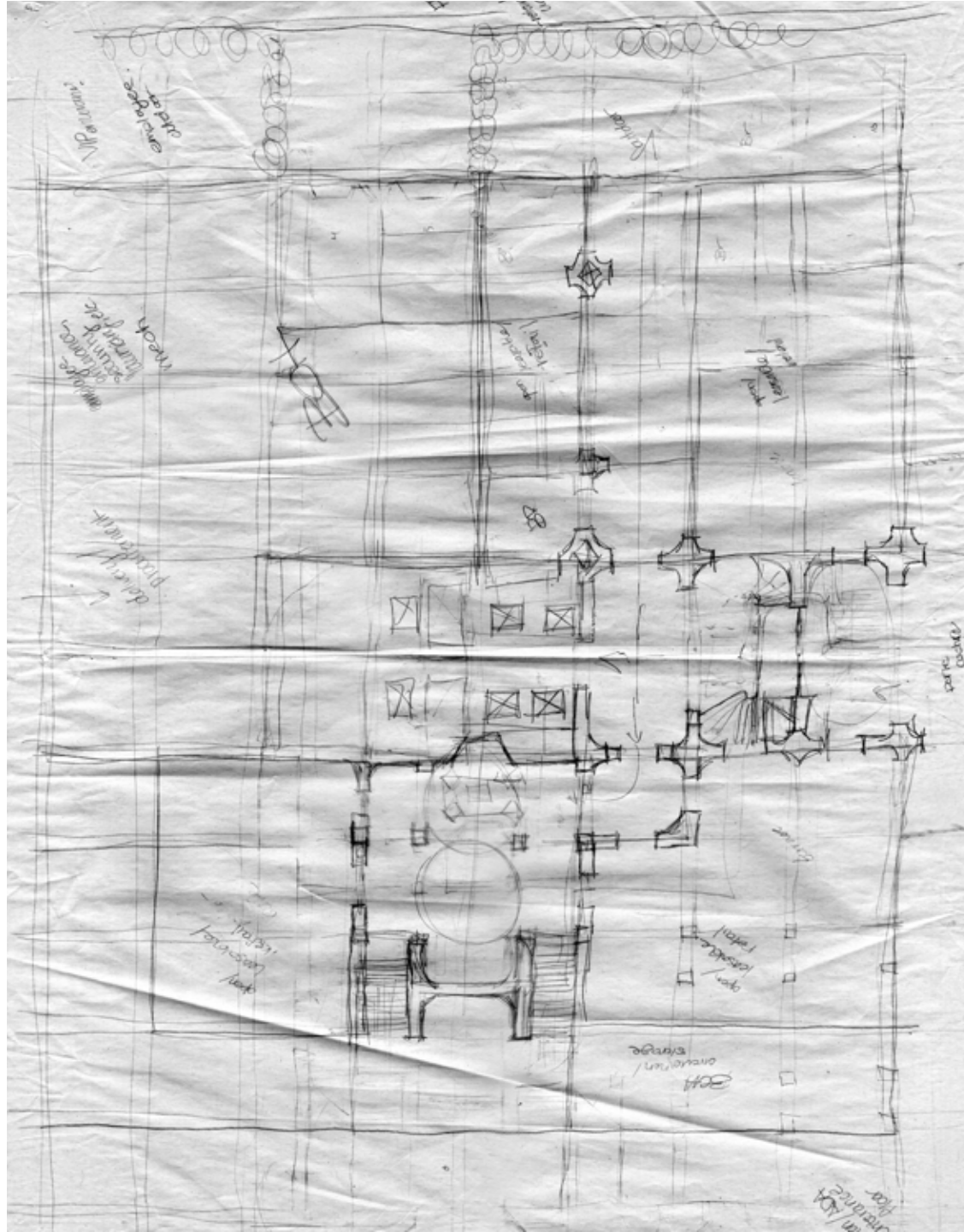


Preliminary Drawing: Building Elevation - 1st Ave

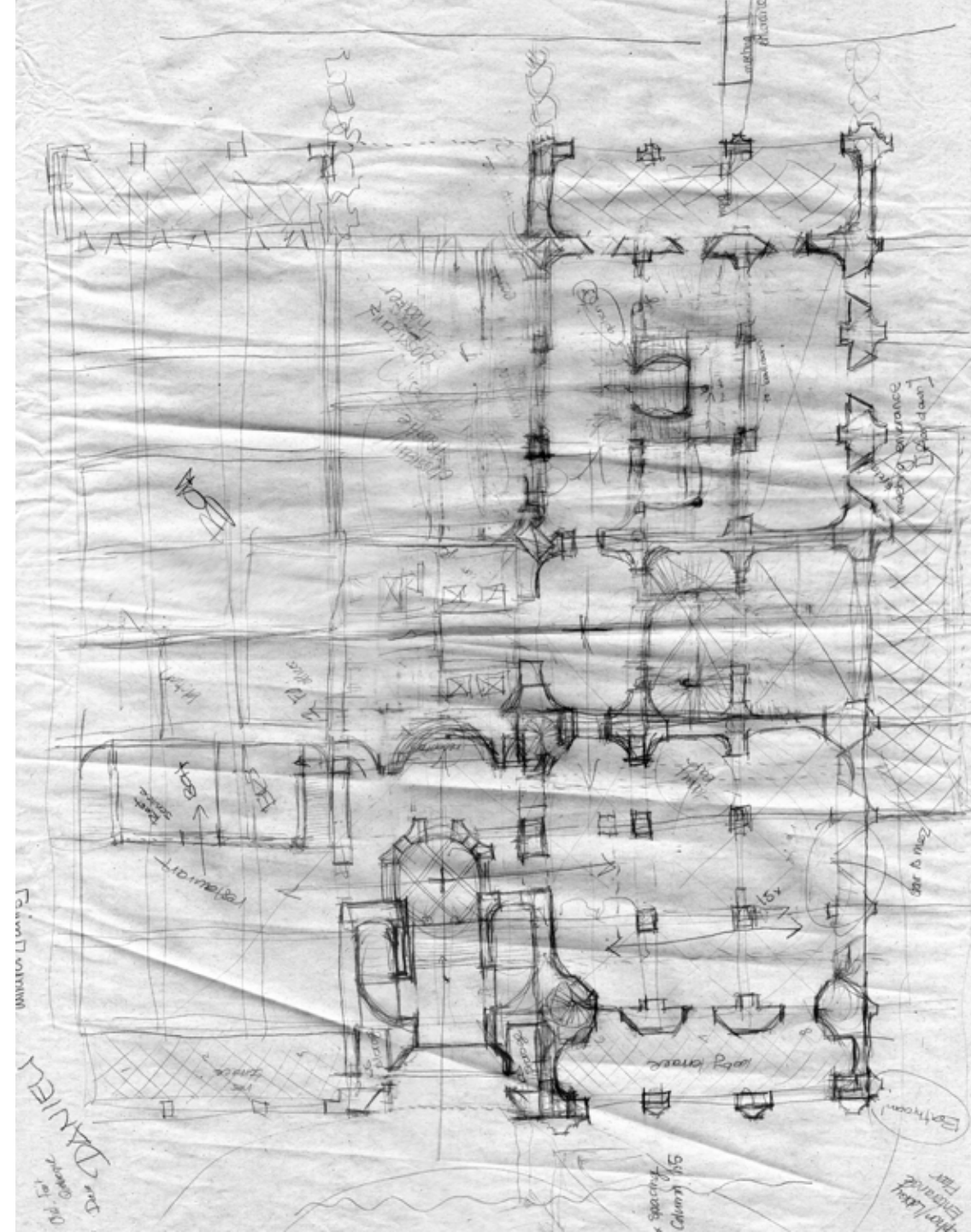


Preliminary Drawing: Section - 1st Ave to FDR Drive

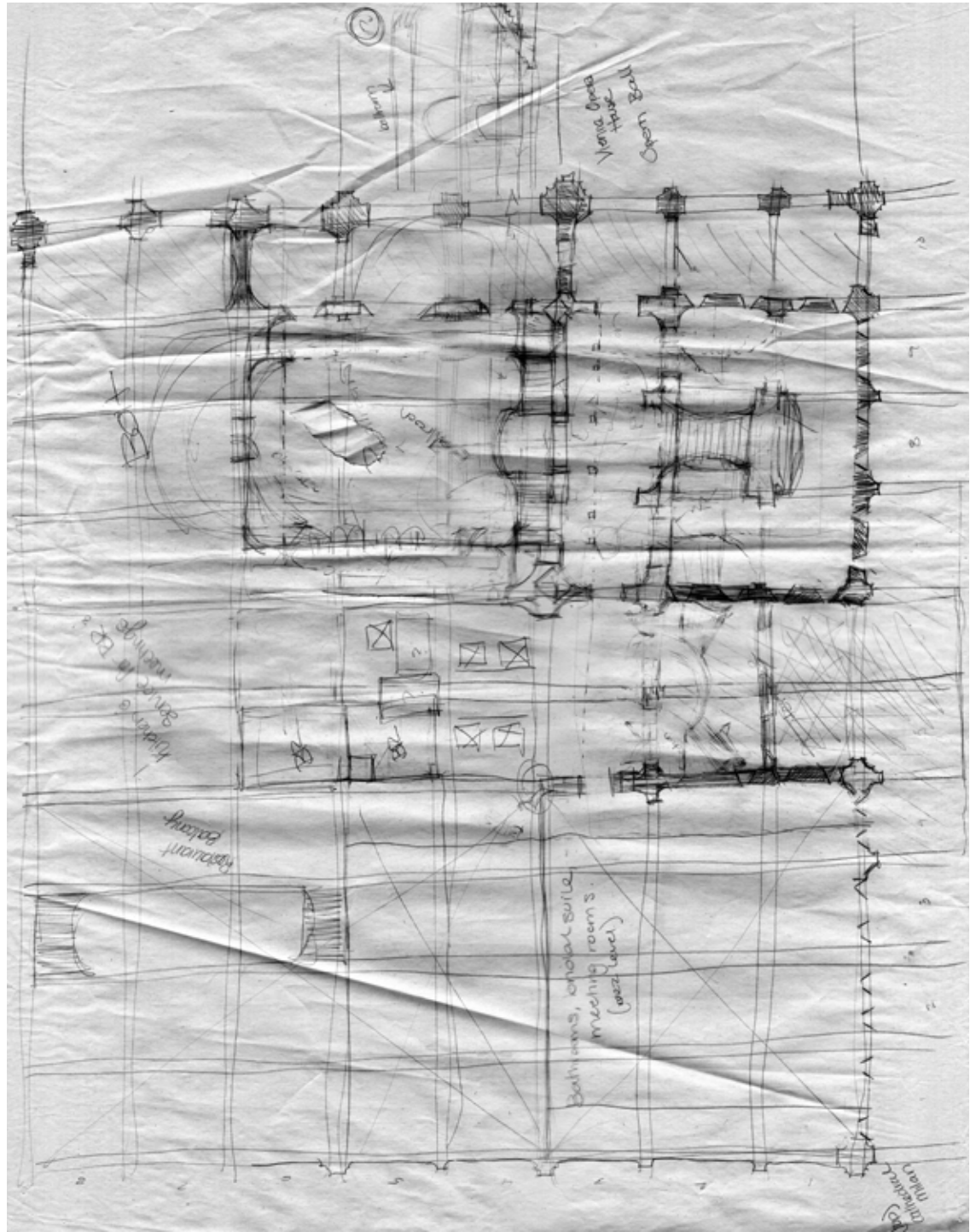




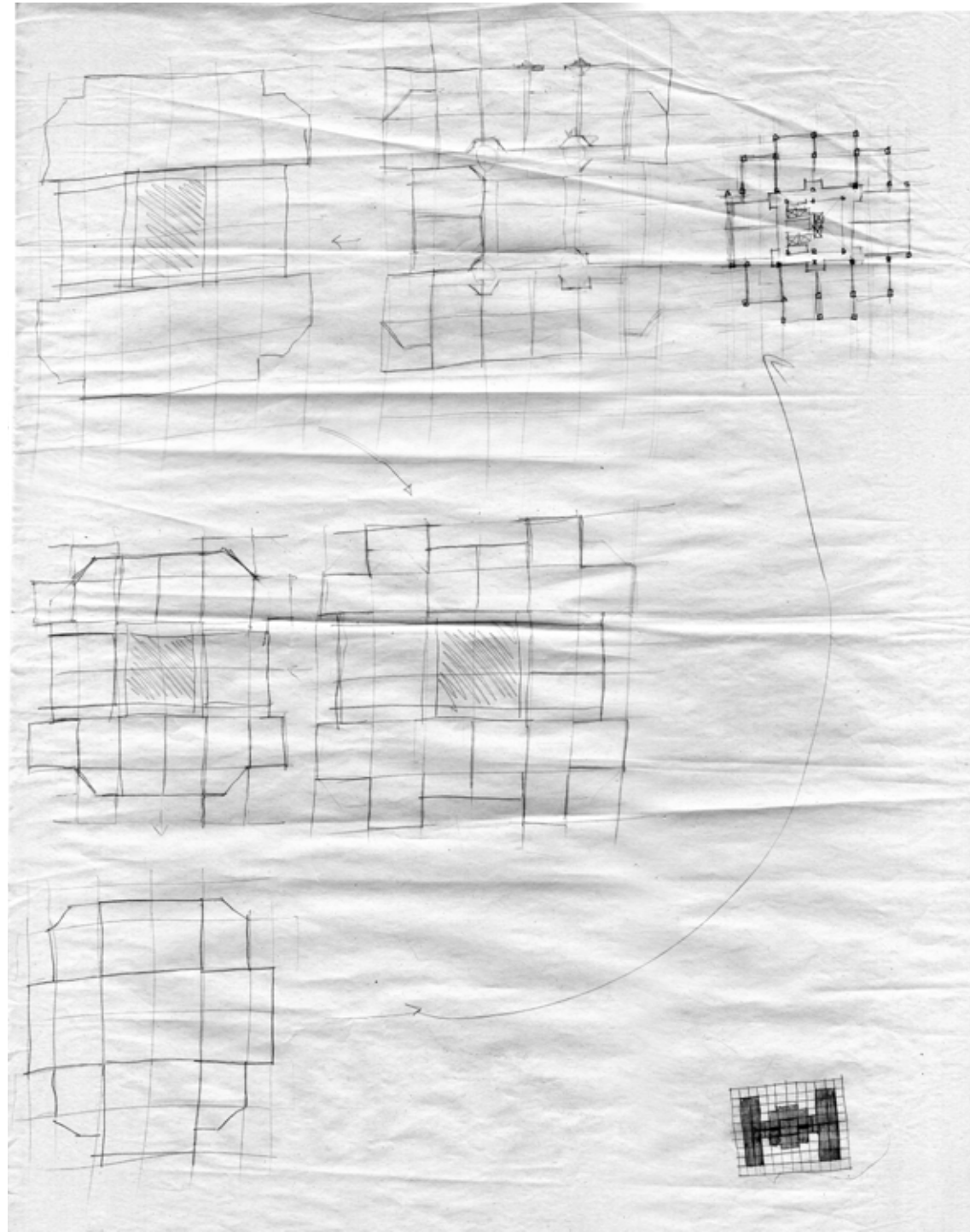
Preliminary Drawing: Floor Plan, Lower Level - 1st Version



Preliminary Drawing: Floor Plan, Lobby Level - 1st Version

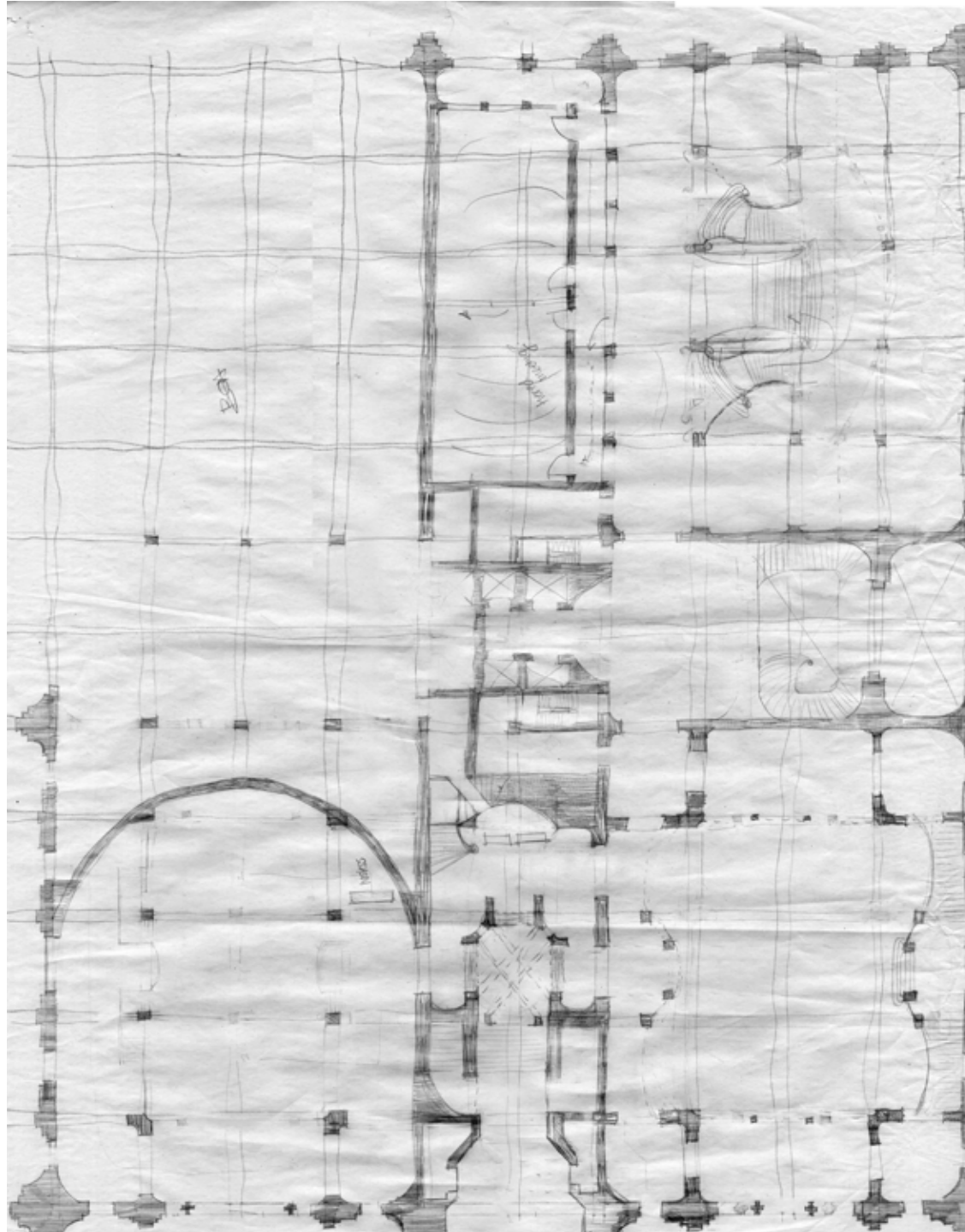


Preliminary Drawing: Floor Plan, Ballroom Level - 1st Version

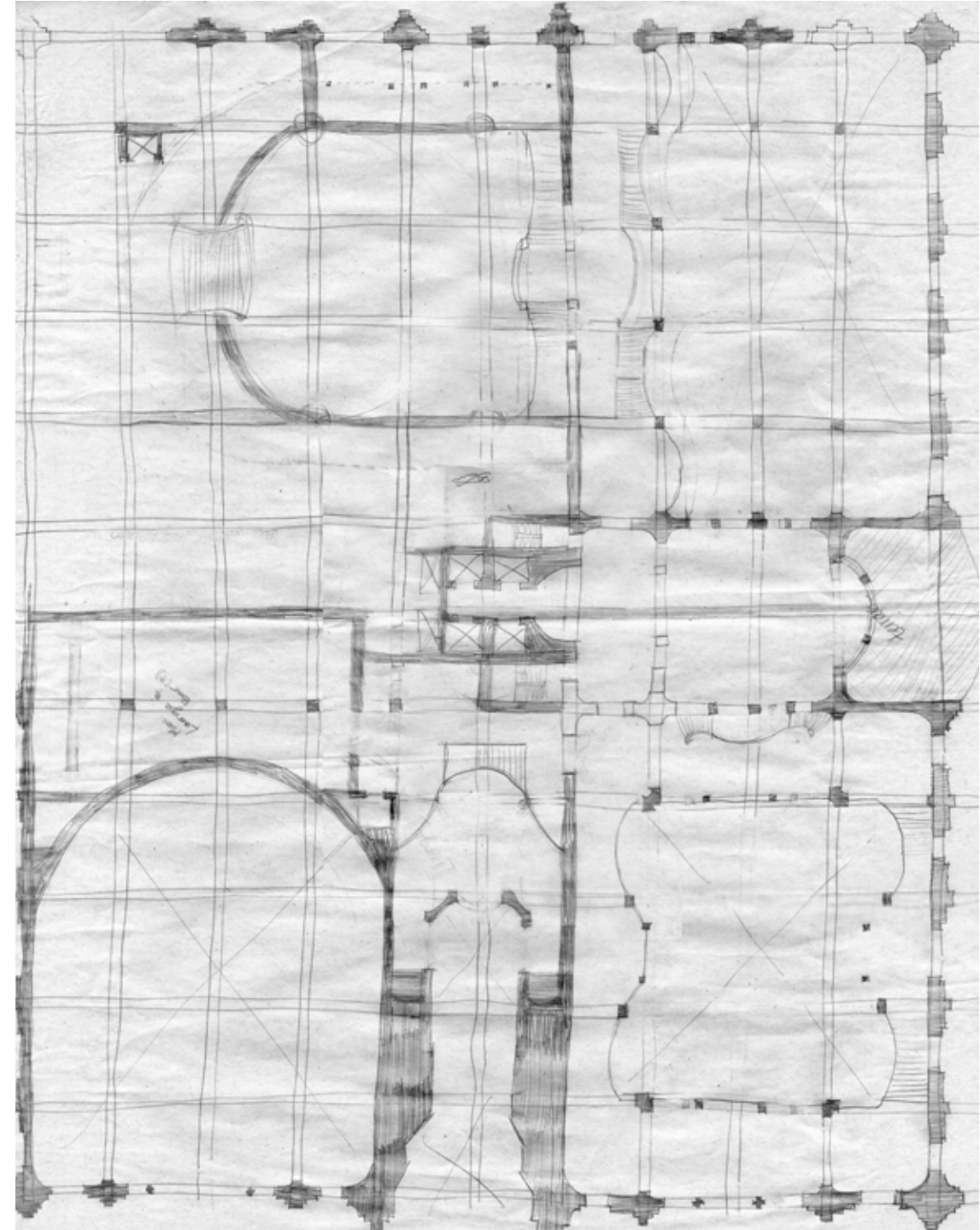


Preliminary Drawing: Tower Floor Plates

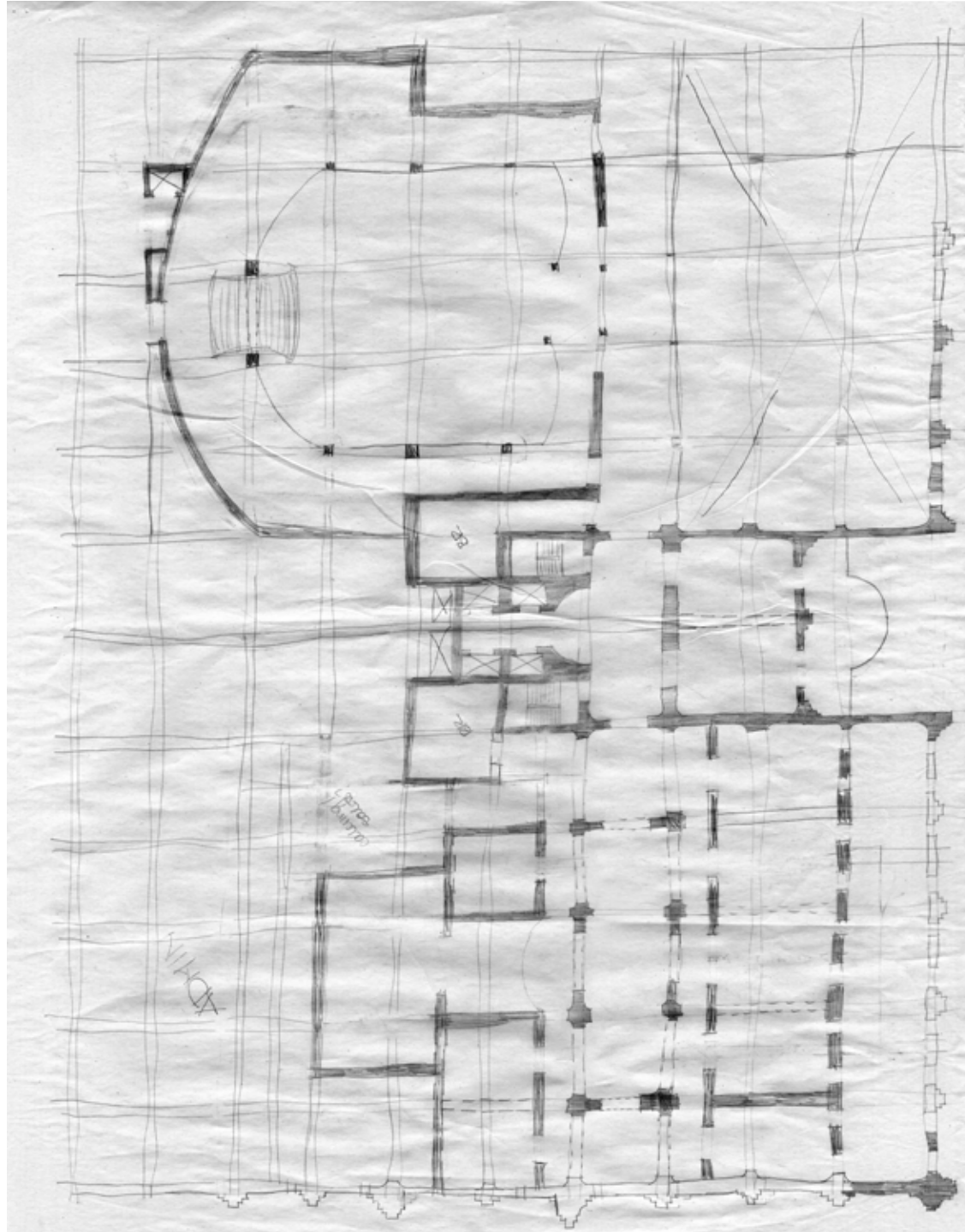




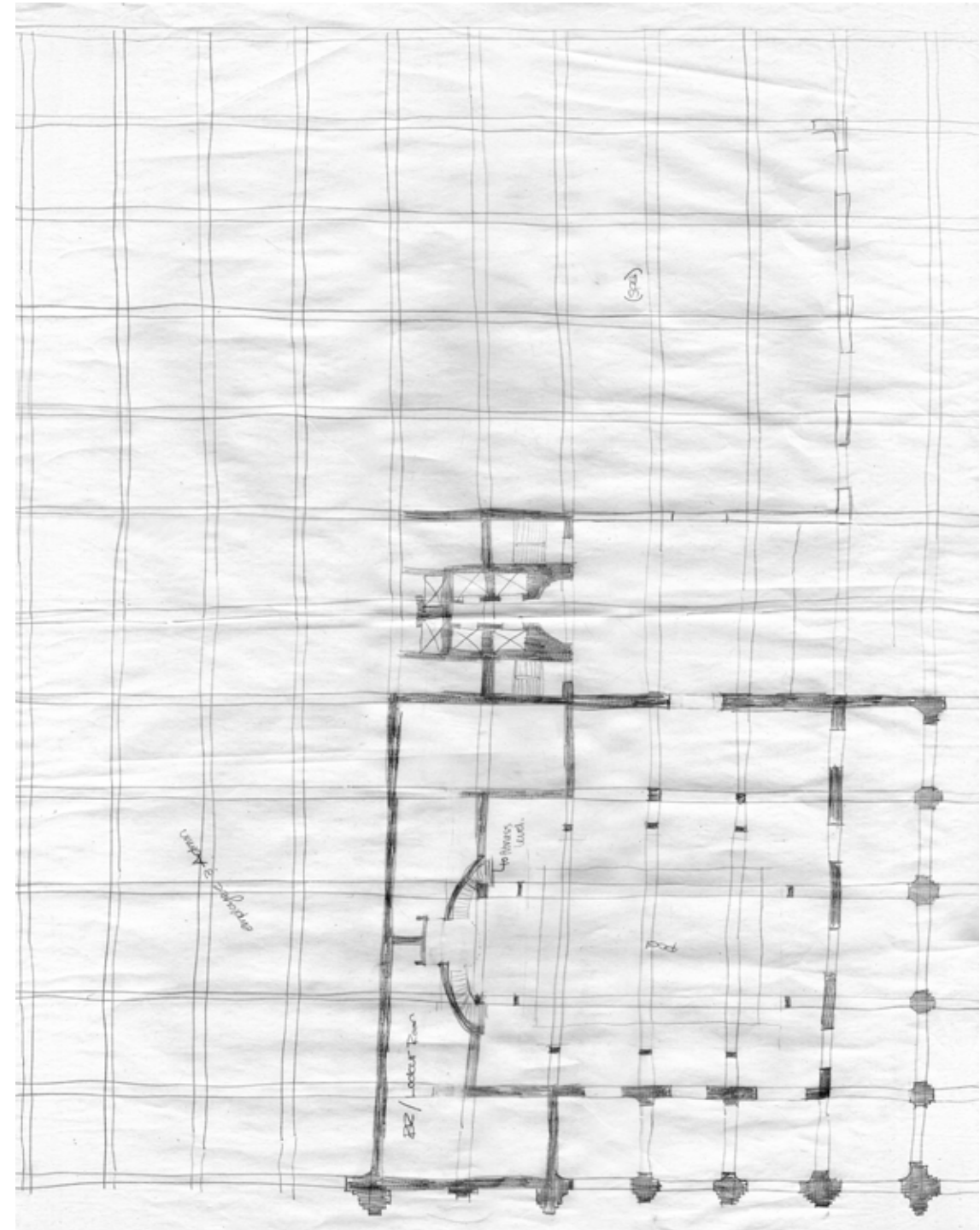
Preliminary Drawing: Floor Plan, Lobby Level - 2nd Version



Preliminary Drawing: Floor Plan, Ballroom Level - 2nd Version

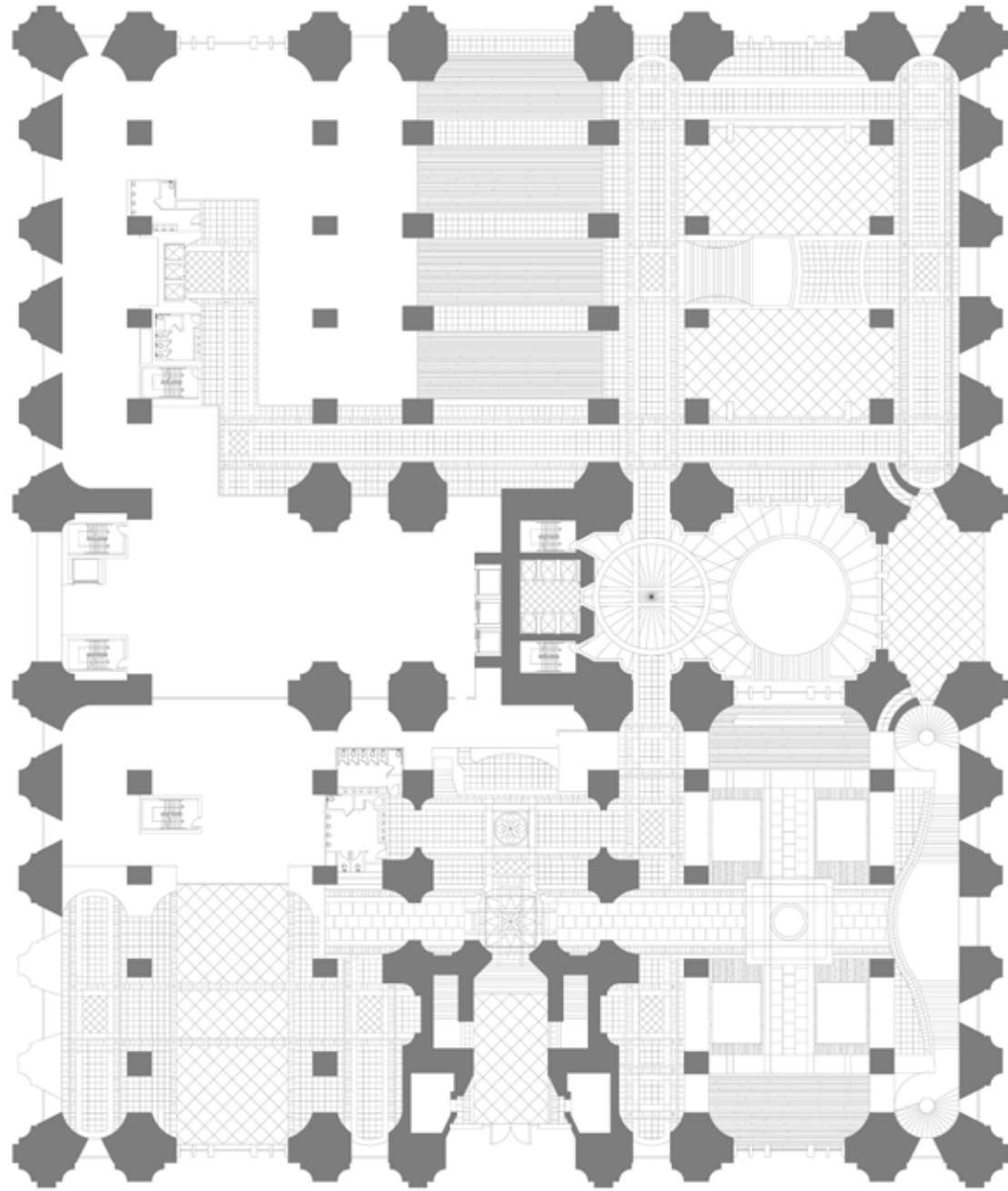


Preliminary Drawing: Floor Plan, Ballroom Mezzanine Level - 1st Version

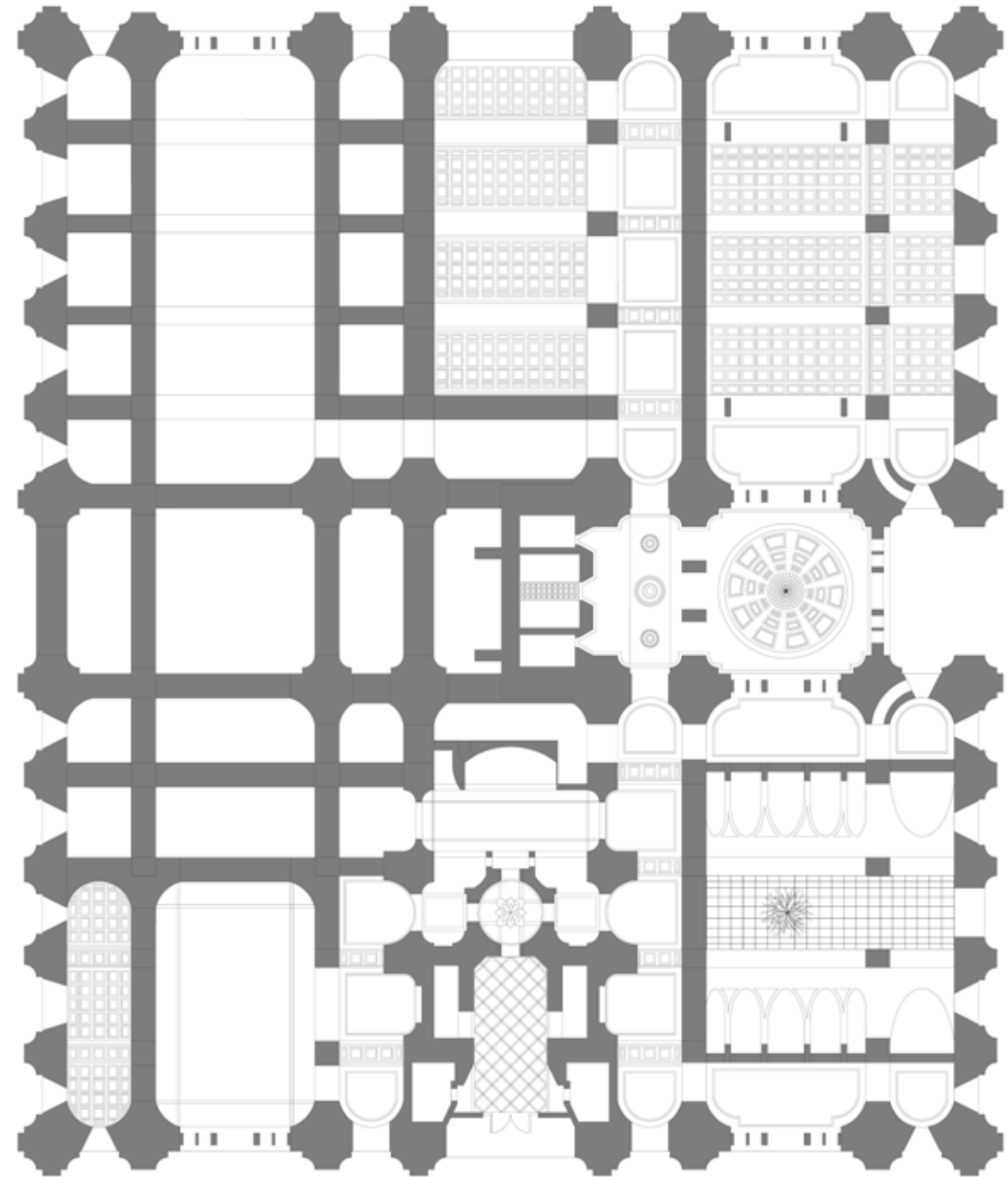


Preliminary Drawing: Floor Plan, Pool Level - 1st Version

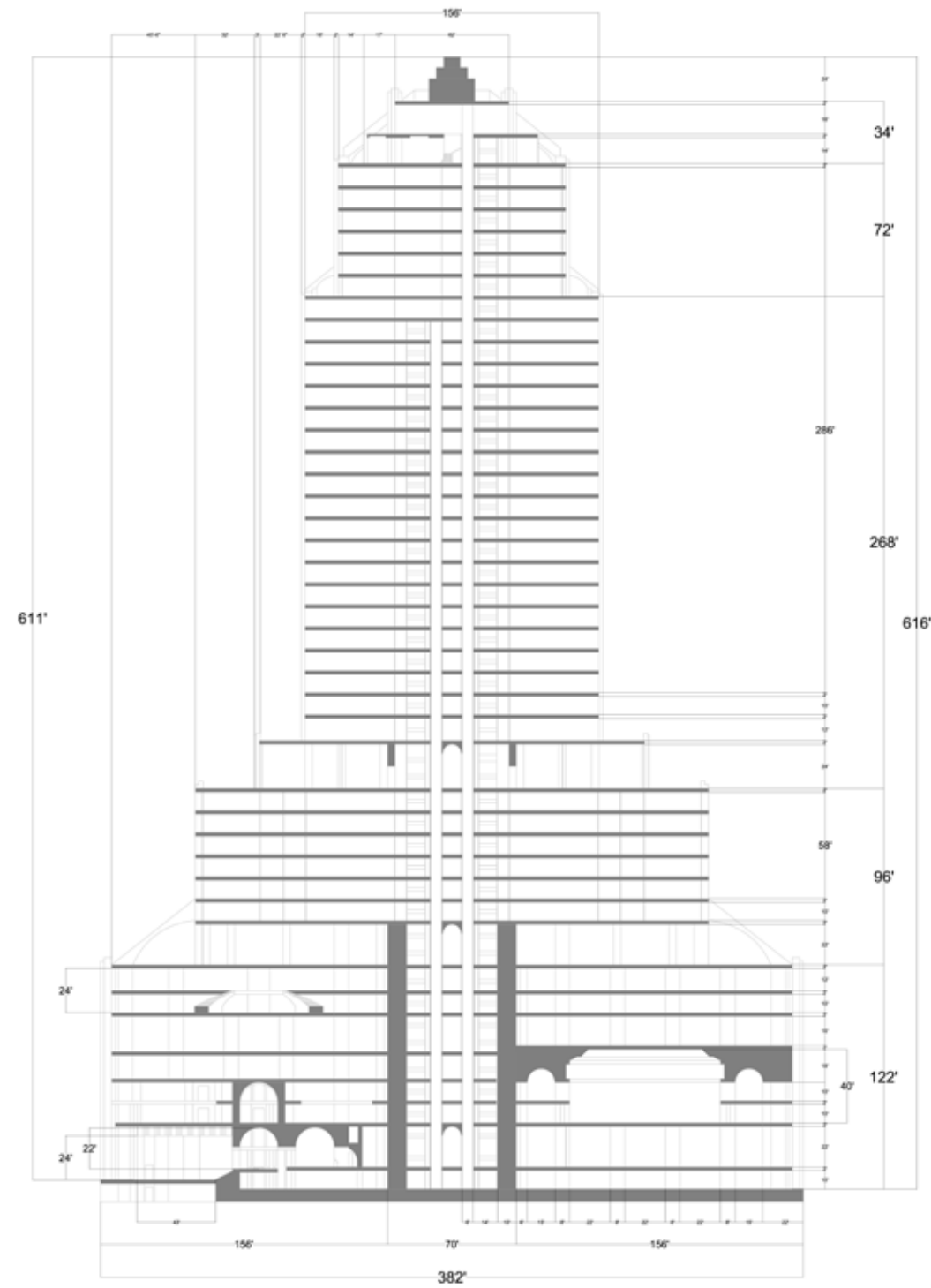




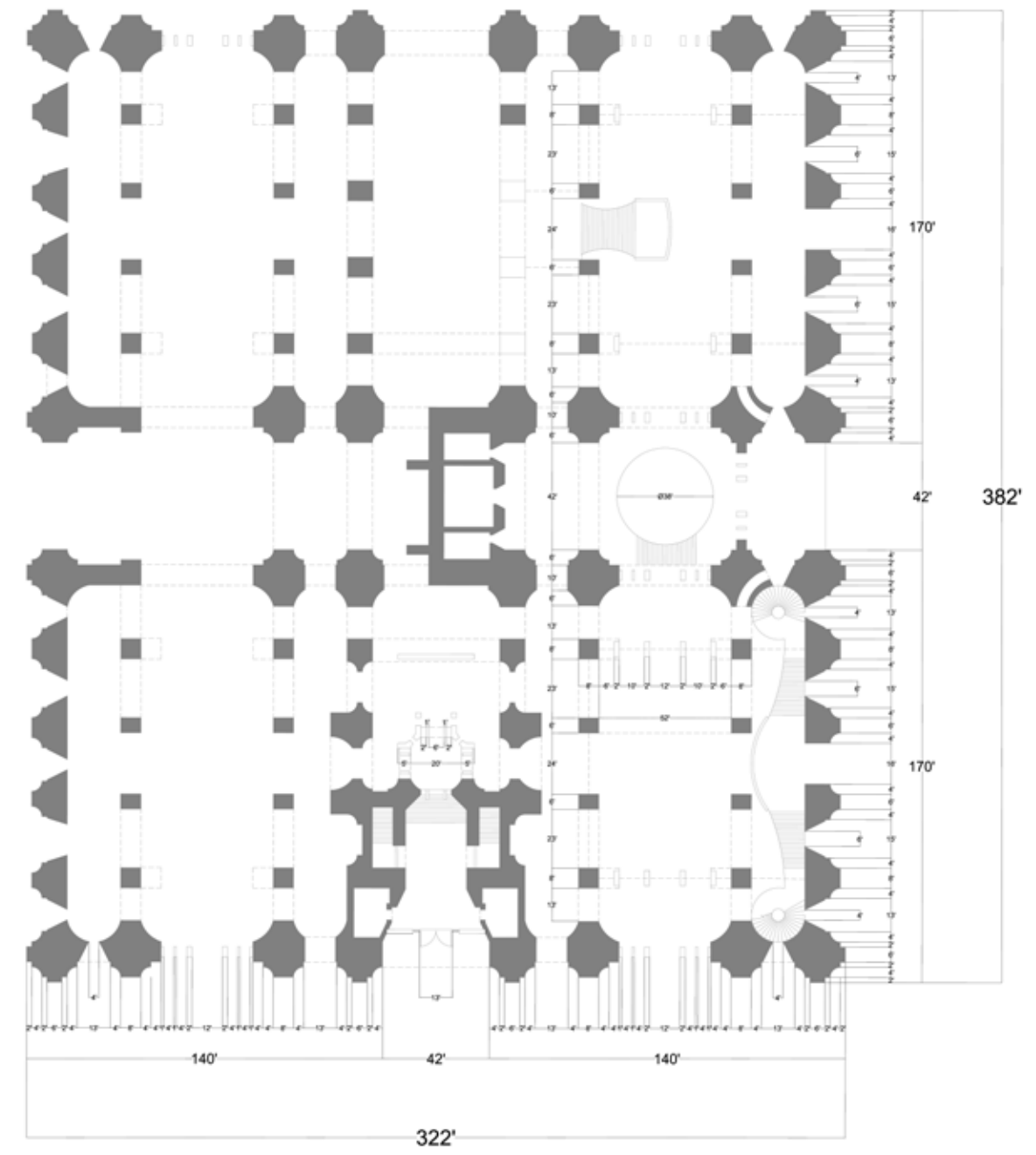
1st Floor: Lobby - Floor Plan



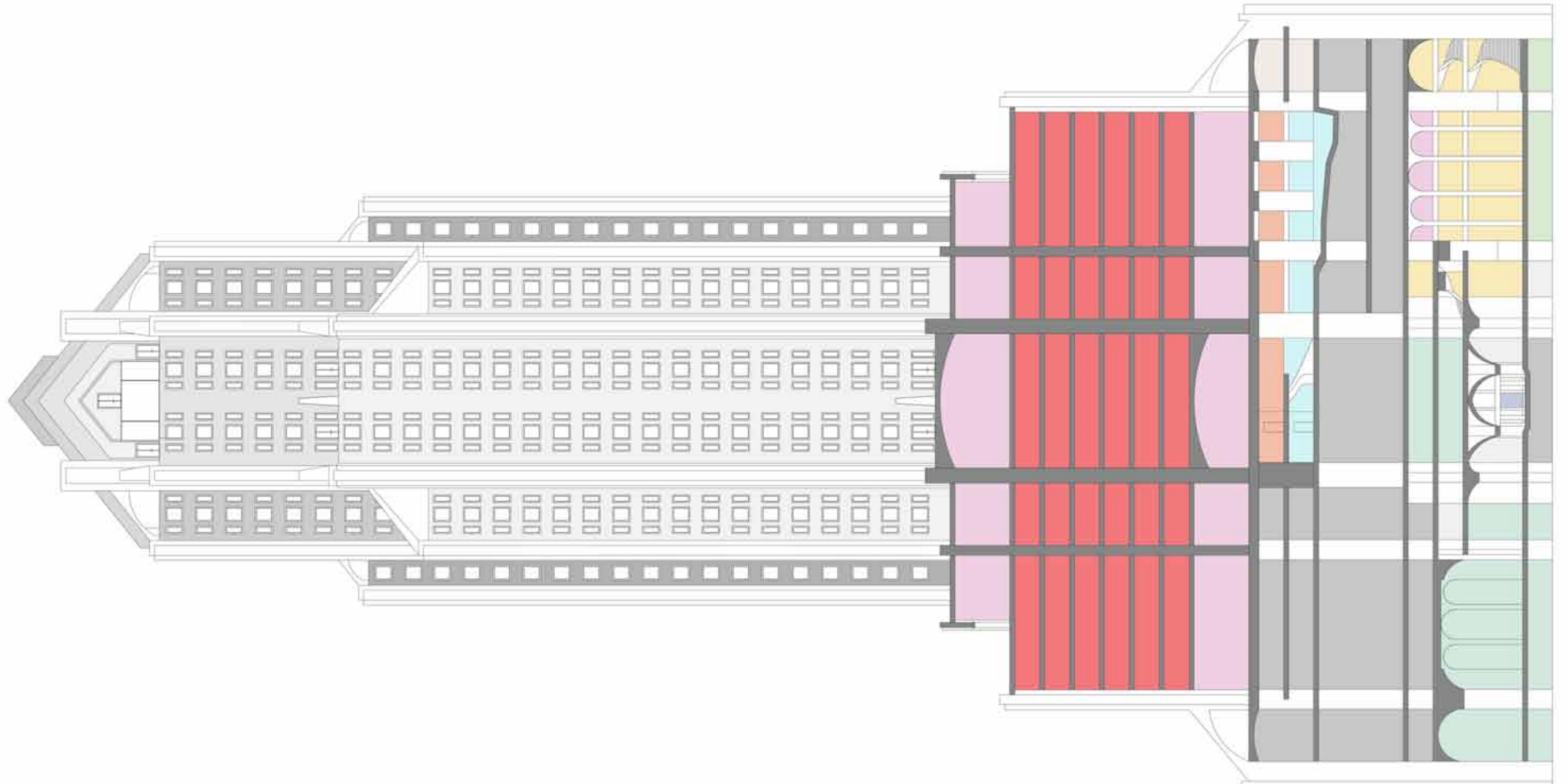
1st Floor: Lobby - Ceiling Plan



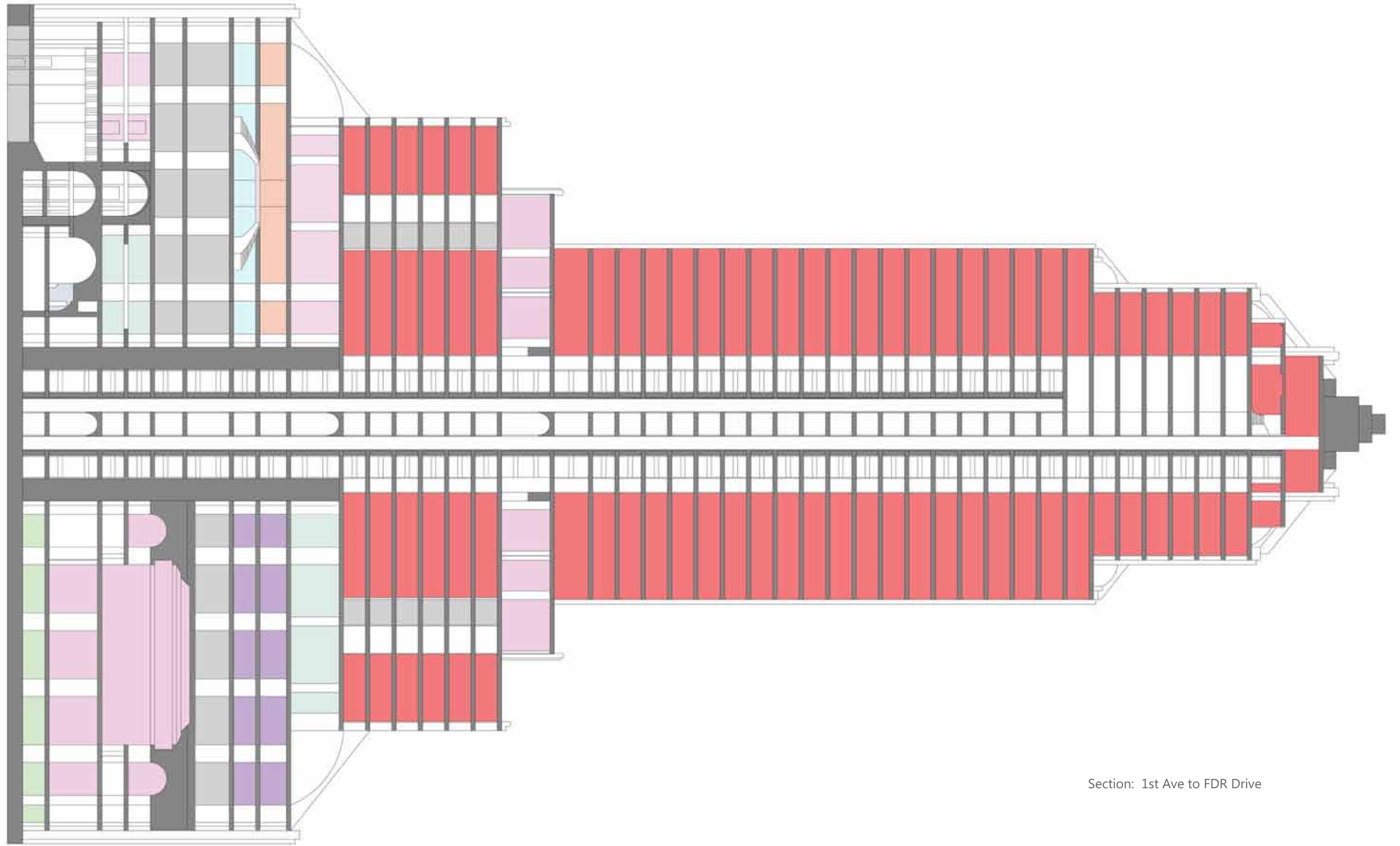
Section: 1st Ave to FDR Drive - Dimensions



1st Floor: Lobby - Dimensions

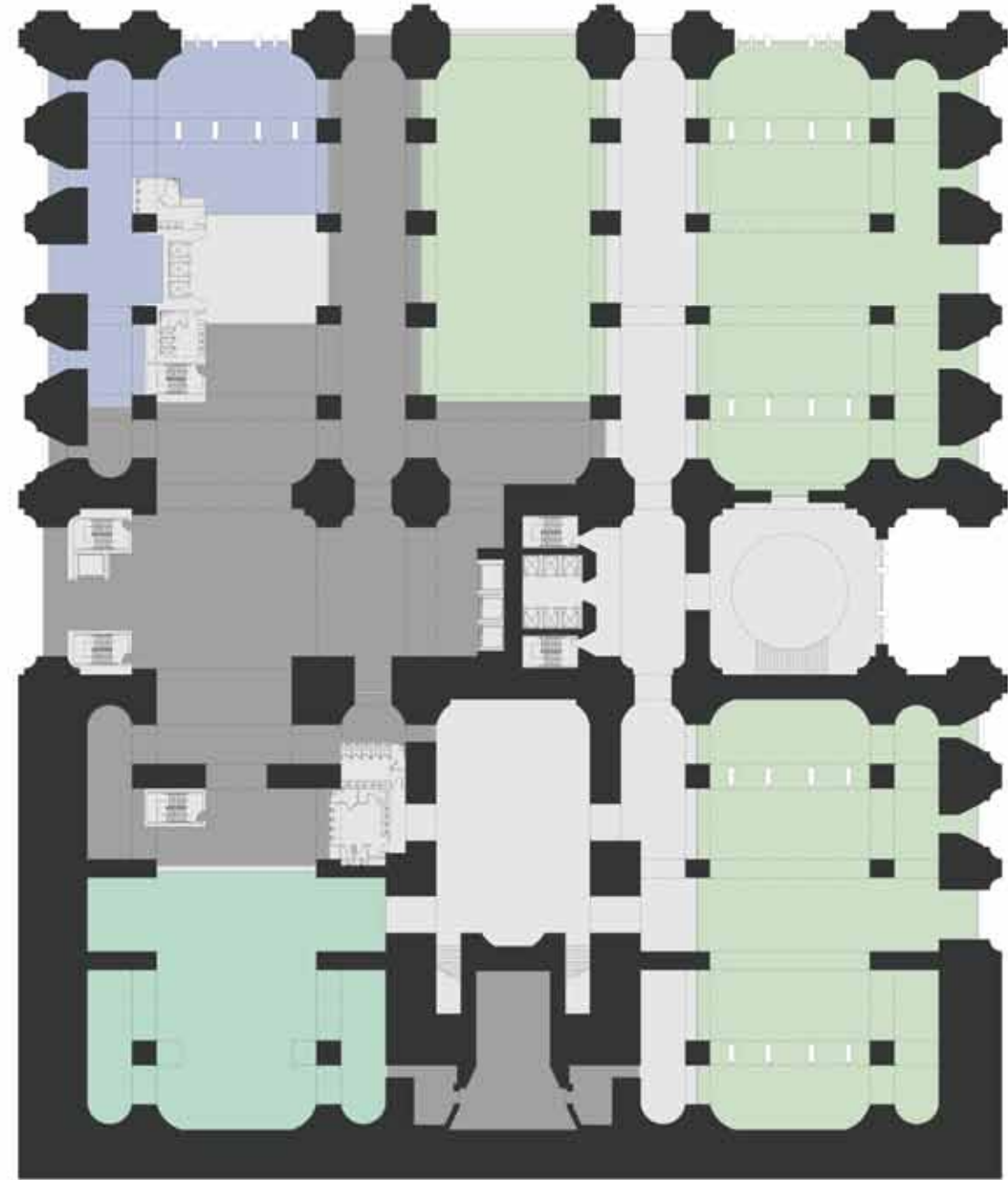


Section: 39th St to 41st St



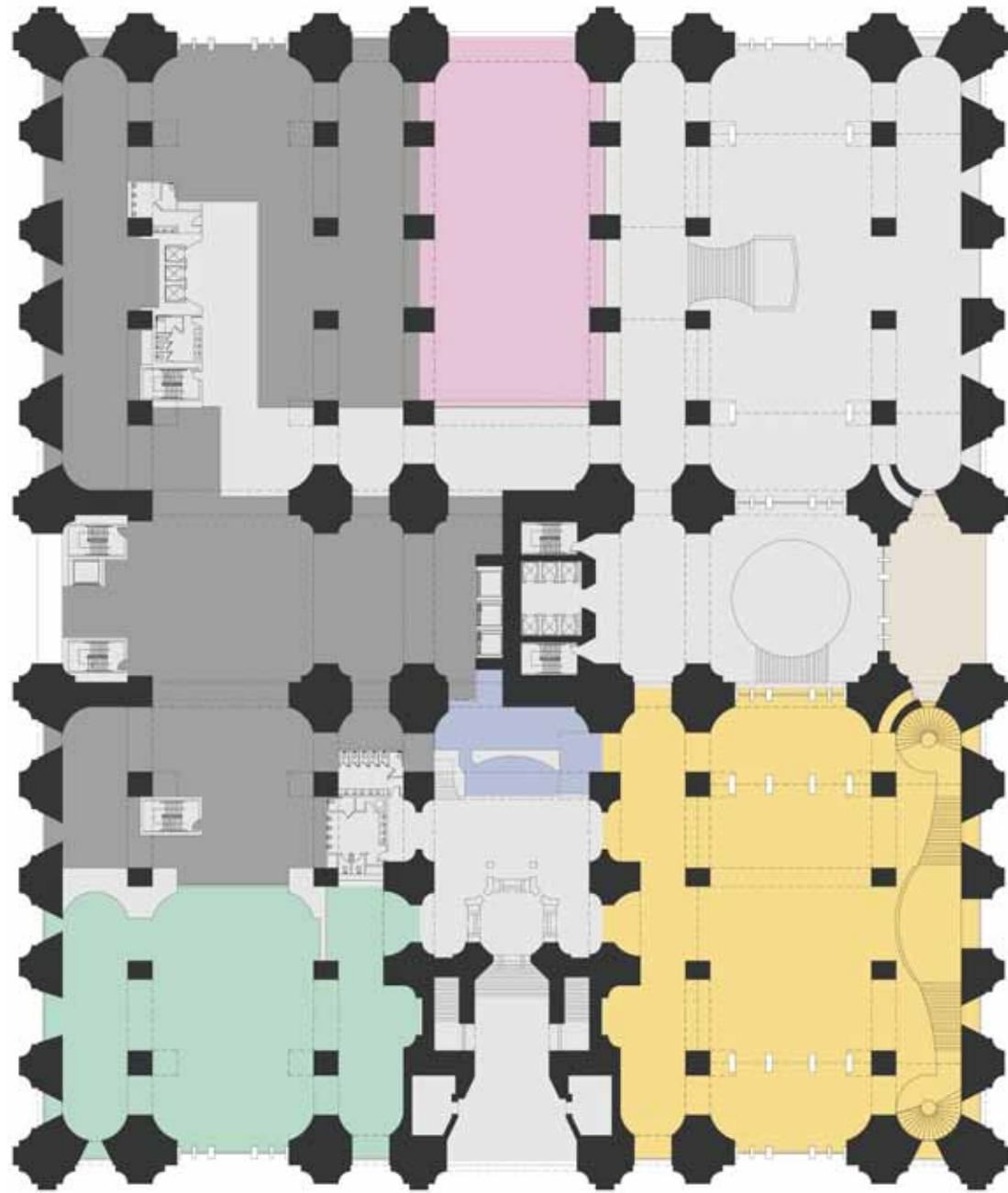
Section: 1st Ave to FDR Drive

-  Reception
-  Restaurants + Bars
-  Lobby
-  Back of House
-  Outdoor Terrace
-  Meeting Rooms
-  Spa
-  Pool
-  Fitness Room
-  Guestrooms

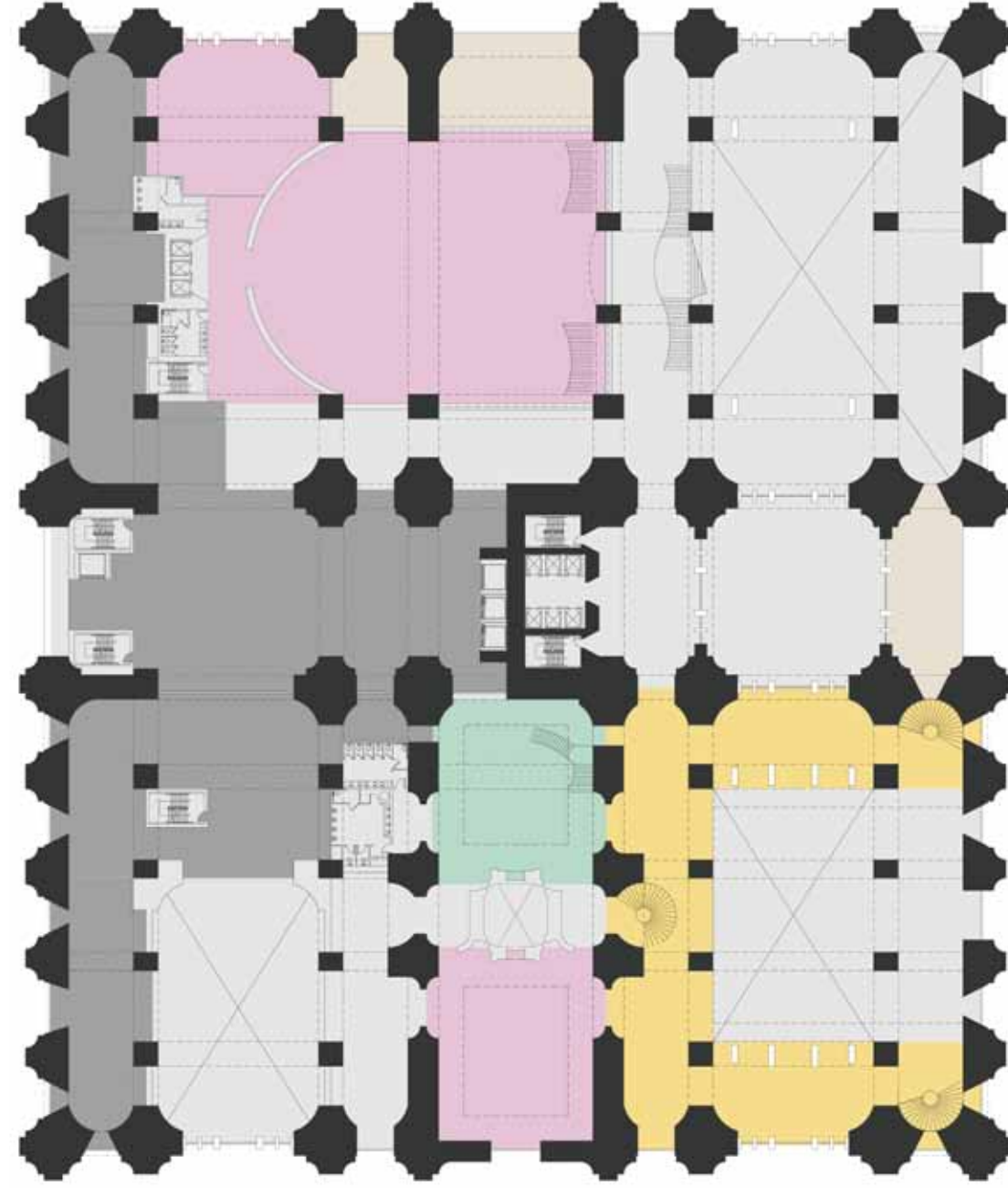


Lower Level: ADA Entrance



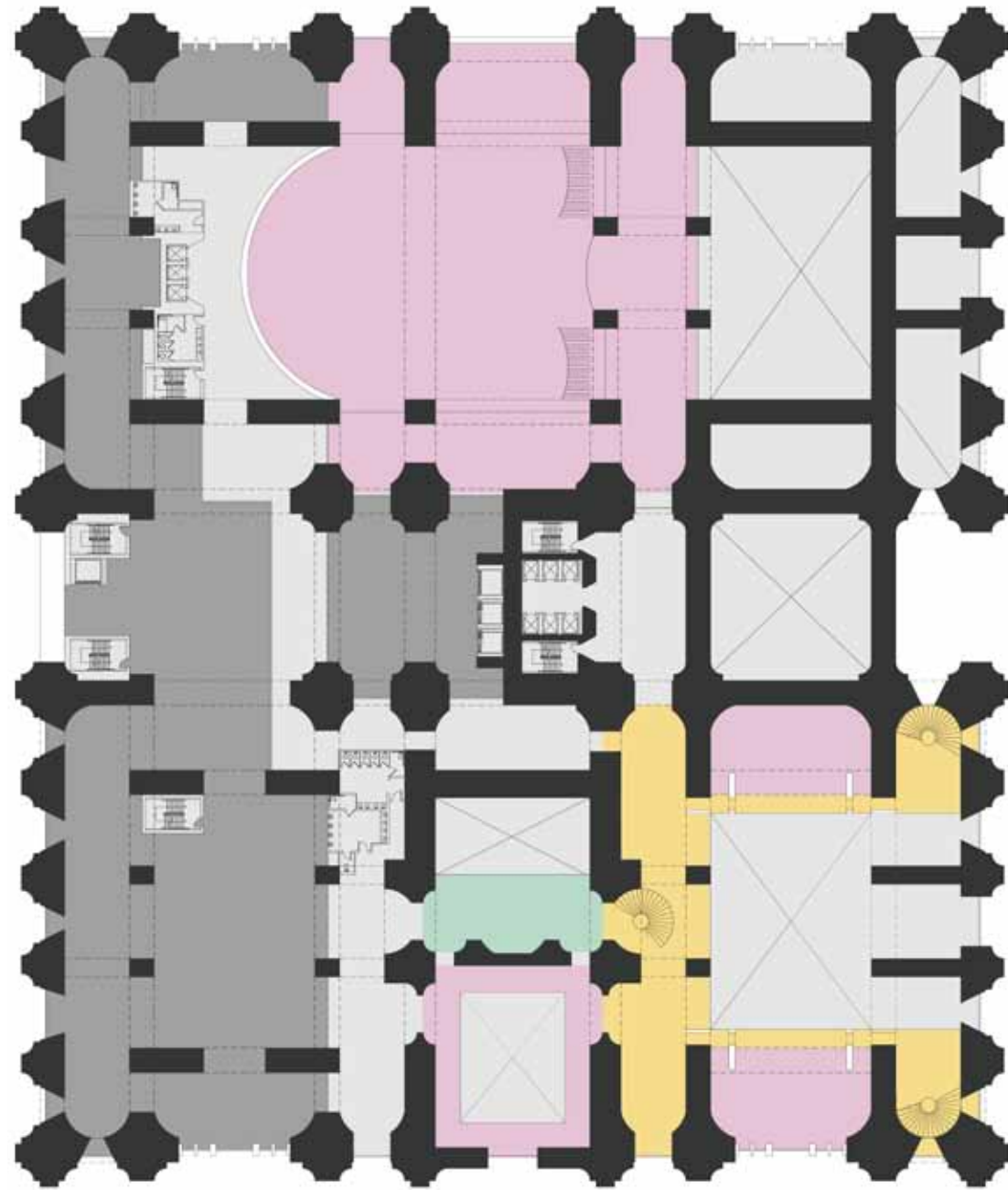


1st Floor: Lobby

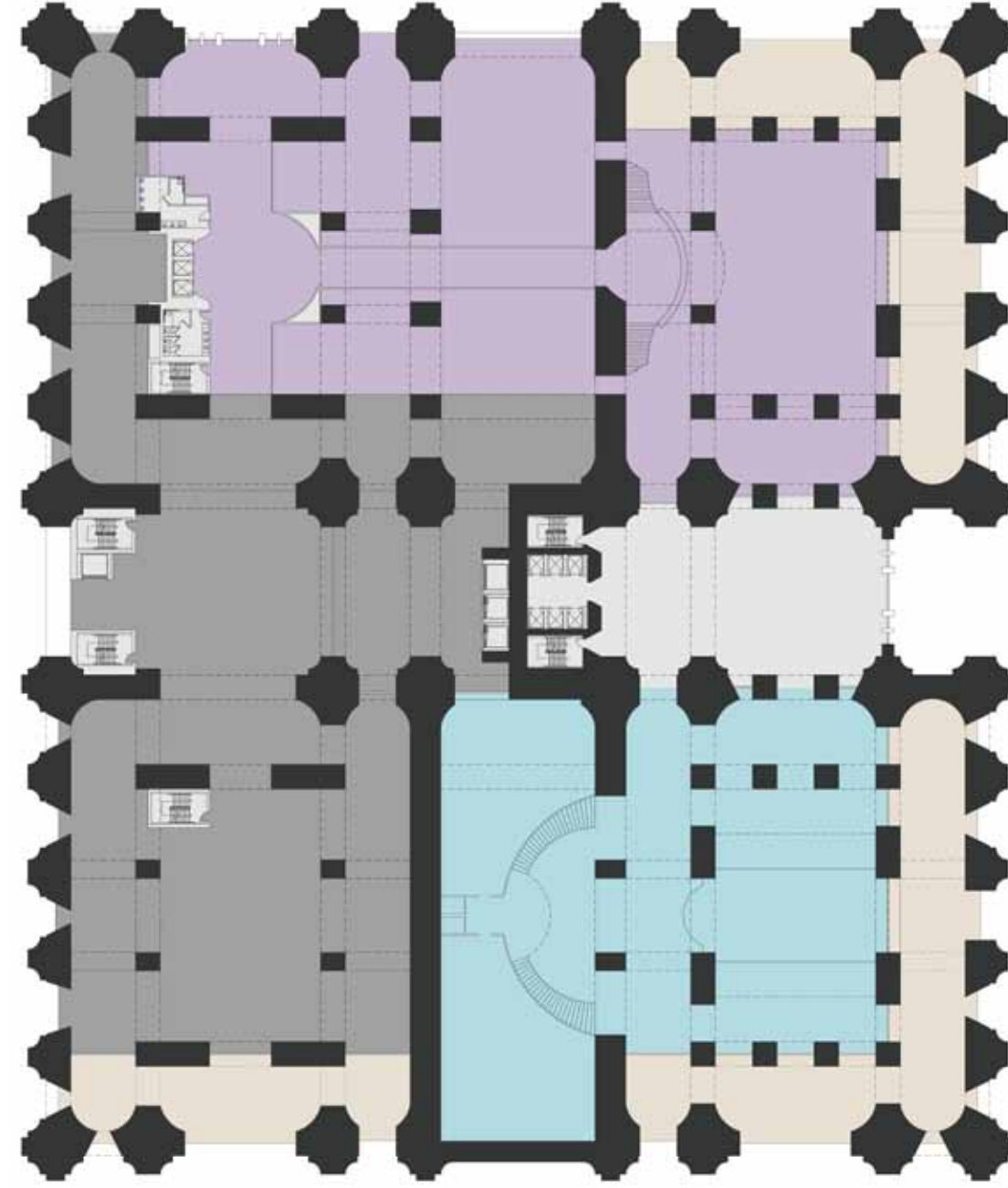


2nd Floor: Lobby Mezzanine + Ballroom

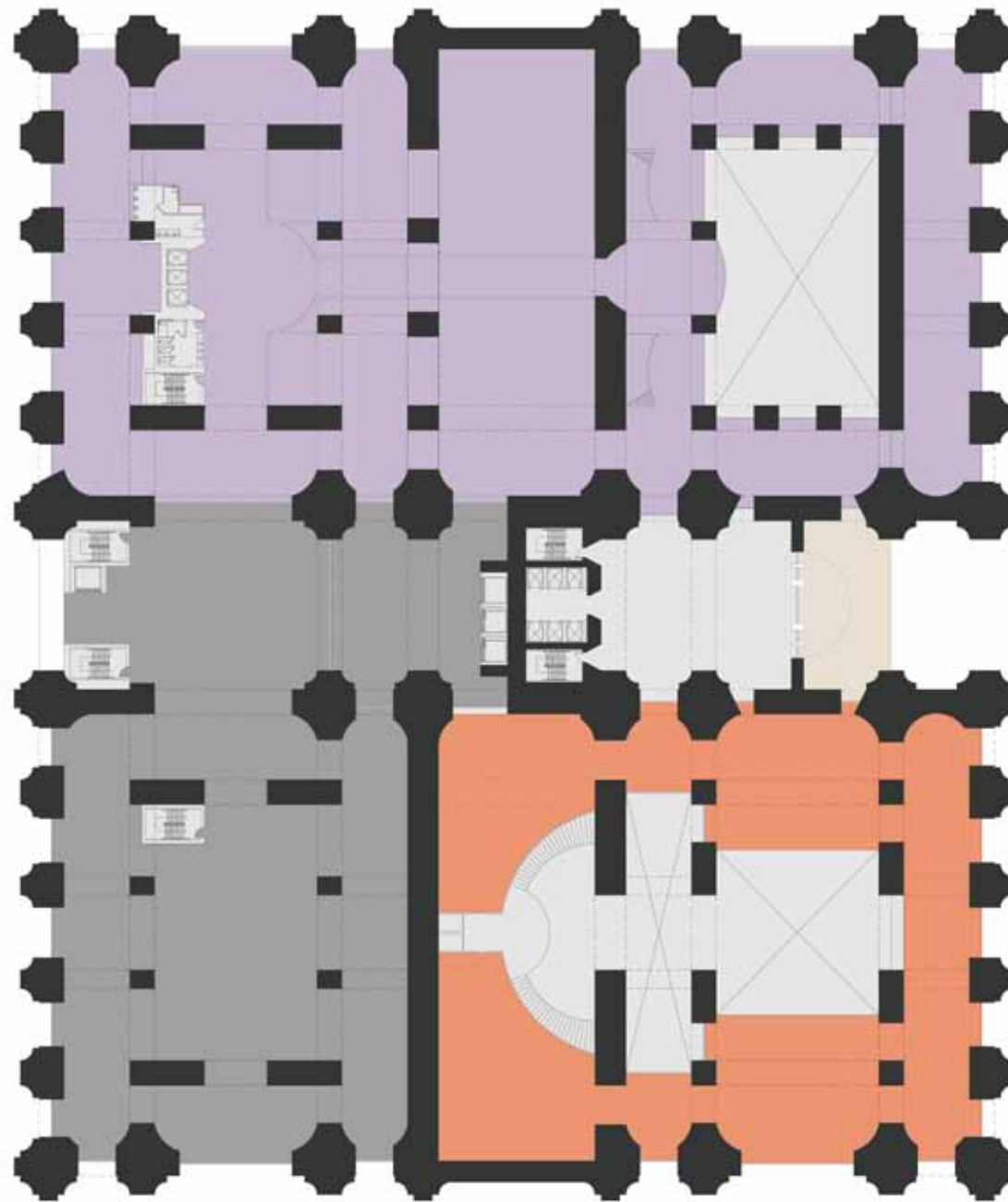




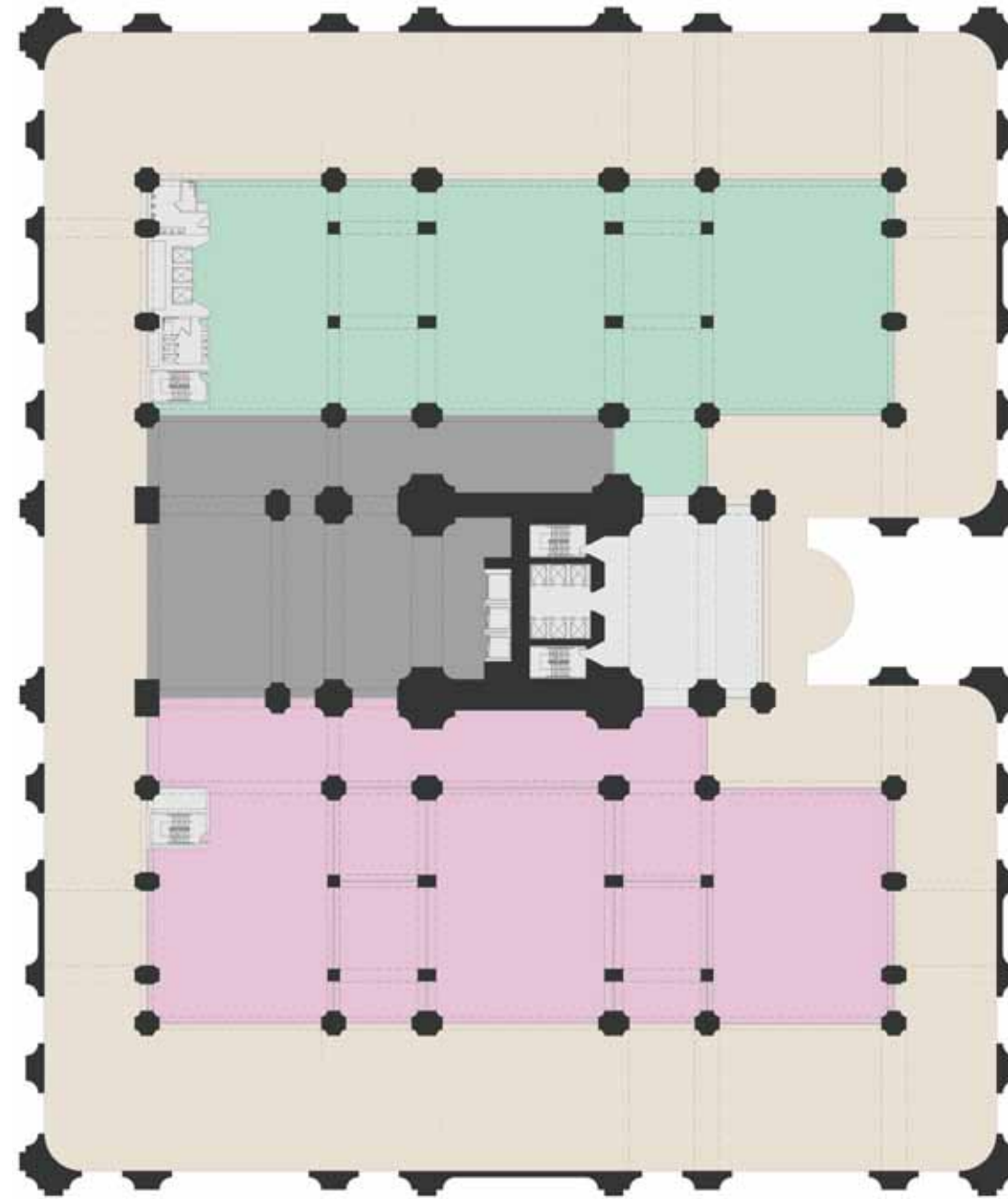
3rd Floor: Ballroom Mezzanine



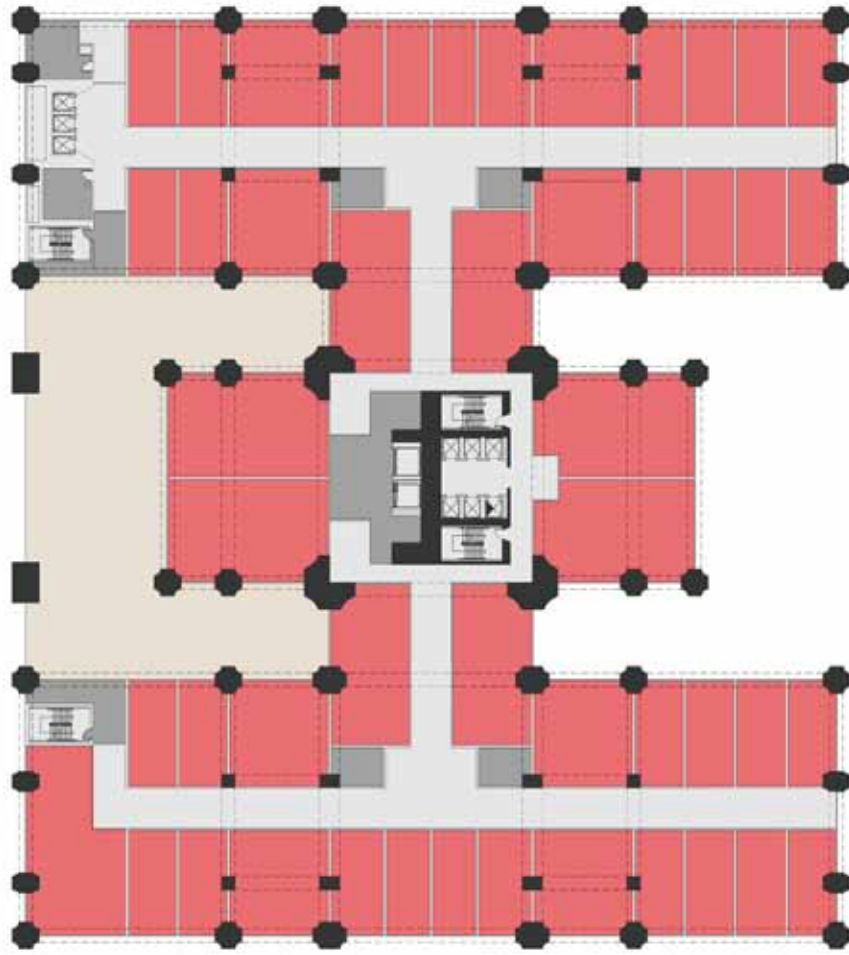
5th Floor: Pool + Spa



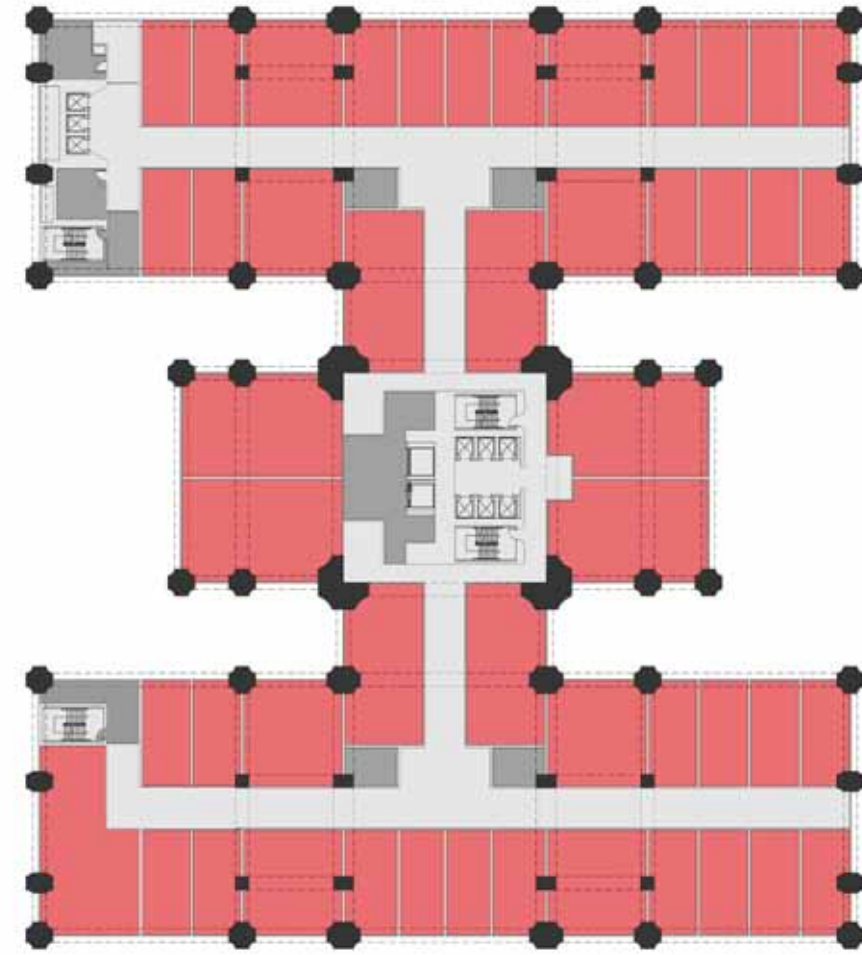
6th Floor: Gym + Spa



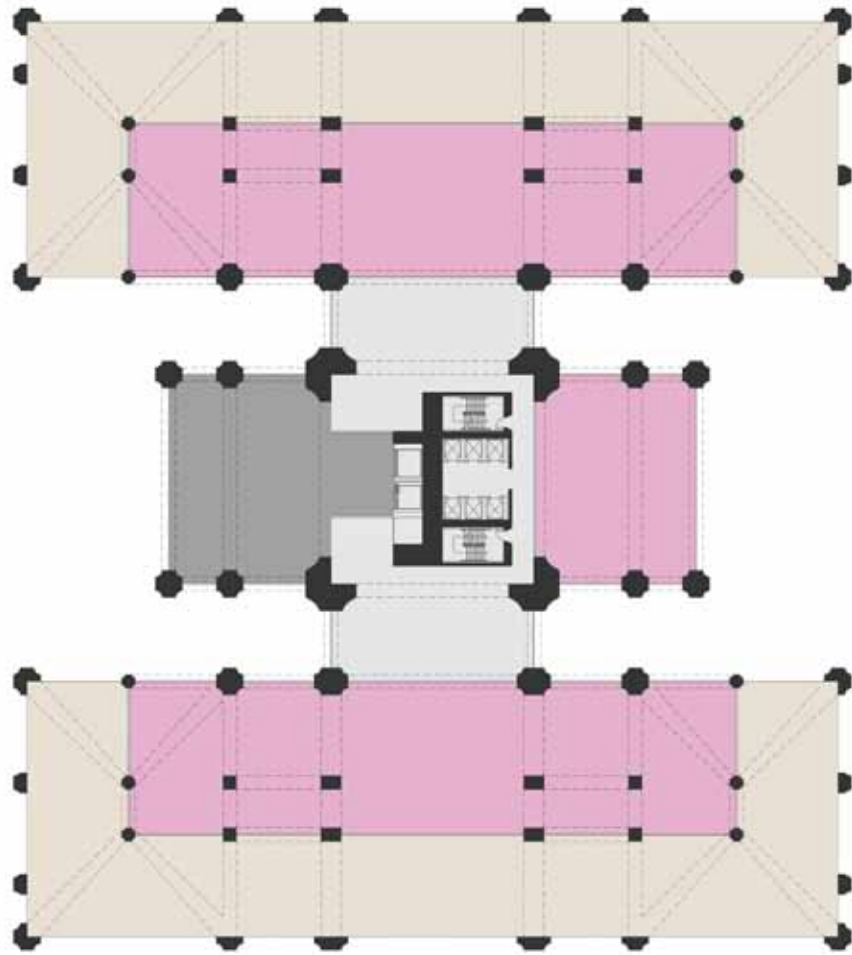
7th Floor: Concierge Level + Boardroom + Rooftop Restaurant/Bar



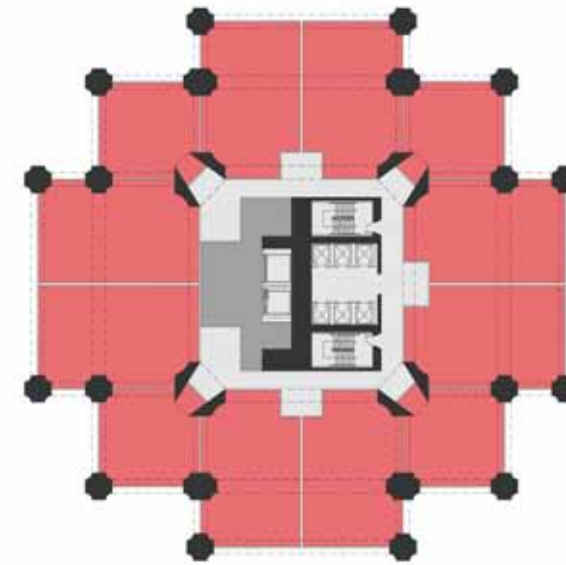
8th Floor: Guestrooms



9th - 13th Floor: Guestrooms

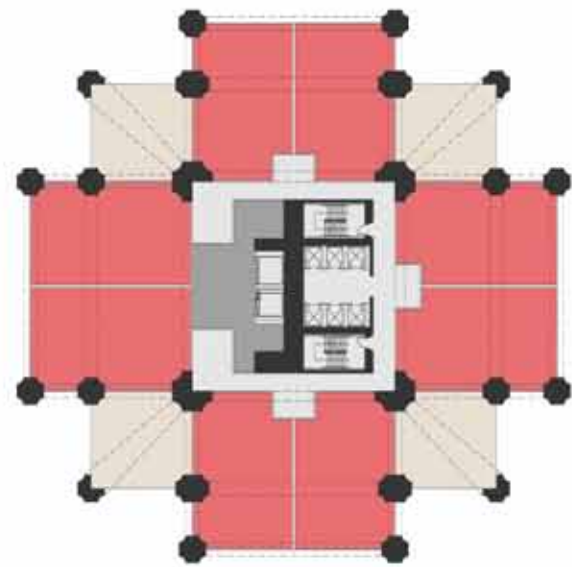


14th Floor: Meetings + Events

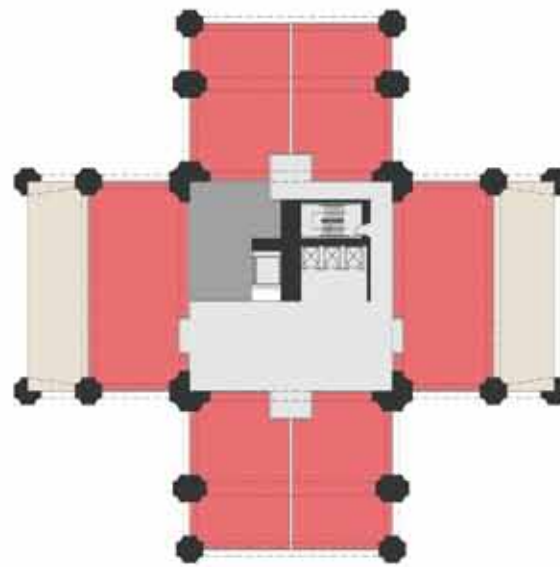


15th - 31st Floor: Tower Guestrooms

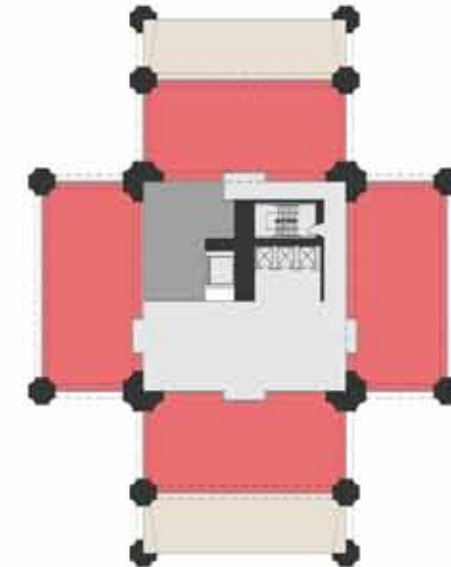




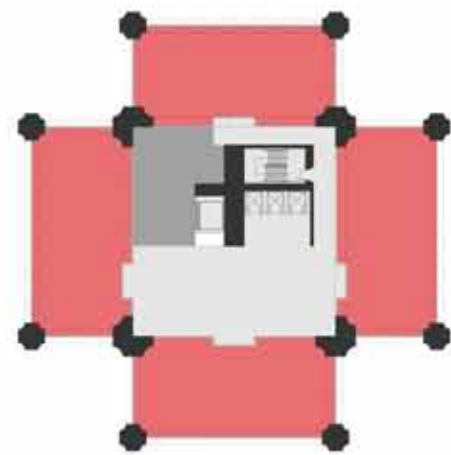
33rd Floor: Tower Guestrooms



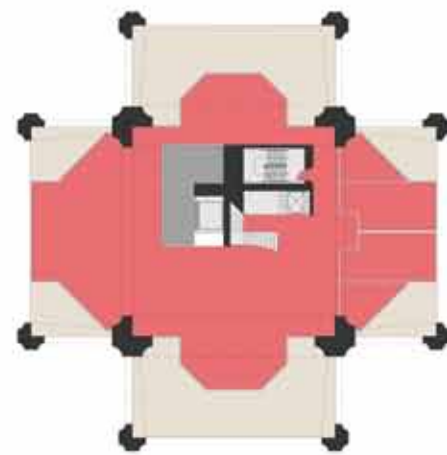
34th Floor: Tower Guestrooms



35th Floor: Tower Guestrooms



36th -40th Floor: Tower Guestrooms



41st Floor: Penthouse Suite 1st Floor

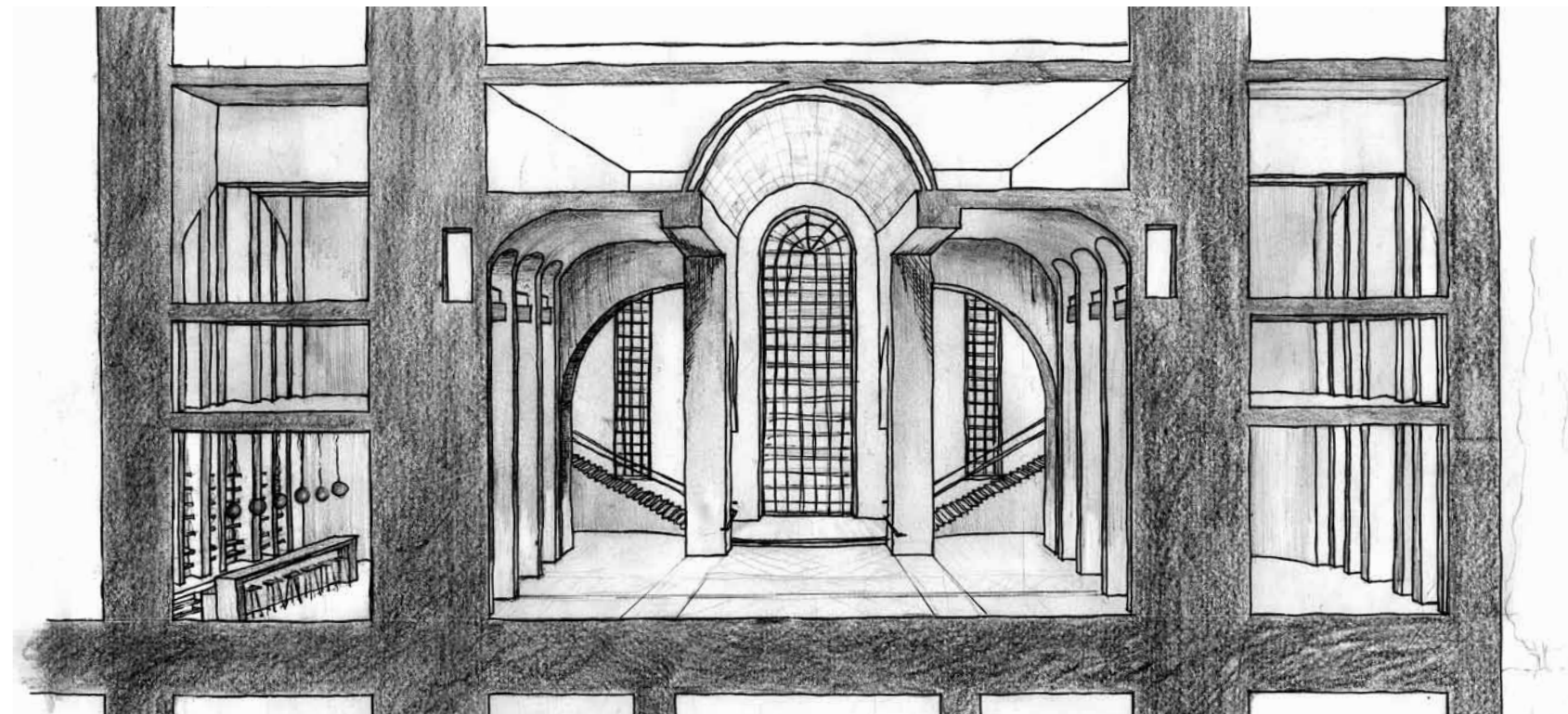


42nd Floor: Penthouse Suite 2nd Floor



## **Choreographed Views**

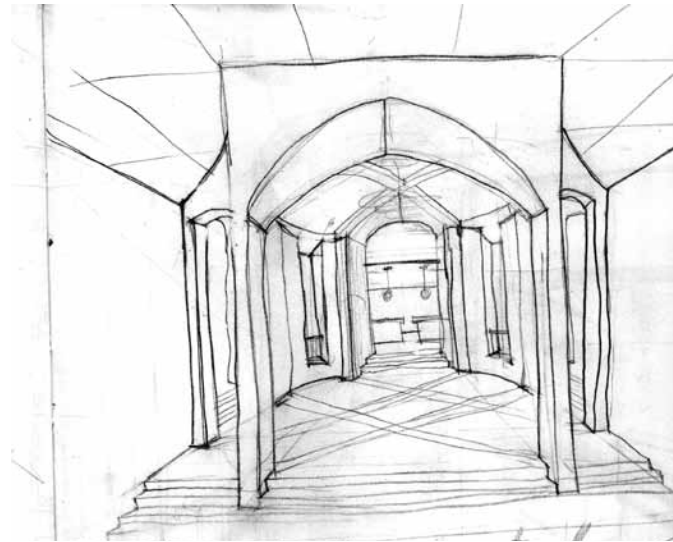
Each building offers a few precious moments where the architect can carefully arrange what a person sees as he or she moves through the sculpted spaces. The importance of these views may go unnoticed to many of the building's visitors. But, the few who perceive the carefully directed movements, the choreographed views, are awarded a glimpse into the architect's mind, and ultimately, the building's soul.



This Page: Section Perspective, Lobby  
Opposite Page + Page 52:  
Sketches, interior perspectives



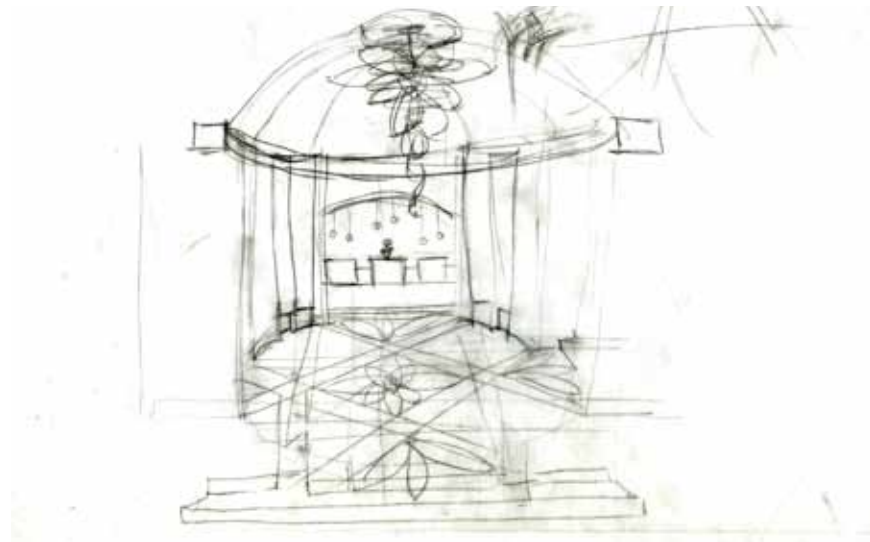
Lobby



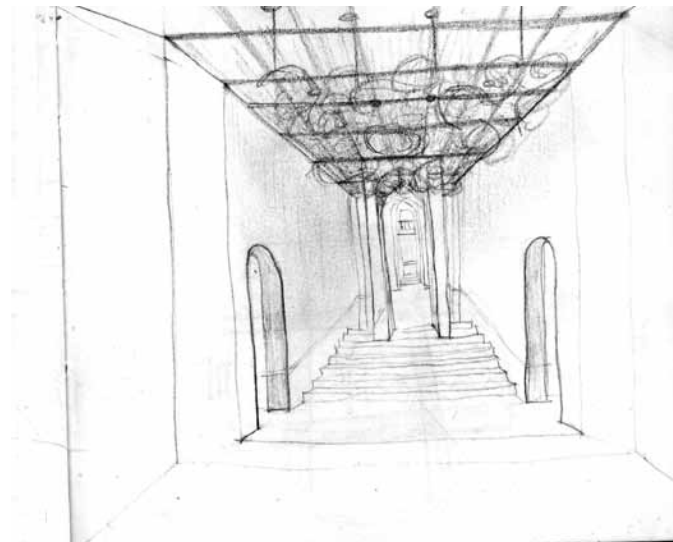
Rotunda



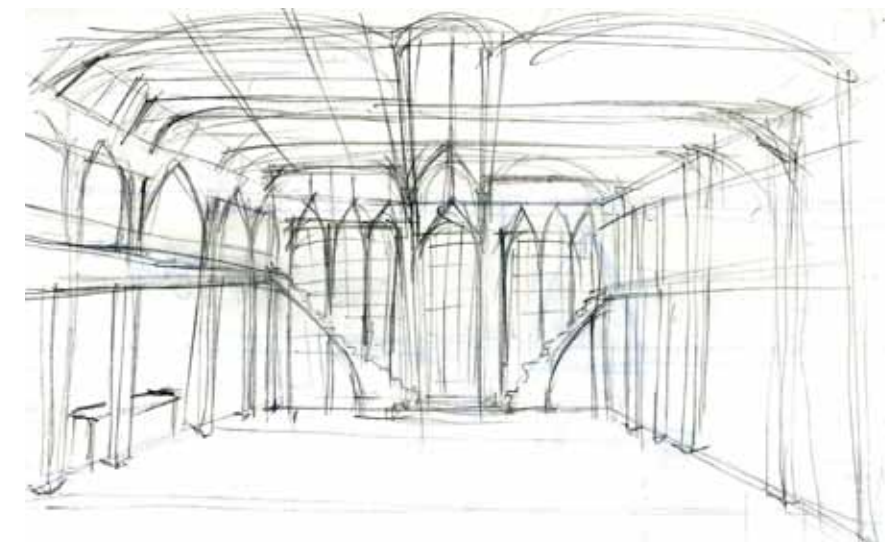
Registration



Rotunda

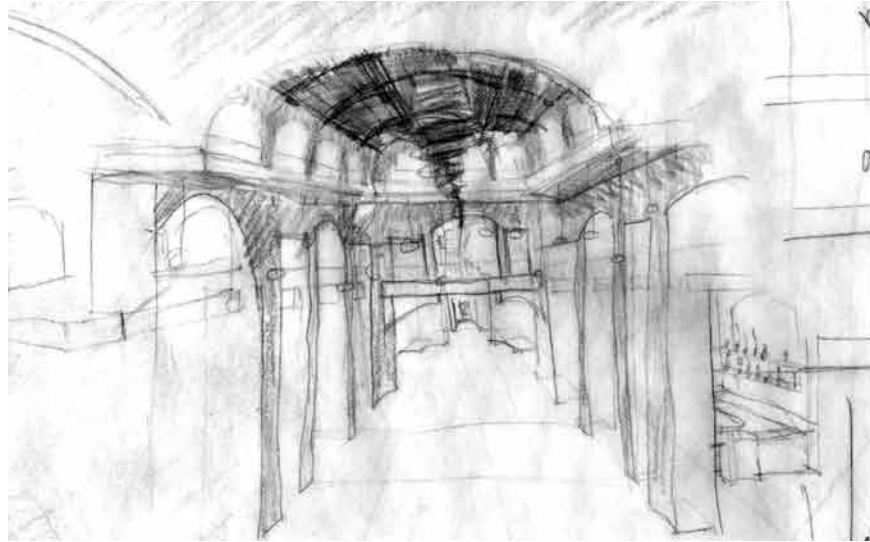


1st Ave Entrance

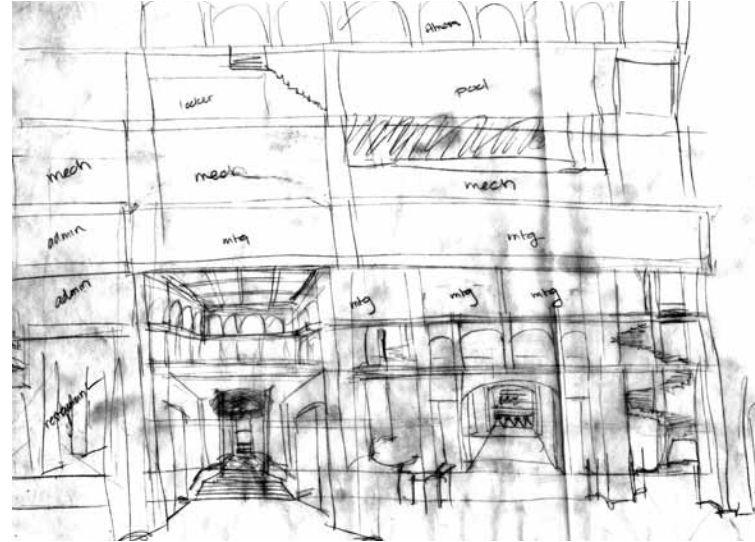


Lobby

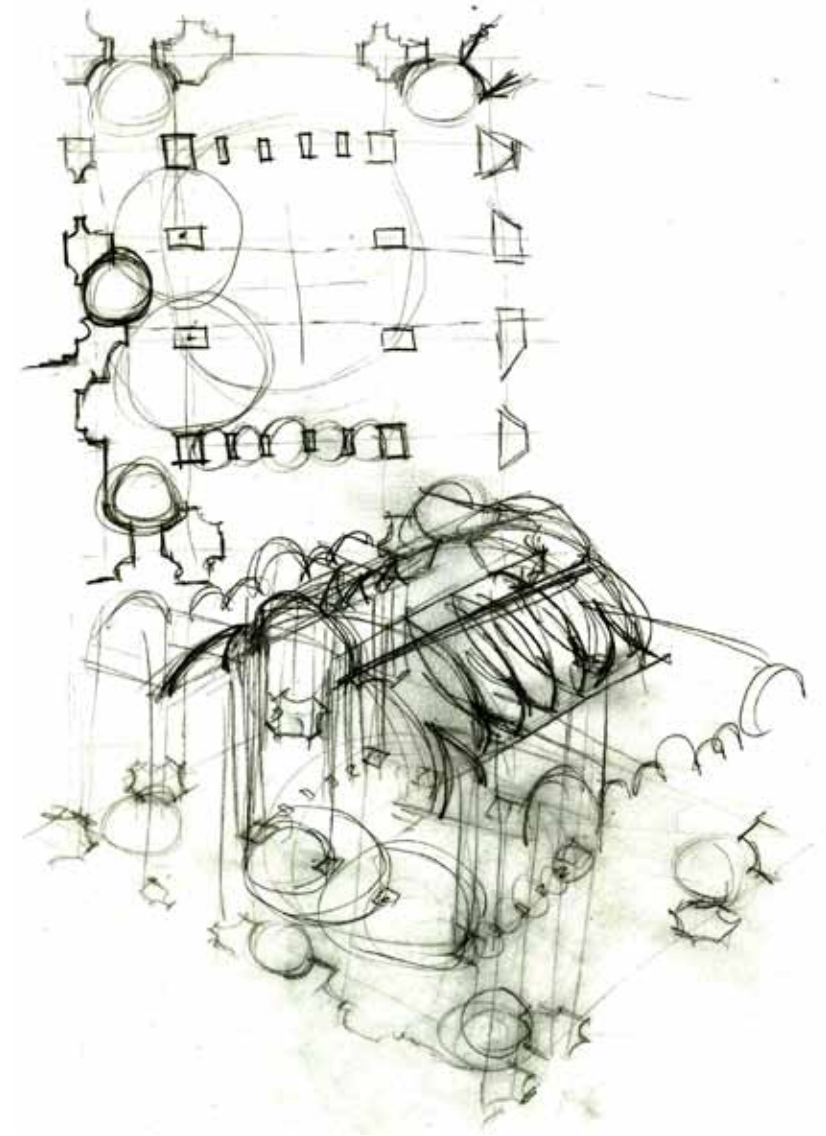




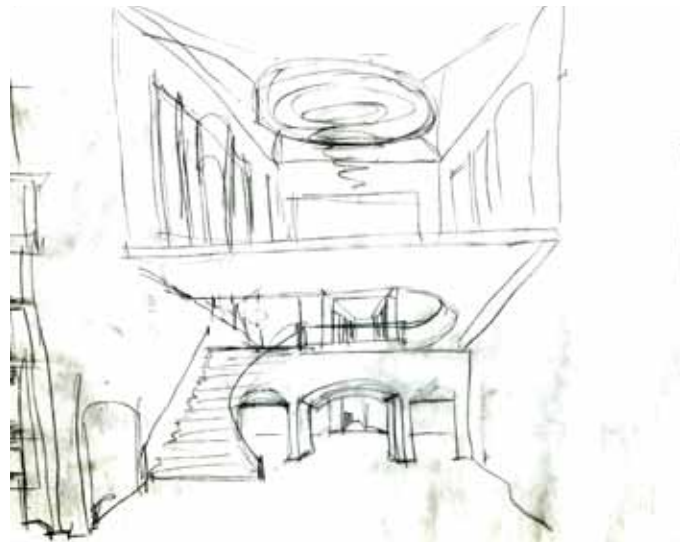
Lobby



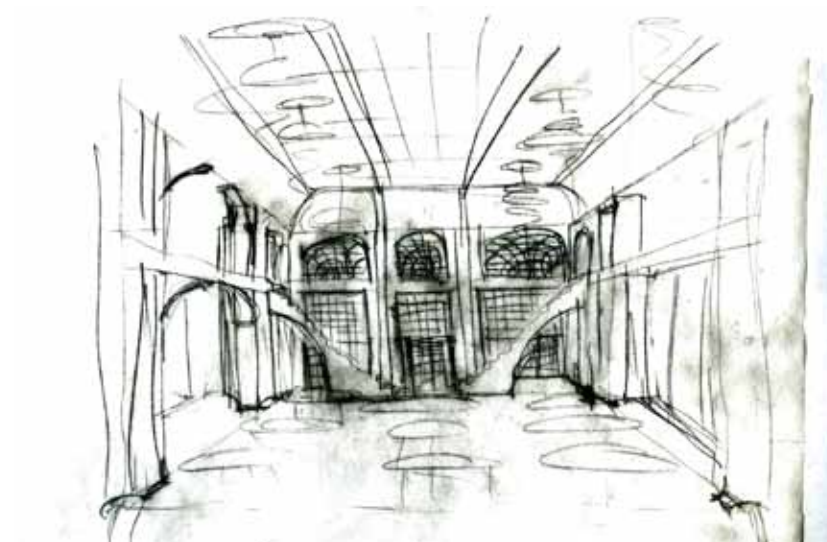
Rotunda



Lobby

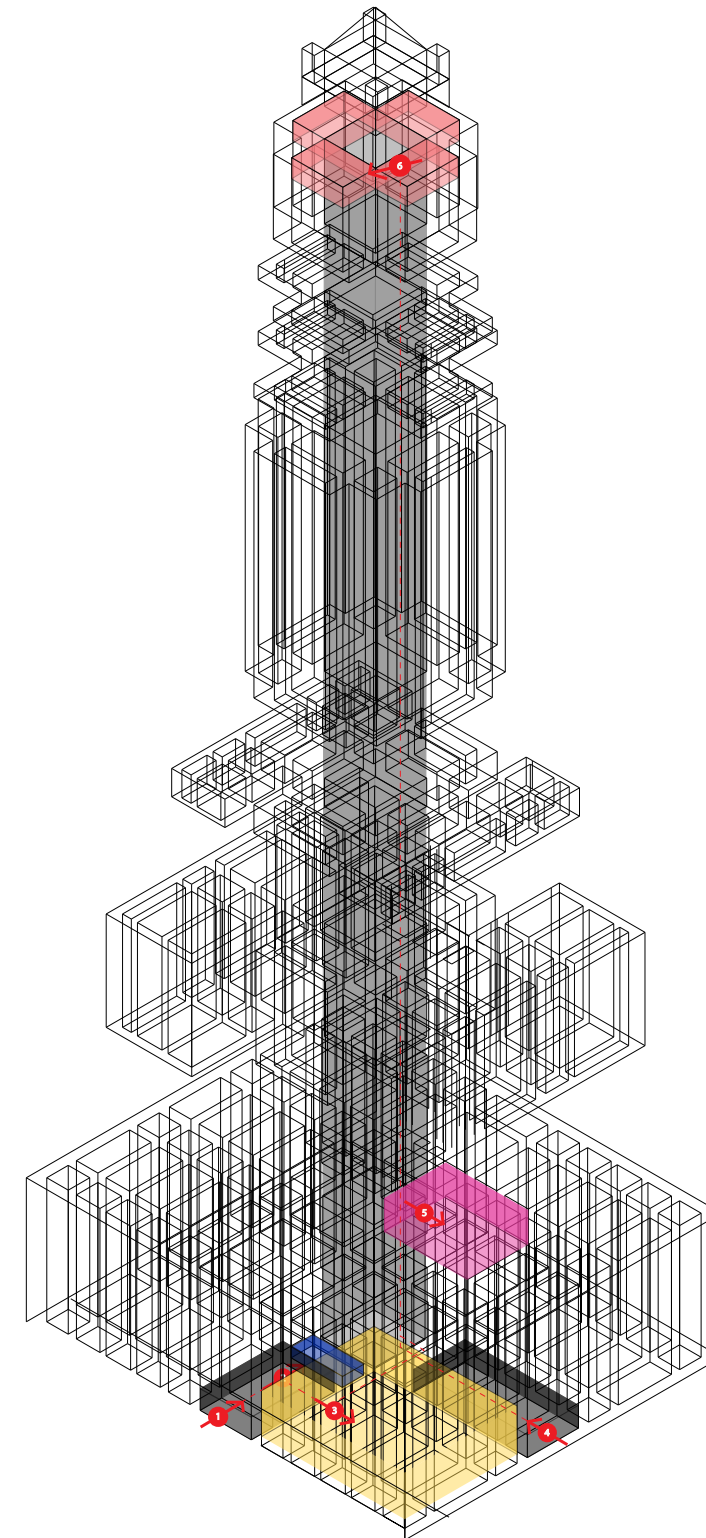


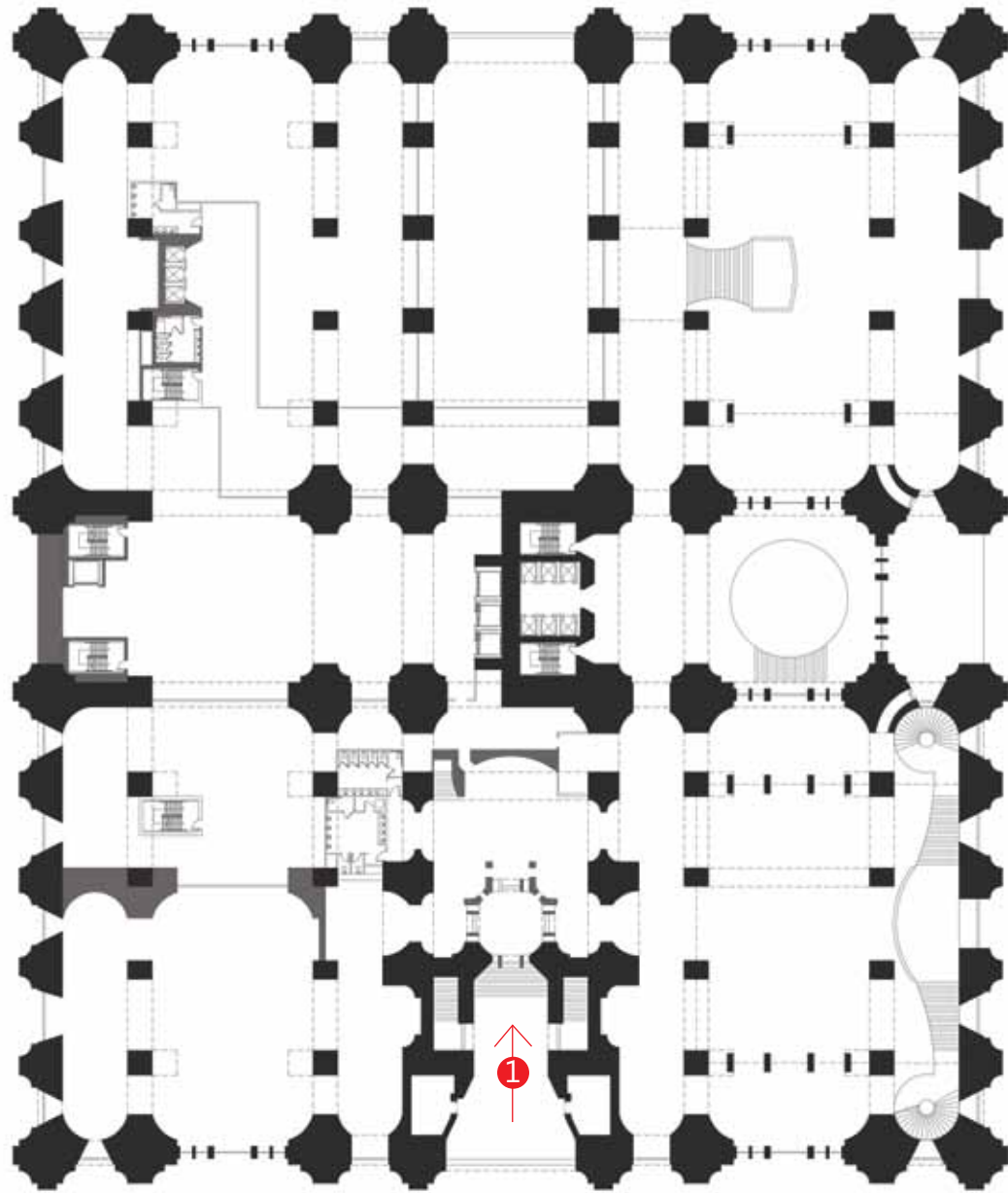
Accessible Entrance



Ballroom

- 1 → 1st Ave Entrance
- 2 → Rotunda
- 3 → Lobby
- 4 → Lower Level + Accessible Entrance
- 5 → Ballroom
- 6 → Penthouse Suite Entrance

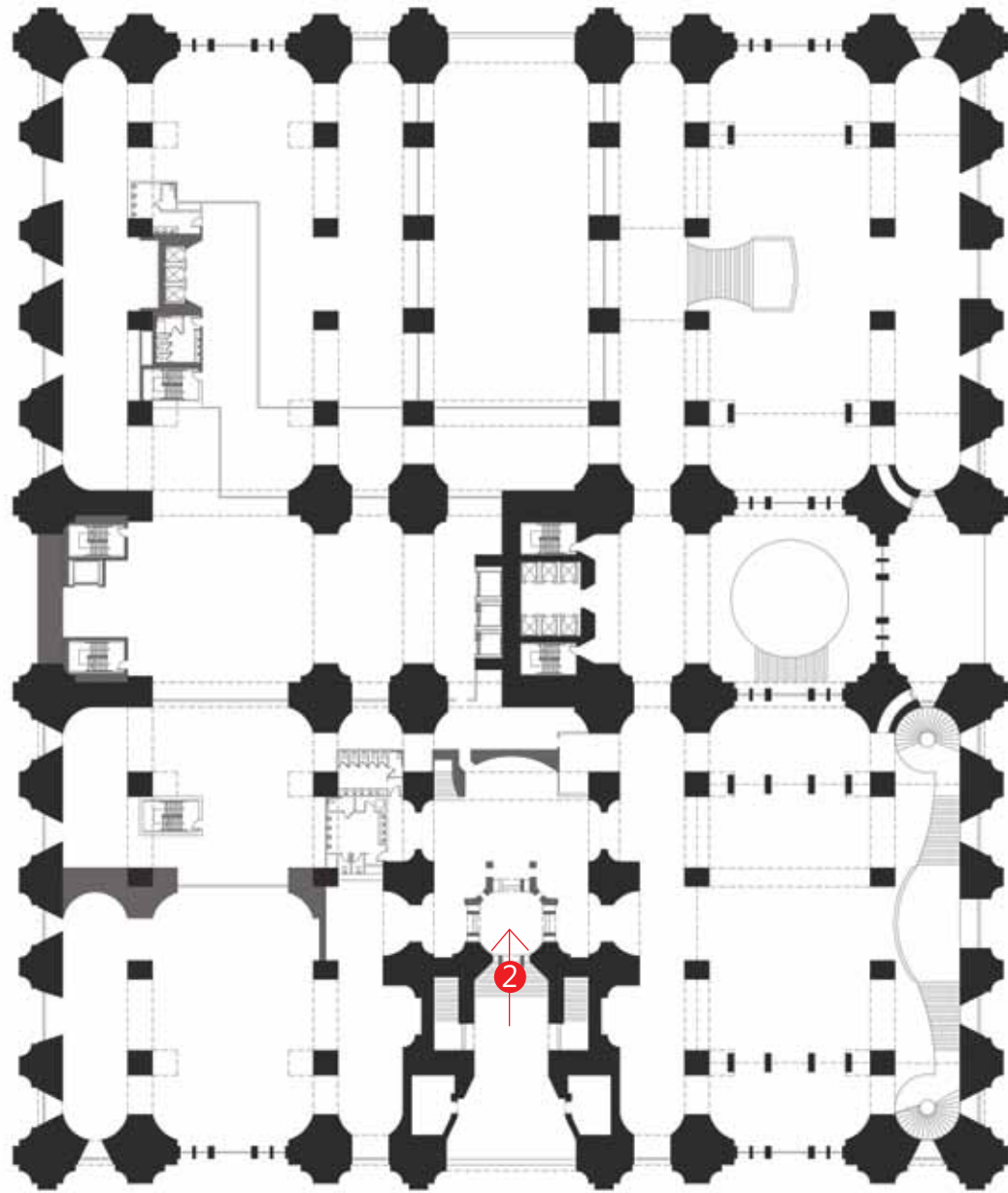




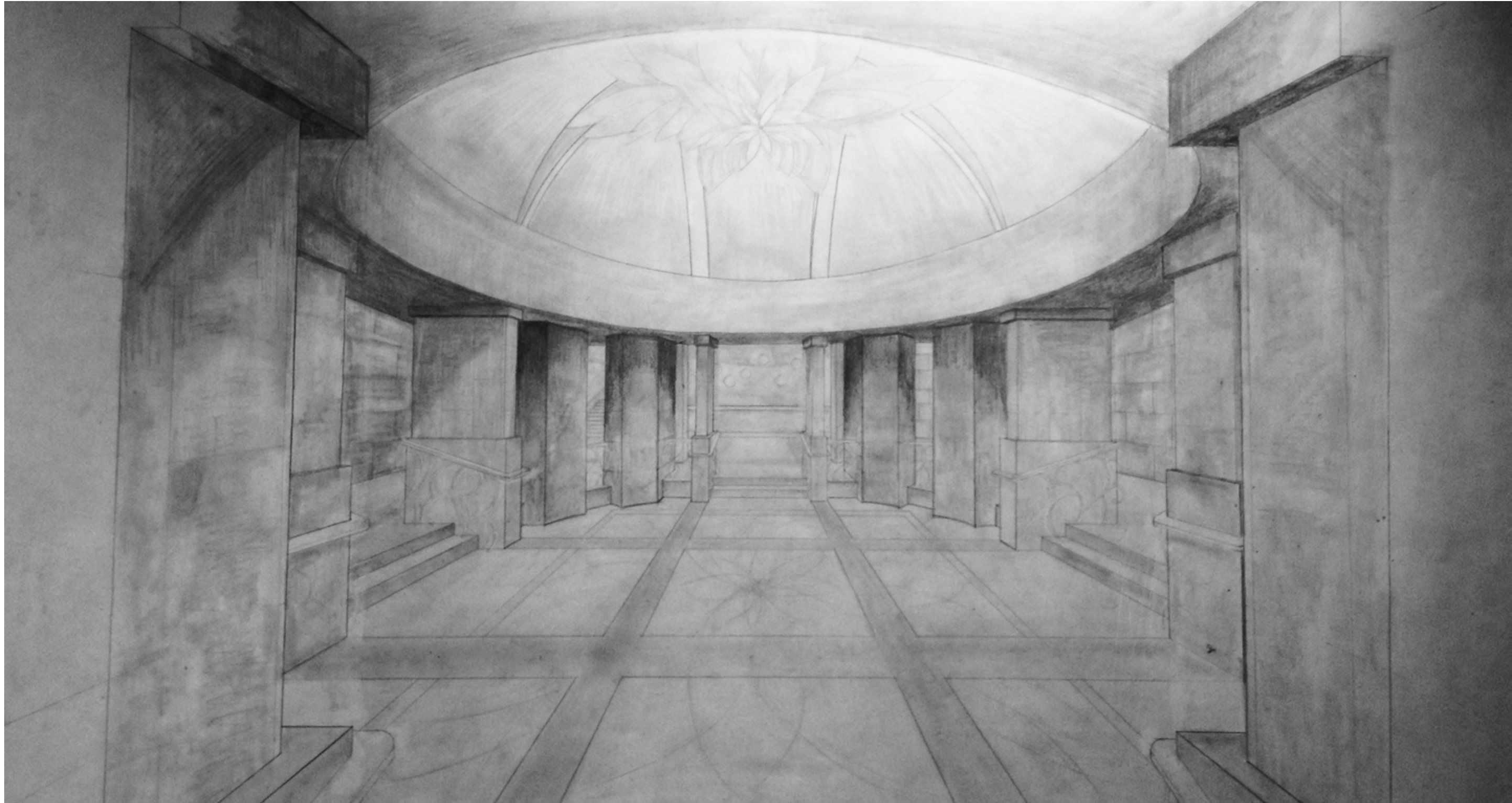
Lobby Level: 1st Ave Entrance



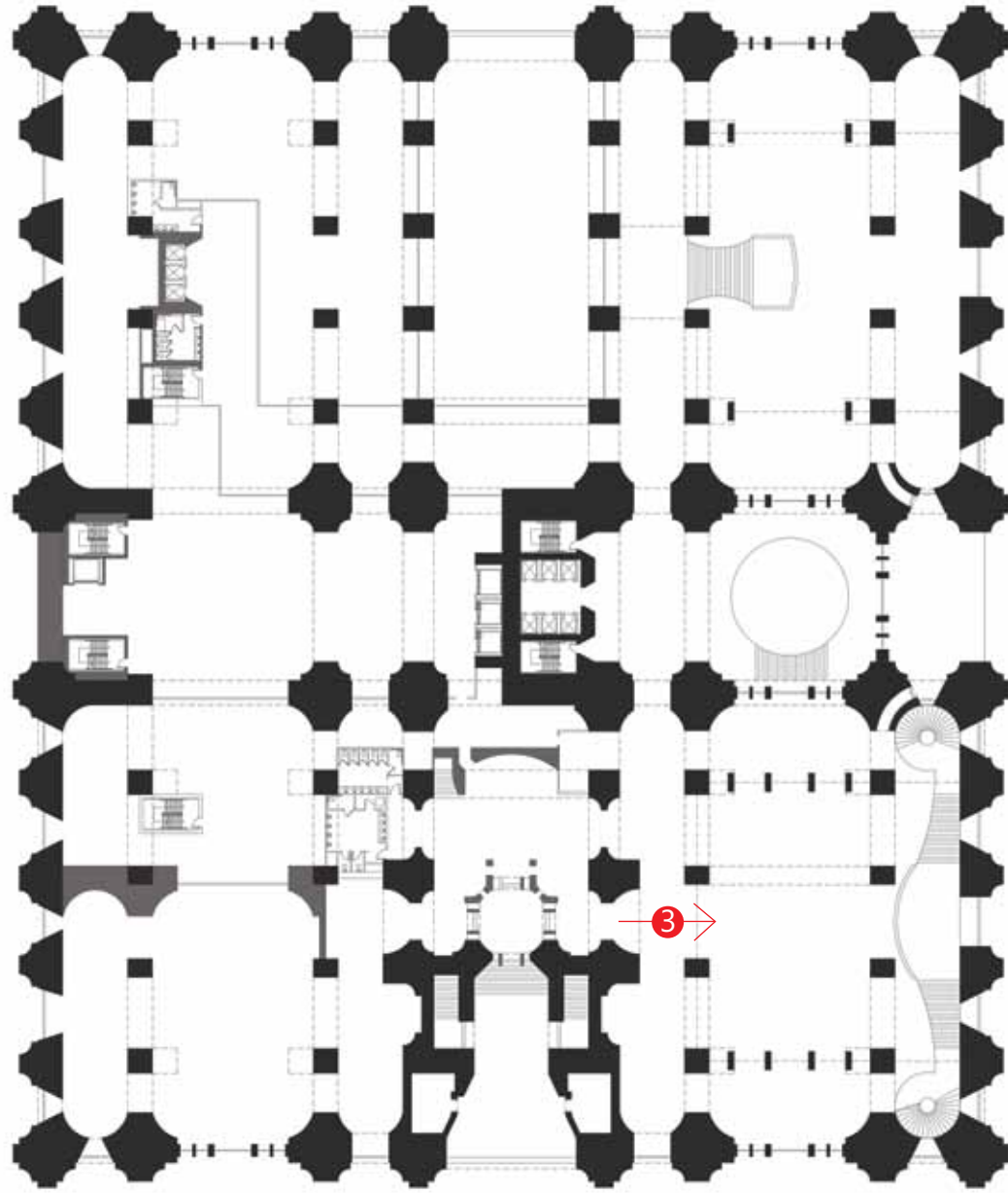




Lobby Level: Rotunda

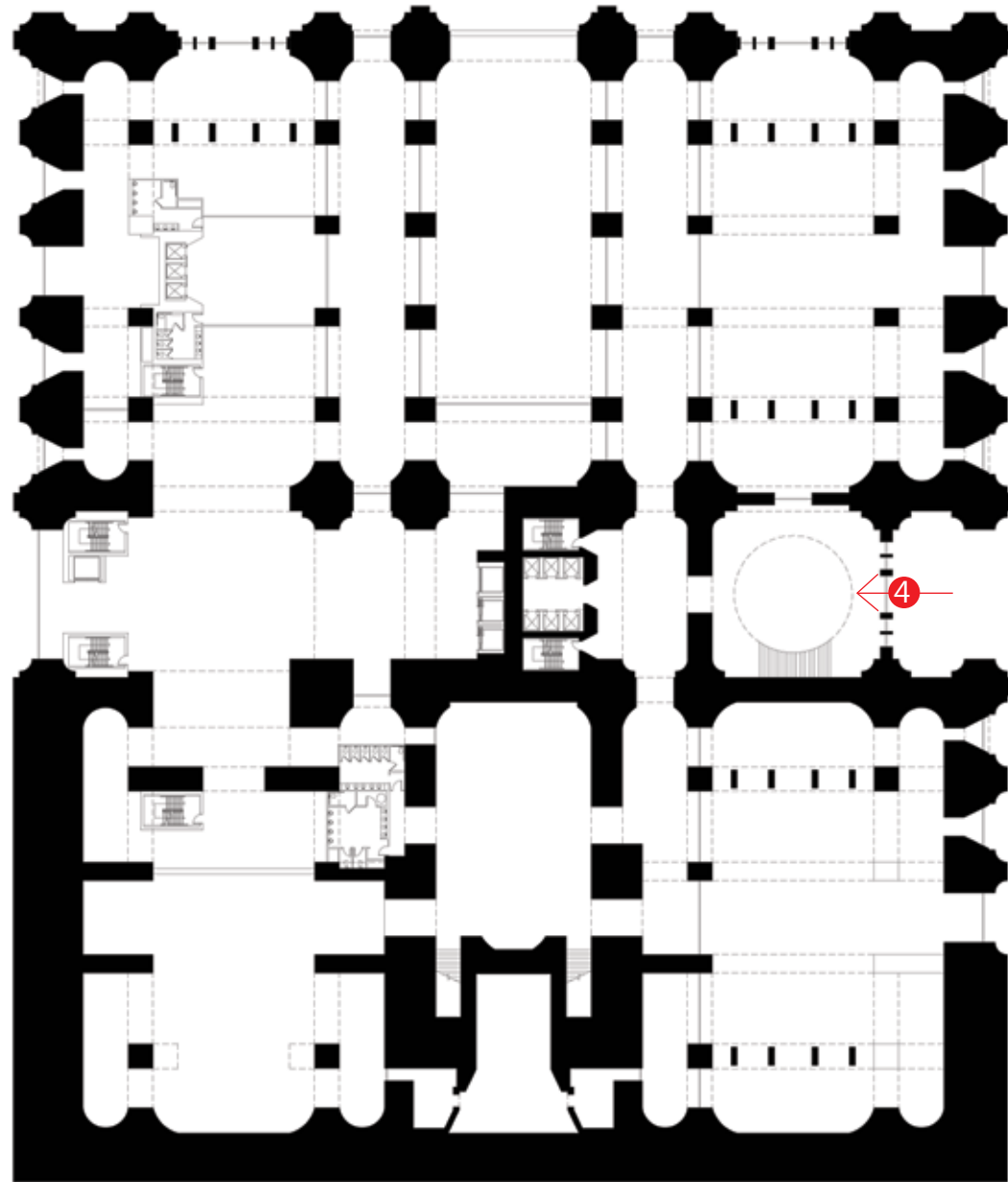






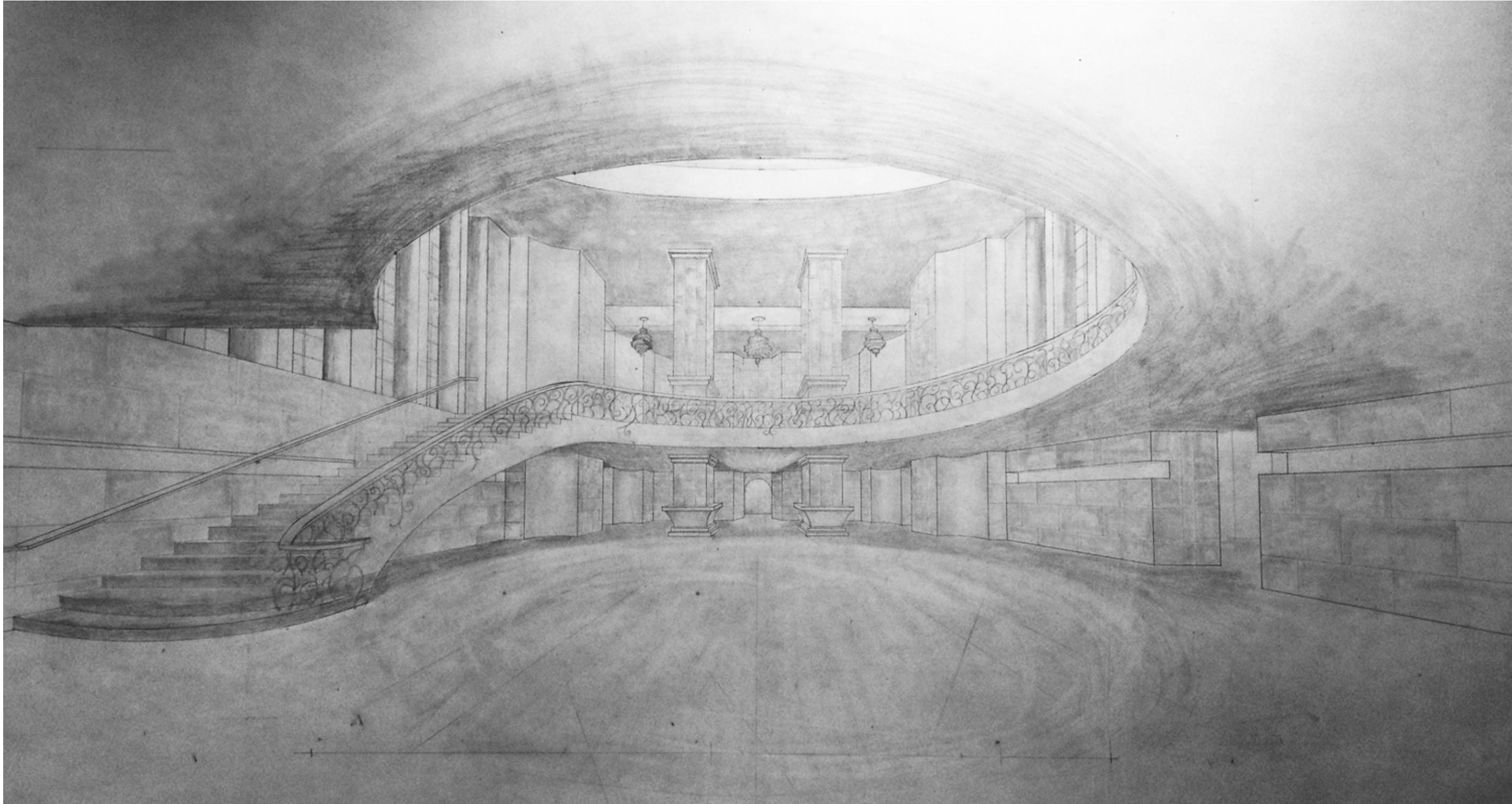
Lobby Level: Lobby

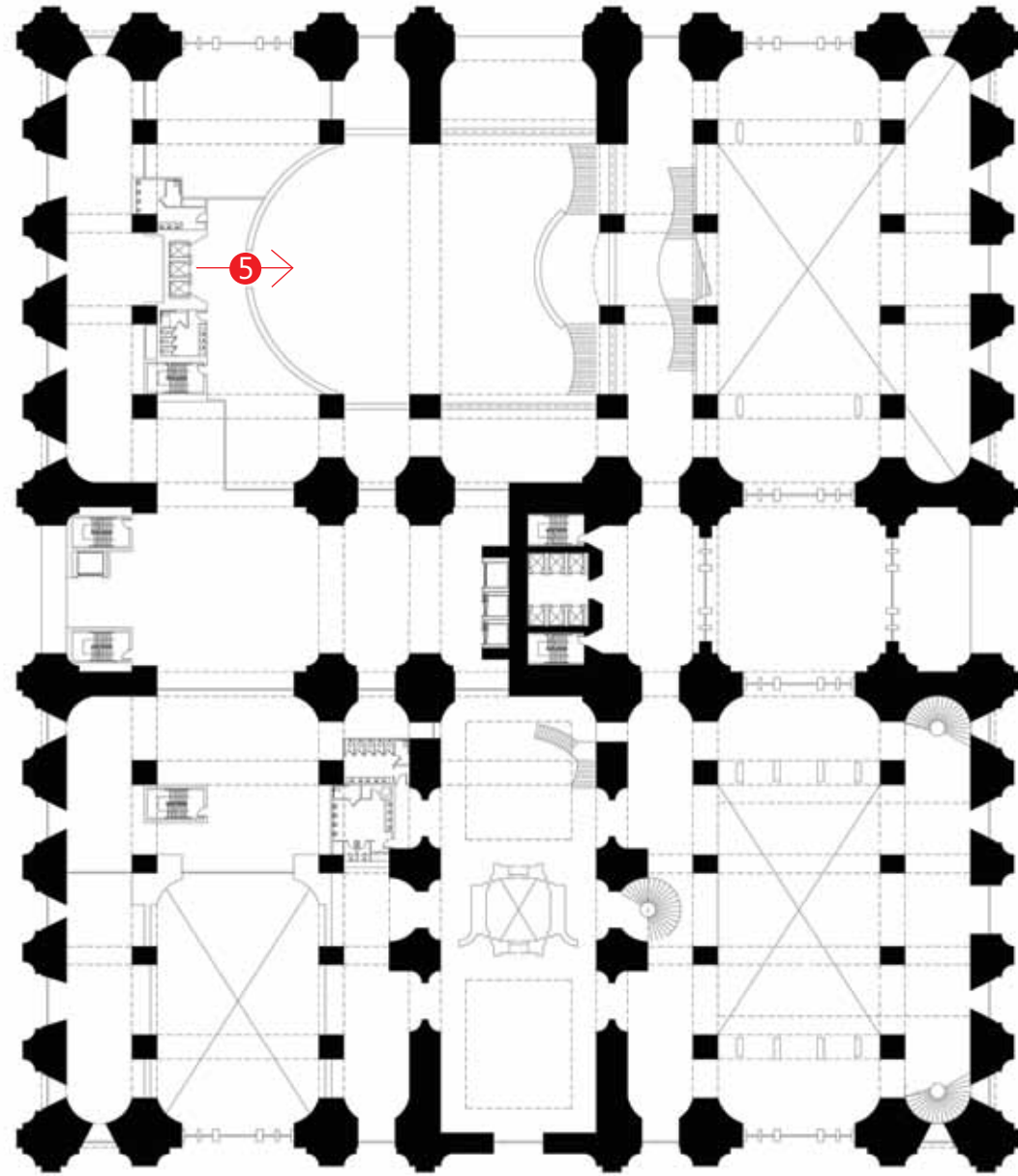




Lower Level: Accessible Entrance

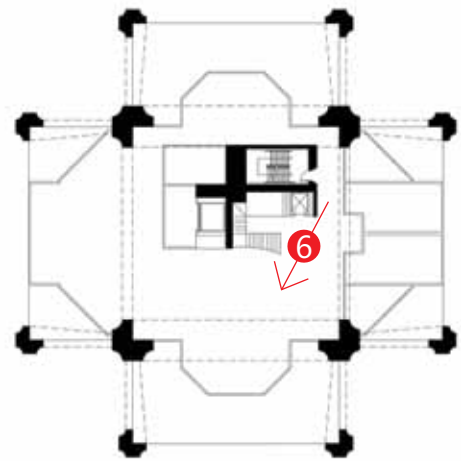






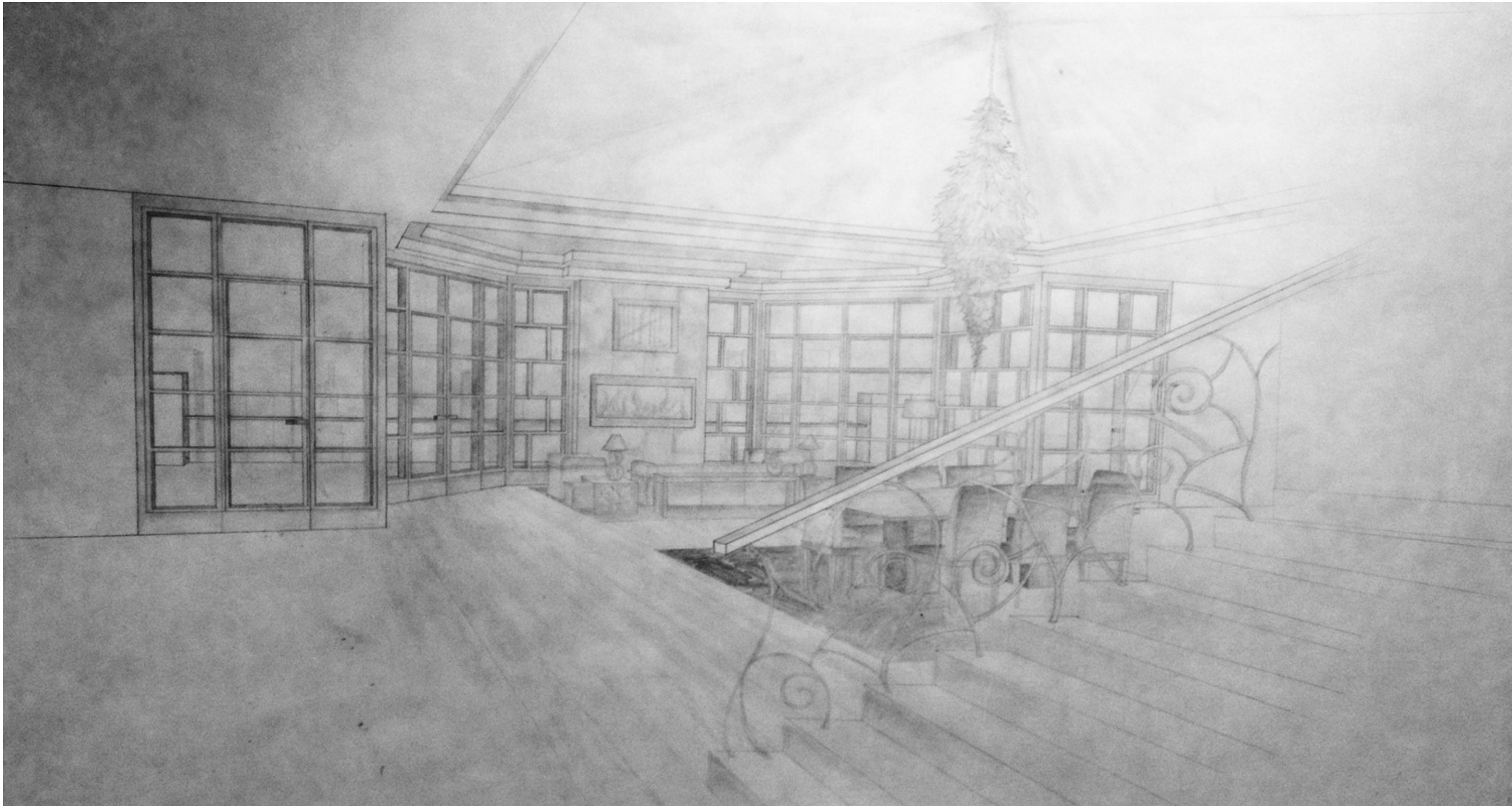
Ballroom Level: Ballroom





41st Floor - Penthouse Suite Entrance







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