Design Project: 173 East Commerce Place
A Multiuse Building on the Riverwalk San Antonio, Texas

This project focusses on the technologies of the building frame and envelope, and emphasis is given to site design and building details.

The Site
The site is at the north-west corner of the intersection of North St. Mary’s Street and East Commerce Street in downtown San Antonio, Texas at the San Antonio River Walk. Parking requirements will be solved by adjacent spaces on existing lots and nearby parking structures. Additional site work including new paving, landscaping, and urban furnishings may be required with the proposed building design.

Architectural Design Program:
• Design a contemporary 21st century building on the given site adjacent to the San Antonio River which provides office and retail space, and bridges the pedestrian connection between street and river level.
• The design of the building must relate to the immediate site and surrounding context.
• The building will be four stories in height from street level with an additional partial floor on the roof, and at river level below the first floor.
• The exact area of each floor, 13,000 +-. , will be determined by the existing property lines of the two buildings to be replaced. See site plan.
• The design will have a multi-story building core with fire rated corridors and stairs, ADA restrooms, storage, mechanical and electrical chases, elevators, and plumbing risers that meet building code and life safety requirements.
• The office spaces shall have a maximum finished floor to ceiling of 10 ft.
• There will be no parking requirements because off-site parking is available in garages across the street and in adjacent parking lots.
• The building will use a Steel Frame structural system.
• The design of the exterior envelope of the building must respond to local climate and must employ adequate sun shading, ventilation, and thermal control and daylighting strategies so as to reduce energy needs. Consider views and pedestrian movement.
• The building will use an HVAC system such as a Variable Refrigerant Flow (VRF).

Street Level/First Floor:
1. A central public lobby with information/security desk, access to elevators, and public restrooms.
2. The remainder of the ground floor will be dedicated to leasable commercial space.

River Level:
1. Leasable commercial space (restaurant/bar/retail)
2. Building services as required.

Second, Third, and Fourth Floors:
1. Leasable office space.
2. Fire rated corridors and two exit stairs.
3. ADA restrooms.
4. Elevators
5. Space for janitor closet, mechanical and electrical chases, plumbing risers, etc.

Roof:
1. An outdoor café and/or bar (bar counter and preparation area no bigger than 400ft² and a seating/gathering area (approx. 1200 ft²) with a retractable shading system for protection from the sun and rain.
2. Stairs and elevator access.

SITE PLAN, The site dimensions are 130’ x 100’

Due Dates:
Week 1
Monday: Jan 25, 2016
Each student is required to construct a scaled site plan and a scaled 3D axonometric drawing of the area shown in the above image. The drawings need to be printed at 1”= 50'-0" and displayed on the wall at the beginning of class. Use Google map, Google Earth along with any drawing program such as Revit or AutoCAD to generate the drawings. DO NOT USE graphics programs such as Illustrator or Photoshop.

There will be at least four interim mandatory design reviews which will determine student progress based upon the following stages of design process:
1. Pre-Design (Research, case study analysis, concept development)
2. Schematic Design (Generation of ideas, analysis and selection of design strategies)
3. Design Development (Development of the design idea so as to address all aspects of the given program and site.
4. Final Design (Development and resolution of design details (technical and assembly), presentation and communication of the design)

Due dates for these reviews and a course calendar will be provided. The final public end of semester design review will be on May 2, 2016.

The Four Phases of an Architectural Design Project

1. Pre-Design: Research and understand the existing conditions of the site, the urban conditions, and the historical and cultural contexts. Consider the client, what the anticipated users of the building need and want, and what the impact on the local community will be. Research and learn from case studies and
relevant precedents of similar buildings types. Study views, building access, landscaping possibilities, site topography, pedestrian and vehicular movement, and sun exposure. A thorough site analysis, an in-depth understanding of the building type, and a sensitivity to cultural and climatic conditions is an essential part of any pre-design study.

2. **Schematic Design:** The first phase of the design process where the architect develops sketches and digital drawings, three dimensional models studies, and diagrammatic information which explore and illustrate a range of potential concepts for the overall design. This includes spatial relationships, scale, massing, and form. Schematic design is also a continuation of the research begun in Pre-Design where zoning requirements or jurisdictional restrictions are discovered and addressed. During this phase the designer studies the different routes the project could take determining the major features the building must have to successfully address to solve the project requirements. Initially, the designer creates two to four conceptual design options for consideration which eventually merge into a single final schematic design which moves forward into design development.

3. **Design Development:** Design development is where the initial design ideas from the schematic phase are taken to a higher level, and the building design becomes more a more complex creation. In this phase the designer explores and selects the mechanical, electrical, plumbing, structural, and architectural systems. The design development phase results in drawings and models that identify the architectural features of the building including stairs, elevators, material types, the exact location of windows and doors, and the specific and accommodates the requirements of life safety codes and ADA standards for design. The result of this phase is a fully developed design which forms a detailed and complete basis for a final comprehensive design.

4. **Final Design:** In this last phase of the project design attention is given to unifying the entire design, and detailing specific areas of the design. All aspects of the design are to be fully resolved including: The organization of all spaces, site placements, programmatic needs, aesthetics, building systems and materials, life safety, accessibility, sustainable design, place making in an urban setting, and the aspirations of clients and the community. The designer also develops a strategy to effectively communicate the final design in verbal, written, and graphic form required at the end of the semester reviews.