ASSIGNMENT 3b: THE STEINBERG FAMILY PAVILION AND ICE ARENA
SUMMER / W(INTERACTIVE)

OVERVIEW:

The seasons have changed - literally and phenomenally. While the rules of engagement are new, our goal remains the same. We’ll continue to find our fun, and we’ll continue to learn to be better architects.

Post Spring Break we turn our attention back to the Steinberg Family Pavilion and Forest Park with the ambition to design a vibrant twelve-month facility, integrated with the site and city, inclusive of the whole community.

Prior to our break we focused on examining use across time, and moving forward we’ll focus on developing a scaled approach, designing and detailing an enclosure and user experience. We’ll interface with you digitally moving forward. To facilitate this new approach, you will develop your project through digital modeling and by extracting information from the model to tell compelling stories through drawings, diagrams, and images.

OBJECTIVES:

- Practice developing clear and convincing digital presentations.
- Increase your skills building comprehensive digital models.
- Design by evaluating the qualities of interior and exterior space and the relationship between the two.
- Develop and detail an intelligent building enclosure.
- Develop a comprehensive building structure.

PROCESS AND WORKFLOW:

Our strategy for the remainder of the semester will be to continue to develop and refine your project through the use of digital modeling software. Using either a portion of the existing site model that has been provided, or beginning with a blank canvas, start by modeling individual fragments of your proposal.

A fragment can be a space, a use, a sequence, or a threshold. DO NOT ATTEMPT TO MODEL THE PROPOSAL IN ITS ENTIRETY. Design the project by making individual decisions, testing ideas, and refining strategies through multiple iterations.

For each conversation and critique with your professor, you will prepare a multi-page concise PDF and lead the discussion of your progress as though you are either making a proposal or substantiating a decision. You do not need to know all of the answers, necessarily, but you should be precise about questions you are posing. In addition to the review of your PDF, you will review the progress of your digital model and the iterations you have explored.

We will build the model incrementally over time, developing a robust design proposal through the investigation of the criteria listed below. And please note, this approach does not preclude analog investigation, but it does bias the digital and the requirements set forth below are put in place for the greater benefit of all. As always, structure your own process. Bend the rules and break them if necessary, but do so for the benefit of all, not just yourself.

SCHEDULE AND CRITERIA:

For the rest of the semester, you will meet with your professors over a digital platform. The details of this collaboration will be left to you and your individual professor to develop, but the collaboration will involve you making more cogent and clear presentations of your work at each meeting. As such, you will be responsible to develop your own schedule using the following outline as a guide.
For each of the criteria and considerations below, you are to use the digital model to iteratively explore design options at both macro AND micro scales.

WEEK 11 / 23 MAR - DIGITAL MODEL CONSTRUCTION / PLAN AND/OR SECTION

In Google Drive, set up a personal folder in your specific studio section using the naming convention provided. Go to Assignment 3_Steinberg, and follow the instructions provided in the folders and documents there. Note: Reading all instructions first will be key to our success!

Begin the construction of your digital model considering use and scale on the site. Either contemplate circulation, site and scale first by placing volumes in a plan configuration, or contemplate volume, site and scale by arranging volumes in section. Regardless of how you begin, construct fragments of your building by making decisions and letting the plan or section grow authentically. Move through the various spaces both interior and exterior until you lose momentum and then switch to either another fragment or the alternate drawing consideration (plan or section).

WEEK 12 / 30 MAR - STRUCTURE WITH PRECEDENT -STRUCTURAL COMPONENT MODELS

Your new pavilion(s) will have interior and exterior spaces, both large and small, and the material systems you use to structure them will play a significant role in shaping the way they are used and perceived by their inhabitants. Contemplate the quality of space most appropriate for the interior and exterior spaces and conduct research to seek out other spaces that achieve these effects through their choice of system. Are they thick or thin, heavy or light, invisible or expressed? Model for yourself some of these various precedent systems and test them in your space. Model multiple and choose one system that works best for your desired outcome.

Ultimately, starting from the ground, develop a building frame that satisfies the complex issues of creating a form, resolving all typical building loads necessary to support the building while still advancing your design agenda as much as necessary to satisfy your larger design intent.

Considerations:

- Does your structural system have a common and/or governing logic for resolving all of the parts in relation to the whole?
- Have you studied alternatives and variations that meet your specific criteria and analyzed their pros and cons?
- Is your structural system exposed or is it concealed, and what is your process for determining the most appropriate answer to these questions?
- Does your structure satisfy a broader agenda? If so, how? If not, why not?

WEEK 13 / 6 APRIL - INTERIOR EXPERIENCE / VIEWS / SEASONAL ENGAGEMENT

Perception and observation have guided our work throughout the entire semester, and we should not lose focus as we shape the way that architecture affects our perception of space. As you contemplate space, examine how transparency reveals information both literally and phenomenally. Working with light, material, boundary, structure, circulation, use, furniture, scale, texture, threshold, etc, you should continue to build on your ideas from the inside out and the outside in to reveal the phenomena of the site and space.

Move your viewpoint inside of the digital model you are creating and scrutinize the spaces you have created. Choose several interior/exterior vantage points that you feel best show use across the transition of space or enclosure. Treat the space as a framework, and build upon it. Without knowing all the answers, test ideas of scale and materiality, use, enclosure and transition to create compelling space.

In 1971 Louis Kahn said, “When you have all the answers about a building before you start building it, your answers are not true. The building gives you answers as it grows and becomes itself.”
Grow your building. Save wireframe views of your building into illustration software almost immediately, and design the building from those views iteratively, again thinking big picture, but refining that big picture through the development of the smallest details. Save the vantage point and continue to export these views into your illustrations over time making them an ongoing part of your conversations with your professor.

Considerations

- Is there a particular narrative that can be developed to shape the experiential systems of the project?
- How can past/future/alternative agendas be folded into the mix using experiential systems?
- How do decisions regarding structural and enclosure systems affect spatial experiences?
- What does your space sound like? Smell like? In the summer? In the winter?
- What are the colors of the interior and exterior materials and why?
- How does this experience change in the alternative season?

WEEK 14 / 13 APRIL - ENCLOSURE - DETAILS AND ASSEMBLY AXONOMETRICS

Develop an enclosure system or series of enclosures, composed of all necessary parts to control the environmental stability of your Pavilion, as well as satisfying the larger design agendas you have established through your Parti.

Remember, envelopes are the primary means of controlling visual and physical access to our buildings as well as energy transmission to and from the spaces we create. As such, we should consider these primary systems in the development of our enclosures:

Aesthetic – Both from the interior of the building and the exterior of the building, the enclosure system, often in conjunction with the structural system, forms the visual expression of our buildings, and this expression must be considered and developed with intent. The agenda for the expression should be developed initially from our Parti and realized through the specific use of materials, their connections and compositions.

Thermal – The flow of all energy is controlled through the tectonics of the enclosure systems of buildings. For a building with such considerable winter AND summer use, the control of thermal energy will be of paramount significance. Just as transparency reveals information, the layering of transparency can provide necessary energy transmission while controlling the flow of thermal energy. Interestingly, with a pavilion such as this, the consideration of energy flow will have to be considered differently in each season.

Use – Operable building elements facilitate use, circulation and view, and must be manipulated strategically to choreograph user experience in and through a building, and it, too, should be developed in conjunction with your larger Parti to become one with your overall design agenda.

Considerations:

- How can you see your building as the site, or integrate the building and the terrain into a single occupiable realm?
- Through the use of overhangs, canopies and or shading devices, can the form of your building define a realm greater than the extent of the enclosure?
- What are the strategies you can employ to keep a space warm in the winter, cool in the summer and still integrated with the site and use they are adjacent to?
- DO NOT shop for products or assemblies online or in CAD/REVIT libraries. Instead, use your knowledge of function and your creativity to invent new systems and assemblies.

WEEK 15 / 20 APRIL - FINAL PRESENTATION DEVELOPMENT

While our challenge to improve our work as architects is never done, the time always comes when designing the presentation strategy is more critical than designing the building itself. To properly sell or substantiate an idea, a simple, “I want” will never suffice. Instead, your job as the architect is to clarify the needs and values of your audience, and substantiate how your work not only satisfies but expands on each of those criteria into not only a satisfied condition but an expanded potential. This is the architects final challenge, and when we do not succeed in this arena our great ideas and hard work lose their agency.
Design a final prospectus for your new Steinberg Pavilion proposal. As simply and clearly as possible, develop a presentation that answers all of the fundamental questions an owner, user, funder, critic might have about the value of this project and proposal. The document must stand on its own, without the benefit of your words or insight. A single 12 page PDF is all that will exist to substantiate your many weeks of hard work.

The questions your document must answer are:

WHY:
- Why is there a need for this project?
- Why does this project have value?
- Why is this a conversation worth having?
- Why is this project worth pursuing/building?

WHAT:
- What are the systems at play in this proposal?
- What are the architectural ingredients that mix together to form a quality solution?
- What are the investigations, processes that substantiate any of your key positions or core values?

HOW:
- How are these visions realized architecturally?
- How do architectural systems compose themselves literally to achieve the phenomenal?
- How does one move through the interior and exterior of the building?
- How is the building summer and w(interactive)?

DELIVERABLES:

WEEKLY (due twice weekly)-
For every conversation you have with your professor, you will be asked to produce a Google Slides document or PDF and lead the presentation of your work with your professor. Presentations should be set up in the form of proposals or substantiations of decisions you have made through iterative investigation. For each critique/conversation, you will create and save a new presentation in your personal folder on Google Drive.

FINAL-
For your final deliverable, you will draft a final digital prospectus. The requirements of the prospectus are as follows and must be adhered to. **NOTE: We WILL NOT have a conventional final review for this project.**

- Maximum 12 digital pages (slides), including cover page. Not spreads, single page layouts.
- Cover Page with Project Name (not project title), Your Name, Date, Studio Professor Name
- Representation of the following:
  - Big Idea / Project Inspiration / The answer to the question, “how can architectural strategies prompt new relationships between summer and winter activities”
  - Programming Strategies, Investigations and Considerations
  - Opportunities / Investigations.
  - Site Plan Proposal
  - Building Floor Plans / Building Sections
  - Structural Component Models / Axonometrics
  - Interior / Exterior / Summer / Winter / Views of center in use
  - Enclosure Details / Axonometrics
  - Text (no paragraph more than 100 words and no more than 500 words total)