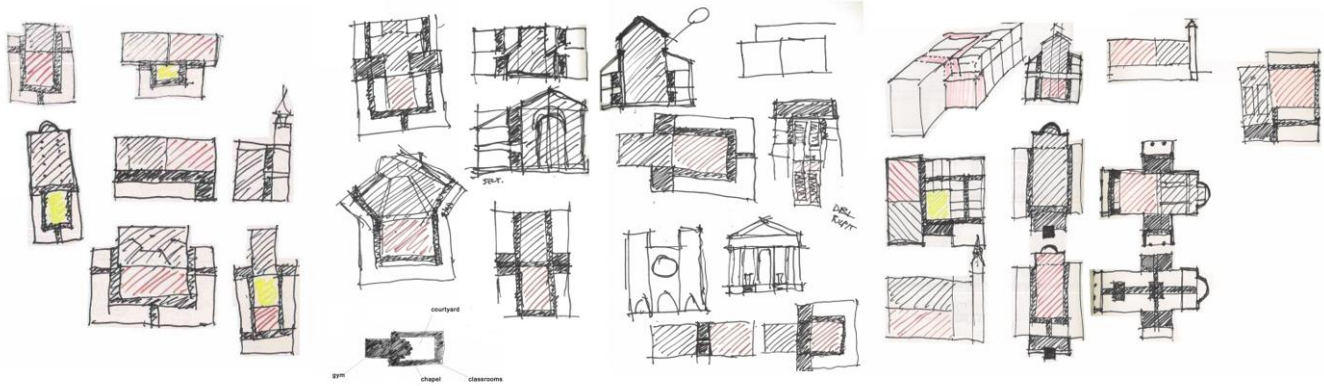


ABRAHAMIC SACRED ARCHITECTURE

ARC 4110 | Architectural Design Studio V – Consultants | Prof. Brandon Ro, AIA, NCARB

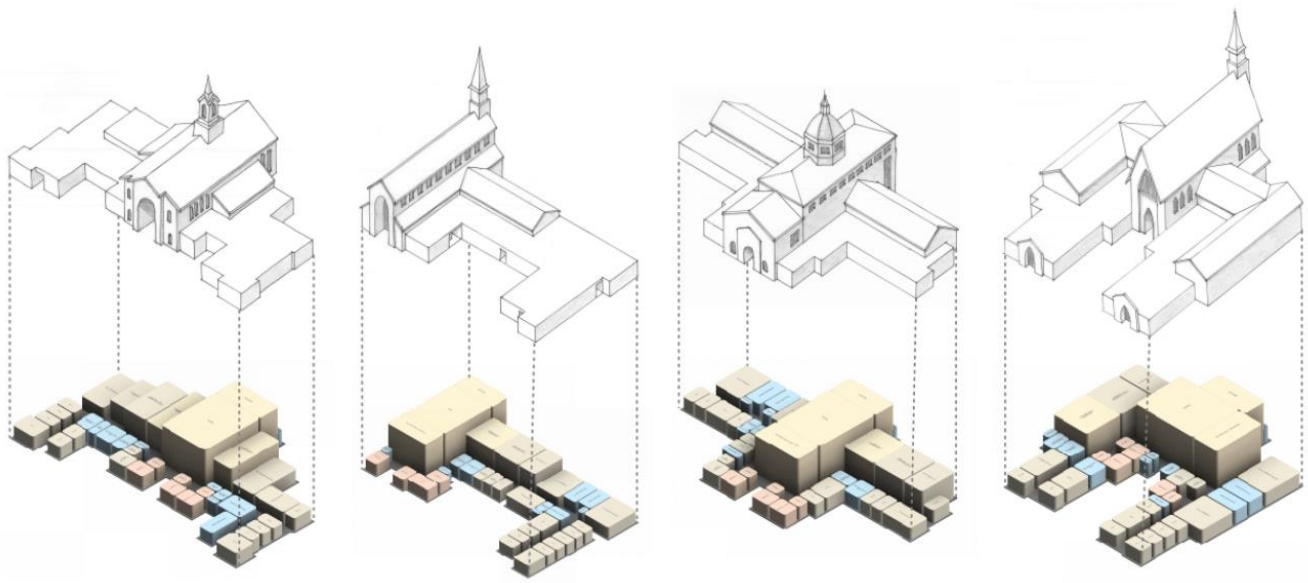
PHASE 2 – SCHEMATIC DESIGN



SCHEMATIC DESIGN

With the knowledge gained from the Pre-Design phase, students will begin the formal architectural design process where ideas and concepts emerge about the project's program, client requirements, and user needs. We call this phase schematic design. As outlined in the course schedule, schematic design includes the following activities:

- Esquisse - Concept Development (Masterplan, Program, Exterior)
- Review Design Concepts (Masterplan, Program, Exterior)
- Refine Design Concept (Masterplan, Program, Exterior)
- Start Studies at Larger Scale
- Develop Plan, Section, Elevation
- Refine Plan, Section, Elevation
- Start Diagrams, Analog Model, Vignettes
- Preparation for Interim Review
- Hand in Project / Pin Up Materials for Review
- Interim Design Review with Professional Jury
- Project SD Phase Reflections
- Digital Portfolio Submission



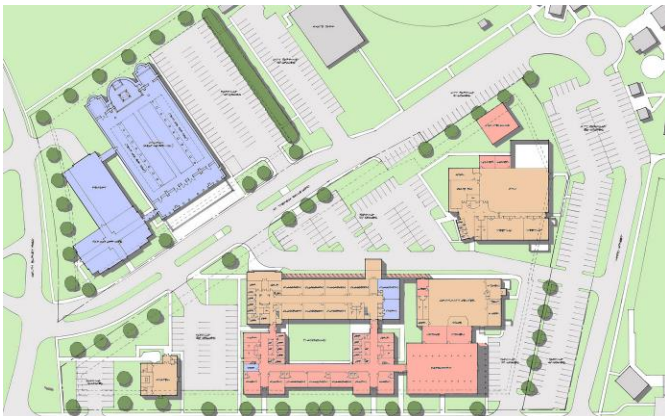
VCBO Architecture, Latter-day Saint Meetinghouse Prototype – Design Options, Utah

ESQUISSE / CONCEPT DEVELOPMENT

Embedded in the *Ecole des Beaux-Arts* curriculum was the *esquisse* – a French word for sketch. The *esquisse* is a preliminary sketch showing the main ideas of your solution to the design challenge and problem explained above. It is done in a short and fixed time, usually anywhere from a couple hours to nine hours. Your final design for the project will be founded on your *esquisse*.

As part of this design process, each student will create a total of **five (5)** quick sketch proposals for the design of main façade, **five (5)** quick sketch proposals for the floor plan layout of the program, and **five (5)** quick sketch proposals for the site plan. The design will be informed based on your findings from your program, precedent, and site analyses.

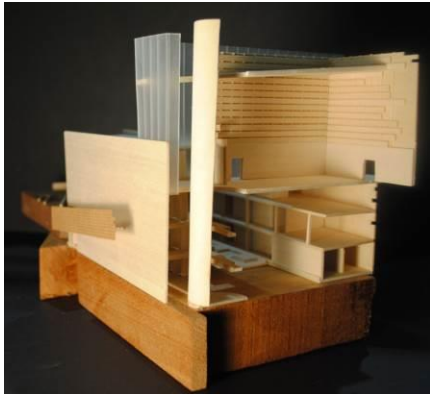
After the *esquisse* exercise, students will select one of their concepts for the façade, floor plan, and site plan to further refine.



Duncan Stroik, St Theresa Masterplan, Sugar Land, Texas



INTERIM REVIEW DELIVERABLES

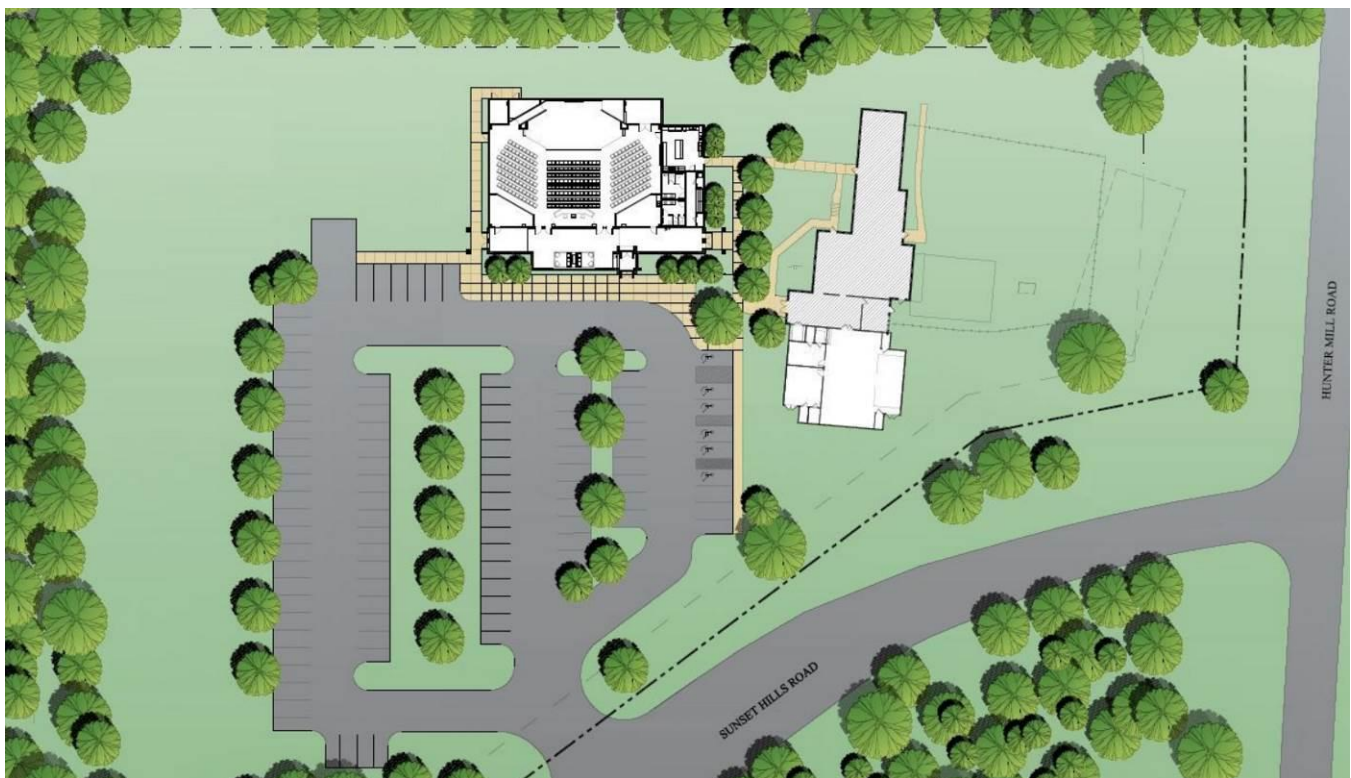


For the Interim Design Review, each student will work on developing their projects by producing the following drawings. These can be assembled on several 24"x36" drawing sheets or a single board 36"x96" in size.

- Site plan showing civil considerations and context around site – should include connections to major roads, parking, landscape areas, paving areas, etc. (1"=100')
- Main Building Elevation and side elevation (1/8"=1'-0")
- Floor plans for all levels with spaces labeled (1/8"=1'-0")
- Longitudinal and cross sections of building showing context and topography changes (1/16"=1'-0")
- Analog model to fit into class site model - should include connections to major roads, parking, landscape areas, paving areas, etc. (1"=50')
- Analog building section model through major worship space – should be at a minimum one structural bay deep (1/8"=1'-0")
- Diagram showing ritual sequence / sacred history narrative strategy
- Vignette perspectives showing user experience (approach from main road, walking to building from parking, building entrance, main worship space, etc.)

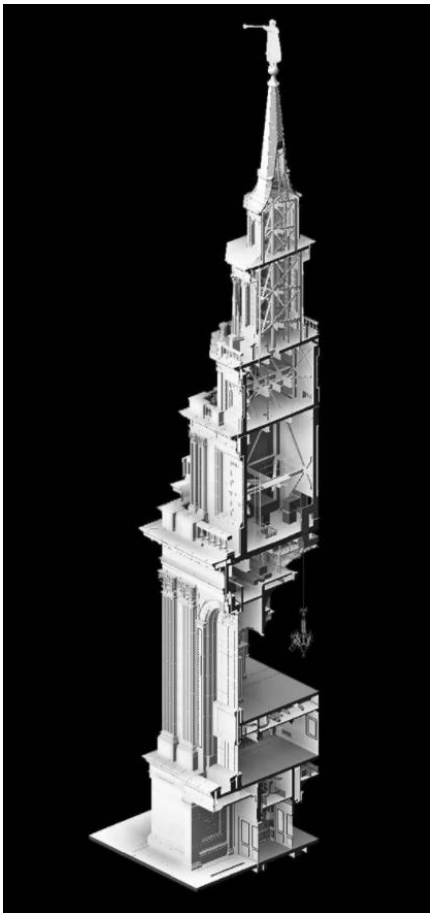
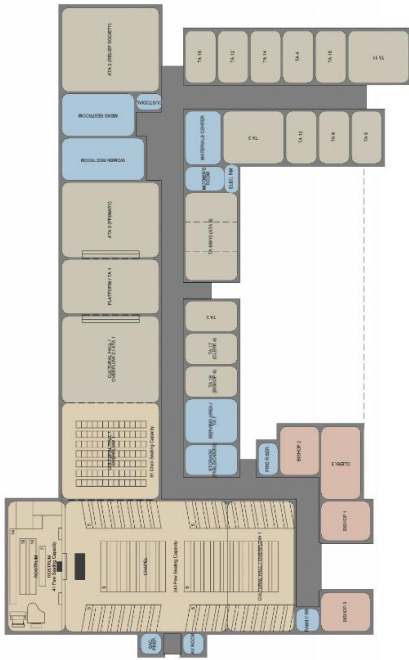
Each drawing should include the following:

- North arrow (when appropriate)
- Graphic scale
- Drawing type label (Ground floor plan, East elevation, section)

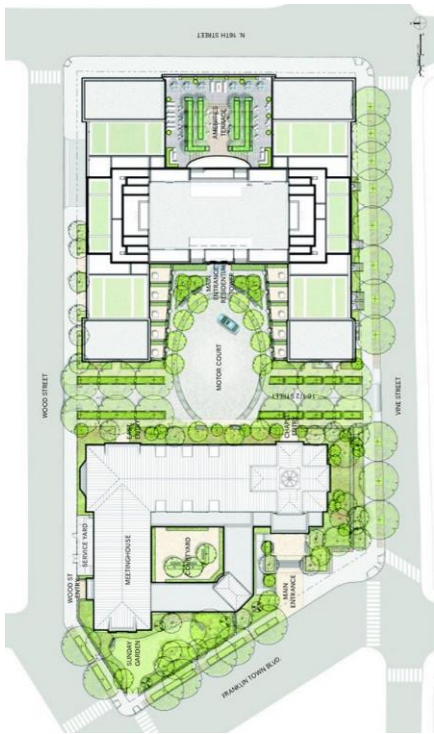


LEW Architects, Reston Presbyterian Church Site Plan, Virginia

RELATED READING



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- Cusato, Marianne, and Ben Pentreath. *Get Your House Right: Architectural Elements to Use & Avoid*. New York: Sterling, 2011.
- Gabriel, Jean-François. *Classical Architecture for the Twenty-First Century: An Introduction to Design*. New York: W.W. Norton & Company, 2004.
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- Schneider, Michael S. *A Beginner's Guide to Constructing the Universe: The Mathematical Archetypes of Nature, Art, and Science*. New York: HarperCollins, 1994.*
- Semes, Steven W. *The Architecture of the Classical Interior*. New York: W.W. Norton, 2004.



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- Summerson, John. *The Classical Language of Architecture*. Cambridge, MA: MIT Press, 1963.
- van Pelt, Robert Jan, and Carroll William Westfall. *Architectural Principles in the Age of Historicism*. New Haven: Yale University Press, 1991.
- Vitruvius Pollio, Marcus. *Vitruvius: The Ten Books on Architecture*. Translated by Morris H. Morgan. New York: Dover, 1960.*
- Ware, William R. *The American Vignola: A Guide to the Making of Classical Architecture*. New York: Dover, 1994. Older edition PDFs available online: (Book 1) <https://archive.org/details/cu31924091026504/page/n1> (Book 2) <https://archive.org/details/americanvignola00vigngoog/page/n5>
- Wittkower, Rudolf. *Architectural Principles in the Age of Humanism*. London: Academy Editions, 1998.
- Students may also want to reference other free digital e-books about architectural design at the following links:
 - <https://www.classicist.org/resources/digital-rare-books-archive/>
 - <http://onlinebooks.library.upenn.edu/webbin/book/browse?type=lcsb&key=Architecture&c=x>

SD PHASE ASSESSMENT

Your design project will be graded based on the following criteria:

LEARNING OBJECTIVE	POINTS
DESIGN SOLUTION: Successful design solution to fundamental architectural problems that integrates concepts, formal/visual principles, creative inquiry, and techniques that address the functional and programmatic requirements of the project.	30
FORMAL & SPATIAL PRINCIPLES: Demonstrates fundamental understanding and application of formal, spatial, and aesthetic principles. (e.g., proportion, classical orders, geometry, user experience, human scale, beauty, hierarchy)	20
SITE DESIGN & MASTERPLAN: Project addresses the immediate site, neighborhood, and urban design needs of the area. Design proposal appropriately responds to issues emerging from the historic district, immediate context, socio-cultural demographic, and institutional presence. Adequate civil design considerations are addressed with site planning for parking, topographic grade changes, greenspace, pedestrian walkways, etc.	50
VISUAL/GRAPHIC COMMUNICATION: Communicates design solutions effectively using architectural presentation materials and techniques (e.g., line weights, level of detail for scale, level of craft, organized graphic presentation). This also includes analog models and their ability to adequately convey the main project characteristics.	20

<p>USE OF PRECEDENTS: Project clearly makes informed and well-reasoned choices regarding the incorporation of design principles from precedent analysis.</p>	20
<p>DESIGN PROCESS: Project demonstrates a rigorous and successful design process. This will be evident in the refinement of the selected concept sketch (<i>esquisse</i>) to the final design solution (e.g., development of plans, sections, elevations, models, diagrams, perspectives, etc.)</p>	20
<p>VERBAL COMMUNICATION: Verbal communication is well planned and executed. Presentation results in further discussion of the design solution.</p>	20
<p>PROJECT REQUIREMENTS: All project requirements and criteria are met, such as deadlines, deliverables, format, portfolio, etc.</p>	20
TOTAL	200 points / 100%