



*Testing design details with full scale prototypes and mock-ups are an Important aspect to the design process. It allows designers to get a full sense of what a paving pattern or bench detail will feel and look like when it is constructed. The top image is a full-scale mock-up by Peter Walker + Partners of paving patterns for plaza components for the National 9/11 Memorial, using chalk. The bottom Image contains full-scale prototypes of bench details made of high-density foam by Sasaki Associates. These studies were integral to understanding details, scale, and proportions.*

**LARC 230: Site Systems I – Materiality in Landscape Architecture**  
**Class:** Tu / Th, 12:30 – 2:20, Architecture Hall 305, 3 Credits  
**Instructor:** Catherine De Almeida, Assistant Professor  
**Contact:** [cdealmeida2@unl.edu](mailto:cdealmeida2@unl.edu); 2-4900  
**Semester:** Fall 2017

### Phase 3: Synthesis of Landscape Materiality – Designing a Performative Assembly System

## **Project Description:**

This third and final phase of the course will test students' skills and knowledge gained throughout the semester. This phase will emphasize the synthesis of understanding landscape materiality, material assemblies, and their performative capacities in constructed landscapes by designing a construction detail for their design projects in Studio. Students must draw and model an innovative, performative design detail using the wide array of conventional and innovative materials and techniques used to construct landscapes that were covered throughout this course. The details will emphasize material components, tectonic relationships, and the performance of the assembly. Detail drawings must have technical precision and high craft, and models will study the tectonic relationships and connections between multiple materials at 1:1 using materials as close to the design intent as possible. After drawing and modeling their details, students will use landscape performance metrics to evaluate their environmental, social, and economic benefits in the context of their design studio projects in LARC 210.

One main objective of this phase is to continue using the graphic representation of technical details as a form of communicating design intent, including their material components and assemblages as applications in the constructed landscape. Students will develop a palette of materials used in their landscape detail. The construction drawing must describe how the materials are assembled, translating technical forms of representation through interpreting and graphically synthesizing complex layers of site design.

Materials and assemblies covered throughout this course should be used, referenced, integrated, and synthesized into a newly developed designed detail specific to their current design projects.

## **Project Format and Structure:**

Students will select a moment in their design projects for Studio to develop as a material assembly detail at 1-1/2"=1'-0". The detail should encompass hardscape (paving), softscape (planting or water), and the transition between the two conditions (seating, curb, flushed, etc.). The detail chosen should also be a synthesis and representative of the design proposal and concept. Details must be drawn in AutoCAD and submitted on an 24"x36" sheet, portrait format. Students must maintain the drawing standards established for the course, including dimensions, labels / leaders, and a title block in paper space. The standards include scale, font, and other styles.

Detailed material assembly drawings must include images of the textures / palette of the materials used, as was done in Phase 2. Additionally, students will make full-scale (1:1) mock-ups of their paving patterns with a partner using tape. Students are required to take professional quality photos (no iPhone photos) to document this 1:1 mock-up from multiple angles.

Finally, students will make a 1:1 tectonic model of their detail. The model must fit within a 1'x1'x1' area. It should emphasize how different

materials are assembled to form the overall detail (above and below ground). Students are required to take professional quality photos (no iPhone photos) to document this model. Images of both the paving pattern and model will be included on your final sheet.

The final submission for Phase 3 will consist of 1 - 24"x36" sheet with the following:

- 1-1/2"=1'-0" detail
- Materials palette for the detail
- Photograph of 1:1 mock-up of paving pattern (placed above paving area of detail drawing)
- Photograph of 1:1 model (1'x1'x1') using a black or white background
- Axonometric landscape performance study
- **NOTE: Detail and axon study can be combined as an exploded axon. However, all the information required of both drawings must be present and clear**

Drawings are to be technically accurate, and each element carefully articulated with the appropriate use of line weights, line types, and textures. Students must integrate their studio project's concept in the design and construction of the detail. Final submissions are due **Thursday, December 7<sup>th</sup>. PDFs must be submitted by 5:00 PM on Canvas.** The sheet and project will be presented with your final studio presentation of your project.

You have the opportunity to incorporate feedback and adjust your details for a final submission of your work for the course to Canvas on **Tuesday, December 12<sup>th</sup> by 8:00 AM.**

#### Project Schedule:

11/9	Phase 3 Format, Description, Schedule, Project Description,
11/14	Required Reading with Quotes and Discussion Desk Crits Draft print of CAD Detail + Materials Palette Paving Pattern Mock-Up in class with a partner using tape
11/16	Group Crits Print of Final sheet- in progress Model discussion
11/21	Desk crits Detail Material Assembly – 1:1 model in progress
11/23	<i>Thanksgiving – No Class</i>
11/28	Group Crits Final Model Performance evaluation discussion
11/30	Group Crits Selection and in progress landscape performance evaluations
12/5	Desk Crits Project refinement; final drafts
12/7	Desk crits Final Production; Submission of Sheet to Canvas by 5PM

- 12/8 Final presentation of Design Detail Sheet + Model with Studio project  
 12/12 Final Submission due in Canvas by 8AM

### Final Requirements:

#### Phase 3

- Boards:** 1 - 24"x36" plotted panel, Portrait format, 1 technical detail drawing of paving (hardscape), edge transition, and softscape, with material swatches, photographs of paving pattern mock-up and model, and landscape performance analysis pinned up for your final review on 12/8 (?).
- Scale:** Detailed Section at 1-1/2"=1'-0"
- Models:** (1) full scale mock-up of paving pattern using tape or chalk  
 (1) 1:1 tectonic study model of drawn design detail; model should emphasize material connection and behavior of the overall assembly
- Photos:** A minimum of 3 professional quality photos of model and of paving pattern (each)
- Description:** Conceptual / thematic title
- Presentation:** The presentation of this project will occur with your final presentation of your studio project. Presentation of this project should emphasize how your overall design concept is implemented at the detail and material scale.

### Project Evaluation:

Phase 3 is worth 30% of your overall grade for the course. Grading will place emphasis on graphic development and clarity, synthesis of skills and knowledge gained throughout the semester, research synthesis, precision and accuracy of detail, quality of visual description, and final presentation.

### Phase 3 Readings:

Week  
13

#### References

##### **Required (Phase 3)**

Kirkwood, Niall, "Practices: Constructing Detail" in *The Art of Landscape Detail: Fundamentals, Practices, and Case Studies*, (New York: John Wiley & Sons, 1999): 109-155.

##### **Supplemental**

Pasnik, Mark, "The Material Autograph" in *Materials: Architecture in Detail* eds. Oscar Riera Ojeda and Mark Pasnik (Gloucester: Rockport Publishers, 2003): 9-12.

Mori, Toshiko ed., "Introduction", *Immaterial / Ultramaterial*, (New York: George Braziller, 2002): xiii-xvii.