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After the Solar Decathlon: Creating A New Design-Build Program

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After the Solar Decathlon: creating a new design-build program

Eric Weber

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Abstract

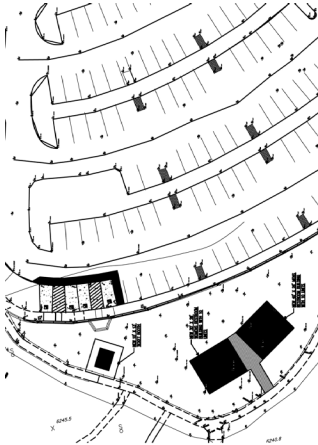
The School of Architecture's intent was to use the Solar Decathlon as a catalyst for creating a new Design Build program. The project allowed the School to leverage support into acquiring tools & equipment essential to creating the house, and for upgrading the school's shop facilities. The projects completed immediately following the Solar Decathlon utilized both digital fabrication and prefabrication. This is significant because the School intends to leverage both of these competencies, developed during the Solar Decathlon, in order to further the School's craft-based pedagogy.

Due to the Design-Build Studio's development of the Solar Decathlon house, there has been significant interest from multiple parties to leverage this offsite-construction experience to create projects that would benefit from these lessons. Despite the team's tremendous success, finishing in second overall, and as the only U.S. team to finish in the top three, translating this interest into viable projects has taken significantly more time and effort than expected. The Design Build Studio's faculty coordinator vetted interested parties, as well as actively searching for projects that fit the program's mission.

The School of Architecture serves the functions normally associated with land grant universities. It is the sole architectural program in the state, and its mission is to work for the benefit of the state's residents. The Design Build Studio's mission includes assisting residents in connecting to the natural resources, wildlife, and ecosystems. In January 2015, the Design Build Studio began work on a project for the State Parks Division, a ticket booth for the Lake Tahoe Shakespeare Festival. The Festival is an annual event at Sand Harbor State Park, the busiest location in the state park system. The project, while small, is in a highly public environment, and serves as an opportunity to showcase the Studio's capability to work in diverse environmental conditions.

Representatives of the State Parks Division have expressed an interest in developing a long-term relationship, with the Design-Build Studio developing

projects across the state. Future projects are anticipated to include guest cabins, ramadas, viewing platforms, and other projects that enrich visitor experiences at the parks. This relationship is an ideal partnership, leveraging the Design-Build Studio's prefabrication skills and social/environmental focus while meeting the Parks Division's needs. If the first project is successful, this partnership will be the catalyst that creates a sustainable future for the Design Build Studio.



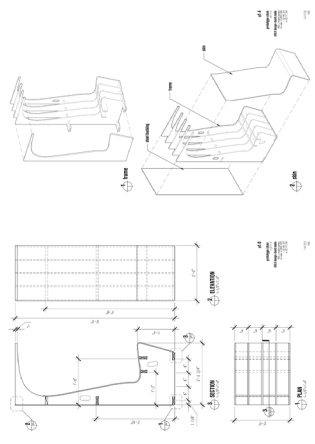
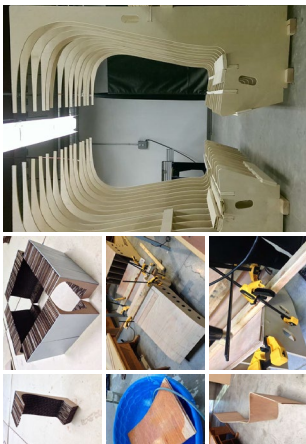
A Sustainable Future

Due to the Design-Build Studio's development of the Solar Decathlon house, there has been significant interest from multiple parties to leverage this collaborative experience to create projects that would benefit from new lessons. Despite the fact that the Design-Build Studio is a relatively new organization, it has already been able to secure funding from several interested parties, as well as actively searching for projects that fit the program's mission.

The School of Architecture serves the functions normally associated with a large university. It is the sole architectural program in the state, and its mission is to work for the benefit of the state's residents. The Design-Build Studio's mission is to provide students with the opportunity to gain experience in the real world of architecture and construction. The Design-Build Studio is a unique organization that provides students with the opportunity to gain experience in the real world of architecture and construction. The Design-Build Studio is a unique organization that provides students with the opportunity to gain experience in the real world of architecture and construction.

Representatives of the State Parks Division have expressed interest in developing a long-term relationship, with the Design-Build Studio developing projects across the state. Future projects are expected to include park stations, interpretive centers, viewing platforms, and other facilities. The Design-Build Studio's partnership with the State Parks Division is a significant step towards the Design-Build Studio's goal of creating a sustainable future for the Design-Build Studio.

After the Solar Decathlon: Creating a New Design – Build Program



The School of Architecture Studio corridor has several functional and experiential shortcomings: the purpose of the Fall 2014 renovation was to address these needs, while simultaneously demonstrating the capabilities of the design-build studio. The project was a significant step towards the Design-Build Studio's goal of creating a sustainable future for the Design-Build Studio.

The renovation provided for student gathering, such as study space, as well as providing surfaces for the extension of the corridor, allowing visitors to perceive the corridor more as a series of review spaces, with the project meeting between the spaces. The renovation provided for student gathering, such as study space, as well as providing surfaces for the extension of the corridor, allowing visitors to perceive the corridor more as a series of review spaces, with the project meeting between the spaces.

The design solution developed as a plywood frame, with a hand-drawn plywood skin applied to the seating surface, the opposite side was clad in hot-rolled steel plates, allowing drawing mounting via magnets. The project was a significant step towards the Design-Build Studio's goal of creating a sustainable future for the Design-Build Studio.

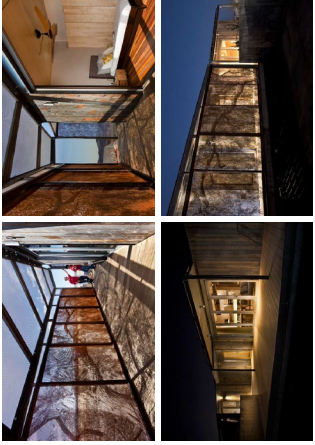
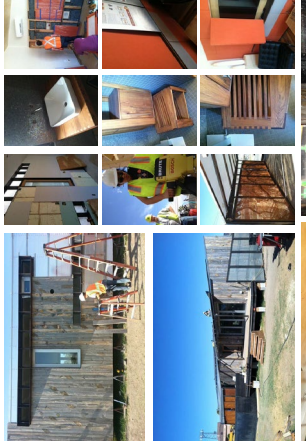


After the Solar Decathlon

After the team returned from successfully participating in the competition, the four-year students that joined the team in August 2013 needed a project to give them something of their own to their portfolios, but also to leverage the energy of the Decathlon in creating a meaningful intervention of the School of Architecture.

The project was to design and construct a gathering space at the midpoint of the School of Architecture studio corridor. The project was a significant step towards the Design-Build Studio's goal of creating a sustainable future for the Design-Build Studio.

Students were explicitly challenged to utilize both digital and conventional construction processes in the creation of the project. The project was a significant step towards the Design-Build Studio's goal of creating a sustainable future for the Design-Build Studio.



Introduction

The School of Architecture's intent was to use the Solar Decathlon as a catalyst for creating a new Design-Build program. The project allowed the School to leverage support into acquiring tools & equipment essential to creating the house, for digital fabrication and prefabrication. This is significant because the School intended to leverage both of these components.

When the Design-Build Studio began work on the Solar Decathlon house, the Studio determined that the appropriate principle was to create a new design-build program. The project was a significant step towards the Design-Build Studio's goal of creating a sustainable future for the Design-Build Studio.

Good architecture creates a sense of place and requires meaningful experiences. Through a combination of context, scale, form, and materiality, architecture can create a sense of place and requires meaningful experiences. The project was a significant step towards the Design-Build Studio's goal of creating a sustainable future for the Design-Build Studio.