

North Dakota State University Fall Third Year Studio

AR371 Architectural Design III

How Technology is Integral with Design

Structure, Context, and Environmental Response

Campus State-of-the-Art Bus Shelter Basic Schedule

No changes will occur - schedule your time as appropriate - the end of the semester always brings many challenges

Objective — To design a state-of-the-art bus shelter for the NDSU Campus with the intent that if grant money is awarded than one or several of the designs may be built. This project may be completed in teams of two or alone and your solutions will be exhibited in the Hjemkomst Center in one of their showcases early next year.

The shelter is to hold 15 - 20 people and have heat/cooling, real-time electronic message signs, connection to the University computer system - computer terminal and wireless connections, connection to NDSU security, and screen/map of current bus location with in the system. It is to be handicap accessible, vandal resistant, and have potential to be moved. Solar, wind, and other energy sources can be considered to power the shelter although the initial site of Albrecht and 17th is above the University steam system.

Could the bicycle be accommodated as part of the design, should there be seating, how to assist the vision and hearing impaired? Many different sites may develop along the NDSU circulator (within campus) and the NDSU shuttle (back and forth to downtown) to the downtown campus. Different bus shelters may be appropriate for various site context issues, all that the University would like is a common "identifier" that could be used on every unique bus station to identify it as part of the University bus system.

How will the shelter you design have a relationship to site issues such as N, S, E, W as specific to weather and sun as well as the context issues and arrival of bus.

In the exploration of the meaning of state-of-the-art, you should consider how history relates to the future and it's inherent meaning in modern form and material. As future forms typically contain a germ of meaning that links us to our past. How can the past of the red river valley and the human interventions within the area's history become an inherent part of a abstract form that will link us to the future? What thoughts does the fact that the bus shelters are for the University imply? How will the details of the shelter reinforce these ideas and also utilize the nature of the material that you have chosen? In other words, what is the relationship between nature, form, material, and the understanding of how architecture can reflect the client request for a state-of-the-art bus shelter while providing a temporary place as area of transition from the private - walking, car or bicycle - to the more public interactions of the bus and University life.



Class Schedule:

November 12 — Jill Hough from the Regional Transit Center for Rural and Small Urban Centers will give a short talk on the project and she will be our client available to us to interview and ask questions.

Research: Real-time electronic messaging, computer terminal and wireless connections, NDSU security, details of the bus, screen map systems, vandal resistant, heating as related to University steam system, bicycle needs and issues, handicap issues, current and future routes, alternate energy sources - wind, solar, issues for identifier, site issues as related to soils, orientation, and weather, site documentation, historical issues, Native American, Fargo, and University, and future thoughts for the University and the city. The research should be gathered and presented in such a way that everyone may share and understand the results of your work. Individual files of information printed and developed by you on your chosen topic will be gather into a group "box" for all to refer to as well as a list of sources and book references that other students may refer to.



November 17 — Initial research information due on the different technical components for the shelter - brief presentations. Three or four form related models related to chosen materiality due - you may explore several different materials as well as one single material in three different ways. 1/4" = 1'-0" Other drawings, photographs, and studies that are helping with your exploration can be presented as well. Always continue the process of design exploration.

November 21 — Schematic Design Documents and model due beginning of class for review SD - Preliminary site plan, plan sections, and elevations along with material indication and any other finish materials notes along with research for technical components applied.

November 24 and 26 — I will be in Tokyo - but you should be using this time to continue and extend your project. I will be bringing back information and fresh thoughts from Tokyo.

December 01 — Design Development documents due beginning of class and updated model and initial detail ideas DD - Refinement of idea, more reality and beginning details modified and developed.

December 08 — Key detail axon and full scale model of key detail for review

December 10 — Class Pin-up to review models and documents

December 12 — Final complete documents and model for group review by Transportation professionals, University representatives, CME faculty and professionals, Architects, and Architecture faculty.

Notes from Interview with Jill Hough and other interesting errata:

Email for Jill - jill.hough@ndsu.edu

Don't be too overwhelmed by money or portability at this stage - this small structure can easily be moved and there are too many issues behind the concept of what a project costs - wait until the end when Gary and a few students will provide a complete listing of the costs and related issues involved for individual projects so that you can learn this relationship - you are the architect and need to provide this vision and understanding of an architect for the client at this stage.

Info on City of Fargo website:

Currently the two most heavily used bus stops are: by Fargo Dome and University Village. The buses used are

- NewFlyer LF35 Ft
- Gillig LF29 Ft
- EIDorado Aerotech 240

Birdair is the company responsible for the fabric structure at the Hjemkomst Center

You may visit the Hjemkomst free of charge with your ID as I have spoken with them and will fax your list of names to provide this opportunity. Go at a time that you may attend an interior tour of the church - every hour on the hour I believe.

The Plains Art Museum is free of charge on the second and fourth Tuesday. I suggest a visit for the architecture as well as the artistic inspiration.

Inspirational Slides



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