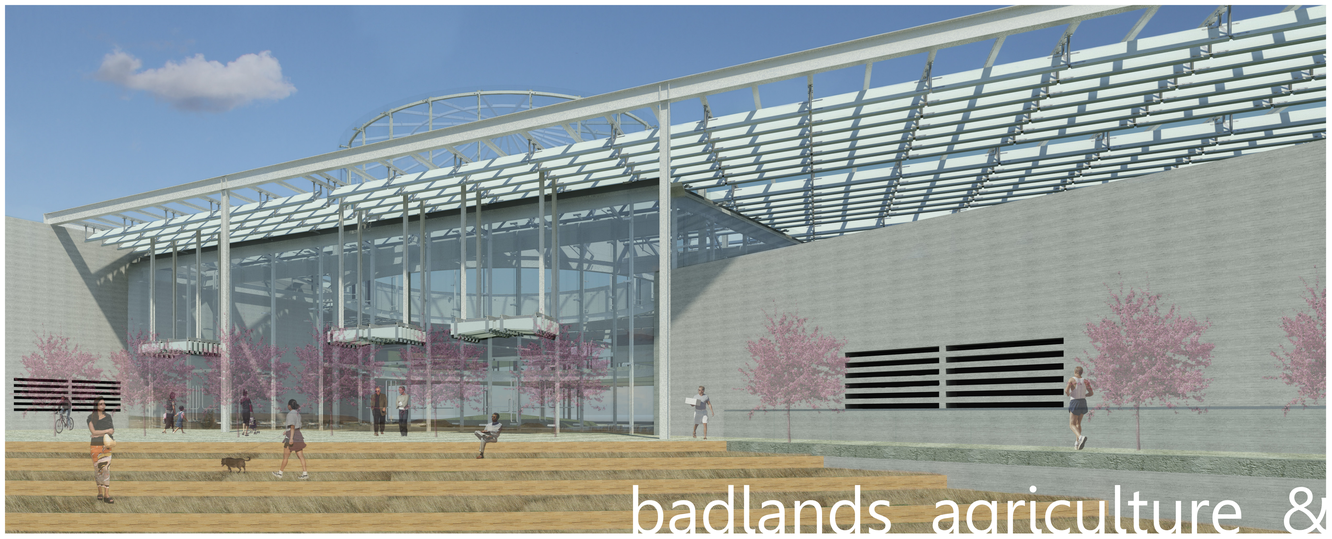
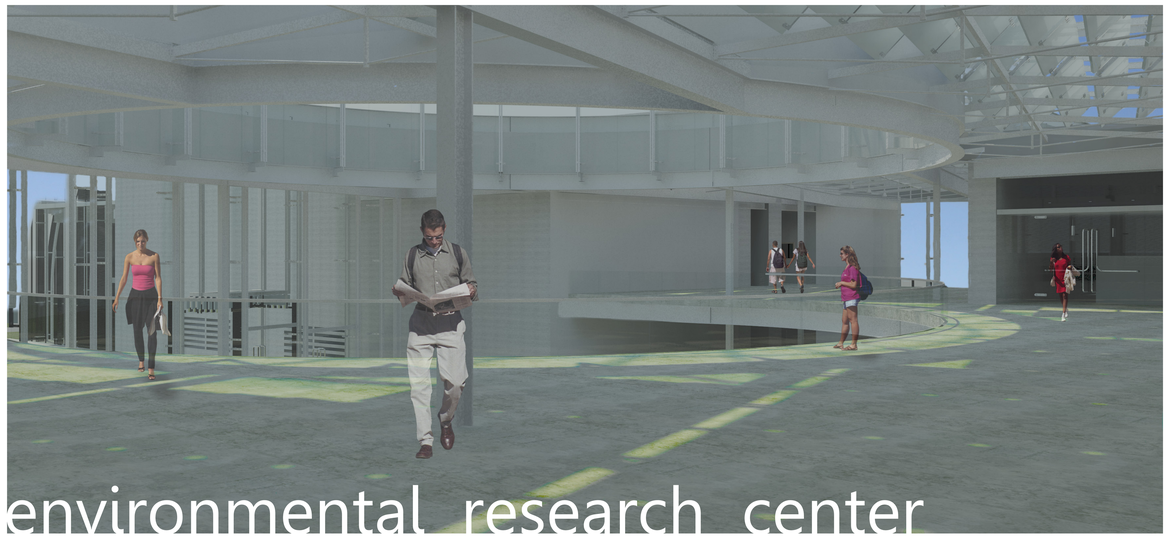


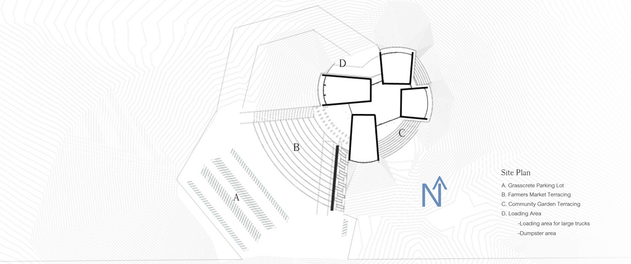


badlands agriculture & environmental research center

inspiration

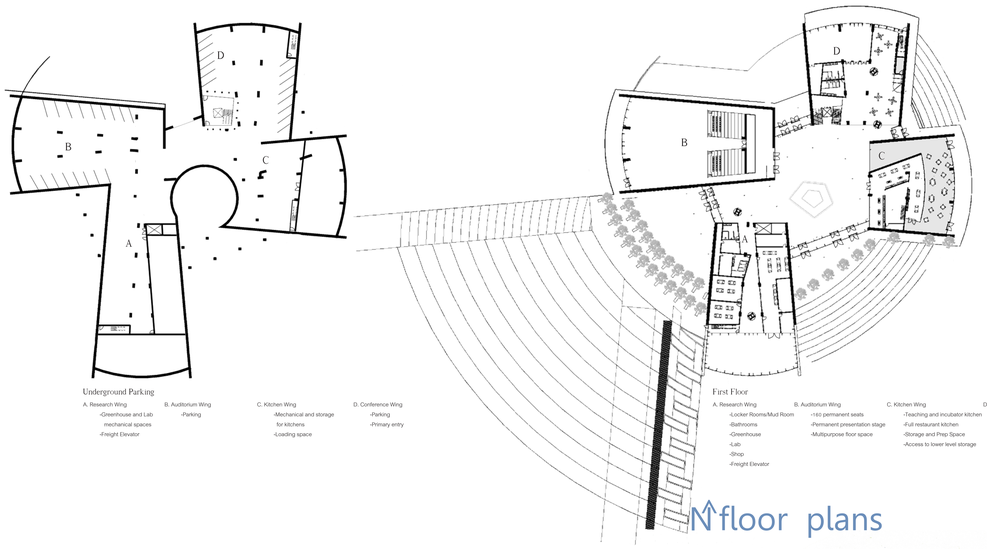
Badlands Agriculture & Environmental Research Center

This project is an examination of local agriculture and how it can be reconnected to a larger community. This project fits into a living/learning center typology that is more agriculture urban, rather than urban agriculture. The idea behind this investigation is that we have lost a connection with food production. There is more concern in recent times about food sourcing and contamination. This investigation seeks to bridge that gap on how communities can reconnect with farmers in the area and source and learn about initiatives such as farm to table and value added agriculture. The primary clients of this facility are the researchers and students that will live there. The community at large is the other primary benefactor from this facility. This facility is situated in western North Dakota, with proximity to Dickinson, but amongst the prairie. The emphasis of this project is reconnecting people to the source of their food, educating them along the way. This project will proceed by pursuing farm to table agriculture and healthy building environments that foster a sustainable lifestyle and nurture human health.



Site Plan

A. Grasscrete Parking Lot
B. Farmers Market Terracing
C. Community Garden Terracing
D. Loading Area
- Loading area for large trucks
- Dumpster area



Underground Parking

A. Research Wing
- Greenhouse and Lab mechanical spaces
- Freight Elevator

B. Auditorium Wing
- Parking

C. Kitchen Wing
- Mechanical and storage for kitchens
- Loading space

D. Conference Wing
- Parking
- Primary entry

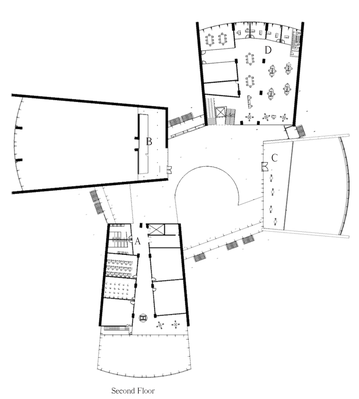
First Floor

A. Research Wing
- Locker Rooms/Mud Room
- Bathrooms
- Greenhouse
- Lab
- Shop
- Freight Elevator

B. Auditorium Wing
- 160 permanent seats
- Permanent presentation stage
- Multipurpose floor space

C. Kitchen Wing
- Teaching and incubator kitchen
- Full restaurant kitchen
- Storage and Prep Space
- Access to lower level storage

D. Conference Wing
- Conference room and storage
- Primary bathrooms
- Cafe



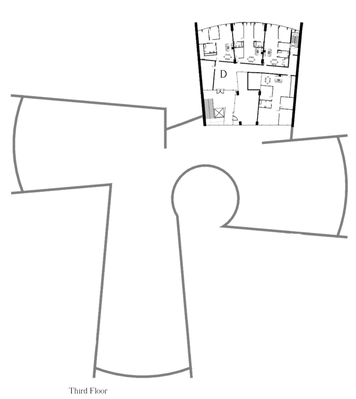
Second Floor

A. Research Wing
- Classrooms
- Greenhouse viewing area
- Bathrooms

B. Auditorium Wing
- Equipment area
- Lighting area

C. Kitchen Wing
- Patio

D. Conference Wing
- Office floor
- Conference room
- Library



Third Floor

D. Conference Wing
- 4 different residential layouts
- Communal indoor and outdoor spaces
- Shared Laundry

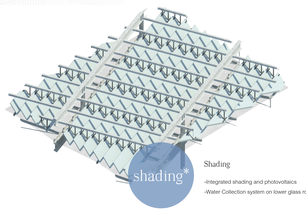
floor plans

details

terrace*

Terracing

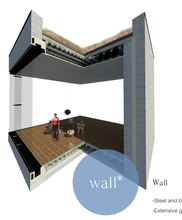
- Sheet piling wall construction
- Farmers market terracing uses grasscrete parking pads



shading*

Shading

- Integrated shading and photovoltaics
- Water Collection system on lower glass roof

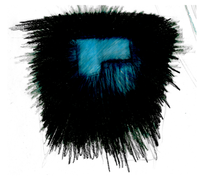


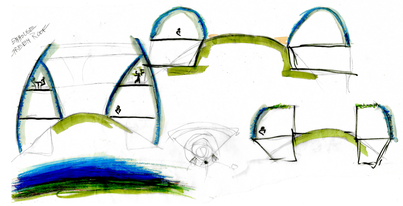
wall*

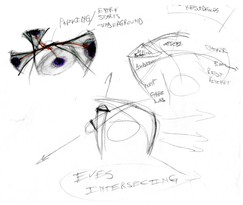
Wall

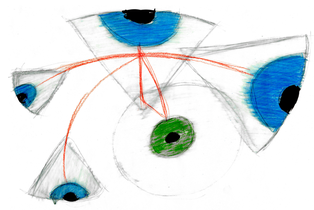
- Steel and boardformed concrete
- Extensive green roof

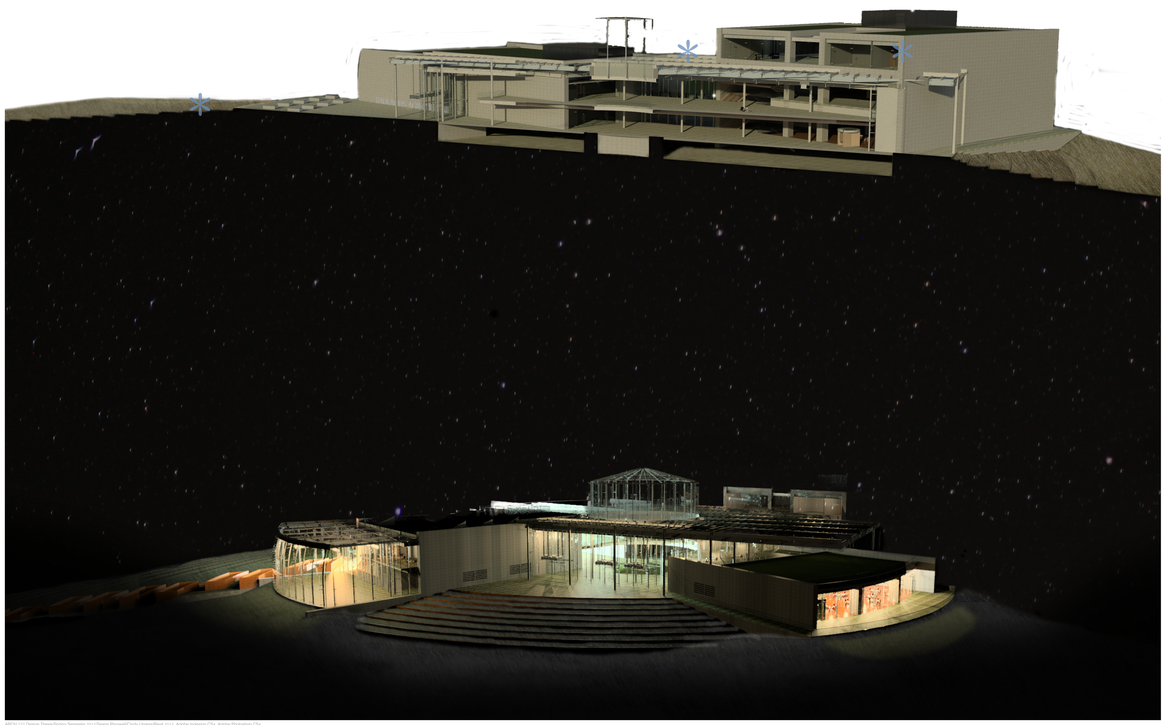
process







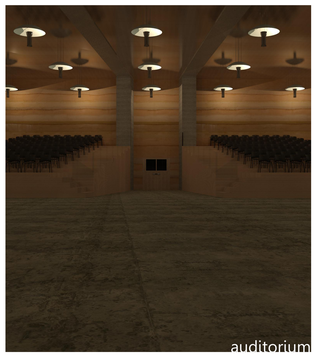




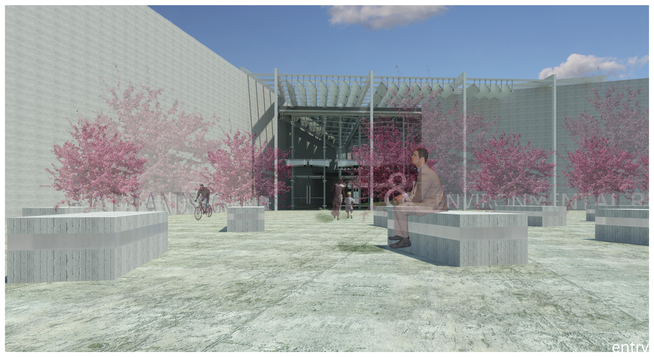
cafe

atrium

restaurant



auditorium



entry

Adobe CS Design Premium Spring Semester 10 | Raven Fitzgerald/Cindy Urmson/Revit 2012, Adobe Indesign CS5, Adobe Photoshop CS5