

Pitkin Nursery Classroom Building

C.F.N.S.R.
Center for Forest Nursery and Seedling Research

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University of Idaho: College of Natural Resources

Goals:
-Provide an Invigorating space with leading Technologies and Teaching opportunities.

Concepts:
-Growth
-Strength
-Earth



Looking North-West Rear Perspective



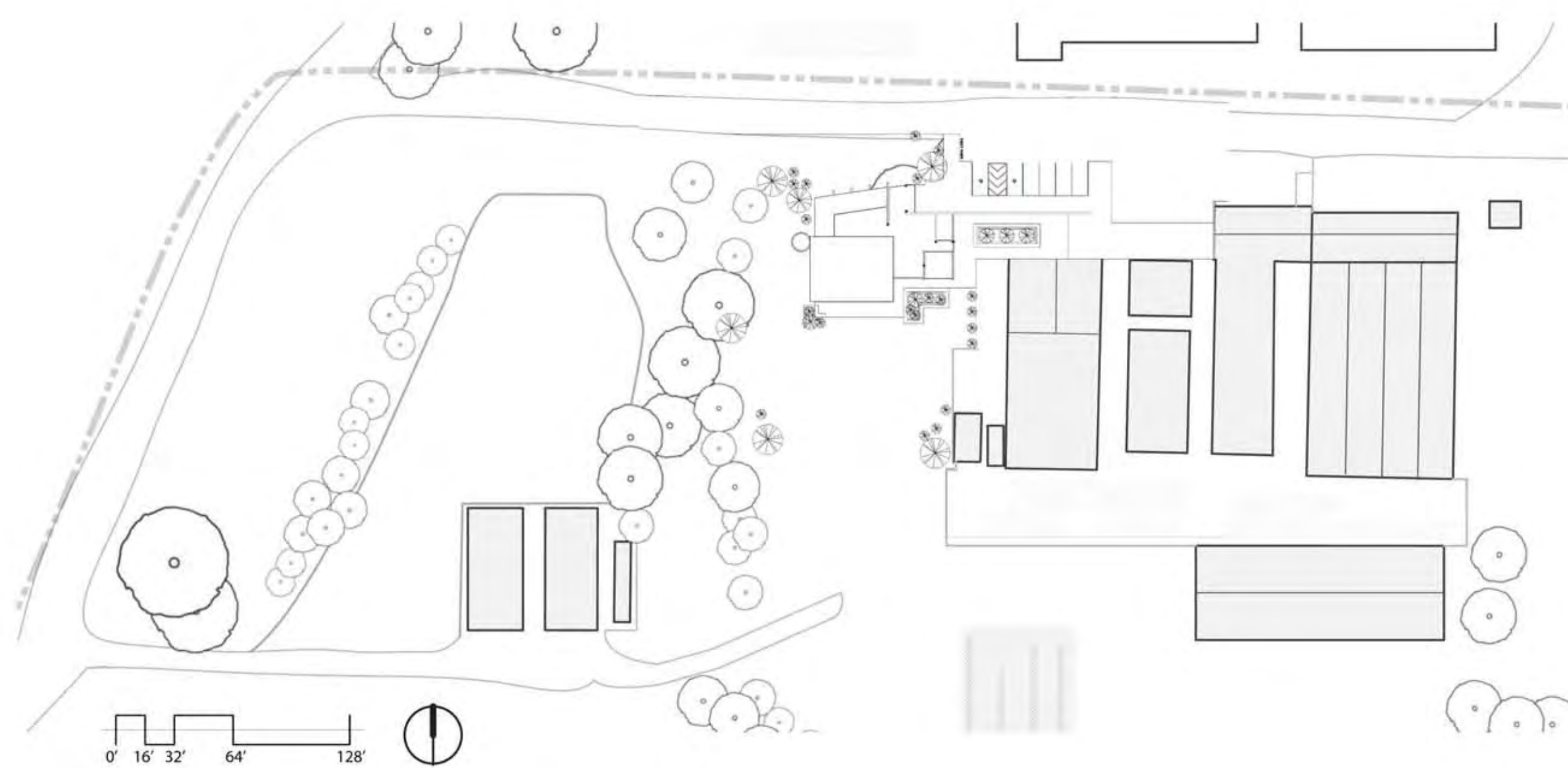
Classroom

Program

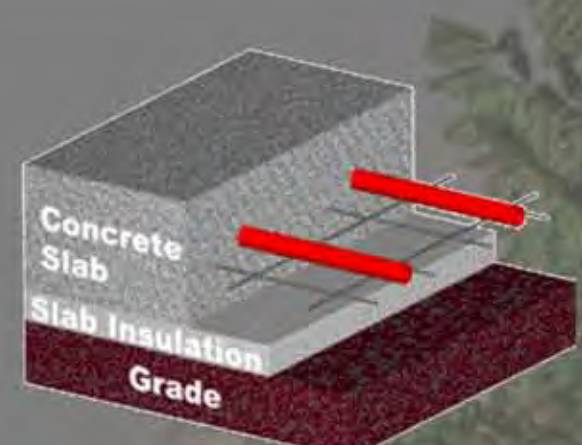
- 1. Classroom..... 840 SF
- 2. Offices (1-Director, 3-Grad)..... 447 SF
- 3. Seed Room (Asst. Director Office)..... 158 SF
- 4. Kitchen..... 100 SF
- 5. Visitors Area (Art, History, Projects)..... 300 SF
- 6. Sales Room (Buy Seedlings)..... 220 SF
- 7. Flex Space/ Circulation..... 600 SF
- 8. Restrooms..... 160 SF
- 9. Mechanical/Storage..... 280 SF
- 10. Classroom Extension (Outdoor)
- 11. Covered Storage
- 12. Cistern
- 13. Bicycle Racks

Design Strategies

- With the different uses of materials and structure within the facility it allows for teaching opportunities for the individuals in the space to interact and learn from the structure and finishes.
- Rammed earth walls in five locations help with solar gain on the north side of facility.
- Hydronic radiant floor heating: creates an even disbursement of heat, and uses the reclaimed water captured by the green room to the cistern to be heated by the boiler.
- Green roof and Cistern: water filtration and catment not only operates the radiant heating but also is used as grey water to run the toilets.
- The use of natural materials such as a concrete slab creates a heat sink for the facility, and to contrast the hard surface warmth from the use of wood creates a comfortable environment.
- By creating southern exposure to the facility it naturally daylight the interior as well as creating views out to the nursery and the rolling Palouse hills.



Structure and Framing



Radiant floor heating:
-poured concrete slab insulation so serve as subfloor, then embed hydronic heating tubing into secondary slab.
-reinforced by grid, which is placed into slab before pouring.

<http://www.hi-valley.com/hydronicsolutions.htm>



Nana Walls

- custom exterior folding doors
- creates clean lines with minimal tracks, frames and side jambs with concealed hardware
- allows for overflow out into the exterior classroom space.

<http://picasaweb.google.com/in/photo/17m2yCoAOOwaVcJg-aUa6Tw>



Reclaimed Wood

- Douglas Fir (timbers used as columns and beams)
- Incens cedar (exterior decking)
- Western species (ceiling panels, mullions, furniture)
- Creates warm interiors and variety of textures

<http://www.trestlewood.com/page/1092/weathered-timbers/>



Green Roof

- vegetation and a growing medium, planted over waterproofing membrane and drainage barrier.
- slants down and drains into cistern for water reclamation

<http://progressivetimes.files.wordpress.com/2010/10/green-roof-detail.jpg>

Standing Seam Roofing

Green Roof

Reclaimed wood timbers

Rammed Earth Walls

Nana Walls

Reclaimed Wood Wall Panels



Section Perspective 'A'