

**Waller Hall Renovation  
MECHANICAL DESIGN**

**HISTORIC BUILDING**

Owner:  
Willamette University  
900 State Street  
Salem, OR 97301  
Bruce Bigler (503) 370-6003

Client:  
Architects Four, LLC\*  
725 Commercial Street SE  
Salem, OR 97301  
Phil Settecase (503) 581-5151

*Project Start:* November 1987  
*Project Finish:* November 1989  
*Facility Type:* Educational  
*Building Age:* Built 1864  
*Construction Cost (Total):* \$2,257,000  
*Construction Cost (EESI Portion):* \$335,366  
*Engineering Fees:* \$17,500  
*Project Size:* 25,019 square feet

\*Company name change from Settecase, Smith, Doss Architects.

EESI Staff Involved: Fred Shaub, Ron Anderson, Dennis Cruz, & Tom Lavelle.

Project Description: Waller Hall, a registered historic building, was constructed in 1864, and is the oldest college building still in use west of the Mississippi. The structure is unique in shape having been built in the form of a Greek cross and it is five stories tall.

EESI performed full design and construction management, including overseeing full scheduling, project and financial tracking.

The existing HVAC system consists of steam radiation only. The new mechanical design by EESI staff is a modern 4-pipe heating and air conditioning fan coils. The systems have been innovatively incorporated into the structure to maintain the original architectural characteristics. The building heat exchanger and chiller is located in an adjacent building and fed underground to the fan coil units within the building. The design includes a full HVAC system, plumbing, fire sprinkler, and Building Automation System. Mechanical design included both the HVAC and plumbing.

**Baxter Hall - Health Services Center  
MECHANICAL & ELECTRICAL DESIGN**

**REMODEL**

Owner:

Willamette University  
900 State Street  
Salem, OR 97301  
Tom Neal (503) 370-6003

*Project Start:*

April 1997

*Project Finish:*

December 1997

*Facility Type:*

Health Clinic

*Building Age:*

Built 1947

*Construction Cost (Total):*

\$337,352

*Construction Cost (EESI Portion):*

\$98,483

*Engineering Fees:*

\$10,700

*Project Size:*

4,200 square feet

Client:

Arbuckle Costic Architect  
363 State Street  
Salem, OR 97301  
Walt Bensman (503) 581-4115

EESI Staff Involved: Fred Shaub, Randy Boyd, John Balaam, & Ron Phelps.

Project Description: Mechanical & electrical design for Health Services Facility remodel in Baxter Hall's abandoned kitchen area. A new HVAC system was designed to comply with CDC requirements for indoor air requirement.

**Baxter Hall  
Campus Recreation & Activities Center  
MECHANICAL & ELECTRICAL DESIGN**

**REMODEL & ADDITION**

Owner:  
Willamette University  
900 State Street  
Salem, OR 97301  
Tom Neal (503) 370-6003

*Project Start:* October 1999  
*Project Finish:* June 2002  
*Facility Type:* Educational  
*Building Age:* Built 1947  
*Construction Cost (Total):* \$2,636,730  
*Construction Cost (EESI Portion):* \$658,488  
*Engineering Fees:* \$41,182  
*Project Size:* 69,067 sf remodel  
10,950 sf addition

Client:  
Architects Four, LLC  
725 Commercial Street SE  
Salem, OR 97301  
Mike McDermott (503) 581-5151

EESI Staff Involved: Fred Shaub, Dan Pullen, John Wallin, Laurel Wong, Ron Anderson, & Ron Phelps.

Project Description: Mechanical, fire sprinkler, and electrical design services for remodel and addition. Design included upgrading fire sprinkler system, new electrical service, new plumbing fixtures, new chiller system, upgrading steam heat to hydronic boilers, and new air distribution system. Building included recreation facility, food services, laundry, classrooms, assembly, activity room, computer lab, study rooms, and lounge.

**Baxter Hall & Health Services Boiler Upgrade  
ASSESSMENT  
COST ESTIMATE**

**ENERGY UPGRADE**

Owner/Client:  
Willamette University  
900 State Street  
Salem, OR 97301  
Tom Neal (503) 370-6003

Project Start: November 1999  
Project Finish: December 1999  
Facility Type: Health Clinic/Dormitory  
Building Age: Built 1947  
Construction Cost: \$138,500<sup>o</sup>  
Engineering Fees: \$1,412.50  
Project Size: 4,200 square feet

<sup>o</sup>Estimate

EESI Staff Involved: Fred Shaub, Pete Sanford, and Ron Phelps.

Project Description: Mechanical assessment and cost estimate for boiler upgrade of Baxter Hall and Health Services Building for design project completed for Architects Four, LLC (project under separate contract).