

**Waller Hall Renovation
MECHANICAL DESIGN**

HISTORIC BUILDING RENOVATION

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.

**Tokyo International University of America
Salem Campus - Phases I, II, & III
MECHANICAL, ELECTRICAL, & CONTROLS DESIGN**

**NEW CONSTRUCTION
ADDITION/EXPANSION**

Owner:
Tokyo International University
PO Box 14040
Salem, OR 97309
Ryuji Torihara (503) 373-3300

Project Start: May 1988
Project Finish: July 1993
Facility Type: Educational
Building Age: Built 1989
Addition 1990
Addition 1993

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

Construction Cost (Total): \$10,100,000
Construction Cost (EESI Portion): \$1,384,545
Engineering Fees: \$38,000
Project Size: 83,490 square feet

total for all 3 Phases

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

EESI Staff Involved: Fred Shaub, Randy Boyd, Ron Anderson, Suzanne Marinello, & Ron Phelps.

Project Description: The TIU campus consists of a 207-student dormitory, kitchen, dining hall, lounges, classrooms, and parking lots. The design and construction took place in three phases:

Above: Tokyo International University -

Phase I

Phase I:

Design of HVAC, Building Automation System (BAS), plumbing, utilities, and parking lot drainage for the new 70,150 square feet Tokyo International University Salem Campus facility including dormitory, kitchen, dining area, lounges, and classrooms.

Phase II - Classroom Wing Addition:

A 5,200 square feet classroom wing addition, extending HVAC from the boiler/chiller room and BAS controls.

Phase III - Lecture Hall and Media Center Addition:

Mechanical, electrical, lighting, and fire alarm design for a 16,000 square feet addition which included offices, auditorium, library, resident housing, restrooms, and lobby. Parabolic fluorescent fixtures, electronic ballasts, and daylight sensing occupancy sensors were used. A sub-distribution panel for the North Wing was installed. EESI also designed HVAC, plumbing, fire sprinklers, and site utilities.

**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

Client:

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

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

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.