Foundation Plant Services (FPS) is a self-supporting unit within the College of Agricultural and Environmental Sciences at UC Davis. FPS produces, tests, maintains and distributes foundation-level virus disease-tested plant materials for use by California nurseries. FPS acts as a crucial link between University researches and the agricultural industry in applying state-of-the-art knowledge, technology, and facilities to benefit nurseries, growers, and the public.

This Trinchero Family Estates Building addition is a small stand-alone building of 7,652 gross square feet immediately adjacent to the existing FPS research building and greenhouses. The new building provides administrative space for staff and graduate students, a conference room and a large seminar room which will accommodate the growth of the program and its public outreach.

Due to the self-supporting nature of the program, the building is being constructed in two phases. The first phase constructed the building shell and site utility improvements and was completed in summer of 2012. The second phase completed the mechanical systems, fire alarm / fire sprinkler systems, tenant improvements and exterior site improvements.
Due to the function of Foundation Plant Services, sustainable landscaping features are of high importance. This facility is located on the west campus near the agricultural fields for the campus. The drought tolerant native / adaptive landscaping on this site was installed and is maintained by the FPS unit themselves. The storm-water retention basin was constructed as part of the first phase and landscaped with plantings not requiring irrigation at the completion of the second phase. Drought-resistant planting and storm-water management information is frequently a topic of FPS’ regularly scheduled industry seminars and included within FPS’ support of the ‘Your Sustainable Garden’ program.

The building design uses displacement ventilation and daylighting with individual occupant controls for their spaces. In addition, interior spaces have durable, low VOC materials including a stained concrete floor which helps to improve indoor air quality. Specific instructions on the use of the building systems will help the occupants use their resources conservatively to maintain a quality environment.

Finally, the phased nature of this project brought forth challenges related to the passing of time, changes to standards and changes to building needs. How to overcome these challenges and still move forward to LEED Silver is a valuable part of this project’s story. Good record keeping for Phase I on product data allowed for the retention of the recycled and regional credit documentation when Phase 2 data was added. Submittal of door materials during construction did allow the wood doors to get installed without the specified sustainable wood certification and so compliance to that credit was not obtained. However, the increase in recyclable and regional material data being generally available for materials allowed the second recyclable material credit to be obtained instead.

**LEED-NC® SILVER**

**SUSTAINABLE SITES**
- Bicycle Parking Spaces
- Priority Parking for Efficient Vehicles
- Shower and Changing Facilities Provided for Occupant Comfort
- Diverse Open Spaces Area
- Surfaces Selected to Reduce Heat Island Effect

**WATER EFFICIENCY**
- 50% Water Efficient Landscaping
- 50% Water Use Reduction

**ENERGY AND ATMOSPHERE**
- Enhanced Commissioning of Building Energy Systems
- 21% Reduction of Energy Use
- Minimal Use of Ozone Depleting Refrigerants
MATERIALS AND RESOURCES
- CONVENIENT RECYCLING STATIONS
- 78% OF CONSTRUCTION WASTE DIVERTED FROM LANDFILL
- 12% OF ARCHITECTURAL MATERIALS CONTAIN RECYCLED CONTENT

INDOOR ENVIRONMENTAL QUALITY
- LOW VOC MATERIALS INSTALLED
- DESIGN OF INDOOR CHEMICAL & POLLUTANT SOURCE CONTROL
- IMPLEMENTATION OF INDOOR AIR QUALITY MANAGEMENT PLAN FOR OCCUPANT WELL BEING
- OCCUPANT CONTROLLABILITY AND EFFICIENT DESIGN OF LIGHTING

Passage of time meant that campus standards had changed. Campus now recommends LED light fixtures to be used inside and outside new projects. This change was made and all LED fixtures were installed. However, the change meant that light pollution criteria on site was not met. The new LED fixtures provide lighting for future bike parking and adjacent campus parking areas; and thus, light spillage occurs beyond the LEED project boundary. Although the shared lot with the original FPS facilities can be identified and described for compliance to LEED online, the shared light with the adjacent Containment Research Facility could not. In exchange, Green Power was added to the project.

By allowing for such compromises and switching of credits achieved, we were able to have a successful project for the user group and still be awarded LEED Silver.

PROJECT INFORMATION

OWNER: UNIVERSITY OF CALIFORNIA, DAVIS
ARCHITECT: UC DAVIS, DAVIS DESIGN GROUP
SHELL CONTRACTOR: D.G. GRANADE, INC.
T.I. CONTRACTOR: CARTER KELLY, INC.
MECH. PLUMBING ENGINEER: R&A ENGINEERING
ELECTRICAL ENGINEER: ECOM ENGINEERING, INC.
CIVIL ENGINEER: MORTON & PITALO
STRUCTURAL: WILLIAM D. BEVIER STRUCTURAL ENGINEER
COMMISSIONING AGENT: PETER SHAHROKH, UC DAVIS

PROJECT TEAM

COMPLETED SPRING 2015
7,652 SQUARE FEET
COST: $3,700,000

CHECK OUT OUR ENERGY USAGE!
Look for this symbol on our building out in west campus at: eco.ucdavis.edu