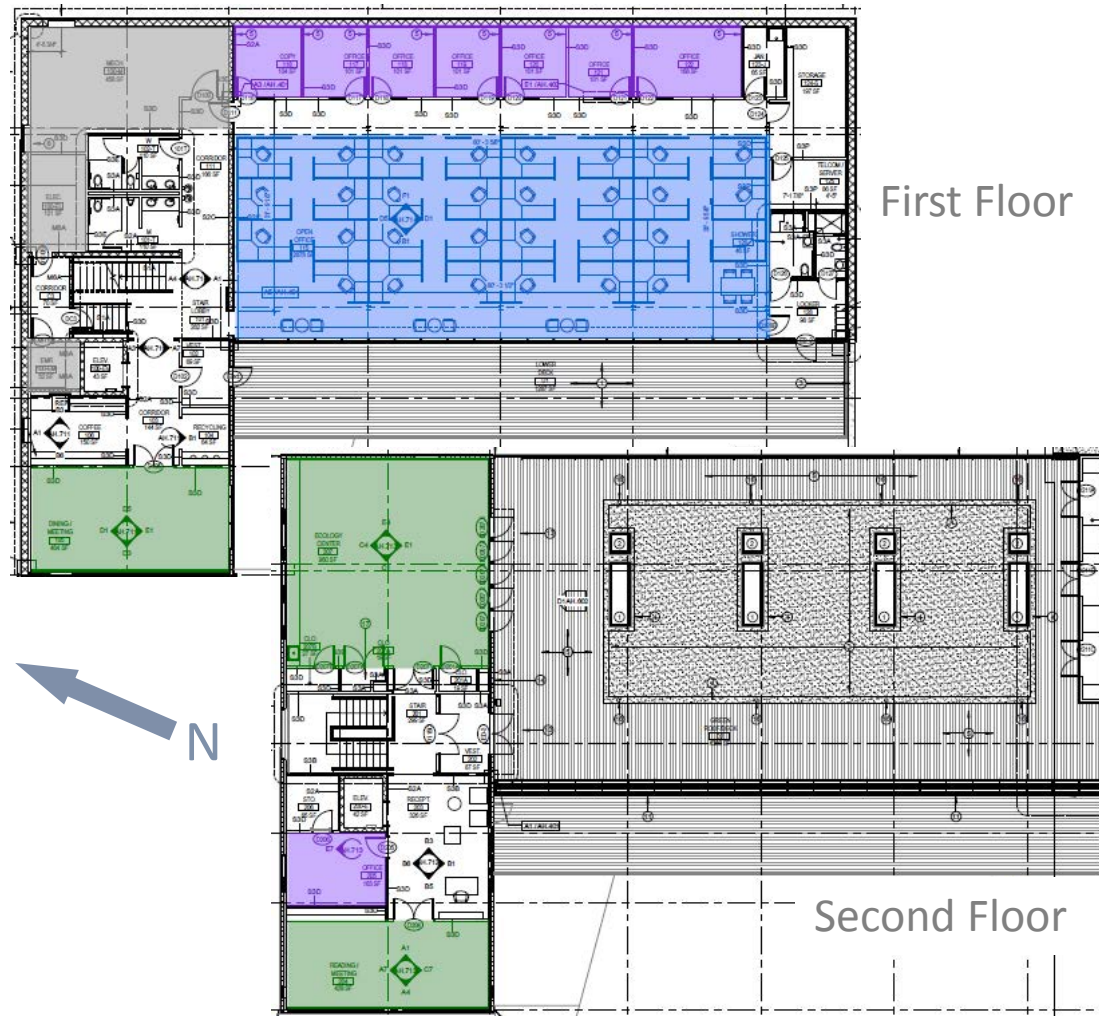






Case Study # 1

Center for Parks and People



-  Private Office
-  Open Office
-  Conference
-  Mech/Elec

Case Study # 1

Center for Parks and People

Energy Conservation Measures:

- High-performance envelope
- Green Roof
- Low Flow Plumbing Fixtures
- Composting Toilets
- Photovoltaic Array
- Electrical vehicle charging station
- Daylighting optimization
- Geothermal Variable Refrigerant Flow (VRF) System
- Natural ventilation
- Energy recovery ventilation
- Expanded thermal comfort conditions

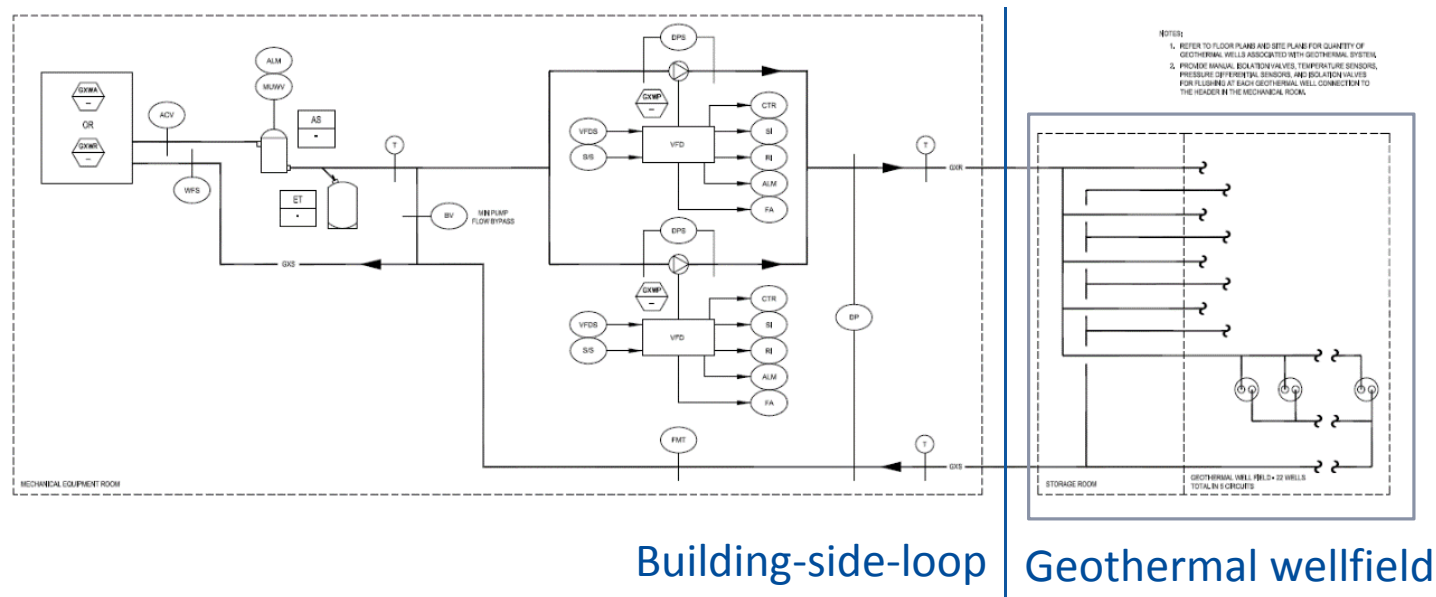


Case Study # I

Center for Parks and People



- Mechanical Highlights:
 - Geothermal VRF system
 - Natural ventilation backed up by mechanical energy recovery ventilation



Case Study # 1

Center for Parks and People



- Electrical Highlights:
 - PV array
 - CFL lighting
 - Daylight optimization

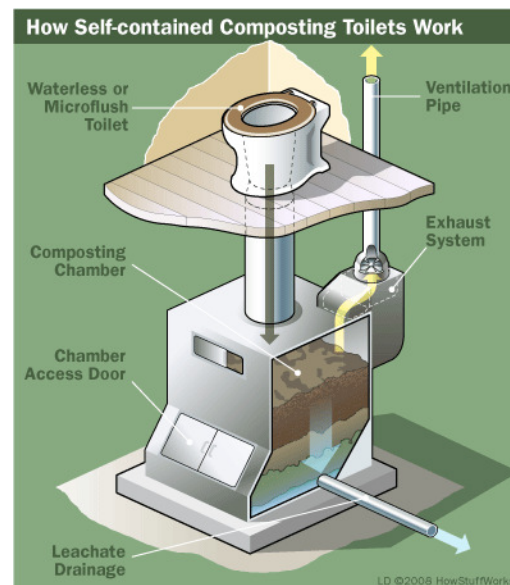


Case Study # 1

Center for Parks and People



- Plumbing Highlights:
 - Low-flow fixtures
 - Composting toilets in the Superintendent's building



Case Study # 1

Center for Parks and People



Certified LEED Platinum!

- 49.3% energy cost savings compared to ASHRAE 90.1-2004
- Energy Star score of 100
- Metered energy use of 43.1 kBtu/ft² (March 2015 through February 2016)

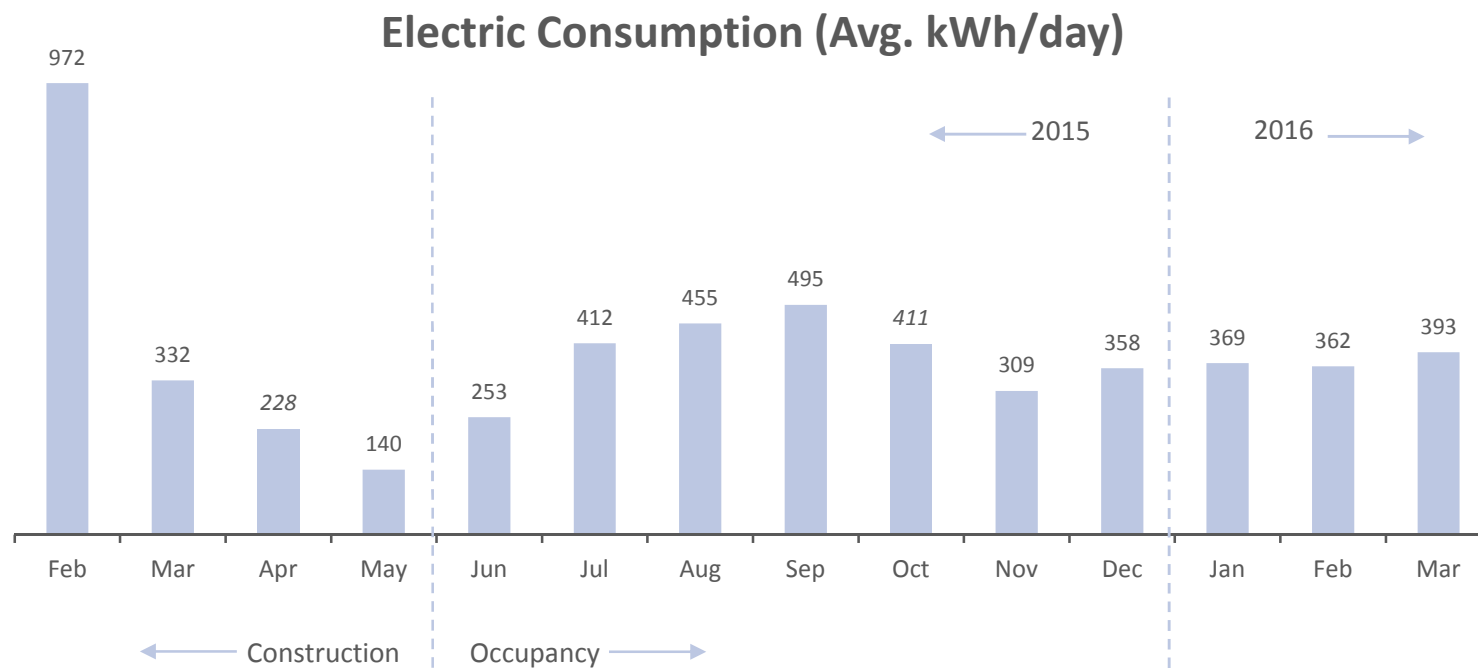


Case Study # 1

Center for Parks and People



Post Occupancy Evaluation Utility Data Analysis:



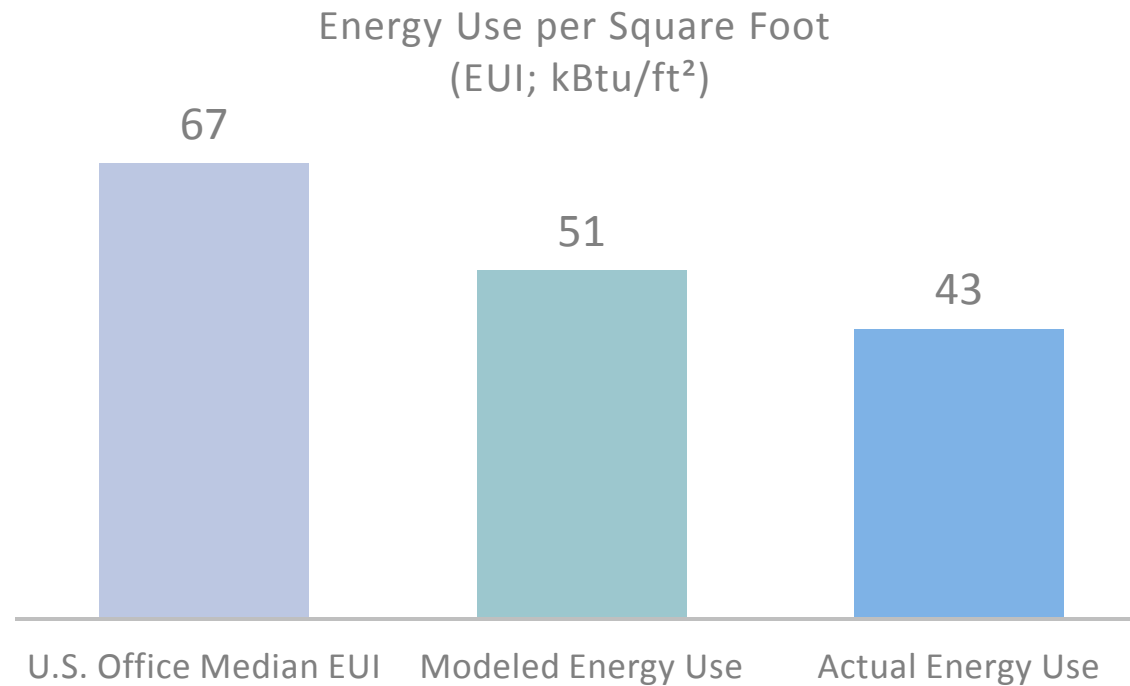
Case Study # 1

Center for Parks and People



Post Occupancy Evaluation

Utility Data Analysis:



Case Study # 1

Center for Parks and People



POE Highlights:

- The organization is thrilled overall with their new building
- Thermal comfort in open office, conference, and corridor spaces
- Daylight and views
- Headquarters building energy use

Case Study # 1

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Issues raised:

- Occupant comfort in private offices
- Superintendent's house A/C use
- Ceiling fan control
- Groundwater pump shut-off
- Composting toilets



Case Study # 1

Center for Parks and People



Lessons Learned:

- Thermal comfort generally worked, ceiling fan controls
- Contractor availability and training
- Composting toilets: design vs. actual frequency of use
- Occupants moving into a new building are generally satisfied, but there is always room for improvement.

Agenda

Introduction

What is Post-Occupancy Evaluation?

- Value Proposition
- Process

Case Studies

- Non-Profit: Parks & People
- **Multifamily Residential: Radian**

Wrap-Up / Recap