

32%

projected utility cost savings

95%

of project waste diverted from landfill

36%

of total site area vegetated to promote biodiversity

THA Bay Terrace Community & Education Center Tacoma, Washington

Completion:	March 2014
Project size:	0.4 acres 7,227 sf
Owner:	Tacoma Housing Authority
Architecture:	GGLO
Interior Design:	GGLO
Landscape Architecture:	GGLO
Contractor:	Absher Construction
Civil Engineer:	KPFF
Structural Engineer:	PCS
Commissioning:	Glumac
MEP Engineer:	Glumac



LEED® GOLD

for New Construction

certification awarded July 2014

LEED Points: 65

Sustainable Sites:	23 of 26
Water Efficiency:	4 of 10
Energy & Atmosphere:	12 of 35
Materials & Resources:	6 of 14
Indoor Environmental Quality:	13 of 15
Innovation in Design:	5 of 6
Regional Priority Credits:	2 of 4

LEED® CREDIT HIGHLIGHTS

Sustainable Sites

SS 1*	Previous developed site
SS 2	Connectivity to community services
SS 4.1	Promotes alternative transportation: public bus access, bicycling, low-emitting vehicles priority parking, parking capacity
SS 5.1*	Native & adaptive vegetation (36%) contributes to open space (52%), habitat, and promotes biodiversity
SS 8	Light pollution reduction

Water Efficiency

WE 1.1	50% designed potable water reduction for irrigation
WE 3.1	31% designed potable water reduction with low-flow faucets and shower, pint-flush urinals, and high-efficiency toilets

Energy & Atmosphere

EA 1	24% potential utility cost savings compared to a conventionally designed building
EA 5	Energy measurement and verification through Energy Star Portfolio Manager

Materials & Resources

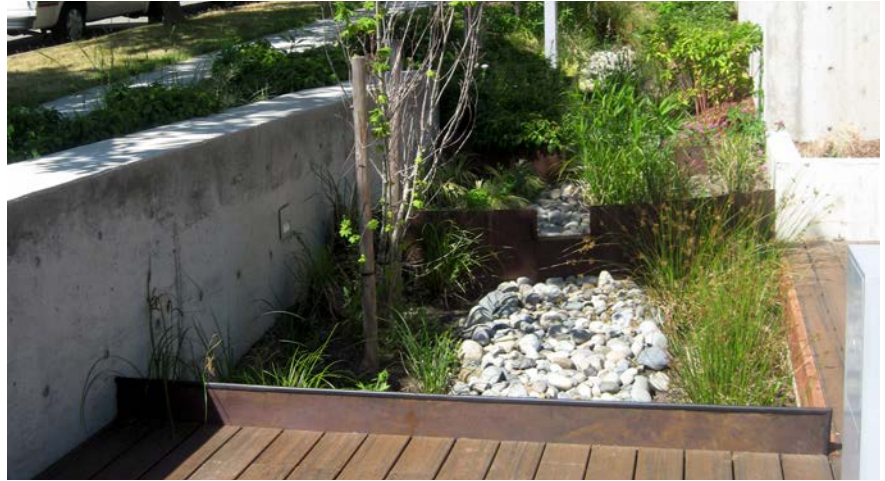
MR 2.1	95% of demolition and construction waste diverted from landfill
MR 4.1	32% recycled content materials including metal framing, windows, toilet partitions, and playground surfacing
MR 5.1	27% of building materials harvested and manufactured locally, including: cabinetry, cedar shingles, and vegetation

Indoor Environmental Quality

EQ 2	Increased indoor air quality measures during construction
EQ 4.1	Low-emitting adhesives, sealants, flooring systems and urea-formaldehyde free composite wood products
EQ 6.1	Controllability by occupants and staff of lighting and thermal comfort systems
EQ 7.1	Energy efficiency upgrades improve thermal comfort
EQ 8.1	Daylighting (83%) and views (99%) provided in regularly occupied spaces

Innovation & Design Process

ID	Exemplary Performance (SSc2, SSc4.1, SSc5.2)
ID	Green Building Education



Background

Tacoma Housing Authority is developing a community that is pursuing individual LEED certifications within the 2500 block of Court G. As part of Tacoma Housing Authority's larger affordable housing community, this Community Center serves both the employees of the Tacoma Housing Authority and the residents of Bay Terrace apartment complex. Additionally, the project accommodates a partnership with Epic Head Start of Tacoma to provide daycare space and an outdoor play area.

Better Site Design

- Over 6,000 sf of vegetation, divided approximately equally between vegetated swales and planted roof, slow down and remove potential pollutants from stormwater run-off, while increasing open space, habitat and promoting biodiversity
- Secure bike storage is located at the main entrance for visitors and staff to promote alternative transportation and reduce single occupant vehicle use. Shower/changing facility is also provided for staff.
- Exterior lighting design reduces light pollution, while addressing safety

Conserving Water

- Extensive native and adaptive vegetation used throughout promotes biodiversity, is drought tolerant, and with high-efficiency irrigation reduces potable water use
- Low-flow faucets, shower, urinals, and high-efficiency toilets reduce water use throughout the building for office, public and Head Start occupants

Conserving Energy

Through optimized building envelope and high-efficiency HVAC system, an energy cost savings of approximately 32% is anticipated relative to a conventionally designed building:

- Efficient Variable Refrigerant Flow (VRF) heat pump with 100% air side economizer and heat recovery ventilation system provides superior efficiency in comparison to typical office HVAC system
- Energy efficient lighting, controls, and daylighting reduce electricity usage.

Better Materials & Indoor Environment

Materials were selected for their durability, promotion of healthy indoor air quality, recycled content and location of harvest and manufacturing:

- Low-emitting paints, sealants, carpeting, and cabinetry (urea-formaldehyde free composite wood) contribute to the health of the indoor environment
- Use of linoleum, a natural rapidly renewable material, reduces the use of finite raw materials and is a healthier flooring choice to reduce children's exposure to phthalates

*Regional Priority Credit