Sustainable Commitments for Shoreline Civic Center

Exterior Design:

- Rain gardens
  Rain which falls on the site is directed to these rain garden areas. These areas have special plants which remove pollutants from the rainwater before it flows to our streams and lakes.

- Pervious Concrete
  Rain which falls is able to penetrate directly through the sidewalk surfaces allowing it to seep back into the ground reducing stormwater run-off.

- Electric Car charging stations
  Charging stations allow an increasing number of staff or visitors with electric cars a convenient opportunity to charge their car batteries, while conducting business inside.

- Bike racks
  To encourage staff to leave their cars at home, bike racks and showers offer an alternative commuting option.

- Green Roof
  A 3050 SF green roof atop the Council Chamber helps to insulate the structure to improve occupant comfort and reduce energy use. The plantings also absorb rainwater, slowing down and diverting impacts to the municipal storm water system.

- Non Heat Absorbing Roofing
  The main roofing is white in order to reflect the solar heat gain conducive to traditional dark roofing materials.

- Enhanced Building Insulation:
  The Building has been designed with full perimeter insulation and glazing well above code requirements. This allows for efficient cooling in the summer and heating in the winter.

- Solar Shades (streetside entry)
  Solar shades on the west and south facades keep the building cooler on sunny days by reducing heat gained from the sun and help relieve the burden on cooling systems which will use less energy.

Interior Architectural Design:

- Regional Material
  Wherever possible, building materials including concrete, pavers, rebar, acoustical ceiling tile, gypsum board, and Solar Panels available in our region were selected to benefit the local economy. Concrete and asphalt demolished on site were ground and used for base course.

- Recycled Content Materials
  Wherever possible, building materials including rebar, asphalt, concrete, acoustical ceiling tiles, gypsum wall board, insulation, metal wall panels toilet compartments, rubber base, and carpet that contain recycled content were selected to relieve the burden on virgin resources.

- Low Emitting Materials
  To preserve indoor air quality for staff and visitors, all adhesives, sealants, paints, coatings, carpet and composite wood products used inside the building are free of volatile organic compounds (VOCs) that offgas into the air.

- Daylight and Views
  Thoughtful placement hard offices, windows and side lites with respect to work areas ensure that occupants have ample access to daylight and views. Natural light and a connection to the outside improve productivity and comfort.

Mechanical Systems:

- CO2 Based Demand Controlled Ventilation (DCV) for high Occupancy Areas
  Carbon Dioxide sensors will be installed in high occupancy areas (not required by state code) to reduce the ventilation air during times of leess than peak occupancy.

- Parallel VAV boxes versus series VAV boxes
  Standard series VAV boxes with PSC motors have been replaced with more efficient parallel VAV boxes with PSC motors.

- Occupancy Sensors to Reduce Ventilation air in Unoccupied Areas
  Occupancy Sensors are used to shut off ventilation air to unoccupied zones.

- Data Center Heat Recovery for Space Heat
  Warm air from the data center is rerouted to the perimeter office zones during heating periods.

- Visqueen Barrier in Server Room
  The Equipment racks have a visqueen screen which isolates the equipment racks such that cool air is forced through the racks and exhausted through the backside of the racks.

- Chiller Efficiency

The Roof top Units are equipped with chillers which are more efficient than what is required by code.

Plumbing Systems:

- Restrooms
  Water use is reduced approximately 43% through dual flush toilets, low flow urinals, low flow showerheads, and automatic sensor controlled lavatory faucets. The automatic sensor utilize the flow of water to recharge the battery in the sensor.

Electrical Systems:

- Daylighting Controls
  Lighting sensors that determine the intensity of natural light available to the perimeter of the building to reduce the artificial lighting required.

- Occupancy Sensors for Lighting
  Occupancy Sensors are located in enclosed rooms such as offices, conference rooms and restrooms.

- Lighting Fixtures
  Highly efficient light fixtures are used through out the project, which exceed energy code requirements and lower density lighting as required by LEED. Exterior fixtures are controlled using photo cells so that they will be off when there is sufficient natural light.

- Programmable Lighting System
  The Lighting control is set on a timer such that lights will be turned off automatically during off hours.

- Energy Efficient Transformers
  The Electrical system utilizes transformers which exceed code requirements for power consumption.

Solar:

- Solar Hot Water System
  By harnessing the energy of the sun the hot water provided to the Council area will eliminate the use of electricity for hot water approximately 75% of the year.

- Photovoltaics
  Photovoltaic panels collect energy from the sun and convert it to electricity. This helps reduce the amount of energy the city has to purchase. The electricity produced from solar energy is renewable and does not result in carbon dioxide emissions. This helps reduce the effects of climate change.

Construction:

- Construction Waste Management
  Demolition and construction waste materials were recycled and reused to result in 90% of construction waste being diverted from the landfill.

Owner Commitment to Operation and Maintenance:

- Green Cleaning
  To maintain the healthy indoor environment during occupancy, the City will implement green cleaning practices that will use only non-toxic cleaning products and methods.

- Green power
  By Entering into an agreement with Seattle City Light for the purchase of Green Power and supporting the development of green power resources, increases the amount of green power available to all.

- Solid Waste & Recycling
  Exterior garbage cans will be solar photovoltaic powered compacters, and food scraps from the City Hall kitchens will be recycled and used for compost production. Both of these actions reduce carbon dioxide emissions and climate change.

- High Efficiency UPS
  The Servers and Telephone systems utilize the most efficient UPS systems available.

- Wattstopper Plugstrips
  Work stations and offices will be equipped with plug strips for task lighting and computers that are equipped with motion sensors to turn off when stations are not occupied.

- Public Education
  An informational Kiosk, signage, and informational walking tour of sustainability items will be provided to educate and inspire the public.

- System Furniture
  The furniture system selected by the City consists of recycled materials and refurbished structure.