Washington State Department of
Enterprise Services

High Performance Public Green Buildings

Implementation of RCW 39.35D
Through July 2016

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Table of Contents

39.35D RCW – "…public buildings can be built and renovated using high-performance methods that save money, improve school performance, and make workers more productive. High-performance public buildings are proven to increase student test scores, reduce worker absenteeism, and cut energy and utility costs."

EXECUTIVE SUMMARY

At the direction of the 2005 Legislature, the Department of Enterprise Services (DES) has prepared and submitted four biennial reports to demonstrate the benefits and challenges of high-performance designs. This is the fifth and final report required by RCW 39.35D.030(4).

State law RCW 39.35D) requires major facility projects funded in the state capital budget or projects paid for through state financing contracts to be certified to at least the Leadership in Energy and Environmental Design (LEED) Silver standard (earning 33 to 38 points out of a potential 69 points for LEED Platinum).

Over the ten-year period, universities, colleges and state agencies have progressed in their implementation of energy performance and efficiencies for both new and existing facilities, and have achieved 82 LEED certifications, with 41 more in construction and on target to achieve certification. The average cost increase to implement LEED for local colleges and state agencies is about 1.3 percent of the total project cost.

Benefits

The implementation of the 2005 High-Performance Green Building law has resulted in many benefits, including:

- Improved energy and water efficiency
- Enhanced indoor environmental quality
- Reduced stormwater impacts to rivers, lakes, and Puget Sound
- Creation of local jobs through the use of regional materials
- Reduced construction waste to landfills
- Increased markets for recycled content materials
- Protection and restoration of habitat
- Reduced automobile reliance

Report Highlights, Accomplishments

- 2015 brought new changes to the Washington State Energy Code, and the United States Building Code Council is increasing its requirements for LEED certification effective October 1, 2016.
- DES is tracking 138 projects: 124 with state-owned LEED project certification status, representing more than $2.2 billion in construction costs. Of these, 82 state-owned projects have been LEED ‘certified’ at the following levels:

  - 2 at Platinum (with another two pending certification)
  - 45 at Gold (with another 11 pending certification)
  - 33 at Silver (with another 28 pending certification)
  - 2 at base certification

- LEED projects at Washington governmental facilities score higher than the national level in Gold and Silver ratings as a percentage of total projects.
- Achieving LEED certification does not always cost more. The costs range from below .7 percent to more than 5.2 percent of the total project first cost. The additional cost, as shown in this report, can be offset by lower facility operating costs and improved tenant comfort that boosts employee productivity.
- Estimated energy savings range from 20 to 80 percent, with the highest savings achieved from a LEED Platinum Skagit Valley College Science and Technology Building.
- The payback for LEED related costs is estimated between 0 and 98 years with the average being 21 years for projects where complete data is available.
- Construction waste recycling practices used on 11 projects diverted more than 9028 tons (an average of 92.5 percent) of construction debris from landfills.
- An experiment of ecolawn trials on the capitol Campus has good potential on sustainable practices for the state Capitol Campus. The goal in this trial is to reduce water use, use no pesticides or synthetic fertilizers, reduce carbon emissions, and provide habitat for pollinators (see appendix A).

Lessons Learned

There have been many lessons learned during this ten-year period. For example, training became a key component of implementation. DES worked with the Department of Ecology and the Cascadia Regional Green Building Council to develop a LEED toolkit that helps contractors and consultants achieve the most cost effective and energy efficient results possible. The use of performance-based contracting and performance expectations have become standard practice in contracting for design and construction of state facilities.

Training has also been an important component for staff, tenants and students of state facilities. The use and operation of sustainable buildings required a change in culture. Outreach and education became necessary to ensure compliance with new building systems. Colleges and state agencies put policies in place and have provided training about the use of space heaters, monitoring of windows and doors, recycling, composting and more to achieve even greater efficiency.

It also became apparent that to achieve LEED certification planning must begin early in the pre-design phase and continue through the design and construction process. LEED certification does add to the cost of a project and needs to be factored into the overall budget. In addition, the certification process requires extensive interaction between the owner, contractor and design team. It is best to establish the sustainability goals and LEED tracking early in the predesign process.

One of the biggest lessons learned is to plan for a greater investment in Heating, Ventilating and Air Conditioning (HVAC) systems. Many older buildings have outdated HVAC and control systems, and replacing these provides the largest energy savings with the greatest long-term benefits. Replacing the HVAC system has become the first choice for meeting long-term efficiency and sustainability goals when renovating an existing building.

Three Recommendations

In an effort to further improve the state's efforts to meet the High-Performance Green Building goals, DES is making three recommendations:

1) **Implement a Statewide Resource Conservation Management program**
   DES received a grant of $225,000 to pilot a statewide Resource Conservation Management (RCM) program for the 2015-17 biennia. The program has identified potential savings that exceed the funding level, producing a positive return on investment. This program is based on the DES RCM program that has reduced energy usage on the Capitol Campus by 31 percent since 2007.

2) **Improved Quality Assurance and Data Collection Process Goal**
   This effort would work in conjunction with the Statewide Resource Conservation Management program to implement a data collection system that will allow a more extensive collection of data and provide automated reports for continual tracking and improvement.

3) **Implement Enhanced Commissioning for Projects**
   The commissioning process incorporates a building operator interview process and a post-occupancy evaluation to ensure that mechanical, electrical and temperature control systems are working as efficiently as possible.

BACKGROUND

Leadership in Energy and Environmental Design (LEED) is an internationally recognized green building certification system. Developed by the U.S. Green Building Council, LEED certification provides proof that a building was designed and built using strategies that improve performance across a variety of metrics, including:

- Energy savings
- Water efficiency
- Carbon dioxide (CO_2) emissions reduction
- Improved indoor air quality
- Stewardship of resources and sensitivity to their impacts

LEED provides a concise framework for achieving practical and measurable results using green building design, construction, operations and maintenance practices. Recently adopted LEED v4, the newest version of the LEED green building program, will add more rigor for water efficiencies, recycling and ecosystem protection to further reduce the impacts resulting from construction that contribute to global climate change.

State law (RCW 39.35D) requires major facility projects funded in the state capital budget or projects paid for through state financing contracts to be certified to at least the LEED Silver standard (earning 33 to 38 points out of a potential 69 points for LEED Platinum).

This standard applies to public agencies that enter into the design phase or the grant application process after July 2005. (*Note: K-12 school projects have their own sustainable schools rating/certification system outlined under RCW 39.35D. 020(b). They report separately and are not included in this report.*)

As mandated under state law, LEED guidelines were developed for public agencies in April 2006. The first two years were spent training project managers in green building design. The trainings included staff from state agencies, community colleges and universities.

Since then, agencies have reported annually to DES about their projects. The department then reports to the governor and the Legislature by September 1 of each even-numbered year. This report covers the period from July 2005 to April 2016. The 2016 report is the final report mandated under state law [See RCW 39.35D.030 (4)].

In addition to applying LEED standards to new and existing buildings, DES is actively assisting agencies to establish Energy Star Portfolio Manager accounts for all buildings larger than 10,000 square feet. This is an opportunity for DES to use this mechanism for collecting energy and water consumption data, and to help facility operators to get this information.

CHANGES IN GREEN BUILDING REPORTING REQUIREMENTS

2015 Washington State Energy Code

As of July 1 2015, Washington state has implemented a new energy code that raises the standards for energy performance as an incremental step towards meeting the 70 percent reduction in annual net energy consumption by 2031, as required under RCW 19.27A.160. Many of the strategies that have been incorporated into the code have previously been developed and tested in LEED buildings.

Some of these energy conservation strategies include:

- Significant changes in the analysis of building envelope design to reduce the amount of heat transferred through the building structure and air infiltration.

- Dedicated Outdoor Air Systems that provide ventilation independent of heating and cooling systems.
- Energy recovery though the use of heat exchangers and similar technology.
- Changes in lighting power density to reduce the energy use of light fixtures throughout buildings
- Changes in lighting control system requirements for enhanced daylight dimming and occupancy sensors.
- Allowing for energy modeling as an alternative path for code compliance rather than a strictly prescriptive approach.
- Emphasis on energy metering to provide detailed meaningful energy performance monitoring to the building owner and operator.

Life-Cycle Cost Analysis Requirement

As of 2015, the Office of Financial Management's Life-Cycle Cost Tool (LCCT) is required for major capital projects. The LCCT assists project owners to compare project design alternatives for initial and long-term cost-effectiveness. The tool also assists with the analysis of the relationship between the initial cost and useful life of building components and design scenarios. Criteria for selecting the design build contractor for colleges and universities must include life-cycle costs, energy costs or energy use index.

The LCCT can be found at: http://ofm.wa.gov/budget/forms.asp

LEED v4 to be implemented October 2016

The U.S. Green Building Council (USGBC) is in the process of transitioning to the new LEED v4 standard. Any new projects submitted after October 31, 2016 will be subject to this new standard. Projects that are currently under construction, or in design and have been submitted to USGBC before this date, will remain under the LEED v2009 standard.

LEED v4 differs from the previous standard in many areas, including:

- Energy metering is now a prerequisite. Under previous versions of LEED, energy metering was one of the credits that counted towards the overall rating of the building. Energy metering is necessary in order to monitor the actual energy performance of the building once it is occupied. This allows the building owners and operators to understand the long-term performance of the building compared to similar facilities.
- Advanced metering is a new prerequisite. Advanced energy metering goes beyond building level metering and can provide detailed real-time data that may indicate equipment failure, need for maintenance or improper settings.

- Water use metering is also now a prerequisite. Like energy metering, water use metering provides performance data for the building owners and operators to verify that the building water use performance matches with the design intent and provides real-time data that can alert the building operators to changes in performance over time.
- Renewable energy production is a renamed credit that allows buildings to benefit from off-site energy resources. This approach may be helpful when a building location does not lend itself to on-site renewable energy production, such as solar or wind.
- Demand response is a new credit with the intent to build a smarter energy grid. Demand response provides building owners and operators with tools enabling them to use energy during low demand periods and conserve energy during high demand periods. One example of this strategy is the Edna Goodrich, an office building in Tumwater used by the state: It produces ice during the evening and night hours and then uses it during the day to cool the building. While financial incentives for demand response has not been extensively implemented in the state, this kind of strategy is helpful for adapting to the growing energy demands that we see in states such as California.
- Building life-cycle impact reduction encourages the reuse of existing structures, historic and blighted buildings and encourages a life-cycle assessment of the whole building.
- Building products disclosure and optimization is a new credit that encourages manufactures to be more transparent about the sourcing and content of materials used in their products.

While LEED v4 incorporates some new prerequisites that could potentially add cost above previous versions of LEED, the changes are consistent with DES' and the state's sustainability and energy reduction goals. The emphasis on additional metering requirements will provide necessary feedback for building owners and operators to monitor and maintain the performance of buildings that will result in long-term energy savings. In the LEED category section of this report, all categories are described to meet the LEED v4 requirements.

Recommendation 1:

Statewide Resource Conservation Management Program

It is recommended that the Legislature create a statewide Resource Conservation Management (RCM) program, to be administered by DES. The RCM program will provide assistance to agencies and help the state meet its goals for data management, energy efficiency, carbon reduction, and lowering the cost of operating state facilities.

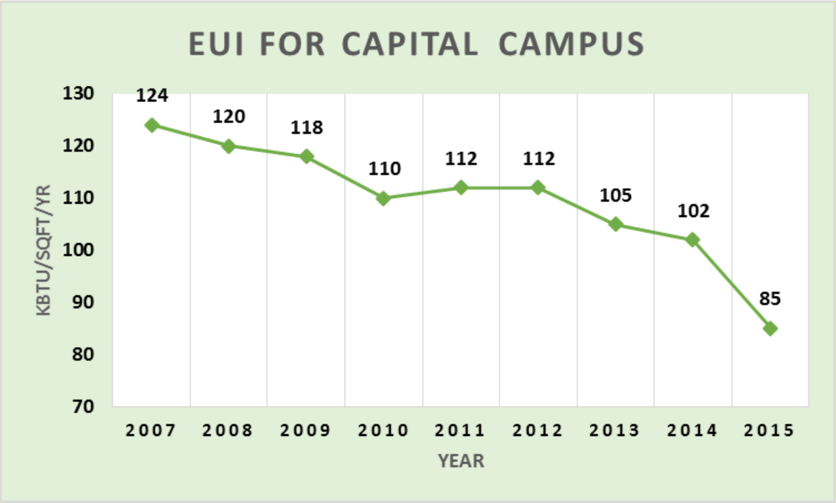
Rather than having multiple databases, it is proposed to establish the Energy Star Portfolio Manager database sponsored by the U.S. Environmental Protection Agency as the single repository of energy data for the state. The major utility companies in the state have the ability to upload energy consumption data directly to Energy Star Portfolio Manager. The utilities that have the available consumption data account for approximately 80 percent of the energy consumed by the state. There would be a considerable initial setup effort to initiate the automatic upload of information.

The RCM program can help agencies set up the reporting accounts to input their energy usage into the Energy Star Portfolio Manager. This will provide reliable and actionable data that can be used to make informed decisions. It will also help agencies identify where they should make energy efficiency improvements. Energy data is used to track progress towards Results Washington goal 5 2.2 to “Reduce the cost of energy used by state owned facilities from $3.23 sf/yr in 2012 to $2.23 sf/yr by 2017.”

The energy use data from Energy Star can also be used for the greenhouse gas reporting by the Department of Ecology. The use of this data could result in an increase in the number of agencies reporting energy usage to Ecology. If the buildings affected by LEED reporting were entered into Energy Star Portfolio Manager, the energy data for the LEED report would be easier to obtain.

The RCM also plays an important role in developing capital improvement projects that provide long-term energy savings. This will result in energy savings performance contracting projects, while systematically leveraging operating and capital funds to achieve more energy and greenhouse gas emission reductions.

The DES RCM program has been used on the Capitol Campus since 2007, reducing energy consumption by 6.2 Million kilowatt-hours and 188,000 Therms.



By making changes to the operation of the chilled-water system, the state avoided $530,000 in energy costs in 2015. This avoided energy consumption is equal to the energy required to heat 231 homes with natural gas, or 456 homes with electricity. In addition, the RCM program achieved a CO2 reduction of 4,258 Metric tons; the equivalent of removing 645 cars from the road or planting 1056 acres of trees.

The RCM provides valuable oversight and strategic planning in complying with the various statutory requirements for public agencies where agencies will be able to concentrate on their critical mission and meet the operational goals required by statute.

Recommendation 2:

Improved Quality Assurance (QA) and Data Collection Process Goal

In 2011, the Joint Legislative Audit and Review Committee (JLARC) completed a statutorily required performance review of the high-performance green building program. JLARC identified the lack of complete and timely reporting by state agencies and institutions as a serious limitation on any evaluation of the program.

DES recommends the data collection effort be expanded to assist with multiple reporting efforts in conjunction with a Statewide RCM program. The quality assurance process will continue for data collection and be integrated into the RCM program once appropriation is approved and the program implemented.

Optimally a data collection system can be implemented with the following recommended features:

- All project submittal data collected in one location and will be easily sorted, accessed, etc.
- Automated reports and tracking spreadsheets that update continuously as new data is collected.
- Automated reports and tracking spreadsheets that are open to public review for viewing at any time.
- Data will be available for development of biennial and custom reports.
- Data will be available to provide feedback to participants regarding building performance.
- Automated reminders sent to the four listed project team members when project teams miss a quality assurance submittal due date.

All templates available for download and complete plans and reports for upload (metering plan, post-construction LEED building cost and performance data and case study template).

- Users will have the ability to update project schedules and team member data as appropriate.
- Annual energy and water consumption reports, available to building operators (review previous submittals, spreadsheet templates to download, completed data to upload).

- Biennial Agency Sustainable Building Report, available to appropriate capital building/facility staff (review previous reports, templates to download, completed report to upload).

DES is involved with five energy-related reports submitted to the Legislature, as shown in the table below. Each requirement collects information for a specific purpose. All of the reporting mechanisms have the same challenges of minimal resources to provide consistent and complete information.

	1	2	3	4	5
REPORTS:	**LEED (RCW 39.35D)**	**Building Benchmarking (RCW 19.27A, EO 12-06)**	**Greenhouse Gas reporting (GHGR)**	**Results WA Goal 5 2.2**	**EO 14-04 State Government Operations**
Definition	Requires LEED Silver minimum Certification on major facilities over 5,000 sq. ft. thru USBGC process	EO 12-06 - Reduce energy usage in state buildings by 20% by 2020		Reduce energy of state facilities from 120 kBtu/ sq.ft./yr. to 106 kBtu/sq.ft./yr. by 2015	Improve the energy efficiency of public buildings
Lead Agency	DES	DES	Ecology	DES	DES
Affected Agencies	All new buildings over 5,000 sq. ft. and major renovations	All public agencies with buildings over 10,000 sq. ft.		All agencies - to participate in projects to reduce energy usage	All agencies - improve efficiency and reduce energy
Affected Agencies (number)*	50	63	140	140	140
Number of Buildings Affected*	139	1,900	10,300	10,300	10,300
Square Footage of Buildings Affected*	7,400,000	89,000,000	108,000,000	108,000,000	108,000,000

	LEED (RCW 39.35D)	**Building Benchmarking (RCW 19.27A, EO 12-06)**	**Greenhouse Gas reporting (GHGR)**	**Results WA Goal 5 2.2**	**EO 14-04 State Government Operations**
Reporting Description	Annual data collection/biennial report	Data available monthly from EPA's Energy Star portfolio manager database	Total Green House Gas Emissions by Agency	Currently uses Energy Star Portfolio Manager building benchmarking data	Proposed to use building benchmarking data to develop baseline and track progress
Reporting frequency	Biennial through 2016	Biennial – RCW 19.27A Annual – EO 12-06	Biennial - Indefinitely	Annually	To be determined (TBD)
Frequency of Data Collection	Annual	Monthly	Biennial	Currently annually Proposed monthly	TBD
Reporting Tool	Excel spreadsheets	**Energy Star Portfolio Mgr.** (EPA)	Ecology's Excel spreadsheets	**Energy Star Portfolio Mgr.**	**Proposed Energy Star Portfolio Mgr.**
Energy Usage	Yes	Yes	Yes	Yes	Yes
Water usage	Yes	No	No	No	No
Additional Data Collected	Cost savings, Post Occupancy, Cost & performance, metering & measurement reports, exemption declarations	NA	NA	NA	NA

The DES State Efficiency and Environmental program has been charged with reviewing the current structure in place for gathering data, content and delivery of the greenhouse gas reporting which state agencies submit biannually. Several agencies have collaborated and recognize the need to reconcile reporting and improve the process. All of the agencies have a great interest in producing a report that is consistent, helpful and clear in its purpose.

With that in mind, collaborative meetings are under way the fall of 2016 by representatives from multiple state agencies (Department of Ecology, Department of Corrections, Department of Transportation, and Department of Commerce) to map the current system. This exercise will identify gaps and provide attendees an opportunity to share their work strategies to meet the various reporting requirements. The outcome of these meetings will provide the foundation to develop potential strategies to improve the reporting process and offer content that is meaningful. DES State Efficiency and Environmental program expects to have those recommendations in early 2017.

Recommendation 3:

Implement commissioning for projects

Commissioning is a process for achieving, verifying and documenting that the performance of a building and its various systems meets the design intent, contract documents and the owner’s operational needs.

The purpose of commissioning a project is to provide the owner and their facility operators with a high level of assurance that the mechanical, electrical and temperature control systems are installed in compliance with the design intent and contract documents. This process does not do away with the responsibility of the system designers or installing contractors, nor is it intended to be a redundant testing or inspection function. Commissioning is performed to complement the efforts of the designers and contractors, enhancing the quality of the systems and aiding in their orderly transfer to the owner. Commissioning would incorporate a building operator interview process and a post occupancy evaluation.

In an effort to improve building performance and occupant comfort, a building operator interview process will be performed after the building has been occupied for two to four months. The interview would include the following:

- Review of building operations manuals (if developed).
- Review of case study to understand green features of the building.
- Interview with building operator to determine familiarity with the green features and strategies for operation.
- Review the schedules and strategies incorporated into the building automation system with the building operator to determine their knowledge of the system.
- DES would develop a summary report for the building operator. It would include appropriate recommendations for improvement. An electronic copy of the report would be kept by the department.
- This effort will require additional funding to conduct and facilitate reporting.

DES has collaborated with the Washington State University Extension Energy Program to develop a post-occupancy evaluation (POE) process that takes into account the design and operation of buildings as they related to occupant performance.

The process would be a valuable tool for DES for evaluating the effectiveness of the green building effort and to share these experiences throughout the state. The reports developed from the evaluation of each state LEED building would provide energy and water savings information, maintenance-related impacts and occupancy survey results. These reports could be posted as case studies on the DES website.

The POE process could be implemented 10 to 15 months after occupancy. Performing the POE before 12 months would help to identify issues prior to the end of the warranty period.

It is recommended that enhanced post-commissioning is contracted separately by the agency, especially within 10 to 12 months after substantial completion (tied to warranty period) and the “Post Construction Energy Model” are simultaneously completed to confirm the design energy modelling is being achieved. This analysis could then be added to the reporting to confirm if the facility operation is performing to the original design goals.

The expected benefits of successfully commissioning projects are that the owner will receive systems that perform at or above the expected level, with reduced operation and maintenance costs. Commissioning also documents system performance parameters to facilitate fine-tuning of control sequences and operational procedures, and to assist in future troubleshooting.

CHALLENGES AND LESSONS LEARNED

DES has coordinated the implementation of RCW 39.35D.030 for more than eleven years. In consultation with affected agencies and universities, the department has developed processes for tracking LEED projects. The following is a combination of feedback from agencies about the issues concerning implementation of the law and knowledge of the state design and construction process.

Challenge 1: Training

Training related to green design and construction practices and the LEED program is an ongoing effort for project managers. Periodic training is provided to state project managers regarding LEED, green building and the quality assurance process.

Contractors are critical to the success of green building projects. Architects are selected based on their knowledge of green design, experience with the LEED program, as well as other qualifications. On the other hand, contractors are selected based on a bidding process that does not necessarily demonstrate their knowledge of green design. To meet this challenge, it was determined that the state could require the successful contractor to either have experience with LEED projects or be required to participate in a free training.

DES worked with the Department of Ecology and the Cascadia Regional Green Building Council to develop the Build-It LEED toolkit that is a training program geared for contractors. It consists of a two-hour presentation, an Excel workbook and a notebook. The department’s Green Building advisor provides the training to contractors.

However, training is not just a challenge for contractors and consultants. Many colleges have recognized the need for and conducted outreach and education campaigns for occupants of their buildings, to ensure compliance with new systems. This includes new policies and training with regards to use of space heaters, monitoring windows and doors, recycling, composting and growing a culture of advocacy for sustainability.

In recent years there has been significant interest in alternative public works options, such as Design-Build, on the assumption that this delivery method will yield buildings with more consistent energy performance. Other alternative public works delivery methods, such as GC/CM (General Contractor / Construction Manager), may also be an effective means to ensure building performance expectations are met. Design-Build and GC/CM methods both engage the general contractor early in the design process to ensure constructability, control cost and establish a team-oriented approach to better align the objectives of the design team, general contractor and building owner.

Challenge 2: Metering

Most state-owned buildings are located on a campus. Often, there is only one or two meters for the entire campus, so there is no way to measure consumption for an individual building. To complicate this further, a central plant may provide steam and chilled water to the individual buildings without any metering. A campus central plant may also provide domestic hot water and chilled water to the buildings.

It has been discovered during the implementation of the high-performance green building requirements that many buildings on campuses measure energy use on a central system and do not have separate meters.. During the ten years of this reporting, several projects have moved towards individual building metering, but this remains a challenge going forward.

To capture savings and accurately reflect efficiencies, proper metering capabilities must be designed and installed in buildings during construction. This includes the monitoring of electrical and other energy consumption, such as gas, steam, hot water, oil and propane.

“Sub-metering the campus has been helpful, but a challenge to implement.” – Bellevue College

Colleges report that in some cases the installed metering systems have not proven sufficiently reliable and have required further upgrades. Pierce College reports: “metering devices vary greatly in cost and sophistication,” and “it is essential to ensure that metering devices and data generated are compatible with Portfolio Manager” for state reporting purposes.

Installing meters in all buildings is difficult to accomplish for a variety of reasons, including:

- Not prioritizing funds to get meters installed at the end of the project.
- Meters were installed, but were not fully programmed into the Energy Management Control System.
- Meters were installed, but are not maintained and functioning properly, resulting in lost data.
- Some meters are installed for electrical and water, but not heating because of the complexities and expense of measuring steam.

The preferred method of monitoring is to integrate an Energy Management Control System (EMCS) or Building Management System (BMS). This allows a breakdown of energy consumption and gives control to the building owner by tracking where energy is being used. These systems track electrical use for elevators, HVAC equipment, receptacles, lighting, emergency power distribution and standby power distribution.

Current transformers and magnetic volume pulse meters connect to EMCS or BMS and make it possible to separately monitor and track electricity consumption, natural gas and in-building water use, including the use of reclaimed water or captured rain water.

While LEED 2009 did not have a requirement for metering, to achieving a LEED rating in LEED 4.0 both advanced energy metering water use metering is a prerequisite.

Challenge 3: Taking advantage of incentives

While some universities and state colleges have taken advantage of energy incentives for many of their projects, state agencies and colleges often do not compete or apply for incentives that will help them achieve their LEED goals. This may be due to tight project timelines or unfamiliarity with incentive programs being offered. Also, it is also the case that energy grants, such as those offered by the Department of Commerce, are for a limited time only and highly competitive. As a result while statewide incentives may not be available, local grants may still be obtained depending on location.

For example, Seattle City Light offers financial assistance for energy analysis, and pay up to 70 percent of the efficiency project costs, which include lighting upgrades, heat recovery, electric furnace upgrades and controls. For new construction, they offer funding to support design and installation of building systems that generate energy-saving performance and for energy efficient equipment, including lighting and HVAC.

Both Puget Sound Energy and Avista Utilities offer rebates to offset the costs of installing efficient equipment, including lighting and lighting controls, occupancy sensors, HVAC equipment and PC power management.

Several local public utility districts, such as Snohomish , Clark , Cowlitz , and Mason counties, as well as City of Tacoma Public Utilities and City of Port Angeles, also offer financial incentives or rebates to improve lighting, heat pumps and building retrofits (as reported http://energy.gov)

The Department of Revenue maintains a list of current incentives on their website.

Challenge 4: Reporting energy measures after building completion for comparison to modeling

Testing mechanical, electrical and temperature control systems at the end of a project does not guarantee performance once the building is occupied and in use. Enhanced post-commissioning should be contracted by the agency within 10 to 12 months after the substantial completion of a project (tied to the warranty period) and a “Post Construction Energy Model” should be completed to confirm that the system meets the performance intended in the design modelling.

Lesson Learned 1: LEED requires considerable planning and effort.

Several colleges have reported that one of their biggest lessons learned is that it is necessary to plan early in the project design and it is essential that the design team has experience with the LEED process to ensure success. LEED certification involves additional project expense, which needs to be factored into the overall project budget.

As Pierce College staff noted: “*The certification process requires extensive interaction between the owner, contractor and design team.*” They also said: “*Directions to the general contractor need to be very specific in regard to achieving LEED points during construction.*”

> *“Start early. Encourage stakeholder training in sustainable design.”*
> *– Central Washington University*

The Walla Walla Skilled Nursing facility staff emphasizes the “*importance of establishing sustainability goals and LEED tracking at the very earliest of the predesign process.*”

Lesson Learned 2: Greater investment in HVAC systems

The largest energy cost for older buildings is outdated HVAC systems. Investing in HVAC systems provides a tremendous opportunity to advance LEED certification for older buildings, and creates long-term benefits for owners and occupants. The Department of Commerce occasionally provides competitive grants, but applications are intensely competitive between colleges and state agencies. Even without additional incentives, HVAC has become a first choice in existing building renovation in achieving long-term efficiency goals.

What is LEED and How much does it cost?

LEED is a green building rating system developed by the U.S. Green Building Council, a non-profit, consensus-based organization made up of architect and engineering firms, product manufacturers, and federal, state and local government agencies.

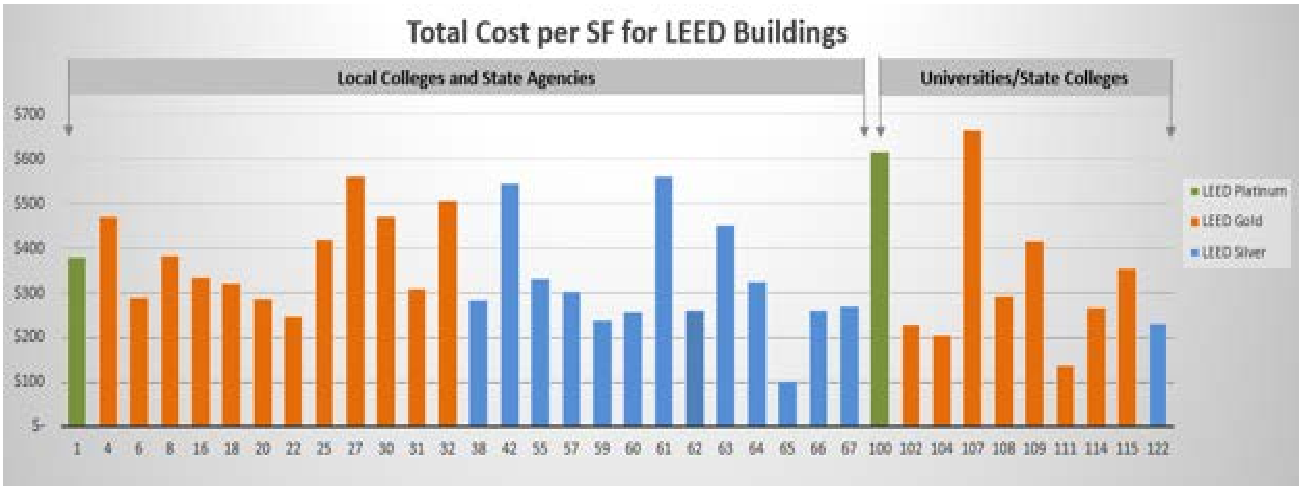
The LEED standard applies to all major facility projects of public agencies receiving any funding in a state capital budget or projects financed through a contract as defined in RCW 39.94.02.020. It includes buildings that are more than 5,000 gross square-feet and that are being newly constructed or going through a major renovation.

LEED 4.0 has four certification as follows:

As of 2006, when the LEED guidelines were developed for public agencies, LEED certification for state agencies and institutions was required to be LEED Silver or higher.

LEED Buildings: Cost per square foot
Building square footage and cost, along with building type and use, are important elements to consider when comparing buildings. The added cost related to LEED is also important in determining the cost-effectiveness of LEED buildings. Building cost per square foot allows for comparing buildings of different size in a common unit of measure. This data is available in the LEED project summary.

The figure below shows the building cost per square foot (building only, not including site preparation costs) and the LEED level achieved. The cost of a building is influenced by type of use, complexity of the building systems, size, choice of materials, and time of year of the bid.



See Master List in Appendix A for corresponding building names to number in graph. The average cost per square foot for local colleges and state agencies is $313. The average cost is slightly higher for universities and state colleges at $342 per square foot.

Determining LEED buildings costs and savings

Costs

Determining the overall cost of LEED buildings is relatively easy. Project accounting provides the breakdown needed to show demolition, site development, and building costs, and consultant fees. Determining the costs for elements directly attributable to meeting LEED requirements, on the other hand, is more difficult because of the integrated nature of building design and construction.

Using LEED strategies in the building design process causes architects and engineers to work together to create buildings that blur the lines between mechanical systems, lighting systems and architectural elements. The quality assurance process attempts to gather the added costs for LEED consultants, as well as construction elements. These costs are provided by the state project manager, the architect or both. This is documented for each project in Appendix 6 (LEED building cost and performance data).

Savings – First cost

Although not typical, first-cost savings can be achieved through careful design. For instance:

- The electrical system in a green building can be smaller than one in a conventional building by using shading devises, earth berms, more insulation, high-performance, operable windows and energy-efficient lighting that incorporates daylight harvesting.

- The heating system can be downsized using a super insulated building envelope and heat recovery on the exhaust air.
- The water systems can be downsized by using low-flow fixtures, saving money on piping and hook-up fees.

Savings – Operating costs

When designing a building, simulation models are used to compare the proposed structure to one built to meet required energy codes, called the baseline building. This simulation accounts for factors that are constant elements in both buildings and those features that can make one more efficient than another.

Constant elements include weather, people loads, operating schedules, and plug loads. Variable features can include insulation levels, window solar heat gain coefficient, mechanical equipment efficiencies, orientation and outside air quantities.

After at least 10 to 15 months of occupancy, the building simulation model can be updated to show actual operating conditions, including a fit to the actual energy use. Unfortunately, even though LEED encourages additional scoring criteria for post-occupancy simulation modeling, this extra building simulation model is rarely completed because of cost ($5,000 to $10,000).

The building simulation model prepared during the design of the building provides the best available calculation of operational savings. This savings figure is used in calculating the payback for LEED-certified buildings in this report.

The operational savings calculated by the building simulation model represent the savings that are “capable” by the proposed building. Some features of the design will deliver those savings regardless of the operator. These features include light shelves, building orientation, earth berms and the envelope (insulation and windows).

Although a building may be “capable” of a certain level of savings in the model, it is possible that a number of elements could keep those savings from being realized.

These include:

- Improper commissioning of mechanical, electrical and control systems.
- Inadequate training of operation and maintenance staff.
- Inadequate staff available to properly maintain the building operating schedules and mechanical systems.

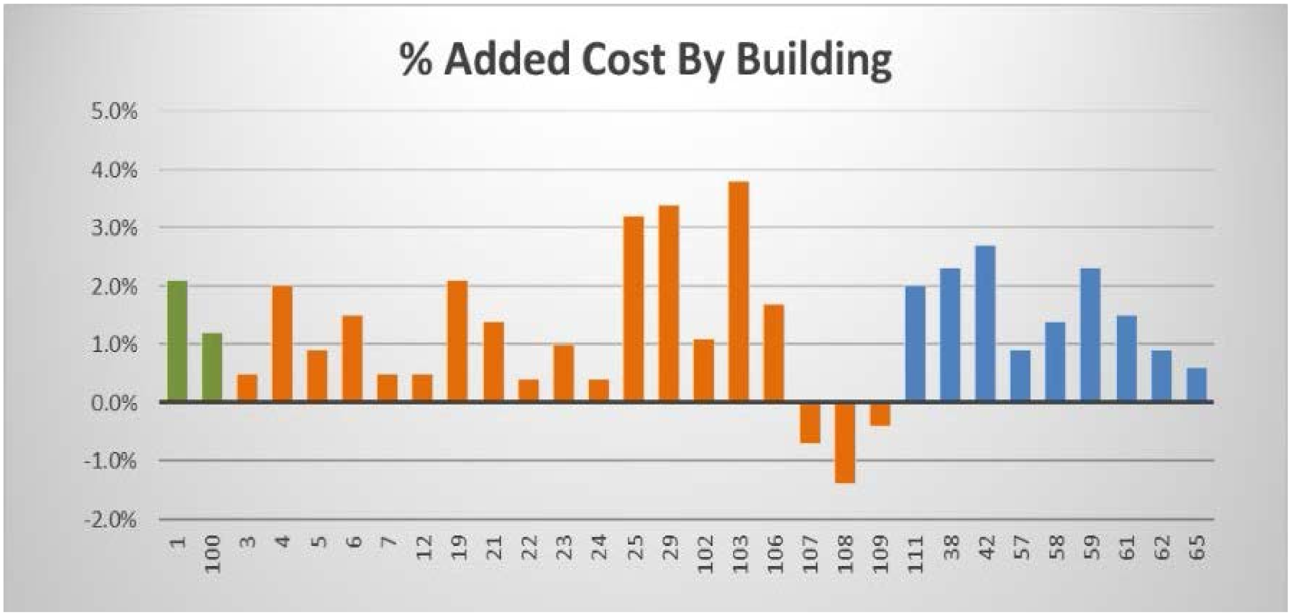
College and university buildings make up 65 percent of those identified in this report. The other 35 percent are a diverse mix that includes prisons, dormitories, kitchen and dining halls, and more. The unique nature of many of these buildings makes it difficult to determine energy and water savings from actual consumption data. While some college and university buildings include only classrooms and offices, most have space with more specialized uses, such as welding and auto shops, gymnasiums or performance halls. For many buildings, this varying mix of uses makes it difficult to find a “like” building for purposes of comparing consumption data.

Where possible, this report compares actual consumption data received from the operators of similar types of buildings. Using year-to-year comparisons of a specific building may be the best way to benchmark. Year-to-year improvements in energy use accomplished through adjustments to the building mechanical and control systems is also a comparison that will be tracked over time and presented in this report.

DES will continue to track energy and water use, and will provide feedback to the building operators if the consumption seems abnormally high. The department will also look for particularly efficient buildings and follow-up with those operators to learn how they achieved greater efficiencies.

Added LEED first costs

The figure below shows an estimate of the added costs and savings for LEED-related elements, such as consultants and construction, as a percentage of the overall project first costs. These added costs and savings were estimated by the state project managers, the architect consultant on the project and the contractor (See Appendix 6 and Master List).



Added cost may be below 0 percent when incentives are used.

Payback for LEED

The payback for LEED related costs is estimated between 0 and 98 years with the average being 21 years for the projects where complete data is available. Only one project is estimated to have a 98-year payback. This was a small project for Green Hill School Health and Administration building that was awarded LEED Silver.

The following formula is used to calculate the payback for added costs of LEED construction during the LEED QA process:

(Added Consultant Costs + Added Construction Costs + LEED Certification Costs) – (Utility Incentives) (Annual Savings in Water and Energy)

- The costs are tracked by the state project managers, the project architect and the contractor.
- The savings figures are from the energy modeling prepared for the Energy Life-Cycle Cost Analysis (ELCCA) process and LEED.

SUMMARY OF LEED RESULTS FOR WASHINGTON STATE

DES is tracking 138 projects: 124 with state-owned LEED project certification status, representing more than $2.2 billion in construction costs. Of these, 82 state-owned projects have been LEED ‘certified’ at the following levels (case studies are included in Appendix B):

- 2 at Platinum (with another two pending certification)
- 45 at Gold (with another 11 pending certification)
- 33 at Silver (with another 28 pending certification)
- 2 at base certification

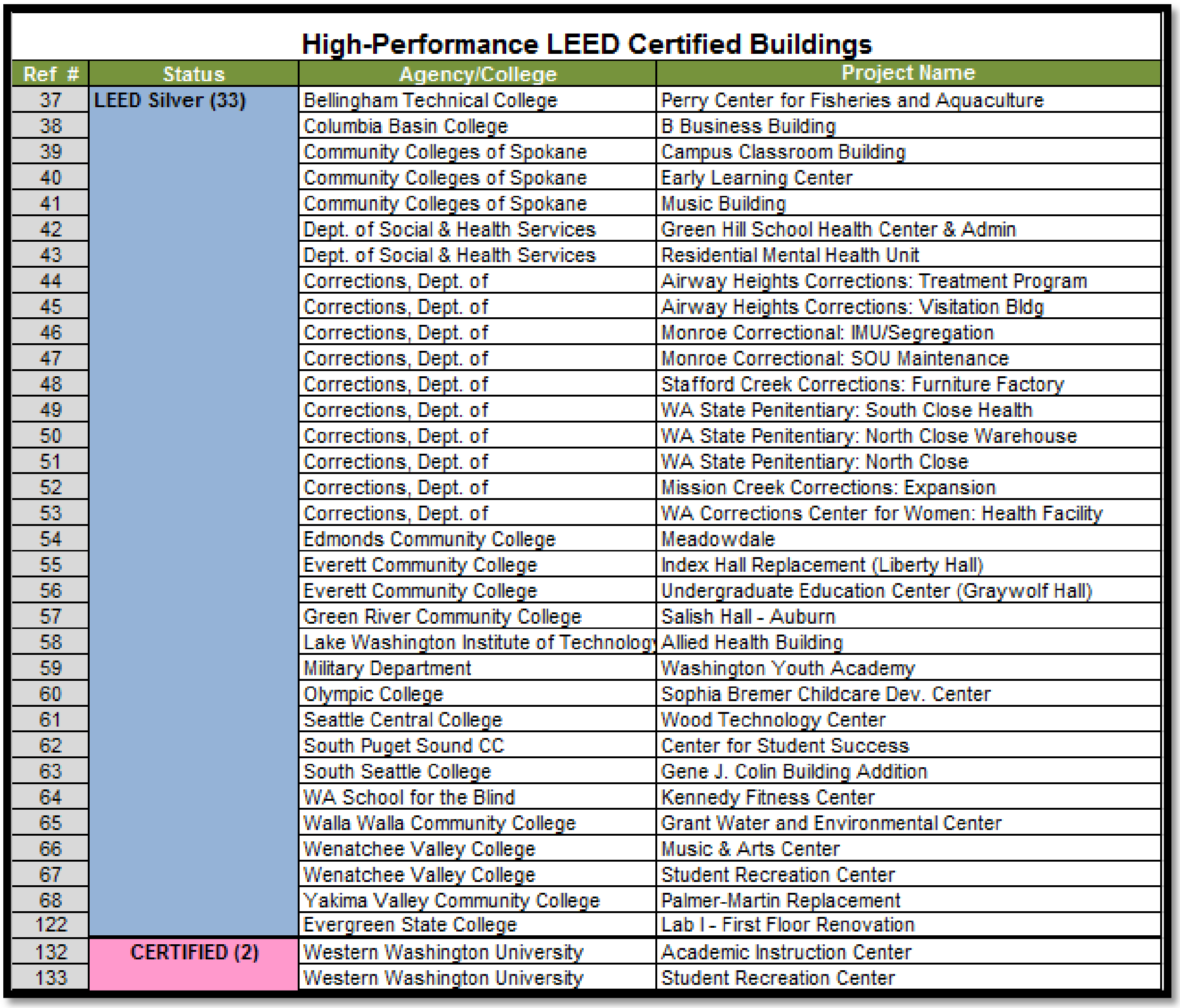
In the last 10 years, only 15 projects have claimed an exemption (see Appendix G). Of these, six exemptions were counties and cities who cited a non-practicable exemption due to limited funding or requirement reflected by federal, state and county historic registers to keep their facilities as close to their historical state as possible.

State-owned projects: LEED Certification to date

High-Performance LEED Certified Buildings

Ref #	Status	Agency/College	Project Name
1	LEED Platinum (2)	Skagit Valley College	Angst Hall - Science and Technology Building
100		University of Washington	Joy Building
3	LEED Gold (45)	Bellevue College	Science & Technology Bldg S
4		Bellevue College	Science & Technology Bldg T
5		Cascadia Community College	Classroom Bldg. 2, Bothell
6		Centralia College	Walton Science Center
7		Clark College	East County Satellite Campus (CTC)
8		Clover Park Technical College	Allied Health Care Facility
9		Columbia Basin College	Center for Career & Technical Education
10		Community Colleges of Spokane	Jenkins Wellness Center
11		Community Colleges of Spokane	Science Building
12		Community Colleges of Spokane	Sn-w'ey'-mn (Business & Social Sciences)
13		Community Colleges of Spokane	Technical Education Building
14		Enterprise Services, Dept. of	O'Brien Building
15		Corrections, Dept. of	Cedar Creek:Perimeter Control Office
16		Corrections, Dept. of	Coyote Ridge Correctional Facilities
17		Corrections, Dept. of	Monroe Correctional: Training Center
18		Everett CC	Walt Price Student Fitness Center
19		Grays Harbor College	Child Care Building
20		North Seattle College	Health Sciences Building
21		North Seattle College	Opportunity Center for Employment and Education
22		Olympic College	Humanities & Student Services
23		Peninsula College	Maier Hall
24		Pierce College	Science & Technology (Rainier) Building
25		Pierce College Puyallup	Arts & Allied Health Bldg
26		Skagit Valley College	Lewis Hall - Academic & Student Support Building
27		South Puget Sound CC	Instructional Building 22
28		South Puget Sound CC	Science Complex
29		South Puget Sound CC	Vocational Tech Building
30		Tacoma Community College	Building #3 Learning Center
31		Tacoma Community College	Health Careers Center (Harned)
32		WA School for the Deaf	Oliver Kastel Voc. Educational Bldg.
33		Yakima Valley Community College	Grandview Library
102		Central Washington University	Dean Hall Science Building
103		Central Washington University	Hogue Technology Building
104		Eastern Washington University	Hargreaves Hall Renovation
105		Eastern Washington University	University Recreation Center
106		Evergreen State College	Seminar II
107		University of Washington	Business Hall (formerly Balmer)
108		University of Washington	Clark Hall
109		University of Washington	Floyd & Delores Jones Playhouse
110		University of Washington	Philip Hall
111		Evergreen State College	Campus Activities Building
112		Washington State University	Vancouver Engineering & Computer Science Bldg
113		Washington State University	Vancouver Undergraduate Building
114		Western Washington University	Miller Hall
115		University of Washington	Savery Hall

State-owned projects: LEED Certification to date (continued)

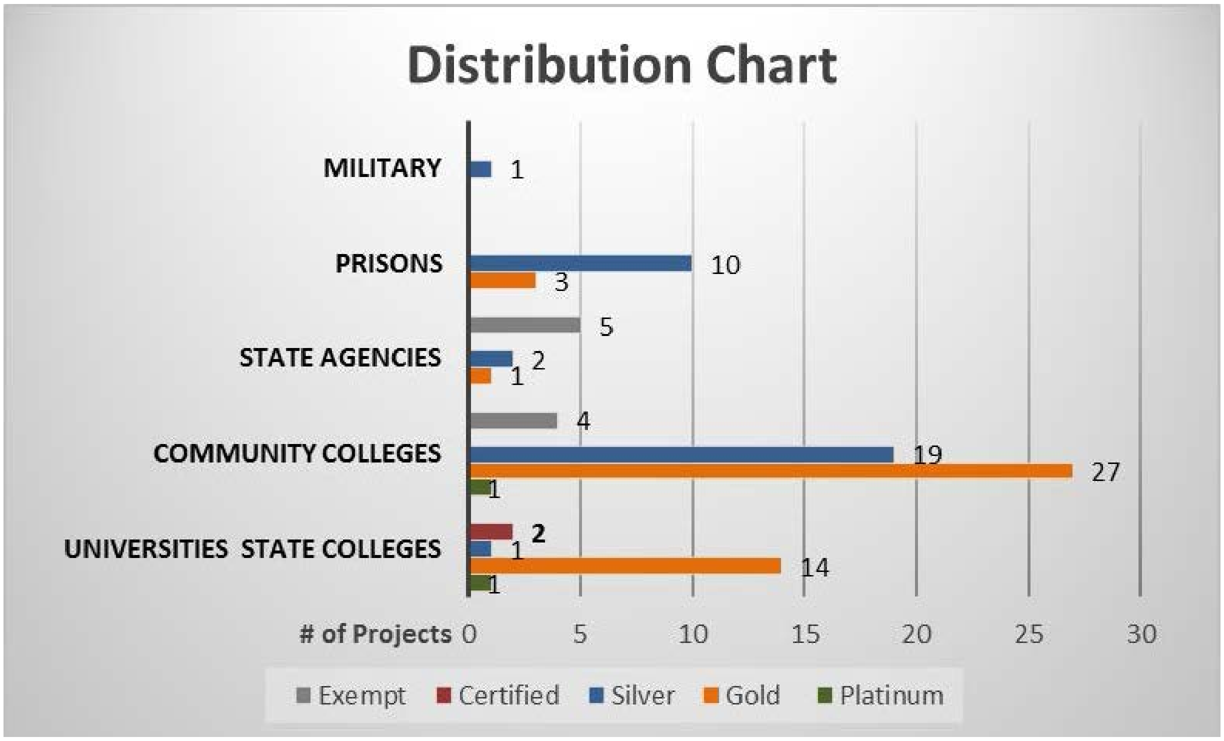


High-Performance LEED Certified Buildings

Ref #	Status	Agency/College	Project Name
37	LEED Silver (33)	Bellingham Technical College	Perry Center for Fisheries and Aquaculture
38		Columbia Basin College	B Business Building
39		Community Colleges of Spokane	Campus Classroom Building
40		Community Colleges of Spokane	Early Learning Center
41		Community Colleges of Spokane	Music Building
42		Dept. of Social & Health Services	Green Hill School Health Center & Admin
43		Dept. of Social & Health Services	Residential Mental Health Unit
44		Corrections, Dept. of	Airway Heights Corrections: Treatment Program
45		Corrections, Dept. of	Airway Heights Corrections: Visitation Bldg
46		Corrections, Dept. of	Monroe Correctional: IMU/Segregation
47		Corrections, Dept. of	Monroe Correctional: SOU Maintenance
48		Corrections, Dept. of	Stafford Creek Corrections: Furniture Factory
49		Corrections, Dept. of	WA State Penitentiary: South Close Health
50		Corrections, Dept. of	WA State Penitentiary: North Close Warehouse
51		Corrections, Dept. of	WA State Penitentiary: North Close
52		Corrections, Dept. of	Mission Creek Corrections: Expansion
53		Corrections, Dept. of	WA Corrections Center for Women: Health Facility
54		Edmonds Community College	Meadowdale
55		Everett Community College	Index Hall Replacement (Liberty Hall)
56		Everett Community College	Undergraduate Education Center (Graywolf Hall)
57		Green River Community College	Salish Hall - Auburn
58		Lake Washington Institute of Technolog	Allied Health Building
59		Military Department	Washington Youth Academy
60		Olympic College	Sophia Bremer Childcare Dev. Center
61		Seattle Central College	Wood Technology Center
62		South Puget Sound CC	Center for Student Success
63		South Seattle College	Gene J. Colin Building Addition
64		WA School for the Blind	Kennedy Fitness Center
65		Walla Walla Community College	Grant Water and Environmental Center
66		Wenatchee Valley College	Music & Arts Center
67		Wenatchee Valley College	Student Recreation Center
68		Yakima Valley Community College	Palmer-Martin Replacement
122		Evergreen State College	Lab I - First Floor Renovation
132	CERTIFIED (2)	Western Washington University	Academic Instruction Center
133		Western Washington University	Student Recreation Center

Note: Projects are not in order of when LEED Certification was awarded. See Master List in Appendix A.

Overall, analysis shows that universities and state colleges strive to attain a minimum LEED Gold certification, while community colleges and state agencies achieve a closer balance between Gold and Silver certifications.

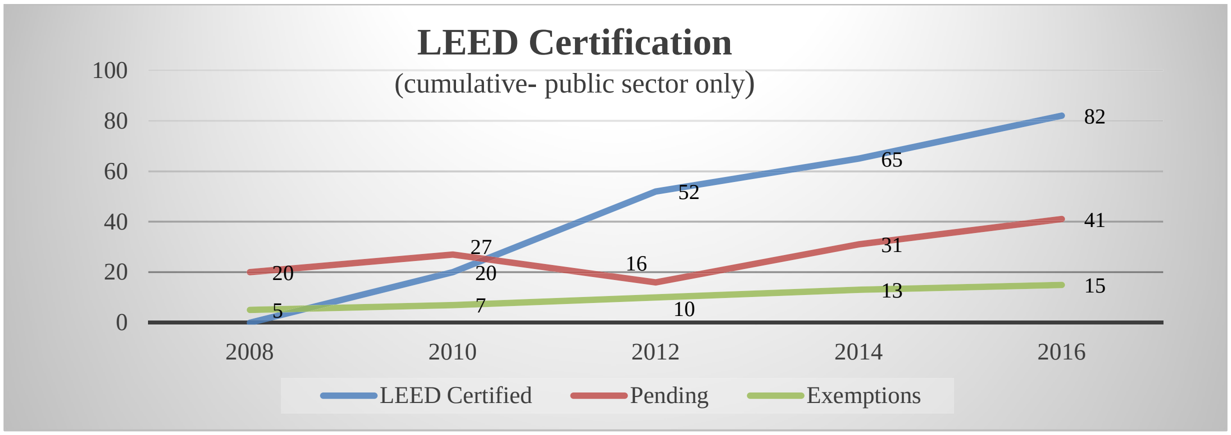


It should be noted that while prisons seem to have a higher rate of Silver Certification, it may be more difficult to implement efficiencies, such as natural lighting, native plantings or location and transportation credits, due the nature of the facilities.

How do we compare nationally?

The Center for Construction Research and Training (CCRT) (http://www.cpwr.com/) reports annually about national LEED registered and certified project updates in all states. The report shows that certifications have increased exponentially from 2000 to 2013. This holds true in Washington, as well.

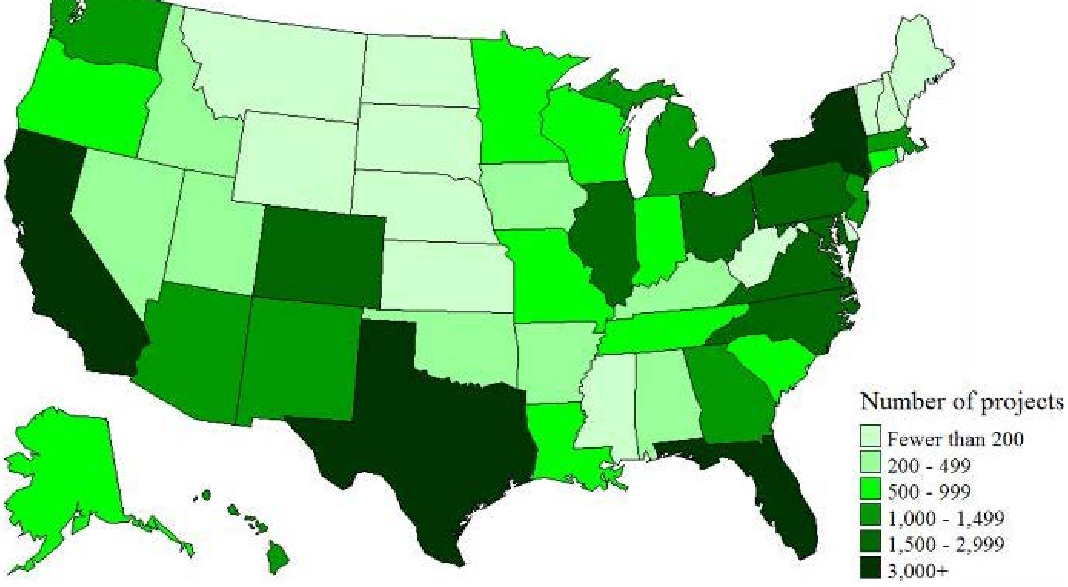
Exponential Growth



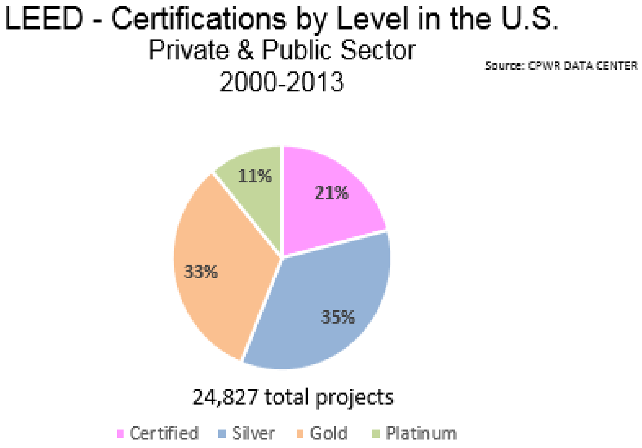
National Comparison

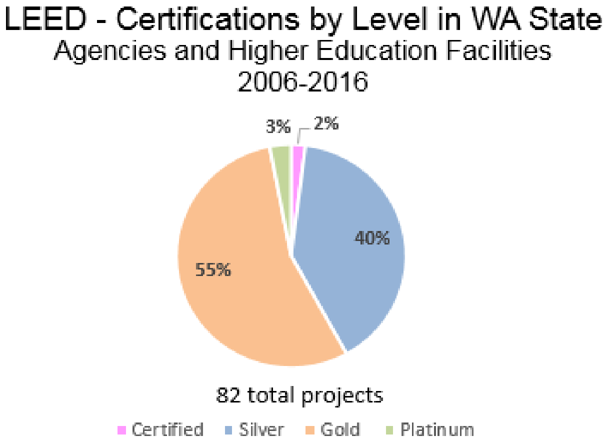
Washington State agencies, colleges and universities accounted for approximately five percent of total certified projects in the state. (1,499 total certified projects divided by 82 public projects reported to DES).

National LEED 2013
(both private & public sector)



LEED projects at Washington governmental facilities score higher than the national level in Gold and Silver ratings as a percentage of total projects.





The higher percentage of Gold-certified projects in Washington is likely due to the focused effort of colleges and universities to achieve that standard.

LEED CATEGORIES AND RESULTS

LEED v4 certification is scored over eight categories with an additional point awarded for an integrative process. While LEED v4 will require prerequisites that are included in descriptions below, the categories and point values are the same as those in LEED 2009 that agencies have been implementing.

Benefits associated with LEED starts with a design process that prioritizes cost-effectives and engages all project team members from design through construction. The other eight categories are outlined as follows:

Location and Transportation (16 points)

This category reflects how the project has taken into account existing infrastructure, such as public transit, street networks, land density, bicycle facilities, parking capacity, and green vehicles.

How it is being implemented in Washington

Most colleges and state agencies are fortunate to have alternative means of transportation readily available since they are located on local bus lines. They have been creative in achieving these points by encouraging a pedestrian environment and promoting bicycle use by providing additional bike racks along with shower and changing facilities. Preferred parking spaces are often reserved for carpool and vanpool vehicles. Several projects have transitioned parking spaces in prominent and desirable places into hybrid and electric vehicle parking to encourage their use.

Sustainable Sites (10 points)

This category considers the environment surrounding the building, with an emphasis on site assessment, site development, protecting or restoring habitat, rainwater management, heat island reduction and light pollution. Construction activity pollution prevention is a prerequisite for this category.

How it is being implemented in Washington

Colleges and state agencies have consistently included changing or retrofitting outdoor light fixtures as part of their design to a shielded light in order to minimize light pollution while still providing safety to the campus. Capture, treatment and release of stormwater has become a standard, and many colleges now implement rain gardens for aesthetic appeal while managing rainwater. Landscaping has been replaced with native plantings and grasses which often means no irrigation system is needed. In addition, plants that shade the building partner with light colored roofs implemented in the design help to avoid a heat island effect.

Rain Garden - Clark College

Projects of note:

- The Walton Science Center, Centralia College - added three infiltration rain gardens totaling a surface area of 1,453 square feet that offset the stormwater runoff and erosion from the site.
- Gray Wolf Hall, Everett Community College – Transitioned a site that was previously 100 percent impervious (parking lot) to a vegetated area that is equal to twice the footprint of the building.
- Maier Hall, Peninsula College – Rainwater is now collected and diverted to the adjacent wetland, which was lacking water due to the previous campus stormwater system. They also added an epiphytic roof of native mosses to reduce the heat island effect.

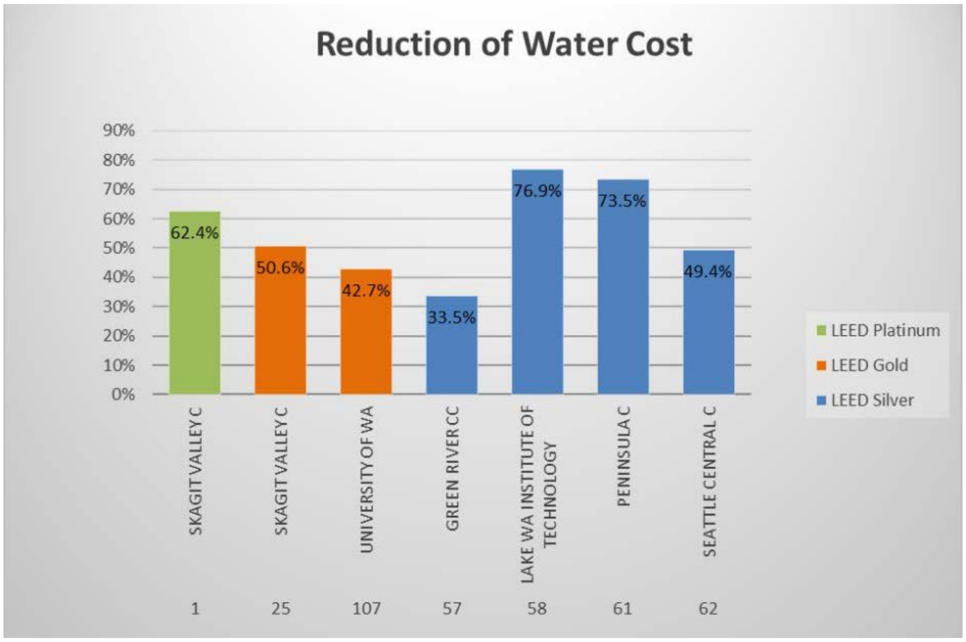
Water efficiency (11 points)

This category takes a holistic look at indoor and outdoor use of water and metering. There are three prerequisites to qualify, which considers water efficiency and reductions in potable water first. Then it considers water use reduction, cooling tower water use, and water metering.

How it is being implemented in Washington

Irrigation systems may be installed to reduce potable water consumption. In addition, almost all institutions striving for certification are replacing traditional fixtures with low-flow fixtures, with an average reduction in water costs of 58 percent.

The figure below compares the interior water usage of a “Base Minimum Building Code” with the reported “proposed” high-performance green buildings. (See appendix F)



Projects of note:

- The Columbia Tech Center, Clark College – The project was designed with a projected total annual water savings of 948,184 gallons. As of 2016, it is saving double that (almost 2 million gallons per year) by decreasing water needed for irrigation due to use of native and drought resistant plants, low-flow fixtures, and on-site filtration of all stormwater resulting in a discount of over $6,000 a year from the city storm sewer impact fees.
- Coyote Ridge, Department of Corrections – Water reclaim and reuse for laundry facilities is saving the prison 2,160,000 gallons per year.

Energy and Atmosphere (33 points)

This category addresses energy use reduction, energy-efficient design strategies and renewable resources. Energy efficiency in a green building starts with a focus on design that reduces energy need by using the orientation of the building, glazing and climate-appropriate building materials as the base. Then it implements strategies such as passive heating and cooling, natural ventilation, and high-efficiency HVAC systems and controls to further reduce a building's energy use.

Prerequisites for this category include fundamental commissioning and verification, minimum energy performance, building-level energy metering, and fundamental refrigerant management. It should be noted that the sub-category for optimizing energy performance includes over half (18) of the allotted points for this category.

How it is being implemented in Washington

This category has required the design architects/engineers and the construction firms to work more closely than ever to achieve maximum results in energy efficiency. Project designs call for improved thermal envelopes, high-efficiency glazing, sunshades, more efficient heating systems, and modern HVAC systems. Natural ventilation is used when possible.

Designs include the use of natural lighting for occupied areas. In the case of older college buildings, entire walls have been removed, and windows installed to bring natural light into interior spaces. Occupancy sensors have been installed in many college buildings to override on-off switches and provide multi-level lighting controls.

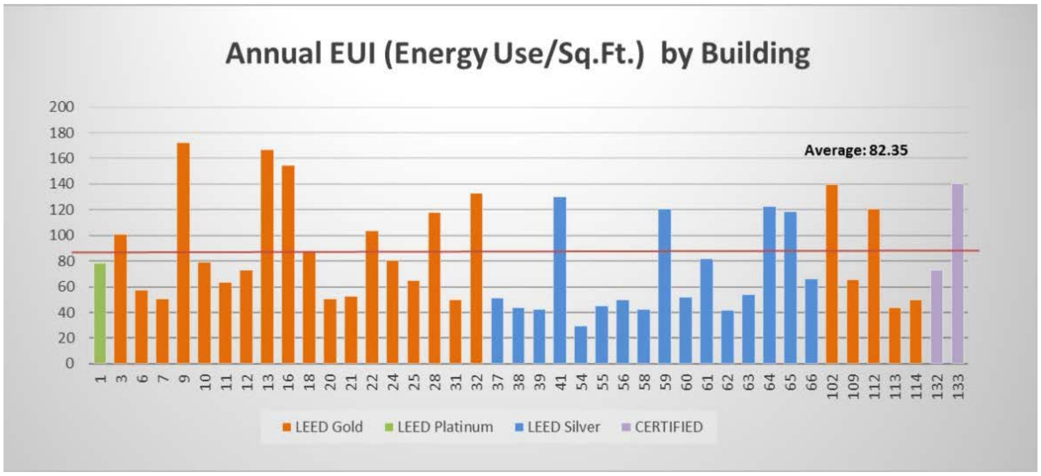
Renewable energy sources include solar, wind, geothermal, bioenergy and water. For new construction, photovoltaics are often used. State project managers have found that LEED Platinum is difficult, if not impossible, to achieve without implementing renewable energy


Photovoltaics used for Bellevue College solar project

production through photovoltaics or wind power. While these options can sometimes be budgeted in new construction, remodeling projects are often considerably smaller and do not often receive funding to implement energy production.

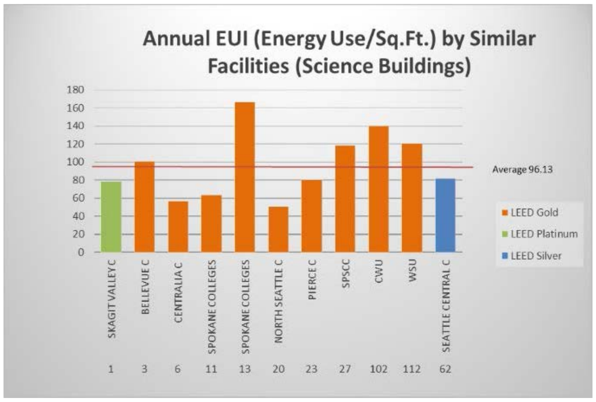
Complete energy and water usage reports were received from 29 LEED projects (see Appendix D). In response to RCW 19.27A.190 (5), DES is actively assisting agencies to establish Energy Star Portfolio Manager accounts for all buildings larger than 10,000 square feet. This is an opportunity for DES to use this mechanism to collect energy and water consumption data and reduce facility operators' efforts to obtain this information.

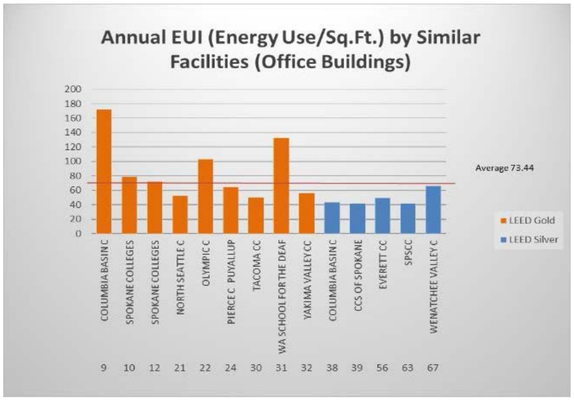
According to the energy and water consumption reports received (See Appendix D); the average energy use intensity for state projects is 82.35 EUI. This compares to an average of 130.7 EUI for college/university projects, according to Energy Star Portfolio Manager. This means that, on average, by implementing green building practices, state agencies and higher educational facilities have reduced their energy use by an overall average of 37 percent.



Note that facilities represented by numbers 1-66 are state agencies and community colleges, while those above 100 are state colleges and universities.

Grouping similar types of buildings provides a better comparison of energy use. The next two charts show a comparison of community college science buildings to college and university classroom/office buildings.

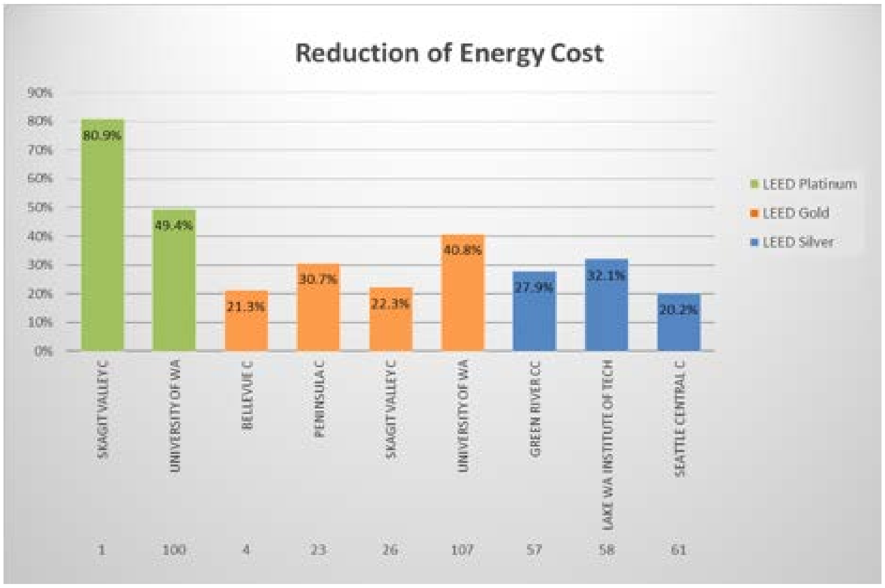




The average EUI for science buildings is 96.13, while the EUI for office buildings averages 73.44. This is due in part to equipment needed for labs, such as increased ventilation needs, servers, refrigeration units, intense lighting, and specific lab equipment needed for specialty science degrees.

Energy cost savings

Agencies and colleges are also report the actual reduction of energy costs as part of their performance. While individual cost savings vary widely, the cost reduction for implementing energy efficiencies average a 36.2 percent reduction in costs. Even when removing the LEED platinum building from the equation, an average 30.6 percent reduction in costs is still achieved.



Angst Hall at Skagit Valley College, which is represented by the first green bar on the chart above, was a LEED Platinum science and technology building. By implementing high-performance building improvements, such as water efficient fixtures, natural light, improved thermal envelope and adding photovoltaics, the college achieved an 80 percent reduction of energy costs from their baseline prior to construction.

By comparison, the same college achieved a 22 percent reduction in energy costs at Lewis Hall, a three-story office building (Denoted as 26). This was achieved by implementing similar improvements, such as water efficient fixtures, installing occupancy sensors and improving air circulation. Together, these two projects saved Skagit Valley College an estimated $52,000 per year in energy costs.

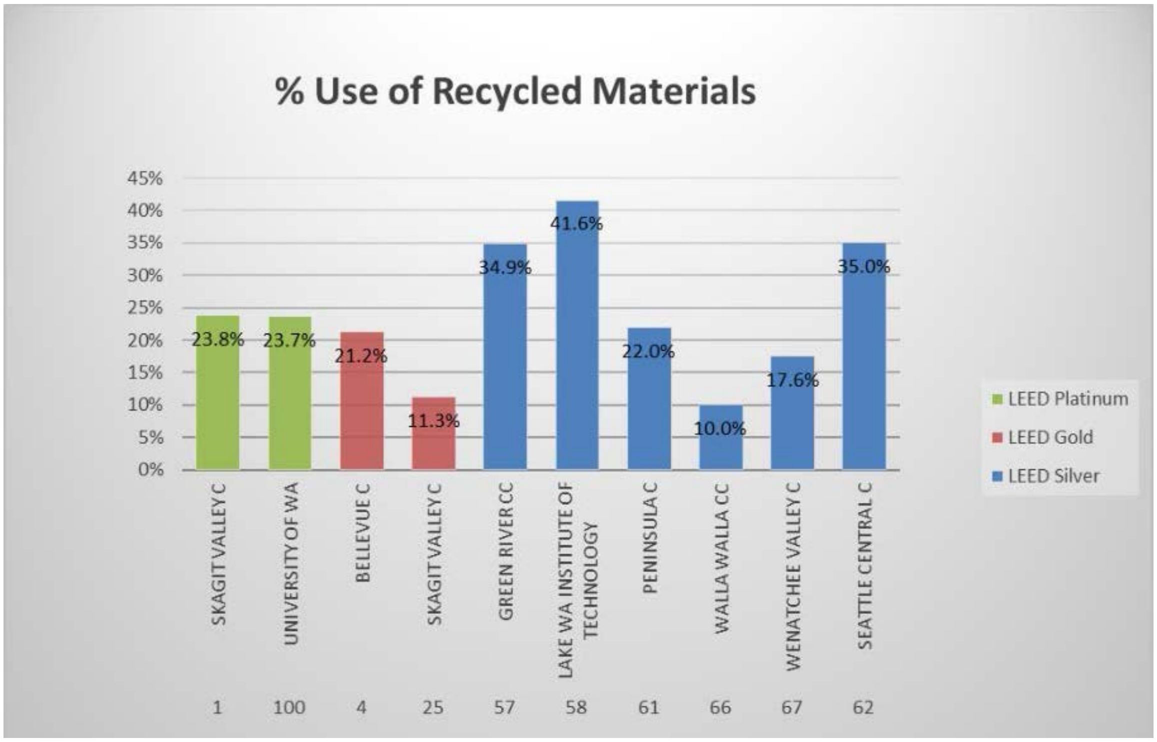
Materials and Resources (13 points)

This category focuses on minimizing impacts associated with the extraction, processing, transport, maintenance and disposal of building materials. Prerequisites include the storage and collection of recyclables, and construction and demolition waste management planning. To obtain credits in this category, project managers must look at the building life-cycle impacts, environmental product impacts, sourcing of raw materials, and minimizing construction waste.

How it is being implemented in Washington

Almost all tracked projects have an organized recycling program for paper, glass, plastics and food waste. Long-term waste management must continue even after construction completion. In addition, recycling construction materials has become a standard procedure for state facility projects. An average of 92.5 percent of the construction waste produced by the 11 projects listed in the chart below was recycled, keeping more than 9,000 tons of construction debris from going to landfills.

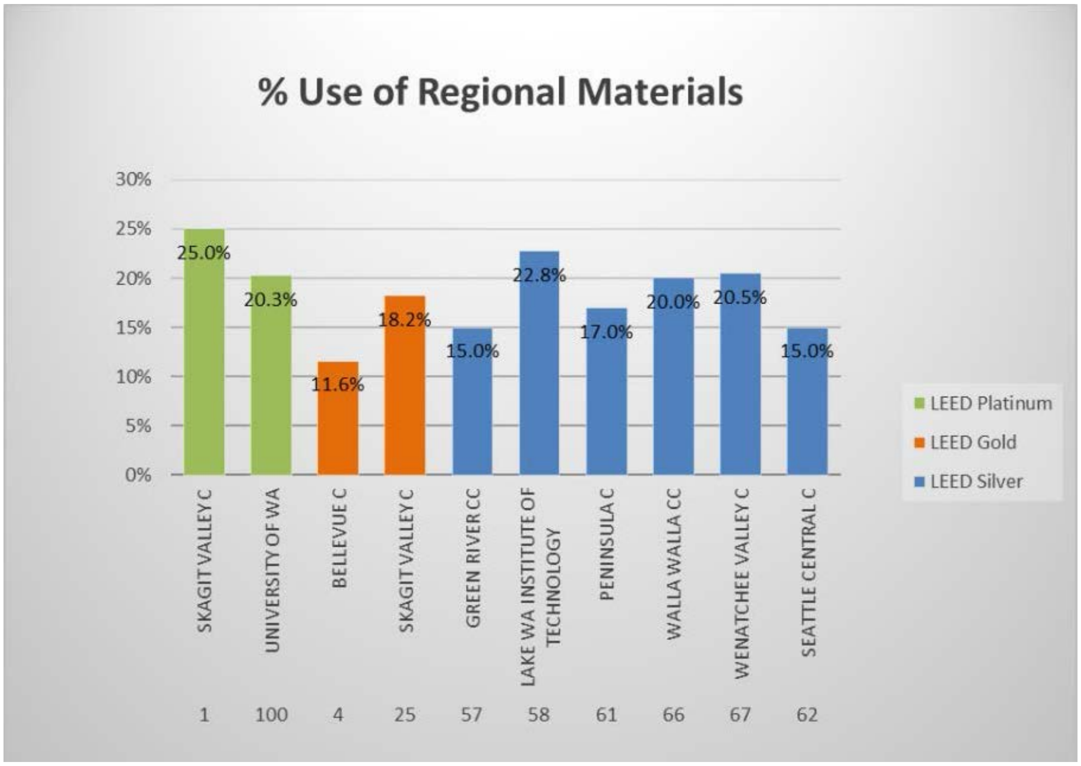
In addition to recycling construction waste, contractors are also reusing construction materials. This number also varies widely depending on the project, but averages 23.8 percent reuse of recycled materials.



Recycled materials include recycled concrete, top soil, rebar, fiber mesh, structural steel, metal flashing, acoustical tile ceiling, particle board, sheathing, insulation, and wood decking.

Regional Sustainable Materials

The purchase of Washington Forest Stewardship Council (FSC) and Sustainable Forestry Initiative (SFI) certified wood ensures that the lumber is harvested in a sustainable way and the wood has the chain of custody documentation to prove it. Sustainable forestry practices reduced the environmental impacts of timber harvesting.



Other regional materials include those manufactured within 500 miles of the project site. This includes but is not limited to terrazzo, concrete, masonry, steel, specialty doors and even photovoltaics.

Projects of note:

- Vocational Education and Support Building, Washington School for the Deaf – Recycled content accounted for 25 percent of the total material costs. More than 96 percent of project construction waste was recycled.
- Walton Science Center, Centralia College – More than 40 percent of the construction material was recycled, with over 95 percent of the construction waste diverted from landfills. The project team selected certified wood materials that allowed them to exceed a 95 percent threshold of FSC certified wood products.

Indoor Environmental Quality (16 points)
This category rewards decision made by project teams to protect the health and comfort of building occupants. This includes thermal, visual and acoustic comfort. High-quality indoor environments increase productivity, decrease absenteeism, and improve the building’s value and aesthetics.

Prerequisites for this category include a minimum indoor air quality performance and environmental tobacco smoke control. It should be noted that smoking is not allowed in government facilities, so this second prerequisite does not apply.

How it is being implemented in Washington

Natural lighting/daylighting is often the first to be implemented to achieve environmental quality, and often provides the added benefit of access to views for the tenant which has been improves productivity. Air ventilation systems using outside air and natural air systems have also been implemented where possible. Unified mechanical and control systems provide better occupant comfort and improved efficiency.

Light sensors and sun shades are often installed to balance the natural light to comfortable working levels for occupants. Some colleges are including operable windows in their design to allow for natural air currents and minimize the use of mechanical heating and cooling.

Many construction projects focus on improving the thermal envelope, adding high efficiency glazing, or adding in-slab thermal or hydronic heating. In addition, many contractors have begun using low-emitting materials and low volatile organic compounds in their construction. Filtration is also performed prior to occupancy to allow minimum exposure to tenants.

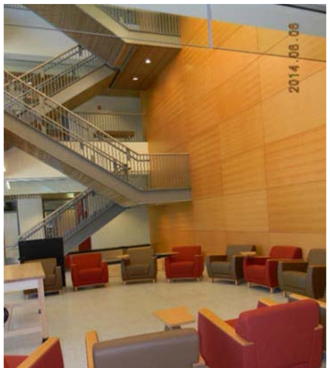
Projects of note:

- John L. O’Brien building, DES – This historic Capitol Campus building renovation allowed removal of hazardous material, primarily asbestos, expansion of the emergency generator, and the addition of a fire protection system, as well as seismic upgrades to improve safety and quality for tenants.
- Maier Hall, Peninsula College – An open-air breezeway connects the campus building to a nearby forest and viewing platform at the edge of a wetland.
- Health and Science Building, Lower Columbia College – Spaces for eating, socializing and individual and group study are located on all floors to bring faculty and students together outside the classroom.

Innovation (6 points)

Sustainable design strategies are constantly evolving and improving. The purpose of this category is to recognize projects for innovative building features and sustainable building practices and strategies. Having a LEED-accredited professional participate in the project design and construction is worth a point for certification, but also provides invaluable service to each unique design and construction project.

How it is being implemented in Washington



Lower Columbia College
Health & Science Building

State facility managers have been proactive in educating tenants as to the strategies, concepts and benefits of green building. For some projects, the managers have installed information kiosks that track energy usage in the building. Signage is often added in the buildings to teach occupants and visitors about different aspects of sustainable design.

Open work areas are being implemented statewide to increase air flow and provide social interaction, and stairways that have been closed off are now being opened up to connect visually to both the interior and exterior spaces to inspire movement and improve health.

In addition, many housekeeping programs have transitioned to Green Cleaning and using sustainable cleaning product to minimize impacts on tenants.

Projects of note:

- Mission Creek Corrections Center, Department of Corrections – installed timed faucets and showers contributing in reducing water usage by 40 percent.
- 1063 Block Replacement Project, DES – designed with low-energy LED lighting throughout the building, and high-efficiency building systems, including a ground source heat exchange, photovoltaic panels, and a smart HVAC system that provides 100 percent fresh air.
- Capitol Campus, DES – The department is conducting an ecolawn trial as part of an effort to reduce water and pesticide use and to provide habitat for pollinators (see Appendix A).

Regional Priority (4 points)

This category covers environmental issues particular to a locale. Issues could be naturally occurring, man-made, or could reflect local environmental concerns, such as water shortages, pollutants or wetlands.

How it is being implemented in Washington

Colleges are aware of their surrounding forests, wetlands, and natural resources surrounding their campuses. They emphasize issues and take extra precautions when designing and managing their projects and in some cases have found ways to improve the land and environment around them. For example, Peninsula College borders forests, wetlands and an environmentally-sensitive ravine. They included in their design a strategy to direct rainwater to the adjacent wetland that was suffering from drought, and implemented all new plantings of native species to eliminate the need for an irrigation system. Skagit Valley College removed a contaminated building within the project limits resulting in a credit for brownfield redevelopment and maximization of open space.

To many colleges, regional priority and environmental concerns are considered at the very beginning of the project in its predesign phases. They recognize the environmental benefits embrace environmental concerns as an opportunity for improving the quality of the neighborhoods they are located in.

Department of Commerce Report: Affordable Housing

Affordable housing projects funded through the state capital budget are exempt from the LEED Silver requirement. However, the Evergreen Sustainable Development Standard (ESDS) is required of projects funded with capital bond proceeds through the Washington State Housing Trust Fund (HTF).

Beginning in January 2015, the HTF conducted a public revision process of the ESDS. Revisions to the Green Communities' standard, as well as updates to the Washington State Energy Code, prompted the need for updates to the ESDS. HTF staff engaged in a series of extensive discussions with sustainable building experts, and two public comment periods, in order to gather input for the revision of the ESDS. At the conclusion of this process, ESDS version 3.0 was published in February 2016. The ESDS Criteria, forms and instructions, and other information can be found at http://www.commerce.wa.gov/evergreen.

Since the inception of the ESDS in June 2007, 171 affordable housing projects have complied with the ESDS criteria (see Appendix A).

Training Efforts

- In the fall of 2015, HTF staff collaborated with Green Communities to host a joint training regarding upcoming changes to both standards. The all-day training was held in Seattle and open to affordable housing stakeholders in Washington.
- In the spring of 2016, a public webinar was conducted regarding the principles of sustainable development as it relates to the updates to the ESDS. The webinar was provided to HTF staff, stakeholders, public funders and construction verifiers.

Lessons Learned

- In affordable housing, additional upfront costs can result in the reduction of homes that a project can provide for Washington's most vulnerable citizens. However, if additional upfront costs result in a quantifiable payback to the project through operations, then investing in those strategies should be an option. In 2014-2015, the HTF staff collaborated with the Washington State Energy Office and the HTF Policy Advisory Team subcommittee to modify a life-cycle cost tool that was developed by the Office of Financial Management (OFM) to address the particulars of affordable housing projects. The ESDS now has a criterion which encourages the use of the tool by granting optional points and training for the tool is available on OFM's website. Life-cycle thinking encourages projects to identify performance based solutions at the beginning of the design process that will result in reducing energy and water consumption and operating and maintenance costs.

- Although energy metering is required for all new construction and substantial rehabilitation projects, monitoring and reporting energy and water performance data to the HTF is optional. Through analysis of HTF project data, it was determined that over a four year period only 39 percent of Housing Trust Fund projects chose to comply with this optional criterion. In response, revisions were made to the criterion to expand options and make it more attainable for projects.

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APPENDICES

A. Referenced Reports
B. Case Study Gallery
C. Agency and University Sustainable Building Reports
D. Energy and Water Savings Reporting Spreadsheets
E. Metering and Measuring Reports
F. LEED Building Cost & Performance Data
G. Exemption Declarations

High Performance Public Green Buildings

Implementation of RCW 39.35D Through July 2016

Appendices

A. Reference Reports
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Appendix A: Referenced Reports

1. State Agencies and Community Colleges (DES-managed projects)
2. State Colleges and Universities (non-DES managed projects)
3. Department of Commerce Update
4. Governing Magazine Article: *Why an Unmowed Capitol Lawn Could be a Sign of Good Management*

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State LEED Projects 2015-2016

No. of LEED Projects that are Certified:		
Certified	Exempt	Pending
82	**15**	**41**

Ref #	Project #	Agency/College	**DES Managed Projects**	Estimate	Footage	Status
1	05-200	Skagit Valley College	Angst Hall - Science and Technology Building	$ 22,536,844	65,232	LEED Platinum
2	14-009	Enterprise Services, Dept. of	1063 Replacement Project	$ 77,218,075	215,000	LEED Platinum (Goal)
3	09-237	Bellevue College	Science & Technology Bldg S	$ 26,094,376	64,238	LEED Gold
4	06-123	Bellevue College	Science & Technology Bldg T	$ 29,634,094	62,882	LEED Gold
5	06-144	Cascadia Community College	Classroom Bldg. 2, Bothell	$ 32,152,972	54,300	LEED Gold
6	03-218	Centralia College	Walton Science Center	$ 20,400,000	70,000	LEED Gold
7	05-099	Clark College	East County Satellite Campus (CTC)	$ 20,470,000	69,984	LEED Gold
8	06-092	Clover Park Technical College	Allied Health Care Facility	$ 21,500,000	56,000	LEED Gold
9	07-152	Columbia Basin College	Center for Career & Technical Education	$ 1,802,000	72,241	LEED Gold
10	07-133	Community Colleges of Spokane	Jenkins Wellness Center	$ 6,825,317	35,708	LEED Gold
11	07-150	Community Colleges of Spokane	Science Building	$ 16,724,189	70,823	LEED Gold
12	04-192	Community Colleges of Spokane	Sn-w'ey'-mn (Business & Social Sciences)	$ 14,407,996	70,533	LEED Gold
13	07-132	Community Colleges of Spokane	Technical Education Building	$ 11,887,746	73,514	LEED Gold
14	07-022	Enterprise Services, Dept. of	O'Brien Building	$ 30,000	100,894	LEED Gold
15	06-330	Corrections, Dept. of	Cedar Creek:Perimeter Control Office	$ 931,000	2,300	LEED Gold
16	06-313	Corrections, Dept. of	Coyote Ridge Correctional Facilities	$ 190,000,000	565,649	LEED Gold
17	02-303 K	Corrections, Dept. of	Monroe Correctional: Training Center	$ 2,032,200	10,372	LEED Gold
18	08-199	Everett CC	Walt Price Student Fitness Center	$ 16,000,000	49,800	LEED Gold
19	09-015	Grays Harbor College	Child Care Building	$ 1,635,000	6,200	LEED Gold
20	08-177	North Seattle College	Health Sciences Building	$ 16,000,000	55,470	LEED Gold
21	06-132	North Seattle College	Opportunity Center for Employment and Education	$ 16,622,807	57,100	LEED Gold
22	05-187	Olympic College	Humanities & Student Services	$ 21,200,000	85,012	LEED Gold
23	14-219	Peninsula College	Maier Hall	$ 27,390,359	62,950	LEED Gold
24	03-200	Pierce College	Science & Technology (Rainier) Building	$ 32,852,954	80,645	LEED Gold
25	03-198	Pierce College Puyallup	Arts & Allied Health Bldg	$ 25,922,787	61,597	LEED Gold
26	07-236	Skagit Valley College	Lewis Hall - Academic & Student Support Building	$ 31,200,000	32,417	LEED Gold
27	08-150	South Puget Sound CC	Instructional Building 22	$ 16,831,000	30,000	LEED Gold
28	03-223	South Puget Sound CC	Science Complex	$ 27,447,577	51,884	LEED Gold
29	08-150	South Puget Sound CC	Vocational Tech Building	$ 8,550,000	40,000	LEED Gold
30	06-205	Tacoma Community College	Building #3 Learning Center	$ 6,129,795	13,000	LEED Gold
31	07-142	Tacoma Community College	Health Careers Center (Harned)	$ 21,444,437	69,599	LEED Gold
32	07-214	Center for Childhood Deafness and Hearing Loss	Oliver Kastel Voc. Educational Bldg.	$ 10,969,086	21,700	LEED Gold
33	09-172	Yakima Valley Community College	Grandview Library	$ 3,116,878	12,144	LEED Gold
34	08-070	Bellingham Technical College	Campus Center	$ 22,400,000	74,000	Gold (Goal)
35	12-258	Big Bend Community College	PTEC Building	$ 34,000,000	76,140	Gold (Goal)
36	06-069	Grays Harbor College	STEM Bldg (Eugene Schermer Building)	$ 41,855,898	70,450	Gold (Goal)
37	08-285	Lower Columbia College	Health Sciences	$ 26,064,822	70,000	Gold (Goal)
38	12-109	Bellingham Technical College	Perry Center for Fisheries and Aquaculture	$ 2,391,603	8,000	LEED Silver
39	07-151	Columbia Basin College	B Business Building	$ 6,377,659	22,500	LEED Silver
40	07-148	Community Colleges of Spokane	Campus Classroom Building	$ 10,679,834	47,497	LEED Silver
41	07-149	Community Colleges of Spokane	Early Learning Center	$ 3,869,980	16,000	LEED Silver
42	07-134	Community Colleges of Spokane	Music Building	$ 9,094,246	25,743	LEED Silver
43	06-481	Dept. of Social & Health Services	Green Hill School Health Center & Admin	$ 11,298,447	20,657	LEED Silver
44	10-457	Dept. of Social & Health Services	Residential Mental Health Unit	$ 4,061,885	53,000	LEED Silver
45	08-300	Corrections, Dept. of	Airway Heights Corrections: Treatment Program	$ 3,626,700	9,600	LEED Silver
46	06-311	Corrections, Dept. of	Airway Heights Corrections: Visitation Bldg	$ 1,975,000	6,100	LEED Silver
47	02-302	Corrections, Dept. of	Monroe Correctional: IMU/Segregation	$ 27,255,000	77,000	LEED Silver
48	04-301 L	Corrections, Dept. of	Monroe Correctional: SOU Maintenance	$ 1,151,600	6,100	LEED Silver

Ref #	Project #	Agency/College	**DES Managed Projects**	Estimate	Footage	Status
49	10-356	Corrections, Dept. of	Stafford Creek Corrections: Furniture Factory	$ 6,848,000	47,500	LEED Silver
50	06-314 I	Corrections, Dept. of	WA State Penitentiary: South Close Health	$ 22,931,500	49,022	LEED Silver
51	04-310 G	Corrections, Dept. of	WA State Penitentiary: North Close Warehouse	$ 6,071,289	39,600	LEED Silver
52	04-310 H	Corrections, Dept. of	WA State Penitentiary: North Close	$ 130,138,868	385,975	LEED Silver
53	08-303	Corrections, Dept. of	Mission Creek Corrections: Expansion	$ 3,278,000	13,697	LEED Silver
54	06-309	Corrections, Dept. of	WA Corrections Center for Women: Health Facility	$ 12,938,000	22,600	LEED Silver
55	08-058	Edmonds Community College	Meadowdale	$ 6,800,000	36,100	LEED Silver
56	09-207	Everett Community College	Index Hall Replacement (Liberty Hall)	$ 29,150,663	88,000	LEED Silver
57	05-219	Everett Community College	Undergraduate Education Center (Graywolf Hall)	$ 33,622,190	77,000	LEED Silver
58	07-193	Green River Community College	Salish Hall - Auburn	$ 25,024,169	82,792	LEED Silver
59	06-073	Lake Washington Institute of Technology	Allied Health Building	$ 24,205,873	83,700	LEED Silver
60	07-189	Military Department	Washington Youth Academy	$ 4,327,175	18,050	LEED Silver
61	08-256	Olympic College	Sophia Bremer Childcare Dev. Center	$ 3,318,000	12,890	LEED Silver
62	08-063	Seattle Central College	Wood Technology Center	$ 19,600,000	35,000	LEED Silver
63	08-150	South Puget Sound CC	Center for Student Success	$ 23,400,000	89,311	LEED Silver
64	10-063	South Seattle College	Gene J. Colin Building Addition	$ 4,707,715	10,400	LEED Silver
65	08-040	WA School for the Blind	Kennedy Fitness Center	$ 9,474,032	29,000	LEED Silver
66	05-210	Walla Walla Community College	Grant Water and Environmental Center	$ 2,817,210	18,500	LEED Silver
67	10-051	Wenatchee Valley College	Music & Arts Center	$ 7,200,000	27,696	LEED Silver
68	14-978	Wenatchee Valley College	Student Recreation Center	$ 6,200,000	22,960	LEED Silver
69	09-094	Yakima Valley Community College	Palmer-Martin Replacement	$ 12,897,000	43,694	LEED Silver
70	08-036	Bellevue College	Student Housing	$ 31,406,878	135,100	Silver (Goal)
71	14-008	Columbia Basin College	WLSS World Language Social Science	$ 14,500,000	87,549	Silver (Goal)
72	16-094	Community Colleges of Spokane	Gymnasium Building 7	$ 13,200,000	49,758	Silver (Goal)
73	16-036	Community Colleges of Spokane	Main Building South Wing Renovation	$ 18,000,000	57,000	Silver (Goal)
74	14-195	Dept of Commerce	Pacific Tower Improvement	$ 14,623,344	215,000	Silver (Goal)
75	10-456	Dept. of Social & Health Services	Echo Glen Children's Center	$ 7,772,938	28,140	Silver (Goal)
76	06-314 J	DOC	WA State Penitentiary: South Close Expansion: Warehouse	$ 5,280,384	21,600	Silver (Goal)
77	10-355	DOC	WA State Penitentiary: Victor Unit	$ 20,756,600	47,487	Silver (Goal)
78	10-355	DOC	WA State Penitentiary: William Unit	$ 20,756,600	47,487	Silver (Goal)
79	14-064	Edmonds Community College	SET	$ 27,000,000	75,690	Silver (Goal)
80	12-051	Green River CC	Student Life Building	$ 20,220,000	65,000	Silver (Goal)
81	12-909	Green River CC	Trades Replacement Project	$ 21,858,629	70,000	Silver (Goal)
82	12-001	Lower Columbia College	Myklebust Gym Renovation	$ 79,433,868	34,654	Silver (Goal)
83	09-146	Peninsula College	Allied Health & Early Childhood Dev. Center	$ 26,512,202	42,000	Silver (Goal)
84	14-062	Renton Technical College	Automotive Complex	$ 15,721,000	17,600	Silver (Goal)
85	10-008	Seattle Central College	Seattle Maritime Academy	$ 19,747,736	27,500	Silver (Goal)
86	14-931	Wenatchee Valley College	Wells Hall Replacement Pre-Design	$ 33,984,000	69,550	Silver (Goal)
87	11-135	Whatcom Community C	Student Recreation Pavillion	$ 9,250,000	41,974	Silver (Goal)
88	08-036	Bellevue College	Health Sciences Bldg - T Building	$ 21,453,000	59,000	Silver (Goal)
89	06-312	Corrections, Dept. of	Mission Creeck Correctional Center -120 Bed	$ 262,064		Exemption
90	10-033	Highline Community College	Building 9	$ 1,809,695	11,700	Exemption
91	12-050	Peninsula College	Fort Worden Building 202	$ 4,455,000	14,000	Exemption
92	06-481	Social and Health Services, Dept. of	Green Hill School - IMU Building	$ 560,239		Exemption
93	05-162	Walla Walla Community College	Clarkston Health Science Bldg.	$ 1,936,000	9,200	Exemption
94	07-203	Washington State Patrol	Fire Training Academy	$ 2,223,234		Exemption
95	06-133	Yakima Valley College	Brown Dental Clinic Renovation	$ 4,315,231	14,770	Exemption
96	10-283	Olympic College (late submittal)	College Instruction Center	$ 43,495,506	72,000	Gold (Goal)
97						

No. of LEED Projects that are Certified:

Certified	Exempt	Pending
82	15	41

State LEED Projects 2015-2016

Ref #	Project #	University/State College	Non-DES Managed Projects	Estimate	Footage	Status
	NA	University of Washington	Joy Building	$ 28,500,000	46,238	LEED Platinum
100	NA	Central Washington University	Barto Hall		121,456	Platinum (Goal)
101	NA	Central Washington University	Dean Hall Science Building	$ 18,038,328	79,095	LEED Gold
102	NA	Central Washington University	Hogue Technology Building		95,996	LEED Gold
103	NA	Eastern Washington University	Hargreaves Hall Renovation	$ 9,292,000	45,172	LEED Gold
104	NA	Eastern Washington University	University Recreation Center			LEED Gold
105	NA	Evergreen State College	Seminar II		159,524	LEED Gold
106	NA	University of Washington	Business Hall (formerly Balmer)	$ 46,800,000	70,518	LEED Gold
107	NA	University of Washington	Clark Hall	$ 9,000,000	30,568	LEED Gold
108	NA	University of Washington	Floyd & Delores Jones Playhouse	$ 5,660,000	13,554	LEED Gold
109	NA	University of Washington	Philip Hall		20,250	LEED Gold
110	NA	Evergreen State College	Campus Activities Building	$ 14,000,000	100,500	LEED Gold
111	NA	Washington State University	Vancouver Engineering & Computer Science Bldg		60,364	LEED Gold
112	NA	Washington State University	Vancouver Undergraduate Building		58,811	LEED Gold
113	NA	Western Washington University	Miller Hall	$ 35,801,240	133,117	LEED Gold
114	NA	University of Washington	Savery Hall	$ 36,200,000	102,105	LEED Gold
115	NA	Central Washington University	Health Sciences	$ 52,500,000	72,200	Gold (Goal)
116	NA	Central Washington University	Samuelson STEM		110,286	Gold (Goal)
117	NA	Eastern Washington University	Martin Williamson Hall	$ 27,000,000	70,000	Gold (Goal)
118	NA	Eastern Washington University	Patterson Hall Renovation	$ 26,440,529	54,300	Gold (Goal)
119	NA	Eastern Washington University	University Science Center - Phase I	$ 75,423,000	90,374	Gold (Goal)
120	NA	Washington State University	Clean Technology Laboratory Bldg.		96,000	Gold (Goal)
121	NA	Evergreen State College	Lab I - First Floor Renovation	$ 6,500,000	28,120	LEED Silver
122	NA	Central Washington University	Physics & Geological Science Facility		109,089	Silver (Goal)
123	NA	Dept. of Transportation	Anacortes Ferry Terminal			Silver (Goal)
124	NA	Dept. of Transportation	Mukilteo Ferry Terminal	$ 5,853,000	8,400	Silver (Goal)
125	NA	Dept. of Transportation	Seattle Ferry Terminal	$ 4,388,000	34,655	Silver (Goal)
126	NA	Dept. of Transportation	SR 520 Bridge Maintenance Facilities			Silver (Goal)
127	NA	Washington State University	Biomedical and Health Science Bldg			Silver (Goal)
128	NA	Washington State University	Compton Union Building			Silver (Goal)
129	NA	Washington State University	Olympia Avenue Student Housing Project			Silver (Goal)
130	NA	Western Washington University	Buchanan Tower Additions (Student Residence)			Silver (Goal)
131	NA	Western Washington University	Academic Instruction Center			CERTIFIED
132	NA	Western Washington University	Student Recreation Center		98,300	CERTIFIED
133	NA	City of Bellingham	Bellingham Federal Building	$ 4,200,000	39,218	Exemption
135	NA	Foss Waterway Seaport/Fort Vancouver National Trust	Balfour Dock Building	$ 915,272		Exemption
136	NA	Grays Harbor Historical Seaport	Seaport Landing	$ 5,314,483	32,910	Exemption
137	NA	Historic Seattle	Washington Hall Restoration			Exemption
138	NA	Pacific Science Center	Yamasaki Courtyard Restoration		55,000	Exemption
139	NA	WSDOT	Alaskan Way Viaduct			Exemption
140	NA	Washigntion State Ferries	Eagle Harbor Maintenance Facility	$ 12,329,800	39,320	Exemption
141	NA	Fort Vancouver National Trust	Quartermaster & Denatal Surgery Renovation Project	$ 960,272	3,365	Exemption
				$2,283,701,647	6,911,982	

Key		Points
LEED Platinum	🟩	52+
LEED Gold	🟧	39-51
LEED Silver	🟦	33-38
LEED Certified	🟪	26-32
Exempt	⬛	

June 23, 2016

Sustainable Buildings Report

Reported by: Dena Harris, ESDS Program Manager
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Overview

Affordable housing projects funded through the state capital budget are exempt from the LEED Silver requirement. However, the Evergreen Sustainable Development Standard (ESDS) is required of projects funded with capital bond proceeds through the Washington State Housing Trust Fund (HTF).

To build the ESDS, a committee of technical experts in the field of sustainable development was created to meet and recommend an existing green building standard. The committee chose the Green Communities Criteria, a national affordable housing green building standard developed by Enterprise Community Partners. Modifications were needed in order to accommodate the diversity of projects funded by the Housing Trust Fund and to focus the criteria on building practices, codes, climate and communities in Washington State. The ESDS has been reviewed by HTF stakeholders with widespread agreement that this standard is the best direction for affordable housing sustainable development in Washington State.

The ESDS contains 82 criteria that safeguard health and safety, increase energy and water efficiency, promote sustainable living, and preserve the environment. In addition to complying with all mandatory requirements of the ESDS, new construction projects must achieve 50 points from the optional criteria, while rehabilitation projects must achieve 40 points.

Beginning in January 2015, the HTF conducted a public revision process of the ESDS. Revisions to the Green Communities' standard, as well as updates to the Washington State Energy Code, prompted the need for updates to the ESDS. HTF staff engaged in a series of extensive discussions with sustainable building experts, and two public comment periods, in order to gather input for the revision of the ESDS. At the conclusion of this process, ESDS version 3.0 was published in February 2016. The ESDS Criteria, forms and instructions, and other information can be found at http://www.commerce.wa.gov/evergreen.

Training Efforts

- In the fall of 2015, HTF staff collaborated with Green Communities to host a joint training regarding upcoming changes to both standards. The all-day training was held in Seattle and open to affordable housing stakeholders in Washington.
- In the spring of 2016, a public webinar was conducted regarding the principles of sustainable development as it relates to the updates to the ESDS. The webinar was provided to HTF staff, stakeholders, public funders and construction verifiers.

Projects

Since the inception of the ESDS in June 2007, 171 affordable housing projects have complied with the ESDS criteria. Below is a complete project list. "Commitment Period" indicates the date the project construction was complete and 90% occupied. "Awarded" indicates the project has received Housing Trust Fund dollars but the contract has not been executed yet. "Executed" indicates that the project is currently in construction.

Project Name	Housing Units	New Construction or Rehab	Status	ESDS version
Mukai Commons	20	Substantial Rehab	Commitment Period	1.3
McCallister Village	48	New Construction	Commitment Period	1.3
Villa los Milagros	74	New Construction	Commitment Period	1.3
Bishop Topel Haven	43	New Construction	Commitment Period	1.3
Salishan 6	90	New Construction	Commitment Period	1.3
Wonderland Estates	109	Moderate Rehab	Commitment Period	1.3
Wanity Park Apartments II	25	Moderate Rehab	Commitment Period	1.3
Reliable Place	24	New Construction	Commitment Period	1.3
Andrews Glen	41	New Construction	Commitment Period	1.3
Sandy Acres Preservation	18	Substantial Rehab	Commitment Period	1.3
Brettler Family Place	52	New Construction	Commitment Period	1.3
YWCA Family Village Issaquah	98	New Construction	Commitment Period	1.3
Olympia Crest Phase II	24	New Construction	Commitment Period	1.3
KCR Transitional Housing	6	Substantial Rehab	Commitment Period	1.3

Shove House	9	New Construction	Commitment Period	1.3
Gateway Garden	32	Moderate Rehab	Commitment Period	1.3
Valle Lindo One	60	New Construction	Commitment Period	1.3
Francis Village	60	New Construction	Commitment Period	1.3
Scargo Hotel	48	Substantial Rehab	Commitment Period	1.3
Salishan Gardens	54	New Construction	Commitment Period	1.3
Lincoln Terrace	12	New Construction	Commitment Period	1.3
White Caps Apartments	16	New Construction	Withdrawn	1.3
Northwest Estates II	17	New Construction	Commitment Period	1.3
SSHP Rehabilitation	28	Moderate Rehab	Commitment Period	1.3
The Summit at Bay Vista	83	New Construction	Commitment Period	1.3
Joseph Cove Apartments	18	Substantial Rehab	Commitment Period	1.3
Welcome Home Project	32	Substantial Rehab	Commitment Period	1.3
Fairview I	24	Substantial Rehab	Commitment Period	1.3
McKena Lane Project	5	New Construction	Commitment Period	1.3
Meridian Manor Apartments	109	Substantial Rehab	Commitment Period	1.3
Olympus Hotel	49	Substantial Rehab	Commitment Period	1.3
FFC Community Housing V	3	Moderate Rehab	Commitment Period	1.3
Lavender Hollow	22	Substantial Rehab	Commitment Period	1.3
Teekalet	10	New Construction	Commitment Period	1.3
Elm Street Apartments	9	Substantial Rehab	Commitment Period	1.3
Edison Terrace South	15	New Construction	Commitment Period	1.3
Holly Creek Housing	18	Substantial Rehab	Commitment Period	1.3

Kensington Court	33	Substantial Rehab	Commitment Period	1.3
Centerstone	17	New Construction	Commitment Period	1.3
Appleway Court	38	New Construction	Commitment Period	1.3
Adams Street Family Campus	16	New Construction	Commitment Period	1.3
Ringold Seasonal Farmworker Housing	97	New Construction	Commitment Period	1.3
The Willows at Melvin Place	8	New Construction	Commitment Period	1.3
YWCA Family Village Issaquah	48	New Construction	Commitment Period	1.3
Catherine of Siena Village	30	New Construction	Commitment Period	1.3
Providence Joseph House	65	New Construction	Commitment Period	1.3
Gethsemane Redevelopment	50	New Construction	Commitment Period	1.3
Salishan Seven	91	New Construction	Commitment Period	1.3
Gossett Place	62	New Construction	Commitment Period	1.3
Urness House	80	New Construction	Commitment Period	1.3
Terry Home II	12	New Construction	Commitment Period	2.0
Tierra Vida Phase 1C	6	New Construction	Commitment Period	1.3
Oroville Harvest Park	76	New Construction	Commitment Period	1.3
Cosecha Court	77	New Construction	Commitment Period	1.3
Williams Apartments	84	New Construction	Commitment Period	1.3
Velocity	58	New Construction	Commitment Period	2.1
Eklund Heights I	13	New Construction	Commitment Period	2.0
Sprague Union Terrace	37	New Construction	Commitment Period	2.0
Clare View Senior	61	New Construction	Commitment Period	2.0
Lariat Gardens	43	New Construction	Commitment Period	2.0

Artspace Mt. Baker Lofts	57	New Construction	Commitment Period	2.0
12th Avenue Arts	88	New Construction	Commitment Period	2.0
Patrick Place Apts	71	New Construction	Commitment Period	2.0
Cherry Park Apartments	14	New Construction	Commitment Period	2.0
Cottage Grove Commons	66	New Construction	Commitment Period	2.0
Youth Haven	17	New Construction	Commitment Period	2.0
2500 Hillside Terrace Phase I	70	New Construction	Commitment Period	2.0
Tierra Verde	4	New Construction	Commitment Period	2.0
Crossroads Housing & Shelter	7	New Construction	Commitment Period	2.0
Cedarstone Apartments	14	Moderate Rehab	Commitment Period	2.0
Pine Meadows Senior Housing	10	New Construction	Commitment Period	2.0
Hudesman House	14	New Construction	Commitment Period	2.0
Appleway Court II	24	New Construction	Commitment Period	2.0
Emerald City Commons	61	New Construction	Commitment Period	2.0
Casa Kino	51	New Construction	Commitment Period	2.0
Spring Street	19	Substantial Rehab	Commitment Period	2.0
Hoffman Apartments	16	Moderate Rehab	Commitment Period	2.0
Seventh Adult Family Home	5	Moderate Rehab	Commitment Period	2.0
Esperanza - Phase 2	128	New Construction	Commitment Period	2.0
Evergreen Homes I	3	Moderate Rehab	Commitment Period	2.0
Frances Haddon Morgan	4	Moderate Rehab	Commitment Period	2.0
Towne Square Apartments	40	Substantial Rehab	Commitment Period	2.0
Three Rivers Village	41	Moderate Rehab	Commitment Period	2.0

DeSoto Senior Housing	13	New Construction	Commitment Period	2.0
Nativity House	145	New Construction	Commitment Period	2.0
Francis Place	42	New Construction	Commitment Period	2.0
Josephinum Rehab - Phase I	50	Moderate Rehab	Commitment Period	2.0
Carson Springs Apartments	8	New Construction	Commitment Period	2.0
Marcus Place	18	Moderate Rehab	Commitment Period	2.0
Caroline W.	46	New Construction	Commitment Period	2.0
Valor Apartments	21	New Construction	Commitment Period	2.0
Pear Blossom Place	7	New Construction	Commitment Period	2.0
FFC Homes VII	3	Moderate Rehab	Commitment Period	2.0
Northwest Corner	30	Moderate Rehab	Commitment Period	2.0
Pivotal Point Apartments	20	New Construction	Commitment Period	2.0
Fourth and Pearl	38	New Construction	Executed	2.2
Kirkland Avenue Townhomes	18	New Construction	Awarded	2.0
Leschi House Redevelopment	69	New Construction	Commitment Period	2.0
Rainier Park	40	New Construction	Executed	2.2
Prairie Oaks	15	New Construction	Commitment Period	2.0
1st Street Apartments	152	New Construction	Commitment Period	2.0
Valle Lindo Two	68	New Construction	Commitment Period	2.0
Harmony Park	24	Moderate Rehab	Awarded	2.0
Monroe Family Village	47	New Construction	Commitment Period	2.0
Frances Haddon Morgan II	4	Moderate Rehab	Commitment Period	2.0
Villa Kathleen, Evergreen Manor & Fircrest Apartments	27	Moderate Rehab	Commitment Period	2.1

Randall Townsend	35	Moderate Rehab	Commitment Period	2.0
Independence Bridge	25	New Construction	Commitment Period	2.0
The Outpost	4	Moderate Rehab	Commitment Period	2.0
Quixote Village	30	New Construction	Commitment Period	2.0
Sylvia's Place	64	New Construction	Commitment Period	2.1
Parkside Place	16	Substantial Rehab	Commitment Period	2.0
West Indiana Street	4	Moderate Rehab	Commitment Period	2.0
Des Moines Family Housing	43	New Construction	Commitment Period	2.0
Sail River Longhouse	21	New Construction	Commitment Period	2.0
MLK Family Housing	86	New Construction	Executed	2.0
Filbert Road	20	New Construction	Executed	2.0
Charter House	30	Moderate Rehab	Commitment Period	2.2
Harbor Manor Apartments	24	Moderate Rehab	Commitment Period	2.0
Emerson Manor	35	Moderate Rehab	Commitment Period	2.0
Wenatchee House	50	Moderate Rehab	Commitment Period	2.0
Naches House	51	Moderate Rehab	Commitment Period	2.0
PROVAIL TBI	12	New Construction	Executed	2.2
Carrie House	4	New Construction	Commitment Period	2.0
The Haines Apartments	30	Moderate Rehab	Commitment Period	2.2
Granger Family Housing	51	New Construction	Executed	2.2
Bakerview Family Housing	50	New Construction	Executed	2.2
FFC Community Homes VIII	3	Moderate Rehab	Commitment Period	2.2
Kirkland Campus Young Adult Transitional	10	New Construction	Commitment Period	2.0

Skagit County Seasonal Farmworker Housing	14	New Construction	Awarded	2.2
Sequim - DD Home	6	Moderate Rehab	Executed	2.2
Federal Way Veterans	45	New Construction	Awarded	2.2
Parkview Homes Xl	3	Moderate Rehab	Commitment Period	2.2
Tall Firs	39	Substantial Rehab	Executed	2.2
Brender Creek Seasonal Farmworker Housing	201	New Construction	Commitment Period	2.2
Guadalupe Haven	86	New Construction	Executed	2.2
Devoe II Housing	50	New Construction	Executed	2.2
University Commons	49	New Construction	Executed	2.2
Building 9	67	Substantial Rehab	Executed	2.2
Aloha Inn Rehab	73	Moderate Rehab	Commitment Period	2.2
Whitman Homes for People with Disabilities	4	New Construction	Executed	2.2
Lyon Building Rehab	64	Moderate Rehab	Commitment Period	2.2
FFC Homes IX	3	Moderate Rehab	Executed	2.2
Lugar Seguro II	97	New Construction	Commitment Period	2.2
Esperanza Phase III	128	New Construction	Awarded	2.2
Woodlake Manor III	24	Moderate Rehab	Executed	2.2
Olympia Commons	41	New Construction	Executed	2.2
Parkview Homes XI	3	Moderate Rehab	Executed	2.2
7th and Cherry	79	New Construction	Executed	2.2
South Medalia	36	New Construction	Awarded	2.2
Eleanor Apartments	80	New Construction	Awarded	2.2

Arcadia Auburn	27	New Construction	Awarded	2.2
Walla Walla Community Teen	6	New Construction	Awarded	2.2
Liberty Bank Building	115	New Construction	Awarded	2.2
Prosser Senior Housing	61	New Construction	Awarded	2.2
Fr. Bach Haven III	51	New Construction	Awarded	2.2
Estelle Supportive Housing	91	New Construction	Awarded	2.2
New Ground Sand Point	7	Moderate Rehab	Awarded	2.2
Connell Family Housing	50	New Construction	Awarded	2.2
Glenwood Apartments	46	Substantial Rehab	Awarded	2.2
Linden Place	31	Substantial Rehab	Awarded	2.2
The Chalet Apartments	78	New Construction	Awarded	2.2
Parkview Homes XII	3	Moderate Rehab	Executed	2.2
Mt Angeles View Phase I	63	New Construction	Awarded	2.2
Athene	60	New Construction	Commitment Period	2.2
Rainier Court Phase IV	97	New Construction	Awarded	2.2
WGL Mattawa	121	New Construction	Awarded	2.2
YouthCare Pathways and Passages	19	Moderate Rehab	Awarded	2.2
South Hill Park Homes Sunnyside	10	New Construction	Awarded	2.2
Sun Rise Phase 2	12	Moderate Rehab	Commitment Period	2.2
University District Apartments	80	New Construction	Awarded	2.2

Lessons Learned

- In affordable housing, additional upfront costs can result in the reduction of homes that a project can provide for Washington’s most volunerable citizens. However, if additional upfront costs result in a quantifiable payback to the project through operations, then investing in those strategies should be an option. In 2014-2015, the HTF staff collaborated with the Washington State Energy Office and the HTF Policy Advisory Team subcommittee to modify a life-cycle cost tool that was developed by the Office of Financial Management (OFM) to address the particulars of affordable housing projects. The ESDS now has a criterion which encourages the use of the tool by granting optional points and training for the tool is available on OFM's website. Life-cycle thinking encourages projects to identify performance based solutions at the beginning of the design process that will result in reducing energy and water consumption and operating and maintenance costs.

- Although energy metering is required for all new construction and substantial rehabilitation projects, monitoring and reporting energy and water performance data to the HTF is optional. Through analysis of HTF project data, it was determined that over a four year period only 39% of Housing Trust Fund projects chose to comply with this optional criterion. In response, revisions were made to the criterion to expand options and make it more attainable for projects.

Recommended Improvements to the Legislation

None

Metering Efforts and Challenges

Electricity metering is required for all new construction and substantial rehabilitation projects. However, exemptions are given to shelters, single room occupancy, designated supportive housing dwelling units, and seasonal farmworker projects. These types of projects experience high turnover and metering creates a significant cost and administrative burden for the owner.

Although most ESDS projects are individually metered, Commerce does not own or operate affordable housing units and therefore does not require the collection of actual energy usage data. However, as stated in the lessons learned section, revisions were made to the optional criterion which encourages monitoring and reporting energy and water performance data.

GOVERNING
THE STATES AND LOCALITIES

MANAGEMENT & LABOR

Why an Unmowed Capitol Lawn Could Be a Sign of Good Management

Sometimes the most efficient thing to do is to *not* do something.

BY DANIEL C. VOCK | JUNE 23, 2016

A groundskeeper outside the Washington state Capitol. *(Washington state Department of Enterprise Services)*

When groundskeepers on Washington state's capitol campus were asked how they would improve efficiency, they came up with an unorthodox idea: Stop cutting the grass.

The grounds crew explained that by spending less time mowing, they would have more time for other things, like making the rest of the state government campus more sustainable. Letting the grass grow also helps carry out Gov. Jay Inslee's goals for improving the state's environmental practices. Cutting back on mowing and other maintenance could reduce the amount of water used as well as the amount of fertilizer, pesticides and fossil fuels required for the upkeep.

So starting this spring, workers got the go-ahead to test the idea at a few out-of-the-way places around Olympia's state government complex. In some fields, the grass is now knee-high. In others, the crews replaced grass with a special mix of durable wildflowers.

Signs with QR codes explain why the patches are unkempt, and people who scan the code can let the state Department of Enterprise Services know what they think of the changes. The responses show a clear love-it-or-hate-it divide, with two-thirds reacting positively.

The operational benefits are clear: Crews are using just one-tenth of the fertilizer and pesticides for the unmowed areas as they would normally; they don't have to irrigate the unmowed patches; and they expect to free up 115 hours this year that were previously spent mowing.

That's crucial as Washington, facing tight budgets like other states, reduced the number of groundskeepers in the last decade from 21 to 16.

The experiment is an outgrowth of Lean, a management process championed by the governor and based on a system for manufacturing improvements developed by Toyota. It has gained popularity in both business and government because it's a collaborative, incremental way to improve quality and increase efficiency. The Lean approach is a departure from the traditional approach of leaving decisions to top staff.

"The employees are the ones we depend on to really put forward the ideas," said Chris Liu, Washington's director of enterprise services. "Instead of having just 10 percent of the people participating, we wanted to have 100 percent of the people participating. This project is one of the outcomes of having everyone participate."

In fact, the decision to let the lawn grow is only one of many new practices suggested by employees since Lean practices were adopted three years ago. Groundskeepers at government properties around Olympia are now mulching trees and scouring for cardboard in dumpsters to produce weed- and erosion-preventing coverings for its gardens. They replaced roses with hundreds of dahlias in one place because dahlias are less susceptible to bug infestations and less attractive to deer.

Grounds crews have also introduced mason bees to help pollinate the capitol campus' flowers. Mason bees sting less than honey bees and work better in cool or wet weather. The agency recently also helped the governor install two beehives to house 30,000 honeybees on the grounds of the executive mansion, which are believed to be the first in the country placed at a governor's residence.

"These trials are not happening in isolation," said Brent Chapman, the horticulturalist for the capitol campus, whose position was created just two years ago.

Indeed, the improvements have opened the door to lots of collaborations with nearby organizations. A Kiwanis group, for instance, started a garden on the capitol campus to grow vegetables for a food bank. The volunteers farm 26,000 square feet and generate 11,000 pounds of produce a year. Meanwhile, local beekeepers are working with the state to maintain the hives at governor's mansion

Even the governor has taken an active interest in the new projects. Inslee sent a letter of thanks to the grounds crews for their innovations and met with some of the workers to talk about future plans.

"I've worked for a lot of governors," said Liu. "This is the first time I've ever had a governor meet with the groundspeople, get their ideas and laud them for coming up with new innovations."

http://www.governing.com/topics/mgmt/gov-washington-capitol-lawn-lean-management.html

Appendix B: Case Study Gallery

1. Bellevue College *Science & Technology Bldg.*	LEED Gold 2010
2. Bellingham Technical College *Campus Center*	LEED Gold (pending)
3. Bellingham Technical College *Perry Center*	LEED Silver (pending)
4. Centralia College *Walton Science Center*	LEED Gold 2009
5. Central Washington University *Dean Hall*	LEED Gold 2010
6. Clark College *Columbia Tech Center*	LEED Gold 2010
7. Coyote Ridge Correctional Facility	LEED Gold 2010
8. Mission Creek Corrections Center	LEED Silver 2009
9. Enterprise Services *1063 Bldg.*	LEED Platinum (pending)
10. Enterprise Services *O'Brien Bldg.*	LEED Gold 2014
11. Everett Community College *Gray Wolf Hall*	LEED Silver 2009
12. Lower Columbia College *Myklebust Gymnasium*	LEED Silver (pending)
13. Lower Columbia College *Health and Science Bldg.*	LEED Gold (pending)
14. Military Dept. *Washington Youth Academy*	LEED Silver 2009
15. Olympic College *Humanities and Student Services*	LEED Gold 2011
16. Peninsula College *Maier Hall*	LEED Gold 2012
17. Skagit Valley College *Lewis Hall*	LEED Gold 2015
18. Skagit Valley College *Science & Allied Health*	LEED Platinum 2010
19. Spokane Falls Community College *sn-w'ey'-mn Hall*	LEED Gold 2008
20. South Puget Sound Community College *ScienceBldg.*	LEED Gold 2010
21. Tacoma Community College *Early Learning Center*	LEED Gold 2009
22. Center for Childhood Deafness and Hearing Loss *Vocational Education and Support Bldg.*	LEED Gold 2015

Late Entry:

23. Olympic College *College Instruction Center*	LEED Gold (pending)

Bellevue College Science and Technology Building LEED Gold

Project Specifics

Gross square footage:	62,882 sf
Construction cost:	$27,633,886
Project occupied:	12/2008
Energy savings:	$20,600 /14.1%
Water savings:	49.8%
Waste recycled:	98 %
Added LEED cost*:	$129,000.
Incentives:	$62,800
LEED Payback**:	6.3 years
CO_2 savings:	not available
Awarded	LEED Gold - 2010

Design and Construction Team

Owner's representative:	Dave Maxwell, Bellevue College
Project manager:	Bob Colasurdo, DES
Architect:	Miller Hull Partnership
Structural engineer:	AHBL
Mechanical engineer:	Hargis Inc.
Civil engineer:	Coughlin Porter Lundeen, Inc.
Electrical engineer:	Sparling
Landscape architect:	Berger Associates
LEED consultant:	O'brien & Associates
General contractor:	M.A. Mortenson Company

Completed in March 2009 and officially designated the "S Building," the three-story, 62,882 square-foot facility houses five high-tech classrooms for life sciences and chemistry classes.

In awarding the Gold LEED rating, the Council cited the S Building's numerous "green" aspects:

1. Heating loss-reducing designs for roof, wall and window construction, and heats with high-efficiency, water-source heat pumps.
2. Brings natural light into 91 percent of its interior space, and uses room-occupancy sensors to turn lights off when not needed.
3. Low-flow fixtures in laboratories, showers and restrooms, and promotes water quality through a landscaping design that enables water to drain naturally to the Kelsey Creek watershed.
4. Electricity from renewable sources for more than one-third of its power needs, using recycled materials in more than one-fifth of its construction and achieving a 98 percent reduction in the amount of construction waste sent to landfills.
5. Utilizes outdoor air for interior ventilation, a maximum-volume air circulation system, and low-emission paint, carpeting and sealants.
6. Uses cooling and appliance refrigerants that minimize or eliminate emissions that contribute to ozone depletion and global warming.
7. Reflects solar heat back into the atmosphere – through use of low-reflective materials in its roof and sidewalks.

Sustainable Sites

Land Improvement: 57 percent of the previously developed site not included in the building footprint has been restored with native plantings.

Alternative Transportation: Bellevue College is served by 4 bus lines with 0.25 miles of the site. Bicycle storage, shower/changing facilities and racks have been provided.

Light pollution Reduction: The project is located in a campus setting and is compliant with LEED-NC for multiple buildings and On-Campus Building Projects.

Water Efficiency

Irrigation: The installed irrigation system reduce potable water consumption by 50.8 percent from baseline.

Water Efficient Fixtures: The project utilizes ultra-low flow urinals, dual flush toilets and low flow lavatories, showers and kitchen sinks for a 50.8 percent reduction from baseline.

Energy and Atmosphere

Natural Light: Direct Line of sight views for 91 percent of all regularly occupied areas has been provided.

Heating and Cooling: Energy efficient methods include an improved thermal envelope, high efficiency glazing, reduced lighting power density, occupancy sensors and high efficiency water source heat pumps.

Lighting: Multi-shared and individual work stations have been provided with occupancy sensors, override on-off switches, and multi-level lighting controls,

Material and Resources

Occupant Recycling: The facility has been provided with appropriately sized dedicated areas for the collection and storage of recycling materials, including cardboard, paper, plastic and glass.

Recycle Materials: Parking lot asphalt demolished for the construction of the building was 100 percent recycled.

Local Materials: 11.6 percent of total building materials and/or products have been extracted, harvested, or recovered, as well as manufactured within 500 miles of the project site.

Indoor environmental quality

Low-Emitting Materials: All indoor paint and coating products comply with the VOC limits of Green Seal and SCAQMD standards. Low emitting materials include adhesives and sealants, paints and coatings, carpet systems, composite woods and Agrifiber.

Innovation in Design

Education: The project includes an educational display highlighting the building's sustainable design features as well as an educational outreach program.

Green Cleaning: The College has committed to LEED –NC v2.1 IDc1.1 CIR ruling for achievement of a Green Housekeeping program.

Innovation & Design

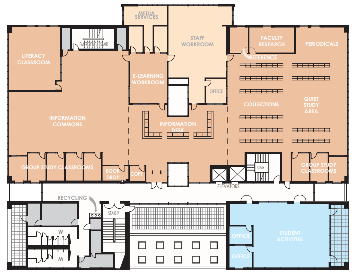
- Recycling Center
- Sustainable Interpretation
- Donor Recognition
- Master Plan Alignment

A recycle sorting center at the northwest corner of Campus Center improves recycling accessibility and visibility to promote campus recycling.

Educational plaques throughout Campus Center allow insight into the sustainable design practices implemented in the Campus Center design.

The West Lobby serves as home to an assembly of stainless steel plaques showcasing the many gracious donors who, through the Bellingham Technical College Foundation, supported the realization of Campus Center. Settlemyer Hall, the college's first-ever large auditorium, is named in honor of Campus Center's largest contributor: the Estate of Earl Settlemyer.

The design of Campus Center coincides with Bellingham Technical College's 20-year Master Plan for development, sustainability, continuity, connectivity, landscaping, and storm water management strategies. The rain garden design and courtyard patterning is intended to be replicated as the college develops to the west, ensuring a cohesive campus for BTC faculty and students.



THIRD FLOOR

SECOND FLOOR

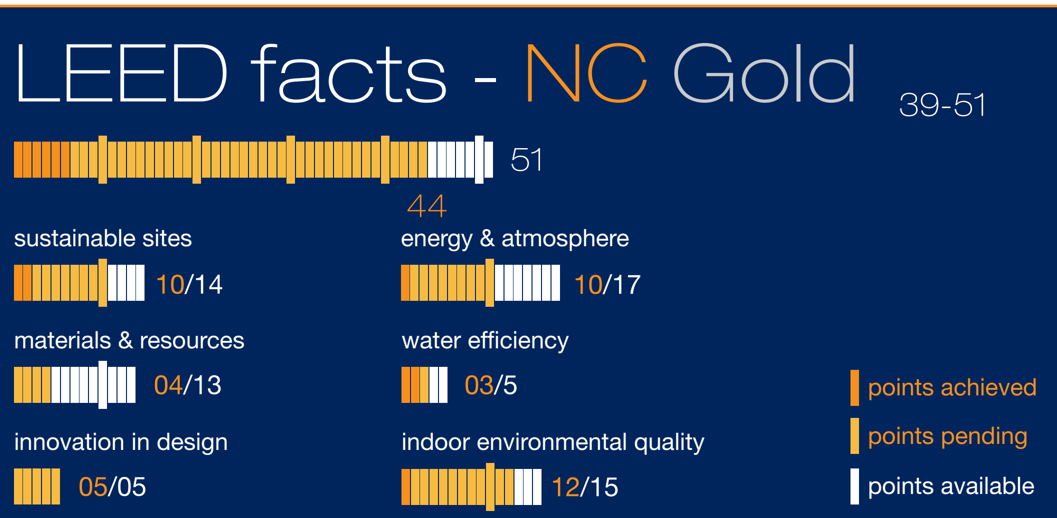
FIRST FLOOR

LEGEND

- 🟧 SHARED/CLASSROOM SPACE
- 🟪 CULINARY ARTS
- 🟥 CAMPUS STORE
- 🟩 COMPUTER NETWORKING
- 🟩 BUSINESS COMPUTER INFORMATION SYSTEMS (BCIS)
- 🟧 LIBRARY
- 🟦 STUDENT ACTIVITIES
- 🟨 SUPPORT
- ⬜ FACILITIES

NORTH

LEED facts - NC Gold



Ratings and Awards:
LEED Gold (pending)

Team:

OWNER
State of Washington
AGENCY
Bellingham Technical College
ARCHITECT
HKP architects
LANDSCAPE ARCHITECT
SvR Design Company
MECHANICAL ENGINEER
Notkin
CIVIL ENGINEER
Wilson Engineering
STRUCTURAL ENGINEER
AHBL
ELECTRICAL ENGINEER
Travis Fitzmaurice Associates
GEOTECHNICAL
Merit Engineering
COST ESTIMATING
The Woolsey Company
SIGNAGE
BrandQuery
HARDWARE
Adams Consulting & Estimating
KITCHEN
Bundy and Associates
AUDIO/VISUAL
AVC Consulting
GENERAL CONTRACTOR
Exxel Pacific

Sustainable design principles have always been at the heart of our design decisions, particularly when it comes to natural ventilation, passive solar strategies, light, views and material expression in the Pacific Northwest. HKP architects actively incorporates sustainable design principles in all of our work and we help clients understand the long-term benefits to our environment and to their operation and maintenance costs.

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314 Pine Street, Suite 205
Mount Vernon, Washington 98273

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HKP architects

CASE STUDY

hkpa.com

CAMPUS CENTER

Bellingham Technical College

LEED Gold Pending

Project Overview

On a site which was previously occupied by four deficient, single-story buildings, the new Campus Center combines seven different programs and services within one uniform and highly efficient building. Located along the campus' circulation core, it serves as a new activity hub providing a large green space and courtyard for both the campus community and the neighborhood community to enjoy. The Campus Center, which opened in Fall 2012, is targeted to achieve LEED Gold.

Campus Center is designed around three major axes: the lower student parking lot from the north, the campus core circulation to the south, and the future Master Plan development to the west. The building also connects to Building G on the east providing new expansion to the Culinary Arts program.

The program includes: a large group instruction hall, conference spaces and expanded commercial and teaching kitchens on the ground floor; office space and classrooms on the second floor; and an expanded and upgraded library and the campus' first-ever student activities lounge on the third floor.

The building provides many spaces for both formal instruction and informal student collaboration outside of a traditional classroom setting. Outdoor balconies to the north and south offer views of Mount Baker and Bellingham Bay, respectively.

With consideration of the college's Master Plan, attentive material selection and environmental design, Campus Center provides a new sustainable campus core to the faculty, students and community alike.

PROJECT FACTS

Square Feet:
72,885, 3 story

Site/Building:
3.5 acres
(within larger campus)

Location:
Bellingham, WA

Construction Cost:
$268/sq. ft.

Total Cost:
$19.5 million

Completed:
Fall 2012

BELLINGHAM TECHNICAL COLLEGE

Testimonial

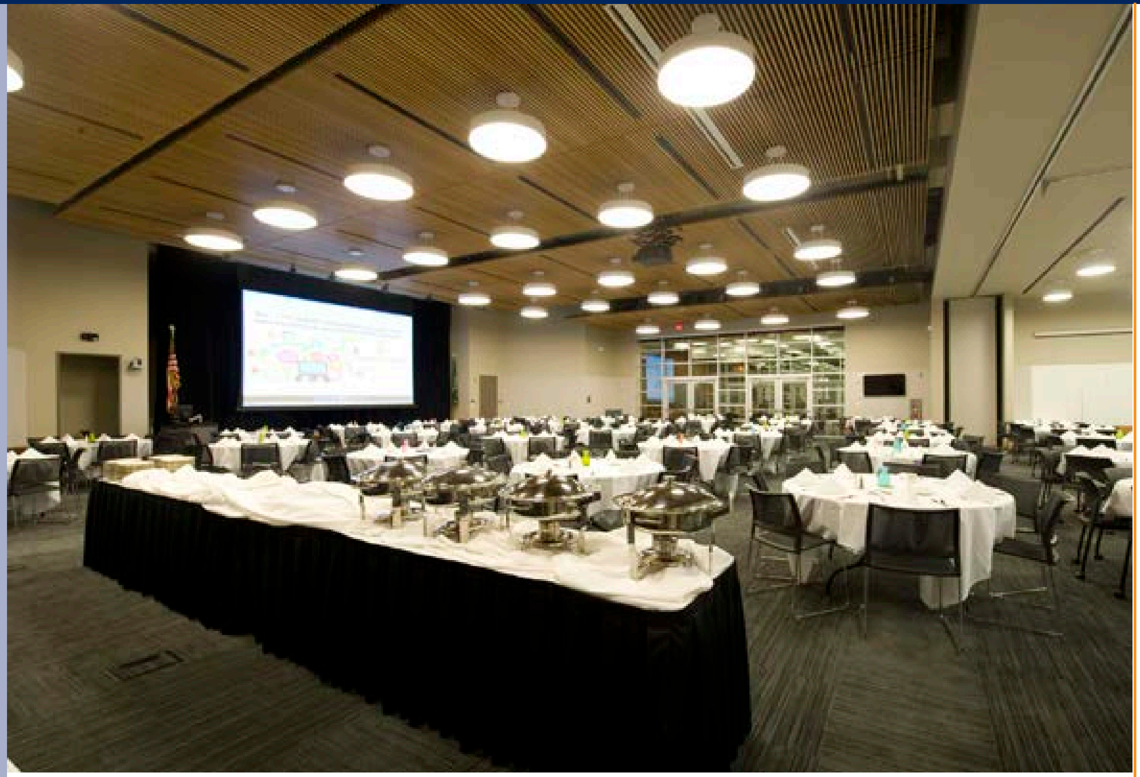
"BTC is thrilled to add this state of the art building to our campus. It allows us to continue to deliver high demand, high-tech education in updated facilities. This facility represents a major step in modernizing our campus and providing leading edge teaching and learning for today and tomorrow's workforce."

- Patricia McKeown,
President of
Bellingham Technical
College

Project Goals

"Beyond the basic program needs, the design goals were to create opportunities for interaction, to showcase the students at work, and to allow the public to engage with the BTC community on a regular basis to see first-hand the incredible environment that exists on campus. As part of the overall Master Plan, the Campus Center is pivotal in defining BTC as an extraordinary higher education place of learning, dedicated to advancement, achievement and sustainability."

- Julie Blazek,
HKP Architect



Design Approach

As an anchor for BTC, Campus Center consolidates many disjointed programs within one cohesive building at the campus core. The building is designed with respect to the campus' existing and future circulation, an open structural system and program organized according to occupants' needs for access, views, natural light, and air.

Attention to the campus' circulation encouraged a main circulation spine connecting the north and south entries. The circulation spine, distinguished by brick on the interior of the building, organizes the instructional spaces from the service areas. The building opens in the middle, by way of vertical light shafts and an entrance on the west elevation. This west elevation will become a main entry focus of the 20-year master circulation plan.

The structural system and program organization guided the design. Four major trusses were engineered to carry the loads while providing large open spaces for the Library and the Large Group Instruction space; these trusses are expressed throughout the interior and exterior of the building.

Priority is given to large public spaces such as the Library and Student Center. Located on the third floor, these spaces receive maximum daylight and unparalleled views of Puget Sound, Mount Baker, and the Canadian Cascades. The second floor is devoted to computer classrooms to support Computer Networking and Business Computer Information Software programs. Two light wells bring natural light from the third floor down to a casual study area and offices on the second floor. The ground floor is reserved for high activity areas such as the bookstore, culinary arts, restaurant, and the Large Group Instruction.

The north and south exposures were optimized with curtain walls providing maximum daylight to the adjacent programs, while the east and west walls were composed of solid masonry and fewer punched openings to provide the adjacent programs with relief from the hot east and west sun.

Exterior overhangs on the western and southern elevations not only provide protection from the elements, but also serve as a transition, connecting the large surrounding courtyards through to the main lobbies.

Energy & Conservation

Campus Center was designed with energy usage and conservation as a main priority with careful consideration of: construction waste, daylighting, green roofs, solar photo voltaic panels, storm water management, water-efficient fixtures and recycling.

Careful attention to design and construction allowed for 97% landfill diversion.

Daylighting studies conducted in collaboration with the Integrated Design Laboratory in Seattle helped optimize daylighting through a large center light well and roof monitors. The two large light wells drive natural light deep into the core of the building illuminating both the library on the third floor and the casual study area on the second floor.

A green roof visible from the third floor library and circulation spine opens up to the west, while the green roof on the main roof incorporates a series of roof monitors and an array of solar photo voltaic panels.

Rain gardens in the courtyard collect storm water, mitigating runoff during high-precipitation events.

Water-efficient plumbing fixtures were selected to minimize water consumption, while drinking-water refilling stations were provided to reduce the use of plastic bottles. Additionally, recycling areas within Campus Center promote accessible recycling.

Materials & Resources

The material selection focused on recycled content, recyclable products, durability, and contextual relevance.

Many of the materials are composed of recycled content, including the concrete, steel, drywall, and counter tops; the Cafe showcases reclaimed fir throughout. The concrete, brick, metal, and carpet were all selected for their recycling capacity. The linoleum flooring throughout Campus Center is natural, durable and recyclable while the concrete and steel will endure decades of high-use. To ensure Campus Center incorporates harmoniously with the existing campus, the exterior was clad in a similar brick to the surrounding buildings.

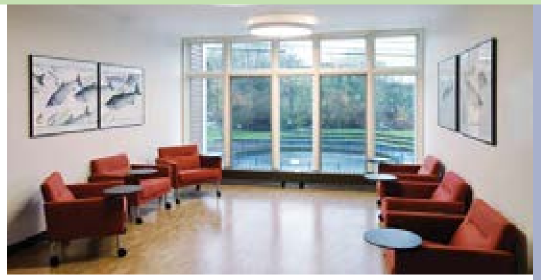
These attentive selections ensure Campus Center not only compliments the existing campus, but provides a resilient place for students and faculty for decades to come.

Future-Proofing: Towards Living Building Challenge

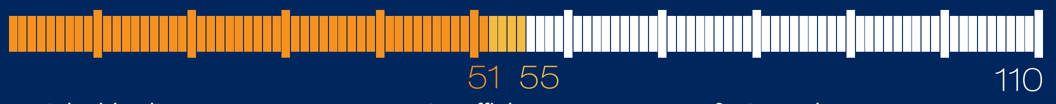
During the design process, the team looked at the potential for this project to meet the Living Building Challenge as well as other sustainable strategies. Due to budgetary constraints and code barriers, the strategies were not incorporated into the building, but many are still viable options to be added to the project at a later date. Strategies that were proposed and presented include:

- Net Zero Energy through Micro-hydro power production and Solar Photovoltaic Array
- Net Zero Water through Composting Toilets, On-site waste treatment, Rainwater collection for irrigation and plumbing
- Urban Agriculture/Orchard
- Ecological Water Flow/Raingardens
- Red List Materials Prohibited
- Responsible Industry & Appropriate Sourcing

> ***"For the first time since the program began in 1978, the public can see and appreciate the incredible work of the students and faculty inside the hatchery. The building represents a commitment to sustainability and resource stewardship that is emulated in BTC's Fisheries and Aquaculture Sciences programs,"***
>
> ***-Julie Blazek, Partner,***
> ***HKP Architects***



LEED facts - NC Silver (50-59)



sustainable sites 18/26

water efficiency 10/10

energy & atmosphere 03/35

materials & resources 03/14

indoor environmental quality 11/15

innovation in design 06/06

regional priority 04/04

🟧 points achieved
🟨 points pending
⬜ points available

Ratings and Awards:

LEED Silver (pending)
NWAIA 2014 Sustainability Award
NWCCC 2014 Best Project Under $10 million Award

Team:

OWNER
Bellingham Technical College
ARCHITECT
HKP Architects
LANDSCAPE ARCHITECT
SvR Design Company
MECHANICAL ENGINEER
Notkin
CIVIL ENGINEER
Wilson Engineering
STRUCTURAL ENGINEER
AHBL
ELECTRICAL ENGINEER
Travis Fitzmaurice Associates
GEOTECHNICAL
GeoEngineers
COST ESTIMATING
The Woolsey Company
SIGNAGE/INTERPRETIVE
BrandQuery
HARDWARE
Adams Consulting & Estimating
ENVELOPE
Wetherholt & Associates
ARCHAEOLOGY
Equinox Research & Consulting Int.
GENERAL CONTRACTOR
Roosendaal-Honcoop

Sustainable design principles have always been at the heart of HKP's design decisions, particularly when it comes to natural ventilation, passive solar strategies, light, views and material expression in the Pacific Northwest. HKP architects actively incorporates sustainable design principles in all of our work and we help clients understand the long-term benefits to our environment and to their operation and maintenance costs.

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CASE STUDY

hkpa.com

PERRY CENTER

Bellingham Technical College

LEED Silver Pending

Project Overview

Buried landfill, digester tanks and old building debris, shorelines setbacks, high-voltage overhead power lines, street easements, cultural mitigation, and Old Town Design Review are just a few of the challenges and opportunities faced in this project.

Since 1974, Bellingham Technical College has been running the Whatcom Creek Hatchery on this site, teaching students through a "books and boots" approach the many facets of fish rearing, habitat restoration and eco-systems protection. They ran this program out of the crumbling old power house from the defunct city wastewater treatment plant. Not many knew the hatchery even existed, or what the students did inside the building.

The new building sits within the Maritime Heritage Park, owned by the City of Bellingham. The park is heavily used by the public, as a destination as well as a greenway throughway. The building needed to allow for movement through the site for visitors, as well as work for the students' access to the fish ponds. To protect the public open green space, the new footprint could be no larger than the removed buildings.

Squeezing the program into the tiny footprint, providing clear, organized circulation, and relating to the maritime and industrial context of the site rendered a building with a simple form and expression. With a focus on showing off the inner workings of the ground floor hatchery, the transparency from the lobby and exterior allows the public to see and appreciate the students' work, even when the building is closed.

PROJECT FACTS

Square Feet:
7,823 SF, 2 story

Site:
.83 acres
(within larger park)

Location:
Bellingham, WA

Construction Cost:
$332/sq. ft.
w/site remediation

Total Cost:
$2.6 million

Completed:
September, 2013

BELLINGHAM TECHNICAL COLLEGE

Testimonials

"Bellingham Technical College's partnerships are a vital cornerstones of our mission. This building - The Perry Center for Fisheries & Aquaculture Sciences - is a prime example of how public & private partnerships work together for a much larger purpose. BTC is very appreciative for each and every gift towards this project. These donations will live on for generations by providing countless students with educational opportunities and honoring this region's natural maritime resources."

- Patricia McKeown,
BTC President

"...I am jealous but happy that the new students get to enjoy a state of the art building, to better prepare them for their futures."

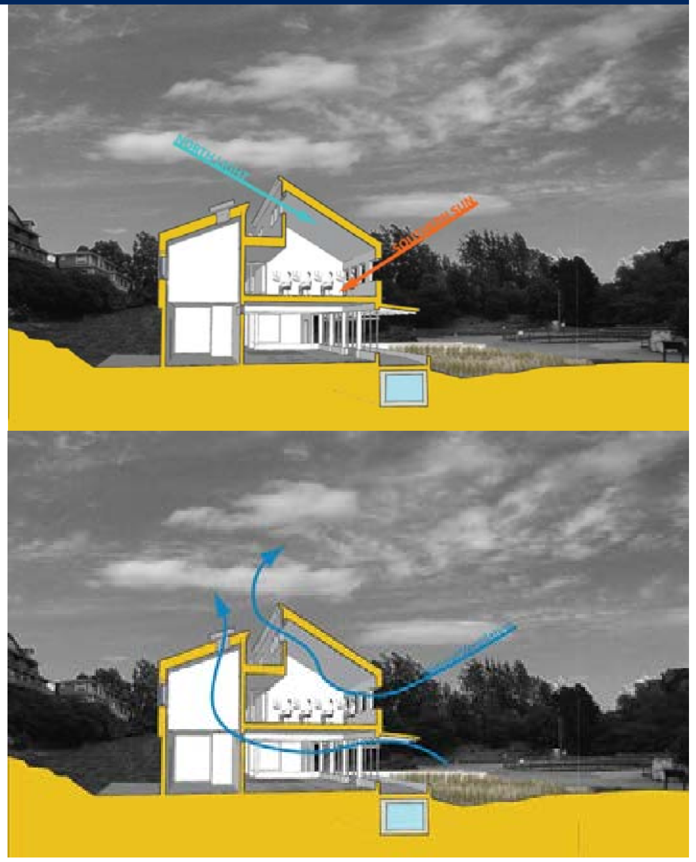
- Former BTC Fisheries
Student

Energy & Conservation

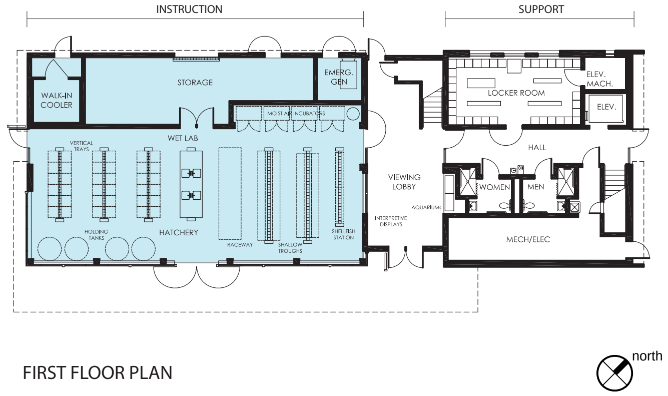
The building design optimizes natural daylighting and ventilation. Classrooms benefit from high clerestory daylighting provided with solar shading and daylighting controls on the lighting fixtures. The classrooms also use the clerestory for natural ventilation.

The hatchery is an unheated space, with UV protection on the glazing to simulate the temperature and shading of the natural stream habitat. There are outside air louvers above the hatchery glazing that allow air to pass through the hatchery and escape up through the storage high bay space via a roof vent.

Cellulose foam and dense-pack insulation is used in the ceiling and wall cavities to provide above code thermal insulation values with environmentally sustainable materials. Heat recovery ventilation is used on the mechanical system to recover exhaust heat.

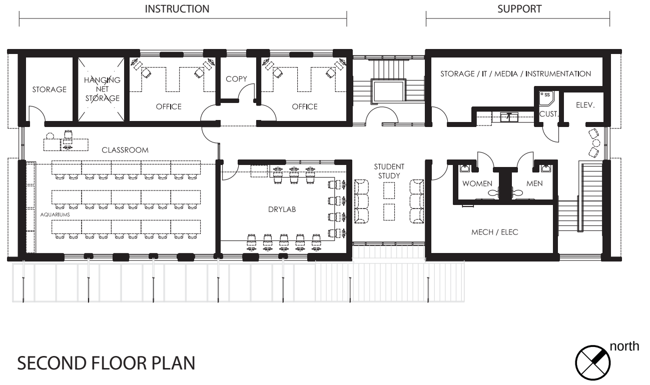


Sustainable Design & Construction



FIRST FLOOR PLAN

🟦 unheated and protected from UV light



SECOND FLOOR PLAN

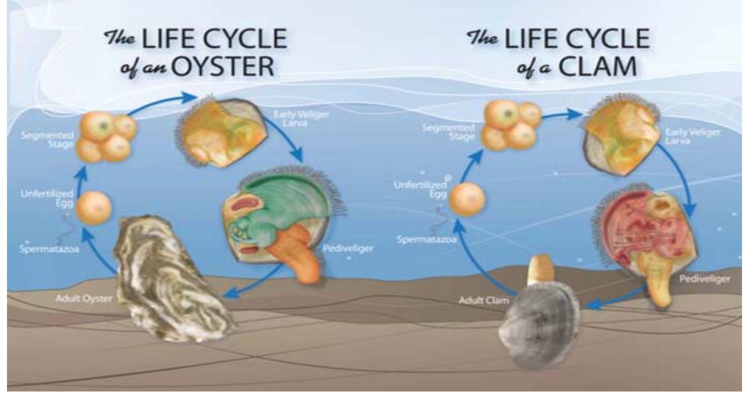
Concrete, steel, and wood make up the main structural building components. The framing was kept simple, with little waste. Exterior materials were chosen for durability and appropriate character for the maritime/industrial setting. A composition of metal roofing and siding, cementitious lap siding and colored concrete help to define the areas of the building.

During construction, construction waste management resulted in 97% recycled waste and landfill reduction. The uilding is designed to be LEED Silver with future-proofing strategies to add to its sustainability in the future if funding allows.

Materials & Resources

The material palette is minimal, reducing the amount of finishes throughout the facility. Finishes are sealed concrete, recycled-content ceramic tile, linoleum and rubber stair treads. Metal products were all chosen for high recycled-content, durability and future recyclability.

Even the donor recognition and interpretive signage materials were chosen with sustainability in mind - glass, metal, cork and soy-based inks were used in their design and fabrication.



Centralia College – Walton Science Center LEED Gold

CENTRALIA COLLEGE
Celebrating 90 Years.

Project Specifics

Gross square footage:	69,984 SF
Construction cost:	$23,980,983
Project occupied:	April 2009
Energy savings:	$ 33,171.00 and 5,486 KBtu/Yr
Water savings:	$ 197.24 / 39,761.67 gallons
Waste recycled:	311.74 Tons / 96.493%
Added LEED cost*:	$ 291,296.00, 1.3% of Constr.
Incentives:	none
LEED Payback**:	8.7 Years
CO_2 savings:	194 Tons
Awarded:	LEED Gold 2009

Design and Construction Team

Owner's representative:	Steve Ward, Centralia College
Project manager:	Jim Copland, DES
Architect:	Leavengood Architects
Structural engineer:	Arun Bhagat, AKB Structural Engineers
Mechanical engineer:	Wood Harbinger
Civil engineer:	Saez Consulting Engineers, Inc.
Electrical engineer:	Wood Harbinger
Landscape architect:	Karen Keist Landscape Architects
LEED consultant:	Green Building Services
General contractor:	Schwiesow Construction

The Walton Science Center at Centralia College is designed as a platform for discovery, organized to activate a vibrant and friendly pedestrian environment. The new three story concrete and steel structure is sympathetic to the original order of the street, housing the science departments, the nursing facilities, general classrooms and administrative offices. The project's visual and physical connections between the interior and exterior, creates an environment that promotes strong campus and community links, while offering innovative new learning opportunities.

Designed prior to the Washington State Sustainable requirements, the project achieved a gold status, without any revisions to the design. This can be attributed to the straightforward approach to achieve the sustainable goals for the campus. Working within a tight budget and a building type that typically has a high-energy demand, the sustainable design is characterized by efficiency and a passive common sense approach to design, in lieu of expansive active systems.

The expression of the passive design is captured in the new structures sun control systems. Overhangs and louvers were designed and tested with the Lighting Lab in Seattle, to reduce energy loads while activating natural lighting and social connections. Rain gardens defined a new passive approach to Storm Water Control for the campus, eliminating the expense of underground water detention. In addition, the College sought sustainable directions in materiality that was not only durable, but also long lasting.

Sustainable Sites

Land Improvement:
The Walton Science Center not only energize an existing pedestrian environment, it invites students to explore the world of science. With generous amounts of break-out spaces, laboratories and classrooms, the Walton Science Center communicates its environmental goals by contributing to a vibrant and healthy community. The new structure fosters public participation, with indoor/outdoor spaces that flow together spatially and visually. The project is part of the existing residential neighborhood, lending 43,000 SF of open space to both the campus and the community,

The new structures replaces the existing science building and two classroom structures that have all reached the end of their building life cycle. Asbestos was identified in the existing science building, the site was classified as a brown-field and cleaned up prior to construction.

In the post development condition the new facility will add 0.16 acres of impervious surface. A passive approach to storm water management was set as a priority. Three infiltration rain gardens were implemented with a total bottom surface area of 1,453 SF. Sized for a 3-inches per hour infiltration rate, the rain gardens offset the storm water runoff and erosion from the site. Additionally a pervious concrete was provided for the ADA Parking and Service/Drop off area.

Alternative Transportation:
The primary means of transportation to the campus has historically been the automobile. To inspire alternative means of transportation, the site is located adjacent to existing city bus lines. Bicycle facilities are located adjacent to the structure and electric power has been provided for alternative transportation vehicles in selected parking spaces around the building. No additional parking spaces were added to the campus parking plan as a result of this project, other than two ADA parking spaces off Locust Street. As a result this leaves an open area on the east side of the building for outdoor activities, graduation ceremonies terraces and pathways that connect the building to the campus.

Light Pollution Reduction:
All new light fixtures for the site are shielded to prevent light pollution of the night sky, the natural environment and crossing the property boundary. Existing Campus Street Lights have been retrofitted to minimize the night sky pollution while providing a safe and secure campus.

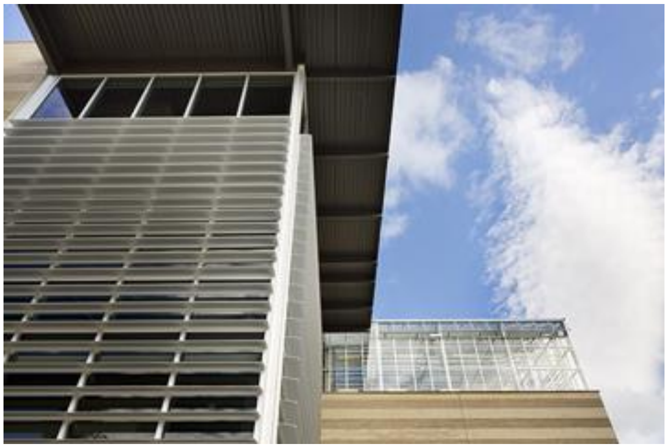
Water Efficiency

Potable water has been reduced by 42.7 percent. The approach for the water harvesting, detention and conservation is defined as passive. With the exception of irrigated turf, Planting material chosen selected is native and drought resistant, once established irrigation will be not be needed. This helps offset the open lawn areas required as a programmatic requirement for graduation ceremonies.

Dual flush toilets, water efficient faucets, low flow urinals, lavatories and kitchen sinks, all contribute to reduce water use for the Structure.

Energy and Atmosphere

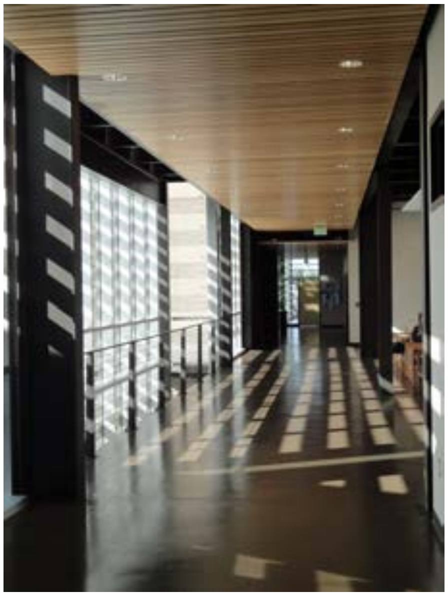
A number of energy conservation measures are designed into the Walton Science Center to reduce the overall energy savings for the site. Highly insulated building envelope including walls, and windows, high efficiency lighting and a highly efficient mechanical system all contribute to the calculated. Large roof overhangs, and sunshades located in large glazed areas minimize heat gain. The energy performance rating has been calculated at 31.2 percent according to the ASHRAE methodology.



High efficient condensing gas fired boilers and hot water heaters are 13 percent more efficient than conventional boilers. Air conditioning systems will be provided to all HVAC systems from a central air-cooled chiller located on the roof.

Variable Air Volume controls at the Science fume hoods are balanced with the general exhaust air valves to provide a negative offset in the room to control fumes while reducing energy loads on the mechanical system.

Natural Light reaches 75% of the building floor area, while a direct line of sight to the exterior reaches 96 % of the structure. Large overhangs and solar shades reduce glare and minimizes heat gain, especially in the south and west facing elevations. Natural light is utilized to enhance the building and reduce energy consumption.

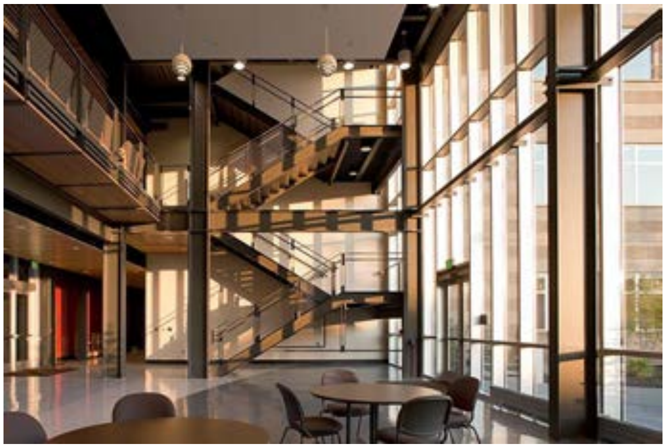


Lighting Daylight controls reduce total quantity of artificial lighting, dimming electrical lights when outside light is adequate. Classrooms are zoned to turn luminaries on only when electric lighting is needed along, thus reducing the electrical load on the project. When electric light is needed the luminaries that are zoned use power while still providing quality light to the space.

Material and Resources

Occupant Recycling:
A Recycling Center is established for the entire building. Concrete demolished from the existing structures on the site was removed and recycled.

Recycle Materials:
Exposed Steel and Concrete constitute a visual expression of recycled and local materials utilized in the structure. Recycled Materials with over 40 percent content are used and expressed in the design and itemized as follows:
Steel, Cast in Place Concrete, Rebar, Precast Concrete, Suspended Ceiling Panels, Mortise Locks, Insulation, Dens Glass Gold Sheathing, Casework,



Local Materials: Local Material used on the project include: Rebar, Steel, Cast in Place Concrete, Casework, Steel Studs, Dens Glass Sheathing, Specialty doors, and Pea Gravel.

Indoor Environmental Quality

Low-Emitting Materials:
Indoor air is protected by the choices of carefully researched finishes and other potential source of fumes. All sealants, paints and adhesives were selected for low volatile organic compounds (VOC) content. Floor finishes all Low VOC as follows; carpet, exposed concrete, concrete sealers, linoleum, and terrazzo. Filtration in the mechanical system exceeds standard industry practice. Operable windows in the administrative areas allow users to control fresh air entering their spaces.

Innovation in Design

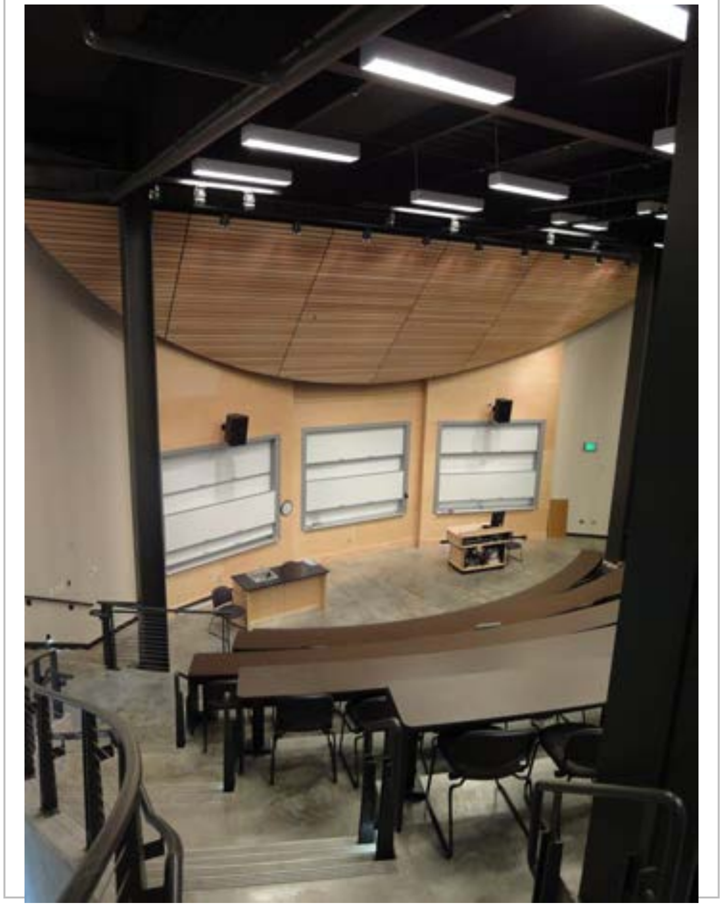
Education:
Signage is currently being developed to teach the different aspects of sustainable design to the users. Signage is being organized to show how the structure achieves sustainable design in each of the following categories:

Construction Waste:
The construction team selected division methods to divert over 95 percent of the construction waste from landfill.

Recycled Material:
Over 40 percent of the construction material was recycled

Water Efficiency:
This project used a combination of high efficiency fixtures including low flow water closets, low flow urinals and lavatories to achieve a 42.7 percent water use reduction.

Material Recourses:
The project team selected certified wood materials that allowed them to exceed a 95 percent threshold of FSC certified wood products.



Washington State Department of
Enterprise Services

Central Washington University – Dean Hall Renovation LEED Gold

Project Specifics

Gross square footage:	79,553 sf
Construction cost:	$23,958,000
Project occupied:	February 2009
Energy savings:	22.7%
Water savings:	140,350 gal/yr
Waste recycled:	2,108 tons/ 68%
Added LEED cost*:	$95,650 design only
Incentives:	none
LEED Payback**:	unknown
CO_2 savings:	unknown
Awarded	LEED Gold - 2010

Design and Construction Team

Owner's representative:	Joanne Hillemann, LEED AP
Architect:	BCRA, Inc.
General contractor:	Lydig Construction
Structural engineer:	PCS Structural Solutions
Mechanical engineer:	MW Consulting Engineers
Civil engineer:	BCRA, Inc.
Electrical engineer:	Abacus Engineering Systems
Landscape architect:	Nature by Design
LEED consultant:	BCRA, Inc.
Commissioning Agent:	Keithly Barber Associates
Acoustic Consultant:	The Greenbusch Group
Photography:	Dane Gregory Meyer

Dean Hall is the first constructed project to achieve LEED Gold GBCI certified on the Central Washington University campus in Ellensburg, WA. The project started under the LEED NCv2.1 rating system but the project team voluntarily chose to substitute selected credits meet the LEED NCv2.2 rating system as allowed by the USGBC compliance path.

Dean Hall, which had been vacant since 1998, now contributes to the academic system and enhances the northwest corner of the campus quadrangle contributing another Science facility to the developing Science neighborhood. Dean Hall houses the Departments of Geography and Anthropology & Museum Studies, museum exhibit space and teaching spaces, and the Dean's administrative offices, College of the Sciences.

Over 75% of the existing building shell and structure was renovated and reused thereby diverting potential waste from the landfill. There are small additions to the east and west sides of the existing building to accommodate an improved entry, new stairs, lobby, and studying areas. The east addition provides a connection and transparency between the building and the quadrangle.

The floors are organized by the public spaces and lecture/classrooms on the first floor, anthropology and geography specific classrooms and lab spaces on the second floor, and department faculty offices, research rooms, plus open and semi-private study areas on the third floor.

Sustainable features include site and building water use reduction, improved energy performance, utilization of recycled, regional, and low-emitting materials, enhancement of daylight and views, and post occupancy evaluations. Dean Hall exceeded the State of Washington requirement to achieve LEED Silver certification (achieved Gold) despite project budgeting prior to the LEED requirement and a difficult bidding environment.

Clark College – Columbia Tech Center LEED Gold

CLARK COLLEGE

Project Specifics

Gross square footage:	69,984 SF
Construction cost:	$20,470,000
Project occupied:	2009
Energy savings:	$ 20,000 / 29%
Water savings:	$5,932 / 2,398,783 gallons per yr
Waste recycled:	323 Tons / 95%
Added LEED cost*:	$ 125,400, 3.4% of Consultant Costs
Incentives:	none
LEED Payback**:	0 Years
CO_2 savings:	Unknown
Awarded:	LEED Gold 2010

Energy-Efficient Design

The Columbia Tech Center was designed with energy conservation in mind, and is targeted to perform nearly 29 percent more efficiently than standard buildings. The design includes an innovative multi-story trombe wall that pre-heats the building's intake air with passive solar energy. Annual energy savings are estimated at nearly $20,000 per year.

Renewable Energy

Roof-top photovoltaic arrays (one fixed and one tracking for a total of 2.25kW) and two micro-wind turbines (2kW) will provide real-life examples of renewable energy systems for students. Students will be able to monitor the energy used by the building and produced on site, while also gaining an understanding of these alternative power sources.

Energy savings are estimated at roughly $19,500 per year. Strategies that increase first cost were carefully balanced against program value and the return on investments (energy, maintenance, and replacement savings).

Higher quality and more efficient HVAC systems contribute to a life of energy savings, as do high efficiency lighting integrated with photocells, all incorporated with occupancy sensor controls.

Sidney Hunt, LEED Green Building Advisor
Phone: (360) 407-9357
Email: sidney.hunt@des.wa.gov

Washington State Department of Enterprise Services

Sustainable Sites

Some of the strategies used to promote healthy ecosystems include and are not limited to:

- Capture, treatment and release of all stormwater on-site.
- Use of rain gardens and bioswales for storm water treatment.
- Reduced impervious surfacing.
- Bicycle parking and Mass Transit service.
- Light pollution avoidance

Rain Garden Source

Water Efficiency

The project was designed with a projected total annual water savings of 948,184 gallons. As of 2016, it is saving double that (almost 2 million gallons per year). This is due to:

- Landscape Irrigation Efficiency: Over 70 percent irrigation water use reduction by landscaping with native and drought tolerant plant species, reducing lawn area, a high-efficiency irrigation system, rain sensors, etc.
- Building Water Use Efficiency: 49.9 percent building potable water use reduction by installing low-flow fixtures, dual flush toilets, and pint flush urinals.
- 100 percent on-site infiltration of storm water not only avoided costly connection fees, but afforded a discount of over $6,000 a year from the City storm sewer impact fees.

Indoor Environmental Quality

- Daylighting: Over 75 percent of occupied spaces have been designed with natural lighting, which has been shown to improve student performance, productivity and overall comfort of occupants.
- Views: Over 90 percent of occupied spaces will have access to exterior views.
- Glazing and Sunshade Devices: Block unwanted sun in summer while capitalizing on passive daylighting and heating with deep penetration of daylight in winter.
- Indoor Air Quality: Non-toxic building materials were used, including low-VOC emitting paints, sealants, adhesives, carpets and finishes. The contractor implemented strict Indoor Air Quality management techniques during construction, and flushed out the building with fresh outside air after construction as an added precaution.
- Mechanical System and Infiltration: Designed for high standards of occupant health and comfort. A complete building flush out was performed after construction to exhaust any remaining irritants. The College uses Green and healthy cleaning practices and cleaning agents to maintain indoor air quality and protect health.

Materials and Resources

Recycling: In addition to providing recycling for building occupants, more than 95 percent of construction wasted generated on the project was diligently recycled (323 tons) and diverted from landfills through an aggressive construction recycling and salvaging program.

Examples of Responsible Materials used on the project include:

- 32.3 percent recycled products from building materials
- 31.4 percent regionally harvested and manufactured building materials
- Certified wood from sustainable forests (FSC certified)
- Urea-formaldehyde free composite wood products and insulation.
- Polished concrete floors reduce materials and maintenance needs, in addition to other low maintenance and durable materials.

Department of Corrections – Coyote Ridge

LEED Gold

Project Specifics

Gross square footage:	738,029 sf
Housing area:	395,341 sf
Industries area:	73,564 sf
Administration area:	269,164 sf
Construction cost:	$190,000,000
Project occupied:	February 2009
Added LEED cost:	$471,000 (after rebates)
Payback period:	6 months
Awarded	LEED Gold - 2010

Design and Construction Team

Project Manager:	Jack Olson
Architect:	Integrus Architecture
General Contractor:	Hunt/Lydig JV
LEED Building Advisor:	David Jansen

Note: Coyote Ridge includes a Minimum Camp that was not part of the LEED Project.

Coyote Ridge Corrections Center is prison consisting of a large campus of 22 buildings. It opened as a minimum security prison in 1992 and began a 2,048 bed medium security expansion in 2006 which included upgrades to obtain a LEED Gold rating for the entire campus. Upgrades were completed in December 2008, and operations began in March 2009. It houses 2,353 inmates and 637 staff.

LEED features include:

- No or low volatile organic compounds (VOC) products
- Regional and recycled content materials
- Pollution prevention during construction
- Switching to low emitting & fuel efficient vehicles
- Water use reduction
- Water Reclaim and reuse for laundry facilities saving 2,160,000 gallons per yr.
- Optimizing energy performance EAc2.2-1.7
- Laundry water heat exchange
- Cooler/freezer condensing unit heat exchange
- Housing unit cell lighting sweep

RESULTS	State Avg. use other prisons	Coyote Ridge after project
Water uses (per offend/day)	140 gallons	109 gallons
Wastewater (per offender/day)	117 gallons	66 gallons

LEED Cost for Coyote Ridge Corrections Center

Ventilation air heat recovery at Housing Units and Food Service	$163,000.00
Indirect evaporative cooling for Medium housing	$ 40,000.00
Enhanced Cell Lighting Controls	$ 24,000.00
High Efficiency Air Filters	$ 17,000.00
LEED design/documentation effort	$ 80,000.00
CI Laundry water/heat reclaim system	$200,000.00
CI Building refrigeration heat recovery	$160,000.00
Design/Builder LEED Consultant/Enhanced Commissioning	$175,000.00
LEED Submittal preparation and fees	$ 30,000.00
Total	$889,000.00

The total Design-Build Cost of the project was $189 million. The LEED cost at Coyote Ridge Corrections Center was estimated to cost $889,000 (.5% of the design budget). After energy rebates of $418,000, the remaining $471,000 in LEED related costs was paid back in about 6 months through energy savings.

Department of Corrections – Mission Creek Corrections Center LEED Silver

Project Specifics

Gross square footage:	13,697 sf
Construction cost:	$4,033,162
Project occupied:	January 2010
Energy Savings:	$12,545/yr
Water savings:	$1,980
Waste recycled:	36.8 Tons / 98.41%
Added LEED cost:	$56,860
Payback period:	3.45 years
CO_2 savings:	48.18 tons
Awarded	LEED Silver 2009

Design and Construction Team

Owner's representative:	Edward Hampton
Project Manager:	Kevin Kobayashi, AAIA
Architect:	Freeman Fong Architecture, PS
Structural engineer:	Integrus
Mechanical engineer:	Inventrix Engineering, Inc.
Civil engineer:	PACE Engineers, Inc.
Electrical engineer:	DEI Electrical Consultants
Landscape architect:	Osborn Pacific Group
Telecommunications:	Hargis Engineers
Geotechnical engineer:	Shannon & Wilson, Inc.
Cost Estimator:	Roen Associates
General Contractor:	Shinstine/Associates LLC

The Washington State Department of Corrections has earned a national reputation for its efforts to make both its operations and facilities more sustainable. The 100 Bed Expansion project will be the first LEED certified building constructed on the Mission Creek Corrections Center for Women campus. Every opportunity was taken to reduce its impact on the environment while maintaining security.

The new housing facility is located on leased property from the Washington State Department of Natural Resources, where the harvesting of trees and effect on wildlife were reduced to minimize the impact on the environment.

The use of natural lighting through clerestories in interior spaces dovetailed nicely with the facility to minimize energy consumption. The building is oriented to maximize sunlight along with individually controlled direct/indirect lighting. All contribute to energy efficient, well-lit and comfortable spaces for offenders.

Because Mission Creek is depended on well water, all resources to minimize water usage such as drought tolerant plants and water efficient fixtures were explored and used.

The design team and General Contractor took every opportunity to provide LEED compliant materials. The team's exemplary performance made possible for the project to meet LEED Silver.

Sustainable Sites

Land Improvement: The harvesting of trees and effect on wildlife were minimized while maintaining a distance of over 150 feet from streams.

Alternative Transportation: The campus is providing parking spaces for hybrid vehicles and carpools. Bicycle storage and changing rooms are also provided.

Heat Island Effect, Roof: A SRI 29 rated cool roof was used to conserve on energy usage.

Water Efficiency

Irrigation: Landscape chosen will not require permanent watering. Only native plants were installed. No potable water will be used for irrigation after plant establishment.

Water efficient fixtures: Low flow fixtures were used throughout the facility for sinks, lavatories, toilets, and showers to reduce water usage.

Energy and Atmosphere

Natural light: All habitable spaces are naturally lit. The interior day room with its high ceiling and clerestories bring in natural light to the interior of the spaces.

Heating and cooling: 3 air handling systems – 2 serving the housing area, separated by building exposure for improved temperature control; and one dedicated to common areas. High-efficiency heat pumps with backup electric resistance provide heat during extreme cold conditions. A flat-plate heat exchanger provides high-efficiency energy recovery.

Lighting: All spaces have daylight zones switched separately from non-daylight zones. The day room includes pendant-mounted direct/indirect lighting with dimmer controls for occupant comfort. Sleeping rooms have separate switches for personal reading lights.

Measurement and Verification: An energy management and controls system provides control and monitor of the building mechanical system.

Material and Resources

Construction Waste Management: The contractor diverted close to 100% of the construction waste from landfills.

Occupant recycling: MCCCW has a recycling program in place, including bottles, cans and paper.

Recycle materials: Materials used on the project included recycled concrete, top soil, reinforcing rebars, fiber mesh, structural steel, metal flashing, acoustical tile ceiling, plastic wainscot, and particle board.

Local materials: Local materials used included recycled concrete, top soil, reinforcing rebars, structural steel, rough carpentry materials, building insulation, asphalt shingles, cementitious siding, metal flashing, hollow metal doors and frames, wood doors, vinyl windows, and particle board.

Indoor Environmental Quality

Low-emitting materials: Formaldehyde-free MDF and low- or no-VOC paints were specified, all carpet is Green Seal compliant, and all sealants and coatings were reviewed by the construction team prior to use in the building.

Chemical and Pollutant Source Control: Permanent recessed walk-off mats were installed, MERV-13 filters were installed in air handlers, and all copy and work rooms were exhausted separately from the main building return air.

Views: Over 75% of the spaces are naturally lit. Over 90% of the spaces have access to views.

Innovation in Design

Green Cleaning: MCCCW is committed to having all its occupants use sustainable cleaning products.

Exemplary Performance:

Water Use Reduction by 40%: Timed faucets and showers contributed in reducing water usage to meet this requirement.

Construction Waste Management: The contractor diverted 98.41% of construction waste from landfills.

Enterprise Services – 1063 Block Replacement Project LEED Platinum (goal)

Project Specifics

Gross square footage:	215,000 SF
Design-Build cost:	$65,500,000
Construction cost:	Approx. $287/SF
Projected Operating Savings:	$60,000/yr
Anticipated LEED Rating:	Platinum
Estimated Utility Incentives:	$150,000

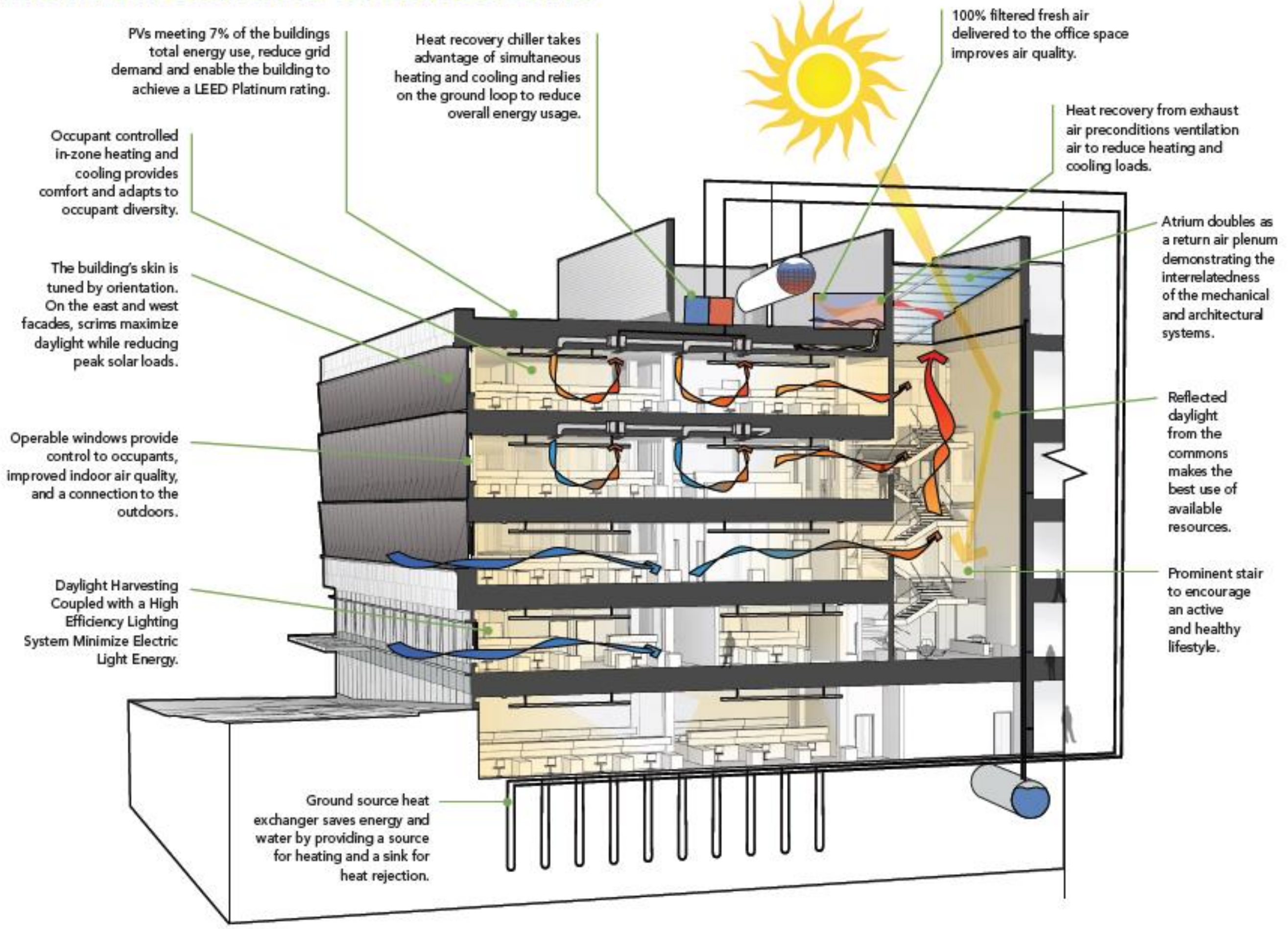
Design and Construction Team

Project manager:	Jon Taylor, DES
Architect:	ZGF Architects LLP
General Contractor:	Sellen Construction
Structural Engineer:	KPFF
Mechanical Engineer:	WSP USA CORP
Civil Engineer:	KPFF
Electrical Engineer:	Gerber Engineering

The proposed 1063 Block Replacement project establishes a new standard for State buildings through a set of interrelated strategies and high-performing achievements, including:

- 100% outside air ventilation system & large windows for daylight improve productivity & reduce the number of worker sick days.
- Building energy performance of 30.1 kBTU/SF/yr (energy use per SF per year).
- A zero emissions renewable solar power roof-top system that will generate 7% of the building's energy, improve the building energy performance and place the building in the top 1% of buildings nationally.
- Energy Star score of 99.
- 35% reduction of potable water through efficient fixtures.
- 50% reduction of irrigation water usage through the use of native or adapted plants and high efficiency irrigation systems.
- 75% construction waste diversion rate through on-site separation of recyclable materials.
- Building's energy efficiencies reduce Green House Gas Emissions by approximately 2.8 million pounds/yr

HIGH-PERFORMANCE GREEN BUILDING



For every dollar invested in the project, an estimated 75 cents will be reinvested back in Washington companies and workers through material and labor costs. "Made in Washington" products and technology will be found throughout the building, further reducing its carbon footprint.

The floor plate will be thinner than conventional office buildings, providing tenants with more daylight and control over their environment through easy access to operable windows that provide passive cooling and increased fresh air. Other sustainable features include:

- A five-story high atrium that brings natural light into work areas throughout the building.
- Low energy LED lighting throughout building
- High-efficiency building systems, including a ground source heat exchange, photovoltaic panels and a smart HVAC system that provides 100% full fresh air.
- Extensive metering to track, diagnose, and control building performance and energy
- High-quality, durable exterior building envelope materials to harmonize with sandstone of historic West campus buildings.
- State-of-the-art wireless and other information technology infrastructure built in.

The building's thoughtful central plant makes double use of the heat recovery chiller. In the winter, these heat recovery chillers pull heat from the ground to heat the building for a majority of the time. In the summer, the heat recovery chillers cool the building and reject heat to the ground, minimizing the use of water consuming cooling towers.

The total building annual energy cost will be almost $50,000 less than a building built to the current Washington State energy code. This cost will be further reduced by the renewable solar power system that will generate almost $10,000 worth of electricity each year.

The building will offer numerous amenities to tenants and visitors including a 5th floor deck with views of Puget Sound and the Olympic Mountains. Generous outdoor plaza areas provide weather protection, landscaping, seating, bike parking, and areas for artwork.

This high-performance building will not only reduce the state's impact on the environment, but with the photovoltaic array will be the first state-owned building to achieve LEED Platinum, making it in the top one percent of buildings nationwide for energy efficiency.

Washington State Department of
Enterprise Services

Enterprise Services – O'Brien Building Renovation LEED Gold

Project Specifics

Gross square footage:	103,000 SF
Construction cost:	$43,000,000
Completion Date:	March 2012
Tenant:	Washington State House of Representatives
Project Manager:	Dwayne Harkness, DES
Architect:	Duarte Bryant
General Contractor:	Berchauer Phillips Construction
LEED Building Advisor	Stuart Simpson

This building is on the National Register of Historic Places as Washington State Capitol Historic District.
(Listed in 1979)

John L. O'Brien Building Renovation
The John L. O'Brien Building, originally known as the Public Health Building, was one of six government buildings envisioned in the 1911 Capitol Master Plan designed by architects Walter Wilder and Harry White. Building Construction began in 1938 and completed in 1940. Federal relief funds were used to finance the original construction project.

In 2007, the Washington State House of Representatives began modernizing this office building with a strong vision for preserving the integrity of its unique design. The roughly $43 million project overhauled the mechanical, electrical and plumbing systems, corrected life-safety code deficiencies, strengthened seismic resistance, and realigned offices to improve space use of the upper three floors.

Energy conservation measures included replacing lighting systems and improvement to the building envelope from changes to windows, insulation, and roofing.

The project replaced:

- Lighting systems with a modern, energy efficient system.
- HVAC system with modern equipment that improved air quality and is more energy efficient.
- Disparate mechanical and electrical control systems with a unified system that provides better occupant comfort and improved efficiency.
- Galvanized pipe plumbing with copper pipe.
- Telecommunications systems with greater capacity and more modern equipment.
- Two elevators.

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Washington State Department of
Enterprise Services

Recycling

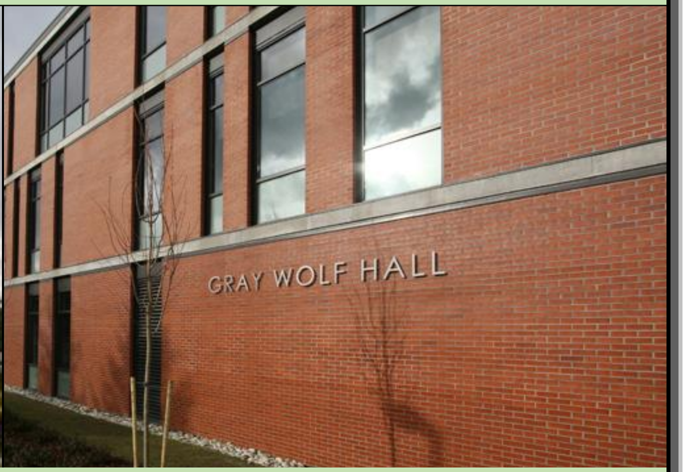
Over 95 percent of the demolition rubble was collected and sent to recycling centers or reused on site, reducing the amount of material sent to landfills and the associated project costs. In addition, reusing these materials reduced the demand for extracting, manufacturing and transporting new products.

Indoor Safety and Quality

Hazardous material was removed, primarily asbestos, the emergency generator capacity was expanded, a fire protection system was added, and the exterior was thoroughly cleaned and repaired. Seismic improvements were made to meet current standards and space efficiencies were improved throughout the building, including the basement.

Additions

Bicycle parking was added for occupants and the building uses the campus green housekeeping program. The John L. O'Brien Building Renovation made the O'Brien building the first state building on campus to receive a LEED rating.



Everett Community College – Gray Wolf Hall

LEED Silver

Project Specifics

Gross square footage:	77,000 sf
Construction cost:	$28,635,000
Project occupied:	04/2009
Energy savings:	$20,000/year / 1,425 MBtus/year
Water savings:	$12,840/year / 120,000 gal/year
Waste recycled:	964 tons / 97%
Incentives:	$103,000
CO_2 savings:	78.6 tons (1.45 lb/kWh)

Design and Construction Team

Owner's representative:	Larry Price, EvCC
Project manager:	Joe Sullivan, DES
Architect:	LMN Architects
Structural engineer:	MKA
Mechanical engineer:	Notkin
Civil engineer:	MKA
Electrical engineer:	Coffman
Landscape architect:	Site Workshop
GC/CM:	Mortenson

Gray Wolf Hall is the first LEED Certified building to be constructed on the Everett Community College Campus, and as such, the school took every reasonable opportunity available to make the building a model for future campus development.

The college needed flexible learning spaces for the department of Communications and Social Sciences, and required specialized video conferencing spaces for the University Center. These spaces will allow the college to continue to practice its mission to "Stay Close, Go Far."

Use of natural ventilation dovetailed nicely with the college's wish to provide operable windows in all offices. The office wing is angled slightly to the northwest, allowing views of both the Olympics and Cascades. Ample daylight fills the offices, and the direct/indirect lighting is individually controllable.

The General Contractor took every opportunity to provide LEED compliant materials and make certain that all subcontractors signed a pledge to do the same. Their exemplary performance made it possible for the project to exceed its mandate for LEED Silver.

Sustainable Sites

Land Improvement: The site was previously 100% impervious (parking lot) and now has vegetated area equal to twice the footprint of the building.

Alternative Transportation: The building is within ¼ mile of several bus stops, including a Transit Center. The campus built a new bicycle storage building and re-activated showers in an adjacent building. In addition, parking spaces for hybrid vehicles and carpools were provided in the parking area.

Water Efficiency

Irrigation: High efficiency irrigation heads were used throughout to reduce water usage. In addition, pedestrian walkway runoff irrigates a native-planted rain garden.

Water Efficient Fixtures: Low flow fixtures were used throughout the facility, including 0.5 gal/flush urinals, 1.6 gal/flush toilets, and electronic sensor faucets.

Energy and Atmosphere

Natural Light: All faculty offices are day lit, and those on the south and west facades are sun-shaded. All offices and classrooms have room-darkening roller shades.

Heating and Cooling: Only the classroom wing is air conditioned, using a high-efficiency DX cooling unit. The office wing is naturally ventilated. A pair of high-efficiency condensing boilers are used to create heating water for both wings.

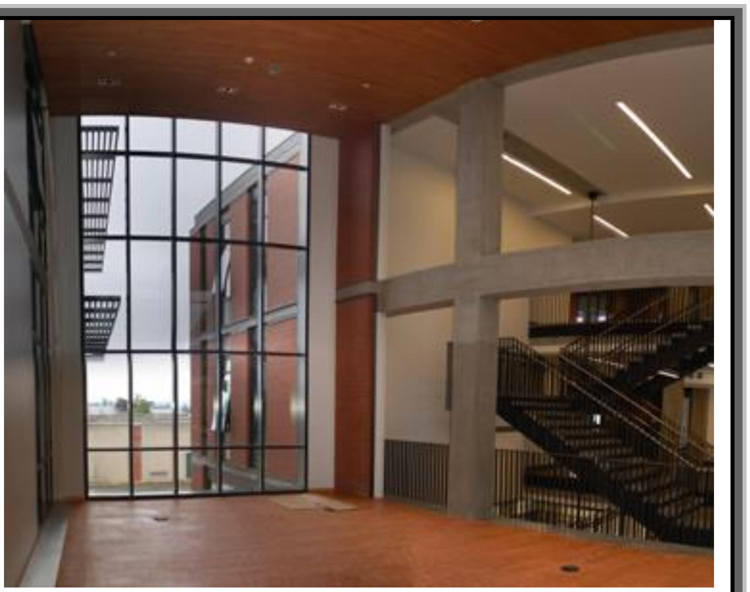
Lighting: The offices contain pendant-mounted direct / indirect lighting with four switchable lighting levels for occupant comfort. Classrooms have daylight zones switched separately from non-daylight zones, and whiteboards can continue to be lit even when projection systems are in use. Occupancy sensors are used in classrooms and restrooms.

Material and Resources

Construction Waste Management: The contractor was able to divert nearly 100% of the construction waste from landfills. This was due in large part through the re-use, on site, of the existing parking lot as fill for foundations.

Occupant Recycling: The EvCC has an exemplary recycling program, including bottles, cans and paper. Receptacles are located throughout the campus.

Recycled Materials: Includes fly ash in concrete, rebar, masonry ties, metal decking, insulation, gypsum wallboard, and aluminum curtain wall systems. Cabinetry substrate was 100% recycled and FSC certified.



Local Materials: Includes brick, concrete (both aggregate and cement), rebar, and foam insulation.

Indoor Environmental Quality

Low-Emitting Materials: Formaldehyde-free MDF and low- or no-VOC paints were specified, all carpet is Green Seal compliant, and all sealants and coatings were reviewed by the construction team prior to use in the building. All contractors signed pledges to comply with the LEED goals of the project, and signs regarding the LEED goals were posted in highly visible locations by the contractor.

Chemical and Pollutant Source Control: Removable recessed walk-off mats were installed, MERV-13 filters were installed in the air handlers, and all copy and work rooms were exhausted separately from the main building return air.

Views: 100% of regularly occupied spaces have access to views.

Innovation in Design

Green Cleaning: EvCC is committed to sustainable cleaning practices, and has implemented the OS1 sustainable cleaning program.

Exemplary Performance:

Maximize Open Space: project installed vegetated open space equal to more than double the footprint of the building.

Construction Waste Management: 97% of construction waste was diverted from landfills.

Alternative Transportation: The campus has a comprehensive transportation management plan which is audited regularly for effectiveness.

Lower Columbia College – Myklebust Gymnasium LEED Silver (Goal)

Lower Columbia COLLEGE

Buildings & Facilities Home

Project Specifics

Gross square footage:	13,650 sf
Construction cost:	$27,943,868
Project occupied:	January 2015
Energy savings:	$17,168/year / 552.5 MBtus/year
Water savings:	35.38%

Students led the effort to renovate the Gym & Fitness Center through a fee of $2.50 per credit in tuition.

Design and Construction Team

Owner's representative:	Nolan Wheeler, LCC Richard Hamilton, LCC
Project manager:	Ronnie Hill, DES
Architect:	Rovelstad Architects
Structural engineer:	PCS Structural Solutions
Mechanical engineer:	Wood Harbinger, Inc.
Civil engineer:	SAEZ Consulting Engineers
Electrical engineer:	Wood Harbinger, Inc.
Landscape architect:	Karen Keist, Landscape Architect
LEED Consultant:	Green Building Services
Contractor:	JWC Construction

How does one breathe new life into a concrete **structure from the 60's, with no windows, no public** space, a limited buildable footprint and no connection to community?

The design of the new Fitness Center and the remodel of the Myklebust Gymnasium is a reflection of that search for a facility that is warm, attractive, open and inviting; and one that reflects the college's commitment to sustainability and building community. Within the structure, students experience a collage of program space. The functional arrangement fosters collaboration with sports programs and multiple opportunities for fitness activities: aerobics, strength training, team sports, climbing, yoga, and Zumba.

A large program with a very limited budget characterized the need for a passive approach to sustainability. Reusing the existing structure constitutes a major savings in the carbon footprint. Sculpting the solar exposure and harvesting daylight for new and existing spaces dominates the design as well as providing a welcoming atmosphere to inspire participation in fitness activities.

To integrate the new structure with the urban/campus context, construction follows a path of high-density development where building forms are designed to maximize transparency and are sculpted to reflect fire separation clearances. Site development allowed minimal disruption to existing conditions while maximizing open space storm water control.

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Washington State Department of Enterprise Services

Sustainable Sites

Alternative Transportation: Located at the hub of the city bus lines, which is free for LCC Students, the structure takes advantage of its location with optimal mass transit. New bicycle parking and its proximity to bus lines allows choices for alternative transportation.

Water: Roof overhangs intentionally drip to rain gardens below. Water efficient Landscaping reduces water consumption by 50 percent. Efficient fixtures reduce water consumption inside by 35 percent. Water savings are projected at 35.38 percent with a baseline calculation of 125,500 gallons of water annually. The design case uses only 81,000 gallons annually. Based on residential rates for Kowlitz County, savings would be approximately $399 annually and $417 annual sewer charges.

Energy and Atmosphere

Natural Light: The project achieved a minimum 2 percent glazing factor or a minimum daylight luminance of 25 foot candles in 100 percent of the new addition. Translucent panels protect the structure from western solar exposure while allowing light to penetrate.

Heating and Cooling: Energy efficient methods include an improved thermal envelope, high efficiency glazing, reduced lighting power density. Optimized Energy Performance averages 23 percent with a collage of existing and new roof top packages. Energy Savings are estimated annually at $17,168 @ 552.5 MBtus.

As an active space natural ventilation is manually controlled with low windows at the fitness addition and (3) garage doors at the second floor to flush the room without mechanical assistance. Air movement is supplemented by ceiling fans.

Material and Resources

Rapidly growing Material: The warmth of wood is complimented by the use of sustainable harvested wood as established by the Forest Stewardship Council (FSC).

Occupant Recycling: The facility has been provided with appropriately sized dedicated areas for the collection and storage of recycling materials, including paper, plastic and glass.

Recycled Materials: Hidden by layers of acoustical ceiling tile, the original glulam beams and the T&G wood decking were restored and exposed. The warmth of the natural materials set the design direction for the new structure. The glulam beams and exposed wood decking offset the carbon footprint of alternative construction types.

Local Materials: 10 percent of total building materials and/or products have been extracted, harvested, or recovered, as well as manufactured within 500 miles of the project site.

Education: The project includes an educational display highlighting the building's sustainable design features as well as an educational outreach program. Details crafted for educational purposes include; controlled drips from roof drains to rain gardens below. Sun control that protects and captures light, translucent panels protect the structure from western solar exposure, while capturing the changing patterns of light and energy throughout the day.

LCC Health and Science Building

LEED Gold (Goal)

Lower Columbia COLLEGE

Project Specifics

Gross square footage:	70,000 sf
Construction cost:	$42,000,000
Project occupied:	2014
Water savings:	42.7%
Waste recycled:	75%
Awarded	Pending

Design and Construction Team

Owner's representative:	Nolan Wheeler, LCC Richard Hamilton, LCC
Project manager:	Ronnie Hill, DES
Architect:	Leavengood Architects
Contractor:	Emerick Construction
Design Architect:	Rovelstad Architects
Mechanical engineer:	Wood Harbinger, Inc.
Civil engineer:	SAEZ Consulting Engineers
Electrical engineer:	Wood Harbinger
Landscape architect:	Karen Keitst, Landscape Architect

The Health and Science Building houses all LCC healthcare and science programs under a single roof for **the first time in the college's 80**-year history.

The Health and Science Building is not just a building to learn about the Sciences and Health Care. It is a building designed to experience the connection to nature and science through both passive and active system design.

Details are crafted with the intent to inspire critical thought about community, sustainability, nature, water, sunshine, energy conservation, the integration of technology and the role that science plays in our everyday lives. We seek to preserve and energize the "uniqueness of place" and use this project as a communication tool to tell the story and inspire our next generation of scientists.

Classrooms and labs are designed to take advantage of natural light supplemented with highly-efficient, motion-activated LED fixtures to conserve power usage. Easy-to-move tables and chairs maximize the flexibility of classrooms for a variety of study configurations and accommodate up to 50 students, almost double the capacity of previous science rooms.

Spaces for eating, socializing, and individual and group study are located on all floors to bring faculty and students together outside the classroom. Research shows that this kind of interaction and cohort study increases student success. Digital displays and interactive computer screens on each floor keep students and faculty informed about important dates and upcoming activities.

Sustainable Sites

Alternative Transportation: Bellevue College is served by 4 bus lines with 0.25 miles of the site. Bicycle storage, shower/changing facilities and racks have been provided.

Light Pollution Reduction: All new light fixtures for the site are shielded to prevent light pollution of the night sky, the natural environment and crossing the property boundary. Existing Campus Street Lights have been retrofitted to minimize the night sky pollution while providing a safe and secure campus.

The College has committed to LEED – NC v2.1 IDc1.1 CIR ruling for achievement of a Green Housekeeping program.

Water Efficiency

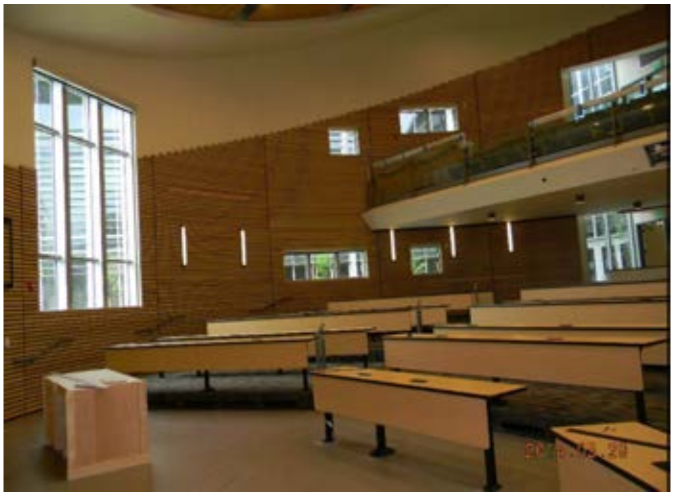
The site is located within the drainage basin of Lake Sacajawea where the importance of water conservation and the control of runoff is critical. The redeveloped site area is 3.83 acres and will be 64 percent impervious and 36 percent pervious; representing a reduction of impervious surface from the pre-development condition of 4 percent or 0.15 acres.

Three infiltration trenches are located adjacent to the building (1,020 sf) and under the rain gardens in the parking lot landscaped islands (2,175 sf). The rain gardens treat storm water runoff by filtering the runoff through vegetation and amended engineered soils.

Irrigation: Portable water has been reduced by 42.7 percent. The approach for water harvesting, detention and conservation is defined as passive. With the exception of irrigated turf, planting material chosen is native and drought resistant. Once established, irrigation will not be needed. This helps offset the open lawn areas required as a programmatic requirement for graduation ceremonies.

Additions: This project used a combination of high efficiency fixtures including low flow water closets, dual flush toilets, water efficient faucets, low flow urinals, lavatories and kitchen sinks all contribute to the reduce water use for the Structure.

The green roof at the third floor reduces the impervious surface to provide a reduction in the water runoff. Public areas are located adjacent to the green roof as an education tool.



Material and Resources

Occupant Recycling: The facility has been provided with appropriately sized dedicated areas for the collection and storage of recycling materials, including paper, plastic and glass.

Recycle Materials: the project diverted over 75 percent of on-site construction waste from landfills. Recycled materials include: steel, cast in place concrete, rebar, precast concrete, suspended ceiling panels, insulation, sheathing, and casework.

Local Materials: Exposed steel and concrete constitute a visual expression of recycled and local materials utilized in the structure. 20 percent of total building materials and/or products have been extracted, harvested, or recovered, as well as manufactured within 500 miles of the project site. Local material used on the project include rebar, steel, cast in place concrete, casework, steel studs, dens glass sheathing, specialty doors, and gravel.

Low-Emitting Materials: Indoor air is protected by the choices of carefully researched finishes and other potential sources of fumes. All sealants, paints and adhesives were selected for low volatile organic compounds (VOC) content. Floor finishes with low VOC include carpet, exposed concrete, concrete sealers, linoleum, and terrazzo. Filtration in the mechanical system exceeds standard industry practice. Operable windows in the administrative areas allow users to control fresh air entering their spaces.

Rapidly Growing Material: The warmth of wood is complimented by the use of sustainable harvested wood as established by the Forest stewardship Council.

Energy and Atmosphere

A highly insulated building envelope including a large roof overhang and sunshades located in large glazed areas minimize heat gain. The energy performance rating has been calculated at 31 percent according to the ASHRAE methodology.

Natural Light: The project achieved a minimum 2 percent glazing factor or a minimum daylight luminance of 25 foot candles in 75 percent of all regularly occupied spaces. Light sensors are zoned in each room to balance required light levels. Classrooms are zoned to turn luminaries on only when electric lighting is needed, thus reducing the electrical load on the project. When

Chilled Beams: Chilled beams are a natural convection HVAC system designed to heat and cool the structure. Pipes of water are passed through a “beam” (a heat exchanger) integrated into the ceiling systems. As the beam chills the air around it, the air becomes denser and falls to the floor. It is replaced by warmer air moving up from below, causing a constant flow of convection and cooling the room. We have achieved a 30 percent reduction in energy from the use of chilled beams.

Solar Panels: Translucent photovoltaic panels are working triple duty. They not only produce energy, but are designed as part of the sun protection on all of the southern exposures and serve as an educational tool. The solar panels are visible from the exterior and to the users inside the structure. They are crafted to be a constant reminder about capturing natural energy. A summary of energy usage is posted online and visible at a dedicated computer on the first floor. In 2015, the building produced 97,000,000 KWh with a carbon offset of 67,343,000 kg’s.

Innovation in Design

Education: We approach the education of sustainable features not just as documentation of what we have achieved but as a learning tool. Details are crafted to tell the story about sustainability:

- Controlled water, drips from the roof overhangs to the rain gardens at the first floor level.
- The expression of water from lecture hall roof flows to a collection point at the front entry.
- Translucent solar panels are integrated into the roof overhangs so that they are visible from the exterior as well as the interior area. They are designed to be experienced instead of hidden.
- Solar Energy Summaries are online and displayed at the first floor lobby.
- Visible sun control that protects and captures light and tells the story of passive design consideration.
- Stairways are celebrated and connect visually to both the interior and exterior spaces. This inspires movement and improves health.
- An educational display highlighting the building’s sustainable design features and an educational outreach program is ongoing and active.


LOWER COLUMBIA COLLEGE
HEALTH & SCIENCE BUILDING


2014.06.08


2014.06.22

Washington Youth Academy

LEED Silver

National Guard Youth ChalleNGe Program

Project Specifics

Gross square footage:	18,050 sf
Construction cost:	$3,594,994
Project occupied:	01/2009
Energy savings:	$1,720 /yr, 175.2 MMbtu/yr
Water savings:	$2,935 /yr, 395,000 gal/yr
Added LEED cost*:	$ 92,400
Incentives:	N/A
LEED Payback**:	19.8 year payback
CO_2 savings:	6.4 tons

Design and Construction Team

Owner's representative:	Ron Cross, Military Department
Project manager:	Yelena Semenova, DES
Architect:	Integrus Architecture
Structural engineer:	Integrus Architecture
Mechanical engineer:	Inventrix Engineering
Civil engineer:	AHBL
Electrical engineer:	Inventrix Engineering
General contractor:	CE&C

Washington Youth Academy is a program of the Washington State National Guard, in partnership with the Bremerton School District. The program is part of the National Guard Youth ChalleNGe that helps "at risk" youth who are 18 years old and have dropped out of high school.

The program was able to reuse and adapt existing site components available at the Washington National Guard's campus in Bremerton to help create a more sustainable approach to the building project.

The existing military vehicle service yard was modified to add a new parking area which includes parking stalls for hybrid electric vehicles. The existing Readiness Center kitchen and dining area was updated with water efficient fixtures, and the existing Armory was renovated to enhance natural lighting for cadet physical training and added staff office space. In addition, the electrical design limited energy costs by the use of dimming sensors and dimming ballasts in the light fixtures.

The program uses sustainable features as a teachable opportunity for the Cadets for what makes a better environment so that they make informed choices for themselves and their families. Cadets are given an orientation on the building's sustainable features and how these features impact their lives. As they are cleaning their dorm and work areas, they are being trained in the use of green cleaning products made available by the program, so they may use these in future jobs or their home.

Sustainable Sites

Land Improvement: Existing, underutilized stormwater system was used for new impervious surfaces.

Alternative Transportation: Bikes racks and showers are provided in the Readiness Center.

Parking stalls for hybrid electric vehicles in prominent and desirable parking locations to encourage their use.

Light Pollution Reduction: The exterior light fixtures were located and oriented to contain any light within the project area.

Water Efficiency

Irrigation: Drought tolerant plants were planted and, once established, require no irrigation.

Water Efficient Fixtures: Water efficient faucets, urinals, toilets and shower heads were included to reduce water use by 33 percent.

Energy and Atmosphere

Natural Light: Natural day lighting was used in occupied spaces to enhance feel and look.

Heating and Cooling: Natural ventilation was used in lieu of a conventional HVAC system to save cost, provide more air changes and eliminate the use of refrigerants.

Lighting: The electrical design limited energy costs by the use of dimming sensors and dimming ballasts in the light fixtures.

Green Power: Green power from local, sustainable source was provided for a minimum two year period.

Material and Resources

Occupant Recycling: Recycling of the program's activities provided at the campus.

Local Materials: Wood products from the region were used throughout as the structural framing systems in the form of glu-lam products.

Indoor Environmental Quality

Low-Emitting Materials:
Low-emitting materials for flooring, paints and sealants were selected for good indoor air quality for the project.

Innovation in Design

Education:
The staff created several elements used to educate the Cadets and family as to LEED features of the project. A brochure and a poster were developed that identifies the sustainable features of the building. The brochure is given as a hand out for the Cadets and visitors. The Cadets are given an overview the sustainable building features at their initial orientation.

Green Cleaning:
Green cleaning products were included in project for a more sustainable environment and as an example for the cadet's understanding and education.

Exemplary Performance:
For exemplary performance used to achieve LEED credits Construction Waste Management, and extensive use regional materials.

*construction and fees.

**Payback equals the added cost for LEED related consultant fees and construction costs, minus the incentives, divided by the savings from utilities based on the modeling performed for the LEED submittal which compares the "as-built" building to an ASHRAE 90.1 building.

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Olympic College Humanities and Student Services LEED Gold

Project Specifics

Gross square footage:	85,012 sf
Construction cost:	$ 21,636,034 (MACC)
Project occupied:	01/2010
Energy savings:	$35,965 and 1,221,528 MMBtus annually;
Water savings:	$2,889 and 501,942 gallons annually
Waste recycled:	581.9 tons / 98.6%
Added LEED cost:	$104,407; 0.43 % of Construction Cost
Incentives:	No utility incentive funding was received
LEED Payback:	2.69 years
CO_2 savings:	162 tons annually

Design and Construction Team

Owner's representative:	Barbara Martin, VP of Administration, Olympic College, Bremerton, WA
Project manager:	Ronnie Hill, DES
Architect:	Yost Grube Hall Architecture
Associate Architect:	Rice Fergus Miller Architecture & Planning
Structural engineer:	KPFF Consulting Engineers
Mechanical engineer:	Notkin Engineering
Civil engineer:	SVR Design Co.
Electrical engineer:	Interface Engineering
Landscape architect:	SVR Design Co.
LEED consultant:	Green Building Services, Inc.

The new Olympic College Humanities and Student Services Building completes a trio of new academic buildings that form the new gateway for the campus.

The building includes a three-story academic wing and a two-story Student Services wing.

The academic wing provides a new home for the Division of Social Sciences and Humanities, consolidating administrative and teaching spaces that had previously been scattered among a number of buildings on campus. The twenty-five new teaching spaces include two distance learning classrooms, a computer-based language lab, an anthropology lab and a 144 seat lecture hall as well as general-purpose classrooms. New spaces in the academic wing also include Social Sciences and Humanities Division and faculty offices and the Writing Center.

The Student Services wing arranges student support functions around a skylit two-story atrium for convenient one-stop service. Student Services programs brought together in the new building include Records & Registration, Financial Aid, Advising, Counseling, and centers for Veterans' Programs, Women's Programs, Access Services, Tutoring, Testing and Careers.

The Humanities and Student Services Building takes advantage of natural lighting during the day. The offices and classrooms incorporate operable windows that allow building operators to take advantage of the natural air currents to minimize the use of mechanical heating and cooling.

Sustainable Sites

Land Improvement: Site selection and Brownfield redevelopment are important factors in reducing environmental impact; the building location takes advantage of existing infrastructure, utilities and public transportation which help protect Greenfields and preserve natural resources. Open space around the building will be retained for the life of the building.

Alternative Transportation: No new parking was developed as a result of this project. Regular bus lines serve the campus and sufficient bicycle parking is provided around the building with nearby shower and changing facilities thereby promoting alternative fuel transportation.

Light Pollution Reduction: The site lighting is full cutoff with no uplight to reduce sky glow and the unnecessary lighting of the sky. Interior lighting was aimed away from windows and skylights for efficient use of light.

Water Efficiency

Irrigation: The landscape design incorporates plant material suited for the region to reduce long-term irrigation needs and were grouped to increase water efficiency by reducing water consumption in the landscaping by 59 percent over conventional means.

Water Efficient Fixtures: The building reduces water use by 20.4 percent via selected low-flow fixtures.

Energy and Atmosphere

Natural Light: The Humanities and Student Services Building takes advantage of natural lighting during the day. The offices and classrooms incorporate operable windows that allow building operators to take advantage of natural air currents to minimize the use of mechanical heating and cooling. Daylight sensors continually monitor available natural light and turn off fixtures when adequate daylight is available. Sunshades on the south facing windows reduce glare, solar heat gains and the need for artificial lighting.

Heating and Cooling: The building's increased energy performance of 40 percent better than ASHRAE 90.1-1999 lessens the environmental impact of energy production and improves energy costs. This is accomplished by using selected high efficiency direct/indirect lighting fixtures, occupancy sensors, day lighting controls, increased wall and roof U-values, high efficiency glazing and a heat recovery system. The HVAC consists of four VAV air handling units with cooling provided by chilled water coils connected to a VAV air-cooled chiller. Tempering of the outside air at the AHUs and individual VAV boxes is provided by the campus hot water system. Heat exchangers at each AHU pre-heat outside air prior to introducing it to the heating coil. The heat exchanger is used rather than utilizing return air for pre-heating or pre-cooling of outside air.

Lighting: Efficient lighting fixtures use the latest technology to reduce glare, improve worker productivity, and generate visual comfort. Occupancy sensors turn lights off when people are not present.

Material and Resources

Occupant Recycling: Recycling collection areas were located throughout the building to provide staff and students with the opportunity to divert waste from landfills.

Recycle Materials: 35.48 percent of materials in the project contain recycled content Recycled materials included concrete, steel, gypsum, roofing materials, etc.

Local Materials: 33.91 percent are manufactured regionally and 13.08 percent are extracted regionally. Regionally sourced materials include wood, brick, steel, glazing, aggregate, etc.

Indoor Environmental Quality

Low-emitting materials: Indoor air quality will be maintained with the use of low-emitting adhesives, paints, carpets, and composites.

Innovation in Design

Education: Olympic College will be providing signage and tours of the Humanities Building focused on sustainability in an effort to educate the community about green building practices.

Green Cleaning: The cleaning staff will be trained in green cleaning practices and their use. Green Seal Certified products will be used.

Integrated Pest Management: The College staff will use the least-toxic means possible to address any potential pest concerns.

Exemplary Performance: 98 percent, or more than 580 tons, of the building's construction waste was diverted from landfill.

Peninsula College – Maier Hall

LEED Gold

PENINSULA COLLEGE

Project Specifics

Gross square footage:	62,950 sf
Construction cost:	$ 27,390,359
Project occupied:	2011
Energy savings:	$15,740 / 32.8% yr
Water savings:	$1,325 / 73.5% yr
Waste recycled:	315 tons / 84%
Added LEED cost:	$402,746/1.5%
Incentives:	No incentives
LEED Payback:	24 years

Design and Construction Team

Owner's representative:	Deborah Frazier
Project manager:	Rafael Urena, DES
Architect:	Schacht | Aslani Architects
General Contractor:	McKinstry Essention, LLC

Awards:

Masonry Institute of Washington
Merit Award, 2012

AIA Seattle Honor Awards
Merit Award, 2011

AIA Seattle
What Makes It Green? 2010

During the design and building process, the architects worked closely with college faculty, staff and students to create a facility uniquely fitted to meet the needs of the Peninsula and the college. The result is a building that carefully blends the college's commitment to teaching and learning with the very latest in sustainability features, creating an environment for effective learning both within and outside Maier Hall.

Inside, students and community members can take advantage of a 131-seat performance hall designed for both musical and spoken performances as well as film showings, a learning center with multiple labs, music facilities, a ceramics lab, modern art studios, multiple classrooms, an inviting learning environment for Basic Skills students, and faculty offices, all supported by geothermal energy, daylight harvesting and natural ventilation, as well as an innovative moss roof.

An open-air breezeway allows students and visitors to pass through the building from the campus to a virgin forest and leads to a viewing platform at the wetland edge. By using less energy and water, Maier Hall will save money for the college, reduce greenhouse gas emissions, and contribute to a healthier environment for students, faculty, and the larger community.

Peninsula Dr. Brinton Sprague, Interim President of Peninsula College, says, “Maier Hall is a beautiful, functional and sustainable building that exemplifies the quality of instruction within.”

Sustainable Sites

Land Improvement: The site borders virgin forests, wetlands and an ecologically-sensitive ravine. All new plantings are native species requiring no permanent irrigation system. Rainwater is collected and directed to the adjacent wetland, which is lacking water due to the campus’ original stormwater system. An epiphytic roof of native mosses reduces heat island effect, while exterior sun screens reduce glare and unwanted solar heat gain. Heating is provided by a geothermal well field and ground-source heat pumps.

Natural Light: The building features extensive use of natural light, natural ventilation and natural cooling though the use of operable windows. These features bring students into direct contact with the unique environment of the campus and reinforce the College’s commitment to sustainability and its expanding programmatic emphasis on environmental issues.

Energy and Atmosphere

Environment: The building form wraps around a first-growth grove of tree and serves as an edge to the existing campus and as a gateway to the wetlands and woodlands beyond. An open-air breezeway allows students and visitors to pass through the building from the campus to a virgin forest and leads to a viewing platform at the wetland edge.

Inside, students and community members can take advantage of a 131-seat performance hall designed for both musical and spoken performances as well as film showings, a learning center with multiple labs, music facilities, a ceramics lab, modern art studios, multiple classrooms, an inviting learning environment for Basic Skills students, and faculty offices, all supported by geothermal energy, daylight harvesting and natural ventilation, as well as an innovative moss roof.

Material and Resources

Occupant recycling: Recycling collection areas were located throughout the building to provide staff and students with the opportunity to divert waste from landfills.

Recycle Materials: 315 tons or 84 percent of construction waste was recycled. This included $1,160,642 value in recycled materials.

Local Materials: 17 percent of the project materials were obtained regionally, totaling $923,568 for this construction.

Total Savings

Electricity:	625,685 kWh per year
Gas:	2,749 Therms per year
Total Btus:	2,383,363 per year
Water Savings:	231,411 gallons per year
Energy & Water Savings:	$17,065 per year

Skagit Valley College – Lewis Hall LEED Gold

Project Specifics

Gross square footage:	72,858 gross sf
Construction cost:	$32,400,000
Project occupied:	2014
Energy savings:	$25,000 / 319,780 kWh/yr
Water savings:	$3,000 / 69,000 gallons/yr
Added LEED cost:	$791,786
Incentives:	No incentives
LEED Payback:	27.8 years
CO_2 savings:	47.7 Metric tons/yr.

Design and construction team

Owner's representative:	Dave Scott, Skagit Valley College
Project manager:	Bob Colasurdo, DES
Architect:	Schreiber, Starling, and Lane Architects
Structural engineer:	Coughlin Porter Lundeen
Mechanical engineer:	Wood Harbinger
Civil engineer:	Northwest Datum & Design Inc.
Electrical engineer:	K Engineers, Inc.
Landscape architect:	HBB Landscape Architecture
LEED consultant:	Brightworks
General contractor:	Burke Construction Group Inc.

Completed in August 2014 and officially designated as Lewis Hall, the three-story, 71,636 square-foot facility houses student services for Registration, Admissions, and Counseling as well academic programs for Health Sciences including 22 classrooms, math and computer labs.

In awarding the Gold LEED rating, the Council cited Lewis Hall's numerous green features.

1. The facility saves heating energy by employing loss-reducing features for roof, wall and window construction, and for its use of occupancy sensors and chilled beams.
2. It saves water through use of low-flow fixtures in restroom and public spaces, and promotes water quality through its use of rain gardens and rainwater collection.
3. It saves lighting energy by use of room occupancy sensors and occupant overrides.
4. It provides for a healthier interior environment by using more outdoor air for interior ventilation, a max volume air circulations system and low emission materials.
5. Parking lot includes electric car charging stations and parking spaces for low emission vehicles.

Sustainable Sites

Land Improvement: 69 percent of the previously developed site is comprised of open space, 41 percent of that open space is vegetated.

Alternative Transportation: Skagit Valley College is served by three (3) bus lines with 0.25 miles of the site. Bicycle storage, shower/changing facilities, and racks have been provided.

Light Pollution Reduction: The project is located in a campus setting and is compliant with LEED-NC for multiple buildings and On-Campus Building Projects.

Water Efficiency

Irrigation: The installed irrigation system reduces potable water consumption by 55.64 percent from baseline.

Water Efficient Fixtures: The project utilizes ultra-low flow urinals, dual flush toilets, and low flow lavatories for an 85 percent reduction from baseline.

Rainwater Collection: This project has a rainwater collection system that collects rain from the surface area of the roof for flush fixtures and irrigation. A 15,000-gallon cistern tank has been provided for rainwater reclamation

Energy and Atmosphere

Natural Light: Occupants experience direct line of site views from many of the regularly occupied areas have been provided.

Heating and Cooling: Energy efficient methods include an improved thermal envelope, high efficiency glazing, occupancy sensors, and chilled beams.

Lighting: Multi shared and individual work stations have been provided with occupancy sensors, override on-off switches, and multi-level lighting controls.

On-Site Renewable Energy: The project included 15.5kW Net Metered Photovoltaic Array generating 16,517kWh per year and saving $1051.17 in electricity.

As part of the project, wood from a Giant Sequoia tree on campus that was diseased was milled and installed in the atrium.

Material and Resources

Recycle Materials: The project utilized 11.52 percent recycled materials by value for building materials.

Local Materials: 18.18 percent of total building materials and/or products have been extracted harvested, or recovered as well as manufactured within 500 miles of the project site.

Occupant Recycling: The facility has been provided with appropriately sized dedicated areas for the collection and storage of recycling materials including cardboard, paper, plastic and glass.

Indoor Environmental Quality

Low Emitting Materials: All indoor paint and coating products comply with the VOC limits of Green Seal and SCAQMD standards. Low emitting materials include adhesives, paints and coatings, carpet systems, composite-woods and agrifiber.

Innovation in Design

Green Cleaning: The College has committed to a LEED-EBOM 2009 IEQc3.6 Green Cleaning/Indoor Pest Management Complaint Housekeeping program.

Exemplary Performance: The facility reduced potable water use for sewage conveyance by 100 percent, reduced water use by 85 percent, and provided double the building area as green space around the building.

Skagit Valley College – Science and Allied Health Building LEED Platinum

Project Specifics

Gross square footage:	65,232 sf
Construction cost:	$22,536,844
Project occupied:	8/2009
Energy savings:	$27,197/23,461 Therm/yr
Water savings:	121,942 gal/yr
Waste recycled:	749 tons / 98 %
Added LEED cost*:	$477,441.
Incentives:	$254,570
LEED Payback**:	8.2 years
CO_2 savings:	1,167 metric tons per year

Design and Construction Team

Owner's representative:	Dennis Rohloff, Skagit Valley College
Project manager:	Bob Colasurdo, DES
Architect:	Schreiber, Starling, & Lande
Structural engineer:	AHBL
Mechanical engineer:	Wood Harbinger
Civil engineer:	LBS Engineers
Electrical engineer:	K-Engineers
Landscape architect:	Murase Associates
LEED consultant:	Green Building Systems
General contractor:	Tiger Construction

The new Laura Angst Hall, Science and Allied Health Building, is sited on the Southwest corner of the main campus located in Mount Vernon.

The building comprises a 65,232-square-feet building with distance education classrooms, labs for nursing and other health occupations, as well as classrooms for astronomy, biology, chemistry, environmental conservation and physics.

The facility was built with a host of sustainable features including a rain garden that will also function as a lab. photovoltaic panels that supply 8.5 percent of the building's electricity, lighting that self-adjusts to natural light, a system that recovers heat from lab hoods, and plumbing fixtures that use 40 percent less water.

The contractor achieved a 98 percent rate of recycling for construction waste, no new parking was added. The building achieved LEED Platinum certification.

The Distance Education portion of the building, equipped with Wi-Fi networks and smart classrooms will allow student options for learning opportunities at other community colleges as well as four-year universities.

Sustainable Sites

Land Improvement: The project removed a contaminated building within the project limits resulting in a credit for brownfield redevelopment and for maximization of open space.

Alternative Transportation: Skagit Valley College is served by two (2) bus lines with 0.25 miles of the site. Bicycle storage, shower/changing facilities and racks have been provided.

Light Pollution Reduction: The project is located in a campus setting and is compliant with LEED-NC for multiple buildings and On-Campus Building Projects.

Water Efficiency

Irrigation: The installed irrigation system reduce potable water consumption by 68.4 percent from baseline.

Water Efficient Fixtures: The project utilizes ultra-low flow urinals, dual flush toilets and low flow lavatories, showers and kitchen sinks for a 48 percent reduction from baseline.

Energy and Atmosphere

Natural Light: The project achieved a minimum 2 percent glazing factor or a minimum daylight illuminance of 25 footcandles in 75.8 percent of all regularly occupied spaces.

Heating and Cooling: Energy efficient methods include an improved thermal envelope, high efficiency glazing, reduced lighting power density, occupancy sensors and high efficiency water source heat pumps.

Lighting: Multi-shared and individual work stations have been provided with occupancy sensors, override on-off switches, and multi-level lighting controls,

Material and Resources

Occupant Recycling: The facility has been provided with appropriately sized dedicated areas for the collection and storage of recycling materials, including cardboard, paper, plastic and glass.

Recycle Materials: The project recycled 749 tons (97.1 percent) of on-site generated waste.

Local Materials: 24.9 percent of total building materials and/or products have been extracted, harvested, or recovered, as well as manufactured within 500 miles of the project site.

Indoor Environmental Quality

Low-Emitting Materials: All indoor paint and coating products comply with the VOC limits of Green Seal and SCAQMD standards. Low emitting materials include adhesives and sealants, paints and coatings, carpet systems, composite woods and Agrifiber.

Innovation in Design

Education: The project includes an educational display highlighting the building's sustainable design features as well as an educational outreach program.

Green Cleaning: The College has committed to LEED –NC v2.1 IDc1.1 CIR ruling for achievement of a Green Housekeeping program.

Spokane Falls – Business and Social Sciences (sn-w’ey’-mn) LEED Gold

Community Colleges of Spokane

Project Specifics

Gross square footage:	70,533 sf
Construction cost:	$16,724,189
Project occupied:	2009
Energy savings:	$24,456 / 498,095 kWh/yr
Water savings:	$327/ 480,675 gallons/yr
Added LEED cost:	$803,399
Incentives:	No incentives
LEED Payback:	24.2 years
Awarded:	2008

Design and Construction Team

Owner’s representative:	Dennis Dunham, Spokane Falls
Project manager:	Gloria Miller, DES
Architect:	NAC Architecture
General Contractor:	Kearsley Construction co.

The project is named sn-w'ey'-mn, which is Inland Salish for a "place of commerce," and it will house classrooms, faculty offices and other facilities for the business and social science programs.

NAC|Architecture worked closely with the Community Colleges of Spokane and Spokane Falls Community College to determine the most effective sustainable practices to incorporate in the 70,000 sf sn-w’ey’-mn Building, which houses the Business and Social Science Departments.

Sustainable attributes include:

- 40 percent reduction in water usage.
- 90 percent of regularly occupied spaces have direct line of sight to one or more exterior windows.
- 75 percent of regularly occupied spaces are daylit.
- 95 percent of construction waste was diverted from landfills to recycling centers or utilized in another form on site during construction.
- Glass thermal buffer wall that maximizes daylight harvesting opportunities in the classrooms while at the same time significantly increasing the energy efficiency of the building envelope.
- MDF (Medium-Density Fiberboard), bamboo, linoleum, terrazzo and carpet tiles with recycled backing are primary interior materials.

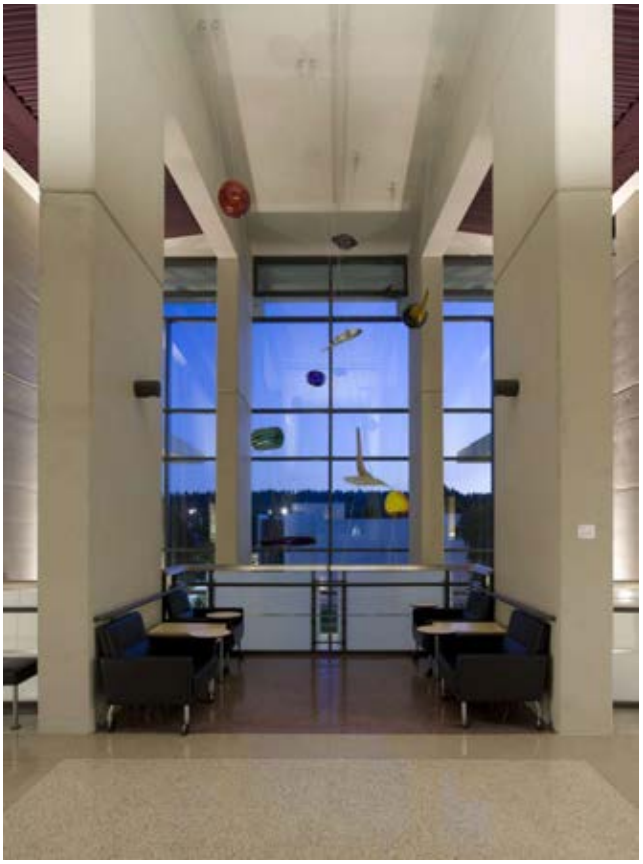
Energy and Atmosphere

Lighting and Heat: The west façade is a rhythm of eight learning lanterns. Each lantern is composed of two stacked classrooms with a floor-to-ceiling thermal buffer wall maximizing the daylight entering the classrooms and creating a visual connection to the campus while also providing an insulating air space to minimize the heat gain and loss through the large expanse of glazing.

The vertical concrete organizational members throughout the exterior are direct connections to the existing campus language, maintaining the continuity of the established rhythm.

A red light/green light system in office corridors indicates whether or not to open windows without interfering with the building mechanical systems.

There is radiant-floor heat in the three-story atrium, double walls of glass on its west side with louvers in between, and installation of bamboo cabinetry, doors and trim assist in saving energy.



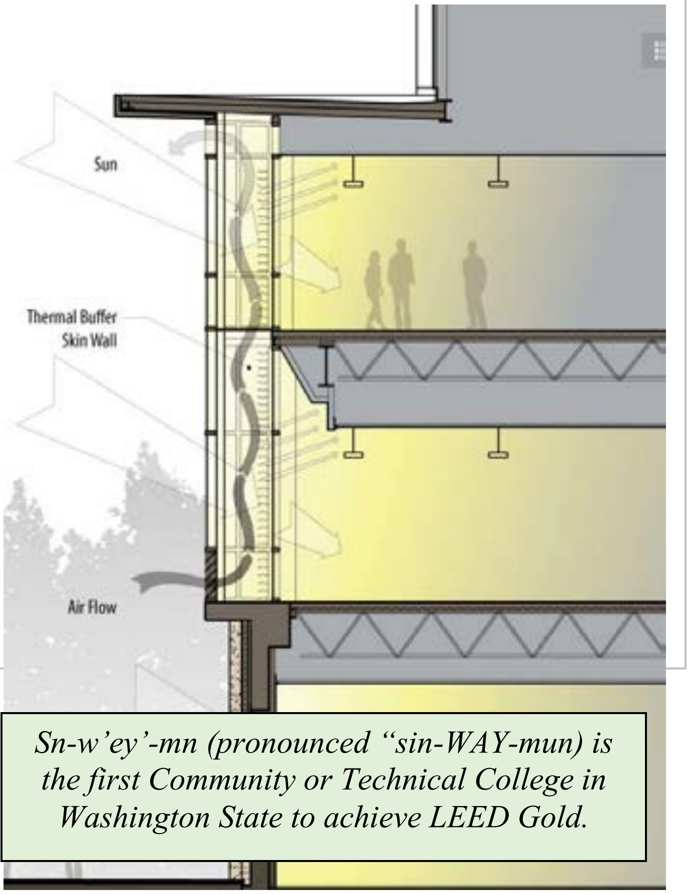
Regional Materials

Aggregate in terrazzo floors was quarried from Chewelah. Concrete was manufactured in Spokane Valley. Masonry veneer was manufactured in Mica, Washington.

Innovation in Design

On-Site Renewable Energy: The building is operating on wind-generated power.

Green Cleaning: The College has committed to a LEED-EBOM 2009 IEQc3.6 Green Cleaning/Indoor Pest Management Complaint Housekeeping program.



Sn-w'ey'-mn (pronounced "sin-WAY-mun) is the first Community or Technical College in Washington State to achieve LEED Gold.

SPSCC – Science Building

LEED Gold

Project Specifics

Gross square footage:	52,000 sf
Construction cost:	$21,901,560
Project occupied:	01/2009
Energy savings:	$ 50,899 and 11 MBtus per year
Water savings:	45,721 gallons/yr
Waste recycled:	418.3Tons / 96.2%

Design and Construction Team

Owner's representative:	Ed Roque, Dean of Capital Facilities
Project manager:	Penny Koal, DES
Architect:	The Miller|Hull Partnership
Lab Planning:	Research Facilities Design
Structural engineer:	AHBL
Civil engineer:	AHBL
Mechanical engineer:	PAE Consulting Engineers
Electrical engineer:	Sparling
Landscape architect:	Murase Associates, Inc.
LEED consultant:	O'Brien & Company, Inc.
General Contractor:	M. A. Mortenson Company

This complex provides specialized instruction for Geology, Physics, Anatomy, Chemistry and Microbiology.

The new three story Natural Sciences Building forms the western edge of the campus and compliments an existing science building to create a Natural Sciences Complex. The building provides specialized instruction for geology, botany, physics, anatomy, chemistry, and biology. An programming goal identified early in the design process centered on how to combine laboratory program elements requiring controlled mechanical ventilation with offices and classroom spaces that were to be naturally ventilated and passively cooled. This core idea significantly influenced the layout of the building and increased our goals for energy savings.

Sustainable site features extend the learning environment to the outside of the building. A central storm water infiltration pond is used for water quality testing, and native plantings within the pond and around the building are used for plant identification by the botany and biology departments.

Separating non-lab spaces in a naturally ventilated wing of the building was a fundamental strategy that led to above average energy savings. The resulting density of systems in the laboratory wing led to greater efficiency in systems piping and distribution.

A 100 person lecture hall uses motor controlled dampers and all classrooms are provided with dedicated exhaust "chimneys" to provide the primary form of ventilation.

Sustainable Sites

Land Improvement: 100 percent on-site stormwater infiltration, porous concrete, native plantings, and no irrigation

Alternative Transportation: Describe how the project provides for alternative means of transportation.

Water Efficiency

Water Efficient Fixtures: 50 percent water savings.

Site Water Use: Native plantings, including transitional native grasses to restore nutrients in the soil, allowed for no irrigation system to be installed.

Energy and Atmosphere

Natural Light: Continuous high and low ribbon windows in the laboratories provide excellent natural lighting for energy savings and improved color rendition. Refracting glass interlayer helps to bounce daylight deeper into the building.

Heating and Cooling: A variable air volume mechanical system maintains safe ventilation standards in the laboratory wing, utilizing occupancy sensors to reduce air exchanges during hours of non-use, and heat recovery in the lab exhaust system to reduce energy consumption.

Natural Ventilation: Offices and Classrooms, including a 100 seat lecture hall, utilize natural ventilation, in-slab radiant heating and thermal mass to greatly reduce energy use.

Measurement and Verification: Mechanical systems are monitored to provide opportunities for tuning and optimization of the systems over the life of the building.

Material and Resources

Construction Waste: Diverted 95 percent of construction waste material from landfill.

Recycled Materials: Recycled content exceeded 10 percent of building materials, including; CMU, steel, wood doors, gypsum products, toilet partitions, particle board, aluminum panels, rigid insulation, ceiling tiles, carpet tile, and ceramic tile.

Local Materials: Exceeded 20 percent of materials manufactured or fabricated within 500 miles of the project site.

Indoor Environmental Quality

Low-emitting Materials: Sealants and adhesives, paint, carpet, and composite wood products all meet required standards for low-emitting materials, reducing off-gassing of these finish materials.

Increase Ventilation Effectiveness: Laboratories are ventilated with 100 percent outside air. Smaller individual offices are naturally ventilated with operable windows. Larger 50 person classrooms utilize stack ventilation and operable windows to draw air through the space. A 100-seat lecture hall utilizes stack ventilation and an automatically controlled air intake damper to draw air through the space. In both classrooms, a mechanical assist system supplements the natural ventilation when necessary.

Controllability of Systems: Offices are naturally ventilated with operable windows and controllability of a solar powered exhaust fan in each office. Classrooms and laboratory ventilation is controlled by individual thermostats.

Innovation

Air Quality testing: A scale model of the proposed building was subjected to wind tunnel testing to confirm that exhaust air effluent would not conflict with air supply and natural ventilation openings in this building and adjacent buildings.

Green Housekeeping: A manual including green cleaning products and procedures was prepared and adopted by the College.

Exemplary Performance: Water savings in excess of 48 percent, and diversion of over 96 percent of construction waste from landfill qualified for exemplary performance.

Tacoma Community College Early Learning Center

LEED Gold

Project Specifics

Gross square footage:	12,962 sf
Construction cost:	$4,873,165
Project occupied:	09/2008
Energy savings:	244 MMBtus/yr; $4,000/yr
Water savings:	237,000 gallons/yr
Waste recycled:	99%
Added LEED cost*:	Approx. $191,000 for construction & fees 3.9% of construction
Incentives:	none

Design and Construction Team

Owner's representative:	Clint Steele, Tacoma Community College
Project manager:	Yelena Semenova, DES
Architect:	McGranahan Architects
Structural engineer:	AHBL Engineers
Mechanical engineer:	BCE Engineers
Civil engineer:	AHBL Engineers
Electrical engineer:	BCE Engineers
Landscape architect:	Cascade Design Collaborative
LEED consultant:	O'Brien & Company
General contractor:	Pease Construction

The Early Learning Center was conceived as a part of a campus-wide initiative to address the concept of environmental Sustainability. The LEED process was utilized as a tool during the design and construction to create a building that meets the requirements for LEED Gold Certification.

The new 12,962 square foot building at Tacoma Community College enables student parents to pursue their education by providing a safe, affordable, and nurturing environment for their children. This project includes classrooms for Infants, Toddlers, Woddlers, and Preschoolers (age 3-5) for a total of 108 children; nearly doubling the capacity of the facility that it replaced. In addition to Early Learning programs for children, the new Center provides a classroom for adults in the Early Childhood Education/Paraeducator programs and observation rooms adjacent to every classroom to provide practicum and field observation opportunities. The facility was funded by TCC students, the TCC Foundation and a State matching grant.

The Early Learning Center received LEED Gold Certification. The building has natural ventilation, operable windows, and radiant floor heating. Through the use of CO2 and occupancy sensors, the ventilation systems adapts to the changing needs of building occupants and maximize energy savings. Bonus LEED innovation credits were achieved through a Green Housekeeping policy for environmental cleaning practices, as well as a Green Building Education program that communicates the sustainable features of the facility.

Sidney Hunt, LEED Green Building Advisor
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Washington State Department of Enterprise Services

Sustainable Sites

Alternative Transportation: The building is within 1/4 mile of 10 bus routes providing building occupants usable access to an alternate means of transportation.

Heat Island Effect: By using a light colored roof and plants that shade the building, the site creates less heat, reducing its contribution to high temperatures in the city.

Light Pollution Reduction: The building utilizes site and exterior lighting that is efficient and reduces glare. As a result excess light is not reflected into the sky and energy is saved.

Water Efficiency

Water Efficient Landscaping: Utilizing drought tolerant plants and mulches to reduce water needs.

Water Use Reduction: By using dual flush toilets, low flow faucets and drought resistant planting this building will use 55% less water.

Energy and Atmosphere

Commissioning of Building Systems: Commissioning is a process that ensures that all of the building mechanical systems are working properly. For example, if a fan was installed incorrectly it would affect all the other systems associated with it and ultimately waste energy.

Optimize Energy Performance: High relief louvers and low intake louvers naturally ventilate the building by allowing cool air to enter the building near the floor and heated air to exit the building near the ceiling.

Optimize Energy Performance: In-slab hydronic heating is used throughout the learning areas saving in energy expenses.

Material and Resources

Storage and Collection of Recyclables: The Early Learning Center and TCC campus has an organized recycling program for paper, glass, plastics and food waste organics. The ELC is the first building on campus to recycle food waste organics.

Construction Waste Management: 75 percent of the building's construction waste was either reused or recycled.

Indoor environmental quality

Low-emitting Materials: Using materials that emit few volatile organic compounds (VOC's) reduces health problems

Daylight and Views: 95 percent of the ELC's indoor spaces allow views to the outdoors and natural daylight.

Innovation in Design

Education: The Early Learning Center incorporates a Green Building Education program that communicates the sustainable features of the facility through comprehensive signage and informational pamphlets.

Green Cleaning: A LEED innovation credit was achieved through a Green Housekeeping Policy with environmentally preferable cleaning products and practices.

Exemplary Credit for Water Use Reduction: A LEED exemplary credit was awarded by achieving water use reduction by more than 40 percent. (The project saved 55 percent.)

Exemplary Credit for Maximizing Open Space: A LEED exemplary credit was earned by achieving Vegetated open space equal to over 40 percent. The project achieved 46 percent by setting aside open space as visual buffers, preserving native vegetation, maintaining an open meadow for shallow stormwater detention, and incorporating outdoor play spaces.

*construction and fees.

**Added cost for LEED related consultant fees and construction costs, minus the incentives, divided by the savings from utilities based on the modeling performed for the LEED submittal which is comparing the "as-built" building to an ASHRAE 90.1 building.

WSD – Vocational Education and Support Bldg. LEED Gold

Project Specifics

Gross square footage:	23,444 sf
Construction cost:	$8,432,819
Project occupied:	2009
Energy savings:	$ 10,636/year / 875 MMBtus/year
Water savings:	26,693 gallons/year
Added LEED cost:	$141,500.
CO_2 savings:	50 tons/year

Design and Construction Team

Owner's representative:	Rick Hauan, WSD
Project manager:	Dwayne Harkness, DES
Architect:	SRG Partnership Inc
Structural engineer:	Kramer Gehlen & Associates, Inc
Mechanical engineer:	PAE Consulting Engineers
Civil engineer:	Hopper, Dennis, Jellison, PLLC
Electrical engineer:	PAE Consulting Engineers
Landscape architect:	J. D. Walsh Associates, P.S.
General contractor:	Triplett Wellman Contractor

The Vocational Education and Support Building is the first of three phases in the larger campus master plan. The master plan seeks to create a cultural core generated between the campus' library, auditorium, gymnasium and multipurpose hall. These programs act as the hearts of the communities on campus and will allow the students to see that they are all part of a significant deaf community.

The building harbors the campus' multi-purpose space with adjoining kitchen, but is otherwise intended to function as a place for vocational education. The spaces dedicated to this purpose include a maintenance shop, automotive shop and a garden shop, supported by ancillary spaces devoted to these functions.

Control and even distribution of daylight played an important role in the multipurpose space in the building, which incorporates physically integrated assemblies of prismatic skylights, operable louvers and electric lights. Windows within this space that face out to the future plaza are shaded on their exterior from direct light and use mechanically controlled interior roller blinds to darken the interior space as necessary.

The buildings multipurpose space is located at the edge of what will someday become a central campus plaza because of this project's role in the overall campus master plan. The spaces within the building that facilitate vocational education are located on the other side of the building from the multipurpose space in order to allow it to have a strong public presence.

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Washington State Department of
Enterprise Services

Sustainable Sites

Land Improvement: The project site is a previously developed site – a brownfield that required asbestos abatement during excavation. The project's storm water runoff from roofs is directed to drywells on site, while the vegetated open spaces become rain gardens for runoff from paved surfaces. These strategies take advantage of the maximized open space and mean that no runoff leaves the site.

Alternative Transportation: Building program includes 2 staff showers and bike racks to be added to campus. The project is located near several bus lines. Designated parking for low emitting and fuel efficient parking will be created for the school's fleet of hybrid cars.

Water Efficiency

Irrigation: Several approaches were used to reduce potable water consumption for irrigation by 68%. The landscape design maximized the use of drought tolerant plant materials while minimizing high water use turf grasses. The irrigation system was designed with highly efficient irrigation heads and is controlled by a sophisticated system. The new irrigation system will also connect to the existing irrigation system in order to take advantage of these new features.

Water Efficient Fixtures: The project has reduced potable water use by 32% from a calculated baseline design through the installation of dual flush water closets, low-flow urinals, and low-flow showers and sinks.

Energy and Atmosphere

Energy Performance: Well-insulated walls, roof and glazing along with a reduced lighting power density, daylighting, premium efficiency motors, variable speed drives, efficient ground source heat pumps, and an efficient domestic hot water heater optimize this project's energy efficiency.

Lighting: An automated lighting control system with integrated time clock and exterior photocell providing interior sweep control and exterior photocell/time clock control were used. Occupancy sensors, dimmable daylighting controls, and individual switches were provided in private offices, and conference room. The multi-purpose space was provided with two lighting control stations for full dimming control of three lighting zones, and raise/lower controls for motorized shades and skylight louvers.

Material and Resources

Occupant Recycling: In addition to conforming to recycling requirements set forth in LEED Materials & Resources Prerequisite Storage and Collection of Recyclables, campus operations have established a Food Waste Composting program.

Recycled Materials: Recycled content counted for 25% of the total material costs and included: concrete, structural steel, metal deck, insulation, metal wall panels, steel doors, gypsum wallboard, acoustic ceilings, rubber floor, carpet, and linoleum.

Wood: FSC certified woods were used for wood doors, casework, and fire treated plywood. These certified wood products accounted for 79% of new wood-based costs.

Local Materials: 26% of total material cost came from local materials.

Indoor Environmental Quality

Chemical and Pollutant Source Control: Removable walk-off mats were installed at all regularly used entry ways with a weekly maintenance schedule. Rooms used for chemical storage are pressurized and exhausted separately from main building return air. MERV-13 filters were installed in the air handlers.

Natural Light and Views: 78% of all regularly occupied spaces have access to daylight and views. Control and even distribution of daylight played an important role in the multipurpose space in the building, which incorporates physically integrated assemblies of prismatic skylights, operable louvers and electric lights.

Innovation in Design

Education: The project facilitates green building education via related signage, a student curriculum describing green building strategies and concepts, and project specific information posted to the school's web site.

Green Cleaning: WSD has outlined green cleaning practices and will be using cleaners that meet Green Seal's standards for industrial cleaners.

Recycling: The campus operations have established a Food Waste Composting program. This building's program is inclusive of a cafeteria with full size commercial kitchen that produces breakfast lunch and dinner for students 5 days/week producing 320 gallons of weekly food waste. The school has established a program to send this material to be composted for reuse.

Construction Waste Management: More than 96% of construction waste was diverted from landfills.

Olympic College – College Instruction Center LEED Gold (Goal)

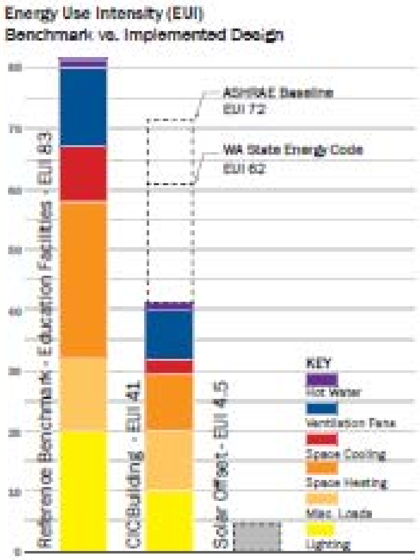
College Instruction Center

Olympic College

The College Instruction Center is a pivotal project in the realization of the College's master plan. It houses a 270-seat theater and instructional space for Fine Art, Music and Health Occupations. Located at the main entry to campus, the building joins the new Library, Science & Tech and Humanities Buildings to create a central quadrangle.

The building's three-story atrium opens into the campus spine, serving as a lobby for the theater, providing student gathering space and creating a sense of community for the multiple programs housed in the facility. Student study and breakout spaces are arranged on multiple levels around the lobby to create a hub of spaces that foster student interaction, encouraging engagement and collaboration.

SUSTAINABILITY TARGET: LEED GOLD



The CIC is designed with the goal of being a model for high performance educational facilities in terms of master plan coordination, program delivery, flexibility, resource conservation and durability.

By using a typical educational facility as a benchmark, the CIC was designed to achieve significant energy savings by focusing on many elements of the design; envelope, lighting, mechanical, plumbing and electrical equipment used by occupants.

A lower EUI number indicates a building is using less energy than a benchmark building.

The benchmark **EUI** for an educational facility is 83. The **CIC** is designed for an **EUI** of 41, which exceeds the ASHRAE Baseline and the Washington State Energy Code. The photo-voltaic system further offsets energy usage of 4.5 kBTU/sf/year to an effectively reduce the **EUI** of 36.5.

SIZE
72,000 SF

COMPLETION DATE
August 2017

PROJECT COST
$47 million

CLIENT
Olympic College
Department of Enterprise Services

ARCHITECT
Schacht Aslani Architects

CONTRACTOR
Korsmo Construction

STRUCTURAL ENGINEER
Magnusson Klemencic

CIVIL ENGINEER
Coughlin Porter Lundeen

MECHANICAL ENGINEER
PAE Engineers

ELECTRICAL ENGINEER
Tres West Engineers

SUSTAINABLE CONSULTING
O'Brien and Company

LANDSCAPE ARCHITECT
Nakano Associates

SITE STRATEGIES

Low impact development strategies for stormwater management, infiltrating rainwater through bio-swales and rain gardens

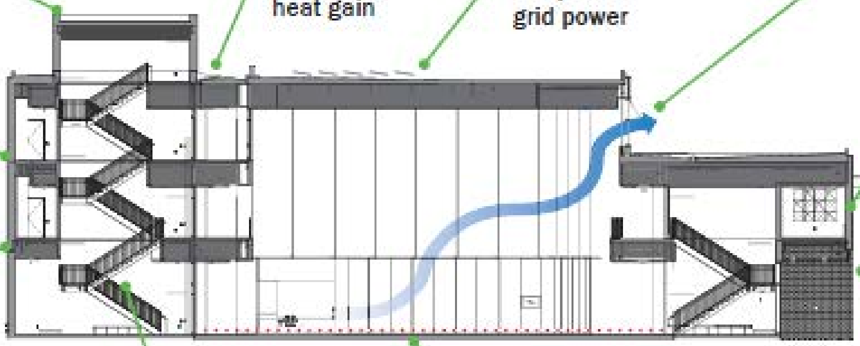
Permeable Paving for Fire Lane

The building footprint is oriented to maximize north and south solar exposures

Drought tolerant plantings reduce water usage

Kitsap transit bus stop relocation

BUILDING STRATEGIES



Mechanical system utilizes heat recovery to reduce heating/ cooling requirements

Super insulated building envelope

Occupant controlled zone heating and cooling

Highly Reflective roof reduces heat gain

100 kv photovoltaic array reduces use of grid power

Natural Ventilation improves indoor air quality

Daylight harvesting and efficient LED lights reduce electrical demand

Highly visible public stairs encourage healthy lifestyles

Radiant Floor Slab Heating increases energy efficiency

Glazing and Sun Shading is based on solar orientation to maximize daylight and minimize heat gain.

Appendix C: Sustainable Building Reports

1. Bellevue College
2. Central Washington University
3. Columbia Basin College
4. Pierce College
5. Skagit Valley College
6. South Puget Sound Community College
7. Walla Walla Skilled Nursing Facility

Sustainable Building Report

Reported by: Patrick Green
(425) 564-3342
Patrick.Green@bellevuecollege.edu

Overview

Bellevue College is committed to reducing consumption of energy and water while reducing waste through constructing and managing buildings to a minimum level of LEED Silver standards.

Projects

S Building – Occupancy Date: June 2009 – Achieved LEED Level - Silver
T Building – Occupancy Date: July 2015 – Achieved LEED Level -Gold

Training Efforts

Beginning in Summer 2015, occupants for new LEED buildings will receive training on the buildings features, intended performance, and occupancy best practices.

Lessons Learned

While infrastructure is built to LEED standards, Bellevue College must conduct outreach and education regarding energy consumption to ensure compliance of occupant behavior, including use of space heaters and monitoring windows and doors. To address these issues, Bellevue College has implemented education campaigns and policy/procedure that encourages conservation behavior. Additionally, Bellevue College implemented building-level metering for water and energy. Water meters will come online in late Spring 2015.

Recommended Improvements to the Legislation

LEED for existing buildings could be implemented with greater investment in HVAC systems. As HVAC is the largest energy cost of older buildings, there is a tremendous opportunity to advance LEED certification for older buildings. Department of Commerce encourages this through occasional competitive grants, but these are intensely competitive among institutions that compete with multiple agencies. If a College could demonstrate a workplan that achieves LEED certification for an existing building, it would help if funding were available.

New Metering Efforts and Challenges

Sub-metering the campus has been helpful, but a challenge to implement. Water meters require access to as-builts that may or may not be correct. Also, the maintenance division has expressed concern that places where meter are could leak. Lastly, getting multiple sub-contractors to connect can be a tedious process.

Sustainable Building Report

Reported by: Mickey Parker, Administrative Services Manager, Facilities Management, Central Washington University
Phone: (509) 963-1275
E-mail: parkerm@cwu.edu

I. Overview

Central Washington University's Campus Facilities Master Plan 2013 sets a key vision for the campus to "take progressive measures toward environmental sustainability. Sustainability is defined as the ability to meet the needs of the present without compromising the ability of the future generations to meet their own needs. Sustainable actions will be taken to improve the relationship between humans and their natural environment, to amplify the beauty of the campus, to decrease resource expenditure and depletion, and to serve as a source of pride for the university community at large. Actions taken will help teach students and citizens learn sustainability by practice rather than words." CWU is committed to resource conservation and another key objective stated in our master plan is to "Develop with resource conservation measures in place. Work toward Leadership in Energy and Environmental Design (LEED) certification for all new and renovated major facilities, as funds permit." CWU's Facilities Management Department has been successful in energy conservation practices, winning the Governor's Excellence in Energy Conservation award in 2004.

II. Projects

Project Name	Current Phase	Size (GSF)	LEED Level	Status	(M or P)	Consump (Yes/No)
Dean Hall Renovation Renovated Science Building	Occupied 2009	79,095	LEED NC Gold	Awarded LEED Gold	M	Yes
Hogue Technology Building Tech Building Renovation and Addition	Occupied 2012	95,996	LEED NC Gold	Awarded LEED Gold	M	Yes
Science Phase II New Physics & Geological Science Facility	Construction	109,089	LEED NC Silver	Goal	M	No
Samuelson STEM New and renovated science facility	Design	110,286	LEED NC Gold	Goal	N/A	N/A
Health Sciences New science facility	Predesign Complete	72,200	LEED NC Gold	Goal	N/A	N/A

III. Training Efforts

Facilities Management encourages and supports training of its staff to increase the quality and depth of implementation and sustainable future. Project management staff attended LEED certification training and one became a LEED AP. The Facilities Department held several LEED orientation workshops to familiarize staff with LEED, and held LEED training pre and post construction. Eco-Charrettes are held early in the design phase to familiarize the building committee with the costs and benefits, and LEED kick-off meetings are held at the on-set of construction to review LEED expectations with the Contractor and subs.

IV. Lessons Learned

Start early. Encourage stakeholder training in sustainable design. Hire consultants well versed in sustainable design. Identify sustainable champion for project. Utilize eco-charrettes early, and revisit later in design/CD phase. Create, follow thru and frequently review LEED checklists and status. Commission building systems, and bring the commissioning agent in early. Provide training for building automation technicians to ensure proper building operation. Be flexible. Innovate.

V. Recommended Improvements to the Legislation

Consider the challenge and applicability in achieving LEED silver certification for renovation projects, and provide additional LEED funding in such cases.

VI. Metering Efforts and Challenges

CWU standards require installation of condensate, electric and water meters on all new construction –LEED and non-LEED projects. Meter tracking and reporting are coordinated through campus-wide Alerton and Ion systems and managed through the Facilities Management Department. The major challenges with metering include limited funds to support the manpower/training needed to verify meter accuracy, maintain meters, and reporting system.

Sustainable Building Report

Reported by: *BRADY BROOKES*
Phone *509 542 5546*
E-mail *bbrookes@columbiabasin.edu*

Overview

Columbia Basin College is committed to designing, building and certifying new buildings to LEED Silver in accordance with Chapter 39.35D RCW High-Performance Public Buildings passed during the 2005 legislative session.

Projects

B Business Building, Occupied Fall of 2009, Achieved LEED Silver
CCTE Center for Career and Technical Education, Occupied December 2010, Achieved LEED Gold
WLSS World Language Social Science, Design Phase, Projected completion January, 2017, expected LEED level is Silver

Training Efforts

CBC holds weekly meetings with staff and consultants to discuss both LEED construction projects on campus and energy performance training.

Lessons Learned

CBC has learned that we should not focus attaining a Gold or Platinum level. We design to reach Silver as the most cost effective for efficiency.

Recommended Improvements to the Legislation

None

New Metering Efforts and Challenges

CBC currently has two LEED Buildings. We maintain spreadsheets on both for energy usage.

Sustainable Building Report

Submitted by: Jim Taylor, Director of Facilities
Debby Aleckson, Budget Manager
Phone: Jim Taylor (253) 964-6588
Debby Aleckson (253) 964-6565
E-mail: jtaylor@pierce.ctc.edu
daleckson@pierce.ctc.edu

I. Overview

Pierce College is committed to compliance with directives and legislation regarding design standards for public buildings. New buildings are constructed to meet no less than LEED Silver certification. Renovation of existing buildings has not resulted in re-designation of buildings to LEED Silver certification but design and construction have incorporated LEED concepts to the greatest degree possible.

II. Projects

Project Name	Project Status	Size (GSF)	LEED Level designed	LEED Level achieved	Metered (M) or Prorated (P)	Consumption Data Provided
Rainier Science & Technology Building – Fort Steilacoom	Completed. Occupied March 2010	80,645	Silver	Gold Awarded June 2010	M	Yes
Arts & Allied Health Building - Puyallup	Completed. Occupied August 2010	61,597	Silver	Gold Awarded February 2011	M	Yes

III. Training Efforts

Project management staff participated with project architects and sub-consultants in researching the LEED program and requirements for achieving necessary points to achieve a minimum of LEED Silver certification. College personnel participated in selecting points to be achieved in order to accomplish this and in monitoring progress through design and construction.

IV. Lessons Learned

- *Implementation of the LEED program is not simplistic and requires considerable planning and effort.*
- *Planning is necessary early in project design in order to ensure success.*
- *It is essential that the A/E design team has experience with the LEED process.*
- *LEED certification involves additional project expense and this needs to be factored into the overall project budget.*

- *Directions to the general contractor need to be very specific in regards to achieving LEED points during construction.*
- *LEED Silver certification is sufficient and there is limited realistic benefit in attempting to achieve higher certification levels.*
- *The certification process requires extensive interaction between the owner, contractor and A/E team.*
- *Successful project completion should include expanded commissioning and post-occupancy assessment through at least the first twelve months following substantial completion.*
- *Unless projects include a means to continually monitor the effectiveness of sustainable design intent, buildings will not be proven to be successful in meeting long-term goals for operating cost or environmental benefit. This will require effective metering, monitoring, periodic re-commissioning and staff training.*
- *Assessments of the benefits of LEED certification need to include the overall impact to long-term building operating costs. The assumption that energy savings alone provide sufficient merit to justify LEED design is not sufficiently valid. Buildings constructed under LEED design guidelines may incur other operating costs that are not being adequately considered.*

V. Recommended Improvements to LEED Legislation

- *Allowable project cost should include a specific line item for LEED certification.*
- *Reinforce to institutions and agencies that there is no intent to encourage or require anything beyond LEED Silver.*
- *Maintenance and Operations cost funding appropriations need to include adequate provision for those costs associated with managing long-term operational costs of sustainable buildings, particularly to ensure the ability to adequately meter, monitor and manage these efforts to ensure compliance with the intent of legislation and executive orders.*
- *Legislation should be written to ensure that Maintenance and Operations appropriations can only be used by institutions and agencies for the express purposes of maintenance and operational costs to include those required to meet sustainable design intent.*
- *Reconsider the value of LEED certification as it currently exists. Explore other options for achieving measurable long-term cost efficiencies while still achieving major environmental goals and benefits.*

VI. Metering Efforts and Challenges

In conjunction with our LEED projects, we are conducting additional energy efficiency initiatives to include grant funded projects through the Department of Commerce. These initiatives include expanded metering of all of our buildings. We have found that metering by building is an essential component of a comprehensive monitoring and metering plan. Metering installed during construction of our LEED buildings has not proven sufficiently reliable and we have included these buildings in more recent metering upgrades. Metering devices vary greatly in cost and sophistication and it is essential to plan and coordinate closely with capable design professionals to include the agency's controls vendor in order to select and install devices that can provide reliable and easily understood data as well as be reasonably maintained. It is also essential to ensure that metering devices and data generated are compatible with Portfolio Manager and that data can be easily uploaded to Portfolio Manager for state reporting purposes.

Sustainable Building Report

Reported by: *Bob Colasurdo / Keith Schrieber*
Phone (206) 510 – 8147 / (206) 682-8300
E-mail: robert.colasurdo@des,wa,gov / schreiber@sslarchitects.com

Overview

The project is comprised of a 100% new single building with a total of three stories and a gross square footage of 71,636 sf. The project site area within the LEED –NC project boundary is 221,434 sf.. The project is located on a campus, there are 54 associated parking spaces, the site was previously developed. The building uses energy from natural gas, electricity, district or campus heating, an on-site renewable. Water is provided from a municipal water system as well as an on-site rainwater system. The sewage is conveyed to a municipal waste system. The project was certified as LEED gold.

Projects

Skagit Valley College Lewis Hall - Substantial Completion August 1, 2014 – Certified LEED Gold

Training Efforts

The college facilities staff had participated in past projects that obtained LEED certification. Prior to the LEED Charette, the college staff and interested faculty were given an introduction to the USGBC and LEED process.

Lessons Learned

We were unable to achieve LEED Credit MRc2 for Waste Reduction as the contractors control of on-site waste collection and his record keeping were insufficient to meet the minimum of 50% reduction by weight. Recommend

Recommended Improvements to the Legislation

LEED sometimes becomes a chase for points and sometimes does not reflect true sustainability. Allow other than USGBC programs for sustainability. Suggest Energy Star or other rating systems be accepted as an equivalent.

Metering Efforts and Challenges

As part of the LEED measurement and verification credit, a central power meter monitors the main incoming power, the feeders to the lighting panelboards, the feeders to the PV system and the feeders to the transformers on each level – 9 metering points in all. The meter reports to the Alerton system on BACNet.

Venturi flow measuring systems that identifies the metered service (hot water heating, etc.), the low rate and pressure drop are provided. They communicate this to the DDC system via differential pressure electronic transmitters.

A magnetic volume pulse meter was installed on the utility company's gas meter to report gas usage through the DDC System.

A pulse meter for total water consumption was installed and reports via the DDC System. A steam meter was installed on the plant feed to report total steam use by the building.

The biggest challenge is getting all of the separately manufactured meters and metering probes to communicate to the DDC Reporting system.

Sustainable Building Report

Reported by: *Yelena Semenova*
Phone 360-407-9338
E-mail Yelena.Semenova@des.wa.gov

Overview:

Sustainable design strategies employed by the project were initially considered during sustainable design brainstorming discussions with design team consultants and in a sustainable design charrette with the SPSCC project team in November 2009. Strategies were reviewed and revised again through design development and completion of design in meetings with the client group through start of construction in November 2011.

Project:

SPSCC Building 22 – The Center for Student Success
Completion Date: January 2014 – Certified LEED Silver.

Recommended Improvements to the Legislation

Describe what improvements could be made to make achieving LEED Silver easier. This might include incentives, disincentives, or (others?).
Suggestion to State process would be to make LEED reporting required by contractors a Pay Application line item.

Metering Efforts and Challenges

Describe the standards or strategies established to meter energy and water in all LEED buildings. Include a description of the challenges encountered in getting meters installed and operational, and in establishing an on-going tracking and reporting system.
I don't know if there are specific metering challenges – meters are provided as follows:

Electricity: *There are nine electrical meters planned for the project and they all report their values to the Building Management System (BMS):*

- *Total building (read at switchboard)*
- *Two meters reading electrical use for elevators*
- *One meter reading electrical use on HVAC equipment*
- *One meter reading electrical use for receptacles*
- *Two meters reading electrical use for lighting*
- *One meter reading power used through the emergency power distribution system*
- *One meter reading power used through the standby power distribution system*

Gas: *The main gas service into the building is metered and the meter reading reported to the DDC monthly. Gas to the boilers are sub-metered and reported to the DDC monthly.*

Other heating fuel *(oil, propane, wood, steam, or hot water): The condensing water system has been equipped with a flow meter and supply and return water temperature sensors that report values to the BMS. Total btu/h's moved by the system can be calculated by those values and will be produced by the BMS monthly.*

Domestic Hot Water: *The domestic hot water will only be metered at the one hot water heater serving the central toilet and janitor's closet stack. The various sinks and toilet rooms spread throughout the building will not be metered as they utilize instantaneous water heating instead of centralized*

Water: *The building's domestic water use is being centrally metered and this value will be reported to the BMS system monthly. In addition, the makeup water to the building's cooling tower will be metered and reported to the BMS.*

Irrigation: *No permanent irrigation is provided for this project.*

Sustainable Building Report

Reported by: Michelle Hitch
Phone 206-223-5235
E-mail mhitch@nbbj.com

Overview

Just as the Community Living Center (CLC) model of care at the new Walla Walla State Veterans Home will focus on life and de-institutionalizing long-term care, the Agency is also committed to providing the most sustainable physical environment for our veterans.

Projects

Walla Walla Skilled Nursing Facility
Substantial Completion or Occupancy Date: November 2016 (estimated)
*Achieved LEED Level: Silver / Gold**

Training Efforts

Agency staff were very familiar with the LEED design and construction process. The Washington Veterans Home in Retsil (completed in 2005) was one of the first State of Washington LEED Gold projects.

Lessons Learned

As mentioned above, the Agency received a Gold LEED rating for the Washington State Veterans Home in 2005. One of the lessons learned in that project and applied in the Walla Walla project was the importance of establishing sustainability goals and LEED tracking at the very earliest of the Predesign process.

No specific forms other than the LEED checklist were used. There was not a specific LEED Spec included in the design documents, but we have attached the Division 1 section on Sustainable Design from our design documents.

Recommended Improvements to the Legislation

The Agency had an opportunity to potentially utilize photo voltaic panels for the project. This would have ensured the achievement of a Gold LEED rating as well as providing for superior long term energy sustainability. Funds, however, were not available to support the design and construction effort. Funding set aside by the Legislature to support such extraordinary sustainability efforts could have a significant impact on new State of Washington facilities.

New Metering Efforts and Challenges

While LEED v4 requires Building-Level Water Metering and Building-Level Energy Metering as prerequisites, the Walla Walla State Veterans Home is being designed with LEED 2009. This version does not have a requirement for metering, although EA Credit 5: Measurement and

Verification is a potential credit to provide for the accountability of building energy consumption over time. This credit was assessed by the team and was determined to be too costly, due to the required installation of metering and sub-metering equipment, and would present overly complex logistics for the reporting process. Given the multi-building configuration of the project, water and power are metered at the building level per the state requirements, but the project is not designed for system type metering.

Appendix D: Energy and Water Reports

1. Bellevue College
2. Bellingham Technical College
3. Central Washington University
4. Centralia College
5. Clark College
6. Columbia Basin College
7. Corrections, Dept. of
8. Edmonds Community College
9. Everett Community College
10. Grays Harbor College
11. Lake Washington Institute of Technology
12. North Seattle College
13. Peninsula College
14. Pierce College
15. School for the Blind
16. School for the Deaf
17. Seattle Central College
18. South Seattle College
19. Community Colleges of Spokane
20. South Puget Sound Community College
21. Tacoma Community College
22. Walla Walla Community College
23. Washington State University
24. Wenatchee Valley College
25. Western Washington University
26. Yakima Valley Community College

State LEED Project **LEED Level Achieved:**

ANNUALIZED DATA FORM

Date:

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: June 14, 2015

To print use legal size paper

Building Name: Science and Technology Building, Building S
Institution Name: Bellevue College
Location: Bellevue, Washington
University/Agency: Bellevue College
Approx. Occupancy Date: Jun-09
Building Use: Classrooms, faculty offices, science labs
Primary HVAC: 2 each Rooftop Supply/Exhaust Units
Building Square Footage: 64238
No. of Lab Hoods: 34
Other High Energy Using Equipment(describe):
Renewable Energy Systems (describe): Heat Exchanger: heat recovered from exhaust air units pre-heats incoming air in supply units during Winter

Submitted By: Patrick Green
Phone: 425-564-3342
Email: patrick.green@bellevuecollege.edu

		%/Year
Average Hours/Wk:	96	75%
No. of People:	500	
Average Hours/Wk:	65	25%
No. of People:	250	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.087
Melded Gas Rate ($/therm): $ 1.04
Other Fuel Rate ($/MMBtu): N/A
List Other Fuel: Nonce
Metered Data: Gas, Electricity
Prorated Data: Water

Year:	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	73134	66622	71920	69494	70850	62779	84635	80099	60009	64451	59968	57893	821854
Electricity ($)	$ 6,363	$ 5,796	$ 6,257	$ 6,046	$ 6,164	$ 5,462	$ 7,363	$ 6,969	$ 5,221	$ 5,607	$ 5,217	$ 5,037	$ 71,501
Gas (therms)	6130	5746	4368	2986	1659	1371	1294	1318	1359	1976	3954	4552	36713
Gas ($)	$ 6,375	$ 5,976	$ 4,543	$ 3,105	$ 1,725	$ 1,426	$ 1,346	$ 1,371	$ 1,413	$ 2,055	$ 4,112	$ 4,734	$ 38,182
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	1080.8703	1080.8703	1080.8703	1080.8703	1080.8703	1080.8703	1080.8703	1080.8703	1080.8703	1080.8703	1080.8703	1080.8703	12970.4436
Interior water/sewer ($)													$ -
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Usage/Person: 29.6467282
KBtu/SF/Year (EUI): 100.8042879
Energy $/SF/Year: $ 1.7074
Total Cost/SF/Year: 1.7074445

This form is used when Portfolio Manager data (total year data) is used or there is mixed data (monthly and annual). Enter the "total year data" in the "Jan" column.

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** Silver

ANNUALIZED DATA FORM

Date: 30-Jun-15

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: Feb 27, 2015

To print use legal size paper

Building Name: Perry Center (PC)
Institution Name: Bellingham Technical College
Location: Bellingham WA
University/Agency: 250
Approx. Occupancy Date: Sep-14
Building Use: Classroom, Computer Lab, Offices, Fish Hatchery
Primary HVAC: Natural Gas
Building Square Footage: 7,823
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe):
Renewable Energy Systems (describe):

Submitted By: Dave Jungkuntz
Phone: 360.752.8355
Email: djunkuntz@btc.ctc.edu

		%/Year
Average Hours/Wk:	45	75
No. of People:	36	
Average Hours/Wk:	16	25
No. of People:	4	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh):
Melded Gas Rate ($/therm):
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data:
Prorated Data:

Year:	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	8,280	8,160	7,440	7,880	7,520	6,680	4,800	5,320	5,040	5,280	6,800	9,440	82,640
Electricity ($)	$ 851	$ 838	$ 767	$ 801	$ 754	$ 682	$ 497	$ 548	$ 521	$ 551	$ 716	$ 882	$ 8,408
Gas (therms)	231	234	158	111	46	15	11	8	18	34	126	166	1,158
Gas ($)	$ 231	$ 233	$ 161	$ 116	$ 54	$ 25	$ 21	$ 18	$ 28	$ 43	$ 137	$ 179	$ 1,246
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	10,472		10,472		10,472		2,992		748		5,984		41,140
Interior water/sewer ($)	$ 299		$ 306		$ 306		$ 282		$ 275		$ 292		$ 1,760
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Usage/Person: 14.6928571
KBtu/SF/Year (EUI): 50.8459261
Energy $/SF/Year: $ 1.2341
Total Cost/SF/Year: 1.4590311

This form is used when Portfolio Manager data (total year data) is used or there is mixed data (monthly and annual). Enter the "total year data" in the "Jan" column.

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** **Date:** 15-Apr-16 Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form Complete all applicable yellow boxes. Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

Building Name: Barto Hall
Institution Name: Central Washington University
Location: Ellensburg, Washington
University/Agency: CWU
Approx. Occupancy Date: Sep-12
Building Use: Residence Hall
Primary HVAC: Heat Recovery / Distributed Fan Coils
Building Square Footage: 121456
No. of Lab Hoods: None
Other High Energy Using Equipment(describe): None
Renewable Energy Systems (describe): 1337.78 SQFT Solar Domestic HW / 46.49kW Solar PV

Submitted By: Mickey Parker
Phone: 509-963-1275
Email: parkerm@cwu.edu

		%/Year
Average Hours/Wk:	168	75%
No. of People:	363	
Average Hours/Wk:	168	25%
No. of People:	0	

Value from Renewables ($/yr): $ 1,583.14
Melded Electric Rate ($/kWh): $ 0.049
Melded Gas Rate ($/therm): $ 0.71
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: E/G/W
Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	117923	105597	110776	102850	106707	98886	105685	107609	110518	115339	109795	102703	1,294,387
Electricity ($)	$ 5,778	$ 5,174	$ 5,428	$ 5,040	$ 5,229	$ 4,845	$ 5,179	$ 5,273	$ 5,415	$ 5,652	$ 5,380	$ 5,032	$ 63,425
Gas (therms)													0
Gas ($)													$ -
Other: Nat. Gas (KBtu)	180540	133518	133722	156672	141066	114036	114750	70788	89352	157794	162282	93534	1,548,054
Other: ($)	$ 1,668	$ 1,282	$ 1,264	$ 1,339	$ 1,199	$ 979	$ 950	$ 603	$ 753	$ 1,278	$ 1,354	$ 809	$ 13,478
Chilled Water (KBtu)*	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water (KBtu)**													0
Steam (KBtu)**	0	0	87	69	17	368013	21296459	2921638	53521	194792	575722	677878	26,088,196
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)	800	913	2802	3699	4217	4458	4589	3736	3129	2146	1374	446	32,309
WATER													
Interior water (gals)	39000	42000	34000	460000	400000	330000	380000	200000	260000	500000	420000	200000	3,265,000
Interior water/sewer ($)	$ 177	$ 186	$ 161	$ 1,735	$ 1,512	$ 1,255	$ 1,440	$ 775	$ 994	$ 1,883	$ 1,589	$ 774	$ 12,479
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 11,992.7 KBtu/SF/Year (EUI): 263.0 Energy $/SF/Year: $ 2.98 Total Cost/SF/Year: $ 3.08

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Gold

Date: 15-Apr-16

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

Building Name: Dean Hall
Institution Name: Central Washington University
Location: Ellensburg, Washington
University/Agency: CWU
Approx. Occupancy Date: Sep-08
Building Use: Classrooms, Science Labs, Offices, Museum
Primary HVAC: Dual Duct System
Building Square Footage: 79095

Submitted By: Mickey Parker
Phone: 509-963-1275
Email: parkerm@cwu.edu

		%/Year
Average Hours/Wk:	61	75%
No. of People:	344	
Average Hours/Wk:	56	25%
No. of People:	48	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.049
Melded Gas Rate ($/therm): $ 0.71
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: E/G/W
Prorated Data:

No. of Lab Hoods: 1
Other High Energy Using Equipment(describe): Two computer labs
Renewable Energy Systems (describe): None

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	77029	70288	73150	75885	81355	78422	90725	85965	82925	79927	73526	76968	946,163
Electricity ($)	$ 3,774	$ 3,444	$ 3,584	$ 3,718	$ 3,986	$ 3,843	$ 4,446	$ 4,212	$ 4,063	$ 3,916	$ 3,603	$ 3,771	$ 46,362
Gas (therms)													0
Gas ($)													$ -
Other: Nat. Gas (KBtu)	11057	10283	11499	10836	10283	10172	10172	10393	10098	11057	20910	11322	138,082
Other: ($)	$ 183	$ 173	$ 193	$ 173	$ 165	$ 169	$ 166	$ 171	$ 161	$ 170	$ 257	$ 178	$ 2,158
Chilled Water (KBtu)*	0	0	0	7630	101469	277362	301257	194831	204811	95580	0	0	1,182,940
Hot Water (KBtu)**													0
Steam (KBtu)**	258276	204963	186008	130303	126569	4338340	102078	216788	172172	203386	313149	255599	6,507,631
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	30000	40000	30000	30000	30000	30000	30000	30000	20000	50000	40000	20000	380000
Interior water/sewer ($)	$ 579	$ 561	$ 615	$ 579	$ 562	$ 597	$ 597	$ 615	$ 545	$ 613	$ 632	$ 580	$ 7,075
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 1,407.4

KBtu/SF/Year (EUI): 139.8

Energy $/SF/Year: $ 1.64

Total Cost/SF/Year: $ 1.73

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Gold

Date: 15-Apr-16

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Due: March 30, 2016

Required per RCW 39.35D.030 (3)(b)

Building Name: Hogue Hall
Institution Name: Central Washington University
Location: Ellensburg, Washington
University/Agency: CWU
Approx. Occupancy Date: Sep-12
Building Use: Classrooms, Labs, Offices
Primary HVAC: Heat Recovery / Chilled Beam
Building Square Footage: 95996
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): Two computer labs / Foundry Lab (Gas & Elec Furnace) / Welding Lab / Machine Lab / Wood Lab
Renewable Energy Systems (describe): 119 SQFT Solar Domestic HW / 28.9 kW Solar PV / 1590 SF Transpired Solar Collector

Submitted By: Mickey Parker
Phone: 509-963-1275
Email: parkerm@cwu.edu

		%/Year
Average Hours/Wk:	67	75%
No. of People:	243	
Average Hours/Wk:	45	25%
No. of People:	42	

Value from Renewables ($/yr): $ 2,043.76
Melded Electric Rate ($/kWh): $ 0.049
Melded Gas Rate ($/therm): $ 0.71
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: E/G/W
Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	64814.25	57898	57926.5	67735	68229	72074.5	62561	48576.25	47692.25	66583.75	69484.75	69407	752,982
Electricity ($)	$ 3,176	$ 2,837	$ 2,838	$ 3,319	$ 3,343	$ 3,532	$ 3,065	$ 2,380	$ 2,337	$ 3,263	$ 3,405	$ 3,401	$ 36,896
Gas (therms)													0
Gas ($)													$ -
Other: Nat. Gas (KBtu)	5197	5086	5418	7740	8403	8293	8514	8956	8670	8735	9486	8772	93,269
Other: ($)	$ 130	$ 125	$ 138	$ 147	$ 149	$ 154	$ 153	$ 159	$ 149	$ 151	$ 165	$ 157	$ 1,778
Chilled Water (KBtu)*	22141	35897	261134	289161	181031	296975	390058	298542	197094	135252	93068	85099	2,285,452
Hot Water (KBtu)**													0
Steam (KBtu)**	2743289	2035332	2061062	2102299	167806	81088	129775	189118	220305	457850	735852	677202	11,600,978
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)	1030	2175	3677	4657	5125	5322	5552	4620	4071	2869	1978	632	41,709
WATER													
Interior water (gals)	20000	20000	10000	20000	20000	10000	1000	10000	10000	10000	20000	20000	171000
Interior water/sewer ($)	$ 563	$ 527	$ 581	$ 563	$ 545	$ 563	$ 547	$ 581	$ 528	$ 546	$ 598	$ 580	$ 6,722
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 887.2
KBtu/SF/Year (EUI): 170.9
Energy $/SF/Year: $ 1.90
Total Cost/SF/Year: $ 1.97

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: 2009

Date: 13-Apr-16

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

Building Name: Walton Science Center (Formerly New Science Center)
Institution Name: Centralia College
Location: Centralia, WA
University/Agency: CC
Approx. Occupancy Date:
Building Use: Classrooms, Offices, and Labs
Primary HVAC: Gas Fired Hot Water with Chiller
Building Square Footage: 70000
No. of Lab Hoods: 37
Other High Energy Using Equipment(describe): Labs, Computer Lab
Renewable Energy Systems (describe): N/A

Submitted By: Andrea Dulaney, Program Coordinator
Phone: 360-736-9391 x. 218
Email: adulaney@centralia.edu

		%/Year
Average Hours/Wk:	90	75%
No. of People:	930	
Average Hours/Wk:	60	25%
No. of People:	400	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.092
Melded Gas Rate ($/therm): 0.999
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: G/W
Prorated Data: E

Year:													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
Electricity (kWh)	60480	57420	58680	51120	51480	50040	48600	48240		49680	50400	64080	590220
Electricity ($)	$ 5,353	$ 5,210	$ 5,655	$ 4,756	$ 4,583	$ 4,748	$ 4,315	$ 4,512		$ 4,458	$ 4,786	$ 6,108	$ 54,485
Gas (therms)	3853.7	2497.0	2559.0	2126.9	1137.2	446.2	233.1	218.1	357.2	738.0	1862.7	3749.5	19778.693
Gas ($)	$ 3,979	$ 2,591	$ 2,654	$ 2,212	$ 1,207	$ 496	$ 276	$ 260	$ 403	$ 796	$ 1,729	$ 3,165	$ 19,767
Other: (KBtu)	0	0	0	0	0	0	0	0	0	0	0	0	0
Other: ($)	0	0	0	0	0	0	0	0	0	0	0	0	$ -
Chilled Water (KBtu)*	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water (KBtu)**	0	0	0	0	0	0	0	0	0	0	0	0	0
Steam (KBtu)**	0	0	0	0	0	0	0	0	0	0	0	0	0
Domestic HW (KBtu)**	0	0	0	0	0	0	0	0	0	0	0	0	0
RENEWABLES													
Solar Thermal (KBtu)	0	0	0	0	0	0	0	0	0	0	0	0	0
Electrical (kWh)	0	0	0	0	0	0	0	0	0	0	0	0	0
WATER													
Interior water (gals)	20196	26928	36652	29920	38148	31416	20944	29172	20944	30668	36652	35904	357544
Interior water/sewer ($)	$ 159	$ 188	$ 230	$ 201	$ 237	$ 208	$ 162	$ 198	$ 162	$ 204	$ 230	$ 227	$ 2,407
Domestic HW (gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Water captured (in)(gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Reclaimed water (in)(gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Reclaimed water (in)($)	0	0	0	0	0	0	0	0	0	0	0	0	$ -
Irrigation (gals)	0	0	1	0	40	97	301	502	437	80	0	0	1458
Irrigation ($)	$ 66	$ 66	$ 71	$ 66	$ 259	$ 535	$ 1,523	$ 2,495	$ 2,181	$ 453	$ 66	$ 66	$ 7,845
Water captured (out)(gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Reclaimed water(out)(gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Reclaimed water (out)($)	0	0	0	0	0	0	0	0	0	0	0	0	$ -

Water Use/Person/Yr: 448.3

KBtu/SF/Year (EUI): 57.0

Energy $/SF/Year: $ 1.06

Total Cost/SF/Year: $ 1.10

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

Energy and Water Consumption and Savings Reporting Form

Required per RCW 39.35D.030 (3)(b)

LEED Level Achieved: Gold

Date: 29-Mar-16

Submit by email to: Sustainability@des.wa.gov

Complete all applicable yellow boxes. Submit as an Excel Spreadsheet

Due: April 15, 2016

Building Name: Clark College at Columbia Tech Center (CTC)
Institution Name: Clark College at Columbia Tech Center (CTC)
Location: Vancouver
University/Agency: Clark College at Columbia Tech Center (CTC)
Approx. Occupancy Date: 2009
Building Use: Classrooms, science labs, offices, meeting space
Primary HVAC: (4) airhandling units with terminal fans
Building Square Footage: 69984
No. of Lab Hoods: 4
Other High Energy Using Equipment(describe): Mechatronics, power utility program (1790 sq. ft.); server room (213 sq. ft.); two computer labs (2292
Renewable Energy Systems (describe): Two 1kw vertical exis wind turbines (non-functioning); 2.2 kw pv arrays

Submitted By: Stacey Mitcham
Phone: (360)992-2438
Email: smitcham@clark.edu

		%/Year
Average Hours/Wk:	59.98	75%
No. of People:	856	
Average Hours/Wk:		
No. of People:		

Value from Renewables ($/yr): $ 50.95
lded Electric Rate ($/kWh): $ 0.070
Melded Gas Rate ($/therm): $ 0.99
Other Fuel Rate ($/MMBtu): $ -
List Other Fuel: 0
etered Data: E/G/W
rorated Data: 0

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	58080	49440	55440	51600	51600	61920	6600	58560	46320	65520	52080	50400	607560
Electricity ($)	$ 3,085	$ 2,636	$ 2,947	$ 2,457	$ 2,458	$ 2,938	$ 3,127	$ 2,782	$ 2,474	$ 3,474	$ 2,772	$ 2,686	$ 33,835
Gas (therms)	2824.6	1787.4	1686.8	1525.2	1192.4	742.8	263.4	255.5	495.5	679.4	1201.5	2099.2	14753.7
Gas ($)	$ 2,872	$ 1,823	$ 1,721	$ 1,558	$ 1,221	$ 766	$ 281	$ 273	$ 516	$ 702	$ 1,143	$ 1,796	$ 14,674
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)	33.141	39.83	64.858	70.44	71.011	99.203	99.415	85.551	75.158	43.853	34.855	10.498	727.813
WATER													
Interior water (gals)	0	39644	0	33600	0	258060	0	638044	0	175780	0	7480	1152608
Interior water/sewer ($)	$ -	$ 374	$ -	$ 342	$ -	$ 737	$ -	$ 1,403	$ -	$ 550	$ -	$ 239	$ 3,645
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)	0	0	0	0	0	228888	0	628320	0	381480	0	7487	1246175
Irrigation ($)	$ -	$ -	$ -	$ -	$ -	$ 422	$ -	$ 1,159	$ -	$ 704	$ -	$ 1	$ 2,287
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 1,795.3

KBtu/SF/Year (EUI): 50.7

Energy $/SF/Year: $ 0.69

Total Cost/SF/Year: $ 0.74

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** Gold **Date:** 15-Apr-16 Submit by email to: sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Building Name: CENTER FOR CAREER AND TECHNICAL EDUCATION

Institution Name: COLUMBIA BASIN COLLEGE

Location: 2600 N. 20TH AVENUE

University/Agency: COLUMBIA BASIN COLLEGE

Approx. Occupancy Date: 12/1/2010

Building Use: Career Education / welding / automotive / nuclear tech programs and instruction

Primary HVAC: 4 pipe fan coil system with dedicated outdoor air system, air cooled chiller, gas boile

Building Square Footage: 72241

No. of Lab Hoods: 32

Other High Energy Using Equipment(describe): Welding and automotive equipment, 3 server rooms

Renewable Energy Systems (describe): Viesmann, Model #DN 20 31 SF solar hot water panel

Submitted By: BRETT RILEY / BRADY BROOKES

Phone: 509 542 5546

Email: bbrookes@columbiabasin.edu

To print use legal size paper

		%/Year
Average Hours/Wk:	50	80
No. of People:	600	
Average Hours/Wk:		
No. of People:		

Value from Renewables ($/yr): $ -

Melded Electric Rate ($/kWh): $ 0.093

Melded Gas Rate ($/therm): $ 0.87

Other Fuel Rate ($/MMBtu): $ -

List Other Fuel:

Metered Data: E G W

Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	120,085	109,173	124,090	124,934	158,362	194,307	223,658	185,010	125,928	124,651	115,427	110,249	1715872.97
Electricity ($)	$ 11,177.4	$ 10,161.7	$ 11,550.1	$ 11,628.7	$ 14,740.2	$ 18,085.8	$ 20,817.8	$ 17,220.5	$ 11,721.3	$ 11,602.4	$ 10,743.8	$ 10,261.9	$ 159,712
Gas (therms)	15,093	8,762	5,325	3,538	1,039	3	1,792	61	193	1,375	12,236	16,258	65675.68
Gas ($)	$ 13,164	$ 7,643	$ 4,645	$ 3,086	$ 906	$ 3	$ 1,563	$ 54	$ 168	$ 1,199	$ 10,672	$ 14,181	$ 57,285
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	108,823	112,291	95,683	41,412	4,211	8,140	81,832	100,266	126,136	133,137	130,281	132,396	1074606.92
Interior water/sewer ($)													$ -
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Usage/Person: 22.3876442

KBtu/SF/Year (EUI): 171.953968

Energy $/SF/Year: $ 3.00

Total Cost/SF/Year: 3.0037826

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Silver

Date: 15-Apr-16

Submit by email to: SustainableBA@ga.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: April 15, 2016

To print use legal size paper

Building Name: B Business Building
Institution Name: Columbia Basin College
Location: 2600 N. 20th Avenue, Pasco, WA
University/Agency: Columbia Basin College
Approx. Occupancy Date: Fall 2009
Building Use: Classroom instruction, computer labs, office areas
Primary HVAC: 4 pipe fan coil sytem with dedicated outdoor air system, water cooled chiller, gas bc
Building Square Footage: 22500
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): Computer lab, 1 server room
Renewable Energy Systems (describe): Viesmann, Model #DN 20 62 SF solar hot water panels

Submitted By: BRETT RILEY/BRADY BROOKES
Phone: 509-542-5546
Email: bbrookes@columbiabasin.edu

		%/Year
Average Hours/Wk:	35	80
No. of People:	2500	
Average Hours/Wk:		
No. of People:		

Value from Renewables ($/yr): $ -
Melded Electric Rate ($/kWh): $ 0.217
Melded Gas Rate ($/therm): $ 0.88
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: E G W
Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	18,599	16,346	17,180	16,211	15,981	15,286	14,749	14,363	14,777	16,037	16,897	16,261	192,687
Electricity ($)	$ 1,116	$ 981	$ 1,031	$ 973	$ 959	$ 917	$ 885	$ 862	$ 887	$ 962	$ 1,014	$ 976	$ 11,561
Gas (therms)	849.990	428.820	212.270	124.990	22.790	12.270	8.430	9.720	20.550	70.710	672.920	1068.580	3502.04
Gas ($)	$ 1,487	$ 750	$ 371	$ 219	$ 40	$ 21	$ 15	$ 17	$ 36	$ 124	$ 1,178	$ 1,870	$ 6,129
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	3,275	2,865	2,601	2,845	2,593	1,493	692	386	1,863	2,995	2,574	686	24,868
Interior water/sewer ($)													$ -
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Usage/Person: 0.1243389

KBtu/SF/Year (EUI): 44.7844928

Energy $/SF/Year: $ 0.79

Total Cost/SF/Year: 0.7862121

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Gold

Date: 7-Jan-16

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: February 27, 2015

To print use legal size paper

Building Name: Medium Security Complex
Institution Name: Coyote Ridge Correction Center
Location: Connell, WA
University/Agency: Department of Correction
Approx. Occupancy Date: 12/31/2008
Building Use: Medium Security Houseing
Primary HVAC: Gas boiler, VAV, compressorized DX cooling, natural gass heat exchanger
Building Square Footage: 565649
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): two 3.188 MMBTU/hr steam boilers. Welders. IT servers
Renewable Energy Systems (describe): 71kW photovoltaic roof

Submitted By: Dorothy Trainer
Phone: 509-544-3520
Email: djtrainer@doc1.wa.gov

		%/Year
Average Hours/Wk:		
No. of People:		
Average Hours/Wk:		
No. of People:		

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh):
Melded Gas Rate ($/therm):
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data:
Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	1044000	936000	993600	694800	957600	1195200	1303200	1245600	1224000	1000800	849600	1202400	12646800
Electricity ($)	$ 65,120	$ 60,951	$ 63,479	$ 55,177	$ 55,273	$ 66,269	$ 74,039	$ 68,292	$ 75,981	$ 65,669	$ 65,663	$ 74,038	$ 789,949
Gas (therms)	66911	50149	45423	35710	27108	22599	19082	22642	23955	25136	36554	67388	442657
Gas ($)	$ 62,758	$ 47,157	$ 42,688	$ 33,379	$ 25,426	$ 21,337	$ 18,135	$ 21,134	$ 22,064	$ 23,197	$ 39,717	$ 42,897	$ 399,889
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	5407666	4442372	4404972	5310426	5277888	5717338	5907330	6626906	5660490	5559136	4971956	5020950	64307430
Interior water/sewer ($)	$ 22,630	$ 25,916	$ 27,628	$ 29,540	$ 29,795	$ 30,968	$ 31,881	$ 32,798	$ 31,464	$ 30,902	$ 29,641	$ 31,001	$ 354,164
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)	0	0	0	61497	177607	186230	202540	250067	176016	45270	0	0	1099227
Irrigation ($)	$ 976	$ 976	$ 976	$ 1,520	$ 2,547	$ 2,623	$ 2,767	$ 3,187	$ 2,533	$ 1,377	$ 976	$ 976	$ 21,437
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: #DIV/0!

KBtu/SF/Year (EUI): 154.5

Energy $/SF/Year: $ 2.10

Total Cost/SF/Year: $ 2.73

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

Energy and Water Consumption and Savings Reporting Form

Required per RCW 39.35D.030 (3)(b)

LEED Level Achieved: Silver

Date: 2-Mar-16

Submit by email to: Sustainability@des.wa.gov

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Due: February 27, 2015

To print use legal size paper

Building Name: Meadowdale
Institution Name: Edmonds Community College
Location: 20128 68th ave w Lynnwood wa 98036
University/Agency:
Approx. Occupancy Date: 4/1/2010
Building Use: Classrooms and Instructional labs
Primary HVAC: central plant hydronic hot and chilled water system
Building Square Footage: 36100
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): computer lab-1263SF
Renewable Energy Systems (describe): none

Submitted By: Mike Talarico
Phone: 206.949.5513
Email: miketa@mckinstry.com

		%/Year
Average Hours/Wk:	74	70%
No. of People:	425	
Average Hours/Wk:	59	30%
No. of People:	5	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.070
Melded Gas Rate ($/therm):
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data:
Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	31036	33565	37047	34692	30314	28183	24012	31672	26007	28517	25989	25931	356,965
Electricity ($)	$ 2,173	$ 2,350	$ 2,593	$ 2,428	$ 2,122	$ 1,973	$ 1,681	$ 2,217	$ 1,820	$ 1,996	$ 1,819	$ 1,815	$ 24,988
Gas (therms)													0
Gas ($)													$ -
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)													0
Interior water/sewer ($)													$ -
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: -
KBtu/SF/Year (EUI): 29.3
Energy $/SF/Year: $ 0.69
Total Cost/SF/Year: $ 0.69

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Silver

Date: 15-Apr-16

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Due: March 30, 2016

Required per RCW 39.35D.030 (3)(b)

Building Name: Graywolf Hall
Institution Name: Everett Community College
Location: Everett Washington
University/Agency: Everett Community College
Approx. Occupancy Date: 2009
Building Use: University Center/Classroom Higher Ed
Primary HVAC: Hydronic Loop / Hot Water Boilers Air Handling Units Exhaust Fans Split DX
Building Square Footage: 77000
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe):
Renewable Energy Systems (describe):

Submitted By: Molly Beeman
Phone: 425-388-9070
Email: mbeeman@everettcc.edu

		%/Year
Average Hours/Wk:	150	100%
No. of People:	225	
Average Hours/Wk:		
No. of People:		

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh):
Melded Gas Rate ($/therm):
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data:
Prorated Data: See Metering/Measuring Report

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	58885	54490	51561	50389	63425	50388	51497	55076	53025	62400	5161	51560	607857
Electricity ($)	5027	4732	4422	4308	5070	4274	4512	4787	4728	5339	4491	4489	56179
Gas (therms)	3479	2105	1810	1258	717	726	147	0	608	1002	2690	3014	17556
Gas ($)	3235	2196	1785	1560	1176	1182	769	681	1046	1310	2097	2240	19277
Other: (KBtu)													0
Other: ($)													0
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	44104	44101	45107	45108	54239	66292	66282	50587	48943	48944	27576	44195	585478
Interior water/sewer ($)	$ 288	$ 287	$ 487	$ 488	$ 582	$ 731	$ 729	$ 569	$ 551	$ 552	$ 334	$ 557	$ 6,155
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr:	2,602.1	KBtu/SF/Year (EUI):	49.7	Energy $/SF/Year:	$ 0.98	Total Cost/SF/Year:	$ 1.06

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Silver

Date: 15-Apr-16

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Due: March 30, 2016

Required per RCW 39.35D.030 (3)(b)

Building Name: Liberty Hall
Institution Name: Everett Community College
Location: Everett Washington
University/Agency: Everett Community College
Approx. Occupancy Date: 2013
Building Use: Health Sciences Education
Primary HVAC: Variable refrigerant system / Hydronic heat in offices
Building Square Footage: 88000
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe):
Renewable Energy Systems (describe):

Submitted By: Molly Beeman
Phone: 425-388-9070
Email: mbeeman@everettcc.edu

		%/Year
Average Hours/Wk:	150	100%
No. of People:	225	
Average Hours/Wk:		
No. of People:		

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh):
Melded Gas Rate ($/therm):
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data:
Prorated Data: See Metering/Measuring Report

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	82751	96153	86793	84666	96153	92111	77008	86155	83602	84879	98493	83602	1052366
Electricity ($)	6634	7570	6871	6578	7436	7228	6201	6751	6652	6865	7787	6643	83216
Gas (therms)	493	380	302	256	170	128	139	129	149	244	725	578	3693
Gas ($)	572	449	366	316	234	177	179	169	189	288	655	563	4157
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	27678	27777	27302	27303	17579	17580	10473	8977	26930	24686	19449	18701	254435
Interior water/sewer ($)	$ 391	$ 392	$ 385	$ 383	$ 273	$ 274	$ 197	$ 181	$ 395	$ 366	$ 305	$ 300	$ 3,842
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 1,130.8

KBtu/SF/Year (EUI): 45.0

Energy $/SF/Year: $ 0.99

Total Cost/SF/Year: $ 1.04

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** Gold **Date:** 15-Apr-16 Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

Building Name: Walt Price Student Fitness Center
Institution Name: Everett Community College
Location: Everett Washington
University/Agency: Everett Community College
Approx. Occupancy Date: 2012
Building Use: Fitness Center/Gymnaisium
Primary HVAC: Hydronic Loop / Hot Water Boilers
Building Square Footage: 49800
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe):
Renewable Energy Systems (describe):

Submitted By: Molly Beeman
Phone: 425-388-9070
Email: mbeeman@everettcc.edu

		%/Year
Average Hours/Wk:	150	100%
No. of People:	200	
Average Hours/Wk:		
No. of People:		

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh):
Melded Gas Rate ($/therm):
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data:
Prorated Data: See Metering/Measuring Report

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	46830	54414	49117	47913	54414	52127	43579	48756	47311	48034	55738	47311	595544.00
Electricity ($)	3754	4284	3889	3723	4208	4091	3509	3821	3765	3885	4407	3760	47096.67
Gas (therms)	3877	3542	2426	1542	1124	433	75	32	578	1393	4548	3810	23378.71
Gas ($)	3684	3285	2601	2490	2330	1156	1116	1089	1394	2001	3368	2902	27416.65
Other: (KBtu)													0.00
Other: ($)													0.00
Chilled Water (KBtu)*													0.00
Hot Water (KBtu)**													0.00
Steam (KBtu)**													0.00
Domestic HW (KBtu)**													0.00
RENEWABLES													
Solar Thermal (KBtu)													0.00
Electrical (kWh)													0.00
WATER													
Interior water (gals)	47826	49420	52870	51108	59598	61585	28051	28050	14213	13464	43387	41890	491462
Interior water/sewer ($)	199	205	174	180	205	199	113	114	62	57	154	149	1811
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 2,457.3 KBtu/SF/Year (EUI): 87.7 Energy $/SF/Year: $ 1.50 Total Cost/SF/Year: $ 1.53

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Pending

Date:

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Due: March 30, 2016

Required per RCW 39.35D.030 (3)(b)

Building Name: Eugene D. Schermer Building
Institution Name: Grays Harbor College
Location: Aberdeen
University/Agency: Grays Harbor College
Approx. Occupancy Date: 7/1/2015
Building Use: Classrooms, computer labs, science labs, nursing program, offices
Primary HVAC: Geothermal
Building Square Footage: 70450
No. of Lab Hoods: 18
Other High Energy Using Equipment(describe): 1 server room, 4 computer labs @ 88 computers
Renewable Energy Systems (describe):

Submitted By: David Smith
Phone: 360-538-4114
Email: david.smith@ghc.edu

		%/Year
Average Hours/Wk:	45	75%
No. of People:	750	
Average Hours/Wk:	45	25%
No. of People:	200	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh):
Melded Gas Rate ($/therm): $ 0.92
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: E,W,G
Prorated Data:

Year:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)													0
Electricity ($)													$ -
Gas (therms)							24	15	56	72	63	817	1047
Gas ($)							$ 35	$ 26	$ 64	$ 71	$ 64	$ 701	$ 961
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)								32912	22440	44880	26180	22440	148852
Interior water/sewer ($)								$ 2,729	$ 1,905	$ 2,118	$ 1,934	$ 1,896	$ 10,582
Domestic HW (gals)													0
Water captured (in)(gals)							8235	8235	8235	8235	8235	8235	49410
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 243.0
KBtu/SF/Year (EUI): 1.5
Energy $/SF/Year: $ 0.01
Total Cost/SF/Year: $ 0.16

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Silver

Date: 7-Mar-16

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

Building Name: Allied Health Building
Institution Name: Lake Washington Institute of Technology
Location: Kirkland, WA
University/Agency: Lake Washington Institute of Technology
Approx. Occupancy Date: Jan-11
Building Use: Higher Education
Primary HVAC: Mitsubishi IVRF
Building Square Footage: 83700
No. of Lab Hoods: 3
Other High Energy Using Equipment(describe): Funeral coolers and exhaust, Building vac system (for medical tools)
Renewable Energy Systems (describe):

Submitted By: Casey Huebner
Phone: (425) 576-5807
Email: casey.huebner@lwtech.edu

		%/Year
Average Hours/Wk:	60	83%
No. of People:	300	
Average Hours/Wk:	80	100%
No. of People:	50	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.088
Melded Gas Rate ($/therm):
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: E, W
Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	97582	87314	85142	92916	76504	71191	91870	84614	77793	82055	100167	97814	1044962
Electricity ($)	$ 8,587	$ 7,684	$ 7,492	$ 8,177	$ 6,732	$ 6,265	$ 8,085	$ 7,446	$ 6,846	$ 7,221	$ 8,815	$ 8,608	$ 91,957
Gas (therms)													0
Gas ($)													$ -
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)		42636		35156		44880		16456		39644		60588	239360
Interior water/sewer ($)		$ 774		$ 719		$ 791		$ 580		$ 752		$ 908	$ 4,524
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 800.5

KBtu/SF/Year (EUI): 42.6

Energy $/SF/Year: $ 1.10

Total Cost/SF/Year: $ 1.15

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** Silver **Date:** 7-Mar-16 Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

Building Name: LWTech Redmond Building

Institution Name: Lake Washington Institute of Technology

Location: 6505 76th Ave NE, Redmond

University/Agency: Lake Washington Institute of Technology

Approx. Occupancy Date: 2005

Building Use: Higher Education

Primary HVAC: Rooftop Packaged cooling and ventalation, Rooftop boilers provide hot water to warm

Building Square Footage: 20000

No. of Lab Hoods: 0

Other High Energy Using Equipment(describe):

Renewable Energy Systems (describe): hydronic loop for heating and cooling

Submitted By: Casey Huebner

Phone: 425 576-5807

Email: casey.huebner@lwtech.edu

		%/Year
Average Hours/Wk:	52	80%
No. of People:	217	
Average Hours/Wk:	52	20%
No. of People:	12	

Value from Renewables ($/yr):

Melded Electric Rate ($/kWh): $ 0.105

Melded Gas Rate ($/therm): $ 0.86

Other Fuel Rate ($/MMBtu):

List Other Fuel:

Metered Data:

Prorated Data:

Year:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	22560	24560	19920	21440	22800	28838	22790	19040	16560	18640	20880	20880	258908
Electricity ($)	$ 2,293	$ 2,423	$ 2,055	$ 2,094	$ 2,217	$ 3,028	$ 2,393	$ 1,989	$ 1,756	$ 2,065	$ 2,203	$ 2,203	$ 26,718
Gas (therms)	1595	1520	992	837	408	210.47	168.6	134.56	403.591	670.754	1585	1762.849	10287.824
Gas ($)	$ 1,667	$ 1,590	$ 1,050	$ 894	$ 457	$ 181	$ 145	$ 174	$ 451	$ 705	$ 1,358	$ 1,506	$ 10,177
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	800	800	1000		11300	33400	44800	25800	25200	20700	8000	2200	174000
Interior water/sewer ($)	$ 167	$ 167	$ 186	$ 157	$ 1,342	$ 3,787	$ 5,048	$ 2,946	$ 2,879	$ 2,052	$ 849	$ 305	$ 19,885
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 988.6

KBtu/SF/Year (EUI): 95.6

Energy $/SF/Year: $ 1.84

Total Cost/SF/Year: $ 2.84

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Gold

ANNUALIZED DATA FORM

Date: 11-Apr-15

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

To print use legal size paper

Building Name: Health Sciences and Student Resources building
Institution Name: North Seattle College
Location: 9600 College Way N, Seattle 98103
University/Agency: Seattle Colleges
Approx. Occupancy Date: Sep-15
Building Use: Café, dining area, classrooms, and learning center
Primary HVAC: hydronic
Building Square Footage: 55470
No. of Lab Hoods: 12
Other High Energy Using Equipment(describe): food service equipment
Renewable Energy Systems (describe):

Submitted By: Adam Maurer
Phone: 206.934.3862
Email: adam.maurer@seattlecolleges.edu

		%/Year
Average Hours/Wk:	84	80%
No. of People:	300-500	
Average Hours/Wk:	45	20%
No. of People:	20-30	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.066
Melded Gas Rate ($/therm):
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data:
Prorated Data: electricity and water

Year:	2015												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	74,893.00	74,281.00	63,216.00	61,373.00	63,011.00	72,214.00	61,676.00	61,151.00	59,551.00	67,709.00	78,796.00	81,508.00	819379
Electricity ($)	$ 4,943	$ 4,903	$ 4,172	$ 4,051	$ 4,159	$ 4,766	$ 4,071	$ 4,036	$ 3,930	$ 4,469	$ 5,201	$ 5,380	$ 54,079
Gas (therms)													0
Gas ($)													$ -
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	27772	34641	26697	49094	54589	52319	88095	116823	120167	40434	54439	37926	702996
Interior water/sewer ($)	$ 652	$ 804	$ 623	$ 1,127	$ 1,252	$ 1,247	$ 2,165	$ 2,863	$ 2,946	$ 970	$ 1,203	$ 879	$ 16,731
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Usage/Person: #VALUE!
KBtu/SF/Year (EUI): 50.40059758
Energy $/SF/Year: $ 0.9749
Total Cost/SF/Year: 1.2765454

This form is used when Portfolio Manager data (total year data) is used or there is mixed data (monthly and annual). Enter the "total year data" in the "Jan" column.

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

Energy and Water Consumption and Savings Reporting Form

Required per RCW 39.35D.030 (3)(b)

LEED Level Achieved: Gold

Date: 11-Apr-15

Submit by email to: Sustainability@des.wa.gov

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Due: March 30, 2016

Building Name: Opportunity Center for Employment and Education
Institution Name: North Seattle College
Location: 9600 College Way N, Seattle, 98103
University/Agency: Seattle Colleges
Approx. Occupancy Date: May-11
Building Use: Various State Agencies including DSHS, CSO, ESD, and others.
Primary HVAC: Under floor air
Building Square Footage: 57100
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): None
Renewable Energy Systems (describe): None

Submitted By: Adam Maurer
Phone: 206-934-3862
Email: adam.maurer@seattlecolleges.edu

		%/Year
Average Hours/Wk:	40	100%
No. of People:	175	
Average Hours/Wk:		
No. of People:		

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.066
Melded Gas Rate ($/therm): $ 1.05
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: gas
Prorated Data: electricity and water

Year:	2015												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	60827	60331	51344	49847	51177	58652	50093	49666	48367	54993	63997	66200	665494
Electricity ($)	$ 4,015	$ 3,982	$ 3,389	$ 3,290	$ 3,378	$ 3,871	$ 3,306	$ 3,278	$ 3,192	$ 3,630	$ 4,224	$ 4,369	$ 43,923
Gas (therms)	1,288 THM	862 THM	864 THM	743 THM	531 THM	208 THM	95 THM	100 THM	342 THM	431 THM	790 THM	1,075 THM	7,329 THM
Gas ($)	$ 1,356.57	$ 919.66	$ 921.87	$ 797.71	$ 583.51	$ 250.28	$ 133.51	$ 138.38	$ 389.02	$ 481.24	$ 755.72	$ 934.92	$ 7,662
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	28588	35659	27482	50537	56193	53857	90683	120255	123698	41622	53980	39040	721594
Interior water/sewer ($)	$ 671	$ 827	$ 641	$ 1,160	$ 1,289	$ 1,284	$ 2,229	$ 2,947	$ 3,032	$ 998	$ 1,239	$ 905	$ 17,223
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 4,123.4
KBtu/SF/Year (EUI): 52.6
Energy $/SF/Year: $ 0.90
Total Cost/SF/Year: $ 1.21

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: N/A

Date: 7-Apr-15

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: June 1, 2015

To print use legal size paper

Building Name: Forks Satellite Site
Institution Name: Peninsula College
Location: Forks, Washington
University/Agency: Peninsula College
Approx. Occupancy Date: 5/7/2014
Building Use: Classrooms, learning lab, offices, student gathering space
Primary HVAC: Heat recovery VRF heat pump system
Building Square Footage: 12,452
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): Server room, learning lab with 16 computers
Renewable Energy Systems (describe): N/A

Submitted By: Laura Price, Capital Coordinator
Phone: 360-417-6263
Email: lprice@pencol.edu

		%/Year
Average Hours/Wk:	60	75%
No. of People:	200	
Average Hours/Wk:	40	25%
No. of People:	50	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.069
Melded Gas Rate ($/therm):
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: E; W
Prorated Data:

Year:					2014	2014	2014	2014	2014	2014	2014	2014	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)					17460	23640	14220	14160	11100	12840	17820	19320	130560
Electricity ($)					$ 1,225	$ 1,405	$ 987	$ 983	$ 823	$ 971	$ 1,290	$ 1,374	$ 9,059
Gas (therms)													0
Gas ($)													$ -
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)					0	0	700	800	1000	700	600	500	4300
Interior water/sewer ($)					$ 56	$ 56	$ 63	$ 172	$ 170	$ 149	$ 146	$ 144	$ 955
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 26.5

KBtu/SF/Year (EUI): 35.8

Energy $/SF/Year: $ 0.73

Total Cost/SF/Year: $ 0.80

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** Gold **Date:** 18-Dec-15 Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form Complete all applicable yellow boxes. Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: June 1, 2013

To print use legal size paper

Building Name: Maier Hall

Institution Name: Peninsula College

Location: Port Angeles, WA

University/Agency: Peninsula College

Approx. Occupancy Date: 8/15/2011

Building Use: Performing Arts/Teaching Spaces

Primary HVAC: Water to Water Geothermal Heat Exchanger

Building Square Footage: 62950

No. of Lab Hoods: 0

Other High Energy Using Equipment(describe): Three (3) electric Kilns and one (1) propane fired Kiln

Renewable Energy Systems (describe):

Submitted By: Rick Croot

Phone: (360) 417-6553

Email: RCroot@pencol.edu

		%/Year
Average Hours/Wk:	70	100%
No. of People:	1581	
Average Hours/Wk:		
No. of People:		

Value from Renewables ($/yr):

Melded Electric Rate ($/kWh): $ 0.061

Melded Gas Rate ($/therm): $ -

Other Fuel Rate ($/MMBtu): $ -

List Other Fuel:

Metered Data:

Prorated Data:

Year:	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	98800	104720	91840	89200	70560	61280	68,080.00	60960	61200	76720	72480	100960	956800
Electricity ($)	$ 5,784	$ 6,258	$ 5,516	$ 5,321	$ 4,470	$ 3,961	$ 4,214	$ 3,856	$ 4,274	$ 4,536	$ 4,598	$ 6,009	$ 58,796
Gas (therms)													0
Gas ($)													$ -
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	1,420.00	720	1,480.00	1,440.00	380	450	442	938	1,726.00	1,387.00	1,663.00	1,981.00	14027
Interior water/sewer ($)	$ 144	$ 132	$ 145	$ 145	$ 126	$ 127	$ 127	$ 136	$ 150	$ 144	$ 148	$ 154	$ 1,679
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)	0	0	0	1,130.00	1,040.00	650	8,540.00	22,310.00	12,940.00	0	0	0	46610
Irrigation ($)	$ -	$ -	$ -	$ 1,130	$ 1,040	$ 650	$ 8,540	$ 22,310	$ 12,940	$ -	$ -	$ -	$ 46,610
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 8.9

KBtu/SF/Year (EUI): 51.9

Energy $/SF/Year: $ 0.93

Total Cost/SF/Year: $ 0.96

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

Building Name: Arts & Allied Health Building
Institution Name: Pierce Collge
Location: 1601 39th Ave SE Puyallup WA 98374
University/Agency: Pierce Collge - Puyallup
Approx. Occupancy Date:
Building Use: Performing Arts & Healthcare Instruction
Primary HVAC: Gas powered boilers with radiant floor heating & cooling & natural ventilation
Building Square Footage: 61597
No. of Lab Hoods: None
Other High Energy Using Equipment(describe): None
Renewable Energy Systems (describe): None

Submitted By: Dana Edmondson
Phone: 253-864-3386
Email: dedmondson@perice.ctc.edu

		%/Year
Average Hours/Wk:	70	100%
No. of People:	370	
Average Hours/Wk:		
No. of People:		

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.083439
Melded Gas Rate ($/therm): $ 1.0
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data:
Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	53199.00	52008.00	56117.00	57308.00	62317.00	62771.00	69383.00	61276.00	51483.00	52660.00	46503.00	44665.00	669690.00
Electricity ($)	$ 4,439	$ 4,340	$ 4,682	$ 4,782	$ 5,200	$ 5,238	$ 5,789	$ 5,113	$ 4,296	$ 4,394	$ 3,880	$ 3,727	$ 55,879
Gas (therms)	3678.4	2509.9	2170.2	1665.4	1201.3	754.2	262.79	291.17	407.06	653.04	1231.37	2442.29	17267.12
Gas ($)	$ 3,652	$ 2,502	$ 2,168	$ 1,672	$ 1,221	$ 782	$ 294	$ 322	$ 437	$ 731	$ 1,162	$ 1,994	$ 16,936
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)		23,188.00		26,928.00		61,336.00		102,476.00		47,872.00		20,196.00	281996
Interior water/sewer ($)	$ -	$ 306	$ -	$ 357	$ -	$ 612	$ -	$ 751	$ -	$ 567	$ -	288..12	$ 2,592
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)	0	0	0	1496	0	152592	0	552024	0	99484	0	0	805596
Irrigation ($)	$ -	$ 27	$ -	$ 34	$ -	$ 543	$ -	$ 1,889	$ -	$ 364	$ -	$ 29	$ 2,886
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 762.2
KBtu/SF/Year (EUI): 65.1
Energy $/SF/Year: $ 1.18
Total Cost/SF/Year: $ 1.22

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** Gold **Date:** 8-Apr-16 Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

Building Name: Rainier
Institution Name: Pierce College Fort Steilacoom
Location: 9401 Farwest Drive SW Lakewood, WA 98498
University/Agency: Pierce College District
Approx. Occupancy Date: 2/25/2010
Building Use: Science Instruction
Primary HVAC: See Note Below
Building Square Footage: 69,996
No. of Lab Hoods: 23
Other High Energy Using Equipment(describe): 3 boilers, 2 hot water heaters, 23 exhaust fans, 8 A/C units, 10 pumps, 1 Cooling tower
Renewable Energy Systems (describe): Photo Voltaic Panels

Submitted By: Dana Edmondson
Phone: 253-864-3386
Email: dedmondson@pierce.ctc.edu

		%/Year
Average Hours/Wk:	74	100%
No. of People:	731	
Average Hours/Wk:		
No. of People:		

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.0550310
Melded Gas Rate ($/therm): $ 0.95
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: E, G, W
Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	78,422.00	68,782.00	73,775.00	73,370.00	74,665.00	85,586.00	91,610.00	84,240.00	69,292.00	78,341.00	78,067.00	75,469.00	931619.00
Electricity ($)	$ 4,316	$ 3,785	$ 4,060	$ 4,038	$ 4,109	$ 4,710	$ 5,041	$ 4,636	$ 3,813	$ 4,311	$ 4,296	$ 4,153	$ 51,268
Gas (therms)	4548.3	2721.9	2905.5	2328	1390.9	850.1	295.23	469.73	717.44	820.88	2803.2	4662.89	24514.07
Gas ($)	$ 4,636	$ 2,788	$ 2,974	$ 2,390	$ 1,451	$ 902	$ 336	$ 513	$ 38	$ 864	$ 2,535	$ 3,883	$ 23,310
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)	22.5	38.2	75.7	116	53.7			120	88.6	44.8	30.1	17.6	607.2
WATER													
Interior water (gals)	9,806.00	12,451.00	9,059.00	14,650.00	12,984.00	22,421.00	26,884.00	18,669.00	10,739.00	11,179.00	12,486.00	12,493.00	173821
Interior water/sewer ($)	$ 46	$ 59	$ 43	$ 69	$ 61	$ 105	$ 126	$ 88	$ 51	$ 53	$ 59	$ 59	$ 818
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 237.8
KBtu/SF/Year (EUI): 80.4
Energy $/SF/Year: $ 1.07
Total Cost/SF/Year: $ 1.08

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Silver

Date: 18-Mar-16

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

Building Name: Kennedy Fitness Center
Institution Name: WA State School for the Blind
Location: Vancouver
University/Agency:
Approx. Occupancy Date: 8/1/2008
Building Use: Gym/pool
Primary HVAC: two Hydro Therm KN10 gas fired boilers
Building Square Footage: 29000

Submitted By: Robert Tracey
Phone: 360-947-3320
Email: rob.tracey@wssb.wa.gov

		%/Year
Average Hours/Wk:	89	0.75
No. of People:	900	
Average Hours/Wk:	50	0.25
No. of People:	450	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.052
Melded Gas Rate ($/therm): $ 0.94
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: G,E,W
Prorated Data: W

No. of Lab Hoods: 0
Other High Energy Using Equipment(describe):
Renewable Energy Systems (describe):

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	33400	31640	29120	30080	23400	21840	12360	25600	21600	31600	32440	29440	322520
Electricity ($)	$ 1,737	$ 1,645	$ 1,514	$ 1,564	$ 1,217	$ 1,136	$ 643	$ 1,331	$ 1,123	$ 1,643	$ 1,687	$ 1,531	$ 16,771
Gas (therms)	3334	3398.5	2988.3	2208.1	1889.7	1356.2	834.4	727.8	750.8	1625.1	1952.5	3404.4	24469.8
Gas ($)	$ 3,134	$ 2,809	$ 2,076	$ 1,776	$ 1,275	$ 784	$ 684	$ 706	$ 1,528	$ 1,835	$ 3,200	$ 23,002	$ 42,809
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	2205	2205	2205	2205	2205	2205	2205	2205	2205	2205	2205	2205	26460
Interior water/sewer ($)			$ 2,668	$ 2,668	$ 2,668	$ 2,668	$ 2,668	$ 2,668	$ 2,668	$ 2,668	$ 2,668	$ 2,668	$ 26,681
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 33.6

KBtu/SF/Year (EUI): 122.3

Energy $/SF/Year: $ 2.05

Total Cost/SF/Year: $ 2.97

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved:

Date: 9-Mar-16

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

Building Name: Oliver Kastel Vocational Education & Facilities Support Building
Institution Name: Washington School for the Deaf
Location: 611 Grand Blvd, Vancouver, Washington 98661
University/Agency: Center for Childhood Deafness and Hearing Loss
Approx. Occupancy Date: 9/25/2009
Building Use: Kitchen, Cafeteria, Auto Shop, Grounds, Custodial, & Maintenance Shops
Primary HVAC: Ground Source Heat Pump
Building Square Footage: 21,700
No. of Lab Hoods: none
Other High Energy Using Equipment(describe):
Renewable Energy Systems (describe):

Submitted By: Warren H. Pratt - Facilities Manager
Phone: 360.418.4293
Email: warren.pratt@cdhl.wa.gov

		%/Year
Average Hours/Wk:	40	75%
No. of People:	150	
Average Hours/Wk:	40	
No. of People:	10	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh):
Melded Gas Rate ($/therm):
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data:
Prorated Data:

Year:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	34560	32880	31440	33120	27120	27360	12480	26400	28080	29040	31440	29760	343680
Electricity ($)	$ 2,310	$ 2,255	$ 2,184	$ 2,077	$ 1,936	$ 2,035	$ 857	$ 1,703	$ 2,076	$ 2,255	$ 2,423	$ 2,285	$ 24,396
Gas (therms)	2127.5	1413.5	1698	1619.2	1467.7	1727.5	235.1	153.3	581.8	1716.9	1296.7	3110.5	17147.7
Gas ($)	$ 2,167	$ 1,455	$ 1,733	$ 1,653	$ 1,500	$ 1,763	$ 253	$ 170	$ 604	$ 1,752	$ 1,289	$ 2,654	$ 16,993
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)			33660		38896		81532		20196		54604		228888
Interior water/sewer ($)			$ 286		$ 304		$ 392		$ 265		$ 336		$ 1,583
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 2,034.6

KBtu/SF/Year (EUI): 133.1

Energy $/SF/Year: $ 1.91

Total Cost/SF/Year: $ 1.98

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** Silver **Date:** 11-Apr-15 Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form Complete all applicable yellow boxes. Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b) **Due: March 30, 2016**

Building Name: Wood Technology Center
Institution Name: Seattle Central College
Location: Seattle
University/Agency: Seattle Colleges
Approx. Occupancy Date: Sep-12
Building Use: Classrooms, Labs, Offices, and Computer Lab, Library, Lecture Hall
Primary HVAC: Direct Exchange
Building Square Footage: 35,000
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): 2 baghouses & 4 spray booths, wood shop equipment, i.e. saws, sanders, c&c machines etc.
Renewable Energy Systems (describe):

Submitted By: Adam Maurer
Phone: 206.934.3862
Email: adam.maurer@seattlecolleges.edu

		%/Year
Average Hours/Wk:	50	75
No. of People:	150	
Average Hours/Wk:	9	25
No. of People:	25	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.067
Melded Gas Rate ($/therm): $ 0.99
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: electricity, gas, and water
Prorated Data:

Year:	2015												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	46,290	48,740	43,480	42,510	40,160	39,610	35,990	35,640	37,300	39,980	46,580	51,900	508180
Electricity ($)	$2,930.32	$3,445.16	$2,902.45	$2,726.83	$2,653.92	$2,561.99	$2,427.59	$1,999.64	$2,231.68	$2,548.75	$3,221.56	$4,256.46	$ 33,906
Gas (therms)	1,499 THM	1,253 THM	1,073 THM	866 THM	515 THM	184 THM	170 THM	178 THM	330 THM	611 THM	1,529 THM	3,059 THM	11266.82
Gas ($)	$ 1,572.87	$ 1,321.05	$ 1,135.85	$ 925.73	$ 568.31	$ 225.89	$ 211.17	$ 219.48	$ 375.89	$ 655.83	$ 1,314.61	$ 2,595.50	$ 11,122
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)		22,441.56		21,693.51		24,685.72			11,968.83	9,724.68		18,701.30	109,215.59
Interior water/sewer ($)	$ 53	$ 919		$ 882		$ 978			$ 712	$ 583	$ 53	$ 781	$ 4,961
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 9.2 KBtu/SF/Year (EUI): 81.7 Energy $/SF/Year: $ 1.29 Total Cost/SF/Year: $ 1.43

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Silver

ANNUALIZED DATA FORM

Date: 11-Apr-15

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

To print use legal size paper

Building Name: SSC Georgetown Building C Expansion (Gene J. Colin)

Institution Name: South Seattle College, Georgetown Campus

Location: 6737 Corson Avenue South

University/Agency: Seattle Colleges District

Approx. Occupancy Date: Jun-12

Building Use: Multi-Use/Classroom/Conference Space/Offices

Primary HVAC: Rooftop VRF System

Building Square Footage: 10,039

No. of Lab Hoods: 0

Other High Energy Using Equipment(describe): None

Renewable Energy Systems (describe): None

Submitted By: Adam Maurer

Phone: 206.934.3862

Email: adam.maurer@seattlecolleges.edu

		%/Year
Average Hours/Wk:	74	100%
No. of People:	20	
Average Hours/Wk:	20	100%
No. of People:	40-150	

Value from Renewables ($/yr):

Melded Electric Rate ($/kWh): $ 0.063

Melded Gas Rate ($/therm):

Other Fuel Rate ($/MMBtu):

List Other Fuel:

Metered Data:

Prorated Data: electricity

Year: 2015

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	13,273	13,273	13,273	13,273	13,273	13,273	13,273	13,273	13,273	13,273	13,273	13,273	159276
Electricity ($)	$841.51	$841.51	$841.51	$841.51	$841.51	$841.51	$841.51	$841.51	$841.51	$841.51	$841.51	$841.51	$ 10,098
Gas (therms)													0
Gas ($)													$ -
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)													0
Interior water/sewer ($)													$ -
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Usage/Person: #VALUE!

KBtu/SF/Year (EUI): 54.13384919

Energy $/SF/Year: $ 1.0059

Total Cost/SF/Year: 1.0058869

This form is used when Portfolio Manager data (total year data) is used or there is mixed data (monthly and annual). Enter the "total year data" in the "Jan" column.

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** Silver **Date:** 6-Jul-16 Submit by email to: SustainableBA@ga.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: Apr 15, 2016

To print use legal size paper

Building Name: Classroom
Institution Name: Spokane Falls Community College
Location: Spokane
University/Agency: Community Colleges of Spokane
Approx. Occupancy Date: 1/30/2013
Building Use: Classrooms
Primary HVAC: Gas
Building Square Footage: 47,497

Submitted By: John Gillette, Director of Facilities Maintenance
Phone: 509.533.4701
Email: john.gillette@ccs.spokane.edu

%/Year
Average Hours/Wk: N/A
No. of People: N/A
Average Hours/Wk: N/A
No. of People: N/A

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.090
Melded Gas Rate ($/therm): $ 0.40
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data:
Prorated Data:

No. of Lab Hoods: None
Other High Energy Using Equipment(describe): None
Renewable Energy Systems (describe): None

Year:	2016	2016	2016	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	44,823	40,942	6,687	9,123	18,872	23,524	18,500	8,875	9,250	12,600	15,945	46,025	255,164
Electricity ($)	$ 4,034.03	$ 3,684.76	$ 601.83	$ 821.03	$ 1,698.46	$ 2,117.13	$ 1,665.00	$ 798.75	$ 832.50	$ 1,134.00	$ 1,435.05	$ 4,142.24	$ 22,965
Gas (therms)	2,396	1,803	282	846	278	134	63	95	427	678	1,924	2,495	11,422
Gas ($)	$ 958.44	$ 721.32	$ 112.81	$ 338.54	$ 111.20	$ 53.73	$ 25.31	$ 38.08	$ 170.93	$ 271.21	$ 769.47	$ 997.87	$ 4,569
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													-
Electrical (kWh)													-
WATER													
Interior water (gals)	5,400	5,600	1,290	6,360	6,080	4,940	3,260	2,750	4,500	6,500	5,130	3,970	55,780
Interior water/sewer ($)	$ 46	$ 48	$ 11	$ 54	$ 52	$ 42	$ 28	$ 23	$ 38	$ 55	$ 44	$ 34	$ 474
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													-
Irrigation ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Year: #VALUE! KBtu/SF/Year (EUI): 42.38 Energy $/SF/Year: $ 0.58 Total Cost/SF/Year: $ 0.59

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton
**Central plant and distribution systems combined annual average efficiency calculated at 65%

State LEED Project **LEED Level Achieved:** Gold **Date:** 6-Jul-16 Submit by email to: SustainableBA@ga.wa.gov

Energy and Water Consumption and Savings Reporting Form Complete all applicable yellow boxes. Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b) **Due: Apr 15, 2016**

To print use legal size paper

Building Name: Jenkins Wellness Center
Institution Name: Spokane Community College
Location: Spokane
University/Agency: Community Colleges of Spokane
Approx. Occupancy Date: 12/1/2010
Building Use: Classrooms
Primary HVAC: Gas
Building Square Footage: 35708
No. of Lab Hoods: None
Other High Energy Using Equipment(describe): None
Renewable Energy Systems (describe): None

Submitted By: John Gillette, Director of Faciities Maintenance
Phone: 509.533.4701
Email: john.gillette@ccs.spokane.edu

		%/Year
Average Hours/Wk:	N/A	
No. of People:	N/A	
Average Hours/Wk:	N/A	
No. of People:	N/A	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.090
Melded Gas Rate ($/therm): $ 0.40
Other Fuel Rate ($/MMBtu):
List Other Fuel: N/A
Metered Data: N/A
Prorated Data: N/A

Year:	2016	2016	2016	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	69,351	64,483	15,438	68,479	70,794	74,406	78,526	75,214	66,643	69,248	64,366	109,914	826,863
Electricity ($)	$ 6,241.61	$ 5,803.45	$ 1,389.44	$ 6,163.15	$ 6,371.49	$ 6,696.57	$ 7,067.37	$ 6,769.23	$ 5,997.90	$ 6,232.31	$ 5,792.94	$ 9,892.22	$ 74,418
Gas (therms)													4
Gas ($)													2
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													-
Electrical (kWh)													-
WATER													
Interior water (gals)	8,960	10,095	1,557	9,184	10,117	8,260	7,227	6,444	7,829	10,063	8,388	7,171	95,295
Interior water/sewer ($)	$ 76	$ 86	$ 13	$ 78	$ 86	$ 70	$ 61	$ 55	$ 67	$ 86	$ 71	$ 61	$ 810
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													-
Irrigation ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Gas meter inoperable during this period. Being repaired

Water Use/Person/Year: #VALUE!
KBtu/SF/Year (EUI): 79.02
Energy $/SF/Year: $ 2.08
Total Cost/SF/Year: $ 2.11

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton
**Central plant and distribution systems combined annual average efficiency calculated at 65%

State LEED Project

LEED Level Achieved: Silver

Date: 6-Jul-16

Submit by email to: SustainableBA@ga.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: Apr 15, 2016

To print use legal size paper

Building Name: Music
Institution Name: Spokane Falls Community College
Location: Spokane
University/Agency: Community Colleges of Spokane
Approx. Occupancy Date: 8/1/2010
Building Use: Classrooms
Primary HVAC: Gas
Building Square Footage: 25743

Submitted By: John Gillette, Director of Faciities Maintenance
Phone: 509.533.4701
Email: john.gillette@ccs.spokane.edu

Value from Renewables ($/yr):

		%/Year
Average Hours/Wk:	N/A	
No. of People:	N/A	
Average Hours/Wk:	N/A	
No. of People:	N/A	

Melded Electric Rate ($/kWh): $ 0.090
Melded Gas Rate ($/therm): $ 0.40
Other Fuel Rate ($/MMBtu):
List Other Fuel: N/A
Metered Data: N/A
Prorated Data: N/A

No. of Lab Hoods: None
Other High Energy Using Equipment(describe): None
Renewable Energy Systems (describe): None

Year:	2016	2016	2016	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	45,637	41,530	8,604	43,977	49,249	61,087	66,564	54,882	42,207	44,904	42,760	45,543	546,947
Electricity ($)	$ 4,107.37	$ 3,737.71	$ 774.38	$ 3,957.96	$ 4,432.40	$ 5,497.85	$ 5,990.76	$ 4,939.42	$ 3,798.66	$ 4,041.40	$ 3,848.39	$ 4,098.91	$ 49,225
Gas (therms)	2,696	2,152	337	1,525	744	408	261	314	538	914	1,976	2,941	14,805
Gas ($)	$ 1,078.43	$ 860.63	$ 134.66	$ 609.87	$ 297.75	$ 163.01	$ 104.38	$ 125.62	$ 215.30	$ 365.45	$ 790.46	$ 1,176.37	$ 5,922
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													-
Electrical (kWh)													-
WATER													
Interior water (gals)													-
Interior water/sewer ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													-
Irrigation ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Year: #VALUE!

KBtu/SF/Year (EUI): 130.00

Energy $/SF/Year: $ 2.14

Total Cost/SF/Year: $ 2.14

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton

**Central plant and distribution systems combined annual average efficiency calculated at 65%

State LEED Project **LEED Level Achieved:** Gold **Date:** 6-Jul-16 Submit by email to: SustainableBA@ga.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: Apr 15, 2016

To print use legal size paper

Building Name: Science
Institution Name: Spokane Falls Community College
Location: Spokane
University/Agency: Community Colleges of Spokane
Approx. Occupancy Date: 4/1/2011
Building Use: Classrooms
Primary HVAC: Gas
Building Square Footage: 70823
No. of Lab Hoods: 35
Other High Energy Using Equipment(describe): None
Renewable Energy Systems (describe): None

Submitted By: John Gillette, Director of Faciities Maintenance
Phone: 509.533.4701
Email: john.gillette@ccs.spokane.edu

%/Year
Average Hours/Wk: N/A
No. of People: N/A
Average Hours/Wk: N/A
No. of People: N/A

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.090
Melded Gas Rate ($/therm): $ 0.40
Other Fuel Rate ($/MMBtu):
List Other Fuel: N/A
Metered Data: N/A
Prorated Data: N/A

Year:	2016	2016	2016	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	107,720	101,458	20,083	102,509	118,299	141,646	145,182	138,438	105,854	111,314	102,242	105,433	1,300,179
Electricity ($)	$ 9,694.77	$ 9,131.26	$ 1,807.46	$ 9,225.83	$ 10,646.94	$ 12,748.14	$ 13,066.35	$ 12,459.42	$ 9,526.90	$ 10,018.26	$ 9,201.78	$ 9,488.96	$ 117,016
Gas (therms)	64	74	1	3	5	2	2	3	6	13	161	157	491
Gas ($)	$ 25.63	$ 29.74	$ 0.45	$ 1.03	$ 2.01	$ 0.62	$ 0.94	$ 1.40	$ 2.26	$ 5.30	$ 64.21	$ 62.81	$ 196
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													-
Electrical (kWh)													-
WATER													
Interior water (gals)	28,616	33,034	7,229	67,611	30,423	23,696	13,655	13,053	15,061	36,347	25,905	10,643	305,273
Interior water/sewer ($)	$ 243	$ 281	$ 61	$ 575	$ 259	$ 201	$ 116	$ 111	$ 128	$ 309	$ 220	$ 90	$ 2,595
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													-
Irrigation ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Year: #VALUE!

KBtu/SF/Year (EUI): 63.33

Energy $/SF/Year: $ 1.66

Total Cost/SF/Year: $ 1.69

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%

State LEED Project **LEED Level Achieved:** Gold **Date:** 6-Jul-16 Submit by email to: SustainableBA@ga.wa.gov

Energy and Water Consumption and Savings Reporting Form Complete all applicable yellow boxes. Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b) **Due: Apr 15, 2016**

To print use legal size paper

Building Name: sn-w'ey'-mn (Business and Social Science)
Institution Name: Spokane Falls Community College
Location: Spokane
University/Agency: Community Colleges of Spokane
Approx. Occupancy Date: 6/1/2008
Building Use: Classrooms
Primary HVAC: Gas
Building Square Footage: 70533
No. of Lab Hoods: None
Other High Energy Using Equipment(describe): None
Renewable Energy Systems (describe): None

Submitted By: John Gillette, Director of Faciities Maintenance
Phone: 509.533.4701
Email: john.gillette@ccs.spokane.edu

%/Year
Average Hours/Wk: N/A
No. of People: N/A
Average Hours/Wk: N/A
No. of People: N/A

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.090
Melded Gas Rate ($/therm): $ 0.40
Other Fuel Rate ($/MMBtu):
List Other Fuel: N/A
Metered Data: N/A
Prorated Data: N/A

Year:	2016	2016	2016	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	41,979	37,919	7,724	258,649	63,600	62,643	250,021	36,140	163,795	238,878	234,453	105,880	1,501,681
Electricity ($)	$ 3,778.11	$ 3,412.71	$ 695.16	$ 23,278.41	$ 5,724.00	$ 5,637.87	$ 22,501.89	$ 3,252.60	$ 14,741.55	$ 21,499.02	$ 21,100.77	$ 9,529.20	$ 135,151
Gas (therms)													-
Gas ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													-
Electrical (kWh)													-
WATER													
Interior water (gals)													-
Interior water/sewer ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													-
Irrigation ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Year: #VALUE!
KBtu/SF/Year (EUI): 72.64
Energy $/SF/Year: $ 1.92
Total Cost/SF/Year: $ 1.92

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton
**Central plant and distribution systems combined annual average efficiency calculated at 65%

State LEED Project

LEED Level Achieved: Gold

Date: 6-Jul-16

Submit by email to: SustainableBA@ga.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: Apr 15, 2016

To print use legal size paper

Building Name: Stannard Technical Education
Institution Name: Spokane Community College
Location: Spokane
University/Agency: Community Colleges of Spokane
Approx. Occupancy Date: 8/1/2011
Building Use: Classrooms
Primary HVAC: Gas
Building Square Footage: 73514

Submitted By: John Gillette, Director of Faciities Maintenance
Phone: 509.533.4701
Email: john.gillette@ccs.spokane.edu

Value from Renewables ($/yr):

%/Year

Average Hours/Wk: N/A
No. of People: N/A
Average Hours/Wk: N/A
No. of People: N/A

Melded Electric Rate ($/kWh): $ 0.090
Melded Gas Rate ($/therm): $ 0.40
Other Fuel Rate ($/MMBtu):
List Other Fuel: N/A
Metered Data: N/A
Prorated Data: N/A

No. of Lab Hoods: None
Other High Energy Using Equipment(describe): Welding boothes, plasma cutter, CNC machines, Hydraulic machines
Renewable Energy Systems (describe): None

Year:	2016	2016	2016	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	282,699	252,811	53,575	235,612	303,450	405,943	426,848	363,228	244,810	266,068	245,799	245,798	3,326,641
Electricity ($)	$ 25,442.92	$ 22,753.00	$ 4,821.71	$ 21,205.09	$ 27,310.54	$ 36,534.90	$ 38,416.33	$ 32,690.51	$ 22,032.92	$ 23,946.08	$ 22,121.88	$ 22,121.78	$ 299,398
Gas (therms)	1,829	1,474	205	887	316	62	54	60	211	531	1,509	1,961	9,098
Gas ($)	$ 731.59	$ 589.42	$ 81.91	$ 354.60	$ 126.28	$ 24.61	$ 21.69	$ 23.99	$ 84.54	$ 212.34	$ 603.55	$ 784.50	$ 3,639
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													-
Electrical (kWh)													-
WATER													
Interior water (gals)													-
Interior water/sewer ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													-
Irrigation ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Year: #VALUE!

KBtu/SF/Year (EUI): 166.77

Energy $/SF/Year: $ 4.12

Total Cost/SF/Year: $ 4.12

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton
**Central plant and distribution systems combined annual average efficiency calculated at 65%

State LEED Project

LEED Level Achieved: Gold

Date: 1-Apr-16

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

Building Name: Center for Student Success
Institution Name: South Puget Sound Community College
Location: Olympia
University/Agency: Higher Eduction
Approx. Occupancy Date: 2014
Building Use: Class rooms, library, student services
Primary HVAC: Natural Gas Boiler
Building Square Footage: 89308
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): 331 PC's
Renewable Energy Systems (describe):

Submitted By: Guy F. Quinlan
Phone: (360)596-5429
Email: gquinlan@spscc.ctc.edu

		%/Year
Average Hours/Wk:	80	80%
No. of People:	8753	
Average Hours/Wk:	40	20%
No. of People:	460	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.060
Melded Gas Rate ($/therm): $ 1.04
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: E/G/W
Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	38,192	36,147	40,417	38,621	45,532	56,715	71,705	66,917	40,341	42,290	33,443	28,323	538,643
Electricity ($)	$ 2,292	$ 2,169	$ 2,425	$ 2,317	$ 2,732	$ 3,403	$ 4,302	$ 4,015	$ 2,420	$ 2,537	$ 2,007	$ 1,699	$ 32,319
Gas (therms)	3,673	2,672	2,277	1,716	1,225	765	576	735	704	997	1,888	1,933	19,161
Gas ($)	$ 3,887	$ 2,837	$ 2,424	$ 1,836	$ 1,331	$ 845	$ 645	$ 812	$ 780	$ 1,089	$ 1,717	$ 1,689	$ 19,891
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	60,214		93,201		125,814		129,479		70,686		70,611		550,004
Interior water/sewer ($)	$ 787		$ 1,197		$ 1,591		$ 1,826		$ 1,028		$ 923		$ 7,352
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 77.5

KBtu/SF/Year (EUI): 42.0

Energy $/SF/Year: $ 0.58

Total Cost/SF/Year: $ 0.67

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

Energy and Water Consumption and Savings Reporting Form

Required per RCW 39.35D.030 (3)(b)

LEED Level Achieved: Gold

Date: 1-Apr-16

Submit by email to: Sustainability@des.wa.gov

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Due: March 30, 2016

Building Name: Automotive, Welding and Central Services
Institution Name: South Puget Sound Community College
Location: Olympia
University/Agency: Higher Education
Approx. Occupancy Date: 2010
Building Use: Class Rooms, Open Car Bays, & Offices
Primary HVAC: Air to Air Heat Pump & Natural Gas Boiler
Building Square Footage: 34851
No. of Lab Hoods: 46
Other High Energy Using Equipment(describe): 24 Welding Machines, 23 Pc's
Renewable Energy Systems (describe):

Submitted By: Guy F. Quinlan
Phone: (360)596-5429
Email: gquinlan@spscc.edu

		%/Year
Average Hours/Wk:	75	80%
No. of People:	490	
Average Hours/Wk:	48	20%
No. of People:	19	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.060
Melded Gas Rate ($/therm): $ 1.06
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: E/G/W
Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	59,391	52,595	45,998	48,663	44,739	39,491	31,486	28,798	36,680	52,179	55,416	44,162	539,598
Electricity ($)	$ 3,563	$ 3,156	$ 2,760	$ 2,920	$ 2,684	$ 2,369	$ 1,889	$ 1,728	$ 2,201	$ 3,131	$ 3,325	$ 2,650	$ 32,376
Gas (therms)	1,119	818	704	609	355	91	57	68	173	402	925	1,233	6,555
Gas ($)	$ 1,210	$ 894	$ 775	$ 675	$ 412	$ 132	$ 97	$ 108	$ 219	$ 461	$ 860	$ 1,091	$ 6,932
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)		7,106		10,098		11,220		3,740		4,114		8,976	45,254
Interior water/sewer ($)		$ 256		$ 269		$ 275		$ 255		$ 257		$ 265	$1,577
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 114.3

KBtu/SF/Year (EUI): 71.6

Energy $/SF/Year: $ 1.13

Total Cost/SF/Year: $ 1.17

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Gold

Date: 1-Apr-16

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

Building Name: Science Complex
Institution Name: South Puget Sound Community College
Location: Olympia
University/Agency: HIGHER Education
Approx. Occupancy Date: 2009
Building Use: Labs, Class Rooms, & Offices
Primary HVAC: Natural Gas Boiler
Building Square Footage: 51884
No. of Lab Hoods: 16
Other High Energy Using Equipment(describe): 77 Pc's
Renewable Energy Systems (describe): 10 KW Photovoltaic System

Submitted By: Guy F. Quinlan
Phone: (360)596-5429
Email: gquinlan@spscc.ctc.edu

		%/Year
Average Hours/Wk:	80	80%
No. of People:	3898	
Average Hours/Wk:	40	20%
No. of People:	361	

Value from Renewables ($/yr): $ 686.34
Melded Electric Rate ($/kWh): $ 0.060
Melded Gas Rate ($/therm): $ 0.99
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: E/G/W/PV
Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	71528	64726	72007	69346	73526	76715	78318	77705	68017	74729	79324	75119	881060
Electricity ($)	$ 4,292	$ 3,884	$ 4,320	$ 4,161	$ 4,412	$ 4,603	$ 4,699	$ 4,662	$ 4,081	$ 4,484	$ 4,759	$ 4,507	$ 52,864
Gas (therms)	4,699	3,510	3,369	2,393	1,584	585	126	471	774	1,453	4,814	7,546	31,326
Gas ($)	$ 4,963	$ 3,716	$ 3,569	$ 2,545	$ 1,710	$ 655	$ 170	$ 534	$ 853	$ 1,572	$ 4,320	$ 6,490	$ 31,098
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)	330	470	800	1150	1300	1620	1530	1530	1080	720	320	220	11070
Electrical (kWh)	20.46	29.14	49.6	71.3	80.6	100.44	94.86	94.86	66.96	44.64	19.84	13.64	686.34
WATER													
Interior water (gals)		68816		38148		51986		30294		26554		52734	268532
Interior water/sewer ($)		$ 891		$ 531		$ 698		$ 480		$ 429		$ 707	$ 3,736
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 84.2

KBtu/SF/Year (EUI): 118.1

Energy $/SF/Year: $ 1.61

Total Cost/SF/Year: $ 1.68

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** Gold **Date:** 1-Apr-16 Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

Building Name: Anthropoplogy Cad Geomatics
Institution Name: South Puget Sound Community College
Location: Olympia
University/Agency: Higher Education
Approx. Occupancy Date: 2010
Building Use: Class Rooms and Office Space
Primary HVAC: Air to Air Heat Pump
Building Square Footage: 27470
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): 124 PC's
Renewable Energy Systems (describe):

Submitted By: Guy F. Quinlan
Phone: (360)596-5429
Email: gquinlan@spscc.ctc.edu

		%/Year
Average Hours/Wk:	168	80%
No. of People:	3475	
Average Hours/Wk:	32	20%
No. of People:	168	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.060
Melded Gas Rate ($/therm): $ 2.74
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data: E/G/W
Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	131853	87255	34003	33806	31080	32494	32330	30724	29837	33033	36308	37554	550277
Electricity ($)	$ 7,911	$ 5,235	$ 2,040	$ 2,028	$ 1,865	$ 1,950	$ 1,940	$ 1,843	$ 1,790	$ 1,982	$ 2,178	$ 2,253	$ 33,017
Gas (therms)	27	25	27	26	29	25	26	28	8	31	3	2	257
Gas ($)	$ 64	$ 62	$ 65	$ 64	$ 67	$ 63	$ 64	$ 66	$ 44	$ 68	$ 39	$ 38	$ 705
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)		15,708		15,334		22,440		6,358		8,602		17,578	86,020
Interior water/sewer ($)		$ 256		$ 255		$ 341		$ 209		$ 219		$ 282	$ 1,560
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 30.6 KBtu/SF/Year (EUI): 69.3 Energy $/SF/Year: $ 1.23 Total Cost/SF/Year: $ 1.28

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** GOLD **Date:** 27-Feb-16 Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

To print use legal size paper

Building Name: TCC Building 3 Early Learning Center
Institution Name: Tacoma Community College
Location: 6501 south 19th street Tacoma WA
University/Agency: Tacoma Community College
Approx. Occupancy Date: Sep-08
Building Use: Daycare, 1 classroom for ESL, english, early child development
Primary HVAC: natural Gas hot water boiler, convectors, NO AHU, NO A/C
Building Square Footage: 13,000
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe):
Renewable Energy Systems (describe):

Submitted By: Kim Cordova
Phone: 253-566-5172
Email: kcordova@tacomacc.edu

		%/Year
Average Hours/Wk:	50	96%
No. of People:	57	
Average Hours/Wk:	0	4%
No. of People:	0	

Value from Renewables ($/yr): $ -
Melded Electric Rate ($/kWh): $ 0.060
Melded Gas Rate ($/therm): $ 1.07
Other Fuel Rate ($/MMBtu): N/A
List Other Fuel: NONE
Metered Data: E/G/W
Prorated Data: E$

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	8548.5	8240	9368	7893.4	8401.5	9722.1	9330.5	9675.2	7874.1	9476.5	7804.4	7812.9	104147.1
Electricity ($)	$ 541	$ 542	$ 585	$ 513	$ 561	$ 642	$ 629	$ 619	$ 558	$ 591	$ 519	520	$ 6,820
Gas (therms)	1624	1632.016	1217.101	1240.468	799.196	403.613	89.866	73781	111.122	645.356	1240.455	1100.488	83884.681
Gas ($)	$ 1,596	1603	1205	1227	831	439	126	110	147	680	1305	1165	$ 10,434
Other: (KBtu)	0	0	0	0	0	0	0	0	0	0	0	0	0
Other: ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Chilled Water (KBtu)*	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water (KBtu)**	0	0	0	0	0	0	0	0	0	0	0	0	0
Steam (KBtu)**	0	0	0	0	0	0	0	0	0	0	0	0	0
Domestic HW (KBtu)**	0	0	0	0	0	0	0	0	0	0	0	0	0
RENEWABLES													
Solar Thermal (KBtu)	0	0	0	0	0	0	0	0	0	0	0	0	0
Electrical (kWh)	0	0	0	0	0	0	0	0	0	0	0	0	0
WATER													
Interior water (gals)	17500	18500	20200	18200	20100	20900	18200	14341	7768	20490	12976	10500	199675
Interior water/sewer ($)	$ 166	$ 176	$ 192	$ 173	$ 191	$ 199	$ 173	$ 136	$ 73	$ 194	$ 123	$ 101	$ 1,897
Domestic HW (gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Water captured (in)(gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Reclaimed water (in)(gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Reclaimed water (in)($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Irrigation (gals)	0	0	0	15	18660	19422	22573	23418	1414	0	0	844	86346
Irrigation ($)	$ -	$ -	$ -	$ 7	$ 90	$ 196	$ 109	$ 113	$ 7	$ -	$ -	$ 4	$ 526
Water captured (out)(gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Reclaimed water(out)(gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Reclaimed water (out)($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Water Use/Person/Yr: 3,649.0 KBtu/SF/Year (EUI): 672.6 Energy $/SF/Year: $ 1.33 Total Cost/SF/Year: $ 1.47

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** gold **Date:** 27-Feb-16 Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form Complete all applicable yellow boxes. Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b) **Due: March 30, 2016**

To print use legal size paper

Building Name: TCC Building 13 Harned Center
Institution Name: Tacoma Community College
Location: 6501 south 19th street Tacoma WA
University/Agency: Tacoma Community College
Approx. Occupancy Date: Sep-14
Building Use: Healthcare education classrooms , lab classrooms
Primary HVAC: Ground Source Heat Pump for heat and AC, Electric potable hot water heaters
Building Square Footage: 69,599
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): X-ray machines
Renewable Energy Systems (describe): NONE

Submitted By: Kim Cordova
Phone: 253-566-5172
Email: kcordova@tacomacc.edu

		%/Year
Average Hours/Wk:	72.5	80%
No. of People:	521	
Average Hours/Wk:	40	20%
No. of People:	91	

Value from Renewables ($/yr): $ -
Melded Electric Rate ($/kWh): $ 0.060
Melded Gas Rate ($/therm): $ 1.07
Other Fuel Rate ($/MMBtu): N/A
List Other Fuel: NONE
Metered Data: E/G/W
Prorated Data: E$

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	91810	78198	96238	81138	88996	90651	87989	77207	83851	83852	77790	82390	1020110
Electricity ($)	$ 4,696	$ 4,000	$ 4,923	$ 4,150	$ 4,552	$ 4,637	$ 4,501	$ 3,949	$ 4,289	$ 4,289	$ 3,979	$ 4,266	$ 52,231
Gas (therms)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Gas ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other: (KBtu)	0	0	0	0	0	0	0	0	0	0	0	0	0
Other: ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Chilled Water (KBtu)*	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water (KBtu)**	0	0	0	0	0	0	0	0	0	0	0	0	0
Steam (KBtu)**	0	0	0	0	0	0	0	0	0	0	0	0	0
Domestic HW (KBtu)**	0	0	0	0	0	0	0	0	0	0	0	0	0
RENEWABLES													
Solar Thermal (KBtu)	0	0	0	0	0	0	0	0	0	0	0	0	0
Electrical (kWh)	0	0	0	0	0	0	0	0	0	0	0	0	0
WATER													
Interior water (gals)	23807	22365	20912	25297	23031	16934	16799	28218	24349	23885	23190	22495	271282
Interior water/sewer ($)	$ 227	$ 213	$ 199	$ 241	$ 219	$ 161	$ 160	$ 269	$ 232	$ 227	$ 214	$ 214	$ 2,576
Domestic HW (gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Water captured (in)(gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Reclaimed water (in)(gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Reclaimed water (in)($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Irrigation (gals)	0	0	0	63652	98455	103377	101408	101278	93532	63652	0	0	625354
Irrigation ($)	$ -	$ -	$ -	$ 308	$ 477	$ 501	$ 492	$ 491	$ 453	$ 308	$ -	$ -	$ 3,030
Water captured (out)(gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Reclaimed water(out)(gals)	0	0	0	0	0	0	0	0	0	0	0	0	0
Reclaimed water (out)($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Water Use/Person/Yr: 623.6 KBtu/SF/Year (EUI): 50.0 Energy $/SF/Year: $ 0.75 Total Cost/SF/Year: $ 0.79

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Silver/Gold

Date: 8-Apr-16

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

Building Name: Water & Environmental Center
Institution Name: Walla Walla Community College
Location: 500 Tausick Way, Walla Walla, WA
University/Agency: Walla Walla Community College
Approx. Occupancy Date: 2007
Building Use: Classrooms, offices, labs, meeting facilities
Primary HVAC:
Building Square Footage: 27,552
No. of Lab Hoods:
Other High Energy Using Equipment(describe):
Renewable Energy Systems (describe):

Submitted By: Dave Stockdale/Shane Loper
Phone: 509 524-5193
Email: dave.stockdale@wwcc.edu

		%/Year
Average Hours/Wk:	50	75%
No. of People:	100	
Average Hours/Wk:	50	25%
No. of People:	25	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.086
Melded Gas Rate ($/therm): $ 0.96
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data:
Prorated Data:

Year:													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	50,960	50,960	44,720	40,480	55,600	51,440	49,760	50,960	50,080	49,520	58,400	56,160	609,040
Electricity ($)	$ 4,267	$ 4,380	$ 3,891	$ 3,642	$ 4,714	$ 4,372	$ 4,272	$ 4,397	$ 4,302	$ 4,259	$ 4,920	$ 4,742	$ 52,157
Gas (therms)	3,340	2,225	726	584	203	91	78	88	273	366	1,822	2,169	11,965
Gas ($)	$ 3,388	$ 2,261	$ 745	$ 601	$ 210	$ 103	$ 89	$ 98	$ 241	$ 319	$ 1,550	$ 1,841	$ 11,447
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	18	39	14	27	115	107	129	162	151	173	28	9	972
Interior water/sewer ($)	$ 635	$ 779	$ 614	$ 697	$ 827	$ 781	$ 825	$ 888	$ 843	$ 821	$ 704	$ 587	$ 9,001
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 12.0
KBtu/SF/Year (EUI): 118.8
Energy $/SF/Year: $ 2.31
Total Cost/SF/Year: $ 2.64

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** Gold

ANNUALIZED DATA FORM

Date: 26-Feb-15

Submit by email to: sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: February 28, 2015

To print use legal size paper

Building Name: Vancouver Engineering & Computer Science Building
Institution Name: Washington State University Vancouver
Location: Vancouver
University/Agency: Washington State University
Approx. Occupancy Date: Oct-11
Building Use: Instruction, Research, and Department Offices
Primary HVAC: Gas-Fired Hot Water Boilers w/Radiant Panels & Central Cooling Plant
Building Square Footage: 60,364
No. of Lab Hoods: 2
Other High Energy Using Equipment(describe): Server Room, x4 IDF Rooms, Mechanical Room - Combined Area = 11,970 square feet
Renewable Energy Systems (describe): N/A

Submitted By: Kevin G. Crowley, EH&S Coordinator
Phone: (360) 546-9706
Email: kevin.g.crowley@vancouver.wsu.edu

		%/Year
Average Hours/Wk:	75	69%
No. of People:	400	
Average Hours/Wk:	75	31%
No. of People:	110	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.060
Melded Gas Rate ($/therm): $ 0.74
Other Fuel Rate ($/MMBtu):
List Other Fuel: N/A
Metered Data: E
Prorated Data: G/W

Year:	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	97,559.65	92,237.81	92,789.35	92,890.09	86,737.98	78,106.53	85,968.36	90,293.33	91,655.43	98,328.25	103,210.97	105,034.48	1114812.23
Electricity ($)	$ 5,360	$ 5,264	$ 5,234	$ 5,298	$ 4,755	$ 4,508	$ 4,953	$ 5,202	$ 5,173	$ 5,406	$ 5,774	$ 5,842	$ 62,770
Gas (therms)	2,641.80	3,732.40	2,454.20	1,226.40	1,523.20	1,859.20	2,198	2,385.60	2,927.40	3,392.20	5,082	5,282.20	34704.6
Gas ($)	$ 2,274	$ 2,236	$ 1,581	$ 1,223	$ 1,070	$ 1,456	$ 2,100	$ 1,877	$ 2,256	$ 2,459	$ 3,280	$ 3,953	$ 25,764
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	19,895	29,643	31,148	76,893	36,301	48,101	45,168	77,187	85,232	61,045	34,511	30,317	575441
Interior water/sewer ($)	$ 497	$ 484	$ 525	$ 648	$ 519	$ 548	$ 537	$ 1,006	$ 374	$ 300	$ 229	$ 219	$ 5,885
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)	0	0	0	0	0	8,191	20,534	21,544	20,758	13,802	224	112	85165
Irrigation ($)	$ 22	$ 22	$ 22	$ 22	$ 23	$ 42	$ 72	$ 75	$ 73	$ 56	$ 22	$ 22	$ 472
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Usage/Person: 1855.66269 KBtu/SF/Year (EUI): 120.505588 Energy $/SF/Year: $ 1.4667 Total Cost/SF/Year: 1.5641528

This form is used when Portfolio Manager data (total year data) is used or there is mixed data (monthly and annual). Enter the "total year data" in the "Jan" column.

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** Gold

ANNUALIZED DATA FORM

Date: 26-Feb-15

Submit by email to: sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: February 28, 2015

To print use legal size paper

Building Name: Vancouver Undergraduate Building
Institution Name: Washington State University Vancouver
Location: Vancouver
University/Agency: Washington State University
Approx. Occupancy Date: Aug-09
Building Use: Instruction and Department Offices
Primary HVAC: Gas-Fired Hot Water Boilers w/Radiant Panels & Central Cooling Plant
Building Square Footage: 58,811
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): Room 100 Instructional PC Lab, x3 IDF Rooms, x1 MCF Room - Combined Area = 4,304 square feet
Renewable Energy Systems (describe): N/A

Submitted By: Kevin G. Crowley, EH&S Coordinator
Phone: (360) 546-9706
Email: kevin.g.crowley@vancouver.wsu.edu

		%/Year
Average Hours/Wk:	75	69%
No. of People:	400	
Average Hours/Wk:	75	31%
No. of People:	110	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.060
Melded Gas Rate ($/therm): $ 0.72
Other Fuel Rate ($/MMBtu):
List Other Fuel: N/A
Metered Data: E
Prorated Data: G/W

Year:	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	36,974.65	34,721.52	35,930.99	35,528.40	32,510.34	30,556.13	32,128.93	32,535.15	35,344.64	35,947.33	31,916.60	31,977.87	406072.55
Electricity ($)	$ 2,130	$ 2,109	$ 2,162	$ 2,138	$ 1,941	$ 1,730	$ 1,841	$ 1,966	$ 2,118	$ 2,151	$ 1,956	$ 1,900	$ 24,142
Gas (therms)	1583.4	2247	1489.6	688.8	569.8	357	169.4	159.6	284.2	763	1958.6	1482.6	11753
Gas ($)	$ 1,363	$ 1,346	$ 960	$ 687	$ 409	$ 280	$ 162	$ 126	$ 219	$ 553	$ 1,264	$ 1,111	$ 8,480
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	19,384	28,880	30,347	74,915	35,367	46,863	44,006	75,201	83,040	59,475	33,624	29,537	560639
Interior water/sewer ($)	$ 484	$ 471	$ 511	$ 631	$ 506	$ 534	$ 523	$ 980	$ 364	$ 292	$ 223	$ 213	$ 5,733
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)	0	0	0	0	898	10,922	27,379	28,725	27,678	18,402	299	150	114453
Irrigation ($)	$ 29	$ 29	$ 29	$ 29	$ 31	$ 56	$ 97	$ 100	$ 97	$ 74	$ 30	$ 29	$ 629
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Usage/Person: 1807.9297

KBtu/SF/Year (EUI): 43.5432069

Energy $/SF/Year: $ 0.5547

Total Cost/SF/Year: 0.6521703

This form is used when Portfolio Manager data (total year data) is used or there is mixed data (monthly and annual). Enter the "total year data" in the "Jan" column.

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project **LEED Level Achieved:** Silver **Date:** 24-Feb-15 Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: April 15, 2016

To print use legal size paper

Building Name: Music and Art Center
Institution Name: Wenatchee Valley College
Location: 1300 5th St. Wenatchee, WA
University/Agency: Wenatchee Valley College
Approx. Occupancy Date: Sep-12
Building Use: Music and fine arts instruction, exhibition, performance
Primary HVAC: Central plant chilled water loop, boiler
Building Square Footage: 27696

Submitted By: Richard Peters
Phone: 509-682-6465
Email: rpeters@wvc.edu

		%/Year
Average Hours/Wk:	84	84%
No. of People:	180	
Average Hours/Wk:	180	
No. of People:	120	

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.034
Melded Gas Rate ($/therm):
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data:
Prorated Data:

No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): Welder, dust collector, other shop equipment in art department
Renewable Energy Systems (describe):

Year:													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	76,640.00	60,800.00	42,720.00	37,840.00	35,760.00	27,920.00	28,720.00	25,280.00	26,640.00	37,360.00	52,560.00	84,960.00	537200
Electricity ($)	$ 2,501	$ 2,107	$ 1,571	$ 1,394	$ 1,274	$ 924	$ 893	$ 805	$ 928	$ 1,253	$ 1,783	$ 2,715	$ 18,146
Gas (therms)													0
Gas ($)													$ -
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*	attached to central plant - meter information not available												0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	400	900	1000	600	800	900	800	200	200	300	1100	800	8000
Interior water/sewer ($)	$ 170	$ 180	$ 182	$ 174	$ 178	$ 180	$ 178	$ 165	$ 165	$ 168	$ 187	$ 178	$ 2,103
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 52.9 KBtu/SF/Year (EUI): 66.2 Energy $/SF/Year: $ 0.66 Total Cost/SF/Year: $ 0.73

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.
**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Silver

Date: 2009

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Due: March 30, 2016

Required per RCW 39.35D.030 (3)(b)

Building Name: Academic Instructional Center
Institution Name: Western Washington University
Location: Bellingham, WA
University/Agency: Western Washington University
Approx. Occupancy Date: 2009
Building Use: Administrative offices, staff/faculty rooms, lecture hall
Primary HVAC: Steam > HW fin-tube radiant perimeter; independent FCU; passive vent w/ air-cooled
Building Square Footage: 130,649

Submitted By: Scott Dorough
Phone: 360-650-2412
Email: scott.dorough@wwu.edu

		%/Year
Average Hours/Wk:	80	100%
No. of People:	1000	
Average Hours/Wk:		
No. of People:		

Value from Renewables ($/yr): $ -
Melded Electric Rate ($/kWh): $ 0.072
Melded Gas Rate ($/therm): $ 0.52
Other Fuel Rate ($/MMBtu): $ 5.29
List Other Fuel: Steam
Metered Data: Electricity (kWh)-Steam (MMBtu)
Prorated Data:

No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): Vivarium requires tight temperature control; requires use of air-cooled chiller during weather dependent conditions.
Renewable Energy Systems (describe): none

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	154,126	140,000	130,671	120,996	114,745	126,470	128,668	114,845	103,199	112,994	138,000	134,992	1,519,706
Electricity ($)	$ 10,850	$ 9,930	$ 9,365	$ 8,659	$ 8,417	$ 9,543	$ 9,706	$ 8,724	$ 7,864	$ 8,385	$ 10,273	$ 10,170	$ 111,885
Gas (therms)													0
Gas ($)													$ -
Other: (KBtu)	656,015	446,950	460,766	458,554	250,597	183,816	119,200	65,635	178,101	250,317	581,779	650,985	4,302,716
Other: ($)	$ 3,583	$ 2,623	$ 2,558	$ 2,254	$ 1,336	$ 1,083	$ 593	$ 368	$ 915	$ 1,276	$ 2,673	$ 3,278	$ 22,539
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	See "**Notes**" immediately below for explanation.												0
Interior water/sewer ($)													$ -
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: -
KBtu/SF/Year (EUI): 72.6
Energy $/SF/Year: $ 1.03
Total Cost/SF/Year: $ 1.03

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

Notes: Domestic water service to this building is provided from the local City of Bellingham water utility via primary distribution network that serves eight major campus buildings. The distribution network has only a single point of metering. Thus, without individual building metering, consumption for Academic Instruction Center itself is unknown.

Likewise, irrigation for the grounds surrounding Academic Instruction Center is provided via general water supply with a single point of metering that also serves adjacent grounds areas.

State LEED Project

Energy and Water Consumption and Savings Reporting Form

Required per RCW 39.35D.030 (3)(b)

LEED Level Achieved: Gold

Date: 2011

Submit by email to: Sustainability@des.wa.gov

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Due: March 30, 2016

Building Name: Miller Hall
Institution Name: Western Washington University
Location: Bellingham, WA
University/Agency: Western Washington University
Approx. Occupancy Date: 2011
Building Use: Classrooms, faculty offices, meeting spaces, food service
Primary HVAC: Steam > HW heating coils in air handling units & cabinet heaters; optimization control
Building Square Footage: 135,369

Submitted By: Scott Dorough
Phone: 360-650-2412
Email: scott.dorough@wwu.edu

Value from Renewables ($/yr): $ -

		%/Year
Average Hours/Wk:	90	100%
No. of People:	800	
Average Hours/Wk:		
No. of People:		

Melded Electric Rate ($/kWh): $ 0.072
Melded Gas Rate ($/therm): $ 0.52
Other Fuel Rate ($/MMBtu): $ 5.29
List Other Fuel: Steam
Metered Data: Electricity (kWh)-Steam (MMBtu)
Prorated Data:

No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): none
Renewable Energy Systems (describe): none

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	82,288	78,632	83,783	84,323	87,634	84,350	92,097	82,283	73,619	86,074	79,804	75,354	990,242
Electricity ($)	$ 5,793	$ 5,577	$ 6,004	$ 6,035	$ 6,428	$ 6,365	$ 6,948	$ 6,250	$ 5,610	$ 6,387	$ 5,941	$ 5,677	$ 73,015
Gas (therms)													0
Gas ($)													$ -
Other: (KBtu)	477,705	446,652	364,465	339,460	158,284	84,628	48,076	23,972	139,669	234,494	481,153	564,532	3,363,090
Other: ($)	$ 2,609	$ 2,621	$ 2,023	$ 1,669	$ 844	$ 499	$ 239	$ 134	$ 717	$ 1,195	$ 2,210	$ 2,843	$ 17,604
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	38,148	49,368	55,352	53,856	55,352	30,668	29,172	20,944	19,448	56,848	62,084	45,628	516,868
Interior water/sewer ($)	$ 712	$ 808	$ 906	$ 834	$ 862	$ 614	$ 610	$ 518	$ 492	$ 884	$ 926	$ 800	$ 8,966
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)	0	0	0	4,488	4,488	14,212	14,960	12,716	11,968	2,244	0	0	65,076
Irrigation ($)	$ -	$ -	$ -	$ 70	$ 73	$ 157	$ 165	$ 156	$ 150	$ 92	$ 78	$ 18	$ 959
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 646.1

KBtu/SF/Year (EUI): 49.8

Energy $/SF/Year: $ 0.67

Total Cost/SF/Year: $ 0.74

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Certified

Date: 2007

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Required per RCW 39.35D.030 (3)(b)

Submit as an Excel Spreadsheet

Due: March 30, 2016

Building Name: Student Recreation Center
Institution Name: Western Washington University
Location: Bellingham, WA
University/Agency: Western Washington University
Approx. Occupancy Date: 2007
Building Use: Recreational center including swimming pool, workout areas and gyms.
Primary HVAC: Steam > HW heating coils in air handling units & cabinet heaters; DX chiller; optimiza
Building Square Footage: 98,300
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe): 25-yard, 6-lane swimming pool w/ adjoining activity area and spa
Renewable Energy Systems (describe): none

Submitted By: Scott Dorough
Phone: 360-650-2412
Email: scott.dorough@wwu.edu

		%/Year
Average Hours/Wk:	100	100%
No. of People:	500	
Average Hours/Wk:		
No. of People:		

Value from Renewables ($/yr): $ -
Melded Electric Rate ($/kWh): $ 0.072
Melded Gas Rate ($/therm): $ 0.52
Other Fuel Rate ($/MMBtu): $ 5.29
List Other Fuel: Steam
Metered Data: Electricity (kWh)-Steam (MMBtu)
Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	139,671	131,886	143,476	145,162	143,659	150,158	151,643	147,683	136,966	142,772	150,156	130,163	1,713,393
Electricity ($)	$ 9,832	$ 9,354	$ 10,282	$ 10,388	$ 10,538	$ 11,331	$ 11,440	$ 11,218	$ 10,437	$ 10,595	$ 11,178	$ 9,806	$ 126,399
Gas (therms)													0
Gas ($)													$ -
Other: (KBtu)	1,086,555	822,879	867,969	877,098	541,993	330,385	280,057	188,961	359,801	556,797	1,000,607	1,012,883	7,925,986
Other: ($)	$ 5,934	$ 4,829	$ 4,818	$ 4,312	$ 2,889	$ 1,947	$ 1,392	$ 1,059	$ 1,848	$ 2,838	$ 4,597	$ 5,101	$ 41,565
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	109,208	115,192	128,656	130,152	134,640	79,288	80,036	94,248	92,752	142,868	147,356	137,632	1,392,028
Interior water/sewer ($)	$ 1,599	$ 1,649	$ 1,842	$ 1,780	$ 1,840	$ 1,263	$ 1,286	$ 1,432	$ 1,400	$ 1,930	$ 1,957	$ 1,940	$ 19,918
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)	0	0	13,464	412,896	426,360	852,720	926,024	409,904	343,332	57,596	748	0	3,443,044
Irrigation ($)	$ -	$ 20	$ 84	$ 1,872	$ 1,935	$ 3,763	$ 4,079	$ 2,112	$ 1,840	$ 443	$ 157	$ 37	$ 16,342
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 2,784.1
KBtu/SF/Year (EUI): 140.1
Energy $/SF/Year: $ 1.71
Total Cost/SF/Year: $ 1.91

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

State LEED Project

LEED Level Achieved: Gold

Date: 6-Jul-16

Submit by email to: Sustainability@des.wa.gov

Energy and Water Consumption and Savings Reporting Form

Complete all applicable yellow boxes.

Submit as an Excel Spreadsheet

Required per RCW 39.35D.030 (3)(b)

Due: March 30, 2016

Building Name: Grandview Library
Institution Name: Yakima Valley Community College
Location: Yakima
University/Agency: Yakima Valley Community College
Approx. Occupancy Date: Sep-11
Building Use: Library
Primary HVAC: Mistubishi Variable Refrigeration System
Building Square Footage: 12144
No. of Lab Hoods: 0
Other High Energy Using Equipment(describe):
Renewable Energy Systems (describe):

Submitted By: Sybil Miller
Phone: 509-574-4692
Email: smiller@yvcc.edu

		%/Year
Average Hours/Wk:	42	100%
No. of People:	15	
Average Hours/Wk:		
No. of People:		

Value from Renewables ($/yr):
Melded Electric Rate ($/kWh): $ 0.096
Melded Gas Rate ($/therm): $ 1.14
Other Fuel Rate ($/MMBtu):
List Other Fuel:
Metered Data:
Prorated Data:

Year:	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ENERGY													
Electricity (kWh)	20225	19341	12705	12737	11875	14268	13553	13953	13962	14420	17788	18346	183173
Electricity ($)	$ 1,772	$ 1,696	$ 1,261	$ 1,253	$ 1,261	$ 1,401	$ 1,370	$ 1,400	$ 1,439	$ 1,387	$ 1,652	$ 1,683	$ 17,575
Gas (therms)	88	97	53	46	20	5	5	16	21	42	64	165	622
Gas ($)	$ 100	$ 109	$ 64	$ 57	$ 31	$ 16	$ 16	$ 27	$ 29	$ 46	$ 65	$ 150	$ 708
Other: (KBtu)													0
Other: ($)													$ -
Chilled Water (KBtu)*													0
Hot Water (KBtu)**													0
Steam (KBtu)**													0
Domestic HW (KBtu)**													0
RENEWABLES													
Solar Thermal (KBtu)													0
Electrical (kWh)													0
WATER													
Interior water (gals)	200	600	400	400	600	300	300	400	400	300	400	300	4600
Interior water/sewer ($)	$ 104	$ 119	$ 109	$ 109	$ 119	$ 106	$ 106	$ 109	$ 109	$ 106	$ 109	$ 106	$ 1,307
Domestic HW (gals)													0
Water captured (in)(gals)													0
Reclaimed water (in)(gals)													0
Reclaimed water (in)($)													$ -
Irrigation (gals)													0
Irrigation ($)													$ -
Water captured (out)(gals)													0
Reclaimed water(out)(gals)													0
Reclaimed water (out)($)													$ -

Water Use/Person/Yr: 306.7

KBtu/SF/Year (EUI): 56.6

Energy $/SF/Year: $ 1.51

Total Cost/SF/Year: $ 1.61

See Below for Explanations regarding data for each of the cells

*Chiller and distribution systems combined efficiency calculated at 2 KW/Ton.

**Central plant and distribution systems combined annual average efficiency calculated at 65%.

Appendix E: Metering and Measurement Reports

2015-2016

1. Corrections, Dept. of *(12 total)*
2. North Seattle College *(2 total)*
3. Seattle Central College
4. South Seattle College
5. Washington State University *(2 total)*

2006-2014

6. Bellevue College
7. Bellingham Technical College
8. Centralia College
9. Edmonds Community College
10. Grays Harbor College
11. North Seattle College
12. Pierce College *(2 total)*
13. Social & Health Services, Dept. of
14. Tacoma Community College
15. University of Washington *(4 total)*

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Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is "prorated". Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov

Building Name: Training Center
Institution Name: Monroe Correction Complex
Approximate Occupancy Date: 2005
Submitted By: Julie Vanneste Date: 4/29/16
Phone: (360)725-8396 Email: javanneste@doc1.wa.gov

(X) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The campus where the building resides is centrally metered for electricity. The meter placed at this building is inoperable. Budget constraints have delayed the replacement of the meter. There are no current plans to install a new metering system.

Gas/Steam/HW: The campus where the building resides is centrally metered for Gas. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the gas use of individual of campus buildings. There are no current plans to install a metering system. If applicable to this campus steam is centrally metered. Hot water is not metered. There are no plans to install a separate metering system.

Water (interior): The campus where the building resides is centrally metered for Water. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the water use of individual of campus buildings. There are no current plans to install a metering system.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is “prorated”. Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov

Building Name: Treatment Program Building
Institution Name: Airway Heights Corrections Center
Approximate Occupancy Date: 2009
Submitted By: Julie Vanneste Date: 4/29/16
Phone: (360)725-8396 Email: javanneste@doc1.wa.gov

(X) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The campus where the building resides is centrally metered for electricity. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the electricity use of individual of campus buildings. There are no current plans to install a metering system.

Gas/Steam/HW: The campus where the building resides is centrally metered for Gas. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the gas use of individual of campus buildings. There are no current plans to install a metering system. If applicable to this campus steam is centrally metered. Hot water is not metered. There are no plans to install a separate metering system.

Water (interior): The campus where the building resides is centrally metered for Water. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the water use of individual of campus buildings. There are no current plans to install a metering system.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is “prorated”. Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov

Building Name: New Visitation Building
Institution Name: Airway Heights Corrections Center
Approximate Occupancy Date: 2008
Submitted By: Julie Vanneste Date: 4/29/16
Phone: (360)725-8396 Email: javanneste@doc1.wa.gov

(X) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The campus where the building resides is centrally metered for electricity. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the electricity use of individual of campus buildings. There are no current plans to install a metering system.

Gas/Steam/HW: The campus where the building resides is centrally metered for Gas. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the gas use of individual of campus buildings. There are no current plans to install a metering system. If applicable to this campus steam is centrally metered. Hot water is not metered. There are no plans to install a separate metering system.

Water (interior): The campus where the building resides is centrally metered for Water. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the water use of individual of campus buildings. There are no current plans to install a metering system.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is “prorated”. Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov

Building Name: Perimeter Control Office
Institution Name: Cedar Creek Corrections Center
Approximate Occupancy Date: 2009
Submitted By: Julie Vanneste Date: 4/29/16
Phone: (360)725-8396 Email: javanneste@doc1.wa.gov

(X) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The campus where the building resides is centrally metered for electricity. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the electricity use of individual of campus buildings. There are no current plans to install a metering system.

Gas/Steam/HW: The campus where the building resides is centrally metered for Gas. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the gas use of individual of campus buildings. There are no current plans to install a metering system. If applicable to this campus steam is centrally metered. Hot water is not metered. There are no plans to install a separate metering system.

Water (interior): The campus where the building resides is centrally metered for Water. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the water use of individual of campus buildings. There are no current plans to install a metering system.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is "prorated". Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov

Building Name: IMU/Segregation Unit
Institution Name: Monroe Correction Complex
Approximate Occupancy Date: 2006
Submitted By: Julie Vanneste Date: 4/29/16
Phone: (360)725-8396 Email: javanneste@doc1.wa.gov

(X) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The campus where the building resides is centrally metered for electricity. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the electricity use of individual of campus buildings. There are no current plans to install a metering system.

Gas/Steam/HW: The campus where the building resides is centrally metered for Gas. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the gas use of individual of campus buildings. There are no current plans to install a metering system. If applicable to this campus steam is centrally metered. Hot water is not metered. There are no plans to install a separate metering system.

Water (interior): The campus where the building resides is centrally metered for Water. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the water use of individual of campus buildings. There are no current plans to install a metering system.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is “prorated”. Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov

Building Name: SOU Maintenance
Institution Name: Monroe Correction Complex
Approximate Occupancy Date: 2005
Submitted By: Julie Vanneste Date: 4/29/16
Phone: (360)725-8396 Email: javanneste@doc1.wa.gov

(X) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The campus where the building resides is centrally metered for electricity. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the electricity use of individual of campus buildings. There are no current plans to install a metering system.

Gas/Steam/HW: The campus where the building resides is centrally metered for Gas. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the gas use of individual of campus buildings. There are no current plans to install a metering system. If applicable to this campus steam is centrally metered. Hot water is not metered. There are no plans to install a separate metering system.

Water (interior): The campus where the building resides is centrally metered for Water. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the water use of individual of campus buildings. There are no current plans to install a metering system.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is “prorated”. Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov

Building Name: 100-Bed Expansion
Institution Name: Mission Creek Corrections Center for Women
Approximate Occupancy Date: 2010
Submitted By: Julie Vanneste Date: 4/29/16
Phone: (360)725-8396 Email: javanneste@doc1.wa.gov

(X) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The campus where the building resides is centrally metered for electricity. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the electricity use of individual of campus buildings. There are no current plans to install a metering system.

Gas/Steam/HW: The campus where the building resides is centrally metered for Gas. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the gas use of individual of campus buildings. There are no current plans to install a metering system. If applicable to this campus steam is centrally metered. Hot water is not metered. There are no plans to install a separate metering system.

Water (interior): The campus where the building resides is centrally metered for Water. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the water use of individual of campus buildings. There are no current plans to install a metering system.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is “prorated”. Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov

Building Name: North Close Security Complex
Institution Name: Washington State Penitentiary
Approximate Occupancy Date: 2007
Submitted By: Julie Vanneste Date: 4/29/16
Phone: (360)725-8396 Email: javanneste@doc1.wa.gov

(X) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The campus where the building resides is centrally metered for electricity. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the electricity use of individual of campus buildings. There are no current plans to install a metering system.

Gas/Steam/HW: The campus where the building resides is centrally metered for Gas. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the gas use of individual of campus buildings. There are no current plans to install a metering system. If applicable to this campus steam is centrally metered. Hot water is not metered. There are no plans to install a separate metering system.

Water (interior): The campus where the building resides is centrally metered for Water. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the water use of individual of campus buildings. There are no current plans to install a metering system.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is “prorated”. Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov

Building Name: South Close Expansion – Correctional l Industries Warehouse
Institution Name: Washington State Penitentiary
Approximate Occupancy Date: 2009
Submitted By: Julie Vanneste   Date: 4/29/16
Phone: (360)725-8396 Email: javanneste@doc1.wa.gov

(X) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The campus where the building resides is centrally metered for electricity. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the electricity use of individual of campus buildings. There are no current plans to install a metering system.

Gas/Steam/HW: The campus where the building resides is centrally metered for Gas. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the gas use of individual of campus buildings. There are no current plans to install a metering system. If applicable to this campus steam is centrally metered. Hot water is not metered. There are no plans to install a separate metering system.

Water (interior):   The campus where the building resides is centrally metered for Water. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the water use of individual of campus buildings. There are no current plans to install a metering system.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is “prorated”. Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov

Building Name: South Close Expansion – Health Services Building
Institution Name: Washington State Penitentiary
Approximate Occupancy Date: 2010
Submitted By: Julie Vanneste Date: 4/29/16
Phone: (360)725-8396 Email: javanneste@doc1.wa.gov

(X) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The campus where the building resides is centrally metered for electricity. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the electricity use of individual of campus buildings. There are no current plans to install a metering system.

Gas/Steam/HW: The campus where the building resides is centrally metered for Gas. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the gas use of individual of campus buildings. There are no current plans to install a metering system. If applicable to this campus steam is centrally metered. Hot water is not metered. There are no plans to install a separate metering system.

Water (interior): The campus where the building resides is centrally metered for Water. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the water use of individual of campus buildings. There are no current plans to install a metering system.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is "prorated". Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov

Building Name: Medium Custody Washington State Penitentiary Living Unit Victor and William 10-355
Institution Name: Washington State Penitentary
Approximate Occupancy Date: 2015
Submitted By: Julie Vanneste Date: 4/29/16
Phone: (360)725-8396 Email: javanneste@doc1.wa.gov

(X) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: These building are separately metered and monitored for electricity consumption.

Gas/Steam/HW:

Water (interior): These buildings are separately metered for water consumption however the facility currently lacks sufficient resources to track water consumption.

Other:

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is “prorated”. Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov

Building Name: Warehouse
Institution Name: Washington State Penitentiary
Approximate Occupancy Date: 2005
Submitted By: Julie Vanneste Date: 4/29/16
Phone: (360)725-8396 Email: javanneste@doc1.wa.gov

(X) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The campus where the building resides is centrally metered for electricity. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the electricity use of individual of campus buildings. There are no current plans to install a metering system.

Gas/Steam/HW: The campus where the building resides is centrally metered for Gas. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the gas use of individual of campus buildings. There are no current plans to install a metering system. If applicable to this campus steam is centrally metered. Hot water is not metered. There are no plans to install a separate metering system.

Water (interior): The campus where the building resides is centrally metered for Water. There is no separate meter on this building. There is not sufficient data to meaningfully prorate the water use of individual of campus buildings. There are no current plans to install a metering system.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is "prorated". Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: Sustainability@des.wa.gov Due Date: March 30, 2016

Building Name: Health Sciences and Student Resources building

Institution Name: North Seattle College

Approximate Occupancy Date: September 2015

Submitted By: Adam Maurer Date: 4/19/2016

Phone: 206.934.3862 Email: adam.maurer@seattlecolleges.edu

☐ This building will not be participating in reporting energy and water data per RCW 39.35D (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity:

The Health Sciences and Student Resources (HSSR) building is sub-metered for electricity. However, the data collection system for this building was not operating correctly, so we were not able to obtain building electricity usage. The building is included on a bigger meter, which tracks usage for four buildings. The prorated usage and charges were determined by applying a usage and charge proportional to the square footage of the building compared to the square footage served by the electric meter. We are investigating electric sub-meter collection problems and hope to retrieve.

Gas/Steam/HW:

The Health Sciences and Student Resources building was under construction until September 2015. The building's natural gas meter did not record any natural gas usage during 2015, which Puget Sound Energy is currently investigating because the meter should have recorded some usage from September-December 2015. If we do retrieve data for natural gas usage for these months we will update the Energy and Water report for this building.

Water (interior):

The Health Sciences and Student Resources (HSSR) building shares the same water meter as the rest of the college, as there is only one curbside meter. The prorated usage and charges were determined by applying a usage and charge proportional to the square footage of the building compared to the square footage served by the water meter. The HSSR also does not have direct irrigation. We are hoping to have building level metering for all utilities operational by the end of 2016.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is “prorated”. Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: Sustainability@des.wa.gov Due Date: March 30, 2016

Building Name: Opportunity Center for Employment and Education
Institution Name: North Seattle College
Approximate Occupancy Date: May 2011
Submitted By: Adam Maurer Date: 4/19/2016
Phone: 206.934.3862 Email: adam.maurer@seattlecolleges.edu

☐ This building will not be participating in reporting energy and water data per RCW 39.35D (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity:

The Opportunity Center for Employment and Education (OCE&E) is sub-metered for electricity. However, the data collection system for this building was not operating correctly, so we were not able to obtain building electricity usage. The building is included on a bigger meter, which tracks usage for four buildings. The prorated usage and charges were determined by applying a usage and charge proportional to the square footage of the building compared to the square footage served by the electric meter. We are investigating electric sub-meter collection problems and hope to retrieve 2015 electric usage data for this building. We will then be able to update the Energy and Water reporting document for 2015.

Gas/Steam/HW:

Water (interior):

The OCE&E building shares the same water meter as the rest of the college, as there is only one curbside meter. The prorated usage and charges were determined by applying a usage and charge proportional to the square footage of the building compared to the square footage served by the water meter. The OCE&E also does not have direct irrigation.

We are hoping to have building level metering for all utilities operational by the end of 2016.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is "prorated". Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: Sustainability@des.wa.gov Due Date: March 30, 2016

Building Name: Seattle Maritime Academy
Institution Name: Seattle Central College
Approximate Occupancy Date: September, 2016
Submitted By: Lee Knawa Date: 4/20/2016
Phone: (360) 407-9208 Email: lee.knawa@des.wa.gov

☐ This building will not be participating in reporting energy and water data per RCW 39.35D (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity:

Electricity Metering is planned for this building. The building is under construction currently and is approximately 55% complete.

Gas/Steam/HW:

Gas Metering is planned for this building. The building is under construction currently and is approximately 55% complete. No Steam will be used in this building. A domestic hot water boiler will be used to provide potable hot water to lavatories, janitorial service sinks and a coffee bar convenience sink. No process water is planned for use in this facility.

Water (interior):

Water Metering is planned for this building. The building is under construction currently and is approximately 55% complete.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is “prorated”. Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: Sustatinability@des.wa.gov Due Date: March 30, 2016

Building Name: SSC Georgetown Building C Expansion (Gene J. Colin)

Institution Name: South Seattle College, Georgetown Campus

Approximate Occupancy Date: June 20012

Submitted By: Adam Maurer Date: 4/19/2016

Phone: 206.934.3862 Email: adam.maurer@seattlecolleges.edu

☐ This building will not be participating in reporting energy and water data per RCW 39.35D (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity:

The building C Expansion is sub-metered for electricity, but for 2015 the data was not reporting on a monthly basis. The only data were we able to obtain was complete kWh usage for the time period of April 12, 2014 to April 12, 2016. With this, we divided the total kWh usage by 24 months to estimate the kWh usage for one month over this time period. We have set the sub-meter to report monthly data moving forward to ensure we have a more accurate picture of electricity usage each month during the year.

Gas/Steam/HW:

The Building C expansion does not use gas, steam, or hot water.

Water (interior):

The Building C Expansion does not have interior water (bathrooms and other water users are located in the original building)

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required to complete one of these M & M Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: sustainability@des.wa.gov Due Date: February 28, 2015.

Building Name: Vancouver Engineering & Computer Science Building
Institution Name: Washington State University Vancouver
Approximate Occupancy Date: 4 October 2011
Submitted By: Kevin G. Crowley, EH&S Coordinator, WSU Vancouver Date: February 26, 2015
Phone: (360) 546-9706 Email: kevin.g.crowley@vancouver.wsu.edu

(___) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: kWhrs and kW demand are retrieved from the main electrical meter in the LEED building. This information is then cross-referenced to a monthly report that is generated automatically.

Gas/Steam/HW: The building is equipped with a natural gas meter, which is read monthly. Therms are calculated by multiplying the volume of gas used between readings by 1.4. Billing is calculated by determining the $/therm from the monthly bill and then multiplying by the therms for a given month.

Water (interior): Water (interior) totals are calculated by dividing the volume of water used per month into the square footage of all occupied space on campus and then multiplying the quotient by the square footage of the LEED building. The campus is looking toward water meters in each building. The implementation date is unknown but LEED buildings will be prioritized.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required to complete one of these M & M Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: sustainability@des.wa.gov Due Date: February 28, 2015.

Building Name: Vancouver Undergraduate Building
Institution Name: Washington State University Vancouver
Approximate Occupancy Date: 31 August 2009
Submitted By: Kevin G. Crowley, EH&S Coordinator, WSU Vancouver Date: February 26, 2015
Phone: (360) 546-9706 Email: kevin.g.crowley@vancouver.wsu.edu

(___) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: kWhrs and kW demand are retrieved from the main electrical meter in the LEED building. This information is then cross-referenced to a monthly report that is generated automatically.

Gas/Steam/HW: The building is equipped with a natural gas meter, which is read monthly. Therms are calculated by multiplying the volume of gas used between readings by 1.4. Billing is calculated by determining the $/therm from the monthly bill and then multiplying by the therms for a given month.

Water (interior): Water (interior) totals are calculated by dividing the volume of water used per month into the square footage of all occupied space on campus and then multiplying the quotient by the square footage of the LEED building. The campus is looking toward water meters in each building. The implementation date is unknown but LEED buildings will be prioritized.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required to complete one of these M & M Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: sustainability@des.wa.gov Due Date: June 14, 2013.

Building Name: Science and Technology, Building S
Institution Name: Bellevue College
Approximate Occupancy Date: 6/2009
Submitted By: Deric Gruen Date: 6/10/2013
Phone: 425.564.2720 Email: deric.gruen@bellevuecollege.edu

(___) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity:

Based on sub-meter data – the annual data is correct, but monthly intervals are approximate.

The cost of electricity is prorated from the campus meter melded rate.

Gas/Steam/HW:

Water (interior):
Consumption is estimated based on irregular recordings of meter data, cost is pro-rated based on campus melded rate.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required to complete one of these M & M Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: sustainability@des.wa.gov Due Date: June 14, 2013.

Building Name: Campus Center (CC)

Institution Name: Bellingham Technical College

Approximate Occupancy Date: April 2012

Submitted By: Dave Jungkuntz, Facilities Manager Date: 6 March 2014

Phone: 360.752.8355 Email: djungkuntz@btc.ctc.edu

Compiled By: Wendy Riedy, Assistant to Facilities Manager Date: 6 March 2014

Phone: 360.752.8489 Email: wriedy@btc.ctc.edu

(___) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide an explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: It is not possible to collect data at this time due to problematic install of sub-metering equipment and interface with building energy management system (EMS). We are working with the electrician, sub-contractor and EMS contractor to have resolved by July 1, 2014.

Gas/Steam/HW: Metered

Water (interior): Metered

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required to complete one of these M & M Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: sustainability@des.wa.gov Due Date: June 14, 2013.

Building Name: NEW SCIENCE CENTER
Institution Name: CENTRALIA COLLEGE
Approximate Occupancy Date: APRIL 1, 2009
Submitted By: GIL ELDER Date: June 6, 2013
Phone: 360.736.9391 X. 434 Email: GELDER@CENTRALIA.EDU
(___) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The data for the electricity is prorated due to three buildings share the same meter. There is a sub-meter installed for the building but at this time, the bugs are being worked out to achieve more accuracy in reporting.

Gas/Steam/HW: The Gas consumption is pulled off the monthly utility bills.

Water (interior): The water consumption is pulled off the monthly utility bills

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required to complete one of these M & M Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: sustainability@des.wa.gov Due Date: June 14, 2013.

Building Name: Meadowdale Hall
Institution Name: Edmonds Community College
Approximate Occupancy Date: April 2010
Submitted By: Francisco Gomez Date: July 28, 2014
Phone: 425-640-1674 Email: francisco.gomez@email.edcc.edu

(___) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity:

GridNavigator is used to gather usage data was easy to compile. Gathering cost info was very difficult because the utility company meters several buildings as one. Difficult to break out costs associated with kwh used by the one sub metered building vs several other buildings on same billing.

Gas/Steam/HW:

Utility company meters most of campus on one meter. This building not sub-metered for gas or water usage. Looking at options with ESCO project to sub meter further.

Water (interior):

Meadowdale Hall is not metered separately from other buildings. We will look at options to sub-meter with future ESCO project.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required to complete one of these M & M Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: sustainability@des.wa.gov Due Date: June 14, 2013.

Building Name: Childcare Center (1400 Building)________________________________
Institution Name: Grays Harbor College___
Approximate Occupancy Date:__________May 2010 ___________________________
Submitted By: Tony Simone_____________Date: May 16, 2013________________
Phone: _360-538-4154_____Email: ___tsimone@ghc.edu_____________________

(__X_) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: Electricity:
The electricity is tracked through the building's EMCS and the PUD utility bills. The results are inputted into Portfolio Manager.

Gas/Steam/HW:
The Gas usage is also tracked through the building's EMCS and the utility bills. This is also inputted into Portfolio Manager.

Water (interior):
The Water is tracked through the building's EMCS and the utility bills. We are still having difficulty with the monitoring device that inputs to the EMCS. It has never worked correctly and we are in the process of trying to get it fixed. This is inputted into Portfolio Manager using the utility information.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required to complete one of these M & M Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: sustainability@des.wa.gov Due Date: June 02, 2014.

Building Name: _______Opportunity Center for Employment and Education (OCE&E)
Institution Name: _____________North Seattle College________________________________
Approximate Occupancy Date: _______May 2011_______________________________________
Submitted By: __Ian Siadak______________________ Date: ____2/27/15________________
Phone: ___206-934-3862___________ Email: ________ian.siadak@seattlecolleges.edu_________

(___) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The OCE&E has electrical submeters from which we pulled usage data. However, one of the meters on the 2nd floor did not report any readings for January and February. An average monthly value was attributed to these two months.

Gas/Steam/HW:

Water (interior): The OCE&E building shares the same water meter as the rest of the college, as there is only one curbside meter. The prorated usage and charges were determined by applying a usage and charge proportional to the square footage of the building compared to the square footage served by the water meter. The OCE&E building does not have direct irrigation. We are hoping to have building level metering for all utilities on this building by the end of 2015.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required to complete one of these M & M Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: sustainability@des.wa.gov Due Date: June 02, 2014.

Building Name: Rainier

Institution Name: Pierce College Fort Steilacoom Occupancy

Date: 2/25/10

Submitted By: Debby Aleckson__Date:______5/29/14______________

Phone: 253-964-6565______ Email: ___daleckson@pierce.ctc.edu_________________

(___) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The main building switchboard is equipped for interface to the EMCS system. Utility invoice is for entire campus at this time. Usage is taken from EMCS and costs are applied using a melded rate.

Gas/Steam/HW: PSE utility invoices are used as the source for monthly information on therm use and cost. The building is equipped with a dedicated gas meter. A pulse transmitter was provided and installed by PSE and trends via the EMCS system.

Water (interior): The building is equipped with a dedicated water meter and pulse transmitter that is programmed to trend via the EMCS system. Irrigation water is metered along with domestic water. There is a deduct meter for irrigation water, but it does not appear to be connected. There is also a deduct meter for the cooling tower domestic water use, but it is not hooked up at this time. Usage is taken from the EMCS and costs are applied using a melded rate

Other: Solar PV is metered and trended via a web-based system. This system is not interfaced with EMCS system. We are using Enphase statements for reports. Fixed array: http://www.sunnyportal.com
Rotary array: https://enlighten.enphaseenergy.com/

Metering and Measurement Report Pierce College AAH Building

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required to complete one of these M & M Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: sustainability@des.wa.gov Due Date: June 14, 2013.

Building Name:___________Arts and Allied Health Building _________________
Institution Name:___________Pierce College Puyallup ____________________________
Approximate Occupancy Date: 7-15-10____________________________________
Submitted By: _Debby Aleckson________Date: 6-14-13
Phone: 253-964-6565 Email: daleckson@pierce.ctc.edu

(___) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: As of June 2012 meter readings through the JCI metasys system have been made available. Utility invoice is for entire campus at this time. Costs established using melded electric rate.

Gas/Steam/HW: PSE utility invoices are used as the source for monthly information on therm use and cost.

Water (interior): As of June 2012 meter readings through the JCI metasys system have been made available. Water use and cost information is taken from the utility invoices.

Other:

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is "prorated". Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov Due Date: June 2, 2014.

Building Name: Phase 2-Residential Housing Unit Renovation for:
Cottages 9, 10, 12, & 13 and Classroom
Institution Name: Echo Glen Children's Center

Approximate Occupancy Date: **Substantial Completion date April, 2010**
Submitted By: Diana Peeples Date: May 29, 2014
Phone: (360)902-8347 Email: peepldu@dshs.wa.gov

(___) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).
Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity:
Customer meters on all renovated buildings. The classroom is serviced by an electric heat pump. Circuit transformers installed on the electrical panel meters the building's power usage in "KW".
Gas/Steam/HW: Natural gas flow meter installed on the incoming gas line measures the building gas consumption in "cubic feet per hour".

Water (interior):
Water is supplied by domestic on-site campus wells. Water flow meter installed on the incoming domestic water line meter the building water consumption in "gallons per minute". Waste water is piped to a municipal sewer and the amount generated affects the costs.

Domestic Hot Water: BTU meter is installed at the hot water piping from the hot water heater measures energy used to heat water based on the gallon per minute flow rate and the temperature delta.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required to complete one of these M & M Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: sustainability@des.wa.gov Due Date: June 14, 2013.

Building Name:____Building 3 (Annette B Weyerhaeuser) Early Learning Center
Institution Name: _Tacoma Community College
Approximate Occupancy Date:_____8-1-2008______________________
Submitted By:____Dave Moffat_____________Date:_5-14-13____________
Phone: _253-566-6047__________Email:______dmoffat@tacomacc.edu_______________________

(___) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: The electric meter is read and recorded 1 time per month, the demand is reset at the same time.

Gas: Natural gas readings are requested for the prior 12 month period from the gas utility for accuracy.

Water (interior): The Potable water meter is read and recorded 1 time per month. The Irrigation deduct meter is read and recorded 1 time per month.

Other: Additionally included is a water deduct meter for the Hydronic system. The total Potable water consumption is calculated by deducting the Hydronic system consumption from the potable consumption reading.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is "prorated". Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov Due Date: August 1, 2013.

Building Name: Clark Hall
Institution Name: University of Washington
Approximate Occupancy Date: December 2008
Submitted By: Guarrin Sakagawa, Facilities Project Engineer, UW, Facilities Services
Date: July 24, 2012
Phone: 206.543.4208 Email: sakagawa@uw.edu

(X) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide an explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: Experiencing meter data collection problems. Data available from November 2012.

Gas/Steam/HW: The PLC storing the data was not set up for sufficient storage, early meter data lost. Data available from September 2012.

Water (interior): UW committed to having this data available from September 2012. It is available but there is less than one year's worth of data to report.

Other: Irrigation deduct meter, same status as water meter above.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required in the event that the Energy and Water Consumption and Savings Reporting Form cannot be completed for a LEED Building or if some of the data in the reporting form is "prorated". Complete one of these Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: SustainableBA@ga.wa.gov Due Date: August 1, 2013.

Building Name: Savery Hall
Institution Name: University of Washington
Approximate Occupancy Date: May 2010
Submitted By: Guarrin Sakagawa, Facilities Project Engineer, UW, Facilities Services
Date: July 24, 2013
Phone: 206.543.4208 Email: sakagawa@uw.edu

(X) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide an explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: UW committed to having electric meter data by September 2012 and the data is available. Less than one year of data to report.

Gas/Steam/HW: UW committed to collecting data from January 2013. Due to technical difficulties collection started May 2013. There is no data to report for CY 2012.

Water (interior): UW committed to collecting data from January 2013. Due to technical difficulties collection started July 2013. There is no data to report for CY 2012.

Other: Irrigation deduct meter, same status as water meter above.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required to complete one of these M & M Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: sustainability@des.wa.gov Due Date: August 1, 2013.

Building Name: Vancouver Engineering & Computer Science
Building Institution Name: Washington State University
Vancouver Approximate Occupancy Date: 4 October 2011
Submitted By: Kevin G. Crowley, EH&S Coordinator, WSU Vancouver
Date: 1 August 2013
Phone: (360) 546-9706 Email: kevin.g.crowley@vancouver.wsu.edu

(___) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: kWhrs and kW demand are retrieved from the main electrical meter in the LEED building. This information is then cross-referenced to a monthly report that is generated automatically.

Gas/Steam/HW: The building is equipped with a natural gas meter which is read monthly. The readings from all gas meters on campus are collected and the contribution of each building is calculated as a percentage of the whole campus. These percentages are multiplied by either the number of therms or the dollar value on the campus' monthly natural gas bill to determine the natural gas costs and therms associated with the LEED building.

Water (interior): Water (interior) totals are calculated by dividing the volume of water used per month into the square footage of all occupied space on campus and then multiplying the quotient by the square footage of the LEED building. The campus is looking toward water meters in each building. The implementation date is unknown but LEED buildings will be prioritized.

Metering and Measurement Report

This purpose of this report is to document issues related to the gathering of energy and water consumption data.

It is required to complete one of these M & M Reports for each LEED building that is not represented by an Energy and Water Consumption and Savings Reporting Form (Excel Spreadsheet), or where some of the data is prorated. This report will be included in the Green Building Report to the Legislature.

Submit completed report(s) to: sustainability@des.wa.gov Due Date: August 1, 2013.

Building Name: Vancouver Undergraduate Building
Institution Name: Washington State University
Vancouver Approximate Occupancy Date: 31
August 2009
Submitted By: Kevin G. Crowley, EH&S Coordinator, WSU Vancouver
Date: 1 August 2013
Phone: (360) 546-9706 Email: kevin.g.crowley@vancouver.wsu.edu

(___) This building will not be participating in reporting energy and water data per RCW 39.35D. (check if applicable).

Provide and explanation of the metering and/or measurement systems established. Indicate if there have been any problems collecting the needed data. Also indicate when problems will be resolved:

Electricity: kWhrs and kW demand are retrieved from the main electrical meter in the LEED building. This information is then cross-referenced to a monthly report that is generated automatically.

Gas/Steam/HW: The building is equipped with a natural gas meter which is read monthly. The readings from all gas meters on campus are collected and the contribution of each building is calculated as a percentage of the whole campus. These percentages are multiplied by either the number of therms or the dollar value on the campus' monthly natural gas bill to determine the natural gas costs and therms associated with the LEED building.

Water (interior): Water (interior) totals are calculated by dividing the volume of water used per month into the square footage of all occupied space on campus and then multiplying the quotient by the square footage of the LEED building. The campus is looking toward water meters in each building. The implementation date is unknown but LEED buildings will be prioritized.

Appendix F: LEED Building Cost and Performance Data

2015-2016

1. Clark College
2. Pierce College *(2 total)*
3. Skagit Valley College
4. Tacoma Community College *(2 total)*
5. Walla Walla Community College *(3 total)*
6. Wenatchee Valley College
7. Whatcom Community College

Late Entries

8. Bellingham Technical College *(2 total)*
9. Olympic College

2006-2014

10. Bellevue College
11. Cascadia Community College
12. Green River Community College
13. Lake Washington Institute of Technology
14. North Seattle Community College*)*
15. Peninsula College *(2 total)*
16. Skagit Valley College
17. Social & Health Services, Dept. of
18. Seattle Central Community College
19. University of Washington *(2 total)*

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LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City: Clark College at Columbia Tech Center (CTC) - Vancouver
Building Gross Square Footage: 69,928
Number of Occupants:
Institution/University or Agency Name: Clark College
Submitted By Name/Phone: Stacey Mitcham (360)992-2438
LEED Level Achieved or (Expected)/Date: Gold
LEED Version Used (e.g. V 2.2 or V 3.0) NC 2.2
Date: 4/12/2016
Submit to: Sustainability@des.wa.gov

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 2,078,657.00
LEED Related Consultant Fees:	$ 70,200.00
Commissioning Fees:	$ 91,066.00
ELCCA Preparation Fees:	$ -
* Use the Application for Payment, Agreement Invoice	

LEED Submittal Fees: $ -

Soft Cost of LEED/Overall Consultant Fees (%): 3.4%

Overall Cost of LEED
$ 125,400.00

Overall Project Cost (Consultant + Construction)
$ 23,924,009.00

Cost of LEED Compared to Overall Costs (%)
0.5%

Building Construction Cost Per Square Foot
$ 272.67

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	N/A		
Site Work & Related Costs:	$ 2,778,217.00		
Building Construction Costs:	$ 19,067,135.00		
Max. Allowable Construction Costs (MACC):	$ 21,845,352.00		LEED Elements Description
Cost of LEED Element***:	$ 55,200.00	>	photovoltaic roof panels, wind turbine (est).
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ 55,200.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs: $ 55,200.00

Hard Cost of LEED/Overall Construction Costs (%): 0%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)	
Gas:	$ -	
Electric:	$ -	
Water:	$ -	
Other:	$ -	>
Total Incentives:	$ -	

Utility Incentives as % of Building Costs
0.0%

Describe

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	
$	(52,154.00)

Payback (Yrs)***
-2.404417686

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**		% Savings	$ Savings	**Baseline Building**	
	Units	$			Units	$
Electricity (kWh)	6,075,602	$ 33,835	#DIV/0!	$ (33,835)	-	$ -
Gas (Therms)	14,754	$ 14,674	#DIV/0!	$ (14,674)	-	$ -
Renewable Energy, Electricity (kWh)	727.81	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	22,208,916	$ 48,509	#DIV/0!	$ (48,509)	-	$ -
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	1,152,608	$ 3,645	#DIV/0!	$ (3,645.00)	-	$ -
Landscape Watering (irrigation water**)	-	$ -	#DIV/0!	$ -	-	$ -
Captured Water (irrigation or interior water)	1,246,175	$ 2,287	Calculate >>	$ -		
Total Water Saving	2,398,783	$ 5,932	#DIV/0!	$ (3,645.00)	-	$ -

Stormwater Management	
	Points 0-2
Stormwater Control Quality and Quantity	
Alt. Transportation Sources & Walkability	
	Points
Density & Community Connectivity	
Public Transportation	
Bike Racks & Showers	
Total Points	0

Construction Waste Recycling		
	Tons	%
Construction Waste Recycled		
Use of Recycled Content Materials		
	$	%
Recycled Content Materials		
Use of Regional Materials		
	$	%
Regional Materials		
Protect Forests, Support Sustainable Forestry		

	Points
Ceterified Wood	
Good indoor Air Quality	
	Points
Const. IAQ Management Plan	
Low-Emitting Materials	
Indoor Chemical & Pollutant Source Control	
Total Points	0
Access to Natural Light	
	Points 0-2
Daylight & Views	

Also Submit:

A Case Study	
(Template Provided @	
http://des.wa.gov/services/facilities/Energy/G	
Final LEED Scorecard	

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City:	Arts and Allied Health/Puyallup
Building Gross Square Footage:	61,597
Number of Occupants:	370
Institution/University or Agency Name:	Pierce College Puyallup
Submitted By Name/Phone:	Dana Edmondson 253-864-3386 Donna Albert /360-489-2420
LEED Level Achieved or (Expected)/Date:	Gold
LEED Version Used (e.g. V 2.2 or V 3.0)	

Date: 4/8/2016

Submit to: Sustainability@des.wa.gov

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 2,884,000.00
LEED Related Consultant Fees:	$ 90,627.00
Commissioning Fees:	$ 97,780.00
ELCCA Preparation Fees:	$ 43,780.00
* Use the Application for Payment, Agreement Invoice	

Overall Cost of LEED
$ 95,627.00

Overall Project Cost (Consultant + Construction)
$ 21,626,000.00

Cost of LEED Compared to Overall Costs (%)
0.4%

LEED Submittal Fees: $ 5,000.00

Building Construction Cost Per Square Foot
$ 286.82

Soft Cost of LEED/Overall Consultant Fees (%): 3.3%

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ -		
Site Work & Related Costs:	$ 1,070,000.00		
Building Construction Costs:	$ 17,667,000.00		
Max. Allowable Construction Costs (MACC):	$ 18,737,000.00		LEED Elements Description
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ -		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs: $ -

Hard Cost of LEED/Overall Construction Costs (%): 0%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)	
Gas:	$ 11,709.00	
Electric:	$ 87,111.00	
Water:	$ -	
Other:	$ -	>
Total Incentives:	$ 98,820.00	

Utility Incentives as % of Building Costs
0.6%

Describe

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ -	#DIV/0!

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	-	$ -	#DIV/0!	$ -	-	$ -
Gas (Therms)	-	$ -	#DIV/0!	$ -	-	$ -
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	-	$ -	#DIV/0!	$ -	-	$ -
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	-	$ -	#DIV/0!	$ -	-	$ -
Landscape Watering (irrigation water**)	-	$ -	#DIV/0!	$ -	-	$ -
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	-	$ -	#DIV/0!	$ -	-	$ -

Stormwater Management		
	Points 0-2	
Stormwater Control Quality and Quantity		
Alt. Transportation Sources & Walkability		
	Points	
Density & Community Connectivity		
Public Transportation		
Bike Racks & Showers		
Total Points	0	
Construction Waste Recycling		
	Tons	%
Construction Waste Recycled		
Use of Recycled Content Materials		
	$	%
Recycled Content Materials		
Use of Regional Materials		
	$	%
Regional Materials		
Protect Forests, Support Sustainable Forestry		
	Points	
Ceterified Wood		
Good indoor Air Quality		
	Points	
Const. IAQ Management Plan		
Low-Emitting Materials		
Indoor Chemical & Pollutant Source Control		
Total Points	0	
Access to Natural Light		
	Points 0-2	
Daylight & Views		

Also Submit:

A Case Study (Template Provided @ ga.wa.gov/eas/green)	
Final LEED Scorecard	

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City: Rainier Building/Lakewood
Building Gross Square Footage: 80,645
Number of Occupants: 626
Institution/University or Agency Name: Pierce College Fort Steilacoom
Submitted By Name/Phone: Dana Edmondson 253-864-3386 and Donna Albert /360-489-2420
LEED Level Achieved or (Expected)/Date: Gold
LEED Version Used (e.g. V 2.2 or V 3.0)
Date: 4/8/2016
Submit to: Sustainability@des.wa.gov

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 3,443,581.00
LEED Related Consultant Fees:	$ 97,050.00
Commissioning Fees:	$ 130,367.00
ELCCA Preparation Fees:	$ 37,950.00
* Use the Application for Payment, Agreement Invoice	

LEED Submittal Fees:	$ 5,000.00
Soft Cost of LEED/Overall Consultant Fees (%):	3.0%

Overall Cost of LEED
$ 276,050.00

Overall Project Cost (Consultant + Construction)
$ 26,651,581.00

Cost of LEED Compared to Overall Costs (%)
1.0%

Building Construction Cost Per Square Foot
$ 262.77

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ -		
Site Work & Related Costs:	$ 2,012,000.00		
Building Construction Costs:	$ 21,191,000.00		
Max. Allowable Construction Costs (MACC):	$ 23,203,000.00		LEED Elements Description
Cost of LEED Element***:	$ 112,000.00	>	PV Array
Cost of LEED Element***:	$ 20,000.00	>	Reheat Coil
Cost of LEED Element***:	$ 42,000.00	>	Green Roof
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ 174,000.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs:	$ 174,000.00
Hard Cost of LEED/Overall Construction Costs (%):	1%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)		
Gas:	$ -		
Electric:	$ -		
Water:	$ -		Describe
Other:	$ 157,500.00	>	PV Grant Money
Total Incentives:	$ 157,500.00		

Utility Incentives as % of Building Costs
0.7%

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ -	#DIV/0!

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**		% Savings	$ Savings	**Baseline Building**	
	Units	$			Units	$
Electricity (kWh)	-	$ -	#DIV/0!	$ -	-	$ -
Gas (Therms)	-	$ -	#DIV/0!	$ -	-	$ -
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	-	$ -	#DIV/0!	$ -	-	$ -
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	-	$ -	#DIV/0!	$ -	-	$ -
Landscape Watering (irrigation water**)	-	$ -	#DIV/0!	$ -	-	$ -
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	-	$ -	#DIV/0!	$ -	-	$ -

Stormwater Management		
	Points 0-2	
Stormwater Control Quality and Quantity		
Alt. Transportation Sources & Walkability		
	Points	
Density & Community Connectivity		
Public Transportation		
Bike Racks & Showers		
Total Points	0	
Construction Waste Recycling		
	Tons	%
Construction Waste Recycled		
Use of Recycled Content Materials		
	$	%
Recycled Content Materials		
Use of Regional Materials		
	$	%
Regional Materials		
Protect Forests, Support Sustainable Forestry		
	Points	
Ceterified Wood		
Good indoor Air Quality		
	Points	
Const. IAQ Management Plan		
Low-Emitting Materials		
Indoor Chemical & Pollutant Source Control		
Total Points	0	
Access to Natural Light		
	Points 0-2	
Daylight & Views		

Also Submit:

A Case Study (Template Provided @ ga.wa.gov/eas/green)	
Final LEED Scorecard	

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City:	Lewis Hall/ Mt. Vernon Washington		
Building Gross Square Footage:	71,636		
Number of Occupants:	625		
Institution/University or Agency Name:	Skagit Valley College		
Submitted By Name/Phone:	Bob Colasurdo (206) 510-8147 / Keith Schrieber (206) 682-8300		
LEED Level Achieved or (Expected)/Date:	Gold		
LEED Version Used (e.g. V 2.2 or V 3.0)	LEED-NC v2009	Date:	3/28/2016
		Submit to:	Sustainability@des.wa.gov

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 2,435,596.00
LEED Related Consultant Fees:	$ 104,481.00
Commissioning Fees:	$ 99,738.00
ELCCA Preparation Fees:	$ 33,988.00
* Use the Application for Payment, Agreement Invoice	

LEED Submittal Fees:	$ 8,000.00
Soft Cost of LEED/Overall Consultant Fees (%):	4.6%

Overall Cost of LEED
$ 791,786.00

Overall Project Cost (Consultant + Construction)
$ 24,608,962.00

Cost of LEED Compared to Overall Costs (%)
3.2%

Building Construction Cost Per Square Foot
$ 289.43

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ 283,536.00		
Site Work & Related Costs:	$ 1,148,271.00		
Building Construction Costs:	$ 20,733,559.00		
Max. Allowable Construction Costs (MACC):	$ 22,165,366.00		LEED Elements Description
Cost of LEED Element***:	$ 94,333.00	>	Photvoltaic Array
Cost of LEED Element***:	$ 126,356.00	>	Vertical Sun Control Devices
Cost of LEED Element***:	$ 42,000.00	>	Contractor's LEED Administration
Cost of LEED Element***:	$ 150,000.00	>	Contractor's Commissioning Costs
Cost of LEED Element***:	$ 68,566.00	>	Entry Foot Grilles
Cost of LEED Element***:	$ 50,000.00	>	Rainwater System
Cost of LEED Element***:	$ 44,950.00	>	Lighting Controls (Daylight Zoning & Occupancy)
Cost of LEED Element***:	$ 85,600.00	>	Exhaust and Steam Heat Recovery
Cost of LEED Element***:	$ 17,500.00	>	Separate Metering of Power & Water
Added LEED Construction Cost:	$ 679,305.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs:	$ 679,305.00
Hard Cost of LEED/Overall Construction Costs (%):	3%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)		
Gas:	$ -		
Electric:	$ -		
Water:	$ -		Describe
Other:	$ -	>	None
Total Incentives:	$ -		

Utility Incentives as % of Building Costs
0.0%

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ 28,760.00	27.53080668

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	89,674	$ 72,733	16.7%	$ 14,629	114,704	$ 87,362
Gas (Therms)	-	$ 16,941	36.6%	$ 9,765	-	$ 26,706
Renewable Energy, Electricity (kWh)	16,517.00	$ 1,051	100.0%	$ 1,051	0	$ -
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	249,685	$ 88,623	22.3%	$ 25,445	391,485	$ 114,068
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	169,100	$ 3,000	50.0%	$ 3,000.00	238,980	$ 6,000
Landscape Watering (irrigation water**)	92,415	$ 230	57.8%	$ 315.00	217,354	$ 545
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	261,515	$ 3,230	50.6%	$ 3,315.00	456,334	$ 6,545

Stormwater Management	
	Points 0-2
Stormwater Control Quality and Quantity	2
Alt. Transportation Sources & Walkability	
	Points
Density & Community Connectivity	5
Public Transportation	6
Bike Racks & Showers	2
Total Points	13

Construction Waste Recycling		
	Tons	%
Construction Waste Recycled	0	0.0
Use of Recycled Content Materials		
	$	%
Recycled Content Materials	$ 1,141,736.00	11.3
Use of Regional Materials		
	$	%
Regional Materials	$ 1,803,785.00	18.2
Protect Forests, Support Sustainable Forestry		

	Points
Ceterified Wood	7
Good indoor Air Quality	
	Points
Const. IAQ Management Plan	1
Low-Emitting Materials	4
Indoor Chemical & Pollutant Source Control	1
Total Points	6
Access to Natural Light	
	Points 0-2
Daylight & Views	0

<u>Also Submit:</u>

A Case Study (Template Provided @ http://des.wa.gov/services/facilities/Energy/	
Final LEED Scorecard	64

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City: Early Learning Center
Building Gross Square Footage: 12,962
Number of Occupants: 57
Institution/University or Agency Name: Tacoma Community College
Submitted By Name/Phone: Matt Lane, McGranahan Architects (253) 383-3084
LEED Level Achieved or (Expected)/Date: Gold
LEED Version Used (e.g. V 2.2 or V 3.0)
Date: 4/15/2016
Submit to: Sustainability@des.wa.gov

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 785,000.00
LEED Related Consultant Fees:	$ 72,000.00
Commissioning Fees:	$ 23,000.00
ELCCA Preparation Fees:	$ -
* Use the Application for Payment, Agreement Invoice	

LEED Submittal Fees: $ 3,500.00

Soft Cost of LEED/Overall Consultant Fees (%): 9.6%

Overall Cost of LEED
$ 191,321.00

Overall Project Cost (Consultant + Construction)
$ 5,661,665.00

Cost of LEED Compared to Overall Costs (%)
3.4%

Building Construction Cost Per Square Foot
$ 305.46

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ 69,000.00		
Site Work & Related Costs:	$ 844,838.00		
Building Construction Costs:	$ 3,959,327.00		
Max. Allowable Construction Costs (MACC):	$ 4,873,165.00		LEED Elements Description
Cost of LEED Element***:	$ 18,578.00	>	Energy Monitoring
Cost of LEED Element***:	$ 20,243.00	>	Metal Framed Skylights
Cost of LEED Element***:	$ 152,000.00	>	Hydronic Heating at concrete slabs
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ 190,821.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ 75,000.00	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ 75,000.00		

Total Added LEED Construction Costs: $ 115,821.00

Hard Cost of LEED/Overall Construction Costs (%): 2%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)	
Gas:	$ -	
Electric:	$ -	
Water:	$ -	
Other:	$ -	>
Total Incentives:	$ -	

Utility Incentives as % of Building Costs
0.0%

Describe

LEED Building Performance Information

Total Savings Over Baseline (energy & water)
$ -

Payback (Yrs)***
#DIV/0!

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**		% Savings	$ Savings	**Baseline Building**	
	Units	$			Units	$
Electricity (kWh)	-	$ -	#DIV/0!	$ -	-	$ -
Gas (Therms)	-	$ -	#DIV/0!	$ -	-	$ -
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	-	$ -	#DIV/0!	$ -	-	$ -
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	-	$ -	#DIV/0!	$ -	-	$ -
Landscape Watering (irrigation water**)	-	$ -	#DIV/0!	$ -	-	$ -
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	-	$ -	#DIV/0!	$ -	-	$ -

Stormwater Management		
	Points 0-2	
Stormwater Control Quality and Quantity		
Alt. Transportation Sources & Walkability		
	Points	
Density & Community Connectivity		
Public Transportation		
Bike Racks & Showers		
Total Points	0	
Construction Waste Recycling		
	Tons	%
Construction Waste Recycled		
Use of Recycled Content Materials		
	$	%
Recycled Content Materials		
Use of Regional Materials		
	$	%
Regional Materials		
Protect Forests, Support Sustainable Forestry		
	Points	
Ceterified Wood		
Good indoor Air Quality		
	Points	
Const. IAQ Management Plan		
Low-Emitting Materials		
Indoor Chemical & Pollutant Source Control		
Total Points	0	
Access to Natural Light		
	Points 0-2	
Daylight & Views		

Also Submit:

A Case Study	
(Template Provided @	
http://des.wa.gov/services/facilities/Energy/G	
Final LEED Scorecard	

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City:	Health Careers Center
Building Gross Square Footage:	69,715
Number of Occupants:	
Institution/University or Agency Name:	Tacoma Community College
Submitted By Name/Phone:	Elizabeth Hyun (253) 566-5151
LEED Level Achieved or (Expected)/Date:	Gold
LEED Version Used (e.g. V 2.2 or V 3.0)	LEED v NC 2.2

Date: 15-Apr-16

Submit to: Sustainability@des.wa.gov

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 3,877,526.00
LEED Related Consultant Fees:	$ -
Commissioning Fees:	$ 130,965.00
ELCCA Preparation Fees:	$ -

* Use the Application for Payment, Agreement Invoice

LEED Submittal Fees:	$ 3,117.00
Soft Cost of LEED/Overall Consultant Fees (%):	0.1%

Overall Cost of LEED
$ 3,117.00

Overall Project Cost (Consultant + Construction)
$ 29,670,688.00

Cost of LEED Compared to Overall Costs (%)
0.0%

Building Construction Cost Per Square Foot
$ 336.82

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ -		
Site Work & Related Costs:	$ 2,308,386.00		
Building Construction Costs:	$ 23,481,659.00		
Max. Allowable Construction Costs (MACC):	$ 25,790,045.00		LEED Elements Description
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ -		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs:	$ -
Hard Cost of LEED/Overall Construction Costs (%):	0%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)		
Gas:	$ -		
Electric:	$ -		
Water:	$ -		Describe
Other:	$ 33,754.00	>	Heat Recovery Unity
Total Incentives:	$ 33,754.00		

Utility Incentives as % of Building Costs
0.1%

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ -	#DIV/0!

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**		% Savings	$ Savings	**Baseline Building**	
	Units	$			Units	$
Electricity (kWh)	-	$ -	#DIV/0!	$ -	-	$ -
Gas (Therms)	-	$ -	#DIV/0!	$ -	-	$ -
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	-	$ -	#DIV/0!	$ -	-	$ -
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	-	$ -	#DIV/0!	$ -	-	$ -
Landscape Watering (irrigation water**)	-	$ -	#DIV/0!	$ -	-	$ -
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	-	$ -	#DIV/0!	$ -	-	$ -

Stormwater Management	
	Points 0-2
Stormwater Control Quality and Quantity	2

Alt. Transportation Sources & Walkability	
	Points
Density & Community Connectivity	1
Public Transportation	1
Bike Racks & Showers	0
Total Points	2

Construction Waste Recycling		
	Tons	%
Construction Waste Recycled	119.5	96.5

Use of Recycled Content Materials		
	$	%
Recycled Content Materials	$ 882,075.00	12.0

Use of Regional Materials		
	$	%
Regional Materials	$ -	0.0

Protect Forests, Support Sustainable Forestry	
	Points
Ceterified Wood	0

Good indoor Air Quality	
	Points
Const. IAQ Management Plan	1
Low-Emitting Materials	4
Indoor Chemical & Pollutant Source Control	
Total Points	5

Access to Natural Light	
	Points 0-2
Daylight & Views	1

<u>Also Submit:</u>

A Case Study (Template Provided @ http://des.wa.gov/services/facilities/Energy/G	
Final LEED Scorecard	

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City: WWCC Clarkston Workforce and Business Development Center
Building Gross Square Footage: 16,013
Number of Occupants:
Institution/University or Agency Name: Walla Walla Community College
Submitted By Name/Phone:
LEED Level Achieved or (Expected)/Date: (Silver)
LEED Version Used (e.g. V 2.2 or V 3.0) LEED 2009
Date: 7/8/2016
Submit to: Sustainability@des.wa.gov

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 462,954.00
LEED Related Consultant Fees:	$ 25,000.00
Commissioning Fees:	$ -
ELCCA Preparation Fees:	N/A
* Use the Application for Payment, Agreement Invoice	

Overall Cost of LEED
$ 27,640.00

Overall Project Cost (Consultant + Construction)
$ 4,582,594.00

Cost of LEED Compared to Overall Costs (%)
0.6%

LEED Submittal Fees: $ 2,640.00

Building Construction Cost Per Square Foot
$ 257.10

Soft Cost of LEED/Overall Consultant Fees (%): 6.0%

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ -		
Site Work & Related Costs:	$ -		
Building Construction Costs:	$ 4,117,000.00		
Max. Allowable Construction Costs (MACC):	$ 4,117,000.00		LEED Elements Description
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ -		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs: $ -

Hard Cost of LEED/Overall Construction Costs (%): 0%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)	
Gas:	$ -	
Electric:	$ -	
Water:	$ -	
Other:	$ -	>
Total Incentives:	$ -	

Utility Incentives as % of Building Costs
0.0%

Describe

LEED Building Performance Information

Total Savings Over Baseline (energy & water)
$ -

Payback (Yrs)***
#DIV/0!

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	-	$ -	#DIV/0!	$ -	-	$ -
Gas (Therms)	-	$ -	#DIV/0!	$ -	-	$ -
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	-	$ -	#DIV/0!	$ -	-	$ -
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	-	$ -	#DIV/0!	$ -	-	$ -
Landscape Watering (irrigation water**)	-	$ -	#DIV/0!	$ -	-	$ -
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	-	$ -	#DIV/0!	$ -	-	$ -

Stormwater Management		
	Points 0-2	
Stormwater Control Quality and Quantity		
Alt. Transportation Sources & Walkability		
	Points	
Density & Community Connectivity		
Public Transportation		
Bike Racks & Showers		
Total Points	0	
Construction Waste Recycling		
	Tons	%
Construction Waste Recycled		
Use of Recycled Content Materials		
	$	%
Recycled Content Materials		
Use of Regional Materials		
	$	%
Regional Materials		
Protect Forests, Support Sustainable Forestry		
	Points	
Ceterified Wood		
Good indoor Air Quality		
	Points	
Const. IAQ Management Plan		
Low-Emitting Materials		
Indoor Chemical & Pollutant Source Control		
Total Points	0	
Access to Natural Light		
	Points 0-2	
Daylight & Views		

Also Submit:

A Case Study	
(Template Provided @	
http://des.wa.gov/services/facilities/Energy/G	
Final LEED Scorecard	

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City:	William A. Grant Water & Environmental Center Phase-2, Walla Walla, WA		
Building Gross Square Footage:	15,998		
Number of Occupants:	????		
Institution/University or Agency Name:	Walla Walla Community College		
Submitted By Name/Phone:	Dave Stockdale 509 524-5193		
LEED Level Achieved or (Expected)/Date:	Gold		
LEED Version Used (e.g. V 2.2 or V 3.0)	2.2	Date:	13/30/2012
		Submit to:	Sustainability@des.wa.gov

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 2,299,000.00
LEED Related Consultant Fees:	$ 83,800.00
Commissioning Fees:	?
ELCCA Preparation Fees:	NA
* Use the Application for Payment, Agreement Invoice	

LEED Submittal Fees:	$ 1,650.00
Soft Cost of LEED/Overall Consultant Fees (%):	3.7%

Overall Cost of LEED
$ 410,450.00

Overall Project Cost (Consultant + Construction)
$ 7,919,650.00

Cost of LEED Compared to Overall Costs (%)
5.2%

Building Construction Cost Per Square Foot
$ 253.84

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ -		
Site Work & Related Costs:	$ 588,000.00		
Building Construction Costs:	$ 4,061,000.00		
Max. Allowable Construction Costs (MACC):	$ 5,619,000.00		LEED Elements Description
Cost of LEED Element***:	$ 325,000.00	>	Photovoltaic System
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ 325,000.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:			

Total Added LEED Construction Costs:	$ 325,000.00
Hard Cost of LEED/Overall Construction Costs (%):	6%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)	
Gas:	$ -	
Electric:	$ -	
Water:	$ -	
Other:	$ -	>
Total Incentives:	$ -	

Utility Incentives as % of Building Costs
0.0%

Describe

LEED Building Performance Information

Total Savings Over Baseline (energy & water)
$ -

Payback (Yrs)***
#DIV/0!

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	-	$ -	#DIV/0!	$ -	-	$ -
Gas (Therms)	-	$ -	#DIV/0!	$ -	-	$ -
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	-	$ -	#DIV/0!	$ -	-	$ -
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	-	$ -	#DIV/0!	$ -	-	$ -
Landscape Watering (irrigation water**)	-	$ -	#DIV/0!	$ -	-	$ -
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	-	$ -	#DIV/0!	$ -	-	$ -

Stormwater Management	
	Points 0-2
Stormwater Control Quality and Quantity	2
Alt. Transportation Sources & Walkability	
	Points
Density & Community Connectivity	0
Public Transportation	0
Bike Racks & Showers	1
Total Points	1

Construction Waste Recycling		
	Tons	%
Construction Waste Recycled		75.0
Use of Recycled Content Materials		
	$	%
Recycled Content Materials		10.0
Use of Regional Materials		
	$	%
Regional Materials		20.0

Protect Forests, Support Sustainable Forestry	
	Points
Ceterified Wood	0
Good indoor Air Quality	
	Points
Const. IAQ Management Plan	2
Low-Emitting Materials	4
Indoor Chemical & Pollutant Source Control	0
Total Points	6
Access to Natural Light	
	Points 0-2
Daylight & Views	2

<u>Also Submit:</u>

A Case Study (Template Provided @ http://des.wa.gov/services/facilities/Energy/G	
Final LEED Scorecard	

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City: William A. Grant Water & Environmental Center, Phase-1, Walla Walla, WA
Building Gross Square Footage: 10,300
Number of Occupants: 136
Institution/University or Agency Name: Walla Walla Community College
Submitted By Name/Phone: Dave Stockdale 509 524-5193
LEED Level Achieved or (Expected)/Date: Silver
LEED Version Used (e.g. V 2.2 or V 3.0) 2.1
Date: 4/9/2010
Submit to: Sustainability@des.wa.gov

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 318,400.00
LEED Related Consultant Fees:	$ 25,000.00
Commissioning Fees:	$ -
ELCCA Preparation Fees:	$ -
* Use the Application for Payment, Agreement Invoice	

LEED Submittal Fees: $ 1,500.00

Soft Cost of LEED/Overall Consultant Fees (%): 8.3%

Overall Cost of LEED
#VALUE!

Overall Project Cost (Consultant + Construction)
$ 319,900.00

Cost of LEED Compared to Overall Costs (%)
#VALUE!

Building Construction Cost Per Square Foot
$ 219.83

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ -		
Site Work & Related Costs:	$ 129,000.00		
Building Construction Costs:	$ 2,264,200.00		
Max. Allowable Construction Costs (MACC):	$ -		LEED Elements Description
Cost of LEED Element***:	$	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ -		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs: not known

Hard Cost of LEED/Overall Construction Costs (%): #VALUE!

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)	
Gas:	$ -	
Electric:	$ -	
Water:	$ -	
Other:	$ -	>
Total Incentives:	$ -	

Utility Incentives as % of Building Costs
0.0%

Describe

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ -	#VALUE!

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**		% Savings	$ Savings	**Baseline Building**	
	Units	$			Units	$
Electricity (kWh)	-	$ -	#DIV/0!	$ -	-	$ -
Gas (Therms)	-	$ -	#DIV/0!	$ -	-	$ -
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	-	$ -	#DIV/0!	$ -	-	$ -
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	-	$ -	#DIV/0!	$ -	-	$ -
Landscape Watering (irrigation water**)	-	$ -	#DIV/0!	$ -	-	$ -
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	-	$ -	#DIV/0!	$ -	-	$ -
Stormwater Management						
	Points 0-2					
Stormwater Control Quality and Quantity	2					
Alt. Transportation Sources & Walkability						
	Points					
Density & Community Connectivity	0					
Public Transportation	0					
Bike Racks & Showers	0					
Total Points	0					
Construction Waste Recycling						
	Tons	%				
Construction Waste Recycled		75.0				
Use of Recycled Content Materials						
	$	%				
Recycled Content Materials		5.0				
Use of Regional Materials						
	$	%				
Regional Materials		50.0				
Protect Forests, Support Sustainable Forestry						
	Points					
Ceterified Wood	0					
Good indoor Air Quality						
	Points					
Const. IAQ Management Plan	1					
Low-Emitting Materials	4					
Indoor Chemical & Pollutant Source Control	1					
Total Points	6					
Access to Natural Light						
	Points 0-2					
Daylight & Views	2					

<u>Also Submit:</u>

A Case Study ☐
(Template Provided @
http://des.wa.gov/services/facilities/Energy/G

Final LEED Scorecard ☐

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City:	Music and Art Center, Wenatchee WA
Building Gross Square Footage:	26, 457 sq. ft.
Number of Occupants:	
Institution/University or Agency Name:	Wenatchee Valley College
Submitted By Name/Phone:	Ty Miller, Integrus Architecture, 509-838-8681
LEED Level Achieved or (Expected)/Date:	Silver, July 2014
LEED Version Used (e.g. V 2.2 or V 3.0)	NC V 2009 (v2.2)

Date: 2/24/2015

Submit to: Sustainability@des.wa.gov

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 1,059,535.00
LEED Related Consultant Fees:	$ -
Commissioning Fees:	$ -
ELCCA Preparation Fees:	$ -
* Use the Application for Payment, Agreement Invoice	

Overall Cost of LEED
#VALUE!

Overall Project Cost (Consultant + Construction)
#VALUE!

Cost of LEED Compared to Overall Costs (%)
#VALUE!

Building Construction Cost Per Square Foot
#VALUE!

LEED Submittal Fees: unknown

Soft Cost of LEED/Overall Consultant Fees (%): #VALUE!

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ -		
Site Work & Related Costs:	$ -		
Building Construction Costs:	$ -		
Max. Allowable Construction Costs (MACC):	$ -		LEED Elements Description
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ -		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs: $ -

Hard Cost of LEED/Overall Construction Costs (%): #DIV/0!

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)	
Gas:	$ -	
Electric:	$ -	
Water:	$ -	
Other:	$ -	>
Total Incentives:	$ -	

Utility Incentives as % of Building Costs
#DIV/0!

Describe

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	
$	3,222.00

Payback (Yrs)***
#VALUE!

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	446,242	$ 8,925	26.5%	$ 3,222	607,412	$ 12,147
Gas (Therms)	-	$ -	#DIV/0!	$ -	-	$ -
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	1,523,024	$ 8,925	26.5%	$ 3,222	2,073,097	$ 12,147
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	45,990	$ -	#DIV/0!	$ -	29,160	$ -
Landscape Watering (irrigation water**)	-	$ -	#DIV/0!	$ -	-	$ -
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	45,990	$ -	#DIV/0!	$ -	29,160	$ -

Stormwater Management	
	Points 0-2
Stormwater Control Quality and Quantity	2
Alt. Transportation Sources & Walkability	
	Points
Density & Community Connectivity	5
Public Transportation	6
Bike Racks & Showers	0
Total Points	11

Construction Waste Recycling		
	Tons	%
Construction Waste Recycled	293.27	95.1
Use of Recycled Content Materials		
	$	
Recycled Content Materials	$ 327,950.88	17.6
Use of Regional Materials		
	$	%
Regional Materials	$ 381,179.93	20.5

Protect Forests, Support Sustainable Forestry	
	Points
Ceterified Wood	0
Good indoor Air Quality	
	Points
Const. IAQ Management Plan	1
Low-Emitting Materials	1
Indoor Chemical & Pollutant Source Control	0
Total Points	2
Access to Natural Light	
	Points 0-2
Daylight & Views	0

Also Submit:

A Case Study (Template Provided @ ga.wa.gov/eas/green)	
Final LEED Scorecard	

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City:	Student Recreation Center
Building Gross Square Footage:	41,974
Number of Occupants:	8 Full time 1,000 transient
Institution/University or Agency Name:	Whatcom Community College
Submitted By Name/Phone:	Katrina Morgan, Fermata Consulting LLC, 206 508 6300
LEED Level Achieved or (Expected)/Date:	Silver, July 2016 (anticipated)
LEED Version Used (e.g. V 2.2 or V 3.0)	LEED-NC v 3.0

Date: 5/18/2016

Submit to: Sustainability@des.wa.gov

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 661,063.00
LEED Related Consultant Fees:	$ 95,550.00
Commissioning Fees:	$ 63,271.00
ELCCA Preparation Fees:	$ 26,456.00

* Use the Application for Payment, Agreement Invoice

LEED Submittal Fees: $ 3,400.00

Soft Cost of LEED/Overall Consultant Fees (%): 0.149683162

Overall Cost of LEED
$ 153,450.00

Overall Project Cost (Consultant + Construction)
$ 9,099,308.00

Cost of LEED Compared to Overall Costs (%)
1.7%

Building Construction Cost Per Square Foot
184.0181541

Construction Costs	Costs**		LEED Elements Description
Building Demolition Cost (if applicable):	$ 92,100.00		
Site Work & Related Costs:	$ 618,767.00		
Building Construction Costs:	$ 7,723,978.00		
Max. Allowable Construction Costs (MACC):	$ 8,434,845.00		
Cost of LEED Element***:	$ 13,000.00	>	HVAC upgrade (VRF) for energy savings. 5% cost add.
Cost of LEED Element***:	$ 28,000.00	>	Electrical and lighting upgrade for energy savings. 2% cost add.
Cost of LEED Element***:	$ 8,500.00	>	Ventilation upgrades for IEQ credits. 5% cost add.
Cost of LEED Element***:	$ 2,000.00	>	Suspended paving system for improved on-site infiltration. 10% cost
Cost of LEED Element***:	$ 3,000.00	>	HVAC controls for energy savings. 5% cost add.
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ 54,500.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs: $ 54,500.00

Hard Cost of LEED/Overall Construction Costs (%): 1%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)
Gas:	$ -
Electric:	$ -
Water:	$ -
Other:	$ -
Total Incentives:	$ -

Utility Incentives as % of Building Costs
0.0%

Describe
>

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ 16,703.32	9.186796397

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)

Energy Effciency and Renewable Energy	Proposed Building				Baseline Building	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	485,717	$ 47,528	22.8%	$ 14,050	660,744	$ 61,578
Gas (Therms)	3,651	$ 3,604	11.9%	$ 488	4,163	$ 4,092
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	2,022,852	$ 51,132	22.1%	$ 14,538	2,671,419	$ 65,670
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	545,660	$ 3,274	39.1%	$ 2,101.74	895,950	$ 5,376
Landscape Watering (irrigation water**)	23,818	$ 60	51.6%	$ 63.58	49,243	$ 123
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	569,478	$ 3,333	39.4%	$ 2,165.32	945,193	$ 5,499

Stormwater Management	
	Points 0-2
Stormwater Control Quality and Quantity	0

Alt. Transportation Sources & Walkability	
	Points
Density & Community Connectivity	5
Public Transportation	6
Bike Racks & Showers	0
Total Points	11

Construction Waste Recycling		
	Tons	%
Construction Waste Recycled	73.14	77.5

Use of Recycled Content Materials		
	$	%
Recycled Content Materials	$ 487,111.00	13.0

Use of Regional Materials		
	$	%
Regional Materials	$ 392,405.00	10.4

Protect Forests, Support Sustainable Forestry	
	Points
Certified Wood	0

Good Indoor Air Quality	
	Points
Const. IAQ Management Plan	1
Low-Emitting Materials	pending
Indoor Chemical & Pollutant Source Control	0
Total Points	1

Access to Natural Light	
	Points 0-2
Daylight & Views	0

Also Submit:

A Case Study	Will submit after a full year of occupancy
(Template Provided @	
http://des.wa.gov/services/facilities/Energy/GreenBl	
Final LEED Scorecard	53

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City:	Campus Center, Bellingham, WA
Building Gross Square Footage:	76,089
Number of Occupants:	736
Institution/University or Agency Name:	Bellingham Technical College
Submitted By Name/Phone:	Russ Weiser, 360-336-2155
LEED Level Achieved or (Expected)/Date:	Gold, 2016
LEED Version Used (e.g. V 2.2 or V 3.0)	V2.2

Date: 6/10/2016
Submit to: Sustainability@des.wa.gov

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 2,666,214.00
LEED Related Consultant Fees:	$ 40,700.00
Commissioning Fees:	$ 117,700.00
ELCCA Preparation Fees:	$ 33,000.00

* Use the Application for Payment, Agreement Invoice

LEED Submittal Fees: $ 5,765.00

Soft Cost of LEED/Overall Consultant Fees (%): 1.7%

Overall Cost of LEED
$ 702,598.00

Overall Project Cost (Consultant + Construction)
$ 24,943,337.00

Cost of LEED Compared to Overall Costs (%)
2.8%

Building Construction Cost Per Square Foot
$ 264.25

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ 204,257.00		
Site Work & Related Costs:	$ 941,880.00		
Building Construction Costs:	$ 20,106,700.00		
Max. Allowable Construction Costs (MACC):	$ 22,271,358.00		LEED Elements Description
Cost of LEED Element***:	$ 2,050.00	>	Bicycle Racks
Cost of LEED Element***:	$ 18,858.00	>	FSC wood
Cost of LEED Element***:	$ 10,000.00	>	Interpretive Signage
Cost of LEED Element***:	$ 1,500.00	>	Water refill station
Cost of LEED Element***:	$ 300.00	>	Low-emitting fuels signage
Cost of LEED Element***:	$ 27,753.00	>	Infiltration - Raingardens
Cost of LEED Element***:	$ 22,766.00	>	Sunshades
Cost of LEED Element***:	$ 128,282.00	>	Green Roof
Cost of LEED Element***:	$ 133,907.00	>	Photovoltaic System
Cost of LEED Element***:	$ 165,992.00	>	Walk-off grates
Cost of LEED Element***:	$ 60,000.00		Showers
Cost of LEED Element***:	$ 37,200.00		Recycle storage area
Cost of LEED Element***:	$ 47,525.00	>	More efficient Mechanical
Added LEED Construction Cost:	$ 656,133.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs: $ 656,133.00

Hard Cost of LEED/Overall Construction Costs (%): 3%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)
Gas:	$ 8,500.00
Electric:	$ 22,598.00
Water:	$ -
Other:	$ -
Total Incentives:	$ 31,098.00

Utility Incentives as % of Building Costs
0.2%

Describe
>

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ 35,124.00	19.11798201

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	584,387	$ 60,460	28.0%	$ 23,482	756,100	$ 83,942
Gas (Therms)	22,552	$ 21,036	29.6%	$ 8,859	32,106	$ 29,895
Renewable Energy, Electricity (kWh)	2,383.00	$ 2,138	100.0%	$ 2,138		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	4,241,580	$ 79,358	30.3%	$ 34,479	5,791,169	$ 113,837
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	119,566	$ 717	35.6%	$ 396.00	185,526	$ 1,113
Landscape Watering (irrigation water**)	99,293	$ 248	50.1%	$ 249.00	198,840	$ 497
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	218,859	$ 965	40.1%	$ 645.00	384,366	$ 1,610
Stormwater Management						
	Points 0-2					
Stormwater Control Quality and Quantity	1					
Alt. Transportation Sources & Walkability						
	Points					
Density & Community Connectivity	0					
Public Transportation	1					
Bike Racks & Showers	1					
Total Points	2					
Construction Waste Recycling						
	Tons	%				
Construction Waste Recycled	175.78	97.5				
Use of Recycled Content Materials						
	$	%				
Recycled Content Materials	$ 878,872.90	22.4				
Use of Regional Materials						
	$	%				
Regional Materials	$ 982,757.00	25.0				
Protect Forests, Support Sustainable Forestry						
	Points					
Certified Wood	1					
Good indoor Air Quality						
	Points					
Const. IAQ Management Plan	2					
Low-Emitting Materials	4					
Indoor Chemical & Pollutant Source Control	1					
Total Points	7					
Access to Natural Light						
	Points 0-2					
Daylight & Views	0					

Also Submit:

A Case Study (Template Provided @ http://des.wa.gov/services/facilities/Energy/G	
Final LEED Scorecard	

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City: BTC Fisheries and Aquaculture Science, Bellingham, WA
Building Gross Square Footage: 7,823
Number of Occupants: 164
Institution/University or Agency Name: Bellingham Technical College
Submitted By Name/Phone: Russell Weiser, 360-336-2155
LEED Level Achieved or (Expected)/Date: Silver, 2016
LEED Version Used (e.g. V 2.2 or V 3.0) LEED-NC v2009
Date: 6/9/2016
Submit to: Sustainability@des.wa.gov

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 448,779.00
LEED Related Consultant Fees:	$ 77,205.00
Commissioning Fees:	$ 8,000.00
ELCCA Preparation Fees:	$ -
* Use the Application for Payment, Agreement Invoice	

Overall Cost of LEED
$ 113,874.00

Overall Project Cost (Consultant + Construction)
$ 2,950,448.00

Cost of LEED Compared to Overall Costs (%)
3.9%

Building Construction Cost Per Square Foot
$ 365.69

LEED Submittal Fees: $ 1,669.00

Soft Cost of LEED/Overall Consultant Fees (%): 17.6%

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ 357,098.00		
Site Work & Related Costs:	$ 282,416.00		
Building Construction Costs:	$ 2,860,770.00		
Max. Allowable Construction Costs (MACC):	$ 2,500,000.00		LEED Elements Description
Cost of LEED Element***:	$ 2,000.00	>	Bicycle Racks (4)
Cost of LEED Element***:	$ 20,000.00	>	Shower and Changing Rooms (2)
Cost of LEED Element***:	$ 5,000.00	>	Lighting Controls
Cost of LEED Element***:	$ 8,000.00	>	Educational Signage
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ 35,000.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs: $ 35,000.00

Hard Cost of LEED/Overall Construction Costs (%): 1%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)	
Gas:	$ -	
Electric:	$ -	
Water:	$ -	
Other:	$ -	>
Total Incentives:	$ -	

Utility Incentives as % of Building Costs
0.0%

Describe

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ 23.16	4916.839378

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**		% Savings	$ Savings	**Baseline Building**	
	Units	$			Units	$
Electricity (kWh)	-	$ -	#DIV/0!	$ -	-	$ -
Gas (Therms)	-	$ -	#DIV/0!	$ -	-	$ -
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	-	$ -	#DIV/0!	$ -	-	$ -
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	10,120	$ 61	27.6%	$ 23.16	13,980	$ 84
Landscape Watering (irrigation water**)	-	$ -	#DIV/0!	$ -	-	$ -
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	10,120	$ 61	27.6%	$ 23.16	13,980	$ 84

Stormwater Management	
	Points 0-2
Stormwater Control Quality and Quantity	0

Alt. Transportation Sources & Walkability	
	Points
Density & Community Connectivity	5
Public Transportation	6
Bike Racks & Showers	1
Total Points	12

Construction Waste Recycling		
	Tons	%
Construction Waste Recycled	500.22	98.3

Use of Recycled Content Materials		
	$	%
Recycled Content Materials	$ 124,079.00	11.6

Use of Regional Materials		
	$	%
Regional Materials	$ -	0.0

Protect Forests, Support Sustainable Forestry	
	Points
Certified Wood	0

Good indoor Air Quality	
	Points
Const. IAQ Management Plan	1
Low-Emitting Materials	4
Indoor Chemical & Pollutant Source Control	1
Total Points	6

Access to Natural Light	
	Points 0-2
Daylight & Views	1

Also Submit:

A Case Study	
(Template Provided @	
http://des.wa.gov/services/facilities/Energy/G	
Final LEED Scorecard	

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City:	College Instruction Center
Building Gross Square Footage:	72,000
Number of Occupants:	1,639
Institution/University or Agency Name:	Olympic College
Submitted By Name/Phone:	Dennis Flynn-360-407-7934
LEED Level Achieved or (Expected)/Date:	Gold (March 2018)
LEED Version Used (e.g. V 2.2 or V 3.0)	LEED v 2009

Date: 20-Apr-16

Submit to: Sustainability@des.wa.gov

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 4,862,820.00
LEED Related Consultant Fees:	$ 137,901.00
Commissioning Fees:	$ 174,650.00
ELCCA Preparation Fees:	$ 36,532.00

* Use the Application for Payment, Agreement Invoice

Overall Cost of LEED
$ 1,108,401.00

Overall Project Cost (Consultant + Construction)
$ 41,192,820.00

Cost of LEED Compared to Overall Costs (%)
2.7%

Building Construction Cost Per Square Foot
$ 433.20

LEED Submittal Fees:	$ -
Soft Cost of LEED/Overall Consultant Fees (%):	2.8%

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ 268,216.00		
Site Work & Related Costs:	$ 3,571,759.00		
Building Construction Costs:	$ 31,190,195.00		
Max. Allowable Construction Costs (MACC):	$ 36,330,000.00		LEED Elements Description
Cost of LEED Element***:	$ 284,232.00	>	Photovoltaic System
Cost of LEED Element***:	$ 128,028.00	>	Upgraded wall insulation
Cost of LEED Element***:	$ 76,820.00	>	Permeable Paving
Cost of LEED Element***:	$ 303,178.00	>	Hydronic System
Cost of LEED Element***:	$ 178,242.00	>	Exterior Sun Control Devices
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ 970,500.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs:	$ 970,500.00
Hard Cost of LEED/Overall Construction Costs (%):	3%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)	
Gas:	$ -	
Electric:	$ -	
Water:	$ -	
Other:	$ -	>
Total Incentives:	$ -	

Utility Incentives as % of Building Costs
0.0%

Describe

LEED Building Performance Information

Total Savings Over Baseline (energy & water)
$ -

Payback (Yrs)***
#DIV/0!

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**		% Savings	$ Savings	**Baseline Building**	
	Units	$			Units	$
Electricity (kWh)	-	$ -	#DIV/0!	$ -	-	$ -
Gas (Therms)	-	$ -	#DIV/0!	$ -	-	$ -
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	-	$ -	#DIV/0!	$ -	-	$ -
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	-	$ -	#DIV/0!	$ -	-	$ -
Landscape Watering (irrigation water**)	-	$ -	#DIV/0!	$ -	-	$ -
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	-	$ -	#DIV/0!	$ -	-	$ -
Stormwater Management						
	Points 0-2					
Stormwater Control Quality and Quantity						
Alt. Transportation Sources & Walkability						
	Points					
Density & Community Connectivity						
Public Transportation						
Bike Racks & Showers						
Total Points	0					
Construction Waste Recycling						
	Tons	%				
Construction Waste Recycled						
Use of Recycled Content Materials						
	$	%				
Recycled Content Materials						
Use of Regional Materials						
	$	%				
Regional Materials						
Protect Forests, Support Sustainable Forestry						
	Points					
Ceterified Wood						
Good indoor Air Quality						
	Points					
Const. IAQ Management Plan						
Low-Emitting Materials						
Indoor Chemical & Pollutant Source Control						
Total Points	0					
Access to Natural Light						
	Points 0-2					
Daylight & Views						

Also Submit:

A Case Study	
(Template Provided @ http://des.wa.gov/services/facilities/Energy/G	
Final LEED Scorecard	

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City: Science and Technology Building / Bellevue
Building Gross Square Footage: 62,882
Number of Occupants: 640
Institution/University or Agency Name: Bellevue College
Submitted By Name/Phone: Bob Colasurdo / (206)510 8147
LEED Level Achieved or (Expected)/Date: Gold
LEED Version Used (e.g. V 2.2 or V 3.0) LEED V2.2

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 2,071,579.00
LEED Related Consultant Fees:	$ 128,948.00
Commissioning Fees:	$ 66,360.00
ELCCA Preparation Fees:	$ 33,872.00
* Use the Application for Payment, Agreement Invoice	

LEED Submittal Fees: $ 7,500.00

Soft Cost of LEED/Overall Consultant Fees (%): 6.6%

Overall Cost of LEED
$ 588,948.00

Overall Project Cost (Consultant + Construction)
$ 29,634,094.00

Cost of LEED Compared to Overall Costs (%)
2.0%

Building Construction Cost Per Square Foot
$ 414.97

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ -		
Site Work & Related Costs:	$ 1,460,639.00		
Building Construction Costs:	$ 26,094,376.00		
Max. Allowable Construction Costs (MACC):	$ 27,555,015.00		LEED Elements Description
Cost of LEED Element***:	$ 60,000.00	>	Exterior Sunshades
Cost of LEED Element***:	$ 10,000.00	>	Contractor's LEED Administration
Cost of LEED Element***:	$ 65,000.00	>	Contractor's Comissioning Costs
Cost of LEED Element***:	$ 60,000.00	>	Skylights and Light Shelves for Daylighting
Cost of LEED Element***:	$ 35,000.00	>	Entry Grilles
Cost of LEED Element***:	$ 17,500.00	>	Separate Metering for power and water
Cost of LEED Element***:	$ 45,000.00	>	Lighting Controls
Cost of LEED Element***:	$ 160,000.00	>	Heat Recovery Systems
Added LEED Construction Cost:	$ 452,500.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs: $ 452,500.00

Hard Cost of LEED/Overall Construction Costs (%): 2%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)
Gas:	$ -
Electric:	$ -

Utility Incentives as % of Building Costs
0.0%

Water:	$ -		Describe
Other:	$ -	>	
Total Incentives:	$ -		

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ 33,744.00	17.45341394

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Efficiency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	1,124,264	$ 88,548	-30.1%	$ (20,490)	870,300	$ 68,058
Gas (Therms)	63,695	$ 67,490	44.3%	$ 53,706	114,688	$ 121,196
Renewable Energy, Electricity (kWh)	-	$ -	0.0%	$ -		
Renewable Energy, Heat (Btu)	-	$ -	0.0%	$ -		
Total Btus, Dollars & Percents	10,206,613	$ 156,038	21.3%	$ 33,216	14,439,134	$ 189,254
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	88,666	$ 532	49.8%	$ 528.00	176,721	$ 1,060
Landscape Watering (irrigation water**)	-	$ -	0.0%	$ -	-	$ -
Captured Water (irrigation or interior water)	-	$ -	0.0%	$ -		
Total Water Saving	88,666	$ 532	99.2%	$ 528.00	176,721	$ 1,060

Stormwater Management	
	Points 0-2
Stormwater Control Quality and Quantity	0
Alt. Transportation Sources & Walkability	
	Points
Density & Community Connectivity	1
Public Transportation	1
Bike Racks & Showers	1
Total Points	3

Construction Waste Recycling		
	Tons	%
Construction Waste Recycled	1149.73	98.0
Use of Recycled Content Materials		
	$	%
Recycled Content Materials	$ 1,146,427.00	21.2
Use of Regional Materials		
	$	%
Regional Materials	$ 626,985.00	11.6
Protect Forests, Support Sustainable Forestry		

	Points
Ceterified Wood	0
Good indoor Air Quality	
	Points
Const. IAQ Management Plan	1
Low-Emitting Materials	4
Indoor Chemical & Pollutant Source Control	1
Total Points	6
Access to Natural Light	
	Points 0-2
Daylight & Views	1

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City: Classroom Building #2 (GLA) Bothell
Building Gross Square Footage: 54,300
Number of Occupants: 800 FTE
Institution/University or Agency Name: State Board of Community & Technical Colleges - Cascadia Community College
Submitted By Name/Phone: Bob Kacel
LEED Level Achieved or (Expected)/Date: Tracking Platinum 2012 or 2013
LEED Version Used (e.g. V 2.2 or V 3.0) Ver 2.2

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 3,139,000.00
LEED Related Consultant Fees:	$ 117,301.00
Commissioning Fees:	$ 86,600.00
ELCCA Preparation Fees:	$ 50,215.00
* Use the Application for Payment, Agreement Invoice	

LEED Submittal Fees: $ -

Soft Cost of LEED/Overall Consultant Fees (%): 3.7%

Overall Cost of LEED
$ 245,594.01

Overall Project Cost (Consultant + Construction)
$ 28,439,000.01

Cost of LEED Compared to Overall Costs (%)
0.9%

Building Construction Cost Per Square Foot
$ 417.13

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ 0.01		
Site Work & Related Costs:	$ 2,649,609.00		
Building Construction Costs:	$ 22,650,391.00		
Max. Allowable Construction Costs (MACC):	$ 25,300,000.01		LEED Elements Description
Cost of LEED Element***:	$ 80,000.00	>	Rainwater Collection/Storage System
Cost of LEED Element***:	$ -	>	Gray Water distribution system
Cost of LEED Element***:	$ 48,293.00	>	"Green" roofs
Cost of LEED Element***:		>	Exemplary Open Space
Cost of LEED Element***:	$ 0.01	>	Green Houskeeping
Cost of LEED Element***:	$ -	>	Integrated Pest Management
Added LEED Construction Cost:	$ 128,293.01		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs: $ 128,293.01

Hard Cost of LEED/Overall Construction Costs (%): 1%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)	
Gas:	$ -	
Electric:	$ -	
Water:	$ -	
Other:	$ -	>

Utility Incentives as % of Building Costs
0.0%

Describe

Total Incentives:	$ -

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ -	#DIV/0!

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	-	$ -	#DIV/0!	$ -	-	$ -
Gas (Therms)	-	$ -	#DIV/0!	$ -	-	$ -
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	-	$ -	#DIV/0!	$ -	-	$ -
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	-	$ -	#DIV/0!	$ -	-	$ -
Landscape Watering (irrigation water**)	-	$ -	#DIV/0!	$ -	-	$ -
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	-	$ -	#DIV/0!	$ -	-	$ -
Stormwater Management						
	Points 0-2					
Stormwater Control Quality and Quantity	2					
Alt. Transportation Sources & Walkability						
	Points					
Density & Community Connectivity	2					
Public Transportation	1					
Bike Racks & Showers	1					
Total Points	4					
Construction Waste Recycling						
	Tons	%				
Construction Waste Recycled						
Use of Recycled Content Materials						
	$	%				
Recycled Content Materials						
Use of Regional Materials						
	$	%				
Regional Materials						
Protect Forests, Support Sustainable Forestry						
	Points					
Ceterified Wood	1					
Good indoor Air Quality						
	Points					
Const. IAQ Management Plan	2					
Low-Emitting Materials	4					
Indoor Chemical & Pollutant Source Control	1					
Total Points	7					
Access to Natural Light						
	Points 0-2					
Daylight & Views	1					

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City: GRCC Health & Science Replacement Building (Salish Hall) / Auburn, WA
Building Gross Square Footage: 82,792
Number of Occupants: 948
Institution/University or Agency Name: Green River Community College
Submitted By Name/Phone: Jim Shanahan/206-682-8300
LEED Level Achieved or (Expected)/Date: LEED Silver/June 26, 2012
LEED Version Used (e.g. V 2.2 or V 3.0) V2.2

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 3,588,383.51
LEED Related Consultant Fees:	$ 93,930.00
Commissioning Fees:	$ 22,205.80
ELCCA Preparation Fees:	$ 42,813.00
* Use the Application for Payment, Agreement Invoice	

Overall Cost of LEED
$ 221,382.00

Overall Project Cost (Consultant + Construction)
$ 25,024,169.19

Cost of LEED Compared to Overall Costs (%)
0.9%

LEED Submittal Fees: $ 6,452.00

Building Construction Cost Per Square Foot
$ 214.09

Soft Cost of LEED/Overall Consultant Fees (%): 2.8%

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ 247,518.10		
Site Work & Related Costs:	$ 3,456,532.03		
Building Construction Costs:	$ 17,725,283.55		
Max. Allowable Construction Costs (MACC):	$ 21,429,333.68		LEED Elements Description
Cost of LEED Element***:	$ 12,000.00	>	Alternative Transporation - Bike Racks
Cost of LEED Element***:	$ 54,000.00	>	External SunShades
Cost of LEED Element***:	$ 25,000.00	>	Solar Leaf Demonstration Project
Cost of LEED Element***:	$ 10,000.00	>	Contractors LEED Documentation
Cost of LEED Element***:	$ 45,000.00	>	Lighting Controls (Daylight zoneing and occupancy)
Cost of LEED Element***:	$ 40,000.00	>	Skylights and Additional Windows for Daylighting
Added LEED Construction Cost:	$ 186,000.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ 15,000.00	>	No Airconditioning in Faculty offices
Savings, Didn't Install Something****	$ 30,000.00	>	Reduced Ceilings/Floor Coverings/Finishes
Savings, Didn't Install Something****	$ 20,000.00	>	Omit Irrigation at Woodland Enhancement Planting
LEED Related Construction Savings:	$ 65,000.00		

Total Added LEED Construction Costs: $ 121,000.00

Hard Cost of LEED/Overall Construction Costs (%): 0.56%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)
Gas:	$ -
Electric:	$ -

Utility Incentives as % of Building Costs
0.0%

Water:	$ -
Other:	$ -
Total Incentives:	$ -

\>

Describe

LEED Building Performance Information

Total Savings Over Baseline (energy & water)
$ 34,388.16

Payback (Yrs)***
6.4

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	872,907	$ 78,932	11.6%	$ 10,395	1,005,746	$ 89,327
Gas (Therms)	6,287	$ 7,484	75.5%	$ 23,080	28,530	$ 30,564
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	3,607,932	$ 86,416	27.9%	$ 33,475	6,285,611	$ 119,891
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	249,340	$ 1,496	33.3%	$ 746.77	373,802	$ 2,243
Landscape Watering (irrigation water**)	65,431	$ 164	50.4%	$ 166.39	131,986	$ 330
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	314,771	$ 1,660	35.5%	$ 913.16	505,788	$ 2,573
Stormwater Management						
	Points 0-2					
Stormwater Control Quality and Quantity	1					
Alt. Transportation Sources & Walkability						
	Points					
Density & Community Connectivity	0					
Public Transportation	1					
Bike Racks & Showers	1					
Total Points	2					
Construction Waste Recycling						
	Tons	%				
Construction Waste Recycled	353	98.8				
Use of Recycled Content Materials						
	$	%				
Recycled Content Materials	$ 1,767,439.00	34.9				
Use of Regional Materials						
	$	%				
Regional Materials	$ 760,690.00	15.0				
Protect Forests, Support Sustainable Forestry						
	Points					
Ceterified Wood	1					
Good indoor Air Quality						
	Points					
Const. IAQ Management Plan	1					
Low-Emitting Materials	4					
Indoor Chemical & Pollutant Source Control	0					
Total Points	5					
Access to Natural Light						
	Points 0-2					
Daylight & Views	1					

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City:	Allied Health Building Kirkland
Building Gross Square Footage:	83,554
Number of Occupants:	
Institution/University or Agency Name:	Lake Washington Institute of Technology
Submitted By Name/Phone:	Ross Whitehead, Schreiber Starling & Lane / 206-682-8300
LEED Level Achieved or (Expected)/Date:	Silver anticipated 8/2012
LEED Version Used (e.g. V 2.2 or V 3.0)	Ver 2.2

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 3,015,389.80
LEED Related Consultant Fees:	$ 29,000.00
Commissioning Fees:	$ 162,700.00
ELCCA Preparation Fees:	$ 24,343.00
* Use the Application for Payment, Agreement Invoice	

Overall Cost of LEED
$ 327,294.00

Overall Project Cost (Consultant + Construction)
$ 24,205,873.20

Cost of LEED Compared to Overall Costs (%)
1.4%

LEED Submittal Fees:	$ -
Soft Cost of LEED/Overall Consultant Fees (%):	1.0%

Building Construction Cost Per Square Foot
$ 239.59

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ 36,000.00		
Site Work & Related Costs:	$ 1,135,672.00		
Building Construction Costs:	$ 20,018,811.40		
Max. Allowable Construction Costs (MACC):	$ 21,190,483.40		LEED Elements Description
Cost of LEED Element***:	$ 76,500.00	>	Certified Wood
Cost of LEED Element***:	$ 38,838.00	>	Daylighting Light Louvers (interior)
Cost of LEED Element***:	$ 90,706.00	>	Louver Window Shade (exterior)
Cost of LEED Element***:	$ 83,500.00	>	Enhanced Commissioning
Cost of LEED Element***:	$ 32,000.00	>	Entrance Grate & Mats
Cost of LEED Element***:	$ 0.00	>	Low VOC materials
Added LEED Construction Cost:	$ 321,544.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ 23,250.00	>	Irrigation System (260,000 gal/yr savings)
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ 23,250.00		

Total Added LEED Construction Costs:	$ 298,294.00
Hard Cost of LEED/Overall Construction Costs (%):	1.4%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)		
Gas:	$ 0.00		
Electric:	$ 0.00		
Water:	$ -		Describe
Other:	$ -	>	

Utility Incentives as % of Building Costs
0.0%

Total Incentives:	$ -

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ 29,800.00	11.0

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	868,377	$ 61,018	32.1%	$ 28,832	1,272,191	$ 89,850
Gas (Therms)	-	$ -	#DIV/0!	$ -	-	$ -
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	2,963,771	$ 61,018	32.1%	$ 28,832	4,341,988	$ 89,850
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	48,546	$ 291	52.3%	$ 319.00	101,715	$ 610
Landscape Watering (irrigation water**)	-	$ -	100.0%	$ 649.00	259,546	$ 649
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -	0	$ -
Total Water Saving	48,546	$ 291	76.9%	$ 968.00	361,261	$ 1,259
Stormwater Management						
	Points 0-2					
Stormwater Control Quality and Quantity	0					
Alt. Transportation Sources & Walkability						
	Points					
Density & Community Connectivity	1					
Public Transportation	1					
Bike Racks & Showers	1					
Total Points	3					
Construction Waste Recycling						
	Tons	%				
Construction Waste Recycled	702	91.0				
Use of Recycled Content Materials						
	$	%				
Recycled Content Materials	$ 1,869,816.94	41.6				
Use of Regional Materials						
	$	%				
Regional Materials	$ 1,106,017.00	22.8				
Protect Forests, Support Sustainable Forestry						
	Points					
Certified Wood	1					
Good indoor Air Quality						
	Points					
Const. IAQ Management Plan	1					
Low-Emitting Materials	1					
Indoor Chemical & Pollutant Source Control	0					
Total Points	2					
Access to Natural Light						
	Points 0-2					
Daylight & Views	0					

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City: Integrated Resource Center / Seattle
Building Gross Square Footage: 47,500
Number of Occupants:
Institution/University or Agency Name: SBCTC/ North Seattle Community College
Submitted By Name/Phone:
LEED Level Achieved or (Expected)/Date: Gold October 2011
LEED Version Used (e.g. V 2.2 or V 3.0) Ver 2.2

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 2,053,223.00
LEED Related Consultant Fees:	$ 112,985.00
Commissioning Fees:	$ 60,320.00
ELCCA Preparation Fees:	$ 31,968.00
* Use the Application for Payment, Agreement Invoice	

Overall Cost of LEED
$ 231,565.00

Overall Project Cost (Consultant + Construction)
$ 16,622,807.00

Cost of LEED Compared to Overall Costs (%)
1.4%

LEED Submittal Fees: $ 1,980.00

Building Construction Cost Per Square Foot
$ 216.04

Soft Cost of LEED/Overall Consultant Fees (%): 5.6%

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ 233,069.00		
Site Work & Related Costs:	$ 858,543.00		
Building Construction Costs:	$ 10,261,888.00		
Max. Allowable Construction Costs (MACC):	$ 14,567,604.00		LEED Elements Description
Cost of LEED Element***:	$ 60,000.00	>	Green roof
Cost of LEED Element***:	$ 280,000.00	>	Raised access floor system
Cost of LEED Element***:	$ 20,000.00	>	Enhanced commissioning
Cost of LEED Element***:	$ 5,000.00	>	High Efficiency Boiler
Cost of LEED Element***:		>	
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ 365,000.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ 150,000.00	>	Less supply air ductwork
Savings, Didn't Install Something****	$ 7,200.00	>	Smaller pumps required
Savings, Didn't Install Something****	$ 91,200.00	>	Smaller AHU
LEED Related Construction Savings:	$ 248,400.00		

Total Added LEED Construction Costs: $ 116,600.00

Hard Cost of LEED/Overall Construction Costs (%): 1%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)
Gas:	$ -
Electric:	$ -

Utility Incentives as % of Building Costs
0.0%

Water:	$ -
Other:	$ -
Total Incentives:	$ -

>

Describe

LEED Building Performance Information

Total Savings Over Baseline (energy & water)
$ 6,967.27

Payback (Yrs)***
33.2

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	293,392	$ 16,760	12.0%	$ 2,284	330,661	$ 19,044
Gas (Therms)	1,328	$ 1,947	58.2%	$ 2,709	3,685	$ 4,656
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	1,134,140	$ 18,707	21.1%	$ 4,993	1,497,007	$ 23,700
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	325,539	$ 1,953	46.3%	$ 1,685.73	606,494	$ 3,639
Landscape Watering (irrigation water**)	32,014	$ 80	78.3%	$ 288.54	147,429	$ 369
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	357,553	$ 2,033	49.3%	$ 1,974.27	753,923	$ 4,008

Stormwater Management		
	Points 0-2	
Stormwater Control Quality and Quantity	0	
Alt. Transportation Sources & Walkability		
	Points	
Density & Community Connectivity	1	
Public Transportation	1	
Bike Racks & Showers	1	
Total Points	3	
Construction Waste Recycling		
	Tons	%
Construction Waste Recycled	200.69	95.7
Use of Recycled Content Materials		
	$	%
Recycled Content Materials	$ 721,935.00	24.5
Use of Regional Materials		
	$	%
Regional Materials	$ -	0.0
Protect Forests, Support Sustainable Forestry		
	Points	
Ceterified Wood	0	
Good indoor Air Quality		
	Points	
Const. IAQ Management Plan	2	
Low-Emitting Materials	3	
Indoor Chemical & Pollutant Source Control	1	
Total Points	6	
Access to Natural Light		
	Points 0-2	
Daylight & Views	2	

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City:	Business & Humanities Center - Maier Hall / Port Angeles
Building Gross Square Footage:	63,221
Number of Occupants:	790
Institution/University or Agency Name:	Peninsula College
Submitted By Name/Phone:	Carl Dominguez/ 206-443-3448
LEED Level Achieved or (Expected)/Date:	LEED Gold/ May 21, 2012
LEED Version Used (e.g. V 2.2 or V 3.0)	V 2.2

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 4,487,262.00
LEED Related Consultant Fees:	$ 109,649.00
Commissioning Fees:	$ 113,670.00
ELCCA Preparation Fees:	$ 18,288.00
* Use the Application for Payment, Agreement Invoice	

LEED Submittal Fees:	$ 3,097.00
Soft Cost of LEED/Overall Consultant Fees (%):	2.5%

Overall Cost of LEED
$ 402,746.00

Overall Project Cost (Consultant + Construction)
$ 27,390,359.00

Cost of LEED Compared to Overall Costs (%)
1.5%

Building Construction Cost Per Square Foot
$ 281.55

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ 440,000.00		
Site Work & Related Costs:	$ 2,260,000.00		
Building Construction Costs:	$ 17,800,000.00		
Max. Allowable Construction Costs (MACC):	$ 22,900,000.00		LEED Elements Description
Cost of LEED Element***:	$ 76,000.00	>	Operable windows - manual/ motorized
Cost of LEED Element***:	$ 44,000.00	>	Ceiling fans
Cost of LEED Element***:	$ 500,000.00	>	Geothermal well field
Cost of LEED Element***:	$ 50,000.00	>	Epiphytic (moss) roof
Cost of LEED Element***:	$ 70,000.00	>	Chilled beams
Cost of LEED Element***:		>	
Added LEED Construction Cost:	$ 740,000.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ 250,000.00	>	Reduced mech cooling - smaller HVAC system due to ventilat
Savings, Didn't Install Something****	$ 200,000.00	>	Stormwater discharge to wetland - no detention tank
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ 450,000.00		

Total Added LEED Construction Costs:	$ 290,000.00
Hard Cost of LEED/Overall Construction Costs (%):	1.3%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)
Gas:	$ -
Electric:	$ -

Utility Incentives as % of Building Costs
0.0%

Water:	$ -		Describe
Other:	$ -	>	
Total Incentives:	$ -		

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ 17,064.51	23.6

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	625,685	$ 32,176	32.8%	$ 15,740	901,674	$ 47,916
Gas (Therms)	2,479	$ 3,328	0.0%	$ -	2,479	$ 3,328
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	2,383,363	$ 35,504	30.7%	$ 15,740	3,325,313	$ 51,244
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	67,446	$ 67	91.9%	$ 762.51	138,327	$ 830
Landscape Watering (irrigation water**)	163,965	$ 410	57.8%	$ 562.00	388,888	$ 972
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	231,411	$ 477	73.5%	$ 1,324.51	527,215	$ 1,802

Stormwater Management	
	Points 0-2
Stormwater Control Quality and Quantity	2
Alt. Transportation Sources & Walkability	
	Points
Density & Community Connectivity	0
Public Transportation	1
Bike Racks & Showers	1
Total Points	2

Construction Waste Recycling		
	Tons	%
Construction Waste Recycled	315	84.0
Use of Recycled Content Materials		
	$	%
Recycled Content Materials	$ 1,160,642.00	22.0
Use of Regional Materials		
	$	%
Regional Materials	$ 923,568.00	17.0

Protect Forests, Support Sustainable Forestry	
	Points
Ceterified Wood	1
Good indoor Air Quality	
	Points
Const. IAQ Management Plan	2
Low-Emitting Materials	3
Indoor Chemical & Pollutant Source Control	1
Total Points	6
Access to Natural Light	
	Points 0-2
Daylight & Views	2

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City:	Angst Hall, Mount Vernon, WA
Building Gross Square Footage:	65,900
Number of Occupants:	678
Institution/University or Agency Name:	Skagit Valley College
Submitted By Name/Phone:	Keith Schreiber, Schreiber Starling& Lane Architects (206) 682-8300
LEED Level Achieved or (Expected)/Date:	Platinum
LEED Version Used (e.g. V 2.2 or V 3.0)	LEED 2.2

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 2,587,013.00
LEED Related Consultant Fees:	$ 118,868.00
Commissioning Fees:	$ 72,996.00
ELCCA Preparation Fees:	$ 19,364.00
* Use the Application for Payment, Agreement Invoice	

Overall Cost of LEED
$ 532,667.00

Overall Project Cost (Consultant + Construction)
$ 25,136,700.00

Cost of LEED Compared to Overall Costs (%)
2.1%

LEED Submittal Fees:	$ 7,660.00
Soft Cost of LEED/Overall Consultant Fees (%):	4.9%

Building Construction Cost Per Square Foot
$ 315.30

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ 191,900.00		
Site Work & Related Costs:	$ 1,571,977.00		
Building Construction Costs:	$ 20,778,150.00		
Max. Allowable Construction Costs (MACC):	$ 22,542,027.00		LEED Elements Description
Cost of LEED Element***:	$ 231,389.00	>	35 KW Photovoaltic Array
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ 10,000.00	>	Contractor's LEED Administration
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ 66,400.00	>	Skylight for daylighting of interior offices
Cost of LEED Element***:	$ 36,000.00	>	Entry foot grilles
Cost of LEED Element***:	$ 17,400.00	>	Separate metering of power and water
Cost of LEED Element***:	$ 44,950.00	>	Lighting Controls (Daylight zoning & occupancy)
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ 406,139.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs:	$ 406,139.00
Hard Cost of LEED/Overall Construction Costs (%):	2%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)
Gas:	$ -

Utility Incentives as % of Building Costs
1.3%

Electric:	$ -
Water:	$ -
Other:	$ 264,650.00
Total Incentives:	$ 264,650.00

>

Describe
Grant for PV system design and installation

LEED Building Performance Information

Total Savings Over Baseline (energy & water)
$ 44,920.00

Payback (Yrs)***
5.966540516

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	397,500	$ 29,372	47.5%	$ 26,559	696,433	$ 55,931
Gas (Therms)	23,549	$ 25,179	33.9%	$ 12,886	35,776	$ 38,065
Renewable Energy, Electricity (kWh)	35,108.00	$ 2,601	100.0%	$ 2,601		
Renewable Energy, Heat (Btu)	-	$ -	0.0%	$ -	0	$ -
Total Btus, Dollars & Percents	3,591,744	$ 51,950	80.9%	$ 42,046	5,954,526	$ 93,996
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	117,200	$ 702	48.0%	$ 648.00	225,524	$ 1,350
Landscape Watering (irrigation water**)	172,352	$ 1,032	38.3%	$ 2,226.00	543,148	$ 3,258
Captured Water (irrigation or interior water)	-	$ -	0.0%	$ -	0	$ -
Total Water Saving	289,552	$ 1,734	165.7%	$ 2,874.00	768,672	$ 4,608
Stormwater Management						
	Points 0-2					
Stormwater Control Quality and Quantity	2					
Alt. Transportation Sources & Walkability						
	Points					
Density & Community Connectivity	1					
Public Transportation	1					
Bike Racks & Showers	1					
Total Points	3					
Construction Waste Recycling						
	Tons	%				
Construction Waste Recycled	749.1	97.1				
Use of Recycled Content Materials						
	$	%				
Recycled Content Materials	$ 1,039,281.83	23.8				
Use of Regional Materials						
	$	%				
Regional Materials	$ 1,090,424.13	25.0				
Protect Forests, Support Sustainable Forestry						
	Points					
Ceterified Wood	1					
Good indoor Air Quality						
	Points					
Const. IAQ Management Plan	1					
Low-Emitting Materials	1					
Indoor Chemical & Pollutant Source Control	1					
Total Points	3					
Access to Natural Light						
	Points 0-2					
Daylight & Views	1					

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City: Phase II - Renovation of Housing Units, 9,10,12,13 & Classroom
Building Gross Square Footage: 28,140
Number of Occupants: 64 residents/12/staff/4 edu
Institution/University or Agency Name: DSHS/Echo Glen Children's Center
Submitted By Name/Phone: Diana Peeples, Project Manager/ 360-902-8347
LEED Level Achieved or (Expected)/Date: Silver Rating
LEED Version Used (e.g. V 2.2 or V 3.0) LEED v2.2

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 727,398.00
LEED Related Consultant Fees:	$ 39,760.00
Commissioning Fees:	$ 35,500.00
ELCCA Preparation Fees:	$ 8,800.00
* Use the Application for Payment, Agreement Invoice	

LEED Submittal Fees:	$ 40,000.00
Soft Cost of LEED/Overall Consultant Fees (%):	11.0%

Overall Cost of LEED
$ 230,760.00

Overall Project Cost (Consultant + Construction)
$ 7,667,398.00

Cost of LEED Compared to Overall Costs (%)
3.0%

Building Construction Cost Per Square Foot
$ 286.07

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ 447,763.00		
Site Work & Related Costs:	$ 1,578,900.00		
Building Construction Costs:	$ 8,049,900.00		
Max. Allowable Construction Costs (MACC):	$ 6,900,000.00		LEED Elements Description
Cost of LEED Element***:	$ 32,000.00	>	EPA Engery Star roof system
Cost of LEED Element***:	$ 96,000.00	>	Low flow metered plumbing fixtures
Cost of LEED Element***:	$ 23,000.00	>	Measurement & Verification plan
Cost of LEED Element***:	$ -	>	No HCFC & Halons in HVAC system
Cost of LEED Element***:	$ -	>	Heat Islands, roof
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ 151,000.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ -		

Total Added LEED Construction Costs:	$ 151,000.00
Hard Cost of LEED/Overall Construction Costs (%):	2%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)	
Gas:	$ -	
Electric:	$ -	
Water:	$ -	
Other:	$ -	>
Total Incentives:	$ -	

Utility Incentives as % of Building Costs
0.0%

Describe

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ 8,095.00	28.5

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**		% Savings	$ Savings	**Baseline Building**	
	Units	$			Units	$
Electricity (kWh)	167,456	$ 13,305	8.0%	$ 1,217	182,425	$ 14,522
Gas (Therms)	32,415	$ 39,609	13.6%	$ 5,908	37,518	$ 45,517
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	3,813,027	$ 52,914	11.9%	$ 7,125	4,374,417	$ 60,039
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	411,720	$ 3,882	28.3%	$ 970.00	578,160	$ 4,852
Landscape Watering (irrigation water**)	-	$ -	#DIV/0!	$ -	-	$ -
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	411,720	$ 3,882	20.0%	$ 970.00	578,160	$ 4,852
Stormwater Management						
	Points 0-2					
Stormwater Control Quality and Quantity	1					
Alt. Transportation Sources & Walkability						
	Points					
Density & Community Connectivity	0					
Public Transportation	0					
Bike Racks & Showers	1					
Total Points	1					
Construction Waste Recycling						
	Tons	%				
Construction Waste Recycled	135.57	97.6				
Use of Recycled Content Materials						
	$	%				
Recycled Content Materials		12.4				
Use of Regional Materials						
	$	%				
Regional Materials		59.9				
Protect Forests, Support Sustainable Forestry						
	Points					
Ceterified Wood						
Good indoor Air Quality						
	Points					
Const. IAQ Management Plan	1					
Low-Emitting Materials	4					
Indoor Chemical & Pollutant Source Control						
Total Points	5					
Access to Natural Light						
	Points 0-2					
Daylight & Views	2					

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City: SCCC Wood Construction Center; Seattle
Building Gross Square Footage: 58,700
Number of Occupants: 200
Institution/University or Agency Name: Seattle Central Community College
Submitted By Name/Phone: Stephen J. Starling
LEED Level Achieved or (Expected)/Date: Mar-13
LEED Version Used (e.g. V 2.2 or V 3.0) V2.2

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 2,661,810.70
LEED Related Consultant Fees:	$ 98,411.00
Commissioning Fees:	$ 71,865.00
ELCCA Preparation Fees:	$ 11,210.00
* Use the Application for Payment, Agreement Invoice	

LEED Submittal Fees: $ 3,972.00

Soft Cost of LEED/Overall Consultant Fees (%): 3.8%

Overall Cost of LEED
$ 177,761.00

Overall Project Cost (Consultant + Construction)
$ 19,513,281.14

Cost of LEED Compared to Overall Costs (%)
0.9%

Building Construction Cost Per Square Foot
$ 266.34

Construction Costs	Costs**		
Building Demolistion Cost (if applicable):	$ 186,380.06		
Site Work & Related Costs:	$ 1,027,000.00		
Building Construction Costs:	$ 15,634,118.38		
Max. Allowable Construction Costs (MACC):	$ 16,847,498.44		LEED Elements Description
Cost of LEED Element***:	$ 3,500.00	>	Alt. Transporat. - Bike Storage
Cost of LEED Element***:	$ 4,000.00	>	Alt. Transporat. - Low Emitting & Fuel Eff. Vehicles
Cost of LEED Element***:	$ 30,000.00	>	Enhanced Commissioning
Cost of LEED Element***:	$ 10,000.00	>	Store/Collect. of Recyclables (Waste wood Recycling)
Cost of LEED Element***:	$ 15,000.00	>	Measurement and Verificatons - Separate Metering
Cost of LEED Element***:	$ 22,878.00	>	Contractor's Commissioning Costs
Cost of LEED Element***:	$ 50,000.00	>	Heat Recovery
Cost of LEED Element***:	$ 10,000.00	>	Contractor LEED Adminstration
Cost of LEED Element***:	$ 25,000.00	>	Rapidly Renewable Materials (Ipe Wood Decking/Siding)
Added LEED Construction Cost:	$ 170,378.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ 50,000.00	>	No Air Conditioning in Shop Wing
Savings, Didn't Install Something****	$ 45,000.00	>	Reduced Ceilings/Floor Coverings/Finishes
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ 95,000.00		

Total Added LEED Construction Costs: $ 75,378.00

Hard Cost of LEED/Overall Construction Costs (%): 0.45%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)
Gas:	$ -
Electric:	$ -

Utility Incentives as % of Building Costs
0.0%

Water:	$ -	>	Describe
Other:	$ -		
Total Incentives:	$ -		

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ 8,016.92	22.2

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	285,141	$ 29,572	17.9%	$ 6,438	-	$ 36,010
Gas (Therms)	992	$ 843	60.1%	$ 1,270	2,413	$ 2,113
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	1,072,386	$ 30,415	20.2%	$ 7,708	241,300	$ 38,123
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	38,562	$ 231	47.7%	$ 210.82	73,698	$ 442
Landscape Watering (irrigation water**)	34,091	$ 85	53.5%	$ 98.11	73,333	$ 183
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	72,653	$ 317	49.4%	$ 308.92	147,031	$ 626
Stormwater Management						
	Points 0-2					
Stormwater Control Quality and Quantity	0					
Alt. Transportation Sources & Walkability						
	Points					
Density & Community Connectivity	1					
Public Transportation	1					
Bike Racks & Showers	1					
Total Points	3					
Construction Waste Recycling						
	Tons	%				
Construction Waste Recycled	236	97.0				
Use of Recycled Content Materials						
	$	%				
Recycled Content Materials	$ 1,185,000	35.0				
Use of Regional Materials						
	$	%				
Regional Materials	$ 510,000.00	15.0				
Protect Forests, Support Sustainable Forestry						
	Points					
Ceterified Wood	1					
Good indoor Air Quality						
	Points					
Const. IAQ Management Plan	1					
Low-Emitting Materials	1					
Indoor Chemical & Pollutant Source Control	1					
Total Points	3					
Access to Natural Light						
	Points 0-2					
Daylight & Views	0					

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City:	Business Hall (formerly Balmer)
Building Gross Square Footage:	70,518
Number of Occupants:	598
Institution/University or Agency Name:	University of Washington
Submitted By Name/Phone:	Clara Simon 206-543-2258
LEED Level Achieved or (Expected)/Date:	Gold
LEED Version Used (e.g. V 2.2 or V 3.0)	LEED-NC v2.2

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 2,150,573.00
LEED Related Consultant Fees:	$ 72,069.00
Commissioning Fees:	$ 77,302.00
ELCCA Preparation Fees:	$ 29,838.00

* Use the Application for Payment, Agreement Invoice

LEED Submittal Fees:	$ 4,428.90
Soft Cost of LEED/Overall Consultant Fees (%):	3.6%

Overall Cost of LEED
$ (174,485.10)

Overall Project Cost (Consultant + Construction)
$ 25,510,595.90

Cost of LEED Compared to Overall Costs (%)
-0.7%

Building Construction Cost Per Square Foot
$ 300.63

Construction Costs	Costs**		
Building Demolistion Cost (if applicable):	$ 1,735,120.00		
Site Work & Related Costs:	$ 466,210.00		
Building Construction Costs:	$ 21,199,999.00		
Max. Allowable Construction Costs (MACC):	$ 23,355,594.00		LEED Elements Description
Cost of LEED Element***:	$ 18,016.00	>	FSC Certified Wood
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Cost of LEED Element***:	$ -	>	
Added LEED Construction Cost:	$ 18,016.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ 268,999.00	>	Construction Waste Recycling
Savings, Didn't Install Something****	$ -	>	
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ 268,999.00		

Total Added LEED Construction Costs:	$ (250,983.00)
Hard Cost of LEED/Overall Construction Costs (%):	-1%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)	
Gas:	$ -	
Electric:	$ -	
Water:	$ -	
Other:	$ -	>
Total Incentives:	$ -	

Utility Incentives as % of Building Costs
0.0%

Describe
Not Pursued Due to Consultant Cost Premium

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	
$	679,270.00

Payback (Yrs)***
-0.256871494

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**		% Savings	$ Savings	**Baseline Building**	
	Units	$			Units	$
Electricity (kWh)	315,338	$ 17,345	31.0%	$ 8,701	459,114	$26,046
Gas (Therms)	9,867	$ 13,124	22.1%	$ 3,729	12,668	$ 16,853
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -		
Total Btus, Dollars & Percents	2,062,949	$ 30,469	40.8%	$ 12,430		$ 42,899
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	149,106	$ 894,636	42.7%	$ 666,840.00	260,246	$ 1,561,476
Landscape Watering (irrigation water**)	-	$ -	#DIV/0!	$ -	-	$ -
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	149,106	$ 894,636	42.7%	$666,840	260,246	$ 1,561,476
Stormwater Management						
	Points 0-2					
Stormwater Control Quality and Quantity						
Alt. Transportation Sources & Walkability						
	Points					
Density & Community Connectivity	1					
Public Transportation	1					
Bike Racks & Showers	1					
Total Points	3					
Construction Waste Recycling						
	Tons	%				
Construction Waste Recycled	3657	0.9				
Use of Recycled Content Materials						
	$	%				
Recycled Content Materials	$ 1,393,836.00	26.0				
Use of Regional Materials						
	$	%				
Regional Materials	$ 1,169,190.00	22.0				
Protect Forests, Support Sustainable Forestry						
	Points					
Ceterified Wood	1					
Good indoor Air Quality						
	Points					
Const. IAQ Management Plan	2					
Low-Emitting Materials	4					
Indoor Chemical & Pollutant Source Control	1					
Total Points	7					
Access to Natural Light						
	Points 0-2					
Daylight & Views	0					

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

High-Performance Green Buildings

Post Construction Submittal (submit at substantial completion)

Received by GA:

Date: 7/1/2012

Submit to: sustainableba@ga.wa.gov

Project Name	Business School, Phase 2 (Balmer Hall)		Agency/Institution	360 - University of Washington
Project Number	201838	GA H-P Green Bldg.#	GA 08-011	
Final Square Footage	70,518			
	Name	Agency or Firm	Phone	E-Mail
Submitted By	Clara Simon	UW Capital Projects	206-543-2258	simonch@uw.edu
	Name	Company	Phone	E-Mail
General Contractor	Kurt Winje	Sellen	206-805-7118	kurt.winje@sellen.com

Construction Related Costs	
Facility Construction Costs (Est.)	
Site Work & Related Costs* (Est.)	
Max.Allowable Construct.Costs(MACC)	

Estimated Construction Costs Associated with LEED**	
Costs Assoc. w/LEED (Est.)	
Savings Assoc. w/LEED (Est.)	
Total Project Cost	
Total Added LEED Cost	

Consultant Related Costs	
A) A/E Fees (Base)	
B) Additional A/E Fees	
Other Consultant Services	Consultant Fees
C) Commissioning	
D) ELCCA	
F) Est.LEED Related from (B,C &D)	$ -
Total Consultant Fees (A,B,C &D)	$ -

Payback for LEED	#DIV/0!

Energy and Water/Sewer Savings and Consumption Est.s (Taken from the LEED Submittal)	
Est. Annual Energy Savings (% $)	
Est. Annual Energy Savings ($/Yr)	
Est. Total Energy Use (kBtu/Yr)	
Est. Total Energy Use ($/Yr)	
Est. Renew. Energy Generated (kWh/yr)	$ -
Est. Renew. Energy Generated (Btuh/yr)	$ -
Est. Annual Water Savings (% $)	
Est. Annual Water Savings ($/Yr)	$ -
Est. Annual Water Use (Gals/Yr)	
Est. Annual Water Cost ($/Yr)	$ -
Est. Annual Sewer Savings ($/yr)	$ -
Est. Annual Sewer Savings (Gals/yr)	
Total Estimated Annual Savings	$ -

* Include demolition costs as part of site work.

** Make a best guess. Use conventional construction techniques as a base for comparison.

Est.Gas Use (therms/yr)	Est.Electric Use (kWh/yr)

Construction Waste Recycled (%)	Construction Waste Recycled (tons)
91	3657

This submittal includes the following:

☒ Provide an updated LEED Checklist.

☒ Provide a two to four page summary of strategies used to meet LEED Credits, include discussion of costs and savings.

☒ Provide 10 pictures of the project illustrating the sustainable features and overall project (include descriptions)

	Gas	Electricity	Water	Other	Total
Utility Incentives Received	$ -	$ -	$ -	$ -	$ -

Form Last Updated
October 2007

LEED Building Cost and Performance Data

Please complete this form to the best of your ability. This information is best completed by the State Project Manager responsible for the project and/or the Architect. Input data into yellow boxes.

Building Name/City:	UWT - Joy Building/Tacoma
Building Gross Square Footage:	46,238
Number of Occupants:	1,034
Institution/University or Agency Name:	University of Washington
Submitted By Name/Phone:	Clara Simon
LEED Level Achieved or (Expected)/Date:	Platinum
LEED Version Used (e.g. V 2.2 or V 3.0)	LEED-NC v2.2

Building Cost Data

Consultant Costs	Costs*
Overall Consultant Fees:	$ 2,500,000.00
LEED Related Consultant Fees:	$ 80,000.00
Commissioning Fees:	$ 130,000.00
ELCCA Preparation Fees:	$ 15,000.00
* Use the Application for Payment, Agreement Invoice	

Overall Cost of LEED
$ 223,011.09

Overall Project Cost (Consultant + Construction)
$ 19,103,011.09

Cost of LEED Compared to Overall Costs (%)
1.2%

Building Construction Cost Per Square Foot
$ 313.33

LEED Submittal Fees:	$ 3,011.09
Soft Cost of LEED/Overall Consultant Fees (%):	3.3%

Construction Costs	Costs**		
Building Demolition Cost (if applicable):	$ 1,500,000.00		
Site Work & Related Costs:	$ 612,058.00		
Building Construction Costs:	$ 14,487,942.00		
Max. Allowable Construction Costs (MACC):	$ 16,600,000.00		LEED Elements Description
Cost of LEED Element***:	$ 15,000.00	>	Installed low flow water fixtures
Cost of LEED Element***:	$ 325,000.00	>	Energy Savings Strategies: Spray Foam Insulation,
Cost of LEED Element***:	$ -	>	Window Upgrade, Operable Storefront Windows with
Cost of LEED Element***:	$ -	>	Natural Ventilation, VRF Mechanical with Heat
Cost of LEED Element***:	$ -	>	Recovery, Central Stair with Roof Monitor, Exterior
Cost of LEED Element***:	$ -	>	Exit Stair
Added LEED Construction Cost:	$ 340,000.00		List Elements not Installed or downsized due to LEED
Savings, Didn't Install Something****	$ 200,000.00	>	Reuse of masonry and timber, Heritage Artifacts,
Savings, Didn't Install Something****	$ -	>	exterior storefront shading from dock canopy
Savings, Didn't Install Something****	$ -	>	
LEED Related Construction Savings:	$ 200,000.00		

Total Added LEED Construction Costs:	$ 140,000.00
Hard Cost of LEED/Overall Construction Costs (%):	0.8%

**Use the Schedule of Values from Construction Invoice and Best Estimates

***Provide a best guess for cost. This could include solar panels, rain water capture system, or other feature that normally won't be pursued if not a LEED project.

****Didn't install something, such as a cooling system or greatly reduced the size due to natural ventilation.

Utility Incentives	Amount ($)	
Gas:	$ -	
Electric:	$ 75,000.00	
Water:	$ -	
Other:	$ -	>

Utility Incentives as % of Building Costs
0.5%

Describe

Total Incentives: $ 75,000.00

LEED Building Performance Information

Total Savings Over Baseline (energy & water)	Payback (Yrs)***
$ 30,180.95	4.9

LEED Attribute	Capture this data from the LEED submittal (LEED OnLine)					
Energy Effciency and Renewable Energy	**Proposed Building**				**Baseline Building**	
	Units	$	% Savings	$ Savings	Units	$
Electricity (kWh)	424,299	$ 24,880	46.6%	$ 21,682	895,951	$ 46,562
Gas (Therms)	4,783	$ 5,299	59.3%	$ 7,732	11,997	$ 13,031
Renewable Energy, Electricity (kWh)	-	$ -	#DIV/0!	$ -		
Renewable Energy, Heat (Btu)	-	$ -	#DIV/0!	$ -	0	$ -
Total Btus, Dollars & Percents	1,926,432	$ 30,179	49.4%	$ 29,414	4,257,581	$ 59,593
Water Efficiency						
	Gallons/Yr	$	% Savings	$ Savings	Gallons/Yr	$
Water Use Reduction (water/sewer*)	163,936	$ 984	43.7%	$ 762.91	291,042	$ 1,747
Landscape Watering (irrigation water**)	1,356	$ 3	54.4%	$ 4.04	2,972	$ 7
Captured Water (irrigation or interior water)	-	$ -	Calculate >>	$ -		
Total Water Saving	165,292	$ 987	43.7%	$ 766.95	294,014	$ 1,754

Stormwater Management		
	Points 0-2	
Stormwater Control Quality and Quantity	1	
Alt. Transportation Sources & Walkability		
	Points	
Density & Community Connectivity	1	
Public Transportation	1	
Bike Racks & Showers	1	
Total Points	3	
Construction Waste Recycling		
	Tons	%
Construction Waste Recycled	367.99	95.1
Use of Recycled Content Materials		
	$	%
Recycled Content Materials	$ 74,951.07	23.7
Use of Regional Materials		
	$	%
Regional Materials	$ 636,171.39	20.3
Protect Forests, Support Sustainable Forestry		
	Points	
Ceterified Wood	1	
Good indoor Air Quality		
	Points	
Const. IAQ Management Plan	2	
Low-Emitting Materials	4	
Indoor Chemical & Pollutant Source Control	1	
Total Points	7	
Access to Natural Light		
	Points 0-2	
Daylight & Views	1	

* Default value used for water/sewer costs of $6/1000 gallons

**Default value used for irrigation water only $2.50/1000 gallons

*** Payback doesn't include many of the intangibles. These can result in greater savings than from energy and water alone. Increased productivity, reductions in sick leave, and worker retention can far outway utility savings. Also environmental benefits can be substantial in moving Washington to its goals. Government must lead by example.

Appendix G: Exemption Declarations

1. City of Bellingham, *Bellingham Federal Building*
2. Corrections, Dept. of, *Mission Creek*
3. Fort Vancouver National Trust, *Quarter Master & Dental Surgery Project*
4. Foss Waterway Seaport, *Balfour Dock Building/Tacoma*
5. Grays Harbor Historical Seaport, *Seaport Landing*
6. Highline Community College, *Building 9*
7. Historic Seattle, *Washington Hall Restoration Project*
8. Pacific Science Center, *Yamasaki Courtyard Restoration Project*
9. Peninsula College, *Fort Worden Building*
10. Social & Health Services, Dept. of, *Green Hill School Intensive Management Unit*
11. Transportation, Dept. of, *Alaska Way Viaduct Replacement*
12. Walla Walla Community College, *Clarkston Health Science Facility*
13. Washington State Ferries, *Eagle Harbor Maintenance Facility*
14. Washington State Patrol, *Fire Training Academy*
15. Yakima Valley College, *Brown Dental Clinic Renovation Project*

CITY OF BELLINGHAM WASHINGTON

DEPARTMENT OF PUBLIC WORKS - FACILITIES
210 Lottie Street, Bellingham, WA 98225
Telephone (360) 778-7830 FAX (360) 778-7901

May 8, 2014

Attn:
Department of Enterprise Services
State of Washington

Re:
High-Performance Green Buildings Exemption Declaration Form Submittal
for Bellingham Federal Building Rehabilitation: Phases II & III, Project Number EF.0110

The Bellingham Federal Building is listed on the National Register of Historic Places. This renovation project aims to create a new office workplace and renovate the existing systems of the historic building. An important objective of the project is to meet the sustainable goals of the federal and state government for public facilities.

The project includes the necessary components of mechanical, electrical, and plumbing system upgrades, in addition to improved life safety measures and an interior tenant fit-out, to create a healthy environment for the building occupants and the general public. The design intent of the project is to strive for implementation of sustainable practices and procedures as required by a LEED certified Core and Shell project.

While the renovation of the Bellingham Federal Building will strive to follow LEED guidelines for certification, the ambitious schedule and restricted budget make it unlikely that is objective will be met. Additionally, the construction boundaries encompass only a portion of the building, making the project unable to achieve LEED certification.

Sincerely,

James Simpson

James Simpson
Facilities Project Manager

STATE OF WASHINGTON
DEPARTMENT OF CORRECTIONS
ADMINISTRATIVE SERVICES DIVISION
CAPITAL PROGRAMS
PO Box 41112, Olympia, Washington 98504-1112
Tel (360) 725-8352 – Fax (360) 586-8723

July 13, 2007

Mr. Stuart Simpson, Facilities Senior Planner
Department of General Administration
E&A Services, Energy Services Section
Post Office Box 41012
Olympia, Washington 98504-1012

Dear Stuart:

Re: LEED Exemption Justification
Mission Creek Corrections Center for Women – 120-Bed Expansion
Project No. 06-312

The Washington State Department of Corrections' Capital staff members have reviewed and considered the Mission Creek expansion project for LEED, and we have determined that we should request an exemption.

Our original advertisement for A/E firms was in June of 2005, prior to the *High Performance Public Building Law* becoming effective. Because the original project scope of 3,200-sq. ft. was well below the LEED guidelines of 5,000-sq. ft., we did not advertise this as a LEED project.

The originally funded scope of work was a combination of a new housing unit and a remodel of an existing housing unit. The new housing unit was to be 3,200-sq. ft. with minimal site work. The remodel of the existing housing unit involved demolition, adding additional toilets, sinks, showers, and enhancing the ventilation system in the restroom areas. The remaining work on the project was an expansion of the existing wastewater treatment system to accommodate the additional population.

We determined during the programming phase of the project that it was best to build a new housing unit, not remodel the existing one. This change in direction created a serious challenge to the project budget for the program needs, leaving no additional funds for LEED. The new housing unit has 11,380-sq. ft. of correctional operations area, with an additional 1,481-sq. ft. of mechanical space located in a basement under the housing unit. The building envelope is wood construction and there is minimal site work.

Even though we are requesting an exemption, we have already included many green building elements in the project. These include: local and recycled content materials; low-emitting materials; views; no added parking; reduced heat island effect; and water-efficient landscaping and fixtures.

The A/E firm did prepare a LEED checklist, with 18 points achieved and incorporated into the project. However, because of the project's small size, remote location, extremely limited budget, and with the constraints of a prison environment, many points are not available.

To summarize the reasons for the exemption request:

1. Because of the small project scope, we did not plan for LEED certification.
2. The original project did not anticipate a new building larger than 3,200 square feet.
3. There are no funds available in the project budget.

Thank you for your consideration of our exemption request. I look forward to hearing back from you. If you have any questions, please call me at (360) 725-8353, or email me at kdnugen@doc1.wa.gov or contact Ed Hampton, Project Manager, at (360) 725-8345 or email at elhampton@doc1.wa.gov.

Sincerely,

Kathleen J. Stewart/for

Kent Nugen, Chief of Capital Operations
Capital Programs

KN:jbs
Enclosure: High Performance Green Building Exemption Request
cc: David Jansen, Administrator
Janine Bogar, Environmental Planner 4
Edward Hampton, Project Manager
Pebble Hernandez, Contract Specialist 3

High-Performance Green Buildings

Exemption Declaration

Received by GA:

Date: 7/9/2007

Submit to: sustainableba@ga.wa.gov

Project Name:	Mission Creek 120 Bed		Agency/Institution	Mission Creek Corrections Center
Project Number:	06-312	GA H-P Green Bldg. #		

	Name	Agency	Phone	E-Mail
Submitted By:	Kent Nugen	DOC	725-8353	kdnugen@msn.com

Conceptual Construction Cost Estimate $1,930,000

Total Facility Square Footage Estimate 12,861

Project Location/Address

Facility Type Exemption*	Exempt Space Approx. %
Transmitter Building	
Pumping Station	
Hospital (not including skilled nursing)	
Research Facilities with Laboratories	

Agency Representative Signature Block

Signature

Name:

Title:

"Not Practicable" Exemption**	Yes/No
The project will seek US Green Bldg. Council LEED Certification**	No
The project will participate in the GA LEED QA process**	No
The project will take no further action regarding LEED.	Yes/No

Agency Representative Signature Block

Signature

Name: Kent Nugen

Title: Chi Kent Nugen

This Exemption Submittal includes the following:

Provide a one page description of why the exemption is being sought. ☒

Provide a LEED Checklist indicating which LEED Credits may be "practicable" for the project. ☐ LEED Score attempting ☐

* If a "Facility Type" exemption is requested and verified, no further submittals are required.

** If a "Not Practicable" exemption is requested, the project should pursue LEED to the level that is "practicable" for the project. Projects are encouraged to participate in the GA LEED QA process and subsequent annual reporting of the energy and water/sewer consumption to GA. This will demonstrate a "Good Faith" effort consistent with the intent of RCW 39.35D. Complete the appropriate GA LEED QA forms as the project progresses through the design and construction process. Feedback from GA will help projects to achieve the proposed LEED goal and will help to maximize utility incentives.

*** If the project continues to seek LEED Certification the project should also participate in the GA LEED QA process.

Form Last Updated
April 2006

General O.O. Howard House • 750 Anderson Street • Vancouver, Washington 98661
360-992-1800 • Fax: 360-992-1810 • www.fortvan.org

FORT VANCOUVER
National Trust

May 13, 2014

Dear Sustainable Building Advisor,

We are respectfully seeking a High-Performance Green Building exemption for the upcoming "Quartermaster and Dental Surgery Renovation Project" located in the West Vancouver Barracks of Fort Vancouver National Site, in the Fort Vancouver National Historic District of Vancouver, WA. Respective addresses for the buildings to be rehabilitated are: 630 Fort Vancouver Way, Vancouver, WA 98661 and 619 Barnes St., Vancouver, WA 98661.

An "Non-Practicable" exemption is being sought for a few reasons:

1. The buildings are listed on the Federal, State and County Historic Registers and are required to reflect their original state by whatever means possible and practical to ensure that history of the Site is most accurately depicted.
2. Federal legislation under Department of Interior Standards, Sec. 106, requires strict adherence to observing the guidelines and measures set forth by the Department.
3. The conceptual design drawings depict compliance to Section 106.
4. It is simply not possible to achieve LEED Silver status with the limited improvements being made on this project.
5. The only elements that will comply would be EnergyStar rated appliances, plumbing fixtures, and HVAC split-system heat pumps. The scope of this project is very small, as the gross square footage of the two buildings combined is 3,365 sq.ft. The elements listed amount to a handful of sinks, toilets, faucets, a few kitchen appliances and two heat pump split-systems. For clarification the plumbing fixtures will be low-flow, low consumption.The composition roofing shingles approved by the Washington State Department of Archaeology and Historic Preservation are made up of a percentage of recycled materials. ***Please note that we seek to be as LEED compliant/energy efficient as possible within the constraints we are given.***

While the total project costs are estimated at $960,272.00. Highest estimated replacement value for the two buildings would be approximately $1,117,750.00. Please feel free to contact me with any questions you may have regarding this project and this request. I look forward to your response.

Best Regards,

Kaare A. Hyde

Kaare A. Hyde | Facilities Manager
Fort Vancouver National Trust
General O.O. Howard House
750 Anderson St.
Vancouver, WA 98661
Direct: 360-992-1816
Website: www.fortvan.org

High-Performance Green Buildings

Exemption Declaration

Received by DES:

Date: 5/13/14

Submit to: Sustainability@des.wa.gov

Project Name:	Quartermaster & Dental Surgery Project Renovation	Agency/Institution	FORT VANCOUVER NATIONAL TRUST
Project Number:			

	Name	Agency	Phone	E-Mail
Submitted By:	KAARE A. HYDE	FORT VANCOUVER TRUST	360-992-1816	KAARE.hyde@fortvan.org

Conceptual Construction Cost Estimate: $915,272

Total Facility Square Footage Estimate: 3,365 ft.^{2}

Project Location/Address: 630 Ft. Vancouver Way, Vancouver, WA 98661, 619 Barnes St. Vancouver, WA 98661

Facility Type Exemption*	Exempt Space Approx. %
Transmitter Building	N/A
Pumping Station	N/A
Hospital (not including skilled nursing)	N/A
Research Facilities with Laboratories	N/A

Agency Representative Signature Block

Kaare A. Hyde

Signature

Name: KAARE A. HYDE

Title: FACILITIES MANAGER

"Not Practicable" Exemption**	Yes/No
The project will seek US Green Bldg. Council LEED Certification***	NO
The project will participate in the GA LEED QA process**	NO
The project will take no further action regarding LEED.	YES

Agency Representative Signature Block

Kaare A. Hyde

Signature

Name: KAARE A. HYDE

Title: FACILITIES MANAGER

This Exemption Submittal includes the following:

Provide a one page description of why the exemption is being sought on Agency Letterhead. ☒

Provide a LEED Checklist indicating which LEED Credits may be "practicable" for the project. ☐ LEED Score attempting

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* If a "Facility Type" exemption is requested and verified, no further submittals are required.

** If a "Not Practicable" exemption is requested, the project should pursue LEED to the level that is "practicable" for the project. Projects are encouraged to participate in the DES LEED QA process and subsequent annual reporting of the energy and water/sewer consumption to DES. This will demonstrate a "Good Faith" effort consistent with the intent of RCW 39.35D. Complete the appropriate DES LEED QA forms as the project progresses through the design and construction process. Feedback from DES will help projects to achieve the proposed LEED goal and will help to maximize utility incentives.

*** If the project continues to seek LEED Certification the project should also participate in the DES LEED QA process.

Form Last Updated
April 2006

FOSS WATERWAY
SEAPORT
Discover by Doing

459-A East 15th Street
Tacoma, WA 98402
P 253.272.2750
F 253.272.3023
www.fosswaterwayseaport.org

The Foss Waterway Seaport is not seeking LEED certification for the renovation and restoration of the Balfour Dock building at 705 Dock Street in Tacoma for the following reasons:

- The large interior volume of existing 1900 historical warehouse cannot be reduced without very significant impact on the historical character of the building.
- The thermal performance of the historical walls, windows and roof have been improved but limited for historical preservation. This limits the amount of potential LEED Energy and Atmosphere credits.
- The existing building site is developed and limits the amount of storm water, heat island and restoration of habitat sustainable site credits possible.
- Some existing building elements are reusable but the amount of material and resource credits is limited to the extent of material that is not at the end of its life.
- The amount of potential day light and views is limited by conformance to preservation to historical openings.

LEED for Existing Buildings: Operations & Maintenance
Registered Building Checklist

Project Name: Foss Waterway Seaport
Project Address 705 Dock Street, Tacoma

Yes	?	No			
7	0	0	**Sustainable Sites**		**12** Points
		0	Credit 1	**LEED Certified Design and Construction**	1
1			Credit 2	**Building Exterior and Hardscape Management Plan**	1
1			Credit 3	**Integrated Pest Management, Erosion Control, and Landscape Management Plan**	1
		0	Credit 4.1	**Alternative Commuting Transportation,** 10%	1
1			Credit 4.2	**Alternative Commuting Transportation,** 25%	1
		0	Credit 4.3	**Alternative Commuting Transportation,** 50%	1
		0	Credit 4.4	**Alternative Commuting Transportation,** 75% or greater	1
1			Credit 5	**Reduced Site Disturbance - Protect or Restore Open Space**	1
1			Credit 6	**Stormwater Management**	1
1			Credit 7.1	**Heat Island Reduction -** Non-Roof	1
		0	Credit 7.2	**Heat Island Reduction -** Roof	1
1			Credit 8	**Light Pollution Reduction**	1

Yes	?	No			
4	0	0	**Water Efficiency**		**10** Points
Y			Prereq 1	**Minimum Indoor Plumbing Fixture and Fitting Efficiency**	Required
1			Credit 1.1	**Water Performance Measurement** - whole building metering	1
1			Credit 1.2	**Water Performance Measurement** - submetering	1
1			Credit 2.1	**Additional Indoor Plumbing Fixture and Fitting Efficiency,** 10%	1
		0	Credit 2.2	**Additional Indoor Plumbing Fixture and Fitting Efficiency,** 20%	1
		0	Credit 2.3	**Additional Indoor Plumbing Fixture and Fitting Efficiency,** 30%	1
1			Credit 3.1	**Water Efficient Landscaping -** Reduce Potable Water Use by 50%	1
		0	Credit 3.2	**Water Efficient Landscaping** - Reduce Potable Water Use by 75%	1
		0	Credit 3.3	**Water Efficient Landscaping** - Reduce Potable Water Use by 100%	1
		0	Credit 4.1	**Cooling Tower Water Management -** Chemical Management	1
		0	Credit 4.2	**Cooling Tower Water Management -** Non-Potable Water Source Use	1

Yes	?	No			
6	0	0	**Energy & Atmosphere**		**30** Points
Y			Prereq 1	**Energy Efficiency Best Management Practices** - Planning, Documentation, and Opportunity Assessment	Required
Y			Prereq 2	**Minimum Energy Efficiency Performance**	Required
Y			Prereq 3	**Refrigerant Management** - Ozone Protection	Required
			Credit 1	**Optimize Energy Efficiency Performance**	15
1			Credit 2.1	**Existing Building Commissioning -** Investigation and Analysis	2
1			Credit 2.2	**Existing Building Commissioning -** Implementation	2
1			Credit 2.3	**Existing Building Commissioning -** Ongoing Commissioning	2
1			Credit 3.1	**Performance Measurement -** Building Automation System	1
1			Credit 3.2	**Performance Measurement -** System-Level Metering, 40%	1
		0	Credit 3.3	**Performance Measurement -** System-Level Metering, 80%	1
1			Credit 4.1	**Renewable Energy -** On-site 3% / Off-site 25%	1
		0	Credit 4.2	**Renewable Energy** - On-site 6% / Off-site 50%	1
		0	Credit 4.3	**Renewable Energy** - On-site 9% / Off-site 75%	1
		0	Credit 4.4	**Renewable Energy** - On-site 12% / Off-site 100%	1
		0	Credit 5	**Refrigerant Management**	1
1			Credit 6	**Emissions Reduction Reporting**	1

Yes	?	No			
5	0	0	**Materials & Resources**		**14** Points
Y			Prereq 1	**Sustainable Purchasing Policy**	Required
Y			Prereq 2	**Solid Waste Management Policy**	Required
1			Credit 1.1	**Sustainable Purchasing** - Ongoing Consumables, 40%	1
		0	Credit 1.2	**Sustainable Purchasing** - Ongoing Consumables, 60%	1
		0	Credit 1.3	**Sustainable Purchasing** - Ongoing Consumables, 80%	1
1			Credit 2.1	**Sustainable Purchasing** - Durable Goods, electric	1
1			Credit 2.2	**Sustainable Purchasing** - Durable Goods, furniture	1
		0	Credit 3	**Sustainable Purchasing** - Facility Alterations and Additions	1
1			Credit 4.1	**Sustainable Purchasing** - Reduced Mercury in Lamps, 90 pg/lum-hr	1
1			Credit 4.2	**Sustainable Purchasing** - Reduced Mercury in Lamps, 70 pg/lum-hr	1
		0	Credit 5	**Sustainable Purchasing -** Food	1
		0	Credit 6	**Solid Waste Management -** Waste Stream Audit	1
1			Credit 7.1	**Solid Waste Management -** Ongoing Consumables, 50%	1
		0	Credit 7.2	**Solid Waste Management -** Ongoing Consumables, 70%	1
		0	Credit 8	**Solid Waste Management -** Durable Goods	1
		0	Credit 9	**Solid Waste Management -** Facility Alterations and Additions	1

Yes	?	No			
12	0	0	**Indoor Environmental Quality**		**19** Points
Y			Prereq 1	**Outdoor Air Introduction and Exhaust Systems**	Required
Y			Prereq 2	**Environmental Tobacco Smoke (ETS) Control**	Required
Y			Prereq 3	**Green Cleaning Policy**	Required
1			Credit 1.1	**IAQ Best Management Practices -** IAQ Management Program	1
1			Credit 1.2	**IAQ Best Management Practices -** Outdoor Air Delivery Monitoring	1
		0	Credit 1.3	**IAQ Best Management Practices -** Increased Ventilation	1
1			Credit 1.4	**IAQ Best Management Practices -** Reduce Particulates in Air Distribution	1
1			Credit 1.5	**IAQ Best Management Practices -** IAQ Management for Facility Alterations and Additions	1
1			Credit 2.1	**Occupant Comfort -** Occupant Survey	1
1			Credit 2.2	**Occupant Comfort -** Occupant Controlled Lighting	1
1			Credit 2.3	**Occupant Comfort -** Thermal Comfort Monitoring	1
		0	Credit 2.4	**Occupant Comfort -** Daylight and Views, 50% Daylight / 45% Views	1
		0	Credit 2.5	**Occupant Comfort -** Daylight and Views, 75% Daylight / 90% Views	1
1			Credit 3.1	**Green Cleaning -** High Performance Cleaning Program	1
1			Credit 3.2	**Green Cleaning -** Custodial Effectiveness Assessment, < 3	1
		0	Credit 3.3	**Green Cleaning -** Custodial Effectiveness Assessment, < 2	1
1			Credit 3.4	**Green Cleaning -** Sustainable Cleaning Products and Materials, 30%	1
		0	Credit 3.5	**Green Cleaning -** Sustainable Cleaning Products and Materials, 60%	1
		0	Credit 3.6	**GreenCleaning -** Sustainable Cleaning Products and Materials, 90%	1
1			Credit 3.7	**Green Cleaning -** Sustainable Cleaning Equipment	1
1			Credit 3.8	**Green Cleaning -** Entryway Systems	1
1			Credit 3.9	**Green Cleaning -** Indoor Integrated Pest Management	1

Yes	?	No			
2	0	0	**Innovation in Operations**		**7** Points
1			Credit 1.1	**Innovation in Operations**	1
		0	Credit 1.2	**Innovation in Operations**	1
		0	Credit 1.3	**Innovation in Operations**	1
		0	Credit 1.4	**Innovation in Operations**	1
1			Credit 2	**LEED® Accredited Professional**	1
1			Credit 3	**Documenting Sustainable Building Cost Impacts**	2

Yes	?	No		
36	0	0	**Project Totals (pre-certification estimates)**	92 Points

30	0	0	**Certified:** 34-42 points, **Silver:** 43-50 points, **Gold:** 51-67 points, **Platinum:** 68-92

High-Performance Green Buildings

Exemption Declaration

Received by DES:

Date: 5/15/14

Submit to: Sustainability@des.wa.gov

Project Name:	SEAPORT LANDING	Agency/Institution	GRAYS HARBOR HISTORICAL SEAPORT
Project Number:			

	Name	Agency	Phone	E-Mail
Submitted By:	LES BOLTON	GHHSA	360-581-1488	LES@HISTORICALSEAPORT.ORG

Conceptual Construction Cost Estimate: 5,314,483.22

Total Facility Square Footage Estimate: 32,910

Project Location/Address: 500 NORTH CUSTER ABERDEEN, WA 98520

Facility Type Exemption*	Exempt Space Approx. %	Agency Representative Signature Block
Transmitter Building		
Pumping Station		
Hospital (not including skilled nursing)		Signature
Research Facilities with Laboratories		Name:
		Title:

"Not Practicable" Exemption**	Yes/No	Agency Representative Signature Block
The project will seek US Green Bldg. Council LEED Certification***	YES	
The project will participate in the GA LEED QA process**	YES	
The project will take no further action regarding LEED.		Signature
		Name: LES BOLTON
		Title: EXECUTIVE DIRECTOR

This Exemption Submittal includes the following:

Provide a one page description of why the exemption is being sought on Agency Letterhead. ☐

Provide a LEED Checklist indicating which LEED Credits may be "practicable" for the project. ☒ LEED Score attempting 41

* If a "Facility Type" exemption is requested and verified, no further submittals are required.

** If a "Not Practicable" exemption is requested, the project should pursue LEED to the level that is "practicable" for the project. Projects are encouraged to participate in the DES LEED QA process and subsequent annual reporting of the energy and water/sewer consumption to DES. This will demonstrate a "Good Faith" effort consistent with the intent of RCW 39.35D. Complete the appropriate DES LEED QA forms as the project progresses through the design and construction process. Feedback from DES will help projects to achieve the proposed LEED goal and will help to maximize utility incentives.

*** If the project continues to seek LEED Certification the project should also participate in the DES LEED QA process.

Form Last Updated
April 2006

LEED for New Construction v 2.2
Registered Project Checklist

Project Name: SEAPORT LANDING

Project Address: 500 NORTH CUSTERABERDEEN, WA 98520

Yes	?	No		
44	4		**Project Totals** (Pre-Certification Estimates)	69 Points
GOLD			**Certified**: 26-32 points **Silver**: 33-38 points **Gold**: 39-51 points **Platinum**: 52-69 points	

Yes	?	No		
11			**Sustainable Sites**	14 Points

Yes	?	No			
			Prereq 1	**Construction Activity Pollution Prevention**	Required
1			Credit 1	**Site Selection**	1
1			Credit 2	**Development Density & Community Connectivity**	1
1			Credit 3	**Brownfield Redevelopment**	1
0			Credit 4.1	**Alternative Transportation**, Public Transportation	1
0			Credit 4.2	**Alternative Transportation**, Bicycle Storage & Changing Rooms	1
1			Credit 4.3	**Alternative Transportation**, Low-Emitting & Fuel Efficient Vehicles	1
1			Credit 4.4	**Alternative Transportation**, Parking Capacity	1
1			Credit 5.1	**Site Development**, Protect or Restore Habitat	1
1			Credit 5.2	**Site Development**, Maximize Open Space	1
1			Credit 6.1	**Stormwater Design**, Quantity Control	1
1			Credit 6.2	**Stormwater Design**, Quality Control	1
0			Credit 7.1	**Heat Island Effect**, Non-Roof	1
1			Credit 7.2	**Heat Island Effect**, Roof	1
1			Credit 8	**Light Pollution Reduction**	1

Yes	?	No		
3			**Water Efficiency**	5 Points

1			Credit 1.1	**Water Efficient Landscaping**, Reduce by 50%	1
0			Credit 1.2	**Water Efficient Landscaping**, No Potable Use or No Irrigation	1
1			Credit 2	**Innovative Wastewater Technologies**	1
0			Credit 3.1	**Water Use Reduction**, 20% Reduction	1
1			Credit 3.2	**Water Use Reduction**, 30% Reduction	1

LEED for New Construction v 2.2

Registered Project Checklist

Yes	?	No			
12			**Energy & Atmosphere**		**17Points**
Yes			Prereq 1	**Fundamental Commissioning of the Building Energy Systems**	Required
Yes			Prereq 1	**Minimum Energy Performance**	Required
Yes			Prereq 1	**Fundamental Refrigerant Management**	Required

***Note for EAc1:** All LEED for New Construction projects registered after June 26, 2007 are required to achieve at least two (2) points.

10			Credit 1	**Optimize Energy Performance**		1 to 10
				Credit 1.1	10.5% New Buildings / 3.5% Existing Building Renovations	1
				Credit 1.2	14% New Buildings / 7% Existing Building Renovations	2
				Credit 1.3	17.5% New Buildings / 10.5% Existing Building Renovations	3
				Credit 1.4	21% New Buildings / 14% Existing Building Renovations	4
				Credit 1.5	24.5% New Buildings / 17.5% Existing Building Renovations	5
				Credit 1.6	28% New Buildings / 21% Existing Building Renovations	6
				Credit 1.7	31.5% New Buildings / 24.5% Existing Building Renovations	7
				Credit 1.8	35% New Buildings / 28% Existing Building Renovations	8
				Credit 1.9	38.5% New Buildings / 31.5% Existing Building Renovations	9
			-->	Credit 1.10	42% New Buildings / 35% Existing Building Renovations	10
1			Credit 2	**On-Site Renewable Energy**		1 to 3
			-->	Credit 2.1	2.5% Renewable Energy	1
				Credit 2.2	7.5% Renewable Energy	2
				Credit 2.3	12.5% Renewable Energy	3
0			Credit 3	**Enhanced Commissioning**		1
0			Credit 4	**Enhanced Refrigerant Management**		1
0			Credit 5	**Measurement & Verification**		1
1			Credit 6	**Green Power**		1

Yes	?	No		
5			**Materials & Resources**	13 Points

Yes			Prereq 1	**Storage & Collection of Recyclables**	Required
1			Credit 1.1	**Building Reuse,** Maintain 75% of Existing Walls, Floors & Roof	1
0			Credit 1.2	**Building Reuse,** Maintain 95% of Existing Walls, Floors & Roof	1
1			Credit 1.3	**Building Reuse,** Maintain 50% of Interior Non-Structural Elements	1
0			Credit 2.1	**Construction Waste Management**, Divert 50% from Disposal	1
1			Credit 2.2	**Construction Waste Management**, Divert 75% from Disposal	1
0			Credit 3.1	**Materials Reuse**, 5%	1
1			Credit 3.2	**Materials Reuse**, 10%	1
0			Credit 4.1	**Recycled Content**, 10% (post-consumer + 1/2 pre-consumer)	1
0			Credit 4.2	**Recycled Content**, 20% (post-consumer + 1/2 pre-consumer)	1
0			Credit 5.1	**Regional Materials**, 10% Extracted, Processed & Manufactured	1
0			Credit 5.2	**Regional Materials**, 20% Extracted, Processed & Manufactured	1
0			Credit 6	**Rapidly Renewable Materials**	1
1			Credit 7	**Certified Wood**	1

Yes	?	No		
12			**Indoor Environmental Quality**	15 Points

Yes			Prereq 1	**Minimum IAQ Performance**	Required
Yes			Prereq 2	**Environmental Tobacco Smoke (ETS) Control**	Required
0			Credit 1	**Outdoor Air Delivery Monitoring**	1
1			Credit 2	**Increased Ventilation**	1
1			Credit 3.1	**Construction IAQ Management Plan,** During Construction	1
1			Credit 3.2	**Construction IAQ Management Plan**, Before Occupancy	1
1			Credit 4.1	**Low-Emitting Materials**, Adhesives & Sealants	1
1			Credit 4.2	**Low-Emitting Materials**, Paints & Coatings	1
1			Credit 4.3	**Low-Emitting Materials**, Carpet Systems	1
1			Credit 4.4	**Low-Emitting Materials**, Composite Wood & Agrifiber Products	1
0			Credit 5	**Indoor Chemical & Pollutant Source Control**	1
1			Credit 6.1	**Controllability of Systems**, Lighting	1
1			Credit 6.2	**Controllability of Systems**, Thermal Comfort	1
1			Credit 7.1	**Thermal Comfort,** Design	1
1			Credit 7.2	**Thermal Comfort,** Verification	1
0			Credit 8.1	**Daylight & Views,** Daylight 75% of Spaces	1
1			Credit 8.2	**Daylight & Views,** Views for 90% of Spaces	1

LEED for New Construction v 2.2

Registered Project Checklist

Yes	?	No			
1	4		**Innovation & Design Process**		5 Points
	1		Credit 1.1	**Innovation in Design:** Provide Specific Title	1
	1		Credit 1.2	**Innovation in Design:** Provide Specific Title	1
	1		Credit 1.3	**Innovation in Design:** Provide Specific Title	1
	1		Credit 1.4	**Innovation in Design:** Provide Specific Title	1
1			Credit 2	**LEED® Accredited Professional**	1

www.highline.edu

Highline
COMMUNITY COLLEGE

MS 24-1
P.O. Box 98000
Des Moines, WA 98198-9800

phone
(206) 878-3710, ext. 3260
fax
(206) 870-3768

Facilities Department

located at
2400 S. 240th Street, Des Moines, WA.

May 4, 2010

Mr. Stuart Simpson, Green Building Advisor
Department of General Administration
P.O. Box 41012
Olympia, WA 98504-1012

RE: Exemption Declaration for LEED, Building 9 at Highline Community College

Dear Mr. Simpson:

As requested I am attaching the Exemption Declaration Form and LEED scorecard of credits. This letter will describe our reasons for the request to be exempt from the LEED process for our project Building 9, State of Washington Project Number 2010-033 (G) 1-1.

Highline Community College was not aware that this project should be considered for a LEED certification until very late in the design process. When we were informed of this goal, the construction documents were already 95% complete. It was not feasible to redo the documents in an attempt to obtain the LEED goal as the delays and costs would have impacted the project severely. We understand that similar projects have estimated design costs for LEED goals at $45,000 to $60,000 and potential costs from the general contractor could approach $50,000. Our design costs could have been potentially higher as we would have had to scrap completed designs and redo them.

The funding for the project is primarily to achieve sound attenuation. The Port of Seattle is contributing approximately 70% of the funds and the balance from Highline. Our budget could not accommodate a serious LEED effort.

While LEED certification is not a goal for Building 9, HCC is pursuing the following green goals:

- Electrical metering of the building to track energy consumption and costs
- Reports of energy use to the GA using the Energy Star Portfolio Manager software
- Specification section 01575 Waste Material Disposal will set goals for the general contractor to reduce waste; reuse/salvage/recycle unavoidable waste; and develop a plan to achieve these goals
- Highline is pursuing possible rebates from Puget Sound Energy

- Implementation of Green cleaning practices and supply materials

Future projects at Highline Community College will be evaluated at the conceptual stage for the possibility of LEED certification. This will allow a realistic assessment of funding, design fees and construction costs.

Thank you for your consideration of our request for LEED exemption for this project. Please contact me if you have any questions.

Sincerely,

Barry Holldorf
Director of Facilities

Attachments: Exemption Declaration
LEED Scorecard

Cc: Larry Yok, Highline
Mike Dooley, Highline
Suzy Holmes, Highline
Jerry Osborn, Stemper Architects

High-Performance Green Buildings

Exemption Declaration

Received by GA:

Date: 13-May-10

Submit to: sustainableba@ga.wa.gov

Project Name	Building 9, Project Number 2010-033G(1-1)	Agency/Institution	Highline Community College
Project Number	2010 033G(1-1)	GA H-P Green Bldg #	

	Name	Agency	Phone	E-Mail
Submitted By:	Barry Holldorf	Highline Community C.	206.878.3710	bholldorf@highline.edu

Conceptual Construction Cost Estimate	$1,809,695
Total Facility Square Footage Estimate	11,700
Project Location/Address	HCC, Des Moines, WA

Facility Type Exemption*	Exempt Space Approx %
Transmitter Building	
Pumping Station	
Hospital (not including skilled nursing)	
Research Facilities with Laboratories	

Agency Representative Signature Block

Signature

Name:

Title:

"Not Practicable" Exemption**	Yes/No
The project will seek US Green Bldg. Council LEED Certification***	No
The project will participate in the GA LEED QA process**	No
The project will take no further action regarding LEED.	No further action

Agency Representative Signature Block

Barry Holldorf

Signature

Name: BARRY HOLLDORF

Facilities Manager

This Exemption Submittal includes the following:

Provide a one page description of why the exemption is being sought. ☒

Provide a LEED Checklist indicating which LEED Credits may be "practicable" for the project. ☒ LEED Score attempting 50

* If a "Facility Type" exemption is requested and verified, no further submittals are required.

** If a "Not Practicable" exemption is requested, the project should pursue LEED to the level that is "practicable" for the project. Projects are encouraged to participate in the GA LEED QA process and subsequent annual reporting of the energy and water/sewer consumption to GA. This will demonstrate a "Good Faith" effort consistent with the intent of RCW 39.35D. Complete the appropriate GA LEED QA forms as the project progresses through the design and construction process. Feedback from GA will help projects to achieve the proposed LEED goal and will help to maximize utility incentives.

*** If the project continues to seek LEED Certification the project should also participate in the GA LEED QA process.

Form Last Updated
April 2006

LEED 2009 for New Construction and Major Renovation

Project Checklist

Building 9 Project Number 2010-033 G (1-1)

Date:May 13, 2010

17	0	0	Sustainable Sites		Possible Points: 26
Y	N	?			
Y			Prereq 1	Construction Activity Pollution Prevention	
1			Credit 1	Site Selection	1
3			Credit 2	Development Density and Community Connectivity	5
			Credit 3	Brownfield Redevelopment	1
5			Credit 4.1	Alternative Transportation—Public Transportation Access	6
1			Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1
			Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3
2			Credit 4.4	Alternative Transportation—Parking Capacity	2
1			Credit 5.1	Site Development—Protect or Restore Habitat	1
1			Credit 5.2	Site Development—Maximize Open Space	1
1			Credit 6.1	Stormwater Design—Quantity Control	1
1			Credit 6.2	Stormwater Design—Quality Control	1
			Credit 7.1	Heat Island Effect—Non-roof	1
1			Credit 7.2	Heat Island Effect—Roof	1
			Credit 8	Light Pollution Reduction	1

4	0	0	Water Efficiency		Possible Points: 10
Y			Prereq 1	Water Use Reduction—20% Reduction	
			Credit 1	Water Efficient Landscaping	2 to 4
				☐ Reduce by 50%	2
				☐ No Potable Water Use or Irrigation	4
2			Credit 2	Innovative Wastewater Technologies	2
2			Credit 3	Water Use Reduction	2 to 4
				☐ Reduce by 30%	2
				☐ Reduce by 35%	3
				☐ Reduce by 40%	4

13	0	0	**Energy and Atmosphere**		**Possible Points: 35**
Y			Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y			Prereq 2	Minimum Energy Performance	
Y			Prereq 3	Fundamental Refrigerant Management	
12			Credit 1	Optimize Energy Performance	1 to 19
				☐ Improve by 12% for New Buildings or 8% for Existing Building Renovations	1
				☐ Improve by 14% for New Buildings or 10% for Existing Building Renovations	2
				☐ Improve by 16% for New Buildings or 12% for Existing Building Renovations	3
				☐ Improve by 18% for New Buildings or 14% for Existing Building Renovations	4
				☐ Improve by 20% for New Buildings or 16% for Existing Building Renovations	5
				☐ Improve by 22% for New Buildings or 18% for Existing Building Renovations	6
				☐ Improve by 24% for New Buildings or 20% for Existing Building Renovations	7
				☐ Improve by 26% for New Buildings or 22% for Existing Building Renovations	8
				☐ Improve by 28% for New Buildings or 24% for Existing Building Renovations	9
				☐ Improve by 30% for New Buildings or 26% for Existing Building Renovations	10
				☐ Improve by 32% for New Buildings or 28% for Existing Building Renovations	11
				☐ Improve by 34% for New Buildings or 30% for Existing Building Renovations	12
				☐ Improve by 36% for New Buildings or 32% for Existing Building Renovations	13
				☐ Improve by 38% for New Buildings or 34% for Existing Building Renovations	14
				☐ Improve by 40% for New Buildings or 36% for Existing Building Renovations	15
				☐ Improve by 42% for New Buildings or 38% for Existing Building Renovations	16
				☐ Improve by 44% for New Buildings or 40% for Existing Building Renovations	17
				☐ Improve by 46% for New Buildings or 42% for Existing Building Renovations	18
				☐ Improve by 48%+ for New Buildings or 44%+ for Existing Building Renovations	19
			Credit 2	On-Site Renewable Energy	1 to 7
				☐ 1% Renewable Energy	1
				☐ 3% Renewable Energy	2
				☐ 5% Renewable Energy	3
				☐ 7% Renewable Energy	4
				☐ 9% Renewable Energy	5
				☐ 11% Renewable Energy	6
				☐ 13% Renewable Energy	7
			Credit 3	Enhanced Commissioning	2
			Credit 4	Enhanced Refrigerant Management	2
1			Credit 5	Measurement and Verification	3
			Credit 6	Green Power	2

7	0	0		**Materials and Resources**	**Possible Points: 14**
Y			Prereq 1	Storage and Collection of Recyclables	
3			Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3
				☐ Reuse 55%	1
				☐ Reuse 75%	2
				☐ Reuse 95%	3
1			Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements	1
2			Credit 2	Construction Waste Management	1 to 2
				☐ 50% Recycled or Salvaged	1
				☐ 75% Recycled or Salvaged	2
1			Credit 3	Materials Reuse	1 to 2
				☐ Reuse 5%	1
				☐ Reuse 10%	2
			Credit 4	Recycled Content	1 to 2
				☐ 10% of Content	1
				☐ 20% of Content	2
			Credit 5	Regional Materials	1 to 2
				☐ 10% of Materials	1
				☐ 20% of Materials	2
			Credit 6	Rapidly Renewable Materials	1
			Credit 7	Certified Wood	1

7	0	0		**Indoor Environmental Quality**	**Possible Points: 15**
Y			Prereq 1	Minimum Indoor Air Quality Performance	
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	
			Credit 1	Outdoor Air Delivery Monitoring	1
1			Credit 2	Increased Ventilation	1
			Credit 3.1	Construction IAQ Management Plan—During Construction	1
			Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
1			Credit 4.1	Low-Emitting Materials—Adhesives and Sealants	1
			Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
			Credit 4.3	Low-Emitting Materials—Flooring Systems	1
1			Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
			Credit 5	Indoor Chemical and Pollutant Source Control	1
1			Credit 6.1	Controllability of Systems—Lighting	1
1			Credit 6.2	Controllability of Systems—Thermal Comfort	1
1			Credit 7.1	Thermal Comfort—Design	1
			Credit 7.2	Thermal Comfort—Verification	1
			Credit 8.1	Daylight and Views—Daylight	1
1			Credit 8.2	Daylight and Views—Views	1

2	0	0	**Innovation and Design Process**		**Possible Points: 6**
1			Credit 1.1	Innovation in Design: Specific Title	1
			Credit 1.2	Innovation in Design: Specific Title	1
			Credit 1.3	Innovation in Design: Specific Title	1
			Credit 1.4	Innovation in Design: Specific Title	1
			Credit 1.5	Innovation in Design: Specific Title	1
1			Credit 2	LEED Accredited Professional	1
0	0	0	**Regional Priority Credits**		**Possible Points: 4**
			Credit 1.1	Regional Priority: Specific Credit	1
			Credit 1.2	Regional Priority: Specific Credit	1
			Credit 1.3	Regional Priority: Specific Credit	1
			Credit 1.4	Regional Priority: Specific Credit	1
50	0	0	**Total**		**Possible Points: 110**

Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

HISTORIC SEATTLE
Educate Advocate Preserve

MEMORANDUM

TO: Janet Rogerson, Heritage Capital Projects Fund Coordinator
FROM: Kji Kelly, Deputy Director
DATE: May 15, 2014
SUBJECT: **High-Performance Green Buildings Exemption Declaration - "Not Practicable" Exemption**

An exemption was granted from meeting LEED silver standards for Washington Hall Rehabilitation Phases 1 and 2. Historic Seattle is asking for an exemption for Phase 3 as well. Our organization does however continue to make incremental energy efficient improvements to the building. These items include:

- Installation of insulation in both the exterior walls and attic
- Restoration of exterior windows
- Rehabilitation of the boiler system
- Installation of insulation on boiler piping
- Installation of wireless thermostat controls
- Installation of low flow toilets

Historic Seattle will most certainly demonstrate a "good faith" effort to be consistent with the intent of RCW 39.35D. We currently are participating in the City of Seattle's Energy Benchmarking Program utilizing the Energy Star Portfolio Manager.

1117 Minor Ave.
Seattle, WA 98101

Tel. 206.622.6952
Fax. 206.622.1197

www.HistoricSeattle.org
info@HistoricSeattle.org

High-Performance Green Buildings

Exemption Declaration

Received by DES:

Date: 15-May-14

Submit to: Sustainability@des.wa.gov

Project Name: Washington Hall Restoration Project

Agency/Institution:

Project Number:

	Name	Agency	Phone	E-Mail
Submitted By:	Eugenia Woo	Historic Seattle	206.622.6952	eugeniaw@historicseattle.org

Conceptual Construction Cost Estimate

Total Facility Square Footage Estimate

Project Location/Address

Facility Type Exemption*	Exempt Space Approx. %
Transmitter Building	
Pumping Station	
Hospital (not including skilled nursing)	
Research Facilities with Laboratories	

Agency Representative Signature Block

Signature

Name:

Title:

"Not Practicable" Exemption**	Yes/No
The project will seek US Green Bldg. Council LEED Certification***	No
The project will participate in the DES LEED QA process**	Yes
The project will take no further action regarding LEED.	No

Agency Representative Signature Block

Eugenia Woo

Signature

Name: Eugenia Woo

Title: Director of Preservation Services

This Exemption Submittal includes the following:

Provide a one page description of why the exemption is being sought on Agency Letterhead. ☒

Provide a LEED Checklist indicating which LEED Credits may be "practicable" for the project. ☐

LEED Score attempting

* If a "Facility Type" exemption is requested and verified, no further submittals are required.

** If a "Not Practicable" exemption is requested, the project should pursue LEED to the level that is "practicable" for the project. Projects are encouraged to participate in the DES LEED QA process and subsequent annual reporting of the energy and water/sewer consumption to DES. This will demonstrate a "Good Faith" effort consistent with the intent of RCW 39.35D. Complete the appropriate DES LEED QA forms as the project progresses through the design and construction process. Feedback from DES will help projects to achieve the proposed LEED goal and will help to maximize utility incentives.

*** If the project continues to seek LEED Certification the project should also participate in the DES LEED QA process.

Form Last Updated
April 2006

ATTACHMENT J
HIGH-PERFORMANCE GREEN BUILDINGS EXEMPTION DECLARATION FROM
Pacific Science Center

May 15, 2014

Re: High-Performance Green Buildings Exemption Declaration

To Whom It May Concern

Pacific Science Center seeks a High Performance Green Buildings exemption for HCPF 2015-2017 as related to the Yamasaki Courtyard Restoration Project-Stair Repair and Terrazzo Cleaning. The project encompasses the exterior stairs located at the main entry point to the Yamasaki Courtyard as well as the deep cleaning and sealing of the Courtyard's terrazzo walkway surfaces. While the total project encompasses 55,000 sq. ft., less than 5000 sq. ft. involves actual stair repair work. The total project cost does not exceed 50% of the assessed value and no architectural review is required for this work. In addition, Pacific Science Center is part of the Living Building Challenge with the goal of achieving net zero water and energy within two decades. As a landmark, no significant new building can be anticipated and all efforts are focused on repair, maintenance and sustainability.

Sincerely,

Scott McConnell

Facilities Manager

PACIFIC SCIENCE CENTER

200 Second Avenue N
Seattle, Washington
98109-4895

206-443-2001
pacificsciencecenter.org

Pacific Science Center is an independent not-for-profit educational institution that inspires lifelong interest in science, math and technology by engaging diverse communities through interactive and innovative exhibits and programs.

High-Performance Green Buildings

Exemption Declaration

Received by DES:

Date: 14-May-14

Submit to: Sustainability@des.wa.gov

Project Name:	Yamasak Courtyard Renewal Project - Stair Repair & T	Agency/Institution	Pacific Science Center
Project Number:			

	Name	Agency	Phone	E-Mail
Submitted By:				

Conceptual Construction Cost Estimate

Total Facility Square Footage Estimate

Project Location/Address

Facility Type Exemption*	Exempt Space Approx. %
Transmitter Building	
Pumping Station	
Hospital (not including skilled nursing)	
Research Facilities with Laboratories	

Agency Representative Signature Block

Signature

Name:

Title:

"Not Practicable" Exemption**	Yes/No
The project will seek US Green Bldg. Council LEED Certification***	No
The project will participate in the DES LEED QA process**	No
The project will take no further action regarding LEED.	Yes

Agency Representative Signature Block

Signature

Name:

Title: Facilites Manager

This Exemption Submittal includes the following:

Provide a one page description of why the exemption is being sought on Agency Letterhead.	x		
Provide a LEED Checklist indicating which LEED Credits may be "practicable" for the project.	n/a	LEED Score attempting	

* If a "Facility Type" exemption is requested and verified, no further submittals are required.

** If a "Not Practicable" exemption is requested, the project should pursue LEED to the level that is "practicable" for the project. Projects are encouraged to participate in the DES LEED QA process and subsequent annual reporting of the energy and water/sewer consumption to DES. This will demonstrate a "Good Faith" effort consistent with the intent of RCW 39.35D. Complete the appropriate DES LEED QA forms as the project progresses through the design and construction process. Feedback from DES will help projects to achieve the proposed LEED goal and will help to maximize utility incentives.

*** If the project continues to seek LEED Certification the project should also participate in the DES LEED QA process.

Form Last Updated
April 2006

PENINSULA COLLEGE

September 22, 2014

Sidney Hunt
Department of Enterprise Services
Engineering & Architectural Services
1500 Jefferson Street SE
PO Box 41401
Olympia, WA 98504-1401
sidney.hunt@des.wa.gov

Re: Project 2012-050 – Fort Worden Building 202 Renovation

Dear Sidney Hunt:

Peninsula College is requesting an exemption for the Fort Worden Building 202 renovation project from the requirement of RCW 39.35D.030, that the project be designed, constructed and certified to at least the LEED silver standard.

This project involves the renovation of an historic building on the Fort Worden State Park campus. The building was originally constructed around 1901 and the renovation will comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties as well as other historic preservation requirements. The project renovates the approximately 14,000 square foot building into a higher education facility with classrooms, a learning lab, student study space, reception, advising and faculty offices.

The rehabilitation of historic buildings creates some unique conditions and certain constraints. At the end of schematic design it became necessary to pursue a less expensive mechanical system than was originally anticipated. The initial LEED checklist for the project was on the borderline for achieving LEED Silver with a far more expensive mechanical system and the less expensive mechanical system selected was deemed not a good candidate for LEED points. Other renovation requirements meant that additional funds for enhancing building performance to the level of LEED silver were not available.

While the college is requesting an exemption from the LEED silver requirement, it should be noted that upgrades to the building with renovation should significantly impact building performance overall. The project has received a Department of Commerce Energy Efficiency Grant. Energy conservation measures include upgrades to the building envelope, lighting and controls, domestic heating plant and plumbing. The Investment Grade Audit completed for the grant submission projects a reduction of the EUI from a baseline of 39.8 to 19.2.

Peninsula College is committed to sustainability and the goal on this project is to implement as many measures as possible to achieve a rating near or at LEED silver. The college, along with the design team and the contractor will work in good faith to ensure as many measures as possible are met. In addition, to the extent the college can participate or facilitate energy and water consumption reporting after construction, it will. This project is located at Fort Worden State Park and within the campus area managed by the Fort Worden Public Development Authority.

A copy of the LEED checklist, completed during schematic design, is attached. This checklist assumes the mechanical system later deemed to be cost prohibitive.

Peninsula College is dedicated to ensuring that Fort Worden Building 202 is an efficient and sustainable facility and will continue to seek opportunities to integrate LEED standards as the project progresses.

If you have any questions, please feel free to contact Laura Price, Capital Coordinator, at 360-417-6263 or lprice@pencol.edu. Thank you.

Sincerely,

Deborah Frazier
Vice-President for Finance and Administration

LEED 2009 for New Construction and Major Renovations

Project Checklist

Fort Worden Building 202 Renovation

Schematic Design - 20 June 2012

Y	?	N			
8	1	17	**Sustainable Sites**		Possible Points: **26**
Y			Prereq 1	Construction Activity Pollution Prevention	
1			Credit 1	Site Selection	1
2		3	Credit 2	Development Density and Community Connectivity	5
		1	Credit 3	Brownfield Redevelopment	1
1		5	Credit 4.1	Alternative Transportation—Public Transportation Access	6
1			Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1
		3	Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3
		2	Credit 4.4	Alternative Transportation—Parking Capacity	2
1			Credit 5.1	Site Development—Protect or Restore Habitat	1
1			Credit 5.2	Site Development—Maximize Open Space	1
		1	Credit 6.1	Stormwater Design—Quantity Control	1
		1	Credit 6.2	Stormwater Design—Quality Control	1
1			Credit 7.1	Heat Island Effect—Non-roof	1
		1	Credit 7.2	Heat Island Effect—Roof	1
	1		Credit 8	Light Pollution Reduction	1

3	1	6	**Water Efficiency**		Possible Points: **10**
Y			Prereq 1	Water Use Reduction—20% Reduction	
		4	Credit 1	Water Efficient Landscaping	2 to 4
		2	Credit 2	Innovative Wastewater Technologies	2
3	1		Credit 3	Water Use Reduction	2 to 4

11	8	16	**Energy and Atmosphere**		Possible Points: **35**
Y			Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y			Prereq 2	Minimum Energy Performance	
Y			Prereq 3	Fundamental Refrigerant Management	
6	6	7	Credit 1	Optimize Energy Performance	1 to 19
		7	Credit 2	On-Site Renewable Energy	1 to 7
1	1		Credit 3	Enhanced Commissioning	2
1		1	Credit 4	Enhanced Refrigerant Management	2
1	1	1	Credit 5	Measurement and Verification	3
2			Credit 6	Green Power	2

11		3	**Materials and Resources**		Possible Points: **14**
Y			Prereq 1	Storage and Collection of Recyclables	
3			Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3
		1	Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements	1
2			Credit 2	Construction Waste Management	1 to 2
2			Credit 3	Materials Reuse	1 to 2

Y	?	N			
			Materials and Resources, Continued		
2			Credit 4	Recycled Content	1 to 2
1		1	Credit 5	Regional Materials	1 to 2
		1	Credit 6	Rapidly Renewable Materials	1
1			Credit 7	Certified Wood	1

10	3	2	**Indoor Environmental Quality**		Possible Points: **15**
Y			Prereq 1	Minimum Indoor Air Quality Performance	
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	
1			Credit 1	Outdoor Air Delivery Monitoring	1
		1	Credit 2	Increased Ventilation	1
1			Credit 3.1	Construction IAQ Management Plan—During Construction	1
1			Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
1			Credit 4.1	Low-Emitting Materials—Adhesives and Sealants	1
1			Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
1			Credit 4.3	Low-Emitting Materials—Flooring Systems	1
1			Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
1			Credit 5	Indoor Chemical and Pollutant Source Control	1
	1		Credit 6.1	Controllability of Systems—Lighting	1
		1	Credit 6.2	Controllability of Systems—Thermal Comfort	1
	1		Credit 7.1	Thermal Comfort—Design	1
	1		Credit 7.2	Thermal Comfort—Verification	1
1			Credit 8.1	Daylight and Views—Daylight	1
1			Credit 8.2	Daylight and Views—Views	1

6			**Innovation and Design Process**		Possible Points: **6**
1			Credit 1.1	Innovation in Design: Specific Title	1
1			Credit 1.2	Innovation in Design: Specific Title	1
1			Credit 1.3	Innovation in Design: Specific Title	1
1			Credit 1.4	Innovation in Design: Specific Title	1
1			Credit 1.5	Innovation in Design: Specific Title	1
1			Credit 2	LEED Accredited Professional	1

1	1	2	**Regional Priority Credits**		Possible Points: **4**
1			Credit 1.1	Regional Priority: Specific Credit	1
	1		Credit 1.2	Regional Priority: Specific Credit	1
		1	Credit 1.3	Regional Priority: Specific Credit	1
		1	Credit 1.4	Regional Priority: Specific Credit	1

50	14	46	**Total**		Possible Points: **110**

Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

High-Performance Green Buildings

Exemption Declaration

Received by DES:

Date: 22-Sep-14

Submit to: Sustainability@des.wa.gov

Project Name:	Fort Worden Building 202 Project	Agency/Institution	Peninsula College
Project Number:	2012-050		

	Name	Agency	Phone	E-Mail
Submitted By:	Deborah Frazier	Peninsula College	360-417-6202	dfrazier@pencol.edu

Conceptual Construction Cost Estimate	$4,455,000
Total Facility Square Footage Estimate	14,000
Project Location/Address	Building 202, Fort Worden State Park, Port Townsend, WA

Facility Type Exemption*	Exempt Space Approx. %	Agency Representative Signature Block
Transmitter Building		
Pumping Station		
Hospital (not including skilled nursing)		Signature
Research Facilities with Laboratories		Name:
		Title:

"Not Practicable" Exemption**	Yes/No	Agency Representative Signature Block
The project will seek US Green Bldg. Council LEED Certification***	No	
The project will participate in the GA LEED QA process**	Yes - as possible	
The project will take no further action regarding LEED.		Signature
		Name: Deborah Frazier
		Title: Vice-President for Finance and Administration

This Exemption Submittal includes the following:

Provide a one page description of why the exemption is being sought on Agency Letterhead. ☒

Provide a LEED Checklist indicating which LEED Credits may be "practicable" for the project. ☒ LEED Score attempting 50

* If a "Facility Type" exemption is requested and verified, no further submittals are required.

** If a "Not Practicable" exemption is requested, the project should pursue LEED to the level that is "practicable" for the project. Projects are encouraged to participate in the DES LEED QA process and subsequent annual reporting of the energy and water/sewer consumption to DES. This will demonstrate a "Good Faith" effort consistent with the intent of RCW 39.35D. Complete the appropriate DES LEED QA forms as the project progresses through the design and construction process. Feedback from DES will help projects to achieve the proposed LEED goal and will help to maximize utility incentives.

*** If the project continues to seek LEED Certification the project should also participate in the DES LEED QA process.

Form Last Updated
April 2006

SUSTAINABLE DESIGN NARRATIVE

for

Green Hill School

Intensive Management Unit (IMU)

Chehalis, Washington

The BCRA Design Team analysis of the IMU finds that while the building may comply with many LEED requirements it is not practicable to meet ***any*** LEED standard. However, sustainable design concepts *will be* implemented throughout the design and construction of the new IMU building at Green Hill School.

The Design Team and the Stakeholders conducted a LEED Workshop. This Workshop provided a complete review of the Leadership in Energy and Environmental Design (LEED) Rating System, Version 2.2, as published by the U.S. Green Building Council (USGBC). The workshop revealed that LEED credits apply more directly to an office type building than they do to a maximum security correctional type of building. LEED credits that are desirable and achievable in an office type of setting are not desirable or practical in an IMU building. LEED professionals are discussing this issue, industry wide in North America, and are considering another ‘lesser’ category to accommodate this type of building.

Many design principals for a maximum security correctional type facility fight against sustainable design principles. For example, in an office building it makes sense to give occupants windows with direct views to the outside and give them enough glazing area to achieve a 2% daylighting factor. However, in an IMU, for security and maintenance concerns, it does not make sense to give the occupants the window placement or the amount of glazing that the LEED credits require. Another example, it makes sense in an office building to install sensor controlled low flow plumbing fixtures and other technologies that help the facility to minimize water usage. However, in an IMU, the plumbing fixtures need to resist clogging as a priority for safety and function. Other IMU design principles that go against sustainable principles are site lighting (bright lights for high security cause light pollution), vegetation for shading (shade trees block ‘line-of-sight’ views for security), energy performance (state codes requiring 100% exhaust in resident rooms obviates energy performance), recycled content (CMU and concrete have low or no recycled content), rapidly renewable materials, low-emitting adhesives, sealants and coatings (epoxy and other durable coatings and sealants will not achieve LEED requirements), and controllability of systems (not practical to allow residents to control lights, heat etc.).

During design and in construction of a building, the incorporation of LEED elements is not a precise science. The documentation required by USGBC to prove a LEED level of performance is tenuous and unpredictable at best. It is good practice to target 2 to 3 points higher than minimum LEED performance level target requirements. A “certified” (lowest) level of LEED is between 26-32 points. Therefore, a project aiming for a “certified” rating should be targeting a minimum of 28-29 points. The IMU (near end of DD is 18 Yes points w/ 6 Maybe points. Therefore, even if ALL of the maybe’s became Yes (not very probable) our total would be 24 and we’d fall short of the required points. Anything less than 26 fails.

The IMU does achieve 70% of the lowest ‘Certified’ LEED level and, as such, should still be considered as a new building which incorporates sustainable principles. Sustainable principles are realized through the use of design strategies that enhance building performance, reduce operating costs, maintain long term value, increase indoor air quality and provide a connection to the outside environment to the maximum extent practicable. The IMU will provide a fully functional, practical environment to its occupants.

The IMU is deemed, by a USGBC Certified LEED AP as ‘*not practicable’* to meet any LEED standard.

End of IMU Sustainable Design Narrative

July 2, 2012

Mr. Stuart Simpson
Sustainability Coordinator
Department of General Administration
PO Box 41012
Olympia, WA 98504

Re: Alaskan Way Viaduct Replacement Program - SR 99 Tunnel Project
North Operations Building, Design Development – Request for Exemption

Dear Mr. Simpson:

This letter is to advise your office that the Washington State Department of Transportation is seeking an exemption from the LEED Silver Certification requirement on the SR 99 Tunnel Project north operations building. Due to the specialized nature of the building it isn't possible to meet the Energy & Atmosphere Prerequisite 2 which requires demonstrating a 10% improvement in the building performance rating. This building provides power for not only the basic building systems, but in addition all the tunnel systems located in the building and the tunnel systems located in the two-mile long tunnel. The majority of the building will be used for tunnel electrical, mechanical, and communications equipment. Approximately 12% of the space is for tunnel maintenance staff and 32% is for tunnel maintenance shops. The systems located in the building are in operation every day, 24 hours a day, 7 days a week supporting the tunnel.

Although WSDOT is asking for this exemption, please be assured that we are performing the work required to meet the requirements for 52 LEED credits. Some of the ways the LEED credits are being met and other design considerations include:

- Siting: The building was sited to make use of a parcel of land that due to the tunnel location would have been unusable by a private developer.
- Square footage: Through a value engineering exercise and the design/builder's design, the building's square footage has been reduced.
- Limited parking / use of alternative transportation modes: Since the building is located in an urban area and is within walking distance of numerous bus routes we are only providing parking for the WSDOT fleet vehicles and car/van pools.
- Landscaping: We have worked with the City of Seattle to maximize the plantings around the building and along the streets. The plantings have been selected for their durability and low water usage. Even though they're not on the site and can't count towards the credit for reduction of heat gain, we are providing funding for 181 trees for the north portal area (81 replacement trees and 100 new trees).
- Other credits: We are meeting many of the credit requirements for ventilation, air quality, day lighting for staff offices and crew rooms, and use of recycled materials.

- Commissioning: The design and construction of the building is through a WSDOT design/build contract. For project commissioning the design/builder is required to meet one of the following guidelines: GSA – General Service Administration Commissioning Guidelines, ACG – Associated Commissioning Group Guidelines, or BCx – Building Commissioning Guidelines. The design/builder is required to provide the commissioning agent (CxA), who shall be certified and registered by ACG or BCx. The CxA must be separate from the designer. All tunnel and building systems are required by contract to be commissioned. Other than the CxA being contracted through the design/build contractor, our project requirements meet the LEED EA Credit 3 requirements.

I am attaching the following documents for your review:

- Exemption Declaration
- Updated LEED checklist
- Environmental Design Considerations.

If you have any questions, please call me at 206-440-4399 or email hilmod@wsdot.wa.gov.

Sincerely,

Diane M. Hilmo, P.E.
Project Manager

Cc: sustainable@ga.wa.gov
Terri Sinclair-Olson
Susan Everett

SR 99 Alaskan Way Viaduct Replacement - Tunnel, North Tunnel Operations Building

LEED-NC v 3

Draft JUNE 26, 2012

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	SUSTAINABLE SITES					
Prerequisite 1	**Construction Activity Pollution Prevention** **Intent: To reduce pollution from construction activities by controlling soil erosion, waterway sedimentation and airborne dust generation.**					
	Create and implement an erosion and sedimentation control plan for all construction activities associated with the project. The plan must conform to the erosion and sedimentation requirements of the 2003 EPA Construction General Permit OR local standards and codes, whichever is more stringent. The plan must describe the measures implemented to accomplish the following objectives: Prevent loss of soil during construction by storm water run-off and/or wind erosion, including protecting topsoil by stock-piling for reuse. Prevent sedimentation of storm sewer or receiving streams. Prevent polluting the air with dust and particulate matter. See reference guide for further information.	**REQ**	**YES**			An erosion and sedimentation control plans have been developed for all construction activities. Stabilization strategies may include (seeding, mulching) and structural strategies (earth dikes, silt fencing, sediment traps and/or sediment basins). The site does not contain existing topsoil. Storm water will not be discharged into a stream, dust and particulate matter permit requirements will be complied with.
Credit 1	**Site Selection** **Intent: To avoid development of inappropriate sites and reduce the environmental impact from the location of a building on a site.**					
	Do not develop buildings, hardscapes, roads or parking area on portions of sites that meet any one of the following criteria:	1	1			LEED boundary is the property line. The site was previously an office building and parking lot.
	.. Prime farmland as defined by the USDA in United States Code of Federal Regulations Title 7, Volume 6, Parts 400 to 699, Section 657.5 (citation 7CFR657.5).					Not farmland
	.. Previously undeveloped land whose elevation is lower than 5 feet above the elevation of the 100-year flood as defined by FEMA.					Previously developed
	.. Land specifically identified as habitat for any species on the Federal or State threatened or endangered lists					Previously developed
	.. Within 100 feet of any wetlands as defined by United State Code of Federal Regulations 40 CFR, Parts 230-233 and Part 22, and isolated wetlands or areas of special concern identified by state or local rule, OR within setback distances from wetlands prescribed in state or local regulations, as defined by local or state rule or law, whichever is more stringent.					Not near wetland
	.. Previously undeveloped land that is within 50 feet of a water body, defined as seas, lakes, rivers, streams and tributaries which support or could support fish, recreation or industrial use, consistent with the terminology of the Clean Water Act.					Previously developed
	.. Land which prior to acquisition for the project was public parkland, unless land of equal or greater value as parkland is accepted in trade by the public land (Park Authority projects are exempt)					Not parkland
Credit 2	**Development Density & Community Connectivity** **Intent: To channel development to urban areas with existing infrastructure, protecting green fields and preserve habitat and natural resources.**					
	OPTION 1: DEVELOPMENT DENSITY - Construct or renovate building on a previously developed site AND in a community with a minimum density of 60,000 sq. ft... per acre net. (Note: density calculation must include the area of the project being built and is based on a typical two-story downtown development.)					
	OPTION 2: COMMUNITY CONNECTIVITY - Construct or renovate building on a site that meets the following criteria: Is located on a previously developed site, is within 1/2 mile of a residential zone or neighborhood with an average density of 10 units per acre net, is within 1/2 mile of at least 10 Basic Services and has pedestrian access between the building and the services. See reference guide for further information.	5	5			The site is located on a previously developed site, is within 1/2 mile of a residential zone with an average density of 10 units per acre net, it is within 1/2 mile of at least 10 Basic Services and has pedestrian access between the building and the services.
Credit 3	**Brownfield Redevelopment** **Intent: To rehabilitate damaged sites where development is complicated by environmental contamination, reducing pressure on undeveloped land.**					
	OPTION 1. Develop on a site documented as contaminated (by means of an ASTM E1903-97 Phase II Environmental Site Assessment or a local Voluntary Cleanup Program)	1	1			Either Option 1 or Option 2 will be met. Per the project Environmental Baseline Report PCE, TCE and VOCs have been

SR 99 Alaskan Way Viaduct Replacement - Tunnel, North Tunnel Operations Building

Draft JUNE 26, 2012

LEED-NC v 3

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	OPTION 2: Develop on a site defined as a brown field by a local state or federal government agency					found in the vicinity due to several dry cleaners previously located
Credit 4	**Alternative Transportation** **Intent: To reduce pollution and land development impacts from automobile use.**					
	4.1 OPTION 1: Locate project within 1/2 mile walking distance (measured from main building entrance) of an existing-or planned and funded-commuter rail, light rail or subway station. OPTION 2: Locate project within 1/4 mile walking distance of 1 or more stops for two or more public or campus or private bus lines usable by building occupants.	6	6			Option 2 Documentation will be provided showing the location of the multiple bus lines and stops within 1/4 mile walking distance.
	4.2 For commercial or institutional buildings, provide secure bicycle racks and/or storage (within 200 yards of a building entrance) for 5% or more of all bldg. users (measured at peak periods), AND, provide shower and changing facilities in the building, or within 200 yards of a building entrance, for 0.5% of Full-Time Equivalent (FTE) occupants. OR For residential buildings, provide covered storage facilities for securing bicycles for 15% or more of building occupants in lieu of changing/shower facilities.	1	1			Shower and changing facilities will be provided (4 showers (2-Men, 2-Women) and secure bike parking to be provided within the building. 17 FTEs will report on a daily basis to the building. (Regional Priority Credit)
	4.3 OPTION 1: Provide preferred parking for low-emitting and fuel-efficient vehicles for 5% of the total vehicle parking capacity of the site. Providing a discounted parking rate is an acceptable substitute for preferred parking for low-emitting and fuel-efficient vehicles. Incentive: Parking rate must be discounted at least 20%, available to all customers, publicly posted and available for a minimum of 2 yrs. OPTION 2: Install alternative-fuel refueling stations for 3% of the total vehicle parking capacity of the site (liquid or gaseous fueling facilities must be separately ventilated or located outdoors.)	3		3		Option 1: Parking is only provided for WSDOT maintenance vehicle fleet. The majority of WSDOT maintenance vehicles use diesel which is required to have a minimum of 10% ethanol. Newer vehicles can use E85. Electrical plug-ins for tunnel maintenance vehicles are provided in the building.
	4.4 OPTION 1: Size parking capacity to meet but not exceed minimum local zoning requirements and provide preferred parking for carpools or van pools for 5% of the total provided parking spaces. OPTION 2: For projects that provide parking for less than 5% of FTE building occupants - provide preferred parking for carpools or van pools, marked as such, for 5% of total provided parking spaces. Providing a discounted parking rate is an acceptable substitute for preferred parking for low-emitting and fuel-efficient vehicles. Incentive: Parking rate must be discounted at least 20%, available to all customers, publicly posted and available for a minimum of 2 yrs. OPTION 3: Provide no new parking.	2	2			Option 1: City of Seattle Municipal Code SMC 23.54.015, minimum parking requirements are up to the discretion of the Director for unique building uses not shown on the SMC parking tables. Off street parking shall be provided for all fleet vehicles. These spaces do not count toward the minimum parking requirements. The parking lot is for WSDOT maintenance vehicle fleet. 2 spaces will be provided for car/van pool vehicles. (Regional Priority Credit)
Credit 5	**Site Development** **Intent: To conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.**					
	5.1 PROTECT OR RESTORE HABITAT - On Greenfield sites, limit all site disturbance to the following parameters: 40 feet beyond the building perimeter, 10 feet beyond surface walkways, patios, surface parking and utilities less than 12 inches in diameter; 15 feet beyond primary roadway curbs and main utility branch trenches; and 25 feet beyond constructed areas with permeable surface (such as pervious paving areas, storm water detention facilities and playing fields) that require additional staging areas to limit compaction in the constructed area -OR - on previously developed or graded sites, restore or protect a minimum of 50% of the site area (excluding the building footprint) or 20% of the total site (including building footprint) whichever is greater with native or adapted vegetation. Projects earning SS Credit 2: Development Density & Community Connectivity may include vegetated roof surface in this calculation if the plants are native or adapted, provide habitat and promote biodiversity	1			1	
	Intent: Provide a high ration of open space to development footprint to promote biodiversity.					
	5.2 MAXIMIZE OPEN SPACE - Sites with local zoning open space requirements: Reduce the development footprint (defined as the total area of the building footprint, hardscape, access roads and parking) and/or provide vegetated open space within the project boundary such that the amount of open space exceeds local zoning requirements by 25% -OR- Sites with no local zoning requirements (i.e., some university campuses, military bases): Provide vegetated open space area adjacent to building that is equal to the building footprint -OR- Sites with zoning ordinance but no open space requirement: Provide vegetated open space equal to 20% of the project's site area. For projects that earn SS Credit 2, vegetated roof areas and pedestrian oriented hardscape can contribute to credit compliance. A minimum of 25% of the open space counted must be vegetated	1	1			Total open space on site is 31% of total area within property lines, which includes pedestrian oriented hardscape, and vegetated portion of this open space is 40% **Documentation:** The project asbuilts and calculations will be provided.

SR 99 Alaskan Way Viaduct Replacement - Tunnel, North Tunnel Operations Building

LEED-NC v 3

Draft JUNE 26, 2012

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
Credit 6	**Storm water Design** **Intent: To limit disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration, reducing or eliminating pollution from storm water runoff and eliminating contaminants.**					
	6.1 **QUANTITY CONTROL** : CASE 1, OPTION 1: Sites with EXISTING IMPERVIOUSNESS 50% OR LESS - Implement a storm water management plan that prevents the post-development peak discharge rate and quantity from exceeding the pre-development peak discharge rate and quantity for the one-and two-year, 24-hour design storms -OR- OPTION 2:Implement a storm water management plan that protects receiving stream channels from excessive erosion. The storm water management plan must include a stream channel protection strategy and quantity control strategies. CASE 2. EXISTING IMPERVIOUSNESS IS GREATER THAN 50% - Implement a storm water management plan that results in a 25% decrease in the volume of storm water runoff from the two-year, 24-hour design storm.	1	1			CASE 2 detention vault provided under building
	Intent: Reduce or eliminate water pollution of natural water flows by managing storm water runoff.					
	6.2 QUALITY CONTROL: Implement a storm water management plan that reduces impervious cover, promotes infiltration, and captures and treats the storm water runoff from 90% of the average annual rainfall using acceptable best management practices (BMPs). BMPs used to treat runoff must be capable of removing 80% of the average annual post development total suspended solids (TSS) load based on existing monitoring reports. BMPs are considered to meet these criteria if: (1) they are designed in accordance with standards and specifications from a state or local program that has adopted these performance standards, OR (2) there exists in-field performance monitoring data demonstrating compliance with the criteria. Data must conform to accepted protocol (e.g., Technology Acceptance Reciprocity Partnership [TARP], Washington State Department of Ecology) for BMP monitoring.	1			1	
Credit 7	**Heat Island Effect** **Intent: To reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impacts to microclimates and human and wildlife habitats.**					
	7.1 **NON-ROOF**: OPTION 1 - Use any combination of the following strategies for 50% of the site hardscape (including roads, sidewalks, courtyards and parking lots): shade (from existing tree canopy or within 5 years of installation), shade from structures covered by solar panels that produce energy used to offset some nonrenewable resource use, shade from architectural devices or structures that have a solar reflectance index (SRI) of at least 29, hardscape materials with a SRI of at least 29, use of an open grid pavement system (at least 50% pervious) -OR: OPTION 2 - Place a minimum of 50% of parking spaces under cover (defined as underground, under deck, under roof, or under a building). Any roof used to shade or cover parking must have an SRI of at least 29, be a vegetated roof or covered by solar panels that produce energy used to offset some nonrenewable resource use.	1	1			Achieve with use of SRI 29 hardscape and shade trees for 50% of hardscape.
	7.2 **ROOF**: OPTION 1: Use roofing materials having a Solar Reflectance Index (SRI) equal to or greater than the values in the reference guide table for a minimum of 75% of the roof surface. OPTION 2: Install a vegetated roof for at least 50% of the roof area. OPTION 3: Install high albedo and vegetated room surfaces that, in combination, meet the criteria shown in the reference guide.	1	1			Option 1: Roof material to be selected to meet SRI requirements.
Credit 8	**Light Pollution Reduction** **Intent: Minimize light trespass from the building and site, reduce sky-glow to increase night sky access, improve nighttime visibility through glare reduction, and reduce development impact on nocturnal environments.**					

SR 99 Alaskan Way Viaduct Replacement - Tunnel, North Tunnel Operations Building

Draft JUNE 26, 2012

LEED-NC v 3

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	Project teams must comply with 1 of the 2 options for interior lighting and the requirement for exterior lighting. INTERIOR LIGHTING: OPTION 1: Reduce the input power (by automatic device) of all nonemergency interior luminaries with a direct line of sight to any openings in the envelope (translucent or transparent) by at least 50% between 11 p.m and 5 a.m. After-hours override may be provided by a manual or occupant-sensing device provided the override lasts no more than 30 minutes. OR - OPTION 2: All openings in the envelope (translucent or transparent) with a direct line of sight to any nonemergency luminaries must have shielding (controlled/closed by automatic device for a resultant transmittance of less than 10% between 11 p.m. and 5 a.m.) AND EXTERIOR LIGHTING: Light areas only as required for safety and comfort. Lighting power densities must not exceed ANSI/ASHRAE/ IESNA Standard 90.1-2007, without amendments. See reference guide for further information.	1	1			Interior Lighting - Option 1. Exterior Lighting - only areas required to be lit for safety and comfort will be lit.
	SUSTAINABLE SITES TOTAL	**26**	**21**	**3**	**2**	
	WATER EFFICIENCY					
Prerequisite 1	**Water Use Reduction** **Intent: To increase water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.**					
	Employee strategies that in aggregate use 20% less water than the water use baseline calculated for the building (not including irrigation). Calculate the baseline according to the commercial baselines indicated in the reference guide.	**REQ**	**YES**			Install flow restrictors and/or reduced flow aerators on lavatory sinks and shower fixtures; install automatic faucet sensors, install low flow, high efficiency fixtures.
Credit 1	**Water Efficient Landscaping** **Intent: To limit or eliminate the use of potable water, or other natural surface or subsurface water resources available on or near the project site, for landscape irrigation.**					
	OPTION 1: REDUCE BY 50%: Reduce potable water consumption for irrigation by 50% from calculated mid-summer baseline case. Reductions must be attributed to any combination of the following items: Plant species, density & microclimate factor, irrigation efficiency, use of captured rainwater, recycled wastewater or water treated and conveyed by a public agency specifically for non-potable uses.	2	2			Plantings are being provided to meet this credit. WSDOT policy is to turn off irrigation once plantings are established.
	OPTION 2: Achieve Option 1 and: Use only captured rainwater, recycled wastewater, recycled gray water, or water treated and conveyed by a public agency specifically for non-potable uses for irrigation -OR- Install landscaping that does not require permanent irrigation systems. Temporary irrigation systems used for plant establishment are allowed only if removed within one year of installation.	2			2	
Credit 2	**Innovative Wastewater Technologies** **Intent: To reduce wastewater generation and potable water demand while increasing the local aquifer recharge.**					
	OPTION 1: Reduce potable water use for building sewage conveyance by 50% through the use of water-conserving fixtures (water closets, urinals) or non-potable water (captured rainwater, recycled gray water, and on-site or municipally treated wastewater). -OR OPTION 2 - Treat 50% of wastewater on-site to tertiary standards. Treated water must be infiltrated or used on-site.	2			2	
Credit 3	**Water Use Reduction** **Intent: To further increase water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.**					
	Employ strategies that in aggregate use **30%** less water than the water use baseline calculated for the building (not including irrigation) after meeting Energy Policy Act of 1992, 2005 and UBC or IBC 2006 fixture performance requirements. Calculations are based on estimated occupant usage and must include only the following fixtures and fixture fittings (as applicable to the project scope): water closets, urinals, lavatory faucets, showers, kitchen sink faucets and pre-rinse spray valves.	2	2			Use ultra-low flow fixtures with sensors.

SR 99 Alaskan Way Viaduct Replacement - Tunnel, North Tunnel Operations Building

LEED-NC v 3

Draft JUNE 26, 2012

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	Employ strategies that in aggregate use **35%** less water than the water use baseline calculated for the building (not including irrigation) after meeting the Energy Policy Act of 1992 fixture performance requirements. Calculations are based on estimated occupant usage and shall include only the following fixtures: water closets, urinals, lavatory faucets, showers and kitchen sinks.	1			1	
	Employ strategies that in aggregate use **40%** less water than the water use baseline calculated for the building (not including irrigation) after meeting the Energy Policy Act of 1992 fixture performance requirements. Calculations are based on estimated occupant usage and shall include only the following fixtures: water closets, urinals, lavatory faucets, showers and kitchen sinks.	1			1	
	WATER EFFICIENCY TOTAL					
		10	**4**	**0**	**6**	
	ENERGY & ATMOSPHERE					
Prerequisite 1	**Fundamental Commissioning of the Building Energy Systems** **Intent: To verify that the project's energy related systems are installed, calibrated and perform according to the WSDOT's project requirements, basis of design, and construction documents.**					
	1) Benefits of commissioning include reduced energy use, lower operating costs, reduced contractor callbacks, better building documentation, improved occupant productivity and verification that the systems perform in accordance with the WSDOT's project requirements.	**REQ**	**YES**			Commissioning agent will be provided by contractor. Building GSF is under 50,000 GSF so the commissioning agent can be on the design or construction team if they have experience on at least 2 previous projects. The Design/Builder will provide a commissioning agent in conformance with the contract requirements.
Prerequisite 2	**Minimum Energy Performance** **Intent: To establish the minimum level of energy efficiency for the proposed building and systems to reduce environmental and economic impacts associated with excessive energy use.**					
	OPTION 1: WHOLE BUILDING ENERGY SIMULATION - Demonstrate a 10% improvement in the proposed building performance rating for new buildings, or a 5% improvement in the proposed building performance rating for major renovations to existing buildings, compared with the baseline building performance. Calculate the baseline building performance rating according to the building performance rating method in Appendix G of ANSI/ASHRAE/IESNA 90.1-2007 (with errata but without addenda) using a computer simulation model for the whole building project.	**REQ**			**NO**	Option 1 can not be met. The building provides electricity for the tunnel equipment located inside the building, 2 miles of tunnel systems, tunnel maintenance shops, and tunnel crew offices and support spaces. Final electrical connected load calculations have not been completed. However based on tunnel systems connected loads compared to the building systems connected loads it isn't possible to demonstrate a 10% improvement in the building's performance rating.
	OPTION 2: PRESCRIPTIVE COMPLIANCE PATH: Appendix Advanced Energy Design Guide - Comply with the prescriptive measures of the Advanced Energy Design Guide appropriate to the project scope. See reference guide for compliance paths.	**REQ**			**NO**	Option 2 can not be met because there is no ASHRAE Advanced Energy Design Guide that applies to this unique building type.
	OPTION 3: PRESCRIPTIVE COMPLIANCE PATH: Advanced Buildings Core Performance Guide - Comply with the prescriptive measures identified in the Advanced Buildings Core Performance Guide developed by the New Buildings Institute. See reference guide for requirements.	**REQ**			**NO**	Option 3 can not be met because there is no Advanced Building Core Performance Guide that applies to this unique building type.
Prerequisite 3	**CFC Reduction in HVAC&R Equipment** **Intent: To reduce stratospheric ozone depletion.**					
	Zero use of CFC-based refrigerants in new base building HVAC&R systems. When reusing existing base building HVAC equipment, complete a comprehensive CFC phase-out conversion prior to project completion. Phase-out plans extending beyond the project completion date will be considered on their merits.	**REQ**	**YES**			No CFC based refrigerants will be used.
Credit 1	**Optimize Energy Performance** **Intent: To achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use.**					

SR 99 Alaskan Way Viaduct Replacement - Tunnel, North Tunnel Operations Building **Draft JUNE 26, 2012**

LEED-NC v 3

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	Select one of the three compliance paths described in the reference guide. OPTION 1: WHOLE BUILDING ENERGY SIMULATION (1-19 points) Calculate baseline building performance according to Appendix G of ANSI/ASHRAE/IESNA standard 90.1-2007 (with errata but without addenda). OPTION 2: PRESCRIPTIVE COMPLIANCE PATH: ASHRAE Advanced Energy Design Guide (1 point) OPTION 3: PRESCRIPTIVE COMPLIANCE PATH: Advanced Buildings Core Performance Guide (1-3 points)	19			19	The building provides electricity for the tunnel equipment located inside the building, 2 miles of tunnel systems, tunnel maintenance shops, and tunnel crew offices and support spaces. Final electrical connected load calculations have not been completed. However based on tunnel systems connected loads compared to the building systems connected loads it isn't possible to demonstrate the following improvements in the building's performance rating to gain these points. 12% - 1 point, 14% - 2 points, 16% - 3 points, 18% - 4 points, 20% - 5 points, etc. up to 48% - 19 points, (Regional Priority Credit - Option 1 48%)
Credit 2	**On-Site Renewable Energy** **Intent: To encourage and recognize increasing levels of on-site renewable energy self-supply in order to reduce environmental and economical impacts associated with fossil fuel energy use.**					
	Use on-site renewable energy systems to offset building energy cost. Calculate project performance by expressing the energy produced by the renewable systems as a percentage of the building's annual energy cost and using the table in the reference guide to determine the number of points achieved. %RENEWABLE ENERGY: 1%=1 POINT, 3%=2 POINTS, 5%=3 POINTS, 7%=4 POINTS, 9%= 5 POINTS, 11%= 6 POINTS, 13%= 7 POINTS. See reference guide for further information.	7			7	(Regional Priority Credit - 13%)
Credit 3	**Enhanced Commissioning** **Intent: To begin the commissioning process early in the design process and execute additional activities after systems performance verification is completed.**					
	Implement or have a contract in place to implement the following additional commissioning process activities in addition to the requirements of EA Prerequisite 1 and in accordance with this LEED-V3 Reference Guide, 2009 Edition: 1. Prior to the start of the construction documents phase, designate an independence Commissioning Authority to lead, review, and oversee the completion of all commissioning process activities. See reference guide. 2. CxA must conduct, at a minimum, one commissioning design review of the WSDOT's Project Requirements, Basis of Design, and design documents prior to mid-construction documents phase and back-check the review comments in the subsequent design submission. 3. CxA must review contractor submittals applicable to systems being commissioned. 4. Develop a systems manual. 5. Verify the requirements for training operating personnel and building occupants are completed. 6. The CxA must be involved in reviewing building operation with O&M staff and occupants within 10 months after substantial completion.	2				Under the WSDOT design/build contract requirements commissioning will be done by the Design/Builder's CxA.
Credit 4	**Enhanced Refrigerant Management** **Intent: To reduce ozone depletion and support early compliance with the Montreal Protocol while minimizing direct contributions to global warming.**					
	Option 1: Do not use refrigerants. **Option 2**: Select refrigerants and HVAC&R that minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change AND do not install fire suppression systems that contain ozone-depleting substances (CFC's, HCFCs or Halons. See reference guide for further information.	2	2			Option 2.
Credit 5	**Measurement and Verification** **Intent: To provide for the ongoing accountability of building energy consumption over time.**					

SR 99 Alaskan Way Viaduct Replacement - Tunnel, North Tunnel Operations Building

LEED-NC v 3

Draft JUNE 26, 2012

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	Option1: Develop and implement a Measurement & Verification (M&V) Plan consistent with Option D: Calibrated Simulation (Savings Estimation Method 2), or **Option 2**: Develop and implement a Measurement & Verification (M&V) Plan consistent with Option B: Energy Conservation Measure Isolation, as specified in the International Performance Measurement & Verification Protocol. The M&V period shall cover a period of no less than one year of post-construction occupancy.	3			3	Metering is being provided in compliance with Code requirements.
Credit 6	**Green Power** **Intent: To encourage the development and use of grid-source, renewable energy technologies on a net zero pollution basis.**					
	Engage in at least a two year renewable energy contract to provide at least 35% of the building's electricity from renewable sources as defined by the Center for Resource Solutions (CRS) Green-e product certification requirements. All purchases of green power shall be based on the quantity of energy consumed, not the cost. DETERMINE THE BASELINE ELECTRICITY USE: Use the annual electricity consumption from the results of EA Credit 1 OR ESTIMATE BASELINE ELECTRICITY USE: use the Dept. of Energy Commercial Buildings Energy Consumption Survey database to determine the estimated electricity use.	2			2	
	ENERGY & ATMOSPHERE TOTAL					
		35	2	0	31	
	MATERIALS & RESOURCES					
Prerequisite 1	**Storage & collection of recyclables** **Intent: To facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills.**					
	Provide an easily accessible dedicated area that serves the entire building and is dedicated to the collection and storage of non-hazardous materials for recycling including (at a minimum) paper, corrugated cardboard, glass, plastics, and metals.	REQ	YES			An area located in the receiving area will be dedicated to the collection and storage of non-hazardous materials for recycling including paper, corrugated cardboard, plastics, and metals.
Credit 1	**Building Reuse - Maintain Existing Walls, Floors and Roof** **Intent: To extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.**					
	1.1 Building Reuse - Maintain Existing Walls, Floors and Roof. Maintain at least **55%** of the existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and non-structural roofing material). Hazardous materials that are remediated as a part of the project scope shall be excluded from the calculation of the percentage maintained. If the project includes an addition to an existing building that is more than 2 times the sq. ft. of the existing building, this credit is not applicable	1			1	(Regional Priority Credit - 55%)
	1.1 Building Reuse - Maintain Existing Walls, Floors and Roof. Maintain at least **75%** of the existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and non-structural roofing material). Hazardous materials that are remediated as a part of the project scope shall be excluded from the calculation of the percentage maintained. If the project includes an addition to an existing building that is more than 2 times the sq. ft. of the existing building, this credit is not applicable.	1			1	
	1.1 Building Reuse - Maintain Existing Walls, Floors and Roof. Maintain at least **95%** of the existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and non-structural roofing material). Hazardous materials that are remediated as a part of the project scope shall be excluded from the calculation of the percentage maintained. If the project includes an addition to an existing building that is more than 2 times the sq. ft. of the existing building, this credit is not applicable.	1			1	
	1.2 Building Reuse - Maintain Interior Nonstructural Elements: Use existing interior nonstructural elements (e.g., interior walls, doors, floor coverings and ceiling systems) in at least 50% (by area) of the competed building, including additions. If the project includes an addition with square footage more than 2 times the square footage of the existing building, this credit is not applicable	1			1	

SR 99 Alaskan Way Viaduct Replacement - Tunnel, North Tunnel Operations Building **Draft JUNE 26, 2012**

LEED-NC v 3

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
Credit 2	**Const Waste Management** **Intent: To divert construction, demolition, and land clearing debris from disposal in landfills and incineration facilities. Redirect recyclable recovered resources back to the manufacturing process and reusable materials to appropriate sites.**					
	(Divert 50% from Disposal) Recycle and/or salvage at least **50%** of non-hazardous construction and demolition debris Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or commingled. Excavated soil and land clearing debris does not contribute to this credit. Calculations can be done by weight or volume, but must be consistent throughout.	1	1			Construction waste disposal firm will sort and recycle or salvage construction waste or debris.
	(Divert 75% from Disposal) Recycle and/or salvage an additional 25% beyond MR Credit 2.1 (75% total) of non-hazardous construction and demolition debris.	1	1			Construction waste disposal firm will sort and recycle or salvage construction waste or debris.
Credit 3	**Materials Reuse** **Intent: To reuse building materials and products to reduce demand for virgin materials and reduce waste, thereby reducing impacts associated with the extraction and processing of virgin resources**					
	3.1 (5%) Use salvaged, refurbished or reused materials, the sum of which constitutes at least **5%**, based on cost, of the total value of materials on the project. Mechanical, electrical and plumbing components and specialty items such as elevators and equipment cannot be included in this calculation. Only include materials permanently installed in the project. Furniture may be included, providing it is included consistently in MR credits 3-7.	1			1	Concrete rubble to be reused through project. Furniture will be reused from other WSDOT locations.
	3.1 (10%) Use salvaged, refurbished or reused materials for an additional 5% beyond MR Credit 3.1 (**10%** total, based on cost).	1			1	
Credit 4	**Recycled Content** **Intent: To increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from the extraction and processing of virgin materials.**					
	(10% post consumer + 1/2 pre-consumer) Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least **10%** (based on cost) of the total value of the materials in the project. The recycled content value of a material assembly shall be determined by weight. The recycled fraction of the assembly is then multiplied by the cost of the assembly to determine the recycled content value. Mechanical, electrical and plumbing components and specialty items such as elevators shall not be included in this calculation. Only include materials permanently installed in the project. Furniture may be included providing it is included consistently in MR credits 3-7. Recycled content shall be defined in accordance with the ISO 14021.	1	1			Establish a project goal for recycled content materials and identify material suppliers that can achieve this goal. Materials that could assist in reaching this goal: steel, rebar (90% recycled content), concrete, CMU, carpeting, ceiling tiles, metal panels.
	(20% post consumer + 1/2 pre-consumer) Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes an additional **10%** beyond MR Credit 4.1 (total 20%, based on cost) of the total materials in the project	1			1	
Credit 5	**Local/Regional materials** **Intent: To increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.**					
	(10% Extracted, Processed & Manufactured Regionally) Use building materials or products that have been extracted, harvested or recovered and manufactured, within 500 miles of the project site for a minimum of **10%** (based on costs) of the total materials value. If only a fraction of a product or material is extracted/harvested/recovered and manufactured locally, then only that percentage (by weight) must contribute to the regional value. Mechanical, electrical and plumbing components and specialty items such as elevators and equipment shall not be included in this calculation. Only include materials permanently installed in the project. Furniture may be included, providing it is included consistently in MR credits 3-7.	1	1			Concrete will be locally manufactured. Other possible materials include: precast, concrete, gypsum, glass, millwork, carpet, plantings, compost, and signage.
	(20% Extracted, Processed & Manufactured Regionally) Use building materials or products that have been extracted, harvested or recovered and manufactured, within a radius of 500 miles of the project site for an additional 10% beyond MR Credit 5.1 (total of **20%** based on cost) of the materials value.	1			1	

SR 99 Alaskan Way Viaduct Replacement - Tunnel, North Tunnel Operations Building

LEED-NC v 3

Draft JUNE 26, 2012

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
Credit 6	**Rapidly renewable materials** **Intent: Reduce the use and depletion of finite raw, and long life-cycle renewable materials by replacing them with rapidly renewable materials.**					
	Use rapidly renewable building materials and products for 2.5% of the total value of all building materials and products used in the project, based on cost. Rapidly renewable building materials and products are made from plants that are typically harvested with a ten-year cycle or shorter.	1			1	
Credit 7	**Certified Wood** **Intent: To encourage environmentally responsible forest management.**					
	Use a minimum of 50% (based on cost) of wood-based materials and products that are certified in accordance with the Forest Stewardship Council's (FSC) Principles and Criteria, for wood building components. These components include, but are not limited to, structural framing and general dimensional framing, flooring, sub-flooring, wood doors and finishes. Only include materials permanently installed in the project. Wood products purchased for temporary use on the project (e.g., formwork, bracing, scaffolding, sidewalk protection and guard rails) may be included in the calculation at the project team's discretion. If any such materials are included, all such materials must be included in the calculation. Furniture may be included, providing it is included consistently in MR Credits 3-7.	1	1			Obtaining credit will depend on market availability and costs
	MATERIALS & RESOURCES TOTAL	14	5	0	9	
	INDOOR ENVIRONMENTAL QUALITY					
Prerequisite 1	**Minimum Indoor Air Quality Performance** **Intent: To establish minimum indoor air quality (IAQ) performance to enhance indoor air quality in buildings, thus contributing to the comfort and well being of the occupants**					
	Meet the minimum requirements of Sections 4 through 7 of ASHRAE 62.1 - 2007, Ventilation for Acceptable Indoor Air Quality (with errata but without addenda). Mechanical ventilation systems must be designed using the Ventilation Rate Procedure or the applicable local code, whichever is more stringent. Naturally ventilated buildings shall comply with ASHRAE 62.1-2007, paragraph 5.1 (with errata but without addenda	REQ	YES			
Prerequisite 2	**Environmental Tobacco Smoke Control** **Intent: To minimize exposure of building occupants, indoor surfaces, and ventilation air distribution systems to Environmental Tobacco Smoke (ETS).**					
	OPTION 1: Prohibit smoking in the building. Locate any exterior designated smoking areas at least 25 ft. away from entries, outdoor air intakes and operable windows. Provide signage to allow smoking in designated areas.	REQ	YES			WSDOT does not allow smoking in state buildings, and will designate exterior smoking area in accordance with state and local laws.
	OPTION 2: Prohibit smoking in the building except in designated smoking areas. Locate any exterior designated smoking areas at least 25 ft. away from entries, outdoor air intakes and operable windows. Provide designated smoking rooms designed to contain, capture and remove ETS from the building. At a minimum, the smoking room must be directly exhausted to the outdoors, away from air intakes and building entry paths, with no re-circulation of ETS-containing air to non-smoking areas and enclosed with impermeable deck -to-deck partitions. (See reference manual for additional requirements.)					
	OPTION 3: (for residential buildings only) Prohibit smoking in all common areas of the building. Locate any exterior designated smoking areas at least 25 ft away from entries, outdoor air intakes and operable windows opening to common areas. Minimize uncontrolled pathways for ETS transfer between individual residential units by sealing penetrations in walls, ceilings and floors in the residential units, and by sealing vertical chases adjacent to the units. All doors in the residential units leading to common hallways shall be weather-stripped or pressurized to minimize air leakage into the hallway. (See reference manual for additional requirements.)					
Credit 1	**Outdoor Air Delivery Monitoring** **Intent: To provide capacity for ventilation system monitoring to help promote occupant comfort and well being.**					

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	Install permanent monitoring systems to ensure that ventilation systems maintain design minimum requirements. Configure all monitoring equipment to generate an alarm when the airflow values or carbon dioxide (CO2) levels vary by 10% or more from the design values via, either a building automation system alarm to the building operator or a visual or audible alert to the building occupants. (See reference manual for requirements for mechanically ventilated and naturally ventilated spaces.)	1	1			
Credit 2	**Increase Ventilation** **Intent: To provide additional outdoor air ventilation to improve indoor air quality and promote occupant comfort, well-being and productivity.**					
	For mechanically ventilated spaces - increase breathing zone outdoor air ventilation rates to all occupied spaces by at least 30% above the minimum rates required by ASHRAE standard 62.1-2007 (with errata but without addenda) as determined by IEQ Prerequisite 1. For naturally ventilated spaces - design natural ventilation systems for occupied spaces to meet the recommendations set forth in the Carbon Trust Good Practice Guide 237 (1998). Determine that natural ventilation is an effective strategy for the project by following the flow diagram process shown in Figure 1.18 of the CIBSE Applications Manual 10:2005, Natural ventilation in non-domestic buildings. See reference manual for additional requirements)	1			1	Could create an energy penalty. Mechanical system is only 100% OSA below 70 F when in cooling mode.
Credit 3	**Construction IAQ Management Plan** **Intent: To reduce indoor air quality problems resulting from construction or renovation and promote the comfort and well-being of construction workers and building occupants.**					
	3.1 **During Construction**: Develop and implement an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building as follows: During construction meet or exceed the recommended Control Measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings under Construction, 2nd Edition 2007, ANSI/SMACNA 008-2008 (Chapter 3) AND protect stored on-site or installed absorptive materials from moisture damage, AND if permanently installed air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 must be used at each return air grille, as determined by ASHRAE 52.2 - 1999. Replace all filtration media immediately prior to occupancy.	1	1			IAQ will be developed.
	3.2 **Before Occupancy** (OPTION 1, FLUSH-OUT): After construction, prior to occupancy and with all interior finishes installed, install new filtration media and perform a building flush-out by supplying a total air volume of 14,000 cu. ft... of outdoor air per sq. ft... of floor area while maintaining an internal temperature of at least 60 degrees and relative humidity no higher than 60%. OR If occupancy is desired prior to completion of the flush-out, the space may be occupied following delivery of a minimum of 3500 cu. ft... of outdoor air per sq. ft... of floor area to the space. (See reference guide for further information)	1	1			Option 1 : Building will be flushed out.
	3.2 **Before Occupancy** (OPTION 2, AIR QUALITY TESTING): Conduct baseline IAQ testing, after construction ends and prior to occupancy, using testing protocols consistent with the US EPA Compendium of Methods for the Determination of Air Pollutants in Indoor Air and as additionally detailed in the LEED reference guide for Green Building Design and Construction, 2009 Edition. See reference guide for additional requirements.					
Credit 4	**Low-Emitting Materials** **Intent: To reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.**					
	4.1 Adhesives & Sealants: All adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the following reference standards. (See reference guide for further information.)	1	1			Specify low-VOC materials in construction documents. Ensure that VOC limits are clearly stated in each section of the specifications where adhesives and sealants are addressed. Common products to evaluate include general construction adhesives, flooring adhesives, fire-stopping sealants, caulking, duct sealants, plumbing adhesives, and cove base adhesives.

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	4.2 Paints & Coatings: Paints and coatings used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the following criteria. (See reference guide for additional requirements)	1	1			Specify low-VOC paints and coatings in construction documents. Ensure that VOC limits are clearly stated in each section of the specifications where paints and coatings are addressed. Track the VOC content of all interior paints and coatings during construction.
	4.3 Carpet Systems: All carpet installed in the building interior must meet the testing and product requirements of the Carpet and Rug Institute's Green Label Plus program. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute's Green Label Plus program. All carpet adhesive shall meet the requirements of EQ Credit 4.1: VOC limit of 50 g/L. See reference guide for hard flooring, setting adhesives and grout.	1	1			Clearly specify requirements for product testing and/or certification in the construction documents. Select products that are either certified under the Green Label Plus program or for which testing has been done by qualified independent laboratories in accordance with the appropriate requirements.
	4.4 Composite Wood & Agri-fiber Products: Composite wood or agrifiber products used on the interior of the building (defined as inside of the weatherproofing system) shall contain no added urea-formaldehyde resins. Laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies shall contain no added urea-formaldehyde resins. Composite wood and agrifiber products are defined as: particleboard, medium density fiberboard (MDF), plywood, wheat board, strawboard, panel substrates and door cores. Materials considered fixtures, furniture, and equipment (FF&E) are not considered base building elements and are not included.	1	1			Specify wood and agrifiber products that contain no added urea-formaldehyde resins. Specify laminating adhesives for field and shop applied assemblies that contain no added urea-formaldehyde resins.
Credit 5	**Indoor chemical & pollutant source control** **Intent: To minimize building occupant exposure to potentially hazardous particulates and chemical pollutants.**					
	Design to minimize & control pollutant entry into buildings and later cross-contamination of regularly occupied areas.					
	Employ permanent entryway systems at least ten feet long in the primary direction of travel to capture dirt & particulates entering the building at regularly used exterior entrances. Acceptable entryway systems include permanently installed grates, grilles or slotted systems that allow for cleaning underneath. Roll-out mats are acceptable only when maintained on a weekly basis by a contracted service organization. Sufficiently exhaust each space where hazardous gases or chemicals may be present or used (including garages, housekeeping/laundry areas, shops of any kind, science labs, prep rooms and copying/printing rooms), to create negative pressure with respect to adjacent spaces with the doors to the room closed. For each of these spaces, provide self-closing doors and deck to deck partitions or a hard lid ceiling. (See reference guide for further information). In mechanically ventilated buildings, install new air filtration media in regularly occupied areas prior to occupancy; these filters must provide a Minimum Efficiency Reporting Value of 13 or better. Filtration should be applied to process both return and outside air that is to be delivered as supply air.	1			1	An entryway system will be installed in entry vestibules. Janitor's closets will have dedicated ventilation.
	Provide containment (i.e. a closed container for storage for off-site disposal in a regulatory compliant storage area, preferably outside the building) for appropriate disposal of hazardous liquid wastes in places where water and chemical concentrate mixing occurs (e.g., housekeeping, janitorial and science labs).					All hazardous liquid wastes scheduled for disposal will be contained in the appropriate container.
Credit 6	**Controllability of systems** **Intent: To provide a high level of lighting system control and/or thermal comfort system control by individual occupants or groups in multi-occupant spaces (i.e., classrooms or conference areas) to promote their productivity, comfort and well-being.**					
	6.1 **Lighting**: Provide individual lighting controls for 90% (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences. AND Provide lighting system controls for all shared multi-occupant spaces to enable adjustment that meets group needs and preferences.	1	1			Occupant control of systems will be used where applicable.

SR 99 Alaskan Way Viaduct Replacement - Tunnel, North Tunnel Operations Building

Draft JUNE 26, 2012

LEED-NC v 3

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	6.2 **Thermal Comfort**: Provide individual comfort controls for 50% (minimum) of the building occupants to enable adjustments to meet individual needs and preferences Operable windows can be used in lieu of controls for occupants located 20 feet inside and 10 feet to either side of the operable part of a window. (See reference guide for further information). AND Provide comfort system controls for all shared multi-occupant spaces to enable adjustments to meet group needs and preferences. (See reference guide for further information)	1	1			Building will have 17 FTEs. Occupant control of systems will be used where applicable. In multi-occupant spaces, provide one accessible means of control over thermal comfort in the space. Thermal comfort controls will be provided for 50% of occupants.
Credit 7	**Thermal Control** **Intent: To provide a comfortable thermal environment that supports occupant productivity and well-being. Provide for the assessment of building thermal comfort over time.**					
	7.1 **Design:** Design HVAC systems and the building envelope to meet the requirements of ASHRAE Standard 55-2004, Thermal Comfort Conditions for Human Occupancy. Demonstrate design compliance in accordance with the Section 6.1.1 Documentation.	1	1			Will meet ASHRAE 55.
	7.2 **Verification:** Agree to conduct a thermal comfort survey of building occupants within a period of six to 18 months after occupancy. This survey should collect anonymous responses about thermal comfort in the building including an assessment of overall satisfaction with thermal performance and identification of thermal comfort-related problems. Agree to develop a plan for corrective action if the survey results indicate that more than 20% of occupants are dissatisfied with thermal comfort in the building. This plan should include measurement of relevant environmental variables in problem areas in accordance with ASHRAE Standard 55-2004.	1	1			WSDOT to send out survey to meet this credit and will follow up on items identified by at least 20% of the survey respondents.
Credit 8	**Daylight and Views** **Intent: To provide for the building occupants a connection between Indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas of the building.**					
	8.1 - OPTION 1: Simulation - Demonstrate through computer simulations that 75% or more of all regularly occupied areas achieving daylight luminance levels of a minimum of 25 foot-candles. See reference guide for further information.	1				
	8.1 - OPTION 2: Prescriptive - For side lighting daylight zone - See reference guide for further information. For Top -lighting daylight Zone - See reference guide for further information.		1			Will be verified in final design, only spaces regularly occupied, shops will not be included in the evaluation.
	8.1 - OPTION 3: DAYLIGHT MEASUREMENT - Demonstrate, through records of indoor light measurements, that a minimum daylight illumination level of 25 foot-candles has been achieved in at least 75% (1 point) or 90% (2 points) of all regularly occupied areas. See reference guide for further information					
	8.1 - OPTION 4: COMBINATION - Any of the above calculation methods may be combined to document the minimum daylight illumination in at least 75% (1 point) or 90% (2 points) of all regularly occupied spaces. See reference guide for further information					
	8.2 Views for 90% of Spaces: Achieve direct line of sight to the outdoor environment via vision glazing between 30" and 90" above the finish floor for building occupants in 90% of all regularly occupied areas. Determine the area with direct line of sight by totaling the regularly occupied square footage that meets the following criteria: See reference guide for further information.	1	1			Only spaces regularly occupied to be included in the evaluation.
	INDOOR ENVIRONMENTAL QUALITY TOTAL	15	13	0	2	

SR 99 Alaskan Way Viaduct Replacement - Tunnel, North Tunnel Operations Building

LEED-NC v 3

Draft JUNE 26, 2012

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	INNOVATION & DESIGN/BUILD PROCESS					
	Intent: To provide design teams and projects the opportunity to be awarded points for exceptional performance above requirements set by the LEED-NC Green Building Rating System and/or innovative performance in Green Building categories not specifically addressed by the LEED Green Building Rating System. Note, innovations credits do not apply, if product/strategy aids in achievement of an existing LEED credit.					
Credit 1.1	Innovation/Process	1			1	
Credit 1.2	Innovation/Process	1	1			Green building operations/ housekeeping - exclusive use of non-toxic cleaning products to maintain building. Product MSDS will be provided.
Credit 1.3	Innovation/Process	1	1			Provide an educational program on the environmental and human health benefits of the green building practices implemented; which might include 1) displays on benefits of green buildings, windows viewing green features, real-time energy consumption data displays, 2) events or tours focused on educational outreach.
Credit 1.4	Innovation/Process	1	1			Buildings serving bored tunnel - demonstrate intent to reduce site disturbance through implementing a tunnel boring strategy. Create a narrative that describes the environmental benefits and significance of tunnel boring versus extensive trenching.
Credit 1.5	Innovation/Process	1			1	Operational strategies - Tunnel's energy use and air quality monitoring systems for the tunnel will be controlled remotely by facilities management system.
Credit 2	Accredited Professional	1	1			A LEED accredited architect prepared the LEED Checklist. The Design/Builder will provide a LEED accredited person during construction
	At least one principal participant of the project team shall be a LEED Accredited Professional (AP)					
	INNOVATION & DESIGN/BUILD PROCESS TOTAL	6	4	0	2	

SR 99 Alaskan Way Viaduct Replacement - Tunnel, North Tunnel Operations Building

Draft JUNE 26, 2012

LEED-NC v 3

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	Regional Priority					
	Through USGBC's regional councils, chapters and affiliates, regionally specific environmental priorities were identified. Depending on a project's specific location, six LEED credits that address regionally prioritized environmental issues have been assigned "bonus points." That means that a project can be awarded up to four extra points – one point each – for up to four of the priority credits.					
Credit 1.1	Regional Priority	1	1			SS c3 - Brownfield Redevelopment
Credit 1.2	Regional Priority	1	1			SS c4.2 - Alternative Transportation - showers and bike racks
Credit 1.3	Regional Priority	1	1			SS c4.4 - Alternative Transportation - Parking Capacity
Credit 1.4	Regional Priority	1			1	EA c1 - Optimize Energy Performance
Credit 1.5	Regional Priority	1			1	EA c2 - On-Site Energy Performance
Credit 1.6	Regional Priority	1			1	MR c1 1 - Building Reuse
	REGIONAL PRIORITY TOTAL - 4 points maximum	6	3	0	3	
	SUSTAINABLE SITES TOTAL	26	21	3	2	
	WATER EFFICIENCY TOTAL	10	4	0	6	
	ENERGY & ATMOSPHERE TOTAL	35	2	0	31	
	MATERIALS & RESOURCES TOTAL	14	5	0	9	
	INDOOR ENVIRONMENTAL QUALITY TOTAL	15	13	0	2	
	INNOVATION & DESIGN/BUILD PROCESS TOTAL	6	4	0	2	
	REGIONAL PRIORITY TOTAL - 4 points maximum	6	3	0	3	
	TOTAL PROJECT LEED POINTS:	112	52	3	55	

CERTIFICATION LEVELS: (100 base points; 6 possible I in D, and 4 Regional Priority points)

- Certified 40-49 points
- Silver 50-59 points
- Gold 60-79 points
- Platinum 80 points and above

SR 99 Alaskan Way Viaduct Replacement - Tunnel, South Tunnel Operations Building

LEED-NC v 3

JUNE 26, 2012 (draft)

	CREDIT INTENT & DESCRIPTION **SUSTAINABLE SITES**	POSSIBLE POINTS	YES	??	NO	STRATEGY
Prerequisite 1	**Construction Activity Pollution Prevention** **Intent: To reduce pollution from construction activities by controlling soil erosion, waterway sedimentation and airborne dust generation.**					
	Create and implement an erosion and sedimentation control plan for all construction activities associated with the project. The plan must conform to the erosion and sedimentation requirements of the 2003 EPA Construction General Permit OR local standards and codes, whichever is more stringent. The plan must describe the measures implemented to accomplish the following objectives: Prevent loss of soil during construction by storm water run-off and/or wind erosion, including protecting topsoil by stock-piling for reuse. Prevent sedimentation of storm sewer or receiving streams. Prevent polluting the air with dust and particulate matter. See reference guide for further information.	REQ	YES			An erosion and sedimentation control plans have been developed for all construction activities. Stabilization strategies may include (seeding, mulching) and structural strategies (earth dikes, silt fencing, sediment traps and/or sediment basins). The site does not contain existing topsoil. Storm water will not be discharged into a stream, dust and particulate matter permit requirements will be complied with.
Credit 1	**Site Selection** **Intent: To avoid development of inappropriate sites and reduce the environmental impact from the location of a building on a site.**					
	Do not develop buildings, hardscapes, roads or parking area on portions of sites that meet any one of the following criteria:	1	1			LEED boundary is the property line. The site was previously an office building and parking lot.
	.. Prime farmland as defined by the USDA in United States Code of Federal Regulations Title 7, Volume 6, Parts 400 to 699, Section 657.5 (citation 7CFR657.5).					Not farmland
	.. Previously undeveloped land whose elevation is lower than 5 feet above the elevation of the 100-year flood as defined by FEMA.					Previously developed
	.. Land specifically identified as habitat for any species on the Federal or State threatened or endangered lists					Previously developed
	.. Within 100 feet of any wetlands as defined by United State Code of Federal Regulations 40 CFR, Parts 230-233 and Part 22, and isolated wetlands or areas of special concern identified by state or local rule, OR within setback distances from wetlands prescribed in state or local regulations, as defined by local or state rule or law, whichever is more stringent.					Not near wetland
	.. Previously undeveloped land that is within 50 feet of a water body, defined as seas, lakes, rivers, streams and tributaries which support or could support fish, recreation or industrial use, consistent with the terminology of the Clean Water Act.					Previously developed
	.. Land which prior to acquisition for the project was public parkland, unless land of equal or greater value as parkland is accepted in trade by the public land (Park Authority projects are exempt)					Not parkland
Credit 2	**Development Density & Community Connectivity** **Intent: To channel development to urban areas with existing infrastructure, protecting green fields and preserve habitat and natural resources.**					
	OPTION 1: DEVELOPMENT DENSITY - Construct or renovate building on a previously developed site AND in a community with a minimum density of 60,000 sq. ft... per acre net. (Note: density calculation must include the area of the project being built and is based on a typical two-story downtown development.)					
	OPTION 2: COMMUNITY CONNECTIVITY - Construct or renovate building on a site that meets the following criteria: Is located on a previously developed site, is within 1/2 mile of a residential zone or neighborhood with an average density of 10 units per acre net, is within 1/2 mile of at least 10 Basic Services and has pedestrian access between the building and the services. See reference guide for further information.	5	5			The site is located on a previously developed site, is within 1/2 mile of a residential zone with an average density of 10 units per acre net, it is within 1/2 mile of at least 10 Basic Services and has pedestrian access between the building and the services.
Credit 3	**Brownfield Redevelopment** **Intent: To rehabilitate damaged sites where development is complicated by environmental contamination, reducing pressure on undeveloped land.**					
	OPTION 1: Develop on a site documented as contaminated (by means of an ASTM E1903-97 Phase II Environmental Site Assessment or a local Voluntary Cleanup Program).	1	1			Either Option 1 or Option 2 will be met. Per the project Environmental Baseline Report contaminants found in the ground

SR 99 Alaskan Way Viaduct Replacement - Tunnel, South Tunnel Operations Building JUNE 26, 2012 (draft)

LEED-NC v 3

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	OPTION 2. Develop on a site defined as a brown field by a local state or federal government agency.					water are petroleum hydrocarbons, PAHs,and metals. Ground
Credit 4	**Alternative Transportation** **Intent: To reduce pollution and land development impacts from automobile use.**					
	4.1 OPTION 1: Locate project within 1/2 mile walking distance (measured from main building entrance) of an existing-or planned and funded-commuter rail, light rail or subway station. OPTION 2: Locate project within 1/4 mile walking distance of 1 or more stops for two or more public or campus or private bus lines usable by building occupants.	6	6			Option 1: The site is located within 1/2 mile of a commuter rail station and a light rail station.
	4.2 For commercial or institutional buildings, provide secure bicycle racks and/or storage (within 200 yards of a building entrance) for 5% or more of all bldg users (measured at peak periods), AND, provide shower and changing facilities in the building, or within 200 yards of a building entrance, for 0.5% of Full-Time Equivalent (FTE) occupants. OR For residential buildings, provide covered storage facilities for securing bicycles for 15% or more of building occupants in lieu of changing/shower facilities.	1			1	This building is not an occupied building. FTEs = 0. Tunnel Maintenance staff will come from off site to perform tunnel maintenance activities as needed. (Regional Priority Credit)
	4.3 OPTION 1: Provide preferred parking for low-emitting and fuel-efficient vehicles for 5% of the total vehicle parking capacity of the site. Providing a discounted parking rate is an acceptable substitute for preferred parking for low-emitting and fuel-efficient vehicles. Incentive: Parking rate must be discounted at least 20%, available to all customers, publicly posted and available for a minimum of 2 yrs. OPTION 2: Install alternative-fuel refueling stations for 3% of the total vehicle parking capacity of the site (liquid or gaseous fueling facilities must be separately ventilated or located outdoors.)	3		3		Option 1: Parking is only provided for WSDOT maintenance vehicle fleet (7 vehicles). The majority of WSDOT maintenance vehicles use diesel which is required to have a minimum of 10% ethanol. Newer vehicles can use E85. Electrical plug-ins for tunnel maintenance vehicles are provided in the building.
	4.4 OPTION 1: Size parking capacity to meet but not exceed minimum local zoning requirements and provide preferred parking for carpools or van pools for 5% of the total provided parking spaces. OPTION 2: For projects that provide parking for less than 5% of FTE building occupants - provide preferred parking for carpools or van pools, marked as such, for 5% of total provided parking spaces. Providing a discounted parking rate is an acceptable substitute for preferred parking for low-emitting and fuel-efficient vehicles. Incentive: Parking rate must be discounted at least 20%, available to all customers, publicly posted and available for a minimum of 2 yrs. OPTION 3: Provide no new parking.	2	2			Option 1: City of Seattle Municipal Code SMC 23.54.015, minimum parking requirements are up to the discretion of the Director for unique building uses not shown on the SMC parking tables. Off street parking shall be provided for all fleet vehicles. These spaces do not count toward the minimum parking requirements. Or Option 3: No parking will be provided for employees. (Regional Priority Credit)
Credit 5	**Site Development** **Intent: To conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.**					
	5.1 PROTECT OR RESTORE HABITAT - On Greenfield sites, limit all site disturbance to the following parameters. 40 feet beyond the building perimeter, 10 feet beyond surface walkways, patios, surface parking and utilities less than 12 inches in diameter; 15 feet beyond primary roadway curbs and main utility branch trenches; and 25 feet beyond constructed areas with permeable surface (such as pervious paving areas, storm water detention facilities and playing fields) that require additional staging areas to limit compaction in the constructed area -OR - on previously developed or graded sites, restore or protect a minimum of 50% of the site area (excluding the building footprint) or 20% of the total site (including building footprint) whichever is greater with native or adapted vegetation. Projects earning SS Credit 2: Development Density & Community Connectivity may include vegetated roof surface in this calculation if the plants are native or adapted, provide habitat and promote biodiversity.	1			1	
	Intent: Provide a high ration of open space to development footprint to promote biodiversity.					

SR 99 Alaskan Way Viaduct Replacement - Tunnel, South Tunnel Operations Building

LEED-NC v 3 **JUNE 26, 2012 (draft)**

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	5.2 MAXIMIZE OPEN SPACE - Sites with local zoning open space requirements: Reduce the development footprint (defined as the total area of the building footprint, hardscape, access roads and parking) and/or provide vegetated open space within the project boundary such that the amount of open space exceeds local zoning requirements by 25% -OR- Sites with no local zoning requirements (i.e., some university campuses, military bases): Provide vegetated open space area adjacent to building that is equal to the building footprint -OR- Sites with zoning ordinance but no open space requirement: Provide vegetated open space equal to 20% of the project's site area. For projects that earn SS Credit 2, vegetated roof areas and pedestrian oriented hardscape can contribute to credit compliance. A minimum of 25% of the open space counted must be vegetated.	1			1	
Credit 6	**Storm water Design** **Intent: To limit disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration, reducing or eliminating pollution from storm water runoff and eliminating contaminants.**					
	6.1 **QUANTITY CONTROL** : CASE 1, OPTION 1: Sites with EXISTING IMPERVIOUSNESS 50% OR LESS - Implement a storm water management plan that prevents the post-development peak discharge rate and quantity from exceeding the pre-development peak discharge rate and quantity for the one-and two-year, 24-hour design storms -OR- OPTION 2:Implement a storm water management plan that protects receiving stream channels from excessive erosion. The storm water management plan must include a stream channel protection strategy and quantity control strategies. CASE 2: EXISTING IMPERVIOUSNESS IS GREATER THAN 50% - Implement a storm water management plan that results in a 25% decrease in the volume of storm water runoff from the two-year, 24-hour design storm.	1			1	
	Intent: Reduce or eliminate water pollution of natural water flows by managing storm water runoff.					
	6.2 QUALITY CONTROL: Implement a storm water management plan that reduces impervious cover, promotes infiltration, and captures and treats the storm water runoff from 90% of the average annual rainfall using acceptable best management practices (BMPs). BMPs used to treat runoff must be capable of removing 80% of the average annual post development total suspended solids (TSS) load based on existing monitoring reports. BMPs are considered to meet these criteria if: (1) they are designed in accordance with standards and specifications from a state or local program that has adopted these performance standards, OR (2) there exists in-field performance monitoring data demonstrating compliance with the criteria. Data must conform to accepted protocol (e.g., Technology Acceptance Reciprocity Partnership [TARP], Washington State Department of Ecology) for BMP monitoring.	1			1	
Credit 7	**Heat Island Effect** **Intent: To reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impacts to microclimates and human and wildlife habitats.**					
	7.1 **NON-ROOF**: OPTION 1 - Use any combination of the following strategies for 50% of the site hardscape (including roads, sidewalks, courtyards and parking lots): shade (from existing tree canopy or within 5 years of installation), shade from structures covered by solar panels that produce energy used to offset some nonrenewable resource use, shade from architectural devices or structures that have a solar reflectance index (SRI) of at least 29, hardscape materials with a SRI of at least 29, use of an open grid pavement system (at least 50% pervious) -OR: OPTION 2 - Place a minimum of 50% of parking spaces under cover (defined as underground, under deck, under roof, or under a building). Any roof used to shade or cover parking must have an SRI of at least 29, be a vegetated roof or covered by solar panels that produce energy used to offset some nonrenewable resource use.	1	1			Achieve with use of SRI 29 hardscape and shade trees for 50% of hardscape.
	7.2 **ROOF**: OPTION 1: Use roofing materials having a Solar Reflectance Index (SRI) equal to or greater than the values in the reference guide table for a minimum of 75% of the roof surface. OPTION 2: Install a vegetated roof for at least 50% of the roof area. OPTION 3: Install high albedo and vegetated room surfaces that, in combination, meet the criteria shown in the reference guide.	1	1			Option 1: Roof material to be selected to meet SRI requirements.
Credit 8	**Light Pollution Reduction**					

SR 99 Alaskan Way Viaduct Replacement - Tunnel, South Tunnel Operations Building

JUNE 26, 2012 (draft)

LEED-NC v 3

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	Intent: Minimize light trespass from the building and site, reduce sky-glow to increase night sky access, improve nighttime visibility through glare reduction, and reduce development impact on nocturnal environments.					
	Project teams must comply with 1 of the 2 options for interior lighting and the requirement for exterior lighting. INTERIOR LIGHTING. OPTION 1: Reduce the input power (by automatic device) of all nonemergency interior luminaries with a direct line of sight to any openings in the envelope (translucent or transparent) by at least 50% between 11 p.m. and 5 a.m. After-hours override may be provided by a manual or occupant-sensing device provided the override lasts no more than 30 minutes. OR - OPTION 2: All openings in the envelope (translucent or transparent) with a direct line of sight to any nonemergency luminaries must have shielding (controlled/closed by automatic device for a resultant transmittance of less than 10% between 11 p m and 5 a m) AND EXTERIOR LIGHTING: Light areas only as required for safety and comfort. Lighting power densities must not exceed ANS /ASHRAE/ IESNA Standard 90.1-2007, without amendments See reference guide for further information	1	1			Interior Lighting - Option 1. Exterior Lighting - only areas required to be lit for safety and comfort will be lit.
	SUSTAINABLE SITES TOTAL	**26**	**18**	**3**	**5**	
	WATER EFFICIENCY					
Prerequisite 1	**Water Use Reduction** **Intent: To increase water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.**					
	Employee strategies that in aggregate use 20% less water than the water use baseline calculated for the building (not including irrigation) Calculate the baseline according to the commercial baselines indicated in the reference guide.	**REQ**	**YES**			Install flow restrictors and/or reduced flow aerators on lavatory sinks and shower fixtures; install automatic faucet sensors, install low flow, high efficiency fixtures.
Credit 1	**Water Efficient Landscaping** **Intent. To limit or eliminate the use of potable water, or other natural surface or subsurface water resources available on or near the project site, for landscape irrigation.**					
	OPTION 1. REDUCE BY 50%: Reduce potable water consumption for irrigation by 50% from calculated mid-summer baseline case. Reductions must be attributed to any combination of the following items: Plant species, density & microclimate factor, irrigation efficiency, use of captured rainwater, recycled wastewater or water treated and conveyed by a public agency specifically for non-potable uses.	**2**	**2**			Plantings are being provided to meet this credit. WSDOT policy is to turn off irrigation once plantings are established.
	OPTION 2. Achieve Option 1 and: Use only captured rainwater, recycled wastewater, recycled gray water, or water treated and conveyed by a public agency specifically for non-potable uses for irrigation -OR- Install landscaping that does not require permanent irrigation systems. Temporary irrigation systems used for plant establishment are allowed only if removed within one year of installation	**2**			**2**	
Credit 2	**Innovative Wastewater Technologies** **Intent: To reduce wastewater generation and potable water demand while increasing the local aquifer recharge.**					
	OPTION 1. Reduce potable water use for building sewage conveyance by 50% through the use of water-conserving fixtures (water closets, urinals) or non-potable water (captured rainwater, recycled gray water, and on-site or municipally treated wastewater) -OR OPTION 2 - Treat 50% of wastewater on-site to tertiary standards. Treated water must be infiltrated or used on-site.	**2**			**2**	
Credit 3	**Water Use Reduction** **Intent: To further increase water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.**					

SR 99 Alaskan Way Viaduct Replacement - Tunnel, South Tunnel Operations Building

LEED-NC v 3

JUNE 26, 2012 (draft)

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	Employ strategies that in aggregate use **30%** less water than the water use baseline calculated for the building (not including irrigation) after meeting Energy Policy Act of 1992, 2005 and UBC or IBC 2006 fixture performance requirements. Calculations are based on estimated occupant usage and must include only the following fixtures and fixture fittings (as applicable to the project scope) water closets, urinals, lavatory faucets, showers, kitchen sink faucets and pre-rinse spray valves.	2	2			Use ultra-low flow fixtures with sensors.
	Employ strategies that in aggregate use **35%** less water than the water use baseline calculated for the building (not including irrigation) after meeting the Energy Policy Act of 1992 fixture performance requirements. Calculations are based on estimated occupant usage and shall include only the following fixtures: water closets, urinals, lavatory faucets, showers and kitchen sinks.	1			1	
	Employ strategies that in aggregate use **40%** less water than the water use baseline calculated for the building (not including irrigation) after meeting the Energy Policy Act of 1992 fixture performance requirements. Calculations are based on estimated occupant usage and shall include only the following fixtures: water closets, urinals, lavatory faucets, showers and kitchen sinks.	1			1	
	WATER EFFICIENCY TOTAL					
		10	**4**	**0**	**6**	
	ENERGY & ATMOSPHERE					
Prerequisite 1	**Fundamental Commissioning of the Building Energy Systems** **Intent: To verify that the project's energy related systems are installed, calibrated and perform according to the WSDOT's project requirements, basis of design, and construction documents.**					
	1) Benefits of commissioning include reduced energy use, lower operating costs, reduced contractor callbacks, better building documentation, improved occupant productivity and verification that the systems perform in accordance with the WSDOT's project requirements.	**REQ**	**YES**			Commissioning agent will be provided by contractor. Building GSF is under 50,000 GSF so the commissioning agent can be on the design or construction team if they have experience on at least 2 previous projects. The Design/Builder will provide a commissioning agent in conformance with the contract requirements.
Prerequisite 2	**Minimum Energy Performance** **Intent: To establish the minimum level of energy efficiency for the proposed building and systems to reduce environmental and economic impacts associated with excessive energy use.**					
	OPTION 1: WHOLE BUILDING ENERGY SIMULATION - Demonstrate a 10% improvement in the proposed building performance rating for new buildings, or a 5% improvement in the proposed building performance rating for major renovations to existing buildings, compared with the baseline building performance. Calculate the baseline building performance rating according to the building performance rating method in Appendix G of ANSI/ASHRAE/IESNA 90.1-2007 (with errata but without addenda) using a computer simulation model for the whole building project.	**REQ**			**NO**	Option 1 can not be met. The building provides electricity for the tunnel equipment located inside the building, 2 miles of tunnel systems, a lay down shop for repairing/maintaining tunnel systems, an office, break room, restrooms (for use by employees performing tunnel maintenance/repairs), and a garage for 7 WSDOT fleet maintenance vehicles. The building is not occupied on a daily basis. The draft electrical connected load calculations show only 10% of the building's load is for the garage, lay down room, office, and small break room. It won't be possible to demonstrate a 10% improvement in the building's performance rating.
	OPTION 2: PRESCRIPTIVE COMPLIANCE PATH: Appendix Advanced Energy Design Guide - Comply with the prescriptive measures of the Advanced Energy Design Guide appropriate to the project scope. See reference guide for compliance paths.					Option 2 can not be met because there is no ASHRAE Advanced Energy Design Guide that applies to this unique building type.
	OPTION 3: PRESCRIPTIVE COMPLIANCE PATH: Advanced Buildings Core Performance Guide - Comply with the prescriptive measures identified in the Advanced Buildings Core Performance Guide developed by the New Buildings Institute. See reference guide for requirements					Option 3 can not be met because there is no Advanced Building Core Performance Guide that applies to this unique building type.
Prerequisite 3	**CFC Reduction in HVAC&R Equipment**					

SR 99 Alaskan Way Viaduct Replacement - Tunnel, South Tunnel Operations Building **JUNE 26, 2012 (draft)**

LEED-NC v 3

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	Intent: To reduce stratospheric ozone depletion.					
	Zero use of CFC-based refrigerants in new base building HVAC&R systems. When reusing existing base building HVAC equipment, complete a comprehensive CFC phase-out conversion prior to project completion. Phase-out plans extending beyond the project completion date will be considered on their merits.	REQ	YES			No CFC based refrigerants will be used.
Credit 1	**Optimize Energy Performance** **Intent: To achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use.**					
	Select one of the three compliance paths described in the reference guide. OPTION 1: WHOLE BUILDING ENERGY SIMULATION (1-19 points) Calculate baseline building performance according to Appendix G of ANSI/ASHRAE/IESNA standard 90.1-2007 (with errata but without addenda). OPTION 2: PRESCRIPTIVE COMPLIANCE PATH: ASHRAE Advanced Energy Design Guide (1 point) OPTION 3. PRESCRIPTIVE COMPLIANCE PATH: Advanced Buildings Core Performance Guide (1-3 points)	19			19	The building provides electricity for the tunnel equipment located inside the building, 2 miles of tunnel systems, a lay down shop for repairing/maintaining tunnel systems, an office, break room, restrooms (for use by employees performing tunnel maintenance/repairs), and a garage for 7 WSDOT fleet maintenance vehicles. The building is not occupied on a daily basis. The draft electrical connected load calculations show only 10% of the building's load is for the garage, lay down room, office, and break room. It won't be possible to demonstrate the following improvements in the building's performance rating to gain these points. 12% - 1 point, 14% - 2 points, 16% - 3 points, 18% - 4 points, 20% - 5 points, etc. up to 48% - 19 points; (Regional Priority Credit - Option 1 48%)
Credit 2	**On-Site Renewable Energy** **Intent: To encourage and recognize increasing levels of on-site renewable energy self-supply in order to reduce environmental and economical impacts associated with fossil fuel energy use.**					
	Use on-site renewable energy systems to offset building energy cost. Calculate project performance by expressing the energy produced by the renewable systems as a percentage of the building's annual energy cost and using the table in the reference guide to determine the number of points achieved. %RENEWABLE ENERGY: 1%=1 POINT, 3%=2 POINTS, 5%=3 POINTS, 7%=4 POINTS, 9%= 5 POINTS, 11%= 6 POINTS, 13%= 7 POINTS. See reference guide for further information	7			7	(Regional Priority Credit - 13%)
Credit 3	**Enhanced Commissioning** **Intent: To begin the commissioning process early in the design process and execute additional activities after systems performance verification is completed.**					
	Implement or have a contract in place to implement the following additional commissioning process activities in addition to the requirements of EA Prerequisite 1 and in accordance with this LEED-V3 Reference Guide, 2009 Edition: 1. Prior to the start of the construction documents phase, designate an independence Commissioning Authority to lead, review, and oversee the completion of all commissioning process activities. See reference guide. 2. CxA must conduct, at a minimum, one commissioning design review of the WSDOT's Project Requirements, Basis of Design, and design documents prior to mid-construction documents phase and back-check the review comments in the subsequent design submission. 3. CxA must review contractor submittals applicable to systems being commissioned. 4. Develop a systems manual 5. Verify the requirements for training operating personnel and building occupants are completed. 6. The CxA must be involved in reviewing building operation with O&M staff and occupants within 10 months after substantial completion.	2				Under the WSDOT design/build contract requirements commissioning will be done by the Design/Builder's CxA
Credit 4	**Enhanced Refrigerant Management**					

SR 99 Alaskan Way Viaduct Replacement - Tunnel, South Tunnel Operations Building

LEED-NC v 3

JUNE 26, 2012 (draft)

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	Intent: To reduce ozone depletion and support early compliance with the Montreal Protocol while minimizing direct contributions to global warming.					
	Option 1: Do not use refrigerants. **Option 2**: Select refrigerants and HVAC&R that minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change AND do not install fire suppression systems that contain ozone-depleting substances (CFC's, HCFCs or Halons. See reference guide for further information.	2	2			Option 2.
Credit 5	**Measurement and Verification** **Intent: To provide for the ongoing accountability of building energy consumption over time.**					
	Option1: Develop and implement a Measurement & Verification (M&V) Plan consistent with Option D: Calibrated Simulation (Savings Estimation Method 2), or **Option 2**. Develop and implement a Measurement & Verification (M&V) Plan consistent with Option B: Energy Conservation Measure Isolation, as specified in the International Performance Measurement & Verification Protocol. The M&V period shall cover a period of no less than one year of post-construction occupancy.	3			3	Metering is being provided in compliance with Code requirements.
Credit 6	**Green Power** **Intent: To encourage the development and use of grid-source, renewable energy technologies on a net zero pollution basis.**					
	Engage in at least a two year renewable energy contract to provide at least 35% of the building's electricity from renewable sources as defined by the Center for Resource Solutions (CRS) Green-e product certification requirements. All purchases of green power shall be based on the quantity of energy consumed, not the cost. DETERMINE THE BASELINE ELECTRICITY USE: Use the annual electricity consumption from the results of EA Credit 1 OR ESTIMATE BASELINE ELECTRICITY USE: use the Dept. of Energy Commercial Buildings Energy Consumption Survey database to determine the estimated electricity use.	2			2	
	ENERGY & ATMOSPHERE TOTAL	35	2	0	31	
	MATERIALS & RESOURCES					
Prerequisite 1	**Storage & collection of recyclables** **Intent: To facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills.**					
	Provide an easily accessible dedicated area that serves the entire building and is dedicated to the collection and storage of non-hazardous materials for recycling including (at a minimum) paper, corrugated cardboard, glass, plastics, and metals.	REQ	YES			An area located in the receiving area will be dedicated to the collection and storage of non-hazardous materials for recycling including paper, corrugated cardboard, plastics, and metals.
Credit 1	**Building Reuse - Maintain Existing Walls, Floors and Roof** **Intent: To extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.**					
	1.1 Building Reuse - Maintain Existing Walls, Floors and Roof. Maintain at least **55%** of the existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and non-structural roofing material). Hazardous materials that are remediated as a part of the project scope shall be excluded from the calculation of the percentage maintained. If the project includes an addition to an existing building that is more than 2 times the sq. ft. of the existing building, this credit is not applicable.	1			1	(Regional Priority Credit - 55%)
	1.1 Building Reuse - Maintain Existing Walls, Floors and Roof. Maintain at least **75%** of the existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and non-structural roofing material). Hazardous materials that are remediated as a part of the project scope shall be excluded from the calculation of the percentage maintained. If the project includes an addition to an existing building that is more than 2 times the sq. ft. of the existing building, this credit is not applicable.	1			1	

SR 99 Alaskan Way Viaduct Replacement - Tunnel, South Tunnel Operations Building

JUNE 26, 2012 (draft)

LEED-NC v 3

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	1.1 Building Reuse - Maintain Existing Walls, Floors and Roof. Maintain at least **95%** of the existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and non-structural roofing material) Hazardous materials that are remediated as a part of the project scope shall be excluded from the calculation of the percentage maintained. If the project includes an addition to an existing building that is more than 2 times the sq. ft. of the existing building, this credit is not applicable.	1			1	
	1.2 Building Reuse - Maintain Interior Nonstructural Elements: Use existing interior nonstructural elements (e.g., interior walls, doors, floor coverings and ceiling systems) in at least 50% (by area) of the competed building, including additions. If the project includes an addition with square footage more than 2 times the square footage of the existing building this credit is not applicable.	1			1	
Credit 2	**Const Waste Management** **Intent: To divert construction, demolition, and land clearing debris from disposal in landfills and incineration facilities. Redirect recyclable recovered resources back to the manufacturing process and reusable materials to appropriate sites.**					
	(Divert 50% from Disposal) Recycle and/or salvage at least **50%** of non-hazardous construction and demolition debris. Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or commingled. Excavated soil and land clearing debris does not contribute to this credit. Calculations can be done by weight or volume, but must be consistent throughout.	1	1			Construction waste disposal firm will sort and recycle or salvage construction waste or debris
	(Divert 75% from Disposal) Recycle and/or salvage an additional 25% beyond MR Credit 2.1 (75% total) of non-hazardous construction and demolition debris.	1	1			Construction waste disposal firm will sort and recycle or salvage construction waste or debris.
Credit 3	**Materials Reuse** **Intent: To reuse building materials and products to reduce demand for virgin materials and reduce waste, thereby reducing impacts associated with the extraction and processing of virgin resources**					
	3.1 (5%) Use salvaged, refurbished or reused materials, the sum of which constitutes at least **5%**, based on cost, of the total value of materials on the project. Mechanical, electrical and plumbing components and specialty items such as elevators and equipment cannot be included in this calculation. Only include materials permanently installed in the project. Furniture may be included, providing it is included consistently in MR credits 3-7.	1			1	Concrete rubble to be reused through project. Furniture will be reused from other WSDOT locations.
	3 1 (10%) Use salvaged, refurbished or reused materials for an additional 5% beyond MR Credit 3.1 (**10%** total, based on cost)	1			1	
Credit 4	**Recycled Content** **Intent: To increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from the extraction and processing of virgin materials.**					
	(10% post consumer + 1/2 pre-consumer) Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least **10%** (based on cost) of the total value of the materials in the project The recycled content value of a material assembly shall be determined by weight. The recycled fraction of the assembly is then multiplied by the cost of the assembly to determine the recycled content value. Mechanical, electrical and plumbing components and specialty items such as elevators shall not be included in this calculation. Only include materials permanently installed in the project. Furniture may be included providing it is included consistently in MR credits 3-7. Recycled content shall be defined in accordance with the ISO 14021.	1	1			Establish a project goal for recycled content materials and identify material suppliers that can achieve this goal. Materials that could assist in reaching this goal. steel, rebar (90% recycled content), concrete, CMU, carpeting, ceiling tiles, metal panels.
	(20% post consumer + 1/2 pre-consumer) Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes an additional **10%** beyond MR Credit 4 1 (total 20% based on cost) of the total materials in the project	1			1	
Credit 5	**Local/Regional materials** **Intent: To increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.**					

SR 99 Alaskan Way Viaduct Replacement - Tunnel, South Tunnel Operations Building

LEED-NC v 3

JUNE 26, 2012 (draft)

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	(10% Extracted, Processed & Manufactured Regionally) Use building materials or products that have been extracted, harvested or recovered and manufactured, within 500 miles of the project site for a minimum of **10%** (based on costs) of the total materials value. If only a fraction of a product or material is extracted/harvested/recovered and manufactured locally, then only that percentage (by weight) must contribute to the regional value. Mechanical, electrical and plumbing components and specialty items such as elevators and equipment shall not be included in this calculation. Only include materials permanently installed in the project. Furniture may be included, providing it is included consistently in MR credits 3-7.	1	1			Concrete will be locally manufactured. Other possible materials include: precast, concrete, gypsum, glass, millwork, carpet, plantings, compost, and signage.
	(20% Extracted, Processed & Manufactured Regionally) Use building materials or products that have been extracted, harvested or recovered and manufactured, within a radius of 500 miles of the project site for an additional 10% beyond MR Credit 5.1 (total of **20%** based on cost) of the materials value.	1			1	
Credit 6	**Rapidly renewable materials** **Intent: Reduce the use and depletion of finite raw, and long life-cycle renewable materials by replacing them with rapidly renewable materials.**					
	Use rapidly renewable building materials and products for 2.5% of the total value of all building materials and products used in the project, based on cost. Rapidly renewable building materials and products are made from plants that are typically harvested with a ten-year cycle or shorter.	1			1	
Credit 7	**Certified Wood** **Intent: To encourage environmentally responsible forest management.**					
	Use a minimum of 50% (based on cost) of wood-based materials and products that are certified in accordance with the Forest Stewardship Council's (FSC) Principles and Criteria, for wood building components. These components include, but are not limited to, structural framing and general dimensional framing, flooring, sub-flooring, wood doors and finishes. Only include materials permanently installed in the project. Wood products purchased for temporary use on the project (e.g., formwork, bracing, scaffolding, sidewalk protection and guard rails) may be included in the calculation at the project team's discretion. If any such materials are included, all such materials must be included in the calculation. Furniture may be included, providing it is included consistently in MR Credits 3-7	1	1			Obtaining credit will depend on market availability and costs.
	MATERIALS & RESOURCES TOTAL					
		14	5	0	9	
	INDOOR ENVIRONMENTAL QUALITY					
Prerequisite 1	**Minimum Indoor Air Quality Performance** **Intent: To establish minimum indoor air quality (IAQ) performance to enhance indoor air quality in buildings, thus contributing to the comfort and well being of the occupants**					
	Meet the minimum requirements of Sections 4 through 7 of ASHRAE 62.1 - 2007, Ventilation for Acceptable Indoor Air Quality (with errata but without addenda). Mechanical ventilation systems must be designed using the Ventilation Rate Procedure or the applicable local code, whichever is more stringent. Naturally ventilated buildings shall comply with ASHRAE 62.1-2007, paragraph 5.1 (with errata but without addenda	REQ	YES			
Prerequisite 2	**Environmental Tobacco Smoke Control** **Intent: To minimize exposure of building occupants, indoor surfaces, and ventilation air distribution systems to Environmental Tobacco Smoke (ETS).**					
	OPTION 1: Prohibit smoking in the building. Locate any exterior designated smoking areas at least 25 ft. away from entries, outdoor air intakes and operable windows. Provide signage to allow smoking in designated areas.	REQ	YES			WSDOT does not allow smoking in state buildings, and will designate exterior smoking area in accordance with state and local laws.

SR 99 Alaskan Way Viaduct Replacement - Tunnel, South Tunnel Operations Building **JUNE 26, 2012 (draft)**

LEED-NC v 3

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	OPTION 2: Prohibit smoking in the building except in designated smoking areas. Locate any exterior designated smoking areas at least 25 ft. away from entries, outdoor air intakes and operable windows. Provide designated smoking rooms designed to contain, capture and remove ETS from the building. At a minimum, the smoking room must be directly exhausted to the outdoors, away from air intakes and building entry paths, with no re-circulation of ETS-containing air to non-smoking areas and enclosed with impermeable deck -to-deck partitions. (See reference manual for additional requirements.)					
	OPTION 3: (for residential buildings only) Prohibit smoking in all common areas of the building. Locate any exterior designated smoking areas at least 25 ft away from entries, outdoor air intakes and operable windows opening to common areas. Minimize uncontrolled pathways for ETS transfer between individual residential units by sealing penetrations in walls, ceilings and floors in the residential units, and by sealing vertical chases adjacent to the units. All doors in the residential units leading to common hallways shall be weather-stripped or pressurized to minimize air leakage into the hallway. (See reference manual for additional requirements.)					
Credit 1	**Outdoor Air Delivery Monitoring** **Intent: To provide capacity for ventilation system monitoring to help promote occupant comfort and well being.**					
	Install permanent monitoring systems to ensure that ventilation systems maintain design minimum requirements. Configure all monitoring equipment to generate an alarm when the airflow values or carbon dioxide (CO2) levels vary by 10% or more from the design values via, either a building automation system alarm to the building operator or a visual or audible alert to the building occupants. (See reference manual for requirements for mechanically ventilated and naturally ventilated spaces.)	1	1			
Credit 2	**Increase Ventilation** **Intent: To provide additional outdoor air ventilation to improve indoor air quality and promote occupant comfort, well-being and productivity.**					
	For mechanically ventilated spaces - increase breathing zone outdoor air ventilation rates to all occupied spaces by at least 30% above the minimum rates required by ASHRAE standard 62 1-2007 (with errata but without addenda) as determined by IEQ Prerequisite 1. For naturally ventilated spaces - design natural ventilation systems for occupied spaces to meet the recommendations set forth in the Carbon Trust Good Practice Guide 237 (1998). Determine that natural ventilation is an effective strategy for the project by following the flow diagram process shown in Figure 1.18 of the CIBSE Applications Manual 10:2005, Natural ventilation in non-domestic buildings. See reference manual for additional requirements)	1			1	
Credit 3	**Construction IAQ Management Plan** **Intent: To reduce indoor air quality problems resulting from construction or renovation and promote the comfort and well-being of construction workers and building occupants.**					
	3.1 **During Construction**: Develop and implement an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building as follows: During construction meet or exceed the recommended Control Measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings under Construction, 2nd Edition 2007, ANSI/SMACNA 008-2008 (Chapter 3) AND protect stored on-site or installed absorptive materials from moisture damage, AND if permanently installed air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 must be used at each return air grille, as determined by ASHRAE 52 2 - 1999. Replace all filtration media immediately prior to occupancy.	1	1			IAQ will be developed.
	3.2 **Before Occupancy** (OPTION 1, FLUSH-OUT): After construction, prior to occupancy and with all interior finishes installed, install new filtration media and perform a building flush-out by supplying a total air volume of 14,000 cu. ft... of outdoor air per sq. ft... of floor area while maintaining an internal temperature of at least 60 degrees and relative humidity no higher than 60%. OR If occupancy is desired prior to completion of the flush-out, the space may be occupied following delivery of a minimum of 3500 cu. ft... of outdoor air per sq. ft... of floor area to the space. (See reference guide for further information)	1	1			Option 1 : Building will be flushed out.

SR 99 Alaskan Way Viaduct Replacement - Tunnel, South Tunnel Operations Building

LEED-NC v 3

JUNE 26, 2012 (draft)

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	3.2 **Before Occupancy** (OPTION 2, AIR QUALITY TESTING): Conduct baseline IAQ testing, after construction ends and prior to occupancy, using testing protocols consistent with the US EPA Compendium of Methods for the Determination of Air Pollutants in Indoor Air and as additionally detailed in the LEED reference guide for Green Building Design and Construction, 2009 Edition. See reference guide for additional requirements.					
Credit 4	**Low-Emitting Materials** **Intent: To reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.**					
	4.1 Adhesives & Sealants. All adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the following reference standards. (See reference guide for further information.)	1	1			Specify low-VOC materials in construction documents. Ensure that VOC limits are clearly stated in each section of the specifications where adhesives and sealants are addressed. Common products to evaluate include general construction adhesives, flooring adhesives, fire-stopping sealants, caulking, duct sealants, plumbing adhesives, and cove base adhesives.
	4.2 Paints & Coatings. Paints and coatings used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the following criteria. (See reference guide for additional requirements)	1	1			Specify low-VOC paints and coatings in construction documents. Ensure that VOC limits are clearly stated in each section of the specifications where paints and coatings are addressed. Track the VOC content of all interior paints and coatings during construction.
	4.3 Carpet Systems. All carpet installed in the building interior must meet the testing and product requirements of the Carpet and Rug Institute's Green Label Plus program. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute's Green Label Plus program. All carpet adhesive shall meet the requirements of EQ Credit 4.1: VOC limit of 50 g/L. See reference guide for hard flooring, setting adhesives and grout.	1	1			Clearly specify requirements for product testing and/or certification in the construction documents. Select products that are either certified under the Green Label Plus program or for which testing has been done by qualified independent laboratories in accordance with the appropriate requirements.
	4.4 Composite Wood & Agri-fiber Products. Composite wood or agrifiber products used on the interior of the building (defined as inside of the weatherproofing system) shall contain no added urea-formaldehyde resins. Laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies shall contain no added urea-formaldehyde resins. Composite wood and agrifiber products are defined as: particleboard, medium density fiberboard (MDF), plywood, wheat board, strawboard, panel substrates and door cores. Materials considered fixtures, furniture, and equipment (FF&E) are not considered base building elements and are not included.	1	1			Specify wood and agrifiber products that contain no added urea-formaldehyde resins. Specify laminating adhesives for field and shop applied assemblies that contain no added urea-formaldehyde resins.
Credit 5	**Indoor chemical & pollutant source control** **Intent: To minimize building occupant exposure to potentially hazardous particulates and chemical pollutants.**					
	Design to minimize & control pollutant entry into buildings and later cross-contamination of regularly occupied areas					
	Employ permanent entryway systems at least ten feet long in the primary direction of travel to capture dirt & particulates entering the building at regularly used exterior entrances. Acceptable entryway systems include permanently installed grates, grilles or slotted systems that allow for cleaning underneath. Roll-out mats are acceptable only when maintained on a weekly basis by a contracted service organization. Sufficiently exhaust each space where hazardous gases or chemicals may be present or used (including garages, housekeeping/laundry areas, shops of any kind, science labs, prep rooms and copying/printing rooms), to create negative pressure with respect to adjacent spaces with the doors to the room closed. For each of these spaces, provide self-closing doors and deck to deck partitions or a hard lid ceiling. (See reference guide for further information). In mechanically ventilated buildings, install new air filtration media in regularly occupied areas prior to occupancy; these filters must provide a Minimum Efficiency Reporting Value of 13 or better. Filtration should be applied to process both return and outside air that is to be delivered as supply air.	1			1	An entryway system will be installed in entry vestibules. Janitor's closets will have dedicated ventilation.

SR 99 Alaskan Way Viaduct Replacement - Tunnel, South Tunnel Operations Building **JUNE 26, 2012 (draft)**

LEED-NC v 3

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	Provide containment (i.e. a closed container for storage for off-site disposal in a regulatory compliant storage area, preferably outside the building) for appropriate disposal of hazardous liquid wastes in places where water and chemical concentrate mixing occurs (e.g., housekeeping, janitorial and science labs).					All hazardous liquid wastes scheduled for disposal will be contained in the appropriate container.
Credit 6	**Controllability of systems** **Intent: To provide a high level of lighting system control and/or thermal comfort system control by individual occupants or groups in multi-occupant spaces (i.e., classrooms or conference areas) to promote their productivity, comfort and well-being.**					
	6.1 **Lighting**: Provide individual lighting controls for 90% (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences. AND Provide lighting system controls for all shared multi-occupant spaces to enable adjustment that meets group needs and preferences.	1	1			Occupant control of systems will be used where applicable.
	6.2 **Thermal Comfort**: Provide individual comfort controls for 50% (minimum) of the building occupants to enable adjustments to meet individual needs and preferences. Operable windows can be used in lieu of controls for occupants located 20 feet inside and 10 feet to either side of the operable part of a window. (See reference guide for further information). AND Provide comfort system controls for all shared multi-occupant spaces to enable adjustments to meet group needs and preferences. (See reference guide for further information).	1	1			Building is unoccupied. Controls will be placed where applicable.
Credit 7	**Thermal Control** **Intent: To provide a comfortable thermal environment that supports occupant productivity and well-being. Provide for the assessment of building thermal comfort over time.**					
	7.1 **Design:** Design HVAC systems and the building envelope to meet the requirements of ASHRAE Standard 55-2004, Thermal Comfort Conditions for Human Occupancy. Demonstrate design compliance in accordance with the Section 6.1.1 Documentation.	1	1			Will meet ASHRAE 55.
	7.2 **Verification:** Agree to conduct a thermal comfort survey of building occupants within a period of six to 18 months after occupancy. This survey should collect anonymous responses about thermal comfort in the building including an assessment of overall satisfaction with thermal performance and identification of thermal comfort-related problems. Agree to develop a plan for corrective action if the survey results indicate that more than 20% of occupants are dissatisfied with thermal comfort in the building. This plan should include measurement of relevant environmental variables in problem areas in accordance with ASHRAE Standard 55-2004.	1	1			WSDOT to send out survey to meet this credit and will follow up on items identified by at least 20% of the survey respondents.
Credit 8	**Daylight and Views** **Intent: To provide for the building occupants a connection between indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas of the building.**					
	8.1 - OPTION 1: Simulation - Demonstrate through computer simulations that 75% or more of all regularly occupied areas achieving daylight luminance levels of a minimum of 25 foot-candles. See reference guide for further information.	1				
	8.1 - OPTION 2: Prescriptive - For side lighting daylight zone - See reference guide for further information. For Top -lighting daylight Zone - See reference guide for further information.		1			Will be verified in final design, only spaces regularly occupied, shops will not be included in the evaluation.
	8.1 - OPTION 3: DAYLIGHT MEASUREMENT - Demonstrate, through records of indoor light measurements, that a minimum daylight illumination level of 25 foot-candles has been achieved in at least 75% (1 point) or 90% (2 points) of all regularly occupied areas. See reference guide for further information.					
	8.1 - OPTION 4. COMBINATION - Any of the above calculation methods may be combined to document the minimum daylight illumination in at least 75% (1 point) or 90% (2 points) of all regularly occupied spaces. See reference guide for further information.					
	8.2 Views for 90% of Spaces: Achieve direct line of sight to the outdoor environment via vision glazing between 30" and 90" above the finish floor for building occupants in 90% of all regularly occupied areas. Determine the area with direct line of sight by totaling the regularly occupied square footage that meets the following criteria: See reference guide for further information.	1	1			**So Ops** - The Shop and the Office are the only (intermittently) occupied spaces in this building. This credit can be met by providing re-lights between Shop and Vehicle bays for direct line of sight through glazed garage bay doors to the outdoors.
	INDOOR ENVIRONMENTAL QUALITY TOTAL	**15**	**13**	**0**	**2**	

SR 99 Alaskan Way Viaduct Replacement - Tunnel, South Tunnel Operations Building

LEED-NC v 3 **JUNE 26, 2012 (draft)**

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	INNOVATION & DESIGN/BUILD PROCESS					
	Intent: To provide design teams and projects the opportunity to be awarded points for exceptional performance above requirements set by the LEED-NC Green Building Rating System and/or innovative performance in Green Building categories not specifically addressed by the LEED Green Building Rating System. Note, Innovations credits do not apply, if product/strategy aids in achievement of an existing LEED credit.					
Credit 1.1	**Innovation/Process**	1			1	
Credit 1.2	**Innovation/Process**	1	1			Green building operations/ housekeeping - exclusive use of non-toxic cleaning products to maintain building. Product MSDS will be provided.
Credit 1.3	**Innovation/Process**	1	1			Provide an educational program on the environmental and human health benefits of the green building practices implemented; which might include 1) displays on benefits of green buildings, windows viewing green features, real-time energy consumption data displays. 2) events or tours focused on educational outreach.
Credit 1.4	**Innovation/Process**	1	1			Buildings serving bored tunnel - demonstrate intent to reduce site disturbance through implementing a tunnel boring strategy. Create a narrative that describes the environmental benefits and significance of tunnel boring versus extensive trenching.
Credit 1.5	**Innovation/Process**	1			1	Operational strategies - Tunnel's energy use and air quality monitoring systems for the tunnel will be controlled remotely by facilities management system.
Credit 2	**Accredited Professional** At least one principal participant of the project team shall be a LEED Accredited Professional (AP).	1	1			A LEED accredited architect prepared the LEED Checklist. The Design/Builder will provide a LEED accredited person during construction.
	INNOVATION & DESIGN/BUILD PROCESS TOTAL	6	4	0	2	

SR 99 Alaskan Way Viaduct Replacement - Tunnel, South Tunnel Operations Building **JUNE 26, 2012 (draft)**

LEED-NC v 3

	CREDIT INTENT & DESCRIPTION	POSSIBLE POINTS	YES	??	NO	STRATEGY
	Regional Priority					
	Through USGBC's regional councils, chapters and affiliates, regionally specific environmental priorities were identified. Depending on a project's specific location, six LEED credits that address regionally prioritized environmental issues have been assigned "bonus points." That means that a project can be awarded up to four extra points – one point each – for up to four of the priority credits.					
Credit 1.1	Regional Priority	1	1			SS c3 - Brownfield Redevelopment
Credit 1.2	Regional Priority	1			1	SS c4 2 - Alternative Transportation - showers and bike racks
Credit 1.3	Regional Priority	1	1			SS c4.4 - Alternative Transportation - Parking Capacity
Credit 1.4	Regional Priority	1			1	EA c1 - Optimize Energy Performance
Credit 1.5	Regional Priority	1			1	EA c2 - On-Site Energy Performance
Credit 1.6	Regional Priority					MR c1.1 - Building Reuse
	REGIONAL PRIORITY TOTAL - 4 points maximum	5	2	0	3	
	SUSTAINABLE SITES TOTAL	26	18	3	5	
	WATER EFFICIENCY TOTAL	10	4	0	6	
	ENERGY & ATMOSPHERE TOTAL	35	2	0	31	
	MATERIALS & RESOURCES TOTAL	14	5	0	9	
	INDOOR ENVIRONMENTAL QUALITY TOTAL	15	13	0	2	
	INNOVATION & DESIGN/BUILD PROCESS TOTAL	6	4	0	2	
	REGIONAL PRIORITY TOTAL - 4 points maximum	5	2	0	3	
	TOTAL PROJECT LEED POINTS:	111	48	3	58	

CERTIFICATION LEVELS: (100 base points; 6 possible I in D, and 4 Regional Priority points)

Certified 40-49 points
Silver 50-59 points
Gold 60-79 points
Platinum 80 points and above

2nd [illegible] 05-1626

October 12, 2006

Mr. John Lynch Assistant Director
State of Washington, General Administration
Division of Engineering & Architectural Services
P.O. box 41012
Olympia, WA 98504-150

RE: Clarkston Health Science Facility
State Project No. 2005-162-G 2005-162G

Walla Walla Community College is respectfully requested exemption from LEED certification requirement on the Clarkston Health Science Facility. As you know, this project has been under-funded from the beginning. The college, E & AS and the consultant team has been exploring all avenues to maintain or program and keep this project within the approved budget. After considerable study, the consultant team determined that the LEED certification (silver) would require the college to reduce the programs by 1,273 S.F. In addition the high bidding market required the reduction of a 1,600 S.F. of remodel. See attached documentation from Fred King of Northwest Architectural Services.

Sincerely

Jim Peterson
Vice President for Administrative Service

Northwest Architectural Company

Bruce E. Blackmer, FAIA
Dale S. Brookie, AIA
Keith M. Comes, AIA
Kevin P. Flanagan, AIA
Thomas E. Golden, AIA
Dana L. Harbaugh, AIA
Brent G. Harding, AIA
Colin R. Jones, AIA
A. Fred King, AIA
Steven J. McNutt, AIA
R. G. Nelson, AIA
Michael R. O'Malley, AIA
Guy J. Overman, AIA
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Gregory J. Stack, AIA
Bruce B. Turner, PE

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Bennett J. Hill, AIA
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October 12, 2006

David Combs, Project Manager
General Administration / E&AS
P. O. Box 41012
Olympia, WA 98504-1012

RE: Walla Walla Community College - Clarkston Health Science Building
State Agreement No. 2005-162 G
NAC Project No. 1-05046 - 1Aa, 4Gf

Dear David:

As you requested, I have attempted to assign costs to all LEED Checklist items we answered as a 'yes' on the list and letter dated January 6, 2006.

We believe this is time well spent to help understand the entire process more thoroughly. Tracking the ideas generated in the checklist through the "eco-charette" meeting referred to above and this letter of explanation have required our consultants as well as ourselves to absorb around 50 hours of time and travel. This amounts to around $4,000.00 and does not include your time or Walla Walla Community College's efforts. This is not a complaint, hut simply an exercise to address your request in itemizing all time and costs associated with the LEED process.

We believe in the concept of the LEED program and the sustainable design protocols. However, we know that validation and the initial introduction of new requirement results in added effort which only reduced the construction funds available for our already undersized project further. Many of the LEED points are accomplished within the design process and standards that our firm has used for years. On the other hand, we also recognize that changes have to be made in our thought processes to achieve the newly established standards. Further, we know that for each new standard there is a Learning Curve and want to provide this information to assist the College, State, and our profession to a more definitive understanding of the actual cost and effort for implementation.

In our January 6, 2006 letter and attached checklist, we outlined that our program size of 10,000 SF would require a reduction to 9,000 SF. As it turns out, the reduction in square footage was not made to accommodate the LEED Checklist ideas. Instead, the area reduction was used to offset increasing costs in the range of 25% over two years. We recently received the bids for this project (which by the way were on target with our estimate) for a building of 9,200 SF costing $1,936,000, which translates to a cost of $210.00/SF.

Since we needed to implement all major design ideas that effected the exterior envelope early in the Schematic Design phase, we started with a central clerestory over the student commons and a translucent ceiling over the central office work area to achieve our targeted credit under 8.1 and 8.2 for Daylighting and Views. These features have remained within the design at an increase to the project cost of approximately $120,000.00. This is the only premium cost identified in our original chart as being verified through this bidding process and answered 'yes' in our original chart attached to this letter. The only reason these design features were retained was to satisfy the occupants and their placement of these design elements at the top of the project's priority list when we concluded our cost reductions (in-house value engineering) to achieve our budget. We believe that we would receive the LEED credits for 8.1 and 8.2. In short, the occupants were willing to give up other program amenities for Daylighting. To verify that each credit has been accomplished and determine the cost for each would require implementing the following process within our office. All other credits listed as a 'yes' are merely estimate guesses. We offer the following information in an effort to demonstrate that we would have followed the checklist if satisfying those requirements would have been practicable.

We have documented this process on one other project within our office which is now under construction. Therefore, we are certain that we would request extra services fees above those received for achieving the goals in those projects if we were to start with the knowledge that we have today on the expanded effort that is required.

The tasks listed below would require the following added effort, at least initially, and fees for our documentation. Additional costs for the General Contractor's verification logs and work are also listed.

Task One: The review of the LEED Project Checklist to determine probable credits that will be selected to be incorporated within the Schematic Design chosen to achieve 38 points and document those credits will require $15,000 to $20,000 of effort. We list 38 points knowing that many of the points targeted to achieve will not materialize. I think that it's also worth noting that the pre-design state process will also have to be expanded to consider LEED program cost increases to determine an adequate budget request.

Task Two: The in-depth application of a specific design and complete understanding with documented submittals to register the project will require $15,000 to $20,000 of added effort during the Design Development phase.

Task Three: Final area calculation, specifications material research, detail documentation, and consultant coordination will require $15,000 to $20,000 of added effort during the Construction Document phase.

Task Four: Bidding approvals, construction monitoring of contractor's verification logs and coordination will require $5,000 to $10,000 in added effort during construction and commissioning.

Task Five: The General Contractor's submittal of written verification logs along with photographs of site and building methods verifying implementation will range from $50,000 to $100,000.

We have verified this last category by requesting that the contractors list their effort to comply with the LEED program as an alternate on projects bid in late 2005 and early 2006. These alternates were listed at $50,000 for a project of 60,000 SF bid at $10,000,000 and an amount of $60,000 for a project of 72,000 SF bid at $13,000,000. This equates to 83 cents per square foot.

Totaling these five tasks creates a range of costs as listed below:

Task One	low	$ 15,000	high	$	20,000
Task Two	low	15,000	high		20,000
Task Three	low	15,000	high		20,000
Task Four	low	5,000	high		10,000
Task Five	low	50,000	high		100,000
Total Added Costs	low	$ 100,000	high	$	170,000

The increase in Tasks One through Four is $50,000 to $70,000 or, for a building of 9,200 SF, creates a range of $5.40/SF to $7.60/SF of added cost. Task Five costs 83 cents per square foot and therefore creates an added total cost of $6.23/SF to $8.43/SF for accomplishing the Silver rating. Using the low range increase of $6.23/SF, our project increases from $1,936,000 to $1,993,316.

66K

To accomplish our budget of $1,936,000 would require an added reduction of 273 SF.

273
[illegible]

The accomplishment of our Daylighting and View credits reduced the project from 10,000 SF to 9,200 SF.

In addition, we listed the 1,600 SF classroom programmed to be remodeled as an alternate which could not be taken.

Adding these three reductions totals 2,673 SF or amounts to three lost classrooms.

The Clarkston facility has reduced their original request of 6.5 classrooms to 3.5 as bid on June 7, 2006.

I believe this analysis and the attached list confirms that our request for a "Not Practicable" Exemption remains valid. In fact, it has become more difficult to maintain the original program requirements because we attempted to achieve the Daylighting credits. Please do not misinterpret this as saying the LEED program has made the entire reduction of program area necessary. We are all aware that the increased construction costs have contributed as much if not more than the LEED program requirements. Both challenges have resulted in a greater reduction in area than expected in our January 6, 2006 request letter. More importantly, the funding request for this building project was submitted prior to the adoption of the LEED requirements. Therefore, funding was not received for the added costs because they were not anticipated.

Sincerely,

A Fred King

A. Fred King, AIA
Principal

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WWCC Clarkston Health Science Building

State Project No. 2005-162
NAC Project No. 1-05046-4Gf
January 6, 2006

Northwest Architectural Company

Bruce E. Blackmer, FAIA
Dale S. Brookie, AIA
Keith M. Comes, AIA
Kevin P. Flanagan, AIA
Thomas E. Golden, AIA
Dana L. Harbaugh, AIA
Brent G. Harding, AIA
Colin R. Jones, AIA
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Richard A. Salogga, AIA
Gregory J. Stack, AIA
Bruce B. Turner, PE

Mark J. Gifford, AIA
Douglas G. Heyamoto, AIA
Malcolm R. Jollie, AIA
William W. Rash, AIA

An "eco-charrette" was conducted for the above referenced project on October 31, 2005. Results of that eco-charrette have led the design team to conclude that achieving the LEED Silver Standard is not practicable for this project. We are therefore seeking a "Not Practicable" Exemption. We offer the following description:

- Clarkston's relatively small size places it at a disadvantage in obtaining LEED points which are easier to achieve in urban areas. Examples include:
  - Inability to meet the minimum development density of 60,000 sf/acre even though the project is located in downtown Clarkston.
  - Lack of a public transportation system.
  - Inability to limit parking due to functional needs and zoning requirements.
- With Clarkston's relatively hot arid climate, it becomes extremely difficult to maintain landscaping with water-use reduction rates required by LEED.
- The building's modest size (9,200 sf) and low water demand provide little to no opportunity to further reduce water usage.
- No readily available source of on-site renewable energy.
- As a consequence of not realizing these 5 to 6 points, WWCC must acquire points elsewhere in the LEED system using extraordinary measures at additional, unanticipated expense. Examples include:
  - Concrete paving for light reflectance in lieu of asphalt paving
  - Recycling 75% of construction waste materials in lieu of 50% recycling
  - Providing 5% salvaged or refurbished materials
  - Providing 10% recycled materials in lieu of 5%
  - Providing Certified Wood
  - Buying "green" power from Avista

It is anticipated that 20-22 points can be achieved without significant impact to the overall project budget.

This project is being partially funded by the state ($1M) with the remainder of the funds ($1.6M) being provided locally.

The increased expenses to the project to achieve even a LEED Certified Standard would require the reduction of area from a total of 10,000 sf (including remodel of existing space) to less than 9,000. This would effectively reduce the project from 4.5 classrooms to 3.5 classrooms.

Offices in
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and Coeur d'Alene

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High-Performance Green Buildings

Received by GA:

Date: 6-Jan

Submit to: sustainableba@ga.wa.gov

Exemption Declaration

Project Name:	WWCC Clarkston Health Science Building		Agency/Institution	Walla Walla Community College
Project Number:	2005-162	GA H-P Green Bldg. #		

	Name	Agency	Phone	E-Mail
Submitted By:	James R. Peterson	WWCC	509-527-4215	jim.peterson@wwcc.ctc.edu

Total Facility Square Footage Estimate 9,000

Project Location/Address Clarkston, WA

Facility Type Exemption*	Exempt Space Approx. %
Transmitter Building	
Pumping Station	
Hospital (not including skilled nursing)	
Research Facilities with Laboratories	

Agency Representative Signature Block

Signature

Name:

Title:

"Not Practicable" Exemption**	Yes/No
Project will attempt to achieve LEED Silver	No
Project will attempt to achieve LEED Certified	No
Project will seek US Green Bldg. Council LEED Certification	No

Agency Representative Signature Block

Signature

Name:

Title:

This Exemption Submittal includes the following:

Provide a one page description of why the exemption is being sought. ☒

* If a "Facility Type" exemption is requested and verified, no further submittals are required.

** If a "Not Practicable" exemption is requested, the project should pursue LEED to the level that is "practicable" for the project. Project are encouraged to participate in the GA Submittal process and subsequent annual reporting of the energy and water/sewer consumption to GA. This will demonstrate a "Good Faith" consistent with the intent of ESSB 5509. Complete the appropriate GA Submittal forms as the project progresses through the design and construction process.

LEED
LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN

Version 2.1 Project Checklist

WWCC Clarkston Health Science Building
Clarkston, Washington 1-05046-4Gf

Yes	?	No			
5	1	8	**Sustainable Sites**		14 Points
					Required
Y			Prereq 1	**Erosion & Sedimentation Control**	1
1			Credit 1	**Site Selection**	1
		N	Credit 2	**Development Density**	1
		N	Credit 3	**Brownfield Redevelopment**	1
		N	Credit 4.1	**Alternative Transportation**, Public Transportation Access	1
1			Credit 4.2	**Alternative Transportation**, Bicycle Storage & Changing Rooms	1
		N	Credit 4.3	**Alternative Transportation**, Alternative Fuel Vehicles	1
	?		Credit 4.4	**Alternative Transportation**, Parking Capacity and Carpooling	1
		N	Credit 5.1	**Reduced Site Disturbance**, Protect or Restore Open Space	1
		N	Credit 5.2	**Reduced Site Disturbance**, Development Footprint	1
1			Credit 6.1	**Stormwater Management**, Rate and Quantity	1
1			Credit 6.2	**Stormwater Management**, Treatment	1
		N	Credit 7.1	**Landscape & Exterior Design to Reduce Heat Islands**, Non-Roof	1
		N	Credit 7.2	**Landscape & Exterior Design to Reduce Heat Islands**, Roof	1
1			Credit 8	**Light Pollution Reduction**	

8

Yes	?	No			
		5	**Water Efficiency**		5 Points
		N	Credit 1.1	**Water Efficient Landscaping**, Reduce by 50%	1
		N	Credit 1.2	**Water Efficient Landscaping**, No Potable Use or No Irrigation	1
		N	Credit 2	**Innovative Wastewater Technologies**	1
		N	Credit 3.1	**Water Use Reduction**, 20% Reduction	1
		N	Credit 3.2	**Water Use Reduction**, 30% Reduction	1

3

Yes	?	No			
4		5	**Energy & Atmosphere**		17 Points
Y			Prereq 1	**Fundamental Building Systems Commissioning**	Required
Y			Prereq 2	**Minimum Energy Performance**	Required
Y			Prereq 3	**CFC Reduction in HVAC&R Equipment**	Required
2			Credit 1	**Optimize Energy Performance**	1 to 10
		N	Credit 2.1	**Renewable Energy**, 5%	1
		N	Credit 2.2	**Renewable Energy**, 10%	1
		N	Credit 2.3	**Renewable Energy**, 20%	1
1			Credit 3	**Additional Commissioning**	1
1			Credit 4	**Ozone Depletion**	1
		N	Credit 5	**Measurement & Verification**	1
		N	Credit 6	**Green Power**	1

4

6

Yes	?	No			
2	1	10	**Materials & Resources**		13 Points
					Required
Y			Prereq 1	**Storage & Collection of Recyclables**	
		N	Credit 1.1	**Building Reuse,** Maintain 75% of Existing Shell	1
		N	Credit 1.2	**Building Reuse,** Maintain 100% of Shell	1
		N	Credit 1.3	**Building Reuse,** Maintain 100% Shell & 50% Non-Shell	1
1			Credit 2.1	**Construction Waste Management,** Divert 50%	1
		N	Credit 2.2	**Construction Waste Management,** Divert 75%	1
		N	Credit 3.1	**Resource Reuse,** Specify 5%	1
		N	Credit 3.2	**Resource Reuse,** Specify 10%	1
1			Credit 4.1	**Recycled Content,** Specify 5% (post-consumer + ½ post-industrial)	1
		N	Credit 4.2	**Recycled Content,** Specify 10% (post-consumer + ½ post-industrial)	1
	?		Credit 5.1	**Local/Regional Materials,** 20% Manufactured Locally	1
		N	Credit 5.2	**Local/Regional Materials,** of 20% Above, 50% Harvested Locally	1
		N	Credit 6	**Rapidly Renewable Materials**	1
	○	N	Credit 7	**Certified Wood**	1

Yes	?	No			
8		7	**Indoor Environmental Quality**		15 Points
Y			Prereq 1	**Minimum IAQ Performance**	Required
Y			Prereq 2	**Environmental Tobacco Smoke (ETS) Control**	Required
		N	Credit 1	**Carbon Dioxide (CO_2) Monitoring**	1
		N	Credit 2	**Ventilation Effectiveness**	1
1			Credit 3.1	**Construction IAQ Management Plan,** During Construction	1
1			Credit 3.2	**Construction IAQ Management Plan,** Before Occupancy	1
1			Credit 4.1	**Low-Emitting Materials,** Adhesives & Sealants	1
1			Credit 4.2	**Low-Emitting Materials,** Paints	1
1			Credit 4.3	**Low-Emitting Materials,** Carpet	1
1			Credit 4.4	**Low-Emitting Materials,** Composite Wood & Agrifiber	1
1			Credit 5	**Indoor Chemical & Pollutant Source Control**	1
1			Credit 6.1	**Controllability of Systems,** Perimeter	1
		N	Credit 6.2	**Controllability of Systems,** Non-Perimeter	1
		N	Credit 7.1	**Thermal Comfort,** Comply with ASHRAE 55-1992	1
		N	Credit 7.2	**Thermal Comfort,** Permanent Monitoring System 2.2	1
		N	Credit 8.1	**Daylight & Views,** Daylight 75% of Spaces	1
		N	Credit 8.2	**Daylight & Views,** Views for 90% of Spaces	1

Yes	?	No			
1		4	**Innovation & Design Process**		5 Points
		N	Credit 1.1	**Innovation in Design:** Provide Specific Title GREEN CLEANING	1
		N	Credit 1.2	**Innovation in Design:** Provide Specific Title EDUCATION	1
		N	Credit 1.3	**Innovation in Design:** Provide Specific Title	1
		N	Credit 1.4	**Innovation in Design:** Provide Specific Title	1
1			Credit 2	**LEED™ Accredited Professional**	1

Yes	?	No		
20	2	39	**Project Totals (pre-certification estimates)**	69 Points

Certified 26-32 points Silver 33-38 points Gold 39-51 points Platinum 52-69 points

High-Performance Green Buildings

Exemption Declaration

Received by GA:

Date: 1/19/2007

Submit to: sustainableba@ga.wa.gov

Project Name:	Eagle Harbor Maintenance Building Remodel and Dock Repairs	Agency/Institution	Washington State Ferries (WSF)
Project Number:	06W062	GA H-P Green Bldg. #	05-056

	Name	Agency	Phone	E-Mail
Submitted By:	Lisa Parriott	WSF	(206) 515-3723	ParrioL@wsdot.wa.gov

Conceptual Construction Cost Estimate: $12,329,800 MB only, excluding inflation to construction midpoint

Total Facility Square Footage Estimate: 39,320

Project Location/Address: Eagle Harbor Maintenance Facility, 497 Harbor View Drive, Bainbridge Island, Washington

Facility Type Exemption*	Exempt Space Approx. %
Transmitter Building	-
Pumping Station	-
Hospital (not including skilled nursing)	-
Research Facilities with Laboratories	-

Agency Representative Signature Block

Signature

Name: -

Title: -

"Not Practicable" Exemption**	Yes/No
The project will seek US Green Bldg. Council LEED Certification***	No
The project will participate in the GA LEED QA process**	Yes
The project will take no further action regarding LEED.	No

Agency Representative Signature Block

Signature

Name: John H. White

Title: WSF Director of Terminal Engineering

This Exemption Submittal includes the following:

Provide a one page description of why the exemption is being sought. ☒

Provide a LEED Checklist indicating which LEED Credits may be "practicable" for the project. ☒ LEED Score attempting 12

* If a "Facility Type" exemption is requested and verified, no further submittals are required.

** If a "Not Practicable" exemption is requested, the project should pursue LEED to the level that is "practicable" for the project. Projects are encouraged to participate in the GA LEED QA process and subsequent annual reporting of the energy and water/sewer consumption to GA. This will demonstrate a "Good Faith" effort consistent with the intent of RCW 39.35D. Complete the appropriate GA LEED QA forms as the project progresses through the design and construction process. Feedback from GA will help projects to achieve the proposed LEED goal and will help to maximize utility incentives.

*** If the project continues to seek LEED Certification the project should also participate in the GA LEED QA process.

Form Last Updated
April 2006

Washington State
Department of Transportation

Douglas B. MacDonald
Secretary of Transportation

Washington State Ferries
2901 3rd Avenue, Suite 500
Seattle, WA 98121-3014

206-515-3400
TTY: 1-800-833-6388
www.wsdot.wa.gov/ferries

W. Michael Anderson
Assistant Secretary of Marine Operations
Executive Director

December 20, 2006

Mr. Stuart Simpson, Energy Engineer
State of Washington Department of General Administration
Division of Engineering and Architectural Services
P.O. Box 41000
Olympia, Washington 98504-1000

Dear Mr. Simpson:

After reviewing the 30% design package for the Eagle Harbor Maintenance Building Remodel and Dock Repair project, it is evident that the existing Maintenance Building renovation will not meet LEED Silver or Certified levels. The current level of funding provides for structural repairs and improvements to the building and surrounding dock along with limited tenant improvements within the building. Efforts to attain the required prerequisites and sufficient additional credits would change the scope of the project significantly.

The constraints of the existing superfund site remediation design and the type of industrial processes performed within the building limit the opportunities to apply many Green Building strategies. We will attempt to meet the intent and requirements of several Green Building features, as indicated on the attached LEED Checklist. There are approximately 12 credits that are feasible to apply to this project.

Due to the constraints that limit the credits that can be attained with this project I request a "Not Practicable" Exemption from the U.S. Green Building Council LEED Certification program. However, the project will participate in the General Administration's LEED Quality Assurance Process.

Sincerely,

John H. White, P.E.
Director, Terminal Engineering

EWT
Attachment: LEED Checklist
cc: Project File

C:\Documents and Settings\melodeeg\Local Settings\Temporary Internet Files\OLK6A\06W062 Not Practicable Exemptio

LEED-NC

LEED-NC Version 2.2 Registered Project Checklist

Washington State Ferries - Eagle Harbor Maintenance Building Remodel and Dock Repairs (30% PS&E)
Bainbridge Island, WA

Instructions

The scorecard below should be used throughout the design and development of your building project to track your anticipated LEED™ score. The spreadsheet automatically dates each printout to give you a snapshot of your LEED™ score as your project progresses. The active spreadsheet sums the credit points for each category and provides a total score for the project. Do not input values in the category subtotal or in the project total fields as this will be done automatically.

The prerequisites are required and must be achieved. Thus, a "Y" appears in the appropriate column for each prerequisite. Beside each credit are three boxes to indicate the likelihood of achieving each credit. To score the project appropriately, input the number of points for that credit into the first column labeled "Y" if this credit will be pursued. Input the number of points in the second column labeled "?" if it is unsure if this credit will be pursued. Finally, input the number of points in the third column labeled "N" if this credit will not be pursued or is not applicable to the project. The possible points available for each credit are shown in the far right column in each category. Remember that Energy & Atmosphere Credit 1 is worth up to 10 points and Energy & Atmosphere Credit 2 is worth up to 3 points.

The total number of points listed in the first box of the Total Project Score indicates the current anticipated score of the project. The ranges for each LEED certification category are listed below this row. A minimum of 33 points and achievement of all prerequisites is required to achieve Silver.

In the Innovation & Design Process category you are encouraged to propose up to four innovations for your project. You should rename the credit titles for Credits 1.1 to 1.4 to reflect the strategies your project will propose.

For each credit, provide a brief discussion of strategies considered for obtaining the credit. If the credit is not being pursued, provide justification for limitations of the project that prevent the credit from being achieved.

Yes	?	No				
3		11		**Sustainable Sites**	14 Points	Discussion
Y			Prereq 1	**Construction Activity Pollution Prevention**	Required	Local code requirements for erosion and sedimentation control achieve this point.
1			Credit 1	**Site Selection**	1	Existing developed site.
1			Credit 2	**Development Density & Community Connectivity**	1	Our site appears to meet option 2 requirements for community connnectivity.
		1	Credit 3	**Brownfield Redevelopment**	1	Must minimize disturbances to cap on superfund site.
1			Credit 4.1	**Alternative Transportation**, Public Transportation Access	1	Our site is within 1/4 mile of two bus lines.
		1	Credit 4.2	**Alternative Transportation**, Bicycle Storage & Changing Rooms	1	Bike racks and shower/changing facilities are not included.
		1	Credit 4.3	**Alternative Transportation**, Low-Emitting and Fuel-Efficient Vehicles	1	No revisions to the current parking plan are planned
		1	Credit 4.4	**Alternative Transportation**, Parking Capacity	1	No revisions to the current parking plan are planned
		1	Credit 5.1	**Site Development**, Protect of Restore Habitat	1	Capped superfund site - Unable to restore site habitat
		1	Credit 5.2	**Site Development**, Maximize Open Space	1	Capped superfund site - Unable to reduce hard surfaces
		1	Credit 6.1	**Stormwater Design**, Quantity Control	1	Capped superfund site - unable to attain this point.
		1	Credit 6.2	**Stormwater Design**, Quality Control	1	Capped superfund site - unable to attain this point.
		1	Credit 7.1	**Heat Island Effect**, Non-Roof	1	Capped superfund site - existing asphalt to remain in place
		1	Credit 7.2	**Heat Island Effect**, Roof	1	Existing roof will not be replaced.
		1	Credit 8	**Light Pollution Reduction**	1	Existing security lighting to remain.

Yes	?	No				
1		4		**Water Efficiency**	5 Points	Discussion
		1	Credit 1.1	**Water Efficient Landscaping**, Reduce by 50%	1	No landscaping planned for project.
		1	Credit 1.2	**Water Efficient Landscaping**, No Potable Use or No Irrigation	1	No landscaping planned for project.
		1	Credit 2	**Innovative Wastewater Technologies**	1	Rainwater catchment system unfeasible.
1			Credit 3.1	**Water Use Reduction**, 20% Reduction	1	Plan to use waterless urinals and low demand fixtures.
		1	Credit 3.2	**Water Use Reduction**, 30% Reduction	1	Unlikely to attain this level of water reduction.

Yes	?	No				
1		5		**Energy & Atmosphere**	17 Points	Discussion
Y		N	Prereq 1	**Fundamental Commissioning of the Building Energy Systems**	Required	Will not meet this requirement -planning to reuse existing systems
Y		N	Prereq 2	**Minimum Energy Performance**	Required	Will not meet this requirement -existing exterior envelope, heating systems, and lighting are not planned to be upgraded.
Y			Prereq 3	**Fundamental Refrigerant Management**	Required	AC unit at IT Room does comply.
		1	Credit 1	**Optimize Energy Performance**	1 to 10	Unable to attain this point.
		1	Credit 2	**On-Site Renewable Energy**	1 to 3	Unable to attain this point.
		1	Credit 3	**Enhanced Commissioning**	1	Unable to attain this point.
1			Credit 4	**Enhanced Refrigerant Management**	1	AC unit at IT Room does comply.
		1	Credit 5	**Measurement & Verification**	1	Unable to attain this point.
		1	Credit 6	**Green Power**	1	Not included at this time

Yes	?	No				
4	3	6		**Materials & Resources**	13 Points	Discussion
Y			Prereq 1	**Storage & Collection of Recyclables**	Required	Will provide recycling area near common lunchroom.
1			Credit 1.1	**Building Reuse**, Maintain 75% of Existing Walls, Floors & Roof	1	Anticipate maintaining 75% of existing walls, floors, and roof
		1	Credit 1.2	**Building Reuse**, Maintain 100% of Existing Walls, Floors & Roof	1	Unable to attain this point. Replacing foundation
		1	Credit 1.3	**Building Reuse**, Maintain 50% of Interior Non-Structural Elements	1	Unable to attain this point.
1			Credit 2.1	**Construction Waste Management**, Divert 50% from Disposal	1	Will specify for contractor to conform.
	1		Credit 2.2	**Construction Waste Management**, Divert 75% from Disposal	1	Possible for contractor to conform
		1	Credit 3.1	**Materials Reuse**, 5%	1	No current plans for reused components
		1	Credit 3.2	**Materials Reuse**,10%	1	No current plans for reused components
1			Credit 4.1	**Recycled Content**, 10% (post-consumer + ½ pre-consumer)	1	Should be able to specify and document 5% recycled material
	1		Credit 4.2	**Recycled Content**, 20% (post-consumer + ½ pre-consumer)	1	May be able to specify and document 10% recycled material
1			Credit 5.1	**Regional Materials**, 10% Extracted, Processed & Manufactured Regio	1	Anticipate 10% regional material use.
	1		Credit 5.2	**Regional Materials**, 20% Extracted, Processed & Manufactured Regio	1	Possible for 20% regional material use
		1	Credit 6	**Rapidly Renewable Materials**	1	Will not be appropriate for this project
		1	Credit 7	**Certified Wood**	1	No current plans for this due to additional costs

Yes	?	No				
2	2	11	Indoor Environmental Quality		15 Points	Discussion
Y		N	Prereq 1	**Minimum IAQ Performance**	Required	Unattainable due to industrial processes.
Y			Prereq 2	**Environmental Tobacco Smoke (ETS) Control**	Required	
		1	Credit 1	**Outdoor Air Delivery Monitoring**	1	No current plans for this due to additional costs
		1	Credit 2	**Increased Ventilation**	1	Does not meet requirements for naturally ventilated spaces. Additional costs associated with mech ventilated spaces
	1		Credit 3.1	**Construction IAQ Management Plan,** During Construction	1	May be able to comply.
		1	Credit 3.2	**Construction IAQ Management Plan,** Before Occupancy	1	Unable to attain this point.
1			Credit 4.1	**Low-Emitting Materials,** Adhesives & Sealants	1	Can specify materials to comply
1			Credit 4.2	**Low-Emitting Materials,** Paints & Coatings	1	Can specify materials to comply
		1	Credit 4.3	**Low-Emitting Materials,** Carpet Systems	1	No carpet used.
	1		Credit 4.4	**Low-Emitting Materials,** Composite Wood & Agrifiber Products	1	May not be appropriate for this project. Must meet structural requirements.
		1	Credit 5	**Indoor Chemical & Pollutant Source Control**	1	Unable to attain this point.
		1	Credit 6.1	**Controllability of Systems,** Lighting	1	Impractical to provide controls for 90% of occupants.
		1	Credit 6.2	**Controllability of Systems,** Thermal Comfort	1	Impractical to provide controls for 50% of occupants.
		1	Credit 7.1	**Thermal Comfort,** Design	1	Unable to attain this point.
		1	Credit 7.2	**Thermal Comfort,** Verification	1	Do not intend to provide a thermal comfort survey
		1	Credit 8.1	**Daylight & Views,** Daylight 75% of Spaces	1	Unable to attain this point.
		1	Credit 8.2	**Daylight & Views,** Views for 90% of Spaces	1	Unable to attain this point.

Yes	?	No				
1		4	Innovation & Design Process		5 Points	Discussion
		1	Credit 1.1	**Innovation in Design**	1	
		1	Credit 1.2	**Innovation in Design**	1	
		1	Credit 1.3	**Innovation in Design**	1	
		1	Credit 1.4	**Innovation in Design**	1	
1			Credit 2	**LEED® Accredited Professional**	1	Craig Swalling is a LEED Accredited professional.

Yes	?	No		
12	5	41	Project Totals (pre-certification estimates)	69 Points

Certified 26-32 points **Silver** 33-38 points **Gold** 39-51 points **Platinum** 52-69 points

STATE OF WASHINGTON
WASHINGTON STATE PATROL
8623 Armstrong Road SW • Olympia, Washington 98504-2626 • (360) 596-6000 • www.wsp.wa.gov

August 29, 2008

Mr. Stuart Simpson
Sustainable Building Advisor
Department of General Administration
Division of Engineering & Architectural Services
210 11th Avenue
PO Box 41000
Olympia WA 98504-1000

Dear Mr. Simpson:

RE: LEED Exemption Request

The Washington State Patrol is asking for an "Exemption" from the LEED Silver requirements for the new student dormitory being designed for the Fire Training Academy in North Bend.

This building will be located in a remote mountain location on an industrial/training facility used to train fire fighters and first responders. The environmental and site constraints of this location impact the LEED points that would be available in a city environment location. The architect is making every effort to minimize the environmental, energy and maintenance impacts in his design.

Because of the site location, and the minimal scope of work, the contractor resources expected to be interested in this project would be significantly limited by the necessity of the documentation required to meet the Silver LEED criteria. This would result in inflated bid proposals driving the cost of the construction beyond the budget.

In conclusion, WSP intends to design & build to the LEED requirements to the best of our abilities, but are limited by the programming and funding request for this new facility that occurred prior to the certification legislation and as a result there is inadequate funding to meet the reporting and documentation required by this program.

Sincerely,

CHIEF JOHN R. BATISTE
Will F. Gla
Mr. William F. Glaeser
Property Management Division

WFG:jsg
Enclosures: (1)
cc: Mr. Jim Gilbert, Facilities Management Section
Ms. Diane Perry, Management Services Bureau
Mr. Dennis Quinsey, Facilities Management Section

High-Performance Green Buildings

[redacted]

Exemption Declaration

Date: 6/16/2008

Submit to: sustainableba@ga.wa.gov

Project Name:	Fire Training Academy - Dormitory	Agency/Institution	225
Project Number:	2007-203	GA H-P Green Bldg. #	

	Name	Agency	Phone	E-Mail
Submitted By:	William Glaeser	Washington State Patrol	360-596-6000	william.glaeser@wsp.wa.gov

Conceptual Construction Cost Estimate: 1.9 million

Total Facility Square Footage Estimate: 9484 gsf

Project Location/Address: 50810 Grouse Ridge Rd., North Bend, 98045

Facility Type Exemption*	Exempt Space Approx. %
Transmitter Building	
Pumping Station	
Hospital (not including skilled nursing)	
Research Facilities with Laboratories	

Agency Representative Signature Block

Signature

Name:

Title:

"Not Practicable" Exemption**	Yes/No
The project will seek US Green Bldg. Council LEED Certification***	No
The project will participate in the GA LEED QA process**	No
The project will take no further action regarding LEED.	Yes

Agency Representative Signature Block

Signature

Name: William F. Glaeser

Title: Property Management Division Administrator

This Exemption Submittal includes the following:

Provide a one page description of why the exemption is being sought. ☒

Provide a LEED Checklist indicating which LEED Credits may be "practicable" for the project. ☐ LEED Score attempting

---

* If a "Facility Type" exemption is requested and verified, no further submittals are required.

** If a "Not Practicable" exemption is requested, the project should pursue LEED to the level that is "practicable" for the project. Projects are encouraged to participate in the GA LEED QA process and subsequent annual reporting of the energy and water/sewer consumption to GA. This will demonstrate a "Good Faith" effort consistent with the intent of RCW 39.35D. Complete the appropriate GA LEED QA forms as the project progresses through the design and construction process. Feedback from GA will help projects to achieve the proposed LEED goal and will help to maximize utility incentives.

*** If the project continues to seek LEED Certification the project should also participate in the GA LEED QA process.

Form Last Updated
April 2006

Yakima Valley Community College
Yakima Campus
South Sixteenth Avenue & Nob Hill Blvd. P.O. Box 22520 Yakima, WA 98907-2520 Phone: (509) 574-4600 FAX: (509) 574-6860

May 19, 2008

Mr. Stuart Simpson
Sustainability Coordinator
Department of General Administration
PO Box 41012
Olympia, WA 98504

Re: Brown Dental Clinic Renovation
State Project No. 2007-155

Dear Mr. Simpson:

This letter is to advise your office that Yakima Valley Community College is seeking exemption from the LEED Silver Certification requirement on the Brown Dental Clinic Renovation Project. This exemption is necessary because of the escalating costs of construction and equipment.

Although the college is taking this exemption, please be assured that our consultant team will pursue all LEED design principles to the greatest practical extent during development of this project.

I am attaching the following documents for your review:

- Exemption Declaration
- Description of why the exemption is necessary
- Updated LEED checklist

If you have any questions, please call me at (509) 574-4618 or email kudge@yvcc.edu.

Sincerely,

Karen Judge

Karen Judge
Director of Capital Projects

Cc: sustainable@ga.wa.gov
Tom Henderson, Assistant Director, Capital Budget
David Lohrengel, E&AS Project Manager
Jeff Wood, Director of Facilities
Sheri Brockway, Architect

High-Performance Green Buildings
Exemption Declaration

Received by GA:

Date: 5/15/2008

Submit to: sustainableba@ga.wa.gov

Project Name:	Brown Dental Renovation	Agency/Institution	Yakima Valley Community College
Project Number:	2007-155	GA H-P Green Bldg. #	

	Name	Agency	Phone	E-Mail
Submitted By:	Karen Judge	YVCC	(509) 574-4618	kjudge@yvcc.edu

Conceptual Construction Cost Estimate $ 4,315,231 *Including Dental Equipment

Total Facility Square Footage Estimate 14,770

Project Location/Address Yakima Campus, Yakima Valley Community College

Facility Type Exemption*	Exempt Space Approx. %
Transmitter Building	
Pumping Station	
Hospital (not including skilled nursing)	
Research Facilities with Laboratories	

Agency Representative Signature Block

Signature

Name:

Title:

"Not Practicable" Exemption**	Yes/No
The project will seek US Green Bldg. Council LEED Certification***	No
The project will participate in the GA LEED QA process**	Yes
The project will take no further action regarding LEED.	

Agency Representative Signature Block

Karen Judge

Signature

Name: Karen Judge

Title: Director of Capital Projects

This Exemption Submittal includes the following:

Provide a one page description of why the exemption is being sought. ☒

Provide a LEED Checklist indicating which LEED Credits may be "practicable" for the project. ☒ LEED Score attempting 36

* If a "Facility Type" exemption is requested and verified, no further submittals are required.

** If a "Not Practicable" exemption is requested, the project should pursue LEED to the level that is "practicable" for the project. Projects are encouraged to participate in the GA LEED QA process and subsequent annual reporting of the energy and water/sewer consumption to GA. This will demonstrate a "Good Faith" effort consistent with the intent of RCW 39.35D. Complete the appropriate GA LEED QA forms as the project progresses through the design and construction process. Feedback from GA will help projects to achieve the proposed LEED goal and will help to maximize utility incentives.

*** If the project continues to seek LEED Certification the project should also participate in the GA LEED QA process.

Form Last Updated
April 2006

BROWN DENTAL RENOVATION

Yakima Valley Community College
State Project No. 2007-155

Due to ongoing increases in construction costs, equipment costs and the cost of relocating the program during construction the project is having budget difficulties. In the search for cost saving measures, several priorities were established which had to be maintained in order to achieve the goals for the program and College.

- **Maintain the size of the building as designed.** It was not considered an option to decrease the size of the building to reduce costs. The funding for the project was requested based on the need to serve additional students. The existing building is grossly undersized for the current program capacity; the design of the renovation project is required to increase the size of the building to properly serve those students, plus the additional students.
- **Provide dental equipment to serve the needs of the program.** The design for the project includes the use of both existing and new dental equipment. It was not considered an option to decrease the amount of dental equipment to be purchased for the building. The list of new equipment was developed based on the increase in program capacity and the need for replacement of aging, high maintenance equipment. To cut costs through a reduction in new equipment would risk under serving the students in the program and presenting the program with almost immediate equipment replacement problems.
- **Design the facility to campus standards.** The facility is being designed using low maintenance, long lasting materials. It was not considered an option to reduce costs through the use of lower cost materials that would provide a shorter life span and increase long term maintenance costs.

With the establishment of these priorities and the commitment of the College to increase the sustainability of its facilities, it has been determined that one cost saving measure that could be incorporated without affecting the overall project quality was to forgo documenting and certifying the project as a LEED project. The project will still be designed as a sustainable project to the LEEDS Silver standard, but without the certification or the costs associated with the required documentation, verification and coordination during the construction administration phase of the project.

The attached LEED NC Version 2.2 Checklist shows the credits (36 total) which will be integrated into the project.

LEED-NC

LEED-NC Version 2.2 Registered Project Checklist
Brown Dental Hygiene Building Renovation
Yakima Valley Community College

Yes	?	No			
9	2	3	**Sustainable Sites**		14 Points
Y			Prereq 1	**Construction Activity Pollution Prevention**	Required
1			Credit 1	**Site Selection**	1
1			Credit 2	**Development Density & Community Connectivity**	1
1			Credit 3	**Brownfield Redevelopment**	1
1			Credit 4.1	**Alternative Transportation**, Public Transportation Access	1
	1		Credit 4.2	**Alternative Transportation**, Bicycle Storage & Changing Rooms	1
1			Credit 4.3	**Alternative Transportation**, Low-Emitting and Fuel-Efficient Vehicles	1
1			Credit 4.4	**Alternative Transportation**, Parking Capacity	1
		1	Credit 5.1	**Site Development**, Protect of Restore Habitat	1
		1	Credit 5.2	**Site Development,** Maximize Open Space	1
1			Credit 6.1	**Stormwater Design,** Quantity Control	1
1			Credit 6.2	**Stormwater Design,** Quality Control	1
	1		Credit 7.1	**Heat Island Effect**, Non-Roof	1
1			Credit 7.2	**Heat Island Effect**, Roof	1
		1	Credit 8	**Light Pollution Reduction**	1

Yes	?	No			
2		3	**Water Efficiency**		5 Points
		1	Credit 1.1	**Water Efficient Landscaping**, Reduce by 50%	1
		1	Credit 1.2	**Water Efficient Landscaping**, No Potable Use or No Irrigation	1
		1	Credit 2	**Innovative Wastewater Technologies**	1
1			Credit 3.1	**Water Use Reduction**, 20% Reduction	1
1			Credit 3.2	**Water Use Reduction**, 30% Reduction	1

Yes	?	No			
5	4	8	**Energy & Atmosphere**		17 Points
Y			Prereq 1	**Fundamental Commissioning of the Building Energy Systems**	Required
Y			Prereq 2	**Minimum Energy Performance**	Required
Y			Prereq 3	**Fundamental Refrigerant Management**	Required
4	3	3	Credit 1	**Optimize Energy Performance**	1 to 10
		3	Credit 2.1	**On-Site Renewable Energy**	1 to 3
1			Credit 3	**Enhanced Commissioning**	1
		1	Credit 4	**Enhanced Refrigerant Management**	1
		1	Credit 5	**Measurement & Verification**	1
	1		Credit 6	**Green Power**	1

continued...

Yes	?	No			
3	2	8	**Materials & Resources**		13 Points
Y			Prereq 1	**Storage & Collection of Recyclables**	Required
1			Credit 1.1	**Building Reuse**, Maintain 75% of Existing Walls, Floors & Roof	1
1			Credit 1.2	**Building Reuse**, Maintain 100% of Existing Walls, Floors & Roof	1
		1	Credit 1.3	**Building Reuse**, Maintain 50% of Interior Non-Structural Elements	1
		1	Credit 2.1	**Construction Waste Management**, Divert 50% from Disposal	1
		1	Credit 2.2	**Construction Waste Management**, Divert 75% from Disposal	1
		1	Credit 3.1	**Materials Reuse**, 5%	1
		1	Credit 3.2	**Materials Reuse**,10%	1
	1		Credit 4.1	**Recycled Content**, 10% (post-consumer + ½ pre-consumer)	1
		1	Credit 4.2	**Recycled Content**, 20% (post-consumer + ½ pre-consumer)	1
	1		Credit 5.1	**Regional Materials**, 10% Extracted, Processed & Manufactured Regio	1
		1	Credit 5.2	**Regional Materials**, 20% Extracted, Processed & Manufactured Regio	1
		1	Credit 6	**Rapidly Renewable Materials**	1
1			Credit 7	**Certified Wood**	1

Yes	?	No			
13	1	1	**Indoor Environmental Quality**		15 Points
Y			Prereq 1	**Minimum IAQ Performance**	Required
Y			Prereq 2	**Environmental Tobacco Smoke** (ETS) **Control**	Required
1			Credit 1	**Outdoor Air Delivery Monitoring**	1
1			Credit 2	**Increased Ventilation**	1
1			Credit 3.1	**Construction IAQ Management Plan**, During Construction	1
1			Credit 3.2	**Construction IAQ Management Plan**, Before Occupancy	1
		1	Credit 4.1	**Low-Emitting Materials**, Adhesives & Sealants	1
	1		Credit 4.2	**Low-Emitting Materials**, Paints & Coatings	1
1			Credit 4.3	**Low-Emitting Materials**, Carpet Systems	1
1			Credit 4.4	**Low-Emitting Materials**, Composite Wood & Agrifiber Products	1
1			Credit 5	**Indoor Chemical & Pollutant Source Control**	1
1			Credit 6.1	**Controllability of Systems**, Lighting	1
1			Credit 6.2	**Controllability of Systems**, Thermal Comfort	1
1			Credit 7.1	**Thermal Comfort**, Design	1
1			Credit 7.2	**Thermal Comfort**, Verification	1
1			Credit 8.1	**Daylight & Views**, Daylight 75% of Spaces	1
1			Credit 8.2	**Daylight & Views**, Views for 90% of Spaces	1

Yes	?	No			
4	1		**Innovation & Design Process**		5 Points
1			Credit 1.1	**Innovation in Design**: Green Building Education	1
1			Credit 1.2	**Innovation in Design**: Green Housekeeping	1
1			Credit 1.3	**Innovation in Design**: Integrated Pest Management	1
	1		Credit 1.4	**Innovation in Design**: Low-emitting furniture systems	1
1			Credit 2	**LEED® Accredited Professional**	1

Yes	?	No		
36	10	23	**Project Totals** (pre-certification estimates)	69 Points

Certified 26-32 points **Silver** 33-38 points **Gold** 39-51 points **Platinum** 52-69 points