

PLANNING COMMISSION PUBLIC HEARING MEETING AGENDA

Thursday, October 18, 2018
7:00 p.m.

Council Chamber · Shoreline City Hall
17500 Midvale Ave N
Shoreline, WA 98133
Estimated Time
7:00
2. ROLL CALL
7:01
3. APPROVAL OF AGENDA
7:03
4. APPROVAL OF MINUTES
a. September 20, 2018 Draft Minutes

b. October 4, 2018 Draft Minutes Public Comment and Testimony at Planning Commission

During General Public Comment, the Planning Commission will take public comment on any subject which is not specifically scheduled later on the agenda. During Public Hearings and Study Sessions, public testimony/comment occurs after initial questions by the Commission which follows the presentation of each staff report. In all cases, speakers are asked to come to the podium to have their comments recorded, state their first and last name, and city of residence. The Chair has discretion to limit or extend time limitations and the number of people permitted to speak. Generally, individuals may speak for three minutes or less, depending on the number of people wishing to speak. When representing the official position of an agency or City-recognized organization, a speaker will be given 5 minutes. Questions for staff will be directed to staff through the Commission.

5. GENERAL PUBLIC COMMENT	7:05
 6. PUBLIC HEARING a. Potential Expansion of Deep Green Incentive Program Staff Presentation Public Testimony 	7:15
7. DIRECTOR'S REPORT	8:15
8. UNFINISHED BUSINESS	8:16
9. NEW BUSINESS	8:17
10. REPORTS OF COMMITTEES & COMMISSIONERS/ANNOUNCEMENTS	8:18
11. AGENDA FOR November 1, 2018	8:19
12. ADJOURNMENT	8:20

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DRAFT

CITY OF SHORELINE

SHORELINE PLANNING COMMISSION MINUTES OF REGULAR MEETING

September 20, 2018 Shoreline City Hall 7:00 P.M. Council Chamber

<u>Commissioners Present</u> <u>Staff Present</u>

Chair Montero
Rachael Markle, Director, Planning and Community Development
Commissioner Davis
Commissioner Lin
Rachael Markle, Director, Planning and Community Development
Paul Cohen, Planning Manager, Planning and Community Development
Steve Szafran, Senior Planner, Planning and Community Development

Commissioner Maul Julie Ainsworth-Taylor, Assistant City Attorney

Commissioner Malek Tricia Juhnke, City Engineer

Carla Hoekzema, Planning Commission Clerk

Commissioners Absent

Vice Chair Mork Commissioner Craft

CALL TO ORDER

Chair Montero called the regular meeting of the Shoreline Planning Commission to order at 7:00 p.m.

ROLL CALL

Upon roll call by Ms. Hoekzema the following Commissioners were present: Chair Montero and Commissioners Davis, Lin, Maul and Malek. Vice Chair Mork and Commissioner Craft were absent.

APPROVAL OF AGENDA

The agenda was accepted as presented.

APPROVAL OF MINUTES

The minutes of September 6, 2018 were approved as submitted.

GENERAL PUBLIC COMMENT

There were no general public comments.

STUDY ITEM: SALES TAX MEASURE FOR SIDEWALKS – PROPOSITION 1

Ms. Juhnke presented the Staff Report for Proposition 1, which would increase the Sales and Use Tax to support the construction of sidewalks. She explained that most of Shoreline's neighborhoods were built to King County rural standards in the 40s, 50s and 60s. When the City incorporated in 1995, investing local tax dollars in infrastructure was a priority, and the community immediately began planning for the improvements on Aurora Avenue, Interurban Trail and stormwater systems. In 2006, Shoreline voters invested in parks through a bond measure, and the Council voted to increase the vehicle license fee in 2009 to help fund the Pavement Management Program.

Ms. Juhnke advised that through surveys and community input, residents have helped direct the priorities for capital investments. Shoreline residents have repeatedly identified sidewalks as important, and this was once again the case in the most recent survey. Only about 1/3 of the City's arterials and even fewer residential streets have sidewalks. Less than half of respondents indicated they were satisfied with the availability of sidewalks on major streets and routes, and even fewer expressed satisfaction with the availability of sidewalks in their neighborhoods. Residents have also expressed frustration with the condition of the existing sidewalks. In this year's survey, 64% of the respondents put investing in sidewalk infrastructure as one of their top two capital improvement priorities.

Ms. Juhnke referred to the City's Pedestrian Plan, which was developed in 2011 and identifies approximately 153 miles of sidewalk. She reviewed that when the City was incorporated there was just 54 miles of sidewalk. Since that time, the City has constructed a little more than 17 miles of sidewalk using funds from the capital budget and grants. Private development has also paid for the construction of 6 miles of sidewalk. Unfortunately, the need for sidewalks is greater that the resources currently available, and the cost estimate to build out the remaining 75 miles of sidewalk is approximately \$400 million. This amount doesn't include the estimated \$110 million needed to repair and maintain the existing sidewalk network.

Ms. Juhnke reported that in order to address the growing need to repair and maintain the existing sidewalk network, the Council voted in June to increase the vehicle license fee by an addition \$20. It is estimated that the increase will generate approximately \$830,000 in additional revenue each year that will be used solely for sidewalk repair and maintenance. While this funding will be a significant boost to the City's effort, it is still small compared to the need. She advised that over the past six years, the City has collected an average of \$1.8 million for transportation projects from the Real Estate Excise Tax (REET), Vehicle License Fee (VLF), and the general fund. This revenue must be divided to pay for street paving, traffic signals, safety improvements and sidewalks. Historically, the City has spent about \$152,000 per year on sidewalk repair and maintenance through the Curb, Ramp, Gutter and Sidewalk Maintenance Program. New sidewalks have generally been built using grant funding or money that was part of a larger capital project such as the Aurora Corridor improvements.

Ms. Juhnke explained that many factors impact the cost of sidewalk construction. For example, planning and design can vary depending on the complexity of the project, and construction costs can vary depending on the price of materials at the time of construction. Other cost factors include accommodating stormwater drainage, relocating utilities, and accommodating parking, driveway and Americans with Disabilities Act (ADA) requirements.

Ms. Juhnke reported that the City appointed 15 Shoreline residents to a Sidewalk Advisory Committee to look at how to prioritize and fund the construction of new sidewalks. Through the process, the committee emphasized the need for access and mobility for everyone, and the committee and City staff developed a 2018 Sidewalk Prioritization Plan that focused on safety, equity, proximity and connectivity. The City Council approved the 2018 Sidewalk Prioritization Plan earlier in 2018 and then considered several funding options that included: increasing property tax, a Sales and Use Tax, increasing the VLF further or a combination of the sources.

Ms. Juhnke reported that the Council ultimately decided to seek voter approval for a Sales and Use Tax increase. If approved by Shoreline voters, Proposition 1 would increase the Sales and Use Tax by 0.2%. If approved, all funds collected would be used solely to support the debt for sidewalk construction or repair. She provided a table showing how Shoreline's Sales and Use Tax rate compares to surrounding jurisdictions. She noted that Shoreline's current rate of 10% is at the bottom. If Proposition 1 is approved by the voters, the rate would increase to 10.2%, placing Shoreline in the middle of surrounding jurisdictions.

Ms. Juhnke explained that the adopted resolution for placing Proposition 1 on the ballot identified 12 specific sidewalk projects to be constructed initially. She provided a table and a map to identify the 12 projects, noting that all of them were part of the 2018 Sidewalk Prioritization Plan. She advised that current projections indicate that only about 70% of the revenue generated would be needed to construct the initial 12 projects. Once the 12 projects are completed, the Council would use the additional revenue to fund other sidewalk projects utilizing the 2018 Sidewalk Prioritization Plan as a guide or to expedite repair and maintenance of existing sidewalks. Again, she emphasized that all funding generated from the ballot measure must be expended to support the City's sidewalk program.

Ms. Juhnke concluded her report by providing the actual ballot language contained in the Voter's Guide and pointing out that a simple majority is required to approve the measure.

Commissioner Malek requested clarification on the 20-year timeline. Ms. Juhnke said that the funding collected over the 20-year period would not fund full build out of the Pedestrian Plan. However, it should generate more revenue than what will be required for the 12-initial projects. The additional revenue would be used for constructing additional sidewalks and/or repairing and maintaining existing sidewalks.

Commissioner Malek asked about the timeline for sidewalk construction. Ms. Juhnke explained that rather than a pay-as-you-go approach, the City would be bonding for the work. The plan is to build more sidewalks earlier and then use the tax revenue to pay the debt service. If Proposition 1 is approved by voters, City staff will finalize a schedule for completing the projects.

STUDY ITEM: 2018 DEVELOPMENT CODE AMENDMENTS (#2)

Mr. Szafran reviewed that the proposed Administrative and Clarifying amendments were presented to the Commission on September 9th. He briefly recapped the amendments that the Commission had questions on.

Recap of Administrative and Clarifying Amendments

- Amendment 1 (SMC 20.20.012) Building Coverage Definition. At the last meeting, the Commission raised questions about what should constitute building coverage and whether eves and other roof elements should be counted as part of that coverage. The Commission also inquired about the exception of ground-mounted solar collectors from building coverage requirements. Currently, there are exceptions for photovoltaic arrays and solar thermal collectors in the commercial zones, but they do not apply in residential zones.
- Amendment 8 (SMC 20.40.405) Homeless Shelter. The proposed amendment would add "Homeless Shelter" to the title page. However, this would no longer be necessary, since it would automatically be added if the Commission recommends that "Homeless Shelter" be added to the Use Table.
- Amendment 17 (SMC 20.50.020) Height. The current code sets the base height for high schools at 50 feet, and the base height may be exceeded to a maximum of 55 feet for gymnasiums and 72 feet for theater fly spaces. Because middle and elementary schools may also want to add these types of uses, staff is recommending to replace "high schools" with "public and private K through 12 schools."
- Amendment 19 (SMC 20.50.040) Landscape Structure in Setback. This amendment would provide clarification on the applicability of maximum height and sight distance requirements to vegetation supported by landscape structures. Based on feedback from the Commission, staff is now recommending an additional change in Item c, which would replace the phrase "Both sides and roof" with "All sides." Because gazebos will count as a landscape structure, requiring an open roof would not make sense.
- Amendment 22 (SMC 20.50.150) Storage Space for Garbage. Staff is proposing that the title to this provision be changed to, "Storage Space for Collection of Garbage, Recyclables and Compostables Standards. This is consistent with the language found in the City's waste agreement.

Next, Mr. Szafran reviewed the proposed policy amendments.

- Amendment 2 (SMC 20.20.024.H) Definitions. This amendment would add a definition for "Homeless Shelter."
- Amendment 12 (SMC 20.40.120) Homeless Shelter Use Table. This amendment would add "Homeless Shelter" as an approved permitted use with indexed criteria in the Community Business (CB), Mixed Business (MB) and Town Center (TC) 1, 2 and 3 zones.
- Amendment 15 (SMC 20.40.405) Homeless Shelter Indexed Criteria. This amendment outlines the indexed criteria that would go along with the new use in the Use Table. The proposed index criteria are intended to allow homeless shelters in certain zones while providing protection

to the residents of the shelter and to ensure the shelters do not impact adjacent land uses. Staff researched jurisdictions in the region to find out how they regulate homeless shelters, and the findings were included in the Staff Report. Also, the City issued a temporary use permit in 2017 for Mary's Place, which functions as a homeless shelter at 16301 Aurora Avenue. The City considers Mary's Place a successful project and used it as a model for developing the proposed regulations.

Chair Montero recalled that the Commission discussed homeless shelters previously. Mr. Cohen clarified that the earlier discussion was focused on transitional encampments, and the criteria evolved over time. Since that time, homeless shelters have come up as another land use the City felt would fill another gap in providing housing. He acknowledged that there are some similarities between the requirements for the two uses.

- Amendment 3 (SMC 20.20.032.L) Definitions. This amendment would add a definition for "Landscape Structures." A unified definition that applies to different types of landscape structures is needed in order to clarify the applicability of the requirements. As proposed, the term "Landscape Structure" will apply to structures that support trees and plants, such as a trellis, arbor, pergola or gazebo.
- Amendment 18 (SMC 20.50.020.3) Height in Commercial Zones. Currently, the base height in the Mixed Use Residential (MUR) zones can be exceeded by 15 feet for rooftop structures such as elevators, arbors, shelters, barbecue enclosures and other structures that provide open space amenities and their access. Staff believes these same height exemptions should be extended to the commercial zones, as well.
- Amendment 21 (SMC 20.50.122) Administrative Design Review for Single Family Residential Attached and Multifamily Residential. The Single Family Residential and Multifamily Residential design standards are outdated from when development in the City was administered by King County. The current design standards do not reflect the City's desire to create attractive and innovative site and building design. The standards will be completely updated in the next year or two. To ensure that development occurring before adoption of the updated standards meets the City's visions, staff recommends extending the use of the Administrative Design Review process to the Single Family Attached and Multifamily design standards. Mr. Cohen added that the Administrative Design Review process allows developers to apply for departures from the design standards, with justification that meets the criteria and intent. This flexibility can allow for better design instead of rigidly following the code.
- Amendment 24 (SMC 20.50.310.B) Tree Removal and Lot Size. This amendment was privately initiated. It proposes to extend the same exemption ratio of tree to property area beyond the current 21,781 square foot cap (1/2 acre). The aim is to be more equitable toward property owners of larger parcels. Currently, the maximum number of trees that can be removed on a residential lot is six. As per the proposed amendment, for every 7,200 square feet beyond ½ acre, the property owner would receive an exemption for one additional tree to be removed.

Amendment 26 (SMC 20.50.350.B.6) – Trees in Setbacks. This privately-initiated amendment would change the development standards for tree clearing activities. The applicant's justification for the proposed amendment was attached to the Staff Report. Staff is recommending denial of the amendment for a number of reasons. Currently, the Shoreline Municipal Code's (SMC) Civil Penalty Section regulates unlawful tree removal and fines are assessed to the responsible party who has committed a violation of the provisions of SMC 20.50 or SMC 20.80. The proposed amendment seeks to require replacement trees in certain circumstances to be the largest size commercially available, and staff has been advised by many landscaping professionals and arborists that trees that are large at the time of planting are often less likely to survive and thrive. Trees that are smaller at the time of planting can typically catch up and surpass those trees that are large at the time of planting. In addition, the proposed amendment would require four replacement trees if a protected tree is damaged and three replacement trees if a significant tree is removed or damaged on a site that has no permit. Typically, unpermitted work has greater penalties than permitted activities, and the development code does not require significant trees to be preserved within required setbacks as long as the minimum retention is met. It is important that a property owner have some flexibility to design, construct and create solar access space or views and replace trees so they adapt better to a new development. Additional reasons for staff's recommendation of denial are included in the Staff Report.

Chair Montero asked staff to provide examples of how unpermitted work has greater penalties than permitted activities. Mr. Szafran said the proposal is four replacement trees for a permitted project and only three if it's an unpermitted activity. It doesn't make sense to assess a greater penalty for permitted projects. Chair Montero asked what the typical penalty would be for unpermitted tree removal. Mr. Szafran answered that the civil penalty would be a substantial monetary fine and replacement trees would be required, as well. Ms. Markle clarified that a developer may not be fined if a tree is unintentionally damaged during construction of a permitted project, but replacement trees would likely be required as restitution. Mr. Szafran summarized that there is already code language in place to address these situations.

• Amendment 27 (SMC 20.50.350.B) and Amendment 28 (SMC 20.50.350.C) – Tree Retention and Replacement for Public Improvements. This provision sets forth the minimum tree retention requirements. The City regularly requires private development to construct street frontage improvements and the City also has capital improvement projects that can impact private properties. Typically, frontage improvement standards have little flexibility in preserving trees because of the frontage standards and the construction around the trees can be damaging to their health. In either case, the street improvements, construction and grading may require tree removal on private properties. These removed trees are out of the control of the property owner for the result of needed public improvements. Therefore, staff recommends that trees on private property that need to be removed by the City should not be included in the minimum tree retention ratio calculation of the affected property owner.

Commissioner Lin noted that frontage improvements typically occur within the right-of-way. She asked if trees within the right-of-way are calculated as part of the tree retention requirement. Mr. Cohen answered no and clarified that the proposed amendment is intended to address trees on private property that are near a frontage improvement project. Trees that are damaged or have to

be removed to accommodate the required frontage improvements should not be counted towards the retention requirement because it is out of the property owner's control. Commissioner Malek added that the trees that remain on the property would count towards the tree retention requirement. He cautioned that if trees within the right-of-way or along the periphery of a property were to count against the developer, it would be more difficult to design a project around the trees that remain on the interior of the property. Mr. Cohen added that the Public Works Department has some flexibility to preserve trees, but sometimes it is not possible. The City also requires street trees as part of frontage improvements.

• Amendment 29 (SMC 20.50.360) – Tree Replacement and Site Restoration. This amendment was privately initiated, and staff recommends denial. The City has the ability to issue Notice and Order and Stop Work Notices. Per SMC 20.30.760, the City requires a maintenance bond for a period of three years for replacement trees required as part of a development project. After three years, the City inspects the site to ensure the trees have survived. If not, the owner is responsible for replacing them. The applicant of the amendment proposes a monitoring period of 10 years, which staff does not support. Typically, after three years, staff has the ability to know if replacement trees are living and healthy. Monitoring replacement trees for a 10-year period is excessive and would require additional staff resources. In terms of penalties, the City already has the ability to assess civil penalties for unlawful tree removal. In addition, staff does not believe it would be appropriate to hold a developer from pursing another development based on a violation on another project. The privately-initiated amendment would tie the projects together.

Commissioner Lin expressed her belief that a three-year time period is reasonable, but she asked if the City reviews the trees on an annual basis. Mr. Cohen said tree replacement requires a three-year maintenance bond. Before a maintenance bond can be released at the end of three years, staff must do a site inspection to make sure the trees are thriving. There is no annual inspection. Commissioner Lin voiced concern that if trees that die are not replaced until the end of the three-year period, there would be no further requirement for the developer to continue to care for them. She suggested that the monitoring should happen earlier. If they are replaced earlier, the City will get an additional year of care for the newly planted trees.

- Amendment 31 (SMC 20.50.390) Required Parking. A school typically has more staff members than the number of classrooms, so the minimum number of parking stalls required should provide at least enough for all staff members plus additional spaces for volunteers, visitors and students with vehicles. Staff has worked with the Shoreline School District to implement minimum parking requirements that consider actual parking demand for elementary, middle and high schools. The proposed changes to the parking requirement would result in more parking spaces than currently required. Based on recent permit applications from the district, the current parking requirements do not account for the total parking needs of the district's schools. The language for Daycare I would be updated by replacing "that residential area" with "the underlying zone."
- Amendment 33 (SMC 20.70.320.C.6) Frontage Improvements. The current language states that frontage improvements are required when a single-family land use is converted to a

commercial land use. The provision can trigger full frontage improvements even if the new use does not necessitate investments in the building that would exceed 50% of the current or appraised value of the existing structure. Most likely, the type of businesses that can convert in single-family houses without spending over 50% would be small businesses such as Certified Public Accountants (CPA), attorneys, etc. More intensive uses, such as restaurants, would most likely trigger the threshold and require full frontage improvements. One of the placemaking goals in the 185th and 145th Station Subarea Plans is to allow commercial businesses in the MUR-35' and MUR-45' zones to attract businesses that will purchase homes and convert them as is into businesses. At some point in the future, those businesses might remodel or redevelop, thus triggering the frontage improvements.

- Amendment 34 (SMC 20.70.320) Waivers for Frontage Improvements. This proposed amendment would allow the City to waive the requirement for frontage improvements in certain circumstances, primarily where the City will not see future redevelopment or the opportunity to get frontage improvements along a roadway. An example would be where a property subdivides and there are no adjacent sidewalks and no likelihood that additional redevelopment would lead to more frontage improvements along the street. The amendment would prevent small segments of sidewalks that will never connect to the overall pedestrian system.
- Amendment 36 (SMC 20.80.082)) and Amendment 37 (SMC 20.80.220). These amendments relate to the Critical Areas Ordinance and were withdrawn because staff feels more research and scientific support is needed.

Andy McRae, General Manager of The Highlands, voiced support for Amendment 24, which would extend the same exemption ratio of tree to property area beyond the current 21,781 square foot cap (1/2 acre). The amendment would only impact properties in The Highlands, the golf club, Ballinger Commons, Kings School, the cemetery and the school district properties. All other residentially-zoned parcels are smaller than the 21,000 square feet. Property owners in The Highlands represent the largest group impacted by the existing limitation. They are only allowed to remove up to six trees on a 2 to 3-acre lot, which is the same as a property owner of a quarter or half acre lot is allowed. He estimated there are between 50 and 100 trees on every lot in the neighborhood. As an example, he shared that one property owner applied for a building permit to construct a garage on a flat piece of property with over 200 primarily mature trees. He needed to remove 16 trees to accommodate his project and was required to replant 29 trees in places where there were already a large number of trees. He felt the proposed amendment seems like a reasonable extension of the current logic.

The Commission agreed to move the proposed amendments forward to a public hearing on November 1st.

DIRECTOR'S REPORT

Director Markle announced that she would present an Emerging Development List to the Commission in October.

<u>UNFINISHED BUSINESS</u>

There was no unfinished business.

NEW BUSINESS

There was no new business.

REPORTS OF COMMITTEES AND COMMISSIONERS/ANNOUNCEMENTS

Commissioner Malek reported that Tom McCormick, a retired attorney and resident of Richmond Beach, has worked tirelessly to review what is happening with the Point Wells development and how it might impact the community. The Richmond Beach Community Association met recently, and the agenda included an update on Point Wells. He summarized that the Point Wells property is currently owned by Blue Squares Real Estate and has been divided into a lower and upper half. The upper half abuts the Town of Woodway and the proposal is to develop 37 new homes along the bluff. The lower half is about 61 acres and the proposal is to develop 3,100 condominiums. The applicant failed to comply with Snohomish County's requests, and their permit application has been deemed expired. According to Snohomish County, the applicant missed on four substantial issues:

- The location does not have the multi-modal transportation necessary to warrant the proposed 180-foot building height.
- Within the high-water mark and vegetation line, four buildings were slated to be well over 9 stories and four were slated to be 18 stories.
- A geotechnical report has not determined the site is suitable for the development.
- Landslide hazard risk and mitigation of the upper bluff still needs to be addressed.

Commissioner Malek summarized that the developer has appealed the County's decision. Information is available via the County's website or by contacting Snohomish County directly. If the applicant's appeal is denied, they may be able to reapply as an urban village that would have approximately 2,000 condominiums, a large mixed-use promenade of commercial and a potential marina. He pointed out that public open space money is available, and it would likely cost \$30 to \$40 million to acquire the property, clean it up, and prepare it for site development into a municipal park or some other public use. He added that an insightful article on Point Wells was also published in the Richmond Beach newspaper.

AGENDA FOR NEXT MEETING

Mr. Szafran announced that a public hearing for the 2018 Comprehensive Plan amendments is scheduled for October 4th.

4a - Draft Minutes from Thursday, September 20, 2018

ADJOURNMENT	
The meeting was adjourned at 8:00 p.m.	
William Montero	Carla Hoekzema
Chair, Planning Commission	Clerk, Planning Commission

DRAFT

CITY OF SHORELINE

SHORELINE PLANNING COMMISSION MINUTES OF PUBLIC HEARING

October 4, 2018 Shoreline City Hall 7:00 P.M. Council Chamber

<u>Commissioners Present</u> <u>Staff Present</u>

Chair Montero Paul Cohen, Planning Manager, Planning and Community Development Vice Chair Mork Steve Szafran, Senior Planner, Planning and Community Development

Commissioner Lin Julie Ainsworth-Taylor, Assistant City Attorney

Commissioner Maul Uki Dele, Surface Water Utility and Environmental Services Manager

Nora Daley-Peng, Senior Transportation Planner Carla Hoekzema, Planning Commission Clerk

Commissioners Absent

Commissioner Craft Commissioner Davis Commissioner Malek

CALL TO ORDER

Chair Montero called the Public Hearing of the Shoreline Planning Commission to order at 7:00 p.m.

ROLL CALL

Upon roll call by Ms. Hoekzema the following Commissioners were present: Chair Montero, Vice Chair Mork, and Commissioners Lin and Maul. Commissioners Craft, Davis and Malek were absent.

APPROVAL OF AGENDA

The agenda was accepted as presented.

APPROVAL OF MINUTES

There were no minutes to approve.

GENERAL PUBLIC COMMENT

There were no general public comments.

PUBLIC HEARING: 2018 Comprehensive Plan Amendments

Chair Montero reviewed the rules and procedures for the public hearing and then opened the hearing.

Staff Presentation

Mr. Szafran reminded the Commission that the State Growth Management Act (GMA) limits review of proposed Comprehensive Plan amendments to once a year. To ensure the public can view the proposals within a citywide context, the GMA directs cities to create a docket that lists the amendments to be considered in the "once a year" review. He advised that the City Council set the final list in March, with eight amendments. He reviewed each of the amendments as follows:

• Amendment 1 would amend Policy LU-47 to read, "Consider annexation of 145th Street adjacent to the existing southern border of the City." The amendment was carried over from the 2017 docket. Due to a legal complexity, the timeline has been extended for the project. Design is currently underway for portions of the roadway, but it has not been completed. Staff is recommending the amendment be placed on the 2019 Comprehensive Plan Docket.

There were no public comments related to Amendment 1.

COMMISSIONER MAUL MOVED THAT THE COMMISSION RECOMMEND AMENDMENT 1 BE CONTINUED TO THE 2019 COMPREHENSIVE PLAN AMENDMENT DOCKET AS RECOMMENDED BY STAFF. VICE CHAIR MORK SECONDED THE MOTION, WHICH CARRIED UNANIMOUSLY.

• Amendment 2 is to "consider amendments to the Point Wells Subarea Plan and other elements of the Comprehensive Plan that may have applicability to reflect the outcomes of the Richmond Beach Transportation Corridor Study as described in Policy PW-9." The amendment would also "consider amendments to the Comprehensive Plan that could result from the development of Interlocal Agreements as described in Policy PW-13." The City anticipated that the corridor study on mitigating adverse impacts from BSRE's proposed development would be completed in 2018, but delays in Snohomish County's review of the Environmental Impact Statement and Snohomish County's denial of BSRE's building permit have delayed the City's review and completion of the corridor study. Staff is recommending the amendment be placed on the 2019 Comprehensive Plan Docket.

Tom Mailhot, Shoreline, noted that this amendment has been on the docket for the past five years. He pointed out that the corridor study would have been funded by BSRE. With Snohomish County's denial of BSRE's building permit, it is not likely that the corridor study will ever be completed. If a future development plan comes forward, the amendment could be placed back on the docket, but it seems pointless to move it forward year after year.

Vice Chair Mork asked about the consequences of not carrying the amendment forward to 2019. Mr. Szafran responded that the amendment could be removed from the docket for now and put back on if and when a development proposal comes forward in the future. Assistant City Attorney

Ainsworth-Taylor said removing the amendment from the docket could impact the City's continuing relationship with BSRE. The amendment was in relation to BSRE's appeal to the Growth Management Hearings Board, and the City stipulated to keep the amendment in a holding pattern as it is considered for the GMA settlement extension. She recently declined to enter into another settlement extension with BSRE and the case had started to move forward. However, the City Attorney decided to put it back into the hold status. She agreed that if the amendment is removed from the docket, it could be put back on the docket in 2020, if necessary. She recommended they leave the amendment on the docket for the time being, since it would not require any action.

COMMISSIONER MAUL MOVED THAT THE COMMISSION RECOMMEND AMENDMENT 2 BE CONTINUED TO THE 2019 COMPREHENSIVE PLAN AMENDMENT DOCKET AS RECOMMENDED BY STAFF. VICE CHAIR MORK SECONDED THE MOTION, WHICH CARRIED UNANIMOUSLY.

• Amendment 3 is to "consider amendments to the Capital Facilities Element Goals and Policies and update of the Surface Water Master Plan." Over the past few years, staff has been working with consultants to update the City's 2011 Surface Water Master Plan, which is a supporting component of the City's Comprehensive Plan. The primary purpose of the 2018 master plan is to address drainage and water quality, challenges associated with growth, increasing regulations and aging infrastructure. The 2018 master plan will guide the City's surface water utility for the next 5 to 10 years, including recommendations for capital improvements, programs, long-term asset management and a financial plan that sustainably supports the utility. Staff is recommending approval of Amendment 3.

Vice Chair Mork asked if the Commission has the authority to recommend review of the Surface Water Master Plan in 5 years as opposed to 10 years. Assistant City Attorney Ainsworth-Taylor answered that the amendment would simply bring the master plan into the Comprehensive Plan. The Comprehensive Plan can be updated on an annual basis, so changes to the master plan could also be done on an annual basis. Ms. Dele added that the master plan would be updated again in 5 years.

There was no public comment regarding Amendment 3.

Vice Chair Mork commented that she was impressed with the amount of work that was done on the Surface Water Master Plan. With all of the construction and new things happening related to surface water, she thanked staff for their attention to detail. She also appreciates that the plan will be updated every 5 years.

VICE CHAIR MORK MOVED THAT THE COMMISSION RECOMMEND APPROVAL OF AMENDMENT 3 AS RECOMMENDED BY STAFF. COMMISSIONER MAUL SECONDED THE MOTION, WHICH CARRIED UNANIMOUSLY.

Amendment 4 is to "consider deleting Appendix D – Master Street Plan from the Transportation
Master Plan and replace with reference to the Engineering Design Manual pursuant to SMC

12.10.015." The Transportation Master Plan (TMP) serves as a Transportation Element of the City's Comprehensive Plan. The TMP speaks to a Master Street Plan. Recommended Transportation Improvements (Chapter 9) and the Master Street Plan (Appendix D) both include elements that are detailed and specific, similar to a development regulation as opposed to a goal/policy that a Comprehensive Plan is supposed to contain. Amendment 4 would revise the text within Chapters 7 and 9 of the TMP and remove the Master Street Plan (Appendix D). Both of these elements are too specific for a policy document.

Vice Chair Mork asked if the amendment is consistent with neighboring municipalities. Ms. Daley-Peng answered that it is consistent with the City of Seattle. Discussion with the City Attorney emphasized that the Comprehensive Plan is a guiding document of goals and policies and not regulations. The current Comprehensive Plan is a duplicate of the Street Matrix in the Engineering Design Manual. This is redundant and leaves the City open to conflict when one document gets updated and the other does not. It is staff's recommendation that the Master Street Plan reside in the Engineering Design Manual only.

There was no public comment regarding Amendment 4.

COMMISSIONER MAUL MOVED THAT THE COMMISSION RECOMMEND APPROVAL OF AMENDMENT 4 AS RECOMMENDED BY STAFF. COMMISSIONER LIN SECONDED THE MOTION, WHICH CARRIED UNANIMOUSLY.

- Amendment 5 was withdrawn by the applicant.
- Amendment 6 is to "consider amendments to the Point Wells Subarea Plan." This amendment originally started as a privately-initiated amendment. However, when reviewing the request, staff identified other necessary amendments. Amendment 6 incorporates both the private and City amendments and would include the following:
 - **a.** Rename the plan from "Subarea Plan 2" to "Point Wells Subarea Plan." Staff recommends approval of this change.
 - **b.** Delete the last sentence under "Geographic and Historical Context," which reads, "The island is bisected roughly north/south by the Burlington Northern Railroad (BNRR) right-of-way." With Woodway's annexation of the upper bluff, the BNRR no longer bisects the unincorporated portion. Staff recommends approval of this change.
 - c. Revise Figure 1 to delete the depicted upper bluff area and to show it instead as being part of the Town of Woodway. Staff recommends approval of this change.
 - d. In the section titled, "Geographic and Historical Context, strike the language describing the lowland area of Point Wells (2nd paragraph) and change the remainder of the paragraph to read, "The only vehicular access to Point Wells is via Richmond Beach Road and the regional road network via the City of Shoreline. However, there is potential easterly access through the Town of Woodway connecting to 116th Avenue West." The amendment

recognizes that a second access road is likely to be required by Snohomish County. Staff recommends approval of this change.

- *e.* Strike Figure 2 as there is no longer a need to identify the upland area vs. the lowland area. Staff recommends approval of this change.
- f. Delete the language that describes the upland portion of Point Wells. Since Woodway has annexed the upper bluff, this paragraph is no longer needed. Staff recommends approval of this change.
- g. Move the language related to Point Wells being a Potential Annexation Area to the section titled, "Designation of a Future Service and Annexation Area (FSAA) at Point Wells." Staff recommends approval of this change.
- h. Add a new sentence at the end of the paragraph under "Snohomish County's designation of Point Wells as an Urban Center." The new sentence would read, "Despite the City's opposition in 2009 Snohomish County rezoned Point Wells as an Urban Center, and in 2010 adopted an Urban Center Development Code that applies to all Urban Centers in Snohomish County." The proposed new privately-initiated language is intended to confirm the fact that the area has been designated as an Urban Center in Snohomish County's Comprehensive Plan. However, in light of the Hearing Examiner's June 29th decision to deny BSRE's application, the Point Wells site is zoned Planned Community Business and the future land use is Urban Village in Snohomish County's Future Land Use Map.

Assistant City Attorney Ainsworth-Taylor explained that, as drafted, this section of the Subarea Plan contains a lot of history, which is not typical for a comprehensive plan. In addition, the language is not consistent with the current situation. Instead of the language proposed by the private citizen, she recommended the following language to replace this entire paragraph: "Point wells is not currently located within the municipal boundaries of the City. Therefore, Snohomish County is responsible for assigning a land use designation and implementing zoning for the area. In 2010, Snohomish County designated and zoned the area Urban Center. In 2012, Snohomish County amended that designation to Urban Village and assigned Planned Community Business zoning to the majority of the area in order to implement that designation. Thus, Snohomish County's present vision for Point Wells is a neighborhood-scaled node with a mix of retail and office uses, public and community facilities, and high-density residential." She suggested that this proposed language summarizes the history of the property and provides an accurate picture of its current land-use designation and zoning, as well as Snohomish County's vision for the area.

i. Replace the 1st paragraph in the section titled, "Designation of a Future Service and Annexation Area (FSAA) at Point Wells." Assistant City Attorney Ainsworth-Taylor commented that the language proposed in the citizen-initiated amendment contains a lot of history, which is not necessarily appropriate for a Comprehensive Plan. Instead of the privately-initiated changes, she suggested that the section be titled, "City of Shoreline's

Intent to Annex Point Wells." The paragraph could read, "In (year), the City originally designated Point Wells as a Potential Annexation Area and in (year), the City changed the designation to a Future Service and Annexation Area. The purpose and function of the Future Service Annexation Area is to (describe the purpose and function of that)."

- **j.** Change the 2nd paragraph in the section titled, "Designation of a Future Service and Annexation Area (FSAA) at Point Wells," to recognize that there is no longer a need to refer to a lowland portion as the upland portion is no longer part of the unincorporated island. Staff recommends approval of this change.
- **k.** Change the 3rd and 4th paragraphs in the section titled, "Designation of a Future Service and Annexation Area (FSAA) at Point Wells," by deleting "lowland portion." This change recognizes that the lowland portion of the site no longer applies. Staff recommends approval of this change.
- **I.** Figure 3 would be renumbered to Figure 2. It would also be revised to delete the indicated acreage figures, which are now incorrect. In addition, the white Upland Area should be shown as being part of the Town of Woodway since Woodway recently annexed the land east of BNRR. Lastly, the Public View Corridor graphic from the previous Figure 2 and its 100-foot and 200-foot elevation contours would be added to the new Figure 2. Staff recommends approval of this change.
- **m.** Add, "once a permit is approved to develop the site," at the end of the 1st sentence in the 1st paragraph under "A Future Vision for Point Wells." Since the Hearing Examiner denied BSRE's development applications and upheld Snohomish County's request to deny the development applications because of substantial conflicts with their code, the actual development of Point Wells would be years after development applications are approved. Staff recommends approval of this change.
- n. Add the following at the end of the 4th paragraph under "A Future Vision for Point Wells" to read, "and that generated traffic after mitigation does not exceed adopted citywide level of service standards and does not exceed the traffic limit for Richmond Beach Drive that is specified in this Subarea Plan." Staff believes this citizen-initiated amendment is an overreach. The proposed language is trying to limit traffic on Richmond Beach Drive to what the subarea set (4,000 Average Daily Trips), which is not necessarily what the City anticipated indefinitely. It also restricts traffic on the roadway more heavily than other comparable roadways within the City. Staff recommends replacing the citizen-initiated proposal with the following, "and that any transportation Level of Service failures, in accordance with Shoreline Municipal Code, are mitigated to maintain the adopted standard." Staff's proposed language confirms that the City's vision includes maintaining the City's Level of Service (LOS) standards.
- **o.** Delete the last sentence of the paragraph below Policy PW-4 since some of the trees at the top of the slope are likely to be cut down as part of a recently-approved single-family development on the upper bluff. Staff is recommending approval of this change.

- p. Change Policy PW-5 to read, "New structures in the NW subarea should rise no higher than elevation 150 or be no taller than 90 feet, whichever is less." Building to the full 200-foot elevation would make the buildings visible to the residents of Woodway and Richmond Beach, and the City should recognize the 90-foot building height limit contained in the County's Planned Community Business zoning regulations. Staff recommends approval of this change.
- **q.** Add a new sentence at the end of Policy PW-7 to read, "New structures in the SE and SW subarea and the southwest portion of the NW subarea should rise no higher than six stories." The height limitation in the view corridor helps preserve the views from existing neighborhoods. Staff recommends approval of this change.
- r. Rather than the citizen-initiated change, staff is recommending alternative language in the 2nd paragraph below Policy PW-10, which would read, "The City re-channelized the Richmond Beach Road corridor from 24th Avenue NW to Dayton Avenue N from four (4) lanes to three (3) lanes. This re-channelization further reduced existing capacity along the corridor. Any changes proposed to the land use within the subarea should be carefully studied to ensure that the trips generated do not exceed the volume-to-capacity (v/c) ratio standard of over .90." Staff is not recommending that a specific number of daily vehicle trips be included in the amended language because background volumes will change over time and the daily trips are not what the City uses for concurrency. Staff is also recommending denial of the last sentence, which reads, "This would be an unacceptable impact, incapable of being mitigated with Richmond Beach Road remaining as three lanes." The City cannot assume traffic on Richmond Beach Road cannot be mitigated. Staff believes the proposed statement is premature and recommends evaluating traffic when the property owner submits a building permit for Point Wells.
- s. Change Policy PW-12 by striking the last sentence. The City does not have a LOS standard based on daily trips, and it is not consistent with citywide standards. The City should evaluate deleting the entire policy since the 4,000 Average Daily Trips (ADTs) is inconsistent with the citywide standards. Staff supports this proposed change.
- t. Add a new Policy PW-13 related to traffic on Richmond Beach Road. Staff believes the new policy is an overreach. Staff does not support limiting this corridor beyond what the rest of the City is limited to from a concurrency perspective. The language proposed is further limiting than the City's adopted LOS standard in that it says no segment can exceed 0.90 v/c. City code says that one segment may exceed the 0.90 v/c as long as the intersection meets LOS. Staff also believes the proposed new policy would limit Council when they decide in the future whatever land use changes are proposed at Point Wells and what mitigation might warrant exceeding the 0.90 v/c, which was done on 15th Avenue NE for example. Staff recommends denial of this change.
- *u*. The applicant has suggested changing the 1st paragraph in the "*Interjurisdictional Coordination*" section by adding "and Edmonds" at the end of the 1st sentence and deleting

the last two sentences as they are no longer accurate given the likelihood of a second access road through Woodway. Staff recommends approval of these changes.

- v. Renumber the policies if Policy PW-13 is adopted.
- w. Delete the last two sentences of current Policy PW-13. Since the Hearing Examiner has denied BSRE's development applications, any new application will be required to complete State Environmental Policy Act (SEPA) review, which includes transportation analysis and mitigation. Staff recommends leaving the language as is.

Tom Mailhot, Shoreline, thanked staff for helping him prepare the amendments, as well as the time they spent reviewing the proposed changes. He said he accepts many of the changes recommended by staff, with the exception of two (Items n and t). Staff recommended denial of Item n because the 4,000-vehicle traffic limit for Richmond Beach Road was not intended to be permanent. He said that, although it may not have been intended to be permanent, it is in the subarea plan. If the City does not want to follow the limit, it should be removed from the subarea plan. It seems inconsistent to include the limit, but not allow it to be mentioned.

Mr. Mailhot said the intent of proposed new Policy PW-13 (Item t) is to codify what the City has consistently said, that traffic from the development must not cause a failure over LOS. While the City welcomes mitigation of any increased traffic from the development, it won't acquire property to widen Richmond Beach Road, and it won't convert the road to four lanes. He noted that staff altered his proposed language for Policy PW-13 so that the proposal would not allow any leg of an intersection fail, and he is willing to accept that change back to what the policy currently is. However, with that change, he doesn't see any problem with adoption of Policy PW-13. Staff argues that it would limit the Council's ability to allow a slightly higher LOS down the road, but that is exactly his point. He wants the Council to enforce the City's current standards unless they actually change the standards through a public process. He said it is important that the subarea plan clearly states the City's current policies for mitigating additional traffic on Richmond Beach Road, and that is what Policy PW-13 would do.

Mr. Szafran said the Traffic Engineer has voiced concern that the City doesn't have control over what happens at Point Wells, and limiting the traffic on Richmond Beach Road would limit the growth that can happen in the City and not just Point Wells. She believes the Council should have the flexibility to change it. Commissioner Maul pointed out that the LOS standards are outlined in the City's Transportation Master Plan. Assistant City Attorney Ainsworth-Taylor added that they are also in the Development Code. Any modification to either document would require a public process.

To further clarify for Vice Chair Mork, Mr. Szafran explained that v/c is a citywide standard, and the Traffic Engineer is concerned about making an exception for one roadway and not the rest of the City. Assistant City Attorney Ainsworth-Taylor added that the code calls out a couple of intersections that are allowed to exceed v/c. Although she doesn't know the rationale for these exceptions, a full analysis was done to support the decision. The Traffic Engineer is concerned about making an exception for Richmond Beach Road without a thorough analysis to support it.

Mr. Mailhot said he was recently told that the two intersections were excepted not because they were failing or exceeding the v/c ratio today, but because they were expected to fail by 2030 if they didn't have a higher ratio. The City's future forecasting showed that eventually the roads would go above 0.90 v/c, so the exception was added to allow that to happen. He noted that there is no real concern that Richmond Beach Drive will exceed the 4,000 ADT limit, as its current volume is about 500 cars and the street is only a mile long. A good portion of the beachside of the roadway cannot be built on because it is either the pump station or the tracks. It's hard to imagine enough development on that road to get it up to 4,000 ADT based on what the City allows.

Mr. Mailhot suggested there is confusion between two arguments. The argument that there should not be a 4,000 ADT limit is separate from his assertion that, as long as the limit is in the subarea plan, his amendment should be able to say the City is going to enforce it. If the City doesn't want to enforce the limit, it should be removed from the plan.

Commissioner Maul felt that the proposed new Policy PW-13 (Item t) is redundant since it addresses issues that are already covered. If there is little possibility for development to cause the street to exceed the 4,000 ADT limit, he is not sure what the concern is.

Commissioner Lin asked if a 0.90 v/c ratio would be greater than the 4,000 ADT limit. Mr. Szafran pointed out that a 4,000 ADT limit would equate to a v/c ratio of about 0.30. Therefore, a 4,000 ADT limit would be a much stricter standard. The Traffic Engineer is concerned because the City measures traffic by LOS and not ADTs.

COMMISSIONER MAUL MOVED THAT THE COMMISSION RECOMMEND APPROVAL OF AMENDMENT 6 AS ADJUSTED BY STAFF AND DISCUSSED BY THE COMMISSION. VICE CHAIR MORK SECONDED THE MOTION, WHICH CARRIED UNANIMOUSLY.

• Amendment 7 is to "consider amending Land use Designations Mixed-Use 1 (MU1) and Mixed-Use 2 (MU2) in the Land Use Element in order to provide clarification." This is a minor amendment proposed by the City Council to provide clarification so that each use can stand alone rather than having MU2 referenced in the MU1 designation. As proposed, Policy LU-9 would remain as is, and Policy LU-10 would be amended by deleting it entirely and replacing it with the language shown in Attachment 7 of the Staff Report.

There was no public comment regarding Amendment 7.

VICE CHAIR MORK MOVED THAT THE COMMISSION RECOMMEND APPROVAL OF AMENDMENT 7 AS RECOMMENDED BY STAFF. COMMISSIOENR MAUL SECONDED THE MOTION, WHICH CARRIED UNANIMOUSLY.

• Amendment 8 is to "consider updates to the Pedestrian System Plan in the Transportation Master Plan (TMP)." As proposed, the following sections would be amended as shown in Attachment 12 of the Staff Report:

- Update Chapter 5 Pedestrian Plan: Figure L (Pedestrian System Plan) and Figure N (Pedestrian Projects Plan).
- Update Chapter 9 Recommended Transportation Improvements: Pedestrian Project Improvements Criteria text and Table 9.3 (Priority Pedestrian Projects Recommended for Funding) based on the 2018 Sidewalk prioritization Plan.
- Remove Table 9.3 (Priority Pedestrian Projects) and Appendix H (Pedestrian Projects Prioritization Matrix) because their level of detail is too specific for the TMP and their content is outdated based on the Sidewalk Prioritization Plan that will live as a planning document outside of the TMP. While the TMP sets policies to direct the prioritization of the Pedestrian System Plan, it does not need to direct the details of the Pedestrian System Plan's implementation.

Staff recommends approval of the proposed amendments as outlined in Attachment 12 of the Staff Report.

There was no public comment regarding Amendment 8.

COMMISSIONER MAUL MOVED THAT THE COMMISSION RECOMMEND APPROVAL OF AMENDMENT 8 AS RECOMMENDED BY STAFF. COMMISSIONER LIN SECONDED THE MOTION, WHICH CARRIED UNANIMOUSLY.

DIRECTOR'S REPORT

Mr. Cohen provided a brief report on current development activity. He distributed a chart showing projects valued at over \$1 million that were either issued permits or are under review since mid-2017. He noted that the projects will result in approximately 850 multifamily residential units. The Alexan Project, which was approved a few weeks ago, will provide approximately 324 multifamily residential units, and the Vale Apartments will result in about 120 multifamily residential units. In addition, about 50 units of townhouse development is in the works, and the City anticipates an application in the next month for another 170-unit townhouse development in the MUR-45' zone. The City has issued permits for one self-storage project and will issue permits for a second one soon. Staff is also having pre-application meetings for potential projects in the MUR-70' zone, with an intent to build just before the stations open.

Mr. Cohen reported that staff has started the negotiation process with the developer at the Sears site/Shoreline Place, and the scope is approximately 1,300 multifamily units and 84,000 square feet of retail space. The developer has proposed a phased, market-driven approach, and a Development Agreement will likely be required. The Development Agreement would come before the Commission for review and a recommendation to the City Council prior to final adoption.

Assistant City Attorney Ainsworth-Taylor reported that she attended a public hearing before the Snohomish County Council relative to Point Wells. There was a well-represented citizen turnout from both Shoreline and Woodway. In the end the Snohomish County council affirmed the Hearing Examiner's

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decision, with modification of just one finding. The council will enter its final motion on October 8th, and it is likely that BSRE will appeal the decision.

UNFINISHED BUSINESS

There was no unfinished business.

NEW BUSINESS

There was no new business.

REPORTS OF COMMITTEES AND COMMISSIONERS/ANNOUNCEMENTS

Vice Chair Mork reported that the subcommittee assigned to review the Planning Commission By-laws (Mork, Malek and Craft) has not yet met. The Commissioners concurred that if the work is not completed by the end of 2018, they can inform the Council that the work will be on their 2019 work schedule.

AGENDA FOR NEXT MEETING

Mr. Cohen reviewed the Commission's meeting schedule for the remainder of 2018, noting a public hearing on October 18th regarding the Green Built Commercial Amendments and a public hearing on November 1st for the 2018 Development Code Amendments. The Commission will discuss potential amendments to the Shoreline Master Program on either November 1st or 15th. The Commission's last meeting of 2018 will be on December 6th and will include a discussion about the joint meeting with the City Council, which is scheduled for January 14th.

ADJOURNMENT

The meeting was adjourned at 8:05 p.m.	
William Montero Chair, Planning Commission	Carla Hoekzema Clerk, Planning Commission

Planning Commission Meeting Date: October 18, 2018	Agenda Item: 6a

PLANNING COMMISSION AGENDA ITEM

CITY OF SHORELINE, WASHINGTON

DEP	AGENDA TITLE: Potential Expansion of Deep Green Incentive Program DEPARTMENT: Planning & Community Development PRESENTED BY: Miranda Redinger, AICP, Senior Planner					
	Public Hearin Discussion	ng		Study Session Update		Recommendation Only Other

INTRODUCTION AND BACKGROUND

In September 2013, Council adopted the Climate Action Plan (CAP), which committed Shoreline to reducing greenhouse gas (GHG) emissions 25% by 2020, 50% by 2030, and 80% by 2050 (below 2007 levels).

In March 2018, Council revised City Council Goal #2, Action Step #4 to read: Implement the 2018-2020 Priority Environmental Strategies, including achievement of citywide Salmon-Safe certification, consideration of expanding green building mandates, and appointment of a stakeholder committee to evaluate and develop a recommendation on the implementation of recommendations from the Climate Action Analysis for the 185th Street Station Subarea.

On August 2, 2018, the Planning Commission discussed various options for expanding the green building mandate that currently exists in Mixed-Use Residential (MUR) zoning in the light rail station subareas to commercial zoning. The staff report for that meeting is available here: http://www.shorelinewa.gov/home/showdocument?id=39436.

To aid in its consideration, at the August 2 meeting, the Planning Commission reviewed a Comparative Analysis by the Rushing Company of various green building protocols against a baseline project currently underway in North City. The final report is included as Attachment A. Following a thoughtful discussion of the analysis and options, the Commission did not reach consensus on a recommendation, and requested that staff solicit additional input from green building certification agencies, the City's Economic Development Manager, and market-rate developers to inform a continued discussion.

The Commission considered this issue again at its September 6, 2018 meeting, but based on discussions with the entities listed above, the staff recommendation had changed. Rather than expanding the green building mandate, staff proposed expanding

Approved By: Project Manager

Planning Director RM

the Deep Green Incentive Program (DGIP), Subchapter 9, SMC 20.50, by adding a fourth tier to include incentives for Built Green 4-Star and Passive House projects in areas outside of MUR zoning.

The staff report for the September 6 meeting is available here: http://www.shorelinewa.gov/home/showdocument?id=40690.

DISCUSSION

PHIUS Net Zero Energy Program

Passive House Institute United States is commonly used in the green building industry as the name of both the certifying organization and the certification, in order to differentiate this standard from European counterparts. In previous discussions and drafts of regulatory language for this project, the certifying organization was often referred to by the acronym PHIUS, while the certification program was truncated to Passive House.

Since the September 6 meeting, in further consultation with PHIUS staff, the City has learned that the appropriate name for the certification is PHIUS+, and that the organization also offers a net zero program, called PHIUS+ Source Zero. The latter is comparable to the International Living Future Institute (ILFI) Zero Energy certification, which is currently eligible for Tier 3 of the DGIP if paired with a Salmon Safe certification.

PHIUS+ Source Zero is an additional recognition that project teams can pursue after achieving PHIUS+ targets. Source Zero extends from the PHIUS+ Standard, which develops numerical energy targets based on a robust analysis of local climate and construction costs. Achieving PHIUS+ means dramatically reducing demand. Achieving PHIUS+ Source Zero means meeting the small remainder with on-site renewable energy. This holistic view pursues both radical load reduction and clean energy production, allowing faster convergence toward the goal of eliminating carbon emissions from building energy.

Throughout this staff report and Attachment B, the organization will be referred to a PHIUS and the certifications will be referred to as PHIUS+ or PHIUS+ Source Zero. In addition to adding the PHIUS+ certification to the proposed Tier 4, staff recommends adding PHIUS+ Source Zero with a companion Salmon Safe certification to Tier 3 of the DGIP.

Parking Reduction

On September 6, the Commission supported the change to expanding the incentive program rather than the mandate, and suggested one additional revision.

With regard to parking, Shoreline Municipal Code (SMC) 20.50.400 outlines potential reductions available through the DGIP (see below). Tier 1 is eligible for a 50% reduction, Tier 2 is eligible for a 35% reduction, and Tier 3 is eligible for a 20% reduction. Adding another tier that followed the pattern of decreasing the available reduction by 15% per tier would only leave a 5% parking reduction for Tier 4.

One potential way to make a parking reduction incentive more meaningful would be to make it cumulative. SMC 20.50.400(A) Reductions to minimum parking requirements articulates multiple ways to achieve a parking reduction, but SMC 20.50.400(F)&(G) specify that reductions may not be combined. The Commission supported the staff proposal of amending SMC 20.50.400(G) to remove reference to the DGIP.

The Commission further suggested that SMC 20.50.400(G), in its entirety, should be deleted, which would allow for affordable housing parking reductions to be combined with other parking reductions. The relevant portions of text from SMC 20.50.400 are below. Note that no changes are proposed to sections A or E, but these are included because they are relevant to SMC 20.50.400(G). A new change is proposed for SMC 20.50.400(F) that would allow parking reductions for the DGIP to be combined with those for proximity to light rail stations. Additional discussion and examples of how this could impact the number of required stalls in several areas of the city follows the code language.

SMC 20.50.400- Reductions to minimum parking requirements

- A. Reductions of up to 25 percent may be approved by the Director using a combination of the following criteria:
 - 1. On-street parking along the parcel's street frontage.
 - 2. Shared parking agreement with nearby parcels within reasonable proximity where land uses do not have conflicting parking demands. The number of on-site parking stalls requested to be reduced must match the number provided in the agreement. A record on title with King County is required.
 - 3. Parking management plan according to criteria established by the Director.
 - 4. A City approved residential parking zone (RPZ) for the surrounding neighborhood within one-quarter mile radius of the subject development. The RPZ must be paid by the developer on an annual basis.
 - 5. A high-capacity transit service stop within one-quarter mile of the development property line with complete City approved curbs, sidewalks, and street crossings.
 - 6. A pedestrian public access easement that is eight feet wide, safely lit and connects through a parcel between minimally two different rights-of-way. This easement may include other pedestrian facilities such as walkways and plazas.
 - 7. City approved traffic calming or traffic diverting facilities to protect the surrounding single-family neighborhoods within one-quarter mile of the development.
 - Retention of at least 20 percent of the significant trees on a site zoned MUR-70'.

- 9. Replacement of all significant trees removed on a site zoned MUR-70' as follows:
 - a. One existing significant tree of eight inches in diameter at breast height for conifers or 12 inches in diameter at breast height for all others equals one new tree.
 - b. Each additional three inches in diameter at breast height equals one additional new tree, up to three trees per significant tree removed.
 - c. Minimum Size Requirements for Replacement Trees under This Provision. Deciduous trees shall be at least one and one-half inches in caliper and evergreens six feet in height.
- B. A project applying for parking reductions under the Deep Green Incentive Program may be eligible for commercial and multi-family projects based on the intended certification they intend to achieve. No parking reductions will be eligible for single-family projects. Parking reductions are not available in R-4 and R-4 zones. Reductions will be based on the following tiers:
 - Tier 1 Living Building or Living Community Challenge Certification: up to 50% reduction in parking required under SMC 20.50.390 for projects meeting the full International Living Future Institute (ILFI) program criteria;
 - 2. Tier 2 Living Building Petal or Emerald Star Certification: up to 35% reduction in parking required under 20.50.390 for projects meeting the respective ILFI or Built Green program criteria;
 - 3. Tier 3 LEED Platinum, 5-Star, or Net Zero Energy Building/Salmon Safe, or PHIUS+ Source Zero/Salmon Safe Certification: up to 20% reduction in parking required under 20.50.390 for projects meeting the respective US Green Building Council, Built Green, or ILFI, PHIUS and/or Salmon Safe program criteria.
 - 4. <u>Tier 4- PHIUS+ or 4-Star Certification: up to 5% reduction in parking required under 20.50.390 for projects meeting the respective PHIUS or Built Green program criteria.</u>
- E. Reductions of up to 50 percent may be approved by the Director for the portion of housing providing low income housing units that are 60 percent of AMI or less as defined by the U.S. Department of Housing and Urban Development.
- F. A parking reduction of 25 percent may be approved by the Director for multifamily development within one-quarter mile of the light rail station. These parking reductions may not be combined with parking reductions identified in subsections A, B and E of this section.
- G. Parking reductions for affordable housing or the Deep Green Incentive Program may not be combined with parking reductions identified in subsection A of this section.

Examples of how parking reductions could be applied

Proposed revisions to the DGIP would create an incentive for 4-Star and PHIUS+ certifications, while these programs are mandatory in Mixed-Use Residential (MUR) zoning in the light rail station subareas. Therefore, it is important to examine how parking reductions would be applied in various scenarios. It is also necessary to

examine different scenarios to evaluate the effect of allowing affordable housing parking reductions to be cumulative.

Below, please find several examples of potential parking requirements for a theoretical 100-unit building, based on different zones, certification programs, and levels of affordability. For the first two (2), the "a" scenario is a more likely development (assuming 4-Star [Tier 4 or mandatory] certification and 20% affordable units targeted towards households making 70% of Area Median Income [AMI], which is the minimum State requirement to participate in Property Tax Exemption program). The "b" scenario supposes a more ambitious project (assuming an Emerald Star [Tier 2] certification and 20% affordable units targeted towards 60% AMI, which would make a project eligible for reductions under SMC 20.50.400). For the sake of simplicity, all affordable units are assumed to be studios and one-bedrooms.

For each scenario, the analysis assumes that 75 of the units are studios and one-bedrooms (.75 parking stalls required per unit), while 25 of the units are two-bedrooms (1.5 parking stalls required per unit). With no reductions, such a building would be required to build 94 parking stalls, four (4) of which would need to be accessible for people with disabilities. Because the requirement for accessible stalls is a Building Code requirement, not the Development Code, and is tied to units, overall parking reductions do not change the number of required accessible stalls.

It should also be noted that each of the potential reductions below are "up to", so each of the scenarios illustrate a maximum parking reduction, not an automatic one.

Example 1a: 4-Star project in Mixed Business zoning within a quarter mile of a RapidRide stop on Aurora Avenue, 20% of units affordable to 70% AMI

- Eligible reductions:
 - 5% reduction through DGIP Tier 4 per SMC 20.50.400(B)(4) and SMC 20.50.630(E)(3)(b)(iv)
 - 25% reduction for proximity to high-capacity transit service per SMC 20.50.400(A)(5)
 - *Note that this would need to be combined with at least one other criteria from SMC 20.50.400(A).
- Total number of required stalls: 68

Example 1b: Emerald-Star project in Mixed Business zoning within a quarter mile of a RapidRide stop on Aurora Avenue, 20% of units affordable to 60% AMI.

- Eligible reductions
 - 35% reduction through DGIP Tier 2 per SMC 20.50.400(B)(2) and SMC 20.50.630(E)(3)(b)(ii)
 - 25% reduction for proximity to high-capacity transit service per SMC 20.50.400(A)(5)

- *Note that this would need to be combined with at least one other criteria from SMC 20.50.400(A).
- 50% reduction for 20% of units per SMC 20.50.400(E)
- Total number of required stalls: 42

Example 2a: 4-Star project in Mixed-Use Residential-45' zoning within a quarter mile of light rail station, 20% of units affordable to 70% AMI

- Eligible reductions:
 - 25% reduction for proximity to light rail station per SMC 20.50.400(F)
- Total number of required stalls: 71

<u>Example 2b: Emerald Star project in Mixed-Use Residential-45' zoning within a quarter mile of light rail station, 20% of units affordable to 60% AMI</u>

- Eligible reductions:
 - 35% reduction through DGIP Tier 2 per SMC 20.50.400(B)(2) and SMC 20.50.630(E)(3)(b)(ii)
 - 25% reduction for proximity to light rail station per SMC 20.50.400(F)
 - o 50% reduction for 20% of units per SMC 20.50.400(E)
- Total number of required stalls: 42
- If this project also met a combination (two [2] or more) of the criteria in 20.50.400(A), and this was allowed to be cumulative (by striking the entire last sentence in SMC 20.40.500[F]), it could be eligible for an additional 25% reduction. Under this scenario, the total number of required stalls would be 32.

Example 3: Emerald Star project in Mixed-Business zoning within a quarter mile of a RapidRide stop on Aurora Avenue, 100% of units affordable to below 60% AMI

- Eligible reductions:
 - 35% reduction through DGIP Tier 2 per SMC 20.50.400(B)(2) and SMC 20.50.630(E)(3)(b)(ii)
 - 25% reduction for proximity to high capacity transit per SMC 20.50.400(A)(5)
 - *Note that this would need to be combined with at least one other criteria from 20.50.400(A).
 - 50% reduction for 100% of units per SMC 20.50.400(E)
- Total number of required stalls: 24

Staff Conclusions and Recommendation

- Allowing cumulative parking reductions may encourage developers to take advantage of the DGIP citywide.
- In light rail station subareas, allowing projects to further reduce parking if they target housing affordability for 60% AMI as opposed to 70% AMI could encourage deeper levels of affordability.
- However, allowing green and affordable projects to further reduce parking by an additional 25% for fulfilling requirements in SMC 20.50.400(A) may be too great a reduction for the benefits.

- In areas within a quarter mile of RapidRide on Aurora Avenue, projects would need to fulfill an additional requirement from SMC 20.50.400(A) to be able to utilize proximity to transit to further reduce parking, which could provide additional amenities.
- To achieve the greatest reduction possible, a project would need to be almost entirely affordable to households making 60% or less of AMI, achieve an ambitious level of green building, be in proximity to transit, and fulfill an additional criterion from SMC 20.40.500(A). Staff believes that it is worthwhile to create an option to support such a project, which would likely be through a non-profit or agency affordable housing provider.

Therefore, staff recommends:

- Striking the second sentence from SMC 20.50.400(F), as shown below. This would allow Deep Green buildings in light rail station subareas to combine parking reductions from the incentive program with those for proximity to transit and deeper affordability.
 - → F. A parking reduction of 25 percent may be approved by the Director for multifamily development within one-quarter mile of the light rail station. These parking reductions may not be combined with parking reductions identified in subsections A, B, and E of this section.
- Striking SMC 20.50.400(G), as shown below.
 - G. Parking reductions for affordable housing or the Deep Green Incentive Program may not be combined with parking reductions identified in subsection A of this section.

SMC 20.50.630(F)- Compliance with minimum standards

When the original DGIP was adopted in April 2017, there was an interest in trying to make all programs within each tier as comparable as possible. However, one of the primary differences between Built Green and International Living Future Institute programs is that Built Green uses energy and water *modeling* for 4- and 5-Star certifications, whereas ILFI requires a *performance* period and analyzes actual use before awarding any certification. Built Green staff offered to perform additional post-occupancy analysis for 5-Star projects applying through the DGIP to make the programs more comparable, which is reflected in SMC 20.50.630(F) below.

However, if the DGIP expands to also include 4-Star citywide, and this encourages additional project registrations, Built Green staff is concerned that they will not have the capacity to perform the additional analysis. PHIUS also uses modeling rather than performance, and shares concerns about staff capacity to commit to additional work for Shoreline that is outside of their standard process.

Staff recommends striking letter "b" from the code language below and relying on the modeling procedures currently used by Built Green and PHIUS, which according to

recent studies by both organizations are very reliable at predicting performance. In fact, the studies revealed that buildings are performing better than modeled.

SMC 20.50.630(F)

- 7. No later than two years after issuance of a final Certificate of Occupancy for the project, or such later date as requested in writing by the owner and approved by the Director for compelling circumstances, the owner shall submit to the Director the project's certification demonstrating how the project complies with the standards contained in this subsection. Compliance must be demonstrated through an independent certification from ILFI, Built Green, or USGBC/Green Building Cascadia Institute (GBCI). A request for an extension to this requirement must be in writing and must contain detailed information about the need for the extension.
 - a. For projects pursuing ILFI certification (Living Building Challenge, Living Community Challenge, Petal Recognition, or Net Zero Energy Building), performance-based requirements such as energy and water must demonstrate compliance through certification from ILFI within the two year timeframe noted above.
 - b. For projects pursuing Built Green certification post-occupancy compliance must be demonstrated with analysis proving 12 consecutive months of net zero energy performance and/or 70% reduction in occupant water use. It is the owner's responsibility to submit utility information to Built Green so analysis can be conducted and shown to the Director.
 - c. For projects pursuing LEED certification, the applicant or owner must show proof of certification by way of the final LEED Construction Review report and LEED Certificate issued by USGBC/GBCI.

<u>Current and Proposed Incentive Program Tier Structure</u>

In summary, the current DGIP consists of a tiered system that rewards projects based on the stringency of the certification a project seeks to attain. Eligibility for benefits is structured by the following level of certification protocol:

- Tier 1 Living Building Challenge or Living Community Challenge;
- Tier 2 Emerald Star or Petal Recognition; or
- Tier 3 LEED Platinum, 5-Star, or Zero Energy plus Salmon-Safe.

Staff recommends that an expanded incentive program be organized as follows:

- Tier 1- Living Building Challenge or Living Community Challenge;
- Tier 2- Emerald Star or Petal Recognition;
- Tier 3- LEED Platinum, 5-Star, Zero Energy plus Salmon Safe, or PHIUS+ Source Zero plus Salmon Safe; or
- Tier 4- PHIUS+ or 4-Star.

NEXT STEPS

November 26- City Council Study Session

<u>December 10</u>- Council Adoption of Ordinance No. 839

RECOMMENDATION

Staff recommends that the Planning Commission make a recommendation to the City Council to expand and amend the Deep Green Incentive Program as per Attachment A. Changes would include adding a Tier 4, consisting of Built Green 4-Star and PHIUS+ certification options, and adding PHIUS+ Source Zero in conjunction with Salmon Safe certification as an option for Tier 3. Regulations would also allow for PHIUS+ to fulfill the green building mandate in MUR zones, as would the Evergreen Standard, but only for affordable housing or school projects that receive State money and are required to design to that standard.

ATTACHMENTS

Attachment A- Final Comparative Analysis of LEED, Built Green, and Passive House Attachment B- Amendatory Language for Development Code Sections

Comparative Analysis of LEED, Built Green, & Passive House

FINAL - September 2018



PREPARED FOR:



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Introduction

When the Shoreline City Council adopted the Climate Action Plan in 2013, they joined King County and other cities in the region by committing to reduce community greenhouse gas emissions 80% by 2050, with an interim target of 50% by 2030. To reduce emissions from new buildings, the City adopted mandatory green building standards in the Mixed-Use Residential (MUR) zoning surrounding two future light rail stations, and a Deep Green Incentive Program to encourage the highest standard for green building citywide.

The Shoreline City Council has directed staff to consider an expansion of the current green building mandate for MUR zoning to also include commercial zoning within the city. This analysis provides a comparison of one code compliant baseline development project against three green building protocols—Built Green 4-Star, Leadership in Energy and Environmental Design (LEED) for Homes Gold, and Passive House Certification. The analysis includes Rough Order of Magnitude (ROM) costs to better understand implications for design and construction, in addition to quantifying environmental performance benefits of the various protocols.

See *Appendix 1 Glossary of Terms* for definitions. A Term included in the Glossary is identified by an <u>underline</u>.

Goals of Study

- Establish a protocol comparison based on a sample project, the Shoreline Apartments project at 17233 15th Ave NE, Shoreline, WA.
- Using the sample project, evaluate the following levels of sustainability compliance using the following tools and metrics:
 - o Code Compliance: 2015 Washington State Energy Code (WSEC) & 2015 Uniform Plumbing Code (UPC) with Washington State Amendments
 - Prescriptive, point-based green building protocols:
 - LEED for Homes Multi-Family Midrise, Gold: must achieve a minimum 60 points with a recommended 5-point buffer. See the LEED for Homes Scorecard (Appendix 2)
 - **Built Green Multi-Family**, 4-Star: must achieve a minimum **400 points** (**60 points** from Sections 2-5 with a recommended 7-point buffer in each Section). See the *Built Green Scorecard* (Appendix 3).
 - Performance-based green building protocol:
 - Passive House: not tracked using a scorecard. Compliance approved through on-site verification and building performance. See the Passive House Strategies List (Appendix 4).
 - o Soft Costs & Hard Costs ROM (Rough Order of Magnitude)
 - Design & Construction Impacts

Executive Summary

This evaluation indicates the following high-level comparison metrics for the pursuit of a code compliant building, LEED for Homes Midrise Gold, Built Green 4-Star and Passive House certification.

Protocol/Approach	Environmental Benefits	ROM Costs to achieve compliance	Significant Design Features & Impacts
Code Compliance	Baseline: varies by project	Sample Building: \$34.24 million (construction costs) unknown at this time (soft costs)	Energy Baseline (code minimum): Includes two C406 Measures Water Baseline (code minimum): Water closets (toilets): 1.6 gpf (gallons per flush) Showerheads: 2.5 gpm (gallons per minute) Private lavatory faucets: 2.2 gpm Kitchen lavatory faucets: 2.2 gpm

Protocol/Approach	Environmental Benefits	ROM Costs to achieve compliance	Significant Design Features & Impacts
LEED for Homes Multi-Family Midrise Target: Gold	Energy: 0-10% ↓ CO₂ emissions annually¹ Water: 1.55 million gallons ↓ annually² Health/Materials: "Building green using LEED enables us all to live, learn, work and play in environments that enhance human health both indoors and outdoors."³	\$275,000- 325,000 0.8 - 0.9% additional cost ⁴	Miscellaneous design and construction adjustments, e.g. design charrette, General Contractor LEED training, 3 rd party energy modeling, <u>commissioning</u> , duct leakage testing, blower door testing between each unit.
Built Green Multi-Family Target: 4-Star	Energy: 75-85% ↓ CO₂ emissions annually¹ Water: 2.08 million gallons ↓ annually² Health/Materials: "Built Green believes the market can act as a powerful force to improve environmental and health outcomes."5	\$600,000- \$2,200,000 1.7 - 6.4% additional cost ⁴	Substantial energy saving design strategies/systems to meet 4-Star prerequisite: 20% better than WA State Energy Code (WSEC). Miscellaneous design and construction adjustments, e.g. 3 rd party energy modeling and commissioning.
Passive House	Energy: 85-95% ↓ CO₂ emissions annually¹ Water: 0 gallons ↓ annually Health/Materials: Similarly, to their high comfort standards, Passive House buildings also provide a healthy and quiet indoor environment.6	\$960,000- 1,700,000 2.8 - 4.9% additional cost ⁴	Enhanced insulation, triple pane glazing, continuous air barrier, air infiltration. Five times better than the 2015 Washington State Energy Code (WSEC), ERVs (Energy Recovery Ventilators).

¹ Estimates based on the 2015 Washington State Energy Code and transition to all electric systems. Based on 2016 data, Seattle City Light is powered by 92% renewable energy (hydro and wind). Seattle City Light is the City of Shoreline's electricity service provider. seattle.gov/light/Fuel Mix.

² Water estimate includes low flow fixtures and excludes process water.

³ Benjamin, Heather. *LEED Enhances Human Health*. 17 Aug 2017. <u>usqbc.org/articles/leed-enhances-human-health</u>.

⁴ Rough order of magnitude calculation based on baseline building valuation of \$34.24 million for average construction costs. Protocol increased costs based on both <u>hard costs</u> and <u>soft costs</u>.

⁵ Built Green Values, Market Focus: <u>builtgreen.net</u>

⁶ International Passive House Association. *What are the benefits of Passive House buildings?* 01 Feb 2017. <u>blog.passivehouse-international.org/benefits-passive-house-buildings</u>

Analysis Assumptions

- **Location:** Project is in the City of Shoreline, density is like the sample project (i.e. projects which do not have density, access to transit, and community resources nearby would need to be evaluated differently).
- Unit Size: All residential units are below 1200 square feet.
- Combustion Uses: Gas fireplace is EPA Certified and installed with doors. Gas hot water heaters are designed and installed with closed combustion.
- This study has been conducted by selecting credits in each rating system which are:
 - 1. **In reference project (sample building)** given the information provided in the 09.20.2017 Permit Submittal Plan Set, as provided by the City of Shoreline. Given the scope of this study and broad applicability to typical project typologies, the baseline building project team was not consulted to verify extrapolations.
 - 2. Typical to design and construction for buildings of this type and within the jurisdiction of the City of Shoreline
 - 3. Lowest cost and minimal time impact to the design, design team, and contractor

Sample Project Data

Basic Information	Systems	Fixtures & Appliances	Cost
Location: Shoreline, WA Type: 2 buildings, 5 stories, wood framed construction/post-tension slab Total gross combined building area: 200,000 sf Units: 243 units Lot size: 1.85 acres Parking: 270 spaces, 2 levels below grade parking WSEC & UPC: 2015	Common areas: Variable Refrigerant Flow (VRF) Units: Cove heaters, trickle vents, whole house fans Domestic hot water: Gas condensing water heaters	Toilets: 1.28 gpf (gallons per flush) Showers: 2 gpm (gallons per minute) Lavatories: 1.5 gpm Refrigerators / Dishwashers / Clothes Washers: ENERGY STAR	Construction Valuation: \$34.24 M Soft Costs: unknown at this time

Green Building Protocol Overview

This section provides a high-level overview of each protocol. (■ - sustainable solutions available in this category, □ - sustainable solutions not available in this category)

LEED for Homes Multi-Family Midrise v4

Administered by: US Green Building Council (USGBC) & Green Business Certification Institute (GBCI)

About:

- The most widely used green building rating system in the world.
- Applies to midrise multi-family (four to six stories). LEED for Homes is also applicable to single family homes, low-rise multi-family (one to three stories), and high rise (above 6 stories, with LEED Provider's permission).

Most significant shift from "typical" / WA State Energy Code (WSEC):

- Blower door testing between units
- Energy Prerequisite 5% improvement over the baseline building performance rating based on ASHRAE Standard 90.1-2010, Appendix G (with errata).

What makes it green? This rating system provides sustainable solutions to address:

	Land Management	Energy	Water	Transportation
	Habitat	Building Materials	Equity & Inclusion	Health & Wellnes
	Food Access	Operations &	Emergency &	Aesthetic
		Maintenance	Disaster Prep	

Built Green Multi-Family v2017

Administered by: Master Builders Association (MBA) of King and Snohomish Counties **About:**

- Local Green Building Program: Developed in partnership with King County, Snohomish County, and other government agencies in Washington State.
- It was originally founded in 1999. Since then, over 32,000 projects have been certified.
- 52% of new homes in Seattle & 32% of new homes in King County were Built Green in 2016.

Most significant shift from "typical" / WA State Energy Code (WSEC):

- Built Green 3-Star requires the building energy model to show 10% better performance than WSEC OR two additional R406/C406 measures.
- Built Green 4-Star requires the building energy model to show 20% better performance than WSEC.

What makes it green? This rating system provides sustainable solutions to address:

Land Management	Energy	Water	Transportation
Habitat	Building Materials	Equity & Inclusion	Health & Wellness
Food Access	Operations &	Emergency &	Aesthetic
	Maintenance	Disaster Prep	

PHIUS+ 2015

Administered by: Passive House Institute United States (PHIUS), peer-reviewed by U.S. Department of Energy (DOE)

Note: PHIUS+ 2018 gets published Sept-Oct 2018.

About:

- Projects that pursue this standard have airtight envelopes, continuous insulation, often triple-paned windows, minimal space conditioning, and optimize natural heating/cooling techniques (e.g. passive solar).
- Given that this protocol is not just for homes, the term 'passive building' is becoming more commonplace.

Most significant shift from "typical" / WA State Energy Code (WSEC):

- Air tightness requirement is five times greater than WSEC. Requires continuous air barriers and a rigorous threshold for the ASTM E779 fan pressure test.
- **Source energy limit** per person enhanced insulation and windows [e.g. roof assembly target R-81 (WSEC requires R-49). Wall assembly above-grade target R-39 (WSEC stipulates R-21 for wood frame construction), triple paned windows]
- Strict space conditioning criteria (newer heating and ventilation systems are typically required to comply (e.g. Energy Recovery Ventilation [ERV]).

What m	What makes it green? This rating system provides sustainable solutions to address:									
	Land Management		Energy		Water		Transportation			
	Habitat		Building Materials		Equity & Inclusion		Health & Wellness			
	Food Access		Operations &		Emergency &		Aesthetic			
			Maintenance		Disaster Prep					

Protocol Comparison: Climate, Ecology & Health

One Star (*) if protocol does <u>not</u> go beyond code requirements or provides minimal opportunity. Maximum five stars (* * * * *) awarded if protocol provides a great opportunity to greatly exceed code or typical practices. Note: The sample building used in this study may not take advantage of all opportunities to incorporate these comprehensive environmental benefits, based on credits selected to achieve certification threshold.

Benefit	Code Compliance	LEED for Homes Gold	Built Green 4-Star	Passive House
Land Management (Preservation of land)	*	**	***	*
Energy (CO ₂ emissions reduction)	*	0-10% CO ₂ emissions reduced / year	★ ★ ★ 75-85% CO₂ emissions reduced / year	★ ★ ★ ★ ★ ★ 85-95% CO₂ emissions reduced / year
Water (Potable water reduction)	*	1.55 million gallons reduced / year	2.08 million gallons reduced / year	0 gallons reduced / year
Transportation (CO ₂ reduction)	*	**	***	*
Habitat (Developing sites that support ecosystems)	*	**	*	-
Building Materials (Improve indoor air quality & reduce exposure to toxins)	*	***	***	**
Building Materials (Local & recycled)	-	***	***	-
Equity & Inclusion (Ensure all are welcome & have a voice)	*	**	**	*
Health & Wellness (Physical & mental health)	*	**	***	**
Food Access (Access to healthy food)	-	*	*	-
Operations & Maintenance (Education & stewardship)	*	**	**	-
Emergency & Disaster Preparation (Resilience)	*	*	*	*
Aesthetic (Beauty)	-	*	*	-

Protocol Comparison: Costs

Impact	Code Compliance	LEED for Homes Gold	Built Green 4-Star	Passive House
Soft Costs	Baseline: varies by project Code does not require: Facilitate an integrated design process (e.g. all disciplines coordinate efforts at the concept/schematic phase) Conduct preliminary energy modelling Ensure the durability of the project (e.g. additional moisture and pest control measures & inspections) Conduct additional systems inspections Provide homeowner education	SUB-TOTAL: \$170,000-200,000 Registration & Certification: \$10,000 LEED On-Site Verification: \$40,000 IPc1 - Integrated Project Planning: Trades Training: \$4,000 IPc1 - Integrated Project Planning: Design charrette: \$6,000 EAp1 - Energy Modeling: \$30,000 EAp1 - Fundamental Commissioning: \$35,000 EAp1 - Duct leakage, ventilation & exhaust testing: \$15,000-\$30,000 EAp3 - O&M + Homeowner Education: \$5,000 MRc1 - Durability Verification: \$4,000 EQp7 - Blower Door Testing & Thermal Enclosure Verification: \$15,000 EQc6 - Garage pressure testing: \$5,000	SUB-TOTAL: \$120,000 - \$200,000 Registration & Certification ~ \$10,000 Built Green Consulting & Verification: \$40,000 3.2 - Commissioning: \$35,000 The energy Modeling: \$35,000	SUB-TOTAL: \$160,000 - \$200,000 Registration & Certification: \$30,000 Passive House Consultant: \$50,000 Commissioning: \$35,000 Passive House Modeling: \$45,000
Hard Costs	Baseline: varies by project	 SUB-TOTAL: \$105,000-125,000 EQp7 - Potential additional sealing/caulking to meet blower door test threshold: \$20,000-40,000 EQc7 - No Added Urea Formaldehyde (NAUF): \$40,000 	SUB-TOTAL: \$360,000- \$860,000 • 3.10 – Advanced hot water heat recovery: e.g. Sewer thermal heat recovery or heat pumps: \$300,000- \$800,000 • 5.52 – RECs (Renewable Energy Credits): \$10,000	SUB-TOTAL: \$770,000-\$1,800,000 Air tightness requirement of 0.05 CFM50 and 0.08 CFM75 per square foot of gross envelope (WSEC requires 0.40 CFM75). Requires continuous air barriers and a rigorous threshold for the ASTM E779 fan pressure test. Advanced sealing measures: General Contractor estimate required.

Impact	Code Compliance	LEED for Homes Gold	Built Green 4-Star	Passive House
Hard Costs Continued	Code Compilance	• IDc4 – 6 EV charging stations: \$45,000	 2.70 – 1 EV charging station: \$8,000 4.18, 4.19 – No Added Urea Formaldehyde (NAUF): \$40,000 	 Source energy limit: 6200 kWh per person per year Roof Assembly target R-81 (WSEC stipulates R-49 for in-roof insulation; R-38 for above-deck insulation) Wall Assembly above-grade target R-39 (WSEC stipulates R-21 for wood frame construction). Requires either deeper studs and/or adding exterior, continuous insulation. Triple paned windows: \$70,000 - \$150,000 (\$3 - \$5/SF) Space Conditioning: Non-standard mechanical systems are typically required to comply (e.g. Energy Recovery Ventilation [ERV], possible heat-pump heating): \$700,000-\$1,400,000
TOTAL ROM COSTS	Baseline	TOTAL: \$275,000-325,000	TOTAL: \$480,000-\$1,060,000	TOTAL: \$930,000-2,000,000
Notable* Design/ Construction Impacts (*not all inclusive)	Baseline (Two 2015 WSEC C406 Measures)	 Design charrette Trades Training – GC LEED training Highly reflective roof surface (e.g. TPO) and/or green roof All plantings 18" from exterior walls WaterSense certified and low-flow plumbing fixtures –1.75gpm showerheads, 1.5gpm lavatory faucets ENERGY STAR appliances – dishwasher, clothes washer, refrigerators Sub-metered irrigation 	Advanced energy efficiency measures to comply with 20% better than WSEC Highly reflective roof surface (e.g. TPO) and/or green roof TPO or built up bitumen roof to reduce water pollutants WaterSense certified and Low-flow plumbing fixtures –1.75gpm showerheads, 1.5gpm lavatory faucets, 1.28gpf toilets ENERGY STAR appliances – dishwasher, clothes washer, refrigerators	 Attention to building geometry – less complicated perimeter (e.g. rectangle or L-shape) will be more efficient for thicker insulation & infiltration mitigation Enhanced R-value walls and roof Triple Pane Glazing Continuous air barrier - reduced air infiltration allowance Decreased rentable square footage, with thicker envelope if on a zero-lot line project Mechanical systems sizing will go down compared to typical practice

Impact	Code Compliance	LEED for Homes Gold		Built Green 4-Star	Passive House
Notable* Design/ Construction Impacts (*not all inclusive) Continued		 ENERGY STAR Portfolio Manager utility tracking Clothes washers: Steel hose + ¼ turn shut off Shower/bath: greenboard All tropical wood – FSC Aggregate within 100 miles, insulation with 25% recycled content CO sensors in all spaces adjacent to garage / ductwork outside fire rated envelope of garage (or soffit'ed) ENERGY STAR plus occupancy sensors, humidistat or timers on all bath fans Walk-off mats at main entries and all walk-up units Garage pressure testing No added urea formaldehyde - NAUF 14 preferred parking spaces (hybrids) 6 EV charging stations 	•	No added urea formaldehyde – NAUF ENERGY STAR Portfolio Manager utility tracking – energy & water use 1 EV charging station Exterior lighting design – meet light pollution requirements	
Number of Projects in Shoreline	Baseline	11		5	0-1

Appendix

- 1. Glossary of Terms
- 2. LEED for Homes Scorecard
- 3. Built Green Scorecard
- 4. Passive House Strategies List

Appendix 1 - Glossary of Terms

Comparative Analysis of LEED, Built Green, & Passive House

<u>Commissioning</u> - the process of verifying, in new construction, all (or some, depending on scope) of the subsystems for mechanical (HVAC), plumbing, electrical, fire/life safety, building envelopes, interior systems, co-generation, utility plants, sustainable systems, lighting, wastewater, controls, and building security to achieve the owner's project requirements as intended by the building owner and as designed by the building architects and engineers.

<u>Energy Recovery Ventilators</u> - the energy recovery process of exchanging the energy contained in normally exhausted building or space air and using it to treat (precondition) the incoming outdoor ventilation air in residential and commercial HVAC systems.

<u>Hard Costs</u> - include expenses *directly* related to the physical construction a building, including tangible assets that you need to acquire to complete your construction project. These costs cover the materials that go into buildings, including cement, drywall, carpet, sod grass; and labor for grading, site excavation, landscaping, and carpentry.

<u>No Added Urea Formaldehyde (NAUF)</u> – refers to products and materials that do not include the permanent adhesive created by the resin of urea and formaldehyde.

<u>Occupancy Sensors</u> - an indoor motion detecting devices used to detect the presence of a person to automatically control lights or temperature or ventilation systems.

Rough Order of Magnitude (ROM) - an estimation of a project's level of effort and cost to complete. A ROM estimate takes place very early in a project's life cycle — during the project selection and approval period and prior to project initiation in most cases.

<u>Soft Costs</u> - include expenses *indirectly* related to construction of a building. Soft costs include architectural, engineering, financing, and legal fees, and other pre- and post-construction expenses.

<u>Thermoplastic Polyolefin (TPO)</u> - refers to polymer/filler blends usually consisting of some fraction of a thermoplastic, an elastomer or rubber, and usually a filler. Outdoor applications such as roofing frequently contain TPO because it does not degrade under solar UV radiation, a common problem with nylons.

<u>Walk-off Mats</u> - used to describe an entire category of commercial floor mats that either scrape or wipe debris from the under soles of shoes.



LEED for Homes V4 Midrise Project Checklist | 07.25.2018 | Project Goal: Gold

Appendix 2

RUSHING

City of Shoreline

7 31 12 PROJECT TOTALS pre-certification estimates					Certifica	ation Thresholds: Certified 40 points Silver 50 points Gold 60 points	
Unlikely No Integrated Design	Max. Points	Yes 10.0	Likely Un	.5 1.	5 Indoor	r Environmental Quality	Max. I
Credit 1 Integrated Project Planning	2	Y			Prereq	Ť	Re
Likely Unlikely No	Max. Points	Y			Prereq		Re
0.5 0.5 0 Location and Transportation	15	Y			Prereq		Re
Prereg 1 Floodplain Avoidance	Reg'd	Y			Prereq		Re
- Credit 1 Site Selection	8	Υ			Prereg		Re
Credit 2 Compact Development	3	Y			Prereq	6 Environmental Tobacco Smoke	Re
0.5 Credit 3 Community Resources	2	Υ			Prereq	7 Compartmentalization	Re
0.5 Credit 4 Access to Transit	2	1		2	Credit	1 Enhanced Ventilation	
Likely Unlikely No	Max. Points	1	0	.5 1.	5 Credit	2 Contaminant Control	
0 3 0 Sustainable Sites	7	1		2	Credit	3 Balancing of Heating and Cooling Distribution Systems	
Prereq 1 Construction Activity Pollution Prevention	Req'd			3	Credit	4 Enhanced Compartmentalization	
Prereq 2 No Invasive Plants	Req'd	2			Credit	5 Enhanced Combustion Venting	
Credit 1 Heat Island Reduction	2	1			Credit	6 Enhanced Garage Pollutant Protection	
3 Credit 2 Rainwater Management	3	3			Credit	7 Low Emitting Products	
Credit 3 Non-Toxic Pest Control	2	1			Credit	8 No Environmental Tobacco Smoke	
Likely Unlikely No	Max. Points	Yes	Likely Un	likely No			Мах.
1 2 0 Water Efficiency	10	3	3	0 0	Innova		
Prereq 1 Water Metering	Req'd	Y			Prereq	, , , , , , , , , , , , , , , , , , , ,	Re
1 2 Credit 1 Indoor Water Use	6	1			Credit		
Credit 2 Outdoor Water Use	4	1			Credit		
Likely Unlikely No	Max. Points		1		Credit	,	
2 15 4 Energy and Atmosphere	37	1			Credit		
Prereq 1 Minimum Energy Performance	Req'd		1		Credit		
Prereq 2 Energy Metering	Req'd		1		Credit	2 LEED AP Homes	
Prereq 3 Education of the Homeowner, Tenant or Bldg Manager	Req'd		Likely Un		Don't	nal Delavite	Max.
2 8 4 Credit 1 Annual Energy Use	30	2		2 (nal Priority	
7 Credit 2 Efficient Hot Water Distribution	5 2	4		1	Credit		
Credit 3 Advanced Utility Tracking	Max. Points	1			Credit Credit		
Likely Unlikely No 1 6 Materials and Resources	9	1			Credit		
Prereg 1 Certified Tropical Wood	Reg'd		-	1	Credit		
Prereq 2 Durability Management	Req'd				Ciedit	J LWG Limaticeu Ventilation	
Credit 1 Durability Management Verification	1						
1 5 Credit 2 Environmentally Preferable Products	5						
1 Credit 3 Construction Waste Management	3						



Please indicate:

X

Preliminary checklist (for own or verifier's use)

Final checklist (for certification review)

Multi-Family Residential New Construction Certification Checklist

Company Name

City of Shoreline Apartments - analysis of the potential for Built Green 4-Star Certification

Project Address

Baseline Building - 17233 15th Ave NE, Shoreline, WA

Number of Units

243

	REQUIRED CREDITS									
Action Item No.	Possible Points	Credit	Total Points	Comments						
THREE-ST	TAR REQL	JIREMENTS (300 points minimum)								
	required	Built Green assumes building meets local code regulations	*	GOOD						
	required	Third-party verification	*	Sustainability consultant fulfills requirements						
	required	Achieve a minimum of 50 points from sections 2-5	*	IN PROGRESS						
Energy	required	All spot exhaust fans must be ENERGY STAR (See Action Item 3-50)	*	GOOD - LIKELY IN BASELINE BLDG						
Energy	required	Install ENERGY STAR refrigerators, dishwashers and clothes washers (if provided by builder) (See Action Items 3-42, 3-47, 3-48)	*	GOOD - IN BASELINE BLDG						
Energy	required	Ventilation system flow rates are tested and within 20% of design flows. Controls and settings are consistent with design	*	IN PROGRESS						
Energy	required	Building modeled to have 10% better performance than the Washington State Energy Code cycle under which the project is permitted OR achieves additional credits in Section R406 (two credits) or C406 (two options) (above the WSEC requirements) (See Action Items 3-1 and 3-2)	*	IN PROGRESS						
IAQ	required	Use only low-VOC/low-toxic interior paints, primers, and finishes for ALL surface areas (See Action Item 4-15)	*	GOOD - LIKELY IN BASELINE BLDG						
IAQ	required	Do not install a wood-burning fireplace inside unit or building	*	GOOD						
Materials	required	Post jobsite recycling plan on site and maintain at least two bins (one for waste, one for recyclables)	*	GOOD - LIKELY IN BASELINE BLDG						
Materials	required	Recycle all clean wood, cardboard, new gypsum scrap, metal, asphalt paving/brick/concrete, electronics, and batteries (See Action Item 5-6, 5-25)	*	GOOD - LIKELY IN BASELINE BLDG						
Materials	required	Use no endangered species or old growth wood (See Action Item 5-36)	*	GOOD - LIKELY IN BASELINE BLDG						

FOUR-ST	AR REQUI	REMENTS (400 points minimum)		
	required	Meet 3-Star requirements	*	IN PROGRESS
	required	Achieve a minimum of 60 points from sections 2-5	*	IN PROGRESS
Site & Water	required	Amend disturbed soil with compost to a depth of min. 10 inches to restore soil environmental functions (See Action Item 2-16)	*	GOOD - LIKELY IN BASELINE BLDG
Site & Water	required	Landscape with plants appropriate for site topography and soil types, emphasizing use of plants with low watering requirements (drought tolerant) (See Action Item 2-41)	*	GOOD - LIKELY IN BASELINE BLDG
Site & Water	required	Install ALL bathroom faucets with gpm 1.5 or less, must be WasterSense labelled	*	NOT IN BASELINE PROJECT
Site & Water	required	Install ALL showerheads with 1.75 gpm or less, must be WaterSense labelled (See Action Item 2-50)	*	NOT IN BASELINE PROJECT
Site & Water	required	Install ALL toilets with 1.28 gpf or less average flush rate, must be WasterSense labelled (See Action Item 2-54)	*	NOT IN BASELINE PROJECT
Energy	Building modeled to have 20% better performance than the Washington State Energy Code cycle under which the project is permitted (See Action Item 3-1)		*	IN PROGRESS
Energy	required	Set up automatic energy benchmarking in Portfolio Manager and share data with Built Green	*	GOOD - LIKELY IN BASELINE BLDG
Energy	required	Design for solar readiness (See handbook for details)	*	GOOD - LIKELY IN BASELINE BLDG
Energy	required	80% of installed lighting shall be high efficacy AND listed on an approved "Qualified Products List" (See Action Item 3-40)	*	NOT IN BASELINE PROJECT
IAQ	required	Provide track-off mats, carpets, and/or shoe grates at principle entryways to building (See Action Item 4-69)	*	NOT IN BASELINE PROJECT
IAQ	required	Use CARB II and/or NAUF composite wood products for indoor applications	*	NOT IN BASELINE PROJECT
IAQ	Provide range exhaust hood directly over cooking appliance. Exhaust hood shall vent directly to the exterior of the building. General kitchen exhaust or recirculating hoods shall not meet this requirement.		*	GOOD - LIKELY IN BASELINE BLDG
Materials	required	Achieve minimum recycling rate of 50% by weight (See Action Items 5-13 through 5-29)	*	GOOD - LIKELY IN BASELINE BLDG

FIVE-STA	FIVE-STAR REQUIREMENTS (600 points minimum)								
	required	Meet 4-Star requirements	*						
	required	Achieve a minimum of 90 points from sections 2-5	*						
Site & Water	required	Install ALL bathroom faucets with gpm 1.0 or less, must be WaterSense labelled (See Action Item 2-48)	*						
Site & Water	required	Install ALL showerheads with gpm 1.5 or less, must be WasterSense labelled (See Action Item 2-50)	*						
Site & Water	required	Install ALL toilets with 1.1 gpf or less average flush rate, must be WaterSense labelled (See Action Item 2-54)	*						
Site & Water	required	Manage 50% of stormwater on site	*						
Energy	required	Building modeled to have 30% better performance than the Washington State Energy Code cycle under which the project is permitted (See Action Item 3-1)	*						
Energy	required	Install solar PV producing 150 kWh for every 1000 sq ft OR install solar hot water producing 500 kBtu for every 1000 sq ft (See Action Items 3-54 and 3-55)	*						
IAQ	required	All hard surface flooring must contain no orthophthalates (See Action Item 4-22)	*						
IAQ	required	All carpet must contain no fly ash (See Action Item 4-26)	*						
Materials	required	Achieve a minimum recycling rate of 90% of waste by weight	*						

NET ZERO	NET ZERO ENERGY LABEL (OPTIONAL)									
	required	Meet any star-level requirements plus point minimum	*							
Energy	required	Demonstrate net zero energy performance over the course of a year	*							
Energy	required	Provide an energy performance disclosure waiver	*							

Check items included this project to qualify for a BUILT GREEN star rating. 2017 version

	QUALIFYING CREDITS				
Action	Possible		Total		
Item No.	Points	Credits	Points	Comments	
SECTION	1: BUILT	GREEN TEAM			
1-1	1-10	Use Built Green member subcontractors, vendors, service providers, and real estate agents			
1-2	5	a) Incorporate Built Green early in the design by conducting an ecocharrette with the development team and owner to determine Built Green features to be included in the project b) Identify team member roles and how they relate to various phases of green lot design, prep and development c) Create a mission statement that includes the project's goals and objectives			
1-3	1	Provide all documentation/copies to third-party verifier electronically	1		
		BUILT GREEN TEAM SECTION TOTALS	1		

SECTION	2: SITE &	WATER		
SITE PROT				
Overall				
2-1	10	Build on an infill lot to take advantage of existing infrastructure and reduce development of virgin sites	10	
2-2	10	Build in a planned Built Green development or certified Built Green Community		
2-3	20	Build on a greyfield or brownfield site	20	
2-4	30	Create a Low Impact Development as defined in handbook		
2-5	5-25	Meet or exceed City of Seattle's Green Factor standards (point tiers in handbook)		NA for projects outside of Seattle
2-6	1-5	Bonus points: Use of Green Factor where it is not part of the project's jurisdictional development requirements	3	LIKELY, LA to do calc
2-7	20	For each acre of development, set aside an equal amount of land as a conservation easement or transfer of development rights		
		Subtotal	33	
Protect Si	te's Natural	Features Fea		
2-8	3	Avoid soil compaction by limiting heavy equipment use to building footprint and construction entrance		
2-9	3	Preserve existing native vegetation as landscaping (min. 25% preserved)		
2-10	1-5	Retain trees on site (1 pt per 20% preserved)		
2-11	10 or 12 or 15	Restore percentage of site outside the footprint for the life of the building (10%, 20%, 30%)		
		Subtotal	0	
Protect Na	atural Proces	sses On-Site		
2-12	2	Install and maintain temporary erosion control devices that significantly reduce sediment discharge from the site beyond code requirements		
2-13	3	Use compost to stabilize disturbed slopes during construction		
2-14	2 or 5	Retain all native topsoil in-situ, or stockpile and protect from erosion	2	
2-15	3	Balance cut and fill, while minimizing change to original topography		
2-16	4	Amend disturbed soil with compost to a depth of min. 10 inches to restore soil environmental functions	4	
2-17	2	Replant or donate removed vegetation for immediate reuse		
2-18	2	Use plants salvaged from another site		
2-19	3	Grind land clearing wood and stumps for reuse on site		
2-20	10 or 20 or 30	Manage specified percentage of stormwater from roof and site on site by 60%, 80%, or 100%		
		Subtotal	6	

Hardscap	es 5 or 10 or	Design to achieve 50%, 75%, or 90% effective pervious surface outside		
2-21	15	of building footprint		
2-22	10 or 15 or			
2-23	25 1	surface on 25%, 50%, or 90%+ of total roof surface Integrate landscaping with parking area beyond code		
2-23		Subtotal	0	
Reduce U	Irban Heat Is			
2-24	5	Install an ENERGY STAR Qualified roof	5	
2-25	5	Provide shading for 30% of hardscapes by using landscape, landscape		
		features, or overhangs For all exterior hardscape, including surface parking, use only light-		
2-26	5	colored pavement for 90% of project area (Solar Reflective Index of .28		
		or better)		
Fliminate	Water Pollu	Subtotal	5	
	I	Wash out concrete trucks in slab or pavement subbase areas, or use		
2-27	1	washout boxes		
2-28	3	Establish and post clean up procedures for spills to prevent illegal discharges	3	
2-29	1	Reduce hazardous waste through good jobsite housekeeping	1	
2-30	2	Construct tire wash, establish and post clean up protocol for use		
2-31	2	Use slow release organic fertilizers to establish vegetation	2	LIKELY
2-32	2	Use less toxic form release agent Use non-toxic (10 pts) or low-toxic (8 pts) outdoor materials for all	2	LIKELY
2-33	8-10	landscaping	8	LIKELY
2-34	5	Use only "Low Hazard" pesticides and herbicides for landscape		
2-35	5	installation and in Operations & Maintenance Plan Do not use galvanized metal, EPDM, or PVC roofing materials		
2-35	2	Use a modified bitumen built-up or TPO membrane roof	2	
2-37	5	No clearing or grading during wet weather periods (November - April)		
2-31	J			
2-38	40 or 50	On-site wastewater treatment for greywater only (40 pts) or for blackwater and greywater (50 pts), min. 50% captured		
		Subtotal	18	
	ONSERVAT			
	Conservation			
2-39 2-40	3-12	Mulch landscape beds with 4 inches of organic mulch Limit use of turf grass, or use no turf grass (3 pts per 25%)	9	
2-40	0-12	Landscape with plants appropriate for site topography and soil types,		
2-41	5	emphasizing use of plants with low watering requirements (drought	5	
		tolerant)		
2-42	2	Install sub-surface or drip systems for irrigation with controls for each zone, including weather or soil moisture-based modulation	2	
2-43	5	Install a WaterSense irrigation system		
2-44	3	Irrigation system commissioned by a professional to ensure no leaks,		
4-44	0	efficient system		
2-45	10	Install landscaping that requires no potable water for irrigation		
		whatsoever after initial establishment period (approximately 2 years)		
2-46	5-20	Install rainwater collection system (cistern) that reduces water consumption for irrigation (5 pts for each 25% of irrigation needs met by		
2-40	3-20	cistern)		
		Provide 100% of building and landscaping water use with captured		
2-47	50	precipitation or reused water purified without the use of chemicals		
		Subtotal	18	
Indoor Co	onservation			
2-48	1-3	Install ALL bathroom faucets with 1.0 gpm (1 pt), 0.5 gpm or less (3 pts),		
2-49	3	must be WaterSense labelled Install ALL kitchen faucets with 1.8 gpm or less	3	
2-40		Install ALE Monor radocts with 1.0 gpm or less	0	4.75
2-50	5-7	Install ALL showerheads with 1.75 gpm (5 pts), 1.5 gpm or less (7 pts),	5	1.75 gpm showerheads & WaterSense- NOT IN BASELINE PROJECT, BUT LIKELY
		must be WaterSense labelled	-	FOR OTHERS WITHIN JURISDICTION
0.54	40	Ctub in plumbing to the grant to fact the first to the fi		
2-51	10	Stub-in plumbing to use greywater for toilet flushing (must test for leaks)		
2-52	20	Use greywater or rainwater for toilet flushing Provide water sub-metering for each unit	0	
2-53	3	, and the second	3	1.28 gpf toilets & WaterSense - NOT IN
2-54	4-12	Install WaterSense labelled toilets (1.28 gpf = 4 pts, 1.1 gpf = 8 pts, 0.8 gpf = 12 pts. All toilets must comply.)	4	BASELINE PROJECT, BUT LIKELY FOR
		ог <u>– р.с </u>		OTHERS WITHIN JURISDICTION
2-55	4	Install no-cartridge waterless urinals or 1/8 gallon urinals and 1.28 gpf		
		maximum (WaterSense if not flushometer) toilets in all common areas		
2 50	3-5	Limit pipe volume between water heat source and furthest fixture. Pipe		
2-56	ა-5	run should store no more than than 0.5 gallons (3 pts) or 0.3 gallons (5 pts)		
		Subtotal	15	
	Water Pollu			
2-57	1	Do not install garbage disposal Subtotal	0	
DESIGN A	LTERNATIV		U	
2-58	10	Follow comprehensive integrated design plan for site and structure (as		
00	10	described in the handbook)		
2-59	5	Provide community common areas accessible to all building occupants	5	
2-60	2	Take advantage of parking reduction credits that are available in your		
_ 50		jurisdiction Provide structured parking within the proposed building footprint at a		
2-61	5 or 10	50% minimum or 100%	10	
		Subtotal	15	

TRANSPORTATION					
2-62	15	Create a Transit-Oriented Development			
2-63	4	Build within ¼ miles of a transit stop or Park and Ride	4		
2-64	15	Create a mixed-use building	15	NOT IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION	
2-65	6-10	Provide subsidized bus passes (25% or 50% subsidized)			
2-66	2	Provide bicycle lockers or bicycle storage beyond code			
2-67	2	Provide bus shelters			
2-68	6-12	Provide dedicated parking spots for carpool or car-share vehicles (6 pts for first stall above code, 2 pts for each additional)			
2-69	2	Provide a link to community trails			
2-70	5-20	Provide EV charging station (5 pts for one station, 3 pts for each additional)	5		
		Subtotal	24		
BENCHMAR	RKING				
2-71	5	Commit to annual benchmarking of building water consumption using ENERGY STAR Portfolio Manager and to sharing this information with Built Green	5		
2-72	7	Install a prominent water use display in high traffic common area			
		Subtotal	5		
EXTRA CR	EDIT/INNC	OVATION for Site and Water			
2-73	1-10	Extra credit / innovation for Site and Water			
		Subtotal	0		
		SITE & WATER TOTAL	139		

		SITE & WATER TOTAL	139	
SECTION	3: ENERG	SY Control of the Con		
ENERGY IM	PROVEMEN	Т		
3-1	1-70	Document energy improvements beyond code using approved energy modeling software (1 pt per % improvement above code)	20	HOLD FOR NOW - 20 pt automatically w 4- star 20% better perforamance modelled
3-2	1-20	Document building improvements beyond code using a prescriptive approach (see handbook for how to calculate points)		HOLD FOR NOW
3-3	50	Bonus points: build a net zero energy building that draws zero outside power or fuel on a net annual basis		
OVOTEMO	OMMICCION	Subtotal	20	
SYSTEMS C				T
3-4	15	Provide Fundamental Commissioning of building systems (see handbook for point tiers) Subtotal	10 10	
AIR SEALIN	G	Gubiotal	10	
3-5	3	Airtight drywall approach for framed structures		
3-6	10	Use airtight building method, such as SIP or ICF for all walls		
3-7	3	Eliminate or airtight seal all air pathways between floors and units		
3-8	5	Use a dense packed blown-in wall insulation system		
3-9	5 or 10 or 15	Conduct blower door test for the whole building with results better than base code requirement (see handbook for point tiers)		
		Subtotal	0	
PASSIVE	DESIGN FEA	ATURES		
3-10	6 or 12	Passive solar: three of the below strategies (6 pts), or five (12 pts)		
3-10a		East/west orientation		
3-10b		Optimal glazing - majority within 22 degrees of due south		
3-10c		Proper overhang sizing		
3-10d		Glazing with Solar Heat Gain Coefficient of less than .40		
3-10e		Natural shading on south side (trees)		
3-11	7	Model solar design features using approved modeling software		
3-12	2	Operable window area greater than code		
HEATING/C	OOLING	Subtotal	0	
Distribution				
			_	
3-13	3	Install ENERGY STAR ceiling fans in all units - minimum one per unit Third-party total duct leakage performance test (see handbook for point	3	
3-14	5 or 10	tiers)		
3-15	2	All ducts are in conditioned space	2	
3-16	3	Locate heating/cooling equipment inside the conditioned space		
		Subtotal	5	
Controls				l
3-17 3-18	2 1	Install programmable thermostats for all individual heating zones Provide separate switching for bathrooms fan/heat lamp and fan/light	2	GOOD - LIKELY IN BASELINE BLDG
3-19	3	combination fixtures Provide electricity and/or natural gas direct metering for each unit	3	ENLET IN BROLLINE DEDO
3-13	3	Install heat systems with separate zones for sleeping and living areas	J	
3-20	5	(not including electric resistance heating)		
3-21	3	Black or smart switches in all units for turning off associated outlets		
Ucot Da	NAME OF THE PERSON OF THE PERS	Subtotal	6	
Heat Reco	very	Install a heat recovery ventilator (HRV) or an energy recovery ventilator		
3-22	5 or 10	(ERV) If HRV or ERV installed, commission and make sure system is		
3-23	10	balanced, includes fan power	^	
		Subtotal	0	

Space Hea	ating/Coolin	g Equipment		
3-24	3 or 5 or 8	Select heat pumps with performance better than ENERGY STAR (see		
3-25	2-4	handbook for point tiers) Select heating system efficiency (natural gas): 96% AFUE (2 pts) or	2	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN
3-26	3	96% AFUE + Variable Speed/ECM blower motor (4 pts) Select ENERGY STAR heating/cooling equipment		JURISDICTION
3-27	2	No gas fireplaces, or use direct vent gas or propane hearth product	2	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN
3-28	5	(AFUE rating) Do not install infrastructure for temporary/portable air conditioners	5	JURISDICTION
0-20	Ŭ	Subtotal	9	
WATER HEA	ATING	Gustotui		
Overall	_			
3-29 3-30	5 2	Install drainwater heat recovery system (DHR) Install whole building "smart" variable-speed recirculation pump		
3-31	2 or 4	Install ultra-high efficiency central (gas) water heater with 92% (2 pts) or 96% (4 pts) thermal efficiency	2	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN
3-32	2	Install the water heater inside the heated space (electric, direct vent, or sealed venting only)	2	JURISDICTION
3-33	8	Install one or more Heat Pump Water Heaters with EF 2.0 or greater		
3-34	25	Install a centralized Heat Pump or Reverse Cycle Chiller to heat the domestic hot water		
		Subtotal	4	
Distribution				
3-35 3-36	10 1	Insulate all hot water recirculation lines		
J-30		Install heat traps on cold inlet pipes at hot water storage tank Subtotal	0	
LIGHTING		Captotal		
Natural Li				
3-37	1	Light-colored interior finishes	1	
Efficient L	iahtina	Subtotal	1	
3-38	1-2	Install lighting dimmer, photo cells, timers, and/or motion detectors for high efficiency fixtures - common areas and in-unit lighting		
2.20	2	Install motion detectors for minimum 90% of exterior fixtures		
3-39 3-40	2 or 5 or 7	Install motion detectors for minimum 90% of exterior fixtures Install high efficacy lighting that is listed on an approved "Qualified Products List" (see handbook for point tiers)		
3-41	5	Avoid excessive outdoor light levels while maintaining adequate light for security and safe access, meet IESNA Levels	5	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION
	-	Subtotal	5	
APPLIANCE 3-42	S 2	Install ENERGY STAR clothes washers in all units	2	IN BASELINE PROJECT
3-43	3	Install ENERGY STAR clothes washers in common laundry facilities instead of in each unit		IN DAGLEINE I NOSEGI
3-44	1	Install ENERGY STAR clothes dryers in all units		
3-45	2	Install ENERGY STAR clothes dryers in common laundry facilities instead of in each unit		
3-46	5	Provide clotheslines to each tenant and "wet room" or outside space in unit or common area for hang drying clothes		
3-47	1	Install an ENERGY STAR dishwasher in all units	1	IN BASELINE PROJECT
3-48	2 or 4	Install ENERGY STAR, or better, refrigerator in all units	2	IN BASELINE PROJECT
3-49	2	Install induction cooktop in all units Install ENERGY STAR exhaust fans in all units, with fan sone rating of	2	IN BASELINE PROJECT
3-50	2	0.3 or less at or above the design CFM		
		Subtotal	7	
ALTERNATI	VE ENERGY	Participate in the local utility's electricity program for renewable		
3-51	7	electricity sources (covers minimum 25% of energy used) Develop incentive program for tenants to purchase Green-e certified		
		RECs		
3-53 3-54	1 5-25	Solar-powered or low-voltage walkway or outdoor area lighting Install photovoltaic system (excluding solar hot water): 5 pts for 300 W/1000 sq ft and 5 pts for each additional 150 W/1000 sq ft.		
3-55	5-25	Install solar thermal for space heating or hot water: 5 pts for 1000 kBtu/1000 sq ft and 5 pts for each additional 500 kBtu/1000 sq ft		
		Subtotal	0	
BENCHMAR	RKING	Include provisions in tenant leases releasing utility consumption and		
3-56	5	billing data to building owner and authorized agents		
3-57	10	Commit to performing a post-occupancy comparison of modeled vs. actual energy performance and to sharing with Built Green		
EXTRA CRE	DIT/INNOVA	Subtotal Subtotal	0	
3-58	110	Extra credit / innovation for Energy		I
		Subtotal	0	•
		ENERGY TOTAL	67	
SECTION	4. HEALT	H & INDOOR AIR QUALITY		

SECTION 4	SECTION 4: HEALTH & INDOOR AIR QUALITY					
OVERALL						
4-1	5	Builder or architect certified to have taken a minimum 8 hour IAQ training approved by Program Manager				
4-2	15	Certify building under an IAQ program approved by Program Manager				
4-3	1	Building is designated non-smoking	1			
	Subtotal 1					

JOBSITE OF	PERATIONS			
4-4	1	Use less-toxic cleaners	1	
4-5	1	Require workers to use VOC-safe masks when applying VOC containing wet products and N-95 dust masks when generating dust	1	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION
4-6	1-5	Take measures during construction operations to avoid moisture problems later (see handbook for examples; 1 pt per action)	5	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION
4-7	2-4	Take measures to avoid problems due to construction dust (see handbook for point tiers)	2	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION
4-8	3	Ventilate during all new wet finish applications	3	JOINED HOW
4-9	2	No use of unvented combustion heaters during construction	2	MAY NOT BE IN BASELINE PROJECT,
4-10	3	Clean duct, furnace, and filter thoroughly before occupancy	3	BUT LIKELY FOR OTHERS WITHIN JURISDICTION
4-11	3	Institute a jobsite anti-idling program for construction vehicles Use non-diesel alternative fuels in construction equipment: electricity,	3	
4-12	3-12	propane, or natural gas (3 pts per 25% of equipment using alternative fuels)		
4-13	4	Require healthy jobsite plan for workers' compliance	4	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION
4-14	4	Implement construction management plan to ensure healthy jobsite plan is implemented optimally and adhered to	4	
		Subtotal	28	
LAYOUT AN	ID MATERIA	L SELECTION		
4-15		Inside the building envelope use only low-VOC products for various applications when wet-applied on site:		
4-15a	2	Tiling	2	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION
4-15b	2	Framing	2	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION
4-15c	4	Flooring	4	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION
4-15d	4	Plumbing	4	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION
4-15e	2	HVAC	2	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION
4-15f	2	Insulating	2	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION
4-15g	2	Drywalling	2	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION
4-16	3	Use urea formaldehyde-free insulation or Greenguard Gold certified insulation product	3	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION
4-17	1	Do not install insulation or carpet padding that contains brominated flame retardant (BFR)		
4-18	3	Use plywood and composites of exterior grade that is NAF, NAUF, or ULEF (for interior use)	3	
4-19	5	Use only shelving, window trim, door trim, base molding, etc., that is NAF, NAUF, or ULEF	5	
4-20	5	Install cabinets made with board that is NAF, NAUF, or ULEF and has low-toxic finish		
4-21	1	Use pre-finished flooring		
4-22	5	Use hard surface flooring without orthophthalate plasticizers		
4-23	10 2	No carpet in units Limit use of carpet to one-third of unit's square footage	2	
4-24 4-25	1	If installing carpet to one-third of unit's square footage If installing carpet system (carpet, pad, and adhesive), specify and use CRI Green Label Plus or Greenguard certified products	1	
4-26	5	If installing carpet system (carpet, pad, and adhesive), specify and use carpet that does not contain fly ash filler in backing		
4-27	1	If using carpet, install by dry method		
4-28	1	Install low pile or less allergen-attracting carpet and pad	1	
4-29	2	Install untreated natural fiber carpet		
4-30	1	Avoid carpet in environments where it can get wet (kitchen, bathroom, near entries) Select materials such that the building is free from all of the materials	1	
4-31	50	and chemicals listed in the handbook. Please discuss with Program Manager before claiming this point Subtotal	34	
MOISTURE	CONTROL	Subtotal	J- 1	
Overall				
4-32	5	Use Building Envelope Consultant during design		
4-33	5	Envelope inspection at various stages of envelope installation by a qualified professional		
4-34	1	Grade to drain away from buildings	1	
Poof		Subtotal	1	
Roof	0 15	Provide 2:12 (9.5 degree) pitch sloped roof surface -for at least 50% of		
4-35	6 or 10	roof (6 pts), or 100% (10 pts)	0	
		Subtotal	0	

Malla Ab	ave Crada			
	ove Grade	Provide continuous air- and weather resistive barrier installed to		
4-36	3	manufacturer's requirements		
4-37	3	Use prefabricated, liquid applied, or self-adhering flashing at siding		
		transitions and penetrations		
4-38	6	Install rainscreen siding		
4-39	3	In wood-framed structures, use low-toxic mold-inhibitor product Subtotal	0	
Below Gra	ade	Subtotal	U	
		For slab on grade, use 10 mil polyethylene vapor barrier or equivalent	2	
4-40	3	performance, directly under slab	3	
4-41	2	Perform moisture test for any slab on grade prior to installing any finish		
		to manufacturer's specifications		
4-42	2	Install mechanical ventilation system to control moisture in crawl space		
4-43	1	Install a rigid perforated footing drain at foundation perimeter, not	1	
	•	connected to roof drain system	•	
4-44	3	Install moisture management system for below grade walls beyond code, i.e., drainage mat	3	
		Subtotal	7	
Openings				
4-45	1	Properly seal building openings and penetrations against moisture and	1	
4-46		air leaks Install additional moisture control measures:		
4-46 4-46a	5	sill pans with back dams or slope at windows	5	
4-46b	3	door pans with back dams at doors	3	
4-46c	5	sill flashing extending up sides of windows	5	
4-46d	3	threshold protection at doors	3	
4-46e	1	metal head flashing at windows	1	
4-46f	1	metal head flashing at doors	1	
4-46g	1	min. 18" overhangs at entryways Provide hose testing or negative pressurization testing to pre-installed	1	
4-47	3	sample of each window type to test assembly for moisture control		
		protection - ASTM E1105 or equal		
		Subtotal	20	
-		FILTRATION		
4-48	2	No stud or joist cavities used for air conveyance Do not install electronic, metal mesh, horse hair, or non-pleated	2	
4-49	2	fiberglass filters		
4-50	1	Make sure air intakes are placed to avoid intake from air pollutant		
		sources (beyond code)		
4-51	1	No parking within 40 feet of building air intakes	1	
4-52	2 or 5	Use effective media air filter, ensuring the HVAC system is designed for the static pressure drop of the filter: MERV 8 (2 pts) or MERV 12+ (5	2	
4-02	2010	pts)	_	
4-53	2	Install operable windows in all occupied spaces, minimum 4% of floor		
4-00		area		
4-54	2	Install CO ₂ detectors in community rooms		
4-55	2	Demand controlled ventilation in all rooms designed for high occupancy		
		Utilize a balanced ventilation approach (supply + exhaust/return) in		
4-56	10	residential units		
		Subtotal	5	
HVAC EQUI		200 6 11 1	4	
4-57 4-58	1	Design to ensure accessibility of all system components Design to prevent standing water in ducted HVAC systems	1	
4-59	3	Commission all spot ventilation fans in all units	·	
4-60	1	Use heating system controls that are free of mercury	1	
4-61	1	Range exhaust hoods shall be ENERGY STAR rated and have a		
-F=V I	'	maximum flow rate less than or equal to 300 cfm		
4-62	2	Install an automatic fan control with 20-minute delay timer, motion sensor, or humidistat for bath exhaust fans	2	
4-63	2	Install quiet bath exhaust fan with smooth ducting, minimum 4 inch, with a fan sone rating of .3 or less at or above the design CFM		
		a lan some rating of to or less at or above the design of IVI		
4-64	1	No sound insulation or other fibrous materials installed inside ducting		
4-65	3	Install sealed combustion heating and hot water equipment	3	
4-66	3 or 5	Compartmentalization testing of sampling of units (see handbook for	-	
4-00	3 01 5	point tiers)		
UEALTILAN	ID INDOOR	Subtotal	8	
4-67		AIR QUALITY Install biodegradable carbon filter at sink		
		Install showerhead filter in all units, include information in the tenant		
4-68	1	handbook		
4.00	_	Provide track-off mats, carpets, and/or shoe grates at principle	0	MAY NOT BE IN BASELINE PROJECT,
4-69	3	entryways to building	3	BUT LIKELY FOR OTHERS WITHIN JURISDICTION
. =0	2	Duraido a abas necessal and at		23. 433.3 11011
4-70	2	Provide a shoe removal and storage area at the entrance to each unit		
4-71	1	Do not install gas-burning appliances inside unit or building		
4-72	1	Install floor drain or catch basin with drain under washing machines (and condensing/heat pump dryers if applicable)		
4-73	1-2	Use radon resistant construction using EPA standards (passive) (1 pt) or	1	
		test for radon and install active system after building is complete (2 pts)		
EVED ()	DIT (DOLLAR	Subtotal	4	
EXTRA CRE 4-74	1-10	ATION for Health and Indoor Air Quality Extra credit / innovation for Health and Indoor Air Quality		
4-/4	1-10	Extra credit / innovation for Health and Indoor Air Quality Subtotal	0	
		HEALTH & INDOOR AIR QUALITY TOTAL	108	
		TEALTH & INDOOR AIR & OALIT I TO TAL	100	

	5: MATER	RIALS EFFICIENCY		
OVERALL	10 or 15 or	Design and build for deconstruction concept - 50% (10 pts), 75% (15		l
5-1	20	pts), or 90% (20 pts)		
		Eliminate materials and systems that require finishes or finish materials		
5-2	1-5	on a minimum of 100 square feet in common areas (1 pt per 100 sqft)		
		Subtotal	0	
	PERATIONS			
5-3	1	Provide weather protection for stored and installed materials Purchase a one-time carbon offset to account for carbon footprint of	1	
5-4	15	materials, minimum of 50% of project footprint		
5-5	2	Use suppliers who offer reusable or recyclable packaging	_	
REDUCE		Subtotal	1	
5-6	5	Implement comprehensive construction waste reduction and	5	
0-0	J	management plan	0	
5-7	5-20	Reduce total waste generated on site (see handbook for point tiers)		
		Subtotal	5	
REUSE		Use deconstruction to dismantle and reuse existing building		l
5-8	15-30	components on site (see handbook for point tiers)		
5-9	1	Sell, give away, or reuse wood scraps, lumber and land clearing debris		
5-10	1	Donate, sell, or give away reusable finish items		
5-10	1-20	Reuse salvaged materials (1 pt per material, examples listed in		
		handbook)		
5-12	1-20	Use salvaged lumber, 1 pt per 100 board feet Subtotal	0	
RECYCLE				
Source	Separation F	Recycling - if points are claimed here, none may be claimed under Co	mmingle F	Recycling
5-13	1	Recycle cardboard by source separation, 90% minimum recycling rate		
5-14	2	Recycle metal scraps by source separation, 90% minimum recycling rate		
5-15	5	Recycle clean scrap wood and broken pallets by source separation, 90% minimum recycling rate		
5-16	2	Recycle package wrap and pallet wrap by source separation, 90% minimum recycling rate		
5-17	3	Recycle drywall by source separation, 90% minimum recycling rate		
5-18	2	Recycle concrete/asphalt rubble, masonry materials, or porcelain by source separation, 90% minimum recycling rate		
5-19	1	Recycle paint by source separation, 90% minimum recycling rate		
5-20	4	Recycle asphalt roofing by source separation, 90% minimum recycling rate		
5-21	2	Recycle carpet padding by source separation, 90% minimum recycling rate		
5-22	2	Recycle carpet by source separation, 90% minimum recycling rate		
5-23	1	Recycle glass by source separation, 90% minimum recycling rate		
5-24	3	Recycle land clearing and yard waste, food waste, soil and sod by source separation, 90% minimum recycling rate		
5-25	3	Recycle electronics and batteries	4	
5-26	1	Provide bin for miscellaneous household waste Subtotal	1 1	
Commir	ngle Recyclin	ng - if points are claimed here, none may be claimed under Source Se	-	Recycling
5-27	10	Send at least 90% of jobsite recyclables (by weight excluding concrete) to an approved commingled recycling facility with 50% recycling rate	10	
5-28	18	Send at least 90% of jobsite recyclables (by weight excluding concrete)	18	MAY NOT BE IN BASELINE PROJECT, BUT COULD BE FOR OTHERS WITHIN
		to an approved commingled recycling facility with 75% recycling rate Send at least 90% of jobsite recyclables (by weight excluding concrete)		JURISDICTION
5-29	24	to an approved commingled recycling facility with 90% recycling rate	20	
DESIGN AN	D MATERIAL	Subtotal	28	
Overall				
5-30	1	Use standard dimensions in design of structure	1	
5-31	10	Design and install recycling stations on each floor, including a maintenance service plan	10	
5-32	8	Design and install food waste management system on each floor, including a maintenance service plan	8	
5-33	1-3	Install materials with longer life cycles		
5-34	1-10	Install locally/regionally produced materials (1 pt per material)	5	
5-35	2-6	Use rapidly renewable building materials and products made from plants harvested within a ten-year cycle or shorter (2 pts per material)		
5-36	3	Use no endangered species or old growth wood	3	
5-37	3	Use no PVC, CPVC, or ABS piping for plumbing or sprinklers within the		
		building envelope Subtotal	27	
		Cubicial		

F				
Framing 5-38	2	Create detailed take-off and provide as cut list to framer		
5-39	2	Use central cutting area or cut packs	2	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN
5-40	6 or 10	Use dimensional lumber that is third-party certified sustainably harvested wood that meets the Tier 1 (10 pts) or Tier 2 (6 pts)		JURISDICTION
		requirements outlined in the handbook, 50% minimum Use sheathing that is third-party certified sustainably harvested wood		
5-41	4 or 7	that meets the Tier 1 (7 pts) or Tier 2 (4 pts) requirements outlined in the handbook, 50% minimum Use beams that are third-party certified sustainably harvested wood that		
5-42	3 or 5	meets the Tier 1 (5 pts) or Tier 2 (3 pts) requirements outlined in the handbook, 50% minimum		
5-43 5-44	5	Use factory framed wall panels (panelized wall construction) Use advanced wall framing - 24-inch OC, with double top plate		
5-45	3	Use engineered structural products and use no 2xs larger than 2x8, and no 4xs larger than 4x8		
5-46	4-8	Use structural insulated panels (SIPs) (see handbook for point tiers)		
5-47	5	Use insulated concrete forms (ICFs)		
5-48 5-49	1 8	Use finger-jointed framing material (e.g. studs) Use Cross Laminated Timber in place of steel or concrete		
3-43	U	Subtotal	2	
Foundatio	n			
5-50	6	Use fly ash or blast furnace slag for 25% by weight of cementitious materials for all concrete		
5-51	2	Use recycled concrete, asphalt, or glass cullet for base or fill		
Sub-Floor		Subtotal	0	
5-52	1	Use recycled content sub-floor		
		Subtotal	0	
Finish Flo 5-53	ı	If using viny flooring, use product with regulated content	2	
5-53 5-54	2 4	If using vinyl flooring, use product with recycled content No vinyl flooring	2	
5-55	1	Use recycled content carpet pad	1	
5-56	2	Use recycled content carpet	2	
5-57	2 or 4	Use replaceable carpet tile for 50% of carpeted area (2 pts) or 100% of carpeted area (4 pts) (minimum of 50 sqft)		
5-58	5	If using tile, use hard surface tile that is 40% recycled content		
5-59	5	Use natural linoleum		
5-60	3 or 5	Use flooring that is third-party certified sustainably harvested wood for at least 50% of hard surface flooring (see handbook for point tiers)		
5-61	1	Use spot repairable floor finish Subtotal	5	
Interior W	alls	Subtotal	J	
5-62	2	Use drywall with a minimum of 95% recycled content synthetic gypsum		
5-63	2 or 3	or 10% if non-synthetic gypsum Use recycled or "reworked" paint and finishes on main surfaces or all surfaces		
0		Subtotal	0	
Ceilings				
5-64	1	If installing acoustical ceiling tiles, select a recycled content product		
Windows		Subtotal	0	
5-65	8	Use all wood, composite, or fiberglass windows		
		Subtotal	0	
Trim 5-66		If using wood trim:		
5-66a	2 or 3	Use trim that is third-party certified sustainably harvested wood, 50%		
5-66b	3	minimum (see handbook for point tiers) Use finger-jointed or MDF trim with no added urea formaldehyde, 90% minimum		
5-66c	1 or 2	Use wood veneers that are third-party certified sustainably harvested woods, 50% minimum (see handbook for point tiers)		
		Subtotal	0	
Cabinetry 5-67	and Counte	For cabinets:		
	4 0	Use third-party certified sustainably harvested wood for at least 75%		
5-67a 5-67b	1 or 2 3	of cabinet casework (see handbook for point tiers) Use recycled-content cabinet casework for at least 75% of all		
5-67c	1	Use cabinet casework and shelving made with agricultural fiber that is NAUF, NAF, or ULEF for at least 75% of all cabinetry		
5-68	1 or 4	Use resource efficient countertop material in lobby/reception areas (1 pt) or in all areas (4 pts)		
		Subtotal	0	
Roof	2	Use recycled content reafing material		
5-69 5-70	2	Use recycled content roofing material Use a modified bitumen built-up roof		
5-71	5	Protect at least 90% of built-up and membrane roofing with ballast, pavers, or vegetated roof systems		
Insulation		Subtotal	0	
5-72	4	All cavity insulation to have a minimum of 40% post-consumer recycled content		
5-73	5	Use environmentally friendly foam building products (CFC-, HFC-,		
ə-73	5	HCFC-free) Subtotal	0	
			•	

Exterior Walls				
5-74	2	Use recycled content sheathing (OSB does not apply)		
5-75	3	Use exterior cladding with reclaimed or recycled material on at least 20% of solid wall surface		
5-76	4	No vinyl siding or exterior trim	4	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION
5-77	3	Use 50-year siding product (minimum 20% of solid wall surface)		
5-78	3 or 5	Use wood siding that is third-party certified sustainably harvested wood on at least 20% of solid wall surface (see handbook for point tiers)		
		Subtotal	4	
Other Exte	erior			
5-79	2 or 3	Use 100% recycled content HDPE or lumber that is third-party certified sustainably harvested wood for decking and porches (see handbook for point tiers)		
5-80	2	Use post-consumer recycled content plastic lumber for decking		
5-81	5	If lumber is used, use no pressure treated lumber		
	-	Subtotal	0	
BENCHMAR	RKING			
5-82	5	Commit to annual tracking of building trash using ENERGY STAR Portfolio Manager and to sharing with Built Green		
		Subtotal	0	
EXTRA CRE	DIT / INNOV	ATION for Materials Efficiency		
5-83	1-10	Extra credit / innovation for Materials Efficiency		
		Subtotal	0	
		MATERIALS EFFICIENCY TOTAL	73	

SECTION	6: OPERA	ATION, MAINTENANCE & TENANT EDUCATION				
6-1	7	Provide educational materials designed for the public that highlight the green building features and their performance that are included in the project	7	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION		
6-2	5	Prepare an environmentally friendly operations and maintenance plan for common area facilities	5	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION		
6-3	5	Prepare an environmentally friendly landscape operations and maintenance plan	5	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION		
6-4	6	Develop and provide a building-wide food waste disposal strategy				
6-5	7	Require tenants to sign an energy consumption data release form (if separately metered)				
6-6	5	Require tenants to sign a water consumption data release form (if separately metered)				
6-7	7	Conduct training sessions for maintenance staff and/or residents	7	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN		
6-8	5	Give individual feedback to all tenants about their energy consumption in comparison to others and/or building average				
6-9		Provide tenants with materials including information on:				
6-9a	1	Where to dispose of food waste (compost)	1	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION		
6-9b	1	Where to dispose of recycleables	1	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION		
6-9c	1	General practices to conserve water and energy	1	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION		
6-9d	1	Transportation options and resources	1	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION		
6-9e	3	EVs, their benefits, and where to charge them	3	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION		
6-9f	2	Green features and benefits of the buildings	2	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION		
6-9g	3	Maintenance checklists for their unit	3	MAY NOT BE IN BASELINE PROJECT, BUT LIKELY FOR OTHERS WITHIN JURISDICTION		
	OPERATION, MAINTENANCE & TENANT EDUCATION TOTAL 36					

PROJECT SUMMARIES					
SECTION 1: BUILT GREEN TEAM	1				
SECTION 2: SITE & WATER	139				
SECTION 3: ENERGY	67				
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SECTION 6: OPERATION, MAINTENANCE & TENANT EDUCATION	36				
GRAND TOTA	AL 424				

Appendix 4 - Passive House Strategies

Comparative Analysis of LEED, Built Green, & Passive House

- **Air Tightness Requirement**: 0.05 CFM50 and 0.08 CFM75 per square foot of gross envelope (WSEC requires 0.40 CFM75). Requires continuous air barriers and a rigorous threshold for the ASTM E779 fan pressure test. Advanced sealing measures: General Contractor estimate required.
- **Source Energy Limit:** 6200 kWh per person per year.
- Roof Assembly: target R-81 (WSEC stipulates R-49 for in-roof insulation; R-38 for above-deck insulation).
- Wall Assembly: above-grade target R-39 (WSEC stipulates R-21 for wood frame construction). Requires either deeper studs and/or adding exterior, continuous insulation.
- **Space Conditioning:** non-standard mechanical systems are typically required to comply (e.g. Energy Recovery Ventilation [ERV], possible heat-pump heating): Attention to building geometry less complicated perimeter (e.g. rectangle or L-shape) will be more efficient for thicker insulation & infiltration mitigation.
- Materials: thicker/denser insulation, triple pane glazing, additional sealing and thermal bridging strategies, and additional shading strategies.
- Resources:
 - o http://www.phius.org/phius-2015-new-passive-building-standard-summary
 - PHIUS+ Certification for Multifamily Performance Requirements (v2.0)
 - http://www.phius.org/PHIUSPlus2015docs/PHIUS-Plus Multifamily-Certification-Standard-v2.1.pdf

Amendments to Shoreline Municipal Code Title 20 Chapters 20.20, 20.30, and 20.50 Potential Expansion of Deep Green Incentive Program (DGIP)

20.20.016 D definitions.

Deep Green- refers to an advanced level of green building that requires more stringent standards for energy and water use, stormwater runoff, site development, materials, and indoor air quality than required by the Building Code. With regard to the Deep Green Incentive Program, this definition is divided into tiers based on certification programs as follows:

- Tier 1- International Living Future Institute's (ILFI) Living Building Challenge[™] or Living Community Challenge[™];
- Tier 2- ILFI's Petal Recognition[™] or Built Green's Emerald Star[™]; and
- Tier 3- US Green Building Council's (<u>USGBC</u>) Leadership in Energy and Environmental Design (LEED) PlatinumTM: Built Green's 5-StarTM: or ILFI's Net Zero Energy BuildingTM (NZEB) or Passive House Institute US's (PHIUS)+Shift ZeroTM, in combination with Salmon SafeTM where applicable.
- Tier 4- Built Green's 4-StarTM or PHIUS+TM.

20.30.080 Preapplication meeting.

A preapplication meeting is required prior to submitting an application for any project requesting departures through the Deep Green Incentive Program to discuss why departures are necessary to achieve certification through International Living Future Institute, Built Green, US Green Building Council, <u>Passive House Institute US</u>, or Salmon Safe programs. A representative from <u>the prospective certifying agency(ies)</u> will be invited to the meeting, but their attendance is not mandatory. <u>If the project would not otherwise require a preapplication meeting</u>, the fee for the preapplication meeting will be waived.

20.30.297 Administrative Design Review (Type A).

- 1. Administrative Design Review approval of departures from the design standards in SMC 20.50.220 through 20.50.250 and SMC 20.50.530 through 20.50.610 shall be granted by the Director upon their finding that the departure is:
 - a) Consistent with the purposes or intent of the applicable subsections; or
 - b) Justified due to unusual site constraints so that meeting the design standards represents a hardship to achieving full development potential.
- 2. Projects applying for the Deep Green Incentive Program by certifying through for certification under the Living Building or Community Challenge, Petal Recognition, Emerald Star, LEED-Platinum, 5-Star, 4-Star, PHIUS+, PHIUS+, Source Zero/Salmon Safe, or Net Zero Energy Building/Salmon Safe programs may receive departures from development standards under SMC 20.40, 20.50, 20.60, and/or 20.70 upon the Director's finding that the departures meet A and/or B above, and as further described under 20.50.630. Submittal documents shall include proof of enrollment in the programs listed above.

20.40.046(D) Mixed-Use Residential Zones

D. Four-Star Built Green construction is required all MUR zones. Construction in MUR zones must achieve green building certification through one of the following protocols: Built Green 4-Star or PHIUS+. If an affordable housing or school project is required to certify through the Evergreen Standard, this protocol shall fulfill the requirement.

20.50.400 Reductions to minimum parking requirements.

- B. A project applying for parking reductions under the Deep Green Incentive Program may be eligible for commercial and multi-family projects based on the intended certification they intend to achieve. No parking reductions will be eligible for single-family projects. Parking reductions are not available in R-4 and R-6 zones. Reductions will be based on the following tiers:
 - 1. Tier 1 Living Building or Living Community Challenge Certification: up to 50% reduction in parking required under 20.50.390 for projects meeting the full International Living Future Institute (ILFI) program criteria;
 - 2. Tier 2 Living Building Petal or Emerald Star Certification: up to 35% reduction in parking required under 20.50.390 for projects meeting the respective ILFI or Built Green program criteria;
 - Tier 3 LEED Platinum, 5-Star, <u>PHIUS+ Source Zero/Salmon Safe</u>, or <u>Net Zero Energy Building/Salmon Safe Certification</u>: up to 20% reduction in parking required under 20.50.390 for projects meeting the respective US Green Building Council, Built Green, <u>PHIUS</u>, or ILFI and/or Salmon Safe program criteria.
 - 4. <u>Tier 4- PHIUS+ or 4-Star: up to 5% reduction in parking required under</u> 20.50.390 for projects meeting the PHIUS or Built Green program criteria.
- C. In the event that the Director approves reductions in the parking requirement, the basis for the determination shall be articulated in writing.
- D. The Director may impose performance standards and conditions of approval on a project, including a financial guarantee.
- E. Reductions of up to 50 percent may be approved by the Director for the portion of housing providing low income housing units that are 60 percent of AMI or less as defined by the U.S. Department of Housing and Urban Development.
- F. A parking reduction of 25 percent may be approved by the Director for multifamily development within one-quarter mile of the light rail station. These parking reductions may not be combined with parking reductions identified in subsections A, B, and E of this section.
- G. Parking reductions for affordable housing or the Deep Green Incentive Program may not be combined with parking reductions identified in subsection A of this section.

Subchapter 9: 20.50.630 – Deep Green Incentive Program (DGIP)

A. **Purpose.** The purpose of this section is to establish an incentive program for Living and Deep Green Buildings in the City of Shoreline. The goal of the DGIP is to encourage development that meets the International Living Future Institute's (ILFI) Living Building ChallengeTM, Living Community ChallengeTM, Petal RecognitionTM, or Net-Zero Energy BuildingTM (NZEB) programs; Built Green's Emerald StarTM or 5-StarTM, or 4-StarTM programs; the US Green Building Council's (USGBC) Leadership in

Energy and Environmental DesignTM (LEED) Platinum program; <u>Passive House Institute USTM's PHIUS+ or PHIUS+Source Zero programs</u>; and/or the Salmon SafeTM program by:

- encouraging development that will serve as a model for other projects throughout the city and region resulting in the construction of more Living and Deep Green Buildings; and
- 2. allowing for departures from Code requirements to remove regulatory barriers.

B. Project qualification.

- Application requirements. In order to request exemptions, waivers, or other
 incentives through the Deep Green Incentive Program, the applicant or owner
 shall submit a summary demonstrating how their project will meet each of the
 requirements of the relevant certification program, such as including an overall
 design concept, proposed energy balance, proposed water balance, and
 descriptions of innovative systems.
- Qualification process. An eligible project shall qualify for the DGIP upon determination by the Director that it has submitted a complete application pursuant to SMC 20.30.297 Administrative Design Review, and has complied with the application requirements of this subsection.
- 3. The project must be registered with the appropriate third-party certification entity such as the International Living Future Institute, Built Green, US Green Building Council, <u>Passive House Institute US</u>, or Salmon Safe.
- 4. Projects requesting departures under the DGIP shall meet the current version of the appropriate certification program, which will qualify them for one of the following tiered packages of incentives:
 - a. Tier 1 Living Building Challenge or Living Community Challenge Certification: achieve all of the Imperatives of the ILFI programs;
 - b. Tier 2 Emerald Star or Petal Certification: satisfy requirements of Built Green program or three or more ILFI Petals, including at least one of the following- Water, Energy, or Materials; er
 - c. Tier 3- LEED Platinum, 5-Star, PHIUS+ Source Zero plus Salmon Safe, or NZEB plus Salmon Safe: satisfy requirements of the respective USGBC, Built Green, PHIUS, or ILFI/, and/or Salmon Safe programs. The addition of Salmon Safe certification to PHIUS+ Source Zero or NZEB projects is not required for detached single-family projects; or
 - d. <u>Tier 4- PHIUS+ or 4-Star: achieve all requirements of the PHIUS or Built Green programs.</u>
- <u>C.</u> **Director's determination.** All Shoreline Deep Green Incentive Program projects are subject to review by the Director under Section 20.30.297. Any departures from the Shoreline Development Code (SMC Title 20) must be approved by the Director prior to submittal of building permit application.

- <u>D.</u> Incentives. A project qualifying for the Shoreline Deep Green Incentive Program will be granted the following tiered incentive packages, based on the certification program for which they are applying:
 - 1. A project qualifying for Tier 1 Living Building Challenge or Living Community Challenge may be granted a waiver of up to 100% City-imposed pre-application and permit application fees. A project qualifying for Tier 2 Emerald Star or Petal Recognition may be granted a waiver of up to 75% of City-imposed application fees. A project qualifying for Tier 3 LEED Platinum, 5-Star, PHIUS+Source Zero/Salmon Safe, or NZEB/Salmon Safe may be granted a waiver of up to 50% of City-imposed application fees. A project qualifying for Tier 4- PHIUS+ or 4-Star may be granted a waiver of up to 25% of City-imposed application fees.
 - 2. Projects qualifying for the DGIP may be granted a reduced Transportation Impact Fee based on a project-level Transportation Impact Analysis.
 - Departures from Development Code requirements when in compliance with SMC 20.50.630(E).
 - 4. Expedited permit review without additional fees provided in SMC Chapter 3.01
- E. **Departures from Development Code requirements.** The following requirements must be met in order to approve departures from Development Code requirements:
 - 1. The departure would result in a development that meets the goals of the Shoreline Deep Green Incentive Program and would not conflict with the health and safety of the community. In making this recommendation, the Director shall consider the extent to which the anticipated environmental performance of the building would be substantially compromised without the departures.
 - 2. A Neighborhood Meeting is required for projects departing from standards in the R-4 or R-6 zones.
 - 3. Departures from the following regulations may be granted for projects qualifying for the Shoreline Deep Green Incentive Program:
 - a. SMC 20.50.020. Residential density limits
 - Tier 1 Living Building Challenge or Living Community Challenge Certification: up to 100% bonus for the base density allowed under zoning designation for projects meeting the full Challenge criteria;
 - Tier 2 Emerald Star or Living Building Petal Certification: up to 75% bonus for the base density allowed under zoning designation for projects meeting the program criteria;
 - iii. Tier 3 LEED Platinum, 5-Star, or PHIUS+ Source Zero/Salmon
 Safe or NZEB/Salmon Safe Certification: up to 50% bonus for the
 base density allowed under zoning designation for projects meeting
 the program criteria-:
 - iv. <u>Tier 4- PHIUS+ or 4-Star: up to 25% bonus for the base density</u> <u>allowed under zoning designation for projects meeting the program</u> criteria.

Minimum lot size of 10,000 square feet is required in all zones with a density maximum in order to request a density bonus. Density bonus is

- not available in R-4 and R-6 zones. Any additional units granted would be required to be built to the same green building standard as the first.
- b. SMC 20.50.390. Parking requirements (not applicable in R-4 and R-6 zones):
 - Tier 1 Living Building Challenge or Living Community Challenge Certification: up to 50% reduction in parking required under 20.50.390 for projects meeting the full Challenge criteria;
 - Tier 2 Emerald Star or Living Building Petal Certification: up to 35% reduction in parking required under 20.50.390 for projects meeting the program criteria;
 - iii. Tier 3 LEED Platinum, 5-Star, <u>PHIUS+ Source Zero/Salmon Safe</u>, or NZEB/Salmon Safe Certification: up to 20% reduction in parking required under 20.50.390 for projects meeting the program criteria.
 - iv. <u>Tier 4- PHIUS+ or 4-Star Certification: up to 5% reduction in parking required under 20.50.390 for projects meeting the program criteria.</u>
- c. Lot coverage standards, as determined necessary by the Director;
- d. Use provisions, as determined necessary by the Director
- e. Standards for storage of solid-waste containers;
- f. Standards for structural building overhangs and minor architectural encroachments into the right-of-way;
- g. Structure height bonus up to 10 feet for development in a zone with height limit of 35 feet. Height bonus is not available in R-4, R-6, R-8, and MUR-35' zones. Structure height bonus up to 20 feet for development in a zone with a height limit of 45 feet or greater; and
- h. A rooftop feature may extend above the structure height bonus provided in SMC 20.50.020 or 20.50.050 if the extension is consistent with the applicable standards established for that rooftop feature within the zone.

F. Compliance with minimum standards.

- 1. For projects requesting departures, fee waivers, or other incentives under the Deep Green Incentive Program, the building permit application shall include a report from the design team demonstrating how the project is likely to achieve the elements of the program through which it intends to be certified.
- 2. For projects applying for an ILFI certification (Tiers 1, 2, or 3), after construction and within six (6) months of issuance of the Certificate of Occupancy, the applicant or owner must show proof that an LBC Preliminary Audit has been scheduled; such as a paid invoice and date of scheduled audit. After construction and within twelve months of issuance of Certificate of Occupancy, the applicant or owner must show a preliminary audit report from ILFI demonstrating project compliance with the Place, Materials, Indoor Air Quality, and Beauty/Inspiration Imperatives that do not require a performance period.
- 3. For projects aiming for Built Green Emerald Star (Tier 2), or 4-Star (Tier 4) certification, after construction and within six (6) months of issuance of the Certificate of Occupancy, the applicant or owner must show proof that the

- project successfully met Built Green certification by way of the Certificate of Merit from the program.
- 4. For projects pursuing LEED certification (Tier 3), the applicant or owner must show, after construction and within six (6) months of issuance of the Certificate of Occupancy, that the project has successfully completed the LEED Design Review phase by way of the final certification report.
- 5. For projects pursuing PHIUS+ (Tier 4) or PHIUS+ Source Zero certification (Tier 3), the applicant or owner must show, after construction and within six (6) months of issuance of the Certificate of Occupancy, that the project has successfully obtained the PHIUS+ or PHIUS+ Source Zero certification.
- For projects pursuing Salmon Safe certification (Tier 3 in conjunction with NZEB or PHIUS+ Source Zero when applicable), the applicant or owner must show, after construction and within six (6) months of issuance of the Certificate of Occupancy, that the project has successfully obtained the Salmon Safe Certificate.
- 7. No later than two years after issuance of a final Certificate of Occupancy for the project, or such later date as requested in writing by the owner and approved by the Director for compelling circumstances, the owner shall submit to the Director the project's certification demonstrating how the project complies with the standards contained in this subsection. Compliance must be demonstrated through an independent certification from ILFI, Built Green, or USGBC/Green Building Cascadia Institute (GBCI). A request for an extension to this requirement must be in writing and must contain detailed information about the need for the extension.
 - a. For projects pursuing ILFI certification (Living Building Challenge, Living Community Challenge, Petal Recognition, or Net-Zero Energy Building), performance based requirements such as energy and water must demonstrate compliance through certification from ILFI within the two year timeframe noted above.
 - b. For projects pursuing Built Green certification post-occupancy compliance must be demonstrated with analysis proving 12 consecutive months of net zero energy performance and/or 70% reduction in occupant water use. It is the owner's responsibility to submit utility information to Built Green so analysis can be conducted and shown to the Director.
 - c. For projects pursuing LEED certification, the applicant or owner must show proof of certification by way of the final LEED Construction Review report and LEED Certificate issued by USGBC/GBCI.
- 8. If the Director determines that the report submitted provides satisfactory evidence that the project has complied with the standards contained in this subsection, the Director shall send the owner a written statement that the project has complied with the standards of the Shoreline Deep Green Incentive Program. If the Director determines that the project does not comply with the standards in this subsection, the Director shall notify the owner of the aspects in which the project does not comply. Components of the project that are included in order to

- comply with the minimum standards of the Shoreline Deep Green Incentive Program shall remain for the life of the project.
- 9. Within 90 days after the Director notifies the owner of the ways in which the project does not comply, or such longer period as the Director may allow for justifiable cause, the owner may submit a supplemental report demonstrating that alterations or improvements have been made such that the project now meets the standards in this subsection.
- 10. If the owner fails to submit a supplemental report within the time allowed pursuant to this subsection, the Director shall determine that the project has failed to demonstrate full compliance with the standards contained in this subsection, and the owner shall be subject to penalties as set forth in subsection 20.30.770.