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MAY 30 2017

CORP OF TOWNSHIP  
OF ESQUIMALT  
DEVELOPMENT SERVICES

Adopted January 10th, 2011



"One-third of Canada's energy use goes to running our homes, offices and other buildings. The federal government's Office of Energy Efficiency (Natural Resources Canada) reports that a corresponding one-third of our current greenhouse gas (GHC) emissions come from the built environment."  
[Green Building and Development as a Public Good, Michael Buzzelli, CPRN Research Report June 2009]

Please answer the following questions and describe the green and innovative features of your proposed development. Depending on the size and scope of your project, some of the following points may not be applicable.

### Green Building Standards

Both energy use and emissions can be reduced by changing or modifying the way we build and equip our buildings.

- 1 Are you building to a recognized green building standard? Yes ☒ No  
If yes, to what program and level?
- 2 If not, have you consulted a Green Building or LEED consultant to discuss the inclusion of green features? ☒ Yes No
- 3 Will you be using high-performance building envelope materials, rainscreen siding, durable interior finish materials or safe to re-use materials in this project? ☒ Yes No  
If so, please describe them. HARDPANEL SIDING ON RAINSCREEN WALL ASSEMBLY
- 4 What percentage of the existing building[s], if any, will be incorporated into the new building? 0 %
- 5 Are you using any locally manufactured wood or stone products to reduce energy used in the transportation of construction materials? Please list any that are being used in this project.  
ALL WOOD USED IN THIS PROJECT WILL BE FROM B.C.
- 6 Have you considered advanced framing techniques to help reduce construction costs and increase energy savings? ☒ Yes No  
PARALLAM & LVLW/ ENGINEERED WOOD JOISTS TO BE UTILIZED
- 7 Will any wood used in this project be eco-certified or produced from sustainably managed forests? If so, by which organization? Fletcher Challenges wood from Elk Falls  
For which parts of the building (e.g. framing, roof, sheathing etc.)? entire arbour
- 8 Can alternatives to Chlorofluorocarbon's and Hydro-chlorofluorocarbons which are often used in air conditioning, packaging, insulation, or solvents be used in this project? If so, please describe these. ☒ Yes No  
Products such as Dow's glycol ethers will be used wherever possible.
- 9 List any products you are proposing that are produced using lower energy levels in manufacturing.  
NOT KNOWN
- 10 Are you using materials which have a recycled content [e.g. roofing materials, interior doors, ceramic tiles or carpets]? Yes No  
UNKNOWN @ TIME OF REZONING
- 11 Will any interior products [e.g. cabinets, insulation or floor sheathing] contain formaldehyde? Yes ☒ No



## Water Management

The intent of the following features is to promote water conservation, re-use water on site, and reduce storm water run-off.

### Indoor Water Fixtures

- |    |                                                                                                                      |                                      |    |     |
|----|----------------------------------------------------------------------------------------------------------------------|--------------------------------------|----|-----|
| 12 | Does your project exceed the BC Building Code requirements for public lavatory faucets and have automatic shut offs? | Yes                                  | No | N/A |
| 13 | For commercial buildings, do flushes for urinals exceed BC Building Code requirements?                               | Yes                                  | No | N/A |
| 14 | Does your project use dual flush toilets and do these exceed the BC Building Code requirements?                      | <input checked="" type="radio"/> Yes | No |     |
| 15 | Does your project exceed the BC Building Code requirements for maximum flow rates for private showers?               | <input checked="" type="radio"/> Yes | No |     |
| 16 | Does your project exceed the BC Building Code requirements for flow rates for kitchen and bathroom faucets?          | <input checked="" type="radio"/> Yes | No |     |

### Storm Water

- |    |                                                                                                                                                                                                                                                                        |                                      |                                     |                                      |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|
| 17 | If your property has water frontage, are you planning to protect trees and vegetation within 60 metres of the high water mark? [Note: For properties located on the Gorge Waterway, please consult Sections 7.1.2.1 and 9.6 of the Esquimalt Official Community Plan.] | Yes                                  | No                                  | <input checked="" type="radio"/> N/A |
| 18 | Will this project eliminate or reduce inflow and infiltration between storm water and sewer pipes from this property?                                                                                                                                                  | <input checked="" type="radio"/> Yes | No                                  | N/A                                  |
| 19 | Will storm water run-off be collected and managed on site (rain gardens, wetlands, or ponds) or used for irrigation or re-circulating outdoor water features? If so, please describe.                                                                                  | Yes                                  | <input checked="" type="radio"/> No | N/A                                  |
| 20 | Have you considered storing rain water on site (rain barrels or <u>cisterns</u> ) for future irrigation uses?                                                                                                                                                          | <input checked="" type="radio"/> Yes | No                                  | N/A                                  |
| 21 | Will surface pollution into storm drains will be mitigated (oil interceptors, bio-swales)? If so, please describe. <u>an oil interceptor will be installed in the parkade</u>                                                                                          | <input checked="" type="radio"/> Yes | No                                  | N/A                                  |
| 22 | Will this project have an engineered green roof system or has the structure been designed for a future green roof installation? <u>(Project designed for future green roof)</u>                                                                                        | <input checked="" type="radio"/> Yes | No                                  | N/A                                  |
| 23 | What percentage of the site will be maintained as naturally permeable surfaces?                                                                                                                                                                                        |                                      | <u>15</u>                           | %                                    |

### Waste water

- |    |                                                                                                                                                                                    |     |    |                                      |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|--------------------------------------|
| 24 | For larger projects, has Integrated Resource Management (IRM) been considered (e.g. heat recovery from waste water or onsite waste water treatment)? If so, please describe these. | Yes | No | <input checked="" type="radio"/> N/A |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|--------------------------------------|

## Natural Features/Landscaping

The way we manage the landscape can reduce water use, protect our urban forest, restore natural vegetation and help to protect the watershed and receiving bodies of water.

- |    |                                                                                  |                                      |                |     |
|----|----------------------------------------------------------------------------------|--------------------------------------|----------------|-----|
| 25 | Are any healthy trees being removed? If so, how many and what species?           | <input checked="" type="radio"/> Yes | No             | N/A |
|    | <u>3 trees being removed.</u>                                                    |                                      |                |     |
|    | Could your site design be altered to save these trees? <u>Unfortunately not.</u> |                                      |                |     |
|    | Have you consulted with our Parks Department regarding their removal?            |                                      | <u>not yet</u> |     |



- 26 Will this project add new trees to the site and increase our urban forest?  
If so, how many and what species? 5 Keyland Cypress ☒ Yes ☐ No ☐ N/A
- 27 Are trees [existing or new] being used to provide shade in summer or to buffer winds? see above ☒ Yes ☐ No ☐ N/A
- 28 Will any existing native vegetation on this site be protected?  
If so, please describe where and how. \_\_\_\_\_ Yes ☒ No ☐ N/A
- 29 Will new landscaped areas incorporate any plant species native to southern Vancouver Island? ☒ Yes ☐ No ☐ N/A
- 30 Will xeriscaping (i.e. the use of drought tolerant plants) be utilized in dry areas? ☒ Yes ☐ No ☐ N/A
- 31 Will high efficiency irrigation systems be installed (e.g. drip irrigation; 'smart' controls)? ☒ Yes ☐ No ☐ N/A
- 32 Have you planned to control invasive species such as Scotch broom, English ivy, Himalayan and evergreen blackberry growing on the property? ☒ Yes ☐ No ☐ N/A
- 33 Will topsoil will be protected and reused on the site? ☒ Yes ☐ No ☐ N/A

### Energy Efficiency

*Improvements in building technology will reduce energy consumption and in turn lower greenhouse gas [GHG] emissions. These improvements will also reduce future operating costs for building occupants.*

- 34 Will the building design be certified by an independent energy auditor/analyst?  
If so, what will the rating be? \_\_\_\_\_ Yes ☒ No ☐ N/A
- 35 Have you considered passive solar design principles for space heating and cooling or planned for natural day lighting? ☒ Yes ☐ No ☐ N/A
- 36 Does the design and siting of buildings maximize exposure to natural light?  
What percentage of interior spaces will be illuminated by sunlight? 45 % ☒ Yes ☐ No ☐ N/A
- 37 Will heating and cooling systems be of enhanced energy efficiency (ie. geothermal, air source heat pump, solar hot water, solar air exchange, etc.).  
If so, please describe. Energy Star variable speed heat pumps w/ SEER rating of 13 (min)  
If you are considering a heat pump, what measures will you take to mitigate any noise associated with the pump? heat pumps will be wall mounted in parkade above headroom height. Yes ☐ No ☐ N/A
- 38 Has the building been designed to be solar ready? rough-ins for roof mounted solar panels will be provided ☒ Yes ☐ No ☐ N/A
- 39 Have you considered using roof mounted photovoltaic panels to convert solar energy to electricity? see above ☒ Yes ☐ No ☐ N/A
- 40 Do windows exceed the BC Building Code heat transfer coefficient standards? ☒ Yes ☐ No ☐ N/A
- 41 Are energy efficient appliances being installed in this project?  
If so, please describe. Energy Star Appliances: W.D.s, dishwashers, & refrigerators
- 42 Will high efficiency light fixtures be used in this project?  
If so, please describe. most, if not all, fixtures will be LED ☒ Yes ☐ No ☐ N/A
- 43 Will building occupants have control over thermal, ventilation and light levels? ☒ Yes ☐ No ☐ N/A
- 44 Will outdoor areas have automatic lighting [i.e. motion sensors or time set]? ☒ Yes ☐ No ☐ N/A
- 45 Will underground parking areas have automatic lighting? ☒ Yes ☐ No ☐ N/A



**Air Quality**

The following items are intended to ensure optimal air quality for building occupants by reducing the use of products which give off gases and odours and allowing occupants control over ventilation.

- |    |                                                                                                                                                                                                                                                         |            |    |            |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----|------------|
| 46 | Will ventilation systems be protected from contamination during construction and certified clean post construction?                                                                                                                                     | Yes        | No | <u>N/A</u> |
| 47 | Are you using any natural, non-toxic, water soluble or low-VOC [volatile organic compound] paints, finishes or other products?<br>If so, please describe. <u>EcoDesign's BioShield paint (or Green planet) EcoWood treatment for fences, deck, wood</u> | <u>Yes</u> | No | N/A        |
| 48 | Will the building have windows that occupants can open?                                                                                                                                                                                                 | <u>Yes</u> | No | N/A        |
| 49 | Will hard floor surface materials cover more than 75% of the liveable floor area?                                                                                                                                                                       | <u>Yes</u> | No | N/A        |
| 50 | Will fresh air intakes be located away from air pollution sources?                                                                                                                                                                                      | <u>Yes</u> | No | N/A        |

**Solid Waste**

Reuse and recycling of material reduces the impact on our landfills, lowers transportation costs, extends the life-cycle of products, and reduces the amount of natural resources used to manufacture new products.

- |    |                                                                                                                                                                                  |            |    |            |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----|------------|
| 51 | Will materials be recycled during demolition of existing buildings and structures?<br>If so, please describe. <u>any re-useable windows, doors will be selectively recycled.</u> | <u>Yes</u> | No | N/A        |
| 52 | Will materials be recycled during the construction phase?<br>If so, please describe. _____                                                                                       | Yes        | No | N/A        |
| 53 | Does your project provide enhanced waste diversion facilities i.e. on-site recycling for cardboard, bottles, cans and or recyclables or on-site composting?                      | <u>Yes</u> | No | N/A        |
| 54 | For new commercial development, are you providing waste and recycling receptacles for customers?                                                                                 | Yes        | No | <u>N/A</u> |

??  
I think not

**Green Mobility**

The intent is to encourage the use of sustainable transportation modes and walking to reduce our reliance on personal vehicles that burn fossil fuels which contributes to poor air quality.

- |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                |            |    |            |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----|------------|
| 55 | Is pedestrian lighting provided in the pathways through parking and landscaped areas and at the entrances to your building[s]?                                                                                                                                                                                                                                                                                                                 | <u>Yes</u> | No | N/A        |
| 56 | For commercial developments, are pedestrians provided with a safe path[s] through the parking areas and across vehicles accesses?                                                                                                                                                                                                                                                                                                              | Yes        | No | <u>N/A</u> |
| 57 | Is access provided for those with assisted mobility devices?                                                                                                                                                                                                                                                                                                                                                                                   | <u>Yes</u> | No | N/A        |
| 58 | Are accessible bike racks provided for visitors?                                                                                                                                                                                                                                                                                                                                                                                               | <u>Yes</u> | No | N/A        |
| 59 | Are secure covered bicycle parking and dedicated lockers provided for residents or employees?                                                                                                                                                                                                                                                                                                                                                  | <u>Yes</u> | No | N/A        |
| 60 | Does your development provide residents or employees with any of the following features to reduce personal automobile use [check all that apply]:<br><input type="checkbox"/> transit passes<br><input type="checkbox"/> car share memberships<br><input type="checkbox"/> shared bicycles for short term use<br><input type="checkbox"/> weather protected bus shelters<br><input checked="" type="checkbox"/> plug-ins for electric vehicles |            |    |            |

Is there something unique or innovative about your project that has not been addressed by this Checklist? If so, please add extra pages to describe it.

electric car charging station provided.