REQUEST FOR PROPOSAL "RFP" No. PS20171212
DESIGN-BUILD INNOVATIVE SOLAR LIGHTING AT ARBUTUS GREENWAY

QUESTIONS AND ANSWERS NO. 2

ISSUED ON SEPTEMBER 7, 2017

Q2.1	ref: Part B Note 5.1 (a) Design It is our opinion that bollards are not an appropriate solution for this project given the project scale and required lighting specifications. We estimate that 500 or more bollards would be required to meet the lighting levels as specified, and that this would not be a viable solution. Is it acceptable to submit a formal RFP response for an Option One (Pole-mounted luminaire) solution only?
A2.1	**It is acceptable to submit in your formal response for just Option One (Pole-mounted luminaire) if the proponent does not have a viable solution for Option Two (Bollard).**
Q2.2	Ref: Part B Table 2: Average Maintained Illuminance Levels The Arbutus Greenway project is located in a challenging solar environment. Pacific Northwest solar insolation conditions, coupled with shading issues on sections of the Greenway, are contributing factors. Innovative energy management techniques will be implemented to maximize illuminance levels throughout the year while also providing an economical and aesthetic solution. This innovative design approach will reduce the visual impact by using appropriately sized solar panels while reducing the cost per installed system. Would it be possible to allow for selective dimming the LED illuminance levels, particularly in winter months and during low activity periods (midnight to 5am), for sites where shading conditions significantly reduce the solar exposure?
A2.2	**Selective dimming to minimum lighting levels during low activity periods is acceptable provided the lighting levels can automatically and rapidly be stepped up by the system upon detecting users during this period. The City's Arbutus Project Team (AGP) would like to have a flexibility in selecting time for the low activity period as well as flexibility in selecting lighting levels during the low activity period.**
Q2.3	Ref: Part B Table 2: Component Section - Solar Panels/Charging System -- Bullet point #2 (System sizing) It is possible to add a clarification statement that states that system sizing should be based on local monthly minimum average insolation data that is referenced from an industry recognized source (i.e. NASA, RET, etc.)?

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	For reference, NASA data for Vancouver for December states a minimum condition of 0.81 kWh/m2/day (Monthly Averaged Insolation Incident on a Horizontal Surface). This compares to an annual average of 3.45 kWh/m2/day.
A2.3	**Please consider Environmental Canada statistics/data for any design purpose (temperature variation during the day, duration of sunlight exposure, rainy days or any other relevant information)**
Q2.4	Ref: Part B Table 2: Component Section - Solar Panels/Charging System -- Bullet point #3 (Port for charging battery from an alternate source). It is not recommended to use an external charger, on a routine basis, to correct deficiencies in available solar power. Routinely running the batteries to a low level before recharging results in a significantly reduced life expectancy for the batteries. Due to this fact we suggest removing this requirement from the RFP. Is this acceptable?
A2.4	**To clarify Part B Table 2 : Component section – Bullet point # 3, the City intends to use the external charging port during times when the battery cannot hold sufficient power to light the system for instance during prolonged dark winters when sunlight is insufficient to charge the batteries. As the City expects this activity to occur infrequently, not routinely, the requirement for an external charging port is to remain within the RFP.**
Q2.5	Would Direct Burial poles be acceptable for use on this project?
A2.5	**Yes. In addition to what is stated in the RFP Part B Table 2: Pole Section – Direct Burial Installation of the pole is acceptable provided the ground conditions allow for such installation and that the installation method meets all relevant loading conditions.**
Q2.6	Would composite poles be acceptable for use on this project?
A2.6	**Yes, provided that the pole meets the requirements specified in the RFP Part B Table 2: Pole Section.**
Q2.7	Is dimming allowed for use on our project, if so to what percentage and how many hours of dimming would be allowed for the lighting profile?
A2.7	**Yes. Please see response A2.2 above.**
Q2.8	Will the city consider self-contained solar lighting products that meet the lighting requirements based on annual lighting averages rather than having to meet those requirements every day of the year?
A2.8	**Self-contained solar lighting products are acceptable. However, specified minimum lighting levels should be achieved through this product on a daily basis.**