DEPARTMENT OF PARKS AND RECREATION

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October 29, 2013

Saint Paul Sustainable Building Policy
Water Street Operations Facility and Parking Lot – Harriet Island Regional Park

STAFF REPORT

The Department of Parks and Recreation is seeking a partial waiver from the Saint Paul Sustainable Building Policy ("Policy") for a new operations storage structure and parking lot at 85 W Water Street adjacent to Harriet Island Regional Park.

The Policy applies to all "municipal or HRA owned facilities financed by the City of Saint Paul or HRA and those buildings utilized by the City's Executive Departments, the Saint Paul Public Library, or the Saint Paul Parks and Recreation Department." The Policy requires that such projects comply with a rating system (e.g., LEED) and the Saint Paul Overlay.

Harriet Island Regional Park makes up a total of 65.19 Acres; this project will redevelop 0.3 acres of parkland for the operations maintenance yard and 1.6 Acres of parkland for parking lot and related green space. The redevelopment replaces a deteriorated industrial building (demolished in 2013) that was used for park staff offices and equipment storage and gravel yard used for event and maintenance operations. The proposed operations facilities and yard include renovating an existing storage building, a new modular office structure, and a new storage structure. From preliminary discussion with sustainable building policy staff, it was determined that the modular structure and renovated storage building are not required to address the sustainable building policy.

The proposed new storage building is an 1800 sq ft. unheated/uncooled structure. Due to its unconditioned nature and primary use for equipment and materials storage, the costs and effort to administer the building with one of the rating systems would be disproportionate to the costs of construction. Parks and Recreation staff recommends that the building comply with relevant items of the Overlay portion of the Policy. Compliance with the Overlay ensures that the building will conserve energy, meet applicable storm water management requirements, and divert construction waste from landfills. All of this will be achieved with relatively lower cost and administrative effort than if the Policy was applied in its entirety.

The parking lot will include 90 parking spaces for park events and park visitors and will accommodate vendor parking during large events at the regional park. The parking lot design was planned for in the 1998 master plan of Harriet Island that proposed a total of 167 parking spaces on the south side of the levy. Trail connections to the park are included with this plan. The parking lot will add much needed parking for park visitors parking will be managed to limit long-term commuter parking.

The Saint Paul Overlay to the Policy requires that projects achieve minimum levels of attainment in several environmental areas. The operations storage structure and parking lot will meet the relevant requirements of the Overlay as follows:

1. Predicted energy use shall meet Minnesota Sustainable Building 2030 "Energy Standards" for new buildings.
    a. *Because the building is unheated and uncooled, and there is no energy used for heating or cooling, there is no benefit to modeling energy use and no opportunity to meet the SB 2030 Energy Standard.*
    b. *Building lights are LED fixtures and are up to 90% more efficient than incandescent lighting.*
    c. *The building has translucent panels in the roofline to allow natural light and reduce the need for artificial light during the day.*
2. Predicted use of potable water in the building must be at least 30% below the Energy Policy Act of 1992.
    a. *N/A. There is no potable water in the proposed storage structure..*
3. Predicted water use for landscaping must be at least 50% less than traditionally irrigated site using typical water consumption for underground irrigation systems standards.
    a. *N/A. There is no irrigation for landscaping as part of this project.*
4. Actual solid waste of construction materials, excluding demolition waste, must be at least 75% recycled or otherwise diverted from landfills.
    a. *At least 75% of construction waste will be diverted from landfills as documented in the Construction Waste Calculator*.
5. Indoor Environmental Quality (IEQ) must be addressed through the following strategies:
    a. Ventilation based on ASHRAE 62.1-2004 or meet the minimum requirements of Sections 4 through 7 of ASHRAE standard 62.1-2007. - *N/A. The proposed building will not be occupied and therefore does not need to meet ventilation requirements.*
    b. Construction IEQ management plan: - *N/A. The proposed building will not be occupied, but is intended for vehicle and equipment storage only.*
    c. Low-emitting materials: *N/A. The proposed building will not be occupied, but is intended for vehicle and equipment storage only.*
    d. Thermal comfort: *N/A. The proposed building will not be occupied and thermal comfort is not applicable.*
6. Storm Water Management Requirements:
    a. Site Eligibility: sites with ¼ acre or more of total land disturbance. *The proposed building and parking lot redevelop a total of 1.9 acres.*
    b. Rate Control: *Due to the close proximity to the levy and the river, there is no rate control required for this project. Although there is no rate control required for the project, the project has been designed to reduce runoff rates as compared to existing conditions.*
    c. Water Quality Management: *This project proposes to employ a variety of structural and low-impact storm water quality treatment facilities. These facilities are designed into a "treatment train" to provide redundancies and enhanced storm water quality treatment. At the discharge point of the treatment train, it is expected that 90% of the Total Suspended Solids (TSS) and 63% of the Total Phosphorous (TP) will be removed from the storm water. This level of treatment exceeds the Sustainable Building Policy treatment rates of 80% TSS removal and 60% TP removal.*
    d. Volume Control/Infiltration: *Due to soil conditions and indication of contamination on site, we are unable to infiltrate the water on the site. There are*

two biofiltration areas, however, that will manage runoff from the parking lot. In cases where infiltration is not possible, it is customary to allow a 70% credit for filtration practices as included as part of this project. As part of the review and design of the project, the treatment and volume control of potential future facilities such as the west parking lot, associated sidewalks and a boulevard sidewalk have been included. The net result is that there will be a net gain of 2,000 s.f. of impervious surface if all of the future improvements are constructed. This equates to an approximate 2.5% increase in the impervious surface for the project area. The required volume design is to infiltrate 1" depth of storm water over the net increase in impervious surface. For this project, this would result in requiring to infiltrate 167 c.f. of storm water. Since, we are unable to infiltrate on this project, we will need to provide additional filtration volume based upon the 70% credit, which results in needing to filtrate a total of 238 c.f of storm water. The current design proposes to provide a total of approximately 6,900 c.f of storm water, which is approximately 29 times more than what is required.

e. Operation and Maintenance plan: *Parks and Recreation will assume responsibility for the rain garden that is associated with the building and parking lot at the trailhead. This includes annual sediment removal and plant maintenance.*

7. Predicted greenhouse gas emissions must be reported to the Minnesota Sustainable Building 2030 database.

a. The only energy used by the building will be for lighting and those lights are LED fixtures that consume up to 90% less electricity than typical. There is, therefore, very little value in tracking the greenhouse gas emissions of this building

8. Annual submittals of energy usage data to the Minnesota Sustainable Building 2030 database.

a. *Because the building is not intended for human occupancy, no energy is used for heating or cooling, there is very little benefit to tracking energy use*