

## **Proposed Solar Array Project at the Mountain View Sports Pavilion and Whisman Sports Center**

### **Background**

In April 2023, the City of Mountain View (City) applied for the Net Energy Metering (NEM) 2.0 program to reserve incentives to install photovoltaic or solar array systems at various city facilities, including the Mountain View Sports Pavilion and Whisman Sports Center (gymnasiums).

The Net Energy Metering Program is administered by the California Public Utilities Commission and provides credits to a building's utility bill for producing excess onsite clean energy over a 20-year period. The deadline to submit projects under NEM 2.0 was April 14, 2023, which the City accomplished. Projects under NEM 2.0 must be completed by April 2026 to receive the incentive. Otherwise, the NEM 3.0 program would need to be pursued, which offers less incentives/savings.

The gymnasiums are maintained and operated jointly by the District and City of Mountain View under a Joint Use Agreement (JUA), requiring joint decisions on enhancements and upgrades, such as installing solar arrays.

### **Considerations**

The proposed project aligns with the City's and District's sustainability goals and provides operational costs savings. Installing solar arrays at the gymnasiums would enable the production of clean energy and support future building electrification projects (e.g. replacement of gas-fired fossil fuel heating equipment with clean-energy heat pumps). It would also provide a pathway to explore battery storage that could further reduce utility costs during peak demand periods (4 p.m. to 9 p.m.). Solar arrays can also recharge batteries during a power outage, enhancing climate resiliency.

District and City staff discussed various solar array locations at both gymnasium locations that would limit impacts on existing operations and maximize cost savings.

The proposed solar array location for the Whisman Sports Center is the rooftop. The estimated installation cost is up to \$500,000 (\$327,000 after receiving a rebate from the Inflation Reduction Act). Under the JUA, the District and the City split operations and maintenance costs 50/50 for the Whisman Sports Center. The City is requesting the school district fund up to \$163,000 of the project costs, which would be the cost after the rebate is applied. The anticipated payback period for the solar array project is eight years with life cycle savings of up to \$1.4 million over 20-30 years of operation.

Figure 1: Whisman Sports Center Proposed Solar Array Location



The proposed solar array location for the Mountain View Sports Pavilion includes rooftop and a solar carport. The estimated cost to install is \$1.4 million (\$970,000 after direct incentives from the Inflation Reduction Act). Although this solar array would be considered a new enhancement to the building, the City is not requesting any funds from the District for the Mountain View Sports Pavilion because the City fully covers the building's utility costs.

City and District staff discussed various locations for the solar carport. The recommended location that minimizes impacts is near the field. However, it would require the removal of at least three mature trees and two 20-gallon-sized trees near the field. Staff analyzed the various locations in the parking lot and are recommending the location that would minimize parking loss and preserve the largest trees. The City could work with the District on mitigation measures for the tree removals.

Installing the solar carport would require parking lot upgrades to maintain compliance with Americans with Disabilities Act (ADA) requirements. This would remove one parking space to provide the required ADA parking stall.

Figure 2: Mountain View Sports Pavilion Proposed Solar Array Location



Once the solar arrays are installed, the terms of the JUA would guide the roles and responsibilities for operating and maintaining the solar array. The City would be responsible for the operation and maintenance of the solar arrays at the Mountain View Sports Pavilion. For the Whisman Sports Center, operation and maintenance costs would be split between the District and the City.

The estimated timeline for construction would occur in late 2025 and be completed within six to eight weeks.

**Recommended Action**

Approve the proposed solar array locations and direct staff to work with the City of Mountain View to negotiate an agreement with a vendor to install the solar array as proposed. If approved, District and City staff will return to the Board to approve the agreement.

**Fiscal Implication:** Estimated expenditures of up to \$163,000 after incentives for the Whisman Sports Center, and minor maintenance costs over a 20-year period.