Weatherization & Electrification Plan

Vashon Park District

Ober Park: 17130 Vashon Hwy SW, Vashon

Fisher Pond Maintenance Building: SW bank Rd & 115th Ave. SW, Vashon

Date Prepared: 11/12/2025

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1.0 Executive Summary

This four-year roadmap outlines a transformative investment in Ober Park and the Fisher Maintenance Building. By moving beyond reactive repairs to proactive modernization, we are ensuring these community assets are energy-efficient, comfortable, and able to service the next generation..

The phased approach prioritizes high-impact "building envelope" improvements first—locking in efficiency gains—before completing the transition to electrified heating systems. This approach will reduce long-term operating costs and significantly lower our carbon footprint.

Roadmap Highlights & Investment Schedule

Phase 1: FY 2026 – We launch the plan by addressing immediate needs and preparing infrastructure for electrification. Key actions include in-house air sealing at both properties to stop immediate energy waste, critical electrical panel upgrades at Ober Park, and replacing the first heating unit at Ober with a modern unit.

- **Estimated Investment: $48,800 – $59,100**

Phase 2: FY 2027 – This phase focuses entirely on the thermal envelope—upgrading insulation, windows, doors, and weather-resistive barriers. This ensures our new heating systems will run at peak efficiency without wasting energy through drafty structures.

- **Estimated Investment: $32,783 – $65,793**

Phase 3: FY 2028 – Here we complete our transition away from fossil fuels. This includes installing the second heat pump and a heat pump water heater at Ober Park, alongside upgrading the Fisher Building's electrical service to support an efficient ductless mini-split system.

- **Estimated Investment: $54,000 – $68,000**

Phase 4: FY 2029 – With more efficient buildings in place, the final phase focuses on Electric Vehicle (EV) charging infrastructure at both Ober Park and the Fisher Building.

- **Estimated Investment: $21,000 – $90,000**

1.1 Project Goals & Scope

This document presents a weatherization and electrification plan for two key assets: Ober Park Building and Fisher Maintenance Building.

The primary goals of this plan are to:

- Significantly reduce greenhouse gas (GHG) emissions by eliminating on-site fossil fuel combustion.
- Reduce long-term operational and energy expenditures.
- Improve indoor air quality, occupant comfort, and building resilience.
- Establish actionable items.

2.0 Introduction & Project Goals

2.1 Purpose of the Plan

The purpose of this document is to provide an actionable roadmap for the weatherization and electrification of Ober Park and Fisher Maintenance Buildings.

This plan serves as a guide to transition these assets away from fossil-fuel dependency, addressing several key organizational priorities simultaneously.

This initiative is driven by several factors:

- **Aging Infrastructure:** A significant portion of the heating equipment in these buildings are aging.
  This presents an operational risk and an opportunity to invest in modern, high-efficiency technology rather than like-for-like replacement.
- **Operational Costs:** Volatile fossil fuel prices and rising utility rates expose the organization to unpredictable and increasing operational expenditures.
  This plan aims to mitigate this risk by reducing energy demand and shifting consumption to non-fossil fuel driven electricity.

- **Organizational Planning:** This plan directly supports Vashon Park District's Strategic Plan, Goal 6 of Leading with Environmental Stewardship. Objective 6.2 of that plan states: "Prioritize cost-effective capital improvements that reduce District environmental and greenhouse impacts, on both land and water-based properties and facilities."

2.2 Key Objectives

The specific objectives for this project are:

- **Climate & Emissions:**
  - Eliminate fossil fuel consumption at Ober Park and Fisher Pond.
  - Align building improvements with decarbonization efforts and county code requirements.
- **Financial:**
  - Decrease operating expenses and increase the usable lifespan.
  - Identify suite of grant funding opportunities to support plan implementation.
- **Operational & Resilience:**
  - Replace all identified HVAC and hot water equipment with high-efficiency, electric alternatives.
  - Enhance building resilience against power outages and extreme weather events through envelope improvements.
- **Staff/Community Experience:**
  - Improve indoor air quality by eliminating on-site combustion and improving ventilation.
  - Enhance thermal comfort for all occupants by eliminating drafts, and improving insulation.
  - Install EV charging at Ober Park and Fisher Pond for appropriate District vehicles.

3.0 Existing Conditions & Building Audit

Ober Park: Profile & Systems

Existing Systems Inventory:

System	Type	Fuel	Age (Est.)	Condition (1-5)	Notes
HVAC	Furnace	Natural Gas	65 Yrs	1	Nearing end of life. Releases foul odor. Concerns of too much gas pressure. Borg Warner is the brand.
HVAC	Furnace	Natural Gas	45 Yrs	3	It functions well. No known issues.
DHW	Hot Water Tank	Natural Gas	Unknown	4	Appears in good condition and functions well. No known issues.
Envelope	Brick	N/A	40 Yrs	2	Drafty, paint peeling, some rotting siding. Skylites in the foyer leak. Holes in the building present.
Electrical	Panel A 225 AMP	Elec	Unknown	4	Good condition. At capacity.
Electrical	Panel B 200 AMP	Elec	Unknown	4	Good condition. At capacity.

3.2 Fisher Maintenance Building: Profile & Systems

System	Type	Fuel	Age (Est.)	Condition (1-5)	Notes
HVAC	Heater	Diesel	30 Yrs	1	Nearing end of life. Used to warm the tool room only.
DHW	Hot Water Tank	Electric	7 Yrs	5	Excellent. Located on the east end of the building.

Envelope	Barn style	N/A	45 Yrs	1	Not functional for heating or cooling. No insulation. Metal roof.
Electrical	200 AMP	Elec	45 Yrs	3	Functional. At capacity.

3.2 Summary of Deficiencies & Opportunities

Summary of Deficiencies: Ober Park

Based on the system's inventory, Ober Park has deficiencies that may pose environmental, health, and safety risks.

HVAC System

- Deficiency: One 65-year-old Borg Warner furnace is in poor condition (1/5), releasing a foul odor at times, and maintenance staff suggest there may be gas pressure concerns. The foul odor is not gas.

Health & Safety:

- The combination of age and gas pressure irregularities can point to a cracked heat exchanger.
- This can lead to carbon monoxide (CO) exposure. Monitors are onsite and have not been triggered by the presence of CO.
- Foul odors can also indicate mold/bacteria growth within the ductwork or poor combustion, both of which degrade indoor air quality.
- The system should be checked for irregularities as soon as possible.

Environmental: A 65-year-old furnace is extremely inefficient. It wastes a large amount of natural gas, leading to excessive energy bills and high carbon emissions.

Inferred Issues: Obsolete system controls, minimal (or non-existent) air filtration, and possible gas leak in the future.

Building Envelope

- **Deficiency:** The 40-year-old brick envelope is in poor condition (2/5), with drafts, peeling paint, rotting siding, holes, and leaking skylights.

Health & Safety:

- Leaking skylights and holes allow for water intrusion, which will inevitably lead to mold and mildew growth in unseen areas (walls, ceilings).
- Rotting siding can compromise structural integrity and create entry points for pests (rodents, insects).

Other issues: Exterior holes present in building, wood stops and trim on doors in windows are failing or have failed due to rot, roof above exterior storage room has been patched but still leaks occasionally, exterior paint is flaking.

Environmental: The drafty condition and penetrations in the mean the building has minimal-to-no effective air sealing. This results in energy waste as heated and cooled air escapes, dramatically increasing the load on the HVAC systems and driving up energy consumption.

Inferred Issues: Hidden moisture damage and rot within the wall assemblies; pest infestations.

Electrical System:

- **Deficiency:** Both main panels are at capacity.

Health & Safety: With no room for new circuits, there is a risk that staff may overload existing circuits with power strips or multi-plugs, creating a fire hazard.
It is common to overload the system, causing electrical apparatus to shut off.

Inferred Issues: The 40+ year age suggests that building wiring may be outdated, poorly grounded, or insufficient for modern office equipment loads.

Summary of Deficiencies: Fisher Maintenance Building

The Fisher Maintenance Building is in a state of needing improvements, particularly its envelope and heating system.

Building Envelope:

- Deficiency: The 45-year-old "barn style" envelope is not in a good condition to support regular maintenance use during winter or summer months. No insulation is present in work areas.

Health & Safety:

- The lack of insulation and functional sealing creates a difficult work environment, particularly during the winter.
- The unsealed structure allows free entry for pests.

Environmental: Currently, adding a heat source to the main part of this building would represent a large source of energy waste. The tool room can be heated, but heat is lost quickly when the heater is not running.

Other issues: Person doors are thin metal with one heavily damaged, sliding doors allow constant air exchange due to large gaps at base, and the building appears to have no vapor barrier.

Inferred Issues: No vapor barrier leads to condensation on interior surfaces, which can accelerate rust on tools and equipment.

HVAC System:

- **Deficiency:** The 30-year-old diesel heater is in very poor condition (1/5), near the end of its life, and heats only the tool room.

Health & Safety:

- Diesel heaters, especially old and poorly maintained ones, are a major source of carbon monoxide (CO) and carcinogenic particulate matter (soot).
- Venting this heater into a workspace is a hazard.

Environmental: Diesel combustion releases high levels of CO2, NOx, SOx, and particulate matter, all of which are potent pollutants.

Inferred Issues: The unit is poorly ventilated and may be leaking fuel or exhaust fumes directly into the workspace.

Electrical System:

- **Deficiency:** The 45-year-old 200 AMP panel is at capacity.

Health & Safety: An old panel at full capacity may not be able to safely support the high-draw tools used in a maintenance environment, leading to tripped breakers.

Inferred Issues: Insufficient and poorly placed outlets, forcing the use of long extension cords.

4.0 Weatherization Plan (Building Envelope)

The purpose of this weatherization plan is to address the critical envelope deficiencies identified in the "Summary of Deficiencies" (Section 3.2). A building's envelope is the foundation of its energy performance. Addressing drafts, water leaks, and poor insulation is the essential first step before new HVAC equipment is sized and installed. A high-performance envelope dramatically reduces the heating and cooling load, allowing for smaller, less expensive HVAC equipment that costs less to operate.

Ober Park:

- **Mold & Mildew:** The leaking skylights and water intrusion at Ober Park and the condensation risk at Fisher Building make mold growth a possibility.
  - **Action:** Perform a visual and (if necessary) air-quality assessment for mold.
  - All water intrusion must be permanently fixed and all mold-damaged materials remediated and replaced.
- **Attic/Ceiling:** Conduct a full inspection of the attic-to-building boundary.
  - **Action:** Seal all top-plate (wall-to-attic) gaps, wire penetrations, and plumbing penetrations using fire-rated caulk and expanding foam sealant.
  - **Action:** Build insulated, air-tight boxes around any attic hatches or access points.
- **Wall Penetrations:**
  - **Action:** Seal all holes in the building. This includes exterior electrical, plumbing, and vent penetrations.
  - Use weather-rated sealants and backer rod for large gaps.
- **Attic:**
  - **Action:** After all air sealing is complete, insulate at a minimum of R-49 (or current building code).
  - Ensure proper baffles are installed at the eaves to maintain ventilation.
- **Ductwork:** The foul odor from the old furnace may have contaminated the ducts.

- **Action:** After the furnace is replaced, have all ductwork professionally cleaned and tested for leaks.
- **Action:** Seal all accessible duct seams and joints with mastic sealant and insulate any ducts running through unconditioned spaces (like the attic or crawlspace) to at least R-8.

- **Skylights:**
- **Action:** Repair or replace all "leaking skylights."
- This water intrusion may be actively damaging the building and creating a mold hazard.

- **Windows:**
- **Action:** Inspect all windows. If they are single-pane or have broken seals, they should be prioritized for replacement with double-pane, low-E, gas-filled units.
- **Action:** At a minimum, caulk all window exteriors and replace or add weather-stripping to all operable windows.

- **Doors:**
- **Action:** Where necessary, install new, high-quality weather-stripping and door sweeps on all exterior doors to eliminate drafts at the floor.

Fisher Maintenance Building:

- **Air Sealing:**
- **Action:** If not present or in failing condition, install a house wrap on the exterior. This may be impractical, if so, insulate walls and install vapor barrier.

- **Structural Sealing:**
- **Action:** Seal all unsealed gaps at the foundation (sill plate) and roof (top plate) junctions using foam sealant.
- **Action:** All penetrations (electrical, plumbing, vents) must be properly flashed and sealed.

- **Walls:**
- **Action:** After the air barrier is in place, insulate all wall cavities.
- Options include mineral wool batts (good for pest/moisture resistance), dense-pack cellulose, or closed-cell spray foam (provides high R-value and an air/vapor barrier in one).

- **Roof/Ceiling:**
  - **Action:** Insulate the ceiling/roof deck to R-49 or higher.
- **Windows:**
  - **Action:** Replace all existing windows with new, double-pane, high-performance units. As a maintenance building, durability and function are key.
- **Doors (Personnel):**
  - **Action:** Install new, insulated-core steel or fiberglass doors with thermal breaks and complete weather-stripping kits.
- **Doors (Equipment/Barn Doors):**
  - **Action:** Replace any large, unsealed "barn doors" with modern, insulated, gasket-sealed overhead doors to stop massive air leaks. If impractical, add skirt to existing doors.

Verification & Quality Control (Both Buildings)

- **Pre-Work Test:** Conduct a blower door test at Ober to establish a baseline air leakage score (measured in Air Changes per Hour, or ACH).
  - Fisher building test should not be conducted until obvious, large air gaps are sealed.
- **Post-Work Test:** After all weatherization work is complete, conduct a final blower door test.
  - The goal is to verify a significant (e.g., 50% or more) reduction in air leakage.

5.0 Electrification Plan: Ober

The goal is to replace two aging gas furnaces and one gas water heater with a modern, centralized electric system.

HVAC Upgrade Recommendations

- **Deficiencies Addressed:** 65-year-old Borg Warner furnace , 45-year-old furnace (3/5 condition).
- **Action 1: Decommission:**
  - Safely remove both natural gas furnaces.
  - Have all ductwork professionally cleaned and sealed to remove any mold, bacteria, or odors from the old system and to work efficiently with the new system.

- The main natural gas line to the building should be capped and decommissioned by the utility provider.

- **Action 2: Install Central Heat Pump:**

- Install a new, high-efficiency, heat pump system.

- This single system will use the existing, newly-cleaned ductwork to provide both high-efficiency heating and central air conditioning, dramatically improving thermal comfort.

Domestic Hot Water Upgrade

- **Deficiency Addressed:** Natural Gas Hot Water Tank (Unknown age).

- **Action 1: Decommission:**

- Remove the existing natural gas hot water tank.

- **Action 2: Install Heat Pump Water Heater (HPWH):**

- Replace the tank with a heat pump water heater.

- This technology uses 2-3 times less electricity than a standard electric tank, supporting the It will require a condensate drain.

Electrical Upgrade Recommendations

- **Deficiency Addressed:** Both 225A and 200A panels are at capacity.

- **Action 1: Conduct Load Calculation:**

- Hire an electrician to perform a full load calculation for the building including the new central heat pump, the new HPWH, and the new EV chargers (see below).

- **Action 2: Service & Panel Upgrade:**

- Based on the load calculation, replace as needed.

- This may also require an upgrade to the main electrical service (the "feed") coming into the building.

- This upgrade is critical and must be done before the new HVAC equipment is installed.

- **Action 3: Install EV Charging:**

- As part of the panel upgrade, install the necessary circuits and infrastructure for the EV charging station.

5.1 Electrification Plan: Fisher

HVAC Upgrade Recommendations

- **Deficiency Addressed:** 30-year-old Diesel Heater (1/5 condition).
- **Action 1: Decommission:**
  - Remove and safely dispose of the diesel heater and any associated indoor or outdoor fuel tanks, following all environmental regulations.
- **Action 2: Install Ductless Mini-Splits:**
  - Install a ductless mini-split heat pump system.
  - This is the ideal solution for this barn style building. It requires no ductwork and allows for zoning.
  - One or two indoor heads can be placed to heat and cool the tool room and other occupied areas, leaving the rest of the storage space unconditioned and saving energy.

Domestic Hot Water (DHW) Upgrade

- **System:** 7-year-old Electric Hot Water Tank (5/5 condition).
- **Action:** No action required. This system is modern, in excellent condition, and already electric. It will be retained.

Electrical Upgrade Recommendations

- **Deficiency Addressed:** 45-year-old 200A panel is at capacity.
- **Action 1: Conduct Load Calculation:**
  - Hire an electrician to perform a load calculation based on the new mini-split heat pump, existing tool/equipment loads, and new EV chargers.
- **Action 2: Panel Upgrade:**
  - Replace the 45-year-old 200A panel with a new, modern panel.
  - Determine if a 200A panel is sufficient or if an upgrade (e.g., to 300A) is needed to support the shop equipment and EV charging.
- **Action 3: Install EV Charging:**
  - As part of the panel upgrade, install circuits for EV charging appropriate for District vehicles.

The "envelope-first" approach is critical. Reducing heating and cooling loads through weatherization is the most cost-effective, permanent measure and reduces the required size (and cost) of new electrified HVAC equipment.

6.0 Detailed Financial Analysis and Cost Projections

This section provides the itemized capital budget required to execute the recommendations outlined in Sections 4.0 and 5.0 of this plan.All cost projections are based on 2025 market research. This budget is intended to form the basis for all multi-year financial planning, Board investment consideration, and external grant applications.

Cost projections are provided in ranges (low-high) to account for project-specific variations.

6.1 Ober Park: Capital Cost Projections

The following analysis details the projected costs required to bring the Ober Park building from its current deficient state to a high-performance, resilient, and fully-electric standard.

6.1.1 Prerequisite: Hazardous Materials Assessment

Due to the age of the building, identifying any lead or asbestos presence is necessary. A records review will be conducted to determine if staff can verify whether an assessment has been conducted. If so, staff will also identify what mitigation steps were taken. Although it is unlikely lead and asbestos are of concern, this budget has been created to account for those costs.

- **Commercial Asbestos Survey:** A comprehensive refurbishment/demolition survey for a commercial property of this size is projected to cost between $2,000 and $5,000.
- **Lead-Based Paint (LBP) Inspection:** A professional inspection using X-Ray Fluorescence (XRF) analysis to identify lead-based paint in all areas to be disturbed is projected to cost between $300 and $600.
- **Mold & Mildew Assessment:** A visual and air-quality assessment to identify mold from leaking skylights and other water intrusion [1] is projected to cost between $500 and $1,000.[2]
- **Subtotal, Prerequisite Assessment: $2,800 – $6,600**

6.1.2 Building Envelope (Weatherization)

This budget addresses the envelope deficiencies.

- **Air Sealing (Maintenance Team - 2026):** This work will be performed in-house by the maintenance team. The budget reflects materials only.
  - *Fire-Rated Caulk:* For sealing all top-plate, wire, and plumbing penetrations.
  - *Expanding Foam Sealant (Bulk):* For sealing sill plates and larger gaps.
  - *Door/Window Weather-Stripping:* Commercial-grade door sweeps and weather-stripping.
  - **Estimated Materials Budget: $2,500 – $4,000**
- **Attic Insulation (Contracted):** To blow-in loose-fill cellulose insulation to a minimum of R-49 after all air sealing is complete.Based on a rate of approximately $3.20 per square foot for R-49 cellulose and an estimated 2,000 sq. ft. attic footprint.
  - **Estimated Cost: $7,800 – $10,000**
- **Skylight Replacement:** Cost for commercial-grade skylight replacement is $2,000 per unit. There are two units.
  - **Estimated Cost: $4,000 – $6,000**
- **Window Replacement (Priority Units):** Full replacement may not be necessary. This budget assumes the replacement of ten (10) priority units with new double-pane, low-E, gas-filled windows.The average installed cost per window is $613 - $1,307.
  - **Estimated Cost: $6,130 – $13,070** (We can probably install these, reducing this cost.)

6.1.3 Systems Electrification (HVAC & DHW)

This budget replaces all identified fossil fuel equipment, including the 65-year-old failing Borg Warner furnace.

- **Central Heat Pump (Commercial Packaged Unit):** Replaces both natural gas furnaces and will use the existing (cleaned) ductwork. Two 5-Ton commercial packaged units are an appropriate size for this building.
  - **Estimated Installed Cost: $70,000 for both.**
- **Duct Cleaning & Sealing:** A prerequisite to installing the new heat pump is the professional cleaning and sealing of all existing ductwork to remove contaminants from the old furnace and ensure efficiency. Commercial duct cleaning costs range from $0.25 - $0.80 per square foot.
  - **Estimated Cost: $2,000 – $4,000**

- **Heat Pump Water Heater (HPWH):** Replaces the natural gas tank. This must be a commercial-grade, high-capacity unit, which has a higher cost than standard residential models
    - **Estimated Installed Cost: $8,000 – $15,000**

6.1.4 Electrical Infrastructure

Both main panels (225A and 200A) are at capacity and cause shutdowns.Full electrification as described in Section 5.0 is impossible without a panel upgrade.

- **Electrical Panel Upgrade:** This project is not a simple panel swap. It is a full *service upgrade* from the utility to handle the new, large electrical loads (central heat pump, HPWH, EV chargers). We are assuming a service upgrade is not required. \
    - **Estimated Cost: $5,000 - $7,000**
- **EV Charging (Level 2):** Installation of infrastructure for two dual-port Level 2 charging stations (four ports total). Costs for commercial installation vary widely based on trenching and panel proximity, from $3,500 to $15,000 *per port*.
- **Estimated Cost (4 ports): $14,000 – $60,000**

6.2 Fisher Maintenance Building: Capital Cost Projections

The following details the costs to improve the state of the Fisher building and convert it into a functional and efficient all-electric workspace.

6.2.1 Building Envelope (Weatherization)

- **Air Sealing (Maintenance Team - 2026):** (Labor In-House). Sealing sill plate, top plates, and all penetrations.
    - **Estimated Materials Budget: $1,500 – $2,500**
- **House Wrap (Weather-Resistive Barrier):** Installation of a house wrap. Material and labor costs range from $0.50 - $2.00 per square foot.
    - **Estimated Cost (3,000 sq. ft. surface): $1,500 – $6,000**
- **Wall Insulation (Contracted):** Dense-pack cellulose or spray foam for all wall cavities.
        - **Estimated Cost (1,500 sq. ft. wall @ $2.00-$4.00/sq ft): $3,000 – $6,000**
- **Roof/Ceiling Insulation (Contracted):** Closed-cell spray foam is recommended to prevent condensation on the metal roof

- **Estimated Cost (1,500 sq. ft. roof @ $1.35-$3.81/sq ft): $2,025 – $5,715**

- **Personnel Doors:** Replace two (2) thin metal doors with new, insulated-core steel doors.
- **Estimated Cost (2 doors @ $800-$2,500/unit): $1,600 – $5,000**
- **Overhead Equipment Doors (Contracted):** Replace two (2) unsealed barn doors with insulated, gasket-sealed overhead doors.
- **Estimated Cost (Two 8x10 doors @ $2,138-$4,390/unit): $4,276 – $8,780**
- **Window Replacement:** Replace all existing windows.
    - **Estimated Cost (4 windows @ $613-$1,307/unit): $2,452 – $5,228**

6.2.2 Systems Electrification (HVAC)

- **Ductless Mini-Split Heat Pump:** Installation of a 2- or 3-zone system to provide heating and cooling to the tool room and occupied areas.
- **Estimated Installed Cost: $8,000 – $12,000**
- **Domestic Hot Water (DHW):** No action required. The existing 7-year-old electric tank is in "Excellent" (5/5) condition and will be retained.

6.2.3 Electrical Infrastructure

The 45-year-old 200A panel is at capacity and may not be able to support the new heat pump and EV chargers.

- **Electrical Service & Panel Upgrade:** Upgrade the 200A panel to a 400A service to support shop equipment, the new mini-split system, and EV charging.
- **Estimated Cost: $3,000 – $6,000**
- **EV Charging (Level 2):** Install infrastructure for District maintenance vehicles.
- **Estimated Cost (2 ports @ $3,500-$15,000/port): $7,000 – $30,000**

7.0 Phased Implementation and Action Plan (2026-2029)

Phase 1: FY 2026 (Action Items & Prerequisites)

This phase addresses the immediate 2026 goals: in-house air sealing at both properties and replacing one heating unit at Ober Park. It also includes the necessary prerequisite assessments and electrical upgrades to support that work.

Ober Park

- **Prerequisite: If Needed, Hazardous Materials Assessment** ($2,800 – $6,600)
- **Action Item: Building Envelope (Weatherization)**
    - **Air Sealing (Maintenance Team):** $2,500 – $4,000 (Materials only)
- **Prerequisite: Electrical Infrastructure**
    - **Electrical Panel Upgrade:** $5,000 – $7,000
- **Prerequisite: Systems Electrification**
    - **Duct Cleaning & Sealing:** $2,000 – $4,000
- **Action Item: Systems Electrification**
    - **Install Central Heat Pump (Unit 1 of 2):** ~$35,000

Fisher Maintenance Building (6.2)

- **Action Item: Building Envelope (Weatherization)**
    - **Air Sealing (Maintenance Team):** $1,500 – $2,500 (Materials only)

Total Phase 1 Investment: $48,800 – $59,100

Phase 2: FY 2027 (Complete Building Envelopes)

With air sealing complete, this phase focuses on finishing the thermal envelope at both buildings by upgrading insulation, windows, and doors. This locks in efficiency gains before completing the full HVAC transition.

Ober Park

- **Building Envelope (Weatherization)**
    - Attic Insulation (R-49): $7,800 – $10,000
    - Skylight Replacement (2 units): $4,000 – $6,000
    - Window Replacement (10 priority units): $6,130 – $13,070

Fisher Maintenance Building

- **Building Envelope (Weatherization)**
    - House Wrap: $1,500 – $6,000

- Wall Insulation: $3,000 – $6,000
- Roof/Ceiling Insulation (Spray foam): $2,025 – $5,715
- Personnel Door Replacement (2 doors): $1,600 – $5,000
- Overhead Equipment Door Replacement (2 doors): $4,276 – $8,780
- Window Replacement (4 windows): $2,452 – $5,228

Total Phase 2 Investment: $32,783 – $65,793

Phase 3: FY 2028 (Complete Systems Electrification)

This phase completes the transition away from fossil fuels by installing the remaining heat pumps at Ober Park and upgrading the Fisher building's electrical service to support its new mini-split system.

Ober Park

- **Systems Electrification (HVAC & DHW)**
  - Install Central Heat Pump (Unit 2 of 2): ~$35,000
  - Install Heat Pump Water Heater (HPWH): $8,000 – $15,000

Fisher Maintenance Building

- **Electrical Infrastructure**
  - **Electrical Service & Panel Upgrade (to 400A):** $3,000 – $6,000
- **Systems Electrification (HVAC)**
  - Install Ductless Mini-Split Heat Pump: $8,000 – $12,000

Total Phase 3 Investment: $54,000 – $68,000

Phase 4: FY 2029 (Final Infrastructure: EV Charging)

With all building systems upgraded and electrical capacity confirmed, this final phase adds the Electric Vehicle (EV) charging infrastructure to both properties.

Ober Park

- **Electrical Infrastructure**
    - EV Charging (4 ports): $14,000 – $60,000

Fisher Maintenance Building

- **Electrical Infrastructure**
    - EV Charging (2 ports): $7,000 – $30,000

Total Phase 4 Investment: $21,000 – $90,000

8.0 Summary

This Weatherization and Electrification Plan represents a major investment in the future of two of the Vashon Park District's core assets. It provides a deliberate, financially-sound roadmap to move beyond short-term, reactive repairs and address the deficiencies in our aging infrastructure. By executing this plan, we are responsibly replacing critical, end-of-life systems—such as the 65-year-old furnace at Ober Park—with modern, efficient, and reliable technology.

The benefits of this four-year initiative will extend far beyond our utility bills. Upon completion, Ober Park and the Fisher Maintenance Building will be more comfortable, resilient, and healthier environments for both District staff and the public we serve. This project is a direct fulfillment of our Strategic Plan's commitment to "Leading with Environmental Stewardship." By transitioning away from fossil fuels, we are significantly reducing our carbon footprint, improving our operational resilience, and ensuring these community facilities can effectively and sustainably serve Vashon for decades to come. We look forward to commencing Phase 1 in 2026.