

MEADOWLARK TRANSMISSION LINE Narrative

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Acronyms and Abbreviations

Acronym	Definition
AC	alternating current
BESS	battery energy storage system
BMP	best management practice
DC	direct current
gen-tie	generation transmission
kV	kilovolt
SCADA	supervisory control and data acquisition
PGE	Portland General Electric
USFWS	U.S. Fish & Wildlife Service

1 Project Description

1.1 Introduction

This project description has been prepared by Meadowlark Energy Storage, LLC (applicant) for the City of Sherwood (City) to allow the construction of an underground 230kV transmission line, three riser poles up to 55' in height, and connecting a proposed access road to SW Langer Farms Pkwy.

The proposed project will allow a proposed Battery Energy Storage System (BESS) facility, located on Taxlot 2S129A003500 in Washington County and approved by Washington County via Type II Special Use Review on December 19, 2024, to connect to the Portland General Electric (PGE) Sherwood substation.

The proposed interconnection will allow the approved BESS facility to provide a service to the regional electric grid by receiving energy (charging) from the Sherwood Substation, storing energy on the site, and then later delivering energy (discharging) back to the point of interconnection when needed. Following construction, the proposed interconnection facilities will not emit pollutants, will not require sanitary facilities, and will not require water.

1.2 Project Location

The proposed project site consists of approximately 0.5 acre project work area that spans across two parcels (Tax lots 2S129A001650 and 2S129A001651), mostly occupied by the existing Sherwood Substation and associated transmission line infrastructure (see Figure 1, Project Location). The project site is located just south of an existing Home Depot at 20260 Southwest Pacific Highway, lying just east of Highway 99 West (Pacific Highway West). The project site is surrounded by City of Sherwood Light Industrial Zoning to the north, south and west, and by Washington County Exclusive Farm Use zoning to the east (see Figure 2, Zoning).

Access to the project site will be provided from Langer Farms Parkway, which fronts the project site.

1.3 Project Objectives

The proposed project will allow the interconnection of an approved BESS facility and provide The City of Sherwood, Washington County, and the State of Oregon with a reliable, economically sound development to receive, store, and discharge electricity from the PGE electric grid, including renewable energy produced by existing solar and wind resources in the region. Construction of the project will accomplish the following objectives:

- Provide grid reliability, resiliency and flexibility while helping manage energy costs.
- Interconnect a new energy storage facility to reliably capture and manage renewable energy in an economically feasible and commercially financeable manner.
- Assist Oregon in meeting its greenhouse gas emissions reduction goals of 80% by 2030, 90% by 2035, and 100% by 2040, as required by Oregon's Clean Energy Bill (House Bill 2021), signed into law on July 19, 2021.
- Provide the City and region with an interconnected battery energy storage system facility with the ability to meet the challenges of integrating additional renewable energy sources into the grid and avoid the rolling

blackouts recently experienced in the southwest United States, by allowing renewable energy to be stored on site and provide approximately 200,000 homes with power when needed.

1.4 Project Characteristics

The proposed project will include the development of electrical facilities and infrastructure. The proposed 230kV electrical transmission line will be located underground. To interconnect to the existing Sherwood substation, the transmission line will need to rise aboveground via three proposed riser poles (See Appendix A, Proposed Riser Poles Visual Simulation). The riser poles will allow an above ground connection to an existing electrical bay within the Sherwood substation. The underground transmission line conduits will also carry telecommunication lines

1.5 Construction

Schedule and Workforce

The construction of the proposed project will last between 3 and 4 months. Construction activities for the proposed project generally fall into three main categories: (1) site preparation; (2) line and pole installation; and (3) testing, commissioning, and cleanup.

The on-site construction workforce is expected to peak at up to 20 individuals; however, the average daily workforce on site during construction is expected to be approximately 10 individuals, comprising construction, supervisory, support, and construction management personnel. It is anticipated that the construction workforce will commute to the site each day from local communities and report to the designated construction staging yards prior to the beginning of each workday. Construction staff not drawn from the local labor pool will stay in local hotels. Deliveries of equipment and materials will generate an estimated five round-trips per day during peak construction periods.

The proposed project will be constructed by several specialized construction contractors. Construction will primarily occur during daylight hours, Monday through Friday, between 7:00 a.m. and 6:00 p.m., as required to meet the construction schedule. Any construction work performed outside the normal work schedule will be coordinated with the appropriate agencies and will conform to City regulations.

Construction Water Use

During construction of the proposed project, water will be required for common construction-related purposes, including but not limited to dust suppression, soil compaction, and grading. Dust-control water may be used for ingress and egress of on-site construction vehicle equipment traffic and for the trenching and installation of the underground lines. Neither a potable water supply, nor sanitary sewer services will be required during construction, because restroom facilities will be provided by portable units to be serviced by licensed providers.

During the construction period, the water used is anticipated to be supplied by purchasing water from the local water purveyor. Water demand during construction is expected to be the same if the project is constructed during a year with normal precipitation, a year with less-than-average precipitation, or a multiple-year period of less-than-average precipitation.

Solid and Nonhazardous Waste

The project site will produce a small amount of solid waste from construction activities. This may include paper, wood, glass, plastics from packing material, waste lumber, insulation, scrap metal and concrete, empty nonhazardous containers, and vegetation waste. These wastes will be segregated, where practical, for recycling. Non-recyclable wastes will be placed in covered dumpsters and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III (nonhazardous waste) landfill. Any vegetation waste generated by site clearing and grubbing will be chipped/mulched and spread on site or hauled off site to an appropriate green waste facility.

Hazardous Materials

The hazardous materials used for construction will be typical of most construction projects of this type. Materials will include small quantities of gasoline, diesel fuel, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliatives, herbicides, and welding materials/supplies. A hazardous materials business plan will be provided to the City. The hazardous materials business plan will include a complete list of all materials used on site and information regarding how the materials will be transported and in what form they will be used. This information will be recorded to maintain safety and prevent possible environmental contamination or worker exposure. During project construction, material safety data sheets for all applicable materials present at the site will be made readily available to on-site personnel.

Hazardous Waste

Small quantities of hazardous waste will most likely be generated over the course of construction. These wastes may include waste paint, spent construction solvents, waste cleaners, waste oil, oily rags, waste batteries, and spent welding materials. Workers will be trained to properly identify and handle all hazardous materials. Hazardous waste will be either recycled or disposed of at a permitted and licensed treatment and/or disposal facility. All hazardous waste shipped off site for recycling or disposal will be transported by a licensed and permitted hazardous waste hauler.

1.6 Operations and Maintenance Activities

Typical operations and maintenance activities that will occur on the project site during operation include, but are not limited to, liaison and remote monitoring, administration and reporting, as well as occasional repair and maintenance of the, electrical transmission lines and riser poles. The site will be unoccupied and remotely operated but visited occasionally for equipment inspections, monitoring and testing, security, landscaping, and maintenance as needed. Periodically, various components may be replaced or renewed to ensure optimal operation.

Outdoor equipment will be sealed or enclosed and will not affect stormwater quality.

Solid and Nonhazardous Waste

The project will produce a small amount of waste associated with maintenance activities, which could include broken and rusted metal, electrical materials, and other miscellaneous solid waste, including the typical refuse generated by workers. Most of these materials will be collected and delivered to recyclers. Non-recyclable waste will be placed in covered dumpsters and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III landfill.

Hazardous Materials

Limited amounts of hazardous materials may be used on the site during operations, including diesel fuel, gasoline, and motor oil for vehicles. Appropriate spill containment and cleanup kits will be maintained during operation of the project.

Hazardous Waste

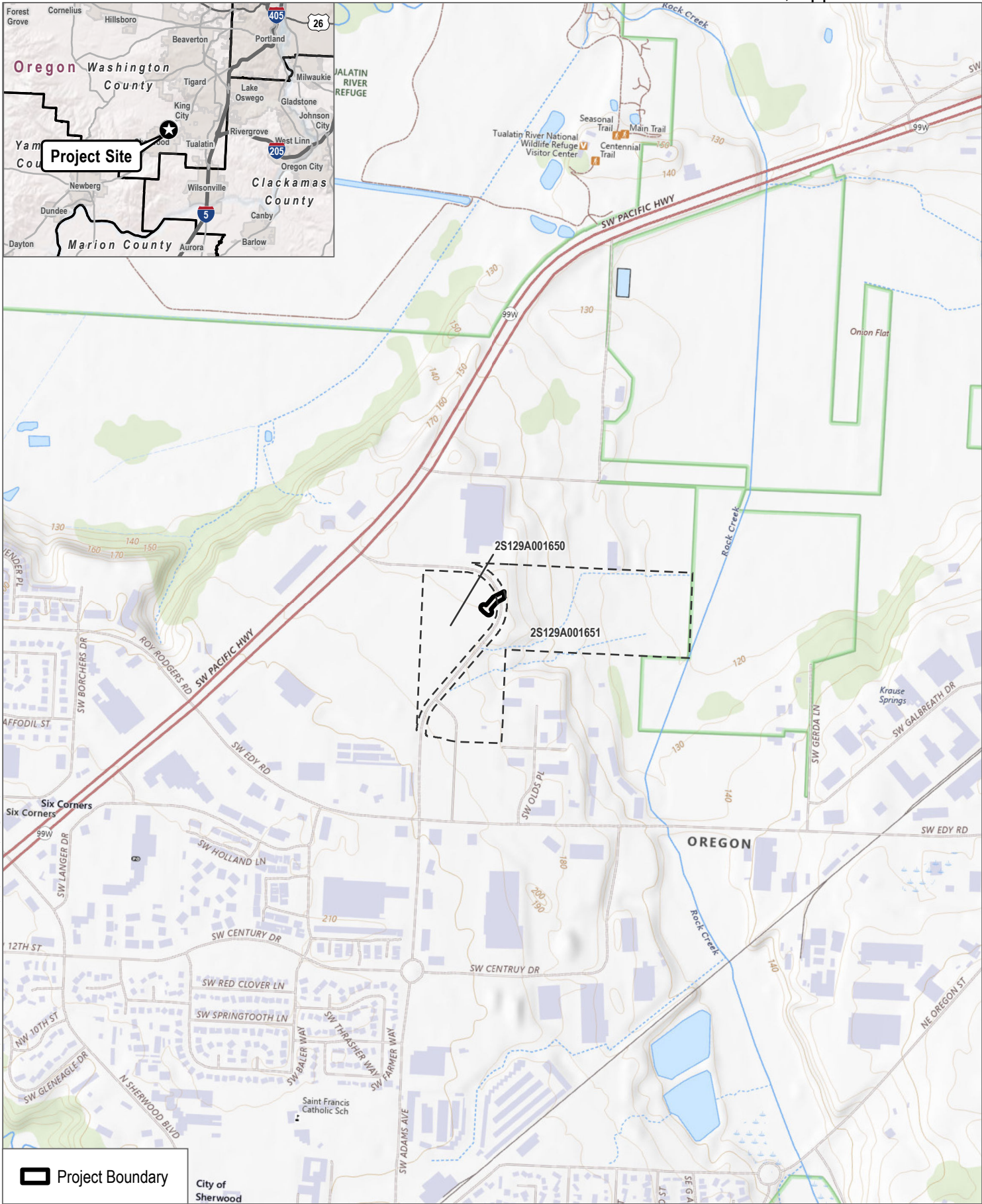
Solid hazardous waste, if generated during operations, will be subject to the material disposal and solid waste management plan to be prepared for the proposed project.

1.7 Decommissioning

At the end of the proposed project's operational term, the applicant may determine that the project site should be decommissioned and deconstructed, or it may seek an extension of its conditional use permit. The proposed project will include BMPs to ensure the collection and recycling of electrical structures and cabling.

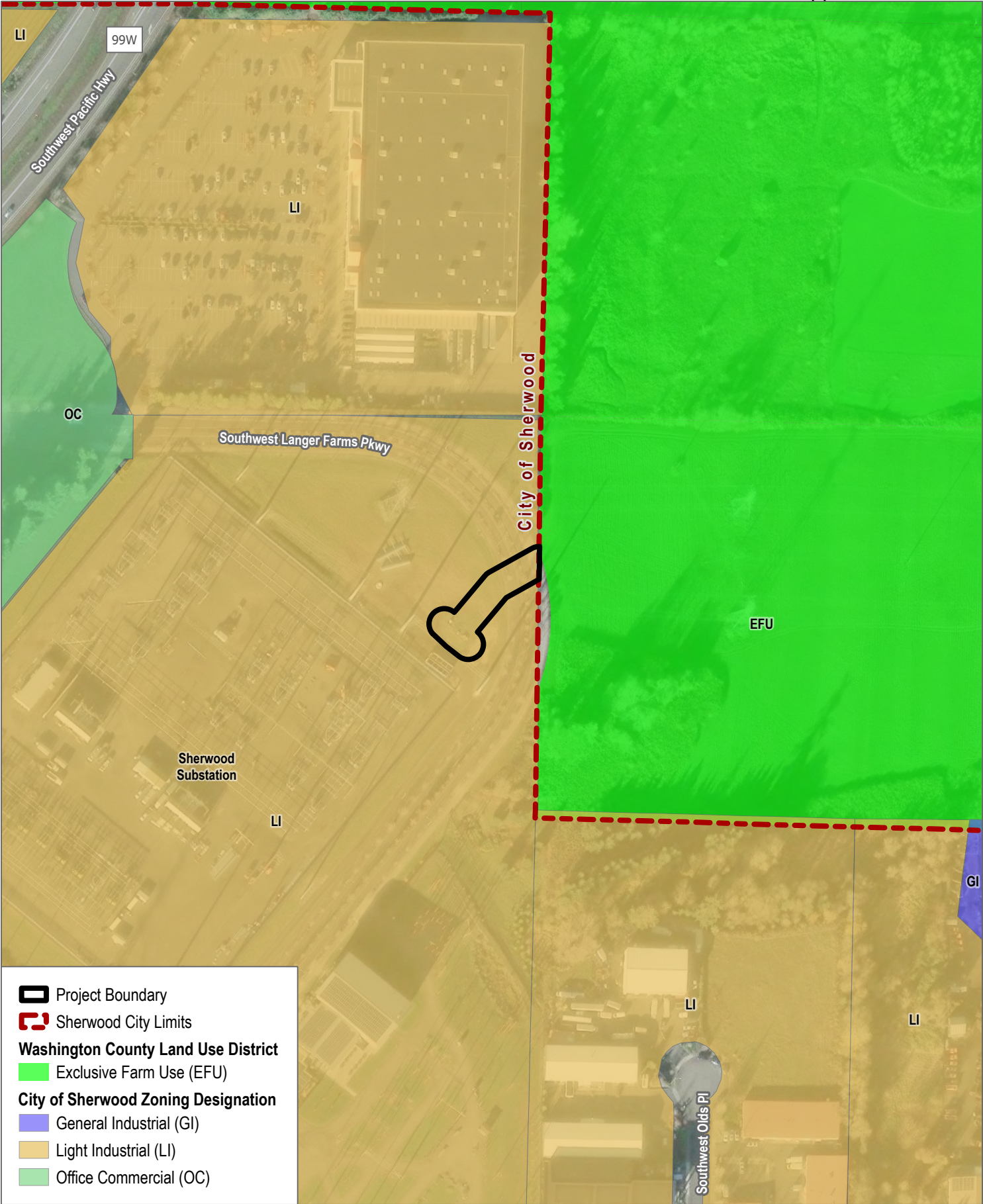
All decommissioning and restoration activities will adhere to the requirements of the appropriate governing authorities and will be in accordance with all applicable federal, state, and City regulations. Following the expiration of a power purchase agreement for the proposed project, the applicant may, at its discretion, choose to enter into subsequent power purchase agreements or to decommission and remove the system and its components.

It is anticipated that during project decommissioning, the underground electrical transmission cabling will be removed and recycled. Riser poles would similarly be removed and recycled. Underground conduits and riser pole foundations will likely remain in place. All lines and structures will be de-energized prior to removal. Site infrastructure will be removed, including walls and the concrete pads that may support the inverters. The area will be thoroughly cleaned and all debris will be removed. A collection and recycling program will be executed to promote recycling of project components and minimize disposal in landfills.



SOURCE: USGS National Map 2026

FIGURE 1
Project Location
Meadowlark Energy Storage Gen-Tie



SOURCE: City of Sherwood 2025, 2026; Washington County 2020; ESRI Aerial Imagery (accessed 2026)

FIGURE 2
Zoning
Meadowlark Energy Storage Gen-Tie

Appendix A

PROPOSED RISER POLES VISUAL SIMULATION

APPENDIX A
PROPOSED RISER POLES VISUAL SIMULATION



Photo A-1: Proposed Riser Poles Visual Simulation