

# Project Narrative

for

Construction of Level 3 EV charging station with load managed battery energy storage system at A1 Gas Station in Arlington, WA

Site Address:

2216 State Route 530 NE

Arlington, WA

## **PROJECT NARRATIVE**

Level 3 EV Charging Station with Battery Energy Storage System

2216 WA-530, Arlington, WA 98223

## **PROJECT OVERVIEW**

Aviat Group, LLC proposes to construct and a new Level 3 DC Fast Charging station with Battery Energy Storage System (BESS) at 2216 WA-530 in Arlington, Washington. The project aims to expand the electric vehicle charging infrastructure in the Arlington area while incorporating energy storage technology to optimize grid integration and provide reliable charging services.

## **SITE DESCRIPTION**

The project site is located within the “HC” Highway Commercial zoning at 2216 WA-530. The site is currently a public fueling station with convenience store and is suitable for commercial development. The property has direct access from WA-530.

## **PROJECT COMPONENTS**

### **1. Charging Infrastructure:**

- Eight (8) stall Level 3 DC Fast Charging with Four (4) dispensers
- Power rating: Up to 350kW per dispenser
- Universal charging compatibility
- Payment systems integration
- Network connectivity equipment

### **2. Battery Energy Storage System:**

- 233kWh Lithium Iron Phosphate battery system
- Safety monitoring systems
- Fire suppression system
- Temperature control systems
- Battery management system

### **3. Electrical Infrastructure:**

- Utility transformer
- Main distribution panel
- Switchgear
- Underground conduit system
- Grounding systems

### **4. Site Improvements:**

- ADA-compliant parking stall
- Concrete equipment pads
- Protective bollards
- Site lighting

## **CONSTRUCTION DETAILS**

### **1. Site Preparation:**

- Minimal grading required site is nearly level
- Installation of erosion control measures

### **2. Underground Work:**

- Utility trenching for electrical conduits
- Foundation preparation for equipment pads
- Underground electrical infrastructure

### **3. Equipment Installation:**

- Concrete pad construction
- BESS installation
- Charging station installation
- Electrical equipment installation

### **4. Site Completion:**

- Sealcoat and striping
- Grass replanted in disturbed areas.
- Site lighting installation
- Signage installation

## **OPERATIONAL CHARACTERISTICS**

### **1. Hours of Operation:**

- 24/7 public access
- Remote monitoring
- Emergency shutdown capabilities

### **2. Safety Features:**

- Emergency stop buttons
- Site lighting
- Fire detection and suppression

### **3. Maintenance:**

- Regular equipment inspections
- Preventive maintenance program
- 24/7 emergency response capability
- Remote monitoring and diagnostics

## **COMPLIANCE MEASURES**

### **1. Environmental:**

- SEPA compliance
- Stormwater management
- Noise mitigation
- Light pollution control

### **2. Safety:**

- Fire code compliance
- Emergency response plan
- Hazardous materials management
- Spill prevention and response

### **3. Building & Zoning:**

- Setback requirements
- Height restrictions
- Parking requirements
- Landscaping requirements
- Airport overlay requirements

#### **4. Accessibility:**

- ADA compliance
- Site circulation
- Emergency access
- Maintenance access

### **PROJECT TIMELINE**

#### **1. Phase 1 - Site Preparation (Weeks 1):**

- Erosion control
- Layout and surveying

#### **2. Phase 2 - Underground Work (Week 2):**

- Trenching
- Conduit installation
- Foundation preparation

#### **3. Phase 3 - Equipment Installation (Week 3)**

- Concrete work
- Equipment placement
- Electrical connections

#### **4. Phase 4 - Site Completion (Week 4):**

- Final grading
- Paving
- Landscaping
- Testing and commissioning

## **PUBLIC BENEFIT**

This project will provide significant benefits to the Arlington community:

- Enhanced EV charging infrastructure
- Support for clean transportation
- Economic development
- Environmental benefits
- Support for local EV adoption

## **IMPACT MITIGATION**

### **1. Construction Impacts:**

- Limited work hours to 7am to 6pm
- Dust control measures
- Traffic management as needed

## **CONCLUSION**

This project represents a significant investment in Arlington's clean energy infrastructure. The design incorporates best practices for safety, efficiency, and environmental protection while providing an essential service to the community. We look forward to working with the city to ensure successful implementation of this project.