

EXHIBIT 2
NOON ENERGY / 350 DEMETER STREET
OPERATIONAL USE PLAN (Revision #1)
November 28, 2025

Noon Energy, Inc. (“Noon Energy”) has developed a novel ultra-long duration energy storage system that utilizes reversable solid oxide cells to store energy without the use of rare earth metals. The storage technology utilizes water-hydrogen storage chemistry. Noon Energy is seeking a Temporary Use Permit (“TUP”) to install a 50kW system prototype system to demonstrate, validate and accelerate the commercialization of the system.

This operational use plan provides the description of the site, an identification and description of the adjacent lands, a description of the current use of the site and industrial buildings, and a description of the proposed system installation with details regarding intensity of site usage.

PROJECT NAME Noon Energy / 350 Demeter Street

LOCATION APN 063-121-320

SITE OWNERS Sycamore Real Estate Investment LLC

APPLICANT JCPoetsch Advisors, Inc. - on behalf of Noon Energy Inc.

OCCUPANCY Research & Development

SITE DESCRIPTION

The 350 Demeter site comprises an area of approximately 2.00 acres including two industrial buildings. Building A is approximately 18,473 square feet and was built in 1970. Building B is approximately 19,200 square feet and was built in 1981. The site is located on the east side of very north end of Demeter Street. The site has been used for storage and warehouse purposes. Prior to the purchase of the property by Sycamore Real Estate Investment LLC in 2015 the site was owned by McCarthy Engineering. Current site tenants include:

- Paul Bundy - 350 Demeter Street - Unit 1A & 2A1
- Delaware Exponent - 350 Demeter Street - Unit 1B & 3A
- Clarence Jackson - 350 Demeter Street - Unit 2A
- Sabbaih Malladi - 350 Demeter Street - Unit 3B
- Joshua’s Moving Packing Services - 350 Demeter Street - Unit 4A & 4B
- Noon Energy- 350 Demeter Street - Unit 5A
- Dr. Roger L McCarthy, P.E. - 350 Demeter Street - Unit 5B

- D Soto Tree Service - 350 Demeter Street - Unit JS Tree Service

Exhibit A maps the site location and Exhibit B provides the property site plan with corresponding unit identification.

PROPOSED USE / PROJECT DESCRIPTION

The proposed project aims to demonstrate, validate, and accelerate the commercialization of a novel, safe, and reversible solid oxide battery energy storage system. The system, developed by Noon Energy, would provide 50 kW / 0.5 MWh (10 hours) of low-cost, long-duration energy storage (LDES). The project would be temporarily placed on the existing outdoor paved area at 350 Demeter between Building A and Building B. The total footprint of the system is approximately 124'-9" by 44'-6". The installation would include two 20-ft shipping containers, storage tanks, and ancillary equipment that would house the proposed 50 kW / 0.5 MWh system. During charging operation, the system would use electrolysis to convert low-cost, non-metal oxide chemicals into storage medium. The storage medium would then be retained in cylinder storage assembly tanks (13,200 SCF capacity), while a small amount of oxygen would be vented to the atmosphere. During electrical discharging, the process would be reversed, converting storage media plus oxygen from the atmosphere into the original oxide chemical, which would be stored in the discharge tank. The system would be test-operated for a period of approximately 12 months to prove its effectiveness and validate operation and cost parameters and would then be removed from the site. (See Exhibit B - Site Plan, Exhibit C - Testing / Demonstration Project Plan and Exhibit D - Equipment).

The site is paved and secured by a concrete wall to the north and fencing with gate to the south. The paved surface is sufficient to support the containers, or equivalent. For the initial power supply (i.e. the initial 2-3 months), the battery system will be connected to an existing electrical panel. Additional power may be needed which initially will be supplied by a portable CARB certified/complainant diesel generator. Further testing after the initial period will be undertaken where the power supply is planned to be a solar array. This solar array will be place on the adjacent site, 230 Demeter pursuant to separate permit applications and approvals.

ZONING

The 350 Demeter Street site is zoned for the Waterfront Office. Permitted land uses pursuant to the Updated Ravenswood / 4 Corners Specific Plan include research and development. The General Plan Designation is General Industrial.

Exhibit E provides the site location in the context of the current zoning map.

ADJACENT LAND USES

- North
 - 391 Demeter Vacant Land / Soil Stockpile Site
Zoned Waterfront Office
R-HD-5 Overlay Zone
- Northwest
 - 391 Demeter Vacant Land / Soil Stockpile Site

Zoned Waterfront Office
R-MD-2 Overlay Zone

- West
 - 351 Demeter Knotty Hole Woodworks
Zoned Industrial Transition
- South
 - 230 Demeter Vacant Land -
Zoned Waterfront Office
- East
 - 2555 Pulgas Bloomhouse
Zoned Waterfront Office

OPERATING INFORMATION

- **Occupants:**

Noon Energy Site Usage - The installation of the prototype system should take two to three weeks. 4-6 engineers will undertake the installation. Following installation, the site will be monitored daily to evaluate system functioning and need for potential system enhancements.

- **Hours of Operation:**

- For the installation of the prototype system work hours of operation are 8:00am to 6:00pm weekdays. Following installation, inspection and monitoring activities will be on an as-need basis and may occur any time day or night.
- After hours monitoring will NOT require any special lighting. If this is contemplated, an amended temporary use permit will be applied for which will include, as necessary, the appropriate lighting plan.

- **Transportation:** For the testing and monitoring only 2 employees are anticipated to visit the site on a daily basis.

- **Noise** - System equipment will include compressors and pumps with estimated decibel levels at the project site fencing boundaries as estimated below

- Hydrogen Processing Unit - in container unit - 55Db
- rSOC Container Unit - in container unit - 55Db
- Compressor Dry Cooler - 60Db
- Compressor Dry Cooler CW. - 60 Db
- N2 Generator - 55 Db
- Pumps. - 55Db

Upon installation, all equipment will be evaluated for noise compliance with the City of East Palo Alto code Chapter 8.52 – Noise Control. Note that the project site is surrounded on 3 sides by concrete wall and the closest residential unit is more than 300 feet away.

- **Fire** - The proposed prototype demonstration project includes the storage of hydrogen in cylinder storage assemblies. Hydrogen is a highly flammable gas, and all hydrogen storage placement will be undertaken pursuant to NFPA regulatory code requirements and Menlo Park Fire Department specifications. Other equipment on site is commercially available and not subject to specific fire department regulations and requirements.
- **Environmental:** The property is subject to a [Risk Management Plan](#), which was approved by and is currently under the oversight of the Regional Water Quality Control Board. Link to the Risk Management plan is provided above.
- **CEQA** - A draft Notice of Exemption has been completed by the 3rd Party review professional group, ICF. Their analysis finds that the project is CEQA exempt pursuant to a Category Class 3 exemption (Section 15303 - new construction or conversion of small structures).

EXHIBIT A

Location Map



EXHIBIT B

Site Plan

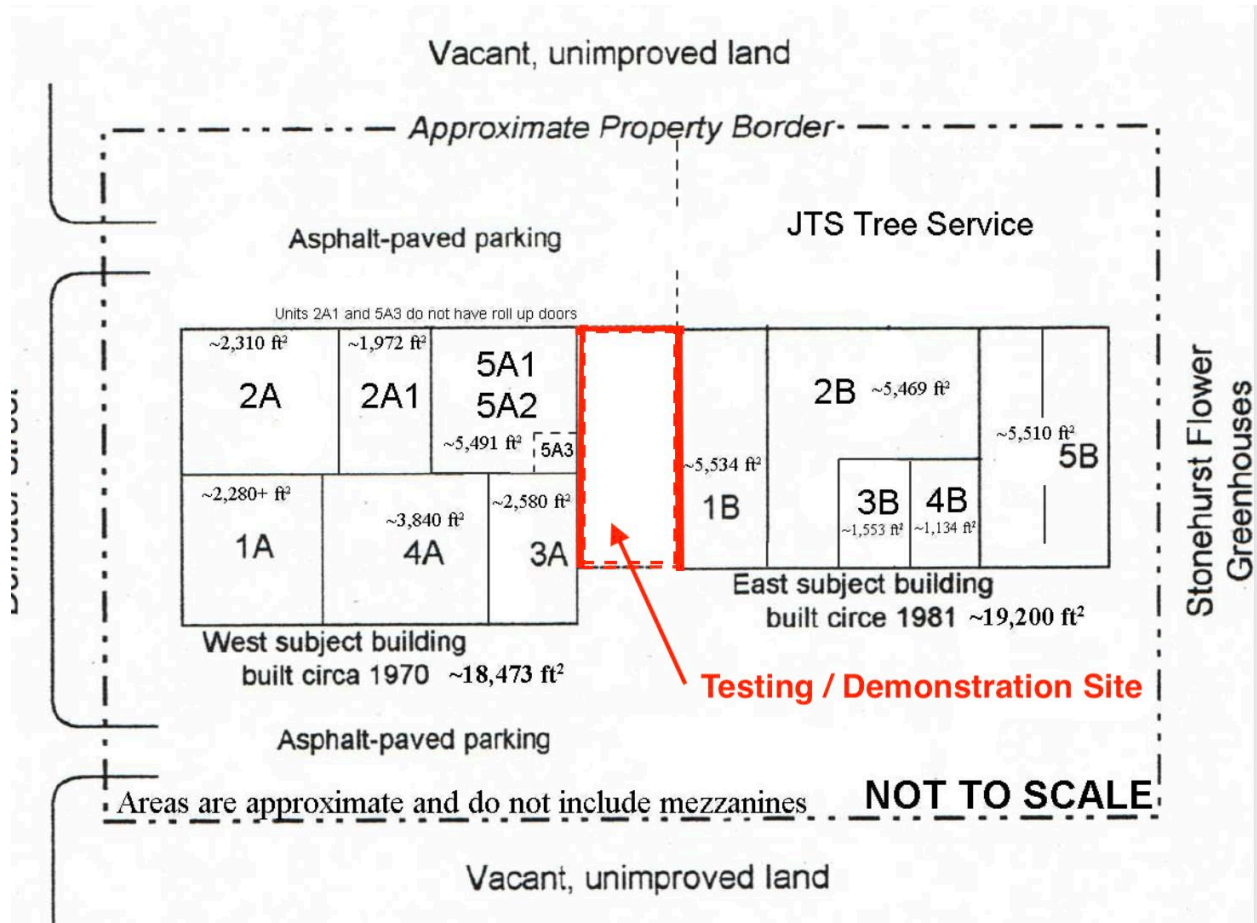


EXHIBIT C

Testing / Demonstration Project Plan

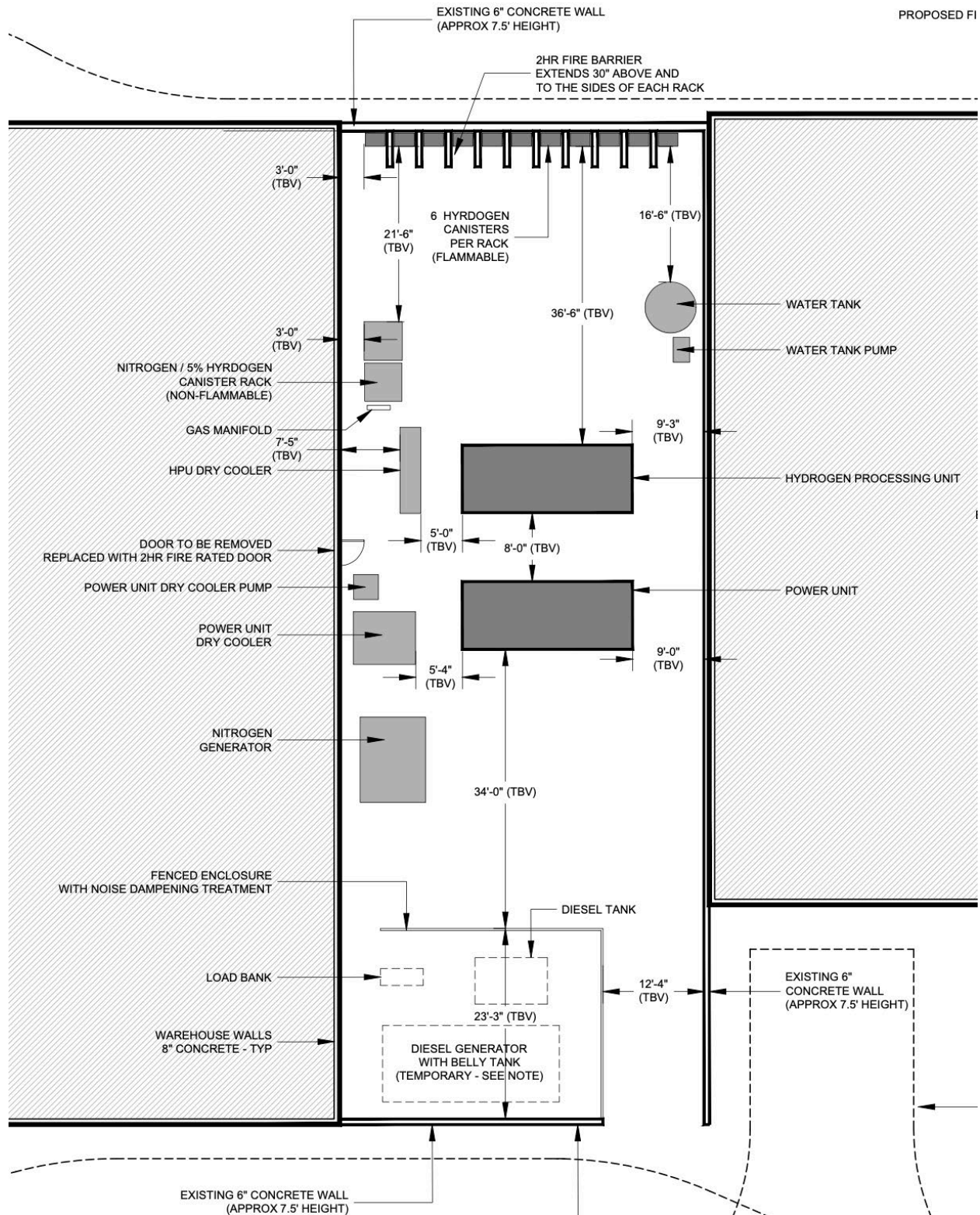


EXHIBIT D

Equipment



Power Unit: Electricity Charge and Discharge



Utility: Dry Cooler



Tank: Condensate Collection Tank



Process Unit: Process & Control System



Utility: N2 Generator



Tank: Gas Cylinder Tanks

EXHIBIT E

Zoning Map