

EXHIBIT 2
NOON ENERGY / 350 DEMETER STREET
OPERATIONAL USE PLAN (Revision #2)
December 5, 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 single story 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 property is located on the east side of the very north end of Demeter Street. The project is proposed to be installed on a vacant 5,625 square foot fully paved outdoor courtyard located between Building A and Building B. 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.—3The closest residential units are on the east side of Illinois Street, approximately 450 feet to the west

PROPOSED USE / PROJECT DESCRIPTION

The proposed project aims to demonstrate, validate, and accelerate the commercialization of a Noon Energy’s long duration energy storage system. The system, developed by Noon Energy, would provide 50 kW / 0.5 MWh (10 hours) of energy storage capacity. The project would be temporarily placed on the existing outdoor paved courtyard at 350 Demeter between Building A and Building B. The testing would consist of repeating charging (converting water into hydrogen) and discharging (use hydrogen to generate electricity) mode. The total footprint of the project is approximately 125feet by 45feet. 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 water into hydrogen which contains energy. Hydrogen 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 discharging operation, the process would be reversed, converting hydrogen into water by reacting oxygen from the atmosphere through the battery system, which would be stored in the water 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 placed 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 F provides the site location in the context of the current zoning map. The project is located more than 400 feet from the nearest residential area which is the east side of Illinois Street.

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 are normal business hours - 8:00am to 6:00pm weekdays. Following installation, inspection and monitoring activities will occur during normal business hours and as an exception and only on an as-need basis during off business hours.
- 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 / Parking:** For the testing and monitoring only 2 employees are anticipated to visit the site on a daily basis. Currently, site parking is not striped and parking stalls are not systematically identified. The project proposes to restripe the paved areas providing 19 stalls - 12 standard, 6 compact and 1 handicapped. Parking plan is identified in Exhibit D.

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

- Hydrogen Processing Unit - 55dB
- rSOC Container Unit- 55dB
- HPU Dry Cooler - 60dB
- Power Unit Dry Cooler - 60dB
- N2 Generator - 55dB

- Pumps - 55dB
- Portable Diesel Generator – 60dB

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 400 feet away. Noise level at the closest property line (which is unoccupied 230 Demeter to the south, is less than 55dB.

- **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.

Emergency Vehicle access was reviewed, and fire lane access is proposed to be provided as specified in Exhibit D.

- **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. The Risk Management Plan specifies requirements to import or exporting of soil, and precautions required for grading work where soil is contaminated. For this project no grading work will be undertaken. 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

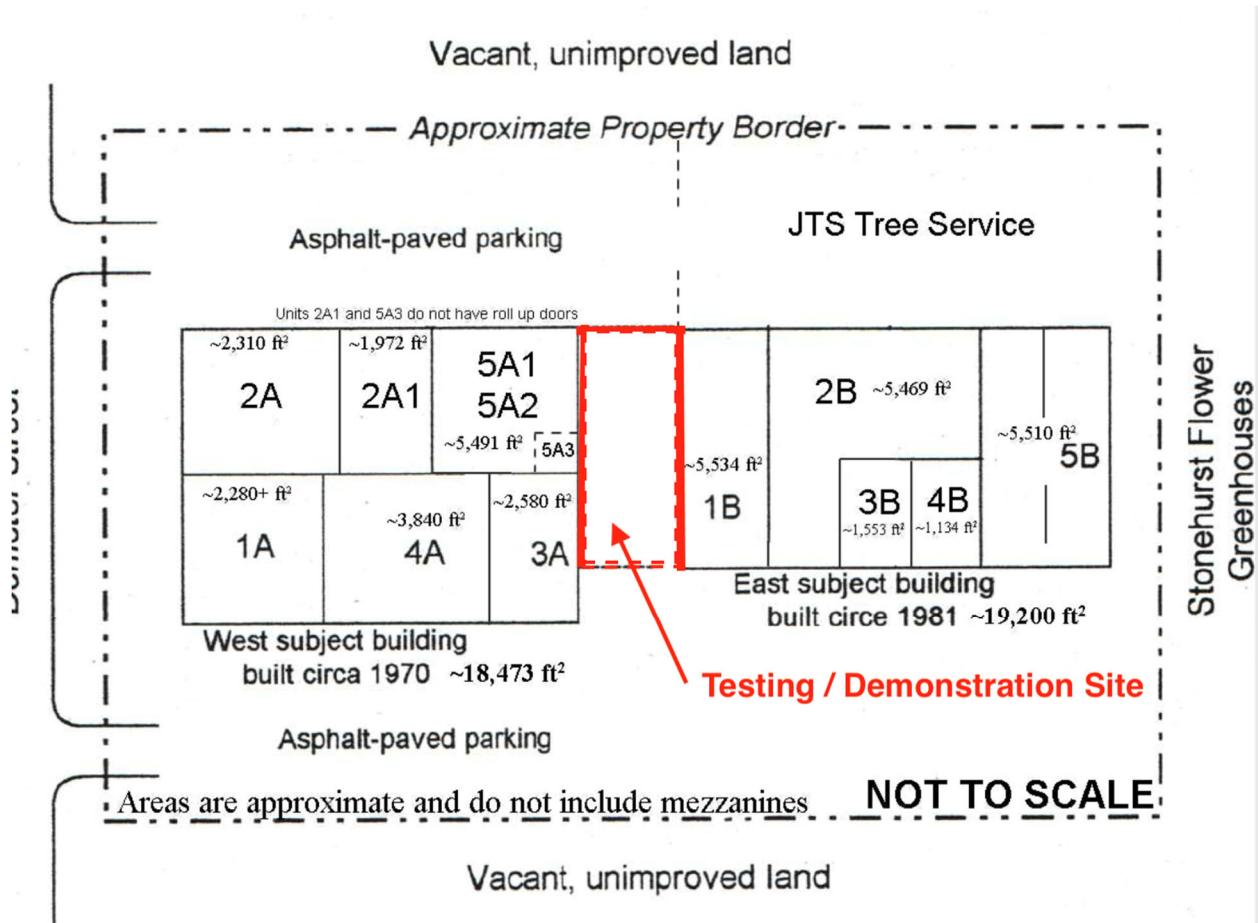


EXHIBIT C

Testing / Demonstration Project Plan

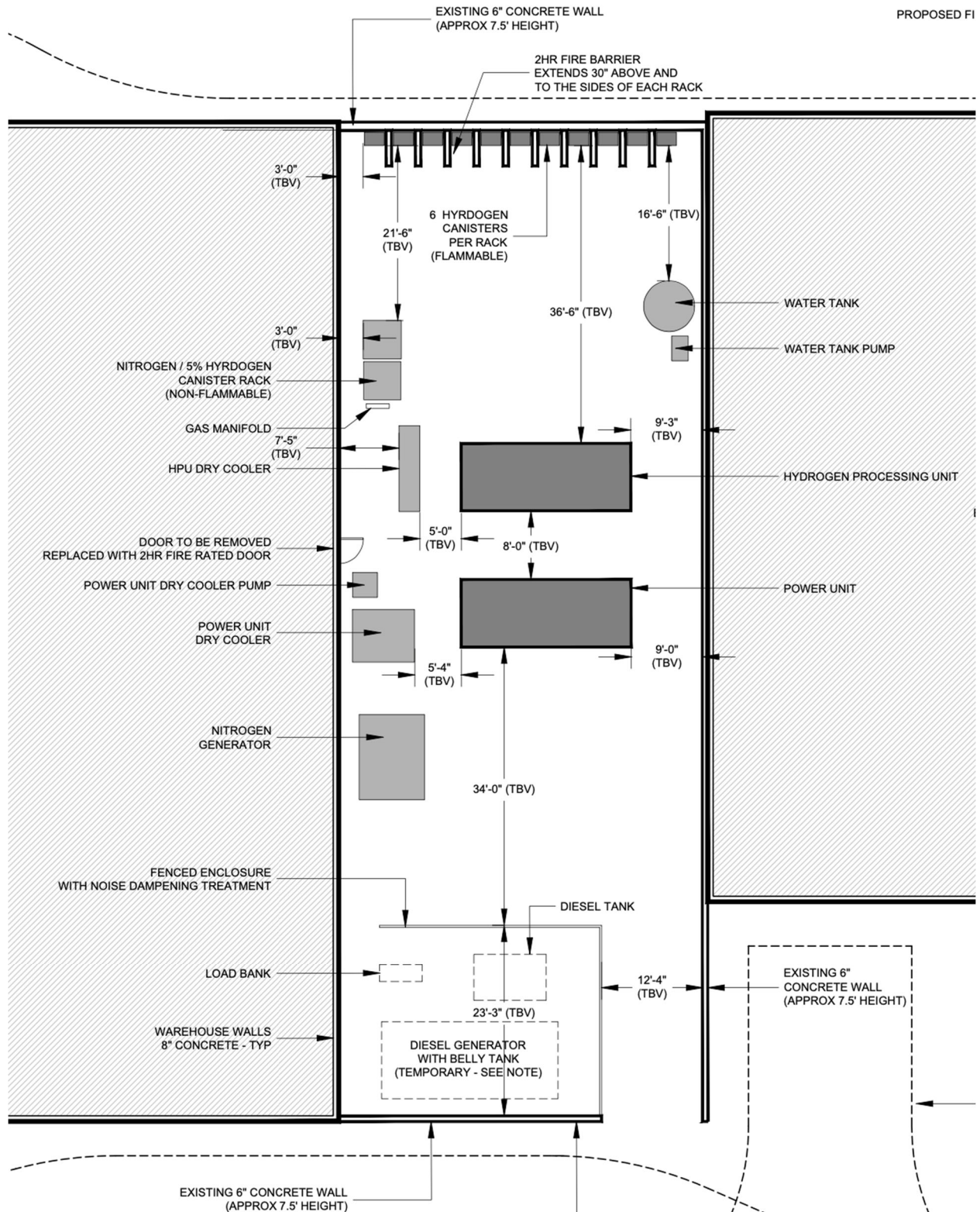


EXHIBIT D

Parking Plan / Fire Access

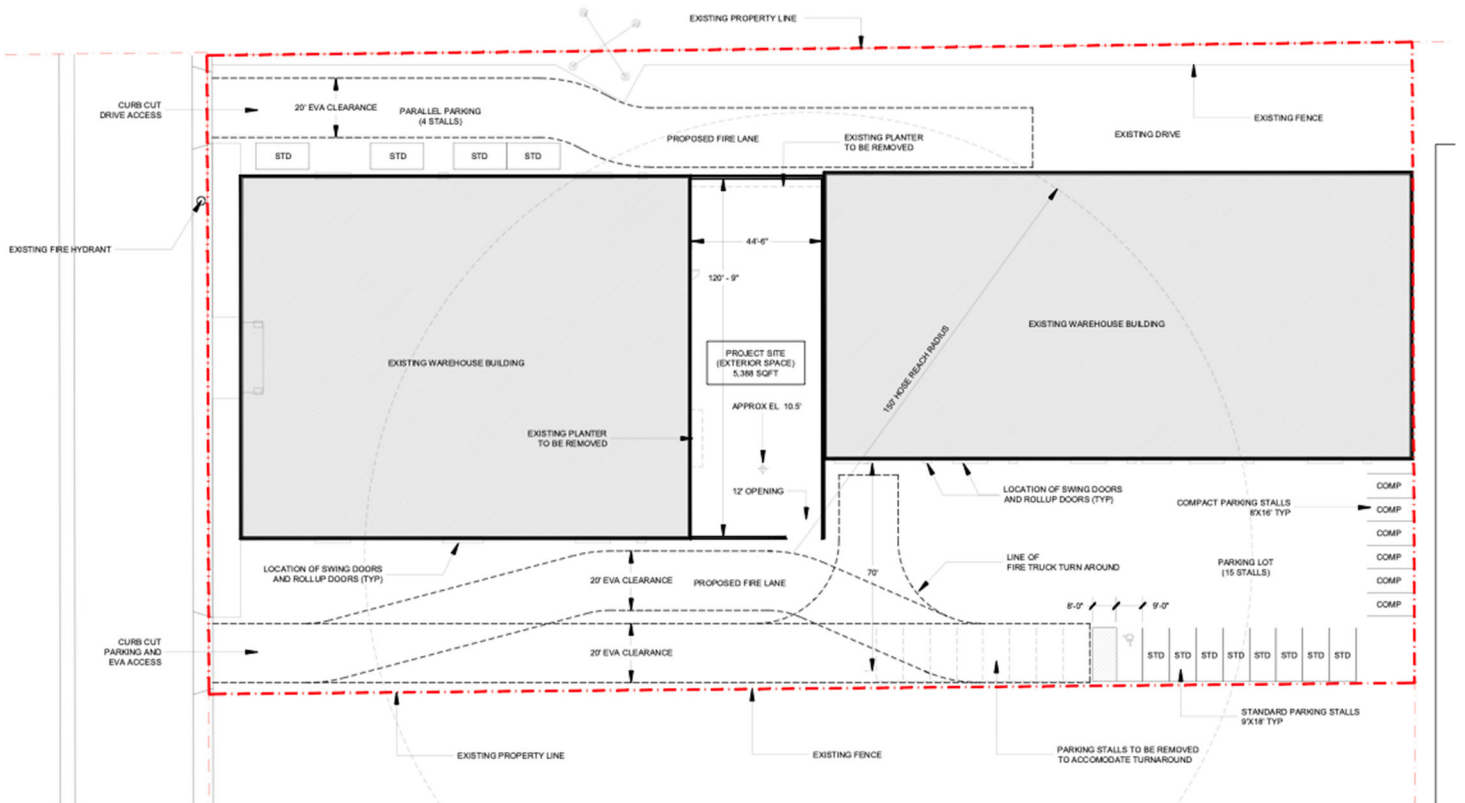


EXHIBIT E

Equipment

<u>Equipment</u>	<u>Description</u>	<u>Height</u>	<u>Footprint</u>
<u>Power Unit</u>	<u>Electricity charging and discharging unit</u>	<u>10ft</u>	<u>20ft X 8ft</u>
<u>Hydrogen Process Unit</u>	<u>Processing hydrogen</u>	<u>10ft</u>	<u>20ft X 8ft</u>
<u>N2 Generator</u>	<u>Generate Nitrogen gas</u>	<u>5ft</u>	<u>8ft X 10ft</u>
<u>HPU Dry Cooler</u>	<u>Cooling unit for Hydrogen Process Unit</u>	<u>3ft</u>	<u>1ft X 10ft</u>
<u>Power Unit Dry Cooler</u>	<u>Cooling unit for Power Unit</u>	<u>5ft</u>	<u>7ft X 6ft</u>
<u>Water Tank and Pump</u>	<u>Store and discharge water</u>	<u>5ft</u>	<u>5ft X 5ft</u>
<u>Diesel Generator</u>	<u>Portable diesel generator certified by CARB (see next page)</u>	<u>5ft</u>	<u>20ft X 10ft</u>
<u>Forming Gas Cylinder</u>	<u>Nitrogen 95% / Hydrogen 5% gas cylinder</u>	<u>5ft</u>	<u>3ft X 3ft</u>
<u>Hydrogen Gas Cylinder</u>	<u>100% hydrogen gas cylinder</u>	<u>5ft</u>	<u>1ft X 2ft</u>

Statewide Portable Equipment Registration

Registration No: 185702

11016174
H34
PH

Legal Owner or Operator:

United Rentals (North America), Inc.

Mailing Address:

400 E. North Avenue
Streamwood, IL 60107

Engine Description:

Certified portable internal combustion engine, compression ignition, manufactured by Cummins, model X12, serial no. 76276903, (Unit Number: 11016174), rated at 513 bhp, Diesel fueled.

Fleet's Compliance Path: Fleet Average Option		Engine DPM Emission Factor: 0.008 g/bhp-hr
Fleet's DPM Average: 0.044		Tier - Placard Color: Tier 4 - Blue
2020 DPM Std: 0.10 g/bhp-hr	2023 DPM Std: 0.06 g/bhp-hr	2027 DPM Std: 0.03 g/bhp-hr

U.S. EPA Engine Family Name:

KCEXL12.0AAA

Conditions:

see attached

Home District:

Bay Area Air Quality Management District

Engine Inspection Discount:

No inspection discount claimed



Expiration Date: December 31, 2025

David J. Mallory

David J. Mallory
Manager, Portable Equipment Registration Program
Enforcement Division

EXHIBIT F

Zoning Map

