



CITY OF HENDERSONVILLE
ENVIRONMENTAL SUSTAINABILITY BOARD

City Operations Center - 2nd Floor Meeting Room | 305 Williams St. |
Hendersonville, NC 28792

Tuesday, August 12, 2025 – 4:30 PM



AGENDA

1. CALL TO ORDER

2. APPROVAL OF AGENDA

3. APPROVAL OF MINUTES

A. July 2025 Environmental Sustainability Board Meeting Minutes

4. PRESENTATIONS

A. Spotlight Solar Presentation - *Tom Grimes, Guest & Fiona McColley, Member* (15 minutes)

5. PUBLIC COMMENT

6. CITY COUNCIL UPDATE

A. City Council Update - *Gina Baxter, Council Member* (5 minutes)

7. OLD BUSINESS

A. Hendo Green Partnership Update - *Jane Edgar, Member* (7 minutes)

B. Hendo Earth Fest Update - *Caitlyn Gendusa, Staff Liaison* (7 minutes)

First subcommittee meeting: August 27th at 5:15 p.m. at the City Operations Center second floor meeting room

C. ESB Outreach Dates - *Emily Davidson, Chair* (7 minutes)

SDS Farmer's Market Schedule:

https://docs.google.com/document/d/15Qi4aX_5a6wihbGM-vNnsarnLMD6J1KgE4VQ9PGQIu8/edit?tab=t.0

SDS at Farmers Market: August 9th

Brooklyn Community Garden (Jules Heimer & Tae Brown)

Caitlyn Gendusa hosting a waste reduction education game 10am-12pm

SDS at Farmers Market: September 13th - Symbolic Monarch Migration Month

Need volunteers

SDS at Farmers Market: October 11th - Seed Saving

Need volunteers

8. NEW BUSINESS

A. Low Waste City Meeting Pilot - *Caitlyn Gendusa, Sustainability Manager* (7 minutes)

The City will be offering compostable serving ware and food waste bins for the following events as part of a new pilot program. Food waste will be taken to the Sustainability Demonstration Station's compost bins. Pilot meetings include:

- Boards & Committees Appreciation Dinner (Sept or Oct 2025)
- Council/Staff Retreat (Feb or March 2026)
- City Council Budget Workshop (May of 2026)

9. ADJOURNMENT

The City of Hendersonville is committed to providing accessible facilities, programs and services for all people in compliance with the Americans with Disabilities Act (ADA). Should you need assistance or an accommodation for this meeting please contact the City Clerk no later than 24 hours prior to the meeting at 697-3005.



CITY OF HENDERSONVILLE ENVIRONMENTAL SUSTAINABILITY BOARD

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Tuesday, July 08, 2025 – 4:30 PM



MINUTES

CALL TO ORDER

Meeting called to order at 4:34 p.m.

APPROVAL OF AGENDA

Emily Davidson motioned to approve first followed by Omar Zafra with the addition of adding more minutes for Hendo Green Partnership update.

APPROVAL OF MINUTES

Jane Edgar motioned to approve June 2025 meeting minutes first followed by Fiona McColley.

PUBLIC COMMENT

Public Comment (*15 minutes*) – no public comments

CITY COUNCIL UPDATE

City Council Update - *Gina Baxter, City Council Member (5 minutes)*

Councilmember Baxter brought up the recent electric vehicle charging station presentation by Caitlyn Gendusa at last week's City Council meeting. As of now, Mayor Volk is not wanting to charge a fee to use these stations. Omar Zafra brought up the consideration for the future of charging a fee for vehicles that idle in the electric vehicle charging spot.

City Council Topics Pertinent to ESB - *Kyla Christensen, Member (5 minutes)*

Please refer to attachment in meeting packet for City Council topics brought up.

OLD BUSINESS

Solar Project - *Omar Zafra, Member (7 minutes)*

Omar Zafra gave an update on the solar installation at the Sustainability Demonstration Station. There is one more part being waited on to come in and after that the system can be installed. Land of Sky is also offering to donate a solar panel that can be used for an additional project however, Caitlyn Gendusa brought up that the board currently does not have available funds to pay for the structure the panels would sit on and table and chairs to go underneath. Caitlyn suggested the board revisit this project later in the year if there are extra funds available.

Outreach Dates

Jane Edgar having ESB Green Partnership booth at Ecusta Trail Grand Opening event - July 18th at 2pm at the Visitors Center

Green Partnership - *Jane Edgar, Member* (7 minutes)

Comments on promotional materials: Caitlyn Gendusa is making recommended updates including looking into an ESB email address, adding dark blue background to logo, and putting a QR code directly to the online application to fill out. Emily Davidson also brought up wanting to know if the questionnaire can send an automated email to anyone that submits.

Jane Edgar and Judy Moolten are planning on working together for the Hendo Green Partnership table at the Ecusta Trail opening July 18th at the Henderson County Visitor Center.

Sustainability Demonstration Station

Farmers Market now dropping off compostable waste as part of new Chef Program

Jill Carter and Emily Davidson setting up at the Farmer's Market this Saturday, July 12th at 7:30 a.m. Alicia Stump is helping to breakdown.

NEW BUSINESS

Vote on new Chair and Vice Chair - *Virginia Tegel, Chair and Caitlyn Gendusa, Staff Liaison* (5 minutes)

Emily Davidson voted on as Chair

Fionna McColley voted on as Vice Chair

Hendo Earth Fest 2026 - *Virginia Tegel, Chair and Caitlyn Gendusa, Staff Liaison* (7 minutes)

The board voted and approved the Hendo Earth Fest guidelines with the proposed revisions which Caitlyn Gendusa is updating.

Caitlyn Gendusa will organize first Hendo Earth Fest Subcommittee Meeting for August. Chair will be voted on after the first meeting to give a chance for interested members to learn more about how the event is planned.

Connection to Warren Wilson College and the Masters of Applied Climate Studies program - *Fionna McColley, Member* (5 minutes)

Fionna McColley brought up the connection she has with Warren Wilson College. If the ESB has any sustainability related topic they would like guidance on from experts in the field, this would be a great contact to explore.

Summary of FY26 ESB Budget - *Caitlyn Gendusa, Staff Liaison* (5 minutes)

Waste reduction event - *Caitlyn Gendusa, Staff Liaison* (7 minutes)

Proposed event to include going over what is/isn't recyclable, recycling audit, and composting overview hosted at the Sustainability Demonstration Station

Emily Davidson brought up idea of having the recycling audit activity being a race against two participants and then following up with education on what the participants got wrong and further education on what is and isn't recyclable. This would be a simplified drop in event format.

ADJOURNMENT

Fiona McColley motioned to adjourn followed by Virginia Tegel

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spotlight solar®



Haven Solar Shelter

June 2025

Craig Merrigan, CEO
Tom Grimes, SVP Business Development



Haven

Item A.

A **shelter** with
shade, seating, table

For....
togetherness,
getting away,
eating,
work,
study

Solar energy for your phone
or computer or anything else

Haven solar shelter

Batteries store power for days...
and nights, with elegant lighting

Add signs and digital content to
deliver your message

Haven is flexible...
options for a standing height
table, or a large seating area



Shade and solar power

Item A.

- 118 square feet of shade and rain shelter
- 1.5 kW of solar power, bifacial

- smooth tab Item A. 8
- no center pole

- 4 wireless charging
- 8 120V outlets
- 4 USB A and 4 USB C
- owner can program on/off outlets



- lithium battery
- 3 days of energy storage
- fast recharge

- integrated LED lighting
- pleasant 2000 lumens, warm 3000K
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- aluminum and stainless steel
- marine grade electrical



- high-strength, beautiful solar



- premium recycled countertop material
- thermally modified wood or TimberTech Advanced PVC



Seating
options,
including
wheelchair
access



Item A.

Standing height table option

Item A.



Large bench option

Item A.

- seating for 8 - 10
- thermally modified wood for long life
- outlets, wireless, and USB



Large bench option

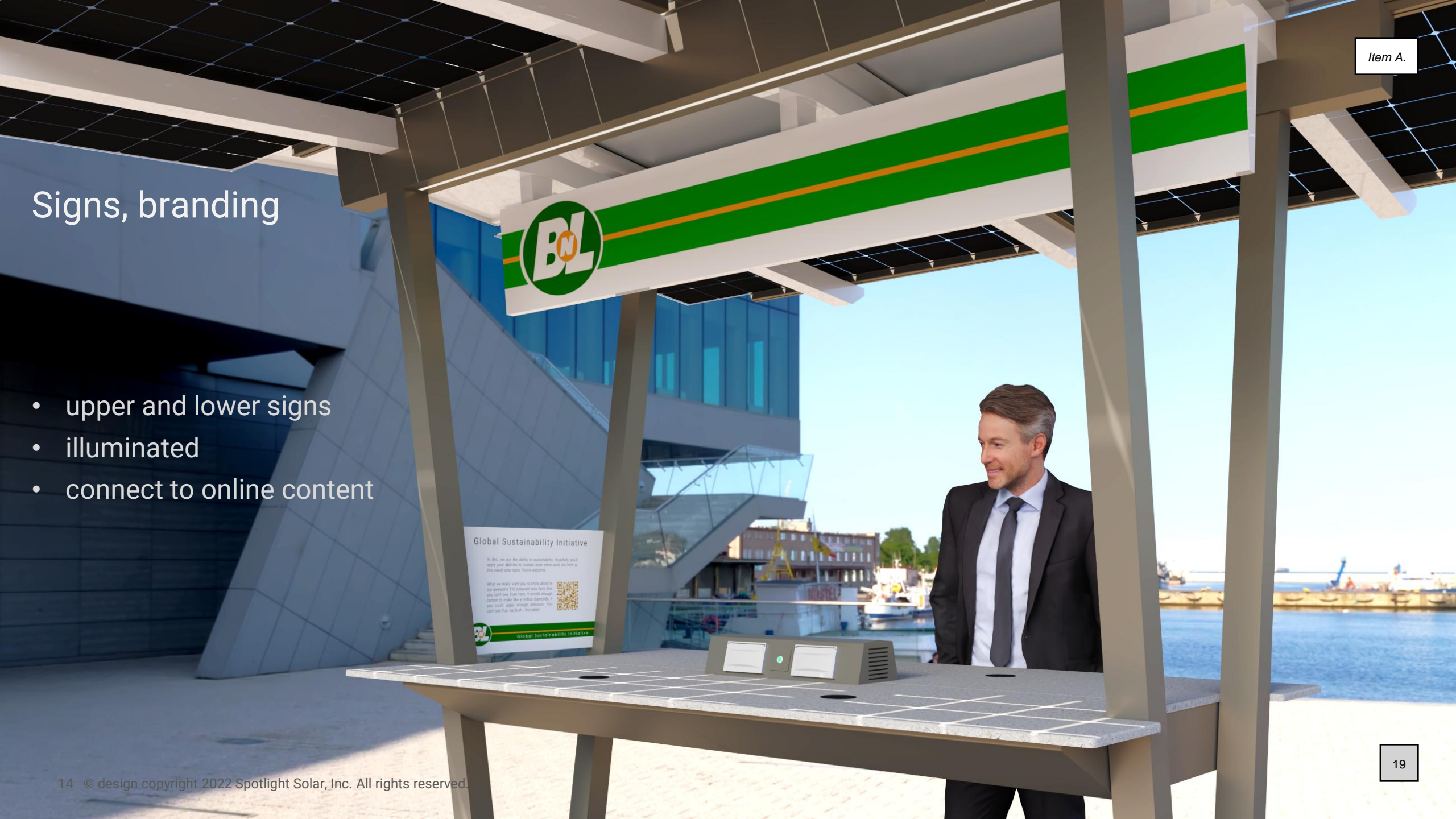
Item A.

- seating for 8 - 10
- thermally modified wood for long life
- outlets, wireless, and USB
- back rest option



Signs, branding

- upper and lower signs
- illuminated
- connect to online content



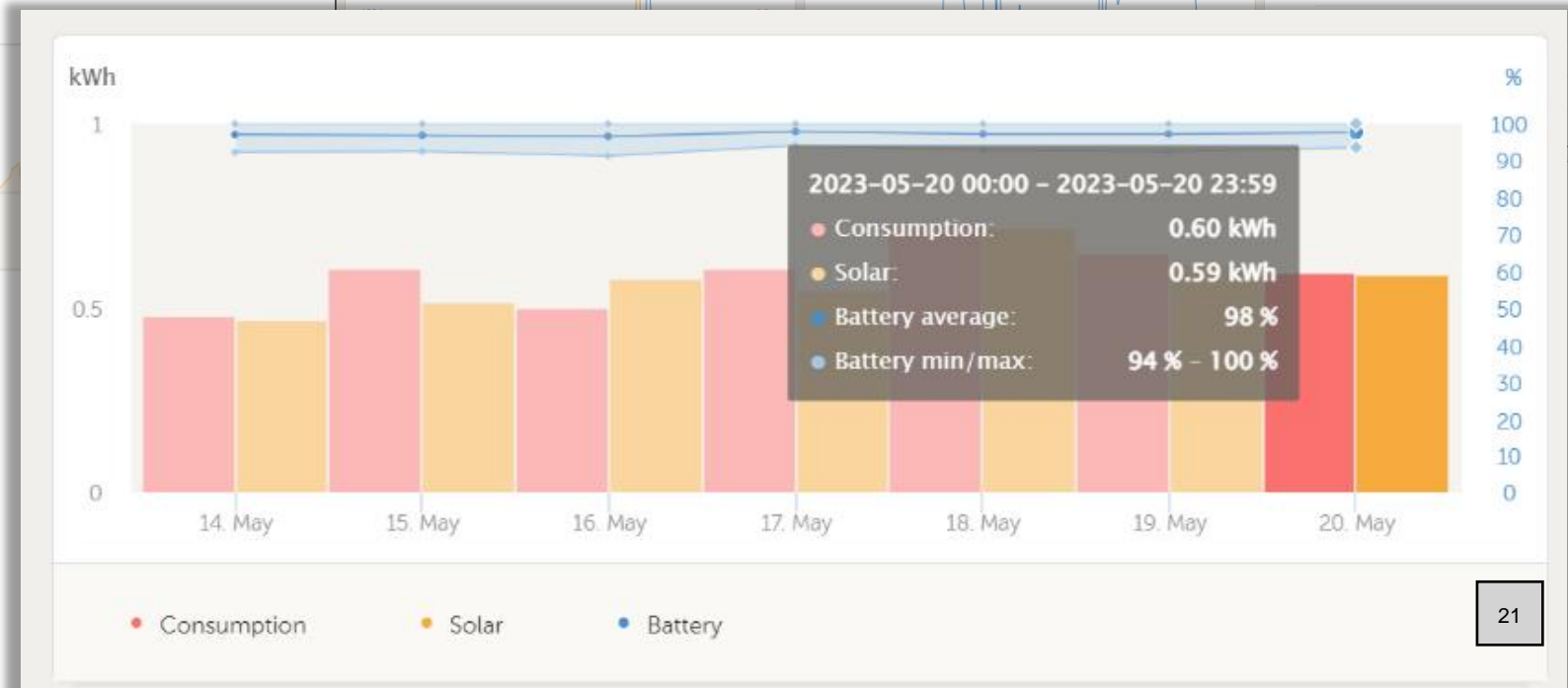
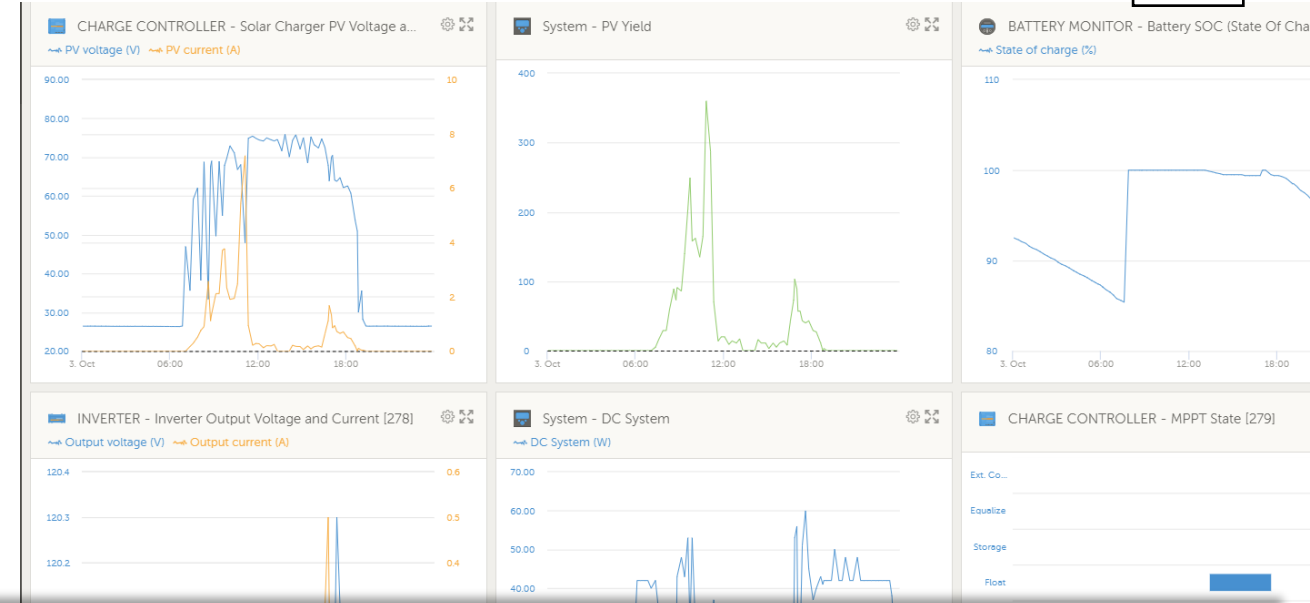
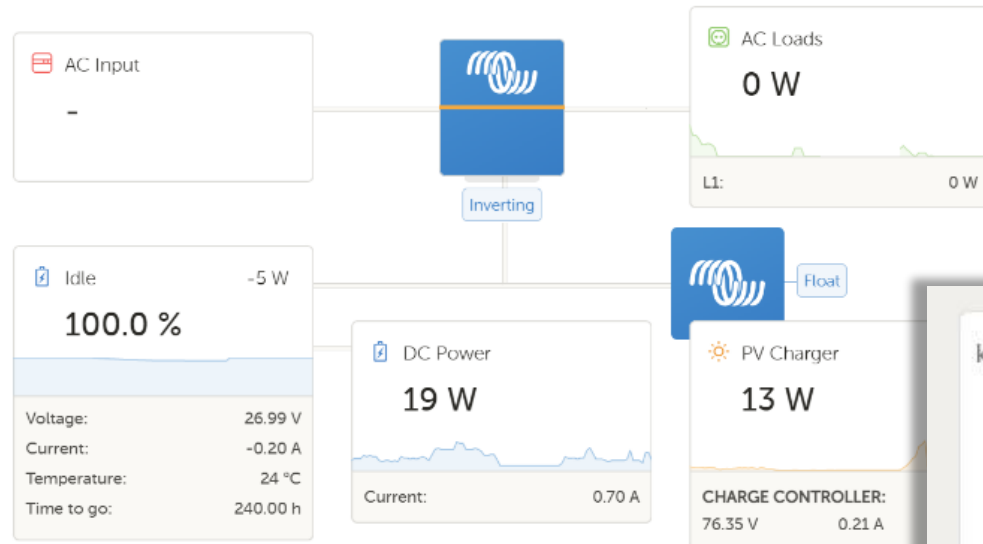
Hands-on experimentation; on-phone and online system data available



Remote Management and Online Data Option

Item A.

- Detailed real-time data via website on solar production, battery status, and energy use
- Remote monitoring for O&M; set power outlet timing
- Educators can use in hands-on lessons





Haven features

Item A.

- shade 11'-6" x 10'
- integrated solar power 1.5 kW + bifacial
- 20 power outlets / wireless charging
- elegant LED lighting
- 3 day battery (2 kWh), safely elevated
- lithium batteries recharge in 2.5 hours
- open farm table style
- high quality solid surfaces
- standing height table option, or seating only
- seating for up to 8
- equitable wheelchair access
- brand, signs integration
- WiFi and sensor options

Example Installations

















Mixed Use Retail / Entertainment – The Boxyard

Item A.















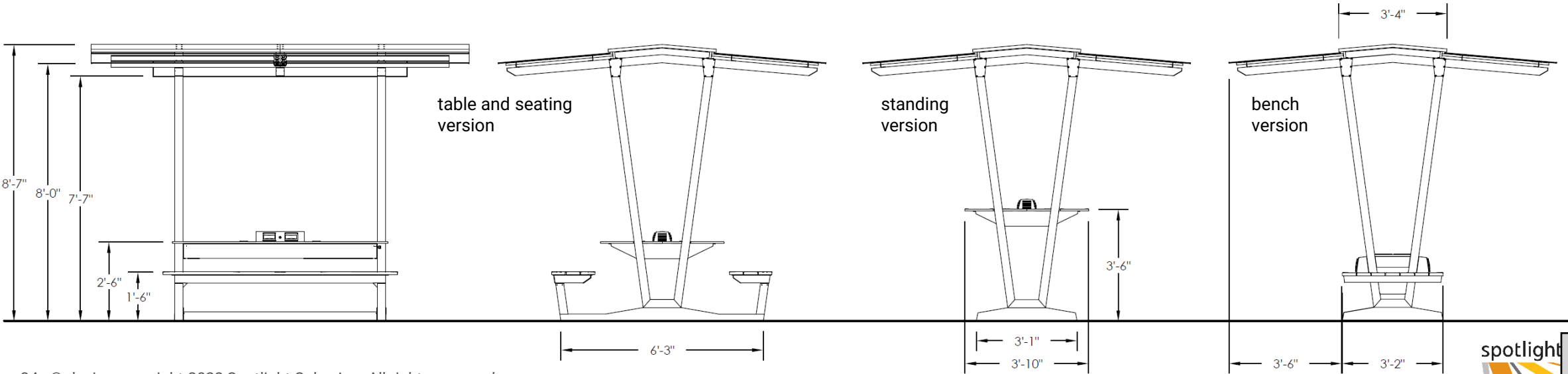
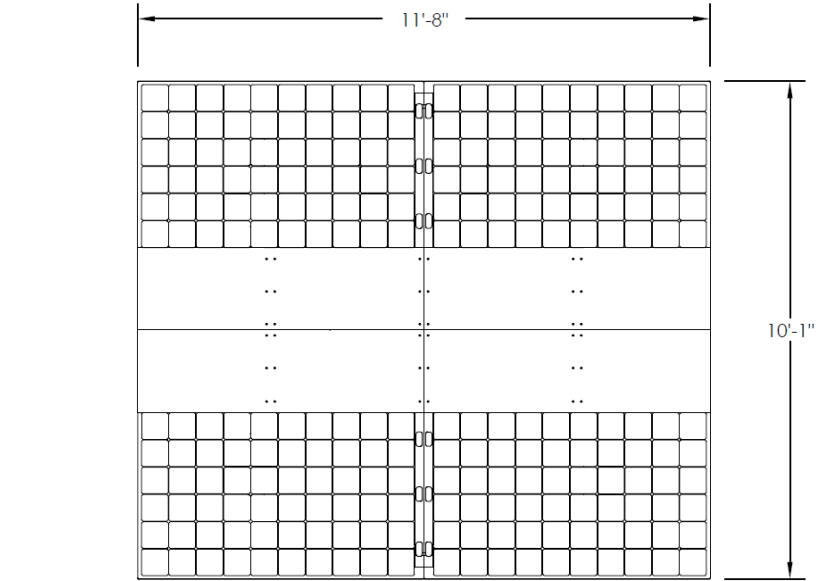
Specifications



Haven Dimensions and Materials

Item A.

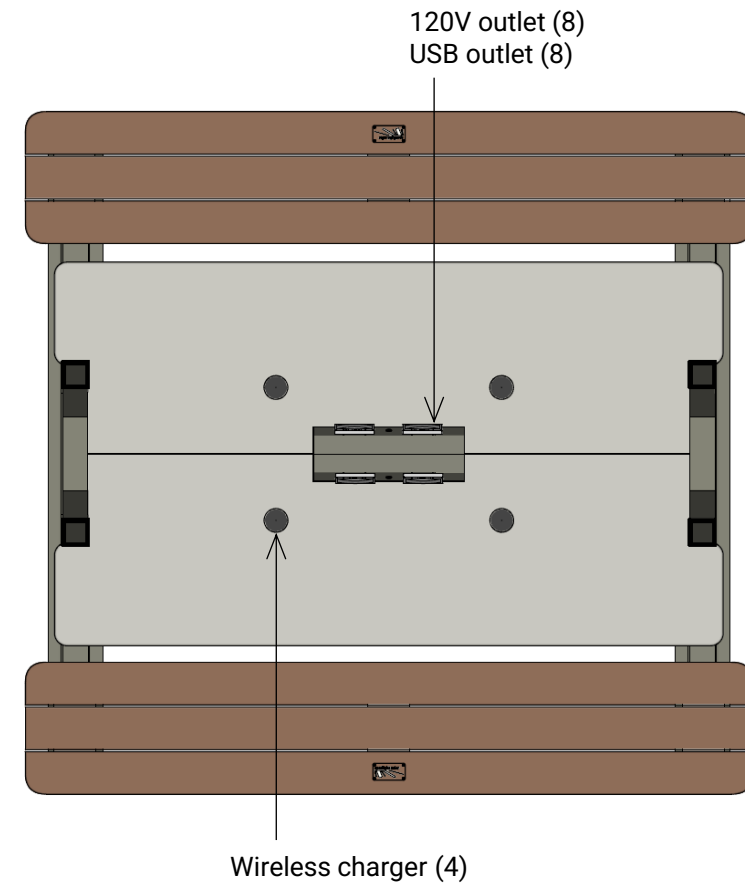
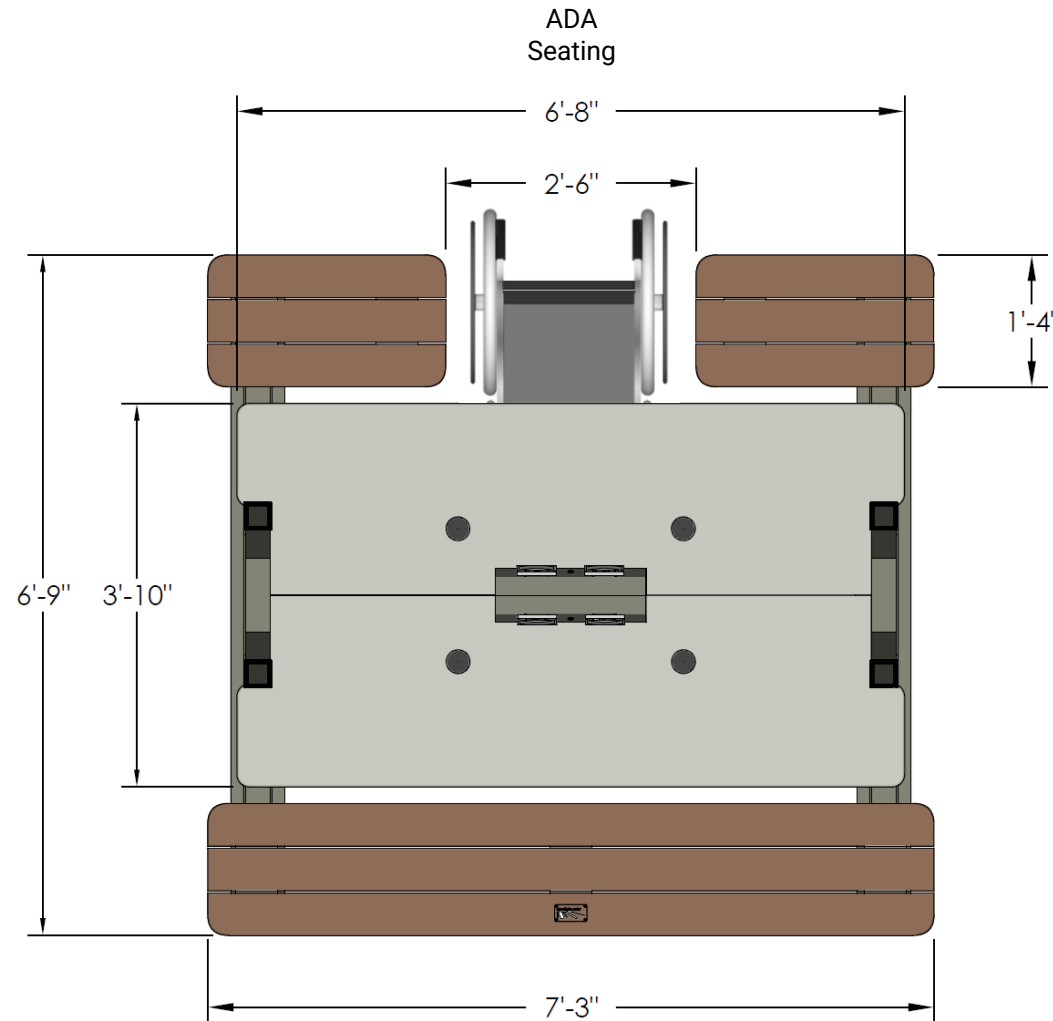
Structure and roof	aluminum (corrosion resistant)
Coating	Super durable powder coat, rated AAMA 2604; additional clearcoat for shoreline
Solar panels	frameless 60 cell bifacial, European made
Battery chemistry	Lithium-Iron-Phosphate (safest per FAA)
Benches	thermally modified wood (20+ year lifetime) or TimberTech Advanced PVC
Table	recycled solid surface
Seating	up to 8 people; wheelchair option in center
Loading	wind 175 MPH, snow 90 PSF
Weight	1035 lbs.



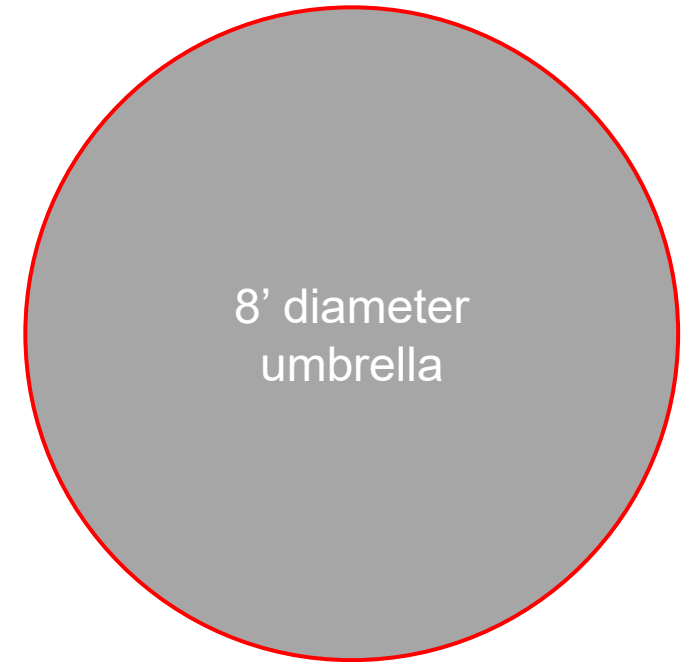
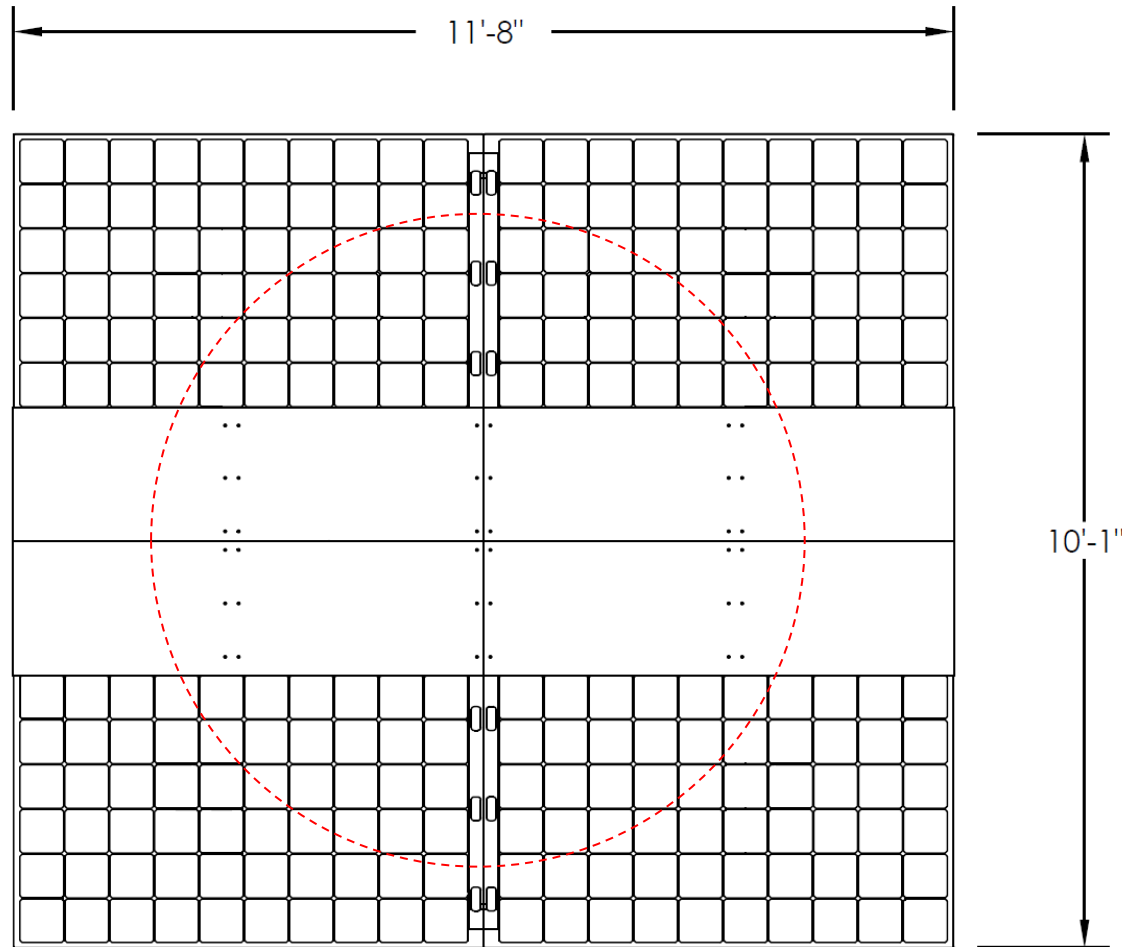
Haven is designed to support multiple users and devices, with three days of clean energy reserves in case of cloudy weather. Lithium Iron Phosphate batteries are used for long life and high performance in a range of temperatures.

	Without lighting	With LED lighting – 2,000 lumens
Lithium battery capacity	1.5 kWh (1.35 kWh usable**)	2 kWh (1.8 kWh usable**)
Depth of discharge	**90% (lithium's full capacity is available vs. AGM's 50%)	
Lithium battery lifetime	15 years (3X vs. AGM)	
Solar capacity	1.5kW plus bifacial bonus*	
Max continuous load, AC outlets	650W @75° F	
Power outlets	4 wireless, 8 120VAC, 4 USB A, 4 USB C (PD) (owner can opt out of 120V outlets)	
3-day energy reserves (each day)	8 phones charged AND 8 hours of laptop charging	8 phones charged AND 8 hours of laptop charging AND 6 hours of lighting

* capacity of solar panels based on manufacturer projections, actual to be confirmed, no more than 10% different; no user experience impact



- 118 square feet



Select Colors and Materials

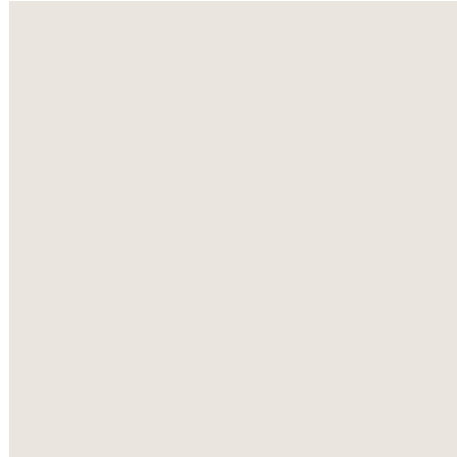
Item A.

main structure and roof



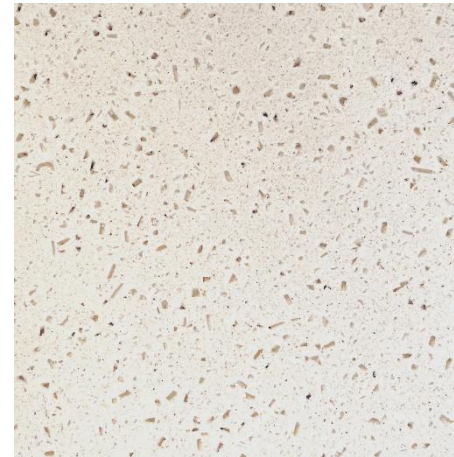
Warm gray
on aluminum

roof and supports



Gray White
RAL 90023
on aluminum

table



Seashell
recycled solid surface acrylic

benches



Solid Ash
thermally modified wood



*Customization of colors available.

Also available in
TimberTech
Advanced PVC

Warranty Items	
Batteries	6 years
Electronics	5 years
Workmanship	10 years
Materials	5 years
Coating and surface finishes	3 years
Solar panels	30 years production / 10 years workmanship

Warranty does not apply to damage, defects, or loss resulting from normal wear and tear, abuse, misuse, or failure to maintain according to Spotlight Solar's instructions.

Coating warranty covers defects such as peeling and corrosion. It does not cover gloss or color retention. Sun exposure and weathering may cause surface color and appearance changes.

Warranty does not include power outlets, which are easily replaced if damaged.

\$ USD

Haven solar shelter with table	24,800
-- choose combination of bench seats or split seats for wheelchairs (ADA compliant)	
LED lighting with higher-capacity battery	2,200
small sign on side with customer's graphics, double-sided	490
large billboard sign under roof with customer's graphics – double-sided	1,200
Remote Management Kit – WiFi + cellular modem + SIM card	1,300
-- 3 yr cellular data service for Remote Management	300
Earth Anchor Kit (base config includes concrete anchors)	700
Shoreline paint upgrade (req'd within 2 mi. of shore)	770
custom paint color	inquire
Haven solar shelter with bench seating, no table	27,800

IMPORTANT: Solar and battery systems qualify for federal credits and depreciation that **can reduce the net cost by 40% - 70%**. Details available upon request.,

Example: taxable customer, Haven

Initial project cost (example)	\$29,000	product, accessories, shipping, self-installation
Federal tax credit / direct payment	-\$8,700	30% Federal investment tax credit or direct pay for tax exempt org
Domestic content credit / payment	-\$2,900	10% Federal credit / payment for 40%+ domestic content
Depreciation tax benefit for taxable orgs	-\$6,890	[29.7% income tax rate] X [(project cost) - (credit amount X 50%)]
Net cost after tax benefits	\$10,510	= 36% of project cost

Example: tax exempt customer, Haven

Initial project cost (example)	\$29,000	product, accessories, shipping, installation
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2. **Installation** can be accomplished by three people with mechanical skill, with proper preparation and tools, in six hours.
3. **Maintenance** required is minimal, including cleaning of surfaces, and occasional re-sealing of wood benches, depending on location. Batteries are expected to last 15+ years.



We're happy to help

Craig Merrigan

Co-founder and CEO

919.264.9692

craig@spotlightsolar.com

Tom Grimes

SVP, Business Development

Spotlight Solar

919.395.8547

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spotlight solar®



Haven Solar Shelter

June 2025

Craig Merrigan, CEO
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Haven

Item A.

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For....
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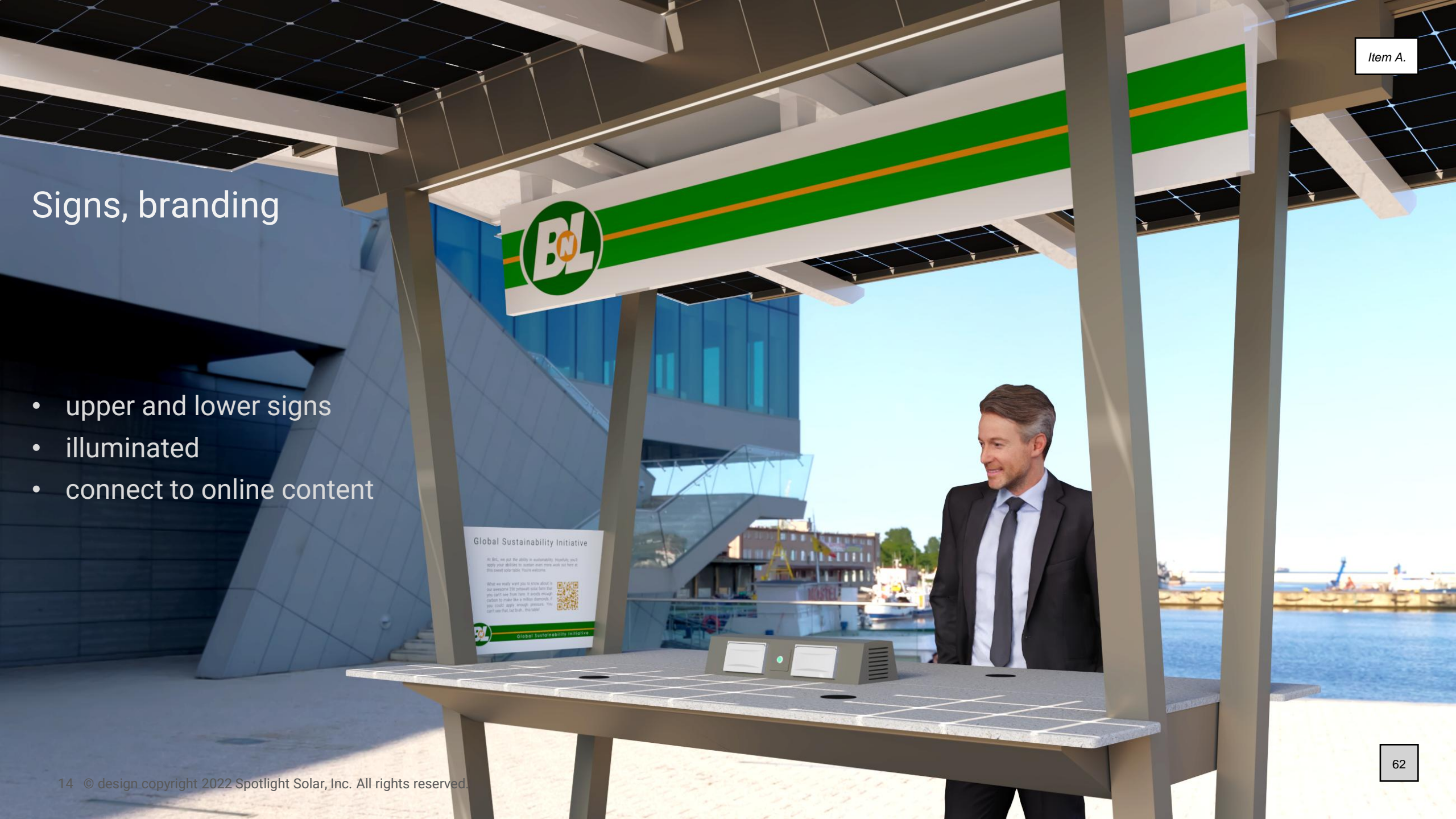
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Global Sustainability Initiative

At BNL, we put the ability in sustainability. Hopefully, you'll apply your abilities to sustain what more we've put here at BNL. Invest your skills. Your wisdom.

What we really want you to know about is our perspective. Our perspective says that you can't see from here. It sounds enough certain to make like a million dollars. If you could, apply enough pressure, you can't see that, but that's the idea!



Global Sustainability Initiative

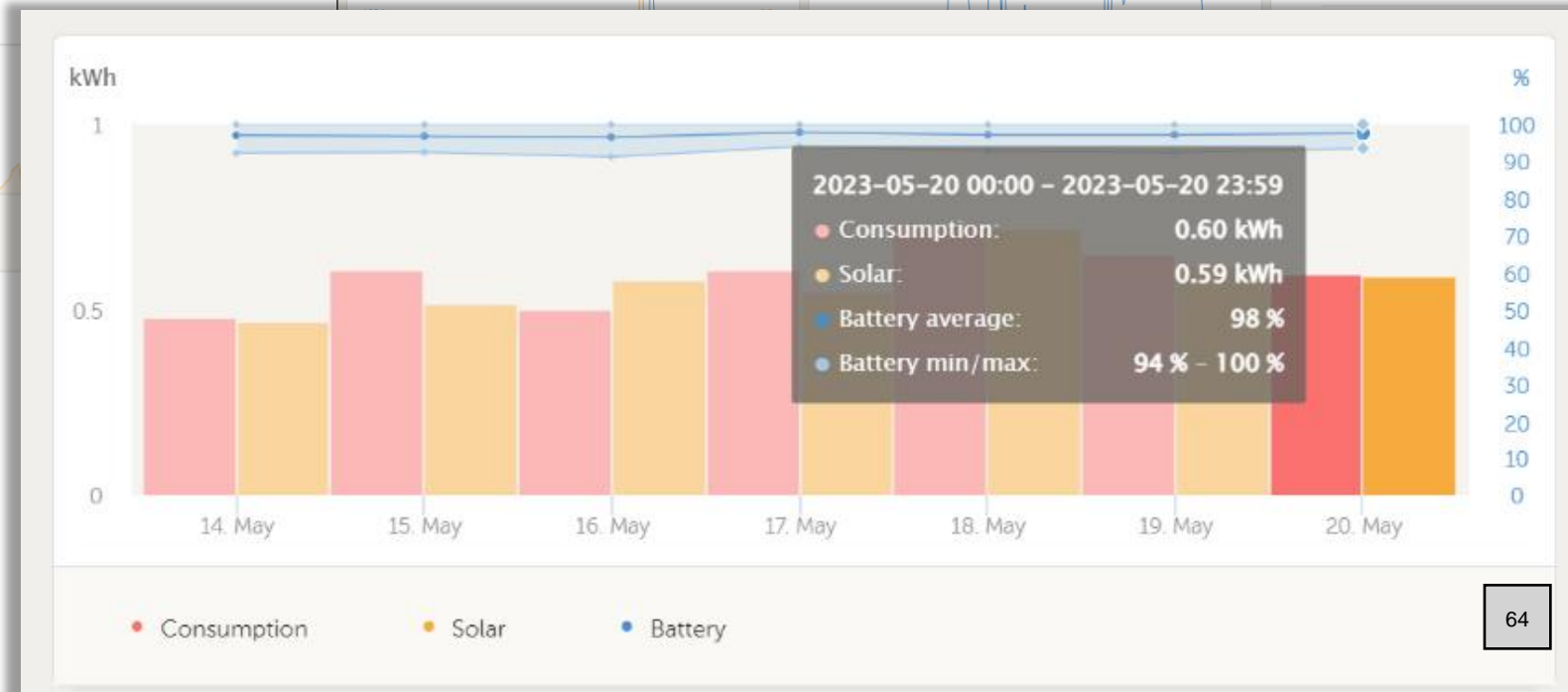
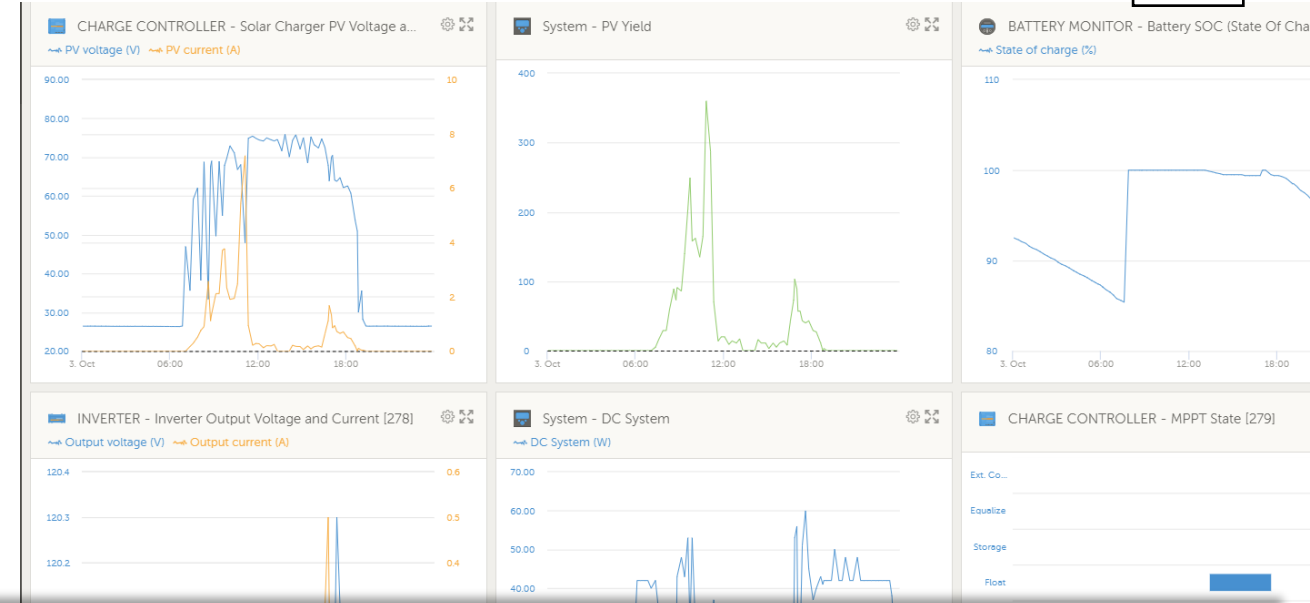
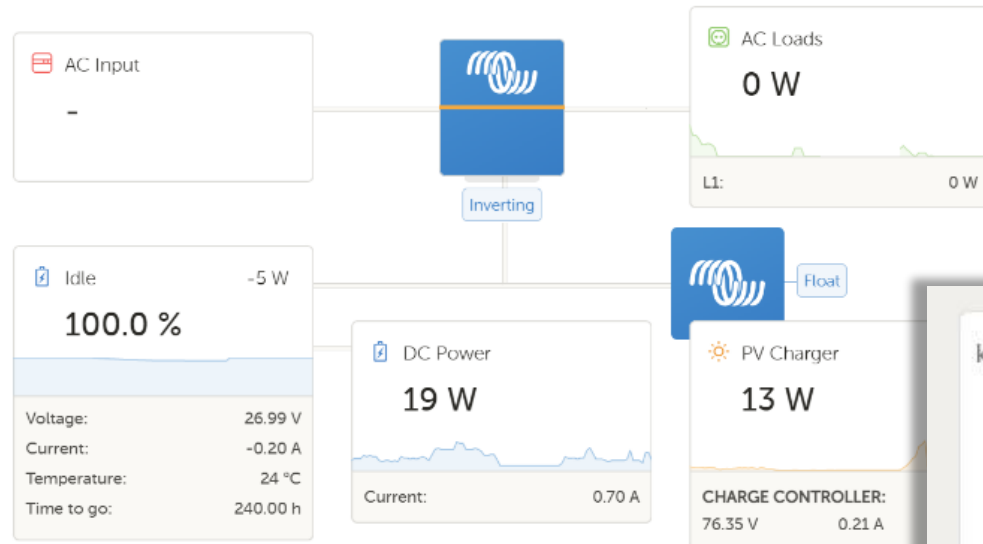
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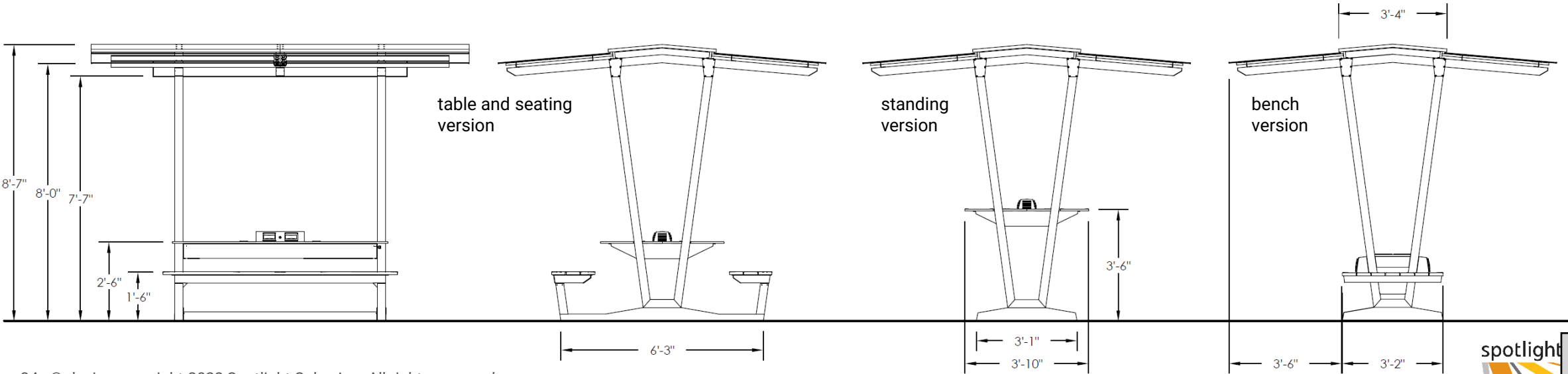
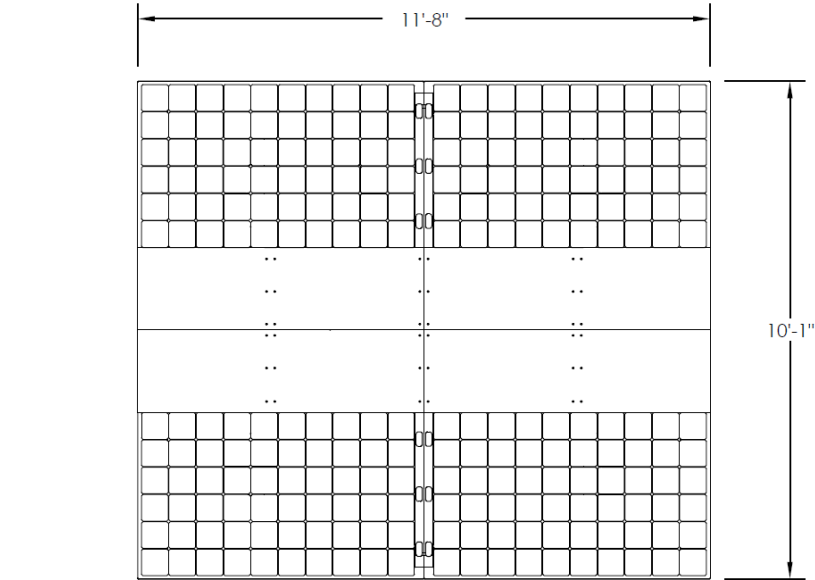
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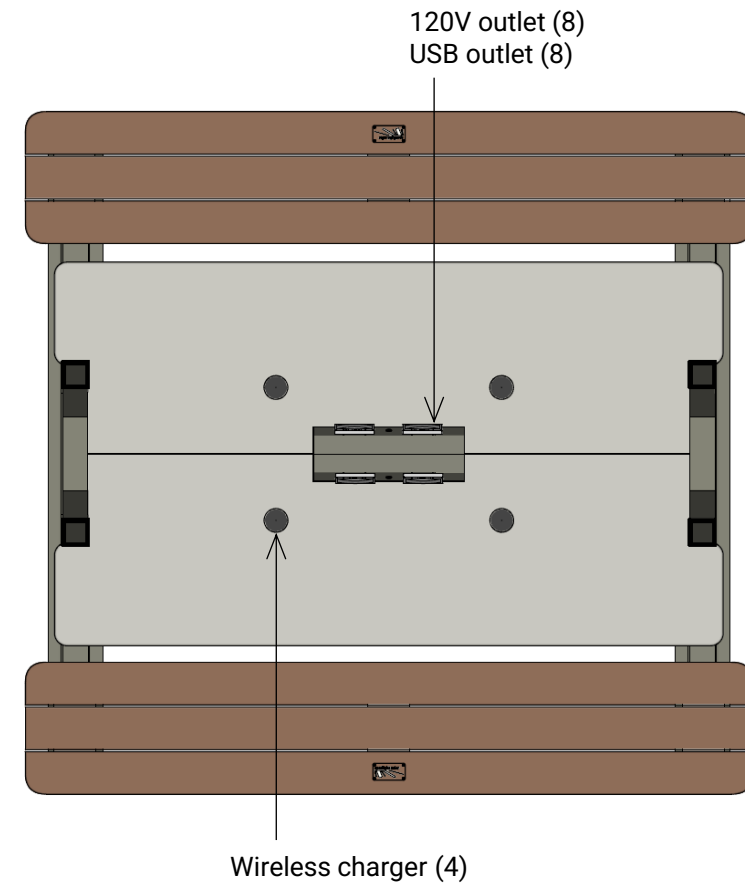
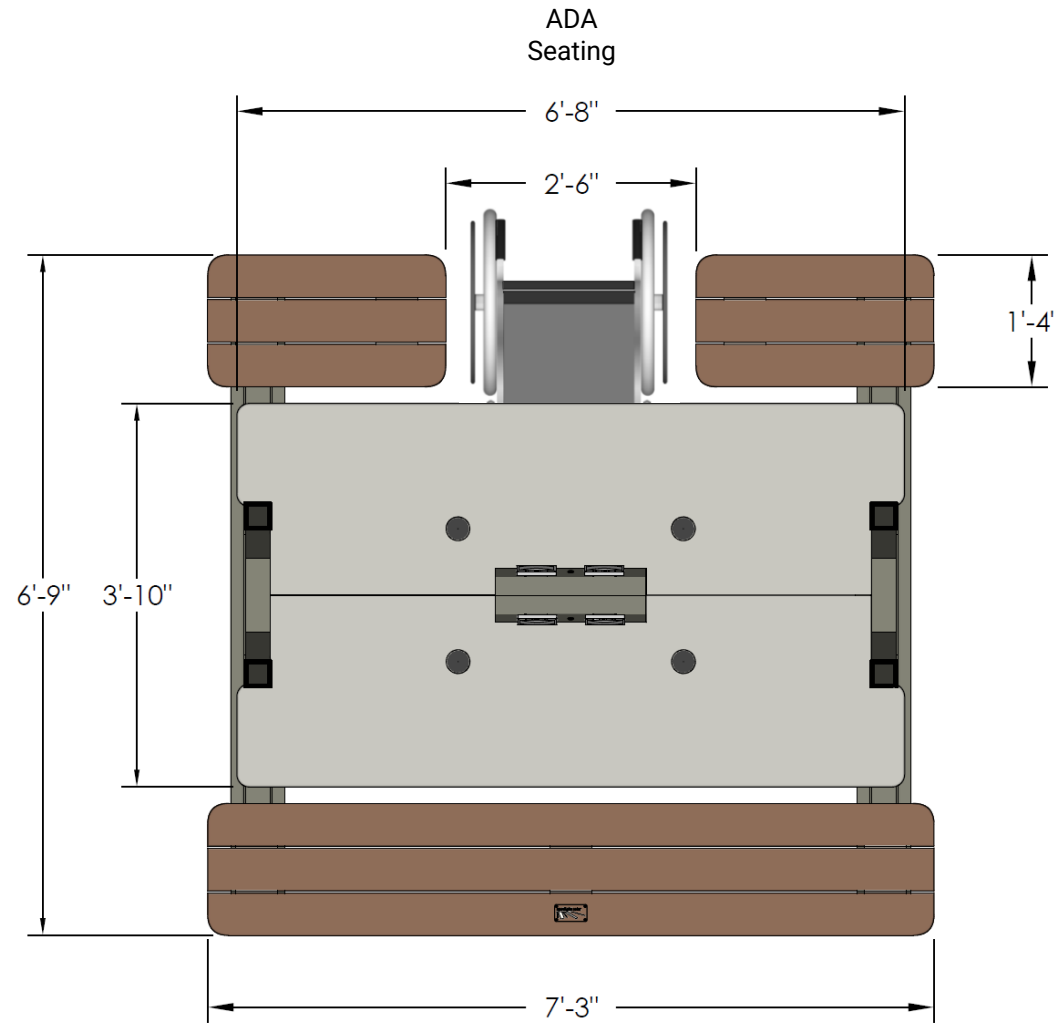
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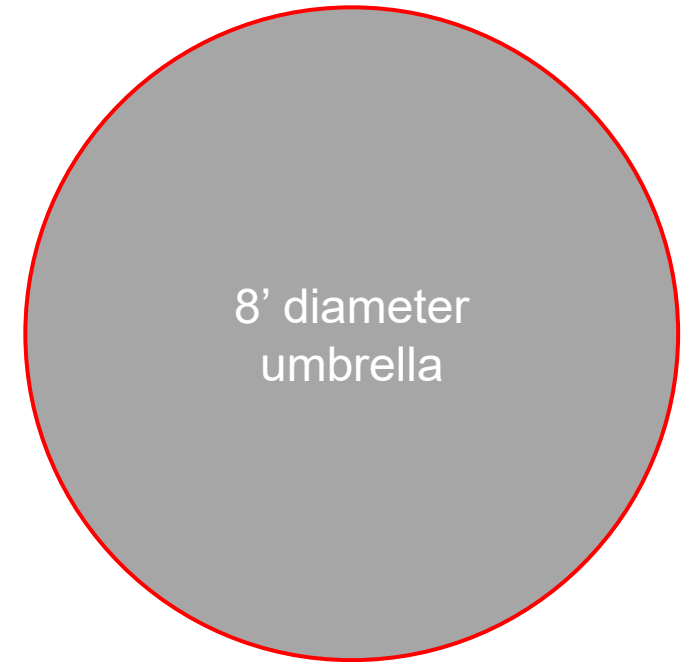
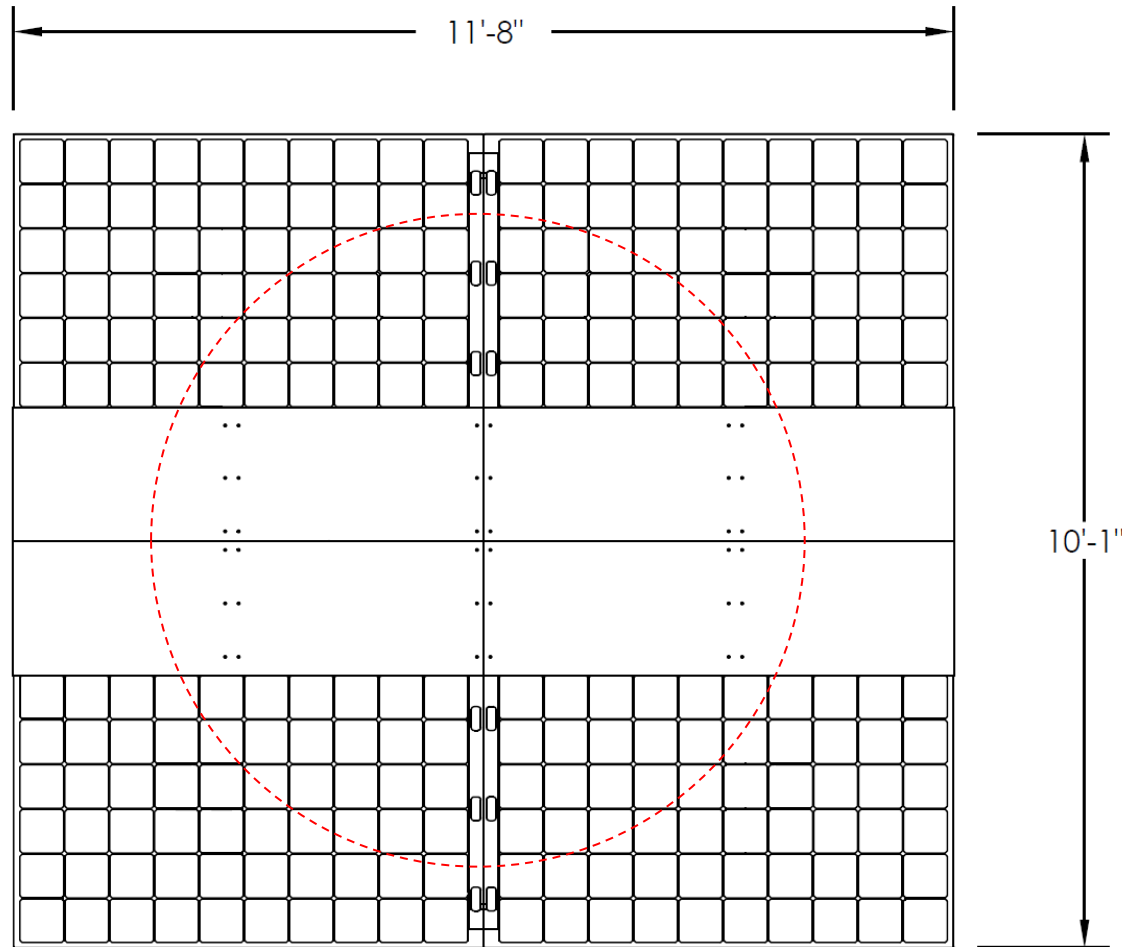
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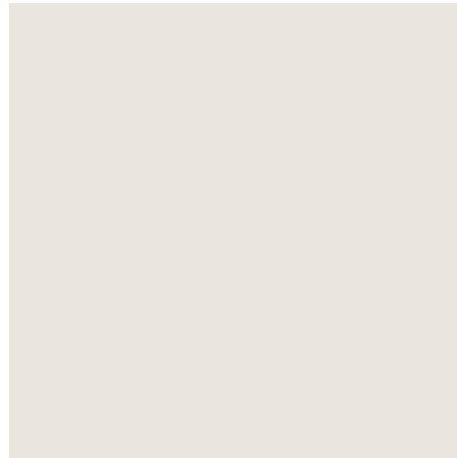
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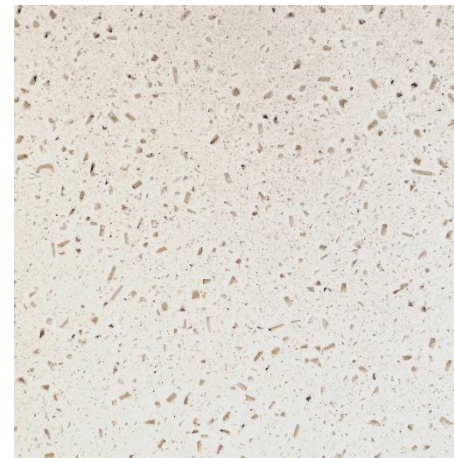
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