

Orlando's “Tiny Green Home”

City Council (August 10, 2020)

Families, Parks, and Recreation Board (approved July 21, 2020)

Alliance Board (approved June 11, 2020)





Why build the Tiny Green Home exhibit?

- **Purpose:** Support residents in their journey to become more environmentally-sustainable at home and increase participation of the City's and OUC's sustainability programs.
- **Programs:** City of Orlando and OUC aim to make sustainability accessible through existing free and low-cost programs and opportunities – oftentimes, not yet discovered by residents!

Orlando Utilities Commission (OUC)

- Since 1923, OUC has provided safe, dependable, affordable electric and water service to customers
- Long legacy of service through community outreach and educational programs including participation in 150 events each year
- Committed to target net-zero carbon emissions by 2050, with a goal to reduce emissions by 50% by 2030
- Offers conservation and renewable programs for residential and commercial customers:

Solar Solutions

- Community Solar
- Commercial & Residential Rooftop Solar
- Floating Solar
- Solar Sculptures

Energy Storage Solutions

- Battery Storage
- Backup Generation

Electric Vehicles

- Commercial & Residential EV Infrastructure

Conservation

- OUConvenient Lighting
- OUCooling
- Energy Efficiency
- Water Conservation
- Smart Energy Technology



Exhibit Collaboration

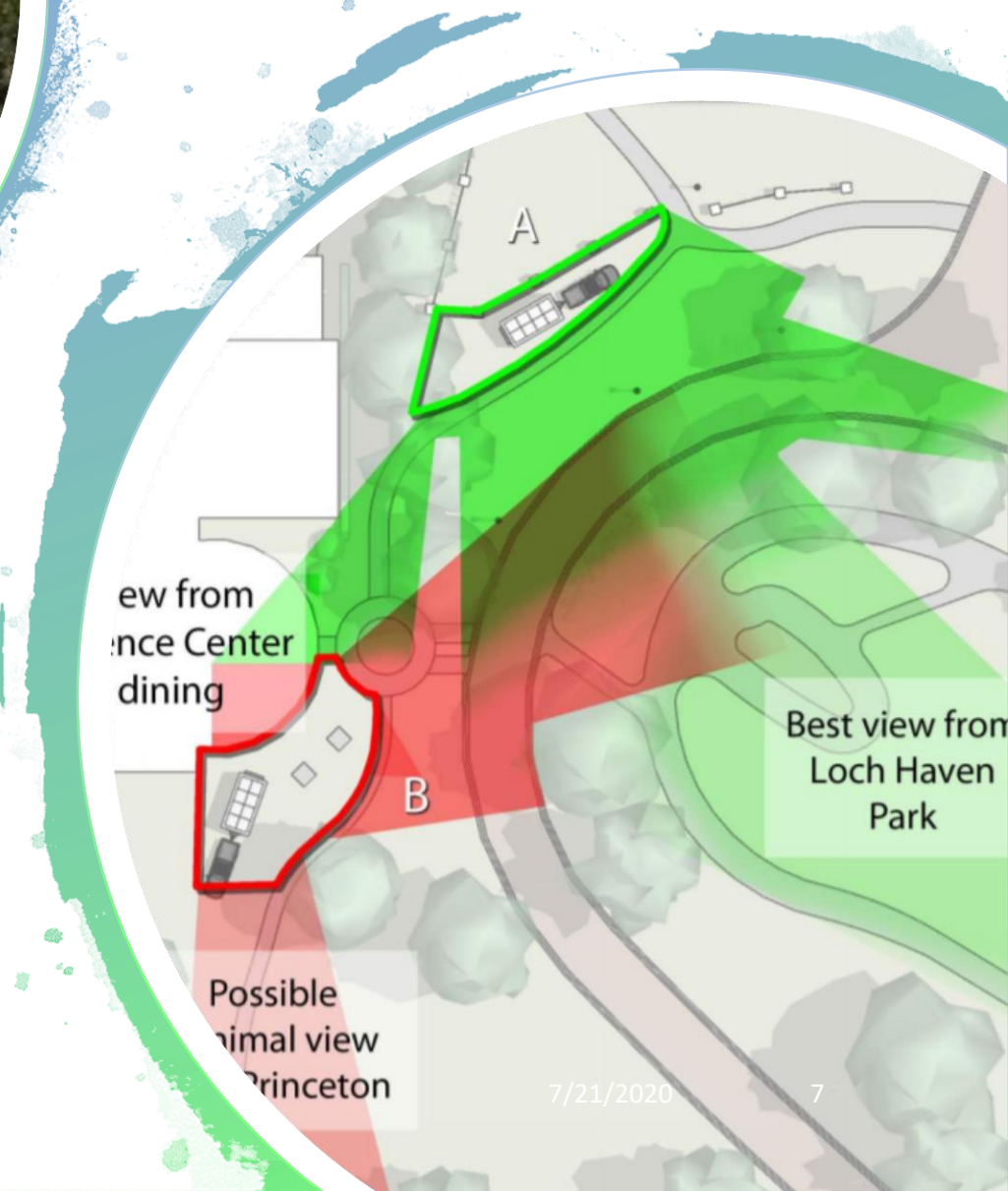
- **Partners:** Orlando Science Center will own, operate, and maintain the exhibit with the design support and sponsorship from:
 - City of Orlando
 - Orlando Utilities Commission (OUC)
- Additional support provided by the Bloomberg Philanthropies American Cities Climate Challenge, Natural Resources Defense Council (NRDC), and architecture firm, Little Diversified Architectural Consulting.



Site & Experience



Orlando Science Center is located in **Loch Haven Park** and the exhibit will be outdoors.



Orlando Science Center
has 620,000 visitors
per year!

Visitors come to learn about science: ecosystems, space, chemistry, technology and more.



Visitor Experience

- **Residents will learn**
 - Journey to clean energy
 - Energy Efficiency, Renewable energy, Electric vehicles
 - Discover opportunities
 - City and OUC programs, rebates and freebies
- **Residents will engage**
 - Explore via interactive displays
 - Feel the difference
 - Play games



Photo source: Orlando Science Center (osc.org)

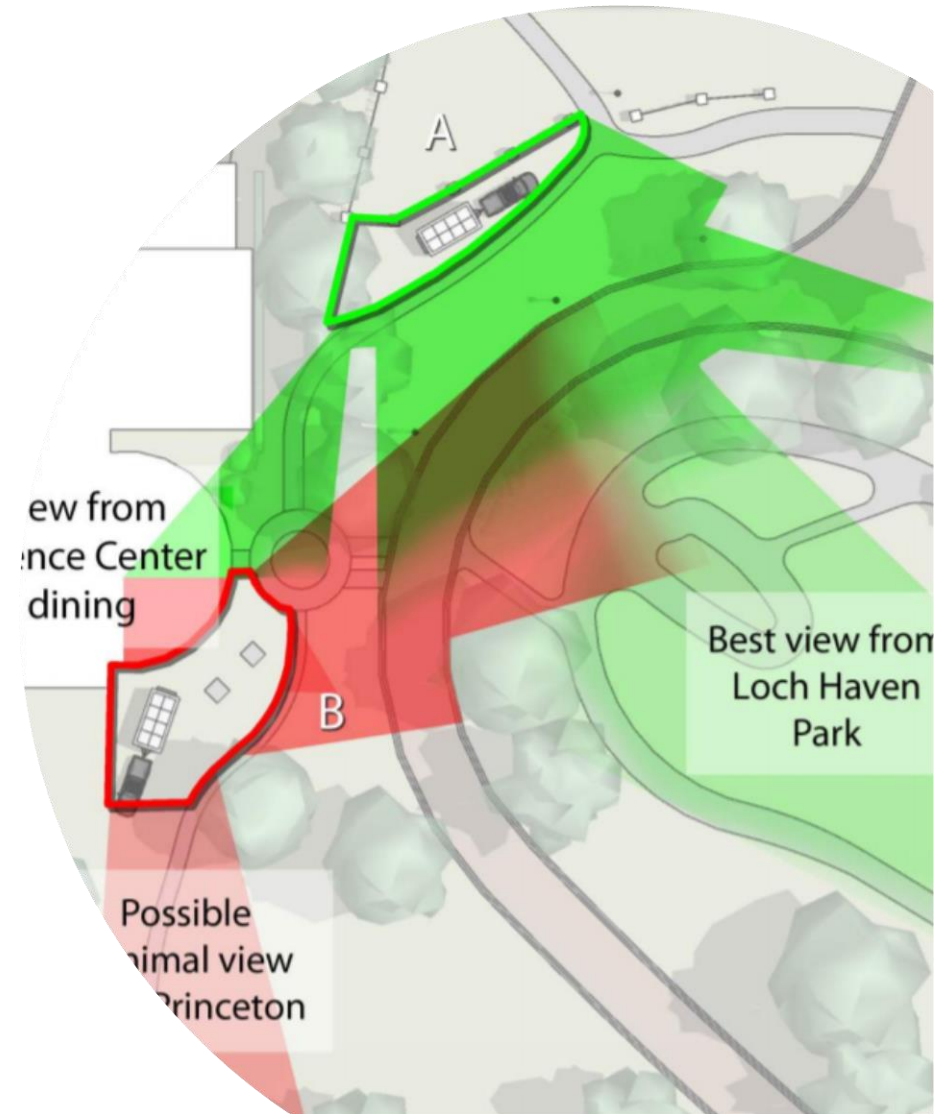


Design & Operation

Concept views



Park views





Front – operating hours



Front – closed periods

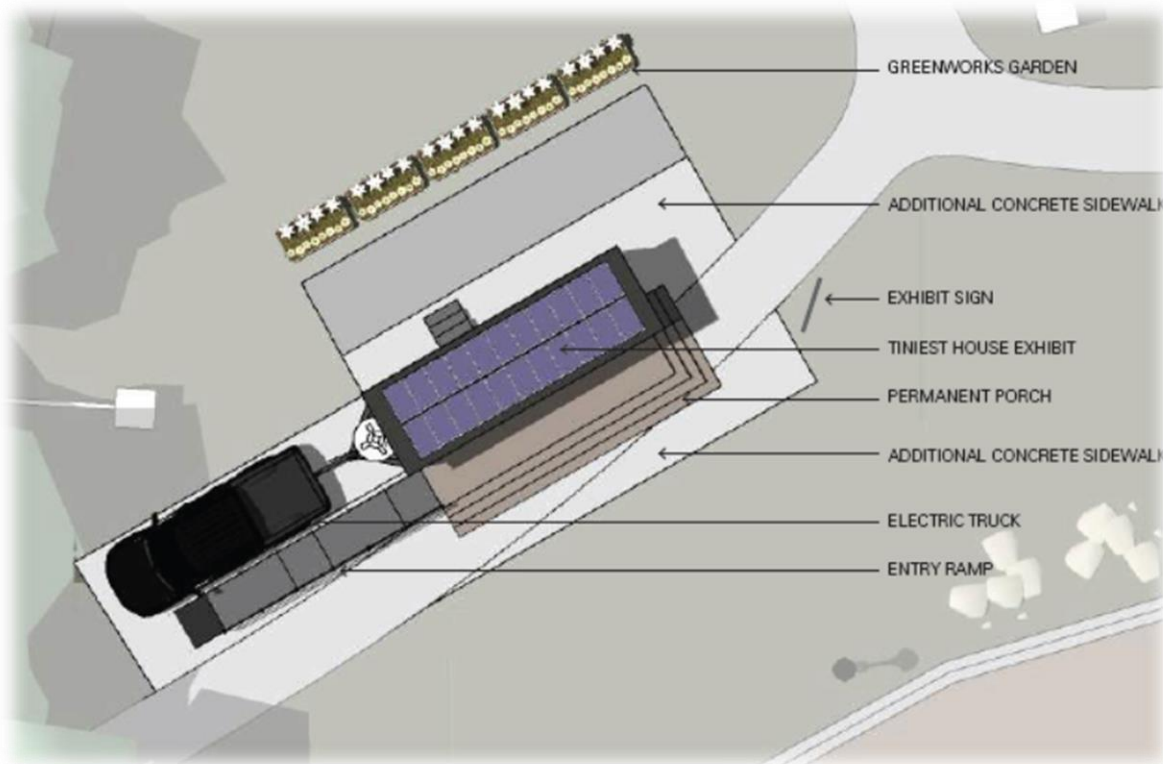
Rear



Signage



Site considerations



Deployments to community events will bring the exhibit to highly visible events, like Earth Day festivals and other community events up to twelve times a year.

Loch Haven Park design considerations include:

- Pad: fiber reinforced concrete (10x20', 8-12" thick)
- Entry ramp (aluminum)
- Visitor deck (wooden)
- Sidewalk: reinforced 6" concrete
- Exterior signage: "Tiny Green Home"
- Curb: removable ramp
- Security: Daily checks and lock-up, LED street light

Schedule

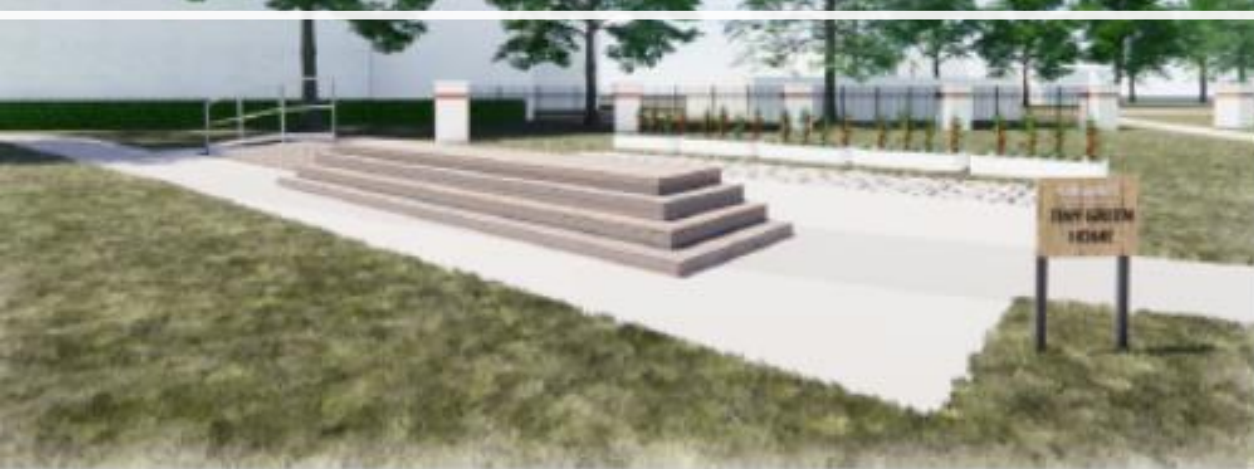
Open: The exhibit will be open during peak season (Jun-Aug) with additional weeks all year

Staffing: OSC will deliver exhibit programming during normal operating hours, 1-2 staff present

Mobility: City and OUC will also be taking the exhibit to various community events throughout the year, approximately 6-12 times per year

January - 4 Weeks							February - 5 Weeks							March - 4 Weeks							OSC Closed to Public OSC Closed to All Peak Attendance			
WK #	MO	TU	WE	TH	FR	SA	SU	WK #	MO	TU	WE	TH	FR	SA	SU	WK #	MO	TU	WE	TH		FR	SA	SU
1			1	2	3	4	5	5	27	28	29	30	31	1	2	10	2	3	4	5	6	7	8	
2	6	7	8	9	10	11	12	6	3	4	5	6	7	8	9	11	9	10	11	12	13	14	15	Weekend (non-peak)
3	13	14	15	16	17	18	19	7	10	11	12	13	14	15	16	12	16	17	18	19	20	21	22	Weekday (non-peak)
4	20	21	22	23	24	25	26	8	17	18	19	20	21	22	23	13	23	24	25	26	27	28	29	
								9	24	25	26	27	28	29	1									
April - 4 Weeks							May - 5 Weeks							June - 4 Weeks										
WK #	MO	TU	WE	TH	FR	SA	SU	WK #	MO	TU	WE	TH	FR	SA	SU	WK #	MO	TU	WE	TH	FR	SA	SU	
14	30	31	1	2	3	4	5	18	27	28	29	30	1	2	3	23	1	2	3	4	5	6	7	
15	6	7	8	9	10	11	12	19	4	5	6	7	8	9	10	24	8	9	10	11	12	13	14	
16	13	14	15	16	17	18	19	20	11	12	13	14	15	16	17	25	15	16	17	18	19	20	21	
17	20	21	22	23	24	25	26	21	18	19	20	21	22	23	24	26	22	23	24	25	26	27	28	
								22	25	26	27	28	29	30	31									
July - 4 Weeks							August - 5 Weeks							September - 4 Weeks										
WK #	MO	TU	WE	TH	FR	SA	SU	WK #	MO	TU	WE	TH	FR	SA	SU	WK #	MO	TU	WE	TH	FR	SA	SU	
27	29	30	1	2	3	4	5	31	27	28	29	30	31	1	2	36	31	1	2	3	4	5	6	
28	6	7	8	9	10	11	12	32	3	4	5	6	7	8	9	37	7	8	9	10	11	12	13	
29	13	14	15	16	17	18	19	33	10	11	12	13	14	15	16	38	14	15	16	17	18	19	20	
30	20	21	22	23	24	25	26	34	17	18	19	20	21	22	23	39	21	22	23	24	25	26	27	
								35	24	25	26	27	28	29	30									
October - 4 Weeks							November - 5 Weeks							December - 4 Weeks										
WK #	MO	TU	WE	TH	FR	SA	SU	WK #	MO	TU	WE	TH	FR	SA	SU	WK #	MO	TU	WE	TH	FR	SA	SU	
40	28	29	30	1	2	3	4	44	26	27	28	29	30	31	1	49	30	1	2	3	4	5	6	
41	5	6	7	8	9	10	11	45	2	3	4	5	6	7	8	50	7	8	9	10	11	12	13	
42	12	13	14	15	16	17	18	46	9	10	11	12	13	14	15	51	14	15	16	17	18	19	20	
43	19	20	21	22	23	24	25	47	16	17	18	19	20	21	22	52	21	22	23	24	25	26	27	
								48	23	24	25	26	27	28	29	53	28	29	30					

Deployed



Deployments will bring the exhibit to highly visible community events, like Earth Day festivals and other popular activities up to twelve times a year.

Project Timeline

Approvals: Alliance Board (June); Family, Parks & Rec (July) City Council (Aug)

Construction off-site: Exhibit unit (Aug – Oct)

Construction on-site: Site preparation: pad and gardens (Aug-Sep)

Launch: Oct – Nov 2020

Retirement: Earliest Oct 2022, extension pending

Site restoration: included in partner agreement

American Cities Climate Challenge



Thank You!

Questions?