



Horticulture at Zoo New England AND Planting 250 Trees in 72 Hours

Josh Meyer | Curator of Horticulture & Sustainability | Jmeyer@zoonewengland.org

MNLA Plant Geek Day

08/28/24

In Memory of Steve Burns



Steven E. Burns

d. July 30, 2024
Holbrook

Steve was an avid outdoorsman who enjoyed spending time with family and friends, hunting, fishing, boating, or just admiring nature. He spent his entire forty plus year career at Arborway Tree Care as a Certified Arborist, a "Tree Doctor" he would say.

In lieu of flowers, donations may be made in memory of Steve to the Franklin Park Zoo and Stone Zoo (one of his favorite accounts) for use in tree care.

Please send to: "In Memory of Steve Burns", Development Office, Zoo New England, One Franklin Park Road, Boston, MA 02121





GORILLA GROVE

Gorilla

TROPICAL FOREST

Baird's Tapir
Giant Anteater
Gorilla
Green Anaconda
Pygmy Hippopotamus
Ring-Tailed Lemur
Spotted Hyena
Two-Toed Sloth

BIRD'S WORLD

Kea
Kookaburra
White-Naped Crane
EXHIBITS INSIDE BUILDING
• Swamp • Rainforest
• Scrubland • Riverbank
RAPTOR RIDGE
Andean Condor
Stellar's Sea Eagle

Franklin Park Zoo

Visitor Guide

Staffing



FRANKLIN FARM

Barn Owl
Chicken
Contact Corral (weather permitting)
Goat
Guinea Hog
Mini Donkey
Poitou Donkey

KALAHARI KINGDOM/ TIGER TALES

Bactrian Camel
Lion
Red River Hog
Tiger

BUTTERFLY HOLLOW

(seasonal)

OUTBACK TRAIL

Aussie Aviary (seasonal)
Emu
Kiwi
Red Kangaroo

SERENGETI CROSSING

Cape Porcupine
Hartmann's Mountain Zebra
Ostrich
Warthog
Wildebeest

CHILDREN'S ZOO

Blanding's Turtle
Hooded Crane
Muntjac
Prairie Dog
Red-Breasted Goose
Red Panda
Spotted Turtle

GIRAFFE SAVANNAH

Grevy's Zebra
Masai Giraffe

Stone Zoo Visitor Guide

Staffing

- TREETOPS AND RIVERBEDS**
- Colobus Monkey
 - North American River Otter
 - White-Cheeked Gibbon

- BARNYARD**
- Goat
 - Pygmy Zebu
 - Sheep

- HIMALAYAN HIGHLANDS**
- Black-Necked Crane
 - Markhor
 - Snow Leopard
 - Yak

- MEXICAN GRAY WOLVES**



- CARIBBEAN COAST**
- Bush Dog
 - Caribbean Flamingo
 - Jamaican Iguana
 - Macaws

- YUKON CREEK**
- Arctic Fox
 - Bald Eagle
 - Black Bear
 - Lynx
 - North American Porcupine
 - Reindeer

- TREASURES OF THE SIERRA MADRE**
- Chacoan Peccary
 - Coati
 - Cougar
 - Gila Monster
 - Jaguar
 - Peregrine Falcon
 - Seba's Short-Tailed Bat

- WINDOWS TO THE WILD**
- African Spurred Tortoise
 - Central American Agouti
 - Cotton-Top Tamarin
 - Rock Hyrax
 - Inca Tern
 - Prehensile-Tailed Porcupine
 - Rock Hyrax
 - Two-Toed Sloth

- ANIMAL DISCOVERY CENTER**
- Box Turtle
 - California Kingsnake
 - Leopard Gecko
 - Panamian Golden Frog
 - Poison Dart Frog
 - Rosy Boa

Zoo Horticulture

- Beautification / guest experience
- Browse program / growing food / enrichment
- Landscape management / toxics
- Exhibit design

Landscaping | Horticulture | Grounds
AZA and AZH

Fauna first
Mission first



Zoo Horticulture Planting Philosophy

- Mostly natives when possible.
- Include plants native to fauna's habitat if possible.
- When appropriate, non-native plants to match texture and visuals of fauna's habitat
- Toxic plants cannot go in exhibits but may be approved by vet staff to go in protected nearby areas.
- When experiencing a lower percentage of native plants, go for species with high biodiversity impact.

Planting philosophy + zoo needs = CHALLENGE



BROWSE

Browse and Branches For Zoo Animals
(Please call Animal Care on ALL CALL or via email when cutting)

Austree	Linden
Bamboo	Maple (all spp. except red)
Beech	Magnolia
Birch	Mulberry
Cottonwood	Russian Olive
Elm	Sweet gum
Forsythia	Sumac
Grapevine	Tulip Tree
Hackberry	Viburnum (leatherleaf & sweet)
Honey locust	Willow & Pussy Willow
Knotweed	Witch hazel

Tall grasses for nesting material (Giraffe burm)
Oak branches for furniture only (not browse)





FURNITURE



TROPICALS

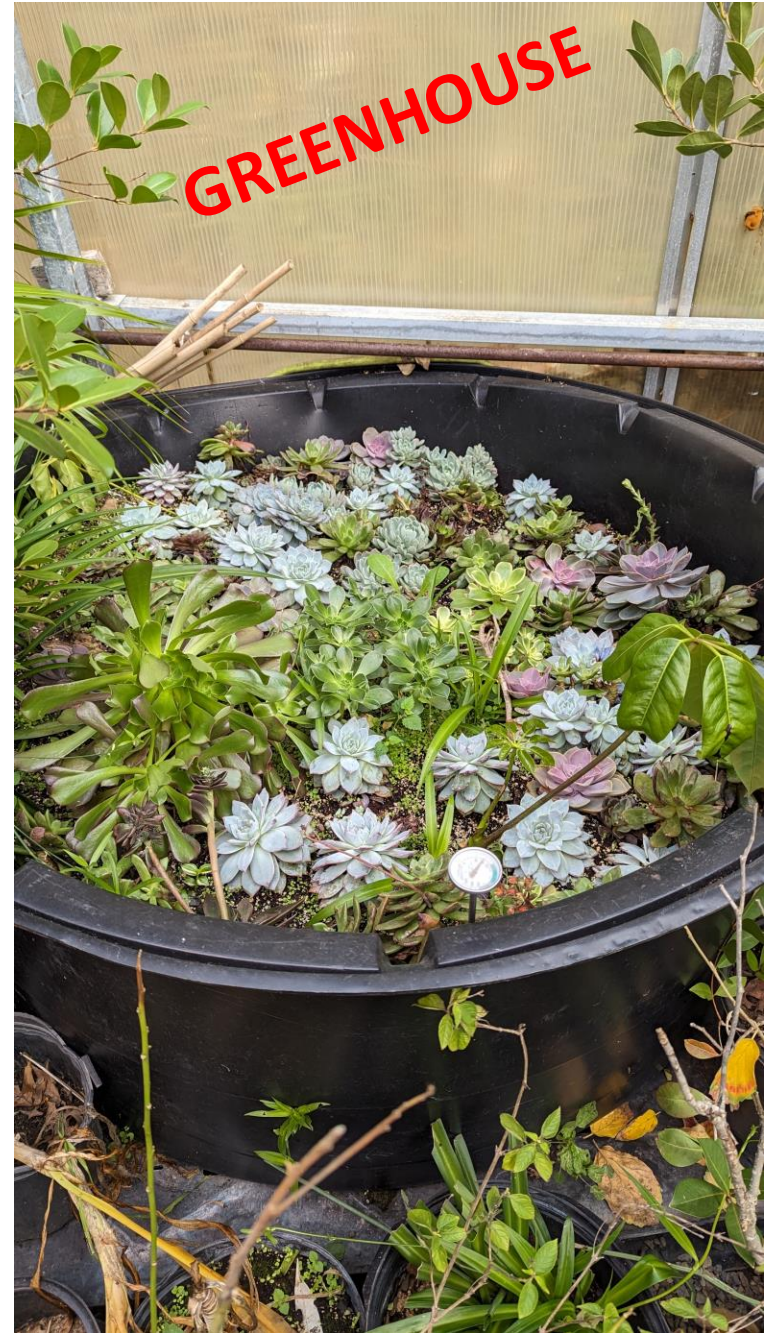
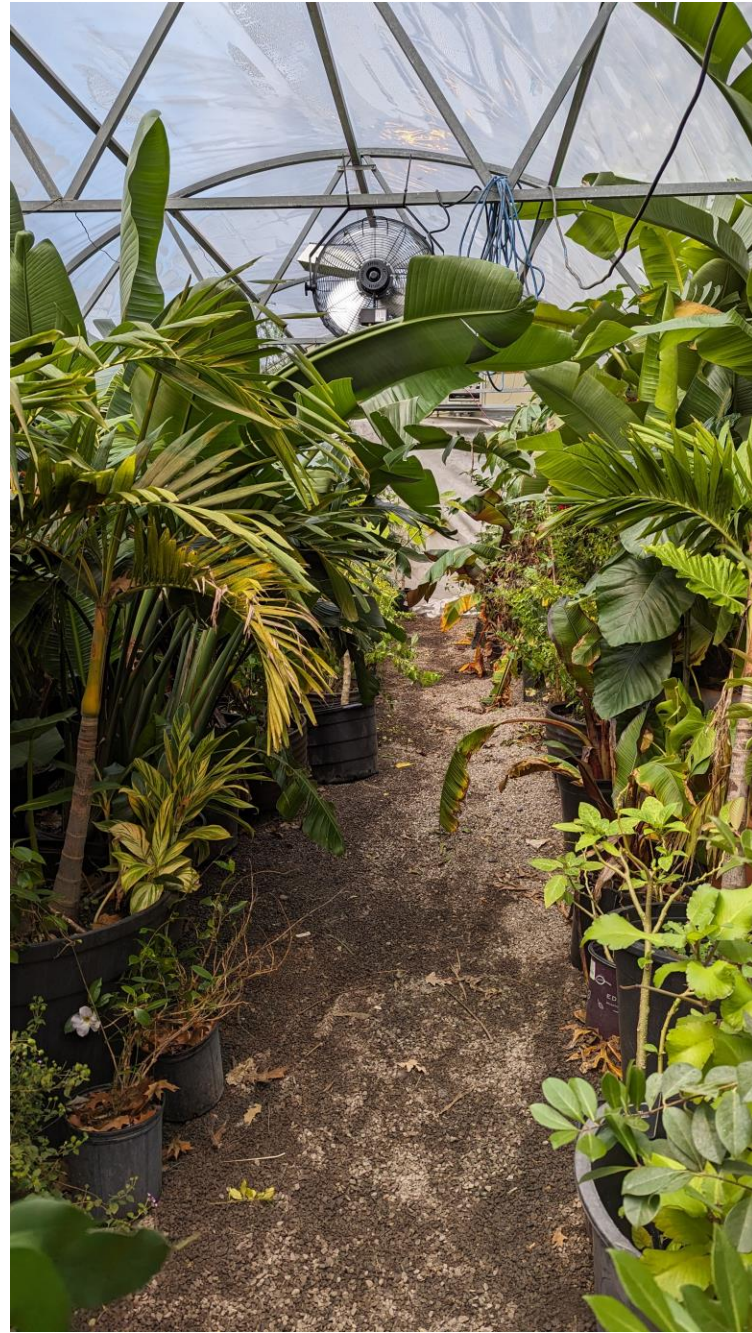


BEAUTIFICATION

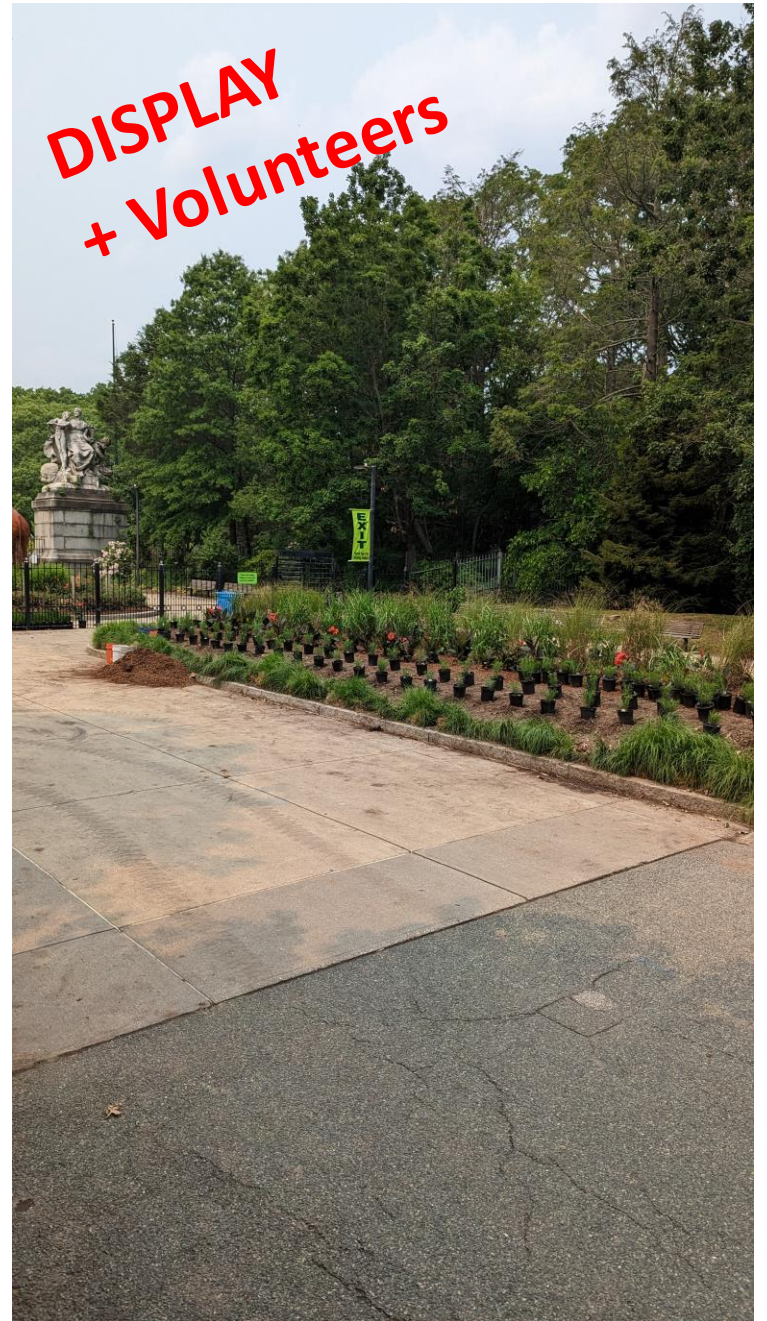












**DISPLAY
+ Volunteers**





BONSAI



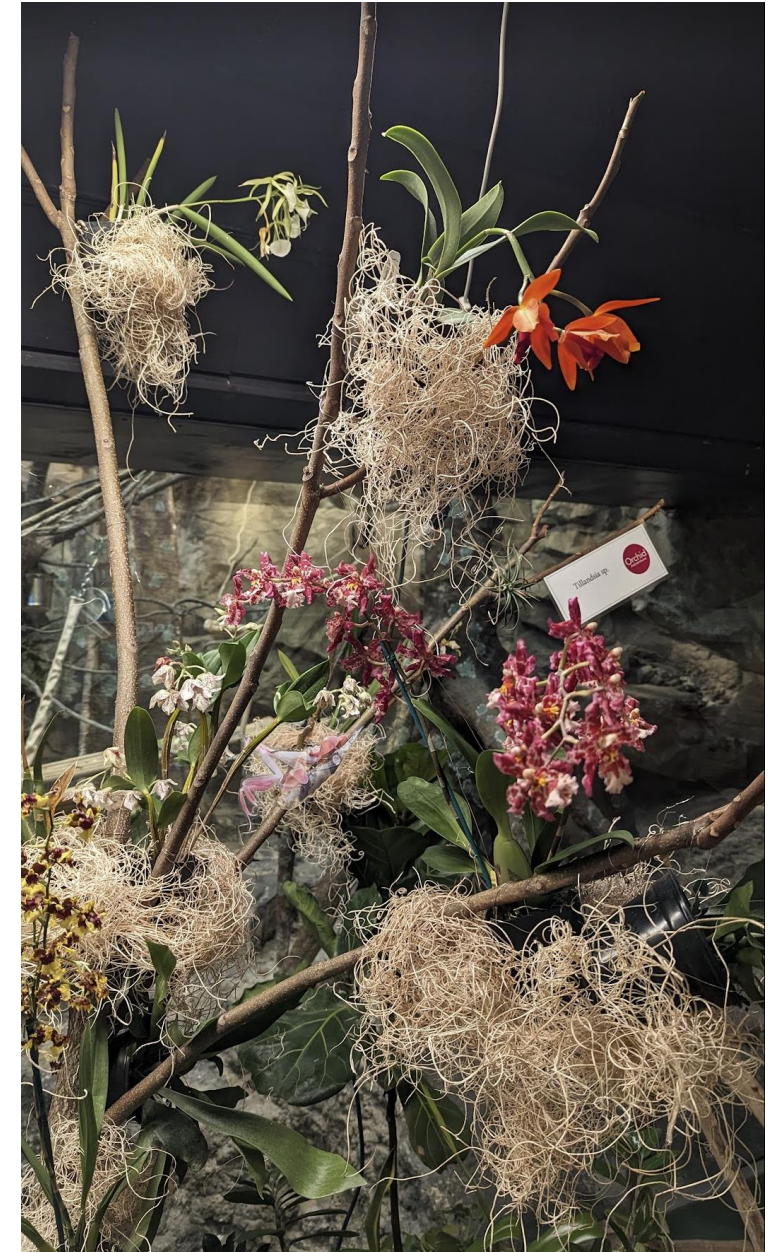


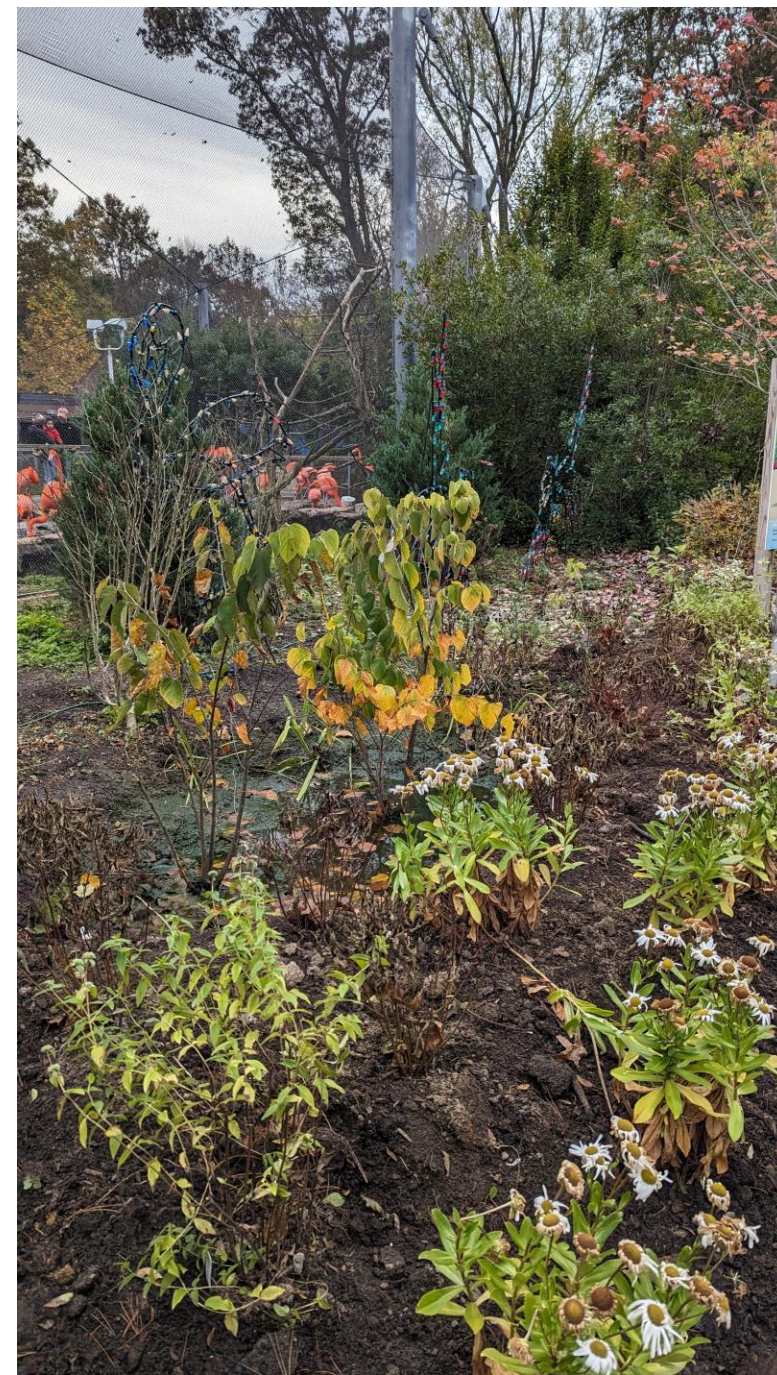
NEW ENGLAND

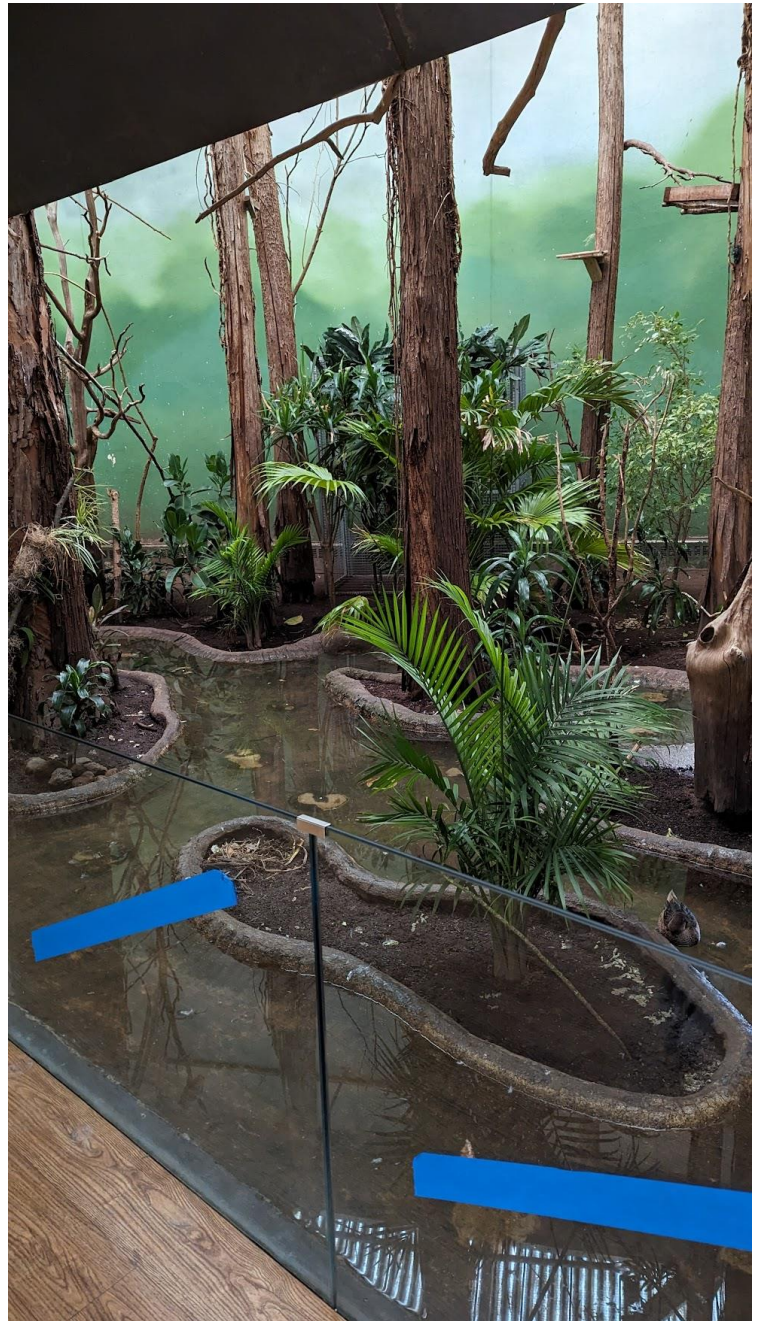
Franklin Park Zoo • Stone Zoo

2024 ORCHID SHOW

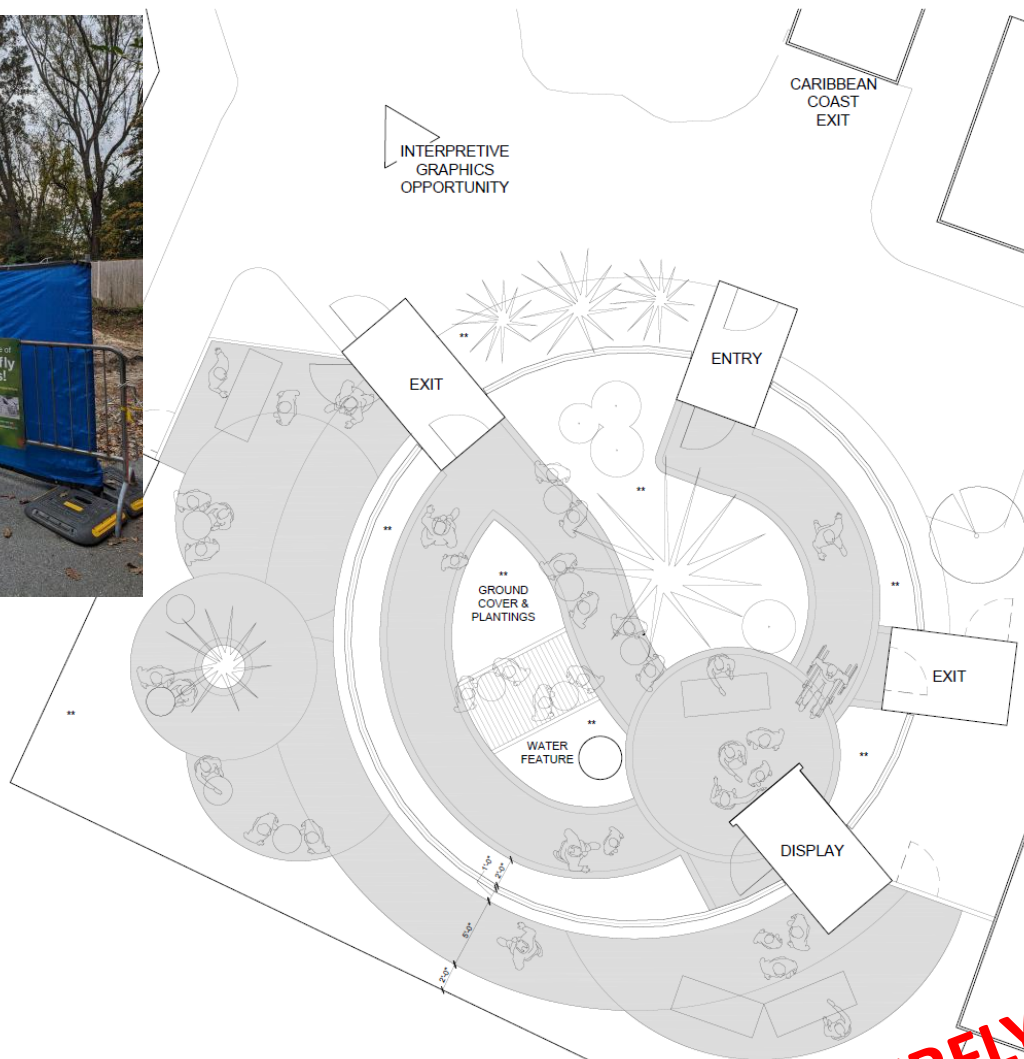
FRANKLIN PARK ZOO











1 LAYOUT PLAN (DRAFT)
SCALE: 1/4" = 1'-0"

**BUTTERFLY
EXHIBIT: STONE
ZOO**

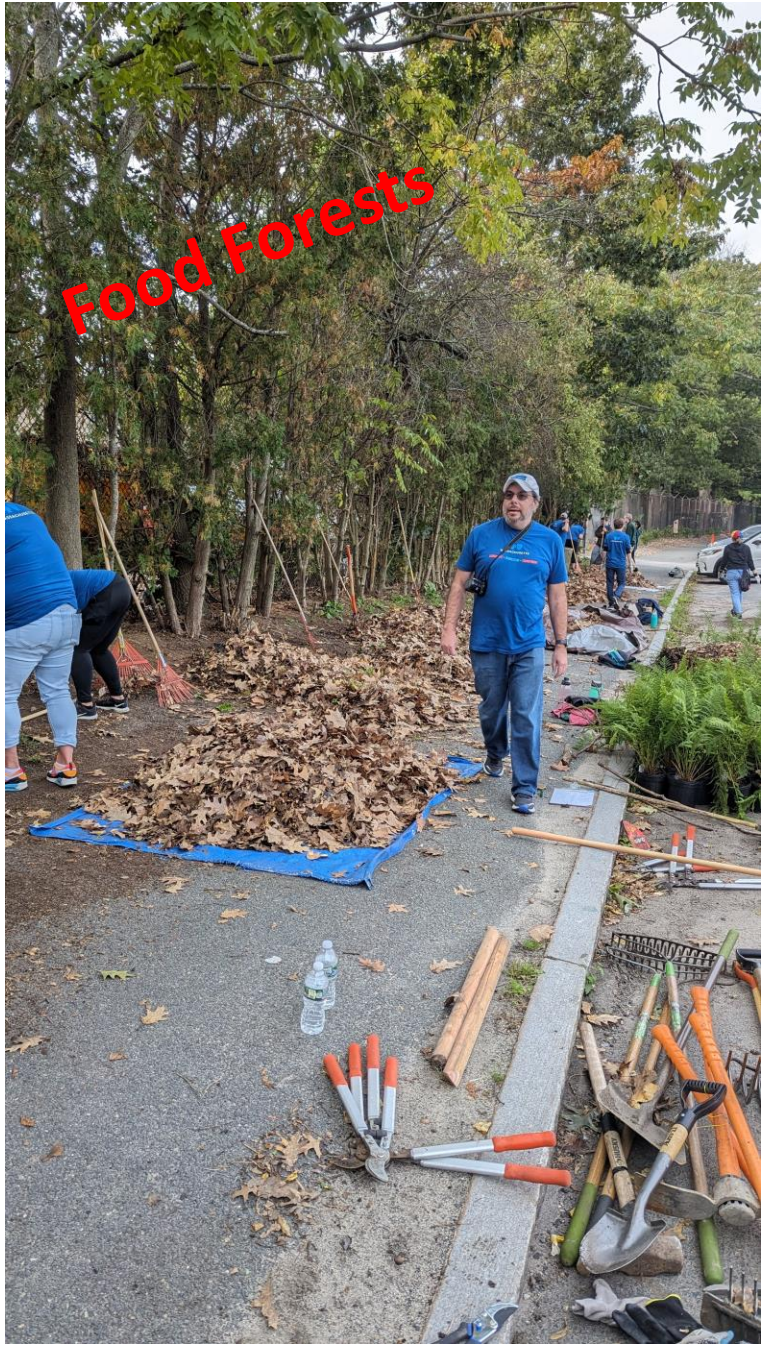




ROCK GARDEN



10192





Education, Communication and Climate Literacy

Climate Policy

Visitor and Community Engagement

Mitigation

Resilience

Climate Justice

Wildlife Conservation



NEW ENGLAND

Franklin Park Zoo ♦ Stone Zoo

Climate Action

- ▶ Increase climate literacy by sharing information about climate as a system that shapes human wellbeing as well as habitats that support biodiversity locally and around the world to increase climate literacy.
 - ▶ Foster hope by sharing information about ways people are already helping to reduce the rate of climate change and preparing for resilience as harmful impacts happen.
 - ▶ Engage a growing number of our audience to help reduce the rate of climate change.
 - ▶ Engage our local communities in the co-design of programs that mitigate climate change or foster community resilience as climate-related events impact our region.
 - ▶ Align with the Carbon Free Boston initiative to become carbon neutral by 2050 by significantly reducing greenhouse gas emissions that contribute to climate change.
- Additionally, we aim to implement the following mitigation goals:

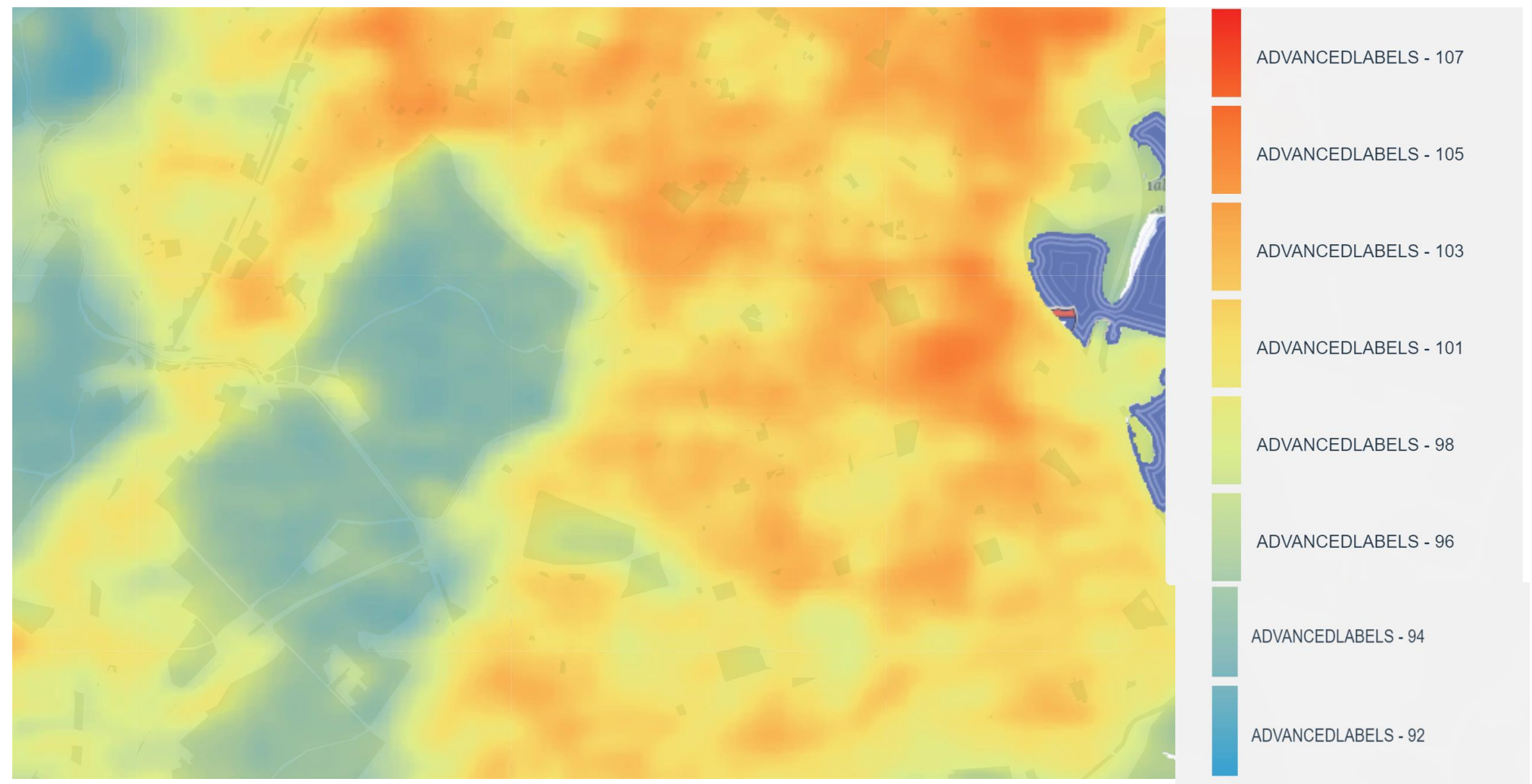
 - Reduce GHG Emissions
 - Enhance Carbon Sinks
 - Implement Sustainable Materials Procurement
 - Implement Sustainable Waste Management
 - Implement Sustainable Transportation
- ▶ Leverage ZNE resources and partnerships to address climate-related equity challenges in the communities we serve.
 - ▶ Consider all field conservation activities through a climate lens to improve adaptation and resilience to climate impacts.
 - ▶ Assist communities in and around our field sites to improve their adaptation and resilience to climate impacts.
- ▶ Increase organizational impact on climate change policy at three levels:
 - ▶ Engage the public to advocate for positive climate policy actions at the local, state, and federal level.
 - ▶ As an institution, advocate directly for policies related to climate change.
 - ▶ Join with the larger AZA community to jointly advocate for positive climate legislation.
- ▶ Optimize energy efficiency for systems that safeguard animal health, visitor comfort and staff comfort.
 - ▶ Prepare for Extreme Weather and Develop Disaster Planning Scenarios
 - ▶ Implement Sustainable Water Practices

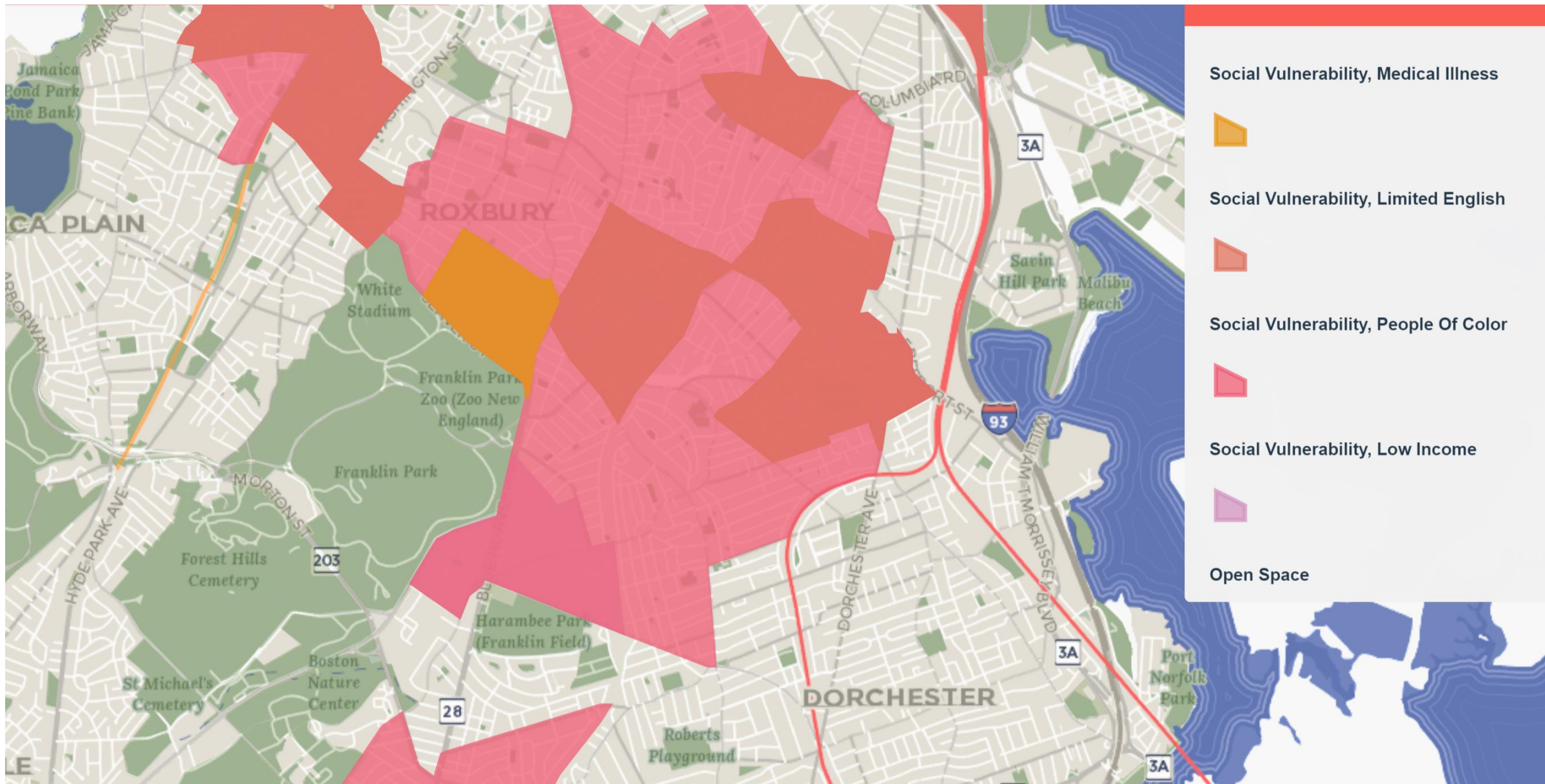
Call to Action (why this plan, why now?)

- **Living collections are greatly impacted by climate change.**
- **We have a lot of acreage and responsibility to our community**
- **We reach over 1 million visitors a year / have a great opportunity to educate.**
- **ZNE is connected to many local government initiatives that prioritize climate action (Boston's climate goals, Franklin Park Action Plan, etc)**
- **Embarking on many new building / deferred maintenance projects.**
- **We need a plan to tackle sustainability initiatives efficiently and effectively.**



This map shows the modeled daytime air temperature at 3pm during a week long analysis in July 2019. Daytime temperatures are higher in dense areas and large paved spaces and lower in well shaded spaces and areas with significant tree canopy.







Title

Zoo New England Tree Protection Policy

Authored by Josh Meyer

Purpose

The purpose of this policy is to promote a diverse, healthy and sustainable collection of trees in order to support the Zoo New England (ZNE) mission rooted in conservation, education, community, and guest experience. Specifically, this policy applies to ZNE’s two properties being Franklin Park Zoo in Boston’s Dorchester neighborhood as well as Stone Zoo in Stoneham, MA.

The preservation of existing trees and the promotion of new tree planting is a public purpose that protects the public health, welfare, environment and aesthetics of the surrounding community and its citizens. The urban forests of ZNE properties serves a wide variety of functions, which promote the health, safety and welfare of staff, guests, living collections, and nearby residents.

These functions include¹:

- (a) conserving energy, by providing shade and evaporative cooling through transpiration;
- (b) improving local and global air quality by absorbing carbon dioxide and ozone, absorbing particulate matter, and producing oxygen;
- (c) reducing wind speed and directing air flow;
- (d) reducing noise pollution;
- (e) providing habitat for birds, small mammals, and other wildlife;
- (f) reducing storm runoff and the potential for soil erosion; and
- (g) increasing real property values;

Additionally, this policy seeks to align with and is furthermore overridden by relevant state and local bylaws and regulations related to tree protection when applicable. This includes:

The Code of the Town of Stoneham, Massachusetts, Chapter 24: Trees²

City of Boston, MA Ordinance 7-15: Establishing protections for the city of Boston tree canopy³

City of Boston, Urban Forest Plan⁴



¹ City of Cambridge
² <https://www.stoneham-ma.gov/DocumentCenter/View/1234/CH24-Trees>
³ <https://www.boston.gov/sites/default/files/file/2021/08/0858.PDF>
⁴ <https://www.boston.gov/departments/parks-and-recreation/urban-forest-plan>



V 1.0

Tree Replacement and Canopy Regeneration Plan

Franklin Park Zoo

Zoo New England

9/2023

Josh Meyer

An aerial photograph of the Franklin Park Zoo area. The image shows a mix of green spaces, including a golf course and various wooded areas, alongside residential neighborhoods with houses and streets. A red location pin with the letter 'A' is placed on the map, pointing to a specific area within the zoo grounds. The text "Franklin Park Zoo" is written in white next to the pin. In the upper left, a large stadium with a green field is visible. The overall scene is a blend of natural and urban environments.

P-1

A new specimen red pine is the only recommendation for planting due to restrictions from the perimeter fence. Food forest shrubs should be prioritized.

Z-2

Up two 20 canopy and 20 understory trees should be planted along the public pathways. Recommended species include oak, sweetgum, maple, redbud, cherry, holly and hickory.

P-2

A total of 35 canopy trees as well as 70 understory trees can be planted in this area.

Blue Hill Ave area: plant 25 understory and 10 canopy trees. Outside Seaver St: plant 20 understory and 5 canopy trees. Inside Seaver St: plant 25 understory and 20 canopy.

Z-1

There's space for approximately 25 new canopy trees: 5 between A2 and Condor; 12 around Australia; and 8 on Glen lane. More oak, maple, and hickory should be considered. Additionally, there's ample space for the planting of 25 understory trees. Native understory and specimens should be considered.

Z-3

Aim to plant at least 20 oaks. Aim to diversify with hickory species, at least 10-15. Grow nursery of 20 willow / austree in barn 4 yard. Use redbud as an understory specimen in public areas.



Z-4

Plant 20 canopy and 20 understory trees along Glen Rd.

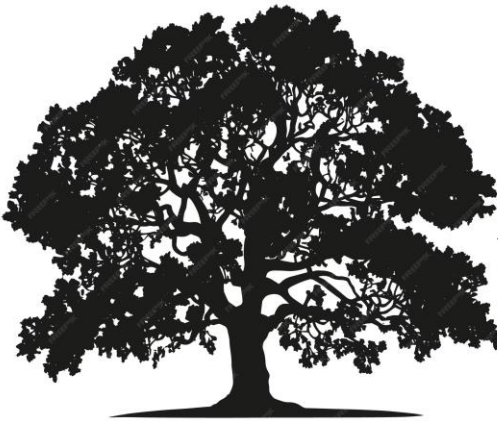
P-4

Food forest trees should be considered in the public areas along Circuit Dr. There is room to plant up to 50 canopy and 50 understory here. Inside of the perimeter fence, there is ample space to plant up to 100 species using the entirety of the species list with special attention paid to diversity.

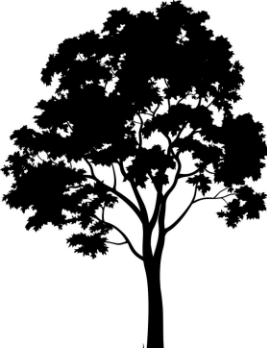
P-3

Pause on tree planting until new design comes out.

Ideal dominate canopy species at Franklin Park Zoo



Oak(s)



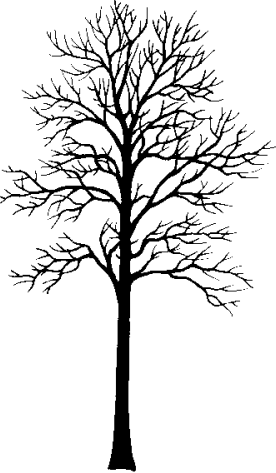
Maple(s)



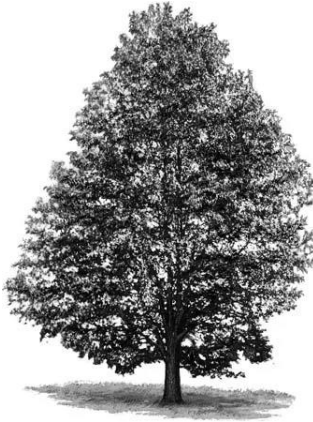
Hickory(s)



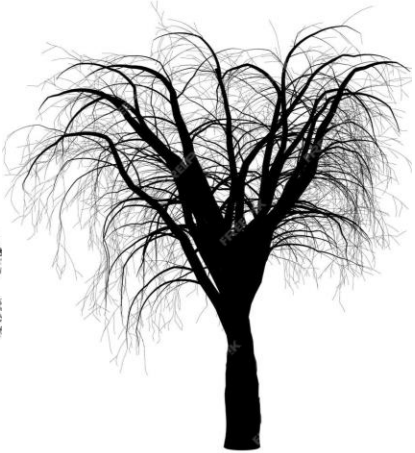
Birch(es)



Tulip Poplar



Sweetgum



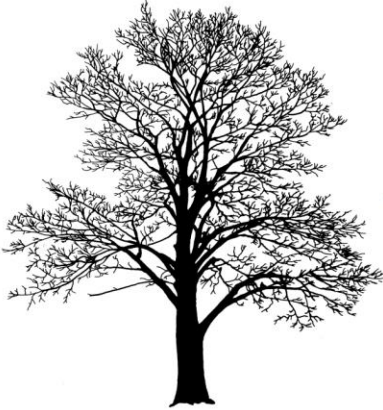
Black Willow



Catalpa



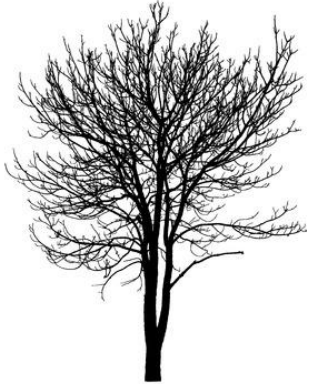
Hackberry



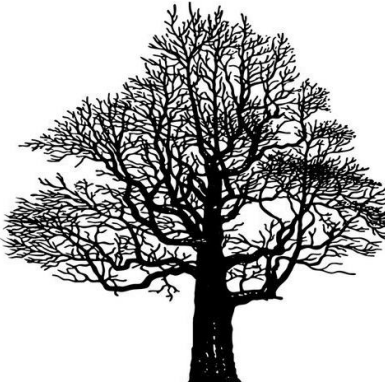
Persimmon



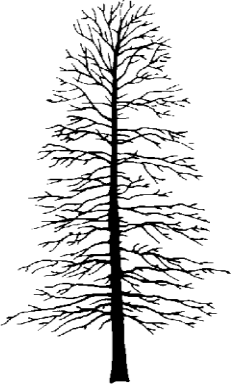
White Spruce



Sassafras



American Sycamore



Black Gum

Ideal dominate understory species at Franklin Park Zoo



Pawpaw

Birch

Am. Hornbeam

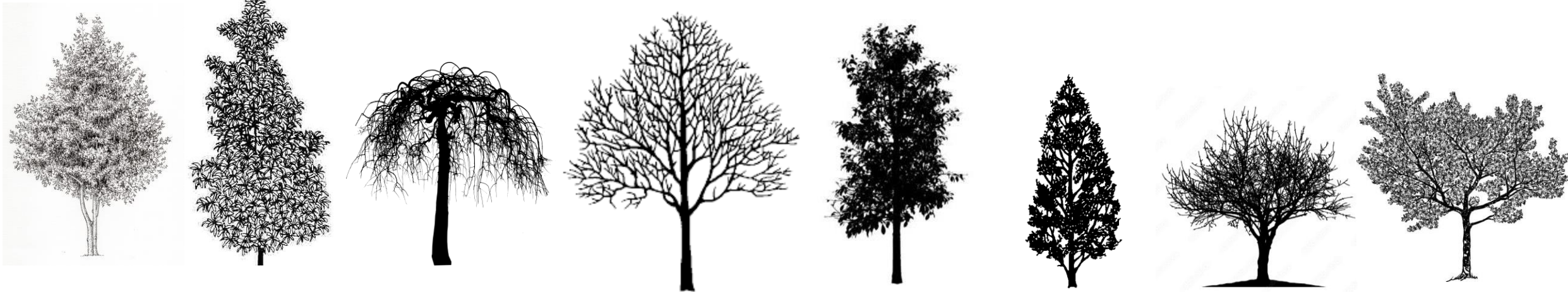
Redbud

Dogwood

Hawthorne

Carolina Silverbell

Witchazel



Am. Holly

Magnolia

Mulberry

Hophornbeam

Sourwood

E. Red Cedar

Cherry

Apple

250

Canopy trees to plant

250

Understory trees to plant

500

TREES

In

10 YEARS

2023

P-1
75 shrub
food forest
planted

P-1
A new
specimen
red pine

2024-25

P-2
Blue Hill Ave area:
plant 25
understory and 10
canopy trees.
Outside Seaver St:
plant 20
understory and 5
canopy
trees. Inside
Seaver St: plant 25
understory and 20
canopy.

Z-3
Grow nursery
of 20 willow
/ austree in
barn 4 yard.

2026-27

Z-4
Plant 5 canopy
and 5
understory trees
along Glen Rd.

Z-4
Plant 15 canopy
and
15 understory
trees along Glen
Rd.

P-2
Inside Seaver
St: plant 25
understory and
20 canopy.

2028-29

Z-2
Up two 20
canopy and 20
understory trees
should be
planted along
the public
pathways.

Z-1
There's space
for
approximately
25 new canopy
trees: 5
between A2
and Condor; 12
around
Australia; and 8
on Glen
lane. Additiona
lly, there's
ample space for
the planting of
25 understory
trees.

2030-31

P-4
Plant up to
25 canopy and
25 understory
on the inside of
the perimeter
fence.

P-4
Plant up to 50
canopy and
50 understory
on the outside
of the perimeter
fence.

2032-33

Z-3
Plant at least 20
oaks and 10-
15 hickory species,
Use 10-20 redbud
as an understory
specimen in public
areas.

P-3
Pause on tree
planting until new
design comes out.

P-4
Plant up to
25 canopy and
25 understory
on the inside of
the perimeter
fence.



CARING FOR
OUR COMMUNITY & TREES
VOLUNTEER WORK
COURTESY OF 

 LOOK UP! 



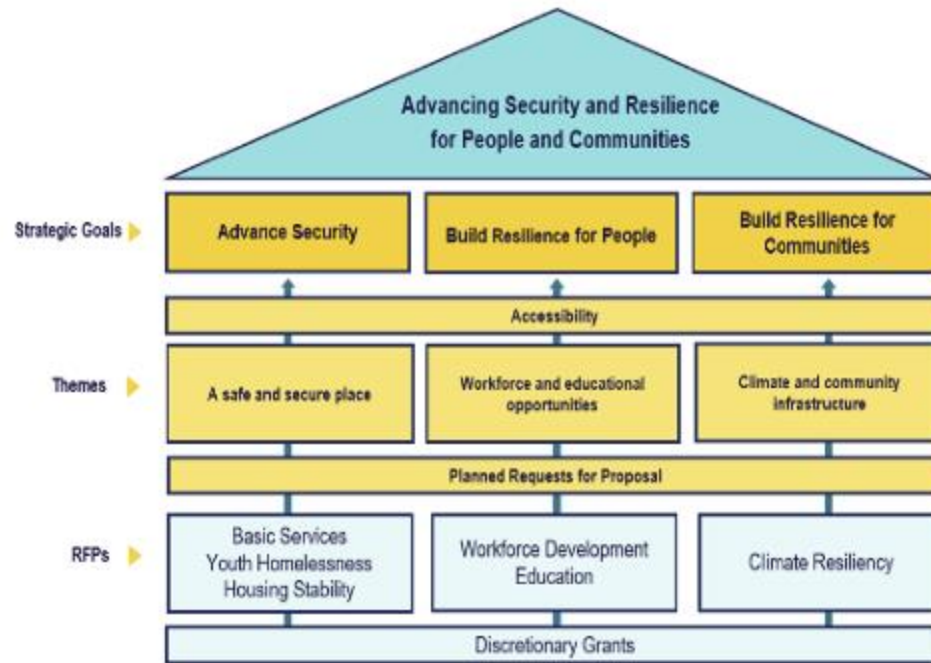

Liberty Mutual.
INSURANCE

Community Investments

Corporate Giving | Torchbearers | Community Engagement

2024 Grantmaking Framework & Overview

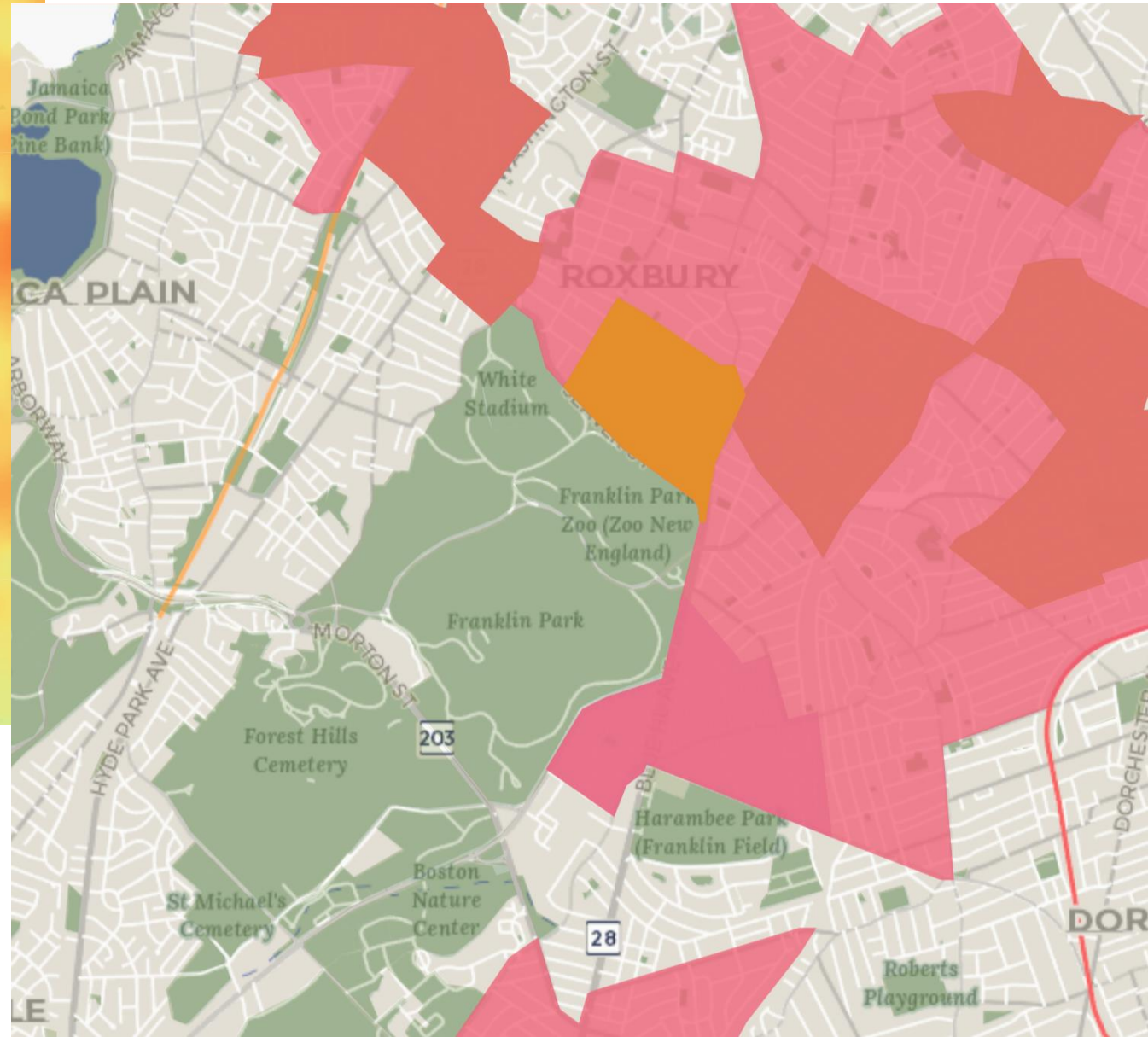
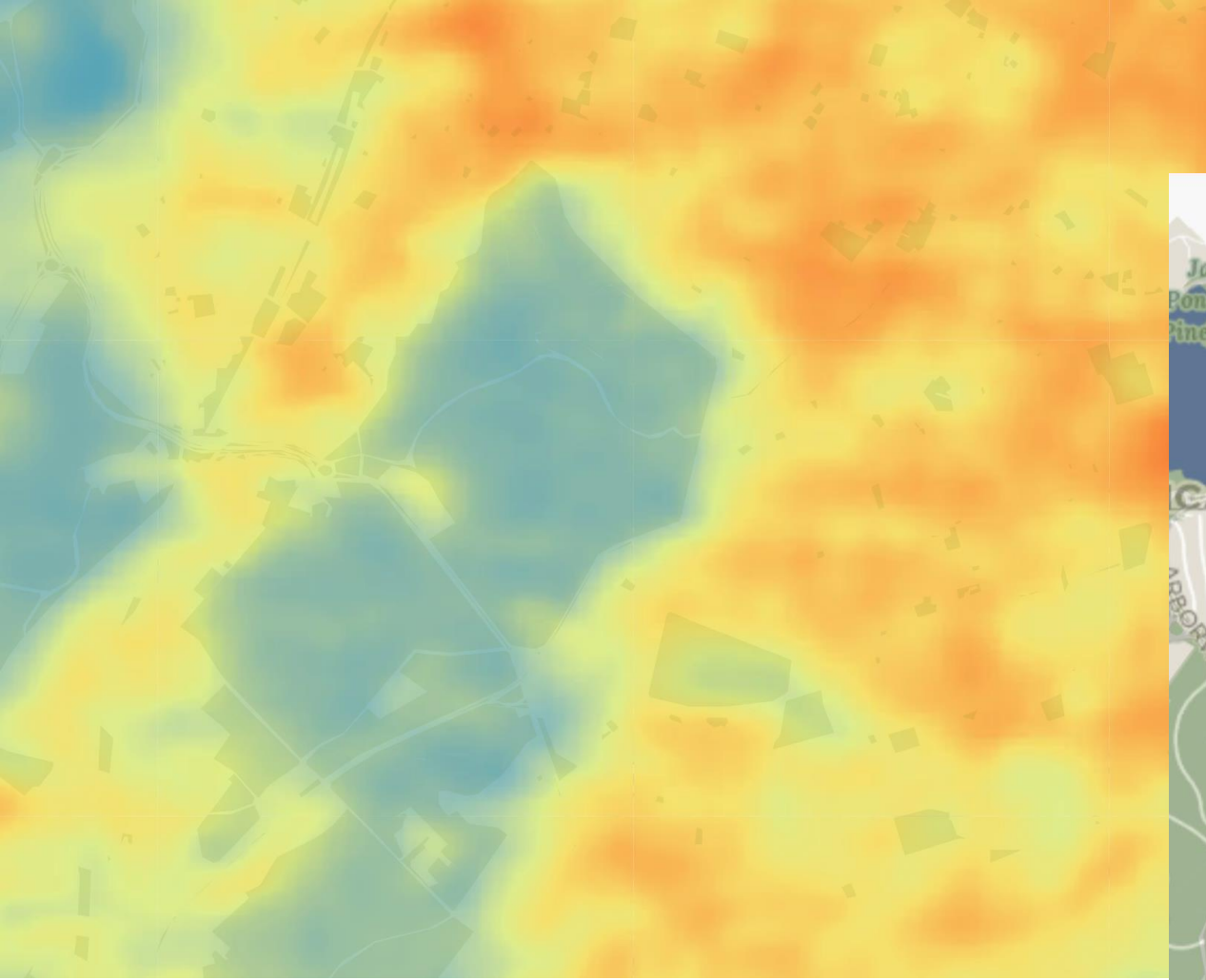
Liberty Mutual Foundation Framework



Liberty Mutual Foundation works to advance the security and resilience for people and communities. Simply stated, we are **Building Resiliency for People** and **Building Resiliency for Communities**. As a Mutual company it is at the heart of our business and the center of our community partnerships. Our Strategic Goals, Programmatic Themes, and ultimately our RFP Initiatives emerge from this framework.

Additionally, as we champion issues of Diversity, Equity and Inclusion in all that we do, accessibility, is at the forefront of our approach. We prioritize community initiatives dedicated to advancing access for people with disabilities. To that end, the Foundation gives preference to organizations and

programs with thoughtful and clearly articulated plans for the inclusion of people of all abilities.



**Zoo New England (ZNE)
Franklin Park Zoo
Department of Horticulture**

**Request for Proposals:
RFP 24 Tree Planting and Installations at Franklin Park Zoo**

Section 1 – Overview and Schedule

A. Executive Summary

Zoo New England’s Franklin Park Zoo is seeking proposals from qualified vendors to provide landscape services for the planting of 250 bare root trees on their property within a 72 hour time period.

Specific tasks include the following:

1. Reading site plans to identify planting locations.
2. Reading corresponding plant labels and tags to correctly select designation locations and species.
3. Digging holes, preparing site, planting bare root tree, and backfilling per ANSI standards or similar.
4. Adding tree protection and watering equipment (such as tree watering bags) per ANSI standards or similar.
5. Performing all of the above work within a 72 hour time period while preventing plant material from drying out.

B. Schedule

The following table provides a Schedule of Events for this RFP through contract finalization and approval. Zoo New England (ZNE) reserves the right to amend this schedule at its sole discretion and at any time through a published Addendum.

EVENT	DATE	LOCAL TIME
RFP Released to Proposers (Advertisement)	3/01/2024	
Deadline for Submitting Proposals	3/09/2024	5:00 PM
Estimated Notification of Selection	3/13/2024	12:00 PM
Estimated Commencement of Tree Planting Project	4/8/2024	7:00 AM



Proposal #:	L2024-1145 (Franklin Park Zoo)	Date:	03/13/2024
Customer:	Zoo New England	Attn:	Josh Meyer
Address:	1 Franklin Park Rd.	Phone #:	207-233-5945
Address:	Boston, MA 02121	Email:	jmeyer@zoonewengland.org
		Submitted By:	Eric Moorehead

**PROPOSAL SPECIFICATIONS AND COST ESTIMATE
(Tree Planting Installations at Franklin Park Zoo)**

This Proposal is to plant 250 bare root trees at Franklin Park Zoo in a 3-day, 72-hour period.

All 250 trees will be supplied by Zoo New England. ZNE will also be responsible for marking all tree locations prior to the start of work. ZNE will supply all soil, tree protection and watering bags.

Skinner Overlook Landscape and Design Inc agrees to supply all necessary labor and hand tools to complete this project in a 72-hour period. In the event of heavy machinery being required, upon agreement with ZNE a change order will be made for the machine and operator at a cost of \$175 per hour paid by ZNE.

Project start date: April 1, 2024.

Why bare root?

- **Value**
- **Aggressive canopy goals**
- **Supported case studies (small scale)**

Goals / Selection Criteria

- Increase canopy
- Add natives
- Add browse
- Add enrichment
- Confident in establishing
- Colorful understory
- Successional oak planting
- Oak alternatives
- Try out urban tolerant natives
- Deep shade options

Ordr Qty	Ackn Qty	Item Description	Price	Amount
25	25	OSTRYA VIRGINIANA 1" HOP HORNBEAM	\$79.52	\$1,988.00
25	25	QUERCUS BICOLOR 'JFS-KW12' 1.25" AMERICAN DREAM SWAMP WHITE OAK	\$82.53	\$2,063.25
25	25	QUERCUS MACROCARPA 'JFS-KW14' 1" COBBLESTONE BUR OAK	\$75.67	\$1,891.75
25	25	CATALPA SPECIOSA 1" PURPLE CATALPA	\$78.80	\$1,970.00
25	25	CELTIS OCCIDENTALIS 9' HACKBERRY	\$41.75	\$1,043.75
25	25	LIRIODENDRON TULIPIFERA 'JFS-OZ' 1.5" EMERALD CITY TULIP TREE	\$91.81	\$2,295.25
25	25	ACER SACCHARUM 'LEGACY' 1.25" LEGACY SUGAR MAPLE	\$96.70	\$2,417.50
25	25	CERCIS CANADENSIS 'UMN7101' 7' HEART'S DESIRE REDBUD	\$78.56	\$1,964.00
25	25	CRATAEGUS PHAENOPYRUM 5' WASHINGTON HAWTHORN	\$35.97	\$899.25
25	25	QUERCUS BICOLOR 1" SWAMP WHITE OAK	\$63.70	\$1,592.50
25	25	BETULA NIGRA 'CITY SLICKER' 5' CITY SLICKER BIRCH	\$23.17	\$579.25
25	25	MALUS 'DONALD WYMAN' 1" DONALD WYMAN CRAB	\$52.58	\$1,314.50
300	300		NET AMOUNT + FREIGHT TAX EXEMPT	\$20,019.00 \$420.00
			TOTAL	\$20,439.00







5

INSERT TREE GUARD, THEN ADD ONE STAKE AND SECURE WITH A STRAP AND TIE OFF WITH ROPE. TREE DIAPER ADDED LATER.

PLANTING BARE ROOT TREES

QUICK GUIDE

ADD A LAYER OF COMPOST, THEN A LAYER OF MULCH

PLANT THE TOP OF THE ROOT ABOVE GROUND LEVEL.

FILL WITH 75% NATIVE SOIL 25% COMPOST

CREATE A BERM AROUND THE TREE TO KEEP WATER IN

3

DIG a SQUARE HOLE TWICE THE WIDTH & DEPTH of the ROOT BALL

1



NEW ENGLAND
Franklin Park Zoo • Stone Zoo

2

4

NOTE

Width of planting hole is at least 3 times root ball diameter in highly compacted soil; at least 2 times root ball diameter in all other types of soil.

2-4" (5-10 cm) layer of mulch over root ball and backfill.

Root collar and top of root ball should be at grade in well-drained soil; up to 4" (10 cm) above grade in poorly drained soils. Be sure the root collar is exposed.

Keep mulch away from trunk base and root collar.

If staking is necessary, use one or two stakes with separate flexible ties. Stakes and ties should remain no longer than one year.

Raised ring of soil to direct water into rootball — especially important if top of root ball is raised above grade.

Use native soil to backfill. No soil amendments are necessary.

TYPICAL PLANTING SITE
Some sites will require special modifications.

Extend stakes into undisturbed soil.

Set ball on undisturbed soil to prevent settling.

Cut burlap, rope and wire basket away from root ball. Remove entirely if possible.

Gently pack backfill soil around base of root ball to stabilize; allow rest of backfill to settle naturally, or tamp lightly.

DETAILED GUIDE

PLANTING MAP

- OSTRYA VIRGINIANA 1"
- HOP HORNBEAM
- QUERCUS BICOLOR 'JFS-KW12' 1.25"
- AMERICAN DREAM SWAMP WHITE OAK
- QUERCUS MACROCARPA 'JFS-KW14" 1"
- COBBLESTONE BUR OAK
- CATALPA SPECIOSA 1" PURPLE
- CATALPA
- CELTIS OCCIDENTALIS 9'
- HACKBERRY
- LIRIODENDRON TULIPIFERA 'JFS-OZ' 1.5"
- EMERALD CITY TULIP TREE
- ACER SACCHARUM 'LEGACY' 1.25"
- LEGACY SUGAR MAPLE
- CERCIS CANADENSIS 'UMN7101' 7'
- HEART'S DESIRE REDBUD
- CRATAEGUS PHAENOPYRUM 5'
- WASHINGTON HAWTHORN
- QUERCUS BICOLOR 1" -
- SWAMP WHITE OAK
- BETULA NIGRA 'CITY SLICKER' 5'
- CITY SLICKER BIRCH
- MALUS 'DONALD WYMAN' 1"
- DONALD WYMAN CRAB

ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5
QB 8	QB 3	CS 12	CP 7	CC 4
BN 10	AS 11	M 'DW' 8	M 'DW' 5	AS 3
CP 5	CP 4	BN 7	CS 3	LT 2
M 'DW' 6	LT 5	QM 8	QM 3	OV 7
CC 6	CS 4	CP 9	CO 16	QM 3
	CC 4	OV 7	LT 2	CO 1
	OV 7	AS 6	QB 9	
	QM 4	CC 5	CC 1	
		QB 14	OV 4	
		LT 11	BN 3	
		CO 8		



gate access for Z4; ZNE staff required

Sources: <https://www.treesformissoula.org/planting-trees>



Five Month Progress Report

Recommended Bare Root Install?

Observations

25	OSTRYA VIRGINIANA 1" <i>HOP HORNBEAM</i>	Yes	Does ok in shade
25	QUERCUS BICOLOR 'JFS-KW12' 1.25" <i>AMERICAN DREAM SWAMP WHITE OAK</i>	Yes, but water well!	Needs consistent watering; some sun
25	QUERCUS MACROCARPA 'JFS-KW14" 1" <i>COBBLESTONE BUR OAK</i>	No	Did not establish well
25	CATALPA SPECIOSA 1" PURPLE <i>CATALPA</i>	Yes	Took long to leaf out. Patience
25	CELTIS OCCIDENTALIS 9' <i>HACKBERRY</i>	Yes	Can take sun or shade / tough sites
25	LIRIODENDRON TULIPIFERA 'JFS-OZ' 1.5" <i>EMERALD CITY TULIP TREE</i>	Yes, but water well!	Did not do well if neglected
25	ACER SACCHARUM 'LEGACY' 1.25" <i>LEGACY SUGAR MAPLE</i>	Yes	Cultivar establishes well
25	CERCIS CANADENSIS 'UMN7101' 7' <i>HEART'S DESIRE REDBUD</i>	Yes	Takes all conditions
25	CRATAEGUS PHAENOPYRUM 5' <i>WASHINGTON HAWTHORN</i>	Yes	Flowered/seeded first year; has rust
25	QUERCUS BICOLOR 1" <i>SWAMP WHITE OAK</i>	Yes, but water well!	Needs consistent watering; some sun
25	BETULA NIGRA 'CITY SLICKER' 5' <i>CITY SLICKER BIRCH</i>	Yes	Leaf drop when dry
25	MALUS 'DONALD WYMAN' 1" <i>DONALD WYMAN CRAB</i>	Yes	Flowered/seeded first year; has rust



Looking Ahead.....

- Orchid Show February 2025
- Bonsai Show summer 2025

-Planting more trees!





Horticulture at Zoo New England

AND

Planting 300 Trees in 2 Weeks

Josh Meyer | Curator of Horticulture & Sustainability | Jmeyer@zoonewengland.org

MNLA Plant Geek Day

08/28/24