MOORPARK COLLEGE FACILITIES MASTER PLAN UPDATE

AMERICA'S TEACHING ZOO MASTER PLAN

January 14, 2015

Gensler

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Table of Contents


The Wilson Family
Carnivore Habitat
African Lions
America's Teaching Zoo
Hillside Theater

1.0 INTRODUCTION

1.1 Project Overview
Project Purpose

1.2 Project Background
History
Timeline

1.3 Planning Process
Process Overview

1.1 Project Overview

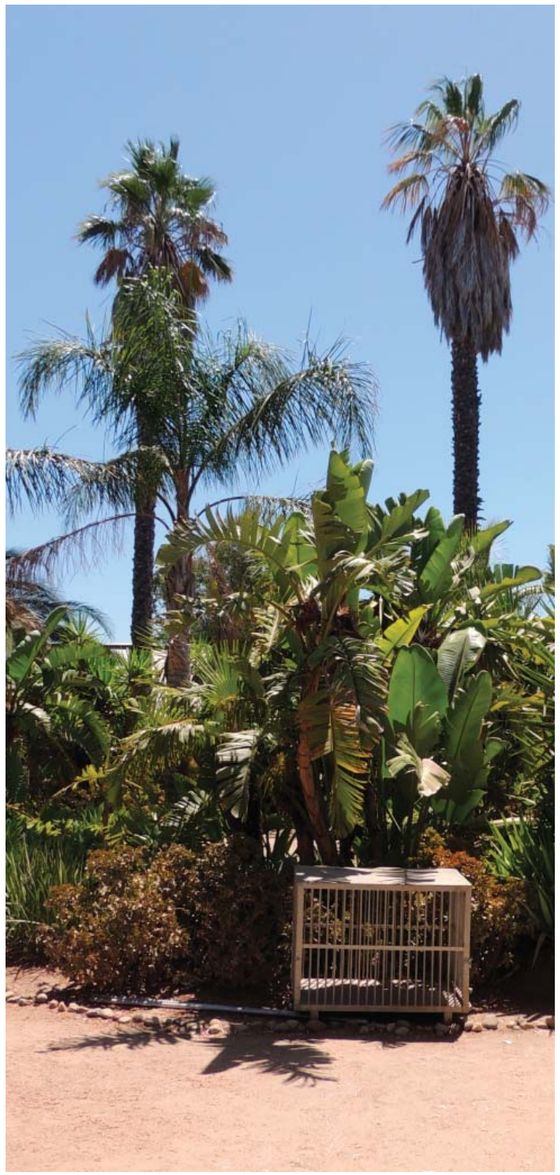
Project Purpose & Description

Moorpark College is preparing a **Facilities Master Plan Update** to guide campus development over the next ten to fifteen years and to support the goals, aspirations and Educational Master Plan of the College. As part of this process, the College has identified the need for a new Master Plan for America's Teaching Zoo.

America's Teaching Zoo (ATZ) is located on the campus of Moorpark College, and supports the College's program in Exotic Animal Training and Management (EATM). The purpose of the **America's Teaching Zoo Master Plan** is to provide a framework for the development of the Zoo over the next decade, in concert with the Moorpark College Master Plan. It will accommodate the physical facility needs of the EATM program, enhance animal welfare and support the Zoo's conservation and education programs.

Moorpark College is unique among California colleges and universities in that it is the only college to offer a program in Exotic Animal Training and Management as well as an on-campus zoo open to the public. The EATM program is distinguished from other community college programs in that over forty percent of the students in the program already have Associate Degrees and twenty-five percent of the students already have a Bachelor Degree. The program serves a diverse student population, ranging in age from recent high-school graduates to older adults returning to school, and attracts students from around the world.

Since the EATM program was established in 1974, its graduates have built careers around the world in animal training, conservation and education. The ATZ Master Plan will ensure the continued growth and success of the EATM program and America's Teaching Zoo and support the educational mission of Moorpark College.

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VIP Tours

1.2 Project Background

History of America's Teaching Zoo

The Exotic Animal Training and Management (EATM) Program was established as a major at Moorpark College in 1974. For the first fifteen years, animals were housed in the "Lower Compound," a collection of animal enclosures constructed near the current football stadium.

In 1990, the EATM Compound was moved to its current location, on a 5 acre site overlooking all of the Moorpark College campus. Animal enclosures were built, and new enclosures are consistently being constructed and updated.

The animal collection has gradually increased over the years as animals were acquired through donations and breeding loans from major zoos and research centers. This extraordinary collection has included exotic animals ranging from marmosets to an Asian elephant, leopard geckos to alligators, turacos to emus. The Zoo is currently home to African lions, spotted hyenas, mountain lions, a wide variety of primates, birds, and many other exotic and endangered animals. New animals are continuously being acquired, as space allows.

As the animal collection grew, so did the program. New courses were developed and enrollment increased. Today, Moorpark College graduates can be found at zoos, aquariums, museums and animal parks around the country, training and caring for exotic animals and educating the public about animals and conservation.

[Excerpted from the Moorpark College website]

Timeline

Information Provided by Moorpark College

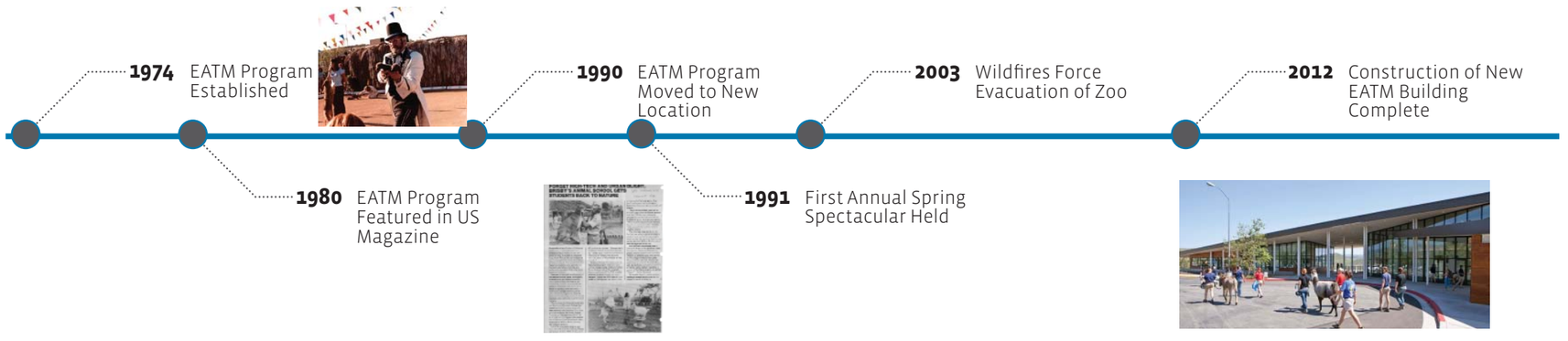


Fig 1.1
Aerial View

1.3 Planning Process

Process Overview

The planning process is organized into five major tasks. Collaboration and input from ATZ / EATM faculty and staff was integrated into the process at each phase.

Project Start Up

The planning process began with a Kick-Off Meeting and Vision Session, which set the stage for ongoing collaboration. At this meeting the consultant team and ATZ / EATM staff worked to establish a vision for the project; identify strengths, weakness, opportunities and threats; and set goals and priorities for the future development of the Zoo.

Existing Site Conditions Analysis

Beginning with an initial site visit, the consultant team has researched and reviewed the existing physical conditions and planning issues. The following chapter summarizes the findings of that analysis, which formed a basis for the development of a Program and Master Plan Options.

Program Analysis

Working with the ATZ / EATM faculty, staff and administrators, the consultant team has evaluated and documented the existing and projected facility needs for the Zoo. The findings of this Program Analysis are presented in Chapter Three of this report, and provided the basis for the development of the Master Plan Options, detailed in Chapter Six.

Master Plan Options

Incorporating the findings of the Existing Conditions Analysis and Program Analysis, the consultant team developed three preliminary Master Plan Options that demonstrate various ways of achieving the goals and principles identified. These planning options illustrate alternatives for land use, circulation and open space. Working together, faculty, staff and administrators and the consultant team evaluated the various approaches and selected a preferred option, which formed the foundation of the final Master Plan detailed in Chapters Seven and Eight.

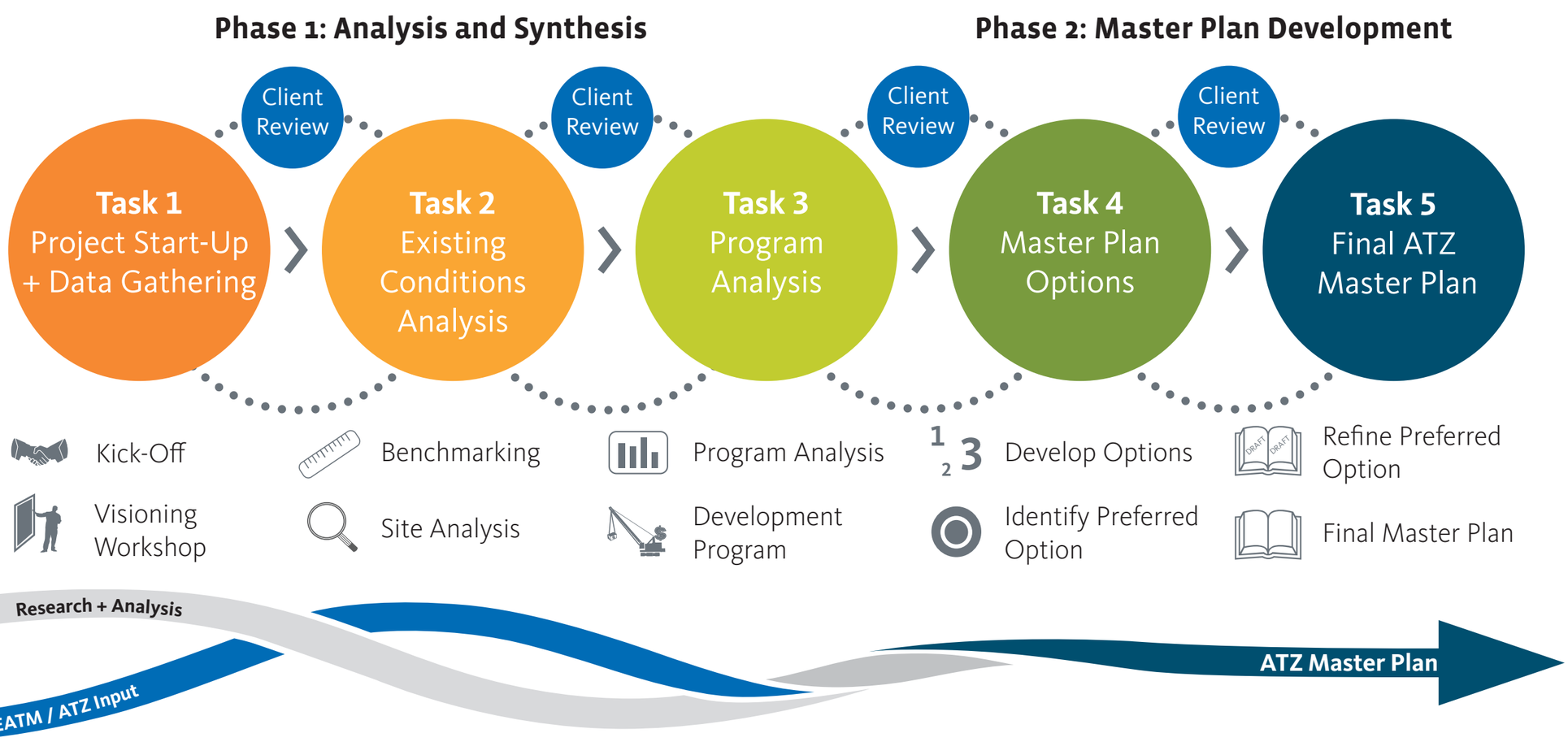


Fig 1.2

Planning Process


The Wilson Family
Carnivore Habitat
African Lions
America's Teaching Zoo
Hillside Theater

2.0 EXISTING CONDITIONS

2.1 Campus Context
- Overview
- Organization
- Project Location

2.2 Built Systems
- Facility Overview
- Facility Condition
- Facility Use
- Infrastructure & Utilities

2.3 Natural Systems
- Topography
- Landscape & Open Space
- Trees

2.4 Visitor Experience
- Amenities
- Animal Exhibits
- Views

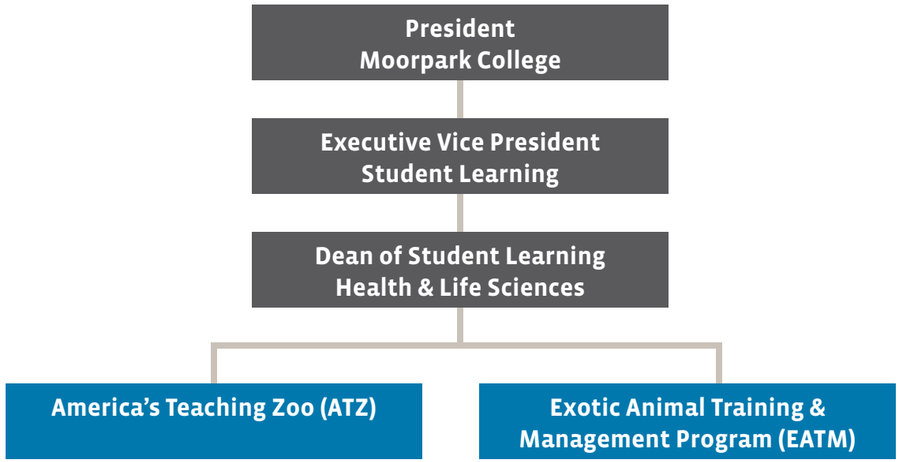
2.1 Campus Context

Overview

America's Teaching Zoo is located in Moorpark, California on the campus of Moorpark College, one of three campuses of the Ventura County Community College District. The Zoo occupies five acres of the 150-acre campus. The EATM Building and Zoo are located to the west of the academic core of the campus, on a ridge overlooking the athletic facilities to the south.

The Zoo is operated in concert with the Exotic Animal Training and Management Program, both of which are overseen by the Dean of Student Learning for Health and Life Sciences.

Organization



Project Location

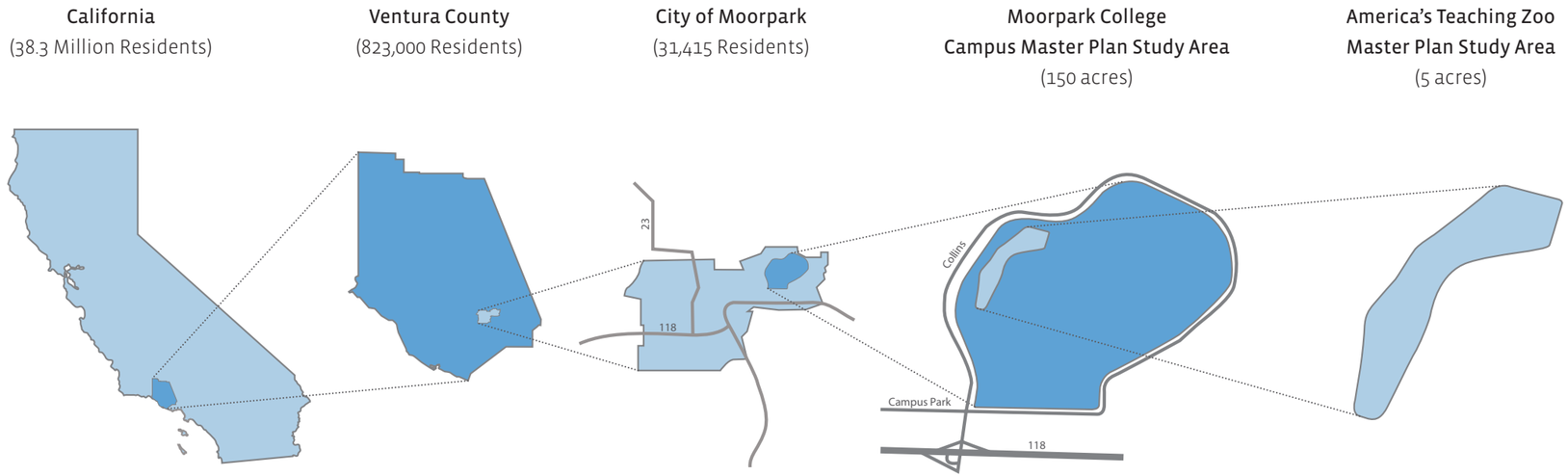


Fig 2.1
Existing Campus

Facilities

(COM) Communications Building
(PA) Performing Arts Building
(A) Administration Building
(HSS) Humanities / Social Sciences Building
(M) Music Building
(FH) Fountain Hall
(LLR) Library Learning Resources
(PS) Physical Sciences Building
(T) Technology / Business Building
(LMC) Life Sciences / Math Building
(HSC) Health Science Center
(SSC) Student Services Annex
(CC) Campus Center
(AA) Applied Arts Building
(CDC) Child Development Center
(AC) Academic Center
(G) Gymnasium
(EATM) EATM Building
(ATZ) America's Teaching Zoo
❶ Observatory
❷ Parking Structure
❸ Maintenance / Operations Center
❹ Baseball Field
❺ Griffin Stadium
❻ Field Hockey Stadium

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Scale 1" = 400'-0" @ 11"x17"
0' 200' 400'

2.2 Built Systems

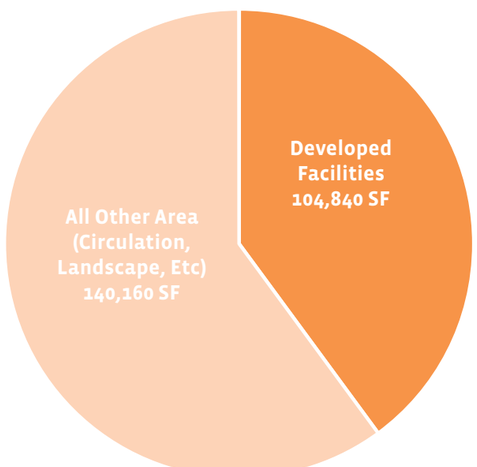
Facility Overview

America's Teaching Zoo encompasses approximately 245,000 square-feet of site area within the current boundaries of the Zoo.

Existing facilities encompass a total area of 104,840 square-feet, covering approximately 40% of the site area within the current Zoo boundary (these figures do not include the EATM Building, which is located outside of the Zoo boundary).

The remaining 60% of the site area is comprised of open space, circulation and landscaped area, as well as undeveloped area.

Site Coverage



Existing Facilities by Area

Facility Number	Facility Name	Existing Net Total Area	Existing Service / Circulation Area	Existing Gross Total Area
1	Zoo Building 1	1,775 SF	N/A	1,775 SF
2	Zoo Building 2	2,820 SF	N/A	2,820 SF
3	Main Theater	8,400 SF	N/A	8,400 SF
4	Picnic Area [Undeveloped]	2,060 SF	N/A	2,060 SF
5	Small Tortoise Exhibit	650 SF	N/A	650 SF
6	Workshop Area	1,600 SF	N/A	1,600 SF
7	Avian Facility (Parrot Gardens)	2,508 SF	12,401 SF	14,909 SF
8	Show Animal Facility	2,472 SF	4,952 SF	7,424 SF
9	Carnivore Facility	4,472 SF	6,657 SF	11,129 SF
10	Small Theater	3,800 SF	N/A	3,800 SF
11	Butterfly Conservation Station	400 SF	600 SF	1,000 SF
12	Domestic Hoofstock Facility	4,641 SF	6,180 SF	10,821 SF
13	Birds of Prey Exhibit	Included in Animal Maintenance		
14	Animal Maintenance	2,130 SF	5,950 SF	8,080 SF
15	Hay Barn / Treatment Room	1,458 SF	N/A	1,458 SF
16	Commissary	1,130 SF	N/A	1,130 SF
17	Primate Gardens	3,540 SF	12,510 SF	16,050 SF
18	Quarantine Area	1,400 SF	10,350 SF	11,750 SF
19	Alligator Habitat	360 SF	N/A	360 SF
20	Galapagos Tortoise Exhibit	1,200 SF	N/A	1,200 SF
21	Aviary	1,500 SF	N/A	1,500 SF
22	Recreation Lawn [Undeveloped]	2,500 SF	N/A	2,500 SF
23	EATM Building [Not Included]			

Note: Picnic Area and Recreation Lawn areas shown for information only. These facilities are not included as developed facilities.

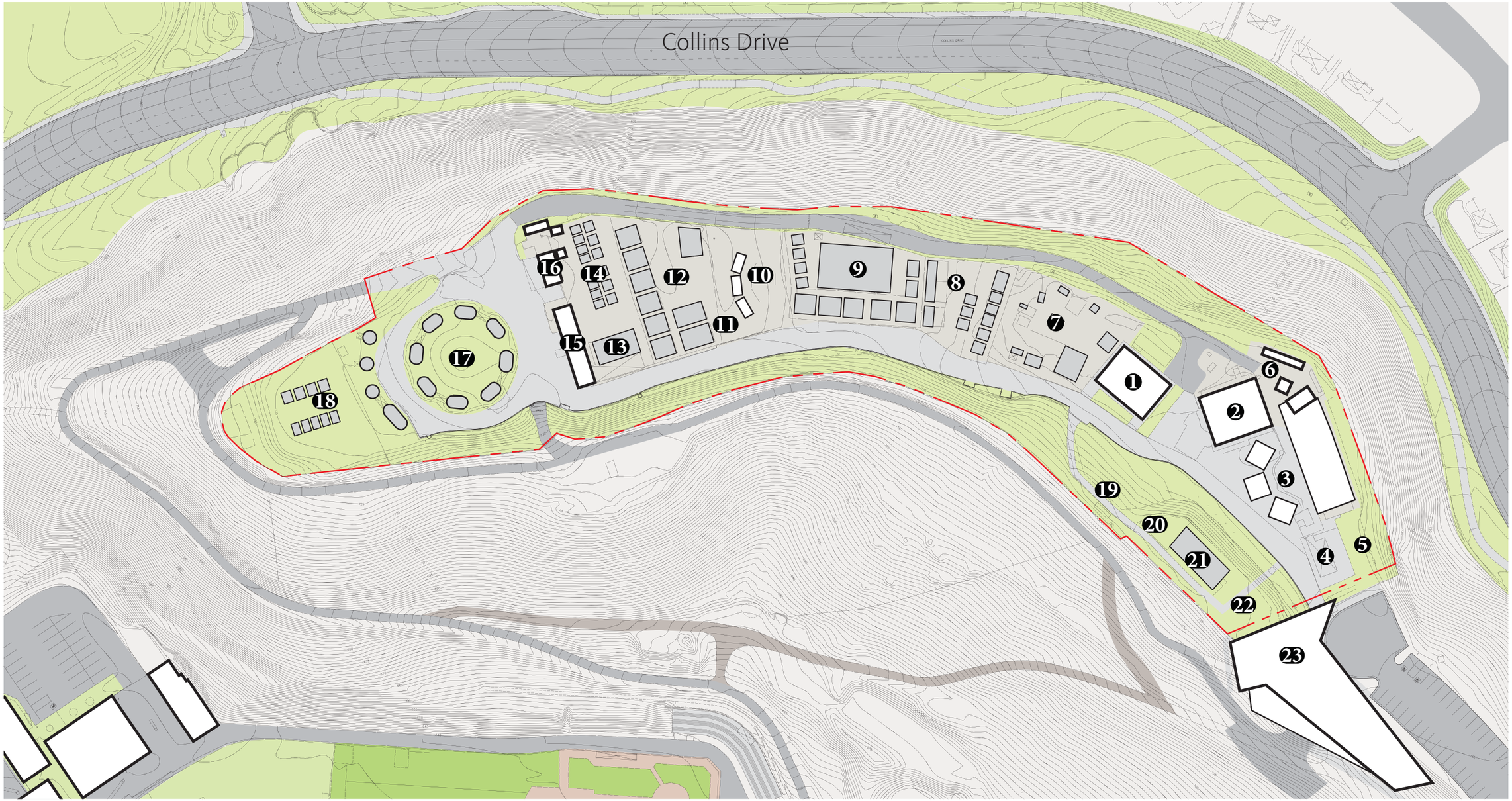


Fig 2.2
Facilities

1. Zoo Building 1
2. Zoo Building 2
3. Main Theater
4. Picnic Area
5. Small Tortoise Exhibit
6. Workshop Area
7. Parrot Gardens
8. Show Animal Area
9. Carnivore Area
10. Small Theater
11. Butterfly Conservation
12. Hoofstock Area
13. Birds of Prey Exhibt
14. Animal Maintenace
15. Hay Barn / Treatment Room
16. Commissary
17. Primate Gardens
18. Quarantine Area
19. Alligator Exhibit
20. Galapagos Tortoise Exhibit
21. Aviary
22. Recreation Lawn
23. EATM Building

Existing Building
Existing Exhibits
Existing Zoo Perimeter

Built Systems

Facility Use

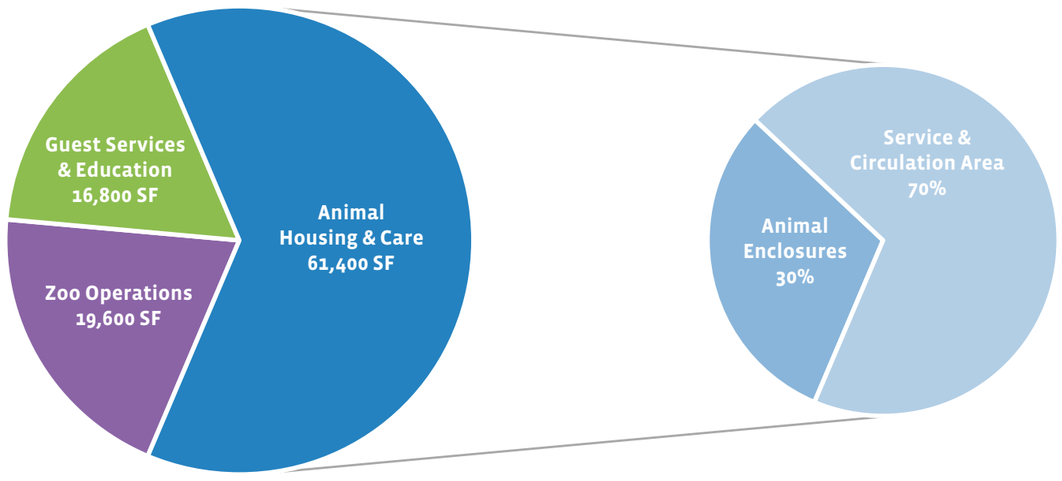
Existing facilities can be categorized in three generalized uses: Animal Housing and Care facilities, Zoo Operations facilities, and Guest Services and Education facilities.

Animal Housing and Care facilities include animal enclosures and the associated service and circulation area enclosed within the secondary barrier of the facility. Animal Housing and Care facilities comprise the majority of the developed area within the Zoo, encompassing a total area of 61,400 square -feet. Of this area, approximately 30% is dedicated to animal enclosures and 70% is used for service and circulation.

Zoo Operations facilities include areas used by ATZ staff as well as EATM students, such as the classrooms and staff offices housed in Buildings Zoo 1 and Zoo 2, the workshop area, the commissary and veterinary treatment room. Zoo Operations facilities comprise approximately 20% of facilities, by area, and include a total area of 19,600 square-feet.

Guest Services and Education facilities include areas primarily used for zoo visitors, such as the picnic area and theatres. In total, these facilities comprise approximately 17% of facilities, by area, and include 16,800 square-feet of area.

Existing Uses by Area



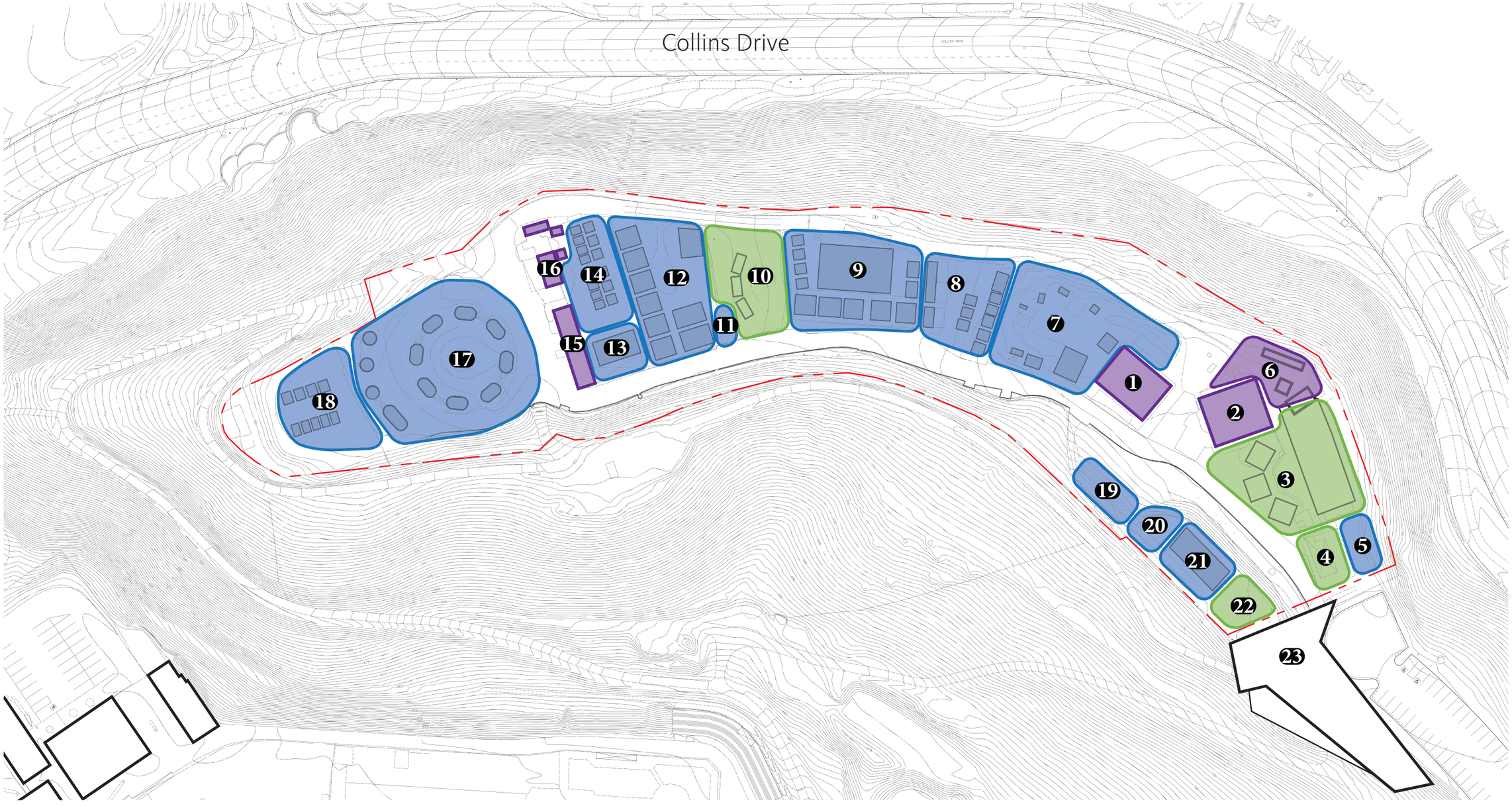


Fig 2.3
Facility Use

1. Zoo Building 1
2. Zoo Building 2
3. Main Theater
4. Picnic Area
5. Small Tortoise Exhibit
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18. Quarantine Area
19. Alligator Exhibit
20. Galapagos Tortoise Exhibit
21. Aviary
22. Recreation Lawn
23. EATM Building

Animal Housing / Care
Zoo Operations
Guest Services / Education

N

Scale 1" = 100'-0" @ 11"x17"
0' 50' 100'

Built Systems

Facility Condition

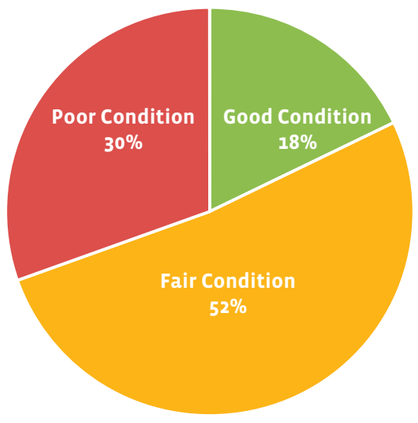
Based on an analysis by EATM and ATZ faculty and staff, over 80% of facilities are in need of replacement or repair, with 30% of existing facilities ranked "poor." Approximately 20% of existing facilities are in "good" condition and require only minor upgrades or improvements to continue serving their use.

Animal Housing and Care facilities include a greater percentage of poor condition facilities, with the plurality of Animal Housing and Care facilities rated "poor." In particular, the Aviary, Mews and Carnivore Facility were all identified as facilities in need of replacement. In contrast, the Primate Gardens and Alligator Exhibit were cited as among the best facilities in the Zoo.

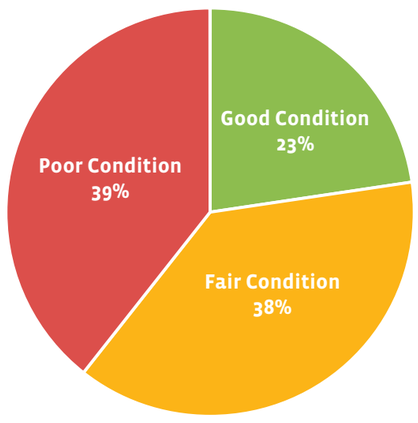
Zoo Operations facilities include a greater percentage of fair condition facilities, with over 60% of Zoo Operations facilities rated "fair." Of note, the only office and rest room facilities on site were rated "poor." Zoo Operations and the EATM program also utilize the EATM building, which is located outside of the current perimeter of the Zoo and is not included in this analysis.

Guest Services and Education facilities were all rated "fair," however certain elements of these facilities, such as the backstage area of the main theatre, were rated "poor." There is also the need for additional facilities to serve program elements that currently cannot be accommodated on the site.

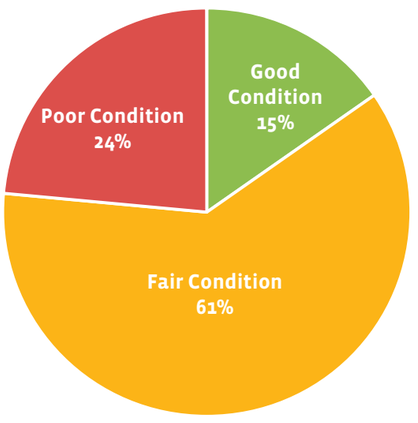
All Facilities



Animal Housing & Care Facilities Only



Zoo Operations Facilities Only



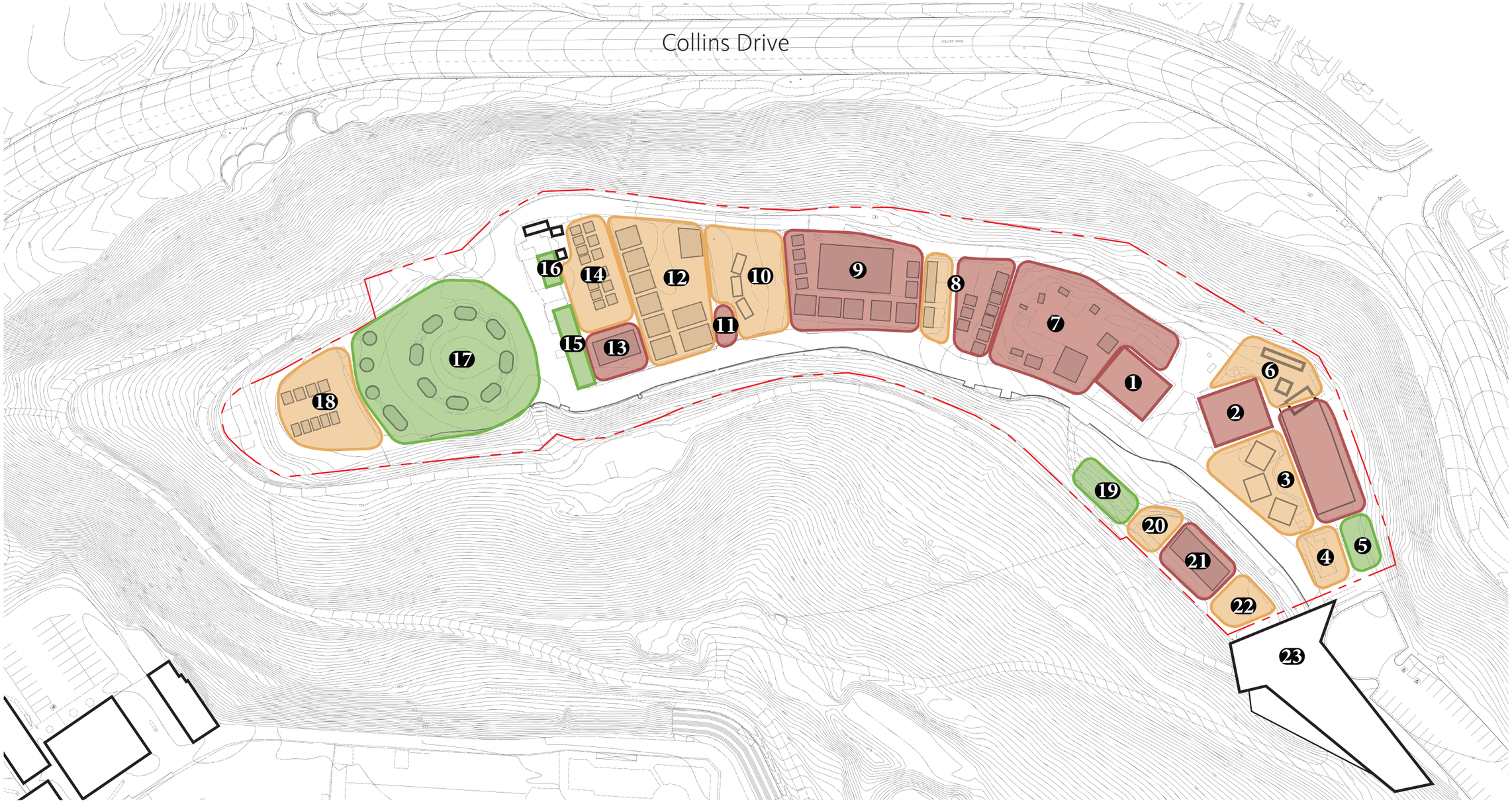


Fig 2.4
Facility Condition

1. Zoo Building 1
2. Zoo Building 2
3. Main Theater
4. Picnic Area
5. Small Tortoise Exhibit
6. Workshop Area
7. Parrot Gardens
8. Show Animal Area
9. Carnivore Area
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13. Birds of Prey Exhibt
14. Animal Maintenace
15. Hay Barn / Treatment Room
16. Commissary
17. Primate Gardens
18. Quarantine Area
19. Alligator Exhibit
20. Galapagos Tortoise Exhibit
21. Aviary
22. Recreation Lawn
23. EATM Building

Good Condition
Fair Condition
Poor Condition

Built Systems

Utilities

America's Teaching Zoo is serviced by existing infrastructure and is connected to the utility systems of the Moorpark College campus. In general, mainline utilities are located under ground beneath the main Zoo road and the unpaved service road located just outside of the Zoo perimeter.

Storm-water runoff and runoff from Zoo operations, including cleaning animal enclosures, is captured and filtered through a bioswale before being discharged into the municipal sewer system.

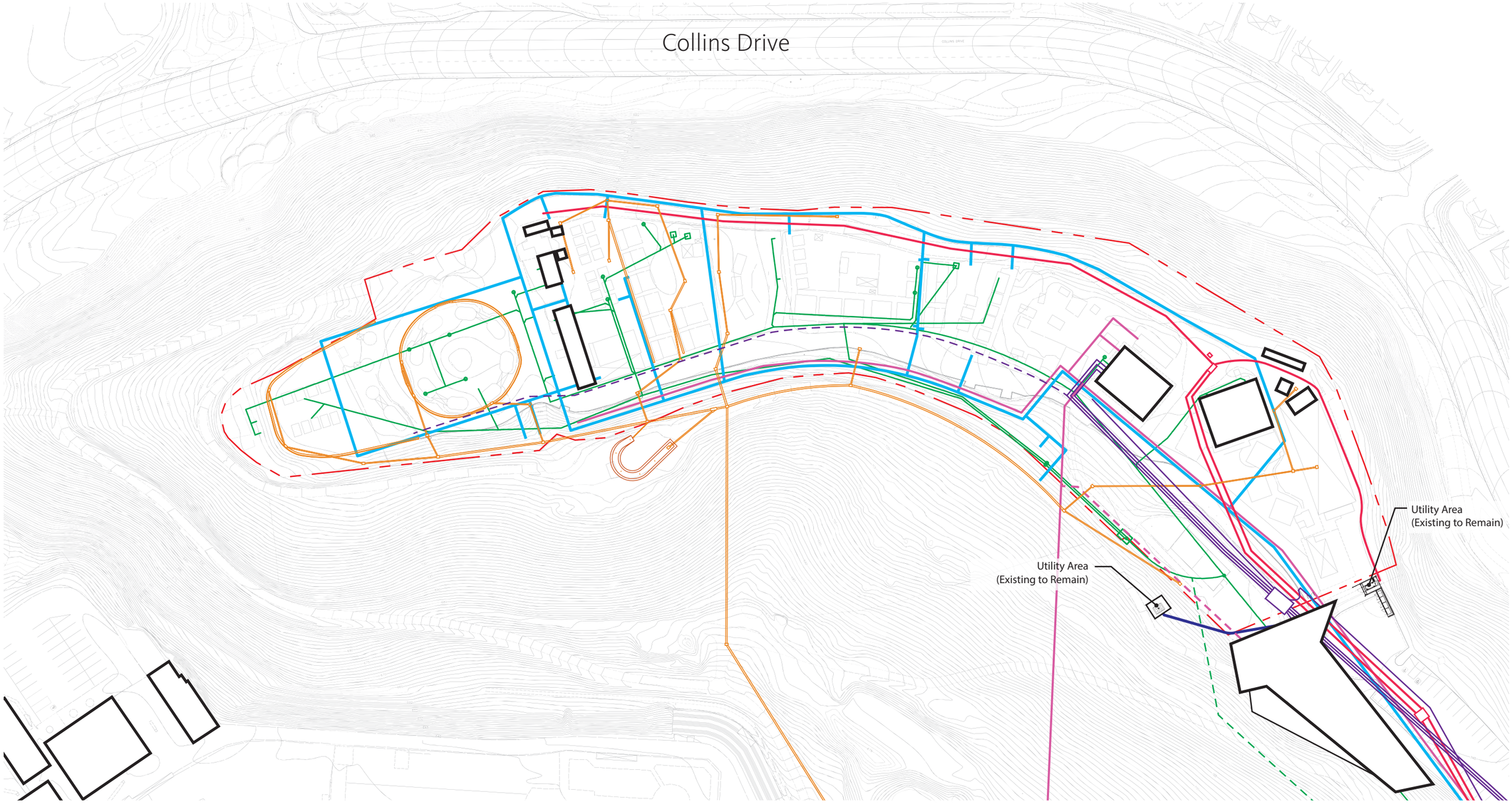


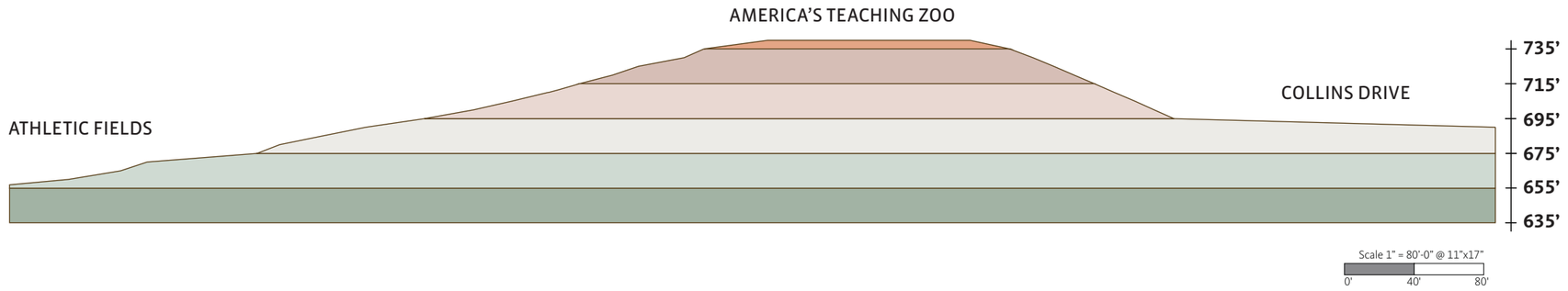
Fig 2.5
Utilities & Infrastructure

2.3 Natural Systems

Topography

America's Teaching Zoo is located along the top of a ridge, overlooking the athletic fields to the south and the Campus Hills residential area to the north. While the project site is generally flat, steep down slopes to the north and south of the site affect development opportunities beyond the current Zoo perimeter.

Section View



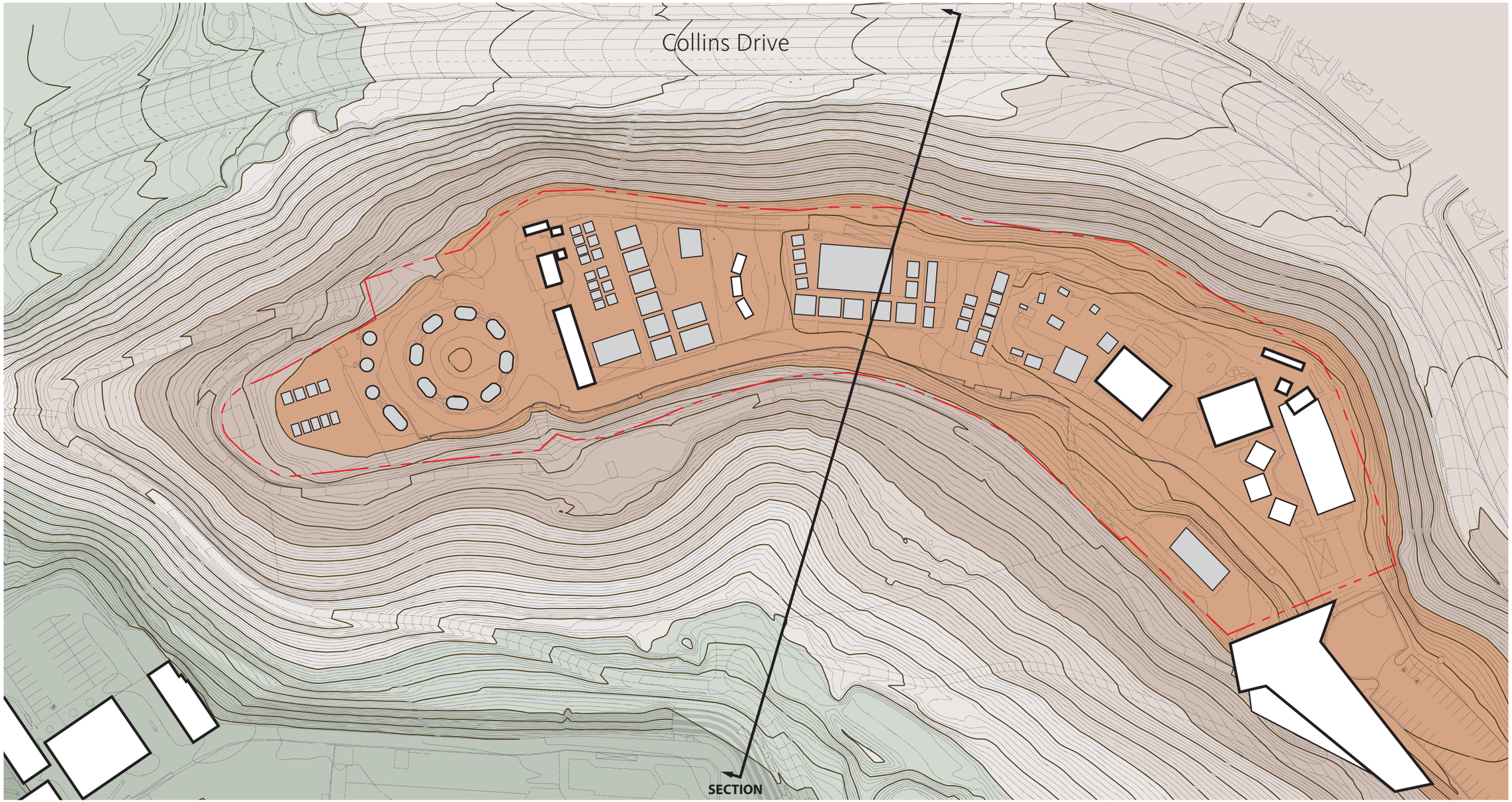


Fig 2.6
Topography

Natural Systems

Landscape & Open Space

America's Teaching Zoo features a varied landscape with established plants and trees and multiple open spaces. The existing landscape includes both native and introduced plant species, many of which are used to provide food and browse for the animal collection. Mature existing trees provide shade cover in some areas that is essential to the comfort and well-being of both visitors and animals.

Open spaces include both landscaped and paved areas across the site, with asphalt paving dominating the visitor areas along the animal enclosures.

Existing Landscape

American Agave

Rose Garden

Orange Tree Citrus sinensis

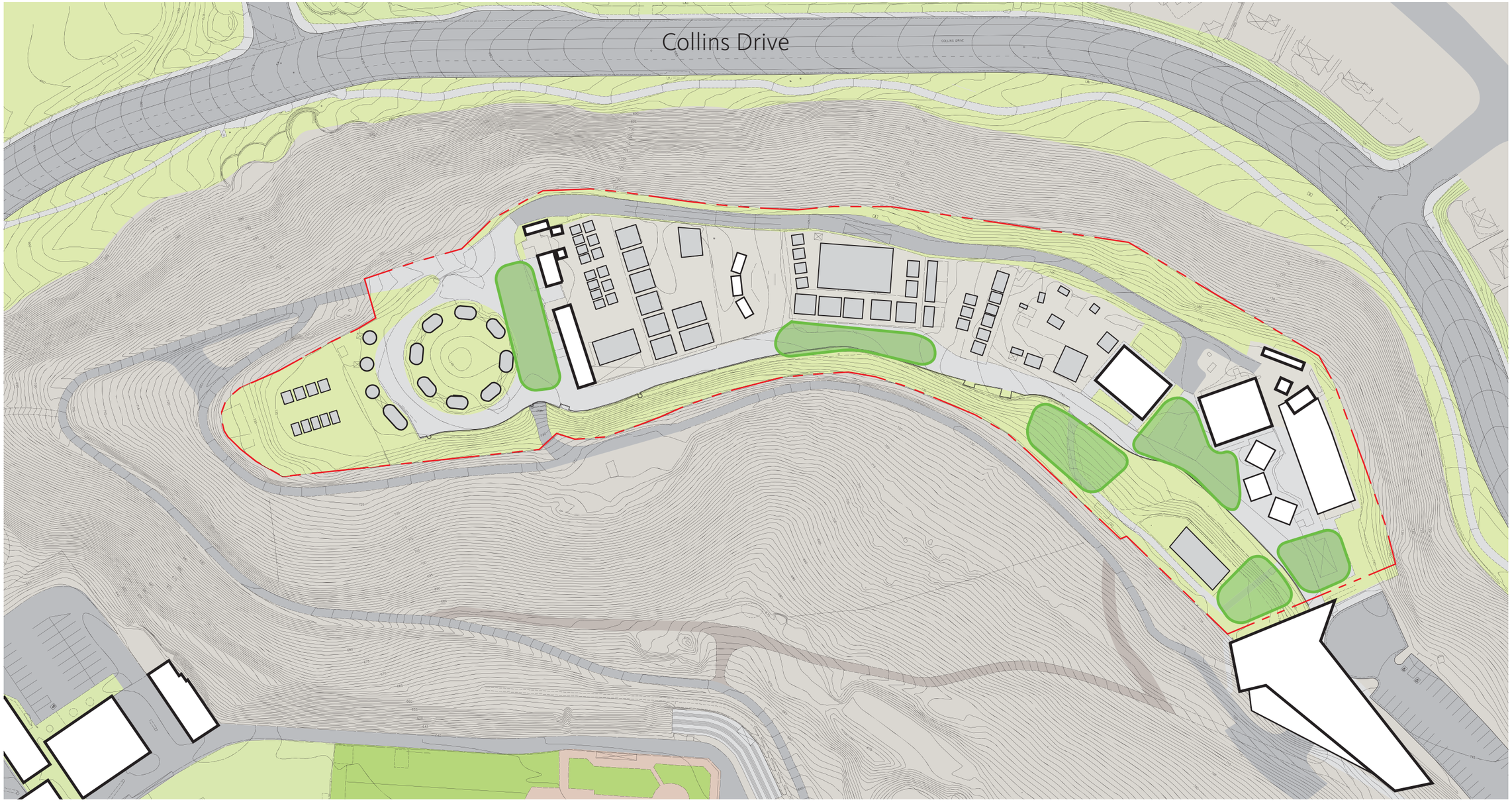


Fig 2.7

Landscape & Open Space

Natural Systems

Existing Trees

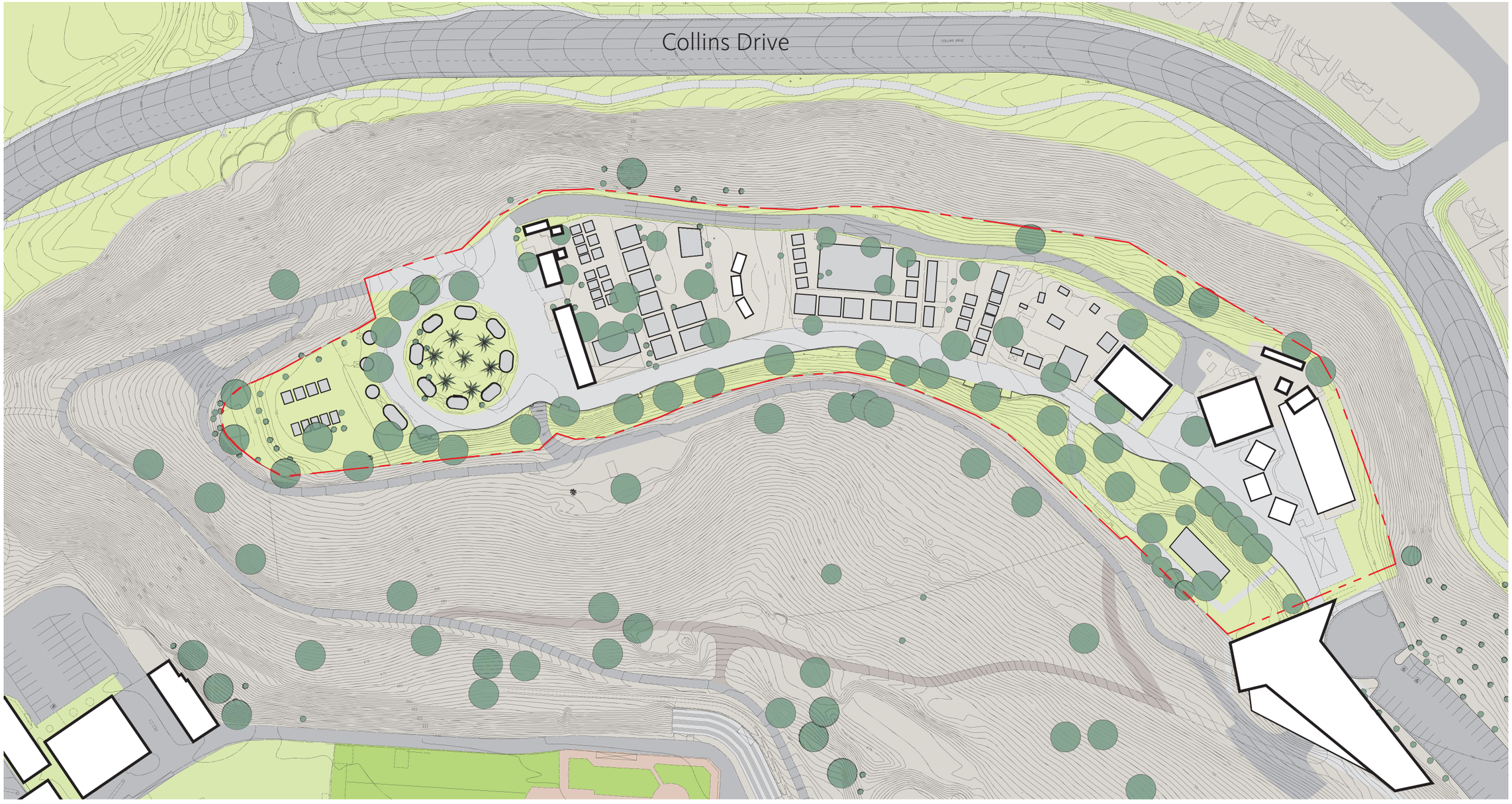


Fig 2.8

Existing Tree Plan

2.4 Visitor Experience

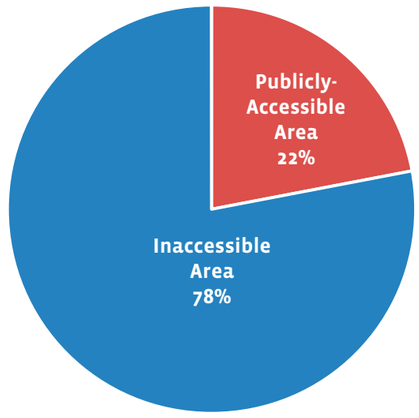
Access and Circulation

Primary access to America's Teaching Zoo is provided through the existing surface parking areas located at the north end of the Moorpark College campus. In general, students, staff and visitors enter the site through pedestrian and vehicular gates located adjacent to the EATM Building (Gates 1A and 1B). Secondary service access is also provided through Gates 2 and 3, located at the opposite end of the site.

Access and circulation within America's Teaching Zoo is provided by two roadways running the length of the site. The main roadway, also known as the Front Road, is used for both visitor circulation and service access. This results in conflicts between visitors and service vehicles. It also requires visitors to double back along the same route to exit the Zoo. The second roadway, known as the Back Road, is not open to the public, and is used exclusively for service. Primary access to the animal enclosures for students and staff is provided by the Back Road.

In general, school groups and summer camp groups are escorted through the Zoo by staff or students. Other visitors are allowed to explore the Zoo unaccompanied during the hours when the zoo is open to the general public on weekends. Public access throughout the site is restricted in order to protect the safety of both visitors and animals, and to allow for students and staff to perform their work. Of the total area within the Zoo perimeter, only approximately twenty percent is publicly-accessible, while approximately eighty percent is restricted to student and staff only.

Public Access



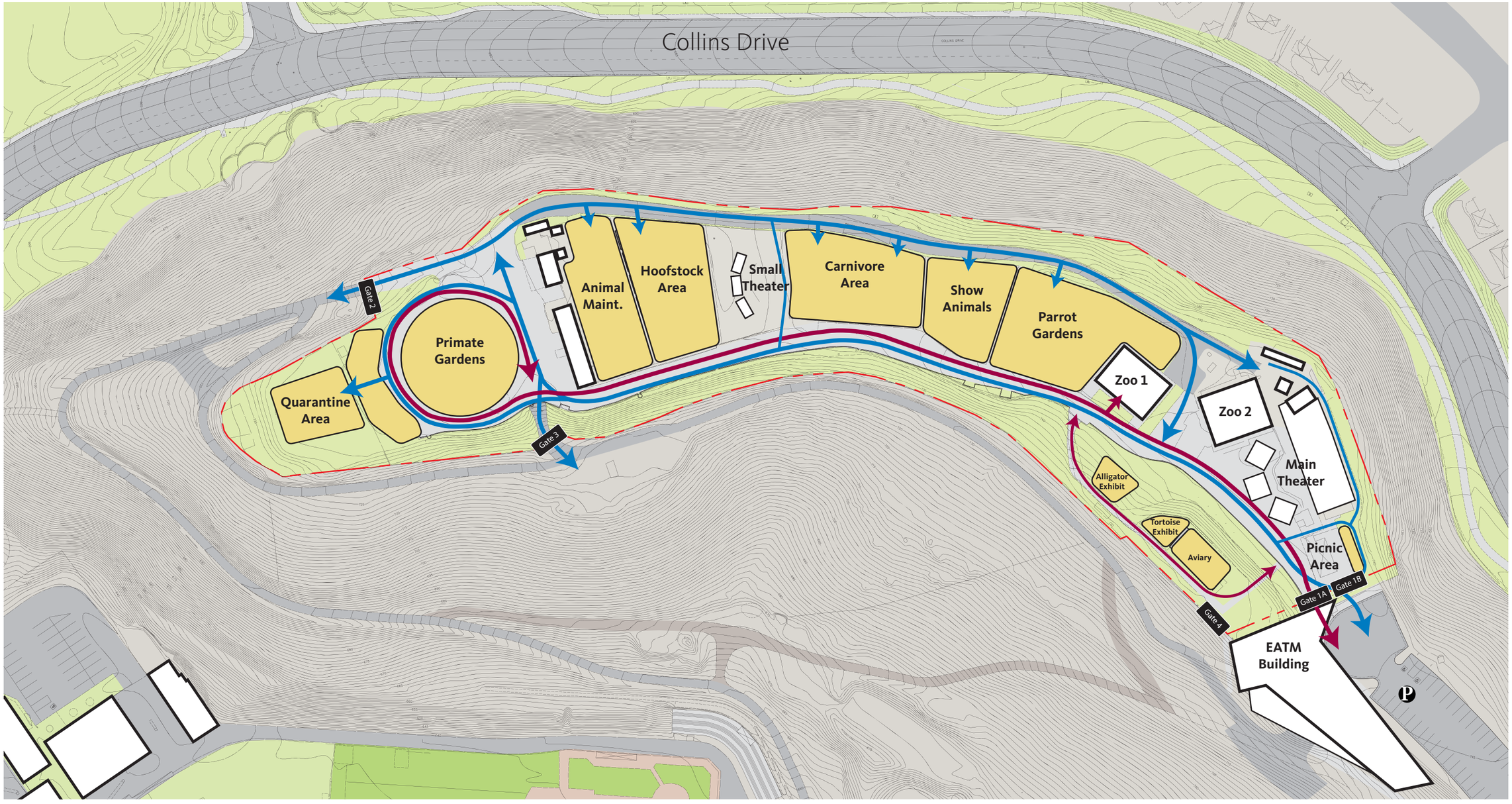


Fig 2.9

Access & Circulation

Visitor Experience

Amenities

Currently, America's Teaching Zoo offers limited visitor amenities. Amenities are concentrated at the east end of the site. While the Zoo provides a picnic area and recreation area, there is no food service offered. Restroom facilities are limited and in poor condition.

Animal Exhibits

Existing animal exhibits are organized linearly along the site, with primary visitor viewing from the Front Road. While some exhibits allow visitors to view animals up-close, such as the Carnivore Exhibit, many exhibits feature obstructed views with multiple layers of chain-link fencing and animal enclosures oriented away from visitor areas.

Views

The Zoo site affords visitors panoramic views of lower Moorpark College campus, Simi Hills and Big Mountain. Primary views to the south are provided from multiple points on the Front Road while more limited views to the north are provided from the Back Road.

Visitor Amenities

Picnic Area

Recreation Area

Visitor Restrooms

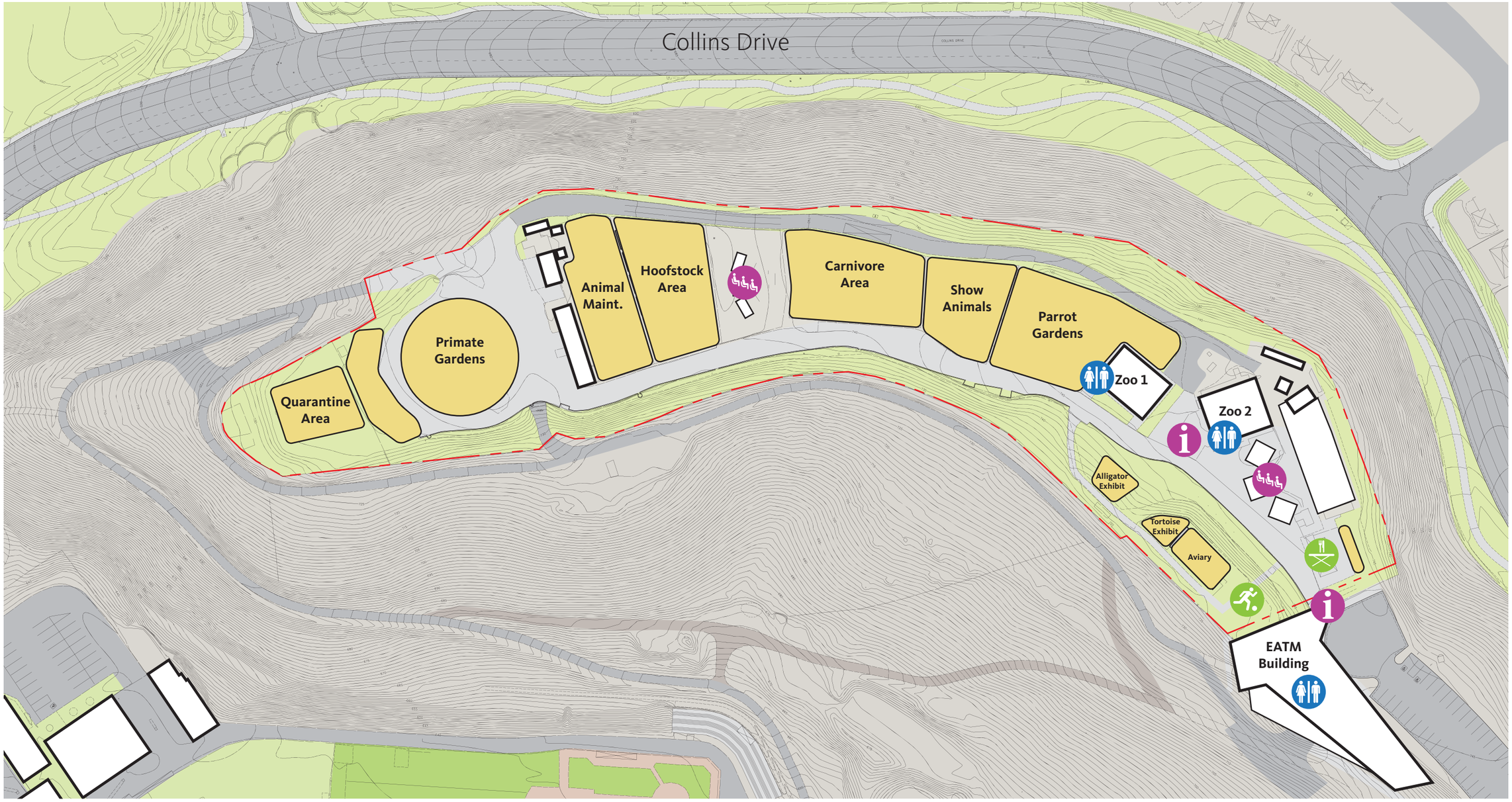


Fig 2.10

Visitor Amenities

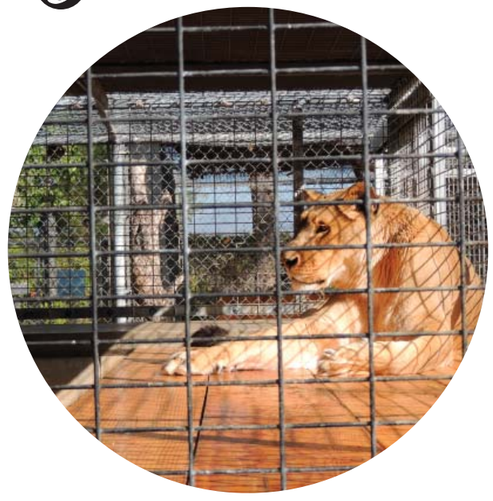
Visitor Experience

Animal Exhibits

❶ Parrot Gardens Exhibit

❷ Show Animals Exhibit

❸ Carnivore Exhibit



❹ Butterfly Conservation Station

❺ Birds of Prey Exhibit

❻ Primate Gardens Exhibit

Fig 2.11

Animal Exhibits

Visitor Experience

Views

❶ View from Alligator Exhibit

❷ View from Parrot Gardens

❸ View from Parrot Gardens

❹ View from Parrot Gardens

❺ View from Birds of Prey Exhibit

❻ View from Birds of Prey Exhibit

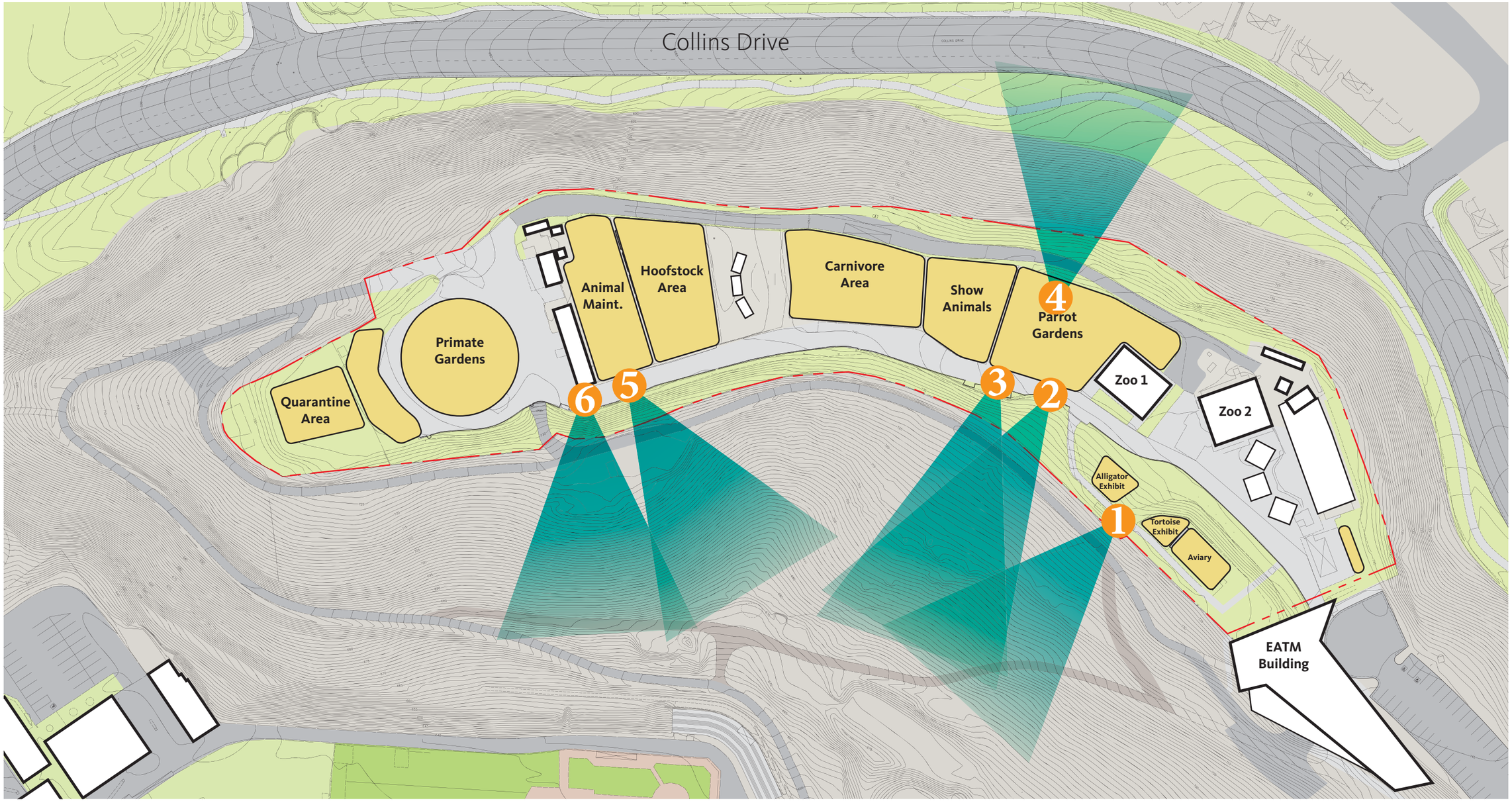


Fig 2.12
Views


The Wilson Family
Carnivore Habitat
African Lions
America's Teaching Zoo
Hillside Theater

3.0 DEVELOPMENT PROGRAM

3.1 Overview

Development Program

The future development of America's Teaching Zoo will require changes to the Zoo's existing physical facilities. While some facilities will be maintained and enhanced, others may be extensively renovated, relocated, or removed and replaced with new facilities. The potential disposition of facilities is informed by the existing conditions analysis and an understanding of the physical condition and functional performance of existing facilities. The proposed disposition plan, to the right, illustrates which facilities are recommended be retained, renovated or replaced.

The development program, detailed in the following sections, quantifies the size of existing and proposed facilities, as well as the program elements contained in each facility. In general, facilities are organized in three categories: Zoo Operations and Management facilities, which include staff offices and student areas; Animal Housing and Care facilities, which include animal enclosures and exercise areas; and, Guest Services and Education facilities, which include theatres recreational areas, and visitor amenities.

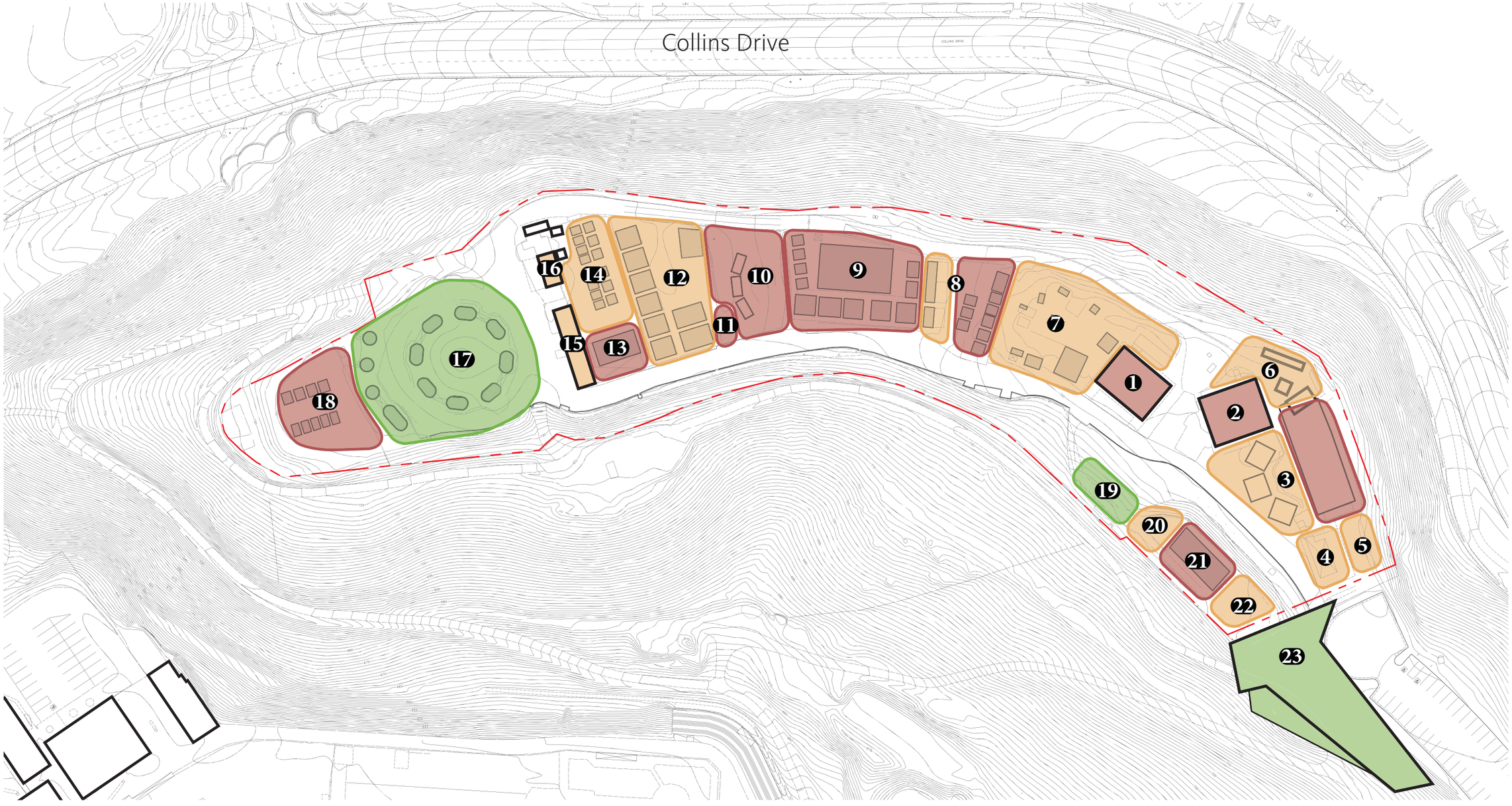


Fig 3.1
Proposed Disposition

1. Zoo Building 1
2. Zoo Building 2
3. Main Theater
4. Picnic Area
5. Small Tortoise Exhibit
6. Workshop Area
7. Parrot Gardens
8. Show Animal Area
9. Carnivore Area
10. Small Theater
11. Butterfly Conservation
12. Hoofstock Area
13. Birds of Prey Exhibt
14. Animal Maintenace
15. Hay Barn / Treatment Room
16. Commissary
17. Primate Gardens
18. Quarantine Area
19. Alligator Exhibit
20. Galapagos Tortoise Exhibit
21. Aviary
22. Recreation Lawn
23. EATM Building

Proposed Demolition
Proposed Relocation
Existing to Remain

N

Scale 1" = 100'-0" @ 11"x17"
0' 50' 100'

3.2 Zoo Operations & Management

Existing Facilities

Existing Zoo Operations and Management Facilities are clustered in two areas on the project site, while individual program elements are divided between multiple facilities. This division creates inefficiencies and operational issues. Zoo offices, classrooms, student spaces and visitor and staff restrooms are housed in two aging facilities near the zoo entrance. Veterinary offices are located in those buildings as well, while the veterinary treatment room is located near the rear of the zoo, along with the commissary and quarantine area.

Proposed Facilities

The development program proposes two new consolidated Zoo Operations and Management facilities, to replace the existing Zoo 1, Zoo 2 and Hay Barn. Zoo Operations and student services are consolidated in a new Zoo Operations Building. Veterinary offices and treatment rooms are enhanced and collocated in a new Veterinary Center.

Facility / Program Element		Existing Capacity / Area			Proposed Capacity / Area		
Number	Name	Existing Net Total Area	Existing Circulation / Service Area	Existing Gross Total Area	Proposed Net Total Area	Proposed Circulation / Service Area	Proposed Gross Total Area
Subtotal	Animal Care and Housing	24,700 SF	49,800 SF	**74,500 SF**	47,700 SF	36,100 SF	**83,800 SF**
Subtotal	Zoo Operations	10,200 SF	10,400 SF	**20,600 SF**	16,800 SF	2,900 SF	**19,700 SF**
Subtotal	Guest Services and Education	16,800 SF	N/A	**16,800 SF**	21,800 SF	4,400 SF	**26,200 SF**
Total	**All Facilities**	51,700 SF	60,200 SF	**111,900 SF**	86,300 SF	43,400 SF	**129,700 SF**
Site Area				**245,000 SF**			**373,000 SF**

Facility / Program Element		Existing Capacity / Area					Proposed Capacity / Area				
Number	Name	Existing Number of Units	Existing Area per Unit (Average)	Existing Net Total Area	Existing Circulation / Service Area	Existing Gross Total Area	Proposed Number of Units	Proposed Area per Unit (Average)	Proposed Net Total Area	Proposed Circulation / Service Area	Proposed Gross Total Area
Zoo Operations & Management Facilities (Continued)											
1	**Zoo Building 1**			**1,775 SF**		**1,775 SF**					**N/A**
1.1	*Administration / Open Office Area*	*1*	*300 SF*	*300 SF*	*N/A*	*300 SF*	*N/A*	*Demolish; Replace with New Zoo Operations Building*			*N/A*
1.2	*Staff Office*	*3*	*95 SF*	*285 SF*	*N/A*	*285 SF*	*N/A*	*Demolish; Replace with New Zoo Operations Building*			*N/A*
1.3	*Reptile House*	*1*	*930 SF*	*930 SF*	*N/A*	*930 SF*	*N/A*	*Demolish; Replace with New Zoo Operations Building*			*N/A*
1.4	*Restrooms*	*2*	*130 SF*	*260 SF*	*N/A*	*260 SF*	*N/A*	*Demolish; Replace with New Zoo Operations Building*			*N/A*
2	**Zoo Building 2**			**2,820 SF**		**2,820 SF**					**N/A**
2.1	*Classroom / Student Lounge*	*1*	*1,740 SF*	*1,740 SF*	*N/A*	*1,740 SF*	*N/A*	*Demolish; Replace with New Zoo Operations Building*			*N/A*
2.2	*Conference Room*	*1*	*280 SF*	*280 SF*	*N/A*	*280 SF*	*N/A*	*Demolish; Replace with New Zoo Operations Building*			*N/A*
2.3	*Computer Lab*	*1*	*280 SF*	*280 SF*	*N/A*	*280 SF*	*N/A*	*Demolish; Replace with New Zoo Operations Building*			*N/A*
2.4	*Vet Office*	*3*	*120 SF*	*360 SF*	*N/A*	*360 SF*	*N/A*	*Demolish; Replace with New Zoo Operations Building*			*N/A*
2.5	*Restrooms*	*2*	*80 SF*	*160 SF*	*N/A*	*160 SF*	*N/A*	*Demolish; Replace with New Zoo Operations Building*			*N/A*
6	**Workshop / Storage Area**			**1,600 SF**		**1,600 SF**			**2,400 SF**		**2,400 SF**
6.1	*Work Area (Outdoor)*	*1*	*1,200 SF*	*1,200 SF*	*N/A*	*1,200 SF*	*1*	*1,200 SF*	*1,200 SF*	*N/A*	*1,200 SF*
6.2	*Storage Area*	*1*	*400 SF*	*400 SF*	*N/A*	*400 SF*	*3*	*400 SF*	*1,200 SF*	*N/A*	*1,200 SF*
15	**Veterinary Center (Current Hay Barn)**			**1,458 SF**	**SF**	**1,458 SF**			**3,100 SF**	**620 SF**	**3,720 SF**
15.1	*Surgery Room*	*N/A*	*Proposed New Facility*			*N/A*	*N/A*	*200 SF*	*200 SF*	*40 SF*	*240 SF*
15.2	*Exam Room / X-Ray Room / Pharmacy*	*1*	*458 SF*	*458 SF*	*N/A*	*458 SF*	*1*	*500 SF*	*500 SF*	*100 SF*	*600 SF*
15.3	*Staff Offices*	*N/A*	*Currently Located in Zoo 2*			*N/A*	*2*	*100 SF*	*200 SF*	*40 SF*	*240 SF*
15.4	*Storage Room*	*N/A*	*Proposed New Facility*			*N/A*	*1*	*500 SF*	*500 SF*	*100 SF*	*600 SF*
15.5	*Staff Restroom / Shower Room*	*N/A*	*Proposed New Facility*			*N/A*	*1*	*100 SF*	*100 SF*	*20 SF*	*120 SF*
15.6	*Locker Room*	*N/A*	*Proposed New Facility*			*N/A*	*1*	*100 SF*	*100 SF*	*20 SF*	*120 SF*
15.7	*Recovery Area*	*N/A*	*Proposed New Facility*			*N/A*	*1*	*1,500 SF*	*1,500 SF*	*300 SF*	*1,800 SF*
15.8	*Hay Barn / Storage Area*	*1*	*1,000 SF*	*1,000 SF*		*1,000 SF*	*N/A*	*See Note*			*N/A*
16	**Commissary**			**1,130 SF**		**1,130 SF**			**1,192 SF**	**238 SF**	**1,430 SF**
16.1	*Kitchen / Food Prep Area*	*1*	*1,130 SF*	*1,130 SF*	*N/A*	*1,130 SF*	*1*	*800 SF*	*800 SF*	*160 SF*	*960 SF*
16.2	*Refrigerated Storage*	*N/A*	*Included Above*			*N/A*	*1*	*42 SF*	*42 SF*	*8 SF*	*50 SF*
16.3	*Dry Storage*	*N/A*	*Included Above*			*N/A*	*1*	*50 SF*	*50 SF*	*10 SF*	*60 SF*
16.4	*Other Storage*	*N/A*	*Included Above*			*N/A*	*1*	*50 SF*	*50 SF*	*10 SF*	*60 SF*
16.5	*Guest Restrooms*						*2*	*125 SF*	*250 SF*	*50 SF*	*300 SF*

Facility / Program Element		Existing Capacity / Area					Proposed Capacity / Area				
Number	Name	Existing Number of Units	Existing Area per Unit (Average)	Existing Net Total Area	Existing Circulation / Service Area	Existing Gross Total Area	Proposed Number of Units	Proposed Area per Unit (Average)	Proposed Net Total Area	Proposed Circulation / Service Area	Proposed Gross Total Area
Zoo Operations & Management Facilities											
18	**Quarantine Area**					**11,750 SF**			**2,100 SF**	**420 SF**	**2,520 SF**
18.1	*Outdoor Quarantine Enclosure*	*10*	*140 SF*	*1,400 SF*	*10,350 SF*	*11,750 SF*	*10*	*140 SF*	*1,400 SF*	*280 SF*	*1,680 SF*
18.2	*Indoor Quarantine Room*	*N/A*		*Proposed New Facility*		*N/A*	*2*	*200 SF*	*400 SF*	*80 SF*	*480 SF*
18.3	*Storage Room*	*N/A*		*Proposed New Facility*		*N/A*	*1*	*300 SF*	*300 SF*	*60 SF*	*360 SF*
28	**New Zoo Operations Building / Event Facility**					**N/A**			**8,000 SF**	**1,600 SF**	**9,600 SF**
28.1	*Reception Area / Open Office*	*N/A*		*Proposed New Facility*		*N/A*	*1*	*600 SF*	*600 SF*	*120 SF*	*720 SF*
28.2	*Classroom*	*N/A*		*Proposed New Facility*		*N/A*	*1*	*2,500 SF*	*2,500 SF*	*500 SF*	*960 SF*
28.3	*Conference Room*	*N/A*		*Proposed New Facility*		*N/A*	*1*	*300 SF*	*300 SF*	*60 SF*	*360 SF*
28.4	*Staff Offices*	*N/A*		*Proposed New Facility*		*N/A*	*6*	*100 SF*	*600 SF*	*120 SF*	*720 SF*
28.5	*Zoo Operations Storage Rooms*	*N/A*		*Proposed New Facility*		*N/A*	*3*	*100 SF*	*300 SF*	*60 SF*	*360 SF*
28.6	*Computer Lab*	*N/A*		*Proposed New Facility*		*N/A*	*1*	*600 SF*	*600 SF*	*120 SF*	*720 SF*
28.7	*Student Learning Lab*	*N/A*		*Proposed New Facility*		*N/A*	*1*	*600 SF*	*600 SF*	*120 SF*	*720 SF*
28.8	*Locker Rooms*	*N/A*		*Proposed New Facility*		*N/A*	*2*	*125 SF*	*250 SF*	*50 SF*	*300 SF*
28.9	*Restrooms (Students / Staff Only)*	*N/A*		*Proposed New Facility*		*N/A*	*2*	*125 SF*	*250 SF*	*50 SF*	*300 SF*
28.10	*Restrooms (Public)*	*N/A*		*Proposed New Facility*		*N/A*	*2*	*125 SF*	*250 SF*	*50 SF*	*300 SF*
28.11	*Mutli-Purpose Room / Event Space*	*N/A*		*Proposed New Facility*		*N/A*	*1*	*1,200 SF*	*1,200 SF*	*240 SF*	*1,440 SF*
28.12	*Catering Kitchen*	*N/A*		*Proposed New Facility*		*N/A*	*1*	*350 SF*	*350 SF*	*70 SF*	*420 SF*
28.13	*Event Storage Rooms*	*N/A*		*Proposed New Facility*		*N/A*	*2*	*100 SF*	*200 SF*	*40 SF*	*240 SF*
Totals											
Subtotal	**Zoo Operations & Management**			10,200 SF	10,400 SF	**20,600 SF**			16,800 SF	2,900 SF	**19,700 SF**

3.3 Animal Housing & Care

Existing Facilities

Existing Animal Housing and Care Facilities are generally clustered by taxonomy, with multiple enclosures for related species grouped within a fenced compound. Exceptions include the Show Animal Facility and Animal Maintenance Facility, where unrelated animals are housed together.

Proposed Facilities

The development program continues to organize animal enclosures and exhibits by taxonomy and relocates animals currently housed in the mixed-taxa compounds. The program also includes one mixed-species exhibit focused on animals native to California. Proposed animal enclosures are sized to improve conditions and are intended as the primary animal housing. Separate "off-exhibit" holding areas are generally not provided.

Facility / Program Element			Existing Capacity / Area					Proposed Capacity / Area					
Number	Name	Existing Species	Existing Number of Units	Existing Area per Unit (Average)	Existing Net Total Area	Existing Circulation / Service Area	Existing Gross Total Area	Proposed Species	Proposed Number of Units	Proposed Area per Unit (Average)	Proposed Net Total Area	Proposed Circulation / Service Area	Proposed Gross Total Area
Animal Housing & Care Facilities													
5	**Small Tortoise Habitat**				**650 SF**		**650 SF**						**N/A**
5.1	*Small Tortoise Enclosure*	*Leopard Tortoise, African Spurred Tortoise*	*2*	*325 SF*	*650 SF*			*N/A*	*N/A*	*Relocate to New Testudine Facility*			*N/A*
7	**Avian Facility (Parrot Gardens)**				**2,508 SF**	**12,401 SF**	**14,909 SF**				**5,150 SF**	**2,575 SF**	**7,725 SF**
7.1	*Exotic Bird Enclosures: Outdoor Area*	*Parrots etc.*	*24*	*52 SF*	*1,248 SF*			*Parrots etc.*	*24*	*55 SF*	*1,320 SF*	*660 SF*	*1,980 SF*
7.2	*Exotic Bird Enclosures: Indoor Area (Barn)*	*N/A*	*N/A*	*Proposed New Facility*				*Parrots etc.*	*24*	*20 SF*	*480 SF*	*240 SF*	*720 SF*
7.3	*Emu Enclosure*	*Emus*	*1*	*1,260 SF*				*Emus*	*1*	*1,260 SF*	*1,260 SF*	*630 SF*	*1,890 SF*
7.4	*Hornbill Aviary*	*N/A*	*N/A*	*Currently Housed in Aviary*				*Hornbills*	*1*	*750 SF*	*750 SF*	*375 SF*	*1,125 SF*
7.5	*Abdim's Stork Enclosure*	*N/A*	*N/A*	*Currently Housed in Show Animal Facility*				*Abdim's Stork*	*1*	*140 SF*	*140 SF*	*70 SF*	*210 SF*
7.6	*Flight Cage*	*N/A*	*N/A*	*Proposed New Facility*				*Training*	*1*	*450 SF*	*450 SF*	*225 SF*	*675 SF*
7.7	*Mixed-Species Aviary*	*N/A*	*N/A*	*Proposed New Facility*				*Varies*	*1*	*750 SF*	*750 SF*	*375 SF*	*1,125 SF*
8	**Show Animal Facility**				**2,472 SF**	**4,952 SF**	**7,424 SF**						**N/A**
8.1	*Hoofstock Enclosure*	*Llamas*	*3*	*400 SF*	*1,200 SF*			*N/A*	*N/A*	*Relocate Animals to Other Facilities, As Appropriate*			*N/A*
8.2	*Large Enclosure*	*Varies*	*6*	*142 SF*	*852 SF*			*N/A*	*N/A*	*Relocate Animals to Other Facilities, As Appropriate*			*N/A*
8.3	*Medium Enclosure*	*Varies*	*3*	*104 SF*	*312 SF*			*N/A*	*N/A*	*Relocate Animals to Other Facilities, As Appropriate*			*N/A*
8.4	*Small Enclosure*	*Varies*	*3*	*36 SF*	*108 SF*			*N/A*	*N/A*	*Relocate Animals to Other Facilities, As Appropriate*			*N/A*
9	**Carnivore Facility**				**4,472 SF**	**6,657 SF**	**11,129 SF**				**10,370 SF**	**5,185 SF**	**15,555 SF**
9.1	*Carnivore Exercise Enclosure*	*Varies*	*1*	*1,600 SF*	*1,600 SF*			*Varies*	*1*	*2,400 SF*	*2,400 SF*	*1,200 SF*	*3,600 SF*
9.2	*Large Enclosure*	*Lions, Hyenas, Puma Singing Dogs, Etc.*	*5*	*400 SF*	*2,000 SF*			*Lions, Tiger, Hyenas*	*4*	*1,600 SF*	*6,400 SF*	*3,200 SF*	*9,600 SF*
9.3	*Medium Enclosure*	*Coyote*	*2*	*240 SF*	*480 SF*			*Coyote, Serval, Sining Dogs, Ocelot*	*6*	*400 SF*	*2,400 SF*	*1,200 SF*	*3,600 SF*
9.4	*Small Enclosure*	*Ocelot, Serval*	*4*	*98 SF*	*392 SF*			*N/A*	*N/A*	*Replace with Medium Enclosures*			
9.5	*Shift Cages*	*N/A*	*N/A*	*Proposed New Facility*				*N/A*	*8*	*60 SF*	*480 SF*	*240 SF*	*720 SF*
9.6	*Holding Area*	*N/A*	*N/A*	*Proposed New Facility*				*N/A*	*8*	*80 SF*	*640 SF*	*320 SF*	*960 SF*
9.7	*Recovery Area*	*N/A*	*N/A*	*Proposed New Facility*				*N/A*	*2*	*150 SF*	*300 SF*	*150 SF*	*450 SF*
9.8	*Training Area*	*N/A*	*N/A*	*Proposed New Facility*				*N/A*	*1*	*150 SF*	*150 SF*	*75 SF*	*225 SF*

Facility / Program Element			Existing Capacity / Area					Proposed Capacity / Area					
Number	Name	Existing Species	Existing Number of Units	Existing Area per Unit (Average)	Existing Net Total Area	Existing Circulation / Service Area	Existing Gross Total Area	Proposed Species	Proposed Number of Units	Proposed Area per Unit (Average)	Proposed Net Total Area	Proposed Circulation / Service Area	Proposed Gross Total Area
Animal Housing & Care Facilities													
11	**Butterfly Conservation Station**				**1,200 SF**	**1,155 SF**	**2,355 SF**				**1,640 SF**	**760 SF**	**2,400 SF**
11.1	*Butterfly Greenhouse / Enclosed Building*		*2*	*136 SF*	*272 SF*	*1,155 SF*	*1,155 SF*	*PVB*	*2*	*150 SF*	*300 SF*	*150 SF*	*450 SF*
11.2	*Butterfly Boxes*		*2*	*235 SF*	*470 SF*	*Included Above*		*PVB, LMB*	*2*	*270 SF*	*540 SF*	*270 SF*	*810 SF*
11.3	*Butterfly Gardens*		*1*	*394 SF*	*394 SF*	*Included Above*			*1*	*700 SF*	*700 SF*	*290 SF*	*990 SF*
11.4	*Soil Sterilization Pit*		*1*	*64 SF*	*64 SF*	*Included Above*			*1*	*100 SF*	*100 SF*	*50 SF*	*150 SF*
12	**Domestic Hoofstock Facility**				**4,641 SF**	**6,180 SF**	**10,821 SF**				**9,443 SF**	**4,722 SF**	**14,165 SF**
12.1	*Water Buffalo Enclosure*		*N/A*	*Currently Housed in Enclosures Listed Below*				*Water Buffalo*	*1*	*1,600 SF*	*1,600 SF*	*800 SF*	*2,400 SF*
12.2	*Large Enclosure*	*Water Buffalo, Sheep*	*2*	*800 SF*	*1,600 SF*			*Sheep, Lamas*	*2*	*800 SF*	*1,600 SF*	*800 SF*	*2,400 SF*
12.3	*Medium Enclosure*	*Donkey, Miniature Horse*	*6*	*400 SF*	*2,400 SF*			*Donkey, Miniature Horse, Goats*	*6*	*400 SF*	*2,400 SF*	*1,200 SF*	*3,600 SF*
12.4	*Small Enclosure*	*N/A*	*2*	*172 SF*	*344 SF*			*Potbellied Pig*	*4*	*220 SF*	*880 SF*	*440 SF*	*1,320 SF*
12.5	*Marine Mammal Enclosure*	*N/A*	*1*	*297 SF*	*297 SF*			*N/A*	*N/A*	*Relocate to Marine Mammal Facility*			*N/A*
12.6	*Exercise/Training Area*	*N/A*	*N/A*	*Proposed New Facility*				*N/A*	*1*	*1,963 SF*	*1,963 SF*	*982 SF*	*2,945 SF*
12.7	*Hay Bar/ Storage Area*	*N/A*	*N/A*	*Currently Housed with Veterinary Center*				*N/A*	*1*	*1,000 SF*	*1,000 SF*	*500 SF*	*1,500 SF*
13	**Mews**				**750 SF**		**750 SF**						**N/A**
13.1	*Mews*	*Birds of Prey*	*1*	*750 SF*	*750 SF*			*N/A*	*N/A*	*Demolish Facility; Relocate to California Habitat*			
14	**Animal Maintenance (Off-Exhibit Area)**				**1,380 SF**	**5,950 SF**	**7,330 SF**				*1,400 SF*	*700 SF*	**2,100 SF**
14.1	*Large Enclosure*	*Varies*	*6*	*100 SF*	*600 SF*			*Varies*	*4*	*200 SF*	*800 SF*	*400 SF*	*1,200 SF*
14.2	*Medium Enclosure*	*Varies*	*8*	*80 SF*	*640 SF*			*Varies*	*6*	*100 SF*	*600 SF*	*300 SF*	*900 SF*
14.3	*Small Enclosure*	*Varies*	*4*	*35 SF*	*140 SF*			*N/A*	*N/A*	*Replace with Medium Enclosures*			
17	**Primate Gardens**				**3,540 SF**	**12,510 SF**	**16,050 SF**				**2,135 SF**	**13,360 SF**	**15,060 SF**
17.1	*Large Enclosure*		*1*	*435 SF*	*435 SF*				*1*	*435 SF*	*435 SF*	*12,510 SF*	*12,510 SF*
17.2	*Medium Enclosure*	*Baboons, Capuchins, Siamangs, Spider Monkeys, Etc.*	*8*	*315 SF*	*2,520 SF*			*Baboons, Capuchins, Siamangs, Spider Monkeys, Etc.*	*8*	*315 SF*			
17.3	*Small Enclosure*	*Coatis, Lemurs*	*3*	*195 SF*	*585 SF*			*Coatis, Lemurs*	*3*	*195 SF*			
17.4	*New Large Enclosure*	*N/A*	*N/A*	*Currently Housed in Show Animal Facility*				*Baboons*	*2*	*300 SF*	*600 SF*	*300 SF*	*900 SF*
17.5	*New Medium Enclosure*	*N/A*	*N/A*	*Currently Housed in Show Animal Facility*				*Capuchins, Squirrel Monkeys*	*6*	*150 SF*	*900 SF*	*450 SF*	*1,350 SF*
17.6	*New Small Enclosure*	*N/A*	*N/A*	*Currently Housed in Animal Maintenance*				*Tamarin*	*2*	*100 SF*	*200 SF*	*100 SF*	*300 SF*

Facility / Program Element			Existing Capacity / Area					Proposed Capacity / Area					
Number	Name	Existing Species	Existing Number of Units	Existing Area per Unit (Average)	Existing Net Total Area	Existing Circulation / Service Area	Existing Gross Total Area	Proposed Species	Proposed Number of Units	Proposed Area per Unit (Average)	Proposed Net Total Area	Proposed Circulation / Service Area	Proposed Gross Total Area
Animal Housing & Care Facilities													
19	**Alligator Habitat**				**360 SF**		**360 SF**				**360 SF**	**180 SF**	**540 SF**
19.1	*Alligator Enclosure*	*Alligator*	*1*	*360 SF*	*360 SF*		*360 SF*	*Alligator*	*1*	*360 SF*	*360 SF*	*180 SF*	*540 SF*
20	**Testudine Facilities**				**1,200 SF**		**1,200 SF**				**1,930 SF**	**965 SF**	**2,895 SF**
20.1	*Galapagos Tortoise Enclosure*	*Galapagos Tortoise*	*1*	*1,200 SF*	*1,200 SF*		*1,200 SF*	*Galapagos Tortoise*	*1*	*1,200 SF*	*1,200 SF*	*600 SF*	*1,800 SF*
20.2	*Snapping Turtle Enclosure*	*N/A*	*N/A*	*Currently Housed in Aviary*			*N/A*	*Hornbill*	*1*	*80 SF*	*80 SF*	*40 SF*	*120 SF*
20.3	*Small Tortoise Enclosure*	*N/A*	*N/A*	*Currently Housed in Small Tortoise Enclosure*			*N/A*	*Snapping Turtle*	*2*	*325 SF*	*650 SF*	*325 SF*	*975 SF*
21	**Aviary**				**1,500 SF**		**1,500 SF**						**N/A**
21.1	*Hornbill Enclosure*	*Hornbill*	*1*	*750 SF*	*750 SF*		*750 SF*	*N/A*	*N/A*	*Demolish Facility; Relocate to Avian Facility*			*N/A*
21.2	*Snapping Turtle Enclosure*	*Snapping Turtle*	*1*	*750 SF*	*750 SF*		*750 SF*	*N/A*	*N/A*	*Demolish Facility; Relocate to Testudine Facility*			*N/A*
23	**New Reptile House**						**N/A**				**800 SF**	**400 SF**	**1,200 SF**
23.1	*Reptile House*	*N/A*	*N/A*	*Currently Housed in Zoo 1*			*N/A*	*Existing Reptile Collection*	*1*	*800 SF*	*800 SF*	*400 SF*	*1,200 SF*
24	**Exotic Hoofstock Facility**						**N/A**				**4,750 SF**	**2,375 SF**	**7,125 SF**
24.1	*Large Enclosure*	*N/A*	*N/A*	*Proposed New Facility*			*N/A*	*TBD*	*1*	*3,200 SF*	*3,200 SF*	*1,600 SF*	*4,800 SF*
24.2	*Small Enclosure*	*N/A*	*N/A*	*Proposed New Facility*			*N/A*	*TBD*	*1*	*1,000 SF*	*1,000 SF*	*500 SF*	*1,500 SF*
24.3	*Exotic Hoofstock Barn*	*N/A*	*N/A*	*Proposed New Facility*			*N/A*		*1*	*550 SF*	*550 SF*	*275 SF*	*825 SF*
25	**California Habitat**						**N/A**				**5,120 SF**	**2,560 SF**	**7,680 SF**
25.1	*Large Enclosure*	*N/A*	*N/A*	*Currently Housed in Carnivore Facility*			*N/A*	*Mountain Lion*	*1*	*1,200 SF*	*1,200 SF*	*600 SF*	*1,800 SF*
25.2	*Medium Enclosure*	*N/A*	*N/A*	*Currently Housed in Show Animal Facility / Animal Maintenance*			*N/A*	*Beaver, Raccoon, Bobcat, Lynx*	*4*	*400 SF*	*1,600 SF*	*800 SF*	*2,400 SF*
25.3	*Small Enclosure*	*N/A*	*N/A*	*Currently Housed in Show Animal Facility*			*N/A*	*Skunk, Badger, Etc.*	*4*	*200 SF*	*800 SF*	*400 SF*	*1,200 SF*
25.4	*Birds of Prey Exhibits*	*N/A*	*N/A*	*Currently Housed in Mews*			*N/A*	*Eagle, Hawks, Vulture, Owls, Etc.*	*8*	*90 SF*	*720 SF*	*360 SF*	*1,080 SF*
25.5	*California Reptile Exhibit*	*N/A*	*N/A*	*Proposed New Facility*			*N/A*	*California Reptiles*	*1*	*200 SF*	*200 SF*	*100 SF*	*300 SF*
25.6	*Botantical Gardens*	*N/A*	*N/A*	*Proposed New Facility*			*N/A*		*1*	*600 SF*	*600 SF*	*300 SF*	*900 SF*

Facility / Program Element			Existing Capacity / Area					Proposed Capacity / Area					
Number	Name	Existing Species	Existing Number of Units	Existing Area per Unit (Average)	Existing Net Total Area	Existing Circulation / Service Area	Existing Gross Total Area	Proposed Species	Proposed Number of Units	Proposed Area per Unit (Average)	Proposed Net Total Area	Proposed Circulation / Service Area	Proposed Gross Total Area
Animal Housing & Care Facilities													
26	**Small Mammal Habitat**						**N/A**				**1,520 SF**	**760 SF**	**2,280 SF**
26.1	*Large Enclosure*	*N/A*	*N/A*	*Proposed New Facility*			*N/A*	*Red Foxes, Coati*	*4*	*200 SF*	*800 SF*	*400 SF*	*1,200 SF*
26.2	*Small Enclosure*	*N/A*	*N/A*	*Proposed New Facility*			*N/A*	*Porcupine, Fennec Foxes, Kinkajou, Opossum*	*6*	*120 SF*	*720 SF*	*360 SF*	*1,080 SF*
27	**Marine Mammal Facility**						**N/A**				**3,100 SF**	**1,550 SF**	**4,650 SF**
27.1	*Large Enclosure/Pool*	*N/A*	*N/A*	*Proposed New Facility*			*N/A*	*Sea Lions*	*1*	*1,200 SF*	*1,200 SF*	*600 SF*	*1,800 SF*
27.2	*Small Enclosure/Pool*	*N/A*	*N/A*	*Proposed New Facility*			*N/A*	*Sea Lions*	*2*	*600 SF*	*1,200 SF*	*600 SF*	*1,800 SF*
27.3	*Guest Viewing Area*	*N/A*	*N/A*	*Proposed New Facility*			*N/A*		*1*	*300 SF*	*300 SF*	*150 SF*	*450 SF*
27.4	*Pump Room/Mechanical*	*N/A*	*N/A*	*Proposed New Facility*			*N/A*		*1*	*400 SF*	*400 SF*	*200 SF*	*600 SF*
Totals													
Subtotal	**Animal Housing & Care**				24,700 SF	49,800 SF	**74,500 SF**				47,700 SF	36,100 SF	**83,800 SF**

3.4 Guest Services & Education

Existing Facilities

Existing Guest Services and Education facilities are clustered near the entrance of the Zoo.

Proposed Facilities

The development program expands Guest Services and Education facilities with new and enhanced program elements to better meet programmatic and functional needs.

Facility / Program Element		Existing Capacity / Area					Proposed Capacity / Area				
Number	Name	Existing Number of Units	Existing Area per Unit (Average)	Existing Net Total Area	Existing Circulation / Service Area	Existing Gross Total Area	Proposed Number of Units	Proposed Area per Unit (Average)	Proposed Net Total Area	Proposed Circulation / Service Area	Proposed Gross Total Area
Guest Services & Education Facilities											
3	**Main Theater**			**8,400 SF**		**8,400 SF**			**8,400 SF**	**1,680 SF**	**10,080 SF**
3.1	*Guest Seating*	*350*	*10 SF*	*3,500 SF*	*N/A*	*3,500 SF*	*350*	*10 SF*	*3,500 SF*	*700 SF*	*4,200 SF*
3.2	*Stage Area*	*1*	*1,100 SF*	*1,100 SF*	*N/A*	*1,100 SF*	*1*	*1,100 SF*	*1,100 SF*	*220 SF*	*1,320 SF*
3.3	*Backstage Area*	*1*	*3,800 SF*	*3,800 SF*	*N/A*	*3,800 SF*	*1*	*3,800 SF*	*3,800 SF*	*760 SF*	*4,560 SF*
4	**Picnic & Recreation Areas**			**2,060 SF**		**2,060 SF**			*4,000 SF*	*800 SF*	**4,800 SF**
4.1	*Covered Picnic Area(s)*	*1*	*2,060 SF*	*2,060 SF*	*N/A*	*2,060 SF*	*2*	*2,000 SF*	*4,000 SF*	*800 SF*	*4,800 SF*
10	**Second Theater**			**3,800 SF**		**3,800 SF**			**3,800 SF**	**760 SF**	**4,560 SF**
10.1	*Guest Seating*	*200*	*10 SF*	*2,000 SF*	*N/A*	*2,000 SF*	*200*	*10 SF*	*2,000 SF*	*400 SF*	*2,400 SF*
10.2	*Stage Area*	*1*	*800 SF*	*800 SF*	*N/A*	*800 SF*	*1*	*800 SF*	*800 SF*	*160 SF*	*960 SF*
10.3	*Backstage Area*	*1*	*1,000 SF*	*1,000 SF*	*N/A*	*1,000 SF*	*1*	*1,000 SF*	*1,000 SF*	*200 SF*	*1,200 SF*
22	**Outdoor Event Facility**					**2,500 SF**			**5,000 SF**	**1,000 SF**	**6,000 SF**
22.1	*Recreation / Event Lawn*	*1*	*2,500 SF*	*2,500 SF*	*N/A*	*2,500 SF*	*1*	*5,000 SF*	*5,000 SF*	*1,000 SF*	*6,000 SF*
28	**Guest Restroom (Marine Mammal Area)**				*N/A*	**2,500 SF**			**600 SF**	**120 SF**	**720 SF**
	Restrooms				*N/A*	*2,500 SF*	*2*	*300 SF*	*600 SF*	*120 SF*	*720 SF*
Totals											
Subtotal	**Guest Services and Education**			16,800 SF	N/A	**16,800 SF**			21,800 SF	4,400 SF	**26,200 SF**


The Wilson Family
Carnivore Habitat
African Lions
America's Teaching Zoo
Hillside Theater

4.0 CASE STUDIES

4.1 Scale Comparisons

Central Park Zoo

Santa Fe College Teaching Zoo

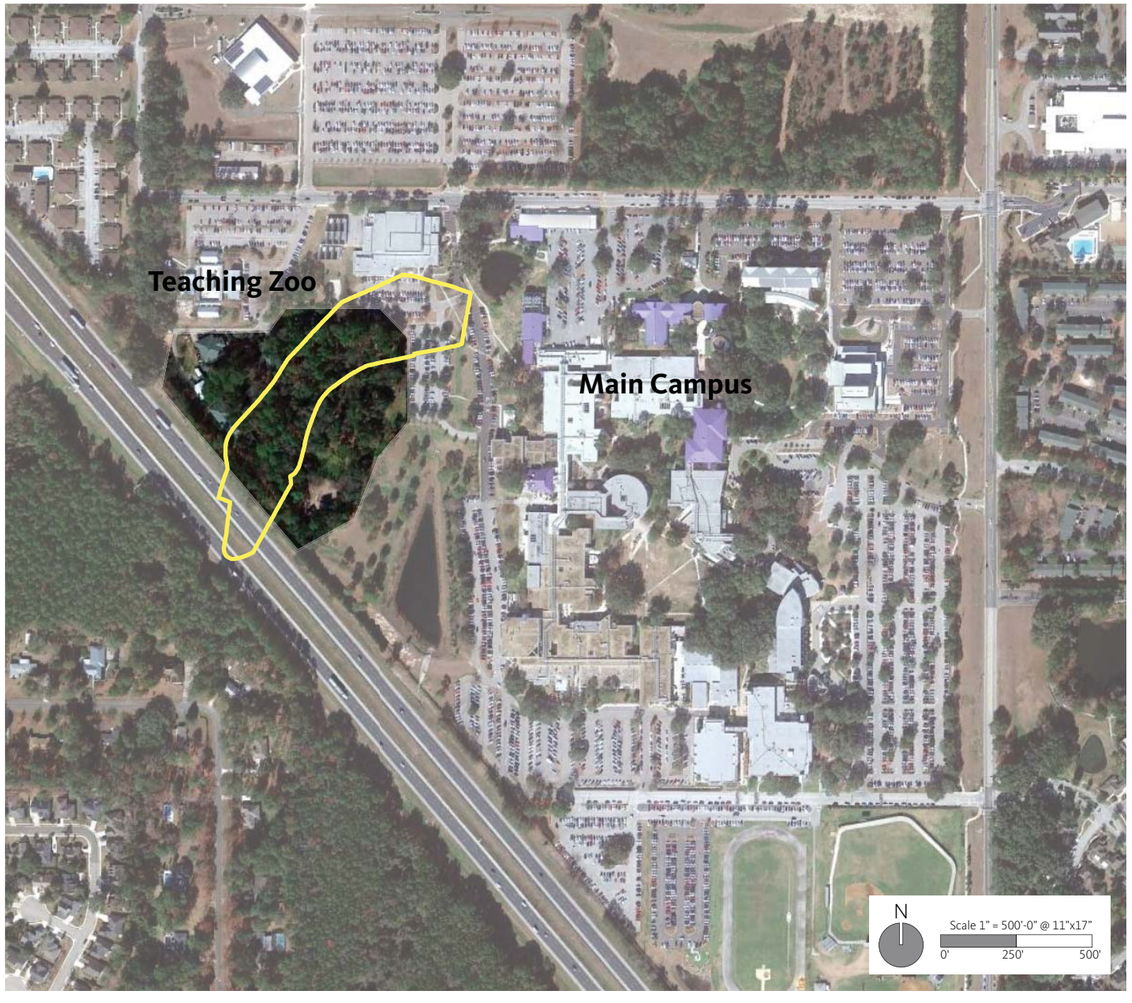
4.1 Scale Comparisons

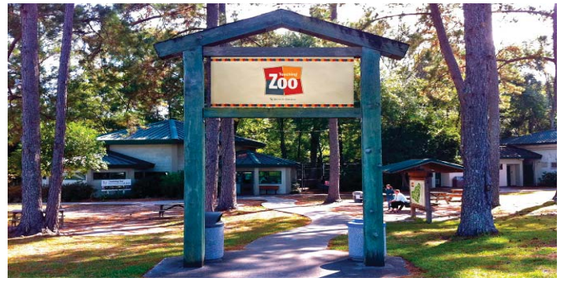
Central Park Zoo, New York, NY

- 6.5 Acres
- 130 Species

Santa Fe College Teaching Zoo, Gainesville, FL

- 10 Acres
- 75 Species, 200+ Animals






The Wilson Family
Carnivore Habitat
African Lions
America's Teaching Zoo
Hillside Theater

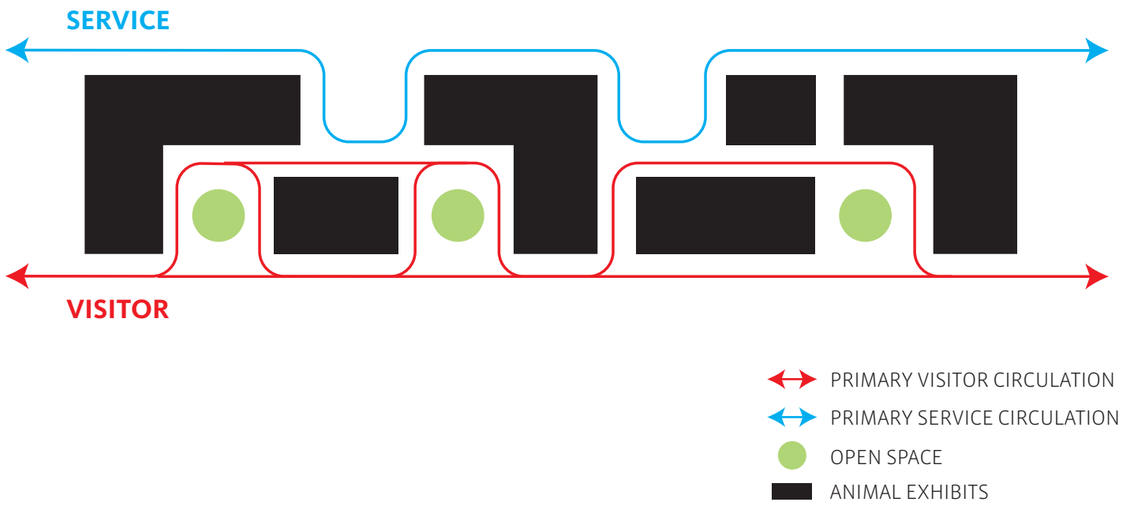
6.0 OPTIONS

6.1 Option 1: Patches

Overview

- Exhibits are organized in longitudinal sections separated by viewing gardens.
- Service and visitor circulation are separated into north and south pathways.
- Zoo operations building is adjacent to the entry with separate maintenance facilities to the west.
- This option requires the least demolition and relocation of existing facilities.

Exhibits, Open Space & Circulation



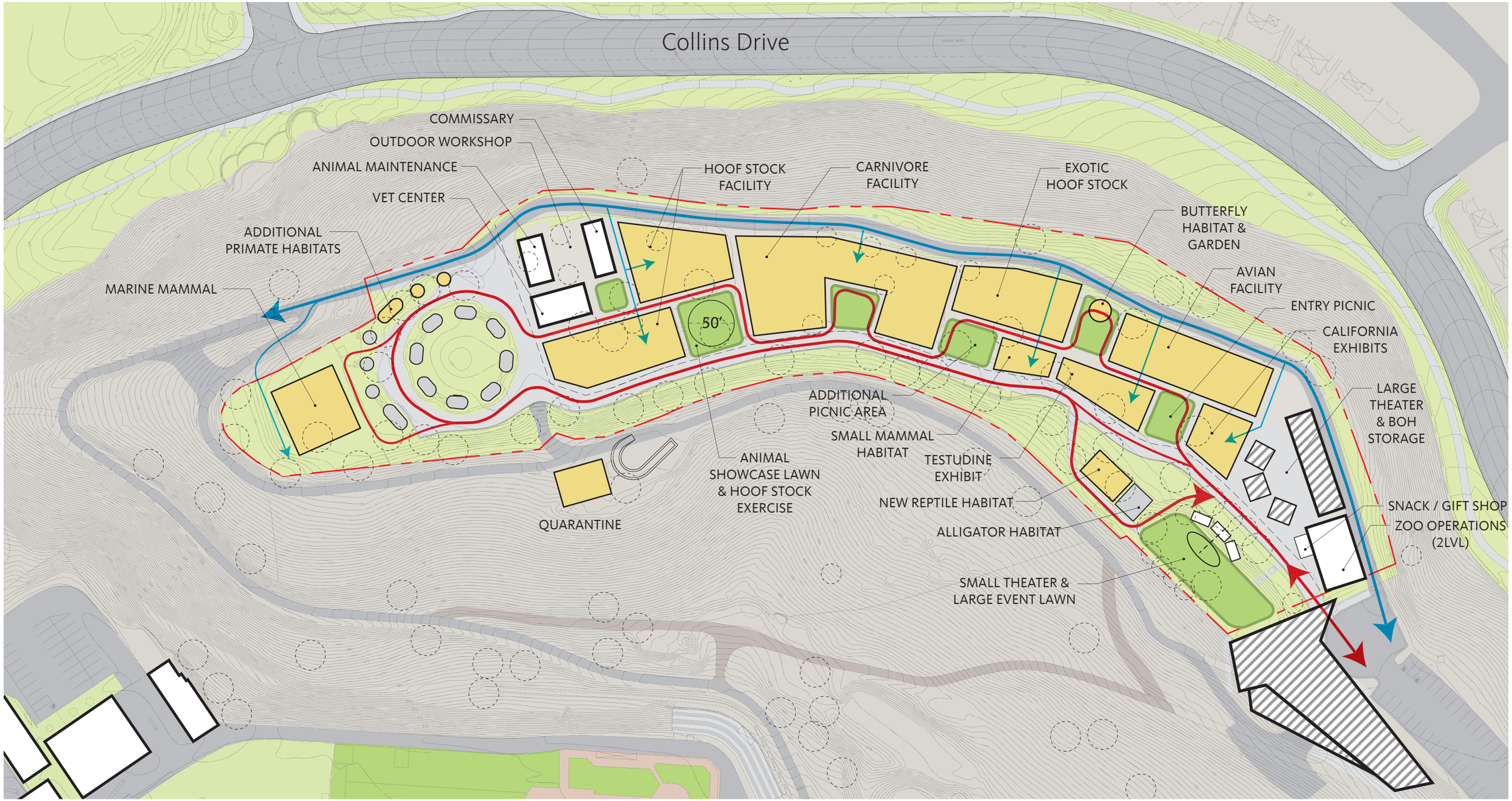


Fig 6.1

Option 1

EXISTING TREE
EXISTING ZOO PERIMETER
EXISTING BUILDING
EXISTING EXHIBIT
NEW BUILDING
NEW EXHIBIT
PRIMARY VISITOR CIRCULATION
PRIMARY SERVICE CIRCULATION

N

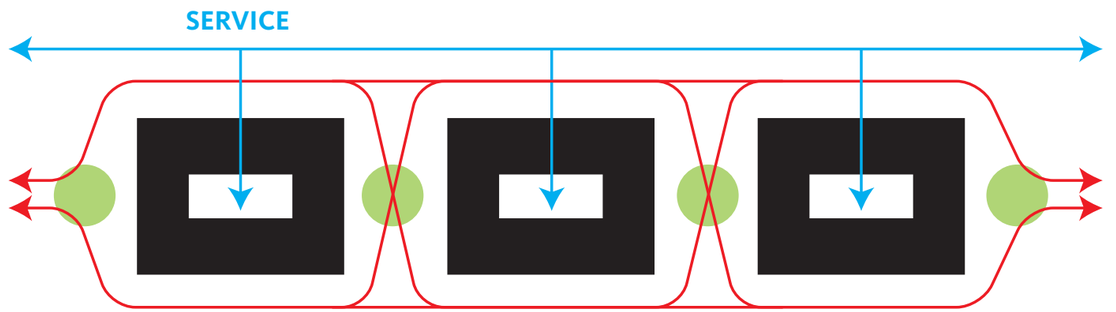
Scale 1" = 100'-0" @ 11"x17"
0' 50' 100'

6.2 Option 2: Pods

Overview

- Exhibits are organized in outward facing pods, viewed by visitors at the perimeters.
- Service and visitor access is separate except for intersections at the north of each exhibit pod.
- Visitors have access to a partial loop that allows a different entry and exit experience.
- The zoo operations are centralized toward the middle of the site.
- The Pods option allows some exhibits and facilities to remain in their existing locations.

Exhibits, Open Space & Circulation



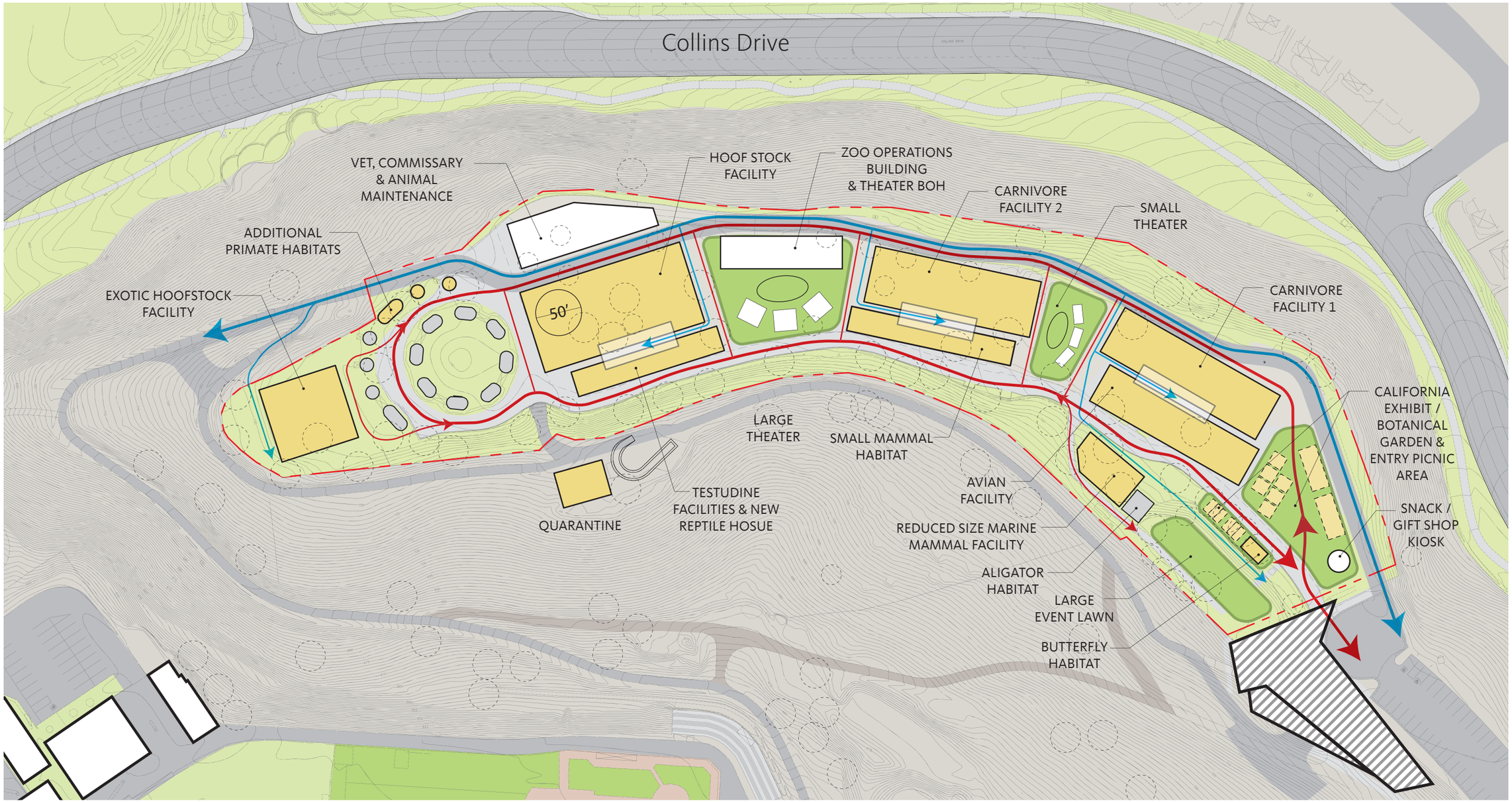


Fig 6.2

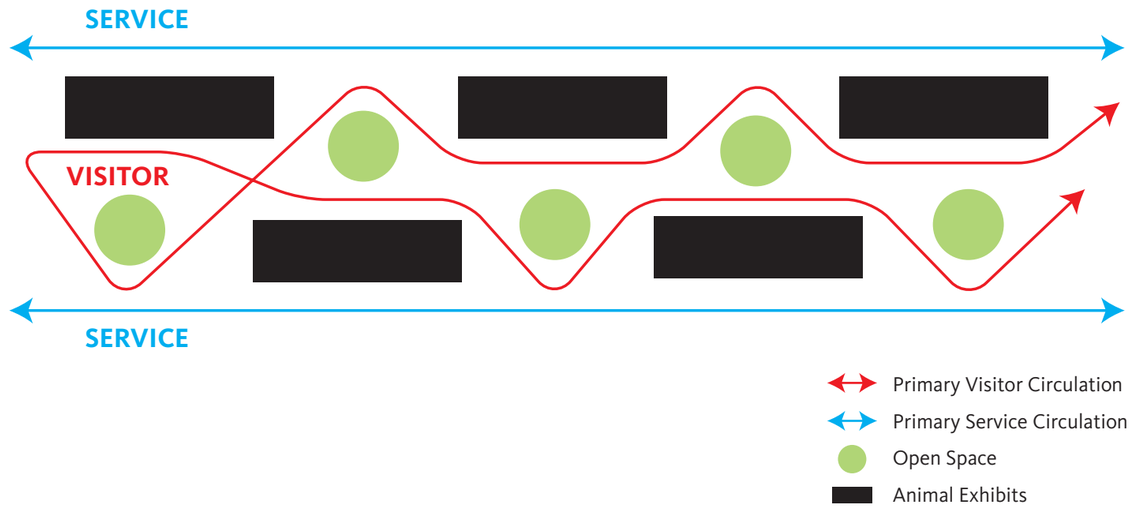
Option 2

6.3 Option 3: Bands

Overview

- The organizing element of this scheme is the central spine for visitor circulation. It has exhibits on both sides and an outdoor space dedicated to each exhibit area.
- Visitor circulation is separate from the service circulation to the north and south of the animal exhibits. An optional pedestrian loop could enhance the visitor experience.
- The zoo operations building, sited on the hillside, is adjacent to the entry and a separate maintenance facility is located toward the western part of the site.
- This option requires relocation of most of the exhibits and a change in the overall circulation of the current configuration.

Exhibits, Open Space & Circulation



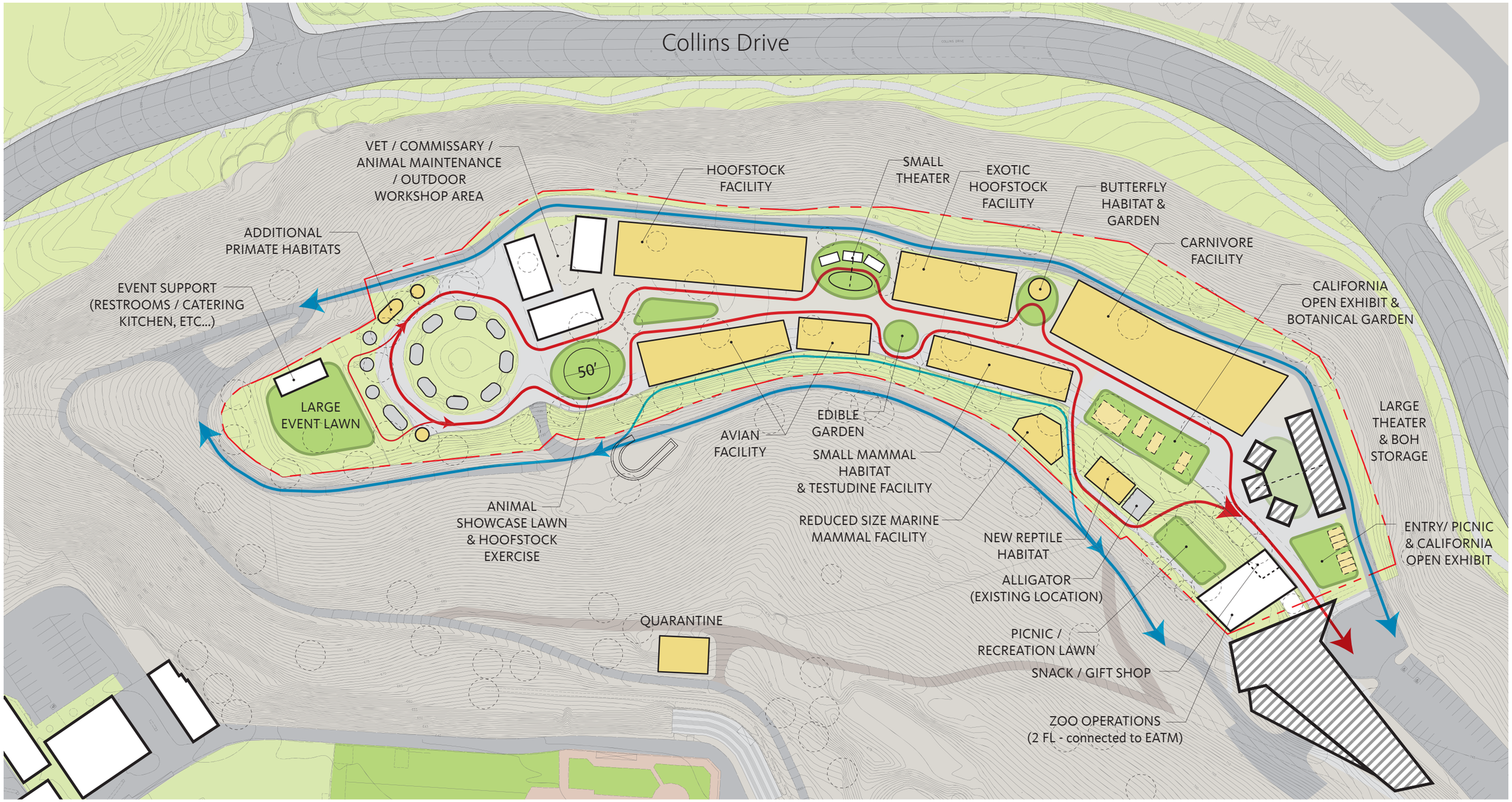


Fig 6.3
Option 3

EXISTING TREE
EXISTING ZOO PERIMETER
EXISTING BUILDING
EXISTING EXHIBIT
NEW BUILDING
NEW EXHIBIT
PRIMARY VISITOR CIRCULATION
PRIMARY SERVICE CIRCULATION

N

Scale 1" = 100'-0" @ 11"x17"
0' 50' 100'


The Wilson Family
Carnivore Habitat
African Lions
America's Teaching Zoo
Hillside Theater

5.0 ANALYSIS FINDINGS

5.1 Strategic Assets

During the first phase of the planning process, the faculty and staff, together with the consultant team, identified the strengths, challenges and opportunities facing America's Teaching Zoo and the Exotic Animal Training and Management Program.

Strengths

- Location and climate
- Engaged and passionate students
- Variety of animals in collection
- Visitor proximity to animals
- Student / visitor interaction
- Connections to other campus programs
- Intimacy of the facilties

Challenges

- Funding constraints
- Lack of awareness in the community
- Limited geographic area
- Infrastructure issues
- Access and circulation
- Topography
- Climate
- Disconnect between EATM and Zoo
- Outdated / poor-condition facilities
- Lack of cohesive design
- Compromised visitor experience

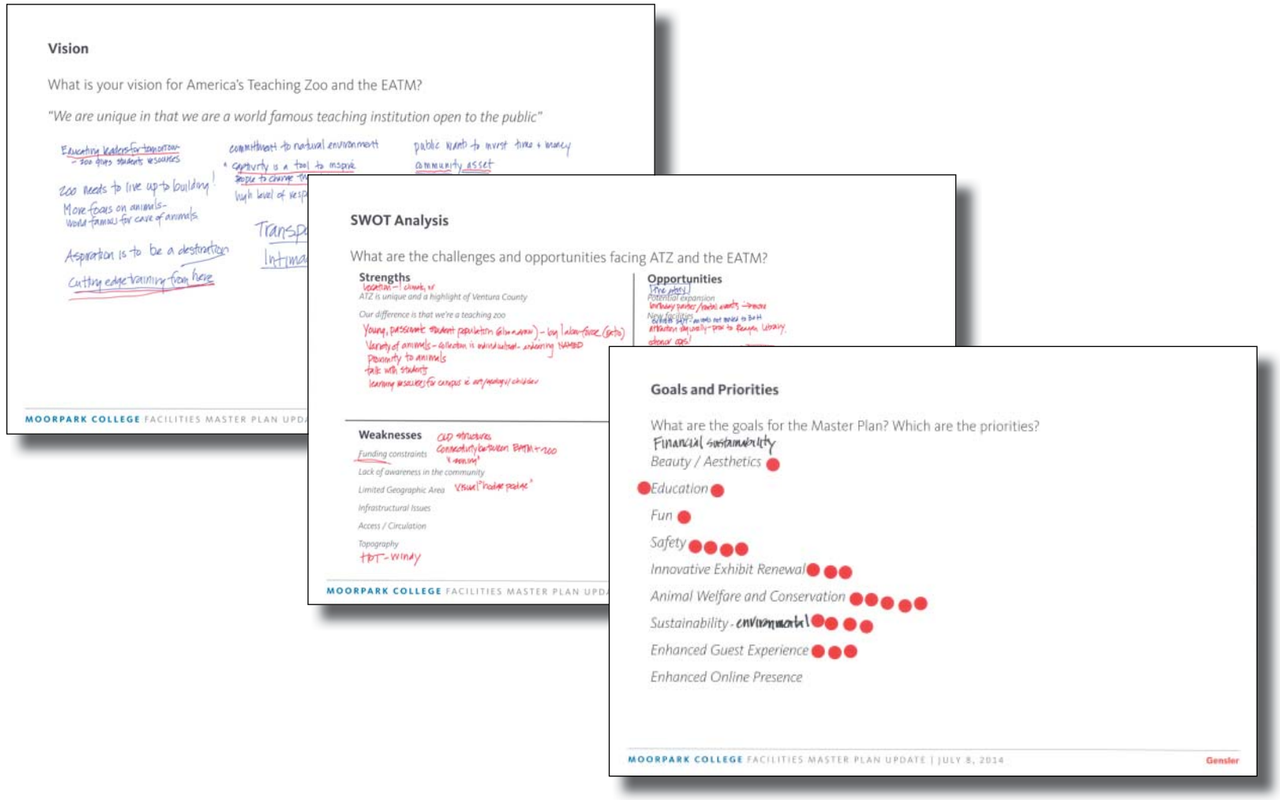
Opportunities

- Potential expansion
- New facilities
- Event rentals / revenue generation
- Regional attractions
- Donor opportunities
- Potential attendance growth
- More naturalistic enclosures
- Placing more animals on exhibit
- Technology
- Developing a story for the Zoo
- Improved signage / interpretive exhibits

Fig 5.1
Visioning Session Analysis

America's Teaching Zoo Vision:

"We are a world famous teaching zoo open to the public."



5.2 Planning Principles

Overview

The following Planning Principles, Goals and Strategies represent the framework for developing a new Master Plan for America's Teaching Zoo. The Principles articulate the overarching vision and aspirations for the future of the Zoo. The Goals represent specific targets for the physical plan. Strategies are potential recommendations for achieving the Goals and realizing the Principles.

Principle I

This is America's Teaching Zoo: animal careers begin here.

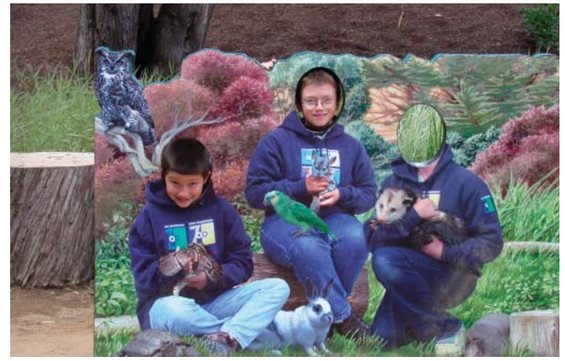
As America's Teaching Zoo, our core mission is to educate the next generation of leaders in animal training and care. The Master Plan should reflect and support our educational mission.

Goals

- Develop the best facilities in the United States for teaching animal care and training
- Continue to support the educational mission of Moorpark College and the Exotic Animal Training and Management Program

Strategies

- Create a development program to meet the physical facility needs of the educational program
- Incorporate teaching and learning spaces throughout the site



Principle II

Safety and animal care are our top priorities.

Our number one priority in everything that we do is the safety of our students, staff and visitors and the care and welfare of our animals. The Master Plan should support and enhance animal care and student, staff and visitor safety.

Goals

- Develop safe, secure and humane enclosures that protect the welfare of our students, staff, visitors and animals
- Create environments that enrich our animals lives and allow them to exercise their natural behaviors to the greatest extent possible

Strategies

- Provide sufficient space for all animals in their primary habitat
- Create appropriate environments (with regards to materials, shade, enrichment etc.) to support the physical and mental health of the animal
- Ensure appropriate fencing and enclosures to keep animals and visitors at a safe distance while maximizing visibility of the animals

- Organize exhibits with appropriate adjacencies and sufficient service access
- Add naturalistic elements to enclosures
- Describe animal care in graphics and programs / tours
- Educate visitors about animal care
- Identify facilities used in animal care
- Label plants used in feeding and enrichment
- Identify animals by individual name and describe their personal life stories and role in training

Principle III

Here, behind the scenes is front and center.

Every visitor gets a VIP experience with an up-close view of animals and personal interaction with our students and animal trainers.

Goals

- Show visitors view how we work to educate animal keepers and train and care for animals
- Maximize visibility and transparency, and allow visitors to see everything about how a zoo works

Strategies

- Allow up-close viewing of animals whenever possible
- Perform husbandry, care and training in view of visitors whenever possible
- Create interpretive and interactive elements that allow visitors to participate in animal care and training, to the extent possible
- Provide formal and informal spaces for animal shows, presentations and keeper talks
- Create flexible training space that can be on view or off view as needed

Planning Principles

Principle IV

This is a wonderful place to explore, learn and have fun.

Learning is fun at America's Teaching Zoo! We want to inspire and educate visitors through engaging and interactive experiences.

Goals

- Design exhibits to create memorable animal experiences
- Create comfortable spaces that enhance learning and enjoyment
- Accommodate all visitors, including those with physical or mental disabilities

Strategies

- Create a welcoming entry for orientation and assembly at the zoo entrance
- Take advantage of the natural environment, existing trees and views
- Provide adequate restrooms, drinking fountains and appropriate amenities throughout the zoo
- Provide shade cover along all visitor paths, viewing areas, theaters and seating areas

- Provide varied animal viewing opportunities
- Enhance visitor circulation
- Separate visitor circulation and service access
- Provide visitor play space and interactive experiences such as water play areas, climbing structures, nature exploration and photo opportunities that accommodate users with varying abilities throughout the zoo
- Add tactile and auditory experiences that accommodate vision-impaired visitors
- Accommodate wheelchair users and mobility-impaired visitors along major paths

Principle V

Our purpose is to inspire conservation and the care of animals and the environment.

As a zoo, we strive to inspire and educate visitors about the care of animals and the conservation of species in the wild.

Goals

- Introduce visitors to the importance of animal conservation

Strategies

- Provide educational signage and programming to educate visitors about animal conservation at all exhibits
- Incorporate sustainable design strategies in all exhibits and facilities
- Create opportunities for visitors to participate in conservation projects

Principle VI

We aspire to cultivate support and investment from the community that we serve.

As a part of VCCCD, we serve the Moorpark and Ventura County communities and support shared synergies between the college and community.

Goals

- Increase awareness and support for the Zoo in the community
- Be a community resource for Ventura County and Southern California
- Become known as a Ventura County destination

Strategies

- Collaborate with regional tourism marketing
- Coordinate with other local destinations, such as the Reagan Library
- Create places for community events
- Enhance signage and wayfinding from the campus and freeway

Principle VII

We are committed to fiscal and environmental sustainability.

As a non-profit public institution, we are financially prudent. The Master Plan supports fiscally-sound development.

Goals

- Create a practical, cost-efficient master plan that can be developed in phases over time
- Provide opportunities for revenue generating uses that can support the operations of the zoo

Strategies

- Create a variety of donor opportunities
- Enhance the facilities for events
- Consider potential food service and retail opportunities
- Create revenue-generating opportunities without compromising ATZ's primary educational mission


The Wilson Family
Carnivore Habitat
African Lions
America's Teaching Zoo
Hillside Theater

7.0 MASTER PLAN OVERVIEW

7.1 Planning Principles

Overview

The following are Planning Principles for developing a new Master Plan for America's Teaching Zoo. These Principles articulate the over arching vision and aspirations for the future of the Zoo.

Principle I

This is America's Teaching Zoo: animal careers begin here.

Principle II

Safety and animal care are our top priorities.

Principle III

Here, behind the scenes is front and center.

Principle IV

Our purpose is to inspire conservation and the care of animals and the environment.

Principle V

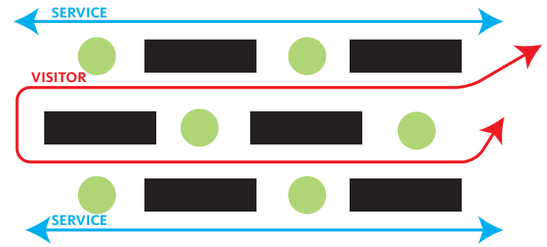
We aspire to cultivate support and investment from the community that we serve.

Principle VI

We are committed to fiscal and environmental sustainability.

7.2 Master Plan Concept

Concept Diagram



Overview

The Master Plan concept provides a framework for the future development of America's Teaching Zoo. Throughout the Zoo, the Master Plan places the care and training of animals front and center with expanded enclosures, enhanced exhibits and new teaching gardens that support the kind of up-close animal experiences that make America's Teaching Zoo unique.

The centerpiece of the plan is the expansion of the Zoo to the south and the reorganization of all exhibits and facilities around a central pedestrian pathway and an exterior loop road providing service access. Vehicular and pedestrian circulation are separated throughout the Zoo to avoid conflicts and enhance the visitor experience. The utilization of new hillside areas allows variation in the design of animal enclosures and habitats and provides more space for animals and visitors. The new Master Plan captures the natural beauty of the Moorpark campus, with open spaces and enclosures carefully positioned to maximize views and native California landscaping incorporated throughout.

The improved visitor experience will begin at the entrance, where visitors will enter into an expansive open plaza. The plaza will provide ample space for large groups of schoolchildren to gather for orientation before proceeding into the heart of the zoo. A new Zoo Operations Building located at the entrance will provide enhanced visitor amenities, including much-needed classroom, lab and administrative space and possibly food service. A lower-level event space opening onto an expansive Event Lawn will accommodate groups of up to 250 people for graduations, conferences, fund-raising galas and revenue-generating events such as weddings.

Just past the Entry Plaza, visitors will find themselves in the California Habitat, an immersive, mixed-species exhibit focused on teaching visitors about the natural world with exhibits featuring plants and animals from across the Golden State.

Downslope from the existing Zoo, the hillside expansion will incorporate a new Carnivore Habitat with enlarged enclosures and improved training facilities and a natural amphitheater built into the hillside.

On the western side of the Zoo, a new Animal Care Center will incorporate the Veterinary Center, Animal Kitchen, off-exhibit animal housing and a workshop area. Primate Gardens will be expanded and enhanced with new landscaping and a central exercise enclosure. Finally, a Marine Mammal Facility will anchor the western edge of the Zoo, creating a new destination for visitors.
.

Fig 7.1

Illustrative Master Plan

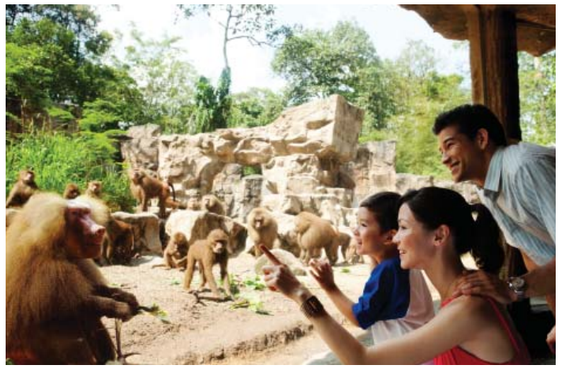
Visitor Experience

The defining feature of the Master Plan is the visitor experience, which offers all visitors a "Behind the Scenes" look at how students and staff care for and train animals. Throughout the Zoo, "Behind the Scenes" activities such as training, feeding, medical care, and caretaking are brought directly adjacent to the visitor path and featured as the zoo's main attraction.

Animal care is prioritized and on display. Larger animal habitats and bedroom enclosures are staggered behind and between training facilities and teaching gardens to provide a comfortable private zone for animals if needed.

The "Behind the Scenes" focus brings animals and keeps out front to interact with visitors. Teaching Gardens located along the visitor path provide a place for student zoo keepers to bring animals out for an intimate and personal educational experience.

Conventional Zoo



Singapore Zoo, Singapore

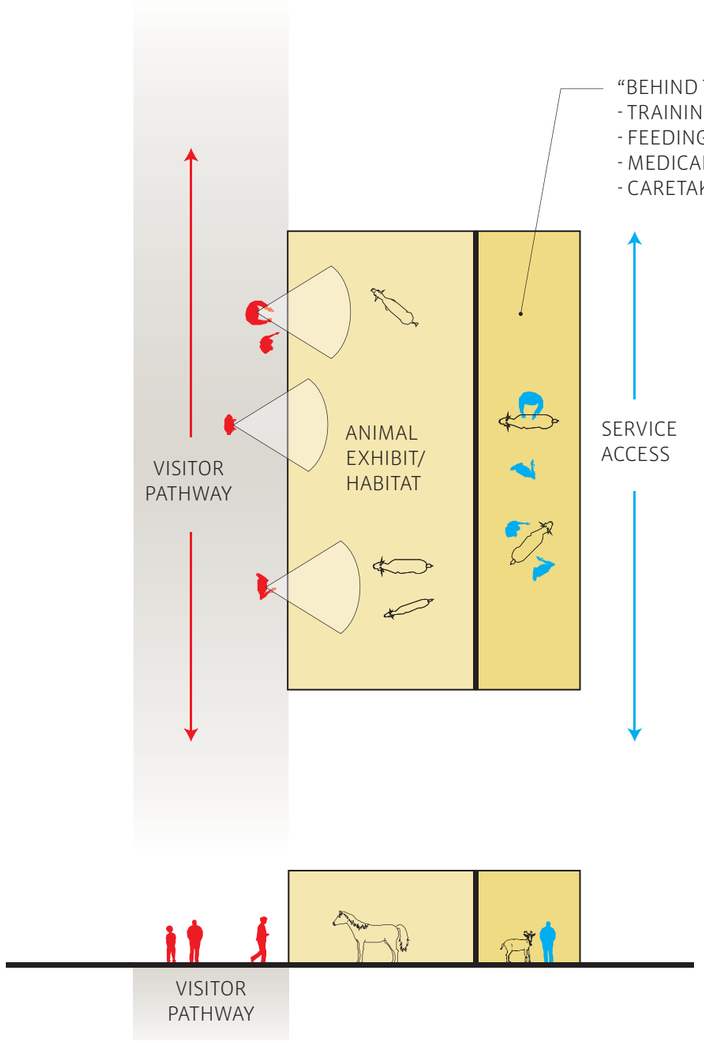
- Visitors view naturalistic animal enclosures from one side
- Activities such as animal husbandry and training take place behind the scenes with zoo keepers and staff
- Visitors have little or no interaction with zoo keepers and are shielded from seeing the animal care or training

Teaching Zoo

Glacier Run
Louisville Zoo, Louisville, KY

- Visitors view all areas where animals are kept and trained
- Animal training and care activities are front and center, allowing visitors to learn how zoo keepers work to care for animals
- Visitors can interact with students and zoo keepers to learn about animals and about careers in animal care
- Modular design and flexible barriers between spaces create multiple options for growing or contracting habitats as the zoo's collection changes.

Conventional Zoo Experience



"Behind the Scenes" Teaching Zoo Visitor Experience

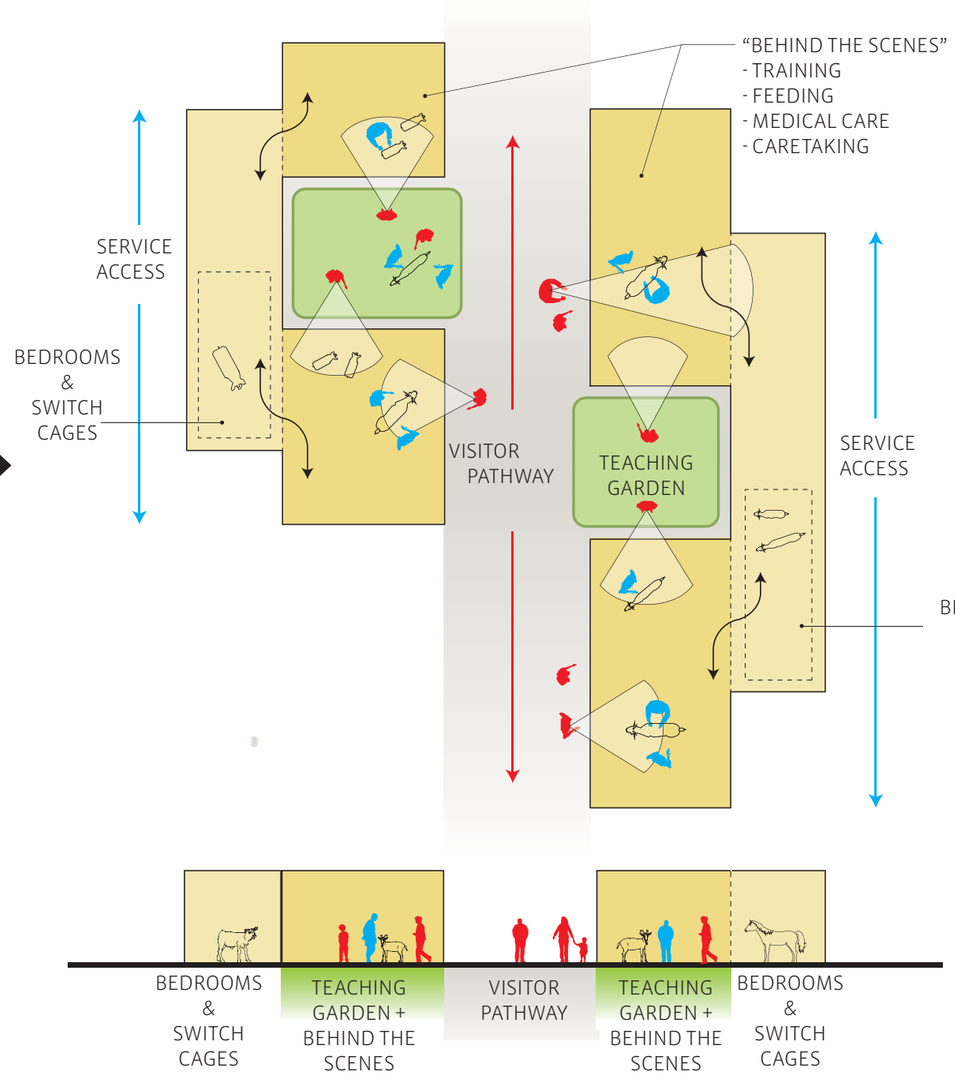


Fig 7.2

Design Concept

7.3 Built Systems

The building and facilities concept will maintain and improve existing facilities that are in generally good condition and over time replace existing buildings and facilities that are in poor condition.

2 New Zoo Operations Building

3 Existing Theater to be refurbished

23 Existing Carnivore Exhibit to be demolished and relocated

16 Commissary to be replaced with new Animal Kitchen

18 Treatment Room to be replaced with new Veterinary Center

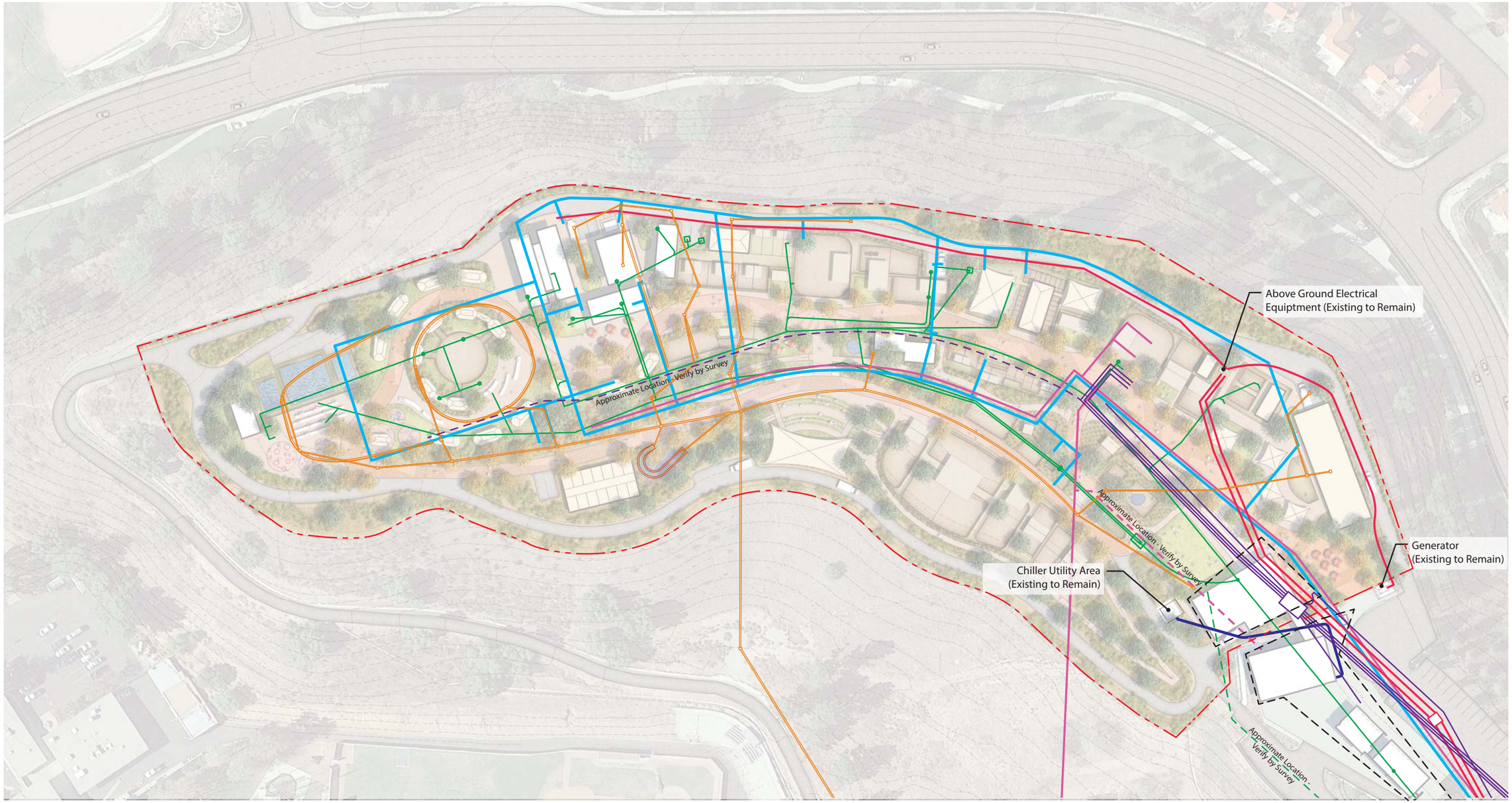
19 Existing Primate Gardens to be expanded and enhanced

Fig 7.3

Development Concept

Fig 7.4

Building Use Concept



Note: Dashed lines indicate approximate locations.

Fig 7.5
Utilities & Infrastructure Concept

7.4 Natural Systems

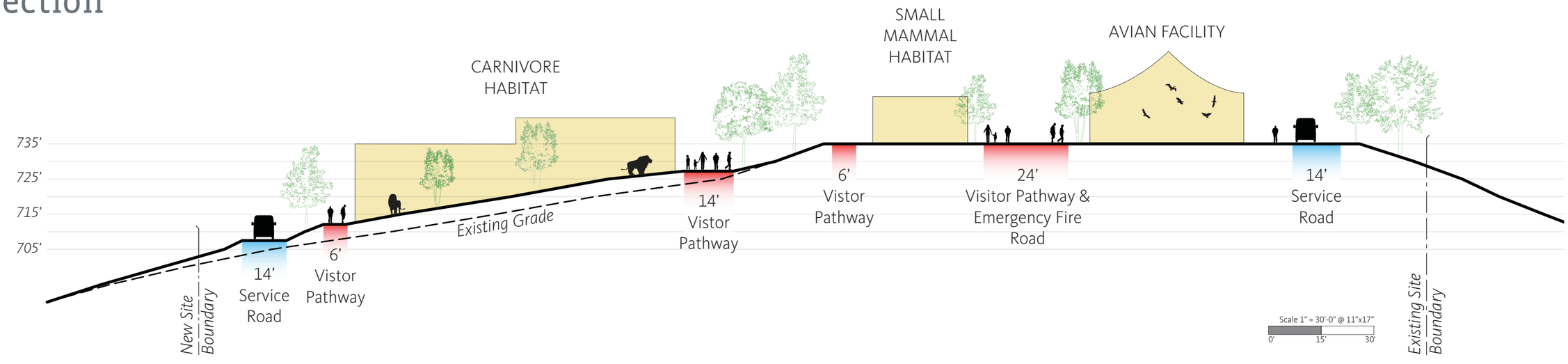
The landscape concept and planting plan will preserve and enhance existing trees and provide shade, color and variety. Throughout the zoo, native and drought-tolerant planting will enhance visitor experience and reduce water use and erosion.

California Sycamore
Platanus racemosa

Palo Verde
Cercidium floridum

Arizona Ash
Fraxinus Velutina

Section



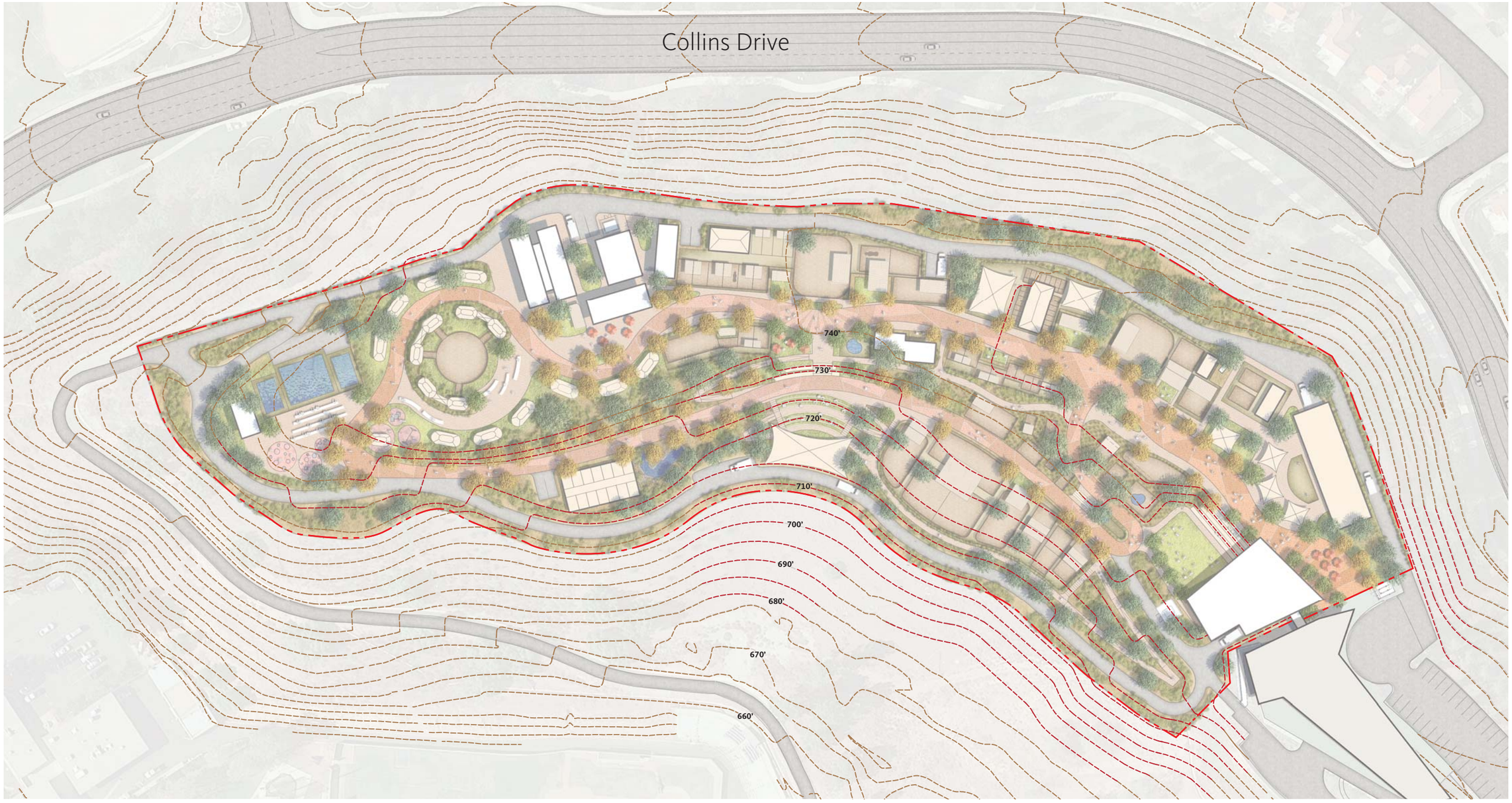


Fig 7.6
Grading Concept

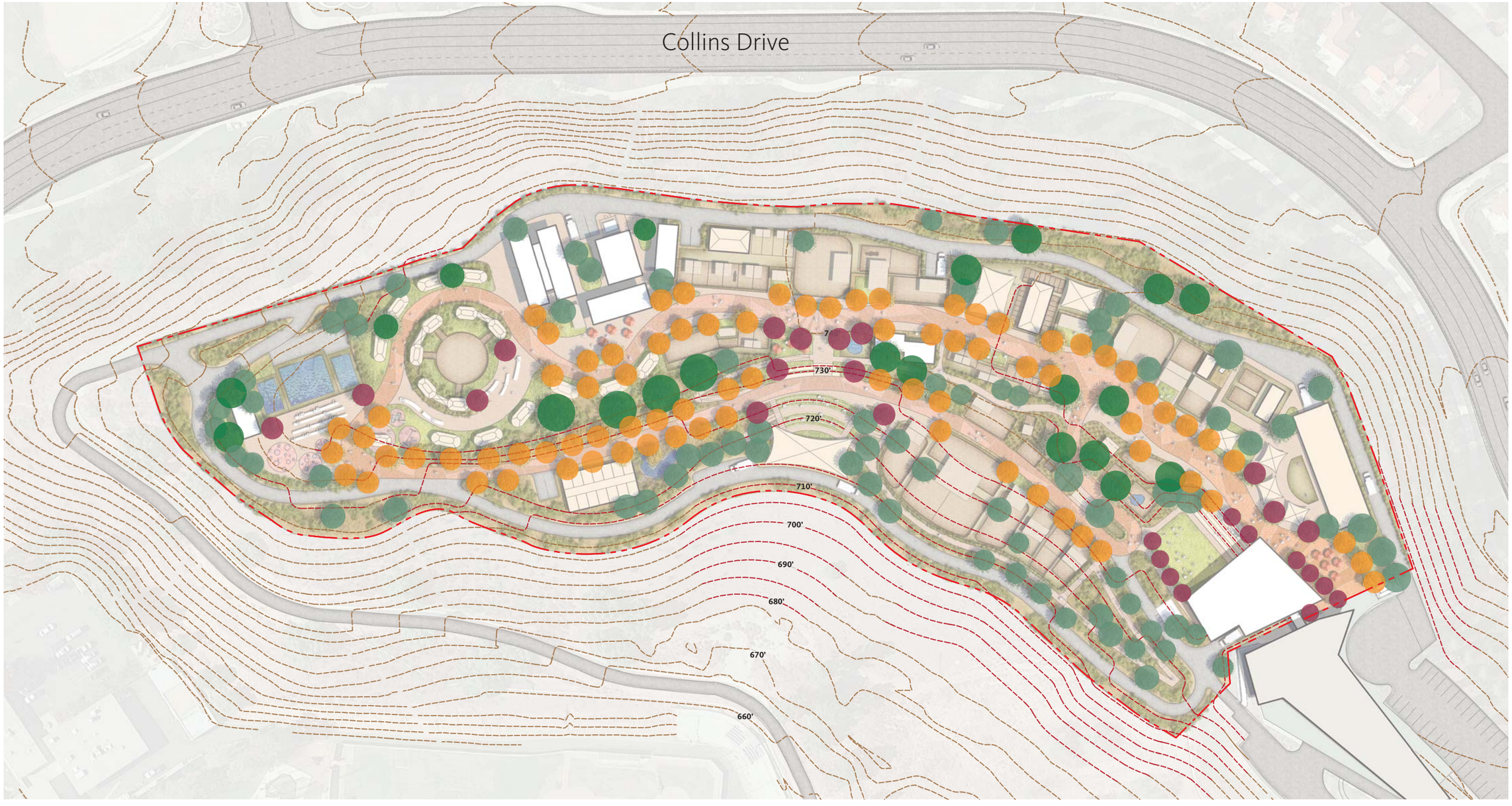


Fig 7.7

Tree Planting Concept

Fig 7.8
Landscape Concept

7.5 Visitor Experience

New open spaces and teaching gardens will provide a variety of learning experiences for students and visitors.

Entry Plaza

Hillside Theater

Entry Picnic Area

Exotic Birds Garden

Kids Water Play Area

Wetland Garden / Bioswale

Fig 7.9

Amenities & Open Space Concept


The Wilson Family
Carnivore Habitat
African Lions
America's Teaching Zoo
Hillside Theater

8.0 ENLARGED AREA PLANS & DESIGN GUIDELINES

8.1 Enlarged Area Plans

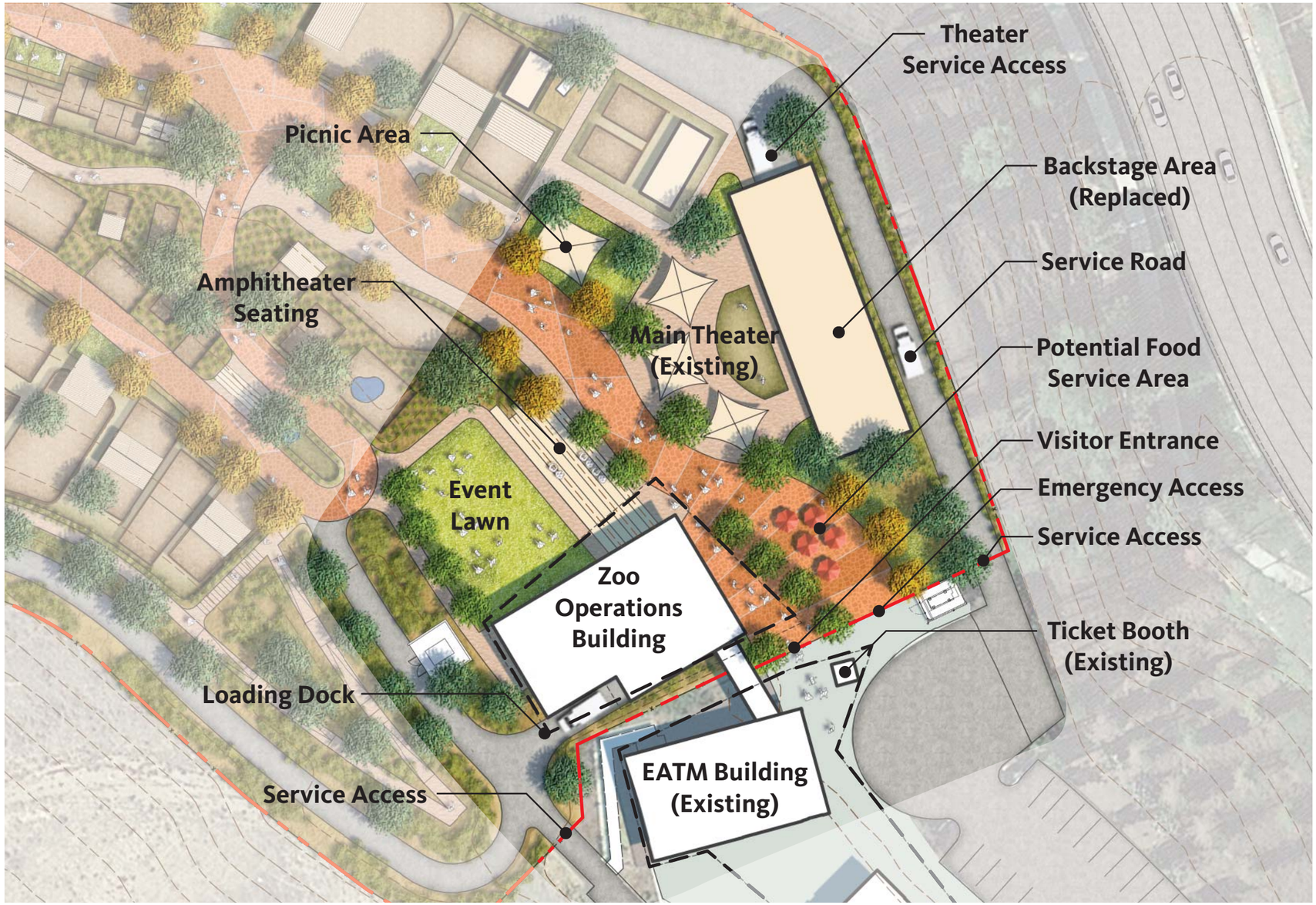
Site Plan

Entry Area

Key Elements

- Entry Plaza
- Visitor Information
- Recreation / Event Lawn
- Picnic Area
- Theater
- Potential Food Service
- Restrooms
- Wayfinding Signage
- Donor Opportunities

Detailed Plan

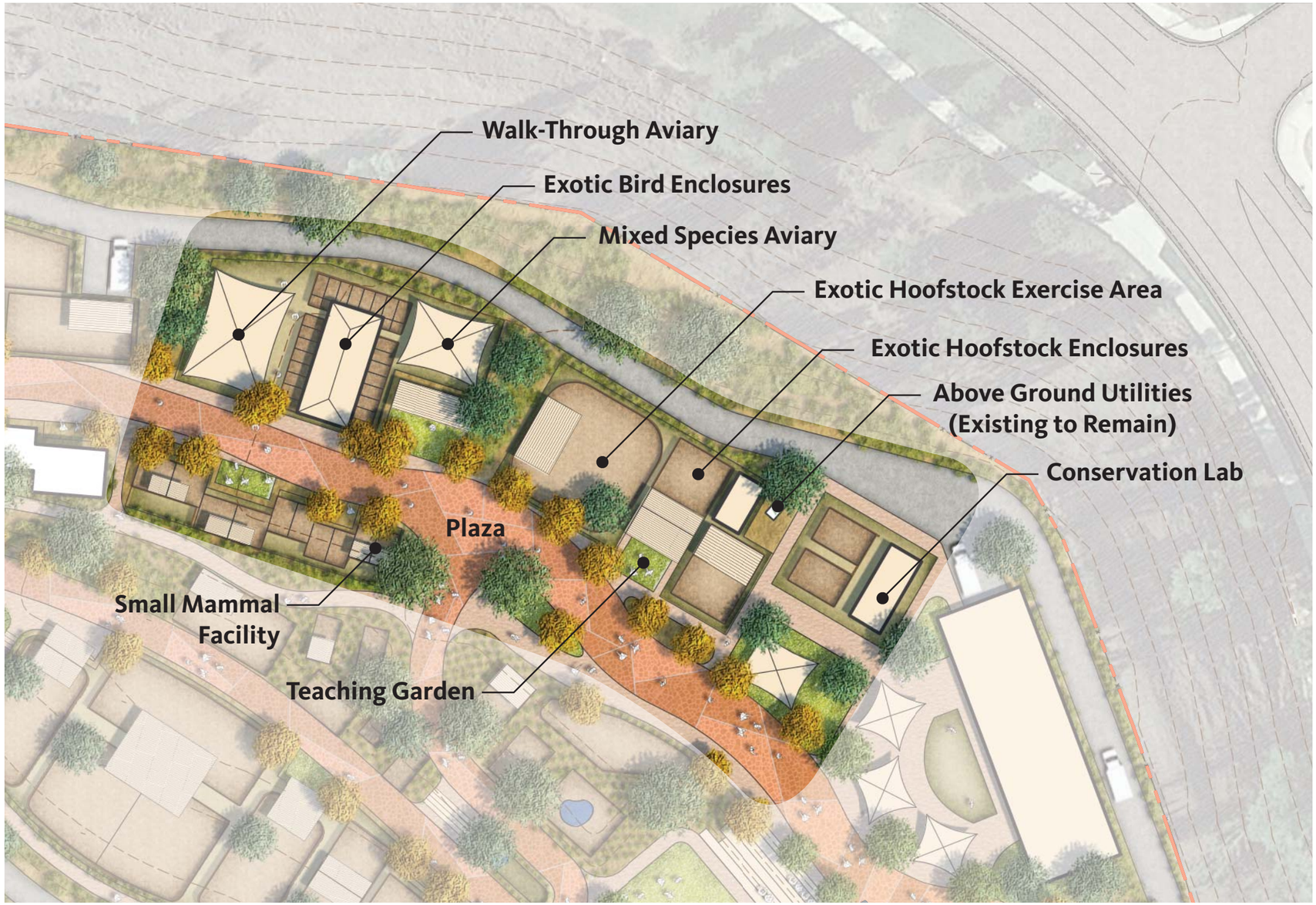


East Zoo Area

Key Elements

- Aviary
- Conservation Lab
- Exotic Hoofstock Facility
- Small Mammal Facility
- Teaching Garden
- Interpretive Signage
- Wayfinding Signage

Detailed Plan



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Scale 1" = 50'-0" @ 11"x17"

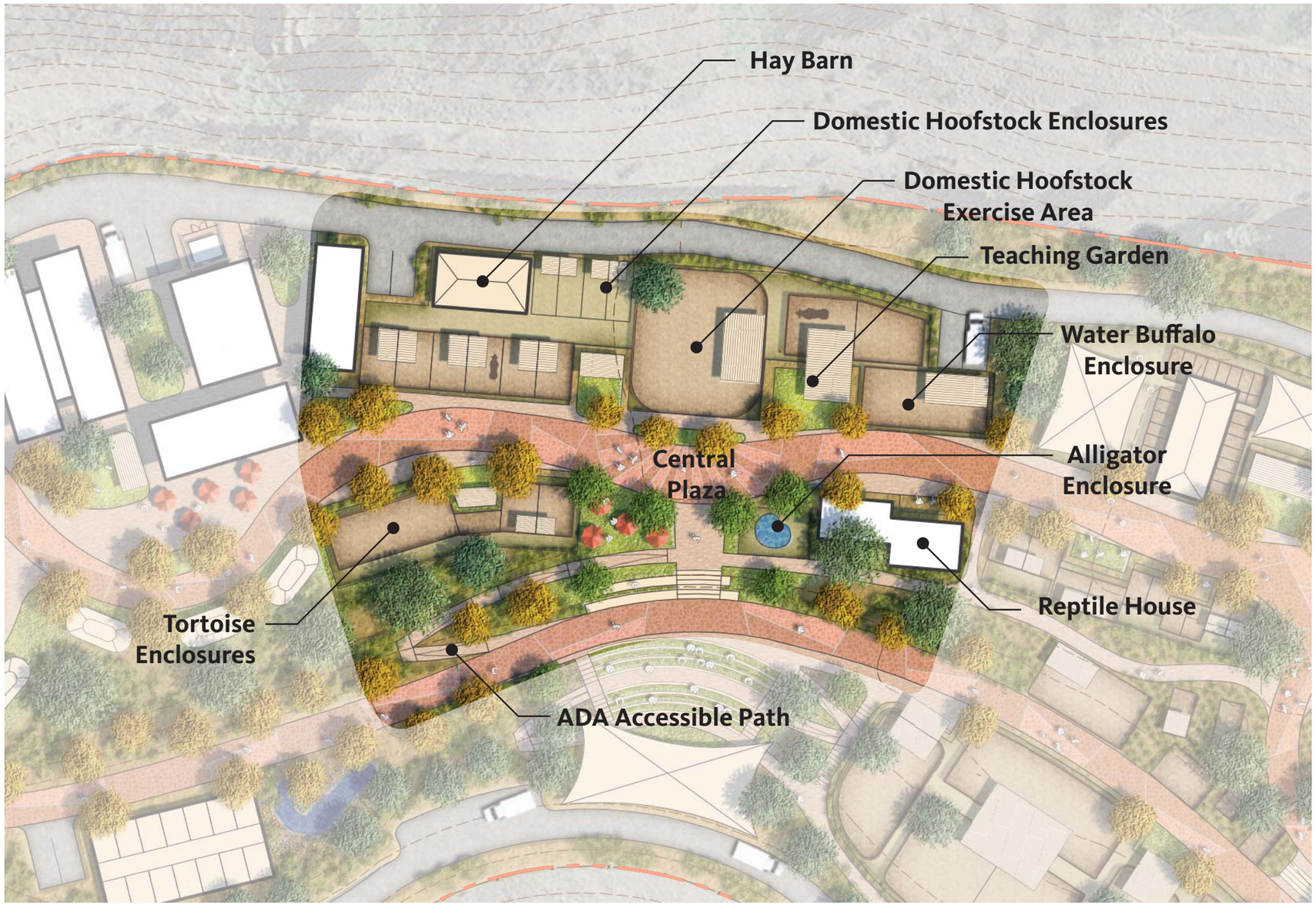
0' 25' 50'

Central Zoo Area

Key Elements

- Domestic Hoofstock
- Alligator Habitat
- Tortoise Habitat
- Reptile House
- Visitor Information
- Picnic Area
- Teaching Garden
- Interpretive Signage
- Wayfinding Signage

Detailed Plan



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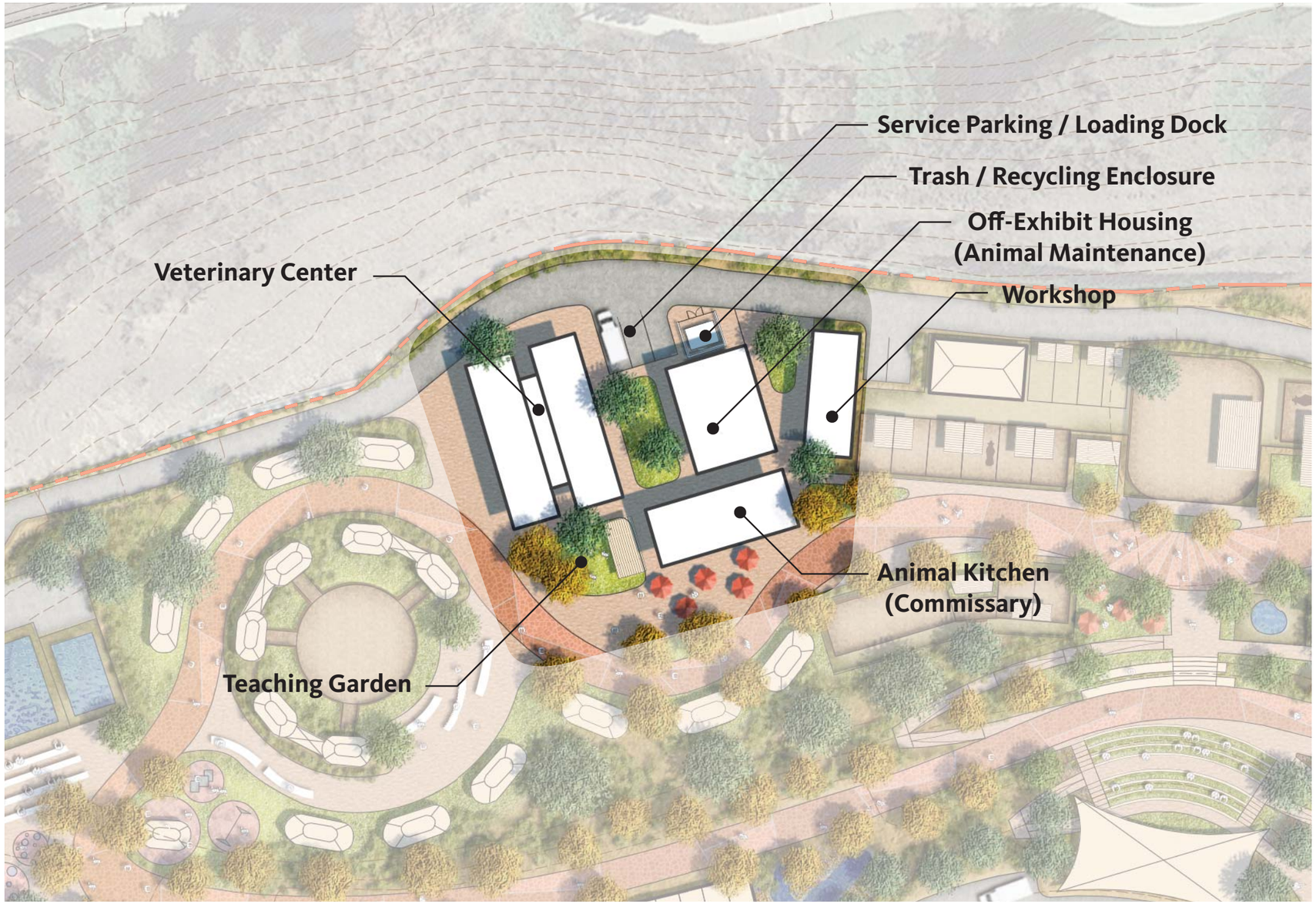
0' 25' 50'

Animal Care Center

Key Elements

- Veterinary Center
- Animal Kitchen
- Workshop Area
- Teaching Garden
- Potential Food Service
- Restrooms
- Interpretive Signage
- Donor Opportunities

Detailed Plan



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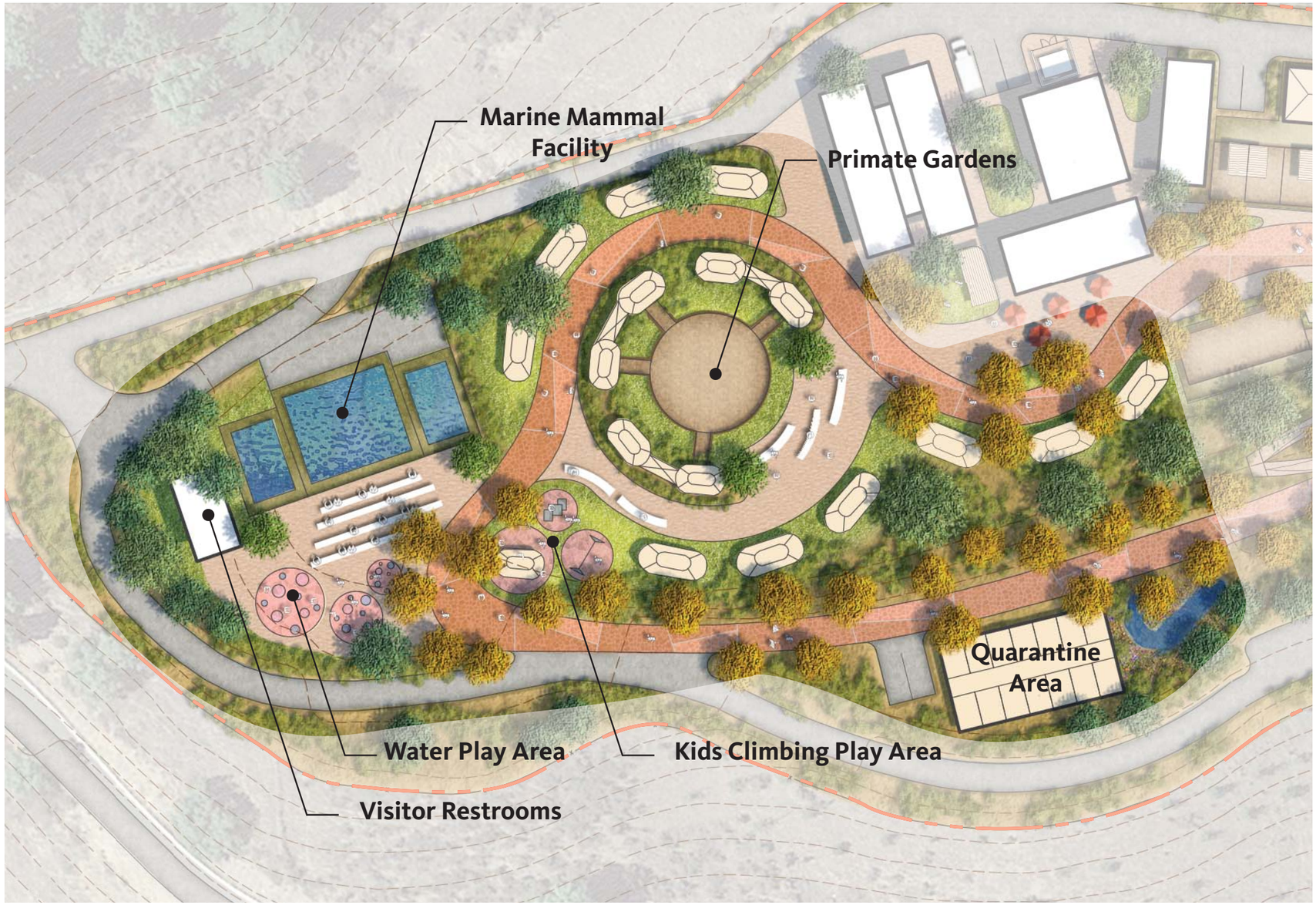
0' 25' 50'

West Zoo Area

Key Elements

- Primate Gardens
- Marine Mammal Facility
- Play Area
- Teaching Gardens
- Restrooms
- Interpretive Signage
- Wayfinding Signage
- Donor Opportunities

Detailed Plan



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Scale 1" = 50'-0" @ 11"x17"

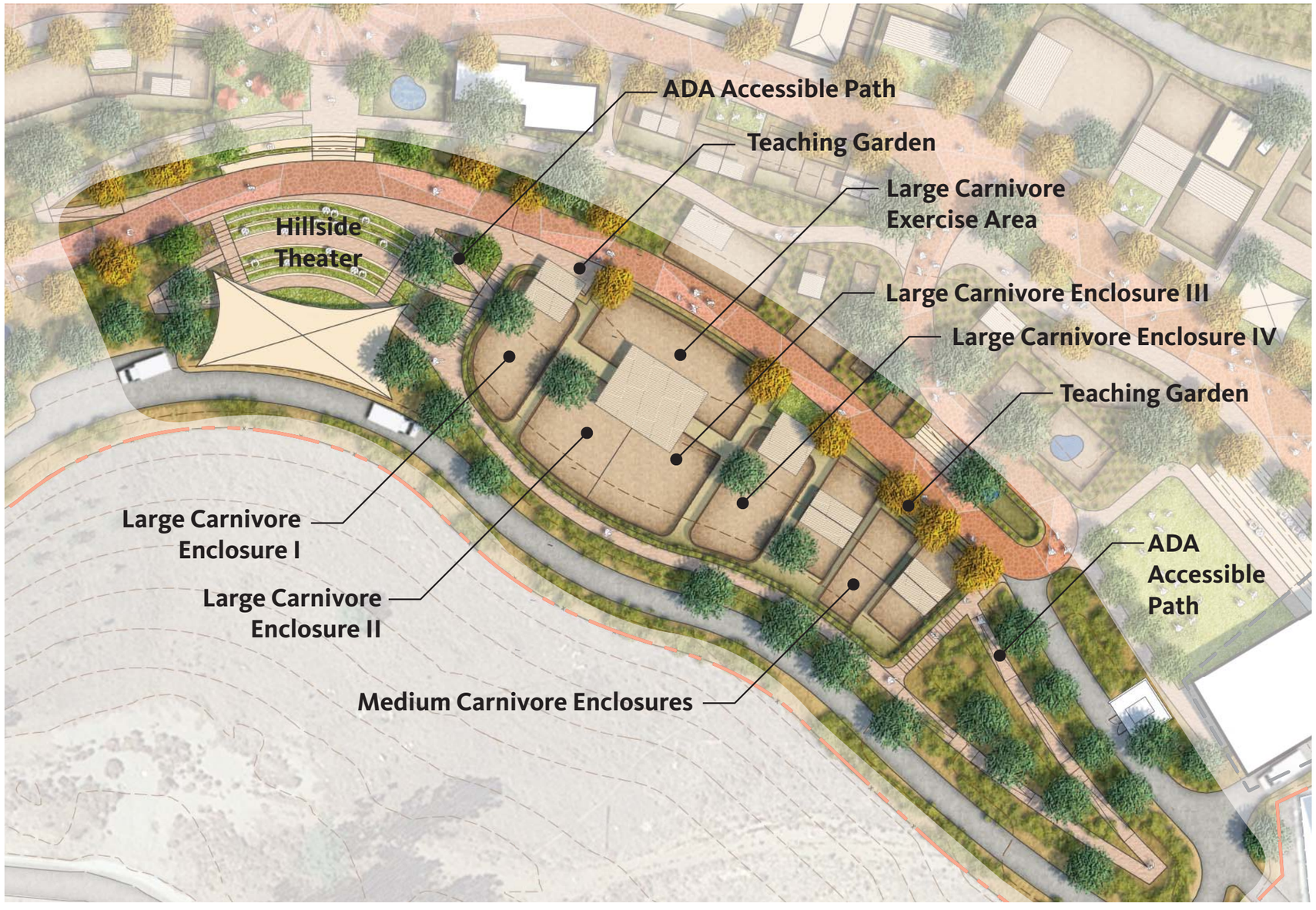
0' 25' 50'

Hillside Expansion Area

Key Elements

- Carnivore Habitat
- Hillside Theater
- Teaching Gardens
- Interpretive Signage
- Wayfinding Signage
- Donor Opportunities

Detailed Plan

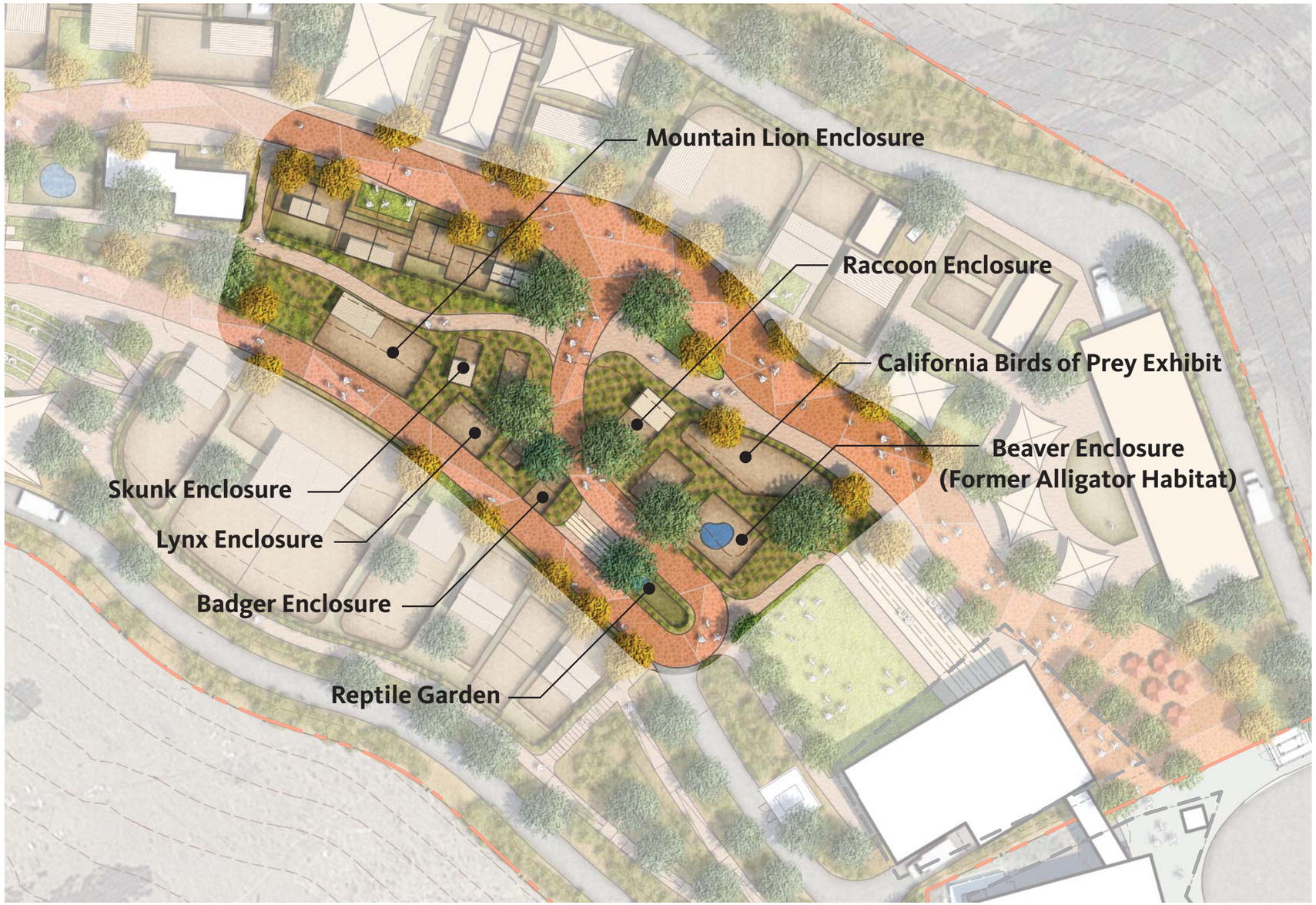


California Gardens Area

Key Elements

- California Gardens
- Teaching Gardens
- Interpretive Signage
- Wayfinding Signage
- Donor Opportunities

Detailed Plan



8.2 General Design Guidelines

Overview

These general design guidelines establish the character and basis for design for the future development of the Zoo. The following sections provide specific guidance for each element of the built environment to ensure the design adheres to the principles of the Master Plan while allowing flexibility to accommodate future needs.

Design Character

In general, all elements of the built environment should reflect a consistent character, establishing a comprehensive campus-wide aesthetic and reflecting the brand and identity of America's Teaching Zoo. Improvements should embody the principle that "behind the scenes is front and center" through design elements that maximize transparency and visitor experience.

The existing EATM building and proposed new Zoo Operations Building and Entry Plaza will establish the design character for the Zoo, with natural materials, expansive shaded areas, and indoor-outdoor spaces. This design character will continue throughout the Zoo, through the use of similar materials and formal elements.

Sustainability

All facilities and exhibits should incorporate sustainable design, reflecting the principles of fiscal and environmental sustainability. This section provides an overview of the sustainable elements that are incorporated throughout the site. Specific sustainable design elements are described in greater detail in the following sections.

Natural Environment

The natural characteristics of the site should be preserved to the greatest extent possible. Site grading should focus on both function and aesthetics. Cuts and fills should be balanced across the site, reducing the need to haul materials on or off site by truck.

To the extent possible, new buildings, exhibits, pathways and landscaping should be located to avoid significant stands of vegetation and/or mature native specimen plants.

Energy Use

All facilities should incorporate design strategies to reduce energy usage such as natural ventilation, passive cooling through shading and use of natural light. Energy-saving technology such as LED fixtures and demand-responsive lighting should be incorporated into all buildings, animal enclosures, path lighting and other facilities as appropriate.

Water Use

Buildings, open spaces and landscaping should be designed to reduce water use and encourage water conservation. Within buildings, water-saving fixtures should be used. All landscaped areas and opens spaces should incorporate drought tolerant plantings and the use of turf should be limited to the areas designated for recreational use.

Buildings, paved areas and landscaped open space should be integrated with site-wide water conservation systems, such as cisterns or detention basins to capture and reuse run-off from buildings and paved paths.

Universal Design

All elements of the building environment within the Zoo, including circulation, buildings and signage, should be accessible and usable by all students, staff and visitors regardless of their age or ability to the greatest extent possible.

Fig 8.1

Master Plan Overview

1 Entry Plaza
2 Zoo Operations Building
3 Main Theater
4 Event Lawn
5 East Picnic Area
6 California Habitat
7 Conservation Lab
8 Exotic Hoofstock Area
9 Small Mammal Facility
10 Aviary
11 Reptile House
12 Domestic Hoofstock Area
13 Central Picnic Area
14 Tortoise Habitat
15 Workshop Area
16 Animal Kitchen
17 Off-Exhibit Housing
18 Veterinary Center
19 Primate Gardens
20 Marine Mammal Facility
21 Quarantine Area
22 Hillside Theater
23 Carnivore Habitat

New Buildings
Existing Buildings
Other Structures
Animal Enclosures
Zoo Perimeter

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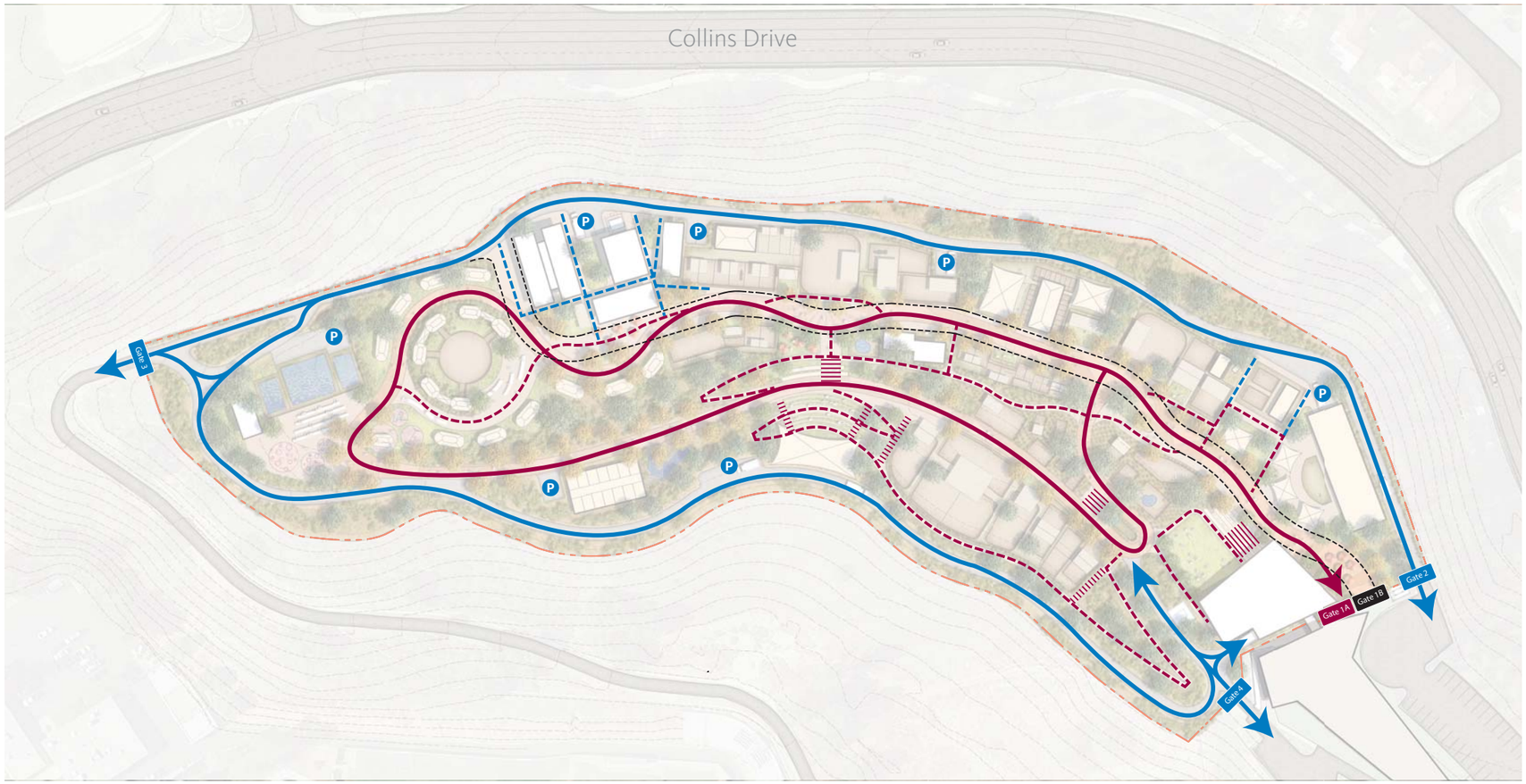
Scale 1" = 100'-0" @ 11"x17"
0' 50' 100'

8.3 Access & Circulation Design Guidelines

Concept Plan



Circulation Type	Use	Width / Slope	Key Elements	Sustainability
Path	› Main visitor loop › Student Circulation › Fire lane	› 15' - 25' › Maximum slope 1:12 per ADA requirements	› Concrete paver system › Integrated graphic pattern / signage	› Utilize permeable paving › Provide shade structures and trees to reduce heat gain
Secondary Path	› Additional circulation connecting upper level to new hillside habitats	› Varies › Maximum slope 1:12 per ADA requirements	› Decomposed granite pathway › Furniture / seating areas	› Utilize permeable paving › Provide shade structures and trees to reduce heat gain
Primary Service Access	› Vehicular service loop	› 14' - 24'	› Concrete or asphalt roadway	› Utilize permeable paving › Capture / filter storm-water run-off
Secondary Service Access	› Non-vehicular service access	› 6' -12' › Maximum slope 1:12 per ADA requirements	› Concrete or decomposed granite pathway	› Utilize permeable paving › Capture / filter storm-water run-off
Fire Access	› Emergency vehicle access	› 24'	› Concrete or asphalt roadway	› Utilize permeable paving › Capture / filter storm-water run-off

Access & Circulation

Precedent Images

Pattern to define main pathway
Levinson Plaza - Boston, Massachusetts

Visitor / Pedestrian Zoo Entrance
America's Teaching Zoo - Moorpark , California

Pattern to define main pathway
Funenpark - Amsterdam, Netherlands

Detailed Guidelines

Gate

Visitor / Pedestrian Gate

The Visitor / Pedestrian Gate is the primary entrance for students and visitors.

Design Specifications

- Six (6) foot minimum width
- Create an Iconic, welcoming design
- Provide secure access

Gate

Service / Vehicular Gate

Service / Vehicular Gates are the primary access points for deliveries and zoo vehicles.

Design Specifications

- Fourteen (14) foot minimum width
- Provide secure access separate from visitor / pedestrian gate

Gate

Emergency / Fire Gate

Emergency / Fire Gates are for emergency access only.

Design Specifications

- Twenty-four (24) foot minimum width
- Provide secure access separate from visitor / pedestrian gate

Access & Circulation

Precedent Images

Mixture of paving options

Furniture blends path and landscape
Allée de Berlin Spandau - Paris, France

Stairs though Central Park
Muscat, Oman

Interactive furniture
Zoo Dresden - Dresden, Germany

Detailed Guidelines

— Primary Path

The Primary Path is the main visitor route through the zoo, connecting all exhibits and facilities. It may include wayfinding info graphics, animal graphic patterns, and donor recognition opportunities.

Design Characteristics

- Fourteen (14) foot minimum width; twenty-four (24) foot maximum width
- Incorporate wayfinding signage along path and at interactions
- Provide shade trees for pedestrian comfort
- Incorporate enhanced paving materials

--- Secondary Path

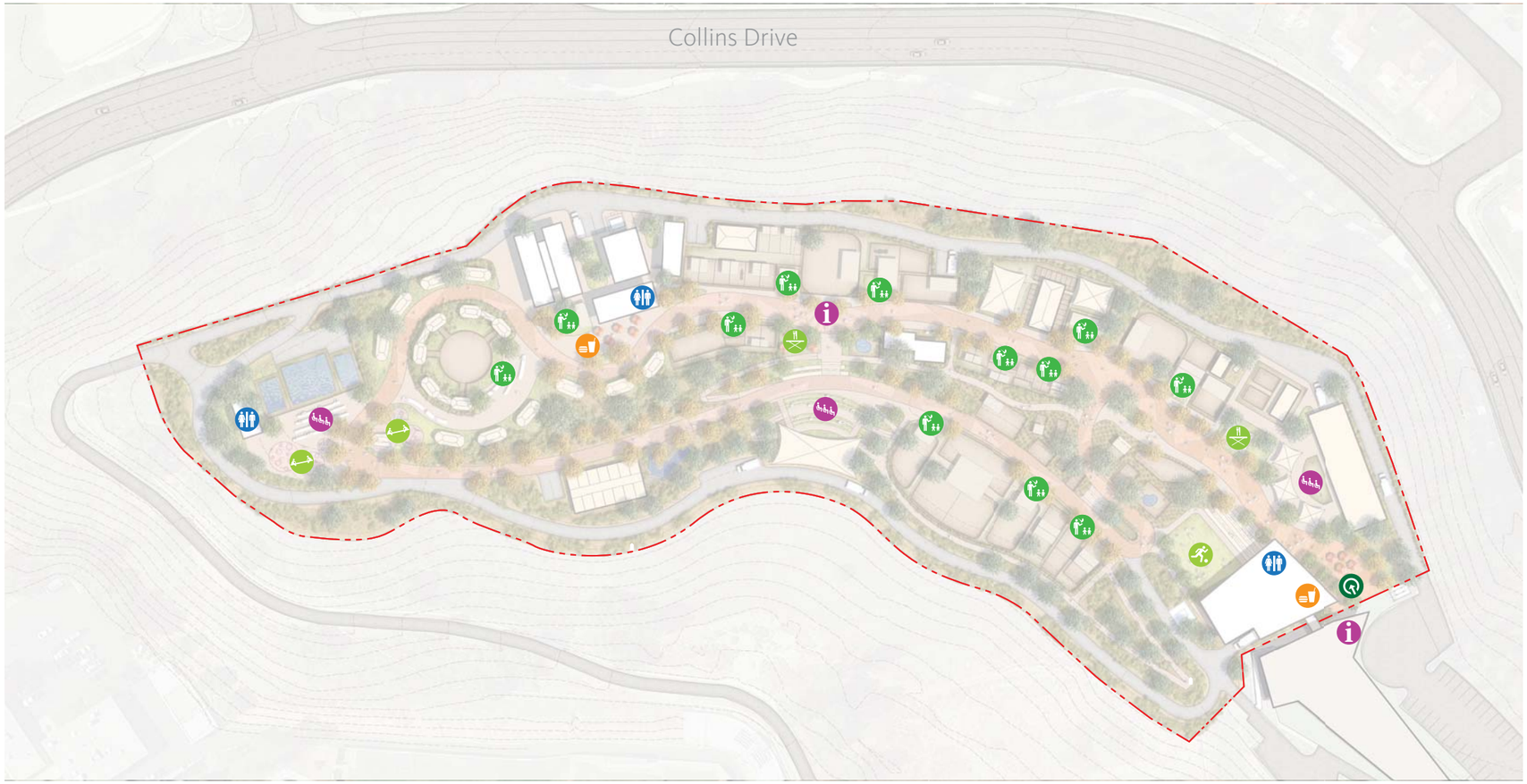
Secondary paths branch off from the main pathway, leading to exhibits and creating gathering spaces and plazas along the Primary Path.

Design Characteristics

- Width varies according to location
- Provide plazas / gathering spaces throughout the zoo
- Incorporate natural or porous paving material
- Provide furniture and seating area

8.4 Amenities & Open Space Design Guidelines

Concept Plan



Open Space Type	Use	Size	Capacity	Key Elements	Sustainability
Entry Plaza	› Information kiosk › School tour drop off and orientation area › Event reception area	› 60' x 60' (3,600 sf)	› 360 (standing)	› Paving pattern › Seating area near F&B › Accent trees	› Utilize permeable paving › Incorporate native plants / trees
Event/Recreation Lawn	› Fund raising gala › Summer camp activities › EATM graduation › Weddings	› 50' x 100' (5,000 sf)	› 500 (standing reception) › 370 (banquet tables)	› Flexible open area › Power supply for events › Adjacency to visitor amenities/ facilities	› Utilize drought resistant lawn
Theaters	› Animal shows › Teaching of trainers	› Main theater: 10,080 sf › Hillside theater: 4,560 sf	› Main theater: 350 seats › Hillside theater: 200 seats	› Bleacher seating › Shade structures	› Provide natural ventilation › Use natural grade
Picnic Areas	› School field trip & summercamp eating area › EATM student study area	› Entry Picnic: 45' x 45' (2,000 sf) › Central Park Picnic: 65' x 50' (3,250 sf)	› Entry Picnic: 200 people › Central Park Picnic: 325 people	› Tensile structure or umbrellas for shading › Adjacency to visitor amenities/ facilities	› Provide compost / recycling bins › Incorporate drought-tolerant landscaping
Teaching Gardens	› Interpretive exhibits › Themed landscapes › Information kiosks › Informal gathering	› 400 sf - 1,500 sf	› 14 - 50 people	› Lawn area for animals › ADA-compliant paving › Visitor seating › Shade structures	› Provide bioswale › Incorporate drought-tolerant landscaping

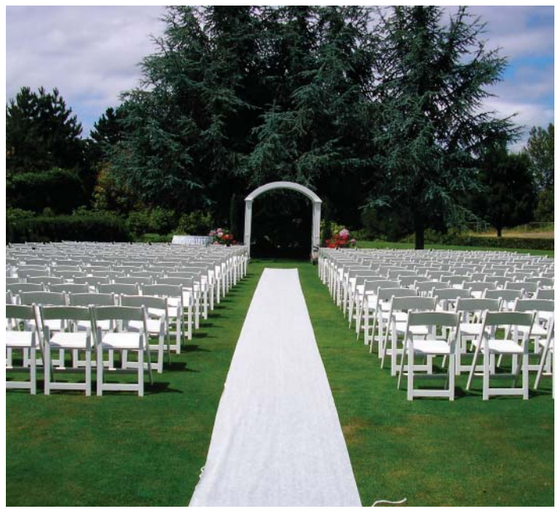
Amenities & Open Space

Precedent Images

Pathway clearly defined by landscape edge
Adelaide Zoo - Adelaide, Australia

Entry plaza with seating near cafe
Adelaide Zoo - Adelaide, Australia

Banquet Event Setup



Wedding Setup

Detailed Guidelines

Entry Plaza

The Entry Plaza is a welcoming open space for visitors and groups to gather. It also serves as an additional outdoor event reception venue, and may be used in conjunction with the Event Lawn.

Design Specifications

- Size: 60' x 60' (3,600) sf
- Guest Capacity: 360 people (standing reception) or 265 people (banquet seating)
- Paving pattern may incorporate wayfinding graphics, animal graphic patterns or donor names
- Utilize permeable paving to prevent excess storm-water run-off
- Trees and shrubs to buffer service road and utility box
- Incorporate seating area for potential food service, with shade provided by trees and umbrellas

Event/Recreation Lawn

A large Event / Recreation Lawn adjacent to the new Zoo Operations Building provides a venue for weddings, banquets, and summer camp activities.

Design Specifications

- Size:. 50' x 100' (5,000 sf)
- Guest Capacity: 500 people (standing reception) or 370 people (banquet seating)
- Incorporate a paved area adjacent to the Zoo Operations Building with electrical outlets for music / DJ booth and space for catering buffet setup
- Provide for irrigation with recycled water

Amenities & Open Space

Precedent Images

Existing Main Theater

Potential accent tree - Palo Verde

Greenery incorporated into theater seating
Oak Point Park - Plano, TX

Trees frame theater and enhance views
Taronga Zoo - Sydney, Australia

Detailed Guidelines

Theaters

Two theaters provide space for animal shows, lectures, events and learning opportunities for students.

Main Theater

- Enhance existing theater with additional landscaping
- Replace backstage area with new structure
- Incorporate signage and donor recognition opportunities

Hillside Theater

- Utilize existing grade, reducing need to cut and fill hillside
- Incorporate flexible shade structure for stage and seating area
- Incorporate enhanced signage and donor opportunities
- Incorporate accent trees to frame the entry to the theater
- Preserve / enhance existing views

Amenities & Open Space

Precedent Images

Tensile shade structure

Picnic Benches
Taste of LA Picnic in the Park - Los Angeles, CA

Sloped lawn

Shade structure in Central Park
Kardinaal Mercier Square - Jette, Belgium

Detailed Guidelines

Picnic Areas

Landscaped Picnic Areas provide flexible green space and shaded seating areas where visiting school groups and EATM students can gather to eat lunch, learn or study. Designated areas may be available for rental for birthday parties and other revenue-generating events.

Entry Picnic Area Design Specifications

- Size: 45' x 45' (2,000 sf)
- Capacity: 12 large picnic tables = 150 people
- Incorporate trees and shrubs to buffer back service road parking spaces
- Utilize drought tolerant plants, lawn and permeable paving
- Provide tensile shade structure above picnic tables

Central Picnic Area / Plaza Design Specifications

- Size: 65' x 50' (3,250 sf)
- Capacity: Varies; up to 12 large picnic tables = 150 people
- Provide a variety of tables, chairs, benches and umbrellas to allow for flexibility
- Incorporate electrical outlet "charging stations" to allow for students to charge laptops and create temporary outdoor classrooms
- Provide play furniture for children

Amenities & Open Space

Precedent Images

Exotic Bird Garden

Carnivore Training Garden

Detailed Guidelines

Teaching Gardens

Teaching gardens are landscaped areas adjacent to animal enclosures where visitors can learn and interact with trainers and animals. Teaching Gardens combine landscape, hard scape, info kiosks, and tactile play structures to enhance the educational zoo experience for kids and adults.

Design Specifications

- Provide shading structure at location closest to animal habitat attraction or where most visitors are anticipated to congregate
- Incorporate interpretive information about the adjacent animal habitat
- Reflect the character of the surrounding exhibits, as detailed below

Exotic Bird Garden

- Accommodate demonstrations of bird training by incorporating props such as a climbing apparatus and tree stumps
- Provide climbing furniture for children to view exhibit from multiple levels

Carnivore Training Garden

- Allow visitors to watch zoo keeper train lions and other carnivores with a metal mesh training wall
- Incorporate tall grasses and natural elements at the perimeter of the teaching garden

Amenities & Open Space

Precedent Images

Kids Learning Corral

Edible Teaching Garden

Wetland Bioswale Park / Lookout Deck
Qunli National Urban Wetland Park - Heilongjiang, China

Wetlands
Bishan Park - Singapore

Detailed Guidelines

Kids Learning Corral / Hoofstock Grooming Garden

- Provide an area for zoo keepers to bring hoofstock out to meet visitors, who may be invited to participate in grooming and feeding

Edible Teaching Garden

- Incorporate a vegetable garden where zoo keepers can teach visitors what vegetables animals eat
- Provide a viewing window where visitors may watch zoo keepers preparing food in the kitchen
- Create elevated areas and viewing platforms to allow smaller children access to views

Medical Care Teaching Garden

- Incorporate interpretive exhibit with animal sculptures to explain standard care procedures for each animal and allow kids to pretend to be zoo keepers and examine animals
- Provide a viewing window allowing visitors to look into the Vet Building to watch EATM veterinarians give medical care to animals.

Wetland Garden/ Bioswale

- Incorporate plants to filter storm-water / run-off from animal facilities
- Provide interpretive signage educating visitors about environmental stewardship
- Create an elevated boardwalk allowing visitors to walk over wetland area

Amenities & Open Space

Precedent Images

Kids Water Park
Wilhelmina Square - Leeuwarden, the Netherlands

Kids Water Park - Graphic pattern
Darling Harbor - Sydney, Australia

Detailed Guidelines

Play Areas

Landscaped areas with play equipment allow children to learn and play.

Design Specifications

- Reflect the theme of adjacent animal exhibits, such as a water play area near the Marine Mammal Facility
- Provide benches with shade structures
- Incorporate graphic pattern on paving with interpretive information

8.5 Landscape & Planting Design Guidelines

Concept Plan

Tree Type	Botanical Name	Appearance	Key Elements	Sustainability
California Sycamore	*Platanus racemosa*	 	› Utilize animal-safe plants › Accommodate pedestrian movement and views › Complement the character of animal exhibits › Preserve existing mature trees and established plants, where possible › Mitigate visual impacts of fences with landscape treatment such as land form and planting design › Maintain natural drainage pattern to the extent possible	› Utilize landscaped areas as bio-swales / rain gardens wetlands to catch and hold water run-off › Plant all hillside areas to reduce erosion and maintain soil stability › Utilize technology to monitor water and irrigation needs to reduce water use › Plant grass / turf in designated lawn areas only › Utilize reclaimed water for irrigation › Incorporate drought-tolerant and native plants › Comply with California's AB 1881-Model Water Efficient Landscape Ordinance, as appropriate
Palo Verde	*Cercidium floridum*	 		
Arizona Ash	*Fraxinus velutina*	 		
Sweet Gum Tree	*Liquidambar styraciflua*	 		
Chinese Pistachio	*Pistacia chinensis*	 		
Silk Oak	*Grevillea robusta*	 		

8.6 Signage & Wayfinding Design Guidelines

Concept Plan

Open Space Type	Use	Key Elements
Wayfinding	› Signage throughout the zoo to guide the visitor through the space	› Durable / waterproof materials › Flexible / changeable signs
Interpretive / Educational Exhibits	› Signage to educate visitors about animals and their care	› Durable / waterproof materials › Interactive signage › Flexible / changeable signs
Donor Opportunities	› Recognize zoo donors and encourage financial support	› Durable / waterproof materials › Graphics on the pathways › Placards on buildings or exhibits

Signage & Wayfinding

Precedent Images

Entry Signage
Taronga Zoo - Sydney Australia

Zone Signage
National Zoo - Washington DC

Zone Signage
Artscape Wychwood Barns - Toronto, Canada

Pathway Markings
National Zoo - Washington DC

Detailed Guidelines

Wayfinding

Wayfinding signage is located throughout the zoo to guide visitors through the space.

Design Specifications

- Provide clear and easily-understood signage
- Utilize graphics and colors to supplement text
- Utilize a common graphic standard and consistent terminology throughout
- Reflect the EATM / ATZ brand and identity
- Provide tactile, visual and auditory elements to accommodate visitors with disabilities

Entry Kiosk

- Create Information Kiosk and signage in the main plaza to orient visitors
- Provide zoo map and times for theater events

Zone Signage

- Incorporate signage throughout the zoo that identifies exhibits ahead
- Utilize clear / bold graphics
- Utilize a consistent graphic language for all signs

Pathway Markings

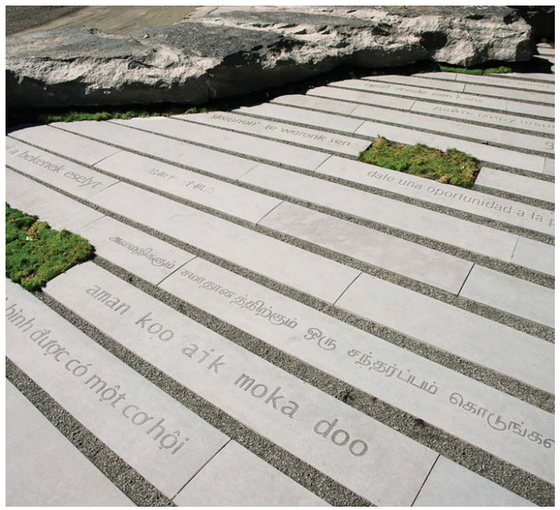
- Incorporate graphics on the pathway to help guide visitor to key areas

Signage & Wayfinding

Precedent Images

Educational Signage
San Francisco Zoo - San Francisco, California

Interactive Display
Kovler Lion House, Lincoln Park, Chicago, IL



Main Pathway
Mount Royal Park - Montréal, Canada

Signage
Fresno Chaffee Zoo - Fresno, California

Detailed Guidelines

Interpretive Exhibit / Educational Signage

Educational signage provides visitors with background information about the species in the collection and specific information about the individual animals on exhibit. Some signs will be interactive to make the exhibit fun for the children.

Design Specifications

- Locate at the entry to each exhibit and in each of the teaching gardens
- Provide fun, interactive and engaging signage for all ages of visitors
- Vary height to accommodate children and adults
- Utilize a consistent graphic style, accommodating a variety of learning styles
- Provide tactile, visual and auditory elements that accommodate visitors with disabilities

Donor Opportunities

Signage recognizing donors and exhibit sponsors may be incorporated throughout the zoo.

Potential Locations for Donor Recognition

- Main Pathway / paving
- Gate / Entry Plaza
- Animal exhibits
- Teaching Gardens
- Central Park
- Furniture throughout the zoo
- Building names
- Trees and landscape elements

8.7 Animal Facilities Design Guidelines

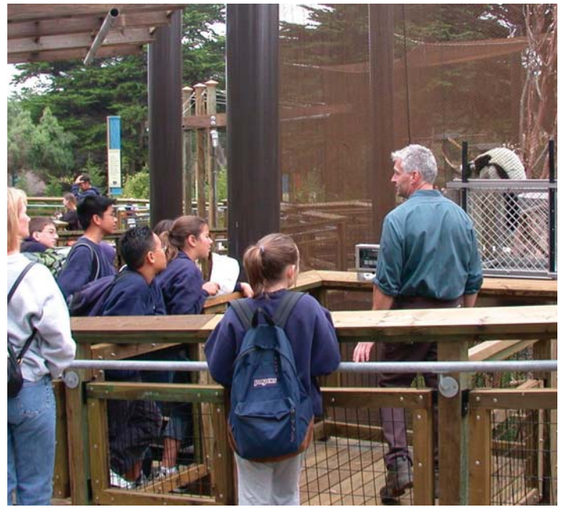
Concept Plan

Animal Facility Type	Use	Key Elements	Sustainability
Animal Enclosures	› Housing and exhibit space for animals	› Natural substrate (where appropriate) › Animal-safe landscaping within enclosures › Shade structures / indoor areas (as needed) › Secure, code compliant fencing that is also transparent and appealing to visitors › Natural behavioral enrichment elements, such as trees and rocks › Durable, low-maintenance materials	› Manage waste-water run-off › Utilize permeable paving › Incorporate native and drought-tolerant landscaping › Utilize LED lighting, where appropriate
Service Areas	› Zoo keeper workspace › Animal enclosure access › Storage	› Natural substrate or concrete slab › Shade structures / indoor areas (as needed)	› Manage waste-water run-off › Utilize permeable paving › Incorporate native and drought-tolerant landscaping › Utilize LED lighting, where appropriate

Animal Facilities

Precedent Images

Eye to Eye view of the animals



Secure, non-visually obtrusive barriers, with mesh primary barrier and lower wooden secondary barrier.

Animal care and training in view of visitors

Natural substrate and animal-safe landscaping

Detailed Guidelines

Animal Enclosures

Animal enclosures include housing and exhibit areas.

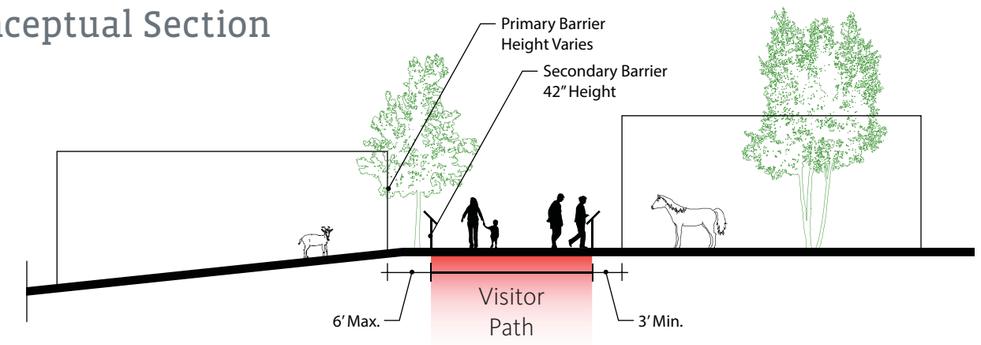
Design Priorities

- Safe, secure and easy to maintain enclosures
- Animal comfort and care
- Enhanced viewing experience
- Adhere to applicable government regulations, such as California Department of Fish and Wildlife regulations and requirements

Design Specifications

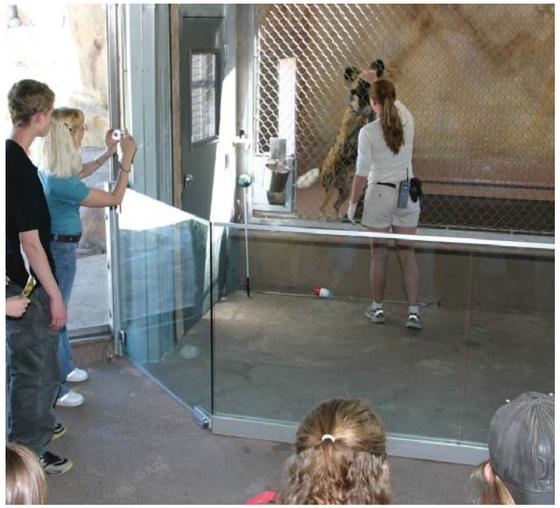
- Maintain minimum distance between enclosures, and between visitors and animals
- Utilize minimally obtrusive fence materials, while ensuring security, safety and code compliance
- Utilize lower secondary barriers (as appropriate)
- Incorporate natural elements and materials such as natural substrate, wood and rocks as well as animal-safe landscape materials
- Provide rain, heat and cold-weather protection as needed
- Incorporate behavioral enrichment, including where visible by visitors
- Incorporate shift cages and removable partitions to allow maximum flexibility in operations
- Refer to program for size specifications

Conceptual Section



Animal Facilities

Precedent Images



Glass barrier

Visible service / training area

Service area

Storage area

Detailed Guidelines

Service Areas

Service areas provide access to support animal enclosures.

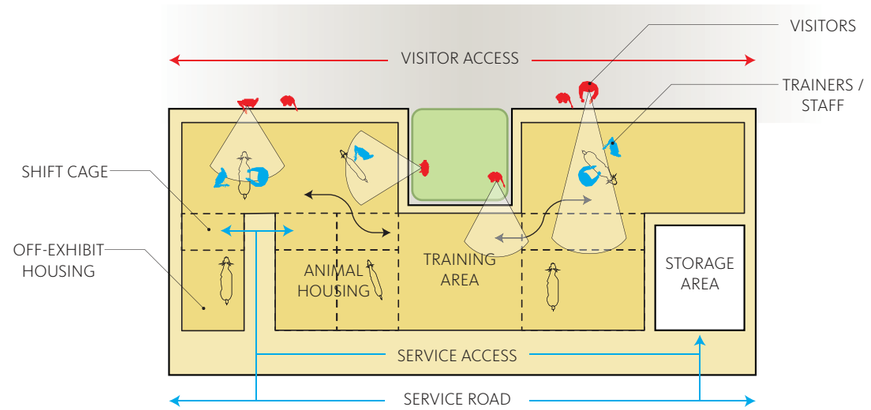
Design Priorities

- Safe, secure and code compliant
- Easy to maintain
- Functional and flexible

Design Specifications

- Maintain minimum distance between enclosures
- Incorporate sustainable and easy to clean materials
- Maintain proper drainage and capture of water run-off
- Provide rain, heat and cold-weather protection as needed
- Incorporate secure storage areas for necessary materials

Conceptual Plan



8.8 Building Design Guidelines

Concept Plan

Facility Type	Use	Key Elements	Sustainability
Zoo Operations Building	› Welcome Center › Zoo Operations Offices › Learning Labs / Meeting Space › Event Facility / Catering Kitchen › Gift Shop / Snack shop › Restrooms / Student Lockers	› Establish a comprehensive campus-wide aesthetic compatible with existing EATM building › Locate entrances along visual and physical axes › Preserve views to the south › Create a welcoming environment for students and visitors › Maximize functionality for staff and students › Support student learning	› Incorporate solar panels › Incorporate low water usage fixtures › Provide natural light › Utilize LED lighting, where appropriate › Utilize natural / recycled materials › Incorporate shade / passive cooling › Incorporate natural ventilation
Animal Care Center	› Veterinary Center › Animal Kitchen (Commissary) › Off-Exhibit Housing (Animal Maintenance) › Workshop and Storage Area	› Provide transparency for visitor viewing, where appropriate › Create a safe and secure facility › Prioritize animal care › Adhere to required codes and regulations	› Incorporate solar panels › Incorporate low water usage fixtures › Provide natural light › Utilize LED lighting, where appropriate › Utilize natural / recycled materials › Incorporate shade / passive cooling › Incorporate natural ventilation

Buildings

Precedent Images

Existing EATM Building
America's Teaching Zoo - Moorpark, CA

Zoo Snack Shop
Central Park Zoo - New York City, NY

Shade Structure
Adelaide Zoo - Adelaide, Australia

Glass Walls - to preserve views
Adelaide Zoo - Adelaide, Australia

Detailed Guidelines

Zoo Operations Building

The Zoo Operations Building is a two-level academic and administration building housing student support services, learning labs and visitor amenities. It will connect to the existing EATM Building.

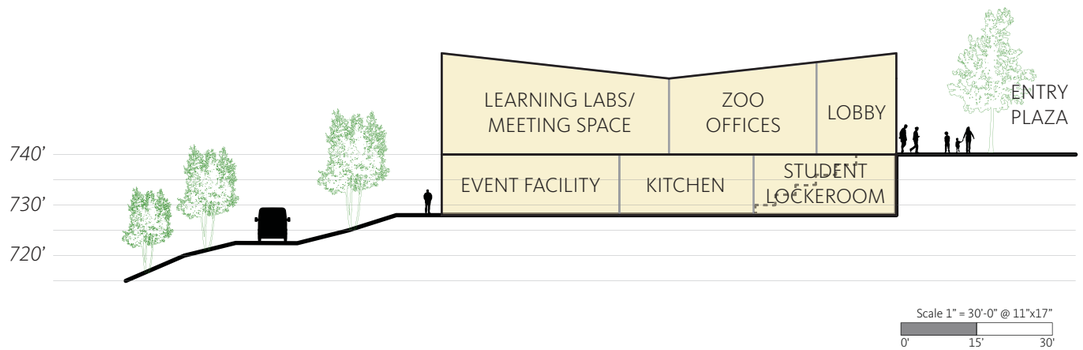
Design Priorities

- Create a welcoming environment for students and visitors
- Provide multi-functional spaces / flexible space
- Create an iconic structure at zoo entry
- Support zoo staff and student learning
- Incorporate visitor amenities
- Provide revenue-generating opportunities

Design Specifications

- Maintain twenty (20) foot setback from existing building overhang
- Minimize impact on existing underground utilities
- Create lower-level event facility open to outdoor event lawn
- Incorporate sustainable design throughout, such as passive cooling, natural ventilation, natural light, water-saving fixtures and energy-efficient lighting

Conceptual Building Section



Buildings

Precedent Images

Animal kitchen viewing area
Santa Barbara Zoo, Santa Barbara, CA

Preparation area in commissary

Veterinary Center
Oregon Zoo -Portland, OR

Existing Veterinary Center
America's Teaching Zoo - Moorpark, CA

Detailed Guidelines

Animal Care Center

Multiple-building compound comprised of Veterinary Center, Animal Kitchen (Commissary), Off-Exhibit Animal Housing (Animal Maintenance) and Workshop.

Design Priorities

- Create a functional and secure facility
- Prioritize animal welfare and student learning
- Provide opportunities for visitors to view animal care activities

Design Specifications

- Organize buildings around a central open space
- Incorporate viewing windows at appropriate locations
- Adhere to relevant codes and regulations
- Buffer noise-sensitive uses, such as the Veterinary Center, from the Workshop area.
- Accommodate changes in technology and equipment needs
- Incorporate service access / loading dock
- Incorporate sustainable design throughout, such as passive cooling, natural ventilation, natural light, water-saving fixtures and energy-efficient lighting


The Wilson Family
Carnivore Habitat
African Lions
America's Teaching Zoo
Hillside Theater

9.0 PHASING & IMPLEMENTATION

9.1 Phase 1

Phase 1A

- New Carnivore Habitat, Hillside Theater and Quarantine Area developed
- Lower level loop path and service road added
- Existing Quarantine Area becomes swing space
- Existing Carnivore Facility and Small Theater demolished

Phase 1B

- New Zoo Operations Building and Event Lawn developed
- New California Habitat exhibit developed
- Existing Birds of Prey Mews, Aviary and Zoo 2 demolished

Phase 1C

- Existing theater renovated
- New Picnic Area developed

Fig 9.1

Phase 1A

Fig 9.2

Phase 1B

Fig 9.3

Phase 1C

9.2 Phase 2

Phase 2A

- New Domestic Hoofstock Facility and Central Plaza developed
- Existing Domestic Hoofstock enclosures and Animal Maintenance enclosures demolished

Phase 2B

- New Animal Maintenance Facility, Commissary and Workshop Area developed
- New Turtles and Tortoises Habitat and Central Park developed
- Existing Primate Gardens expanded
- Existing Animal Maintenance enclosures and Commissary demolished

Phase 2C

- New Veterinary Center developed
- New Primate enclosures and Primate Viewing Area developed
- Existing Veterinary Center demolished

Fig 9.4

Phase 2A

Fig 9.5
Phase 2B

Fig 9.6
Phase 2C

9.3 Phase 3

Phase 3A

- New Avian Facility developed
- Existing Parrot Gardens demolished

Phase 3B

- New Small Mammal Facility, Reptile House and Alligator Habitat developed
- Existing Show Animal Facility and Zoo 1 demolished

Phase 3C

- New Exotic Hoofstock Facility developed

Fig 9.7

Phase 3A

Fig 9.8
Phase 3B

Buildings
Other Structures
Animal Enclosures
Zoo Perimeter

N
Scale 1" = 100'-0" @ 11"x17"
0' 50' 100'

Fig 9.9

Phase 3C

9.4 Phase 4

Phase 4

- New Marine Mammal Facility and Water Play Area developed

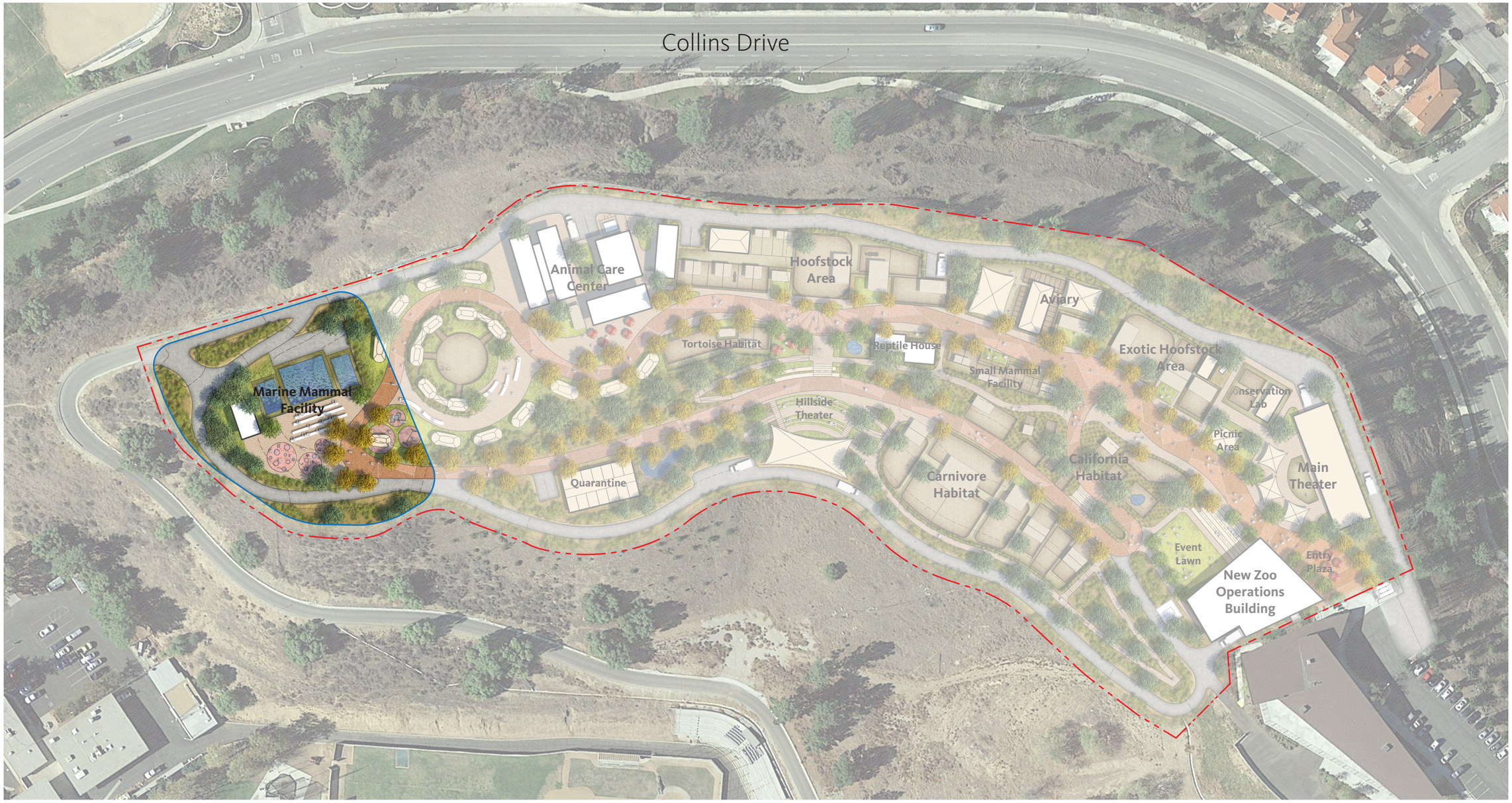


Fig 9.10

Phase 4