

# Empathy-Driven Design for Animal Habitats in Zoo Boise Master Plan Phases 1A and 1B Design Concepts

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Saving and protecting species around the globe is central to the mission of Zoo Boise. With more than 350,000 annual visitors and as home to over 300 dynamic animals, Zoo Boise is uniquely positioned to advance this mission by curating profound experiences that foster empathy and move audiences to take caring action on behalf of animals and nature.

Animal habitats are foundational to the visitor experience, and the intentional, empathy-driven design of these habitats and interpretive experiences are integral to the development of empathy for animals and nature in zoo audiences. A growing body of research shows a correlation between guest perceptions of habitat complexity and animal well-being and feelings of empathy for animals in human care and in nature. With the goal of conceptualizing habitats that are incubators for empathy, GLMV Zoos has applied the principles of empathy-driven design to this project, which are further supported by the findings and recommendations from AWARE Institute's guest perception and animal behavior evaluations conducted simultaneously at Zoo Boise.

This suite of concept designs includes:

- Magellanic penguin
- Red panda
- Meerkat
- Snow leopard
- Sea eagle
- Small Animal Kingdom renovations, including Aldabra tortoises, sloths, spider monkeys, tamarins, flying fox, and sand cats
- Giraffe feedings associated with the African Plaza

Each habitat features unique elements informed and guided by empathy-driven research, AWARE Institute's research, and design intent. Some strategies can be seen consistently across habitats, such as:

- Bringing guests and animals "nose to nose" through the strategic use of glass and other non-visually-restrictive containments, and positioning habitat elements to encourage animals to interact with visitors through their own agency.
- Designing complex habitats that encourage and highlight a range and high frequency of natural behaviors.
- Attention to guest experience elements intended to extend the time guests spend in each habitat.
- Numerous viewing opportunities and experiences that immerse guests in habitats from different perspectives.
- Experiences and spaces that encourage perspective-taking.

With AWARE Institute's research having established baselines on guest perspective-taking, stay time, observation of active natural behaviors, and perceptions of animal well-being, Zoo Boise is well positioned to conduct further research upon the construction of these habitats to evaluate the impact of intentional, empathy-driven habitat design on influencing empathy for animals and nature.

What follows are narrative overviews of each animal habitat and a discussion of habitat design elements intended to engage guests in rich, stimulating experiences that build empathy for animals and nature.

## Magellanic Penguin

### Project Narrative:

As identified in the latest Zoo Boise Master Plan, a new habitat that will be home to Magellanic penguins is the anchor habitat within the reimagined heart of Zoo Boise. The main guest experience will be the expansive underwater views of the large saltwater pool with water currents and movement visible as soon as visitors enter the zoo. This underwater view will draw people away from the front entry with a large viewing area directly adjacent to the Conservation Plaza. Guests will make their way up a grade change of over 10 feet on their way to the upper plaza; along the way, they will experience glass railing and seating opportunities that will allow views into the terrestrial portion of the habitat with more nose-to-beak opportunities. They will also have direct access to a private animal encounter space where keepers can facilitate an interactive experience within the habitat. Finally, visitors will be able to view an indoor day room and shaded viewing platform before proceeding on their journey. The animal care building will be the backdrop to the habitat. In addition to life support systems, it will include an integrated roman shade system, which will provide shade and limit exposure to avian disease transmission. In the event of an emergency, the animal care building can also provide backup shelter to the zoo's snow leopards, who share the building as a backdrop to their new habitat.



### Empathy-Driven Design Elements:

Through their evaluation of animal behavior and guest perceptions at Zoo Boise's existing penguin habitat, AWARE Institute identified opportunities to increase the favorability of visitor perceptions of penguin welfare and to increase the time visitors spend at the penguin habitat through greater exhibit complexity, multiple keeper access points, numerous terrestrial and aquatic routes, a variety of vantage points, multiple guest viewing areas, and substrate diversity.

### Greater Habitat Complexity:

In the design intent of the Magellanic penguin habitat, greater habitat complexity is addressed in both aquatic and dryland areas. The 1,200 square feet of land includes thematic rockwork, beach rock, and sandy beds that allow the penguins various choices of substrates when out of the water. The pool area provides for complexity with zero-point entry, submerged shelves, water with a depth of 6 feet, and “islands” in the center of the pool. These aquatic features provide for various points of entry or exit from the pool while creating variation in the space’s topography. Additionally, the islands will create multiple swimming pathways in which penguins could choose to engage and prevent a “single viewpoint” from which the whole pool is visible to a single animal. Further exploration of exhibit features that address water currents, temperatures, or other stimuli can occur in upcoming design phases as they become applicable to the associated level of design.

### Multiple Keeper Access Points:

To reduce anticipatory behavior being observed in penguins living in the existing habitat when animal care staff are expected, the new Magellanic penguin habitat design features numerous access points for keepers. Zookeepers may enter the habitat directly through the building or through one of three exterior access points. These multiple points of entry will provide staff with great flexibility to provide variety for penguins and prevent or disrupt anticipatory behaviors. Through engaging exhibit and enrichment experiences, the time currently spent by penguins in these undesirable behaviors can be redirected to natural behaviors that will enhance the penguins’ well-being, encourage extended stay time in guests and build stronger feelings of empathy.

### Numerous Terrestrial and Aquatic Routes:

To encourage more active natural behaviors and provide penguins with additional choice and control, the new penguin habitat design creates a range of opportunities for penguins to choose how they would like to move throughout and across the habitat at any given time. The locations and diversity of substrates on land give penguins the choice to cross the habitat in a variety of ways:

- 1) completely on the rockwork
- 2) by rockwork and sand
- 3) by rockwork and beach pebbles
- 4) by a combination of all three
- 5) The penguins can even choose to move onto the islands located in the center of the pool as they desire or up the vertical rockwork of the exhibit boundary walls.

In the proposed pool layout, the water is comprised of multiple zones: zero-depth entry, submerged shelves, and deep-water zones. Additionally, the support for the islands breaks up the pool and creates diversity in the underwater space. This provides the opportunity for the penguins to:

- 1) Swim directly up and down the length of the habitat, either directly adjacent to the visitors or toward the rear of the pool away from visitors
- 2) Swim in a large circle around the islands
- 3) Swim in a figure-8 style formation between the island supports
- 4) Or any combination of these styles.



### A Variety of Vantage Points:

To encourage penguins to explore their habitat and support social management, this proposed design creates multiple vantage points throughout and utilizes vertical elements to create views that are sheltered from one area or another depending on location and use. It is the intent of this design to limit a single point from which the entire habitat is easily visible to a single animal. At the same time, the goal of allowing penguins to remove or distance themselves from the view of the public is also a concept explored by the design team.

### Multiple Viewing Areas:

In this new habitat, penguins and guests can engage in multiple ways. The underwater viewing area will allow visitors to appreciate how these birds interact with and move through the water; the proposed depth of 6 feet will facilitate floating, diving, “porpoising,” and other exciting natural behaviors. As guests make their way up the middle mountain, they will find themselves nose-to-beak with penguins on land, drawing comparisons between how these animals locomote through two very different mediums. Here is also the guest entrance to a penguin encounter space which can be activated by members of the Zoo Boise staff, providing the ultimate empathy-building experience. The final viewing opportunity for penguins comes at the top of the mountain where visitors can catch a glimpse of the indoor penguin nursing room. This opportunity, while providing visitors with views of the Zoo’s newest penguins, will also provide an insight into the “back-of-house” care that the animals receive and showcase Zoo Boise’s commitment to its penguin colony both on and off-exhibit.

### Substrate Diversity:

AWARE Institute has made note of the existing exhibit’s concrete construction with limited rockwork, important for sanitation but lacking in substrate diversity that is positively correlated to animal well-being. In the new habitat’s design intent, GLMV Zoos aims to balance both through built elements that aid in the maintenance of a clean and healthy habitat and account for the needs of these species at a standard that meets and exceeds the expectations of a modern AZA facility. Concrete rockwork, beach pebble, and sand are all habitat features intended to help the Zoo staff mitigate musculoskeletal, joint, and foot health issues. Additional well-being considerations in the design include a roman shade canopy which can be deployed in the event of an avian influenza outbreak, an isolation room, and life support systems designed for penguins.

## Red Panda

### Project Narrative:

Guests to Zoo Boise love the red pandas, and the layout of this new habitat brings guests into the center of their new home. Guests will experience red pandas in three large outdoor habitats and have views into an interior day room. The initial entry into the space brings guests under an overhead transfer with large glass views into Yards 1 and 2. The immersive experience will be able to house a breeding group and cubs, while still holding space for retired pandas or additional breeding groups. This will be a world-class red panda facility. The first phase of this project will utilize Yard 2 for a temporary sea eagle habitat with a small, conditioned holding building that can be repurposed into a cozy space for red pandas with glass viewing for guests. The proposed landscape bed within the internal space will allow shaded seating and an opportunity for landscaping and shade trees while still allowing access to the existing waterway and seasonal boat rides.



### Empathy-Driven Design Elements:

Following AWARE Institute's evaluation of Zoo Boise's existing red panda habitat, opportunities to increase time spent at the red panda habitat and to increase favorability of visitor perceptions of red panda welfare include more naturalistic spaces, arboreal opportunities, multiple substrate types, and automated and enriched feeding opportunities. Though many of these elements will be further developed in future design phases, this concept design provides an important framework and foundation.

### More Naturalistic Spaces:

While the aesthetic and interior of the new red panda habitats will continue to be developed through later stages of the design process, the location of the new habitats presents an opportunity to incorporate existing trees and tree cover. These elements can be supplemented with other vegetation and climbing structures, as well as various substrates. Each of these habitats has a unique orientation and relationship to the site

which can facilitate diverse microclimates. These habitat layouts along with proximity to conditioned spaces will allow the animals to choose the appropriate microclimates that suit their needs.

Arboreal Opportunities:

Each new habitat is proposed to have a minimum top-net height of 18 feet, which will provide ample opportunity for red pandas to climb on natural or fabricated vertical elements. As this design progresses, it will be important to consider numerous flexible arboreal pathways between elements, providing high and low connection points that encourage natural and varied behavior in red pandas as they move throughout their new habitats.

Multiple Substrate Types:

To further encourage natural behaviors correlated with animal well-being and integral to dynamic visitor experiences, substrate types that allow the red pandas to dig, forage, explore, and play can and should be integrated into future design phases. The inclusion of dig barriers in this concept design will maintain the safety and security of red pandas as mixed substrate features are incorporated in future design stages.

Automated and Enriched Feeding Opportunities:

The abundance of habitats associated with this design, in addition to the inclusion of timed automated feeders, provides staff with a multitude of ways to keep the red pandas engaged throughout the day. When Zoo Boise is not at maximum capacity for red pandas, staff would have the option to rotate animals through different yards at different times of day, allowing for the restocking of food and/or enrichment items, providing for enhanced stimulation, and adding interest and surprise to the guest experience. Additionally, the design goal of planting these habitats with bamboo of various species would allow the red pandas to graze on the bamboo species that they prefer while leaving others as naturalistic vegetation in the habitat. More details on timed feeding apparatuses and enriched feeding opportunities can be explored with Zoo Boise in upcoming design phases.

## Meerkat

### Project Narrative:

Representing Africa in the Conservation Plaza, the new meerkat habitat is located within an existing landscape bed. New shade trees and perimeter landscaping give the meerkats an outdoor habitat that includes shade and sun-basking areas. Guests engage with meerkats through two large glass viewing areas that are positioned to provide adequate viewing space yet keep critical pathways open. A screening fence and landscaping are used to give the animals a buffer from events occurring within the plaza and provide critical maintenance access outside of the main flow of pedestrian traffic. The northern orientation of the animal care building and indoor day room will provide shade for pedestrians on hot summer days and will be visible to guests coming from the penguin plaza on their way up to snow leopard. The elevated day room will bring guests nose-to-nose with meerkats while minimal theming will be required to make this habitat and building feel in place within the Conservation Plaza. Architectural materials and construction methods will follow those established by the gibbon building and plaza shelters to provide continuous theming and continuity to the heart of the Zoo.



### Empathy-Driven Design Elements:

Though evaluation of Zoo Boise's existing meerkat habitat was not included in AWARE Institute's scope, empathy-driven design principles and the predominant themes of AWARE Institute's research heavily influence the new meerkat habitat concept design. Features will promote empathy for these unique animals and support a thriving colony of meerkats.

The building includes a large, shaded glass viewing window where guests will encounter meerkats at an elevated level, possibly even seeing the animals digging or tunneling through their habitat's substrate immediately behind the glass. The 775-square-foot outdoor exhibit features two large glass viewing windows where visitors can watch the meerkats dig, bask, forage, and stand guard over the colony. With

only glass between them and the meerkats, guests will feel immersed in the meerkat habitat, coming eye to eye with these curious creatures as the animals explore their dynamic habitat.

This habitat is intentionally designed to facilitate enhanced choice and control for the meerkat colony. The building interior features two off-exhibit areas where meerkats can retreat for time away from visitors. The orientation of the indoor areas creates a roundabout to the main exhibit yard, allowing the animals to have greater quality choices on where they would like to spend their time. New landscaping is anticipated to provide shade and cover and the new habitat will include substrates that encourage meerkats to engage in natural digging behavior.

## Snow Leopard

### Project Narrative:

One of the most dynamic and modern habitats to come out of the recent Master Plan, the snow leopard habitat is at the high point of the “middle mountain” experience and includes three outdoor yards and an overhead pathway that will be an iconic focal point for Zoo Boise. In addition to animal spaces, a multipurpose space referred to as the “Cat Walk” adds a thematic and immersive way to interact with leopards and much-needed event and meeting space that can be rented or utilized for functions throughout the year. The interior will provide restrooms, storage, and unique views into Yard 1. This building will also allow keepers to interact with animals from the rooftop and access the overhead path for maintenance and care needs. The main animal care spaces and an indoor day room will be located within the footprint of the second floor of the animal commissary building. Views into this space are made available to the public from a small outdoor plaza that also includes a family restroom and a private nursing room. Themed concrete rockwork is strategically placed to provide the animals with high perches and vertical climbing opportunities that are both challenging and appropriate for these acrobatic animals.



### Empathy-Driven Design Elements:

In their evaluation of Zoo Boise’s existing snow leopard habitat, AWARE Institute recommended a host of opportunities to facilitate increased empathy in guests and enhance snow leopard well-being including larger, naturalistic spaces; more vertical exhibit features; roundabout access; 24/7 access, and dynamic exhibit features, all of which are reflected in the new snow leopard habitat concept design.

### Larger, Naturalistic Spaces:

The new Zoo Boise snow leopard complex is a sequence of three habitats with features intended to blur the line between natural snow leopard habitat and human encroachment into these environments to stimulate discussion around human-animal conflict locally and globally. Snow leopard Yard 1 is 1,200 square feet with expansive vertical rockwork walls that allow the cats to climb, leap, and perch on high ledges such as

they would in their natural habitat. Yard 2 features similar rockwork; however, in this habitat it creates an artificial cave that provides shade and a place of rest for the snow leopards. The rockwork also serves as a backdrop to a water feature that flows into a small pond and continues to flow through the site. Yard 3 capitalizes on an existing change in topography and trees to create shade and climbing elements for the cats. All three habitats connect with the “Cat Walk”, a key feature of the middle mountain which is the backdrop for human-animal conflict interpretation. It is the combination of these natural features alongside more man-made elements that will create a dynamic home for snow leopards but also allow for a unique educational opportunity about their diminishing natural habitat. Having set the stage for a potentially difficult conversation by cultivating empathy for snow leopards through immersing guests in naturalistic environments where they will encounter thriving snow leopards engaging in natural behaviors, Zoo Boise will be well positioned to motivate their guests to become advocates and supporters of living with wildlife.

#### More Vertical Exhibit Features:

As has been detailed above, vertical elements in each habitat will encourage a wide variety of natural behaviors by snow leopards in these new habitats and create novel viewing opportunities for guests. The vertical rock walls, natural topography changes, existing trees, and overhead shifting opportunities associated with the “Cat Walk” will provide variety for both snow leopards and guests. These built-in features of the habitats can be augmented with additional platforms and climbing elements, for both interior and exterior spaces, in upcoming design phases.

#### Roundabout Access:

Several roundabout opportunities for snow leopards are integrated into the new habitat concept design, both inside and outside. In the interior animal care building, these can be implemented in the following ways:

- 1) Connect Animal Management Stalls 1 and 2 with Medical Stalls 1 and 2.
- 2) Connect the dayroom to Animal Management Stall 1 and Medical Stall 1.
- 3) Connect the dayroom to Management Stalls 1 & 3, Medical Stall 1, and the birthing room.
- 4) Connect the dayroom to Management Stall 3 and the birthing room
- 5) Connect all interior spaces for a large roundabout area.

Connection of exterior habitats can also create flexible roundabout areas:

- 1) Connect interior and exterior spaces by linking Animal Management Stalls 2 and/or 1 with Yard 1 and the off-habitat holding area.
- 2) Connect Yard 1, Yard 2, and the “Cat Walk” via the overhead transfers.



#### 24/7 Access:

The new snow leopard habitat design features three outdoor yards and a large indoor dayroom, which allows for maximum flexibility without any single animal being restricted to a small holding area for any extended period. The habitat is designed so that all cats have their own space even when the maximum population size of six is reached. This takes into account breeding and non-breeding individuals

Dynamic Exhibit Features:

With many dynamic features already having been detailed above, additional features that will further enhance the snow leopard experience will be explored in future design phases. The intent is to incorporate training walls in two of the habitats with a zip-line-style feeding device in a third. These elements will facilitate dynamic training and feeding experiences in each habitat for both snow leopards and guests. Not only will these interactive experiences add interest and excitement for snow leopards, but Zoo Boise's team will demonstrate to its guests, using these experiences, the high-quality of care all animals receive and cultivate trust and support in their community.

## Sea Eagle

### Project Narrative:

The new sea eagle habitat is designed to provide the greatest opportunities for these majestic birds to exhibit some of their most iconic features: their large wing spans and massive nests. The new pedestrian path will take guests over a wooden bridge designed to have running water underneath and soaring eagles overhead. The habitat is designed to be tall, long, and nestled in existing trees on both sides. A single large habitat can be divided, if needed, into two smaller habitats, allowing flexibility during nesting seasons as well as providing options for quarantine and covered habitats. The animal holding is positioned over penguin life support within the footprint of the penguin animal care building. This elevated care building will allow eagles to perch high above the yard and exercise their large wings as they soar to and from their holding perches. Keepers will also have access to this high perching location, providing opportunities for training and animal care within the habitat.



### Empathy-Driven Design Elements:

Though not included in AWARE Institute's scope, the new sea eagle habitat concept embodies empathy-driven design principles and incorporates innovative features that facilitate the exceptional well-being of Zoo Boise's resident sea eagles.

Spanning the length of middle mountain, this substantial habitat will create a flyway for these large, impressive birds. Expansive in both length and height, the habitat will encapsulate existing trees and provide the sea eagles with an environment to stretch their wings and fly amongst the trees as they would in the wild, a unique feature among many sea eagle habitats.

If needed, the single large habitat can be separated into two for breeding. These habitats share a recirculating water feature, a place for the birds to bathe, eat fish, and interact with ice in the winter months much as they would in the wild. The design intent includes the ability to deploy a roman shade cover over

the top of the upper exhibit to protect the birds from an avian influenza outbreak without being restricted indoors and out of the view of the public for prolonged periods.

Visitors will feel wonder and awe as they encounter these majestic birds in an immersive, natural environment, perched in the trees or soaring along the visitor path. Crossing under the habitat while sea eagles fly directly overhead will be a once-in-a-lifetime experience for many Zoo Boise visitors and multiple viewing elevations will facilitate perspective-taking as kids stretch their wings like an eagle and imagine what life would be like in a nest.

## Small Animal Kingdom Renovations

### Project Narrative:

The existing Small Animal Kingdom building is proposed to have a major overhaul with the removal of the exterior path and repurposing of many of the interior animal spaces. The exterior path, existing viewing opportunities, and portions of the building will need to be removed to accommodate a new education building while the existing interior habitats will be reimagined with new homes for sloths, flying foxes, and others. New exterior habitats will include tamarins and an expanded habitat for spider monkeys. Mr. Mac and Ms. Mac, beloved Aldabra tortoises, will get new and updated habitats. A new exterior path will add views into a new sand cat habitat and an endangered small cat breeding facility, and will return guests to the main path and new restroom expansion.



### Empathy-Driven Design Elements:

A dynamic space that will engage Zoo Boise guests with diverse and charismatic animals, the renovation to Small Animal Kingdom provides extensive opportunities to cultivate empathy and enhance animal well-being. Animal habitats in this space will include Aldabra tortoises, spider monkeys, tamarins, flying foxes, sloths, and sand cats.

#### Aldabra Tortoises (Mr. and Ms. Mac)

Mr. and Ms. Mac, beloved tortoises of Zoo Boise, will be getting new habitats that will facilitate greater flexibility and space. If needed, Mr. Mac and Ms. Mac can be separated into two distinct yards, or the pair can continue to rotate in and out of the yard, animal care space, and rainforest dayroom. Upcoming design phases will expand on individual specifications such as pools, exhibit features, and engagement opportunities with the public that will help to round out these habitats to provide ideal welfare for these animals and empathy-building experiences.

### Spider Monkeys

The existing spider monkey dayroom will undergo minor renovations to enhance the exhibit without affecting the overall space design. More major modifications will be made to the spider monkey shift area, including larger shift stalls and adding access doors so that roundabouts can be created between all three indoor areas as well as a roundabout between the new spider monkey habitat and all indoor areas. The more efficient operation of the space for keepers along with a reimagined outdoor habitat with diverse vertical features will provide high-impact improvements for the primates and enhance visitor perceptions of spider monkey well-being, integral to fostering positive empathy.

### Tamarins

The design intent for the tamarins is to relocate them to the indoor rainforest habitat with a new glass-front exhibit that will allow guests the ability to get nose-to-nose with these small primates. The tamarins will also benefit from a new overhead tunnel located on the west side of the building which will connect them to a new 450-square-foot outdoor habitat under the shade of existing and new trees. This will create a great opportunity for these animals to enjoy their home 365 days a year and give visitors a new way to view and interact with these engaging small monkeys.

### Flying fox

One modification to Small Animal Kingdom will be an addition to house flying foxes. Crowd favorites, flying fox are engaging animals that sleep upside down and fly to move around. Visitors will get a thrill searching for these animals that prefer to be up high in their habitat. The addition will provide an indoor animal management space that gives the bats a warm and humid building in which to live year-round. Visitors will have both an outdoor and indoor view into the animal care area, providing a window to the bats' life from multiple vantage points.

### Sloth

These renovations will bring Zoo Boise's sloth out from behind glass and mesh into an immersive rainforest. Looking up, guests will experience the sloth moving throughout the entire habitat on vines and branches suspended overhead. Designated stations throughout the rainforest will bring the sloth down from the trees for facilitated close encounters with guests. Both these serendipitous and facilitated encounters are profoundly powerful in fostering empathy for animals and nature. This change will also give Zoo Boise's sloth greater choice and control as it moves throughout the rainforest, choosing the microclimates in which it would like to spend its time.

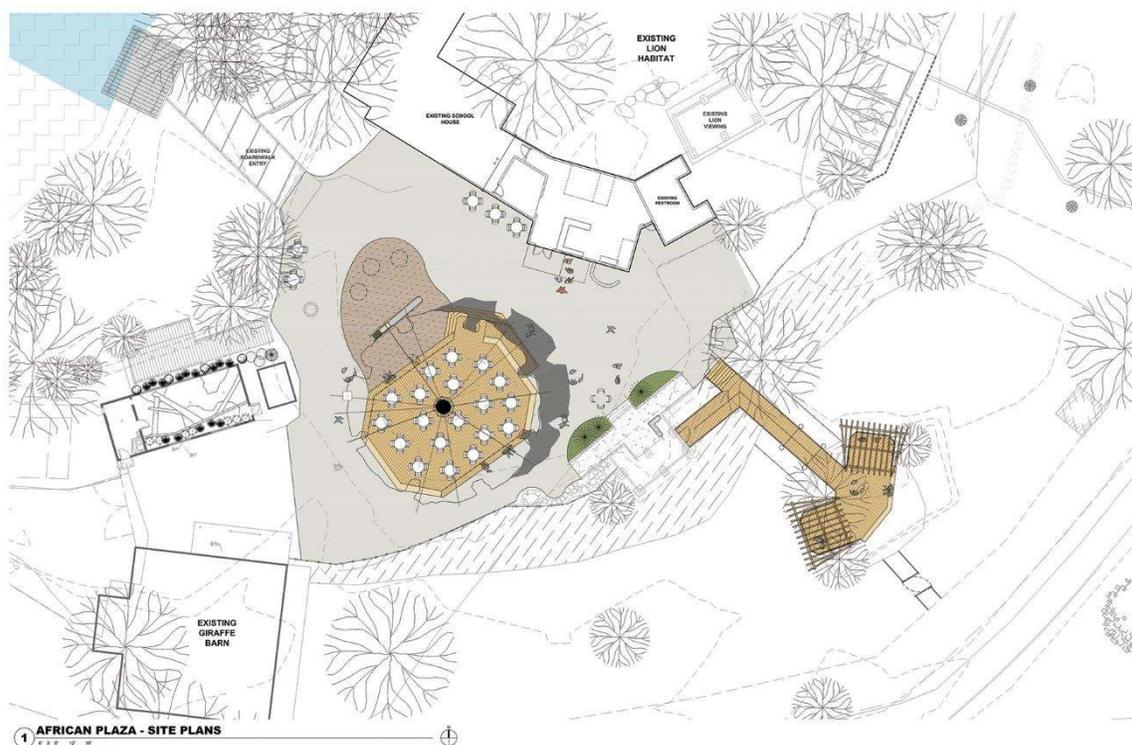
### Sand Cats

Sand cats are a unique and iconic species for Zoo Boise, and the new habitat will not only showcase the species in a habitat that is designed specifically for them, but will also take advantage of existing buildings already dedicated to Zoo Boise's successful management of the species. The existing "quarantine" building will undergo an internal renovation to facilitate this as the primary animal care space for managing these cats. Additionally, direct access and roundabout opportunities will be integrated into the existing footprint. To maintain a balance between viewable animal spaces and sensitivity to the reclusive nature of these cats, this concept includes a 600-square-foot guest-facing yard as well as a 600-square-foot off-exhibit yard with access to a small shelter. This will allow the cats maximum choice to maintain their ideal level of comfort.

## African Plaza and Giraffe Feeding Experience

### Project Narrative:

The existing African Plaza will be activated to elevate the guest experience. A newly renovated Kijiji Café will rejuvenate the space by incorporating a larger catering kitchen and walk-up window. The renovation will provide a more accessible food experience in the middle of the zoo and facilitate increased efficiency in food production and in larger quantities. This will increase the capacity for events and large group catering compared to the current kitchen space. In addition to updates to Kijiji Café, the existing giraffe slide will be relocated to the plaza and a large, elevated deck will be added for outdoor dining. These improvements and an addition of a giraffe feeding platform will all create a destination plaza that will increase the stay time of guests and enhance the overall zoo experience.



### Empathy-Driven Design Elements:

Foundational to empathy are comfort and security. By improving guest amenities in the African Plaza, Zoo Boise will meet and exceed its guests' basic needs, providing the space and fostering receptiveness to empathy-building experiences and messaging.

Modifications to the African Plaza will create a truly memorable experience for guests at Zoo Boise. By opening views into the giraffe habitat both at ground level and on a new, elevated viewing deck, guests will get close to animals on multiple levels—eye-to-eye and marveling at the height and size of these exotic animals. Careful configuration of the giraffe feeding deck in between both habitats brings visitors into the giraffes' home and also reduces stress and agitation between the two giraffes by allowing both to engage in this enriching activity. In addition to being nose-to-nose with the giraffe while participating in a feeding session, children and families will have the ability to engage with the iconic giraffe slide. The new proximity to giraffes will facilitate parallel play and create direct connections with their joy and the animal that inspires it only yards away. In addition to the live animal and play experiences, the African Plaza will be a space for guests to gather, rest, extend their stay with the animals, and make connections to the conservation messaging that they have experienced here and throughout the rest of the zoo.

## Additional Components

### Project Narratives:

While not animal habitats, additional elements of the Phase 1a and Phase 1b concept design process will be integral to achieving Zoo Boise's intention to cultivate empathy for animals and nature while providing for exceptional well-being in their resident animals. Those additional components include:

#### Education

Education is one of the most important parts of the Zoo Boise mission. Currently, classes and education groups use all available spaces, including outdoor tents. Zoo Boise is unable to meet the current need for educational programming, much less provide any opportunity for expanding their program. The new education complex will propel Zoo Boise into the future, meeting current education needs and creating capacity for future growth. The state-of-the-art, two-story, uniquely zoo-education space will include indoor/outdoor classrooms and multi-use flexible spaces, ambassador animal spaces, office spaces for staff, restrooms, a kitchenette, and plenty of functional space to support the educational programs of the zoo. This Boise-Modern-inspired space will blend in with the look and feel of the area while creating a dedicated and safe entry point for parents and children. This will dramatically increase the capacity to impact and influence children and adults by forwarding the mission of Zoo Boise to save and protect wildlife.

#### Administration Remodel

Currently functioning as the gift shop and multipurpose room, this building was identified in the Master Plan to be renovated into administrative and guest services for Zoo Boise. The proposed floor plan will bring much-needed office space to the front entry; allow critical administrative staff, including the director and executive staff, to interact directly with the daily operations; and allow exterior guests such as Board members and consultants secure entrance to meetings directly from parking within Julia Davis Park. Renovations are limited to the existing footprint of the building. This renovation will provide ten offices and will include new spaces for a staff break room, restroom, a small meeting room, and an outdoor break area.

#### Animal Commissary

The new animal commissary building is a two-story building centrally located off the Conservation Plaza and will act as an anchor within the Master Plan. The expanded animal hospital and new café, as described in the Zoo Boise Master Plan, will all take their design and layout based on the footprint of this building. The lower level is dedicated to animal diet prep and spaces supporting animal care staff including a keeper work room, lockers, showers, and a break room. Within the footprint of the building, guests will have access to new restrooms, while the upper level is dedicated to the care of snow leopards as well as much-needed office space. Dealing with floodplain concerns and a large amount of grade change from the front to back, this building will be one of the more demanding to design and construct. Adding to the complexity of this building, the materials and theming will need to transition from a modern structure facing the plaza to a subtle backdrop of the upper plaza of snow leopards and penguins.

#### Gift Shop

The current gift shop is no longer fulfilling the needs of Zoo Boise and will be renovated into a new administration and guest services building. The new gift shop, located to the south of the main entry gate, will be a larger building with a dedicated storage room directly accessible from exterior parking and dedicated office spaces for staff. The location and shape of the new building are designed to be outside of the current floodplain and allow a direct connection to the Conservation Plaza with large, operable glass walls. This connection will allow the gift shop to flow out into the Zoo for special events and on days with accommodating weather. Adjacent to the gift shop is a new North American habitat that will bring a new species to the Conservation Plaza and help promote the zoo's message of local conservation and protection. A new paved exit plaza located to the south will accommodate a space for rentable strollers and scooters to be managed by gift shop staff as well as provide event access into the Conservation Plaza.