# MASTER PLAN PROJECTS

## **CAMPING TRAILS**

#### PROGRAM OBJECTIVES

Connecting people with nature in a regional destination setting.

Meeting the vision of NEW Zoo and Adventure Park, a campground will cultivate a new user base and increase multi-use recreational value.

AMENITIES NEEDED

• Large, level, dry site for remote camping

experience with large tents, multiple

• Small, level, dry site for platform tents within walking distance to Trailhead

• Central Trailhead Facility to purchase

camping basics (firewood, matches,

• Close proximity to biking trails, race

staging area or event location

s'mores supplies etc.) and for plumbing.

small tents, and rustic restrooms

#### POTENTIAL USERS

- Scout/ School/ Church Groups
- Families
- Overnight event staging (bike races)
- Pop-up event and concert attendees (Zoo Brew, Projected Packer Games, Concerts, etc.)

#### **IMPLEMENTATION**

#### ► Site 1 - Rustic

• A walk-in trail from the multi-use parking lot to the campground

Facility

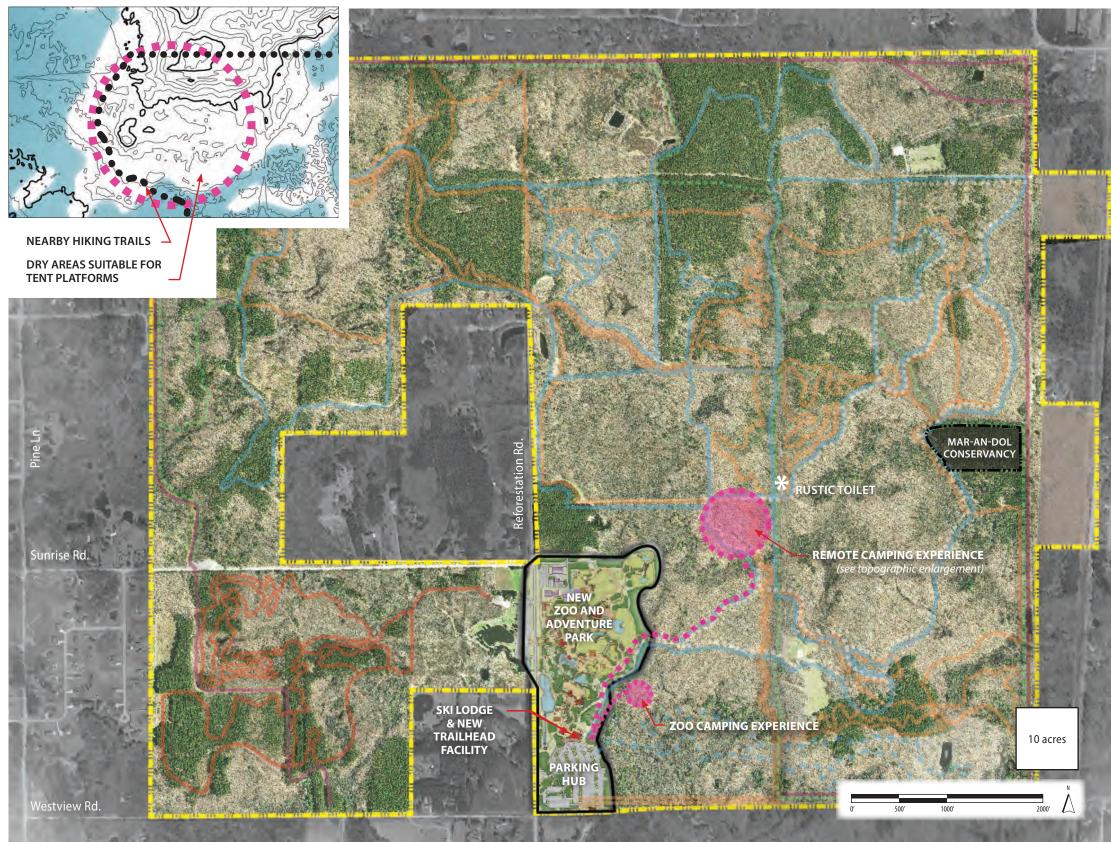
- 2 large group sites for up to 20 campers
- Barbecues
- Primitive toilets
- Access to drinking water
- Way-finding and interpretative signage
- Site Reservation and parking fee payment system
- "Leave No Trace" policy
- Potential drive-up access

#### ► Site 2 - Zoo Camp

- Six to ten platform tent sites with central fire pit and shared picnic tables
- Staffed "Ranger" support during peak season
- Walking distance to Trailhead Facility for showers and electricity



#### **Topographic Enlargement:** Remote Camping Experience





## SKIING & SNOWSHOEING TRAILS

#### PROGRAM OBJECTIVES

Reinforce the Reforestation Camp as a year-round regional destination for outdoor recreation, by growing the existing ski program and improving amenities.

#### OPPORTUNITIES FOR GROWTH

#### Snowmaker Support

Snow-making capabilities would expand the ski season during times inadequate snowpack. This service has been requested by the ski community and fits with the identified master plan drivers. With an existing electric line already in place along the lit ski trail, only water would be needed to provided the necessary services to operate a snow making machine along the path of the lit trial.

#### ► Trail Expansion

Increasing the mileage of available lit and unlit ski trails within the park provides an opportunity to highlight growth and facilitate increased volume of use. The NE corner of the has been identified by ski members of the Volunteer board as an area best suited for expansion. Additionally, interest in biathlon use of the park has been expressed by some members of the ski community. While regulatory hurdles currently prevent unauthorized use of the rifle range, extending ski trails into this area would facilitate the future biathlon activity if an opportunity arises.

#### ► Ski Lodge

The ski lodge provides a valuable amenity for skiers and is a tremendous asset for the park as a rental facility. In summer months, the ski lodge can be focused as a rental facility while in the winter can be dedicated as a "dry" warm-up space with concessions.

#### ► New Trailhead Facility & Staging Area Improvement

A new trailhead facility will provide a much-needed arrival location for trailhead, trail passes and trail information. In the winter, this can serve as a dedicated "wet" facility for skiers, providing changing rooms, restrooms, shower, bag storage, and a dedicated indoor place for performing the dirty work of preparing skis. In the summer, all recreational trail users, adventure park users, and zoo-goers can use the restroom facilities which would relieve the ski lodge restrooms from being accessible to the public during private rental events.

#### Off-Season Amenities

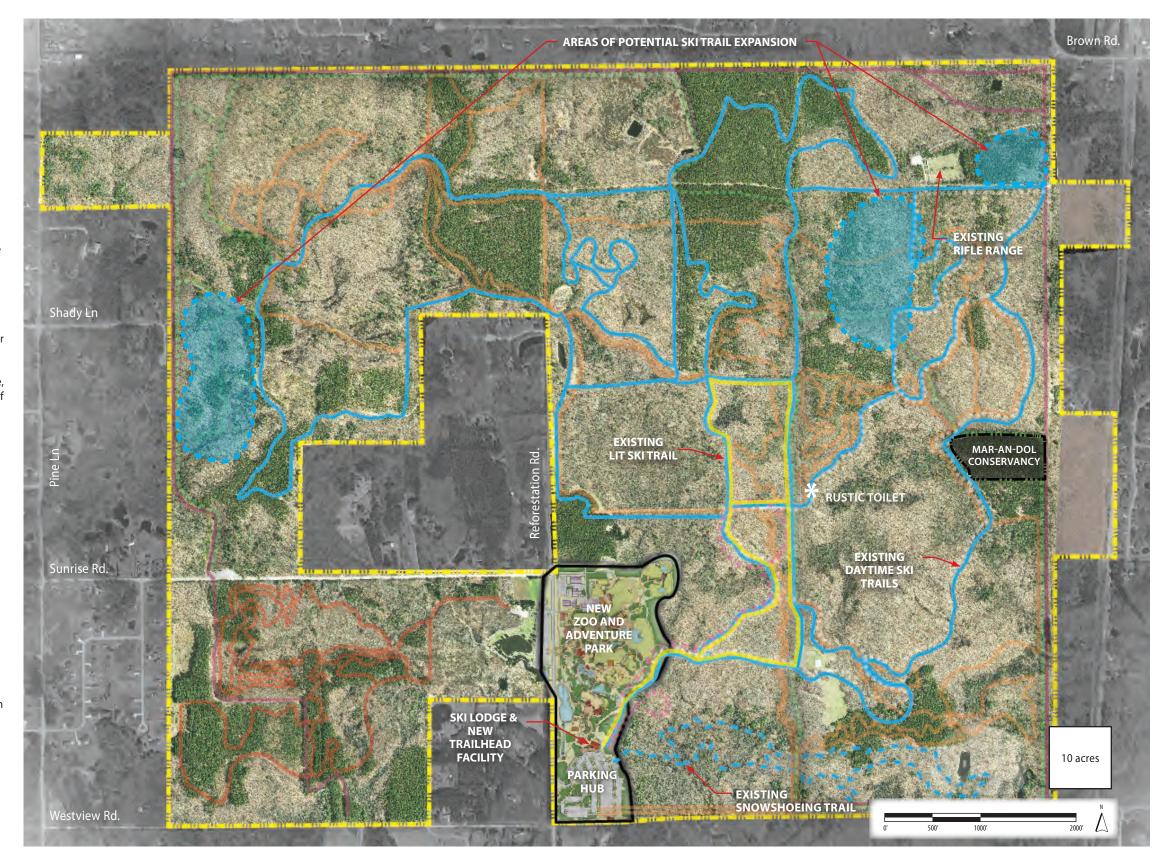
One to two miles of paved pathway for dryland training during the off season would increase off-season trail use





**Lodge Staging** 

Summer Ski Training



## MOUNTAIN BIKING TRAILS

#### PROGRAM OBJECTIVES

Expand the Mountain Bike (MTB) program through a strategic expansion of the trail system to capture under-represented user groups and increase offerings to heavy trail utilizers.

Our analysis revealed several opportunities for improvement that would reduce conflict between user groups and improve amenities for mountain bikers.

#### POTENTIAL USERS

- All Cyclists
- Families
- Bike Racers
- Off-roaders

#### AMENITIES NEEDED

- Improved Facilities: New trailhead facility with restroom and bike wash to reduce conflict with event use at the ski lodge. Continued maintenance of existing trails. Move trailhead closer to new trailhead facility.
- Gentle trails connecting to destinations such as a clearing with picnic tables, ponds, a lookout tower, or other points of interest with interpretative materials.
- Pump Track playground for children
- With community investment and maintenance, provide increased mileage of designated highspeed trails with few intersections where the potential for collisions and conflict is high.

#### PHASING IMPLEMENTATION

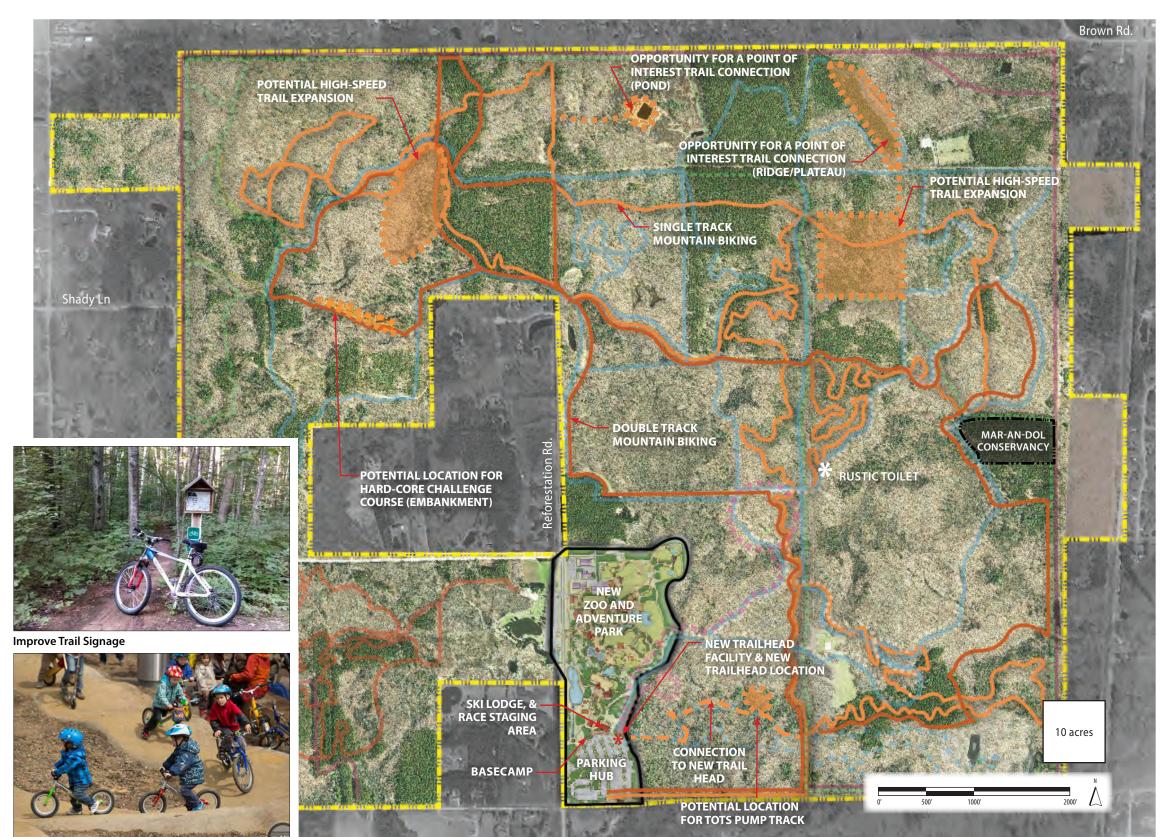
As the MTB community grows through marketing and strategic planning implementation, amenities can improve to serve the need of the most heavily represented or dedicated user groups as they emerge. For this reason, more general improvements that will serve all users are recommended for implementation in Phase 1 with specialized programs requiring community participation and volunteer investment in Phase 2.

#### ► Phase 1

- New Trailhead Facility at north end of parking lot with dedicated trail user restrooms and a bike wash.
- Expanded lawn area at the ski lodge for staging races
- Improved signage with updated, detailed trail information
- Creation of family MTB trails to connect with destinations, interpretative materials and points of interest on hiking trails
- Designate trails for specific users- family, high-speed, hard-core to focus improvements on specialized user need.

#### ► Phase 2

- Kids Pump Track playground
- Community-designed, hard-core challenge course
- Increased mileage along hi-speed cycling paths with user investment









## FAT TIRE & SNOWMOBILING TRAILS

#### **PROGRAM OBJECTIVES**

Grow the fat bike program as a year-round biking opportunity to generate revenue and provide a unique a rental experience for visitors to explore the natural recreation features in the Reforestation Camp park from a novel vantage point.

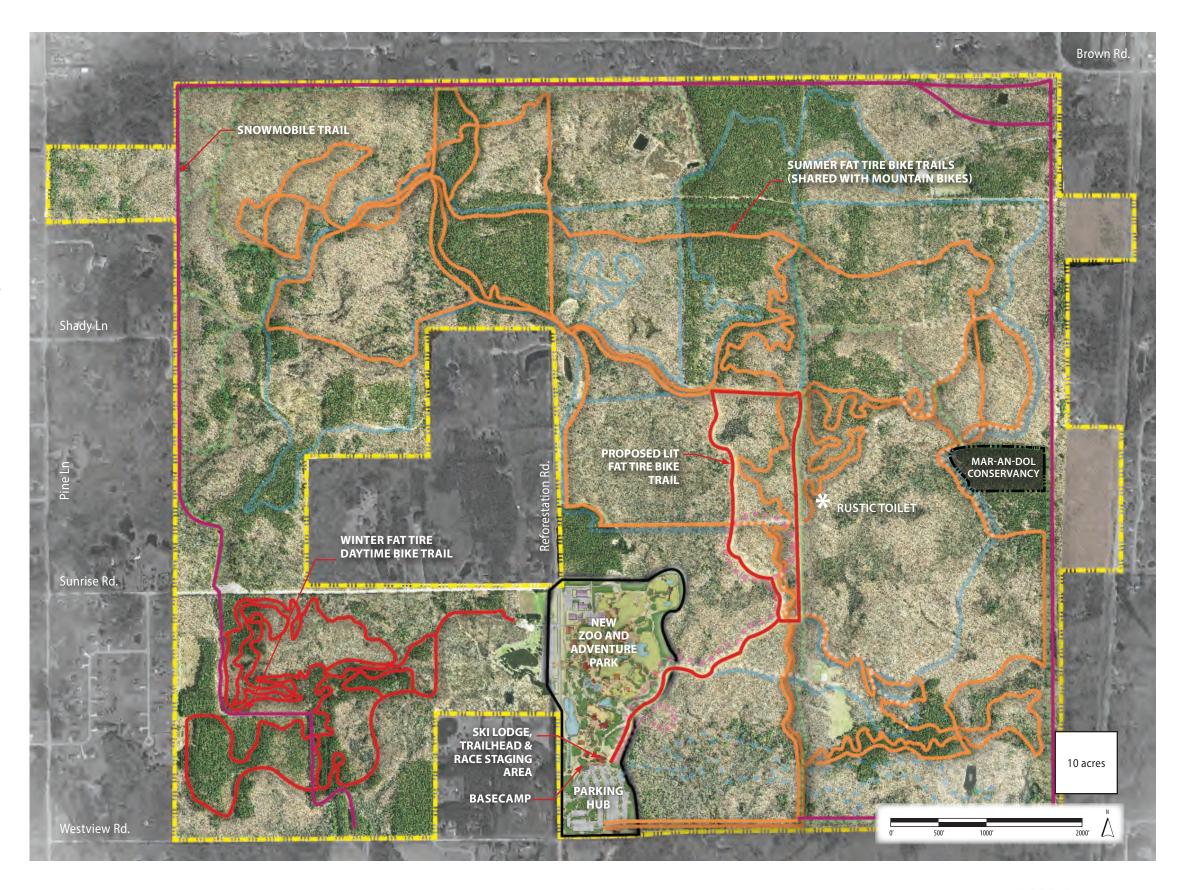
#### OPPORTUNITIES FOR GROWTH

- ▶ Maintain the existing Fat Tire program rental services and increase rental use.
- ► Create a parallel track for fat tire bikes along the lit ski trail in ski season to increase winter and after dark biking opportunities.
- ▶ Maintain the existing "Winter Bike Trail" for fat tire bikes in the SW corner of the park beside snowmobile trails in winter months.
- ▶ Identify geographic regions within the Restoration Camp that are uniquely suited for fat bikes such as exposed sand ridges, marsh, and difficult terrain and build trails that traverse these features to highlight and differentiate fat bike experience.
- ▶ Increase the visibly of fat bike program by connecting with and supporting the growth of community groups through event hosting, races and skill building workshops.





Fat Tire Bike use in all seasons



## HIKING TRAILS

#### PROGRAM OBJECTIVES

#### Increase the diversity of experiences and amenities for visitors exploring the Restoration Camp on foot.

Grow community support for hiking programs by expanding trails to reach areas of geographic interest such as sand ridges, streams, ponds and high points where lookouts could be constructed in combination with interpretative materials will increase interest in hiking. Highlight the unique character of the Reforestation Camp through interpretative historical programming.

#### OPPORTUNITIES FOR GROWTH

- ► Identify points of interest and develop interventions that create destinations within the reforestation Camp. Strategically implement a system of simple amenities and interpretative materials within the park by bringing hikers to ponds, clearings, sand ridges and providing shelters benches, fire pits, or wildlife blinds in places where views would be most advantageous. Introduce historical Wisconsin logging history, play elements and general history.
- Expand interpretative program from the zipline fire watch tower to encompass the entire Reforestation Camp as an immersive historical experience telling the story of the region and larger historical themes of conservation, prison history and 20th century NE Wisconsin. Reconstruct prisoner trails and housing with interpretative information featuring biographies and quotes from the men who lived at the reforestation camp.
- ► Create a natural playground along shorter family-friendly trails made from rough logs and manipulated topography with opportunities for kids to dig and erect temporary structures from natural materials.
- ▶ Build a new Trailhead Facility with restrooms, shower, warm-up/cool down space, trail passes and trail information. On the exterior, water bottle fill stations, trash receptacles and hose for cleanup for trail users will be provided.
- ► Create a sculpture walk near the zoo entrance connecting the park to the local arts community, engaging a new demographic of visitors and increasing the frequency of events with the unveiling of each new temporary exhibition.
- ▶ Provide stretching equipment for runners at the proposed trailhead facility located at the Parking Hub.
- ▶ Improve signage and mapping for more effective wayfinding and to accommodate new visitors to the park.
- ► Provide "pop-up" events including trail running and adventure racing.

#### **Suggested Points of Interest**

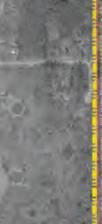




























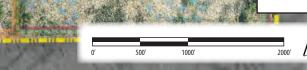
**SCULPTURE WALK** 

PROPOSED TRAILHEAD

FACILITY







10 acres

USTIC TOILET

INTERPRETIVE OPPORTUNITIES

# **EQUESTRIAN TRAILS**

#### PROGRAM OBJECTIVES

Maintain the equestrian program at its current level of use.

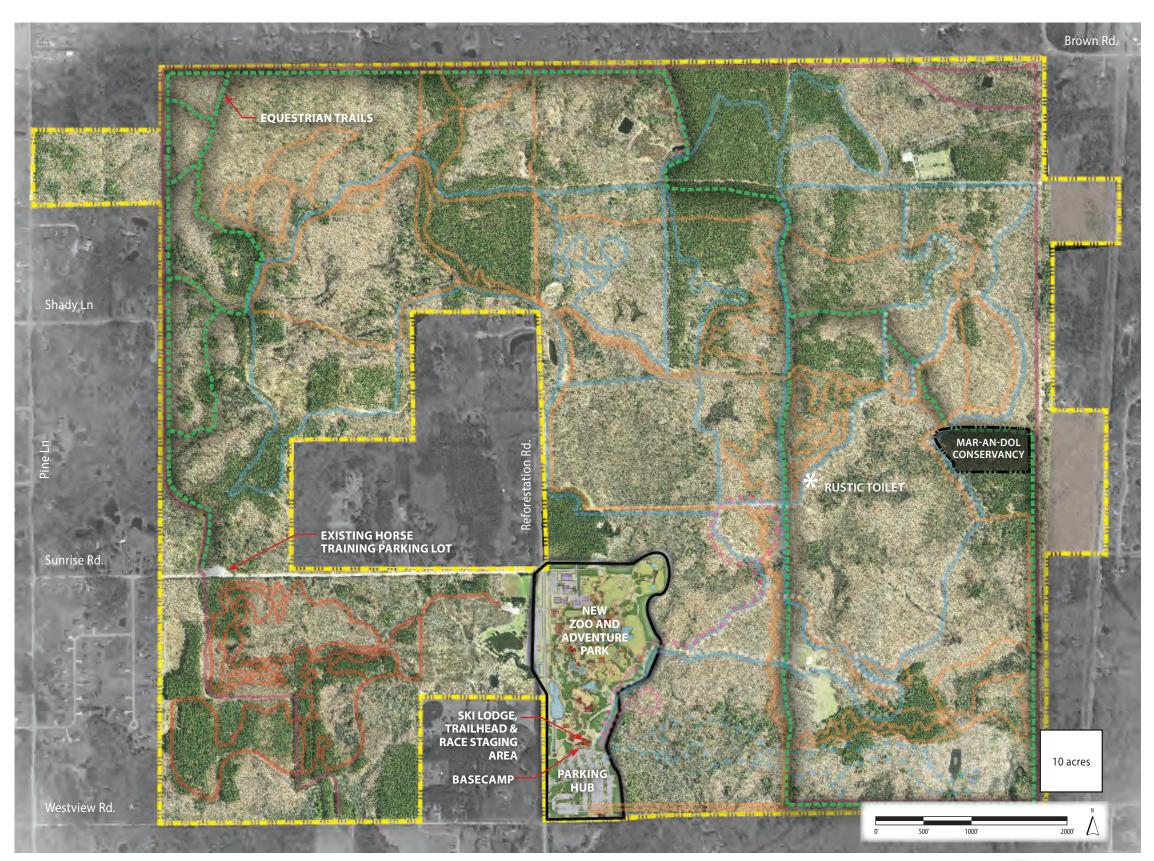
#### RECOMMENDATIONS

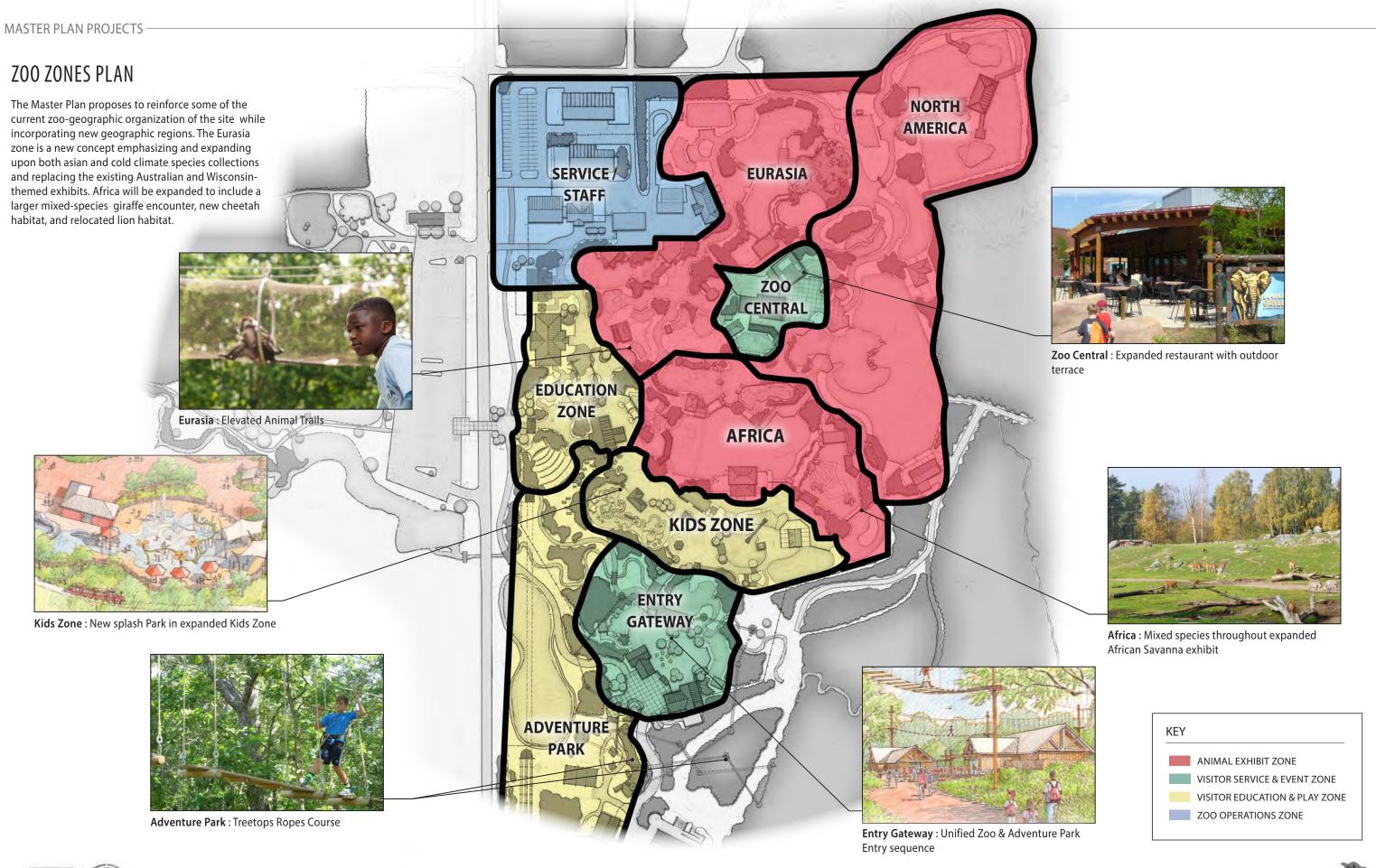
- ▶ Maintain the equestrian trails and work with community members to continue the existing strong volunteer support
- ▶ Improve amenities at the horse trailer parking lot. Resurface lot, replace fence, provide a hitching rail and water for both horses and riders.
- ▶ Update signage at trail heads to accurately depict status of trails and locations.
- ► Continue to work with cyclists and perform trail construction that reduces conflict between users through installation of speed gates at trail crossings and providing signage to alert riders to oncoming traffic.
- No ride-for-fee or horse rental service will be provided on the site.
- ► Current length of trails adequate in relation to quantity of users.

#### MAINTENANCE

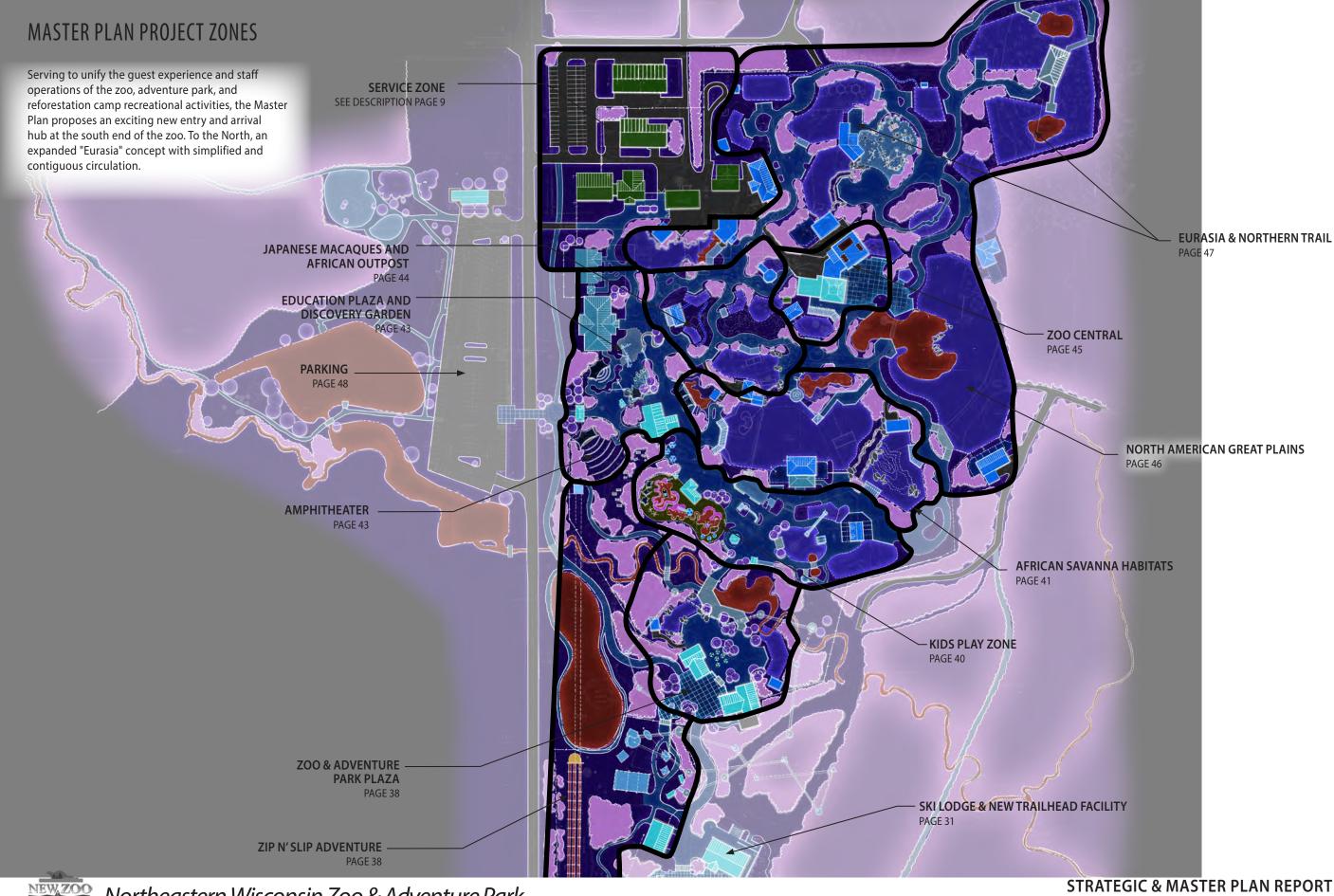
The equestrian trails were created in the 1990s at the Park's expense in response to advocacy by the equestrian community of Brown County. An agreement was formed that care of the trails would be performed as a collaboration partnership between park staff and community volunteers. While the existing equestrian trail users are the most active of all user volunteer groups, the actual trail use and quantity of trail users is lower than that of other types of recreational trails. Due to these relatively low number of trail users, it is recommended to keep the existing 8 miles of marked bridle trails without further expansion.











### ZOO AND ADVENTURE PARK PLAZA

A need for increased pedestrian safety, an improved entry experience, greater parking volume, and a unified zoo and adventure park drove the relocation of the main zoo entrance to the southern end of the park, combining ticketing and entry to both parks at the same plaza. Through this interlaced sequence of entry and access, the Zoo and Adventure Park will be inextricable from one another.

Visitors approaching the plaza will view the existing climbing structures, zipline and 300' long "Zip N' Slip" slip and slide while passing beneath the suspended lines of the adventure park tree-top course and exhilarated climbers. The 450' long wooded path connecting the parking area to the to the plaza will direct visitors to their destinations through signage and sculpture. The path opens to the new entry gateway to create a welcoming outdoor room where visitors can regroup and consider their exciting options: visit the zoo, do the adventure park or tackle both in one day! In this space clear informational displays presenting adventure park activities and ticket options will be key to meeting the goal of a unified park and increasing cross-over use of amenities. Ticketing point-of-sales can occur either indoors at the main ticketing building or outdoors at shaded sales kiosks that divides the gateway, offering flexibility to respond to changing weather, visitor volume and staff availability. Restrooms and seasonal concessions on the west side of the ticketing kiosks will be accessible from the interior entry plaza. Designed to accommodate a high volume of guests, this space will offer the first glimpse of animal exhibits as guests prepare for their NEW Zoo Experience. The treetops adventure course will also traverse this gateway and plaza forming a delicate threshold above Haller's Creek Bridge which connects the plaza to the zoo, further interweaving and mutually enhancing the zoo and adventure park experiences.



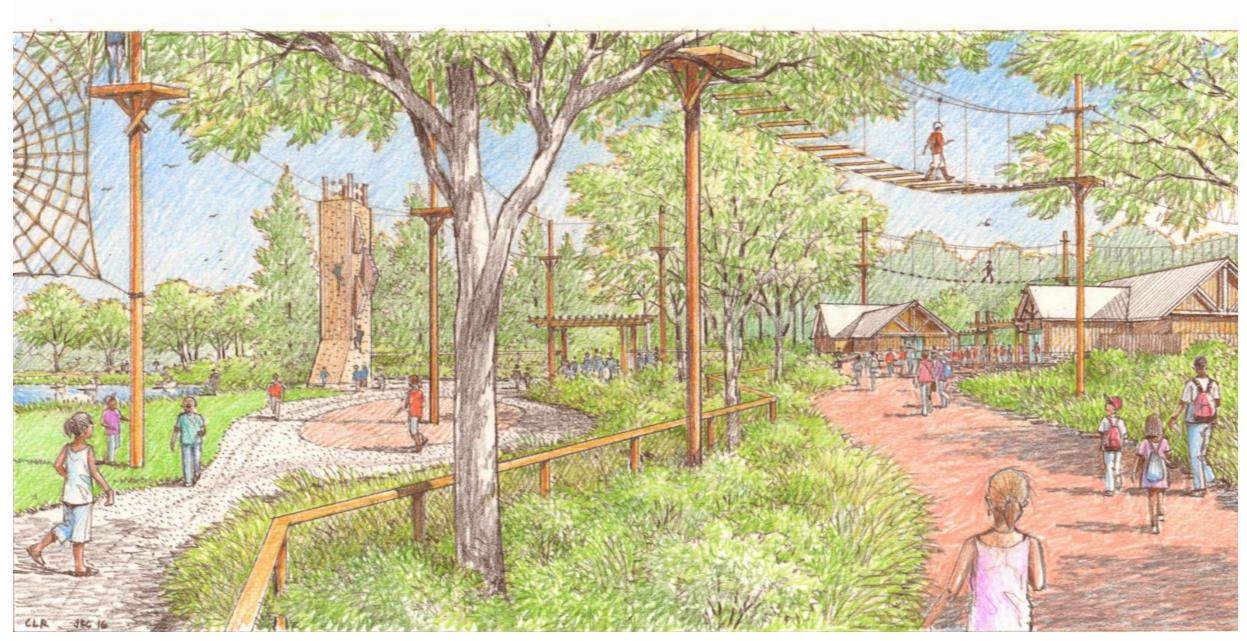






Zoo Entries: Active and spacious for guest ease and comfort





New Zoo Entry and Adventure Park Plaza:

Visitor approach to new entry plaza with a new overhead tree-tops adventure course



## KIDS PLAY ZONE

The existing Children's Zoo is one of the Zoo's best features and a destination for many families who visit. This plan expands upon the strengths of this area to create an enhanced dynamic space for active play. In this revised layout the terminal node of the alpaca and goat barn forms the eastern boundary of the children's zone as the main path circulates through the space flowing northeast toward the African lion exhibit and northwest toward savanna views and the education zone beyond. The existing hoofstock barn will be upgraded with updated and connected outdoor yards for greater flexibility of animal management and increased public viewing opportunities from the exterior.

The new splash park will become a popular attraction for families in the summer, with interactive water features and play elements. A new restroom and snack facility at the gateway to the Kids Zone and entry point into the splash park ensures a self-contained play session. Shaded areas with tables and chairs located along the edges will provide a cool, dry vantage point for caretakers. The new train station located to the south offers a queuing shelter for the relocated train. The Endangered Species Carousel will also be relocated to this zone for another exciting play element.



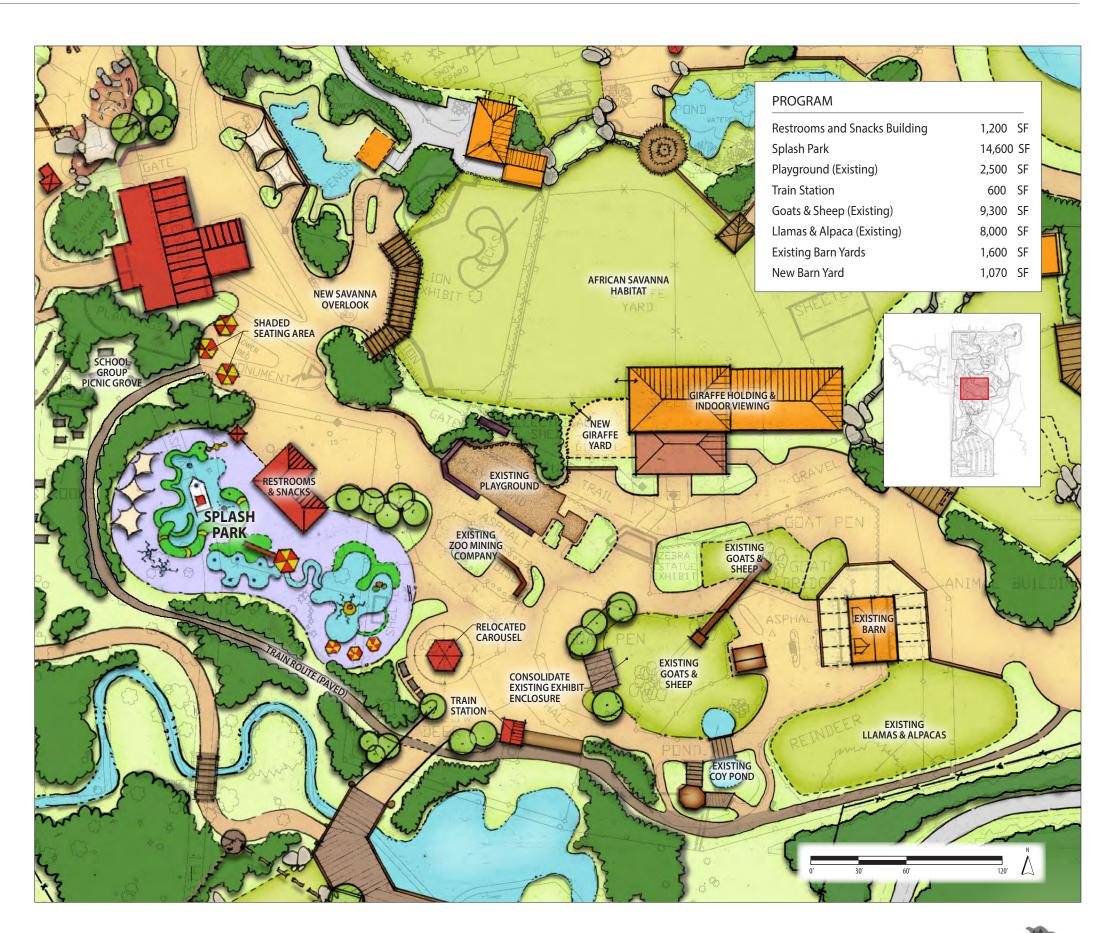


New Waterpark: Exciting splashpark with interactive features





**Train Station:** Relocated Carousel & new train station near existing mining station



## AFRICAN SAVANNA HABITATS

One of the first habitats visitors will encounter after entering the zoo will be a dramatic panoramic view of the new spacious mixed species African Savanna Habitat. This exhibit expands and reorganizes the centrally located existing lion and giraffe exhibits. Additional giraffe, ostrich, and antelope may be added to the Zoo's collection to create a more enriching and dynamic savanna habitat producing an exciting first impression for visitors as they enter the Zoo. An additional Savanna view hut and feed hoist will anchor a new African marketplace and expand the very popular giraffe feeding program. The existing giraffe holding building will be expanded to accommodate a larger herd and improved indoor viewing during winter months.

The existing Lion habitat, currently located at the front of the Zoo, is relocated to the east side of the new African Savanna Habitat. The new Lion Habitat will house multiple lions within a large open space with heated and elevated kopje rocks, and a view shelter with nose-to-nose viewing. A woven mesh lion barrier encloses the space and provides a transparent, open view of the savanna beyond, providing overlapping views of giraffes, hoofstock and lions. To the north of the Savanna, a new flamingo exhibit will replace where wattled crane was previously.





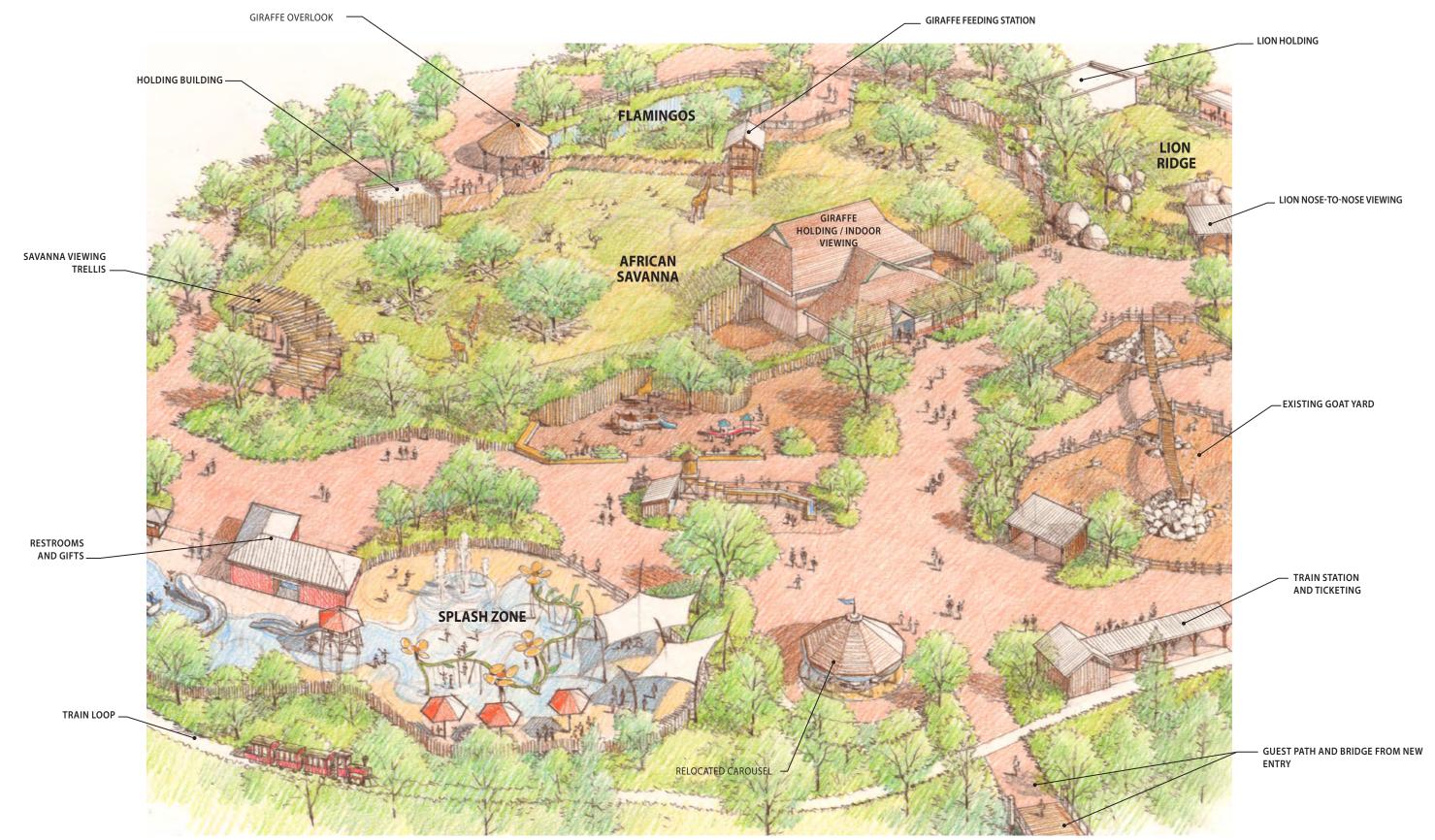
African Savanna: Mixed hoofstock species and nose-to-nose lion viewing





Lion Habitat: Overlapping views and elevated Kopje rocks





Kid's Play Zone and African Savanna birds-eye perspective

## **EDUCATION PLAZA & DISCOVERY GARDEN**

The new Education Plaza and Discovery Garden will reappropriate the existing Zoo entry infrastructure to orient school groups into the zoo. School groups will now arrive from the west parking lot (previously the main parking lot) via a safer pedestrian crossing path with signage, speed bumps and paving change. Upon passing through the new school group entry gate, visitors will enter the new education orientation zone. Education services are concentrated in this zone, providing multiple locations for gathering, orientation and programmed activities. At the Biodiversity Lab, students are primed to understand their zoo experience through the lens of environmental conservation with interactive demonstrations featuring the small animals that are housed there. The Biodiversity lab provides a year-round classroom and event rental space while outdoor demonstrations at Ursa Minor Stage can serve both groups or general public audiences. The Discovery Garden and Snake Bench provide a staging area for activity-based learning, zoo entry, and a visit to the Conservation Learning Center. School groups will remain in the zoo for lunch, eating and playing in the bucolic outdoor setting of the Picnic Grove. Additional private office spaces will be located north of the conservation learning center.

This zone improves the quality and efficacy of school group visits while streamlining overall zoo circulation by bringing students directly to education amenities at a separate point of entry from the general public. Tracing the path of school groups from arrival to departure, this zone meets the NEW Zoo's vision as a regional destination promoting conservation education with expanded education facilities, new programming, and spaces to accommodate group meals, play, and gathering for a full day NEW Zoo experience.









Discovery Garden: Fun and playful setting to reinforce the message of environmental conservation.



## JAPANESE MACAQUES & AFRICAN OUTPOST

The Master Plan builds upon the existing Japanese Macaque exhibit by creating a new north habitat connected to the existing enclosure via a mesh-enclosed treetop animal trail system. New features within the habitat enclosures, such as heated rocks, deadfall and a heated pool, will provide a destination for the monkeys and a special point of interest for visitors in the winter months.

To the east, a new red panda exhibit is revealed as guests walk through a soft mulch "bamboo forest" trail while catching glimpses of macaques overhead. Emerging from the forest, guests encounter a new exhibit with dramatic above and underwater views of Asian otters probing for prey in mud and under rocks.

Providing a transition between the Asian and Tropical Zoo Central zones, a new cheetah habitat and lively African Outpost Marketplace will anchor the northern edge of the new African Savanna and existing South African Penguins. The marketplace is an opportunity to overlay a message of both cultural immersion and the dynamics of animal and human coexistence.



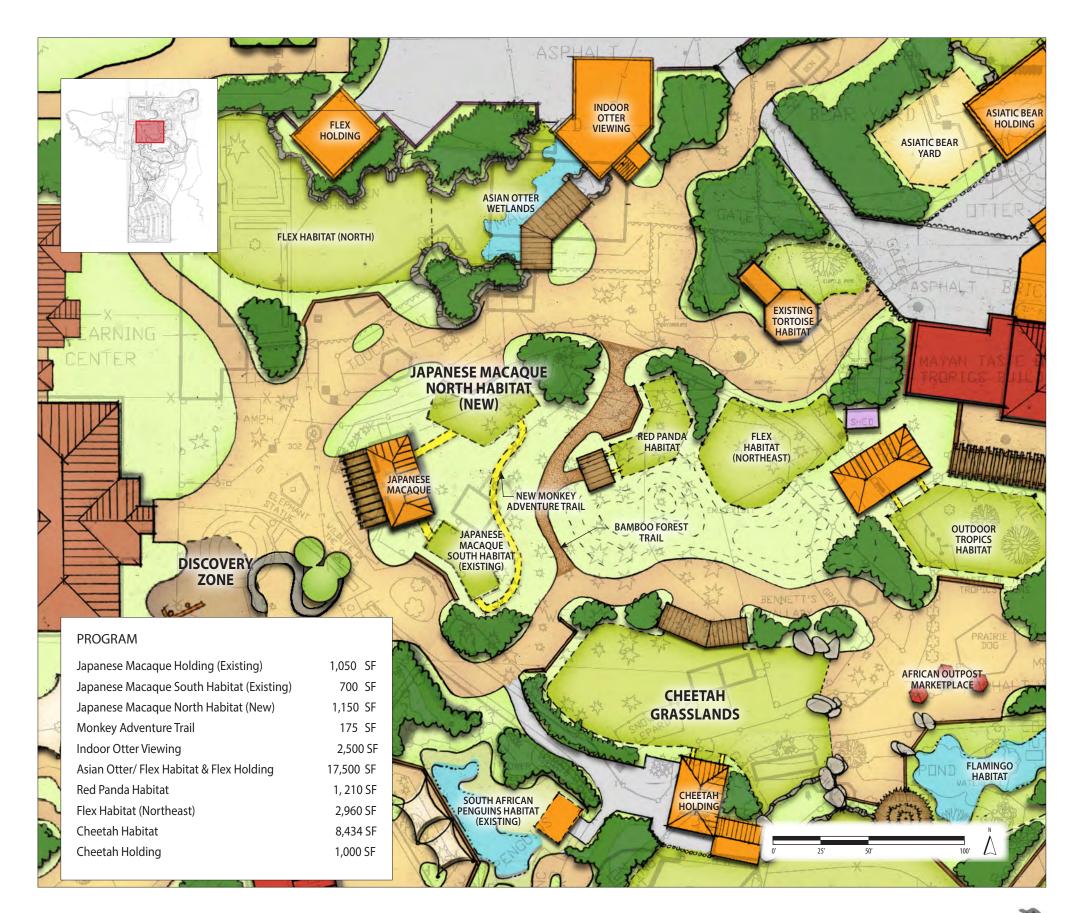


Japanese Macaque Trails: Overhead passages and heated pools





African Outpost Marketplace: Zulu huts and drums





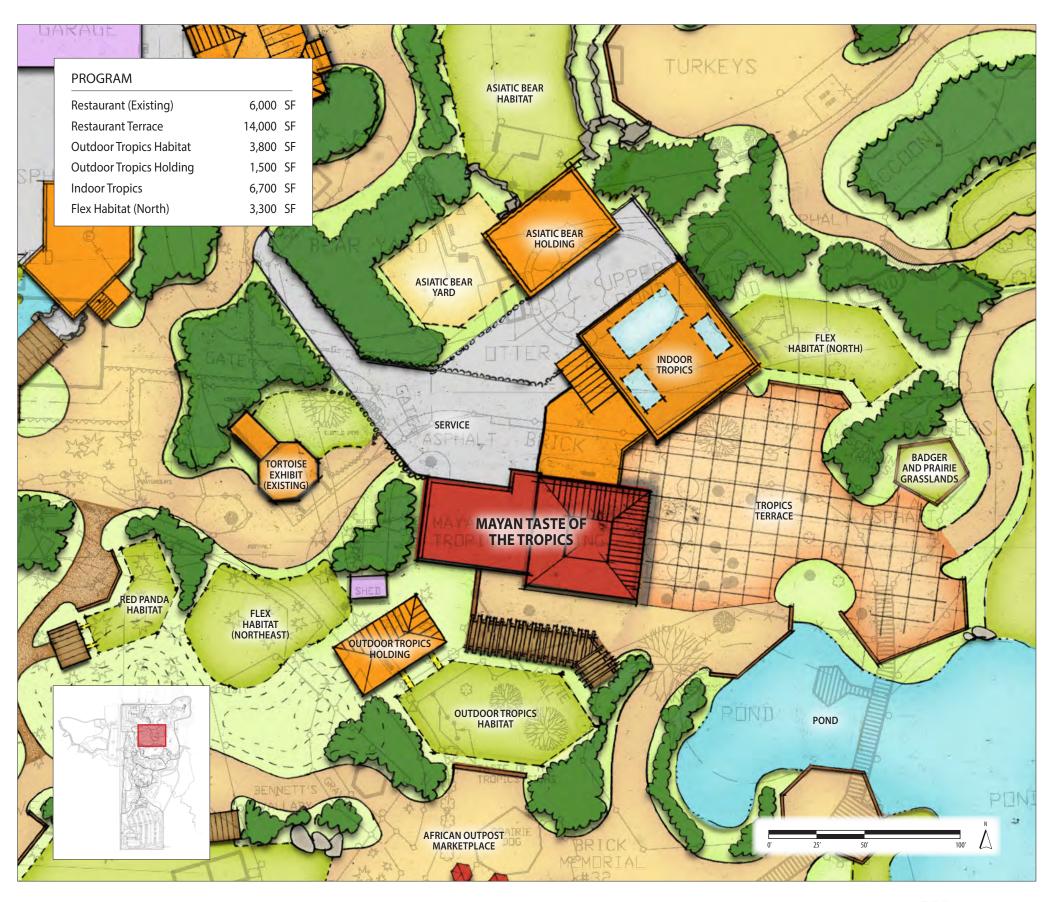


# **ZOO CENTRAL**

Zoo Central provides a significant opportunity to generate revenue at the Taste of the Tropics restaurant, extend stay times by remaining at the zoo for lunch and create a high-quality experience for guests with improved food service offerings. A new indoor exhibit frames the NW corner of the central plaza and provides a year-round, engaging visitor experience as well as improved housing for some of the zoo's more climate-sensitive species. As the Main Hub of the zoo, this plan endeavors to create a destination that will reinvigorate the entire guest experience through improved services, indoor attractions and an outdoor seating/ eating area designed for optimal views of Elk and Bison on the grassy plain to the east and aquatic birds swimming in the pond to the southwest. To the south, the African Outpost Marketplace continues the energy of the terrace experience overlaid with cultural vibrance.



**Zoo Central:** Outdoor dining overlook



# NORTH AMERICAN GREAT PLAINS

Expanding the plains habitat to the SE will accommodate a new sequence of exhibits and facilitate a more cohesive visitor flow. This new configuration of path and Plains will provide continuous views along the western edge of the habitat with designated view rails and a view shelter displaying interpretive materials at the southern end. An increased and diversified hoofstock population will be housed in a new, relocated holding building connecting to the service path on the eastern boundary of the zoo for keeper access and habitat maintenance. The existing bridge overlooking Plains Pond on the main visitor path will be replaced by an access path with pond overlook to accommodate heavier traffic as visitors make their way to Zoo Central and the Mayan Taste of the Tropics Restaurant. From Zoo Central Plaza, guests will have opportunities to view the Plains herd at the Plaza, the Indoor Mayan Exhibit + Restaurant, and from the southern view shelter. A new holding building to the north will provide additional plains, holding and off-exhibit yards as well as holding for the new Red Wolf Woods. New species to be housed here for the plains exhibit include black-footed ferrets and burrowing owls.

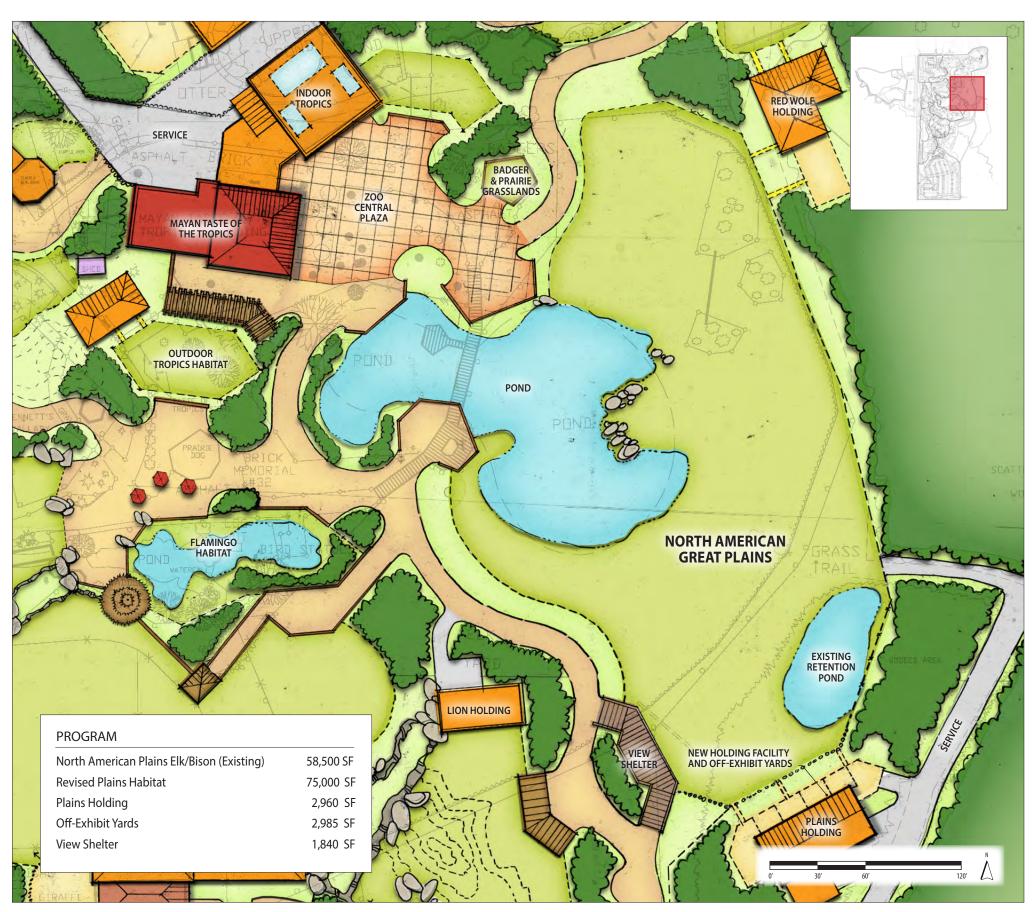








**Great Plains:** Diversified species and expanded habitat



## **EURASIA & NORTHERN TRAIL**

Northern Trail anchors the northern aspect of the zoo, effectively utilizing the native landscape in immersive moose habitats. Building on the strengths of these areas, this plan expands the trail to include an expansive new Red Wolf habitat and a new Red Wolf holding building for an exciting pack movement encounter. Red Wolf Holding can also simultaneously be used to house smaller species for the Great Plains Habitat.

Circulation at the moose exhibit and Riley Building will be greatly improved with the addition of a loop path extending from the building's deck, to connect with a feeding deck at the exhibit's northern boundary. Guests will travel back to the exhibit entrance along a deeply immersive path with ground level with new views from the north within the beautiful forested landscape that makes up this exhibit and the larger park. Minor improvements, such as adding fans to the existing deck at the Riley Building, will help to maximize visitor experience.

To the West, a new Eurasian zone anchored by a central core of rotating Asian tiger and Asian bear habitats with indoor underwater viewing will showcase two new major species to the Zoo. A new "Nature Play" zone will encourage parallel play where children can emulate the leaping and strength of the nearby Tiger, Bear, and Lynx habitats and trails. A new mesh-enclosed lynx trail is woven into the edge of the northern trail and eastern edge of Eurasia. Finally, a new snow leopard habitat and holding building completes the Asian "cat trail" journey, culminating near the recently renovated nutrition center.





Eurasia: Lynx trails and Red Wolf Woods



Nature Play Zone: Deadfall timbers and boulders for nature play



# PARKING AND ENTRY

As visitor volume grows with the addition of new exhibits, more special events, and improved attractions, the existing entrance inside the gift shop will be inadequate. The existing lot used for primary zoo parking does not meet peak volume needs and poses a risk to visitors crossing Reforestation Drive to access the existing main entrance. Relocating the primary parking and entrance to the south creates a safer, more pleasant entrance experience that will entice visitors to engage in other recreational attractions in the park and extend their stay. Improving the entry signage and drive sequence will provide a more welcoming arrival for zoo, park, and trail guests.

From the new entrance in the south lot, visitors to the NEW Zoo will be exposed to recreational opportunities across the entire park with an emphasis on the Adventure park ropes and treetop courses as they make their way to the entry plaza.

Existing Parking Lot Area:	357 spaces
Phase 1 Parking :	96 spaces
Phase 2 Parking:	162 spaces
Entry Plaza Revisions:	16 spaces
Total Parking Hub Spaces:	631 spaces





Parking: New solar panels and signage may also be incorporated to provide opportunities for passive environmental education.



# OVERALL PARKING ANALYSIS: ZOO, ADVENTURE PARK & REFORESTATION CAMP

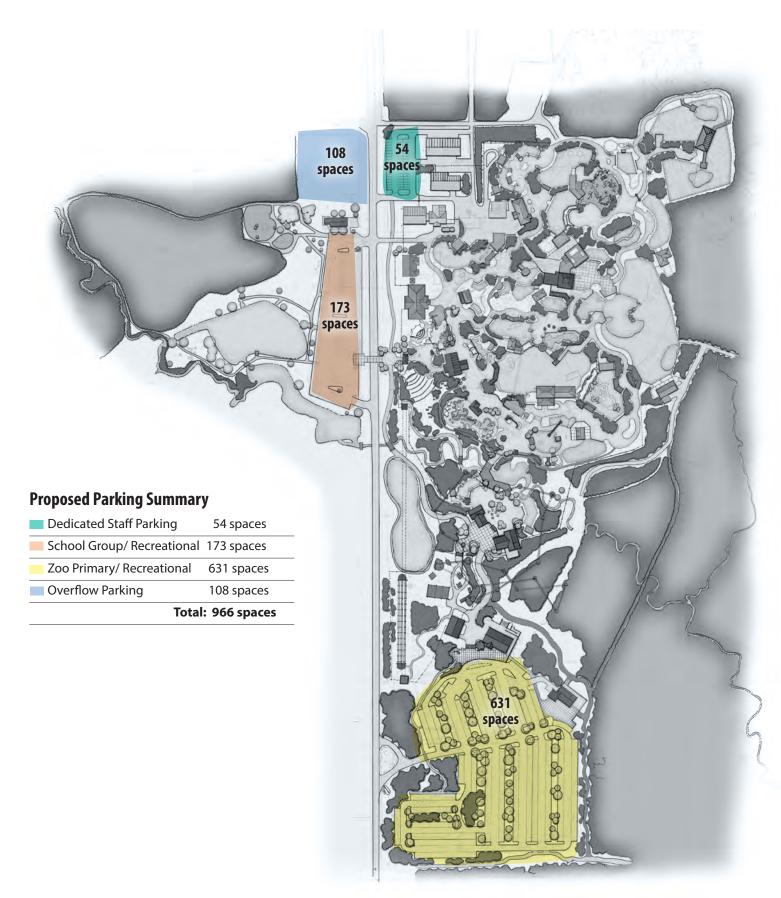
Following is an analysis of existing parking versus proposed parking. Currently, the NEW Zoo & Adventure Park uses what is marked as "school group/recreational" as the main zoo parking lot, while the marked "primary" lot on this plan is currently used as adventure park and trail user parking only. It is proposed to create one main entry "Parking Hub" for all user groups in the "Primary Lot" on the southern end of the Reforestation Camp. The current main zoo parking lot will be used for school groups and recreational trail users only.

EXISTING PARKING		PROPOSED PARKING	
Zone	Spaces	Zone	Spaces
Main Parking Lot	173	North Parking Lot (Overflow)	108
Upper Level Parking Lot	427	School Group Lot	173
		Staff Parking	54
		Parking Hub	631
		New Spaces =	+/-366
TOTAL EXISTING	+/- 600	TOTAL PROPOSED	+/-966

#### PARKING ASSESSMENT FOR ZOO AND ADVENTURE PARK

- 1) Design day = 1% of annual attendance
- 2) Design day = 3,000 or more
- 3) Parking demand = design day x 80% / 3.5 Per car / 1.5 to 1.75 Turnover

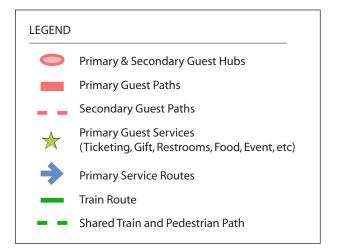
ANNUAL ATTENDANCE	DESIGN DAY	PARKING DEMAND*	
300,000	3,000	390 to 490 Spaces	
350,000	3,500	450 to 550 Spaces	
400,000	4,000	520 to 620 Spaces	
500,000	5,000	650 to 750 Spaces	
* Paved parking spaces, overflow parking spaces, and street parking			



JANUARY 26, 2017

# PROPOSED ZOO GUEST & SERVICE CIRCULATION





SEE PLAN FOR CONTINUATION



SEE INSET PLAN FOR CONTINUATION

