

# • THE BIG IDEA





#### Observed current condition of site identity

Your Zoo is a site of huge contrast, with dense pockets of bustling activity with urban qualities at its centre, and tranquil, natural landscape pockets that are calm and serene closer to its periphery. It has both the qualities of the lush, urban national park within which it sits, and the lively, vibrant qualities of the larger metropolis of Toronto right nearby, with each occurring in somewhat fragmented pockets currently.

#### Vision for Your future Zoo, enhancing existing qualities

The Zoo of Contrasts builds off of these amazing qualities, further enhancing each, and accentuating the differences between the two as a way to create even more diverse and intriguing experiences when they are experienced in comparison to each other. In this way, Your Zoo of Contrasts becomes like a dense, well-connected city at its core, with a rich, continuous landscape periphery that includes natural, protected pockets, and larger, lusher habitats for guests to explore, collectively providing enriched experiences for animals, guests, staff and volunteers.



A Zoo of contrasts builds on the huge diversity of existing qualities onsite, amplifying these, and accentuating their differences when in proximity to each other, to make each stronger. By emphasizing contrasts this allows for the diversity of site qualities, species, guest experiences and story telling to really shine. It also enables the creation of more surprising and memorable experiences onsite and beyond the site's boundaries.



Diverse site: bustling, programmed activity areas contrasted with picturesque, open habitat landscapes





Atmospheres: immersive, high-tech zones for exploration contrasted with serene, contemplative trails to discover



Landscapes: broad, open habitats with vast views contrasted with lush, dense environments packed with biodiversity



A Zoo of contrasts celebrates not only diversity of landscapes and context, but also celebrates the huge variety of species that make up the ecosystem, from tiny, more difficult to notice but incredibly important species to large, charismatic show-stoppers. It finds ways to further use seasonality onsite as a way to create awe-inspiring moments throughout the year, and similarly uses contrast to expand the scope of programs and experiences offered onsite as well as virtually.



Species: small, intriguing species that are important to the ecosystem contrasted with large, charismatic animals



Programs: areas for a quiet escape from city life contrasted with lively, engaging events and activities for many people



Seasons: activities that cater to the hot season contrasted with spaces and programs drawing guests in colder, darker seasons



**Experiences**: opportunities to engage with science contrasted with spaces to relax and spend the night near animals





#### Your Zoo today

Today, Your Zoo has many different areas, but two main qualities that stand out from the rest - that of busy, more heavilyprogrammed, urban pockets, in contrast to natural landscape pockets. These two qualities are interspersed with one another, often close together, and create varying experiences around the Zoo but do not yet work together to give a clear identity to the site. Pockets exist more out of happenstance than design, which is felt through the experience of a Zoo visit today.

Accentuating contrast allows for the creation of a high-tech, highly-active, immersive urban hub as well as a naturalized, expansive landscape that invites guests to be transported momentarily out of the city. Juxtaposed against each other, the contrast brings added richness to the two main qualities that underly Your Zoo, building on these to develop new guest experiences, improve and extend habitats, and enhance and showcase sustainable practices onsite and beyond the site.

#### The vision for tomorrow



# 4. THE BIG IDEA 4.1. ZOO OF CONTRASTS: TWO MAIN INTERVENTION ZONES

The Zoo of Contrasts Master Plan builds on two incredible qualities that are already found onsite today, that of the lush, green, biodiverse periphery, and the dense, city-like urban core, called The District. These become the two main intervention zones within the Master Plan, creating two types of experience onsite that play off of one another and enrich each other through their differences.



The District

The District is the vibrant, bustling, urban heart of Your Zoo tomorrow. This is where dense hubs of activity will occur, supported by technology and a higher density of programs in central areas.









The Park zone surrounds the District zone, stretching to Your Zoo site's edges and offering expansive landscapes where it is possible to get momentarily lost in exploration and enjoy both the serenity and tranquility of nature, as well as the exciting experience of "discovering" animals in larger, immersive habitats.







#### The Park







## **4. THE BIG IDEA** 4.1. ZOO OF CONTRASTS: EXISTING QUALITIES OF THE PARK

Many areas within Your Zoo today have park-like qualities, especially areas near the periphery of the site. These include more open landscapes, often with an edge that is bounded by native plant species, that may also attract native animal species. These landscapes sometimes exist somewhat removed from the Zoo experience itself, in many cases, despite the incredible qualities that exist in them inherently.





# **4. THE BIG IDEA** 4.1. ZOO OF CONTRASTS: ENHANCING THE PARK EXPERIENCE BY MAKING IT MORE IMMERSIVE

The Zoo of Contrasts builds off of these existing park qualities, using vegetation to further connect many of these vegetated pockets, as well as to embrace the fencing within them and create a sense of immersion in more wild spaces, with a close connection to animals. These park-like landscapes bring a sense of discovery and exploration to a journey around Your Zoo, as guests experience species in larger, lusher landscapes, with more diversity in them.





# **4. THE BIG IDEA** 4.1. ZOO OF CONTRASTS: ENHANCING THE PARK EXPERIENCE BY MAKING IT MORE IMMERSIVE

Connecting vegetated pockets builds corridors for native species, including small species like butterflies and other insects, to move more freely around the site and find food and shelter. Expanding these elements into habitats also creates enrichment for Zoo species, and creates more dynamic and ever-changing experiences for guests onsite.





### **4. THE BIG IDEA** 4.1. ZOO OF CONTRASTS: EXISTING QUALITIES IN THE DISTRICT

Many areas within Your Zoo today have very urban qualities, including clusters of amenities, ample signage, various seating opportunities, and activity areas with many programs located close together.





# **4. THE BIG IDEA** 4.1. ZOO OF CONTRASTS: INTENSIFYING THE DISTRICT EXPERIENCE BY MULTIPLYING OFFERINGS

The Zoo of Contrasts builds off of these existing urban successes, and brings a new identity to spaces within The District by embedding technology into interactive display areas, as well as tech wayfinding, maps, and messaging boards that become much more flexible and engaging. These spaces that help to define the district are places of gathering and connecting with each other, as well as with information and programming, and with species onsite and beyond the site.





# **4. THE BIG IDEA** 4.1. ZOO OF CONTRASTS: INTENSIFYING THE DISTRICT EXPERIENCE BY MULTIPLYING OFFERINGS

Embedding technology in these urban hubs allows for these to become places for wayfinding as well as for learning about what Your Zoo is doing beyond the site to further conservation, as well as initiatives, projects, and partnerships that Your Zoo is leading and is involved in. They also become places to celebrate the unique ways in which animals orient themselves and move, using technology to showcase some of these unique behaviours and incorporating this as part of the wayfinding story.



# Wayfinding to species' habitats tells the story of how species orient themselves and move

### Landscape masks building, contrasting small habitats with high-tech hubs





### **Saving Wildlife**

Showcasing the big species with the important little ones is equally important. This helps demonstrate the critical role they each play and the interdependence they have on maintaining the integrity of the ecosystem.



Igniting the Passion

Using contrast as a way to enhance the experience of working and volunteering at Your Zoo. Offering natural refuges near hightech science pavilions, and immersive dining experiences in nutrition hubs, with forested spaces for an after-lunch stroll not far from these.



### **Creating Wow**

Building contrast allows Your Zoo to further enhance its already unique natural location, as well as its busy, active programmed hubs. The two can be even more engaging experiences when offered in contrast to each other.



### **Our Community + Our Zoo**

Your Zoo is a city within a city. For the community, this means creating spaces that are highly active and programmable, as well as guieter contemplative spaces to use.





### **Revolutionize Zoo Tech**

Expanding technology as a platform for enhancing busy, active hubs with information and interaction, while keeping technology in natural areas minimal by using apps to enhance the natural experience. Also using technology to enhance and monitor animal welfare including movement and feeding.



In order to design Your Zoo as a whole, as well as specific projects within the Master Plan, a series of strategies was developed as a toolkit providing a clear "how-to" for developing the site. These build off of Your Zoo's mission and vision, ensuring that each project strengthens the mission. The strategies also help the Zoo to build on the theme of "Zoo of Contrasts", creating a way to continually invite new experiences and a new energy into each project as the site constantly enhances and renews itself. The strategies were identified and then prioritized through an inclusive process with Your Zoo's leadership and Master Plan Project Steering Committee, as well through input from staff representatives.

1. Densify strategically!

2. Welcome the community!

3. Optimize the existing!

4. Turn pain points into opportunities!



5. Activate winter/accommodate summer!

7. Make the fences/barriers disappear!



6. Use nature!

By folding the landscape to safely separate guests and animals, and animals from animals By hiding fencing and barriers in landscape elements, and removing superfluous fences near non-dangerous animals By inverting the roles between humans and animals, sometimes enclosing humans to give animals more freedom to roam By allowing free-roaming animals where possible, making the experience feel more immersive and park-like

By utilizing nature for landscape performance (for water management, for shade, for hiding fencing)

By diversifying nature to create dynamic, changing seasonal experiences that are very photogenic

By offering different ways to navigate the site, with different speeds of experience By offering different experiences with each mode of transportation, including different vantage points such as from a monorail or raised walking path By building technology that empowers guests to book and track different forms of transportation while onsite, and for their next visit By planning intermodality the same way a city does, programming hubs of activities where different modes are crossing



By adding new programs on the fence line, accessible from both sides By creating unique vantage points along the edge, inside habitats and outside in the valley By embedding changing landscape experiences along the edge By making the edge an infrastructure piece serving the inside and/or the outside of the Zoo By using technology to fill in the gaps between onsite and off-site visits and experiences

By removing all outdated technology and signage By only keeping what serves animal, staff and guests simultaneously By only keeping what matters and determining criteria for what to keep with the community By celebrating nostalgia by contrasting old with new By using technology to create more serene environments by sharing information to guests' personal devices



8. Go multimodal!



10. Clean up the attic!





By adding an engaging program and solving the pain points simultaneously By building surprising animal encounters into moments where guests must wait By slowing the experience and making it about the journey, not only the destination By using technology to help visitors report and resolve maintenance pain points on the go

By prioritizing places where there are two or three problems to solve, doing it with one move, and adding a fun experience

By optimizing the uses, combinations, and placement of objects onsite By optimizing resources, such as water use onsite, to maximize reuse and reduce the need for additional resources where possible By using technology for metrics onsite to improve efficiency and for automation of some systems By making moments out of "musts", inviting people to lend a hand with animal welfare activities By housing animals in enclosures that work well for their size and timesharing habitats/mixing species

By creating semi-structured spaces with programs that invite guests to make those spaces their own

By filling in the gaps, gualifying the ungualified areas on guests' routes

By adding animals and animal supporting programs on peoples' routes

By creating shared facilities between the community and the Zoo

By welcoming programs that directly serve the community in their daily lives

By creating hubs with identity that are animal-centric, and offering shelter, food & beverages

By thinking 3-dimensionally



By expanding browse and diet crop production onsite and in strategic locations

By composing landscape elements to create comfortable microclimates



By using technology to deliver messages at strategic decision making points, sharing information to emphasize the journey

By using technology to help the community know about and engage with the amenities that the Zoo already has to offer By creating specific spaces that recognize and celebrate donor contributions and volunteer contributions, and act as gathering places

By adapting some of the strongest parts of the summer programs that are indoors, building on successes knowing what works in the hot season

By creating season-specific experiences through programs and landscapes and technology celebrating snow, ice, cold and darkness

By maximizing indoor options for kids and families during cold months and providing cooler indoor and outdoor experience areas in hotter months

By energizing areas that shine even more in winter, such as charismatic Canadian winter species habitats

By designing/facilitating cool retreats and stations for heat-sensitive animals on exhibit, as well as guests, during the warmer months

By using nature to blur boundaries and create immersion such that guests feel more connected to animals in their habitats





#### 1. Densify strategically!

2. Welcome the community!

The animals, experiences and programs at Your Zoo are currently spread across a very large site. By densifying strategically, Your Zoo will be able to consolidate program in some areas, while creating more serene experiences in others, reducing the use of resources in areas that are underused, and creating new efficiencies and synergies in areas that are heavily used.

Your Zoo has the opportunity to develop an even stronger relationship with the surrounding community than currently exists. Your Zoo is able to do so by creating programs that directly serve the community, as well as spaces that support community needs. In addition, spaces will be created

that celebrate the many current and future donors and volunteers who are an integral part of Your









<del>6</del>6

#### 3. Optimize the existing!

Zoo community.

Your Toronto Zoo has space, resources, flows, and processes that collectively comprise the site. By optimizing each of these, Your Zoo will be able to maximize the uses and outputs of each of these assets that already exist onsite but have the potential to be better utilized. Part of this becomes about using technology to better track resources and flows onsite to find opportunities for improvement.



#### 4. Turn pain points into opportunities!

Your Zoo has a number of pain points on site that have the potential to act as springboards for new, exciting opportunities. By seeing the challenge that must be addressed as a new opportunity, Your Zoo will be able to imagine new programs and spaces that take advantage of the pain point's unique quality that can be seen as an asset when redeveloping areas on site.



#### 5. Activate winter/Accommodate summer!

Your Zoo sits in an incredible landscape that has immense potential in winter, which is currently not used as many areas simply shrink or close in winter. Your Zoo has the potential to be even more exciting in winter than in summer, in many areas, with specific programming that caters to winter and the shoulder seasons. Although it is already incredibly active in summer, Your Zoo will also find new ways to adapt facilities to climate change, to make them comfortable for animals and inviting for quests even on the hottest days of summer.





#### 6. Use nature!

Your Toronto Zoo has an abundance of nature both on site and arround its periphery. There exist opportunities for site improvement through the use of nature in new and innovative ways that can be both cost effective, and create new experiences on site. Using nature allows for the enhancement of seasonal variation and celebration on site, as well as improved sustainability.







#### 7. Make the fences/barriers disappear!

Creating safe divisions between animals and humans, as well as different animal species, is a necessity within a zoo site. There exist opportunities on site to hide these divisions and find innovative ways to embed these elements in the landscape so that they become experiential connectors and enrichment elements rather than dividers.



Barriers detracting from experience



#### 8. Go multimodal!

As an incredibly expansive site, Your Zoo has real potential to explore new ways of moving people and creating unique experience through different modes of transportation. Going multimodal allows people to experience Your Zoo at different speeds, from different heights, with different trajectories and provides new perspectives with each visit.



#### 9. Celebrate the edge!

Your Toronto Zoo has an edge that is largely bounded by woods, but remains a divider between the Zoo and its context. This strategy seeks to stitch Your Zoo back into its context, by celebrating and opening up its edge. The strategy also seeks to make some edges of the site more accessible to the public, using the edge as a space of connection between Your Zoo and its neighbours.





#### 10. Clean up the attic!

Your Toronto Zoo has an abundance of things on site, some which are of great value and importance to the site, and others that have less value but have gradually accumulated. This strategy aims to remove entities on site that are not adding anything to the site, keeping the artifacts and spaces that are important, and allowing these to really shine.



New speeds, new experience



Site edge as boundary



Many objects creating visual distraction



Nature creating experiential landscape barriers



Barriers to enhance experience and habitats





Important artifacts celebrated, excess removed



Projects within the Master Plan must incorporate at least five strategies in order to be considered. While the strategies work at the site-level to frame redevelopment, they also inform how each project fits into the larger context. It is in using the tools collectively that the strategies bring a more holistic approach to redeveloping Your Zoo's site. By using a series of strategies together, the projects are able to focus on animal welfare enhancement, guest experience improvements, site sustainability, and the larger role of technology within Your Zoo in the future, simultaneously.



Turn pain points into opportunities!



### **4. THE BIG IDEA** 4.3. YOUR ZOO OF THE FUTURE: TECHNOLOGY AS AN INTEGRAL PLAYER

While Your Toronto Zoo is a leader in many areas, technology is an area that has been significantly underfunded. A Technology Master Plan was conducted by WSP, in parallel with this Master Plan. The new Technology Master Plan will be used as a roadmap for technological development across the site, and also within projects in the Master Plan. The roadmap builds on four core themes - digital guest experience, connected animal care, creating a Conservation Centre of Excellence, and creating a resilient organizaion - over 5-year and 10-year timeframes. The role of technology for Your Zoo will move from one of a Cost Optimizer, in which technology operates efficiently at the lowest possible cost, to one of a Strategic Enabler, in which technology is used to gain sustainable advantage going forward. The Technology strategy aims to Create WOW, while making the back of house, or "hidden Zoo" go extinct, using technology as a way to bring more of Your Zoo to its guests, faciliate and enhance care, and create resiliency in the conservation world and within the Zoo organization, on site and off site.



#### **Digital guest experience**

Through enhanced technology, Your Zoo will be able to be a leader in digital guest experience leveraging smartphones and integrating wearable technology, as well as through the creation of hyper immersive experiences.

#### **Connected animal care**

Technology will allow Your Zoo to facilitate animal care and welfare and enhance it even further by increasing monitoring which will help with predictive healthcare and early diagnosis of problems, as well as through the automation of elements such as nutrition.

#### **Conservation Centre of Excellence**

While Your Zoo is already a conservation leader in the field, expansion of technologies will allow it to become a Conservation Centre of Excellence through advanced analytics, enhanced education platforms, and increased use of technology for wildlife tracking and research partnerships offsite.



### A resilient organization

New technology implementation will allow Your Zoo to create digital data systems and smart infrastructure, digital revenue streams, and commercial partnerships. Together, these will allow Your Zoo to develop physically resilient infrastructure and create robust systems for sustainability, while creating operational adaptability and agility in the face of challenges, creating financial resilience and reducing our climate impact.



### **4. THE BIG IDEA** 4.3. YOUR ZOO OF THE FUTURE: TECHNOLOGY AS AN INTEGRAL PLAYER

The four core themes established in the Technology Master Plan are further detailed through the creation of 8 building blocks that group critical projects together to be addressed by Your Zoo. While improvements and advances in technology at the Zoo are very much tied in with guest experience and improving operations on site, there is a strong focus within Your Zoo's Technology Master Plan on how projects are related to conservation initiatives both onsite and offsite, as described below. As a critically important piece of conservation involves building awareness and getting people engaged, many elements of the plan focus on how technology can be used to build interest, awareness, and enthusiasm around species conservation and the broader mission of Your Zoo. More information on the Technology Master Plan can be found in Appendix 5.



Better platforms will open the path for clear data collection and curation, enhancing conservation efforts.

New tap to donate options, as well as digital gifts, will enable greater conservation funding for Your Zoo.

Showcasing animal data to the public to accelerate response rates, as well as metering and monitoring of flows and resources onsite to expand sustainability onsite and beyond.



Guests will learn about conservation through the new app experiences, digital conservation exhibits and online tools.



Enhanced safety systems will safeguard animals, staff, volunteers, and guests within Your Zoo.



### 4. THE BIG IDEA 4.3. YOUR ZOO OF THE FUTURE: TECHNOLOGY CONNECTING YOUR ZOO TO THE WORLD

### Proposed experience of IT projects:

With significant technological developments on site, Your Zoo is able to expand the many facets of operations and experiences offered beyond its borders. The digitization of nutrition metrics allows for data like these to be used by educators far from the Zoo. Using cameras and sensor information gathered on site and around the world, Your Zoo is able to develop an even more engaging and robust virtual conservation education program, with the opportunity to use real-time data and livefeeds to examine animal behaviour, care, nutrition, health, and reproduction, to promote saving wildlife. Development of Virtual Reality technology allows Your Zoo to create a virtual Zoo experience, at a distance, creating a fun, memorable and impactful journey.

### Building blocks of the Information Technologies (IT) strategy for this area:



### IT projects recommended to be investigated in this capital project (refer to Appendix 5 for the full Technology Master Plan):

- 2.1. Manage Technology Partnerships / Become an innovation zone
- 3.1. Scale worldwide conservation: Animal tracking
- 3.2. Scale worldwide conservation: Poaching tracking
- 3.8. Centralized Animal Database in warehouse (reproduction, welfare, nutrition)
- 3.9. Digitize nutrition information to Zoo staff, volunteers & guests
- 4.20. Build Zoo App Education V2
- 4.21. Implement VR/AR experience
- 7.4. Track key nutrition metrics



A virtual Zoo class, using footage and sensor data gathered on site, with the option to livestream animal behaviour real-time.

