



toronto ZOO

MASTER PLAN

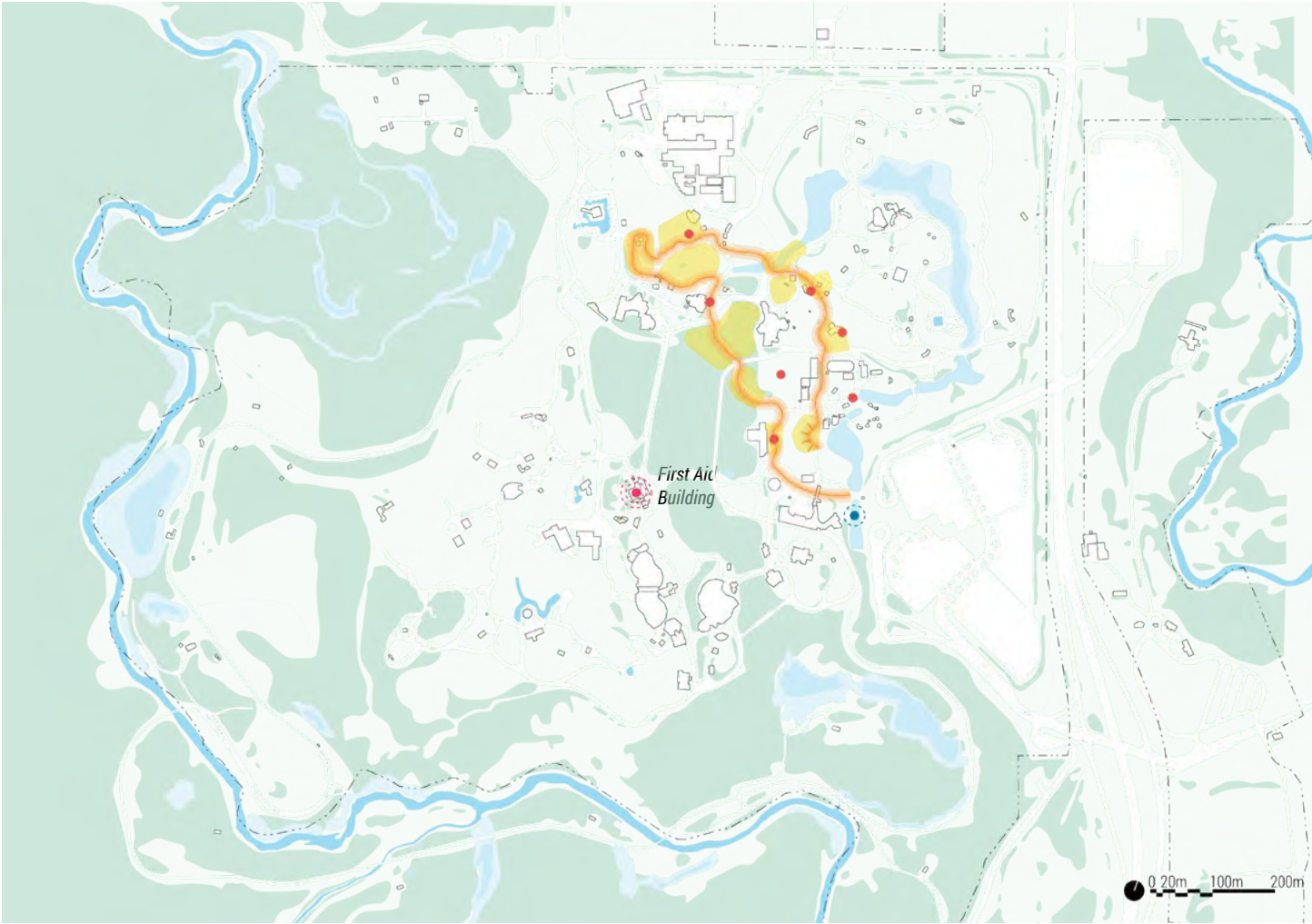
APPENDIX 2. MASTER PLAN LAYERS

FEBRUARY, 2022

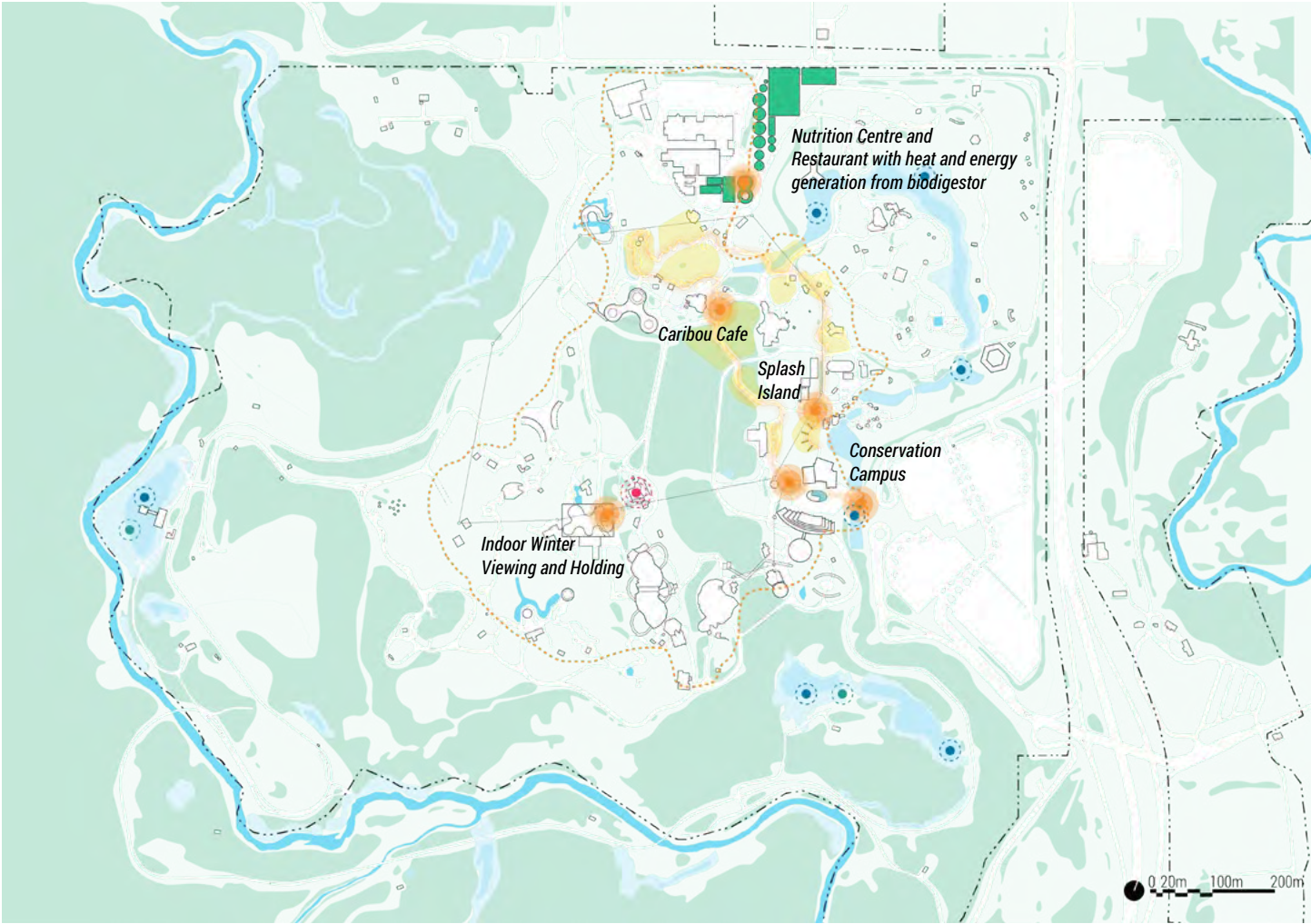
APPENDIX 1. THE NEW MASTER PLAN LAYERS

EXISTING VERSUS PROPOSED TECHNOLOGY ONSITE

Existing



Proposed



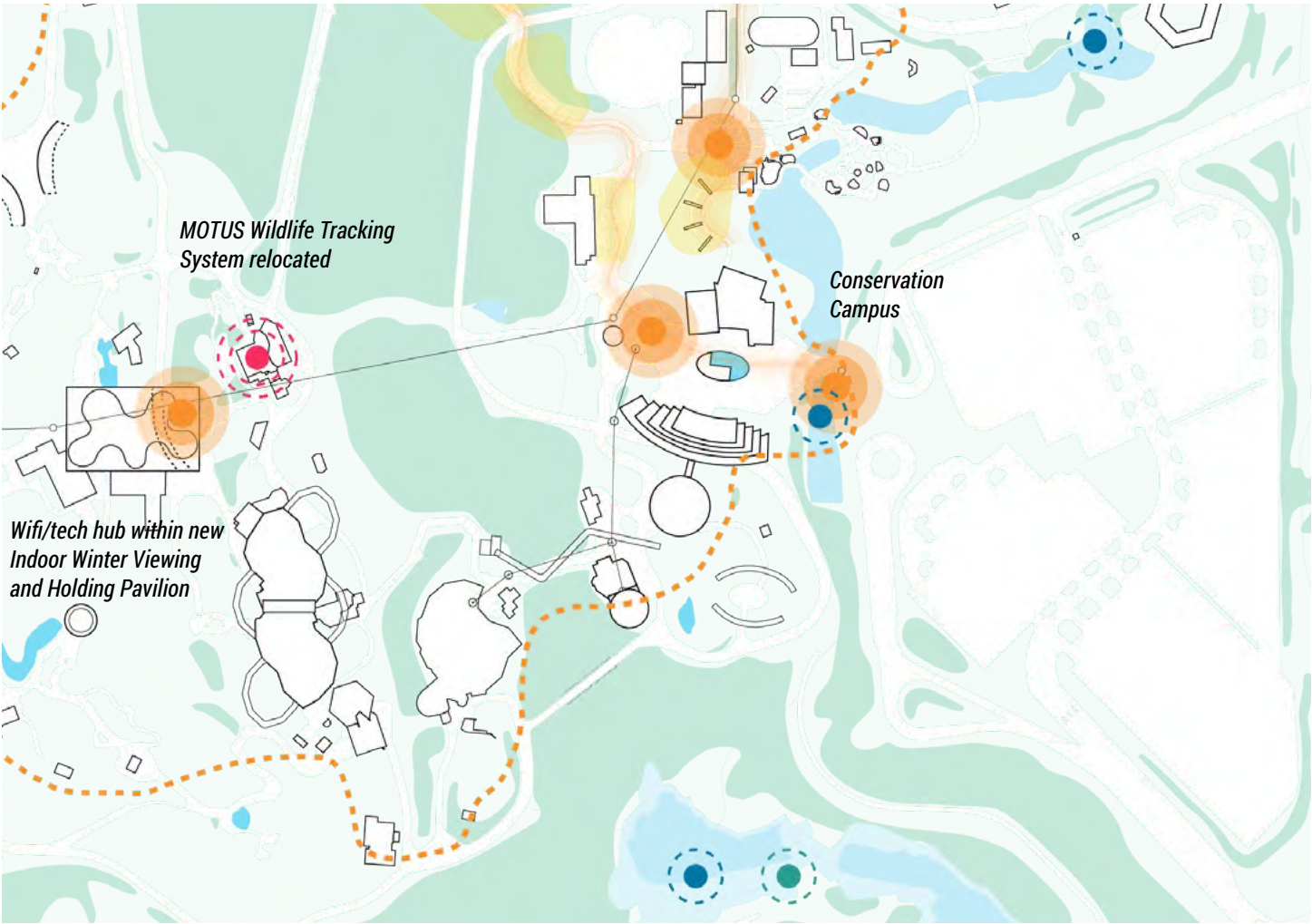
Technology used on the Zoo site is currently quite minimal across all areas including guest experience, animal monitoring and welfare, and for monitoring sustainability. With the Technology Master Plan being developed simultaneously with this Master Plan there exists real potential to increase the uses of technology by Your Zoo. Technology will be used to enhance guest experience on site and to diversify and expand Your Zoo’s offerings beyond the site, as well as for monitoring animal health, tracking and researching native species at Your Zoo, and for assessing and improving water quality and other environmental metrics. Technology development on site allows for a much richer Zoo experience off site as well, building on the many different types of information that are gathered, as well as through the use of new experiential technologies that allow individuals to be digitally transported to Your Zoo.

Legend

- Terra Lumina immersive multimedia show
- Wifi along path
- Current wifi access points
- 80% coverage of this zone by wifi
- Proposed wifi/tech hub location
- MOTUS Wildlife Tracking System antenna (managed by Bird Studies Canada)
- Cleantech - biodigester heat and energy network
- Water monitoring station
- Amphibian monitoring device
- Site boundary

APPENDIX 1. THE NEW MASTER PLAN LAYERS

PROPOSED TECHNOLOGY ONSITE



Legend

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- Site boundary



Densify strategically!

By providing technology hubs where people gather, such as at the Zoo entry and at key, highly visited exhibits.



Optimize the Existing!

Build on existing technology and technological successes, including building on the growing online social media presence.



Activate winter/accommodate summer!

Use technology as a way to showcase behaviours and seasonal phenomena, such as hibernation, that are unique to the shoulder seasons.



Clean up the attic!

Allow technology to replace some redundant signage and hold more information that can also change regularly.



Celebrate the edge!

Use technology to engage with people who may not normally engage with the outdoors, in a way that uses a platform they are excited about.



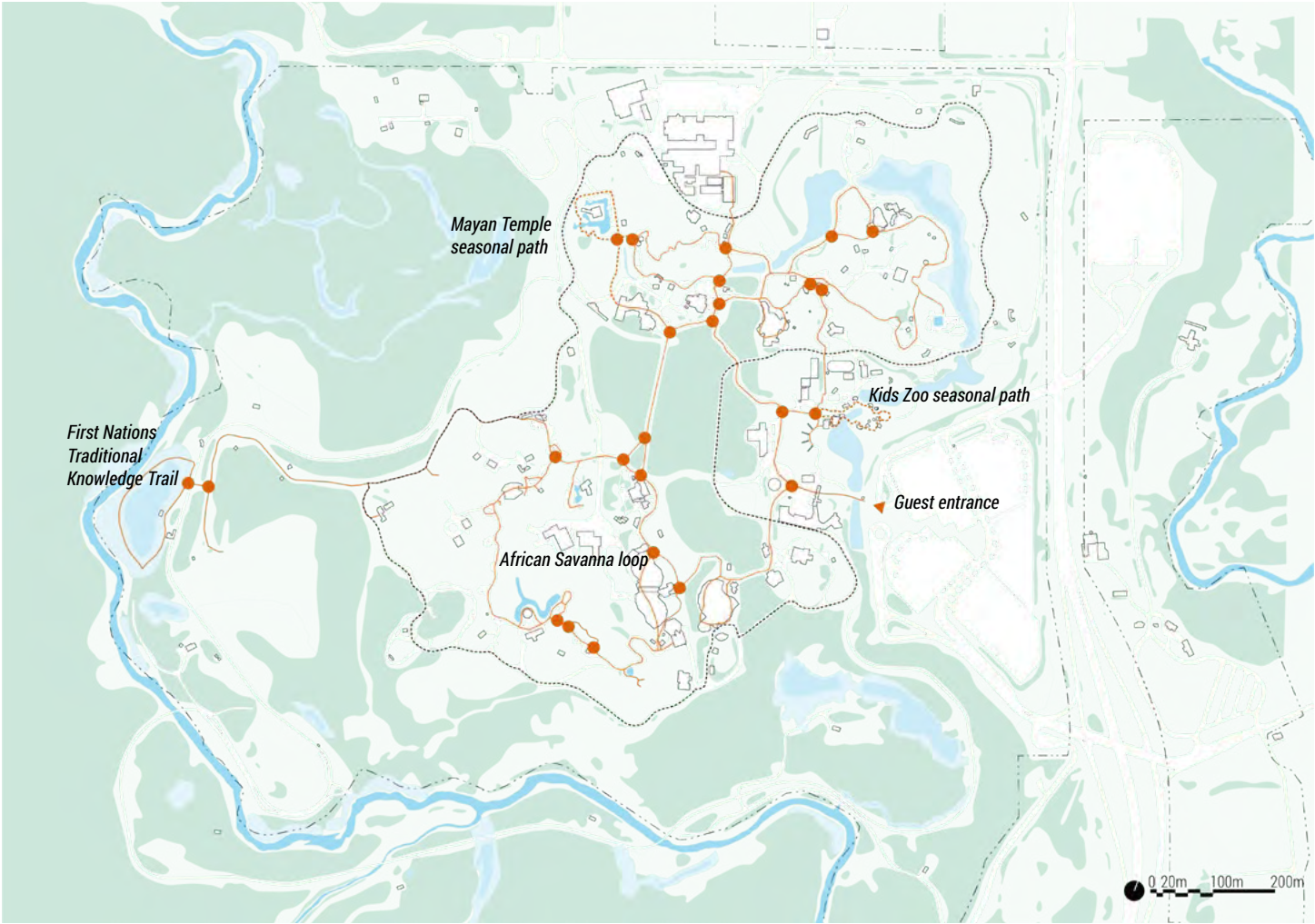
Go multimodal!

Envision technology as a series of tools that allows guests to visit Your Zoo and engage with it from afar, even if they never set foot onsite!

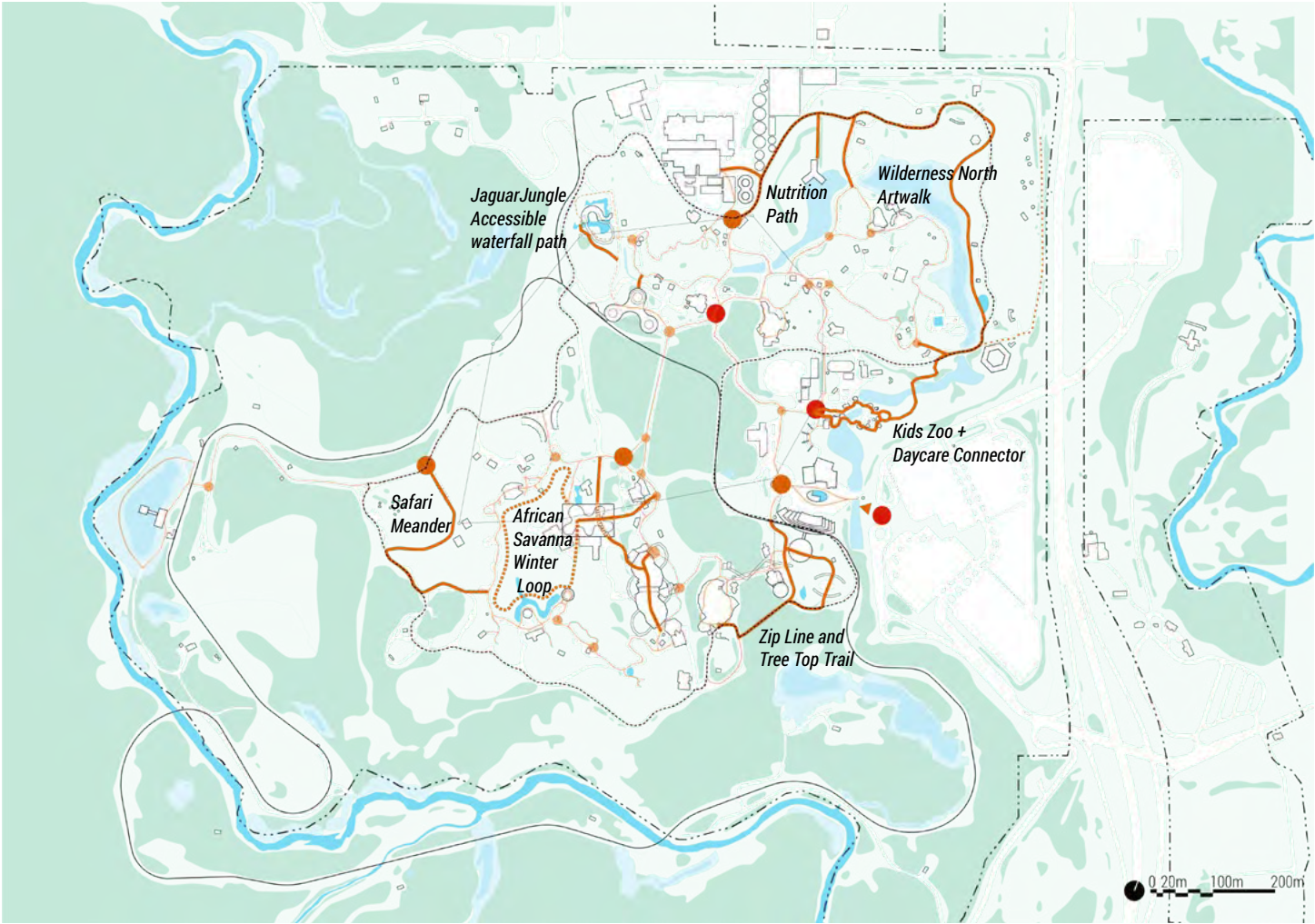
APPENDIX 1. THE NEW MASTER PLAN LAYERS

EXISTING VERSUS PROPOSED GUEST CIRCULATION AND DECISION-MAKING POINTS

Existing



Proposed



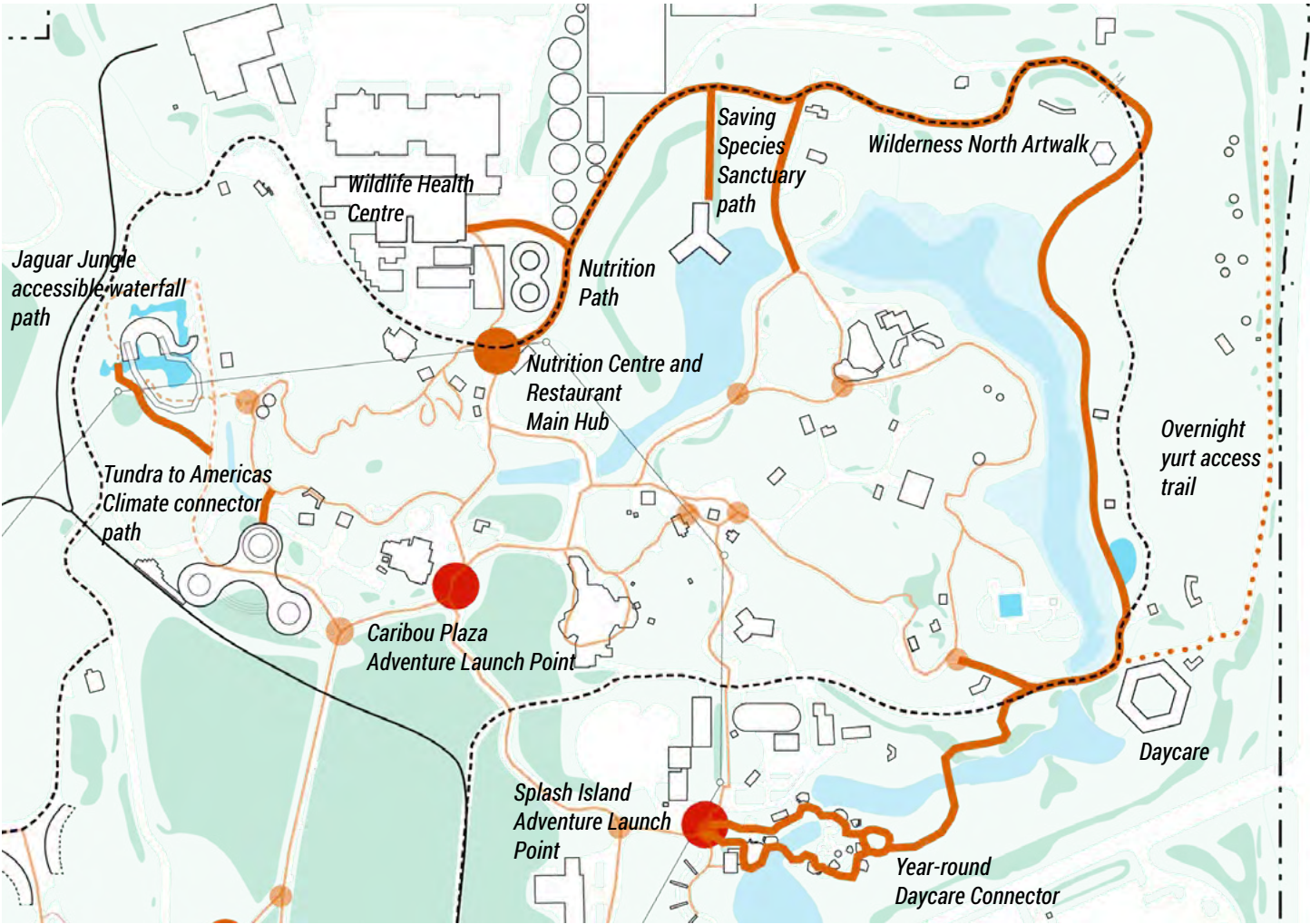
Site circulation today is made up of a network of paths across the vast site, with many decision-making points that tend to lack a hierarchy, making navigation challenging at times. Proposed circulation networks aim to create a more distinct hierarchy of circulation, with clear gathering hubs where many types of information can be found. New pedestrian circulation routes aim to bring people through areas where new landscape experiences are created, where guests may be immersed between two close habitats, or find themselves on top of a pavilion that offers a new vantage point over the landscape.

Legend

- Pedestrian circulation
- - - Seasonal path, closed in winter
- Adventure launch point
- Main decision-making hub
- Secondary decision point, minimal signage
- New pedestrian circulation routes
- Winter loop
- - - Yurt access trail
- - - Zoomobile route
- Monorail, or elevated walking path
- - - Site boundary

APPENDIX 1. THE NEW MASTER PLAN LAYERS

PROPOSED GUEST CIRCULATION AND DECISION-MAKING POINTS



Legend

- Pedestrian circulation
- Seasonal path, closed in winter
- Adventure launch point
- Main decision-making hub
- Secondary decision point, minimal signage
- New pedestrian circulation routes
- Winter loop
- Yurt access trail
- Zoomobile route
- Monorail, or elevated walking path
- Site boundary



Densify strategically!

By consolidating information at key points to create major wayfinding hubs, and removing it at other points.



Optimize the Existing!

By using signage that is already simple and clear, and enhancing hubs where they are already logical and successful.



Activate winter/accommodate summer!

By adding winter loops that bring a specific and unique seasonal experience for guests and providing summer loops that take advantage of cool microclimates.



Clean up the attic!

By removing unnecessary signs and information markers.



Celebrate the edge!

By opening up guest circulation closer to the periphery of the site, in new habitat areas.

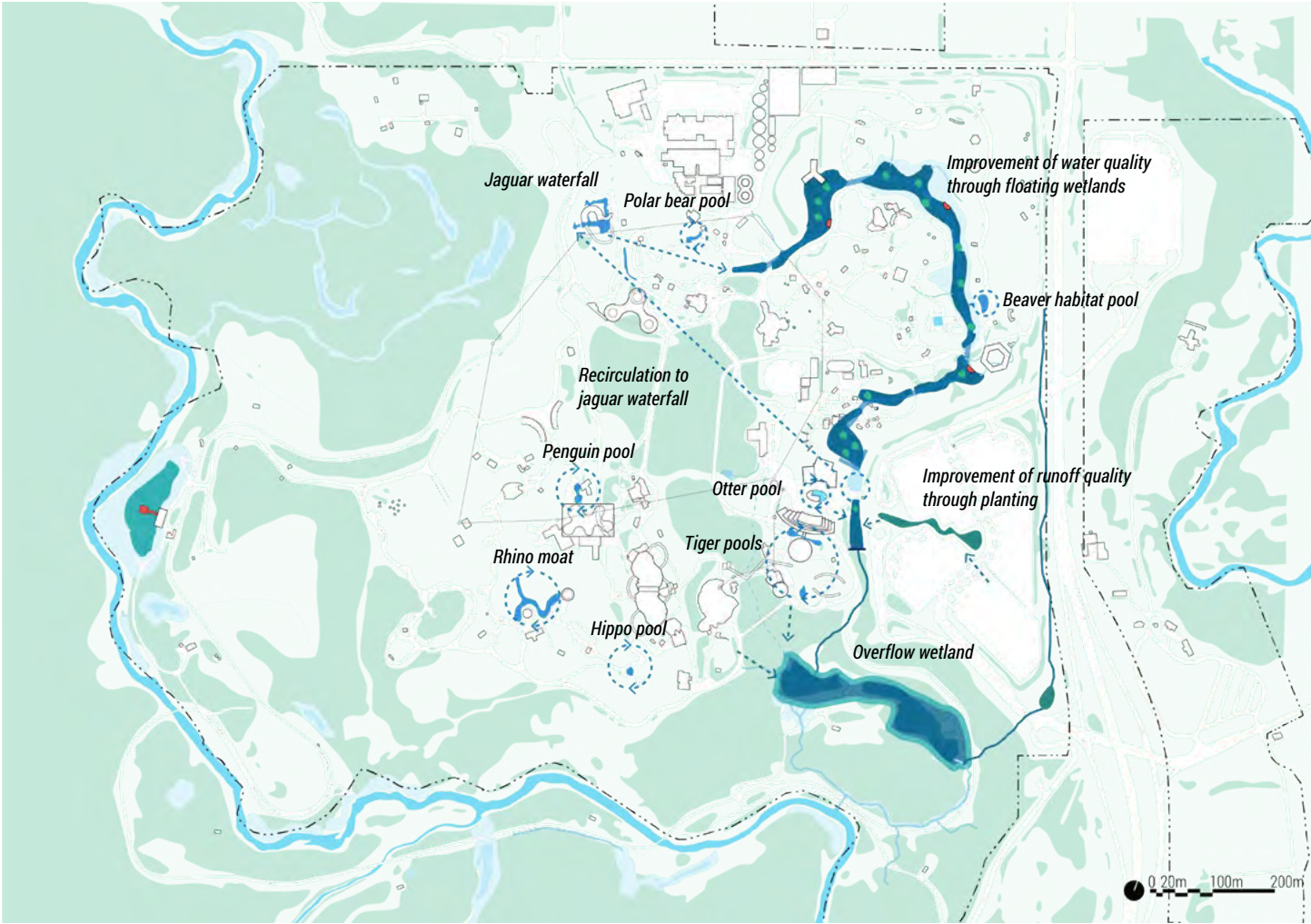
APPENDIX 1. THE NEW MASTER PLAN LAYERS

EXISTING VERSUS PROPOSED WATER NETWORKS

Existing



Proposed



Today, habitat pools are primarily filled with tapwater that goes straight to the sewer over very short timeframes. Flows from the jaguar waterfall move into a larger stormwater wetland system, and are then ultimately pumped back up to the waterfall, but water is not of high enough quality in this system for it to be used for habitats. Redevelopment of flows in the new Master Plan aims to optimize the use of water onsite by creating cyclical flows within habitats so that water is treated and reused locally. The stormwater system will be enhanced with substantially more vegetation, including floating wetlands, to improve quality and create an engaging series of spaces that are inviting for guests to be near and where they can learn about the water system.

As an expert in this area, and constantly committed to improving the ravines and the water courses that feed into them, the TRCA is a partner that Your Zoo is excited to work closely with to further develop and implement these strategies.

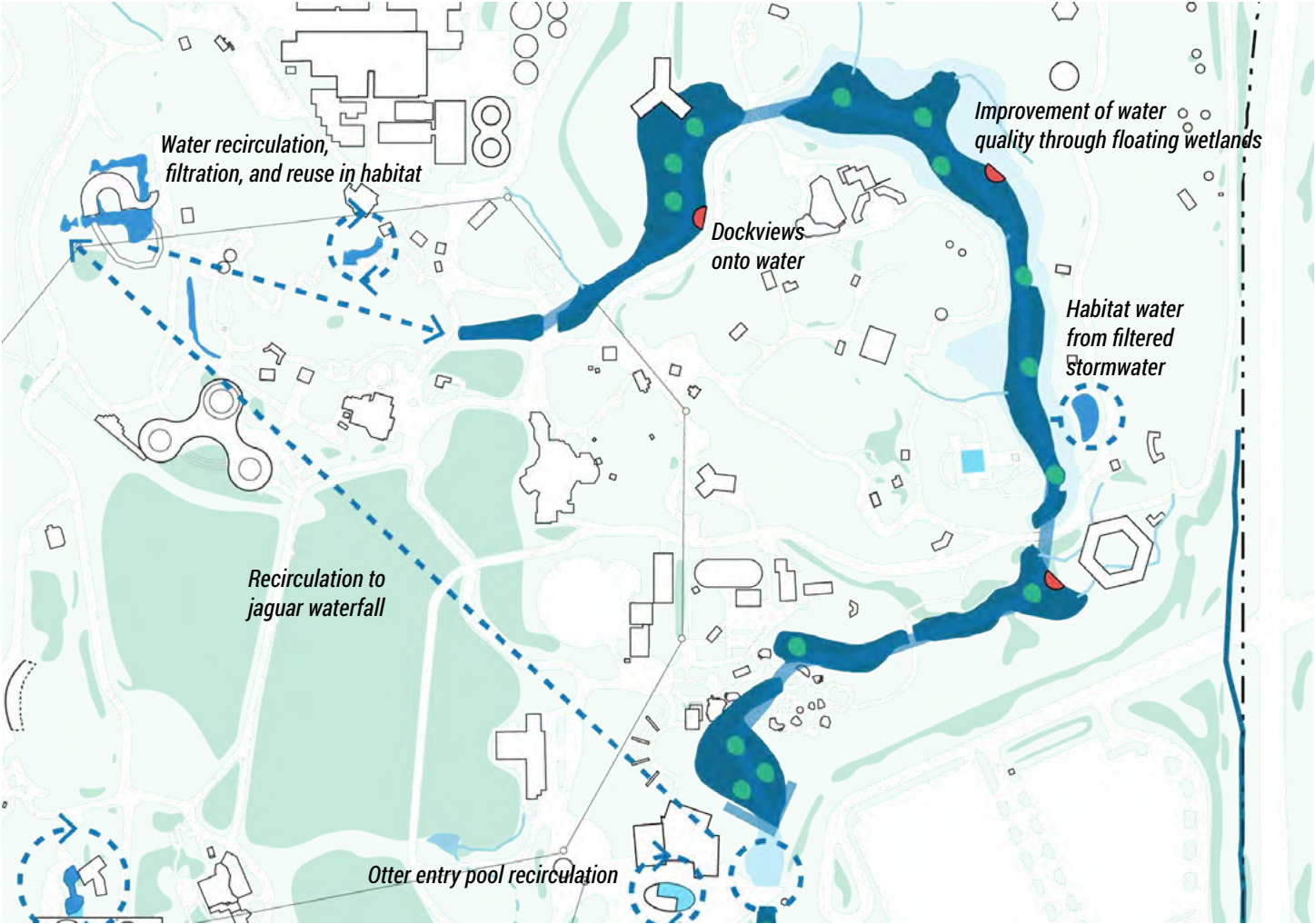
Legend

- Stormwater management network
- Water in habitat
- Wetland
- Pump location
- Floating wetland
- Weir

- Stormwater pond with improved amphibian habitat
- Access overlooking water
- Habitat water piped underground
- Habitat filled with tapwater that then enters sewer
- Water recirculation, filtration, reuse within exhibit
- Water for habitat filtered from stormwater system
- Flow into stormwater system or planted swale
- Site boundary

APPENDIX 1. THE NEW MASTER PLAN LAYERS

PROPOSED WATER NETWORKS



Legend

- Stormwater management network
- Water in habitat
- Wetland
- Pump location
- Floating wetland
- Weir

- Stormwater pond with improved amphibian habitat
- Access overlooking water
- Habitat water piped underground
- Water recirculation, filtration, reuse within exhibit
- Water for habitat filtered from stormwater system
- Flow into stormwater system or planted swale
- Site boundary



Optimize the existing!

By reducing water losses onsite, increasing water quality, and improving reuse and retention onsite through planting and reorganizaiton of flows.



Use nature!

By showcasing the plants that make up the stormwater system, and adding to these with floating wetlands that create interesting habitats.



Activate winter/accommodate summer!

By using water onsite for winter program for guests, such as through unique lighting and reflections, or for skating, and for cooling in summer.



Celebrate the edge!

By bringing people to the water's edge and treating this internal, underused edge as a unique site entity with qualities to showcase and experience.

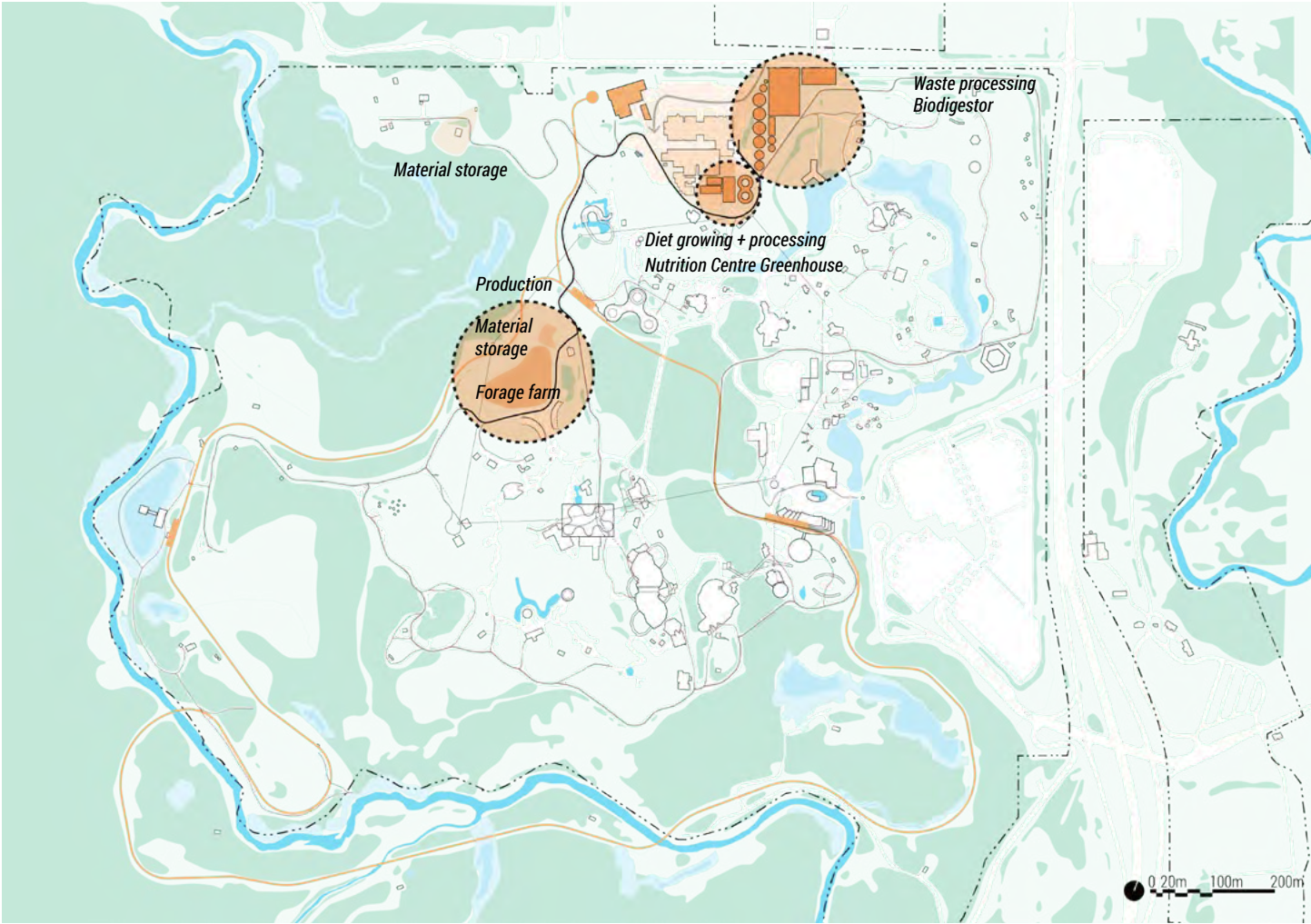
APPENDIX 1. THE NEW MASTER PLAN LAYERS

EXISTING VERSUS PROPOSED LOGISTICS ROUTES AND HUBS

Existing



Proposed



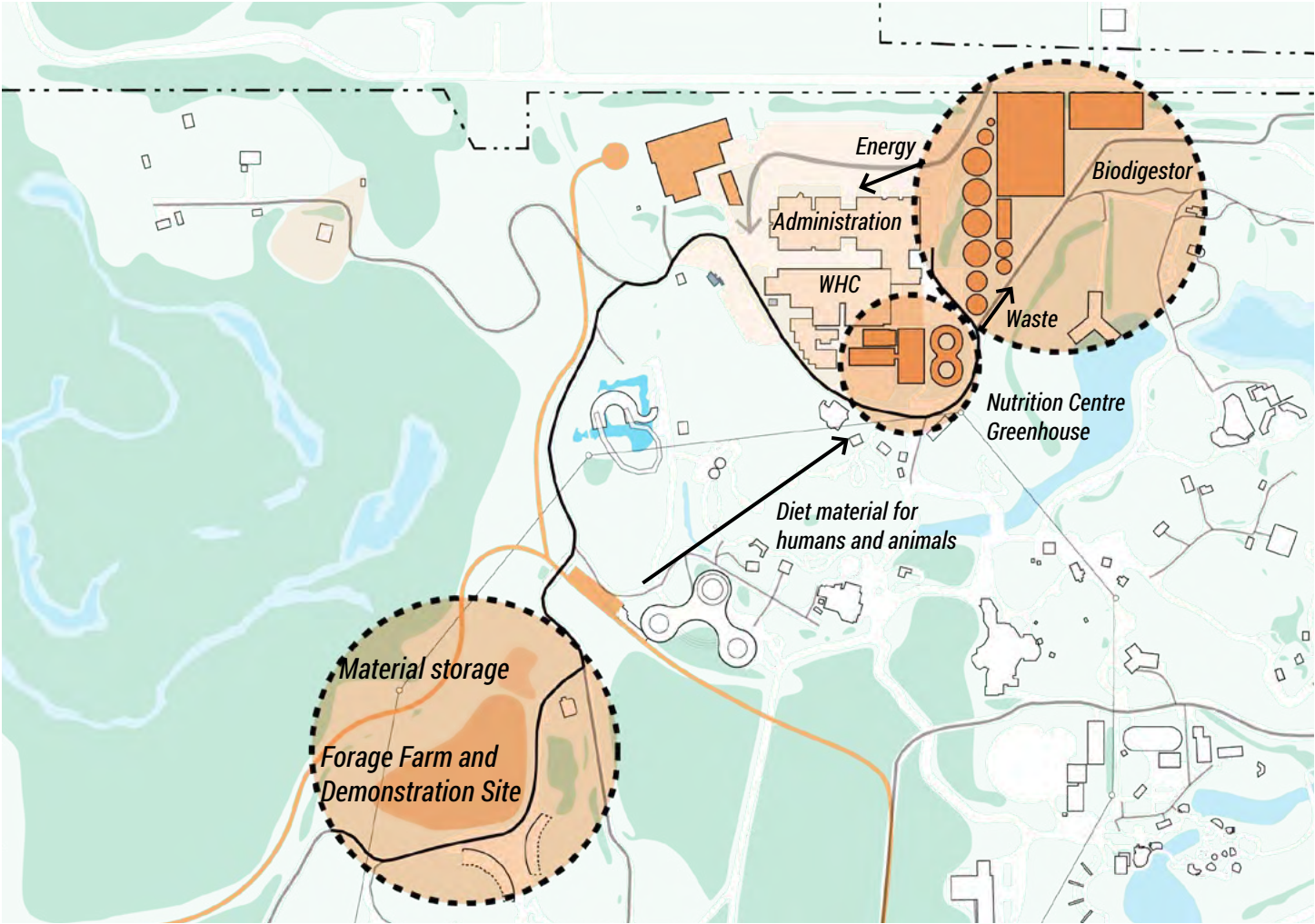
Existing site logistics focus mostly on material storage locations and transportation around the site. The Master Plan aims to reduce the distance that materials travel by increasing food production onsite, both for animals as well as guests and staff and volunteers, facilitating processing of these materials and disposal of waste, and facilitating distribution onsite. The creation of logical connections between the Forage Farm, Nutrition Centre and Biodigester, strategically placed in relation to each other as well as service roads, facilitates all of these operations and helps reduce Your Zoo’s carbon footprint.

Legend

- Logistics hub
- Logistics hub buildings
- Forage farm and demonstration site
- Main service road
- Secondary service road
- Monorail
- Site boundary

APPENDIX 1. THE NEW MASTER PLAN LAYERS

PROPOSED LOGISTICS ROUTES AND HUBS



Legend

- Logistics hub
- Logistics hub buildings
- Forage farm and demonstration site
- Main service road
- Secondary service road
- Monorail
- Site boundary



Densify strategically!

By creating key, well-placed logistics programs, to simplify movement of materials and maintenance on site and reduce Your Zoo’s carbon footprint.



Optimize the Existing!

By reorganizing the existing administration logistics hub to make it more functional, and by establishing new programs in locations that are already well-served by roads.



Go multimodal!

By using new fleets of human-powered and electric vehicles, and the monorail where possible, to move materials farther on site, with less energy expenditure.



Clean up the attic!

By strategically consolidating waste collection points where possible, to logical places for guest waste disposal as well as easy points to collect from, logistically, for staff.



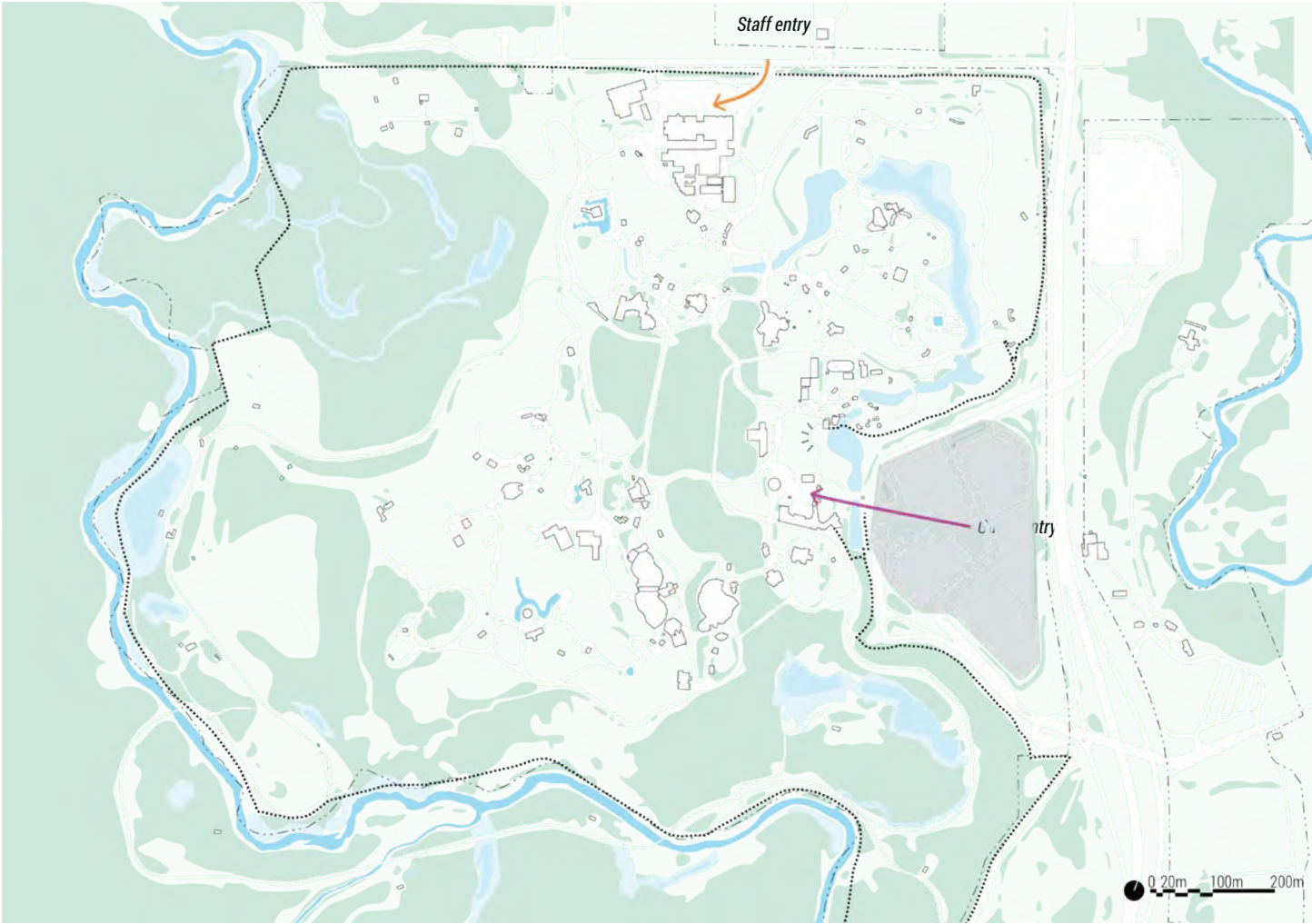
Turn pain points into opportunities!

By using currently underused areas for food and energy production onsite, and by locating new storage areas in underused but convenient locations.

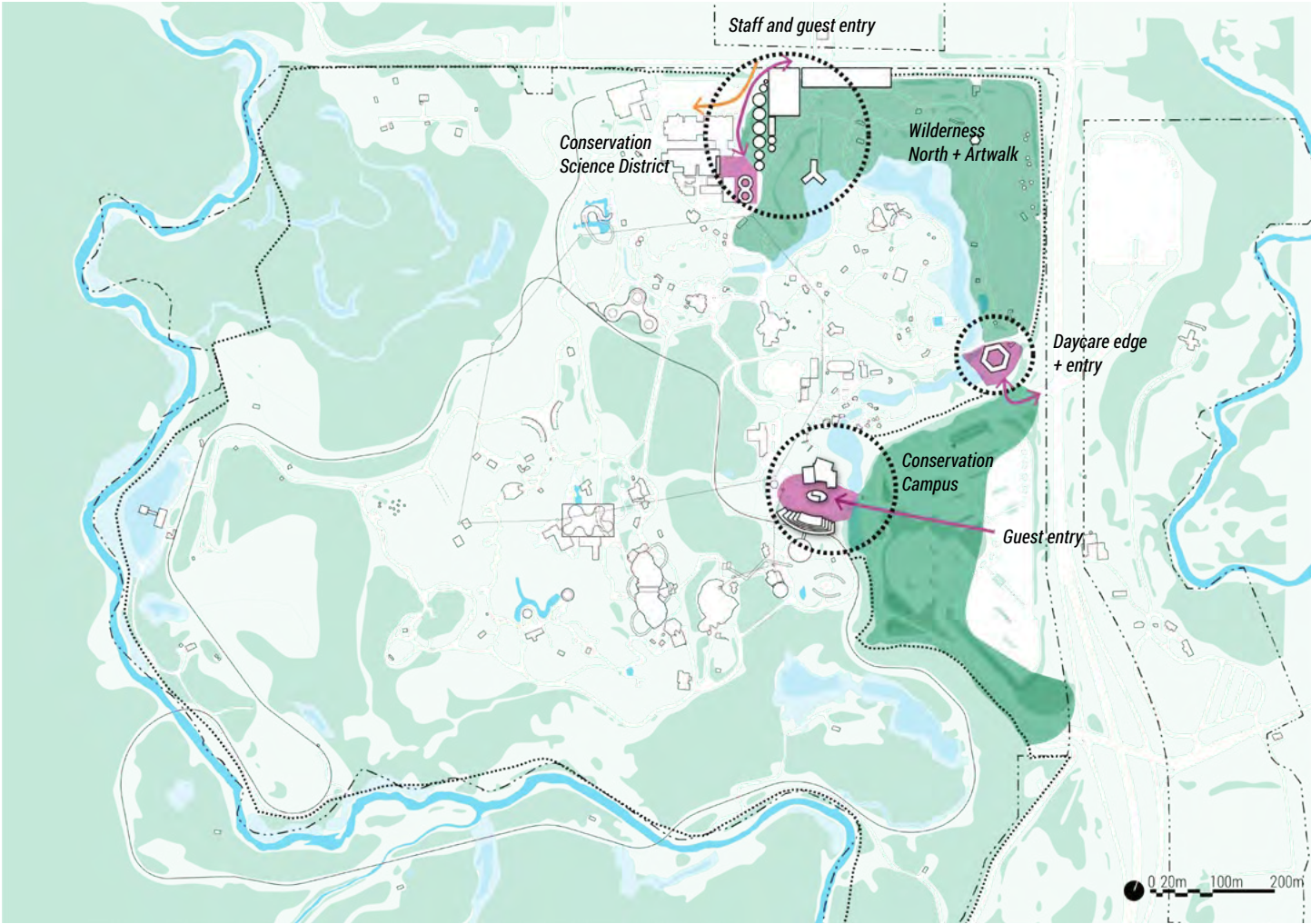
APPENDIX 1. THE NEW MASTER PLAN LAYERS

EXISTING VERSUS PROPOSED SITE PERIPHERY

Existing



Proposed



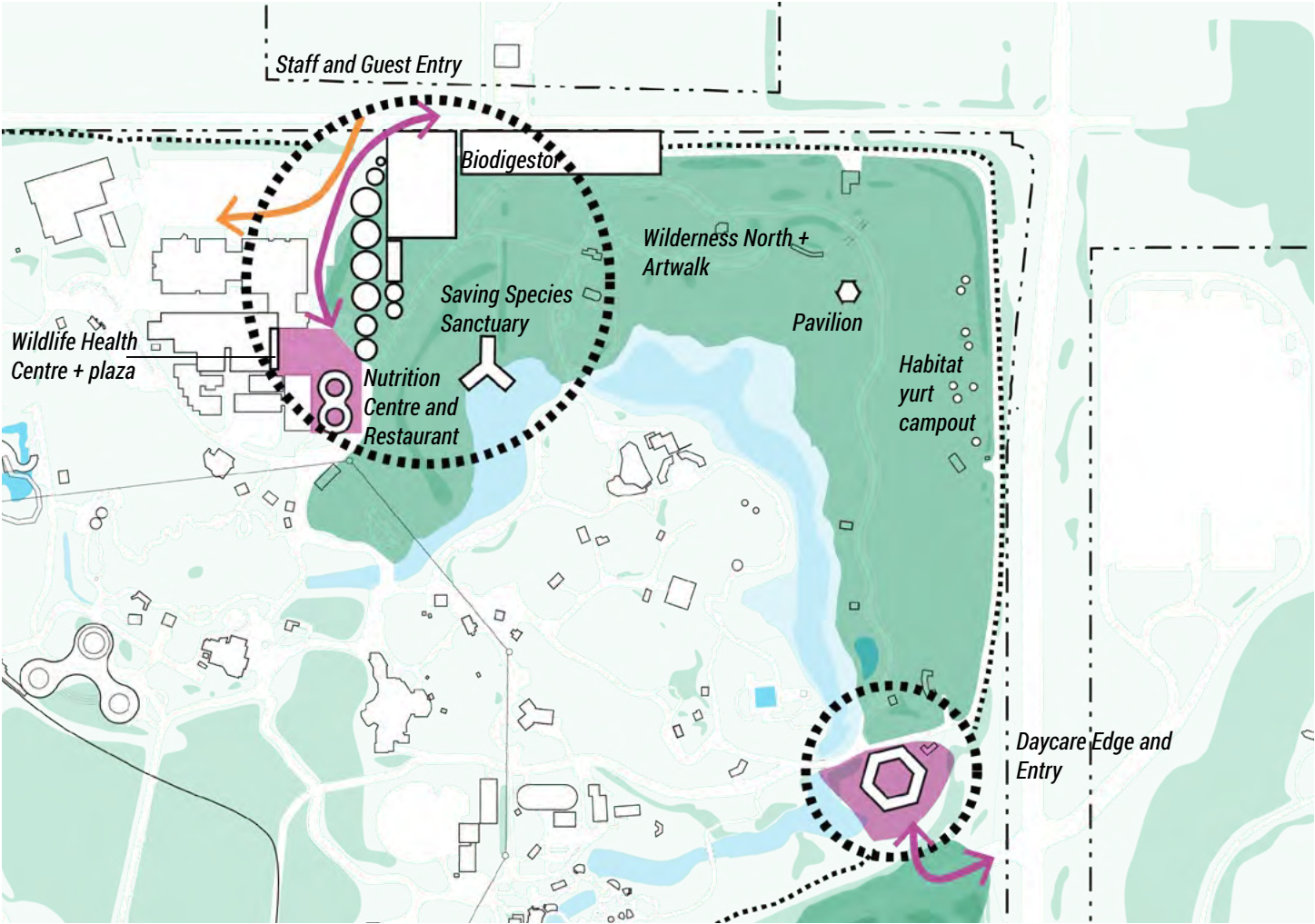
The edge of the Zoo site today is framed primarily by a fence and the two main entry points that bring people into Your Zoo. The edge is a place of many opportunities to further celebrate the connection between Your Zoo and its context, and community, rather than acting as a divider. To achieve this, projects are proposed at strategic locations close to the periphery of the site, where they can act as spaces that are more public, with the opportunity to activate these nodes with activities beyond standard Zoo hours, as well as opening these spaces to help support community-related activities and events. With the creation of a daycare and new entry point just north of Parking Lot 1, Wilderness North makes Canadian species much more accessible and offers a new and diverse program that has the potential to engage guests with different interests as well as to bring return visits with a dynamic artwalk program.

Legend

- Site boundary
- Perimeter fence
- Paved periphery
- Staff flow
- Guest flow
- Public program on edge
- Thickened habitat edge
- Program opening up edge

APPENDIX 1. THE NEW MASTER PLAN LAYERS

PROPOSED SITE PERIPHERY



Legend

- Site boundary
- Perimeter fence
- Paved periphery
- Staff flow
- Guest flow
- Public program on edge
- Thickened habitat edge
- Program opening up edge



Celebrate the edge!

By adding program at the edge to bring guests here, and by adding additional points of entry so that some edge program can be free.



Optimize the Existing!

By reorganizing habitat areas to bring Canadian species close to Your Zoo's entrance so that they are better visited, and celebrated.



Density strategically!

By adding program to periphery locations that complement their ease of access, and where they will thrive due to this context.



Welcome the community!

By increasing points of guest entry along the periphery, and adding program near the edge that supports the community.



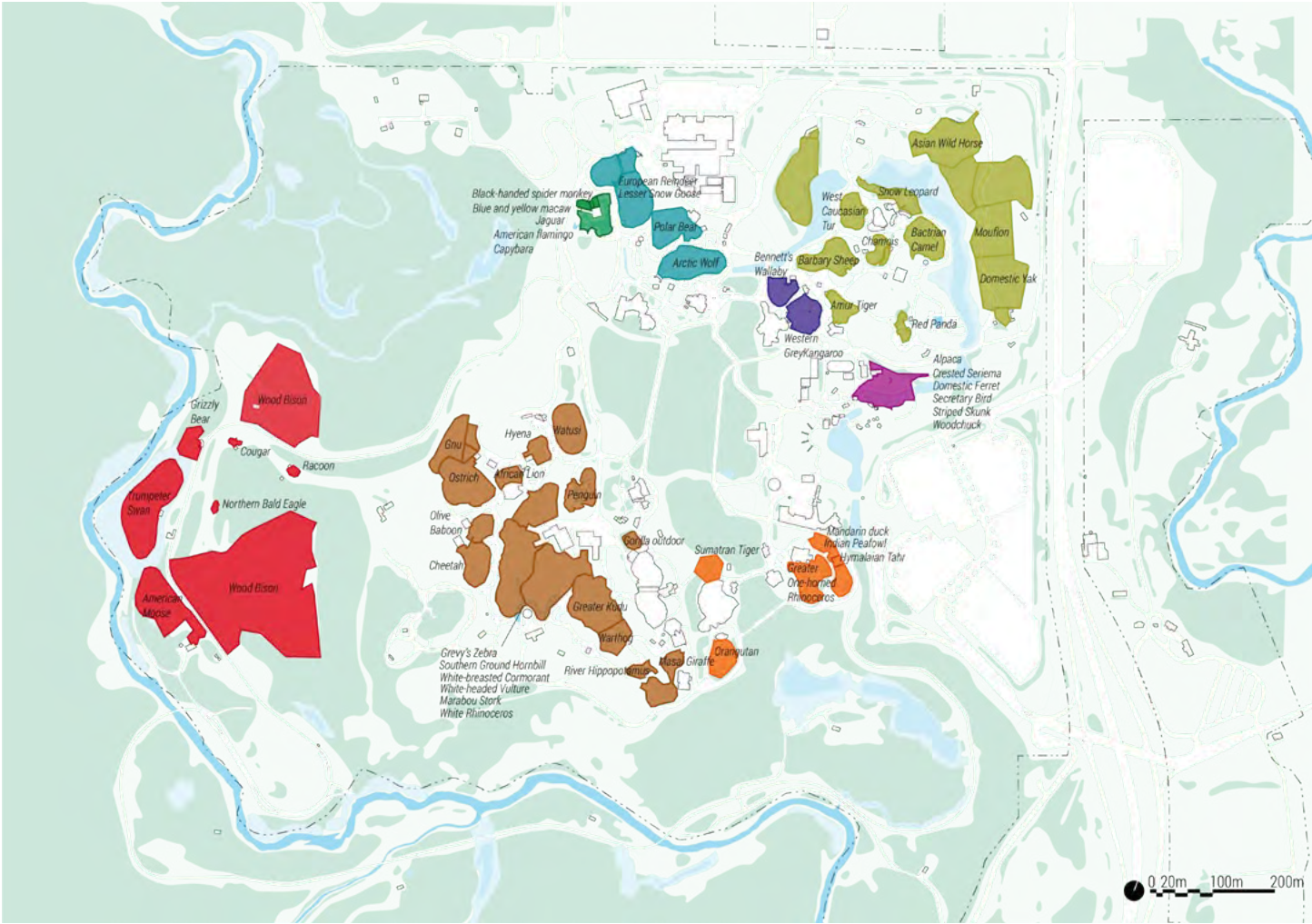
Turn pain points into opportunities!

By moving Canadian species to an easy to visit edge of Your Zoo, and by putting unique, more secluded program by hard to reach edges.

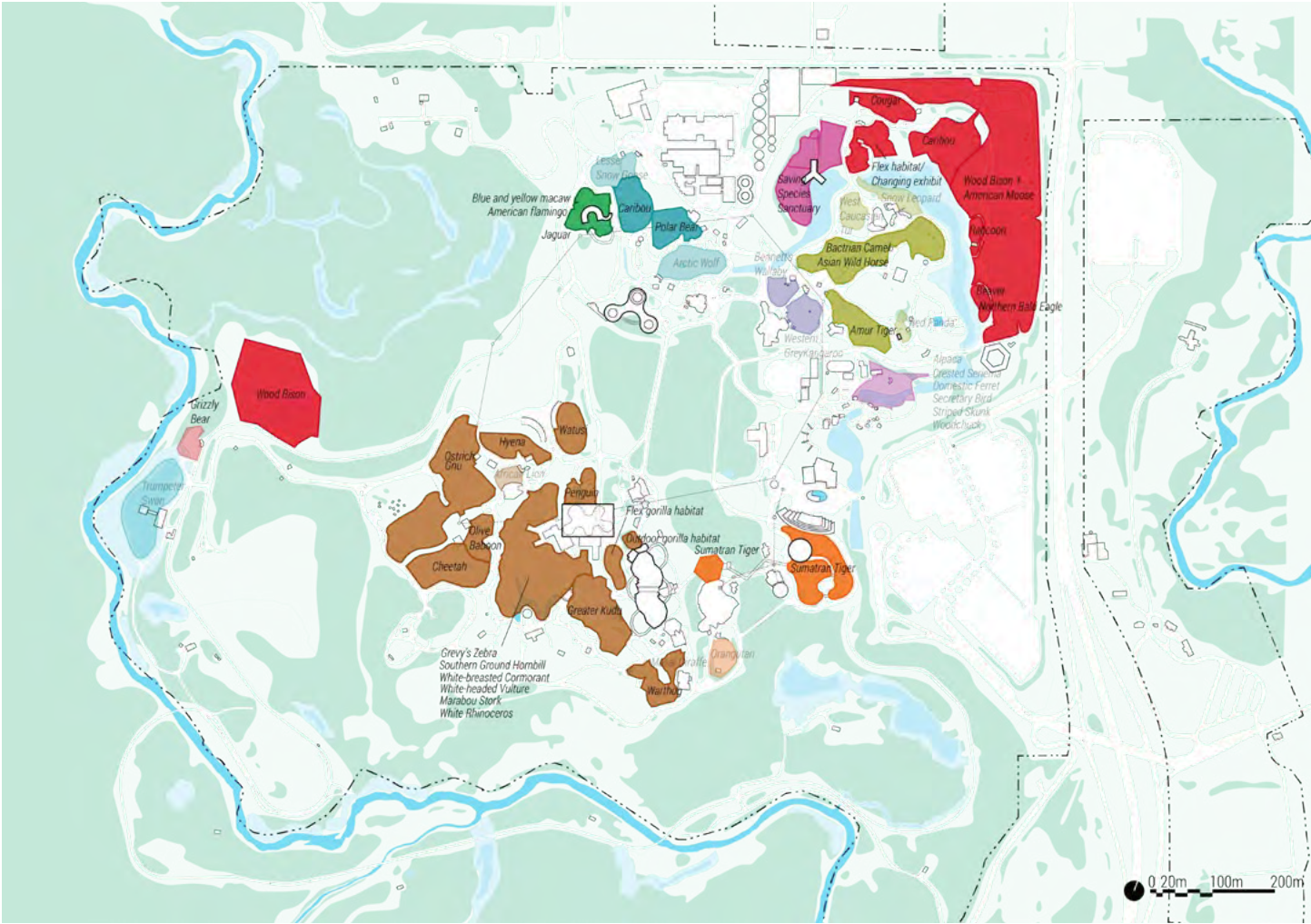
APPENDIX 1. THE NEW MASTER PLAN LAYERS

EXISTING VERSUS PROPOSED HABITATS AND HOLDINGS

Existing



Proposed



Habitats and holding onsite today are sometimes small and somewhat fragmented. The Master Plan proposes the expansion of habitats into adjacent areas, the connection of habitats in new ways to create unique experiences, such as by using 360 connecting tubes as well as habitat bridges, and the change in location of most Canadian Domain species to the northeastern corner of the site where they become much more accessible to guests. The addition of the new African Indoor Winter Viewing and Holding Pavilion gives these animals more space in winter, as well as making them accessible to guests beyond the summer.

Legend

- Canadian Domain Species (New Wilderness North)
- African Species
- Indo-Malayan Species
- Kids Zoo Species
- Australasian Species
- Tundra Species
- Americas Species
- Eurasian Species
- Saving Species Sanctuary

APPENDIX 1. THE NEW MASTER PLAN LAYERS

PROPOSED HABITATS AND HOLDINGS



Legend

- Canadian Domain Species (New Wilderness North)
- African Species
- Australasian Species
- Tundra Species
- Eurasian Species
- Saving Species Sanctuary



Celebrate the edge!
By bringing new habitats to areas that are currently less visited but easy to access.



Optimize the Existing!
By keeping successful habitat areas, enhancing those that need to be expanded, and using underused grassy spaces for habitat expansion.



Densify strategically!
By putting more species together in shared habitats, and by giving them additional space by doing so.



Make the fences/barriers disappear!
By combining species together and having fewer fences between them, as well as using landscape elements to connect and divide habitats.

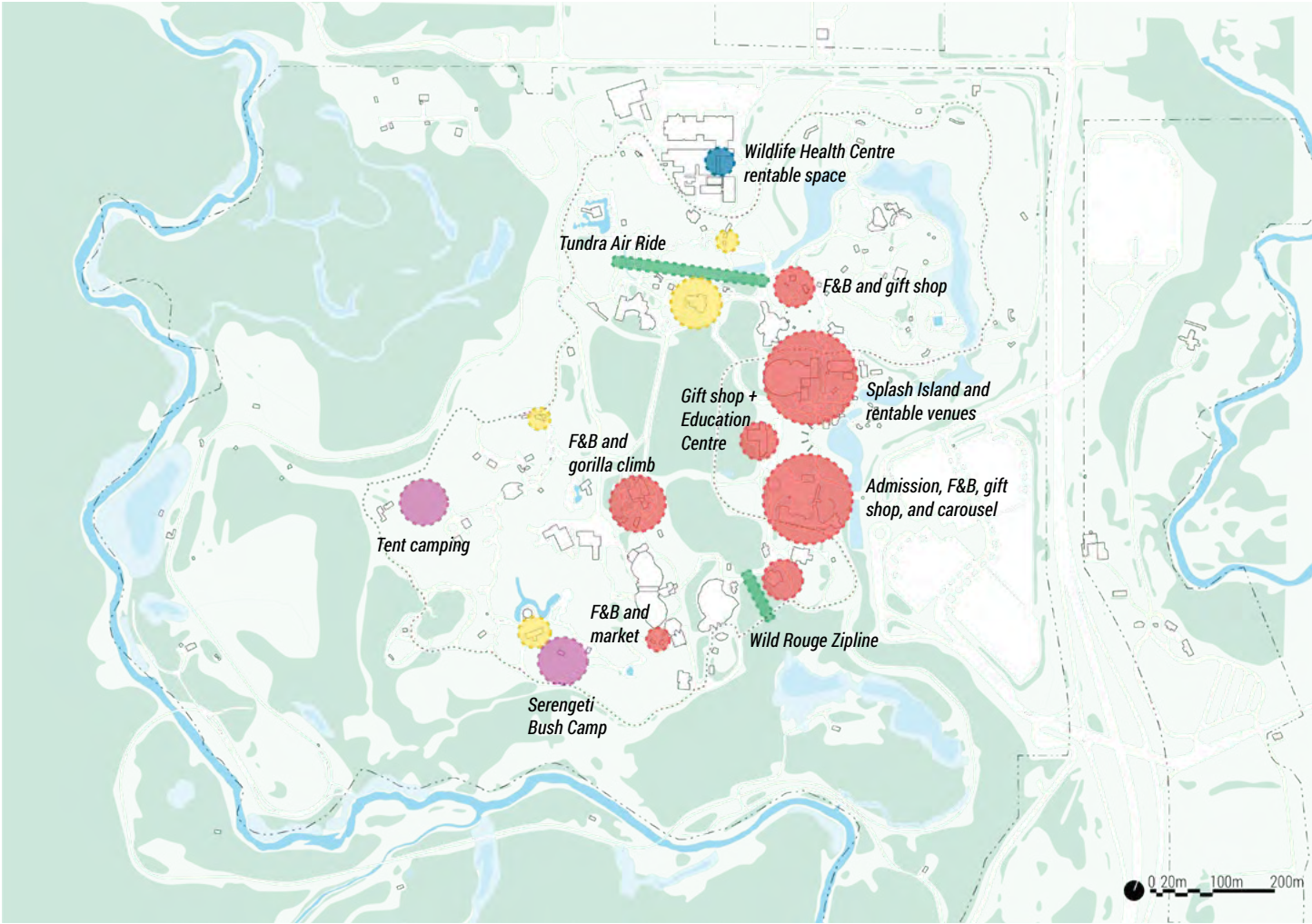


Turn pain points into opportunities!
By consolidating and expanding winter holding, expanding habitats into underused areas, and moving species into more accessible areas.

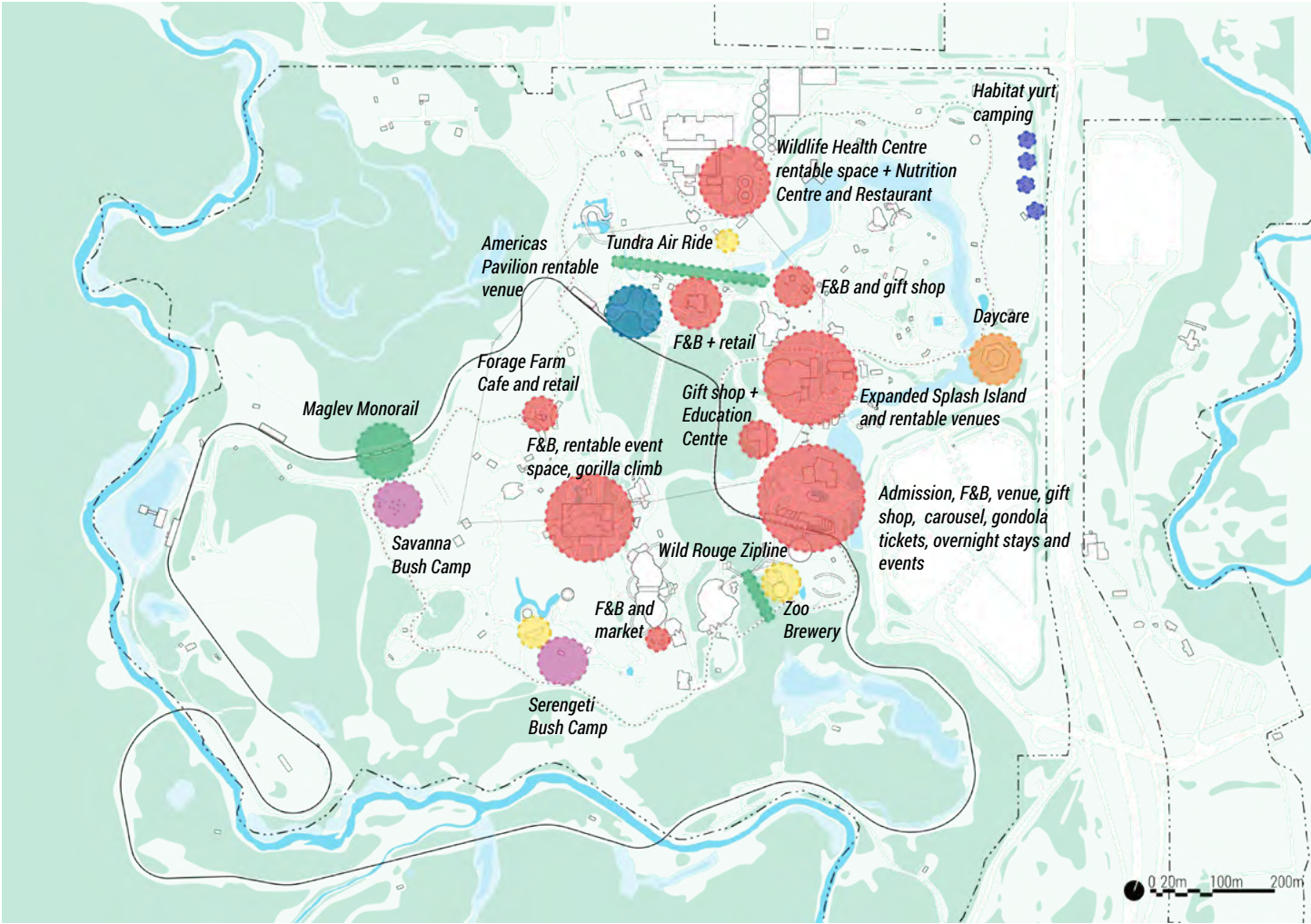
APPENDIX 1. THE NEW MASTER PLAN LAYERS

EXISTING VERSUS PROPOSED REVENUE GENERATORS

Existing



Proposed



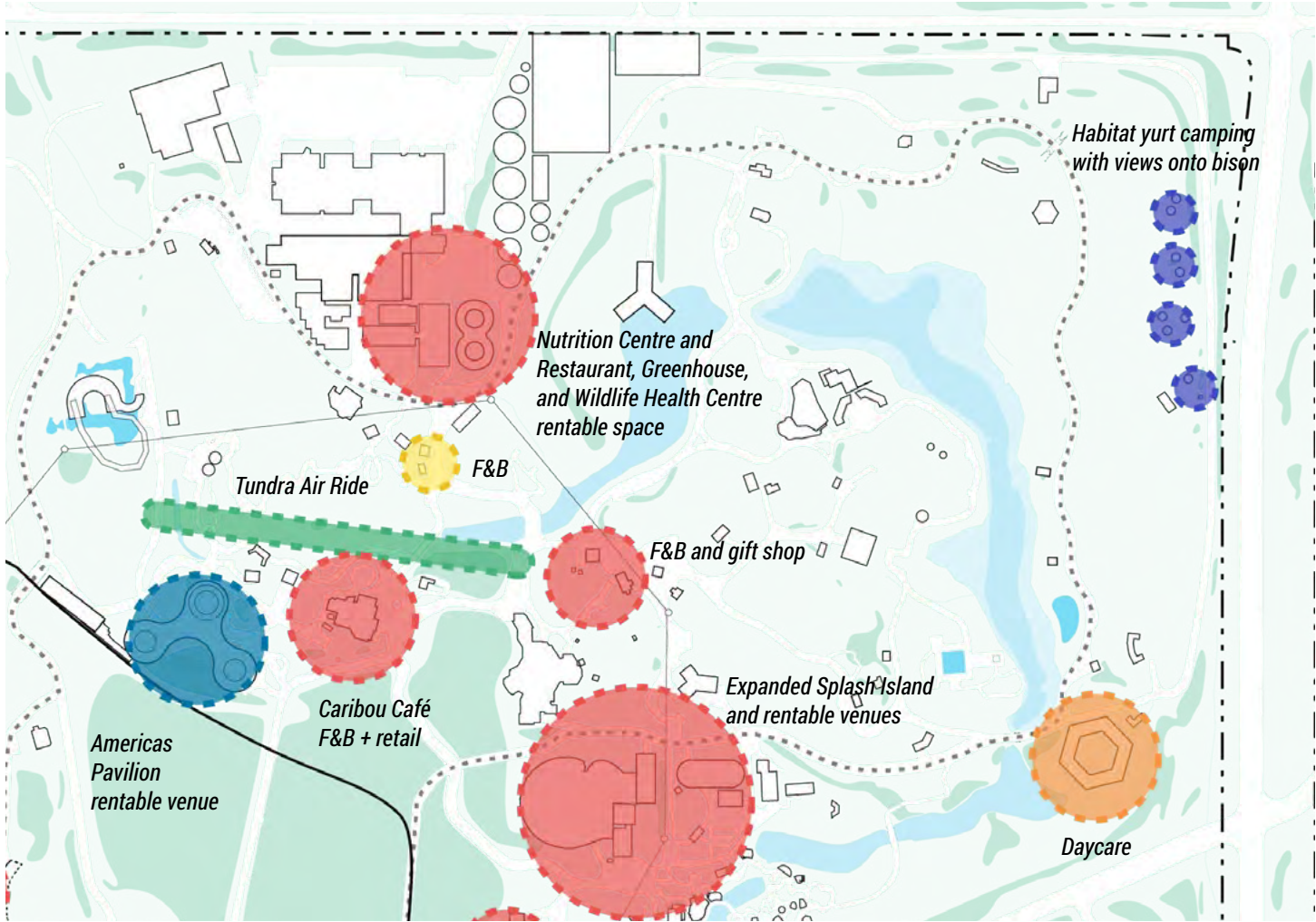
Your Zoo's revenue generators currently consist primarily of a few main areas with food and beverage offerings where souvenirs and tickets for rides and venues may also be purchased, and a couple seasonal camping opportunities. The Master Plan expands upon these by increasing the number of venues that can host revenue-generating programs, and increasing the number of overnight opportunities with some that can be open year-round.

Legend

- Food and drink program revenue
- Multi-program revenue generator
- Paid activity
- Summer camping overnight
- Year round overnight stay
- Rentable venue
- On site daycare

APPENDIX 1. THE NEW MASTER PLAN LAYERS

PROPOSED REVENUE GENERATORS



Legend

- Food program revenue
- Multi-program revenue generator
- Paid activity
- Onsite daycare
- Year round overnight stay
- Rentable venue



Celebrate the edge!
By adding more program closer to the edge and easily accessible hubs, so that it can be semi-public and generate revenue in the evening as well.



Optimize the Existing!
By building on existing programmatic successes, such as onsite camping, and enhancing these, for example by moving camping closer to species.



Use nature!
By using it as a tool to create immersive experiences, such as onsite camping, and blur the boundaries of the habitat edge.



Densify strategically!
By adding program to areas where paid program is successful, and adding program to areas with easy access and ample foot traffic.



Welcome the community!
By adding programs that support community needs and desires, such as a daycare and shared spaces for cooking classes or lectures onsite.

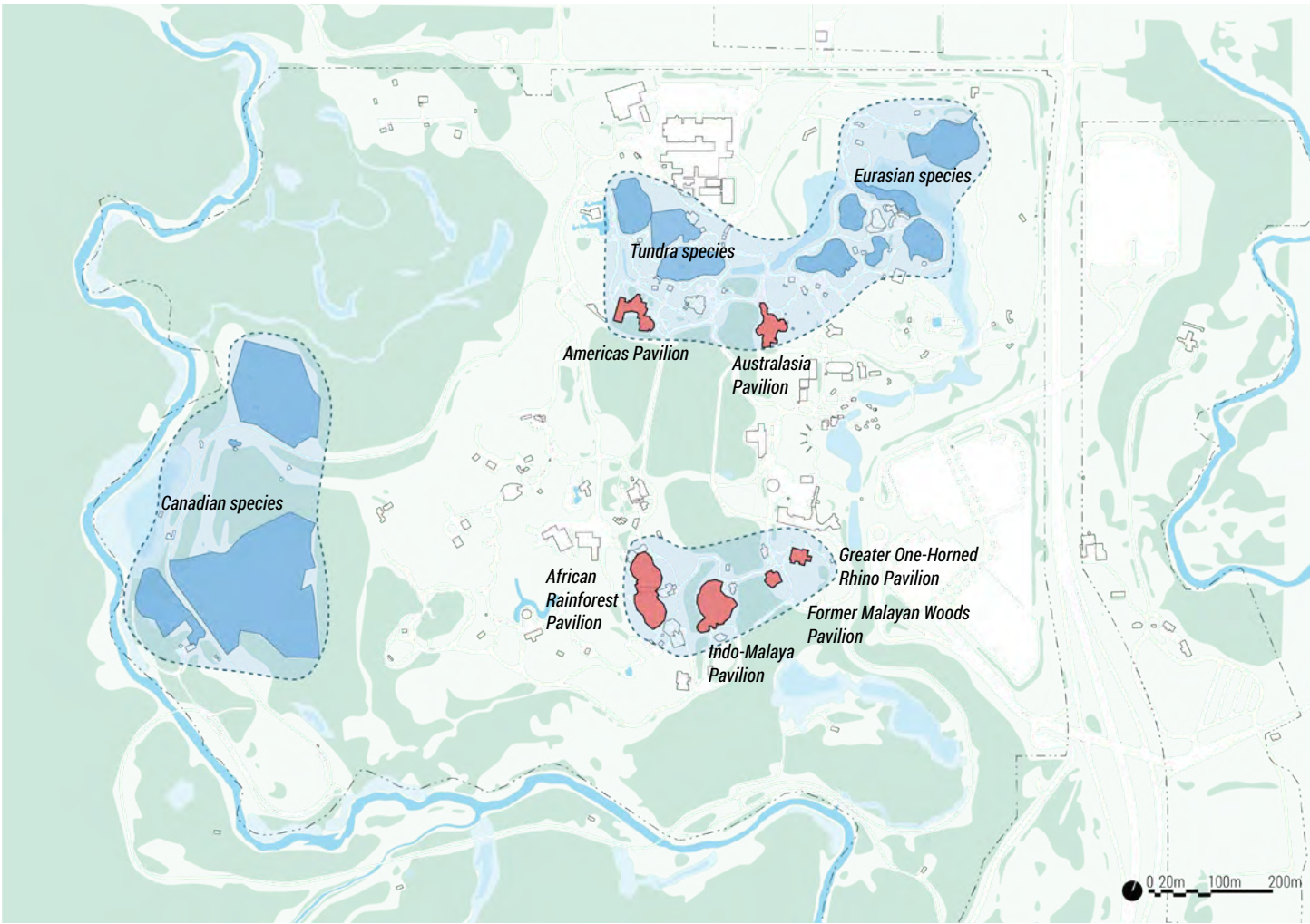


Go multimodal!
By viewing the monorail as an opportunity for additional unique program, such as a moving cafe with incredible views, that varies by season.

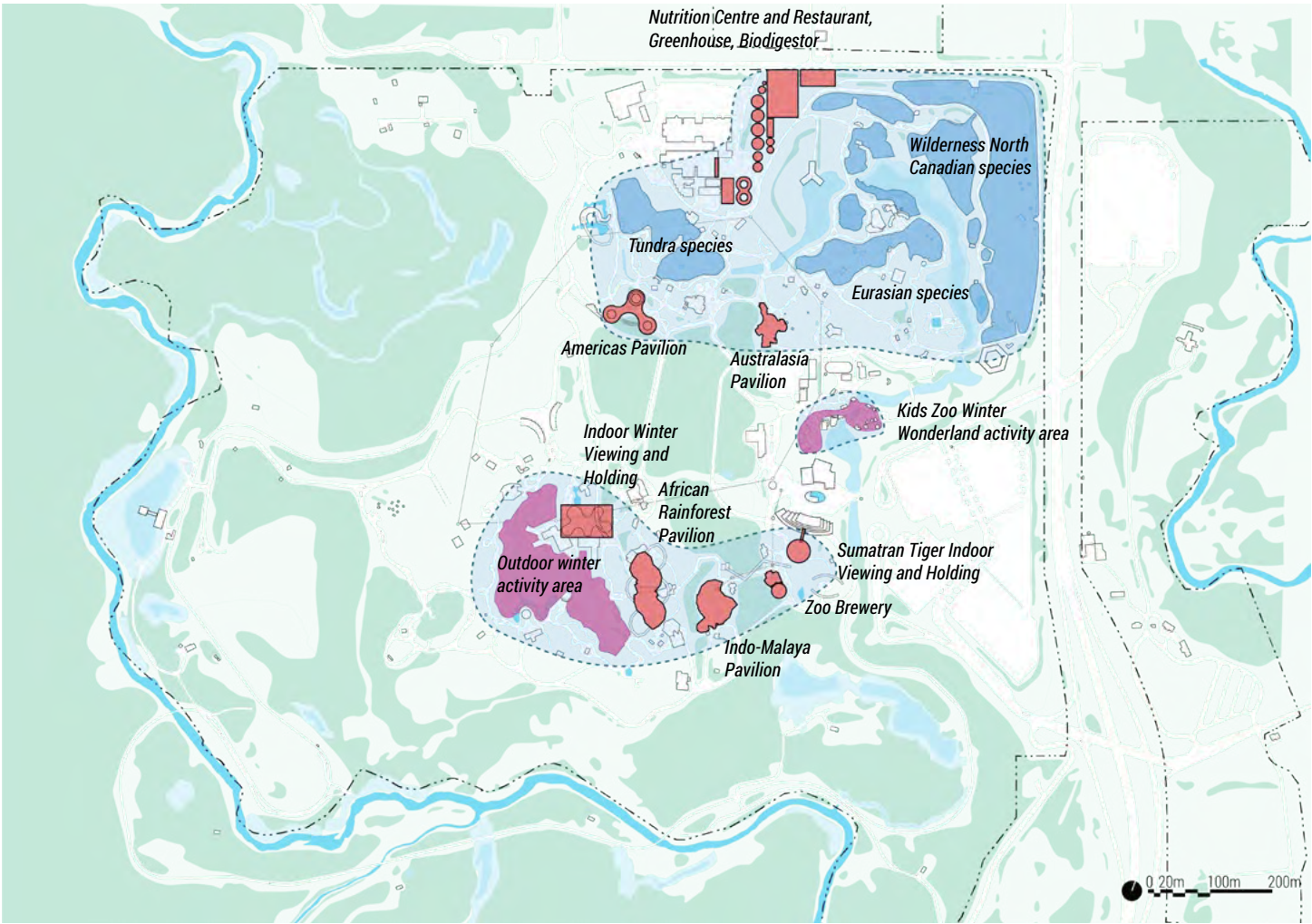
APPENDIX 1. THE NEW MASTER PLAN LAYERS

EXISTING VERSUS PROPOSED WINTER ZOO

Existing



Proposed



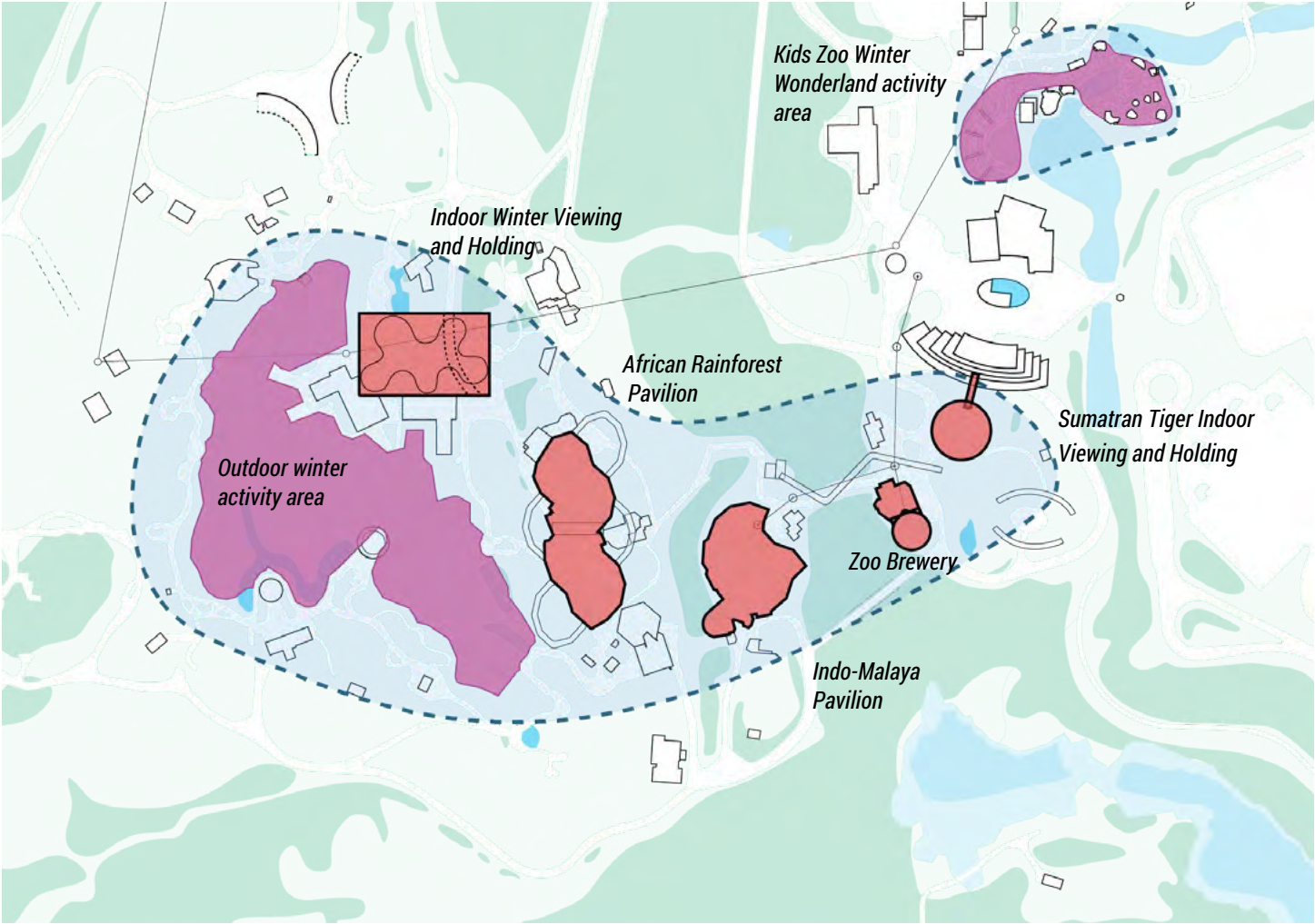
The winter Zoo currently consists of species in the Canadian Domain that are beautiful in winter but difficult to access, as well as outdoor species in Tundra and Eurasia and four main indoor pavilion experiences. The Master Plan moves the Canadian Domain species to an area where they become much more accessible especially in winter, as well as further developing the two existing winter hub areas with existing pavilions, and complementing these with new pavilions, greenhouses, a biodigestor and expanded outdoor winter programs in unused habitats in winter. New outdoor programming at the Kids Zoo becomes a point of connection between the two main winter Zoo areas, also creating year-round outdoor activity connected to the daycare.

Legend

- Outdoor winter habitat
- Warm pavilion
- Winter clusters
- Programmable outdoor winter area for guests

APPENDIX 1. THE NEW MASTER PLAN LAYERS

PROPOSED WINTER ZOO



Legend

- Outdoor winter habitat
- Warm pavilion
- Winter clusters
- Programmable outdoor winter area for guests



Activate winter/accommodate summer!

By showcasing more species in winter through new holdings, celebrating winter outdoor species, creating winter-specific program, and creating cool summer viewing.



Densify strategically!

By creating winter-specific hubs and loops so that guests have a clear trajectory with many species on it.



Optimize the existing!

By using accessible areas for winter species such as Canadian species, and using unused winter habitats for unique winter outdoor program.



Use nature!

By celebrating winter through the use of colour and texture in plantings, as well as creation of microclimate and protected pockets.



Turn pain points into opportunities!

By creating new, larger winter holdings that become major guest attractions, celebrating species that aren't currently viewed in winter.

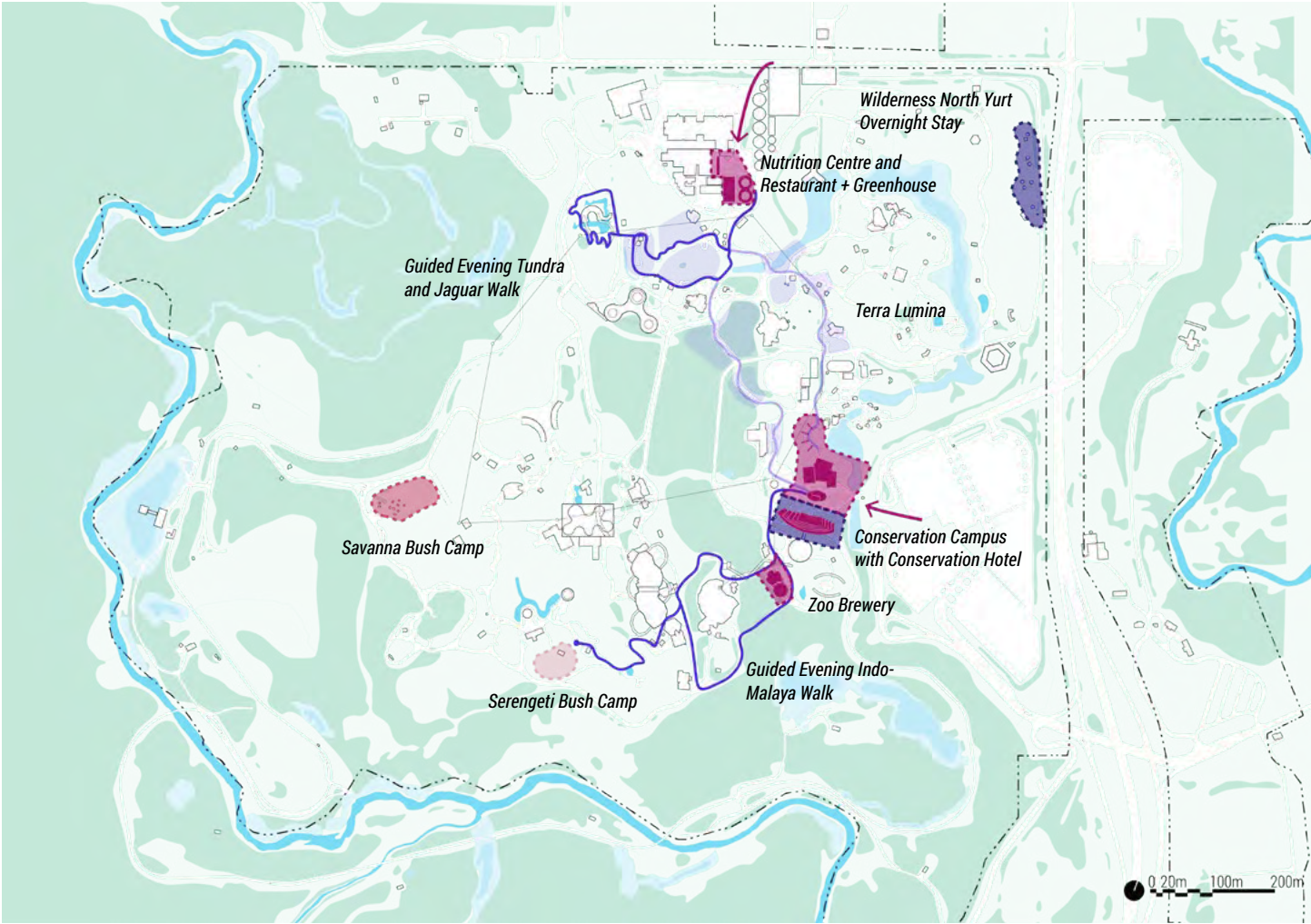
APPENDIX 1. THE NEW MASTER PLAN LAYERS

EXISTING VERSUS PROPOSED EVENING ZOO

Existing



Proposed



With few exceptions, Your Zoo is predominantly open only during the day. Evening activities currently include two camp-out experiences that happen in summer, as well as Terra Lumina, running during the winter months. The Master Plan proposes increasing the number of evening events at Your Zoo, and centring these around hubs near the Zoo's periphery - the Conservation Campus and the Nutrition Centre and Restaurant - and expanding the possibility for evening tours from here, to see animals that are active at night. It also proposes to expand the offerings for types of accomodation and locations, providing areas where guests could stay overnight in close proximity to species.

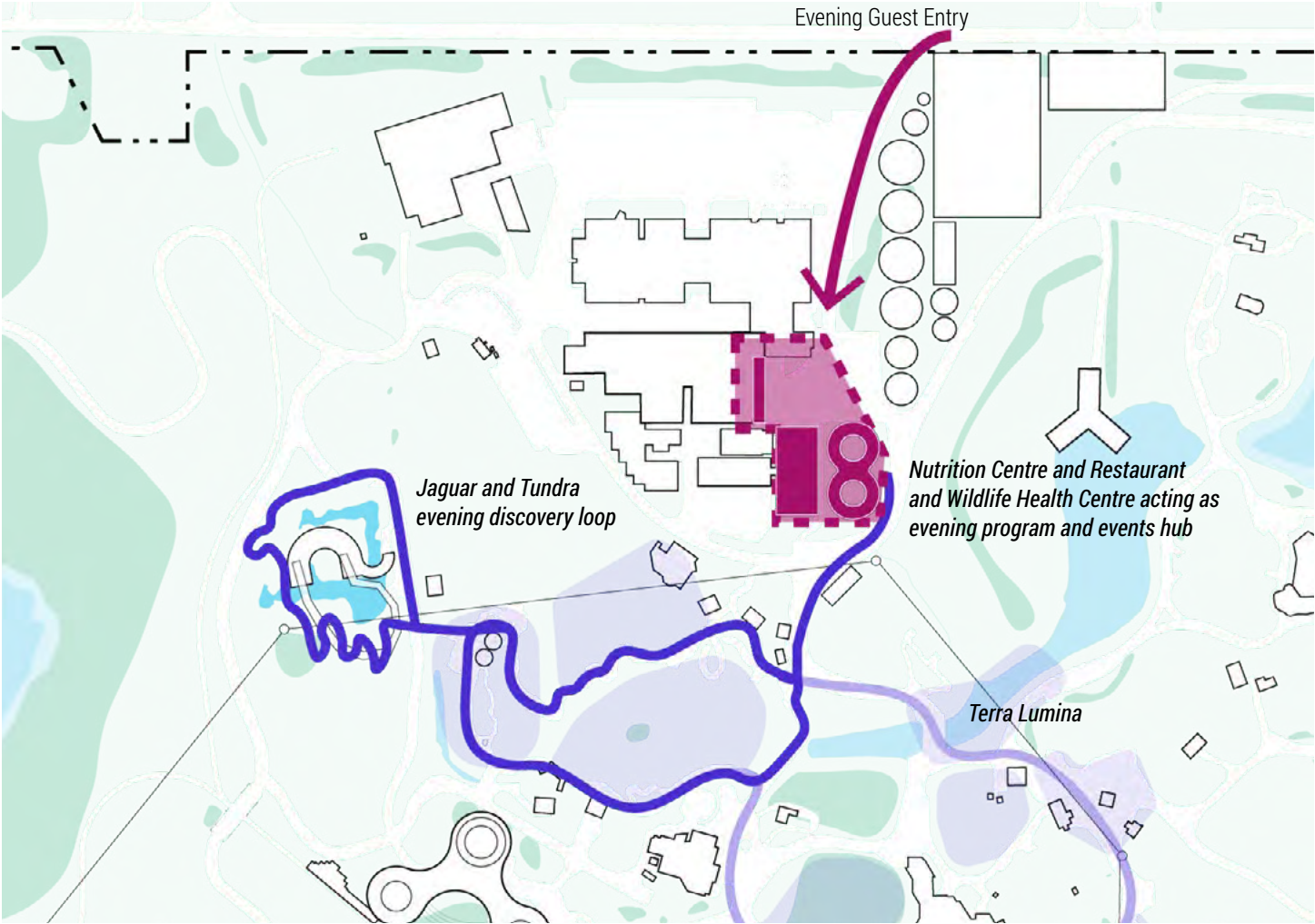
By extending its hours and offering evening programming, Your Zoo is able to be more agile and reactive to climate events, including by offering evening programming in the middle of summer, when a midday visit may be much less desirable.

Legend

- Evening program path and activity area
- Guest entry
- Area of year round overnight stay
- Area of seasonal overnight stay
- Evening program hub
- Building with evening program

APPENDIX 1. THE NEW MASTER PLAN LAYERS

PROPOSED EVENING ZOO



- Celebrate the edge!**
By bringing more program closer to the edge so that it is easy to designate smaller areas that are still accessible after regular Zoo hours.
- Densify strategically!**
By creating evening programming that is based out of daytime program hubs, and having additional evening-specific routes departing from there.
- Optimize the Existing!**
By building on existing assets such as the Wildlife Health Centre spaces, and increasing their evening use by adding more programs nearby.
- Turn pain points into opportunities!**
By using a huge underused part of the day for revenue generation, but using infrastructure that is also a revenue generator during the day.

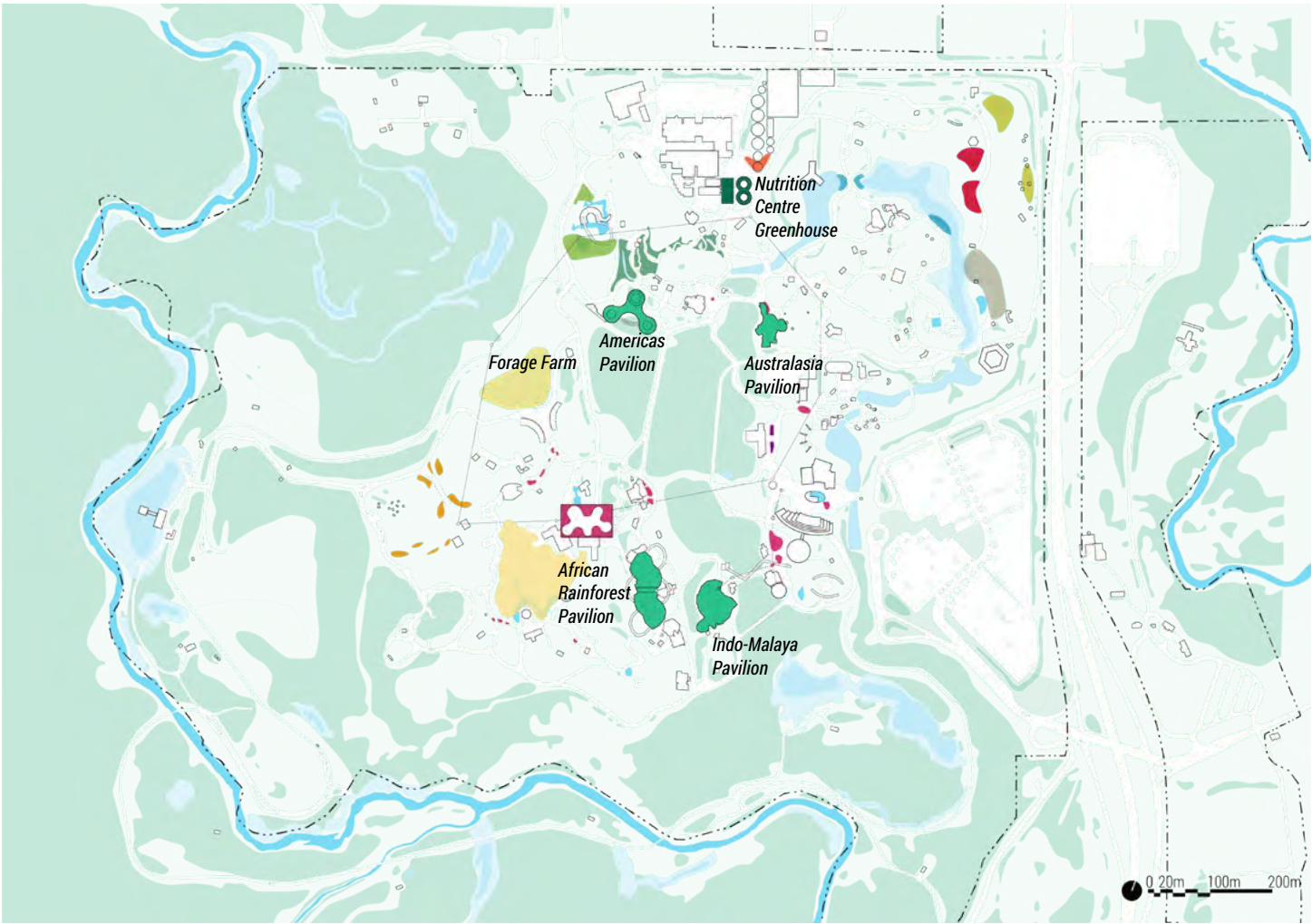
APPENDIX 1. THE NEW MASTER PLAN LAYERS

EXISTING VERSUS PROPOSED BOTANY

Existing



Proposed



Botany onsite today is focused around small displays at key points along paths, within the greenhouse, as well as within some pavilions, and some immersive landscapes around habitats. The Master Plan aims to make botany even more present as a tool used in all seasons to enhance the experience of moving through different landscapes at different times of year, while also helping to create more immersive experiences around habitats. Botany is used in the Master Plan as a way to transport people into different habitats even before they might see an animal, and to help in creating a sense of awe and discovery as guests move through a diversity of botanical experiences across Your Zoo.

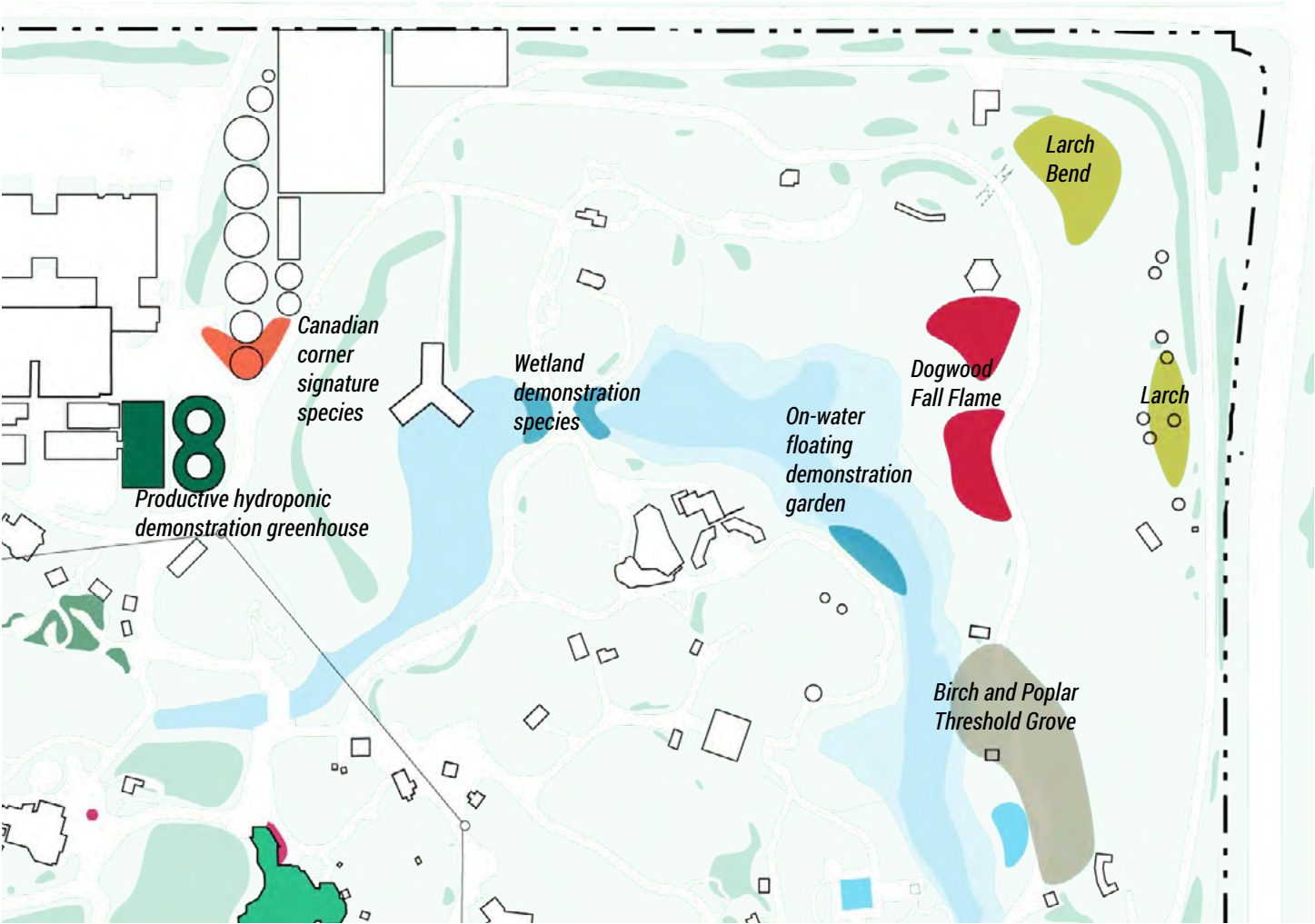
Legend

- Varied outdoor seasonal plantings
- Greenhouse
- Ferns, dense groundcover, climbing vines
- Seasonally varying productive farm landscape
- Tall mixed grasses
- Savanna habitat planting

- Tundra tree, bush and groundcover planting
- Interior botanical display in pavilion
- Iconic Canadian trees - sugar maple, birch, spruce
- Wetland showcase species mix
- Dogwoods
- Larch
- Poplar and birch Canadian Domain entry
- Spring flowering browse tree demonstration

APPENDIX 1. THE NEW MASTER PLAN LAYERS

PROPOSED BOTANY



Legend

- Varied outdoor seasonal plantings
- Greenhouse
- Tundra tree, bush and groundcover planting
- Interior botanical display in pavilion
- Iconic Canadian trees - sugar maple, birch, spruce
- Wetland showcase species mix
- Dogwoods
- Larch
- Poplar and birch Canadian Domain entry
- Spring flowering browse tree demonstration



Use nature!

By picking specific plantings that create unique moments in different areas on site, that also vary seasonally.



Celebrate the edge!

By adding unique plantings to the arrival experience, as well as to specific edges of the site, to create unique, seasonally changing experiences.



Densify strategically!

By creating unique botanical moments at entry and exit points and key points along routes as well as high foot-traffic areas.



Optimize the existing!

By building off of existing botanical qualities and ecosystems and adding signature species into these areas to make them shine even more.



Activate winter/accommodate summer!

By using specific plantings that celebrate winter through colour and texture to create botanical areas of interest for winter tours, and creating cool summer microclimates.