



STAFF REPORT

To: Board of Management

From: Robin D. Hale
Chief Operating Officer

Subject: **2015-2024 CAPITAL WORKS PROGRAM**

Date: 2014-08-28

Summary:

This report provides a description of the capital projects, timing and costs for consideration by the Board of Management.

Recommendation:

The Policy & Finance Committee, at its meeting of 2014-08-19, has recommended that the 2015-2024 Capital Works Program, as attached, be approved by the Board of Management.

Financial Implications:

The 2015-2024 Capital Works Program (CWP) is comprised of eleven (11) projects and meets the debt targets set by the City. The CWP will require a total gross cash flow of \$61.0 million and \$60.0 million on a net basis after outside funding sources. The total cash flow required in 2015 is \$6.0 million on a gross and net basis including previously approved funding, but not including potential carry-forwards from 2014.

To demonstrate the City's commitment to one of its key assets, the capital target has been established at \$6.0 million for 2014 and subsequent years.

Background:

The 2015-2024 Capital Works Program Planning documentation has been submitted (in draft) to the Financial Planning Division of the City of Toronto for review, analysis and forwarding to the Budget Committee and Executive Committee for approval by Council. Any changes by the Board will be communicated to the City.

The City debt target of \$6.0 million for each year in the 2015-2024 CWP does relieve many of the pressures faced by the Zoo in attempting to meet its strategic objectives. However, significant pressures and challenges remain as a result of continued escalation of construction

costs. In Toronto for example, the Construction Index increased by 45.2% between 2002 and 2013, while the Consumer Price Index for the same period increased by 23.3%.

In the 2015-2024 CWP, the Toronto Zoo has updated amounts for various projects in later years within the Capital plan to better reflect the realistic cost of construction on a project by project basis. This costing practice is the optimum approach for costing the program to meet the requirements and objectives of each project based on the determination of the respective project elements and specifications.

The basis of the current CWP is the prior year's approved plan and eight major reports completed previously: the Building Audit Report and Site Services Study, the Revenue and Visitor Experience Enhancement Study, the report on Information Needs 2000, the North Zoo Site Redevelopment Schematic Design, the Animal Health Facilities Feasibility Study, the Educational Development Feasibility Study, the Audit of Animal Exhibits & Holdings and the Site Accessibility Feasibility Study. The program is also consistent with the directions provided in the 2009 Strategic Plan, however, development of a new strategic plan for the Toronto Zoo is currently underway.

In 2014, upon acceptance of the new Strategic Plan it is anticipated that work will commence on a new Master Plan for the Toronto Zoo, to be completed by mid-2015. The new Master Plan will be a critical factor in steering the overall direction of maintaining and enhancing the Zoo's infrastructure, the guest experience, and potential fundraising efforts. With the exception of the annual projects, the Wildlife Health Centre, and the Orangutan Outdoor project, the other projects listed are considered placeholders until confirmed by the Master Plan (2015).

The Capital request is necessary to permit the Zoo to maintain a state of good repair of its assets, meet heightened public viewing expectations and satisfy our future accreditation requirements. With an estimated average of 1.3 million visitors annually, the Toronto Zoo intends to remain one of the top zoos in North America and a destination of choice.

Comments/Discussion:

The following discussion provides further information on the projects included in the Capital Works Plan.

2015-2024 Capital Projects – City Supported

Wildlife Health Centre

In early 2004, staff and consultants developed the program for the provision of a separate quarantine facility and a new wildlife health centre.

Construction of the Quarantine Facility was completed in 2007, as the first phase of the Wildlife Health Facilities Project. The Quarantine Facility enabled the Zoo to meet accreditation standards of the zoological associations that require quarantine of incoming animals for the protection of the existing collection. The existing wildlife health facility has evolved within an original Zoo animal holding building. It does not meet current hospital

standards as detailed by various inspecting groups, including the Canadian Council on Animal Care (CCAC). Major deficiencies include: traffic flow problems; multiple functions of clinical and surgery rooms; inappropriate animal holding rooms which do not provide adequate environmental control for sensitive species; lack of recovery facilities; lack of appropriate holdings for large hoofed stock; narrow hallways; inadequate storage for equipment and supplies; lack of crate-washing facility; and limited vehicle access.

In 2012, detailed design of a new wildlife hospital and research facilities was substantially completed for use in the construction of the facility and to provide support for fundraising. As a follow-up to the detailed design of the Wildlife Health Centre the construction of the facility will be tendered and awarded in 2014, with construction scheduled to continue until completion in 2017. Accordingly, the debt funding for this project in 2015-2017 was pre-approved in the 2014-2023 CWP. The construction of the WHC is a key state of good repair project that will address significant accreditation concerns. The fundraising campaign includes the WHC project and support from the community is anticipated. As such, funds raised in the initial years of the capital campaign could be used to advance the construction schedule of this essential state of good repair initiative.

The new Wildlife Health & Reproduction Centre is being specifically designed for medical and surgical care of zoo species, and will provide specialized housing for hospitalized animals. The facility will be equipped to provide maximum efficiency, comfort, and safety in handling and care of animal patients, in a professional and hygienic setting.

Orangutan Outdoor Exhibits

Since 1974, the orang-utans have had no access to the outdoors as do our other great apes the lowland gorillas. A seasonal outdoor exhibit is critical for the behavioural enrichment of the animals and was originally to be constructed as the final phase of the original Orang-utan Project. However, this is now seen to be a major animal welfare issue and as a result, this project has been re-prioritized in the 2015-2024 CWP. There has been significant interest expressed from the community to support the outdoor portion of the exhibit and it is anticipated that the \$1.0 million in external funds will be available in advance of submission of the 2016-2025 CWP in May 2015. As such, the outdoor portion of the orangutan project has been reclassified and moved up in the 2015-2024 plan. The overall area will reflect a Borneo/Sumatran Rainforest habitat for these intelligent primates. The connection to the new outdoor exhibit at the south side of the Indo-Malaya Pavilion will be visible from the Zoomobile route.

Design would be completed in 2016 with construction to follow later in 2017 through 2018.

Orangutan Indoor Exhibits

In 1994, the orang-utan holding capital project (Phase I) was completed. The current indoor exhibit is a design from 1974 and no longer meets modern zoo exhibitry standards. The Orang-utan Phase II is an exhibit improvement project to upgrade the indoor living conditions, animal enrichment and living space for the orang-utans and will also ensure a new standard of state of good repair. The area will be redesigned and renovated as a Borneo/Sumatran Rainforest habitat

for these intelligent primates. The Phase III design includes provision for connection to a new outdoor exhibit at the south side of the Indo Malaya Pavilion to be visible from the Zoomobile route. As mentioned previously, the opportunity to engage the community to support the outdoor portion of the exhibit has resulted in a reclassification and re-prioritization of both projects related to the welfare of the Orang-utans.

Ultimately, the combined indoor/outdoor project will provide for a new landscape immersion visitor experience including education and interactive features and ensure a new standard of animal care.

In 2018, a conceptual design for renovating the indoor exhibit would be completed based on the initial feasibility report. Detailed design would then be scheduled with construction / renovation of the indoor exhibit to follow in 2018-2019.

Hippo House & Exhibit Refurbishment

The hippo house is one of the zoo's original concrete structures, built in 1973. It needs to be upgraded or replaced to acceptable standards for breeding, animal management, winter holding and public viewing. The new house will incorporate the latest space and material standards as well as green energy to reduce utility usage. Construction of the new house closer to the present exhibit would correct the above problems and eliminate visitor viewing problems during times of inclement weather when the animals are restricted to the house. The new house would also include the installation of a restraint unit, new floors with non-slip flooring material, sufficient storage and services, and a shelter / shade structure to provide year round adequate exercise area for the hippo's. Also required, is more indoor stalls and outdoor yards to provide adequate housing for breeding / surplus needs.

The new / refurbished exhibit would be planned to allow for underwater viewing, keeper talks and winter viewing.

Design work for the Hippo House & Exhibit Refurbishment would commence in 2019 with construction of a new house, yards and winter facilities to follow in 2020-2022. The cost of this project is within the approved debt target of the City for the 2015-2024 CWP submission, but has been increased to more accurately reflect the anticipated level of spending necessary to complete the house and exhibit refurbishment.

Gorilla II: Outdoor Display

A Gorilla Feasibility Study was completed in 1993 and updated in 2001. The plan provides for a new outdoor display to be extended up the hill to the north, towards the Family Centre. The wire mesh roof will be eliminated and viewing will be over a moat or through glass. Behavioural enrichment components will be included in all aspects of the project.

This project will improve visibility for visitors and provide a larger, more enriched environment for the gorillas. With increased size, the exhibit will be better able to withstand increased seasonal use by the gorillas.

Detailed design of the exhibit will now occur in 2022 with construction to follow in 2023-2024.

Breeding Holding Facility

Increased breeding and holding space is required if the Zoo is to meet its commitments to the various collaborative breeding programs for endangered species (i.e. Species Survival Plans and other programs). It has become clear that the quality of future collections will be determined by the commitment made today to animal breeding.

The availability of animals has decreased as wild animal populations disappear and as regulations governing animal collection and distribution have become more restrictive. Many animals breed poorly on exhibit. Holding space is required for both large hoofstock and for specimens which must be brought indoors for the winter, and for temporary housing of animals during cleaning/maintenance of exhibits.

One of the most important contributions zoos can make to conservation is participation in captive breeding programs. This cannot be achieved without appropriate breeding facilities. As a result of the debt room within the plan created by separating out of the Orang-utan Outdoor Exhibit which may be funded through interested external sources, this important project has been moved into the plan.

Detailed design of the facility will be finalized in 2023 with construction to follow later in 2023-2024.

Building & Services Refurbishment

The Building & Services Refurbishment project, the result of a Building Audit Report approved by the Board in 1998, implements the repair or replacement of building components requiring attention over the next 10⁺ years. Since 1998, items of immediate concern, including the replacement of mechanical and electrical equipment in over 25 buildings on site, have been completed. Site services (gas, water, hydro) were reviewed and evaluated in a similar manner in 1999. A Bridge Condition Evaluation was conducted by an engineering consultant in early 2007 and outlined a series of repairs and rehabilitation for the seven bridges on the Zoo site.

To assist with future planning an Audit of Animal Exhibits & Holdings was completed in 2007 to determine the current repair status and future maintenance and replacement requirements, in compliance with accreditation standards, and to provide a comparison to similar holdings/exhibits at other accredited Zoos. As well, a Site Accessibility Feasibility Study was completed in early 2012 to ensure the requirements of the Accessibility for Ontarians with Disabilities Act (AODA) may be met.

In 2015, replacement/repair of roofs and skylights at Pavilions, animal holding buildings and service buildings on site as recommended in the Building Audit will include Peacock Café, Himalayan Tahr, Hyena, Sumatran Tiger, Moose. Other work will include replacement of deteriorated epoxy, metal work, ceilings, walls, siding, windows and doors at various Zoo buildings to meet the AZA accreditation standards. Also, the installation of a sprinkler system at the African Rainforest Pavilion will commence as per FM Global recommendation and design by Construction Control.

Exhibit & Holding Refurbishment

Exhibit & Holding Refurbishment is a multi-year plan involving various initiatives to renovate exhibits throughout the Zoo site.

For 2015, as part of the Wildlife Health Centre project the Invertebrate House would be demolished to make way for the Necropsy wing of the hospital. This house is currently used for rearing invertebrates that are used throughout the Zoo. The current holding has also been used for public tours as part of the health centre experience. A new building will meet current environmental standards and will ensure the invertebrate collection is maintained at the required levels to meet Zoo requirements.

Part of the 2009 review of Exhibits & Holdings determined that the Main Gate Aviary holding and exhibit was not meeting existing recognized standards. As part of the Front Entrance Capital Project scheduled for 2015 a new exhibit to replace the aviary is proposed. The new exhibit would provide our visitors with their first animal experience at the Zoo.

Information Systems

The Information Needs 2000 Report, approved by the Board in April 1999, outlined the various systems that needed replacement at the Zoo including points of sale, data warehousing, biology and conservation records system, document management and imaging, telecommunications and financial systems.

In 2003, the Toronto Zoo launched a project to replace the Zoo's core financial, retail and administrative systems with a public sector version of an off-the-shelf Enterprise Resources Planning (ERP) software package. A contract was awarded for the ERP system to be phased in over the period of 2005-2007. The Financial module was implemented in 2005 and the Service Management module went live in 2006. The Point of Sale systems were completed in 2007, and the Human Resources / timekeeping modules and Fixed Asset ledger were completed in 2008.

In 2014, the Zoo is continuing the implementation of the new CRM system and is also completing the replacement of outdated hardware (Zoo owned PC's, and peripherals). Additionally, various technological enhancements, including digital signage, is continuing to meet the objective of enriching and exporting the Zoo experience to expanded markets through the extension of the Toronto Zoo Network to multiple locations and the setup of a secondary network. Work has also commenced on replacement of the BIOCON animal records database to with the new Zoo Information Management System (ZIMS) being adopted by leading zoos across North America.

In 2015, work will continue on the ZIMS project and general hardware lifecycle management throughout the site.

Grounds and Visitor Improvements

The Grounds and Visitor Improvements Project addresses the needs of the public concerning visitor amenities, the appearance of indoor and outdoor areas, improvements to site circulation and visitor orientation.

In 2015, plans include continuation of the implementation the recommendations outlined in the accessibility plan developed in 2011 to address the requirements of the Accessibility for Ontarians with Disabilities Act. Other specific improvements will focus on area signage planned to improve Zoo visitor site circulation and orientation consistent with the recommendations of the Revenue and Visitor Experience Enhancement Study. Provision of accessibility and pathway improvements, additional seating, shade and drinking water and washroom enhancements is also planned for various locations around the site.

Externally Funded Projects

The five (5) projects outlined below include several initiatives that would address many significant SOGR issues for the Toronto Zoo. Although these projects represent key requirements for the sustainability of the Zoo, in accordance with City submission guidelines they have been submitted as “S7” within CAPTOR due to funding constraints. This unfunded need creates additional pressures as the plan submitted is reliant on the Toronto Zoo’s and City’s ability to secure non-City funding for capital projects through the significant fundraising campaign. It remains our understanding that externally funded projects not included in the Budget Committee recommended 10-Year Capital Plan may be added in the future when fundraising results are realized.

The externally funded projects include the redesign and renovation of the Front Entrance, Canadian Wilderness, Tropical Americas, Centre for Sustainable Life and Learning (Educational Development), and Ride and Revenue Development. As mentioned previously, work on a new Capital Master Plan will commence in 2015 to determine what specific projects and their priorities are to be further developed in the CWP.

Front Entrance & Food Services

In 2008, external seating areas were expanded at the side of the Africa and Americas restaurants to provide additional capacity in the summer and shoulder seasons after the seasonal closure of the snack bars at the Zoomobile stations. In 2009, restaurant seating was also renovated in the Americas as part of the North Zoo Site – Tundra Trek Project. In 2010, the Peacock Café was expanded and renovated with donated funds from Compass Foods, the Zoo’s food services provider. In 2012-2013, a new food services area was constructed for the Panda exhibit area.

The Revenue and Visitor Experience Enhancement Study also recommended that significant renovations are required at the front entrance to the Zoo. This work is proposed to be undertaken as part of a major Front Entrance Redevelopment project in 2017-2018.

The Study outlined that the main visitor entrance to the Zoo is deficient and outdated in a number of aspects. The shortcomings include inefficient admissions, inadequate visitor

amenities, lack of orientation for first time visitors, insufficient orientation space inside the front entrance, unmemorable front entrance, indirect access to the Zoomobile, entrance/exit turnstiles are oriented opposite to the norm and the food facility is not directly accessible. The renovations proposed for the front entrance are designed to achieve improved ticketing, to provide a memorable entrance/exit to the Zoo, to locate retail and food opportunities directly in line with the visitors' path of movement to maximize retail opportunities, to provide an enlarged plaza and to improve the overall level of services to the Zoo visitor.

A study originally planned for 2011 to determine the feasibility of design, build, and operate scenarios for the front entrance was deferred. However, subject to securing external funding and sponsorships, design work for the new front entrance and related food services would commence in 2017, with construction to follow in 2017-2018.

Canadian Wilderness

The North Zoo Site Redevelopment Feasibility Study, which included the Canadian Wilderness Experience Concept Report, the Eurasia Rehabilitation Plan and the Tropical Americas Rehabilitation Plan, was adopted by the Board of Management in September 2003.

The overall project will complete the more efficient integration of visitor site circulation changes at the Zoo by bringing key Canadian animal exhibits now in the Rouge Valley up onto the tableland. The existing Canadian Domain exhibits are in need of major renovations for the welfare of the animals and viewing by the public. The need to eliminate the long walk and steep hill at the Canadian Domain for the primary Canadian/North American animal experience is necessary because of the absence of the Domain Ride. Although the Valley is a spectacular backdrop, the area has received visitor complaints concerning the long walk and steep hill.

The construction is phased to minimize operational disruptions for Zoo staff/public and to provide for an extended period of opening events.

The first phase, Tundra Trek was completed in 2009. The Tundra Trek won the coveted CAZA Baines Award and has received public acclaim for its innovative presentation of Northern species and habitat.

Phase III of the North Zoo Site Redevelopment Project relates to the Mixed Woodland Biome/Boreal Forest Biome. Detailed design and construction would be scheduled for 2018-2020. This initiative would complete the Canadian Wilderness Experience area, featuring a new Orientation Centre, moose, beaver and otter exhibits, and a drive-through bison/elk paddock on the Zoomobile tour. This phase of the project is classed as "S7", however, this significant State of Good Repair (SOGR) project for the Toronto Zoo will address key exhibitry and (SOGR) requirements and remains a key focus of the capital campaign. It will result in revitalized exhibits and a reduction of essential SOGR backlog issues. It also addresses key accreditation issues that such exhibits must be built to modern animal care standards while ensuring that the Toronto Zoo continues to meet increased public expectations.

North Zoo Site – Tropical Americas

The Tropical Americas rehabilitation represents Phase IV of the North Zoo Site Redevelopment and will involve the relocation and consolidation of the South America exhibits along with the refitting of a portion of the exhibits in the Americas Pavilion for Tropical American animals. Funds are provided in the project budget in 2020-2022, however, the cost estimates will need to be re-adjusted based on recent project experience, as outlined previously.

Educational Development

A Feasibility Study was completed in 2006 for a Centre for Sustainable Life & Learning. The Centre would support the development of interactive programs and learning strategies, provide professional training and to position the Zoo as a leader in development, evaluation, research and dissemination of formal and informal programs. The Centre for Sustainable Life & Learning will be an innovative, dynamic, state of the art building that provides ecologically and socially responsible learning space for a wide variety of visitors and users. It will also be an institution that continuously educates users and visitors about the efficiency of its functions, and the mandate and activities of the Zoo. Once the Centre is built, the Zoo will then be in a position to take the lead on biodiversity issues as a participant in the City's designation as a "Regional Centre of Expertise in Education for Sustainable Development". The Centre will serve teachers at all levels to receive more intense and effective learning experiences that relate directly to the curriculum.

Detailed design of the Centre for Sustainable Life & Learning is proposed for 2022 with construction to follow in 2023-2024, however the phasing is dependent on the availability of outside funding.

Ride & Revenue Development

Development of thematic rides to enhance revenue and the visitor immersion experience includes a Safari Jeep ride in the African Savanna, planned for 2024-2025.

Conclusion:

Throughout its 40 year history, the Toronto Zoo has inspired people to love, respect and protect wildlife and wild spaces. The Board of Management, dedicated staff, passionate supporters, and approximately 430 volunteers will continue to deliver the message of the Toronto Zoo in the next 40 years to over 135,000 students, and over 30,000 membership households, and a strong visitor base averaging over 1.3 million guests per year.

To date, over \$169.7 million has been invested in the City's asset through the Capital Works Plan (CWP). The 2015-2024 CWP represents a balanced approach to maintaining the existing facilities and approval of the plan will enable the Zoo to complete various key State of Good Repair projects. As well, creation of new exhibits in the plan will allow the Zoo to remain a destination of choice. Every year for the past ten years, the Zoo has either opened new facilities (e.g. the award winning African Rainforest, Tundra Trek, and Giant Panda Experience) or enhanced existing ones.

As one of the largest zoos in the world, the Toronto Zoo seeks to become sustainable for the long term through the strengthening of our fundraising capacity. The continued support of the City through the Capital Works Program, in concert with continued fundraising progress in a highly competitive marketplace, will facilitate the continuous improvement of the Zoo for both wildlife and visitors.

Robin D. Hale
Chief Operating Officer

List of Attachments:

Schedule I - 2015-2024 Capital Works Program

Schedule II - Council Approved 2014-2023 Capital Works Program