

Festival Plaza Site at Exhibition Place Toronto Master Plan

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Introducing Festival Plaza

Exhibition Place

Exhibition Place is a landmark attraction for the City, Canada and the world. Its wonderful location, on the lake next to Ontario Place, provides an opportunity to add to its significance on Toronto's waterfront through the transformation of the last major parking lot area on the site into a new multi-purpose Festival Plaza. Exhibition Place has, for over a century, been a space synonymous with public enjoyment, exhibition, innovation, education and entertainment. Over the last decade, Exhibition Place added substantially to its offering, with the Direct Energy Centre, BMO Field and the Allstream Centre, as well as the exciting re-use of the many historic buildings to the west. All this activity has taken place with a concomitant focus on environmental sustainability, with the iconic wind turbine a visual reminder of this commitment.

The announcement of the hotel complex surrounding the Stanley Barracks marks another key stage in Exhibition Place's evolution. It represents a substantial private

investment and is located on the eastern half of the major parking area that has dominated the character of the Exhibition Place grounds for so long.

Exhibition Place is now entering a mature state of evolution, with nearly all of its major buildings and open areas accounted for. The site of Festival Plaza is the last remaining large unimproved central area, with the potential to become an attractive, functionally flexible major public open space and a focus for the entire grounds.

Purpose of the Study

The Festival Plaza site is on a 6.7 hectare surface parking lot situated directly south of BMO Field and the Direct Energy Centre and bounded by the Better Living Centre to the west and the Stanley Barracks to the east. Beyond serving as visitor parking for a large number of events, tradeshows, fairs and conferences hosted by Exhibition Place, the site accommodates a variety of temporary uses, including the CNE and the Honda Indy.



As part of the Strategic Plan for 2009-2012, the Exhibition Place Board of Governors established a goal of developing a master plan for Festival Plaza as part of a broader desire to, “enhance our public assets by addressing infrastructure deficits.” The master plan is intended to present a vision and preferred direction for Festival Plaza that adheres to the Board of Governors’ environmental mandate, particularly with respect to parkland and green space and rainwater management. The master plan illustrates the desired concept for Festival Plaza and provides a written description of the functional effectiveness, flexibility and design characteristics of the site.

Study Process

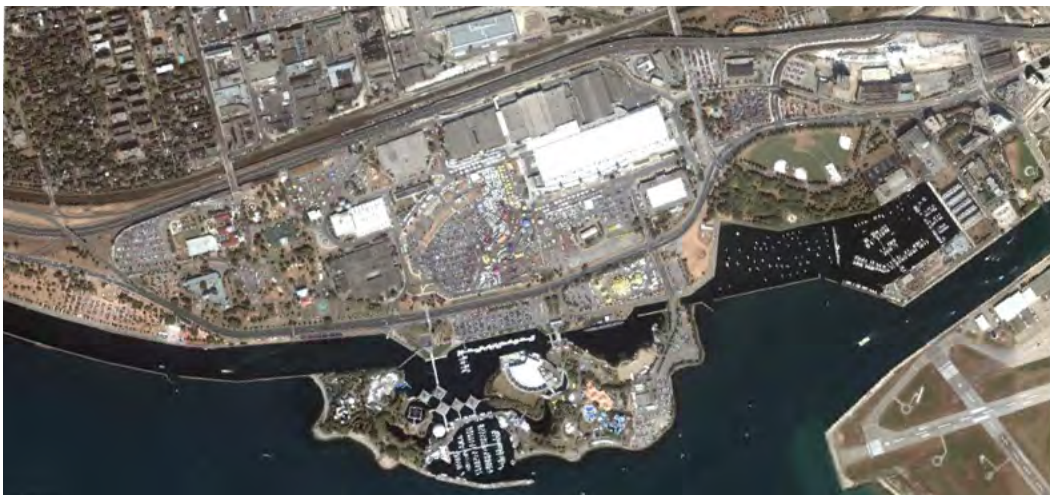
Creating a vision and master plan for Festival Plaza has been a collaborative and iterative process that has included input from key stakeholders, Exhibition Place staff, and the Exhibition Place Board of Governors.

The three month process began with a review of all relevant background documents and site visits by the consultant team, consisting of Urban Strategies Inc., Phillips Farevaag Smallerberg and Arup. After developing an initial matrix of site constraints and possible opportunities, the consultant team interviewed stakeholders, including representatives of the Honda Indy, Ontario Place, the CNE, BMO Field and Maple Leaf Sports and Entertainment. The consultant team then hosted a two-day workshop and charrette with attendees from a variety of different organizations including the City of Toronto, Exhibition Place staff and the stakeholders listed above. Through the workshops, structuring principles and a number of master plan options were elaborated, providing varied directions for the team to explore and develop into master plan options for the site. Following a presentation of refined options to Exhibition Place staff, and subsequent iterations, a preferred direction was selected for further elaboration as the master plan concept.

An Evolving Context



Aerial of Exhibition Place, ca. 1960.



Aerial of Exhibition Place, ca. 2002.



Aerial of Exhibition Place, ca. 2008.



Growing Urban Communities

Exhibition Place no longer sits at the periphery of central Toronto. To the north of Exhibition Place's northern edge, Liberty Village has become a prominent new mixed-use area; to the east, the Fort York neighbourhood has also grown significantly in the last decade. With this increased urbanization, Exhibition Place will continue to attract more people from a number of different directions, using various modes of transportation, necessitating careful planning of connections to its immediate context, particularly the north-south pedestrian routes to Ontario Place and the lake.

Ontario Place + PanAm Games

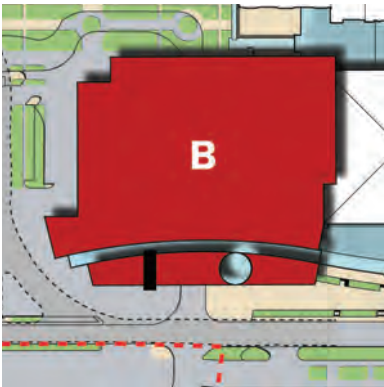
To the south, Ontario Place is in the process of initiating a major transformation, which will radically change the character of the context and function of Festival Plaza. Ontario Place has launched a number of initiatives that will eventually result in a much more active, built-out, year-round area, generating its own pedestrian, vehicular and urban design environment. While the specific nature and timing of this intensification is unknown, the Festival Plaza design must in the short-term anticipate the arrival of the PanAm and Parapan Am games in 2015 and the demands this event will place on both of these sites bordering Lake Shore Boulevard. Essentially, Festival Plaza will become the central open space of a very distinctive combined Ontario Place/Exhibition Place public waterfront district, and that highly desirable future must underlie its planning and design.





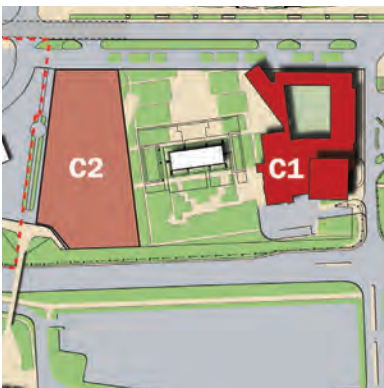
A. BMO Field Expansion

With the increasing popularity of the Toronto FC and international soccer increasing, BMO Field has plans to extend its eastern grandstand sometime in the future. The proposed expansion will have an ample undercroft, which may be used to enhance the amenity of the site directly north of Festival Plaza. This site, framed by the Direct Energy Center to the east and the Horse Palace to the north, will be able to host smaller scale events and has the potential to create a significant pedestrian gateway to Festival Plaza.



B. Direct Energy Centre Expansion

The Direct Energy Center, to the north of Festival Plaza along Princes' Boulevard, has proposed an eastern expansion toward BMO Field. Although the expansion does not directly affect the capacity and function of Festival Plaza, it will narrow the existing space and channel pedestrian access toward the centre of the Festival Plaza site. The expansion will provide adequate space for both the CNE and the Honda Indy, and the narrowed site will provide an opportunity to further enhance the pedestrian realm established by the expansion of BMO Field.

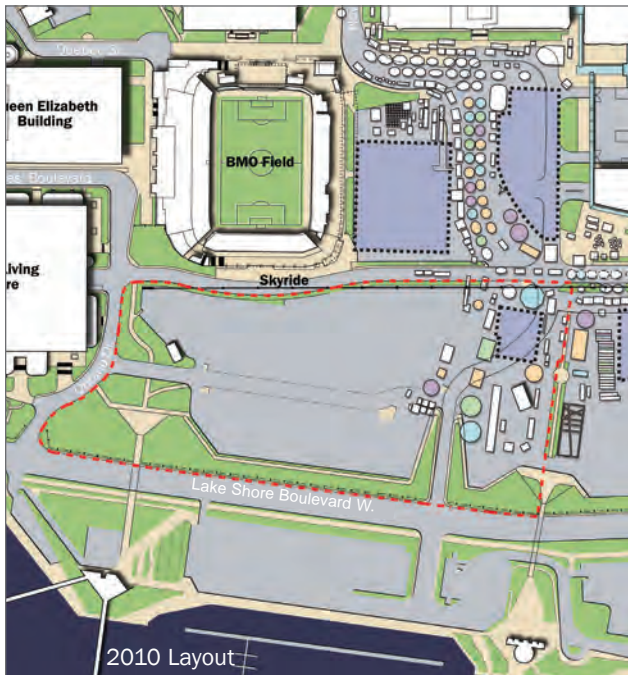


C. Hotel Phase 1 + 2

A two-phase hotel development has been proposed east of Festival Plaza at the site of the existing Stanley Barracks. The first phase of the hotel proposes an ample green space west of its phase one site, with the proposed second phase bracketing this green space and abutting the eastern edge of Festival Plaza. While the first phase of the hotel will not directly impact the feel of Festival Plaza, the second phase will provide a good 'street wall' and will help frame the eastern edge of the site.

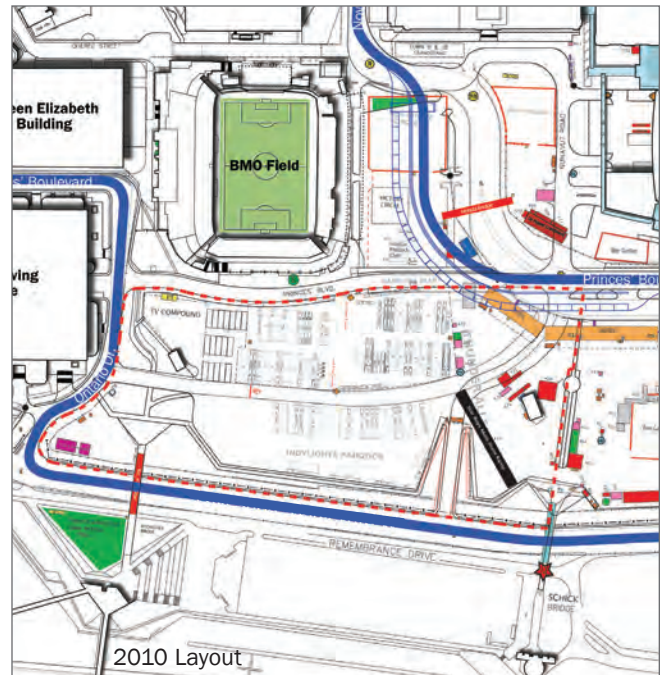
Understanding the Site

Site Uses



CNE

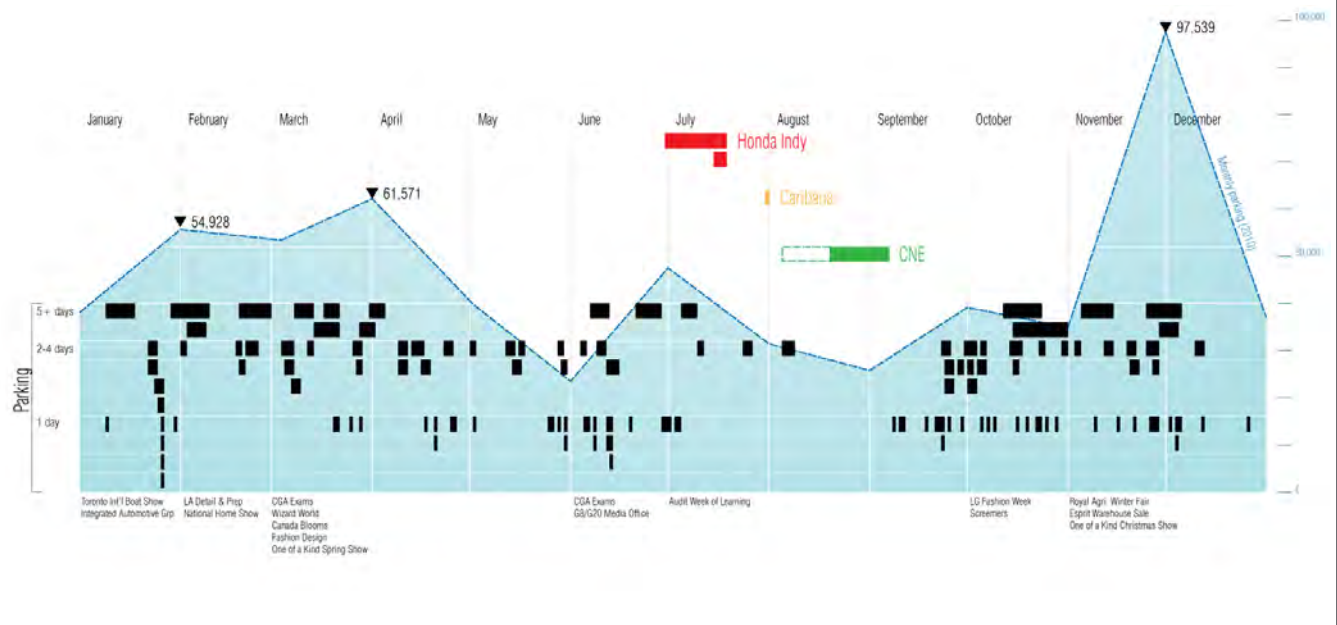
The CNE operates from the first week in August, when the casino in the Better Living Building opens, until Labour Day, when the fair closes. During this time, the CNE requires a durable and level surface for its midway, as well as storage for the trailers and the mobile housing 'village' for the carnival employees. Though the footprint of the CNE is large, the event itself is flexible, and has changed its layout throughout the years.



Honda Indy

In addition to the CNE, the Honda Indy is the second-most significant user of Festival Plaza. Although the route of the race hugs the periphery of the site, the requirements for staging related events and accommodating the many race tractor-trailers has an impact on the site. Most notably, the north edge of the site, along Princes' Boulevard, holds the pit lanes and the grandstand for the annual race.

Lot 2 - Usage Schedule 2010



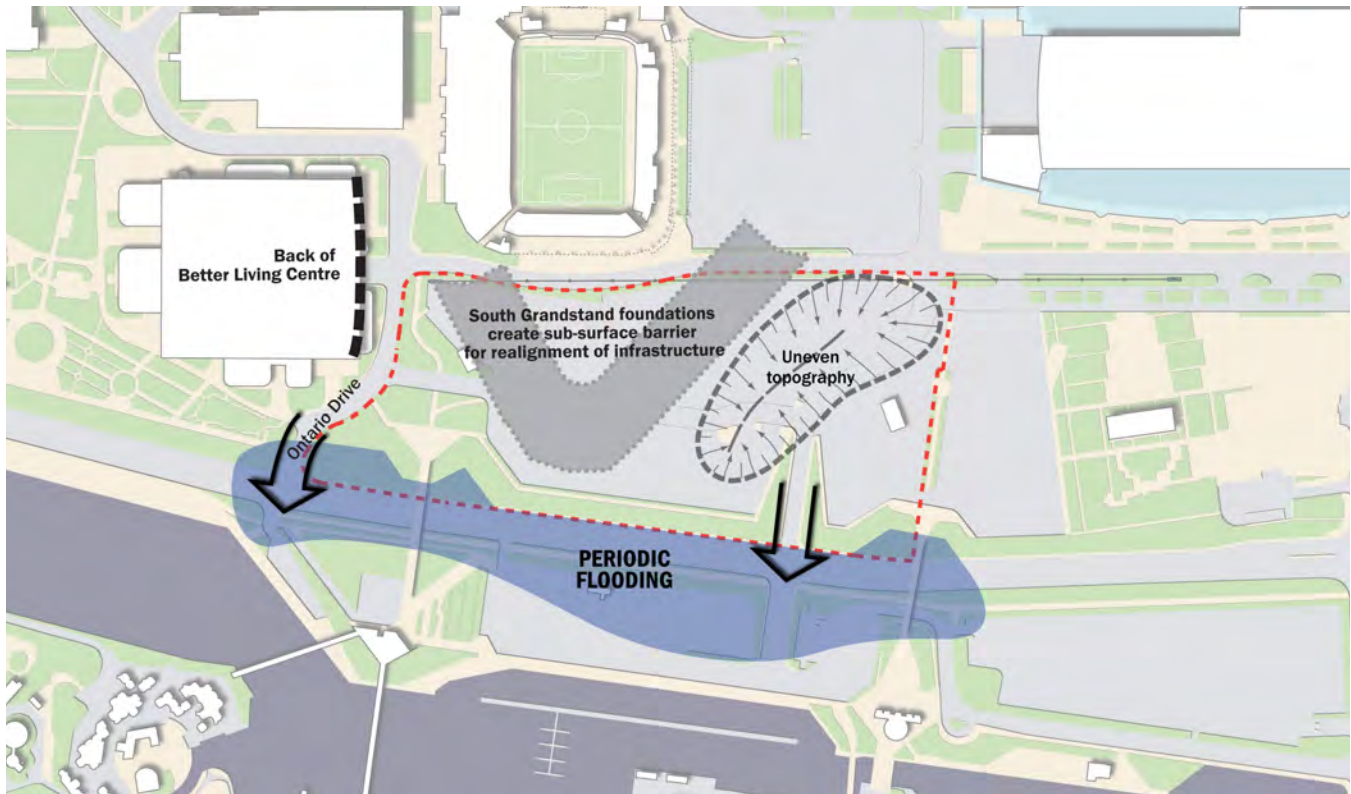
Parking

Parking places the most consistent demand on the site, with peak parking rates as high as 65,000 per month in December. Depending on the location and type of event, different parts of the site are used with barriers to direct drivers to appropriate parking areas.

Concerts, Festivals and Other Events

In addition to providing parking for Exhibition Place attendees, Festival Plaza plays host to shorter, less lengthy events, including such major events as the Pope's visit in 2002, as an annual staging ground for both Caribana and the Boat Show, as well as providing space for residential trailers used during the Royal Agricultural Fair.

Site Constraints



Stadium Footings

Although it was demolished in 1999, the footings of the former Exhibition Stadium remain just below the surface of much of Festival Plaza. The partial removal of the footings may ultimately be necessary in order to accommodate new servicing conduit and level the site.

Water Runoff

The existing non-porous surface of the site, in combination with its natural grade toward the lake, contributes to flooding on Lake Shore Boulevard during major rainfalls. This has been exacerbated by the recent creation of a southern exit point, which channels rainfall directly onto the Lake Shore Boulevard. During a recent rainstorm, the flooding was severe enough to cause buckling in the surface asphalt when the retention capacity of the stormwater system was overwhelmed. The regrading of the site and the introduction of new landscaping must act to mitigate these conditions.

The Vision for Festival Plaza



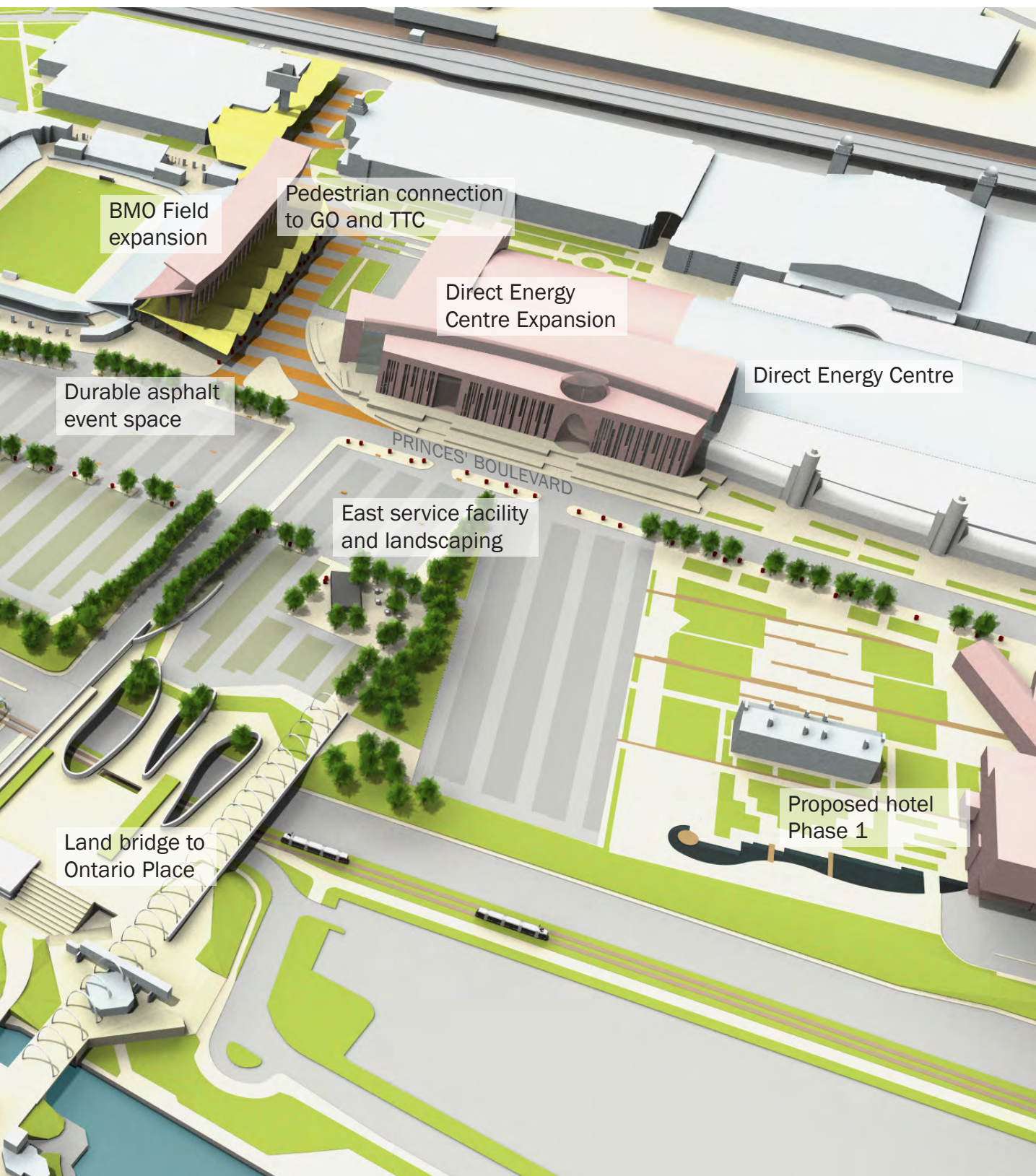
Festival Plaza will be the central focus for Exhibition Place. Well integrated into its surroundings, it will provide a flexible space for gathering, celebration, education and innovation.

Festival Plaza will be an exemplar of sustainability: its landscaped areas will complement its innovative solutions to stormwater management and demonstrate Exhibition Place's commitment to the environment.

Most importantly, Festival Plaza will be a place that people want to go: whether for a concert or the CNE, Festival Plaza will be an important public asset on Toronto's waterfront.

The Master Plan





Guiding Principles



During the initial stakeholder workshops, a number of concerns, aspirations and priorities were discussed, leading to the elaboration of the following master plan principles which guided design explorations for the site.

Flexible

Festival Plaza must be a flexible space – one that is able to provide a platform for its many uses, including the CNE, large public events and efficient surface parking. The creation of a flexible site will also provide opportunities to host a wide variety of future events, including concerts, festivals, sports tournaments and outdoor markets.

Level

Critical to its flexibility and use, the Festival Plaza site must be leveled. Depressions in the current surface create significant challenges for the efficient use and enjoyment of the site.



Environmentally Sustainable

To continue Exhibition Place's commitment to environmental sustainability, Festival Plaza must incorporate sustainable methods of stormwater management and heat island and climate change mitigation on site. While a predominantly hard surface is functionally required to accommodate the high-intensity uses anticipated, attractive and strategically located landscaping is essential.

Pedestrian Oriented

Festival Plaza must be pedestrian-friendly, accommodating accessible, attractive pedestrian movement and wayfinding. Festival Plaza must provide improved linkages between its entry points at the TTC and GO stops that continue through to Ontario Place.

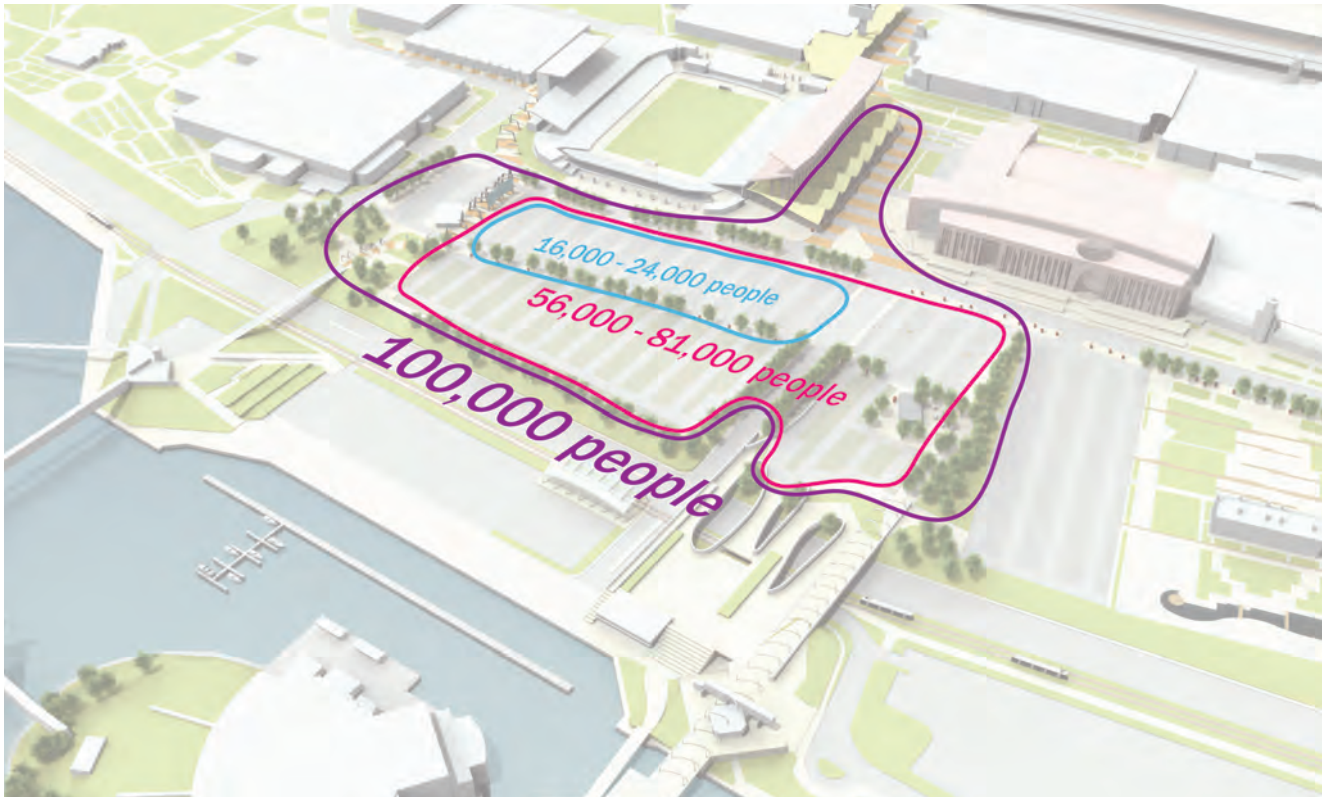
Well Served

To ensure functional flexibility for its many current and future uses, Festival Plaza must provide a well-designed infrastructure grid for water, wastewater and electricity, as well as washrooms and other public facilities.

Efficient Parking Provision

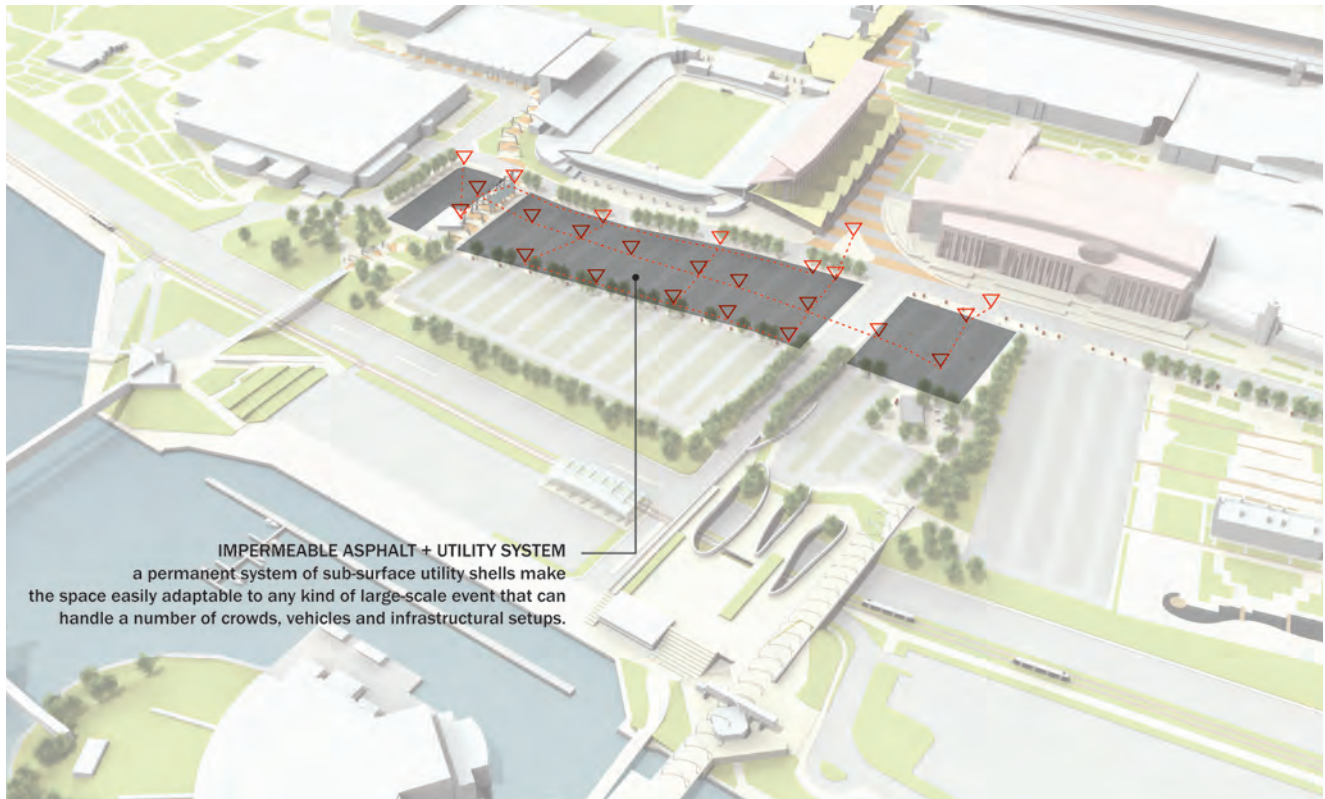
In addition to accommodating a wide variety of activities, Festival Plaza must continue to provide a large supply of surface parking that is efficient and easy to navigate as a support to the growing intensity of indoor uses in the grounds.

Elements of the Plan



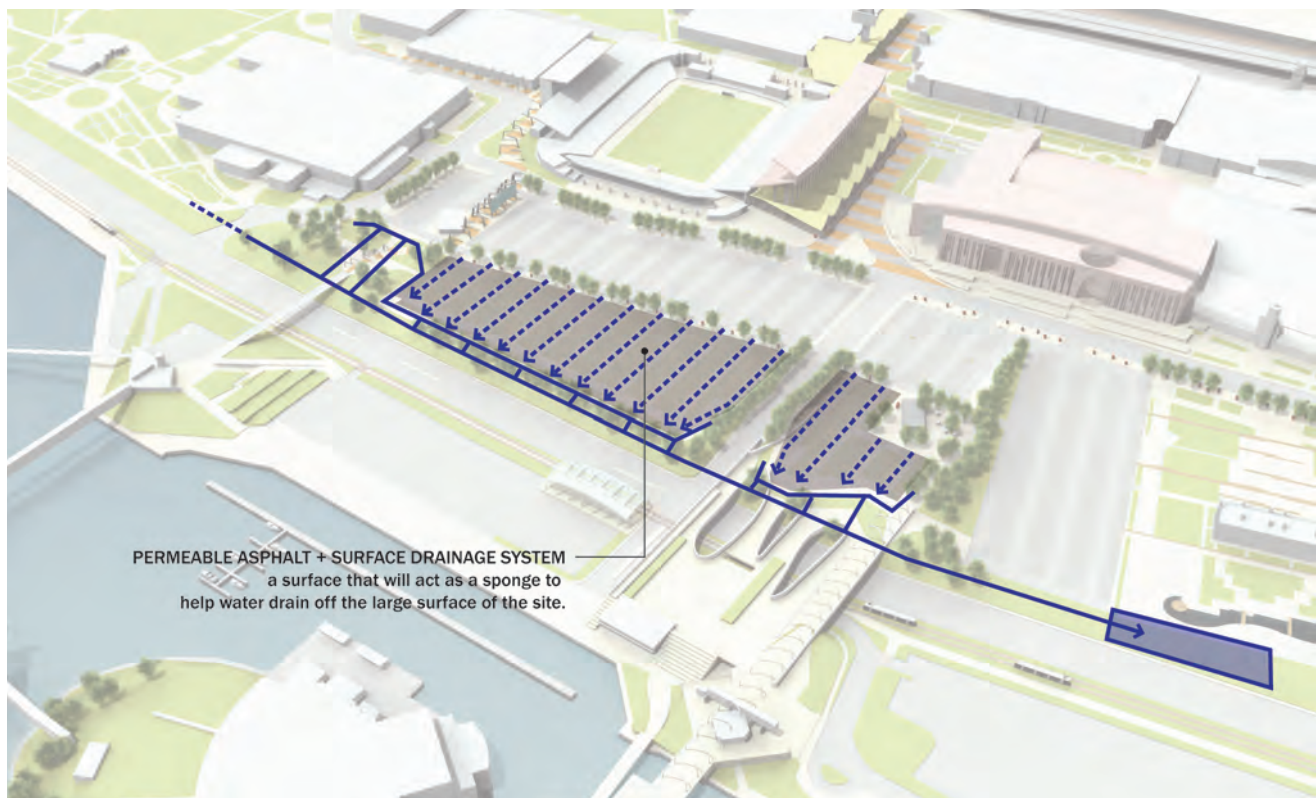
Multi-purpose: crowd and event capacity

Festival Plaza will be designed to accommodate small, medium and large crowd events. The northern half of the site, along Princes' Boulevard, is able to comfortably accommodate between 16,000 and 24,000 people, at 0.93 square metres and 0.65 square metres of space per person. The larger site, including the area east of BMO Field, has a capacity of approximately 56,000 to 81,000 people. Including adjacent roadways and Princes' Boulevard the site could accommodate over 100,000.



Robust Surface: Utility and Servicing

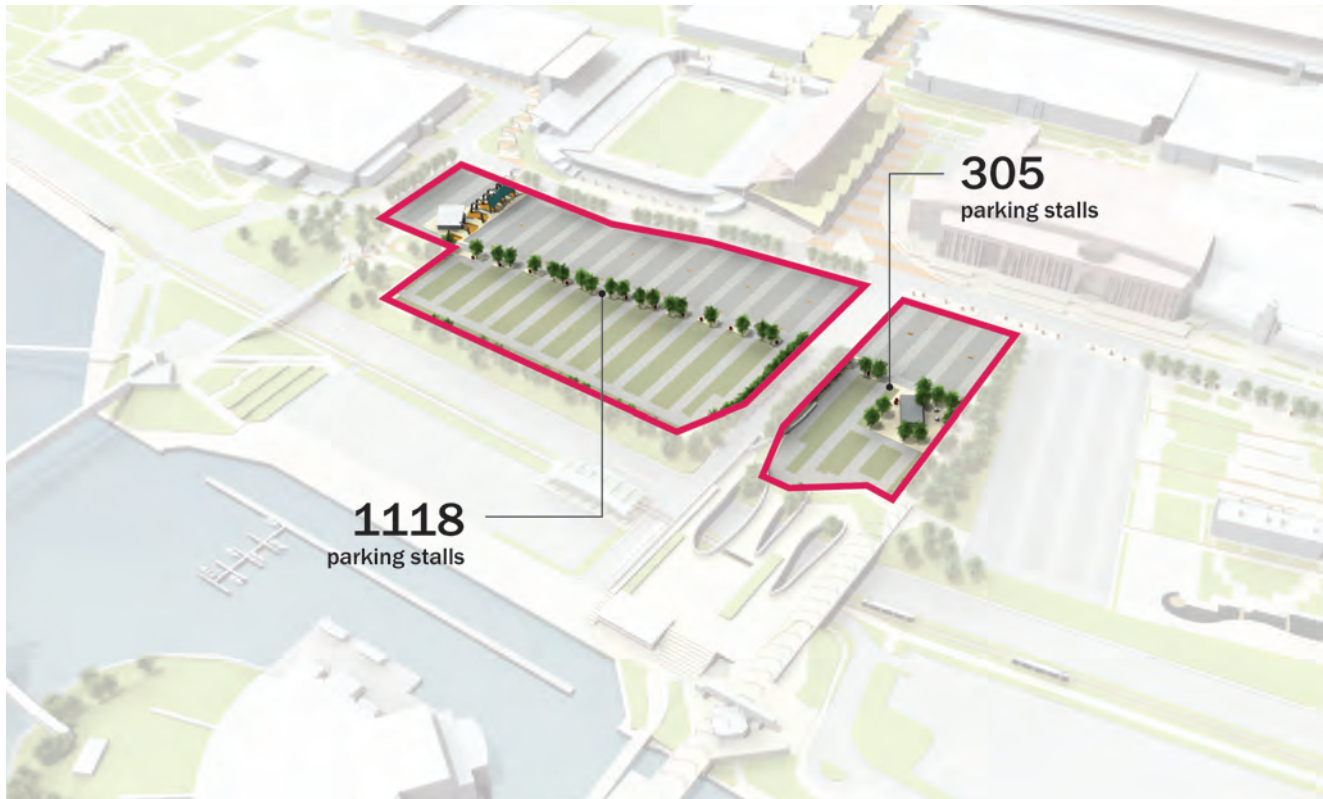
The northern portion of the plaza will be resurfaced and graded to accommodate events that demand a robust surface, particularly the CNE. This surface treatment will be made of ordinary asphalt, which can withstand the shearing force of turning tractor-trailers, have spikes driven into it and accommodate any other physical demands typically placed by the CNE or the Honda Indy on asphalt surfaces. In addition to a more robust surface, security and IT cables will be laid in addition to two lines of 6" sub-surface conduit that will run east-west to accommodate 600V electrical cables. Empty 6" conduit will run north-south approximately every 150 metres, allowing temporary electrical cable to connect to the 600V electrical runs. New handholds will be laid along the empty conduit to facilitate the easy installation of temporary electrical cable.



Porous Surface: Stormwater

The south half of the plaza, between the east-west roadway and the landscaped escarpment along the southern edge of the site, will be graded and resurfaced with a permeable asphalt system.

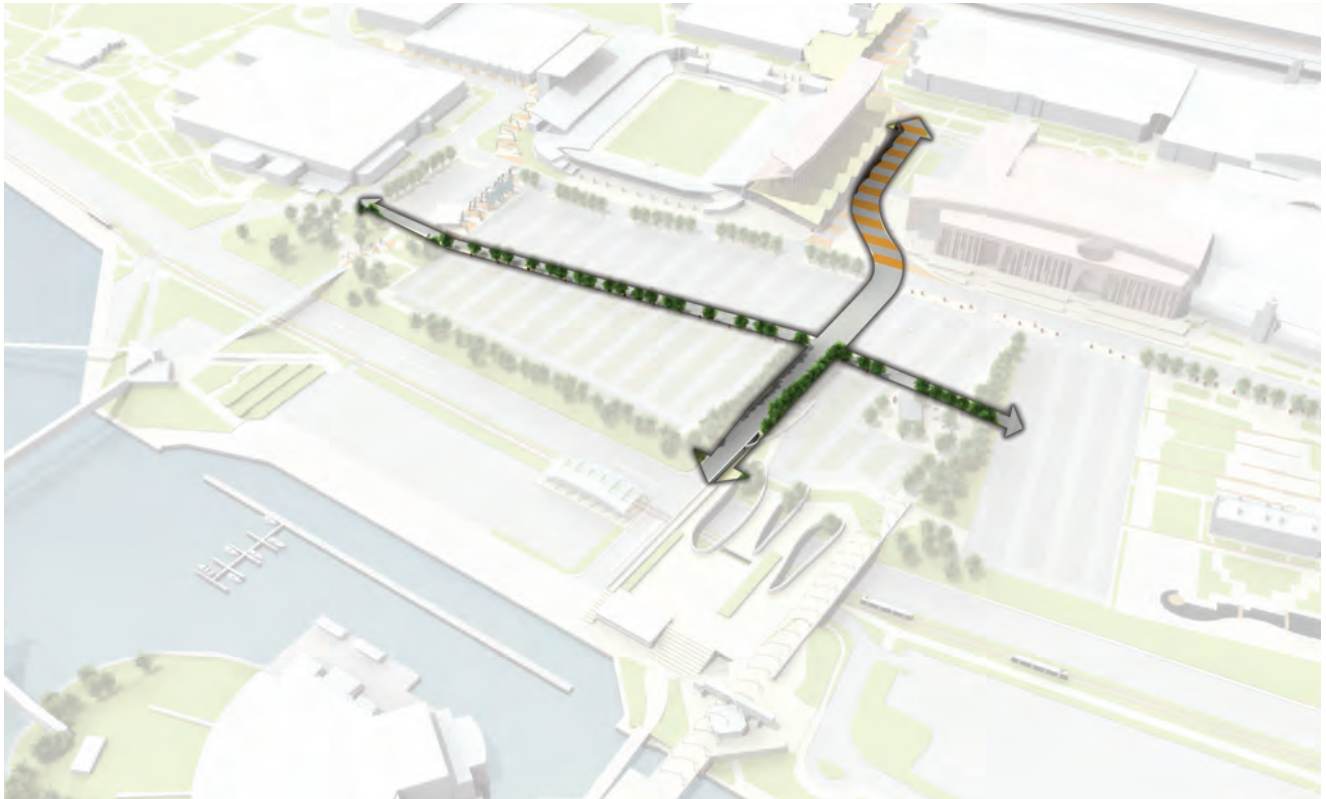
The permeable asphalt will retain, collect and pre-treat stormwater, which will then be piped underground into a stormwater retention pond southeast of the site. The retention pond could be incorporated into the future hotel site.



Parking: capacity and wayfinding

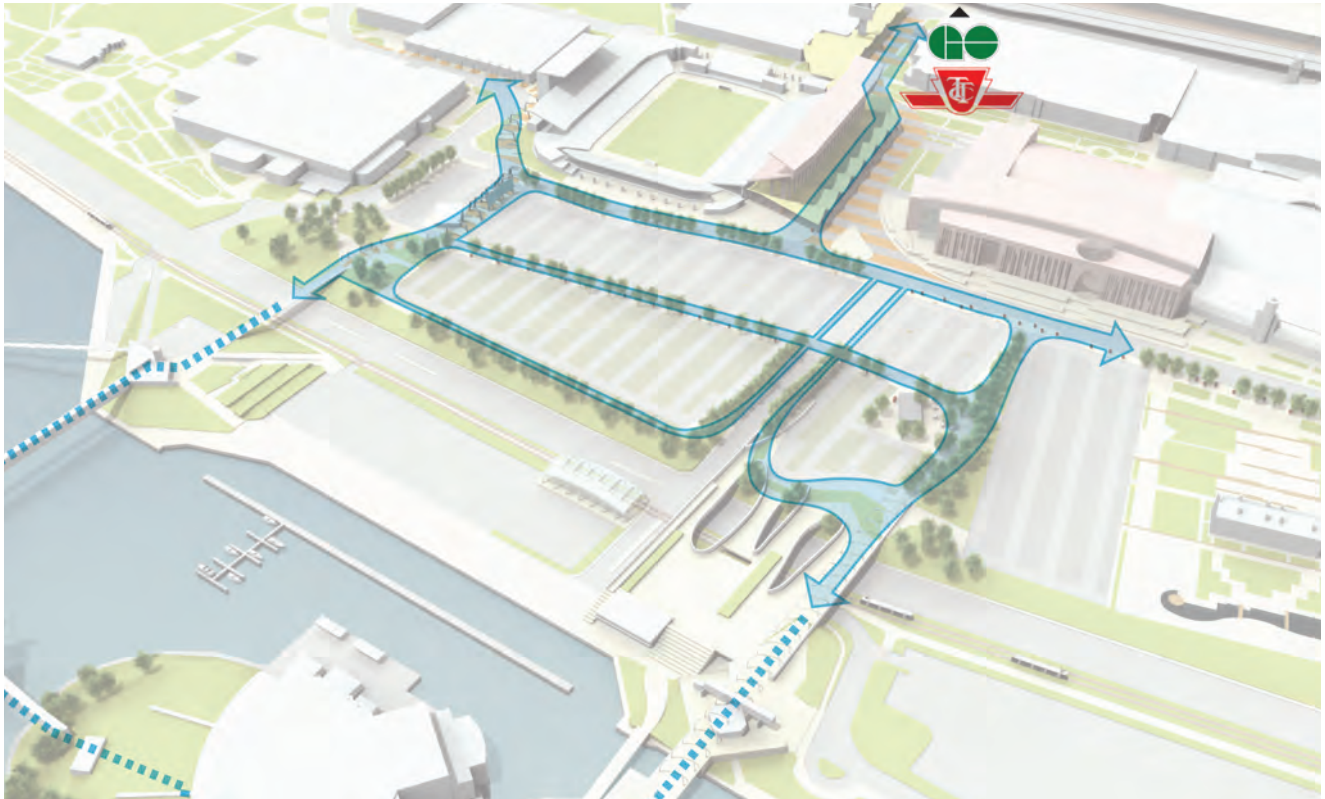
Efficient and easily navigated parking will be partly achieved by realigning it from an east-west orientation to a north-south orientation. In combination with adequate wayfinding aids, realigned parking will create a more easily navigated space and reduce the reliance on temporary barriers and gates. In addition, a north-south parking orientation will allow for efficiencies in lighting, which will be a critical consideration for wayfinding and, more importantly, safety.

The realigned parking will provide approximately the same amount of parking stalls as are currently provided.



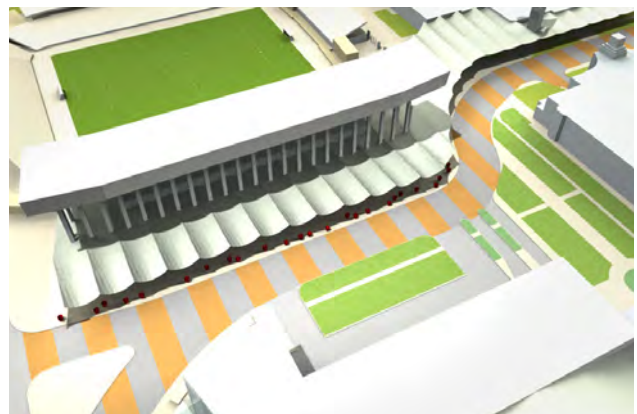
Automobile routes: East-west spine, Nova Scotia Avenue & Nunavut Road

In order to provide easily navigated automobile routes in and out of the site, Festival Plaza will have an east-west spine through the centre of the plaza. The current southern exit will be realigned, anticipating the expansion of the Direct Energy Centre. North of Princes' Boulevard, a realigned Nova Scotia Avenue will replace Nunavut Road until its intersection at Princes' Boulevard. South of Princes' Boulevard, Nunavut Road will provide a straight route in and out of the site. The realigned roadways will aid in navigating the parking lot as well as providing clear demarcation between automobiles and pedestrians.



Pedestrian routes: spines, connections and canopies

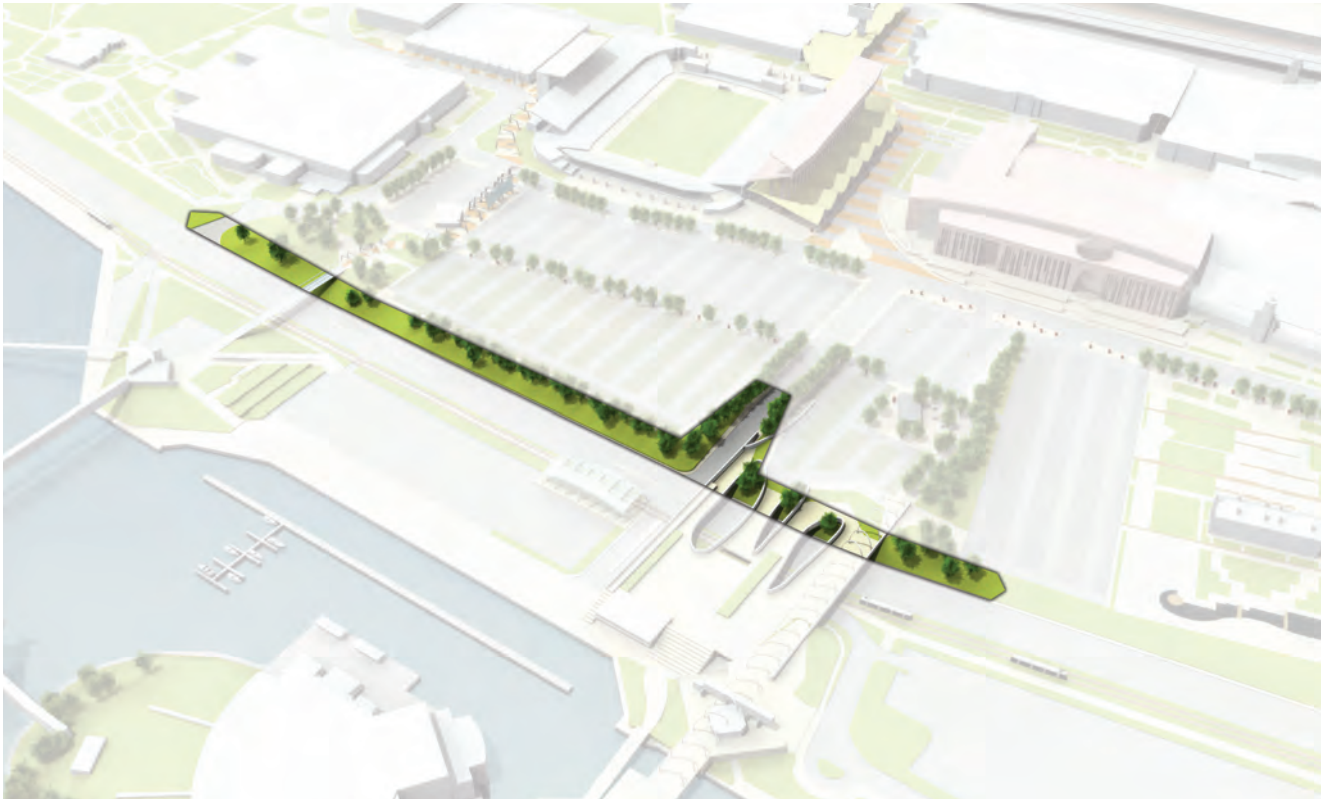
The success of Festival Plaza depends on its ability to provide pedestrians with ample and enjoyable connections throughout. In addition to the cross-plaza connections to Ontario Place, a weather-protecting canopy will link Princes' Boulevard to the GO and TTC stops. This northern connection will utilize the opportunity provided by the proposed expansion of BMO Field and create a covered walkway extending immediately east of the Food Building. The walkway will be approximately 10 metres high and will draw pedestrians from both transit stops south into all of Festival Plaza's activities.





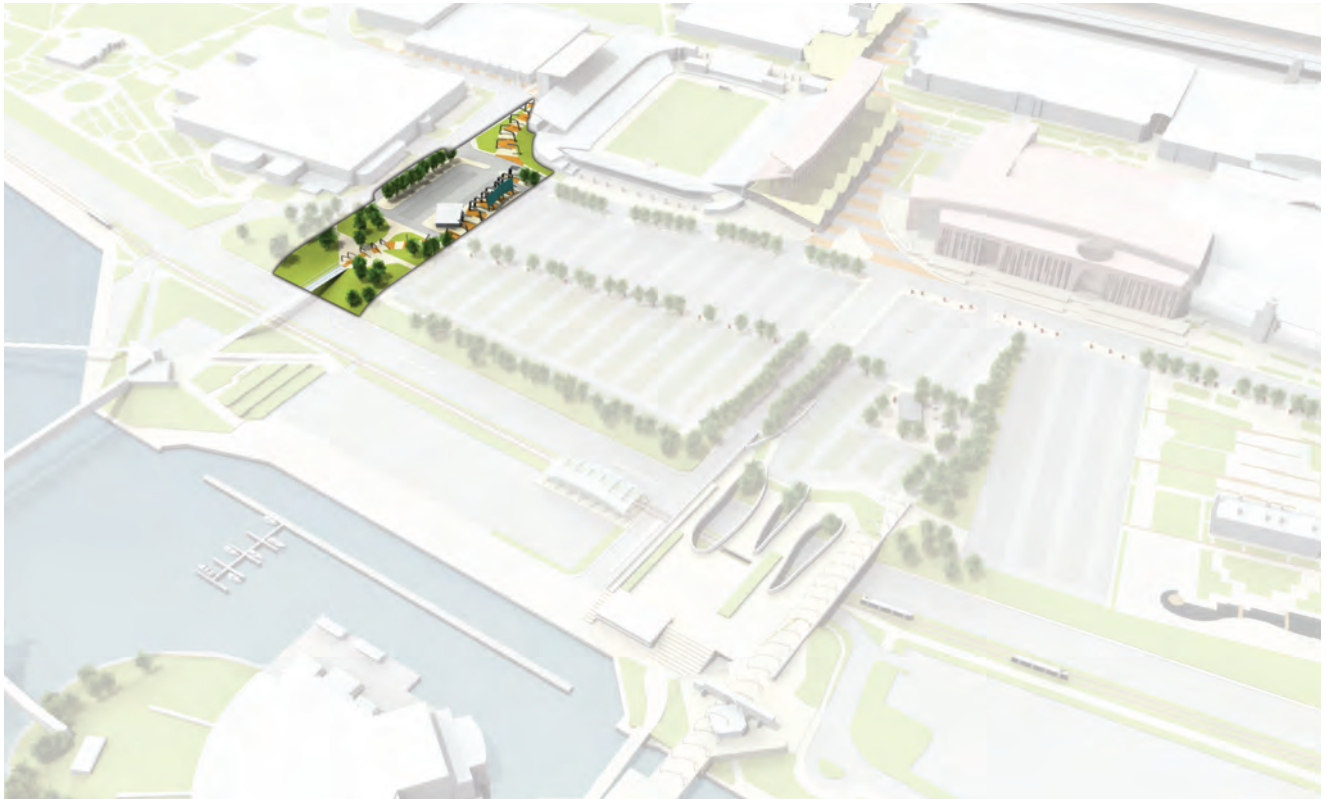
Landscape

Exhibition Place is known for its commitment to environmental sustainability. Festival Plaza will continue to demonstrate that commitment to the public. Wherever possible, pedestrian connections through the site will be shaded by well-planted trees. The eastern, western and southern edges of the Plaza will be well landscaped. The northern edge, along Princes' Boulevard, will retain and add to the existing trees, providing a consistent, tree-lined boulevard between the Princes' Gates and the western edge of Festival Plaza. The existing east-west vehicular route through the plaza will be realigned and a landscaped and treed strip will be introduced to facilitate pedestrian connections. This centre spine may also be used to provide stormwater runoff mitigation from the northern half of the site.



Southern Edge: landscaping

The 3-metre bluff along the south side of the site will continue to provide a landscaped buffer between Festival Plaza and Lake Shore Boulevard. The pedestrian walk along the top of the escarpment will remain, providing a shaded pedestrian link between the eastern and western edges of the site.



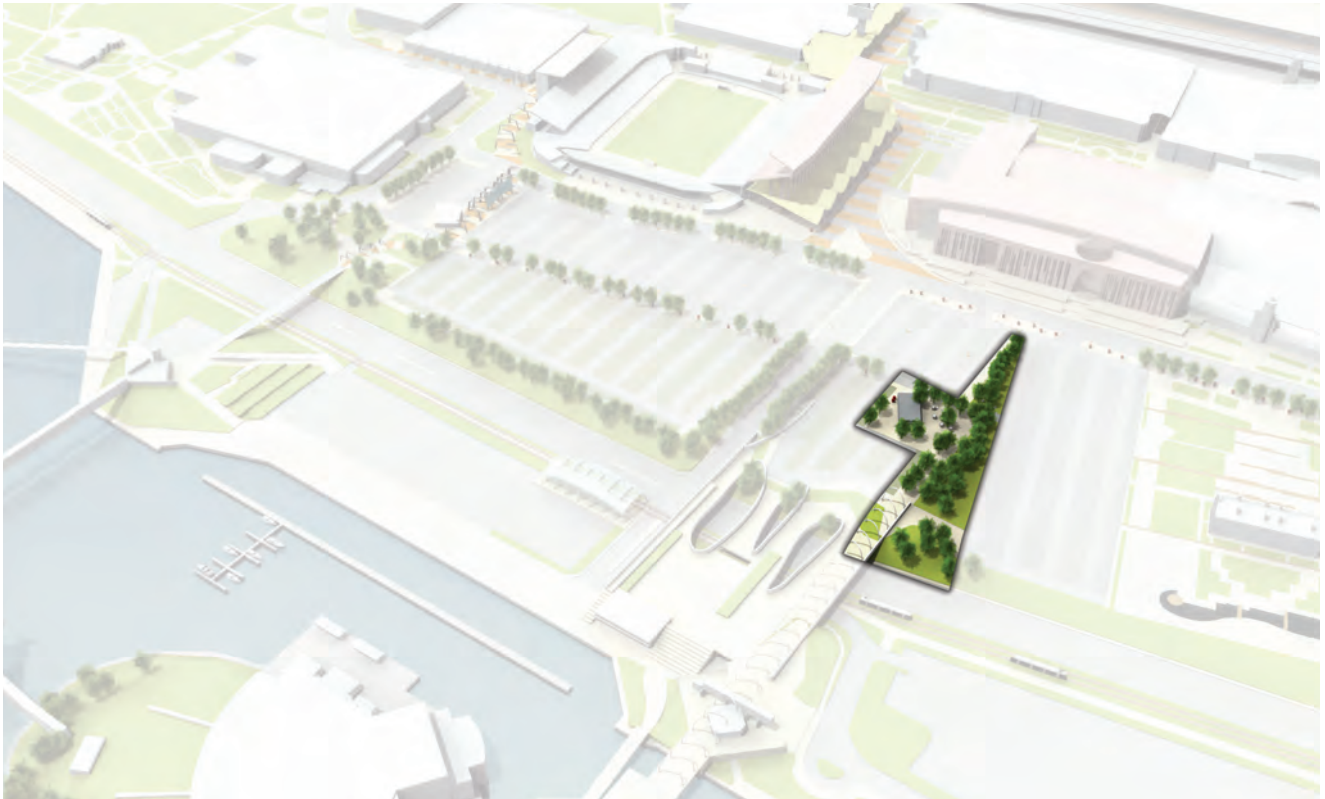
Western Edge: landscaping, screen and amenity area

At the visual terminus of Princes' Boulevard, the western edge of Festival Plaza will be well landscaped and provide a clear pedestrian connection from BMO Field and the TTC/GO link to the bridge to Ontario Place.

Marking this connection and masking the east loading docks of the Better Living Centre, a public art screen will provide shade and wayfinding for pedestrians. The screen may incorporate programmable LED lights, which would serve a variety of purposes, from wayfinding to advertising to light-displays.



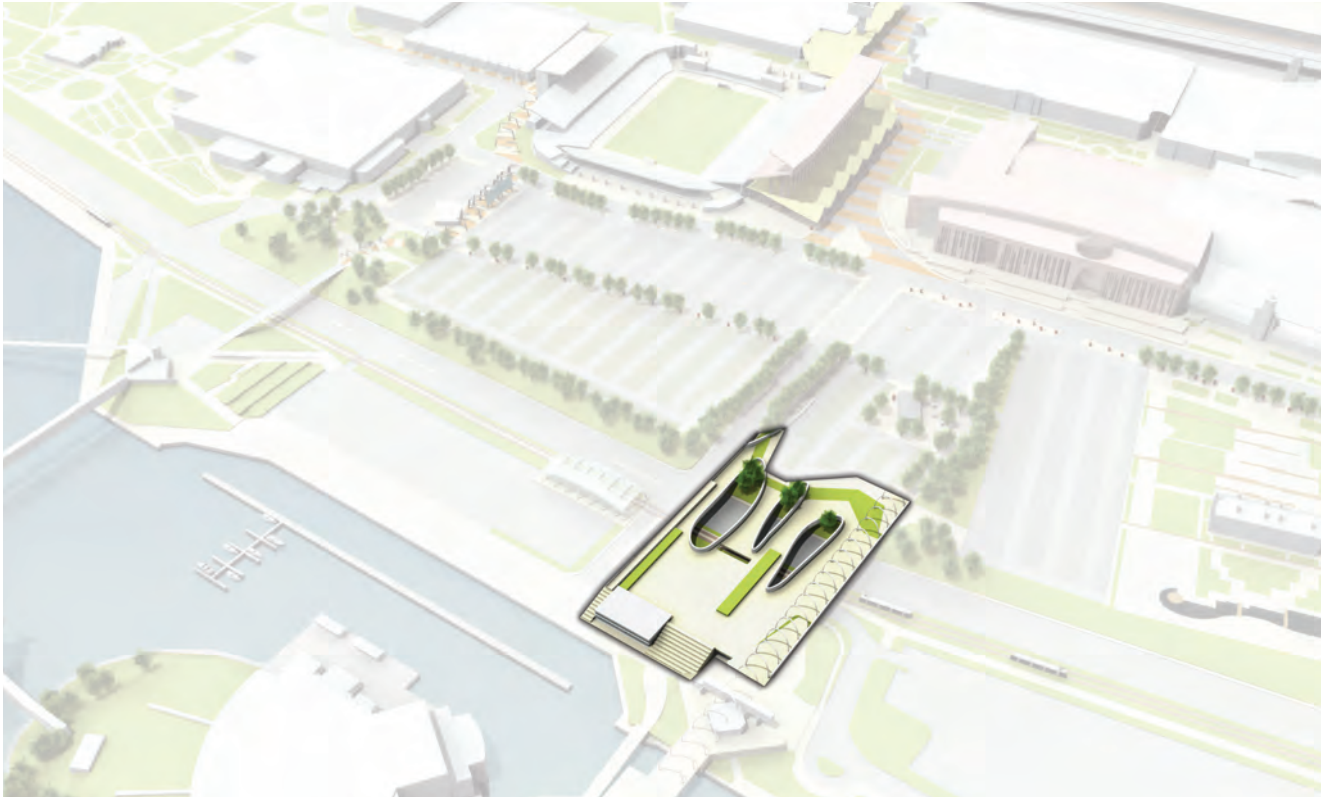
The existing electrical substation will be integrated into a washroom facility and will be able to provide the servicing base for a temporary stage, if one is needed for large events.



Eastern Edge: landscaping and amenity area

The eastern edge of Festival Plaza will provide a mirror of the amenity area along the the plaza's western edge. Until the development of Phase 2 of the hotel site immediately east of the plaza, the realigned parking on the site provides an opportunity to create a generously landscaped 'finger' and accentuate the existing pedestrian connection between the bridge to Ontario Place and Princes' Boulevard. The existing substation will be incorporated into a service amenity, which will provide Exhibition Place the opportunity to incorporate food and beverage kiosks into Festival Plaza as well as adding more services and washrooms to the site.





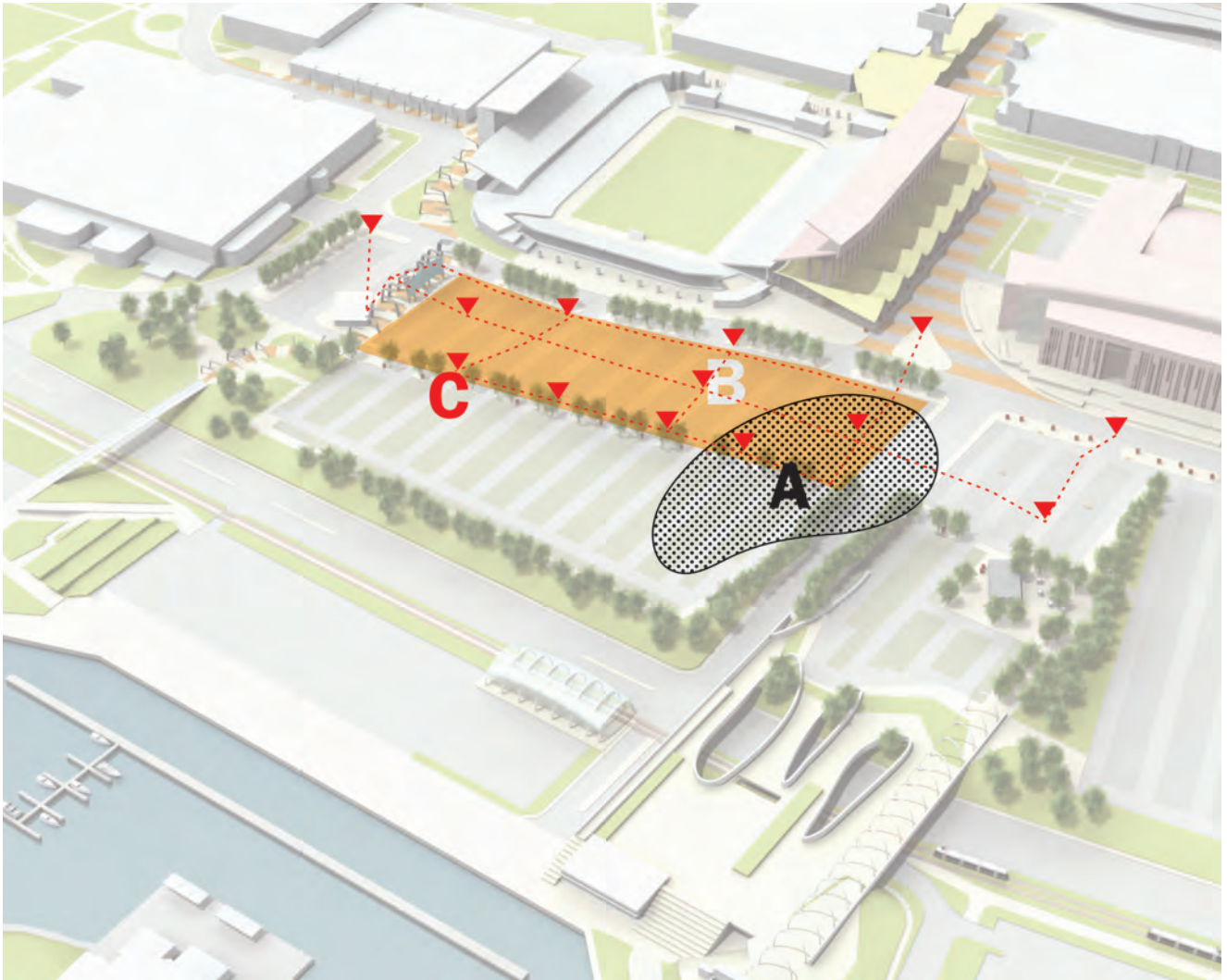
Land Bridge

A prominent feature of Festival Plaza will be the land bridge linking it to Ontario Place. This generously dimensioned land bridge will mark the real connection between the two sites. The bridge will become an important focus for both Exhibition Place and Ontario Place and provide a feature around which new development on both sites can be planned and setting up an easy pedestrian, transit and vehicular coordination between them.

Next Steps:

Pre-Pan Am and Parapan Am Games

The following section describes the priorities for Festival Plaza in order to prepare the site for staging the Pan Am and Parapan Am Games in 2015. The critical first elements for the next three years are to level the event surface on the northern half of the site; provide landscaping, public amenities and washrooms along the western edge; and realign parking throughout the site.



Level Event Surface

The most immediate solution to leveling Festival Plaza will be to fill the depression east of the grandstand of the former Exhibition Stadium. It may be necessary to level all of the depression shown in area 'A', as well as parts of area 'B' to achieve the desired grade and run the required conduit. Using Princes' Boulevard as a baseline elevation, the depression should be filled to raise it to the same level with a slight grade down toward the southern edge of the plaza, directing stormwater runoff south toward the landscaped spine proposed to run east-west through the centre of the plaza.

In order to provide the most flexible space possible for hosting events, Festival Plaza will lay security and IT cable as well as two east-west runs of 6" conduit and 600V electrical cable. Empty 6" conduit will be laid north-south every 150 metres in order to allow temporary cable to connect to the east-west runs. The appropriate number of handholds will be installed along these north-south connections to efficiently run cable. It is likely that partial excavation of the footings will be needed in order to lay the empty conduit.

Priorities

- A) Fill the depression east of the footings to the height of Princes' Boulevard
- B) Regrade and resurface the northern half of the site (robust surface)
- C) Lay 6" utility conduit, 600V electrical cable, IT and security cable, and new handholds (as illustrated)



Western Edge

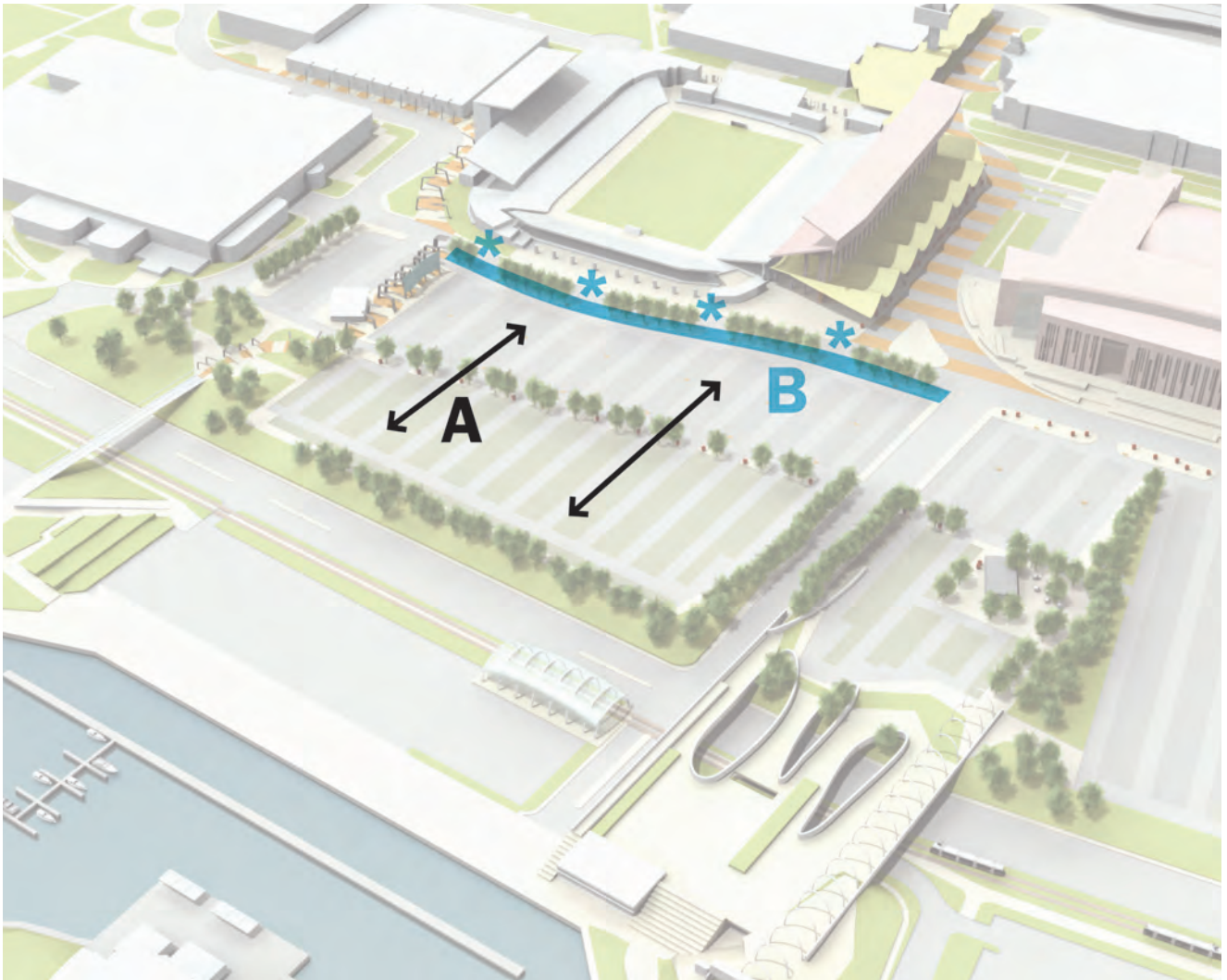
The western edge of Festival Plaza is currently formed by the service-end of the Better Living Centre and is the visual terminus of Princes' Boulevard. In the longer-term, a series of public art screens/shade would provide an improved visual terminus for Princes' Boulevard while simultaneously providing shade for pedestrians along an enhanced north-south pedestrian corridor. These screens could incorporate LED lights.

In the short term, the existing structure 'A' on the western portion of the site, an electrical substation, will form the base for a 'service and amenity kiosk', whose primary role will be to provide much-needed washrooms on an interim basis and as an electrical 'plug-in' for a possible adjacent, temporary stage. The final structure would be an architecturally significant building – one that creates a visible and attractive destination along the western edge of the plaza.

As well as providing amenities, the western edge will provide a high-quality landscaped north-south connection between Princes' Boulevard and Ontario Place, enhancing the existing pedestrian link. Well lit and generously treed, the connection will frame the western edge of the site and begin to provide an important visual reference for fair attendees.

Priorities

- A) Construct an interim washroom/service facility around the existing substation
- B) Enhance the pedestrian walkway connecting Princes' Boulevard to the westerly bridge to Ontario Place
- C) Landscape and plant trees along the pedestrian walkway
- D) Provide adequate lighting for the pedestrian walkway



Parking and Wayfinding

Parking stalls are currently laid in a north-south orientation, with connecting roads running east-west through the site. The new Festival Plaza parking will orient stalls east to west allowing better north-south pedestrian and vehicular circulation. Along the northern edge of the site, a rolled curb condition with an associated well-treed pedestrian walk should be created to help produce an enhanced streetscape along Princes' Boulevard. The curb should be interspersed with appropriately spaced entrance and exit points into the realigned parking to the south.

The new parking lot will incorporate wayfinding aids, which may include painted numbers or colours on the surface of the asphalt. The existing Cube Pole light standards may be kept, although their location may be changed to provide adequate lighting throughout the parking lot.

Priorities

- A) Reorient parking stalls to have an east-west orientation with north-south access roads
- B) Create a curbed and treed pedestrian condition along the northern edge of the plaza site with appropriately spaced entrances/exits into the parking lot
- C) Re-locate existing light standards, as needed

Cost Assumptions and Phasing

The phasing for the implementation of the pre-Pan Am priorities is based on an understanding of an available budget amount of approximately \$2 million. The cost items identified below attempt to cover the priorities of the Pre-Pan Am phase, but more detailed cost assessments should be undertaken at the time of tendering the indicated work. Current best estimates suggest a budget of approximately \$3 million may be required.

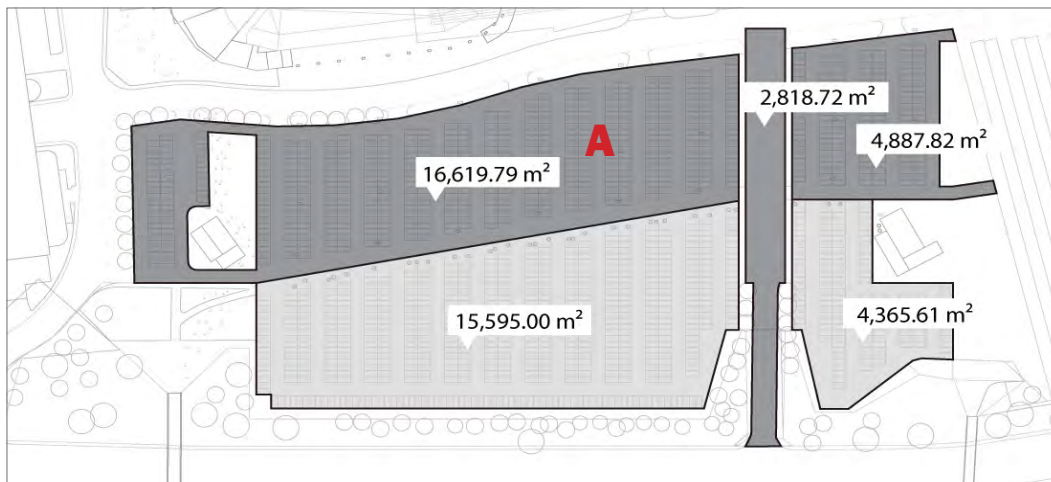


Figure 1:
hard surface areas

Priorities

A) Regrading the northern portion of the site: **\$1.8 million**

The north portion of the site has an area of approximately 16,620 sq.m. For this area to be level, there would likely be three different steps involved: asphalt removal, cut and fill, and laying new asphalt. Key cost assumptions for these three steps are: \$5/m² for asphalt removal; \$20/m³ for 'cut and fill'; \$10/m² of surface grading; and \$45/m² for new asphalt. To arrive at the total cost, the area of the entire Parcel 'A' was taken into account (Figure 1). The critical variables of this cost analysis are: a) the area required for 'cut and fill', and b) the depth at which the 'cut and fill' must occur. For the purpose of this costing exercise, we have assumed a 1 metre 'cut and fill' will occur throughout parcel 'A'. Changes in either the area or depth of 'cut and fill' will affect the overall cost of the leveling and resurfacing. This is the largest single budget item and refinement of the necessary scope should be undertaken at the time of tendering.

B) Servicing the northern portion of the site (conduit, potable water, sanitary & lighting): **\$630,000**

From consultations with Exhibition Place staff, it is likely that there will need to be approximately 490 metres of conduit and 600V cable laid, with an additional 401 metres of empty conduit for the north/south connections. 10 new handholds will be required to access the conduit. The cost assumption for this is based on: \$30/m of 6" duct, \$105/m for 600V cable and \$2,000 per handhold. With respect to potable water, there will need to be approximately 345 metres of pipe laid, with 10 handholds. Each linear metre of potable water piping costs approximately \$100/m and each handhold costs approximately \$2,000. The cost for sanitary piping is approximately \$200/m, and it is estimated that the site would need approximately 345 metres of piping. In addition to the pipe, 10 sanitary chambers, to temporarily contain hold waste from recreational vehicles, would be required at a cost of \$4,000 each. Lighting costs are

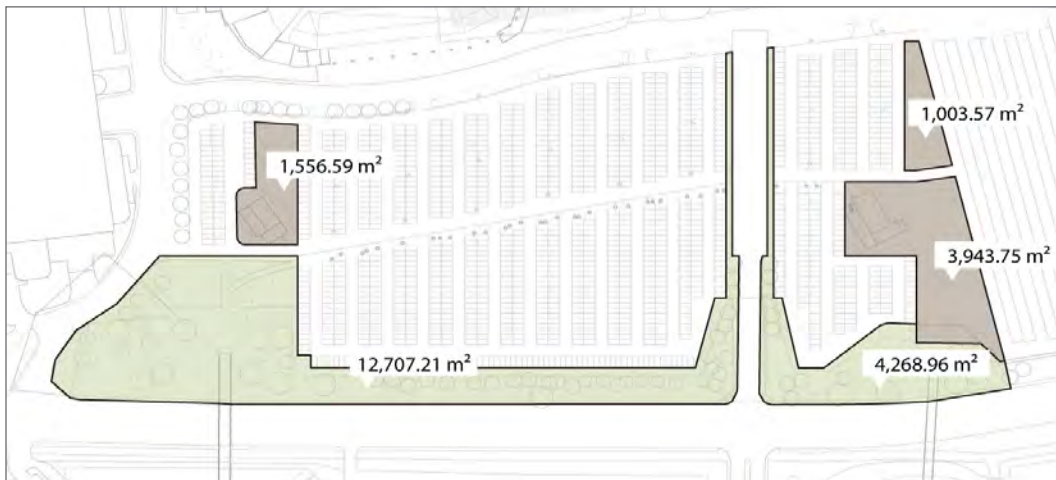


Figure 2:
potential landscaping areas

assumed at approximately \$20,000/light, which includes the standard, base and necessary conduit, wire and control allotment. The site will require 12 new standards. Connection for line voltage and future data requirements is estimated to cost \$10,000, which would bring the total cost of lighting to approximately \$250,000. A critical assumption in this cost estimate is the reuse of existing manholes and hydrants. Should new manholes be needed, their cost would be approximately \$5,000 each, whereas hydrants would cost approximately \$6,700 each.

C) Landscaping (landscape and trees):

Allowance of **\$200,000**

The extent and quality of required landscaping is highly flexible. This Pre-Pan Am budget therefore sets an allowance for landscaping which can be adjusted according to available funds. This allowance would be adequate to provide a good landscape environment in the

key locations; at the western edge of the plaza, around the washroom amenity facility, and along the pedestrian walkway on Princes Boulevard. With respect to cost assumptions, new trees cost approximately \$2000 each, presuming that irrigation is already nearby. Landscaping costs are assumed at approximately \$15/m².

D) Washrooms (western substation): **\$400,000**

The cost estimates for washroom facilities to the western sub-station are almost entirely reliant on the degree to which the building itself is designed and built. The basic costs assumptions are approximately \$45,000 for addressing security requirements, \$25,000 each for connections to potable water and sanitary, and an additional \$5,000 for electrical connections, bringing the total base cost to \$75,000. A straightforward washroom block of approximately 20 stalls is anticipated to cost \$300,000.



Festival Plaza has the potential to become a significant public asset for Toronto as well as providing a platform for a collaborative and unique partnership with Ontario Place. Dividing the implementation of the master plan into two specific phases will allow Exhibition Place to address significant challenges on the site in anticipation of the Pan Am and Parapan Am Games and set the foundation for future enhancement of the site. The presentation of Festival Plaza to the world through the 2015 Games will provide ample momentum for the completion of the remainder of the master plan. Over time, the master plan will guide the revitalization of Festival Plaza and direct the development of an innovative and sustainable public asset on Toronto's waterfront.