



## **Staff Report for DDO Park Project Steering Committee**

**Date of Meeting: October 30, 2023**

**Report Number: SRIES.23.007**

**Department: Infrastructure and Engineering Services**

**Division: Infrastructure Delivery**

**Subject: Richmond Hill David Dunlap Observatory Park  
Project Update**

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### **Purpose:**

To provide an update on the status of the Richmond Hill David Dunlap Observatory Park.

### **Recommendation(s):**

- a) That Staff Presentation and Staff Report SRIES.23.007 regarding Richmond Hill David Dunlap Observatory Park Project update be received;
- b) That the site servicing, panhandle works and parking lot be combined with the 16th Avenue entrance feature and Elvis Stojko Arena parking lot rehabilitation and that staff proceed with the construction in 2025;
- c) That the Radio Shack Building be decommissioned and a heritage plaque installed to commemorate its Cultural Significance.

### **Contact Person:**

Bob Levesque, Director, Infrastructure Delivery, extension 2947

### **Report Approval:**

**Submitted by:** Paolo Masaro, Executive Director of Infrastructure and Engineering Services

**Approved by:** Darlene Joslin, City Manager

All reports are electronically reviewed and/or approved by the Division Director, Treasurer (as required), City Solicitor (as required), Commissioner and City Manager. Details of the reports approval are attached.

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### Background:

**The implementation of the “Early Priorities” continues with the design of the pedestrian bridge and construction is anticipated to commence in 2024.**

Staff are actively progressing with the design and implementation of the pedestrian bridge, with construction slated to start in 2024, aiming for completion by Q4 2025. The fundamental goal of this infrastructure is to improve active transportation connectivity, enhance accessibility within the community, and provide a safe connection for pedestrians/cyclists to access between RHDDO Park on the east side of the CN Rail corridor and Observatory Lane and Yonge Street on the west side. The Yonge Street and Carville Road/16th Avenue KDA is an intensification area and a major node of retail and commercial development on the Yonge Street Regional Rapid Transit corridor that will benefit from this pedestrian-orientation connection to the RHDDO.

The Government of Canada is investing \$3,180,000 in this project through the Active Transportation Fund (ATF), which awards funds to make active transportation easier, safer and more convenient in support of Canada’s National Active Transportation Strategy.

**The multi-modal transportation operations analysis for the RHDDO Park has been completed and resulted in a number of pedestrian, cyclist, and transit network recommendations.**

The study included the required auto, pedestrian, cyclist, and transit network improvements. Additionally, a Parking Study was conducted to project the anticipated parking demand of all proposed land uses and recommend parking provisions while maximizing the park’s open space and promoting the City’s green initiatives related to reducing single occupant vehicle travel.

Traffic analysis revealed capacity issues at key intersections like Yonge Street at Carville Avenue / 16th Avenue and Bayview Avenue at 16th Avenue, impacting east-west and north-south traffic flow due to capacity limitations. The RHDDO Park development is expected to increase traffic volumes by up to 5% at these intersections. Other signalized intersections performed well in various scenarios, while un-signalized intersections operated efficiently, except for minor delays at the Southern RHDDO Park access and the Hillview Drive at Bayview Avenue intersection in the 2032 future total horizon. Sensitivity analysis indicated that the Sixteenth Avenue Public School access can manage overflow traffic from RHDDO Park, and proposed measures, including an eastbound right turn lane at Hillview Drive, alleviate delays.

The multi-modal transportation operations analysis resulted in a number of pedestrian, cyclist, and transit network recommendations, including proposed pedestrian crossovers, sidewalks, shared and signed bike routes, transit route modifications, and more.

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### **The study recommends parking supply based on anticipated vehicle and bicycle parking demands associated with park development.**

The study found that, upon full development of the RHDDO Park, 298 parking spots would meet the average daily parking demand during the most active season. However, the proposed expansion and maintaining the existing parking spaces would result in 234 on-site parking spaces. Despite the overall deficit in on-site parking given the unconstrained demand, the priorities of the park's stakeholders include maintaining green space and valuing sustainability. Residual capacity given the varied timing of park uses is available during different times of the year.

During the busiest period from May to September, especially on weekends, on-street parking within a 400-meter walking distance from park entrances can accommodate high demand for the picnic area and amphitheater. Additionally, there are 128 parking spaces at the Elvis Stojko Arena, primarily designated for arena-related use. It is recommended to proceed with the proposed 234 parking spaces to align with the park's broader development goals.

To meet the demands of proposed land uses and promote sustainability, it is suggested to provide 60 bicycle parking spaces throughout the park, including accommodations for e-bikes and e-scooters in each set of bicycle parking stalls. The study recommends ongoing monitoring of on-site and on-street vehicle and bicycle parking demand as the city's sustainable transportation network evolves. Resident-only parking permits or paid on-street parking could be introduced if needed to encourage sustainable transportation modes over time.

### **Consolidating the remaining Panhandle projects with the 16th Avenue Entrance, and Elvis Stojko Arena parking lot rehab into one coordinated assignment offers opportunities for streamlined design, traffic enhancements, conflict prevention, and potential cost savings.**

Following direction from council to pause the delivery of a community Pickleball hub as per staff report SRPI.23.063, has allowed for a reassessment of the delivery of the remaining panhandle works, marking a shift from medium-priority to an early-priority project to implement the site servicing required for future park facilities and amenities. .

The remaining works include the site servicing, a multi-use path, an access road and new parking lot in addition to a new 16<sup>th</sup> Avenue Entrance feature and the reconstruction of the Elvis Stojko Arena parking lot.

As such, Staff explored four alternatives for completion of the remaining Panhandle works. The alternatives include proceeding with all works, delaying the site servicing and panhandle works to combine with a future assignment, installing site servicing only or a portion of the site services. The reevaluation suggests transitioning the Panhandle Lands project into an early priority, aligning it with the 16th Avenue Entrance and Elvis Stojko Arena parking lot rehabilitation.

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**Table 1: Delivery of Remaining Works within Panhandle Lands**

<b>Alternative</b>	<b>Description</b>	<b>Comments</b>
1	<b>Bundle all Remaining works for Construction in 2025</b>	<b>Construct site servicing, panhandle access road, parking lot and MUP in conjunction with Elvis Stojko arena parking lot rehabilitation and 16th Avenue entrance feature in 2025.</b>
2	Proceed with Site Servicing and Panhandle access road	Complete tree removals, earthworks and construct site servicing, panhandle lands access road, parking lot and MUP.
3	Proceed with Site Servicing Only	Install site servicing only from 16th Avenue to RHDDO
4	Proceed with a portion of Site Servicing	Install site servicing from 16th Avenue to north end of Elvis Stojko Arena Parking Lot

An assessment of the options confirmed Alternative 1 being the most preferred.

This combined approach enhances coordination for design and construction, unlocking economies of scale and potential cost savings. Moreover, it allows for a comprehensive site plan application for the Panhandle works, in sync with proposed improvements at the 16th Ave Entrance and Elvis Stojko Arena Parking lot. This holistic strategy also explores traffic circulation enhancements, minimizes conflicts, and safeguards previously completed works. It retains the Panhandle access road alignment along the western boundary, preserving space for a future Sports Facility with specific uses outlined in future studies.

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**Figure 1: Site Servicing, Panhandle Access Road, Parking lot, Entrance Feature**



### Radio Shack Building status

The Radio Shack Building which is identified as a heritage attribute and forms part of the cultural heritage value of the property is described in the David Dunlap Observatory Building Conditional Assessment report as being in very poor condition and in a state of disrepair. Given the disrepair, the report confirms that the floor, wall, and ceiling finishes are not salvageable. The designated substance and hazardous materials survey identified that the interior wallboards, vinyl floor tiles and caulking applied throughout contain asbestos. From a conditional assessment point of view, given the significant disrepair, the consultant's recommendation is to decommission the building. The Radio Shack importance will be recognized and commemorated by a site design feature and plaque.

### Pump House Building status

The Pump House is not identified as a heritage attribute and was not included in the David Dunlap Observatory Building Conditional Assessment. A review and evaluation of the pump house will be required as part of a future assignment to determine the viability of restoring and repurposing the pump house as a mechanical and / or electrical building in a future assignment.

Staff will report back in 2024 on the various options available regarding the pump house building following further evaluation and consultant study.

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Meanwhile, staff have taken measures to safeguard both buildings, including boarding up access points and installing fencing around the radio shack. Regular inspections are conducted to ensure the structures remain protected in the interim.

**Solar power options was explored and it was concluded that implementing solar technology at the David Dunlap Observatory Park is not recommended.**

The project team explored four options as a way to make a positive impact on the environment. The option evaluated include solar stations on the hillside, solar roof on the fieldhouse, solar carports, and renewable energy credits (REC). The solar panel carports would cover 14 parking spaces, which is approximately 16%, of the 86 parking spaces in the panhandle parking lot. The number of spaces being 14 were selected as they match the number of planned electric vehicle charging stations.

All options were assessed based on their order of magnitude capital costs, estimated annual energy production, savings, pros and cons, and expected payback periods.

**Table 2. Solar Technology Feasibility Options Summary**

<b>Option Description</b>	<b>Capital Costs</b>	<b>Annual Energy Production</b>	<b>Savings</b>	<b>Expected Payback Period</b>
<b>Solar Station on Hillside - 65kW Solar Station on South Hillside</b>	\$390,000.00	93,600 KWH/year	\$12,168.00 annually	32 years
<b>Solar Roof of Fieldhouse - 65kW Solar Station on Fieldhouse Roof</b>	\$295,000.00	90,600 KWH/year	\$11,935.00 annually	25 years
<b>Solar Carport - 65kW Solar Carport over 14 parking spaces</b>	\$540,000.00	74,750 KWH/year	\$9,847.00 annually	54 years
<b>Renewable Energy Credits - Purchase of Renewable Energy Certificates</b>	Alectra Hydro Costs + \$2,500.00 annually	N/A	Does not require special equipment or wiring	N/A

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After a comprehensive review conducted by the city consultant and project team, it has been determined that implementing solar technology at the David Dunlap Observatory Park is not advisable. The reasons for this include the high upfront capital cost, ongoing operational costs, and a lengthy payback period attributed to the small-scale energy savings.

The City will continue to implement its Sustainability metrics program, allocating funds toward improving the efficiency of fixtures, features, and equipment planned for this project.

### **Phase 3 of the ecological restoration project has commenced.**

In August 2023, the Toronto & Region Conservation Authority (TRCA) working on behalf of the City commenced Phase 3 of the ecological restoration project, which will consist of meadow creation and woodland restoration.

The meadow creation activities that will restore 1.22 hectares of meadow will include site preparation including mowing, tilling, and oat seeding, wildlife habitat feature installations, invasive plant management followed by seeding with native grasses and pollinator wildflower species. Ongoing management will include maintenance mowing and invasive plant management.

The woodland restoration activities will create 1.8 hectares of woodlot and includes hazard tree removals, invasive plant management, tree planting and installation of fencing and tree shelters to protect newly planted trees from damage by browsing deer and wildlife.

To date the initial two phases of ecological restoration has planted more than 10,000 trees and shrubs and fencing has been installed to protect the newly planted trees from browsing deer.

### **A review of the sequencing and costing of the ‘Early and Medium Priority’ projects was conducted to better inform the 10 year capital forecast.**

The City saw a significant increase in project tender bid prices in 2023. The increase in costs is mainly a result of inflationary pressures and continued market supply chain issues. With the considerable financial commitment required for the implementation of the RHDDO Park, a review of the project assignments and cost estimates was undertaken to better reflect the current economic situation.

Table 2 and 3 below summarizes the updated project assignment groupings, costing and anticipated timeframe for the implementation of RHDDO Park elements.

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**Table 3: 'Early Priority' Progress**

<b>Project/Activity</b>	<b>Status</b>
Update RHDDO website and landing page	Completed
Restoration of Observatory and Administration Building	Completed
Administration Building - Water Supply Improvements	Completed
Assignment 1 - Interim Trails	Completed
Assignment 2 – Multi-use Path and Nature Trails	Completed
Woodlot Restoration Phase 1 (multiyear implementation)	Completed
Cultural and Recreational Programming in-person and virtual	Ongoing
Woodlot Restoration Phase 2(multiyear implementation)	Ongoing
Woodlot Restoration Phase 3 Restoration Plan Development	Ongoing
Assignment 3 – Observatory Lane Pedestrian Rail Overpass	Ongoing

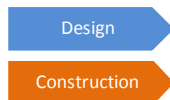


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**Table 4: Anticipated timeframe for current and ‘Early Priority’ implementation**

Projects	2024	2025	2026	2027	2028	2029
<b>RHDDO Consultant Services</b> Miscellaneous works and PM services						
<b>RHDDO Assignment 3</b> Observatory Lane Pedestrian Rail Overpass						
<b>RHDDO Assignment 4</b> Site Servicing Panhandle Access Road with Multi-use Path and Panhandle Parking Lot						
<b>RHDDO Assignment 5</b> 16th Ave. Entrance including entry element Elvis Stojko Arena Parking Lot Restoration Hillsview Drive Entrance Eastern Entrance (DDO Parkette)						
<b>RHDDO Assignment 6</b> Washroom Facility Playground and Water Feature Element Great Lawn						
<b>RHDDO Assignment 7</b> Picnic Area and Covered Pavilions Observatory Parking Lot						
<b>RHDDO Assignment 8</b> Park Operations Maintenance Facility						

**Legend**



### Financial/Staffing/Other Implications:

**Future project assignments will be reviewed to find efficiencies.**

The implementation of the future phases of RHDDO Park will have an impact on the Cash-in-Lieu of Parkland Reserve Fund and the Outdoor Recreation Development Charges Reserve Fund. The approach to implementation of future projects is planned to be reviewed in 2024 to conduct an examination of the RHDDO Park implementation and phasing plan for opportunities to create further economies of scale and / or efficiencies. Staff to bring forward recommendations at a future Capital Sustainability Steering Committee Meeting.

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### **Alternative sources of funding.**

There are potential sources of funding available including grants or loans from senior government or agencies, private sponsorships or partnerships and community fund raising. Given the magnitude of the project and the number of elements allocated for the Park, financing will be a challenge.

Staff have and will continue to explore alternative sources funding as implementation progresses to assist in the implementation of the RHDDO Park such as the recently announced \$3,180,000 funding from the Federal Ministry of Intergovernmental Affairs, Infrastructure and Communities Active Transportation Fund. This funding will assist the City in the implementation of the Observatory Park Pedestrian / Cyclist Bridge and Recreation Trail.

### **Relationship to Council's Strategic Priorities 2020-2022:**

Ensuring fiscal responsibility is an important aspect of all projects especially long-term capital investments required to implement the RHDDO Park. The continual review of the park implementation costing and phasing to explore opportunities for cost savings and efficiencies is consistent with the Relationship to Council's Strategic Priorities 2020-2022 – **Fiscal Responsibility**.

The expansion of the trails within RHDDO Park and the future implementation of the pedestrian / Cyclist Bridge promotes a variety of recreational, educational and leisure experiences for residents of Richmond ensure a **Strong Sense of Belonging** and facilitates Getting around the City.

The preservation and enhancement of the natural areas is one of eight key principles in the Master Plan and is part of the long-term plan to restore the woodlands to a healthy forest. Natural Environment Staff are leading the works being undertaking which includes the removal of invasive species, dead and hazardous trees, planting of native trees and shrubs and invasive species management. This ongoing woodlot restoration project **Balances Growth and Green** by preserving and enhancing the natural areas within RHDDO Park.

### **Climate Change Considerations:**

The manner in which the City plans and designs parks and related facilities impacts the City's larger greenhouse gas (GHG) emissions and the City's vulnerability to the impacts of climate change. The 2022 Parks Plan approved by Council on June 22, 2022 provides direction for a climate change lens to be applied to the development and redevelopment of parks including facilities like those noted in this staff report. For example, understanding how best to design capital projects to integrate long-lasting materials and low-maintenance requires knowledge building and sharing. This approach ensures that the services and facilities RHDDO Park provide are integrate as a key component of a healthy, sustainable and resilient community.

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### **Conclusion:**

The Early Priority projects planned for implementation in the next few years are major components of the overall RHDDO Park and includes the pedestrian bridge, site servicing, park entrances, panhandle lands works, playground, water play element, picnic facilities, great lawn, washroom facility, Operations Maintenance Facility and additional parking.

To ensure the implementation is rolled out in a fiscally responsible manner staff will continually review the approach to implementation and phasing of the development of RHDDO Park elements to ensure it done in a financially sustainable manner.

Staff are recommending the implementation of the site servicing, panhandle drive and parking be combined together with the 16th Avenue Entrance and Elvis Stojko Arena Parking lot rehabilitation. This larger assignment package will target construction for 2025, which will provide time to explore opportunities to modify the traffic circulation within the arena parking lot, avoid conflicts and the potential of damaging completed works. In addition, combining the projects into one larger tender call provides opportunities for economies of scale and the potential cost savings.

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### Report Approval Details

Document Title:	SRIES.23.007 Richmond Hill David Dunlap Observatory Park Project Update.docx
Attachments:	
Final Approval Date:	Oct 18, 2023

This report and all of its attachments were approved and signed as outlined below:

**Bob Levesque - Oct 18, 2023 - 10:43 AM**

**Paolo Masaro - Oct 18, 2023 - 11:52 AM**

**Darlene Joslin - Oct 18, 2023 - 2:20 PM**