Parking Study
Ottawa Carleton Detention Centre
2244 Innes Rd, Ottawa, Ontario

Prepared for

Colliers Project Leaders Inc.
27 Place D'Armes, Suite 203. Kingston, Ontario, K7K 6Z6
Project 1079200-272455

Prepared by

Jp2g Consultants Inc.
Jp2g Project No. 20-5060A

September 23, 2022

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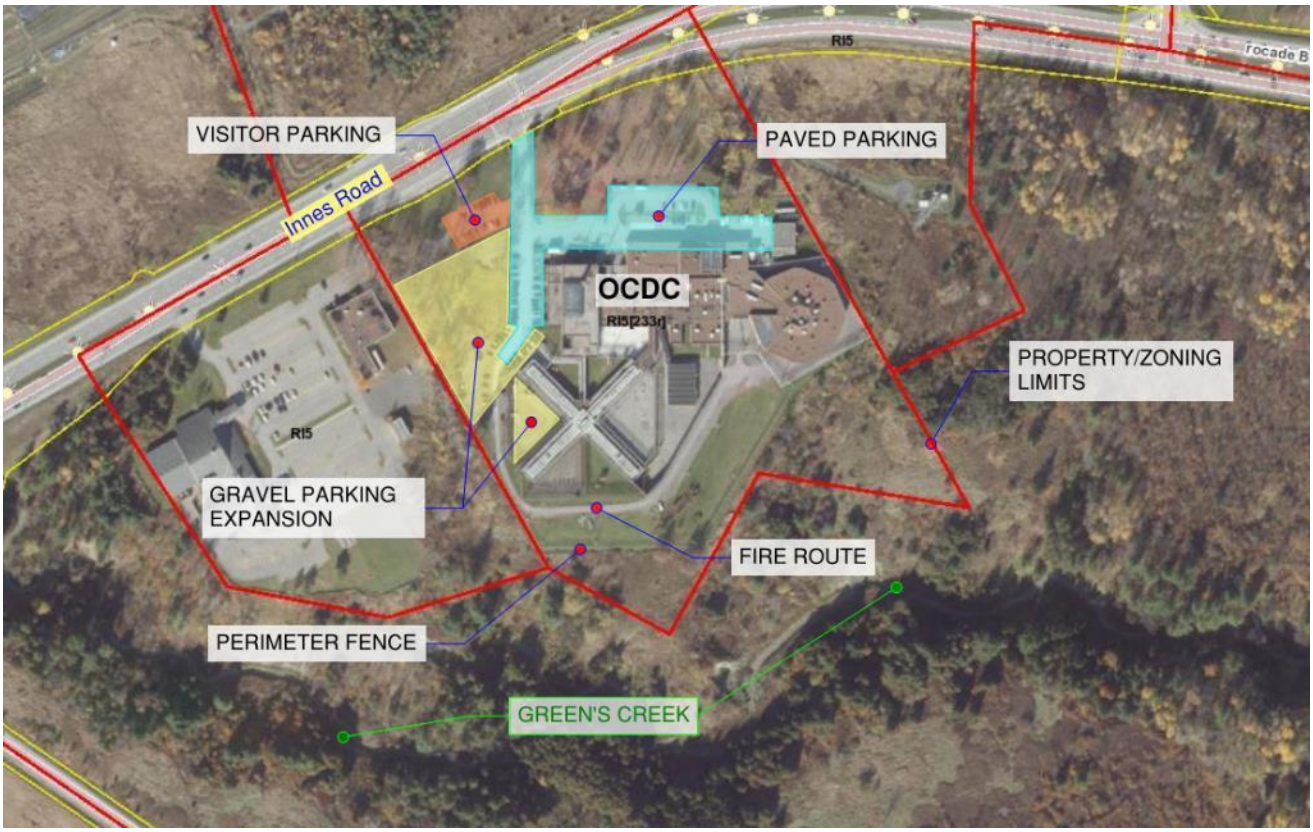
1 Introduction

1.1 Project Scope

Jp2g Consultants Inc. (Jp2g) was retained by Colliers Project Leaders, acting on behalf of Infrastructure Ontario (IO, OILC), to provide Pre-Design, Schematic Design, Design Development, Construction Documents, Construction Procurement, Construction Services and Construction Close-out for the Temporary Parking Lot Expansion project at the Ottawa Carleton Detention Centre (OCDC) located at 2244 Innes Road, in Ottawa. A Key Map is included below for reference purposes.

The Temporary Parking Expansion project includes the gravel areas which are currently used for parking overflow, the paved parking areas along the fire route on the west side of the building, and the visitor parking outside the perimeter fence. This Project Scope does not include the paved parking areas in front of the main facility, though are discussed in this Parking Study for background and context purposes.



Key Map

1.2 Project Issues

The available parking at the OCDC is insufficient for current staffing needs. Because of the insufficient number of staff parking spaces, staff overflow parking occurs in the irregular shaped gravel parking area east of the main building, and inside the perimeter fence, where parking spaces, traffic movement, and pedestrian facilities are not delineated, and vehicles are parked in an ad-hoc fashion around existing trees, landscaping, vegetation, and a central depressed area now considered to be a wetland.

1.3 Project Purpose

The purpose of the project is to develop a Design package in accordance with requirements from Infrastructure Ontario (IO), the National Capital Commission (NCC), and the City of Ottawa (City). The Design package is to include reports and documents necessary to support the proposed Temporary Parking Expansion, which includes this updated Parking Study.

Essentially, this project seeks to optimize the existing ad-hock gravel parking expansion with authorities having jurisdiction, in a safe, effective, and sustainable manner.

1.4 Previous Report

An Institutional Parking Space Study (September 27, 2018) for the OCDC was competed by Stephenson Engineering (Project No.: 20180784) and can be found in Appendix A. The purpose of this previous Parking Space Study was to determine the feasibility of a parking expansion within the limits of the existing property at Ottawa-Carleton Detention Centre.

2 Existing Parking Conditions

2.1 Parking Map with Number of Spaces

A parking map with number of parking spaces is included and summarized below:

OCDC Parking Map

Paved parking area (number of spaces = 95)

The paved parking area inside the perimeter fence was part of the original development (based on GeoOttawa historical mapping) and includes parking spaces for staff, operational vehicles, loading/delivery, and accessibility spaces. The parking area also includes vehicles parked on either side of the paved fire route.

Visitor parking area (number of spaces = 24)

The visitor parking area is paved and located outside the perimeter fence.

Gravel parking area (estimated number of spaces = 81)

The gravel parking area east of the main building, and inside the perimeter fence, was not part of the original development and is currently used for overflow staff parking. The gravel area is irregular shaped where parking spaces, traffic movement, and pedestrian facilities are not delineated, and vehicles are parked in an ad-hoc fashion around existing trees, landscaping, vegetation, and a central depressed area considered to be a wetland. The parking area also includes vehicles parked on either side of the paved fire route.

Gravel triangular area (estimated number of spaces = 24)

A former gravel yard is currently used for used for overflow staff parking. The fenced gravel area is triangular shaped, with an open gate access where parking spaces, traffic movement, and pedestrian facilities are not delineated, and vehicles are parked in an ad-hoc fashion.

Total estimated number of current parking spaces: 224

2.2 OCDC Staff Parking Requirements

2.2.1 Parking Needs

There are currently insufficient parking spaces at the OCDC. This creates a health and safety concerns for vehicles/pedestrians in the parking areas, and functional concerns for operating a correctional facility. The OCDC is a correctional facility with specialized staff and operational requirements. Without adequate parking spaces, the OCDC cannot maintain safe and functional operations. Specific parking needs for this site include:

- Onsite training, health professionals, lawyers, police, and border agents, require additional parking spaces daily, up to 20 spaces per day. These visits fluctuate and do not have a consistent timeframe.
- In the event of a building threat or triggered lockdown, an emergency response team (ERT), police, fire fighters, and administrative support could be called in at any given time, requiring up to 35+ additional parking spaces.
- Staff are hired from areas beyond Ottawa (e.g., Arnprior, Hawkesbury, Quebec) and logistically, communal travel is not feasible due to the variations in shift schedules and possible canceled shifts.
- Volunteers who support inmates visit daily, including support groups, require additional parking.
- Intermittent Sentences, when courts order the inmates to report to the institution for weekend stays and then are released for weekdays, impacts parking counts on the weekend.

2.2.2 Alternative Modes of Transportation

Staff commuting via alternative modes of transportation (e.g., OC Transpo, bicycle, shuttling, carpooling) is limited given the location of the OCDC is somewhat secluded and working shifts have fixed times that are not flexible. As part of their job duties, guards require to change into clean uniforms with security gear making a personal vehicle more suitable.

OC Transpo bus #25 stops directly in front of the OCDC, however runs infrequently overnight, which does not accommodate OCDC staff. The OCDC is a 24hr facility with rotating shifts.

There is a bike path that runs along Innes Road which forms part of the NCC cycling network in Ottawa. However, using a bicycle is not a feasible alternative during winter or inclement weather.

Because the correctional facilities in Cornwall, Hawkesbury and Pembroke have recently closed, those staff commute to the OCDC by car and using alternative modes of transportation is not feasible.

Using alternative modes of transportation could be unsafe for staff or guards, if they inadvertently interact with inmates that are being released, inmates arriving to or departing from intermittent sentences, or inmate visitors.

It is understood that OCDC staff park free of charge inside the secure perimeter fence.

2.2.3 Staff Count

Based on information provided by OCDC:

390 Total number of staff and correctional officers at OCDC.
220 Average number of active staff and correctional officers during visiting hours.
35 Average number of active staff and correctional officers during non-visiting hours (night shift)

Typical shift times:
0630-1830 hrs
0900-2100 hrs
0800-1600 hrs
1830-0630 hrs

The peak period of active staff and correctional officers typically occurs at around 9am, with significantly less active staff and correctional officers during the non-visiting hour (night shift)

2.2.4 Vehicle Traffic Count

On July 19, 2021, a Vehicle Traffic Count of incoming and outgoing traffic was conducted at OCDC during the peak period of active staff and correctional officers, between 8am and 9am. In general, traffic was free flowing with no waiting time at the perimeter fence access gate.

Incoming Traffic

50 Total number of vehicles.
1 Transfer vehicles (included in above Total)
3 Service/Delivery vehicles (included in above Total

Outgoing Traffic

8 Total number of vehicles.
1 Transfer vehicles (included in above Total)
2 Service/Delivery vehicles (included in above Total

Only 2 persons were observed entering the OCDC from the OC Transpo bus stop. After 9am, there was significantly less incoming and outgoing traffic, and the parking area (including paved and gravel areas) appeared to be at 90-95% capacity i.e. no visible open parking spaces when looking from a distance.

2.2.5 Parking Count

Based on the total number of available parking spaces (224), including both paved and gravel areas, there is currently just enough parking spaces to meet the average number of active staff and correctional officers (220) at OCDC. However, parking counts are estimates based on available information, visual observations, and ad-hock parking conditions.

2.3 Topographical Survey and Site Photos

A topographical survey was conducted on July 19 to 21, 2021 to supplement existing topographical information for the gravel parking area, to the fence gate that leads to the rear of the facility. The survey was required to understand existing surface drainage conditions within the limits of the proposed Parking expansion. Select site photos taken during the survey are included in Appendix B.

2.4 Storm Drainage

Main paved parking

The paved areas in front of the OCDC facility are relatively flat and surface drainage is collected by a storm sewer system, including two (2) catchbasins and one (1) manhole, which outlet towards the east of the main facility.

Visitor Parking

The paved Visitor Parking is relatively flat and sheet drains onto the adjacent grassed areas. There are no storm catchbasins in the Visitor Parking area.

Gravel overflow parking

The gravel areas west of the OCDC facility are relatively flat, with practically no slopes, and naturally drain towards the central depressed vegetated area considered to be a wetland. Once the depressed vegetated area reaches a water ponding level of approximately 0.3m, it then discharges towards the northwest through a 400mm diameter culvert towards a ditch that connects to a ditch inlet at Innes Road.

There are no storm catchbasins in the gravel areas. Because the gravel area is flat, surface drainage also naturally infiltrates into the sub-surface. Throughout the gravel overflow parking area, numerous shallow depressions and ponding after rainfall are apparent.

2.5 Site Lighting and Security

Site lighting is provided with varying light standard heights and fixtures, around the main facility, along the fire route, and parking areas. This includes 2 light standard poles and one higher pole for security cameras within the gravel overflow parking area. The higher light poles are located closer to the building.

2.6 Fencing

There is a 2.4m high perimeter fence, complete with barbed wire, that surrounds the OCDC facility. This fencing borders the west side of the property along the gravel parking overflow area. This fencing also separates the Visitor Parking with a gated access. The fencing is generally in fair conditions.

There is also ~6m high fencing, complete with barbed wire, around the perimeter for the gravel triangular area currently used for parking overflow.

2.7 Wetland and Trees

The central depressed area within the gravel overflow parking is considered to be a wetland based on information provided by an Environmental Consultant retained under a separate assignment. Based on GeoOttawa this natural feature was present during the original development, including its 'ring' road.


1976


2002


2011


2019

The wetland consists mainly of trees, shrubs, and cattails. As previously noted, the wetland eventually discharges to a ditch inlet at Innes Road at the northwest corner of the property.

There are also approximately a dozen existing mature trees and small vegetated patches along the west perimeter fence in the gravel area where vehicles park beside and around.

2.8 Rear Slope towards Green's Creek

South of the OCDC facility, there is an existing slope towards Green's Creek. Based on available topographic information, the southern most portion of the Temporary Parking Expansion project is located approximately 50 metres from the crest of the slope at its closest point. The slope is approximately 20m high and 50m long at its closest point to Green's Creek. A Slope Stability Analysis was undertaken as a separate assignment, to identify any potential risks associated with this Temporary Parking Expansion project. Based on the results of the Slope Stability Analysis, rehabilitating the parking area would not have any adverse impact on the existing slope towards Green's Creek.

3 Project Considerations

3.1 Parking Layout Design

The proposed parking expansion will be located in an irregular shaped area with a centrally located wetland that is to remain protected. Conventional rectangular shaped parking areas will not be possible but the following parking layout design considerations should be applied:

- Parking spaces and lanes should have functional access/egress, with adequate turning movements.
- Parking spaces should be minimum 2.6x5.2m (3.2x5.2m for accessibility) per local municipal standards.
- Parking aisle should be minimum 6.7m.
- Code Compliant Fire Route.
- Sufficient accessibility parking spaces in suitable locations (per Treasury Board, OCDC).
- Designated parking for motorcycles (as necessary, per OCDC).
- Parking for small vehicles (not required, per OCDC).
- Snow removal operations and snow storage.
- Storm drainage for rainwater and snow melt.
- Compatible site lighting and security, post locations, and underground power/data conduits.

3.2 City of Ottawa By-Law

According to City By-law, for a correctional facility, the minimum parking space rate is 1 parking space per 100m^2 of gross floor area. The OCDC gross floor area is approximately 12,225m2, therefore the minimum parking spaces required is 123.

3.3 Preliminary NCC Review Comments

Preliminary National Capital Commission (NCC) review comments on the proposed parking expansion were received on February 25, 2021. Preliminary Comments are included in Appendix C and are summarized as follows:

1) Proposed development to satisfy municipal planning requirements of the City of Ottawa.
2) Proposed development to align with policies, guidelines, and objective of the Greenbelt Master Plan (GMP).
3) Proposed development must respect slope stability setbacks of Green's Creek as defined in the 2011 Green's Creek Fluvial Risk Study.
4) Plans must show all parking areas, including existing parking at the front of the facility.
5) Environmental Considerations, including protection of existing wetland.
6) Subject to Federal Impact Assessment Act (IAA)
7) Draft Mitigation Form (MMF) submitted with 66% Design package.
8) No archaeological investigation or monitoring is required.
9) Species at Risk Assessment Report, including wetland delineation, characterization, and function.
10) Provide recent site photos.
11) Provide following plans
    i) Site Plan, showing Mud Creek and Green's Creek
    ii) Site Grading Plan
    iii) Stormwater Management and Drainage Plan
    iv) Geotechnical Report
    v) Landscaping Plans, including Tree Removal and Planting Plans.
    vi) Lighting Plan
12) Parking Study (update to Stephenson Engineering Parking Space Study, September 27, 2018)

3.4 City of Ottawa Pre-Consultation Internal Department Comments

A pre-consultation meeting with City of Ottawa stakeholders was conducted on September 6, 2021. Review Comments are included in Appendix D and are summarized as follows:

1) Traffic Impact Assessment (TIA) is not required for the parking expansion
2) TIA screening form is not required.
3) Noise study is not required.
4) Tree Conservation Report (TCR) is required in accordance with City of Ottawa requirements.
5) Landscape Plan and Tree Planting is required in accordance with City of Ottawa requirements
6) Urban Design – Design Brief is required in accordance with City of Ottawa requirements.
7) Official Plan applicable policy: in accordance with NCC Greenbelt Master Plan.
8) Zoning By-Law2008-250: Rural Institutional with exception 233r (RI5[233r]), correctional facility permitted
9) Designed lighting to be provided throughout the parking area.
10) Pedestrian facilities and network to be provided to/from the main facility.
11) Planning Rationale is required in accordance with City of Ottawa requirements.
12) Stormwater management in accordance with Green's Creek Fluvial Master Study, Rideau Valley Conservation Area (RVCA) and Ministry of the Environment, Conservation, and Parks (MECP) requirements.
13) Geotechnical Investigation for grade raise restrictions, slope stability and groundwater levels.

3.5 Slope Stability Analysis

The impact of this project, on the existing slope at the rear of the OCDC facility towards Green's Creek, is considered to be relatively minor. Proposed grade changes will not be increased significantly (within +/- 0.2 metres), no additional surface water will be directed towards the slope, and the slope is approximately 50m away from the parking expansion limits.

However, given there is evidence of existing/ongoing issues with erosion and instability within the slopes adjacent to the property, a Slope Stability Analysis was undertaken to identify any potential risks associated with this Temporary Parking Expansion project. Based on the results of the Slope Stability Analysis, rehabilitating the parking area would not have any adverse impact on the existing slope towards Green's Creek.

3.6 Parking Expansion at the Front of OCDC Facility

Locating the Temporary Parking Expansion in front of the OCDC facility, outside the perimeter fence, was considered but is not the preferred alternative. The area north of the main paved parking area, with its numerous mature trees, provides a desirable visual buffer between Innes Road and the OCDC facility.

3.7 Construction Requirements and Sequencing

Understanding construction restrictions and assumptions will be required for the Design phase, cost estimating, and constructability.

- OCDC facility will remain operational during construction.
- Temporary offsite parking may be required to meet staff needs, e.g. neighbouring property (Lifecentre and Eglise Nouvel Espoir) west of OCDC
- Parking expansion may need to be constructed in multiple phased areas to permit partial parking occupancy.
- Contractor will require security clearance and comply with OCDC access requirements.
- Contractor will need to coordinate construction activities with OCDC operations (e.g. transfer vehicles, deliveries)
- There is limited staging area within the perimeter fence for construction equipment and materials.
- Wetland protection and monitoring to be provided throughout construction.
- Excess Soil Removals to be in accordance with City of Ottawa requirements.

Anticipated construction sequence is as follows:

- Mobilization, staging, construction fencing (construction material and equipment)
- Environmental Requirements (wetland and tree protection, silt fences, erosion and sediment control, etc.)
- Removals (asphalt, granular materials, fencing/gates, trees/vegetation, light posts, etc.)
- Excavation and Grading (granular sub-base, light post foundations, electrical/data conduits, etc.)
- Stormwater Management (culvert, headwall, underground exfiltration storage facility TBC, etc.)
- Fencing (repairs, new fencing/gates)
- Site Lighting and Security (light poles, fixtures, cameras, connections)
- Asphalt construction and Line Painting
- Landscape reinstatements (trees, grassed areas, vegetation, etc.)
- Cleaning, Commissioning and Closeout

4 Preliminary Parking Design

Preliminary 66% Design drawings were developed based on Existing Parking Conditions and Project Considerations described above and included as a separate attachment. The limits of work for the Design include the gravel parking expansion areas, a portion of the paved parking along the fire route west of the building, and the asphalt visitor parking area (asphalt resurfacing only). The paved parking areas in front of the main building are not included in the Design scope.

The intent of the Preliminary Design is to formalize the existing ad-hock gravel parking expansion, in accordance with authorities having jurisdiction, in a safe, effective, and sustainable manner. This includes:

1. Asphalt parking reconstruction of the gravel parking expansion areas in accordance with Parking Layout Design requirements. Closely match existing elevations and drainage condition.
2. Maintain and protect existing Wetland, including adding a 5m grassed buffer around the Wetland.
3. Remove existing trees and install new trees as per Tree Planting plan.
4. Improve stormwater management infrastructure (culvert, headwall, ditches, potential underground storage)
5. Perimeter fencing to remain in its current location. Minor repairs if required, as directed by OCDC.
6. Removal of fencing around triangular gravel area that are no longer required for security purposes, including relocating existing rear gate access further south.
7. Install new light standards to provide sufficient lighting to all parking spaces, including security cameras mounted on light standard poles. Re-use existing lighting/camera poles where possible.
8. Power and data for light standards and security cameras connected to the existing conduit stub that was installed in a previous project near the staff locker trailers.

Because the parking design layout is within an irregular shaped area with a central wetland to remain, this does not permit typical access and egress traffic movement typically found in a conventional rectangular parking layout. The parking design layout does provide standard parking space and aisle dimensions. Pedestrian facilities will be limited to signage and line painting, and will not include separate walkways.

The wetland exists naturally and has not been maintained over time (i.e. no watering or regular landscaping maintenance), therefore the design intent is to closely match existing drainage and elevations, to limit disturbance to current ecological wetland conditions. Drainage design includes surface draining towards the wetland to closely match existing conditions, with no concrete curbs or sidewalks within the parking areas. The existing culvert and headwall will be replaced due to their aging condition, however the wetland will continue to discharge into the existing ditch that connects to the municipal ditch inlet at Innes Road.

For stormwater quantity control, a new underground exfiltration storage facility can be installed upstream from the ditch inlet at Innes Road, to control additional stormwater flows produced from replacing gravel areas with asphalt areas. This underground facility would potentially reduce stormwater that eventually discharges into Green's Creek via the municipal ditch inlet.

Slope stability and erosion concerns at the rear of the facility should not increase since proposed parking design closely matches existing elevations and drainage conditions.

The proposed number of parking spaces is as follows:

127	Paved parking (original development) – No change
24	Visitor asphalt parking – No change
81	New parking expansion (currently gravel)
24	New parking expansion inside triangular area (currently gravel)
256	**Total (+ 32 from current conditions)**

5 Cost Estimates

Order of magnitude cost estimates are included in Appendix E.
Cost estimates will be revised once client/stakeholder input is provided.

6 Next Steps

***Ongoing, to be reviewed with Client.

- NCC approvals
- City of Ottawa Site Plan Control
- Stormwater Management Report
- Tree conservation and replanting report.

End of Report

Appendix A Institutional Parking Space Study, Stephenson Engineering

REPORT

Institutional Parking Space Study

Ottawa-Carleton Detention Centre
Located at 2244 Innes Rd
Ottawa, Ontario, K1B 4C4

Submitted to:
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September 27, 2018
Project No.: 20180784

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1. Introduction

Stephenson Engineering Ltd. (Stephenson) was retained by Colliers Project Leaders Inc. and Infrastructure Ontario (IO, OILC) to perform a parking space study at Ottawa-Carleton Detention Centre, located at 2244 Innes Rd in Ottawa in accordance with the terms of our proposal, dated May 08, 2018. This undertaking is required to maintain the infrastructure of the Ottawa-Carleton Detention Centre. The feasibility study includes a conceptual parking lot layout, conceptual cost estimate and report. The study considers the applicable design manuals and standards including Ontario Provincial Specifications. The purpose of the study is to determine the feasibility of a parking expansion on adjacent lands which are available.

The scope of our work included the following:

1. Reviewed available relevant drawings and reports;
2. Performed a visual review and site investigation of the current parking layout spaces and characteristics of the site as it relates to the project;
3. Performed a meeting with site representative to collect information; such as approximate gross building area, the total number of existing parking spaces, approximate number of employees in each shift and number of shifts and estimate parking space required.
4. Prepared a conceptual parking lot layout to determine the feasibility of a parking expansion; and
5. Prepared a conceptual cost estimate and report.

2. Background

Ottawa-Carleton Detention Centre, located at 2244 Innes Rd in Ottawa, is a government organization correctional facility. The site is located between Innes Rd and Anderson Rd in Gloucester, Ottawa. The existing parking lots are composed of asphalt areas with painted lines, asphalt areas with no painted lines, and gravel areas. Estimating the exact number of parking spaces is difficult due to no painted lines in several areas but there are approximately 89 parking spaces. The north eastern most parking lot has 10 parking spaces which are always utilized by ministry

vehicles. The number of available paved parking spaces at each lot as per our observation and site investigation is shown in Table 1 below.

The lot size is approximately 21 acres.

Table 1: Summary of Total Existing Parking Spaces

Parking Lots	Number of parking Spaces
Asphalt Parking	72
Barrier Free Accessible Parking	2
Total	**74**

The parking lots in the property have one entrance/exit from Innes Rd with a single road that goes around the property for fire and access to the parking lots. There are fewer parking spaces available in winter due to snow removal.

3. Document Review

The following documents were provided to us for Ottawa-Carleton Detention Centre by Colliers for review:

- ASCE 38-02 Level 'B' SUE Investigation Drawings 1 to 5 prepared by MultiView. Dated May 2015.
- Electrical site plan and details for Repair of Security Gates Drawings E1 and E2 prepared by Ministry of Government Services, Dated March 1980.
- CCTV Intercom & Gate Control Layout for Perimeter Security Fence Drawings E1 prepared by Ministry of Government Services, Dated April 1985.
- Electrical plot plan, motor control schedule and details Drawing E-1 prepared by Flemming and Secord Architects; and Fraser and Macie Architects, Dated November 1969.
- Ground floor electrical details for Security Renovations Drawings E1.1 prepared by J.L. Richards & Associates LTD.; and Pye & Richards Architects & Planning Consultants, Dated October 1979.

4. Observation and Site Meeting

In order to complete the study, Stephenson Engineering Ltd. conducted an initial site investigation and meeting with Ontario Correctional Services College personnel on August 3, 2018, to review the site and discuss the scope of work. Based on the conducted site investigation and reference drawings, we revised and updated the

existing parking lot drawing, also prepared conceptual parking layout expansion drawing and a construction cost estimate.

5. Expansion Proposal

Based on the available information received for the gross area and the business office and required parking rate, number of staff (148) and correctional officers (110), the required parking space will be more than 258 parking spaces at this site. The existing parking lot capacity has a maximum of 227 spots. Based on survey data and information gathered from the facility, there is an estimated parking deficit of more than 65 parking spots. As a result, we are proposing a two-phase expansion utilizing the existing gravel lands first before developing the additional lands available within the lot. Please note that these phases are in no particular order and the client may choose to only develop one of the two options explained below. Additionally, any and all expansion/construction within this site will require the project to be done in phases as to retain the minimum required number of parking spaces for employees and visitors.

5.1

The first portion of the proposed expansion is to provide additional surface parking by paving and marking spaces within the existing gravel lots. Currently these lots are accessible to all visitors and staff, however, the lots are not either not paved or properly lined and in turn the use of them lacks optimization. Providing a paved surface with marked lines allows for an additional 174 spaces. It is important to note that this number of spaces may already be used, though, due to no line markings it may also be cut down to a lower number of available parking spots.

Table 2: Summary of proposal 5.1 number of parking spaces

Parking Lots	Number of existing parking spaces if gravel lots are to be paved
Asphalt Parking	174
Barrier Free Accessible Parking	0
Total	**174**

5.2

The second portion of the proposed expansion is the development of the swamp lands shown within the blue region in the key plan below. This area lies on the west north west of the lot and falls in between three gravel lots. Two access routes will be utilized from the main entrance to the complex which will allow entrances and exits to the proposed parking lot. This space can provide an additional 71 surface parking spaces. The total number of spaces that can be provided given both phases of this proposal are constructed will be 245 parking spaces. It has been determined that there is inadequate space to consider parking lot expansions to the east, south or north of the complex.

Table 3: Summary of proposal 5.2 number of parking spaces

Parking Lots	Number of additional parking Spaces
Asphalt Parking	71
Barrier Free Accessible Parking	0
Total	**71**

6. Project Consideration

To evaluate the feasibility of parking lot expansion at this site, several issues and constraints were identified and reviewed.
At the time of this study, there was no existing site survey and drainage information available for the site. The existing drainage at the site will need to be studied in detail to determine the exact drainage reconstruction requirements. Utility locates and additional investigations shall be completed during detailed parking lot expansion design in order to determine the requirement, extent and associated costs of utility relocations, if any.

Formerly a pond, the blue zone area has vegetation and can be used for the expansion. Due to the existence of a wet land, the cost estimate for this zone is considered higher due to soil conditions, backfilling required and all other specific development requirements. The yellow zone area is currently a gravel parking area. The red zone area is a fenced, gravel parking area that is currently being also currently being utilized for parking. The personnel on site (Mr. Ashdown) expressed an interest in moving the fence forward to disallow vehicles from parking in the fire lane. Additional lighting will be required for the proposed expansion. Lastly, the visitor parking lot to the north west is paved, however it has no available line markings. All zones referenced can be viewed in the key plan found on page 8.

7. Proposal Limitations

This feasibility study and the provided conceptual parking lot layout drawings have been prepared based on the existing drawings provided by Colliers. Additional investigations will be required with current and up-to-date topographical, legal, utility, lighting, security, civil and geotechnical information. Options for addressing parking above what is available within the current facility and review of transit options and off-site parking solutions are out of scope of this work. All drawings were prepared for conceptual layout and cost estimate purposes. Detailed investigations and design will be required to pursue the construction of this proposal.

8. Construction Cost Estimate

We have prepared conceptual construction cost estimates for the proposed project. The following is a summary of the estimated costs and associated cost per additional parking space for the proposed parking expansions; The following cost estimate is based on the information obtained during our site investigation and drawings. The final costs will not be known until that the complete design and tender package is available and the works bidding is completed and the final quantities of required works are known. The following cost estimate should be treated as an approximate. We recommend that the clients consider carrying a contingency allowance of approximately 15% for unforeseen site conditions during the completion of construction. The cost estimate below is also based on the assumption that there are no hazardous materials or contaminated soil at the work area. Please note the higher cost for section 5.2 is based upon the estimated costs for water management systems required as well as any site preparation, subdrain changes and additional lighting requirements.

Table 3: Breakdown of the estimated cost for the proposed expansion in section 5.1

Parking Expansion Breakdown	Estimated Cost
Estimated Total construction cost	$ 184,900
Estimated cost for lining parking spaces on pavement	$5,000
Estimated cost for paving all gravel lots (Estimated 35$/$m^2$)	$ 179,900

Table 4: Breakdown of the estimated cost for the proposed expansion in section 5.2

Parking Expansion Breakdown	Estimated Cost
Estimated construction cost	$ 1,278,000
Estimated number of parking spaces	71
Estimated cost per parking space	$ 18,000

***Soft costs such as Topographic survey, Geotechnical, Consulting fees and permits are not included in the above cost estimates.**

9. Summary

The purpose of this study was to determine the feasibility of a parking expansion within the limits of the existing property at Ottawa-Carleton Detention Centre. The proposed expansion, drawings and conceptual cost estimates were prepared based on the available data at the time of the study. Conceptual drawings and associated cost estimates have been prepared for client's review and decision.

per _____
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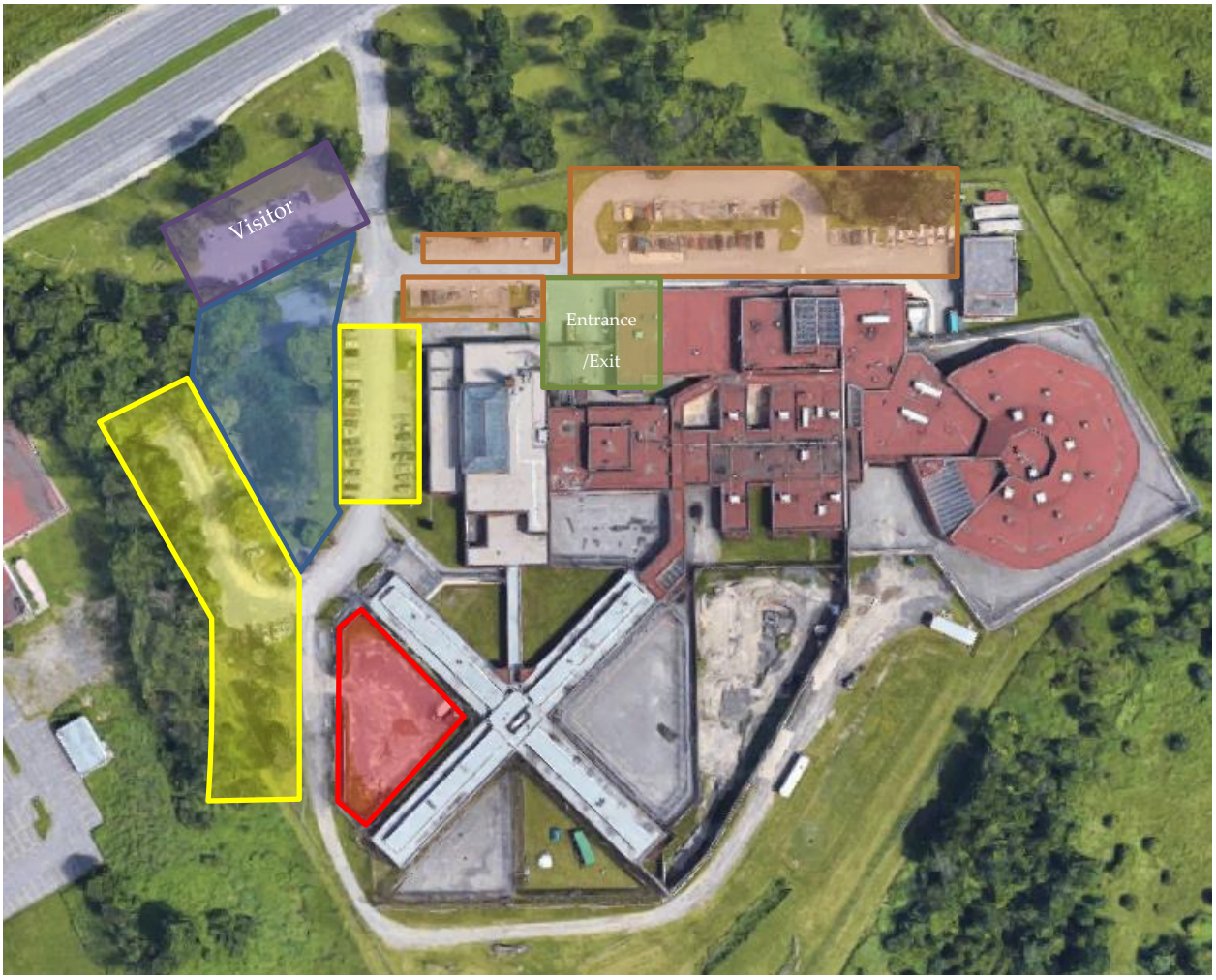
Appendix A – Photographs



Existing Asphalt Parking with Painted Lines

South-West Parking Lot (Gravel)

West Parking Lot (Gravel)

Blue Zone Proposed for Expansion

Visitor Parking (Paved with no marked lines)

Key Plan

Photograph # 1: View of North-west staff gravel parking lot

Photograph # 2: View of west side of building, fenced, gravel parking lot space

Photograph # 3: View of west side of building, fenced, gravel parking lot space located adjacent to the fire lane

Photograph # 4: View of North-west staff gravel parking area

Photograph # 5: View of North-west staff gravel parking area

Photograph # 6: View of West staff parking area, in the fire lane

Photograph # 7: View of West staff parking area

Photograph # 8: View of North-west side of building

Photograph # 10: View of blue zone area, where vegetation is present

Photograph # 11: View of blue zone area, where vegetation is present

Photograph # 12: View of blue zone area, where vegetation is present

Photograph # 13: View of North side of building at existing parking lot

Photograph # 13: View of North side of building at existing parking lot

Photograph # 13: View of North side of building at existing parking lot

Appendix B – Drawings

stephenson ENGINEERING
2550 Victoria Park Ave. Suite 602
Toronto ON M2J 5A9
Tel: (416) 635 9970
www.stephenson-eng.com
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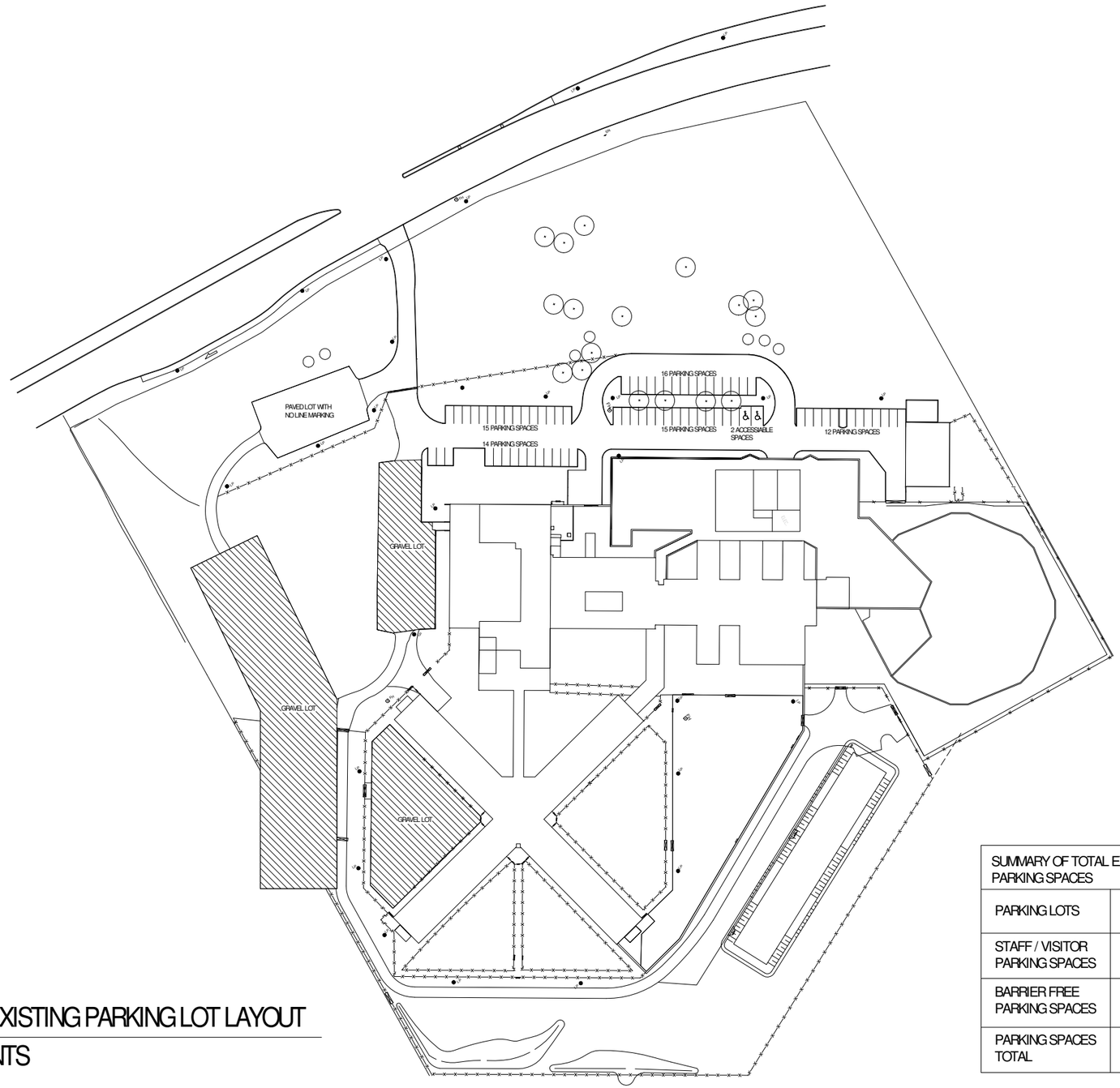
PROJECT:

COLLIERS - INSTITUTIONAL PARKING STUDY
B - 17875 OTTAWA CARLETON DETENTION CENTRE
2244 INNES RD, GLOUCESTER, ON K1B 4C4

Project No. 20180784
DATE
BY JS
SHEET C1-01

No.	Description	Date



1 / C1-01 EXISTING PARKING LOT LAYOUT
NTS

SUMMARY OF TOTAL EXISTING PARKING SPACES	
PARKING LOTS	NUMBER OF PARKING SPACES
STAFF / VISITOR PARKING SPACES	72
BARRIER FREE PARKING SPACES	2
PARKING SPACES TOTAL	74

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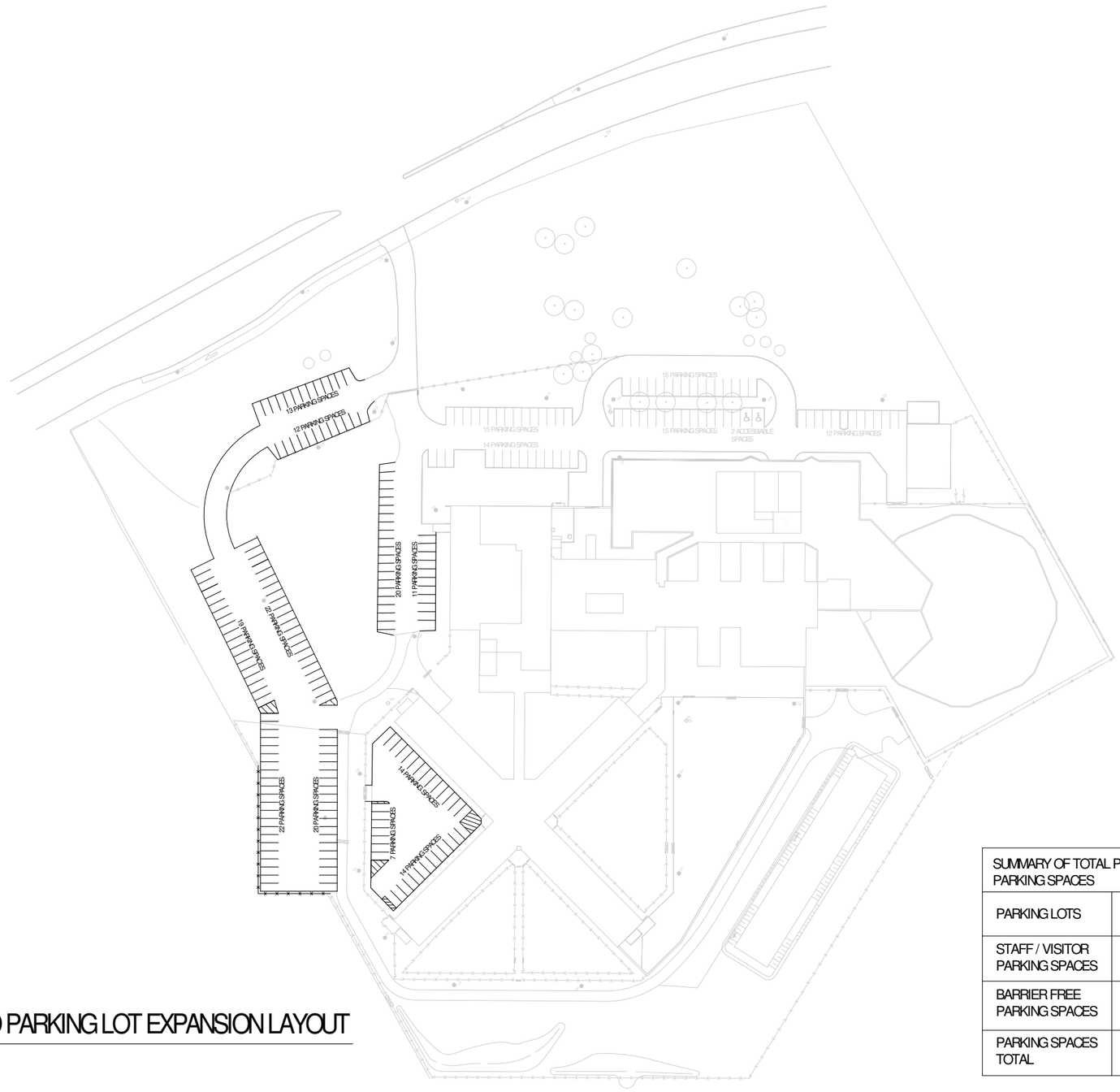
PROJECT:

COLLIERS - INSTITUTIONAL PARKING STUDY
B - 17875 OTTAWA CARLETON DETENTION CENTRE
2244 INNES RD, GLOUCESTER, ON K1B 4C4

Project No.	20180784
DATE	
BY	JS
SHEET	C1-02

No.	Description	Date



1
C1-02
PROPOSED PAVED PARKING LOT EXPANSION LAYOUT
NTS

SUMMARY OF TOTAL PROPOSED PAVED PARKING SPACES	
PARKING LOTS	NUMBER OF PARKING SPACES
STAFF / VISITOR PARKING SPACES	246
BARRIER FREE PARKING SPACES	2
PARKING SPACES TOTAL	248

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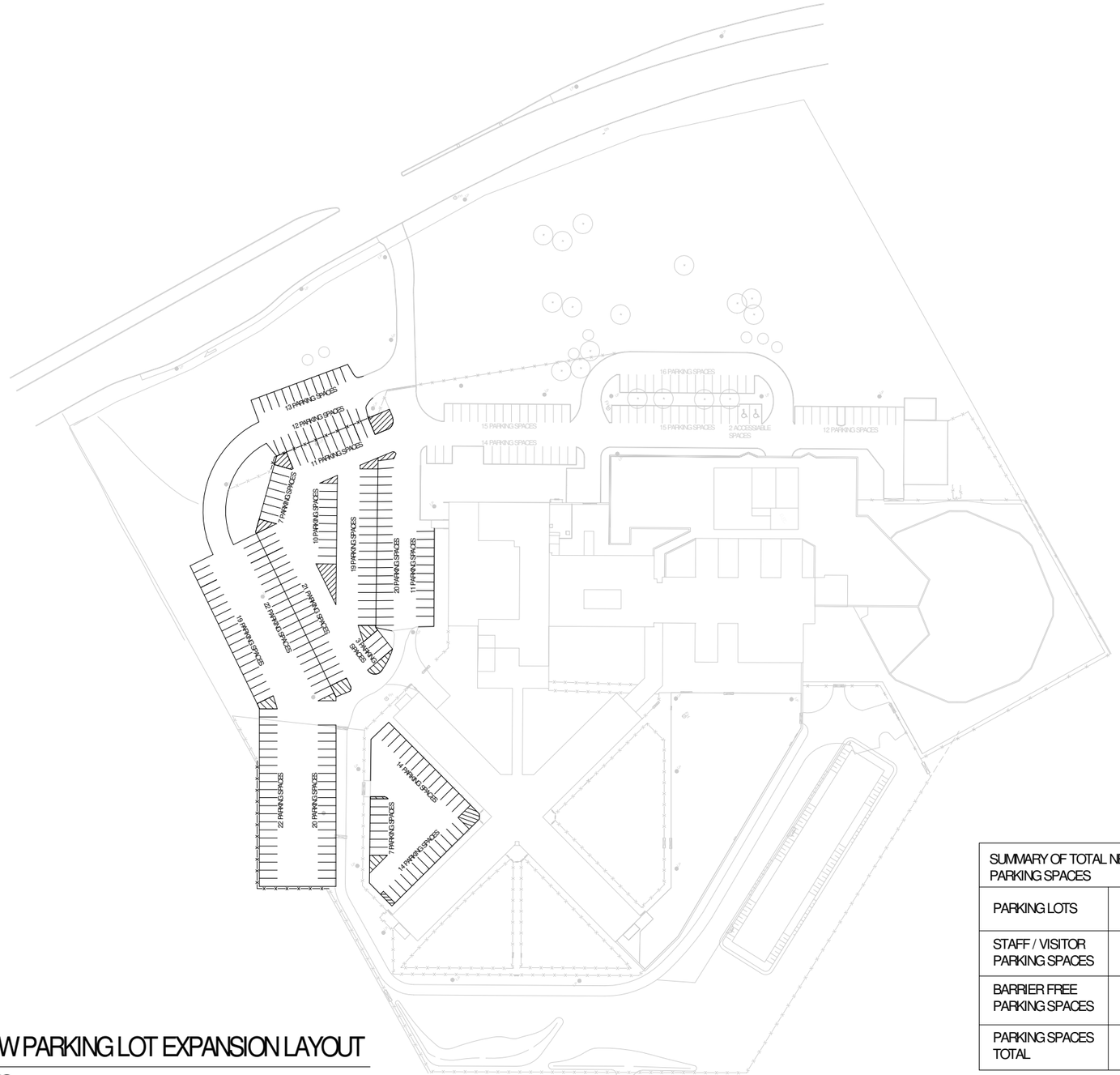
PROJECT:

COLLIERS - INSTITUTIONAL PARKING STUDY
B - 17875 OTTAWA CARLETON DETENTION CENTRE
2244 INNES RD, GLOUCESTER, ON K1B 4C4

Project No. 20180784
DATE
BY JS
SHEET C1-03

No.	Description	Date



1 / C1-03 NEW PARKING LOT EXPANSION LAYOUT
NTS

SUMMARY OF TOTAL NEW PARKING SPACES	
PARKING LOTS	NUMBER OF PARKING SPACES
STAFF / VISITOR PARKING SPACES	317
BARRIER FREE PARKING SPACES	2
PARKING SPACES TOTAL	319

Appendix C – Site Contact Information

ID: B-17875

Building Name: Ontario Carleton Detention Centre

Site Contact	Site Superintendent
Name: Steven Ashdown	**Name:** Michael Wood
Number: 613-824-6080 ext.215	**Number:** 613-824-6080 ext. 228
Email: Steven.ashdown@ontario.ca	**Email:** Mike.wood@ontario.ca

Appendix B Select Site Photos (July 19-21, 2021)

P1 – Innes Road (from visitor parking)


P2 – Ditch inlet at Innes Road

P3 – Fire Route (looking north)

P4 – Fire Route (looking south)


P5 – Wetland Area (along fire route, looking south)

P6 – Wetland Area (south portion)

P7 – Wetland area (looking north)

P8 – Wetland Area (along fire route, looking north)

P9 – Wetland area (outlet location, headwall)

P10 – Gravel Parking Area (north portion)

P11 – Gravel Parking Area (north portion)

P12 – Gravel Parking Area (north portion)

P13 – Gravel Parking Area (along perimeter fence)

P14 – Gravel Parking Area (along perimeter fence)

P15 – Gravel Parking Area (along perimeter fence)

P16 – Gravel Parking Area (along perimeter fence)

P17 – Gravel Parking Area (along perimeter fence)

P18 – Gravel Parking Area (along perimeter fence)

P19 – Gravel Parking Area (south of wetland)

P20 – Gravel Parking Area (south of wetland)

P21 – Gravel Parking Area (triangular yard)

P22 – Gravel Parking Area (triangular yard)

P23 – Fire route access to rear gate

P24 – Slope behind facility

Appendix C Preliminary NCC Review Comments

NATIONAL CAPITAL COMMISSION
COMMISSION DE LA CAPITALE NATIONALE

February 25, 2021

VIA E-MAIL

Domenico Giangregorio
COLLIERS PROJECT LEADERS

RE: Preliminary Comments on OCDC Proposed Parking Expansion

The purpose of this letter is to provide Colliers with preliminary comments on the proposed parking lot expansion at Ottawa-Carlton Detention Centre at 2244 Innes Road. NCC staff had the opportunity to meet internally and discuss the 33% Design Plans submitted on January 22, 2021.

Coordination with Municipal Planning Process

1. As part of the Federal Approval process with the NCC, the Proponent is required to satisfy the municipal planning requirements of the City of Ottawa, including obtaining necessary Zoning By-law Amendments (if applicable) and Site Plan Control Approval. As an initial step, the Proponent must request for a pre-consultation meeting with the City of Ottawa. Information on the pre-application process can be found here: https://ottawa.ca/en/pre-application-consultation.

2. The NCC will coordinate review of the proposal under the *National Capital Act*, with that of the City of Ottawa municipal planning process.

3. In the case of conflict between federal plans and/or policies and the municipal planning framework, the more restrictive plan, policy, guideline, or provision shall apply.

Canada's Capital Greenbelt Master Plan

4. The site is designated *Non-Federal Facility & Operations* in the Canada's Capital Greenbelt Master Plan (GMP). The NCC must be satisfied that the proposal aligns with the policies, guidelines and objectives of the Greenbelt Master Plan. Federal and Non-Federal facilities in the GMP will be carefully managed to control their footprint and ecological impact. Existing Non-Federal facilities are permitted; however, they are required to complement the roles of the Greenbelt and contribute positively to the Greenbelt's visual landscapes. The goal is to guide these facilities to be consistent with and complementary to the roles of the Greenbelt. Minor expansions of Non-Federal

facilities are permitted; however, the expansion must be consistent with the policies of the Greenbelt Master Plan (see Table 5.5; Policy 3, p.66 and 7.6 Mer Bleue Sector (p. 116).

5. Apply context-sensitive design best practices to the planning, design and location of parking facilities that aim to conserve the natural and visual resources. The NCC discourages expansion of existing parking surfaces and encourages shielded lighting and protection of the night sky. The NCC advocates avoidance of impact on habitats and eliminate if possible unnecessary lighting at the facilities to help achieve a night sky quality without compromising safety (Policies 6.7 “J and K” of the Greenbelt Master Plan).

6. The proposed parking expansion or any future projects on this site must respect the slope stability setbacks of Green's Creek as defined in the *2011 Green's Creek Fluvial Risk Study*. Continued efforts are required to improve the headwaters of Green’s Creek and its tributaries in this sector. The Greenbelt Master Plan encourages to work with the proponent to ensure the protection of fluvial geomorphology, particularly those addressing erosion control thresholds. The NCC requires that integrated stormwater management measures for the proposed parking expansion to mitigate fluvial geomorphological risks to the Greenbelt unstable lands at the southern limits of the site (Greenbelt Master Plan policies of Section 6.3.1.2 (b) and Section 7.6 (Q).

Site Design & Landscaping

7. Existing parking areas on site have been expanded without required approvals from both Federal and Municipal approval authorities.

8. Any approved parking on the site must substantially support the protection of the Natural Environment of the Greenbelt in accordance with the guidelines and policies contained in the Greenbelt Master Plan.

9. Plans must show all parking areas, including the existing parking at the front of the facility. It is unclear from the 33% design plans, what is approved parking and what is proposed parking subject to approval.

10. Generally, the Proponent must follow the principles of “greening parking lots” which are as follows:
    - planting and protecting trees;
    - providing good quality soil and generous landscaped areas;
    - managing stormwater on-site;
    - reducing the urban heat island effect; and
    - using sustainable materials and technologies.

11. The NCC requests that the paved connection between the visitor parking and staff parking lot be removed. Since there is a desire on site to maintain these two parking lots as being distinct from one another, this connection does not serve a purpose. Eliminating it would reduce the overall paved area on site.

12. The NCC is not supportive of parking in front of the facility due to tree removal and soil compaction. Maintaining a landscaped buffer between the facility and Innes Road is important from both a visual and environmental perspective.

13. The Proponent shall use continuous landscaping and signage to reinforce pedestrian walkways within parking areas and delineate which parking areas are for staff and visitors.

14. The width of drive aisles must be shown on the plans. The standard width for a two-way traffic is 6.7 metres.

15. Parking space dimensions must be shown on the plan. A single spot can be highlighted to show the dimensions. A standard parking space size is 2.6 metres by 5.2 metres. Parking spaces should never exceed 3.1 metres in width.

16. Consideration should also be given to providing small car spaces, which must be properly signed. Small car spaces typically measure a minimum width of 2.4 metres and a minimum length of 4.6 metres. More information about the permitted number of small car spaces will be provided through the municipal planning process.

17. The hatched areas at the end of rows of parking cannot be painted lines. They must be raised landscaped islands with proper curbing. If these areas are left simply as painted lines, vehicles may elect to park in these areas and only perpetuate the existing unsightly parking situation on site.

Parking Rates & Parking Study

18. Providing the minimum required parking spaces should be an objective of the site, especially given the site's location in the Greenbelt.

19. The Parking Study provided by Stephenson Engineering dated September 27, 2018 does not reflect the 33% design plans. One option in the Parking Study indicates that a total of 248 parking spaces are proposed on site (new & existing). The second option indicates that a total of 319 are proposed. The 33% design plans show a total of 305 (74 existing + 231 new). An addendum to this parking study is required that shows all existing and proposed parking spaces on the site. The rates must align with what is proposed on the plans.

20. The Parking Study also appears to show proposed parking spaces beyond the property line, which is not permitted.

21. The Parking Study does not contain a proper analysis of parking demand during peak periods or provide parking demand information for staff and visitors of the facility. The Study provides lists a total number of staff and correctional officers, however, provides no analysis or assessment about shift times and the feasibility and appropriateness of shared parking on the site depending on the time of day.

Environmental Considerations

22. The vegetation feature F may meet the federal definition of a wetland. This feature should be preserved and protected in the design of the parking lot expansion. The NCC is subject to the Federal Policy on Wetland Conservation, and removal of the feature may trigger compensation requirements and project review by Environment and Climate Change Canada.

23. Existing trees to be protected (with high visibility fencing installed at the perimeter of their critical root zones). The Proponent should provide a Tree Inventory Plan showing the size (DBH), species and health condition of trees which may be impacted on the site, including removals and trees to be preserved. Tree removal must be pre-approved by the NCC. A replanting/landscape plan must be developed to ensure compensation for trees removed. The NCC requires all trees ≥10cm DBH removed from federal land in the Capital Region to be compensate. The compensation scenario for the loss of ecological features and functions is determined on a context sensitive basis and guided by the principle of 'no net loss' at a minimum and preferably according to the principle of 'net environmental gain'.

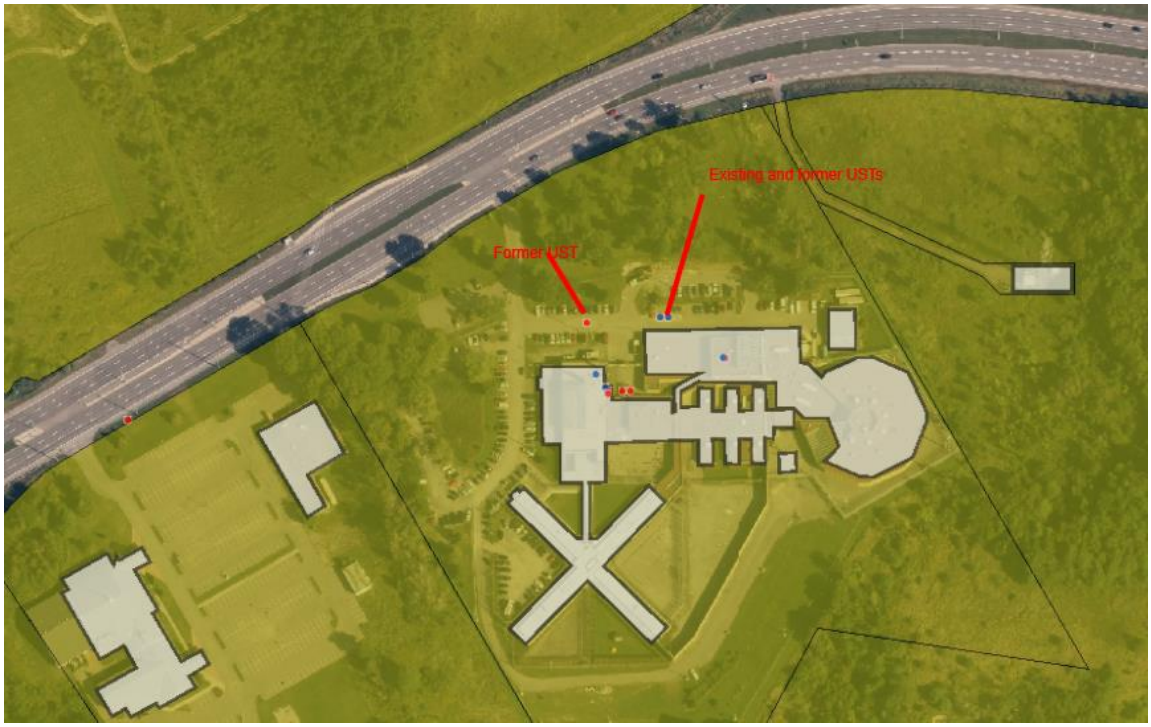
24. The 33% design does not indicate installation of lighting as part of the parking lot expansion. Will lighting be included? The NCC requires outdoor lighting to be compliant with "dark sky" principles. The City of Toronto's Best Practices for Effective Lighting, publicly available online, should be consulted in development of a lighting design. The lighting design (if applicable) should be submitted for NCC review.

25. Erosion and sediment control notes are included in the 33% drawing package. Page C2, notes "Install silt fence in location shown" but the location of required silt fencing is not indicated on the C1 drawing, nor is a sediment fence detail provided in C2.

26. More information is requested regarding the stormwater management and snow management approach. Specifically, how will water quality and quantity being managed to ensure no adverse impacts to nearby surface water?

27. Has porous asphalt been considered as a paving material?

28. A review of NCC records indicates existing and former underground fuel tanks as depicted on the image below. Will the project affect these storage tanks?



Impact Assessment Process

29. Projects on federal land are subject to the federal Impact Assessment Act (IAA). Before an NCC Federal Approval can be issued or construction can begin, the NCC must determine pursuant to the IAA that the project is not likely to cause significant adverse environmental effects.

30. Attached to these comments is the document “Interim Guidance on sections 81 to 91 of the *Impact Assessment Act”.*

31. A draft Project Description, prepared according to the information requirements of the attached document, should be submitted as soon as possible. Once the draft Project description is received, it will be reviewed by the NCC’s Communications. The OCDC team will be required to incorporate any revisions requested by NCC Communications and provide the NCC a French translation. The final English and French versions will be posted by the NCC to the Impact Assessment Registry, and a minimum 30-day public comment period will begin.

32. The draft Mitigation Measures Form (MMF), prepared according to the information requirements previously provided, should be submitted with the 66% design package. The revised Species at Risk Assessment Report should also be submitted with the 66% design package.

33. The NCC's Archaeologist has reviewed the OCDC parking proposal. In addition to having a low pre-contact archaeological potential, the location concerned also has a low potential for historical archaeological resources. No archaeological investigation or monitoring of project work is thus required. This advice should be integrated into the draft MMF.

Species at Risk Assessment Report

34. Invasive species on site should be listed, their distribution mapped, photographs included in the report as well as relevant mitigation measures.

35. If the vegetation feature F 'the depression' (SAR report, August 2020) meets the federal definition of a wetland, a proper wetland delineation, characterization and function assessment is needed. Federal lands are subject to the Federal Policy on Wetland Conservation with the goal of "no net loss of wetland functions". The federal wetland classification system uses the National Wetlands Working Group's (1988) definition of a wetland: "land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic vegetation, and various kinds of biological activity which are adapted to a wet environment" (Hanson et al., 2008). This definition does not specify size criteria for wetlands as in OWES, and therefore may be considered a wetland from a federal perspective. For full due diligence, please use the wetland ecological functions assessment tool provided in the federal wetland classification guidelines (Hanson et al., 2008) to assess the wetland function of this 'depression'.

36. A map showing nearby streams (Mud Creek and Green's creek) needs to be included in the report as well as a discussion on the project potential impacts to nearby streams and mitigation measures needed.

37. The background review and target species list should include fauna and flora species at risk (SAR) and species of conservation concern (SOCC). Federally listed species do not seem to have been considered. A SAR is defined as: Endangered and threatened species that are listed under Schedule 1 of the federal SARA, Endangered and threatened species that are listed under the SARO. SOCC are defined as: Special concern species on the SARO list, Species with special concern status assigned by COSEWIC regardless of its listing on Schedule 1 of SARA, Species with provincial ranks of S1 to S3 (NHIC).

38. ELC codes should be used for the detailed vegetation community description and a detailed mapping of each vegetation communities is needed.

39. A detailed tree inventory describing and mapping each tree ≥10cm diameter at breast height (DBH) is needed for the site. For each tree we must know the species, DBH, condition and potential as a bat maternal roost.

Approval Process

To reiterate some of the information previously provided by Kelly Wojnarski**,** in her email from October 14th, below is some additional information about the Federal Approvals process.

1. This project is Level 2 FLUDA – this means it is subject to e-vote by the NCC Board of Directors (e-votes occur weekly).
2. The e-vote process generally occurs at the 99% design or pre-tender stage.
3. The submission requirements to be submitted with the Step 2 form include:
    - Completed and signed Step 2 form (attached)
    - Submission Requirements outlined below.
4. Please note that there is a review fee of $2,000 plus tax, associated with the federal approval. The payment is typically processed when the Step 2 form is submitted and reviewed. Please confirm who will be paying the processing fee when the Step 2 form is returned.

Submission Requirements

The following submission requirements are required to be submitted as part of the Federal Approvals process. Submission requirements pertaining to the necessary municipal planning approvals will be provided by the City of Ottawa following a pre-consultation meeting.

1. A copy of plans and reports submitted as part of the municipal planning process.
2. Written 1-2 page project description including scope and timelines.
3. Recent site Photos of existing parking areas on site – taken in Winter 2021 or Spring 2021
4. The following plans:
    - Site Plan;
    - Site Grading Plan;
    - Stormwater and Drainage Plan;
    - Geotechnical Report;
    - Landscaping Plans, including Tree Removal and Planting Plans; and
    - Lighting Plan.
5. Revision or addendum to Stephenson Engineering Parking Space Study dated September 27, 2018.
6. Documents necessary for the Environmental Assessment process, including:
    - Project Description;
    - Draft Mitigation Measures Form (MMF); and
    - Updated Species at Risk Assessment Report.

Attachments:

Attachment 1: Interim Guidance on sections 81 to 91 of the *Impact Assessment Act*
Attachment 2: NCC Step 2 Form

Thank you for the opportunity to comment and provide input at this early stage in the process.

Sincerely,

Kate Goslett
Senior Land Use Planner, Capital Planning
National Capital Commission
Kate.Goslett@ncc-ccn.ca
(613) 406-8134

cc.

Martin Barakengera, NCC
Natalie Glancy, NCC
Camille Tremblay, NCC
Kelly Wojnarski, NCC
Ted Horton, NCC
Sylvie Lalonde, NCC
Isabelle Hughes, NCC

NATIONAL CAPITAL COMMISSION
COMMISSION DE LA CAPITALE NATIONALE

April 1, 2022

VIA E-MAIL

Domenico Giangregorio
COLLIERS PROJECT LEADERS

RE: Comments on OCDC Proposed Parking Expansion – 66% Site Plan

The purpose of this letter is to provide Colliers with comments on the proposed parking lot expansion at Ottawa-Carlton Detention Centre at 2244 Innes Road, and identify additional required documentation to support the project. NCC staff comments are based on the 66% drawings dated 2022-02-02 and the Draft Parking Study dated 2022-02-01. These comments are not final, and will be supplemented when the additional required documentation is provided, particularly related to environmental impacts.

Coordination with Municipal Planning Process

1. The Proponent is required to satisfy the municipal planning requirements of the City of Ottawa, including obtaining necessary Zoning By-law Amendments (if applicable) and Site Plan Control Approval.

2. The NCC will coordinate review of the proposal under the *National Capital Act*, with that of the City of Ottawa municipal planning process. Please see attached "Approval Process Map".

3. In the case of conflict between federal plans and/or policies and the municipal planning framework, the more restrictive plan, policy, guideline, or provision shall apply.

Federal Policy, Regulatory Requirements, and Guidance

Canada's Capital Greenbelt Master Plan

4. The site is designated *Non-Federal Facility & Operations* in the Canada's Capital Greenbelt Master Plan (GMP). The NCC must be satisfied that the proposal aligns with the policies, guidelines and objectives of the Greenbelt Master Plan. Federal and Non-Federal facilities in the GMP will be carefully managed to control their footprint and ecological impact. Existing Non-Federal facilities are permitted; however, they are required to complement the roles of the Greenbelt and contribute positively to the Greenbelt's visual landscapes. The goal is to guide these facilities to be consistent with and complementary to the roles of the Greenbelt. Specific policies related to this land use include:

a. Minor expansions of Non-Federal facilities are permitted; however, the expansion must be consistent with the policies of the Greenbelt Master Plan (see Table 5.5; Policy 3, p.66 and 7.6 Mer Bleue Sector (p. 116). In particular, other Greenbelt roles shall not be negatively impacted, or the expansion should contribute positively to these Greenbelt roles.

b. Championing environmental stewardship and best management practices in facility management.

5. Apply context-sensitive design best practices to the planning, design and location of parking facilities that aim to conserve the natural and visual resources. The NCC discourages expansion of existing parking surfaces and encourages shielded lighting and protection of the night sky. The NCC advocates avoidance of impact on habitats and eliminate if possible unnecessary lighting at the facilities to help achieve a night sky quality without compromising safety (Policies 6.7 “J and K” of the Greenbelt Master Plan).

6. The proposed parking expansion or any future projects on this site must respect the slope stability setbacks of Green's Creek as defined in the *2011 Green's Creek Fluvial Risk Study*. Continued efforts are required to improve the headwaters of Green’s Creek and its tributaries in this sector. The Greenbelt Master Plan encourages to work with the proponent to ensure the protection of fluvial geomorphology, particularly those addressing erosion control thresholds. The NCC requires integrated stormwater management measures for the proposed parking expansion to mitigate fluvial geomorphological risks to the Greenbelt unstable lands at the southern limits of the site (Greenbelt Master Plan policies of Section 6.3.1.2 (b) and Section 7.6 (Q)). In addition, While it is understood that the Proponent, as a Provincial entity, will not be obtaining a permit from the Rideau Valley Conservation Authority (RVCA), it is an NCC requirement that the RVCA be engaged in the review of the Proposal. The NCC will require implementation of advice and recommendations provided by the RVCA for projects located in this area (Greenbelt Master Plan policy (e) of Section 6.3.1.1). Establishment of infrastructure, structures, development or site alteration will not be permitted within areas defined as “natural hazard lands” by the NCC or its partners. (Greenbelt Master Plan policy (c) of Section 6.3.1.2)

7. Additional policies of the plan that should be considered in the design of this project include:

a. The designation of Innes Road as a scenic route, which requires that the visual character of the landscape from roadways be maintained or improved.

b. The prioritization of transportation demand management measures when assessing new infrastructure proposals, including giving priority to sustainable low-carbon and non-carbon transportation initiatives over approaches that create more capacity for vehicles.

Site Design & Landscaping

8. Existing parking areas on site have previously been expanded without required approvals from both Federal and Municipal approval authorities.

9. Any approved parking on the site must substantially support the protection of the Natural Environment of the Greenbelt in accordance with the guidelines and policies contained in the Greenbelt Master Plan.

10. Generally, the Proponent must follow best practices for low-impact parking lots, including:
    - planting and protecting trees;
    - providing good quality soil and generous landscaped areas;
    - managing stormwater on-site;
    - reducing the urban heat island effect;
    - using permeable paving materials where possible; and,
    - using sustainable materials and technologies.

11. The NCC is not supportive of parking in front of the facility due to tree removal and soil compaction. Maintaining a landscaped buffer between the facility and Innes Road is important from both a visual and environmental perspective. The NCC is supportive of containing the parking expansion within the perimeter fence of the facility.

12. The NCC will require that all municipal by-laws be adhered to, and that the City of Ottawa design guidelines for parking lots be respected to the extent feasible while meeting the objectives and requirements of Federal policy. In particular, the following municipal requirements should be included in the planned parking expansion:
    a. 15% of the parking lot should be landscaped area
    b. A 3m buffer between the parking area and all lot lines shall be provided
    c. Bicycle parking must be provided at a rate of 1 space per 1500 square metres of gross floor area, and must be located so as to provide convenient access to main entrances.
    d. Minimum and maximum parking space and drive aisle dimensions shall be respected, including for accessible parking spaces.

13. The hatched areas at the end of rows of parking cannot be painted lines; they must be areas inaccessible to vehicles.
    a. If these areas are left simply as painted lines, vehicles may elect to park in these areas and only perpetuate the existing unsightly and potentially unsafe parking situation on site.
    b. Although it is the Proponent's intention is to avoid altering the drainage pattern of the site, it remains possible to provide landscaping or other appropriate solution to demarcate these areas as unavailable for parking while still permitting surface water flow.
    c. For example, appropriate solutions could include creating landscaped islands with curbing that include curb cuts and bioswales or other water retention feature, or using a permeable surface demarcated by a barrier to vehicles such as a low fence, guardrail or row of bollards.

14. The parking layout should be designed to ensure the safety of pedestrians and cyclists within the parking lot, particularly as employees are anticipated to be walking to/from their vehicles while vehicles are entering and leaving the facility.

Parking Rates

15. Providing the minimum required parking spaces should be an objective of the proposal, especially given the site's location in the Greenbelt.

16. Transportation demand management principles must be applied to this project. Transportation demand management is based on the idea that the demand for transportation infrastructure such as parking is not fixed, but rather that it can be managed to cope with a lower "supply" of infrastructure. Transportation demand management approaches that should be considered for the site include:
    a. Setting a target for reduction in single occupant personal vehicle use, through switching to alternative modes (e.g. carpooling, transit, cycling).
    b. Assessing the existing demand, and identifying factors that influence that demand (e.g. transit availability, parking availability, cost). The employer can then work to address barriers to switching to alternate modes (e.g. working with OC Transpo to ensure that bus route timing aligns with shift timing).
    c. Incentivizing commutes via alternative modes, for example by:
        i. Charging a fee for onsite parking
        ii. Purchase of discounted transit passes via direct debit from paychecks
        iii. Having an employee carpool network
        iv. Dedicated preferential carpool parking
        v. Hosting employee engagement activities, such as bike month
        vi. Providing information to employees about available transit options

Environmental Requirements

17. Projects on federal land are subject to the federal Impact Assessment Act (IAA). Before an NCC Federal Approval can be issued or construction can begin, the NCC must determine pursuant to the IAA that the project is not likely to cause significant adverse environmental effects.

18. The depression between the visitor parking and current informal parking area, considered a wetland under the federal classification system, should be preserved and protected in the design of the parking lot expansion. Federal lands, including those of the NCC, are subject to the Federal Policy on Wetland Conservation, with the goal of "no net loss of wetland functions". Understanding of the wetland's ecological functions is critical to the evaluation of any potential environmental impacts resulting from the Proposal – see "Submission Requirements" below for further details. Removal of the wetland or any portion of it may trigger compensation requirements and project review by Environment and Climate Change Canada.

19. Existing trees are to be protected (with high visibility fencing installed at the perimeter of their critical root zones during work on site).

20. Any tree removal must be pre-approved by the NCC.
    a) The NCC requires compensation for all trees ≥10cm DBH removed from federal land in the National Capital Region.
    b) The compensation scenario for the loss of ecological features and functions is determined on a context-sensitive basis and guided by the principle of 'no net loss' at a minimum and preferably according to the principle of 'net environmental gain'.

21. The NCC requires outdoor lighting to be compliant with "dark sky" and "bird friendly" principles. The NCC's "Bird-Safe Design Guidelines", publicly available online, should be consulted in development of a lighting design. Of note, according to the NCC's Bird-Safe Design Guidelines, all outdoor lights should have a colour temperature of no more than 3,000 Kelvin and full cut-off fixtures should be used to limit light spill.

Questions and Comments on 66% Submission

Proposed infrastructure

22. Are all provincial and municipal requirements being met through the proposed layout? Please indicate clearly on the plans or in the supporting parking study report how the requirements are being addressed. In particular, the following are not clearly indicated on the plans or in the report:
    a. Minimum of 15% of surface area to be landscaped.
    b. 3 metre buffer between the parking lot and the western lot line
    c. Bicycle parking
    d. Provision of accessible parking spaces (see below).
23. Accessible parking spaces are required as provided by O. Reg. 191/11 under the Accessibility for Ontarians with Disabilities Act, 2005.
        a. The required accessible parking space width should be updated on page 8 of the Draft Parking Study to align with O. Reg. 191/11 for both Type A and Type B spaces.
        b. Plans should clearly indicate where accessible parking spaces are located.

24. Will any charging be provided for electric vehicles onsite?

25. In addition to being located with convenient access to the main entrance, provided bicycle parking should be secure (i.e. within the perimeter fence) and covered to protect bicycles from rain or snow.
        a. If possible, access to lockers and change rooms should be provided for staff to encourage use of active modes of transportation.
26. The Draft Parking Study does not contain a complete analysis of parking demand for the site. In addition, no information has been provided regarding ability to modulate or manage the demand to minimize the need for onsite parking.

a. Given the in-person nature of the work at the site, the NCC expects a continued need for parking on site, comparable to the existing demand. However, the NCC expects that only the minimum number of parking stalls that are required for operations will be formalized on site.
b. Furthermore, given that most employees needing to access the site are on shifts and therefore groups of employees arrive and depart at the same time, this site is a strong candidate for demand management through switching from single occupant private vehicle use to carpooling, shuttles or transit. The site is also optimally located on a bicycle path, within a 30-minute ride from many residential communities.
c. Further identification of potential interventions to make the site more friendly to active mode and transit users should be included in the submitted materials. For example, providing sidewalks or delineating dedicated pedestrian routes and ensuring the entrance gate is safe and easy to use for pedestrians and cyclists will ensure that those walking from the bus stop or cycling to the site are welcome and safe.
d. See the "Detailed requirements for Plans and Reports" below for further information on what is expected for an appropriate transportation demand analysis and management plan.

Proposed landscaping and lighting

Lighting

27. Based on the understanding that the paved connection between the visitor's parking and employee parking is to be maintained only for site maintenance and snow management purposes, why is lighting proposed in this area? Can it be removed?

28. The NCC would encourage further exploring options to reduce, or completely eliminate, light spill into the wetland area, for example using directed lighting, cut-off features and moving the lampposts further away from the area.

29. Has any remote control, programming or use of light-level sensors been considered to control the lights to reduce lighting levels to the minimum possible? For example, having modulation of lighting levels by time of day and time of year, as well as based on the presence/absence of cloud cover or snow.

30. The colour temperature of the proposed lighting exceeds the 3000 Kelvin limit recommended by the NCC's Bird-Safe Design Guidelines.

Landscaping

31. Parking areas should be delineated by appropriate landscaping and site furnishings rather than road markings/painted lines alone. Per the City of Ottawa design guidelines applicable to parking lots, unbuilt portions of the site not required for

minimum parking requirements should be landscaped (e.g. planting trees, shrubs or adding ground cover).

a. Successive historical photographs indicate an ongoing encroachment of the parking area into the wetland. Physical design elements are required to delineate the parking area and prevent further encroachment.
b. Please detail on your plans your proposed features to limit encroachment, whether through poured curbing pre-cast curbing, or large landscape boulders.

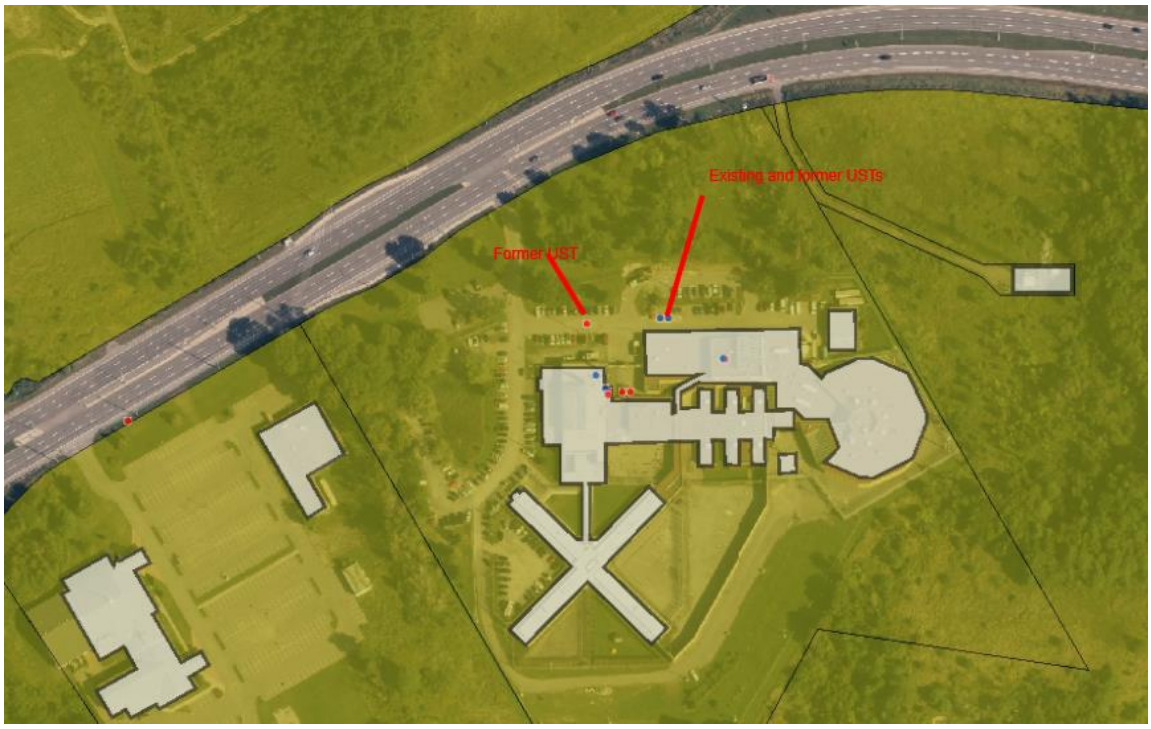
32. Changing the existing packed gravel to a paved asphalt surface will likely increase the amount of surface runoff water, thereby affecting the capacity of the wetland to absorb and retain stormwater from the parking area. Efforts should be made to mitigate this impact through design, for example by:
    a. Reducing impervious surfaces to the minimum that is functionally required.
    b. Introducing bioswales or other surface water retention mechanisms within the landscaped areas of the parking.
    c. Using a vegetated cover for the wetland buffer area that will absorb more water than grass does.
33. Please identify which potential permeable paving options were evaluated and if not retained, why it was concluded that they are not feasible solutions for this site.

34. The proposed 5m buffer between the parking area and the wetland may not be sufficient. Typically, a buffer of 15m would be required around the wetland, however due to the existing use of this site (not approved) and the likely man-made nature of the wetland, a smaller buffer may be acceptable.
    a. Characterization of the wetland and its ecological functions, as well as advice from the RVCA will be required to determine an appropriate buffer distance for this site.
35. Reinstatement of disturbed areas of the site and tree compensation for any removed trees will be required. Proposed reinstatement landscaping and locations for planting the required compensation should be identified in the drawings as soon as possible.
    a. The NCC will require that all proposed plantings be native, non-invasive species. The NCC will review and approve the reinstatement and compensation plan, as well as the landscaping proposed for the site.

Environmental Considerations

36. A comprehensive review of potential environmental impacts and associated NCC comments will be provided once the requested studies and reports have been submitted by the proponent, including:
    a. Slope stability assessment (geotechnical analysis), as requested by the RVCA
    b. Tree Inventory
    c. Species at Risk Assessment Report
    d. Draft Mitigation Measures Form
    e. Stormwater Management Plan
    f. See the attached “Step 2 Form” and the Submission Requirements section below for further details on the requested documents.

37. A review of NCC records indicates existing and former underground fuel tanks as depicted on the image below. Will the project affect these storage tanks?



Submission Requirements

The submission requirements for a complete application under the Federal Approvals process are identified in the attached draft "Step 2" Form. The "Step 2" Form should be read as identifying required information and plans; the required information may be packaged in order to meet requirements for other regulatory authorities such as the City of Ottawa. Where specific standalone reports or standardized formats are required, they are identified below.

In addition to the submission requirements identified in the Step 2 Form, please provide the following:

A. Information to finalise the draft Step 2 Form (attached):

   a. Project development schedule, including anticipated approval date

   b. Confirmation of Proponent Entity

i. The entity should be either the NCC tenant (Government of Ontario) or the manager of the project. If not the tenant, the entity should have authorization to act on behalf of the tenant.

ii. A person at director-level or equivalent with authority to sign on behalf of the organization should be identified. The approval letter will be issued to that person.

iii. Consultants and contracted project managers (i.e. Colliers Project Leaders) may continue to act as the main contact point for the approval even though they would not be identified as the "Proponent".

B. A copy of all plans and reports submitted to the City of Ottawa for the municipal site plan control application.

C. A copy of all plans and reports submitted to the Rideau Valley Conservation Authority for their review.

D. A copy of the comments or responses provided by the City of Ottawa and RVCA.

Submission requirements detailed information:

Site development and landscape plans

- Plans should clearly show the different surface treatments (maintained from existing and new) - shading is identified in the legend but not in the plans
- A separate landscaping plan should be provided that clearly identifies trees proposed for removal (with an X), trees retained (symbol for existing trees) and proposed new plantings (symbol for new trees and vegetation, showing tree compensation and other landscape buffer elements).
    - The landscaping plan should be stamped by a landscape architect.
    - The landscaping plan should show the species of the existing and proposed trees, as well as details of the proposed planting and landscaping methods, including soil requirements, etc.
- Clearly indicate the property/lot line on the plans, ensure that the "limits of work" line encompasses all proposed works, and identify the meaning of all the line types in the legend (e.g. red dashed line, zigzag line, etc).
- In addition to plan views, provide sections showing the structure of the proposed surface (thickness, supporting fill, etc.) and the design of buffer treatments (e.g. curb and landscaped no parking areas)
- Please provide information on pedestrian and cyclist mobility/movement, indicating key origins and destinations adjacent to and within the site, such as

building entrances and egress, bus stops, bicycle parking, visitor access gates, etc.. Anticipated pedestrian and cyclist movements across the site and through the parking area should be clearly indicated, with potential conflict zones with vehicular movements and the proposed treatment to reduce the risk of collisions identified.

- This requirement could be addressed within the site and landscape plans, as per the City's request to show the pedestrian network on these plans.

Regulatory Framework

- Please provide an analysis of how the Proposal responds to the applicable NCC plans and policies, including the requirements identified at the start of the letter, in addition to information about how other regulatory requirements or reviews are being met (i.e. EA process, municipal bylaws and design guidelines, conservation authority review.).
- Please include with your submission a zoning compliance table indicating a breakdown of your proposed development along with indication of whether the site conforms to each applicable section of the zoning by-law.
    - Please specifically include a breakdown of your required and provided Accessible Parking, with reference to the applicable regulation or zoning by-law.
    - Please specifically include a breakdown of your required and provided Bicycle Parking, with reference to the applicable regulation or zoning by-law.

Transportation Demand Study

- This analysis and plan can be integrated within the draft parking study and does not need to be a standalone document.

- MCS should set a modal split target for employee travel to the site. This target may already be determined through Provincial strategies or policy, or could be set based on the specific operations and location of the OCDC facility.

- Thorough documentation of existing travel patterns and modes used to get to/from the site by employees should be presented in order to identify the current modal split, to help set a realistic target and develop options to meet the set target.

    - Ideally this would be an employee survey (either representative sample or entire population) identifying typical mode of travel, origin/destination, and providing an opportunity for comments/notes on their commute experience.

    - If an employee survey is not feasible, information can be gathered from on-site observation.

- Based on the modal split target established, a required minimum number of parking spaces for peak periods should be identified for regular operations. This minimum number of parking spaces should be equal to or less than the current observed parking demand.

- The plan should identify any measures or programming that will be implemented to achieve the modal split target.

- Additional parking needs for emergency or other contingency requirements should also be identified, as distinct from the base parking requirement.

    - The transportation demand management plan and site design should identify how these additional spaces would be reserved or made available for emergency/contingency use, rather than becoming general use parking having an overflow situation in case of emergency.

    - If different design is possible for the emergency/contingency parking given its more infrequent use (e.g. more permeable surface treatment), this should be identified as an opportunity.

Impact Assessment Act

- A draft Project Description, prepared according to the information requirements of the attached document, should be submitted as soon as possible. Once the draft Project description is received, it will be reviewed by the NCC's Communications. The OCDC team will be required to incorporate any revisions requested by NCC Communications and provide the NCC a French translation. The final English and French versions will be posted by the NCC to the Impact Assessment Registry, and a minimum 30-day public comment period will begin.

- The NCC's Archaeologist has reviewed the OCDC parking proposal. In addition to having a low pre-contact archaeological potential, the location concerned also has a low potential for historical archaeological resources. No archaeological investigation or monitoring of project work is thus required. This advice should be integrated into the draft MMF.

Species at Risk Assessment Report

- Invasive species on site should be listed, their distribution mapped, photographs included in the report as well as relevant mitigation measures.

- A proper wetland delineation, characterization and function assessment is needed. For full due diligence, please use the wetland ecological functions assessment tool provided in the federal wetland classification guidelines (Hanson et al., 2008) to assess the wetland function of the 'depression' located within the site.

- A map showing nearby streams (Mud Creek and Green's creek) needs to be included in the report as well as a discussion on the project potential impacts to nearby streams and mitigation measures needed.

- The background review and target species list should include fauna and flora species at risk (SAR) and species of conservation concern (SOCC). Federally listed species must be considered. A SAR is defined as: Endangered and threatened species that are listed under Schedule 1 of the federal SARA, Endangered and threatened species that are listed under the SARO. SOCC are defined as: Special concern species on the SARO list, Species with special concern status assigned by COSEWIC regardless of its listing on Schedule 1 of SARA, Species with provincial ranks of S1 to S3 (NHIC).

- ELC codes should be used for the detailed vegetation community description and a detailed mapping of each vegetation communities is needed.

- A detailed tree inventory describing and mapping each tree ≥10cm diameter at breast height (DBH) is needed for the site. For each tree we must know the species, DBH, condition and potential as a bat maternal roost.

Tree Inventory Plan

- A Tree Inventory Plan should show the size (DBH), species and health condition of trees which may be impacted on the site, including identification of which trees are proposed to be removed or preserved. A replanting/landscape plan must be developed to ensure compensation for trees removed (see site plans above for details).

Attachments:

Attachment 1: Approval Process Map
Attachment 2: Interim Guidance on sections 81 to 91 of the *Impact Assessment Act*
Attachment 3: Draft NCC Step 2 Form

We look forward to receiving the requested environmental reports and reviewing the impacts to your proposal at that time. Please advise if you would like to schedule a meeting to go over the comments provided in this letter and the draft "Step 2" Form.

Sincerely,

Marion Gale
Senior Land Use Planner, Federal Approvals, Heritage and Archaeology
National Capital Commission
Marion.Gale@ncc-ccn.ca
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cc.

Martin Barakengera, NCC
Natalie Glancy, NCC
Camille Tremblay, NCC
Ted Horton, NCC
Sylvie Lalonde, NCC
Isabelle Hughes, NCC
Natalie Bélanger, NCC
Christopher Hetherington, NCC
Michael Boughton, City of Ottawa
Jamie Batchelor, RVCA

Appendix D City of Ottawa Pre-Consultation Internal Department Comments

Pre-Consultation Application 2244 Innes Road – OCDC – City of Ottawa Internal Department Comments

Transportation:

- A TIA is not required for a parking expansion.
- A screening form is not required.
- Noise study is not required.

Environmental:

Tree Conservation Report Requirements:

- A Tree Conservation Report (TCR) must be supplied for review along with the suite of other plans/reports required by the City
    - An approved TCR is a requirement of Site Plan approval.
- As of January 1 2021, any removal of privately-owned trees 10cm or larger in diameter, or publicly (City) owned trees of any diameter requires a tree permit issued under the Tree Protection Bylaw (Bylaw 2020 – 340); the permit will be based on an approved TCR and made available at or near plan approval.
- The Planning Forester from Planning and Growth Management as well as foresters from Forestry Services will review the submitted TCR
    - If tree removal is required, both municipal and privately-owned trees will be addressed in a single permit issued through the Planning Forester
    - Compensation may be required for city owned trees – if so, it will need to be paid prior to the release of the tree permit
- The TCR must list all trees on site by species, diameter and health condition
- Please identify trees by ownership – private onsite, private on adjoining site, city owned, co-owned (trees on a property line)
- The TCR must list all trees on adjacent sites if they have a critical root zone that extends onto the development site
- If trees are to be removed, the TCR must clearly show where they are, and document the reason they cannot be retained
- All retained trees must be shown and all retained trees within the area impacted by the development process must be protected as per City guidelines available at Tree Protection Specification or by searching Ottawa.ca
- The location of tree protection fencing must be shown on a plan

- Show the critical root zone of the retained trees
- If excavation will occur within the critical root zone, please show the limits of excavation
- The City encourages the retention of healthy trees; if possible, please seek opportunities for retention of trees that will contribute to the design/function of the site.

For more information on the process or help with tree retention options, contact Mark Richardson mark.richardson@ottawa.ca or on City of Ottawa

Landscape Plan Tree Planting Requirements:

Minimum Setbacks

- Maintain 1.5m from sidewalk or MUP/cycle track.
- Maintain 2.5m from curb
- Coniferous species require a minimum 4.5m setback from curb, sidewalk or MUP/cycle track/pathway.
- Maintain 7.5m between large growing trees, and 4m between small growing trees. Park or open space planting should consider 10m spacing.
- Adhere to Ottawa Hydro's planting guidelines (species and setbacks) when planting around overhead primary conductors.

Tree specifications

- Minimum stock size: 50mm tree caliper for deciduous, 200cm height for coniferous.
- Maximize the use of large deciduous species wherever possible to maximize future canopy coverage
- Tree planting on city property shall be in accordance with the City of Ottawa's Tree Planting Specification; and include watering and warranty as described in the specification (can be provided by Forestry Services).
- Plant native trees whenever possible
- No root barriers, dead-man anchor systems, or planters are permitted.
- No tree stakes unless necessary (and only 1 on the prevailing winds side of the tree)

Hard surface planting

- Curb style planter is highly recommended

- No grates are to be used and if guards are required, City of Ottawa standard (which can be provided) shall be used.
- Trees are to be planted at grade

Soil Volume

- Please ensure adequate soil volumes are met:

Tree Type/Size	Single Tree Soil Volume (m3)	Multiple Tree Soil Volume (m3/tree)
Ornamental	15	9
Columnar	15	9
Small	20	12
Medium	25	15
Large	30	18
Conifer	25	15

Please note that these soil volumes are not applicable in cases with Sensitive Marine Clay.

Sensitive Marine Clay

- Please follow the City's 2017 Tree Planting in Sensitive Marine Clay guidelines

For additional information on the following please contact tracy.smith@Ottawa.ca

Urban Design:

- A design brief is required. Please see attached terms of reference.
- Please provide additional landscaped area and tree coverage within the proposed parking area.
- Please ensure that all parking spaces are functional and have adequate ability for turning movements.
- Efforts to retain the existing vegetation abutting Innes Road should be undertaken, and any parking expansion, should not be located closer to Innes Road than the existing parking area.

Planning:

- Comments provided by Michael Boughton, Senior Planner, Development Review - East

- **Official Plan:** The City's Official Plan (OP), Schedule B, designates the subject site "Greenbelt Employment and Institutional Area" for the entire property, which is in the NCC Greenbelt. Section 3.5 and 3.5.2 of the OP outlines the applicable land use policies, the more notable of which include those highlighted below. The proposed development is also to conform with other relevant OP policies, specifically Section 4.11 as may be applicable.
  - Policy 1 of Sec. 3.5 states that the policies for the Greenbelt in the City's Official Plan implement the provisions of the NCC Greenbelt Master Plan.
  - Policy 1 of Sec. 3.5.2 states in part that lands designated Greenbelt Employment and Institutional Area permit institutional, cultural, recreational and research facilities provided that, c) the programming, land use, and landscape character of these facilities respect the Greenbelt's rural character and benefit from an extensive open area, isolation or a rural environment.

- **Zoning By-law 2008-250:** The site is zoned "Rural Institutional" subject to Rural Exception 233r (RI5[233r]). The Exception simply recognizes a "correctional facility" as an additional permitted use. A link to the relevant zone provisions is provided.

Rural Institutional (RI5): https://ottawa.ca/en/living-ottawa/laws-licences-and-permits/laws/law-z/planning-development-and-construction/maps-and-zoning/zoning-law-no-2008-250/zoning-law-2008-250-consolidation/part-13-rural-zones-sections-211-236#ri-rural-institutional-zone-sections-223-and-224

  - Sec. 69 of the Zoning By-law is to be complied with.
  - Part 4 – Parking Provisions of the Zoning By-law are to be complied with, in particular, Sec. 101, 102, 106, 107, 109, and 110.
  - Note that Sec. 110 requires a minimum landscape buffer of 3.0 metres from a lot line to any part of the proposed parking area.
  - The applicable parking rate (Sec. 101) for a correctional facility is 1sp./100 sq.m. GFA. We may discuss whether to exclude cell blocks from the floor area calculation.

- **New Draft Official Plan:** For information purposes only, the new draft City of Ottawa Official Plan, which is scheduled to be presented to Committee(s) and Council later this October 2021, designates the subject site as "Greenbelt Facility" on Schedule B4 of the Greenbelt Transect. The proposed policies that apply to Greenbelt Facility, Sec. 8, would apply once the new OP has been approved by the Ministry of Municipal Affairs. It is recommended that you take note of these draft policies in the event the site plan control application affecting the subject site is filed after Council's adoption of the new OP.

- **Comments:**
  - The proposed parking area modifications and expansion are to respect the provisions of the NCC Greenbelt Master Plan.
  - Consideration is to be given to protecting as many trees as possible and avoid tree removal, particularly along the site's front yard.
  - Appropriately designed lighting is to be provided throughout the parking area.
  - It appears from the images provided in the parking study that segments of existing fencing may require resetting or replacement.

- Planning staff will focus on traffic and pedestrian circulation within the parking area, the design of the space – parking space dimensions, drive aisle widths, and landscaped islands – to provide opportunities for tree planting/greenspace and to aid in efficient traffic circulation.
- Clearly show on the site and landscape plans the pedestrian network to/from the main facility.
- Consideration should be given to providing additional and replacement tree planting along the west side yard and front yard of the parking area expansion/improvements to provide the enhanced screening from Innes Road and the adjacent property.
- Submission Requirements (Planning) – planning rationale, dimensioned site plan and landscape plan (stamped by LA), lighting plan, site survey plan, revised parking study (should reference parking requirements in Zoning By-law 2008-250).

Engineering:

- Servicing: On Innes Rd., there is an existing 400mm. dia. watermain (feedermain) with a private water supply to the buildings, a 525mm dia. sanitary trunk sewer, as well as 300mm. dia. storm sewer on the north side of Innes Rd., and a 750mm. dia. storm trunk sewer on the south side, where few catchbasins on the subject site are connected to. Overall, there appears to be an internal storm network consisting of catchbasin manholes, ditch inlet catchbasins, catchbasins and various diameter storm sewers situated to the east of the access road, running along the eastern portion of the site, where a stormwater detention area exists. It is at this point where we see a significant grade difference at the southern end of the site. Here, there has been grading and drainage works carried out in the past to capture the stormwater via manhole catchbasin, catchbasin and storm sewer network. However, in the absence of an exhaustive storm sewer network, the Applicant shall demonstrate managing stormwater through, for example, sustainable approaches (see LID note below).

  As part of the servicing component, the Applicant is recommended to consult the City's geoOttawa website: (http://maps.ottawa.ca/geoOttawa/) for basic information regarding the municipal services on Innes Rd.

- Geotechnical Considerations: The area within close vicinity to the subject site consists of silty clay. These can bring some constraints along with them, specifically:
  - grade raise restrictions
  - slope stability (around drainage features)
  - relatively high groundwater levels.

- Tree Planting and Clay Soils: With the geotechnical considerations, the City's planting policies should be consulted with respect to planting restrictions and requirements. Also, it is recommended that the Applicant refer to the comments provided by the City's Forestry team for this pre-application consultation with respect to this note.

- Stormwater Management: the subject site falls within the Mud Creek subwatershed, where it ultimately empties into the Green's Creek watershed. The Mud Creek Cumulative Impact Study (CIS), which was finalized in February 2021, speaks to existing conditions, erosion thresholds, mitigation alternatives, modelling for water quality and quantity, for a study area that's limited to the reaches of Mud Creek upstream of Renaud Rd., and north of the rail corridor. Further information regarding this study can be obtained through Development Review staff, and is to be consulted accordingly. Per NCC comments, the Greenbelt Master Plan and the Green's Creek Fluvial Master Study are also to be consulted and integrated, accordingly.

  Alongside the stormwater management component, please ensure that the RVCA is circulated and have provided their comments and requirements on the water quality control, accordingly.

- Low Impact Development (LID): To echo the NCC's comment pertaining to following the principles of "greening parking lots", the Applicant is to look into the implementation of LID best management practices. However, with clay soils present, there may be low permeability, and in turn, limited infiltration volumes. Nonetheless, the Applicant is to consider LIDs and provide rationale in the servicing and stormwater management report on its effectiveness in the development, in accordance with the Ministry of the Environment, Conservation, and Parks (MECP) and City of Ottawa guidelines for development.

- Development Charges (DC): The site is subject to development charges for the works associated for Greenbelt Development, with registration or upon the issuance of first conditional building permit, whichever comes first. Further information regarding this, as well as DC calculations, exemptions, indexing of rates can be obtained through Gary Baker, DC Program Coordinator (gary.baker@ottawa.ca).

- MECP ECA: Please note that this site may be subject to an MECP Environmental Compliance Approval (ECA). Please refer to the Servicing Memo for further information.

- Please find attached additional engineering comments for the proposed development.

Application Type and Fees:

- The Application Fees (2021 Rates) for the applications are as follows:

Application Type	Planning/ Legal Fee	Initial Engineering Design Review & Inspection Fee	Conservation Authority Fee (Initial)	Total
Site Plan Control Approval (New – Standard)	$18,780.86	$10,000 (incl. HST) services >$300,000	1,040.00	**$29,820.86**

- Link to Application for Site Plan Control Approval: https://app06.ottawa.ca/online_services/forms/ds/site_plan_control_en.pdf
- Link To Relevant Policy – As part of Planning staff's review, we will evaluate your proposal against the relevant Official Plan policies. I have provided a link to it on the City's website.
    - City Official Plan: https://ottawa.ca/en/planning-development-and-construction/official-plan-and-master-plans/official-plan

Required Plans and Reports Submissions

- Attached for your information and action is a list of plans and studies required for the type of application outlined above. The required plans and studies focus on the above and other matters necessary for staff and circulated agencies to provide informed review and comment on the proposed site plan control approval application. The list is also used to deem the application complete.

Please refer to the links to Guide to preparing studies and plans and fees for further information. Additional information is available related to building permits, development charges, and the Accessibility Design Standards. Be aware that other fees and permits may be required, outside of the development review process. You may obtain background drawings by contacting informationcentre@ottawa.ca.

These pre-application consultation comments are valid for one year. If you submit a development application(s) after this time, you may be required to meet for another pre-consultation meeting and/or the submission requirements may change. You are as well encouraged to contact us for a follow-up meeting if the plan/concept will be further refined.

Appendix E Order of Magnitude Cost Estimate

*Probable Construction Cost Estimates - February 1, 2022

OCDC Temportary Parking Lot Paving, 2244 Innes Road, Ottawa, ON

66% Submission

ID	DESCRIPTION	UNIT	QTY	UNIT $	TOTAL
1	mobilization and demobilization	l.s.	1	$ 25,000	$ 25,000
2	phasing requirements to maintain partial occupancy	l.s.	1	$ 25,000	$ 25,000
3	site excavation and grading	m^3	3600	$ 20	$ 72,000
4	remove/discard exisiting asphalt and deliterious material	m^2	3500	$ 35	$ 122,500
5	tree removal	ea	12	$ 600	$ 7,200
6	concrete curbs	m	100	$ 130	$ 13,000
7	HL3 Asphalt (50mm)	m^2	7200	$ 22	$ 158,400
8	HL8 Asphalt (50mm)	m^2	1500	$ 24	$ 36,000
9	Granular A (150mm)	m^2	7200	$ 20	$ 144,000
10	Granular B (300mm)	m^2	5700	$ 36	$ 205,200
11	Granular B (450mm)	m^2	1500	$ 52	$ 78,000
12	storm - subdrain (150mm dia PVC)	m	50	$ 250	$ 12,500
13	storm - sewers (250mm dia PVC)	m	0	$ 350	$ -
14	sewer insulation (50mm)	m^2	0	$ 25	$ -
15	storm - manholes (1200mm dia)	ea	0	$ 6,000	$ -
16	storm - catchbasin (600mm dia)	ea	0	$ 4,500	$ -
17	underground stormwater management storage	l.s.	1	$ 75,000	$ 75,000
18	Stormceptor for SWM quality control	ea	1	$ 18,000	$ 18,000
19	outlet ditch treatment and connection to existing ditch	l.s.	1	$ 20,000	$ 20,000
20	existing wetland protection (approx. 1975m2 incl 5m buffer)	l.s.	1	$ 15,000	$ 15,000
20	Site lighting and security (order of magnitude)	l.s.	1	$ 275,000	$ 275,000
21	Fencing repairs	m	100	$ 400	$ 40,000
22	erosion control during construction	l.s.	1	$ 5,000	$ 5,000
23	line painting and signage	l.s.	1	$ 10,000	$ 10,000
24	landscaping (topsoil and sod)	l.s.	1	$ 30,000	$ 30,000
25	CCTV inspection (post)	l.s.		$ 1,500	$ -
26				**Sub Total**	**1,386,800**
27	15% Overhead and Profit	l.s.	1	$ 208,020	$ 208,020
28	10% Contingency	l.s.	1	$ 138,680	$ 138,680
29				**Total**	**1,733,500**

***Disclaimer:** *In providing estimates of probable construction cost, the Client understands that the Consultant has no control over the cost or availability of labour, equipment or materials, or over market conditions or the Contractor's method of pricing, and that the Consultant's opinion of probable construction costs are made on the basis of the Consultant's professional judgement, current knowledge and past experience. The Consultant makes no warranty, express or implied, that the bids or the negotiated cost of the Work will not vary from the Consultant's opinion of probable construction cost. The provided Cost Estimate is an opinion of probable costs and NOT a guaranteed maximum price.*