Nokia Ottawa Campus 570 March Road Design Brief

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Contents

- 1. Project Description
- 2. Design Directives
- 3. Site, Context, & Analysis
- 4. Design Research
- 5. Additional Materials Appendix



1. Project Description

- Design Description
- Project Statistics
- Proposal Plan & Renderings



Project Description

The Subject Site comprises 4.49 ha of land bounded by March Road, Terry Fox Drive and Legget Drive. The south boundary of the Subject Site is irregular and approximately 50 m south of the office building. The Subject Site is currently occupied by a large surface parking that was being used by the office building to the north.

The legal description of the Subject Site is: Parts 5, 7 and 8 on 4R-35453





Project Description The Subject Site is poised to be a cornerstone in Kanata's ongoing efforts to enhance its commercial and research infrastructure, creating a dynamic workplace for Nokia. This development strategically integrates state-of-the-art R&D Engineering Hub and R&D lab spaces, designed with flexibility, collaboration, and sustainability in mind, to meet the specific needs of Nokia. The R&D Engineering Hub, prominently fronting March Road, will maximize visibility and establish a strong corporate presence along this major thoroughfare, while the R&D Lab Building will address Legget Drive, anchoring the development's eastern edge.

North of these primary structures, the development will feature a newly envisioned serpentine lifestyle street that serves as the vibrant core of the site. This street will seamlessly connect the Brookstreet Hotel on Legget Drive with a future development, Main & Main, on March Road. The ground floors of the R&D Engineering Hub and R&D Lab Building will be lined with retail spaces, initially accommodating employee dining and fitness facilities, but designed to evolve into a lively retail corridor. This curated mix of retail establishments will serve both the Nokia occupants and the wider community, fostering a lively, pedestrian-friendly atmosphere.

In alignment with the City's vision for sustainable growth and vibrant communities, it is recommended the lifestyle street is planned to be a future mixed-use residential area with retail spaces, creating a vibrant live-work-play environment. This street will become a double-sided retail corridor, capable of being closed to automotive traffic during large events and festivals, further enhancing its role as a community gathering place. Enhanced paving, wide sidewalks, and other streetscape features will make this an ideal pedestrian-friendly environment, encouraging interaction and connection.

The development will include a lush amenity plaza facing March Road, providing a tranguil retreat for employees and promoting well-being and social interaction. The integration of open spaces within the development and the proposed future development north of the lifestyle street that connect with the city's existing open space plan will provide recreational opportunities, promote wellness, and enhance the overall quality of life for employees, residents and visitors.

The project also includes a structured parking garage with a unique architectural expression. Interior to the parking garage is a secure bike storage area, allowing the many employees who choose to ride their bike to work the ability to safely secure their bike during work hours.

A mechanical work yard will be discreetly integrated south of the R&D Lab Building along Legget Road to ensure operational efficiency without detracting from the development's overall visual appeal. The mechanical work yard as well as the loading dock for the R&D Lab building will be screened from the pedestrian view.

This proposed development is designed to be a catalyst for economic growth, community engagement, and sustainable urban living, setting a new standard for future projects in the City of Ottawa.



Project Description

LAB-CENTRIC DESIGN

The labs are an important part of how we function. We must support and transform this dynamic space into the strategic layout of the campus.

SPACE + BEHAVIOR

Instead of letting space influence behavior, we should recognize that space and behavior equally complement one another.

SPACE PLANNING

Through the creative arrangement of spaces, the goal is to provide campus for people to live, work, and play.

SUSTAINABLE APPROACH

Address sustainable initiatives on both large and small scales throughout the campus.

FUTURE PROOFING

Explore solutions that afford the ability to flex based on immediate and future needs and shift to accommodate various program requirements.

BLENDED APPROACH

The building should support technology, culture, and organization in order for everyone to have the ability to get their best work accomplished.

ENERGY EFFICIENCIES

A space can work smarter not harder by utilizing energy more efficiently.

EXPLORE FUNDING OPPORTNITIES

Leverage opportunities for government funding to offset energy and Infrastructure costs.

RE-ACTIVATED AMENITIES

Activate amenities that support work, move, and play modes. Re-engage entertainment, sports, wellbeing and food related.

COLLABORATION + CONNECTION

We must maintain culture, collaboration, and connection in both virtual and in-person ways to support and engage employees.

WELLNESS FOCUSED

Create spaces that leave people feeling better than when they arrived.

EMPLOYEE JOURNEY

Enhance the campus journey through the use of planning, signage, and wayfinding. The movement should be a positive experience.

IN-HOUSE TECH DEPLOYMENT

Utilize Nokia's technology to showcase capabilities on site and to capture data analytics for analysis.

EMPLOYMENT INPUT

Our campus design must be informed by employees needs. We need to understand impacts of employee-driven flexibility on physical space.

ENGAGEMENT TOOL

Our space can do more for us; it can serve as a way to engage employees, visitors, and clients with the company.

HANDS-ON WORK MODES

Amenities that offer mobility and flexibility in the design of the space to transform, meet the employees needs, and allow for hands-on collaboration.

TALENT ATTRACTION

Creating an environment that is inspiring and engaging to attract the next generation of talent.

FLEXIBILITY + MOBILITY

Opportunities to feel engaged, connected, and productive—leveraging the hybrid work mode.

SPACE ON DEMAND

Ensure that when employees are in the office, they have the space they need to work, collaborate, engage, and connect.

Project Statistics

PROJECT:	NOKIA OTTAWA CAMPUS	ZONING PERFORMANCE STANDARDS	MC (2845)	
ADDRESS:	570 MARCH RD, KANATA OTTAWA ON K2K 2T6	CITY OF OTTAWA ZONING BY-LAW 2008-250	REQUIRED	
202200000000		MINIMUM LOT SETBACK (m) EAST	Om	
DEVELOPER:	TBD	MINIMUM LOT SETBACK (m) NORTH	Om	
APPPLICANT:	GREG WINTERS, NOVATECH	MINIMUM LOT SETBACK (m) SOUTH	Om	
		MINIMUM LOT SETBACK (m) WEST	2m	
		5 C C C C C C C C C C C C C C C C C C C	80	

PROVISIONS	PARKING RATE	AREA	REQUIRED	PROVIDED
MINIMUM BICYCLE PARKING SPACES RATES (ENGINEERING HUB) *	1/250 m ²	21 042 m ²	85	85*(ITEM B)
MINIMUM BICYCLE PARKING SPACE RATES (LAB) *	1/1500 m ²	31 948 m ²	22	26*(ITEM B)
MINIMUM BICYCLE PARKING SPACE RATES (RETAIL)	1/250 m ²	2 120m ²	9	9
MINIMUM LOADING SPACE RATES (ENGINEERING HUB)	2: 15000-24999 m ²	21.042 m ²	2	2
MINIMUM LOADING SPACE RATES (LAB)	2: 25000+m ²	31 948 m ²	2	2
MINIMUM LOADING SPACE RATES (RETAIL)	1: 2000-4999 m ²	2 120m ²	1	1

"WHERE THE NUMBER OF BICYCLE PARKING SPACES REQUIRED FOR A SINGLE OFFICE OR RESIDENTIAL BUILDING EXCEEDS FIFTY 50 SPACES, A MINIMUM OF 25% OF THAT REQUIRED TOTAL MUST BE LOCATED WITHIN:

A) A BUILDING OR STRUCTURE;

B) A SECURE AREA SUCH AS A SUPERVISED PARKING LOT OR ENCLOSURE WITH SECURE ENTRANCE; OR

C) BICYCLE LOCKERS.

*A MINIMUM OF 50% OF THE BICYCLE PARKING SPACES REQUIRED BY THIS BY-LAW MUST BE HORIZONTAL SPACES AT GROUND LEVEL. (BY-LAW 2021-215)

The Subject Site is zoned Mixed Use Centre with an exception (MC [2854])

PROVISIONS	REQUIRED	PROVIDED
MINIMUM BUILDING HEIGHT	4 STOREYS AND 14 M	8 STOREYS AND 44M
MINIMUM BUILDING HEIGHT DOES NOT APPLY TO ABOVE GRADE PARKING STRUCTURES.	NA. THE PARKING IN THE BUILDING IS NOT A SEPARATE PARKING STRUCTURE.	N/A
MAXIMUM BUILDING HEIGHT	30 STOREYS AND 94 M	8 STOREYS AND 44M
PARKING	NO PARKING IS REQUIRED.	931
TOWER DEFINITION	FOR THE PURPOSE OF THE BELOW PROVISIONS, A TOWER IS DEFINED AS THE PORTION OF THE BUILDING ABOVE THE PODIUM.	ONLY THE R&D ENGINEERING HUB TOWER IS DEFINED AS A TOWER.
MINIMUM SEPARATION BETWEEN TWO TOWERS	32 METRES IN HEIGHT OR GREATER: 25 M.	N/A (ONLY 1 TOWER)
BUILDINGS ON LOTS THAT SHARE A LOT LINE WITH LEGGET DRIVE OR AN INTERNAL PRIVATE STREET SHALL HAVE A MAXIMUM PODIUM HEIGHT OF	4 STOREYS AND 14 M.	THE R&D ENGINEERING HUB PODIUM IS 1 STOREY AND 6.5 M HIGH
TOWERS ARE REQUIRED TO HAVE A STEP BACK FROM THE PODIUM OF THE BUILDING:	1. FOR A BUILDING ABUTTING PRIVATELY OWNED PUBLIC SPACE, LEGGET DRIVE, OR A PUBLIC PARK, MINIMUM STEP BACK REQUIRED, INCLUDING BALCONIES: 3 M; AND 2. IN ALL OTHER CASES, MINIMUM STEP BACK REQUIRED, INCLUDING BALCONIES: 1.5 M.	STEPBACK (E)ABUTTING LEGGET DR 4.575M MINIMUM. STEPBACK (N)ABUTTING PRIVATE DR/ PUBLIC SPACE 3.0 MINIMUM.
BALCONY PROJECTIONS	NOTWITHSTANDING SECTION 65 FOR PERMITTED PROJECTIONS, BALCONIES ARE NOT PERMITTED TO PROJECT BEYOND THE FRONT WALL OF THE PODIUM.	COMPLIES. NO BALCONIES PROJECT BEYOND THE FRONT WALL OF THE PODIUM.

LOT AREA LOT FRONTAGE LOT DEPT IRREGULAR	45 445m ² 238,4m 133,81m	11,066ac. 782,480t 439,009tt	
LOT COVERAGE BUILDING HEIGHT		50% 44 m	
TOTAL GROUND FLOOR AR	EA	12 700m²	136 702ft
R&D LAB BUILDING		7 177m ²	77 253ff
RETAIL R&D ENGINEERING HUB		2 120m ² 3 972m ²	22 819# ² 42 754# ²
STANDARD SPACE (2.60m)	K 5.20m)	899 12	-

PROVIDED

1.934m

17.674m 85.370m

9.673m

Proposal Plan & Renderings



Proposal Plan & Renderings R&D Engineering Hub



Proposal Plan & Renderings R&D Lab Building





Proposal Plan & Renderings Perspective View





Proposal Plan & Renderings Perspective View



Proposal Plan & Renderings

Perspective View



2. Design Directives

- City Design Policies Summary
- Response to Urban Design Directions
- Urban Design Guidelines for Kanata North Economic District



City Design Policies Summary Ottawa Official Plan

6.6.3.2 Kanata North Economic District

- New development should promote growth and a competitive position for talent, jobs and investments:
 - Transform from a car-oriented business park to a mixed use innovation district with a wide range of uses residential, employment, commercial and institutional.
 - Focus highest densities at emerging activity centres with 600m of Transitway stations at Terry Fox Drive.
 - Create a finer grid block pattern and introduce new private and public streets to improve connectivity.
- The zoning By-law will aim to broaden land use permissions, reduce required setbacks, reduce on-site parking requirements, and establish min/max floor space index ratio.
- Activity centres shall develop a high density of jobs and housing, and permit up to high rise buildings. Activity centres should also include signature a urban plaza which may be privately owned.
- Encourage broad range of dwelling sizes, including market and affordable housing.
- Development shall not require minimum parking.
- Consider new connections to reduce the block length including exploring one or more new intersections between Solandt/March Road and Terry Fox/March Road.



Response to Urban Design Directions

Comment:

The site is within a Design Priority Area. You are encouraged visit to the UDRP even though a visit to the UDRP is not required for properties within the Kanata North Economic District.

Response:

Noted. Based on the above the applicant has opted not to attend UDRP.

Comment:

A Design Brief required. Please refer to the attached Terms of Reference **Response:**

Urban Design Brief is now included

Comment:

Treatment of the building along proposed "lifestyle street" appropriate. Would like additional details on how the lifestyle street, including cross sections and paver treatment patterns.

Response:

Outline of buildings now shown on street cross sections. Please refer to the Landscape Plan by CSW for additional details.

Comment:

Per the criteria in OP, there needs to be more consideration to how the development interacts with the existing public streets. As proposed, the development turns it back on March Road and Legget Drive. Recommend at-grade retail or non-residential uses (amenity for office users). For areas where this is not possible, consider green walls and murals.

Response:

Pedestrian plazas at both the junctions with Legget and March road will provide vibrant pedestrian realm, welcoming the public onto the lifestyle street. The design theme of the plaza spaces will extend along the lifestyle street providing an animated pedestrian environment fronted by commercial and mixed-use buildings. The landscape as you head south along both March and Leggett will transition into street trees adjacent to the sidewalk with a buffer of shrub plantings and columnar trees at the base of the parking structure and R&D Lab Building.

Comment:

Public realm treatment needed - please refer to criteria in the OP for March Road and Legget Drive.

Response:

A staggered double avenue of trees has been included along March Road between the sidewalk and underground utilities and a wide shrub planting buffer at the base of the parking structure will include additional columnar tree plantings to provide attractive green space along March Road. As you approach the Lifestyle Street junction, low walls and shrub beds will provide additional year-round visual interest to the drop-off area and surface parking. The meandering walls will lead to a pedestrian plaza at the junction with the Lifestyle Street.

Response to Urban Design Directions

Comment:

Per the OP, surface parking in and around the pick-up drop off area along March Road needs to be removed. This area should be treated like a woonerf. **Response:**

This is treated as a woonerf with a curbless drop-off and continuity of the plaza unit paving materials and patterning. The parking needs to remain as part of the programming for visitor parking and handicap accessible parking.

Comment:

Details on the equipment yard, and its relationship to Legget Drive are needed. **Response:**

A perforated metal fence system set approximately 24 meters from Legget Drive will screen the equipment yard. The screening system will block eye-level views of the equipment from pedestrians and drivers along Legget Drive.

Comment: Appreciate the three dimensionality of the façades. Response: Noted

Comment: Please detail sustainability strategy as part of your formal submission. Response: Included in this Urban Design Brief

Comment: Explore the potential for additional green roofs. **Response: Green roofs are not currently in the budget**



The Kanata North Economic District Urban Design Framework and Guidelines were approved by Council on September 18, 2024. An assessment against the relevant sections of the guidelines is provided below.

Building Form Guidelines

1. Land Use

1.1 Activity Centres: Mixed-use, residential, employment, commercial, leisure, entertainment, and institutional uses and outdoor and indoor community amenity areas. Residential uses of three to four storeys are not permitted as standalone buildings, but may be permitted provided they are located at the base of, and are designed and physically connected to, a mid- or high-rise building.

The Subject Site is in an Activity Centre. A mixed-use building with office and retail uses is proposed.

2. Siting, continuity, separation

2.1 Place the base of buildings so as to form a continuous building edge along streets and public spaces or (Figure 3.2) An example of buildings forming a continuous building edge along a public street. Privately Owned Public Space (POPS). In the absence of an existing context of buildings developed at the street edge, new buildings should be sited at the back of the sidewalk.

There is no existing context of buildings developed at the street edge. The building is placed at the back of the sidewalk on the proposed lifestyle street. It is further setback from March Road and Legget Drive.

2.2 Additional setbacks beyond the land use development standards and existing prevalent patterns may be necessary and appropriate at transit stops, building entrances for urban pocket parks and in tree preservation areas to accommodate heavy pedestrian traffic and public and private amenities.

An additional setback is provided on March Road to accommodate the building entrance and on Legget Drive to accommodate tree planting.

2.3 Sufficient setbacks and step backs should be provided to avoid a street canyon effect and minimize microclimate impacts on the public realm and private amenity areas.

The section of the building on the lifestyle street is one storey, avoiding a street canyon effect. Likewise, the increased setback to March Road and Legget Drive also avoid this effect.

3. Building Height

3.1 Activity Centres: The minimum height is 4 storeys, and the maximum height is 40 storeys.

The building is eight storeys.

4. Parking

4.1 Development shall not require minimum parking, though it may be allowed as an interim measure as the area awaits the future development of the BRT system.

The zoning of the Subject Site exempts it from minimum parking.

4.2 Locate parking underground or in above ground parking structures that are lined with active land uses to camouflage the parking use.

Parking is in an above ground parking structure. Two sides of the structure are linked to the building, the other two sides are attractively clad, disguising the building's function.

4.3. Limited surface parking spaces may be considered for emergency services access, as well as for the accommodation of people with disabilities, but these should be located interior to a site near building side or rear entries.

Limited surface parking provided at the building entry is for drop-off and short-term parking only.

6. Massing for Mid-rise Buildings

6.1 Mid-rise buildings, including corner buildings, should include three distinctive and integrated parts— the base, middle, and top. These guidelines provide guidance for buildings based on these three component parts.

The mid-rise section of the building has a recessed base (i.e, ground floor) with pilotis supporting the middle and top. The middle is glazed and the top is opaque to distinguish it.

6.2 Implement height transitions to ensure compatibility with low-rise buildings by using stepbacks or other building form techniques.

The closest low-rise buildings are commercial and light industrial, with the nearest low-rise residential buildings 300m to the north. Although transition is not required, the building does transition to the north, to the one storey retail section.

6.3 Consider the incorporation of additional stepbacks at upper levels to reduce the perceived mass of the building, allowing more light to reach the street and creating terraces for outdoor use.

The mass of the building is broken up vertically into two masses and horizontally by clearly telegraphed building levels.

6.4 Design rooftops to include amenities such as terraces, gardens, or recreational areas for building occupants, enhancing the usability of the building.



The rooftop does not have amenities, but extensive amenity areas are provided at ground level.

6.5 Building articulation should be used to create interest in the building and enhance the pedestrian experience. Blank walls of more than 8 m in length should be avoided.

As described above, the building is highly articulated.

6.6 Promote architectural diversity while respecting the local context.

The building is consistent with the architectural style of the business park but is a more modern, mixed use and people-oriented design.

6.7 The design of corner buildings should incorporate building form variations that highlight the building's prominent and visible location, such as additional building height relative to surrounding buildings, distinctive rooftop and façade elements, and shifts in building geometry.

The proposal is not a corner building.

8. Building Base

8.1 Base height: High- and Mid-rise buildings facing the signature public plaza, Legget Drive, and March Road shall have a consistent base height set at 25 m that lines or faces the sidewalk and street edge.

The R&D lab building that fronts on Leggett Drive and functions as the building base is 27.5m high.

8.1.a all other buildings, including building frontages along lifestyle streets, shall have a minimum base height of 2 storeys and a maximum base height of 3 storeys.

Not applicable as there is only one building.

8.2 Base setback: Mixed-use buildings, and where permitted, residential buildings facing secondary streets can be set back with small garden areas but should be lined with residential front doors facing the street (together with a lobby entrance).

The proposal is a mixed-use building with no residential. There are entries on all street frontages.

8.3 Stepback above base: A step back of 5 m or greater shall be included on a building that faces the signature public plaza, lifestyle streets, and Legget Drive.

The tower portion of the building is setback more than 5 m from the base facing Legget Drive.

8.3.a in all other areas, a minimum step back, including any balconies, should be 3 m.

The part of the building facing March Road does not have a base/podium. Refer to response to 8.5 below.

8.4 Up to one third of mid-rise and tower frontages in the activity centres, on the March Road Corridor or abutting public spaces may extend to the ground to allow for creative entrances and architectural approaches (Figure 3.6).

The March Road frontage takes advantage of this to provide a creative entry.

8.5 For lots where a step back is difficult to achieve, alternative design techniques to further delineate the tower from the base may be considered.

A different approach has been taken facing March Road. The building 'base' (i.e., the ground floor) is inset behind the rest of the tower. This clearly delineates the base from the tower and provides a creative, sheltered entry.

8.6 Where possible, workspaces, hotels, other non-residential uses, as well as mixed-use residential buildings should line the sidewalk edge with active uses.

Active retail uses line the lifestyle street.

8.7 Buildings should respect the character and vertical rhythm of the adjacent properties and create a comfortable pedestrian scale by:

8.7.a breaking up a long façade vertically through massing and architectural articulation;

8.7.b determining appropriateness of larger-scale façades in certain areas, such as along March Road; and

8.7.c introducing multiple entrances, one approximately every 10 m to allow for increased access into and out of buildings

The building is well articulated with multiple entries. Longer facades are broken up with architectural articulation.

8.8 Use high-quality, durable, and environmentally sustainable materials, an appropriate variety in texture, and carefully crafted details to achieve visual interest and longevity for the façade and that are unique and interesting to the eye, to reflect the innovation that is at the centre of the KNED economy.

Proposal is consistent with this. Refer to the Design Brief for details.

8.9 Use bird-friendly best management practices in accordance with the City's guidelines. In particular, apply visual markers or use low reflectance materials on all exterior glazing within the first 20 m of the building above grade.

Bird safety has been considered. Refer to the Design Brief for details.

8.10 The ground floor of the base should be highly transparent to contribute to the vibrant public realm and pedestrian friendly nature of the Activity Centres.



The frontages to the Lifestyle Street and March Road (excepting the parking structure) have high levels of transparency.

8.10.a Frontages along the lifestyle street, Legget Drive, public spaces, and local streets within the Activity Centres, should maintain a transparency of 60-80% along the public-facing building façade.

The frontages to the Lifestyle Street and March Road (excepting the parking structure) have high levels of transparency. Due to building requirements, the Legget Drive frontage has limited transparency.

8.10.b All other frontages that line public roads and other rights-ofway should maintain a minimum transparency of 50% on public facing ground floor façades.

Due to building requirements, the Legget Drive frontage has limited transparency.

9. Building Middle (Tower)

9.1 Orientation and shape of a tower will be determined through fulfillment of the City Terms of Reference for wind / shadow studies.

Shadows were considered but a wind study was not required.

9.2 Articulate the tower with high-quality, sustainable materials and finishes to promote design excellence, innovation, and building longevity, including:

9.2.a orienting and shaping the tower to improve building energy performance, natural ventilation, and daylighting;

9.2b articulating the façades to respond to changes in solar orientation, wind effects, and context; and

9.2c where possible, include operable windows to provide natural ventilation and help reduce mechanical heating and cooling requirements.

The above will be further considered during detailed design. All four facades are glazed.

10. Building Top

10.1 The top should be integral to the overall architecture of a high-rise building, either as a distinct or lighter feature of the building or a termination of the continuous middle portion of the tower (Figure 3.8).

Notwithstanding that this is a mid-rise building, the building top is both distinct and well-integrated.

10.2 Integrate roof-top mechanical or telecommunications equipment, signage, and amenity spaces into the design and massing of the upper floors.

The roof design includes a parapet to accommodate roof-top mechanical and telecommunications equipment. Signage is integrated into the building top.

10.3 The top should make an appropriate contribution to the character of the KNED skyline:

10.3.a for a background building, the top should fit into the overall character of the skyline and have the ability to support outdoor resident amenities and/ or green roofs; and

10.3.b for a landmark building, the top should enrich the KNED skyline by creating a new focal point (Figure 3.9).

The building is a background building. The design is consistent with the buildings in the business park. Ground level amenity areas are provided.

11. Architectural Materials and Details

11.1 Building Materials: Primary building materials should be high-quality and durable, including brick, granite, stone, metal, and glass. Flexibility should be provided for the specification of materials outside of these materials to allow for creativity and expression for the innovation ecosystem in the KNED.

This is subject to detailed design but high quality materials will be used.

11.2 Façade Projections: Main entrances should have canopies that project at least 2 m to provide weather protection for passersby. At entrances and along building façades, canopy projections with details such as metal hangers or support brackets, free-standing signage, and decorative light fixtures are encouraged.

The design of the building forms a projection larger than 2 m.

11.3 Windows: When feasible, buildings should provide openings and windows that overlook public streets and open spaces to establish a human connection. 11.3.a Views into commercial spaces should not be obscured by signage or partitions.

11.4 Lighting: Building lighting should encourage pedestrian activity and safety at all hours while respecting residential uses.

11.4. aEntryways and areas of high activity should be appropriately illuminated while minimizing potential light glare, spill, and light pollution.

11.4.b Outdoor building sconces are required to add interest to building façades and additional light on the street. This is required for all commercial, office, mixed-use and residential development.

The above four points are subject to detailed design but will be considered.

Public Realm and Connectivity Guidelines

1. Signature Urban Plaza and Lifestyle Street

1.1 The northern Activity Centre, at March Road and Terry Fox Drive will have a signature lifestyle street, while the southern Activity Centre, at Legget Drive, with have a signature urban plaza, each of which will offer central gathering spaces that may be privately-owned. The plaza and lifestyle streets shall be framed by buildings that include active ground level activity.

The Subject Site is at the southern activity centre. It provides a lifestyle street which has ground level retail.

2. Block Standards

2.1 As development occurs in the Activity Centres and along corridors, new streets may be required to accommodate development. The average block size, regardless of ownership, should be maintained at approximately 1ha or 150-180 m lengthwise and 70-100 m widthwise (Figure 4.2).

The proposed lifestyle street breaks up the large Nokia block which is currently 475 m long.

2.2. Additional curb cuts and new streets should be carefully studied and coordinated with future District-wide transportation improvements.

The proposed lifestyle has been long planned and is shown in the guidelines themselves.

2.3 Where appropriate, break up larger street blocks or larger development parcels by introducing mid-block pedestrian or multi-use connections, public or private, outdoor or indoor to increase and enhance the overall pedestrian accessibility and walkability of the area (Figure 4.3).

The proposed lifestyle street breaks up the large Nokia block which is currently 475 m long.

2.4 When a mid-block connection is on private lands, it should be properly signed and designed to welcome pedestrians and may be integrated into the lobby or atrium of a high-rise building (Figure 4.4).

The lifestyle street is private. The street's design is welcoming and reads as a public street. Signage will be provided.

2.5 Any private roadways built within the block structure should maintain sidewalk and street tree standards equivalent to the standards for public streets

The lifestyle street is an innovative new design with wide sidewalks but is consistent with City standards.

2.6 Any through-lots within the District that abut both Legget Drive and March Road shall adhere to the street frontage standards for each respective street. Additionally, any corner through lots that front Legget Drive, March Road, and Solandt Road shall adhere to the street frontage standards for each respective street.

Noted.

3. Building and site access

3.1 Implement the City's Accessibility Design Standards.

Noted.

3.2 Locate the main pedestrian entrance at the street with a seamless connection to the sidewalk.

3.3 Where the main pedestrian entrance is located away from the sidewalk provide a direct, clearly defined pedestrian connection such as a walkway or a pedestrian plaza, between the main pedestrian entrance and the sidewalk.

3.4 Pedestrian entrances should be located at the edge of the sidewalk or along open space for buildings located in Activity Centres.

Pedestrian access to the entry is possible from March Road.

4. Loading, servicing, and utilities

4.1 Entrances and access for servicing and utilities should be located on private internal drives where feasible

Back-of-house functions for the office and retail are within/below the building and accessed via a servicing entry from Legget Drive.

4.1.a Private access located on Legget Drive or Solandt Road east of March Road is discouraged.

Primary access is from March Road and servicing is accessed from Legget Drive.

4.2 Access for servicing and utilities in the District shall be provided from the rear of buildings, a public lane, or a shared driveway to minimize the visual impacts and interference with the pedestrian realm.

Back-of-house functions for the office and retail are within/below the building and accessed via a servicing entry from Legget Drive.

4.3 Internalize and integrate servicing and other required utilities into the design of the base of the building.

Back-of-house functions for the office and retail are within/below the building and accessed via a servicing entry from Legget Drive.

4.5 Recess, screen, and minimize the size of garage doors and service openings visible from streets and other public spaces.

Vehicle entry points are recessed.

4.6 Service and garage openings should be screened or designed as integral parts of the building and high quality finishings should be used.

Vehicle entry points are recessed.

4.7 Ventilation shaft, grates, and other above-grade site servicing equipment must be oriented away from public sidewalks and communal spaces and must be integrated into the building and landscape design.

Subject to detailed design but these items will be considered.

4.8 Coordinate, and where possible integrate, public transit stop elements such as benches and shelters within the site and building design.

Existing bus stops are accessible from the Subject Site by existing sidewalks and proposed pathways.

5. Streetscape and Landscaping

5.1 Street Trees

5.1.a A mix of native species is recommended to encourage biodiversity. Street trees should maintain like varieties on the same block.

Refer to the Landscape Plan.

5.1.b The street-tree pattern should be spaced consistently at an approximate distance not to exceed 8 m. A closer spacing distance of 6 m should be considered for Legget Drive and other highly-trafficked pedestrian areas including the lifestyle street.

Refer to the Landscape Plan.

5.1.c The District includes a number mature tree stands, both in natural settings as well as adjacent to buildings and streets. The preservation of mature trees is desired, and should be addressed during the review process and integrated into future development. Buildings adjacent to March Road and Legget Drive may be setback to preserve mature stands of trees provided those that are preserved are used as the basis for an urban pocket park or other public realm amenity, with street furniture, wayfinding signs and similar that will work seamlessly with the urban fabric necessary to transform the park from a suburban to urban environment.

Refer to the TCR for tree retention details.

5.1.d Plant trees in permeable surfaces with approximately 10 m2 of soil area per tree to allow for successful growth over time.

Refer to the Landscape Plan.

5.2 Lighting

5.2.a Street lights should be located at

the outer edge of all sidewalks, should be 4-5 m tall, and should be spaced regularly at least every 15 m.

Streetlights are existing.

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5.2.b Lighting should be compatible with, and not conflict with the tree canopy, should be aimed away from the windows of residential uses and should be Dark Skies compliant.

Lighting design is to be confirmed, but will comply.

5.3 Street Furniture

No street furniture on public streets is proposed. Refer to Landscape Plan for details within the site.

5.4 Special Landmark Features

5.4.a Special landmark features should be included and repeated along Legget Drive and along the lifestyle street that are unique to the KNED and act as identifiers of the distinct nature of the District's innovation businesses. Special landmark features could include distinct light stands and sconces, unique street furniture, unique signage or hard landscaped features such as stone posts, repeating banners, public art, as well as interactive placards that present interesting facts about the District or area within the District.

The existing distinct features in this section of Leggett Drive (light stands, street furniture and signage) will be retained.

- 5.5 Special Conditions
- 5.5.a Legget Drive:

Provide consistent curbside landscaping that complements street tree plantings without interfering with on-street parking access and street furniture. Outdoor planters at various levels should be used to augment landscape treatments.

Refer to the Landscape Plan.

6. Public Realm Activation

6.1 The Kanata North Economic District is set within a unique natural environment. The District's public realm should be equally unique and support formal and informal programming during all four seasons to provide an active and lively setting.

6.2 Provide ground-level activities within buildings that enhance the public realm and serve as a public amenity throughout the year. Examples include a public indoor garden, museum, library, or other passive or active recreational amenity that serves to enrich the cultural and/or ecological experience of employees, residents, students and visitors

The proposal includes ground floor retail. The proposed lifestyle street suits outdoor activities and programming.

6.3 Consider a wide range of recreational activities geared towards students and young professionals including mini skate parks, rollerblade tracks, rock climbing walls, indoor space for ping pong, billiards or cards, board game and trivia nights in addition to other amenities for all ages and genders.

The building will have indoor amenity areas for Nokia employees only.

6.4 Introduce outdoor elements into the open space and public realm network that provide an engaging environment throughout all four seasons. Examples include the ability to support an ice-skating rink in the signature urban plaza (that doubles as a splash pad or outdoor performance venue in warmer months), park areas set aside for ice sculptures or winter play, a structure or natural ice-skating ribbon, a cross-country ski trail, or other outdoor amenities that provide year-round interest.

The proposed lifestyle street suits outdoor activities and programming.

6.5 In addition to the following guidelines, a broader winter city design approach should be developed and used as a guide for the buildout of the public realm network.

6.5.a Plan for smaller distributed snow storage areas with solar access to melt snow more quickly. Storage area placement should consider site drainage and be located to not create a waterflow issue on impervious surfaces. Snow storage shall not interfere with walkability and access.

To be confirmed but the above will be considered.

6.5.b Consider solar access in the placement of buildings and outdoor spaces. The mass of buildings should maximize shade in the summer and sunlight in the winter onto open spaces.

The main outdoor space is southeast facing, an ideal orientation.

6.5.d Roofs of buildings and awnings should be designed to prevent falling snow and ice.

The building has a flat roof.

6.5.f Use colorful awnings, canopies, and streetscape treatments to provide visual interest throughout the year.

To be confirmed, but this could be accommodated, particularly on the lifestyle street.

7. Active Street Frontages

7.1 Active street frontages play an important role in animating the District's public realm and ensuring a variety of activities and levels of pedestrian interest. While these guidelines pertain primarily to mixed-use buildings within the Activity Centres, should any multi-family residential buildings within the District be permitted, these should strive to provide an active and engaging street front that will complement the area's evolving mixed-use and pedestrian-friendly development pattern.

The location of recommended Active Street Frontages illustrated in Figure 4.9 provides the general location for the application of the following guidelines. In addition to these locations, any lifestyle streets, public or private, should be lined with active frontages as specified in these guidelines.

Figure 4.9 shows Active Street Frontages on three sides of the Subject Site.

7.2 Ensure that ground-floor uses are active and pedestrian-oriented within Active Street Frontage areas. Uses that have low propensity for walk-in traffic should be discouraged from locating in these locations.

The building has retail and office entry at ground level.

7.3 Ensure that primary building entrances are clearly visible and intuitively accessible from the street. For all buildings facing streets and green or open space, a primary access point on the public space should be provided.

The entry to the office building is clearly telegraphed by the large building overhang.

7.5 Provide frequent entries, transparency, and operable walls where possible to encourage visual and physical connections between the ground floor and the public sidewalk.

The retail on the lifestyle street provides these.

7.6 Avoid blank walls greater than 4 m in length. If unavoidable, they should be landscaped or decorated in a manner that makes them visually interesting.

Blank walls greater than 4 m in length are proposed. They are landscaped or decorated in a manner that makes them visually interesting.

7.7 Orient private balconies and terraces toward the street to encourage an interface between the private and public realms and to create eyes on the street.

Gensler NO

Not applicable as the building is not residential.

7.8 Include elements such as textured materials, awnings, plantings, signage and eating to create a visually engaging and inviting building edge to frame the sidewalk and create stopping points to relax, gather, and socialize.

7.9 Standalone Residential Buildings:

Not applicable as the building is not residential.



2. Site, Context and Analysis

- Existing Site Conditions and Surrounding Area
- Perspective Images
- Protected View Corridors
- Built and Natural Heritage Assets
- Microclimate Conditions
- Key Surrounding Uses
- Urban Pattern Streets & Blocks
- Characteristics of Adjacent Streets and Public Realm
- Mobility Networks



Existing Site Conditions and Surrounding Area



I. Commercial uses on East side of Legget Dr.



2. Nokia campus from Legget Dr



3. Nokia campus from March Rd







Existing Site Conditions and Surrounding Area





Brookstreet Hotel on Legget Dr.



2. Nokia campus parkin lot looking Northwest



Perspective Images

NORTH

To the north of the Subject Site across Terry Fox Dr. is a 1- and 2-storey strip mall, 2storey townhouses on Banchory Crescent and a wooded section of 360 Terry Fox Dr. which is also developed with a 2-storey office building. The current zoning here permits maximum heights of approximately 6 storeys, 4 storeys and 14 storeys at these locations respectively. In particular, the undeveloped section of 360 Terry Fox could be developed for a mixed use development up to 14 storeys.

SOUTH

To the south is a 2-storey office and light industrial building built in 2015 currently occupied by Sanmina, a high-tech manufacturer. The building is oriented to March Rd. and surface parking is provided to the south of the building.



EAST

To the east across Legget Dr. are four office buildings at 555, 535 and 515 Legget Dr. and the 18 storey Brookstreet Hotel at 525 Legget Dr. There are current Zoning By-law Amendment and Site Plan Control applications for a 30-storey apartment building further west, connected to the hotel. There is an existing raised covered footbridge over Legget Dr. that connects the existing Nokia office building and 555 Legget Dr.



To the west across March Rd. are several low-rise commercial buildings. Moving south to north there is a 4-storey office building at 50 Hines Rd., the parking lot at the rear of a 1-storey building fronting Hines Rd. and occupied by the Royal Canadian Legion (70 Hines Rd.), a 2storey office building (84 Hines Rd.), a former dwelling now used as an office (525 March Rd.), a gym and strip mall (555 and 591 March), a vacant parcel and, at the junction with Terry Fox Dr., a 2-storey office building. To the northwest is a lowrise residential neighbourhood.



Built and Natural Heritage Assets



Park Facilities

- 1. Richcraft Recreation Complex
- 2. Monk Environmental Park
- 3. Morgan's GrantWoods Park
- 4. Allenby Park
- 5. Gateshead Park
- 6. McKinley Park
- 7. Shirley's Brook Park
- 8. Ravenscroft Park
- 9. Juanita Snelgrove Park
- 10. Trillium Woods Park
- 1. South March Highlands Conservation Forest
- 12. Forestbrook Park
- 13. Klondike Road Park
- 14. W.C. Bowes Park
- 15. Dunoille Park
- 16. Old March Town Hall Park
- 17. Brookshire Park
- 18. Lismer Pines Park
- 19. Kimmin Court Park
- 20. Logan Lea Park
- 21. Lawren Harris Park
 - Daycare
- Community Centre
- School
- Green Space
- Kanata North Economic District
 - Site

Microclimate Conditions

The front of the R&D Engineering Hub and retail areas, oriented on the northwest side of the site, will receive minimal direct sunlight in the morning but will benefit from ample natural light in the late afternoon and evening, especially during the summer months. This orientation enhances natural lighting, reducing the need for artificial lighting during peak hours and contributing to energy efficiency.

The R&D Engineering Hub will have varied solar exposure throughout the day. The southwest facade will receive significant afternoon sunlight, promoting passive solar heating during the cooler months, which can reduce heating energy consumption. In contrast, the northeast facade will receive softer morning light, which is ideal for reducing glare and enhancing occupant comfort. During winter, shadows cast by the R&D Engineering Hub will extend towards the northeast, with minimal impact on the newly designed amenity plaza due to its strategic positioning.

The R&D Lab Building is designed to optimize natural light while minimizing excessive heat gain. The northwest facade will remain cool in the mornings, while the southeast facade benefits from ample morning sunlight, reducing reliance on artificial lighting. This southeast orientation also protects the building from intense afternoon sun, helping to maintain a comfortable indoor environment and reduce cooling loads. In winter, shadows from the R&D Lab Building will fall towards the southeast, minimally affecting the amenity plaza.

Positioned to receive sunlight during the midday and afternoon hours, the amenity plaza provides a comfortable, sunlit environment that can be used for various activities throughout the year. The amenity plaza is also shielded from cold northwest winds by the R&D Engineering Hub and the parking garage, creating a more sheltered microclimate that enhances usability during colder months. Additionally, this open space promotes natural ventilation and cooling during the summer, reducing the need for mechanical cooling within adjacent buildings.

The parking structure is designed to minimize its shadow impact on the surrounding buildings and open space. Its placement ensures that it does not obstruct significant sunlight from reaching the R&D Engineering Hub or the amenity plaza during peak daylight hours, thereby supporting natural light penetration and enhancing the overall sustainability of the site.

Prevailing winds in Ottawa, typically from the northwest in winter and the southwest in summer, have been strategically considered in the development layout. The northwest-facing front of the R&D Engineering Hub will be exposed to cold northwest winds during winter, but the building design incorporates features such as insulated facades and strategic landscaping to mitigate heat loss and enhance thermal comfort. The southwest winds in summer will naturally ventilate the southwest facade of the R&D Engineering Hub and the amenity plaza, promoting cooling and reducing energy consumption for air conditioning. The R&D Lab Building, with its southeast facade, will benefit from these cooling breezes, further enhancing the development's overall sustainability.

The thoughtful orientation and placement of the R&D Engineering Hub, R&D Lab Building, parking garage, and amenity plaza are key to maximizing solar gains, minimizing shadow impacts, and optimizing natural ventilation.
Microclimate Conditions Direct Sun Hours Analysis





Key Surrounding Uses



Urban Pattern – Streets & Blocks



🕨 Blocks 🛛 🛑 Site

Urban Pattern – Streets & Blocks

Future and Current Development Proposals on Adjacent Properties/Planned Functions



Characteristics of Adjacent Streets and Public Realm Legget Drive

Existing Conditions





March Road

Existing Conditions



Proposed Cross Section

Proposed Cross Section



Mobility Networks



Future Cycle Track — Multi-Use Path — Pathways — Sidewalk
Kanata North Economic District - Future BRT Route O Future BRT Stop
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3. Design Research

- Parti Diagrams/Sketches/Precedent Images
- Design Evolution
- Massing in Planned Context
- Block Plan
- Transition Between Proposed Development and Surrounding Area
- Abutting Public Realm Conditions
- Street Renderings and Cross Sections
- Sustainable Design
- Bird-Safe Design



Parti Diagrams/Sketches/Precedent Images



Design Evolution



The evolution of the proposed development as gone through many iterations with several considerations leading to the final proposed layout. Initiated as an interior renovation project, the Gensler team proposed a potential option to maximize the land to create a dynamic live-work-play development. As a phasing strategy to maintain day-to-day business for Nokia, the existing facilities is proposed to remain while new facilities are developed. After the new Nokia facilities are constructed, the north side of the property can be redeveloped into a mixed-use high-rise residential district. The future Nokia campus plan has morphed over several options to meet Nokia's space utilization and programming needs. As the space and programming needs were refined over various versions of the master plan, the lifestyle street shifted back and forth to meet those needs. The final placement of the lifestyle street provides wide sidewalks for pedestrians while connecting the proposed development on the west side of March Road and the existing curb cut for the existing development on the east side of Legget Drive. The R&D Engineering Hub is located on March Road to provide visual presence for motorists passing by and a structured parking garage is located to the south of the R&D Engineering Hub to serve the employees. The final location of the service drive to the south of the structured parking garage has been shifted slightly north from previous versions of the plans to preserve heritage trees. Finally, the architecture of the R&D Lab building along Legget Drive has been refined over many iterations to provide glazing and visual interest to meet the City's desire to make this street a pedestrian-oriented street.

Massing in Planned Context North Massing





Massing in Planned Context South Massing





Massing in Planned Context South Massing



Block Plan



Transition Between Proposed Development and Surrounding Area



Abutting Public Realm Conditions



Active Edges Lifestyle Plaza Nokia Arrival Plaza New Signalized Intersection

Combined Plaza Area: 5,550 m2 Site Dedicated to Public Realm: 12.35%

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51





























































Legget Drive Rendering





Legget Drive Rendering





Street Cross Section: Legget Drive





March Road Rendering



March Road Rendering




Street Cross Section: March Road





Sustainable Design

Sustainability Goals

In 2021, Nokia identified the following sustainability goals:

Current Goals

- Climate: Combatting climate change through mitigation and adaptation solutions will grow in importance
- Integrity: Emphasizing the importance of respect for ethical behaviour, security and privacy
- Culture: Ensuring our ability to attract the best talent and creating high performance inclusive teams that make things happen

Future Goals

- 2025: Joined RE100 initiative in 2021, use 100% renewable electricity in Nokia facilities by 2025.
- 2030: Reduce GHG emissions across value chain (Scope 1, 2 and 3) by 50% between 2019 and 2030, and reach net zero by 2050.
- 2030: Final assembly suppliers reach net zero emissions by 2030
- 2030: Suppliers reduce GHG emissions by 50% by 2030

A variety of frameworks were reviewed for their potential to add value to the Ottawa Nokia Campus design and for their alignment with Nokia's Sustainability focus areas of Climate, Integrity, and Culture. The framework Nokia will be pursuing for this development is as follows:

– LEED Gold Certification: Internationally recognized certification program for excellence in sustainable buildings and provides the greatest brand recognition in the industry. Touches on all aspects of sustainability, including building design and construction, operations, and indoor air quality. Provides a balanced approach addressing all three of Nokia's Sustainability Focus Areas of Climate, Integrity, and Culture and aligns with Nokia's future sustainability targets for carbon reduction.

Other frameworks that could be achieved if Nokia desires to pursue them include:

– WELL Silver (or higher) Certification: Internationally recognized certification program for whole-person health. Focuses on indoor air quality and occupant well-being, aiding in Nokia's ability to attract the best talent and create high performance teams. WELL and LEED certification complement each other in the optimization of healthy and high-performance environments.

– Zero Carbon Building (ZCB) Design Certification: Nationally recognized certification program raising the bar on carbon reductions. Focuses on operational and embodied carbon combatting climate change and aligns with Nokia's future sustainability targets for carbon reduction. Potential to achieve ZCB-Performance certification as well.

Sustainable Design

Landscape Approach

- Prioritize use of drought tolerant, native plant material for water efficient landscaping.
- Incorporate storm water management strategy.
- Vegetated bioswales and rain garden to capture, store and treat run-off.
- Focus on biodiversity as well as plant palette for all 4 seasons.
- Low maintenance, locally sourced materials.
- Use of materials with recycled content.
- All wood products to meet FSC certification.
- Paving materials with high SRI values (Solar Reflectance Index) to reduce heat island effect.
- Enhance community connectivity with improved access to active transportation networks and rapid transit facilities.



















Bird-Safe Design

The following will be applied for bird-safe design:

- Incorporate visual interest or differentiation of material, texture, colour, opacity, or other features to fragment reflections.
- All glazing that could create a fly-through, mirror maze or black hole effect should use bird-safe glass or integrated protection measures.
- Glass railings, parapets, and similar clear barriers should use bird-safe glass.
- Design landscape plantings to minimize reflections of trees and shrubs in nearby buildings. In cases where landscape planting near a glazed building façade or other reflective surface is desirable for shading or other purposes, minimizing transparency and reflectivity of glazing will be applied to obscure habitat reflections in some locations.
- Avoid or minimize the number of linear landscape features leading directly into glass façades or doors. Where such features cannot be avoided, minimizing transparency and reflectivity of glazing will be applied.
- Avoid using plant species known to attract birds (e.g., those with abundant fruit or seed crops, or with flowers attractive to hummingbirds) in locations that could result in harmful collisions.
- Minimize the reflection of rooftop landscapes in adjacent building features or surrounding properties.
- Avoid locating ornamental fountains, ponds, stormwater retention basins, wetlands, swales or related infrastructure near glass façades or windows.
- Avoid up-lighting
- Specify Dark Sky compliant, full-cutoff exterior fixtures to reduce light trespass.
- Use motion detectors and other automatic lighting controls to reduce or extinguish non-essential lighting between 11 pm and 6 am.
- Use minimum wattage fixtures to achieve appropriate lighting levels.
- Minimize amount and visual impact of perimeter lighting.
- Avoid use of floodlighting.
- Use motion detectors and/or other automatic lighting controls to extinguish lights from unoccupied spaces in non-residential buildings after business hours.
- Install light dimmers in lobbies, atria and perimeter corridors for nighttime use.

Additional Materials - Appendix

- Site Plan
- Landscape Plan
- Grading and Drainage Plan
- Site Servicing Plan
- Composite Roof Plan
- Building Elevations
- Building Sections
- Floor Plans
- Shadow Analysis



Site Plan



Landscape Plan



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Grading and Drainage Plan



Site Servicing Plan



Composite Roof Plan



Nokia OIC v17.1 16 May 2024

Nokia Ottawa Campus

05/09/2024

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COMPOSITE PLAN - LEVEL 10

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Building Elevations East Elevation (Legget Drive)





Building Elevations

South Elevation (Perimeter Access Road)



0 5 10 20 40



Building Elevations West Elevation (March Road)





Building Elevations North Elevation (Lifestyle Street)



0 5 10 20 40



Building Sections Section A



Gensler NO<IA

A

Building Sections Section B









Floor Plans

Level 00 Ground Level























March 21st



3:00 PM



June 21st



3:00 PM



September 21st



3:00 PM



December 21st





