University of Ottawa

FACULTY OF HEALTH SCIENCES

200 Lees Avenue, Ottawa, Ontario,

Design Brief

June 28, 2021

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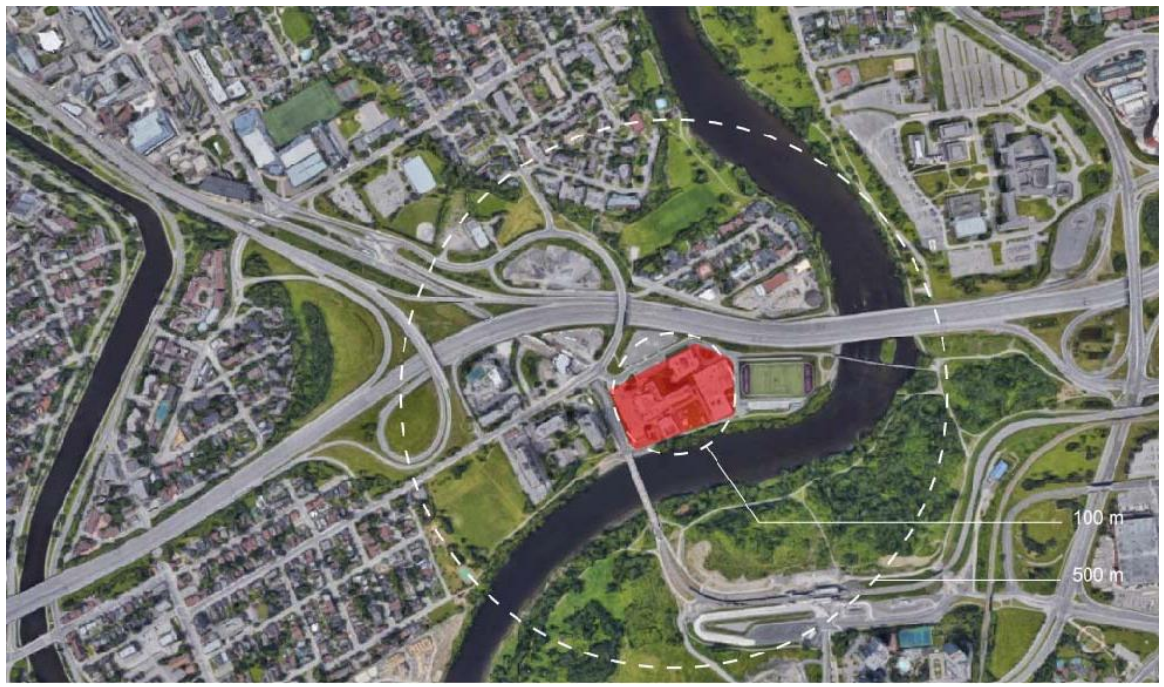
1.0 Project Background

1.1 Description & Project Purpose

The proposed development is located at 200 Lees Avenue along the Rideau River and the OLRT corridor. This is the former Algonquin College Campus and the new Faculty of Health Sciences will be the first building as part of the campus redeveloped which will be renamed to the River Campus.

The proposed uOttawa Faculty of Health Sciences will be a world class teaching and research facility that collocates four of the five departments that comprise the Faculty. The building will be 5 storeys high with a 5,218m² footprint and a GFA of 23,147m². The ground floor will have general teaching spaces, three specialty labs, the library and a large social area that links the academic quad in the centre of the campus to the river terrace that takes advantage of the southern exposure and views to the river. The upper floors contain labs and offices for faculty and researchers. The building will be the catalyst for the redevelopment of this site into the new River Campus that will include future university related uses.



1.2 Vision & Goals

Vision

"The new Faculty of Health Sciences at the University of Ottawa will be a contemporary, state-of-the-art teaching and research facility that will be the catalyst for the new River Campus".

Goals

The site has a long history in the city and the University of Ottawa and the design team have identified the following goals for this project.

- Collaborative Work Environment,
- Nimble and Adaptive Facilities,
- Delightful Environments, Equity, diversity and Inclusion,
- Sustainable and Energy Efficient,
- Community and
- Future Land Use

The River Campus will revitalize a forgotten part of the City of Ottawa along the Rideau River. It will be a Transit Oriented campus that will rely on Lees Station and the adjacent Multi-Use Pathways to bring users to the building. The new campus will have less vehicle parking and ample bicycle parking.

1.0 Project Background

1.3 Planning Context

City of Ottawa Official Plan

The subject Lands are designated Mixed-Use Centre and Major Open Space on Schedule B of the City of Ottawa Official Plan.
The mixed Use Centre designation is to “ensure that large scale, high traffic generating institutions locate only on large parcels of land, with direct access to an arterial road and near rapid transit stations; impose regulations which ensure that the size and intensity of these uses is compatible with adjacent uses; and provide for a range of ancillary service users.”

Mixed-use Centres also encourages increased density to occur over time which provides opportunities for walking cycling are support transit use.

Zoning By-Law 2008-50

The subject property is subject to three different zones within the City of Ottawa Zoning By-law 2008-250. The sports field on the East side of the site is zoned TD2[2077]. The open space along the Rideau River is zoned O1H[2088]. No development associated with this proposal is planned on these two parcels. The west side of the site where the proposed FHS building is planned is zoned TD3[2029]. The TD3 subzone is a Transit Oriented Development zone with medium to high density targets located in proximity to accommodate transit supportive land uses. It permits post-secondary educational uses.

Old Ottawa East Community Design Plan

The Old Ottawa East Community Design Plan completed in 2011 includes Lees Avenue and identifies the River Campus as a Mixed-Use Centre. It notes separation by landscaped buffers and that the site be linked by pedestrian and bicycle pathways.

1.0 Project Background

1.4 Site Context – Existing Site Photos

Image Location Plan

1 - View from North

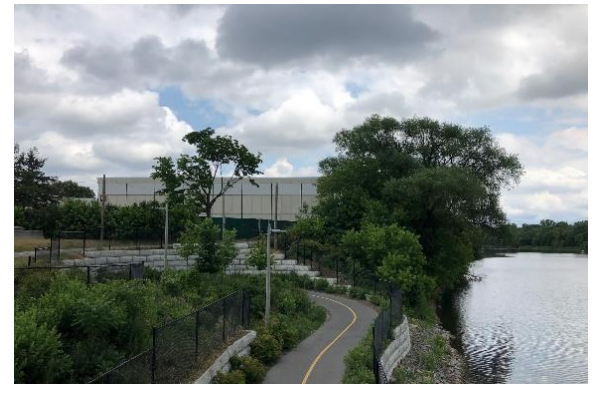
2 – View from East

3- View from North West / Site Entrance

4– View Lees Ave. Overpass

5 - View North from LRT Bridge

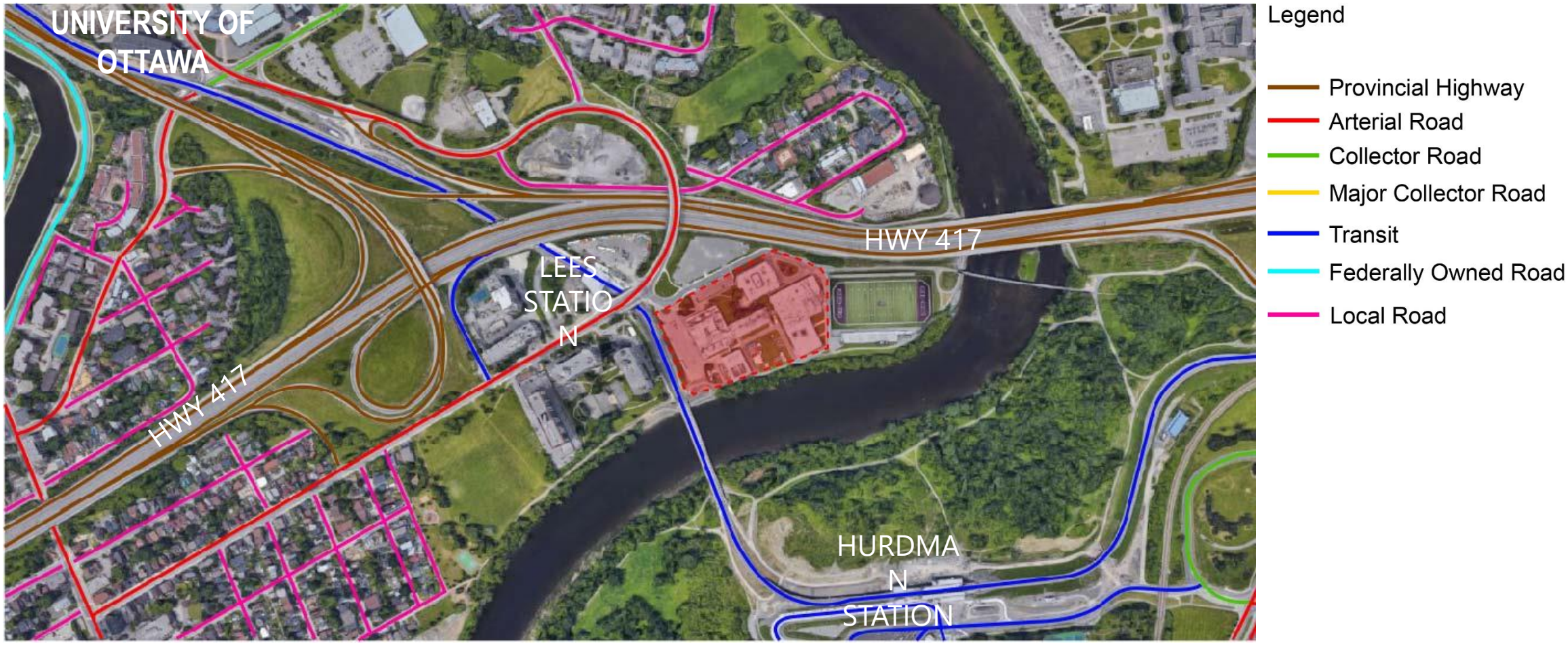
6 - View from South West



7 - View from Cycle Path Switch Back

1.0 Project Background

1.4 Site Context – Transit Oriented Development



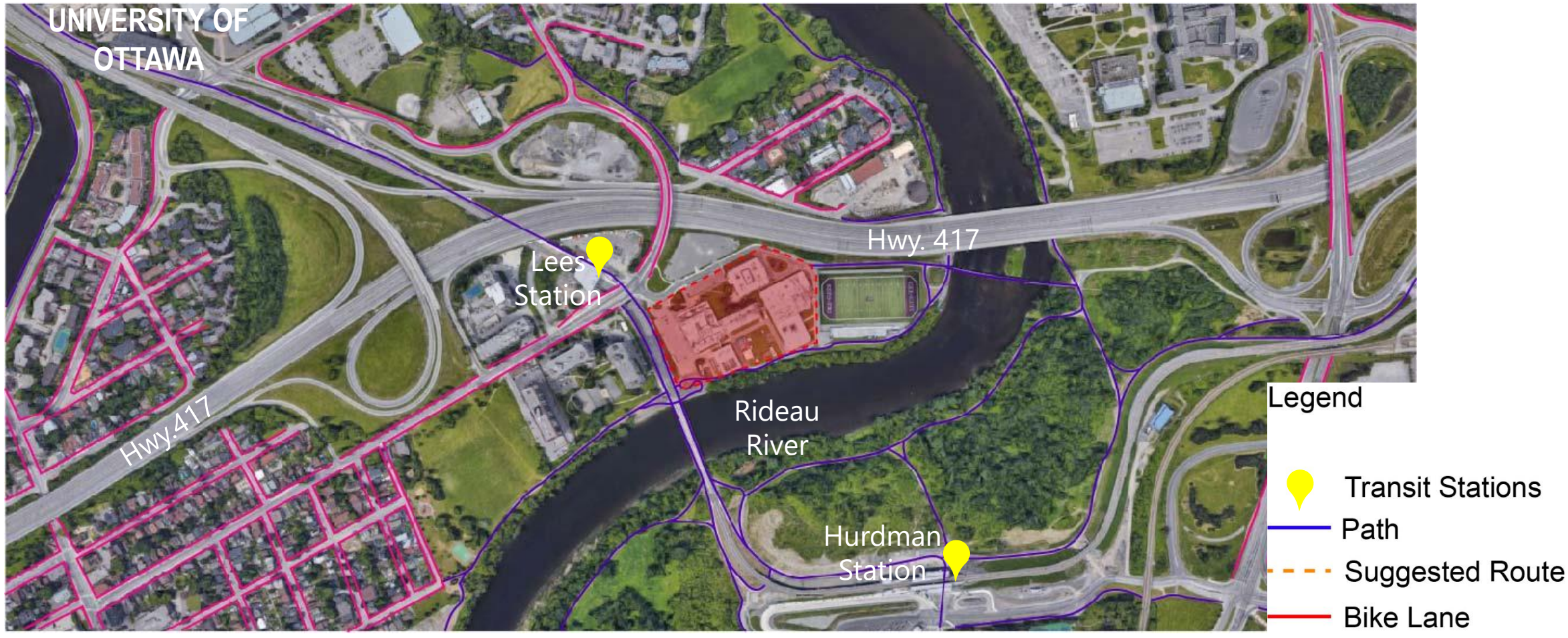
The site is only connected to the city street system at the intersection at the NW corner of the site. The existing internal road network will be maintained for this development. In keeping with the Official Plan, walking, cycling and transit shall have first priority as part of a balanced transportation system that accommodates all users and minimises environmental and financial impacts.

The west side of the site is defined by the LRT corridor and is the de facto front street to this building. The building has been located to reinforce this relationship placing the primary entrances at the north and south ends of the west “SPINE” wall in close proximity to the LRT. Both entrances connect to the LRT. The main entrance Arrival plaza extends to the existing stairs to the Platform exist at the NW corner of the site and the multi-use paths at the SW corner of the site connect to the Proposed River Terrace entrance on the south side of the site.

The pedestrian level podium is clear glass to address CPTED issues and provide visual interest with an indoor/outdoor connection. The screened shipping/receiving court has been placed on the east side of the building to separate it from regular and large pedestrian flows from Lees Station on the west side of the building.

1.0 Project Background

1.4 Site Context – Pedestrian and Cycling Network



The site can be accessed from all directions on foot or bicycle by the Multi-use Pathways that encircled it.
The north pathway extends across the site to the Lees Avenue Intersection. A North-South Pathway with bicycle parking is proposed on the west side of the building at grade level and will connect to the pathway network running along the Rideau River. 152 Bicycle parking spaces have been provided around the site to align with LEED requirements.

1.0 Project Background

1.4 Site Analysis – Density Map

The proposed building will be increasing the density of the site in alignment with the TD zoning. The building will employ approximately 550 people and up to 3500 people could use the building daily.
Five existing 1960- 1980's era apartment buildings, ranging from 12 to 21 storeys are immediately west of the site.
Further away from the site and separated from the site by parks and major roadways are lower density residential developments.
New higher density residential development along Main Street is connected to the site by the multi-use trails along the river.

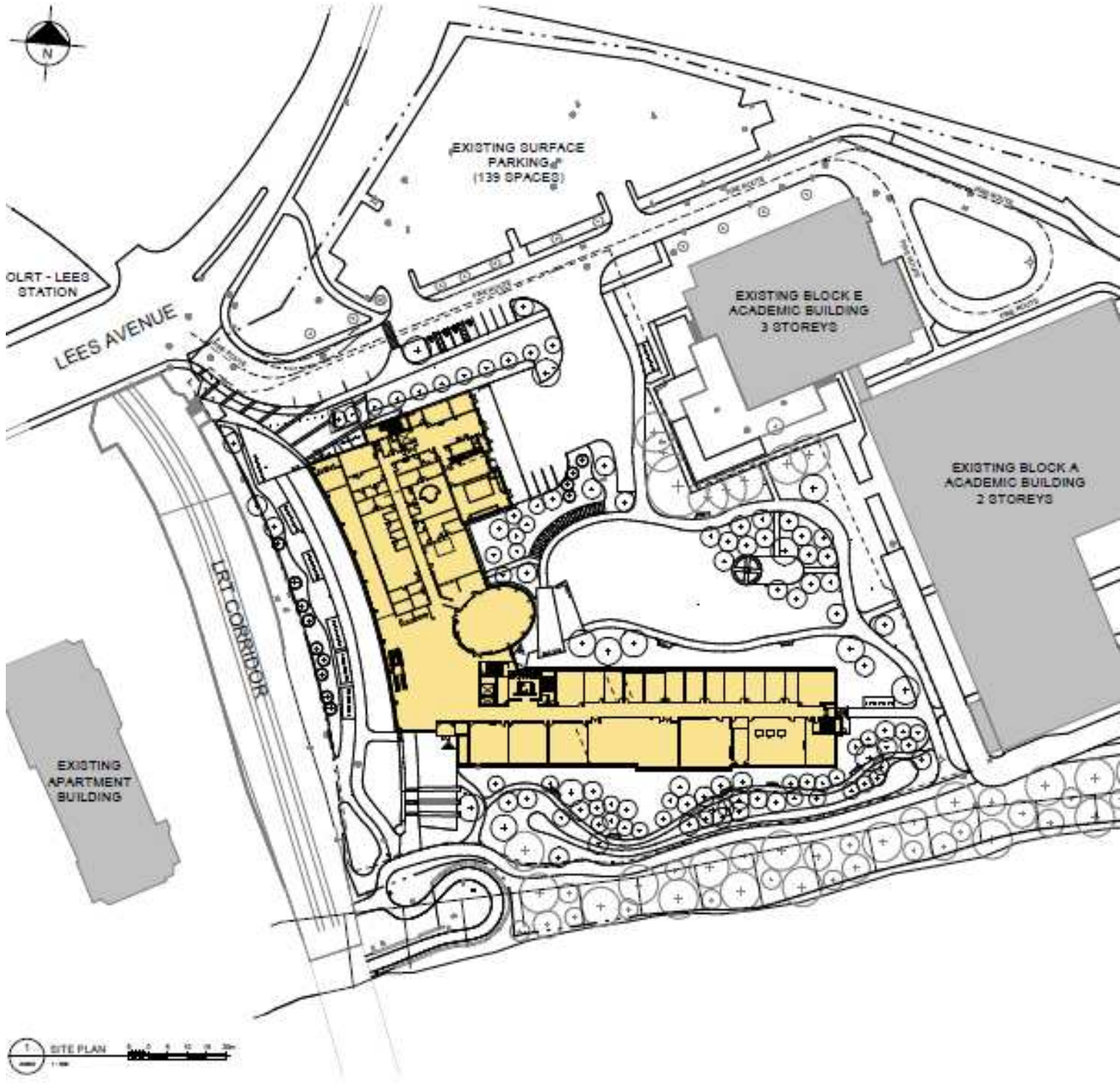
2.0 Design Proposal

2.1 Site Plan

Proposed Development Summary
Campus Area: 70,000m²
Building Footprint : 5,218m²
Gross Floor Area: 23,147m²

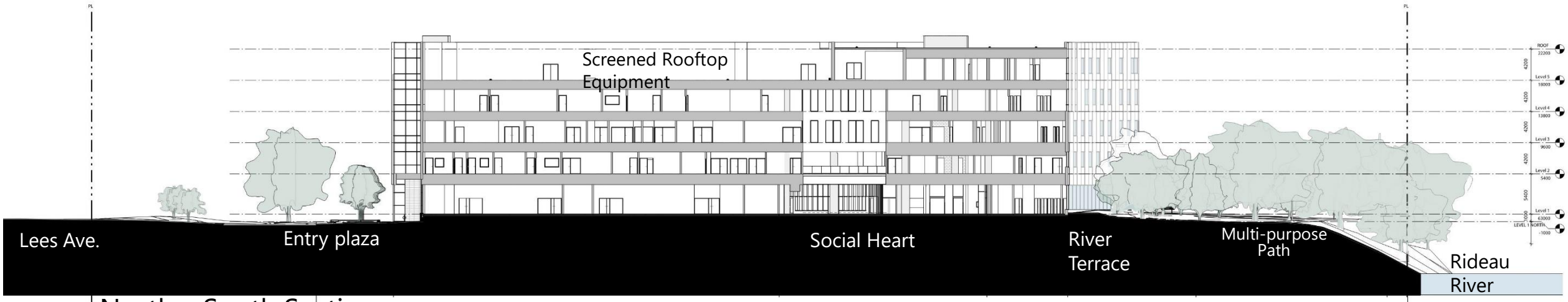
The proposed building location is a response to site conditions. Our analysis of the site revealed the following:

- The majority of users will be LRT users accessing the site through the existing, narrow, street and sidewalk at the north west corner of the site.
- At least two thirds of cyclist will approach the site along it western edge, either from the main campus to the north or at the south-west corner.
- The river is six to seven meters below the main campus site, cutting off grade level views to the river during all seasons. The steep bank between the main campus plateau and the river's edge is heavily treed and the Rideau Valley Conservation Authority has authority on how this land can be used.
- The only visual access to the river is at the south west corner of the site where the city of Ottawa cycling path works its way up the bank to the main campus level and traverses the southern edge of the site on University property.
- Preferred views from the site, at grade are concentrated to the south-west corner. From the upper levels of the building the preferred views and access to natural light will be from the west and south.
- Views to the building from the north will be limited and obscured by buildings and infrastructure. The view from the OLRT corridor will be the prominent and the view and approach from the south will make this a gateway site to the downtown.
- Future development of the site will be to the east but in the short to medium term will include the existing buildings to remain.

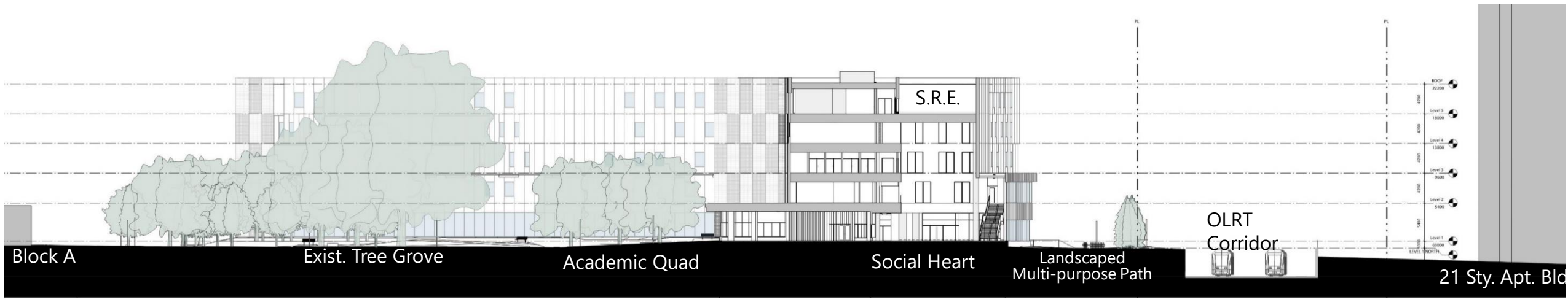


2.0 Design Proposal

2.2 Building & Site Sections



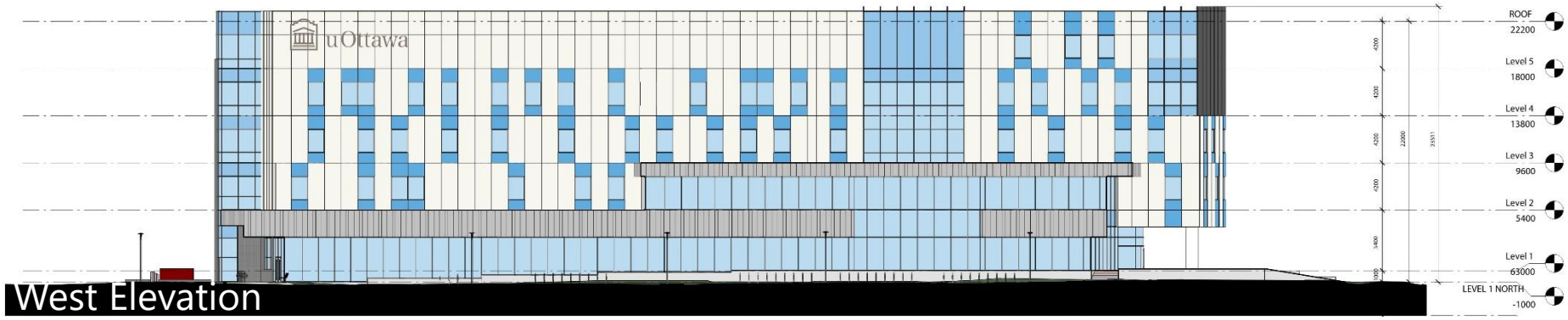
North – South Section



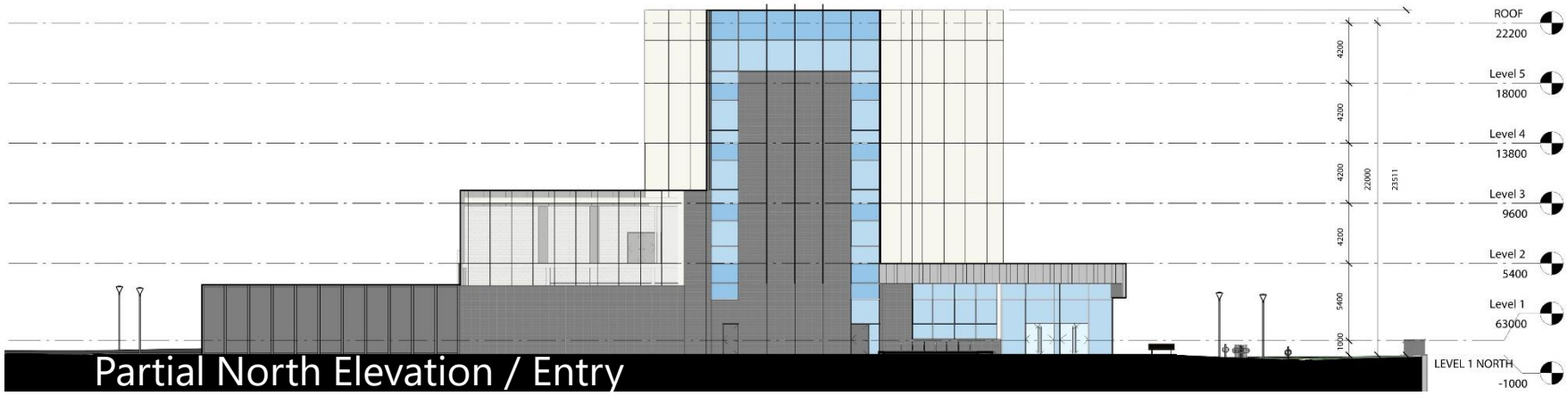
East – West Section

2.0 Design Proposal

2.3 Building Elevations



West Elevation

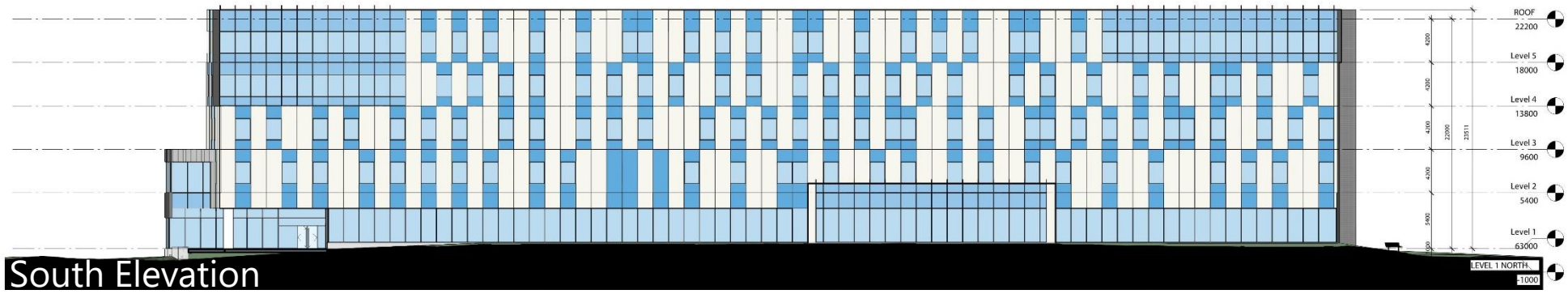


Partial North Elevation / Entry

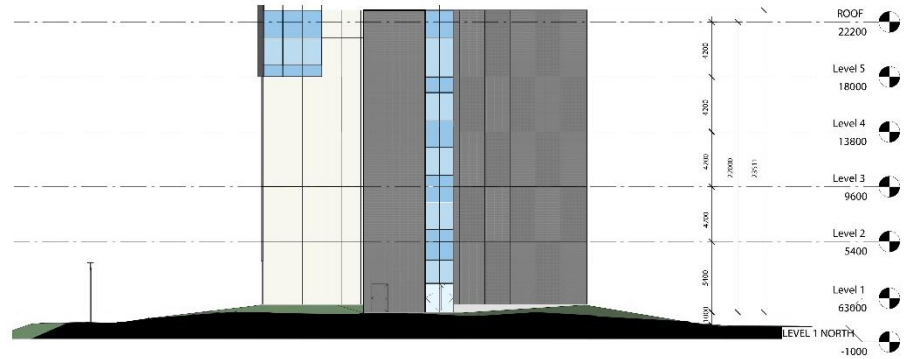
Partial East Elevation

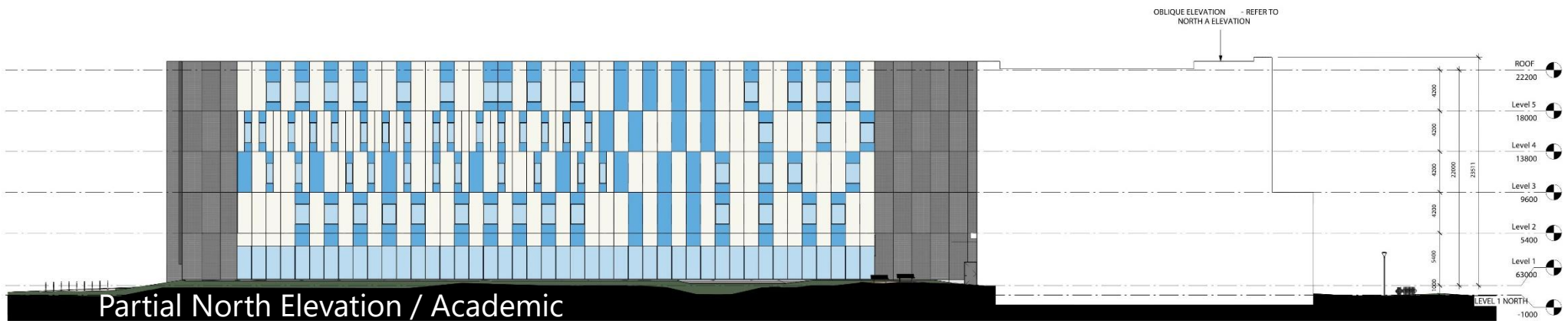
2.0 Design Proposal

2.3 Building Elevations



South Elevation





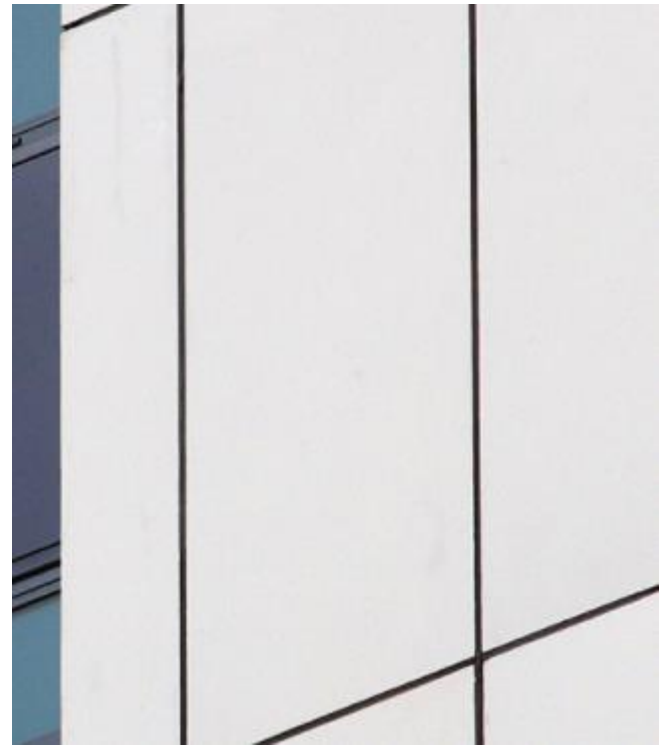
Partial North Elevation / Academic

2.0 Design Proposal

2.4 Building Materials - Proposed

Light Blue Tinted Glass

Light Blue Metal
Spandrel Panels



White Composite Aluminum Panels

Exposed Wood Soffits on Spine

Large format Dark Masonry

Spine – Dark Standing
Seam Metal

2.0 Design Proposal

2.5 Building Views and Massing

Original Massing
The initial building proposal to the Urban Design Review Panel was conceived as 3 intersecting building masses arranged to enclose an interior courtyard at the centre of the site.

The massing was articulated with a large volume on the upper floors to identify the principal entrance. Additional massing articulation included masonry stair towers, a separate Mechanical Penthouse and large expanses of glass into the Social Heart of the building. The balance of the massing was a comprised of a simple façade with regular spacing of punched window all on a glass podium.

The planning of the three blocks did not take full advantage of the southern exposure or the river connection which can only occur at the SW corner of the site due to grade differences. The only jester towards the LRT is the large entrance mass. It also placed the vehicular service access to the building in conflict with the regular flow of people between the site and building entrances. Future development would require an additional service court(s) possibly resulting in more paving on the site.

2.0 Design Proposal

2.5 Building Views and Massing

Proposed Massing

The proposed massing has been refined to an articulated L-shaped block that places equal importance on the Academic Quad, the River View, the OLRT corridor and the Site Entry. It addresses future development and separates vehicular and pedestrian movements.

The mass is articulated with stair towers at the north entrance and on the east façade. Large expanses of glass on the south elevation that are related to large open areas on the interior breakdown the scale of the elevation. Similarly on the west elevation a large glazed wall into the atrium will allow light to penetrate deep into the interior. The west façade has a secondary mass referred to as the Spine, that connects the north and south entrances. Its form is an expression of the LRT track curvature that it faces. The upper portions of the Spine will be clad in a different material while the lower wall is glass to permit views into and from the building as it merges with the glass podium that the remainder of the building sits upon.

The fenestration of the main building block is a playful rhythm of glass and metal cladding. The window wall ratio is just below 30%. The seemingly arbitrary nature of the fenestration further breaks down the scale of the block and is an expression of all the movements that occur around this site. The super insulated walls and their detailing achieve the demanding energy goals of this project

View East / West Elevation

2.0 Design Proposal

2.5 Building View and Massing

View South / North Elevation

2.0 Design Proposal

2.5 Building View and Massing

View North / South Elevation

2.0 Design Proposal

2.5 Building View and Massing

View West / East Elevations

2.0 Design Proposal

2.6 Perspectives

View Lees Avenue –from LRT Stairs

2.0 Design Proposal

2.6 Perspectives

View from South-West / River Bike Path

2.0 Design Proposal

2.6 Perspectives

View from East / Academic Quad

2.0 Design Proposal

2.6 Perspectives

West Elevation from Multiuse Path into Social Heart

2.0 Design Proposal

2.7 Sustainability

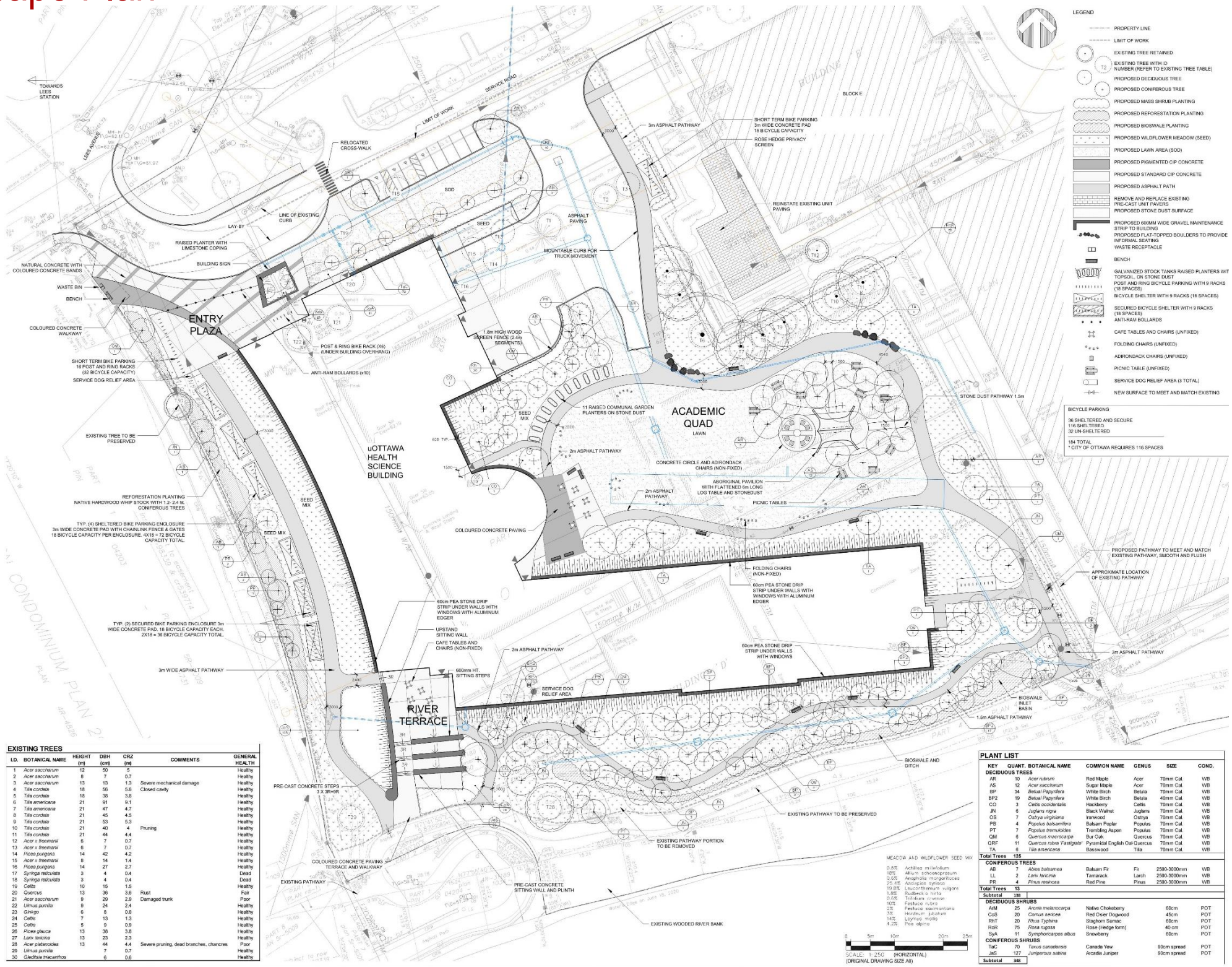
The project is targeting LEED Platinum Certification. In accordance with LEED BD&C v4. The project will include:

- Roof Top Photovoltaic System
- 16 LEED EAc2 points – Optimized Energy Performance – 42% Energy Costs savings compared to ASHRAE 90.1
- Durability Plan for a 50 year Building as per CSA S478-95
- R-40 Roof and R28 Walls
- Approximately 30% Window to Wall ratio
- High-albedo reflective white top coat roofing
- Proximity to Sustainable site features including the LRT and bike parking
- TEDI Score below 37 kWh/m²/year
- Green house gas emission reduction
- Water management and conservation
- Pollution Prevention
- Product selection and resource conservation
- Indoor Environmental quality (thermal, air, and lighting)
- Site Conservations – Protection and preservation of existing mature trees
- A Solid Waste Management programme for all construction phases.

3.0 Landscape Concept

The Landscaping Plan is based on a framework that organizes and unifies a collection of individual buildings in the tradition of a campus.
The landscape is structured around a hierarchy of spaces that will provide for a range of activities and microclimate choices, particularity in the shoulder seasons. Each linked but compartmental space has a distinct spatial and plant character relating to their ecological and program functions.
The resulting design prioritizes pedestrian movement with strong connections between the Social Heart, the Academic Quad and the River Terrace.
The concept is complementary to the main uOttawa Campus utilizing signature elements such as light standards signage, site furniture and the columnar Oak trees.
Building Entrances are located close to the site access points.

3.0 Landscape Plan



EXISTING TREES

I.D.	BOTANICAL NAME	HEIGHT (m)	DBH (cm)	CRZ (m)	COMMENTS	GENERAL HEALTH
1	*Acer saccharum*	12	50	5		Healthy
2	*Acer saccharum*	8	7	0.7		Healthy
3	*Acer saccharum*	13	13	1.3	Severe mechanical damage	Healthy
4	*Tilia cordata*	18	56	5.6	Closed cavity	Healthy
5	*Tilia cordata*	18	38	3.8		Healthy
6	*Tilia americana*	21	91	9.1		Healthy
7	*Tilia americana*	21	47	4.7		Healthy
8	*Tilia cordata*	21	45	4.5		Healthy
9	*Tilia cordata*	21	53	5.3		Healthy
10	*Tilia cordata*	21	40	4	Pruning	Healthy
11	*Tilia cordata*	21	44	4.4		Healthy
12	*Acer x freemanii*	6	7	0.7		Healthy
13	*Acer x freemanii*	6	7	0.7		Healthy
14	*Picea pungens*	14	42	4.2		Healthy
15	*Acer x freemanii*	8	14	1.4		Healthy
16	*Picea pungens*	14	27	2.7		Healthy
17	*Syringa reticulata*	3	4	0.4		Dead
18	*Syringa reticulata*	3	4	0.4		Dead
19	*Celtis*	10	15	1.5		Healthy
20	*Quercus*	13	36	3.6	Rust	Fair
21	*Acer saccharum*	9	29	2.9	Damaged trunk	Poor
22	*Ulmus pumila*	9	24	2.4		Healthy
23	*Ginkgo*	8	8	0.8		Healthy
24	*Celtis*	7	13	1.3		Healthy
25	*Celtis*	5	9	0.9		Healthy
26	*Picea glauca*	13	38	3.8		Healthy
27	*Larix laricina*	13	23	2.3		Healthy
28	*Acer platanoides*	13	44	4.4	Severe pruning, dead branches, chancres	Poor
29	*Ulmus pumila*		7	0.7		Healthy
30	*Gleditsia triacanthos*		6	0.6		Healthy

PLANT LIST

KEY	QUANT.	BOTANICAL NAME	COMMON NAME	GENUS	SIZE	COND.
DECIDUOUS TREES						
AR	10	*Acer rubrum*	Red Maple	Acer	70mm Cal.	WB
AS	12	*Acer saccharum*	Sugar Maple	Acer	70mm Cal.	WB
BP	34	*Betual Papyrifera*	White Birch	Betula	70mm Cal.	WB
BP2	19	*Betual Papyrifera*	White Birch	Betula	40mm Cal.	WB
CO	3	*Celtis occidentalis*	Hackberry	Celtis	70mm Cal.	WB
JN	6	*Juglans nigra*	Black Walnut	Juglans	70mm Cal.	WB
OS	7	*Ostrya virginiana*	Ironwood	Ostrya	70mm Cal.	WB
PB	4	*Populus balsamifera*	Balsam Poplar	Populus	70mm Cal.	WB
PT	7	*Populus tremuloides*	Trembling Aspen	Populus	70mm Cal.	WB
QM	6	*Quercus macrocarpa*	Bur Oak	Quercus	70mm Cal.	WB
QRF	11	*Quercus rubra 'Fastigiata'*	Pyramidal English Oak	Quercus	70mm Cal.	WB
TA	6	*Tilia americana*	Basswood	Tilia	70mm Cal.	WB
Total Trees	**125**					
CONIFEROUS TREES						
AB	7	*Abies balsamea*	Balsam Fir	Fir	2500-3000mm	WB
LL	2	*Larix laricina*	Tamarack	Larch	2500-3000mm	WB
PR	4	*Pinus resinosa*	Red Pine	Pinus	2500-3000mm	WB
Total Trees	**13**					
Subtotal	**138**					
DECIDUOUS SHRUBS						
ArM	25	*Aronia melanocarpa*	Native Chokeberry		60cm	POT
CoS	20	*Cornus sericea*	Red Osier Dogwood		45cm	POT
RhT	20	*Rhus Typhina*	Staghorn Sumac		60cm	POT
RoR	75	*Rosa rugosa*	Rose (Hedge form)		40 cm	POT
SyA	11	*Symphoricarpos albus*	Snowberry		60cm	POT
CONIFEROUS SHRUBS						
TaC	70	*Taxus canadensis*	Canada Yew		90cm spread	POT
JaS	127	*Juniperous sabina*	Arcadia Juniper		90cm spread	POT
Subtotal	**348**					

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