NOUVELLE ÉCOLE SECONDAIRE ORLÉANS SUD **DESIGN REPORT AND PLANNING RATIONALE** April 04, 2025

Conseil des écoles publiques de l'Est de l'Ontario



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# **TABLE OF CONTENTS**

#### PART 1 - SITE DESCRIPTION

•	INTRODUCTIONSITE DESCRIPTIONPHOTOGRAPHS OF EXISTING CONDITIONS	06
PART 2 - DRAWINGS		
•	SITE PLAN KEY GUIDELINES	13
•	FLOOR PLANS	14
•	ELEVATIONS	16
•	3D VIEWS	17



PART 1 - SITE

### PART 1 INTRODUCTION

#### **DESIGN PROPOSAL**

The new CEPEO high school in Orleans mainly consists of an academic wing (classrooms, science and computer labs) and a community wing (double gymnasium, library, cafeteria and multipurpose stage).

The 84,713 sq. ft. (7,873 m2) school is scheduled to be built beginning in the summer of 2025, with a planned opening in the fall of 2027 for 713 students. A designated area for 12 portables has been identified on the site plan. A second phase of expansion is planned to meet the growing needs and demands of the local community. The school board has set a target of 1,091 students for the fully constructed school.

#### Design Overview

- The building is located facing Mer-Bleue road while having welcoming visibility from the elementary school on site, the future residential neighbourhood and along the pedestrian pathway tieing in the currrently built residential neighbourhood to Mer-Bleue.
- The main entrance on Mer-Bleue welcomes students and staff arriving by bicycle or foot. A
  secondary entrance is provided on the northwest side of the building for staff and students arriving
  by car from the adjacent parking lot. A third entrance is provided on the southeast façade for
  students arriving by bus.
- A central lobby with access to the gymnasium, library, cafeteria and stage should be made available to the community outside of school hours.
- The building footprint must be compact to preserve green spaces and allow for future development on the site.
- In terms of outdoor facilities, there is a basketball court and a multi-use trail.
- The building was sited and designed to allow for future expansion of the facility. Future areas for development were identified (addition to the classroom wing on the northeast corner of the building; addition to the northwest of the gymnasium facilities; an area was designated for future portables).

#### SUSTAINABLE DEVELOPMENT CONSIDERATIONS

The design was implemented based on energy conservation strategies and sustainable building practices to design healthy living spaces.

- Building orientation takes into account savings and potential passive solar energy opportunities.
- Maximizes energy efficiency through best practice building envelope design, including thermally efficient glazing.
- Selection of sustainable materials (life cycle cost) with a high recycled content.
- Strategic placement of windows to maximize natural light and views.
- Common areas are located in spaces well lit by natural light. Every occupied space in the building has access to natural light.
- Specify low-flow, low-flush plumbing fixtures to minimize water consumption.
- Specify mechanical and electrical systems that are energy efficient, require minimal maintenance and are easy to use.
- LED lighting will be used to minimize energy loads. Lighting controls such as occupancy sensors
- Minimization of construction waste
- The compact volume of the new secondary school minimises the impact of the building's footprint
  on the school grounds and the environment.
- Flexibility in design, ability to expand and provide spaces capable of serving multiple functions.
- Bird-friendly design guidelines are integrated by applying bird-safe markings across the full surface
  of large, glazed areas—particularly in the cafeteria and on both sides of the main lobby—helping
  to prevent bird collisions.
- The design supports wildlife protection and species-at-risk by scheduling tree and shrub removals outside of critical nesting periods (before April 1st) and incorporating bird-safe markings on large glass surfaces to minimize impacts on local bird populations.



PART 1 \_ SITE DESCRIPTION



## **PART 1** SITE DESCRIPTION

Administrative region : Municipality of

Cumberland, City of Ottawa

Total area: 52 457 m<sup>2</sup>

Address: 2405 & 2419 Mer-Bleue

Street, Ottawa, ON K4A 3V1

### **Site Description**

- The property is located south of Orleans, and is accessible from Mer-Bleue Street which connects downtown Orleans to the Notre-Dame-des-Champs sector.
- The property is currently occupied by an abandoned house bordering the street as well as the remains of exterior developments corresponding to the demolished industrial buildings including a storage barn, a gravel-covered space having been used for a commercial materials storage operation.







# PART 1 \_ SITE DESCRIPTION

#### Immediate context

#### NORTH

 Recent residential area composed of townhouses and condominiums ranging in height from two to three stories.

#### **EAST**

 Future elementary school (under construction) on two floors (northeast) and future residential area (southeast).

#### **WEST**

 Vacant wooded site and a few single-family homes.

### **SOUTH**

- Private property with a singlefamily home along the street, a shed set back from the lot, and a strip of vegetation along neighboring properties.
- Further to the southeast is land reserved for future residential development.







### PART 1 \_ SITE DESCRIPTION

### **Design Integration with The Broader Community**

The new high school site plays a vital role in weaving into the broader fabric of the Mer-Bleue community. As shown on the map, it sits within the yellow boundary lines that define the growing Mer-Bleue neighbourhood. Strategically positioned along Mr-Bleue Road, the school acts as a gateway—marking a clear transition from the public street edge to the quieter residential areas beyond.

Located in the southeast corner of the parcel, the school is carefully sited to create a green buffer between its facilities and the existing adjacent townhouses. This buffer softens the edge between institutional and residential zones, helping the site integrate more sensitively into its surroundings.

The design also places the soccer field at a residential street corner, allowing easy access to nearby street parking and offering a valuable recreational amenity for the wider community.

A community multi-use pathway is integrated along the boundary of the school site, connecting it to Mer-Bleue Road. This pathway enhances accessibility and encourages active transportation while reinforcing the site's openness and community connection.

Finally, the layout takes into account the existing conditions of Mer-Bleue Road and anticipates the future road widening project. As a result, the school remains well-positioned and functional under both current and future roadway scenarios—ensuring its long-term adaptability and resilience.



SITE MAP - DESIGN INTEGRATION WITH THE BROADER COMMUNITY





# **PART 1** PHOTOGRAPHS OF EXISTING CONDITIONS



1. VIEW FROM MER-BLEUE TOWARDS THE RESIDENTIAL AREA

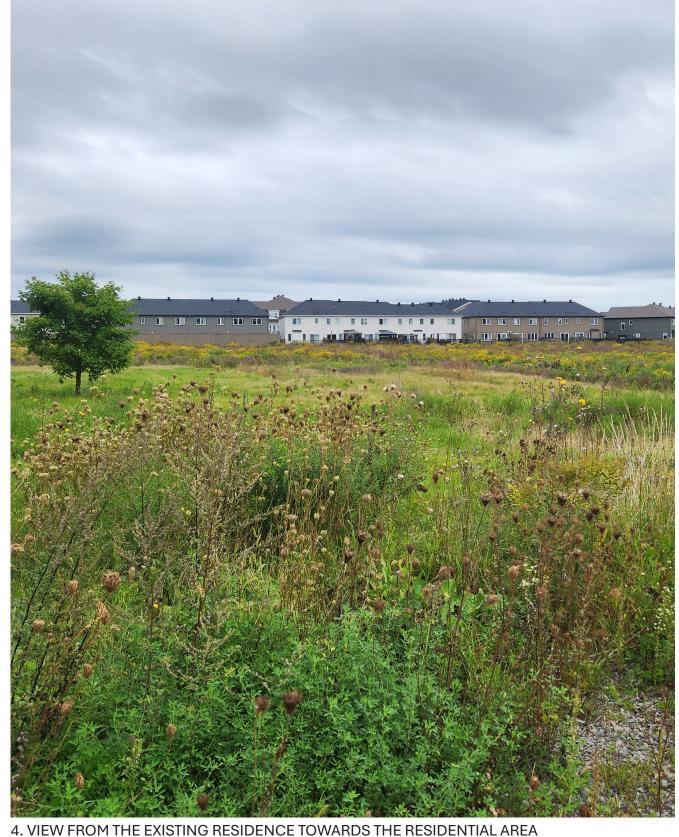


2. VIEW FROM THE DEMOLISHED INDUSTRIAL SITE











# **PART 1** \_ PHOTOGRAPHS OF EXISTING CONDITIONS



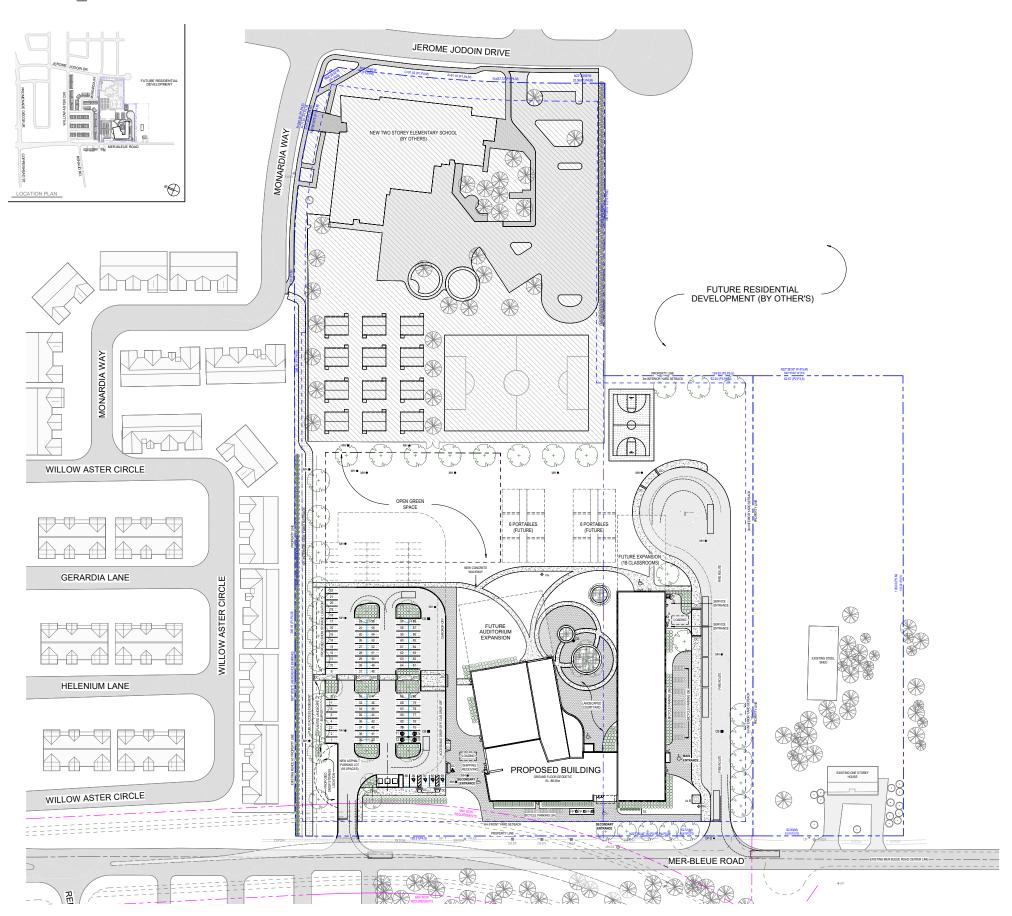




5. EXISTING PONDING ON SITE

**PART 2 - DRAWINGS** 

## PART 2 \_ SITE PLAN KEY GUIDELINES



#### **GUIDELINES 01:**

The building is located on the southeast corner, maximizing visibility and accessibility from Mer-Bleue Street and the interior street serving the parking area, creating a remarkable visual impact in the residential context. The main entrance opens directly onto the street to facilitate access for pedestrians arriving from Mer-Bleue Street where there will be a school bus stop. A secondary entrance accessible from the parking lot is planned for cars and bicycles.

#### **GUIDELINES 02:**

The gymnasiums are ideally located near the parking lot and in direct relation to the elementary school under construction to the east, with direct access to the soccer and basketball fields to maximize their use.

#### **GUIDELINES 03:**

The building is located on the southern part of the site, so as to create a distance from the residential community. The building footprint is to be compact in order to preserve green spaces and allow for future development on the site. A future auditorium is being built next to the double gymnasium. Additional classrooms are to be added next to the classroom wing.

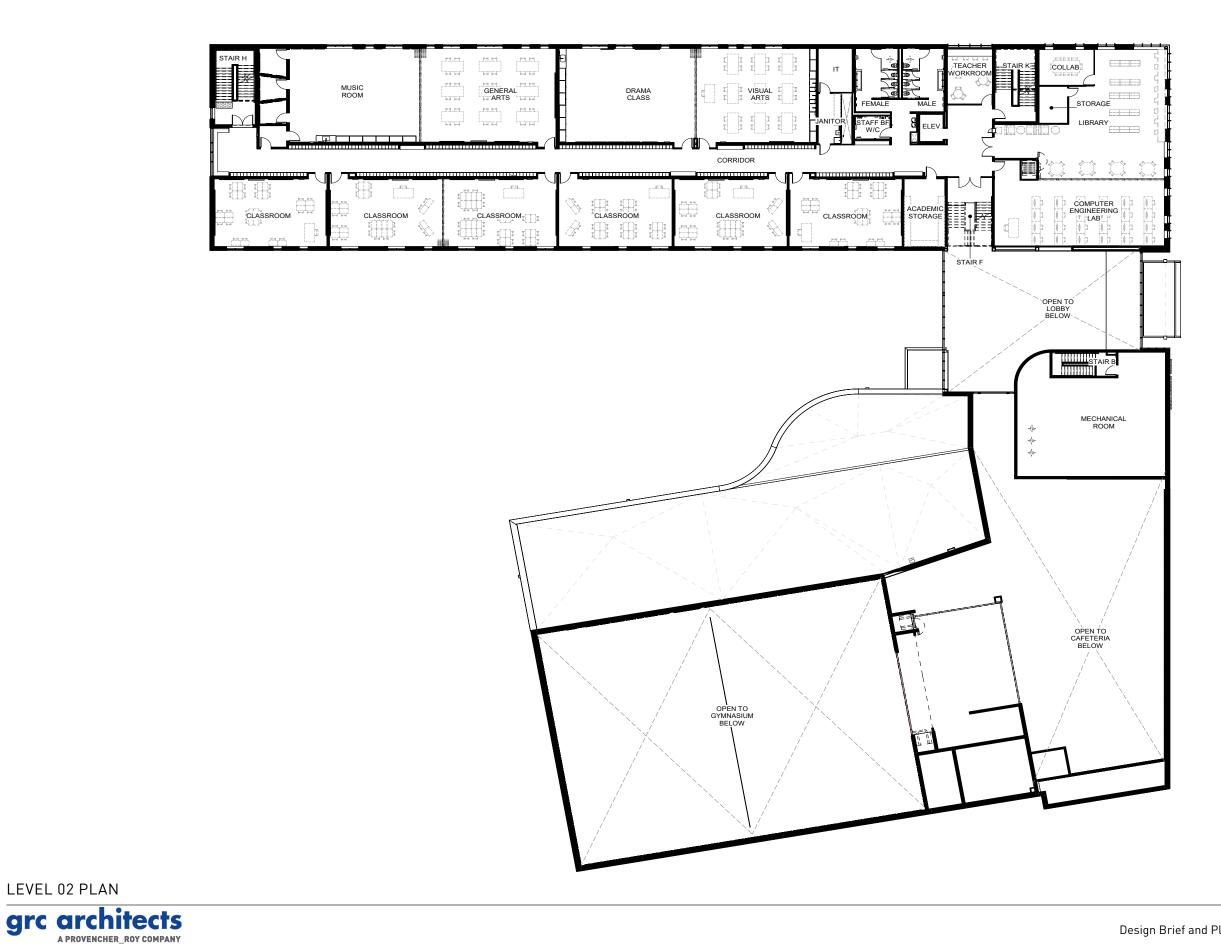




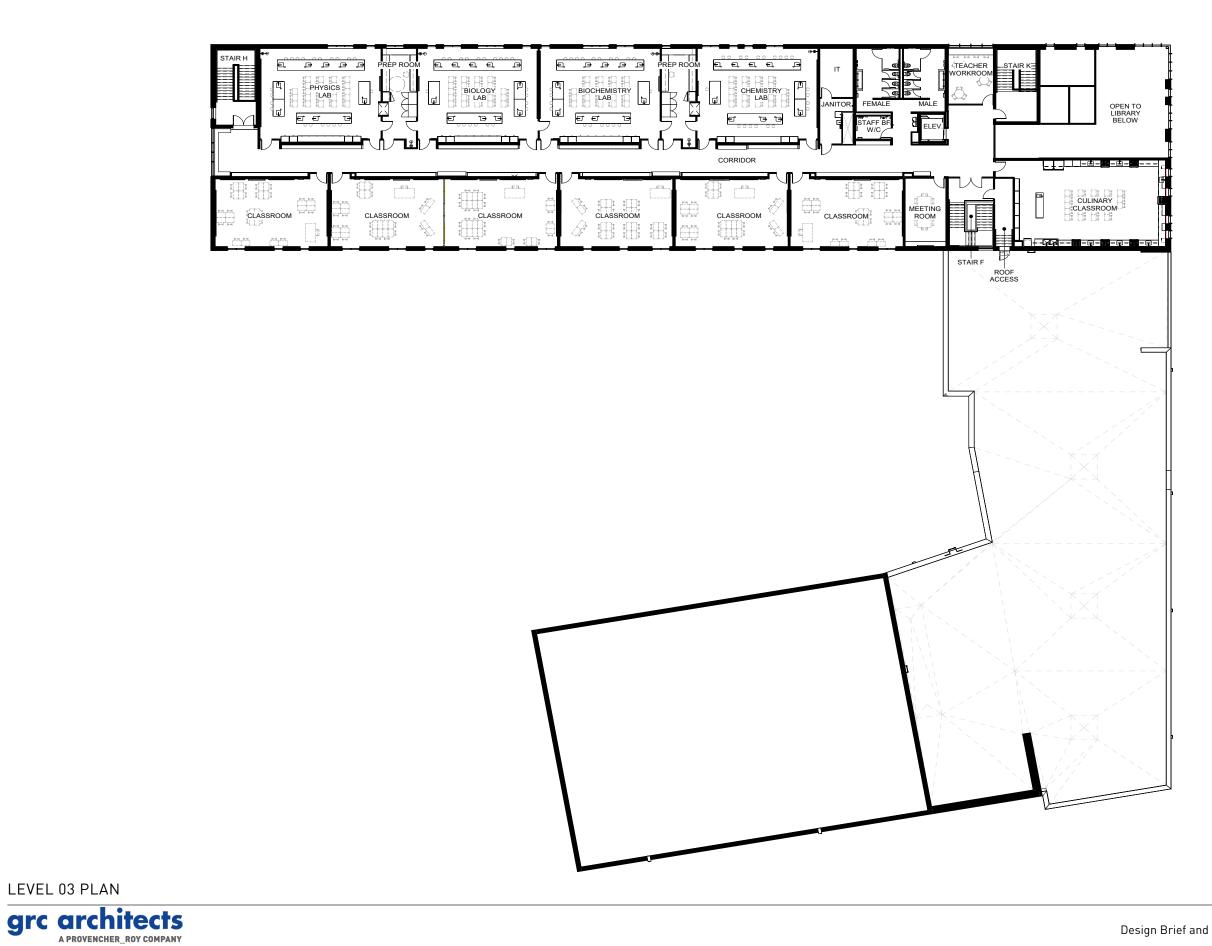




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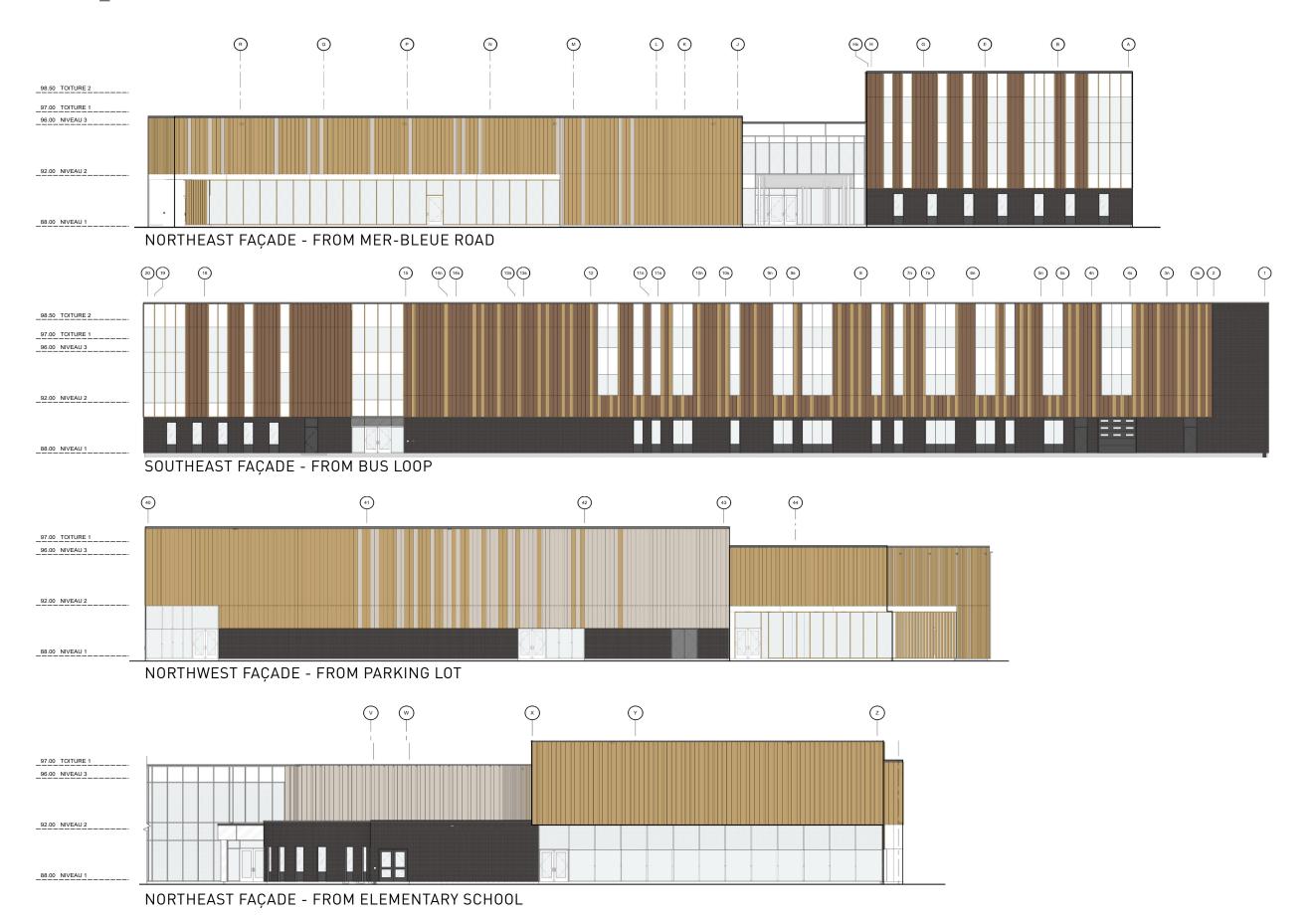






# PART 2\_ELEVATIONS









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# PART 2\_3D VIEWS

Note: Refer to landscaping drawings for the site design and planting location.



VIEW ON THE LIBRARY FROM MER-BLEUE ROAD



VIEW ON THE GYMNASIUM AND THE COURTYARD FROM THE ELEMENTARY SCHOOL



# PART 2\_3D VIEWS

Note: Refer to landscaping drawings for the site design and planting location.



VIEW ON THE CAFETERIA AND THE GYMNASIUM FROM MER-BLEU ROAD



VIEW ON THE SCHOOL CORNER FROM MER-BLEUE AND RENEAUD INTERSECTION



