Structured vs. unstructured: Modifying the studio to facilitate learning

Ren Thomas, Assistant Professor, Dalhousie University

What is "studio"?

✳ In architecture and landscape architecture, "studio" describes a course in which students primarily work on a design concept for a theoretical project on a real site

✳ No scheduled lectures

✳ The instructor spends the majority of the time in individual or group critiques on the design

✳ Students refine their design and research materials

✳ Presentations, often to external critics, focus on the design aesthetic rather than considerations such as cost, feasibility, or public acceptance

What is "studio"?

✳ While architecture studios emphasize strong conceptual design, working iteratively with the professor, and peer-based learning with observation and critique, planning studios emphasize the team process, working iteratively with a client, and team-based learning (Senbel 2012)

✳ Planning studios take more collaborative approaches to problem solving, including facilitating discussions with community members, so healthy group dynamics are critical (Kotval 2003)

✳ The outcome in many planning studios is often a community-supported proposal, report, or design concept rather than a refined design reflecting an individual student's tastes or preferences

What is experiential learning?

✳ Students get real-world experience by working on a real project with a real client

✳ Can be a win-win: small municipalities, non-profits, or community-based organizations without extensive planning capacity obtain much-needed (temporary) human resources, while students learn how to work with a client

✳ Many planning studios adopt an experiential learning approach, working on a real project defined by a client

Modifying the studio

✳ Fourth year undergraduate studio in urban design, 6 hours class time per week, 13 weeks

✳ Major modifications to the unstructured format

  ✳ Gradual transition from lectures and applied exercises to less structured time

  ✳ Gradual transition from individual to group assignments

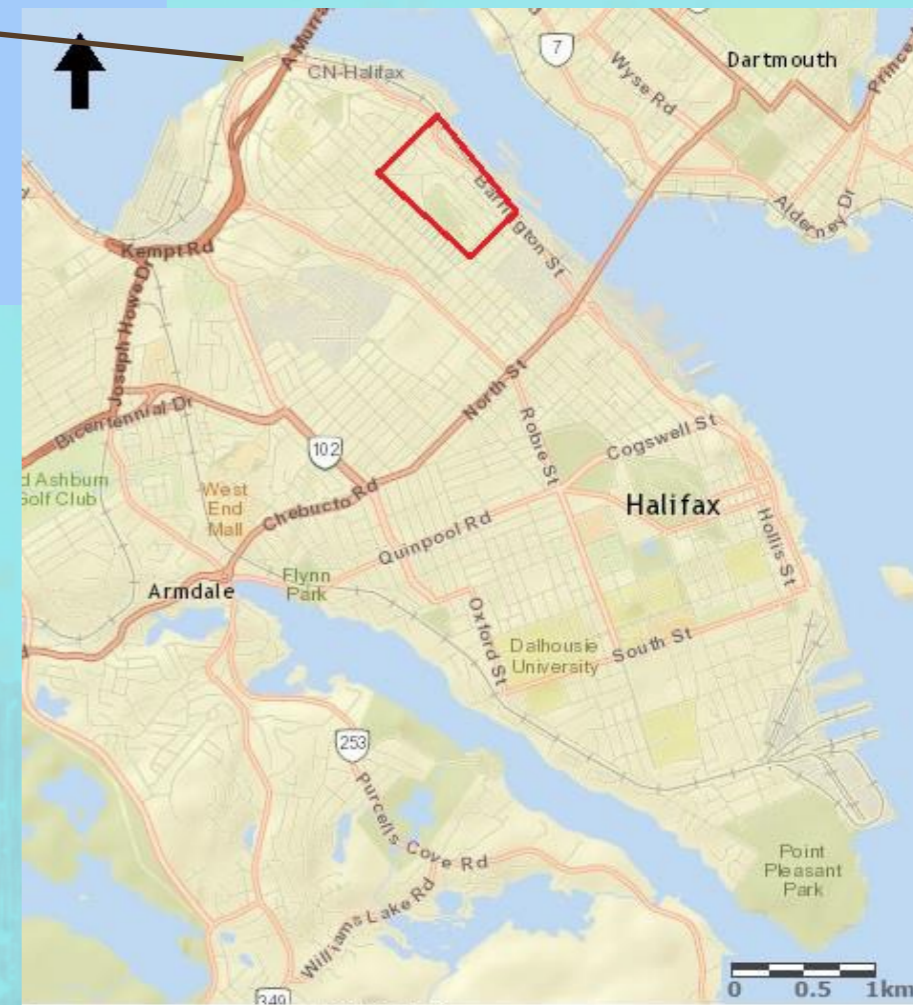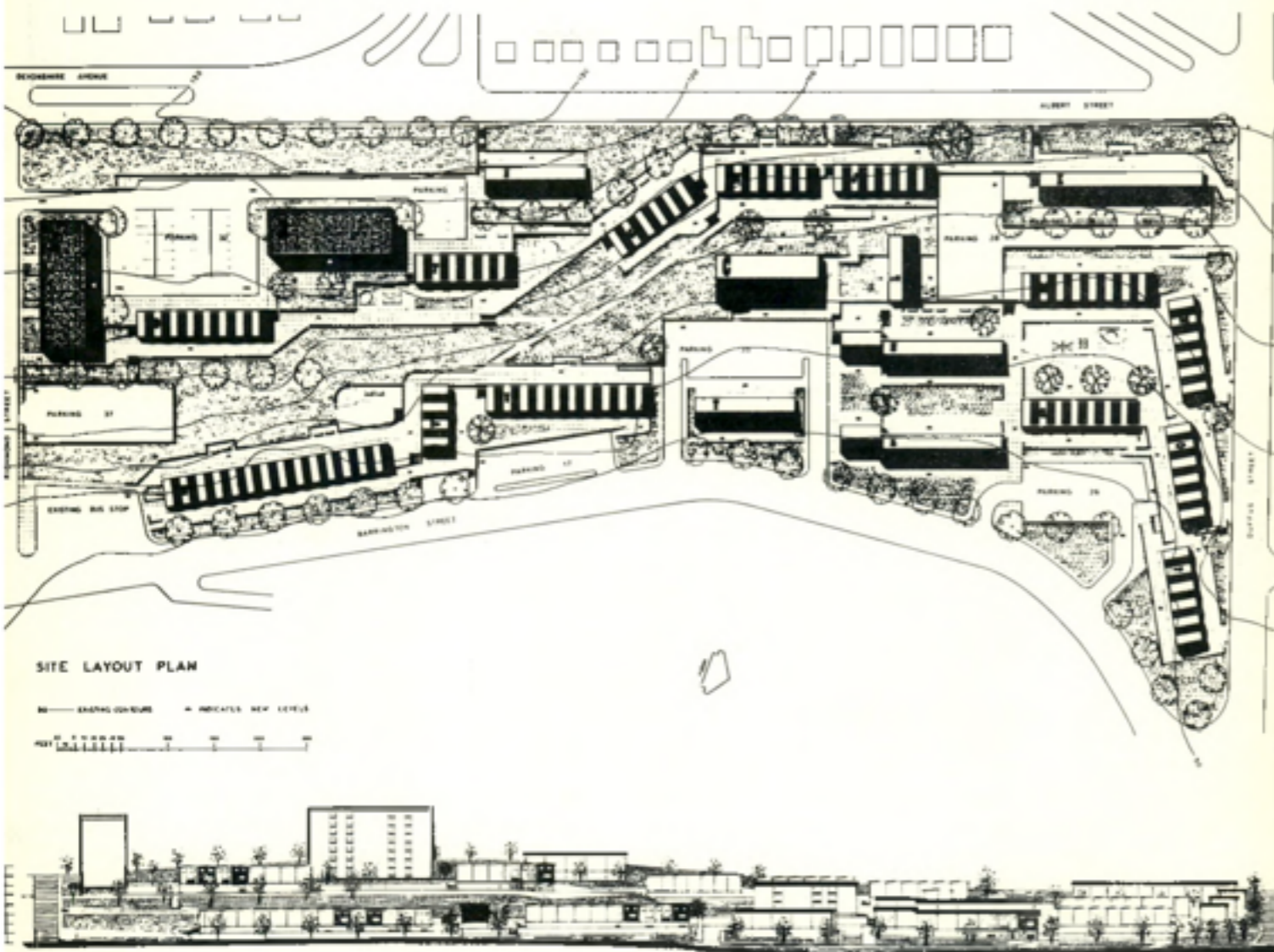 ✳ Clear project expectations/deliverables from the client

Why Modify?

✳ Client was a non-profit organization in a vulnerable neighbourhood (Mulgrave Park)

✳ Students are new to the studio format

✳ Students have varying levels of skill (e.g. drawing, project management, group work)

✳ Instructor experience with both unstructured design studios and experiential learning courses
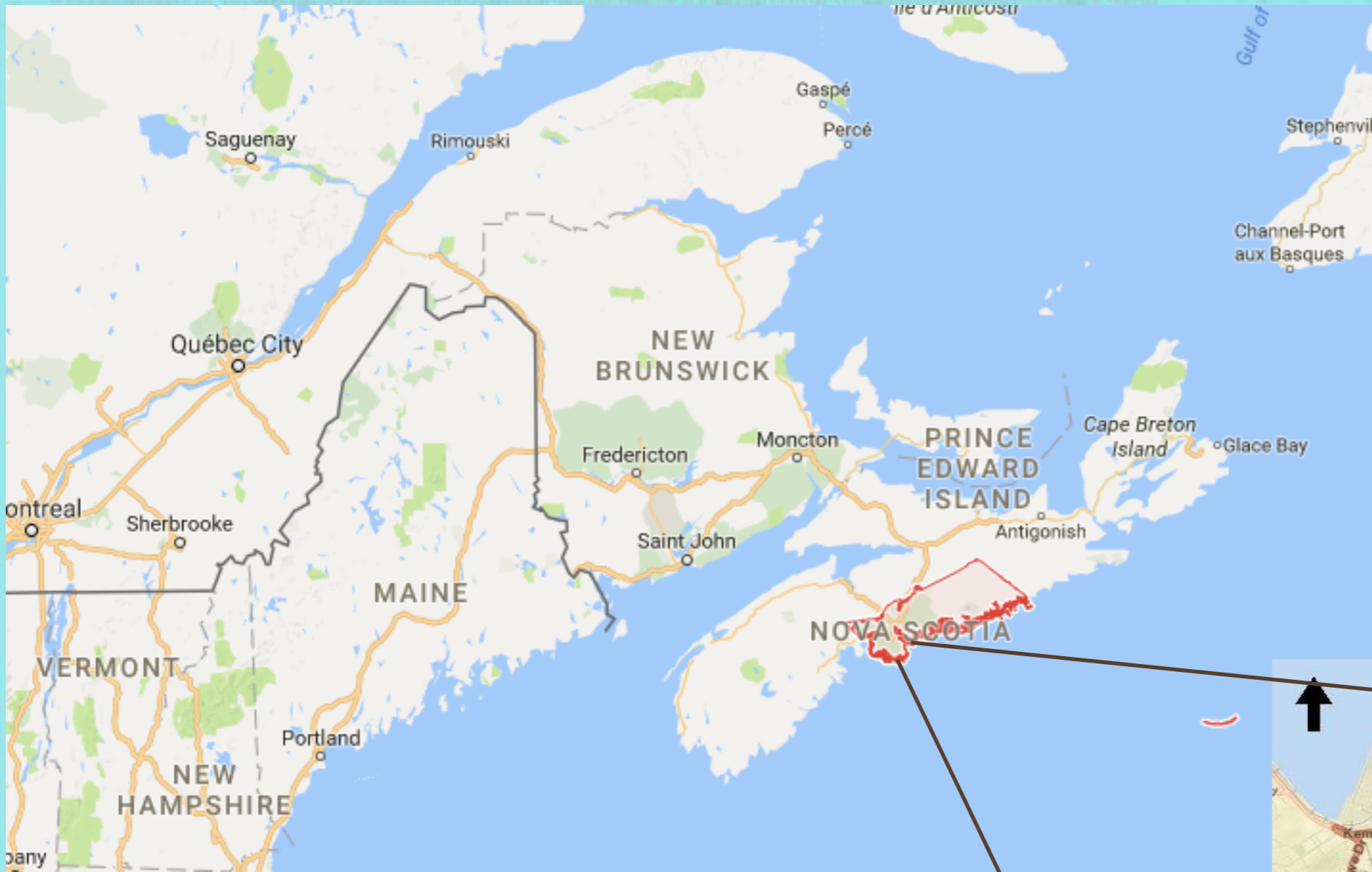
Mulgrave Park

Halifax, Nova Scotia
Population: 403,390
Median income: $76,193

SITE LAYOUT PLAN

SITE ELEVATION TO BARRINGTON STREET

SCHEDULE OF ACCOMMODATION

Mulgrave Park Housing Project

Central Mortgage and Housing Corporation —
Architectural and Planning Division

Ian MacLennan — Chief Architect and Planner

Maurice Clayton — Architect/Planner in charge
of project.

Assisted by A. M. Henderson, Atlantic Regional
Architect and Erwin C. Cleve.

Leslie R. Fairn and Associates   —Associate
J. Philip Dumaresq & Associates } Architects
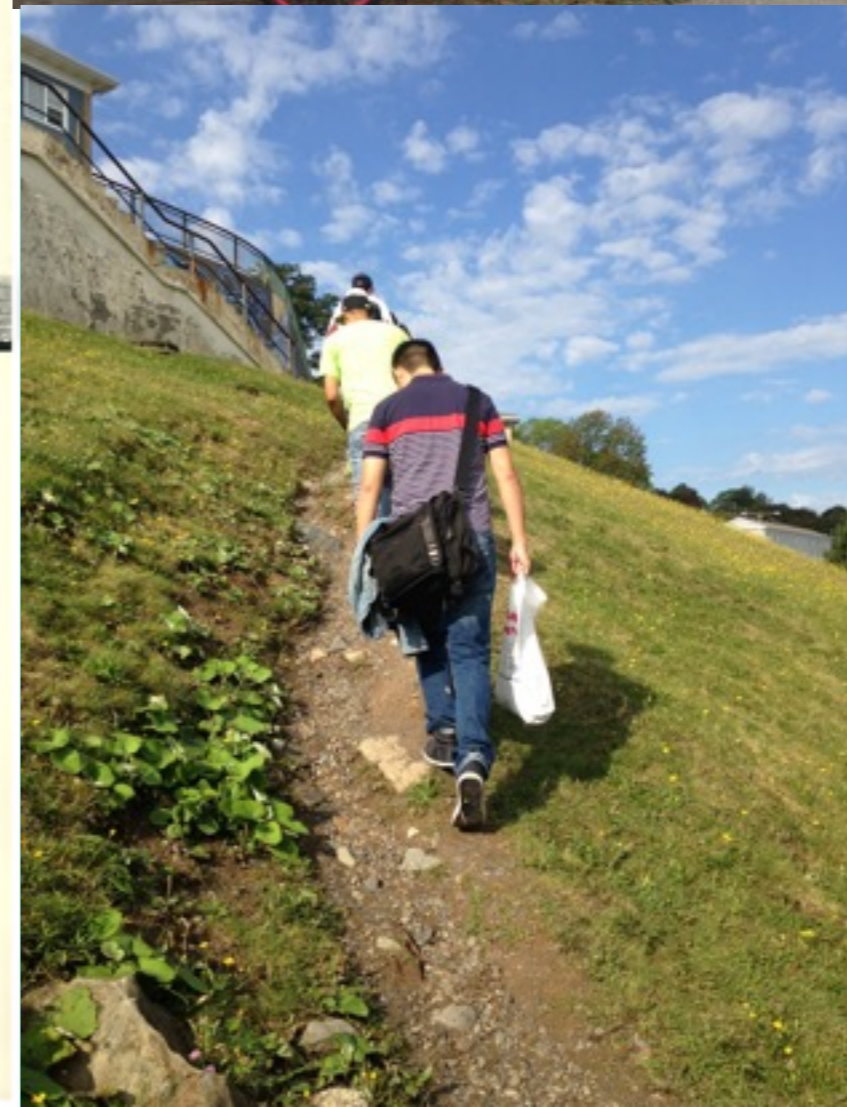
CMHC architects' drawings of
Mulgrave Park (1960)

Mulgrave
Park
(2016)

	Lecture/Instruction	Exercise
Site History	Guest lecture and NFB film on design of the Mulgrave Park (1960)	Using hard copy maps to make figure ground drawings
Housing Policy	Governmental roles in affordable housing, local housing needs, barriers to affordable housing	Writing a one-page summary on key affordability issue Halifax is facing, upload to the consultation website for the National Affordable Housing Strategy
Health and Sustainability	Theories and practices integrating health and sustainability	Developing a survey for residents on desired health/sustainability characteristics of their community
Funding Alternatives	Municipal budget, community grants program, civic crowdfunding	Find potential funding sources for individual design/ programming elements, decide how to prioritize and implement them

Student Peter Nightingale's GIS site plan

| Property Lines | Buildings | HRM Greenspace | Sidewalk/Walkways | Driveways/Parking | Roads |

Data Source: HRM Corporate Dataset (2012)
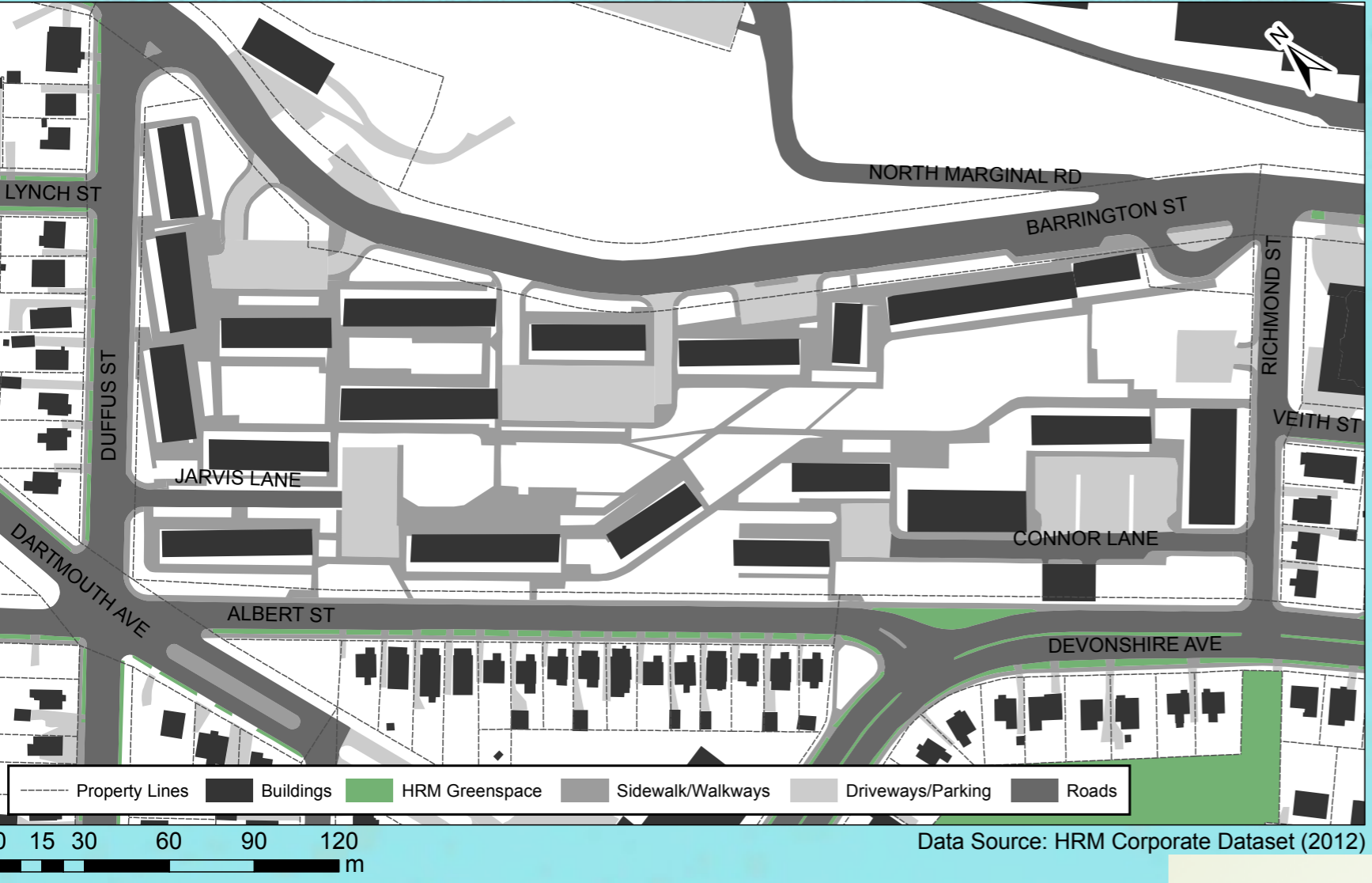
0 15 30 60 90 120 m

Figure Ground Images
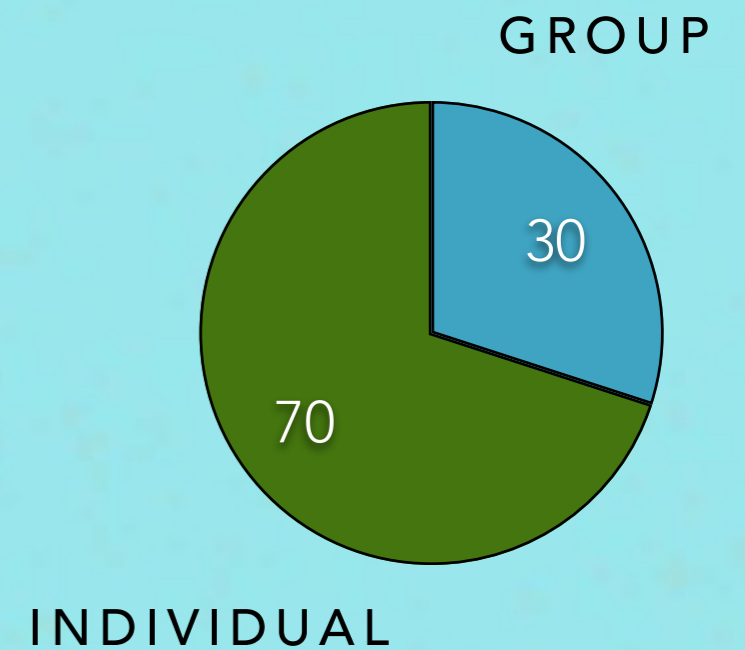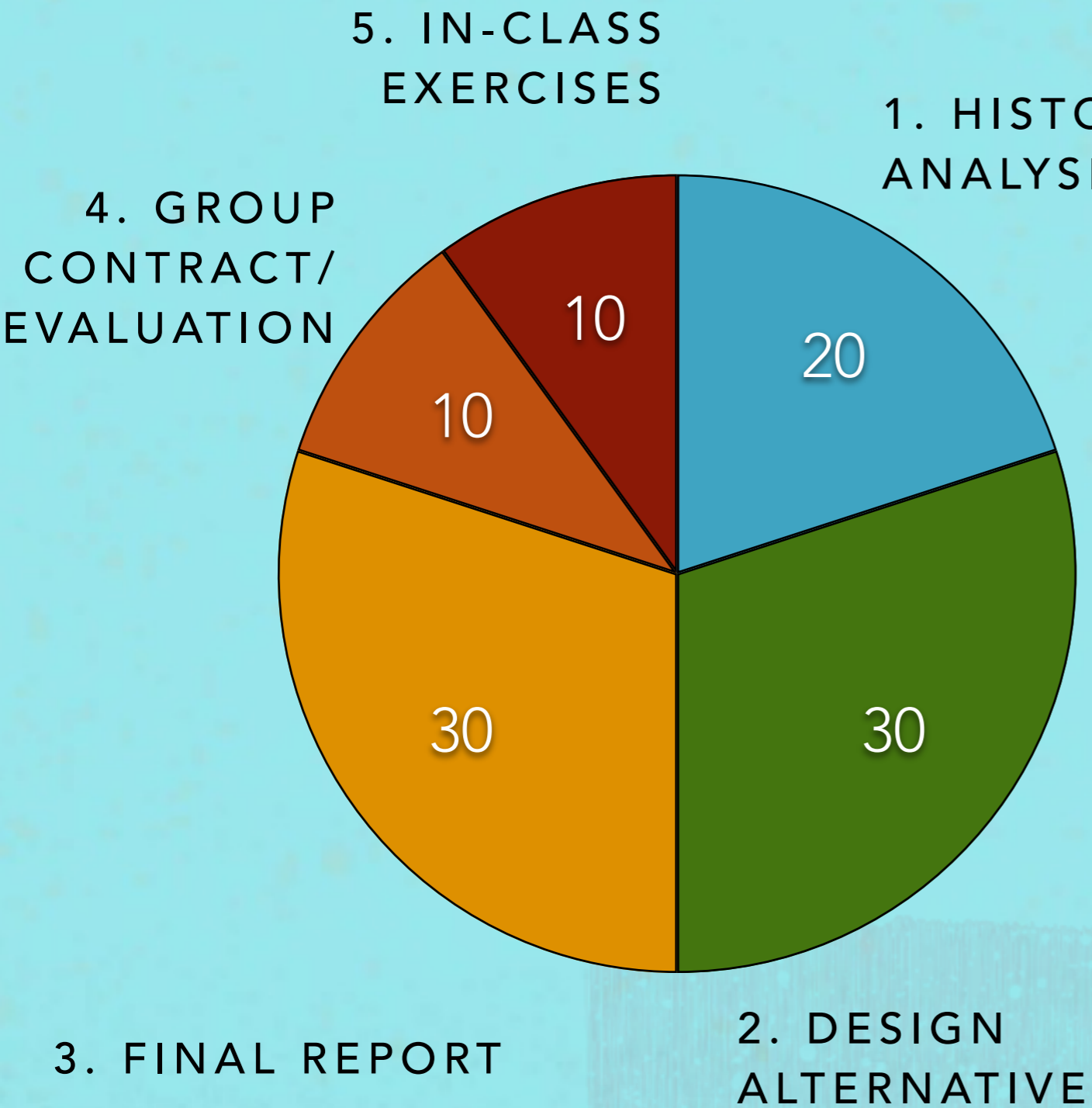
1878

1918

1941

1969

2016

Student Yuedi Zhan's figure ground drawings

Assessments

Assessments

✳ Gradual transition from individual assignments to group assignments

  ✳ Individual historical analysis

  ✳ Individual + consultation with others on design/programming element

  ✳ Group collaboration on final design/programming element and report

✳ Individual in-class assignments (10)

✳ Group contract/evaluation to manage conflicts

Design Elements
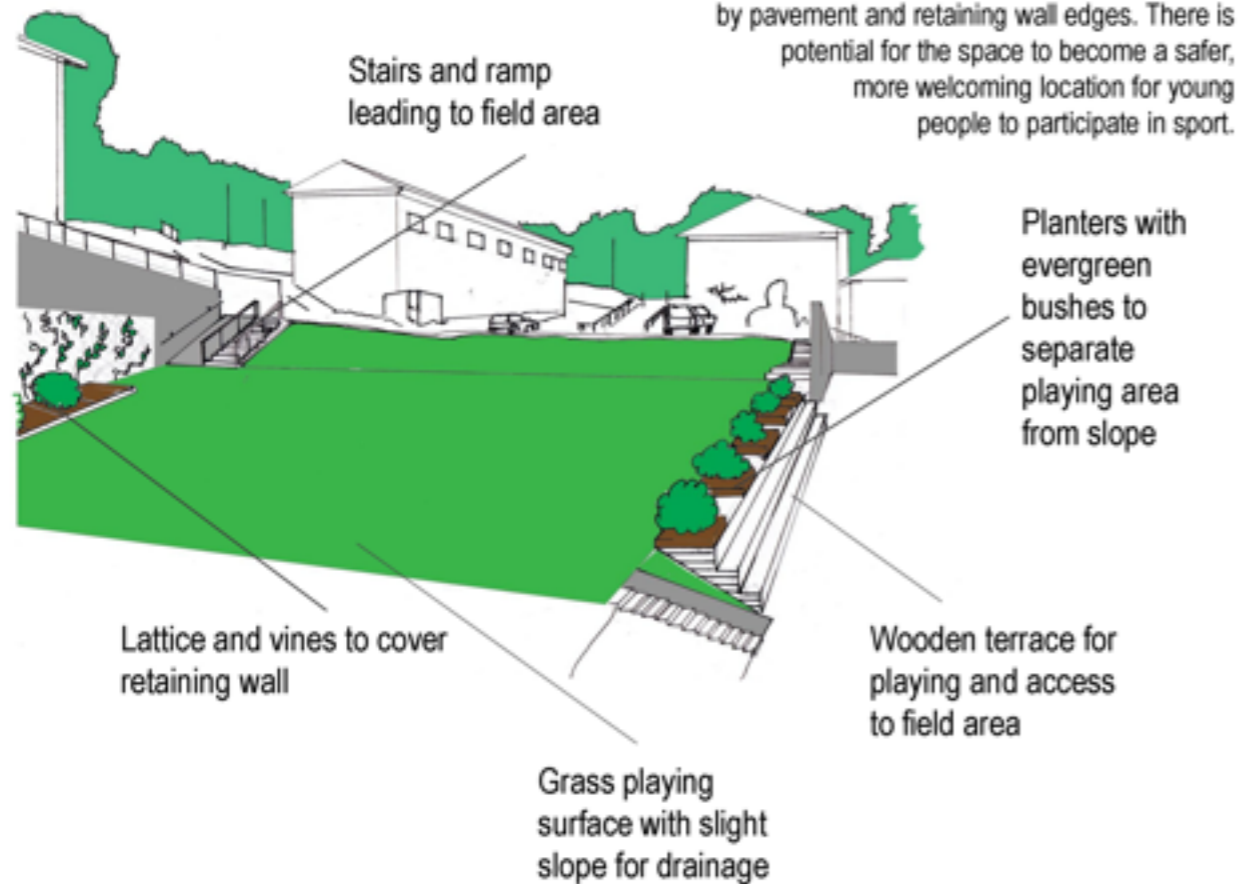
✳ Redesigning a gravelly, uneven field in the center of the community as a level playing field for children (see Figure 6a and 6b)

✳ Removing some unnecessary retaining walls and using plants to improve the appearance of others

✳ Adding a second community garden and greenhouse

✳ Building a skate/scooter park with lighting for evening use

✳ Redesigning the existing basketball court with a level playing surface, seating, and accommodations for younger kids

✳ Redesigning two of the main staircases into the neighbourhood to accommodate informal socializing that happens in these locations

✳ Better universal access into and around the site through introducing ramps and level pavement where possible

✳ Introducing a boulevard with planting and seating, which can be used for activities like a farmer's market

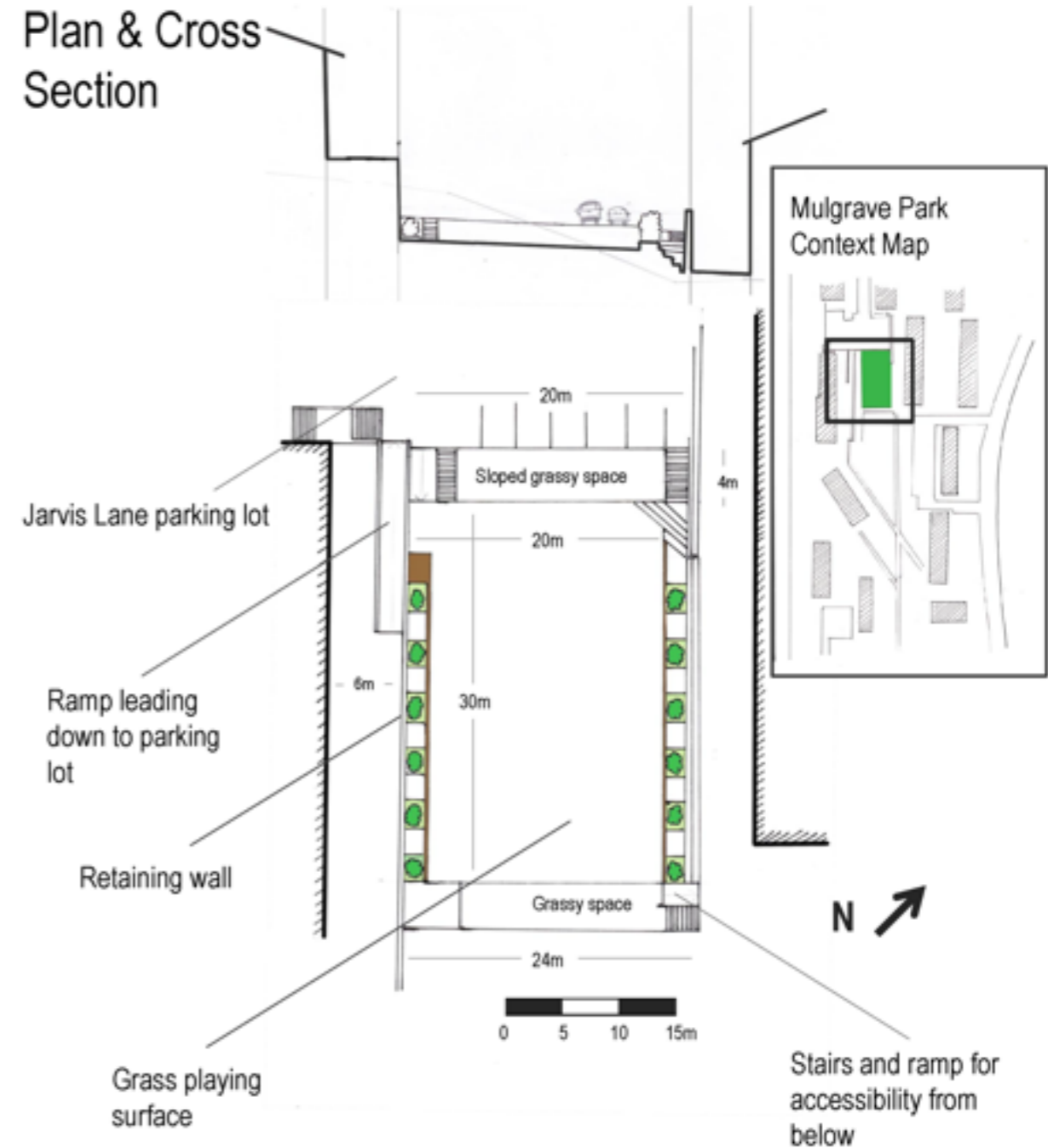# MULGRAVE PARK DESIGN ALTERNATIVE: CENTRAL PLAYING FIELD

November 2nd, 2016

Concept Perspective

The grassy space in the centre of Mulgrave Park is frequently used by children as a place to play. The playing surface is heavily sloped and is bordered by pavement and retaining wall edges. There is potential for the space to become a safer, more welcoming location for young people to participate in sport.

Stairs and ramp leading to field area

Planters with evergreen bushes to separate playing area from slope

Lattice and vines to cover retaining wall

Wooden terrace for playing and access to field area

Grass playing surface with slight slope for drainage

Playing Field Redesign Concept: Plan & Cross Section

Mulgrave Park Context Map

Jarvis Lane parking lot

Sloped grassy space

20m

20m

4m

6m

30m

Ramp leading down to parking lot

Retaining wall

Grassy space

24m

0 5 10 15m

N

Grass playing surface

Stairs and ramp for accessibility from below

Budget Estimates & Applicable Grants

- FCM – Green Municipal Fund
- Volunteer Labour/ Donated Materials
- Active Halifax Communities Funding
- Let Them Be Kids

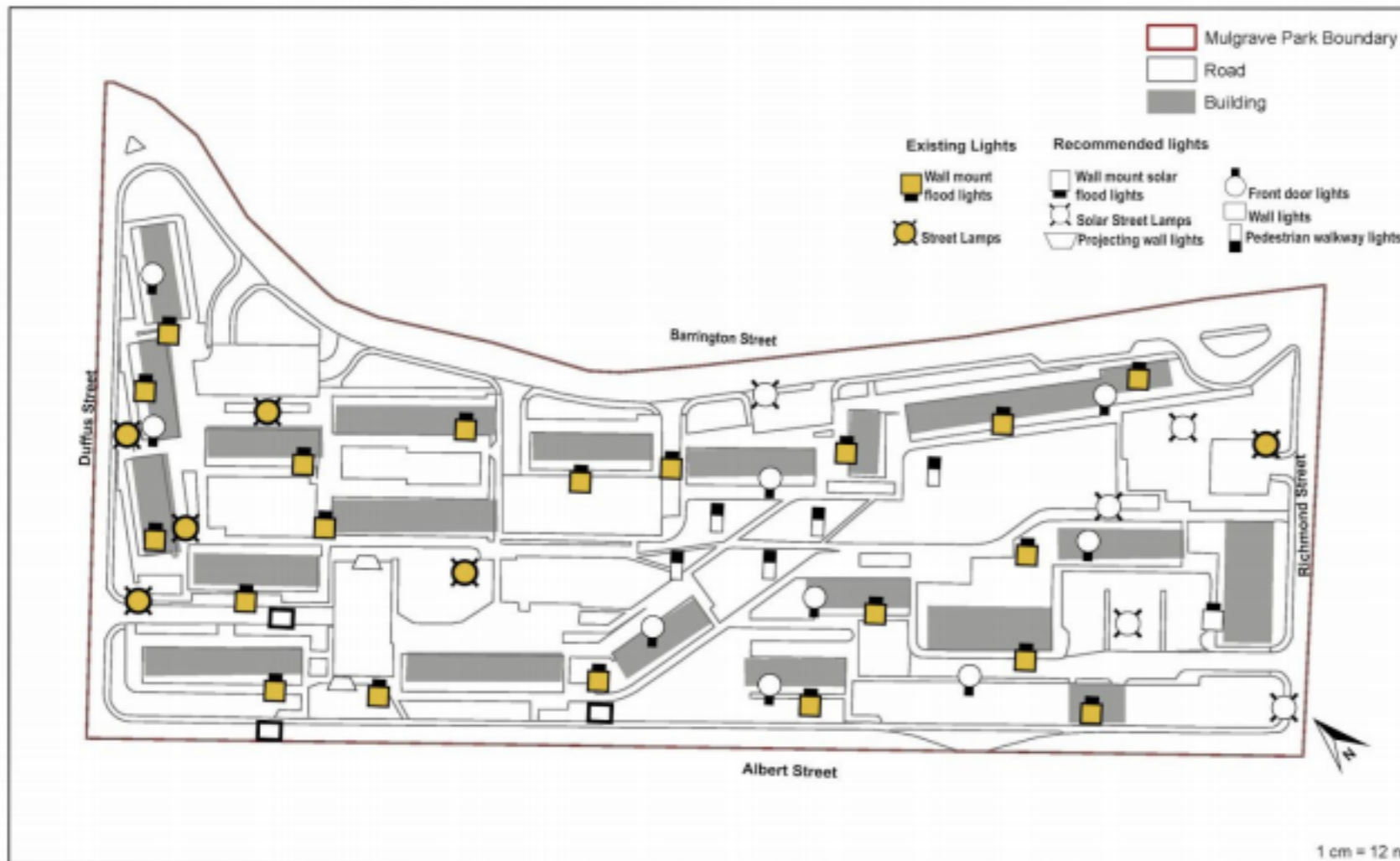Cost estimate: CAD$11,500

(Hunsley & Associates Landscaping)

Base expenditures

- Landscaping crew
- Equipment & machinery rental
- Grass seed
- Lumber
- Lattice
- Concrete
- Evergreen plants
- Soil

Programming Elements

✳ A program to allow residents to paint window boxes and seed them with annuals

✳ A program to install seating, garbage bins, bike racks, and an outdoor community events board

✳ Elements to increase the perception of safety on the site (glow in the dark paint for the existing murals, a Brighter Nights program, and CCTV cameras)

✳ A farmers' market on the new boulevard, which could also be used for education about nutrition and a winter holiday market

✳ Improved wayfinding and signage

✳ Improved lighting, including some solar-powered and LED fixtures, implemented over time

✳ Developing a community van program to be used to improve access to grocery stores, medical centres, cultural, sports, and entertainment activities nearby

Mulgrave Park in Halifax, Nova Scotia

Mulgrave Park Boundary
Road
Building

Existing Lights
Wall mount flood lights
Street Lamps

Recommended lights
Wall mount solar flood lights
Solar Street Lamps
Projecting wall lights
Front door lights
Wall lights
Pedestrian walkway lights

Duffus Street
Barrington Street
Richmond Street
Albert Street

1 cm = 12 m

Data source: HRM Corporate Dataset (2014).

Student Yuedi Zhan's lighting plan

Student Harry Zhu's boulevard design

34

This redesigned space could include:

- An area dedicated for non-vehicle use to encourage a safe environment for people using the space
- The group painting of non-vehicle space with vibrant colours to create a stronger sense of public space
- Installing site furniture including benches and picnic tables to provide seating areas
- Installing light poles with LED lighting. The additional lighting will encourage night use

Figure 5.17: Rendering of viewing platform

The second phase is to transform the parking lot by constricting a boulevard into the parking lot as a public space. Following this theme, tree planting will improve the pedestrian environment. However, the number of parking spots will be reduced. The detailed design includes:

- A boulevard space with trees that offer space to events such as the farmers market
- Three crosswalks connecting the sidewalks to the boulevard which create clear walking paths to pedestrian but also safety measures to avoid conflict with vehicles
- Trees along the sidewalks to further improve greenery in the space
- Installing site furniture including benches and picnic tables to allow area for sitting and socializing
- Installing light poles with improved LED lights to allow nighttime use
- Widening stairways and building a wheelchair ramp will improve accessibility between the parking lot and the view platform

Figure 5.18: Renderings of proposed boulevard design

- A new stairway connects to Albert Street to encourage people from outside the community to come in and use the space
- Twenty parking spots will be removed from the parking lot. The Studio recommends converting spaces to a combination of angled and parallel parking spaces to accommodate more cars in a reduced space
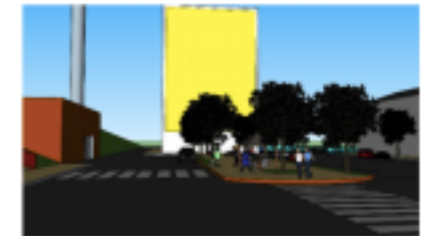- Cars will drive in a single-lane, counterclockwise direction

Learning Outcomes

1. Developing an understanding of the importance of natural processes, built form, community aspirations, and the regulatory environment as the basis for good urban design

2. Using techniques of inventory, interpretation, and synthesis to identify constraints and opportunities for development

3. Translating opportunities and limitations for development into principles and criteria for design interventions

4. Developing technical knowledge and skills needed to propose intervention through specific design proposals and policy recommendations that respond to design criteria

5. Learning to evaluate proposals based on design principles and criteria

6. Exercising written, graphic, and oral communication skills

7. Working effectively with project partners

Learning Outcomes

1. **Developing an understanding of the importance of natural processes, built form, community aspirations, and the regulatory environment as the basis for good urban design**

2. Using techniques of inventory, interpretation, and synthesis to identify constraints and opportunities for development

3. Translating opportunities and limitations for development into principles and criteria for design interventions

4. Developing technical knowledge and skills needed to propose intervention through specific design proposals and policy recommendations that respond to design criteria

5. **Learning to evaluate proposals based on design principles and criteria**

6. **Exercising written, graphic, and oral communication skills**

7. **Working effectively with project partners**

Challenges

✳ Jurisdictional issues complicated maintenance in Mulgrave Park—challenging for students to work under conditions of uncertainty

✳ Students still had varying levels of skill in designing and representing their ideas at the end of the course
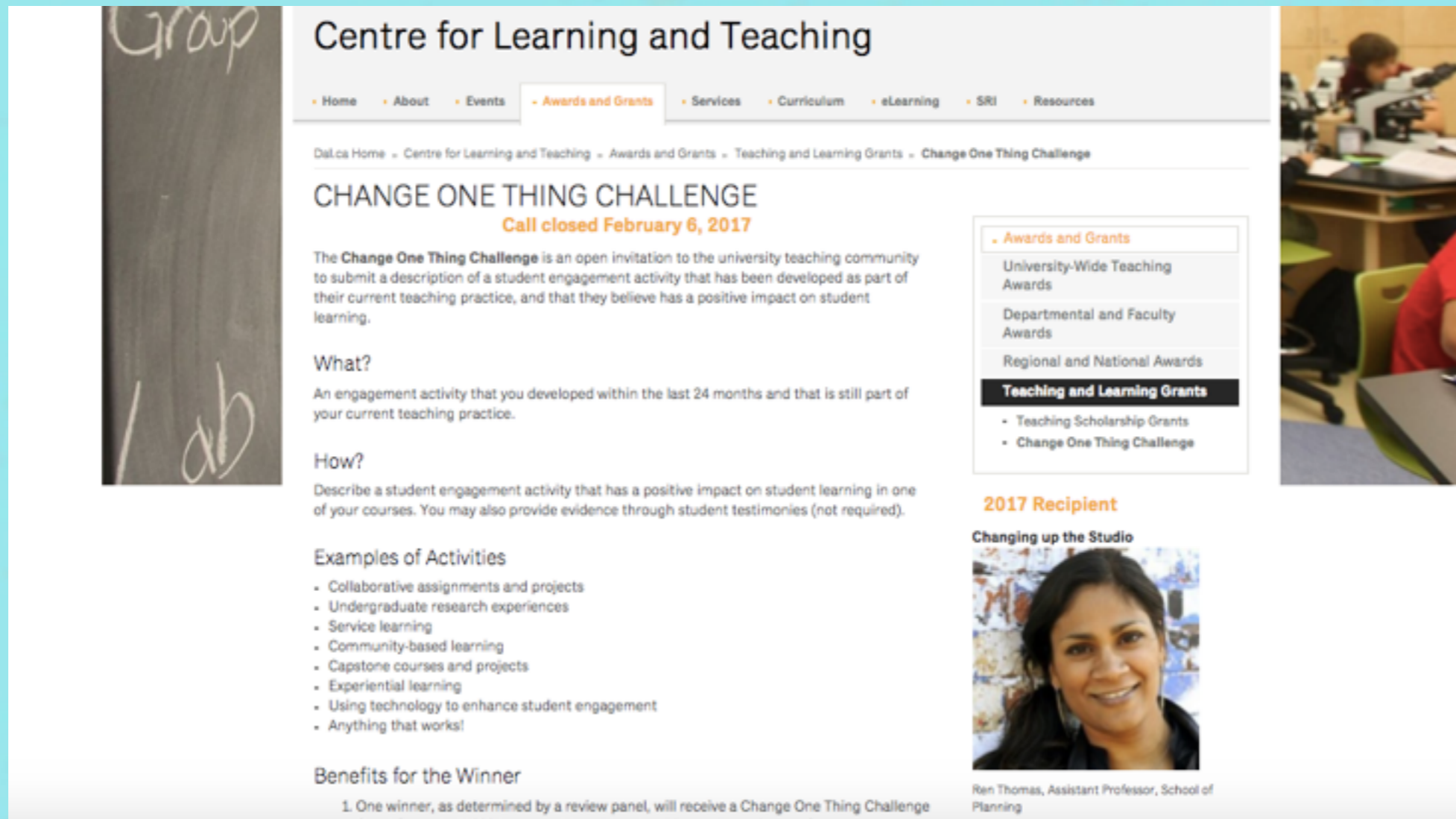
Four months after the studio ended, Federal MP Andy Fillmore announced $5 million in improvements to Mulgrave Park (2017-2019) for badly needed repairs to buildings, undergrounding services, and retaining walls. Some of the students' work will be integrated

Reflections on Modifications

✳ Overall, gradually introducing more unstructured time worked well

   ✳ Students gained technical skills and background knowledge

✳ Gradually introducing group work worked well

✳ Students developed their own design/programming proposals and were able to develop funding options for each project, which the non-profit client used to apply for grants

Acknowledgements

Winning the Dalhousie University "Change One Thing" Challenge allowed me to present at a conference on teaching and learning

Contact me

ren.thomas@dal.ca

www.renthomas.ca/presentations

Blog posts on Mulgrave Park:
http://www.renthomas.ca/housing/mulgrave-park-studio
http://www.renthomas.ca/housing/mulgrave-park-studio-the-final-product
http://www.renthomas.ca/housing/mulgrave-park-to-get-5-million-in-upgrades