Design Concepts for Mulgrave Park

Dalhousie School of Planning

2016 Urban Design Studio PLAN 4002

Halifax, Nova Scotia

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Executive Summary

Mulgrave Park is a public housing community located in the North End of Halifax. The site is bounded by Devonshire Avenue, Albert, Barrington, Duffus, and Richmond Streets. The Dalhousie Urban Design Studio, with the help of the Mulgrave Park Caring and Learning Centre and Phoenix Youth, provided design and programing solutions to improve different aspects of Mulgrave Park in the fall of 2016.

In September 2016 Dalhousie Urban Design Studio conducted a site analysis to determine possible solutions to improve several aspects of Mulgrave Park. Our main goals for this project were: preserving existing community space, improving inter-neighbourhood connectivity, creating designs that work for all residents of Mulgrave Park and implementing improvements that preserve the history and identity of the area.

Studio members developed projects and programming solutions that are flexible and independent. This allows Mulgrave Park and its community groups to implement each solution individually based on their priorities and funding availability. The projects are:

1. Wayfinding
2. Accessible Ramps
3. Outer Street Connections
4. Retaining Wall Improvements
5. Scooter Park
6. Central Playing Field
7. Basketball Court
8. Second Community Garden
9. Paint the Planters
10. Safety Recommendations
11. Lighting Improvements
12. Site Furniture
13. Connor Lane Lot Redesign
14. Connor Lane Farmer's Market
15. Community Shuttle
16. Enhanced Programming

We, the Dalhousie Urban Design Studio, hope that our design and programming recommendations can provide community leaders with the tools, or ideas, required to improve Mulgrave Park for current and future residents.

Acknowledgements

We would like to thank Crystal John, of the Mulgrave Park Caring and Learning Centre, and Maurice James, of the Phoenix Youth Organization, for sharing their knowledge and experiences of Mulgrave Park. Without their guidance, this report would not have been possible. We would also like to thank the people of Mulgrave Park for hosting the 2016 Dalhousie School of Planning Urban Design Studio, and allowing us to conduct research in their community. Finally, we grateful to our instructor, Dr. Ren Thomas, for her guidance throughout this project.

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1.0 Introduction

Mulgrave Park is a public housing community in the North End of Halifax, Nova Scotia. The Park is bounded by Richmond Street, Albert Street, Devonshire Avenue, Duffus Street, and Barrington Street in Halifax's North End. The public housing community that is on the site today was originally constructed in the 1960s as short-term housing for residents displaced from urban renewal projects in downtown Halifax and Africville (Bealing, 2002).

Figure 1.1 Location of Mulgrave Park on Halifax Peninsula

This project was undertaken to fulfil course requirements for the Urban Design Studio at Dalhousie University's School of Planning. This report will cover areas for improvement that have been identified during site visits and through client input.

Historical Analysis

History of Mulgrave Park:

Mulgrave Park was originally part of a large tract of land called the Governor's North Farm and a summer encampment for Nova Scotia's Mi'kmaq (Shutlak, 2005). Many different land uses have occurred in the Mulgrave Park area over time: farmland in the early 1800s, a popular public green space in the 1850s, debris storage and vacant land after the Halifax Explosion of 1917, a military housing community in 1941, and a public housing community from 1962 until the present. These different uses were shaped by historical events and policy changes (see Figure 2).

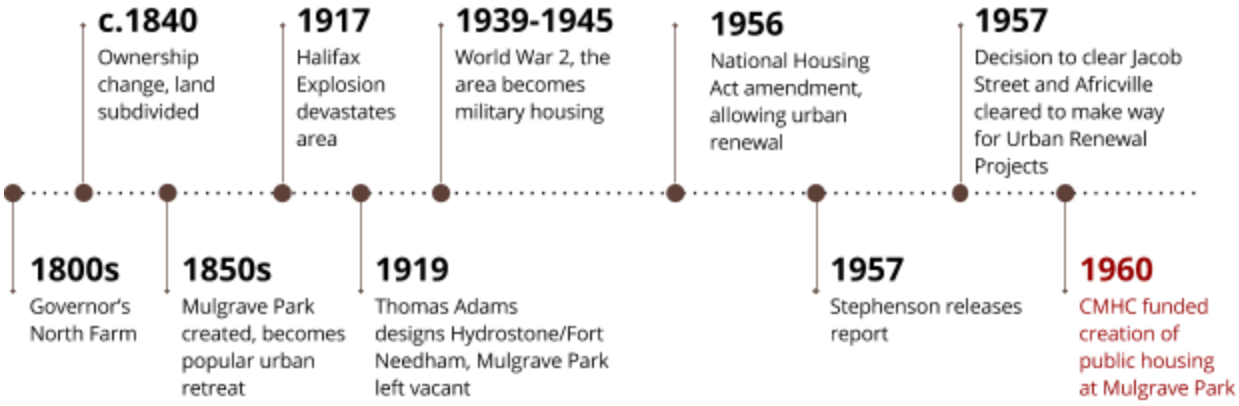


Figure 1.2: Timeline of the history of Mulgrave Park

Prior to the Halifax Explosion in 1917, Mulgrave Park was a popular public green space and urban retreat (Bealing, 2002). After the Halifax Explosion, debris was stored at the site, and the land was left undeveloped. The Great Depression, coupled with a lack of desire for former residents to return to the area, delayed development of the area.

This sale of the Governor's North Farm initiated the transformation of Mulgrave Park over the coming decades. Each owner left his or her stamp on this tract of land. The Board of Railway Commissioners bought the former farm, developed a rail yard, and subdivided the land for further residential development (Shutlak, 2005). This neighbourhood would become the area of Richmond (Bealing, 2002). The sale of these lands drove investment that created new value on Common farm land that would soon be destroyed by the Halifax Explosion.

To spearhead redevelopment efforts, the federal government created the Halifax Relief Commision (HRC). Led by Thomas Adams, a pioneer for town planning in North America, the HRC prepared a redevelopment plan for the North End of Halifax (Bealing, 2002). The HRC developed emergency and permanent housing for those who had lost their homes in the explosion (Bealing, 2002). Adams' redesign established Fort Needham Park as the primary public green space for the neighbourhood. There were no plans to redesign Mulgrave Park, and therefore it remained vacant land until 1941.

The overwhelming arrival of military personnel during World War II brought unexpected and substantial population growth. In response, the federal government funded military housing construction on the site. The accommodations were intended to be temporary housing rather than a long-term infrastructure investment. The site stayed as military housing until it was transformed into public housing in 1962, as a direct result of the Stephenson's 1957 report (Built Halifax, 2016).

After the war, Wartime Housing Limited (now CMHC) sold the site of Mulgrave Park to the city to develop public housing (Shutlak, 2005). Funds for the project came from a federal and provincial partnership (Bealing, 2002). Through a 1956 amendment to the National Housing Act, "slums" and commercial could be cleared as long as existing residents were rehoused (CMHC,1959). The redeveloped land could be used for "highest and best use."

Incorporating highest and best use into housing legislation is an important development. Highest and best use puts a site through four tests: legally permissible, physically possible, financially viable, and maximally productive for valuation purposes (Appraisal Institute, 2015). High importance was placed on the value of the land and not on the residents of Africville and Jacob Street. The residents were evicted and rehoused in Mulgrave Park with no consideration given to the social networks within the community (Bealing, 2002).

Social Effects of Urban Renewal

Factors such as population growth and the Halifax Explosion played a major role in influencing the urbanization and revitalization of the City of Halifax. In 1957, the city hired Gordon Stephenson to explore areas to be designated for urban renewal projects. Stephenson claimed that "the time [was] ripe for urban redevelopment and improvement, in which many of the bad results of nineteenth- and early twentieth-century vicissitudes may be removed" (Stephenson, 1957, p.6). Stephenson implied that the "bad results" were the deteriorating, overcrowded houses intermingled with scattered businesses and vacant lots in downtown Halifax. He strongly recommended that low-income housing of central Halifax be a priority for demolition, as he considered it to be a "repellant to good commercial development" (Bacher, 1993, p. 215).

The driving force of urban renewal was economic, hence housing construction was a secondary consideration (Bealing, 2002). Stephenson's report deemed housing of Africville and Jacob Street (an African Canadian community located on the northern tip of the Halifax peninsula and a low income downtown community, respectively) substandard. The community did not have basic municipal services, and the city had no desire to invest in the proper infrastructure for those services. Stephenson recommended the resettlement of Africville and Jacob Street. This process displaced approximately 1,600 people, many of whom were of ethnic minorities (Neville, 2010). The

government then committed to providing alternative housing to those who were displaced, most of whom moved to what is now Mulgrave Park (Grant & Roth, 2015).

Physical Characteristics:

Mulgrave Park experienced significant land use change, as it shifted from sparsely populated pastureland into a planned public housing community. In Thomas Adam's plan released in 1918, economic development was the priority after the Explosion. This priority was evident in the realignment of the streets, which was intended to increase traffic speed and improve stormwater drainage (Adams, 1918). The design realigned Albert Street and created Dartmouth Avenue. The intersection of these two streets was relocated to what was originally Acadia Square. This design began to reflect the street network that exists in Mulgrave Park today.

The change in transportation modes, from horse and cart to streetcar, led to major changes in street patterns. The current vehicle-oriented traffic system required fewer intersections to improve traffic efficiency, both the number of intersections and the density of the streets were reduced. For example, a section of Dartmouth Avenue was removed. This trend favouring vehicular efficiency has existed since the 1960s.

Due to the increased demand for housing opportunities, a major change to the street pattern was the expansion of the site to cross Kenny, Ross, and Roome Streets. With the exception of a few minor changes to the street network, the current street network in the Mulgrave Park is roughly the same as the network of the 1960s (figure

Figure 1.3: Street pattern change over time

1.3).

2.0 Site Observations

Site Layout

Mulgrave Park is situated on a steep east-facing slope rising from Halifax Harbour, opposite the Irving shipyard. The 11-acre site is home to a total of 21 buildings: two 8-storey apartment buildings, eighteen 3-storey maisonette buildings, and one heating plant (Built Halifax, 2016; C. John, personal communication, September 21, 2016). Originally, there were 2 more buildings on the site which have been demolished (C. John, personal communication, September 21, 2016).

There is a one major green space in Mulgrave Park, with the remaining open space being steeply sloped and largely unusable for recreation. Retaining walls have been built to create level areas for a playground and a basketball court. In some areas, the community has created their own green spaces, such as the creation of a community garden in the northern section of the site. The perimeter of the site is lined with trees, but there is little tree cover within the community.

Figure 2.1: Existing site conditions

There are no public streets that run through Mulgrave Park. Vehicle access to the site is via two lanes, one from Duffus St and the other from Richmond St, and five parking lots for residents and visitors. Movement within the park is limited to pedestrian pathways, stairs, and ramps. The design and condition of these walkways creates accessibility issues for anyone with mobility challenges. Public transit access to Mulgrave Park consists of four bus stops, only one of which has a shelter, serving a bus route that travels between south-end Halifax and Mumford Terminal in the west end of Halifax.

Maintenance Issues

Much of the existing infrastructure on the site, such as stairways, retaining walls, and pavement, has deteriorated significantly in the past five decades. Many of the retaining walls and stairways are crumbling to the point where metal rebar is exposed, and sections have been reinforced with wood or surrounded by concrete barriers for safety. Fences and railings designed to prevent falls are themselves at risk of falling down.

During a night-time site visit, it was observed that much of the lighting in Mulgrave Park is not functioning, resulting in some areas being poorly lit. The lighting around the basketball court is intentionally turned off at night to discourage night time usage (C. John, personal communication, October 11, 2016).

Figure 2.2: Existing site conditions

Surrounding Neighbourhood

The buildings in Mulgrave Park appear to be out of scale with the surrounding neighbourhood, which consists mainly of single detached housing. There is only one multi-storey residential building south of Mulgrave Park, which is on the opposite side of Richmond Street. There are several public facilities near the site, such as recreation centres, arena, and places of worship. The area on the harbour side of Barrington Street, across from Mulgrave Park, is occupied by CN Rail's Halifax Intermodal Terminal, the Port Authority's Richmond Terminals, and the Irving Shipbuilding facility. Some of these industrial facilities operate 24-hours a day, and contribute some noise and light pollution to the area.

3.0 Goals and Objectives

After meeting with representatives of the community, our team came up with a list of design criteria that our potential projects had to meet. The following goals are the measure by which the studio team's work was evaluated. The design goals are outcome oriented but broad enough to allow the studio team to be creative. The objectives are specific steps required to meet the goals.

Design Criteria

There are four goals for design and programming elements that will take place in Mulgrave Park:

- Ensure our design, material, and landscaping selections work for current and future residents of Mulgrave Park.
- Preserve community space and create more opportunity to connect with each other and the city.
- Ensure design and programming solutions respect the community's history and identity.

Objectives

- Design improved connections within the park and to the surrounding community.
- Preserve existing murals and improve to the retaining walls by adding vegetation to make the area more attractive.
- Promote safety in the community.
- Improve community comfort.
- Improve existing recreation areas and design new spaces for community use

The following six sections present our ideas regarding accessibility, aesthetics, beautification, open space redesigns, programming enhancements, and safety and comfort.

4.0 Methodology

Background Research

The urban design studio team conducted a comprehensive historical analysis in order to achieve an understanding of the major events and themes that shaped Mulgrave Park. Studying best practices, and reviewing of relevant literature helped us to understand the opportunities for the community.

In addition to background research, the studio team attended two guided site visits. These two site visits took place on the morning of September 21 and evening of October 11 and were guided by Crystal John of the Mulgrave Park Caring and Learning Centre and Maurice James of the Phoenix Youth Centre. Visiting Mulgrave Park in both the day and the night allowed the studio team to gain a wider perspective by observing the site under both conditions. Each studio team member then embarked on additional site visits to individually collect information for their respective projects.

Design Process

To ensure consistency in our results, each studio team member adhered to the same overarching criteria, as outlined in the Goals and Objectives section of this document. Using these criteria, the studio team developed a comprehensive list of design solutions and programs aimed to address the needs of the Mulgrave Park community. These suggested improvement are based on both site observations as well and discussions with community representatives.

Each studio team member was tasked with an item from the design solutions list. Next, each member prepared individual posters developing their ideas to present these ideas to the entire team for feedback. After this process, the studio team grouped their individual designs together thematically to present the six design groups presented in this report.

The studio team then shared each concept recommendation with the Mulgrave Park community through a poster presentation held on November 23, 2016. The posters were left with the community centre a week in order to allow residents to add their feedback to the posters.

5.0 Mulgrave Park Design Alternatives

These design and programming concepts are the result of careful site analysis. Studio members identified areas for public space improvements, programming gaps, and designs to enhance accessibility of the community. The concepts were developed individually before being grouped into the following sections.

5.1 Connections, Accessibility & Aesthetics

Background

Currently, Mulgrave Park is poorly equipped for those who use wheelchairs or have mobility challenges. Limited accessibility means that the community is a challenging place for disabled and elderly people to reside in. Mulgrave Park is steeply sloped from the harbour and as a result, east-west movement is incredibly challenging.

This problem is also compounded by the poor maintenance of walkways and poor overall connectivity. For instance, the staircase infrastructure located at the perimeter of the site suffers in both these aspects. These staircases do not provide adequate connections to the surrounding neighbourhood; they also suffer from long term neglect and lack of maintenance which has led to deterioration and safety concerns.

Goals

- To improve accessibility and mobility throughout Mulgrave Park
- To strengthen connections with civic street network
- Enhance movement for those with mobility issues

Wayfinding

We suggest that a new network of wider, more accessible, and newly named pedestrian streets be implemented throughout the community. Due to the slopes in Mulgrave Park, it may not be possible to achieve a barrier-free design for every street. As a result, some areas will still require the use of staircases. However, a barrier-free street that should be prioritized is the pathway from the Caring and Learning Centre on Jarvis Lane to the Apartments on Connor Lane (shown in blue on map, figure 4). This way, many of the accessible units within Mulgrave Park can have better access to community amenities.

These changes will make it easier for non-residents of the park, including emergency services and delivery services, to find houses quickly.For demonstration purposes, the street names shown in the map were borrowed from the names of nearby buildings. The community could instead consider having a naming competition for the streets as a way to create community ownership of the new wayfinding system.

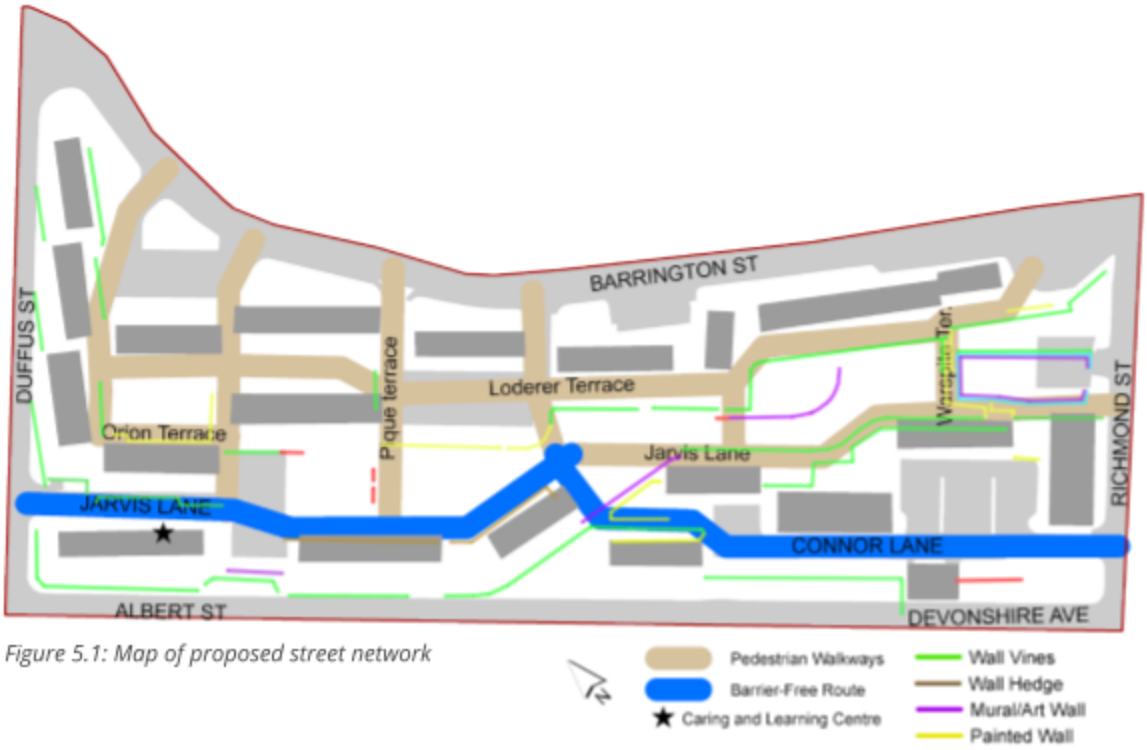


Figure 5.1: Map of proposed street network

New signage will be installed at intersections of these streets to make the new street names more prominent. At entrances to the park, and main intersections within the park, additional directional signage will be installed showing the direction of side streets off of the main streets.

Once the new street network of streets is laid out, housing units in Mulgrave Park will have their civic addresses changed to be numbered off of the new pedestrian streets.

Accessible Ramps

Whereas overcoming the east-west incline is nearly impossible for people in Mulgrave Park with limited mobility, improving accessibility for north-south travel should be a realistic goal. Since the incline of the land here is more moderate, the use of ramps combined with good maintenance will create a corridor of accessible paths that stretch across the entire western portion of Mulgrave Park.

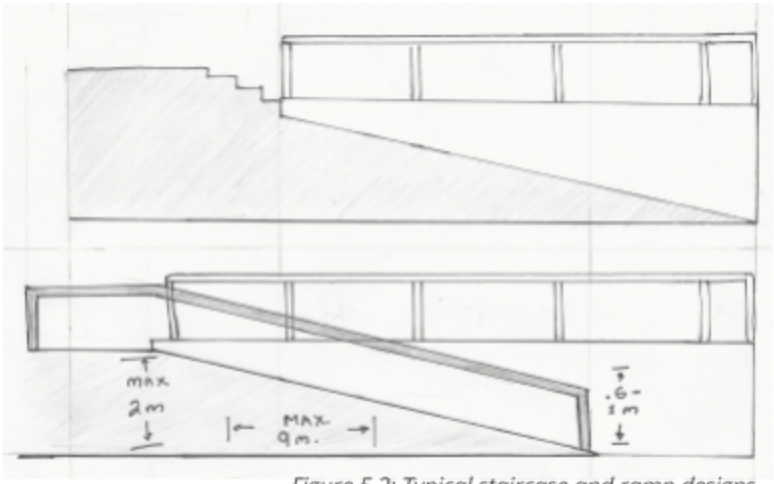


Figure 5.2: Typical staircase and ramp designs

Areas in Mulgrave Park already containing accessibility ramps include the high-rise apartments on the southwest corner as well as a few of the housing units and community spaces on the west side of Jarvis Lane. Although the areas in between are not currently accessible, there is opportunity for improvement with the implementation of ramps and increased maintenance. Doing so would also help better connect the community to its resources at the Caring and Learning Centre.

Outer Street Connections

Connections to some of the streets outside the community are in need of improvement due to general lack of maintenance. Current stair design in certain locations causes dark corners in stairwells, creating safety concerns.

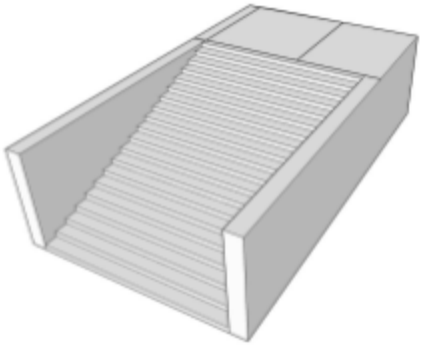


Figure 5.3: Redesigned entrance staircase

When the time comes to fix these outer stairways, it is recommended to implement a wider and more open design (as shown in figure 6). The Jarvis Lane staircase will have a rise of six inches while the run will be 16 inches. This design is intended for the stairway behind the Caring and Learning Centre but can be implemented at various locations connecting outer streets, with a varying scale depending on the various dimensions.

The main objectives of this design are to improve accessibility from the outer streets into Mulgrave Park, eliminate dark corners and to open up the stairways to encourage better connections to the outer neighbourhood.

The addition of a sidewalk on Barrington Street would significantly improve these outer connections and increase accessibility. This new sidewalk would be located on the eastern side between the Richmond Street crosswalk and the northbound bus stop, allowing Mulgrave Park residents a safer way to access transit.

Retaining Wall Improvements

Figure 5.4: Proposed retaining wall improvements

Mulgrave Park's steep topography necessitated the use of use large retaining walls during its construction. These concrete retaining walls dominate the landscape of the neighbourhood and create an unfriendly atmosphere. In order to soften the presence of the retaining walls, it is suggested to add forms of clinging vegetation. *English Ivy* is a year-round northeastern evergreen vine that is easy to grow and maintain. An alternative option is *Boston Ivy,* a vine which changes colour with the seasons but loses its leaves during the winter.

Figure 5.5: Proposed retaining wall improvements

Another design solution is to plant vegetation in front of the retaining walls in locations with sufficient room. *Emerald* and *Privet Hedges* are inexpensive to install and will stay green year-round.

Walls without enough space or deemed not suitable for vegetation can be set aside for murals and other art projects. It is also suggested that any walls existing on the site which no longer provide any retaining function be removed or scaled back. These changes can be implemented over time and integrated into the maintenance schedule. **Appendix B** contains a detailed map showing suggested retaining wall changes.

Implementation

Implementing all of the infrastructure projects detailed in this section would likely be beyond the ability of the community to fund. Rather than implementing all the recommendations at once, it is instead suggested that these new designs be considered incrementally, at the time when upgrades and maintenance would otherwise take place. As the staircases and retaining walls reach the end of their lifespans, they should be replaced in accordance with this plan instead of the status quo.

The new naming of streets and the re-addressing of buildings can be implemented at a relatively low cost and the community to may consider funding these parts of the plan in the near future.

Ramps and stairs are more suitable for people with different mobility limitations. For example, people using wheelchairs have different requirements than people who use canes (Centre for Excellence in Universal Design, 2014). One is not always better than the other, and ideally, ramps and stairs should be paired with each other (Centre for Excellence in Universal Design, 2014). There are a variety of publicly available guidelines for ramp implementation. One handbook titled *Building for Everyone: A Universal Design Approach* created by the Centre for Excellence in Universal Design in 2014 includes detailed specifications, as shown in **Appendix A.**

For Mulgrave Park there are major barriers to the implementation of ramps. First, the height that stairs currently rise is too great for the placement of ramps. Multi-level ramps with appropriate rest stops would be required. This may not be feasible for everywhere in the area, as multi-level ramps would require a greater amount of space than is available.

5.2 Open Space Redesigns

Background

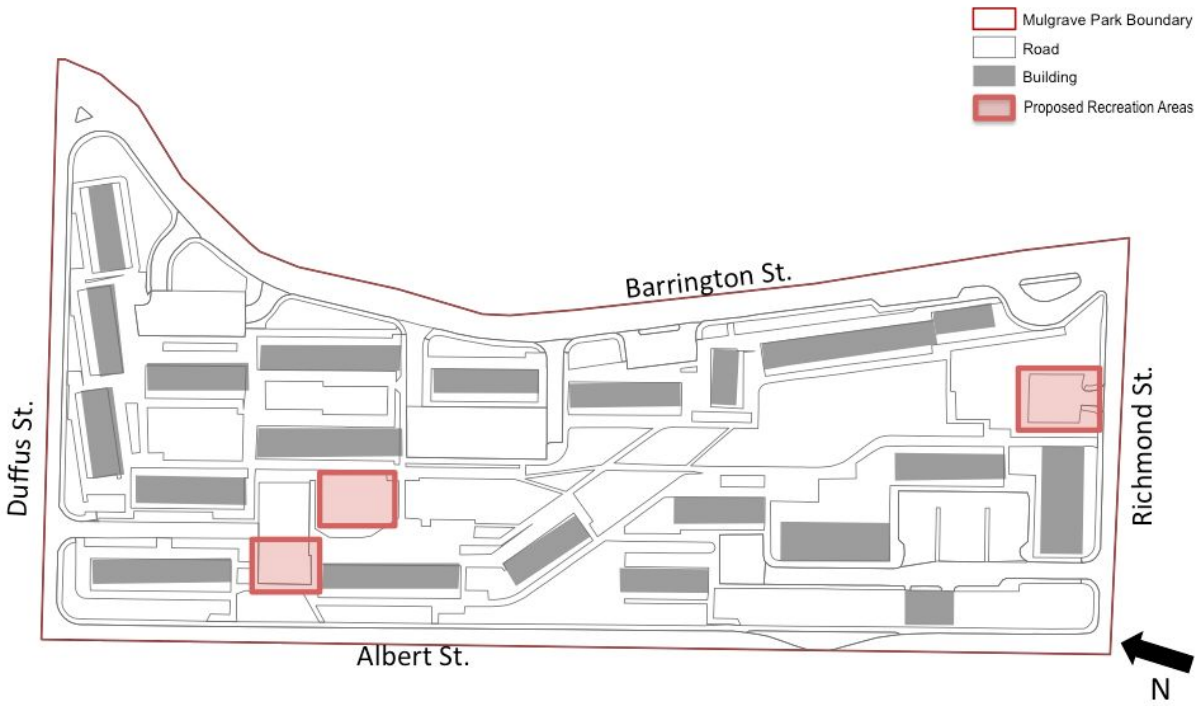
The following projects will provide the residents of Mulgrave Park with opportunities for outdoor recreation, physical activity, and social connections. These open space redesigns include:

- A recreational area called the Scooter Park for residents to play on their bicycles, scooters, and skateboards
- Upgrades of the existing basketball court, which include the creation of additional space on a safer playing surface and the addition of light fixtures for nighttime games
- The full modification of a grass and gravel space. This redesign will involve the regrading and flattening of its surface to enable Mulgrave Park residents to play various sports and other outdoor activities

Goals

The goals of these redesigns are to:

- Encourage physically active lifestyles
- Create social connections among children, youth, and parents in the neighbourhood
- Increase opportunities for outdoor recreation



The Scooter Park

The Scooter Park will be located far from the local traffic, particularly from the main parking lot. It will be composed of concrete to ensure longevity and durability. The parking lot will be repaved during the development of the Scooter Park. It will occupy half of the parking lot that is located southeast of the Mulgrave Park Caring and Learning Centre.

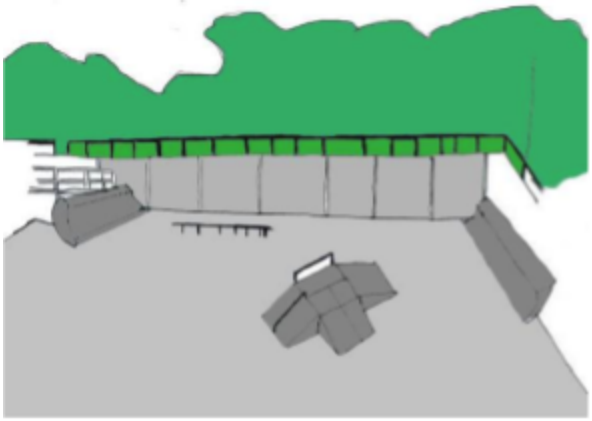


Figure 5.6: Proposed Scooter Park

As this space is already an active site for the community members, and due to the proximity of the Caring and Learning Centre, residents will likely be present to supervise the children who use the Scooter Park. The existing staircase landings and the addition of benches will provide the opportunity for residents to watch and enjoy those who use it.

Central Playing Field

The grassy space in the centre of Mulgrave Park is frequently used by children as a place to play. However, the playing surface is steep and 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 sports.

Stairs and ramps will be included in certain locations to increase walkability in Mulgrave Park and improve overall accessibility. A sloped grassy strip will be located at the northern end of the field to act as a buffer between the play area and the Jarvis Lane parking lot. This strip will also function as a place for children to play and go sledding during the winter months. Though the field will be levelled appropriately to function as a sports field, it will have a slight slope to provide efficient drainage.

Basketball Court

The basketball court is used by all ages. Within the fenced basketball court area, there are two basketball nets and a large paved space next to the court. This area has great potential to become an even more vibrant place for sports and socializing. The total area is approximately 910m2 (2,986 ft2). The following proposed changes are intended to improve the playing conditions while encouraging more children to use the court for a variety of recreational purposes.

New Attribute	**Benefits**
Lowered Basketball Net (2.5m)	Installing a lower basketball net to increase the amount of basketball nets and provide a net more suitable for the young children.
Hopscotch & Foursquare	Encourage more youth to use the area for a variety of recreational activities. This will allow youth with varying recreational interests to use the same area.
Lighting	Another light will be added to extend the period of time to play and encourage safety.
Bench	Three benches will be added to provide a resting spot for people to watch activities and socialize.
Garbage Can	There will be two garbage cans added to the area to help reduce the amount of litter and provide a safe play area.
Levelled Pavement	The existing pavement will be overlaid to level the playing area. This will help drainage and provide a safer playing environment.
Sign of Respect	A sign will be put up on the Richmond Street entrance to encourage people from outside Mulgrave Park to treat the area with respect
Painted Retaining Walls	The retaining walls facing the inside of the Basketball court will be painted to provide a more vibrant feel by adding colour to the area.

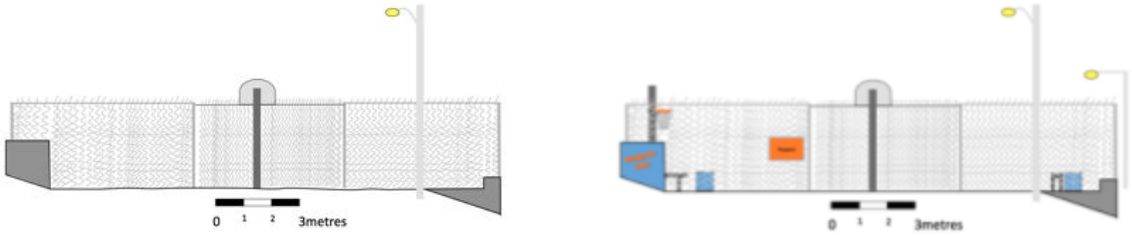


Figure 5.8: Before and after, basketball court additions

Implementation

The construction of the Scooter Park and the basketball court renewal will require repaving. The Scooter Park will also require the relocation of waste bins and five parking stalls, and traffic separation will be accomplished with stone bollards. These spaces will also feature improved lighting to extend the hours of play. An estimated budget for the project is available in **Appendix B**.

The construction of the Central Playing Field will require leveling the sloped surface to make it more accessible, safe, and enjoyable to use as a recreational open space. This will require a slight extension of the retaining wall height on the west side of the site. Wooden planter boxes with evergreen bushes will be included in a row at the foot of the retaining wall to create a safety buffer between the playing surface and the concrete. On the eastern side of the site, a similar row of planters will be included to create a buffer between the edge of the open space and the adjacent residential building.

5.3 Beautification of Mulgrave Park

Background

The main objective of the proposed projects is to beautify Mulgrave Park by creating more green and natural features. A second community garden will be implemented and made accessible to the entire community; it will be a place where people can garden, or to simply sit and enjoy themselves. The Paint the Planters Program will be a community bonding program that beautifies Mulgrave Park by installing flower boxes on residents' homes.

Goals

The primary goal of these projects is to help beautify Mulgrave Park, while additional objectives are:

- To provide an opportunity to get to know neighbours
- To promote community pride
- To create a sense of belonging to the community
- To promote safety and crime prevention
- To have better access to fresh foods
- To learn new skills and have fun

Second Community Garden

A new community garden in Mulgrave Park will greatly benefit the community. It will not only beautify the space, but it will also provide access to fresh foods. The most significant design change is the removal of the retaining wall and terracing the slope. In addition, a greenhouse will be built. This will allow people to grow produce during the winter months as well. To save on heating costs the greenhouse will be heated using solar energy.

The removal of the retaining wall will allow for the creation of two terraced beds. Each bed will be 2.5m in width and 1.5m in height. There are stairs in the middle of the garden. This is to help reach the second beds and to create a place where residents can sit and enjoy the garden. The greenhouse is 5m in width and can be built on the

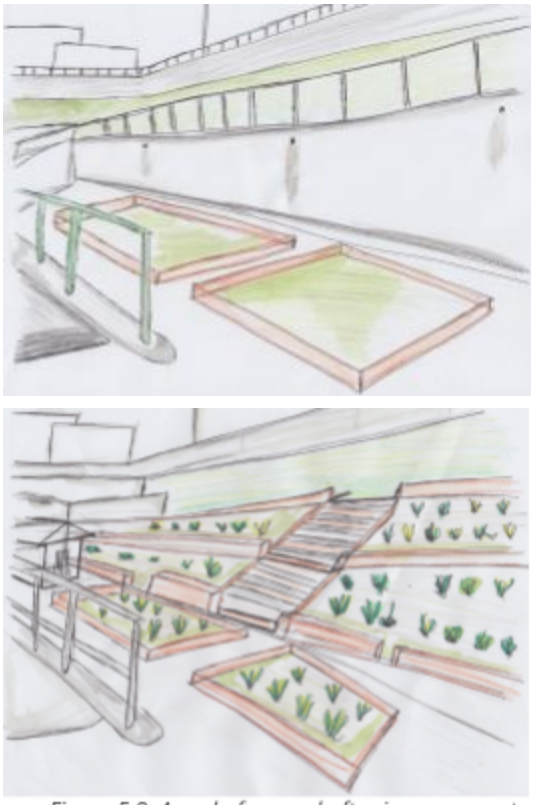


Figure 5.9: Area before and after improvements

ground by the two planters that already exist on site.

The design characteristics of the terraced gardens allow people of all ages to garden. The height of each bed is 1.5m. This allows for elderly people to garden without causing discomfort in their backs. The beds are 2.5m wide, and 0.75m of which is made up of stone that allows people to stand on it.

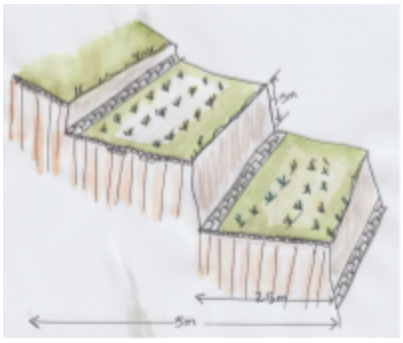


Figure 5.10: Proposed terracing design

Paint the Planters Program

Responding to a request for more flowers and other beautification strategies in the neighbourhood, this program will encourage the Mulgrave residents to paint their own colourful and unique window flower boxes for their respective units. Flower and/or herb seeds will be provided as well, which will give the residents the opportunity to choose what flowers or herbs will be grown in their flower boxes.

Figure 5.11: New flower boxes

Presented in the map below are the recommended locations for the window boxes. This map was composed in the geospatial analysis software ArcGIS. The green represents the sides of the buildings that are south-facing, which will receive the most sunlight compared to other slope aspects.

Figure 5.12: Map of proposed flower box locations

Implementation

The total cost of the community garden is approximately $7,000. The highest cost is attributed to the building of the greenhouse. The breakdown of costs is as follows:

- Greenhouse: $5,000
- Removal of retaining wall: $1,000
- Building materials: $1,000

SolarCity HRM and the Halifax Foundation offer grants that can cover the costs of the greenhouse and the removal of the retaining wall. As for the building materials donations from local Lowe's or The Home Depot will be ideal. The operational costs should be minimized if members of the community are willing to volunteer.

The most expensive design element of the plan is the construction of the greenhouse. The concept of the community garden can be implemented in phases to manage the high costs associated. Phase one will include the removal of retaining wall and the terracing of planters. The building of the greenhouse can be in phase two when the community has allocated sufficient fund through grants to cover the costs.

A full table of costs associated with the Paint the Planters Program is shown in **Appendix C**.

5.4 Site Infrastructure Improvements

Background

During site visits, the studio team noted inadequate lighting in several areas of Mulgrave Park. Many of the light fixtures on the site were not functioning at the time of these visits, contributing to a perception of an unsafe environment. A lack of site furniture was also noted during site visits.

Goals

- Improve site lighting
- Enhance community comfort
- Increase safety in the community

Improved Site Lighting

Poor night lighting levels on the site does not encourage use of public space. This report provides a new night lighting plan, including solar floor lights, and wall lights.

Wall-mounted solar flood lights could replace the existing street lamps to conserve energy, and reduce maintenance, as they have a longer lifetime. These lights will address the issues of existing blind spots and dark corners around Mulgrave Park, many of which are found near the turning points of the staircases (see figure 6).

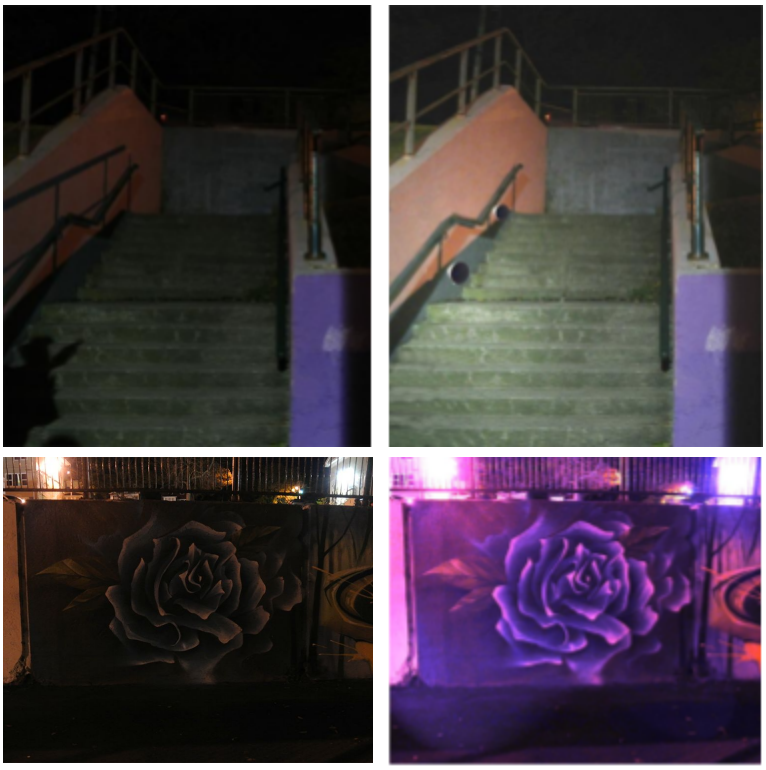
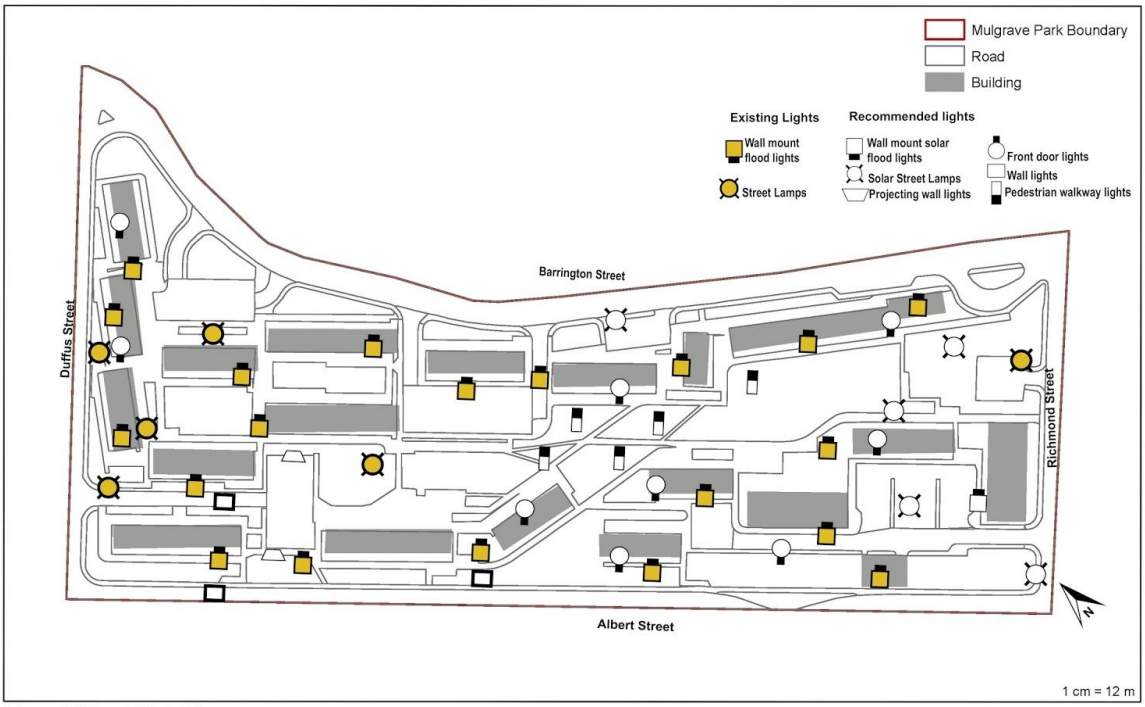


Figure 5.13: Lighting, before and after

Wall lights could be installed along the sidewalks to increase lighting coverage and improve visibility in Mulgrave Park at night (see figure 5.3). Solar lights should be installed at a greater height on the retaining and building facades walls to stop light pollution in suites. This lighting relocation will reduce resident irritation and illuminate a larger surface area.

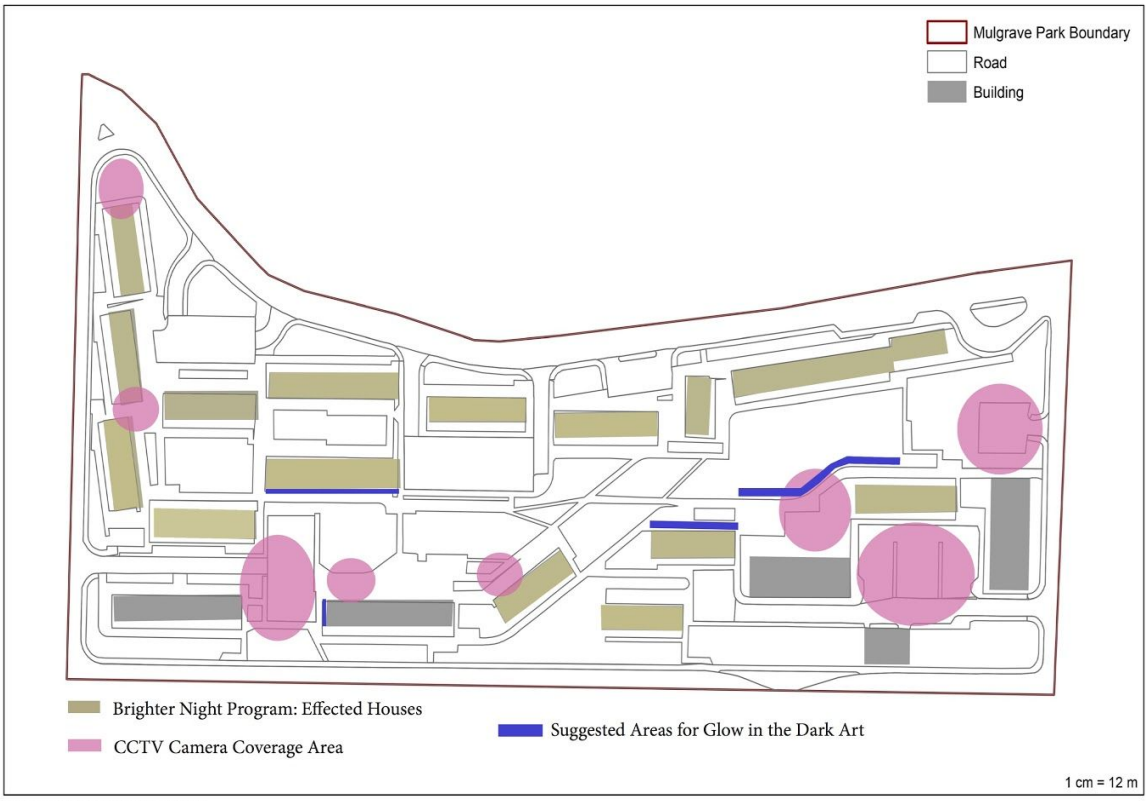
To highlight the murals in the evenings, wall lights can be located at the top of the retaining walls to illuminate the murals.

Mulgrave Park in Halifax, Nova Scotia



Data source: HRM Corporate Dataset (2014).

Mulgrave Park in Halifax, Nova Scotia



Data source: HRM Corporate Dataset (2014).

Glow in the Dark Murals

The objective of this program is to bring the murals in Mulgrave Park to life in the evenings. As the community has many excellent murals, it is important to note that adding glow-in-the-dark paint to them will not ruin their current aesthetics.

Glow-in-the-dark powder can be purchased from Canadian Tire or Amazon. As coloured paint will lower the effects of glow in the dark, we recommend using clear paint with coloured glow-in-the-dark powder. This has the added benefit of preserving the existing colours of murals, negating the need to repaint artwork to make it glow.

Glow-in-the-dark murals can be undertaken separately or in combination with other lighting improvements. The major theme is to draw attention to this unique feature of the site.

Brighter Nights

The objective of this program is to brighten the neighborhood in order to increase the perception of safety (Toronto Hydro, 2016). This program encourages residents to turn on the exterior lights from dawn to dusk. The program utilizes the suggested LED light improvements to conserve as much energy as possible.

The program relies on groups of local volunteers and Halifax Regional Police to change the lights to an LED and raise awareness about the program.

CCTV Cameras

As actual and perceived safety are significant concerns in Mulgrave Park, it is recommended that CCTV cameras be installed in high-risk locations. Typically, these locations are large open spaces such as parking lots, playgrounds, and blind spots. Prior to implementation, the residents should be surveyed to determine whether they would accept a CCTV camera surveillance system. Cooperation and acceptance among residents is essential to the success of this program, as residents may feel unjustly monitored and reject the idea. They are intended to increase the perception of safety; residents might feel safer walking along routes that they know are being monitored. The Implementation section of this chapter provides recommendations for installation of the cameras.

Site Furniture

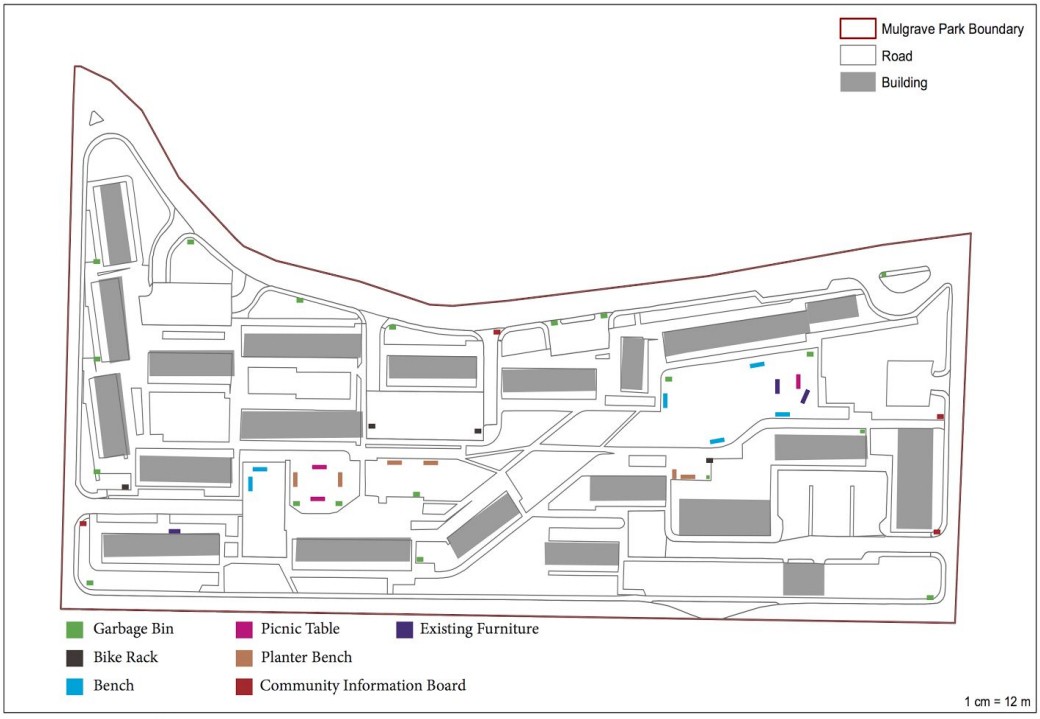
The Studio proposes that planter benches, regular benches, picnic tables, and movable chairs are added to Mulgrave Park. The planter benches and regular benches can be mounted to the surface with pole mounts and hold-down kits (Upbeat Site Furnishings, 2014). Unlike ground mounting, surface mounting will secure the benches but still allow them to be moved or relocated when necessary. This flexibility in design will give the community the opportunity to move this furniture without directly impacting the landscape. The addition of movable chairs, such as Adirondack chairs, will contribute to this flexibility (figure 5.14). They are beneficial additions to the site for special community events, as they can be stored when they are not being used.

Figure 5.14: Street Furniture

Figure 5.15: Information Sign

Garbage bins should be distributed around Mulgrave Park to decrease litter. Four community information boards could be installed throughout Mulgrave Park (figure 5.15). The boards will be located in high-traffic areas, for example near to the Caring and Learning Centre

Mulgrave Park in Halifax, Nova Scotia



Data source: HRM Corporate Dataset (2014).

Supporting Programs: Hands On Halifax

Cooperation with the Hands-On-Halifax Organization will allow the residents to be actively engaged in the improvement of their community. The organization provides community woodworking workshops that residents can attend and learn how to build their own planter benches or other types of site furniture they may need (Hands-On Halifax, n.d.). Residents can choose paint colours for the site furniture they create. The average fee for these workshops is $50, which includes the materials and labour required to build the furniture.

Implementation

Installation costs may vary, and a qualified professional should be engaged before undertaking this work.

Lighting

Phase 1: to install wall lights and walkway lights. This phase lasts about 18 months, as the process is costly and time-consuming.

Phase 2: to install solar street lamps and front door lights, and to introduce the Brighter Nights program. This phase will be executed over 3 months.

Phase 3: to install solar wall-mounted flood lights throughout Mulgrave Park. This phase will occur over 9 months.

Site Furniture

Phase 1: to host workshops or consultation sessions to engage the residents selecting the location of benches. This phase will take place over 3 months.

Phase 2: to install site furniture in targeted areas. This phase will take place over 12 months

Phase 3: to add the remaining site furniture as needed over a 6 month period

CCTV Cameras

Phase 1: to survey the opinions of the residents on the installation of CCTV Cameras. This phase will take part over 6 months.

Phase 2: to install the cameras in high-risk locations, such as parking lots, blind spots, and playgrounds. This phase is an Alpha test, which should last for about 6 months.

Phase 3: if the CCTV cameras are popular and effective, the remaining cameras will be installed over several locations in Mulgrave Park over a 3-month period.

5.5 Connor Lane Parking Lot: Redesign and Market

Background

The Connor Lane parking lot and adjacent platform area to the east are subject to a new redesign. Currently, the parking lot is solely dedicated for parking vehicles while the platform has no defined function. In both these uses, the spaces are underutilized. The goal for this parking lot redesign is to create a more functional space for community activities while also improving the walking environment and overall appearance of the area.

A current issue that many residents face in Mulgrave Park is food accessibility. The nearest grocery store is a 25 minute walk, or a 20 minute bus ride away. The proposed farmer's market will address food accessibility by bringing fresh food into the community. Additionally, community leaders will teach residents how to plan and prepare healthy meals. The market will be developed over the next four years.

Goals

- Increase open space and create opportunities for community events
- Improve safety for pedestrians in Connor Lane Parking Lot
- Improve access to fresh food

Connor Lane Parking Lot Redesign

The parking lot at Connor Lane could be redesigned to increase pedestrian space. The first phase will focus on creating a Harbour View Platform area, capitalizing on the unobstructed view of Halifax Harbour from the higher-elevation areas of Mulgrave Park. The goal is to transform the platform area into a successful space where people gather, socialize and enjoy the view.

Figure 5.16: Rendering of proposed lot redesign

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

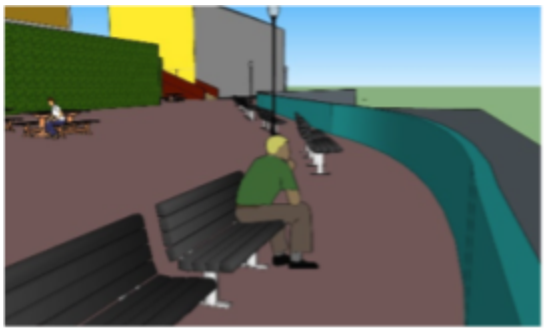


Figure 5.17: Rendering of viewing platform

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:

Figure 5.18: Renderings of proposed boulevard design

- 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
- 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

Connor Lane Market

Once the area has been redesigned, the space can be used to host a summer farmers market. The market will be located along the boulevard of the newly redesigned parking lot, and be open to residents and the public at large. The farmers market would rely on produce from the neighborhood's community garden and the unsold produce from local farmers to provide fresh produce at an inexpensive price.

Figure 5.19: Market space

In addition to increasing accessibility to fresh produce, community events, such as cooking classes, could be held at the market for residents. Live music by local musicians or community members could also act as a way of attracting people to the market.

The initial design of the market could accommodate approximately eight vendors. In the fall and winter, a holiday market could be introduced in the same space. Outdoor heaters could be used for vendors during the winter months. Potential vendors could include local crafters, bakers, and artists selling Christmas crafts, baked goods and holiday food.

If the market is successful, it could be expanded to the Harbour View Platform. An expanded market could accommodate up to 25 vendors, and increase the variety of products available at each market.

Implementation

Due to the scale of the parking lot redesign, this will be a major capital project. The estimated cost for the Harbour View Platform is $67,000, with the rest of the parking lot redesign estimated to cost $100,800. However, cost for labour and potential cost overruns could bring the total cost of both phases to over $200,000. A cost breakdown is shown on in **Appendix E**. Due to the significant costs associated with this project, outside funding would likely be required.

The market should run on a trial basis to gauge interest from the community. An estimate for the total cost of of building and operating the market for four years, including the expansion to the Harbour View Platform in year four, is approximately $19,770. A cost breakdown is shown in **Appendix E**. Programs such as the Atlantic Canada Opportunity Agency's Innovation Communities Fund could be used to fund such a project. If there is wide community support for the market, fundraising events could help support the initiative.

5.6 Connecting Mulgrave Park to the City

Background

Mulgrave Park is an established community with a strong sense of pride and identity. Many of its strengths lie in its existing programs and community initiatives led by such groups as the Phoenix Youth Centre and the Caring and Learning Centre.

The studio team recommends taking the opportunity to better establish connections with the outside community. Mulgrave Park stands to benefit from increased connectivity and interaction with the surrounding community while also taking better advantage of the readily available resources existing in the HRM.

Goals

- Expand programming opportunities for residents of Mulgrave Park
- To improve the community's access to amenities and resources in the city
- Build on the existing strengths of the organizations within the community

Existing Strengths and Opportunities

Mulgrave Park's strong foundation of existing programming is largely credited to the success of the Phoenix Youth programming and the Caring and Learning Centre. Phoenix Youth is responsible for a learning and employment centre, a supporting housing program, and youth outreach services, amongst other initiatives. The Caring and Learning Centre organizes community programs such as Community BBQ events, a community garden and movie nights. Although Mulgrave Park is a cohesive, tight-knit community with numerous existing strengths, the community also faces significant challenges. The community faces issues of social separation as well as poor access to public transit and amenities. Phoenix Youth has a network of facilities and services throughout the HRM. If residents of Mulgrave Park could be connected with the other locations of Phoenix Youth, these services could become more accessible to residents of Mulgrave Park.

Mulgrave Park Community Shuttle

The acquisition of a van can help to break down barriers and alleviate some of the constraints faced by the Mulgrave Park community.

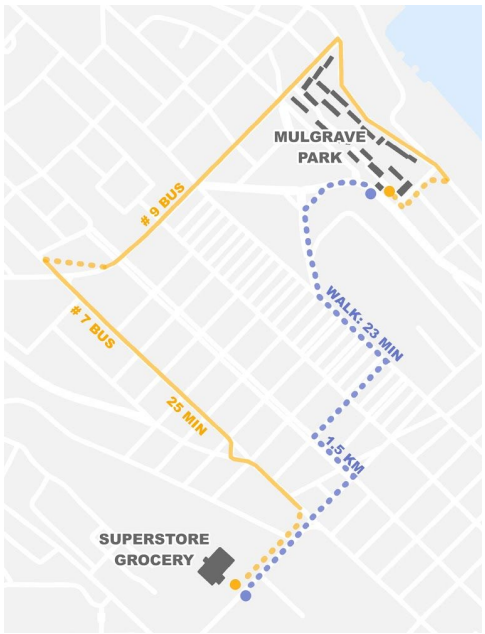
With the use of a community shuttle, Mulgrave Park would be better able to access the existing resources in the HRM. By alleviating the transportation barrier, there is potential to connect with sports, cultural and employment programming throughout the city.

For instance, the Halifax Sport and Social Club offers leagues year-round for a variety of sports at a relatively low cost. The community shuttle could support travel for events such as basketball tournaments or other recreational events throughout the city. In the winter, free trips to The Halifax Oval become possible, as do more ambitious activities such as ski trips.

Cultural activities may include tours to local museums and galleries, Halifax Explosion events or regular excursions to the public library. For employment, the shuttle can be used to facilitate the link between Mulgrave Park and the variety of resource centres that Phoenix Youth offers throughout the city.

Access to Transit and Amenities

A primary use for the community shuttle is to better link the community with outside resources. The community of Mulgrave Park is poorly served in both the basic amenities of access to food and in access to public transit. This issue is further complicated by many of its community members having economic disadvantages or mobility issues.



Problem: Nearest grocery store inaccessible

If walking, one must navigate a significantly challenging slope. This becomes increasingly difficult if faced with less than ideal weather conditions, winter season, mobility issues, or if carrying grocery bags.

If travelling by transit, one must interpret a complex and ineffective bus schedule in which the ideal travelling routes will vary from weekdays to Saturdays, and again on Sunday. Despite the short travelling distance, the journey usually involves a transfer and significant walking. When searching bus times, Google will suggest that walking is faster.

Proposed solution: Grocery Shuttle

Implementing a grocery shuttle to a new proposed destination at 2651 Windsor Street (Sobey's) would add access to a pharmacy and medical centre.

Benefits of the grocery shuttle include:

- Improved access to fresh food & medical, reduces time and transit cost
- Promotes health, self-sufficiency and increases food options
- Fosters community through group social activity
- Helps those with physical and financial barriers seniors
- Service especially beneficial in winter season

Figure 5.20: Enhanced seasonal programming suggestions

Implementation

To fund the purchase of the van, the studio team suggests 3 possible approaches.

Irving Oil has become a significant presence in the community with the recent construction of the Shipbuilding facility. Irving has a significant history of contributing to its surrounding communities and are a realistically viable funding option (Irving, 2016). Sobey's continues to fund many grocery shuttles throughout Canadian cities (Brock University, 2015) and could be a realistic contributor to a van that brings shoppers to their store. From a grant perspective, Phoenix Youth has been unable to achieve grant security for more than one year at a time (HR Council, 2015). If long term guarantees

were facilitated, more of the organization's resources could contribute to program delivery and other funding (HR Council, 2015).

6.0 Conclusion

These design proposals and programming enhancements can be undertaken separately or in combination with one another depending on priorities and funding. The projects are the result of careful study and analysis with input from our clients. This document can to be used to acquire future funds and serve as a foundation for public space improvements. We would like to thank our clients and the residents of Mulgrave Park for allowing the Studio to complete this project and inspire our proposals.

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8.0 Appendices

Appendix A: Ramp Specifications Table

Type	Specification	Value
Ramp	Maximum ramp gradient	1:20 (1 m rise over 20m run)
	Maximum ramp length	9,000cm
	Minimum ramp width	150cm
Resting spots (Landings)	Minimum turning space at ramp ends	180cm x 180cm
	Minimum landing dimensions	130cm by 200cm
	Maximum rise between ramp landings	45cm
	Minimum dimensions for landings on either end of ramp	240cm
Handrails	Height	9 to 11cm above ramp
	Secondary handrail height	6 to 7.5cm above ramp
	Handrail extension beyond ramp end	30cm
	Handrail end curve beyond ramp end	15cm downward
Drainage	Maximum cross-fall gradient	1:50

cm = centimetres

m = metres

Appendix B: Detailed Cost Estimates for Open Space Redesigns

Scooter Park Cost Estimate	
Pavement	$6,400
Scooter Park	$18,400
Total	**$24,800** (Skatepark.org, 2012)

Central Playing Field Budget Estimates	
Labour Services and Building Materials	**Approximate Cost**
6” x 6” lumber	$500
Evergreen plants	$1200
Lattice	$100
Soil	$300
Grass seed	$150
Landscaping labour	$6000
Equipment and machinery rental	$4500
Concrete and rock removal	$600
Total:	**$12,750**
Kent Building Supplies, 2016.; Hunsley and Associates Landscaping, 2016.	

Basketball Court Budget Estimate	
Basketball Net	$10,750
Basketball Net Installation	Minimum of $10,000
Garbage Cans	$20-$300
Level Pavement	$2 per ft^2
Paint (Ground, Sign, Walls)	$25-$60

Appendix C: Beautification Costs

Amenity	Potential Source(s)	Type	Quantity	Cost per Unit
Window box (installation brackets included)	Home Depot	Wood	250 (i.e., 1 per housing unit)	* (min.) $16/box (7"x7"x24")
Flowers	· Irises Halifax · Halifax Seed Company Inc. · Halifax Seed · Hope Seeds	Annuals (e.g., Sweet Peas, Morning Glory, Petunias, Verbenas, etc.)	10 seed packs per flower species (e.g., 10 packs x 3 flower types = 30 seed packs)	(min.) $3.50/3g (~30 seed/g) pack @ Hope Seeds
Soil	· Rona · Home Depot · Lowe's	Garden soil	Will depend on the required size and number of planter boxes	(min.) $3.00/28.3 litre bag OR $178/bulk bag (1 cubic yard) for the Vigoro brand @ Home Depot
Paint	· Deserres · Michaels	Acrylic (assorted colours, min. 6 colours)	Enough to paint a total of ~3 square feet of planter box surface area (e.g., 5 tubs per colour x 6 colours, min.)	(min.) $7.00/ 8oz tub for the Deserres brand @ Deserres
Paint brushes	· Deserres · Michaels	Round & flat, select sizes	Min. 100 brushes	(min.) $13/value pack of 12 brushes @ Michaels (e.g., item # # 10335746); Can also be borrowed
Paint palettes	· Atlantic Superstore · Sobey's · Deserres · Party City · Dollarama	Disposable plates	250 x (1 per flower box)	(min.) $5/pack of twenty 9" plates @ Party City
		Plastic palette	250 x (1 per unit)	(min.) $0.99/palette @ Michaels
Installation hardware	· Home Depot · Home Hardware · Canadian Tire	Screws	250 x (4 per flower box)	(min.) $0.20/screw

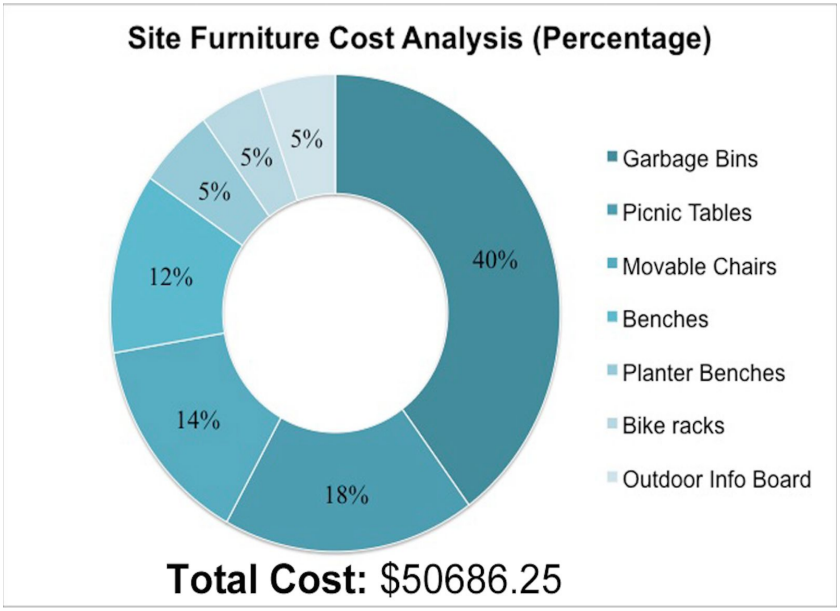
	· Rona · Lowe's	Screwdrivers	10 (number is variable)	Can be borrowed
		Power drill (required for proper installation of box)	5 (number is variable)	Can be borrowed
Advertising supplies (e.g. flyers)	· Staples · Campus Copy in SUB (Dalhousie)	Paper	250 x (1 per housing unit)	$4/pack of 250 sheets, 8 ½ x 11
		Colour Printing	250 x (1 per housing unit)	· $0.49/copy @ Campus Copy · $0.44/copy (bulk print of >250 copies) @ Campus Copy
Venue	Needham Recreation Centre	n/a	n/a	TBD
	Devonshire Arena (dry floor required)	n/a	n/a	$60 (min. 3-hour rental in the Spring/Summer)
			ESTIMATED TOTAL COST:	$5,700-$6,000

Potential Funding/Donation Opportunities

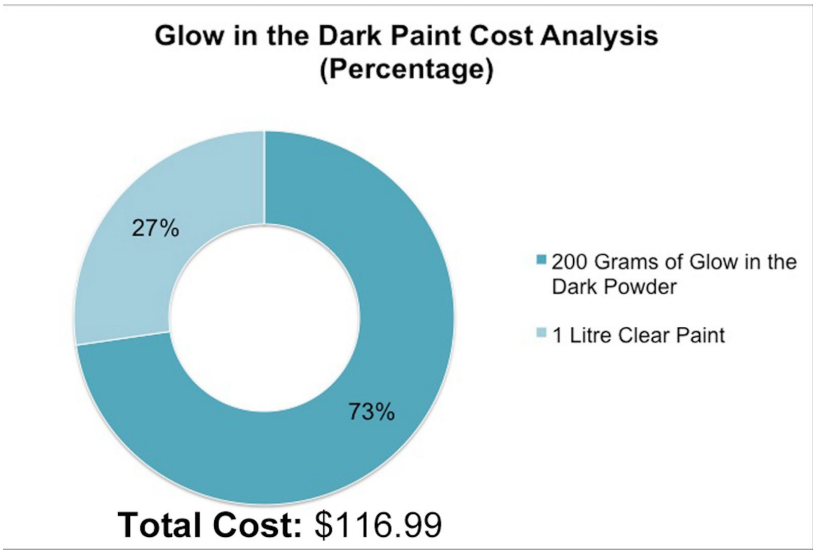
As indicated in the table above, the estimated budget for this program is roughly $6,000, which will only cover the initial year of the program. As such, the budget excludes costs to maintain these window boxes in future years. To facilitate the kickstarter cost, provided below is a list of potential funding and donation opportunities for this project, as taken from the HRM Volunteer Services website (2014):

- 4Cs Foundation;
- Canon Canada Inc.;
- GlaxoSmithKline Foundation;
- Halifax Foundation;
- HRM Events;
- Lawson Foundation;
- McCain Foundation;
- McLean Foundation;
- Royal Bank Community Donations;
- Salamander Foundation;
- Healthy Communities Community Grant Program; and
- Neighbourhood Placemaking Program.

Appendix D:



(Backyard City, n.d.; Designed for Outdoors, n.d.; Global Industrial, n.d.a; Global Industrial, n.d.b; Trashcans Unlimited, n.d.; TreeTopProducts, n.d.a; TreeTopProducts, n.d.b; Walmart, n.d.; Wayfair, n.d.)



(Amazon Canada, 2016; Canadian Tire, 2016)

Appendix E: Potential Costing for Connor Lane Lot Redesign

Breakdown of Potential Costs for Connor Lane Lot Redesign

Phase 1	**Total Cost**	**$66,900**
	Ground Painting	$30,100
	Benches	$6,800
	Light Poles	$30,000
Phase 2	**Total Cost**	**$100,790**
	Paving & Crosswalk	$57,940
	Lights, Benches, Picnic Tables	$37,000
	Trees	$5,850
Total Cost of Parking Lot Redesign		**$167,690**
(Barco Product, 2016; Improvenet by craftjack, 2016; Javed, 2010; Lindon City, n.d.; Pedestrian and Bicycle Information Center, 2016)		

Breakdown of Potential Costs for Connor Lane Market

Phase 1	**Total Cost**	**$7,750**
	Permits & Insurance	$750
	Vendor Stalls	$5,000
	Signage & Advertising	$2,000
Phase 2	**Total Cost**	**$2,450**
	Permits	$150
	Outdoor Heating	$1,300
	Signage & Advertising	$1000
Phase 3	**Total Cost**	**$9,750**
	Additional Vendor Stalls	$9,750
Total cost of market		**$19,770**
(AAMI, 2016; Province of Nova Scotia, 2016; Home Depot Canada, 2016; News Atlantic, 2016; Staples Canada, 2016)		