

Rethinking the Relationship between Stadiums and Public Space

by

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Abstract

This thesis examines how a centrally located stadium can be woven into the public space of a Canadian city to become an active member of the urban fabric. Common community desires for spectator sports have faced difficulties because conventional stadium architecture normally demands large quantities of land. Consequently, stadiums are often located on the periphery of a city, with disadvantages for public access.

This thesis proposes a new form of public infrastructure in the heart of Halifax, a small east coast Canadian city. The proposal is situated on an urban block that currently houses various separated institutions. This is within the Halifax Common, a series of open spaces that run through the city. The project introduces elements of stadium architecture and pedestrian routes that attempt to stitch everything together into an inclusive urban fabric that operates throughout the year.

Acknowledgements

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Chapter 1: Introduction

The Desires

Places of large gathering and spectating have long been part of the urban existence. The desire for spectator sports and events has led to the construction of infrastructure to facilitate this wish. Today, stadiums are present in most cities around the globe. Like art galleries and theatres, they are often considered civic icons for both the enjoyment of the masses as well as the portrayal of the city's character to visitors both in person and through media (Sheard, Powel and Bingham-Hall 2005, 19).

The Concerns

Presently, there is an emerging discussion about the social role of publicly-funded intuitions and architecture, with growing concerns about accessibility, inclusion, and diversity. Stadiums serve as an extreme example of a typology becoming increasingly private. Over time these venues have become contentious and debated topics within communities. Often constructed using large amounts of public funds, they frequently require significant amounts of highly subsidized land (Flowers 2018, 8). They have earned the reputation of "White Elephants", as they struggle with limited use after the event ends and have developed negative effects on their surrounding space. This has led to a relocation to the periphery of the cities, exacerbating these issues. Recently there has a shift back toward developing urban stadiums (Schneider 2018).

Halifax is a city currently without a permanent infrastructure for viewing outdoor sporting events. It too has entered this

dilemma, with the idea of a new stadium reoccurring often throughout its history (Campbell 2018). As a Canadian city, outdoor spectating and gathering is severely impacted by the effects of winter and they remain dormant for most of the year. Recent attempts have followed conventional North America strategies leading to local controversy and debate.

In 2019, a professional soccer team was established in the city as part of a Canadian development league. They began operating out of a temporary 6,000-seat venue on the historic Halifax Commons. This has raised an interesting dynamic as they operate a for-profit business on what is public space (Dubé 2017). While they are currently operating on this site on a three-year lease, their future home is one of question.

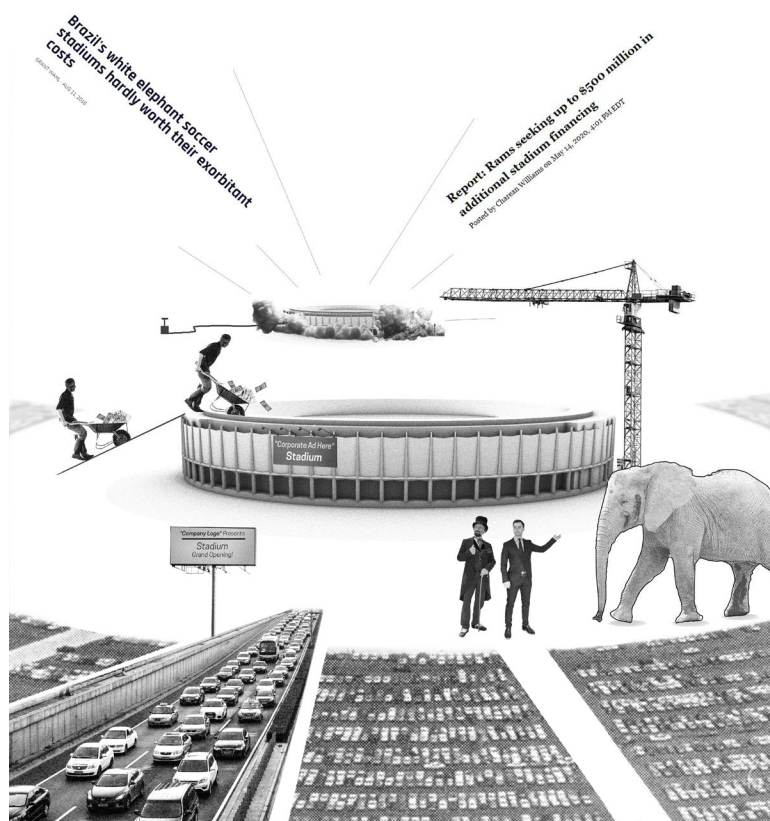


Figure 1: Collage of concerns; adding graphic detail to common headlines.

The Opportunity

Leading stadium architects have suggested that the entire concept of the stadium needs to be reconsidered and that a stronger integration into their surrounding fabric must be pursued if they are to become viable in the future (Beckham 2015). While they have approached this from an economic perspective, an alternative approach of integration is possible.

Using Halifax as a testing ground, the relationship between public space and programmed institutions is investigated by locating elements of a permanent stadium on a block of the Halifax Commons. By cracking open the isolated institutions that have long occupied the site, their components can be reconsidered and adapted to better reflect their public presence. Connections and exchanges are identified and enhanced to allow programs to build off one another by sharing services and energy. The process of reassembly provides new opportunities for common use of the public space throughout the changing seasons.

Critical to this proposal is the exploration of methods that encourage a more inclusive use of public space. It will consider how visibility, adaptability, and accessibility can be enhanced to provide program, use, and space for a wider variety of users. The thesis aims to suggest a new way of considering publicly-funded venues and their value to their investors — the people.

Thesis Question: How can a centrally located stadium be woven into the public space of a Canadian city to become an active member of the urban fabric?

Chapter 2: The Choreography of the Masses

The Desire for the Spectacle

Spectating and entertainment have long been a part of human life. Historical records document distinct moments in history by referencing performances of speech, song, theatre, and sport that took place. Archeologists have unearthed remnants of past structures dedicated to the gathering of people to witness these moments. As architecture has evolved and advanced, the design of stadiums remains similar in principle to that of Ancient Greece and Rome (Nixdorf 2008, 16). Raked seating terraces allow for enlarged capacities and sightlines to the performance taking place. Often configured in a bowl, this architectural form can be best seen in the sporting venues of today (Nixdorf 2008, 17).

This desire for sporting events continues to grow throughout cities around the globe. Their strong presence within media and pop culture is indicative of their role within society. While technology has radically changed the entertainment landscape, seeing a live event in person remains a popular experience (Nixdorf 2008, 135). This has led to the construction of tens of thousands of stadiums worldwide. Sports have long had a reputation of a blue-collar pastime, with many of today's sporting events having origins in the working class (Marg 2012, 55). In Canada's early days, soccer and rugby games were often organized between foreign sailors, local miners, and dockworkers. Many of whom brought the games with them after migrating to the new country (Amis 1996,147). They often serve as social

condensers, as their global nature can bring together a diverse cross-section of the population (Rich and Misener and Dubeau 2015, 132). Volkwin Marg describes their role of stadiums and sports within the public realm as follows;

These are the largest public space and, full or empty, they have become collective symbols of our cities and states, you could say the cathedrals of our secularized mass society, catalysts for the ambivalent transformation of individuals and mass. -Volkwin Marg (Marg 2012,13)

As Canada is a country made up of many cultures and diversity, much of our collective pastimes and attractions have roots from all over the globe. The global nature of many sports serves as an immediate common thread between newly arriving peoples and those already in the country. While not guaranteed, sporting events can serve as a catalyst for bringing people together. In the study of an Ontario-based social soccer event called the Community Cup, the authors describe the role soccer and sport have played in connecting newly-formed communities through shared interests. Using sport as a method of starting a dialogue among neighbours, it begins with a common enjoyment of professional and participatory sports and branches into other aspects of social life (Rich and Misener and Dabeau 2015, 137).

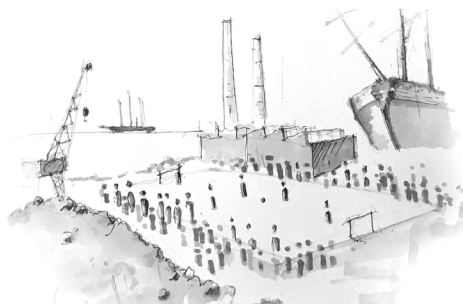


Figure 2: Impression of scene as described by John Amis in which British sailors would row ashore to arrange soccer match with local miners and dockworkers. (Amis 1996, 147)

Becoming White Elephants

Over time, the venues that host sports at the professional level have evolved and today have become controversial pieces of architecture. Their requirement of large parcels of land, the rising costs to the public, and their infrequent use have led to debate within communities, often earning them the name; “White Elephants” (Manfred 2015). Oxford University Press defines this term as follows; “A possession that is useless or troublesome, especially one that is expensive to maintain or difficult to dispose of” (Oxford University Press, n.d.).

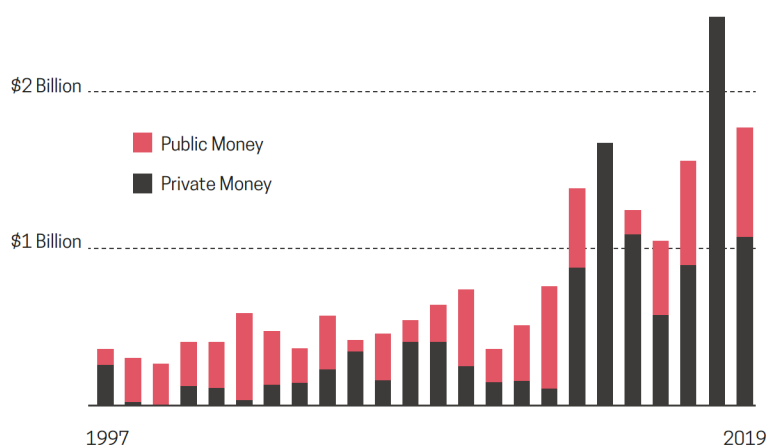


Figure 3: Graph displaying rising costs of NFL stadiums. 24 of the 32 teams have constructed new stadium since 1997. (adapted from Brangan 2019)

Using the National Football League as an example, figure 3 depicts how rapidly the costs have risen, leading to the billion-dollar price tags as seen in the most recent developments. Controversial financial arrangements that exist between cities and team owners, have led to much of the public disdain. Cities often see them as an attraction that will boost the city’s reputation and incentivize growth. Large quantities of taxpayer dollars are then directed to

help fund their construction. Due to tax incentives often given to team ownership, the city's hopes of recouping its investment rely on taxing the external amenities that benefit from the events (ex. hotels, restaurants, fuel sales). While this model is often pushed, the true amount of return is hard to calculate, with economists suggesting it is less than expected (Humphreys and Lander 2015, 294).

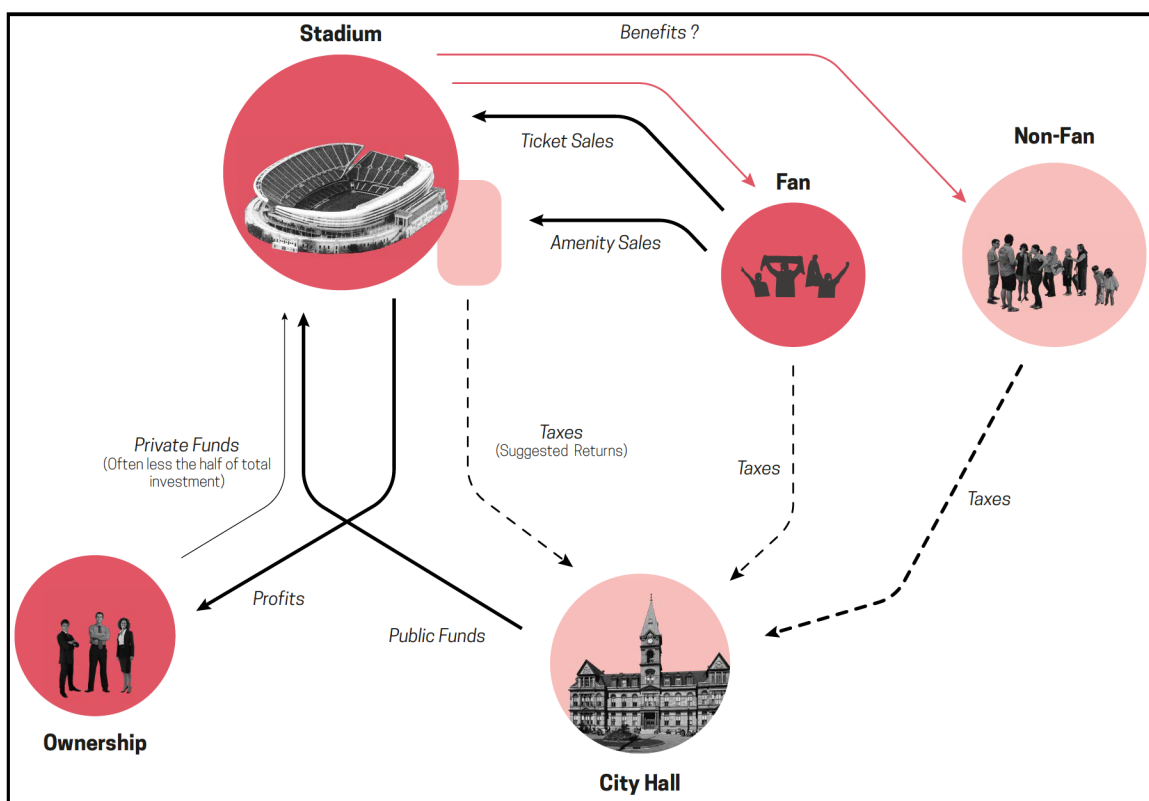


Figure 4: Diagram of common stadium financing models as described by Moshe Lander (Humphreys and Lander 2015)

An Evolution

Stadiums location, form, and relationship to their surroundings have gone through many shifts since the time of antiquity. By investigating their evolution, we can note key characteristics that have led to the current development.

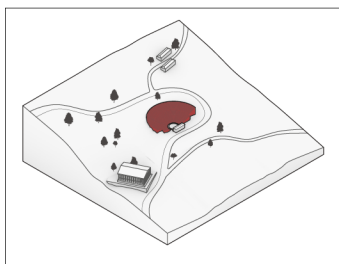


Figure 5: The Greek Amphitheatre

Ancient Greece

While the Greeks invented the Olympics Games, it is perhaps the venues created for theatre that influenced stadium design the most. The Amphitheatres, like that of the Theatre at Epidauros, demonstrate a form that serves the bases of all later stadia (Nixdorf 2008, 17). Built into a hill, the background to the stage is the landscape itself.

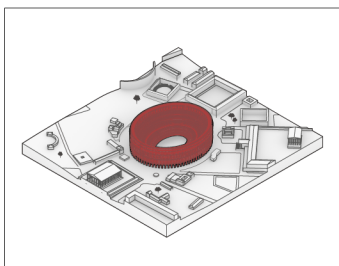


Figure 6: The Roman Colosseum

Ancient Rome

Located at the heart of the Roman capital, the Colosseum was constructed as a place of mass entertainment. One of theatre, sport, and conflict, it was conceived as a tool to appease the people. Situated among temples, markets, and housing, its scale and design made it a focal point within the city (Marg 2012, 28). Designed in the round, remnants of the structure remain to this day.

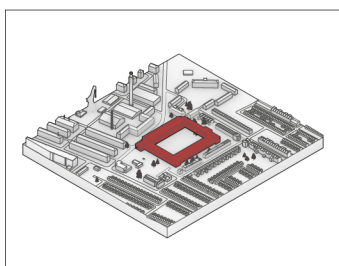


Figure 7: Traditional English Stands

Traditional Football Stands of Industrial England

During the industrial revolution, organized sport and leisure once again returned to civilization at a scale not seen before. As games like soccer and rugby took shape, new infrastructure began to be developed. Often built within the industrial neighbourhoods, these new stadiums were simple, adaptable, cheap to construct, and easy to get to (Sheard, Powel, and Bingham-Hall 2005, 103). Many remain today, having evolved and modernized over the last century to house some of the world's most famous sporting clubs (ex. Liverpool FC and Anfield Stadium).

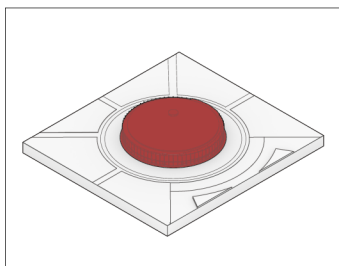


Figure 8: The Houston Astrodome

The Astrodome: The Parking Lot Stadium:

During the 1960s, American society was becoming increasingly dependent on the automobile. Architecture and urban planning reflected this through their designs of car-centric cities (Flowers 2018, 26). Considering that thousands would be gathering for a sporting event or concert, stadiums were built on the periphery of the city, close to highways, roads, and expressways. Having each attendee arrive by car meant thousands of individual parking spaces would be required. The result can be seen in that of the Houston Astrodome and its expansive parking lot (36,000 spots). At the time of its construction, it was cutting edge, the first multi-purpose domed stadium in the world (Flowers 2018, 14). Today it sits vacant without a permanent tenant in sight. Its construction and location make it expensive to demolish, and difficult to adapt.

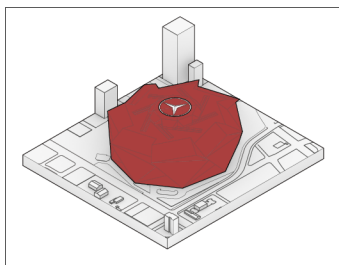


Figure 9: The “High Tech” Stadium
Mercedes Benz Stadium depicted.

‘High Tech’ Stadiums:

Today, stadiums have become increasingly expensive to design and build. Recent football stadiums in the United States have reached costs of over three billion each to construct (Brangan 2019). They have become objects within the urban fabric, large icons meant to attract consumers to spend on the entertainment of sport. To financially compete with the city’s other attractions, new and advanced (expensive) technology is added to increase the novelty of the venues experience. Corporatization has also become ever more present — baked into the architecture itself. Naming rights and advertisement boards and screens cover the stadium, as can be seen with the Mercedes Benz Stadium (2017) in Atlanta, Georgia, USA. The operable oculus roof

is emblazoned with a corporate logo representing this desire to attract and generate as much money as possible.

Projected Evolution:

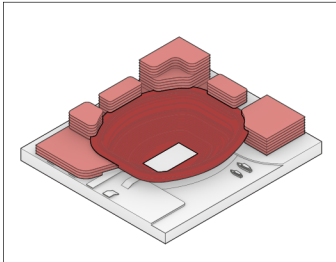


Figure 10: The Projected Evolution

Stadium architects have acknowledged that the current trend is becoming increasingly untenable in the future. In “Stadiums of the Tomorrow”, a 2018 joint research project by Populous Architect and the National Geographic, a new model is proposed (Populous 2018). They suggest the stadium embeds itself into other venues of entertainment, intending to increase profits by integrating casinos, luxury skyboxes, and condos into the stadium.

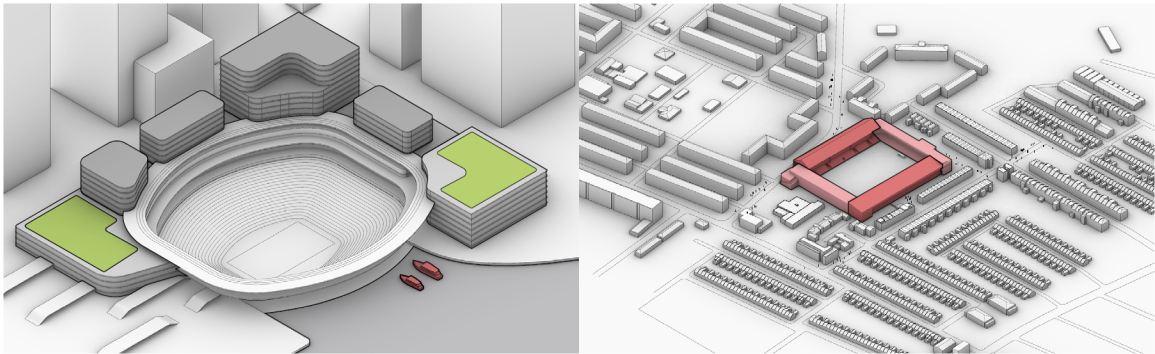


Figure 11: The proposed “Future Stadium” vs traditional UK soccer grounds.

This latest shift displays just how far sports entertainment has strayed from its origins. Perhaps elements of the past should inform this idea of integration and the stadium of the future should reestablish itself as a place for the masses and not just the privileged.

Becoming Less Accessible

Recently, critics within society are beginning to ask questions of many of our institutions. Museums, art galleries, symphony halls, stadiums, and arenas are some of the most expensive constructions cities and local governments fund. All are dedicated to entertainment, performance, and exhibition, but over time have also become increasingly privatized. Growing admission costs, transportation access, and private viewings have all become widespread issues in cities throughout the globe. The Metropolitan Museum of Art serves as an example, as it has faced this criticism after establishing an admission cost of all visitors from outside of New York State. Replacing the long-standing “recommended admission”, critics have raised concern as this 2018 decision begins to limit access and who can afford to attend (Schwartz 2018). All this while the museum emblazes the names of wealthy donors into the architecture of the city-owned Museum that houses many publicly-owned artworks (Schwartz 2018). The question of whether safeguards against these trends can be created through policy, planning, but specifically architecture, is what this thesis’ design proposal seeks to answer.

Chapter 3: Halifax as a Testing Ground

Using Halifax as a testing ground for a new concept of stadium design fits within the existing local debate. Halifax once had multiple pieces of event infrastructure that have since been dismantled and relocated (figure 7). Recent suggestions of a reintroduction of such venues have ignited public discourse on public spending and what should be considered for the public good. If Halifax were to invest in such a building, location and access are key elements in question.

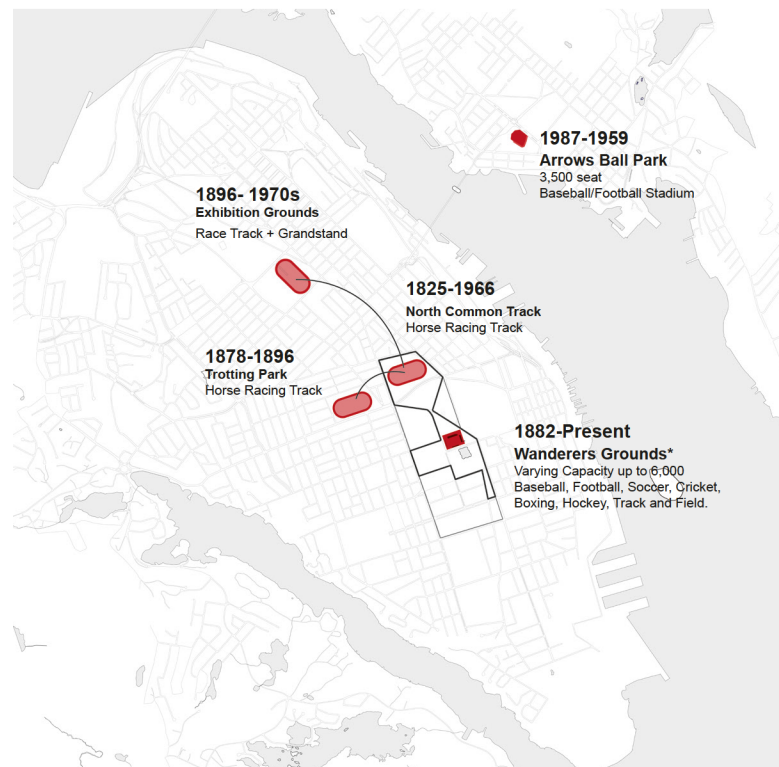


Figure 12: Past venues within Halifax. Locations obtained using aerial photos over HRM.

Location

Over the past decade, a global shift back towards the urban stadium has occurred. Planners have realized that locating a stadium outside the urban core leads to a dependencies on cars to commute to and from the event, as well as the expense of supporting infrastructure that then needs to be supported post-game. (figure 8)

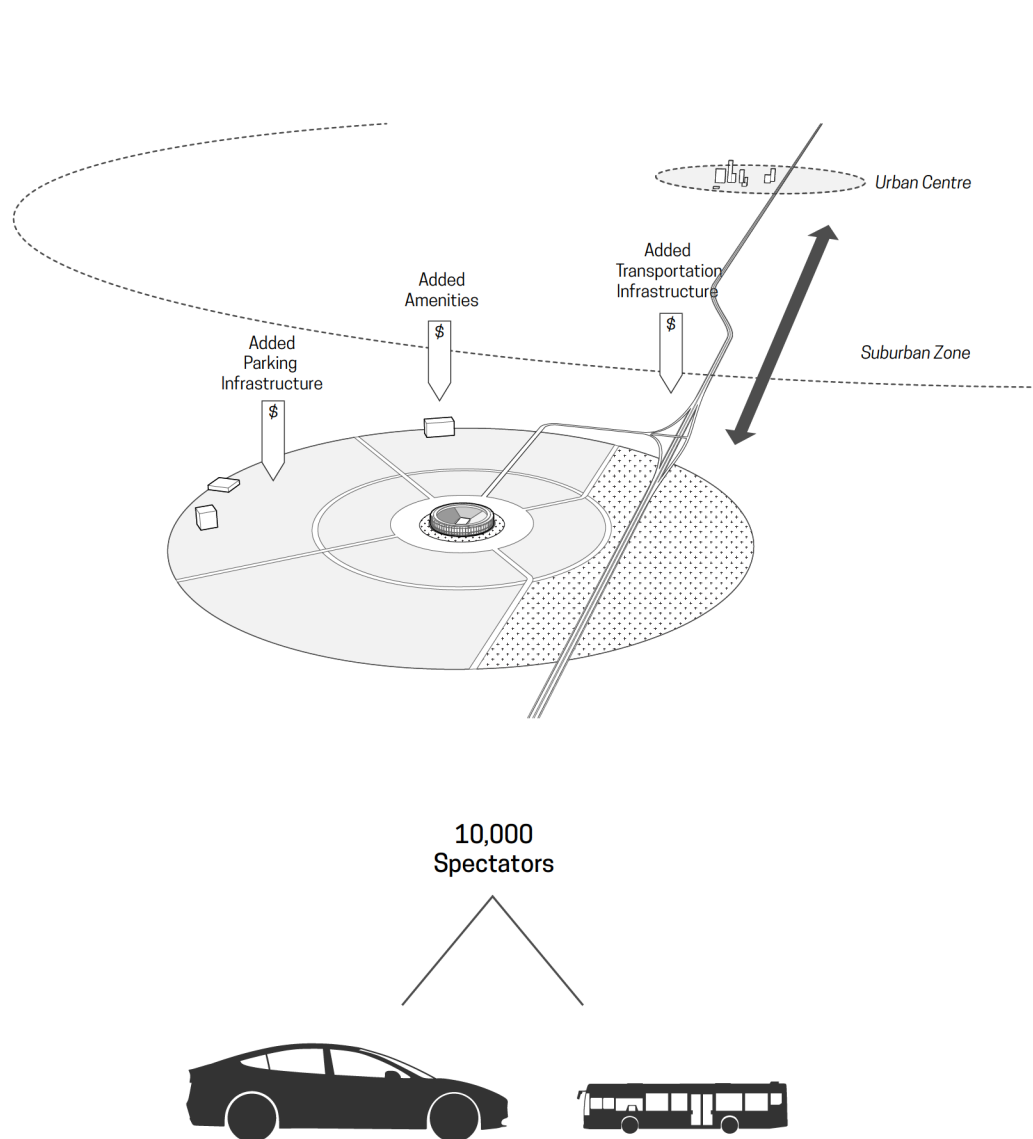


Figure 13: Old model of locating stadium infrastructure at the city's periphery. A model dependant on the automobile.

This shift is illustrated with the three professional franchises of Oakland all relocating to urban centers. (figure 9)

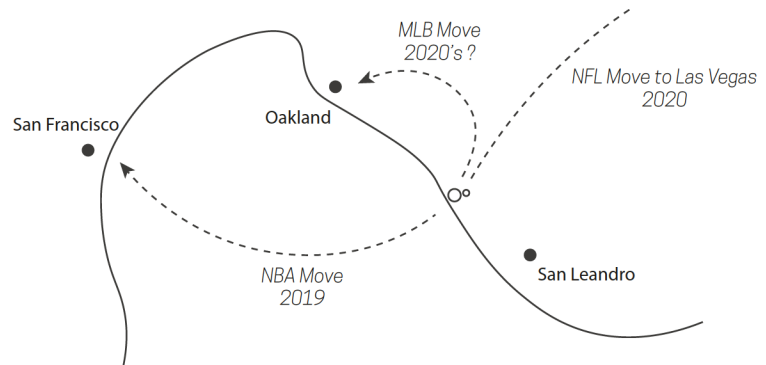


Figure 14: The recent Oakland California stadium migration to downtown cores.

By locating the stadium where existing infrastructure is in place, the transportation demands are spread among various systems. Being close to bus routes, neighbourhood living, parking garages, pubs, and restaurants eliminates the need for new infrastructure and instead relies on and contributes to what is existing. By taking this a step further, locating elements of a stadium in a public park can create a form of a buffer, ensuring various modes of access are used and an emphasis on public use is enforced. (figure 10) With ownership of the land being public, no one user is in control of the site. The city can then use this infrastructure as it sees fit, leasing out use not only to a professional franchise, but also university teams, schools, cultural events, performances, and other public events. Terms can be imposed to ensure tickets are made available for organizations that serve the underprivileged and safeguards placed to limit advertising to being displayed only during an organization's rented time.

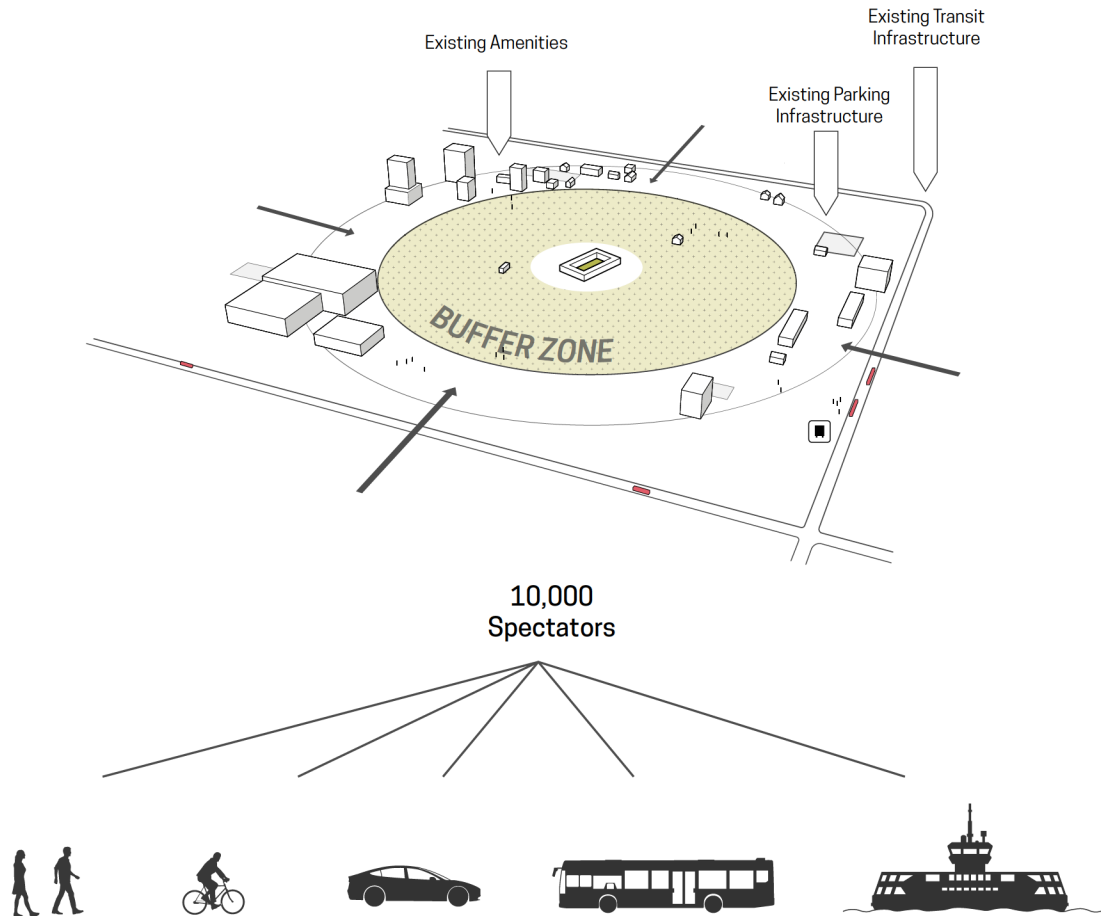


Figure 15: An Urban Model for Stadium Development. Using the park as a buffer against commercialization. Relying on existing amenities and infrastructure and encouraging mixed modes of transportation.

Greater Site Context

The proposed site is one that lies on the historic Halifax Common. The Common was established by surveyors in 1749 during the city's early settlement. Situated at the center of the Halifax Peninsula and at the base of a historic fort, the public park contains various institutions and fields to facilitate public recreation, leisure, performance, and exhibition. (figure 11) The Municipal-controlled park has hosted many notable events. Royal Visits, VE Day celebrations, Papal visits, and large concerts have all taken place on the grounds over the years. With all major transportation systems leading to the

nearby Downtown and Spring Garden Road business district, the park is easily accessible to multiple modes of travel.



Figure 16: The Halifax Peninsula with The Commons and main transportation routes highlighted. (HRM 2020)

As the city has developed over the years, the Common has seen a reduction from its original size. At its establishment, it contained approximately 235 acres of undeveloped land, much of which was swamp and was later drained. Over time, the site has been carved up as public and private intuitions have been established. Hospitals, schools, graveyards, and private development now occupy parts of the space. Today little over 100 acres remain (City of Halifax 1994). Given the age of the original declaration, the rightful use of the site has been debated consistently with little consensus reached. While some believe no development (even public development) should be constructed and that the entire site should be returned to open, unprogrammed space, this thesis takes the position that programmed space

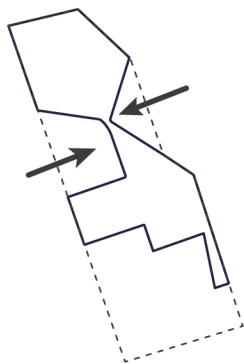


Figure 17: Current footprint of the eroding Commons. Latest erosions indicated with arrows.

can be introduced if done to enhance public usefulness while keeping the spirit of the original declaration intact. It draws on the words of Jonathan Belcher, Esq., Lieutenant Governor of Nova Scotia, in the Official Grant of 1763: “...Grant land lying and being in the Peninsula of Halifax containing the whole two hundred and thirty-five acres for a Common for use of the inhabitants of the Town of Halifax forever” (as quoted in City of Halifax 1994).

Any development should be for the public and embody the three concepts later discussed in Chapter 4; transparency, accessibility, and adaptability. Keeping in mind the words of famed Halifax politician, Joseph Howe, during his libel trial in 1835: “...What is right? What is just? What is public good?” (Nova Scotia Legislature 2017).



Figure 18: The Halifax Peninsula (base map from HRM 2020)



Figure 19: Babe Ruth on the Wanderers Grounds, 1942 (NS Sports Hall of Fame, ref. 2016.16.44)

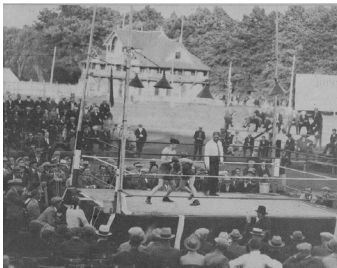


Figure 20: Outdoor Boxing on the Wanderers Grounds (NS Archive. Reference no.: Tom Connors Nova Scotia Archives accession 1987-218 no. 075 / negative no. N-3925)



Figure 21: Montreal trails on the Wanderers Grounds 1930. (NS Archive. Reference no.: Tom Connors Nova Scotia Archives accession 1987-218 no. 526 / negative no. N-8205)

Specific Site

The Wanderers Grounds is a municipal property located on a block at the centre of the Common and has hosted spectator events since the 1880s (Macdonald 1974). It has recently become the temporary home of the Halifax Wanderers Football Club (soccer) of the Canadian Premier League. It also houses various independently functioning institutions, many of which have occupied the site for many decades. These include; The Museum of Natural History, the Halifax Lancers (a horse riding school and stable), the Wanderers Grounds, the Halifax Wanderers Lawn Bowling Club, a Municipal maintenance depot and greenhouses dedicated to the upkeep of the Commons, and the HRM

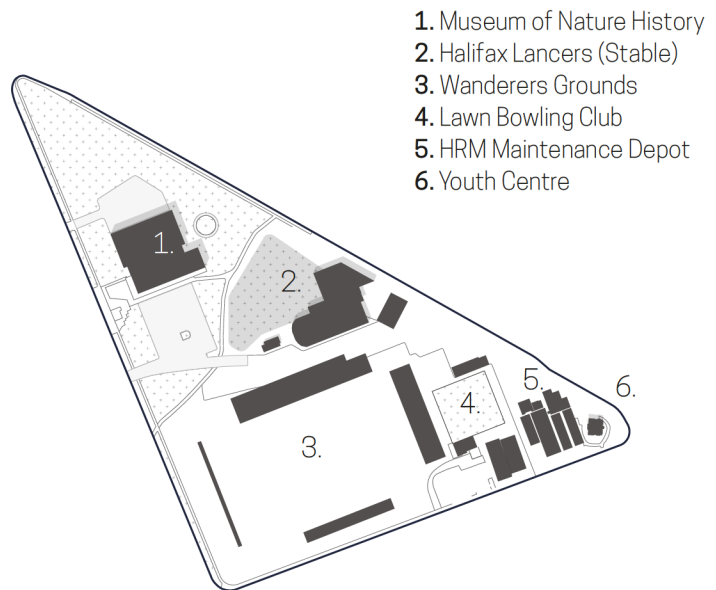


Figure 22: Current Institutions on Site

Power House Youth Centre (occupying a heritage building, once the home of the groundskeeper).

Barriers

While all these programs have public functions, they take up most of the block and have limited accessibility. Fences further divide, isolating each institution from one another. With individual access points, circulation through the site is limited to a single path cutting from Bell Road to Summer Street. With a site so densely packed with program, with limited provided parking, users must walk to the site and rely on an existing parking structure in the surrounding area. This can be observed during an event on the Wanderers Grounds, or a concert taking place on the Garrison Grounds

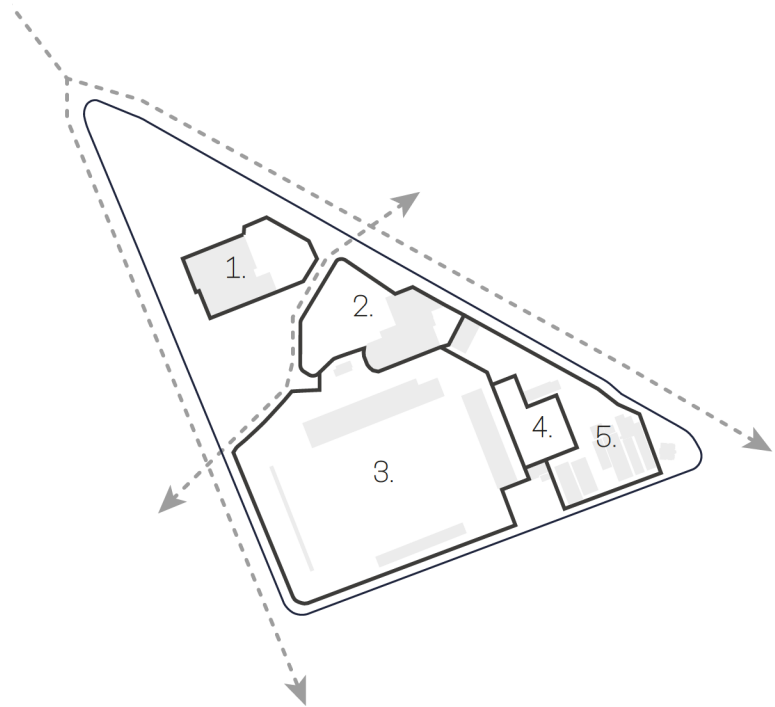


Figure 23: Current Divisions and Circulation

Seasonal Shifts

Each year, as the seasons shift into winter, most of the programs go dormant until the following spring. (figure 19). As a Canadian city, much of the Commons is buried in snow, covering the sports fields, courts, pool, and skatepark. Only two programs remain active. The skating oval on the North Common is maintained and cleared, bringing crowds together when the ice is suitable. The Lancers also maintain their functions, as the horses are capable of handling the cold. They also have their indoor arena for when the weather is undesirable. This reduction of communal activity suggests that there is a need for public programming through this half of the year. An adaption of infrastructure could provide new spaces for social life and interaction during the cold months.

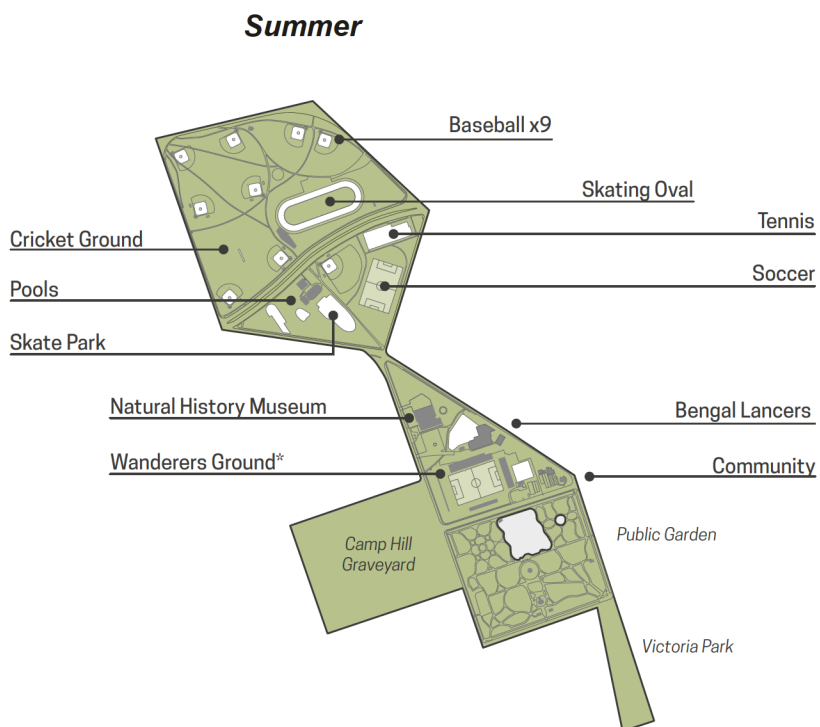


Figure 24: Current summer programming on the Halifax Commons.

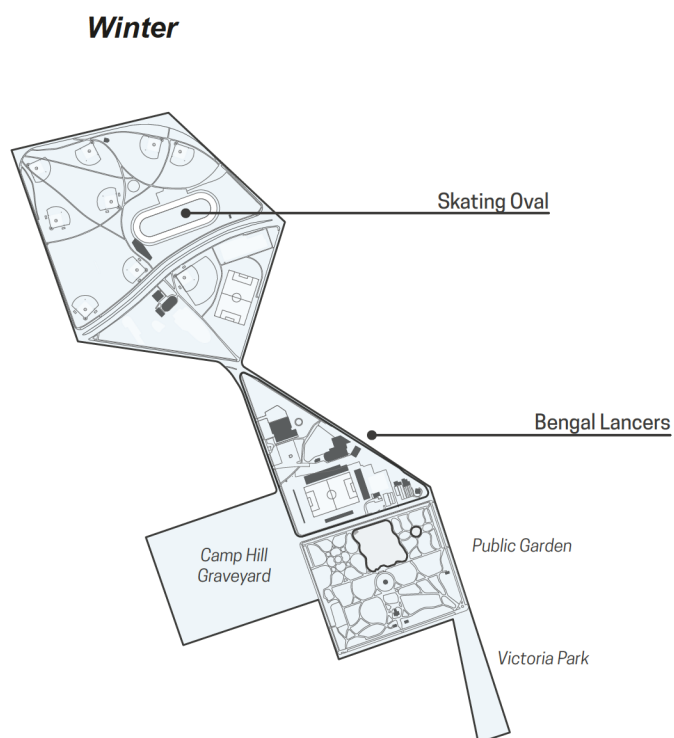


Figure 25: Current winter programming on the Halifax Common.

Chapter 4: A Strategy for Moving Forward

Introducing elements of permanent and adaptable stadium infrastructure to such a site risks alienating the pedestrian from the site. The typology's past development has created magnets of venues that attract people during the event but repulse the passerby when the event is over. The proposed strategy is to combine public programming that will de-magnetizing the site through the elimination of barriers such as fencing, by increasing transparency, and by being capable of adapting to fit the seasonal desires of the public.

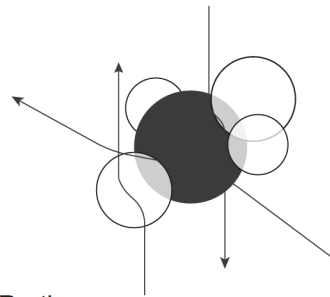
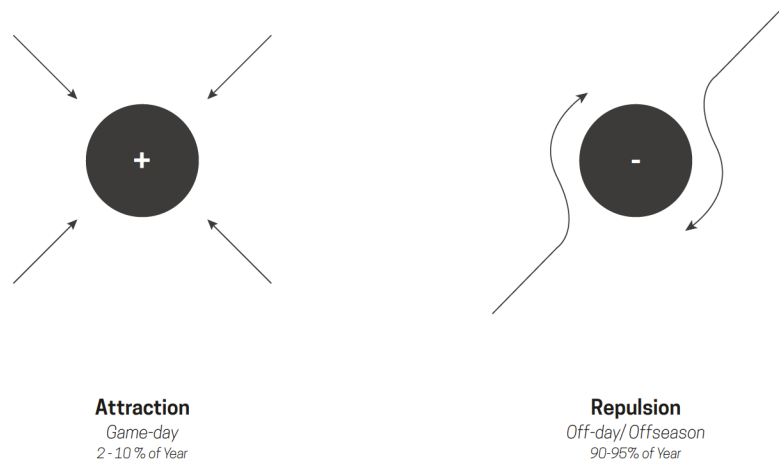


Figure 26: Thesis Parti

As sites become developed to facilitate specific programs and activities, they risk become exclusionary to those that don't relate to such activities. It is therefore highly important to consider not only the expected users, but the unexpected, or casual users of the site. It is important that the site is program-specific while also adaptable to adjust to non-specific programming. The Project for Public Space, an American non-profit organization made up of planners, architects, and urban designers, work to define and promote good public space (Project for Public Spaces 2020). The following diagram explains their approach, dividing "place" into four categories; Sociability, Uses and Activities, Access and Linkages, and Comfort and Image. Highlighted in red are subcategories identified that the institutions of the site currently lack.

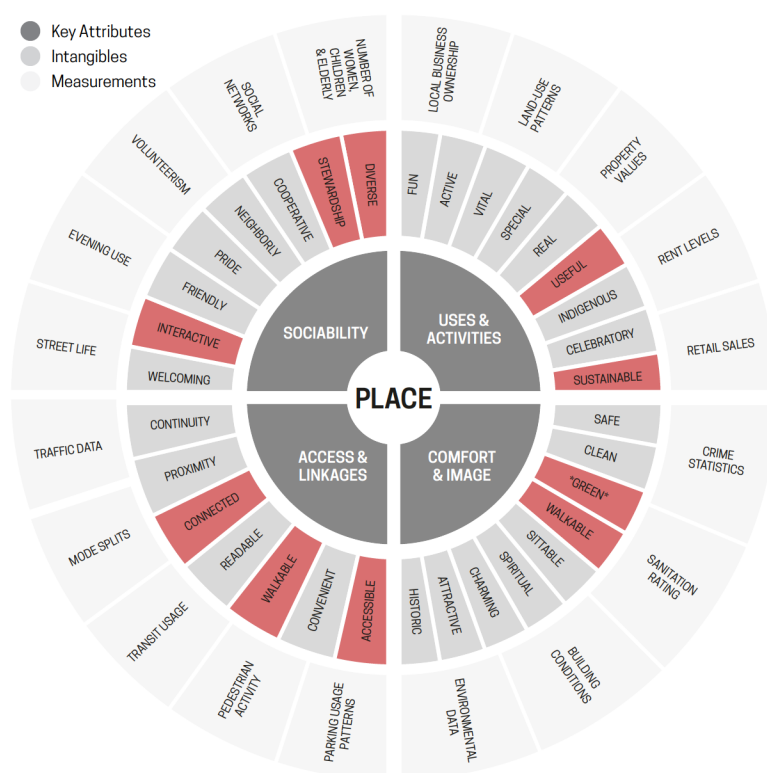


Figure 27: Diagram of what makes successful "place". (based on Project for Public Spaces 2020)

Dissecting the Site

Identifying Seasonal Uses

As a Canadian city, life within Halifax is set by its drastic shifts in seasons. With a wide margin between the hot summer months and the frigid cold of winter, outdoor activities become limited as the cold sets in. Thinking from the perspective of landscape and plant life, it can be further simplified into two seasons; the frost and the frost-free season. In Halifax, this divide forms two almost equal parts to the year. As the grass fields of the Commons begin to die, so too does much of the activity. By laying out the activities based on their season, we can see how little programmed use the Commons provides for over half the calendar year.

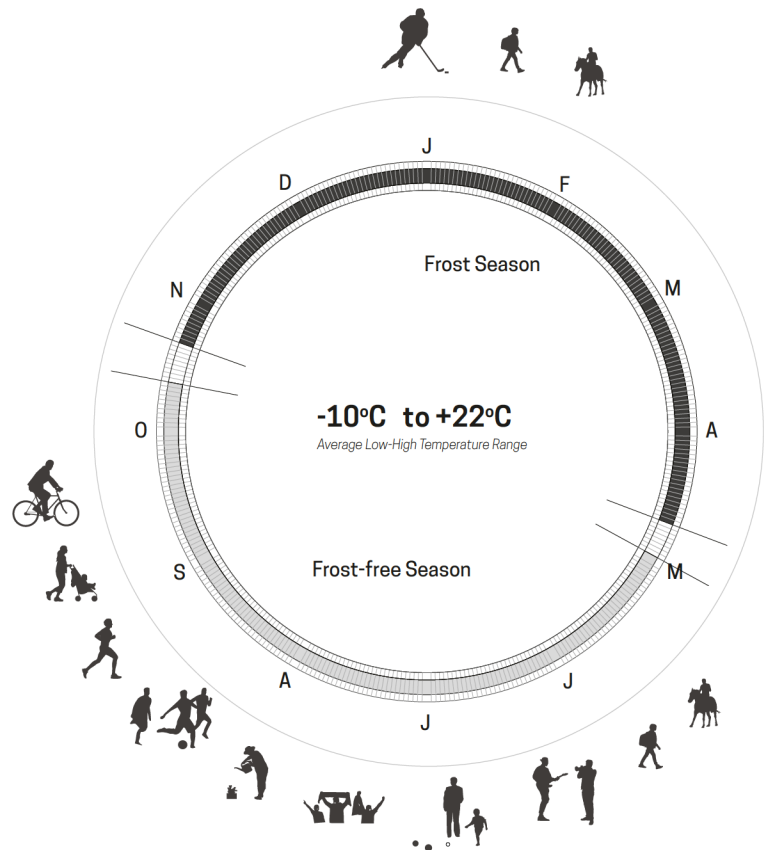


Figure 28: The temperature change between the two main season of Halifax; the frost season and the frost-free season. Mapping how the current characters of the Halifax Common align.

Exploding Isolated Institutions

The next step is to further examine each institution on the specific site. Having a long and valuable history in the area, each of the six operates independently. This fragmented assembly causes the site to be inaccessible to many and limits pedestrians' abilities to cross, forming a block that then must be circumnavigated. By exploding each into the sum of their parts we can observe and infer where overlaps and redundancies may exist. Washrooms, services, heat, performance spaces, and exhibition spaces can be reconsidered to serve multiple roles.

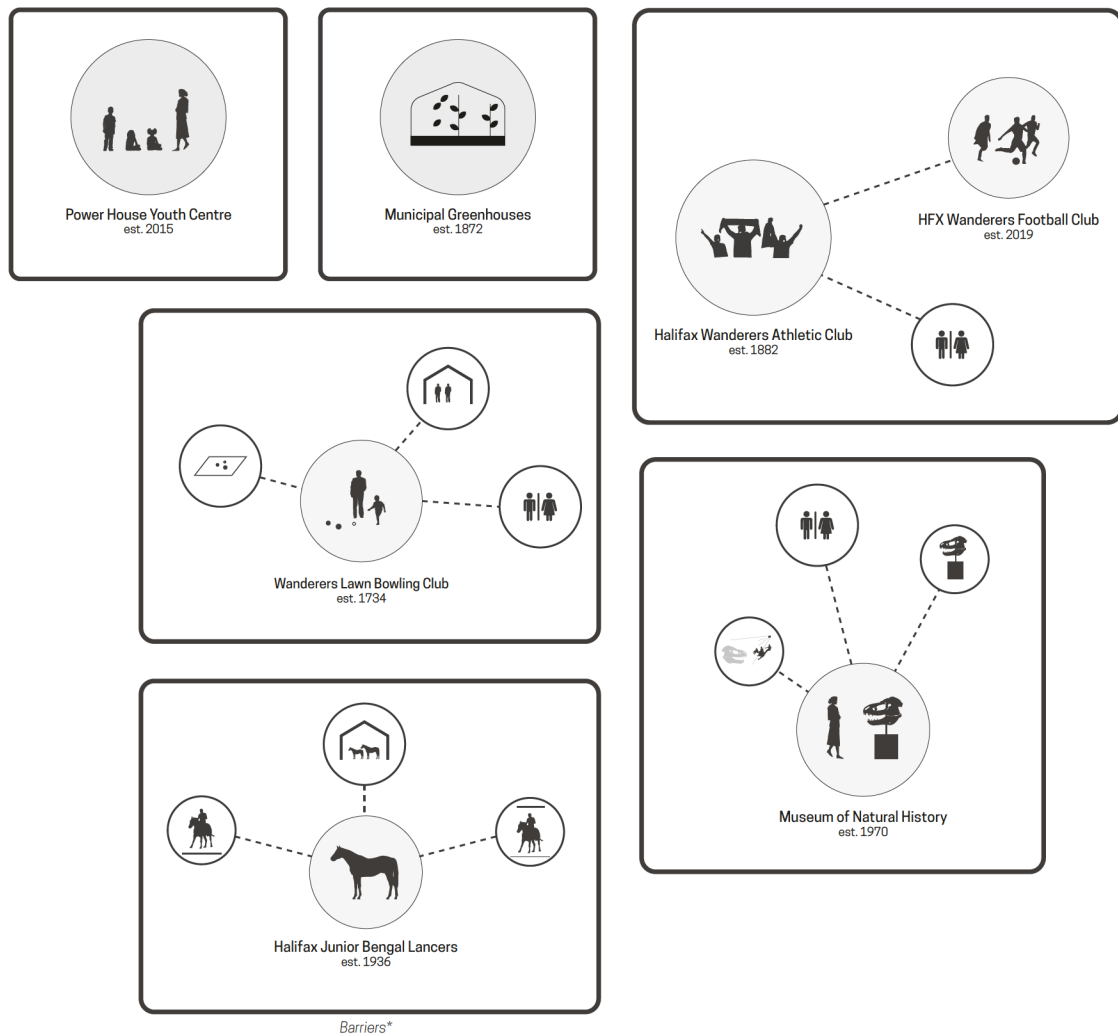


Figure 29: Current institutions exploded into their basic programs. Borders represent hard divisions constructed through fencing.

Timeline of Circulation

The site was not always so fragmented and segregated. In the early days of the Commons, a brook ran through most of the peninsula, exiting into the harbour. Two paths followed what was called Fresh Water Brook on either side as it cut across the site and flowed into the public gardens. After being diverted into a system of pipes, the site was then transformed (Glen, Mickillop and Smith 2018). The proposal seeks to eliminate all fences and provide an open space, where pedestrians can once again flow through the site unopposed.

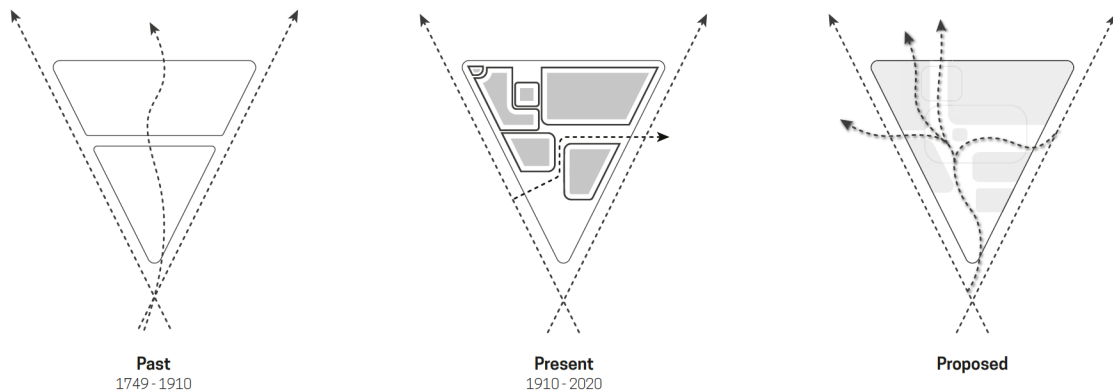


Figure 30: Proposing a restoration of a direct but flexible link between the North Common and the Public Gardens.

Theories of Assembly

Collage City

Architectural historian Colin Rowe, in his 1983 book *Collage City*, advocates for a restoration of the “speculative pleasure” of the city walker (Cutler 2010). He argues that instead of thinking of the building as objects onto themselves, having individual structures be part of a larger assemblage creates a better experience for the passersby. Rowe was critical of the Modernists movement and its tendency to advocate for “towers in parks”; buildings that encouraged roaming as a form of circulation between isolated buildings (Cutler

2010). He instead believed that the compact blocks seen in the cities of renaissance Spain or the dense streets of Ancient Rome created a richer experience as one passes through. A designed route creates a journey of discovery as new things are revealed only as one travels through the space (Rowe and Koetter 1983, 68). Using these ideas, the proposed block is made up of a series of reveals, allowing the pedestrian to engage with the “collage” of institutions through key glimpses into each during their journey. This collage method contrasts the current setup of the site and better facilitates cross-programming.

Fun Palace

When considering how each of the distinct programs should relate to each other, adaptation and flexibility are key. Cedric Price, an architect and writer, with his speculative proposal “Fun Palace” introduced original ideas of circulation and organization as he sought to create a “laboratory of pleasure” (Price and Littlewood 1968, 130). This was a space for events that could shift and adapt to its program, weather, and users to create a place for both formal and spontaneous expressions. He was critical of creating over-formalized spaces, with redundant buildings acting as “a straitjacket to total use and enjoyment” (Price and Littlewood 1968, 129).

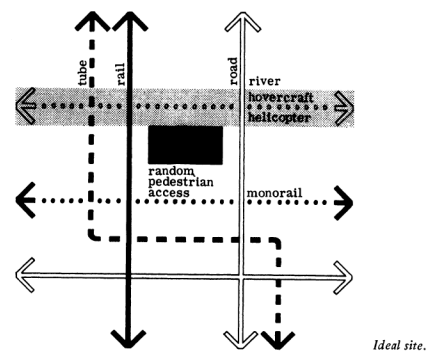


Figure 31: Captioned “Ideal Site”, this drawing shows proposed transit paths serving the site of the Fun Palace. (Price and Littlewood 1968)

His model described the ideal site as one located amid a series of urban circulation flows, easily accessible from a variety of modes. In both plan and section, temporary facades and sliding doors would allow spaces to expand and retract to facilitate a wide range of use. The proposal acts as a framework for use rather than a purposed built structure. Much like the collage city, the meandering circulation was intended to

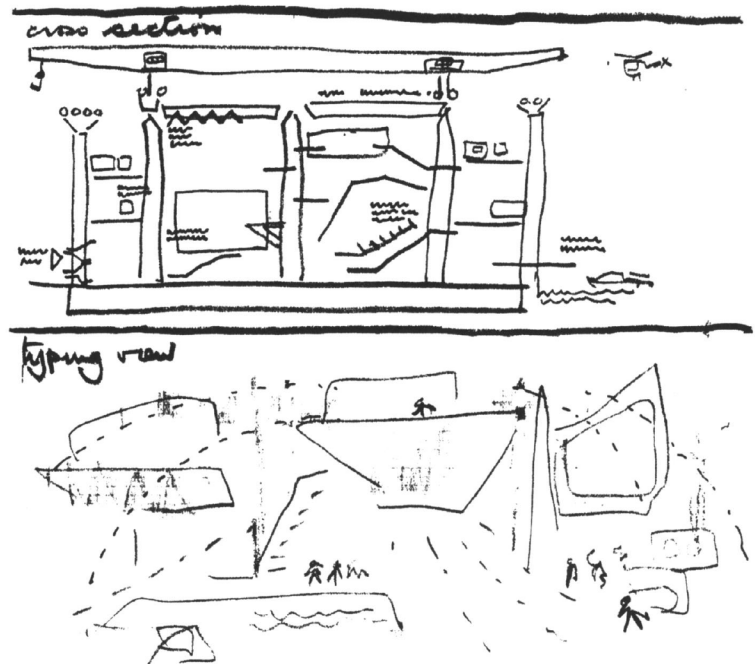


Figure 32: Sketches from Cedric Price's original notes. Archived at the Cedric Price Archive, Canadian Centre of Architecture, Montreal. (Matthews 2006, 44)

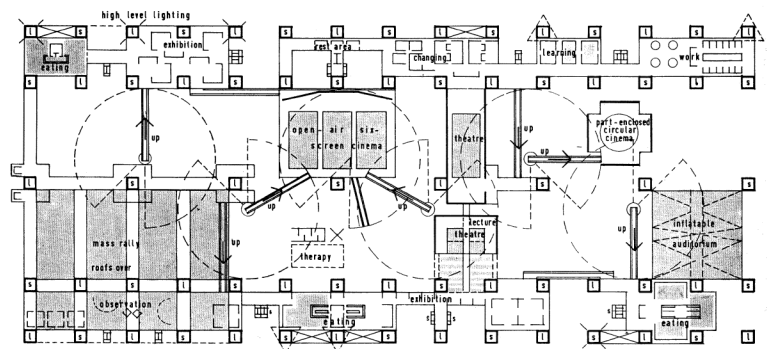


Figure 33: Plan view of Fun Palace, showing adaptable thresholds. (Price and Littlewood 1968)

encourage a degree of involvement and engagement as one would pass through.

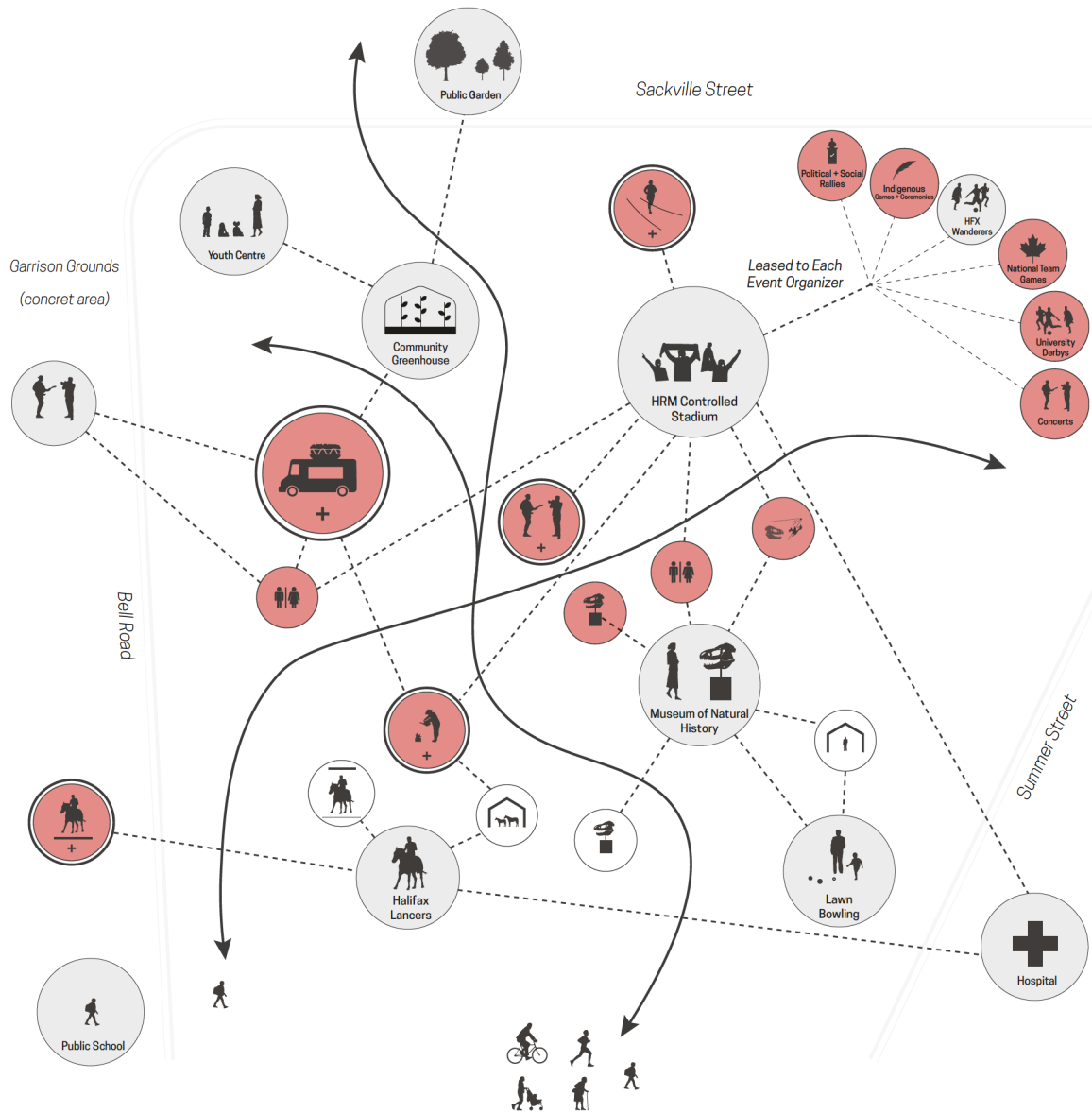


Figure 34: New linkages and circulation paths connecting the various users and programs on the site. Highlighted in red are new opportunities and programs added to the site.

A New Reassembly

After having analyzed the institutions and considered expanded uses, the block can now be collaged back

together.

The stadium component is no longer so prescribed, but rather a structure to host a wider variety of events and users. During the frost-free season, it is leased out by the city for social rallies, concerts, and sporting events such as rugby and soccer games that could be at the university level, national team fixtures, amateur level competitions, and the Wanderers professional development games. The Museum has shared washrooms and expands out beyond its footprint. An underground addition containing a new gallery space, and uses the surrounding park to host spill-out exhibitions with rocks, fossils, and plant life. The building also provides a sheltered space for the lawn bowling club, with shared use of its interior amenities. The Lancer's indoor and outdoor riding spaces are visible and with the outdoor paddock relocated across the street next to the Garrison Grounds, the horses once again crossing the street restores the interaction the public once had. Further exchanges between the greenhouses, the urban gardens, the youth centre, the flexible amenity zones, and the neighbouring hospital, public school, and the public gardens are encouraged.

The new circulation paths weave through the site, connecting, passing, and facilitating each institution. (see figure 34) One can now move from the North Common to the Public Garden by passing through the site, with moments of pause, rest, and interest along the way. Conversations between gardeners, stable attendees, tourists, dog walkers, and the homeless are promoted as one occupies the integrated block.

Chapter 5: Design Proposal

This thesis uses the circumstances and conditions of a site in Halifax to test ideas that can be applied not only to stadium design but to a variety of typologies in cities around the globe. If future publicly-funded institutions are to better interface with the people, there needs to be a shift in how they are designed at various scales. While the architecture should be tailored to specific uses, a new level of flexibility is required. Using this principle, this thesis proposes three key objectives to design with at the meso and micro-scale; transparency, accessibility, and adaptability.

Transparency

This proposal takes the position that some activities within the public realm require some limitation to access due to safety, financial, and spatial concerns. Performers, curators, and artists often require pay to fill in for where government grants fall short. While this is commonplace within western society, the cost of admission can exclude many who cannot afford it. If such an event takes place on public land, transparency is critical. Allowing the passerby to take in the experience as an observer is key. While direct participation cannot always be achieved, having the sounds, smells, and sights open to the passerby starts to break down the hard barriers and better include others. This proposal acknowledges that during the small percentage of time an event is taking place, the open nature of the space must be maintained as much as possible.

Accessibility

Accessibility is what makes our space democratic. Public space, and as an extension, publicly-funded architecture should be as accessible as possible. Keeping the existing institutions on their downtown location ensures access is not limited to those privileged to own personal vehicles. Existing transit routes already provide access as they flow into the downtown. Eliminating fencing from the site removes both the physical and visual barriers to allows pedestrians to flow through and observe the functions of the site.

Participation is key, as discussed earlier, both municipal and partner programs must make up for where the gaps in accessibility exist. Requirements for ensuring access for the underprivileged must be part of the terms of leasing any of the event spaces. Services must also be designed to be capable to serve a wide range of demographics, adjusting quickly to various users. Washrooms remaining publicly accessible, locker room showers available, and market spaces used to facilitate soup kitchens ensure that even the underserved members of our society can benefit from the space.

The reinvention of public library serves as an example of adapting public infrastructure to serve a wide range of users. Instead of remaining solely a place to house books, today many are designed as community hubs. Designed as open concept and flexible, today's libraries offer centrally located spaces to publicly meet, preform, gather and share. They also offer accessibly to technology, information, public restrooms and a warm space during the winter for the underprivileged within our communities (Young 2018). They citizens of Halifax have seen this in action as the Halifax

Public Library follows this model and its adaptable design offers methods for other public institutions to follow.

Adaptability

Over time, shifts in society and culture change and so too do citizens' desires for public space. Infrastructure must be designed to adapt from the beginning. Using the Fun Palace as an example, the architecture of the site is designed to adjust to the changes the seasons bring, but also be flexible to facilitate unexpected uses. The site has a history of adaption, with the sporting clubhouse being converted to a home for the elderly during a time of housing shortage. The surrounding area was also used for emergency shelter and housing in the aftermath of the 1918 Halifax Explosion. Having the ability and flexibility to adapt quickly to the needs of the public is critical for public space.

Fitting into Site

The site's location in the center of the commons forms a linkage between the open spaces of the North Common and the heavily treed Public Gardens to the south. It occupies the valley flanked by the Halifax Citadel to the east and Camp Hill (now the hospital and graveyard sites) to the west. The proposal strives to reduce its profile to allow a continuous flow of landscape and open space across the site. This is achieved by covering much of the program with earth, allowing the pedestrian to roam atop the architecture beneath. Taking design inspiration from the parking lot placed beneath Boston Common (the American equivalent to the Halifax Common), the earth is excavated to provide subterranean program and recovered with landscape (Greeson and Friedmann 1965). This design move also

harkens back to the design of the Citadel as greenery is meant to lessen the visual effect and blend into the earth, and form subterranean connections of services and spaces. The addition of the canopy is designed like a blade, as minimal in profile as possible to ensure sightlines through the site, creating a continuous visual connection to the surrounding spaces.

While the Commons is considered a park, much of the surface area has been converted to parking over the decades. By increasing the amount of both green space and trees cover, a smoother transition and connection into the public garden is achieved.

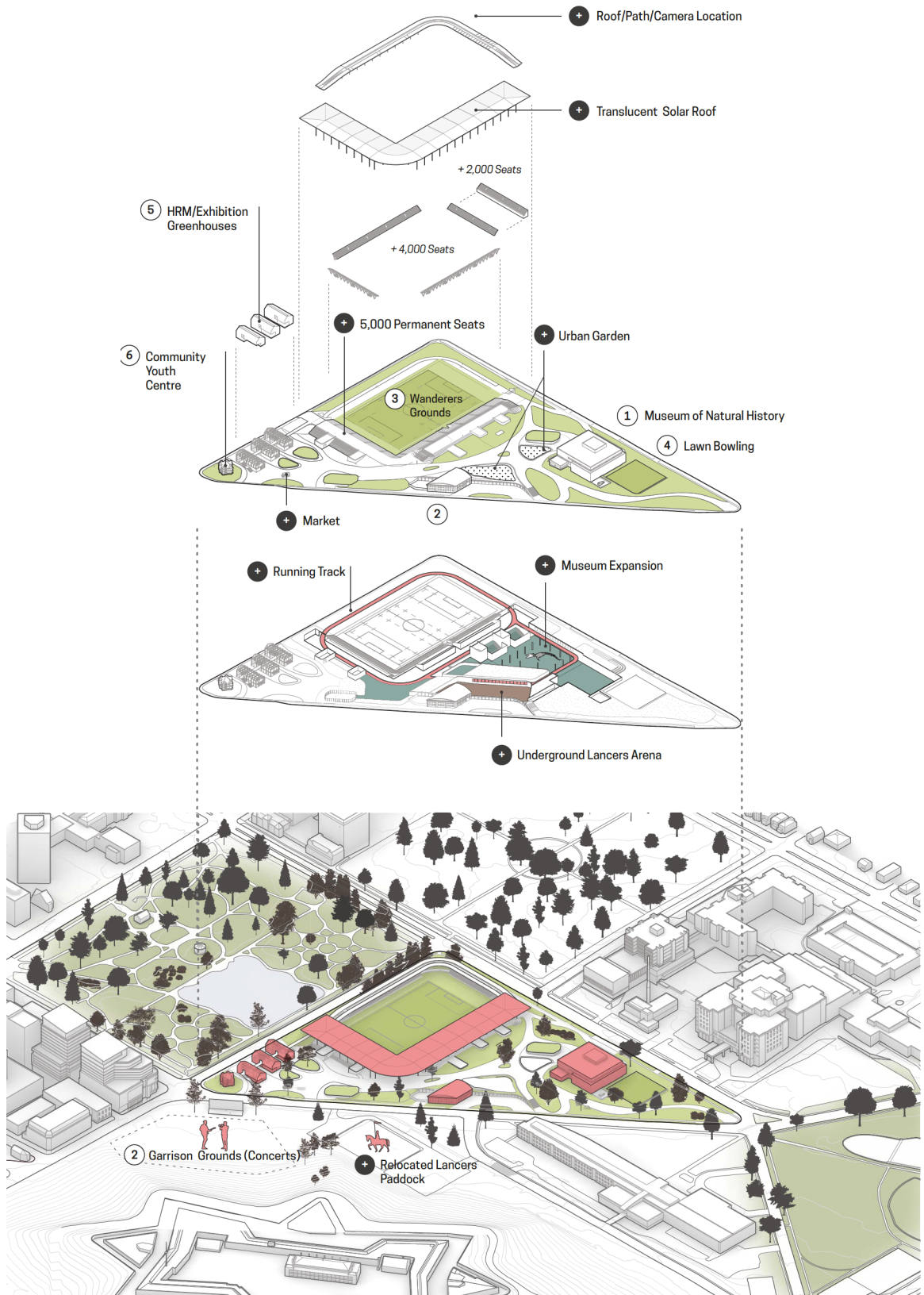


Figure 35: Exploded isometric drawing depicting the proposal and its relationship to the surrounding site.

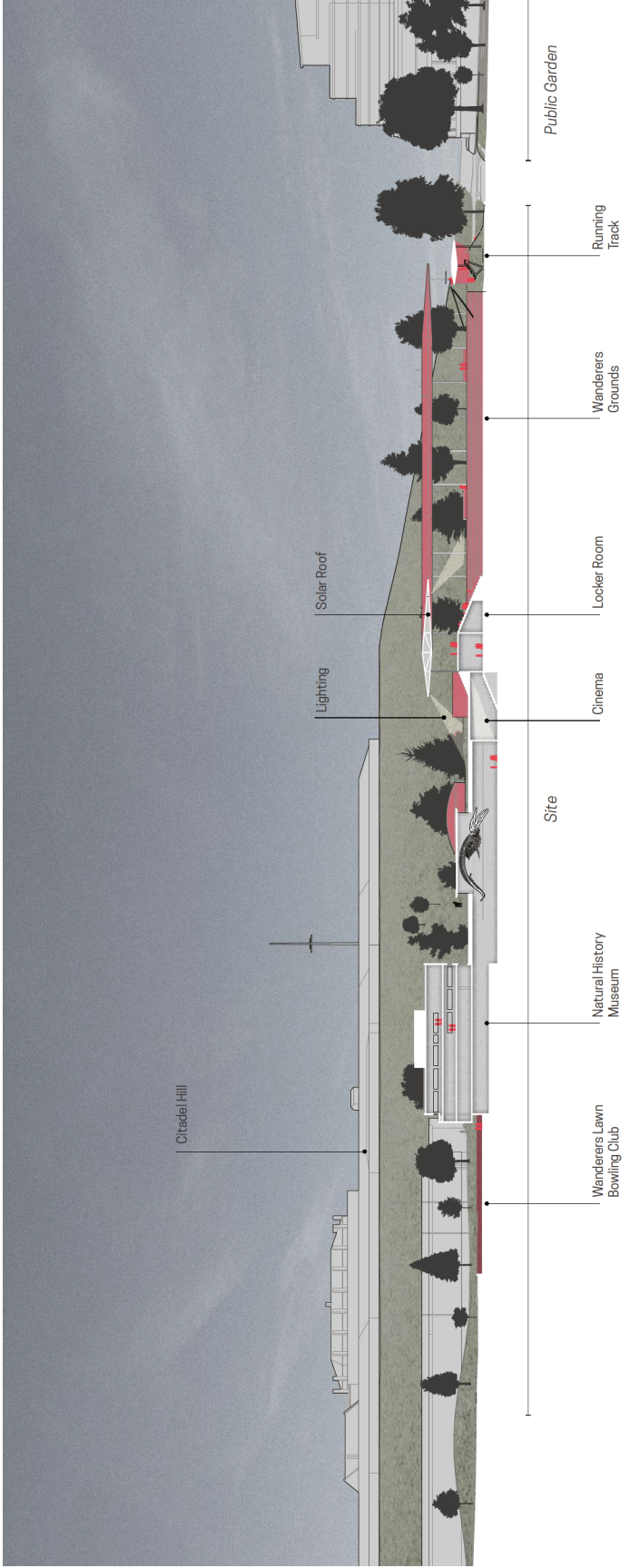


Figure 36: Long site section cutting through the proposal and the surrounding site showing the sectional relationship between the museum and the stadium, as well as the relationship between subterranean and surface programming. Citadel Hill can be seen in the background, and the Public Gardens to the right.

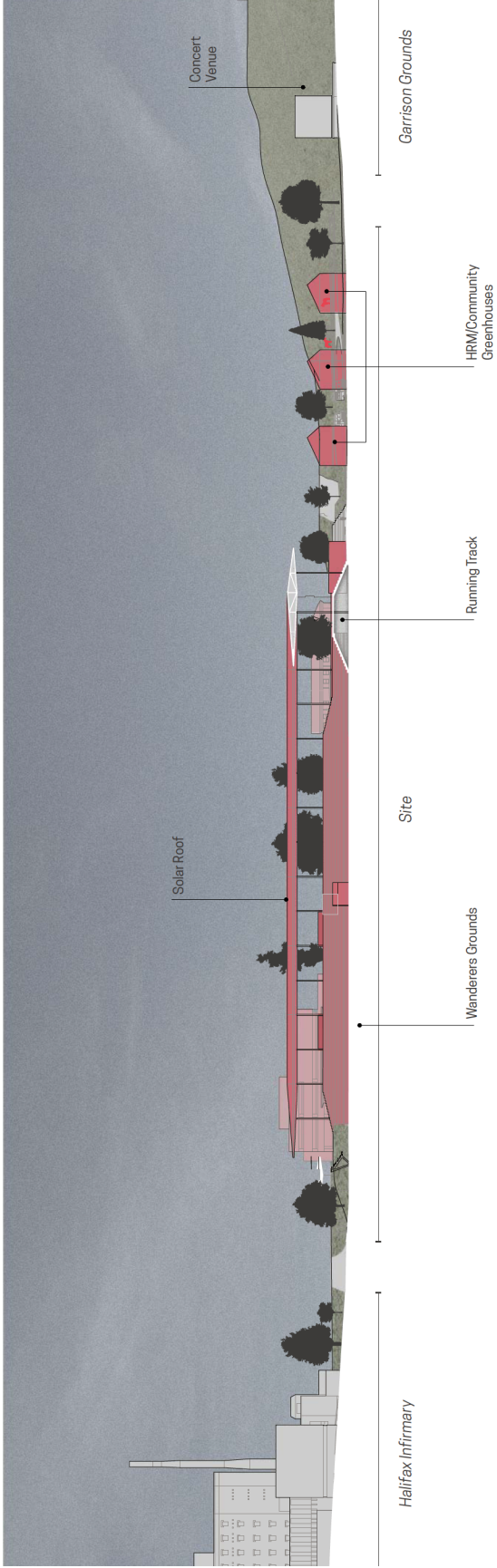


Figure 37: Site cross section. Showing the topographical relationship between the proposal and the site.

Adaptation of Program

While some institutions on the site operate throughout the shifting seasons, others must adapt and transform. The museum, Lancers' infrastructure, and youth center remain uninterrupted by the falling snow. However, the remaining programs must adjust to find a new purpose.

As the thesis seeks to use stadium infrastructure as a method of examining public use and access to tax-funded buildings, the notion of the stadium itself must be completely flexible. If we consider it to only be a stadium when a game is taking place, we are left with something else for the remainder of the year. Using this logic, the main elements of the added architecture are designed to be simple and easy to adapt.



Figure 38: Members of the public tend to their gardens after the stadium seating has been converted to the community greenhouse for the winter months.

The two dominant functions of the terraces are to seat spectators during an event and form a place of community gardening. The Canopy is designed to both shelter viewers and enclose a space for growing. Translucent polycarbonate panels cover the pitched roof, with embedded photovoltaics absorbing the sun's energy during the day.

As the winter months set in, a series of vertical trusses and translucent panels are attached to the perimeter of the canopy. Seats are removed and planter boxes are affixed to the south-facing slopes the terraces form. The community gardeners both on-site and from various points in the city now move their gardens into this new space. The arcade becomes a place to hold events and sell their fresh crops to the public. The large open space is also used by the museum, with plant-based exhibitions taking form within.

Beneath the stands, the corridor becomes a running track, passing through as it weaves through the site. The team locker rooms convert to change rooms and runners are now given the chance to exercise within a communal setting.

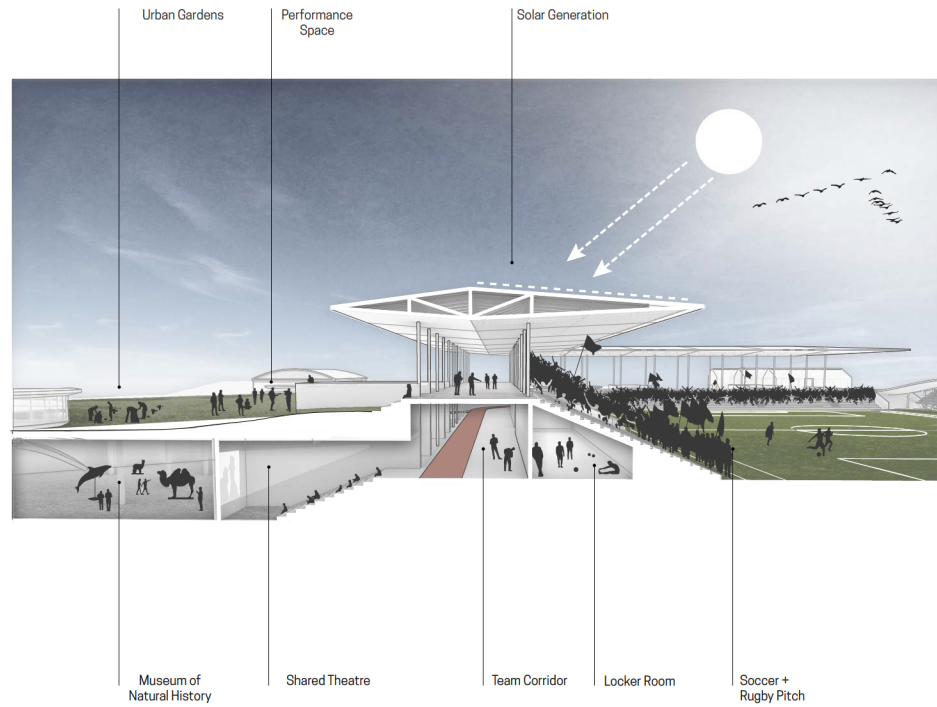


Figure 39: Section of proposal depicting uses during the summer months. The pitched roof collects energy as the summer sun beats down.

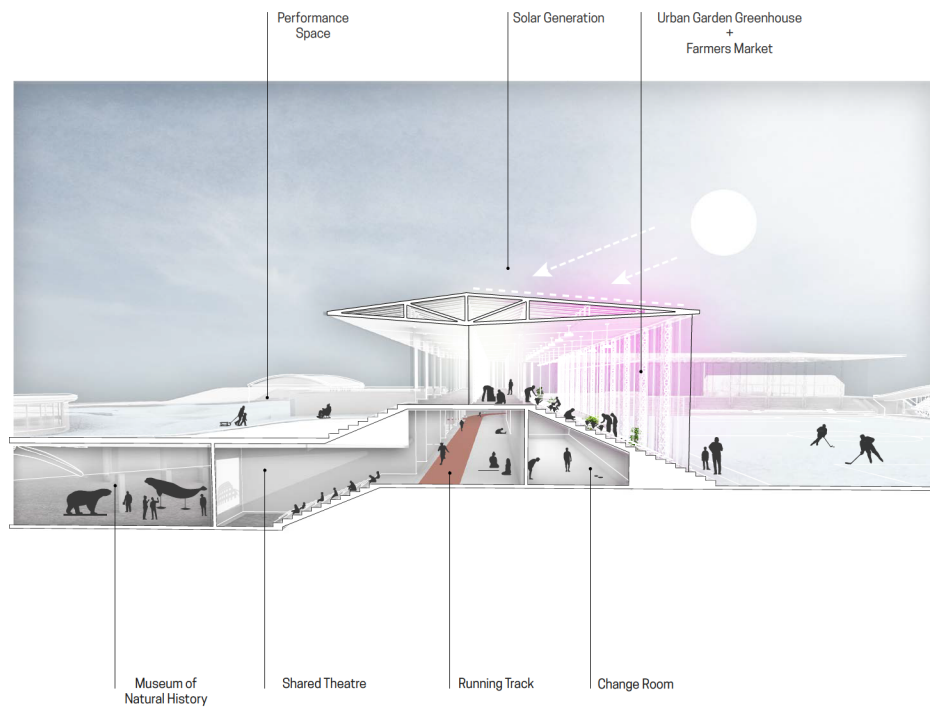


Figure 40: Section of proposal depicting uses during the winter months. The roof continues generating energy while the interior spaces are converted to among other things, a greenhouse and a running track.

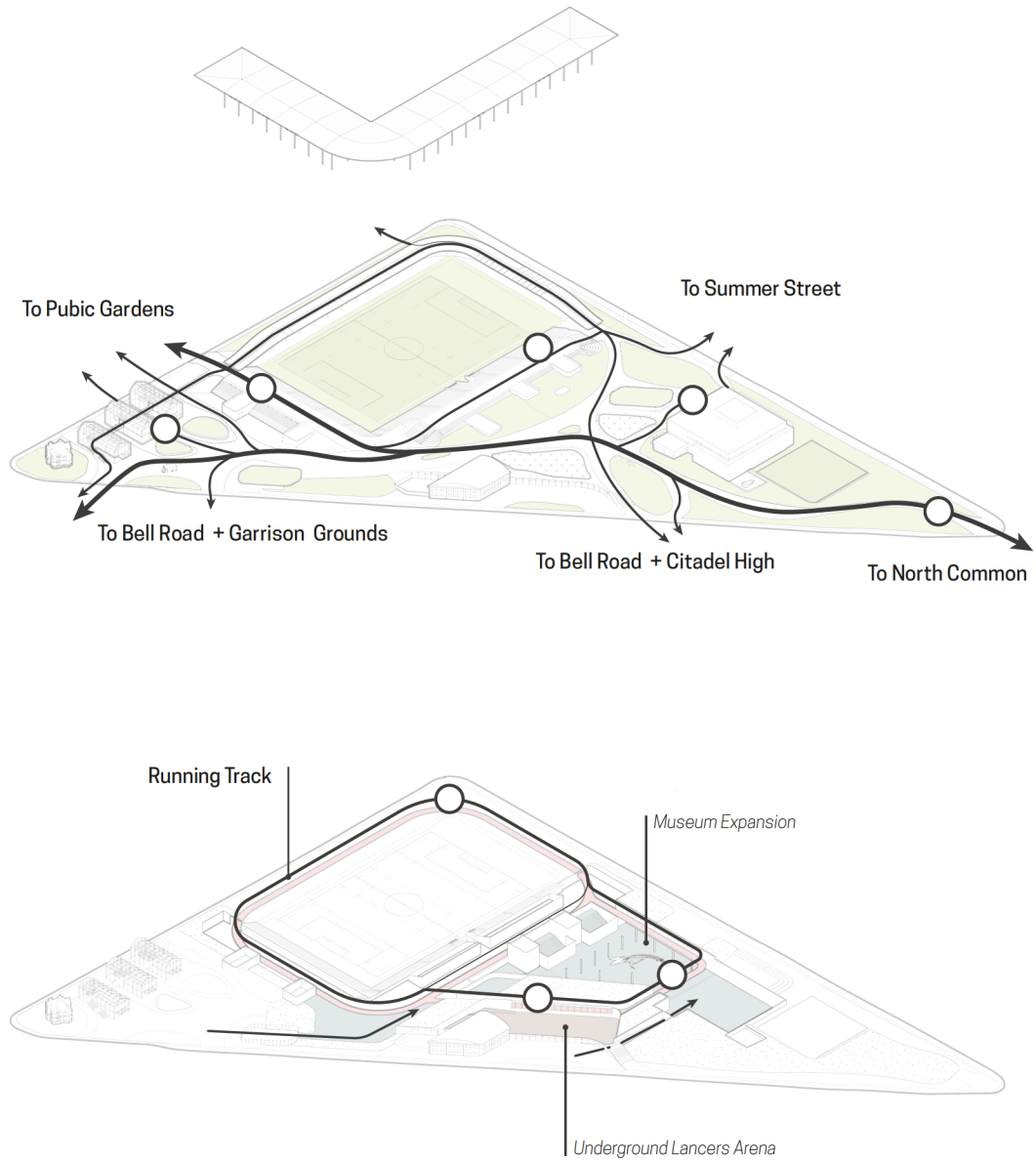


Figure 41: Isometric drawings highlighting circulation routes through the surface and subterranean spaces of the site. White circles mark locations of interest further explains in figures 36-44.

Circulation

Creating a new series of circulation routes and streams is achieved through two systems of movement, subterranean flows and surface flows. Surface flows are open-air routes that weave through the site linking the North Commons to the Public Gardens. Passing in close proximity to each of the institutions located on-site, various users are given glimpses into the spaces and activities happening around them.

The subterranean flows are sheltered from the environment and provide access to the service spaces and archival spaces of the institutions. A running track open to the public also runs beneath the landscape, through the museum, by the Lancer's indoor arena, under the stands and out into the exterior, passing alongside the public gardens before looping back into the museum. This public route echoes that of the surface flows by also facilitating visual connections between spaces and users.

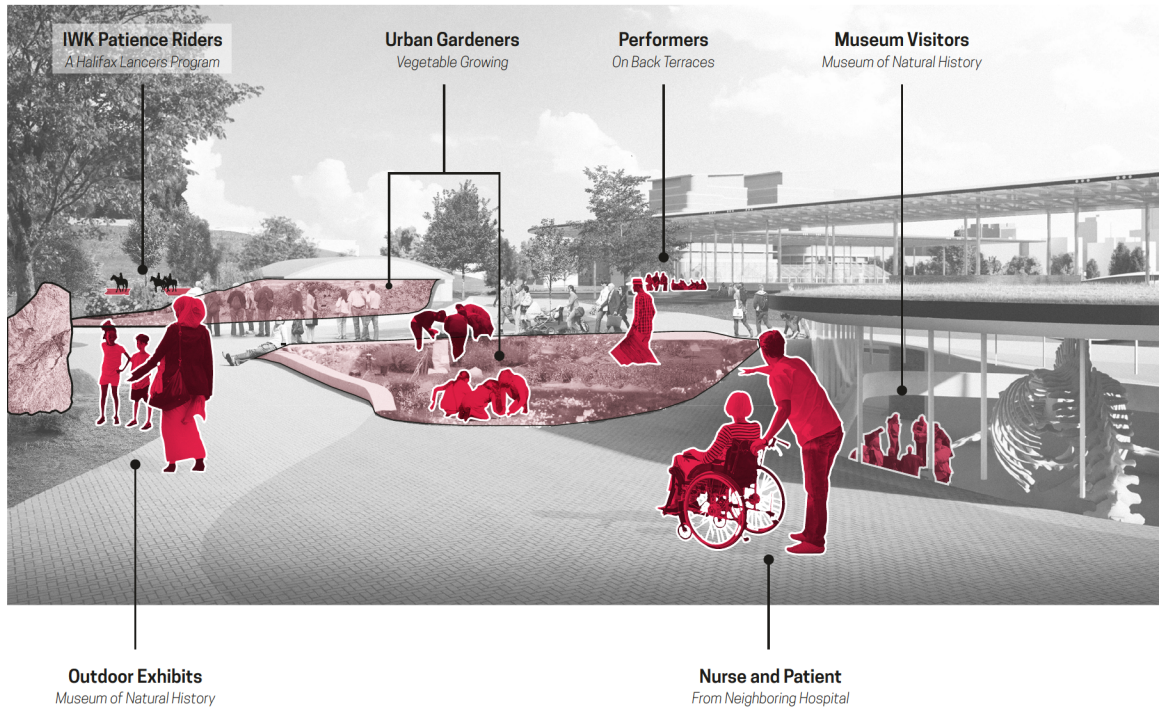


Figure 42: Summer users seen in the garden spaces located in the centre garden-space atop the museum addition .

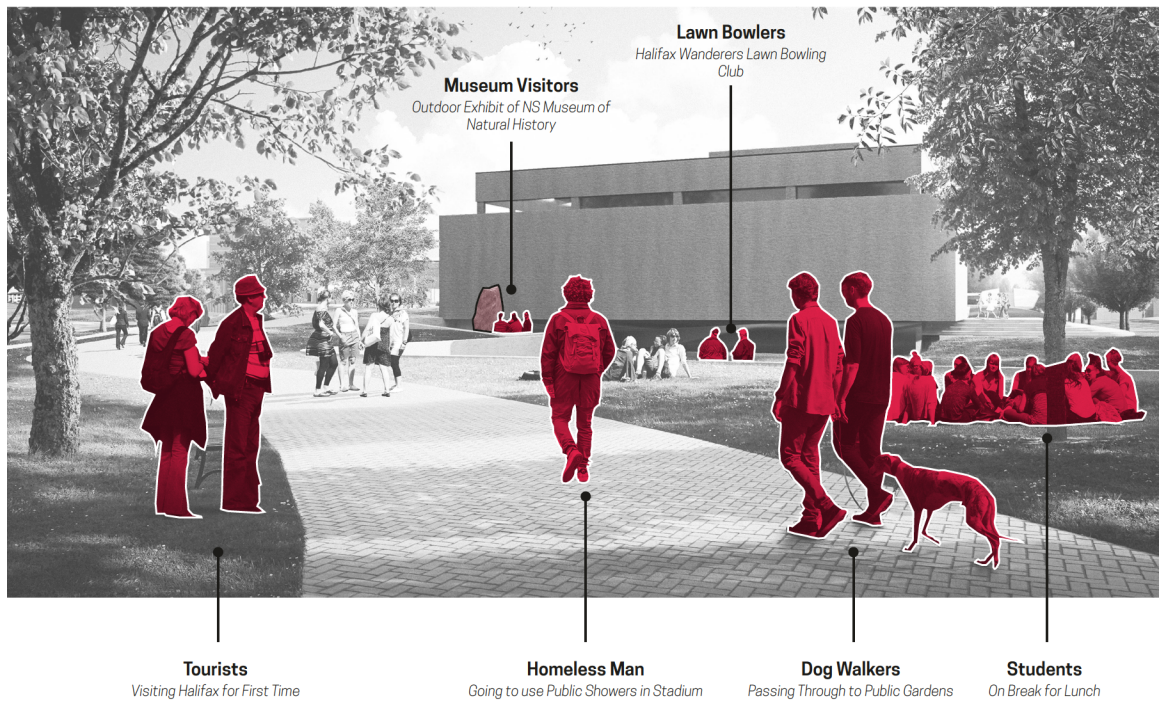


Figure 43: Summer users seen as one enters the site from the direction of the North Common.



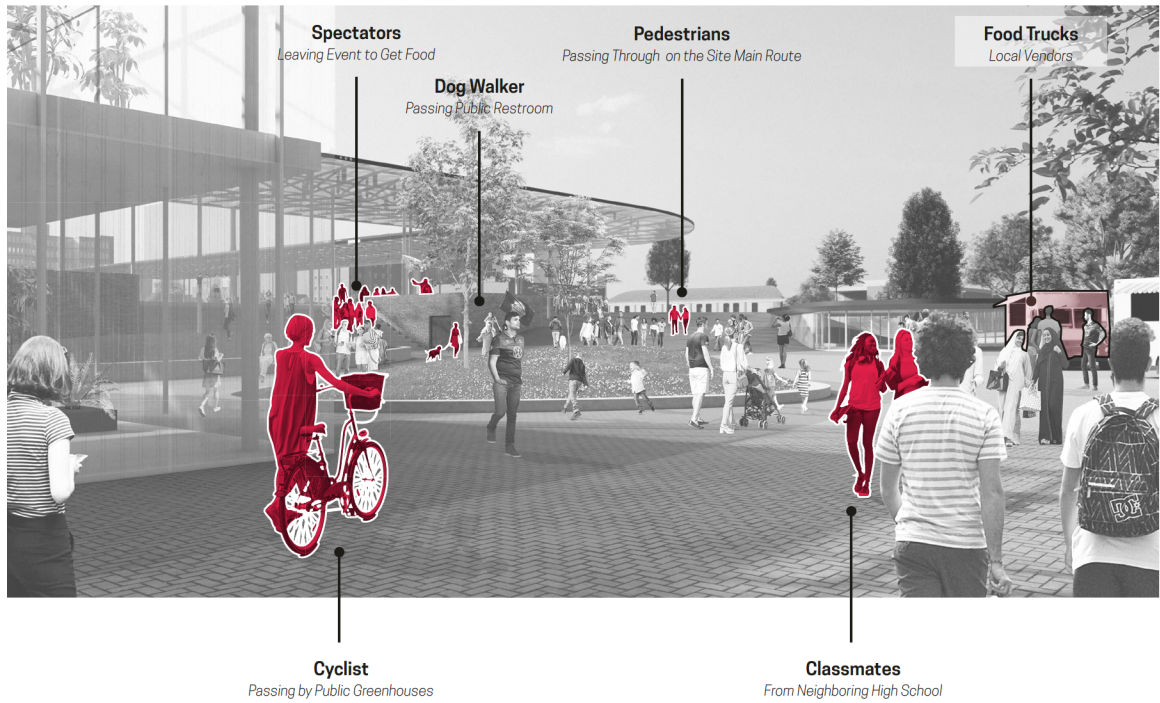


Figure 44: Summertime crowds and pedestrians gather and cross the market and year round greenhouses.

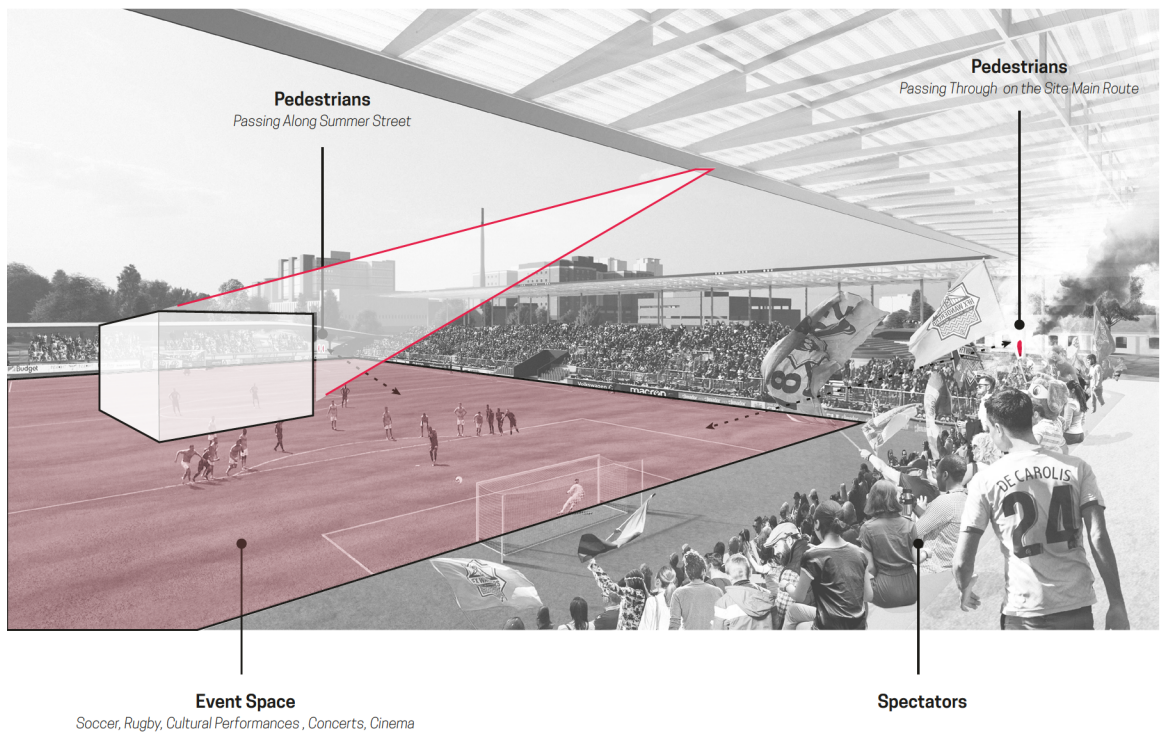


Figure 45: A crowd of spectators gather to take in an event.



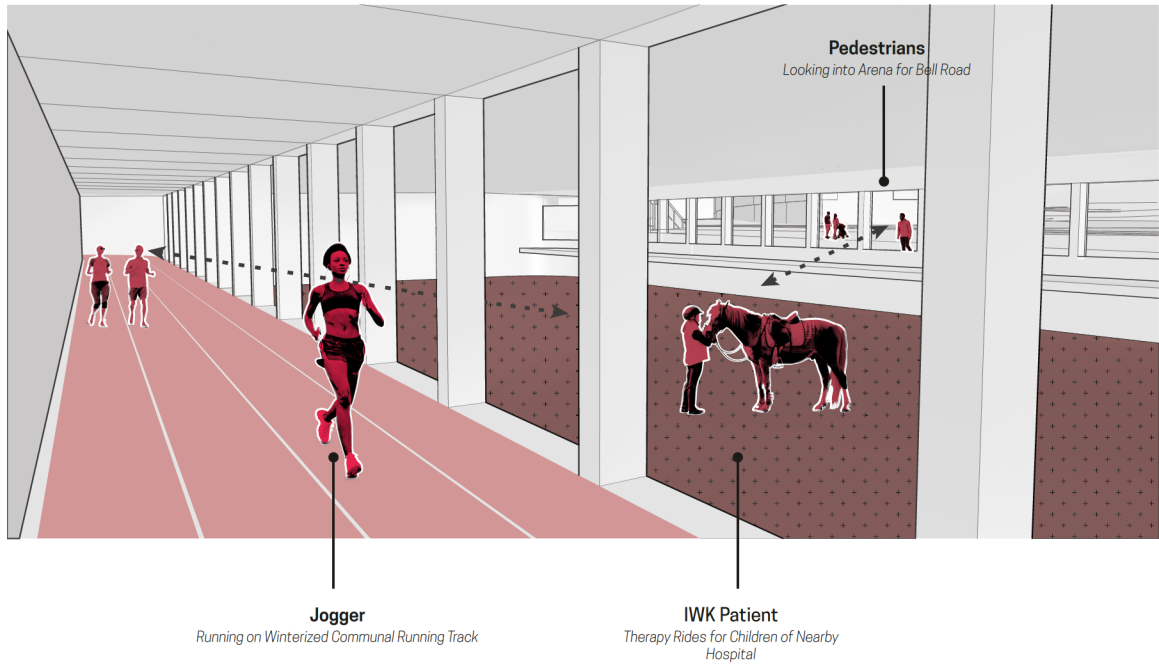


Figure 46: Joggers on the communal running track pass the Lancers indoor arena during the winter months.

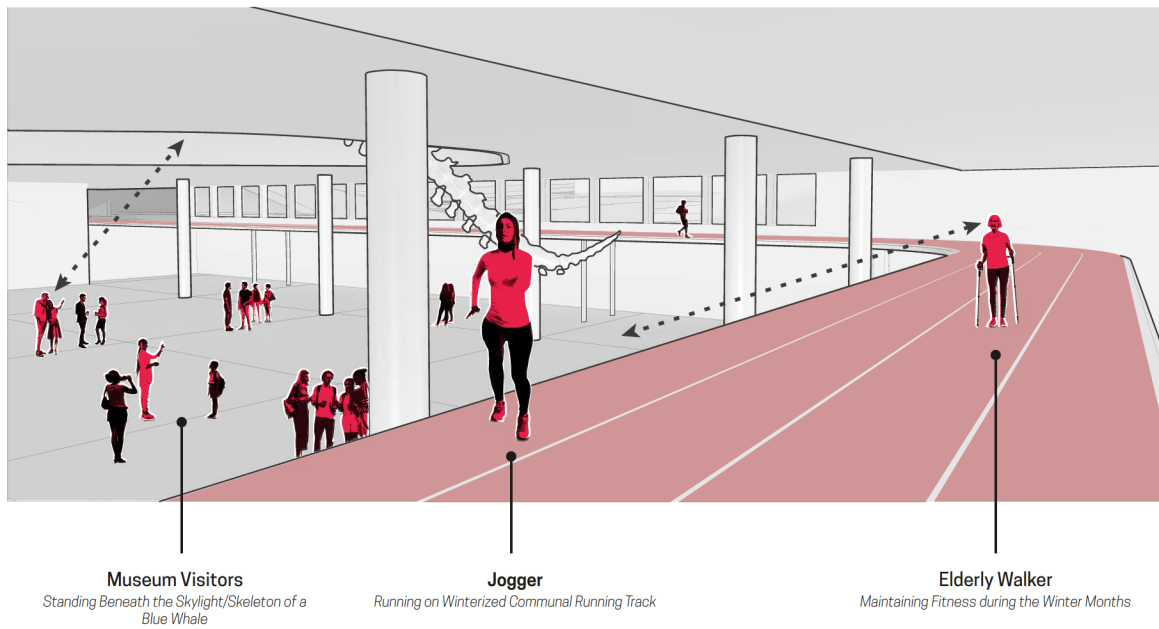
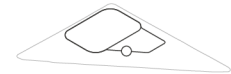
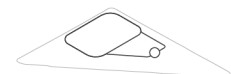


Figure 47: Users on the communal running track pass through the museum addition.



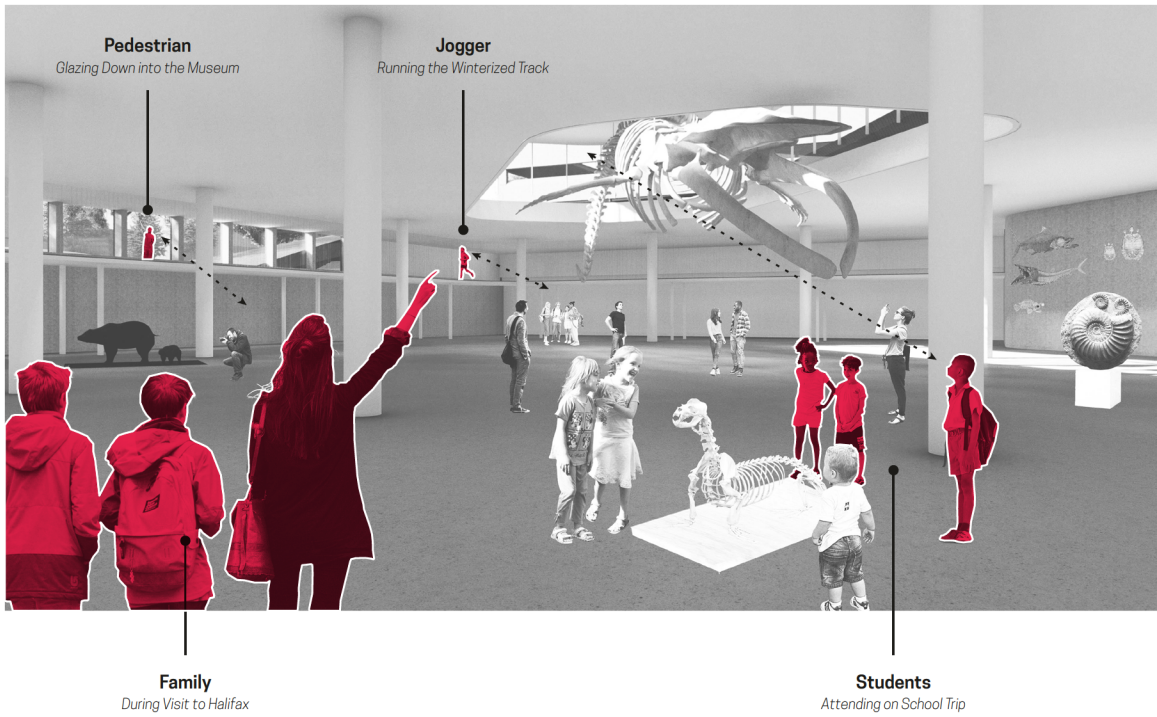


Figure 48: Visitors to the museum are given glimpses of the outside and watch as joggers pass through the space.

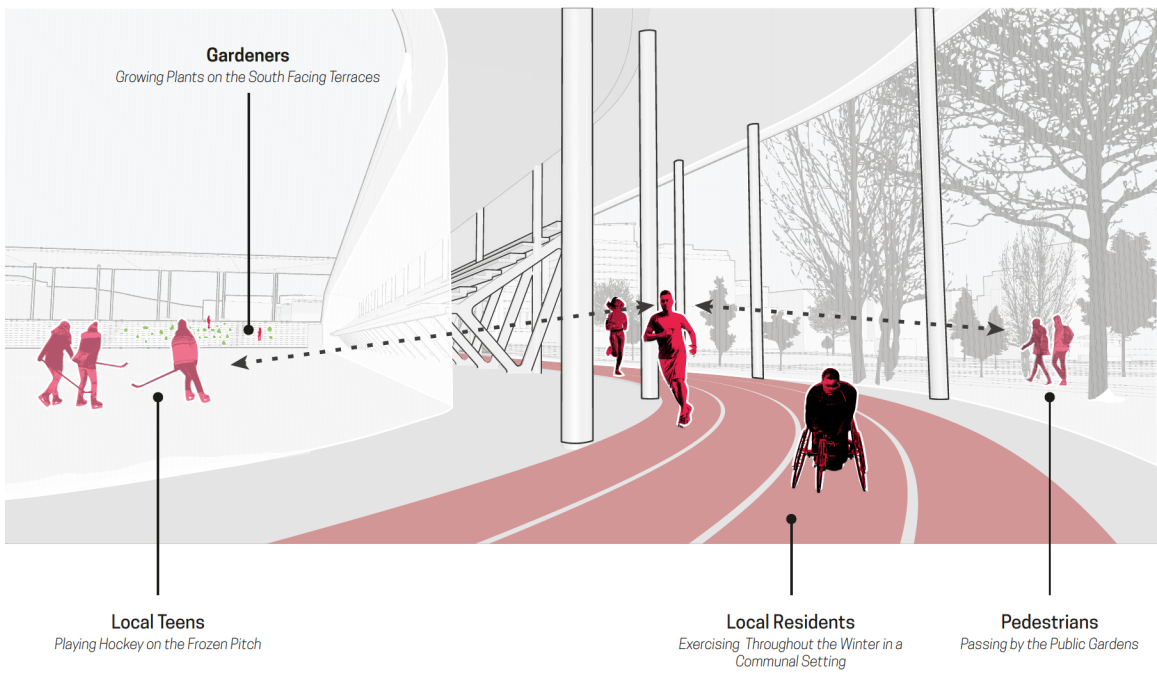
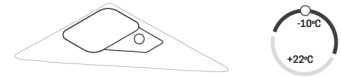


Figure 49: Community members jog through the site, sheltered beneath the canopy. The acts of exercise are once again made public during the winter cold.



Exchanges

The spaces and institutions of the site share many similarities concerning programmatic and energy requirements. The site has always had a level of exchange occurring between spaces as the greenhouses and service depot serve the surrounding commons. Plants move from the site's greenhouses to the public garden as the spring turns to summer. This exchange is reversed when the seasons move back into winter. Given the proposal's new configuration with its collage of linked institutions, these exchanges can be further expanded. The translucent canopy of the stands is pitch and south facing to allow the sun's energy to generate electricity through a system of embedded photovoltaics. This can power an event but also be shared with the museum, Lancer's facility, and the youth center. It can also be sent to the neighbouring hospital to assist with their large power demands.

The community gardens both on-site and located throughout the city are relocated into the stands during the winter. Manure from the Lancer's serves as a natural fertilizer, and the overflow heat generated by the various enclosed buildings can be put through a heat exchange and pumped up and into the greenhouse. The proximity to the neighbouring hospital and the public high school allow a steady exchange of thought as the museum helps educate the students and provides exercise space for hospital patients, staff, and visitors.

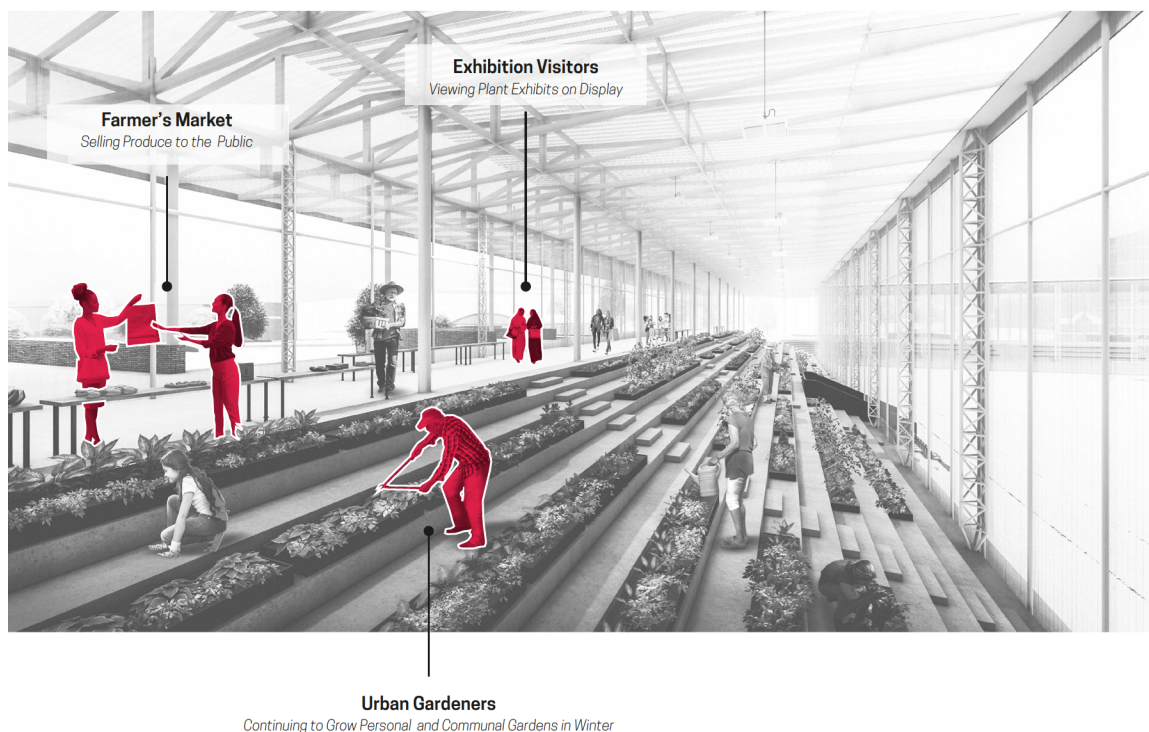


Figure 50: Users within the community greenhouse work, buy, and observe the greenery as the communal acts of gardening are extended into the winter.



Figure 51: A bird's eye view of the site during a cold winter night. The ultraviolet light of the greenhouse creates a new beacon on the Halifax Common.

Chapter 6: Conclusion

If publicly-funded venues are to truly serve the people, then changes to design thinking and requirements of programs will need to be enacted. Using elements of stadium infrastructure to test methods of considering how a change may work in theory and practice was a purposeful challenge, as these venues have come to represent much of what is wrong with venues of entertainment and exhibition.

Making spaces as inclusive as possible is a challenge that designers, governments, and society at large must undertake if we are to preserve public space. Methods of collaging programs, sharing energy, and facilitating connections through design are steps towards creating better spaces. Transparency, accessibility, and adaptability are elements needed to ensure a democratic future for our shared space.

As this thesis is set with an existing context both physically and politically, time will only tell how the site is used and how it will affect public life in Halifax. While global stadium and exhibition architecture seems to be headed towards further privatization, perhaps a shift in thinking could lead us back toward a public typology.

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