
SAWH METHOD 2024

University of Edinburgh

Edinburgh, GB

'Decoding the City'

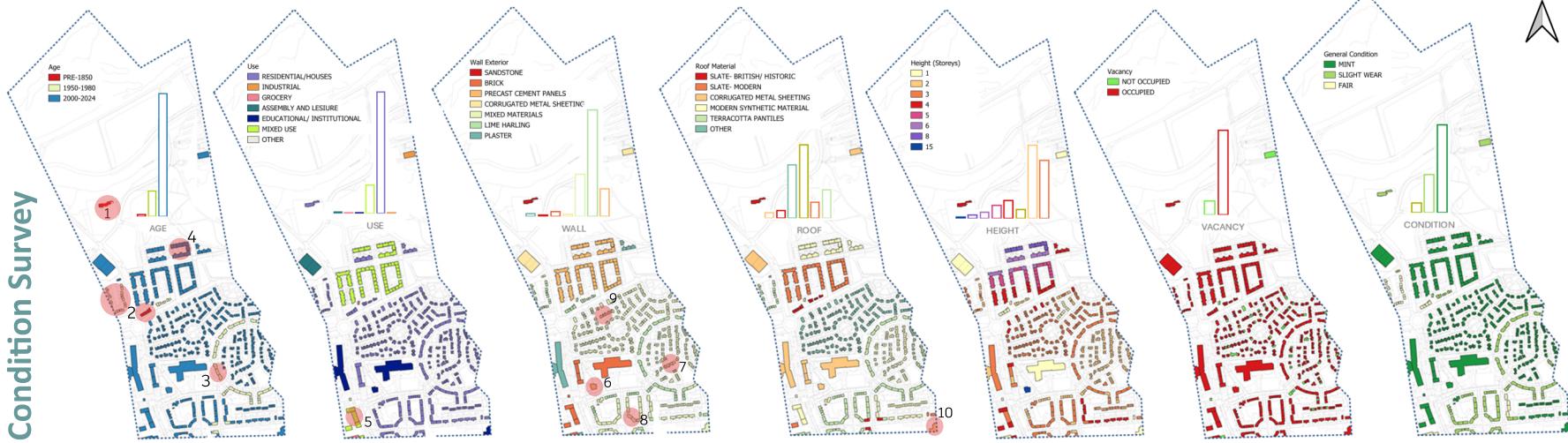
Method description by Ruxandra-Iulia Stoica, University of Edinburgh

"This project aims to introduce an integrated urban conservation approach and methodology. The focus is to convey an understanding of cultural values within the historic urban environment, and their role for truly sustainable development. This understanding enables the identification, analysis of development, and interpretation of the cultural significance of the many elements, tangible and intangible, that make up the historic urban fabric. This exercise will provide first-hand experience in understanding the particularity of an urban area as a complex organism, therefore the emphasis will be as much on the nature of the community and its needs, as on the physical form within which its life takes place. These are inseparable and also in continuous change, their interplay being the essence of an urban area's character.

The project will analyse the history of an area, its topography, use, streetscape and architectural character (all graphically illustrated), as well as assess its overall development and relationships within the city. The particular strengths and weaknesses of the area will be discussed, resulting in recommendations for the enhancement of the character of the area."

(edited for length by JW, SAWH)

Condition Survey



Building - Age



Among all the building only 1% belong to before 19th Century, one of them being an A-listed building.

14% of these tenements were constructed in the 20th Century and the remaining tenements are recently built, including the sports complex and educational institutions.

Usage

83% of the zone is used for residence. Based on the residential used, the ratio for groceries and other amenities were found to be less than 20%. Whereas, the contribution of educational areas for these communities are well provided, so are the recreational spaces. There is scope of more gathering spaces like Plaza and grocery store for this zone.



Wall Exterior Material

This zone comprises of a very unique set of materials used for the exteriors. Sandstone, Brick, Metal sheets and pre-cast cement for the newer construction. Whereas, the old tenements built after the worldwars are lime harled and need maintenance since they are significant.



Roof Material

Majority of the residences and mixed-use buildings, upto 40% are covered with modern synthetic materials. The old tenements (20%) have terracotta pantiles. A very few houses were covered with slate. Most of these roofs were in good condition.



Height



Vacancy



General Condition



Views & Recreational Spaces



- Reclaimed land from the marshy land near berrie rocks comes under the conservation area and has been proposed to be used for waterfront spaces for recreation.
- The residential zone on the other hand has a few pocket playgrounds for the community. There are 3 such playgrounds in the area.
- The schools and other educational institutions have well planned playgrounds for outdoor activities.

Streetscape:

The site has well planned road network throughout. On the west is the Major road junction that is usually busy in the morning and evenings.

The west pilton road is the busiest, as it connects to the harbour. Most of the residential areas have vehicular access.

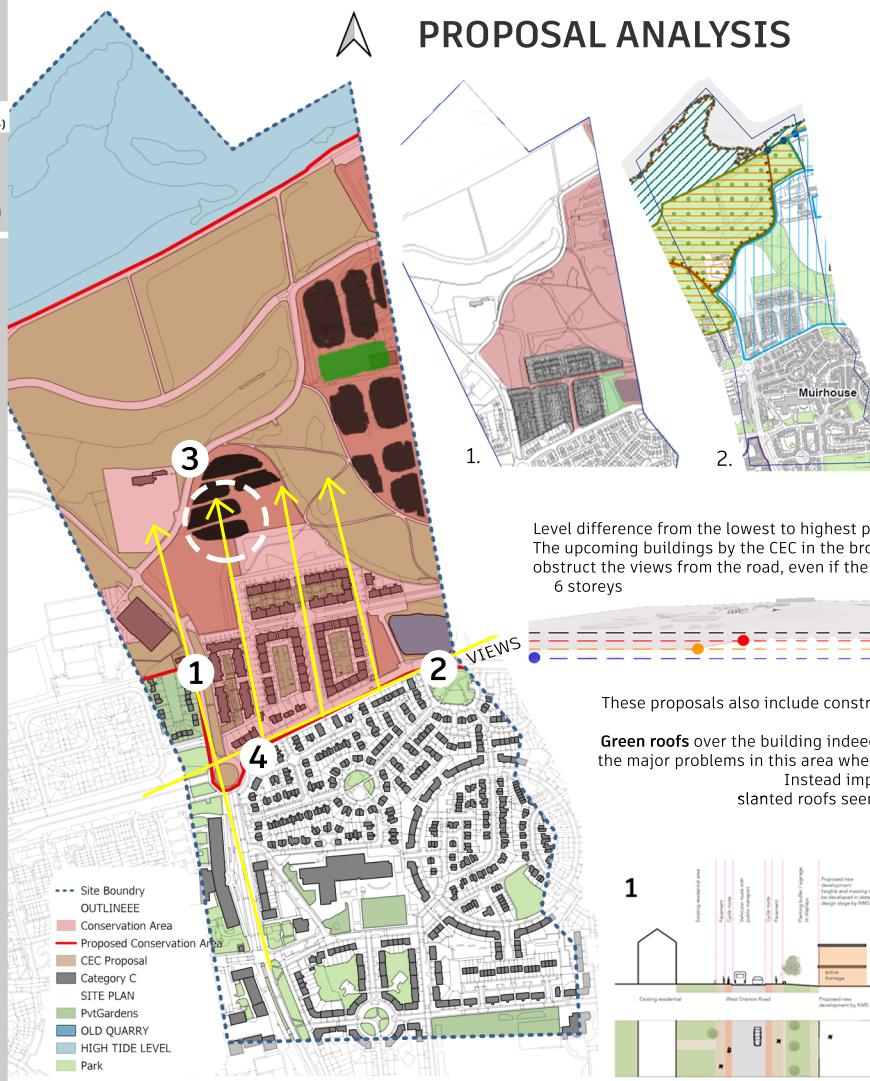
Pedestrian routes:

The west junction despite being the busiest route lacks proper pedestrian paths, crosswalks and cycle routes.

Signages and street lights are in a good ratio except for a few places in the residential areas.



PROPOSAL ANALYSIS



Council of Edinburgh City
Edinburgh College
Edinburgh Waterfront
Edinburgh Park/South Gyle
Green Belt
Countrywide Policy Area
Special Landscape Area
Site of Special Scientific Interest / National Nature Heritage Designation (Natura 2000 site and/or SSSI)
Cycleway / Footpath Safeguard

Env 1a, Env 2a-d

Env 4, Env 5

Env 6

Env 10

Env 11

Env 13, Env 14

Table 6, Table 8

RECOMMENDATIONS

WATER ACTIVITIES
Elevated platforms for views



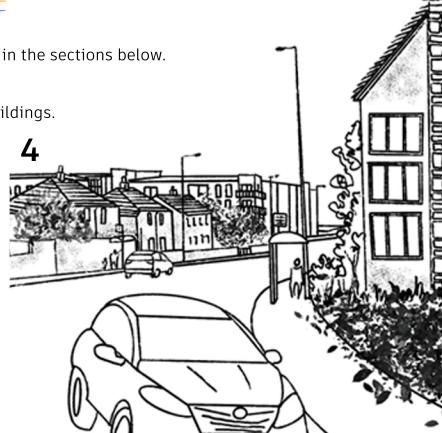
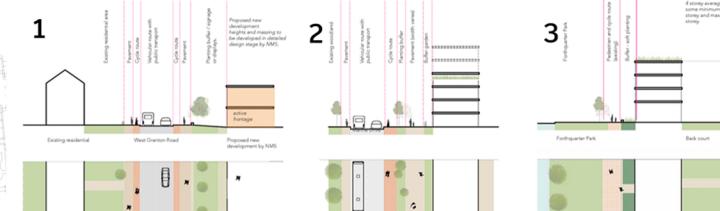
PLAZA/ HUB



These proposals also include construction of new pedestrian, cycle paths and bus routes as shown in the sections below.

Green roofs over the building indeed helps moderating the heat island effect, but dampness being the major problems in this area where rainfalls are 685mm a year, can cause more damage to the buildings.

Instead implementation of traditional slate on slanted roofs seems to be a better option for such locations.



CONSERVATION PLAN



Change in proposed bus route
This route from the estates of Royston House and demolished new granton house is historically significant and serene for the pedestrians. This proposal can be replaced by ferry routes from the shore.



New Building listing: Category C
Among all the building in this zone, only one is A-listed, whereas 128 of them should fall under Category C to be protected and given importance, since they belong to a certain era and style of construction.



The new building materials guideline by the CEC includes Brick blocks, which might not be advisable for the humidity that builds up near the shore. Instead, lime-harled facades can be encouraged to compliment the older tenements of this area that signify its history. According to the residents, majority have expressed their disapproval of the modernisation of the neighbourhood.

RECOMMENDATIONS

SWOT ANALYSIS

Tangible Buildings

Strength

- Presence of Craigroyston house and traditional tenements adds value to the area.
- Adaptive reuse and mix-usage of buildings

- Maintenance problems in the residential areas
- Preservation challenges: Balancing the need for modernisation
- Dampness in building
- Need for proper pathways

Weakness

- Multiple views of Cramond island
- Abundant recreational space
- Old quarry and beanie rocks being significant features

- Multiple views of Cramond island
- Abundant recreational space
- Old quarry and beanie rocks being significant features

Opportunity

- Ecotourism
- Marine life regeneration of the dolphins
- Water activities and transports.

- Heritage trails for history enthusiasts
- Educational programs to create opportunities for guided tours, lectures and workshops on various subjects.

Threats

- Urban pressures
- Gentrification
- Lack of awareness in people about the value of the area leading to neglect of the buildings

Landscape

Strength

- Existing community groups
- Volunteerism and community involvement in decision making of the proposals
- Cultural diversity

- Economic inequalities
- Imbalance in the ratio of residential areas and that of essential services
- Demographic shifts: Aging population and outmigration.

Weakness

- Seasonal fluctuations
- Improper infrastructure
- Environmental degradation
- Weak control of traffic

- Sustainable tourism initiatives by introducing water activities;
- Investing in social hubs and visitor centers

Intangible Community

Opportunity

- Community led initiatives
- Creating opportunities for economic growth in jobs through tourism and construction of the upcoming projects in/around the site.

- Rising housing costs
- Redevelopment pressures
- Political or social conflicts
- Health crisis due to improper sanitation of the neighbourhood

Tourism

Threats

- Lack of awareness
- Natural disasters
- Competition from other waterfront destinations like Aberdeen beachfront development project.

Pilton is recorded from 1337 onwards, its name derived from the Anglian “pyll tun”, meaning “farm toun” or “the place beside the small stream”.

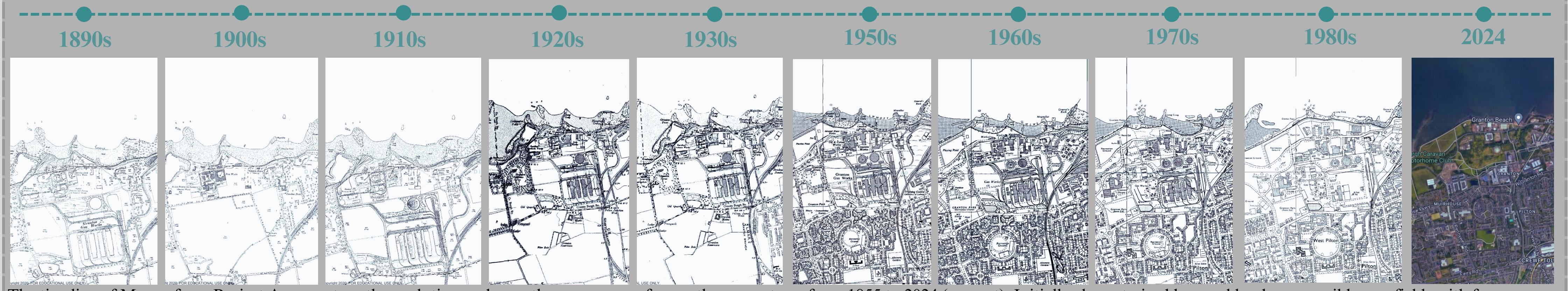


Granton is a historic town on the Firth of Forth that has been incorporated into the City of Edinburgh. “Granton” is derived from the Anglian “gran tun”, meaning ‘farm place at the gravel or sand’



History & Significance

Granton was first recorded in association with Granton Castle, which was first mentioned in 1479. The construction of Granton Castle, later demolished, and the emergence of Caroline Park House contributes to the area's historical richness.



The timeline of Maps of our Project Area portray the evolution and growth over a span of more than a century, from 1855 to 2024 (present). Initially characterized by rural landscapes, wild open fields with fewer structures like the Granton Castle, Caroline Park House and several structures clustered around the main quarry and Granton Reservoir. the area gradually transformed with the rise of industrialization. The development of industrial estates, such as the West Shore Industrial Estate, marked the shift towards urbanization, accompanied by the expansion of infrastructure like gasworks and railways. By the mid-20th century, rapid development ensued, with the establishment of additional industrial facilities and the construction of major housing schemes lead to the demolition of Granton Mains and Drylaw Main Cottages. This period also saw the demolition of older structures to make way for modern amenities, including schools and recreational spaces. The transformation culminated in a shift towards community-centric development, as evidenced by the creation of parks, playing fields, and housing estates, shaping the urban landscape of Granton and West Pilton.

Heritage Assets & their Significance : Granton is home to a number of valuable heritage artefacts, buildings and places. This is where its value derives from intangible cultural associations as well as inherent aesthetic and physical values. Granton, situated on the shores of the Firth of Forth in Edinburgh, Scotland, boasts a rich tapestry of built and industrial heritage that reflects its historical significance as a hub of maritime activity and industrial innovation. From its humble origins as a fishing village to its transformation into a bustling port and industrial center during the 19th and 20th centuries, Granton's built environment stands as a testament to its enduring cultural legacy.



GRANTON ZONE 1B

Tutors : Ruxandra-lulia Stoica, Nikolia Kartalou, Georgina Allison

MSc Architectural Conservation 2022-23
AC1 ARCH119

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THE UNIVERSITY of EDINBURGH
Edinburgh College of Art

On Surveying our Project Area, we divided our site into Zones to analyze data and segregate our built structures in Typologies based on their physical characteristics. Our project area is diverse, it is flourishing with natural typology, geology and architectural landscape & heritage. Buildings characterized by a mix of residential, industrial, and commercial structures.

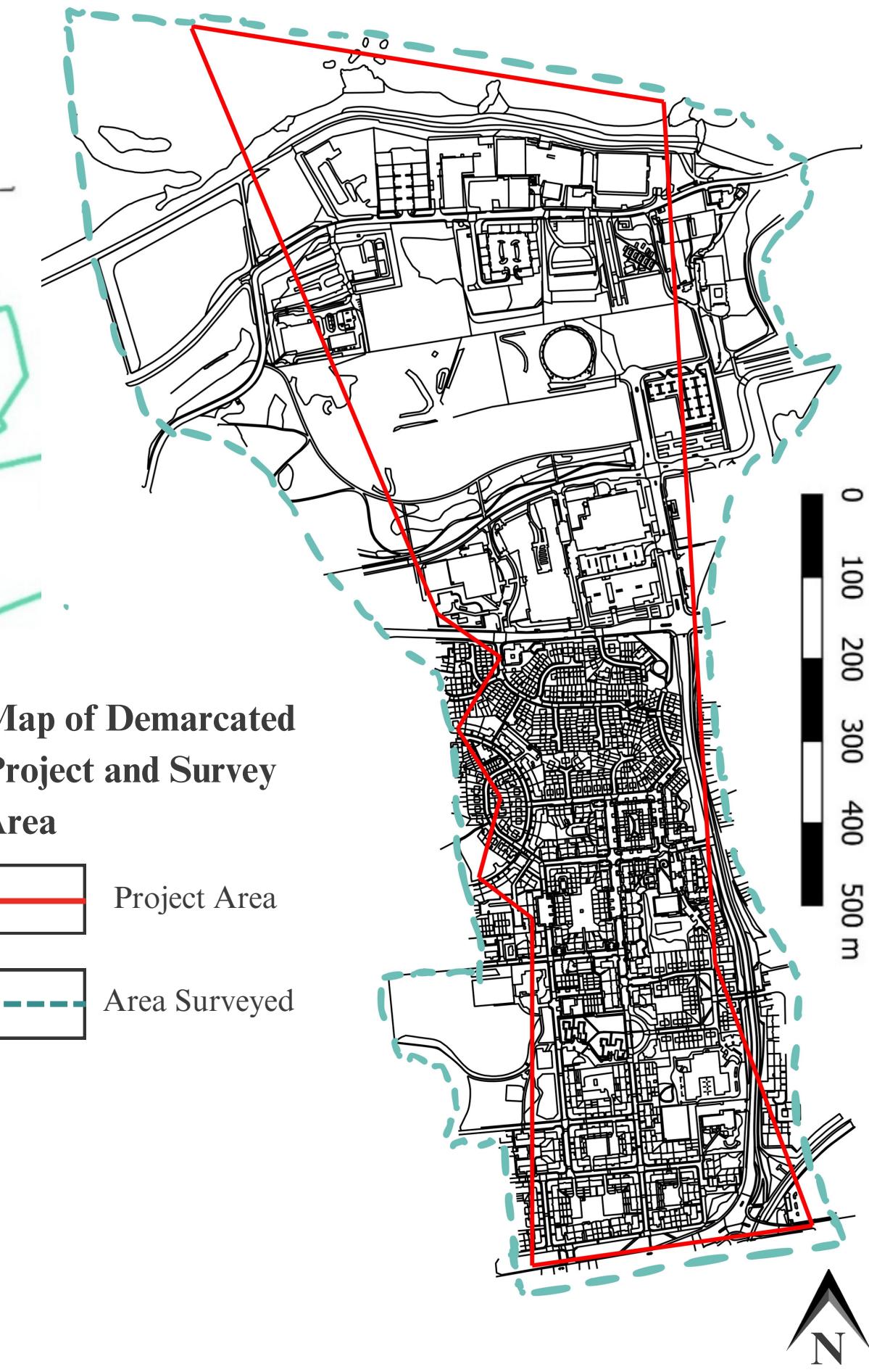
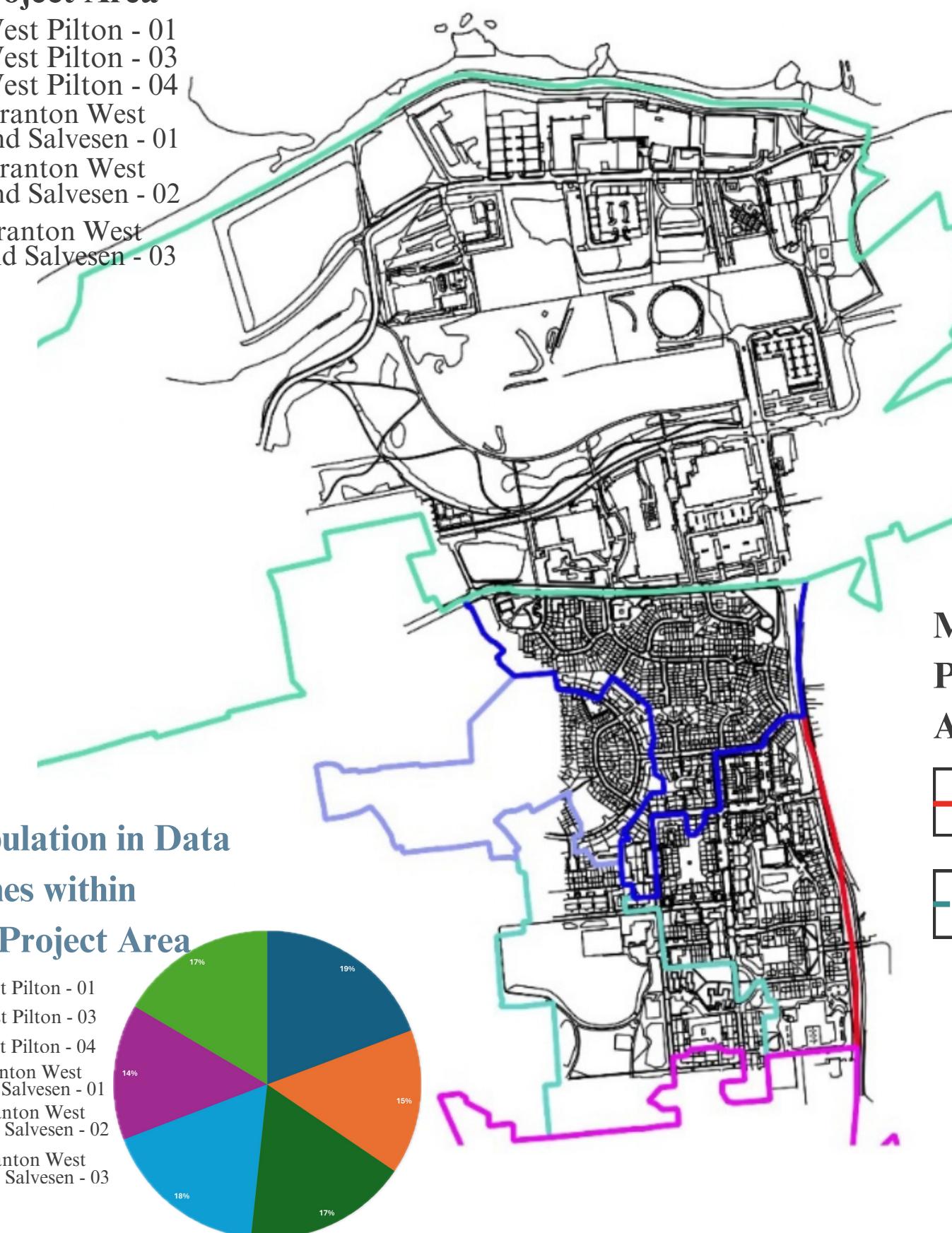
Site Survey

- Silverknowles
- Typologies
 - Churches
 - Cafes/Restaurants
 - Convenience Stores
 - Educational
 - Childcare Centres
 - Grocery Stores
 - Sports Centres/Gyms
 - Hospitals
 - Community Centres
 - Flats
 - Houses
 - Dentists
 - Charities
 - Industrial
 - Shops/Businesses
 - Historical Landmarks
- EServices
 - Grocery Shops
 - Hospitals/Pharmacies
 - Petrol Stations
 - Community Centres
 - Education Centres
 - Higher Education
 - Primary Schools
 - Polling Centre
 - Recycling/Waste Management Facilities
- Historic Buildings and Monuments
 - Granton Gasworks
 - Granton Castle Walled Garden
- Street Accessibility
 - Light-Controlled Pedestrian Crossing
 - Ramps
 - Tactile Paving
 - Low Curbs
- Green Spaces
 - Forthquarter Park
 - West Pilton Grove Playpark
 - Playpark
 - Gypsy Brae Recreation Ground
- Main Roads
 - W. Granton Access
 - W. Granton Road
- Transport
 - Bus Stations
 - Car Parks
- Cycle Routes
- group1



Data Zones within the Project Area

- West Pilton - 01
- West Pilton - 03
- West Pilton - 04
- Granton West and Salvesen - 01
- Granton West and Salvesen - 02
- Granton West and Salvesen - 03



This survey helps us evaluate the structural integrity of urban planning, mixed use of buildings and heritage built areas, identifying issues within the area on a Urbanscape level. The condition survey delves into the socioeconomic fabric of Granton and West Pilton, examining factors such as demographic composition, income distribution, and access to amenities and services. It identifies areas of social deprivation, highlighting the need for targeted interventions to improve community well-being. Environmental considerations are paramount in the condition survey, encompassing aspects such as green spaces, pollution levels, and sustainability initiatives.



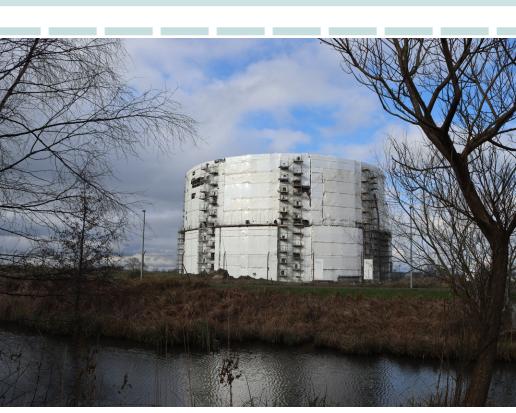
Morrisons Supermarket



Waterfront Hospital



Unnamed Community Centre in W. Pilton



Granton Gasholder from the Waterfront Park



W. Pilton Neighbourhood Centre



Living Well Neighbourhood Centre



Granton Castle Walled Garden



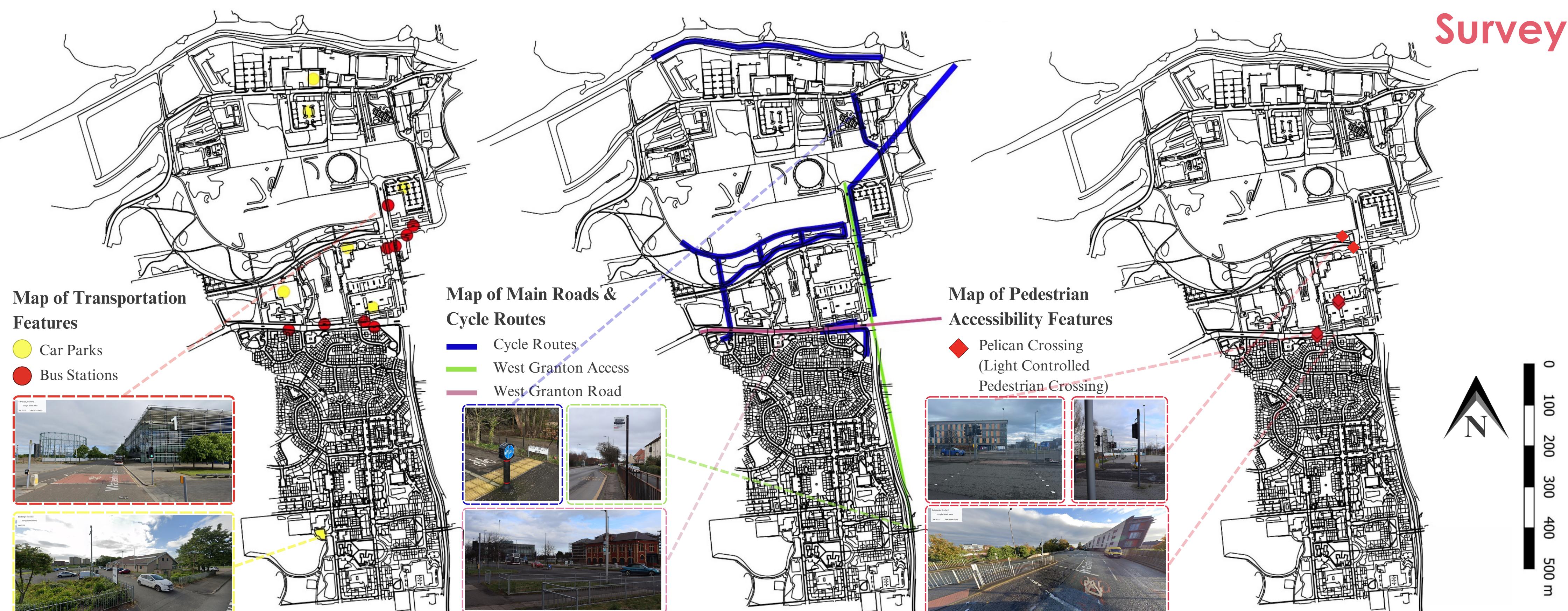
Granton Beach

GRANTON ZONE 1B

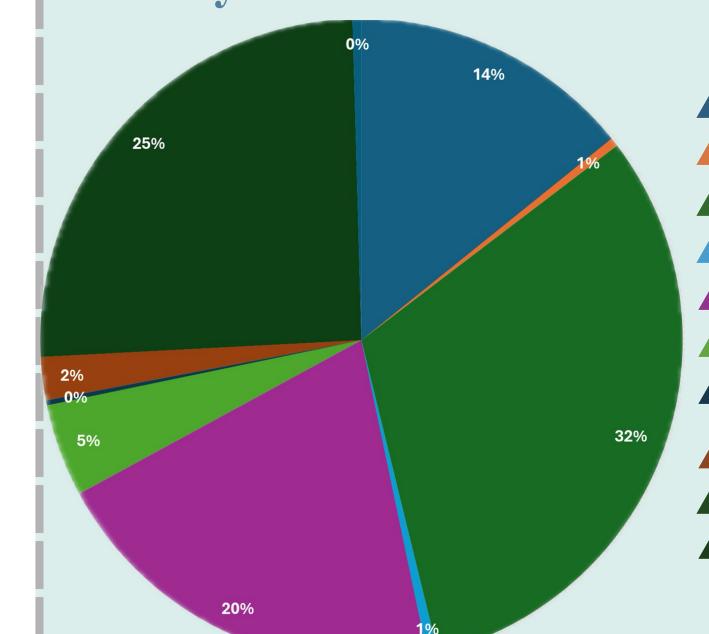
Tutors : Ruxandra-lulia Stoica, Nikolia Kartalou, Georgina Allison

With the help of The Scottish Index of Multiple Deprivation (SIMD), Scotland's Census, Scottish Neighbourhood Statistics, we could have an indepth analysis and attain demographical data in order to complete our on-field survey analysis. These findings underscore the complex socioeconomic challenges faced by the population in the Project Area, highlighting the need for targeted interventions and support services to address deprivation, improve infrastructure with regards to Transportation requirements (Public Transport Systems), Structural Integrity and Planning of Main Roads and Access Roads, Cycle Routes and Pedestrian Walkways : Pelican Crossings, Footpaths. It also gives an insight on an Overall Data for Health Conditions of People residing in the Project Area.

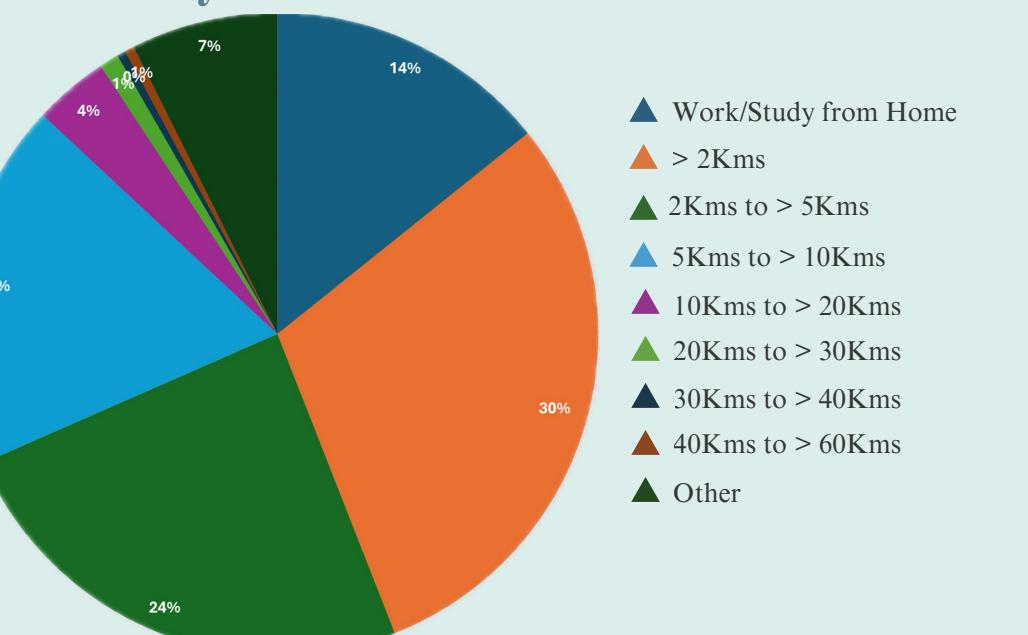
Accessibility Condition Survey



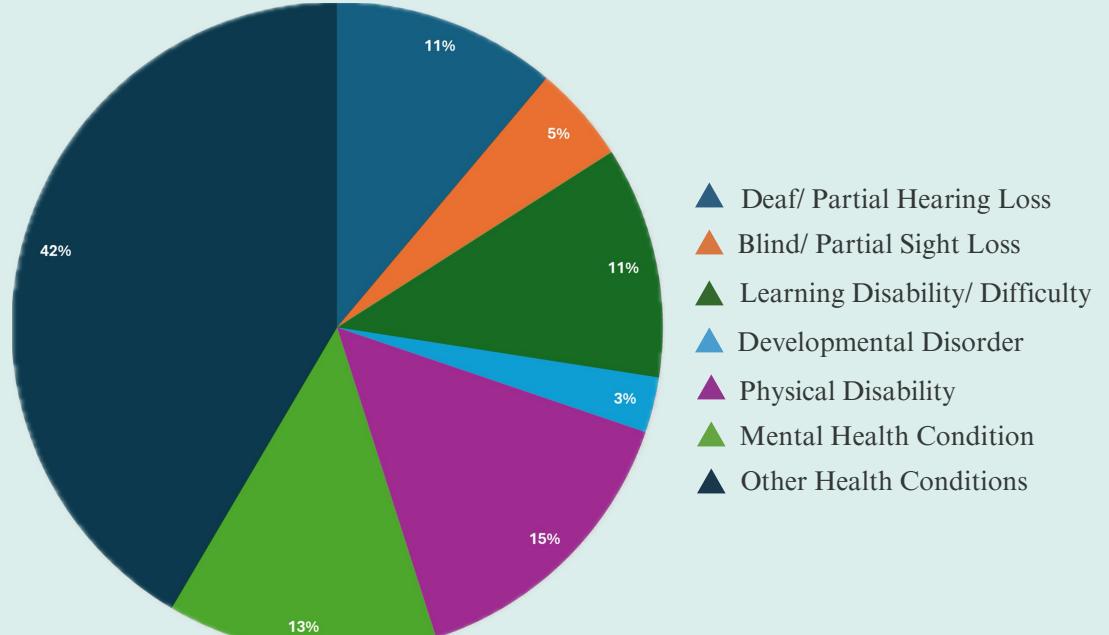
Demographics: Methods of Travel to Work or Study



Demographics of Distance Travelled to Work and Study



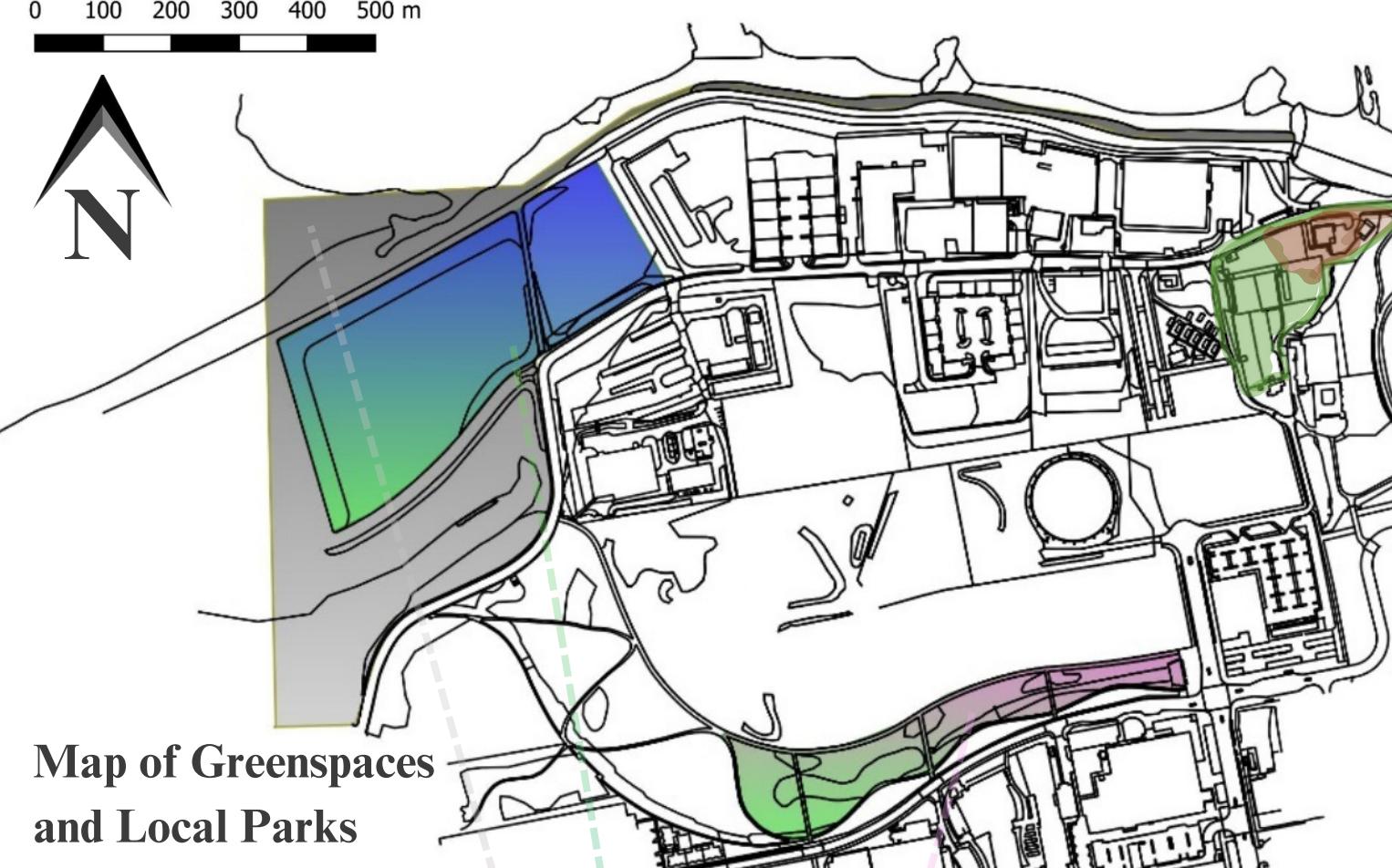
Demographics of Long Term Health Conditions and Disabilities



Key Takeaways from this Survey:

- Population and Housing:** The PA is home to 5,409 residents, with a significant proportion (67%) being of working age. Income deprivation affects 20% of the population, and 14% are employment deprived. Overcrowding is a concern, with 21% of housing in the area deemed overcrowded.
- Deprivation Analysis:** The Scottish Index of Multiple Deprivation (SIMD) identified significant deprivation across multiple indicators in the Project Area (PA), with three data zones ranking among the most deprived 20% in Scotland.
- Movement and Infrastructure:** A majority of residents travel between 2km to 5km for work and study, primarily relying on bus, bicycle, and walking. Granton boasts three tram lines and three bus lines connecting to the city centre.
- Education:** A notable portion of the population aged 16-19 are not engaged in education, employment, or training. Furthermore, 30% of working-age adults lack qualifications beyond level 4 of the Scottish Credit and Qualifications Framework. Only a small fraction (5%) enroll in First degree courses at university.
- Health:** Disability assistance is received by 17% of the population, while alcohol-related conditions lead to hospitalizations for 15% of residents, and drug use or poisoning for 17%. Additionally, 20% of the population is prescribed medication for mental health conditions. Disability limits daily activities for a significant portion of the community, with 67% facing limitations in access to vehicles.

0 100 200 300 400 500 m



Map of Greenspaces and Local Parks

Gypsy Brae Recreation Ground

Forthquarter Park

West Pilton Grove Playpark

Playpark

Granton Castle Walled Garden

Silverknowes Esplanade

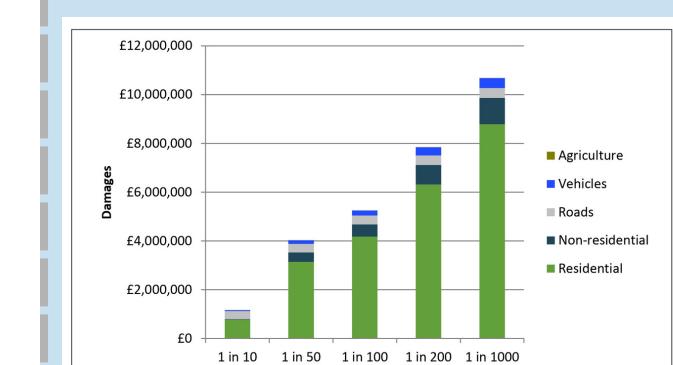


Key Takeaways from the Landscape Survey:

- Gypsy Brae Recreation Ground:** GBRG offers opportunities for peaceful strolls and wildlife observation but requires management improvements. It is associated with the Edinburgh Living Landscape program.
- Forthquarter Park:** In good condition overall, Forthquarter Park supports the urban environment and addresses climate change and ecological concerns. However, overgrown vegetation and poor signage pose safety risks.
- West Pilton Park:** While a large greenspace, West Pilton Park lacks playground equipment and has neglected sports spaces. Efforts by trustees and community engagement aim to improve maintenance, but issues with pathways, seating, and accessibility persist.
- Playparks:** Playground structures in playparks are poorly maintained, leading to concerns about safety for children due to vandalism and litter, resulting in decreased usage.
- Granton Castle Walled Garden:** Recognized as a Category B listed building, GCWG is managed by the community but faces challenges due to limited funding and volunteer resources. Restoration efforts are hindered, impacting accessibility and development plans.
- Silverknowes Esplanade:** Stretching from the outer edge of Granton all along the coast to Cramond Village, this long, wide pavement bordered with grass is accessible by cycles and for walking. It is a strip of wildish landscape along with a beautiful view of the Firth of Forth.

Key Takeaways from the Area Flooding Survey:

- Potentially Vulnerable Areas to Flooding:** The report identifies areas at risk of flooding, highlighting potential damages to residential and non-residential properties, transport infrastructure, agriculture, and community facilities.
- Comprehensive Flood Analysis of Granton's Coast:** The Scottish Environment Protection Agency (SEPA) provides analytical maps projecting future flood occurrences, offering insight into potential challenges by 2080.
- Typologies of Flooding:** Granton faces threats from surface water and coastal flooding. Surface water flooding occurs when rainfall overwhelms drainage systems, while coastal flooding poses risks due to factors like sea level rise and erosion. Understanding these typologies is crucial for addressing the multifaceted nature of flooding in the area.
- Surface Water Flooding:** The analysis examines the capacity of existing drainage infrastructure to cope with intense precipitation events and assesses vulnerability to surface water flooding. Future urban development plans and climate projections are considered to anticipate evolving risks.
- Coastal Flooding:** Granton's proximity to the Firth of Forth makes it highly vulnerable to coastal flooding. Evaluating risks and impacts, such as sea level rise and erosion, is essential. Coastal defence systems play a critical role in adaptation and mitigation efforts.



The damages associated with Floods of different likelihood are shown in Fig 2.

Landscape & Coastal Flooding Demographics

Potentially Vulnerable Areas to Flooding :

	1 in 10 High likelihood	1 in 200 Medium likelihood	1 in 1000 Low likelihood
Residential properties (total 2,400)	10	290	360
Non-residential properties (total 1,100)	<10	60	80
People	30	630	800
Community facilities	0	<10 Educational buildings	<10 Educational buildings
Utilities	<10	20	30
Transport links (excluding minor roads)	2 A roads, 1 B road at 10 locations	3 A roads, 1 B road at 31 locations	3 A roads, 1 B road at 38 locations
Environmental designated areas (km ²)	0.3	0.3	0.3
Designated cultural heritage sites	2	4	4
Agricultural land (km ²)	<0.01	<0.01	<0.01

Table 1: Summary of flooding impacts

The risk of flooding to people, property, community facilities, utilities, the transport network, designated sites and agricultural land is summarised in Table 1.

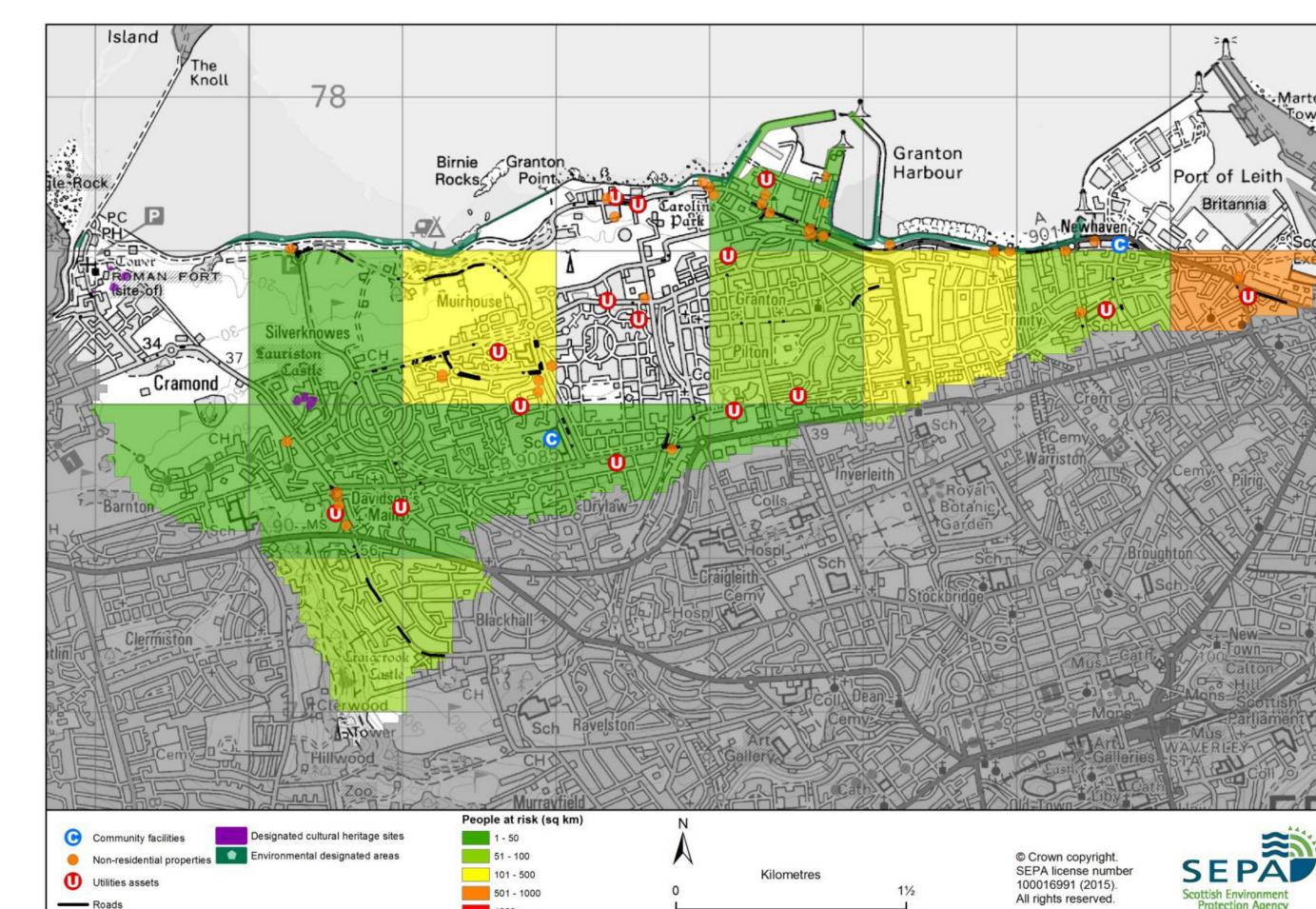


Figure 3: Impacts of flooding

For this Potentially Vulnerable Area, the highest damages are to residential properties, followed by damages to non-residential properties.

GRANTON ZONE 1B

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SWOT Analysis &

Conservation Management Plan

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS	STRATEGIES & ACTION ITEMS
<ul style="list-style-type: none"> Historic identity & character Proximity to city centre Bicycle & footpaths Proximity to greenspaces & local parks Proximity to educational facilities 	<ul style="list-style-type: none"> Insufficient accessibility Poor condition infrastructure Reliance on vehicles Lack of relief from environmental factors Insufficient services 	<ul style="list-style-type: none"> Increasing public transportation Infrastructure renewal Installation of shelters & seating Conserve & recycle assets Compact urban growth 	<ul style="list-style-type: none"> Surface water & coastal flooding Encroachment on historical assets Loss of greenspaces 	<p>Enhance coastline protection through innovative coastal defence systems and methods. Perform research and study on the reintroduction of native ecology to the Firth of Forth as a barrier against coastal erosion</p> <p>Provide sufficient seating and shelter from environmental conditions along scenic routes and in highly populated areas</p>
<ul style="list-style-type: none"> Labour potential Community engagement Educational enrolment Educational facilities & community centres available Quantity of greenspaces 	<ul style="list-style-type: none"> Lack of security - Income & employment deprivation Insufficient education levels Use of drugs & alcohol - Lack of accessibility Disused playparks & community centres 	<ul style="list-style-type: none"> Increase public awareness & engagement Promote local living Built in access to health & social care facilities in future places - Restructure as an educational hub Develop sports training centres 	<ul style="list-style-type: none"> Lack of skilled labour High deprivation Cost of Living crisis Neglect & vandalism Deterioration of urban fabric 	<p>Pelican crossings on Waterfront Broadway</p> <p>Workable Pelican Crossings on the West Granton Main Road</p> <p>Add Pelican Crossings over the West Granton Access</p> <p>Add Pelican Crossings on internal road Junctions</p>
<ul style="list-style-type: none"> Economic value of historic assets Functional value of bicycle & footpaths Higher education/skilled training facilities 	<ul style="list-style-type: none"> Income & employment deprivation Lack of mixed-uses Lack of local businesses & industry High maintenance cost 	<ul style="list-style-type: none"> Increase diverse business base Build community wealth Improve local liveability Incentives for private sector, tourism, & private owners Reintroduce native ecology & related industry to the Forth 	<ul style="list-style-type: none"> Lack of investment in historic areas Lack of skilled labour force Continuous deprivation Cost of Living crisis 	<p>Adaptive reuse of heritage assets, such as the Granton Gasholder o Renovate Granton Gasholder to reestablish its aesthetic quality, accentuate its historic value, and establish it as part of the public realm.</p> <p>Improve community commitments to heritage conservation through visibility to promote volunteering and renewal through funding</p>
<ul style="list-style-type: none"> Granton Gas Holder GCWG West Pilton neighbourhood 	<ul style="list-style-type: none"> Poorly maintained Lack of funding Lack of community involvement & awareness 	<ul style="list-style-type: none"> Enhance industrial heritage Increase awareness about local heritage, values, & significance Repair and conserve GCWG Implement Conservation Area designations 	<ul style="list-style-type: none"> Loss of cultural identity Loss of historical significance Lack of Conservation Area designation for pre- & post-WWII West Pilton neighbourhood 	<p>Implementing Active Travel routes would improve the usage of these spaces, which in turn would improve issues like Vandalism and Safety for the Local Community</p>
<ul style="list-style-type: none"> Abundant greenspaces with Scenic views of the Firth of Forth Promenades, esplanades & beach areas 	<ul style="list-style-type: none"> Industrial waste & general waste - Vandalism - Lack of playgrounds & maintenance Inaccessibility 	<ul style="list-style-type: none"> Implement infrastructure with beachfronts, training centers & parks Improve waste management - Increase awareness on environmental impacts 	<ul style="list-style-type: none"> Loss of geological & topographical importance Threat of soil & sea contamination 	<p>Flood resistant designs and construction is vital to flood management in the PA. This can be accomplished by implementing the following strategies:</p> <ul style="list-style-type: none"> Implement building codes and standards requiring flood-resistant design features, such as elevated foundations and flood barriers. Retrofit existing buildings to improve resilience to flooding, such as flood vents and sump pumps Incorporate green infrastructure techniques, such as permeable pavements and green roofs Develop early warning systems to provide information about impending flood events to residents and emergency responders Establish emergency preparedness plans that outline evacuation routes, shelter locations, and procedures for coordinating response efforts Implement natural flood management techniques, such as floodplain restoration and wetland preservation

GRANTON ZONE 1B

Tutors : Ruxandra-lulia Stoica, Nikolia Kartalou, Georgina Allison



PROJECT STUDY AREAS

INTRODUCTION

This study identifies and assesses the architectural and cultural values within the historic urban environment of Granton.

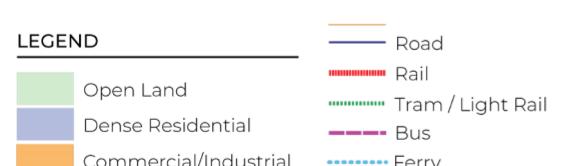
This report assesses the tangible and intangible qualities of Granton as they relate to the natural and built environment to determine best methods to conserve and enhance its character, and ultimately considers what role transportation plays in the past, present and future of the region.

Site Boundary

Granton is bound to the north of Edinburgh on the Firth of Forth, bordered on the east by Trinity, south by Ferry Road, and west by Pennywell Road. This study focuses on the area known as East Pilton; portions of this will extend beyond the identified boundary in order to provide a comprehensive understanding of surrounding amenities, services, and landmarks.



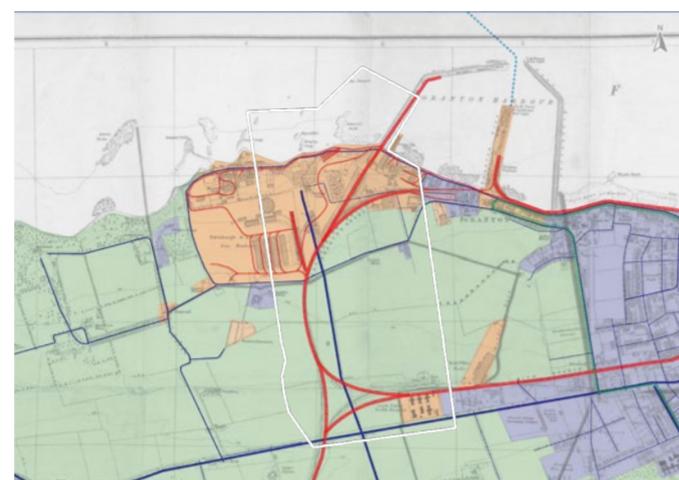
BOUNDARY OF SITE 2



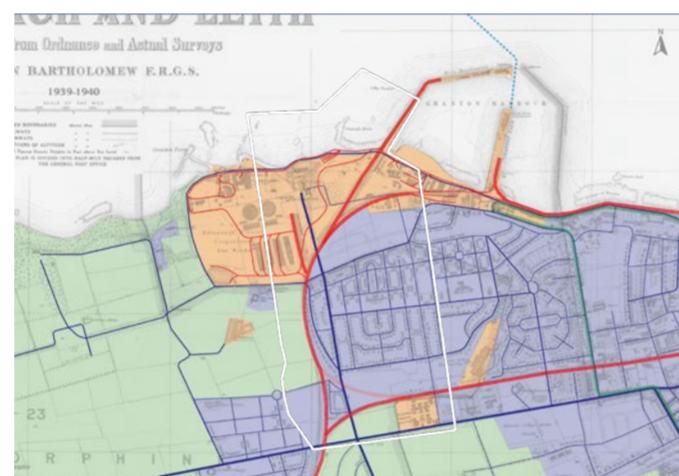
1817, R. KIRKWOOD MAP OF EDINBURGH



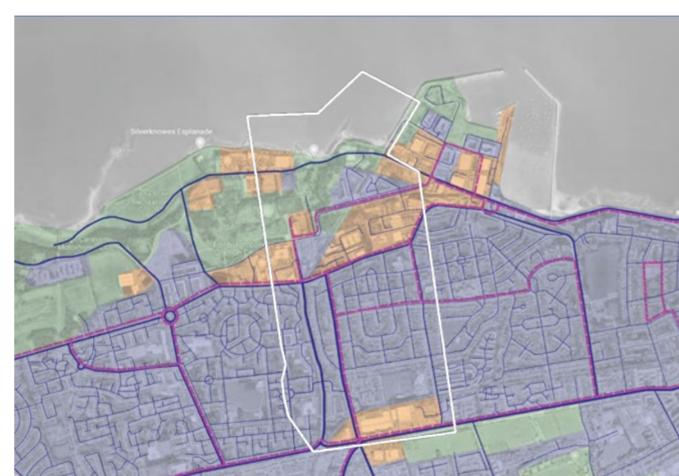
1852, R. KIRKWOOD MAP OF EDINBURGHSHIRE



1910, POST OFFICE MAP OF EDINBURGH, LEITH & PORTOBELLO BY BARTHOLOMEW



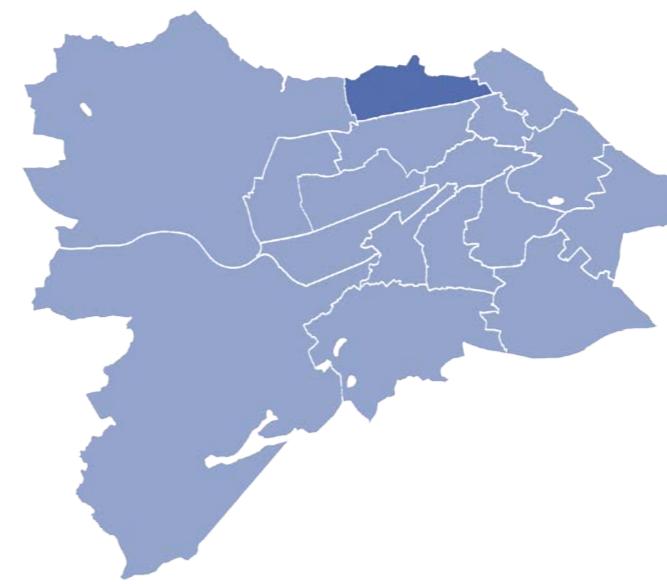
1939, POST OFFICE MAP OF EDINBURGH, LEITH & PORTOBELLO BY BARTHOLOMEW



2024 CURRENT MAP



1936, AERIAL PHOTOGRAPH



2024, DIAGRAM OF EDINBURGHSHIRE

HISTORICAL DEVELOPMENT

1817 Map by R. Kirkwood reflects Granton's landscape and use. Newhaven is a settlement to the east, with residential accommodation and a harbour front. Granton is dispersed country houses with a simple road network.

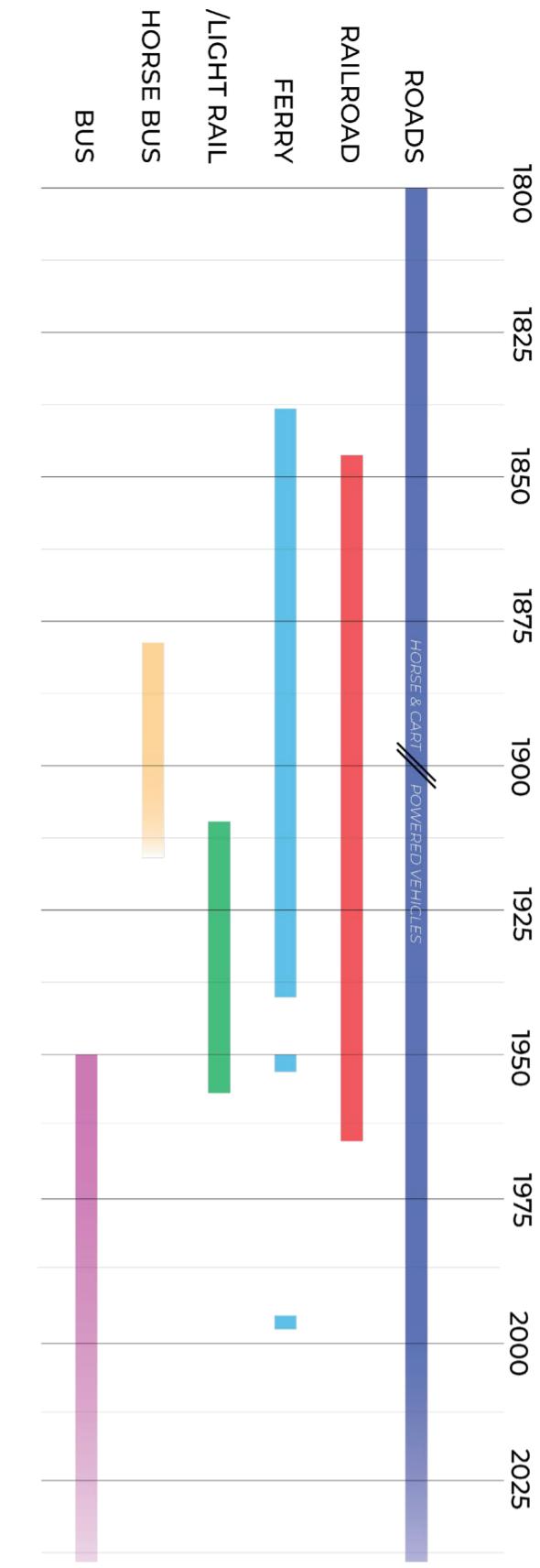
1835 - 1842 The Harbour Piers were constructed by the 5th Duke of Buccleuch.

1861 The Caledonian Railway opened from Murrayfield to Granton Harbour.

1890 The ferry became obsolete when the Forth bridge opened.



1900, GRANTON CASTLE



TIMELINE OF TRANSPORT USE IN GRANTON



1860'S, RAIL NETWORK



1909, RAILWAY STATION (STATION SQ)



1991, AERIAL VIEW PHOTOGRAPH



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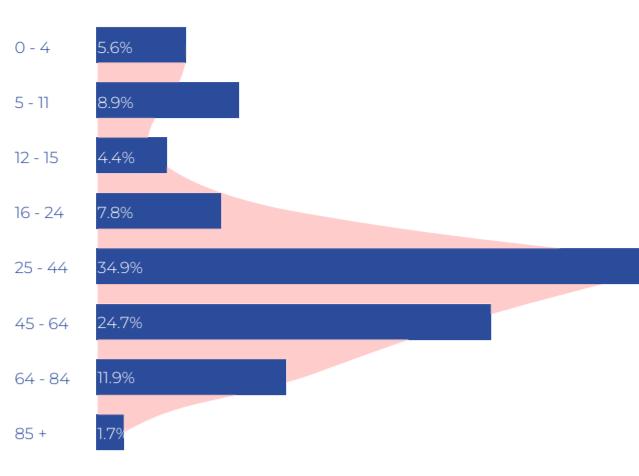
Decoding The City

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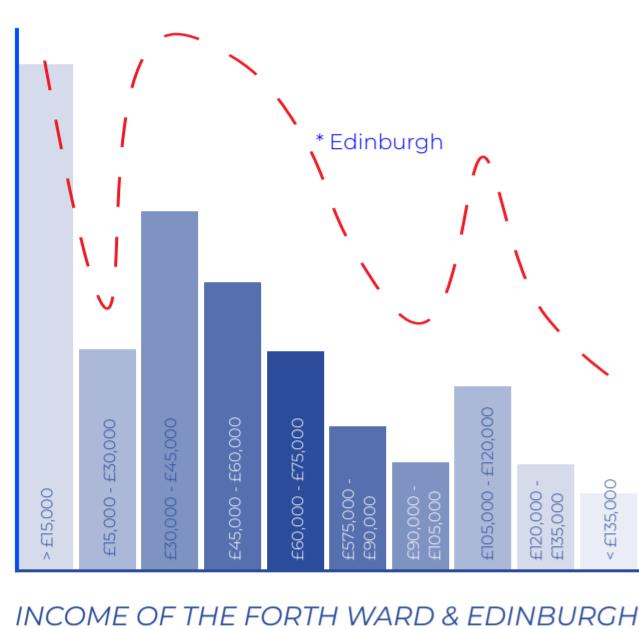
Course Leader: Georgina Allison, Dr. Nikolia Kartalou & Dr. Ruxandra-Iulia Stoica

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DEMOCRAPHICS

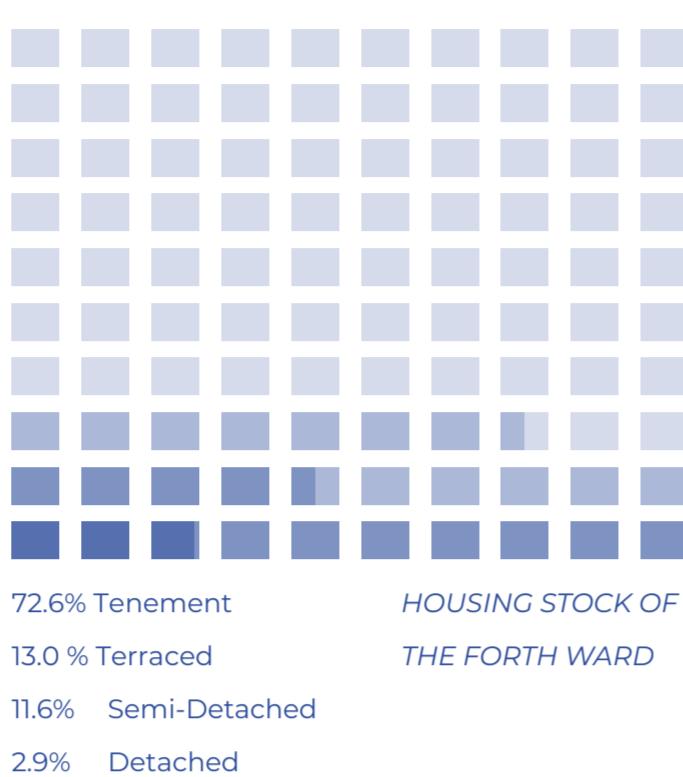


AGE PROFILE OF THE FORTH WARD & EDINBURGH



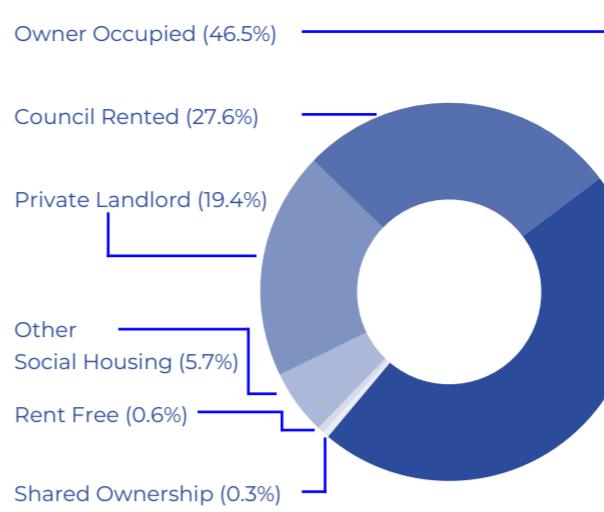
INCOME OF THE FORTH WARD & EDINBURGH

Average Property Value £335,865 in Edinburgh £268,590 in the Forth Ward

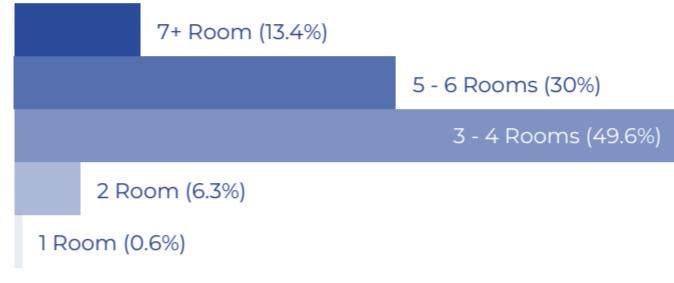


57.5 Crimes/1000 people & 1,367 Crimes Reported in 2022

Home brake ins, mugged and robbed, stolen cars and items from car, physical attacks, noisy neighbours, domestic violence



HOUSE OWNERSHIP OF THE FORTH WARD

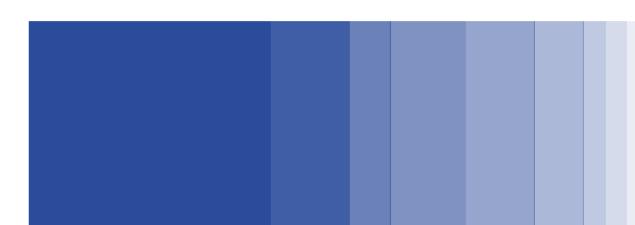


ROOMS PER HOUSE IN THE FORTH WARD



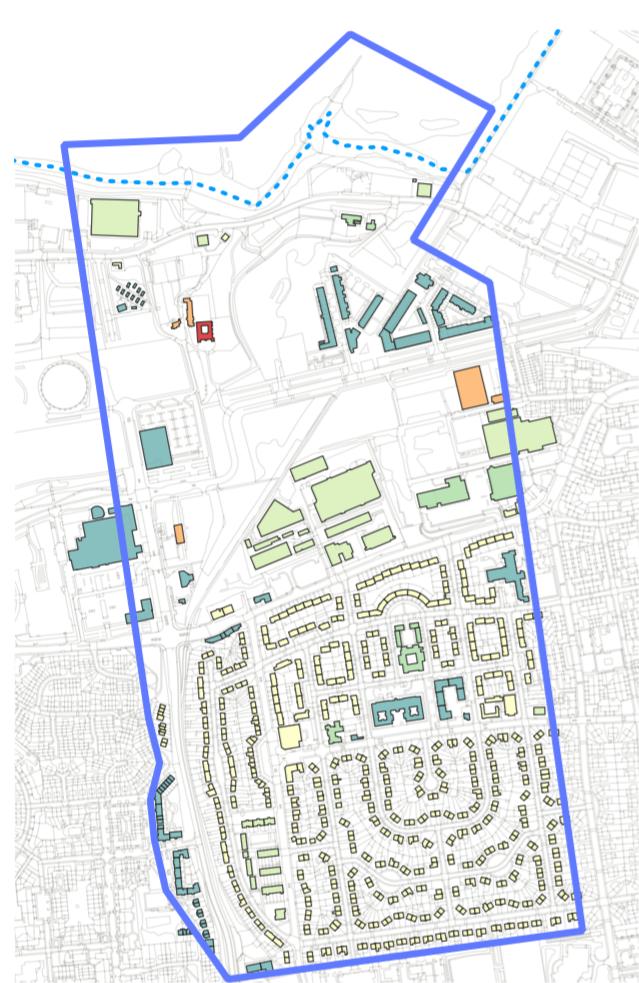
PEOPLE/HOUSEHOLD IN THE FORTH WARD

There are 13,859 buildings in the Forth Ward ; 722 lie within Site 2



40.3% FT Employed	12.6% Unemployed
13.5% PT Employed	11.5% Retired
6.7% Self Employed	8.2% FT Student
	3.5% Carer
	3.7% Sick
	2.5% Other

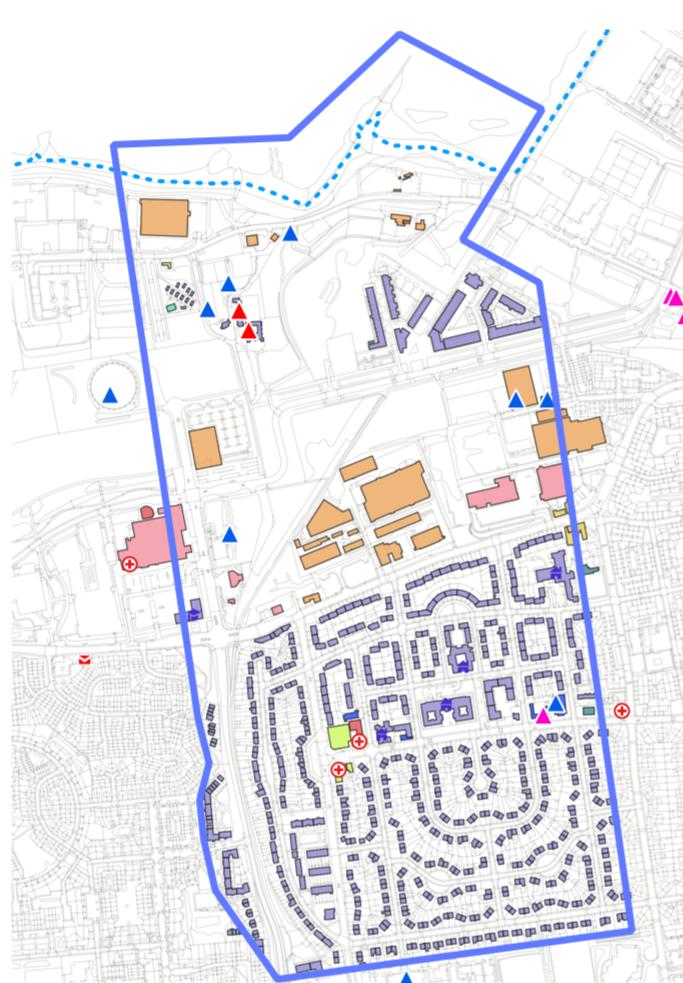
Average Household Income
£52,835 in Edinburgh
£42,532 in the Forth Ward



MAP OF BUILDING AGE

PRE-1850	1950 - 1980
1850 - 1900	1980 - 2000
1900 - 1950	2000 - 2024

- ▲ CATEGORY A-LISTED BUILDING
- ▲ CATEGORY B-LISTED BUILDING
- ▲ CATEGORY C-LISTED BUILDING



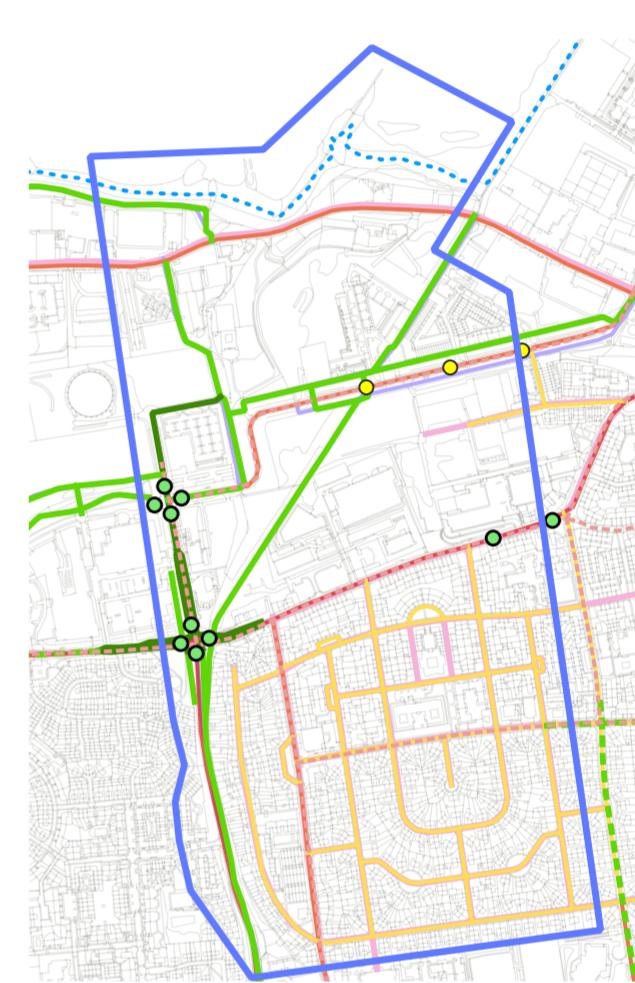
MAP OF BUILDING USES

RESIDENTIAL	RELIGIOUS
INDUSTRIAL	MIXED USE
COMMERCIAL	
RESTAURANT/CAFE	
BUSINESS/OFFICE	
ASSEMBLY/LEISURE	
MEDICAL/CARE FACILITY	



GREEN SPACE MAP

PUBLIC GREEN
PRIVATE GARDENS
PLAYING FIELDS
BEACH
BOWLING GREENS
OPEN SEMI - NATURAL
OPEN WATER



TRANSPORTATION ROUTE MAP

PRIMARY ROADS
SECONDARY ROADS
QUIET ROADS (2MPH)
BUS ROUTES
PEDESTRIAN
PEDESTRIAN & CYCLE PATHS
TRAIL
DEDICATED CYCLE PATH
BIKE FRIENDLY ROADS
LIGHT CONTROLLED
BELISHA BEACON



PEDESTRIAN HEAT MAP

TOWNSCAPE ANALYSIS

QGIS maps help to understand the site's building stock through their function and utilisation, in order to make conservation and development suggestions. Thermal assessments of the current building stock were reviewed to determine how the 1930's residential structures compared with newer developments. Indications of heat loss through walls and fenestrations were observed.



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Zone 1: Residential Interwar

Essential Character

Mix of 2 storey 4-block villas and 3 storey flat blocks all with uniform pitched rooflines, use of harling, and accent slates.



ZONE 1 - ESSENTIAL CHARACTER



ZONE 1 - DETRACTING BUILDINGS

Zone 2: Residential Modern

Essential Character

Mid-rise, multi-storey w/ mixed materiality. Universal design, unspecific to earlier Granton architecture



ZONE 2 - ESSENTIAL CHARACTER



ZONE 2 - DETRACTING BUILDINGS

Zone 3: Modern Commercial

Essential Character

Boxy, large chains/businesses and small early 20th century mixed-use shop fronts. Universal design lack specific tie/connection to Granton.



ZONE 3 - ESSENTIAL CHARACTER



ZONE 3 - DETRACTING BUILDINGS

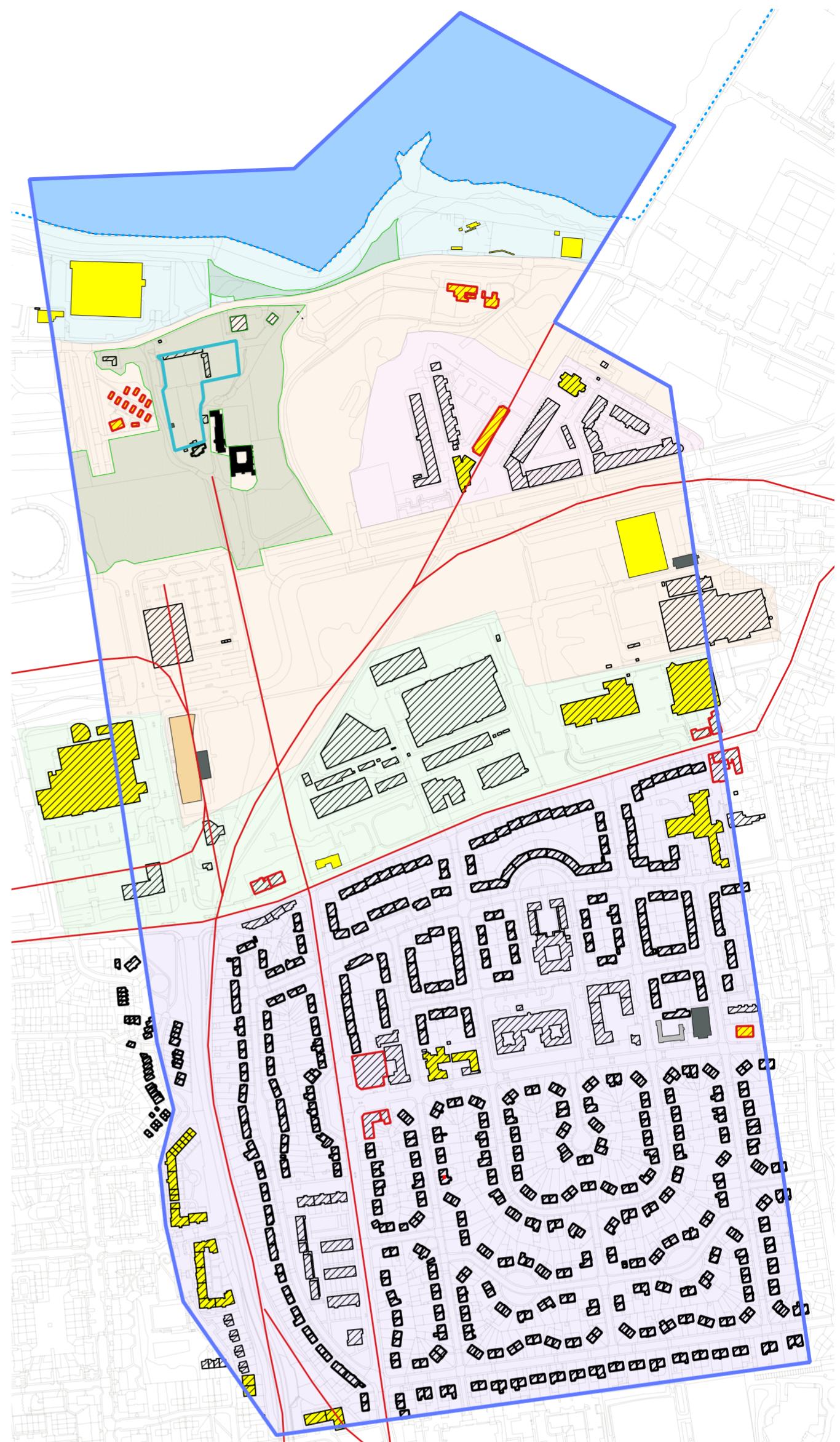
CONSERVATION PLAN

- Listed Building: A
- Listed Building: B
- Listed Building: C
- Strongly Contribute
- Neutral
- Neutral, but not to be continued
- Detract, non-immediate
- Detract, immediate demolition advisable
- Facade needs addressed
- Roof needs addressed
- Pavement strongly contributes
- Greenspaces
- Water
- Boundary Walls
- Former Plot lines / Roads / Railways

- ZONE 1: RESIDENTIAL INTERWAR
- ZONE 2: RESIDENTIAL MODERN
- ZONE 3: MODERN COMMERCIAL
- ZONE 4: HARBOUR & WATERFRONT
- ZONE 5: INDUSTRIAL & HISTORICAL

Character Area Appraisal

Five zones of distinct character have been identified. Defining unique attributes ensures that key elements which contribute to the historic, social, and architectural character are preserved and retained.



CONSERVATION PLAN W/ CHARACTER AREAS

Zone 4: Waterfront & Harbour

Essential Character

Open space, rugged natural coastline. Prominent views towards Fife and Forth Bridge. Granton harbour breakwall retained.



ZONE 4 - ESSENTIAL CHARACTER



ZONE 4 - DETRACTING BUILDINGS

Zone 5 : Industrial & Historical

Essential Character

Retains the remnants of original transportation/rail linkages ('Shore Walk' and W Granton Access). Landmark buildings throughout



ZONE 5 - ESSENTIAL CHARACTER



ZONE 5 - DETRACTING BUILDINGS

Current proposals

- MASTER DEVELOPMENT PLANS
- GRANTON WATERFRONT DEVELOPMENT
- FRAMEWORK 2020
- THE WALLED GARDEN
- WEST SHORE ROAD & THE COASTAL AREA
- GAS WORKS STATION & ITS PRECINCT
- GRANTON GAS HOLDER
- GRANTON HUB & COMMUNITY GARDEN
- SOCIAL BITE VILLAGE



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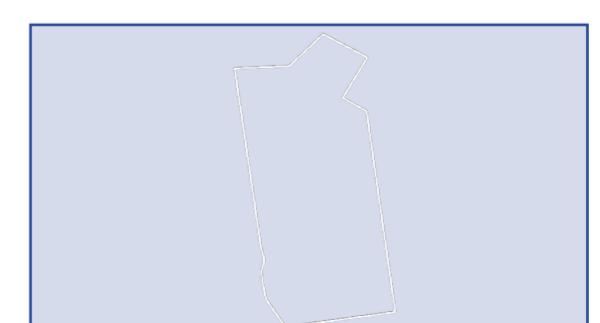
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1998, GRANTON GASWORKS RAILWAY STATION



1890, CAROLINE PARK HOUSE



2011, CAROLINE PARK HOUSE

CULTURAL SIGNIFICANCE

Historical Significance

Granton Castle bore witness to the turbulent events of the mid-16th century. Caroline Park House now stands adjacent to the site of the demolished castle.

Landscape Significance

Granton's urban heritage is exemplified by its transformation from an agricultural expanse to an industrial powerhouse. In 1836, the establishment of Granton Harbour, facilitated the flow of goods but also offered ferry services and shelter during storms.

Technological Significance

The region's technological innovation is further distinguished, by the pioneering efforts of the Madelvic Car Factory (1898) and the impact of the Granton Harbour Train Ferry. Additionally, the Granton Gas Holder and Gas Works Station symbolise the region's industrial and architectural excellence.

Architectural Significance

Pre-1930s, Granton was an agricultural space. East and West Pilton were developed by Edenezer James MacRae. The council housing in "four-in-a-block style" was carried out from 1936-37 and then completed in the 1950s.



2024, STATION SQUARE (GRANTON GASWORKS RAILWAY STATION)



1938, GATE PIERS TO CAROLINE PARK HOUSE



2024, GATE PIERS TO CAROLINE PARK HOUSE



2001, MADELVIC CAR FACTORY (GRANTON HUB)



2024, MADELVIC CAR FACTORY (GRANTON HUB)

SWOT ANALYSIS



Strengths

Proximity to Newhaven, Cramond, and Edinburgh City Centre. Also links to Fife and the Firth of Forth.

Historic landmarks enrich the neighbourhood's cultural identity. E.g. Madelvic Car Factory, Caroline House, & Granton Station.

Public access to the **designed landscapes** (Caroline Park & Granton Community Garden).

Retains the **distinct master housing scheme**.



Opportunities

Transportation: Service Granton to its peripheral neighbourhoods & promote alternate modes of transportation.

Land Development: Vacant land free for development to provide rejuvenation and improve infrastructure.

Neighbourhood Integration: Revision of development plan to integrate existing residences into modern development & Diversify the community profile.

Engage with Existing Heritage: Reintroduce the historic railway route as a pedestrian path. Address the shoreline ecosystem for the public.

Economic Development: Tourism outreach by indicating viewpoints for Forth Bridge and Firth of Forth. The development of waterfront areas for recreational activities. Establishing sustainable business models to bolster employment opportunities.



Weaknesses

Public transport system prioritises links to and from Edinburgh city centre; does not provide direct peripheral links to Newhaven and Cramond.

New developments do not complement or acknowledge the historic architectural character.

A **car-centric neighbourhood**; there is lack of parking for visitors resulting in the blocking of narrower roads by cars.

Hard zoning boundaries - areas lack variation of amenities and community integration

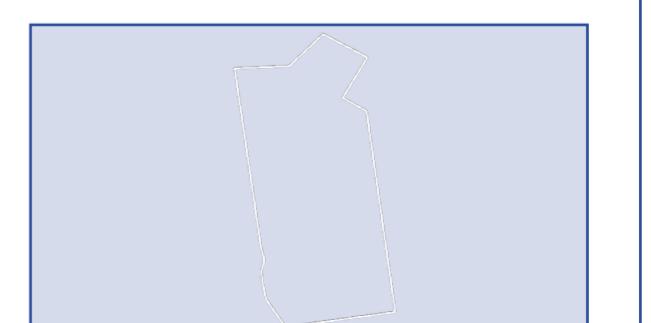
The lack of **communal pride** and personal investment results in the overwhelming presence of litter.



Threats

Waterfront areas prone to flooding and coastal erosion.

Proposed Development Plan: Large-scale council development plan (drastic land use change) does not take into account current-resident needs. The proposed tram location jeopardises the functionality of the streetscape. New development detracts from landmark buildings.



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MASTER PLAN

Granton's greatest disadvantage are:

- Inadequate public transit
- Lack of history awareness
- Poor pedestrian/ cycle routes.

These proposals seek to remedy these issues for residents and visitors with minimal infrastructure.



Proposal A: Transit Pilot Programme

The infrastructure required for a tram is both expensive and invasive. This lack of funding should not keep Granton from receiving improved mobility for residents and visitors.

We propose a pilot programme with alternative public transportation options until a tram line more feasible.

The proposal aims to re-establish Granton as a transportation hub to foster an appreciation for its heritage, add economic opportunities, and lower personal vehicle reliance.

Alternative Public Transport such as Rapid buses and community shuttles.

Ferries connecting Granton directly with the Firth of Forth and re-establish historic ferry routes.

Improved ticketing System which would allow for more cost efficiency across public transport while also tracking ridership to be used to improve services where needed.



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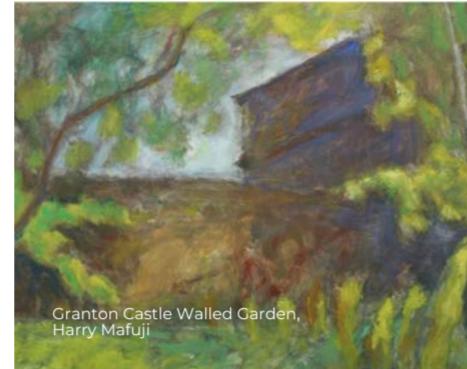


Proposal B: Heritage Path

This would enhance the accessibility and link to Granton's heritage.

Physical markers would be installed at points of interest (as placards/ QR codes). Brochures/ maps would be available in printed and digital formats.

The route focuses centrally on Granton, and could be altered to integrate the proposed pedestrian and cycle pathway (Proposal C), and the community shuttle (Proposal A), to allow for more accessibility.



Granton Castle Walled Garden, Harry Mafui

7. Caroline Park House

Dating back to the 16th century, Caroline Park House was once known as Royston House. The extensive alterations that came with its name change in the 17th century give it the Renaissance character seen today.

8. Gas Works

Said to be the most elegant gas holders in Scotland, the framing of one gas holder remains today, constructed of riveted rolled steel. Now a listed as a category B historic structure, it signifies Granton's varied role in the Industrial Revolution.

9. Granton Gas Works Train Station

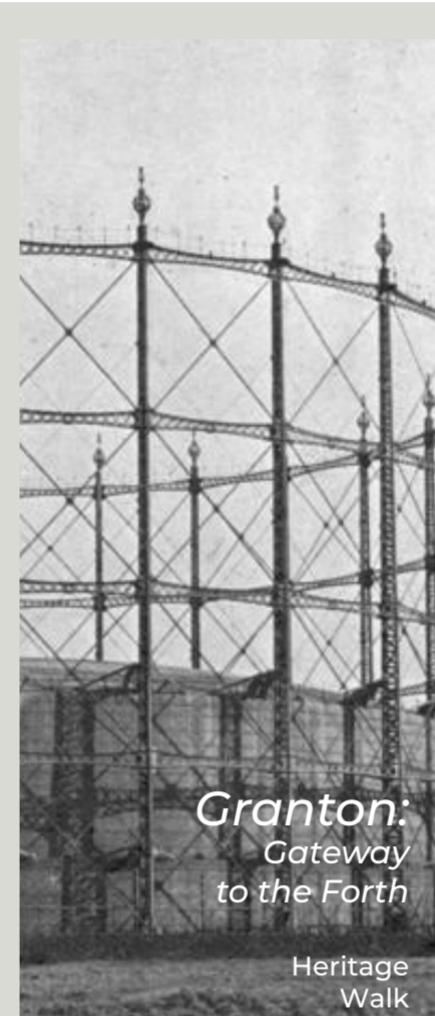
Serving both goods and passengers, Granton's railway tied the harbour to the city. Constructed in 1903, the station closed in 1942 as other forms of transport grew.

10. Madelvic House & Car Factory

Now the location of the Granton:Hub, the Victorian red brick Madelvic House was once the site of one of Scotland's first electric vehicle manufacturers.



Scan QR Code
To Learn More



Granton:
Gateway
to the Forth
Heritage Walk



Proposal C: Pedestrian & Bike Routes

The current transit plan lacks demarcation between vehicular, pedestrian, and cycle routes, resulting in a disconnected layout.

To enhance connectivity we propose:

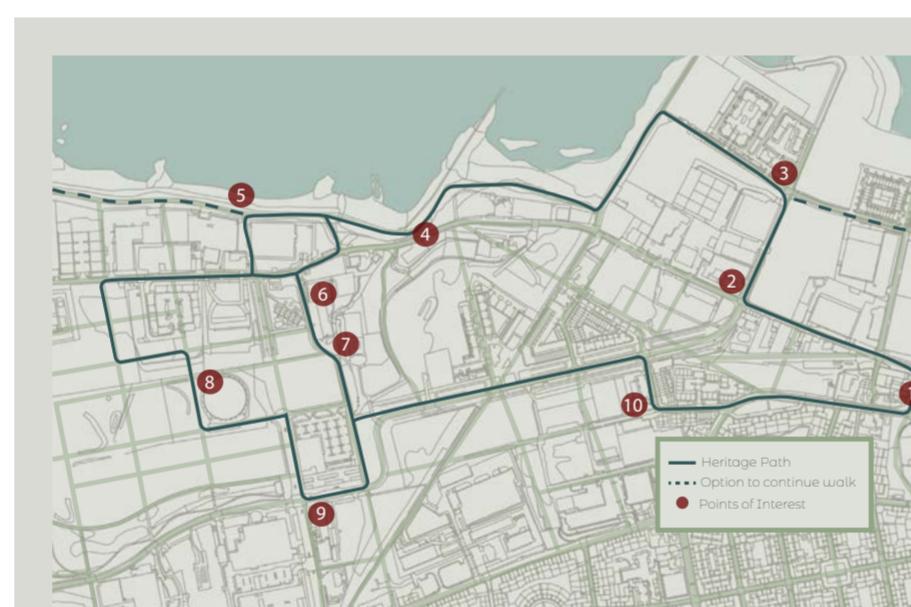
One-sided street parking regulations

Transition zones at residential entry points to underscore pedestrian priority

Employ Belisha Beacons and speed limit signs

Integrate a proposed pedestrian/ cycle routes into residential zones, complementing existing pathways

By prioritising pedestrian and cyclist needs, the proposal aims to establish a cohesive network of routes that not only enhance connectivity but also promote sustainable modes of transportation.



The Heritage Pathway

A great place to start is Granton Square, you can join the trail at any point. Informational markers will guide the way and lead you to each location, feel free to meander and wander. The walk can about an hour at a leisurely pace. We encourage you to follow the links and read more about Granton's intriguing past!

1. Granton Square
2. Granton Lighthouse
3. Granton Harbour
4. Granton Castle Gates
5. Granton Beach
6. Granton Castle Walled Garden
7. Caroline Park House
8. Gas Works
9. Gas Works Train Stations
10. Madelvic House



Proposed Transportation Routes, Methods, and Road Traffic

Group 2 Boundary

Waterline

Routes

- Main Roads
- Secondary Roads
- Quiet Roads 20mph
- Pedestrian
- Pedestrian / Cycle Paths
- Proposed Designated Cycle Lanes
- Street Parking on One Side
- Street Parking on Both Sides
- Bus Routes
- Proposed Community Shuttle
- Proposed Ferry Route
- Proposed Express Bus Lines

Heritage Path

- Heritage Path
- Heritage Path
- Optional Extension

Road Points

- Light Controlled Crossing
- Proposed Light Controlled Crossing
- Belisha Beacon
- Proposed Belisha Beacon
- Express Bus Line Stops
- Heritage Path POI

0 200 400 m

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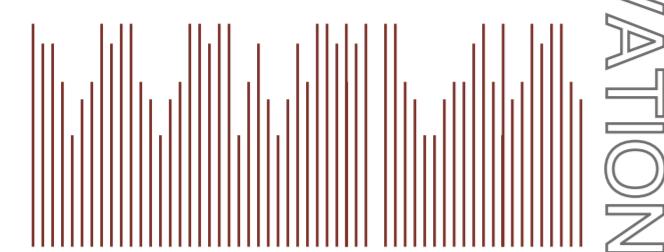
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URBAN

ANALYSIS

CURRENT STATE



Granton territory is largely agricultural



1636

1760S

1830

1844

C1870

C1890

1914

1925

1730S

1939

1956-60

Granton's industrial past begins during the industrial revolution, highly influenced by Buccleuch family



Act of Parliament to extend Edinburgh's railway to Granton Harbour

Northern Lighthouse Board constructs depot AB Fleming builds ink making factory

Harbour requisitioned for WW1

East and West Pilton begin developing

Tram system shuts down and AB Fleming factory closes



Last Granton rail line closes

Regeneration efforts, Waterfront Development Plan



1970 Declining industries higher unemployment and drug use in area

1980S

1990S

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1980S Regeneration efforts, Waterfront Development Plan



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1970 Declining industries higher unemployment and drug use in area

1980S Regeneration efforts, Waterfront Development Plan



URBAN

ANALYSIS

RECOMMENDATIONS

CONSERVATION

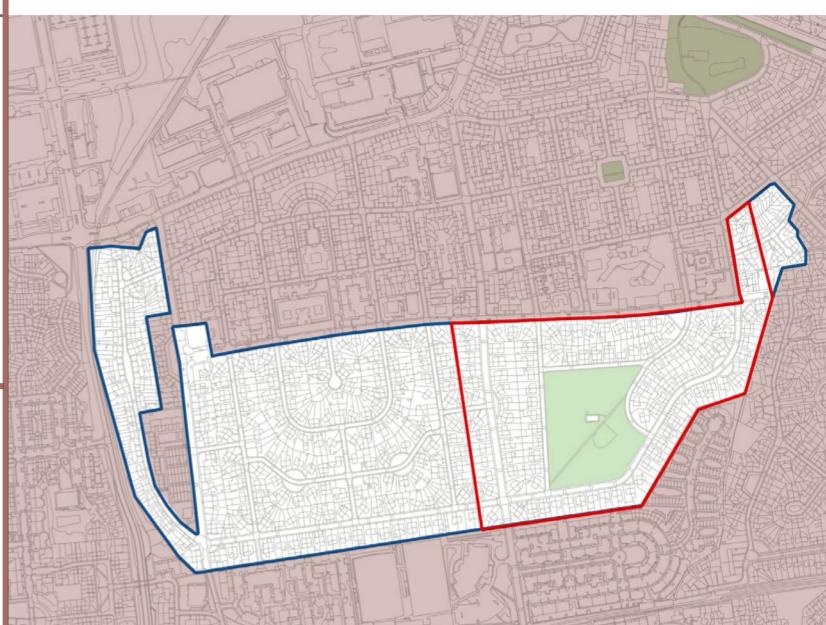
Presence of its industrial heritage
Mactaggart & Mickel development
Waterfront
Green spaces
Community-led spaces
Younger demographic

Promote and enhance heritage
Offer protective methods for built heritage
Engage with the site's maritime appeal and make the harbour more accessible
Increase pedestrianisation to allow more chance encounters with the site's heritage

Unpromoted industrial heritage
Incompatible developments (character & scale)
Inaccessibility (entry to certain spaces & pedestrianisation)
Inconsistent maintenance
Younger demographic

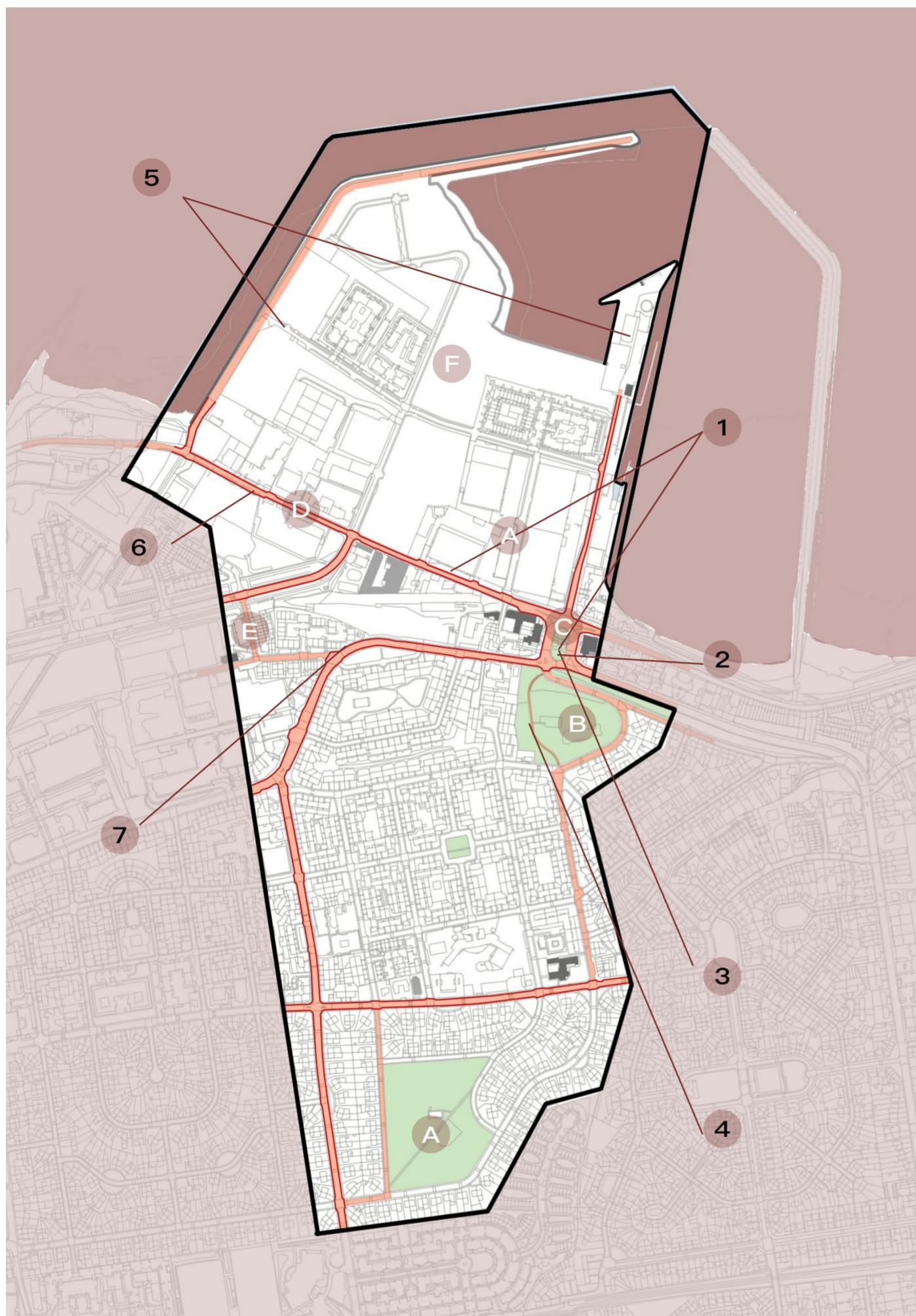
Shortfall of government funding
New, incompatible developments and modifications (undermine character & restrict use of space)
Flooding

- Preserve the character of Mactaggart & Mickel residential development of East Pilton
- Neighborhood extends beyond CA; limited for scope of study
- Highlight original Mactaggart & Mickel design



HERITAGE TRAILS

- Enhance and promote the cultural significance
- Preserve the memory of the area (the industrial past the community's past)
- Help develop an attachment to Granton for visitors, residents and

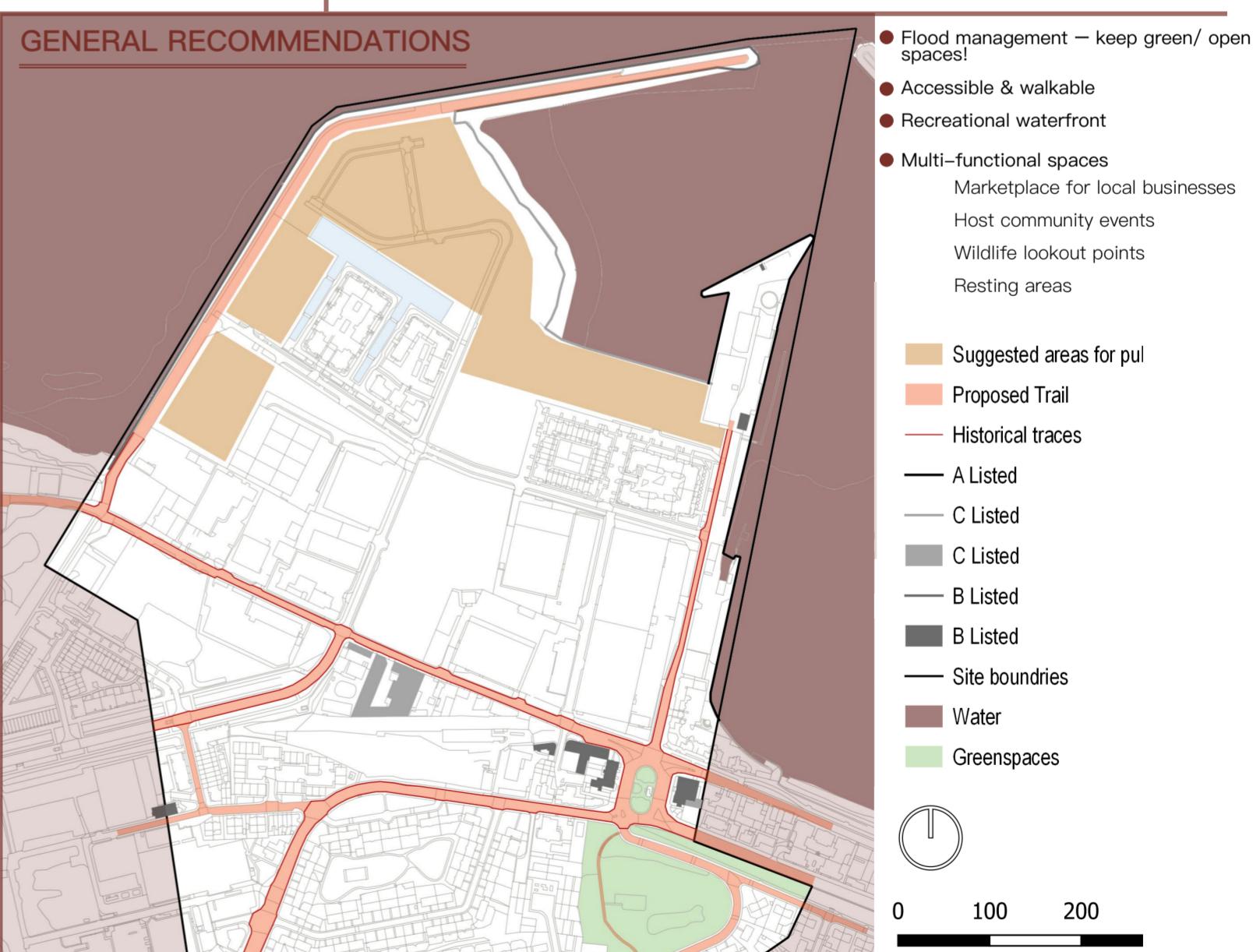


- A** Mactaggart & Mickel Development
- B** Gronto Crescent Park
- C** Gronto Square
- D** West Harbour Road
- E** Former Madelvic Factory
- F** The Harbour

0 200 400 600 m

- 1 Add a distinctive pavement
Add more catering businesses
- 2 Mitigate the speed of cars and make the area more inviting for pedestrians
- 3 Make it a cultural hub/ for events
- 4 Provide Universal Accessibility
- 5 Provide public access for the breakwaters
- 6 Enlarge the sidewalks
- 7 Revitalise the area and enhance the cultural use

GENERAL RECOMMENDATIONS



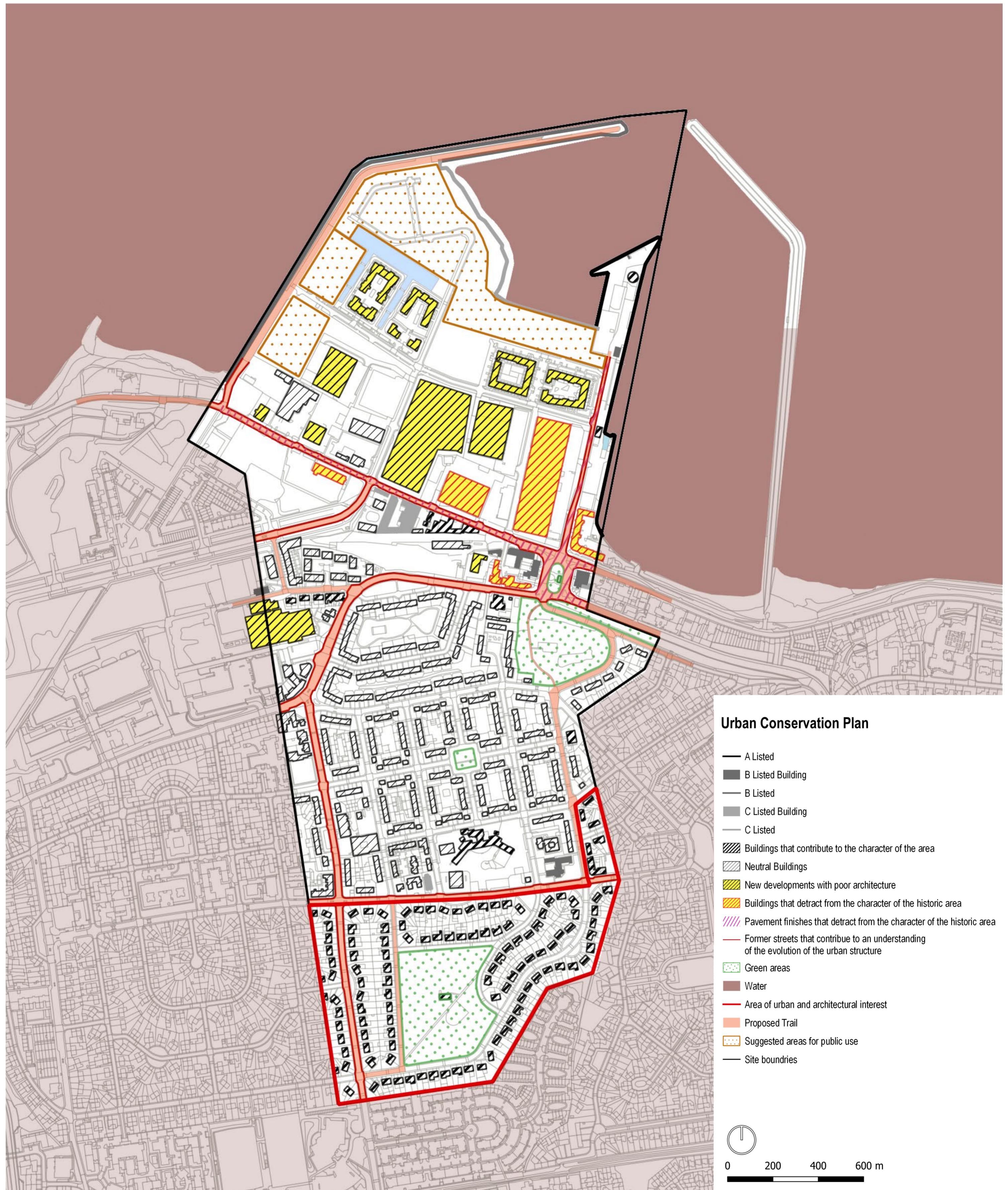
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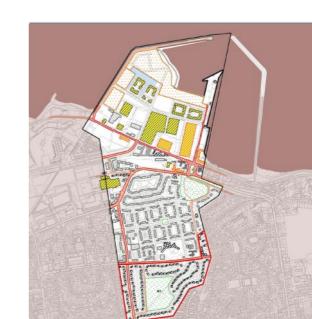


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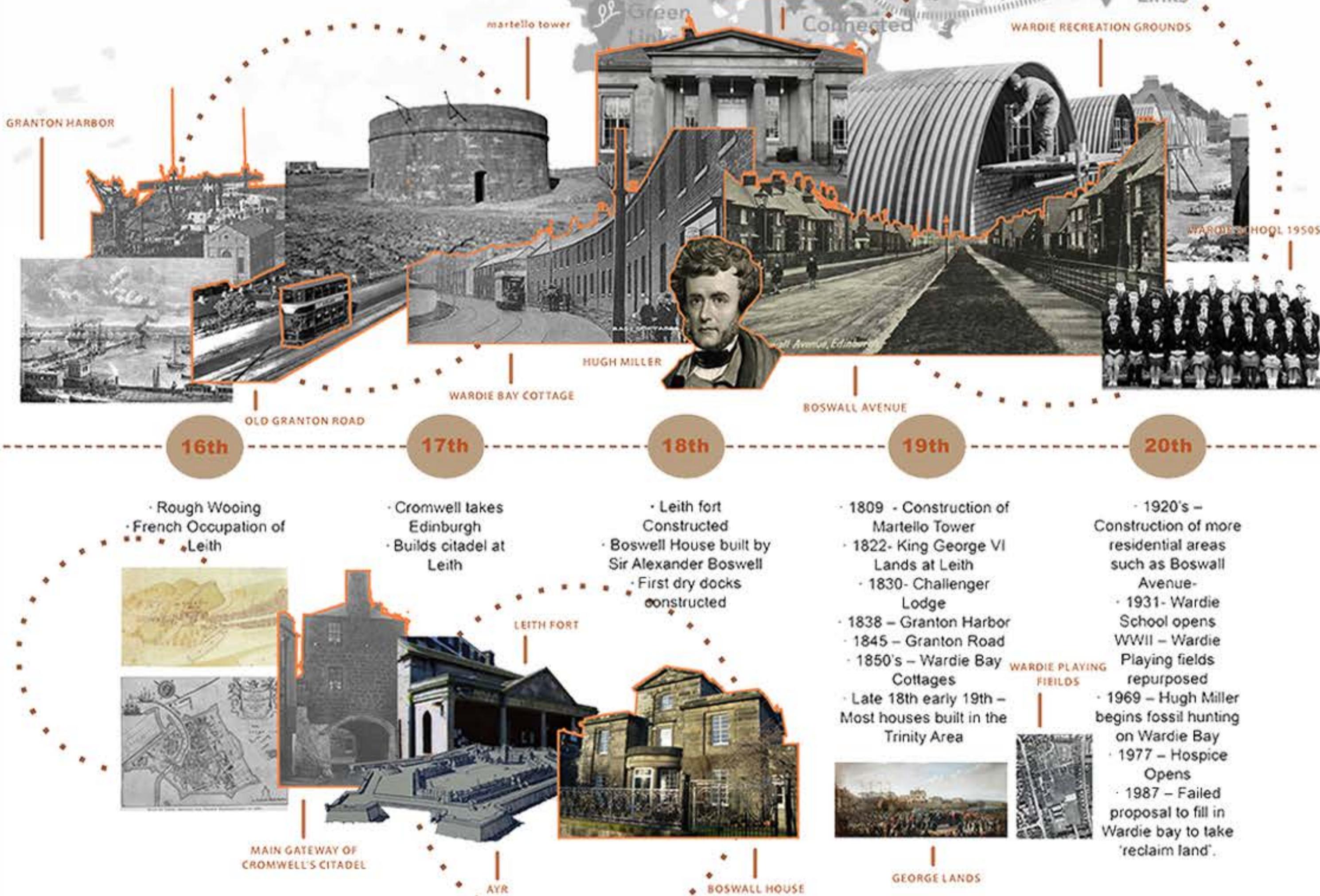
INTRODUCTION

The Urban conservation project at site 4 in Leith, Edinburgh, encompasses the areas of Wardie Bay, Wardie, Granton and Trinity. The project aims to provide a comprehensive understanding of the historical development of this Urban landscape. The study focuses on two main arterial roads, Lower Granton Road, which runs parallel to the beach and waterfront, and Granton Road, connecting these three distinct areas.

The primary objective is to gain insights into the Geographical, social and economic contexts that have shaped the evolution of this urban environment. By employing Urban conservation methodologies, the project seeks to characterise the area concerning its historic development, physical fabric, and function as a community. Through a critical appraisal of these complex interactions, the project aims to develop skills for evaluating the consequences of urban conservation decisions.

Furthermore, the project endeavours to cultivate an understanding of the requirements for effective urban conservation management, with a particular emphasis on the social and economic components. This holistic approach acknowledges the intricate interplay between the built environment, societal dynamics, economic factors, and collective data to come up with sustainable Urban strategies.

HISTORICAL TIMELINE



SITE AREA



TRINITY CONSERVATION AREA



GRANTON & DISTRICT COMMUNITY COUNCIL AREA



CURRENT EVENTS

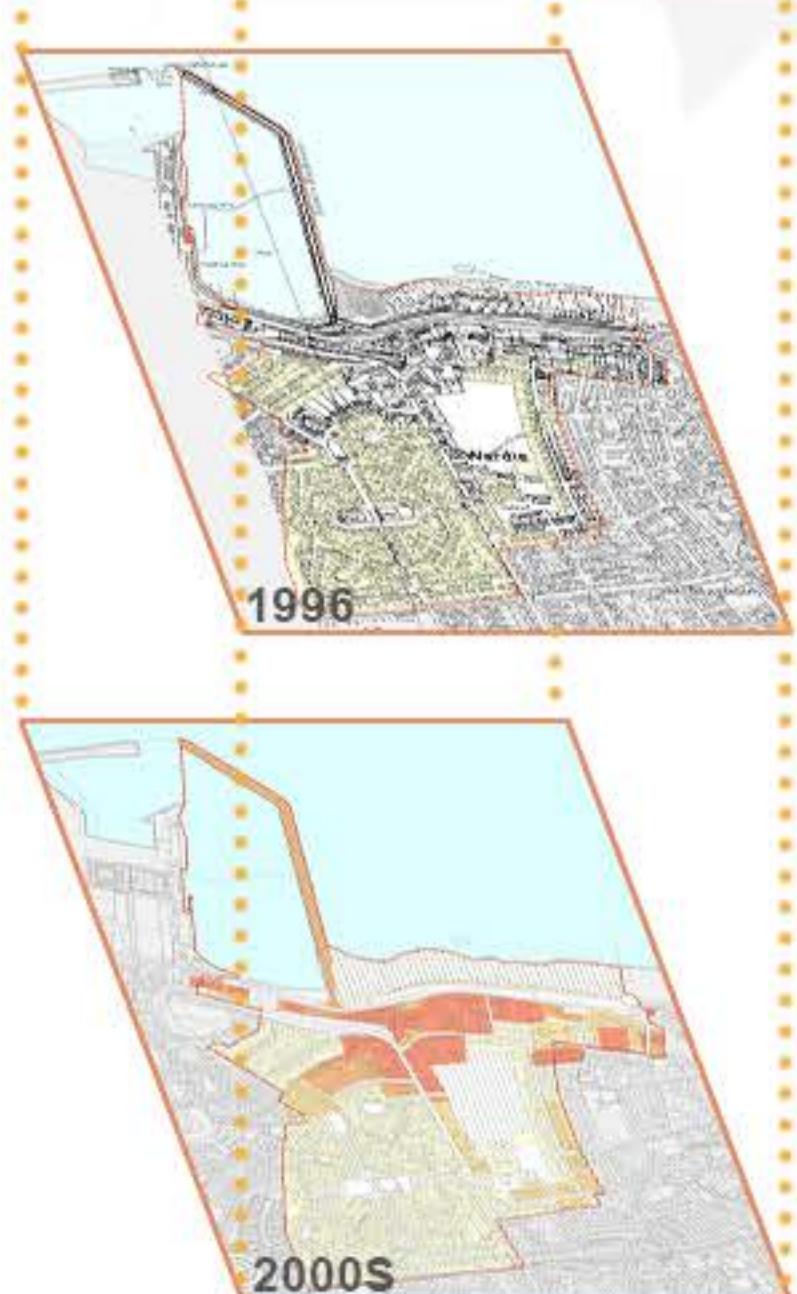


URBAN CONSERVATION

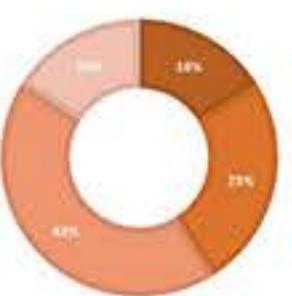
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Group 4: WANZE.Z HARRY.M BRYAN.N YUTONG.L SHARAVAN.K

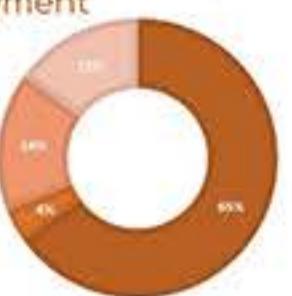
URBAN MORPHOLOGY



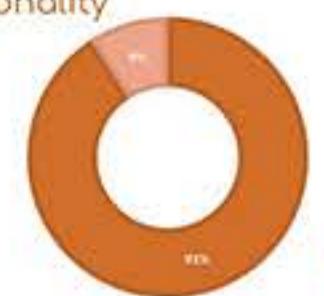
Age



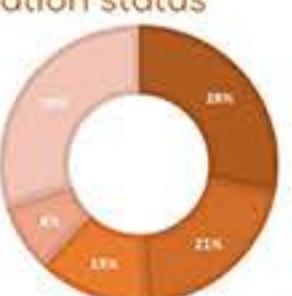
Employment



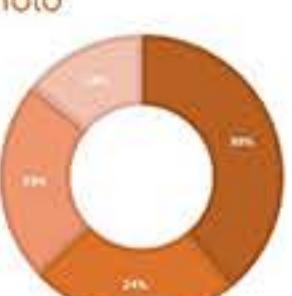
Nationality



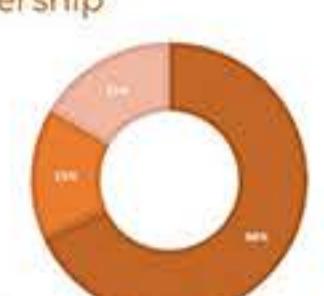
Education status



Household



Ownership



Area	Area of plot	Built up area	GCD	Number 1	Number 2	Open space ratio
Granton	500	300	100	5	3	5:3
Wardie	150	200	50	3	4	3:4
Trinity	700	2250	50	14	45	14:45

COMMUNITY

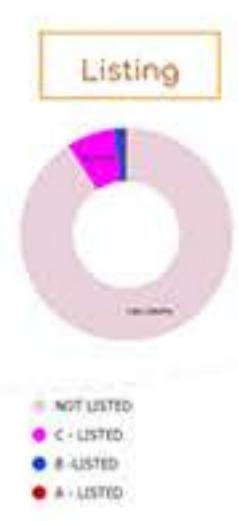
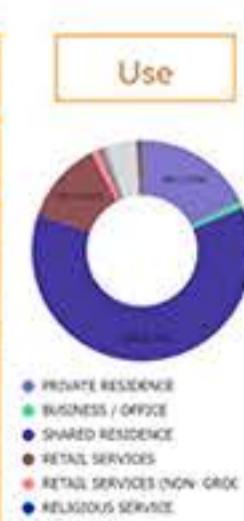
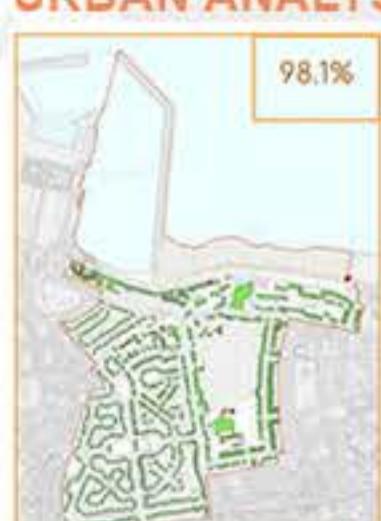


To understand in detail about the sudden change in character of houses in these three areas of study is by doing a built-up to open space ratio. From the table, we observe that Trinity has larger plots compared to Wardie and Granton. Additionally, Trinity offers more open spaces, with a higher ratio of frontal gardens and backyards. This indicates that Trinity has a more spacious layout and a greater emphasis on green areas within its residential properties.

ARCHITECTURAL TYPOLOGY



URBAN ANALYSIS



RECOMMENDATION(D
ESIGNATED OPEN
SPACE)

Wardie Beach
-Scientific Importance
-Community Importance

Wardie Field
-Rain Catchment Area
-Distinctive Urban Character

OPPORTUNITIES

Opportunities
Commercialisation
Connectivity with the city

RECOMMENDATION(U
RBAN DEVELOPMENT)

We are proposing the tram line to run along the granton road. The reason is that the Granton road is not connected to most of the public spaces in our site (The Granton ground, primary school, Hospice building). Moreover, the people of Wardie live in shared houses and many dont own cars and that way they rely on public transport for transit. But, the tram stop ends here, so how can we link the tram line with the route is a major issue that was not studied in our study area. The proposal will solve a lot of problems like the accessibility & differences in the areas of trinity, Granton & Wardie)

SWOT ANALYSIS

STRENGTH

Strength
Significant number of listed buildings
Valuable green and public spaces
Strong sense of community
General good condition of architectural fabric

RECOMMENDATION(C
ONSERVATION AREA)

The proposed conservation area should mandate the following rules:

Scottish slate-tiled roofs and rainwater goods in cast iron, zinc, or aluminum, painted black or match brickwork.

Preservation of architectural features like skews, chimney heads, and chimney pots.

Use of porous paint for facades if any external alterations done in future to avoid damage of original masonry
Preservation of original 6 over 6 paned sash windows, finished in white after any future repairs.

WEAKNESS

Weakness
Lack of public facilities
Accessibility
Lack of gap sites



THREATS

Threats
Rising sea level
Exposure to harsh coastal conditions
Use of modern materials
Privately ownership of the bay

RECOMMENDATION(P
UBLIC FACILITY
IMPROVEMENT)

Proposed Use
-Commercial development
-Public Toilets / Washrooms
-Lockers
-Waste Bins
-Benches

TRANSPORTATION
ACTIVITY



Litter Only
No Household Waste



