EDINBURGH'S RELATIONSHIP TO THE SEA A DESIGN SPRINT

Conclusions Report

Urban C:Lab / Buro Happold, Academy of Urbanism and The City of Edinburgh









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FACILITATORS



Urban C:Lab/Buro Happold

Urban C:Lab is a learning, development and research programme initiated by Buro Happold that sets both within and apart from the company as a whole. The Urban C:Lab cohort are selected from the firm-wide future leadership for a two year programme.

Based on the free-thinking, nonhierarchical structure of thinktanks like Lockheed Martin's famous Skunkworks, C:Lab is an independent programme divorced from typical project constraints, that focuses on exploring emergent, multi-disciplinary disruption in the built environment at both the building and city scales. A collaborative endeavour, Urban C:Lab partners with clients, designers, academia, think tanks and external institutions to reimagine and challenge how our environments are designed.

THE ACADEMY OF URBANISM

The Academy of Urbanism

The Academy of Urbanism is a politically independent, not-for-profit organisation that brings together both current and next generation urban leaders, thinkers and practitioners to explore the urban context.



The City of Edinburgh Council

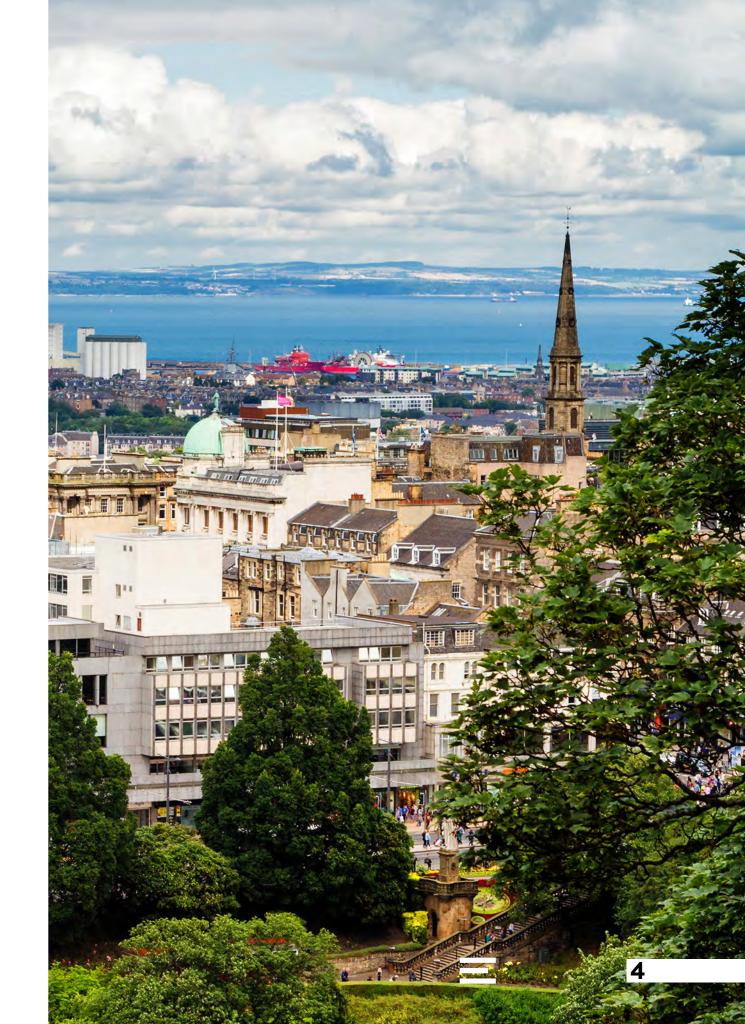
Based in Scotland's capital city, the Council provides a range of public services to over 498,800 citizens. The City of Edinburgh Council is responsible for providing political leadership and governance for a comprehensive range of services across the city.

EXECUTIVE SUMMARY

Summary

In summary, the sprint explored a number of key concepts within the tight timescale and it is clear that there are many opportunities, within and beyond Edinburgh, to improve the city's relationship to the sea. Improving physical and digital connectivity will support economic opportunities and social mobility, whilst incorporating green and blue infrastructure along active travel routes will provide physical and mental wellbeing benefits and boost the city's climate resilience.

Developing areas for industry, housing and innovation across the city will support Edinburgh's existing businesses and attract new investments into the city. Finally, Edinburgh's heritage and character was recognised as one of the city's most valuable assets throughout the sprint, and new development should place the city's identity and local communities at its heart



INTRODUCTION

Why a Design Sprint?

"Design sprints" have been developed across multiple industries as a way of engaging in innovative design thinking quickly and at low risk, to take new products, ideas, and services to market. Buro Happold employs the basic methodology of design sprints to explore broad topics and themes across our projects and areas of influence in a nimble way, enabling the agile creation of strategic thought leadership and roadmaps for progress. To date, Urban C:Lab has collaborated with the cities of Eindhoven, Barcleona, NYC, Dubai and Berlin on design sprints targeting key issues for those urban contexts, and has also staged sprints which re-imagined the urban high street, shopping centres, and a shift toward human centric design.

Format

Generally, this design sprint followed the format depicted graphically to the right: an introduction and "scene-setting" (as established in the briefing pack attached in Appendix A) to the City of Edinburgh and it's shore; an exercise envisioning what an idealised state of affairs in various sectors (transport, commerce, tourism, etc.) would look like; and application of these ideals to Edinburgh's coastline. These were applied across several different scales (regional, citywide, and across different notional neighbourhood "types") so that the challenges and opportunities for each of these sectors could be examined.





INTRODUCTION

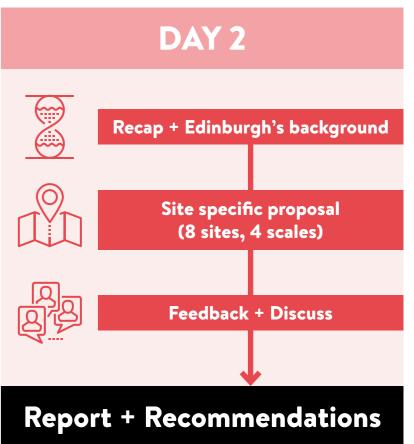
The sprint topic: Edinburgh's Relationship to the Sea

Despite Edinburgh's proximity to the sea and its kilometres of beautiful coastline, it is not often thought of as a coastal city. The city's identity, and indeed its foundation, has always looked away from the sea and toward historic Old Town, Georgian New Town, and Edinburgh Castle. The industries for which it is known (finance, high tech, and academia) and the festivals for which it is known worldwide – the annual Edinburgh International Festival and Edinburgh International Fringe Festival – take little to no notice of the city's maritime presence. This sprint sought to reimagine Edinburgh's relationship with the sea as a vibrant, central part of city's life, commerce, and future, recognizing both the opportunities it affords and the challenges the city's coastal position presents.

Challenges of coastal cities

Over the past few decades, more people and infrastructure have massed along the world's shores than ever before, with coastal cities expanding at unprecedented scales. As these cities grow and urbanize, they often become detached from their environmental surroundings, and yet, the demands of their local ecosystems remain, sometimes threatening the viability of the cities themselves. Modern coastal cities also face the unique challenges presented by underutilised and stranded fishing and shipping assets, rising sea levels, shifts from maritime trade, and the destruction and loss of seaside habitat--all of which contribute to a loss of connection to the sea. Edinburgh is no different. However, as some long stretches of its coastline were only ever lightly developed, if at all, the opportunities for re-imagining the coastline are greater and the obstacles are less than those faced by many other cities.





INTRODUCTION

Desired outcomes of the Design Sprint

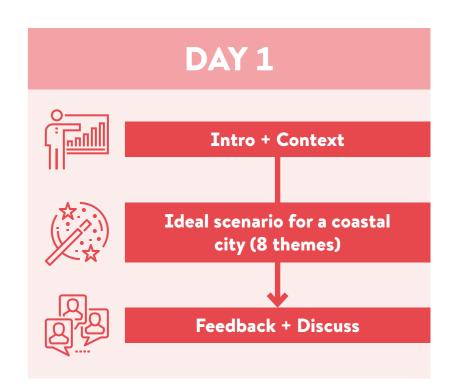
Drawing on the context given in the Attendee Briefing Packs (see Appendix A) and attendee's individual knowledge and experience, the aim of the sprint was to first imagine what characterised an ideal coastal city, and then to apply this idealized vision to Edinburgh and its coast. What factors led to success in all of the realms that make a modern city vibrant, liveable, equitable, and future-proof? What challenges – and what opportunities – do these various sectors present?

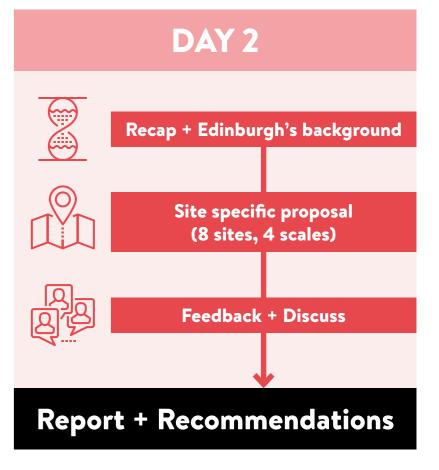
Approach to the Design Sprint sessions

The format of the sprint session, while ultimately a visioning exercise with practical aims at its heart, stresses blue sky thinking: a recognition of constraints, but a spirit of "what if we could?" By starting with an idealization of outcomes divorced of context, the goal was to then apply those ideals to the design sprint proposition and then ask, given the realities, "why not"?

What does a successful coastal city look like?

As a part of scene-setting, the sprint participants reviewed case studies at the city scale where integration of urban settings with coastal locations yielded positive results. Rather than providing fixed, prescriptive solutions, these exemplars were presented to spark conversation, inspire, and suggest opportunities. A brief summary of these case studies follows...





COASTAL CITIES TRANSFORMATION INSPIRATION

Hamburg

The HafenCity project is Europe's largest inner-city urban development project, aiming to be the blueprint for the new European waterfront city. The mixed-use development replaces the former port with residential, commercial, leisure and tourism facilities. HafenCity's commitment to ecological sustainability and supporting social mix is underpinned by a network of high-quality public spaces and economic sustainability elements, increasing Hamburg's resilience and embracing its coastal connections.

Vancouver

Vancouver's redundant industrial coastline was redeveloped in the early 2000s to create a vibrant coastal destination. Reclaiming the coastline through a large number of mixed-use public spaces, the shoreline now includes a combination of green and blue infrastructure to protect the city against rising sea levels.

Barcelona

Barcelona's coastline was developed in conjunction with preparations for the 1992 Olympic Games. As part of this €2.2bn redevelopment scheme, a 2-mile beachfront was restored to recreational use and a marina was built, totally reinvigorating the city's disused industrial coastline. Barcelona's beaches now provide an important leisure asset for the city's residents, while enhancing its booming tourism trade.



Pre-regeneration



Post-regeneration



Pre-regeneration



Post-regeneration



Pre-regeneration



Post-regeneration

DAY1/ SCENARIOS TO BE STUDIED

Following on from the case studies, what an idealized city looked like in each of the following "scenarios" was discussed:

Urban Neighbourhoods

Linking future and existing communities together



Active Space

Promoting outside recreation and sporting activities



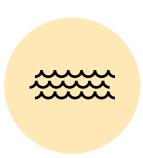
Industry

Creating a favourable environment for business, industry and commerce



Seaside Ecology

Enhancing and protecting the coast's natural habitat and seaside ecology



Climate Resilience

Ensuring adaptability and flexibility in response to shocks and stresses



Tourism

Attracting tourists and visitors



Culture and Heritage

Preserving cultural heritage while supporting creative activities



Place Identity

Establishing and maintaining a strong sense of place



DAY1/ IDEAL SCENARIOS FOR A COASTAL CITY

The following key ideas were developed for each scenario:

Urban Neighbourhoods

- Maintaining identity
- Diversity
- Empowerment



Active Space

- Harnessing the dynamism of the coast
- Balancing tourism with local needs
- Active infrastructure



Industry

- Robust infrastructure
- New technologies
- Better management of legacy industries



Seaside Ecology

- Habitat restoration
- Making the shore and the sea visible creating
- Opportunities for engagement



- Natural barriers
- Space for floodwater
- Reinventing the shoreline



Tourism

- De-centralised
- Year-round tourism
- Blended into seaside neighbourhoods



Culture and Heritage

- · Linking the centre to the coast
- · Coastal assets can be celebrated?
- A cultural promenade or seaside corridor



Place Identity

- Identity
- Diversity
- Empowerment



DAY1/ IDEAL SCENARIOS FOR A COASTAL CITY

Climate Resilience

Active Space

Urban Neighbourhoods

As discussion of the scenarios developed, the interconnections between them became clear:

Industry

Culture and Heritage

Seaside Ecology

Place Identity

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	<u>a</u> <u>a</u> <u>a</u>							
& & [\] &		1. Protecting communities at risk		1. Tourism at the sea integrated with neighbourhoods 2. Tourism housing that doesn't compete with resident housing	Digital infrastructure that connects neighbourhoods Industrial growth that doesn't displace citizens	Connecting coastal neighbourhoods to the city centre and the coast Neighbourhoods that represent their residents	1. Engagement with local environmental groups - seeing is caring 2. Open access to the water's edge	1. Community engagement 2. Improved access to the sea will enhance its identity 3. Diversity
	1. Protecting communities at risk		1. Wild swimming/faimily friendly coasts	1. Canals as flood storage	Using technology to improve outcomes Reduce the impacts of new development		Plantings at water's edge Natural softscapes instead of hardened water's edge	
<u> </u>		1. Wild swimming/faimily friendly coasts		1. An active boardwalk - like Coney Island		1. Create cultural activities along the shore	1. Re-establishing natural edges to improve storm resilience 2. New natural walk on water's edge	
	Tourism housing that doesn't compete with resident housing Tourism at the sea integrated with neighbourhoods	1. An active boardwalk - like Coney Island 2. Canals as flood storage	1. An active boardwalk - like Coney Island		1. Better transport links	An app that details activities and events Tourism fueled by cultural venues and nature	1. Floating accommodation	1. Tourism that honors the coast
	Digital infrastructure that connects neighbourhoods Industrial growth that doesn't displace citizens	Using technology to improve outcomes Reduce the impacts of new development		1. Better transport links			Renewable and green energy Monitoring water quality and wildlife	1. Industry that doesn't compromise the area's character
	Connecting coastal neighbourhoods to the city centre and the coast Neighbourhoods that represent their residents		1. Create cultural activities along the shore	An app that details activities and events Tourism fueled by cultural venues and nature			1. Tourist and cultural trail	1. Repurposing stranded assets 2. Art installations that highlight the sea and its ecology
*****	1. Engagement with local environmental groups - seeing is caring 2. Open access to the water's edge	Plantings at water's edge Natural softscapes instead of hardened water's edge	1. Re-establishing natural edges to improve storm resilience 2. New natural walk on water's edge	1. Floating accommodation	Monitoring water quality and wildlife Renewable and green energy	1. Tourist and cultural trail		
	1. Community engagement 2. Improved access to the sea will enhance its identity 3. Diversity			1. Tourism that honors the coast	1. Industry that doesn't compromise the area's character	Art installations that highlight the sea and its ecology Repurposing stranded assets		

Tourism

DAY1/ IDEAL SCENARIOS FOR A COASTAL CITY - THEMES

During Day 1, the following themes emerged:

Coastlines offer their cities huge but unmet potential and opportunities:

During the design there was enthusiasm about seizing the opportunities that coastal cities still have to offer for tourism, industry, active space and leading the way in climate adaptation and mitigation. This was expressed by advocates for virtually every scenario.

We need to engage a diverse range of individuals and groups from existing and new communities for transformational change:

Sprint participants discussed the role of place identity in ensuring locals feel connected, development is holistic, and communities thrive. This is of particular importance in coastal towns and cities that have large, seasonal tourist populations. Sustainable cities need mixed-use neighbourhoods and robust infrastructure that supports tourism, industry and other aspects of city life.

Participants emphasised the importance of political culture and will that empower local people and allow communities to grasp economic levers to deliver impactful change that suits them.

Connectivity between coastal spaces and the rest of the city is the key to taking advantage of opportunities:

Both locals and tourists need reliable, affordable and efficient public transport and active travel routes in order for them to access the coastline and the amenities that it offers. Green and blue infrastructure along active travel routes contributes to quality of life, whilst also providing climate adaptation benefits, and supporting and connecting urban and coastal biodiversity and isolated neighbourhoods.

We need a better, more thorough and deeper understanding of the sea:

Cities and their residents are unable to connect with the sea if they do not see it and cannot interact with it. Sprint participants proposed a combination of educational corridors and hubs, and information boards displaying real-time data on local marine habitats in order to improve local knowledge of life underwater. The idea of creating underwater national parks was also put forward, protecting and drawing attention to marine life.

DAY2/ EDINBURGH AS A COASTAL CITY CHALLENGES AND OPPORTUNITIES

The second session of the sprint looked more closely at Edinburgh's context, exploring the city's historic development, the challenges and opportunities it faces, and how the idealised scenarios developed in Day 1 could be applied to the very real Edinburgh. Some of the challenges and opportunities that were cited by sprint participants at the beginning of the session are cited below.

CHALLENGE		OPPORTUNITY		
Spacial inequality	Whilst Edinburgh is one of Scotland's most affluent cities, 16% of residents, including 21% of children, are living in poverty. Poverty is not distributed equally across the city, with poverty rates at the ward level varying from 5% to 29%.	Green space	Edinburgh has a wealth of green spaces across the city, but they are not distributed evenly. Some communities close to the sea. These green spaces are a public amenity and provide a wide range of co-benefits such as biodiversity and ecosystem support, climate adaptation and mitigation, a space for community engagement and education, and mental and physical well-being benefits.	
Climate change and sea level rise	Edinburgh's sea level is projected to increase by 10-18cm by 2050 and 23-39cm by 2095. Coastal flooding has not been a challenge for Edinburgh up to now, but there are concerns that climate change could lead to more widespread coastal flooding from rising sea levels, increased storm surges and rougher sea conditions.	Local and regional connectivity	Connectivity within Edinburgh and between Edinburgh and other cities, nationally and regionally, is vital for the city's economic, social and environmental progress. Whilst Edinburgh has a public transport system consisting of buses, trams and rail links, opportunities remain to improve public transport and active travel links.	
Affordability	Edinburgh is the least affordable Scottish city for both buyers and renters, with the average house costing more than 6 times the average full-time wage. Whilst typical Scottish rent equates to one-third of average earnings, the ratio in Edinburgh is 45%.	De-carbonisation and climate adaption	Edinburgh's future climate adaptation presents opportunities for carbon capture and storage, the development of low-carbon neighbourhoods and offsetting carbon emissions.	

Edinburgh's relationship to the sea cannot be fully understood at a single scale. A sustainable and resilient future for Edinburgh's coastline requires systems thinking and transformational change that goes beyond just 'local' action; in order to understand Edinburgh's potential we need to explore the city's connections both within its boundaries and beyond, identifying opportunities and challenges that its coastal position offers.

In the second session of the sprint, groups were tasked with applying their blue-sky thinking to case studies at various scales across Edinburgh, Scotland and the wider Nordic region. The sprint explored the following scales:

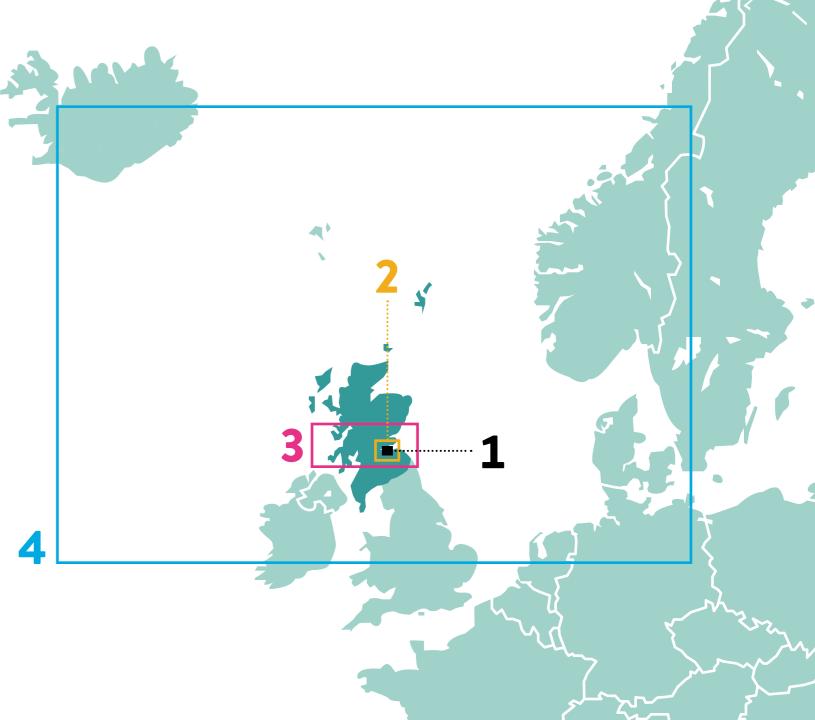
1: 4 'Character Areas' within Edinburgh

2: Edinburgh City

3: The Central Belt

4: Across the entire Nordic region

These are described in more detail in the following pages.





The following "scales" were examined:

CHARACTER AREA 1 - THE GREEN COAST:

Largely undeveloped shorefront



CHARACTER AREA 2 - THE PORT:

Some industry with legacy fishing and shipping activity



CHARACTER AREA 3 - THE TWO HARBOURS:

Marinas and Residential development



CHARACTER AREA 4 - SEASIDE PROMENADE:

Victorian commercial, residential and leisure site





The following "scales" were examined:

EDINBURGH CITY SCALE:

Edinburgh in its entirety

CENTRAL BELT SCALE:

A coast-to-coast region encompassing Glasgow and Edinburgh

THE NORDICS: A broader region that a

A broader region that echoes the boundaries of the Hanseatic League in a modern context









The following key ideas were developed for each scenario:

CHARACTER AREA 1 - THE GREEN COAST:

- Green corridors for connectivity
- Focus on swimming
- Make the coast attractive



CHARACTER AREA 2 - THE PORT:

- Focus on mobility and access
- · Attract new industries
- · Impove public realm and wayfinding



CHARACTER AREA 3 - THE TWO HARBOURS:

- Nature-based solutions
- Flood resilient design
- Addressing inequalities



CHARACTER AREA 4 - SEASIDE PROMENADE:

- Build perpendicular to the coastline
- · Place-making through local harbours
- Improve connectivty





The following key ideas were developed for each scenario:

EDINBURGH CITY SCALE

GROUP 1:

- A 'las ramblas' for Edinburgh
- Redevelop disused tunnel as cyclepath •
- Celebrate local identities

GROUP 2:

- Convert ringroad to canal
- Soft edge coastline
- Seasonally adaptive modular structures

CENTRAL BELT SCALE:

- Build perpendicular to the coastline
- Place-making through local harbours
- Improve connectivty

THE NORDICS:

- Nordic float festival
- Green tourism
- Building partnerships





FIVE BIG IDEAS FOR EDINBURGH

The scenarios explored in the design sprint highlight many ideas, and whilst each proposal was presented separately, they complemented each other. Five themes that emerged across all scales included:

01

Connectivity:

On foot, by public transport, by bike, and electronically.

02

Opening up the seaside:

Providing greenspace and connections to nature for all.

03

Making the coast vibrant:

Cultural connections and activities.

04

Ecology:

Preserving the coast's ecology, and educating residents about its vibrancy, addressing climate change. 05

Appropriate development:

Development that honours the coast and Edinburgh's character.











1/5: CONNECTIVITY

Efficient movement of people and goods is essential for a productive economy, as well as for social cohesion, health and well-being, not just at the neighbourhood or city scale but also regionally.

Systems thinking:

Sprint participants discussed the role of place identity in ensuring locals feel connected, development is holistic, and communities thrive. This is of particular importance in coastal towns and cities that have large, seasonal tourist populations. Sustainable cities need mixed-use neighbourhoods and robust infrastructure that supports tourism, industry and other aspects of city life.

Connecting Edinburgh and Glasgow:

Whilst the Edinburgh Glasgow Improvement Programme will improve rail connections between Scotland's two largest cities, the sprint team focusing on the central belt scale explored the possibility of joining the two cities with a canal, connecting the North Sea with the Atlantic Ocean. This would improve freight connections, redistribute wealth across the central belt and bring the connection with the sea inland. Pushing the boundary of ideas, you could even have extreme potentials such as combining Edinburgh and Glasgow to form one super-city.

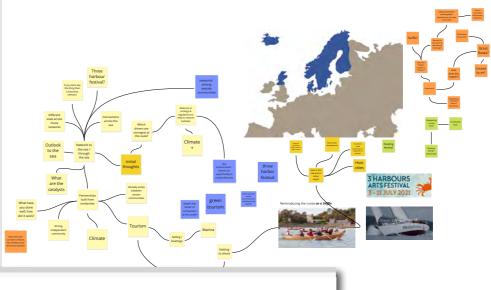
Improved digital connections:

When addressing connectivity, technological ties as well as physical ties need to be considered. Improved broadband across all of Scotland, ensuring the islands are as well connected as cities, would provide economic and social benefits throughout the country. Digital connectivity and online teaching also provides a means of connecting Scotland to the Arctic and Nordic regions. The University of the Highlands and Islands demonstrates the power of remote communication and teaching to form connections between Scotland's remote areas



<u>Click here</u> to view all the 'Vision Boards' online (zoomable)







2/5: OPENING UP THE SEASIDE

Whilst regional connectivity is needed to maximise Edinburgh's potential, improved connectivity at the city scale is also needed to address the city's social and environmental challenges. What does this look like at the coastline?

Making active travel the default:

Edinburgh's existing active travel routes should be improved by creating additional connecting routes where there are gaps in the network that prevent access to the shore, adding green and blue infrastructure to the routes, and creating a series of biodiversity corridors. Benefits would include promoting active travel, supporting biodiversity, improving flood resilience and making the city more accessible for non-car owners.

In order to celebrate the city's heritage and character, participants suggested re-opening the tunnel from Waverly Station to King George V Park for pedestrians and cyclists,

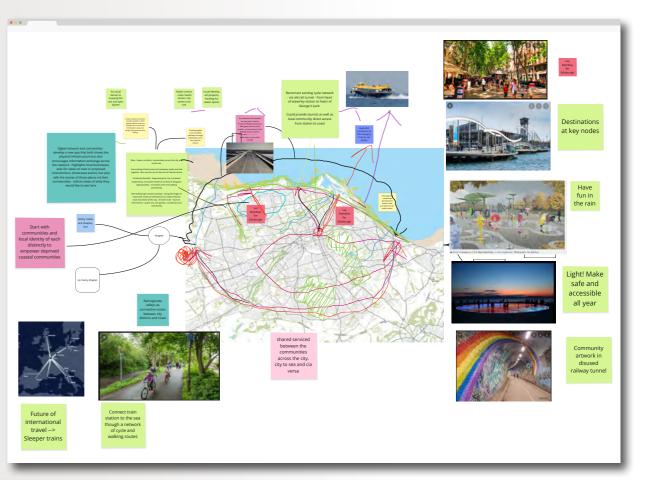
creating a direct route from the station to the sea, improving connectivity for residents and tourists.

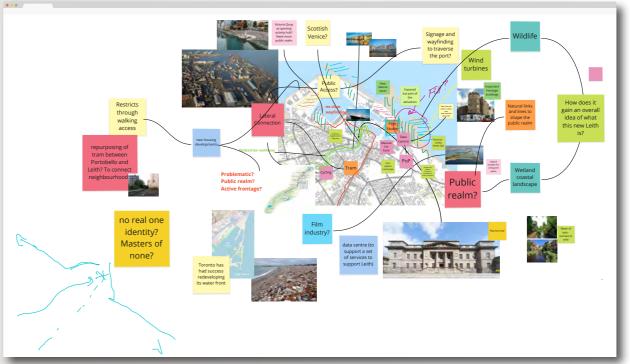
Efficient and affordable public transport:

As well as challenging the traditional private vehicle focus of city planning, participants highlighted the need for affordable, fast and accessible public transport. Whilst the city has a successful tram network that makes the city centre more accessible, public transport could be improved outside of the city centre and along the shore. A site for a new transport hub was identified at the intersection of road and rail infrastructure near Portobello, with the aim of improving connectivity to the neighbourhood and attracting visitors to the seaside at Portobello, and then, via active walking and cycleways, to the seaside as a whole.



Click here to view all the 'Vision Boards' online (zoomable)





3/5: MAKING THE COAST VIBRANT

Edinburgh is a historical city, with both the medieval Old Town and Georgian New Town contributing to the city's identity. Edinburgh's future development needs to be carried out in a way that celebrates the character of the city's places and communities.

Protecting views and access to the sea:

Many views in Edinburgh are open to the sea. Modern expansion should echo historic development, building outwards, perpendicular to the coastline, ensuring public access and views to the sea remain, and that the movements of nature remain a part of the city's fabric.

A creative idea developed by the group exploring the Nordic regional scale was to launch a Nordic Festival – celebrating the region's many characters and connecting Nordic communities across the sea.

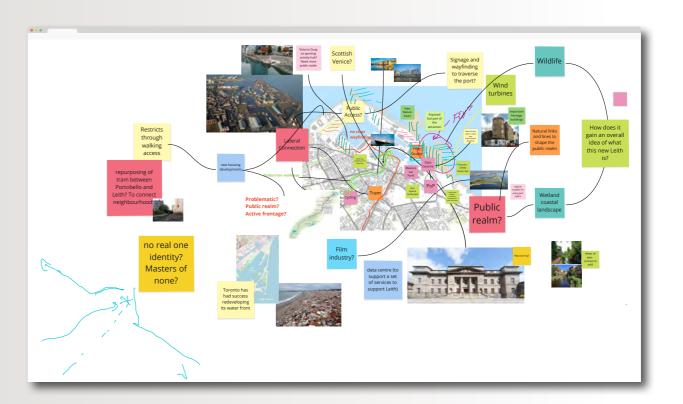
Developing and Edinburgh City app:

An app aimed at both residents and tourists, presenting the physical infrastructure of the city and also encouraging information exchange across the network - highlighting local businesses, showcasing events and telling the stories of the city's places and communities. The app could also be used to solicit views of what locals would like to see in their neighbourhoods and what outcomes they would like from coastal development. Whilst Edinburgh already has various apps for different aspects of city life, such the Transport for Edinburgh app, a single app that collects city data and shares real-time information with users would improve quality of life in the city.



<u>Click here</u> to view all the 'Vision Boards' online (zoomable)





4/5: ECOLOGY

A key theme that was discussed throughout the sprint was climate resilience, particularly in relation to rising sea levels, given Edinburgh's coastal position. Groups working at both the city and neighbourhood scales proposed increasing the amount of green space in Edinburgh; creating attractive public amenities that connect communities to the coast as well as to neighbouring communities.

Welcoming water into the city:

The implementation of a series of public spaces, both along the coastline and across the city, that are able to flood safely during storm surges or extreme rainfall, will contribute to flood resilience. Additional green space will also reduce the urban heat island effect and offer co-benefits such as improved health and well-being, increased property values and support biodiversity.

BURO HAPPOLD

Equitably distributed green spaces:

Participants highlighted the importance of distributing new green and blue infrastructure equitably across the city, given the potential co-benefits they could bring and the existing spatial inequalities in Edinburgh. Implemented in partnership with local communities, nature-based solutions can be an affordable and scalable tool to build climate and community resilience across Edinburgh.



'The Big U' project in New York by Rebuild by Design

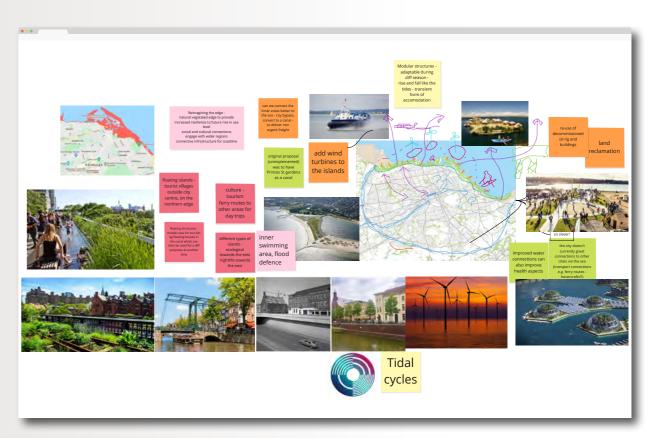


New Orleans' Mirabeau Water Garden

Above are two good examples of nature-based solutions for adaptation at different scales in urban areas.



Click here to view all the 'Vision Boards' online (zoomable)





5/5: APPROPRIATE DEVELOPMENT

Coastal cities, such as Edinburgh, that have significant and seasonal tourist populations, as well as new and growing industries, need to create sustainable, mixed-use neighbourhoods that support industry whilst maintaining the local community's character.

Hybrid landscapes:

A key idea that emerged from the sprint was the creation of hybrid landscapes. Generated by combining traditional urban planning with small-scale appropriation, hybrid landscapes strengthen community sentiment and can reduce the gentrifying impacts of redevelopment.

Creating 'las ramblas' in Edinburgh:

Connecting Edinburgh's West End to the coast at Leith by creating a 2-mile long corridor – similar to Barcelona's Las Ramblas – would better connect the port to the city centre and create a destination for tourists and local businesses.

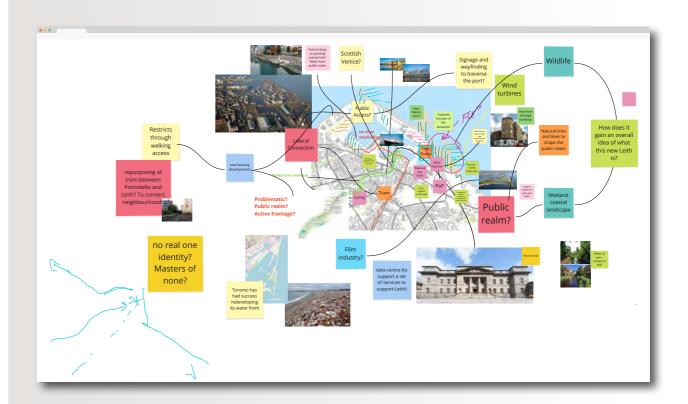
Fostering innovation through infrastructure:

22@Barcelona is an example of an urban innovation district that supports industries and the local community. The district began as a government-led urban renewal project in 2000, transforming the rundown industrial neighbourhood of Poblenou into a knowledge centre. The co-working district is home to knowledge-intensive clusters and promotes collaboration between universities, entrepreneurs, urban planners and businesses. Leith could become a new innovation district in Edinburgh, with improved digital infrastructure to attract and support new industries.



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NEXT STEPS/ POTENTIAL SHORT-TERM ACTIONS

From Buro Happold's longest running design sprint, Energy Island, exploring the future of Cornwall's green energy, we have found that to maximise the impact of sprints, they need to be used as a catalyst for further work. The initial event creates excitement and bold ideas, but these need to be followed by impactful actions. We therefore make the following recommendations for the City of Edinburgh in re-imagining its relationship with the sea:

Making the wild an accessible amenity:

With recreational opportunities

– walking tours, community
clean-up and re-planting; light
watercraft tours

Opening the coastline to neighbourhoods with limited access to open space:

Pathways under "hard" infrastructure like train tracks and roadways, special temporary road closures to create accessways to the sea; or an "event" to build excitement for more permanent works

Lightweight connectivity:

Small changes that could be introduced immediately – e.g. pop-up events to bring people to the coast; "pub in the park" etc., before trying to implement major infrastructure projects

Community engagement:

Finding out what people want and what needs the coastline can serve

Making connections:

To existing local environmental and community groups to encourage people working together with shared goals

Re-routing the coast-to-coast bikeway:

To follow the coast within the city's borders

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NEXT STEPS/ POTENTIAL LONG-TERM ACTIONS

From Buro Happold's longest running design sprint, Energy Island, exploring the future of Cornwall's green energy, we have found that to maximise the impact of sprints, they need to be used as a catalyst for further work. The initial event creates excitement and bold ideas, but these need to be followed by impactful actions. We therefore make the following recommendations for the City of Edinburgh in re-imagining its relationship with the sea:

Creating pedestrian walkways to the sea:

through transport routes or derelict areas that barricade communities from the coast; forming educational journeys with meeting points encouraging interaction

Sensible shoreline development:

with community engagement and inclusion at the forefront of proposals

'Las Ramblas' style promenade:

connecting the old city centre to coastal areas with shops, restaurants and cultural institutions

Large-scale habitat restoration and smart reduction of hardscaping:

future-proofing the city in the face of climate change

Redevelopment of abandoned industrial and shipping areas:

into residential and commercial areas

A bath and boathouse for recreational watersports:

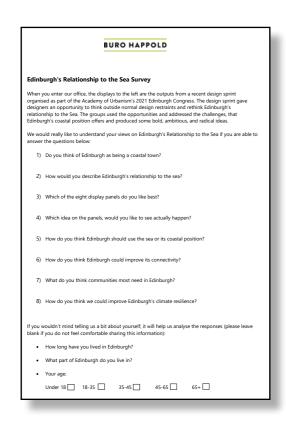
encouraging people to exercise by offering safe and free swimming areas

Creating a seaside nature center and park:

with walkways and restored habitats

ENGAGING WITH OTHERS

Design sprints are excellent mechanisms for bringing together different people to explore ideas and apply blue skye thinking. However, it's limited to those that attend the event so we wrote a survey for people to answer while reviewing the outputs of the design sprint. These were displayed at Edinburgh Doors Open Days on 25th and 26th September.



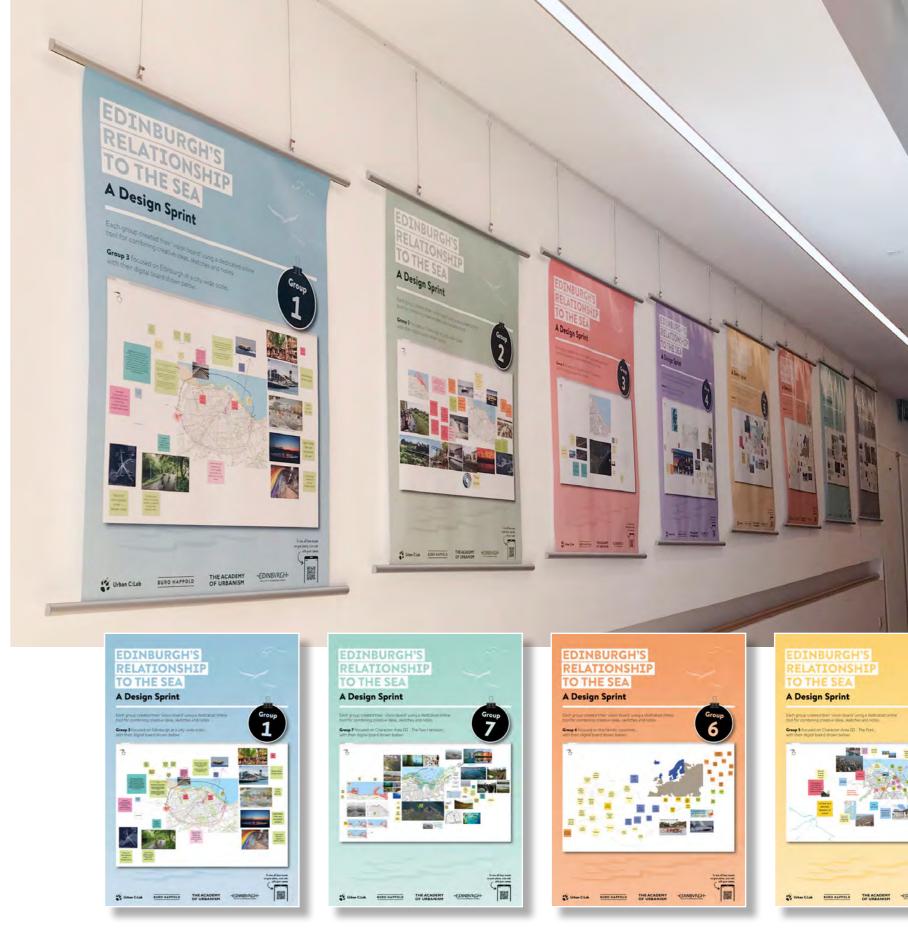
Survey Results:

- Many commented that relationship was underutilised
- Majority felt there was a need for more greenspace, safer walking/cycling routes, activities at the sea, renewable energy sources

Quotes:

"Communities need to feel more part of the city."

"Edinburgh tends to look to its history, rather than its future."



LIST OF PARTICIPANTS

Alexandria Anderson, 7n Architects Alexandra Consoli, Buro Happold Alex Couling, Buro Happold Amy Rennie, Buro Happold **Andrew Burrell**, Academy of Urbanism Anne-Marie Galmstrup, Galmstrup Architects Ben Wilson, The City of Edinburgh Council **Brian Evans**, The City of Glasgow Council Cailin Murphy, Academy of Urbanism Camilla Ween, UN Habitat UEF Claire Hope, Buro Happold David Maclachlan, Buro Happold **Elena Navarro Soto**, Henning Larsen Architects Elias Gomes, Buro Happold Emily Harrison, Buro Happold Emily McDonald, Buro Happold **Ewan Anderson**, 7n Architects Felix Summers, Buro Happold

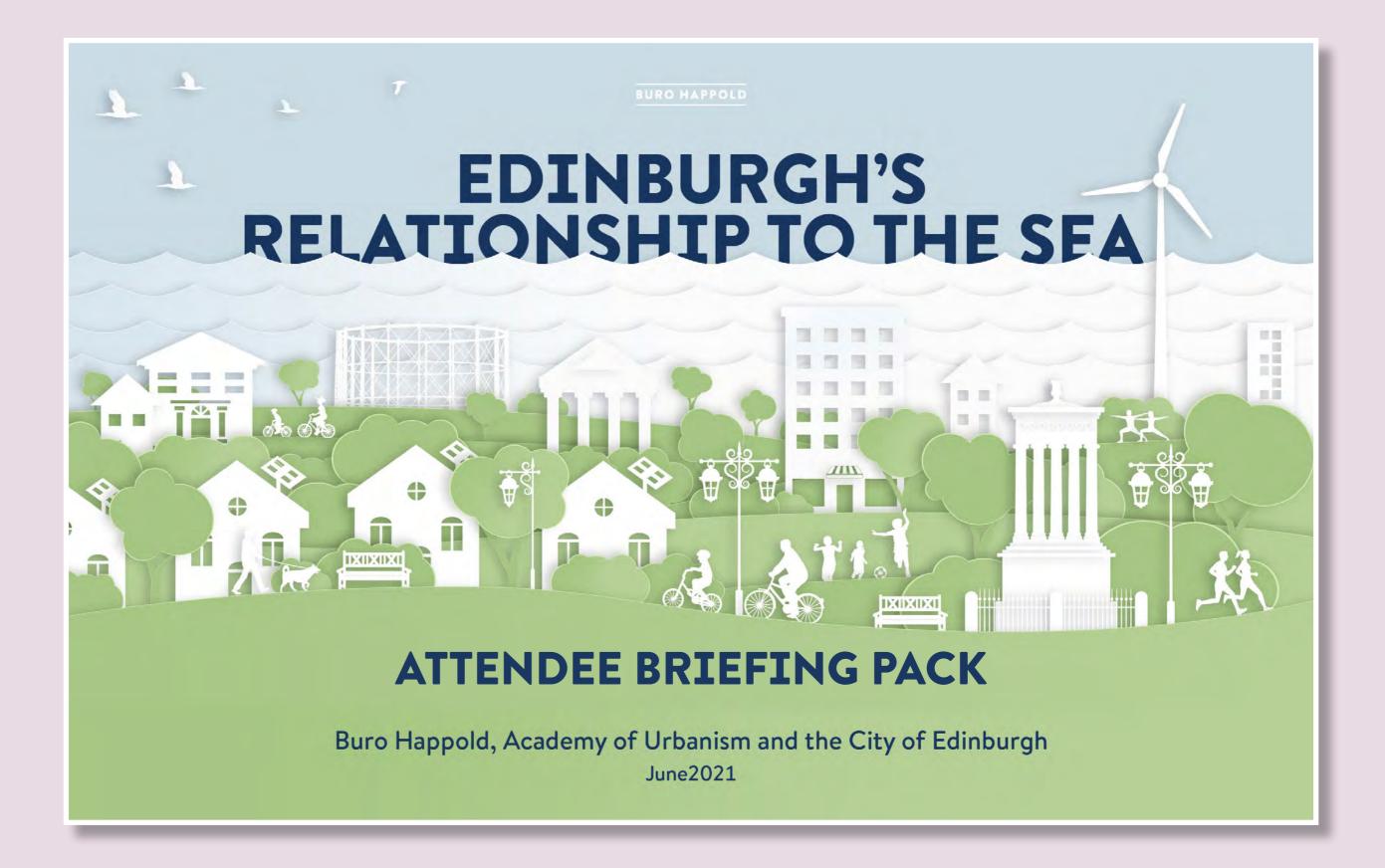
Fiorella Modolo, Warden Armstrong

Flora Fraser, Buro Happold

Francis Newton, The City of Edinburgh Council Frazer McNaughton, NatureScot **Gary Jebb**, The University of Edinburgh Gavin Thompson, Buro Happold Gianluca Cavallaro-Ng, UCL Ian Gilzean, The Scottish Government Ian Stewart, Buro Happold Jas Atwal, Academy of Urbanism Jenny Jones, Jenny Jones Studio **Jeroen Zuidgeest**, Studios for New Realities Johnny Cadell, Architecture and Design Scotland Jordan McLoughlin, Buro Happold Juliet Kernohan, Buro Happold Kathleen Hetrick, Buro Happold Kathleen Higgins, Buro Happold Kristy Macari, Dundee University Laura Kinnaird. Reiach & Hall Architects Lawrie Robertson, Buro Happold Lesley Porteous, The City of Edinburgh Council Lorraine Landels, Buro Happold

Mark Thormann, WHY Architects Mark Cunliffe, Buro Happold Martin Flett. 7n Architects Morag Bain, Architecture and Design Scotland Natalie Murray, Wardell Armstrong Nilani Venn, Buro Happold Nora McCawley, Buro Happold Olivia Bennett, Buro Happold Reinier de Graaf, OMA / AMO Saffron Mustafa, UCL Sally Pickard, Buro Happold Sam Stockley, University of Dundee **Sonja Stockmarr**, Henning Larsen Architects **Stephen Long**, Scottish Futures Trust Tierney Lovell, Sustrans Lucy Bretelle, Buro Happold Lucy Moore, Buro Happold Lyle Chrystie, Reiach & Hall Architects Malcolm Fraser, Fraser Livingston Architects

APPENDIX: ATTENDEE BRIEFING PACK



APPENDIX: INTRODUCTION

What is a Design Sprint?

Design sprints have been developed across multiple industries as a way of applying innovative design thinking in order to reduce the risk in taking a new product or service to market. Buro Happold has adapted this basic methodology of the design sprint to allow the broad exploration, across our projects, of key strategic themes that enable the creation of strategic roadmaps to achieve agreed outcomes.

June 2021 Design Sprint -Edinburgh's relationship with the sea:

As coastal cities grow, they become detached from their environmental surroundings, while still requiring services from their local ecosystem. The demands placed on the host ecosystem threaten the viability of the cities themselves. Coastal cities such as Edinburgh are facing the challenges of rising sea levels, a loss of connection to the sea and the destruction of habitat, now and in the future.

The design sprint will explore the future of the Edinburgh coastline and the city's relationship with the sea, asking questions like:

- · How do we ensure that Edinburgh's coastline is resilient to future shocks and stresses?
- Are the existing amenities enough?
- Do they promote healthy communities and neighbourhoods?
- · How do we unlock social and economic potential?

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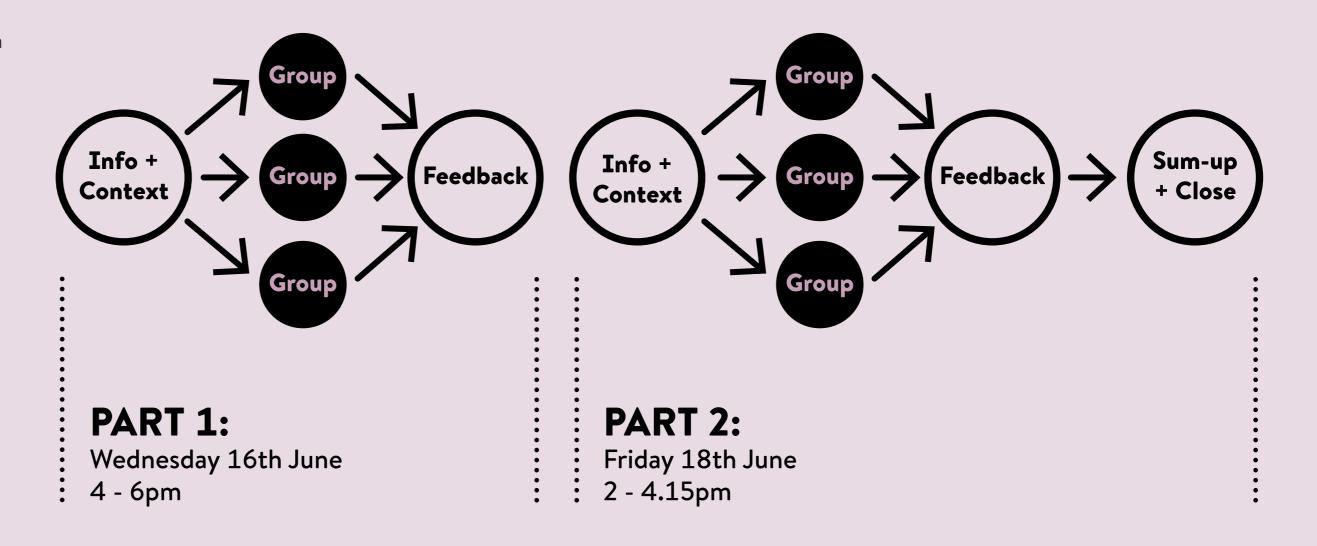
APPENDIX:

OVERVIEW OF SPRINT

In the first session of the sprint, we will begin with an introduction to the subject and each of the scenarios we are going to explore:
Urban neighbourhoods; Climate resilience;
Active space; Tourism; Industry; Culture and heritage; Seaside ecology; Place identity.
We will then split into different groups, each exploring a specific scenario.

The second session will consider the historic and geographic context of Edinburgh, and apply the ideas we have developed from the first session to various sites across the city.

The aim of this design sprint is to explore ideas quickly and collaboratively, expanding our thinking around coastal cities. The sprint will not only explore ideas with today's challenges in mind, but will think about other potential future disruptors and drivers of change, and explore how future scenarios could help us reconsider coastal cities' relationships with the sea.



APPENDIX: OVERVIEW OF SPRINT

SESSION 1: Wednesday 16th June 2021, 4 – 6pm

This session is for debate and blue sky thinking

- Context and framing today's challenges 25 mins
- Breakout sessions (in 8 groups) **45 minutes**
- Groups to feedback 40 minutes
- Sum up and close **10minutes**

SESSION 2: Friday 18th June 2021, 2 – 4.15pm

This session will consider how ideas might be practically implemented at various scales and character areas in Edinburgh

- Recap session 1 **5 minutes**
- Context and framing today's challenges 10 minutes
- Breakout sessions (in groups) **60 minutes**
- Groups to present ideas **50 minutes**
- Sum up and close **10 minutes**

APPENDIX: LOGISTICS AND LINKS

This is a two-part sprint, 4pm - 6pm Wednesday 16th and 2pm - 4:15pm Friday 18th June 2021. There will be continuity between the two sprints, so participants need to attend both sessions. Please let us know if you are unavailable for either session. We would appreciate it if attendees could join on time.

Also, please be aware that both sessions will be recorded.

ZOOM LINKS:

Session 1 (Wednesday): https://burohappold.zoom.us/j/91598821227

Session 2 (Friday): https://burohappold.zoom.us/j/95357553070

MIRO:

Shared Miro Board:

https://miro.com/app/board/o9J_I_d7UG0=/

Miro Tutorial:

https://www.youtube.com/watch?v=Sm6FwJZ9k5w

If you have not previously used Miro, you will need to sign up. Please do so before the session.