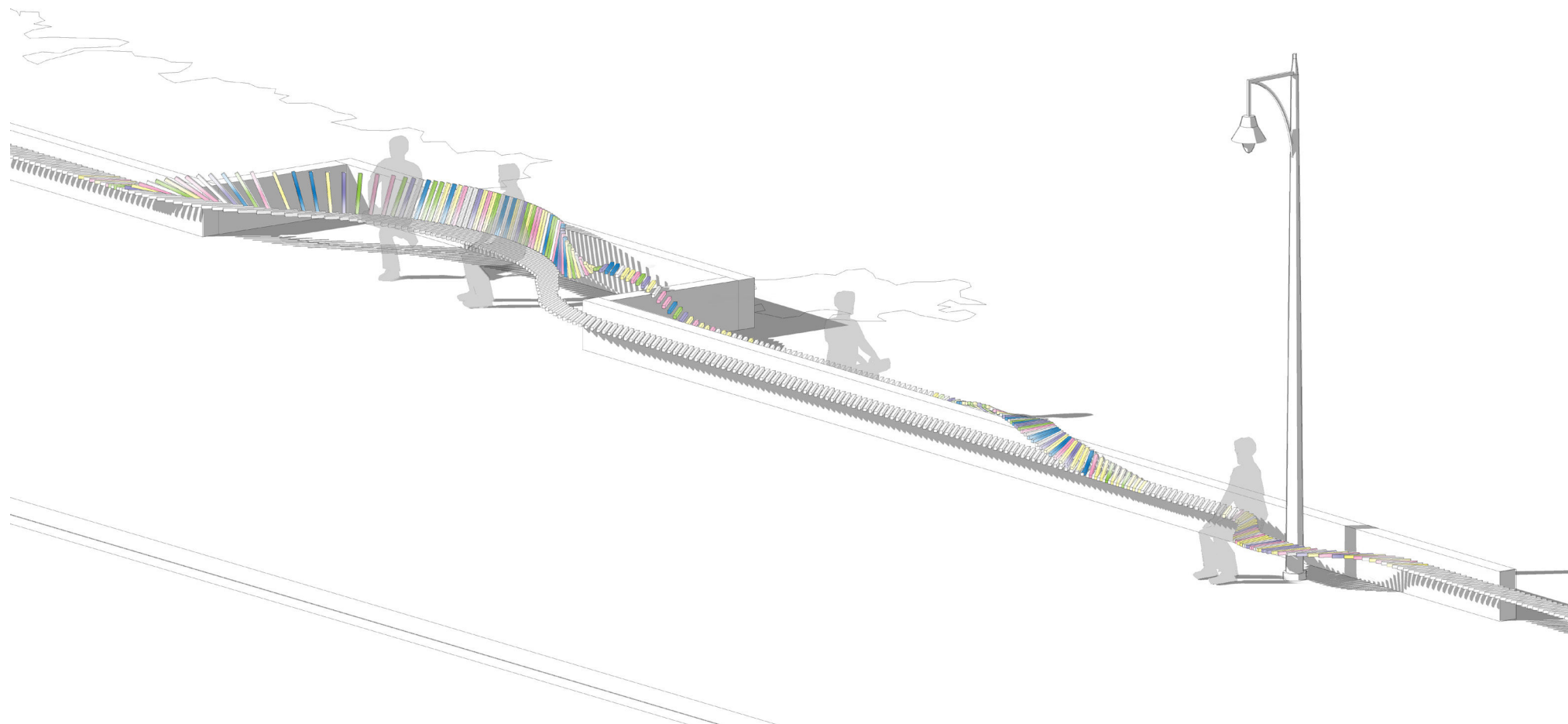




THE LONGEST BENCH

Littlehampton

Design and Access Statement

Studio [Weave](#)
September 2009

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1 Introduction

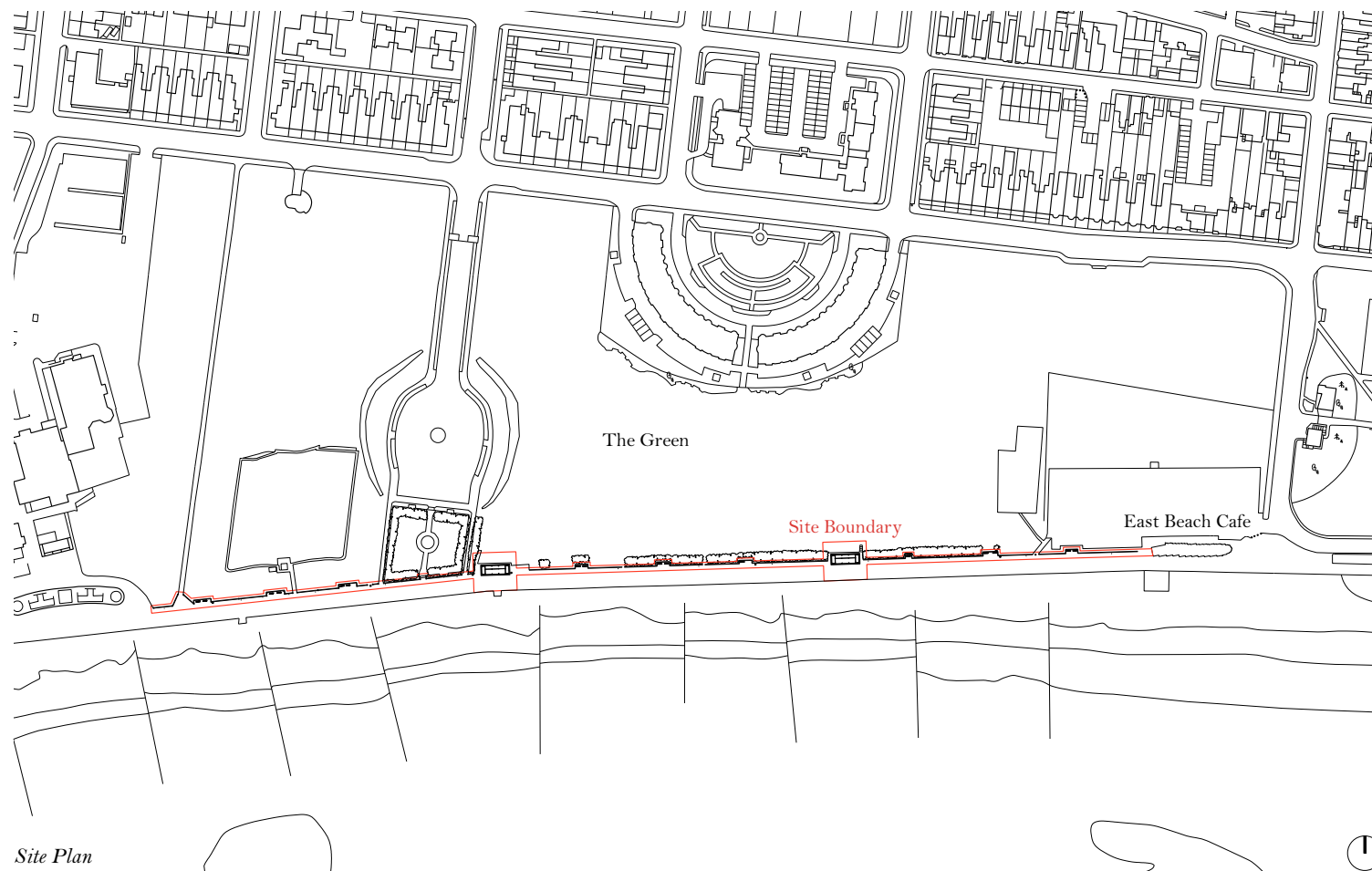
This project began as an idea to create a very long bench down the spine of the promenade at Littlehampton. The structure currently measures 655m (following the curve of the bench) and this would be the longest bench in the UK or perhaps the world.

Inspired by Boardwalks and Charm Bracelets, the structure will form a long bench which will meander around lampposts and rise and bend to form shelters and wind breaks, connecting and defining the promenade as a whole, while underlining it as a string of special places.

To inspire and develop this string of places, we worked with Connaught Junior School. The children showed us how they use the promenade, what they think of it, and what it means to them, giving us insights into the site we would never otherwise have.

This statement sets out our site research and analysis; involvement and consultation; aims, and design proposals.

This document is prepared by Studio Weave for Arun District Council.



2 The Site

2.1 Location

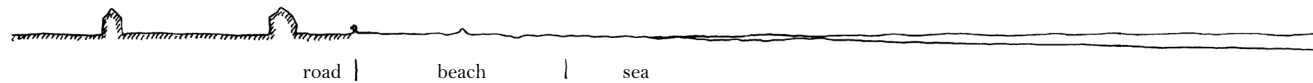
Littlehampton, West Sussex is a town on the South Coast at the mouth of the River Arun.

The town has two beaches either side of the river estuary: the East Beach which runs from the river mouth eastwards between the beach and the green; and the West Beach, which has a European Blue Flag and an SSSI.

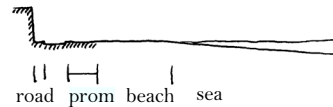
The promenade runs along the East Beach from the harbour westwards towards Worthing and beyond. The site for The Longest Bench follows a redbrick wall that accompanies the promenade for over half a kilometre, between the East Beach Café and the row of shops just before the River.

Littlehampton Town Centre sits just north of the East Beach. The seafront promenade is a distinctive and key public space in the town. At the river mouth, the East Beach connects to the very successful and award winning East Bank development.

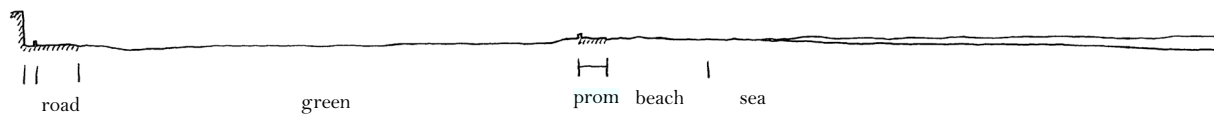
West Wittering



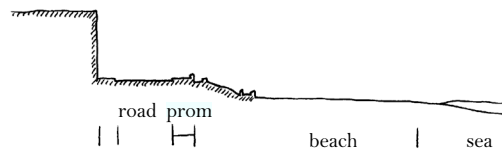
Bognor



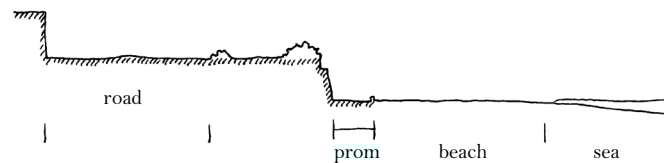
Littlehampton



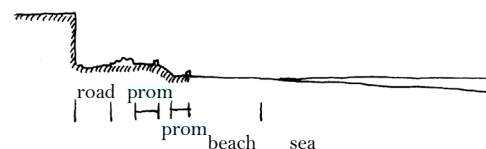
Brighton



Saltdean



Eastbourne



2 The Site

2.2 Site Ownership

The site is owned and maintained by Arun District Council.

2.3 Seaside Comparisons

Our initial impressions and research revealed the distinctive character of Littlehampton promenade. Unusually, the promenade is level with the beach. Without the often seen barriers of sharp level changes and bulky handrails, the connection with the sea is strong.

Also, this promenade, unlike many, is not backed by a busy seafront road and rows of facades but stretches between the beach and a green. Promenades are normally found either by the water or through a park, Littlehampton promenade is both.



Existing Benches



Low Redbrick Wall and Lamppost



Existing Shelter



Opening in Wall

2 The Site

2.4 Site Analysis

The promenade at Littlehampton sits within a series of distinct stripes made up of the town, the green, the promenade, the beach, and the sea. The promenade is accompanied by a low redbrick wall which runs along its border with the green. Although seating is provided, people perch on this wall, stopping as suits them anywhere along its length.

The continuity of the wall is interrupted by a series of incidents such as openings, lampposts, flagpoles and shelters. These however primarily address the beach and don't take advantage of the duality of the promenade.

On summer days, the seafront is busy; particularly at weekends. At peak times, the entire length of the redbrick wall is used as seating. Both the beach and the green are used for many activities including walking, cycling, ball games, picnics, water sports, and so on. The existing shelters are mainly avoided due to their attractiveness for vagrants.

2 The Site

2.5 Social and Economic Context

Littlehampton is the second largest town in the Arun District (population 35,000). The local economy has suffered from the decline of the traditional staying seaside holiday market, accentuated by the loss of key manufacturing employers. Parts of the town suffer from economic and social problems with two of the most deprived wards in West Sussex and two identified Local Neighbourhood Initiative Areas.

In response to these issues, the Council and its partners are working towards a co-ordinated approach to regenerate the town. Building on the already successful East Bank development – which has received a number of design awards; and the recent development of the iconic East Beach Café – which since opening has achieved national prominence; the regeneration programme is gaining significant momentum.

2.6 Planning Policy

2.6.1 The Waterfront Strategy

The strategy for regeneration in Littlehampton is guided by the Littlehampton Vision which proposes a framework for development over the next fifteen years. This identifies opportunities to develop, enhance and better integrate the town centre, the harbour, and seafront area. One of the actions identified by the Town Centre Action Group was the development of a Waterfront Strategy. The Longest Bench forms an integral part of this strategy and aims to, along with the Café, act as a catalyst for future development.

2.6.2 The Arun District Council Local Plan

The Local Plan describes the Council's overarching objective as being to implement sustainable development, defined as: "development that meets the need of the present without compromising the ability of future generations to meet their own needs." (the "Brutland" definition). The Longest Bench also aims to meet the needs of the present - by providing seating and shelter along the seafront within an attractive and unique but light-touching development; as well as not compromising future development – like a charm bracelet, the bench would support diverse future additions to the bench as future generations see fit.

More specific policy areas affecting the bench include the following:

The Longest Bench falls outside Policy Area 2: Built-up Area Boundary, however, the proposals are not for buildings but for seating and shelter which supports the recreational use of the seafront.

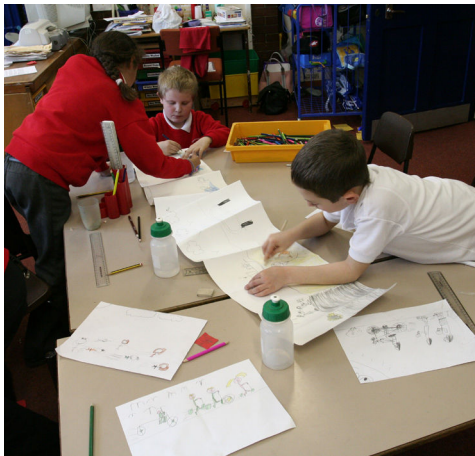
The Green falls within Policy Area 5: Protection of Open Space. This policy states that "The District Council will protect public and private open spaces, playing fields, outdoor sports facilities and children's play facilities from development other than associated recreational development." The Longest Bench recognises the significance of the green as a recreational space and does not damage the quality of or reduce the area of the green. The proposed new seating and shelters will serve to improve the accessibility, use, and attractiveness of the green.

The Promenade also borders Policy Area 8: The Littlehampton Harbour Strategy. This policy states that planning permission will only be granted within this area for development which "supports the continuation and development of the harbour as a commercial and recreational port." The Longest Bench does not fall within this area however the project aims to complement the leisure and fairground character of the harbour park.

3 Involvement and Consultation

3.0 Involvement and Consultation

3.1 Connaught Junior School



Workshop at Connaught Junior School



Children Unveiling the Prototype

We worked with a class of 7 and 8 year olds from Connaught Junior School in Littlehampton. We chose to work with a Year 3 class as they are likely to remain together as a class for the duration of the project. We initially wrote letters to the children asking them what they do on the promenade, whether they know any stories about the promenade, and what games they play there. Their replies emphasised to us the importance of the green and their desire for a more colourful, and more playful promenade.

We also held a workshop with the children from Connaught where we played five simultaneous games of Consequence. To play this game, you start with a long roll of paper, one person starts the drawing then folds over the paper, leaving only a sliver of their drawing visible, and passes it to the next person who continues the drawing. At the end, the paper is unfolded to reveal a long surprise drawing. We drew long fantasy promenades.

3.2 Arun District Council

We are working in consultation with all relevant departments within the Council. An initial presentation of the project was given as part of the Shifting Sands Seminar – a conference exploring outstanding design in seaside regeneration – at The Windmill, Littlehampton in March 2007. This presentation was attended by a number of Council representatives and was part-organised and sponsored by the Council.

Since then we have been working closely with the council to develop the scheme as part of a wider vision for the regeneration of the area which included the commissioning of a Waterfront Strategy. The Longest Bench formed part of the Waterfront Strategy which was adopted by Arun DC on the 8th July 2009.

3.3 Public Consultation

The views of the public are regarded as critical to the success of the project. We will take account of the views and ideas expressed throughout this process.

The Waterfront Strategy went out for public consultation at the end of April 09 and the Longest Bench proposal was part of this scheme. The proposals were on view in Littlehampton town centre in the 'Regeneration Shop' which was a staffed exhibition occupying an empty shop premise in the High Street. The exhibition was open for an 8 week period. In addition a range of promotional messages were sent via the Arun DC website, radio advertising, local press, and in various local publications. The response to the public consultation was positive with a significant number of people commenting in favour of the project.

The project is supported by local businesses, and local residents groups, and the Littlehampton Town Centre Action Group, who funded the initial feasibility study.

The public perception and attitude will be measured before, during, and after the completion of the project via Arun District Council's resident consumer panel of 1,500 local residents.



Site Photograph

4 Proposals

4.1 Aims and Objectives

The aims of this project are to:

*** Build the longest bench in the world!**

At over 600m (following the curve of the bench) this bench would be the longest bench in the UK or maybe even the world! This would create a huge amount of new seating that would cater for residents and visitors alike.

*** Create a landmark project that creates an attraction throughout the year.**

While creating a unique landmark, that looks great in all seasons, the project also respects its environment and touches the ground lightly with minimal disruption to the site.

*** Play on the unique duality of Littlehampton promenade.**

The promenade at Littlehampton runs between the beach and the green. The Longest Bench aims to celebrate this quality by addressing both sides and playfully jumping over the brick wall as it does so.

*** Identify and improve underused facilities.**

The current shelters are dark, dirty, and obstructive. The project aims to replace these with shelters that feel open, bright and safe.

*** Create a durable and robust public space.**

The materials and design will be carefully considered to ensure the Longest Bench is easy to look after so it can be used for a long time.

*** Build on the success of the East Bank development and the East Beach Café.**

These projects have worked to redefine Littlehampton as a place of outstanding, dynamic, and exciting cultural offering. The Longest Bench will carry on the momentum created by these projects in attracting interest and visitors to the town.

*** Create a backbone for future development.**

The Longest Bench is a core feature of the Waterfront Strategy, designed to ensure that the cultural renaissance of Littlehampton is cohesive; has public support; and sets a framework which is consistent with the Littlehampton Vision and with associated developments on the seafront and elsewhere in the town.



Images of Boardwalks



Images of Charm Bracelets

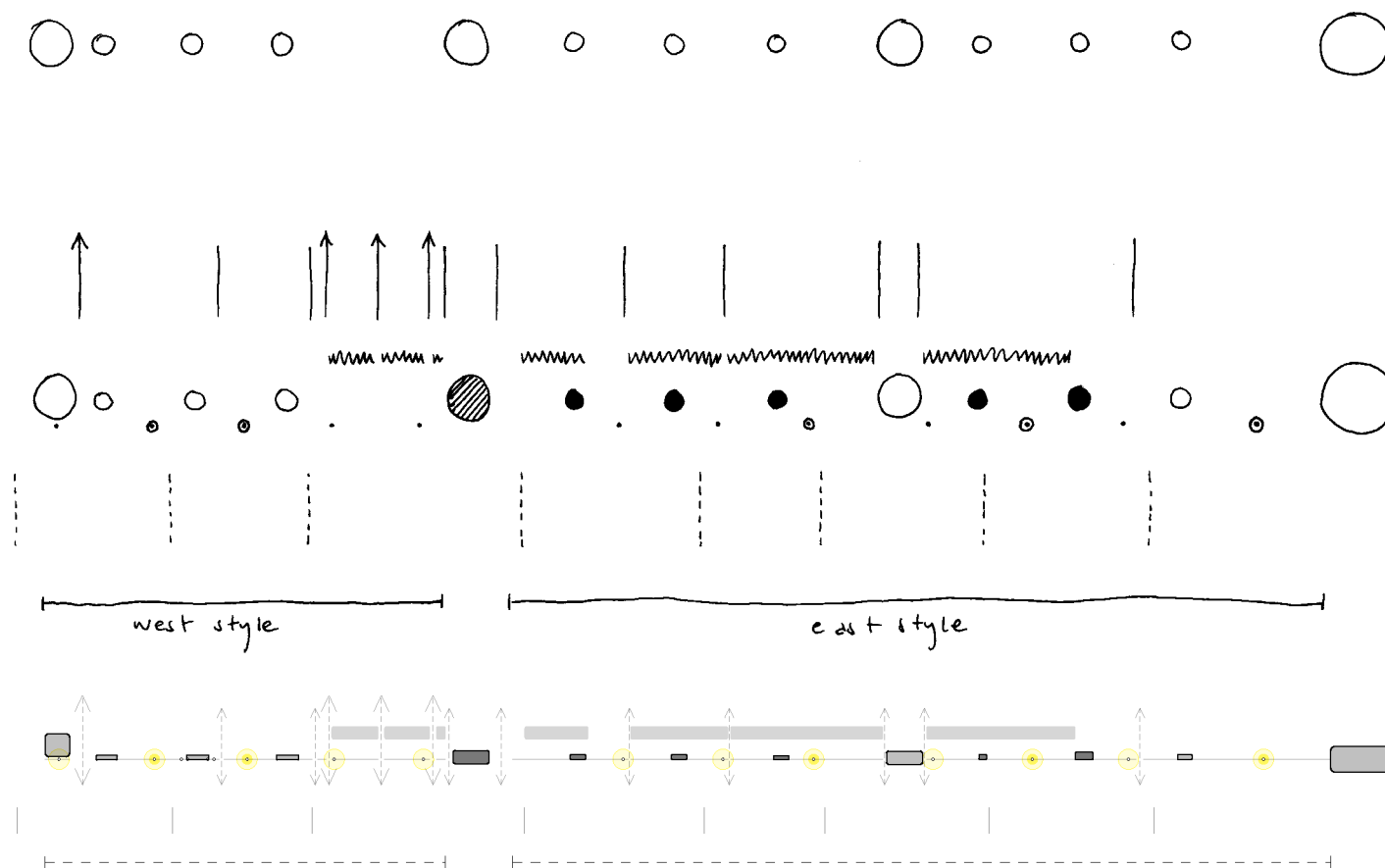


4 Proposals

4.2 Boardwalks and Charm Bracelets

A boardwalk is a path made up of timber boards tied together, laid to give access to sensitive environments. They are most often found meandering across sandy beaches or wetlands. The project is inspired by the way the simplest boardwalks, made of boards loosely tied together, are constructed around the existing environment: a run of boards resting gently on the sand, connecting the places along its way.

A charm bracelet consists of a simple chain which is then personalised with trinkets given as presents by friends or family. Each charm has its own story of travels or events or friendships. Each bracelet is a unique collection. Similarly, The Longest Bench, while connecting and defining the promenade as a whole, will underline it as a string of special places.



Site Analysis Diagrams

4 Proposals

4.3 The Longest Bench

4.3.1 Objectives

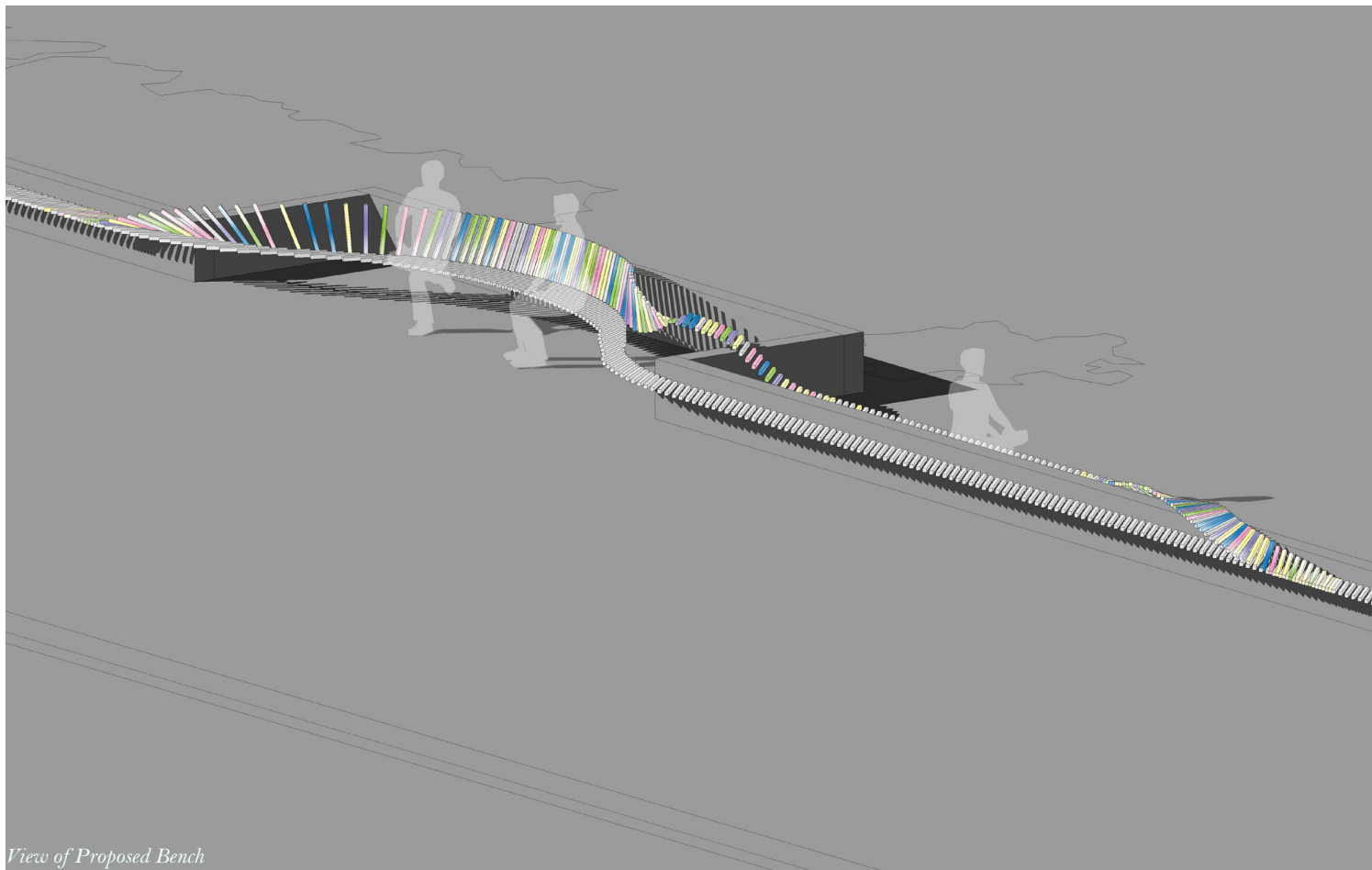
As the drawings illustrate, we have carried out a careful site analysis plotting each incident along the promenade including the variations and openings in the wall, lampposts, flagpoles, bins, benches, and the start and finish of the wall.

Our aim is to leave the existing site as unchanged as possible, using the variations and interruptions to inform the bench. The existing bins will be maintained and incorporated into the design. Access to lampposts, flagpoles and other fixtures will be maintained.

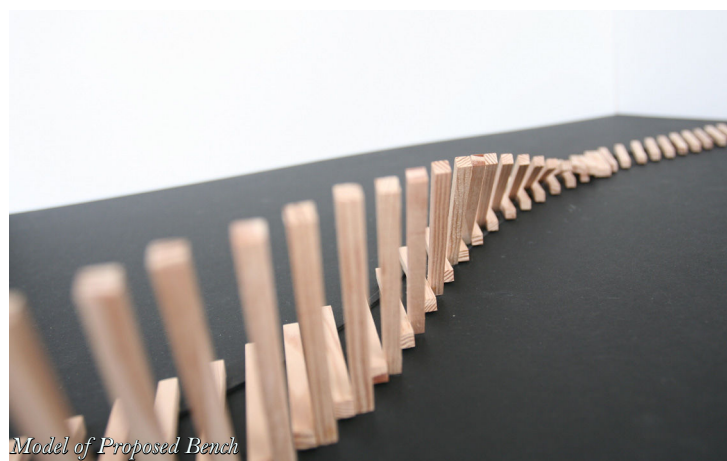
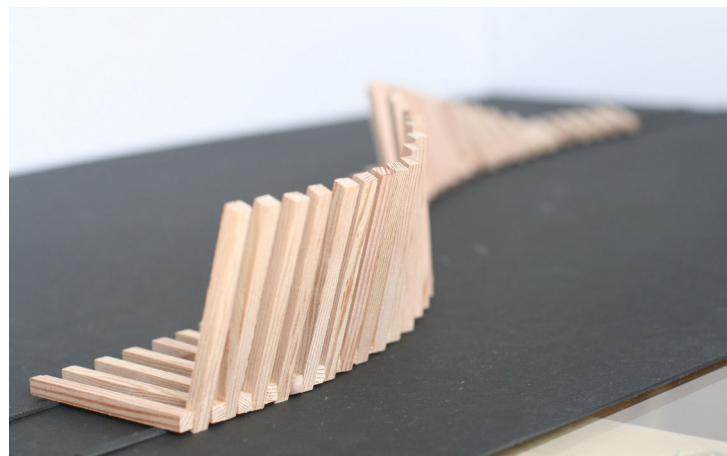
4 Proposals

4.3.2 Form

The Longest Bench is inspired by the physical quality of a boardwalk, woven into the existing environment and resting gently on its habitat. It runs along by the redbrick wall forming a chain of seating that faces the sea but also climbs and turns to face the green; it meanders around lampposts to create huddles around the lamps; rises, falls, and bends to form seat backs; dips down behind bins; and embeds into the ground to maintain openings.

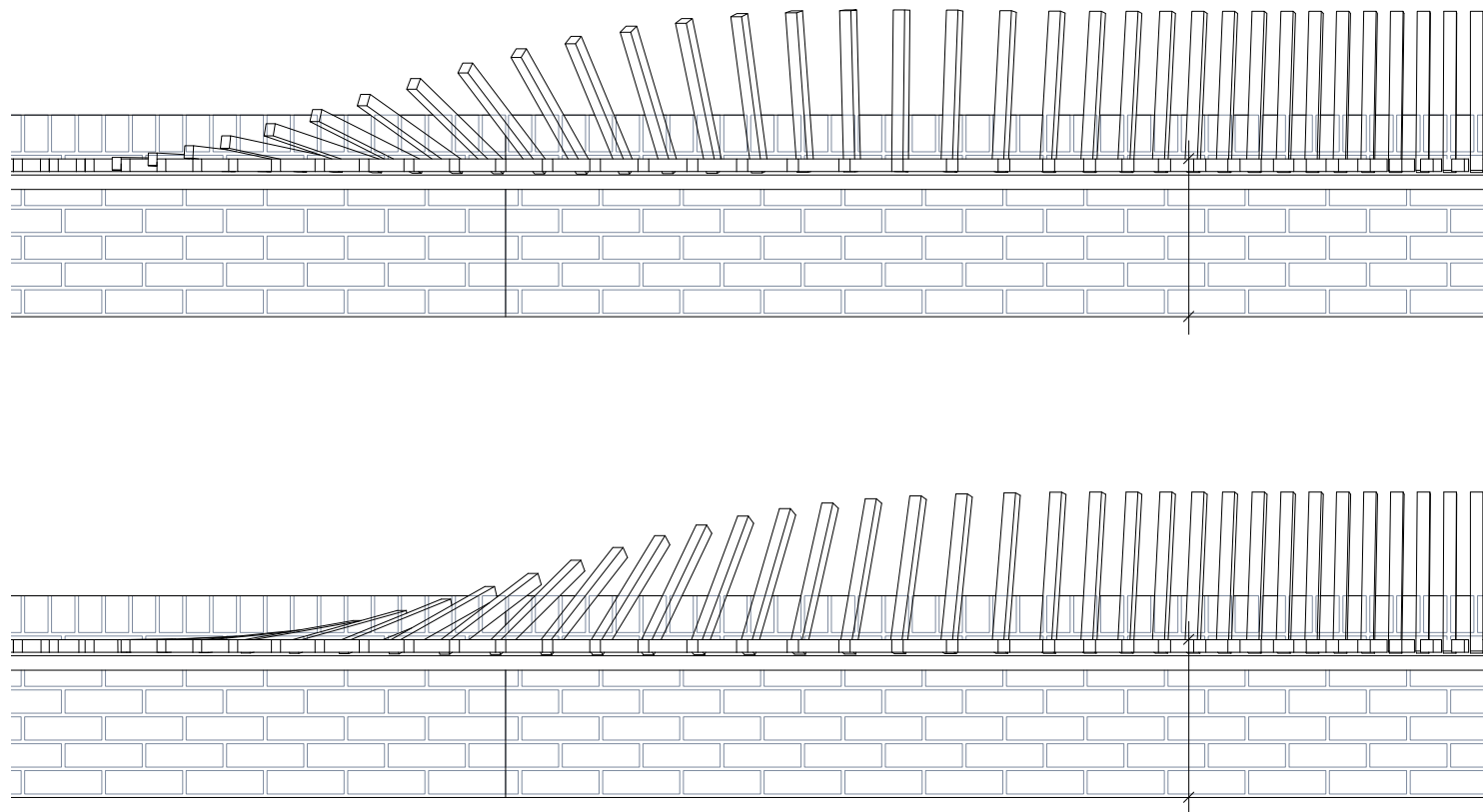


View of Proposed Bench



4 Proposals

This boardwalk forms the “chain” of the charm bracelet which is the continuous base for a collection of charm-places. It is made up of identical simple components that are arrayed to accommodate the complex shapes called for by the form of the wall and the activities which take place along it. In places a second array un-zips to form seat backs or to jump over the wall to create seating on both sides. An unobtrusive arm can also be fixed to the main bench at intervals to provide arm support and prevent cycling along the bench.



Elevations of Bar Movement

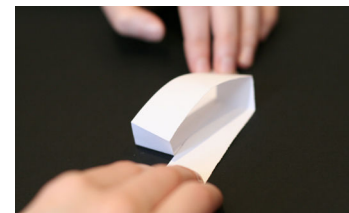
4 Proposals

4.3.3 Repetitive Elements

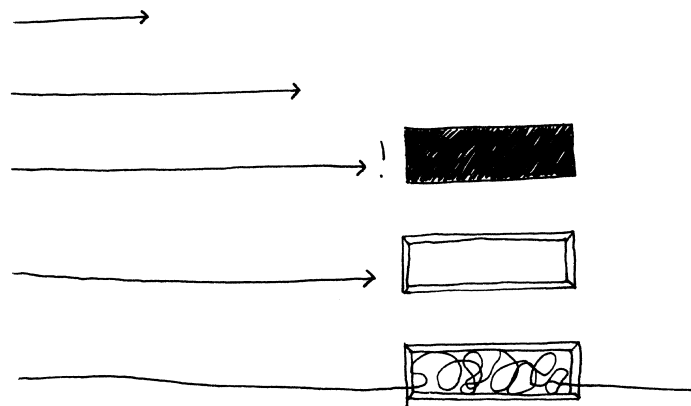
The bench is made up of thousands of identical bars. There are, of course practical advantages of using simple, repetitive elements, in terms of construction and manufacturing. However we are also fascinated by the way this simple element arrays, twists and turns to create complex geometries: the way this animal moves, if you like.



Propsoed Shelter Formal Concept



Existing Shelter



Propsoed Shelter Concept

4 Proposals

4.4 Shelter Charms

4.4.1 Objectives

Two important incidents along the promenade are the two shelters. The children told us they felt these were dirty and unsafe. They are dividing rather than connecting the green and the promenade. We would like to propose two new shelters, in place of the existing structures, that define the connection between the promenade and the green and feel bright, open, and safe.

4 Proposals

4.4.2 Form

The proposed Shelter Charms are each made of a strip which forms a simple opening by looping around once. The gently curving and twisting form reaches out to both sides, making no front or back. The bench stretches as it approaches the loop and then inside goes a little bit haywire, bouncing off the walls and ceiling creating seats and openings from which to walk between the green and the promenade. The loops of the shelters contain the haywire stretch of bench and frame the views each way. The gaps between the bars close as the structure gets higher to prevent climbing.



View of Proposed New Shelter

4 Proposals

4.4.3 Shelter from the Elements

The broad roof provides shelter from the rain and protection from the bright summer sunshine.

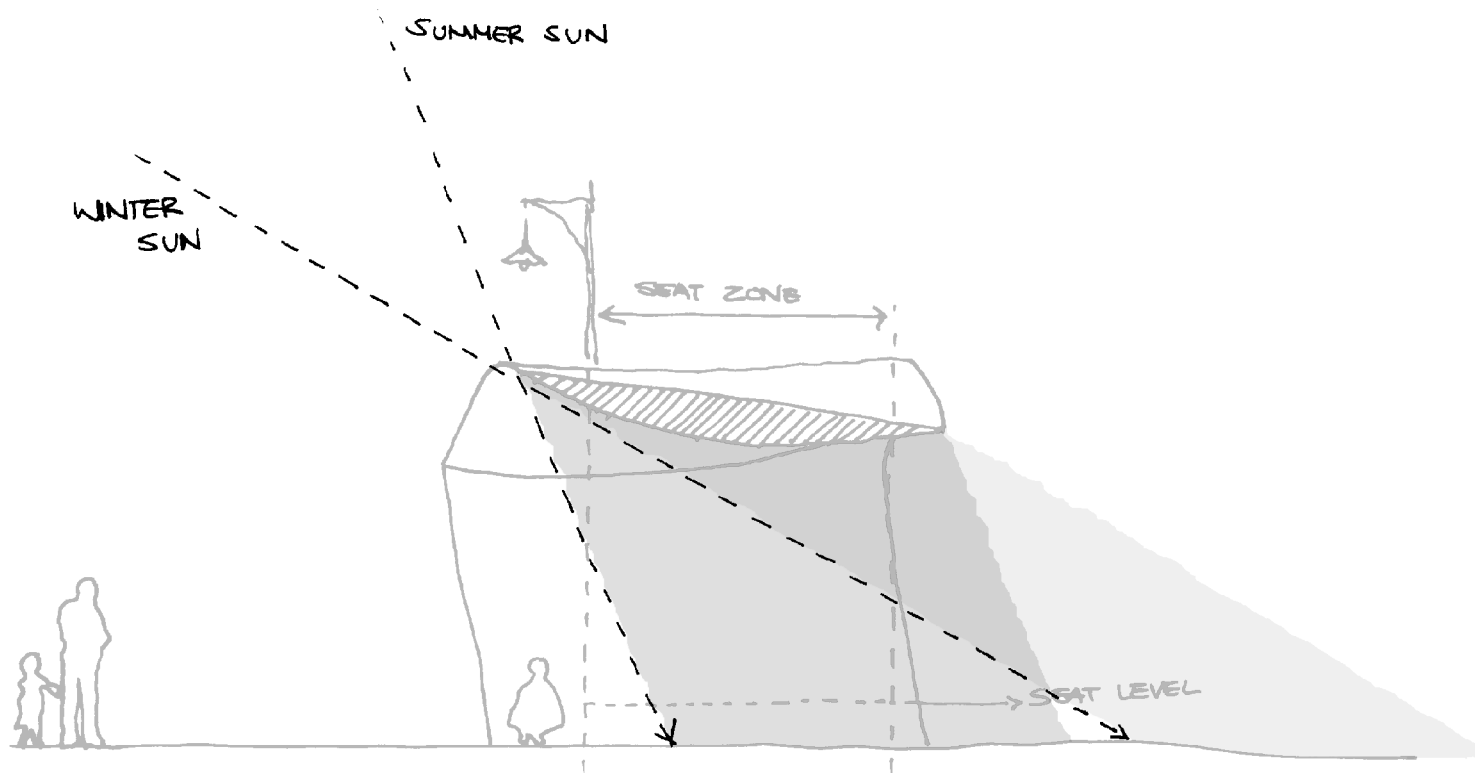


Diagram of Shelter to show Sun Shading

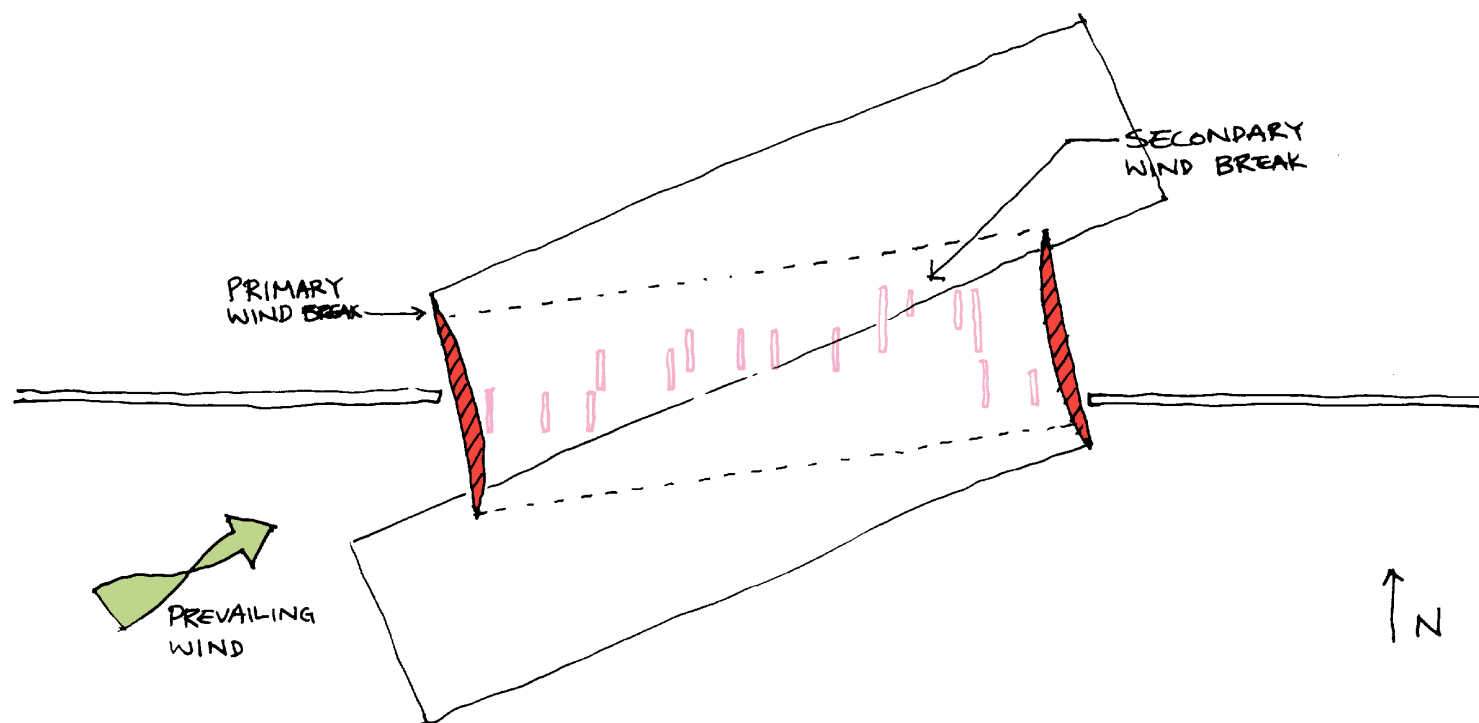


Diagram of Shelter to show Wind Protection

4 Proposals

The shelter is angled to protect against the south westerly prevailing winds and the haywire bars within the loop further help to slow the wind down in a similar way to bushes or trees.

4.4.4 The Shelters as Charms

These two shelters, along with the East Beach Café, form the initial charms. Like the game of Consequence the Longest Bench unfolds a series of individual playful spaces. Like a charm bracelet, we begin with a couple of charms and more can be added as birthday presents later.



Prototype of Proposed Bench

4 Proposals

4.5 Materials

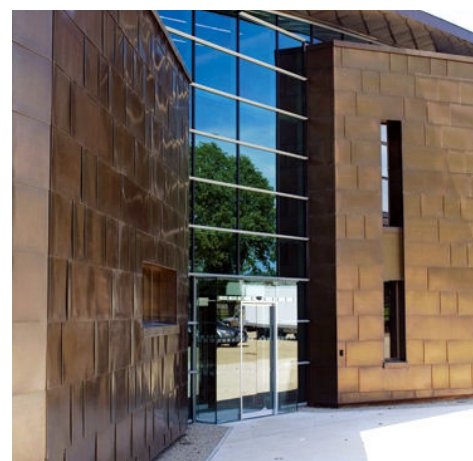
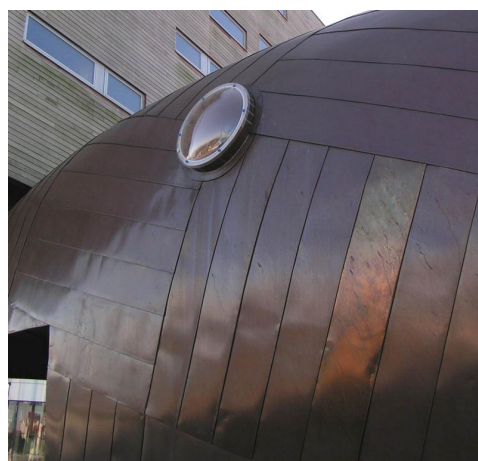
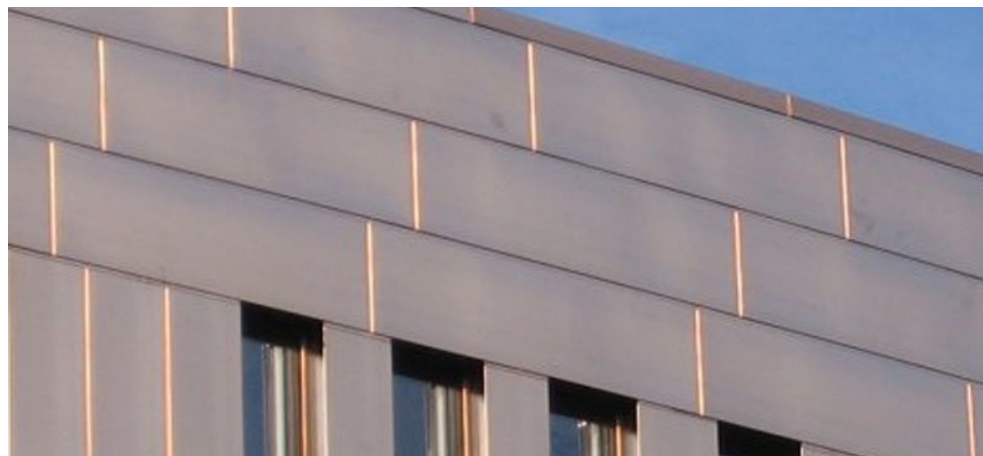
4.5.1 Bench

The bench will be made from thousands of identical enamelled steel bars. The enamel finish allows the bars to be brightly and lastingly coloured.

These bars will be supported on a simple and minimal stainless steel structure which will sit inconspicuously in front of the existing low redbrick wall. The intention is that the structure will simply support the bright enamelled bars, impacting the existing site as little as possible.



Images of Copper Alloy Cladding



4 Proposals

4.5.2 Shelter

The shelter will consist of a steel structure clad in metal panels. The steel structure will be treated and/or coated with a finish suitable for the marine environment.

The cladding will be a bronze coloured copper alloy which has a timber panel backing to resist denting.

The floor surface of the shelters will match the existing promenade. A stainless steel or similar trim will be embedded into the existing ground surface to delineate the looped shape.

The bars continue inside the shelter with a stainless steel structure supporting their loops and twists.

4 Proposals

4.5.3 Life Expectancy

The bench is designed to have a minimum 20 year life expectancy however, given the longevity of the proposed materials, the bench should enjoy a much longer life.

All the main products used in the construction of the bench will come with a suitable manufacturers / suppliers warranty.

The enamelled bars will come with a minimum of 10 years manufacturer's warranty which will generally cover adhesion, colour face stability, protection against corrosion and other manufacturing defects. Vitreous Enamel is widely used in public amenities, notably on the London Underground. Enamelled products are used to provide signage and maps as well as the support bars, the most hard wearing part of the train.

Resistance to coining, graffiti, scratching and impact will be specified as a tender requirement according to the relevant British Standards – BS 1344 and BS 3830.

4.5.4 Maintenance

All materials are very low maintenance, requiring only an occasional wash.

** Access to Low Wall*

Should access be required for the maintenance of a section of wall or a lamppost, for example, the bench will be removable both by slat and by length with the exception of the shelters. All fixings will be tamper proof to ensure this can only be done with the proper equipment.

** Flag Poles*

The four flag poles towards the west end of the bench have a hinge down mechanism. At these points the bench design will incorporate opening elements to allow access to the flag poles.

** Cleaning*

The full length of the bench including underneath it is accessible so there should be no undue collection of litter or sand over and above the existing. The bench incorporates the existing bins and maintains their locations so users of the promenade can continue to use these. As the enamel is non-porous and so smooth it is naturally graffiti resistant and any attempts can be easily cleaned off.

** Tamarisk Hedge*

There may be more desire to keep the Tamarisk hedge well trimmed to ensure the bench is accessible along its entire length.

4 Proposals

4.6 Environmental Sustainability

The Longest Bench is extremely environmentally and socially sustainable. We intend for the project to be built from local, recyclable, long-lasting materials; and by local manufacturers and fabricators.

In the use of local manufacturers we aim to minimise transport and support local business. In the use of prefabricated construction, we aim to ensure efficiency both in time and materials; to minimise waste; to minimise disruption and damage to the site and surroundings; and to achieve better and safer working conditions for all involved.

The project is designed to have a low impact on its surroundings with minimal foundations and a structure that touches the ground lightly. This will also minimise disruption to the site and ensure the safety of those working on site and members of the public.

The predominant materials used in the project are enamelled steel, and stainless steel, both 100% recyclable materials.

Properties of stainless steel and enamel are as follows:

Stainless steel:

- * Light, structurally efficient material
- * Long-term structural and visual durability
- * Corrosion resistant
- * Very low maintenance
- * 100% recyclable, on average 70% recycled content (Steel Construction Institute)

Enamel:

- * Highly durable material
- * Withstands salt, acid and high temperatures
- * Does not fade
- * Vandal and graffiti resistance
- * Very low maintenance
- * 100% Recyclable

4 Proposals

4.7 Access

4.7.1 Disabled Users

As there is level access to the entire length of the bench, the project is completely accessible.

The bench substantially increases the provision of seating along the promenade, a proportion of this with back support.

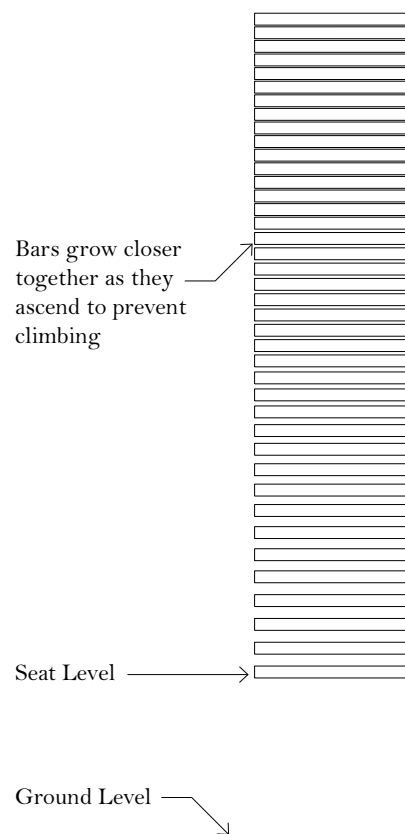
There will also be several spots along the length where there is space for a wheelchair user to sit within the line of the bench next to other users.

The project will meet the requirements of the DDA and an Equality Impact Assessment will be undertaken.

By definition the Longest Bench will be available to and accessible by everyone.

4.7.2 Access for Maintenance

The bench will be removable both by slat and by length to allow for access for maintenance to a section of wall, lampposts, flagpoles etc. All fixings will be tamper proof to ensure this can only be done with the proper equipment.



4 Proposals

4.8 Safety Measures

As this project is within the public realm it is important to consider the safety and robustness of the design and all the materials used.

Precautions taken to ensure that the design discourages vandalism and misuse include:

* Skateboarding

As the bench is made of a run of individual bars, there is no straight edge so it is impossible for skateboarders to grind along its edge.

* Cycling along the bench

Arm supports at approx. 100 - 150mm above seat level will be placed at intervals to ensure that it is impossible to cycle along any length of the bench. This will also discourage rough sleepers. The arm rests will also be placed to mark where the bench goes down to allow for access between the green and the prom.

* Climbing the Shelter

Within the shelter, the bars will become much closer together as the structure ascends to prevent people being able to grip between the bars and climb up the structure.

The cladding will be detailed such that there are no protrusions that can be climbed.

* Fixings

The enamelled bars are fixed with structural rivets, which require specific equipment to undo. Other fixings will be specified tamper-proof as appropriate.

* Solar Gain

The enamelled bars are reflective and pale in colour so the heat gain by solar radiation will be low. The enamel layer is a poor heat conductor which will prevent the collection of heat in the inner steel structure of the bars. Also, as the bars have a very low thermal mass, they will lose any heat energy much quicker than their surroundings.

The materials used will also be carefully chosen to ensure that they are virtually maintenance free and can withstand the harsh seaside environment:

* Enamel is naturally very tough and its smooth glossy surface makes it graffiti resistant. It is also very durable even in salty environments.

* The structure will be made from high quality stainless steel which will not rust or require repeated coatings or treatments.

* The cladding used for the shelters will be robust enough to withstand denting and erosion in the seaside environment.

5 The Team

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