

Zip World Liverpool

Design & Access Statement

Zip World Liverpool

December 2019

Contents

01	Introduction	02
1.1	Summary	02
1.2	Team Organogram	04
1.3	Design Team	05
02	Analysis	07
2.1	The Site	08
2.2	Site Location	09
2.3	History	10
2.4	Existing Layouts	12
2.5	Planning Policy	14
03	Design	19
3.1	Overview / Design Principles	21
3.2	Proposed Masterplan	22
3.3	Crows Nest Proposal	24
3.4	Central Library Proposal	25
3.5	Movement Plan	26
3.6	Customer Journey	28
3.7	Central Library - Existing & Proposed	34
3.8	Crows Nest & Central Library - Detailed	36
3.9	Library Platform	38
3.10	Crows Next Opening	40
3.11	Materiality	42
3.12	Access	44
3.13	Consultation	46

01 Introduction

1.1 Summary

The vision for the project is to create an exciting and engaging adventure sports experience in the heart of Liverpool City Centre.

Zip World are seeking to construct a two-line zip wire adventure ride that will begin at the St. John's Beacon Crows Nest, travelling past St. George's Hall and over St. John's Gardens, and descending onto the rear of Liverpool Central Library roof.

Visitors will arrive at the Zip World facility and Visitors Centre within the Central Library, here they will receive their equipment and initial briefing. They will be led from the Library to the base of the tower by foot to a reception and security area at the base of the tower. From here they will be taken up to the top of the tower (level 2) via a lift. At this level 2 there is a holding and briefing area where riders prepare for the big launch from the tower.

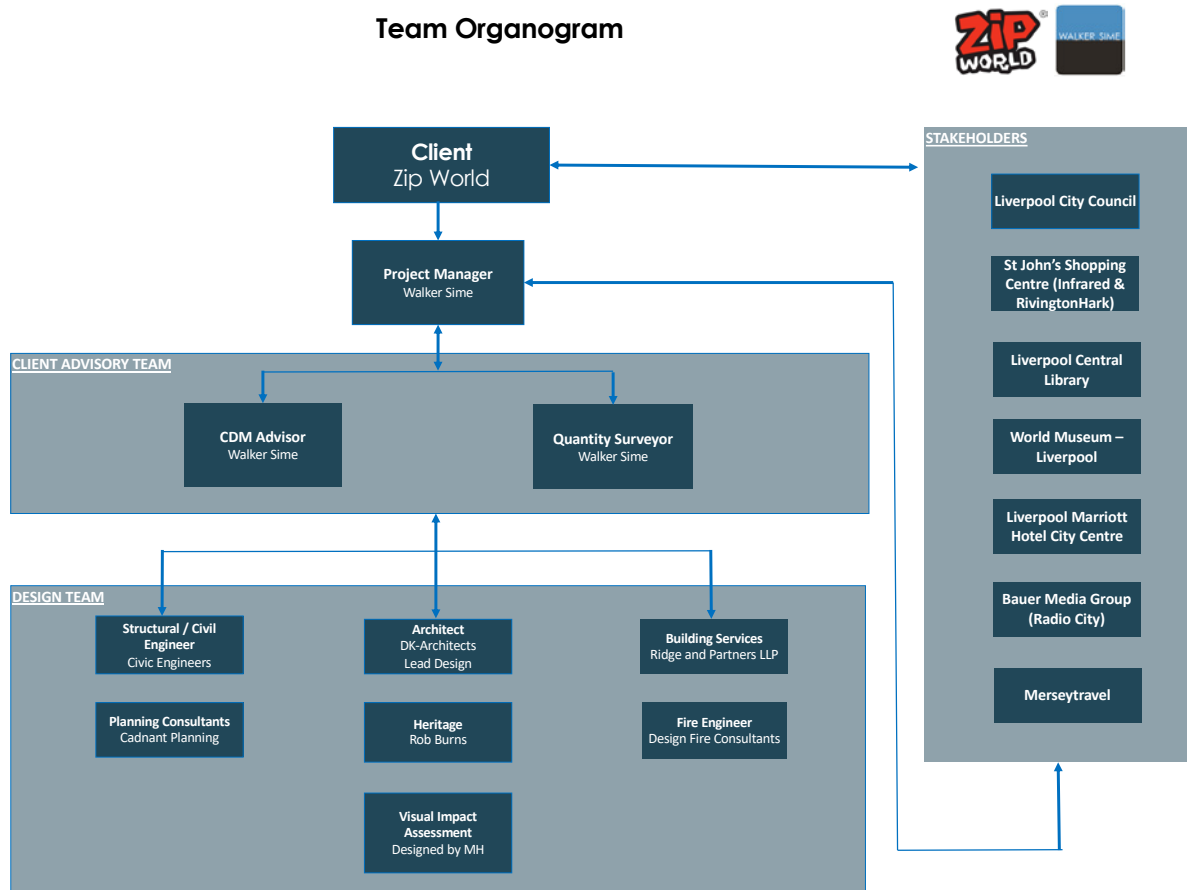
Visitors will descend in pairs down the zip wires, high over Hood Street descending over St. John's gardens and landing on a newly created platform on the rear of the Library roof. Once the ride is complete, riders will descend from the roof via stairs or lift and return to the reception area on the ground floor of the Library and make their way down to ground level. Once at ground level, the visitors will return their equipment back to the Zip World facility and pick up their belongings left in lockers to finish the experience.



Early visualisation of the project, design and branding are for illustrative purposes only

1.6 Team Organogram

A Team Organogram shown here illustrates the structure and team organisation.



1.7 Design Team

Client: Zip World Ltd.

Architect: DK-Architects

Project Manager / Quantity Surveyor: Walker Sime

Structural Engineer: Civic Engineering

Mechanical & Electrical: Ridge & Partners

Planning Consultant: Cadnant Planning

Heritage Consultant: Rob Burns

Townscape and Visual Impact: Designed by MH

Acoustic Consultant: Hepworth Acoustics

Transport Consultant: Curtins



DK-Architects



hepworthacoustics



Analysis

2.1 The Site

The site is split across two areas within the city centre of Liverpool.

1. St. John's Beacon is located along Houghton Street and is one of the most distinguishable landmarks of the Liverpool skyline. The tower has seen a number of alterations over the years, the key amendments was the addition of a secondary floor to the Crows Nest which is now occupied by Radio City 96.7.

2. The Central Library is part of the group of Grade I listed buildings on William Brown Street that include The Walker Art Gallery and The Liverpool World Museum. The Library has seen some significant refurbishments over the years.

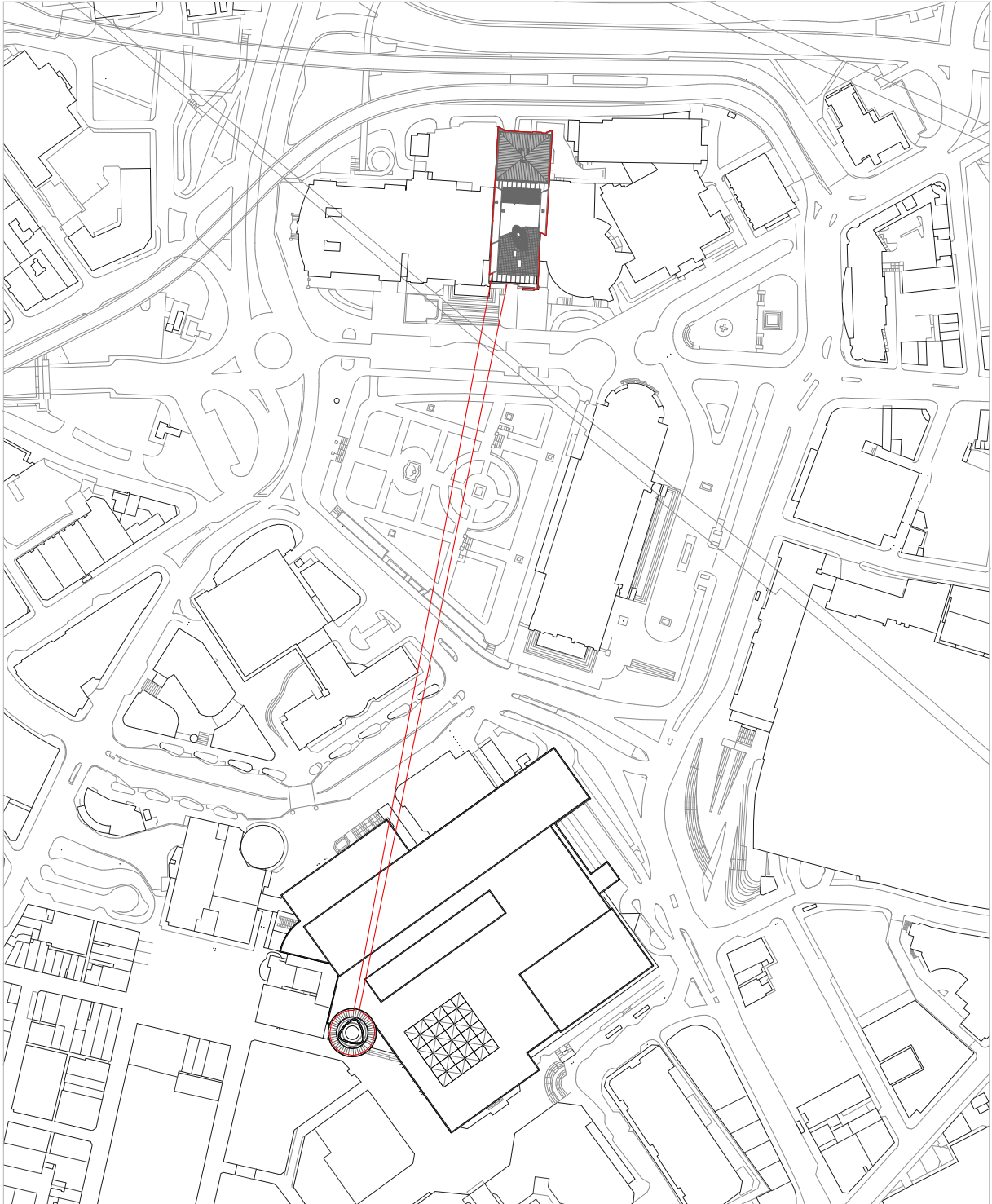
The library was significantly refurbished in 2013 and now includes an atrium topped with a glass dome and a roof terrace with views out over the city centre.

Two key Liverpool landmarks therefore establish the site.



Aerial imagery of the proposed sites.

2.2 Site Location



Site Location Plan

2.3 History

Both the Library and the St. John's Shopping Centre with its tower have been subject to substantial change in the face of events effecting Liverpool over its rich history.

The Liverpool Central Library

The Library inhabits the Grade II* Listed William Brown Museum and Library Building that suffered extensive damage during the blitz, 1941, resulting in a post war addition to the library being built to replace the damaged sections.

In 2008 the decision was made to replace the post-war additions with new state of the art facilities, and is what currently stands today. Due to the extent of the damage, the majority of the original building for the Library remains in only the facade facing on to William Brown Street. The spaces within, as well as the brand new repository to the rear are of new construction. During the redevelopment a new repository building was built to the rear of the library which backs on to Clayton Street. The refurbished Library was re-opened to the public in 2013 and with it a new roof terrace that looks over St. George's Gardens and a new entrance

Adjacent to the new development the original Picton Reading Room and Hornby Library remain and have been refurbished. With this in mind it

was proposed that the siting of the proposed zip wire facilities on the roof would sit predominantly over the new repository building, this would achieve minimum impact on both the physical and visual relationship with the listed building as well as being as far away as possible from William Brown Street.

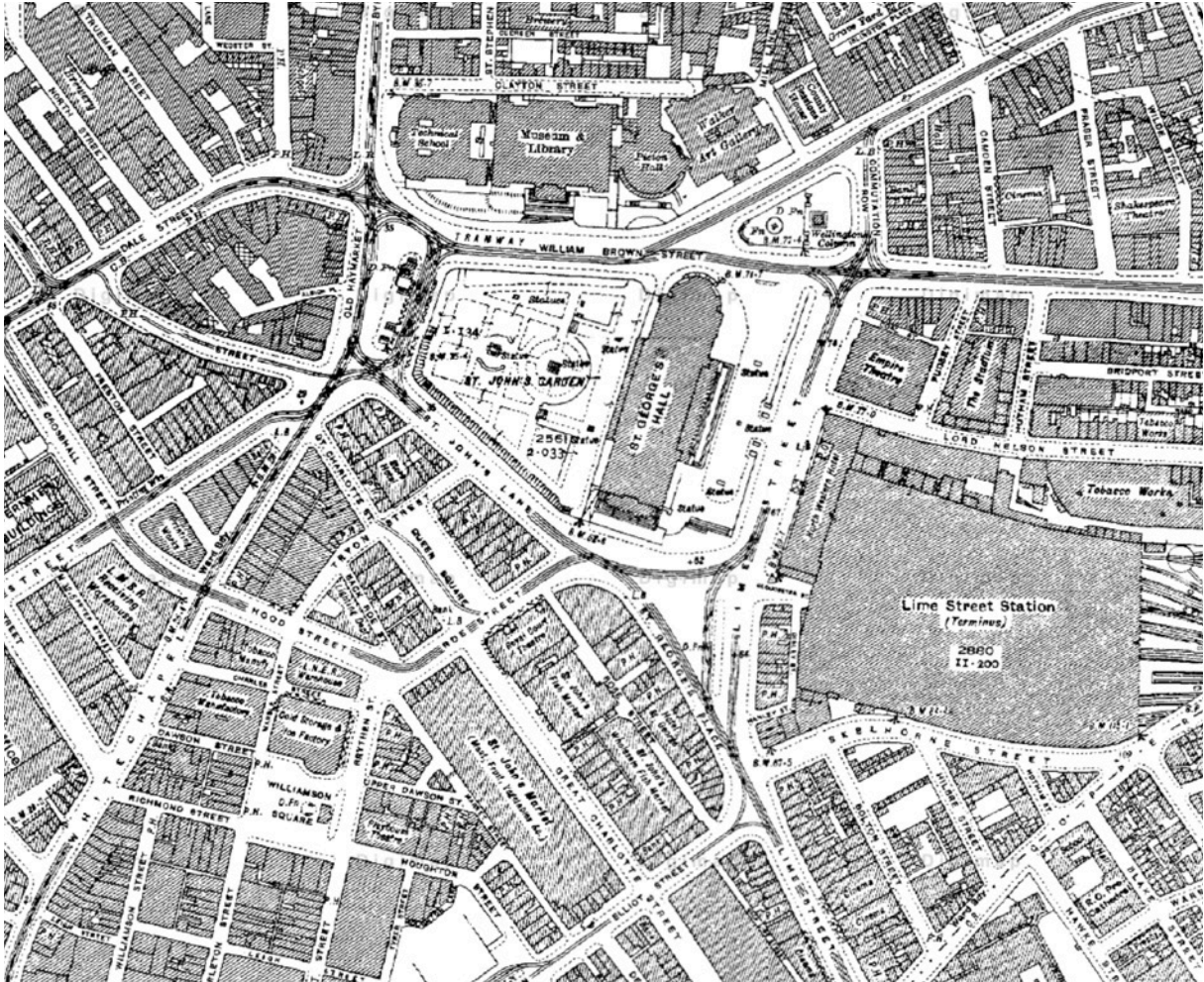
St. John's Shopping Centre and Tower

The St. John's Shopping Centre was opened in its current form in 1969. It begun its life in 1822 as the largest indoor market of the 19th century. Its redevelopment in the 20th century represented a major overhaul of the market as well as introducing new elements and infrastructure, the most prominent of which was the tower and beacon, now known as the Radio City Tower.

This represented a celebration of technology and excitement and offered 360 degree views of the city from a rotating restaurant as well as an external terrace. These offerings were used to varying amounts over the years the function of the crows nest changed, today being home to Radio City and also offering a partial public viewing experience. Arguably most importantly the tower now stands as one of Liverpool's most iconic landmarks, one that can be seen from extensive long distances.



Construction photographs of St. John's Beacon and the more recent alterations to the Library.



1920's Historical Map of St. John's Market and the Library and Museum



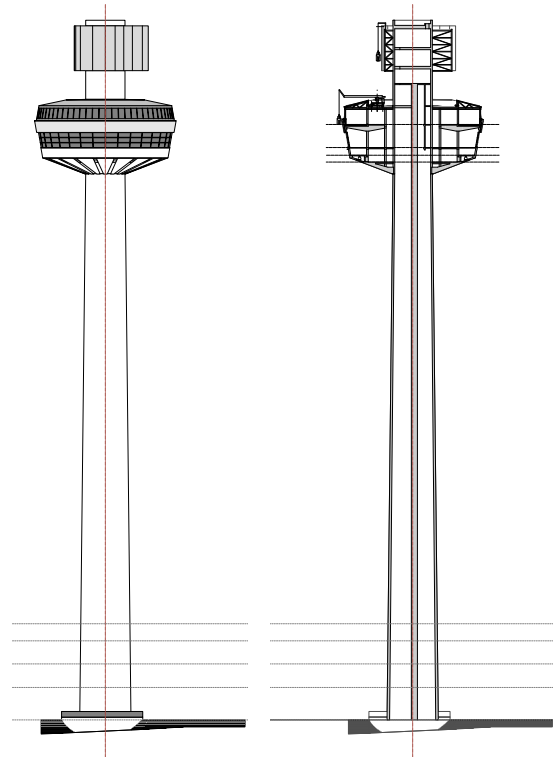
Aerial shot of St. John's Beacon

2.4 Existing Layouts

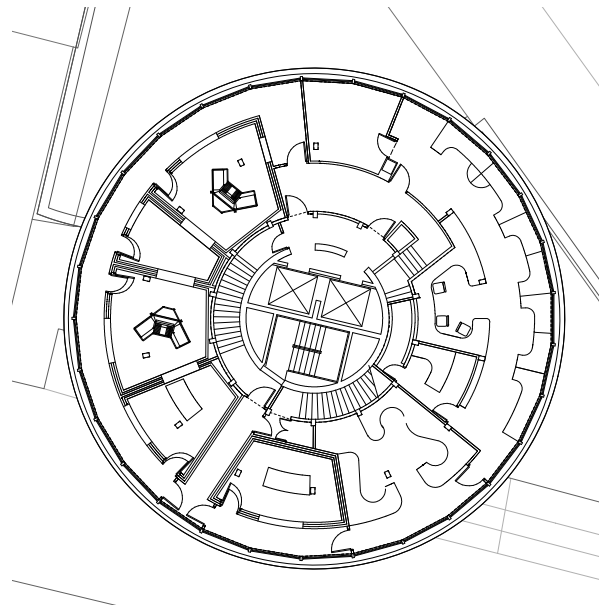
Existing Information

Existing information has been provided and gathered from various sources. A snapshot can be seen here. Following the initial design and concept stage, additional surveys and information was undertaken to establish a more detailed design of the scheme.

Site levels, existing floor plans & elevations were obtained to enable the design team to provide a coherent proposal.

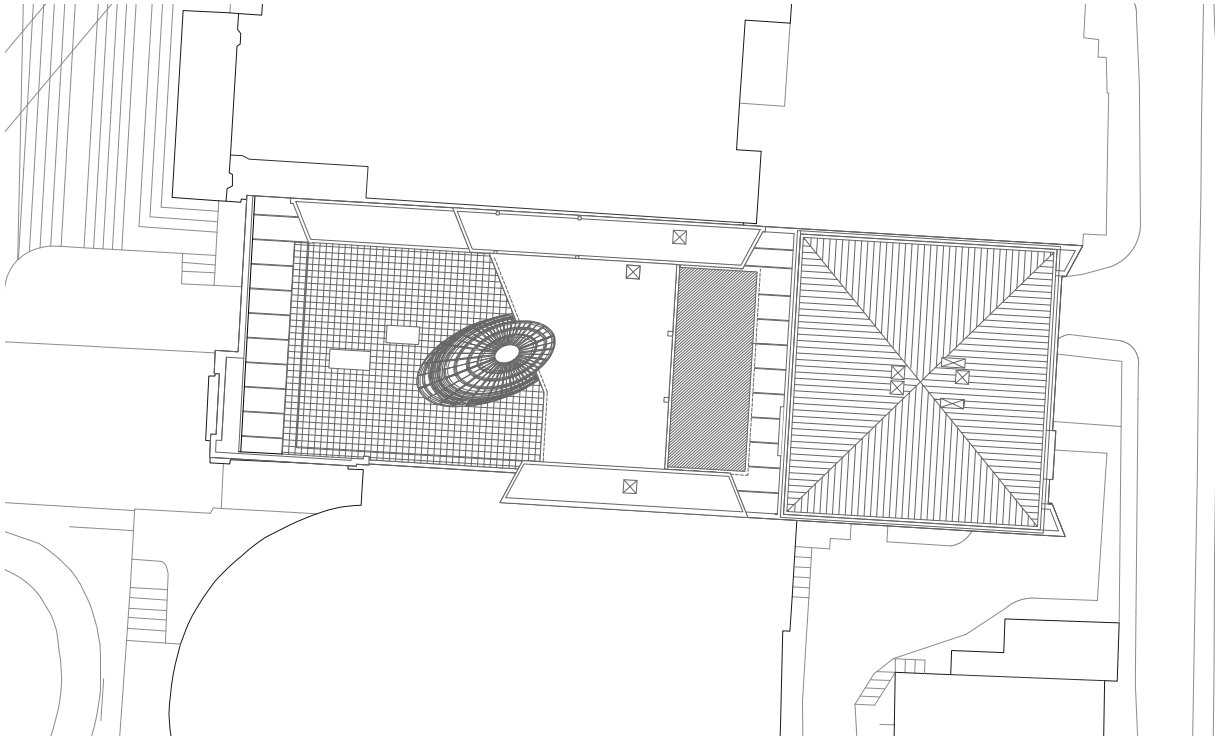


Existing St. John's Beacon Elevation & Section



Existing St John's Tower Plan

Some exiting survey information and existing drawings were available to begin the design process.



Existing Central Library Roof Plan with 2013 renovations



Existing St John's Plan

2.5 Planning Policy

National Planning Policy

Relevant national planning policy is set out in:

- National Planning Policy Framework (NPPF) (2019);
- PPG 'Design: Process and tools' (2019);

The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these should be applied. The main design policies within the NPPF that have been referenced as part of the design process are below:

The four main aspects of the PGG were of relevance to the design process, these are:

- Planning for well-designed places
- Making decisions about design
- Tools for assessing and improving design quality
- Effective community engagement on design

These have been specifically explored through the national and local plans mentioned here. The 10 points of good design set out in the National Design Guide have been covered to some degree where appropriate in this Design and Access Statement.

12. Achieving well-designed places	
Para 124	The creation of high quality buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities...
Para 127	Planning policies and decisions should ensure that developments: <ul style="list-style-type: none"> a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development; b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping; c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities); d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit; e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.

Local Planning Policy & Guidance

Relevant local planning policy is set out in:

- Unitary Development Plan (UDP), which was adopted in 2002;
- Liverpool Local Plan which has been submitted for examination in May 2018;

UDP	
GEN 3 – Heritage and Design in the Built Environment	The Plan aims to protect and enhance the built environment of the City by: i. preserving and enhancing historically and architecturally important buildings and areas and, where appropriate, improving them through the leveraging of available funds; ii. encouraging a high standard of design and landscaping in developments; iii. improving accessibility for people with mobility and sensory impairments; and iv. creating an attractive environment which is safe and secure both day and night.
HD18 – General Design Requirements	Policy HD18 provides specific criteria to ensure a high quality of design for any new development.

Although the Liverpool Local Plan is only at submission stage, and is not expected to be adopted during the course of considering the current proposal, due regard has been given to the relevant emerging policies. The main policies which are of relevance are summarised on the following pages:

2.5 Planning Policy

Liverpool Local Plan			
Policy CC18 St George's Quarter			<p>The application site is mainly located within St George's Quarter and therefore policy CC18 is of relevance.</p> <p>Proposals within the St George's Quarter should:</p> <ul style="list-style-type: none"> a. complement the area's existing cultural attractions and uses; b. contribute to improving linkages between cultural hubs in the City Centre; c. contribute to enhancing the public realm, important open space assets and environmental quality; and d. conserve the historic fabric of the area.
Policy UD1 Character and Distinctiveness	UD1	Local and	<p>Development proposals should demonstrate that the following aspects have been taken into account:</p> <p>Local grain and pattern of development, and where this has been fragmented, the opportunity to re-stitch damaged historic townscape;</p> <p>Means and pattern of enclosure, and any intrinsic rhythms and patterns established by streets, spaces and built form;</p> <ul style="list-style-type: none"> c. Patterns of movement and street character; d. The form, scale, proportion, building line, frontages, plot sizes, storey and absolute heights, rooflines, skyline, roofscape and ratios of solid to void within buildings; e. Materials, colours, tones and textures, which should be appropriate to the characteristics of the local area; f. Relationship and response to topography, and natural and built landscapes, including the underlying morphology of the area; g. The need to preserve, improve and create views into and out of development and also across it; h. Focal buildings, landmarks, compositions and building ensembles, nodes and gateways; <p>and</p> <ul style="list-style-type: none"> i. Designated and non-designated historic assets.
Policy UD2 Development Layout and Form			<p>1. Development proposals should demonstrate that the layout and form of the proposal ensures that:</p> <ul style="list-style-type: none"> a. The structure allows for ease of multi-modal movement, transition and connection to other areas and should be based on the established local grain. Where the local grain has been fractured, proposals should seek to repair the structure; b. The design has been considered from both a macro and a micro-scale, with adequate responses to issues of skyline impact, scale, relationship to existing structures, function, amenity, and its relationship to the public realm

Liverpool Local Plan	
Policy UD2 Development Layout and Form	<p>c. The scale and mass of the proposal takes account of the hierarchy and height-width ratio of streets and spaces, focal buildings, landmarks, nodes and gateways;</p> <p>d. The design and layout promotes physical activity;</p> <p>e. Enclosure, continuity and cohesion are key elements in street and space design, helping define public and private realms, and allow for specific uses and functionality;</p> <p>f. New public spaces are fit for purpose and seek to supplement existing spaces;</p> <p>g. A variety of blocks and plots are provided, and future expansions and adaptations or change of use, and existing uses and activity have been considered</p> <p>h. Safe, secure and usable private and communal space is provided, where appropriate;</p> <p>i. Form, height, scale and massing are appropriate to the function of the building and its context;</p> <p>j. Car parking, cycle, waste and recycling storage are designed in a positive manner and are integrated into the development;</p> <p>k. The proposal reduces the opportunities for crime without compromising social cohesion;</p> <p>l. Retained and introduced vegetation is conceived as integral components of the layout design, respecting and enhancing the distinctive character of the site;</p> <p>m. There is a good outlook and adequate privacy for existing and proposed development.</p> <p>n. Active frontages are provided onto all public realm to ensure natural surveillance over these spaces; and</p> <p>o. There is sufficient sunlight and daylight to penetrate into and between buildings, and ensure that adjoining land or properties are protected from unacceptable overshadowing</p> <p>2. The developer should demonstrate that adequate building and street/space management has been considered as part of the design, and appropriate regimes put in place to demonstrate how these will be secured and delivered.</p> <p>3. Sustainable Urban Drainage Systems (SUDs) should be included in the earliest stages of the design process to ensure that they are successfully designed, built and maintained, are appropriate for the site circumstances, and are well incorporated into the development layout.</p>

Design



03 Design

3.1 Overview / Design Principles

The project is split in to two different components that make use of existing structures within the city. Arrival, kitting up and landing take place in and on the library. The exciting experience of accessing the viewing deck and launching take place in the tower. This has meant that the project has been approached from three main aspects:

1. Central Library - Visitors centre and kitting up.
2. St. Johns Tower - Viewing platform and launch.
3. Central Library Roof - Landing Zone and access in to the Library and exit.

Careful consideration has been given to the visitor movement, which has in turn influenced each design decision (please refer to the Movement Plan section for more information).

Following discussions with the Central Library, it was decided that the Reception, Kitting Up, associated Public and Staff facilities, as well as shared Retail and F&B offerings would be located at the rear of the ground floor library space.

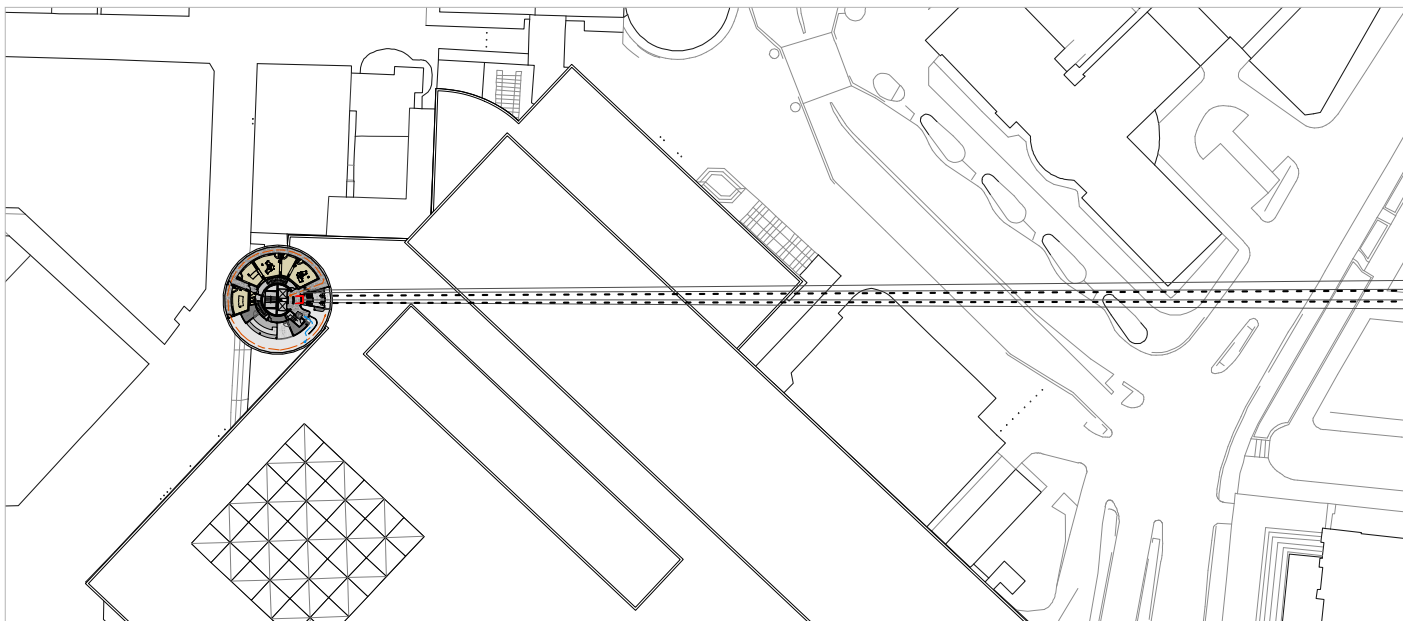
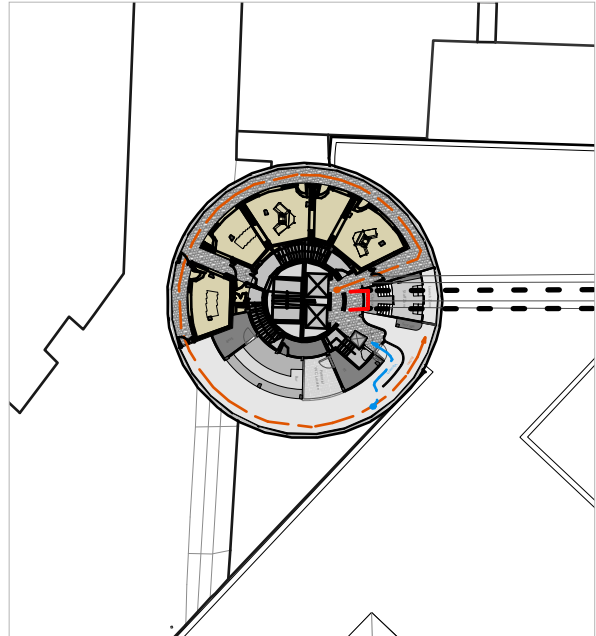
Riders will be accompanied on foot from the Central Library to the base of the St. John's Beacon. Using the existing lifts within the tower, riders will be escorted up to level 2 where they will be lead through the viewing gallery and then on to the launch zone where will eventually be clipped in and sent down the Zip Wire.

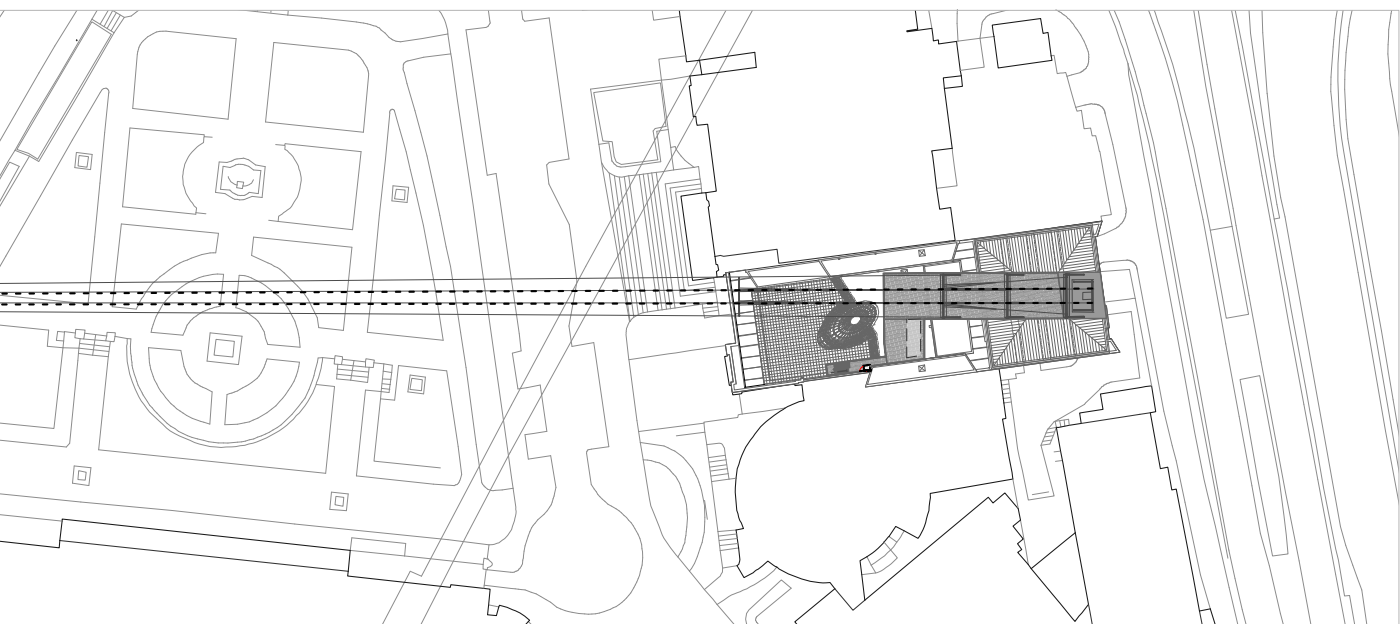
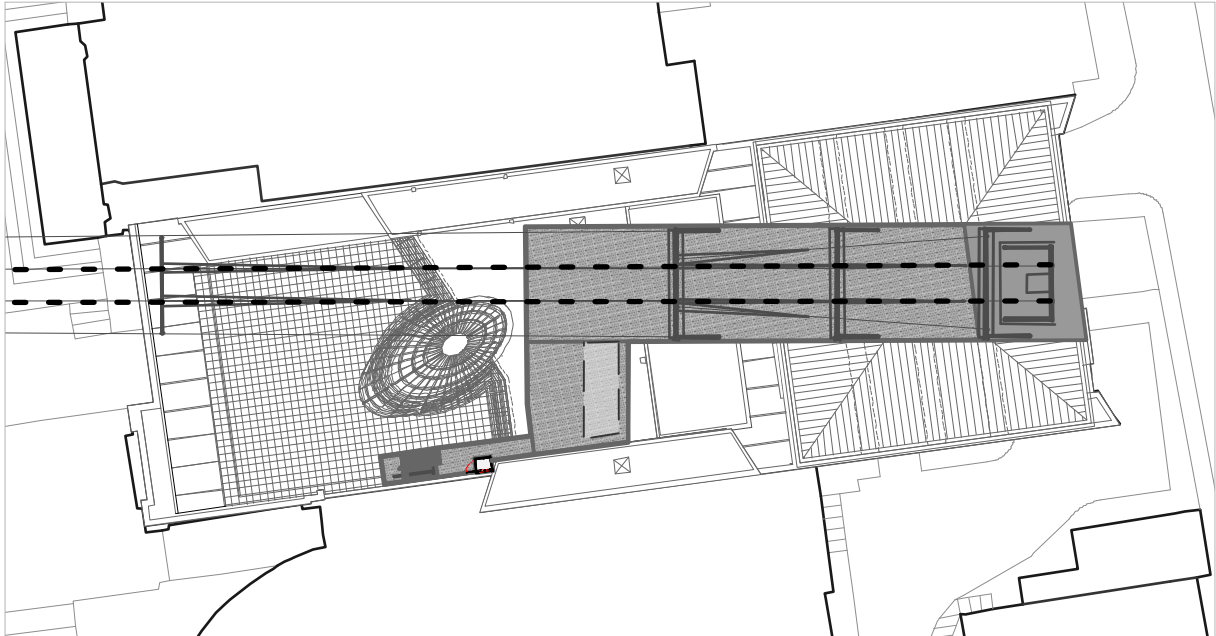
The distance between the two sites is approximately 400m in length. This will offer a thrilling experience with accompanying views over the city.

3.2 Proposed Masterplan

As illustrated, the zipline will decent from Level Two of the St. Johns tower Crows Nest and descend to the roof of the Library Storage building. A new platform level will be erected on the Library roof with associated take-off and landing gantries together with the necessary landing/manoeuvring space for the visitors.

Once on the platform, the visitors will decent by using either the new external staircase or platform lift from the Landing Platform to the Library roof terrace. From here, they will make their way to the ground floor.

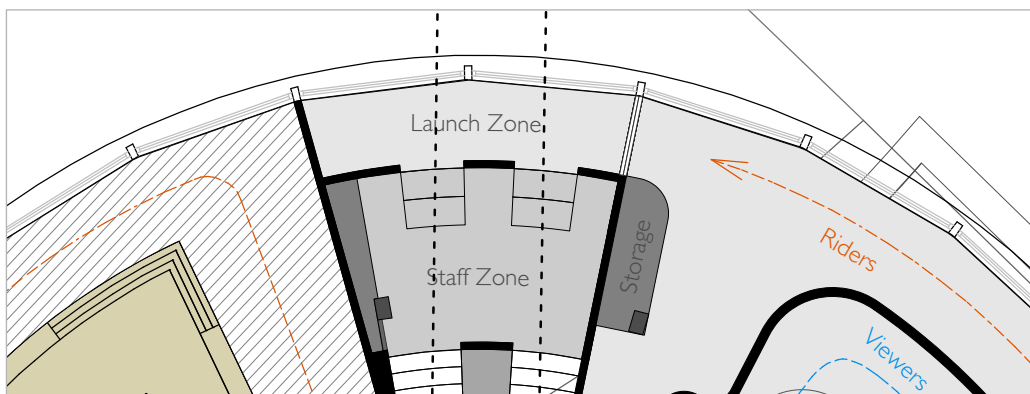
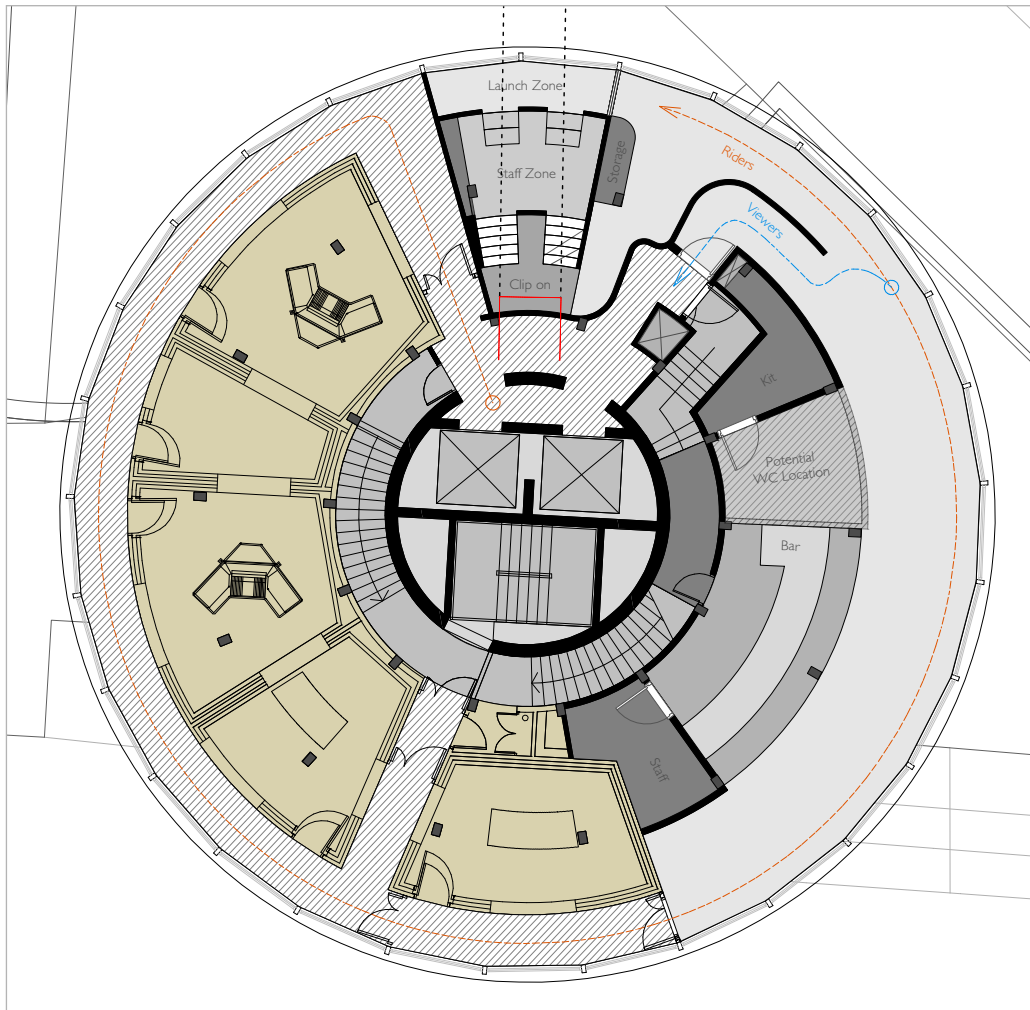




3.3 Crows Nest Proposal

Using the existing lifts within the tower, riders will be escorted up the tower where they will be lead through the viewing gallery to where they will eventually be clipped in and sent down the Zip Wire.

The intention is for Zip World to occupy half of the floor on Level 2 within the Crows Nest (non-occupied space highlighted in yellow). As illustrated, riders route is demarcated in red.




3.5 Movement Plan

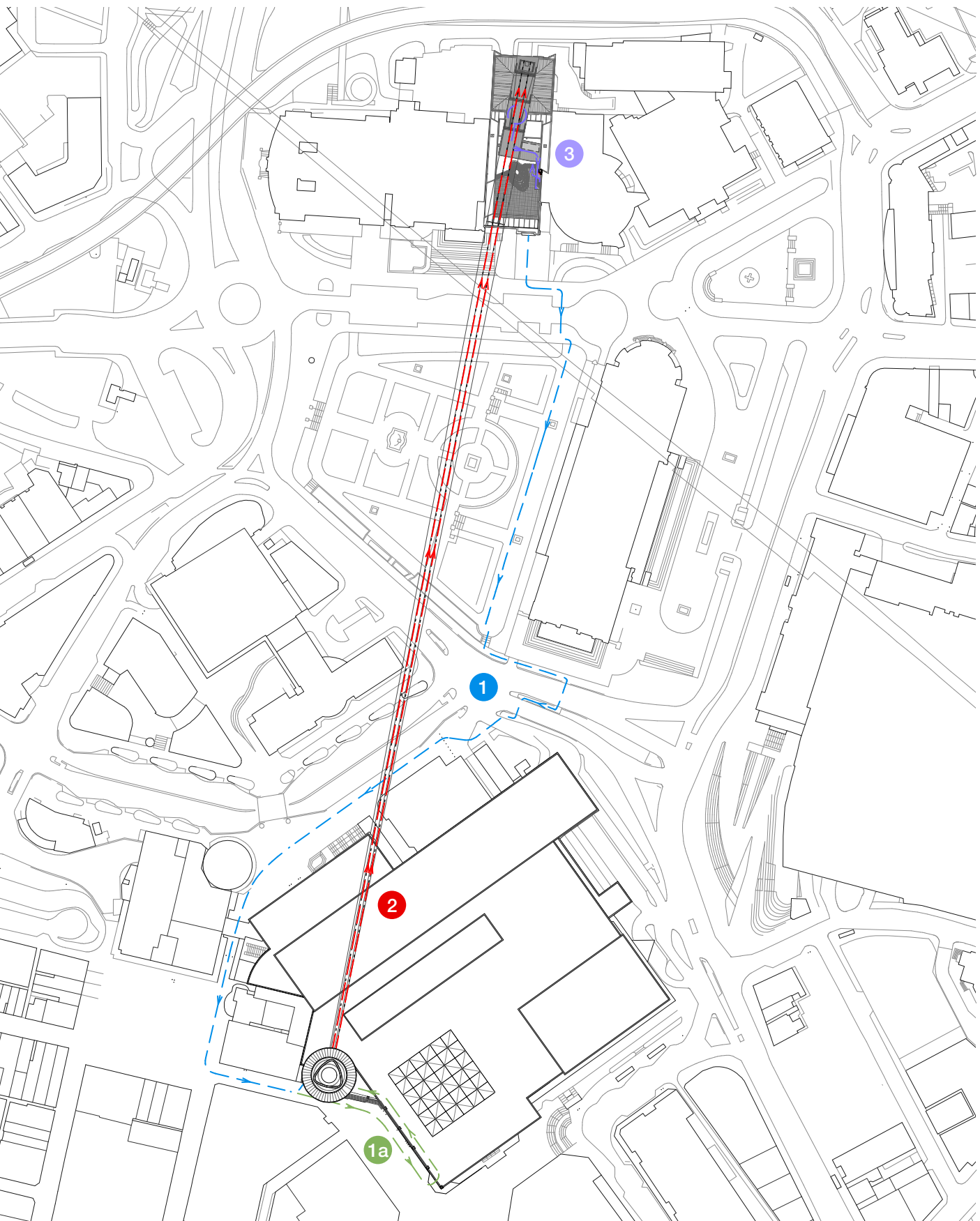
As illustrated, the key movements of the operation is highlighted on the adjacent page. The intention is for the visitors to begin their journey from the Central Library. Having been briefed and kitted up, the visitors will make their way across to St. John's Beacon.

Here they will be escorted to the Crows Nest via the lifts and be lead through the viewing gallery to where they will eventually be clipped in and sent down the Zip Wire.

Having landed on the proposed Central Library landing platform, the visitors will make their way back down to the ground floor. Once on the ground floor, the public will return their kit and be able to purchase footage of their experience.

See following section for more detailed breakdown of customer movement.

- 
- 1** Route from starting point.
Central Library to St John's Tower
 - 1a** Route for public with impaired mobility.
 - 2** Zipline route.
 - 3** Central Library Landing Platform.
Finishing Point.



3.6 Customer Journey

1. Library

1.1 Customer flow

1.1.1 Customers will enter the main entrance of the Liverpool central library and walk to the check in desk which will be located in the main lobby. They will be greeted by one of two Adventure hosts who will check in the customers. They will give them guidance on when they should go to the kit up area for their allocated time. At this time the Adventure host will make sure that they are fit and able to take part in the adventure, and also explain to them that they are not able to take any personal belongings on the adventure, except necessary medical equipment. After this the customers will be weighed in to make sure that they do not exceed the maximum weight limit. Once they have been weighed, they will have their weight written on their wrist band. If the customer has a while until their kit up time, the Adventure Host will let them know that they can wait either in the cafe or the seating areas that are around the library floor.

1.1.2 The allocated timings for the sessions are on the hour (00), 20 past (.20) and 20 to (.40) the hour and will have a capacity of 12 people. On the allocated session, the customer will go to the briefing room. Here they will be greeted by an instructor who will brief the group and making sure that they understand what to expect. The customers will then be asked to empty out anything out of their pockets or anything that could be defined as a 'Loose Article' into a box. At this point they will be passed onto the kit up team.

1.1.3 The kit up team will take the customers through the kit up process. The kit up team will show the group the lockers, and state that they must put any remaining personal belongings into the lockers provided. The Kit up team will then use a wand scanner to see if there are any items remaining on the person. Once the person has been checked they will get a stamp to show that they are clear from loose articles. At this point the Kit up team will systematically start to kit up the group, starting with Coveralls, Harness, Trolley, Helmet, Eye protection and a Reel Camera. The kit up team will then hand over the group to the Adventure Host (Tour guide) to walk the route to the tower.



2. Walking Route

2.1 The Adventure Host (Tour Guide) will walk the group from the library to the tower using the route identified in 2.2. This will also include a 'Stop off' in the St Johns shopping centre, where there is a Zip World unit. This will be used initially to check-in customers into the tower, before being briefed and a secondary check of safety equipment being undertaken. This area will also be used as a sales and a waiting station for groups before they go onto the adventure. The Adventure Host (Tour Guide) will talk to the group about the experience, information about the library and tower and any other factual information to add to the customer experience.

2.2 Walking Route

The walking route is highlighted below:

1. From the Library
2. Out of Library
3. Over William Brown Street
4. Through St Johns Gardens
5. Pedestrian crossing over St Johns Lane
6. Pedestrian crossing over Hood Street
7. Walk down Roe Street Concourse
8. Through to Williams Square
9. Option to go into St Johns shopping centre (Dependant on customer flow)
10. Down Houghton street to the entrance to the tower.



3.6 Customer Journey

3.0 Tower

3.1 Customer flow

3.1.1 Upon arrival at the tower, the customers will be greeted at the base of the tower by a member of the Zip World Team - Adventure Host (Tower Base), this will be done in the area directly outside of the tower under the glass roof.

3.1.2 The Adventure Host (Tour Guide) will make sure that all of the group are accounted for before briefly outlining what to expect next. At this point the Adventure host (Tower Reception) will ensure that there is enough capacity in the tower to take the group, ensuring that the maximum number will not be exceeded. If the tower is at its limit, the group will be held outside of the tower until there is latent occupancy in the tower. The Adventure host (Tower Reception) will also ensure that if the capacity limit has been reached, the library have been told not to send any additional groups, ensuring that there is no queue outside the tower in the elements.

3.1.3 The Adventure host (Tower Reception) will sign the participants into the building.

3.1.4 Once the group are signed in, the Adventure host (Tower Reception) will lead the group to the lift, and send them up to level 2 floor. The max number of participants in each lift is 20 people (1360 Kg), so each group will go up in one lift.

3.1.5 Once on level 2 the group will be greeted by the Adventure host (Tower Top) outside the lift. The Adventure host (Tower Top) will brief the team on the process of what is about to happen, what they need to do, when they are likely to zip and and personal setup that is required for there Zip, the adventure host will then lead the team to the queuing area, in preparation for dispatch.

3.1.6 The Adventure host (Tower Top), will then do a final dispatch check to ensure that the customers are ready to zip. This check will include:

3.1.6.1 Visual check to ensure that all equipment that is needed is present.

3.1.6.2 A visual check of the wrist bands to ensure that the person has been correctly signed in from the library.

3.1.6.3 A loose article check, prior to final approval that the customer is ready for dispatch. Once this is done, the customer will get a stamp to show that they are ready to dispatch.



3.1.7 The Adventure host (Tower Top) will then hand over each pair of customers to a Senior Instructor who will walk the customers to their respective instructors on each line.

3.1.8 The instructors will then clip the customers on, and do their own visual check to ensure that:

3.1.8.1 Check that the equipment is secured correctly, and the correct weight set up is done for the atmospheric conditions.

3.1.8.2 Check that the customer is happy, and ready to dispatch.

3.1.8.3 Final check for any loose articles, including shoes, jewelry and phones.

3.1.9 The instructors will then cross check each other's work covering the same areas as per 3.1.8.1 - 3.1.8.3 before showing that they are both ready to dispatch the customers.

3.1.10 The senior instructor will conduct the radio calls to the base to ensure that they are ready to receive the dispatch.

3.1.11 Once the senior instructor has approval from the base, they will tell the instructors to open the safety gate. The Senior instructor will then say to remove the safety carabiner on the zip line.

3.1.12 The senior instructor will then conduct a countdown and advise the customers to lift their legs up before dispatching themselves down the zip wire.

3.1.13 The Senior instructor will then radio that the riders are away and the gates are closed.

3.2 Scenario: Customer refuses to Zip in the tower

If a customer decides that they do not want to go down the zip once they have been signed into the tower, the Adventure host (Tower Top) will radio the The Adventure Host (Tower Base) and notify them that the customer will be coming down in the lift; The customer will need to be signed out of the tower and escorted to the library by the Adventure Host (Tour Guide) to get dekkitted.



3.6 Customer Journey

4.0 Receive

4.1 Customer flow

4.1.1 2 x Instructors (one for each line) will welcome the customers into the base. When ready, they will operate the VSAP and lower the customers to the floor.

4.1.2 Once lowered to the floor, the instructors will unclip the customers and reset the braking system, and raise the wires back to the operational height.

4.1.3 The customers will be guided to the staircase to take them down to the viewing balcony, before entering the building and going down the Zip World lift to the ground floor and the de-kit area.

4.1.4 The instructors will do a visual inspection of the braking system to ensure that it has reset correctly. Once this is complete and the instructors are happy to receive the next dispatch, the radio call 'Riders Off' will be called.

4.1.5 The base is ready to receive the next dispatch.

