DESIGN PORTFOLIO

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HISTORY:

City Walk is positioned at the heart of Canberra, surrounded by greenery and commercial zones, spanning over 400 meters long. In 1971, a "oncebustling street open to traffic" (ACT Government, 2023) was closed off from Alinga Street, becoming pedestrianised, creating City Walk, as demonstrated in Figures 1 and 2. The carousel round is displayed at the City Walk and Petrie Plaza intersection, where it originally came from St. Kilda and relocated to Canberra in 1974. Being a Canberra historic piece, the carousel has been restored multiple times and has been used by many generations. In 1979, the "Canberra Times Fountain [was] gifted to the people of [the] city" (ACT Government, 2023) by Bob Woodward. The fountain is a well-known landmark often lit up to celebrate multiple events. It is important to note that City Walk has had multiple revitalisations to continue to meet the ACT's standards and as an attempt to create a more welcoming space for the community, with the most recent renewal being in 2020. The arrival of City Walk in 1971 was welcomed by the Canberran community, with the vibrant and lively space, as demonstrated in Figure 3, taken in 1980. This image is contrasted to Figure 4, taken in 2023, where it is evident that City Walk is no longer a vibrant space and has become an isolated area. For this task, I am to revitalise City Walk through innovative and creative designs, ultimately creating a functional space for the community. Examples of revitalising urban spaces, such as the Goods Line in Sydney and Highline in Manhattan, must be thoroughly used to ensure an understanding of revitalising an area and an opportunity to learn from these examples.

Figure 1:



Figure 2:



Figure 3:



Figure 4:



OBSERVATIONS:

As the urban designer for this designated space, I have chosen to conduct my empathetic research by immersing myself in the environment by observing the area, specifically its natural form, functionality, and use by the community. Through observing City Walk, it has become apparent that the space lacks vibrancy and accessibility to all users. Therefore, transforming City Walk into a more vibrant and accessible space ultimately accommodates everyone and allows for a further cohesive community.

Observing City Walk on a weekday showed that 9:30- 10 am and 11:50-12:30 pm were the most populated times in commuting people through City Walk, in getting to work and lunch break. During these times, in particular, the 11:50-12:30 pm, several people were seen sitting on the benches and grass areas reading newspapers, answering phone calls, eating their lunch, as well as taking a break from cycling and enjoying the sunshine, as demonstrated in Figures 5, and 6. However, from my observations, it was noticed that there were no accessible seating areas designed for the disabled community. It was also noted that City Walk lacked colour and atmosphere, specifically in the paving of City Walk, prompting a number of people to stay inside the shopping centres rather than outside. Thus, from these observations, it is imperative for my design of City Walk to include equitable access for the community.

Figure 5:



Figure 6:



Figure 7:



A second day of observations was done on Saturday to ensure that I completely understood City Walk and how a weekend differs from a weekday. A major difference I noticed from my previous observations on a Wednesday was that it was quieter and more unpopulated from 9:00 am to 10 am. This could be because it was a weekend, and more people are likely to sleep in or because of co-curricular sports. During 10:30–11 am, City Walk became more popular as the sun came out. At 11:30 am-2:00 pm, City Walk was populated with people eating lunch outside, going to nearby stores, and sitting on benches, as demonstrated in Figure 7. A key similarity from my previous Wednesday observations was that it started to become popular in the afternoon, particularly at lunchtime; refer to Figure 8 of a pedestrian and cyclist traffic flow. This data is critical in informing me how to design City Walk and consider the traffic flow.

Figure 8:

PEDESTRIAN/ CYCLIST TRAFFIC FLOW

Wednesday	9:30AM	10:00- 11:30AM	11:50AM- 12:30PM		
Saturday	9:00 – 9:30AM	10:00AM	10:30- 11:00AM	11:30AM- 12:30PM	1:00-2:00PM

LOW: NOT BUSY/ UNPOPULATI

MILD: STARTING TO GET POPULATED

HIGH: VERY POPULATED

EMPATHETIC RESEARCH:

From interviews, it was found that clients viewed City Walk as "cluttered" and "disconnected" from the rest of the city, with no apparent structure affecting the dynamic of City Walk. These responses back up the observations conducted in City Walk that the urban space lacks vibrancy. Due to the area being "cluttered", this makes the area appear small and feel dull. This also affects the disabled community, making commuting to places more difficult due to the unnecessary clutter. It is important to note that the clients interviewed, based on their observations from section 1 of City Walk. Section 1 is illustrated in Figure 9, highlighting that I need to focus all of my resources on section 1 as the urban designer.

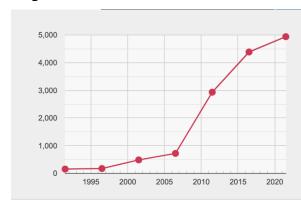
Figure 9:



DEMOGRAPHIC:

The suburb, Canberra City (City), is surrounded by shopping centres and employment buildings due to the City being in the centre of Canberra and close to several suburbs such as Reid, Acton, Turner and Braddon. From the 2021 Census data, the City's estimated population is 4,939 (Australian Bureau of Statistics, 2021). This is a significant increase from the estimated population in the 2016 Census data, 4,386, with a 2.4% annual population change from 2016-2021 (Australian Bureau of Statistics, 2016). This increase could result from the City comprising 99.3% flats and apartments. Figure 10 highlights the rapid spike in the population, emphasising that the City is a space for the community to do their shopping, work or reside in. The City's population is split into segments, being defined by age brackets, with a clear pattern illustrated.

Figure 10:



The median age group for the Canberra City is 27 years old. Figure 11 highlights that the two highest age brackets in Canberra City are 20-29 and 30-39 years old, with a combined percentage of 61.7%, more than half of the population. These age brackets are normally strongly associated with studying, reinforced by the multiple educational sites, such as the Australian National University (ANU), as demonstrated in Figure 12, of ANU's demographic. From this graph by the ANU, the top age brackets are in the 20s; this backs up Canberra city's age group of 20-29 years old being the highest age group. The age group of 10-19 years old are the second highest, with a percentage of 13.3%, again associated with studying and schooling. The age group of 40-70+ has a combined percentage of 22.7%, which is less than the combined percentage of 20-39 years old and is less than the age group of 20-29 years old percentage. From examining the data, Canberra City is mostly targeted to the younger age groups from 10-39 years old, who are mostly studying in an area nearby and possibly living in an apartment. Since apartments usually do not have a large backyard, I must create a vibrant area with equitable access to give the community opportunities to gather.

Figure 11:

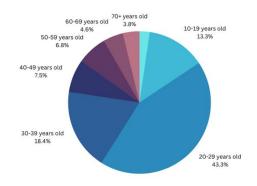


Figure 12:

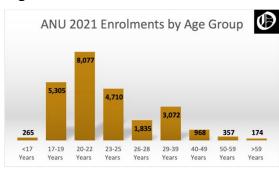
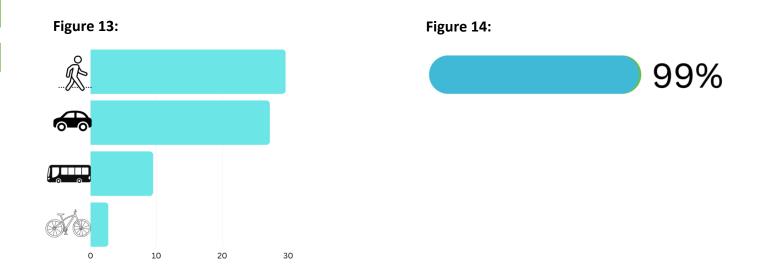
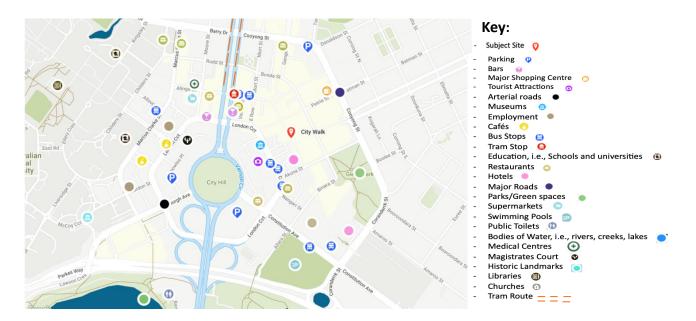


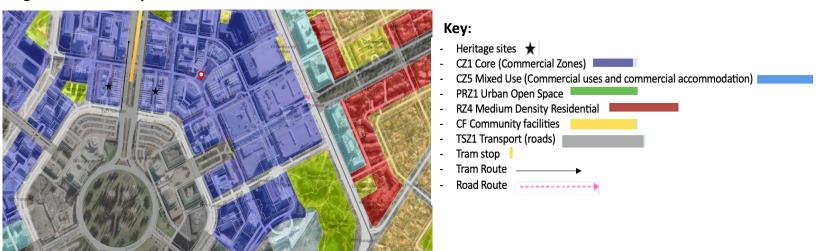
Figure 13 illustrates the different modes of transport the people in the City use. This graph shows that the community uses walking paths the most, which was also noted in my observations of City Walk. Whilst observing City Walk, there was a particular pattern between the paths of pedestrians and cyclists. In my observations, it was noted that most pedestrians used the textured path to commute to places, whereas cyclists used the smooth path. This is because the smooth path is easier for cyclists to ride on and is clear of obstructions. As demonstrated in Figure 14, 99% of pedestrians used the textured brick path to commute to places. Only 1% of people used the cyclist's path to get around the traffic. This data demonstrates the importance of including different textured paths for different means of transport. Due to walking paths being the most used by the community, it is crucial for me to implement effective walking paths that lead the community to gathering areas.

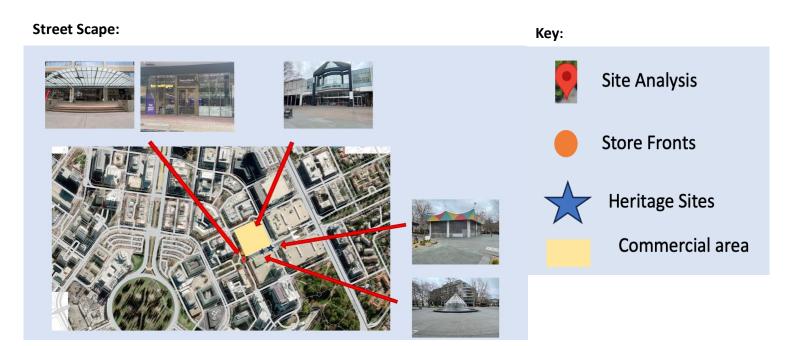


District Analysis: https://my.atlist.com/map/ae009424-fd4b-4411-8763-b0d30ca86acc?share=true



Neighbourhood Analysis:





The City is divided into three major sections, as demonstrated in figures 15, 16 and 17. From these images, it can be seen that the area lacks flow and vibrancy. In the first image, the area appears dull, lacking greenery except for a few trees and garden beds. In contrast, the third image highlights a revitalised area emphasising sustainability, evident by the garden beds, choice of materials, and the presence of trees. However, even in the revitalised section, dark paving makes the area feel and appear dull and somewhat closed off from the rest of the City. This suggests an overall disconnect within city walk, contributing to the area's unwelcoming atmosphere.

For the purpose of this task, I am going to revitalise section 1 because this section needs more vibrancy. In addition, in section 2 of City Walk, the 2020 revitalisations have "received the Good Design Award" (ACT Government, 2023), emphasising that this section does not need a revitalisation.

Therefore, for my design of City Walk, it is crucial to consider innovative paving options to infuse vibrancy into the space. Also, designing effective pathways to communal gatherings can improve flow and encourage community engagement. Embedding greenery elements, installing lighting, and introducing interactive activities for the community will help create a vibrant atmosphere.

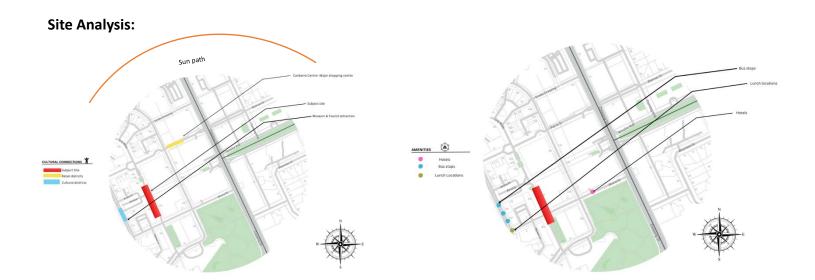


Figure 15:



Figure 16:



Figure 17:



DESIGN PROPOSAL:

Design Problem:

After closely observing City Walk, it has become evident that the area lacks vibrancy and defined spaces. Despite being centrally located in Canberra, City Walk fails to engage effectively with the community. In 2020, the Government attempted to revitalise the area, having unsuccessfully been able to create a lively and accessible space for all users. The use of concrete benches and dark paving throughout City Walk creates a dull atmosphere, contributing to the area's lack of vibrancy. This, in turn, discourages the community from visiting the area. The lack of an inviting atmosphere is even more pronounced at night, making the area less desirable and popular. The Goods Line in Sydney is an example of an urban space revitalised from an isolated area to a bustling urban space. The urban designers have used a wide range of green elements, lighting, and street furniture to create a lively space that brings the community together (Government Architect New South Wales, 2023). Furthermore, City Walk does not consider equitable access, specifically in seating areas and the pavement, making it difficult for the whole community to enjoy the area. In the urban space Strøget in Copenhagen, the urban designers have created different paths by skilfully maximising different materials from the community to differentiate between the paths, with one being a blind path. This is where the urban designers have used tactile paving to ensure that the disabled community can commute to places, highlighting the urban designer's inclusivity. If these issues in City Walk are not addressed, the urban space will continue to deter the community, contributing to the undesirable area. Therefore, urban designers must address these concerns by revitalising City Walk to restore the vibrancy and accessibility in the area.

Design brief:

City Walk is now a place that has become undesirable and inaccessible, promoting the need for the revitalisation of City Walk. In order to successfully revitalise City Walk, the urban space layout will need to be carefully considered. Areas that need to be considered to create a vibrant and accessible urban space include street furniture, greenery, lighting, paving and paths to attract the community, particularly the young population. Due to 99.3% of the residents living in apartments, street furniture in benches, picnic tables and study hubs must be spread throughout the space and tailored to different needs to promote community activity. Using more street furniture, which is tailored to different people and spread throughout the urban space, will attract many people who appreciate an area that is not cluttered and accessible. This also helps to break up the area and create structure. For City Walk's revitalisation to be practical, large spacious paths must be implemented into the design, accommodating the disabled community.

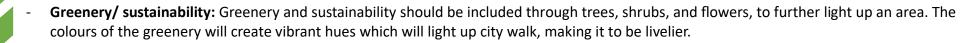
As mentioned in empathetic research, walking is the most used mode of transport; thus, the pathways must effectively direct the community to gathering areas, street furniture and engaging community activities, which further help with traffic flow. These paths should include different textures for different modes of transport, such as a smooth surface for cycling, a rough surface for walking and tactile paving for the disabled community. Strategically laying out the paths will be key in maximising the urban space and attracting the community.

Furthermore, lighting is another major consideration for the revitalisation of City Walk. Adequate and sufficient lighting is crucial in making the area vibrant and creating a comfy atmosphere.

Considerations and Constraints:

Considerations:

- **Colour** can be considered in City Walk to brighten up the space, to create it more vibrant. This can be implemented through paving tiles, choice of greenery and street art. Colour can also help to influence the community's mood, for example yellow is often associated with happiness, whereas blue is often associated with sadness.
- Street Furniture can be considered to promote community activity. It is crucial that the street furniture is strategically placed within City Walk, so it does not obstruct the walkways. Different kinds of street furniture also promote different social interaction. For example, study hubs influence young students who are in university and school. Picnic tables, grass areas and seating areas, give an opportunity for the community to interact and socialise with each other. This might be especially relevant to the people who live in appartements, due to the limited backyard space.
- Paving tiles: different paving tiles should be considered to brighten up an area and give more life to City Walk. Dull paving tiles like the ones in City Walk, risk creating a dull atmosphere. The paving tiles which are considered need to be in line with the design standards for urban infrastructure for Canberra. Consideration of equitable paving tiles is crucial to ensure that all members of the community are included.



- **Lighting:** Adequate lighting should be considered in City Walk, through different forms, such as paving lights as demonstrated in the High line Manhattan. Furthermore, light walkways, fairy lights and lamp posts also should be considered, to lighten up the space.
- **Human centric:** It is important as an urban designer that I address the way humans interact and use the designated space, as well as the effect of cultural principles and behaviours on City Walk, to create a functional and vibrant urban space. According to the ACT Government, Canberra is seen globally to be "an advanced welcoming city" (ACT Government, 2023) where "everyone belongs" (ACT Government, 2023).
- **Amenities:** Including amenities is crucial in making city walk to be a desirable space, as it provides comfort to the community in their daily life. For example, implementing playgrounds or activities for children to interact with, allows for parents or older people to go on walks, study in the study hubs, or socialise on the grass/picnic areas. By doing this, it eases off the stress from parents or guardians in having to engage their children.
- **Walkways:** Strategic walkways need to be considered to ensure that the walkways are leading the community, to social areas. This will help to again promote social interaction with the community. By also including set walkways for pedestrians, cyclists, and walkways for the disabled community, this will help to encourage the community to utilise city walk more.
- **The community:** By fostering engaging interactive community activities, such as playgrounds for children, large, scaled games like chess and connect four, will help to bring the community together.
- **Drainage systems** it is important to consider implementing drainage systems into the urban space, to ensure that excess water is removed. Thus, mitigating any possible risk to the community.
- History of City Walk- I can consider the original layout of City Walk as demonstrated in figure 18, to inform my thinking in revitalising the area.

Figure 18:



Constraints:

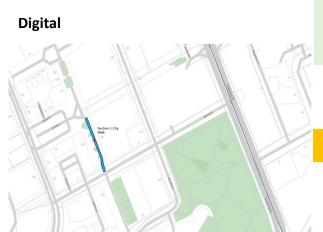
- -Size of the area: I am constrained to the measurement of City Walk and need to design my revitalisation of the area within this fixed measurement.
- **-Existing trees and Buildings:** I am constrained to design my revitalisation of the urban space, around the existing trees, buildings, and heritage sites. Thus, it is important that I maximise this to my advantage, by using the existing trees and buildings for shading.
- -Zoning of City Walk: City Walk has the zoning of CZ1 core, meaning that City Walk is used by restaurants, commercial centres, businesses, and retail stores. The zoning is fixed and cannot be changed, meaning that I am constrained to this element.
- -The design standards for urban infrastructure: I am constrained to follow the design standards for urban infrastructure, to ensure that the urban space is safe for the community.
- **-Fixed time frame:** I am constrained to a fixed time limit, where the urban space must be revitalised in the time frame.

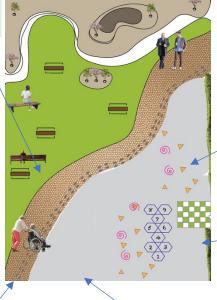
Evaluation Criteria for success:

Success criteria	Success criteria	Testing methedology
Sustainability: vegetation	Sustaianbility will be embedded within the	Sustainabillity will be tested within the ubran
	urban space, through different greenery.	space, by conducting aa research sstudy. The
	These include trees, shrubs, and flowers.	study will include taking the poultion of the air
	Sustainbility will further be incoproated	in City Walk before its revitilisaation,
	through different recycled wood for the	compaared to my revitilisation of City Walk.
	benches. Incorporaating vegetation within	These results will be compared to determine
	the urban space has a positive effect on the	whethere there iis a difference between
	eenvitonment and society. this is becaause	including greenery within the urban space, or
	vegetation emits oxygen, brings colour to the	not. Research study papers will also be
	space, aand "provides refuge and protection	vieiwed to compare my results with.
	for native [animals and insects]" (NSW	Furthermore, I will also test the effects of
	Government, 2023). Thus, ultimatellty it help	biodviersity, by seeing if it opens the spaace,
	to improve biodiveristy in the urbanaspace.	aand makes it more vibrant. I will further
		observe how many people are within City
		Walk, and compare to my intiala observations
		of City Walk.



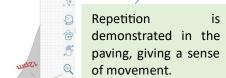
Aesthetic: colour and overall presentation of the urban space	The urban space will incorporate aesthetics through colour. The colour will be demonstrated through the choice of greenery such as bright coloured flowers. Furthermore, colour will be seen on the floor of the urban space, through different	The overall aesthetics of the urban space will be considered through a study, where around 30 people in the community will be observed. I will note down the communities' observations as well as any feedback that	
	coloured shapes.	they have on the space. The people who will be chosen for the study, will also be given 2 images of city walk, before its revitalisation and now with its revitalisation. They will also be given the question: Does city walk incorporate more colour now, compared to before? These observations, feedback, and responses will inform as to how I can improve the aesthetics of the urban space.	
Innovation: Lighting	Innovation will be demonstrated through the different forms of lighting that will be implemented within the design. These include light paving, glowing paths, and string lights.	Lighting will be demonstrated by observing the lights function at night. Within this observation, it is key that I take note if the lighting is adequate and lights up the urban space. I will also observe how many people are at night, and whether they are reliant on the lights to guide their way within the urban space. This will inform me if the lights are useful to the community.	
Paving tiles	The paving tiles will be changed from the original City Walk paving tiles, to paving tiles which are more intricate and modern, to brighten up the area.	The effect of the paving tiles will be tested, by conducting a study with 30 members of the community. These people will be given a photo of City Walk with its original tiles, and a photo of City Walk with the new tiles. They will be asked as to which paving tiles, create a more vibrant space.	
Paving walkways	The paving walkways will be suited to different forms of transport, such as cycling, pedestrians, and to the disabled community.	The paving walkways will be tested by observing how the community use these walkways. As the designer I will be noting down if the community is using the walkways for different forms of transport, and also if the community are using the paths to direct them to gathering areas. This will inform me if the paths are being used by the community, or whether there needs to be improvement to the texture or layout of the paths.	
Function	The urban space will function to be a place for the community to interact and socialise in, as well as study.	The functionality of City Walk will be tested by observing how the community interacts within the space. By doing this, it will inform me as to how the community perceives the functionality of City Walk. I will also conduct a survey of 50 members of the community, where I will have a conversation with the community as to how they use the space, whether studying or socialising.	
DEATION: Digital	The large open area with benches, promotes social activity for the community, giving a sense of belonging.		





Ideally in this design, there should be benches in the children's area, so parents can sit and watch. In this design there is only 1 path, this is not practical in peak times.

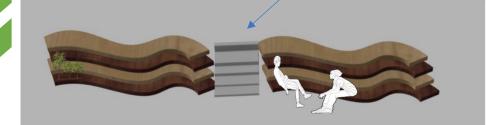
A play area for children, promoting again social cohesion and recreation. The activities include hopscotch, and chess.



Space is used to direct the community to gathering areas. In this design having 2 main areas where the community can gather is effective in drawing the community together.



There will also be a ramp, to include the disabled community.

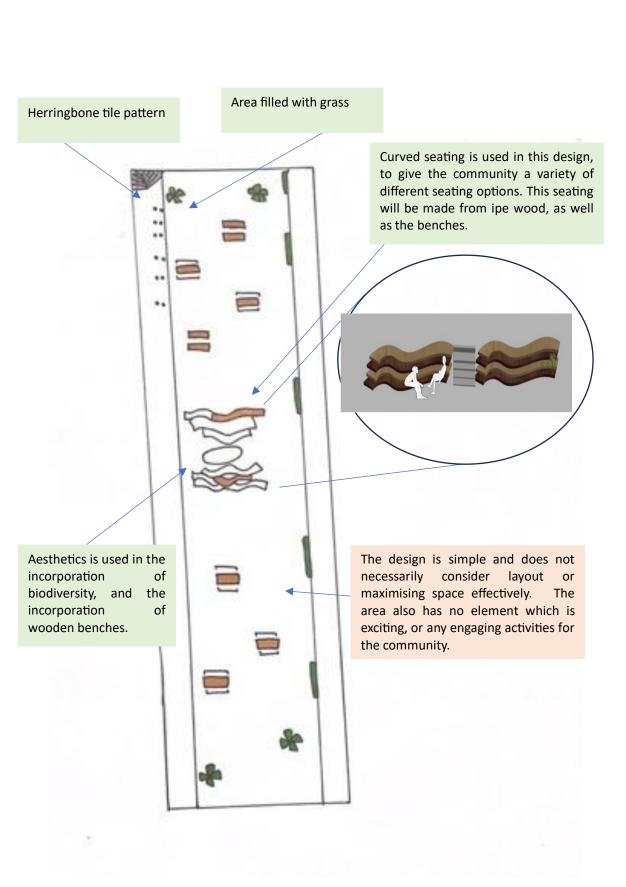




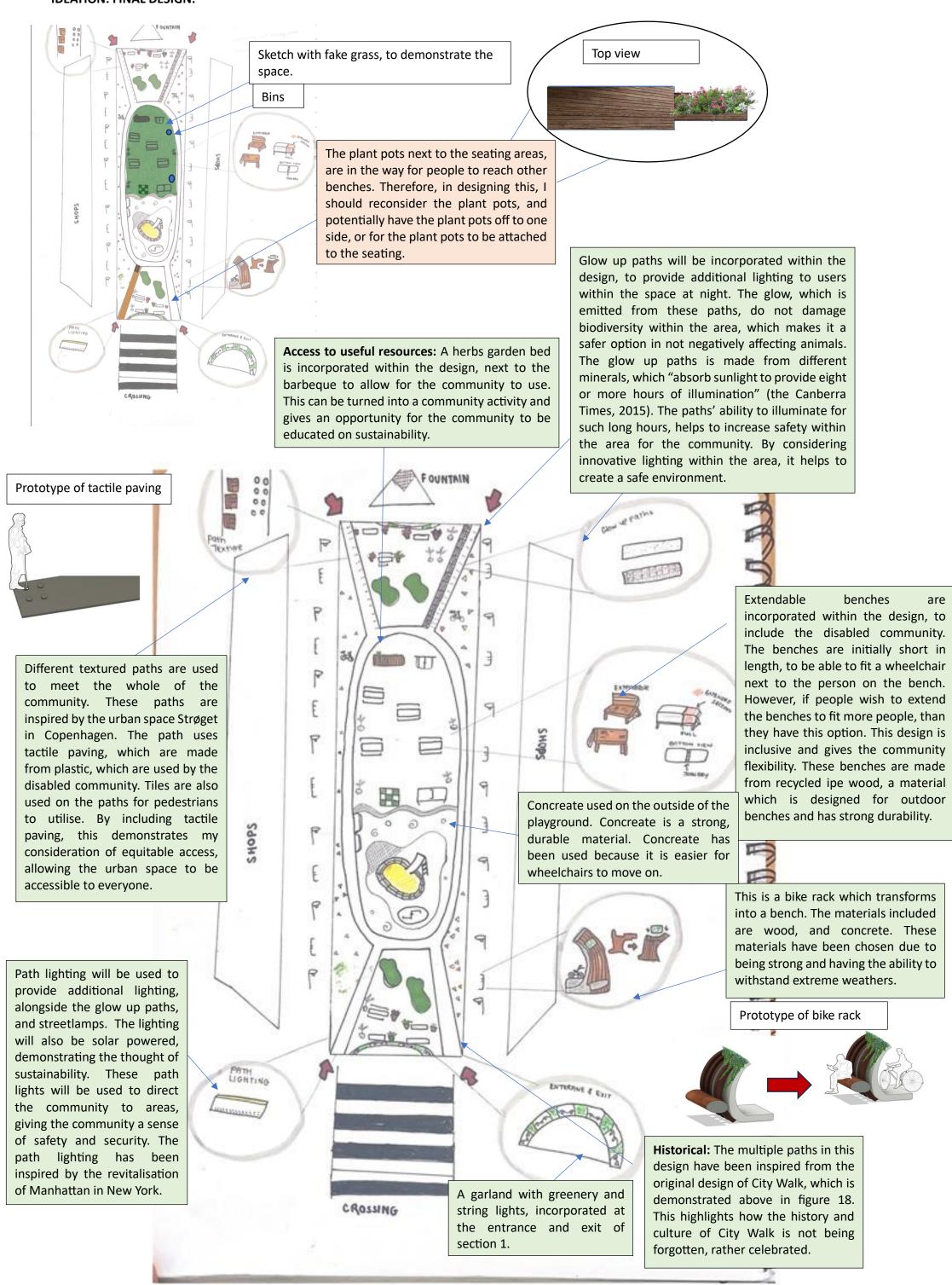
Texture of stairs



Demonstration of seating area being in City Walk.

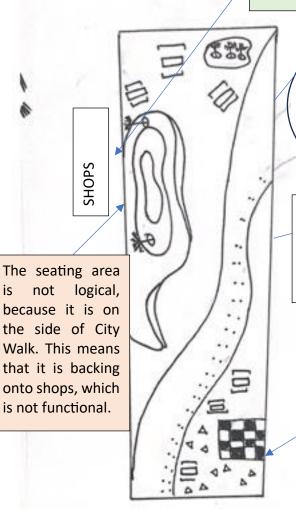


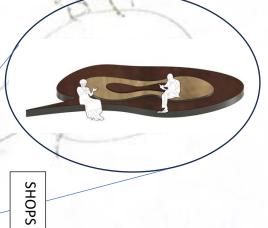
IDEATION: FINAL DESIGN:





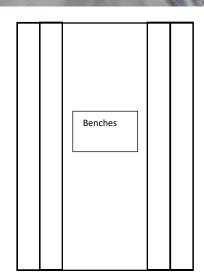
These seating areas will be made from a combination of concrete and wood. The concreate will be used as the structure of the seating, due to its strong characteristics. The wood will be used on top for decoration, to bring the whole look together and to be aesthetically appealing to the community.







Play area= engages the community and promotes the community to socialise with each other.



Testing path layout

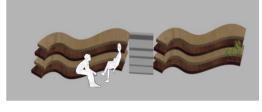
















SEATING AREA:

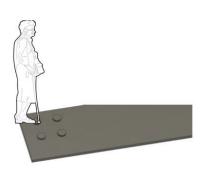


BENCHES:





TACTILE PAVING:



FINAL DESIGN PROTOTYPE:

Featuring: garland, bike racks, and garden beds



I was tasked with revitalising a section of City Walk. The urban space incorporates a range of biodiversity and equitable access within the design to make the area vibrant and inclusive.

Through empathetic research and observations, it was found that section 1 of City Walk lacked vibrancy and accessibility to all community users. It was noted that within City Walk, the paving tiles made the area appear dull and feel enclosed. In addition, the street furniture included within City Walk did not cater to the disabled community. Thus, the lack of vibrancy and accessibility within City Walk is a significant issue that has not been addressed, prompting my revitalisation of section 1 City Walk. Within this revitalisation, I have focused my resources on embedding biodiversity within the urban space and creating paths tailored to pedestrians, cyclists, and the disabled community. These paths are needed to direct the community to the main areas for socialising.

It was found in empathetic research that the highest age bracket of the City's population was 20-29 years old, comprising 99.3% apartments and flats. Due to the high number of apartments, it was key for my urban space to have a number of critical areas where the community could socialise, relax and be engaged. This is because, typically, apartments do not have a large backyard space, so including these open spaces would allow these people to have an area to socialise in. This is demonstrated in the kid's playground, ping pong tennis and chess setup, which promotes the community to come together. Around the playground, there is concrete to allow wheelchairs to easily move on the surface, as well as scooters and roller blades.

Including a range of street furniture, from picnic tables, single benches, and garden beds, was also crucial in promoting the area to this demographic. The single benches have been included within the urban space to give the community flexibility in choosing their street furniture and give people who are studying an option to do so peacefully. Ideally, these benches would have a small table from the side of the bench to give the community an option whether they want to study or not.

Embedding biodiversity within the area makes the urban space feel more welcoming and colourful due to the vibrant hues of the trees and shrubs radiating throughout the urban space. Incorporating biodiversity within the area demonstrates the design principle of sustainability. The inclusion of biodiversity will ultimately positively impact the urban space, attracting more people to the area and improving the air quality of the urban space.

The paths have been strategically placed within the urban space to direct the community to the main area to socialise. Including the four paths from different sides of the urban space helps to even out traffic flow. The paving within the urban space uses a more modern pattern to brighten up the area from the original dark paving. The paving also includes tactile paving for the disabled community, allowing the whole community to utilise the urban space fully. This links in with the design principle of having good accessibility in an urban space to allow the community to enjoy the area.

Safety is a key element in making a good urban space, which was essential to consider in my revitalisation. Lighting was embedded within my urban space as a safety feature for the area, and it makes sure that the urban space is safe and functional not only during the day but also at night. Within this design, lamp posts, path lighting, string lights, and glow-up-in-the-dark paths were incorporated within the design. Glow-up paths are innovative lighting, which have been chosen within this design due to their ability to light up a path for a long time and have no negative effect on animals. These glow-up paths ensure the community can see the paths while walking or cycling at night. Utilising a wide range of lighting allows the community to use and enjoy the space at night and feel safe due to the amount of lighting within the area.

The materials chosen within the urban space are fairly low maintenance, i.e., ipe, wood, with a water-resistant coating. This wood is strong and durable and is made for outdoor benches. However, the garden beds and the lighting may need some maintenance work after a certain time to ensure that all the lights are properly functioning and that the garden beds are neat.

Overall, my design of the revitalisation of section 1 of City Walk will help restore the lack of accessibility and vibrancy within the area and attract more people.

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