

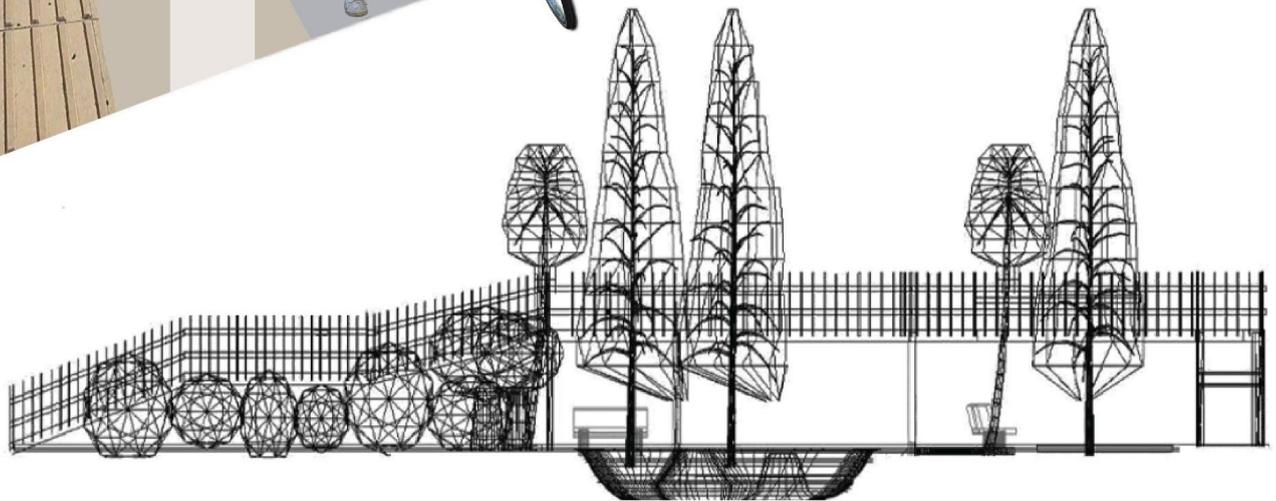
# **The Armature**

**Team 10's Proposals**

**Brenton Wang, Stephen Zhuang, Brian Yin, Adara Hagman**

Team 10's **THE**  
**ARMATURE**  
1UP Design Competition 2021

An armature for an ever-changing daily life."  
"An open-ended, incomplete and ambiguous  
structure waiting to be 'misused.'"



## **Introduction**

We are visualizing a sustainable and inclusive Wychwood Barns Park. The goal of the project is to have minimum implementations achieving the most sustainable and inclusive result. The structure, called "armature," is expected to inspire the visitors to explore its endless possibilities and make use of every inch of the structure. It will be waiting to be filled in with details like an armature by its users.

## **On-Site Visit Observations:**

The users of the park are very diverse and lively; lots of different age groups can be found in the park. Skating and socializing seem to be the main activities. The main access point is beside the Wychwood Barns Park City Sign and on the opposite side from the road where the dog park and volleyball court are.

It appears that Wychwood Barns Park is a community center. Traffic is both ways throughout the entire park, including rollerblades, scooters, strollers, and walking. Most of the people concentrate around the natural ice rink during winter. The site's aesthetic is mostly brick and wood. There are tiny art installations on wood panels and signage in different areas of the park.

The wooden beams all along the tops of the barn are great for greenery (hydroponics), they could collect rainwater which will be reused. There are two storage containers on one of the ends of the barn which could be painted and used to store any children's garden or other items that could be stolen at night. There are lots of wooden planting crates, ceiling, beams, and other structures in the barn space that could have art painted on it by the local artists or even students as part of a children's garden model. There are two wooden structures in the playground area which are perfect for solar panels.

## **Strengths:**

Plenty of open space and variety of activity. Wychwood Barns Park is a gathering space for the community, with lots of pedestrians and people hanging out. Vibrant and active.

## **Weaknesses:**

There is a lot of litter on grass fields yet a few garbage cans in the park. The water fountains are not functioning and the playground structure is not inclusive to everyone's abilities. There is a children's garden hidden behind the field near the colorful shed but it was quite rundown. The garden contains basic infrastructures including chalkboards, educational signages, and some seats.

## **Site Photos by Adara:**

<https://drive.google.com/drive/folders/1-1Ai2PxEC45xD7yCTbcmoXve8w2viQXk>

## **Site History & Design Concept:**

During the process of researching Wychwood Barns Park and the city of Toronto's history, we discovered links between the Barns and Toronto's old transit system. Wychwood Barns Park, formally known as The St. Clair Carhouse, was constructed to serve the TCR's St. Clair streetcar line during the 1910s. This structure perfectly suited the city of Toronto, a city designed for cars, steadily cultivating the automotive ethos decades ago. To pay tribute and to celebrate the history of the park and its city, we decided to develop our design based on the theme of transit.

According to Google, the definition of transit is "the carrying of people, goods, or materials from one place to another". We wanted to apply these principles to the Wychwood Barns Park, to make every location of the park accessible from a nearby location, bolstering freedom of movement.

Following the spirit of transit, we value the importance of the paths within the park, which is why we implemented Highlines that are an attraction in and of itself.

"The point of a city is the multiplicity of choices. It is impossible to take advantage of the multiplicity of choices without being able to get around easily. Furthermore, the economic foundation of cities is trade. Trade-in ideas, services, skills, and personnel—and certainly in goods—demands efficient, fluid transportation and communication." —An Economic Analysis of Rapid Transit in New York, 1870 - 2010 By Kyle M. Kirschling

To present the idea of transit in our design, we recontextualize the essence of transit into our architecture design, which means that our park design promotes the exchange of ideas, the formation of bonds, and access to choices.

In the early periods of conceiving the design for the park, a vague idea about a free structure formed in my head. It is a structure that doesn't speak on its own but amplifies another's volume, a structure that serves its users with countless possibilities. It wasn't until I came across the presentation Buildings and Almost Buildings, by Mimi Hoang and Eric Bunge, the co-founding partners of nARCHITECTS, that I was finally able to articulate my thoughts. I would like to quote a sentence from the presentation which perfectly summarizes my intention: "Is it complete? Or was it, in fact, the state of incompleteness that excited us, that opened up new possibilities in our minds? Was it the elusive or ambiguous status that encouraged users or "misusers" to appropriate this intervention as their own."

I would consider the design of the Highline as an "almost building", which has endless possible functions waiting for the users/"misusers" to explore or "misuse".

The Highline is a free structure. The Highline is an elevated pathway without the slippery sand; The Highline is a shade for the people on the first level; The Highline is a walkway shade for the existing pavement/walkway; The Highline is an extension of walkways; The Highline is an outdoor

exhibition space; The Highline is a lookout point, The Highline is a canvas for the graffiti artists; The Highline is the support for the benches; The Highline is the roof of the playset.

The Highline is an armature. It is a basic framework but an unfinished building. This framework will be filled slowly by the users. For instance, seniors going to the garden club in Wychwood Barns Park every week can hang plants all over the railings of the Highline, graffiti artists from different backgrounds can paint over the Highline with the beauty from their own culture, and kids can imagine the structure as a spaceship or a fort during their games.

Similar to the sculpture-inspired word “armature” to represent basic framework and biology-inspired terminology “skin” to represent facade, the functions, and features of our design can be represented by transportation-inspired phrases “Exchange of ideas”, “Formation of bonds” and “Access to choices.”

### **Design Solution:**

#### **Kept:**

1. Playground
2. Historical pavement
3. Sandpit
4. Waterpark
5. Grass fields
6. Picnic area

#### **Added:**

7. Added Highline
  - a. Arts Space
  - b. Shade
    - i. Provided by the walls
    - ii. Provided by the elevated walkways
    - iii. Provided by the curtains of vines falling down
  - c. More Freedom of Movement
  - d. Look Out points
  - e. Walls
    - i. Guarantees the shade for the users sitting on the benches mounted to the walls
8. Umbrellas
9. Added Greenery
  - a. More Organic Look
  - b. Less Artificial Feel
10. Trash Cans

- a. Less Litter/Trash
- 11. Solar Panels
  - a. Cleaner Power
- 12. Rainwater Collector
  - a. Filter rainwater
    - i. Water plants
- 13. Wall Mounted Benches
  - a. More Convenient Rest
  - b. People Stay Longer
- 14. A.D.A Compliant
  - a. Inclusive, Accessible
  - b. Safer for Disabled People
- 15. Charging Port
  - a. Powered by solar panels

**Subtracted:**

1. Concrete block beside the picnic area
2. Stair chair beside the picnic area

**Materials:**

- Highline
  - Recycled Steel
  - Green Concrete
- Solar Panels
  - Aluminium Frame
  - Tempered Glass
  - Encapsulant - EVA
  - Solar Cells
  - Encapsulant - EVA
  - Back Sheet
  - Junction Box
- Benches
  - Natural Wood
  - Recycled Steel

**Precedents:**

# Sou Fujimoto

## House NA

Between nature & architecture  
Between architecture & city  
Between simplicity & complexity

Impression of Tokyo: A forest formed by man-made objects, a city where small objects gather close to each other  
In house NA, passers-by look up and face the owner, nodding their heads, forming an interesting sense of space.



## Tainan Cafe

Between furniture & architecture  
Between architecture & city

This is a "monster" created through "stairs".  
Stairs are intertwined to reshape the space.  
The building has the scale of furniture.  
Stairs can also provide shade and rain protection, which is an "extension of the street"





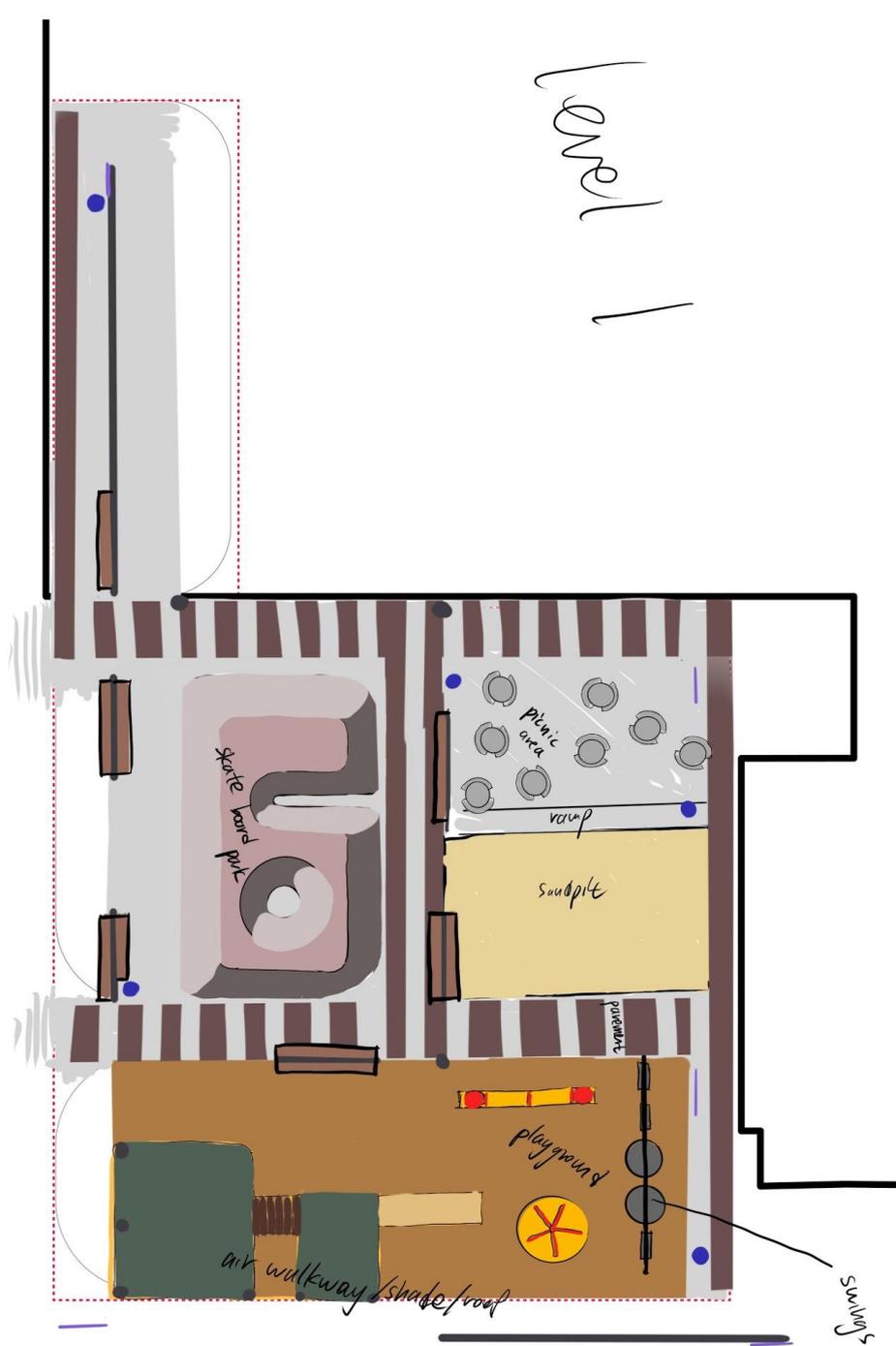
**Concept**

**plans:**

level 1

Scale: 1:125  
0 1 5 10 15 20m

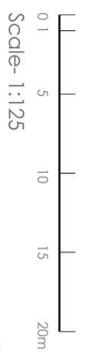
- icon
- trash can
- bench
- umbrella
- table



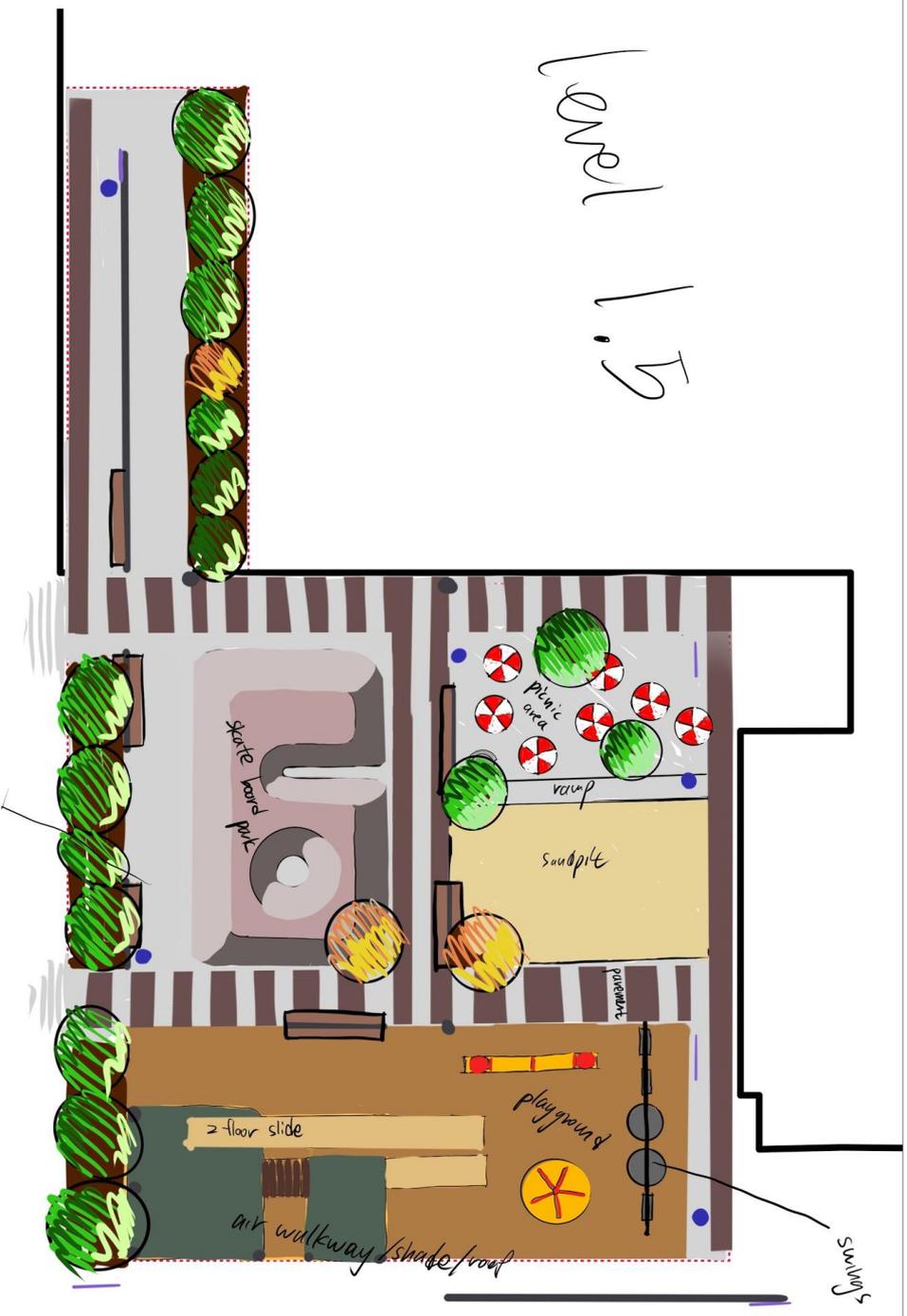
Wychwood Ave.



level 1.5



- icon
- trash can
- bench
- umbrella
- table



Wychwood Ave.

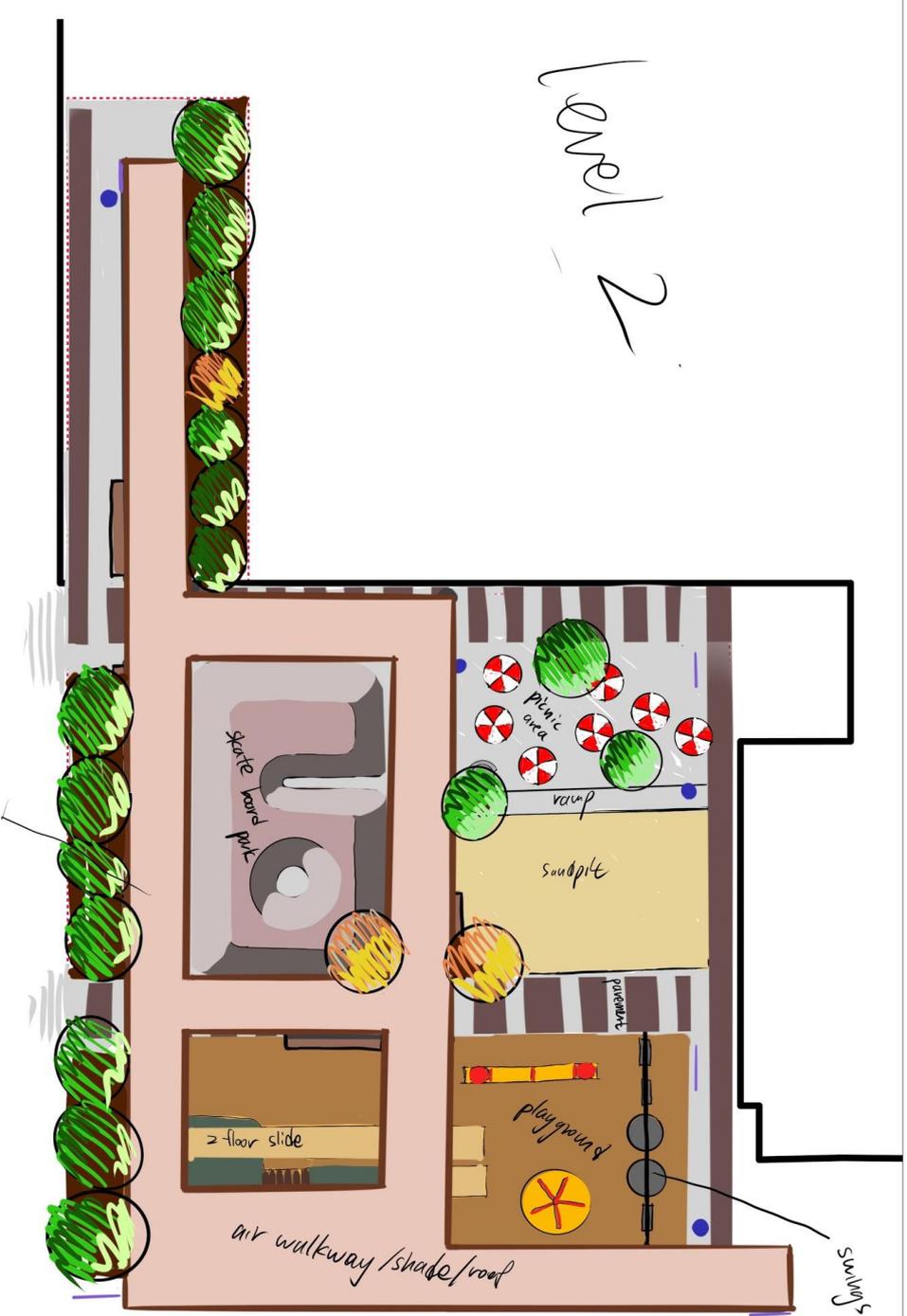


Level 2

Scale: 1:125



- icon
- trash can
- bench
- umbrella
- table



Wychwood Ave.



## **Circulation:**

The existing pavement is wide enough for 5 people to go side by side. The width of the highline is 6ft, which allows at least 2 people, including wheelchair users, to pass by each other. This allows different directions and paces of movement to take place on the highline. The shape of the highline can be seen as the number “8,” the interior lane on the highline which is the closest to the 2 openings has a relatively slower pace, whereas the exterior lane on the highline has a relatively faster pace. The location of the tactile pavings is carefully planned---it is separated from the row of columns supporting the highline and the lane for people moving at a faster speed such as bikers and scooters. Tactile pavings are placed right beside the grass field, which is relatively more open and less dangerous than any other location.

## **Programs (in terms of transit system terminologies):**

### **‘Exchange of Ideas’:**

The wired fences along the Highline can be used not only as trellises for the vine to climb on, but also the shelf on which the members of the nearby gardening club can hang their pots of flowers on. This allows the members to showcase their gardening techniques to others, which consequently promotes the conversation among plant-lovers to exchange their strategies to plant.

The Highline can also be used as outdoor art galleries where artists from Artscape Wychwood Barns exhibit their artworks or installations. The height and the shape of the Highline effectively control the flow of people on the platform, causing it to be safe from the slippery sand and not hurt kids. Painters can use the wired fences as outdoor art panels and hang their paintings along the fences. Even the wired fences themselves can also be used as the canvas for cross-stitching art installations. During winters when the highline is covered with snow, the wired fences that were filled up with vines will be decorated with lights instead. The highline will exhibit light installations and Ice sculptures instead.

Artists can hold monthly art events on the Highline, where they walk along the Highline, study each’s work, and give compliments and criticisms.

Advocates can voice out by painting graffiti on the columns and the walls supporting the Highline.

Artists from different cultural backgrounds are encouraged to work together and to create artwork showing the beauty of different cultures, which all comprise one mural. This can familiarize people from different ethnic and cultural backgrounds and promote more interactions and friendships among Toronto's diverse community.

Overall, our principle is that we should add in as many opportunities for creativity and creation by the community as possible, and not have a "set" function for any one component of the Park.

### **'Access to choices':**

ADA compliant equipment is included in the part to ensure the inclusiveness and accessibility of the park. This way, disabled people have just as much mobility as everybody else.

ADA compliant playground equipment including wheelchair swings and cruisers are added onto the existing playground, so that all children, disability or no disability, have equal opportunity to play in the playground. All ADA-compliant playground equipment is between normal playground equipment to better promote the interaction between different children.

Access to the highline is also guaranteed to everyone. Two ramps are built along the longest side of the highline, keeping the slope of the ramp under the standard measurements for wheelchair ramps. There are also landings in the ramp to allow wheelchair users to relax while going up.

The concrete barrier and the staircase along the edges of the picnic area will be demolished and replaced with ramps so that wheelchair users can access the picnic area easily.

Besides the ramps, tactile pavings are another ADA compliant equipment intended to be installed all across the park. It will trace along the existing pavements and the highline, providing everyone the same access to every corner of the park.

The multifunction aspect of the highline also provides much more choices that can be accessed within the park. Besides the pre-existing access to the sandpit, the picnic area, the playground, and the water park, the highline further provides the access to more trash cans, more shades, more charging ports, more walkways, more lookout points, more graffiti walls, more art installations, more seats, more lights, more outdoor gallery space, and more greeneries.

### **'Formation of bonds':**

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