

Milestone #1: Informational Research Report

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HCDE 493

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## Introduction

For the first milestone in our capstone, we gathered information about two parks that exemplify Bellevue parks: Crossroads Park, a large community park, and Mercer Slough Nature Park, a nature trail. We additionally reviewed the existing resources, signage laws, and City of Bellevue accessibility policies. We conducted field observations at both sites to gain a better understanding of the current signage at the parks. Afterward, we analyzed our observations through thematic analysis to highlight the main takeaways.

## Bellevue's Philosophy

*"Bellevue welcomes the world.*

*Our diversity is our strength.*

*We embrace the future while respecting our past."*

— Bellevue City Council, Vision Statement (City of Bellevue, 2021).

The City of Bellevue's vision statement is a meaningful proclamation that all are welcome in the city and its programs and services, championing inclusivity and diversity as key to creating lasting communities. Not only does the City of Bellevue strive to adhere to ADA standards, Title VI, and the Washington State Law Against Discrimination, but the city also seeks to go above and beyond minimum compliance standards in many of its projects (City of Bellevue, n.d.)

The city is intentional about supporting accessibility, which creates inviting community spaces. As cited in the city's inclusive interactions handbook, design researcher Sara Hendren explains, "everyone should recognize that both giving and receiving assistance are actions we will each take up in turn, every one of us. Human needfulness really is universal" (p. 7). Improving the experiences of people with different needs is important because the results will help everyone, as we all go through different stages of life and needfulness (Amson et al., n.d.).

## Statistics of Bellevue Residents

Accessibility for people with disabilities is important. 10% of Bellevue residents report having a disability; nationally, the statistic is 26%. These numbers are most likely underreported due to stigma against people with disabilities. In the Bellevue School District, 9% of students are in special education programs. The Center for Talent Innovation conducted a study in 2017 on employees with disabilities and found that only 3.2% of people reported their disabilities to their employers, while the actual number of employees with disabilities is close to 30%. More than 60% of disabilities were considered "invisible", meaning that these disabilities aren't obvious unless the person discloses it themselves (Amson et al., n.d.). For people who are already experiencing stigma and invisibility, it is even more important to provide support, access, and resources to welcome them.

Language access is important for those with limited English proficiency (LEP). From a community survey in 2019, 44% of Bellevue residents speak a language other than English at

home, 41.2% of students in Bellevue School District speak a first language other than English, and over 41% of Bellevue residents were born in another country. (Amson et al., 2022). The most common languages in Bellevue are Traditional and Simplified Chinese, Spanish, Vietnamese, Japanese, Korean, and Russian. Bellevue’s “safe harbor” threshold is that if a language is spoken by 5% of the population, or 1000 individuals, whichever is less, then vital information (see legal definition below) must be translated for it (City of Bellevue ADA/Title VI Administrator).

## Past Work

### *Universal Design Handbook*

Revised in the spring of 2023, the City of Bellevue’s Universal Design Handbook defines best practices of universal design and accessibility during training, meetings, and events. While it is largely focused on in-person methods to create inclusive spaces for all, there are guidelines for content development and written communication (City of Bellevue DART, 2023, pp. 7-11 & pp. 20-25). Our team will use this information to guide the signage redesign during Milestone #3.

### *Inclusive Interactions Handbook*

Created by the Disability Allyship Resource Team (DART) Employee Resource Group to guide city employees as they serve the public and interact with the diverse populations that make up their community. There are best practices for written communication that align with the Universal Design Handbook’s guidelines (Amson et al., n.d., pp. 45-50). Our team will use this information to guide the signage redesign during Milestone #3.

### *Language Access Resource Guide*

Created in August of 2022, the City of Bellevue’s Language Access Resource Guide focuses on defining language access and determining when it should be considered. It defines the four-factor analysis as a method for employees to determine what information they need to provide in languages other than English. This is defined by asking the four following questions:

1. Does the project contain vital information?
2. What is the frequency of contact between project information/outreach and limited English proficiency (LEP) individuals?
3. What languages will any project information/outreach need to be provided in?
4. Which services will be needed to effectively provide language access? (Amson et al., 2022, pp. 6)

While the guide discusses how to write for translation, there are no guidelines related to how symbology can help communicate information. This could be an important part of our group’s final design system that could improve the way the City of Bellevue reviews its language accessibility.

### Endelman Report

In 2012, the City of Bellevue worked with Endelman & Associates – an accessibility consulting firm – to assess the ADA compliance of ten of the city’s public facilities. This included the Crossroads Community Park & Center, with an emphasis on the community center, golf course, parking, and upper portion east of the skate bowl. Many opportunities and pain points were identified such as slope issues, accessible routes, drinking fountains, accessible parking stalls, and accessible bathrooms that are non-compliant (Overview & Executive Summary 21). Mentions of improved signage revolved around defining accessible parking stalls and directional signage to accessible features of the park (ADA Survey Results 1, 18, 30). While our project scope is focused solely on the accessibility of signage itself, it is valuable to understand the previous work conducted on one of the project’s main sites. (Sourced from the City of Bellevue shared folder).

### Current Signage Practice

Typical City of Bellevue park signage has a teal background and white lettering. Both the photos below are from Crossroads Park. The photo on the left illustrates this consistent signage branding with a typical park rules sign. This sign is consistently posted in the City of Bellevue’s parks for visitors to understand the rules and regulations within the space. The photo on the right is of off-leash dog area rules.

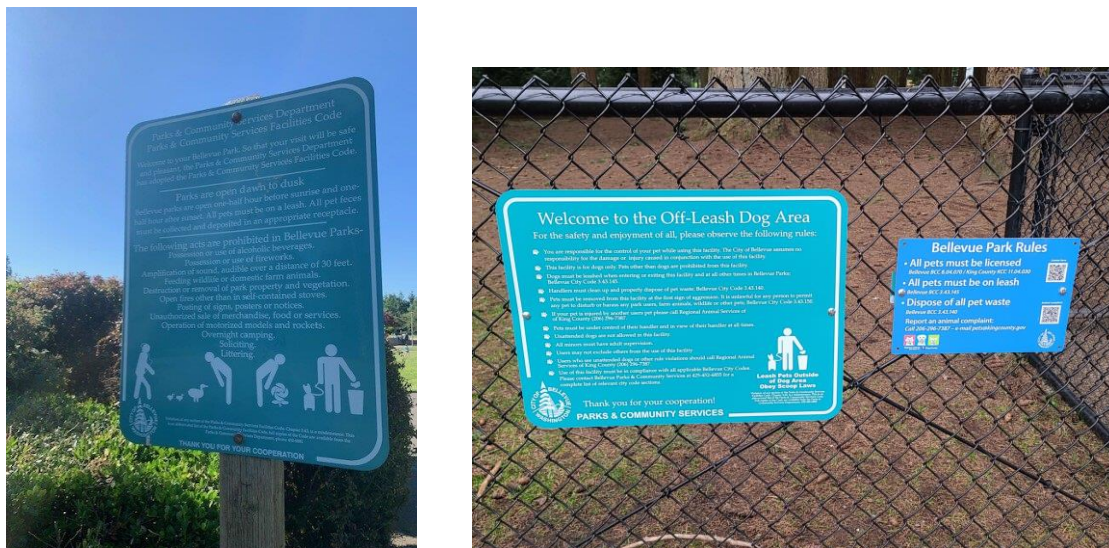


Figure 1. Example signage showing City of Bellevue sign branding (Sourced from City of Bellevue shared folder and personal photo).

The photo below is a more detailed illustration of the guidelines for the City of Bellevue rules sign shown above.





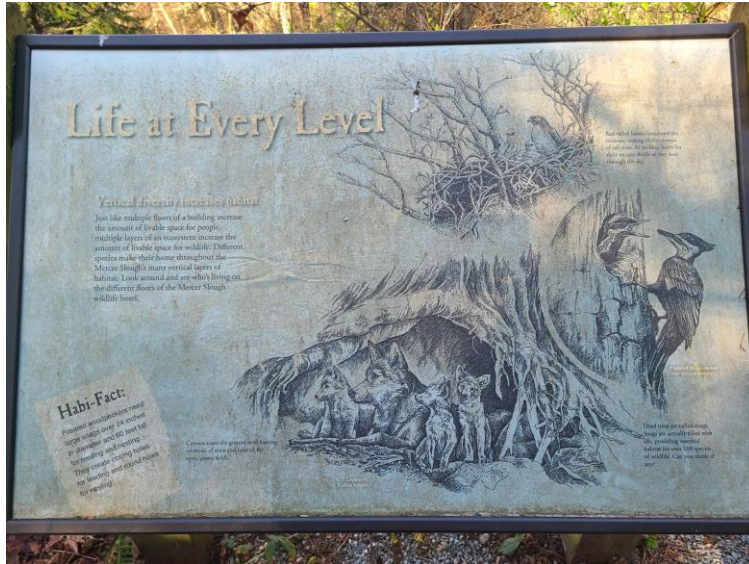


Figure 4. Example signage from Mercer Slough Nature Park. 4a (left) shows an educational sign about habitats and wildlife. 4b (right) shows a wooden bollard with a trail name and directional information to other landmarks in the park. (Sign photography captured by capstone team members.)

Our team consistently came across the signage shown, illustrating the City of Bellevue's desire for visual consistency within their signage to create higher reliability and trust in the information for visitors.

### Example Signage

The New York City Parks is an example of consistent signage, and a strength of their signage style guide is the modularity. With the ability to follow a defined visual language while also having flexibility in what this looks like, their signage design is easily adaptable to their needs whenever necessary (Chase et al., n.d., pp. 90).



A. 1-Column Configuration



C. 3-Column Configuration



B. 2-Column Configuration



D. 4-Column Configuration



Figure 5. Example New York City Parks signage and design system style guide examples of modularity (Chase et al.)

For wayfinding specifically, a great example is the Aviation Department of the Port Authority of New York & New Jersey's Airport Standard Manual (Port Authority of New York and New Jersey, 2020). Focusing on the purpose of wayfinding, they illustrate important principles of signage such as spatial zoning and information strategy, and define their design system.



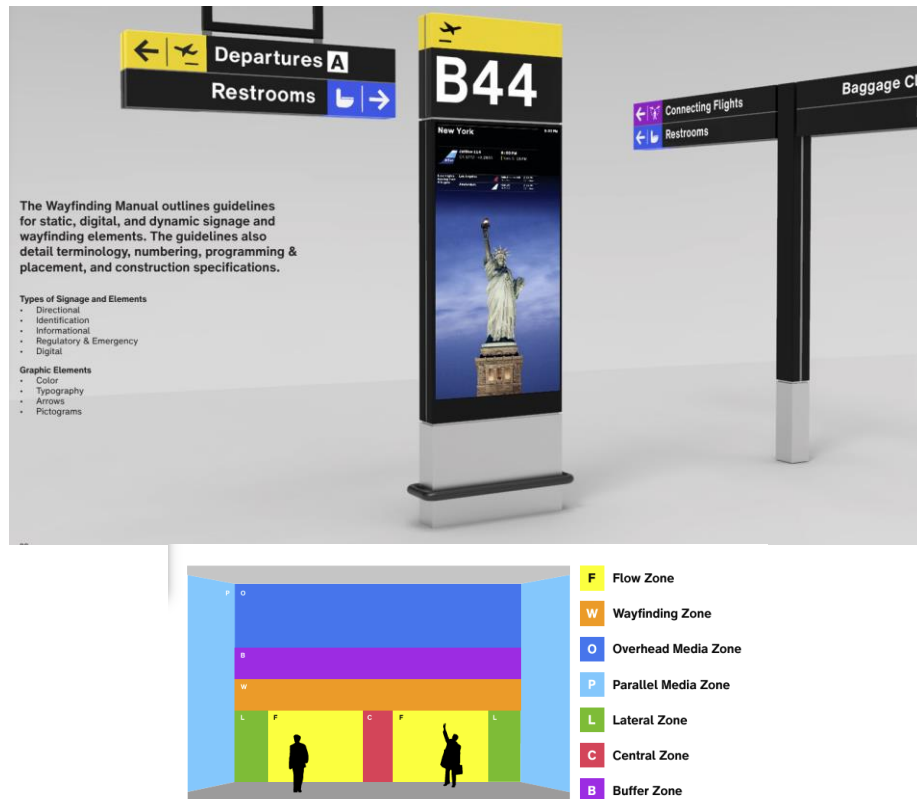


Figure 5. Design system style guide of Port Authority of New York and New Jersey and definition of spatial zoning of signage (Port Authority of New York and New Jersey, 2020)

## Definitions

### ADA

The Americans with Disabilities Act is a federal civil rights law passed in 1990 and amended in 2008 which “prohibits discrimination against people with disabilities in everyday activities” (U.S. Department of Justice Civil Rights Division, n.d.).

A person with a disability is defined by ADA as someone who:

- has a physical or mental impairment that substantially limits one or more major life activities,
- has a history or record of such an impairment (such as cancer that is in remission), or
- is perceived by others as having such an impairment (such as a person who has scars from a severe burn).

### Title VI

Title VI was part of the Civil Rights Act of 1964 and “prohibits discrimination based on race, color, and national origin in programs and activities receiving federal financial assistance” (U.S. Department of Justice, n.d.). In relation to our project, this means recipients of federal financial assistance must take reasonable steps to make their programs and activities accessible for eligible people with limited English proficiency.

*Washington State Law Against Discrimination*

A set of laws (RCW49.60) designed to protect individuals in Washington state from discrimination (Washington State Human Rights Commission, n.d.).

*Vital Information*

The Department of Justice's August 2023 [Language Access Plan](#) defines vital information as information that must be provided to people so they know the law and can act safely in accordance with it. This means that language access to information and services for community members who have limited English proficiency (LEP) is vital (U.S. Department of Justice, 2023, pp. 4).

From the City of Bellevue's Four Factor Analysis infographic, vital documents are defined to include:

- Applications
- Consent and compliant forms
- Notices of rights
- Notices advising limited English proficiency (LEP) persons of the availability of free language assistance
- Notices for city projects, programs, and events (City of Bellevue ADA/Title VI Administrator, n.d.)

## **Field Observations**

Field observation is a qualitative research method that uses ethnographic field research methods to observe a live population. During the field observation, the research team recorded their observations based on five different categories: people, environment, weather, accessibility, and signage. The main objective is to gain a better understanding of the current interactions with signage as well as the types of activity happening at the park.

### **Thematic Analysis**

Thematic analysis is a method used to analyze field observations. It involves looking at the notes and jotting them down in sticky notes or other forms. Then you look at all the sticky notes to generate common themes across the entire observation. The themes drive the next phase of the design which is user research.

### ***Crossroads Park***

Our first place of research is Crossroads Park in Bellevue, Washington. Crossroads Park is a 34-acre public park that features tennis courts, basketball courts, a horseshoe pit, restrooms, a skate park, play areas, picnic shelters, and jogging paths. The main attractions of the park are the Crossroads Water Spray Playground, a community center, a par-3 golf course, the Bellevue Youth Theatre, and seasonal community gardens. Crossroads Park is located in one of the most culturally diverse areas in Bellevue (City of Bellevue, n.d.).

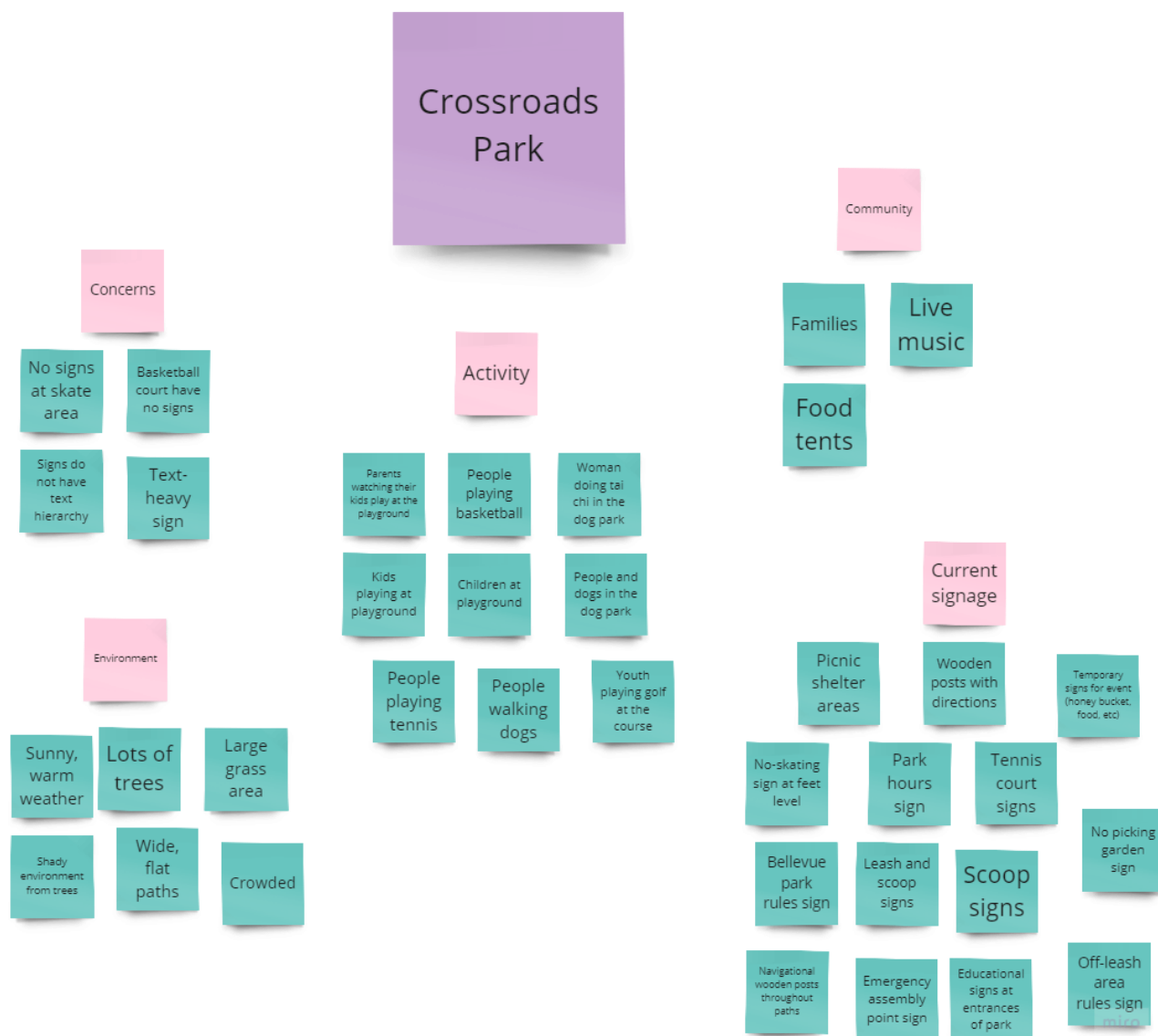


Figure 7a. Thematic analysis done on observations at Crossroads Park made on Saturday, 3/30/2024. Themes are sorted into Concerns, Environment, Activity, Community, and Current Signage.

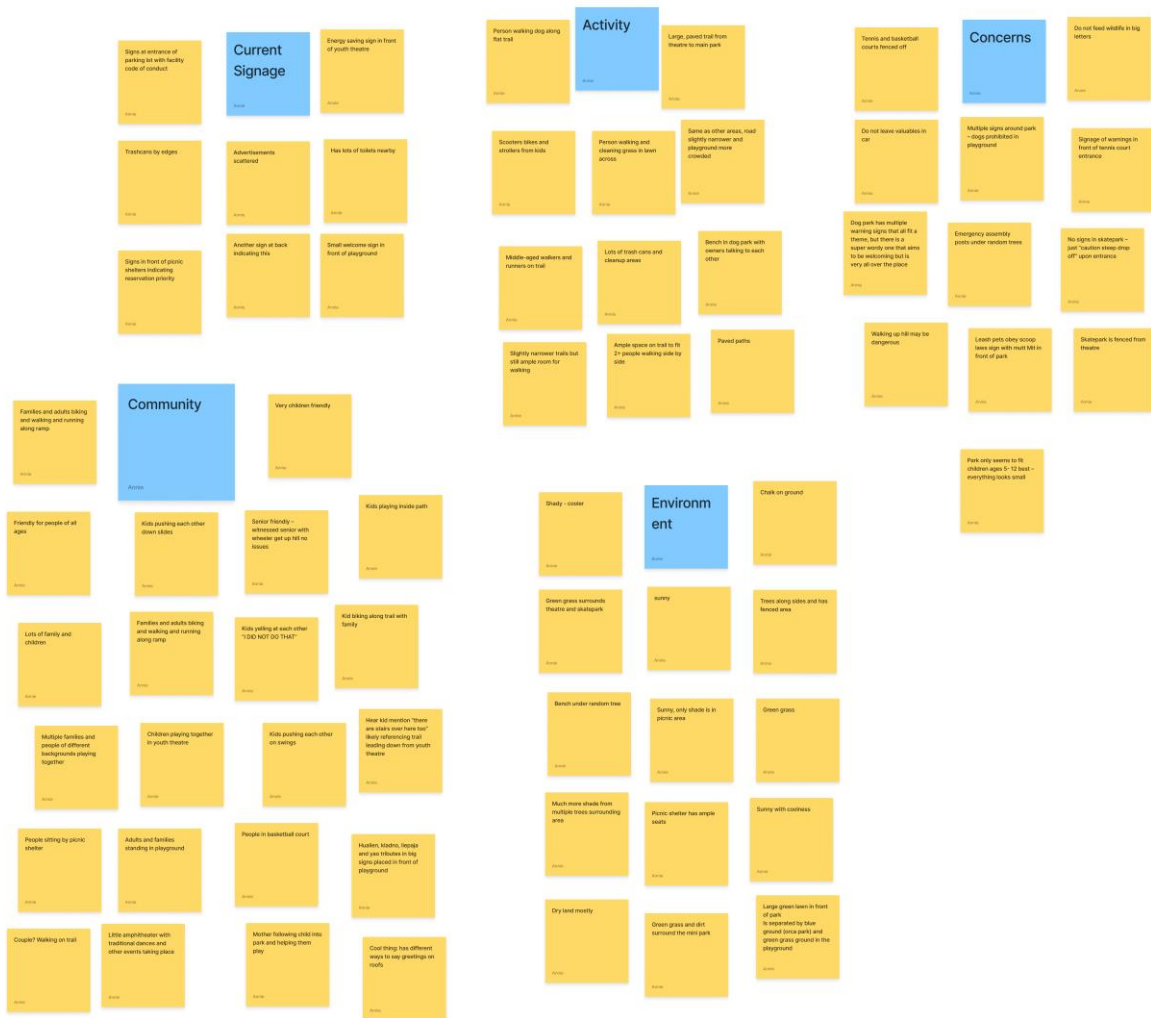


Figure 7b. Continuing from Figure 7a, thematic analysis done on observations at Crossroads Park made on Sunday, 3/31/2024. Themes are sorted into Concerns, Environment, Activity, Community, and Current Signage.

For our Crossroads Park observations, the data was collected via the methods shown in Appendix A, under Field Observation Plan and Field Observation Analysis. The themes we found from our analysis of Crossroads Park are *Current signage*, *Concerns*, *Community*, *Activity*, and *Environment*. *Current signage* contains observations about what signs the City of Bellevue currently has placed around the park, along with specific facilities surrounding the park, such as picnic shelters and public restrooms. *Concerns* contain observations of signage issues, safety hazards, and other areas that may pose concerns for the public, such as how some areas didn't have enough signage coverage while other areas were too text-heavy on signage. *Community* contains observations of how the community interacts with each other at the park, such as in the instances of children playing together. *Activity* contains observations of what people were doing on the trails, such as biking or walking. *Environment* contains observations of weather, road conditions, and other natural surroundings along Crossroads Park. While we observed individual sections of Crossroads Park, the thematic analysis was done holistically on all collected observations. Figure 7a shows the thematic analysis done on observations made on Saturday



3/30/2024, and Figure 7b shows the thematic analysis done on observations made on Sunday 3/31/2024.

### *Mercer Slough Nature Park*

Our second place of research is Mercer Slough Nature Park in Bellevue, Washington. Mercer Slough Nature Park is a trail park that consists of two trails, Bellefields Loop and Heritage Loop. The park is 329 acres and has ample room for biking, walking, and observing. Mercer Slough Nature Park is Lake Washington's largest remaining wetland, with hundreds of plant species and an abundance of water resources (City of Bellevue, n.d.). For field observations, we observed both the Bellefields Loop and Heritage Loop in the park.

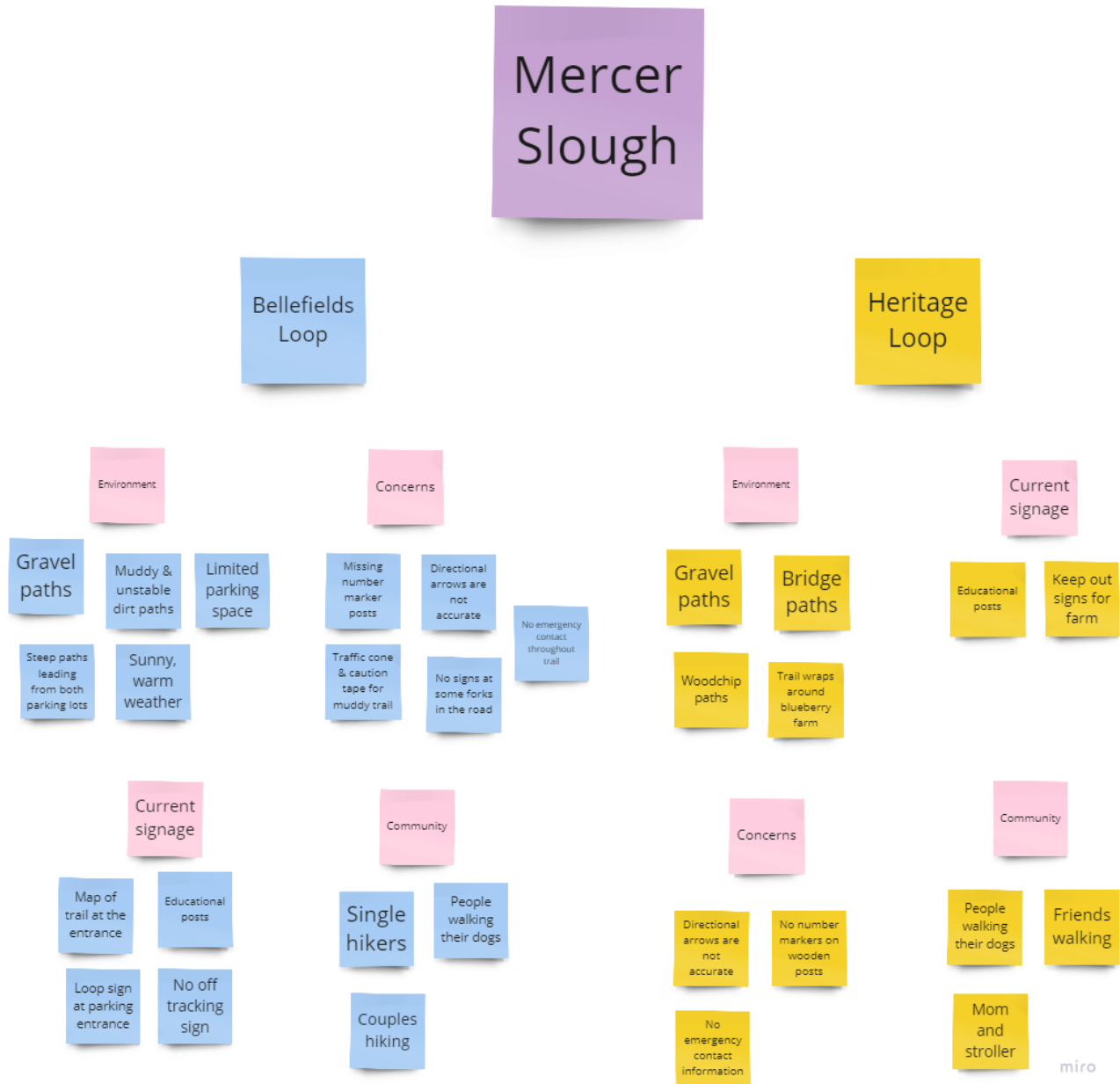
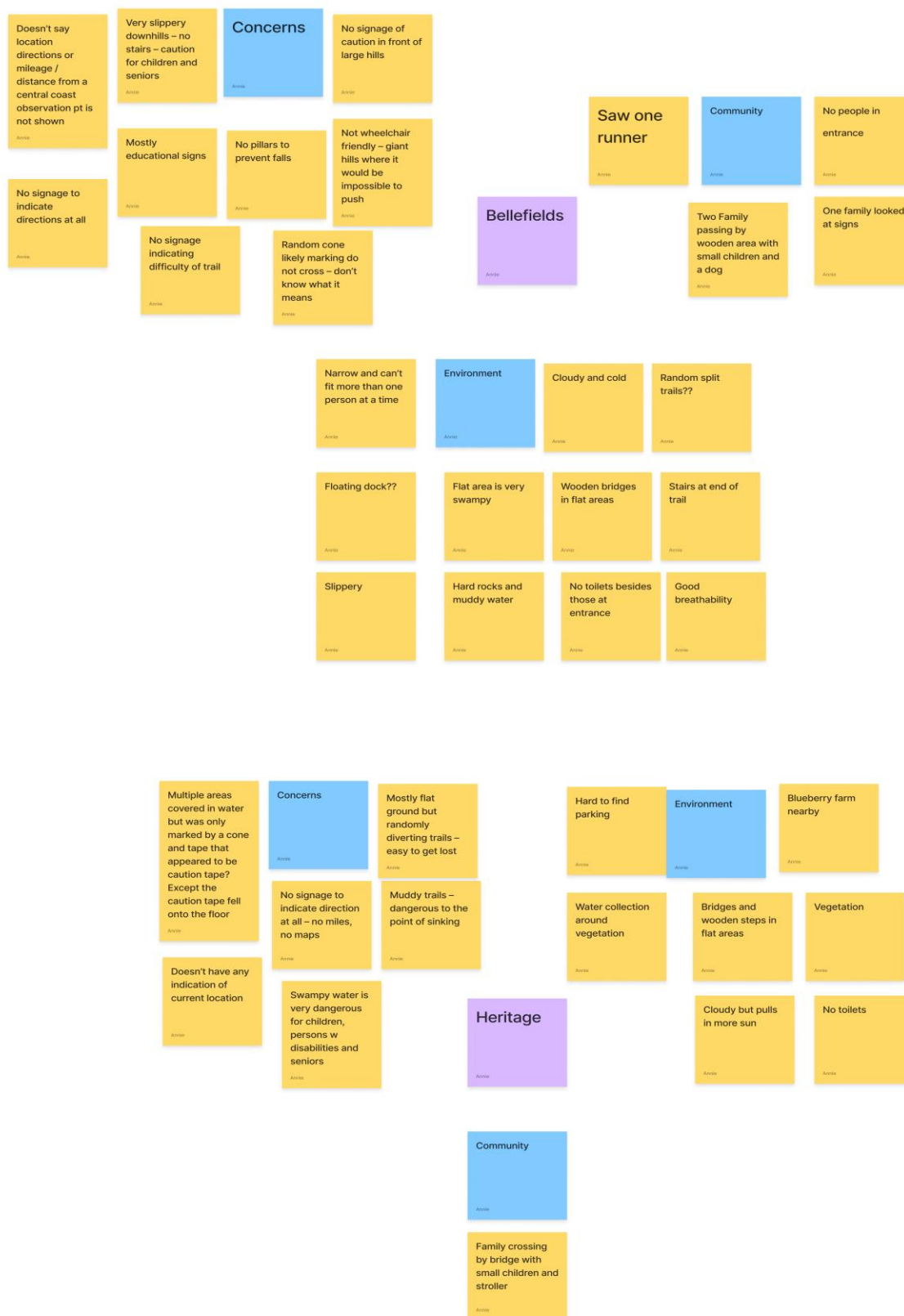


Figure 8a. Thematic analysis done on observations at Mercer Slough Nature Park made on Saturday, 3/30/2024. These are observations from both the Bellefields and Heritage Loop trails. Themes are sorted into Environment, Concerns, Current signage, and Community.



*Figure 8b. Continuing from Figure 8a, thematic analysis done on observations at Mercer Slough Nature Park made on Sunday, 3/31/2024. These are observations from both the Bellefields and Heritage Loop trails. Themes are sorted into Concerns, Environment, and Community – Current Signage was not included here as observations are all shown in Figure 8a.*

Similarly, for our Mercer Slough Nature Park observations, the data was also collected via the methods shown in Appendix A and can be found in the same documents, under Field Observation Plan and Field Observation Analysis. The themes we found from our analyses of both the Bellefields and Heritage Loop trails at Mercer Slough Nature Park are *Current signage*, *Concerns*, *Community*, and *Environment*. *Current signage* contains observations of signage that already exists at the Bellefields and Heritage Loops. *Concerns* contain observations of potential safety hazards at both trail loops. *Community* contains observations of people who were passing by both trail loops. *Environment* contains observations of weather and trail conditions. Like the way we did a thematic analysis for Crossroads Park, the analysis for Mercer Slough Nature Park was done holistically for both trails. Figure 8a shows the thematic analysis done on observations made on Saturday 3/30/2024, and Figure 8b shows the thematic analysis done on observations made on Sunday 3/31/2024.

### Summary of Finalized Observations

#### *Crossroads Park*

Overall, Crossroads Park **provides abundant informational signs** for visitors. This includes the park guideline rules, leash & scoop signs for dog owners, and navigation wooden posts to direct people to different areas of the park.

The primary concern with the signs at Crossroads Park is that there are **little to no interactions with the current signs**. The park guideline rule signs are located at the entrances of the main area next to the parking lots. Although, these signs are text-heavy with no text hierarchy to structure and organize the information. Furthermore, the icons at the bottom of these signs are not directly related to the information provided. The placement of some signs (no skating area) is at foot level which is easy to miss.

The environment at Crossroads welcomes people to the park. The paved trails are flat and wide enough which enables multiple people and dogs to walk side by side. The trees provide adequate shade in certain areas for people as they walk. There are designated areas for people to engage in various activities such as tennis, basketball, playground, youth golf, and the off-leash dog park.

#### *Mercer Slough Nature Park*

Overall, the Mercer Slough Nature trails **lack caution, location indications, and navigation signs** (at fork in the roads and throughout the trail). However, the reason behind this is for people to **immerse themselves in nature and explore**. Besides the steep paths near the entrances of Bellefields Loop, both loops are relatively easy and short to traverse.

Mercer Slough Nature Park had a lot of educational signage along both trails and their entrances. The main issue regarding signage from both the Bellefields Loop and Heritage Loop at Mercer Slough Nature Park is that the wooden bollards, functioning as trail markers providing

directionality and distance, were hard to understand; the directions appeared contradictory because directions were provided on multiple sides of the bollards. Additionally, though we were told by a park ranger that the wooden bollards have identifying numbers and emergency contact information, none of us were able to find that information. This could pose wayfinding and safety issues, especially for those who may not be as familiar with the trails. From the observations about *Community*, the amount of foot traffic inside both loops in the park was also significantly less than that of Crossroads Park and consisted mostly of families and single able-bodied hikers and runners. This would likely create an additional concern to the limited direction signage, as with fewer people on the trails, accidents and safety hazards may not be noticed within the trails as easily compared to if there were more people.

In the Heritage Loop area, there were areas where the trails were either steep, muddy, or a combination of both. Given these observations were done the day after it rained, these less-than-ideal conditions may have been a random occurrence, but regardless, having warning signage or indicators in front of these trails may lessen the chance of an accident occurring due to these conditions. For example, a permanent sign indicating that the trails around the north parking lot are steep and hard to traverse may help visitors navigate to another parking lot. An example like this is an instance of signage design that our team can consider.

The environment at both trails was observed to be in adequate condition for walking. There were gravel paths, wooden bridges in flat areas, woodchip paths, and ample walking space for most of both trails. The area is well-shaded yet lets a bit of sunlight in, so visibility was high throughout the trail. Plants, ponds, and sights surrounding the trails go to capture the views of nature that Mercer Slough Nature Park has to offer.

## **Conclusion**

### **Main Takeaways**

From our research, the City of Bellevue places an important emphasis on diversity and accessibility. These traits should be reflected in their park signage especially. When considering how to approach the signage redesign process, our team would want to ensure that language access and ADA standards are considered throughout the entire process. Furthermore, at nature-based trails such as Mercer Slough Nature Park, our team would want to ensure the signage also doesn't draw away from the natural resources within those trails that visitors are meant to enjoy.

### **Next Steps**

While signage plays a fundamental role in the design of the City of Bellevue's parks, we noticed that not many visitors read the signs around both parks based on our research and field observation findings. We hope to increase the accessibility and viewership of signage because signs include important information for safety and park guidelines and are also valuable sources of environmental and historical education.

For our next phase, we intend to interview park rangers and other Parks & Recreation staff, as well as regular park visitors recommended to us by those park rangers. The goal of this user research interviewing stage is to understand two different spaces: (1) the intentions, experiences, and common issues experienced by Parks & Recreation staff, such as park rangers, when implementing effective and accessible signage, and (2) the behaviors, needs, and accessibility concerns faced by parks visitors as they interpret signage. We believe that these interviews will help give us an even more informed understanding of the current state of signage in Bellevue parks and point us towards possible design recommendations for the phase after.



**Appendix**Field Observation PlanField Observation Analysis

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