



VISIONING THE BROOKLYN-41ST THRESHOLD

A PLAN OF “WEST OF 15TH” AS A BIKE FRIENDLY NEIGHBORHOOD

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Project Statement

As Seattle is promoting to make its transportation system a more environmentally, economically and socially sustainable, University of Washington is participating in and contributing to the community planning of University District area, especially the "West of 15th" area. It is aiming to create a multimodal transportation system that contains biking, biking, taking light rail as well as walking. The goal of this project is to make the West of 15th area a more bike-friendly district. It is expected to ease the traffic pressure and reduce the greenhouse gas emission. It would also bring more social interactions on streets through public transporting and increasing of walking. In order to achieve these goals, better connection between Brooklyn light rail station and UW campus should be made. Safer and more accessible bike lanes and pavements should be built. More trees should also be planted in order to create a more comfortable environment for commuting.

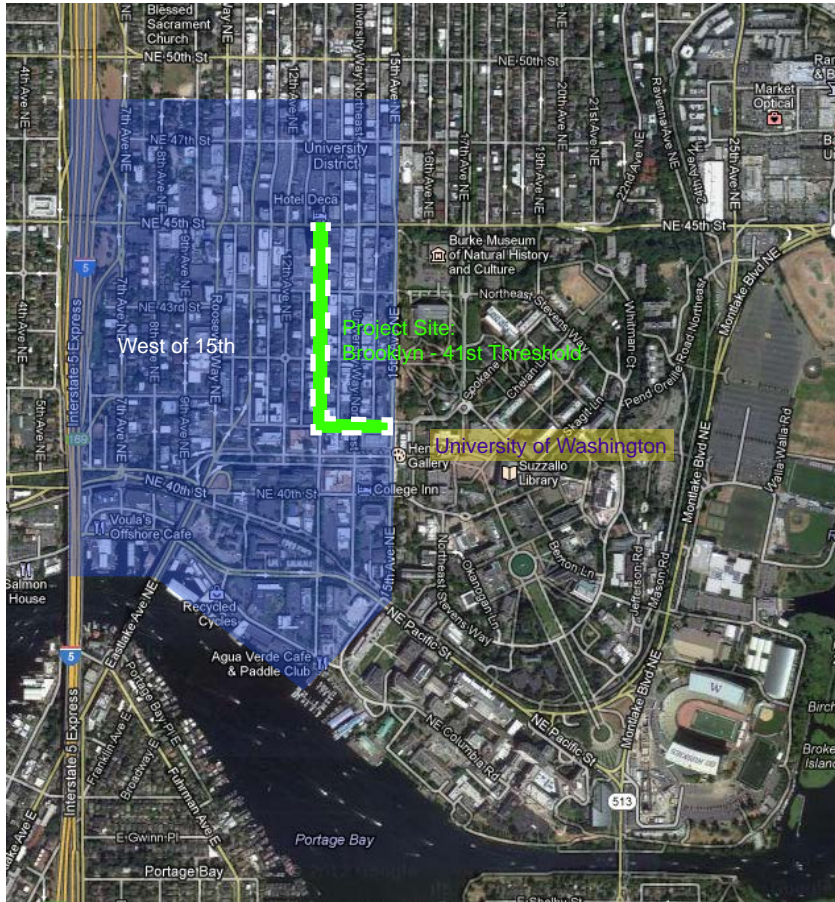


Fig. 1, Project Site locates in "West of 15th" Area

Introduction to the "West of 15th"

The "West of 15th" refers to the area bounded by the highway I-5, and the 15th Avenue, reaching the 50th Street in the north, and enclosed by the waterfront in the south. The area is located in the University District of Seattle, just to the west side of University of Washington (UW). The "West of 15th" is an area with mixed land use. While a majority of the structures in the "West of 15th" are residential, the University Way functions as the major commercial district in the area. Buildings in different ages and styles spread out through the neighborhood. The population in the "West of 15th" neighborhood is relatively denser as compared to the rest of University District.

As a result of the location, the University of Washington greatly influences the social and spatial characters of the "West of 15th" area. UW occupies approximately 4 millions GSF (Gross Square Feet) in the "West of 15th". Its recent investment in student housing has brought a considerable amount of new residents to the neighborhood. This has made the neighborhood's demographics younger and more diverse. Everyday, more than 70,000 people come to the UW campus. Many of them pass through the "West of 15th" neighborhood on a daily base (Office of the University Architect 2010). This makes the neighborhood a dynamic transient area between the UW campus and other locations in Seattle.

The current transportation mode of this area is automobile-dominated. The nearby location to UW marks the area with heavy reliance on public transit. Although most of the major roads in the "West of 15th" area have designated bike lanes, biking activity in this area is still limited. Positioned in the heart of "West of 15th", a new light rail station has been proposed by Sound Transit. The station will be located on the Brooklyn Avenue, in the block between the 43rd and 45th Street. This new infrastructure will introduce a multimodal transportation system to the area. The Department of Planning and Development (DPD) has officially labeled the "West of 15th" as an "Eco-District" to promote non-motorized uses.

Introduction to the Brooklyn-41st Threshold

The Brooklyn-41st Threshold is located along the central line of the “West of 15th” neighborhood. It consists with two major parts: the Brooklyn Avenue between 41st Street and 43rd Street, and 41st Street between Brooklyn Avenue and the 15th Avenue (the area is labeled green on the map). The Brooklyn Avenues is where the future light rail station is located on, and the 41st Street connects to one of the main pedestrian entrances of University of Washington. Therefore, this threshold is the one of the major pathways connecting the proposed light rail station and the University of Washington campus. This unique location and transient function brings the threshold relatively higher traffic flow as compared to other sections in the neighborhood. As the same time, it also brings a need for a higher level of pedestrian and bike infrastructure Along the Brooklyn Avenue and the 41st Street.

Seeing the need and the potential of the threshold. The planning department of City of Seattle and University of Washington have both proposed a plan to turn the Brooklyn Ave into a bike friendly green street (Office of the University Architect 2010). This plan has envisioned a future with multiple transportation modes, especially with a strong preference and reliance on public transit. In this future, the Brooklyn-41st threshold will play an increasingly significant role in connecting the light rail station and the UW campus and promoting non-automobile oriented transportation.



Proposed Brooklyn Light Rail Station



UW Tower



Major Pedestrian and Bike Entrance to UW

Fig. 2, Brooklyn - 41st Threshold

Site Context

Located in the heart of the “West of 15th” neighborhood, and of the University District, the Brooklyn - 41st Threshold is a dynamic site with diverse spatial and social characteristics. With the aids of GIS maps, this section will analyze the site context from different spatial and social and perspectives.

Transportation Networks

The street network around the Brooklyn - 41st Threshold is organized with clear grid system. There are both two-way and one-way streets around this threshold. Most of the streets are having two lanes for each direction, some with street parking along the road. Public transit network has been spread out around the threshold offering a considerable number of bus routes. On the contrary, the bike routes in the neighborhood are less planned and developed. In the immediate context of the Brooklyn - 41st, very few streets are designated as bike routes. Among the few bike street, the Brooklyn Ave is a major one.



Fig. 3, nikes on UW campus

Fig. 4, bus on the University Avenue



Fig. 5, Transportation Networks, Bike routes and Metro Transit

Current Building Uses

As illustrated in the map, the neighborhood around Brooklyn - 41st Threshold is an area with a mix of school facilities, commercial and residential buildings.

Buildings labeled in purple are properties of University of Washington. They function as administration buildings, classrooms and dormitories. These buildings are mostly located in the south and east of the Brooklyn-41st Threshold.

Buildings labeled by blue in the map are for retail services, including restaurants, clothing, book store, etc. These commercial buildings are concentrated along the University Way (the Ave).

The yellow buildings on the map are residential buildings. A majority of them are multi-family apartments. As mentioned earlier, students are the major residents in this area.

Other types of buildings spread out among the area, including churches, federal buildings, recreations facilities, etc. The overall building density of the area is high.

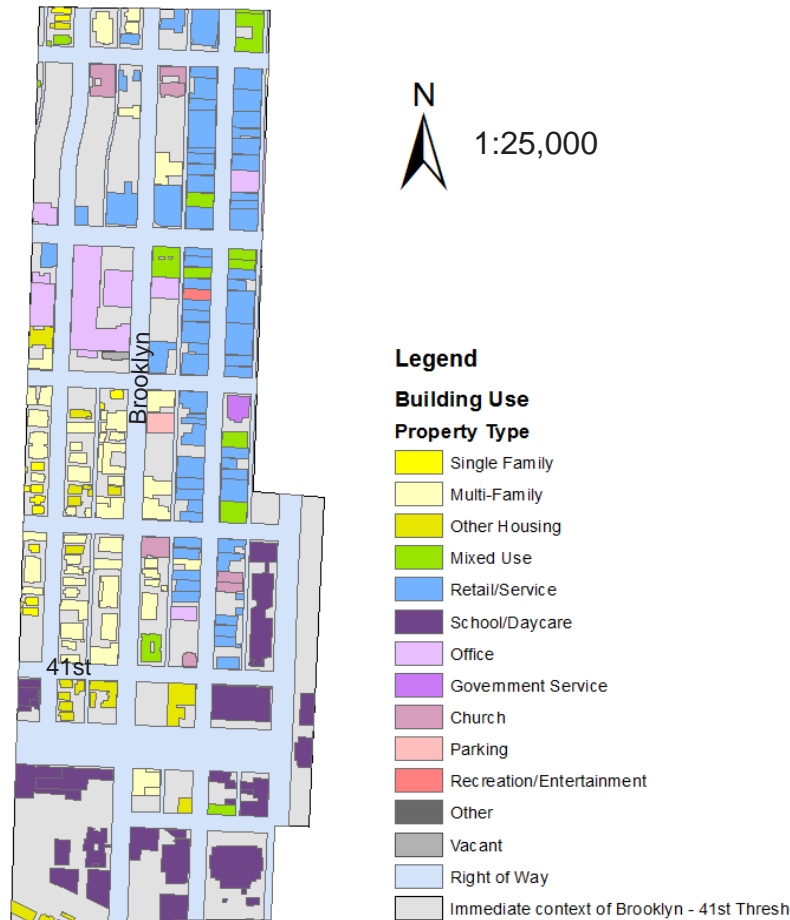


Fig. 6, Existing Building Uses



Fig. 7, UW Tower



Fig. 8, apartment building in the neighborhood

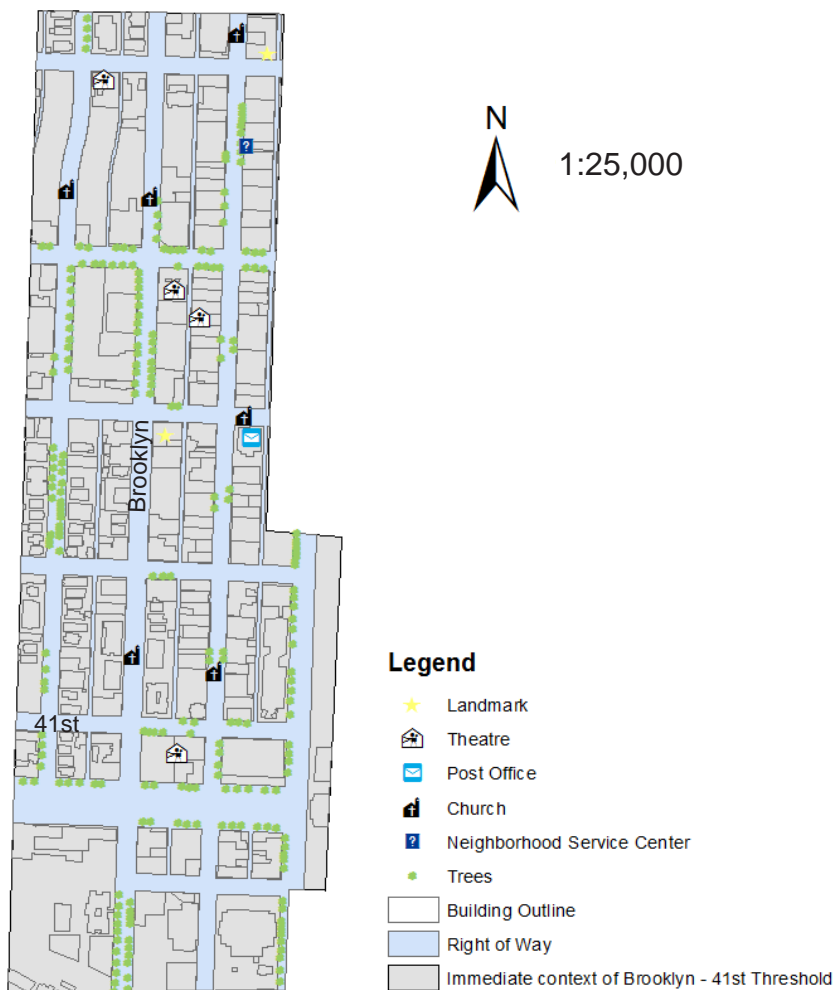


Fig. 9, Community Amenities

Community Amenities

The area around the Brooklyn - 41st Threshold has a variety of community assests, ranging from post offices, churches to theatre.

The level of green in the area is average. Trees were planted along the roads. However, the neighborhood lacks designated green open spaces, such as parks or playground.



Fig. 10, (above) the Napture Theatre on Brooklyn Ave and 45th St
Fig. 11, (below) Church of Christ of Scientist on the University Way

Proposal Details

This project proposes bike friendly development on the Brooklyn - 41st Threshold, which is labeled in dark blue on the map to the right. This Threshold was chosen for its location between the UW campus and the future light rail station. With the proposed bike friendly developments, this threshold will function as a major transient area with considerable flow of pedestrians and bikers.

Major developments proposed in the project include:

- Adding designated bike lanes
- Adding crosswalks on the major interactions
- Changing some stop signs into traffic lights to promote pedestrian and biker safety
- Constructing an urban park
- Adding trees along the streets
- Changing the 41st Street into a non-automobile, pedestrian and biker only street

This report will focus on two sections of the threshold which are both the nodes of this area. Site maps and 3D models were created for the two sites to illustrate the details of the proposal.

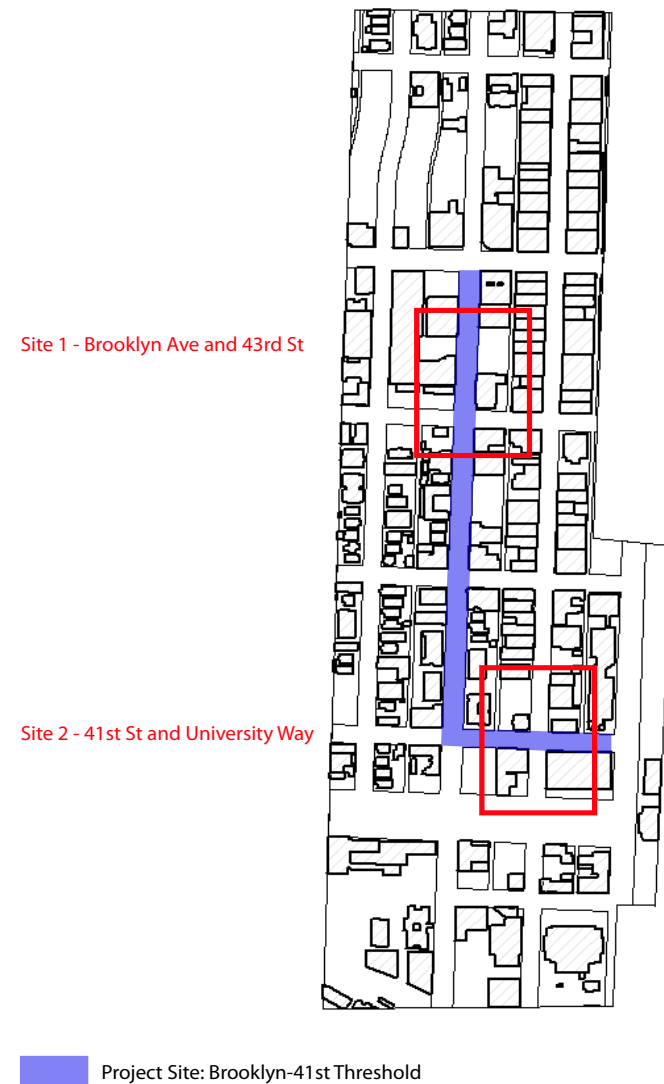


Fig. 12, Site 1 & Site 2 Context Map

Site 1- Brooklyn and 43rd



On the current site, both Brooklyn Ave. and 43rd street are wide for driving but lacking bike lanes that people feel safe to bike on. The road is bumpy and needed to be repaved. There are four stops signs at each of the corner. However, there are no sidewalks on the road. On northwest corner is UW tower and UW foundation building. On northeast corner the former site of Chase Bank. The bank was moved out in 2011 and the building is currently vacant. There are two parking lots on the site, one on south side of UW foundation building, and the other is on north side of former Chase Bank building. They are been frequently used by people who go to work around or people who want to go to University Way. On the southwest corner is a single family house that has been used as a leasing apartment and renting rooms seperately. There is a small public parking area on southside of the house. On the southeast corner is the University Manor Apartment which is a 9 stories-tall brick building. Tenants are mostly students from UW. In general, there are not many trees and bushes on the area, and plants are comparatively young than others in the district.

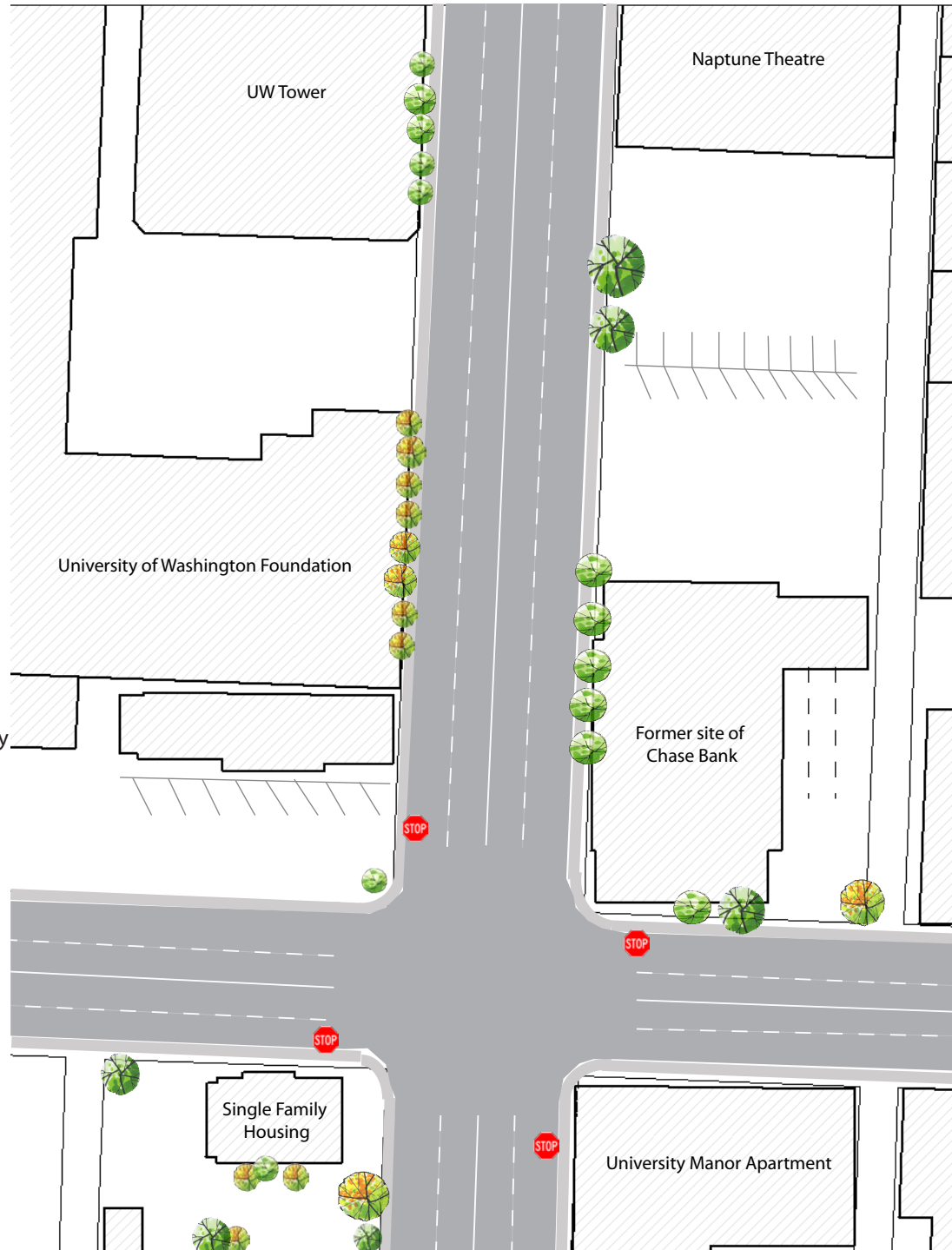


Fig. 13, Site 1 - Current Condition



On the envisioning site, the former Chans Bank building, as well as a part of the northside parking area, will be replaced to the sound transit - Brooklyn light rail station. There is an entrance facing street on both north and south side of the station. Trees will be planted around the newly built station and in the parking lot. The single family house on the southwest corner will be substituted by an urban park, which offer the surrounding residences a place for social activities.

Sidewalks will be added on the intersections. Bike lane will be painted to green color and short shrubs will be planted between the bike lanes and driving lanes, for providing safer biking environment. Stop signs on four corners of the intersection will be changed to traffic lights since heavier traffic is expected after the light rail station is built, and traffic lights are considered to provide safer walking environment.

Bike racks will be provided in both parking lots and also in the park as encouraging people to bike and using public transportation.

Fig. 14, Site 1 - After Envisioning



Fig. 15, Site 1 - Envisioning Urban Park & Light Rail Station



Fig. 16, Site 1 - Envisioning Brooklyn Ave and Light Rail Station



Fig. 17, Site 1 - Envisioning Intersection of Brooklyn Ave & 43rd Street

The urban park will provide open spaces for public activity. It allows surrounding residences, as well as the commuting people who need to wait for their light rail or bus, to relax themselves in a natural environment. Moreover, bike racks are also available in the park, providing conveniences for bikers. This park, as the only big and green open space surrounded by all tall buildings, will offer people a place to release their high tension from the life in a modern and high technology city.

Bike lanes will be painted green and enclosed by a line of short shrubs, aiming to offer bikers a safer biking environment. Taller shrubs will be planted on the edge of both sides pavements in order to prevent people from freely going across the road and at the same time providing people a more comfortable place to walk on.

Site 2- 41st and University Way



One the current site, there are four stop signs on each corner of the intersection as well as sidewalks on four sides. University Way is one of the busiest street around UW campus with the heaviest load of walkers, bikers and vehicles everyday going in and out from the campus. 41st street as a west-east connection is also frequently used by bikers because the road is wide and comparatively has less vehicles than others since both ends of west and east sides are dead ends. Both sides of University Way and 41st street have been used as parking places. There is also a short distance of designated biking lane on west side of Schmitz hall.

On the northwest corner is the church of Christ of Scientist. In front of the building facing the street, there is a bus stop containing major routes that commute from campus to other areas such as downtown. On the northeast corner is the Wells Fargo Bank, owning a big area of paring spaces in the back. On the southwest corer is the Floyd and Delores Jones Playhouse Theatre and on the southeast corner is the Schmitz hall.

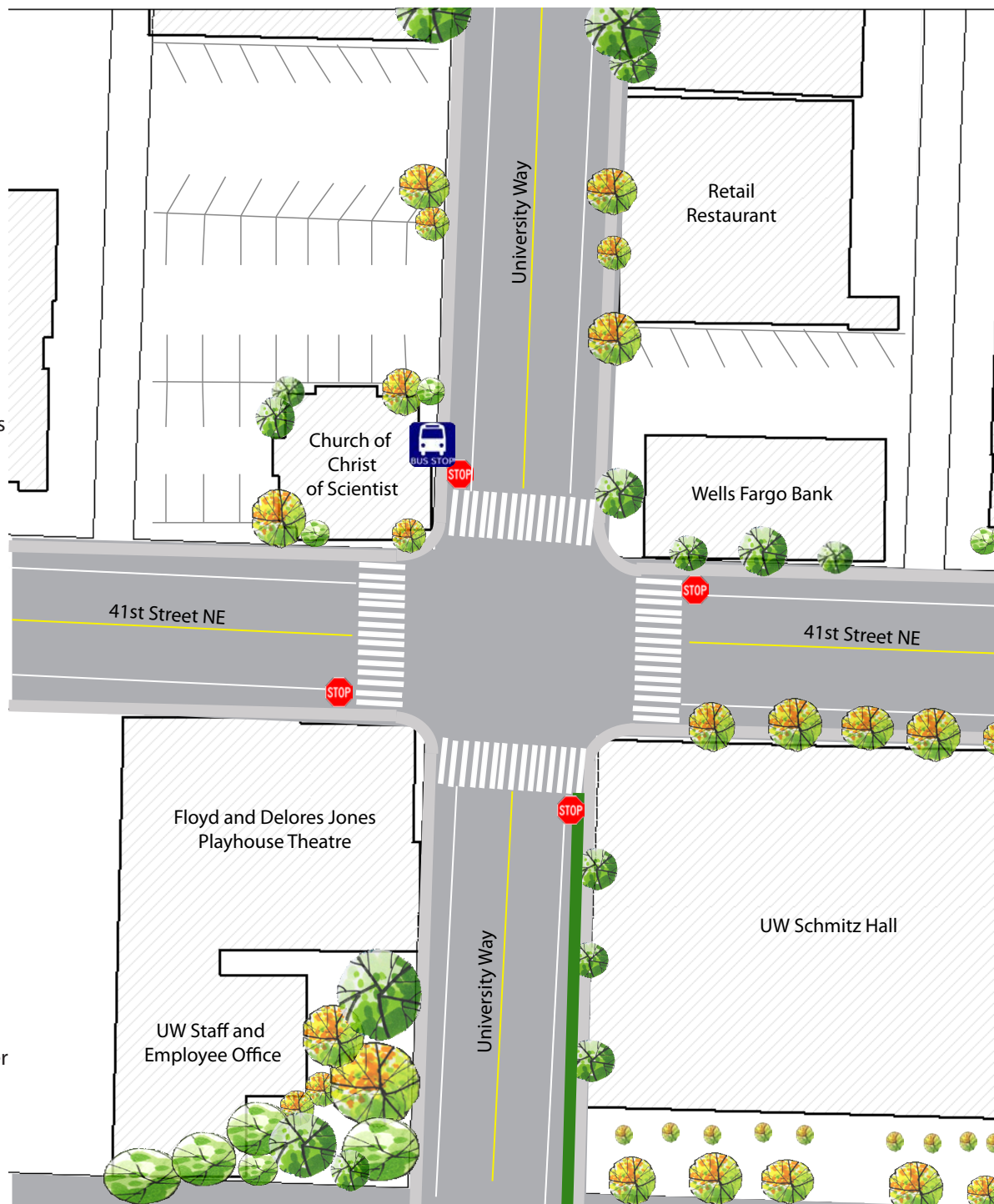


Fig. 18, Site 2 - Current Condition



On the envisioning site, the 41st street will be used as a Biker and Pedestrian only street. Parking spaces will be moved to the back of Church of Christ of Scientist and the entire road will be painted green. On the edge of the road, tall bushes will be planting for isolating the pavements and the biking lane. Short shrubs will be planted in middle of the bike lane as division of two-way biking lane. Bike lanes will also be added on University Way. They will be painted green and also encircled by short shrubs as the same as site 1.

Fig. 19, Site 2 - After Envisioning



Fig. 20, Site 2 - Envisioning Intersection of University Way & 42nd Street

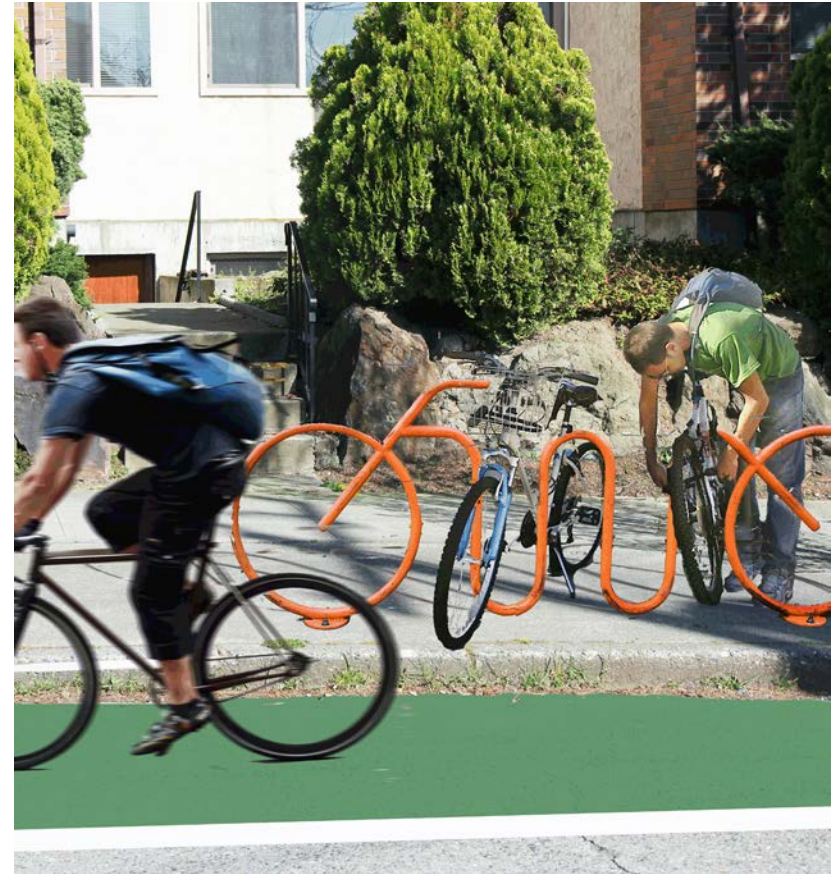
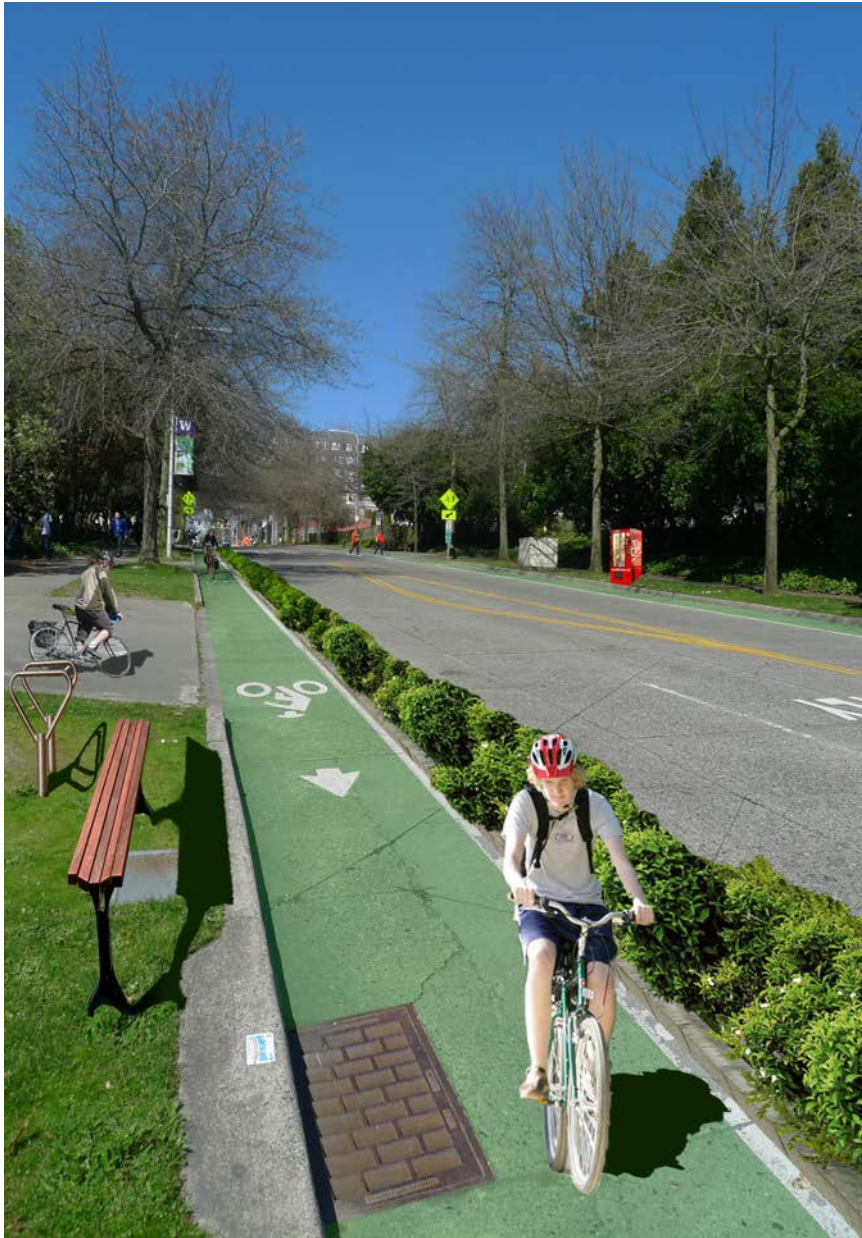


Fig. 21, Site 2 - Envisioning Church of Christ of Scientist



Fig. 22, Site 2 - Envisioning Wells Fargo Bank

Bike lanes will be painted green on both University Way and 42nd street. Trees will be planted in the middle of 42nd street and short bush will be planted to encircle the bike lanes on University Way. Taller bushes will be planted on the edge of the pavement. Bike racks will be available on both parking lots close to the church and the bank.



A GREEN FUTURE FOR THE BIKERS

WITH BIKE FRIENDLY
INFRASTRUCTURE AND AMENITIES



BROOKLYN - 41ST THRESHOLD,
A DYNAMIC, GREEN AND BIKE FRIENDLY NEIBORHOOD

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Contributions:

1. Wrote up the introduction of “West of 15th” and of Brooklyn-41st Threshold
2. Created the GIS maps for context
3. Analyzed the spatial and social characteristics of the neighborhood
4. Created the site maps (based on GIS map, edited by Illustrator) of the current condition proposed condition for both sites
5. Compiled the report and formatted it by InDesign

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Contributions:

1. Wrote up the Project Statement
2. Composed the explanations of the site maps, offering details of the proposal
3. Created SketchUp models for both sites to show details of the proposal in 3D
4. Processed images through Photoshop to visualize the site in the future
5. Wrote up captions for images and figures, and compiled the List of Figures
6. Revised the format of the report