Slow Motion: The Spaces of Waiting at the Bainbridge Island Ferry Terminal

Michael Wright

A thesis
submitted in partial fulfillment of the
requirements for the degree of

Master of Architecture

University of Washington

2012

Committee:
Brian McLaren, co-chair
Brad Khouri, co-chair

Program Authorized to Offer Degree:
Architecture

Acknowledgements

I would like to thank the following individuals without whom this thesis would not have been possible.

My thesis committee Brian McLaren and Brad Khouri

My thesis prep instructor Louisa Iarocci

The Washington State Ferries Engineering Department Staff, Lei Lu, Eric Robinson, and Electra Enslow

The Bainbridge Island Historical Musuem staff and curator Rick Chandler

I would also like to thank my parents and Aunt Janey for giving so much love to our new family

for Shannon

Contents

List of Figures

FIGURE 1. VIEW OF SEATTLE FROM BAINBRIDGE ISLAND FERRY.

Slow Motion: The Spaces of Waiting at the Bainbridge Island Ferry Terminal

> The whence and whither is primary. Now almost secondary is all our ordinary work, our work on forms, our plans, our elevations. What we should do is to proceed on foot again and again through our imagined buildings. Then after months of approaching and reapproaching, and looking and turning, then only draw them up for the builder.
>
> Philip Johnson[1]

Introduction

Overview

The beauty of the Puget Sound is succinctly captured in the thirty-five minute ferry ride from downtown Seattle to Bainbridge Island (Figure 1). This journey is a complete, and self-contained experience regardless of whether one commences it simply for pleasure or for the daily commute, and the complex character of arriving and departing leads to a diversity of expectations, through which the ferry terminal can be interpreted.

The ferry terminal typology is defined physically by its position between land

FIGURE 2. IMAGE SERIES OF FERRY DISEMBARKING FROM WINSLOW.

FIGURE 3. THE COORDINATED LOADING OF AUTOMOBILES FROM THE TERMINAL HOLDING LOT

and sea. It is also defined temporally by the well-choreographed sequence of events that simultaneously animate and annihilate its spaces (Figure 3). In contemporary terminal design the efficient operation of traffic flows is the base framework upon which all other design decisions are made. Designing for a consistent experience is an admirable and difficult goal, however this goal often overshadows the subtle opportunities that arise when passengers find themselves outside of the framework of efficiency. These periods of waiting exhibit unique characteristics dependent upon a passengers place and direction in time and space, that ferry terminal architecture too often ignores.

This thesis proposes to re-interpret the ferry terminal typology not as a skin covering an abstraction of efficiency but instead a background upon which the lives of those who travel to and from Bainbridge Island is enacted. The design reveals the social/physical/temporal interactions and provides waiting passengers with a better knowledge of their choices within the spaces of waiting. Existing simultaneously as a threshold to the Island and as a space for the enacting of commuter choreography, meaning in this space is derived from blurring the edge between elemental boundary and domestic familiarity. This tension between polarities which elevates the mundane act of waiting is achieved through an underlying ambiguity to the terminals design which mirrors the complexity of its transient inhabitants.

Problem

The requirements for a ferry terminal as a functioning typology are extreme. The load and unload process must happen with promptness and coordination in order for a schedule to be kept. When a boat falls behind schedule all proceeding sailings fall behind schedule, and making up a gap of an hour can take the rest of the day. The spaces of the ferry terminal therefore must be able to operate efficiently, and the challenge for a designer lies in finding the territory, or overlaps in territory, wherein a design intervention can take place. The narrow path which the design

FIGURE 4. FERRY APPROACHING WING WALLS AND VEHICLE LINKSPAN.

intervention must take lies between the obstructing and the ineffectual. In order to not be an obstruction the terminal design must acknowledge the flows and create spaces for them, and to resist the ineffectual it must utilize the resources of the site. The resources of the site are the choreographed movements of the people and automobiles, animated for the purpose of boarding a ferry. The placement and adjacency of the spaces of waiting to these resources will be important in bringing about a closer examination of the site itself by the sites users.

By necessity, all ferry terminals are located along the shore of a substantial body of water and therefore usually occupy a site of tremendous value from the stand point of natural aesthetics. The terminal design therefore must acknowledge the threshold separating the elements of water and land, and also on a separate level the choreography of waiting and boarding. These elements occur simultaneously, and at ever shifting intensities. The terminal must operate as a backdrop and frame for natural splendor and the activities of its users.

As a place of transition and transience the ferry terminal is seen by its users through markedly different perceptions of time. Commuters gain knowledge and familiarity of place through a lifetime of use, and with this familiarity comes an emergent efficiency of action. The terminal can act as container and framing device for these emergent actions but it cannot fully control them, nor should it attempt to.

Approach

Allowing for freedom of movement and choice among the users of the terminal is key to bringing about a fuller utilization of site, that will be experienced over the course of many years of use and shifting time perceptions. As a users arrival time changes, so too their expectations of the terminal spaces. They have a shifting radius of possible activity that the terminal can provide. Additionally the complex interaction of inbound and outbound users can occur within the frame of the terminal at increasing radial distances from the crucial areas of disembarkation.

FIGURE 5. BICYCLISTS AWAITING SIGNAL TO DISEMBARK.

Adjacent to these zones are the traditional areas of waiting, where in the sphere of ferry terminal typologies most of the waiting occurs, or is implied to occur. However outside these areas and great distances non-traditional spaces of waiting can occur because of a strong attraction. These attractions, be they programmatic elements or site resources, are there to bring users to a greater understanding of the site, and over the course of years of use allow for a renewed interest in the site. These areas are there to create a level of waiting anticipation within regular commuters. If they find themselves within the waiting envelope which can utilize these spaces they will have the foreknowledge to activate them to their fullest potential. At most times these spaces will only exist on the periphery of the regular users, because being the most well versed in commuting, they will find no time within their efficiently choreographed schedule to use them. But because of their ever shifting aspect they will continually activate the interest of these users and eventually because of the inevitability of schedule breakdowns be activated.

The loading and unloading activity which animates the site is the most important site resource because it involves the watching of people by people. The unloading activity can act as both a cue for waiting passengers to ready themselves for disembarkation and also for detached passengers to focus their attention on the crucial areas of anticipated activity. Throughout the site there will be identified areas of expectation, these areas can be framed within the other areas of the site. This framing of the mundane aspects of loading and unloading is meant to enhance and revalue these activities for the users. This enables them to be more conscientious in their everyday use of the site, and enriches the emotional attachment of the site through a re-framing of the mundane as the monumental.

As everyday users of the site gain specific knowledge of a place they are better equipped to navigate the ambiguities of a free flowing site plan. It is not necessary to bring attention to areas of the site visually or even through signage because the presence of other users along a path allows one to choose to follow a crowd who's objective is not known, and through this discover a new portion of the site. The

commuters as a group exhibit a strong tendency toward exclusive knowledge held within the group, earned over years of commuting experience. It is therefore desirable to have within the site areas which are designed with the specific activation through a commuters emergent knowledge of place. The form that these interventions take can be nodes and pathways that do not outwardly exhibit themselves as the most efficient route, but if one is well versed in the spatial/temporal connectivity of the site, they will activate these areas, and begin to incorporate them into their place knowledge.

The ultimate goal for the design is to make the act of waiting a more enriching experience that is reflective of the changing nature of waiting, the changing aspects of the site, and the changing internal knowledge that the site users exhibit over the course of their relationship with the ferry terminal.

FIGURE 6. IMPLIED SPATIAL DEMARCATIONS BEFORE ARRIVAL




Frame

Efficiency ≠ Enriching Experience

For most of the past two hundred years travel has been dominated by the characteristics of speed and efficiency. This has been achieved through the progressive advancements in transportation technology which leaves one with the sense that transportation must ultimately achieve and unlimited speed and efficiency. This line of thinking devalues all travel, because no level of efficiency can ever be perfect and the everyday scheduling breakdowns create more exasperation than they should had these ideals of efficiency not taken hold in the collective consciousness.

Traveling for work (commuting) versus travel for pleasure involves opposing conceptions of time and space, and as a result these experiences of the same journey are drastically different. The duality of this experience of travel exhibits itself in the threshold spaces of the ferry terminal. These sites of arrival and departure represent a micro journey before and after the macro journey, an experience that is contained within a much larger series of events. The modern transportation terminal prepares the traveler for the experience of travel by spatially orienting the passenger to the vehicle of transport. Through its emphasis on efficiency and speed the modern

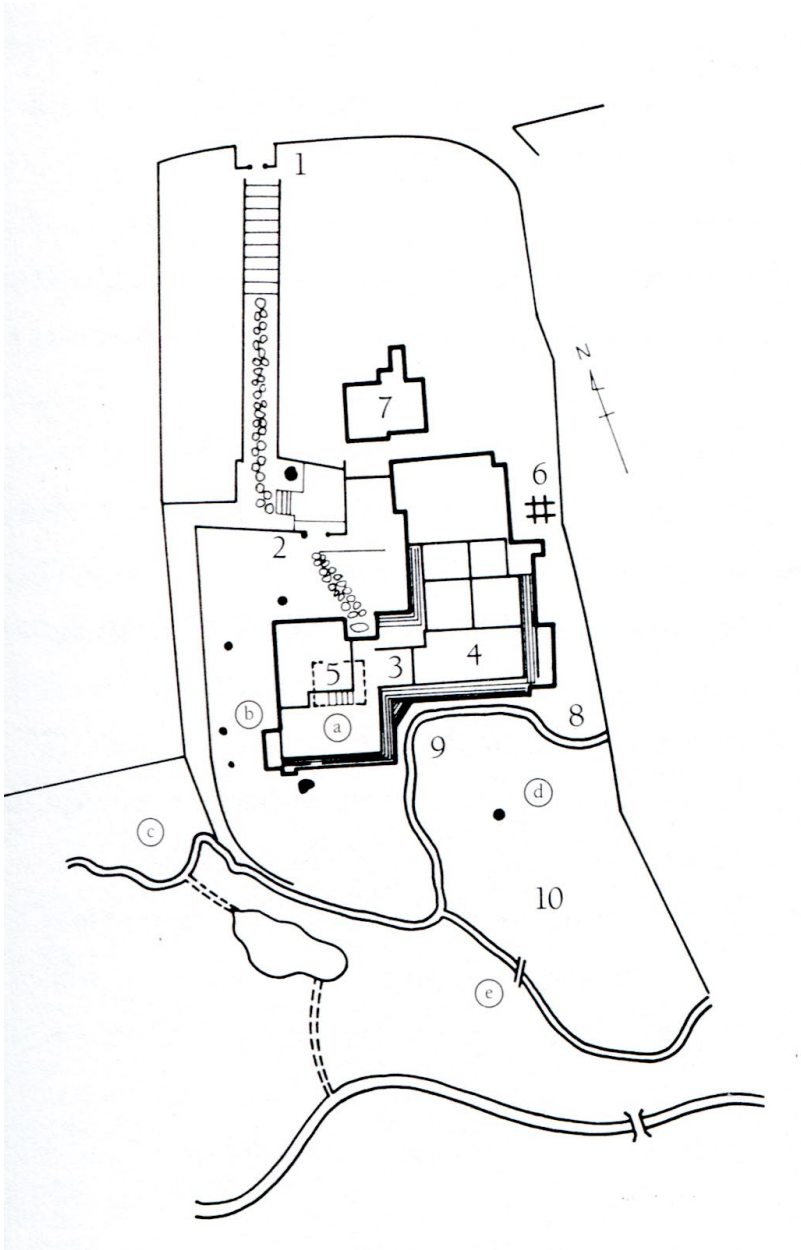


FIGURE 7. PLAN OF SHISEN-DO

terminal vehicularizes the pedestrian.[2] Rather than an enriching experience, this design ethos calculates it on being an efficient one.

A study of intermodal terminals produced by ARUP comments that regular commuters are insensitive to the "appearance of individual terminals."[3] The list of desired design features includes: "bright lighting, clear lines of visibility and transparent architecture."[4] Whether the latter refers to the actual physical transparency of the architectural surfaces or the diagrammatic layout of the spaces is not known. But in either case the intent appears superficial, calculated to produce efficient flow. Most, if not all, manuals of design put out by transportation research organizations and governmental bodies take this approach. They are intended to make broadly applicable design recommendations, and assume that since most users do not have a desire to linger in these spaces no attempts should be made to encourage this.

It therefore seems appropriate to shift the attention away from the design of ferry terminals, obscured in the efficiency miasma, and focus instead on typologies which exhibit similar spatial procession by users but are drastically different in function. The *Shisen-Do* (Figure 7), a Buddhist Temple in Kyoto, designed by the 17th century intellectual Ishikawa Jozan is identified by the author Gunter Nitschke for its subtle manipulation of space and by extension the time experience of the occupants. At *Shisen-Do,* the architect Jozan has manipulated the texture and configuration of spaces of the buildings and their approaches to change the users experienced duration of time. The approach to the temple are diagrammatically straightforward, however Jozan uses subtle, and brief shifts in direction to "create detours" which set the entry sequence "experientially further apart".[5] The configuration of interior spaces of worship and the texture of the building surfaces work to manipulate the occupants passage towards the goal of a state of meditation. Despite their drastically different functions, strong parallels can be made between the *Shisen-Do* temple and the transportation terminal.

Underlying both is a spatial framework of stasis and flows and the experiential

character of these in from the travelers perspective. The perceptual experience of pre-railroad travel, as described by Wolfgang Schivelbusch is an “intense appreciation”, which after the introduction of mechanical conveyance becomes subsequently stressful and exhausting.[6] The temple/terminal analogy can be carried further because of their functions as refuge, and thresholds between forms of embodiment. The spaces of *Shisen-Do* when thought of as a stop along a linear journey could very well function as a terminal; its architecture shapes spaces and simultaneously shapes the motion of the human body. The gaze of the occupant, their inward and outward attention, has the power to shape and be shaped by the architecture through which they pass. The occupant exists between forms of travel in the terminal, but at all times they are traveling through space and time.

The space at *Shisen-Do* are not purposefully deceptive, or labyrinthine, they are manipulating the experience of arrival to increase (and decrease) the occupants attention along the journey. Efficient layout is not a cure to any real ailment, and in fact becomes poisonous when it overshadows other aspects of a spaces design. Despite a commuters goal directed travel, they can at any moment be brought to a stand still by delays, and thrust back into the intense appreciation referred to by Schivelbusch. Regardless of the speed of approach the design of these spaces will impact the traveler.

Nitschke’s thematic framework establishes opposition between Eastern and Western attitudes about time and space. In the East “eternity philosophies” equate space with rest[7]. By contrast Americans save time by compressing space, “through speed and ease of movement.”[8] These two diametrically opposed attitudes of time and space, and movement and time are particularly applicable to the spaces of the transportation terminal.

Commuter + Terminal = Choreography

Through careful design the ferry terminal with its ritual activity of commuting can make manifest a powerful, albeit short, experience of travel. Built and lived spaces can become monumental through design, and also through their daily use. A commuter's awareness of their mundane daily ritual gives them the power to greatly change the perceptions of commuting across time. The ritualized spaces that Nitschke describes, such as at *Shisen-Do,* are not literally monumental in scale and form, like the Grand Central Station, but gain significance of place through the ritual movements and accumulated experiences those spaces embody.

Anthony Raynsford observes that there is a tension between taking part in the spectacle and simultaneously being witness to it. The impact that the pedestrian movements have on the New York Grand Central Station is described by Raynsford's as "unindividuated clusters" whose motion was synchronized by omnipresent clocks.[9] Framed by the monumental ordering spaces of Grand Central Station this "choreography of the machine"[10] becomes the emergent spectacle. The overall sense is that this "synchronization and domestication" of the users movements evokes a malignant sense of control, that is masked by the Beaux-Arts Architecture of Grand Central Station. By contrast in *Mundane Mobilities, Banal Travels*, the authors see the everyday nature of commuting as having the potential to take on uncanny power rather than being contained by mechanized routines:

> The perforation of the ordinary by the extraordinary can bring forth transformative or even enchanting moments or situations. A shaft of light, a shift in perception or change in perspective causes the familiar to become peculiar, uncanny. It should not therefore be assumed that regular mobilities engender the serial experience of repetitive scenes, for this is to assume a stasis and spatial fixity that unusual or disruptive intrusions are apt to dispel, interruptions that might seem especially remarkable against a familiar background.[11]

They see the commuter as equipped with "practical competencies,"[12] the

necessities for navigation, that elevate them above the synchronized crowds of Raynsford's Grand Central Station. This effort to re-value the insignificant everyday experiences of travel echo Nitschke's descriptions of the Japanese concept of "*Ma*". *Ma*, space, or interval: a " . . . *continuum* that links the world into a single seamless structure."[13] When viewed within this continuous structure of time and space the everyday commute is not a fragment of lost time but an integral part of life. It needs to take on a significance in the broader context of memorable experiences; the intermediary spaces which are used on a daily basis as the transition zones between modes of transportation, function as a repositories of accumulated experience.

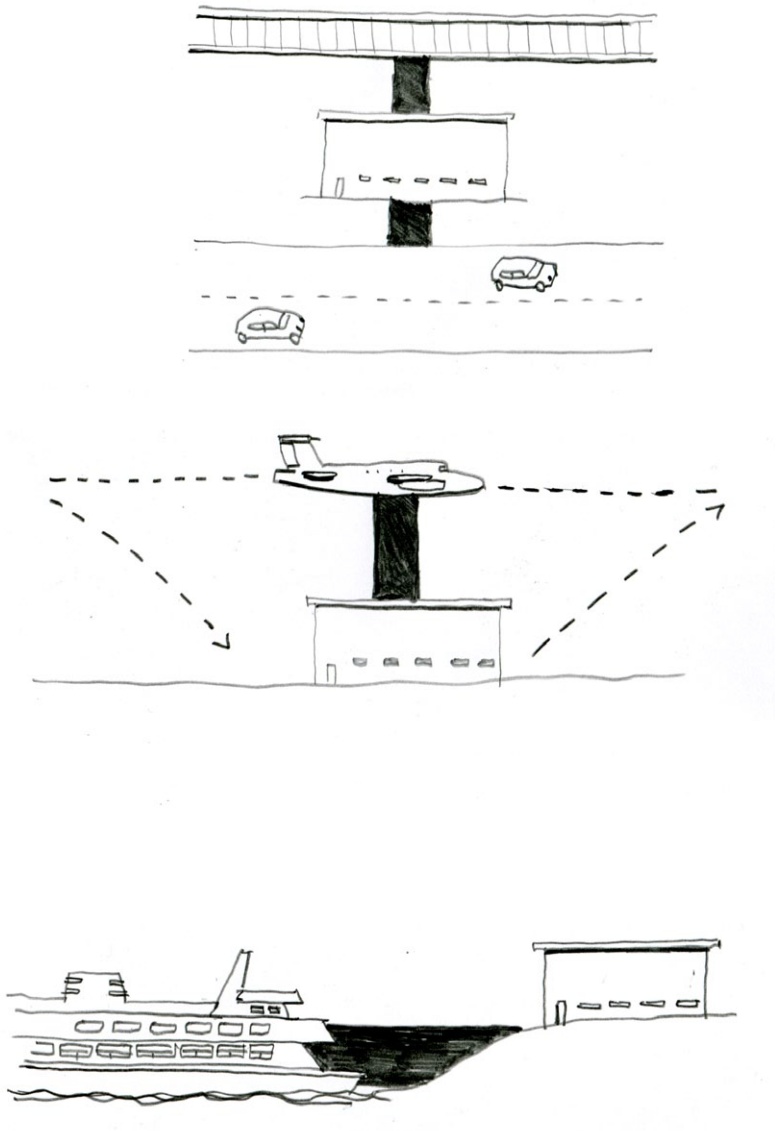


FIGURE 8. TRANSPORTATION CONNECTION TYPE

Ferry + Terminal = Place

It may seem that all transportation terminals are merely places for arrival and departure and therefore their utility is identical, independent of the type of transportation that they serve. The platform that one ascends to board a train is functionally no different than the one used for airplanes, or ships. Despite this similarity there are drastic differences in the experiential qualities of these types of transportation.

Different forms of travel have been described as unique "modes of embodiment" each with their own specific "sensual knowledges which secure and familiarize the process of travel."[14] The ferry, so central to the mobility of the islanders, has the power to distort islander's "perceived duration of time."[15] A ferry that serves an island community plays a more significant role in everyday life than any other form of transportation. Island communities are products of and producers of water-derived isolation, and connection. If land travel connects land communities, and air travel connects distant destinations, water travel both connects and isolates. According to Hodson and others, island communities, and especially its commuters, construct a shared time, based upon the rhythms of the ferry schedule.[16] The local communities use the ferry's essential qualities to "organize the temporal environment on the island."[17]

The ferry terminal has a similar relationship to the water as the airport does to the sky; both terminals serve as fixed boundaries between grounded land based transportation networks and the unbounded elemental spaces of the sky or water. The airplane and the ferry boat do not exhibit the transitory nature that other forms of transport like the bus, or automobile exhibit, their arrival and departure being such a fleeting occurrence as to fall below perception, their existence is marked by their passage not by their fixity (Figure 8). Existing along a linear space of movement, the bus or train merely stops on its journey to take on or unload passengers its trajectory unchanged by the suspension of movement. The ferry boat and the airplane, by

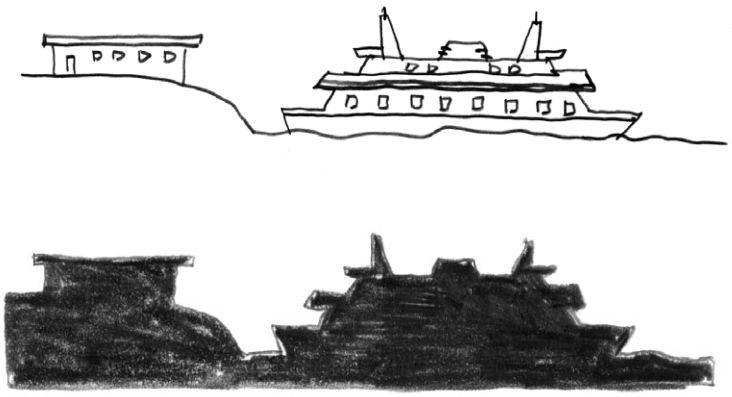


FIGURE 9. GESTALT SPACE OF THE TERMINAL AND FERRY.

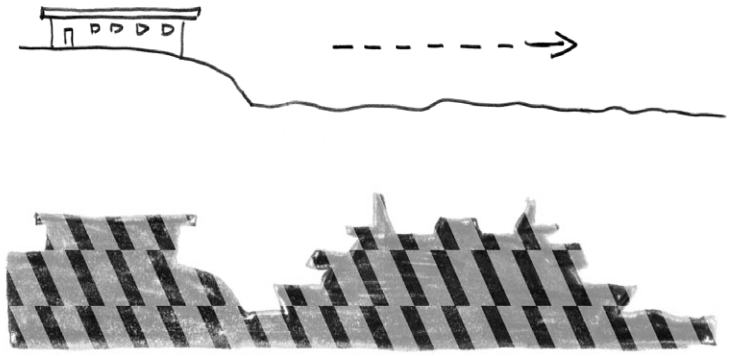


FIGURE 10. SPATIAL ANNIHILATION THROUGH ABSENCE.

contrast, become extensions of the terminal space, they arrive seemingly floating outside the land based spatial experience, and once they stop they become inert and attached to the terminal. Together the ferry boat and the ferry terminal create a gestalt place (Figure 9), and through their separation a space of potential is created.

What Nitschke describes as the experience of the void, or unbounded awareness[18], is evoked in the space of potential existing between vehicle and terminal. The uniqueness of this spatial potential is echoed by Dylan Trigg writing in *Memory of Place,* **"**Spatially and temporally, we are confronted with the logic of annihilation, a displacement of place, and a reconstitution of orientation."[19] Anthony Vidler describes it as the double annihilation, "precipitated by expectation within a world that potentially exhibits fullness of being, but which turns out to be haunted by absence instead, . . ."[20] This is the perfect description of the uneasy feeling of arriving to the terminal just after the departure of the ferry (Figure 10).

A transitional space, broadly defined, prepares one's perceptions of the destination spaces. In the case of the ferry terminal its spaces are not only preparing one for the spaces of the ferry itself but the spatial experience of the journey across the water. Schivelbusch observes that in rail travel the passengers are enclosed within the train compartment, unable to distance themselves from the rapidly moving landscape. It was only by fixating on distant objects that they could bring their focus to bear for any reasonable period of time.[21] Schivelbusch states that the world is brought to the observer "through the apparatus which moved him through the world."[22] While being transported by vehicle, the perspective from which one observes the world is dictated by that vehicle; its speed, openness, and adjacency to its surroundings, all culminate to form the travel experience. The lingering effects of these forms of travel no doubt skew one's perceptions of the terminal spaces that transition them back to the broader pedestrian experience (Figure 11).

The transitional space represents a designed response to a necessary programmatic spatial separation. In the common case of the transition from car to house an individual passes over a driveway, perhaps up stairs, through a garden,

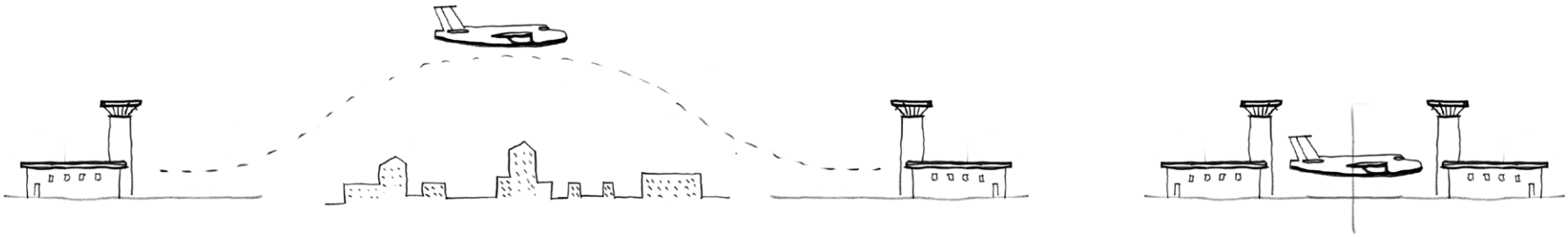


FIGURE 11. SPATIAL ANNIHILATION THROUGH SPEED.

under a trellis, onto a porch and then into a door. Instead of thinking of these spaces as individuated one were to think of them as a seamless prolonged experience of transition between modes of dwelling aligned with the complete experience, the concept is returned to that of the Japanese *Ma*. The terminal is not separated from the ferry it is the space between them that connects them into a seamless whole. The design of the ferry terminals architecture is constrained by the boundaries that rigidly delimit the site as an internalized experience, a transitional buffer between modes of transportation, and often the efficient operation of a ferry terminal's machinery has overshadowed its other role as a threshold to a specialized journey.

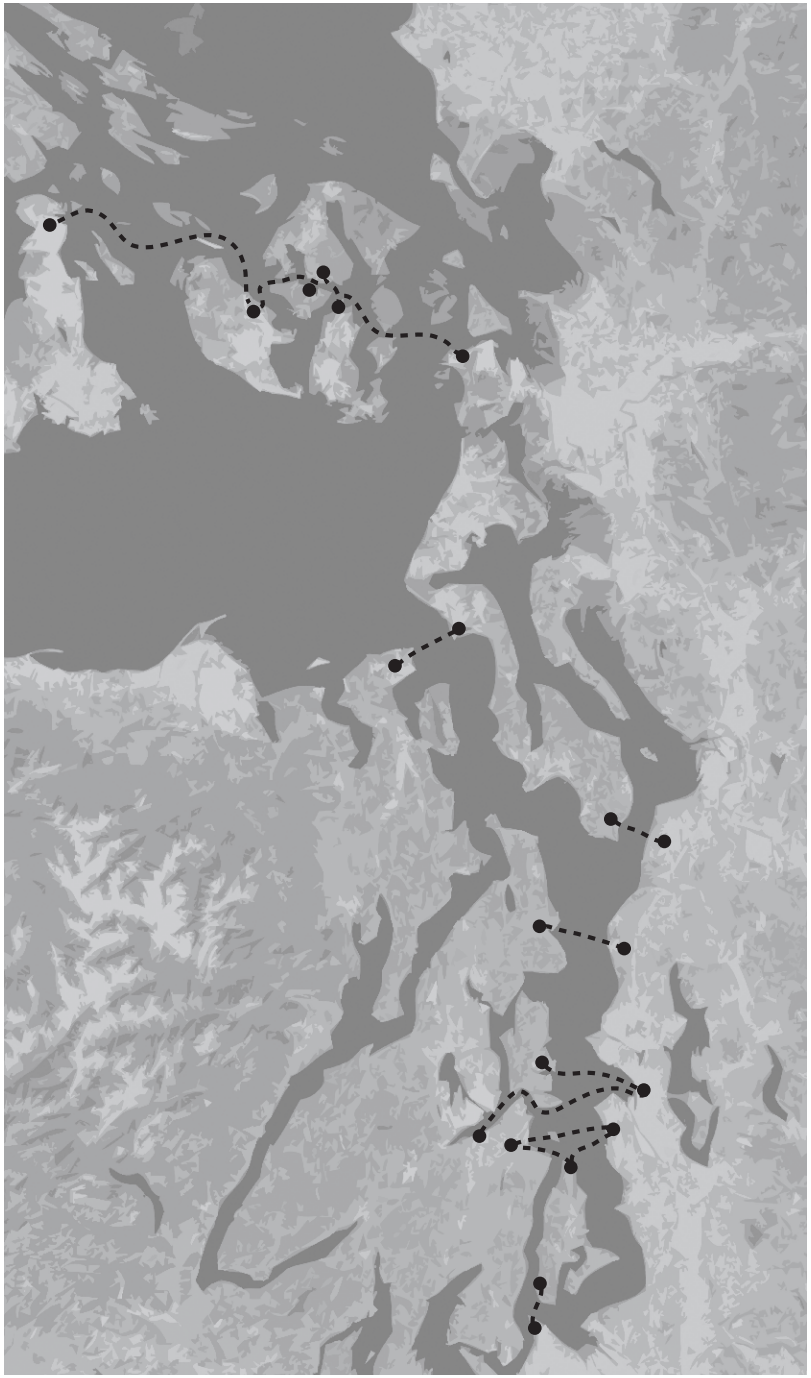


FIGURE 12. PUGET SOUND FERRY ROUTES AND TERMINALS.

Precedents

Puget Sound Ferry Terminals

As a group, the 20 ferry terminals of the Puget Sound (Figure 12) represent an important body for analysis and gaining insight into the unique requirements for ferry terminals in this region. The Washington State Department of Transportation annually produces the Ferries Division Terminal Design Manual (TDM). This 800 page document details the recommended design choices from the traffic intersection into the terminal all the way to the dolphins that guide the ferry into the slip. Chapter 450 details the architectural aspects of the ferry terminals, but one should not hope to find any specific insights. The descriptions given of terminal buildings are broad and somewhat obvious ". . . minimize maintenance, maximize building longevity, and be architecturally compatible with the surrounding environment."[23] Since all terminals in the Puget Sound are located next to a body of saltwater, corrosion protection is paramount. The choice of materials is not made on the grounds of resistance so much as their ability to be maintained and easily inspected.[24]

The valuable insights to be had from the TDM come from its descriptions of the waterside loading/unloading apparatus, a system of ramps which must adjust to the changing tides of the site. The waiting area for pedestrians and automobiles precedes the mechanical linkage to the ferry and exists at a permanent slope, ascending (sometimes for pedestrians) and descending , depending upon the shoreline topography. The goal of the approach ramp is to establish a point at which the mechanical apparatus, the link-span, is able to oscillate between tidal polarities and maintain an approachable slope. Since the schedule for ferry service is known and rarely if ever deviated from, and because of the predictability of the tides it can be calculated how long, in terms of time, the ramp will be outside an acceptable slope range. The length of the link-span and therefore its ability to maintain slope

FIGURE 13. THE ENCLOSED HYDRAULIC CYLINDER OF THE H-SPAN, VEHICLE TRANSFER SPAN.

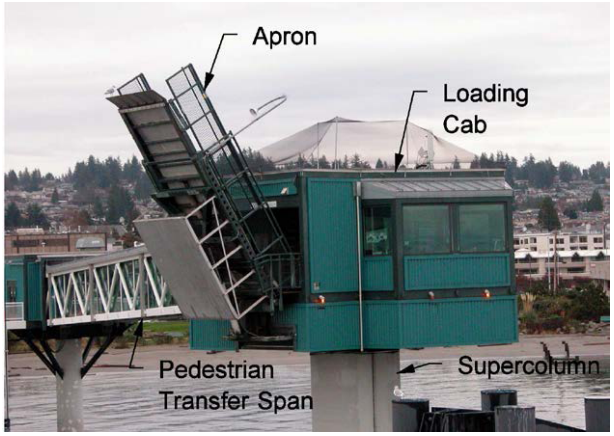


FIGURE 14. SUPERCOLUMN PEDESTRIAN TRANSFER SPAN, EDMONDS.

over changes in vertical height is dependent not upon the expected range of tides but instead upon the calculated time periods of it use within the extremes of tidal range.[25] Put another way, because the ramp is only used at intervals dependent upon the cycles of the ferry arrival and departure, its time frame of use is in fact quite narrow - especially when one considers the cessation of sailings during late night and early morning hours.

The vehicle and pedestrian link-span's have gone through design changes in the past decade. Previously the adjustable vehicle spans have been of the M-Span design, in which the bridge is suspended by steel cables which are suspended via a steel framework over the bridge deck. This design has been proven costly to maintain and the WSF are undergoing a program to replace them with the new H-Span design (Figure 13). The H-Span incorporates two hydraulic cylinders on either side of the bridge deck, these cylinders are enclosed in what is known as a "super column"[26], a steel piling which protects and supports it. The super column design is now being incorporated into the pedestrian link-spans as well, and examples of this design are in operation at the Edmonds and Kingston terminals (Figure 14). The H-Span design greatly reduces the footprint of the link-span, and in the case of the vehicle bridge allows for unlimited clearance for boarding vehicles, additionally the link-spans can be kept to a more slender dimension in plan, which allow for more flexibility in the terminal's layout. A closer analysis of each of the Puget Sound terminals is located in Appendix D.

FIGURE 15. NAOSHIMA TERMINAL SITE CONTEXT

FIGURE 16. ROOF ACTING AS FRAMING DEVICE FOR SURROUNDING LANDSCAPE.

Naoshima Ferry Terminal

The Naoshima Ferry Terminal serves an island about half the size of Bainbridge in the Inland Sea of Japan. Although at a much smaller scale than the Puget Sound ferries, the Naoshima ferries still provide a vital link to the mainland and play a central role in the lives of the islanders. The Japanese architecture firm SANAA successfully bring their minimalist style to a typology that is typically dominated by infrastructure. Functionally the project is distilled down to its basic components, a ticketing office, waiting area and access ramp to the ferry. Through this distillation of form the building achieves a powerful connection to the surrounding waterfront (Figure 16). This connection subverts the space of expectation that usually dominates the typology. The large roof, which unifies all activities underneath also disperses the direction of the site, it is neither focused on the land nor the water but the threshold between the two.

Unlike Bainbridge, the Naoshima facility has no dedicated pedestrian overhead loading structure, instead these two traffic flows are combined on a single level, which is similar to many of the smaller scale Puget Sound Terminals. The lack of level separation between automobile traffic and pedestrian traffic places all passengers in closer proximity to each other during the embarkation-waiting period. The sweeping roof of the terminal also serves to unify these waiting spaces, avoiding the usual segregated nature of pedestrians and automobiles.

In its physical form and atmosphere the Naoshima Island Facility is quiet and tranquil. The actual enclosed space is less than twenty percent of the area covered by the roof, leaving the space largely open to the horizon, and with only painted white markings on the concrete flooring to differentiate spaces of arrival and departure. The fluidity of these spaces contributes to the overall effect of a serene atmosphere that is open out towards the sea, and to the adjacent park.

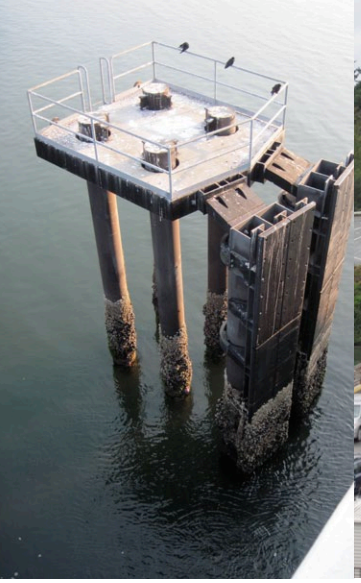
FIGURE 17. ROPEID TERMINAL IN CONTEXT NEXT TO GRANITE CLIFF FACE.

FIGURE 18. THE LOADING/UNLOADING AREA FRAMED BY THE BUILDING FORM.

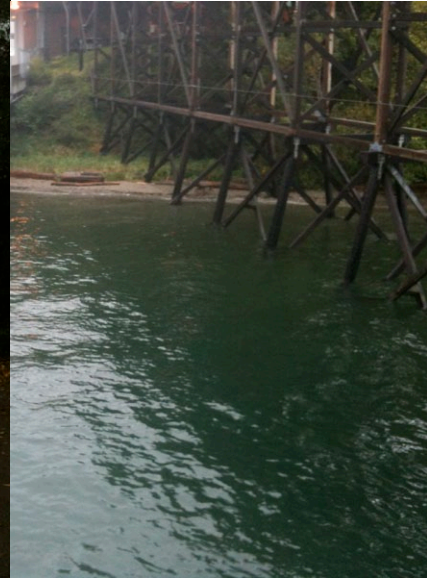
Ropeid Ferry Terminal

Located along the scenic Norwegian highway route this very small pedestrian and vehicle terminal, completed in 2003 and designed by the Norwegian firm of Jensen & Skodvin.[27] The Ropeid and the Naoshima ferry terminal exhibit highly different characters. The Ropeid exists more along a route (the Norwegian scenic highways) and the ferry itself crosses a fairly narrow fjord. The spatial characteristic of seeing the ferry during the entirety of it's passage makes the ferry/terminal connection space palpable and distracting. The orientation of the terminal, east to west, somewhat negates this effect by opening the terminal up northward. The narrow site is abutted to the south by a granite cliff face (Figure 17), which the terminal is built into directly and uses as the southern wall. The enclosure therefore has minimal access to east, west, and south views. The northern view is adjacent to the pedestrian offloading/loading route, spatially this creates the negative space of expectation which the offloading passengers fill. First the view is replaced by the ferry, and then the unloading passengers. The framing of the movement which the terminal facilitates adds another level of complexity to the site, the choreography of loading and unloading are put on display (Figure 18).

As a strategy this could be applied more successfully at a commuter terminal, wherein the users who have grown accustomed to the surrounding environment and might find themselves in a state of detachment waiting for the ferry to arrive. The activation of the spaces of offloading by the exiting/arriving passengers is useful as a transparent cue to the forthcoming loading sequence.





Site

Overview

Bainbridge Island is located moderately inhabited 65 square mile land mass located 8 miles west of downtown Seattle, on the eastern edge of the Kitsap Peninsula. Winslow, the major town on Bainbridge Island represent one of Seattle's most remote bedroom communities, isolated by water and the ferry system which connects it with downtown. Unlike similar sized and inhabited islands, such as Vashon Island to the south, Bainbridge Island has sizeable commuter population, and for this reason it is served by the largest vessels in the WSF fleet.

The Bainbridge Island Ferry Terminal is located in Eagle Harbor (Figure 19), where it has been located historically since the early 20th century. The ferry ride from downtown Seattle to Winslow takes approximately 35 minutes and covers only 8 miles, making for an average speed just above 14 mph. The ferry is for most of those who commute from Bainbridge Island, the major segment of their commute, and also its slowest.

FIGURE 19. SCALE SITE MAPS, PUGET SOUND, BAINBRIDGE ISLAND, EAGLE HARBOR, TERMINAL

FIGURE 20. NORTH ENTRY TO BAINBRIDGE ISLAND, ACROSS FROM THE AGATE PASS BRIDGE.

FIGURE 21. CONTINUATION OF STATE ROUTE 104 ALONG EDMONDS/KINGSTON FERRY ROUTE.

As a way to introduce the subtleties of the site what follows is the author's narrative of commuting to and from the Bainbridge Island Ferry Terminal.

Outbound

I can't wait for my coffee to cool down, so into the travel cup it goes. The oatmeal is put into the Snapware. My laptop is taking too long to shutdown, into the backpack. Zip. Zip. I have a boat to catch, and everything falls in line behind that goal.

Scudding along in the car towards the Agate Pass Bridge, I pass the Clearwater Casino, the Kitsap Transit park and ride with its cord wood piled pickup trucks, handmade signs draped over the brimming stacks informally announcing one's entrance to the Kitsap Peninsula. If this were a weekend the park and ride lot would be transformed into a de facto used car lot, the occasional boat for sale straining legitimacy.

You will be clued into the occasional howling wind through the Agate Passage by the two raggedy windsocks which top the bridge, pay them heed because once you clear the sheltered bank and onto the bridge deck your steering wheel is liable to be jerked from your hands as the wind takes control. The view down is of swirling white capped surf, an unfortunate crab boat being tossed around. After crossing the bridge onto Bainbridge Island proper, I gradually climb up a hill and to my left a wood sign with blue painted relief exclaims: Welcome to Bainbridge Island, with the image of the ferry. The icon of an island is the vehicle through which one leaves and arrives it. In a sense I am driving on this ferry right now, it is an extension of State Route 305, a slowly moving patch of highway. On Google Maps you will find other ferry routes labeled as the State Routes which they connect.

The drive along 305 is marked on both sides by a buttress of evergreen trees, this screen is punctuated by the occasional moldering cabin being taken back by the woods from which it sprung. The slow roll and curve of the highway gives no

FIGURE 22. PASSENGERS WALKING ABOARD FROM THE APRON

FIGURE 23. DIAMOND PARKING LOT, NORTH OF SITE.

indication of the steep terrain that lies just beyond the screen of trees. The bane and bragging right of Bainbridge cyclists, and the focus every February of the Chilly Hilly bicycle race. The trees remain unbroken until you reach Lovgreen Road with its equestrian sports yard, Then to Madison Avenue and the Bainbridge First Baptist Church with its perennial classic car show and Rotary events signs.

The woods are thinning out now revealing the small manufactures and office parks which dot the corridor. Past High School Road and the only fast food allowed on the island, a McDonalds, the road dives down, back into the woods. The bicycle commuters, who have been steadily accumulating in the shoulders begin their long coast to the terminal. At the base of the hill the clock tower of the city hall cum police station pops, a 1940's streamline concrete block building. Now I have reached the crucial intersection of Winslow Way and SR 305. It is from here that all vehicles exit the ferry and it is here that they enter the precinct of the terminal, the lazily traversed routes which pour into this gateway now become linear approaches to a single point. But I am not passing through this threshold, not yet, I still need to park my car. As you may imagine the area surrounding a ferry terminal is subject to an especially ruthless level of parking enforcement, just one example of the many ways in which a ferry terminal casts its shadow over the community it is surrounded by. You will be hard pressed to find any insignificant alleyway that is not plastered top to bottom with no parking signs. Downtown Winslow is in the permanent state of Seattle on a Saturday night. There are public places to park but they are restricted to two hours enough time you might hope to make a brazen errand to downtown Seattle with. A space can be had in the pay lots for $200 a month, or you could take your car onboard for twice that amount. My parking spot (which shall remain secret) I discovered not by word of mouth but instead by, I am reluctant to admit, following some fellow commuters back to their cars.

From my parking spot I access the Waterfront Trail, a rather misleading title considering it only touches upon the waterfront during three short passages. From the trail I enter Winslow Way, the main street of Winslow, which is the main town

FIGURE 24. EARLY MOTORIST WAITING FERRIES ARRIVAL

FIGURE 25. EXISTING TERMINAL PASSENGER LOADING CORRIDOR

on Bainbridge Island. Here is where most of the shopping, eating, and entertaining happen. It is a six minute walk from here to the ferry terminal and it is where most walk-on tourists end up on their excursions to the island. If I have timed things right the boat I am taking outbound has arrived by now and is offloading. I am making my way through Winslow past the ravine, and the Bainbridge Island Art Musuem under construction and finally back to the intersection with State Route 305. Walking down Olympic Drive I can just barely make out the ferry, if it is in its final approach, it is obscured by terminal machinery of loading and offloading, else I will see it turning past Wing Point. Also from here I see the cars stacked neatly in their lanes a good indicator of the traffic level for this particular sailing. I have been joined at this point by an ever growing pack of commuters. This is made all the more stranger by the seemingly quiet surroundings. This is an activity pulled from a different context. Hundreds of people amassing from all directions is an activity of the city stripped of its indifferent crowds and magnified; a migration of sorts. All these individuals are headed in the same direction, for the same gate. There is a constant checking of each others pace to gauge ones punctuality. This is the closest Bainbridge Island gets to a state of pandemonium, of pedestrians rushing down Olympic Drive, as others rush up into town, all around cars are making quick U-turns in a desperate search for parking.

As a student my shifting schedule has given me glimpses of both the crowded morning commuter boats filling the terminal with conversation and business attire, and the quiet afternoon boats with children on their day out, teenagers arriving for their music lessons from Bainbridge tutors, and day jobbers coming ashore in trucks towing trailers full of lawn equipment , the equestrian dentist going out for a house call.

Beneath my feet is worn out, dark, stained indoor/outdoor carpet. Opening the frosted Plexiglas windows to look down upon the motorcyclists comparing rides. The monotonous LED sign alternately expressing the obvious VESSEL DEPARTED, or the unsettling SECURITY WARNING. The ever multiplying electrical conduit

FIGURE 26. LOWERING THE PASSENGER APRON

wrapping the buildings like security camera ivy.

Then approaching the trestle ramp, looking at the galley staff outside on the fire stairs grabbing a quick cigarette break during the boat changeover. The man with his hand truck full of muffins and doughnuts ready to jump on board once the net gets pulled back, and then immediately stand aside as the onrush of exiting passengers fills the walkway with activity. The whole structure sways from the exiting passengers ascent to the terminal.

Like any well versed commuter I am safe in my seat eating my oatmeal, stretching my legs, comfortable in the moment, expecting 35 minutes of detachment. However if you stopped and waited you would have been witness to the mad sprint of the poor late commuters, brief cases flailing, the spectacle amplified all the more by the street's renewed quiet.

I am not late today, I don't have to watch the ferry pull away from the wing walls with its inexorable slowness. However, I have been there many times before. I lived in Winslow for a year, in an apartment across the street from the ferry terminal, I missed more boats during that time than all the years following. There is something about the close proximity that created overconfidence, I could leave my apartment six minutes before the boat departed. I now live north of the island and I leave my house fifty minutes before departure, with at least a ten minute buffer should the unexpected happen.

Upon missing a boat I am overtaken by the stillness and emptiness of the hallway as the ferry despite being such an enormous vehicle glides silently past Wing Point, the pre-recorded security message blaring over the PA system audible from shore. If I have arrived very late there is a brief moment where I stare off at the outbound boat to check which side has the wake, because after all the boat is double ended, and its nearly motionless form on the horizon does little to indicate its direction of travel. The worst is arriving to a quiet terminal, thinking I have made it there early only to realize in actuality I have missed the boat.

FIGURE 27. BUSES AWAITING OFFLOADING PASSENGERS

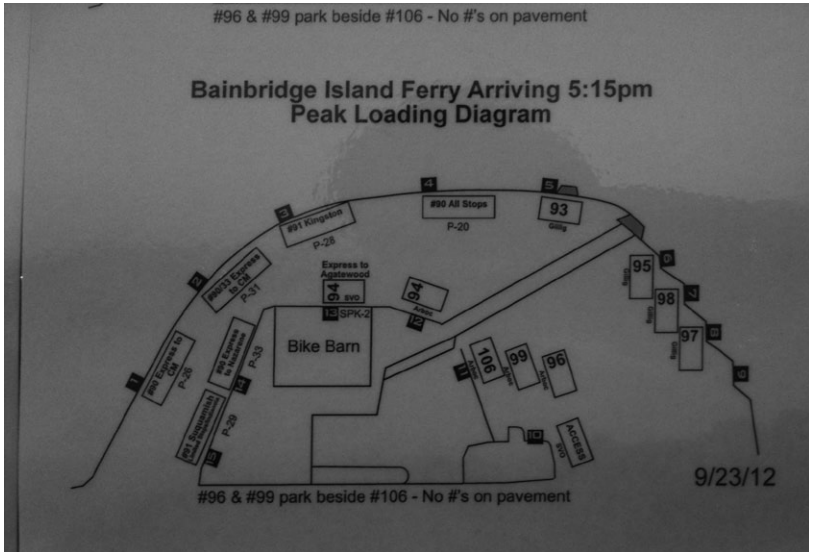


FIGURE 28. EXISTING TRANSIT CENTER DIAGRAM

Inbound

While waiting in the Seattle Ferry Terminal I easily get a picture of the days sports activities by quick glance over the assembled passengers. Sounder, Seahawks, and Mariners games all have their unique color schemes, the size and rowdiness of the crowd gives me a quick idea of how important the game was. The fans are returning either exultant or crestfallen, a sprinkling of loud inebriates no matter the outcome.

Contemporary life you tend to think of as in constant motion but it is just the opposite. Before trains and the modern transportation infrastructure motion was ceaseless, your body was your main form of travel and nothing could check this motion. Now I allow myself to be trapped by the ferry, the bus, the train. I am stranded in Seattle without this vital lifeline.

You are attached to the architectural frame that the ferry represents, and its inherent stasis. You move freely within the world, but this is just what seems to be taking place. The ferry does not have a vehicular scale, the ferry does not exhibit the economy of spaces one finds aboard airplanes or trains. There are no hallways where people are forced to squeeze past. The rest rooms are not mere closets. There is a weightiness to the fixtures which belie the fact that the entire space must float on the water.

Walking across the terminal's polished bare concrete floors I make my way to the swinging door that exits onto to the bus stop. The door does not invite interaction, worn away to the bare plywood where you would expect a push plate to be the surface of the door has become sticky from the endless procession of pressing hands making their way to the buses, the Bainbridge Island Blarney Stone of sorts. I kick the door open at its base instead. Outside the busses are tightly arranged in the half moon shaped transit terminal. A small photocopied diagram of the platform are all that directs one to the bus stops. But like all things at this place, I only need to learn once where the bus stops.

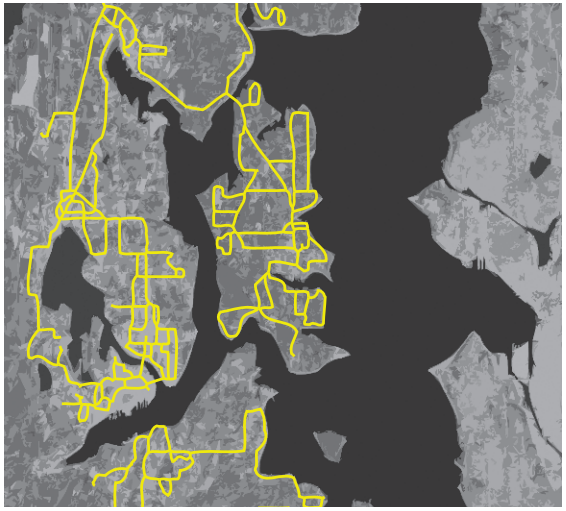


FIGURE 29. KITSAP PENINSULA BUS ROUTES

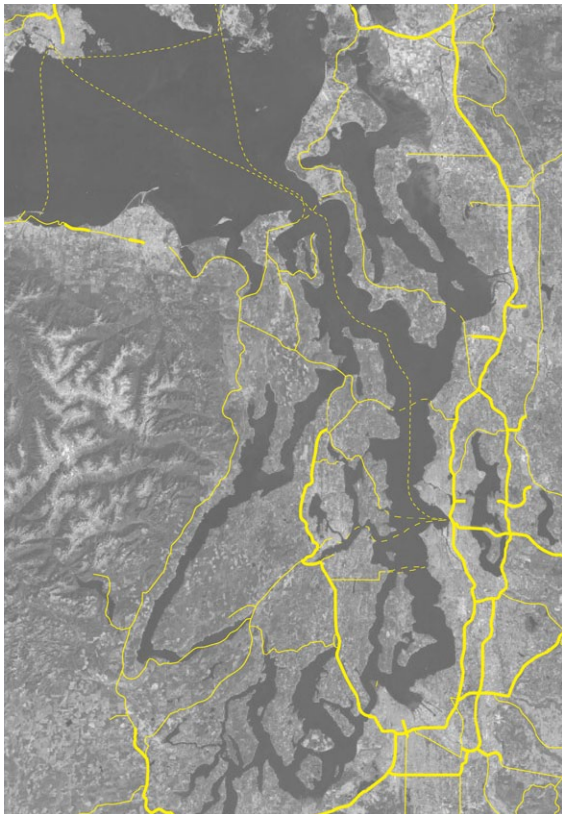


FIGURE 30. REGION WIDE HIGHWAY NETWORK

The bus drivers are standing just outside or seated inside the cabs reading books. Taking the bus certainly has its advantages, mainly you are safe in the knowledge that the boat will actually wait for delayed buses if need be, you are in some respects guaranteed to get aboard. However this being Kitsap county and not known for its thriving night life the last bus leaves the terminal at 8:00 PM, leaving you at the mercy of the three cabs which serve the terminal.

I make my way back along the waterfront trail, this time by flashlight, my progress interrupted by the occasional bicyclist head lamp, or late night dog walker. There is something perversely rewarding about a walk through dark woods at night after a long day of work, solitude and serenity along with a heightened sensorial awareness that comes from being surrounded by darkness. This is Bainbridge Island, what could possibly be lurking out there in those woods?

I am back in my car and soon passing over the Agate Pass Bridge, my headlights illuminating the rows of riveted girders evoking the ribs of some enormous whale, surrounded by water and blackness.

Pathways

The Bainbridge Island Ferry Terminal is located at the crossroads of diverse transportation streams. Within the Kitsap Peninsula there is a large network of busses which serve the major towns, Bremerton, Silverdale, Poulsbo, Kingston (Figure 29). Many of these major towns are also linked via ferry terminal to the eastern shores towns of the Puget Sound. This creates a further layer of linkages along highway routes throughout the entire region (Figure 30). The site is accessed therefore by highway and pedestrian routes, and in the case of bicyclist a combination of the two. These pathways arrive at the site from diverse directions, which establish the radiating spaces of waiting (Figure 31).

In order to analyze these site specific spaces of waiting the user groups have

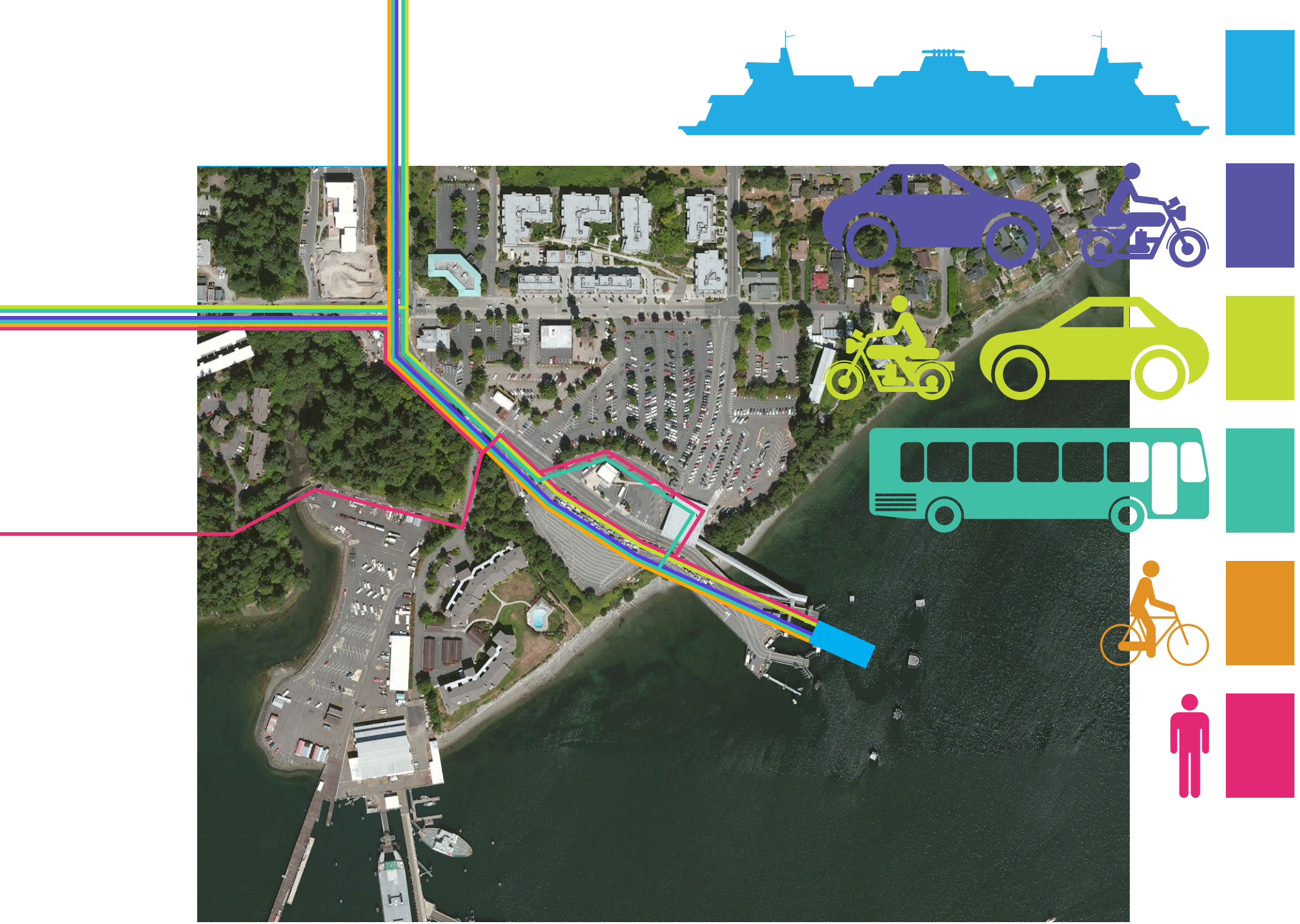


FIGURE 31. EXISTING SITE WIDE ARRIVAL ROUTES

FIGURE 32. INDIVIDUAL TIME EMBODIMENTS

been divided into four basic time embodiments (Figure 32). The first three are outbound individuals, and the last is the individual arriving from the offloading boat. Beginning with the outbound individuals the three main categories are early, right on time, and missed boat.

The early individual has arrived on site somewhere in the range of ten minutes prior to boarding, they are comfortable in their accessing of the site assets, perhaps getting a coffee or using the restroom. They may also access some of the less programmatic elements of the site such as the shoreline or waterfront trail.

The second group of outbound individuals, the right on time group, arrive either while the boat is unloading or actually in the process of loading. For this group the site areas will not be accessed, instead they are focusing on positioning themselves for boarding. Even such things as restroom breaks will be delayed until on board the vessel. This group will also be the single group to push the spatial efficiency of the terminal design to its limits, in some cases they will be entering a site filled with arriving passengers or automobiles and must therefore navigate safely through this activity to gain their preferred waiting position.

The last of the outbound group is the missed boat group. These individuals have either run to the end of the passenger loading walkway only to be turned away, or they have arrived somewhere within 20 minutes of the boat leaving. In a sense the missed boat individuals are the earliest group of those outbound, but unlike the early individuals they have had their spatial expectations broken upon seeing the boat leave, and therefore they will immediaetely shift their focus to the site and its assets. This individual can now access all the site areas, including those at the very periphery.

The arriving individual, or inbound, is unique in that they too will access the site assets but from a much different perspective than the outbound groups. For those arriving to the site there are several possible modes which they may take. For the majority they will access the busses awaiting at the tranist stop, or be picked up by awaiting cars. Other's will simply walk from the site. Those left lingering at the terminal are awaiting pickup, which may be a long period.

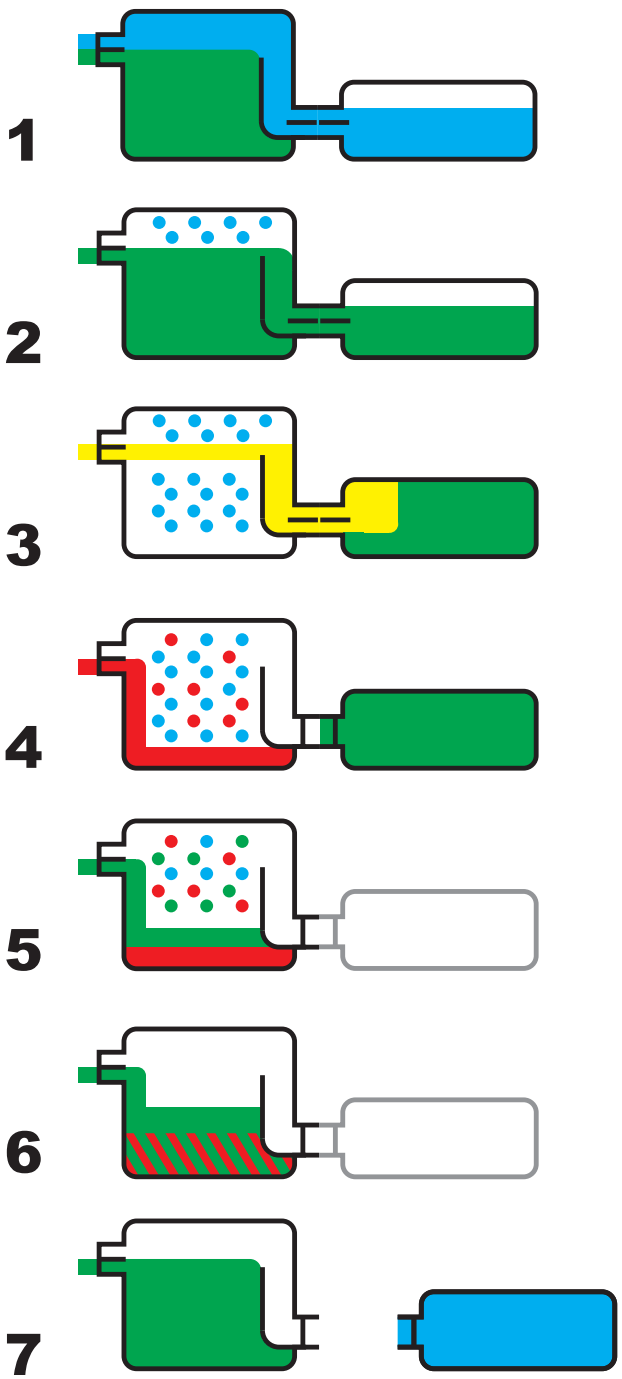
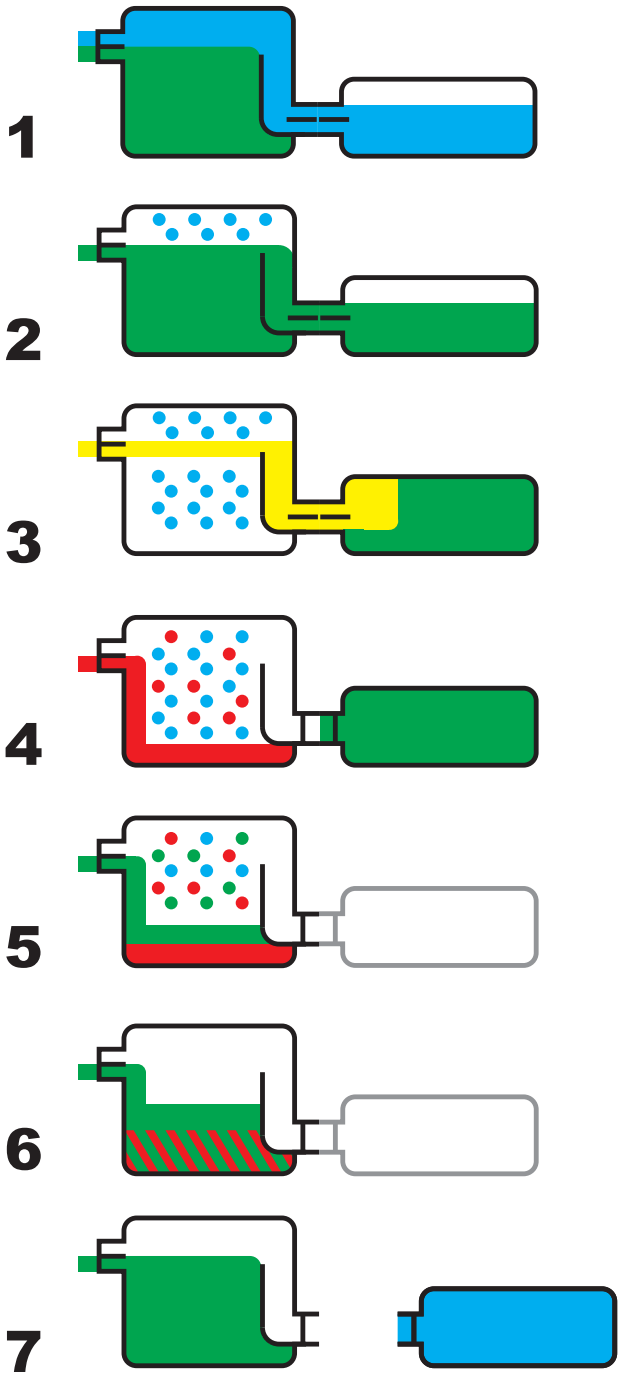


FIGURE 33. SIMPLIFIED LOAD/UNLOAD SEQUENCE

Sequences

After identifying the four major time groups using the site it now becomes possible to identify the spatial characteristics of their site utilization. In order to make this identification it is necessary to divide up the loading and unloading process into distinct periods. Each of these periods is marked by some significant event on site, the arrival or a time group or the closing off or opening up of an area. A simplified diagram of these seven periods is shown in Figure 33.

Two key points extrapolated from the preceding sequential analysis are that waiting is a highly variable activity that is dependent upon the individual's time state upon arrival, and the existing terminal, ignorant of this fact, treats waiting as a homogenous and consolidated activity. It is shown by this analysis however that waiting is actually fluid and dynamic. From this spatial-temporal analysis a program of spaces is proposed whose function is to meet the waiting requirements over the entire spectrum of individual spatial-temporal states. Instead of establishing areas for specific temporal states the strategy was taken to allow for the most freedom of choice among terminal users so that the often specific direction to waiting, closer to the ferry arrival point as is often assumed, does not dominate and starve other portions of the site of activity. A further challenge is to identify where these spaces of waiting could enmesh with the programmatic elements of a functioning terminal (Figure 35).



The sequence begins with the ferry unloading arrivals into the the terminal. The early individuals have already arrived on the site and are positioned to load the boat.

In the second period the ferry is now loading, most of the arriving individuals have left the site through some means, but those awaiting others still linger.

In the third phase all early arrivals have loaded and the just on time group arrive to immediately board, the site still has lingering arrivals.

In the fourth period the ferry has stopped loading and shut off access points in preparation for departure, it is at this time that those who have missed the boat begin to accumulate at the site, and intermingle with the arrivals who may be still present.

In the fifth period most if not all arrivals have left the site, and the early group begins to arrive on site and mingle with those who have missed the boat, who by this point have found activities and spaces to wait until the next boat.

In the sixth period more and more early arrivals are accumulating on the site and begin to overshadow the activity of those who have missed the boat.

In the seventh and last period the early arrivals and individuals who have missed the boat become unified because their attention is now focused on the arrival of the ferry. The ferries arrival signals the beginning of a new cycle.

FIGURE 34. IN DEPTH LOAD/UNLOAD SEQUENCE EXPLANATION

Functional Program Elements

Waterside Structures

Over Head Pedestrian Transfer Span **Waiting?**

Vehicle Trestle and Transfer Span **Kept**

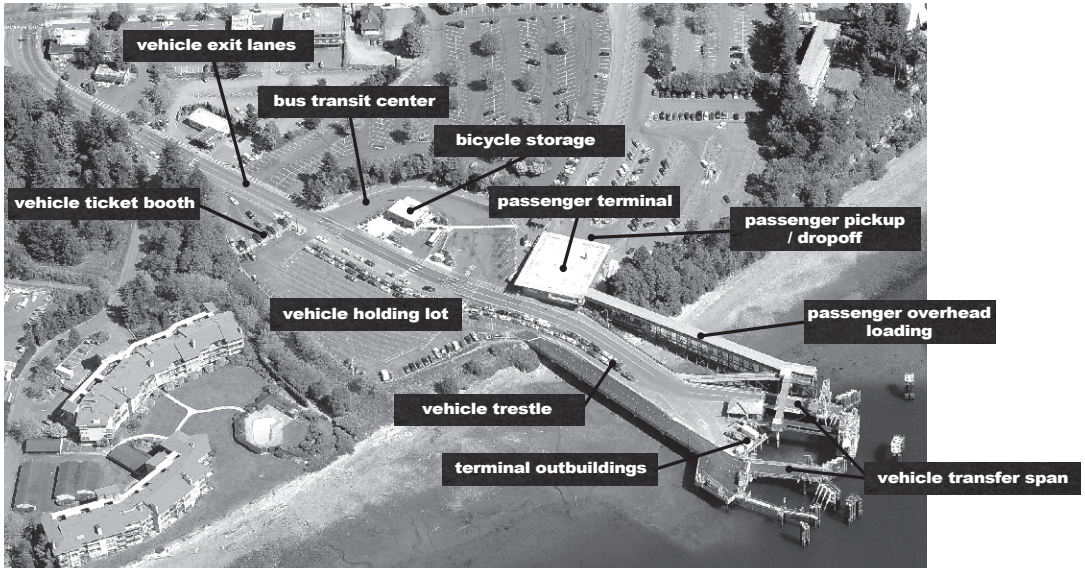


FIGURE 36. EXISTING SITE PROGRAM ELEMENTS

Landside Structures

Pedestrian Areas

Pickup/Dropoff **Waiting**

Bathrooms

Staff Areas

Offices

Bathrooms

Storage

Parking

Bus Areas

Approach Lanes **Waiting?**

Passenger Shelters **Waiting**

Automobile Areas

Ticketing Booths **Waiting?**

Holding Lanes **Waiting**

Approach Lanes **Waiting?**

Terminal Out Buildings

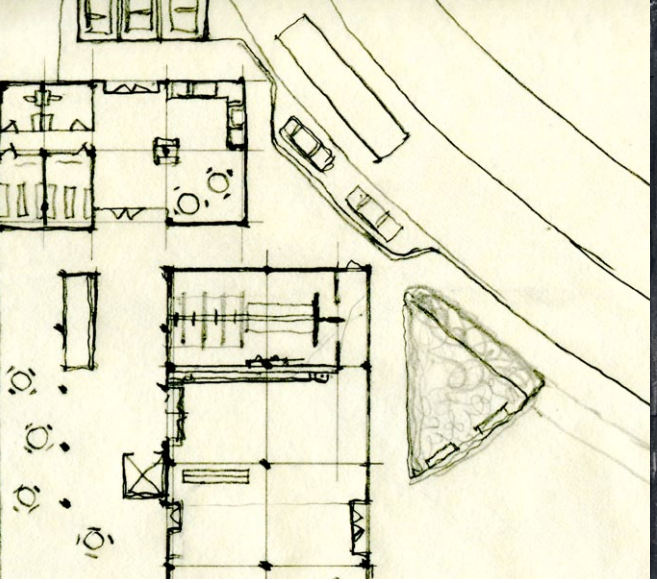
Physical Plant **Kept**

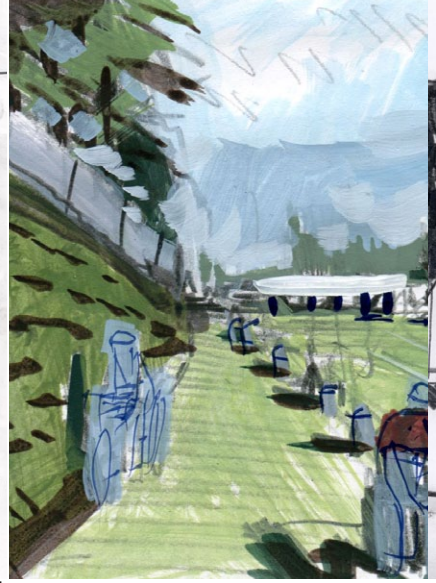
Storage **Kept**

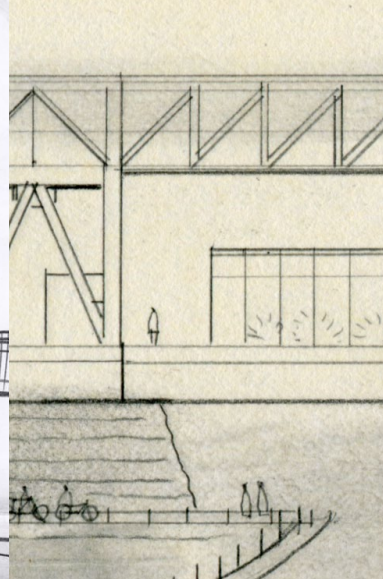
Retail Areas

Cafe **Waiting**

FIGURE 35. PROGRAM WAITING SPACES POTENTIAL







Design

Overview

All the areas of a ferry terminal have the potential for waiting, for very brief durations. For example the tolling plaza for motorist represents a predictable period of waiting, but it is such brief duration that programmatically there is no need to service in this area - except, for the cumulative time periods spent by the regular commuters. The short and long periods of waiting thus need to be treated differently, the shorter periods usually are specifically directional, like the approaching motorists, and the longer periods directionless, or direction seeking, for example the late cyclist who has just missed the boat. Therefore at the most basic level allowing for directionality of waiting emerging spontaneously on the site is facilitated by the porosity of site boundaries, specifically the minimal differentiation between vehicular and pedestrian pathways, and incoming and outgoing pathways. Within this open framework are still existent the implied efficient corridors which allow for a smoothly operating terminal but they are hidden within the larger site area. The unified area of the site is achieved through the use of green paving devices that blur the boundaries between vehicle and pedestrian. This material palette is continued across and up the existing parking established to the northeast of the terminal.

The lower level is established as a wide open semi-parkland that is briefly

FIGURE 37. SITE ROOF PLAN

FIGURE 38. SITE GROUND PLAN

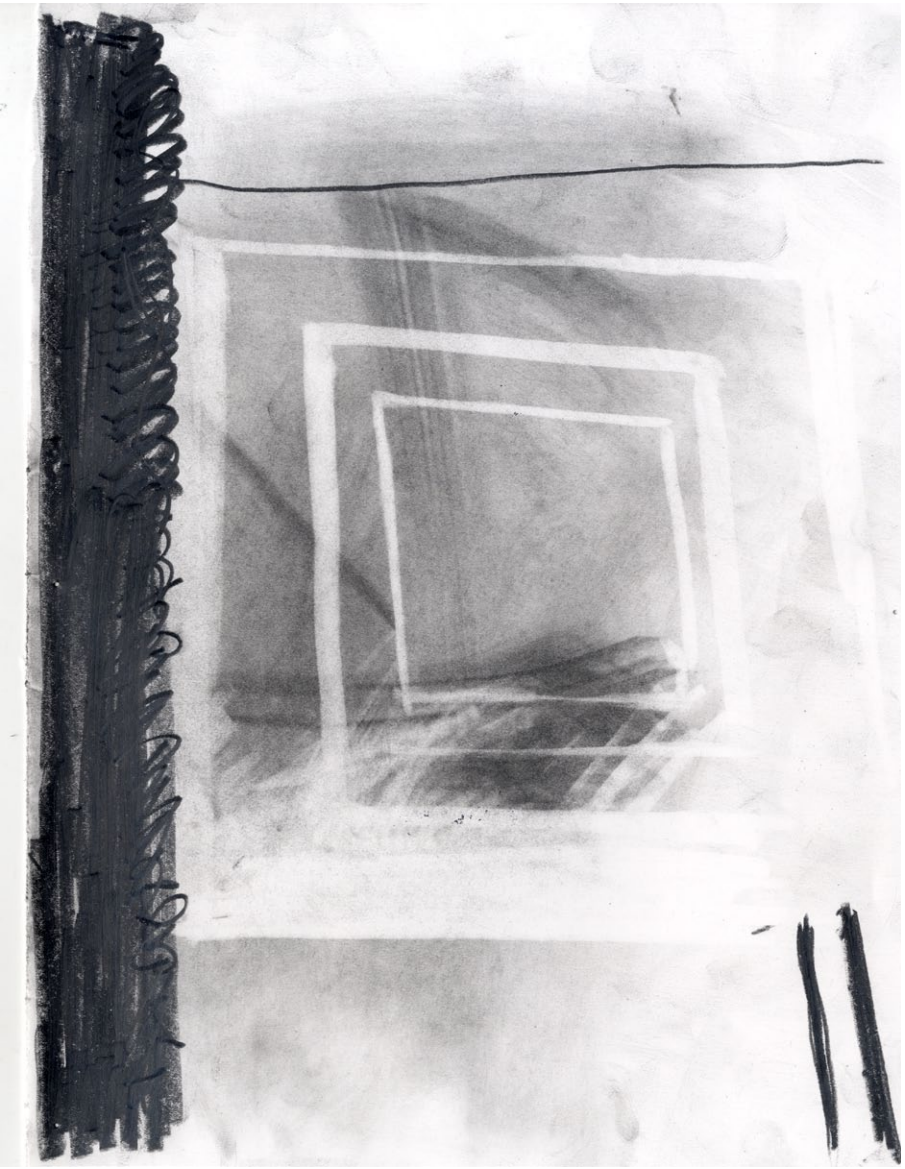


FIGURE 39. EARLY FRAMING CONCEPTUALIZATION

full of activity during boat offload and load, but then returns to its typical tranquility after the brief 20 minute changeover. The ferry loading sequence is fluently achieved through a lifting up of bus and pedestrian pathways near the shoreline that allows for the arriving motorists to flow through the site unimpeded. The platform level establishes a threshold for loading and unloading motorists, and also frames the surrounding harbor. This framing deemphasizes the image of the ferry traveling into Eagle Harbor and this lack of fixation on the object of the ferry allows for a more generalized attraction to other site areas by the waiting passengers.

Atop the platform where the pedestrian and bus activities are taking place another threshold condition is established through a unifying roof. The roof marks two boundaries, one between land and water, the other between the spatial character of the buses, and the movement of pedestrians. The boundary is between high speed and graceful curvature and the slow and meandering, jogging back and forth across the waters edge. Together the platform and the roofline create a double framing element, which capture both the water and the sky. At a closer level, the spaces of waiting on the platform, which are the conditioned areas for pedestrians, are arranged in a way to capture the slipping past of arriving passengers, and a further framing of these spaces of expectation. The main waiting space is made adjacent to the arriving pedestrian ramp and the two share an implied edge. As the pedestrian peel away from this line towards buses, and other site exits, they are once again framed by the edges of the cafe centered on the platform. The cafe is surrounded by shallow plantings whose curbs allow for a careful fluctuating of the flow of pedestrians, with pockets to collect them in areas as the slip past. The space created between these two waiting “pavilions” is the implied civic space of the island, a grand entryway. Framed simultaneously by the roof and the two pavilions pedestrians are symbolically welcomed onto the island. The terminal in this instance acts as a very two-dimensional boundary, a frame as mentioned before, through which to pass. The design therefore is meant to reflect openness along this frame, essentially a hands-off, or backdrop approach to the event of arrival.

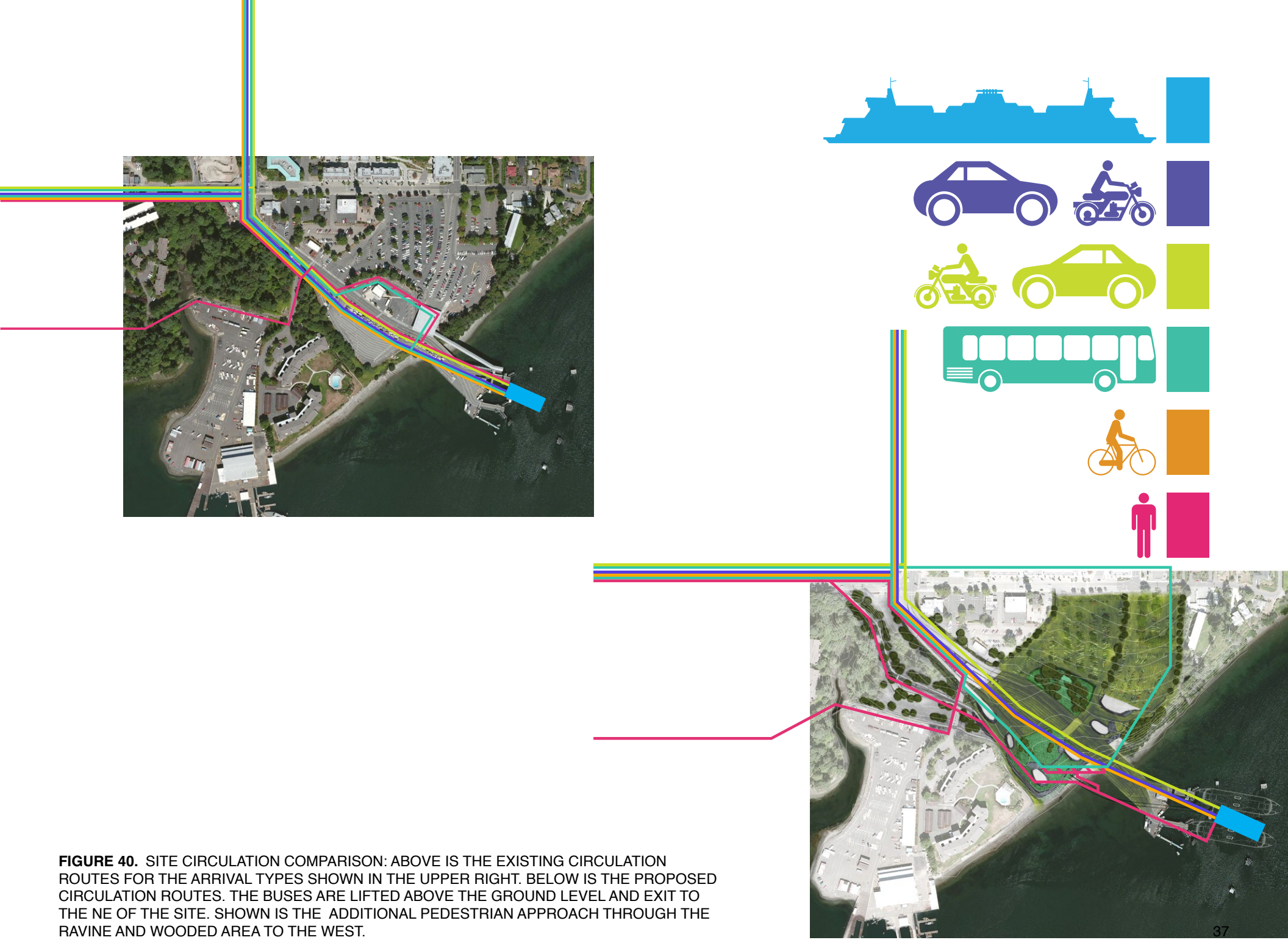
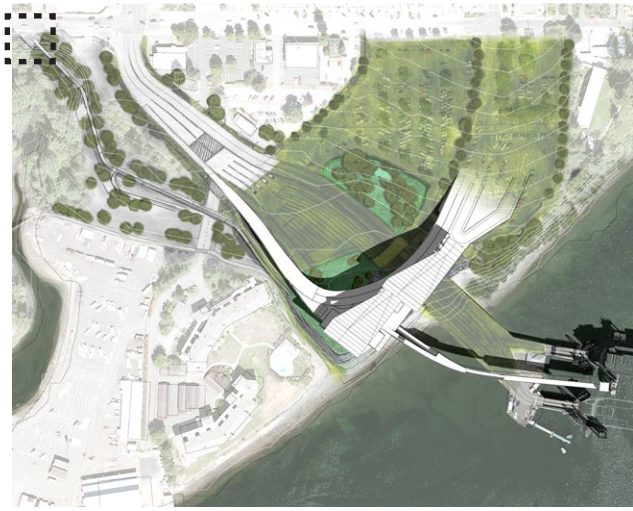


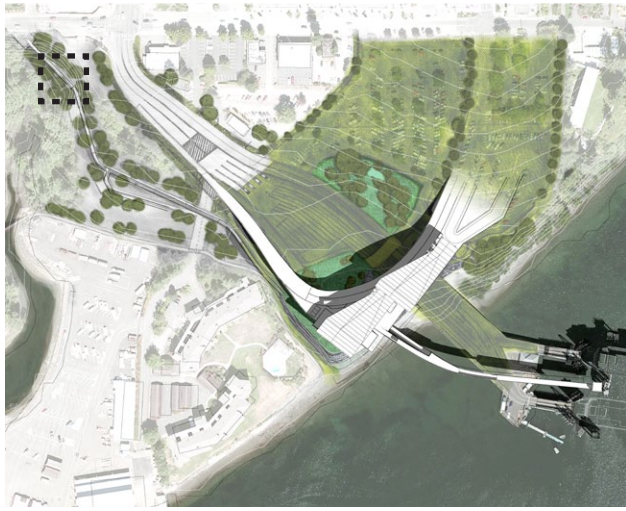
FIGURE 40. SITE CIRCULATION COMPARISON: ABOVE IS THE EXISTING CIRCULATION ROUTES FOR THE ARRIVAL TYPES SHOWN IN THE UPPER RIGHT. BELOW IS THE PROPOSED CIRCULATION ROUTES. THE BUSES ARE LIFTED ABOVE THE GROUND LEVEL AND EXIT TO THE NE OF THE SITE. SHOWN IS THE ADDITIONAL PEDESTRIAN APPROACH THROUGH THE RAVINE AND WOODED AREA TO THE WEST.

FIGURE 41. SE AERIAL VIEW OF SITE



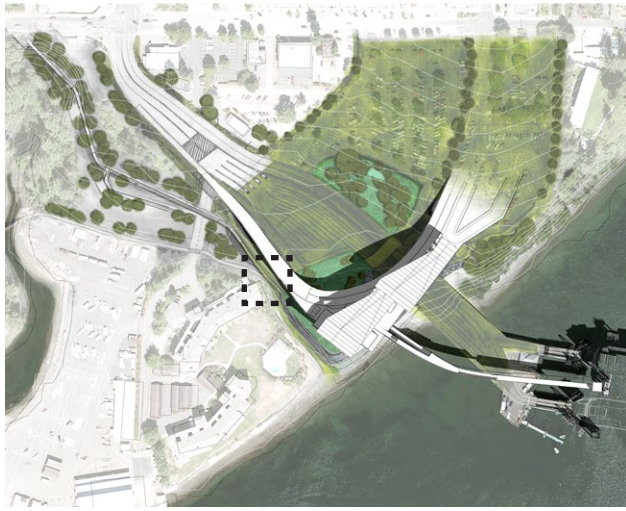
Entry point along Winslow Way for pedestrians. This pathway is designed to give a more varied experience for the commuters who usually are forced to parallel the motorized traffic into the terminal. The entryway also functions as convenient place for pickup and dropoff of passengers outside of the hectic areas closer in.

FIGURE 42. PEDESTRIAN ENTRY ALONG WINSLOW



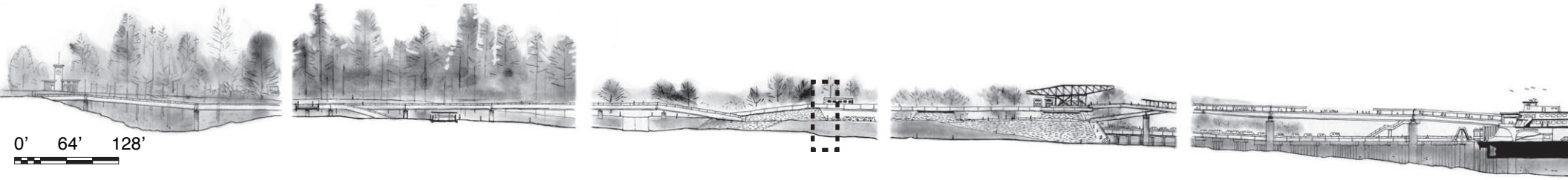
Within the wooded area to the SW of the vehicular pathways the pedestrian ramp crosses a steep ravine with views to the brackish stream at the base. The elevated pedestrian pathway enhances the pedestrian site experience. The path provides a circuitous place to wait before a boat that is also a linear, efficient device for movement.

FIGURE 43. PEDESTRIAN RAMP OVER RAVINE



Here is a quiet area, just after the bus ramp has achieved a steady height of 16 feet above the ground level the many pedestrian pathways which interlace the site come to a crossroads. From the area pictured one can continue straight to the shore, or to the bluff structure overlooking the shore, additionally one can turn left into the vehicle holding lot.

FIGURE 44. PEDESTRIAN SITE ENTRY ADJACENT TO BUS OVERHEAD RAMP LOOKING SOUTHEAST



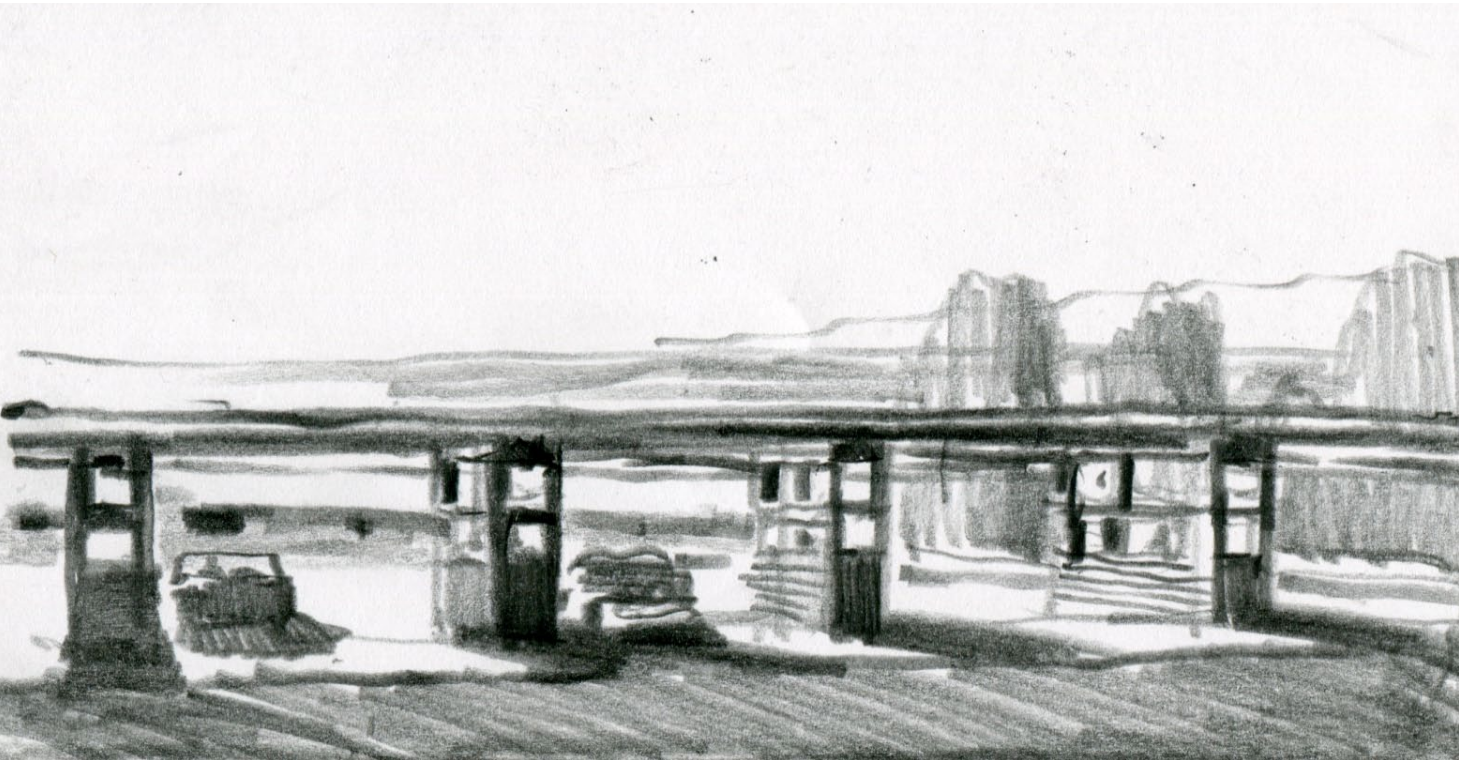
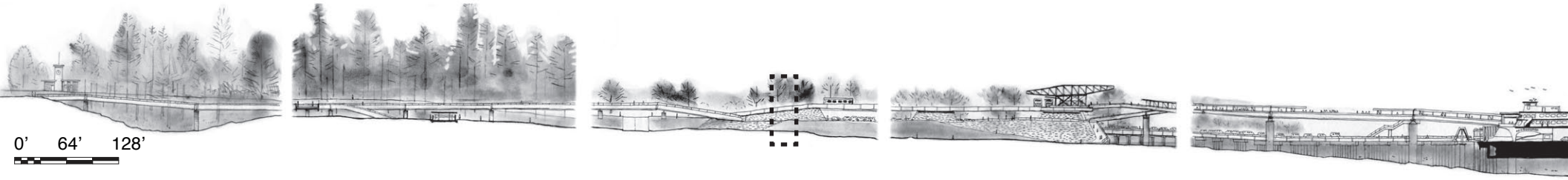


FIGURE 45. TOLLBOOTHS BACKLIT BY MORNING SUNSHINE, LOOKING SOUTHEAST

The automobile site entry experience begins with the toll plaza just a short distance down from the main intersection. The toll plaza is unified under a thin steel roof which spans from booth to booth. The booths are composed of steel frame with a cedar batten rain screen. Echoing the main platforms dual roof structure the individual booths have shorter conditioned roofs which allow for the openness near the main roof, letting the morning light stream through. Beyond the tolling plaza the site is paved with drivable grass, reinforcing the automobile threshold



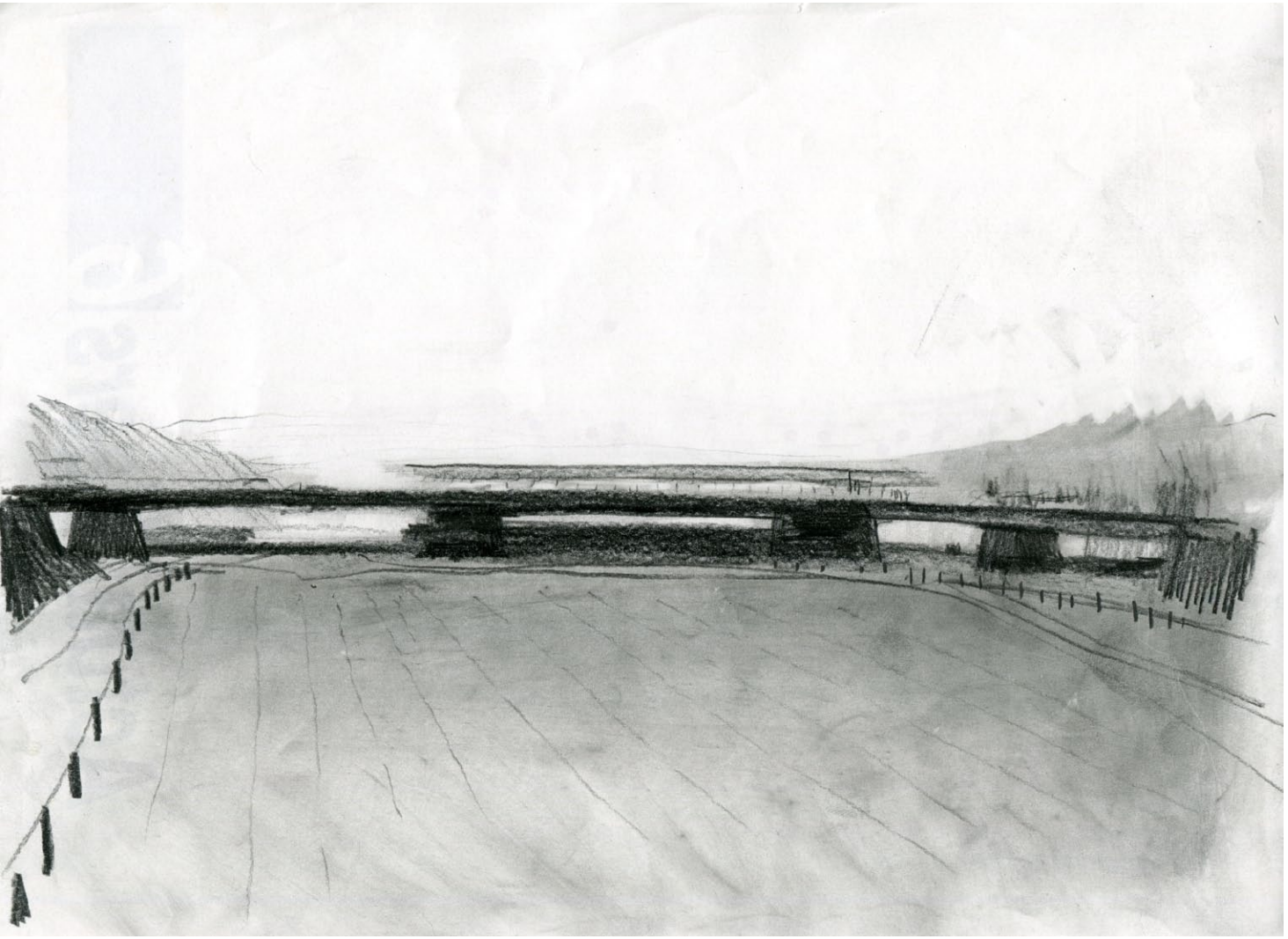
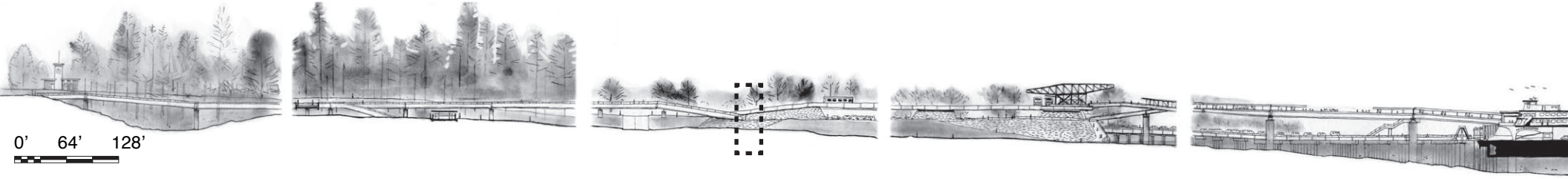
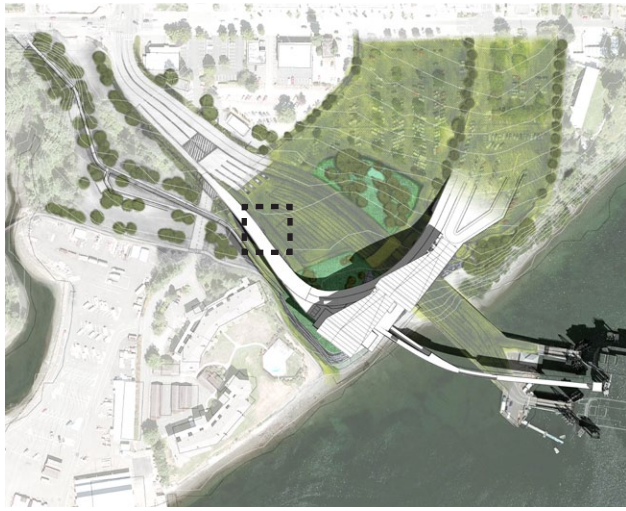


FIGURE 46. HOLDING LOT LOOKING SOUTHEAST

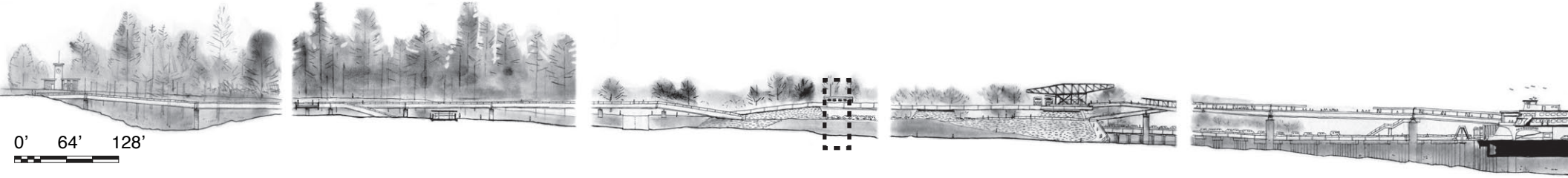


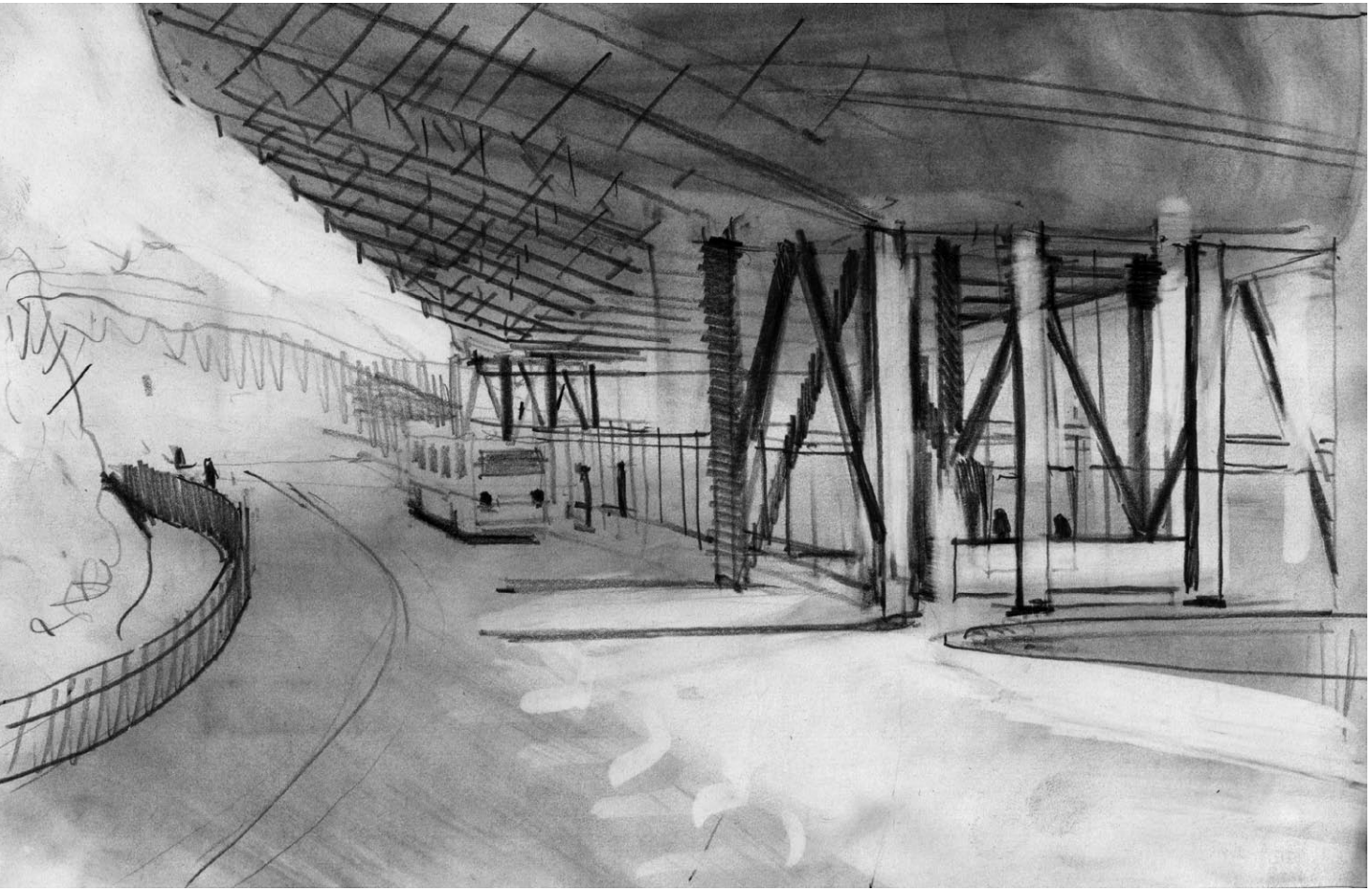
Here inside the vehicle holding lot the main formal design elements are made apparent. The platform and roof create dual frames from above and below outwards to the water, additionally they create the main site threshold between water and land. The terminal location directionally along the lanes of waiting allows for waiting motorists to access the terminal buildings and return to the cars without crossing incoming or outgoing traffic. Also notice the openness of the lower level, all traffic is separated by concrete bollards, allowing for directionless movement during periods of waiting



Here looking NW, back towards the toll booth one sees the cyclist pathway breaking from the main automobile entry lanes. To the left is the bus platform beginning to lift up above the site resting atop a concrete structure surrounded by a textile stabilized earth berm which has been panted with flora to match the rest of the lower level landscaping. Also along this long sloping route the main bicycle storage areas are scattered, allowing for quick lockups and movement onto the boat without crossing the other major traffic on site.

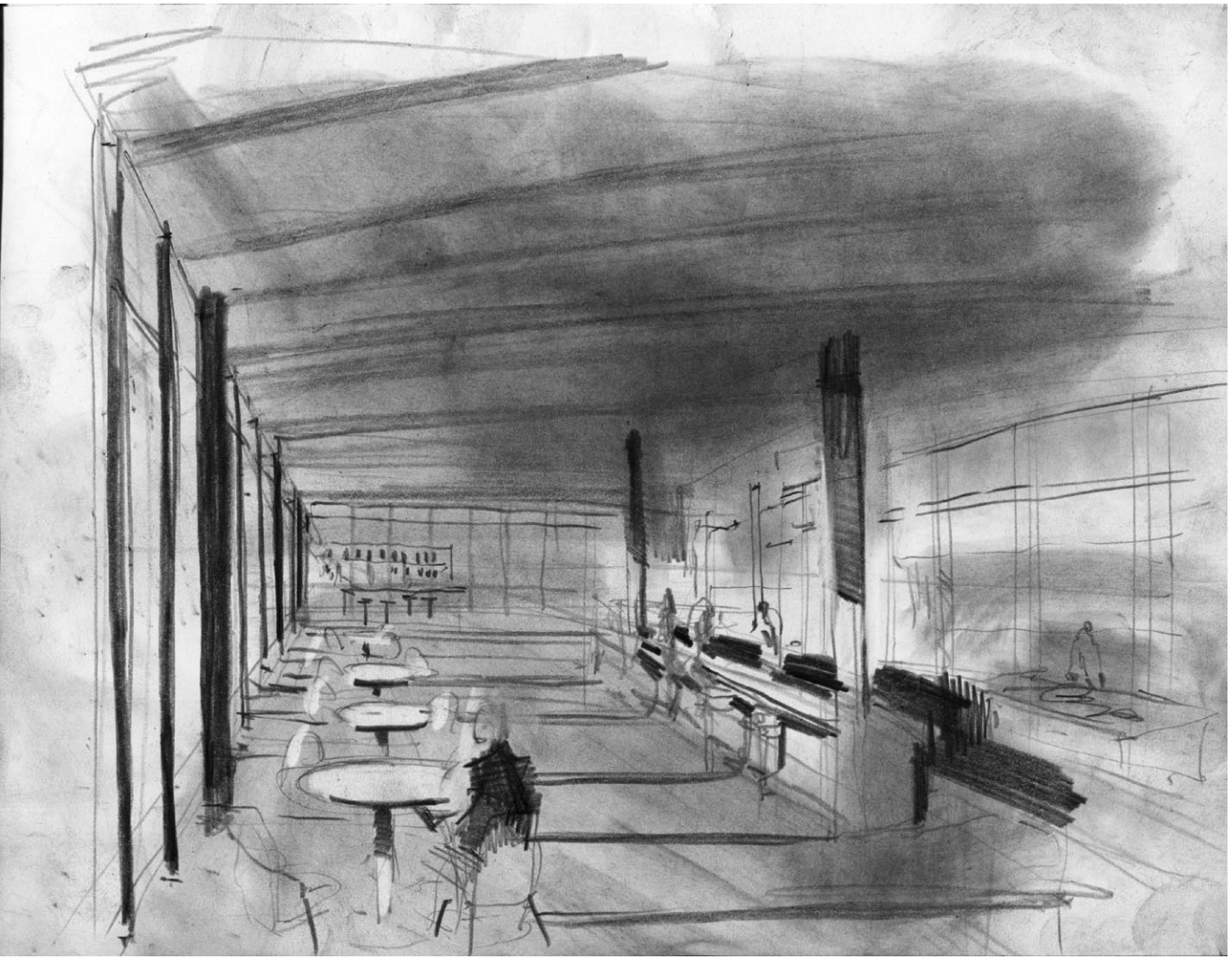
FIGURE 47. TOLLBOOTH AND BICYCLE LANES LOOKING NORTHWEST





The transit center which now exists lifted above the site on the main platform presents a spectacular arrival sequence for bus commuters. First lifting above the site via the platform and then being let off underneath the expansive trussed roof which frames the view outwards to the water. Adjacent to the bus drop off areas are the three main circulation cores which allow motorists and cyclists to access the platform waiting areas and amenities.

FIGURE 48. TRANSIT CENTER PICKUP / DROPOFF



This is the interior of the cafe, atop the platform and adjacent to the main terminal waiting area. From the interior of the cafe the best harbor views can be had and also the movements from the lower vehicle levels and upper pedestrian levels. The cafe is placed for those who have missed the boat and are seeking a long term waiting space and for arriving passengers who may be waiting for pickup along the NE corner of the platform.

FIGURE 49. INTERIOR OF CAFE LOOKING SOUTHWEST

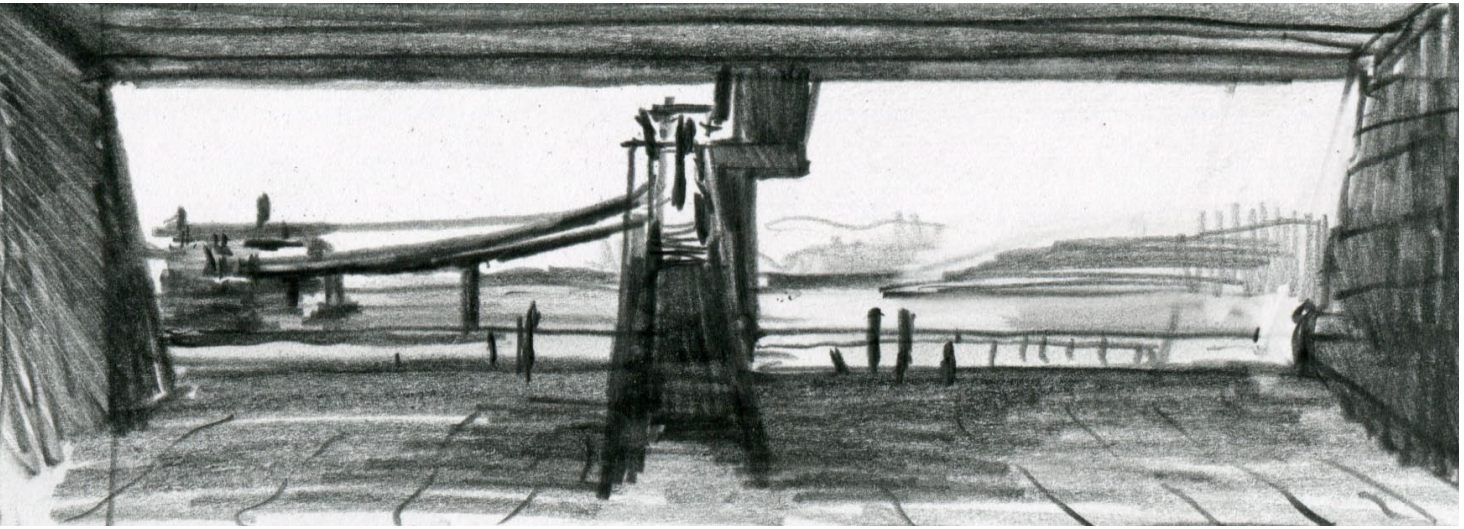


FIGURE 50. UNDERSIDE OF TRANSIT CENTER, PEDESTRIAN OVERHEAD LOADING RAMPS LOOKING SOUTHEAST

The view from underneath the platform out towards the water is framed by two massive earth berms who through their ponderous mass set off the lightness of the concrete platform that sits gingerly atop them. The pedestrian overhead loading splits off in a scissor ramp which allows for access above and below the platform. The ramp also allows a circuitous route for motorist accessing the platform from below, given them an opportunity to view the waterfront from a vantage point usually reserved for the pedestrians.

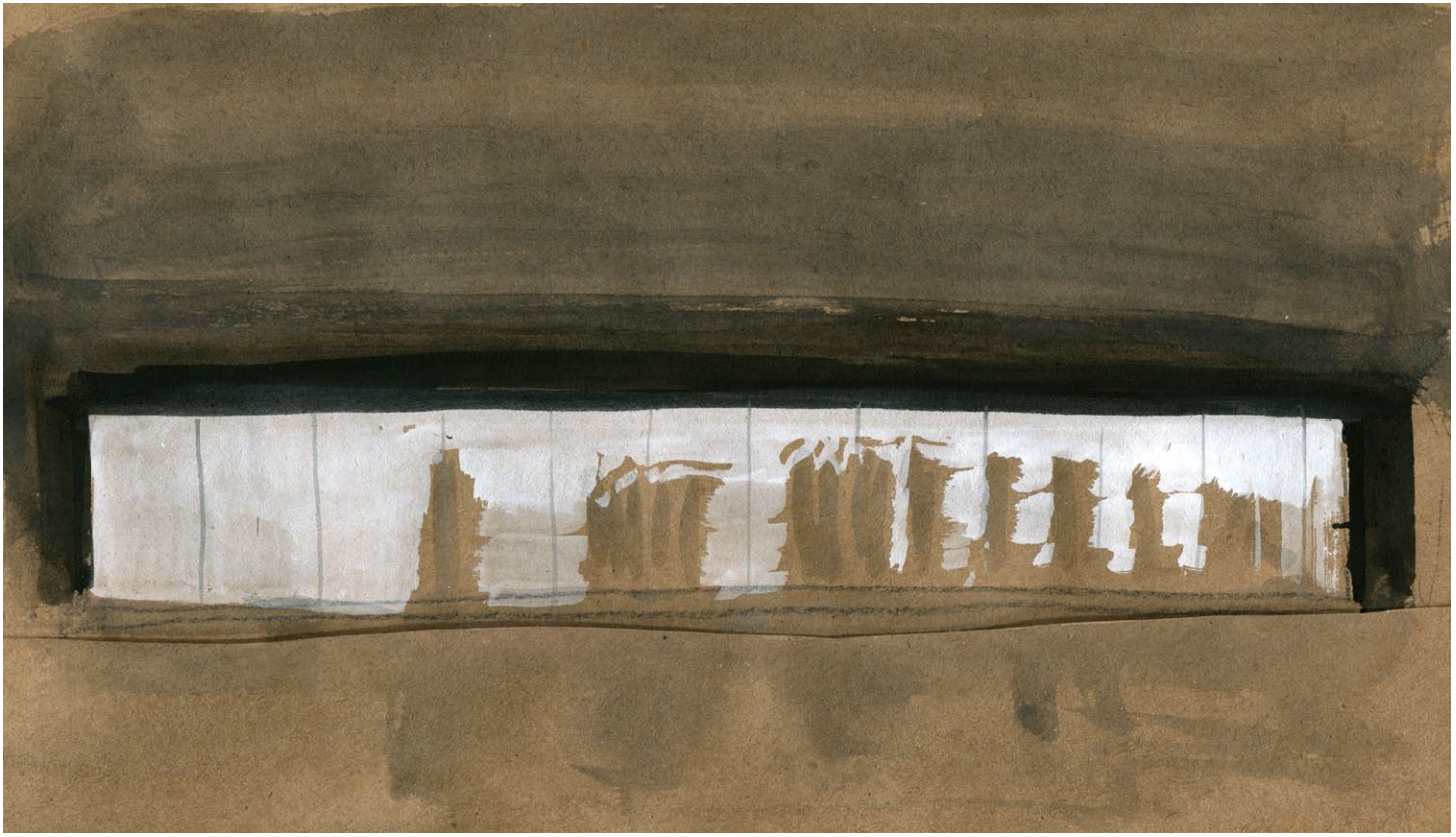
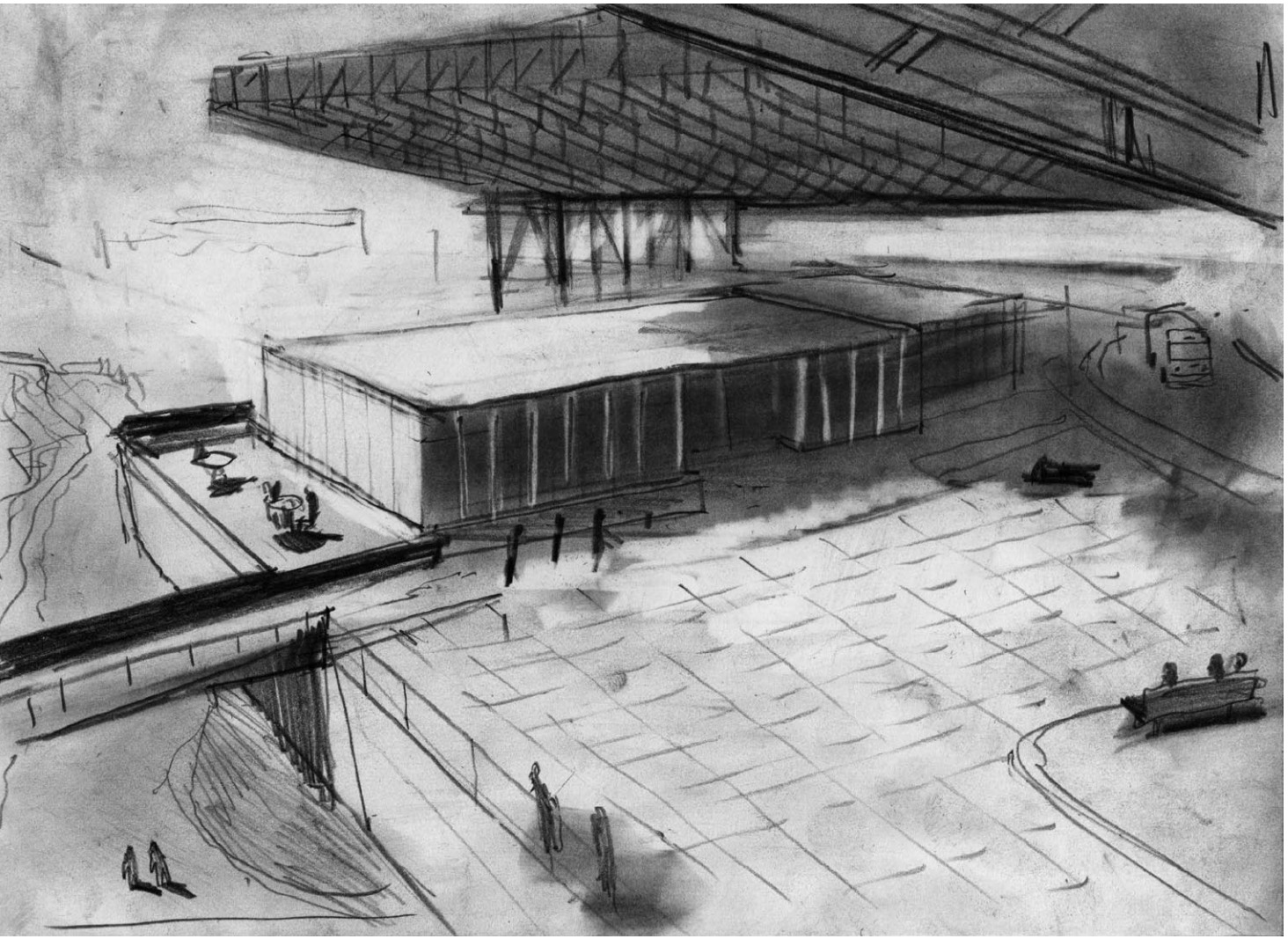


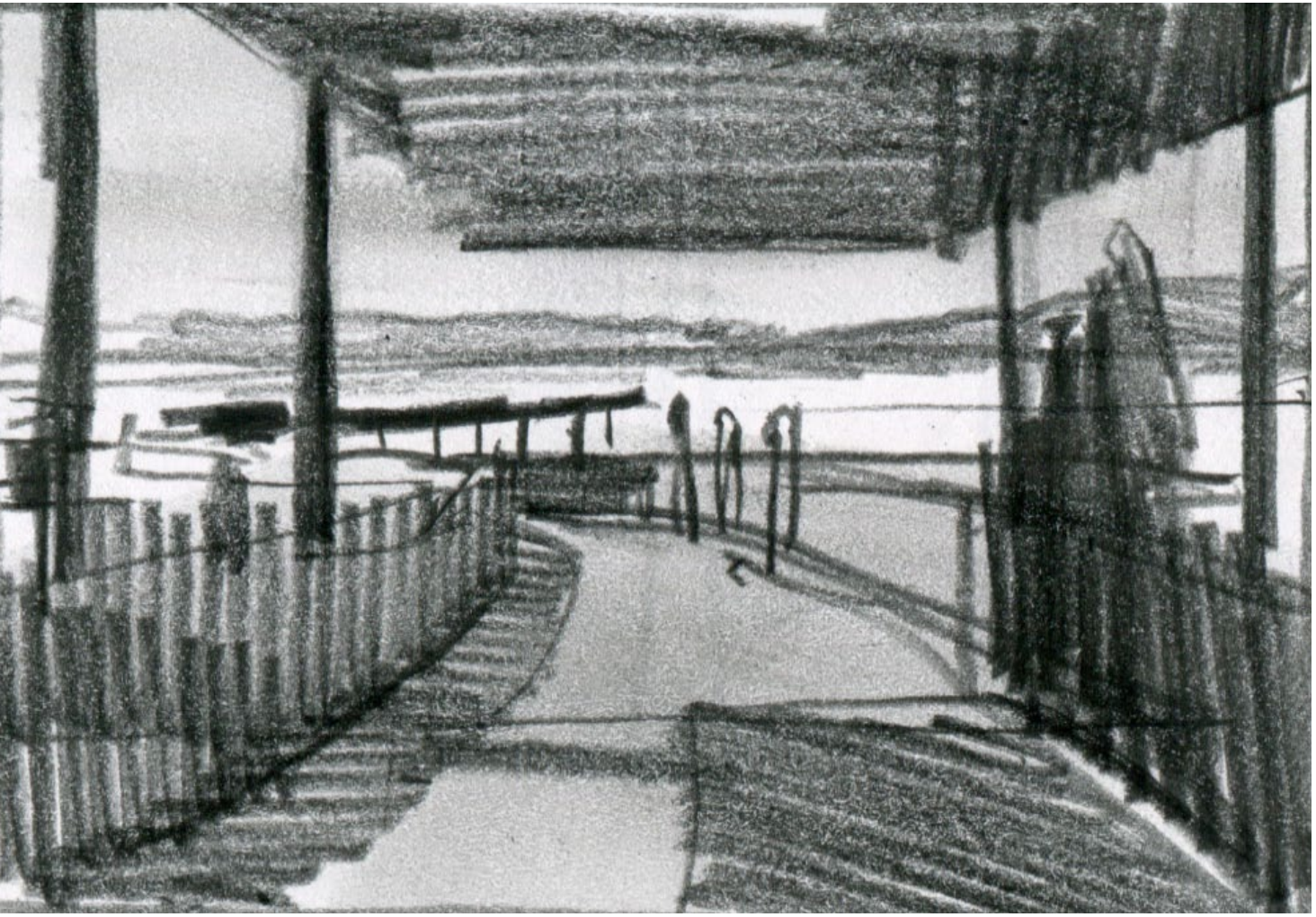
FIGURE 51. INTERIOR OF MAIN WAITING ROOM LOOKING NORTHEAST

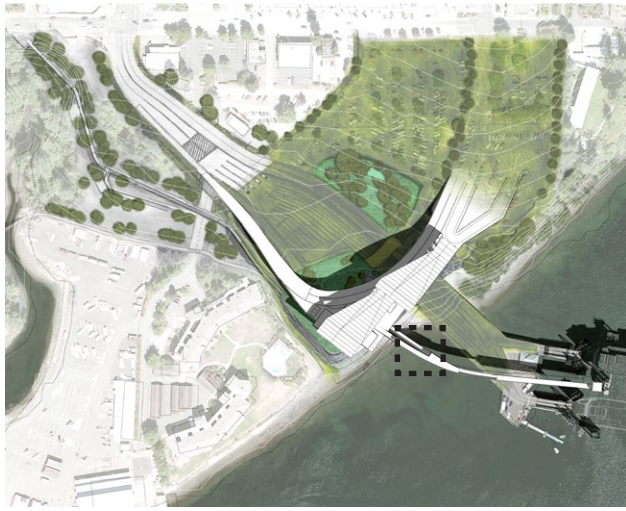
This view is taken from inside the main waiting area, the NE wall is composed of floor to ceiling golden colored glass, which allows for the silhouettes of unloading passengers to be thrown across the interior of the room. The colored glass was chosen for the purpose of focusing attention inward to the silent process of waiting and to enliven the cooler atmosphere of the harbor.



Here is the place of expectation, where those waiting to board sit calmly to witness the unloading of the ferry, before they take their place along the same platform to board. The large waiting room is sized to be comfortable and inwardly focused during times of inclement weather but then on the rare sunny day the southern wall composed of multi-fold panels opens to the rest of the platform. The upper trussed roof acts as a shield from rain year round.

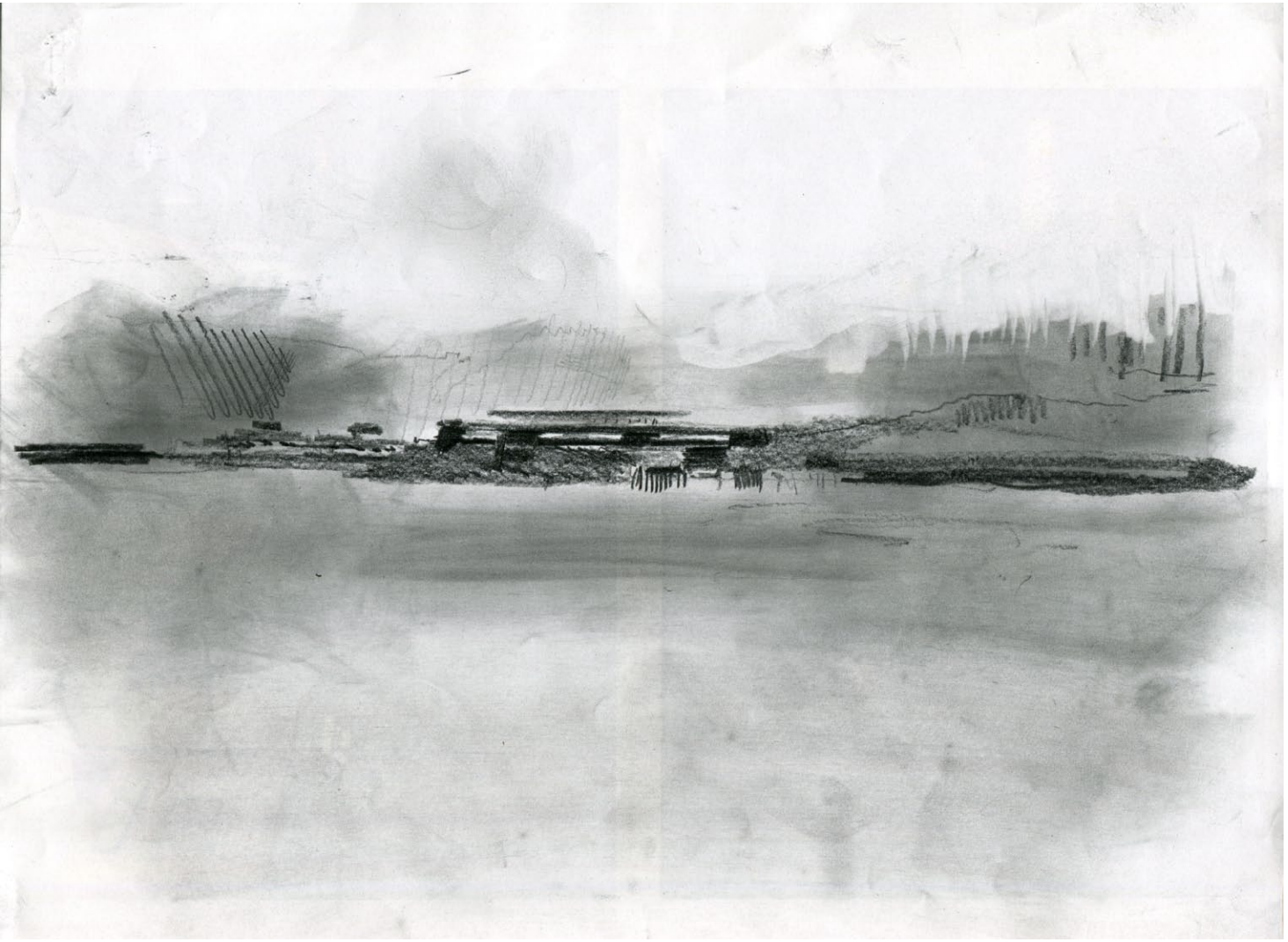
FIGURE 52. MAIN WAITING BUILDING AND PEDESTRIAN OVERHEAD LOADING RAMP





At this particular jumping off point the passenger is confronted with a choice, to linger underneath the inviting canopy to take in the overall views of the shoreline and witness the loading and unloading automobiles, or walk out and into open air at the very middle of the pedestrian ramp. The skipped roof creates an implied barrier between the upper and lower pedestrian ramps, those waiting will stay under the nearer roof line.

FIGURE 53. PEDESTRIAN OVERHEAD LOADING RAMP LOOKING SOUTH



Either arriving or departing, here is the view from aboard the ferry into Eagle Harbor as it rounds Wing Point. The major element of the long span roof is the most recognizable landmark within the terminal creating a sense of destination and identity for the island. The machinery of the terminal, all the necessities of efficiency have been unified atop the platform and under the roof, giving a definitive shape to the most important threshold to Bainbridge Island.

FIGURE 54. SITE SEEN FROM APPROACHING / DISEMBARKING FERRY

Conclusion

Overview

From the inception of this thesis there was a strong desire to look beyond the specific transit complexities of the ferry terminal typology to establish a broad foundation of inquiry that could be applicable to all forms of transit terminal. As the thesis progressed into the design phase it was revealed that what these typologies all share are spaces of waiting. It was difficult to return to the particulars of the Bainbridge Island terminal after molding the framework because the terminal needed a site specific response that reinterpreted the spaces of waiting through the research while simultaneously satisfying the initially put aside transit complexities. Behind all this was the inescapable desire to “do justice” to the site, which after 7 years of commuting had evolved a strong emotional presence. The design for the terminal did create, in a primitive atmospheric fashion, the threefold spatial relationship between land and water, waiting and passage, and arrival and departure.

The Future

The concrete materiality that can evoke the desired experiential qualities of the design remain to be developed. The multitude of experiences derived from the multitude of users is something that also needs further exploration. Attempting to make a civic threshold that incorporates so many ideas may have been an unwise ambition. There are areas where the theoretical desires are not met, but the pathway to a fully successful design has been established. It will be very interesting to inquire into the typological potential of spaces of waiting, not only within the area of transportation terminals but in all architectural typologies. The places where one pauses along the journey are without a doubt important experiences, worthy of the same attention paid to the destination spaces, if not more.

Notes

1 Johnson, Philip. "Whence & Whither: The Processional Element in Architecture." *Perspecta*. (1965): p. 172. Print.

2 ARUP in association with Nelson Nygard, Fehr & Peers, SMWM. *Draft Working Paper Intermodal and Terminal Access Study Terminal Good Practice Design Guidelines*. 2001. PDF file. p. 17.

3 ARUP. p. 20.

4 ARUP. p. 22.

5 Nitschke, Günter. *From Shinto to Ando: Studies in Architectural Anthropology in Japan*. London: Academy Editions, 1993. p. 37.

6 Schivelbusch, Wolfgang. *The Railway Journey: The Industrialization of Time and Space in the 19th Century*. Berkeley, Calif: University of California Press, 1986. pp. 58.

7 Nitschke. p. 35.

8 Nitschke. p. 34.

9 Raynsford, Anthony. "Swarm of the Metropolis: Passenger Circulation at Grand Central Terminal and the Ideology of the Crowd Aesthetic." *Journal of Architectural Education*. 50.1 (1996). Print. p. 11 and 12.

10 Raynsford. p. 12.

11 Binnie, Jon, Tim Edensor, Julian Holloway, Steve Millington, and Craig Young. "Mundane Mobilities, Banal Travels." *Social & Cultural Geography*. 8.2 (2007). Print. pp 168-167

12 Binnie. p. 167.

13 Nitschke. p. 58.

14 Binnie. p. 168.

15 Hodson, Jaigris, and Phillip Vannini. "Island Time: the Media Logic and Ritual of Ferry Commuting on Gabriola Island, BC." *Canadian Journal of Communication*. 32.2 (2007). p. 271.

16 Hodson. p. 270.

17 Hodson. p. 271.

18 Nitschke. p. 59.

19 Trigg, Dylan. The Memory of Place: A Phenomenology of the Uncanny. Athens: Ohio University Press, 2012. Print. p. 121.

20 Vidler, Anthony. “The Architecture of the Uncanny: the Unhomely Houses of the Romantic Sublime.” Assemblage. 1987.3 (1987): 6-29. Print. p. 181.

21 Schivelbusch. p. 56.

22 Schivelbusch. p. 64.

23 Washington State Department of Transportation. Terminal Design Manual Washington State Ferries. 2012. PDF file, p 450-6

24 Eric Robinson, Terminal Engineering Dept. WSF, personal interview, 17 September 2012.

25 Washington State Department of Transportation. Terminal Design Manual Washington State Ferries. 2012. PDF file p. 620-9

26 Washington State Department of Transportation. Chapter 610.

27 The Phaidon Atlas of 21st Century World Architecture. London: Phaidon, 2008. Print. p. 242

28 “Vessel passengers do not fully use the existing terminal building. Passengers tend to circulate near the pedestrian elevated walkway, closer to the vessels, instead of waiting in the terminal near shore..” East, Russell S, and Eugene V. Armstrong. “Intermodal Ferry Terminal Master Plans for Washington State Ferries : Planning for the Future.” Transportation Research Record. (1999). Print. p. 110

Bibliography

Ackerman, J M, C C. Nocera, and J A. Bargh. “Incidental Haptic Sensations Influence Social Judgments and Decisions.” Science. 328.5986 (2010): 1712-1715. Print.

ARUP in association with Nelson Nygard, Fehr & Peers, SMWM. *Draft Working Paper Intermodal and Terminal Access Study Terminal Good Practice Design Guidelines*. 2001. PDF file.

Beaudouin, Laurent, and Ronny C. Theuil. “Slow Architecture.” A + U. 481.481 (2010): 14-17. Print

Binnie, Jon, Tim Edensor, Julian Holloway, Steve Millington, and Craig Young. “Mundane Mobilities, Banal Travels.” *Social & Cultural Geography*. 8.2 (2007). Print.

Demoro, Harre W. *The Evergreen Fleet: A Pictorial History of Washington State Ferries*. San Marino, Ca: Golden West Books, 1971. Print.

Diehl, Michael. *Crossings : on the ferries of Puget Sound*. Bainbridge Island, Wash : Island Earth Publications, 2008. Print.

East, Russell S, and Eugene V. Armstrong. “Intermodal Ferry Terminal Master Plans for Washington State Ferries : Planning for the Future.” *Transportation Research Record*. (1999). Print.

Edwards, Brian, and Brian Edwards. *The Modern Airport Terminal: New Approaches to Airport Architecture*. London: Spon Press, 2005. Print.

Heat, Moon W. L. *River-horse: The Logbook of a Boat Across America*. Boston: Houghton Mifflin, 1999. Print.

Hodson, Jaigris, and Phillip Vannini. “Island Time: the Media Logic and Ritual of Ferry Commuting on Gabriola Island, Bc.” *Canadian Journal of Communication*. 32.2 (2007). Print.

Johnson, Philip. “Whence & Whither: The Processional Element in Architecture.” *Perspecta*. (1965): 167-178. Print.

Krucker, Bruno. “Complex Ordinariness: the Upper Lawn Pavilion by Alison and Peter Smithson.” *Daidalos*. 2000.75 (2000): 44-51. Print.

Loose, Verne W., and Leonard Roueche, “The impact of congestion on traffic levels: The case of ferry transportation” *Transportation Research Part A: General, Volume 13, Issue 2*. 79-82 (April 1979). Print.

McCarter, Robert. *Building Machines*. New York: Princeton Architectural Press, 1987. Print.
Neal, Carolyn, and Thomas K. Janus. *Puget Sound Ferries: From Canoe to Catamaran, an Illustrated History*. Sun Valley, Calif: American Historical Press, 2001. Print.

Nitschke, Günter. From Shinto to Ando: Studies in Architectural Anthropology in Japan. London: Academy Editions, 1993. Print.

Parr, A E. “Psychological Aspects of Urbanology.” *Journal of Social Issues*. 22.4 (1966): 39-45. Print.

The Phaidon Atlas of 21st Century World Architecture. London: Phaidon, 2008. Print.

Raynsford, Anthony. “Swarm of the Metropolis: Passenger Circulation at Grand Central Terminal and the Ideology of the Crowd Aesthetic.” *Journal of Architectural Education*. 50.1 (1996). Print.

Robinson, Julia W. “Architectural Research: Incorporating Myth and Science.” *Journal of Architectural Education*. 44 (1990): 20-32. Print.

Rosler, Martha. “Travel Stories.” *Grey Room*. 1.8 (2002): 108-137. Print.

Sanaa: Kazuyo Sejima, Ryue Nishizawa : 2004-2008. El Escorial: El croquis, 2008. Print.

Schivelbusch, Wolfgang. *The Railway Journey: The Industrialization of Time and Space in the 19th Century*. Berkeley, Calif: University of California Press, 1986. Print.

Trigg, Dylan. *The Memory of Place: A Phenomenology of the Uncanny.* Athens: Ohio University Press, 2012. Print.

Vannini, P. “The Techne of Making a Ferry: a Non-Representational Approach to Passengers’ Gathering Taskscapes.” *Journal of Transport Geography*. 19.5 (2011): 1031-1036. Print.

Vannini, Phillip. “Constellations of (in-)convenience: Disentangling the Assemblages of Canada’s West Coast Island Mobilities.” *Social & Cultural Geography*. 12.5 (2011): 471-492. Print.

Vidler, Anthony. “The Architecture of the Uncanny: the Unhomely Houses of the Romantic Sublime.” *Assemblage*. 1987.3 (1987): 6-29. Print.

Washington State Department of Transportation. *Terminal Design Manual Washington State Ferries*. 2012. PDF file

Washington State Department of Transportation. *Washington State Department of Transportation Ferries Division Final Long-Range Plan.* 2009. PDF file

Williams, L.E, and J.A Bargh. “Experiencing Physical Warmth Promotes Interpersonal Warmth.” Science. 322.5901 (2008): 606-607. Print.

Image Credits

All images credit the author unless otherwise noted.
Aerial photos from Appendix A credit Google Maps.

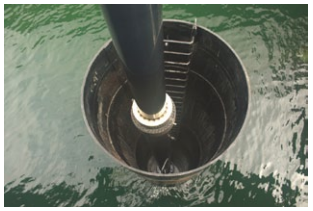
http://commons.wikimedia.org/wiki/File%3AHelsinki_Metro_train_interior.jpg

By Lussmu (Finish Wikipedia) [CC-BY-2.0 (http://creativecommons.org/licenses/by/2.0)], via Wikimedia Commons

http://commons.wikimedia.org/wiki/File%3ALufthansa_A380_economy_cabin.jpg

By Pawel Drozd and Elzbieta Czerwinska-Drozd (Own work) [CC-BY-SA-3.]

Rimer, J T. Shisendo, Hall of the Poetry Immortals. New York: Weatherhill, 1991. Print.



Washington State Department of Transportation. Terminal Design Manual Washington State Ferries. 2012. PDF file.

Google Maps

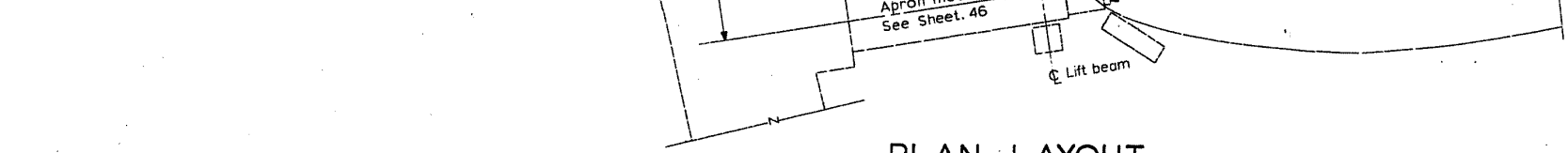
Google Maps

http://openbuildings.com/buildings/ropeid-profile-41809#!buildings-media/0

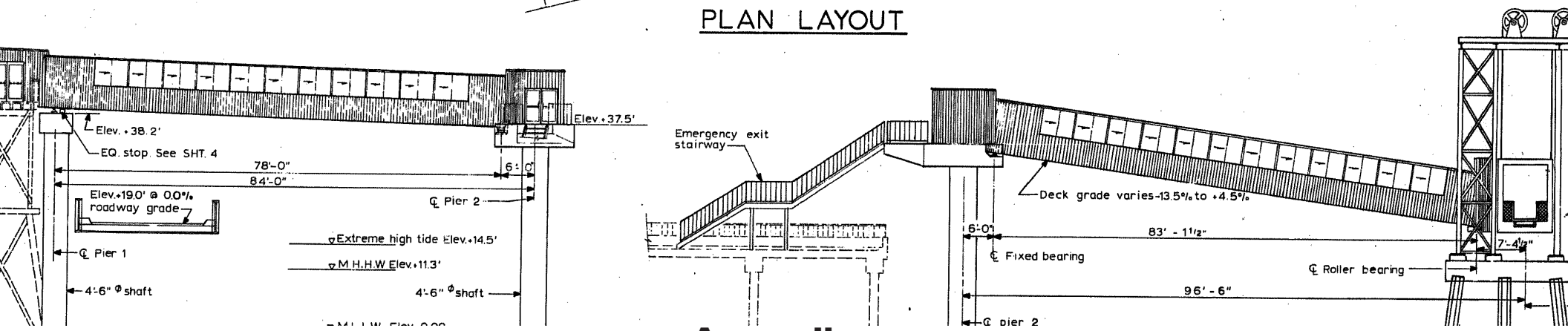
copyright Jiri Havran

http://commons.wikimedia.org/wiki/File%3ARopeid.JPG

By Reinhardheydt (Own work) [Public domain], via Wikimedia Commons



PLAN LAYOUT



Appendices

FIGURE 55. SITE PLAN SECTION GUIDE

Legend

1. pedestrian bridge
2. vehicle entry lanes
3. vehicle exit lanes
4. elevated bus roadway
5. bicycle entry lanes
6. vehicle tolling plaza
7. parkland

FIGURE 56. SECTION A

FIGURE 57. SECTION B

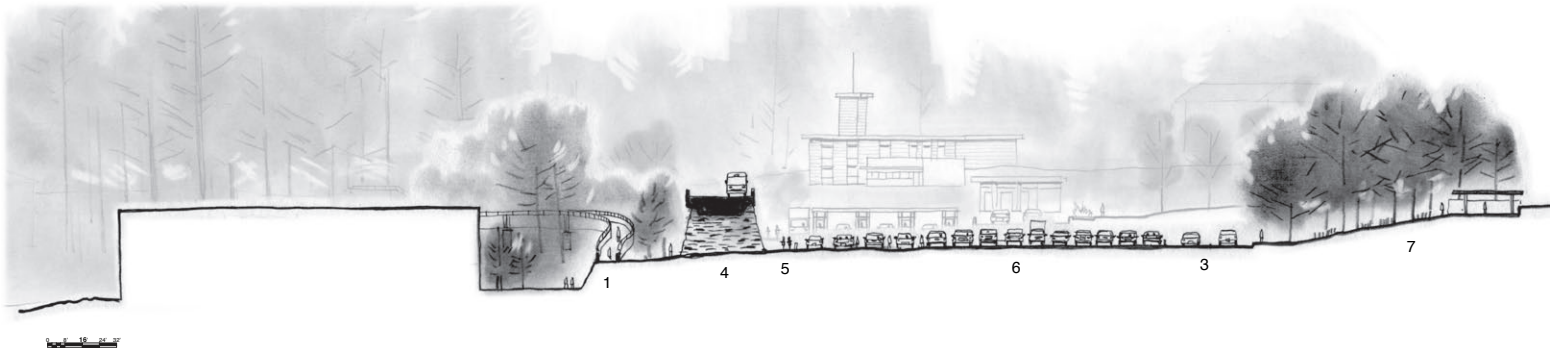


FIGURE 58. SECTION C

Section E

FIGURE 59. SITE SECTION

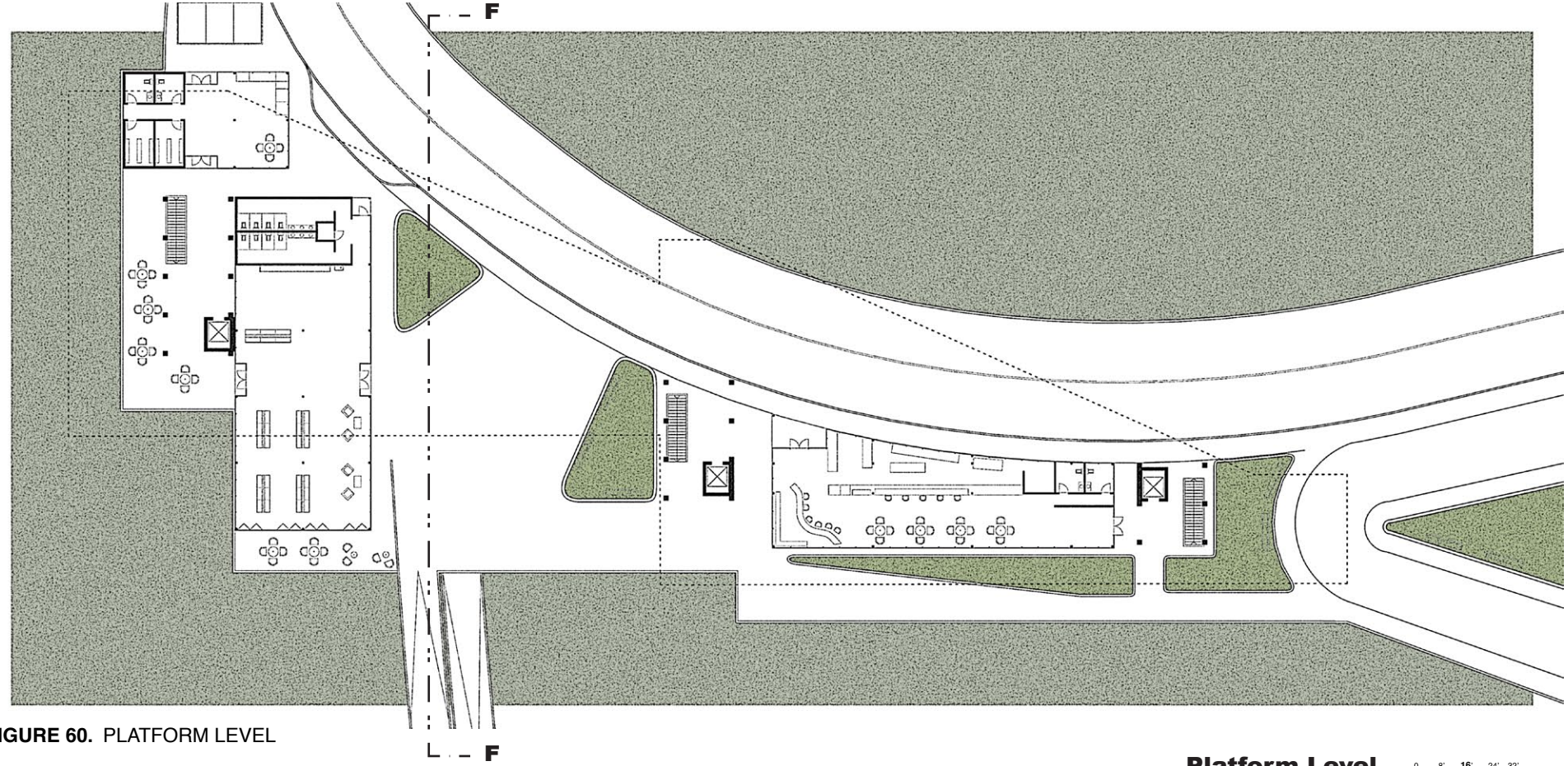


FIGURE 60. PLATFORM LEVEL

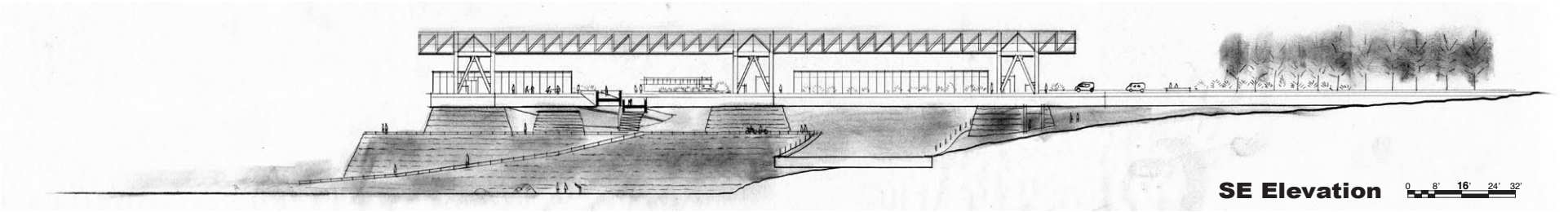


FIGURE 61. SE ELEVATION

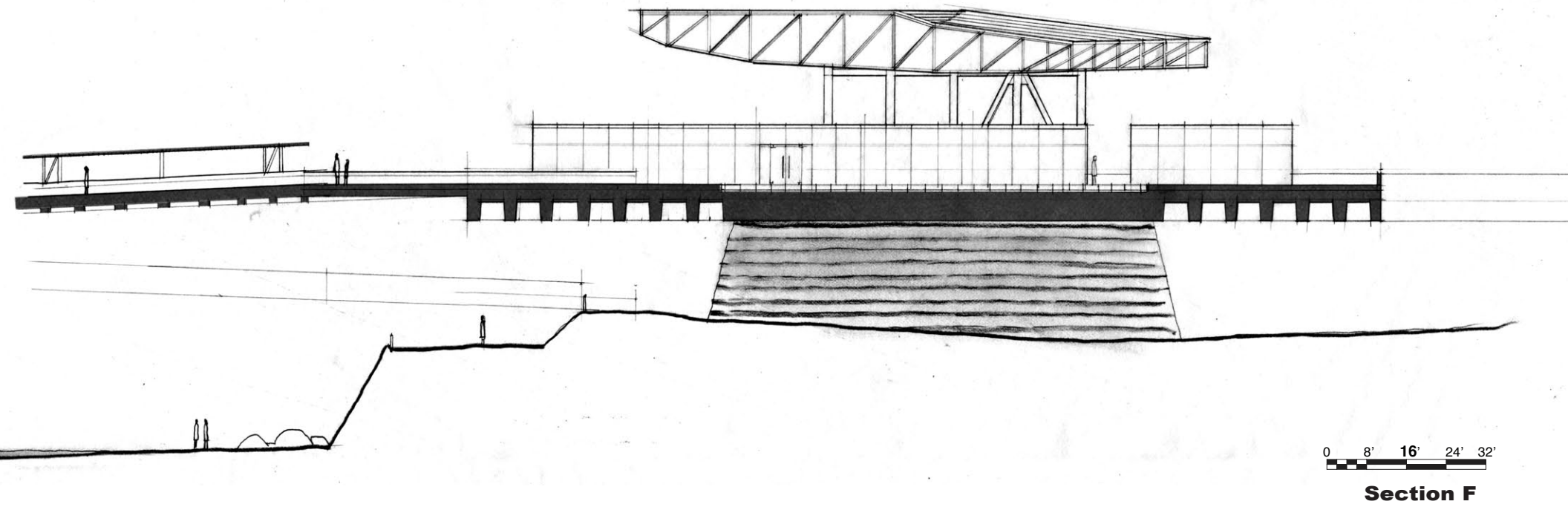
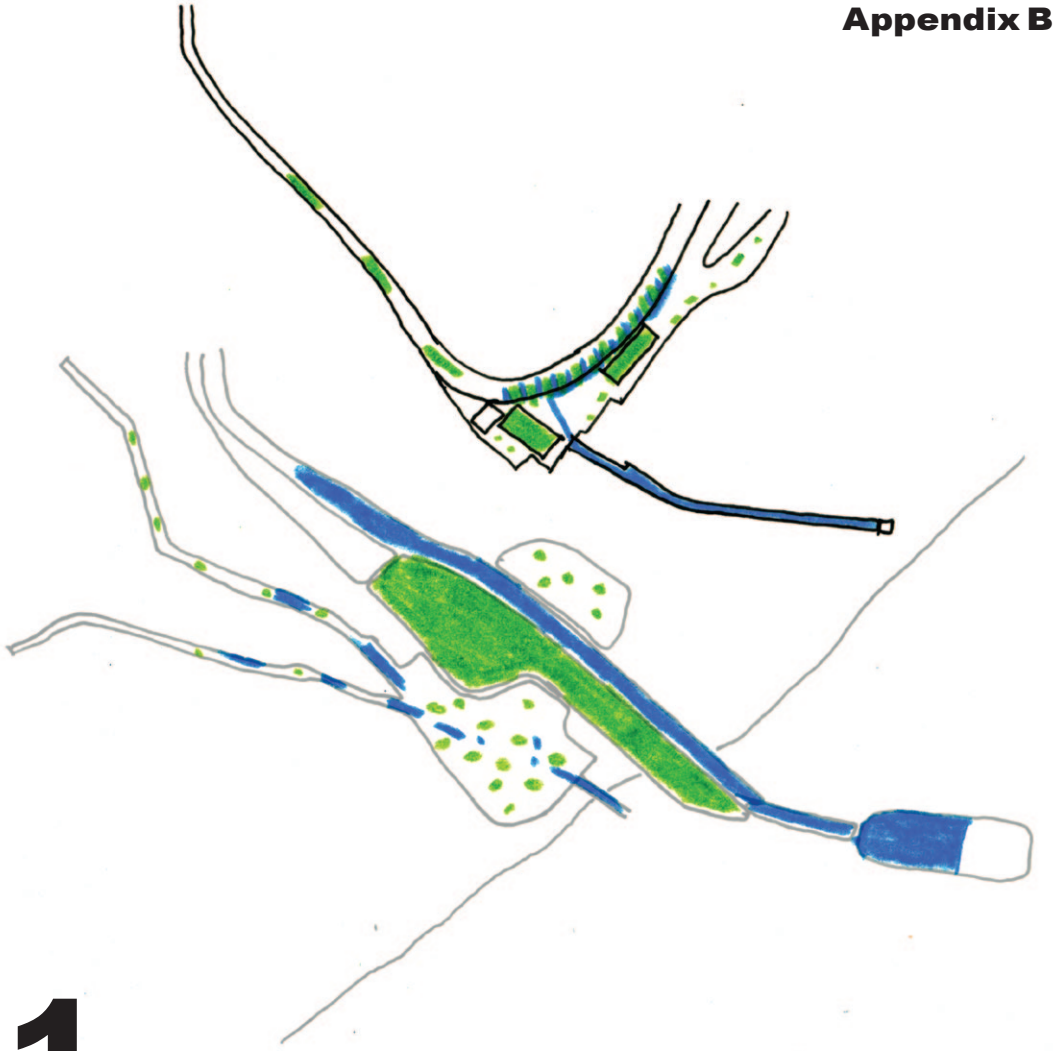


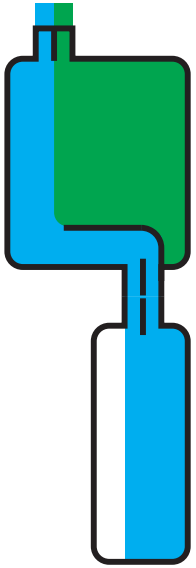
FIGURE 62. PLATFORM SECTION

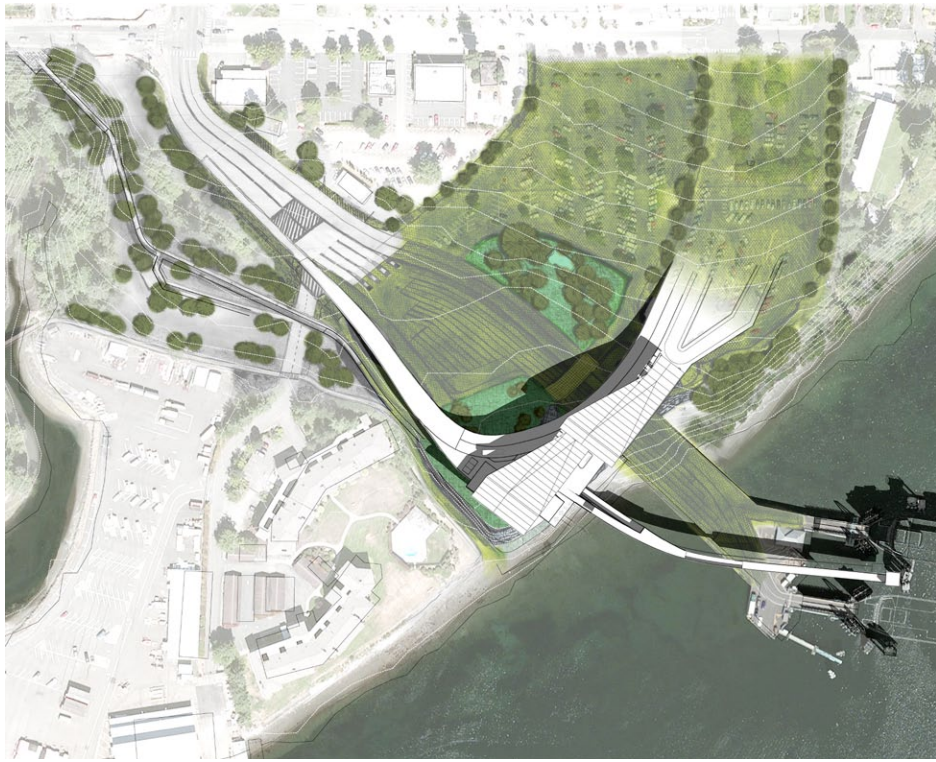


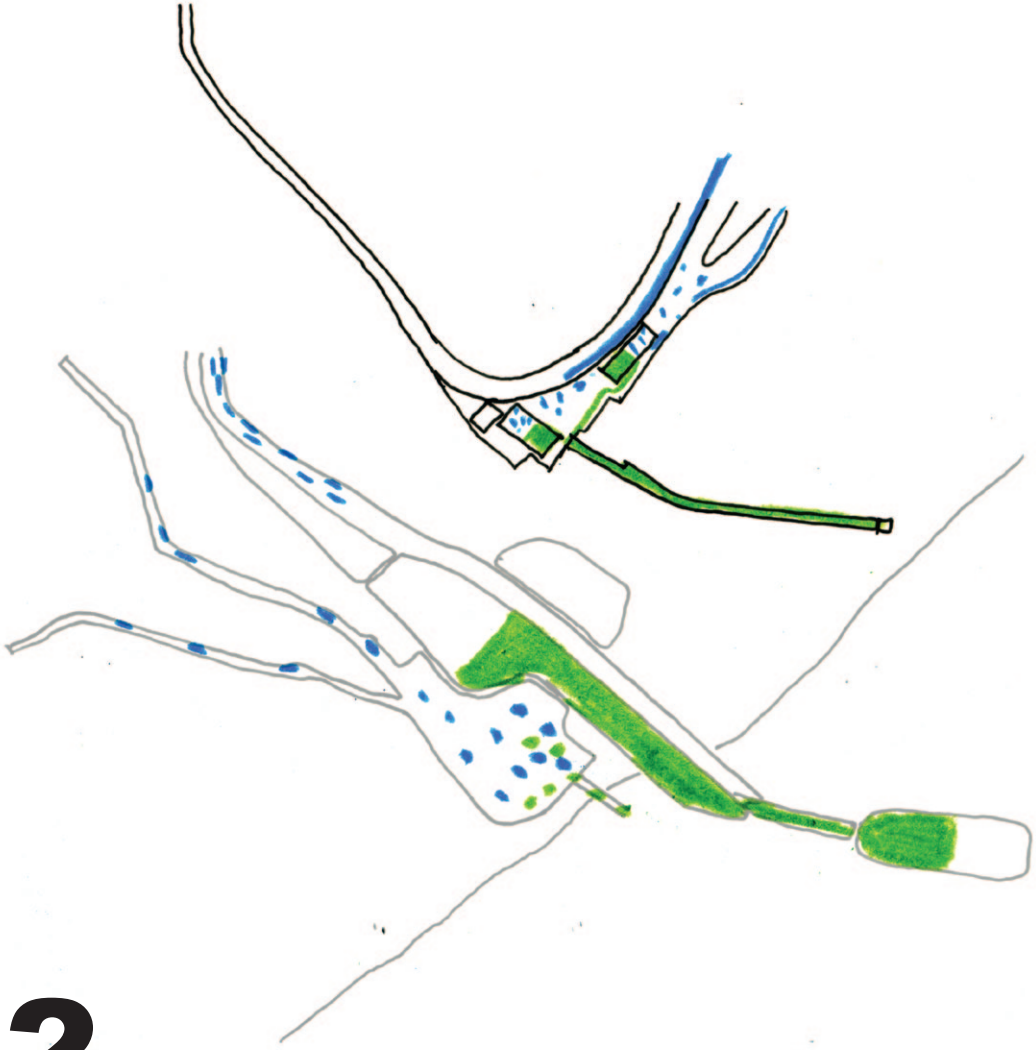
1

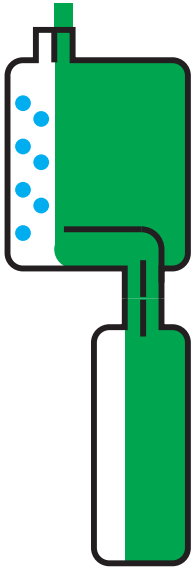
FIGURE 63. SITE SPECIFIC PHASE 1

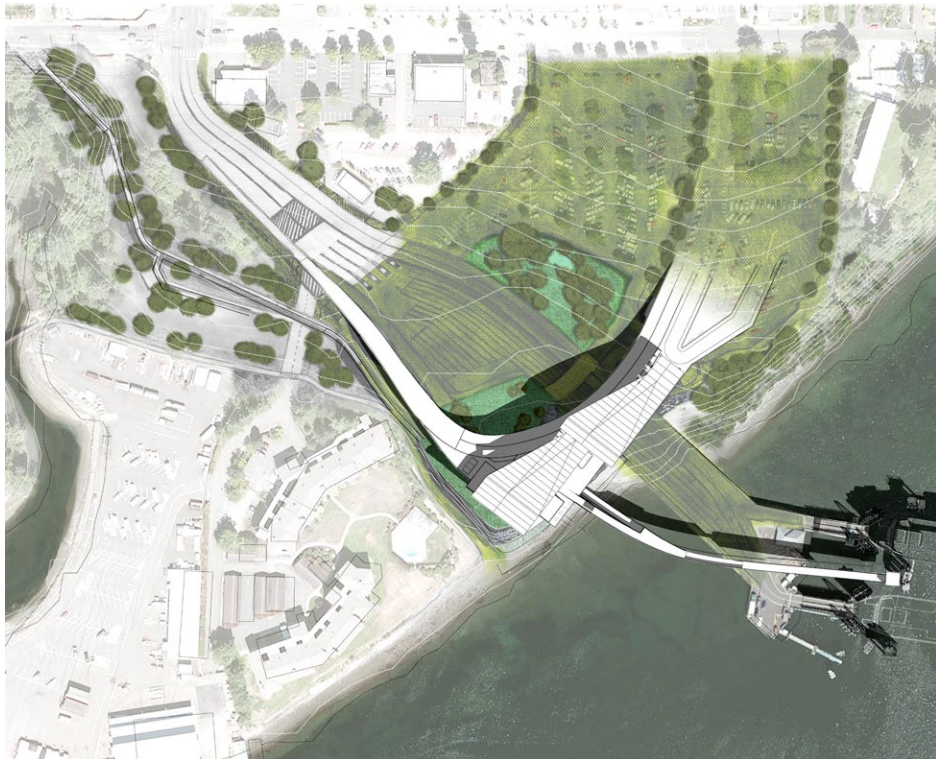
During this phase the buses have assembled along the platform level and arriving passengers are boarding the buses just as the arriving bus passengers are preparing to board the ferry. The two waiting areas are at their most active. Clusters of arriving pedestrian passengers begin to make their ways to the elevated walkway underneath the platform







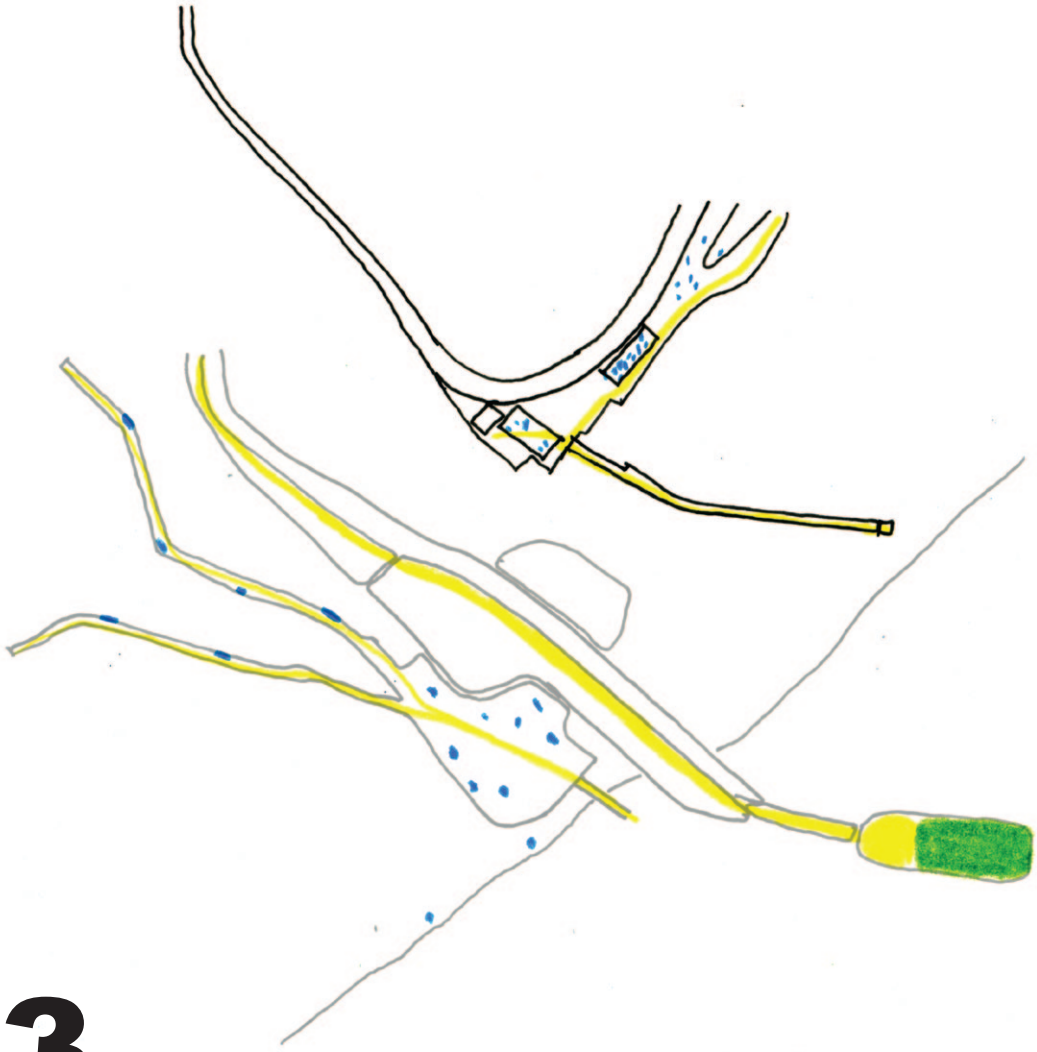


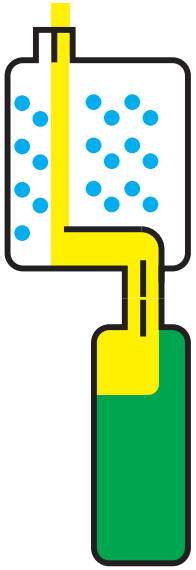


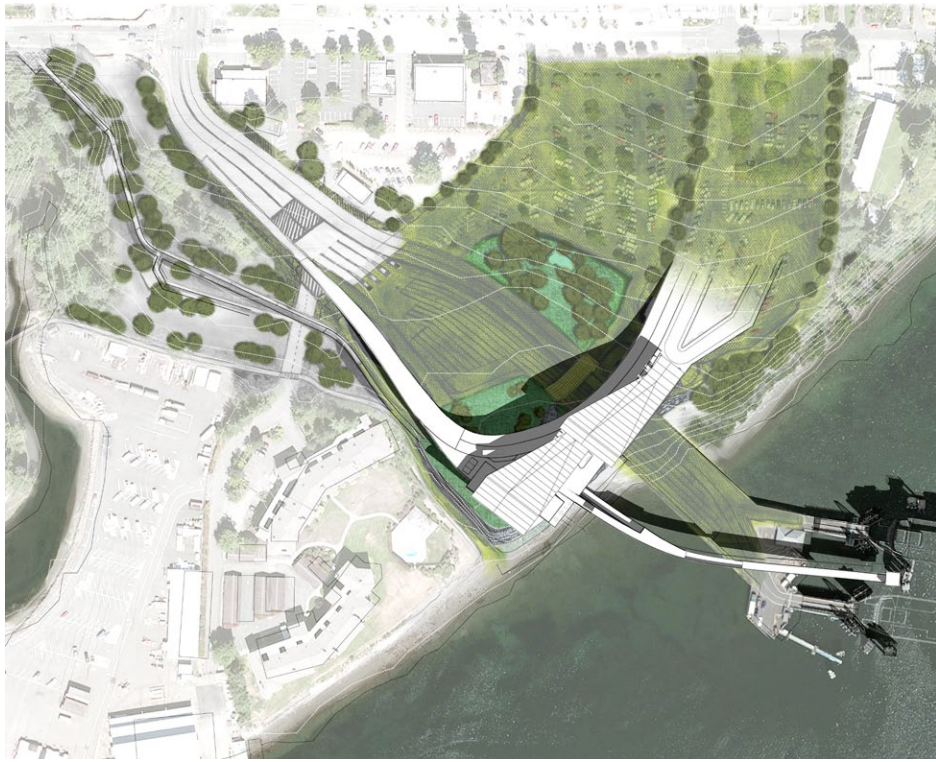
2

FIGURE 64. SITE SPECIFIC PHASE 2

During this phase the buses are leaving along the route to the northeast and the majority of arriving passengers have left the terminal area. Those assembled to board the ferry begin to make their walk down the pedestrian bridge, and the motorists are at their cars as the vehicle hold lanes become active.



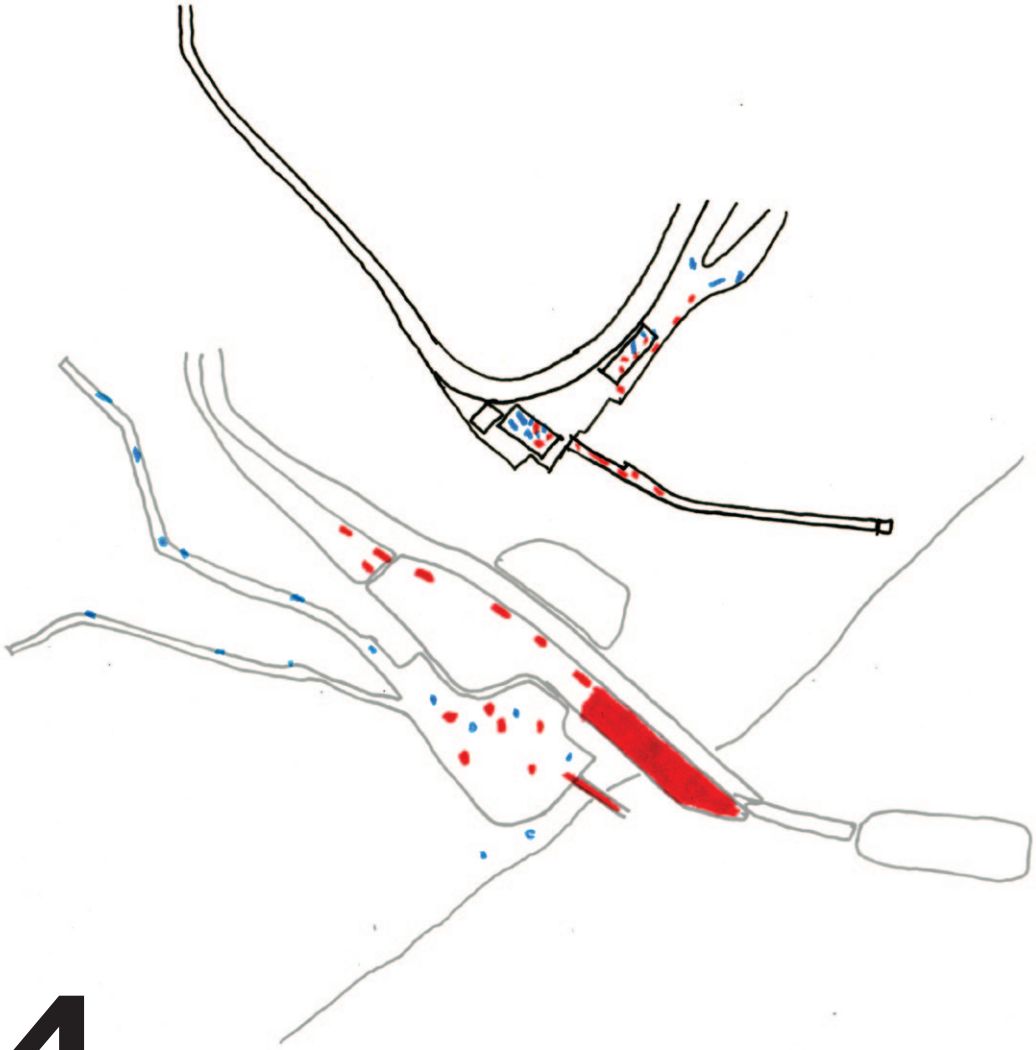


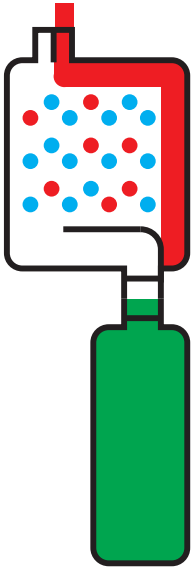


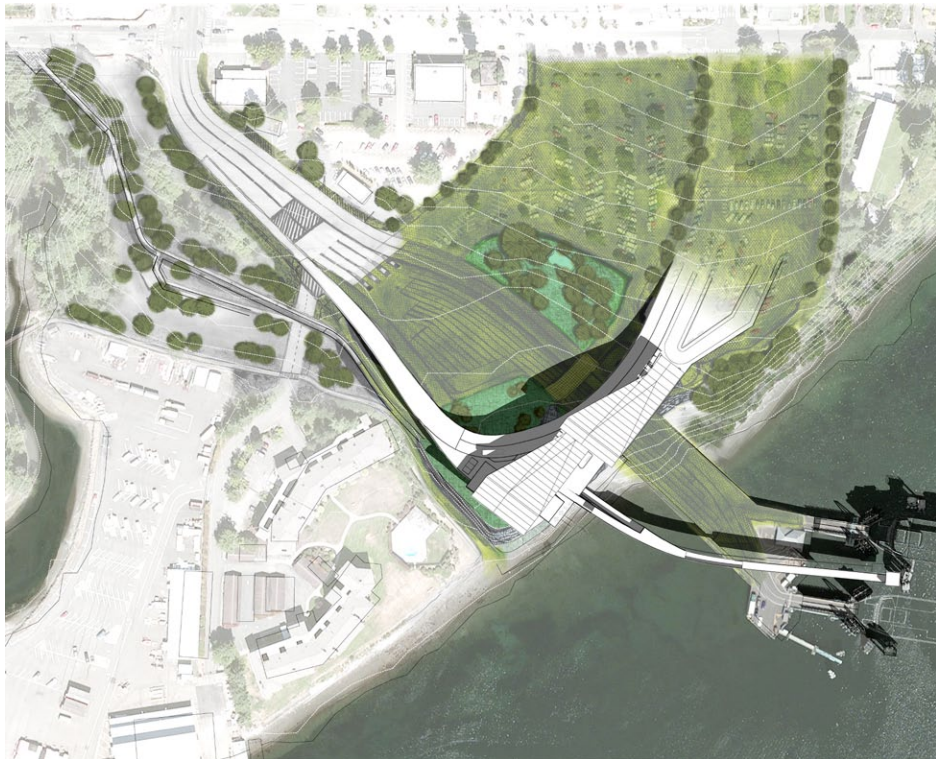
3

FIGURE 65. SITE SPECIFIC PHASE 3

During this phase the just on time individuals arrive on site and make their ways immediately to the boat. There are still some individuals who recently arrived and await passage away from the site or are lingering for other reasons, they congregate in the recently evacuated spaces of waiting.



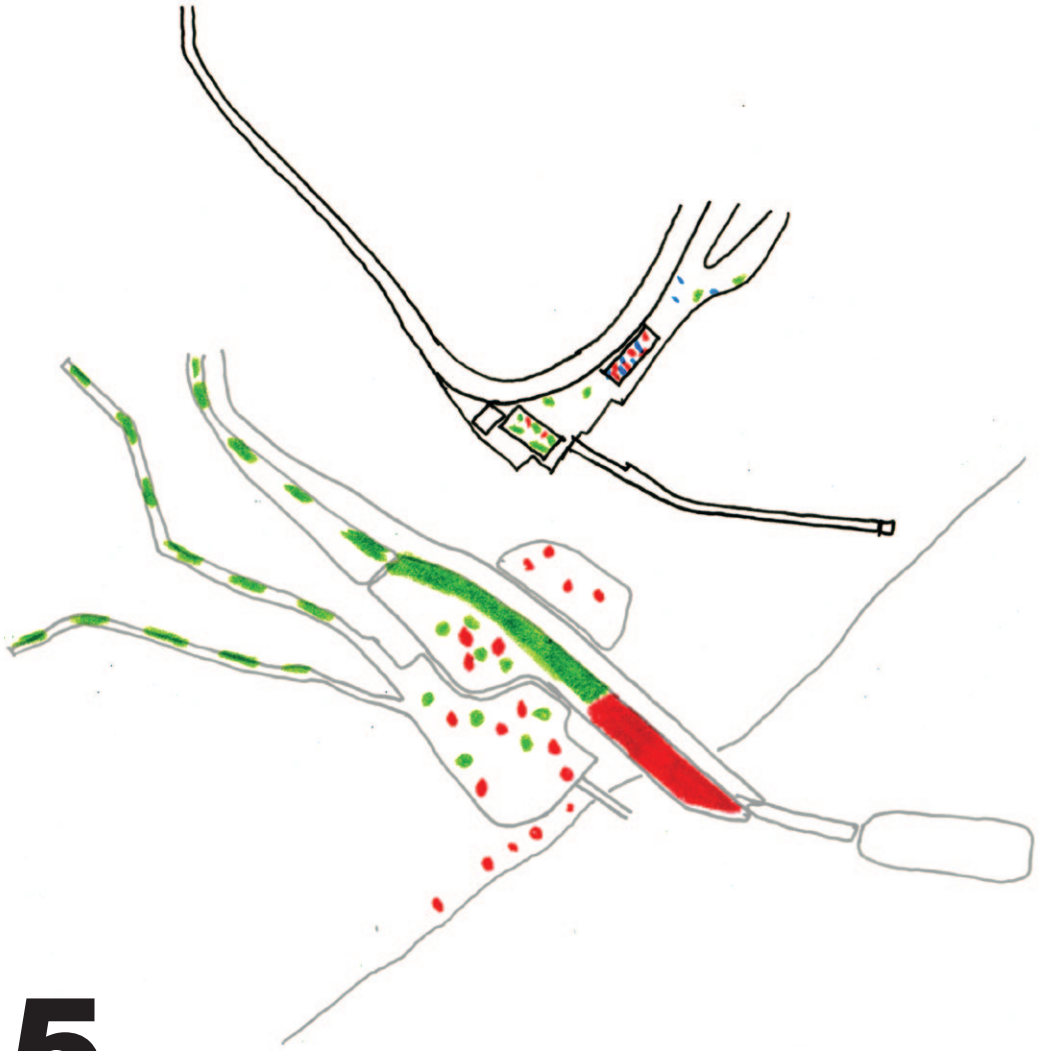


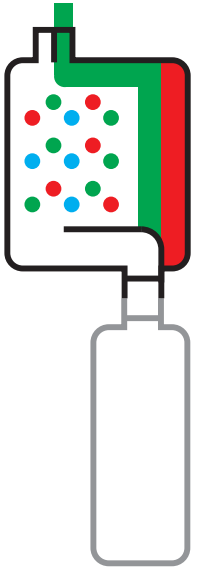


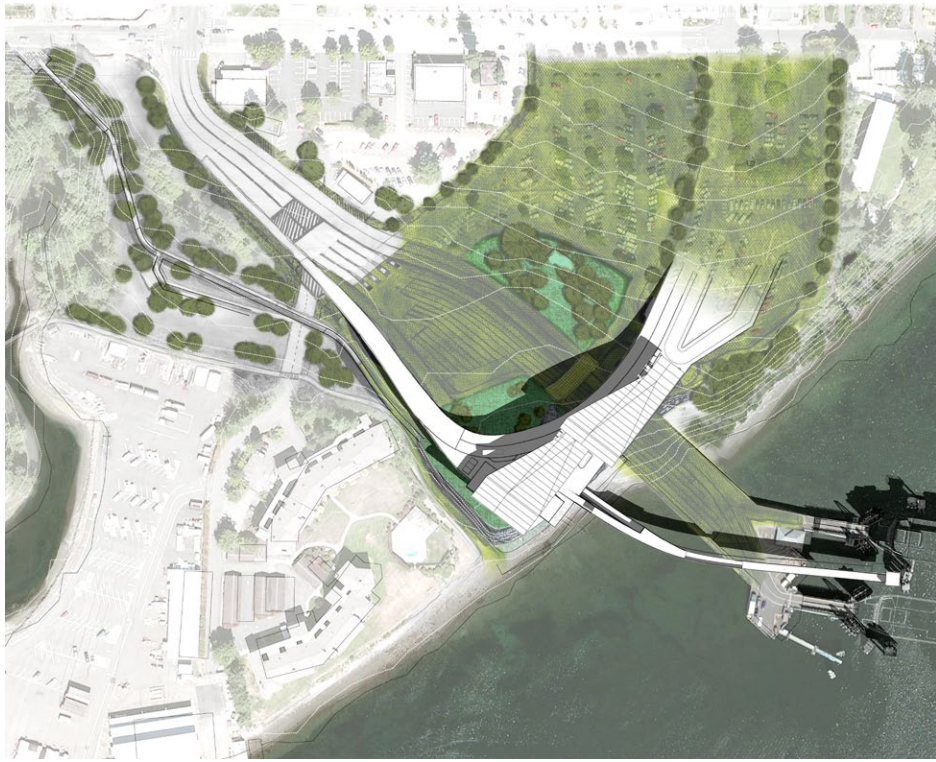
4

FIGURE 66. SITE SPECIFIC PHASE 4

During this phase the entry points to the ferry have been closed and no more boarding takes place. Across the site individuals are scattered along the approach to the ferry, once it is established that the boat has left they can now access the other portions of the site at a comfortable pace. The site is at its most quiet during this phase.



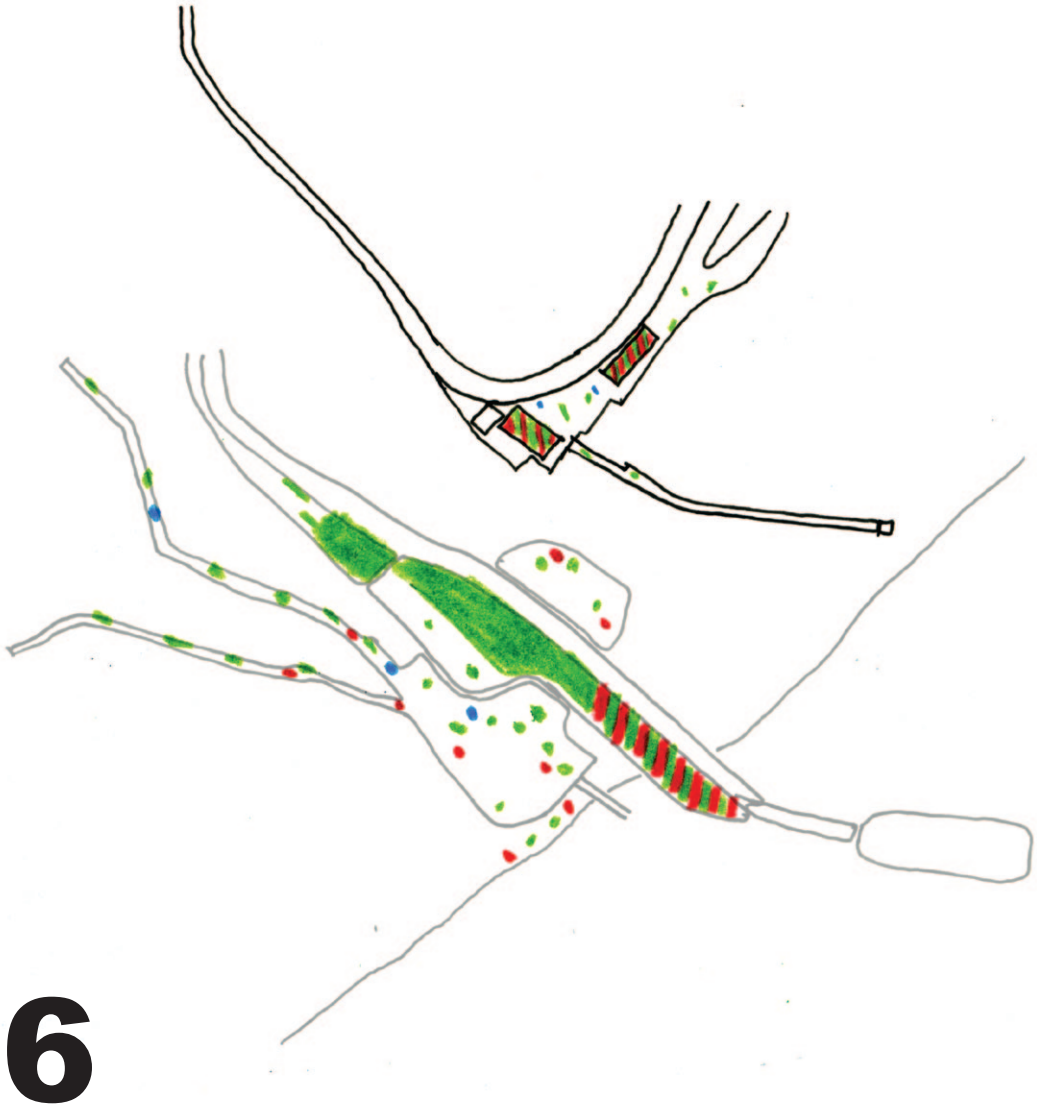


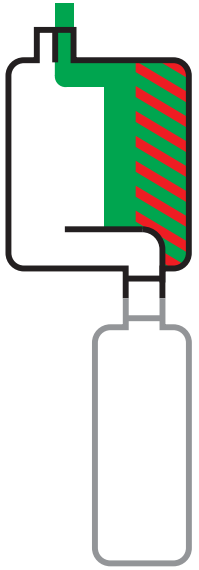


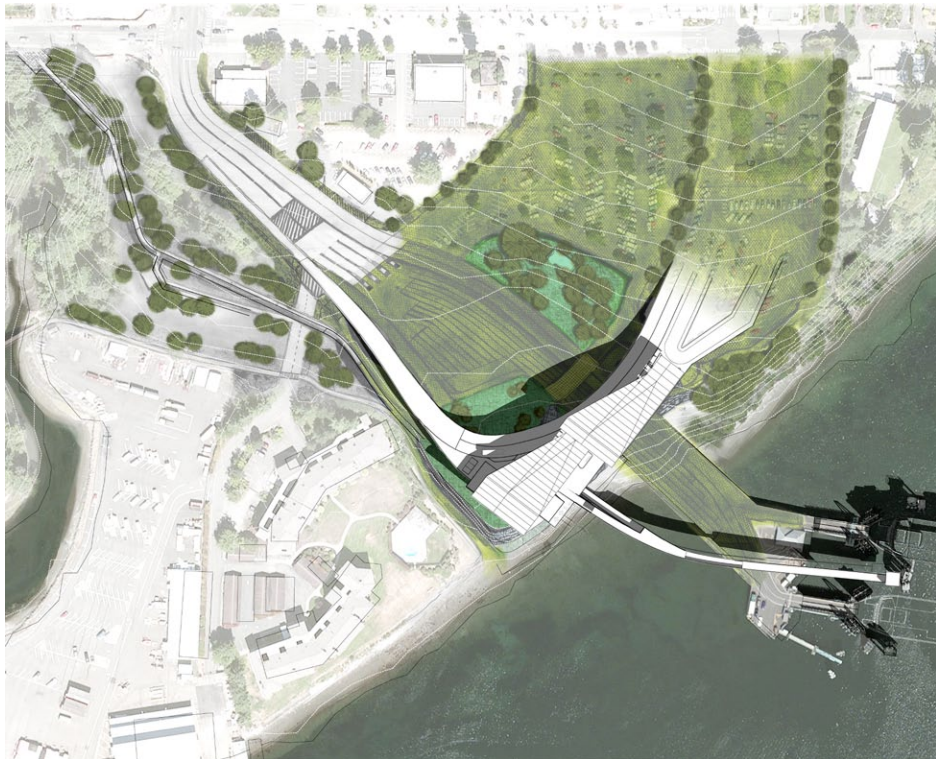
5

FIGURE 67. SITE SPECIFIC PHASE 5

During this phase most of the individuals who missed the boat have established themselves in other activities across the site. A slow trickle of early individuals begin to arrive on site and because they have a time duration similar to the late individuals they begin to utilize the other portions of the site.



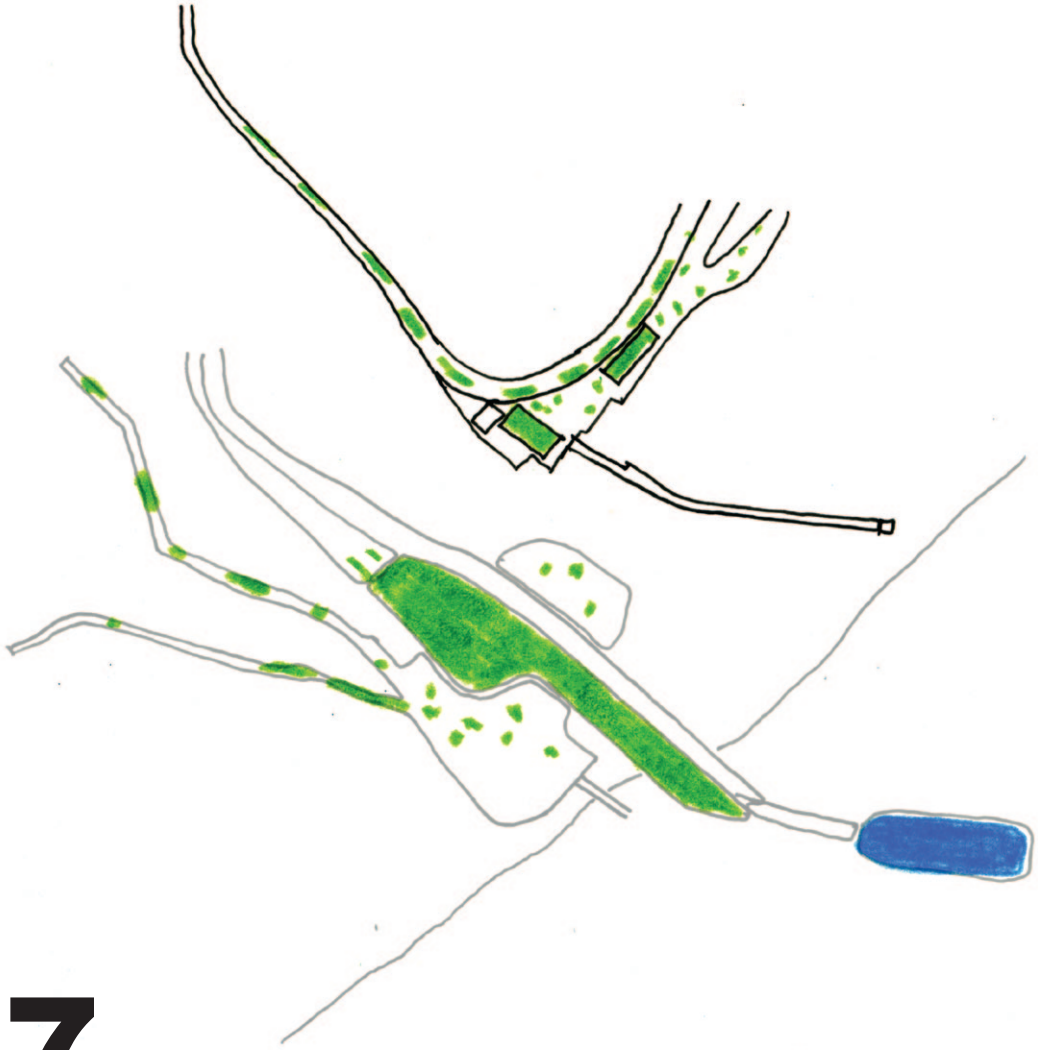


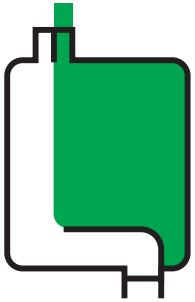


6

FIGURE 68. SITE SPECIFIC PHASE 6

During this phase more and more early arrivals are filling the site, the boat will at this point be visible on the horizon. This marks a shift in the activities of the individuals who previously missed the boat, they now no longer have their attention paid inwardly to the site assets but instead out to the approaching boat. Their mindset is thus the same as those just arriving, looking forward to boarding.





7

FIGURE 69. SITE SPECIFIC PHASE 7

During this phase the boat has docked and the ramps begin to lower into place. Motorists are returning to their cars and pedestrian passengers ready themselves to board. Along edge spaces of the upper platform people begin to congregate. A stream of buses animates the platform.

Appendix C - Vehicle Load and Unload Sequence

This sequential analysis presents the separate phases of loading and unloading of the ferry. Each transportation type has a specific phase in which it loads and unloads. The colors indicate the time embodiments which are tied to the Spatial Sequence shown in Figure 33.

FIGURE 70. LOAD/UNLOAD BY VEHICLE

Appendix D - WSF Terminal Analysis

This typological analysis consists of first identifying four key programmatic features of the ferry terminal and their spatial relationship. Those four key features are: the major traffic regulating intersection which establishes the terminal boundary between roads, the segregated areas of waiting for automobiles, pedestrians, and bicycles, the tolling area regulating automobile flows, and the pedestrian approaches to the ferry.

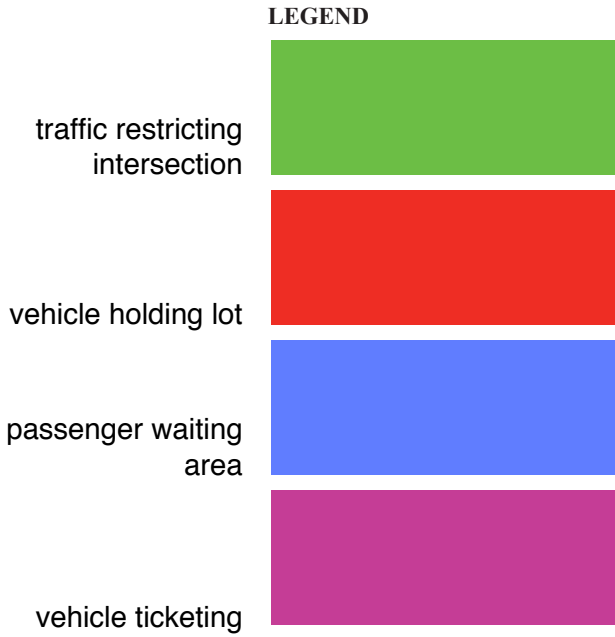


FIGURE 71. WSF TERMINAL CONTEXT MAPS

Seattle

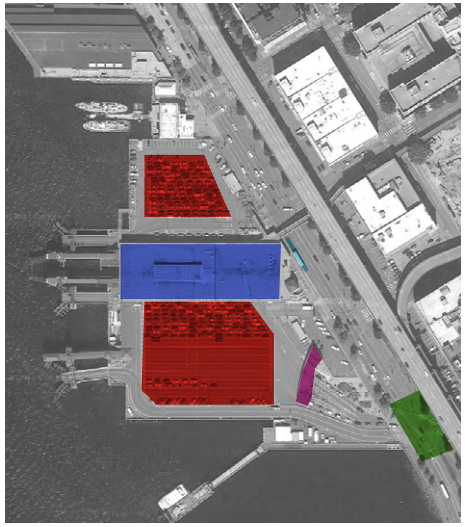


FIGURE 72. SEATTLE TERMINAL

Anacortes

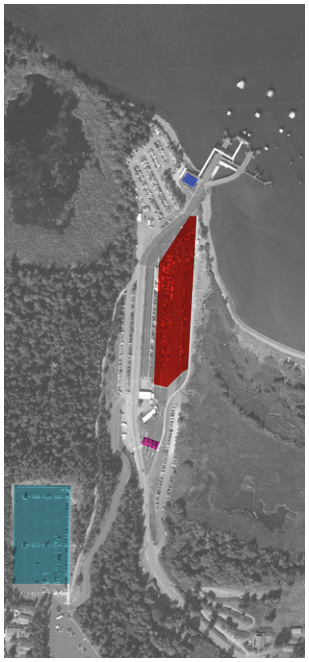


FIGURE 73. ANACORTES TERMINAL

Seattle and Anacortes are the two largest ferry terminals, Seattle serves the two largest routes (Bremerton and Bainbridge) and Anacortes serves the most destinations (the San Juan Islands and Canada).

Despite having a similar area as Seattle the spaces of waiting for the Anacortes terminal are minimal. Anacortes is a heavily tourist dependent terminal, and most of those tourists arrive by automobile, and therefore do not require shelter from the elements.

Kingston

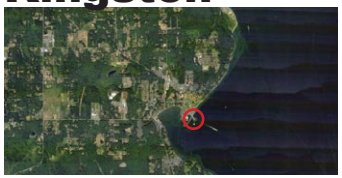
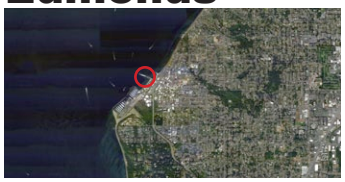


FIGURE 74. KINGSTON TERMINAL

Edmonds



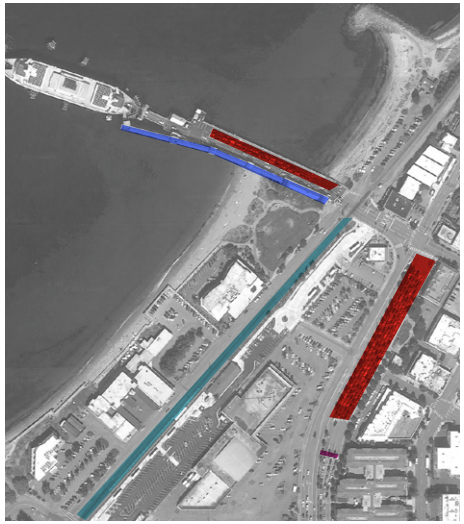
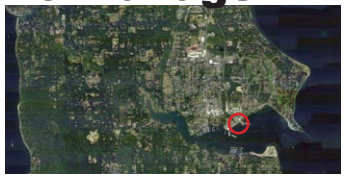


FIGURE 76. EDMONDS TERMINAL

Bainbridge



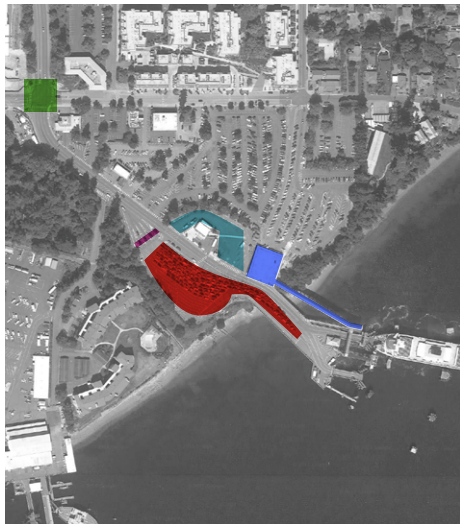


FIGURE 75. BAINBDRIGE TERMINAL

The second tier of heavily used terminals are these four. They all include overhead passenger loading sructures, at the Edmonds, Kingston, and Bainbridge passengers enter the OHL at grade, requiring substantial distances to gain the elevation required by the boat. At the Bremerton terminal passengers enter the OHL from a raised platform, which closes the distance between the OHL entry and the vesssel.

Bremerton

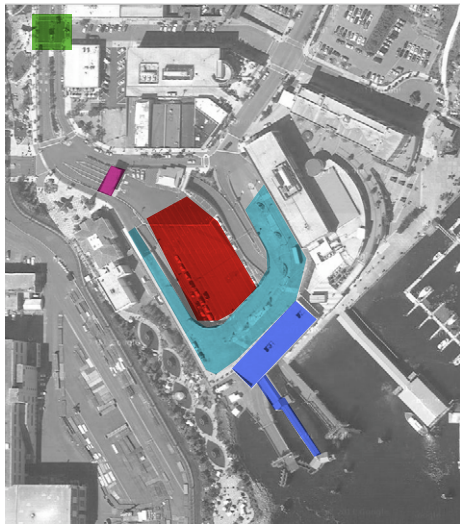
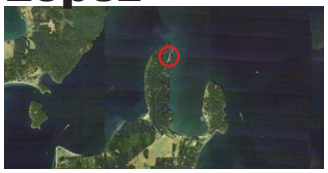


FIGURE 77. BREMERTON TERMINAL

Lopez



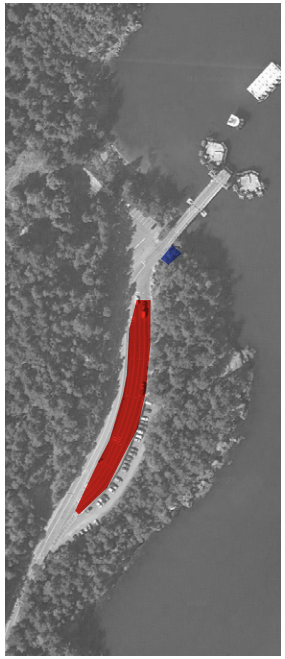


FIGURE 78. LOPEZ TERMINAL

Friday Harbor

FIGURE 79. FRIDAY HARBOR TERMINAL

Shaw

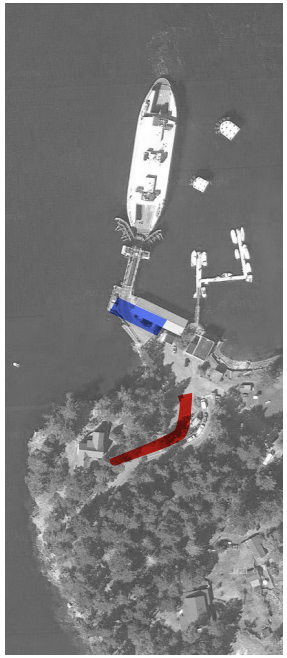


FIGURE 81. SHAW TERMINAL

These are the San Juan Island terminals served by the Anacortes terminal. Notice they do not have vehicle toll plazas, because round trip fare is purchased at the Anacortes terminal. This makes for a very minimal layout of spaces. The passenger waiting areas are small and placed abutting the shoreline, all passengers must walk aboard the vessel car deck.

Orcas

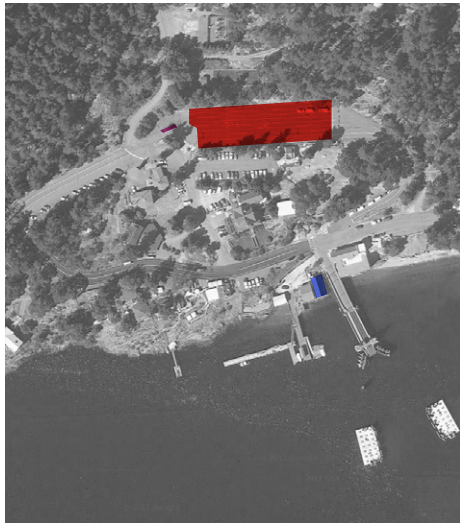
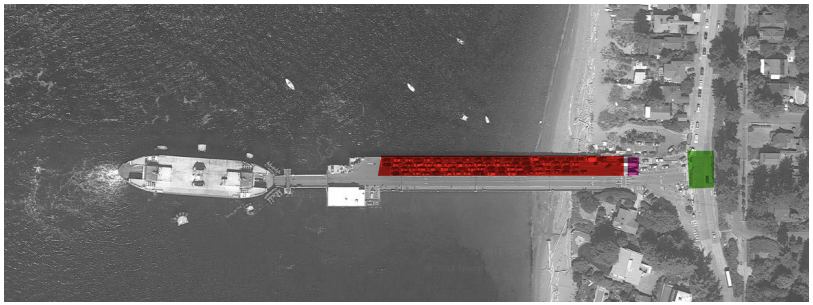


FIGURE 80. ORCAS TERMINAL



Southworth

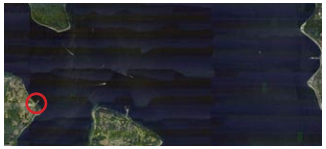


FIGURE 82. SOUTHWORTH TERMINAL

Fauntleroy

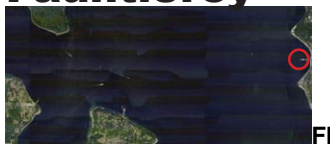
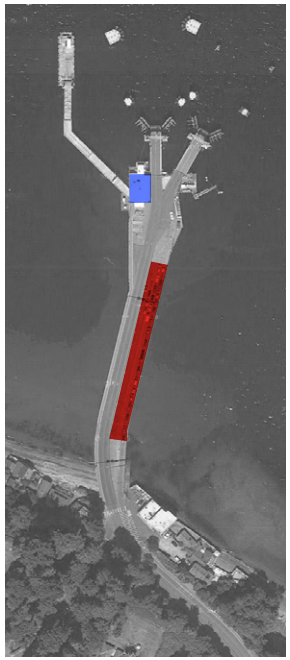


FIGURE 83. FAUNTLEROY TERMINAL



These three terminals form a triangle in the south Puget Sound. Notice the sim

Vashon

FIGURE 84. VASHON TERMINAL

Coupeville

FIGURE 85. COUPEVILLE TERMINAL

Clinton

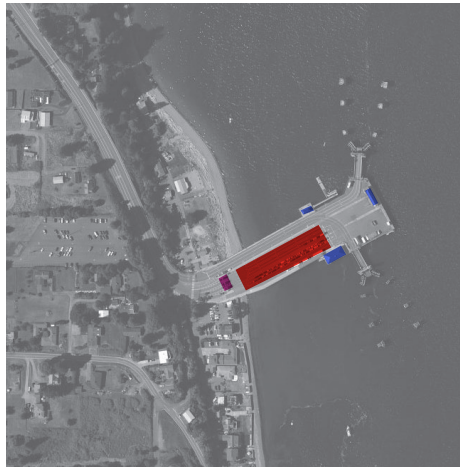


FIGURE 86. CLINTON TERMINAL

Port Townsend

FIGURE 88. PORT TOWNSEND TERMINAL

The four small scale terminals which connect Whidbey Island to both shores of the Puget Sound. They share a similar sized ferry and therefore their vehicle holding lots are similar in area.

Mukilteo

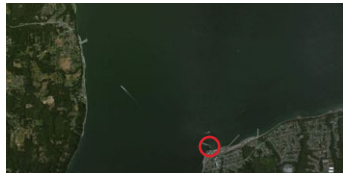


FIGURE 87. MUKILTEO TERMINAL