

ENHANCING AND CONNECTING AQUATIC SPACE IN JEFFERSON CHALMERS

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TABLE OF CONTENTS

THESIS STATEMENT AND ABSTRACT		10000000000000000000000000000000000000	
WHY JEFFERSON CHALMERS?			02
CONTEXT AND CONDITIONS			03
A BRIEF HISTORY		F.W.Var.R.Flev. B.S.	Light Light
PLANS AND PROJECTS IN JEFFERSON	N CHALMERS		05
READINGS			06
PRELIMINARY STUDIES			07
SKETCH PROBLEMS	THE RESERVE TO SERVE		08
COMMUNITY EVENTS			09
COMMUNITY SURVEY			
SITE ANALYSIS			
SCHEMATIC DESIGN			12
DESIGN PROPOSAL I: COMMUNITY CEI	NTER	ulle or balk a	3
DESIGN PROPOSAL II: CONNECTIVITY	STRATEGY		4
CONCLUSION	The state of the s		15
BIBLIOGRAPHY	The first of		6





THESIS STATEMENT:

By proposing a public space intervention utilizing community engagement data, this thesis will study how to augment the riverfront spaces of the Jefferson Chalmers neighborhood of Detroit, enabling them to better serve their community by addressing programmatic desires of the residents and mitigating the geographic disconnectivity inherent in the fabric of the area.

A B S T R A C T

This thesis posits that using community feedback supported by research and tempered with design insight will engender a more successful riverfront public space for the residents of Jefferson Chalmers, increasing the neighborhood's connection to the water. Through conducting an extensive investigation of the neighborhood, this study will collect citizens' requests and opinions about their aquatic spaces and subsequently curate that feedback to inform a proposal for an architectural intervention within a greater planning strategy that serves to connect its community laterally along the water, longitudinally to the water, and vertically into the water itself.



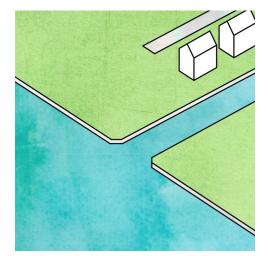


Figure 1: Aquatic Resources

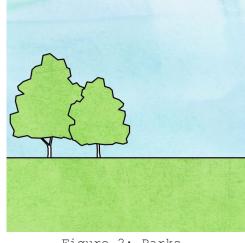


Figure 2: Parks

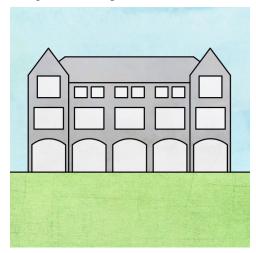


Figure 3: Historic Architecture

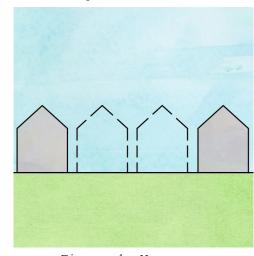


Figure 4: Vacancy

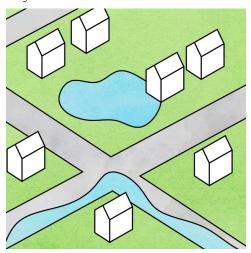


Figure 5: Flooding

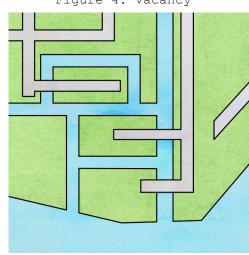


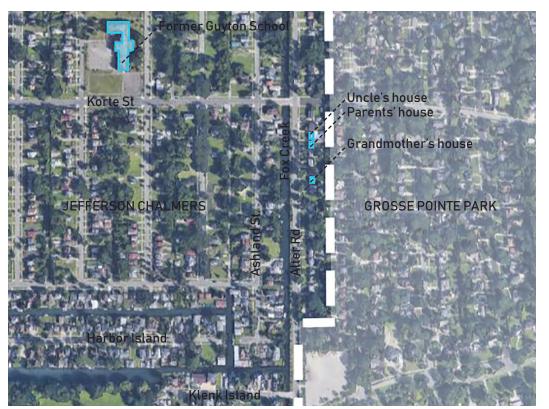
Figure 6: Disconnectivity

To explain this project's specific focus on Jefferson Chalmers, pictured here are a series of diagrams that highlight the assets and opportunities that encouraged a study of this neighborhood. The primary interest in Jefferson Chalmers is derived from its riverfront location in conjunction with its network of canals, a condition found in no other neighborhood of Detroit. Additionally, the area's abundant expanses of parks were very attractive to a thesis with an emphasis on public space. Furthermore, Jefferson Chalmers is home to a wealth of historic architecture dating from the early 20th Century, which, while not explicitly pertinent to this thesis, served to further entice a study of this community.

However, it is not only the positive qualities of the area that helped to land this thesis in Jefferson Chalmers, as the neighborhood's considerable vacancy, frequent flooding, and discontinuous geography also are appealing subjects of study. While individually these qualities might not be unique to this neighborhood, they are uniquely combined in Jefferson Chalmers.



Figure 7: Parents' (center) and Uncle's (left) former houses on Alter Road



It was a more personal connection, however, that initially caused Jefferson Chalmers to become the area of interest for this thesis. What originally drew my attention to this place was a Request for Proposal put out by the City of Detroit, combined with the nearly simultaneous discovery that my parents, sisters, and uncle used to live in Jefferson Chalmers. While I had known that my family used to live on Alter Road before I was born, I was unaware of which neighborhood of Detroit they lived in. Upon entering their previous address into Google Maps one day, I learned that they used to reside in Jefferson Chalmers, in a duplex across the street from Fox Creek. The discovery that my family lived next to a canal just two blocks from the Detroit River in a neighborhood that the City has recently taken interest in revitalizing virtually guaranteed that my thesis would study Jefferson Chalmers.

In November of 1993, my parents moved to 274 Alter Road from Kalamazoo with my oldest sister, who was less than a month old at the time. They moved to Detroit because my father got a job there, choosing to live in Jefferson Chalmers because the house next door to my uncle was available. My uncle, who lived in and owned a duplex at 280 Alter Road since 1987, moved to Jefferson Chalmers because "it was good, affordable housing next to a good part of town." He stayed for ten years because, in his words, he "lived there for free since [his] tenant's rent paid the mortgage," only leaving because of a job transfer to Kansas City in 1997. Around the time my parents moved there, my grandmother also bought a house (from a group of nuns) in Jefferson Chalmers, at 254 Alter Road. However, shortly after this, she met her second husband and moved to a scenic little town in northern Michigan instead. Two years after moving to Detroit, my other sister was born, and thus every bedroom in my parents' house was filled.

My parents tell me that while Alter Road itself was fairly nice, the next street over (Ashland) was "a mess," with several burned-out houses and abandoned cars. Although they lived less than a half mile from the Detroit River, my family reports that they never went to enjoy it, as they did not view this riverfront as a desirable public space, referring to it as both "dangerous," and "nasty." At the time, there was a trailer park at the foot of Alter Road on the river, and the riverfront parks were not perceived to be safe "at day or at night", due to noticeable drug activity, which has since been eradicated. Despite this, they enjoyed their home on Alter Road, but figured that they would need a slightly bigger house when they were expecting to have me, moving out just before my birth in 1996. They would have liked to buy my grandmother's previous house just down the block as it had plenty of room for our newly-expanded family, but ultimately they made the decision to leave Detroit for a variety of reasons, namely that the emergency response times were too long (one elderly neighbor of theirs once had to wait 40 minutes for an ambulance), that the city's taxes were disproportionally higher than the quality of services they provided, and that they wanted to live closer to a Lutheran school.

In addition to my family's ties to Jefferson Chalmers, I have my own connection to the neighborhood, formed through my most recent summer employment. A little while after learning that my family used to live in Jefferson Chalmersand consequently deciding that my impending thesis would study that neighborhood- I began an internship at Quinn Evans Architects, who were selected as the historic preservation consultant on the City of Detroit's RFP for Jefferson Chalmersan incredible bit of happenstance I discovered on my first day of City's vision for the area and the history of Jefferson Chalmers. Many days were spent diving deeply into the neighborhood's history, jumping down infinite rabbit holes of census records, city directories, and newspaper archives to gather any and all information on specific commercial nodes and the former Stark and Guyton Schools for Historic Structures Report documents. I also gained plenty of exposure to the location of my future thesis through numerous site visits, the nature of which were to discern the unique character of each block in the neighborhood to determine possible Conservation Overlay Districts (read: I got paid to walk around and take notes about houses). As a result, I walked down almost every street in Jefferson Chalmers.



Figure 9: On the job in Jefferson Chalmers



Figure 10: On the job in Jefferson Chalmers

At Quinn Evans, I was fortunate enough to attend meetings with the Planning and Development Department, as well as other consultants on the project like W Architecture and McEwen Studio. Through these meetings I was able to watch the creation of the neighborhood framework plan unfold before me. I even acquired my first taste of community engagement, attending the one of the community meetings put on by the City of Detroit to discuss the ongoing planning and projects in the

area. At this meeting, I was not a member of the public coming to be informed but a member of the project coming to inform the public. At the end of the summer, the team at Quinn Evans was exceedingly generous, giving me permission to use their historic maps, site photos, and onboarding materials for this thesis.







Figure 11: Lakewood Street



Figure 13: Marlborough Street



Figure 15: Manistique Street



Figure 12: Freud Street



Figure 14: Piper Boulevard

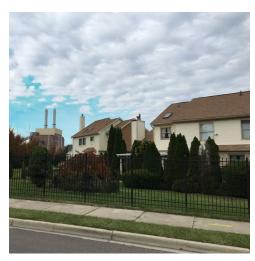


Figure 16: Clairpointe Street

RESIDENTIAL AREAS

The conditions found in the residential areas are the best indicator of this neighborhood's diverse environment. Much of the housing stock of Jefferson Chalmers was built during the 1920s, with many of these homes still in impeccable condition today, particularly south of Jefferson Avenue nearer to the canals. Examples of residential streets that have maintained their density, historic character, and mature tree canopy include Piper Boulevard, Marlborough Street, and Lakewood Street, whose architectural styles range from Tudor revival to American Four-Square and from Neo-Federal to Arts and Crafts. North of Jefferson, the few houses that remain are small bungalows dispersed in vast tracts of vacant land, imparting a soundless, rural environment. Streets that best typify this condition include Eastlawn or Coplin, which lack a tree canopy and have little to no houses left standing.

Somewhere on the spectrum between a dense, intact community and a sparse, fractured one lies the streets of Manistique, Philip, and Ashland, as well as the "CTC," the blocks between Clairpointe, Tennessee, and Conner streets. These areas retain more homes than the streets north of Jefferson yet have much more vacant land than the intact areas closer to the river. These zones of simultaneous density and vacancy are where urban agriculture is most prevalent. It is also in this mixed typology where two schools lie vacant– Stark School on Avondale and Guyton Elementary on Philip. Another residential condition of this neighborhood is the suburban gated cul-desac, filled with beige homes and plain apartment buildings that completely disregard the established street grid and character of the area, as typified by Victoria Park.

COMMERCIAL CORRIDORS

The next typology present in Jefferson Chalmers is the commercial corridor, found on Jefferson and Kercheval avenues. Jefferson Avenue has two conditions- the contemporary strip mall to the west and the early 20th Century main street to the east, the latter of which was designated as a historic district in 2004 [1]. Located between Eastlawn and Alter Roads on Jefferson Avenue, the Jefferson Chalmers Historic Business District is comprised of forty historic commercial, institutional, and apartment buildings, the majority of which are Art Deco, Neo-Gothic, or Classical revival and were completed by architects like Charles N. Agree and Donaldson & Meier [2]. Notable buildings in the district include the St. Columba Parish Building, the Vanity Ballroom, 14400 E. Jefferson, the Chalmers Building adjacent Monticello Ballroom, and Windmill Pointe Manor. Because of the architectural excellence and relative integrity of this district, the National Trust for Historic Preservation has bestowed upon the Jefferson Chalmers Historic Business District "National Treasure" status, the first one in the state of Michigan [3].

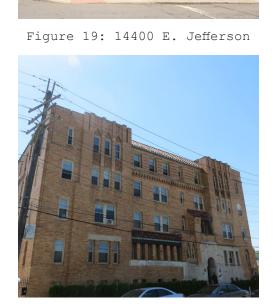
Kercheval Avenue, which also features historic architecture but has less remaining building stock, acts as a secondary commercial artery north of Jefferson. Significant buildings on this corridor include the Monteith Public Library, St. John's Congregational Church, and a four-story Moorish revival apartment building.



Figure 18: Vanity Ballroom



Figure 20: Monticello Ballroom



Building

Figure 21: Windmill Pointe Manor

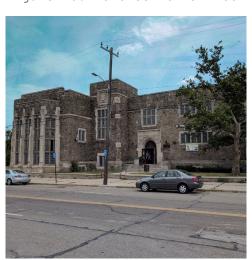


Figure 22: Monteith Library





Figure 23: Dossin Mansion



Figure 25: Harbor Island



Figure 24: Harbor Island



Figure 26: Fox Creek





T H E C A N A L S

The third typology found in Jefferson Chalmers is the canals, of which the neighborhood boasts three miles [4]. These technically public yet veritably intimate waterways are Jefferson Chalmers' best-kept secret, as they are only able to be experienced by boat.

True to the variegated urban fabric they cut through, these canals feature a wide variety of conditions along their shorelines. Parts on and around Grayhaven Island feature a smattering of historic mansions- like the Lawrence Fisher Mansion, a lavish Mediterranean villa, or the purportedly haunted Mission-style Dossin Mansion. The remainder of Grayhaven is lined with grey apartments and an array of nearly identical white and beige suburban houses. Another common condition along the canals is the bucolic scenery of overgrown parks and vacant land, as no fewer than three failed developments lie on canal frontage. Finally, the picturesque, modestly-sized cottage is ubiquitous to the canals of Harbor Island and Klenk Island, usually paired with a charming yet collapsing boathouse.

[In order to better explore this unique urban condition, I embarked on a kayak tour of Jefferson Chalmers's canals one cold and drizzly October morning. Armed with two jackets, a waterproof phone case, and a sense of adventure, I paddled through the pristine canals and the startlingly choppy Detroit River, taking as many photos as I could.]

Figure 29: Maheras-Gentry Recreation Center



Figure 31: Lenox Community Center in A.B. Ford Park



Figure 33: Riverfront-Lakewood East Riverwalk



Figure 35: Mariner Park Riverwalk



Figure 30: Maheras-Gentry Pond



Figure 32: A.B. Ford Riverwalk



igure 34: Riverfront-Lakewood East



Figure 36: Fox Creek in Mariner
Park

RIVERFRONT PARKS

The fourth and final typology found in this neighborhood is that of the riverfront park. The 120 acres of public waterfront [4], which have become the center of this thesis's study, are split between four parks: Maheras-Gentry, Alfred Brush Ford, Riverfront-Lakewood East, and Mariner. At 15.8 acres of park per 1,000 citizens, Jefferson Chalmers has 1.95 times more park land than the Detroit average, which is 8.1 per 1,000 residents [5]. While affording scenic riverfront views of Canada, Belle Isle, and even downtown Detroit, these vast parks are somewhat lacking in accessibility, amenities, and infrastructure, with two vacant community centers between them. The first vacant community center is located behind the abandoned Stark Elementary School, in Jefferson Chalmers's largest park, Maheras-Gentry, which is situated at the neighborhood's southwestern edge. Baseball diamonds cover the majority of the land in this park, while the remainder has dilapidated basketball courts, a man-made habitat remediation pond (which fishermen and blue herons alike have been known to use), a small hill, a picnic shelter, a shuttered public pool, and a walking trail.

The second abandoned recreational facility- the Lenox Community Center- is found in Alfred Brush Ford Park, the second-largest and most activated of the four parks. A.B. Ford, as it is known, is adjacent to the most intact residential area in the community, and features a riverwalk, two playgrounds, a soccer field, basketball courts, a picnic shelter, and the only restroom in any of Jefferson Chalmers's parks. It also has two abandoned missile control towers, an anachronistic leftover from the Cold War era. Across the canal from A.B. Ford is Riverfront-Lakewood East Park, the third-largest and least-



Figure 37: Riverfront Parks Comparison



Figure 38: Maheras-Gentry



Figure 39: A.B. Ford



Figure 40: Riverfront-Lakewood East



Figure 41: Mariner Park



Figure 42: FEMA 100-year floodplain



Figure 45: Existing buildings cccupancy map





Figures 43 & 44 : Disconnectivity examples

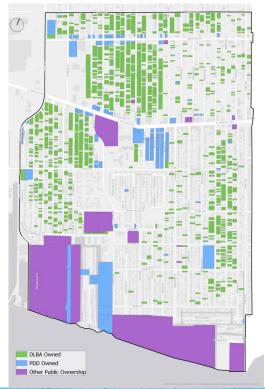


Figure 46: Publicly-owned land map

used park. Partially forested and virtually abandoned, this park has no programmatic elements, save a solitary picnic shelter and an overgrown riverwalk. A barricade of concrete and boulders prevents vehicles from entering an abandoned parking lot, making visitors feel unwelcome. The site is only accessible by one bridge at the end of Alter Road, as the park is bound on all sides by canals and the Detroit River. The last and smallest park is Mariner Park, which sits on Fox Creek across from Windmill Pointe Park, an exclusive recreational space for Grosse Pointers. A lighthouse-which might look like a replica but actually dates back to 1933 [6] - stands at the corner of the site, and soccer fields have replaced the former Marine Hospital. The only apparent programmatic commonality between all four of the riverfront parks is the prevalence of fishing, which can be observed in every park most months of the year.

In contrast to the public waterfront of Jefferson Chalmers, the private Windmill Pointe Park across Fox Creek has a different repertoire of programs. This park, which is only accessible to citizens of Grosse Pointe, boasts a movie theater, concessions stand, tennis and volleyball courts, a marina, and a pool.

PHYSICAL CONDITIONS

Outside of the four typologies of residential areas, commercial corridors, canals, and riverfront parks, there are additional physical conditions that define Jefferson Chalmers. For example, much of the area lies within a floodplain due to its low elevation and poor soil drainage, and as a result the neighborhood experiences frequent flooding at even



Figure 47

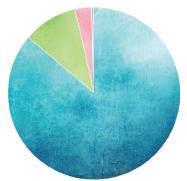
POPULATION DECLINE, 2010-2016 Neighborhood-Wide



City of Detroit Jefferson Chalmers

Figure 48

JEFFERSON CHALMERS RACE/ETHNICITY

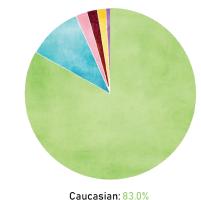


African-American: 86.3% Caucasian: 10.2% Multiracial: 3.2% Other: 0.3%

Figure 49

\$32,942 \$28,099 Solve the state of the stat

GROSSE POINTE PARK RACE/ETHNICITY



African-American: 10.5%
Multiracial: 2.1%
Asian: 1.9%
Hispanic: 1.7%
Figure 50 Other: 0.7%

MEDIAN HOUSE INCOME, 2016

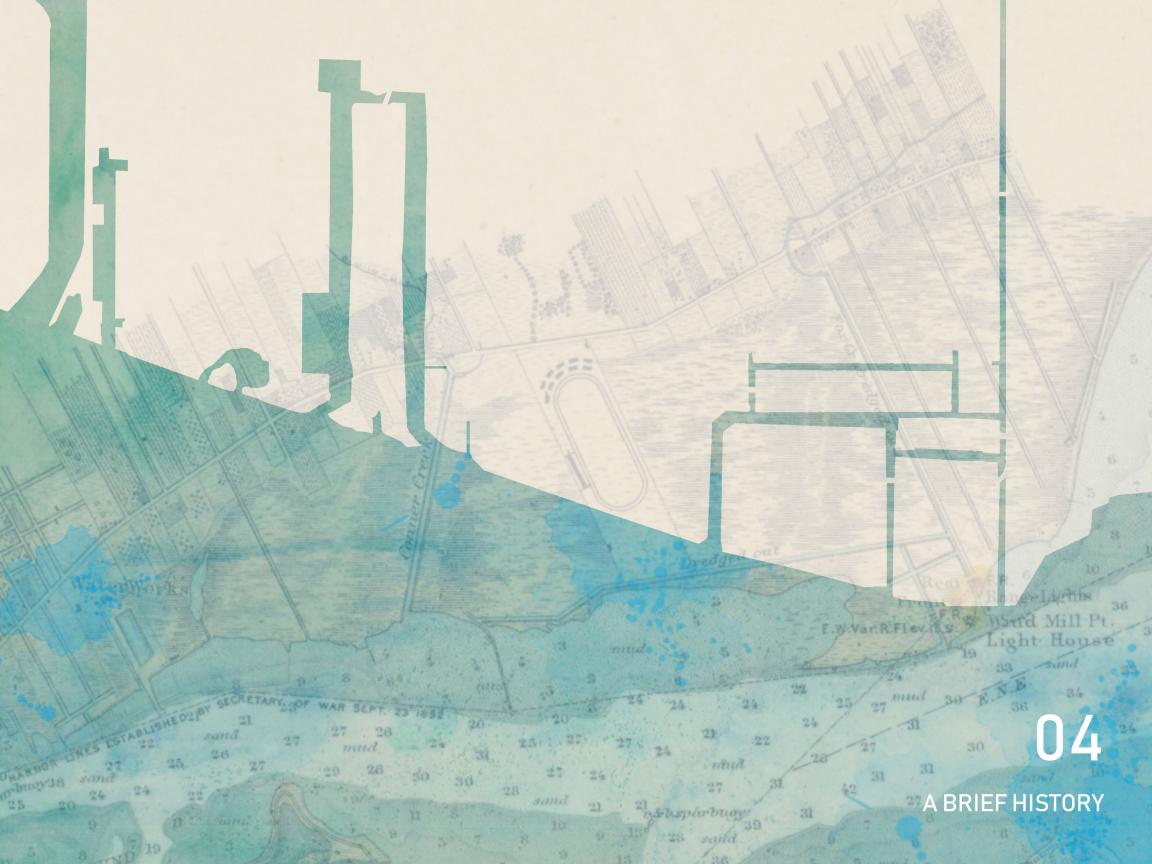


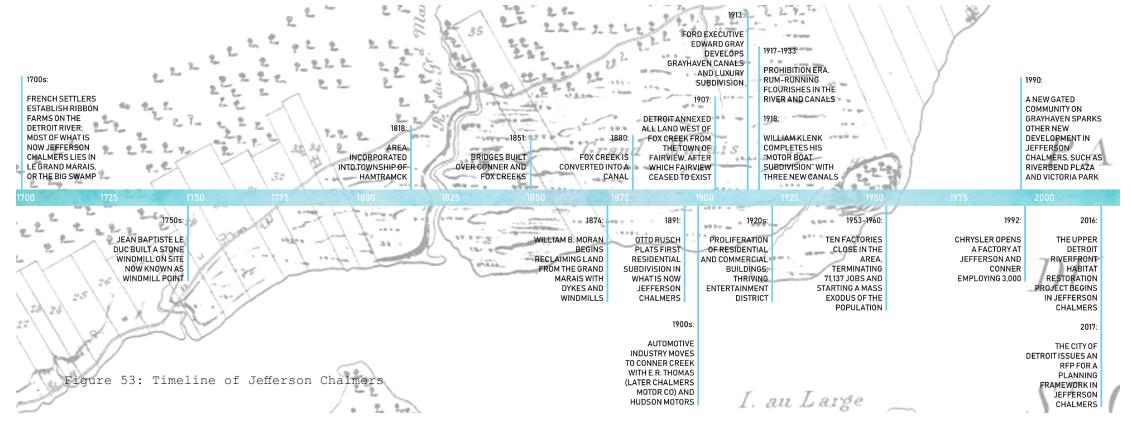
Figure 52

normal rain events. Furthermore, because of the canals and an extended period of urban renewal, the street grid is disjointed and discontinuous, and thus not very walkable. There are few bridges over the canals, so walking between the adjacent parks of A.B. Ford and Riverfront-Lakewood East has been recorded to take over a half hour [7].

D E M O G R A P H I C S

The final conditions of Jefferson Chalmers pertain not to the physical environment but to the people that live there. The current population is estimated to be 7,881, which is an 11% decrease from 2010 [8]. By contrast, Detroit as a whole sustained an 8% population loss between 2010 and 2016, signifying that Jefferson Chalmers has a slightly accelerated rate of exodus [5]. The demographics of Jefferson Chalmers are fairly homogeneous, with 86.3% of the population being African American [9]. The remaining minority is comprised of 10.2% Caucasian, 3.2% Multiracial, and 0.3% "Other" [9]. The neighboring Grosse Pointe Park is reversely homogeneous, with an 83% Caucasian population [9]. Distantly after that, the population is 10.5% African American, 2.1% Multiracial, 1.9% Asian American, 1.7% Hispanic, and 0.7% "Other" [9]. The median household income of Jefferson Chalmers is \$32,942, which is nearly \$5,000 higher than the Detroit average of \$28,099 [10]. This, however, pales in comparison to the average household income of Grosse Pointe Park, which is over triple that of Jefferson Chalmers, at \$104,914.





As most Detroiters know. French settlers established ribbon farms on the Detroit River in the early 1700s, taking advantage of an existing Indian trail that ran approximately where Jefferson Avenue is today [2]. The area that is now Jefferson Chalmers began as a vast wetland, which the French appropriately named 'Le Grand Marais,' or the Big Swamp [2]. Flowing through this wetland were two creeks, the Rivière du Grand Marais and the Coulée de Renards. At the eastern edge of this marsh was a sandy promontory named Le Presque-Île. later rechristened Windmill Point for a windmill erected by Jean Baptiste Le Duc in the 1750s [2]. The windmill was later accompanied by the Windmill Point Lighthouse in 1838, an iteration of which still stands today [6]. Since the land in the Grand Marais was inhospitable, it was not settled as early as the rest of Detroit's riverfront, as the first map showing settlements within the marsh dates to 1796.

Despite being incorporated into the Township of Hamtramck in 1818, this boggy land would remain sparsely settled until 1874, when a prominent landowner named William Moran decided to start using dykes and windmills to reclaim land from the swamp between the Rivière du Grand Marais and the Coulée de Renards, which the successive English settlers had renamed Conners Creek and Fox Creek, respectively [2]. In 1891, developer Otto Rusch platted the first subdivision in what would later become Jefferson Chalmers, the same year that rail magnate George Hendrie opened his rapid transit line on Jefferson Avenue [2]. Much of the land south of Jefferson was recreational, with fishing, boating, horseracing, and automobile racing prevalent [2]. The remnants of the neighborhood's racing history are still visible in the brick paving of Marlborough Street today [2].



Figure 54: 1876 lake chart



Figure 55: 1907 lake chart



The automotive industry moved into the area with the opening of the E. R. Thomas Company- later known as the Chalmers Motor Co.- in 1905 [2]. Two years later, Detroit annexed the lands west of Fox Creek from the short-lived city of Fairview, by which time both Conners and Fox Creeks had been converted into canals and had bridges where they intersected Jefferson Avenue [2]. Around this time, resort hotels and boathouses started popping up along the riverfront and residential developers began creating new canals to give their properties the appeal of waterfront living [2]. In 1910, the Hudson Motor Company opened a plant designed by Albert Kahn, and shortly thereafter, the Continental Motor Company also moved to Jefferson Chalmers, further establishing the area adjacent to Conners Creek as an industrial district [2].

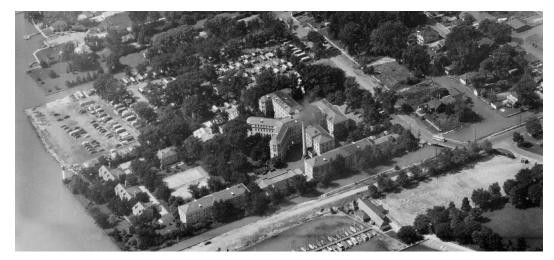
At the riverfront, Ford Motor Company executive Edward Gray began reclaiming land from the river in 1913, creating two canals and an island-modestly named "Grayhaven"- on which a subdivision of mansions would attract wealthy new residents [2]. However, only a few mansions- one of which was owned by legendary speedboat racer Gar Wood- were ever built on the island, three of which remain to this day [2]. The year 1915 marked the beginning of exponential commercial growth in the area, particularly along Jefferson Avenue [2]. That same year, Jefferson Chalmers gained its first of many performance venues- the Lakewood Theater- thus beginning its phase as an entertainment district [2]. This identity was strengthened by the start of Prohibition in 1917, as speakeasies and rumrunning flourished along Jefferson Avenue and the canals [2]. Perhaps coincidentally, 1918 brought with it the completion of more canals, this time by real estate tycoon William Klenk, who created the 'Motor Boat Subdivision' at the foot of Fox Creek [2].



Figure 57: 1921 lake chart



Figure 58: 1936 lake chart



By the 1920s, Jefferson Avenue had become a thriving commercial and entertainment district, with no less than two jazz halls- the Monticello and Vanity ballrooms- and the opening of another auditorium, the Cinderella Theater [2]. The 1920s also saw radical land reclamation efforts to accommodate a population boom due to the proximity of the Hudson, Chalmers, and Continental automotive plants. Commercial buildings, apartments, and waterfront housing proliferated, with the majority of all structures in Jefferson Chalmers being constructed in this decade [2]. To serve the people brought by this population boom, the City of Detroit set aside 52 acres of riverfront in 1928 to create Algonquin Park, setting a precedent for public waterfronts in the neighborhood [11]. However, this precedent was almost immediately contradicted with the erection of the Marine Hospital on the riverfront next to the Windmill Point Lighthouse in 1930 [12]. The public's access to the waterfront was further challenged by the opening of a trailer park adjacent to the Marine Hospital in the 1940s, as well as the construction of a missile command center during the Cold War [12,13].

The 1950s marked the start of a mass exodus and the prolonged decline of the neighborhood, with over 70,000 jobs disappearing as ten factories closed in the area before 1960 [2]. This loss of industry nearly decimated the neighborhood, with much of its population migrating to seek employment elsewhere in the decades that followed. One early attempt to stem population loss in the 1960s was the opening of a recreation center in Algonquin Park, which was renamed Maheras Park after a local who died in World War II [11, 14]. This recreation center, which the City promised to build for a predominantly African-American part of the



Figure 60: 1952 aerial collage



Figure 61: 1981 aerial collage



Figure 62: 1997 aerial collage

neighborhood, was almost given to a white community instead in order to reduce 'white flight' to the suburbs [11]. Had it not been for the intervention of local janitor-turnedactivist Bronson Gentry, the recreation center in Maheras Park would have never existed [11]. Other attempts to revitalize Jefferson Chalmers continued in the 1980s with the creation of more riverfront parks- Alfred Brush Ford Park and Riverfront-Lakewood East Park, the former of the two providing another recreation center. The 1980s and 1990s saw widespread urban renewal in Jefferson Chalmers, with a gated development on Grayhaven Island opening in 1990, soon followed by the developments of the gated Victoria Park subdivision, Riverbend shopping plaza, and many other private developments [2]. Concurrently with these developments, Chrysler opened its Jeep Cherokee plant in the Conner Creek Industrial district, providing the area with 3.000 new jobs [2]. By 1997, much of the urban renewal efforts were complete, resulting in large portions of this historic neighborhood being erased from existence. Today, Jefferson Chalmers is still the subject of many redevelopment efforts, which will be discussed at length in the next chapter.



2012 NEIGHBORHOOD STABILIZATION PLAN

To achieve this thesis's goal of using community engagement data to inform a design solution, it has been necessary to collect from previous and current projects in Jefferson Chalmers. The first project is the 2012 Neighborhood Stabilization Plan, created by local groups like the Creekside Community Development Corporation, Hope Community Outreach and Development, and the Southeast Waterfront Neighborhood Association, with the overarching goal of "creating a cleaner, safer neighborhood that preserves and enhances its current assets and encourages investment from new and existing stakeholders" [15]. While currently inactive, the plan is relevant to this thesis as it illustrates the residents' collective interest in enhancing their riverfront, as one of their explicitly stated objectives was to "preserve and improve the parks," which they had hoped to be accomplish by either forming a community-based land trust or starting an 'adopta-park' program [15]. Another interest of the Stabilization Plan was to "maintain open land," by which they meant the many publicly-owned vacant parcels [15]. One means of stewardship included "using vacant land to reduce flooding caused by stormwater runoff," illustrating residents' support for a blue infrastructure system [15].

LOWER EASTSIDE ACTION PLAN

The second pertinent yet inactive project is the Lower Eastside Action Plan, conducted between 2009 and 2017 by the Eastside Community Network in partnership with the Taubman College of Architecture and Urban Planning at the University of Michigan [16, 4]. The objective of this planning process was "to

inform residents, city officials, and other stakeholders about ways to monitor property ownership and steward publicly owned land in order to stabilize neighborhoods and repurpose vacant land [4]." While this plan undertakes a larger area than Jefferson Chalmers alone- encompassing the area bound by Mt. Elliot, I-94, Alter, and the Detroit River - one chapter of the planning document is dedicated to assessing and addressing issues specific to Jefferson Chalmers, specifically the portion south of Jefferson [16, 4]. By partnering with many local community groups and block clubs, the University of Michigan identified residents' wishes and visions for the area, which included preserving the riverfront parks and repurposing areas of lower density into "naturescapes," or low-maintenance landscapes that aid in stormwater management [4].

JEFFERSON EAST, INC.

One local organization that is heavily involved in Jefferson Chalmers is the Jefferson East, Inc., with several projects currently underway to revitalize buildings in the historic business district. As an organization primarily concerned with business development, many of their projects are commercial in nature, such as opening Jefferson Chalmers's "first sit-down restaurant in 30 years" - Norma G's Caribbean Cuisine [17]. Additional commercial ventures include rehabbing a former Kresge storefront into JEI's new headquarters, which will be shared with Alma Kitchen, a new fusion restaurant, as well as their fundraising efforts to restore and reactivate the Vanity Ballroom, creating new retail spaces and a neighborhood destination [17]. In addition to commercial improvements, Jefferson East, Inc. is in the process of restoring three historic apartment buildings- the



Figure 63: Vanity Ballroom rendering



Figure 64: Hotel Savarine rendering



Figure 65: Kresge Building rendering



Figure 66: Norma G's rendering

KEY DISCUSSION POINTS:

- Install wayfinding signage along Riverside Dr. to draw pedestrian activity towards the park.
- Leverage and enhance access to the lake view points.
- Improve facilities for fishing in Mariners Park.
- Bring in affordable and healthy food truck options.
- Improve entry points at the end of each major street into Brush Ford Park.
- Keep the gate open at Lennox St..
- Install phones throughout the parks to enhance security.
- Install more seating (benches, chairs, etc.)



Figure 67: Community parks charrette

IDAO Apartments, Marlborough Apartments, and the Hotel Savarine, providing Jefferson Chalmers with a total of 100 mixed-income housing units [17]. In a manner more relevant to this thesis, JEI has also led a community workshop to learn which programs residents would like to see in their riverfront parks, with peoples' answers including things like adding food trucks, waterfront seating, floating docks; music, dance, and birdwatching classes, as well as a market and better pedestrian access [18].

UPPER DETROIT RIVERFRONT HABITAT RESTORATION PROJECT

Currently, there are plans to improve parts of Jefferson Chalmers's riverfront parks in the Upper Detroit Riverfront Habitat Restoration Project, headed by the Parks and Recreation Department, the Environmental Protection Agency, and EA Engineering [19]. This project will restore one mile of the Detroit River, 2,000 feet of the canals, and 30 acres of wildlife habitat in the neighborhood, specifically in A.B. Ford, Riverfront-Lakewood East, and Mariner Parks [19]. This project was created to address the serious environmental issues of the Detroit River, as it is listed as an Area of Concern by the Michigan Department of Environmental Quality [19]. In an ambitious bioremediation effort, the project will convert seven acres of the parks back into wetlands and reintroduce native planting to the parks to improve water quality and enhance aquatic and riparian habitats, encouraging the return of native animal species like terns, muskellunge, and frogs [20]. To accomplish this, parts of A.B. Ford Park and the majority of Riverfront-Lakewood East Park will be converted into natural habitat [19]. Additional features of the design include creating



Figure 68: Conceptual design proposal

SUBSTRATE ENHANCEMENT FOR HABITAT IN CANAL



Figure 69: Wetland rendering



FISH CLEANING

STATIONS

ADD LIGHTS TO

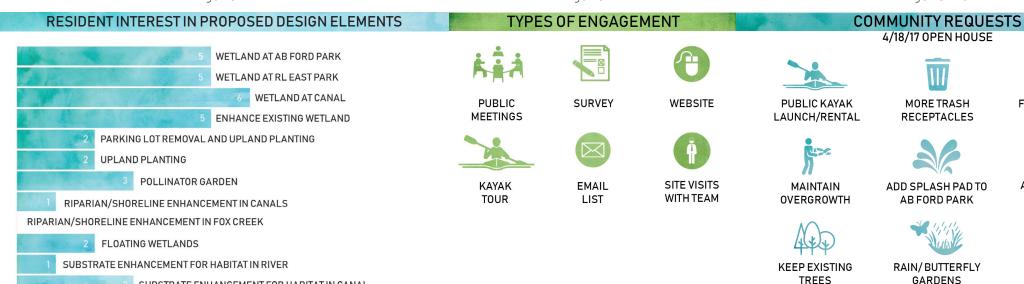
RIVERWALK

EXTEND

RIVERWALK

Figure 70: Inlet rendering

Figure 71 Figure 72 Figure 73



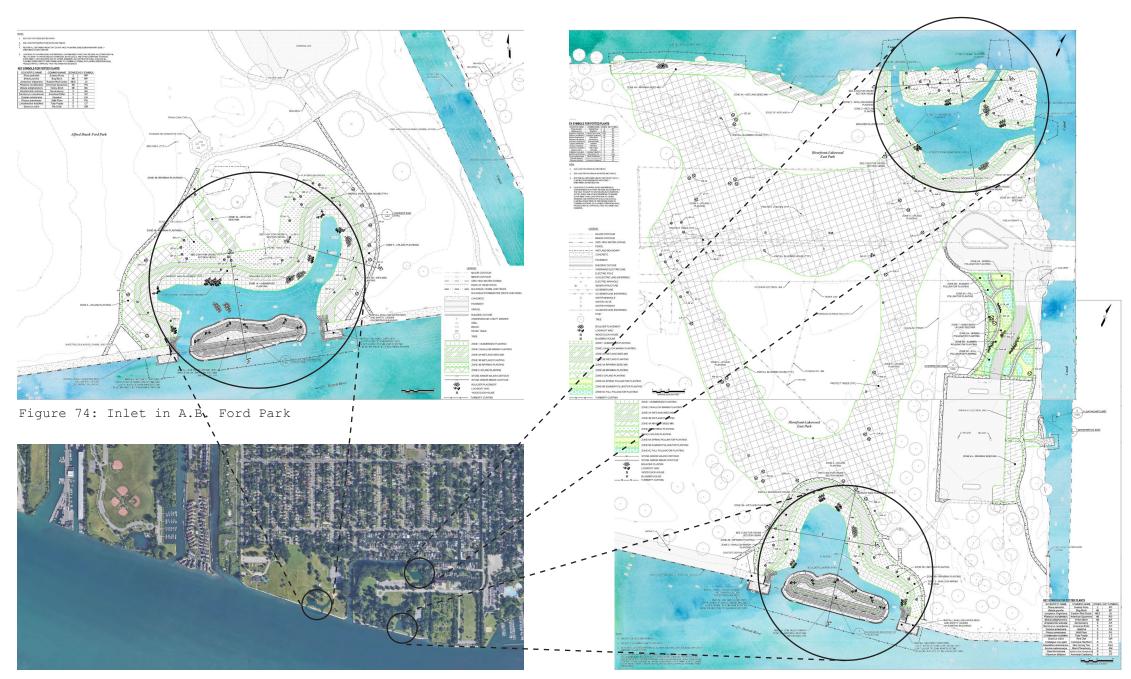


Figure 75: Locations of the three proposed inlets

Figure 76: Inlets in Riverfront-Lakewood East Park

three small inlets in the shorelines of A.B. Ford and Riverfront-Lakewood East Parks, replacing an abandoned parking lot with upland vegetation in Riverfront-Lakewood East, and planting a pollinator garden. Conceptual plans and renderings of the project have been made public on the project's website, as well as at various community meetings. The project's engagement efforts include open houses, a small survey, and an email list, yielding several citizen requests, such as adding kayak rental and launches, better park maintenance, providing fish cleaning stations, creating a splash pad, and connecting the parks with bridges [19]. While many of these requests will not be provided, this project has empowered local residents by forming the Friends of the Jefferson Chalmers Riverfront Parks, a citizen task force officially sanctioned by the City of Detroit to protect, enhance, and maintain the parks in perpetuity.

[In a conversation with project manager Ariana Zannetti, I learned that the scope of the project has been reduced to A.B. Ford and Riverfront-Lakewood East Parks, jettisoning the canal habitat improvements to Fox Creek in Mariner Park due to its heavy boat traffic. Ms. Zannetti was kind enough to even share the project's most recent drawings with me, which she informed me are "90% complete" as construction will begin in 2019.]

JEFFERSON CHALMERS NEIGHBORHOOD DEVELOPMENT AND IMPLEMENTATION PLAN

The largest ongoing project in the area is the Jefferson Chalmers Neighborhood Development and Implementation Plan, initiated by the RFP put out by the Planning and Development Department. The project, whose team includes W Architecture, Quinn Evans Architects, the Community Development Associates of Detroit, BioHabitats, and McEwen Studio, focuses on research and community engagement, landscape architecture, streetscape and connectivity improvement, housing rehabilitation, economic development, historic preservation, and zoning, all with the overarching goal of improving the quality of life in the neighborhood [21]. Since community engagement is the project's top priority, the City has collected a wealth of data useful for this thesis. Their engagement has identified- by means of a survey with nearly 400 responses- that the residents' top priority is to improve the parks and that their most valued asset by a wide margin is their waterfront [5]. The City's multiple surveys, newsletters, email updates, four community meetings, countless other sessions with community groups, the creation of a residentlead advisory group (the Residents in Action), and many open office hours events have accumulated a myriad of citizen requests, many of which are specific programmatic wishes for their riverfront. Requests pertinent to this thesis include, but are not limited to, fishing piers, a recreation center, a pool, kayak rental, access to the river and canals, connecting the parks with bridges, and a nature center [22]. The city has used their engagement efforts to inform fourteen specific recommendations for Jefferson Chalmers, which have

-GENTRY PARK ENTRY (KITCHENER)







Figure 80: Initial Recommendations Map

PUBLIC

Housing

Figure 86

• Attract a full-service grocery store · Small-scale retail space for local Construct approximately 200 to 250 units of new rental housing Potential for approx 1/3 of units to be affordable at 50%-60% AMI, which means \$798-\$958/month for a 2BR* 7) ALTER CANAL PATH AB FORD CANOPY BRIDGE Figure 83





FISHING PIERS



MOVIES/ **ENTERTAINMENT**



DAYCARE CENTER



FLOOD **PREVENTION**



MORE STREET LIGHTS

COMMUNITY REQUESTS 3/27/18 COMMUNITY MEETING



BAKERY/ COFFEE SHOP



ACCESS TO RIVER/CANALS



REOPEN

SCHOOLS





RECREATION

CENTER

NATURE

CENTER

GROCERY

AFFORDABLE HOUSING

BIKE SENIOR **TRAILS** CENTER







BATHROOMS IN **PARKS**









ALLEY MAINTENANCE



SKATING RINK





CLOTHING STORES







INTEGRATE GATED COMMUNITIES



VOCATIONAL TRAINING









TYPES OF ENGAGEMENT Figure 85





Retail and Economic Development

150

Parks and Landscape



WEBSITE

Priority Issues for Jefferson Chalmers



REC #13: MIXED-USE DEVELOPMENT AT JEFFERSON & PIPER

OFFICE



ORAL HISTORIES

What is Jefferson Chalmers' greatest asset?

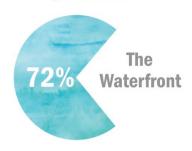


Figure 87

been voted on and assessed by community members via a questionnaire distributed to nearly every store, community group, and household in the area [23]. A few recommendations featured in the questionnaire overlap the intentions of this thesis, such as increasing access to the waterfront parks by bridging between them and opening new pedestrian entrances, as well as improving canal access by the creation of paths along and across them, thus addressing various connectivity issues of the neighborhood [23]. Other less pertinent but equally exciting proposals include reactivating Guyton School with residential, commercial, and/or community uses, reusing vacant lots for rain gardens and solar farms, and creating a large mixed-use development on Jefferson Avenue-complete with a full-service grocery store and 200 to 250 mixed-income residential units [23].

[Jacky White, who works for the Planning Department on this project, updated my knowledge of the recommendations, informing me that the PDD hopes to implement all fourteen recommendations but will start with the ones the community votes as their top priorities, phasing in the rest over time. Furthermore, any recommendations that the community are opposedtowillbescrappedaltogether. Jackyalsoconferredthat one purpose of these recommendations is "attracting people to the neighborhood," not just improving the neighborhood for the residents but also for visitors and newcomers, whose presence will help stabilize Jefferson Chalmers financially.]

Jefferson Chalmers Neighborhood Framework Plan

SUMMARY OF FINAL RECOMMENDATIONS





REJUVENATE RETAIL ON E JEFFERSON AVE.



UPPORT NEIGHBORHOOD-SERVING RETAIL ON JEFFERSON



BUILD A MIXED-USE DEVELOPMENT AT JEFFERSON AND PIPER



ENHANCE JEFFERSON STREETSCAPE

■ LONG TERM FRAMEWORK

(Boards 6-10)

SHORT TERM ACTION PROJECTS

The Short Term Action Projects will be implemented in the next 3-5 years.

These projects are covered in more detail in the following boards



STABILIZE NEIGHBORHOOD

HOUSING

REHAB LAND BANK-OWNED VACANT HOUSES



RE-PURPOSE GUYTON AS COMMUNITY SPACE AND AFFORDABLE HOUSING





ESTABLISH A CONSERVATION OVERLAY DISTRICT



NORTH OF JEFFERSON



IMPROVE WALKABILITY + SUSTAINABILITY



IMPROVE PUBLIC ACCESS TO THE RIVERFRONT



IMPROVE PUBLIC ACCESS TO THE CANALS



IMPROVE PEDESTRIAN CONNECTIONS



IMPROVE STREETSCAPES



REUSE VACANT LOTS

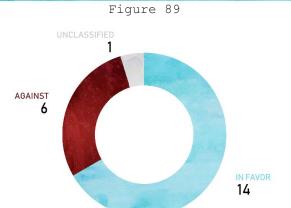
Planning and Development Department - City of Detroit



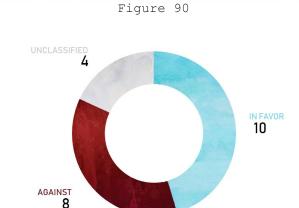
Figure 88 63

COMMUNITY FEEDBACK ON RECOMMENDATIONS

REC. #1: IMPROVE ACCESS TO RIVERFRONT PARKS

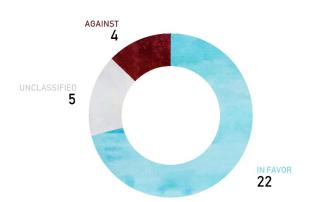


REC. #2: IMPROVE ACCESS TO CANALS



REC. #5: IMPROVE STREETSCAPES





"Connecting the parks is most important to me. Our "I live on Lenox Street that would directly be affected by "Yes! This is exactly what we need! This is the highest neighborhood in general feels disconnected. I think this would help push accountability for higher standard of park care."

"I love the removal of dead ends into the parks. I completely disagree with a bridge. It's been discussed. It is not feasible."

included in the planning initiative. Absolutely yes!"

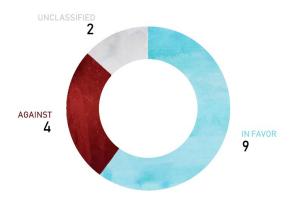
"Canal crossings are expensive and will not provide large benefit."

this enhancement. I have held out hope this would be priority possible. Especially the street trees and traffic calming."

"Build swales in vacant land to hold water."

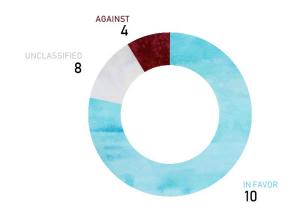
REC. #6: IMPROVE PEDESTRIAN CONNECTIONS

Figure 92



REC. #8: REUSE VACANT LOTS - RAIN GARDENS

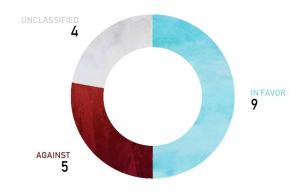
Figure 93



are beautiful."

REC. #10: REUSE VACANT LOTS - FOREST PATCHES

Figure 94



"Love this idea! This will really add character to the area "Excellent. Hove this. Rain gardens really work! And they "This adds to the character of our neighborhood. We need friendly forests."

and make people excited to explore their neighborhoods."

"Squatters and other problems. No woods."

[&]quot;I would rather have current sidewalks improved."

[&]quot;Fix infrastructure before this."

The community has given their feedback on these recommendations through an extensively distributed questionnaire from the Planning Department, with 352 respondents [8]. While connecting the parks is supported, bridges themselves are polarizing. Illustrating this point, one resident expressed their support, writing, "Connecting the parks is most important to me. Our neighborhood in general feels disconnected," while another contradicts this, saying, "I completely disagree with a bridge. It's been discussed. It is not feasible" [24]. However, proposing stormwater infrastructure on vacant lots and streetscapes was well-received, as was improving pedestrian access and walkability.

In February of 2019, the city commenced implementation on five of their recommendations, with the remaining eight to be carried out in later phases over the years. The five immediate interventions include projects supporting community retail on Jefferson Avenue, rehabilitating houses owned by the Detroit Land Bank, and providing more affordable housing units [8]. Perhaps the most notable of five immediate implementations are the adaptive reuse of Guyton School and the large mixed-use development on Jefferson Avenue, which will include a grocery store and mixed-income housing [8]. Other recommendations that will be implemented at an undetermined time in the future include residential streetscape improvements, improving pedestrian connections and canal access, and establishing a Conservation Overlay District [8].

JEFFERSONCHALMERSCOMMUNITYADVOCATES

However, the Planning Department's project does not address the community's most passionate requests: reopening the closed schools and community centers. This is due to the simple fact that the parks and schools are outside of the Planning Department's control; nevertheless, residents are very vocal that their neighborhood is incomplete without a recreation center. The formation of the Jefferson Chalmers Community Advocates group confirms some dissatisfaction with the City's proposals. The JCCA is comprised of several community members-many of whom are also members of the City's Residents in Action committee- who are understandably wary of the "outsiders" coming in to "fix" their neighborhood. They have conducted a survey whose results validate their concerns, which are summed up in their mantra, "Development without Displacement." Various concerns they have voiced to the Planning Department include reducing the price of affordable pricing to 30% of the Area Median Income (instead of the current 50%), giving home repair grants to residents to maintain the neighborhood's historic character, and fixing property taxes at current levels for long-time residents to combat the effects of potential gentrification, a very real potential side effect of the City's recommendations [25]. Additional requests for the Planning Department are to reopen the Guyton School and Maheras-Gentry community center as their original functions [25]. While these concerns and requests are valid, the Planning Department does not have the authority to address them, which some residents have yet to come to terms with. However, one request that the Planning Department can address is the

JEFFERSON CHALMERS COMMUNITY SURVEY RESULTS HERE ARE SAMPLE IN COLUMN THE C

In December 2017, a group of long time residents in the Jefferson Chalmers neighborhood came together to discuss plans for redevelopment in their neighborhood. Known as the Jefferson Chalmers Community Group, members began to engage residents in face to face conversations about community needs while at the same time collecting important survey data.

To date, more than 200 households have participated in the survey responding to questions ranging from types of food favored by local community members to assessment of resident engagement in decisions that impact their community.

The majority of those completing the survey are long term residents having lived in the Jeff Chalmers neighborhood more than 20 years and ranging in ages between 46 and 65 years of age.

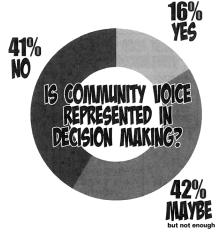
90% WANT MORE SCHOOLS IN THE COMMUNITY

97.6% WANT MORE RECREATIONAL STEELS IN THE COMMUNITY

76% BELIEVE JOBS FOR YOUTH AND ADULTS ARE VERY MUCH NEEDED

HERE ARE SAMPLE RESPONSES FROM THE SURVEY FINDINGS.
THIS DATA CAN HELP
INFORM CURRENT PUBLIC/
PRIVATE INVESTMENTS AND
REDEVELOPMENT PLANS
FOR JEFFERSON CHALMERS
NEIGHBORHOODS.

•••••



DO RESIDENTS FEAR DISPLACEMENT OR BEING PRICED OUT?

37% Yes 37% Maybe

Figure 95

residents' disapproval of putting residential or retail functions into Guyton School, with one resident declaring, "We do not want nor need mixed-use development in [the] building or on the existing property. [25]" In an attempt to make their voice heard, the group attended a City Council meeting on October 30th, 2018, during which they enumerated their complaints against the Planning Department's project, with one resident

JEFFERSON CHALMERS COMMUNITY SURVEY RESULTS

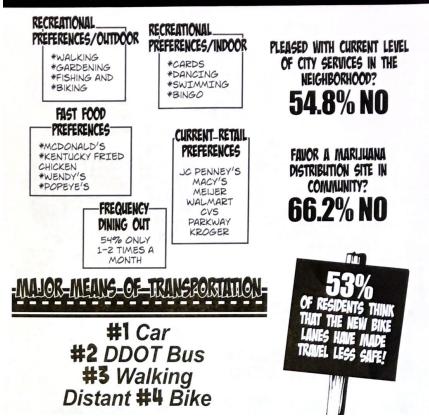


Figure 96

asserting, "What the City is planning to do in our community does not line up with the wishes of the present residents. [25]"

PROJECTS AND PLANS SUMMARIES

2012 NEIGHBORHOOD STABILIZATION PLAN

OBJECTIVE

"TO CREATE A CLEANER, SAFER NEIGHBORHOOD THAT PRESERVES AND ENHANCES ITS CURRENT ASSETS AND ENCOURAGES INVESTMENT FROM NEW AND EXISTING STAKEHOLDERS"

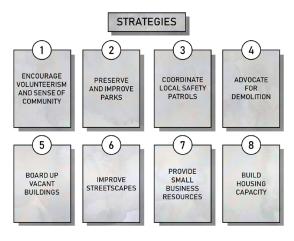
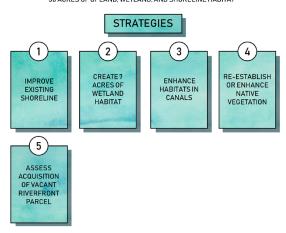


Figure 97

UPPER DETROIT RIVERFRONT PARKS HABITAT RESTORATION

OBJECTIVE

TO WORK WITH COMMUNITY MEMBERS TO EVALUATE AND DESIGN WILDLIFE HABITAT RESTORATION FOR ONE MILE OF DETROIT RIVER AND CANAL SHORELINE AND RESTORE 30 ACRES OF UPLAND, WETLAND, AND SHORELINE HABITAT



LOWER EASTSIDE ACTION PLAN

OBJECTIVE

"TO INFORM RESIDENTS, CITY OFFICIALS, AND OTHER STAKEHOLDERS ABOUT WAYS TO MONITOR PROPERTY OWNERSHIP AND TO STEWARD PUBLICLY OWNED LAND IN ORDER TO STABILIZE NEIGHBORHOODS AND REPURPOSE VACANT LAND."

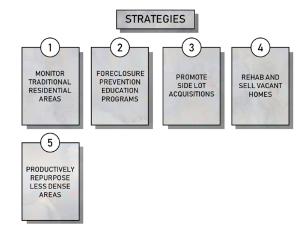


Figure 98

JC NEIGHBORHOOD DEVELOPMENT & IMPLEMENTATION PLAN

OBJECTIVE

"TO CREATE A NEIGHBORHOOD DEVELOPMENT AND IMPLEMENTATION PLAN FOCUSING ON LAND STEWARDSHIP. STORMWATER INFRASTRUCTURE, COMMERCIAL CORRIDOR IMPROVEMENTS, HISTORIC PRESERVATION, AND REHABILITATION DEVELOPMENT."



JEFFERSON EAST, INC.

OBJECTIVE

"GROWING DETROITS EAST JEFFERSON CORRIDOR AND ITS ADJOINING NEIGHBORHOODS THROUGH FACILITATIVE LEADERSHIP, COLLABORATIVE PARTNERSHIPS, AND INNOVATIVE AND IMPACTFUL PROGRAMMING."

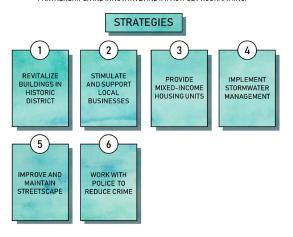
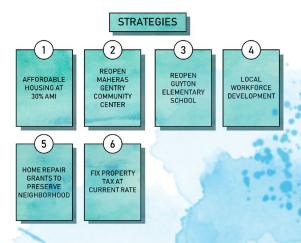


Figure 99

JEFFERSON CHALMERS COMMUNITY ADVOCATES

OBJECTIVE

"DEVELOPMENT WITHOUT DISPLACEMENT"





'BLUE SPACE' READINGS

In order to broaden this thesis's research beyond the boundaries of Jefferson Chalmers, it became necessary to seek out scholarly articles on aquatic space, public space, and riparian connectivity. In Sebastian Völker and Thomas Kistemann's study, "The Impact of Blue Space on Human Health and Well-Being," the authors undertake a thorough assessment of 36 previous studies conducted between 1981 and 2011 on the benefits of inland aquatic environments on humans [26]. Blue space, which is defined by the authors as "all visible surface waters," is shown to positively impact humans in the realms of perception and preference, emotion, recreation, and health. Of all the categories, water influences human perception the most, with 25 studies reporting strong preference of aquatic environments over their non-aquatic counterparts [26]. Multiple studies also corroborate that blue spaces act as 'therapeutic landscapes,' which provide a measureable sense of mental restoration. [26]

Another study conducted by the University of Plymouth tested the extent to which people prefer aquatic environments, having subjects rank photographs of built spaces, natural "green" spaces, and aquatic "blue" spaces, as well as scenes combining built, green, and blue spaces in ratios of two-thirds to one-third; e.g. a "built-aquatic" scene would be two-thirds built and one-third aquatic [27]. The study found that, in general, as the ratio of water in the scene increased, people's preference of that scene also increased, with every scene that featured any amount of water outscoring every scene that did not include water, regardless of if it was a built or natural space

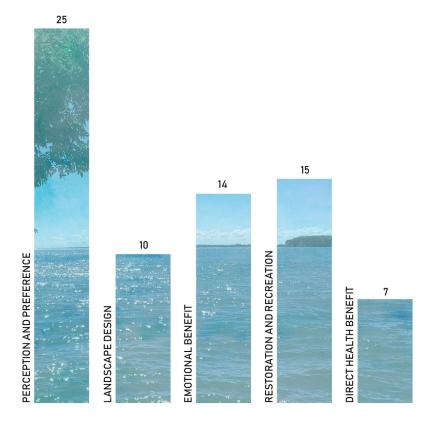


Figure 103: Number of studies reporting benefits

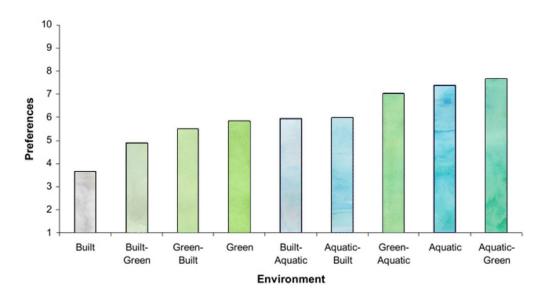


Figure 104: Environmental preference results

[27]. The only deviation of this trend is that subjects did not vote the fully aquatic scene (with no visible land or buildings) as the most preferred, as they rated the aquatic-green environment the highest, closely followed by the fully aquatic scene [27].

PUBLIC SPACE READINGS

One critically relevant reading is "A Day in the Life of Neighborhood Place," by Phoebe Wall Wilson in the book "Everyday Urbanism." This essay builds off of the work of Ray Oldenburg, author of "The Great Good Place," who posits that people need a "third place" that is not their home (their "first place") or their work (their "second place") in order to maintain a sense of well-being [28]. Wilson extends this theory, asserting that for this "third place" to be most effective, it needs to "combine civic services with community-oriented micro-commercial amenities," in addition to open space to ensure this "third place" will be sustainable [28]. The space or building in which all three elements are present is called the "neighborhood place" [28]. The public-private partnership of the civic and micro-commercial functions generates revenue to maintain and enhance the open space, which is essential to its success [28]. Examples of this pairing include a library and a coffee shop on a plaza or a recreation center and a local market in a park. This community-focused yet profitgenerating combination of programs could easily be applied to reopen one of the abandoned community centers on the Jefferson Chalmers riverfront, providing the residents with a much-needed 'third place."



Figure 105: Neighborhood space diagram



A second reading that is at least marginally relevant is an excerpt of from Remaking Urban Waterfronts titled "The Public Interest in the Waterfront," written by Laurel Rafferty. In it, the author discusses a little-known piece of federal legislature that is applicable to this thesis: the Public Trust Doctrine, a law that "establishes public ownership rights to water and to land touched by water [29]." This means that riverfronts like that of Jefferson Chalmers are legally "owned by the public and held in trust by the state for the public benefit," with the public having "the right to fully enjoy and use these public trust lands. [29]" The doctrine goes even further, saying, "the public's right to these lands is a property right that cannot be conveyed to private ownership, even when public trust lands are privately owned. [29]" Thus, the state can legally force private landowners to provide public access to any waterfront, requiring landowners to provide a 10' wide minimum easement along the shoreline, and can even prohibit them from building any privately-programmed building within 100' of the water. [29] Therefore, this doctrine can be invoked on private properties to ensure citizens have access to and along their shorelines, which are legally considered to be public spaces; a fact which could prove useful on the waterfront of Jefferson Chalmers.

CONNECTIVITY READING

A particularly informative journal article that heavily influenced this thesis was "The Social Connectivity of Urban Rivers" by G. Mathias Kondolf and Pedro J. Pinto. This article provided the terminology with which to frame this thesis's studies of riparian connectivity, which the Kondolf and Pinto categorize into lateral, longitudinal, and vertical typologies [30]. Lateral connectivity refers to the potential for riverfronts to be continuous along the shore, whereas longitudinal connectivity denotes the perpendicular connection both to and across rivers [30]. Vertical connectivity, then, refers to the ability of a person to descend into the river itself, as many urban rivers lie below the pedestrian level [30]. The authors argue that for a riverfront to be most successful as a public space, they need to incorporate lateral, longitudinal, and vertical aspects of connectivity [30]. When all three types are present, the urban riverfront becomes a thoroughly accessible and democratic social space. However, the authors acknowledge that while rivers can aid in connecting people to each other via transportation, they also act as dividers, illustrating that as the distance between riverbanks increases, social connection between people either side of the river decreases. This study of lateral, longitudinal, and vertical connectivity applies to Jefferson Chalmers as their riverfront lacks each of the three types of connection. Lateral connection is absent due to the canals that interrupt the shoreline, while longitudinal connection from the neighborhood to the riverfront is impeded by a variety of physical barriers, which will be discussed in the next chapter. Vertical connection similarly deficient as there are no opportunities for people to descend into the water from publicly-owned land.

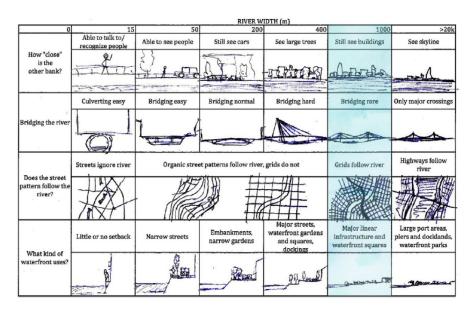


Figure 107: The effect of river width on environments

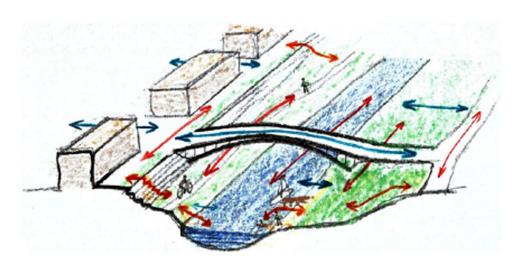


Figure 108: Lateral, longitudinal, and vertical connectivity diagram







Figure 109: Key terms





Figure 110: 1901 and 2018



Figure 111: 1921 and 2018



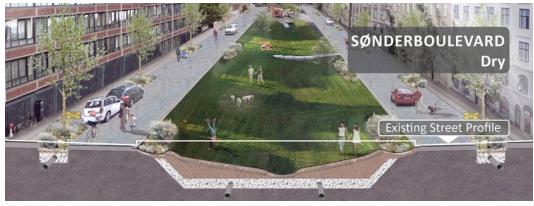
Figure 112: 1949 and 2018





Two preliminary studies conducted early in the process explore an important subtopic of this thesis: the effect of water on this neighborhood. The first study documents the geographical morphology of the shoreline overtime, overlaying historic lake charts and aerial photos from 1901, 1921, and 1949 over current satellite imagery. This study demonstrates the drastic changes that have occurred to the Jefferson Chalmers waterfront in a relatively short period of time, as almost all of the land reclamation efforts were completed in a span of fifty years. Furthermore, it shows that most of the land comprising the riverfront parks of Jefferson Chalmers were the product of landfill and reclamation, with parts of them not being created until after 1949. The transformation of this shoreline continues today in the EPA's proposed wetland inlets for A.B. Ford and Lakewood-East Parks.

The second study proposes an ambitious stormwater infrastructure system of new canals and water retention ponds to mitigate the area's chronic flooding, which tends to manifest itself in the streets and in residents' basements. The discerning of where a 'blue infrastructure' system is most needed was facilitated by overlaying the FEMAdesignated 100-year floodplain outline on a parcel map of the neighborhood, the combination of which elucidated where new canals could run or where vacant lots could be converted into water retention ponds. In all likelihood, the large scale of this intervention is unnecessary and could be perceived as invasive by the residents, and as such this type of exploration has been scaled down later in this thesis project. However, a similar blue infrastructure system with a more contextsensitive approach could be successful in remediating this neighborhood's flooding. This could include interventions like



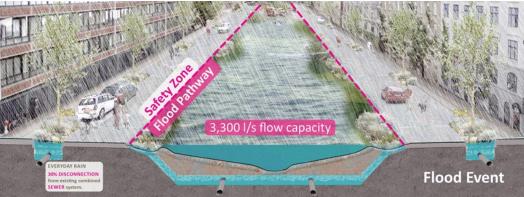
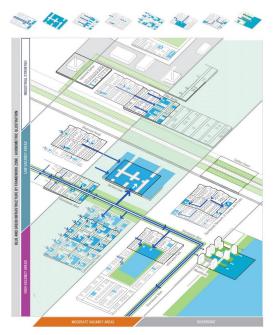


Figure 115: Copenhagen Strategic Flood Masterplan





drainage swales along streets, a more sporadic network of retention ponds, or even the creation of a new canal in a vacant alleyway, all with the purpose of giving excess water a proper place to remain in or return to the ground.

A variety of precedents inspired and supported this stormwater management exercise, the most prominent of which was from the Detroit Future City proposal of 2012. This extensive guidebook includes a section on blue infrastructure, which lists various stormwater interventions that can be executed on Detroit's plentiful stock of vacant, publicly-owned land, such as stormwater boulevards, infiltration parks, concentrated ponds, and surface lakes [31], many of which could easily and appropriately be implemented on the vacant and public lands of Jefferson Chalmers. The second precedent that reinforced this study is the Copenhagen Strategic Flood Masterplan, created by Ramboll and Atelier Dreiseitl in response to a devastating flood that hit Copenhagen in 2011 [32]. In order to mitigate and control future flooding, the City of Copenhagen will be employing an arsenal of eight blue infrastructure tactics that allow water to collect within contained, landscaped areas of parks, plazas, canals, creeks, streets, and boulevards, protecting both citizens and the built environment in 'cloudburst' events while providing desirable public spaces during the rest of the year [32]. The final blue infrastructure precedent is the Bahnstadt Heidelberg project by Latz und Partner in Germany. By creating a canal-like water feature and grading the site to shed water into it, excess water is collected into an amenity the public can enjoy.

Figure 116: Detroit Future City Figure 117: Bahnstadt Heidelberg

(DIS) CONNECTIVITY STUDY

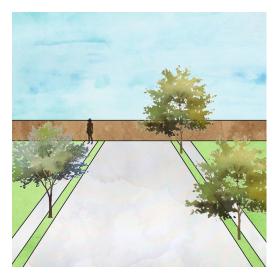


Figure 118: Barrier Type 1:
Dead Ends

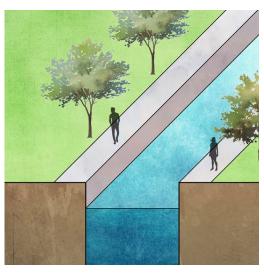


Figure 119: Barrier Type 2: Canals

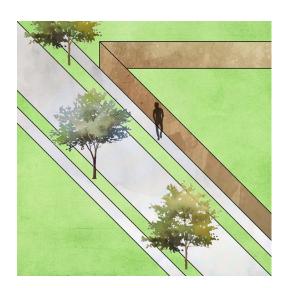


Figure 120: Barrier Type 3: Fences

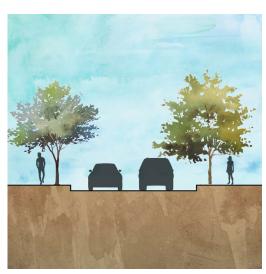


Figure 121: Access

Recalling Kondolf and Pinto's concepts of riparian connectivity and applying them to Jefferson Chalmers, a third study takes inventory of every instance of the riverfront's disconnectivity- of which there are no fewer than fourteen- and plotted them on a map. Three typologies of barriers arose from this study: canals, dead ends, and fences, all of which prevent lateral, longitudinal, and vertical connectivity. The canals, while providing longitudinal connection to the river in their own right, also act to prevent any lateral connectivity. Furthermore, many dead end streets terminate in barricades at the parks, denying potential longitudinal access points to the riverfront, as do the many fences of the neighborhood. Strangely, these fences impede access to both private and public land. The riverfront, while mostly publicly-owned, is interrupted by tracts of vacant, privately owned land- for example, the vacant lots next to Mariner Park. There are also instances of vacant publiclyowned land whose waterfronts are rendered inaccessible via fence, occurring at the canal-front site along Lenox Street. Between all four parks, there are five points of entry occurring at the ends of Conner, Lenox, Lakewood, and Alter roads, all of which prioritize the vehicle over the pedestrian.



GRAYHAVEN MOORING FACILITY FENCE



PORT DRIVE DEAD END



CANAL WEST OF GRAYHAVEN



CANAL EAST OF GRAYHAVEN



FENCE ALONG LENOX STREET



FOX CREEK SEPARATING GROSSE POINTE PARK AND MARINER PARK



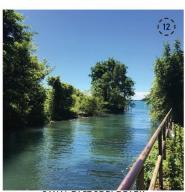
Figure 122: Disconnectivity study



RIVERSIDE DRIVE DEAD END (FROM AB FORD PARK)



PIPER BOULEVARD DEAD END



FENCE AT VACANT RIVERFRONT LOT

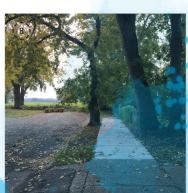
CANAL EAST OF RLE PARK



CANAL BETWEEN RLE PARK AND AB FORD



NEWPORT STREET DEAD END

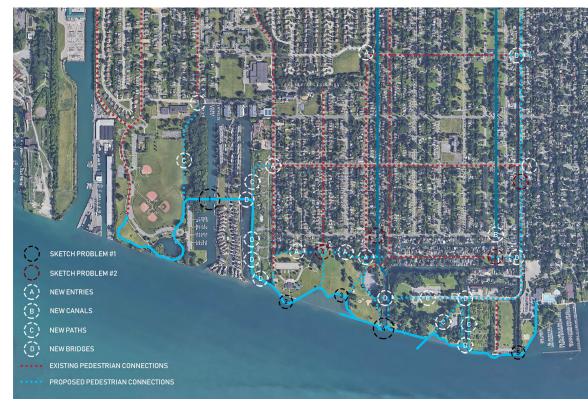


EASTLAWN STREET DEAD END



Following the disconnectivity study, the first sketch problem arose in an attempt to unify the riverfront parks to each other through a series of interventions along a pedestrian path. This connector, whose form is derived by preserving all existing site features as well as drawing inspiration from historic shorelines, is envisioned to be a nearly two-mile-long boardwalk with amenities like seating, fishing piers, and kayak launches, as well as multiple pedestrian bridges linking the parks. The vignettes created for this sketch problem depict five potential interventions along the path. (However, it is important to note that these sketch problems, while endeavoring to provide a solution to the site's interrupted nature, were also an exercise in design creativity, meaning that many of them are too grandiose or foreign for their context; an issue will be addressed later in this thesis). The first intervention is an elevated pedestrian bridge linking Maheras-Gentry Park to Grayhaven Island, doubling as an observation deck affording views of historic mansions and the riverfront, employing a 30' clearance to allow tall ships to pass underneath [Fig. 125]. To keep the proportions of the vertical circulation slender, stairs and elevators are separated into their own towers, and the triangular motif has been abstracted from the gables of the surrounding houses. The second vignette [Fig. 126] illustrates a portion of the path that cantilevers over the river, whose profile in section was inspired by the adjacent octagonal missile towers of A.B. Ford Park. The third intervention [Fig. 128] proposes carving into the shoreline of A.B. Ford Park to simulate that of 1949, returning a portion to its previous wetland state. While similar to the inlets planned for the Upper Detroit Riverfront Habitat Restoration Project, this design

takes the idea farther to create a larger neighborhood asset that recreates history. The fourth vignette [Fig. 124] is a long ramping pedestrian bridge whose form echoes the curves of the connector. As this part of the site also must allow for sailboats to pass, this tall, bold sky-bridge was designed to link A.B. Ford and Riverfront-Lakewood East parks, from which one can survey Canada, Belle Isle, and downtown Detroit. The final intervention [Fig. 127] is a simple footbridge connecting Mariner Park to Grosse Pointe, with wood timbers arrayed in opposite directions along a curving structure. This type of bridge could be replicated or modified at a variety of other locations in Jefferson Chalmers, providing much-needed pedestrian canal crossings.



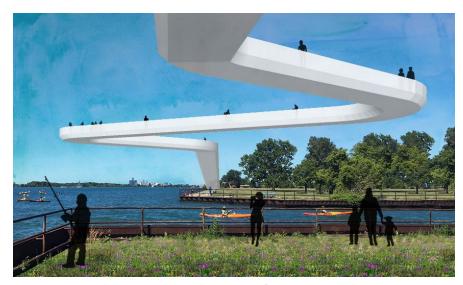


Figure 124: Vignette #4 perspective

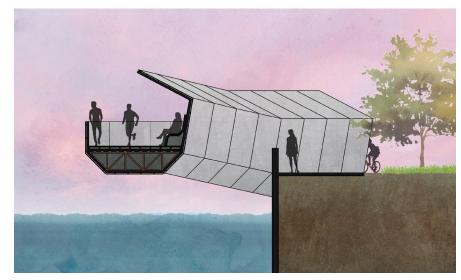


Figure 126: Vignette #2 section

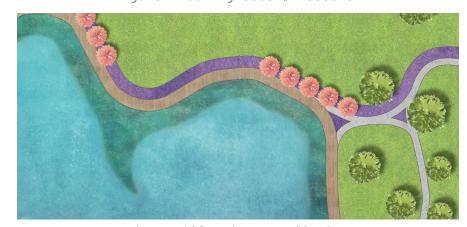


Figure 128: Vignette #3 plan



Figure 125: Vignette #1 perspective



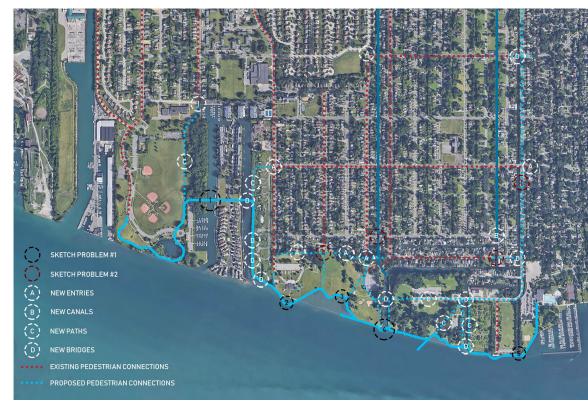
Figure 127: Vignette #5 elevation



Figure 129: 1949 Waterfront with path iterations

While these vignettes addressed lateral shoreline connectivity, they ignored longitudinal connection to the neighborhood, which second sketch problem rectifies. In it, four typologies are identified that would improve access to the parks: new entryways, canals, paths, and bridges. Although there are plethora of sites in Jefferson Chalmers where these interventions could be employed, one example of each is provided, with the rest plotted on a map. The first is the addition of a pedestrian path following the length of Fox Creek, with stepped seating down to a public kayak launch, thus increasing both longitudinal and vertical connectivity [Figs. 135-136]. The second is a pedestrian-powered gondola bridge that provides a canal crossing at the end of Harbor Island while still allowing for boats to pass with a less dramatic intervention than an elevated bridge, necessary due to the intervention's residential site [Figs. 133-134]. Precedents for this type of innovative bridging solution include the Transbordér Gondola Bridge in Hamrštejn, Czechia, or the Erlebnisbrücke Transporter Bridge in Mönchengladbach, Germany. The third intervention is the creation of a canal down the alley to the west of Lakewood Street that would provide small boat and pedestrian access to A.B. Ford Park while also recreating a former canal from 1907 [Fig. 131]. Imitating the surrounding

houses, the pentagonal portals over the canal signify entry to the park while thematically tying into the neighborhood. The final vignette [Fig. 132] depicts a gateway installation that creates a new entrance to A.B. Ford Park at Piper Boulevard's dead end, extending the sidewalks from Piper all the way to the river while providing stormwater swales along the street. The shifting forms of the thresholds are meant to emulate the mesmerizing, tranquil motion of the river to which they lead the visitor.



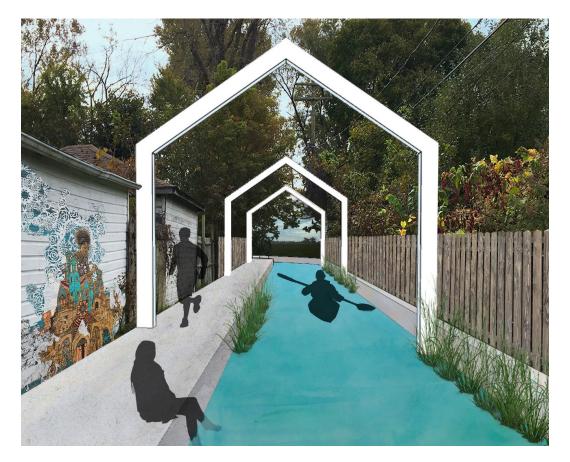


Figure 131: Vignette #3 perspective



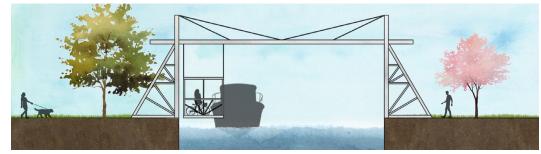


Figure 133: Vignette #2 elevation

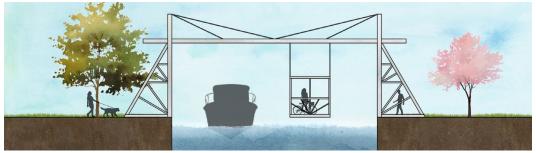


Figure 134: Vignette #2 elevation



Figure 135: Vignette #1 existing section



Figure 132: Vignette #4 perspective



PDD COMMUNITY MEETING #3

To further discern the residents' desires for their riverfront, the act of attending community meetings was indispensable. On October 9th, I attended was the third of four community meetings hosted by the Planning and Development Department at the Salvation Army on Conner Street. This was not the first neighborhood meeting I had been to, as I attended one while working for Quinn Evans; luckily this time I was attending as a member of the public and not one of the project members. One relevant takeaway from this event is that the Parks and Recreation Department believes it is theoretically possible to reopen one of the abandoned recreation centers with a public-private partnership to generate revenue, and that the center the City is more interested in reopening would be the Lenox Community Center. Additionally, the Planning team introduced their fourteen initial recommendations at this meeting, on which implementation of the highest voted options will begin in February 2019. Community members at the meeting had mixed reactions to the proposals, with vocal support for new retail on Jefferson and opposition to converting Guyton into residential or mixed-use. Furthermore, there was definite trepidation caused by a rendering of the monumental bridge proposed between A.B. Ford and Riverfront-Lakewood East parks, as some residents voiced that they would rather have their money put to reopening a recreation center.

COMMUNITY MEETING #3

10/9/18



Figure 137: Meeting takeaways

PDD OFFICE HOURS EVENT

The second enormously useful community event I attended was one of the Planning Department's several Office Hours sessions, held at the Monteith Public Library on October 29th. As it was a much smaller event than the community meeting- with 10 people compared to 200- I could witness residents' conversations with Planning Department members Allen Penniman and Josh Bails about their desires and concerns regarding the project. Before the meeting started, I was able to ask Allen and Josh about the status of the vacant riverfront next to Mariner Park and the abandoned canal-frontage along Lenox. They informed me that the former is owned by a foreign investor who has no plans for it and the latter will be up for development after the City provides public access to and along the water, which can occur after a lawsuit is settled between the City and the previous developer of the site. Perhaps the most encouraging information I learned at the meeting was the attendees' support for a riverfront connector path. One resident articulated his exasperation with the lack of connectivity, saying, "It's SO hard to get to that park!" in reference to Riverfront-Lakewood East. However, the group present agreed that an iconic, towering bridge might be too costly, suggesting a hinging bridge or a ferry bridge instead. Other topics discussed included the Guyton School and the abandoned recreation centers, with another resident expressing, "There are no community services... This is the only neighborhood without a community center."

PDD OFFICE HOURS

10/29/18



Figure 138: Meeting takeaways

SOUTHEASTERN WATERFRONT NEIGHBORHOOD ASSOCIATION

The third neighborhood event I attended was a meeting held by the Southeastern Waterfront Neighborhood Association at Hope Community Church on November 12th. This meeting provided valuable insights that I would not have been able to obtain otherwise. For example, I learned that there currently are grassroots efforts forming to reactivate the Lenox Community Center, with John Myers, the secretary of the Friends of the Jefferson Chalmers Riverfront Parks, saying that they "anticipate that the Lenox Center will be reopened and expanded." John also informed the group that the Ralph Wilson Foundation will be donating a pavilion, playground, bathrooms, and a small greenway loop to Maheras-Gentry Park, and that the Detroit Pistons are sponsoring basketball courts there as well. Another interesting development disclosed at this meeting was that construction on the Manistique Community Treehouse, a new public space for Jefferson Chalmers youths, will begin construction in the spring of 2019. Finally, Monique Holliday of Hope Community Outreach and Development relayed that the Jefferson Chalmers Youth Council has filled out the Planning Department's survey on the fourteen recommendations, ensuring that a crucial yet often forgotten demographic is given a voice.

SWNA MEETING

11/12/18

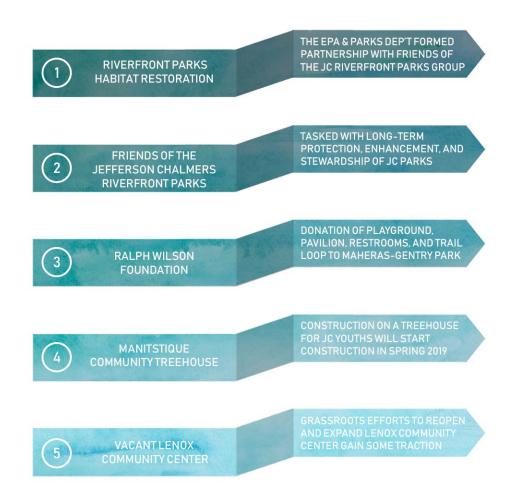


Figure 139: Meeting takeaways

PDD COMMUNITY MEETING #4

The fourth community meeting I attended was another event held by the Planning and Development Department on February 16th. As this was the final community engagement meeting of their year-long engagement process, the meeting was held to announce the five recommendations that will commence in 2019, thus transitioning into the implementation phase of the project after four town hall meetings, 40 focus groups, and distributing 2,000 community engagement toolkits [8]. The Director of the Planning Department, Maurice Cox, assured attendees that the City has an "absolute commitment" to implementing the remaining eight recommendations in the future as funding accumulates. Additionally, Megan Elliott, a representative from the Parks and Recreation Department, confirmed that the former Lenox Center is planned to reopen with small-scale gathering and multipurpose spaces, and that the City was looking into adding a gymnasium onto the existing building. However, the City is unable to address the community's vocal and insistent desires to reopen one of the community's vacant schools or to provide residents with a public pool.

COMMUNITY MEETING #4



Figure 140: Meeting takeaways

FRIENDS OF THE JEFFERSON CHALMERS RIVERFRONT PARKS GROUP MEETING #1

A few days later, I attended a meeting of the Friends of the Jefferson Chalmers Riverfront Parks group (or FJCRP for short). This thesis has been greatly served by forging a connection with the FJCRP, thanks to Deborah James, the vice president of the group. The FJCRP, a committee set up by and working with the Parks and Recreation department, was formed to "advocate for the protection, enhancement, and stewardship of [the] parks in order to provide and promote conservation, education, and recreation opportunities for visitors," giving residents autonomy over their public riverfront assets [33]. The meeting, held at the Ewald Library in neighboring Grosse Pointe Park, was a reaction to the last Planning Department event, particularly to the new developments concerning the former Lenox Center. Residents were surprised by the announcement that the City was hoping to add a gymnasium onto the Lenox Center and expressed concerns that this act would block the park's extraordinary views. The group also expressed their opposition of private enterprise being allowed with the parks, preferring public, community-centric programs instead. Siobhan Gregory, a local activist who was in attendance, is responsible for leading the community's campaign to reopen the Lenox Center with educationally-focused programming, including classrooms, a S.T.E.M. laboratory space, and a community kitchen incubator.

HAVE CONCERNS WITH ADDING A GYMNASIUM ONTO THE LENOX LENOX GYMNASIUM CENTER: CAME AS A SURPRISE "CURVEBALL" EXTENSIVE WATER DAMAGE REPORTED BUT THE CITY WILL NOT **CONDITION OF LENOX** ALLOW ASSESSMENT/ENTRY CENTER OPPOSED TO PRIVATE BUSINESSES IN PARK BUT WOULD SUPPORT COMMERCIAL PARK **COMMUNITY ENTERPRISES FUNCTIONS** FOCUS ON EDUCATIONAL PROGRAMS FOR YOUTH (S.T.E.M. LENOX CENTER LAB SPACE, CLASSROOMS) PROGRAMMATIC DESIRES

FJCRP MEETING

2/20/19

Figure 141: Meeting takeaways

CITY HOPING TO PUT CONCESSIONS

FRIENDS OF THE JEFFERSON CHALMERS RIVERFRONT PARKS GROUP MEETING #2

The final community meeting I attended was another FJCRP gathering held at the Ewald Library. At this meeting, I was informed as to why the two previous community centers in Jefferson Chalmers had closed- the Lenox Center due to extensive water damage and the center in Maheras-Gentry due to budget cuts. It was also at this meeting that I learned that the FJCRP's mission statement includes the phrase "to continue the transformation of the riverfront as a destination for residents and visitors to enjoy," a statement which has guided the direction of my thesis [33]. After the meeting, I asked two members of the FJCRP where they would like to see a new gymnasium in the neighborhood instead of attached to the Lenox Center, to which they responded "Maheras-Gentry-that's the sports park!"

Just a few days before the final presentation of this thesis, I was informed by Deborah James that the Lenox Center had secured three million dollars for its reopening. Whether or not this sum includes a new gymnasium added to the existing building remains to be seen, and the FJCRP intends to be fully involved in the decision-making processes this funding will stimulate.

FJCRP MEETING

3/1/19



BUREAUCRAIC INFEFICIENCIES

THE PARKS DEPARTMENT HAS NOT KEPT THE FJCRP GROUP UPDATED DESPITE HAVING CREATED THEM

Figure 142: Meeting takeaways



In order to determine which of the countless citizen requests and opinions collected from neighborhood meetings and ongoing projects are most important to the community, it became necessary to conduct a survey asking residents to prioritize their civic, commercial, and recreational programmatic desires, taking a cue from Phoebe Wall Wilson's "neighborhood place." The seven question survey asked which programs residents preferred, where they would like to see a public space building, what they want done with the vacant riverfront next to Mariner Park, and if they would approve of the creation of new canals. Every program on the survey was taken directly from the community's feedback on current projects, also allowing for write-in answers. Surveys were distributed at various establishments along Jefferson Avenue and at community events, as well as by two extremely helpful residents, Deborah James and Kaija Wuollet, who administered surveys to their neighbors. Two more people that greatly contributed to the survey's success were Allen Penniman and Minnie Lester, who were kind enough to allow surveys to be completed at their community meetings, a PDD Office Hours event and a Southeastern Waterfront Neighborhood Association gathering, respectively.

The results were incredibly informative. In the realm of civic programs, there was near-unanimous support for a new recreation center, followed by a nature center, classroom spaces, and a pool. Commercial functions that scored highly were, in order of descending popularity, a bakery/coffee shop, restaurant, movies/entertainment, a grocery store, kayak rental, and a small business incubator, while the top recreational programs

JEFFERSON CHALMERS PUBLIC SPACE SURVEY

**NOTE: This survey is being conducted by a graduate student of architecture at the University of Detroit Mercy. Your feedback will inform the design of a building and landscape for a master's thesis project, which will never be built or effect your neighborhood in any real way.

reque meetii which	TION 1: Of this list of CIVIC public space sts gathered from local community ngs, workshops, and questionnaires, THREE would you like to see added to iverfront? (Please check up to 3 boxes)	QUESTION 3: Of this list of RECREATIONAL public space requests, which FIVE would you like to see added to your riverfront? (Please check up to 5 boxes)		
	Recreation center/gathering space Pool Public marina Classroom space for schools Classroom space for vocational training		Fishing piers Floating docks Seating- especially at waterfront Walking trails Bathrooms/pavilions Fish cleaning stations	
	Day care center Nature center Other:		Community gardens Butterfly/pollinator gardens Tot lots/playground Forested areas Landscaping for flood/rain control	
QUESTION 2: Of this list of COMMERCIAL space requests, which FIVE would you like to see added to your riverfront? (Please check up to 5 boxes)				
	Kayak rental Skat <mark>ing rink Bowling alley Movies/outdoor ent</mark> ertainment	buildi were	TION 4: If a new riverfront public space ng with functions inspired by questions 1-3 to be built in Jefferson Chalmers, where I you want it to be? (Please check 1 box)	
	Grocery/produce Bakery/coffee shop Restaurant Food trucks Commercial flower/vegetable growing Small business start-up space		On vacant lot next to Mariner Park In Riverfront Lakewood East Park In A.B. Ford Park In Maheras-Gentry Park Another place:	
	Market space Other:	PLEA	SE SEE REVERSE SIDE OF PAPER!	

Figure 143: Survey front side

JEFFERSON CHALMERS PUBLIC SPACE SURVEY

**NOTE: This survey is being conducted by a graduate student of architecture at the University of Detroit Mercy.
Your feedback will inform the design of a building and landscape for a master's thesis project, which will never
be built or effect your neighborhood in any real way.

with t	TION 5: What would you like to see done he vacant riverfront lot next to Mariner (Please check 1 box)	QUESTION 7: If you would like, please tell me about yourself:
	Create another park	Age:
	Add housing	Gender:
	Add retail	Race/ethnicity:
	Create a public use building	Years lived in Jefferson Chalmers:
	Other:	Comments/a fun fact:
	TION 6: How would you feel about the on of new canals that run down unused	
alleyv	vays for the purposes of recreation and	
flood/	rain control? (Please check1box)	
	-	
	That would be great!	
	That would be terrible!	
	I am indifferent to this.	
Ш	Other:	
	Thank you for taking the time to complete this student ver	
	Please return this paper back to the locat	ion you found it by November 11th, 2018.
	Have a wond	derful day!
		STORE

were walking trails, riverfront seating, bathrooms and pavilions, fishing piers, landscaping for flood control, and pollinator gardens. 43% of the respondents chose A.B. Ford Park as the most ideal site for a new public space building, and residents were supportive of converting the vacant riverfront into a park or the site of a building for public use.

Surprisingly, many residents were generally enthusiastic about the creation of new canals for recreational and stormwater management purposes, with 65% of respondents voting in favor and 22% unsure but not explicitly opposed. The racial demographics of the respondents were satisfactorily varied for such a homogeneous population, with 50% of the participants identifying as African American, 35.7% as Caucasian, and 3.6% Asian American. 51.7% of respondents identified as female while 34.5% identified as male, with the remaining 13.8% choosing not to report their gender. 86% of participants lived in Jefferson Chalmers, with 7% from elsewhere and another 7% not reporting. However, the age distribution among survey respondents heavily favored middle-aged and elderly age groups, with a median age of 63 and an average age of 56.8. This is due to the fact that community meetings tend to be attended by older citizens and that the author was uncertain of how to administer surveys to members of younger demographics.

In addition to providing some insight as to the community's priorities for their riverfront public space, this survey effectively provided this thesis a "client," for whom an architectural intervention will be designed. Serendipitously, the survey reinforced the author's initial predictions on which





Figure 147

QUESTION #5: VACANT RIVERFRONT PARCEL IDEAS





QUESTION #6: NEW CANAL PROPOSAL FEEDBACK

Figure 149



Figure 151		CIVIC PUBLIC SPACE PROGRAMS	
	REC CENTER	RECREATION CENTER/GATHERING SPACE	26 votes
	2	NATURE CENTER	18 votes
		CLASSROOMS	11 vote:
		POOL	10 votes
Figure 152	#	COMMERCIAL PUBLIC SPACE PROGRAMS	
	((
		BAKERY/COFFEE SHOP	17 votes
		RESTAURANT	15 votes
	***	MOVIES/OUTDOOR ENTERTAINMENT	14 votes
	1	GROCERY/PRODUCE	14 votes
		KAYAK RENTAL	11 votes
	<u>\$</u>	SMALL BUSINESS INCUBATOR	10 votes
Figure 153		RECREATIONAL PUBLIC SPACE PROGRA	MS
	S	WALKING TRAILS	21 votes
		SEATING-ESPECIALLY AT WATERFRONT	16 votes
	* †	BATHROOMS/PAVILIONS	15 votes
	<u>f</u>	FISHING PIERS	13 votes
	Dula	LANDSCAPING FOR FLOOD/RAIN CONTROL	13 votes
	38	BUTTERFLY/POLLINATOR GARDENS	11 votes

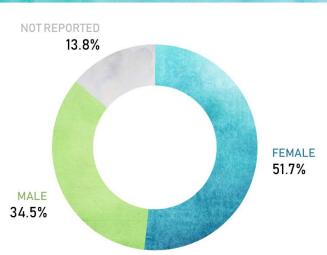
programs the community wanted, as the results corroborated the citizens' foremost wish for a recreational center, with supplementary desires for kayaking, a restaurant or café, fishing piers, and waterfront seating.

While indispensable to this thesis, there are a few critiques of this survey; the foremost of which is that local youths were not represented in the results. To paraphrase one resident, "The youth voice is imperative to the parks' success," as they will be a key demographic utilizing them. If the parks do not have programs that young people will enjoy, it is more than likely that the parks will remain underutilized. Furthermore, the sample size of the survey could be considered too small to be fully representative of Jefferson Chalmers as a whole, as a total of 28 surveys were collected. A critique from one local community development representative is that if not properly conducted, this student survey could mislead residents into thinking it will have real effects on their neighborhood, a valid concern which was addressed with frequent verbal and written disclaimers about its fictitious nature.

After collecting and computing all of the responses to the survey, it became necessary to narrow down the community's highest-voted civic, micro-commercial, and recreational programs down to a logical collection of functions that could coexist within a building. In response to some particularly insightful critique, the building will not house a random amalgamation of functions based solely on the residents' highest votes but will curate the desires of the community into a cohesive intervention whose programs best complement each other and are the most appropriate for a riverfront park.

ASIAN AMERICAN NOT REPORTED 3.6% 10.7%

GENDER OF RESPONDENTS



% LIVING IN JEFFERSON CHALMERS

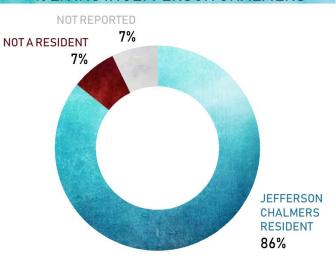


Figure 156

Figure 154

CAUCASIAN

35.7%

Figure 155

This process started by eliminating all programs with less than ten votes, winnowing down from 35 programs to 16. Additional listening and perception helped to further simplify the list. For example, despite being the second-most preferred micro-commercial program, discussion with members of the FJCRP made it clear that a restaurant would not be the best fit for their riverfront parks. Furthermore, intuition revealed that a grocery store or start-up business incubator would be better suited for Jefferson Avenue. At the end of this process, the final list of programs that would be addressed in this thesis fit into the typology of community recreation center, with a large gathering space, outdoor entertainment space, a community kitchen, classrooms, conference rooms, and a coffee shop, as well as an indoor pool, gymnasium, and small fitness center.

AFRICAN

50.0%

AMERICAN



The conclusion of the survey brought with it the transition into the design phase of this thesis, which proposes a community recreation center. This community hub would also act as the terminus of a pedestrian paths network connecting the riverfront parks to each other and to the neighborhood they serve, addressing the area's severe disconnectivity. The site of this recreation center will be in Alfred Brush Ford Park due to the majority vote as well as the park's adjacency to the most densely populated part of the Jefferson Chalmers.

A.B. Ford Park is mostly open lawn, with two parking lots, two soccer fields, two basketball courts, and two playgrounds, as well as a few clusters of mature trees and a concrete riverwalk. The seawall is fairly damaged due to years of ice floes piling up against it, and the site frequently has standing water because of its location within the 100-year floodplain. The picturesque Lakewood Canal forms the site's eastern border, separating A.B. Ford Park from its neighbor, Riverfront-Lakewood East Park. Four streets dead-end at the north edge of the park, beyond which lies a collection of charming early 20th-Century houses.

The existing Lenox Center, located at the west end of the park, is a small, unassuming brick building that is currently boarded up with plywood. Painted on the plywood at two locations on the north face of the building are two murals. The building, gifted to the neighborhood by the Kiwanis organization, once held three multipurpose rooms, three conference rooms, and a commercial kitchen [34]. Next to the building is a picnic pavilion, as well as the two concrete silos leftover from the Cold War. Officially known as Nike Missile Control Site D-23, these two anachronistic concrete

towers once provided radar communications for missiles stashed beneath Belle Isle, none of which were ever deployed [13]. On the opposite end of the park, there is a small concrete-block restroom structure, as well as another picnic pavilion.

Throughout most of the year, people can be observed fishing, walking their dogs along the riverwalk, playing on the playgrounds, and having cookouts. Some residents even brave these activities in the snow, playing on the playground or walking their dogs in the bitter winter winds. When its not covered in snow, local soccer teams play their games on the vast open lawn of the park. The park hosts an annual fireworks display in the summer, a "fishing derby" event, and Jefferson East Inc.'s "Jazzin' on the River," a day of free jazz concerts on the riverfront [35]. Other events planned by the Friends of the Jefferson Chalmers Riverfront Parks for A.B. Ford Park include game nights, movie nights, an Easter egg hunt, and a cider social. In the near future, a portion on the eastern half of this site will be home to one of the three wetland coves proposed by the EPA and Parks Department, which breaks ground in 2019.



130 Figure 157 131







MURAL ON LENOX CENTER

PARK TO HOUSES CONDITION

SOCCER FIELD

LAKEWOOD CANAL







WEST PLAYGROUND

RESTROOM PAVILION

FORMER LENOX CENTER AND MISSILE SILO

Figure 158: Site analysis

EASTPLAYGROUND









RIVERWALK CONDITION INSTANCE OF FLOODING

ICE FLOES

VIEW AT CORNER CONDITION



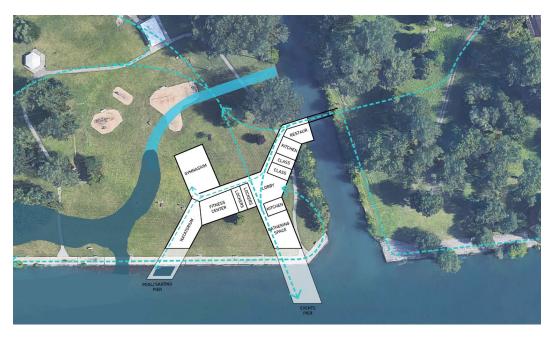


Figure 159: Plan iteration

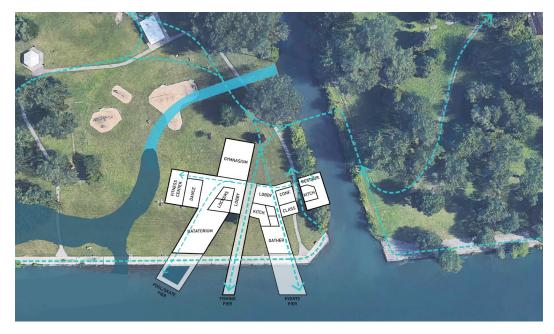
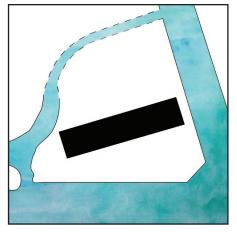


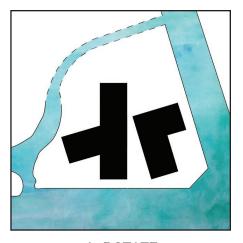
Figure 160: Plan iteration

After narrowing down the program list and analyzing the site, schematic design of the proposed building and paths network could commence. The community hub, after extensive study and iteration, has been located between the Lakewood Canal and the location of the future wetland at the riverfront to connect the community with their aquatic resources, as well as to help bridge between A.B. Ford and Lakewood-East Parks. The pedestrian paths network, envisioned as a series of dendritic tributaries all collecting at one central building on the river, took shape by utilizing existing infrastructure and vacant lots, careful to respect existing site features such as buildings, trees, and playgrounds.

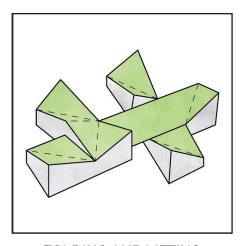
From early in the design process, the form of the building was intended to mirror the branching of the paths, with each branch of the building oriented toward specific views of the canals, wetland inlet, and river. This branching was fleshed out over an extended period of sketching, exploring countless schematic floorplans, two of which are shown at left. The floorplan that was chosen to develop further was derived from a series of site-specific operations, starting with a mass perpendicular to the canal, adding two masses perpendicular to the river, then splitting the form, rotating a portion of it, and then extending a pier between the two forms [Figure 161]. Once the schematic floorplan had been laid out, a 3D massing study commenced, resulting in a series of six concepts inspired by the views, the nearby residential, and the aquatic nature of the site. Such concepts include "intersecting telescopes," "undulating houses," and "peeling ship prow," with each concept using the same floorplan and siting [Figure 162].



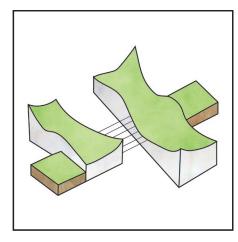
1. PERPENDICULAR TO CANAL



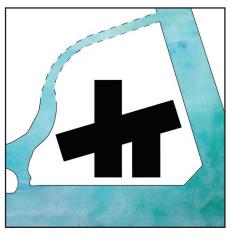
4. ROTATE



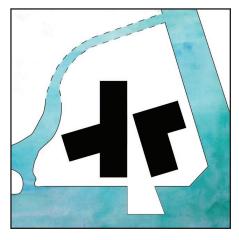
FOLDING AND LIFTING



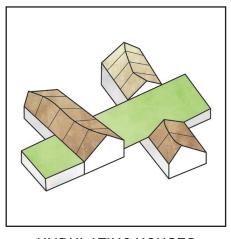
WATER IN MOTION



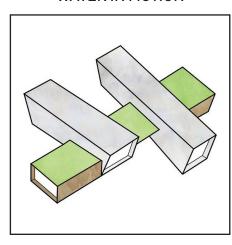
2. PERPENDICULAR TO RIVER



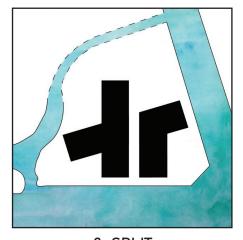
5. EXTEND



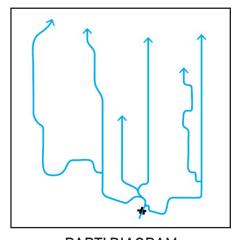
UNDULATING HOUSES



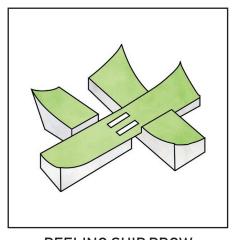
INTERSECTING TELESCOPES



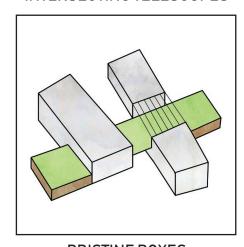
3. SPLIT



PARTI DIAGRAM



PEELING SHIP PROW



PRISTINE BOXES

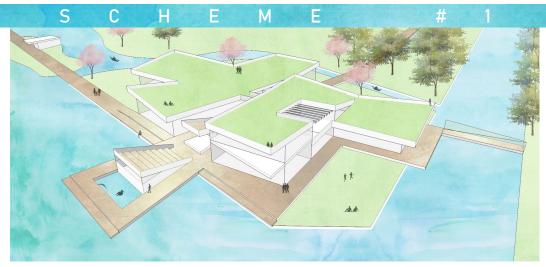
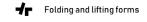


Figure 163: Aerial perspective



Figure 164: Entry perspective





2nd story cafe and lounge

┩ Not earth-sheltered

Sauna on pier

Exports classes, conference, and gymnasium to Lenox Center

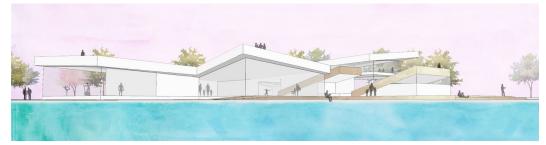
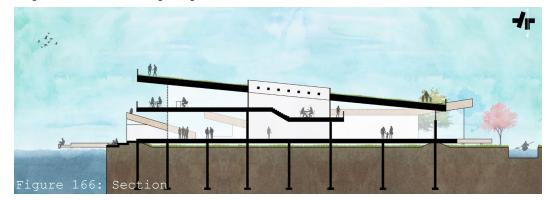
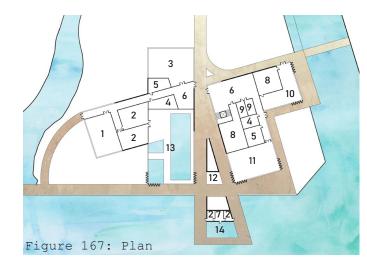


Figure 165: River perspective



The first of two massing concepts that were further developed into schematic buildings was the "folding and lifting" forms concept, which incorporated a rotating pedestrian bridge connecting to the neighboring park, necessary for allowing for boats to pass through to the river. The western building houses recreational functions like a natatorium, fitness center, and exercise classroom while the eastern building has gathering functions like an events space and community kitchen/restaurant. The walls of the restaurant, gathering, and natatorium spaces all fold away, allowing functions to spill out into the park. Between the two buildings is an outdoor stage whose seating is on the roof of a small sauna building. Adjacent to the sauna is a protected river swimming area at the end of the pier. The second floor holds a café and observation lounge with a rooftop courtyard overlooking the canal. This scheme does not include classrooms and conference rooms as previously planned due to the community's updates about and visions for the Lenox Center, as the community hopes to program that building with educational and small meeting spaces. The entirety of the roof is green and occupiable to replace the land taken by the building.



- 1. Fitness room
- 2. Locker room
- 3. Dance classroom
- 4. Storage
- Mechanical
- 6. Lobby
- 7. Sauna
- 8. Kitchen
- 9. Restroom
- 10. Cafe
- 11. Gathering space
- 12. Stage
- 13. Natatorium
- 14. River pool

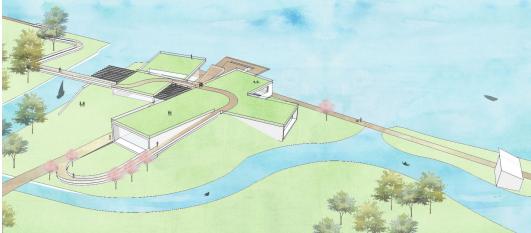


Figure 168: Aerial perspective



Figure 169: Entry perspective



Ramped canopy bridge

→ No second story

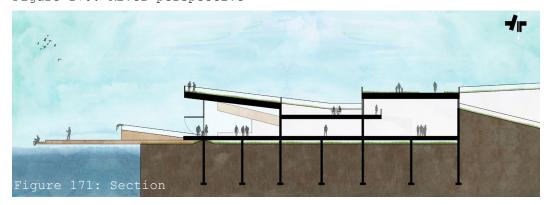
Partially earth-sheltered

No sauna on pier

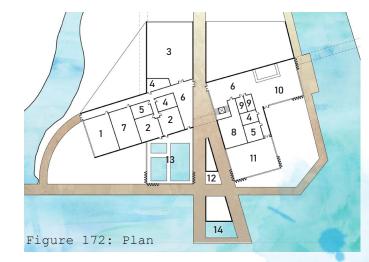
Exports classes, conference, and restaurant to Lenox Center



Figure 170: River perspective



The second scheme explores the "intersecting telescopes" concept. The height of these forms is dictated by a ramped pedestrian bridge allowing for 30' tall sailboats to pass underneath. The ramped bridge merges with the building, following the roof's slope and circumambulating to the building's entry. The north sides of the buildings are earthsheltered, and the buildings have no second story to reduce imposition. This scheme exports the classrooms, conference rooms, and community restaurant to the Lenox Center, There is an identical splitting of functions present in this scheme, with recreational programs in the western half and gathering in the eastern half, although this scheme incorporates a gymnasium as well. The same walls open up as the first scheme, and the outdoor stage and pier are the similar, although this scheme has no sauna. Both schemes are lifted slightly off the ground to clear the floodplain, and both propose a short canal to connect the wetland inlet to the canal, using the removed dirt to fill beneath the building, a feature removed in the final design to better integrate the project into the site.



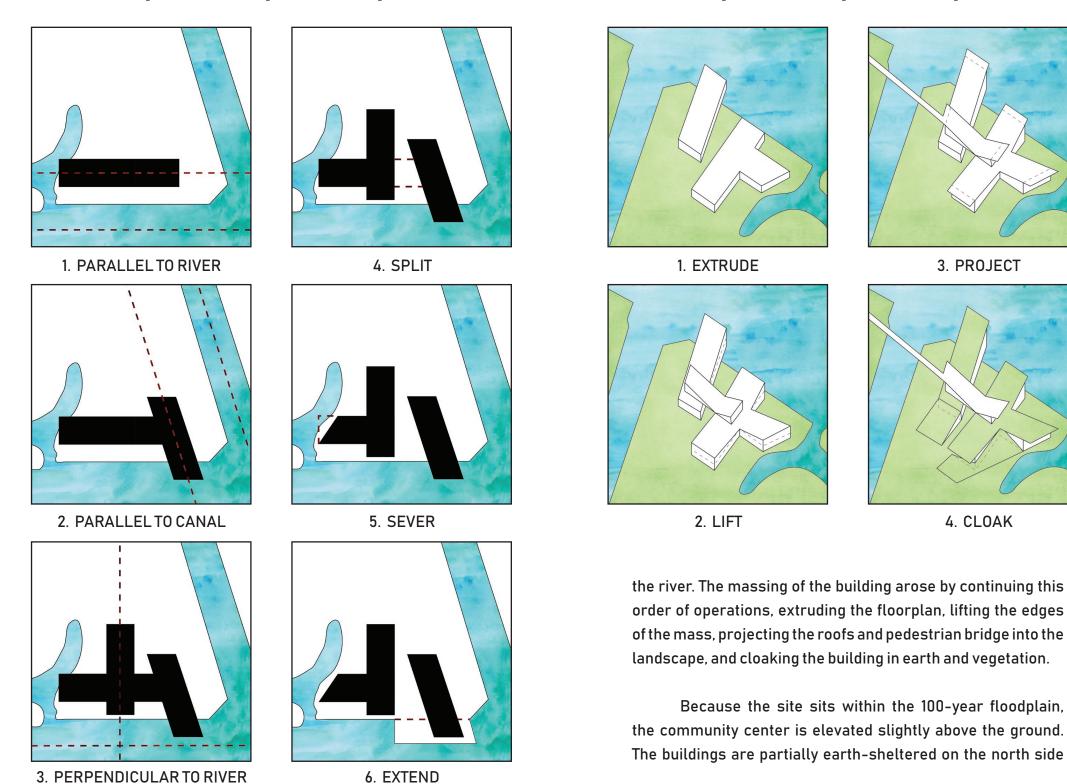
- 1. Fitness room
- 2. Locker room
- 3. Gymnasium
- 4. Storage
- Mechanical
- 6. Lobby
- 7. Dance classroom
- 8. Kitchen
- 9. Restroom
- 10. Cafe
- 11. Gathering space
- 12. Stage
- 13. Natatorium
- 14. River pool





The final design of the building combines the "folding and lifting" formal concept of the first scheme with the ramping pedestrian bridge of the second, maintaining a similar branching plan and employing a horizontal, panoramic expression. It is sited at the riverfront between the Lakewood Canalandthelocation of the future wetland in let in order to most directly connect residents to their aquatic resources, as well as to help tie the neighboring parks together. This prominent

riverfront location is at the intersection of lateral, longitudinal, and vertical connectivity, enabling residents to engage with their waterfront in new ways by capitalizing on three different aquatic assets—the river, canal, and wetland. The plan of the building was generated by creating forms parallel to both the river and the canal to maximize views, with one form protruding past the shoreline [Fig. 174]. After adding a form perpendicular to the river, the footprint was then split in two by a pier extending into





facing the park to help integrate the building with the landscape as well as to provide a sledding hill. Perhaps the most significant guiding principle of this building is that there would be no net loss of park space, as the walkable green roofs of the building replace all of the land taken up by the building's footprint. In order to connect the riverfront parks, a ramping canopy bridge is proposed, whose 40' height is necessary to let sailboats pass underneath. The reason that a canopy bridge

was chosen as opposed to a drawbridge or rotational bridge is that it is the only bridge typology that does not have to be manned or monitored to let boats through. This way, boaters are not blocked out of the neighborhood or trapped in the canal when the park closes for the night. Furthermore, its remarkable height would serve to attract users from all over to these parks, guaranteeing their future use. The bridge is essentially only half of a bridge as it merges with the roof of the community



center, whose form continues the bridge's path along its roof and gradually guides it down and around to the building's entry. The archways of the bridge increase in number as ramp rises, creating a sense of security.

Programmatically, the western building houses recreational functions like a natatorium- complete with a lap pool, thermal pool, and leisure pool, a fitness room, and an exercise classroom, while the eastern building holds gathering functions, including a large gathering space, community kitchen, and combined café and lounge. Above part of the café is a small reading loft overlooking the canal. The walls

of the café, gathering, and natatorium spaces all fold away, allowing functions to spill outdoors onto the riverwalk, pier, and picnic lawn. The second floor of the gathering building holds a small observation lounge that opens out onto the green roof. On the green roof above the recreation building is an outdoor stage whose seating is provided by the gentle slope of the building below.

Nestled between the two buildings is a small sauna whose roof acts as diving platform for the protected river swimming area at the end of the pier. This variety of natural pool has extensive precedent in Scandinavian countries in

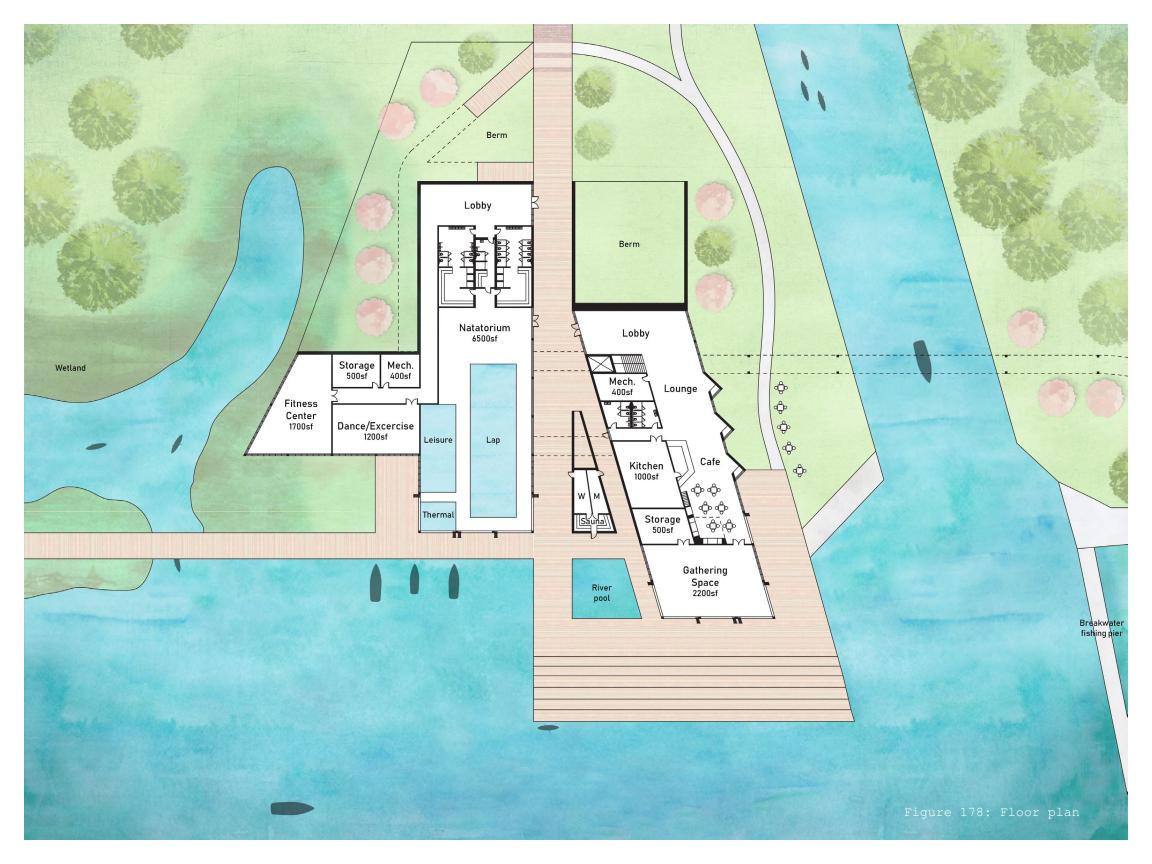




Figure 179: Site plan

the "harbor bath," which is a kind of pier that provides vertical connectivity by allowing users to directly access the water by essentially creating an enclosed pool within the river itself. Across the wetland inlet from the recreation building is a boathouse and snack stand that rents kayaks and ice skates, depending on the season. Just beyond the canal is a long breakwater

that protects the community center and swimming pier

Figure 180

from damaging ice floes while doubling as a fishing pier.

The buildings' exterior material palette is comprised of glass, brown brick, grass roof surfaces, channel glass, and wood. The east, south, and west façades are mainly glass to maximize views of the canal, river, and wetland, respectively. These vast expanses of glass are shaded in the summer by the dramatic roof projections of the



building. Where the buildings require natural light but have no views of water, as is the case on the northerly portions of the design, translucent channel glass is used to capture sunlight. Some degree of opacity is afforded by the occasional brown brick wall, echoing the brown brick of the Lenox Center and the houses beyond the park. To mediate between the inside and the outside of the building, the wood floor of the gathering space continues outside the building as the material of the pier and riverwalk. The same wood is also utilized to highlight the soffit of the roof projections, heightening their dramatism. Adorning the fascia of the roofs are zinc panels; a material chosen to glint in the sunlight. The gathering space has floor-to-ceiling

glass on three sides, the remaining wall a marble accent. The exposed columns of the room would have a polished concrete surface, providing some tactile delight. The floor and ceiling sport warm wooden planks to offset the coldness of the glass, marble, and concrete. Similarly, the café and lounge are clad in warmwood planks with a cool, white hexagonal tile for contrast. The landscape palette consists of the existing grass lawn, taller riparian plantings at the wetland, and lavender-dominant pollinator gardens, as well as the addition of several cherry trees matching the existing trees around the Lenox Center.

While designing the building, it was crucial to keep



the experience of the user in mind through small details, like the steps leading down to the water at the end of the pier where someone could sit and dangle their feet in water as they watch boats go by, or the protruding window seats in the café where one could curl up with a coffee and a good book. This experiential focus was also explored in the siting of the sauna next to the river pool, where a person can brave a cold plunge after a sweat, as well as in the long walk up the ramp through the treetops to reach unparalleled views of Belle Isle, Canada, and the Detroit skyline.

The building was also intended to be an ideal setting for events that the Friends of the Jefferson Chalmers Riverfront Parks group plans. The gathering space, designed to hold 230 people, could easily accommodate community events like vendor fairs or game nights, in addition to being rented out for

family reunions and weddings. Furthermore, the extensive green roof could be used for the annual fireworks show, and the rooftop stage could be a venue for a summer concert series or a family movie night.

Since community engagement was important to this thesis, shared here are a few specific instances of how resident input has influenced the design. In addition to the site and programs of the building being chosen by survey respondents, listening to residents has helped shape the form and program of the project as well. For example, after corresponding with John Myers, a member of the FJCRP, the decision was made to remove an entire branch of the building to block less views of the water. The choice to cloak the building in earth in order to minimize imposition and blend with the landscape was also due to this same conversation. Additionally, the decision to

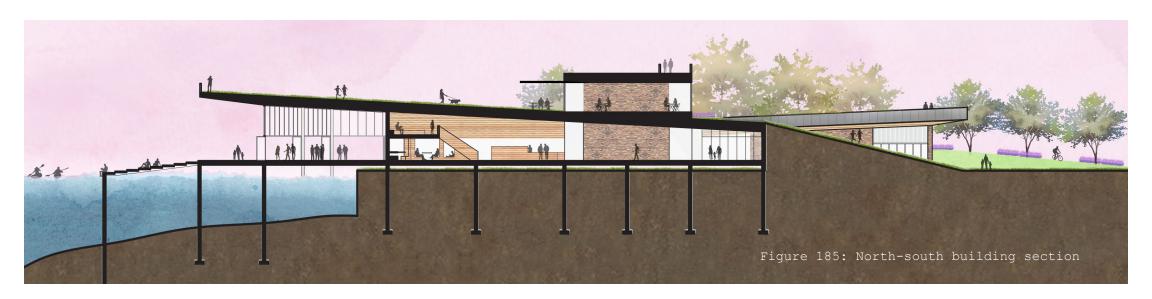




provide a second-story observation lounge was inspired by an early conversation with Deborah James, while the gymnasium that was oncepart of the program list has been detached and sited in Maheras-Gentry Park after a conversation with members of the FJCRP. Furthermore, the choice to transfer the classrooms, community restaurant, and conference spaces that were originally planned for this building to the Lenox Center was due to the community's vision for similar functions to reprogram their building. Because of this, the goal for the community hub

that this thesis proposes is that it would complement the Lenox Center's reopening, as the Lenox Center is better suited for smaller-scale gathering and educational programs and this thesis's design accommodates indoor recreation and large assembly.

While design of the building was already underway, it became apparent that some community members were apprehensive about building a new structure in their parks as





it would block the views afforded by the site and disturb the natural character of this park. These concerns, while valid, did not compel a last-minute site change for the proposed community hub, a decision defended in the following series of statements. Firstly, parks are ideal and common locations for community centers, with Jefferson Chalmers itself setting a precedent for this pairing of public amenities. Although adding a new building to A.B. Ford Park would inevitably block some views of the water, the design proposed by this thesis would

provide uninterrupted views of the river, canals, and wetland on its roof, replacing the views lost at ground level with an elevated, panoramic view of their aquatic assets. Additionally, the intuition to split the building in two stemmed from a desire to preserve a view to the river at ground level. Lastly, by enclosing a portion of the park in a mostly-transparent building on the shore, residents are better enabled to enjoy their waterfront year-round.



To ensure the future stability of this proposed community hub, it is necessary to create a constant revenue stream to cover the operation and maintenance costs, as gleaned from Phoebe Wall Wilson's neighborhood space theory. Such revenue-generating micro-commercial functions include the café, kayak and ice skate rentals, and indoor pools, while the free, civic programs are the observation lounge, fitness room, rooftop performance space, and community kitchen. In

addition, the design's unique interaction with the water and the elevated views it affords would provide desirable public space with the potential to become a regional attraction, which aligns with the goals of the FJCRP group. Increasing visitation to the parks will ensure their sustainability by increasing their revenue potential, thus funding the parks' future upkeep.



Figure 188: Program list







Zooming out from the community center, a proposed master plan shows how the new community hub would relate to the larger context. The proposed building is at the epicenter of a paths network that provides lateral, longitudinal, and vertical connectivity by tying the parks to each other and to the neighborhood while providing opportunities to directly engage with the water.

Lateral connectivity is created with a series of proposed bridges throughout the paths network, and longitudinal connectivity occurs by improving three existing paths along Clairpointe, Lenox, and Lakewood while creating two new trails running through the neighborhood to the riverfront. Vertical connectivity is achieved by proposing river access points in A.B. Ford and Lakewood-East Parks and canal access points along Fox Creek. The paths themselves are comprised of three materials: a reddish brick within the residential area to recall the brick pavement of Marlborough Street, a wooden boardwalk at portions near the water, and simple concrete within the parks. This pedestrian network complemented by a similar, intertwined stormwater remediation



network that will serve to mitigate flooding within the 100-year floodplain. This is accomplished through a series of conveyance canals and retention ponds on vacant lots, as rendered in the first of seven vignettes, allowing the floodplain to naturally inundate by providing space for excess water to collect while also diverting water to the Detroit River via Fox Creek. This method of stormwater remediation was inspired by a study conducted by graduate students at the University of

Michigan, who proposed converting Essex Street in Jefferson Chalmers into a conveyance canal emptying excess rainwater into Fox Creek [36]. This thesis borrows the concept of the conveyance canal but routes it through vacant lots instead. Additionally, this thesis pushes the conveyance canal idea further by proposing a series of wetland retention ponds and bio-swales that collect and filter excess water before it flows into the conveyance canal and reaches Fox Creek. As an added















bonus, this network will be navigable by kayak to enable people to explore Jefferson Chalmers in a new way.

The second intervention [Fig. 192] located along this paths network is a prototype of a pedestrian bridge crossing Fox Creek. This simple bridge could be replicated at other points of disconnectivity that do not require the ability for boat traffic to pass through, such as the eastern Grayhaven canal or a location further north on Fox Creek.

The third intervention [Fig. 193] is of a rotational bridge between Maheras-Gentry Park and Grayhaven Island. Because of the marina located at the northern end of the western Grayhaven canal, this intervention must take the movement of watercraft into consideration. This rotational bridge requires a staffed operator's station, which would be incorporated into the existing gated development on the island.

The fourth intervention [Fig. 194] illustrates a variety of suggested upgrades to the riverwalk in A.B. Ford Park, such as continuous riverfront seating, intermittent shading in the form of pergolas, and the creation of a lower level platform to access and engage with the river, while the fifth intervention [Fig. 195] proposes a new pedestrian path along Fox Creek to replace an existing fence. This new path would be accompanied by seating along the canal as well as intermittent kayak launch platforms below to provide vertical access to the canal.

The penultimate vignette [Fig. 196] demonstrates how the dead ends of Eastlawn, Newport, Piper, and Riverside could be opened up to increase pedestrian access to A.B. Ford Park, with proposed bio-swales on either side of the streets.

The final vignette [Fig. 197] depicts a productive landscape intervention of solar power and cut-flower growing, two programs that scored highly with the community on one of the Planning Department's surveys [8]. The site chosen for this intervention was the vast, fallow lot along the eastern Grayhaven canal, replacing the extensive failed development along Lenox Street. This productive landscape could generate revenue for the City to help fund the new community hub while opening up the site to public use with a path following the shoreline.



At the final presentation of this year's research and design, a variety of valid comments were made both in support and critique of this thesis. While the panel agreed that the project was thoroughly developed and rooted in community engagement, they highlighted some missed opportunities in the process and design. Perhaps the most significant missed opportunity is the lack of a feasibility study. Since this thesis was grounded by the reality of current circumstances in Jefferson Chalmers, it would have been advantageous to demonstrate how to make the proposed design a reality, bringing the process full-circle. However, it could be considered appropriate that there was no feasibility study included, as to not make any pretense about this thesis becoming a reality. Therefore, any community members who might see this thesis would not be misled as this proposal is, at most, an elaborate and fictitious thought experiment intended to imagine and illustrate possibilities.

Having said this, this thesis does contain an assortment of ideas that could be implemented in reality, including the repurposing of vacant lots and alleys for alleviating excess stormwater, creating pedestrian access points to A.B. Ford Park at the dead-ends, and providing opportunities to directly engage with the water in public kayak launches and seating platforms at water-level along the canals and riverfront. Additionally, even converting the Lenox site into a flowering productive landscape or bridging the canals to connect the riverfront parks is potentially within the realm of possibility.

Further critique pertains to the design of the proposed architecture, specifically the aesthetic incongruence between

the community hub building and the bridge that extends from it. The bridge has a formal language of repetitive archways that is not at all present in the building, missing the opportunity for a more cohesive design. Another comment made about the design itself was that it could have embraced a more contextually-inspired aesthetic, drawing from the vernacular and architecture of its place. This could have been accomplished by deriving inspiration from the Lenox Center, early 20th Century brick homes, or the many boat sheds along the canals. Moreover, the layout of the floor plan could have benefitted from additional study, as interior organization of the building may have been limited due to the predetermined building footprint. Despite this, it was noted that the scale of the building felt appropriate to the site, not overwhelming the park.

However, it was feedback from one juror in particular that had the potential to validate or invalidate the entire thesis: FJCRP vice president Deborah James. Thankfully, Deborah approved of the thesis's final design proposals, none of which she had seen prior to the critique. At the critique, Deborah confirmed that the community's top programmatic priority is a recreation center, corroborating the premise of this thesis. Regarding the architecture itself, Deborah remarked that she liked the notion of splitting the building in two and appreciated how the building fits into the landscape.

Ultimately, the two core objectives of this thesis were to address the programmatic desires of Jefferson Chalmers residents and to mitigate the area's disconnectivity, studying both objectives through a specific focus on the aquatic public spaces

of the neighborhood, principally the four riverfront parks. These goals were intended to be accomplished by listening to the community's wants and needs through compiling available opinions and data as well as conducting original engagement and directly meeting with members of the community. This thesis has attempted to address the community's vocalized wishes by designing spaces for indoor gathering and recreation, being sure to include a public pool, a desire which has been brought up at multiple community meetings. Conducting a survey asking residents to prioritize various civic, micro-commercial, and recreational programs clarified the community requests collected from the Planning Department, Parks and Recreation Department, and other previous and ongoing projects in the neighborhood. The survey was undertaken to create a program list for a theoretical building, in which the functions were directly chosen and influenced by community input in order to design spaces to fill the needs voiced by the community.

Additionally, this thesis has proposed mitigating lateral, longitudinal, and vertical disconnectivity with an extensive paths network connecting the riverfront parks to each other and to the neighborhood. The proposed pedestrian bridges, paths, and park entries create new lateral and longitudinal connections while kayak launch platforms and stepped seating provide vertical connectivity, something altogether absent from every public space in the neighborhood. Together, the connectivity strategy of the paths network and the community recreation center it leads to would provide Jefferson Chalmers with the vibrant riverfront community spaces it deserves.

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FIGURES 1-8: Matthew Northcott
FIGURES 9-10: Quinn Evans Architects
FIGURE 11: Matthew Northcott
FIGURES 12-13: Quinn Evans Architects
FIGURE 14: Matthew Northcott
FIGURE 15: Quinn Evans Architects
FIGURES 16-20: Matthew Northcott
FIGURES 21-22: Quinn Evans Architects
FIGURES 23-41: Matthew Northcott

FIGURES 42-44: Detroitmi.gov/departments/planning-and-development-department/east-design-region/jefferson-chalmers

FIGURES 45-46: Quinn Evans Architects

FIGURE 47: Matthew Northcott

FIGURE 48: Detroitmi.gov/departments/planning-and-development-

department/east-design-region/jefferson-chalmers

FIGURE 49-51: Matthew Northcott

FIGURE 52: Detroitmi.gov/departments/planning-and-development-

department/east-design-region/jefferson-chalmers

FIGURE 53: Matthew Northcott on base map from Quinn Evans Architects

FIGURES 54-62: Quinn Evans Architects

FIGURES 63-66: https://www.enterprisecommunity.org/

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FIGURE 67: https://www.880cities.org/wp-content/uploads/2017/02/

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FIGURES 68-70: http://cityofdetroit.wixsite.com/upperdetroitriver

FIGURES 71-73: Matthew Northcott

FIGURE 74: Ariana Zannetti; City of Detroit

FIGURE 75: Matthew Northcott

FIGURE 76: Ariana Zannetti; City of Detroit

FIGURES~77-83: Detroitmi.gov/departments/planning-and-development-develop

department/east-design-region/jefferson-chalmers

FIGURES 84-85: Matthew Northcott

FIGURES 86-88: Detroitmi.gov/departments/planning-and-development-

department/east-design-region/jefferson-chalmers

FIGURES 89-94: Matthew Northcott

FIGURE 95-96: Jefferson Chalmers Community Advocates

FIGURES 97-103: Matthew Northcott

FIGURE 104: White et al.

FIGURES 105-106: Matthew Northcott

FIGURES 107-108: G. Mathias Kondolf and Pedro J. Pinto.

FIGURE 109: Matthew Northcott

FIGURES 110-114: Matthew Northcott with map from Quinn Evans Architects

FIGURE 115: Landezine.com/index.php/2015/05/copenhagen-strategic-flood-

masterplan-by-atelier-dreiseitl/.

FIGURE 116: Stoss.net/projects/29/detroit-future-city/

FIGURE 117: https://www.latzundpartner.de/en/projekte/urbane-

transformation/bahnstadt-heidelberg-de/

FIGURES 118-128: Matthew Northcott

FIGURE 129: Matthew Northcott with map from Quinn Evans Architects

FIGURES 130-147: Matthew Northcott

FIGURE 148: Matthew Northcott with map from Quinn Evans Architects

FIGURES 149-197 Matthew Northcott



