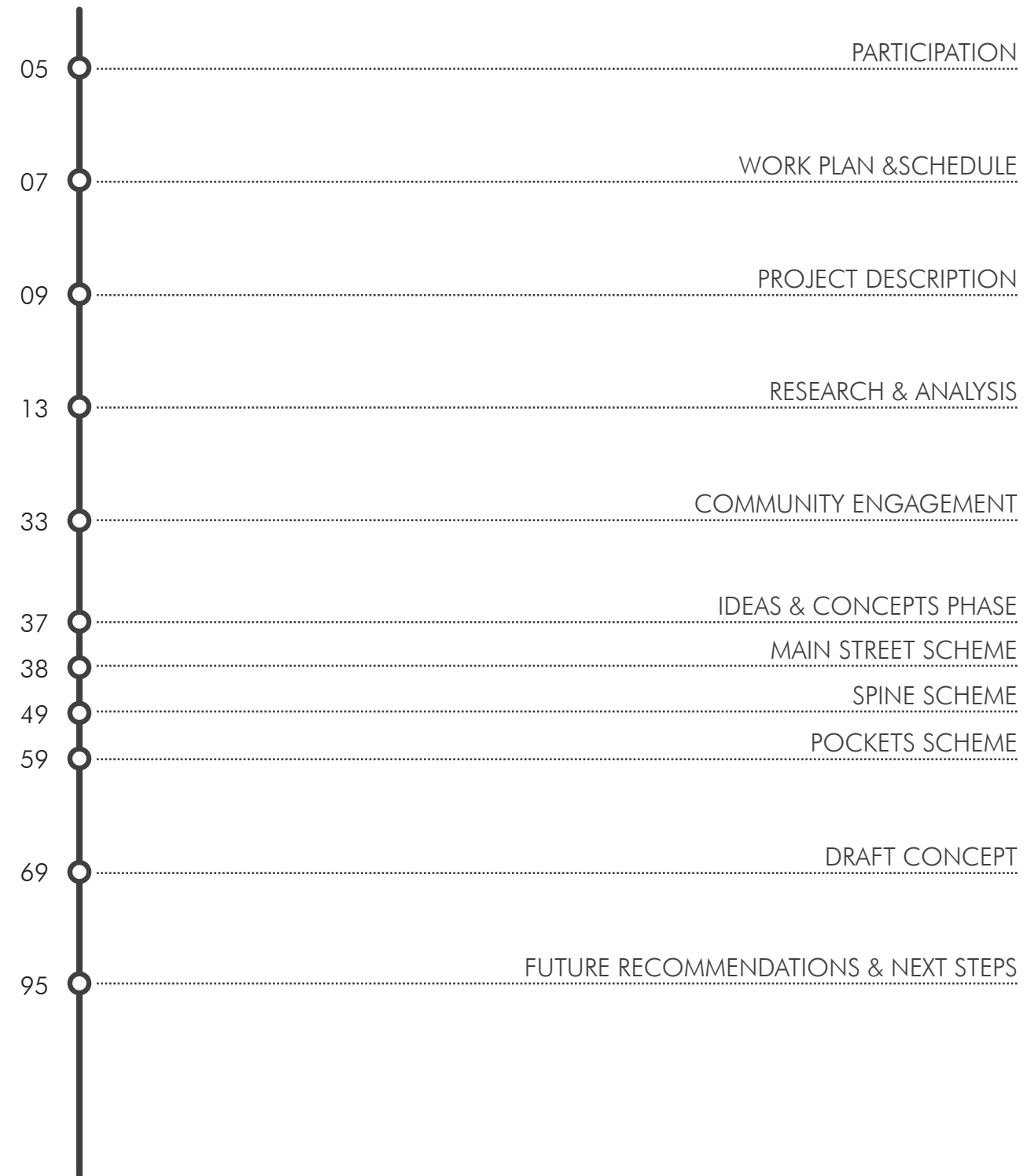
 **CiDi**
civic district
development study
white lake township

CiDi

table of contents



A vertical table of contents for the CiDi report. It features a central vertical line with circular markers at each page number. Horizontal dotted lines extend from each marker to the right, where the corresponding section title is listed. The sections are ordered from top to bottom: PARTICIPATION (05), WORK PLAN & SCHEDULE (07), PROJECT DESCRIPTION (09), RESEARCH & ANALYSIS (13), COMMUNITY ENGAGEMENT (33), IDEAS & CONCEPTS PHASE (37), MAIN STREET SCHEME (38), SPINE SCHEME (49), POCKETS SCHEME (59), DRAFT CONCEPT (69), and FUTURE RECOMMENDATIONS & NEXT STEPS (95).

05	PARTICIPATION
07	WORK PLAN & SCHEDULE
09	PROJECT DESCRIPTION
13	RESEARCH & ANALYSIS
33	COMMUNITY ENGAGEMENT
37	IDEAS & CONCEPTS PHASE
38	MAIN STREET SCHEME
49	SPINE SCHEME
59	POCKETS SCHEME
69	DRAFT CONCEPT
95	FUTURE RECOMMENDATIONS & NEXT STEPS

CiDi participation

CONSULTANTS

inFORM studio:
Michael Guthrie, AIA, LEED AP
Eric Klooster, AIA
Cory Lavigne, AIA, LEED AP
Estrellita Perez
Wendy Zhang

IMPACT GROUPS

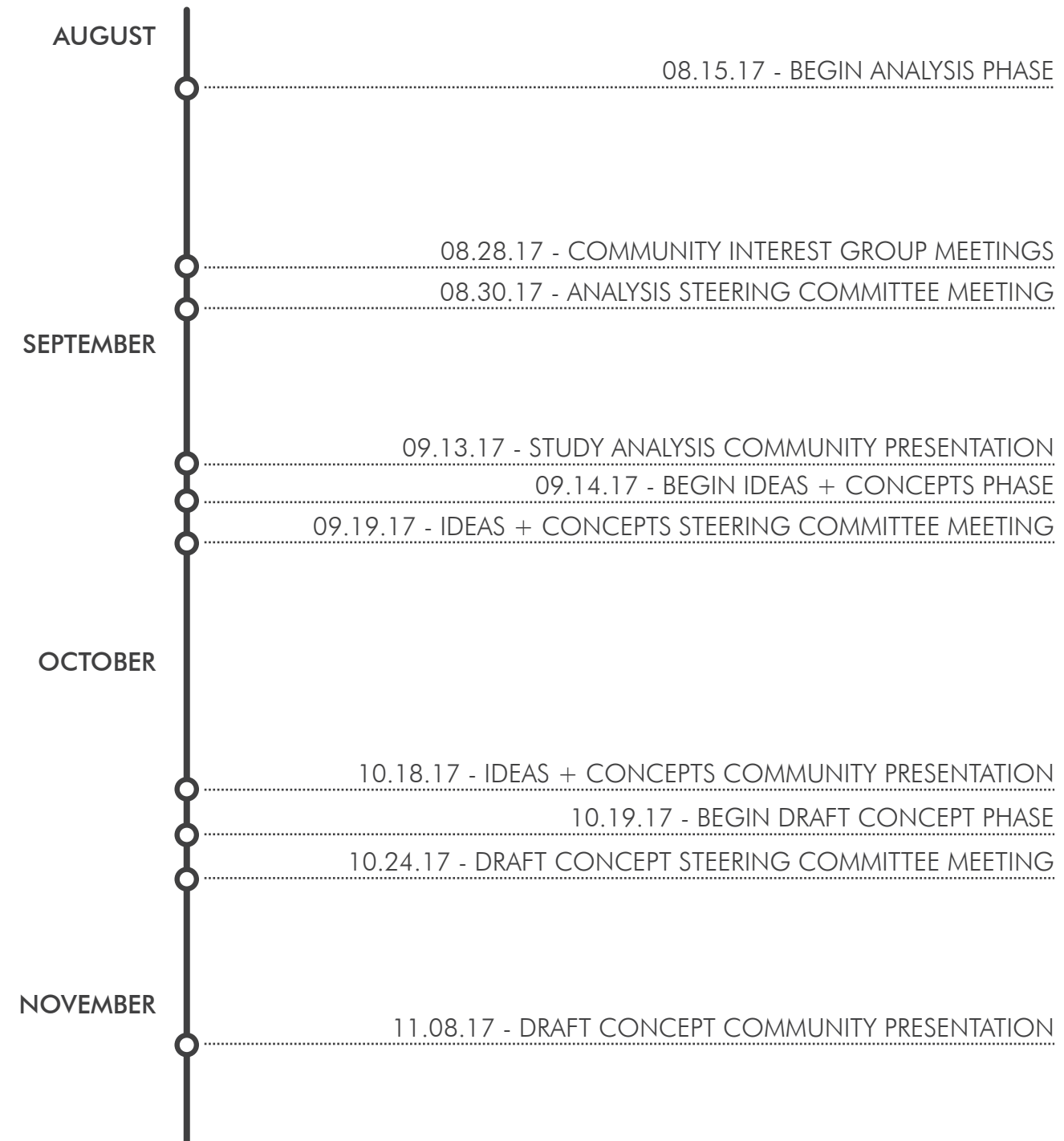
Educational Impact Group
Adjacent Property Owner &
Developer Impact Group
Township Impact Group
Library Impact Group

DISTRICT PLANNING ADVISORY COMMITTEE

Michael Powell	White Lake Township - Board of Trustees
Dan Keller	White Lake Township - Police Department
Andrew Gurka	White Lake Township - Fire Chief
Jason Iacoanoeli, AICP	White Lake Township - Planning Department
Liz Smith	White Lake Township - Board of Trustees
Mike Roman	White Lake Township - Treasurer
Sean O'Neil, AICP	White Lake Township - Planning Director
Kathy Gordinear	Dublin Community Senior Center
Larry Ostrowski	White Lake Township - Library
Roger + Gerry Herrington	White Lake Township - Library
Denise Stefanick	White Lake Township - Library
Glenn Rossow	White Lake Township - Library
Amy Rosen	White Lake Township - Library
Jennifer Schultz	White Lake Township - Library

CiDi

work plan & schedule



CiDi

project description

The White Lake Township Civic District, or CiDi, Development Study was initiated in response to the White Lake Township Public Library and the Township of White Lake purchasing property along Elizabeth Lake Road across from the Village Lakes shopping center, just south of Highland Road, M-59. The CiDi Development Study provides a unique opportunity for the Township to establish a plan for a Civic Campus inclusive of Library, Township Hall, Public Safety Facilities, Community Center, Senior Center, and public spaces that can impact the surrounding areas and serve as a catalyst for surrounding development.

The intent of the CiDi Development Study is to leverage the design and planning of the proposed Civic Campus with the surrounding region to create momentum that spurs development with an emphasis on creating a walkable, active small town center that is sustainable and attractive for residents and business. The design and planning process utilized research, analysis, and community input to develop a planning approach that is uniquely targeted to White Lake Township through a series of strategies that address infrastructure, storm-water management, environment and ecology, recreation, land use, neighborhood connectivity, and development density.

White Lake Township is characterized by its rural areas, large state parks, and a multiplicity of lakes offering boundless recreation opportunities. This unique circumstance creates a series of challenges and opportunities that shape the character of the CiDi Development Study. The study area is defined by Highland Road, M-59, to the North, Teggerdine to the East, and Brendel Lake to the South and West. The study area includes approximately 90 acres of potential developed area with a focus on the Civic Campus area and the adjacent commercial and residential zones.

CiDi

executive summary

Introduction

The Civic District Development Plan proposes a sustainably based urban approach for the future development of civic, community, commercial and residential needs within the heart of White Lake Township for next 25+ years. Conceptual elements of the plan were heavily influenced by community input from stakeholders of White Lake Township with considerations given to urban densities with green strategies, an active+passive park system, preservation of cultural heritage and a healthy storm water management concept with integrated amenity space.

White Lake Township is distinguished with tremendous ecological resources including diverse wetlands, woodlands and lakes. Implementing a focused downtown masterplan integrated with the shopping center at Town Center Blvd. and adjacent to Brendel Lake could propel the region as an economic engine for the township and create a unique destination that would epitomize the identity of the community.

The integrated downtown master plan would transform the quality of urban life into a safer, more pedestrian oriented and culturally rich experience. An approach

that favors a greener design with density would reduce the overall impervious impact and allow for more greenspace improving the environment, and simultaneously increase the useable square footage for productive economic activity.

The content informing the design process was immersive and rigorous. A concentrated and thorough review of previous master plans and studies, an intensive physical assessment of existing conditions, and a substantial and well-orchestrated community participation process directed the vision and ultimate conclusions within the plan.

The current shopping center bounded by Elizabeth Lake Road and M59 that demonstrates a F.A.R. (Floor Area Ratio) of 0.17 would be nearly doubled to 0.38, increasing property values, reducing impervious parking and preserving qualitative greenspace. The strategy would create a higher density of development at the intersection of Elizabeth Lake Road and Town Center Blvd that would be characterized as a walkable district with a F.A.R. of nearly 0.50 within this zone of development.

Expanding the exposure of the wetlands and creeks that are a part of the Brendel Lake water system creates

visibility for environmental and cultural heritage while establishing an attractive context for amenity space. The park zones integrate a diverse set of spaces that include lake access, an environmental interpretive center and amphitheater all interconnected with trails. These zones manifest significant programming opportunities including: biking, hiking, picnic space, kayak|canoe rental, onshore fishing and art park with layered perpendicular connections to the more urbanized district. The central location and main conduit can serve as a community parade route and destination.

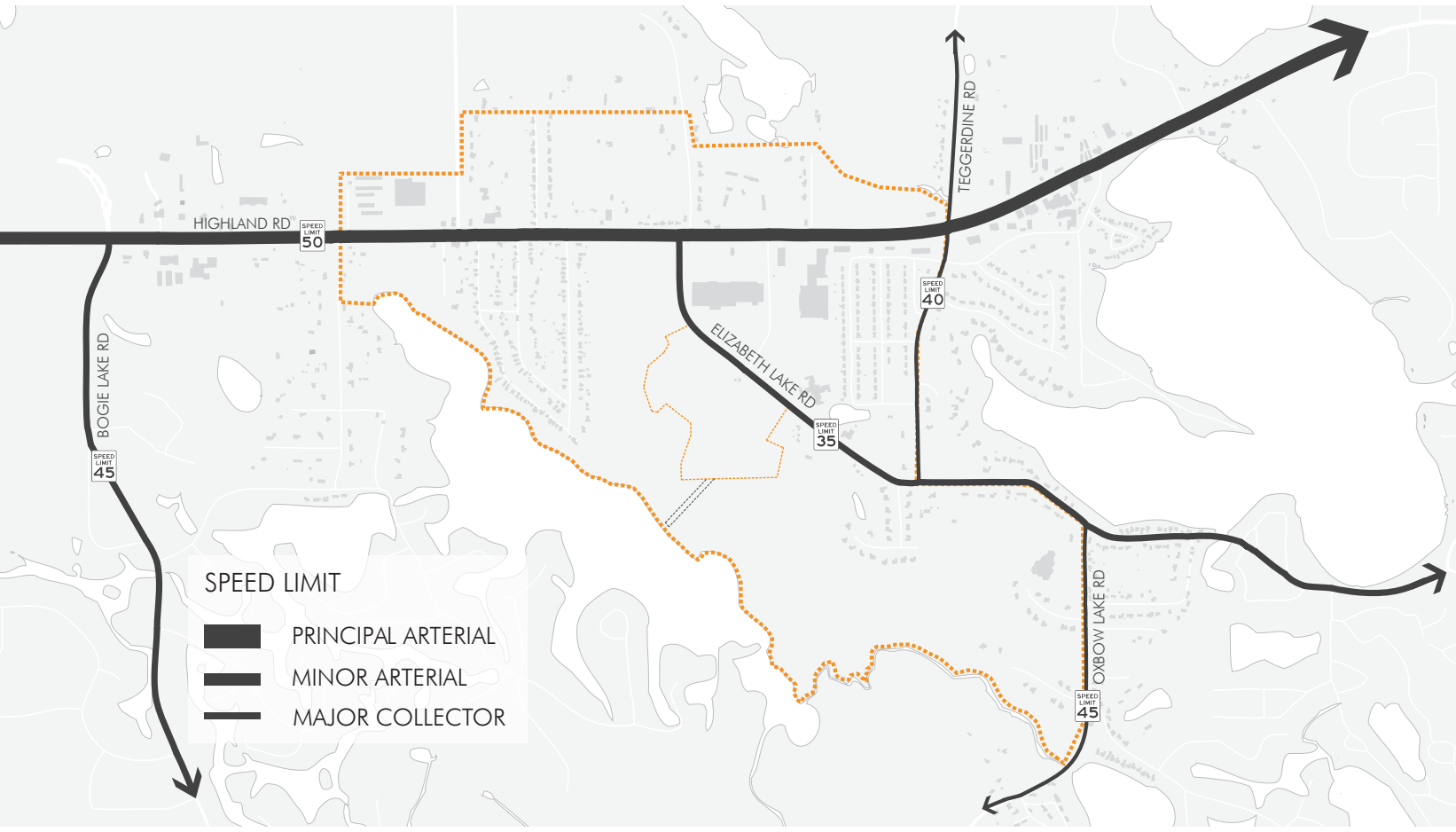
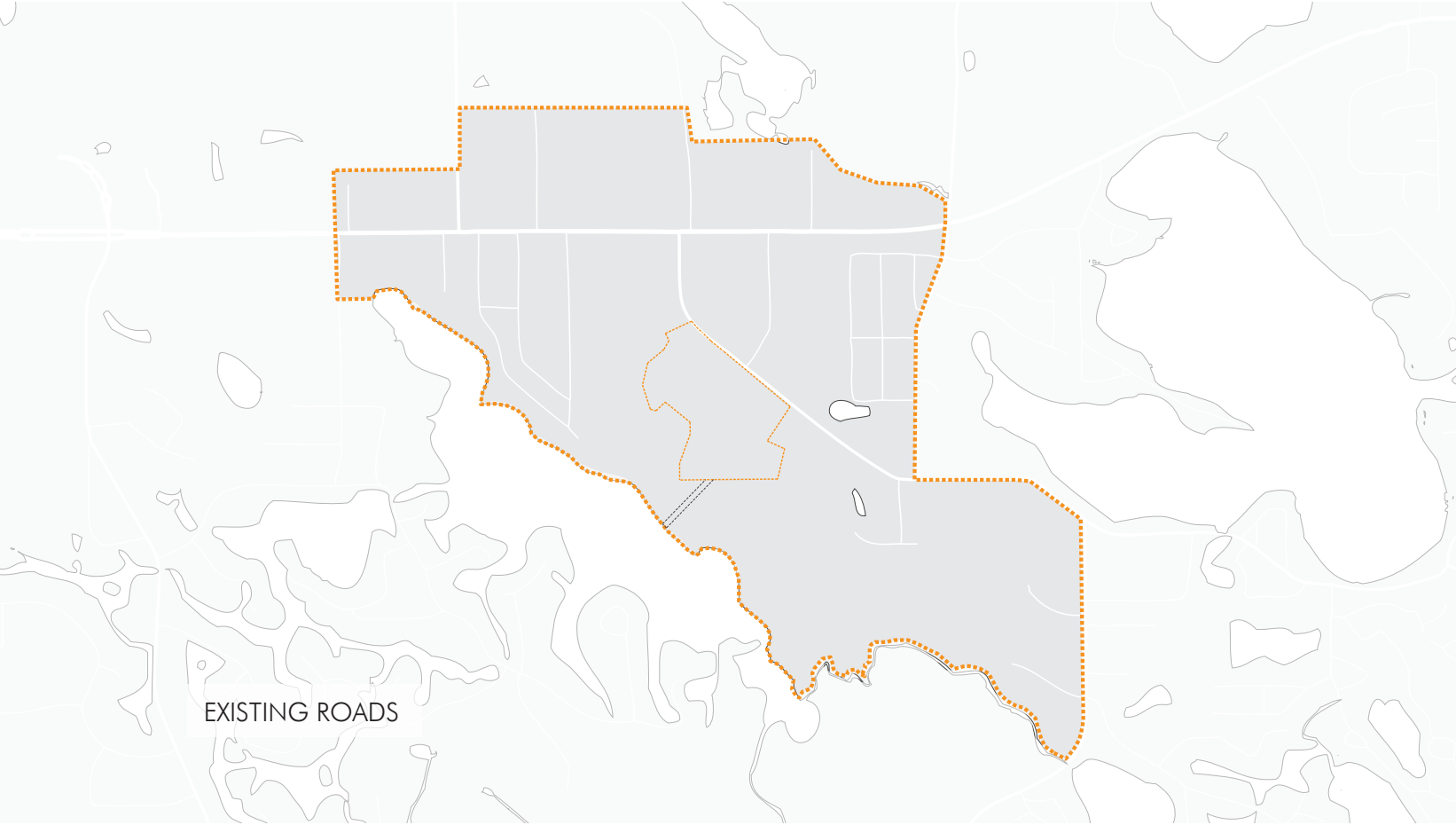
CiDi

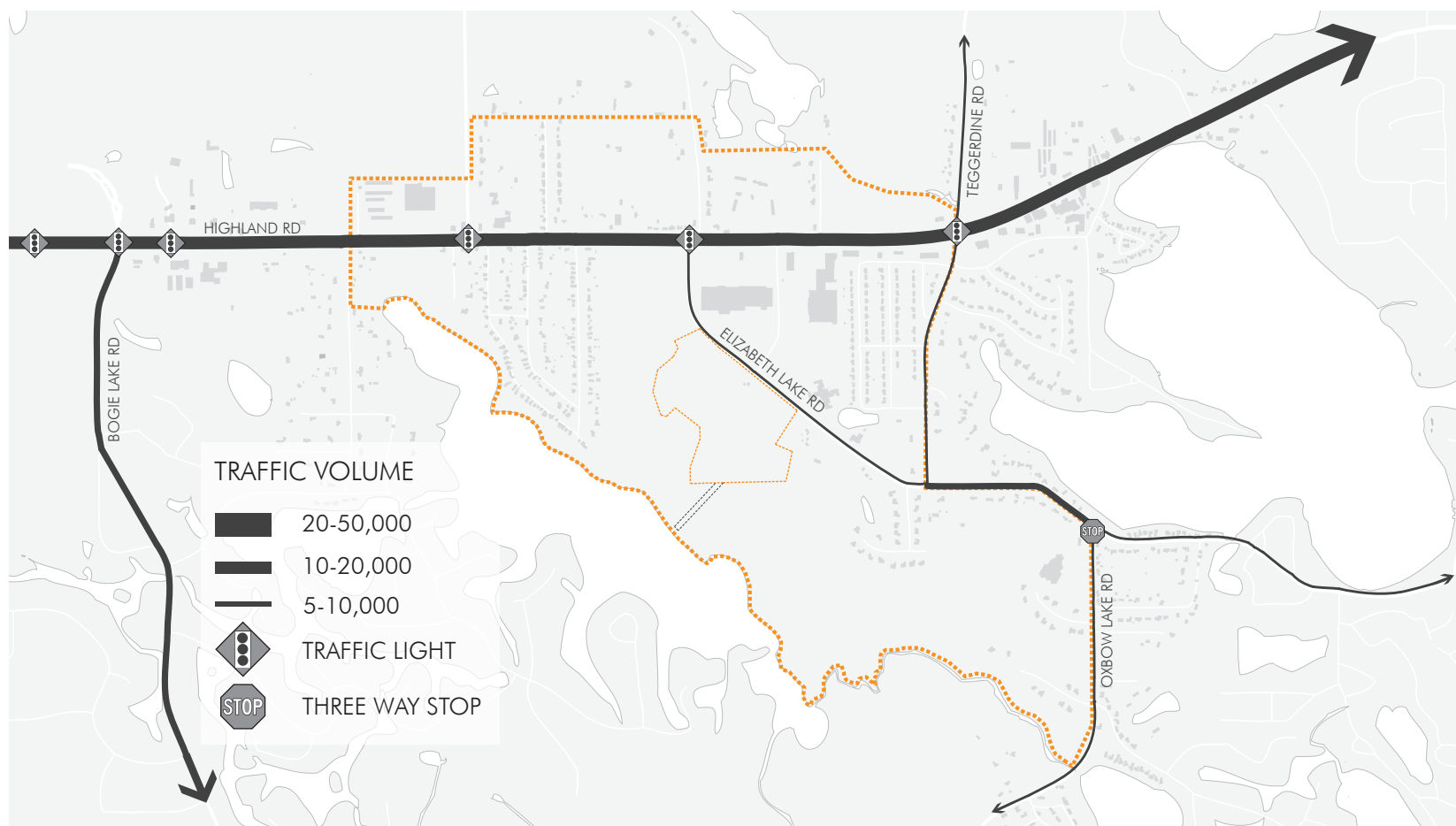
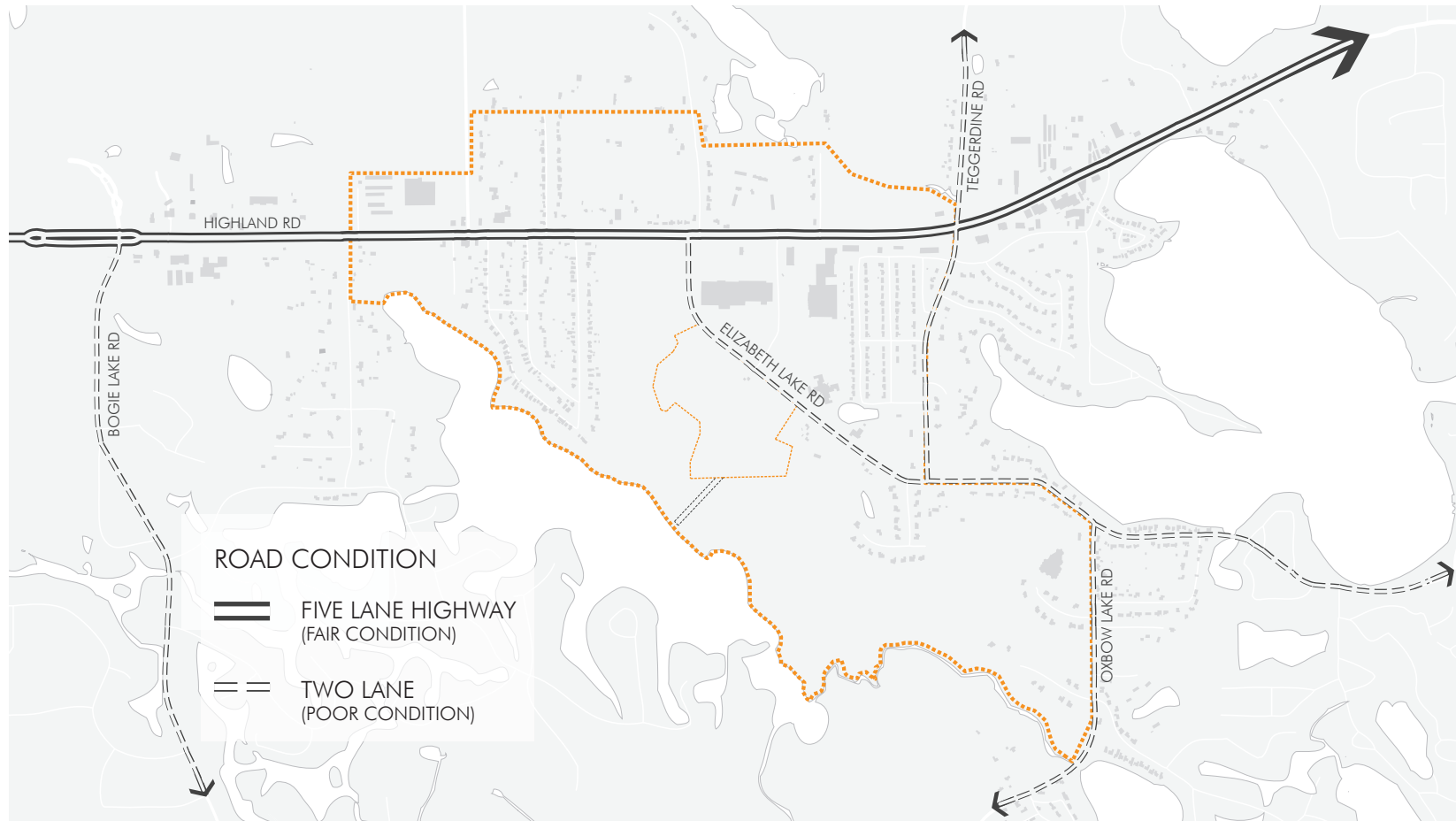
research & analysis

The CiDi Development Study started with a thorough and comprehensive research and analysis phase to assess the existing conditions and understand the various cultural, social, economic, political, and ecological factors within the study area and the surrounding neighborhoods. The results of this research along with community input was utilized in developing and framing strategies for the study.

Existing conditions were studied through a series of exercises including gathering and analysis of satellite imagery, existing maps, field research, public record, and community demographics. This data informed the study of transportation, land use, housing, natural ecologies, public spaces, and recreational opportunities as they currently exist. This information was compiled and layered into maps and imagery to draw correlations and create comparisons that were used to frame explorations and test assumptions prior to moving into the design and planning of the CiDi Development Study area. The Township's current and previous land use, zoning maps, and master plans were studied to understand past goals and the trajectory of the Township's land use and development plans.







CiDi transportation

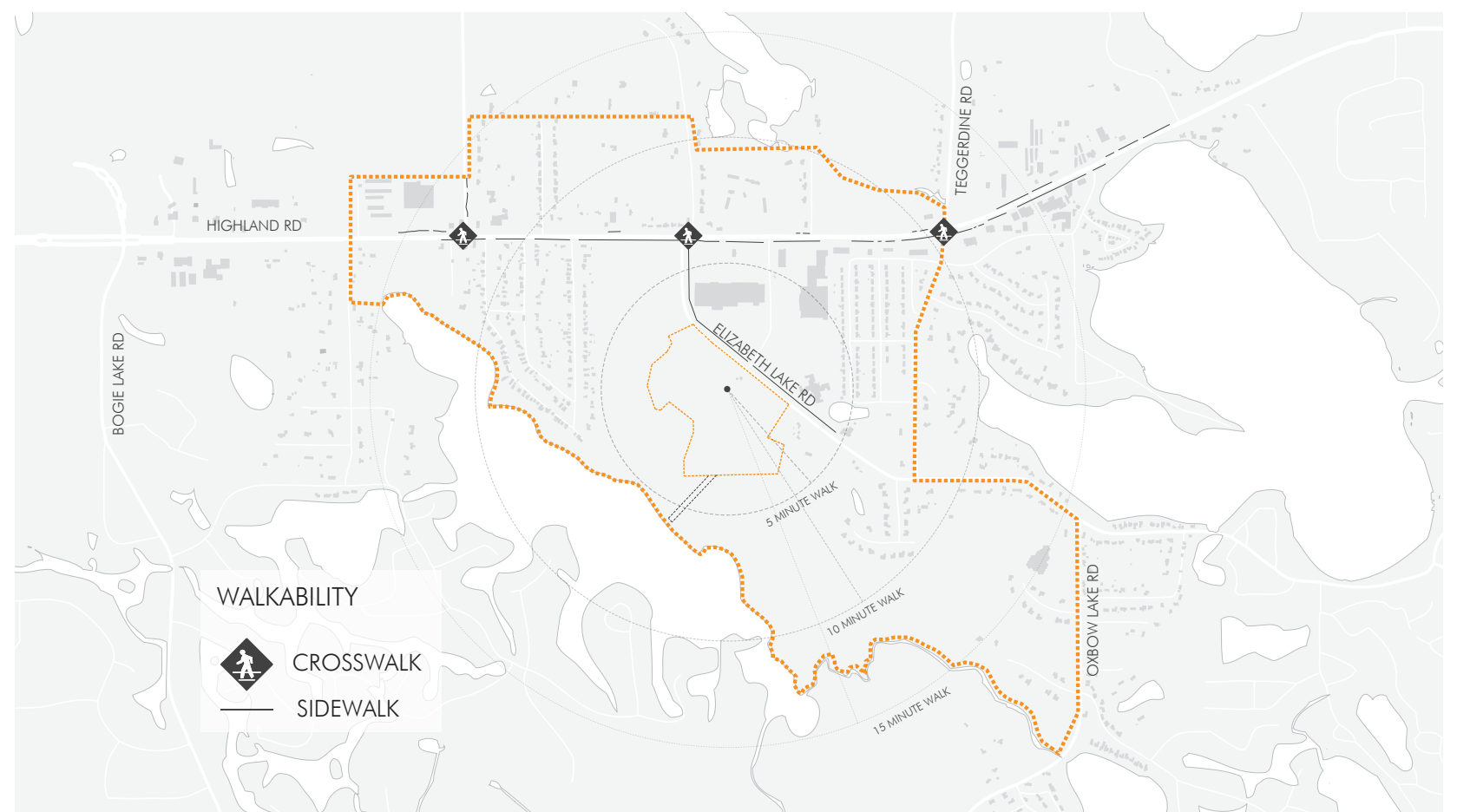
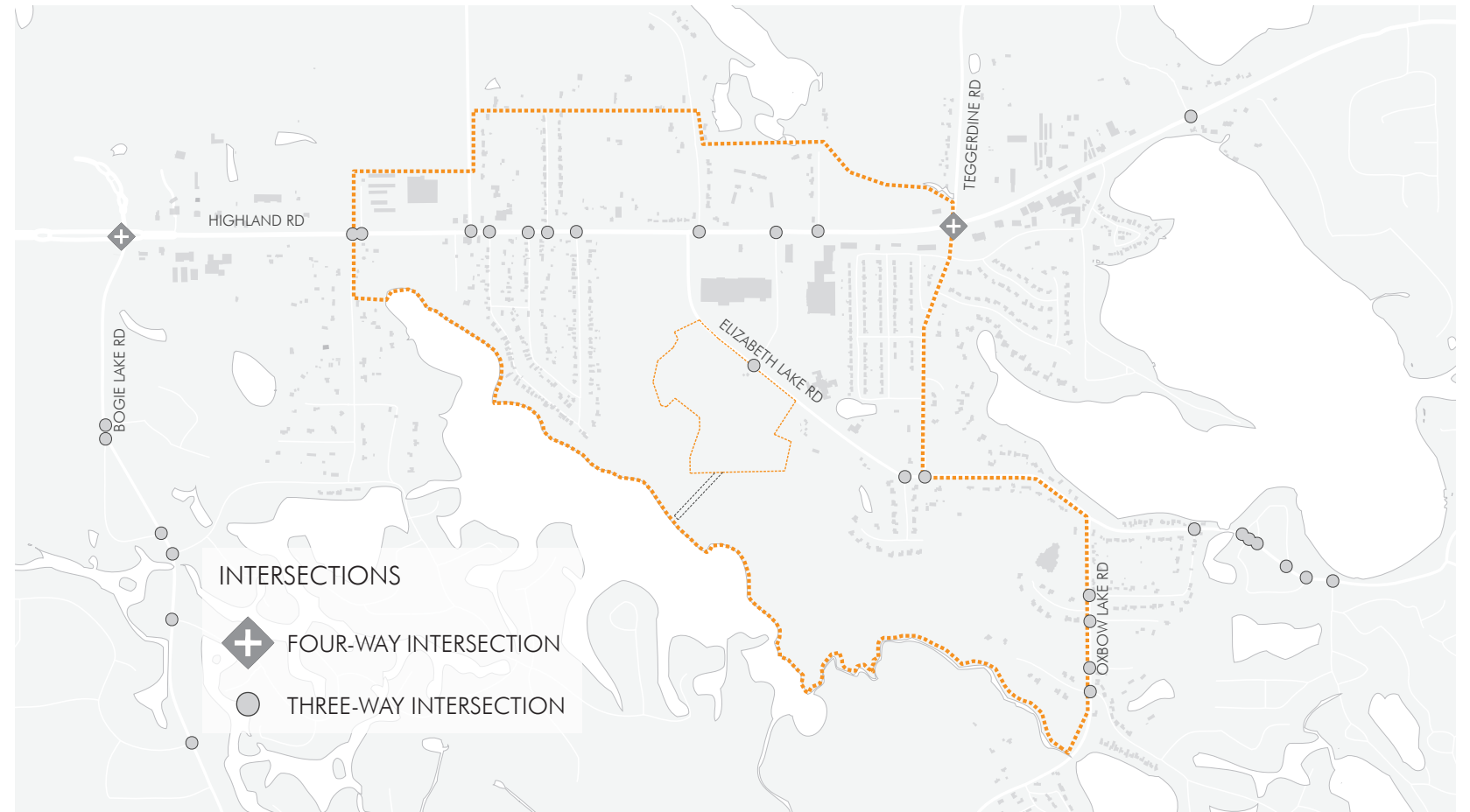
The existing road infrastructure is greatly impacted by the geography of the lakes in the study impact area and the Township as a whole. The road system is not organized into neatly sized rectilinear grids, but rather large swooping stretches with disjointed intersections and connections in response to the existing lakes and wetlands. This road network results in difficulties with creating connectivity and smooth traffic flow. Blind corners and confusing intersections lead to traffic incidents and backups.

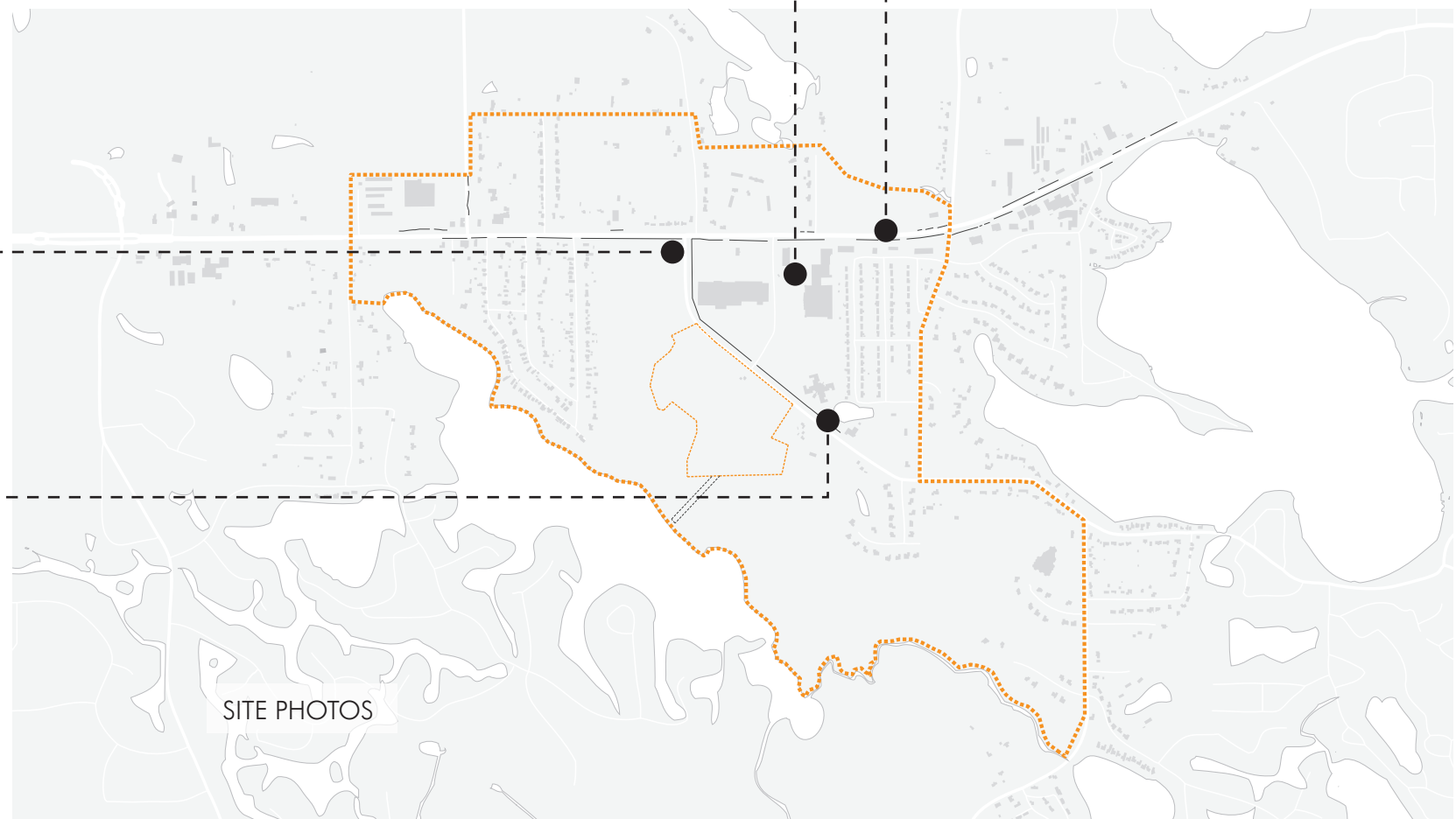
The major roads impacting and being affected in the study area are Highland Road (M-59) to north, Teggerdine Road, Oxbow Lake Road, Bogie Lake Road, and Elizabeth Lake Road. Highland Road is a major arterial highway with high speeds and large traffic volumes. Highland Road is a major organizer for development as its high vehicular traffic volumes make it the most desirable based on current development models. Highland Road is in fair condition and would be difficult if not impossible to make any significant adjustments to traffic patterns.

Elizabeth Lake Road, Oxbow Lake Road, Bogie Lake Road, and Teggerdine Road are substantially smaller two lane roads that experience significantly less traffic,

but are in poor condition and still experience rather high posted speeds and even higher travelled speeds. All functioning stop lights are located on Highland Road at major intersections with the remainder of intersections relying on stop signs. These intersections can be rather difficult to navigate in a vehicle and near suicidal for pedestrians due to the blind corners and unclear traffic flow patterns. These intersections warrant further study based on the direction of the proposed CiDi Development Study. The sparse road network is a significant contributor to the difficulties and high speeds, as there are few intersections to calm traffic and organize flows.

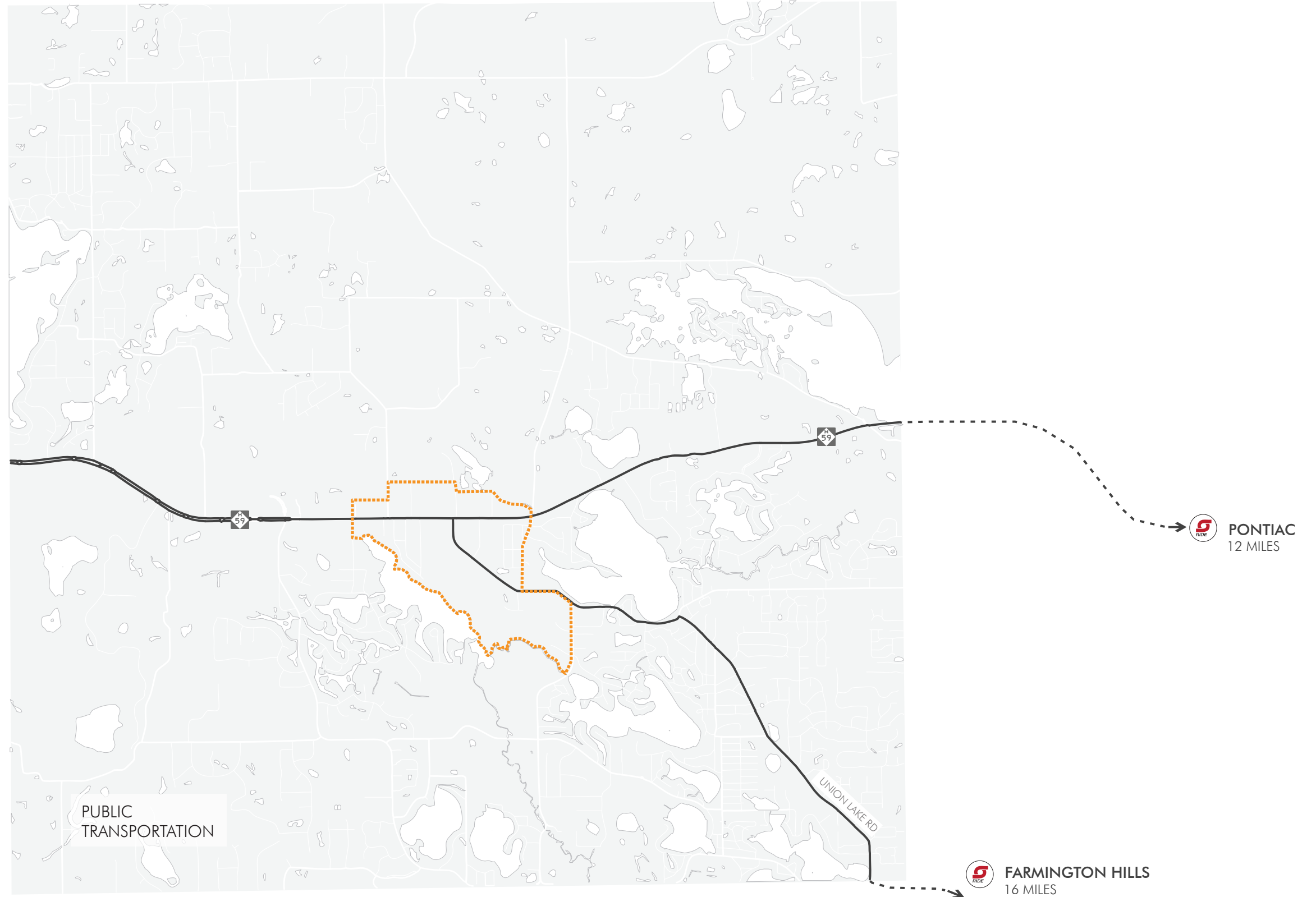
The existing pedestrian transportation system is as expected in an area that relies heavily on the automobile as the primary source of transportation. The existing system is limited to a number of disconnected sidewalks in poor condition primarily along Highland Road and extending partially down Elizabeth Lake Road. The current pedestrian network is disconnected from land use as the walks tend to terminate unexpectedly at parking lots without clearly defined and marked paths to residential and business uses. Long distances between destinations greatly impacts the usability of the pedestrian system and make pedestrian travel undesirable and impractical. The pedestrian system has some safety concerns as many of the existing walks must navigate multiple curb cuts with high entrance and exit speeds and are located within very close proximity of high speed vehicular traffic. The existing pedestrian network makes recreational opportunities for walking, hiking, running, and biking difficult as walks end abruptly, lacking continuity and broader connectivity. A higher density of connected walk-ways with improved streetscape elements such as landscaping, lighting, and site furniture can greatly improve the pedestrian mobility within the defined development study area.

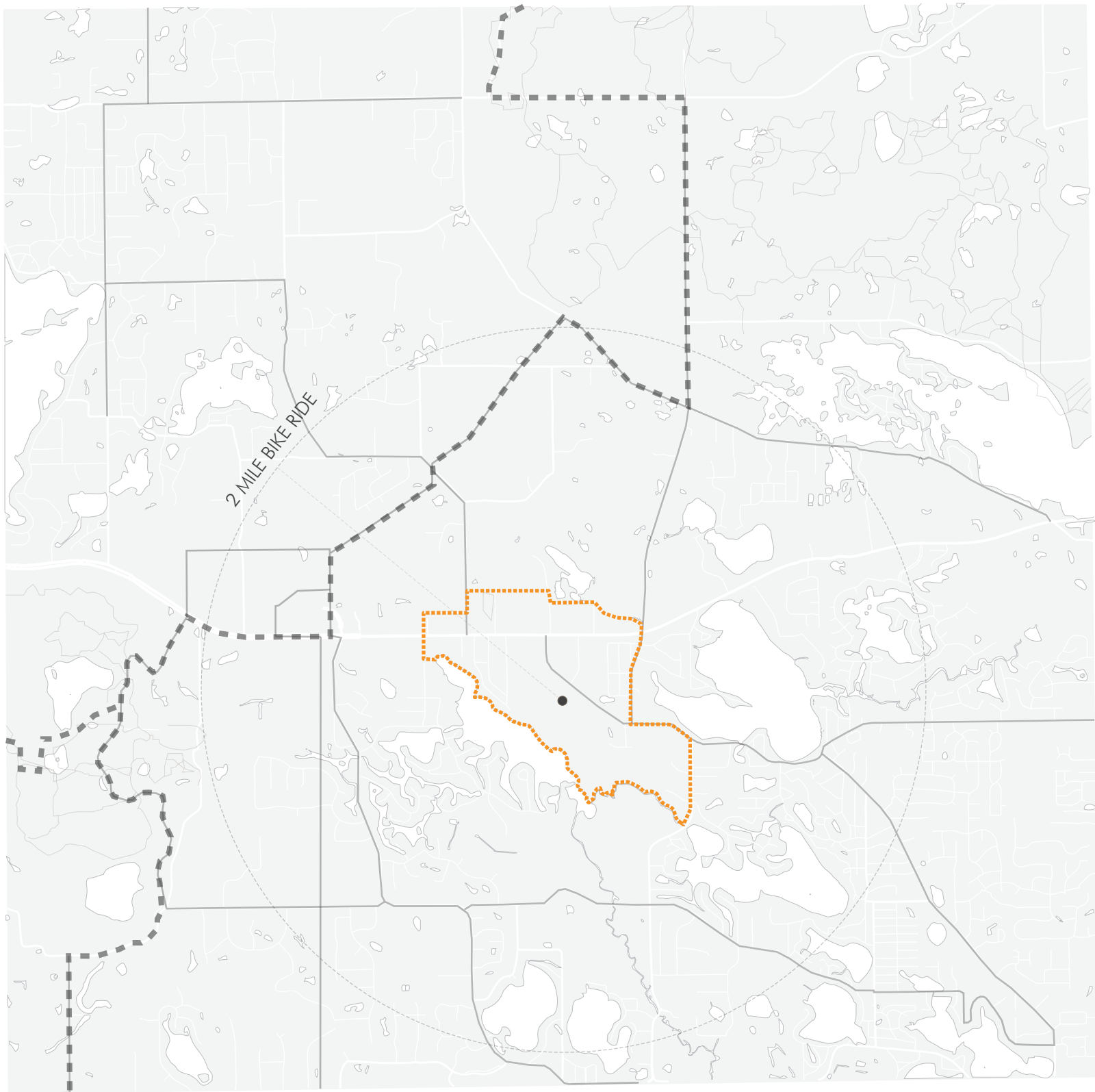




White Lake Township is not currently being served by any form of public transportation or mass transit system and the current and forecast population density doesn't support the implementation or feasibility of any such system. The nearest access to public transportation is the SMART bus system located in Pontiac or Farmington Hills, several miles away. This allows the conclusion that people accessing the proposed CiDi Development Study area will be arriving via personal automobile and should focus design on providing vehicular access to visitors and creating pedestrian mobility within the study area for a park-once district.

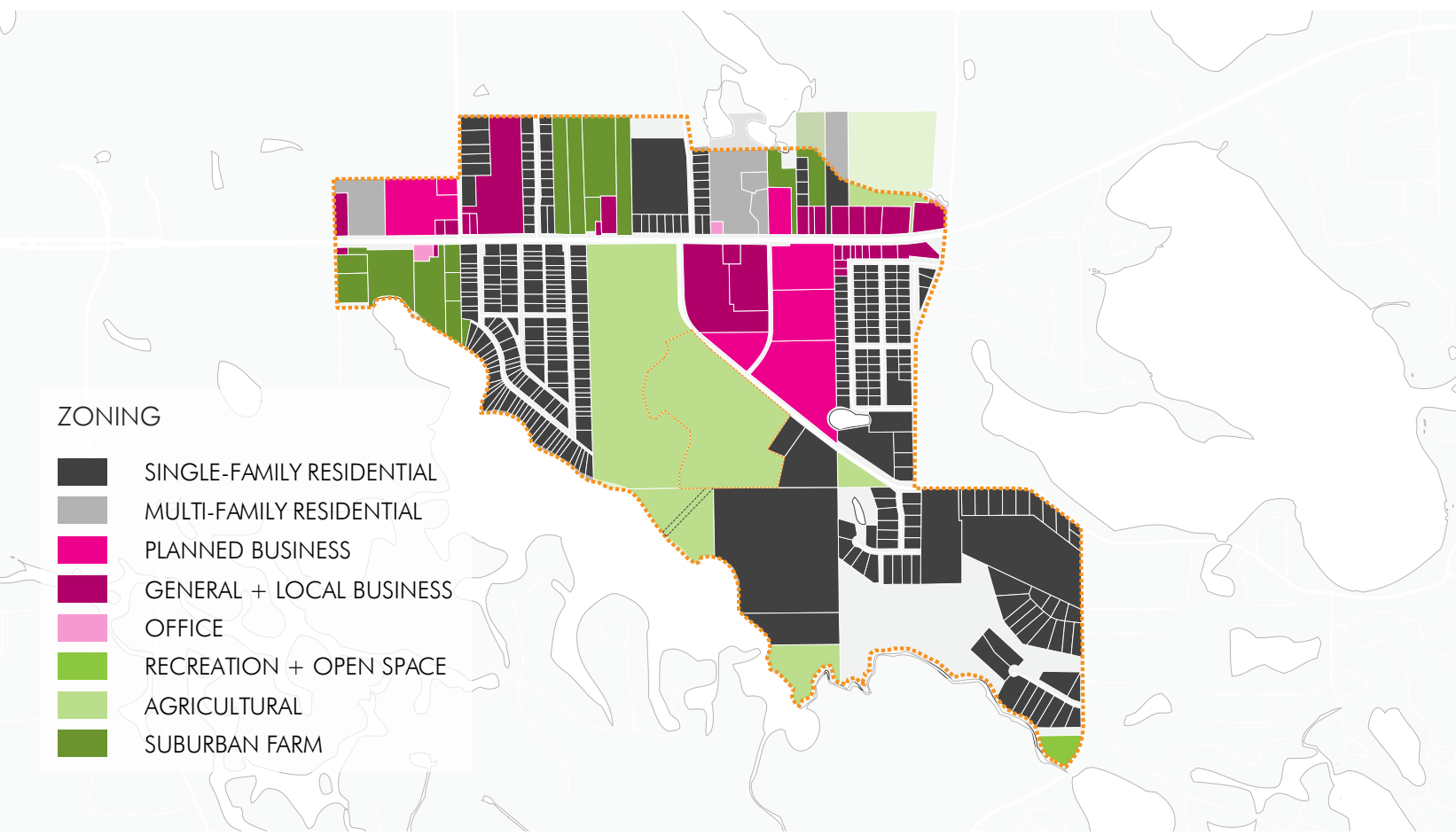
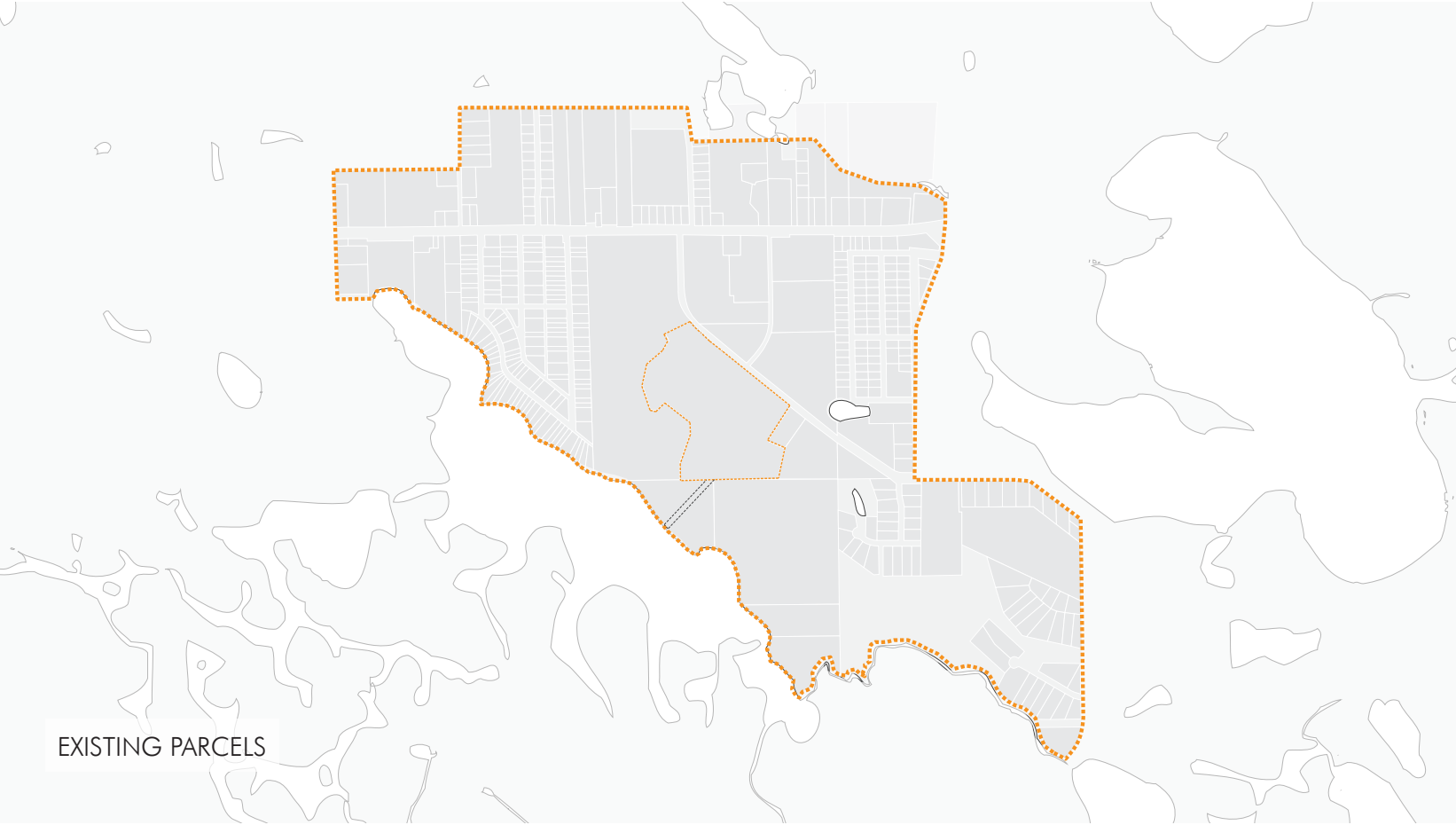
The CiDi Development Study area is in reasonable proximity to proposed Oakland County – County Concept Bike Trails that serve to create a network of bike trails within the county through state parks and recreation areas. Connecting the CiDi study area into this bike trail / path network creates an opportunity to layer transportation infrastructure with recreational activities and improve pedestrian mobility and connectivity.

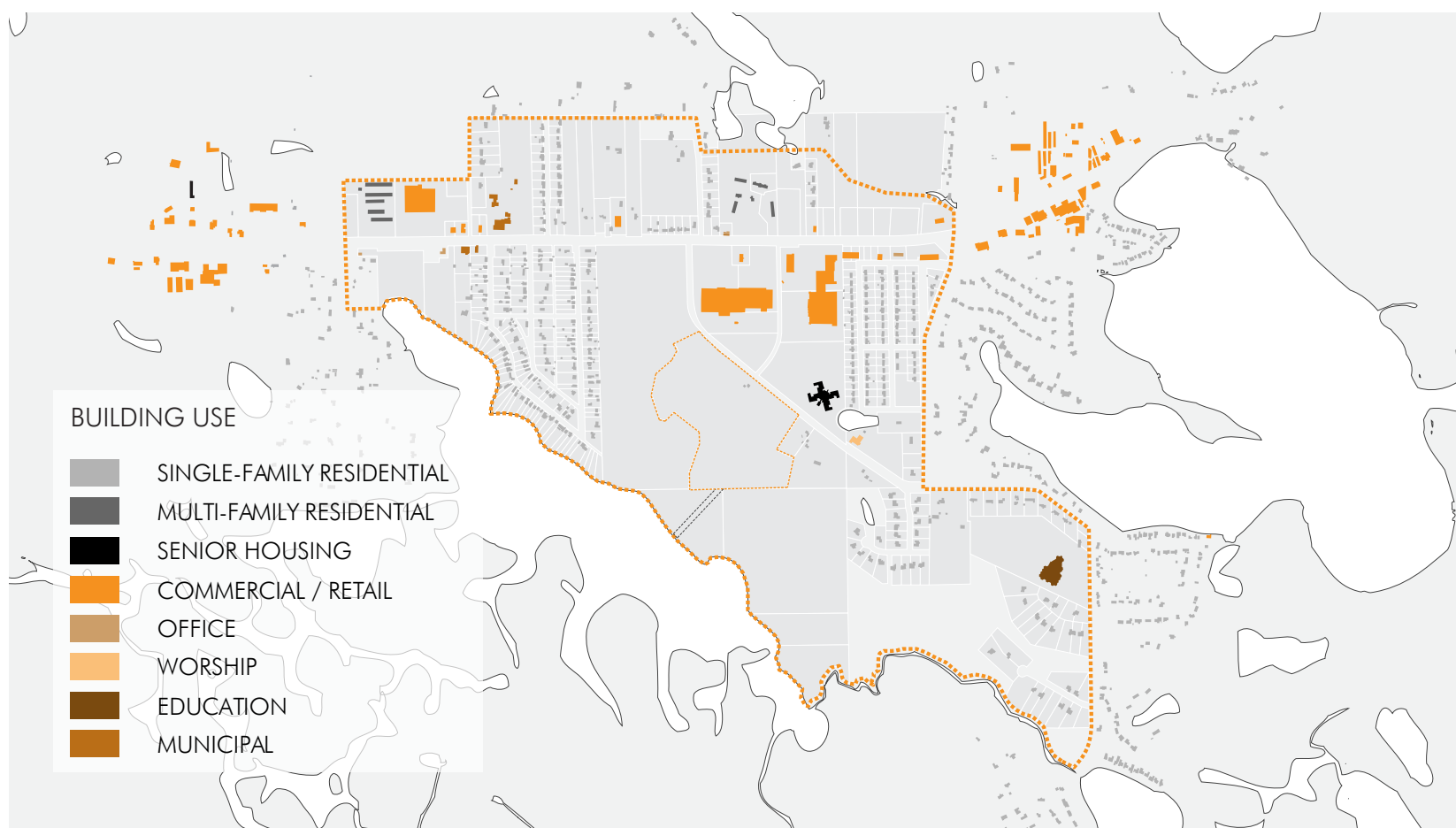
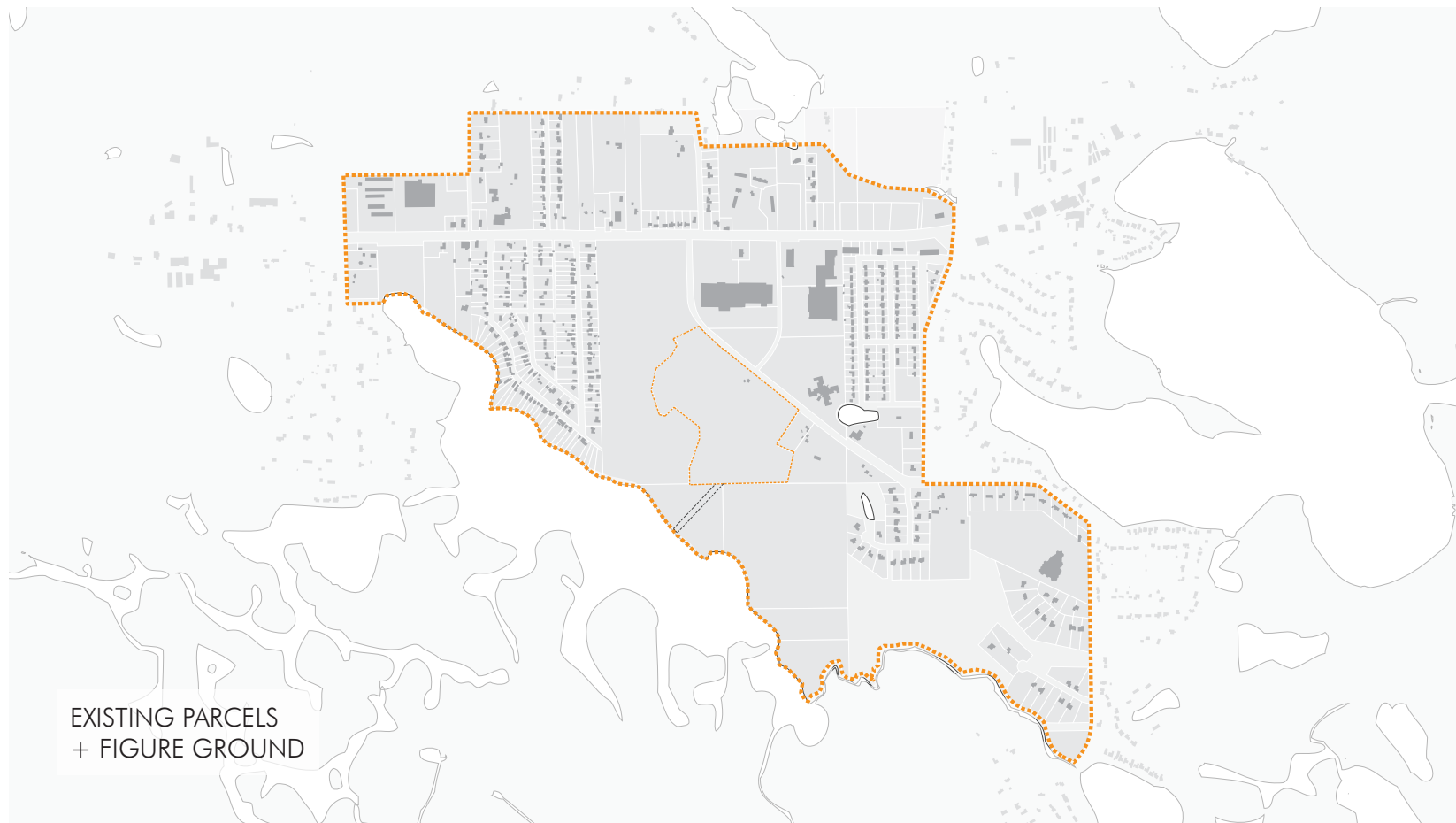




TRAIL NETWORKS

- ■ ■ COUNTY CONCEPT
- PROPOSED PATHWAY
- PARK PATH





CiDi land use

Existing land use patterns were studied and analyzed to garner an understanding of where development was currently taking place, what types of development were located in specific areas, what type of developments existed, what types of developments were missing, and draw some conclusions as to what forces were influencing those decisions. This understanding was used to shape what types of developments should be included in the CiDi master plan, where they should be located, and how they should interface with adjacent uses and existing developments.

residential and agricultural with a small number of parcels zoned for business along Highland Road. This same dynamic is evident in analysis of existing building uses where a vast majority of residential use is single-family with very few multi-family or senior / assisted living and all of the built commercial / retail space is fronting on or has visibility from Highland Road. This land use pattern alludes to perceptions that will have to be addressed in the preparation of the CiDi master plan.

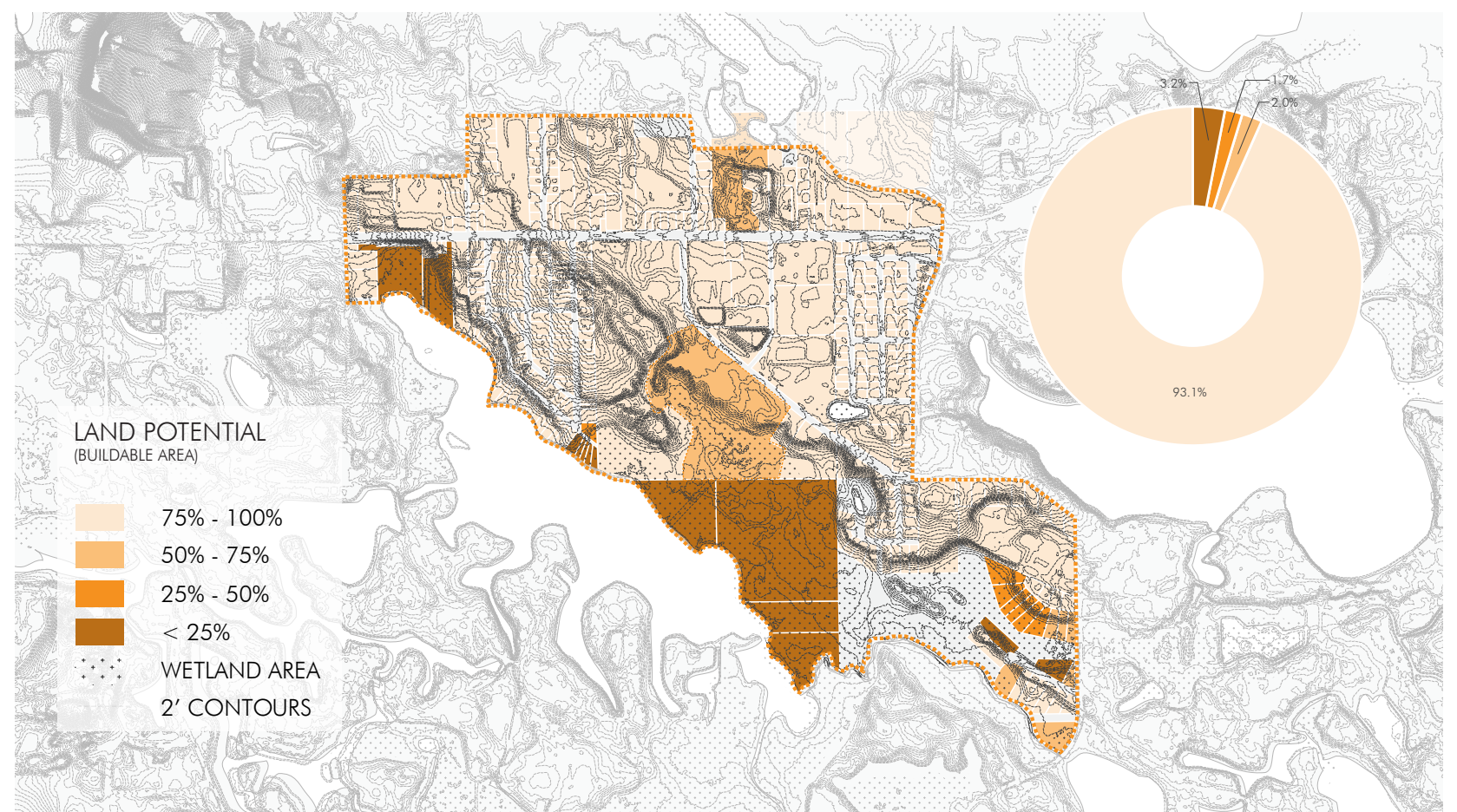
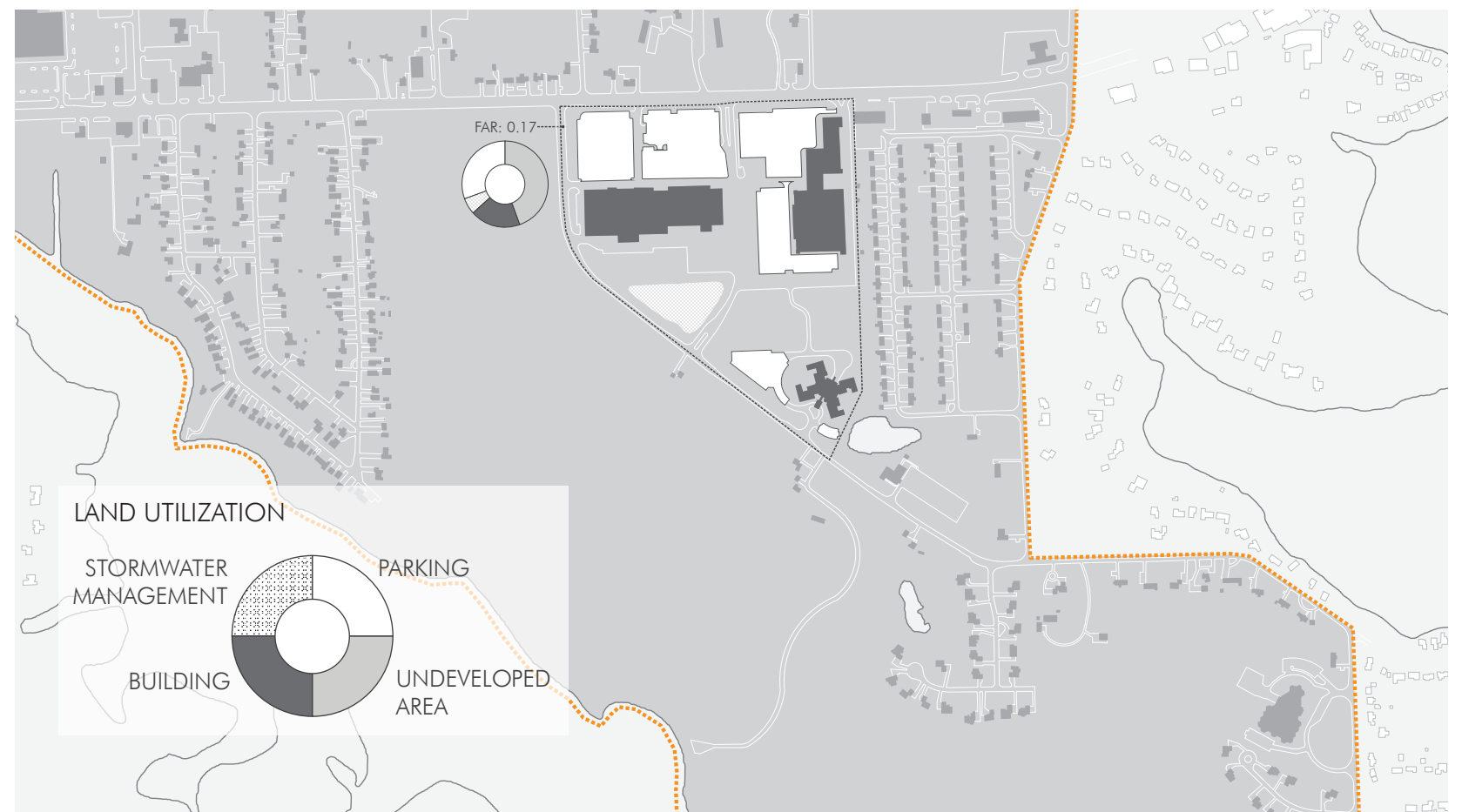
A figure ground study illustrates how the building footprints occupy the land and shape the exterior environment. When examining the figure ground for the study area in relationship to the parcel designations it is clear that there is a tremendous amount of un-built or open space and that the existing building volumes provide little definition to exterior spaces with the exception of the single family residential neighborhood along the eastern border of the study area that provides a very clear grid organization and street definition. It is also evident that building footprints occupy a relatively small percentage of the parcels on which they are built. A majority of the parcels within the study are currently zoned single family

Existing land utilization was studied for the Village Lakes shopping center commercial area in order to understand how existing buildable land was being utilized and establish a baseline floor area ratio for the study area. Floor area ratio is the building floor area (all floors) divided by the parcel area and is a good indicator of urban density and walkability. Cities and town centers that are lauded for their walkability generally have an FAR that is 1 to 1.5 or higher with most European town centers being 3 or above. Understanding that a significant proportion of buildable land is currently being utilized for surface parking and storm water management will inform the process of master planning and looking for opportunities to increase FAR and improve walkability and activity.

The land potential study is meant to understand the difficulties involved with developing within the defined study area. Due to the geography and topography of the area and the many associated lakes, there are significant designated wetland areas to contend with when proposing development. There is a perception from speaking with the development impact group, that many of the parcels cannot be developed because of wetlands. The analysis indicates that there are significant areas of wetlands, but the majority of parcels maintain a relatively large proportion of buildable area. The CiDi master plan will have to address these perceptions and illustrate

how parcels can be developed with the wetland and topographical constraints.

The square mile analysis is stripped down to show only the street grid in one square mile and is conducted to understand the urban fabric, walk ability, and connectivity through comparison with cities whose characteristics have been thoroughly studied and are generally understood. This analysis provides a precedent to examine block sizes, intersections, interaction with the water's edge, and density. What is visible in the analysis is that the study area consists of a very spread out, meandering street infrastructure with large block sizes and very few intersections comparatively with a lack of engagement with the water's edge.

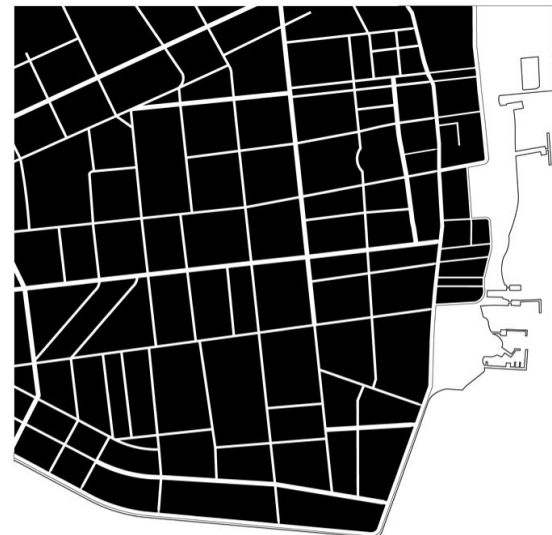




WHITE LAKE, MI



PORTLAND, OR



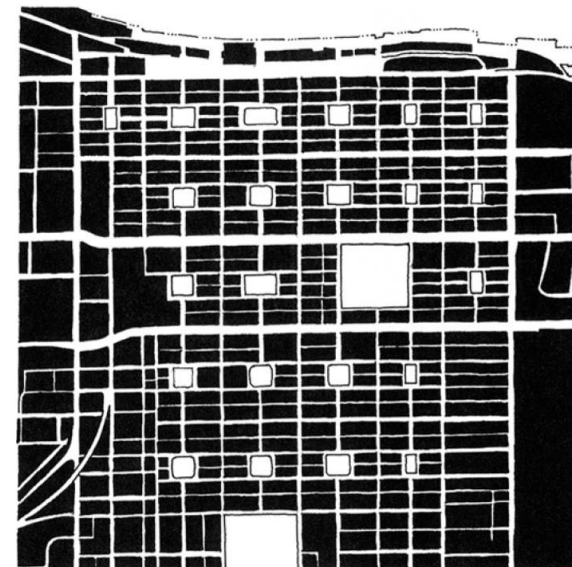
CHARLESTON, SC



BARCELONA, SPAIN



BOSTON, MA (1980)



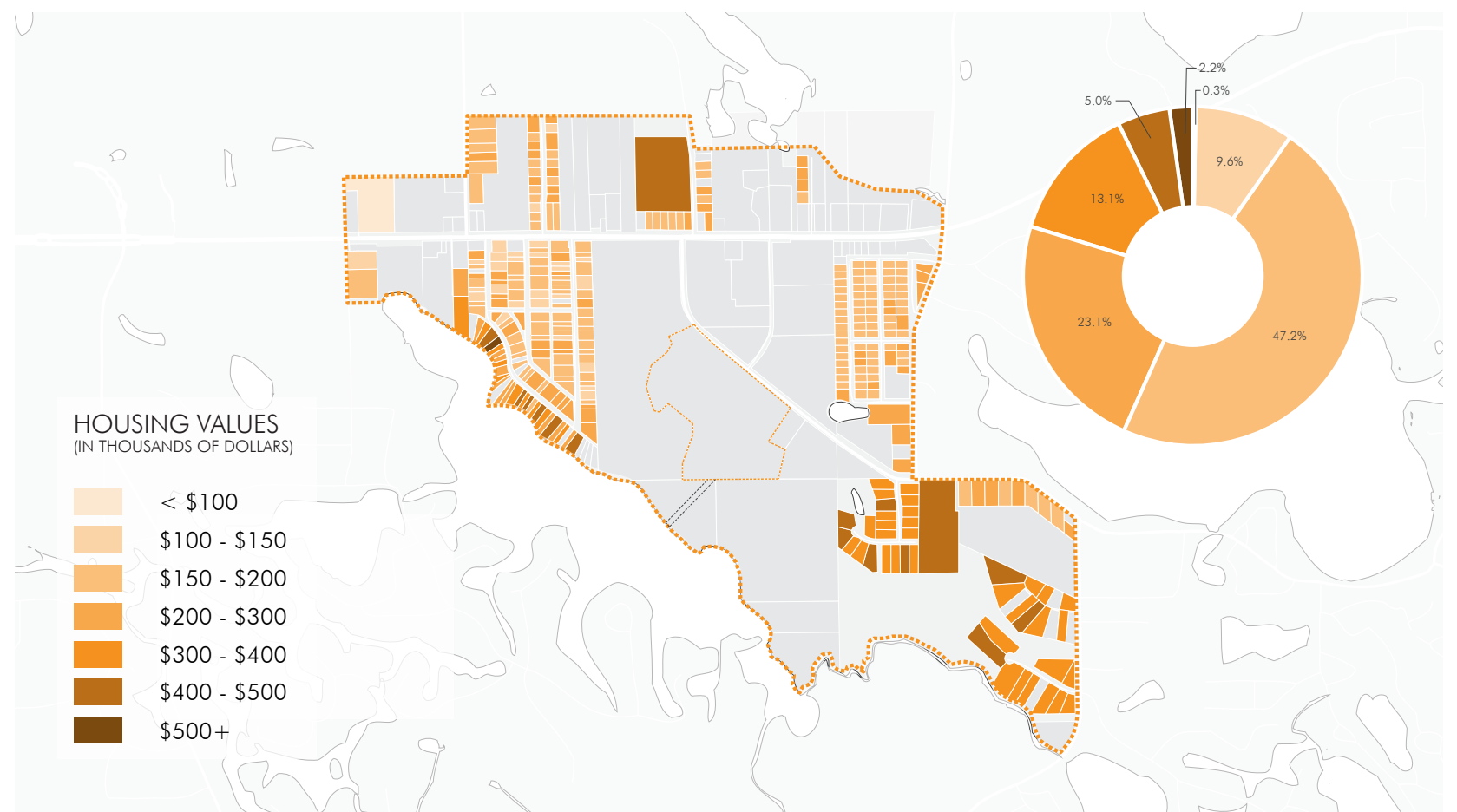
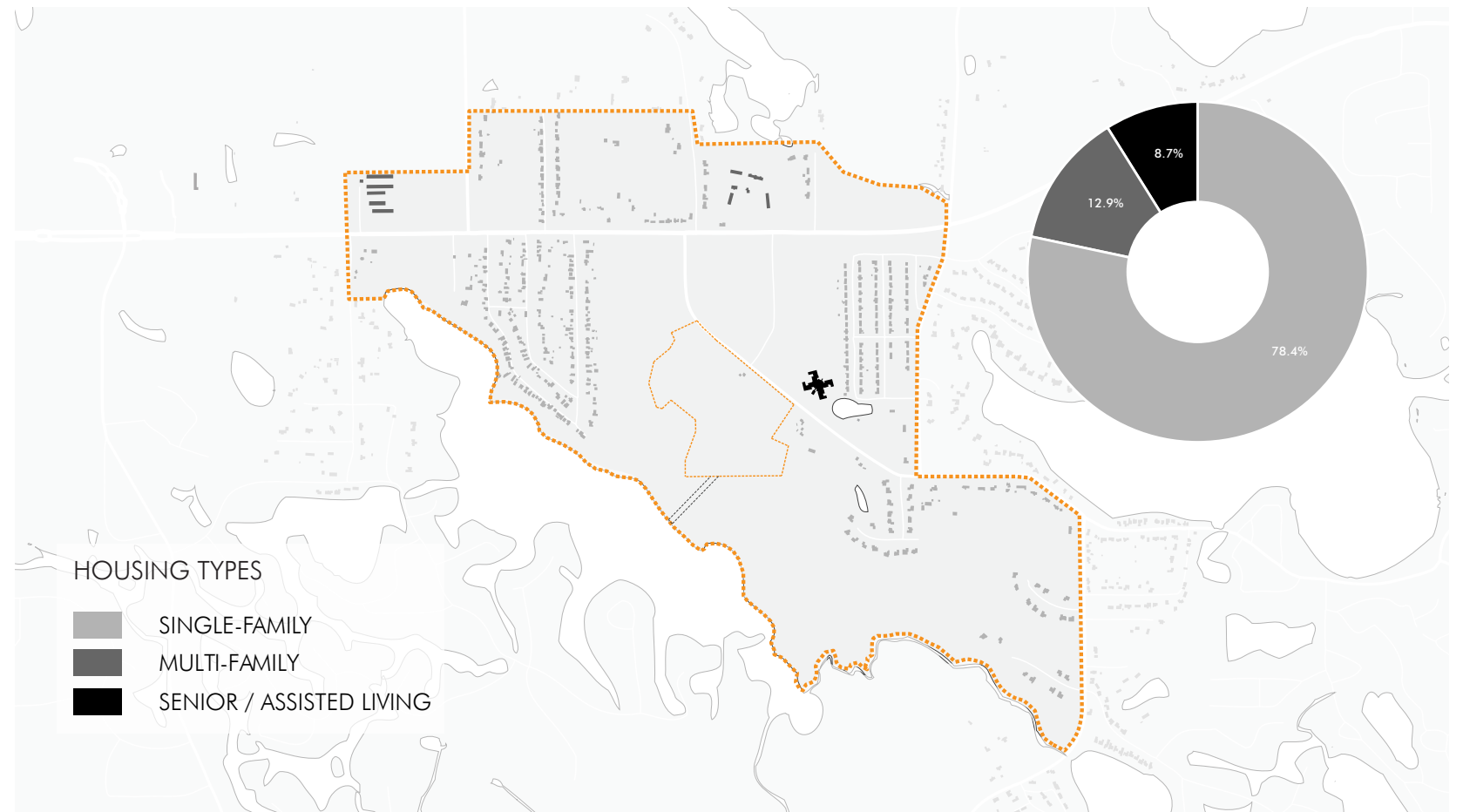
SAVANNAH, GA

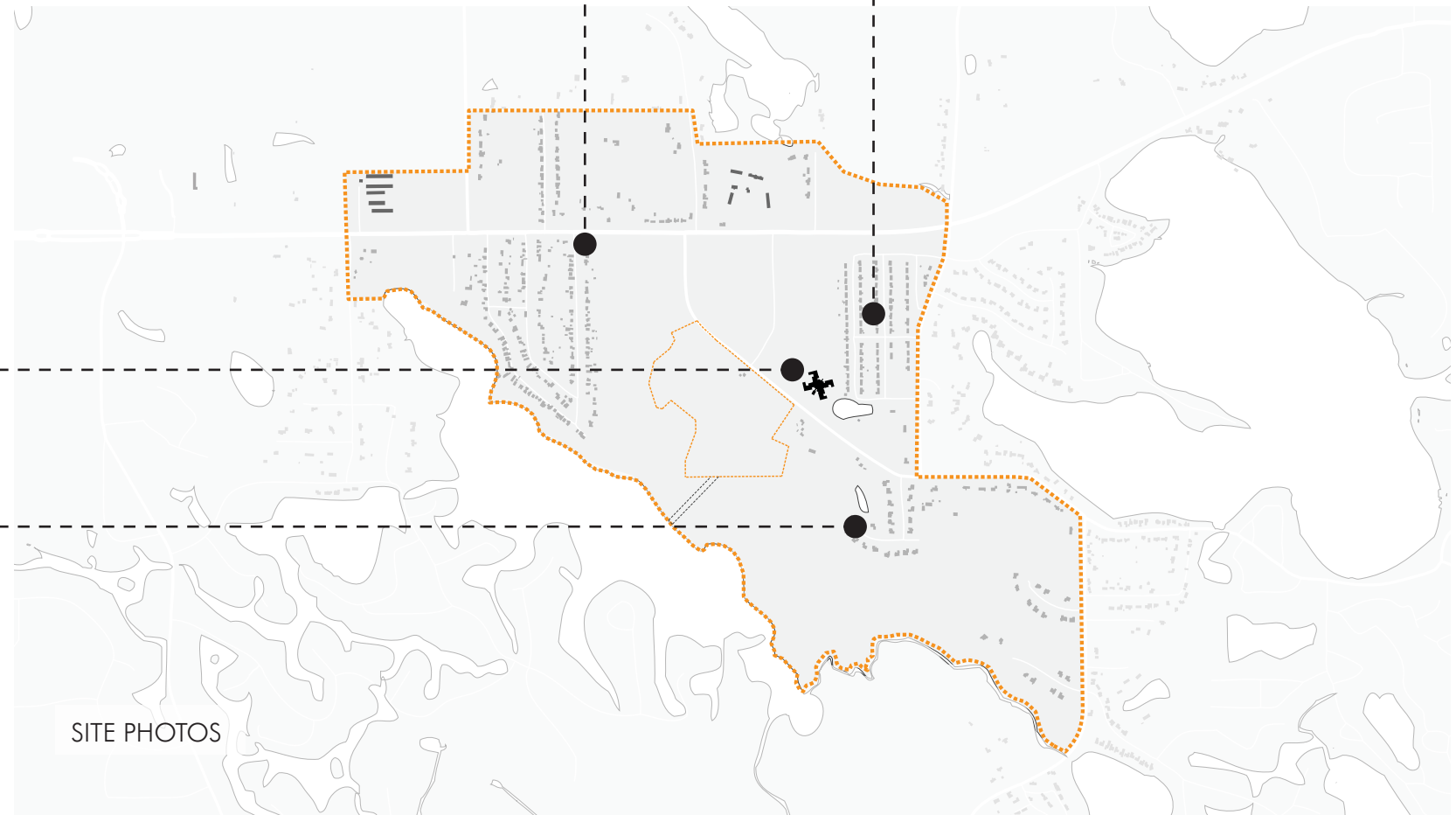
CiDi housing

Existing housing stock is analyzed to understand current make up, diversity, and affordability in an effort to find gaps and establish needs that could be addressed in the master plan. Typically, vibrant communities are characterized by a variety of housing options with different styles, levels of affordability, and opportunities to rent or own. The existing conditions in the study area consist of an overwhelming majority of detached single-family homes located in neighborhoods isolated to the same use and lacking connectivity to surrounding neighborhoods and adjacent uses. This limited diversity in quality housing types can be a potential barrier for home ownership in the Township and Study Area and limit the market pool for attracting residents to the Township and community. There is a very limited amount of multi-family housing options, with one apartment complex in the study area and one apartment style condo complex at the far edge of the study area. There is one facility for long-term assisted living care and rehabilitation. There is a serious lack of opportunity for multiple family housing, rental units, and independent senior housing.

Housing values in the study area are primarily on the higher end with nearly 50% of properties commanding a value over \$200,000 and over 90%

of properties valued over \$150,000 with less than one percent valued below \$100,000. Neighborhoods experience a relatively uniform home value, with the exception of lake front properties that demand an expectedly higher value. The home values indicate a potential gap in entry level housing and quality affordable housing and could be a barrier to home ownership and recruitment of new residents.



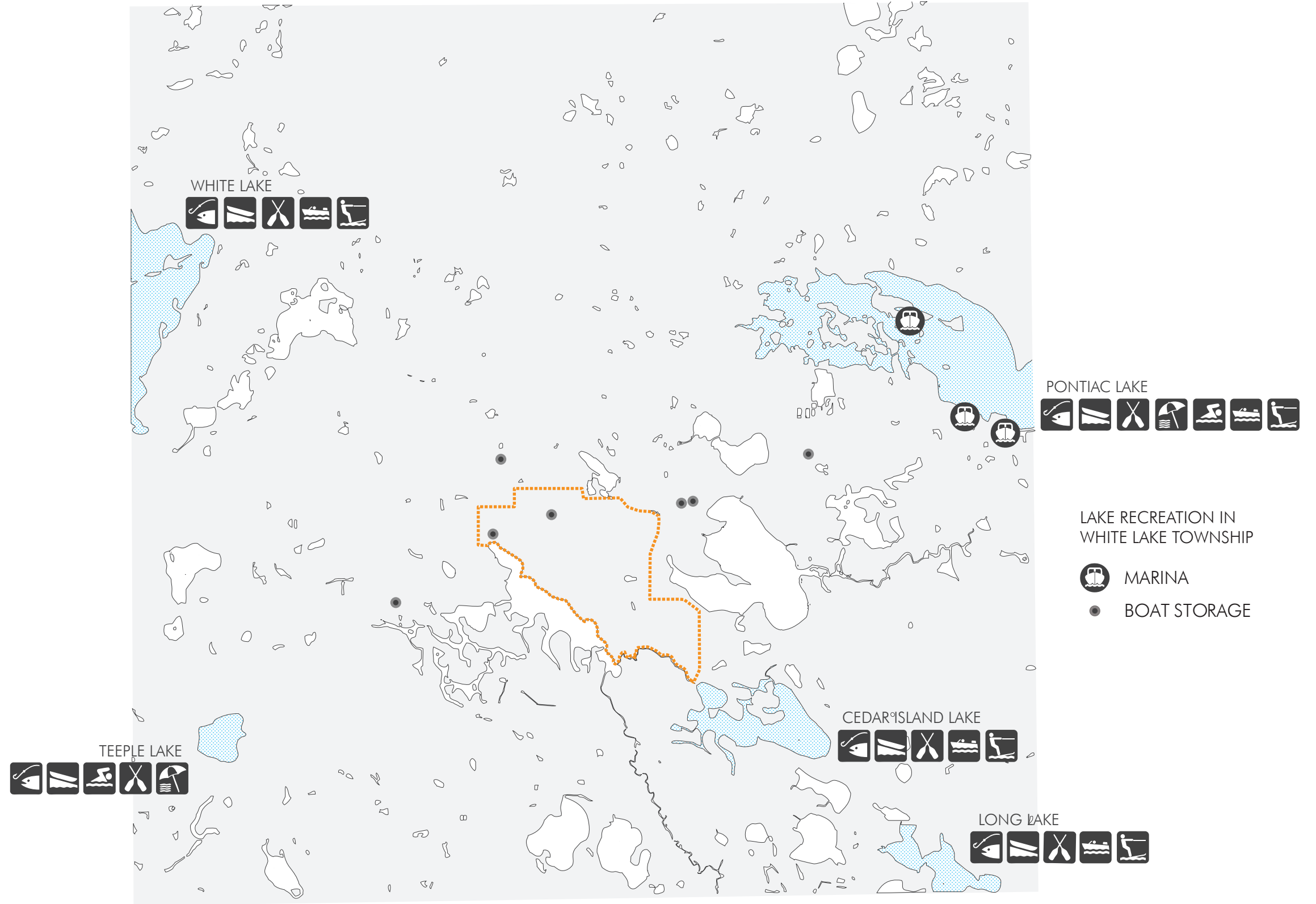


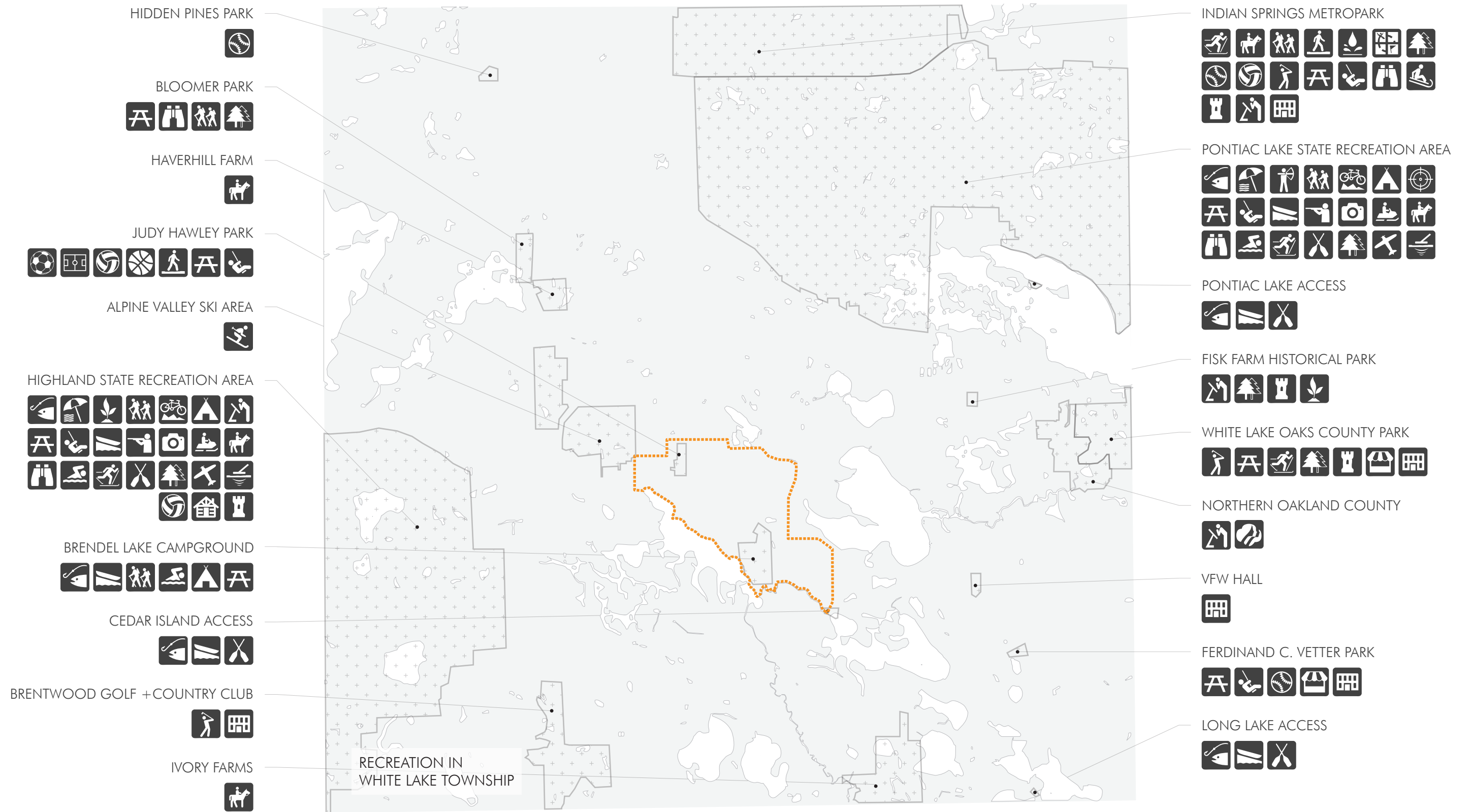
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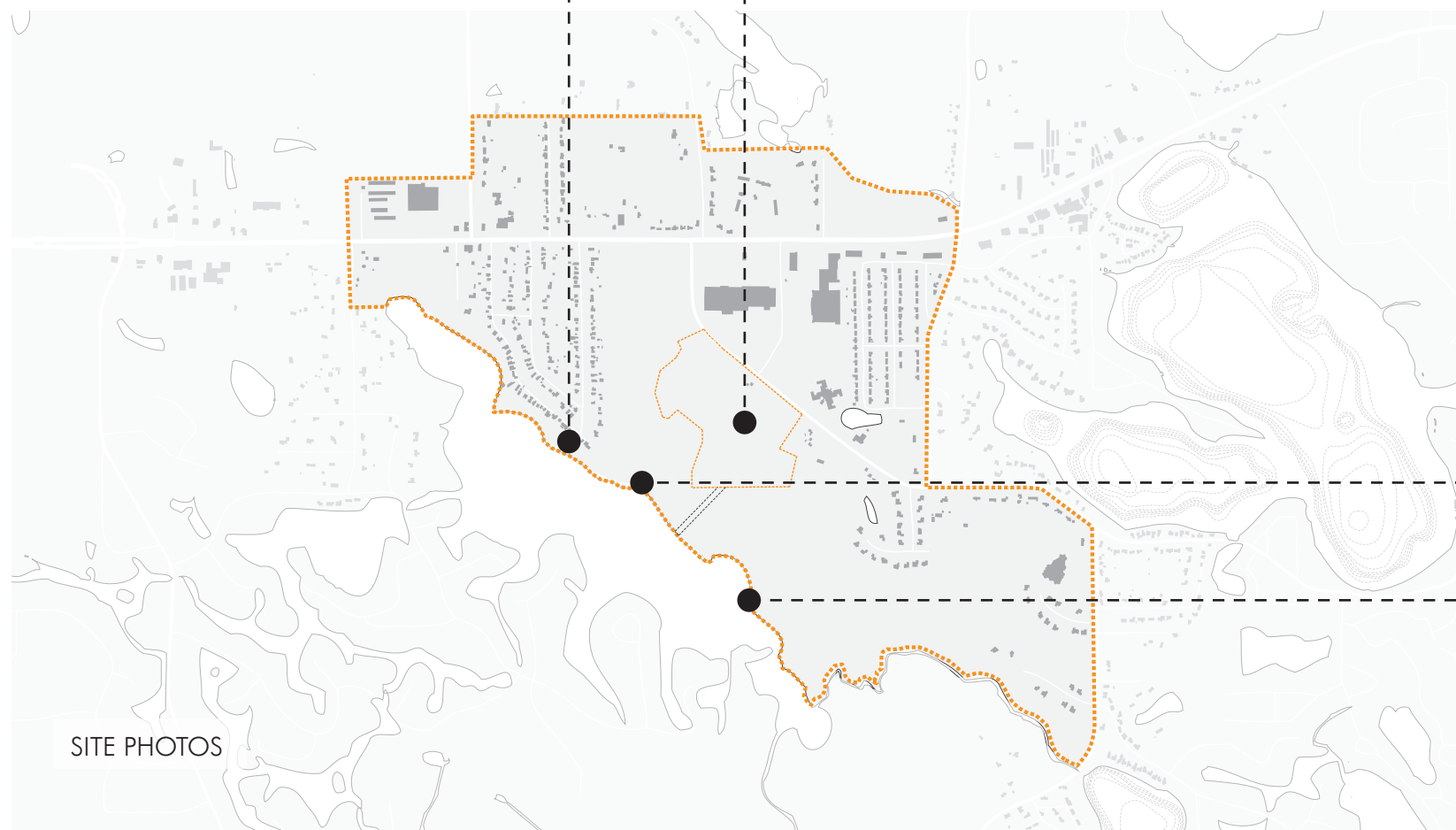
nature

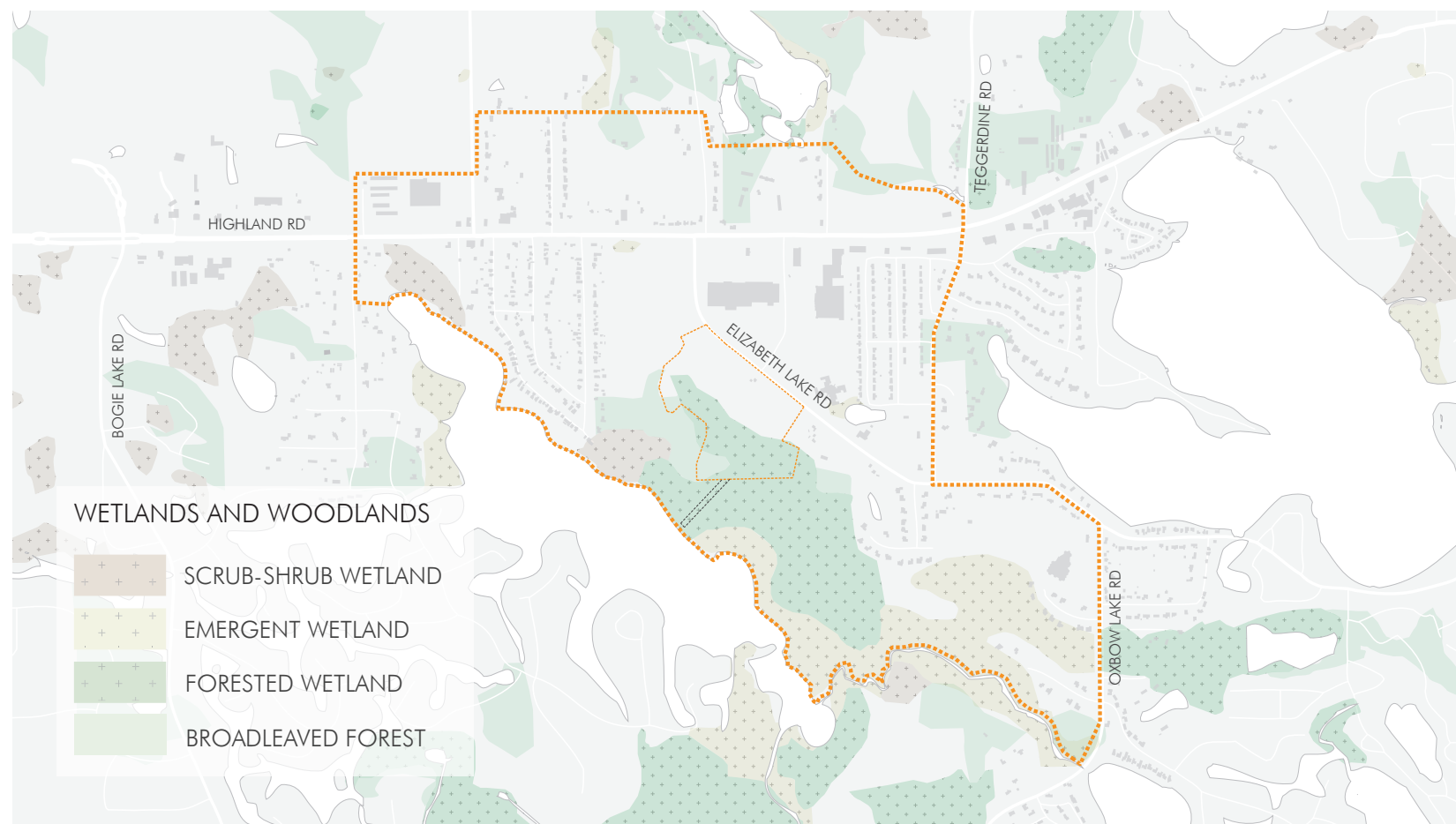
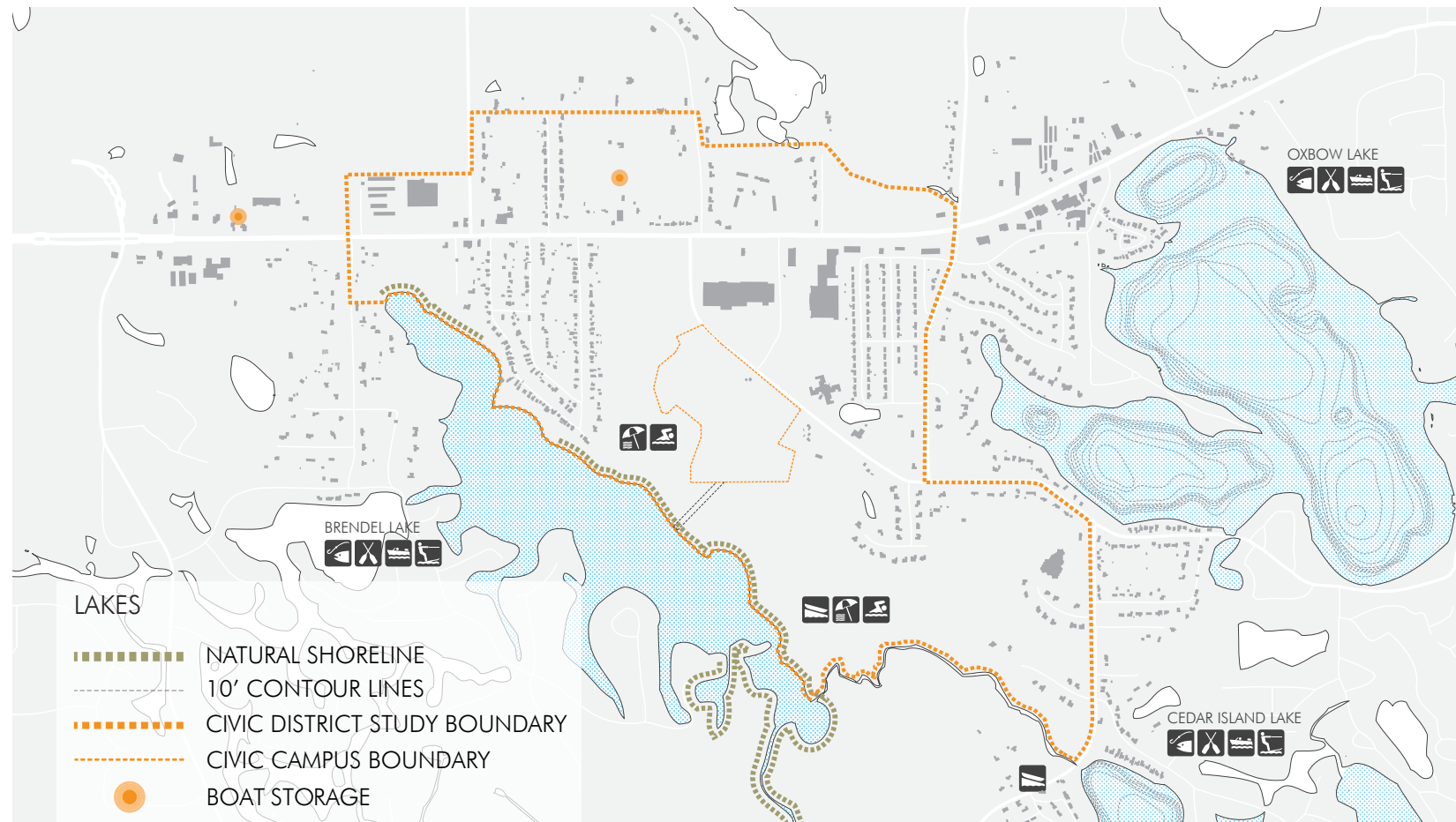
White Lake Township is characterized by its natural ecologies and abundance of outdoor recreation opportunities. The landscape of White Lake Township is organized around its many in-land lakes that shape the road system, development patterns, and provide many recreation opportunities. There are several public lakes in the community as well as many private lakes that offer opportunities for boating, swimming, fishing, and other water sports that shape and define much of the culture of White Lake Township and its residents.

White Lake Township offers other outdoor recreation activities through the many parks, trails, and natural areas. There are two large natural recreational areas in the Indian Springs Metropark and Highland State Recreation Area that influence and shape the character of the recreation opportunities available. The master plan will look to leverage these assets in establishing a character and framework for the CiDi study area.



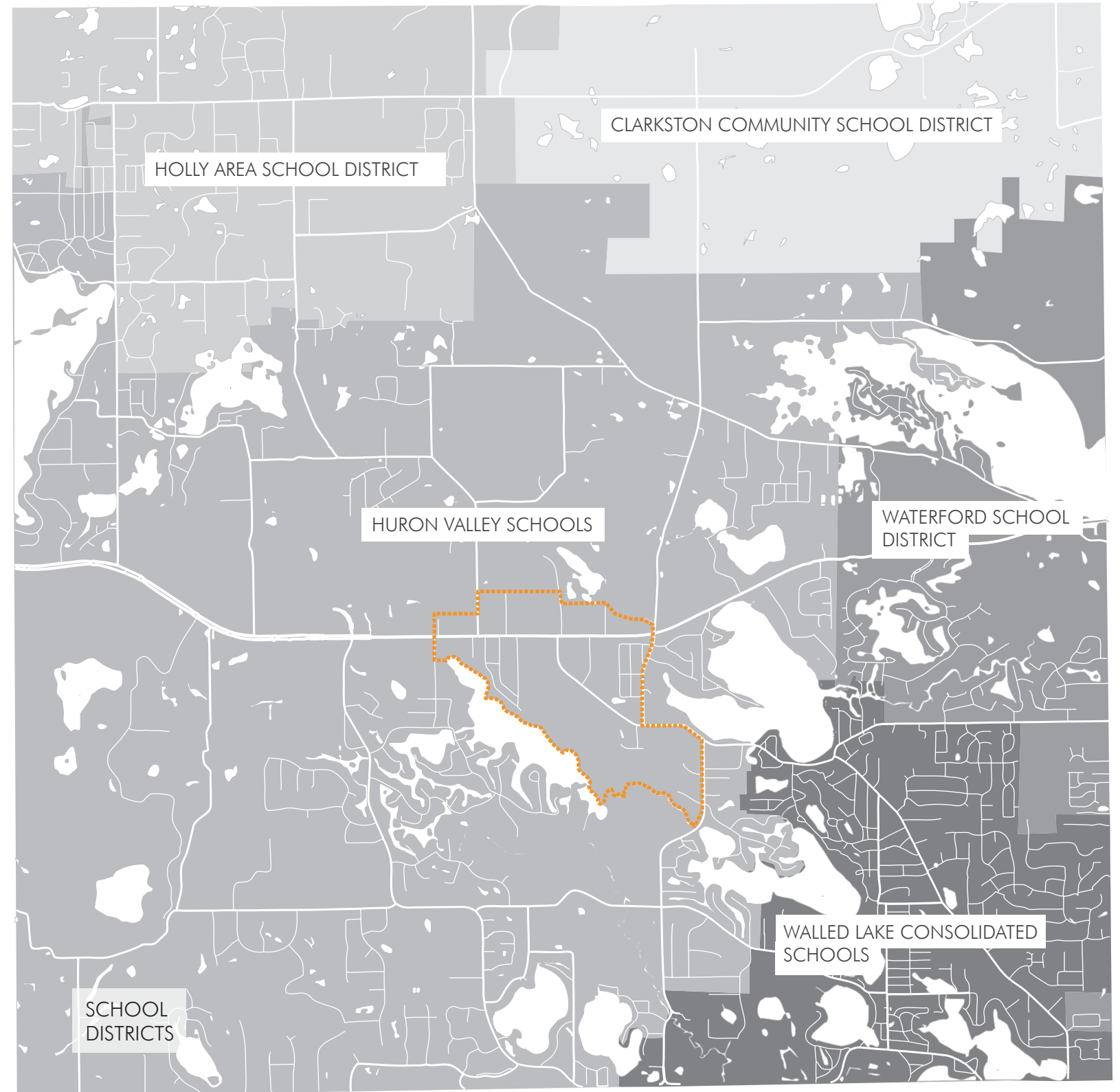






The lakes immediately affecting / affected by the CiDi study area are Brendel Lake, Oxbow Lake, and Cedar Island Lake, w/ Brendel Lake offering frontage along the study area. While Brendel Lake is private, the master plan will examine potential opportunities to interact with the shoreline in a way that respects the private designation of the lake while creating public amenities. The CiDi study area encompasses wetland areas of varying types that have the potential to integrate into the overall design scheme for the area and become assets / amenities instead of impediments to development.

The natural / un-developed shoreline immersed within the wetlands along Brendel Lake within the study area provide opportunities to explore nature and wildlife as well as create a low-key public space on the water. The different types of wetlands are important to understand the plant and wildlife make-up in the region and know what the implications are for any potential development or intervention.





• BROOKS
ELEMENTARY

• OXBOW
ELEMENTARY

• HOUGHTON
ELEMENTARY

• DUBLIN ELEMENTARY

LAKWOOD ELEMENTARY •

• ST. PATRICK SCHOOL

WHITE LAKE MIDDLE SCHOOL •

• LAKELAND HIGH SCHOOL

SCHOOL
LOCATIONS

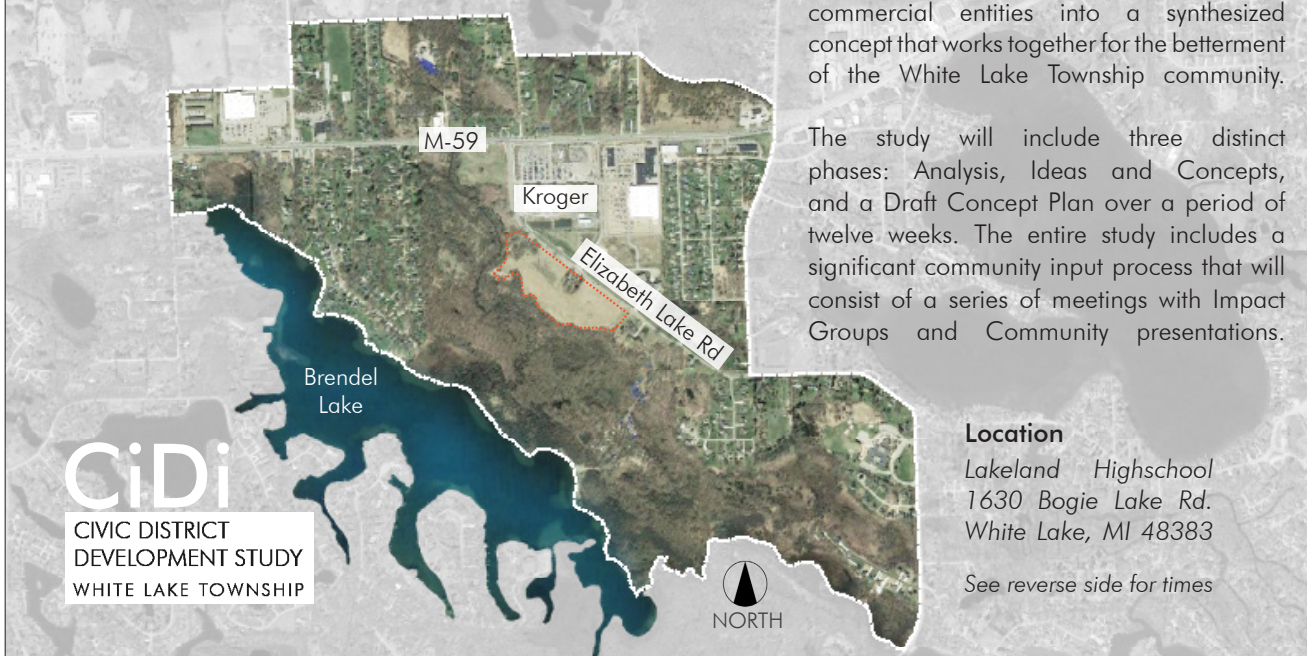
• OAKLAND COMMUNITY
COLLEGE

CiDi

community engagement

The development of the CiDi study plan relied heavily on soliciting input from the community in order to understand the needs and desires of the region. The community was engaged through a series of outreach exercises, including design and strategy presentations at Lakeland High School and a series of digital web based surveys. Surveys were advertised via the Township and Library websites as well as social media platforms to solicit feedback in questionnaire based forms and map based input via the map.social platform. Community input was essential in determining proposed building uses, community amenities, recreational uses, safety concerns, and public spaces.

LOOKING AT A CAMPUS STUDY FOR WHITE LAKE TOWNSHIP



The intent of the Civic District Development study is to galvanize the development interests of municipal, educational, and commercial entities into a synthesized concept that works together for the betterment of the White Lake Township community.

The study will include three distinct phases: Analysis, Ideas and Concepts, and a Draft Concept Plan over a period of twelve weeks. The entire study includes a significant community input process that will consist of a series of meetings with Impact Groups and Community presentations.

Location
Lakeland Highschool
1630 Bogie Lake Rd.
White Lake, MI 48383
See reverse side for times

CiDi
CIVIC DISTRICT
DEVELOPMENT STUDY
WHITE LAKE TOWNSHIP

JOIN US!

SEPTEMBER 09.13.17 **STUDY ANALYSIS COMMUNITY PRESENTATION**
@ 7:00 - 9:00 PM
Lakeland Auditorium/CPA
1630 Bogie Lake Rd.
White Lake, MI 48383

OCTOBER 10.18.17 **IDEAS + CONCEPTS COMMUNITY PRESENTATION**
@ 7:00 - 9:00 PM
Lakeland Auditorium/CPA
1630 Bogie Lake Rd.
White Lake, MI 48383

NOVEMBER 11.08.17 **DRAFT CONCEPT COMMUNITY PRESENTATION**
@ 7:00 - 9:00 PM
Lakeland Auxiliary Cafe
1630 Bogie Lake Rd.
White Lake, MI 48383

All are welcome and encouraged to attend!

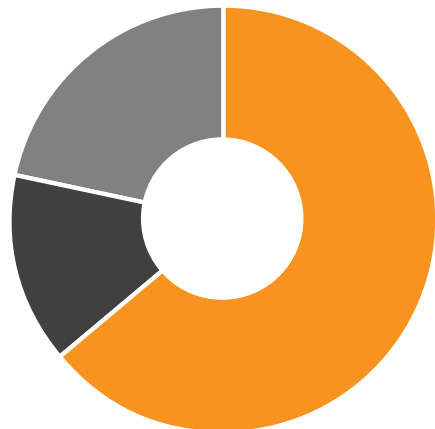
 

For more information please contact:
White Lake Township Library
ph. 248.698.4942 ext.5
White Lake Township City Hall
ph. 248.698.3300 ext.2



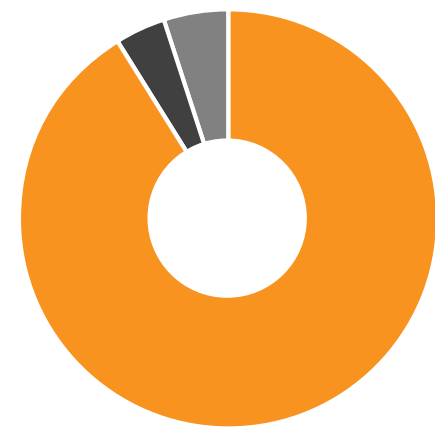
Would a central Civic Campus and District help provide an identity for White Lake Township?

- NO
- YES



Does White Lake Township have enough diversity in its housing types?

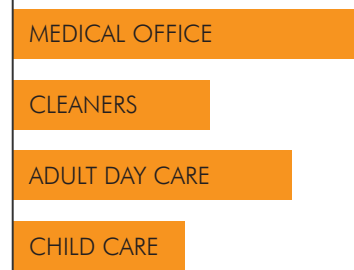
- NOT SURE
- NO
- YES



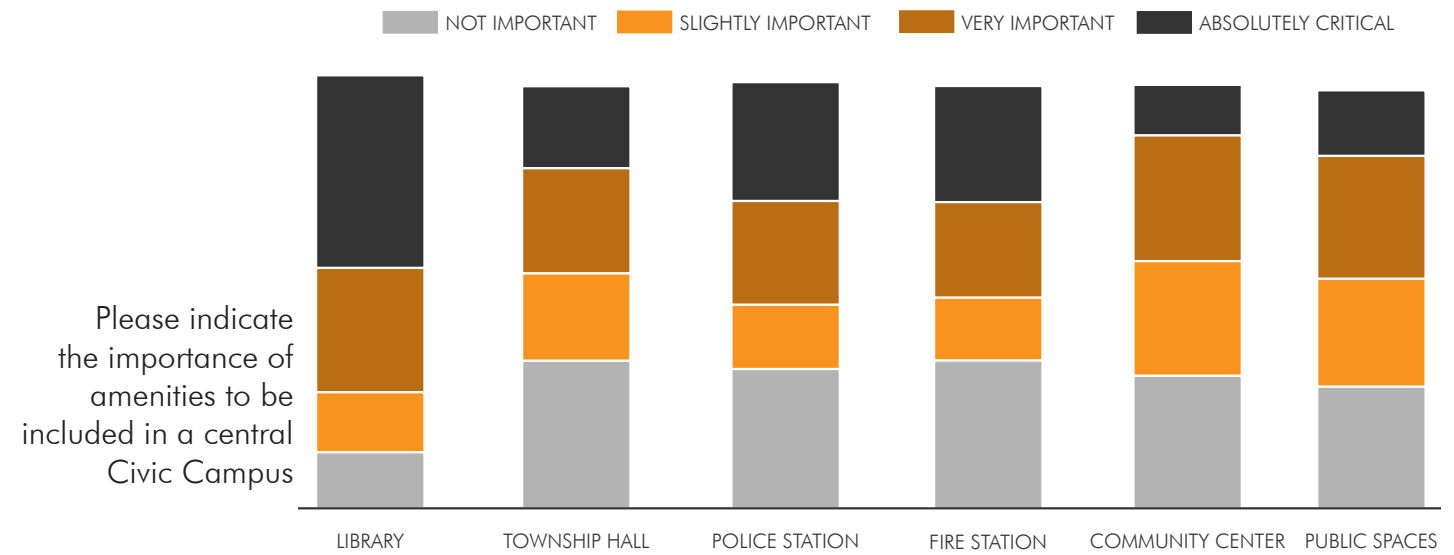
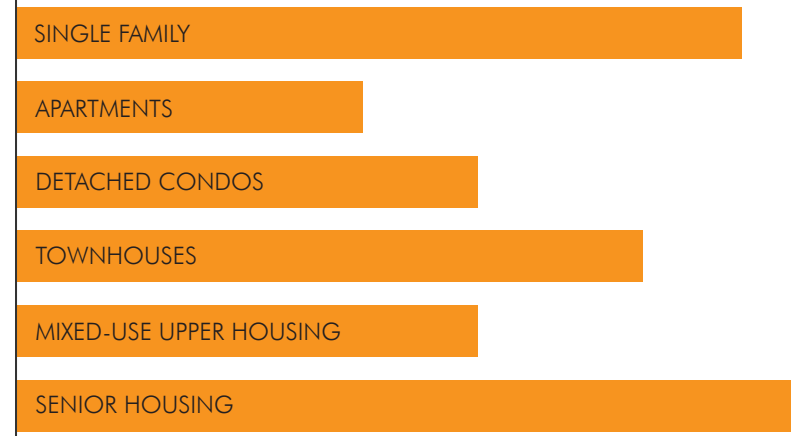
What is your current housing situation?

- OTHER
- RENT
- OWN

What kind of services are currently missing in White Lake Township?

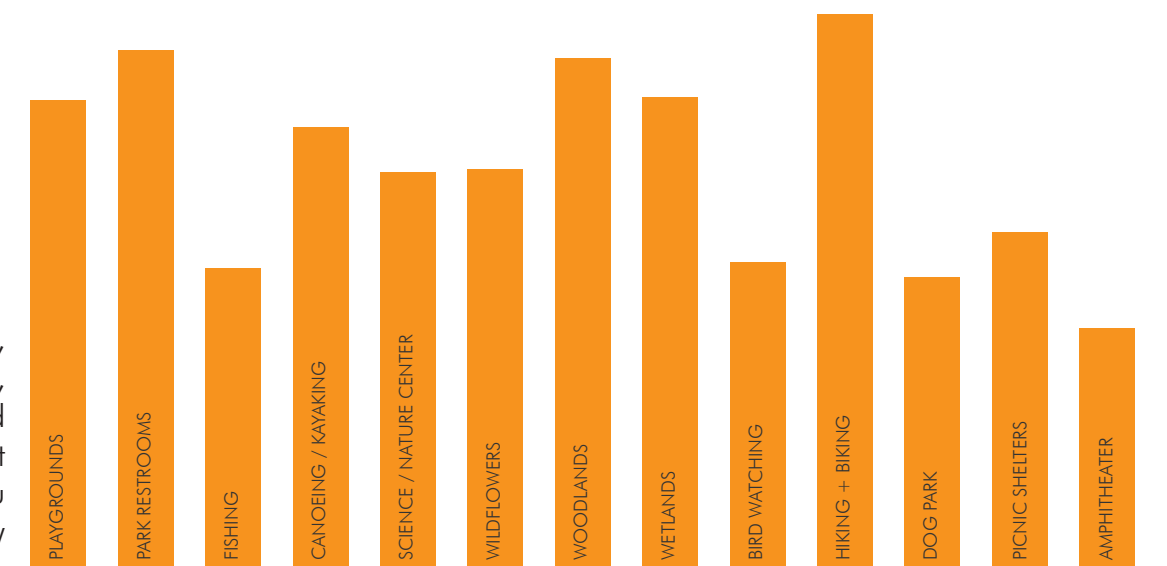


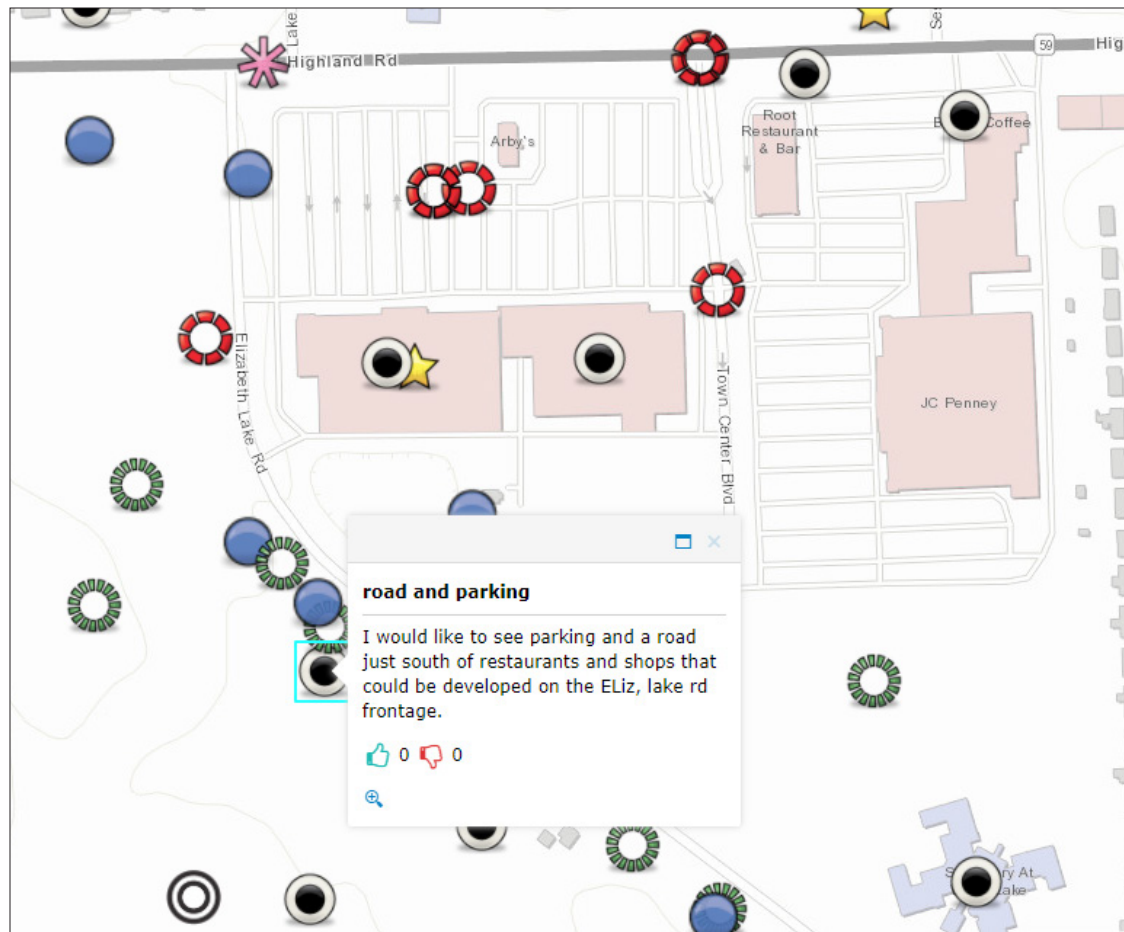
What types of housing could benefit the development of the Civic District?



Please indicate the importance of amenities to be included in a central Civic Campus

Recreational, educational, environmental and cultural amenities that are important to you and your family

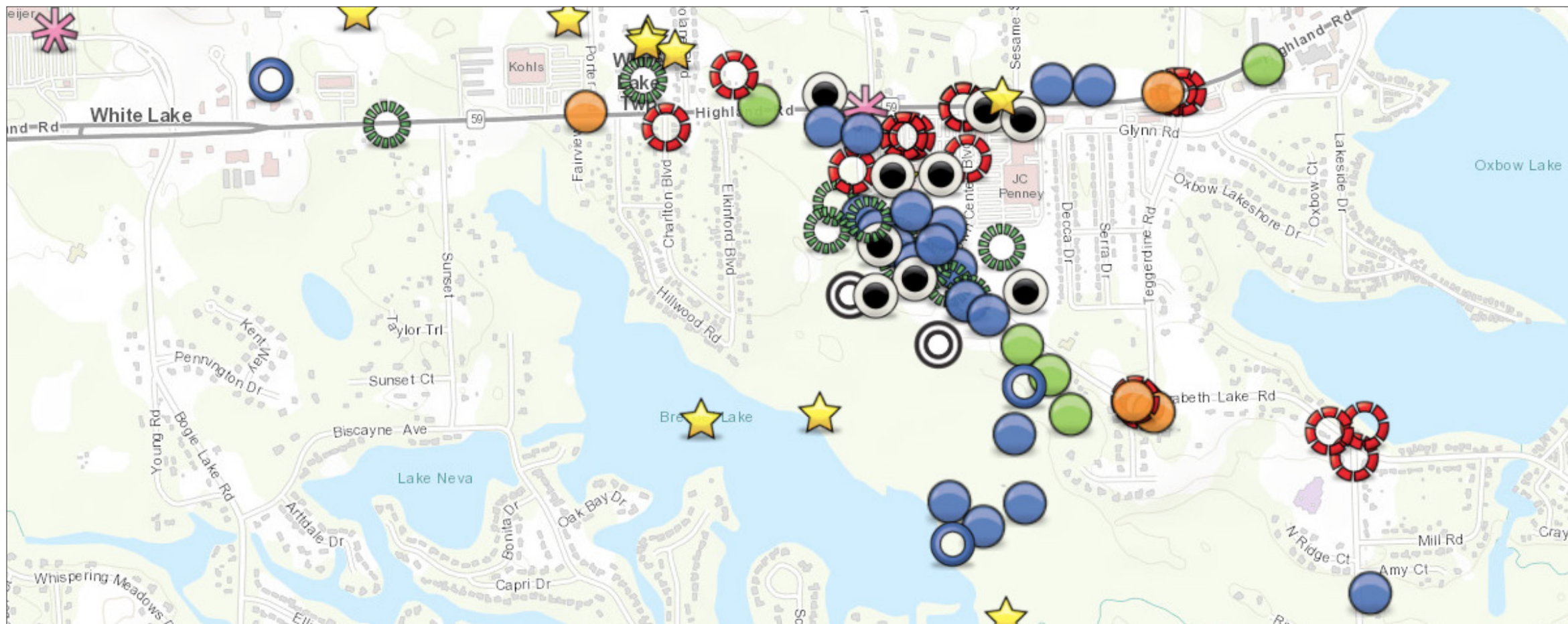
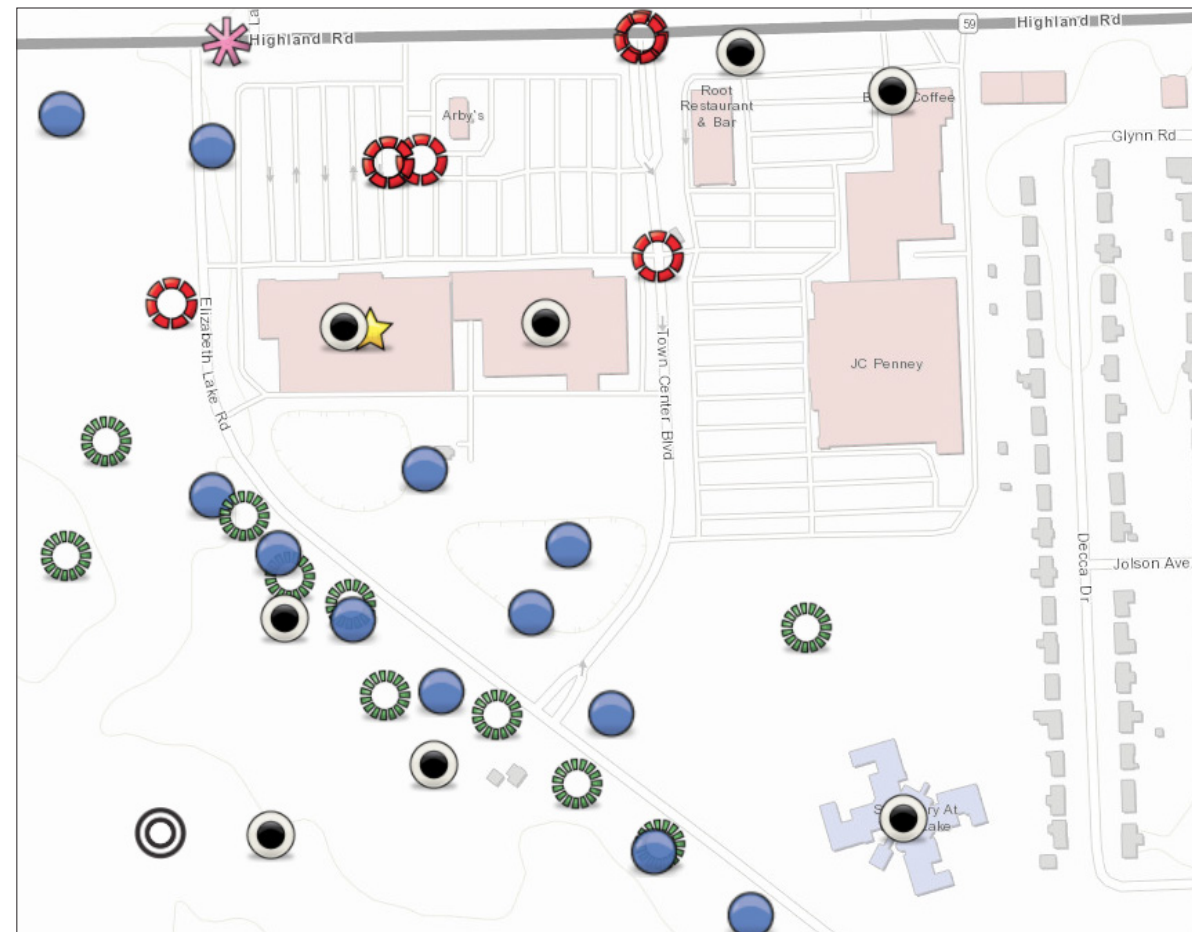














road and parking

I would like to see parking and a road just south of restaurants and shops that could be developed on the ELIZ, lake rd frontage.

0 0



-  **COMMUNITY ASSET**
Assets to the community that should be maintained or enhanced.
-  **DEVELOPMENT PRIORITY SITE**
Sites you feel should be developed or redeveloped in the short term.
-  **PROBLEMATIC INTERSECTION**
Intersections that you feel are a safety concern or impact the smooth flow of traffic.
-  **PUBLIC SAFETY CONCERN**
Are areas that you feel pose a concern to public safety and pedestrians.
-  **UNDESIRABLE USE**
An existing use in the community that you feel is undesirable.
-  **KEY TRANSIT DESTINATION**
An area in the community that should be better served by public transit.
-  **DESIRED USE/DEVELOPMENT**
Identifies an area and a use that you would like to see
-  **POOR APPEARANCE**
Areas that you feel are unsightly or could benefit from additional landscaping or aesthetic improvements.
-  **RECREATION**
Identifies an area where you currently enjoy recreational activities, such as fishing, hiking, biking, etc.
-  **OTHER**
All other points/issues you would like to add.

CiDi

ideas & concepts phase

The ideas and concepts phase of the study process offered the opportunity to explore many ideas for the development of the area through a three separate concepts exploring different solutions to the many opportunities present in the study area. The three different concepts explored the area through a series of conceptual strategies as well as pragmatic solution based strategies that explored alternatives for building uses, adjacencies of building uses, parking, open space, built density, and street grids. All concepts shared the same goal of activating the district with a walkable small town center strategy that would be attractive to business and residents while creating a space that could be used to identify White Lake Township.

The purpose of creating multiple concepts was not to design three isolated strategies and allow the Township steering board and community engagement respondents to select their favorite to proceed forward. The idea behind developing three concepts was to explore as many ideas as possible and open as many dialogues as possible on tackling certain aspects of the district planning. Certain aspects of each scheme were intentionally ambitious for the area in an effort to expand potentials and challenge preconceptions of what could work

in the proposed area. The purpose was then to solicit feedback on individual elements to review and respond too from each scheme and create a final scheme that works with the most successful elements of each scheme.

The three schemes: Main Street, Spine, and Pocket are unique in their approach to public space, parking, density, building use, and orientation. The following pages will review the important elements of each scheme and lead into the discussion of the final proposed draft concept.

CiDi

main street scheme

SCHEME INFORMATION

DEVELOPED SITE AREA:	3,783,647 SF
BUILT AREA:	1,859,795 SF
FLOOR AREA RATIO (FAR):	0.49
PARKING PROVIDED:	3504 SPACES
PARKING RATIO:	1:531 SF

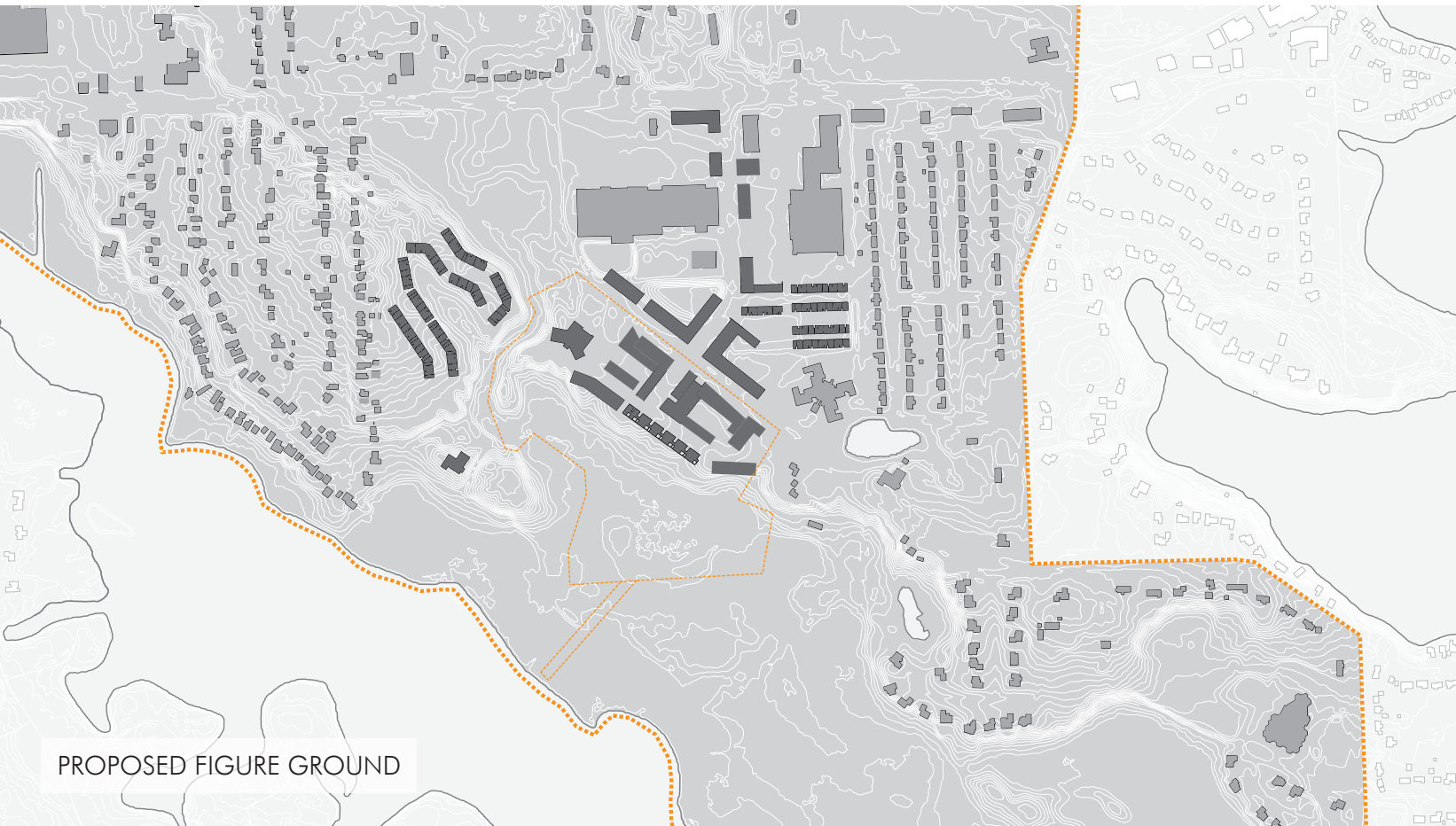
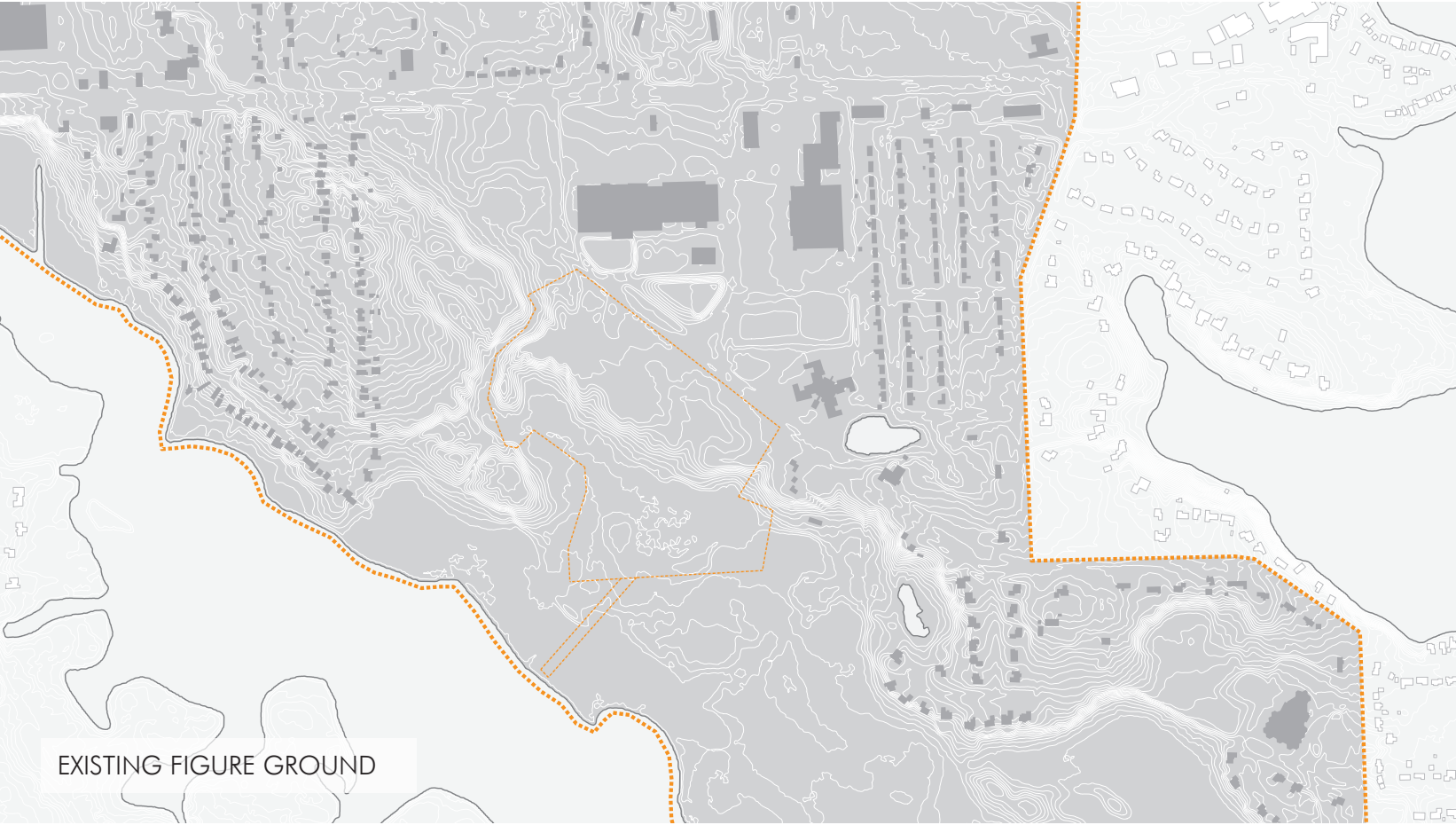
The concept for the Main Street scheme is to create a new “main street” or series of main streets in form and character that define the organizational and development strategy for the CiDi study area. The focal point of the Main Street scheme is the intersection of Elizabeth Lake Road and Town Center Blvd. This central organization point is the primary “main street” with higher density mixed-use developments defining the Elizabeth Lake Road street and the first blocks north and south of Elizabeth Lake Road on Town Center Blvd. Smaller feeder streets are organized off of this framework to create a small town center organization. Some unique elements of this scheme are the boardwalk area surrounding the improved storm water wetland basin behind Kroger and the athletic fields at the corner of M-59 and Elizabeth Lake Road

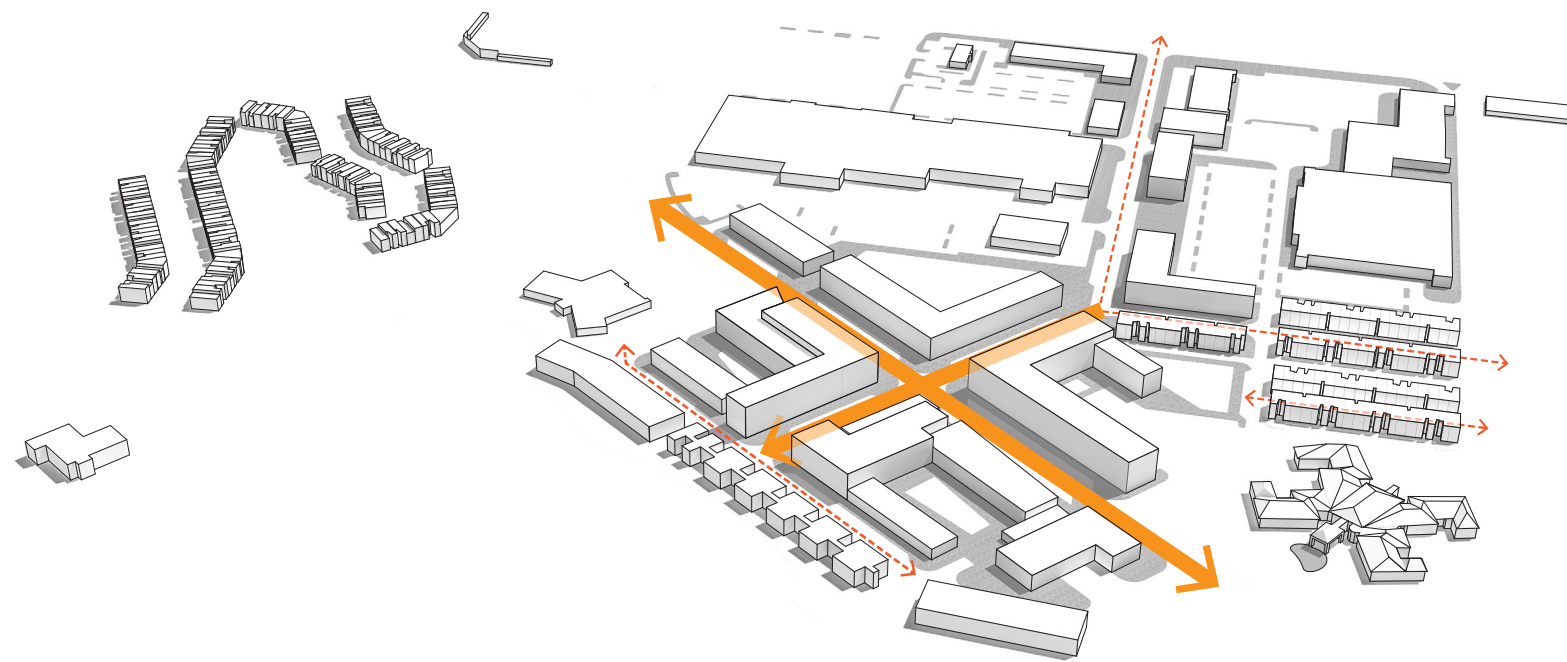
The scheme is programmed with mixed-used buildings at the main intersection and along Town Center Blvd, transitioning into

retail uses closer to M-59 Highland Road. Live / Work buildings are programmed as infill, with senior housing and apartment style housing forming transitional buffers to adjacent single-family residential neighborhoods. Municipal uses are given prominence in this scheme along Elizabeth Lake Road for high visibility.

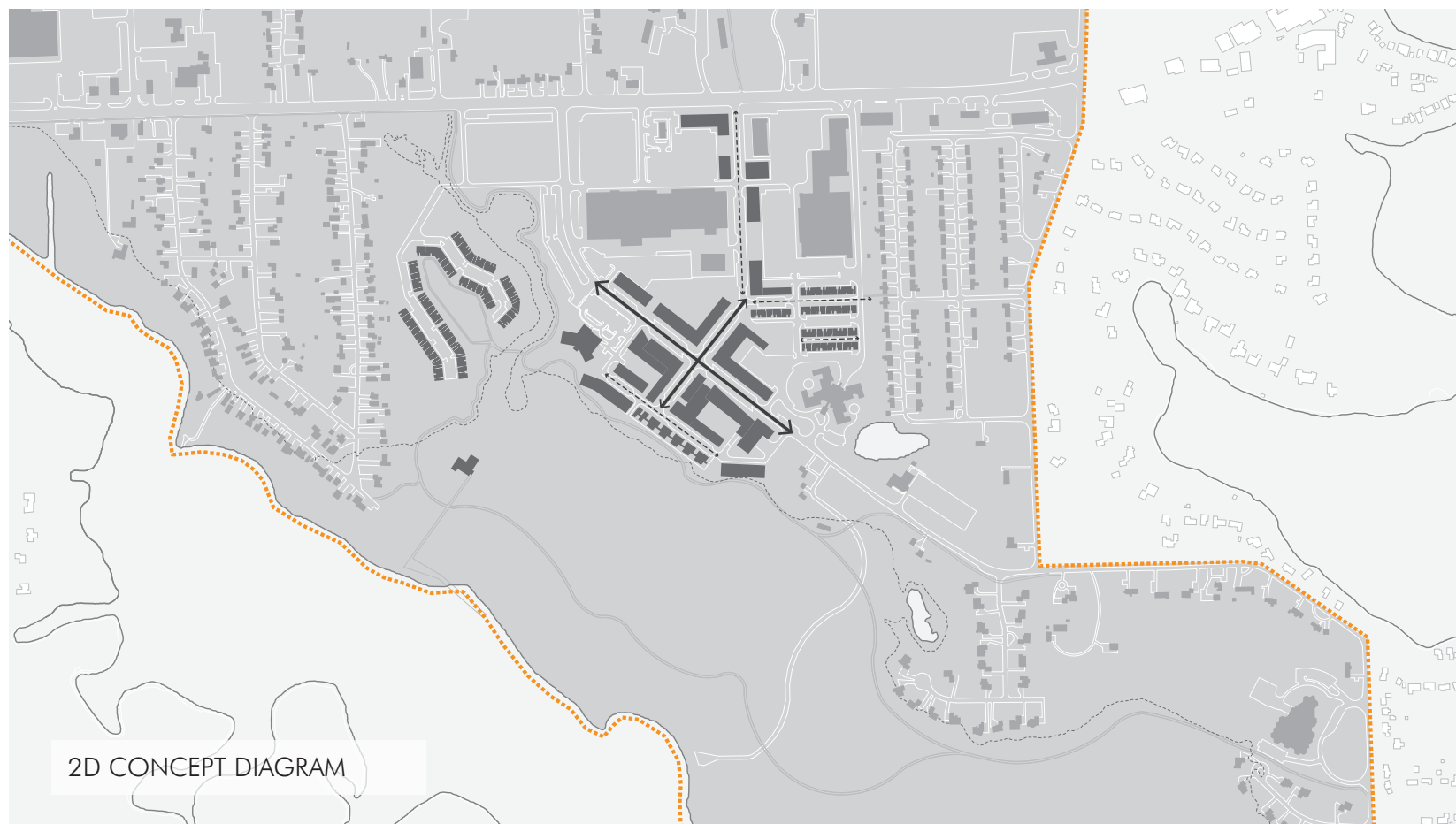
The Main Street scheme acknowledges the lack of and feasibility for a public transportation system and frames the study area as a “park-once” district, providing on-site parking for patrons and then encouraging the use of walkable infrastructure to explore the many opportunities available for shopping, recreation, and socializing. The scheme utilizes a mixture of on-street parking as part of a pedestrian friendly streetscape, surface parking, and walk-out day-lit parking decks that capitalize on the topography and maximize the use of open space. This is part of a system that expands the transportation infrastructure by organizing street grids, expanding sidewalks, adding bike lanes, creating recreation trails, and making connections to ease and encourage pedestrian travel. Density is increased to promote walkability, with the goal being to drastically increase the Floor Area Ratio in the study area. This is achieved by right sizing parking quantities, reducing setbacks, minimizing surface parking, increasing building footprint and height, and regionalizing the storm water management strategy.



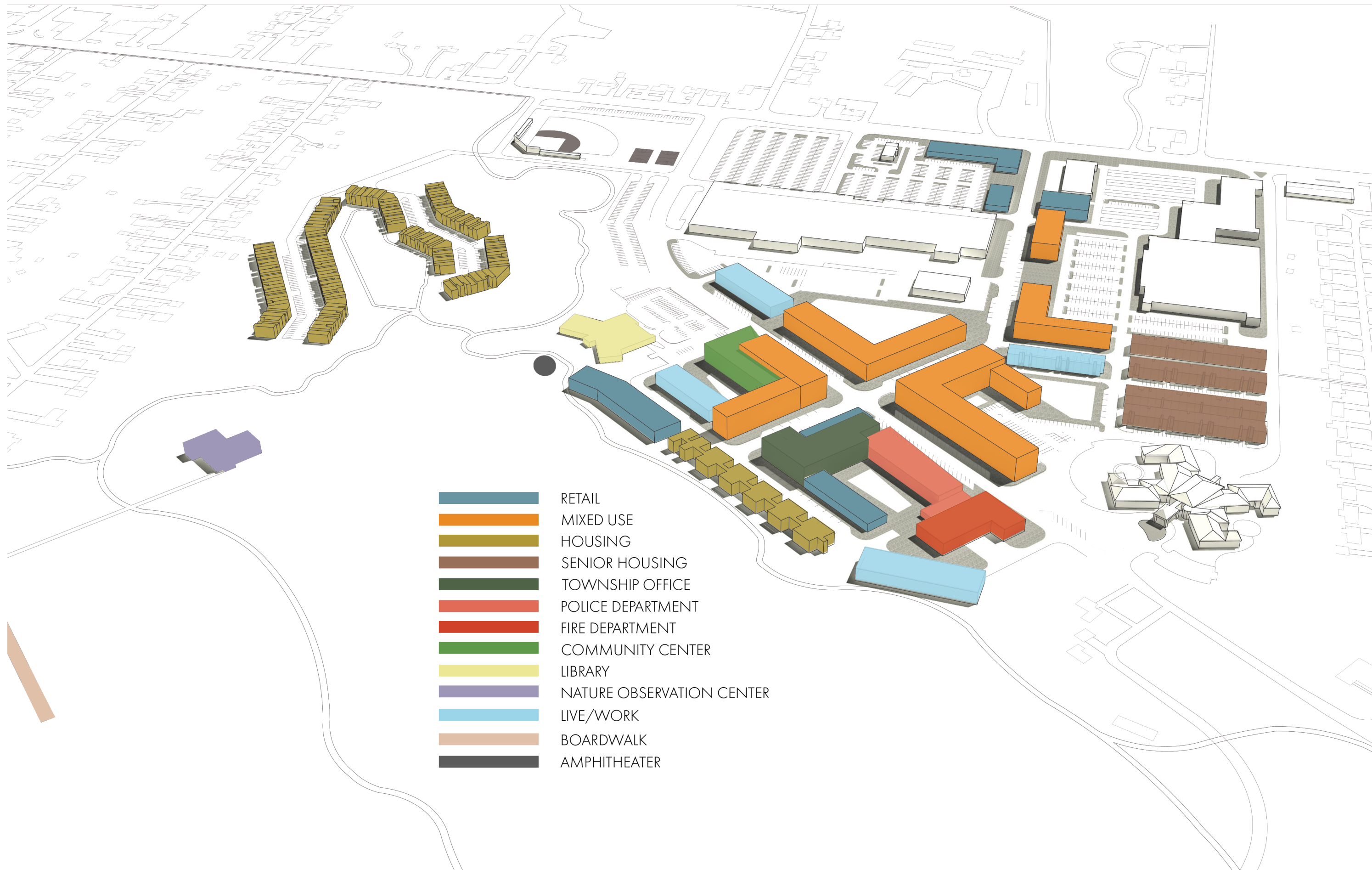




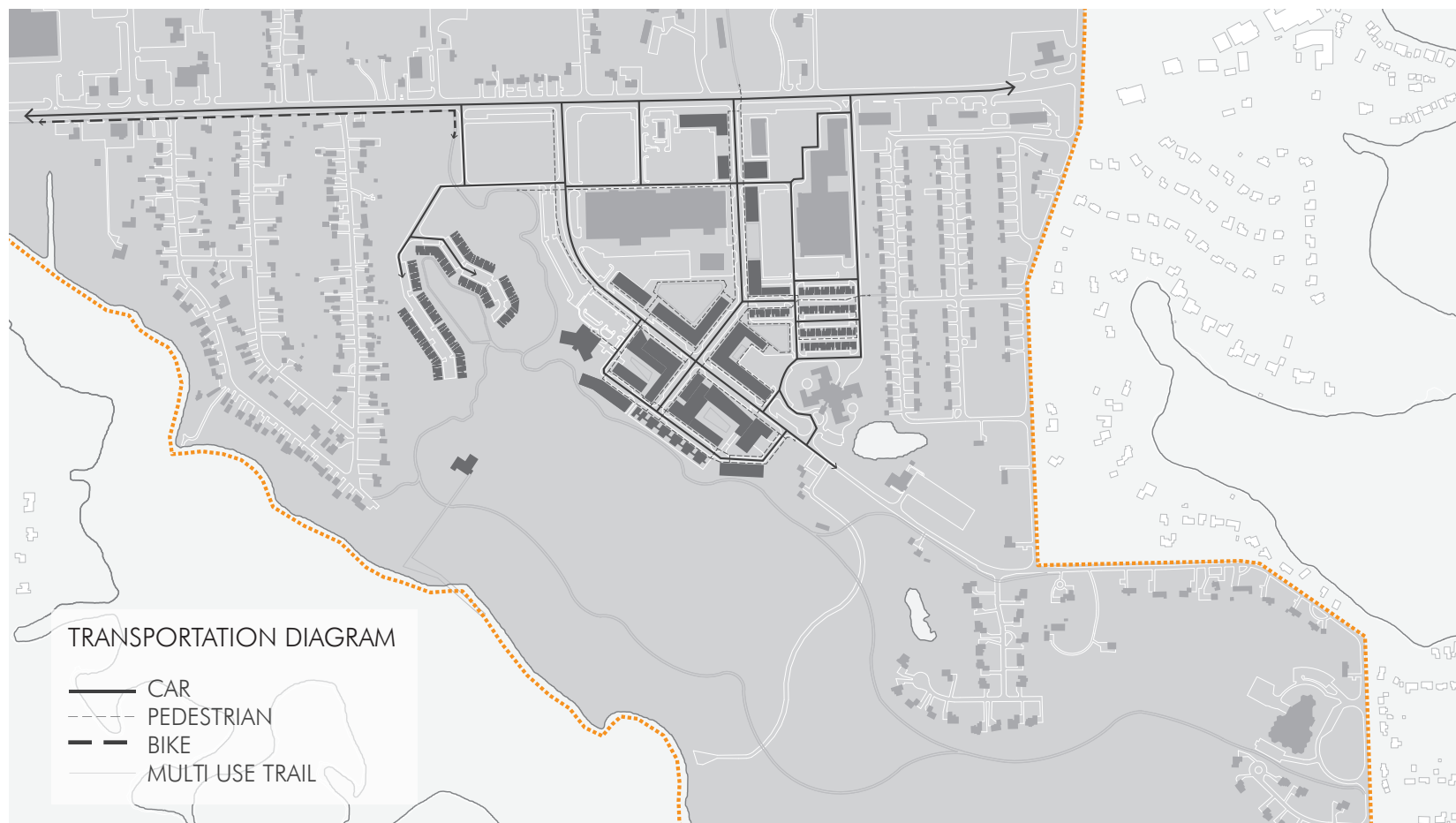
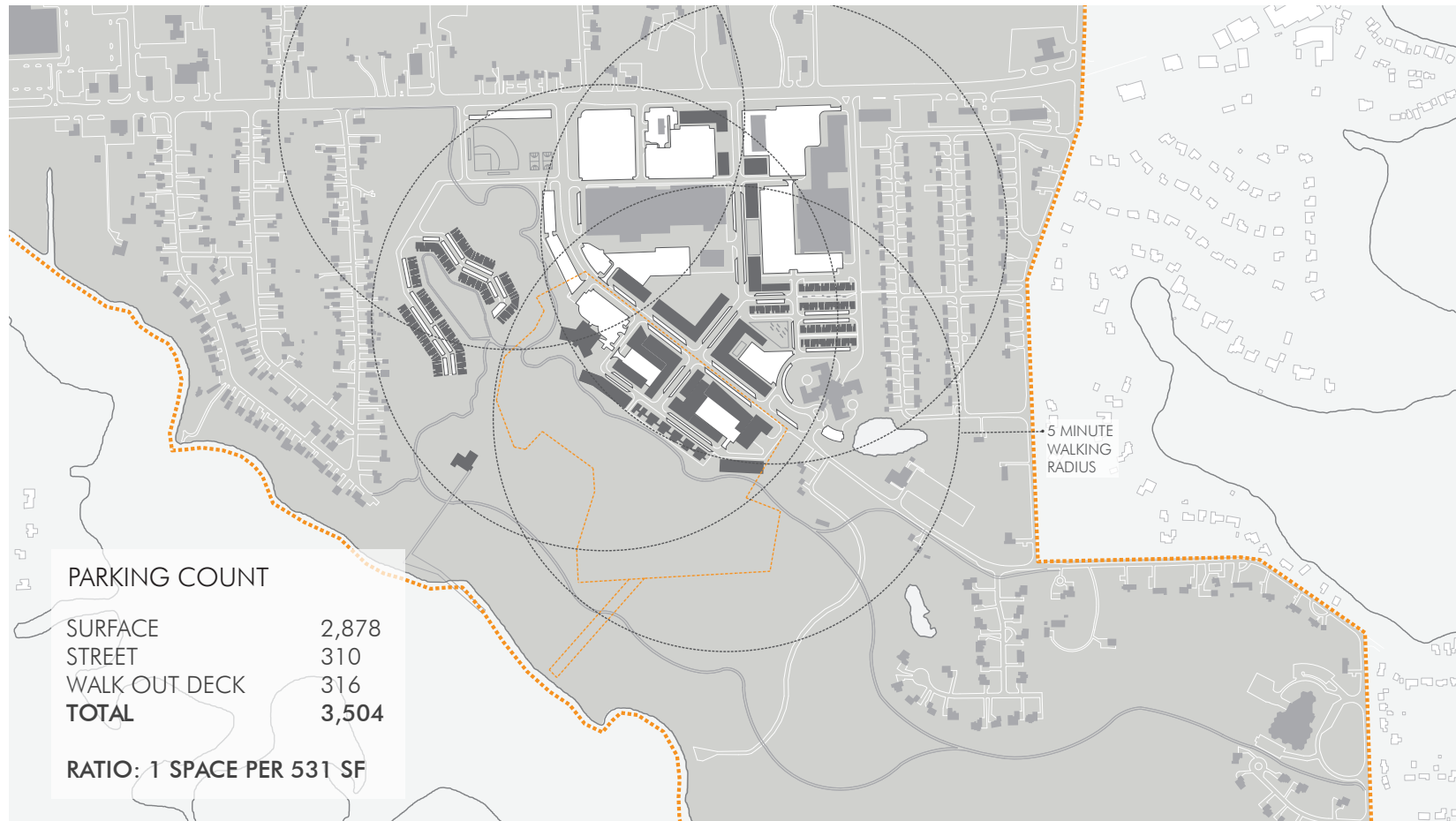
3D CONCEPT DIAGRAM



2D CONCEPT DIAGRAM

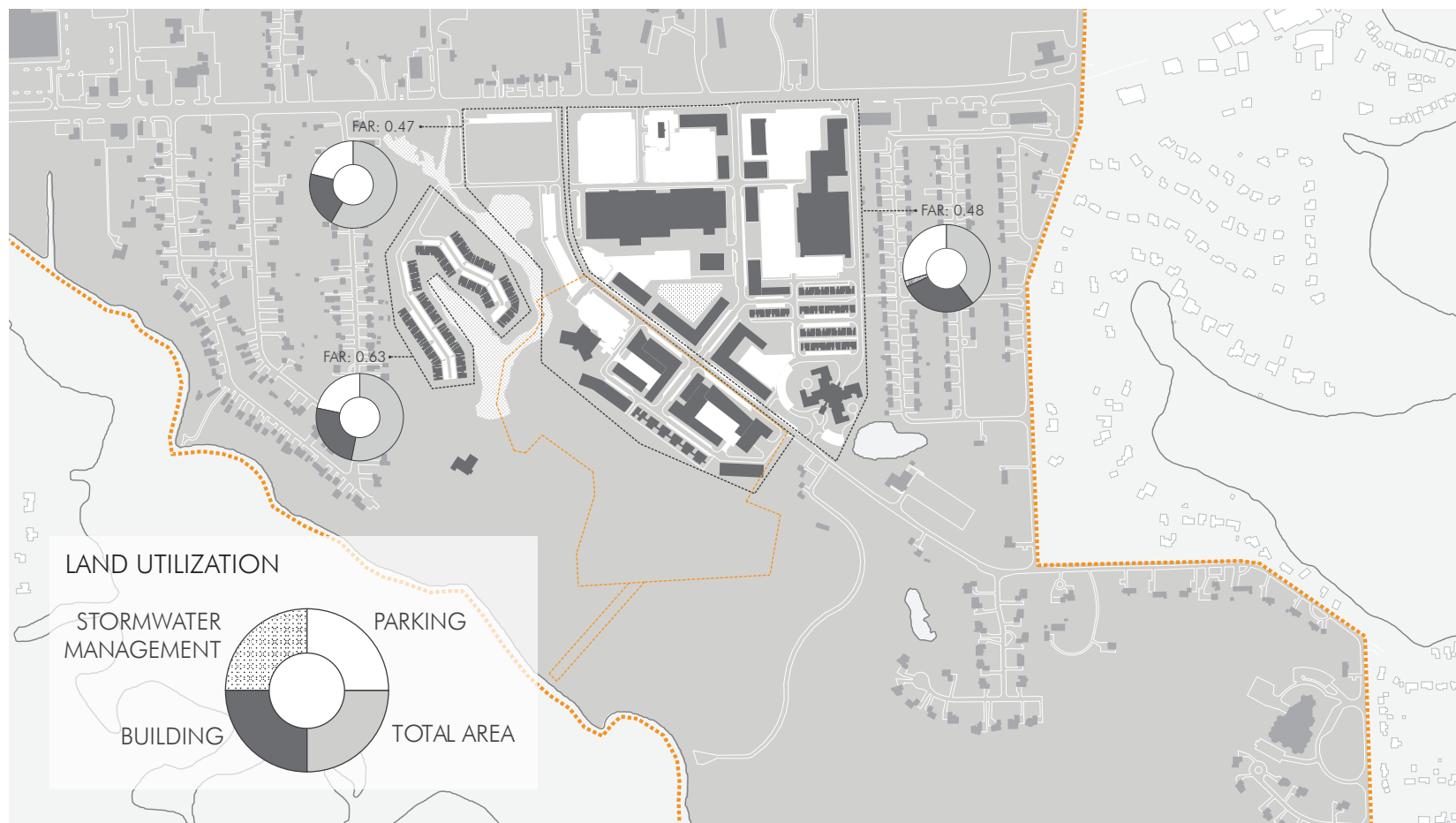
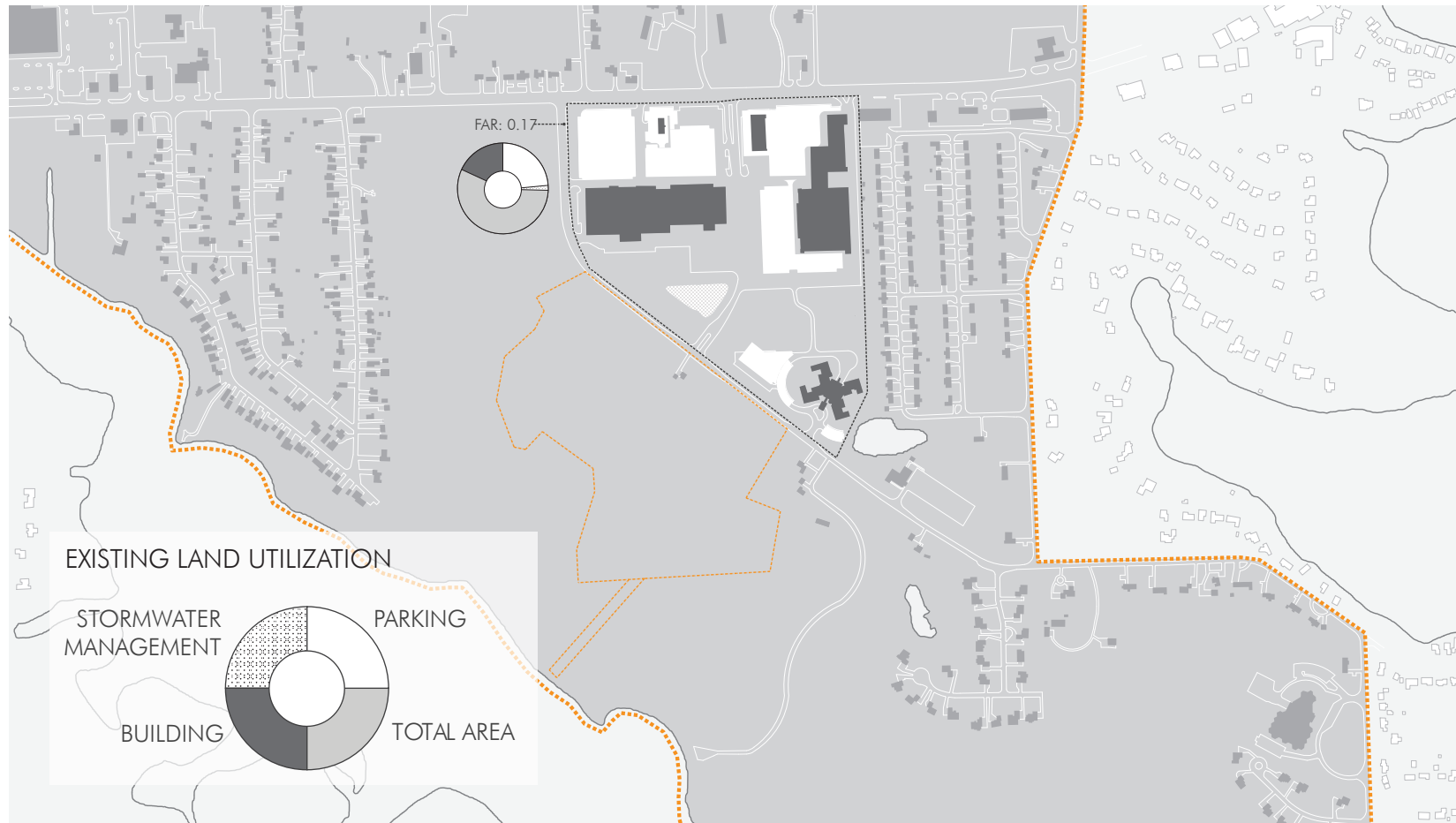


- RETAIL
- MIXED USE
- HOUSING
- SENIOR HOUSING
- TOWNSHIP OFFICE
- POLICE DEPARTMENT
- FIRE DEPARTMENT
- COMMUNITY CENTER
- LIBRARY
- NATURE OBSERVATION CENTER
- LIVE/WORK
- BOARDWALK
- AMPHITHEATER





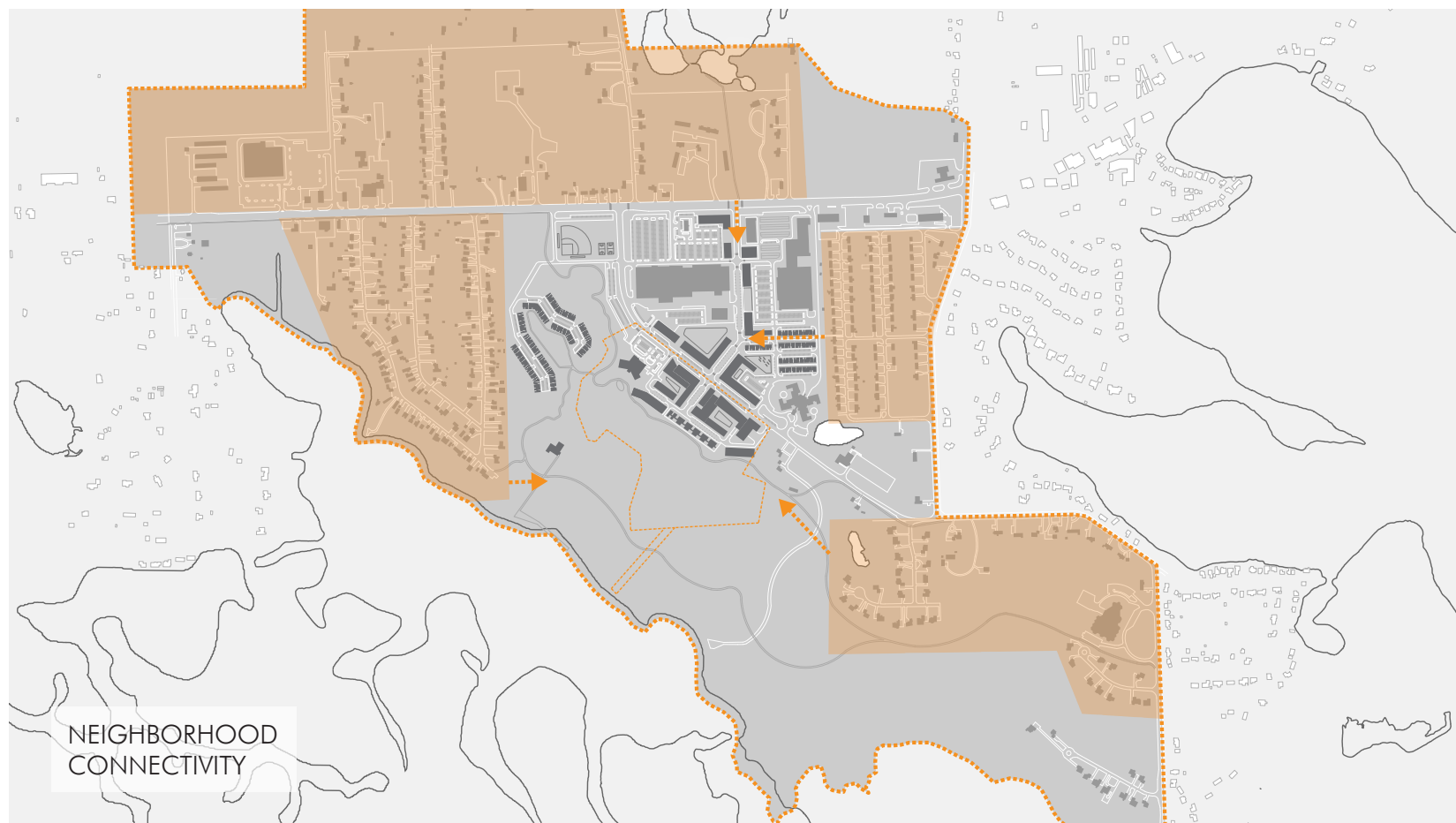
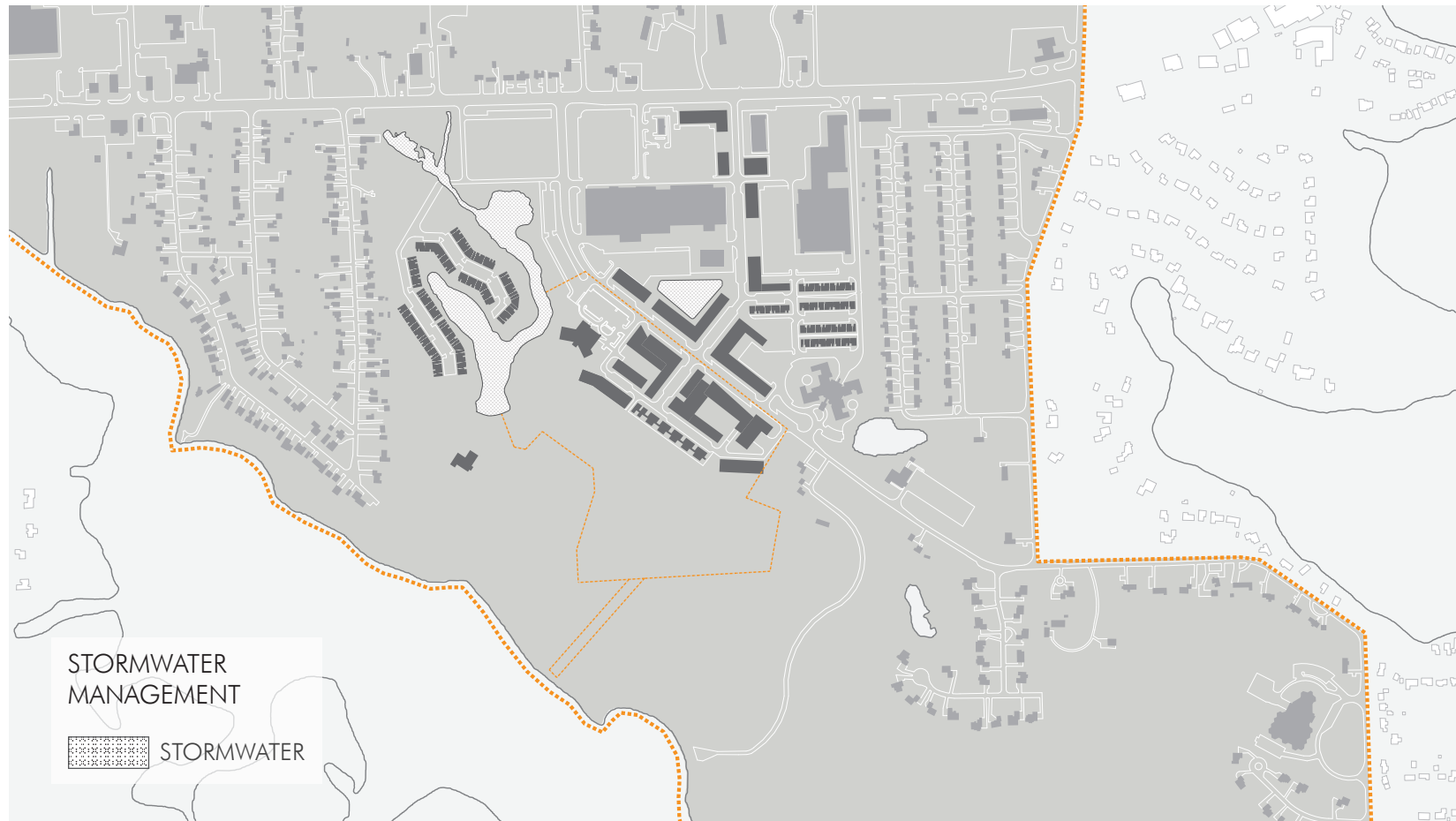
- LEGEND
- 1. RETAIL
 - 2. MIXED USE
 - 3. HOUSING
 - 4. SENIOR LIVING
 - 5. TOWNSHIP OFFICE
 - 6. POLICE DEPARTMENT
 - 7. FIRE DEPARTMENT
 - 8. COMMUNITY CENTER
 - 9. LIBRARY
 - 10. NATURE OBSERVATION CENTER
 - 11. LIVE/WORK
 - 12. MULTI-USE TRAIL
 - 13. BOARDWALK
 - 14. BIKE LANE
 - 15. AMPHITHEATER
 - 16. ATHLETIC FIELD





BUILDING LEGEND

MARK	USE
1	RETAIL
2	MIXED USE
3	HOUSING
4	SENIOR LIVING
5	TOWNSHIP OFFICE
6	POLICE DEPARTMENT
7	FIRE DEPARTMENT
8	COMMUNITY CENTER
9	LIBRARY
10	NATURE CENTER
11	LIVE / WORK
12	MULTI-USE-TRAIL
13	BOARDWALK
14	BIKE LANE
15	AMPHITHEATER
16	ATHLETIC FIELD



CiDi

spine scheme

SCHEME INFORMATION

DEVELOPED SITE AREA:	3,829,457 SF
BUILT AREA:	2,937,436 SF
FLOOR AREA RATIO (FAR):	0.77
PARKING PROVIDED:	3070 SPACES
PARKING RATIO:	1:957 SF

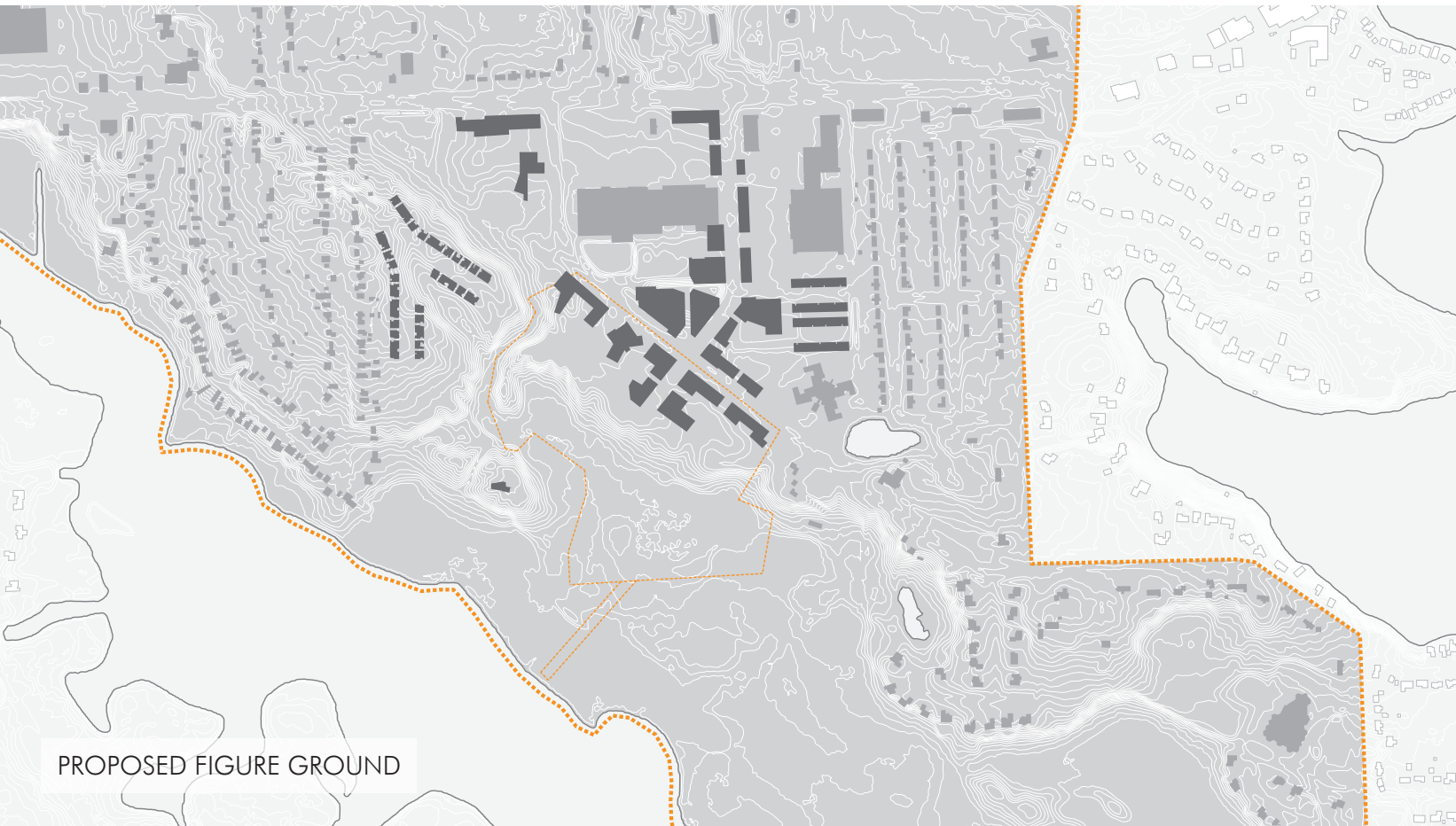
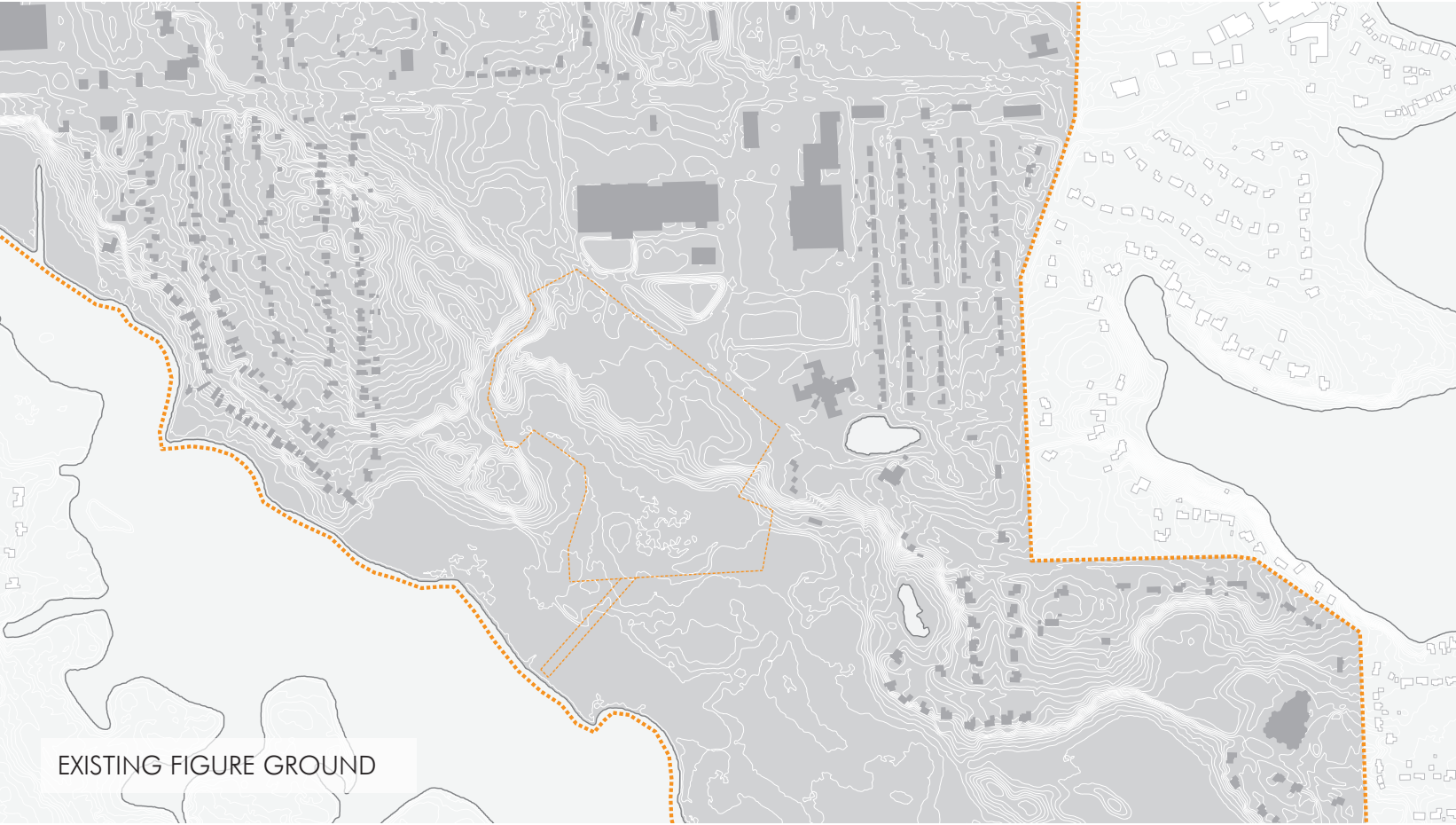
The concept for the Spine scheme is to create a pedestrian only spine for a portion of where Town Center Blvd currently exists and filter traffic towards this spine through streets, walks, and alleys. This strategy gives prominence to the pedestrian and the pedestrian experience with expansive walkways along the central Spine and re-organizing vehicular traffic flow to the periphery. Larger building volumes are focused on the Spine, with the built environment defining the exterior public spaces and giving shape to the pedestrian areas and pathways. Some unique elements of this scheme are the pedestrian only circulation through the spine and the large public spaces along the natural edge to the southwest of the study area at the termination of the Spine.

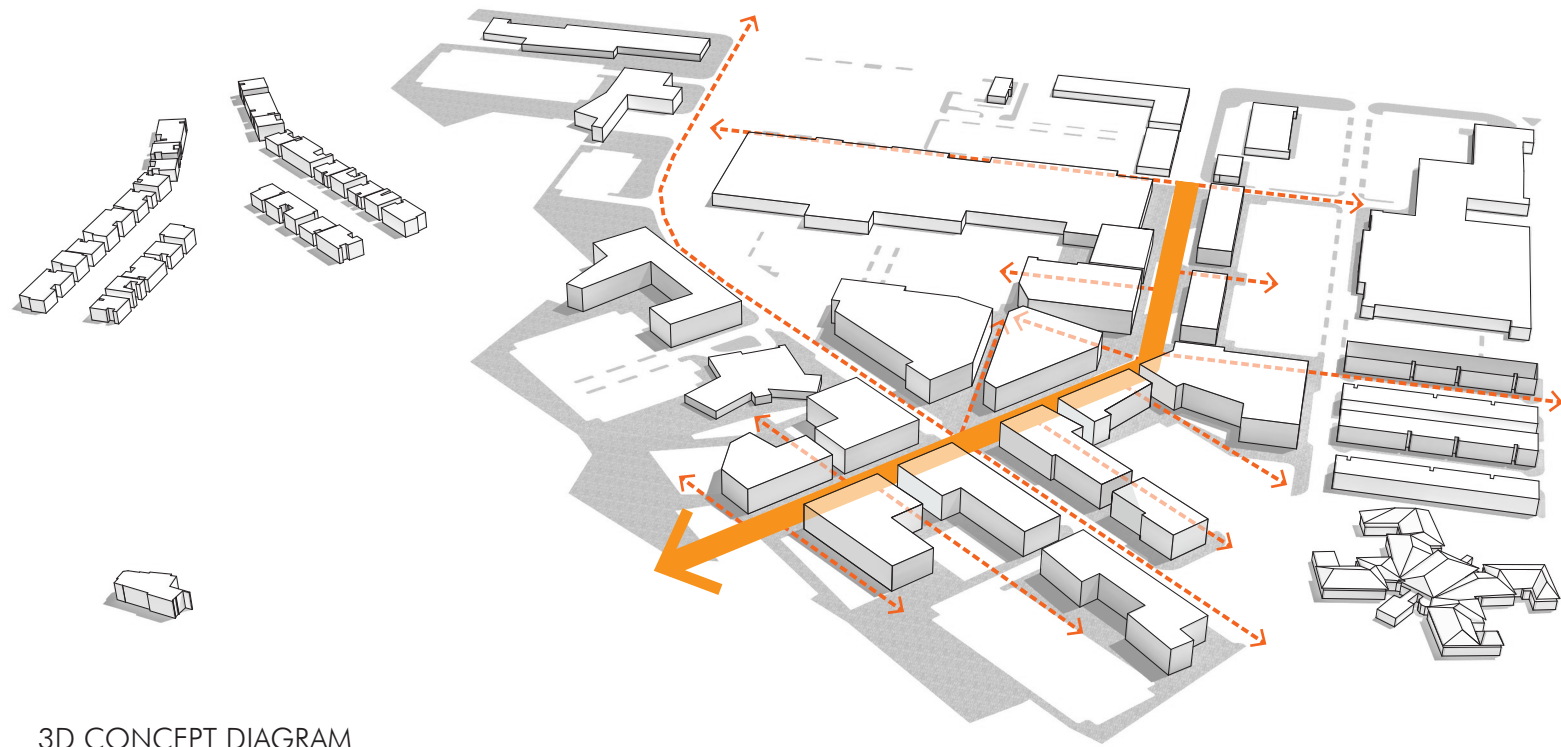
The scheme is programmed with mixed-used and retail buildings along the main Spine w/ senior housing and community service uses at the termination point. Live / Work

buildings and missing middle housing units forming transitional buffers to adjacent single-family residential neighborhoods. Municipal uses are located along Elizabeth Lake Road with high visibility from the road and public safety functions located with proximity, but not direct entry, to M-59 Highland Road for quick and safe access to the major vehicular thoroughfare.

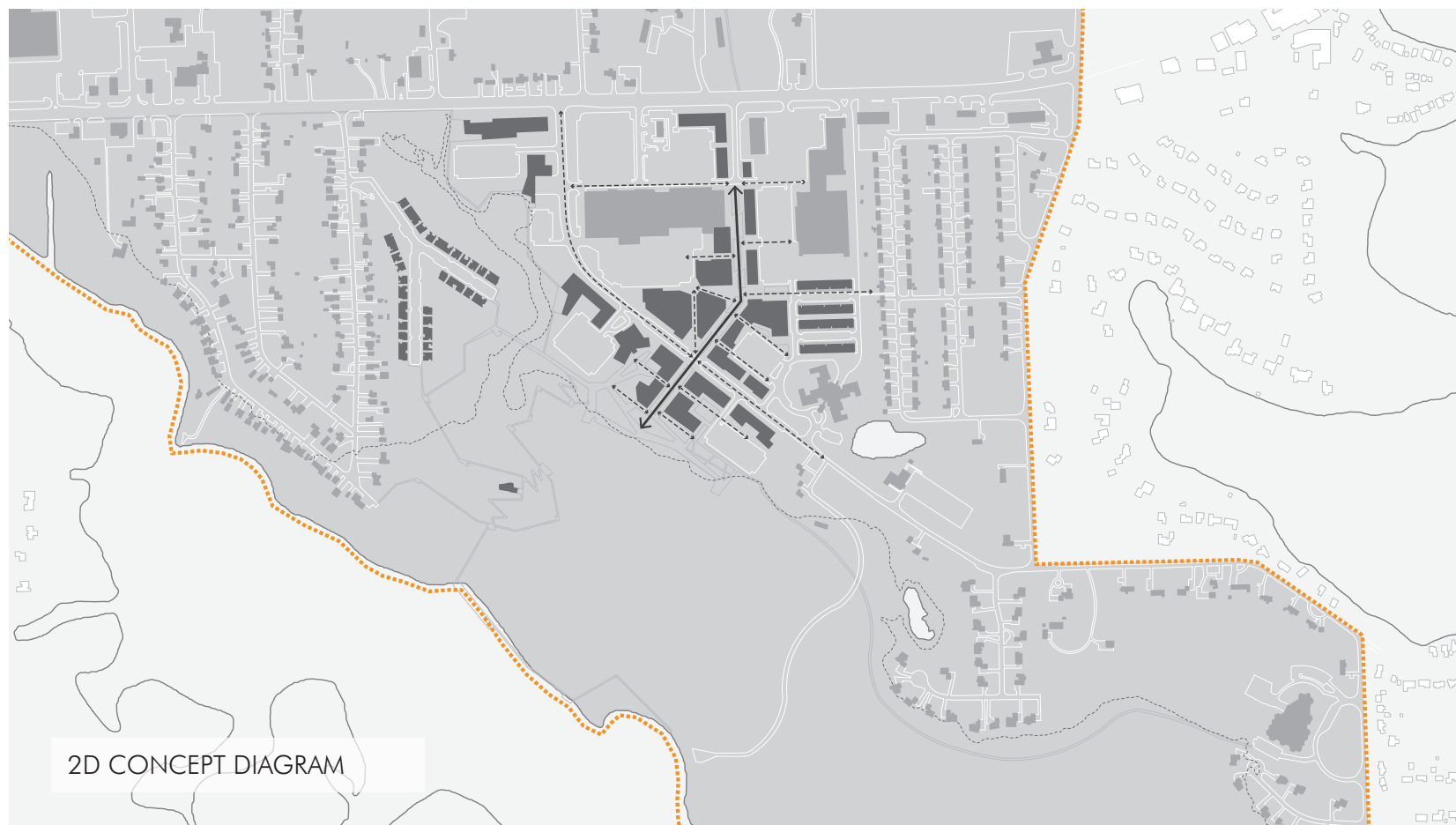
The Spine scheme acknowledges the lack of and feasibility for a public transportation system and frames the study area as a “park-once” district, providing on-site parking for patrons and then encouraging the use of walkable infrastructure to explore the many opportunities available for shopping, recreation, and socializing. The scheme utilizes a mixture of on-street parking as part of a pedestrian friendly streetscape and surface parking. This is part of a system that expands the transportation infrastructure by expanding sidewalks, adding bike lanes, creating recreation trails, and making connections to ease and encourage pedestrian travel, while re-organizing vehicular traffic to the periphery. Density is increased to promote walkability, with the goal being to drastically increase the Floor Area Ratio in the study area. This is achieved by right sizing parking quantities, reducing setbacks, minimizing surface parking, increasing building footprint and height, and regionalizing the storm water management strategy.



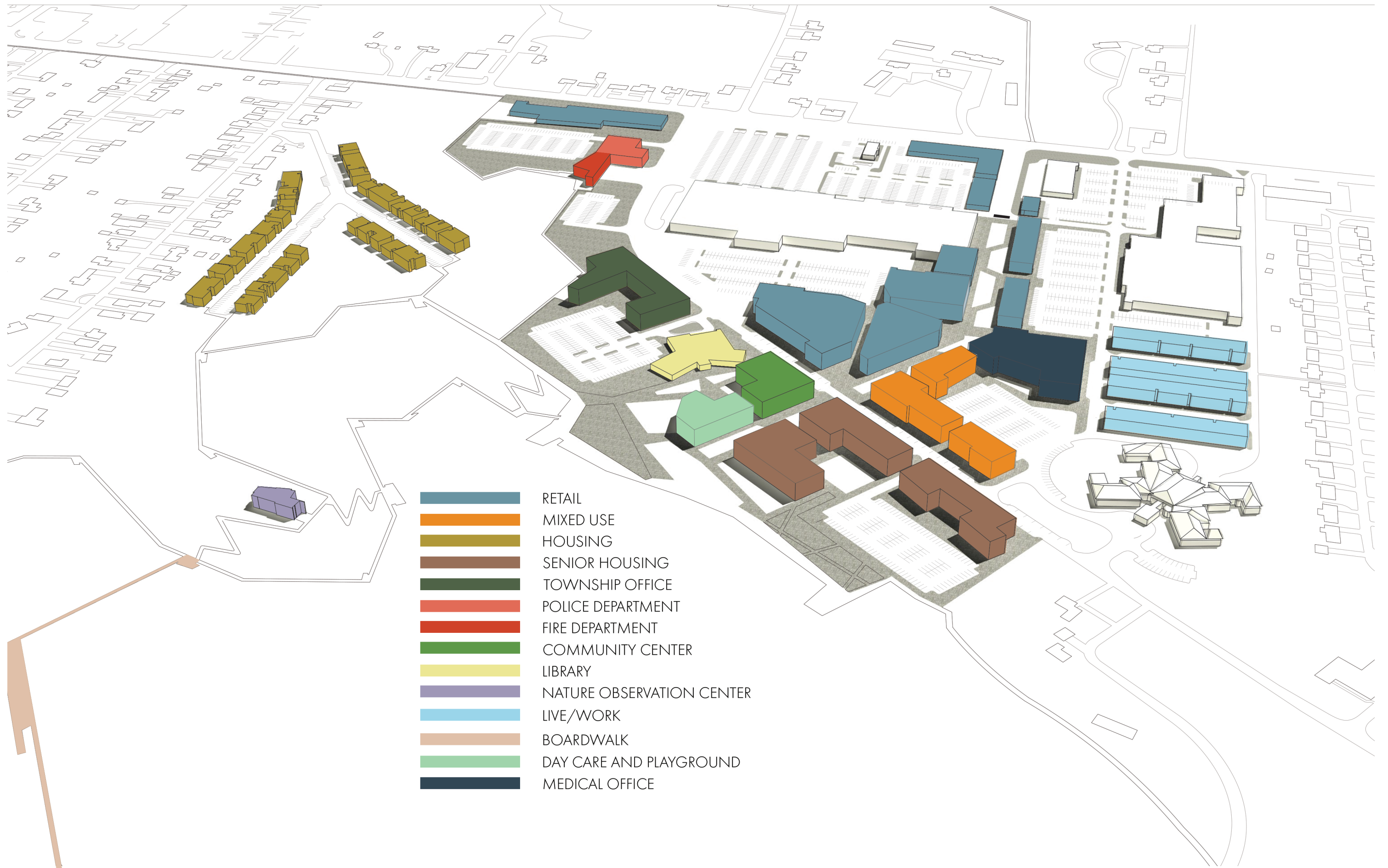




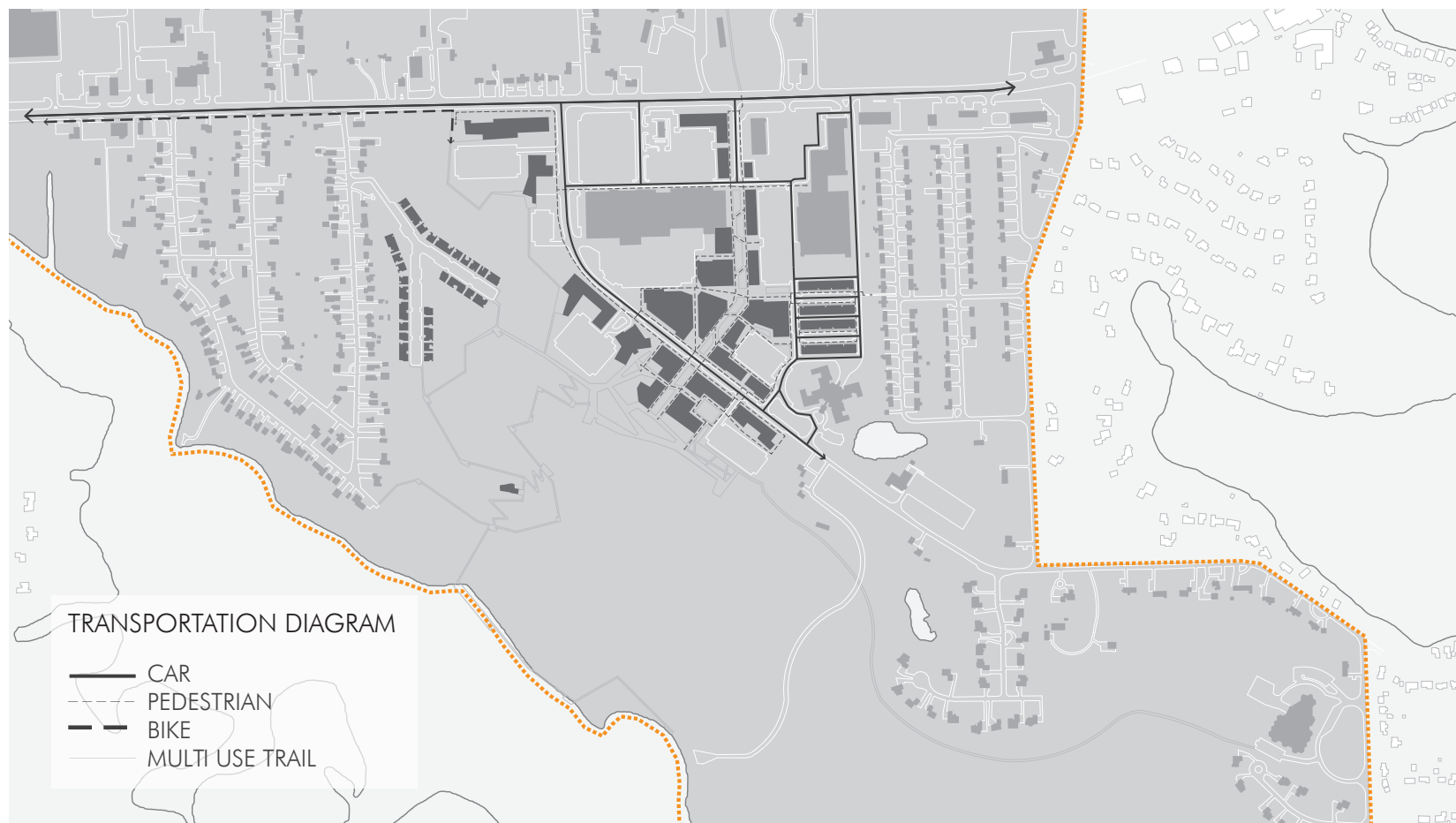
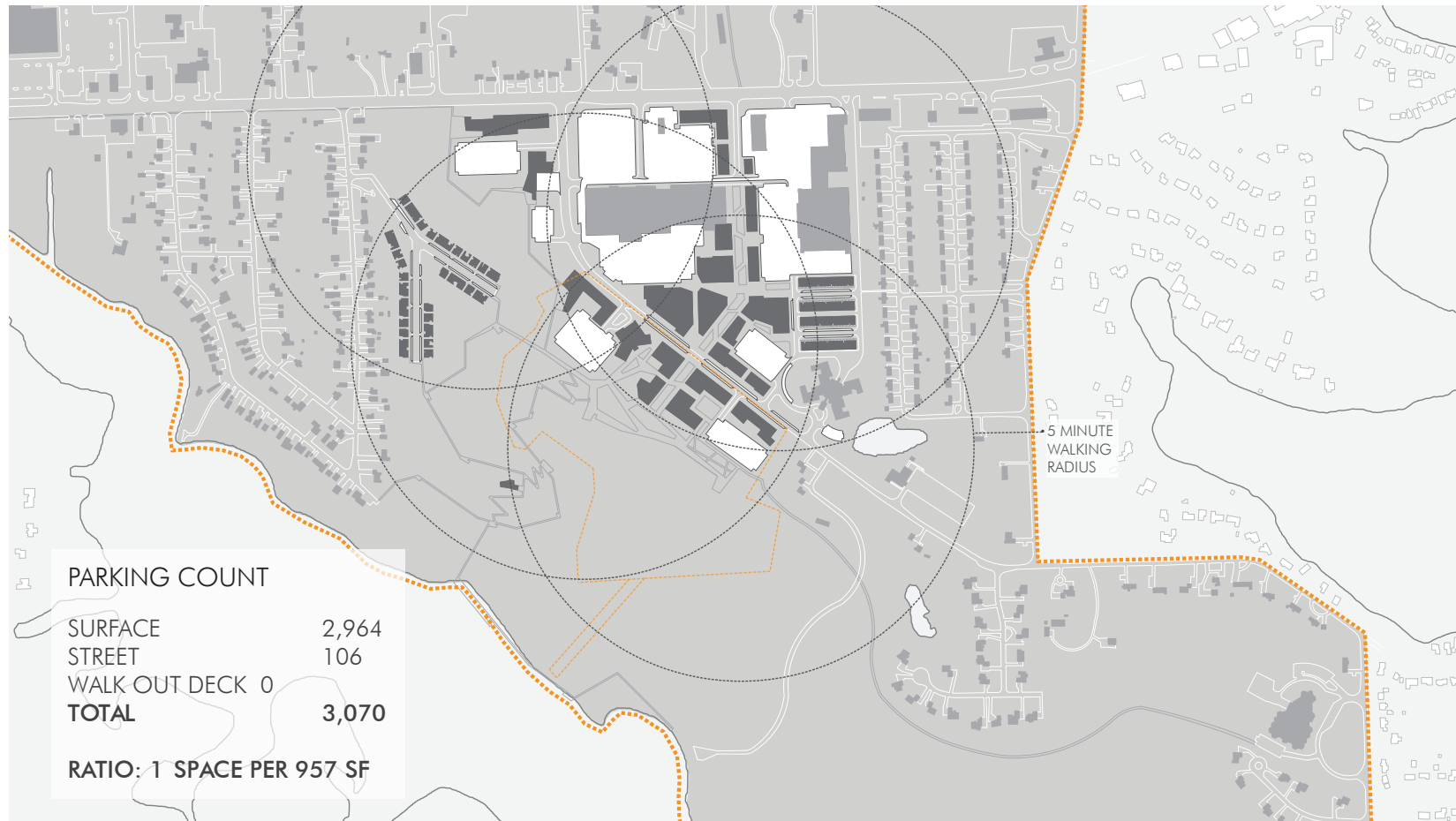
3D CONCEPT DIAGRAM

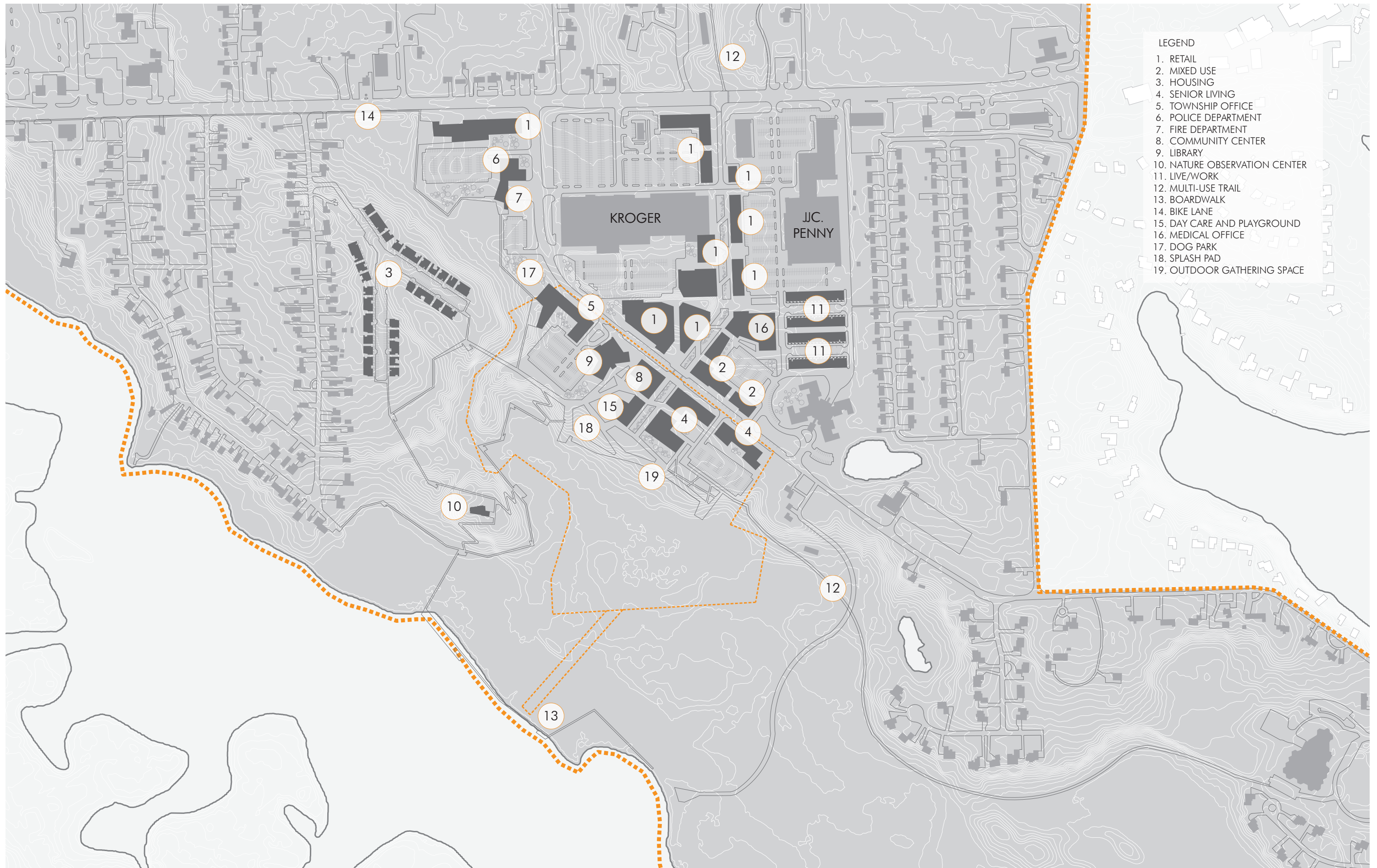


2D CONCEPT DIAGRAM

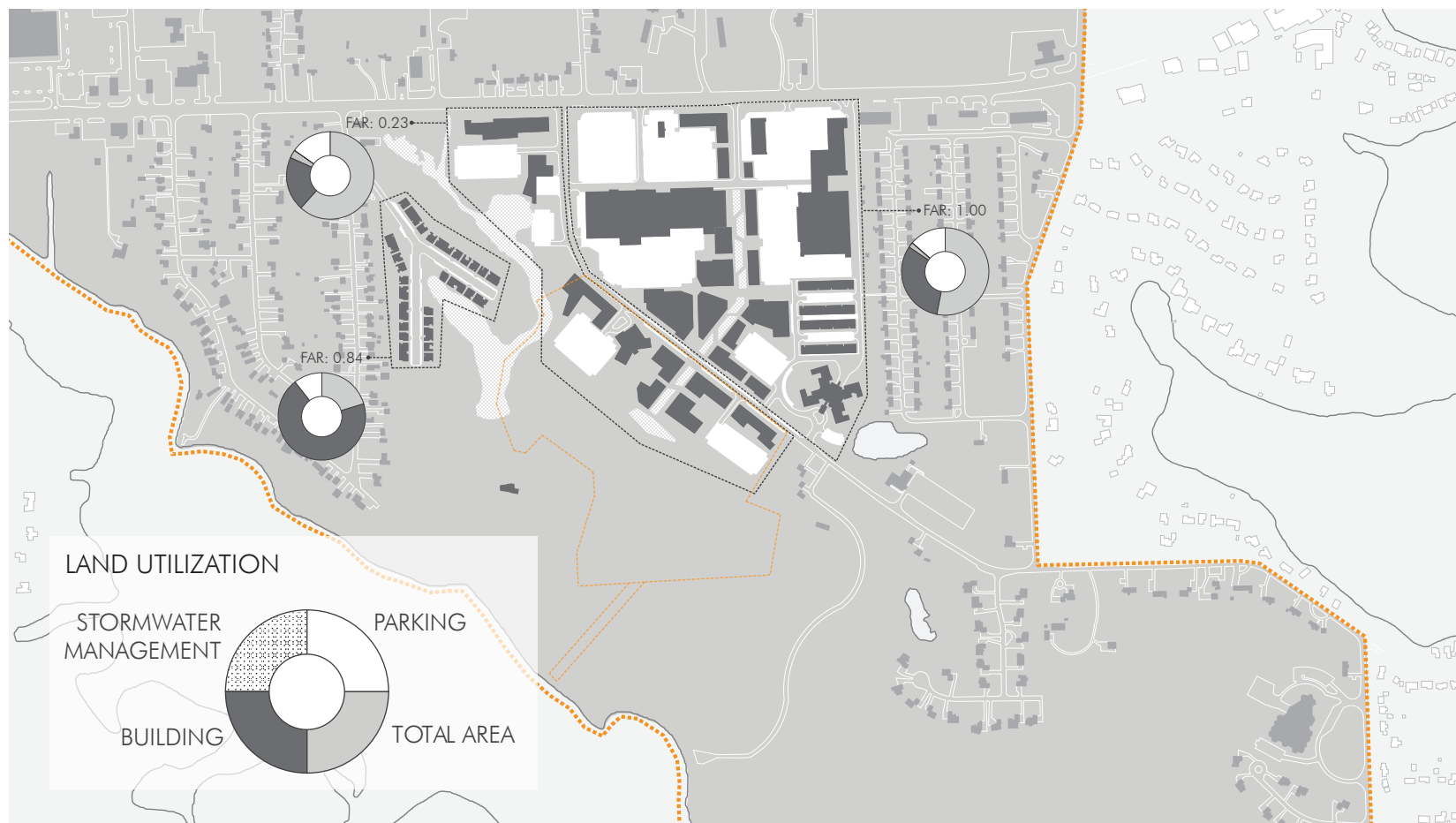
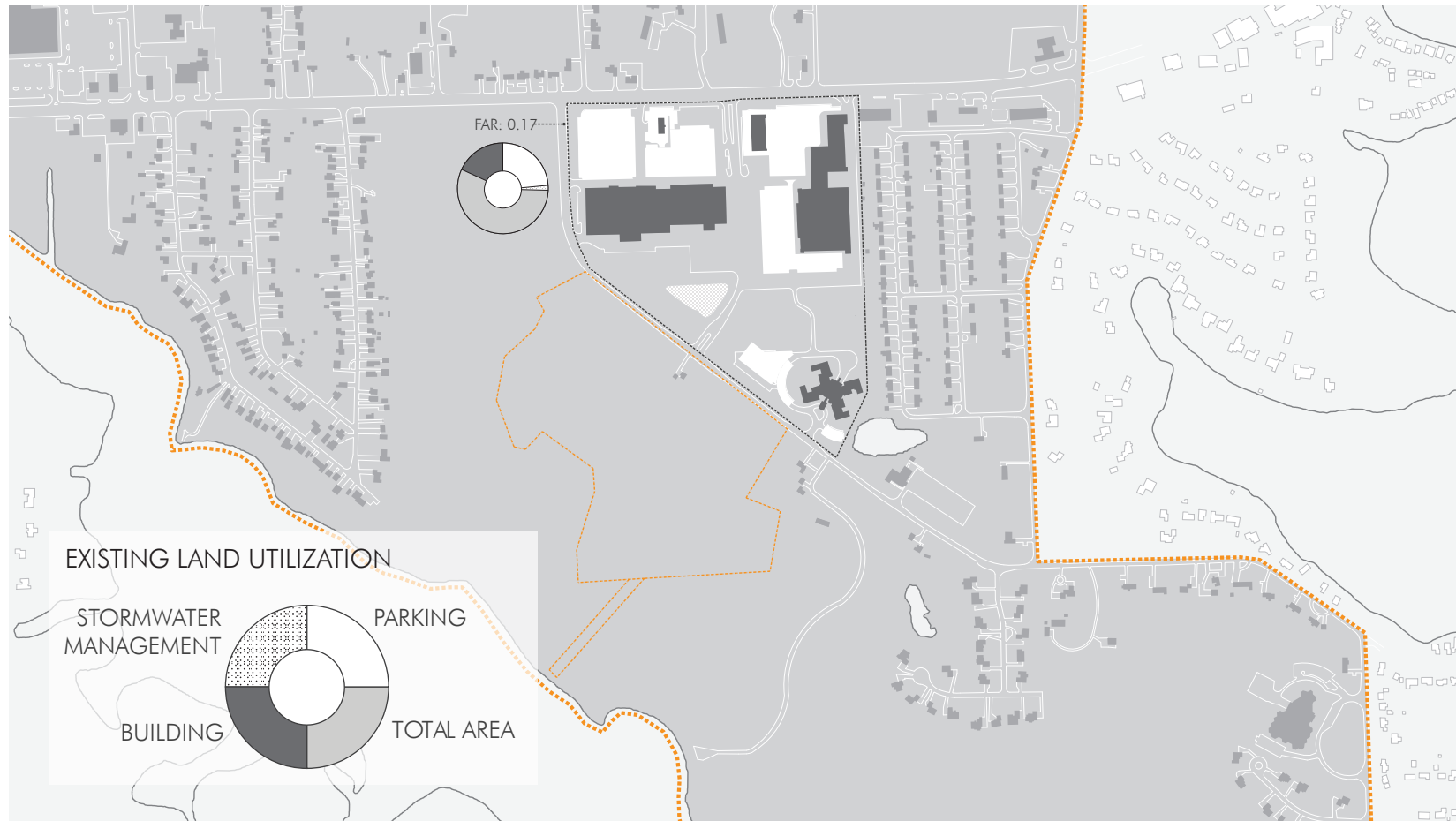


- RETAIL
- MIXED USE
- HOUSING
- SENIOR HOUSING
- TOWNSHIP OFFICE
- POLICE DEPARTMENT
- FIRE DEPARTMENT
- COMMUNITY CENTER
- LIBRARY
- NATURE OBSERVATION CENTER
- LIVE/WORK
- BOARDWALK
- DAY CARE AND PLAYGROUND
- MEDICAL OFFICE





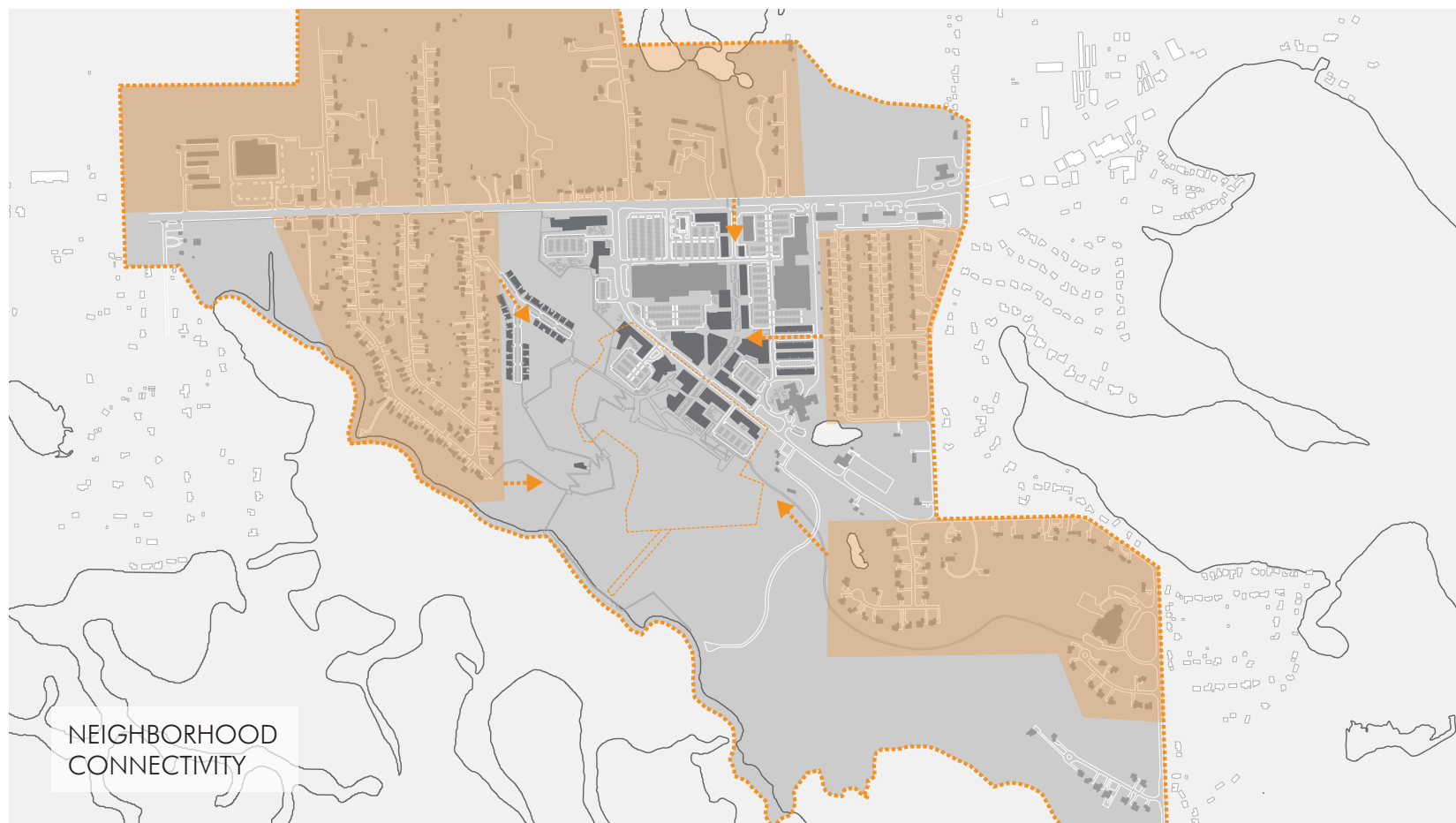
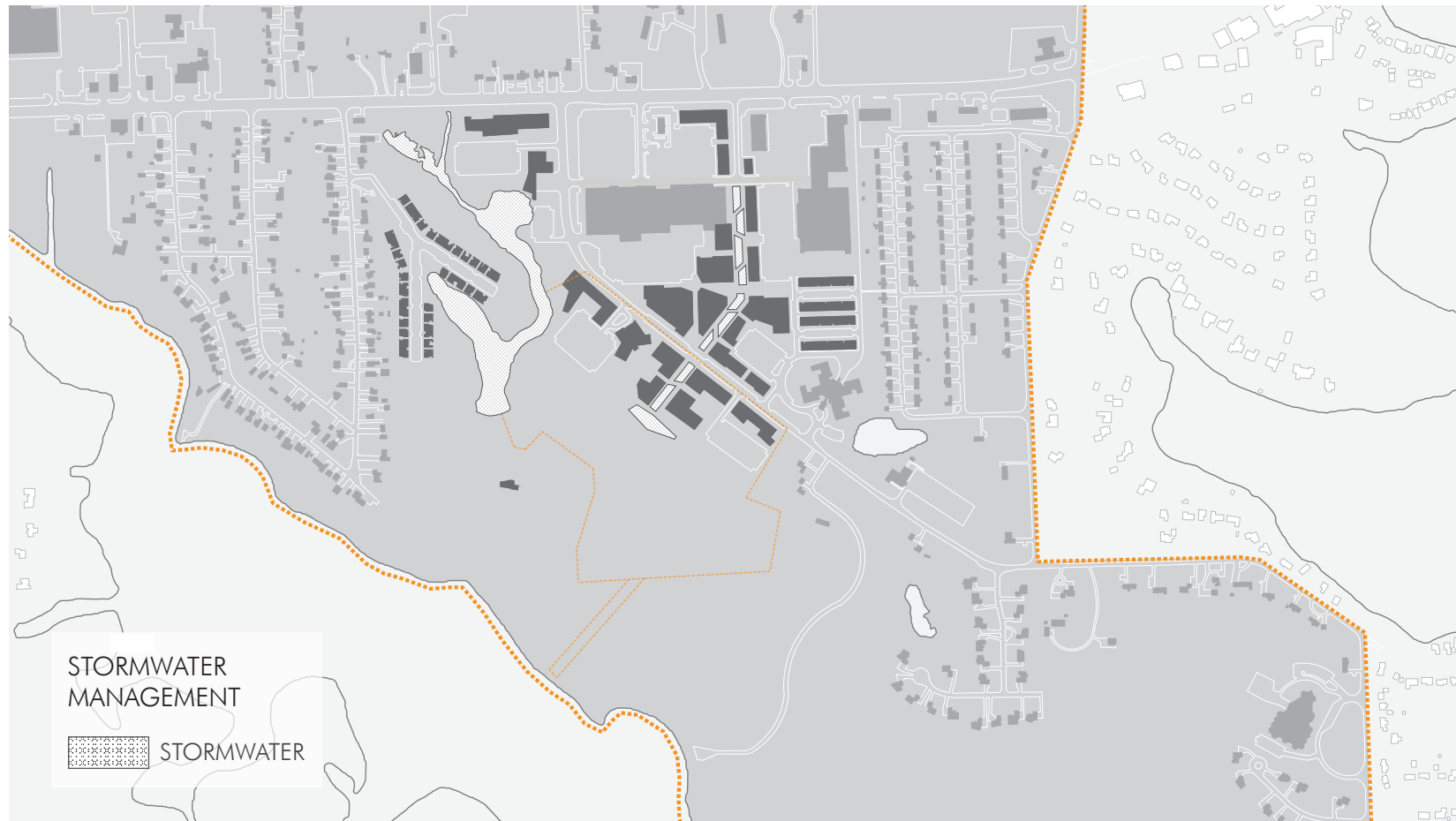
- LEGEND
- 1. RETAIL
 - 2. MIXED USE
 - 3. HOUSING
 - 4. SENIOR LIVING
 - 5. TOWNSHIP OFFICE
 - 6. POLICE DEPARTMENT
 - 7. FIRE DEPARTMENT
 - 8. COMMUNITY CENTER
 - 9. LIBRARY
 - 10. NATURE OBSERVATION CENTER
 - 11. LIVE/WORK
 - 12. MULTI-USE TRAIL
 - 13. BOARDWALK
 - 14. BIKE LANE
 - 15. DAY CARE AND PLAYGROUND
 - 16. MEDICAL OFFICE
 - 17. DOG PARK
 - 18. SPLASH PAD
 - 19. OUTDOOR GATHERING SPACE





BUILDING LEGEND

MARK	USE
1	RETAIL
2	MIXED USE
3	HOUSING
4	SENIOR LIVING
5	TOWNSHIP OFFICE
6	POLICE DEPARTMENT
7	FIRE DEPARTMENT
8	COMMUNITY CENTER
9	LIBRARY
10	NATURE CENTER
11	LIVE / WORK
12	MULTI-USE TRAIL
13	BOARDWALK
14	BIKE LANE
15	DAY CARE + PLAYGROUND
16	MEDICAL OFFICE
17	DOG PARK
18	SPLASH PAD
19	OUTDOOR GATHERING SPACE



CiDi

pocket scheme

SCHEME INFORMATION

DEVELOPED SITE AREA:	3,829,457 SF
BUILT AREA:	2,587,300 SF
FLOOR AREA RATIO (FAR):	0.68
PARKING PROVIDED:	3119 SPACES
PARKING RATIO:	1:830 SF

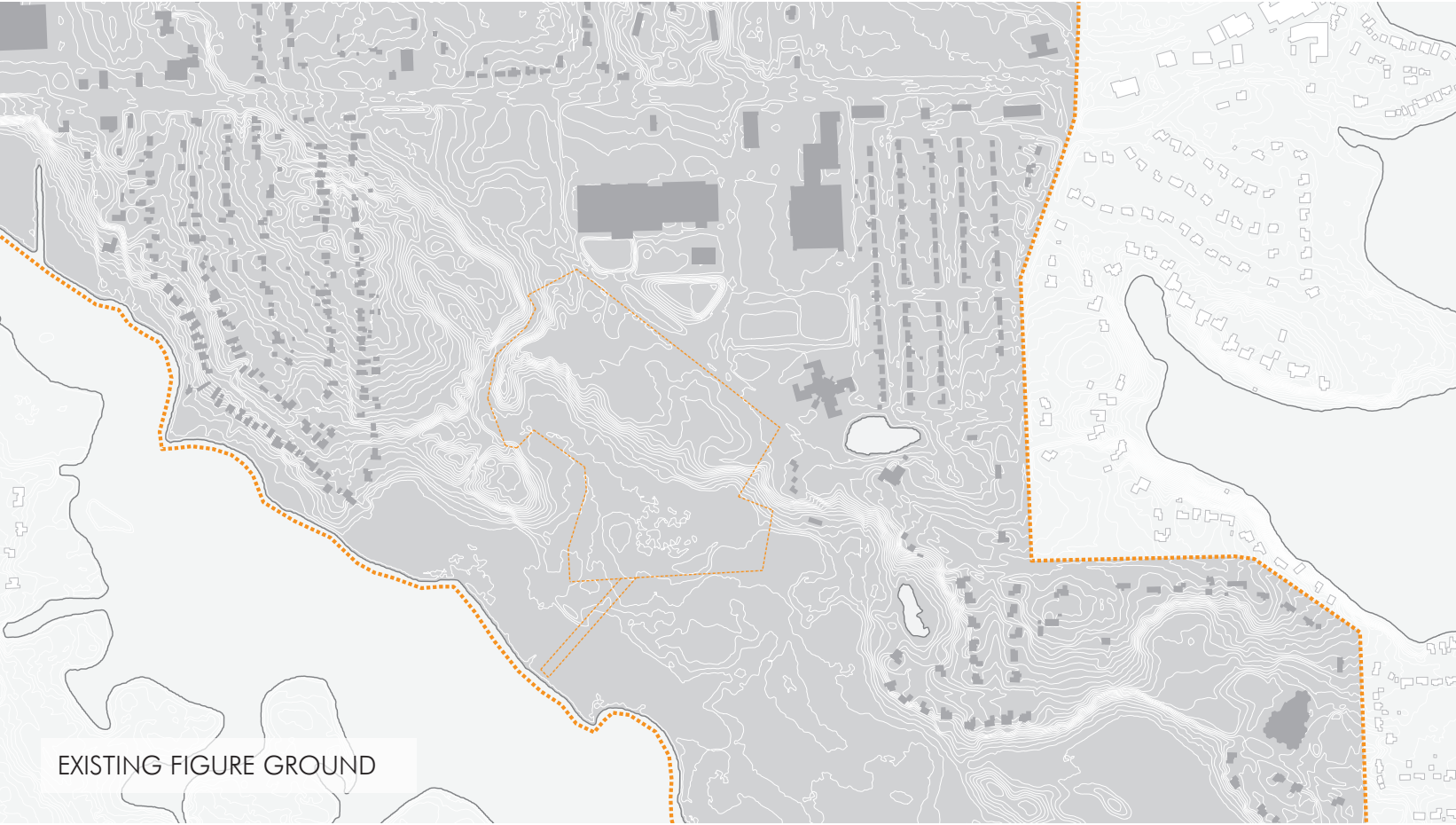
The concept for the Pocket scheme is to create a series of active, open public spaces programmed with various public uses and connect those spaces into a network through streets, walks, and alleys. Streets are organized on a predictable grid sized for pedestrian comfort and focused on creating sight lines to the natural edge between the study area and Brendel Lake. Building volumes are designed to create parks, plazas, courtyards, and public squares that can be activated with public programming and life. Some unique elements of this scheme are the large quantity of public spaces and the large boardwalk / swim platform created along the waterfront of Brendel Lake.

The scheme is programmed with mixed-used buildings defining the major intersection of Elizabeth Lake Road and Town Center Blvd. Senior housing, townhome residential units, and detached single-family housing units form transitional buffers to adjacent

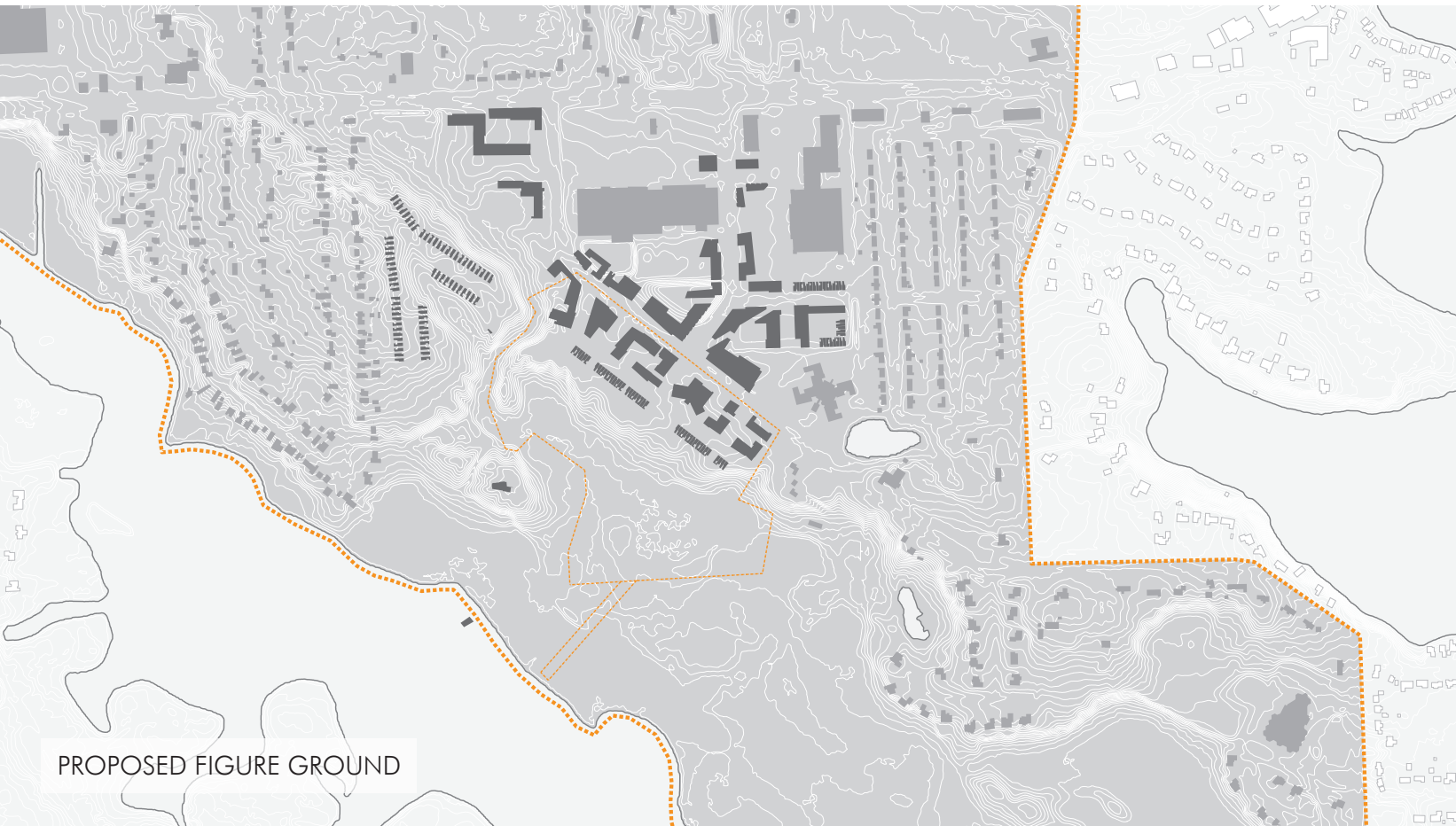
single-family residential neighborhoods. Municipal uses are located along Elizabeth Lake Road with high visibility from the road and public safety functions located with proximity, but not direct entry, to M-59 Highland Road for quick and safe access to the major vehicular thoroughfare.

The Pocket scheme acknowledges the lack of and feasibility for a public transportation system and frames the study area as a “park-once” district, providing on-site parking for patrons and then encouraging the use of walkable infrastructure to explore the many opportunities available for shopping, recreation, and socializing. The scheme utilizes a mixture of on-street parking as part of a pedestrian friendly streetscape, minimal surface parking, and walk-out day-lit parking decks that capitalize on the topography and maximize the use of open space. This is part of a system that expands the transportation infrastructure by organizing street grids, expanding sidewalks, adding bike lanes, creating recreation trails, and making connections to ease and encourage pedestrian travel. Density is increased to promote walkability, with the goal being to drastically increase the Floor Area Ratio in the study area. This is achieved by right sizing parking quantities, reducing setbacks, minimizing surface parking, increasing building footprint and height, and regionalizing the storm water management strategy.

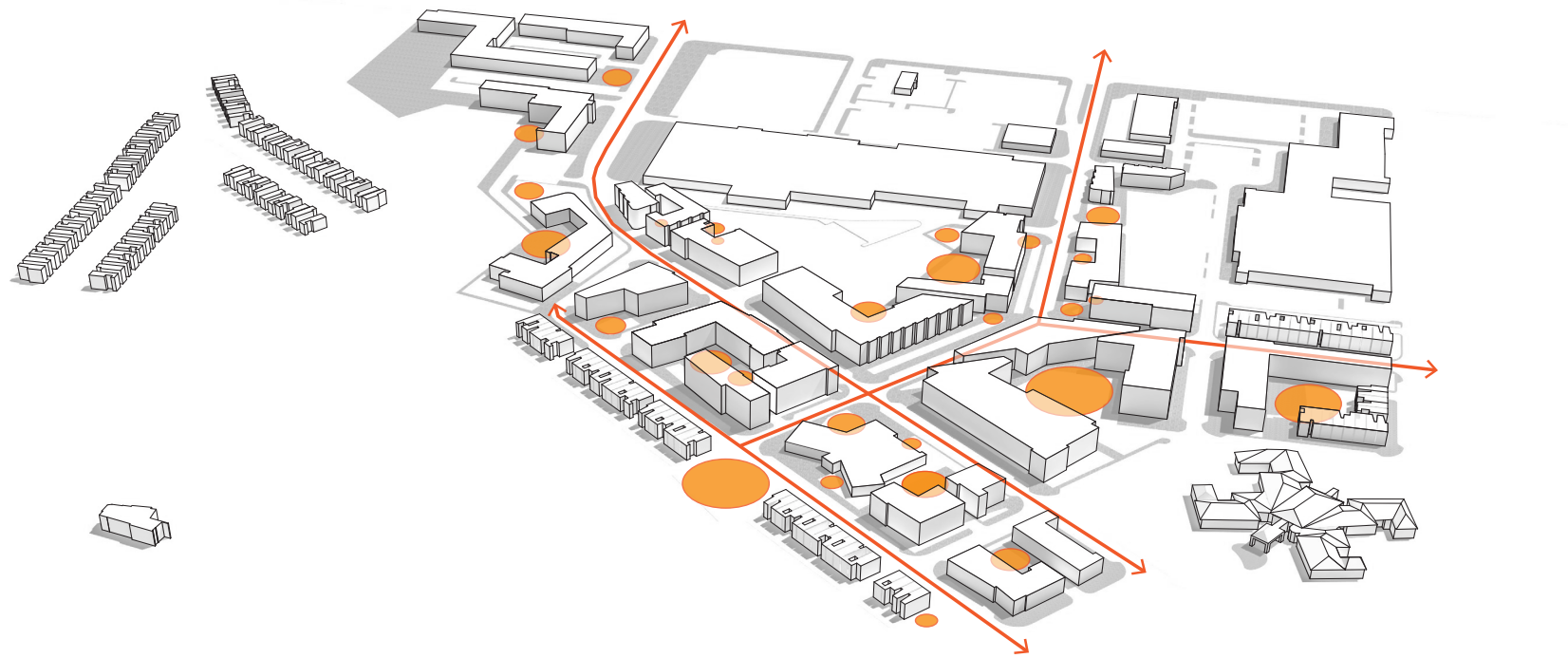




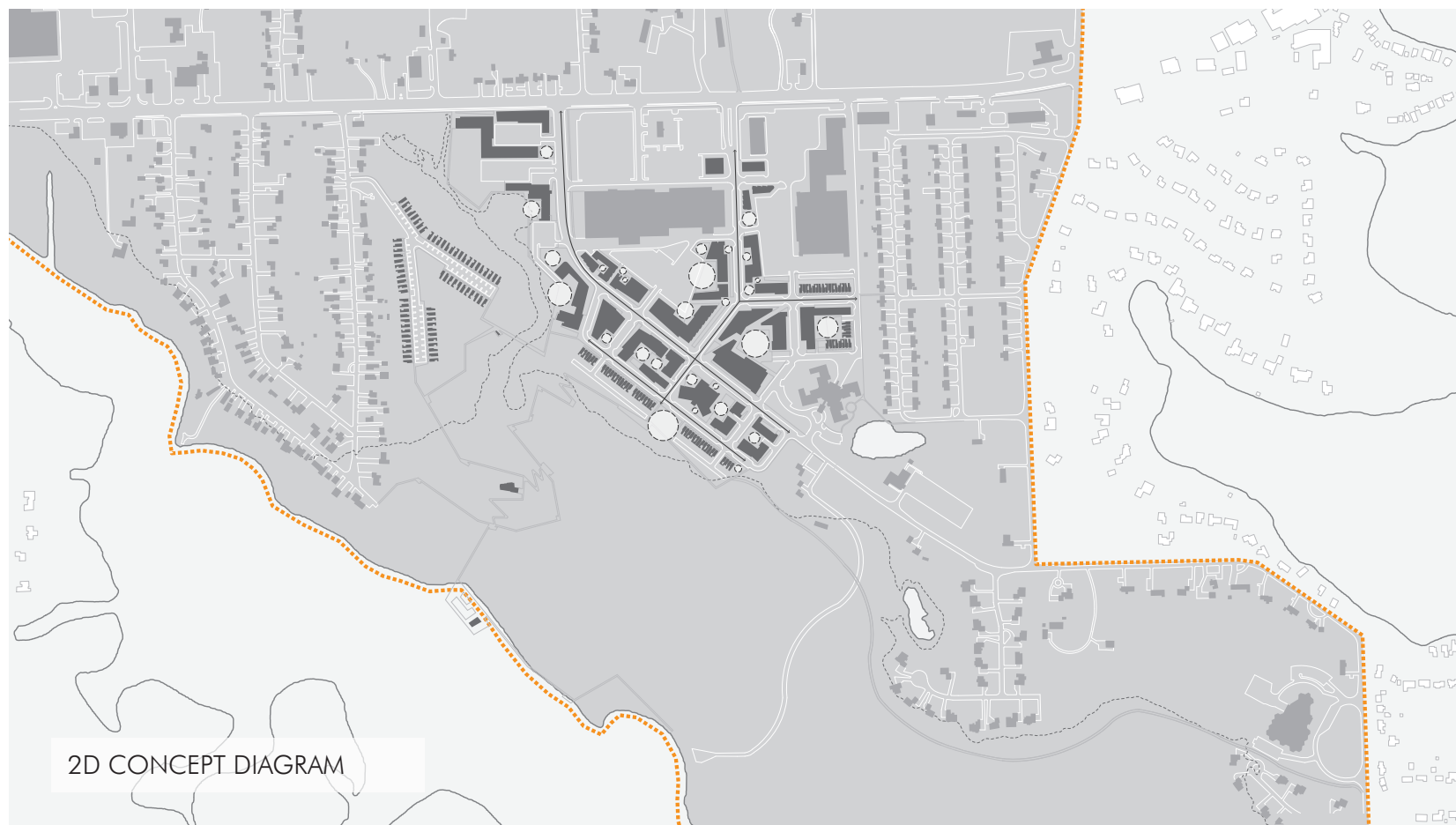
EXISTING FIGURE GROUND



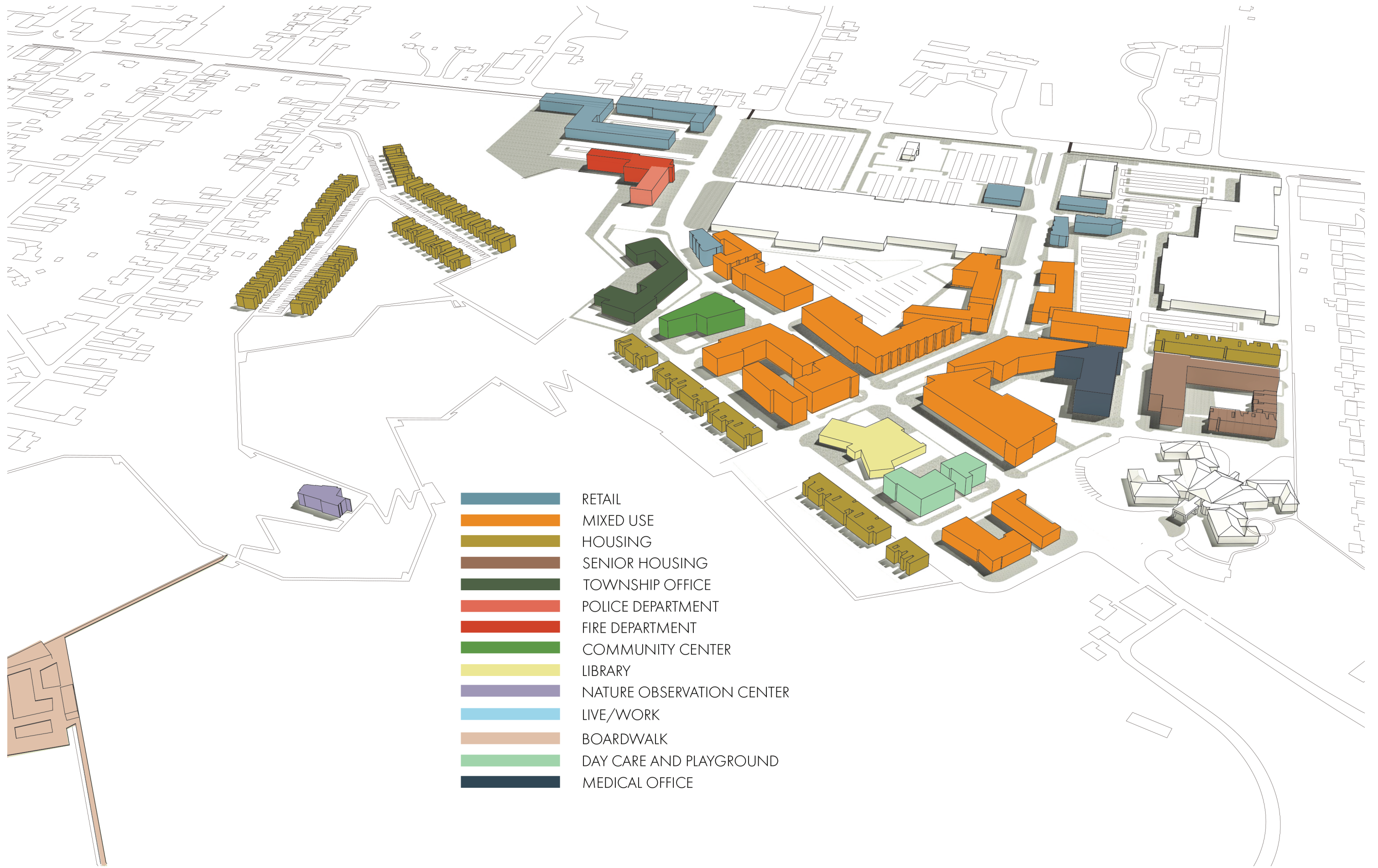
PROPOSED FIGURE GROUND



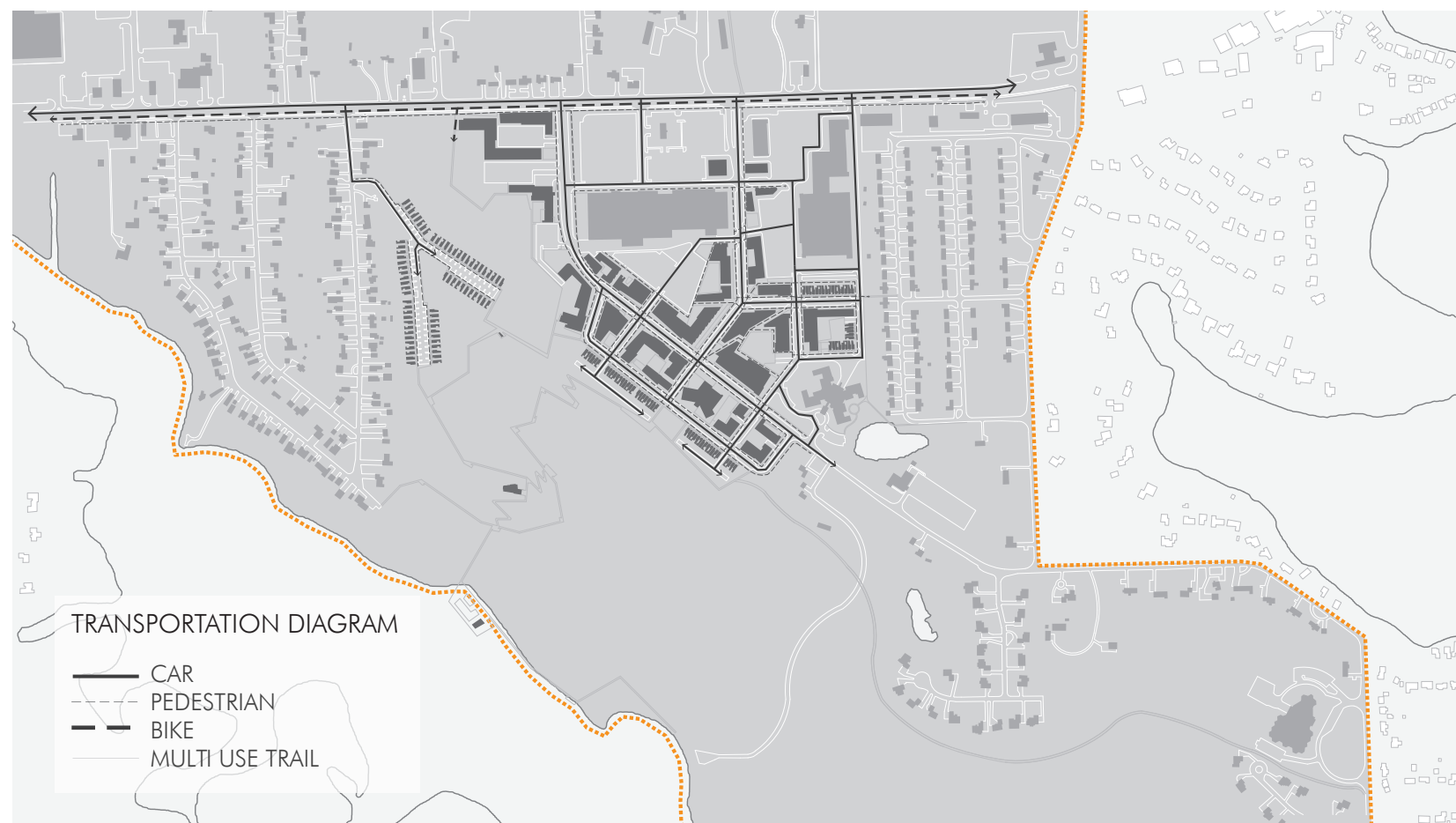
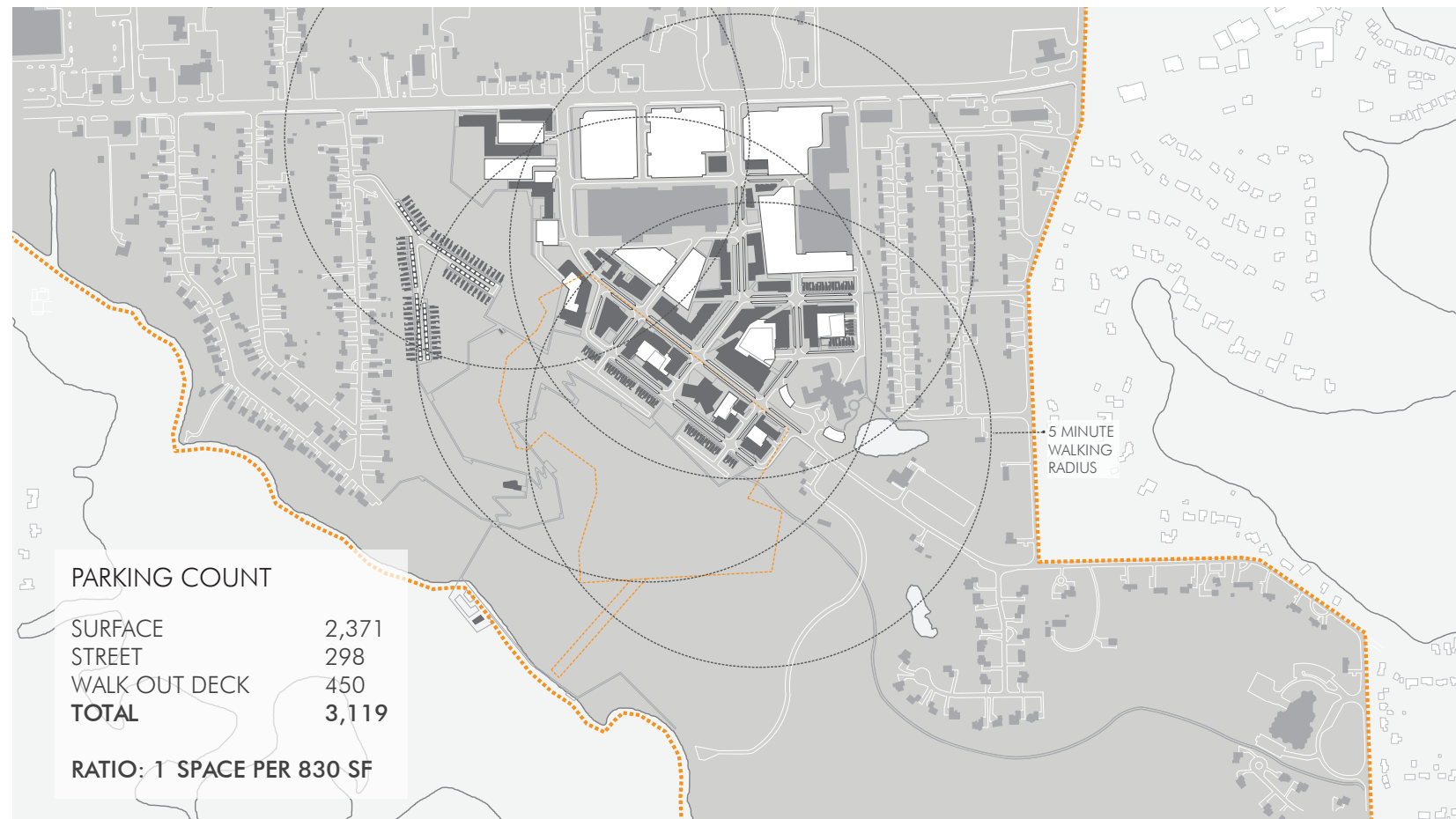
3D CONCEPT DIAGRAM

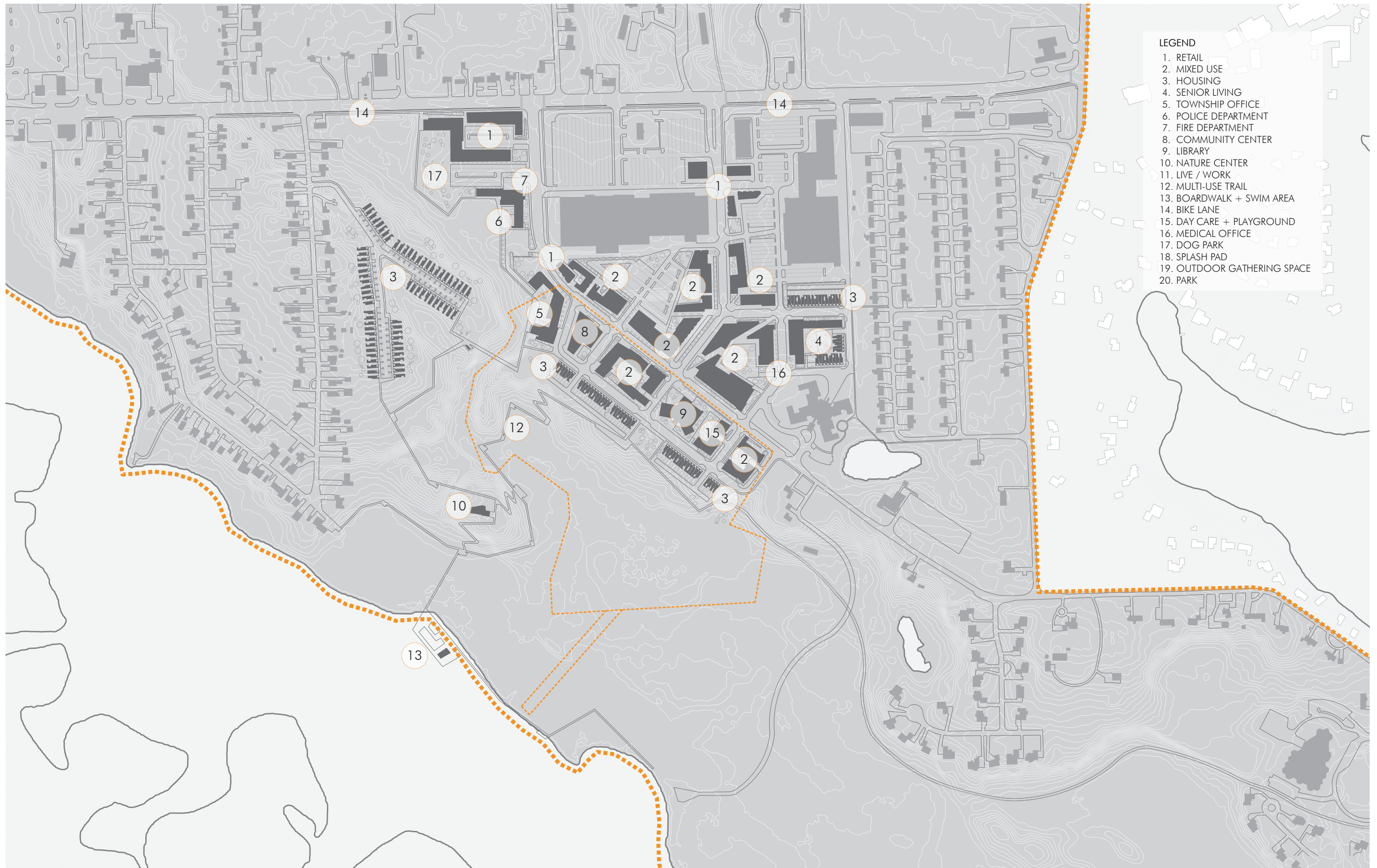


2D CONCEPT DIAGRAM

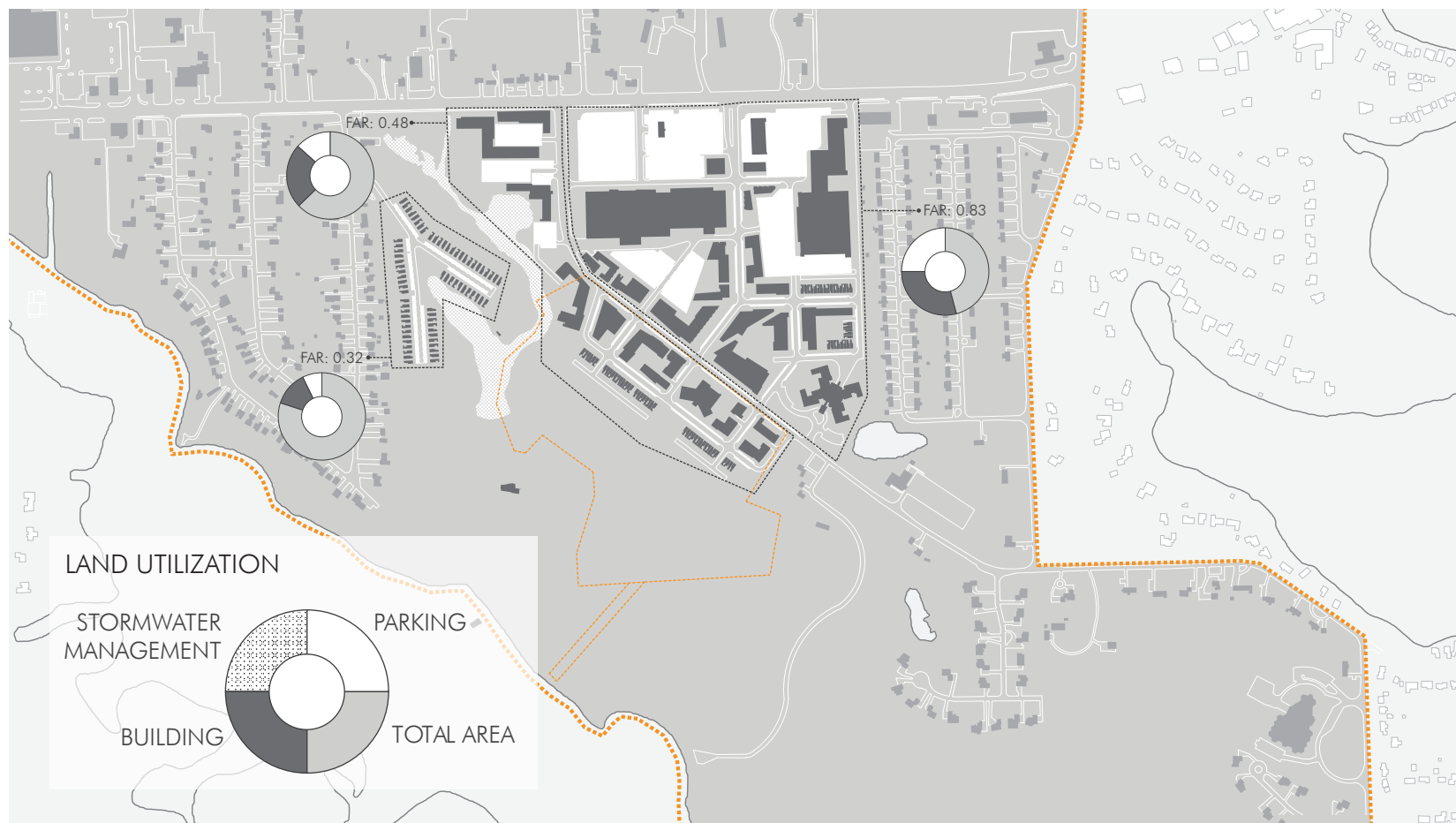
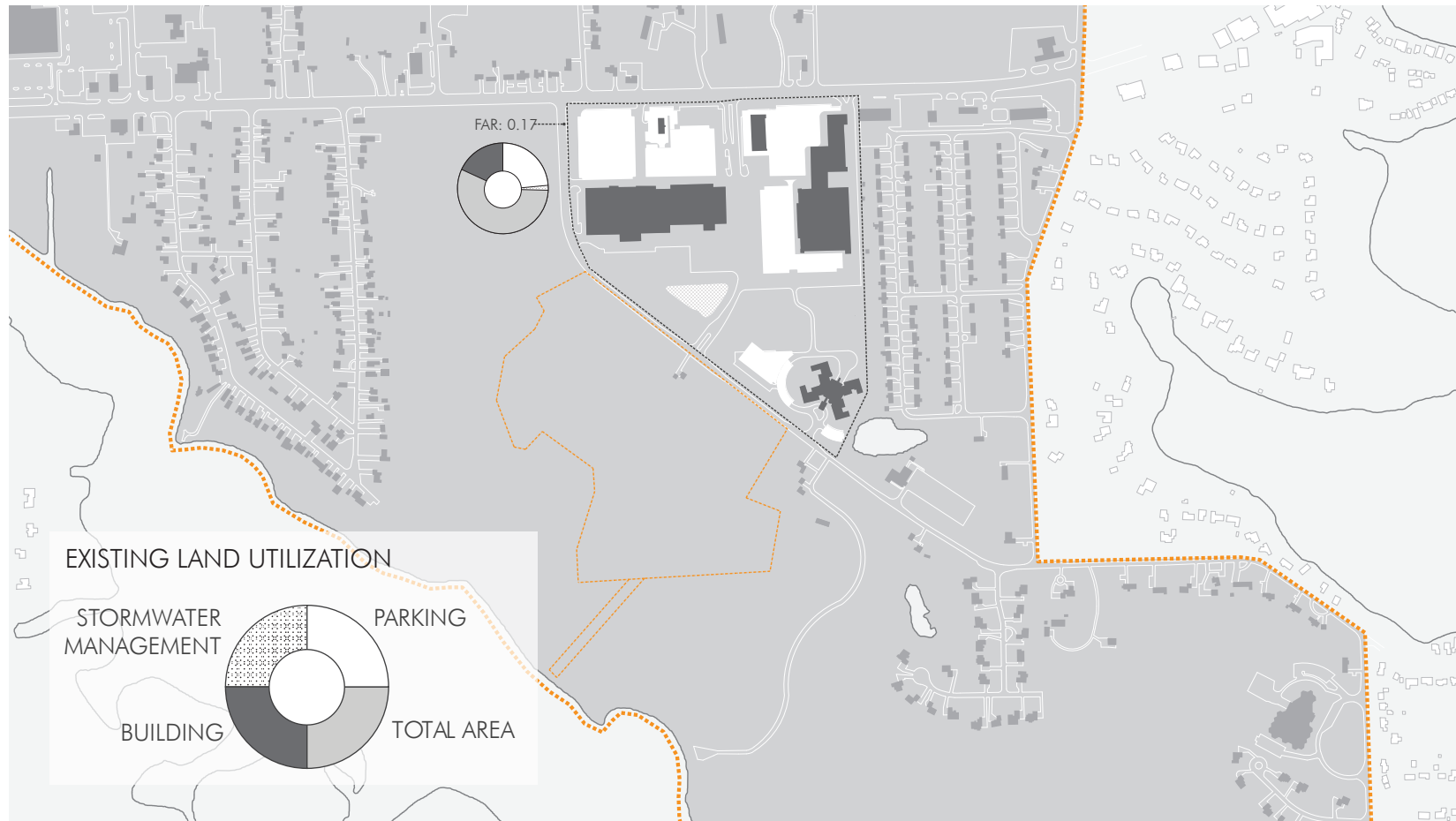


- RETAIL
- MIXED USE
- HOUSING
- SENIOR HOUSING
- TOWNSHIP OFFICE
- POLICE DEPARTMENT
- FIRE DEPARTMENT
- COMMUNITY CENTER
- LIBRARY
- NATURE OBSERVATION CENTER
- LIVE/WORK
- BOARDWALK
- DAY CARE AND PLAYGROUND
- MEDICAL OFFICE



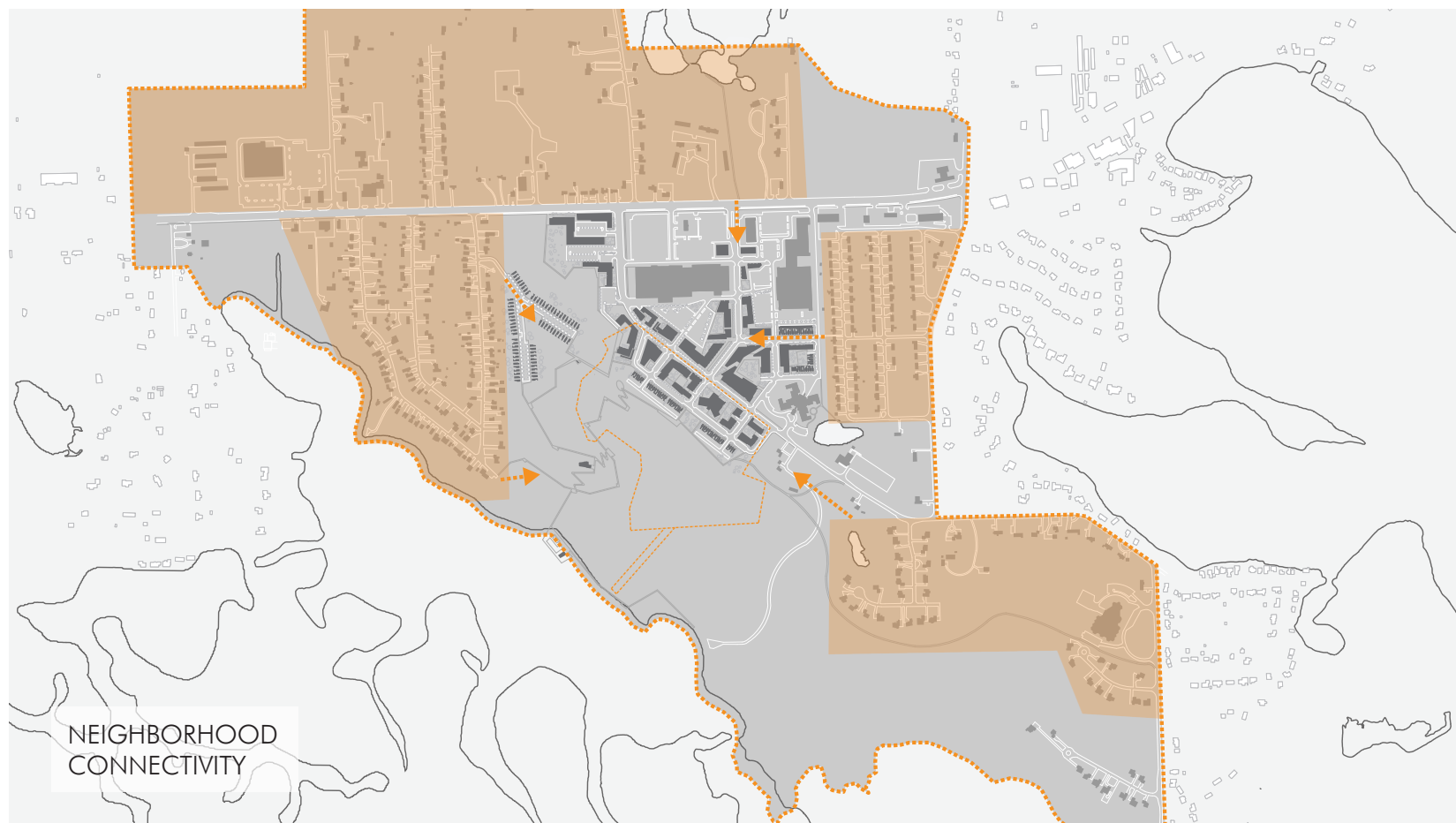
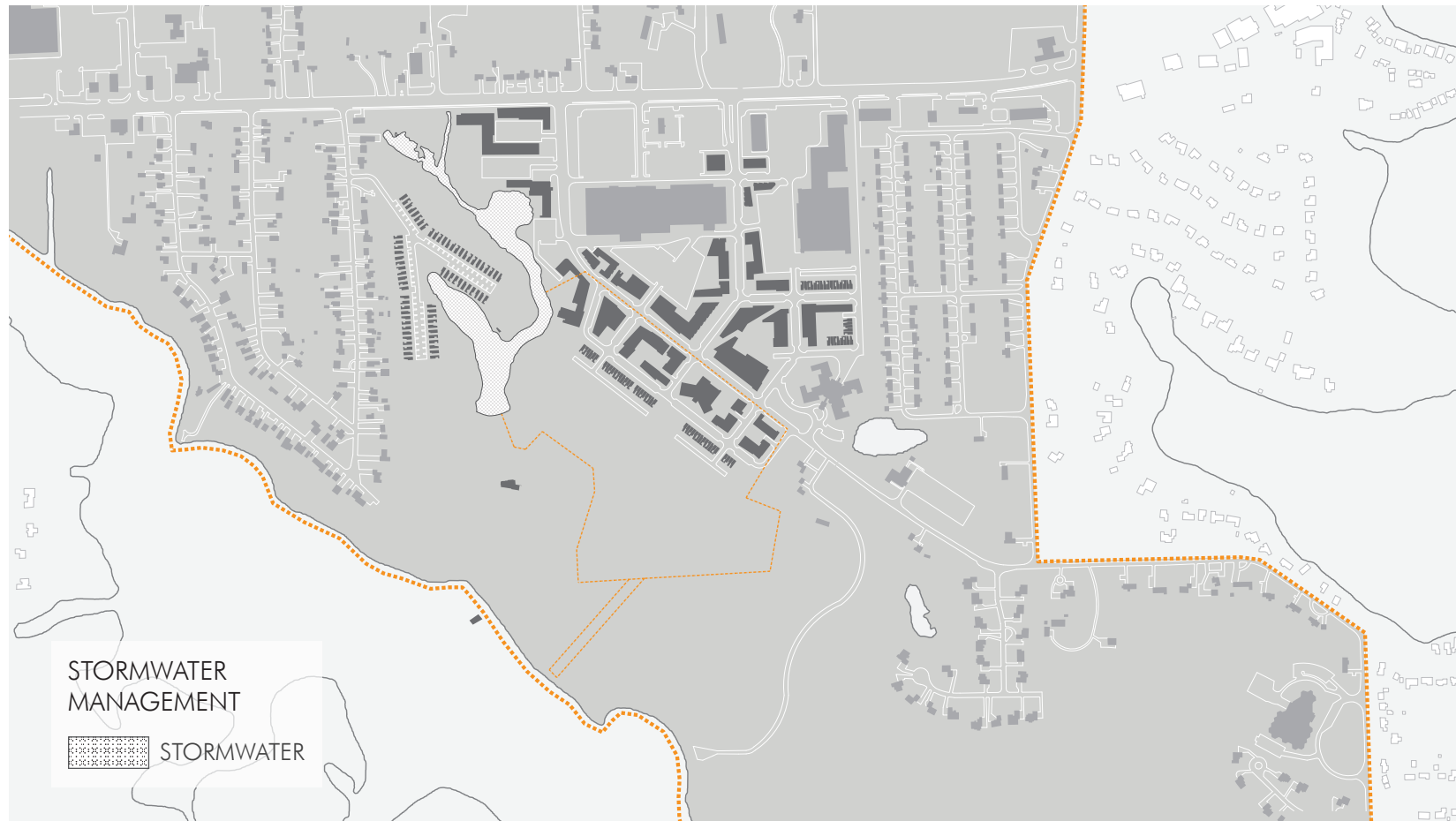


- LEGEND**
- 1. RETAIL
 - 2. MIXED USE
 - 3. HOUSING
 - 4. SENIOR LIVING
 - 5. TOWNSHIP OFFICE
 - 6. POLICE DEPARTMENT
 - 7. FIRE DEPARTMENT
 - 8. COMMUNITY CENTER
 - 9. LIBRARY
 - 10. NATURE CENTER
 - 11. LIVE / WORK
 - 12. MULTI-USE TRAIL
 - 13. BOARDWALK + SWIM AREA
 - 14. BIKE LANE
 - 15. DAY CARE + PLAYGROUND
 - 16. MEDICAL OFFICE
 - 17. DOG PARK
 - 18. SPLASH PAD
 - 19. OUTDOOR GATHERING SPACE
 - 20. PARK





BUILDING LEGEND	
MARK	USE
1	RETAIL
2	MIXED USE
3	HOUSING
4	SENIOR LIVING
5	TOWNSHIP OFFICE
6	POLICE DEPARTMENT
7	FIRE DEPARTMENT
8	COMMUNITY CENTER
9	LIBRARY
10	NATURE CENTER
11	LIVE / WORK
12	MULTI-USE TRAIL
13	BOARDWALK
14	BIKE LANE
15	DAY CARE + PLAYGROUND
16	MEDICAL OFFICE
17	DOG PARK
18	SPLASH PAD
19	OUTDOOR GATHERING SPACE
20	PLAYGROUND



CiDi

draft concept phase

The Draft Concept for the CiDi study is the final result of the research, analysis, and ideas that is meant to shape the direction and strategy for development in the CiDi study area. The intent of the draft concept is to distill the most successful and impactful aspects of each design idea into a strategy that can serve as a guide to shape development in the specific study region. The concept is not intended to be an inflexible or prescriptive document, but rather a living document that can shape goals and stimulate strategies for reaching those goals.

The draft concept for the CiDi study area maintains the main study goal of activating the district with a walkable small town center strategy that would be attractive to business and residents while creating a space that could be used to identify White Lake Township. The final Draft concept of the study is a compilation of the strategies from the earlier Ideas + Concepts stage that were most effective at achieving this goal in the unique circumstances of the study area based on community feedback and response from the steering committee.

From the Ideas + Concepts phase, there was concern placing any municipal developments, even future ones, on land that was not currently owned by the Township, so

that was addressed in the final Draft Concept. The density and parking ratios in the Draft Concept are less ambitious than in any of the original proposals and less ambitious than would generally be recommended for a walkable area in response to concerns over feasibility in White Lake Township and setting realistic achievable expectations. Many proposals from the Ideas + Concepts phase challenged convention and expectations and have changed the perception for the area in ways that are evidenced in the final execution of the Draft Concept.

CiDi

draft concept scheme

SCHEME INFORMATION

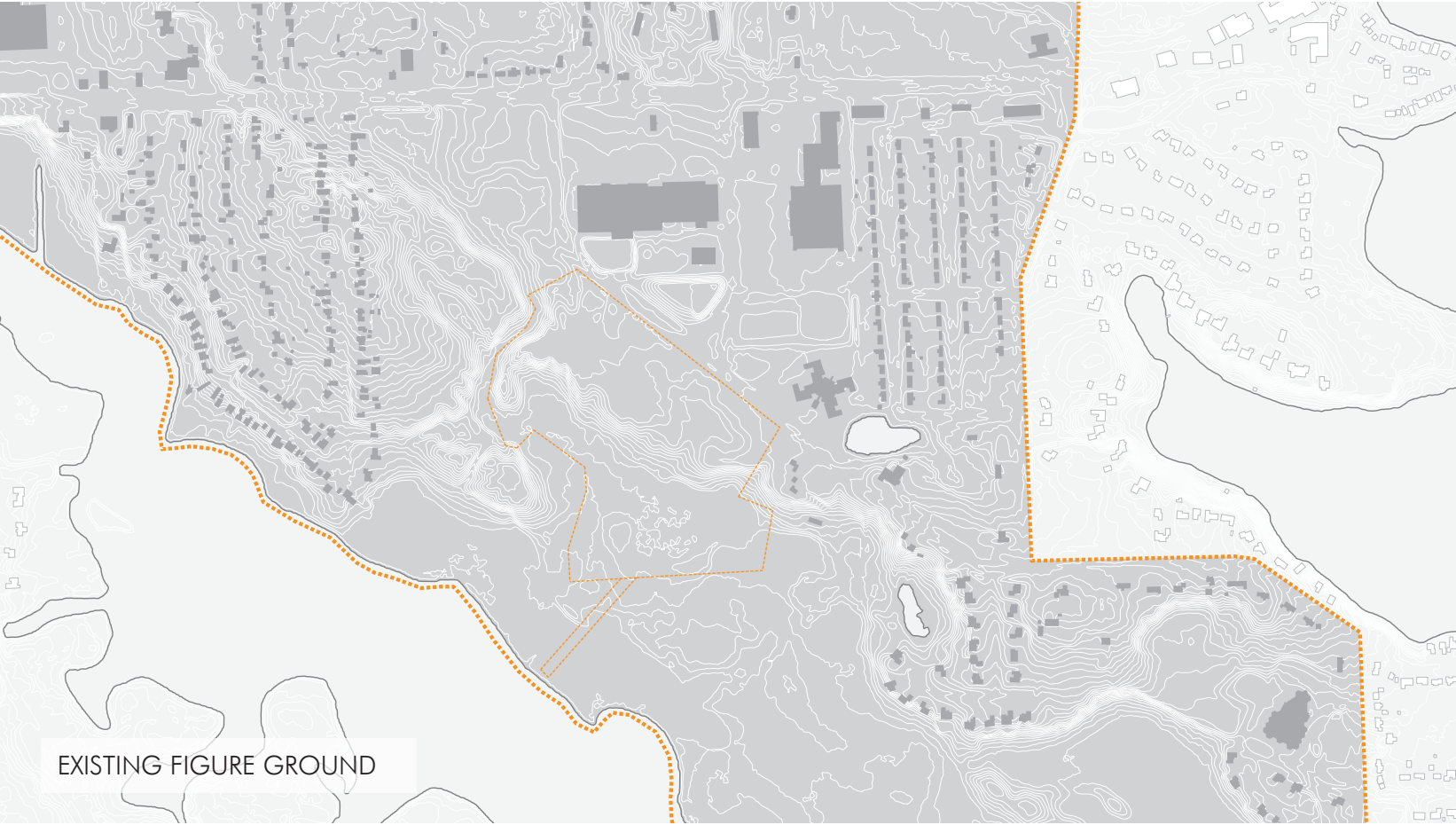
DEVELOPED SITE AREA:	3,932,406 SF
BUILT AREA:	1,359,518SF
FLOOR AREA RATIO (FAR):	0.35
PARKING PROVIDED:	2202 SPACES
PARKING RATIO:	1:510 SF

unique features of earlier proposals including the boardwalk and swim platform along Brendel Lake and the large public spaces along the natural edge of the property.

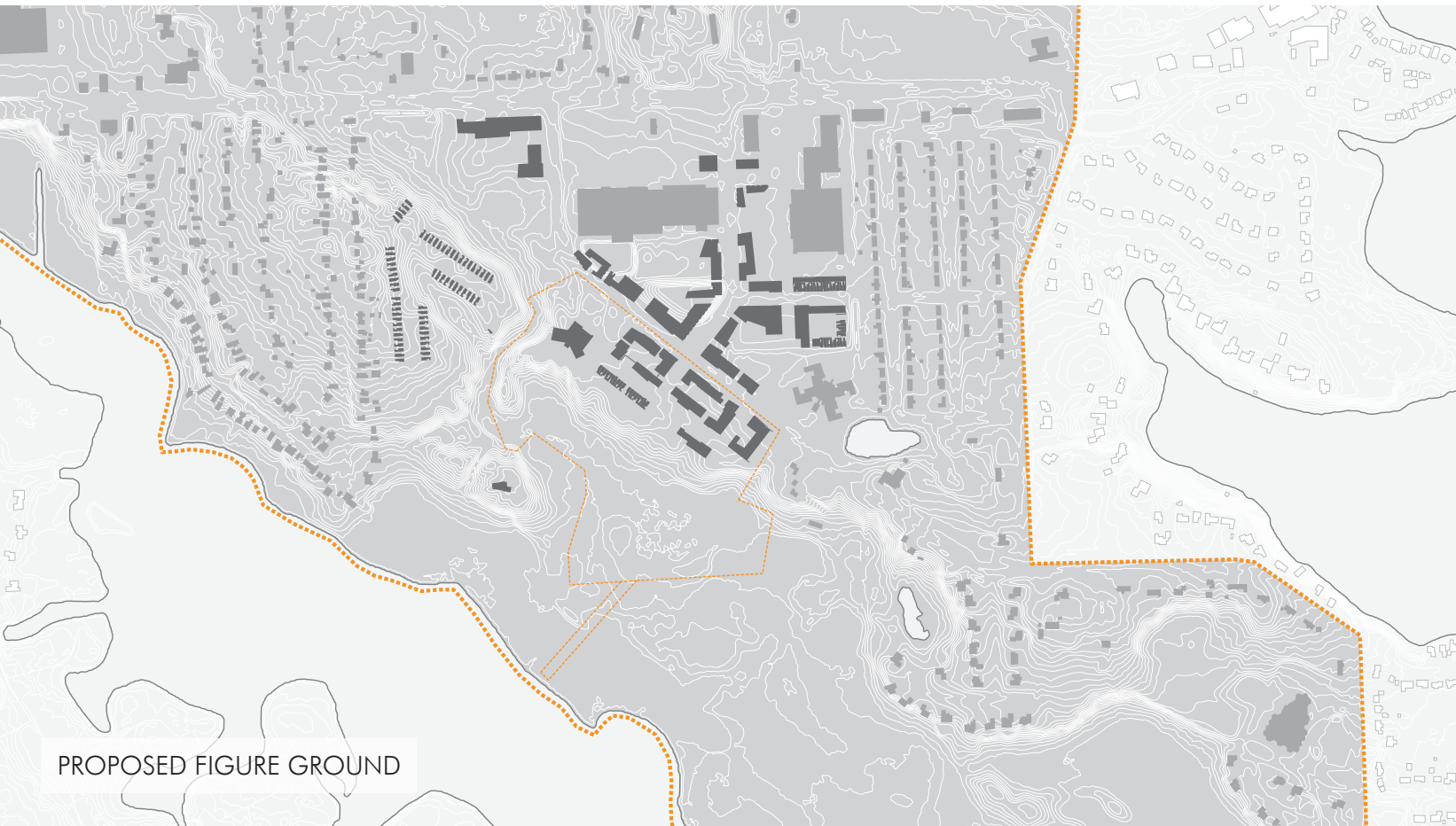
The scheme is programmed with mixed-used buildings defining the major intersection of Elizabeth Lake Road and Town Center Blvd. Municipal functions are pushed to the back, off the main street to give prominence and visibility to the commercial and office functions in the mixed-use buildings, with the exception of the Library and the Public Safety Building for visibility from the street and proximity to the street for expediency in response to emergency situations. Senior housing, townhome residential units, and detached single-family housing units form transitional buffers to adjacent single-family residential neighborhoods. Retail, mixed-use, and medical office buildings create infill and transition to the adjacent existing uses.

The final draft concept scheme merges elements from several of the original Ideas + Concepts proposals. In this effort, the concept carries elements of the previous ideas such as creating a Main Street along Elizabeth Lake Road and Town Center Blvd as well as a network of active public pockets and an expanded pedestrian spine along Town Center Blvd. This scheme adopted the street grid from the Pockets scheme for the pedestrian comfort of its block size as well as the reinforcement of vision corridors creating site lines to the natural features along the edge of the property. Building volumes have been scaled down from proposals in response to concern over feasibility to support density levels, but maintain function of defining main streets and public spaces such as plazas, squares, courtyards, etc. The draft concept scheme adopted some of the

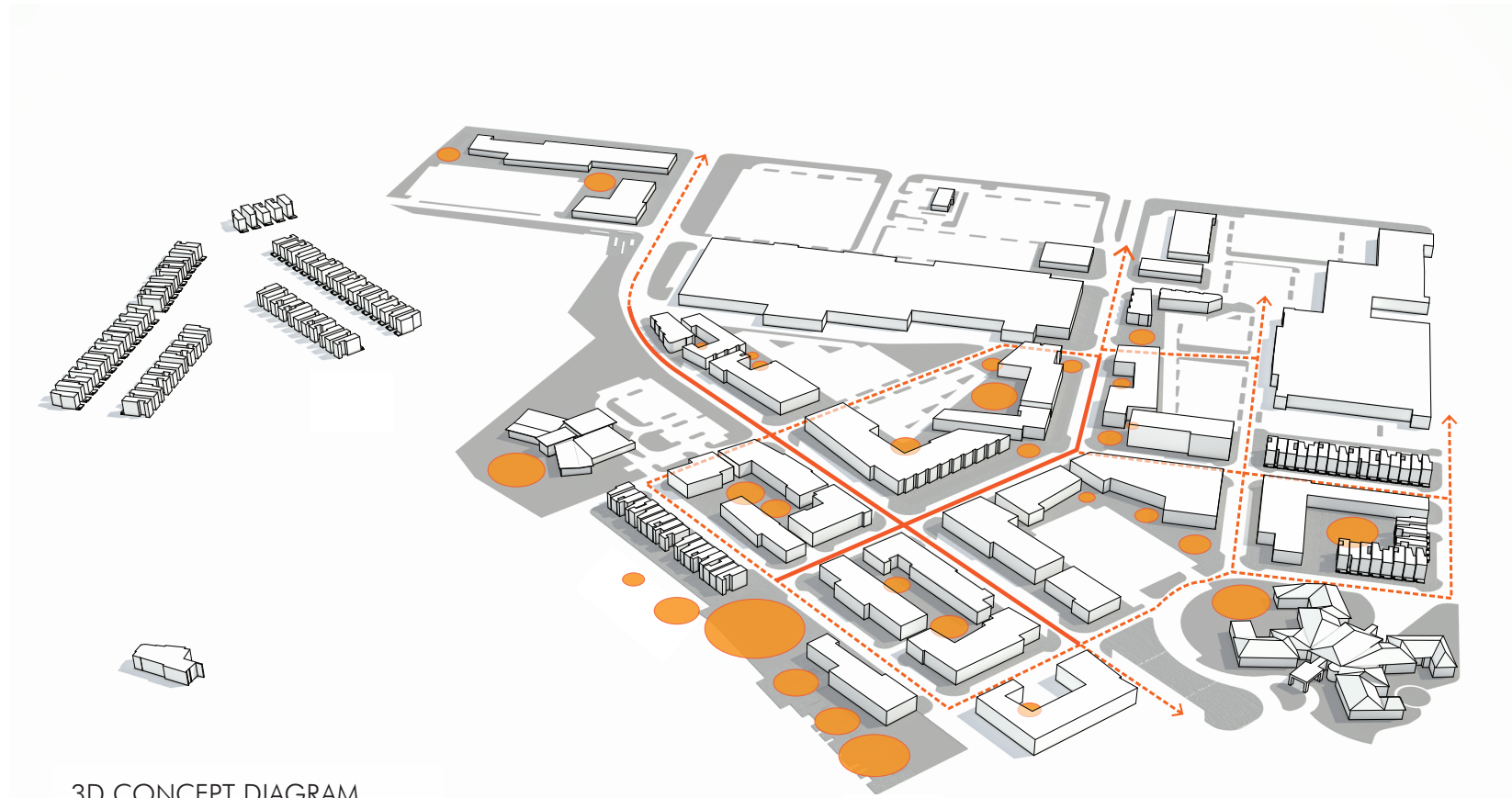




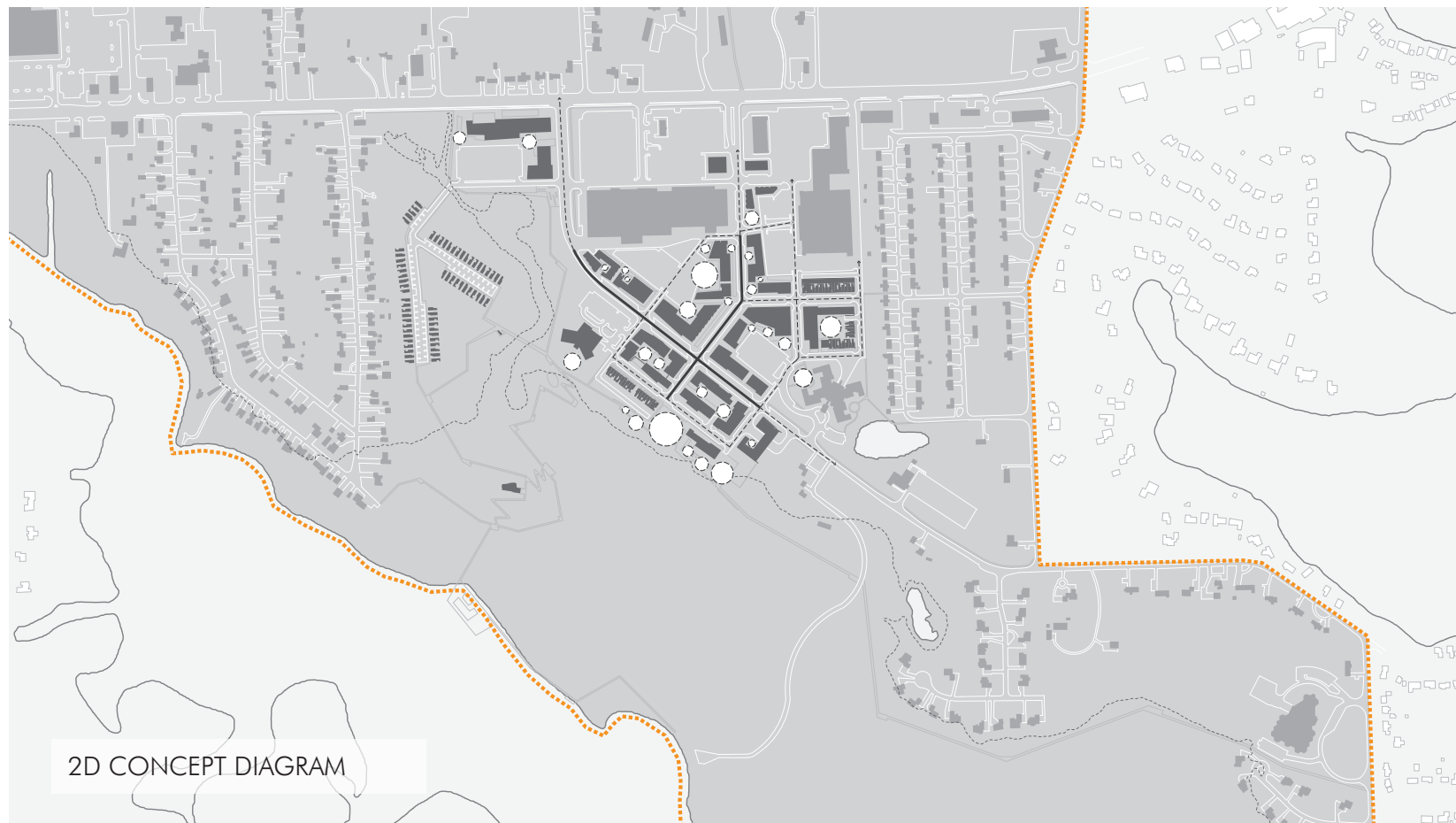
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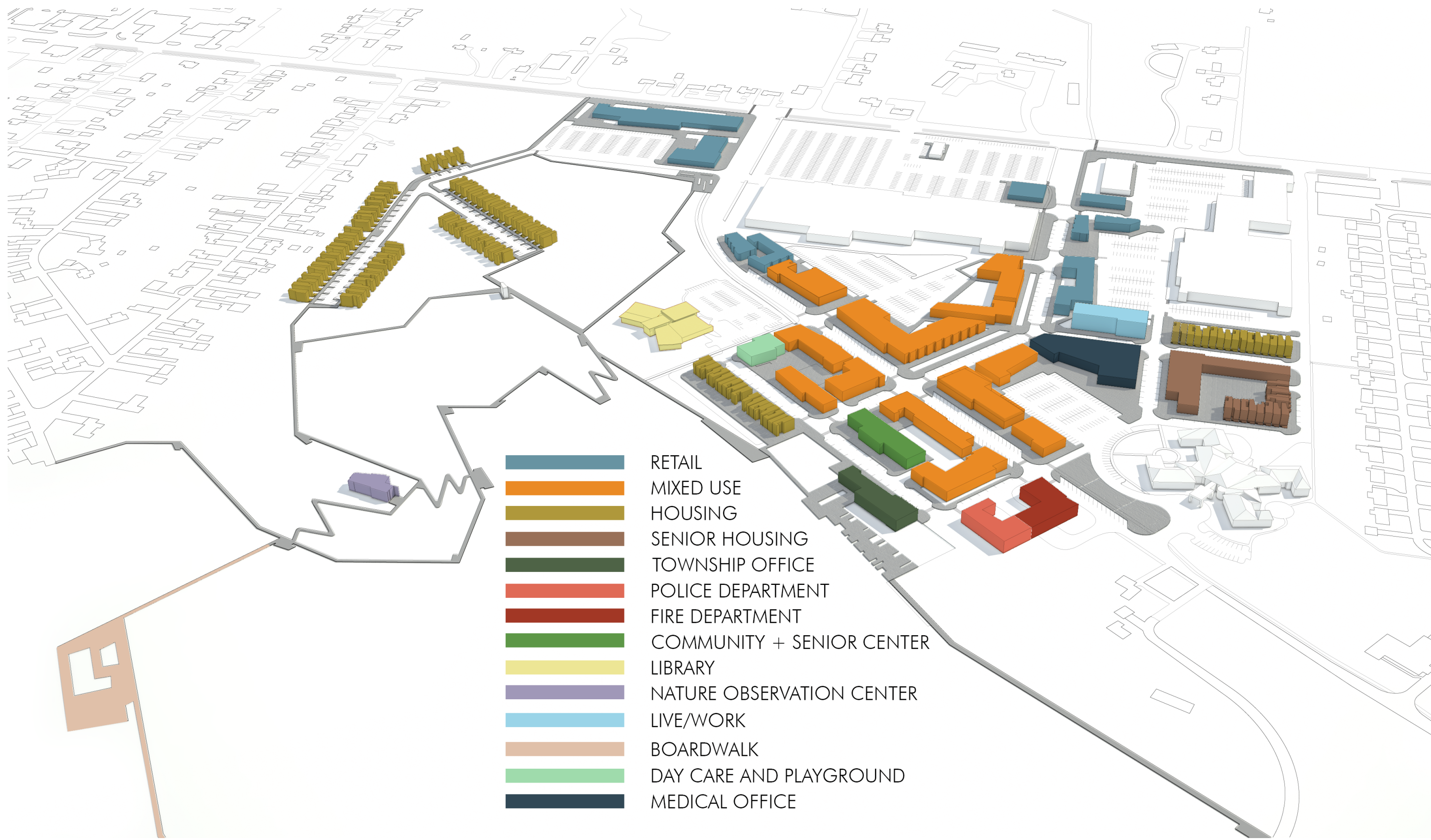
PROPOSED FIGURE GROUND



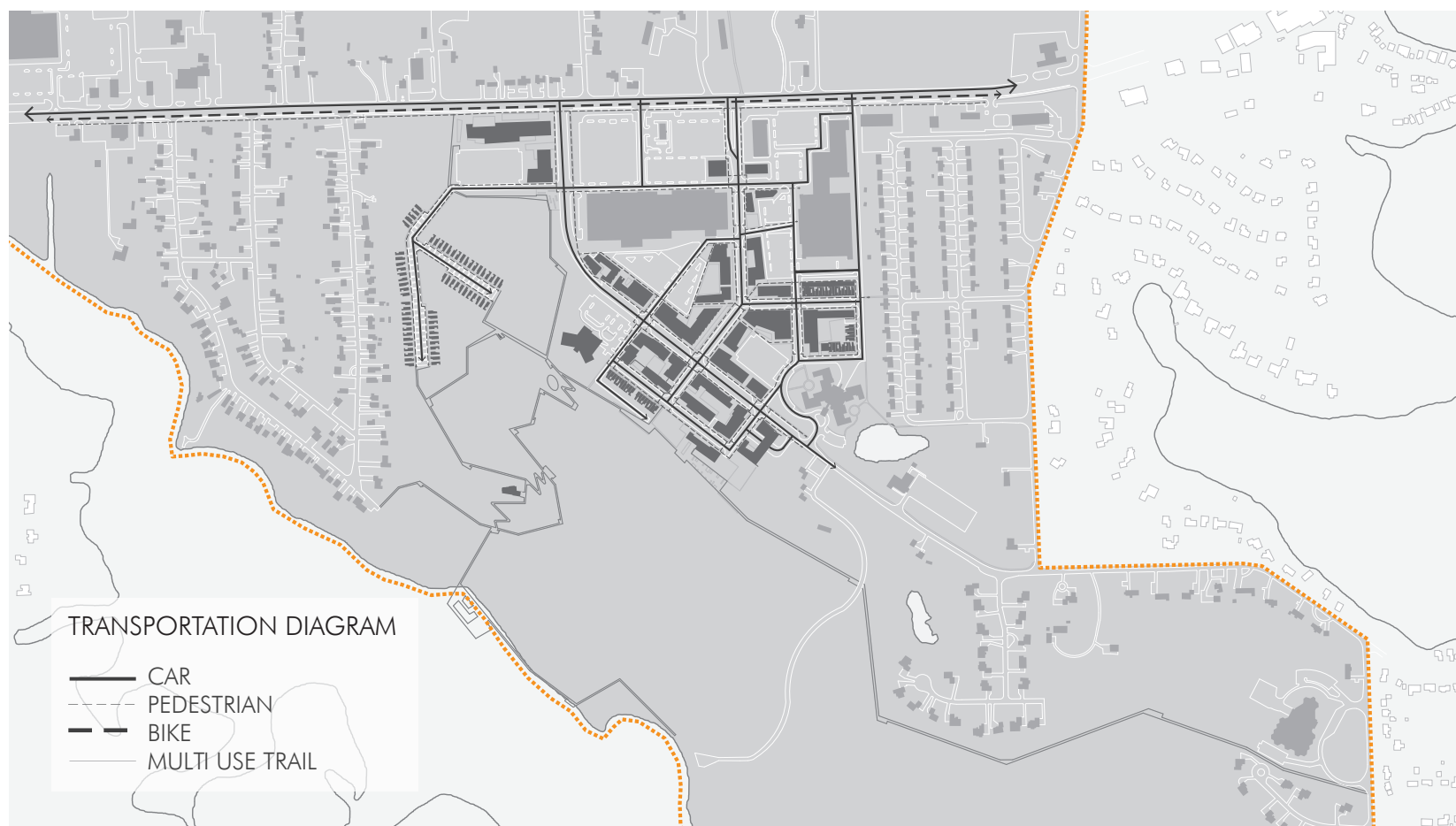
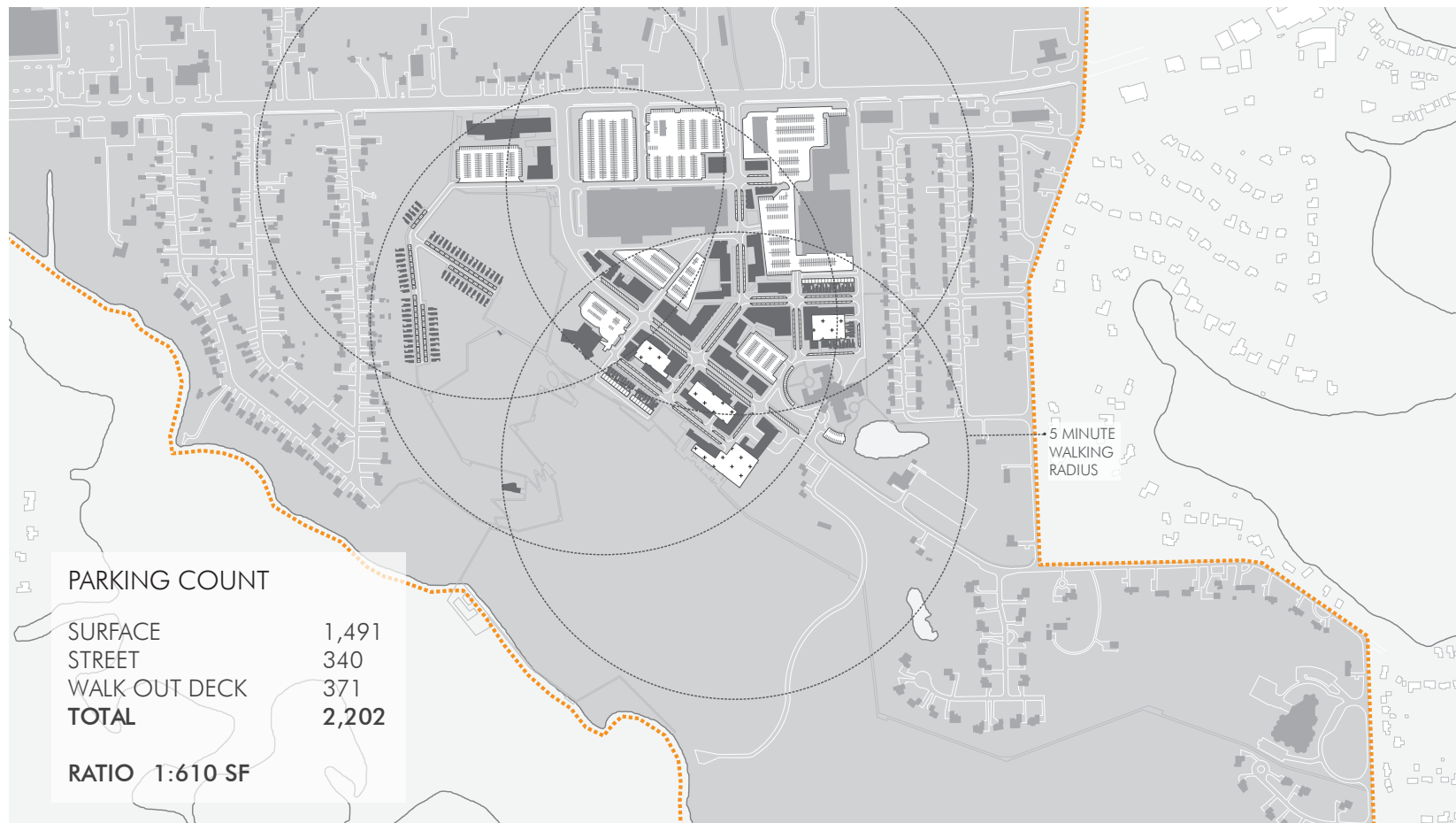
3D CONCEPT DIAGRAM



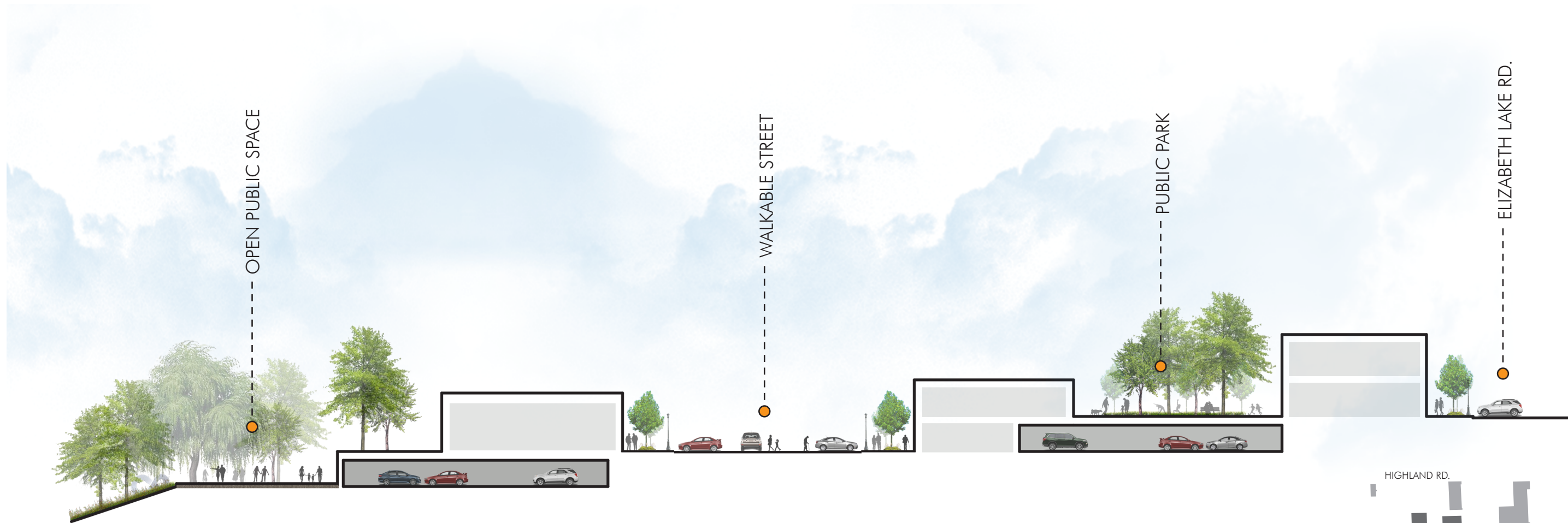
2D CONCEPT DIAGRAM

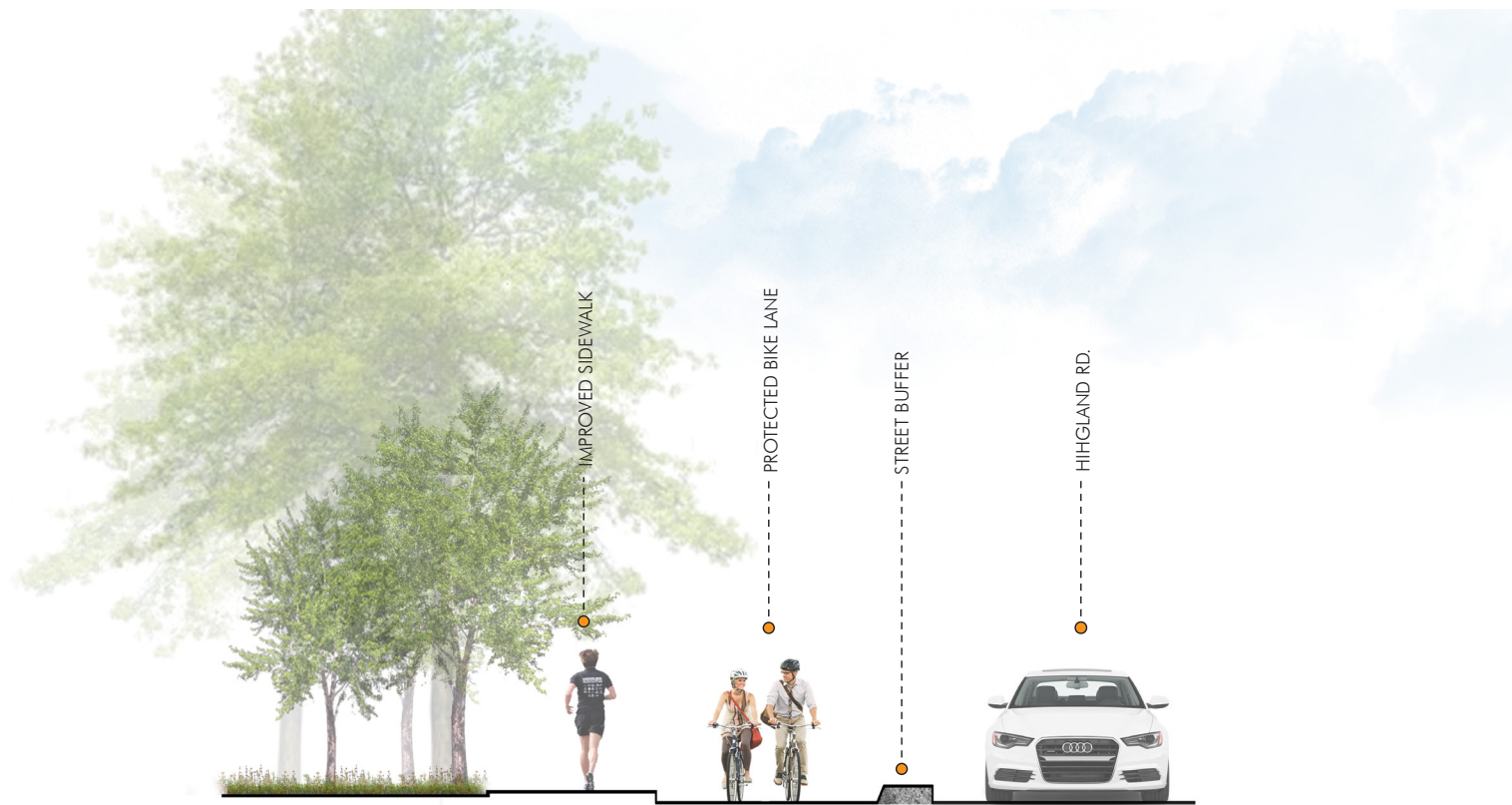
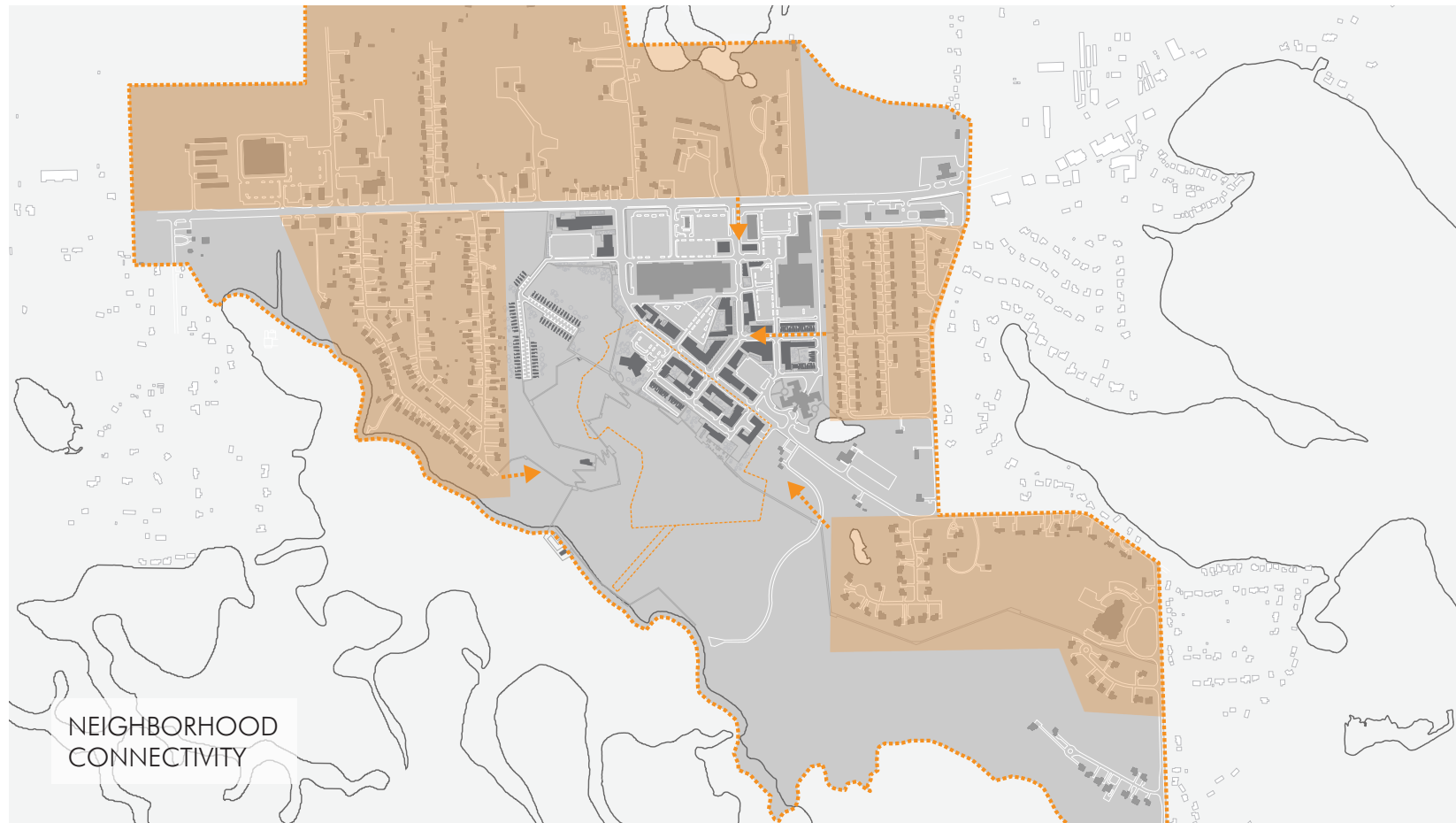


- RETAIL
- MIXED USE
- HOUSING
- SENIOR HOUSING
- TOWNSHIP OFFICE
- POLICE DEPARTMENT
- FIRE DEPARTMENT
- COMMUNITY + SENIOR CENTER
- LIBRARY
- NATURE OBSERVATION CENTER
- LIVE/WORK
- BOARDWALK
- DAY CARE AND PLAYGROUND
- MEDICAL OFFICE



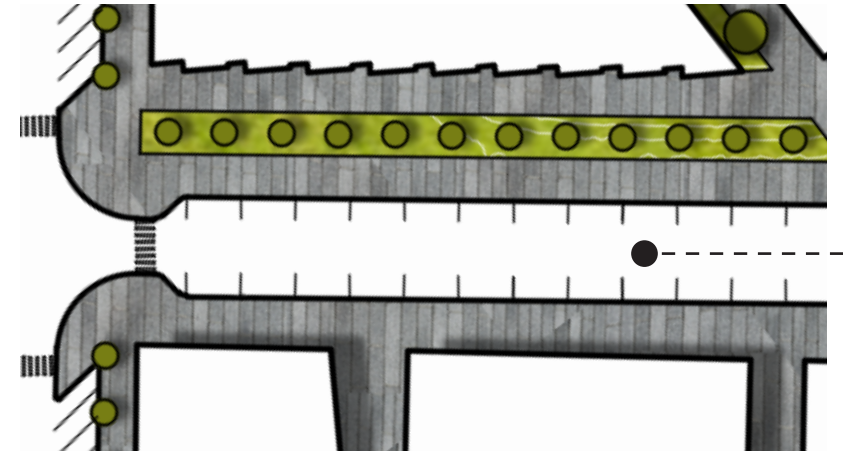
The Pocket scheme acknowledges the lack of and feasibility for a public transportation system and frames the study area as a “park-once” district, providing on-site parking for patrons and then encouraging the use of walkable infrastructure to explore the many opportunities available for shopping, recreation, and socializing. The scheme utilizes a mixture of on-street parking as part of a pedestrian friendly streetscape, minimized surface parking, and walk-out day-lit parking decks that capitalize on the topography and maximize the use of open space. This is part of a system that expands the transportation infrastructure by organizing street grids, expanding sidewalks, adding bike lanes, creating recreation trails, and making connections to ease and encourage pedestrian travel. Density is increased to promote walkability, with the goal being to drastically increase the Floor Area Ratio in the study area. This is achieved by right sizing parking quantities, reducing setbacks, minimizing surface parking, increasing building footprint and height, and regionalizing the storm water management strategy.

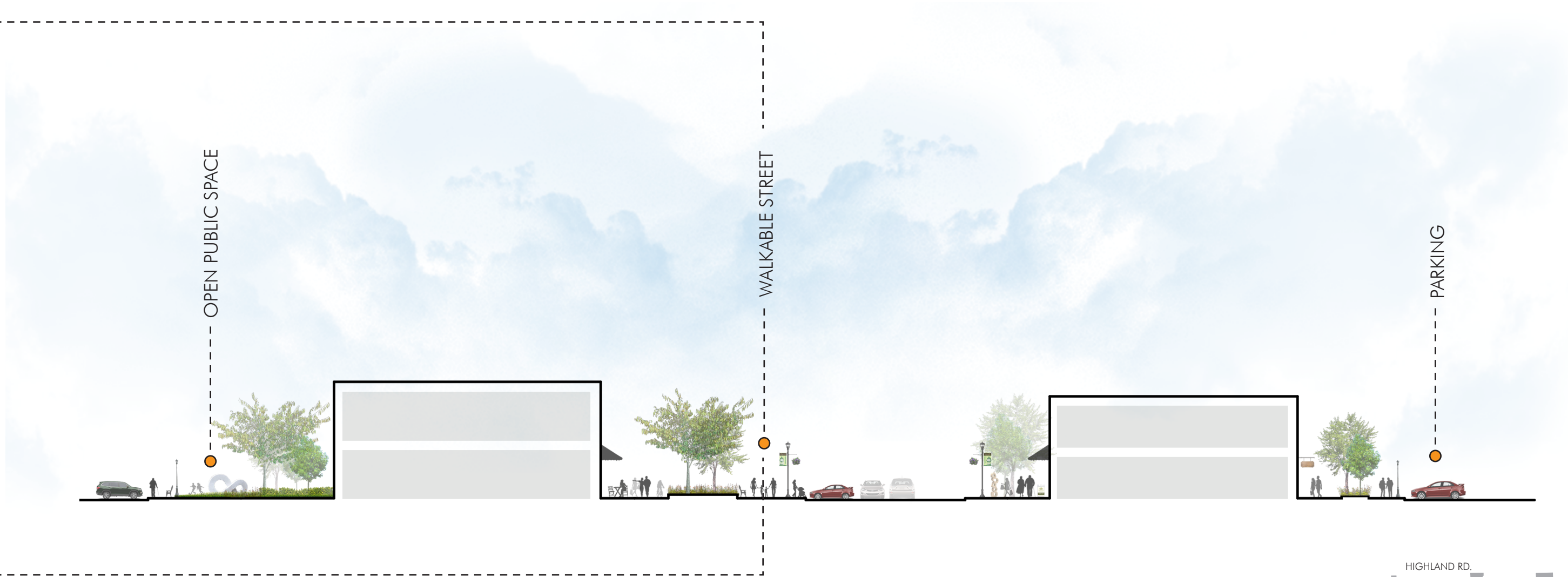


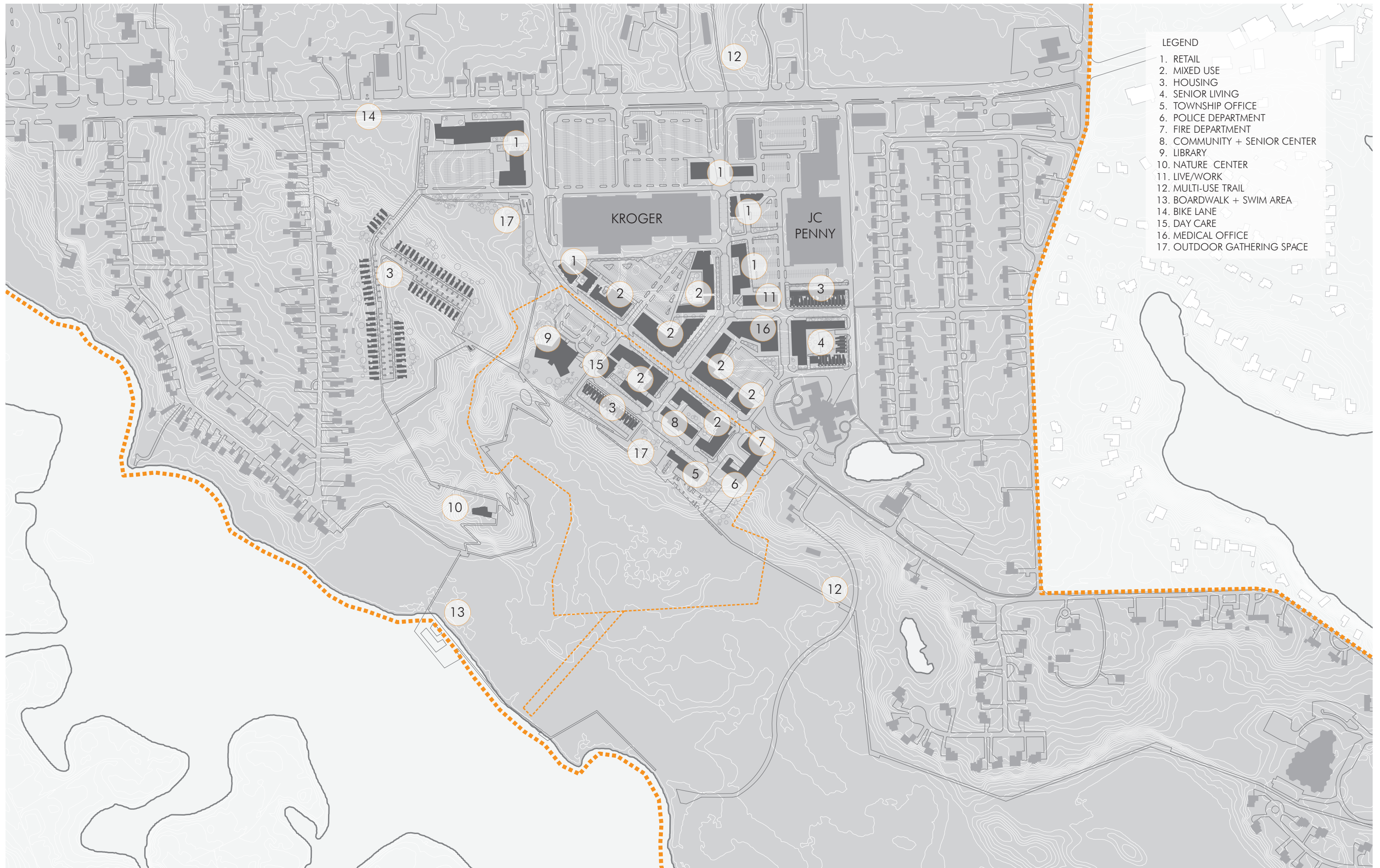


BIKE LANE DETAIL

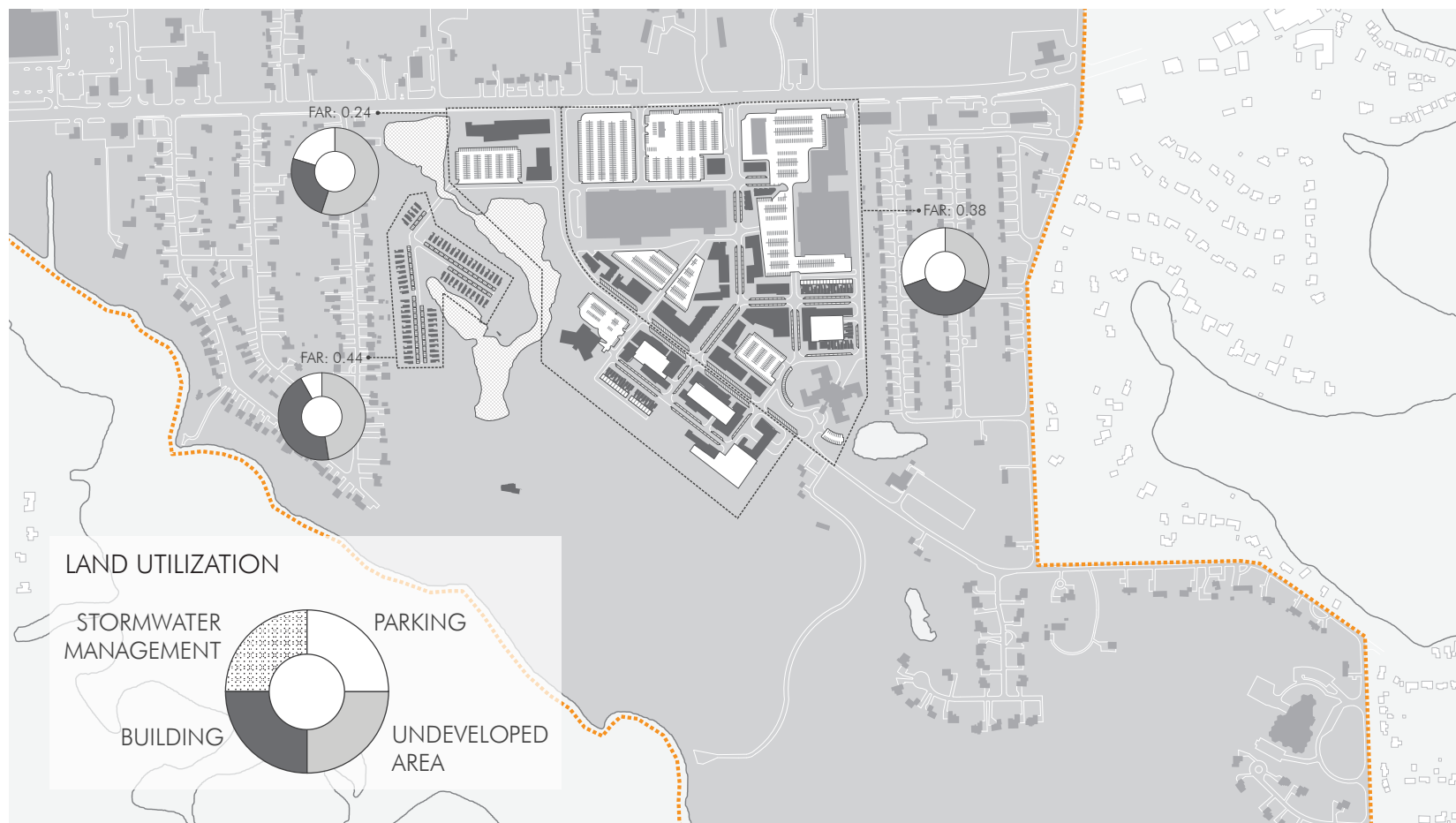
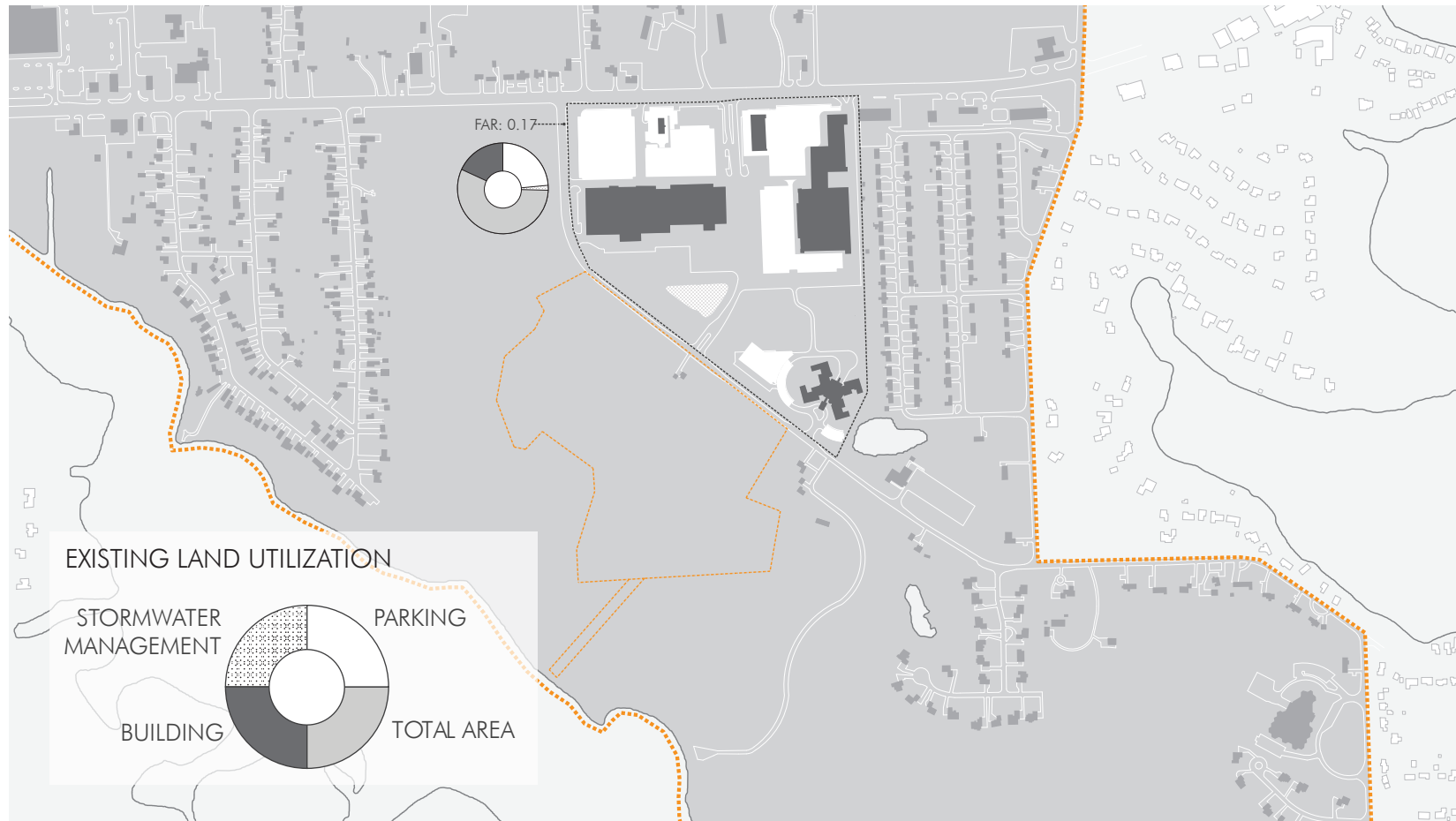
The proposed Draft Concept for the CiDi study area emphasizes an active public life by creating spaces that encourage engagement with the public realm. Much of this is done through the street scape and designing the thoroughfares as places for people with an emphasis on pedestrians instead of an emphasis on vehicles. This is accomplished with using street parking as a buffer from pedestrians to vehicle traffic, widening sidewalks and including landscaping, street furniture and making spaces for outdoor dining and gathering.







- LEGEND
- 1. RETAIL
 - 2. MIXED USE
 - 3. HOUSING
 - 4. SENIOR LIVING
 - 5. TOWNSHIP OFFICE
 - 6. POLICE DEPARTMENT
 - 7. FIRE DEPARTMENT
 - 8. COMMUNITY + SENIOR CENTER
 - 9. LIBRARY
 - 10. NATURE CENTER
 - 11. LIVE/WORK
 - 12. MULTI-USE TRAIL
 - 13. BOARDWALK + SWIM AREA
 - 14. BIKE LANE
 - 15. DAY CARE
 - 16. MEDICAL OFFICE
 - 17. OUTDOOR GATHERING SPACE



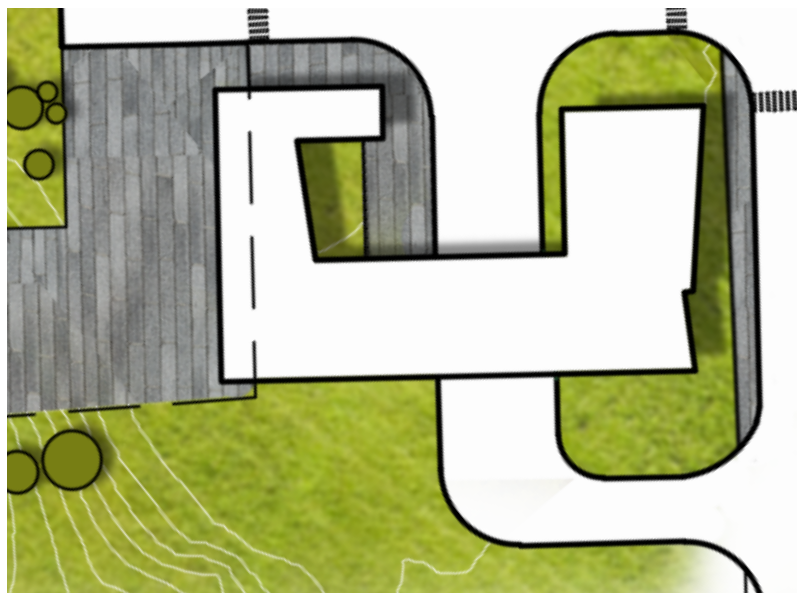
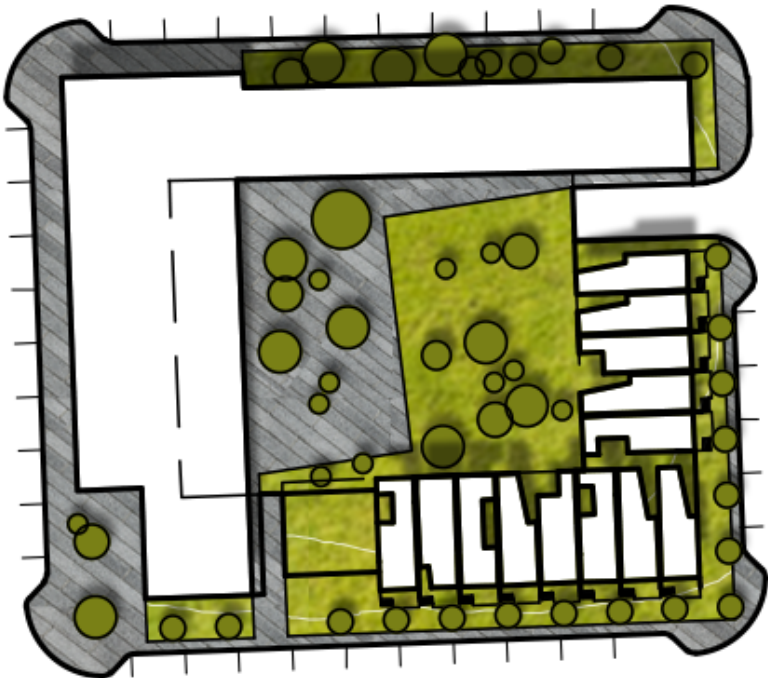
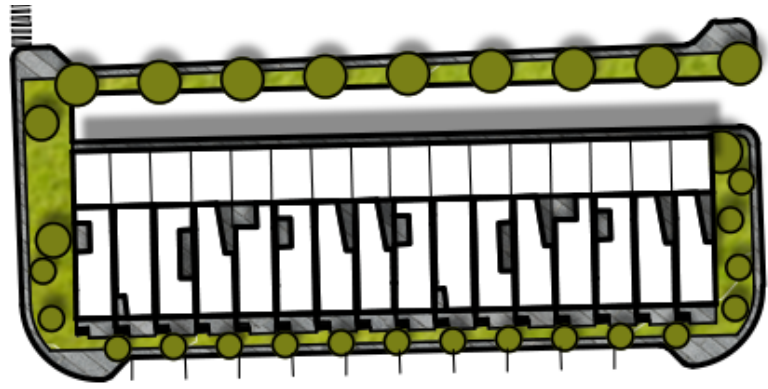


BUILDING LEGEND

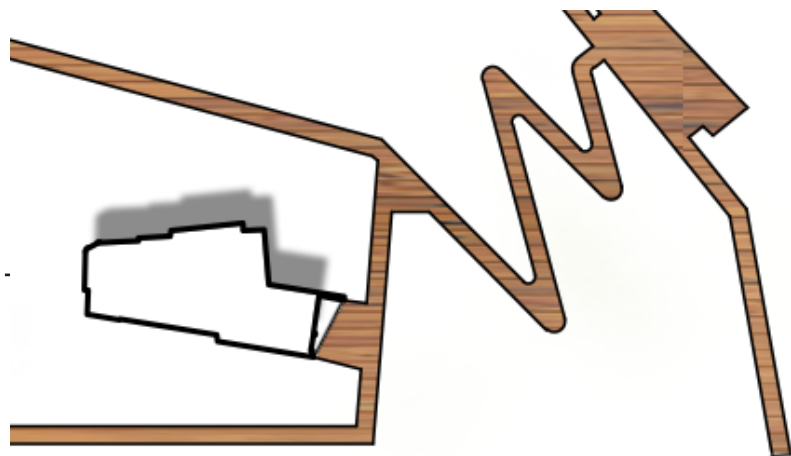
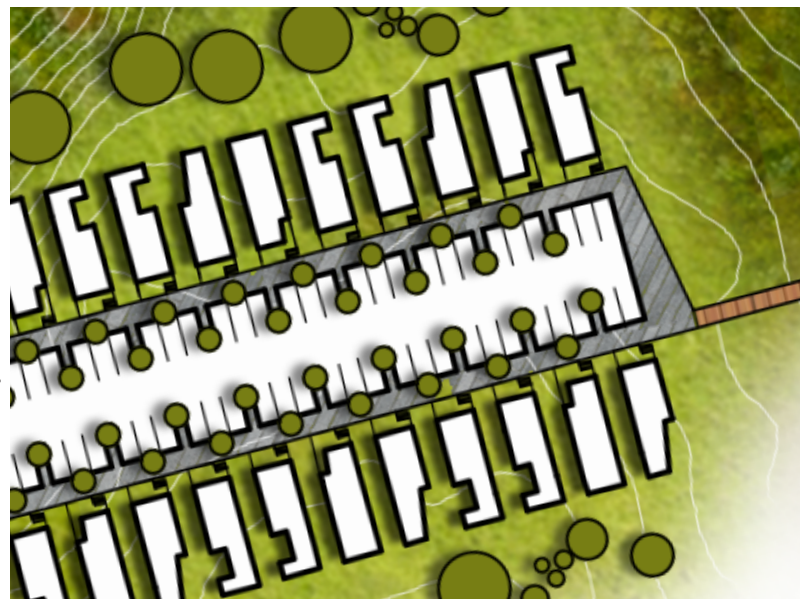
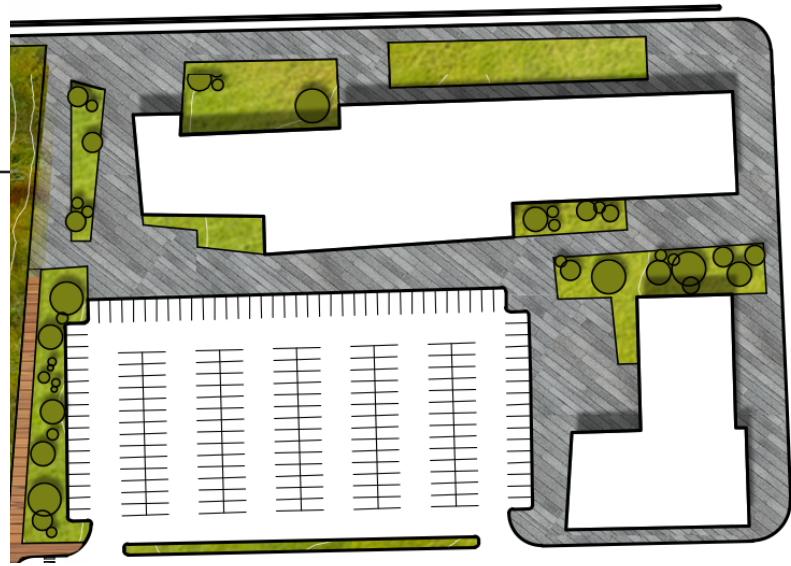
MARK	USE
1	RETAIL
2	MIXED USE
3	HOUSING
4	SENIOR LIVING
5	TOWNSHIP OFFICE
6	POLICE DEPARTMENT
7	FIRE DEPARTMENT
8	COMMUNITY CENTER
9	LIBRARY
10	NATURE CENTER
11	LIVE / WORK
12	MULTI-USE TRAIL
13	BIKE LANE
14	DAY CARE + PLAYGROUND
15	MEDICAL OFFICE
16	OUTDOOR GATHERING SPACE
17	AMPHITHEATER





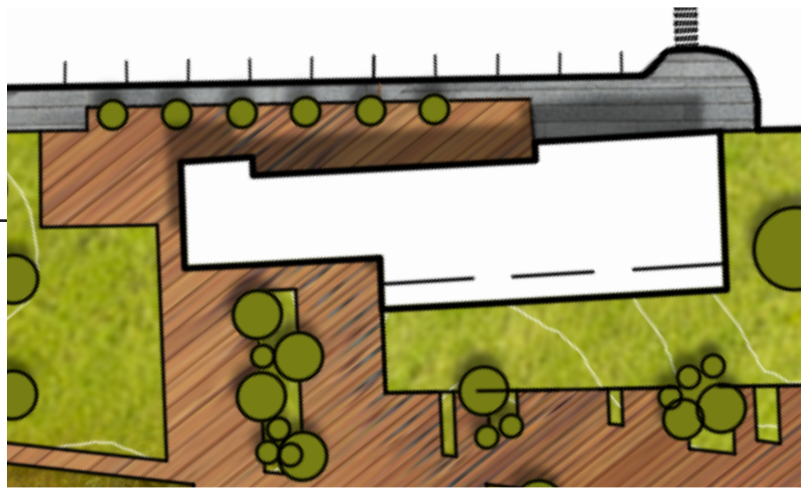
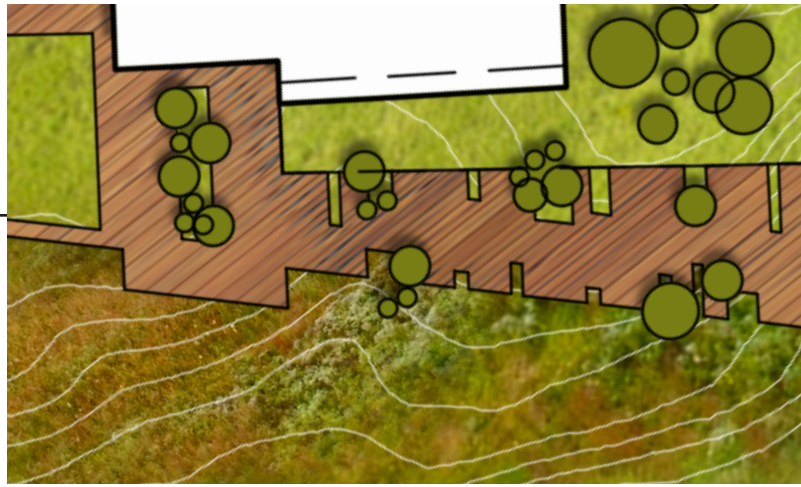








TO BOARDWALK ALONG
PORTION OF BRENDEL LAKE

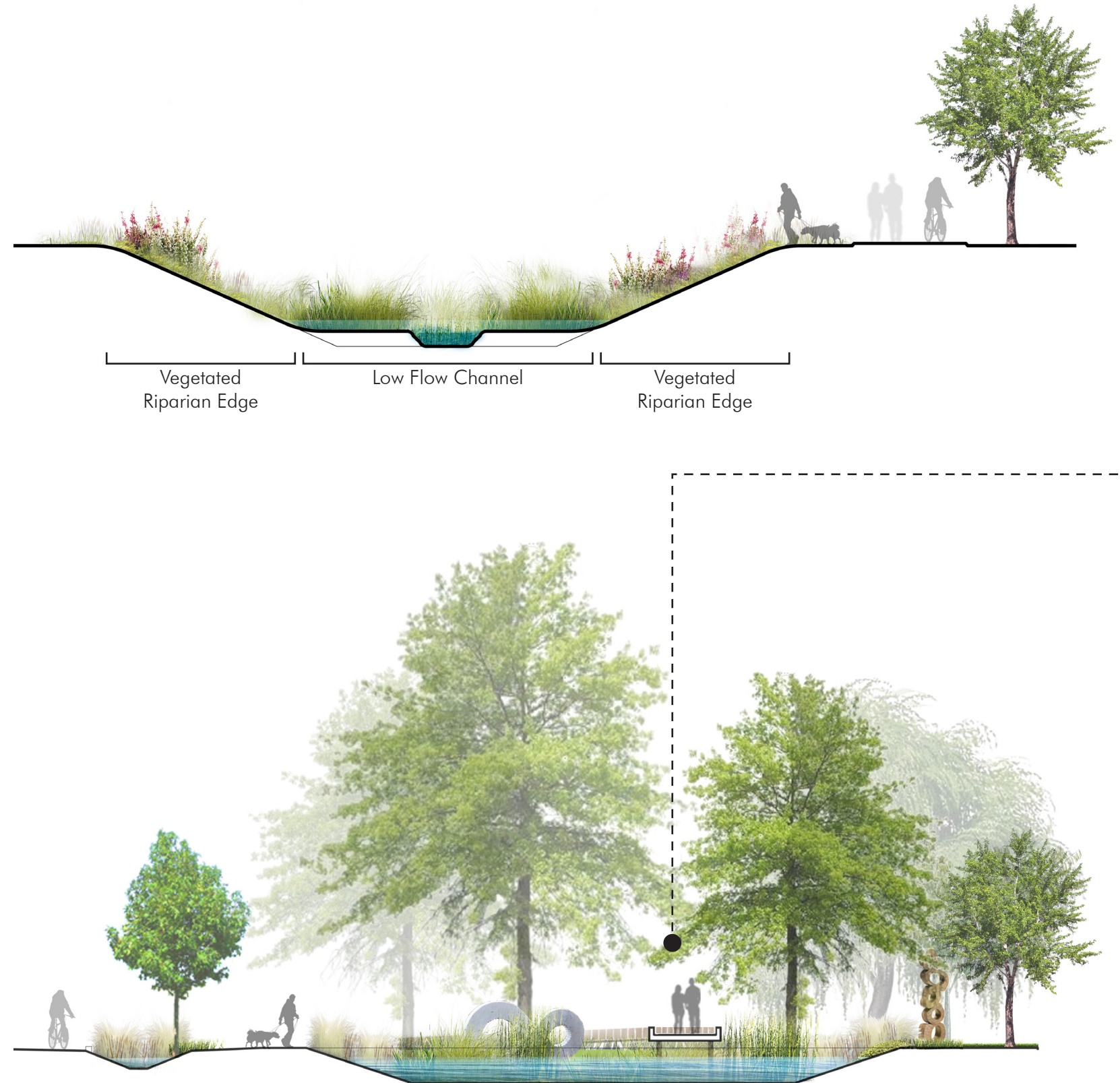


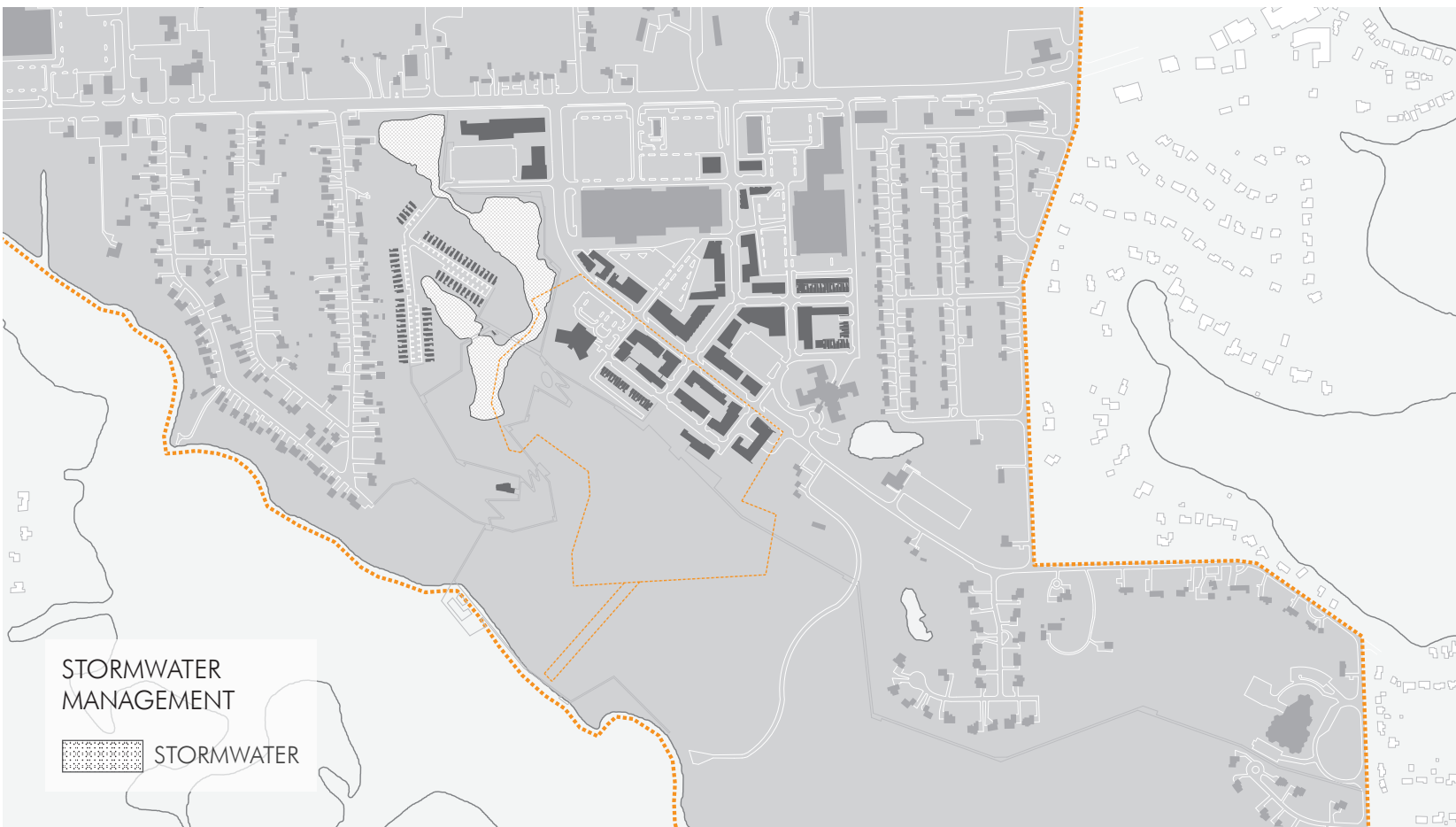
CiDi wetland amenity

Wetlands provide higher rates of biological activity than most ecosystems, and as a result they play a key role in the favorable biogeochemical processes that filter sediments and organic matter, as well as additional storage capacity during rain events.

Constructed wetlands could be created in the CiDi study area for retention basins as a regional strategy for storm water management to alleviate requirements on buildable land area and create an amenity that boosts property values in improves user experience while creating recreational opportunities.

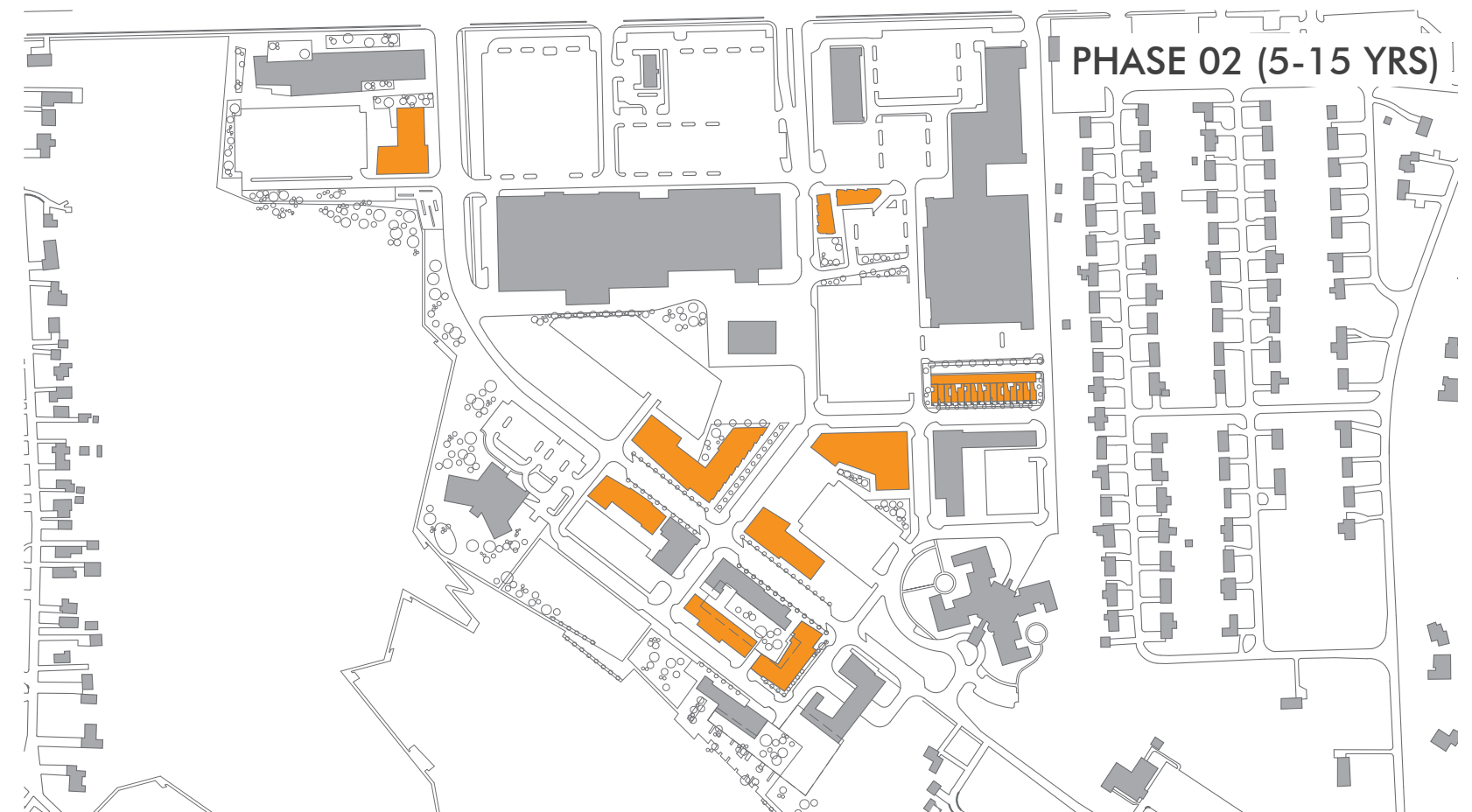
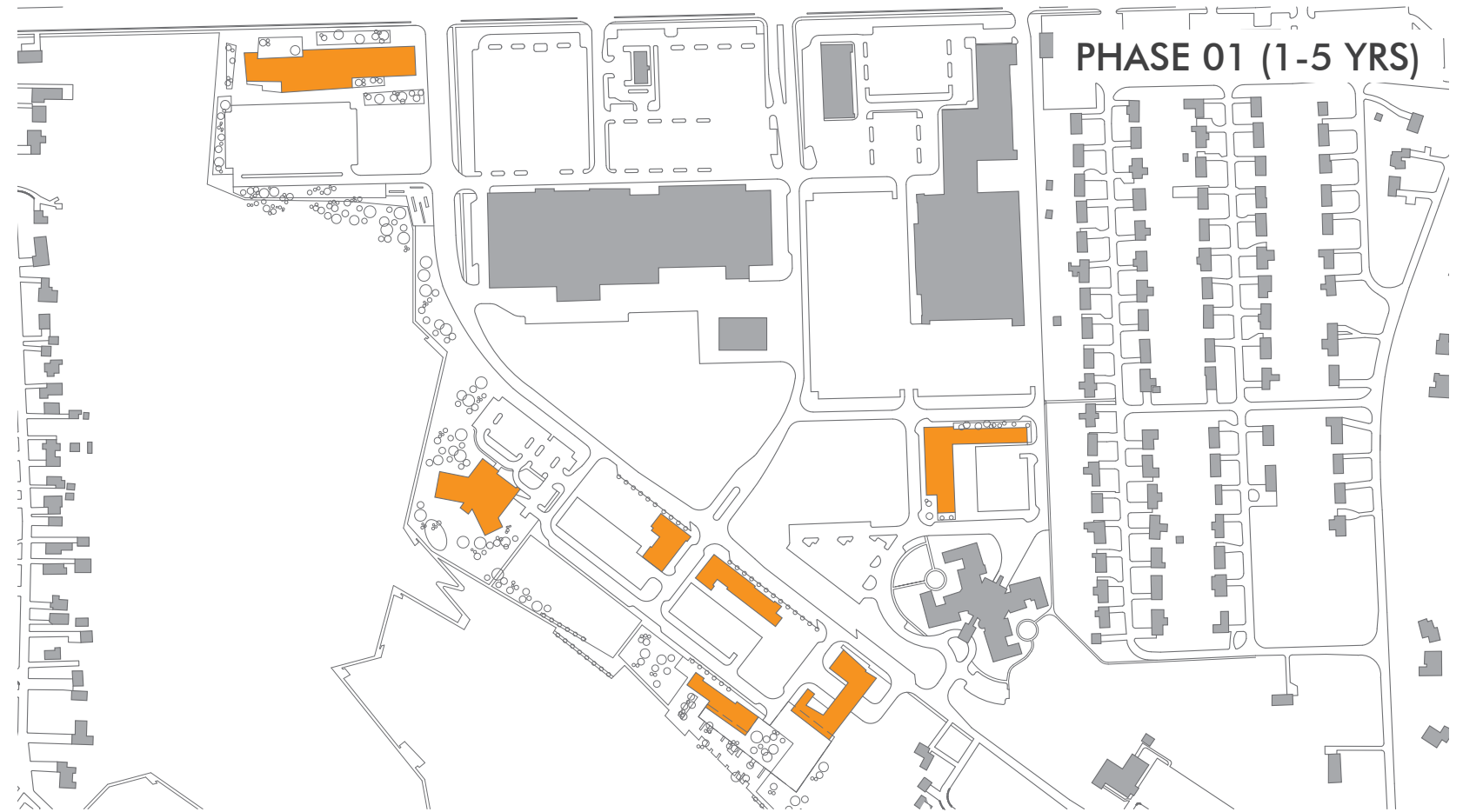
The constructed wetlands and large pools could be used for water quality treatment and serve as a natural storage area.

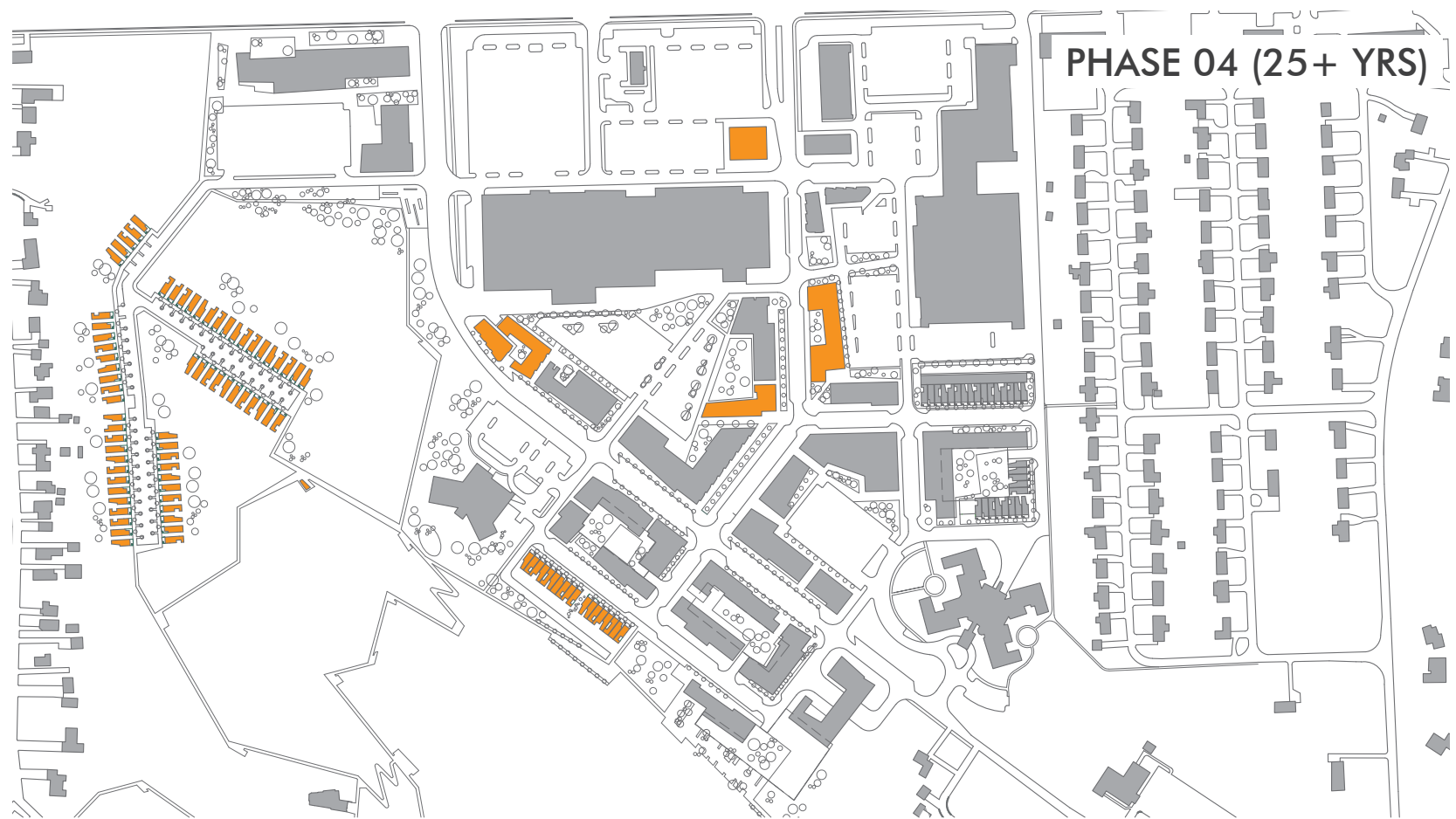
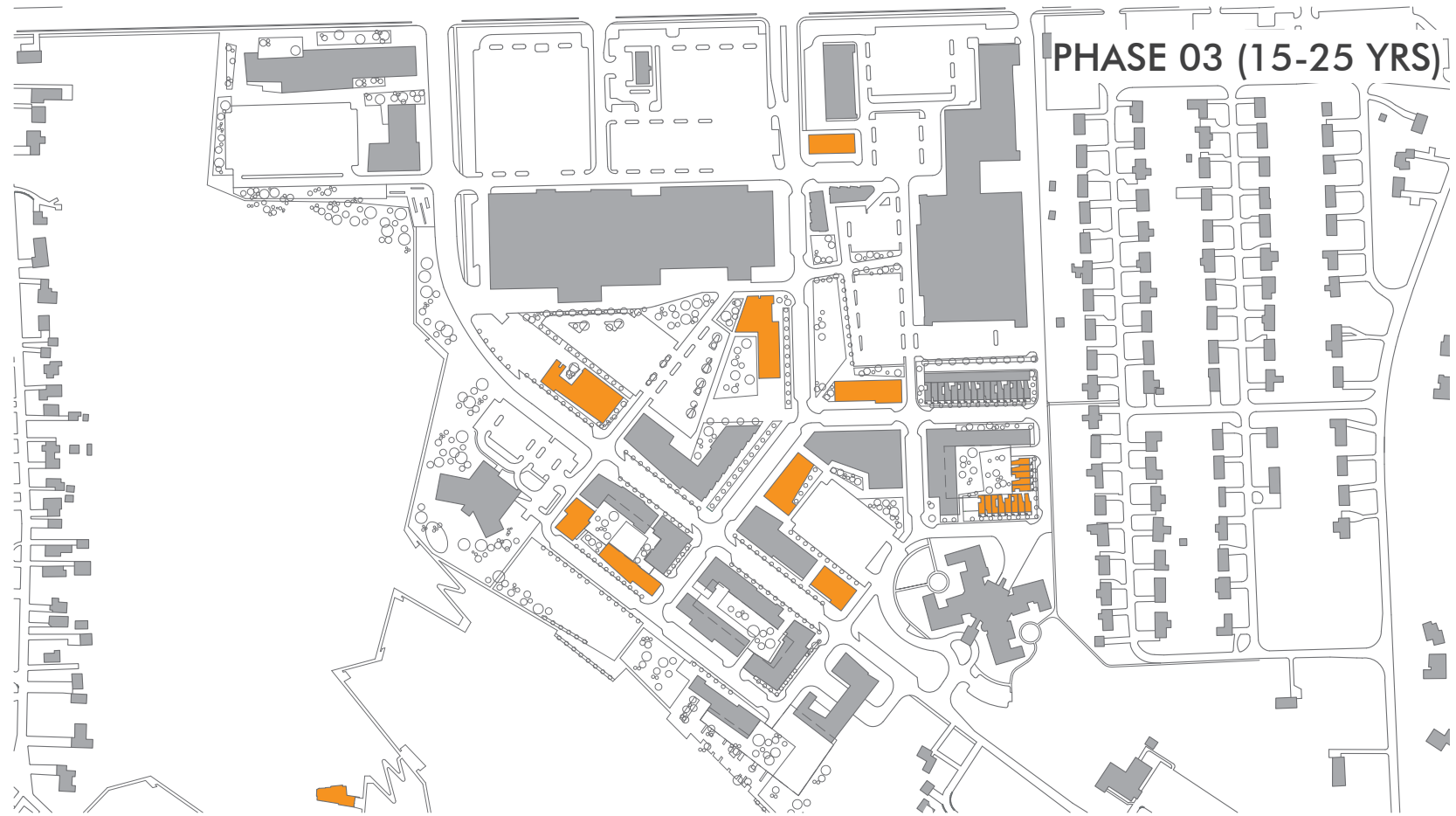




CiDi phasing

The suggested phasing is meant to acknowledge that this level of development doesn't occur at once, but rather develops over a period of time through collaborative efforts between public and private interests. The phasing, as suggested relies on public and private partnerships to create momentum that influences further development and regeneration in the region. The phasing diagrams are meant to be suggestive and should be re-evaluated as developments take place in response to market conditions and community needs.





CiDi

future recommendations

Overview:

The momentum generated in forming an initial vision for a Civic District Development Plan is both encouraging and challenging. A tremendous start has been established but next steps should be considered in order to establish a path towards realization. The recommended strategy for facilitating this project at the next level would be developing the planning aspects in more detail for years 1-5 and developing a feasibility study for the more ambitious aspects of the 25+ year plan including economic assessments and feasibility. It is important that both stages be conducted in parallel with one another and by a qualified multi-disciplined design team.

Parcel Acquisition:

Critical to the contiguous quality of the Civic District Development Plan would be the acquisition of the approximately 1 acre parcel, PIN 12-22-351-001, in order to complete the intersection desired at Town Center Blvd. and Elizabeth Lake Road. Acquiring the parcel initiates the integration of the entire district south of Elizabeth Lake Road.

Economic Impact Analysis:

An important early phase is to determine the direct impact that the project will have on the local and regional economy. The direct

impact is defined as economic activity that stems directly from the redevelopment plan. This would include such things as employment earnings, business expenses, taxes, etc. that are generated by new businesses and entities locating to the area.

The second phase is to quantify the indirect impact of the redevelopment plan. Indirect impacts are essentially the expenditures that occur as a result of the development plan. This includes a measure of business-to-business expenditures such as what business owners spend on operational needs.

Next is a measurement of induced impact. Each dollar generated by the redevelopment will circulate through the local economy. For example a business owner pays employees who in turn purchase goods and services elsewhere in the local economy.

The number of times that a dollar circulates through the economy and generates new spending is measured by using a multiplier. Therefore, an earnings multiplier of 1.75 estimates that a dollar will generate an additional \$.75 in the economy. Similarly, a job multiplier of 2.09 estimates that each direct job resulting from the redevelopment generates an additional 1.09 jobs in the economy.

In order for an economic impact

analysis to provide a true and accurate assessment, the impact must be net of dollars that are simply being redirected from within the local economy. The analysis should specifically provide for that distinction. Equally, the measure of fiscal impact, must also consider the additional cost of providing municipal services that would not otherwise be necessary, such as increased police and fire protection, demands on public works, the cost of additional children entering the school system and other factors.

A clear understanding and accurate measure of fiscal impact is extremely important, particularly if public funds or resources will be used to subsidize or induce development. This not only helps to substantiate whether assistance can or should be provided, it helps to quantify the level and amount of resources that may or may not be available. In addition, the fiscal impact analysis will allow the applicable taxing jurisdictions to incorporate both revenue and expenses into longer term planning efforts.

Sales tax revenue, property taxes, user and permit fees, utilities and other revenues associated with new development will be projected over a phased period of time. The associated revenue and benefit to each applicable taxing jurisdiction

will be quantified. As mentioned, benchmark costs will then be applied to estimate the increased cost of providing services to support development. With the potential exception of residential development and the cost incurred by local school districts, the type of development anticipated will likely produce a positive fiscal impact. In other words, the additional tax revenue generated by the development, should offset capital cost and expenses.

Both the economic and fiscal impact analyses will provide information integral to longer term planning efforts, financing, grant requests and other activities. While impacts can vary over time and change based on variations in development scenarios and unforeseen impacts, planning for such a large scale venture must include an initial understanding of net benefits.

Zoning Study + Form Based Code:

As the Civic District Development Plan illustrates a collective vision, policy must be developed as the instruction manual to achieve that vision. An initial zoning study is recommended to determine a more formal boundary for the development envelope of the Civic District. Zoning strategies should embrace a level of form based code in order to foster predictable results between the physical form of new structures and their relationship to the public realm. Three elements are recommended for inclusion in

the FBC: a regulating plan, public standards and building standards. The regulating plan is intended to synchronize with the zoning map, designating the locations within the Civic District that certain building types and building forms should be encouraged. The public standards identify the components that make up the public realm. Sidewalks, bike lanes, on-street parking, street lights, landscape elements and furniture shape the quality of these critical arteries within the district. Building standards shape the scale, formal arrangement and functions of the architecture within the development. Careful consideration should be considered in regulating building standards so as not to stifle creativity but still encourage architectural integrity.

Elizabeth Lake Road Impact Study

For a successful Civic District with a qualitative urban character to be established, White Lake Township will need to leverage partnerships with the MDOT and the Road Commission for Oakland County with an expressed interest in defining the character of Elizabeth Lake Road. The intended urban atmosphere will be dependent upon on-street parking, limited setbacks and a concentrated emphasis on the increase of pedestrian activity; all of which lead to a desire for slowing traffic. The impact of the vision should consider a reduced speed limit of 25mph and a reduction in the R.O.W. width to

allow for denser development within the district. Additional study items should include signalization of key intersections and routing by-pass traffic on Teggerdine Road.

Developer RFQ

During the Phase 01 (1-5 year) outlook, the township should consider a Developer RFQ for the block at the southeast corner of Elizabeth Lake Road and Town Center Blvd. The developer RFQ could be considered as a Private Mixed-Use Development RFQ or be inclusive of a Public-Private Mixed-Use Development where the township could lease back Township Offices and a Police+Fire Station. The selected developer would be responsible to plan, design, finance, build and operate the facilities. The complimentary program to any township uses should include retail, dining, commercial and residential uses. The township's contribution to the project could be the property and the guarantee of a long term lease of required facilities for township purposes.

