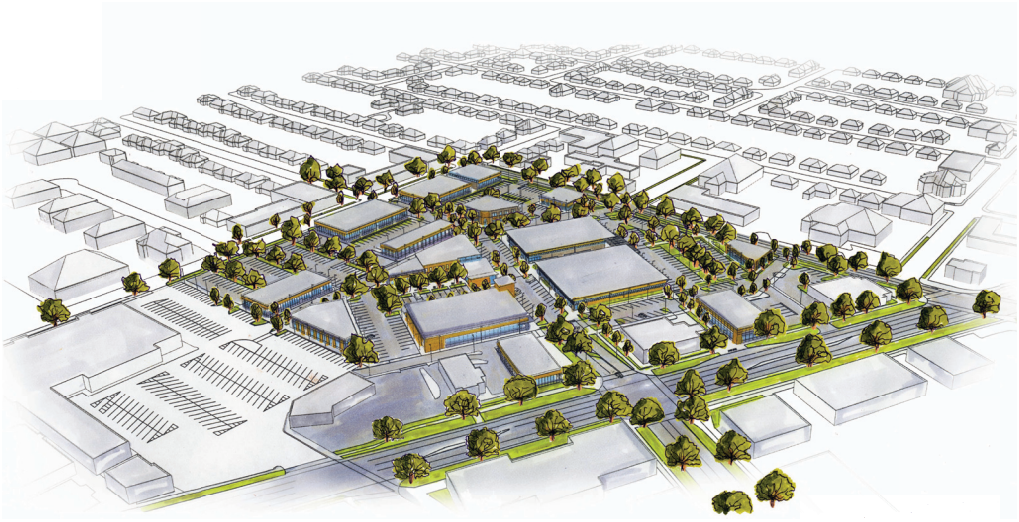


Not Big Box:
Waremart Redevelopment Plan

Fall 2011 • Architecture

Benjamin Bye • Architecture
Nico Larco • Associate Professor • Architecture

UNIVERSITY OF OREGON

SCI
Sustainable Cities Initiative

Acknowledgements

The participants of this course would like to acknowledge the City of Springfield staff members and project stakeholders who aided in the completion of the studio, offering knowledge of the site and its surroundings as well as giving project critiques throughout the design process: Steven Yett, Property Owner; John Tamulonis, Springfield Community Development Manager; Courtney Griesel, Springfield City Project Lead; Mark Metzger, Springfield Senior Planner; Jeff Towery, Springfield Assistant City Manager; and The Mohawk Business Association, aka “The Hawks”.

Students would also like to thank the University of Oregon faculty, city staff, and visitors who provided students with critiques and direction during project reviews and outside of set class times: Steven Yett, Mark Miksis, Michael Fifield, Michael Larice, John Rowell, Philip Speranza, Mark Metzger, Courtney Griesel, Brook Muller, Kaarin Knudson, Johnpaul Jones, Kristi Krueger, John Tamulonis, Gary Karp, Peter Keyes, Hugh Prichard, Anne Delaney, Doug McKay, Larry Bissett, and Deni Ruggeri.

Students would like to give a special thanks to Professor Nico Larco and Instructor Allen Lowe, who worked with students from initial conception to final products through engagement in studio, the city, and the site. We are also grateful to Planning, Public Policy, and Management professors Rich Margerum, Robert Young, Bob Parker and their students, who collaborated in design charrettes and reviews with studio participants throughout the term. Those students’ final work is summarized in a separate report.

SCI Directors and Staff

Robert Liberty, Executive Director

Nico Larco, SCI Associate Director, and Associate Professor of Architecture

Marc Schlossberg, SCI Associate Director, and Associate Professor of Planning, Public Policy, and Management

Chris Jones, SCI Program Manager

About SCI

The Sustainable Cities Initiative (SCI) is a cross-disciplinary organization at the University of Oregon that promotes education, service, public outreach, and research on the design and development of sustainable cities. We are redefining higher education for the public good and catalyzing community change toward sustainability. Our work addresses sustainability at multiple scales and emerges from the conviction that creating the sustainable city cannot happen within any single discipline. SCI is grounded in cross-disciplinary engagement as the key strategy for improving community sustainability. Our work connects student energy, faculty experience, and community needs to produce innovative, tangible solutions for the creation of a sustainable society.

About SCYP

The Sustainable City Year Program (SCYP) is a year-long partnership between SCI and one city in Oregon, in which students and faculty in courses from across the university collaborate with the partner city on sustainability and livability projects. SCYP faculty and students work in collaboration with staff from the partner city through a variety of studio projects and service-learning courses to provide students with real-world projects to investigate. Students bring energy, enthusiasm, and innovative approaches to difficult, persistent problems. SCYP's primary value derives from collaborations resulting in on-the-ground impact and expanded conversations for a community ready to transition to a more sustainable and livable future. SCY 2011-12 includes courses in Architecture; Arts and Administration; Business; Economics; Journalism; Landscape Architecture; Law; Oregon Leadership in Sustainability; and Planning, Public Policy, and Management.

About Springfield, Oregon

The City of Springfield has been a leader in sustainable practices for more than 30 years, tackling local issues ranging from waste and stormwater management to urban and suburban redevelopment. It is the first and only jurisdiction in Oregon to create two separate Urban Renewal Districts by voter approval. Constrained by dramatic hillsides and rivers to the north and south, Springfield has worked tirelessly to develop efficiently and respectfully within its natural boundary as well as the current urban growth boundary. Springfield is proud of its relationships and ability to work with property owners and developers on difficult developments, reaching agreements that are to the benefit of both the project and the affected property owners. These relationships with citizens are what continue to allow Springfield to turn policy and planning into reality. Springfield recruited a strong, diverse set of partners to supplement city staff participation in SCYP. Partners include the Springfield Utility Board, Willamalane Park and Recreation District, Metro Wastewater Management Commission, United Way of Lane County, and Springfield School District 19.

Course Participants

Nico Larco, Associate Professor, Architecture

Allen Lowe, Instructor, Architecture and Planning, Public Policy, and Management

Chris Becker, Architecture Undergraduate

Benjamin Bye, Architecture Undergraduate

Naomi Campollo, Architecture Undergraduate

Lydia Chambers, Architecture Graduate

Jamie Corsaro, Architecture Graduate

Melissa Hansen, Architecture Undergraduate

Dijon Jones, Architecture Graduate

Alayna Kilkuskie, Architecture Undergraduate

Billy McCormick, Architecture Undergraduate

Kendyl Mitsui, Architecture Undergraduate

Matt Nichols, Architecture Undergraduate

Ann Phillips, Architecture Graduate

Dan Reid, Architecture Graduate

Kaysie Rozsonits, Architecture Undergraduate

Emilio Todescato, Architecture Undergraduate

Robyn Webb, Architecture Undergraduate

Farleigh Winters, Architecture Undergraduate

Table of Contents

Executive Summary

During the Fall 2011 academic term at the University of Oregon, six groups of students in an architecture design studio worked with the City of Springfield to develop six approaches for redevelopment of the former Waremart site at the intersection of Mohawk Boulevard and Centennial Boulevard.

The City of Springfield has goals for the site to be sustainably redeveloped and to catalyze the redevelopment of adjacent sites. The city asked student groups to explore urban design concepts for future uses of the site, with individual student groups focusing on scenarios based on three primary uses for the site: employment, mixed-income housing, or medical-related development.

Students explored site conditions and other factors influencing development on the site. These investigations led the students to focus on key issues that were then addressed in the various groups' design proposals, including:

- The large size of the Waremart block (11 acres), which limits pedestrian and cyclist access.
- The auto-centric design of the current site that limits active transportation (walking and biking) to, from, and through the site.
- The potential for greater levels of connectivity to the surrounding neighborhoods.
- The lack of activity on the site despite its close proximity to flourishing developments and the highly-traveled Mohawk Boulevard.

Student groups kept these issues at the front of their design agendas while creating six unique design proposals. The groups each faced similar challenges in site design. In their design proposals, many of the groups identified and emphasized a few common and important elements:

- Creating a unique identity for the site.
- Encouraging a more bicycle- and pedestrian-friendly environment.
- Incorporating sustainable strategies in every aspect of design, including green streets, bioswales, measures to reduce automobile dependence, and the mitigation of water runoff from the site.
- Developing a mixed-use center for the Mohawk neighborhood.
- Proposing design solutions that will encourage neighboring sites to redevelop.

This report documents the student groups' research of existing conditions, the various approaches to the site's redevelopment, and the groups' final design proposals.

Introduction

The Sustainable Cities Initiative (SCI) is a cross-disciplinary organization that addresses sustainability at multiple scales, from the region down to the building. SCI's Sustainable City Year Program engages faculty and students at the University of Oregon in research and design while providing service and technical assistance to a different city each year. As part of a year-long partnership between the University of Oregon and the City of Springfield, Oregon, the Waremart Redevelopment architecture studio looked at the mostly vacant 11-acre site at the northeast corner of Mohawk Boulevard and Centennial Boulevard.

The former Springfield Waremart closed its doors over a decade ago and has since sat mostly empty. At over 40,000 square feet, the vacant building and the nearly 11-acre site encompassing it are in need of new development. The City of Springfield and property owner Steven Yett have the opportunity to catalyze neighborhood-wide redevelopment with the rejuvenation of the former Waremart site. The City of Springfield used this opportunity to partner with students in a University of Oregon architecture studio to propose urban design ideas for the site and to examine the implications of those proposals for the surrounding Mohawk commercial area.

The City of Springfield asked students to explore urban design concepts for potential future uses of the site, with individual groups focusing on three use scenarios: Light-Industrial / Campus Industrial, Affordable / Mixed-Income Housing, and Office / Commercial / Medical-Related. Student groups were asked to create both short-term recommendations for use of the site and long-term plans for the site and the surrounding area. The short-term recommendations would look at what could be done to improve the site without complete redevelopment, such as the adaptive reuse of existing buildings. Long-term plans would look at the overall urban design of the site, as well as the areas surrounding the site, with the goal of encouraging redevelopment throughout the Mohawk commercial area.

Figures 1-4: Current site conditions.

Background Information

The Site

The former Waremart site occupies 11 acres along the eastern edge of Mohawk Boulevard, a busy arterial street transporting people between downtown Springfield and major retail areas to the north. Centennial Boulevard, a major east-west arterial connecting Springfield and Eugene, borders the southern edge of the site. The northern edge of the site is landlocked by the neighboring Bi-Mart property, which is still in operation. Within the Waremart site, several standalone buildings house businesses that thrive off of the busy traffic along Mohawk Boulevard. Of those buildings, two banks, Wells Fargo and Umpqua Bank, are privately owned and not part of the Waremart property. The two large buildings on the site, however, are sitting mostly empty. The former Waremart building sits vacant, except for a month-long period each year when it serves as a haunted house. Situated next to the former Waremart building is a former department store, with a sprawling unorganized plan. That building currently houses small businesses, including a dance studio, gym, and several antique stores.

The site is part of The Mohawk District, which is one of six formally adopted “nodal development” areas within Springfield. Nodes are intended to include a mix of commercial, residential, and employment uses built at higher than usual densities. This designation gives students a platform to begin designing, as it is a call for urbanism in a previously suburban area. The designated nodal districts are intended to reduce auto dependence by making it convenient to use public transit and active modes of transportation (walking and biking) to commute between home, stores, and the workplace. In Springfield’s “nodal development” districts, code amendments favor mixed-use development, reduced parking counts, and increased transit use.

As the site currently stands, it is not meeting the goals of a nodal development district. Students visited the site, met with residents and business owners, studied maps, and studied documentation about the area to better understand the current state of the Waremart site and the Mohawk neighborhood. Students’ observations and studies early in the design process informed how projects were carried out later in the design process.

Figure 5: Satellite Image of the Mohawk Neighborhood with the site outlined in yellow. Source: City of Springfield.

Block Structure

The Waremart site in its current condition does not contain a block structure. In its nearly 11 acres, there are no through streets and no pedestrian walkways. The site was originally designed to accommodate parking, not people. A comparison of the Waremart site's block structure to downtown Springfield's block structure illustrates that roughly six downtown Springfield blocks fit within the area of the site (see Figure 6). Introducing a block structure to the site can help increase pedestrian access to the site as well as aid in a clear site organization and hierarchy.

Without through streets, parking lots dominate the site as well as the surrounding area. With very little building frontage on the surrounding streets and small amounts of landscaping within the site, the buildings act as islands within the sea of parking that encompasses them. The large areas of impervious pavement create significant water management problems, contributing to an already overloaded stormwater system in Springfield. Figure 7 shows the vast area on and around the site that is occupied by impervious parking surfaces.

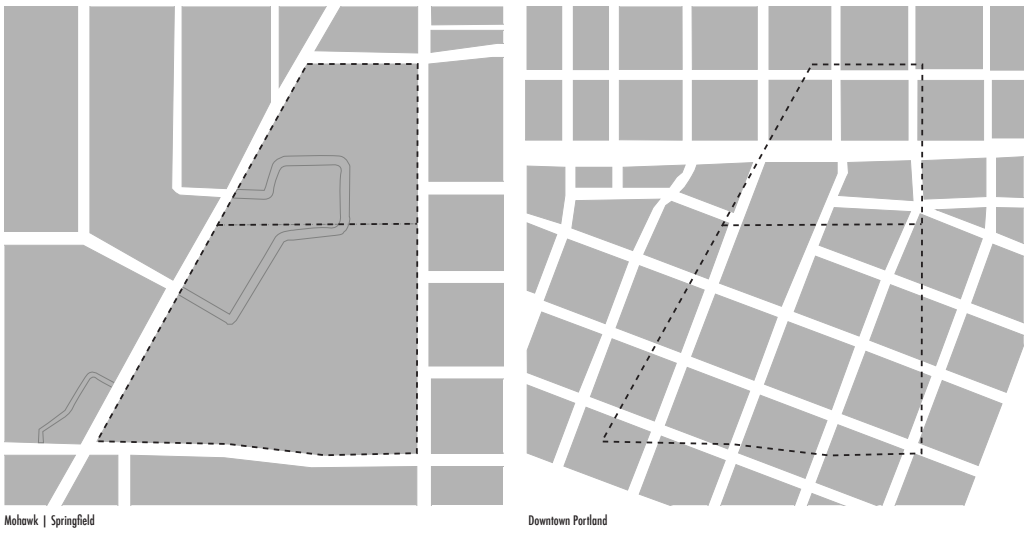


Figure 6: Scale comparison of Waremart and downtown Springfield block structure.

Neighborhood Landmarks

Figure 7: Diagram of impervious parking surface.

Nearby neighborhood landmarks provide opportunities for the redevelopment of the former Waremart site. Highway 105 and Mohawk Boulevard bring large amounts of traffic near or past the site. Site development can also benefit from the significant traffic that nearby retailers like Walmart, WinCo Foods, Wilco, Bi-Mart, and Jerry's Home Improvement Center draw to the Mohawk node. Nearby McKenzie-Willamette Medical Center, located only a quarter of a mile from the site, provides opportunities for medical-related development on the site. Creating connections with adjacent landmarks and the high level of traffic around the site can help drive successful redevelopment of the Waremart site.

Figure 8: Nearby landmarks for the Mohawk node, including (a) high traffic roads and highways, (b) major chain retailers, (c) McKenzie-Willamette Medical Center, and (d) Willamalane Park.

Methodology

This report summarizes the conceptual plans and analysis of Springfield's former Waremart site. Students created the designs in an upper level architecture urban design studio taught by Professor Nico Larco and a former city planner for the City of Eugene, Allen Lowe. Students broke into six groups of 2-3 students to work on the designs. The groups focused designs on three areas of interest as suggested by the City of Springfield: medical uses, campus industrial, and affordable/mixed-income housing.

The project began with an on-site introduction to the site and to the key players in the project. Students in both the architecture studio and three planning, public policy, and management classes focusing efforts on the same site attended this event. Site owner Steven Yett introduced students to the site and its possibilities. Mark Metzger, Senior Planner for the City of Springfield, presented information on the greater Mohawk neighborhood as well as its place within the city, from both a planning and an economic standpoint. Courtney Griesel, the project lead for the City of Springfield, spoke of the city's involvement in the project. Business owners from the Mohawk Business Association gave insight on the current state of businesses in the Mohawk area, both on the Waremart site and nearby. Members of the association showed great excitement for the prospect of site redevelopment and helped kick the project off with energy. The important background information gained in this meeting helped jump-start students' design processes.

Following the site presentation, students toured the site, gaining insight through conversations with the site owner, business owners, and city employees. Planning students provided the architecture students with a greater understanding of the site, offering a different perspective to inform their design efforts.

After visiting the site and meeting the stakeholders involved in the project, students began their analysis and played out initial design concepts. In an early design charrette, students from both the architecture studio and the planning, public policy, and management class collaborated to lay out initial conceptions of the site and ways to approach the project. In these early stages of the project, most focus was placed on the site and its connection with the greater Mohawk neighborhood. Following early collaborative efforts, planning and architecture students focused on their individual areas of exploration, meeting periodically through the term to review work and design concepts.

Throughout the term, student groups kept close contact with Steven Yett and the City of Springfield staff, who reviewed projects and critiqued the groups' ideas. Likewise, students used their own ideas to convey to Steven Yett and the city staff the vast array of possibilities for the site. It was through this process of collaboration, checks and balances through critiques, and personal growth of students that the studio designs came to fruition.

Six Approaches to the Waremart Redevelopment

The six student groups' approaches to the Waremart redevelopment take on the many challenges of the site. Students approached the site with an underlying goal of sustainable development. Sustainability was a focus in all layers of project development. Broad ideas of density, livability, and transportation were used to address the macro scale of sustainability. Details of the site like water management, building orientation, and material usage addressed sustainability on a micro scale. Students worked off of the energy of community members and the aid of experts to develop six exciting and distinct approaches to the redevelopment of the dilapidated Waremart site. Each of the six approaches focused on one of three future scenarios, described below.

Employment

"Campus industrial" refers to large-scale campus employment centers like the Royal Caribbean call center, a successful existing example in Springfield. Employment centers are great assets to cities as they can employ large numbers of people. The Waremart site, with its large area and central location, meets the high land use demands of an employment center, which would otherwise be located on the periphery of the city, where large tracts of land are more plentiful. Approach 1 and Approach 2 focus on Employment.

Housing

Mixed-income housing is another use that can be positive for both the city and the developer. The Waremart site is well situated for housing from a planning perspective because of its access to public transportation and public schools, as well as its centralized location within the City of Springfield. Increased density as achieved through housing also will benefit commercial development and related uses in the area and on the site. Approach 3 and Approach 4 focus on Housing.

Medical

Close proximity to the McKenzie-Willamette Medical Center makes medical uses attractive to both city planners and site developers. Most existing off-campus medical offices in the Mohawk area are dated buildings from the early 1960s, neither attracting new patients nor retaining practices. Medical uses are also attractive to developers because they often lead to long-term rent arrangements, making them secure investments. Medical offices like long-term rental agreements because large and expensive equipment is often used in their buildings, making moving cumbersome and expensive. Approach 5 and Approach 6 focus on Medical uses.

Approach 1: The Commons at Mohawk (Employment)

Alayna Kilkuskie • Matt Nichols • Ann Phillips

The first approach to the redevelopment of the former Waremart site focuses on responding to the current character and demographic of the Mohawk neighborhood. By creating a place where the current population of the neighborhood can live, work, and play, The Commons at Mohawk becomes a true heart and pulse in the Mohawk node. Working from the inside out, Approach 1 uses the idea of community as an undertone in all design decisions.

Figure 9-11: The spirit of place envisioned for the Commons at Mohawk.

Goals and Interventions

A major goal of Approach 1 is to connect the neighborhood west of Mohawk with the neighborhood to the east of Mohawk. The site, with its lack of pedestrian pathways and connecting roads, currently acts as a barrier between the two neighborhoods. To encourage a connection, Approach 1 creates a new main street (“Mel Street”) through the site, connecting M and L streets on either side of the site. Mel Street is bordered with buildings on either side, with parking lots tucked behind buildings rather than surrounding them.

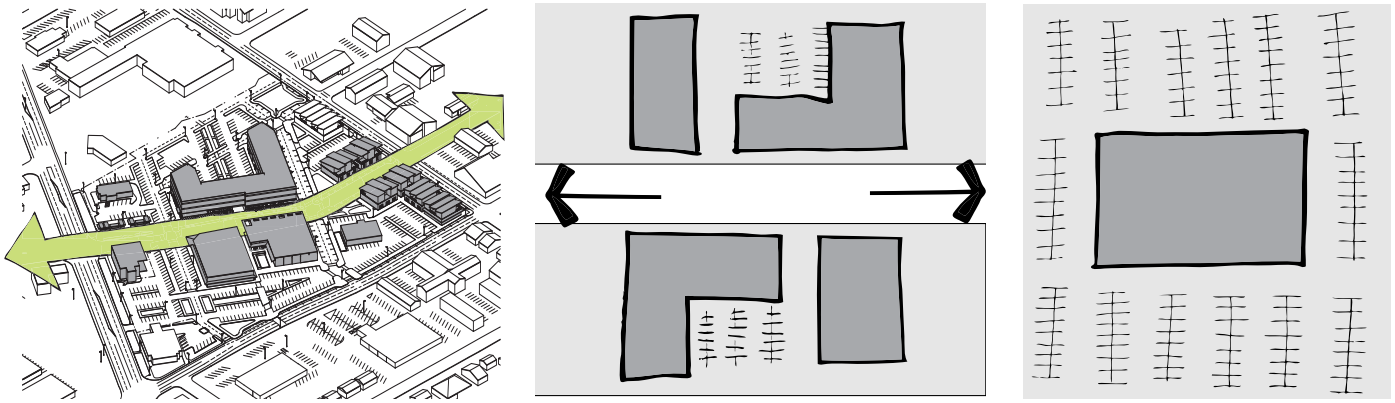


Figure 12-14: Approach 1 diagrams show Mel Street reconnecting the surrounding neighborhoods and the urban approach used, compared with the disconnection of the existing site fabric.

Figure 15: Approach 1 site plan.

Figure 16: An aerial perspective of Approach 1.

Approach 1 also places major importance on site use throughout the entire day, using many interconnected methods to achieve a high level of use. As an employment center, daytime activity can be expected due to the high number of employees working on the site. Leaving space for food carts and restaurants along Mel Street will encourage employees to stay on site during lunch hours and break times. To draw further activity to the site throughout the day, a major retail draw, such as a destination grocery store will be located on the site. The most difficult hours to keep the site alive are during the night. Entertainment choices like a bowling alley, bars, and restaurants will give the site nightlife, giving the current residents of the neighborhood a new hub of activity. Furthermore, live/work housing will be located on the eastern side of the site, neighboring existing medium density housing. The introduction of housing to the site will help bring life to the site in the nighttime hours when residents are home from work. The live/work archetype also encourages use by local businesses and artisans, responding to and respecting the existing demographics of the neighborhood. By catering to future site residents, employees, and visitors as well as existing residents of the neighborhood, Approach 1 can support activity at all hours of the day.

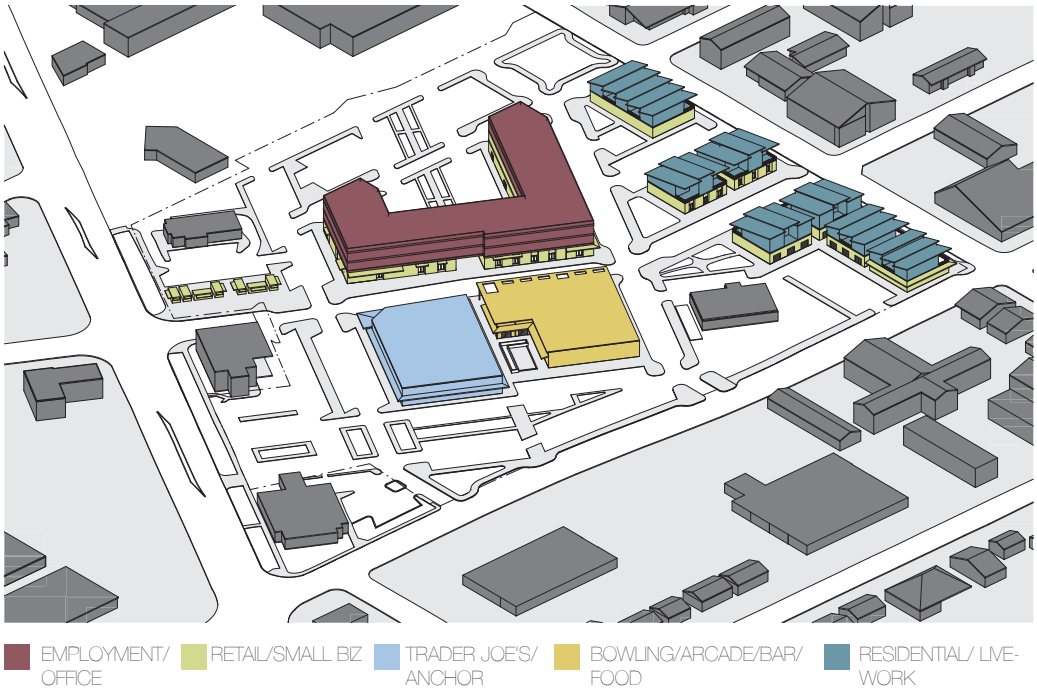
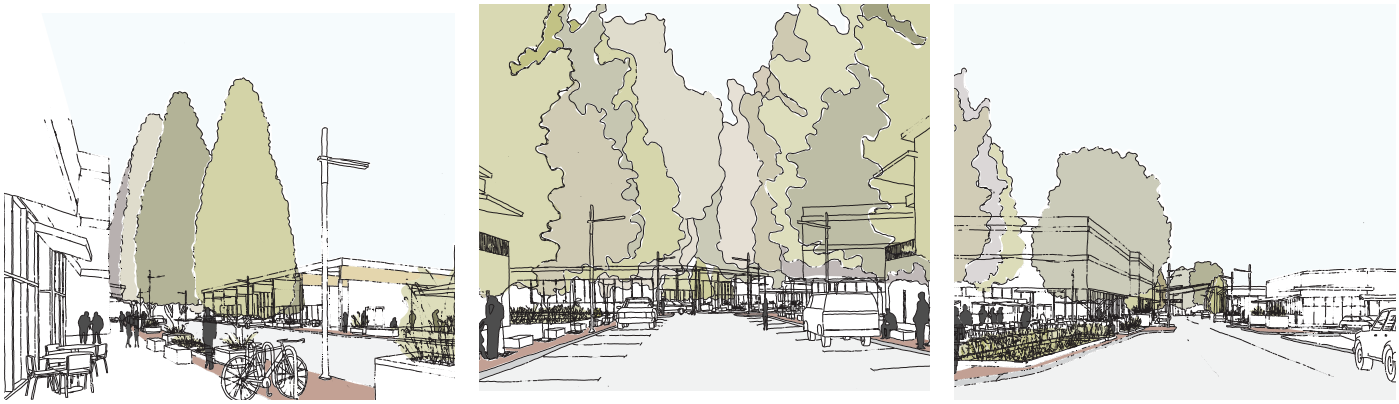


Figure 17: Mixed-use diagram.

Approach 1 encourages pedestrian and cyclist use, introducing a bike route and attractive sidewalks throughout the site. This approach recommends the introduction of a bicycle boulevard on 17th Street that connects downtown Main Street with the site. The bike route would continue through the site to Bi-Mart on the northern side, giving cyclists and commuters ease of access to the Mohawk neighborhood. (Existing bike routes through the neighborhood are located along the busy Mohawk Boulevard, discouraging many would-be commuters from cycling to work.) Sidewalks with attractive plantings and paving encourage pedestrian use of the site. Shoppers who might otherwise drive from shop to shop will be encouraged to walk instead. Implementation of pedestrian and cyclist strategies can help discourage car use in The Commons at Mohawk, making it a safer, quieter, and more walkable development.

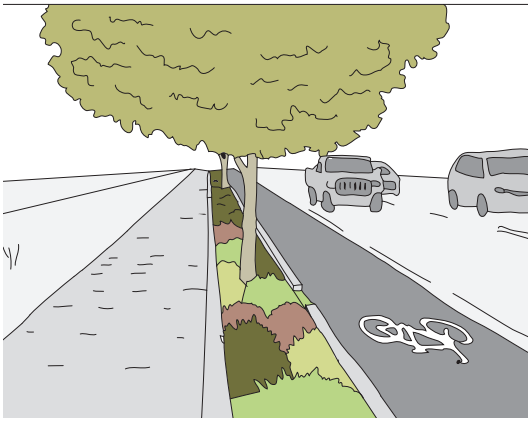
Figure 18: Plan of Mel Street.

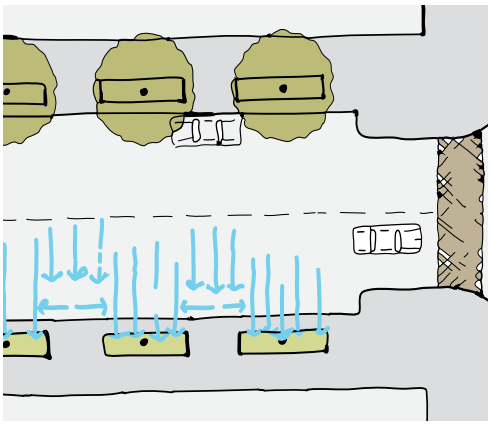


Figures 19-21: Perspectives highlighting the pedestrian-friendly environment created by Approach 1.

Sustainable Strategies

Sustainable strategies at an urban level are inherent in the design goals and subsequent interventions recommended by Approach 1, but the group also explored many active sustainable practices. Green streets are used throughout the site, helping to reduce the heat island effect while managing water within the site. Planting trees throughout the site provides shade while reducing the negative impact of the heat island effect that is often present in areas with large parking surfaces. The green streets use green gutters to filter and mitigate rainwater runoff from the site. Housing and offices throughout the site are oriented to best utilize daylight. Using sustainable strategies as a backbone for site design can help make a healthy development where people want to live, work, shop, and recreate.





Figures 22 and 23: Sustainable strategy diagrams: bike lane and bioswale; stormwater flow diagram.

Figures 24 and 25: Impervious surfaces (brown) converted to pervious asphalt (blue) and vegetation.

Figure 26: Section through Mel Street at the bowling alley.

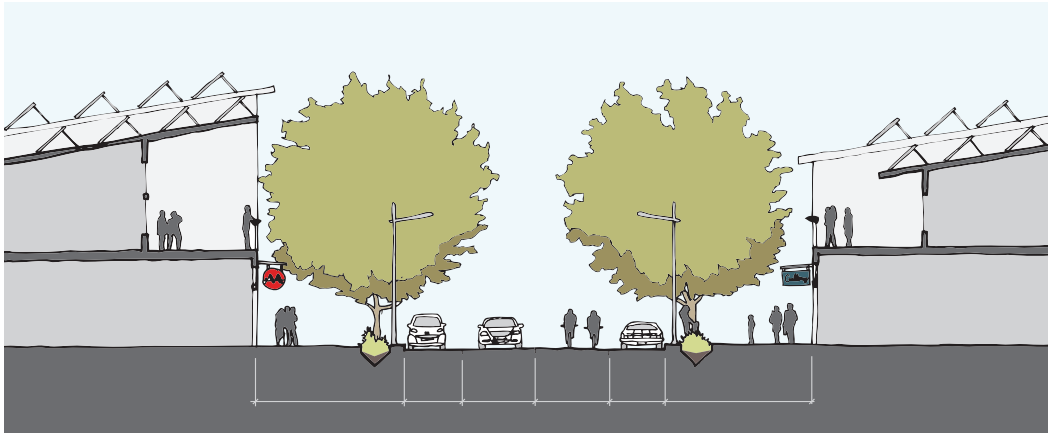


Figure 27: Section through Mel Street at the live/work housing.

Figure 28: Section through 16th Street.

Approach 2: Mohawk Crossing (Employment)

Lydia Chambers • Jamie Corsaro

Mohawk Crossing embodies a sustainable identity, creating green space for working and gathering. As an employment center for the City of Springfield, Approach 2 can influence people throughout the region, promoting ecological thinking to an expanded public field. Through increased design efficiencies, Mohawk Crossing is able to introduce green strategies into surrounding roadways, circulation patterns, parking areas, and building designs. By studying the Mohawk neighborhood at the nodal level, many design strategies can be derived from surrounding opportunities. These design strategies can unify the neighborhood's development and improve appearances and operations.

Figure 29: Improving and expanding greenways.

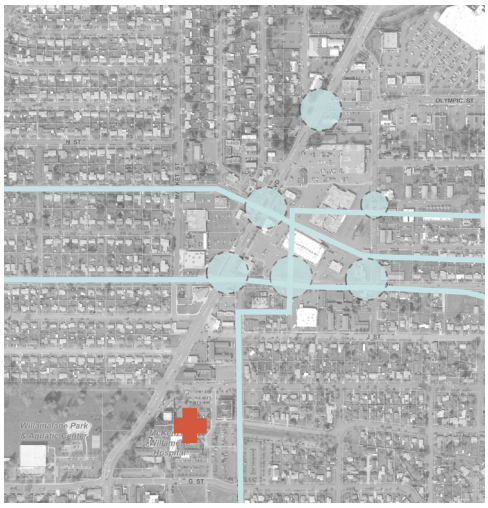


Figure 30: Nodal pedestrian and cyclist patterns.

Figure 31: Determining areas of influence.

Figure 32: Proposed increased street density.

Figure 33: Approach 2 site plan.

Goals and Interventions

Branding the site with a sustainable identity was a major goal of Approach 2's redevelopment proposal for the Waremart site. Green roofs, bioswales, abundant trees, increased density, and holistic site design provide passersby with immediate recognition of the site as a sustainable development. With an abundance of trees along streets and between parking stalls, Mohawk Crossing begins to match appearances with the nearby Willamalane Park. With a proposed increase in tree density along Mohawk Boulevard, the site, along with Willamalane Park, will begin to mark the entire Mohawk Node as a "green neighborhood."

Figures 34-35: Perspectives illustrating the sustainable identity of Approach 2.

Figure 36: Gathering space perspective.

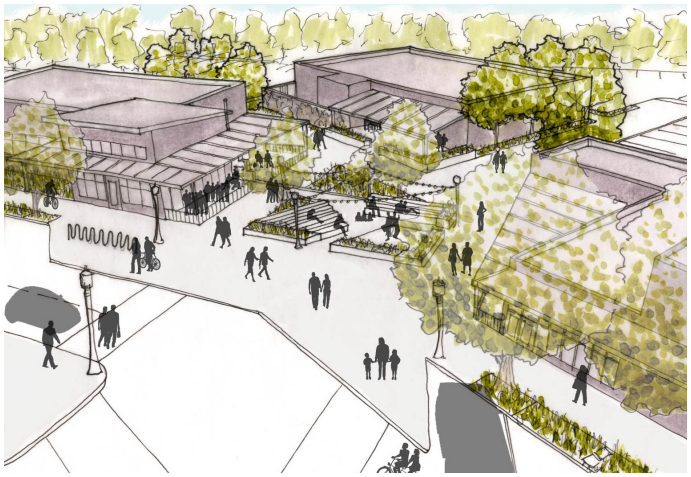


Figure 37: Restaurant Node perspective.

Approach 2 also proposes **creating a gathering place** in the center of the site, encouraging synergy between neighboring businesses and residences. The gathering place becomes a space for interaction between workers, businesses, and neighbors. Using the central focus of the gathering space, we propose two small, architecturally unique shops to give interest and differentiation to the site. Alongside the gathering place is a conglomeration of restaurants forming a smaller restaurant node within the development. The smaller scale of the restaurant node provides an intimate space for outdoor dining and opens the doors to high quality restaurants in the development. Building on current adjacencies, the restaurant node incorporates the existing Track Town Pizza at its core.

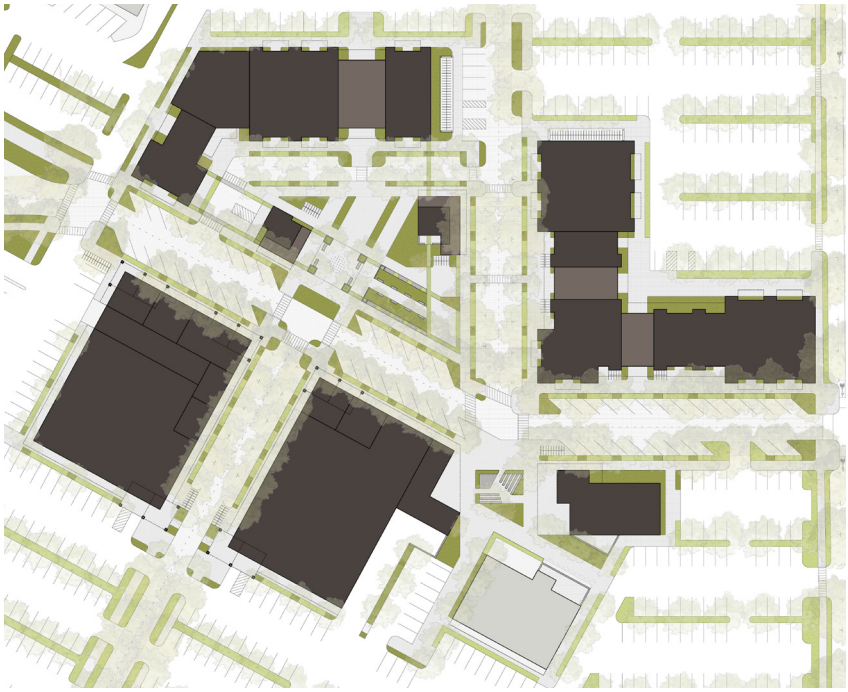


Figure 38: Plan of Approach 2's gathering space and restaurant node.

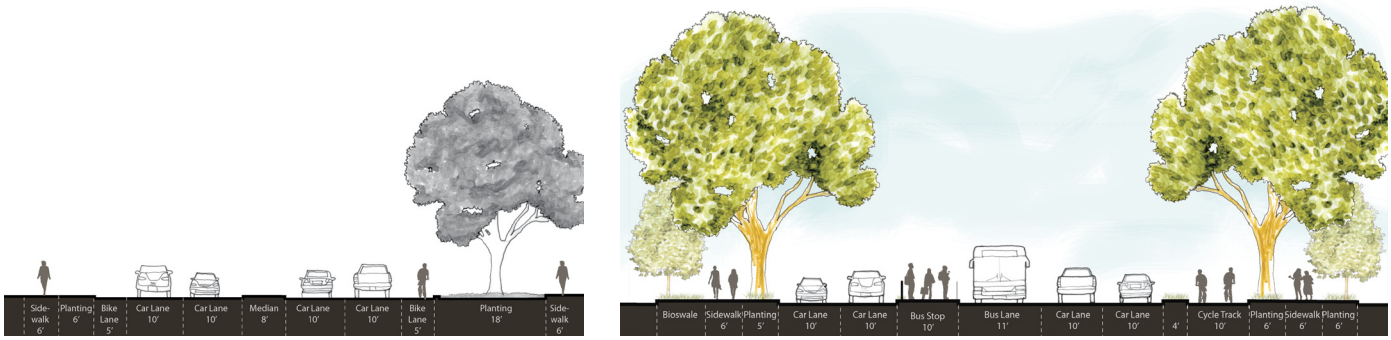
Sustainable Strategies

Approach 2 proposes interventions from the city and from the developer to make the Mohawk neighborhood a sustainable node. Street interventions are Approach 2's primary mode of achieving sustainability on a nodal level. Inefficiencies like underutilized turning lanes, oversized driving lanes, and unnecessary medians are taken out of the streets. Increasing the efficient use of the portion of the right-of-way dedicated to auto traffic allows for more landscaping, on-street parking, and safer bicycle lanes. The proposed interventions **make streets pedestrian friendly, promote bicycle commuting, and increase tree cover.**

We propose to adapt Mohawk Boulevard (see Figure 40 and 41) for the inclusion of the EmX bus. The large median can be replaced with a bus lane and bus platform. The introduction of the EmX bus route through the district will aid in commuting and boost connectivity throughout the city. To encourage safer bicycle commuting, the two existing bike lanes can be joined to form one protected cycle track. On Centennial Boulevard (see Figure 42 and 43) the large center turn lane can be removed to allow for on-street parking. The street adaptations proposed by Approach 2 use existing space more efficiently to create safer, more habitable streets.

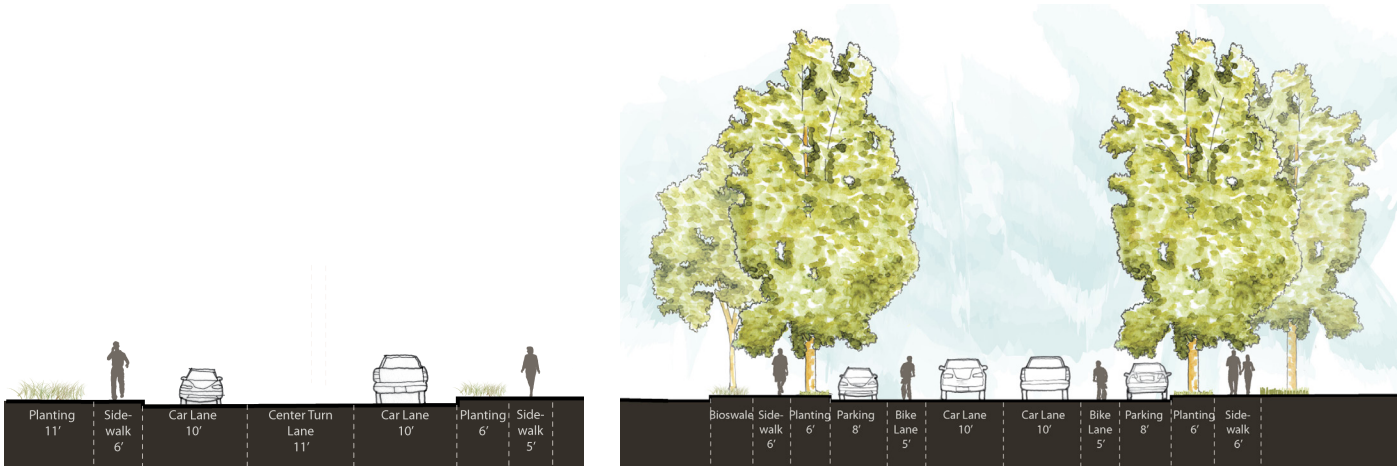
The main plaza of the development highlights the sustainable identity of Approach 2. Alongside small boutique shops is a highly visible interactive bioswale. The placement of a large bioswale in the site's center informs shoppers and employees of the importance of sustainable development. The bioswale acts not just as water mitigation device but also as a design feature for the development. The interplay between bioswale and site design is illustrated most clearly in the plaza, shown in Figure 39. By integrating sustainable practices throughout the design of Mohawk Crossing, Approach 2 embodies the level of sustainability that many new developments strive for.

Figure 39: The main plaza with an emphasis on sustainable practices proposed in Approach 2.



Figures 40 and 41: Mohawk Boulevard before (left) and after (right) proposed interventions.

Figures 42 and 43: Centennial Boulevard before (left and after (right) proposed interventions.



Figures 44 and 45: 18th Street before (left) and after (right) proposed interventions.

Approach 3: Mohawk Park (Housing)

Chris Becker • Billy McCormick • Robyn Webb

The third approach to redeveloping the former Waremart site explores the union of a mixed-use housing development with themes of sustainability, livability, and identity. What arose from this amalgamation of ideas was a unique housing development that incorporates a neighborhood park, increased density, and a strong connection to the surrounding neighborhoods. Mohawk Park's identity as a sustainable center for the Mohawk neighborhood can help draw residents and retailers looking for a unique and healthy place to live and work.

Figure 46: Experiencing sustainability at a Mohawk Park Café.

Figure 47: Good neighborhood diagram.

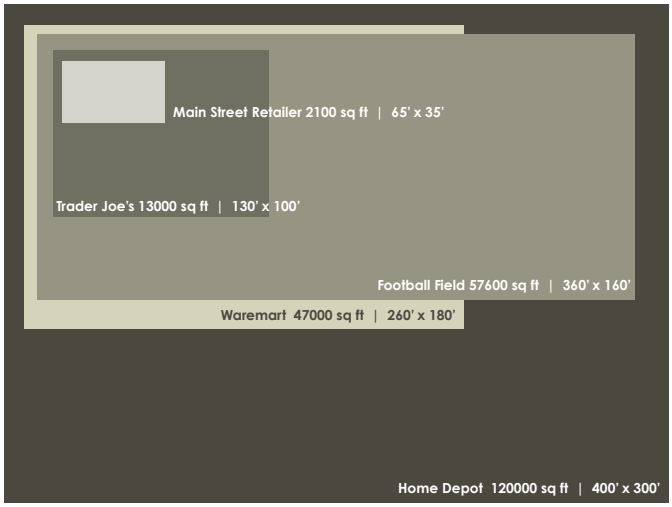


Figure 48: Comparing the "Big Box" and the "Main Street" retailers.

Figure 49: Approach 3 site plan.

Goals and Interventions

Approach 3 set out to **create an identity** for Mohawk Park as a great sustainable neighborhood. By studying other great neighborhoods, Approach 3 created a list of metrics for the “great neighborhood.” Identifying history, open space, schools, trees, local business, and walkability as key attributes of a great neighborhood, Approach 3 focuses on ways to apply these traits to urban design. Creating a place for local business to thrive was an important challenge on the site, especially as the Mohawk area is becoming dominated by chain retail stores. To encourage use by local business owners, Approach 3 decreases the size of most stores to around 2,000 square feet, a marked decrease from current trend of the “big box” store, which can be up to 120,000 square feet.

By creating a place for local business to thrive, Mohawk Park is also creating amenities for housing. Beyond local businesses, Approach 3 also calls for a YMCA, a Trader Joe’s, and a neighborhood park within the site. These amenities will both supplement neighboring residents’ needs and draw new residents to Mohawk Park’s housing. Within walking distance from two public schools, and with family-oriented amenities within the site, the new housing should be attractive to families. As a centerpiece to the neighborhood, Approach 3’s greatest amenity is its park. The Mohawk neighborhood is currently devoid of small-scale parks. A neighborhood park gives the large population of people living on and around the site a place for recreation and relaxation that is within a comfortable walking distance from homes and schools. The park is located along the edge of the site, creating a connection with the neighbors of Mohawk Park.

Figure 50: Looking into Mohawk Park: "A Neighborhood Amenity."

Mohawk Park is intended to be a place for a broad spectrum of people and incomes to live, using a diversity of means to accomplish this goal. With many different housing typologies and sizes, Mohawk Park can accommodate families and singles, young and old, rich and poor. Mixed-use apartments, row houses, and one- and two-story apartments are proposed, giving many options of living style as well. Mixed-use housing places residents directly over shops, giving a uniquely urban sense to the neighborhood. Those looking for a greater sense of privacy and ownership may choose to live in a row house with a private yard and garage. Apartments are proposed throughout the site, providing a high density of units per acre.

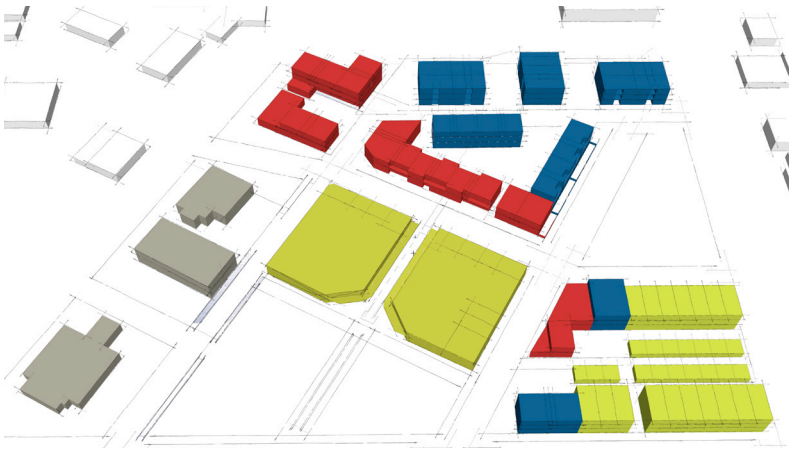


Figure 51: Housing typologies proposed in Approach 3, with apartments in red, row houses in blue, and mixed-use housing in green.

With sustainability as a driving force in Mohawk Park's development, a strong emphasis is put on visibility of the development's sustainable elements. One of Approach 3's goals was to tell a story with the path of storm water through the site. Sloped roofs and curb cutouts on streets collect rainwater and funnel it into bioswales and rain gardens that retain storm water and percolate it into the ground. Marsh plants, shrubs, small trees and other foliage absorb and filter water while holding soil in place. The interpretive rain garden created in the heart of the former Waremart building is a centerpiece of active water management. An outdoor path and rain garden created by removing two 20-foot bays from the building connect the YMCA and Trader Joe's to the development's main street. Rainwater landing on the expansive roof of the former Waremart building is drawn by gravity to the centrally located rain garden/breezeway, giving visitors to the site a visible symbol of the sustainable strategies at play in Mohawk Park.

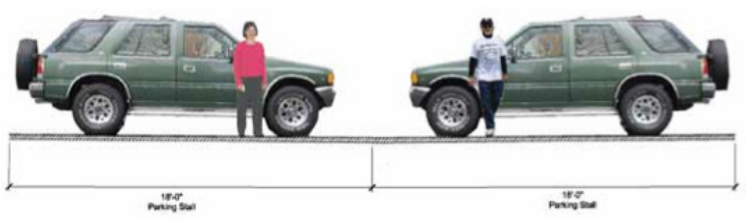
Figures 52 and 53: A cross-section and perspective of the interpretive rain garden symbolically cutting through the heart of the former Waremart building, giving the development an identity as a leader in sustainable development.

Sustainable Strategies

Increasing density, walkability, livability, and sustainable education on the site are sustainable strategies that help achieve broader design goals. Approach 3 also proposes small changes that can increase the sustainability of the site design. More specifically, Approach 3 explores the impact of sustainable strategies in roadway and parking lot design.

Conventional parking stalls are often oversized and unnecessary. By decreasing 18-foot parking stalls to 15 feet, a considerable amount of space can be created for landscape-based stormwater management. These parking stalls can be used throughout the site to increase the abundance of bioswales while meeting parking demand.

Flow-through planters are proposed in conjunction with parking and landscaping throughout the site to increase rainwater retention and infiltration wherever possible. Flow-through planters are contained landscape areas designed to capture and retain stormwater runoff. With vertical sidewalls, they have more storage volume in less space than a standard bioswale. They can be built to fit between driveways, utilities, and trees. This approach locates pockets of green throughout the site.



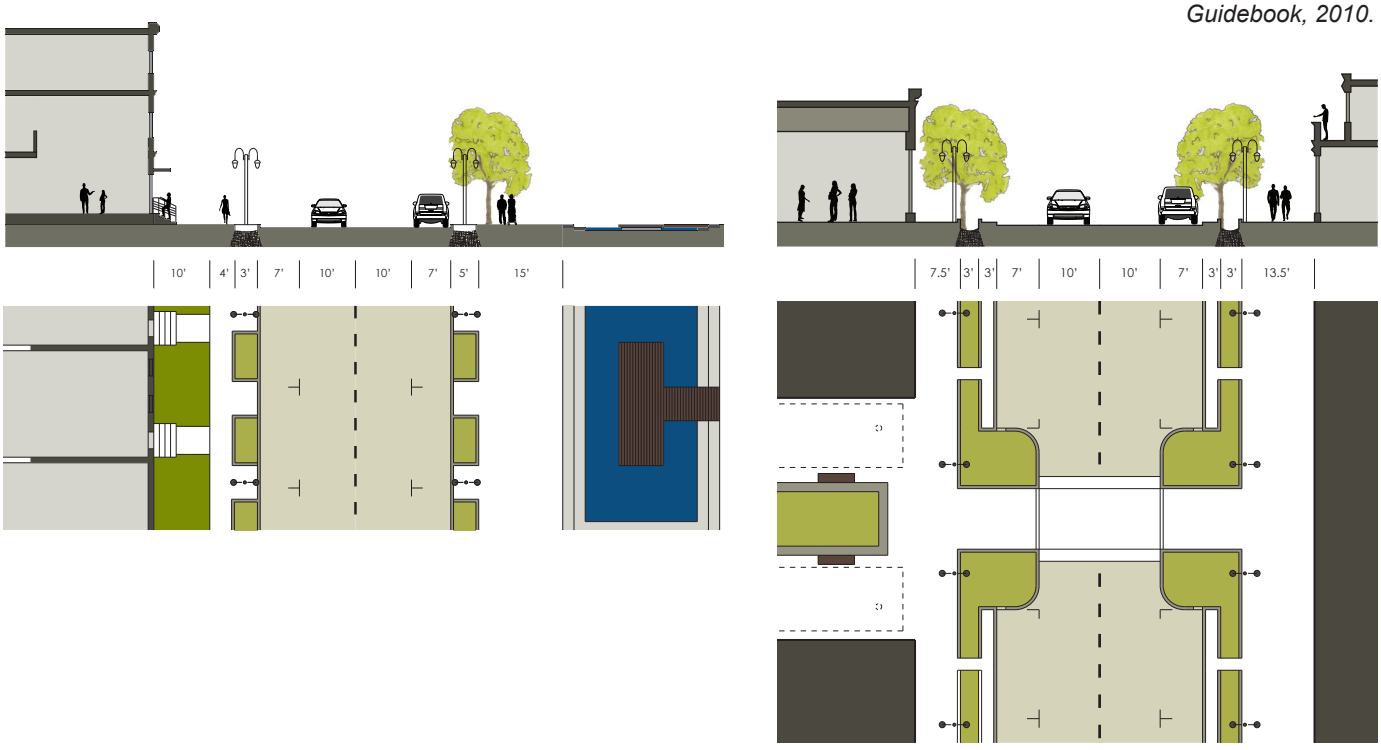
▲ *This typical cross section illustrates a conventional parking lot condition with 18 feet long parking stalls.*

Figure 54: Diagram re-evaluating the standard parking stall length. Source: San Mateo County Sustainable Green Streets and Parking Lots Design Guidebook, 2010.

Approach 3 uses stormwater curb extensions in place of standard sewers and gutters along the redesigned main street. Stormwater curb extensions are landscaped areas within the parking zone of a street that capture stormwater and allow it to interact with plants and soil. The curb extensions provide a buffer of grasses, sedges, rushes, shrubs, groundcovers, and trees between pedestrians and cars while decreasing street widths at crosswalks, producing safer pedestrian conditions on the site.

Integrating sustainable strategies throughout the site gives the design a marked identity to improve the community. Through redevelopment of the site in a sustainable manner, Approach 3 can transform eleven acres of previously impermeable surface area, creating a site-wide stormwater mitigation and retention system. This greatly eases the stresses currently placed on the Springfield stormwater management system and could serve as a precedent for future development throughout the region.

Figure 55: A storm water curb extension. Source: San Mateo County Sustainable Green Streets and Parking Lots Design Guidebook, 2010.



Figures 56 and 57: Sustainably designed street cross-sections for Approach 3.

Approach 4: The Mohawk Redevelopment (Housing)

Naomi Campollo • Melissa Hansen • Kendyl Mitsui

Approach 4's proposal is based on amenity-driven housing development that serves new housing on site and the existing neighborhood. Using urban design interventions to enforce the site as a "people place," Approach 4 takes a humanistic approach in its design. The Mohawk Redevelopment explores in detail the human scale, human interactions, and human needs.

Figures 58 and 59: Two perspectives of the plaza and boardwalk, showing community and pedestrian oriented activities.

Goals and Interventions

Dual goals of creating active streetscapes and a place for pedestrians are central to Approach 4's many design recommendations. A smaller block structure is recommended to encourage pedestrian travel throughout the site. Outdoor space is also provided for each of the 145 housing units located on site, again encouraging residents to get outside and activate the streetscape. The newly proposed block structure and building proximities shown in the figure-ground drawings (see Figures 61 and 62) illustrate how connections could increase with a denser, more interconnected plan.

Approach 4 also intends to provide a center for Springfield, creating within its design an active retail area to draw people from throughout the city. With retail stores and community centers like a gym and daycare, the Mohawk Redevelopment gives the people of Springfield a new center for daily activity. Improving the site for local businesses is another way to draw people and retailers to the site. Providing exciting public places to draw people to the site and activate businesses is a major strategy employed by Approach 4. Along the new main street through the development (Milk Street), a public plaza activates the street. Figure 64 shows a plan of the public plaza, with its exciting use of street furniture, designed to create interesting "people places" as shown in the plaza perspectives (see Figures 58 and 59).

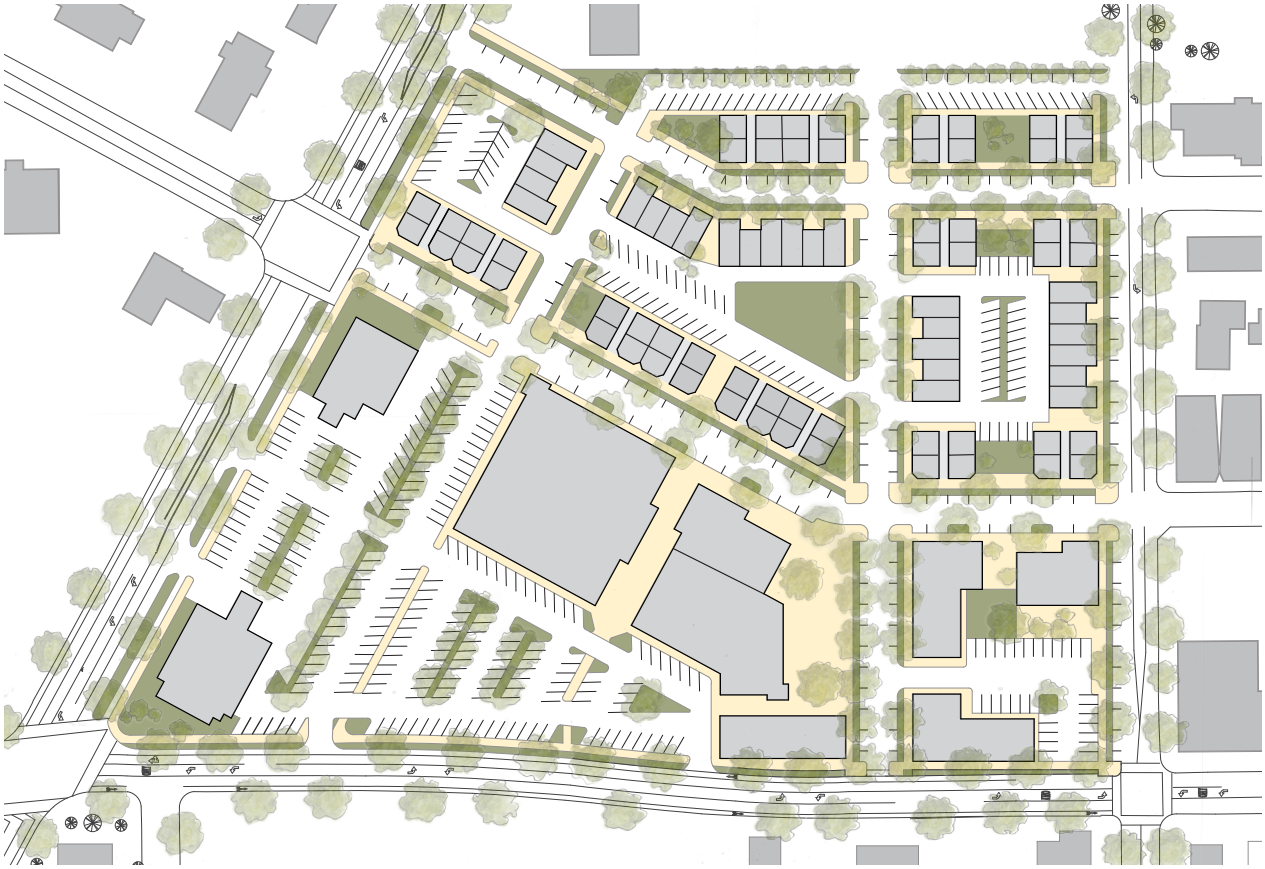


Figure 60: Approach 4 site plan.

Figures 61 and 62: Figure-ground studies of the site before and after proposed changes.

Figure 63: Perspective highlighting an active streetscape.

The Mohawk Redevelopment proposes to minimize the sea of parking for cars, introducing on-street parking and tucks away parking lots wherever possible on the site. Adding buildings and trees along Mohawk Boulevard diminishes the impact of larger parking lots and improves the face of Mohawk Boulevard. Improvements to the face of Mohawk Boulevard makes the site more inviting to the high volume of traffic that moves up and down the street every day, greatly improving the chances of successful retail development on the site.

Figure 64: Plan of the plaza and boardwalk area of Approach 4. The street furniture in red creates many moments for people to interact with one another and the environment.

Figure 65: An opportunities and constraints map reveals the importance of edge conditions. Major streets with transit lines are highlighted in yellow.

Figure 66: A bird's-eye view of the proposed site redesign, with opportunities and constraints recognized and addressed.

Sustainable Strategies

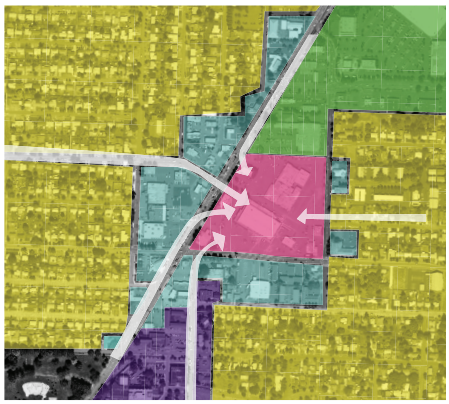
Approach 4 explores many opportunities to incorporate sustainability into the framework of residential development. Housing units are organized along a north/south axis to improve passive solar orientation, creating opportunities for positive solar gain and daylighting. When possible, building reuse, rather than demolition, was chosen to minimize project waste. The former Waremart building is repurposed as a grocery store, weight room, and child care center, coupling history with sustainability. A large community garden was also proposed as a place for neighbors to interact and grow fresh produce for themselves. Approach 4 uses urban design strategies to enforce a sense of community with the inclusion of a community garden in the design proposal.

Figure 67: A diagram of sustainable strategies utilized by Approach 4; pink highlights passive solar orientation, blue highlights the community garden, yellow highlights building reuse, and green highlights bioswale placement on site.

Approach 5: The Mohawk (Medical)

Ben Bye • Dijon Jones • Emilio Todescato

Approach 5 explores the confluence of major site influences and how they can lead to the design of a successful nodal hub. This approach is driven by the energies of existing retail, medical, and residential uses already present in the neighborhood. Through the creation of an urban fabric for the Mohawk neighborhood, Approach 5 hopes to facilitate beneficial urban growth at the scale of the site and the city.



Figures 68-70: Diagrams used by Approach 5 to explore the opportunities like the continuation of green streets (shown in green in Figure 69) and constraints like the sea of parking on and around the site (shown in pink in Figure 68), as well as how the surrounding uses can influence the site and make it a central node of the neighborhood (in Figure 70, The Mohawk site is shown in pink, medical use in purple, local commercial in blue, chain retail in green, and residential in yellow).

Goals and Interventions

The driving goal behind the design of The Mohawk was to create a nodal confluence of the surrounding neighborhood's energies and uses. Approach 5 draws energy from the excitement of local business owners and residents toward the project and is tied closely to the local context. The current neighborhood has a pattern of current uses that help organize Approach 5's site plan. Figures 68-70 above illustrate the neighborhood uses that surround the site and how they inform the site's design. Current major neighborhood uses responded to by Approach 5 are the hospital and its outlying clinics to the south, two residential neighborhoods to the east and west, chain retail to the north, and smaller scale local commercial use located on and around the site. Approach 5 used those surrounding forces within the context of the site to guide proposed development on the site. Around the edges of the site, proposed uses respond directly to existing adjacencies and their possible synergies, while the center of the site becomes a mixed-use node that responds to the needs of the neighborhood as a whole.

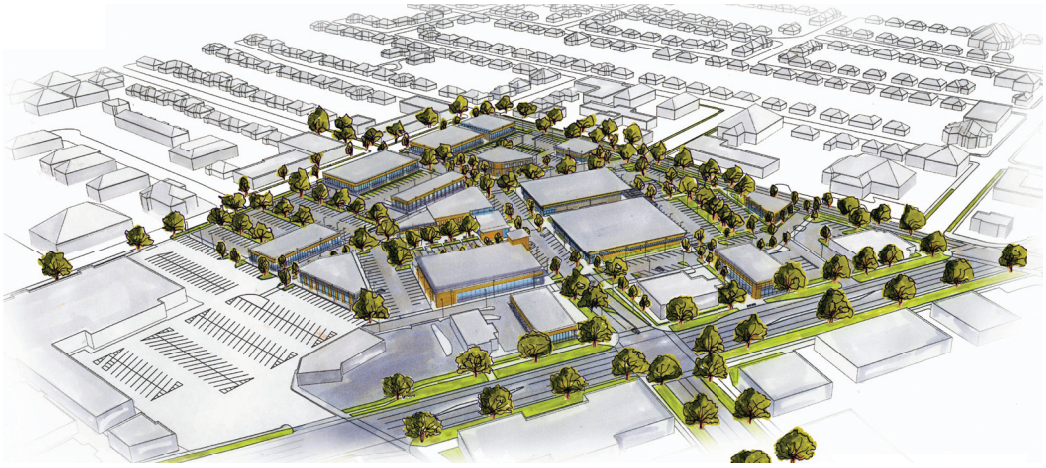
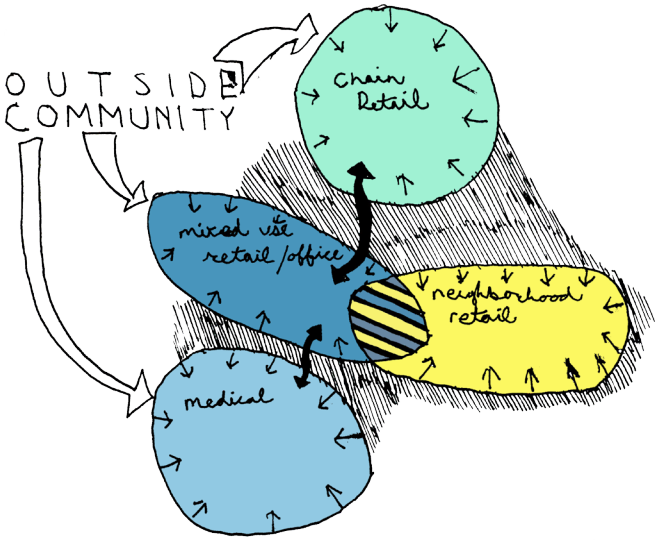
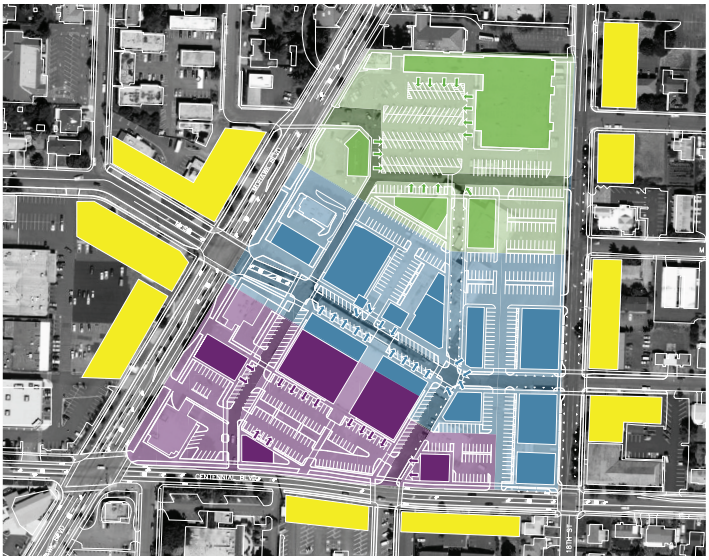


Figure 71: Approach 5 site plan.

Figure 72: Approach 5 site plan.





Figures 73 and 74: Diagrams showing the interplay and resolution of the disparate uses that surround the site.

In the design of a development with the contrasting uses of medical and retail bundled together, consideration of their interface was important. Developers and urban planners who reviewed students' work during the design process questioned the validity of the combination of uses. Rather than throw away the retail side of the design, which is fundamental to the creation of place and identity within the Mohawk node, Approach 5 proposes two distinct centers, one of larger-scale medical uses directly related to the McKenzie-Willamette Medical Center, and another of retail with community-scale medical offices interspersed throughout. Community-scale medical offices are located on axis with the major residential areas surrounding the site. The mid- to large-scale medical uses were defined as outpatient clinics, physical therapists, medical offices, urgent care, and medical labs. These buildings are to be located on the southern edge of the site closer to the hospital. Community-scale medical uses are those that can serve the community and aid in the improvement of health. These are areas of the medical field that can fit unobtrusively into urban retail blocks, fitting into small niches with as little as 800 square feet for psychiatrists, to around 1,600 square feet for chiropractors. Other community-scale medical uses could include gyms, yoga studios, and dance studios. All of these uses can coincide with retail, gaining value from strong synergies with other uses as they put more eyes on the businesses.

Figure 75: A diagram illustrating the ability of community scale medical uses to fit into the niches of a retail neighborhood.

Figure 76: A perspective from Mohawk Boulevard illustrating the visibility of major shops located along the main street.

Figure 77: A perspective looking from the major medical hub through the axis to the retail hub.

Figure 78: The main plaza and pavilion as a magnet for the main street.

Another major goal and consideration of Approach 5 was to create a sense of place and community for the people of the Mohawk neighborhood through the design of an active and lively main street bisecting the site. To encourage activity on the main street, a wide mix of uses was proposed. Small storefronts cover the south side of the street, providing spots for local businesses to continue to thrive in the neighborhood, while a major retail draw, like a Trader Joe's or Market of Choice, is proposed to bring customers from throughout the Springfield area. Designing parking and building entrances to encourage movement from one shop to the next was a major consideration of the design, and can be seen in the enlarged plan (see Figure 79). To draw customers from the chain retail hub to the north and the medical hub to the south, an axis is proposed between the two, terminating in the site's center with an attractive architectural pavilion. The pavilion, envisioned here as an ice cream shop, acts as a magnet pulling people into the site. Another goal of the pavilion and the main axis through the site was to educate residents on the sustainable features utilized on site. The roof of the pavilion funnels water into a rain garden that lines the outdoor dining plaza, illustrating the site's sustainable water management practices.

Figure 79: A plan highlighting the central node of the site.

Sustainable Strategies

Approach 5 integrates sustainable strategies into many aspects of the design. On a broad level, block size is reduced to make the area more walkable, transit has more access to the site, and a focus on neighborhood integration reduces the need for residents to travel beyond the neighborhood for daily activities. This approach also uses sustainable systems to manage water and beautify the site.

The first step recommended by Approach 5 is to improve the edge conditions around the site. New bioswales and new trees along the site's periphery will improve the aesthetics of the site immediately. Improved edge conditions can help pull neighboring residents onto the site and into its businesses. Improving the edges of the site may also influence neighboring landowners to make similar improvements.

Approach 5 also recommends a holistic approach to water management on site, introducing site-wide water management strategies on roads, sidewalks, and roofs. The streets and parking lots throughout the site would all have adjacent permeable surfaces to naturally filter water and mitigate water runoff. On-street parking spots use permeable pavers, both as a water management tool and to differentiate parking surface from driving surface. Water collection is another way to reduce water waste on site. With 145,500 square feet of roof surface on the site (after build-out), rain water collection could be a useful strategy. Rain water collected from roofs can be used in bathrooms and for irrigation of plants in the dryer summer months, greatly reducing potable water demands on site.

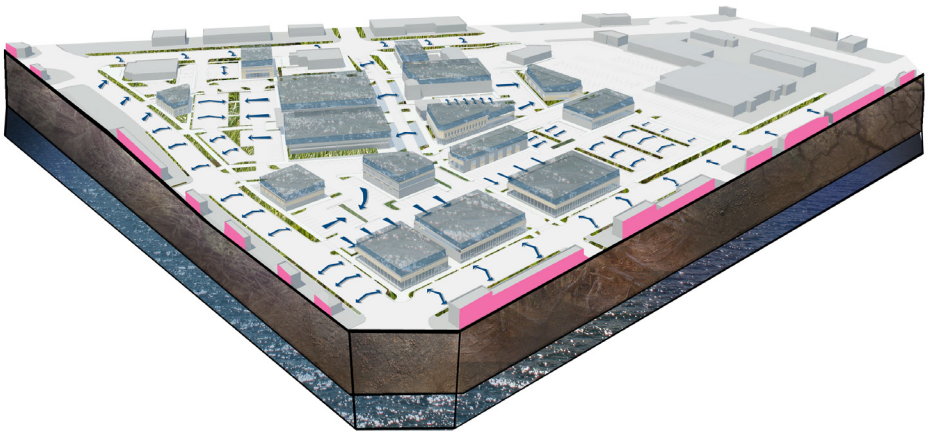


Figure 80: Diagram of site-wide water management strategies.

Figures 81 and 82: Centennial Boulevard before and after recommended edge improvements.

Figures 83 and 84: Diagram of the medical parking lot before and after recommended edge improvements.

Figures 85 and 86: Centennial Boulevard before and after recommended edge improvements.

Approach 6: Mohawk Commons (Medical)

Dan Reid • Kaysie Rozsonits • Farleigh Winters

Mohawk Commons approaches the redevelopment of the former Waremart site with a goal of improving its identity. Through the incorporation of sustainable practices, Approach 6 intends to improve the longevity of this nodal development and create a precedent for future projects. A large assisted living center is proposed as a catalyst for future site development.

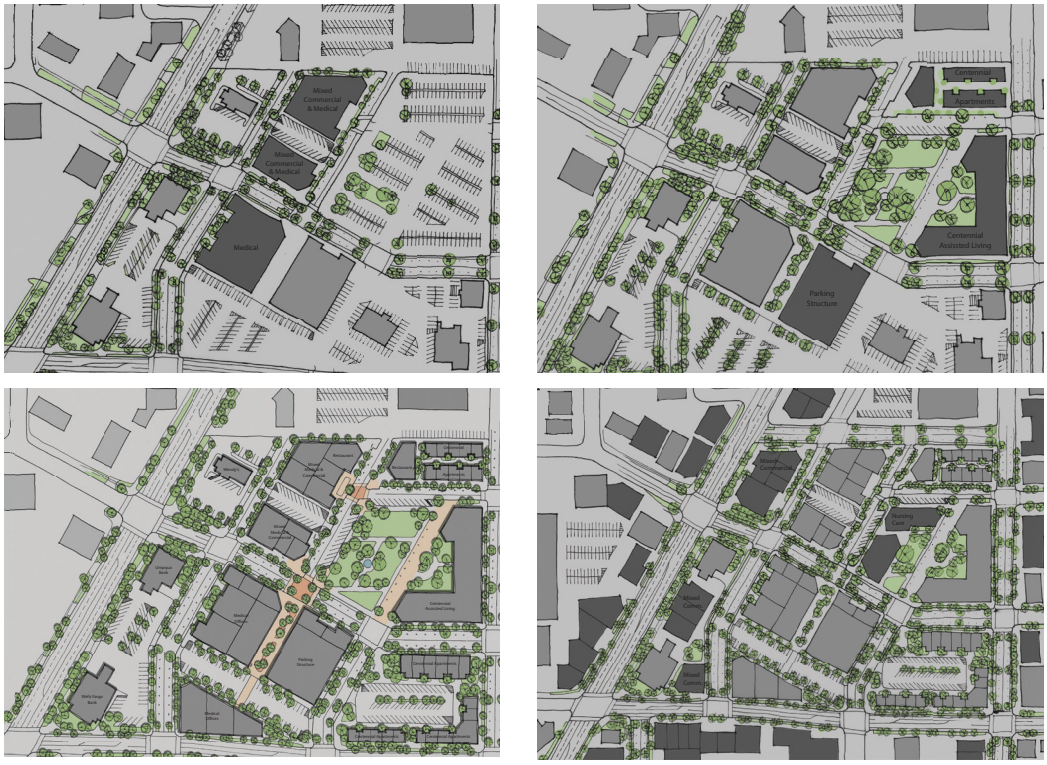
Figure 87: Medical development with a sustainable identity.

Figure 88: Appearance of Mohawk Commons from neighboring Bi-Mart.

Figure 89: Site plan of Mohawk Commons.

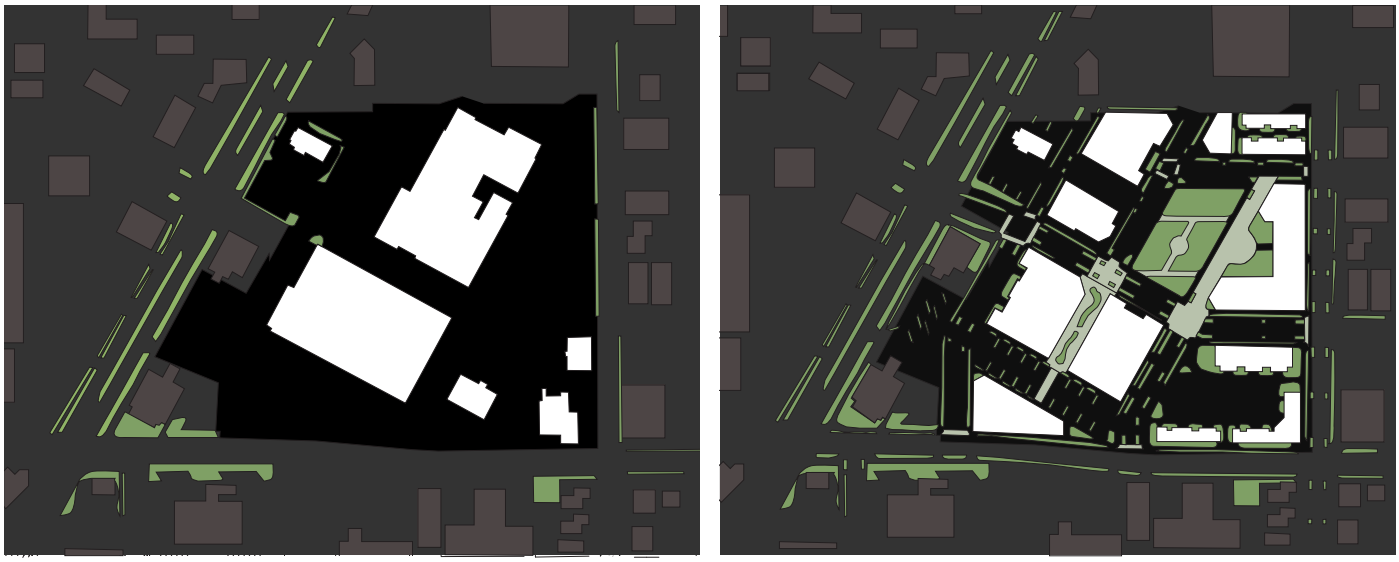
Goals and Interventions

As a means of creating both identity and economic viability, Mohawk Commons seeks to establish a concentrated medical district, with strong commercial and residential attributes. In addition to creating a structure for medical offices and commercial units, an assisted living facility is proposed. Assisted living can provide an economic engine for other uses on the site. With assisted living come many synergistic relationships between residents and medical uses, restaurants, and retail. Centennial Assisted Living, the proposed assisted living center, can be supported by McKenzie-Willamette Medical Center and its surrounding clinics as well as proposed medical offices, stores, and entertainment amenities located on site. Senior residents have the advantage of aging in place, maintaining the amenities they enjoyed while living independently, and being provided with the level of support they need. Mixing uses on site is a way to give residents the independence of nearby amenities and give stores a broader customer base than they would otherwise have. Independent living apartments are also offered on site as a place for residents to transition comfortably into assisted living. To further facilitate the success of the assisted living and medical uses on site, Approach 6 proposes a rezoning of the Mohawk neighborhood, expanding medical zoning north into the site from the hospital to the south, and expanding residential zoning into the site from the east. The rezoning of the Mohawk Node will encourage growth patterns that aid in the redevelopment of the site.



Figures 90 - 93: A series of plans describing the phases of proposed construction for Approach 6.

Approach 6 proposes a coherent development plan, with four phases of expansion. Phasing maximizes the balance of investment and return on development. The first phase, shown in Figure 90, proposes the construction of the street grid as well as some medical offices and retail. With medical and retail uses in place and running, the proper amenities are available on site to



Figures 94 and 95: Diagrams of impervious surfaces (black) and pervious surfaces (gray and green) before and after development.

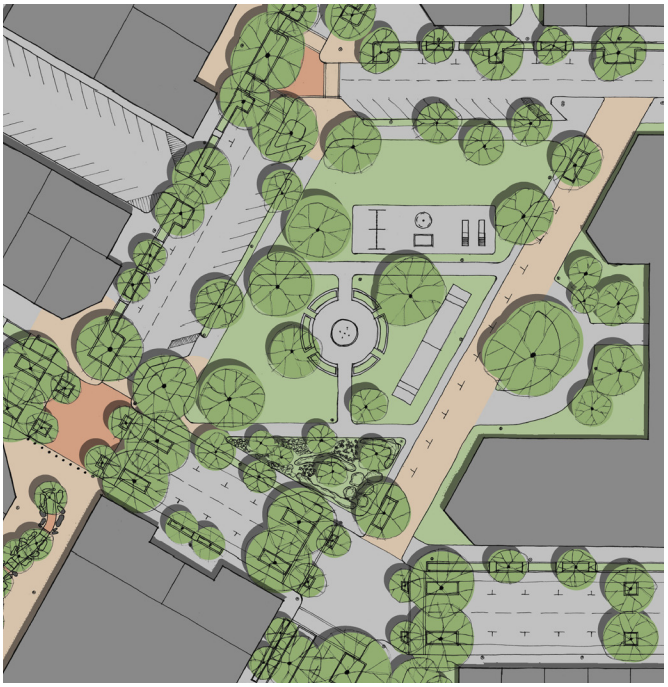


Figure 96: Plan of the centrally located park.

facilitate the construction and support of an assisted living center in phase two. In phase two, developments continue to increase the building density on site. The construction of a parking garage is recommended to support a higher building density on site. The high costs of a parking structure can be offset by the high revenues of the medical industry and the higher density of development afforded through its presence. The proposal of Approach 6 focuses on the third phase of design, which meets current parking demands and design goals. Beyond the third phase of development, increased transit use and higher density may allow reductions in the area dedicated to parking (see Figures 94 and 95).

Sustainable Strategies

A large park is the highlight of Approach 6, giving residents living on or near the site an outdoor gathering space. A park is especially important to residents of the assisted living center who may have a limited range of mobility, and it provides residents with views of greenery from their homes. The park serves to increase pervious surfaces and improve tree canopy coverage on site. With the inclusion of street trees and park trees, Approach 6 was able to give the site 59% canopy coverage. Increased pedestrian and bicycle access on site reduce the necessity of automobile use, enlivening street frontages with added activity. Infiltration planters are used to decrease water runoff on site while increasing the prevalence of native plant species.

Figure 97: Section through the park.

Conclusion: Summary of Design Recommendations

The City of Springfield, along with developer Steven Yett, are interested in the redevelopment of the former Waremart site. Focusing on medical, employment, and housing developments, students explored the many opportunities of the 11-acre site. In conjunction with the City of Springfield's Mohawk Nodal Development District plan, students designed mixed-use urban plans focusing on sustainability, connectivity, increased density, identity, and mixed uses. With high visibility from the busy Mohawk Boulevard, the site lends itself well to the proposed development patterns. The former Waremart site is an excellent location for the exploration of sustainable development in a suburban infill location. Given the profusion of similar abandoned "big box" sites across the nation, redevelopment of the former Waremart site can provide precedents for similar projects in the future.

The following recommendations emerged as common themes appearing throughout the six different design approaches.

Develop a Sustainable Identity

- Use sustainability as a defining development feature. In each of the above approaches, it provides a way to create a unique and influential identity for the site.
- Integrate water mitigation features throughout site plans, with a focus on bioswales in large impervious parking areas.
- Use water mitigation features as an opportunity to educate visitors to the site of the many environmental benefits the features exemplify.
- Plant trees throughout the site to reduce water runoff, reduce the heat island effect, and increase the development's aesthetic qualities.
- When possible, re-use existing buildings on site to reduce waste. The former Waremart building was incorporated into most of the design approaches; its structure can easily be adapted to many different uses but was most commonly recommended for use as a grocery store.

Introduce Walkability and Connectivity

- Introduce a block structure to the site, providing safe pedestrian sidewalks and decreased parking lot sizes. A block structure will encourage pedestrian activity on site and to the site, decreasing automobile dependence.
- Provide safer bicycle routes to and through the site, supporting bicycle commuters. Current bike routes on busy streets like Mohawk Boulevard discourage cyclists because of the street's high-speed traffic and narrow bike lanes. Student designs recommend designating 16th Street south of the Waremart site as a bike route for its connection all the way to Main Street as well as creating a protected bike track on Mohawk Boulevard.

- Add streets and sidewalks within the site to increase street frontage for businesses and residences.

Consider Parking

- When large parking lots are needed, break them up with bioswales and vegetation, making them less severe.
- Provide on-street parking to reduce parking lot demands and to help bring activity to the streets.
- Use smaller interspersed parking lots to create pedestrian-scaled parking with closer proximity to individual destinations.

Design Sustainable Streets

- Create curb extensions at intersections to slow traffic and shorten pedestrian crossing distances.
- Place bioswales or flow-through planters on the edges of roads to mitigate water runoff from streets and to give pedestrians a layer of separation from the roadway.
- Provide on-street parking as a buffer between the street and sidewalk, as well as to minimize demands for large parking lots. On-street parking will also serve to slow down traffic, creating safer pedestrian conditions.

Design in Phases

- Implement changes to the site in phases to encourage development within and around the site. Most approaches are not feasible to implement all at once.
- Consider future street placement and complete the main street grid in an early phase of redevelopment. All six approaches called for the creation of a block structure in the site. If this block structure is part of a master plan for the site, it should be established early to provide a predictable development environment.
- Renovate the Waremart building as a first phase catalyst for future site development. Since renovation is less expensive than new construction, the renovation of the former Waremart building can be a strong impetus to initiate future site development.

Engage the Mohawk Node

- Create connections with the Mohawk neighborhood through continuities with existing development patterns around the site.
- Create a bike route along 16th Street south of the Waremart site to connect the site to the downtown and McKenzie-Willamette Medical Center, improving safe access to the site and the surrounding neighborhood by cyclists.

- Continue proposed street designs into the surrounding neighborhoods, weaving the site into the city with continued street trees and bioswales.
- Design nodal development patterns that can activate local business and encourage mixed-use development patterns as proposed by the nodal development district.

Encourage Mixed Use Development

- Mix uses throughout the site and the neighborhood to encourage activity throughout the day and create synergies between neighboring businesses and residences. Just as the Mohawk Business Association introduces fellow entrepreneurs to city residents through business referrals, a mix of uses can induce similar connections through increased frequency of interaction between businesses and local residents.
- Encourage the presence of local businesses and entrepreneurs at a variety of scales to promote a unique community atmosphere.