

Village of Mundelein
Master Redevelopment Implementation Plan
July 23rd, 2012



Village Board

Kenneth H. Kessler, Mayor
Esmie Dahlstrom, Village Clerk
Steve Lentz, Trustee
James Nutschig, Trustee
Robin Meier, Trustee
Ray Semple, Trustee
Ed Sullivan, Trustee
Terri Voss, Trustee

Working Group

Robin Meier, Trustee
Scott Black, Chairman, Plan Commission
Terry Roswick, Commission Member, Appearance Review Commission
Donna Morrison, Commission Member, Economic Development Commission
Michael Flynn, Assistant Village Administrator
Adam Boeche, Director of Public Works & Engineering

Plan Commission

Scott Black, Chairman
Charles F. Butler, Jr.
Bill Rekus
Gary Gunther
Meghan Spina
Raymond Ladewig
Richard Edmunds

Village Staff

John A. Lobaito, Village Administrator
Michael Flynn, Assistant Village Administrator
Adam Boeche, Director of Public Works & Engineering
Victor Barrera, Director of Planning and Development
Amanda Orenchuk, Planner

Consultant Team

Farr Associates
Sam Schwartz Engineering
Business Districts, Inc.
Mallon and Associates
Patrick Engineering

Table of Contents

Introduction.....4
Market Assessment and Development Strategies.....7
TIF Analysis.....13
Illustrative Master Plan.....20
Transportation Framework.....27
Phase I Staging.....35
Turning a Space into a Place: Place-making.....46
Pedestrian Overpass.....55
LEED-Neighborhood Development.....57
Regulatory Guidelines.....59
Implementation.....62
Appendix 1:
Technical Memorandum
for Pedestrian Grade Separation.....64
Appendix 2:
Downtown Retail Market
Development Action Plan.....72

Introduction

The Village of Mundelein has dedicated significant resources in order to revitalize the area surrounding the Metra station. Over the last decade, this has included the creation of a Transit Oriented Plan for the area, the creation of a TIF district, and the purchase of land. In order to build off of these prior planning efforts and resources already contributed, the Village is creating a Master Redevelopment Implementation Plan for 17 acres of Village-owned land (“study area”). The Master Redevelopment Implementation Plan (“the plan”) provides recommendations on the prospects for attracting private development and the necessary improvements to achieve it. Specifically, this includes the following goals:

- Create a vibrant, urban place
- Increase residential density
- Provide needed infrastructure
- Generate TIF increment to fund future improvements
- Attract new businesses and create employment opportunities

The plan addresses the actions and phasing necessary to create a place and to create a market where one currently doesn’t exist. This will not happen without public sector intervention.

The plan illustrates land uses and conceptual building scale and massing. However, it does not constitute detailed site or building design. As specific projects move toward implementation, their designs will vary from those illustrated in the plan. Specifically, this plan assumes the following:

- New buildings are presented as “building envelopes” with dimensions and calculations that are realistic but flexible. For example, building widths are 65’ to allow double-loaded corridors in case residential is preferred. Actual building designs will include appropriate levels of detail including upper-floor setbacks, façade articulation, signage, lighting and materials.
- Any representations of units, square footages, or parking spaces are conceptual. Actual layouts and quantities will vary based on site-specific factors and market conditions at the time of development.
- The proposed development program (uses and heights) should be permitted and encouraged. The Plan provides simply one option among many for potential buildout.

Site History

The study area is a subset of a larger area included in the Village’s 2004 Transit Oriented Plan. The goals of the 2004 Plan include:

- Reconnect the street grid
- Increase growth and density near train station
- Increase utilization of transit functions/surrounding area
- Draw activity into the heart of the station area
- Exemplify sustainable development practices
- Provide comprehensive stormwater management

Each of these goals remain relevant and critical to the area’s success and provide guidance for the Master Redevelopment Implementation Plan.



Rendered site plan from the 2004 URS Transit Oriented Plan

The larger economy has undergone significant changes since the 2004 TOD Plan was adopted and it is not feasible that this area could support the amounts of various land uses projected within that plan. Specifically, the 2004 Plan identified market support for the following land uses:

- 110,000-160,000 s.f. of convenience/national retail
- 50,000-100,000 s.f. of office
- 600-800 for sale residential units
- 400-600 for rent residential units
- 5.9 acres of open space (Village Green)
- 750 commuter parking spaces
- 450-675 visitor/shopper parking spaces

And identified potential tenants such as:

- Bookstore
- Cards & Gifts
- Coffee Shop
- Video/DVD Rental
- Small to Mid-Sized Lifestyle Center (100,000-150,000 s.f.)

The 2004 Plan contemplated a civic campus to include the Village Hall, the Post Office, community rooms for public gatherings, and/or fitness rooms for health and wellness, and/or stages for public performance with an anticipated 160 parking spaces.



Downtown TIF District Boundaries

The 2004 Plan offers guidance on implementation, some of which has already been completed. For example, a TIF district was created in 2005. Also as recommended in the 2004 Plan, the Village acquired the Sigma property in order to remove an antiquated, unsightly industrial use from downtown. The Village’s long-term goals for this site are to stimulate new, attractive, mixed-use development in the center of town, as detailed in the 2004 Plan. The Village desires to promote transit-oriented, sustainable development that complements existing development within downtown.

In 2011, the Village adopted an updated Comprehensive Plan which included a Downtown Subarea Plan. The Downtown Subarea Plan further described that while the vision created for downtown in the 2004 TOD Plan still had support and was still valid, “the density of development, timing, sequencing, and priority of implementation steps has changed.” The Master Redevelopment Implementation Plan complements the goals of the Downtown Subarea specifically mixed-use development, pedestrian-orientation, and TOD planning principles.

TOD Elements

In a sense, the Village is “starting from scratch” with the acquisition and demolition of property north of the Metra parking lot. This is a tremendous opportunity to realize the Village’s goal of transit-oriented development in the study area. Each of the listed elements below is critical to achieving true transit-oriented development and influenced the recommendations in this plan.

Mix of Uses

Allowing for a mix of uses (including housing, shopping, parks and civic buildings) provides a critical mass of activity that benefit from and contribute to transit. A mix of uses also creates activity with office and retail being the emphasis during the day and residents and restaurants continuing the activity into the evening and on weekends.

Residential Density

Retail, an important element of TOD and tax revenue, depends on “rooftops” or a concentration of potential shoppers. Development around a transit station is an appropriate place to allow for additional residential density to benefit from the transit service and to attract and support retailers.

Access to Transit

Transit should be visible and accessible for all modes of transportation including pedestrians, bicyclists, and drivers. Bus feeder service or shuttles may be a long-term consideration and are further examples of providing access to transit.

Pedestrian-Orientation

Pedestrian-orientation is essential for successful TODs which means creating an environment that is safe, comfortable, and interesting for those who walk to or within them. This can be achieved through interconnected sidewalks, pedestrian-scaled lighting, compact development, interesting retail displays, and a mix of uses.

Public-Private Partnerships

The Village has taken the necessary steps to prepare this site for redevelopment in order to achieve its goals; however, the Village can’t do it alone. Successful implementation will require significant private investment. Below are the appropriate roles for the public and private sectors.

Role of the Public Sector

- Market the TOD
- Provide incentives for TOD
- Provide sufficient infrastructure
- Help to secure financing
- Program special events
- Communicate with the general public
- Keep plans up to date
- Ensure zoning enables the plan’s objectives

Role of the Private Sector

- Purchase land
- Construct buildings
- Attract tenants

Connecting to Downtown Mundelein

There are no firm boundaries to define downtown Mundelein but the majority of commercial uses are centered along Lake Street and Hawley Street. Recently, commercial growth in the Village has occurred in a dispersed manner away from downtown. The Village has spent considerable effort in planning for the revitalization of downtown in order to re-establish it as a viable commercial center. The Master Redevelopment Implementation Plan proposes development that should complement, rather than compete, with efforts in the larger downtown. The site is not intended to be a relocated downtown but rather a part of it. Given this site's industrial history, it has largely been disconnected from downtown. The site, as proposed, connects to downtown through new street connections, sidewalks, extension of the North Shore Bike trail, and a pedestrian overpass. It is anticipated that further connection would be provided through streetscaping and special event programming. Further study of the Chicago/Hawley intersection will be required in order to fully explore the design and engineering necessary to provide a safe and aesthetically-pleasing crossing for pedestrians. It is envisioned that the square and surrounding buildings will provide a defined center that relates to the Metra station but will also recognize the importance of connecting to downtown.

Previous planning efforts including the Comprehensive Plan and the Downtown Development Review plan for incremental change in the downtown area. An incremental approach is appropriate given that the area is built-out and opportunities for infill development are limited. The Comprehensive Plan encourages downtown to "have strong pedestrian orientation" with buildings built to the building line and a restriction on auto-oriented uses reserved for Lake Street.

There are no illusions here, no magic bullet. The market conditions are stark and achieving the Village's vision will be difficult. However, the Village has taken important steps, most notably creating a TIF district and gaining control of a significant portion of land. To attract investment, the area must be truly distinctive in the marketplace. It must be attractive in terms of aesthetics and public incentives. There are significant hurdles to overcome and much is left in the private sector's hands.

Design Process

The recommendations included in this plan reflect a coordinated effort between the consultant team and an appointed Working Group made up of Village staff and a representative of several Village boards/commissions including the Village Board, Appearance Review Commission, Economic Development Commission, and Plan Commission. Nearly 20 site designs were drafted and considered in order to obtain the ideal configuration.

To supplement the insight gained from the Working Group, interviews were conducted with Village Trustees, local developers, real estate brokers and property managers to gain local insights into existing conditions and desired results. Others consulted as a part of the process include Metra, Canadian National Railway Company, West Shore Pipeline, and Weston Solutions. With the understanding that a public gathering place was an important focal point for the project, the consultant team researched scale comparisons of existing places and conducted a precedent study of successful public spaces which are documented on the following pages.

Elements of Success

The urban design of this project has been carefully considered to enable success in these key ways:

- It requires that the placement and character of buildings that will be built over many years each contributes incrementally to defining a public space, the core asset of the plan.
- The plan provides for maximum flexibility of uses to allow the private market to determine what land uses are viable to develop in the years to come.
- The recommended regulations concern the form of development rather than the land uses.
- The foundation of the plan is a public-private partnership between the Village of Mundelein and Weston Solutions that holds great promise to construct buildings that spatially define the public space, setting the stage for later phases.
- Planning the project to be LEED-ND eligible will create an advantageous marketplace distinction in the northwest suburbs and position the project for funding opportunities.

What is Required for Success?

Success of this project requires the following:

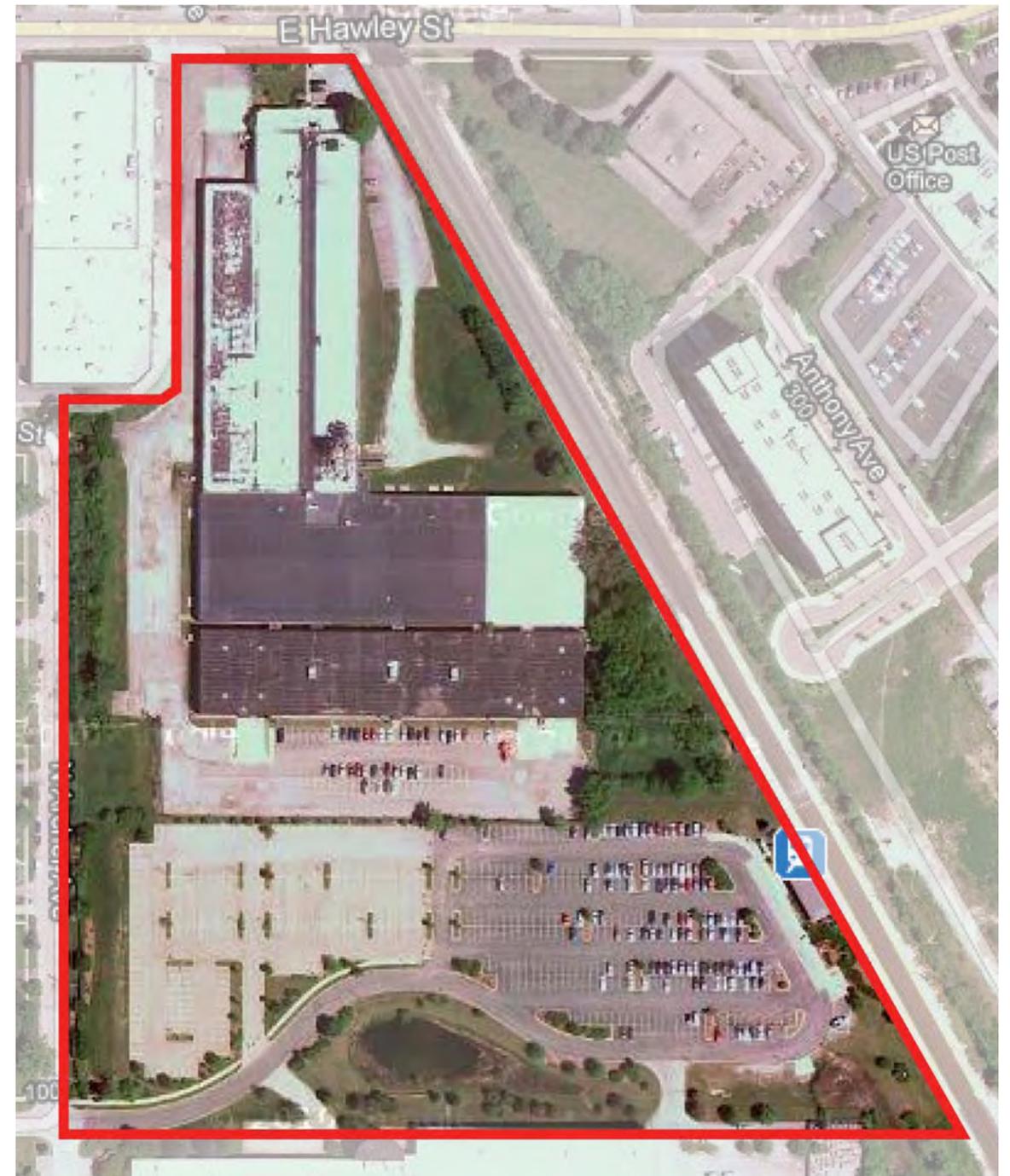
- Municipal leadership to provide sustained support and advocacy for the project over the several years (and multiple electoral terms) it will take to implement.
- Weston's vigorous marketing of the land it controls in Phase I to viable tenants and users.
- Adherence by the Village and the developer to uphold project design quality such as minimum building heights, proper façade materials, LEED compliance and the like.
- A level of fiscal stability that allows this project to remain a priority for the Village.

What's in a Name?

The Village's first name was Mechanics Grove in honor of early settlers who were former tradesmen. While still unincorporated, the area was renamed Holcomb for an area developer named John Holcomb. In 1909, the area was incorporated as Rockefeller in honor of John D. Rockefeller. Only months later, Rockefeller became AREA in response to a request by a local educational entrepreneur, Arthur Sheldon, who bought 600 acres for a trade school. AREA was an acronym for a sales technique taught at the school. It stood for "Ability, Reliability, Endurance, and Action." The school land was purchased by Archbishop George Mundelein (later Cardinal) to construct St. Mary of the Lake Seminary in 1921. In 1924, the Village changed its name for the last time to honor Cardinal George Mundelein.

Throughout this plan, reference is made to Rockefeller Square, a suggestion for creating a distinct identity for the area that relates to the Village's unique naming history. As businesses develop, they should be encouraged to pick up this theme as appropriate. For example, they could paint a mural on the side of their building describing the Village's naming history; they could install plaques on walls or sidewalks; or they could even choose to incorporate one of the Village's former names into their business name. Similarly, public art and streetscaping elements provide another way to reinforce this theme and identity.

Source: Village of Mundelein website- www.mundelein.org/community_info.history.htm



Study Area

Market Assessment and Development Strategies

The success of the Master Redevelopment Implementation Plan won't only be measured by the design and construction of the buildings; it will depend on the type, mix and tenure of the tenants that occupy the project. The successful development and occupancy of Phase I will set the stage for additional development around the Village Hall that will be known as Rockefeller Square. The implementation recommendations that follow are based on two overarching premises: 1) sequencing is critical to realizing the study area's full potential, and 2) further public subsidy will be required. The proposed buildings (Village Hall, Hawley retail building, and corporate office building) must be completed in order to generate tax increment to support subsequent buildings to establish a vital TOD area. Subsequent buildings surrounding Rockefeller Square will require the continuation of strong Village partnerships with private sector partners. The recommended implementation strategies provide guidance on realizing the Phase I vision as well as looking long-term to create strong partnerships that capitalize on market realities.

The vision for this area is one of a vibrant district where residents and visitors experience a mix of retail, restaurant, residential, and employment opportunities. In the interim, the realities of today's market mean initial uses are more likely to be medical/health care; educational/institutional; financial services; personal services; and quick service restaurants. As Mundelein's population grows and office build-out supplies more daytime employees, a viable customer base will enable "second-generation" businesses such as retail and full service restaurants to locate within Rockefeller Square. Table 6 identifies potential tenants for this site. This list is provided as a reference only; tenant attraction is not a role for the Village to play and should be left to private property owners and developers.

The consultant team contacted potential tenants as part of their market analysis. Although many potential tenants expressed interest in Mundelein and the proposed Rockefeller Square project, many questions remained regarding timing, co-tenancy, rental rates, size of space, tenant allowances and building delivery conditions. These questions are best answered by the private developers and property owners at the time of individual building design and construction. Current market rents in downtown Mundelein are \$8.00-\$14.00/square foot. These rates are likely much lower than those needed to support new construction which are likely \$25.00 to \$28.00/square foot. Because rent is the return on investment for land and construction, this means that before construction commences the Village may need to commit to subsidies for the retail component of the first mixed-use building or buildings. As more buildings are developed and more tenants are attracted to the area, it is assumed that tenants would be willing to pay higher rents and the required subsidy would decline.

The implementation strategies outlined in this Plan recognize that tenant leases are a legal relationship with property owners that can be influenced by the Village and its policies. Successful implementation relies on strong, but flexible, public private partnerships. These strategies create a framework for the frequent, open communication most likely to result in strong partnerships and completed projects. They also recognize the need for the project's context to set an image for the area that could attract Lake County's best developers. Most importantly, these strategies establish a process that recognizes the tough financial conditions of today's market and the need for short-term compromise in pursuit of a long term vision.

Market Characteristics

A general overview of market characteristics is provided in the following pages in order to better understand the economic context for future development potential.

Community Population Overview

The Village of Mundelein is a diverse community where residents value family-oriented lifestyles. Top quality schools and new commercial development districts serve its residents and draw destination shoppers from surrounding communities.

As Table 1 reports, compared to Lake County and the metro area, the residents of Mundelein have higher rates of home ownership and a higher rate of Hispanic ethnicity. Additionally, jobs per household are lower in Mundelein as compared to the county and the metro area.

Table 2 below reports the population growth for Mundelein and surrounding communities. As this table illustrates, the percent increase in Mundelein's population lags that of peer communities and the county as a whole. However, Table 3 reveals that this change has actually been a reduction in household size confirmed by higher percentage growth in households. This table's entries are ranked by unit growth to highlight Mundelein's significant position within the regional development market.

Those smaller households also saw significant income growth in comparison to Lake County. As Table 4 confirms, that growth was consistent with the very desirable surrounding communities.

Population changes in Mundelein present opportunities to offer downtown specialty shopping and dining that better matches a growing population of higher income, smaller households. That suggests a need to attract high quality business operators who offer good value but not necessarily the lowest prices.

	Mundelein	Lake County	Chicago-Naperville-Joliet, IL-IN-WI Metro
Total Population	30,035	703,861	9,458,903
Population Density (per Sq. Mi.)	3,358.60	1,494.20	1,298.30
Owner Occupied Housing Units	78.90%	73.30%	62.40%
Hispanic Ethnicity	31.50%	20.50%	21.40%
Average Household Income	\$108,235	\$113,925	\$84,653
Number of Employees	10,703	373,051	4,619,106
Jobs per household	1.1	1.5	1.3

© 2012, by Applied Geographic Solutions, Inc.

Table 1

	2010 Population	2000 Population	Population Increase	% change
Hawthorn Woods	6,546	5,415	1,131	20.9%
Vernon Hills	23,114	20,427	2,687	13.2%
Long Grove	7,726	6,921	805	11.6%
Lake County	703,861	644,356	59,505	9.2%
Libertyville	21,159	20,026	1,133	5.7%
Mundelein	30,174	29,767	407	1.4%

Source: US Census 2010, BDI

Table 2

	2010 Households	2000 Households	Unit growth	% Change
Vernon Hills	8,989	7,689	1,300	16.9%
Libertyville	7,683	7,011	672	9.6%
Mundelein	9,834	9,329	505	5.4%
Hawthorn Woods	2,063	1,591	472	29.7%
Long Grove	2,417	2,006	411	20.5%

Source: US Census 2010, BDI

Table 3

	2012 Average Household Income	2000 Average Household Income	Increase	% Increase
Vernon Hills	\$124,110	\$86,869	\$37,241	42.9%
Long Grove	\$231,389	\$163,750	\$67,639	41.3%
Libertyville	\$161,219	\$117,591	\$43,628	37.1%
Mundelein	\$108,235	\$80,287	\$27,948	34.8%
Hawthorn Woods	\$205,856	\$158,810	\$47,046	29.6%
Lake County	\$113,925	\$93,893	\$20,032	21.3%

Table 4

Retail, Dining, and Entertainment Market Assessment

While this plan seeks to realize Mundelein's vision for its downtown, one should note that stores, restaurants, entertainment venues, and consumer services must attract customers from beyond the community to succeed. The logical markets for downtown Mundelein are:

- **Community Affiliated:** Successful downtowns often define the character of a community. Similarly, residents are proud to bring guests to dine in independent restaurants and seek special items at unique stores. The downtown serves as a setting for community festivals that draw residents. This relationship creates a bond that makes community residents an important market for a downtown
- **Pedestrian:** Residents living within a ½ -mile walk of downtown are particularly active users. The frequent trips and presence of these nearby residents adds vitality even when businesses are not open. Consequently this market is more important to the success of downtown than its spending power suggests.

- **Convenience (also bicycle):** If one can drive to obtain a needed item within five-minutes, that location can be the routine choice to meet every day needs provided there is desirable quality and variety. Convenience shoppers are the core market for most neighborhood retail clusters. In serving the broader community, effective downtowns also serve their surrounding neighborhood. This five-minute drive time market also identifies the homes of bicyclists who can travel downtown in ten-minutes or less and encompasses the ½ -mile pedestrian market. These markets add recreational users to the convenience mix. The convenience five-minute drive time is the primary trade area for downtown Mundelein, and it should provide 60% to 85% of the spending captured by study area businesses.
- **Destination:** The businesses gaining the smaller percentages of their sales from the convenience market create a destination draw for downtown because their unique offering attracts shoppers and diners from a larger geography. Customers from this secondary trade area add sales to adjacent convenience businesses. The stores attracting this market also give the downtown a unique character that distinguishes it from other shopping options. One should note that, although the sales volume from this market is a smaller percent of the downtown's total volume, these marginal sales add significantly to the profits of all businesses and, without destination customers, few businesses could meet their operational goals.

Using Mundelein Metra Station as the center point, Table 5 highlights key demographic and spending characteristics of these markets. To turn the spending power into supported retail square footage, this table divides spending power by \$300 average sales per square foot (*ICSC, Center View; U.S. Mall Performance, February 2011*).

Business owners typically won't spend more than 5% to 10% of annual sales on rent. If sales achieve national sales per square foot averages of \$300 per square foot, then acceptable gross rents are between \$15 and \$30 per square foot. However, interviews associated with this project confirmed that rents in vintage properties near the study area are \$8 to \$14, with most properties on the lower end of that range. Although actual business sales are proprietary information, those rents suggest that downtown Mundelein businesses may be achieving sales far below national averages. These low rents also reduce the owners capital available to pay for property improvements and discourage investors considering buying available property. In addition to the development proposed in the study area, nearby aging properties need improvement to support attracting higher rent paying tenants into the study area.

In summary, the retail, restaurant, personal service, and entertainment businesses of downtown Mundelein are operating in a very competitive market that offers sufficient buying power for well-conceived and managed businesses to thrive but can destroy weak concepts. The challenge to implementing this plan is attracting quality tenants willing to pay rents that support new construction as detailed in the Phase I TIF Analysis. To meet that challenge, the Village may be required to actively partner with developers by assuming costs that reduce operating and construction expenses to a level that makes the study area more attractive than other opportunities within this competitive Lake County subregion.

	Pedestrian: ½ Mile	Convenience: 5-Minute Drive	Destination: 15-Minute Drive	Village of Mundelein
Total Population	3,691	25,528	166,577	30,035
Population Density (per Sq. Mi.)	4,686.80	4,391.90	1,363.70	3,358.60
Median Age	36.6	36.5	36.2	36.7
Owner Occupied Housing Units	80.30%	79.40%	78.60%	78.90%
Hispanic Ethnicity	45.80%	35.50%	12.80%	31.50%
Average Household Income	\$111,948	\$105,008	\$133,642	\$108,235
Jobs per household	1.6	0.9	2.1	1.1
Total Aggregate Annual Retail Sales	\$59,368,782	\$396,890,779	\$3,451,120,384	\$477,966,082
Supportable Retail Square Feet	197,896	1,322,969	11,503,735	1,593,220
© 2012, by Applied Geographic Solutions, Inc., BDI				

Table 5

Table 6 is a potential tenant list organized by land use category. Although it is not likely the Village will be directly involved in tenant attraction, this list provides a useful guide to the types of tenants likely to locate in the study area along with their space requirements and contact information.

CATEGORY	TENANT	SIZE - SQFT.	CLOSEST LOCATION	CONTACT	COMPANY
<i>Medical/Health Care</i>					
	Loyola Health Care	10,000 - 20,000	17 miles S, Niles		Loyola Health Care
	Advocate Health Care	5,000 - 8,000	3.1 miles SE, Libertyville		Advocate Health Care
	AthletiCo	4,000 - 6,000	4.8 miles N, Grayslake	Tom Beardsley	AthletiCo
	Community Health	5,000 - 10,000	8.8 miles NE, Waukegan		Community Health
	Chiro One Wellness	2,200	2.4 miles SE, Vernon Hills	Dean Vlahos	Newmark Knight Frank
	ATI	3,000 - 4,000	17 miles SE, Niles	Luke Malloy	Cushman & Wakefield
	Med Spring	4,500 - 6,000	Coming to market - Texas	Jim Sakanich	CBRE
<i>Educational/Institutional</i>					
	University of Phoenix	15,000 - 20,000	15 miles S, Schaumburg		University of Phoenix
	Rasmussen School	10,000 - 20,000	29 miles S, Oak Brook		Rasmussen School
	Kaplan University	5,000 - 10,000	25 miles SE, Chicago		Kaplan University
	National Louis University	20,000 - 30,000	12 miles S, Wheeling		National Louis University
	Lewis University	8,000 - 15,000	12 miles S, Wheeling		Lewis University
	Northeastern Illinois University	15,000 - 25,000	25 miles SE, Chicago		Northeastern Illinois University
	Paul Mitchell Schools	8,000 - 15,000	33 miles SE, Chicago	Rick Scardino	Lee & Associates
	Canella School of Hair Design	4,000 - 6,000	22 miles SW, Elgin	Joe Canella	Canella
	Primrose	14,000	19 miles SW, Algonquin	Allen Joffe	Baum Realty Group
	Tricoci University	6,000 - 10,000	2.9 miles E, Libertyville	Lara Keene	Baum Realty Group
	Swim Schools	8,000 - 10,000			
<i>Retail</i>					
<i>Food Service</i>					
Restaurants	Egg Harbor Café	4,500 - 6,000	2.9 miles SE, Lincolnshire		
	Corner Bakery Café	4,000 - 5,500	3.0 miles SE, Vernon Hills	Steve Frishman	Mid-America
Sandwich shops					
	Einstein Bagel	2,200	2.5 miles E, Libertyville	Matt Gould	Mid-America
	Jersey Mike's	1,500 - 1,800	2.7 miles E, Vernon Hills	William Hoag	Mid-America
	Firehouse Subs	1,600 - 2,200	17 miles SE, Niles	Gary Litvin	Horizon
	Penn Station	1,800	30 miles S, Lombard	Bill Selonick	Newmark Knight Frank
	Potbelly	2,200	3.5 miles SE, Vernon Hills	Dave Keady	HAS
	Wich Wich	2,000	17 miles SW, Hoffman Estates	Greg Kirsch	Newmark Knight Frank
Pizza					
	Homemade Pizza Co.	900 - 1,500	8.1 miles E, Lake Forest	Lara Keene	Baum Realty Group
	Papa John's	1,000 - 2,000	2.5 miles E, Libertyville		Papa John's
	Jet's Pizza	1,450 - 1,800	8.9 miles SE, Wheeling		Jet's Pizza

Table 6

Table 6 (continued)

CATEGORY	TENANT	SIZE - SQFT.	CLOSEST LOCATION	CONTACT	COMPANY
Coffee/tea					
	Caribou Coffee	1,500 - 1,800	2.6 miles NE, Libertyville	Jacob Dell	CBRE
Quick Casual	Panera Bread	4,000	2.4 miles E, Libertyville	Lara Keene	Baum Realty Group
	Chipotle	2,400	2.4 miles NE, Libertyville	Steve Frishman	Mid-America
	Five Guys	2,500	2.5 miles NE, Libertyville	Steve Frishman	Mid-America
	Meatheads	2,500	15 miles SE, Northbrook	Mike Chin	Tartan
	Qdoba	2,500	3.3 miles SE, Vernon Hills	Brent Wayburn	Cushman & Wakefield
	Wingstop	1,200 - 2,000	21 miles N, Kenosha	Jon Feld	Baum Realty Group
<i>Service/Convenience</i>					
Dry Cleaner	CD One Price Cleaners	2,500 - 3,500	2.5 miles E, Libertyville		
	Tide Dry Cleaners	3,000	Coming to market	Allen Joffe	Baum Realty Group
Hair	Lady Janes	1,200	9.1 miles S, Palatine	Dean Vlahos	Newmark Knight Frank
Convenience Store	7-Eleven	1,500 - 2,000	2.5 miles SE, Vernon Hills	Jeff Cermak	7-Eleven
Mailing/Packaging/Copying	Federal Express		2.4 miles SE, Vernon Hills		
Nail Salon					
Telephone	AT&T	2,500	2.0 miles, Mundelein	Wendell Hollan	CBRE
	Verizon	2,000 - 3,000	3.1 miles SE, Vernon Hills	Amir Bishar	Verizon
	US Cellular	2,000	2.4 miles SE, Vernon Hills	Peter Graham	CBRE
	T-Mobile	2,000 - 3,000	2.9 miles SE, Vernon Hills	Meredith Oliver	Cushman & Wakefield
<i>Financial</i>					
Bank					
Insurance					
Services	Cash Store	1,500 - 1,800		Peter Scannell	Mid-America
Offices					
Attorneys					
Medical					
Dental					
Other	Weight Watchers	1,200	2.4 miles E, Libertyville		
<i>Fitness/Salon</i>					
	Anytime Fitness	2,500 - 3,500	12 miles SE, Northbrook	Nick Reynolds	Anytime Fitness
	CorePower Yoga	4,000	29 miles S, Chicago	Mike Chin	Tartan
	Fitness 19	8,000 - 11,000	5.4 miles S, Buffalo Grove	Allen Joffe	Baum Realty Group
	Massage Envy	3,500	3.6 miles SE Vernon Hills	Peter Scannel	Mid-America

Table 6

Office and Commercial Services Assessment

Unlike retailers and restaurateurs who must find space specifically connected to a consumer market, office tenants look regionally and are able to relocate for price or amenities. The study area could accommodate both Class A space (signature multi-story buildings usually serving as corporate headquarters), and Class B space that, when new, often exists as multi-tenant offices in mixed use development. Although recent activity suggests that the market may be stabilizing, the regional office market is very weak. The North Suburban vacancy rate for Class B Office space is 22.8%, slightly lower than the overall Suburban Chicago Class B vacancy rate of 24.1%. Class A space has a North Suburban Vacancy rate of 16.5% and an overall Suburban Chicago vacancy rate of 19.4%. These are historically high rates never before seen since the suburban Chicago market was first monitored 30 years ago. Although there is evidence that vacancy rates may soon decline slightly it is expected to be three to five years before the vacancy rates falls to the 10% or lower rate that could stimulate speculative office construction.

Despite the weak office real estate market, an existing entrepreneurial spirit in downtowns like Mundelein can overcome that weakness. This is possible as business owners choose office locations that minimize their commute, provide desired amenities, and support their hometown. These important location decision-making factors, although difficult to quantify, cannot be overlooked. Generally small-to mid-sized corporations requiring developments of 10,000 to 30,000 square feet can make this type of choice. Weston Solutions, Mundelein's partner in the proposed station area development, is just this type of business. These unique office opportunities cannot be documented because they often involve property acquisition or landlord/tenant relationships formed based on the tenant's commitment to invest in the community. Planning projects and notices in Village publications can stimulate these "micro-market" opportunities. In other communities, specialized advertising agencies, medical providers, insurance servicing businesses, and manufacturing representatives have moved into new construction and added from 30 to 150 employees per business.

Adding office space is linked to locating tenants committed to downtown and thereby identifying "build to suit" projects. Rather than supporting a specific target square feet of office to be built downtown, this assessment underscores the need to capitalize on community affiliation and secure "micro-market" office tenants as a component that could improve the financing of potential developments.

Residential Uses Assessment

Nationally the equity residential market has suffered significant value declines. As a result, there are few entry level projects, particularly townhome and condominium projects, underway.

Although construction costs have fallen somewhat, the market price for townhome and condominium units has fallen more. Consequently, any potential projects face significant difficulty meeting community quality standards at a marketable unit price.

The challenging equity multi-family market has opened opportunities for luxury apartments that did not exist when young upwardly mobile investors could easily purchase a condominium or townhome. On August 2, 2011, Crain's Chicago Business described the appeal of this market to investors, "Sales of apartment properties are surging in the Chicago area and nationwide as investors try to increase their presence in the multi-family market, arguably the strongest real estate sector." The recent request by Cardinal Square developers to continue their Mundelein station area project with rental apartments is an example of this market dynamic. When considering apartments, developments must be of sufficient size to generate enough income to support amenities like athletic facilities, party rooms and on-site management that can oversee high standards in tenancing and maintenance.

In summary, the housing market faces many challenges today. In the near-term, downtown Mundelein could expand its housing variety by adding luxury rental units that accommodate recent college graduates, aging residents with roots in Mundelein but a primary residence elsewhere, and other transitioning families. Although no one is certain when support for development of equity multi-family products will reemerge, that product will be a longer-term option.

TIF Analysis

The Village established a TIF District that includes the study area in order to support development that will enhance the Village and provide significant property tax revenue into the future. The TIF District was established in 2005 and will receive its last revenue in 2029. As this project began, the Village reported that all existing revenue, both realized and projected, has been dedicated to planned development including additional Cardinal Square buildings, the Village Hall building, and the office headquarters building. Consequently, this analysis looks at the allocation of incremental revenue that might be generated by a building developed along Hawley as an inducement to partner with the Village in other buildings.

Understanding the overall staging of three buildings is critical to projecting the cash flows necessary to retire bonds issued for the purchase and preparation of the study area land. The development agreement that governs the partnership must be executed and the buildings constructed on schedule or the Village will be forced to retire the bonds from general obligation funds. The 2011 Annual TIF District Report lists the amount to be paid over 15 years at \$12.4 million. The analysis that follows examines how the Hawley retail building can meet today's challenging market conditions. It looks at how the TIF funds can directly support the project by covering TIF eligible costs and indirectly support it by funding amenities that make the area a more desirable development location. Essentially, this feasibility analysis screens the preferred development concept to estimate its potential contribution in realizing the Mundelein TOD concept. Understanding the public and private resources that must be marshaled to achieve this plan is the analysis goal.

Hawley Retail Lot Feasibility

A developer will examine the opportunity for a building along Hawley based on an overall investment that must include property development and the cost to provide the public amenities. The assumptions listed in Table 7 underlie this preliminary investigation.

Table 7

1	New Retail Development Hurdle Rate	11%
2	New Apartment Hurdle Rate	9%
3	New Construction Average Net Rent	\$15.00 to \$25.00
4	Monthly Luxury Apartment Net Rent/SF	\$1.70
5	Residential Construction per SF	\$167.05
6	Store Construction (includes buildout)	\$165.00
7	Restaurant Construction (includes buildout)	\$195.00
8	Footprint utilization for upper story	85%
9	Soft Cost	15%
10	Surface Parking Space	\$6,000
11	Garage Parking Space	\$23,000
12	Condo/Apartment Size	800 sq. ft.
13	TIF revenue per commercial SF	\$7.15
14	TIF Revenue per residential SF	\$3.00

The analysis that follows uses Table 7 assumptions to calculate the investment returns for two privately-constructed building development scenarios. This simplified assessment compares a basic cost estimate to the value of projected income from the proposed development.

For example, if net operating income for new commercial space is \$25 per square foot (line 3), a 1,000 square foot new space provides annual income of \$25,000. The \$25,000 is an 11% return (line 1) on \$227,273 so that is the amount a developer would invest to achieve the \$25,000 income, the market rate return. The assumptions provide a cost to construct retail space (line 8) of \$165 per square foot so a 1,000 square foot store costs \$165,000 to construct, the hard costs. Soft costs including design, engineering, and permitting add 15% to costs (line 9). Totalling construction costs, \$165,000, and soft costs, \$24,750, calculates project costs before land acquisition and parking at \$189,750.

Since, in this example, the investor is willing to invest \$227,273 for the expected income there is \$37,523 to pay for land, parking, and infrastructure costs (\$227,273-\$189,750=\$37,523). After the development is complete, the Village would gain TIF revenue from incremental property tax revenue and, as stores and restaurants open, sales tax revenue that it may dedicate to development costs. The residential property tax revenue feeding the TIF is reduced by mandatory payments to the school districts.

It is helpful to begin with very optimistic assumptions about the Hawley Retail building because if very optimistic assumptions fall short of the public or private development goals, the project concept must change to improve the returns or it is unlikely to be built. The optimistic approach assumes that the Phase I building is available for occupancy in 2014 and that it generates full income from initial occupancy. Once there are design concept that under optimistic assumptions meets public and private investment criteria, it is possible to test the concepts' sensitivity to timing and price changes.

Scenario 1: Multi-story Residential Over Retail



Table 8 describes an optimistic build-out of the Multi-story Residential Over Retail design concept.

Table 8

2014 Hawley Retail Building Phase I	
Ground Floor	14,000
3 residential stories	35,700
2017 Building Phase II	
Ground Floor	10,000
3 residential stories	25,500
Total SQFT	85,200
Total Residential Units	77

Using the Table 7 assumptions for TIF per square foot, Lines 13 and 14, generates the Table 9 estimates for TIF revenue. That revenue might fund public improvements or fill gaps between investment returns based on market rate rent and the cost to construct buildings meeting established design standards.

Table 9

Pay as you go TIF Revenue	\$4,884,000
Bond in 2013 at 6% interest	\$2,718,214

The "Pay as you go" amount, \$4.9 million, would allocate each year's TIF revenue to reimburse eligible expenses after it is received. To the extent that revenue falls short of estimates, the allocation of funds is lowered. The "Bonded in 2013" amount, \$2.7 million is the maximum loan that the project TIF revenue could retire over the remaining life of the TIF if the interest rate were 6%. In practice, the riskiness of this revenue projection means that the bond issuers would require projections to cover at least double the actual bond payments so the "up front" funds would not exceed \$1.4 million. Whatever remains after the annual payments to retire the bond become "Pay as you go" revenue available for other projects.

In TIF districts, the intent of the designation is to incent projects that would not occur "but for" public/private partnerships that invest the TIF funds in public improvements or reduce development costs to make a project attractive to the market. Table 10 compares the cost of the Hawley retail building concept to the value that the market would place on the return that property generates under the very optimistic assumptions of Table 7.

Because the building program outlined elsewhere in this plan suggests that Net Operating Income (NOI) from ground floor rents could range from \$15 to \$20, this analysis calculates the ground floor value at both amounts to provide a range for the gap between value and cost. Note that land costs are not included and therefore have been assumed as an incentive for this development. No surface parking costs were included in the project. That parking is assumed to be public parking to be paid for by the TIF as a separate cost. One garage space was included for each residential unit.

Table 10

	\$15 GF NOI	\$20 GF NOI
Income Value	\$17,144,727	\$18,235,636
Construction plus Soft Costs	\$18,507,479	\$18,507,479
Public Surface Parking	\$576,000	\$576,000
Gap	(\$1,938,752)	(\$847,843)

As Table 10 demonstrates, the net operating income from the ground floor determines the amount of additional incentive is necessary. If the average rent is lower, there would be proportionately higher incentives required to support the project. Any TIF revenue that remains would be used for amenities like the public open space and additional roads that improve connectivity.

Scenario 2: Flats Over Retail



With the thought that today's weak market suggests a very modest building development, scenario 2 examines the project described in Table 11.

Table 11

2014 Hawley Retail Building	
Ground Floor	13,000
1 residential story	11,000
Total SQ FT	24,000
Total Residential Units	11

As in Scenario 1, Table 12 estimates the revenue over the remaining life of the TIF that would result from development of Scenario 2.

Table 12

Pay as you go TIF Revenue	\$1,889,250
Bond in 2013 at 6% interest	\$1,088,695

Again, since ground floor NOI could range from \$15 to \$20, this analysis calculates the ground floor value at both amounts to provide a range for the gap between value and cost. Note that land costs are not included and therefore have been assumed as an incentive for this development. Again, surface parking was provided separately as a TIF cost and one surface space was charged for each residential unit. Table 13 calculates the project feasibility for Scenario 2.

As Table 13 demonstrates, the net operating income from the ground floor determines the amount of additional incentive necessary. If the average rent is lower, there would be proportionately higher incentives required to support the project.

Table 13

	\$15 GF NOI	\$20 GF NOI
Income Value	\$4,266,061	\$4,856,970
Construction plus Soft Costs	\$4,655,833	\$4,655,833
Public Surface Parking	\$312,000	\$312,000
Gap	(\$701,772)	(\$110,863)

Site Feasibility

At the conceptual proposal level, potential private partners and the Village need to see an indication that the project could cover construction, and infrastructure costs. This analysis shows that even using a conservative, \$15 NOI, partnerships could be developed to support these concepts.

Although the scenario feasibility analysis confirms that partnerships offering land and TIF support could induce development, little remains to cover amenities that would make that project more likely. The conservative projections associated with lower ground floor rents were used for a Table 14 calculation of the amenities budget that each scenario might fund with additional TIF.

Table 14

	Present Value of TIF Revenue Estimate	Private Project Gap	Additional Amenities Budget
Scenario 1	\$2,718,214	(\$1,938,752)	\$779,462
Scenario 2	\$1,088,695	(\$701,772)	\$386,923

As a companion to the TIF analysis, Table 15 demonstrates sample land uses and their respective construction costs and typical rents. The difference between these numbers provides a rent gap which can be used to determine when or if a subsidy should be provided in order to attract certain types of uses.

Table 15

Land Use	Typical S.F.	Construction Cost per S.F. (1)	Expected Net Rent per S.F.	Tenant Allowance per S.F.	Typical Sales per S.F.	Design Considerations	Rent Gap per S.F. (No Land Costs)
Residential							
Multi-family Apartments	900	\$165	\$1.70 per month	soft costs 15%	N/A	4-7 stories steel frame	
Attached Single-family	1,600	\$158	\$325,000 price		N/A	brick on concrete block, \$275,000 frame	
Office							
Medical Office Bldgs.	5,000 - 8,500	\$145	\$20 - \$30	\$20 - \$40	N/A		(\$5.57)
Professional (Lawyers, etc.)	2,000 - 10,000	\$130	\$20 - \$25	\$10 - \$25	N/A		(\$3.60)
Institutional/ Civic							
Private Grade school					N/A	60,000 sf lot. 40 parking spaces. Accommodates 140 kids.	
Day Care	8,000 - 10,000	\$152	\$20 - \$20	\$10 - \$15	N/A	3,000 sf outdoor play area	(\$8.02)
Government	10,000 +	\$120 - \$150	\$15 - \$22	\$5 - \$10	N/A		(\$8.54)
College/Higher Education	10,000+	\$120 - \$150	\$15 - \$25	\$10 - \$15	N/A		(\$6.77)
Retail							
Convenience Retail (7-11)	2,500 - 3,000	\$150	\$23 - \$25	\$25	\$250		(\$7.97)
Art Gallery	2,000	\$150	\$21	\$25	\$110	Highly variable size and much lower rent for gallery/studio space	(\$9.97)
Restaurants/Bars							
Fast Casual	1,200 - 2,500	\$150	\$25 - \$30	\$10 - \$20	\$670		(\$2.37)
Fine Dining	7,500 - 8,500	\$170	\$20 - \$30	\$20 - \$25	\$500	Banquet Space? Could be much smaller	(\$9.45)
Brew Pub	5,000 - 8,000	\$120	\$10 - \$20	\$15 - \$25	\$500	Outdoor seating	(\$9.97)
Deli	3,500 - 5,000	\$125	\$20 - \$25	\$10 - \$20	\$670		(\$5.57)
Coffee Shop	1,750 - 2,200	\$175	\$25 - \$35	\$15 - \$25	\$400	Drive-thru	(\$2.66)
Service							
Dance Studio	1,500 - 3,500	\$130	\$10 - \$18	\$10 - \$20	N/A		(\$11.10)
Dry Cleaner	800 - 2,200	\$150	\$20 - \$30	\$5 - \$10	\$300		(\$4.04)
Children's Entertainment	15,000 - 20,000	\$125	\$10 - \$18	\$5 - \$10		18' clear ceiling height	(\$9.34)
Health Spa	3,000 - 5,000	\$150	\$15 - \$25	\$10 - \$20	N/A		(\$9.87)
Fitness	7,000 - 50,000	\$135	\$15 - \$20	\$10 - \$25	N/A		(\$9.37)
Bank	2,500 - 4,500	\$185	\$30 - \$50	\$10 - \$20	N/A	Drive-thru	\$3.55
Eco-Industrial							
Specialty Manufacturer	varies		\$6 - \$8			Growth potential is important	

Market Conclusions

The current market presents real challenges to development in this area. Retail development in the overall Chicago Market is at the lowest since it's been tracked in the mid 80's. With significant vacancy still in the market (11%) it is difficult to build new construction that can compete with the rent structure of existing buildings. The initial ability to attract retailers will likely be limited by the amount of exposure to Hawley Street. It is anticipated that the amount of retail will not exceed 25,000 square feet.

To be clear, "supportable" retail does not necessarily mean tenants are able to pay sufficient rents to support new construction. Even before the recent market crash, incentives were a standard part of a downtown development deal. Given the TIF district in place, the challenge will be to determine the priorities for TIF expenditures for public improvements and demands for incentives. There may be a situation where future increment is the only source of incentives.

Initial focus should be on attracting uses that create a critical mass of shoppers in order to attract viable retailers. A critical mass of shoppers includes daytime population (office workers) and nighttime population (residents). Given current market conditions for this site, a "game changer" would be an institutional, health care, or educational user that has a built-in user base (employees and visitors) of a significant size.

Office

The office market is the weakest market nationally at the moment. Office development is entirely tenant-driven based on the desires and needs of end users. General predictions are that suburban office development is likely to resume sometime after 2015.

Restaurants

As stated elsewhere in this plan, the Village's role should not include tenant attraction as this is best left to private property owners and developers. Restaurants would be a desirable use in this area as a destination use and as a use that is largely missing in downtown Mundelein. On the other hand, restaurants are expensive to build and have unique requirements for kitchen equipment, ventilation, etc. Given the significant investment required, significant incentives are typically required. Examples from elsewhere in the state include the City of Champaign, which offered a \$100,000 grant for interior and exterior renovation and a free liquor license to any investor willing to spend \$400,000 to acquire and build-out a full-service restaurant in downtown. The program was authorized for only one year to make sure it had immediate impact. Since the announcement of the program, five new restaurants have opened in downtown Champaign. The Village of Palatine spent \$400,000 to relocate Durty Nellie's (a bar and restaurant known for its young, high-energy crowd) to their TOD area.

Residential

Regionally and nationally, the for-rent housing market is active now. An oversupply of for-sale residential product in the region has been widely reported. Successful residential development on this site is likely to be of a type that is not found elsewhere in the market and will not compete with Cardinal Square. It is likely that any multi-family development constructed in the near future will be apartments. It is possible to convert these to for-sale units as the market demands and changes.

Retail

Although attracting retail is a long-term goal for this area, it does not drive transit-oriented development. The maxim for retail developers is, "retail follows rooftops." The Urban Land Institute's report entitled, "Ten Principles for Successful Development Around Transit" underscores this point by saying, "Although retail is a desirable element in a community and a valuable generator of tax revenues, it may not be supported by market demand, and public agencies must resist the temptation to require retail as a part of a project." As previously mentioned, it is likely that interim uses would initially rent space that in the long term would convert to retail uses.

Based on the preceding market analysis, and the ambitious nature of the proposed development program, there are several strategies that can be employed in order to facilitate the desired development.

Strategy 1: Create a tenant recruitment team to take full advantage of the unique partnership already established with Weston Solutions.

- Establish a Retail Recruitment Team consisting of representatives from Weston, Village staff and an outside broker.
- Develop a leasing brochure and website that can be used to promote Rockefeller Square to prospective tenants.
- Use tenant list and broker contacts in Table 6 to delineate potential tenants.
- Use the Retail Recruitment Team to engage the local brokerage community in attracting tenants to Weston's Hawley Retail lot.
- Schedule monthly Team meetings to discuss progress and outreach.
- Provide quarterly reports on tenancing to elected officials.
- Attend regional and local International Council of Shopping Center trade shows to promote Mundelein and Rockefeller Square.

Strategy 2: Recognize the importance of providing an inviting context by enhancing the appearance and marketing of nearby vintage properties.

- Continue implementing the Action Steps recommended in the Downtown Retail Market Development Action Plan (Attached as an appendix to this report).
- Strictly enforce building codes in vintage downtown Mundelein properties.
- Provide construction phasing information so businesses can celebrate each new phase and create events around milestones like ground breaking and topping off.
- Revise marketing material to include information on proposed plans and position vintage properties as an affordable complement to the high volume tenants expected at Rockefeller Square.

Strategy 3: Keep the Mundelein Master Redevelopment Plan prominently positioned within the Chicago suburban real estate development market.

- Seek trade press articles announcing the unique partnership established with Weston Solutions.
- Create a one page marketing flyer that can be distributed at Lake County Partners economic development events as well as other regional and state economic development forums.
- Offer one-on-one developer tours to investors undertaking projects elsewhere in the Chicago Region.
- Issue press releases as tenants commit to the project area.

Strategy 4: Build the daytime market by attracting build-to-suit office to the study area.

- Make retention visits to expanding local businesses and determine who might move if they cannot find local signature space.
- With approval of potentially moving local business, facilitate matches with developers who toured the study area and expressed interest.
- Place article in Village newsletter about entrepreneur's unique opportunity to live and work in the same community.
- Make a presentation on the plan to local chamber of commerce and seek to open dialogue with members who may consider locating in study area.

Strategy 5: Establish effective public private partnerships for additional properties that fairly capitalize on market conditions as they offer desired public amenities.

- To define village investment potential, engage the community financial consultant in an analysis of projected Village revenue from the three Weston Solutions buildings with the goal of determining potential to finance infrastructure and amenities that could attract additional users.
- Evaluate the past experience of private partners seeking Village financial commitment to learn whether their completed projects presented quality and financial responsibility.
- Establish relationships with banks interested in supporting local development that can be referred to potential developers.

Strategy 6: Increase the local population by encouraging construction of medium- to high-density apartments.

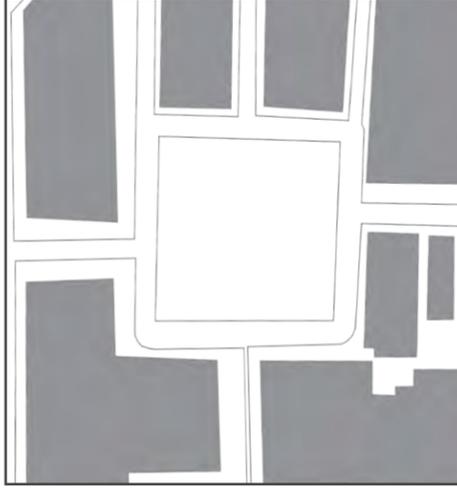
- Encourage the completion of Cardinal Square as a rental community.
- Revise parking requirements to increase flexibility by allowing land banking of some potential parking that can be built upon as a second phase if the reduced parking meets marketing and resident needs.
- Make any zoning changes necessary to fully entitle rental housing at a 5 to 8 story density necessary to support the efficient construction of market rate rental housing.
- Present fully entitled opportunity to any developers actively seeking to build luxury apartments.

Case Study: Market Square, Pittsburgh PA

Market Square before redesign



Current Market Square layout



Market Square after redesign



Source: Pittsburgh Downtown Partnership, "Market Square". Accessed on: 25 May 2012. <http://www.downtownpittsburgh.com/play/market-square>

Market Square Place is a historic site located in downtown Pittsburgh, Pennsylvania. The Square was redesigned in the last five years to revitalize the public space with dining and retail and to increase use.

Traffic calming measures were undertaken and the square was redesigned to be more pedestrian-oriented. The new street layout maintains site accessibility by car, train or bus. The redesign also included a tree design that allows for more visibility from one side of the Square to the other. This improves safety and makes the user feel secure, while maintaining the aesthetics and shade offered by vegetation.

The sidewalks were increased to an average of 22 feet wide to allow for outdoor dining and active use. Creating more welcoming sidewalks has spurred retail and dining on the first floor, with offices and residential spaces above. This characteristic is particularly appropriate for Rockefeller Square, where street level arcades and sidewalk design anticipates this sort of environment. The balance between building scale and sidewalk space created in Market Square serves as a parallel to the size and scale of Rockefeller Square, where an equally vibrant and active square and streetscape will be created.

Adjacent to Market Square is a piazza, which has enjoyed an increase in use from the renovation. The piazza has an obelisk and fountains at its center, and in the winter months the piazza is converted into a public ice skating rink. The obelisk is decorated as a Christmas tree, and the surrounding buildings offer public events, including a gingerbread house decorating contest. This consideration for seasonal use can be applied in Mundelein, including ice skating in the winter months and outdoor performances in the summer.

Since its renovation, Market Square has seen a tremendous increase in demand for retail, housing, office and commercial space, and dining. In addition to this, the Square offers programming throughout the year and even has its own blog, where residents can get news on upcoming events, sales and get exclusive discounts.

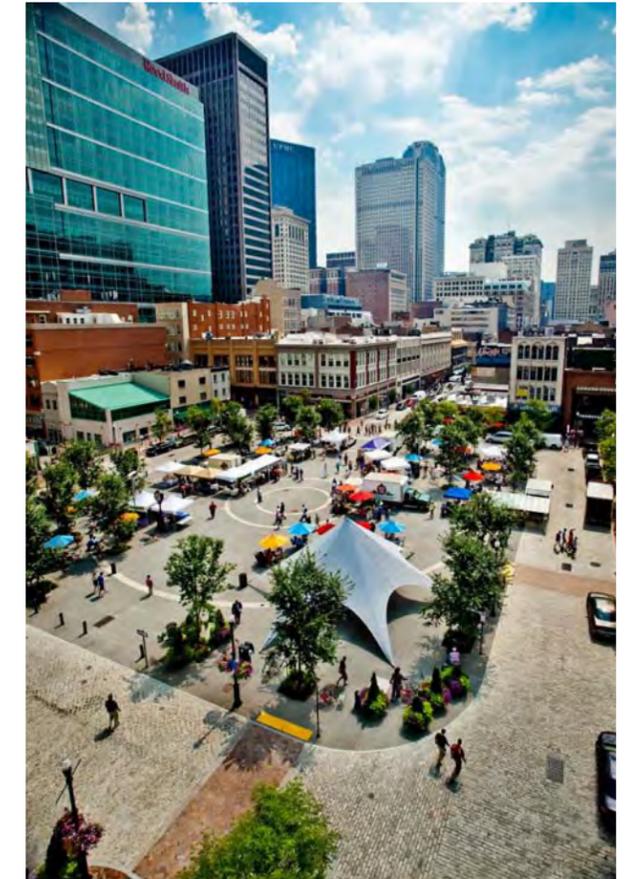
Examples of programming and attractions at Market Square:

- Carnegie Library of Pittsburgh's Reading Room in Market Square.
- Market Square Farmers Market and Noontime Concert Series.
- Over 30 nearby bars, restaurants and coffee shops, including original dining and nationally recognized franchises.
- A variety of retail, services and recreation, including fitness studios, banking, hair salons, home improvement and many more.

Piazza adjacent to Market Square



An outdoor market at Market Square

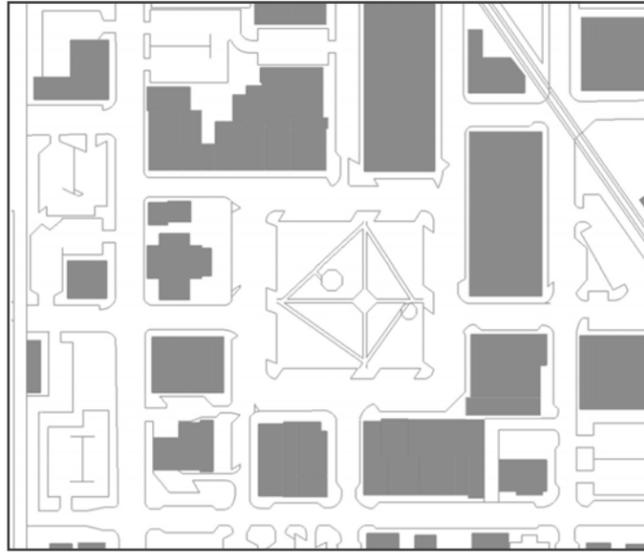


Children enjoying an outdoor performance



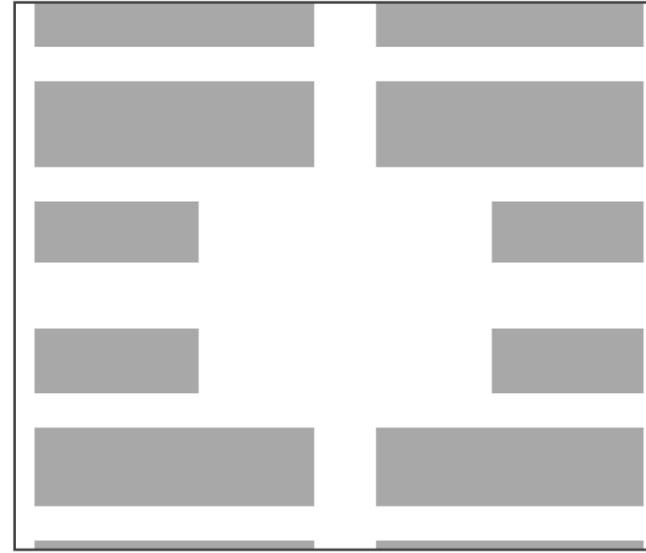
Precedent Studies: Public Spaces

Woodstock Town Square, Illinois



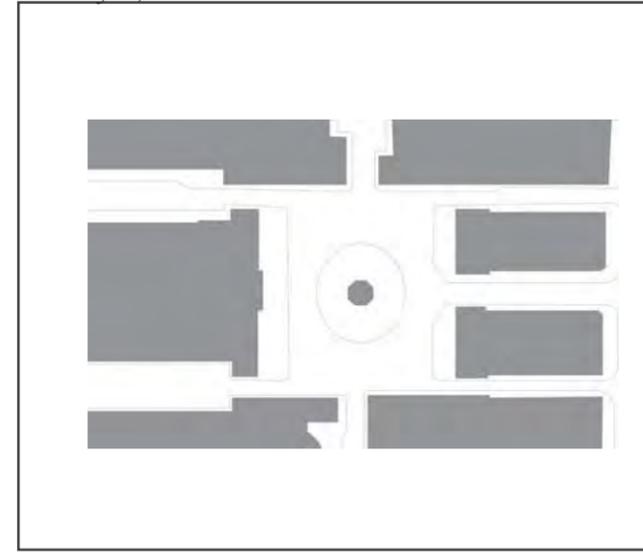
The Town Square in Woodstock, Illinois, offers access to nearby restaurants, live entertainment and retail. The square offers a variety of programming throughout the year, including plays and other performances, farmers markets, festivals, and fairs. Traffic is circulated one way around the square and is closed for pedestrian use during special events.

Savannah, Georgia



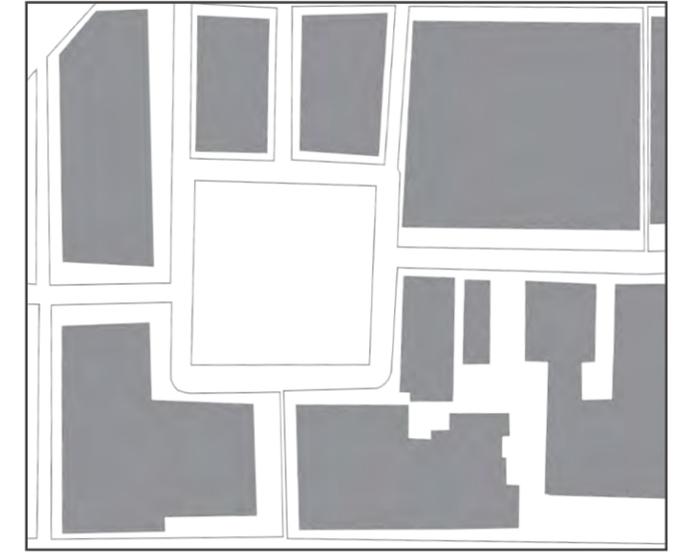
Savannah, Georgia is known for its system of squares. Here it is evident that a variety of trees and a central fountain lend a sense of place to the square and attract pedestrians. Benches surrounding the trees offer seating, and the high canopies offer shade and seclusion, while maintaining visibility across the square.

Place Royale, Reims



Place Royale in Reims is an historic square, surrounded by traditional buildings. The center of the square is occupied by a monument, and vehicular traffic is directed around the square's perimeter. In the surrounding buildings, the first floors include arcades for pedestrians that enhance the character of the streetscape.

Market Place Square, Pittsburgh

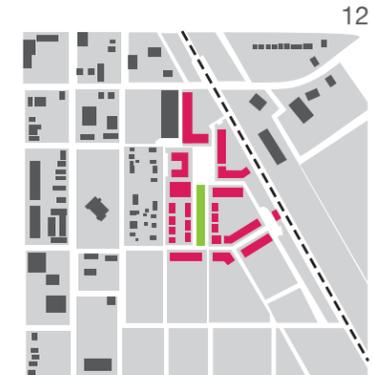
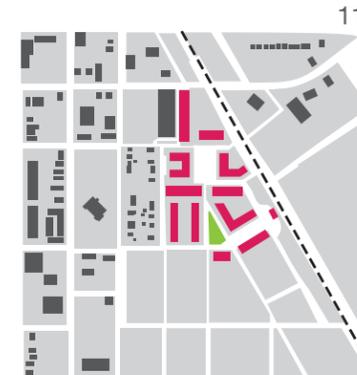
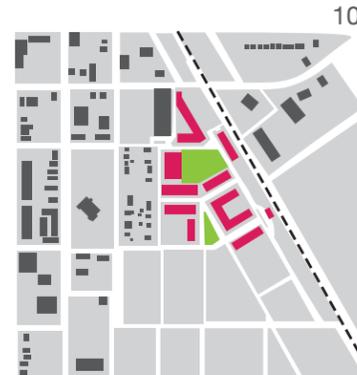
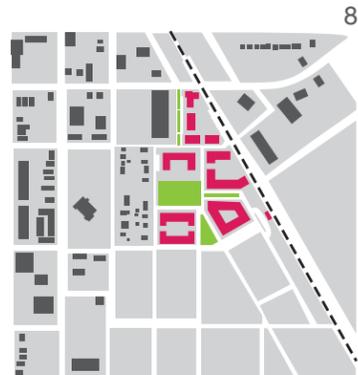
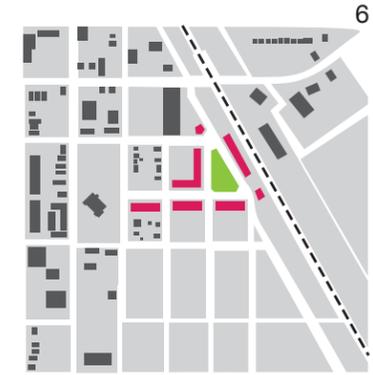
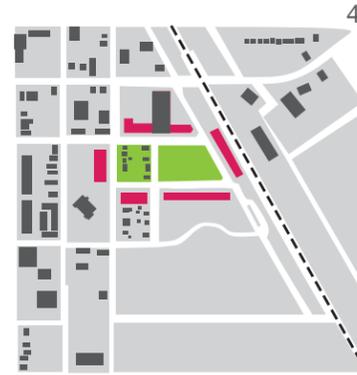
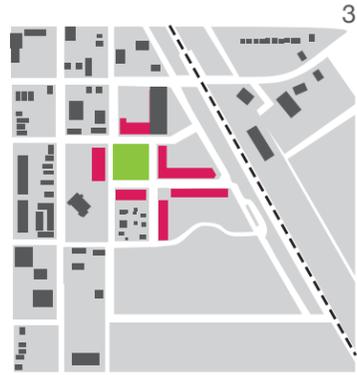
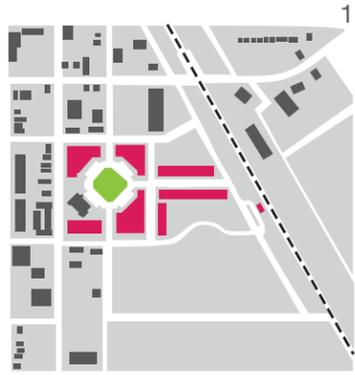


Market Square Place in Pittsburgh is a historic square that was redesigned in the last five years through a public design process. The project was completed with public and private funds.

The redesign included removal of vehicular through-lanes and rerouting of traffic to the perimeter, widening of the sidewalks to encourage al fresco dining, and a modification of the tree layout, to allow more visibility from one side of the square to the other. The square is now a vibrant public space, and has attracted a variety of new retail and dining opportunities.

Design Alternatives Considered

Nearly twenty design alternatives were considered for the study area to address public space, Village Hall location, and buildings for the study area.



Illustrative Master Plan

The preferred master plan includes several key concepts that build off of the essential TOD elements. These elements draw from the Village's goals for the area as expressed in the 2004 Transit Oriented Plan and the Comprehensive Plan.

Rockefeller Square

Rockefeller Square, the name, is an homage to Mundelein's naming history and the fact that the Village was once known as Rockefeller. Rockefeller Square, the place, is envisioned to be a strong focal point for redevelopment of the area. Its primary role is as a civic gathering space but it also can provide integrated stormwater management if designed to allow for infiltration and detention under the plaza. The plaza and surrounding streets are comparable to the area currently used for the annual Mundelein Days festival which could be relocated here in the future.

Reconnected Street Grid

The preferred master plan was designed to reconnect the downtown street grid to the north, west, and south. This allows improvement of circulation throughout downtown by providing additional access points and choice in routes. Additionally, the Metra station will become more visible and accessible by creating more points of access to it for both cars and pedestrians. The street south of Village Hall could be constructed as a street or as a pedestrian path (as an interim or permanent feature) to allow an additional access point to Lake Street/Route 45.

Pedestrian Overpass

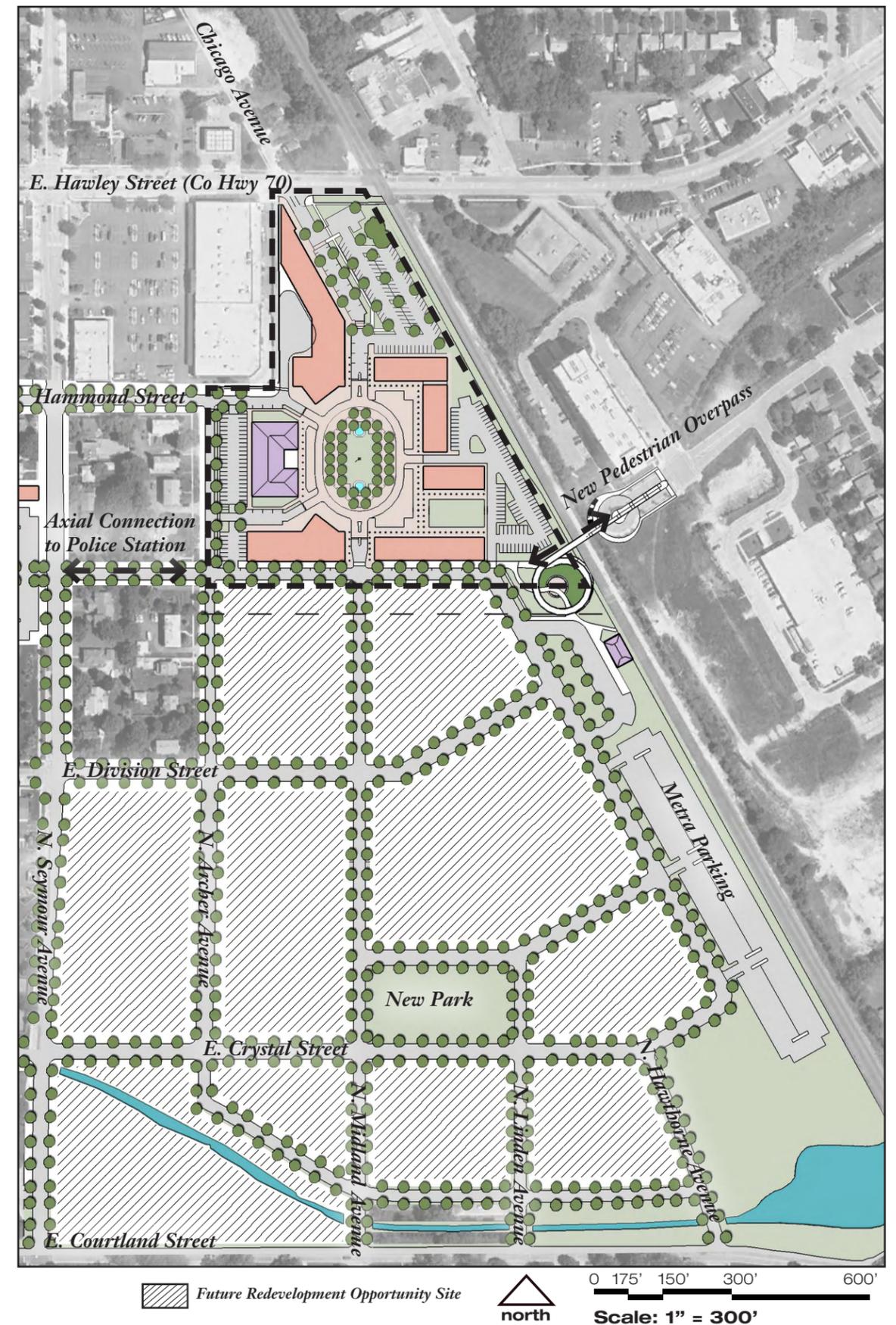
The plan includes an overpass for pedestrians and bicyclists to connect the east and west sides of the tracks with an attractive structure. This structure is envisioned to be both functional and focal for the area by creating a distinctive landmark that enhances Mundelein's identity.

Arcade

At the northern and southern ends of the plaza, proposed zoning requirements will create an arcade feature on buildings constructed on identified corners. The arcade is a visual technique to draw pedestrians in by letting them know that there is something to see deeper within the site.

LEED-ND Rating System

The concepts in this plan are predicated on the principles of LEED-ND, which aim to encourage development that meets the principles of smart growth, new urbanism, and green building practices. The rating system includes prerequisites and categories of achievable points in order to obtain certification.



Rockefeller Square

This bird's eye view, looking southeast, provides a conceptual view of the project as fully constructed.



Phase I

Phase I was identified as a crucial first step to realizing the Village's goals for the area on an approximately 10.5 acre site. The essential components of Phase I include a relocated Village Hall, a new street connection to Hawley Street, and a public space. The pages that follow detail the improvements and recommendations for Phase I. To the right, Phase I overlays the 2004 TOD Study in an effort to demonstrate that while this plan does reconsider some of the elements of the 2004 Plan, nothing in the Phase I plan precludes the full implementation of the 2004 Plan.

Village Hall

The Village has outgrown its current space and the existing site is too small for expansion. The Village is considering relocating Village Hall to the former Sigma site (between Hawley Street and the Metra parking lot).

Relocating the Village Hall provides an anchor user to stimulate investment with the goal of achieving mixed-use development. The Village Hall and a new accompanying public space will be designed to attract visitors and provide a location for community events. All of this is intended to create a "sense of place" for Mundelein that is truly distinctive and enhances the quality of life for residents and businesses. The new Village Hall is designed to be an efficient, attractive facility that reflects community pride. Development in this area will be sustainable which means fiscally and socially responsible that will set Mundelein apart from neighboring communities.

The relocated Village Hall is intended to be a catalyst for new development in the area. It is proposed to be 35,000 square feet, 20,000 of which is intended for Village use. For about seven years, approximately 15,000 square feet of this space will be leased out to a tenant (currently anticipated to be Weston Solutions). When the time is mutually beneficial, the tenant will move out and the village may choose to expand into the space or continue to lease it out.

The former Sigma site provides a central, easily accessible location for Village Hall on land that the Village already owns. Civic uses, such as Village Halls, are "traffic generators" that can stimulate development and attract compatible uses.

The Village Hall building is estimated to cost \$10 million and the necessary public improvements are estimated to cost an additional \$2 million. Funding for the building depends on a variety of sources including a General Obligation (G.O.) Bond, rent from the tenant, transportation funds, sewer addition and expansion funds, and grant funding. TIF funds are not contemplated to be used in Phase I public improvements or building construction.

These efforts are intended to increase the property tax base of the TIF district and ultimately for all taxing bodies—schools, library, park district, etc. As part of this new development, the Village also wanted to provide a new location for the Village Hall and retain the 125 jobs that Sigma Services provides in the downtown. Retaining Sigma was accomplished by leasing 165 N. Archer (the old "Anatol" building) to Sigma and a variety of new businesses.

Weston Solutions

Weston Solutions expressed an interest in partnering with the Village in its redevelopment efforts of this site. Weston Solutions is a 50-year old environmental engineering firm with 1800 employees in 60 offices around the world. Weston is an employee-owned company focused on sustainable solutions with experience in remediation, development, and construction. Their Chicago regional office in Vernon Hills has about 60 employees.

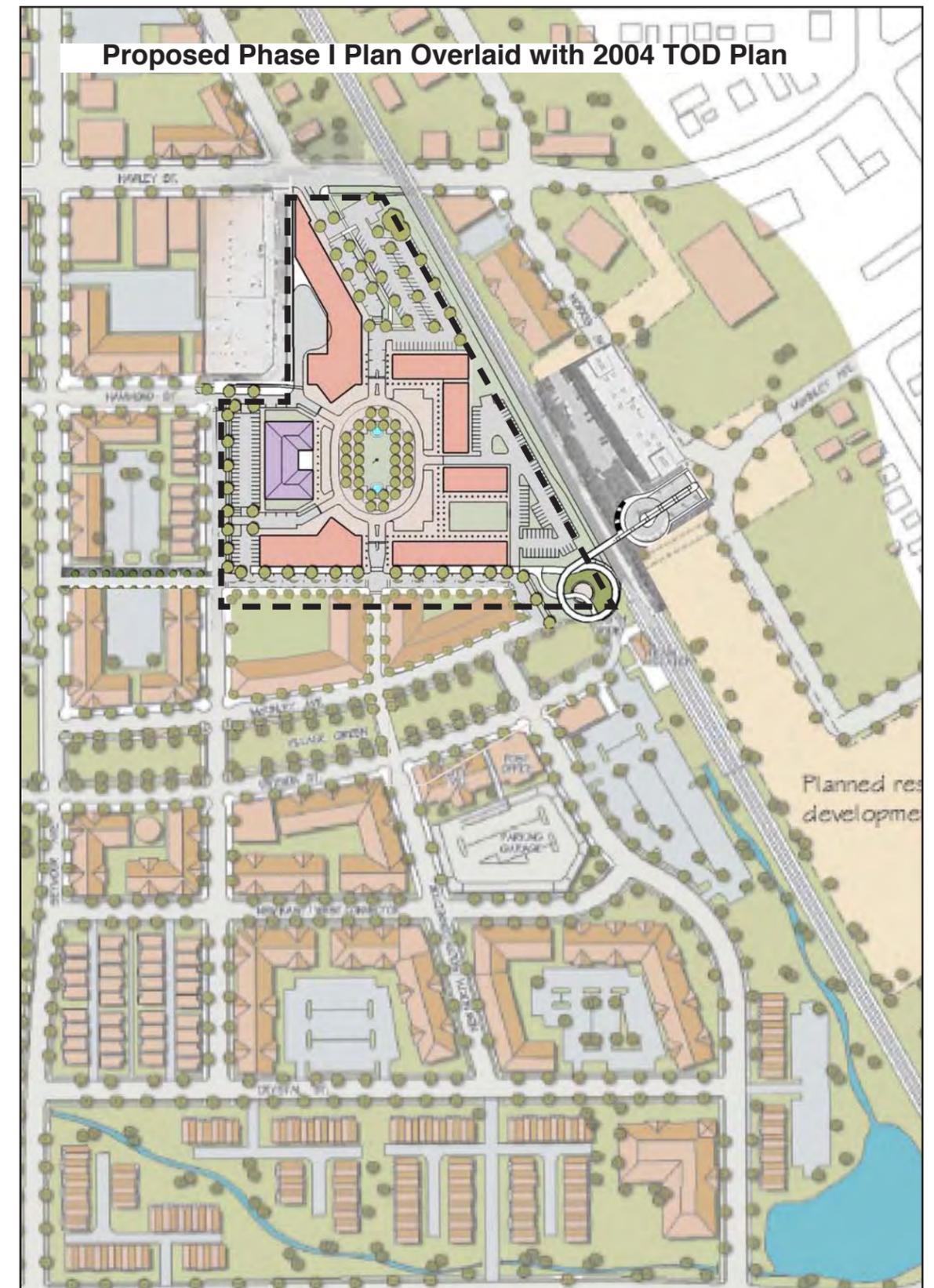
Weston Solutions' lease in its current office is ending. They have identified Mundelein as a desirable place based on its regional location and proximity to the train station. Weston also has an interest in developing a portion of the train station area for sale/lease to other users.

As an environmental engineering firm, they desire a location within a LEED-certified building to underscore the company's core values. The Village Hall site gives them an opportunity to construct a green roof (something for which they are known) to display that product to potential clients. There are several important components to the partnership. Weston would act as general contractor for the construction of Phase I and would be a tenant in Village Hall for approximately seven years. Weston would develop a mixed-use building for other end users (with specific uses to be determined at a later date) and would also construct an office building to house their headquarters.

Weston's interest in partnering with the Village is important for a few reasons. The first is that having a tenant take space on a portion of the building helps to finance construction of Village Hall. Because the leased portion of the Village Hall is taxable, increment will begin to be generated in the TIF district. Weston's relocation also brings 40-60 highly-skilled, full-time jobs to downtown Mundelein. Employees spend money in local businesses and add vitality to the area.

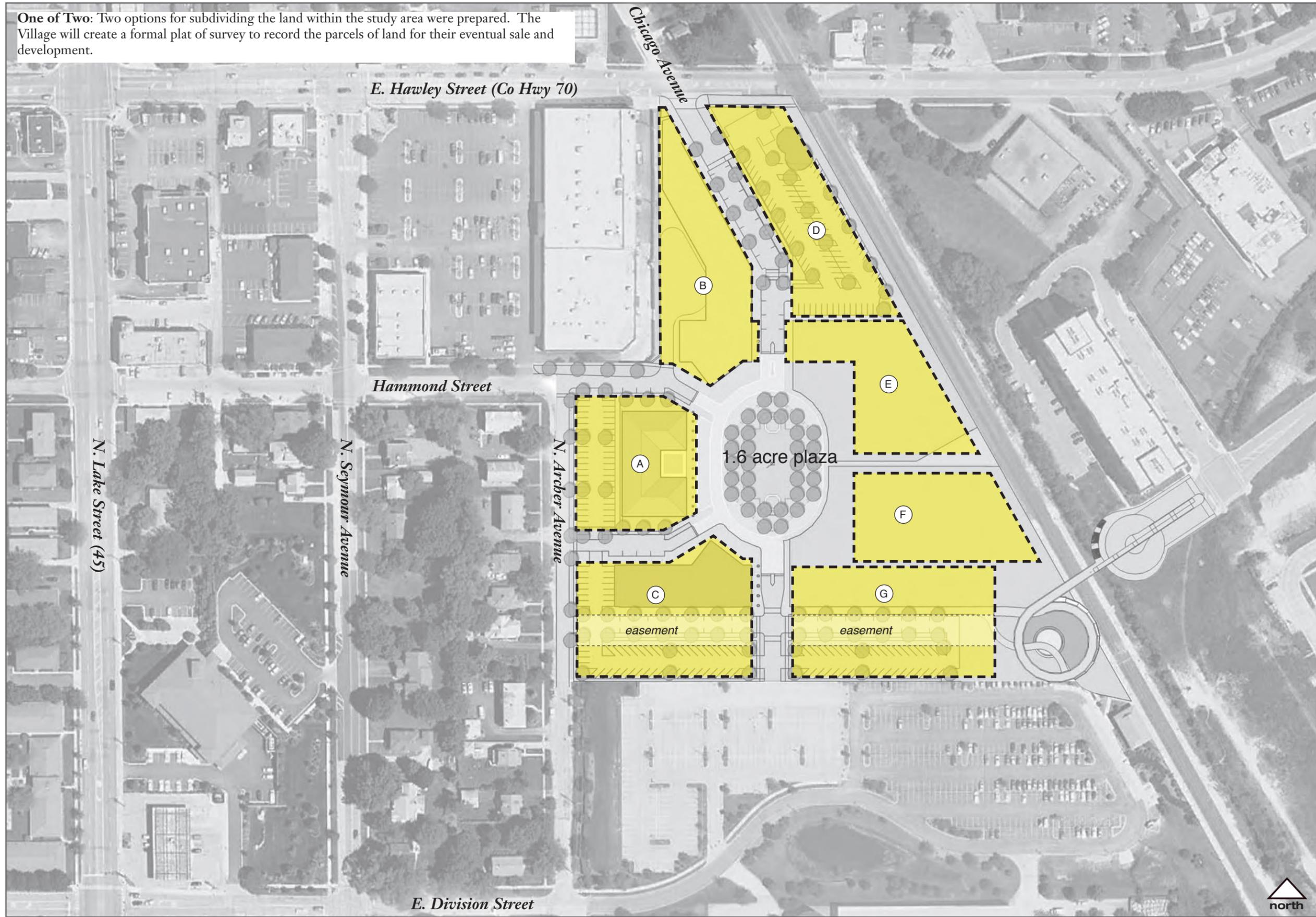
Weston also provides the stimulus for, and expertise in, sustainable development which the Village can capitalize on to create a niche development for other like-minded investors. Weston's development will signal to the market that this site has opportunity. Similarly, Weston is willing to develop a minimum of two additional lots beyond the Village Hall. This provides a ready source of private investment to help meet the Village's short and long-term goals for the area. Real estate deals in today's market are always tenant driven. To have a "real user" at the table that can help jump start this project is a significant benefit to the Village and to this project.

Weston receives development rights for two lots: one for a commercial project and one on which they will construct their new regional headquarters. As builder and developer of the Village Hall, Weston is paid for its services. There are incentives for Weston to build the commercial lot and their corporate office before the end of their lease in Village Hall.



This illustration demonstrates that the recommendations of the Master Redevelopment Implementation Plan do not preclude implementation of major elements of the 2004 TOD Plan, most notably, the Village Green.

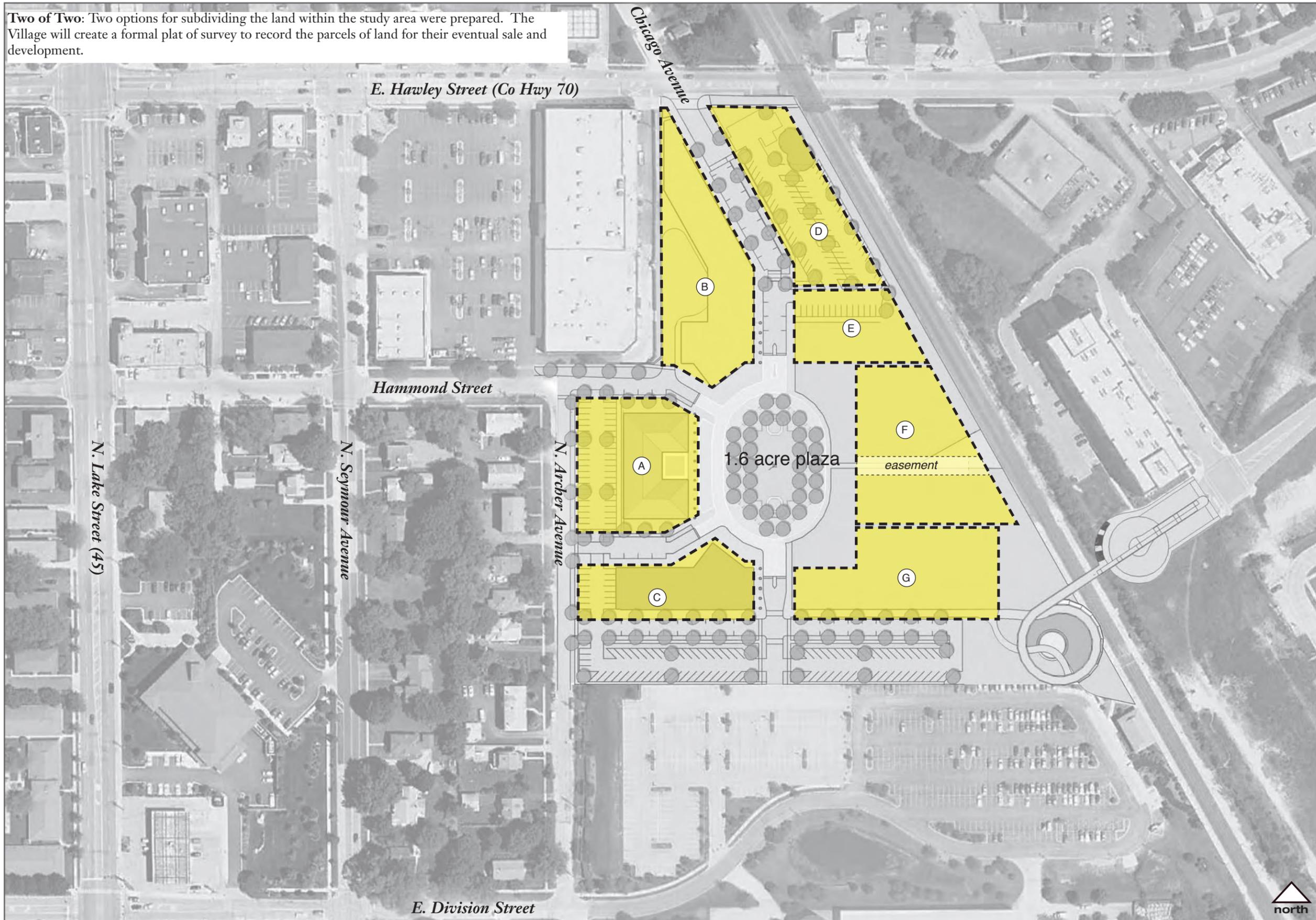
One of Two: Two options for subdividing the land within the study area were prepared. The Village will create a formal plat of survey to record the parcels of land for their eventual sale and development.



**SUBDIVISION PLAN:
OPTION 1**

- LOT A .88 acres
- LOT B 1.01 acres
- LOT C .92 acres
- LOT D .98 acres
- LOT E .83 acres
- LOT F .80 acres
- LOT G 1.02 acres

Two of Two: Two options for subdividing the land within the study area were prepared. The Village will create a formal plat of survey to record the parcels of land for their eventual sale and development.



**SUBDIVISION PLAN:
OPTION 2**

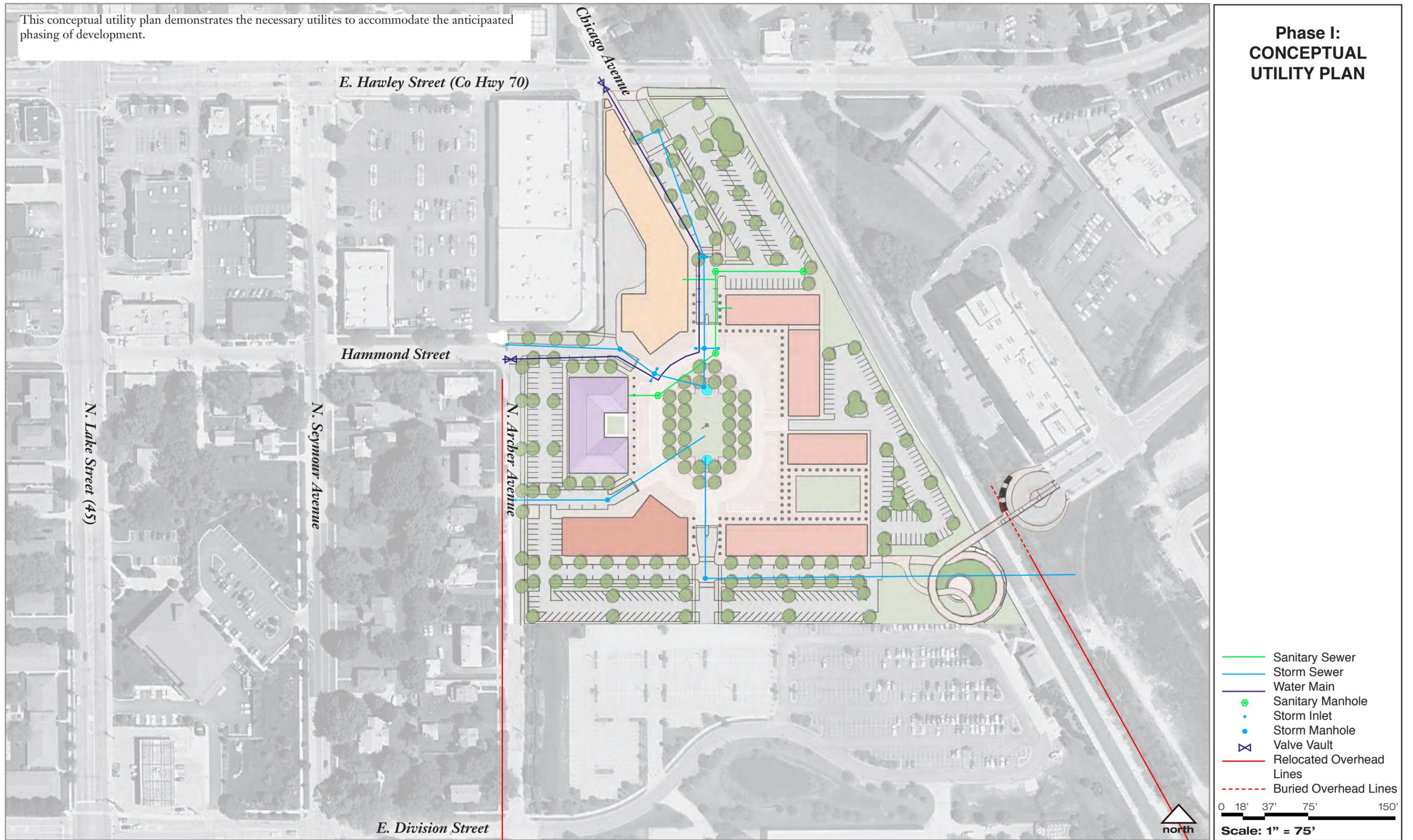
- LOT A .88 acres
- LOT B 1.01 acres
- LOT C .60 acres
- LOT D .78 acres
- LOT E .53 acres
- LOT F .92 acres
- LOT G .97 acres



0 37' 75' 150' 300'

Scale: 1" = 150'

This conceptual utility plan demonstrates the necessary utilities to accommodate the anticipated phasing of development.



**Phase I:
CONCEPTUAL
UTILITY PLAN**

- Sanitary Sewer
- Storm Sewer
- Water Main
- Sanitary Manhole
- Storm Inlet
- Storm Manhole
- ⊗ Valve Vault
- Relocated Overhead Lines
- - - Buried Overhead Lines

0 18' 37' 75' 150'
Scale: 1" = 75'

Transportation Framework

Improved access from both Hawley Street and Lake Street must be provided for any new development to succeed in this area. It must have new connections to the existing grid system and better visibility from the major streets that surround it. The new connections have to provide more than simply additional vehicular capacity. They must be streets that help create the identity and sense of place in the development.

The transportation objectives to ensure success in the short-term and long-term are much different. In the short-term, the project must simply provide better access to Hawley Street, begin to reconnect the grid, and provide enough parking to allow all tenants to succeed. In the long-term, the project's transportation system should be one that encourages all modes of travel and supports the overall sustainability of the site. It will reconnect the entire grid system in the area bounded by Hawley Street, Lake Street, and Courtland Street. It will encourage less parking but more people through a series of parking management strategies.

Existing Transportation Conditions at the Metra Station

Accessing the Metra station and the land surrounding can be challenging for any user. Despite the considerable amount of signage directing people to the Metra station, the location remains hidden from drivers and pedestrians on Hawley Street and Lake Street. The station has the second lowest percentage of people that walk and bike to access the station on the North Central line and the highest percentage that drive and park.

There are two surface parking lots that serve the Mundelein Metra station. They are located adjacent to each other and provide a total 475 parking spaces. The price of parking for commuters is \$1.50 per day on weekdays and free on the weekends.

The Village conducts daily parking demand counts. Based on current counts, the parking provided by Metra far exceeds the demand. The peak daily parking demand for any one day in 2011 or 2012 was 194 parking spaces, which equates to 40% usage. Most of the western parking lot is roped off by the Village.

Even though supply far exceeds demand, these parking spaces cannot be removed. These spaces were built using federal funds for future demand. The parking spaces can be relocated and can also be used by non-commuters after the last inbound train leaves the station in the morning.

There are four inbound Metra trains between 6:15 a.m. and 7:15 a.m. with no additional inbound service until 9:29 a.m. Nine inbound trains and ten outbound trains stop at the Mundelein station on the weekdays. There is no weekend service. According to 2006 data from the RTA, there were 544 boardings and alightings at the Mundelein station.

Cardinal Square is a good example of a transit oriented development – an 84-unit, residential building located in close proximity to a transit station with additional multi-family buildings proposed for future construction – but is missing direct pedestrian access to the station. Residents have to drive to the Metra station or walk around the super block, even though it is located right across the tracks. SSE observed 23 vehicles driving from Cardinal Square and turning out to Seymour Avenue. It is assumed that these drivers were either parking at the Metra station or dropping someone off.

TOD Parking in the Chicagoland Area

SSE reviewed the existing parking supplies at twelve other Metra stations that have varying land uses and densities surrounding them. The ridership data and parking supply data is listed in the table below.

Line	Station	Metra Boardings (2006)	Metra Parking Spaces	Metra Parking Spaces per Boarding	Effective Use
North Central	Mundelein	283	475	1.68	40%
	Wheeling	306	485	1.58	40%
	Buffalo Grove	545	1062	1.95	71%
	Prairie View	299	405	1.35	32%
	Vernon Hills	353	658	1.86	42%
	Antioch	262	318	1.21	58%
Union Pacific North	Highwood	279	96	0.34	25%
Milwaukee District North	Morton Grove	966	474	0.49	100%
Union Pacific Northwest	Harvard	274	222	0.81	78%
Milwaukee District West	Elgin	476	147	0.31	99%
Union Pacific West	Villa Park	835	485	0.58	99%
BNSF Railway	Downers Grove	2328	889	0.38	96%

Table 16

Phase I Circulation Recommendations

Similar to the layout of the buildings, a number of circulation alternatives were analyzed throughout the process to determine how all modes of traffic would be able to easily access and safely move through the site. The circulation pattern for the current site layout provides a new connection to Hawley Street as well as from Hammond Street and Archer Avenue, provides a future direct connection to Metra, promotes safe traffic speeds within the site, and assists with creating a sense of place.

Hawley Street/Chicago Avenue

North Chicago Avenue currently terminates at Hawley Street. As part of the current layout, Chicago Avenue would be extended further south from its currently terminus. The new leg of Chicago Avenue aligns with the existing leg of Chicago Avenue at Hawley Street at the same angle. This new leg of the intersection will provide a 36' three-lane cross section – one southbound lane, and two northbound lanes (a left-turn lane and a combination through/right-turn lane) – at the intersection. The northbound movements will operate under stop control. A turn lane analysis will be necessary to determine if a left-turn lane is necessary on Hawley Street at Chicago Avenue. Signage will be necessary to alert drivers not to block the intersection during train crossings.

Chicago Avenue Extension, between Hawley Street and the Square

Chicago Avenue will continue to extend to the south of its intersection with Hawley Street. It should be designed with a width of 36', with 10' travel lanes in both the northbound and southbound directions and parallel parking on both sides of the street. Turn lanes are not necessary at the drive-ways that serve the parking lot to the east of the street. The street should have 25 miles per hour (mph) speed limit and appropriate signage should be posted.

A commercial building will be located on the west side of the street and a surface parking lot will be located on the east side. Pedestrian crossings between these two uses should be made as safe and visible as possible using a number of pedestrian safety tools, including, but not limited to:

- Curb extensions
- Signage alerting drivers that it is state law to stop for pedestrians
- International crosswalks
- Rapid flash beacons
- Lighting

Chicago Avenue at Rockefeller Square

The most unique feature of this development is Rockefeller Square. As described earlier, it will consist of a public space in the middle, an oval shaped street (Chicago Avenue) running around its perimeter, and a combination of parking and pedestrian space between the buildings and the street. It will allow continuous vehicular flow that promotes slow travel speed around its perimeter. Unlike a roundabout, Rockefeller Square is not designed to serve as a traffic control feature between two roadways, but to simply extend Chicago Avenue further south.

In the short-term, Chicago Avenue will be a two-way street that runs between the Chicago Avenue extension and “New” street. It will be 18' in width and provide travel in both directions.

In the long-term, Chicago Avenue will only allow travel in a one-way counter-clockwise direction around Rockefeller Square. Pedestrian crossings will be provided at each intersection location to allow people to access the space in the middle. Parking will be provided in the areas outside of Chicago Avenue, adjacent to the buildings. It is recommended that the parking, travel lane, and inside area of Rockefeller Square consist of different surface materials to help make users aware of how the space should be used. This section of Chicago Avenue will be designed to allow a fire truck to get around Rockefeller Square and access the side streets.

Chicago Avenue intersections

The proposed street network shows three east-west connections, two of which will connect to Archer Avenue and the other will connect further to the east in the future. Each of these three streets should be two-way streets with 9' travel lanes in each direction. On-street parallel parking or loading zones can be considered at each of these streets if it is appropriate for the adjacent buildings.

Chicago Avenue Extension, south of Rockefeller Square

Chicago Avenue will eventually extend further to the south of the oval, continuing on to the Metra parking. The Chicago Avenue extension should continue as a 36' roadway, similar to the cross section north of Rockefeller Square. More discussion of this extension will be provided in Phase II.

Phase I Parking

Parking is necessary for almost any development in the Chicagoland area to succeed. Most people don't want a parking lot until they actually need it to park their car. For this particular site, the issue of parking is even more challenging. There must be enough parking to allow the commercial land uses to succeed and to support the Village Hall and office building. However, providing too much parking will create an atmosphere that is not enjoyable for pedestrians and will set precedence for future land uses that will create even more unused parking. One of the long term goals of this project is to create a unique place where people want to walk and spend time in, and building too much parking completely contradicts this idea. In order to balance the needs of the site in the short term and in the long term, the future parking supply must be thought of as flexible, and it must be assumed that parking demand will not grow at a linear rate with additional buildings.

Metra Parking

In the short term, the Metra parking lots will be used as overflow parking for the Village Hall and the office building. A pedestrian connection will need to be built to connect these lots to the new development. Chicago Avenue will eventually extend to these lots, providing a direct connection between the parking lots and Hawley Street.

On-Street Parking

Parking should be provided on-street wherever possible in the new development. In addition to increasing the parking supply, on-street parking also provides a number of other benefits that help create a neighborhood atmosphere. When cars are parked on-street, traffic operates at slower speeds and an additional buffer is created between moving lanes and sidewalks.

Off-Street Parking

As discussed earlier, providing the “correct” amount of off-street parking will be one of the most challenging parts of this development, both in the short term and the long term. The development must provide enough parking to accommodate people that drive to the site, but not so much parking so that the site becomes a sea of asphalt. The key to accomplishing this is to constantly weigh the benefits of adding off-street parking along with the costs and being flexible when it comes to parking requirements.

As part of Phase I, an off-street surface parking lot is proposed on the east side of Chicago Avenue. This parking lot would serve the parking needs for the commercial development on the west side of the street.

An additional off-street surface lot is proposed behind the Village Hall. Between this surface lot, the perpendicular parking provided in front of Village Hall and the parallel parking proposed on Archer Avenue and the side streets that connect to Rockefeller Square will be provided for the Village Hall and the proposed office building. Any additional parking can be accommodated by the Metra surface lots, assuming there is a safe pedestrian connection between the parking and the office building. The exact number of parking spaces will be determined when there are more specific development plans.



Existing Street Network



Proposed Street Network

Phase II Circulation

As development continues to the south, the grid network should continue to extend so that Chicago Avenue connects to Courtland Street. Streets should continue to be designed with narrow travel lanes and on-street parking to promote a pedestrian friendly area.

Sidewalks should be mandatory for all new streets and development, with a minimum width of 6'. Crosswalks should be provided at every intersection and additional treatments, such as bump-outs, mid-block crossings, or pedestrian signals should be considered where appropriate. Streets should be designed so that pedestrians of all ages and abilities can safely walk to their destination.

An improved pedestrian crossing should be considered at the intersection of Hawley Street and Chicago Avenue to connect the existing land uses to the north of Hawley with the proposed development. At the minimum, this should include crosswalks and signage. A pedestrian refuge island should be considered on the west leg of Hawley Street.

Bike lanes should be considered as part of future street design. A connection should be made between the proposed development and the North Shore Bike Path. Bike parking should be included with all proposed developments and secure, sheltered bike parking should be considered at the Metra station.

Phase II Parking

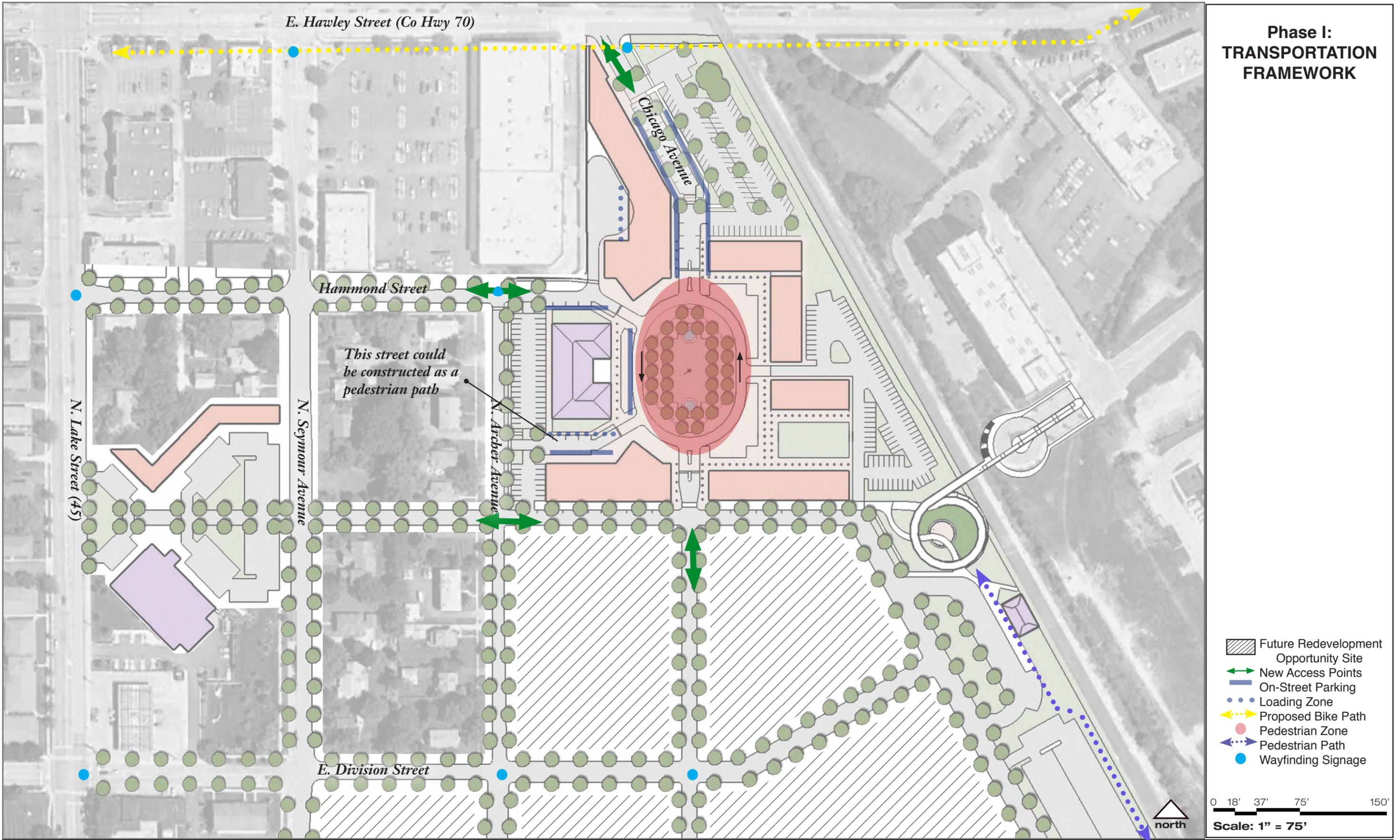
Once the Phase I buildings are occupied, parking demand is created, and new development is planned further to the south, decisions on parking will become more critical. The Village will need to take a strong role in promoting development that takes advantage of the Metra line and the future walkability of the area. It should be intended that anyone that drives to the site should park once and walk to any destinations.

In order to accomplish this, the Village should not have parking minimums or maximums for any new development and allow the “parking market” to set itself. New development in this area should not be simply required to provide a certain number of parking spaces based on the number of square feet. Each development should justify how much parking they need and explain how it would be provided, either by using existing parking or building additional parking.

Sharing parking between land uses must be mandatory. To make the best use of a limited resource, parking must be planned holistically so that demand is analyzed throughout the day. Parking counts should be continually conducted in order to have an accurate picture of how much parking is needed and at what times of the day. The more information that is available for future parking decisions the better.

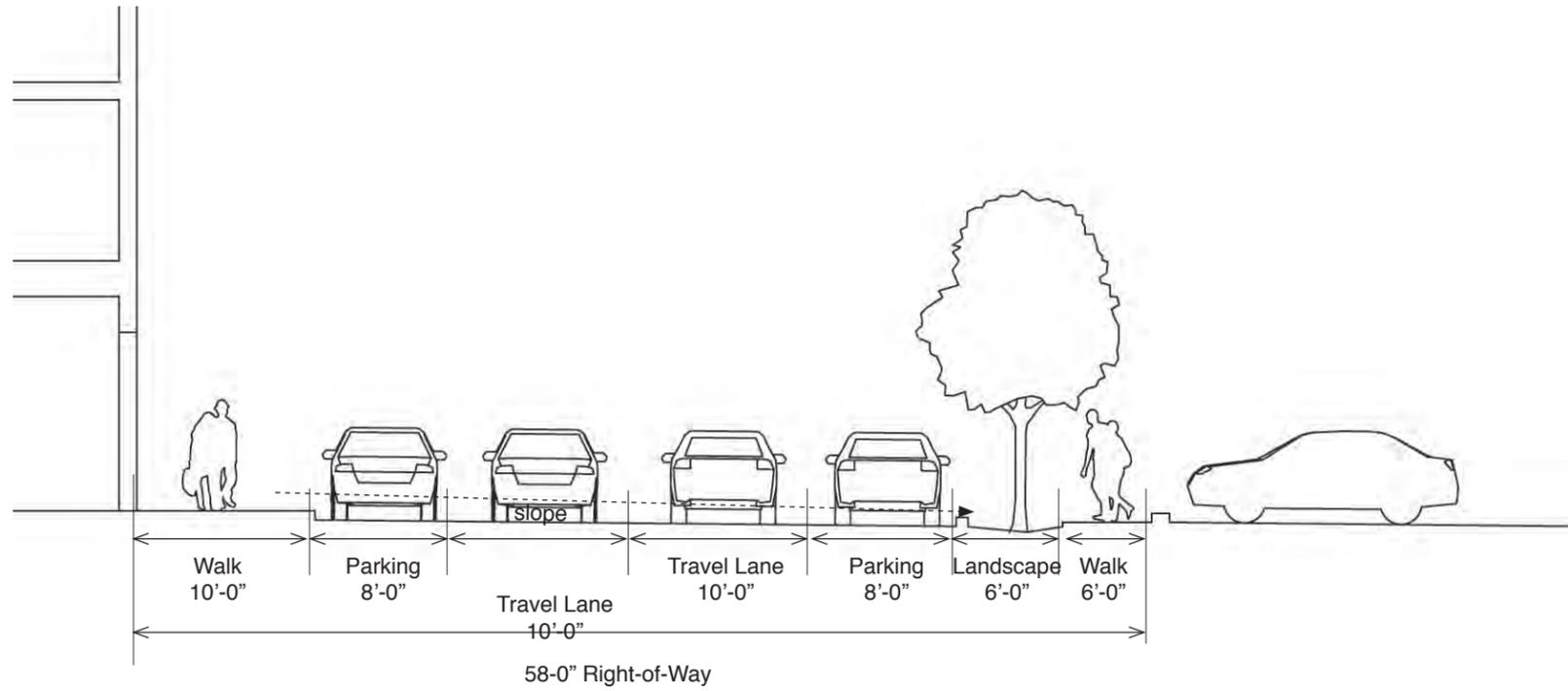
In the long-term, the existing Metra commuter parking lots may be relocated to accommodate development. The relocation may occur to surface lots, a parking structure, or on-street spaces in coordination with Metra. Regardless of future location, direct access to the arterial street network is a priority for Metra. The search pattern for commuters to find the next parking space should be easily identifiable and convenient within a quarter mile of the platform with a direct line of sight to the platform.

In order to minimize the space required for parking, the Village should be creative when planning Phase II. All options should be on the table, including pricing the most convenient parking space, designating undersized spaces for small cars, motorcycle, and bicycle parking, and implementing car sharing or even bike sharing in the immediate area. Developments should also be encouraged to provide individual methods to reduce their own parking. This could include incentivizing transit use, unbundling the cost of parking from the cost of a unit or rent, or providing a car sharing service for residents of a building. Creating a great and unique place will require the Village to think differently about parking.

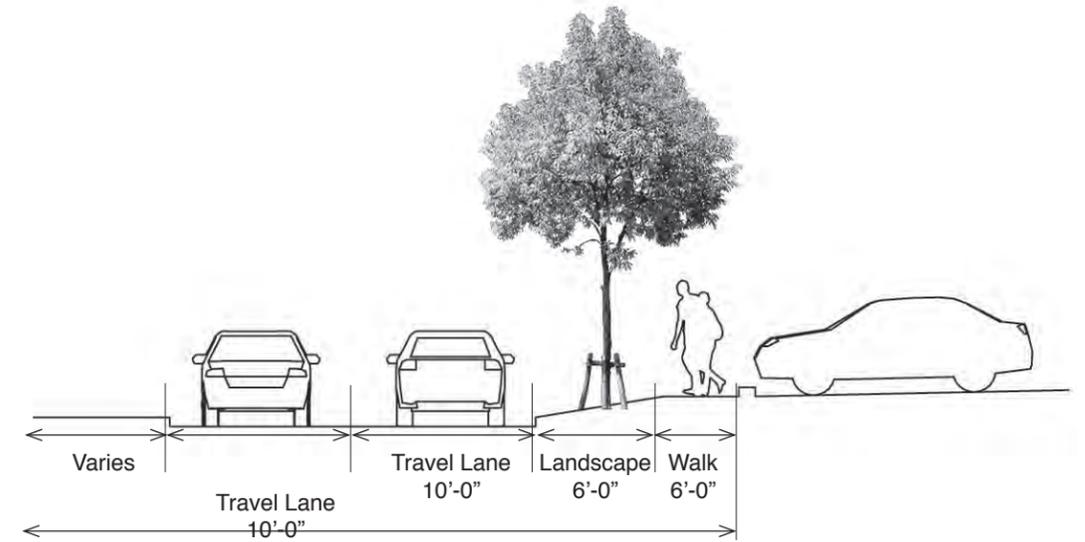


Street Sections

The following street sections demonstrate the recommended widths for the streets within the study area and should not be exceeded. The widths are likely more narrow than other places in the Village which will help to maintain the pedestrian orientation and distinct identity of the site.

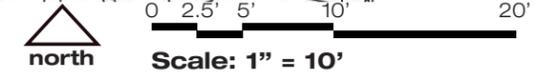
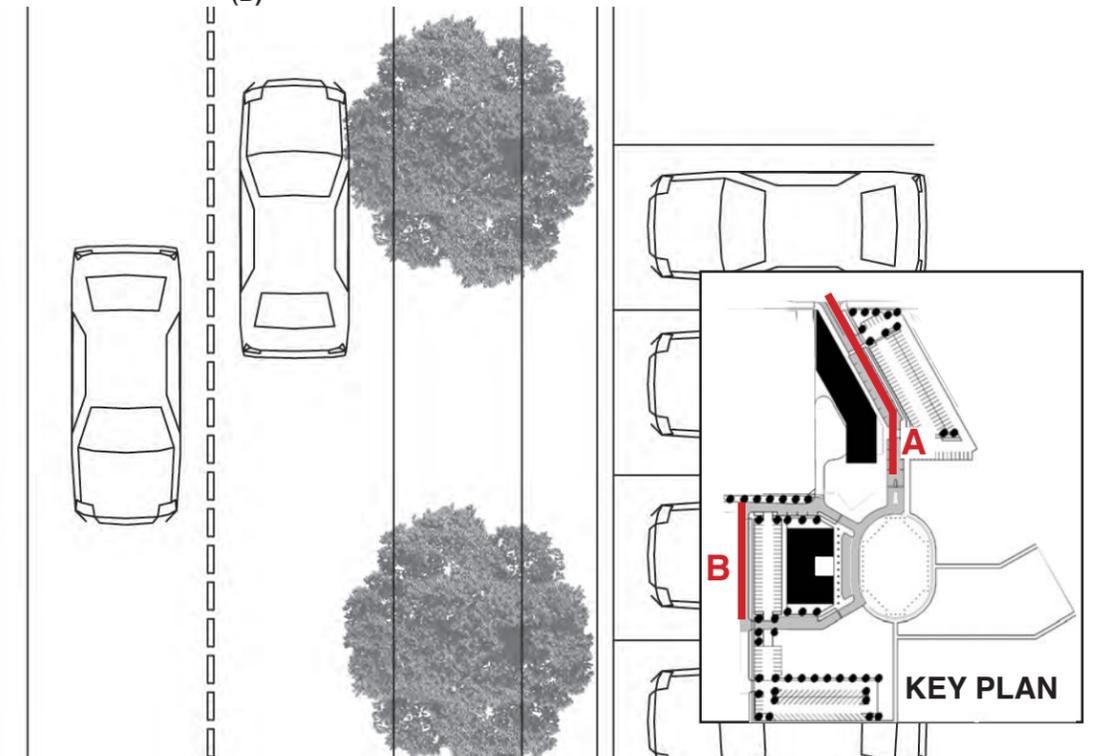
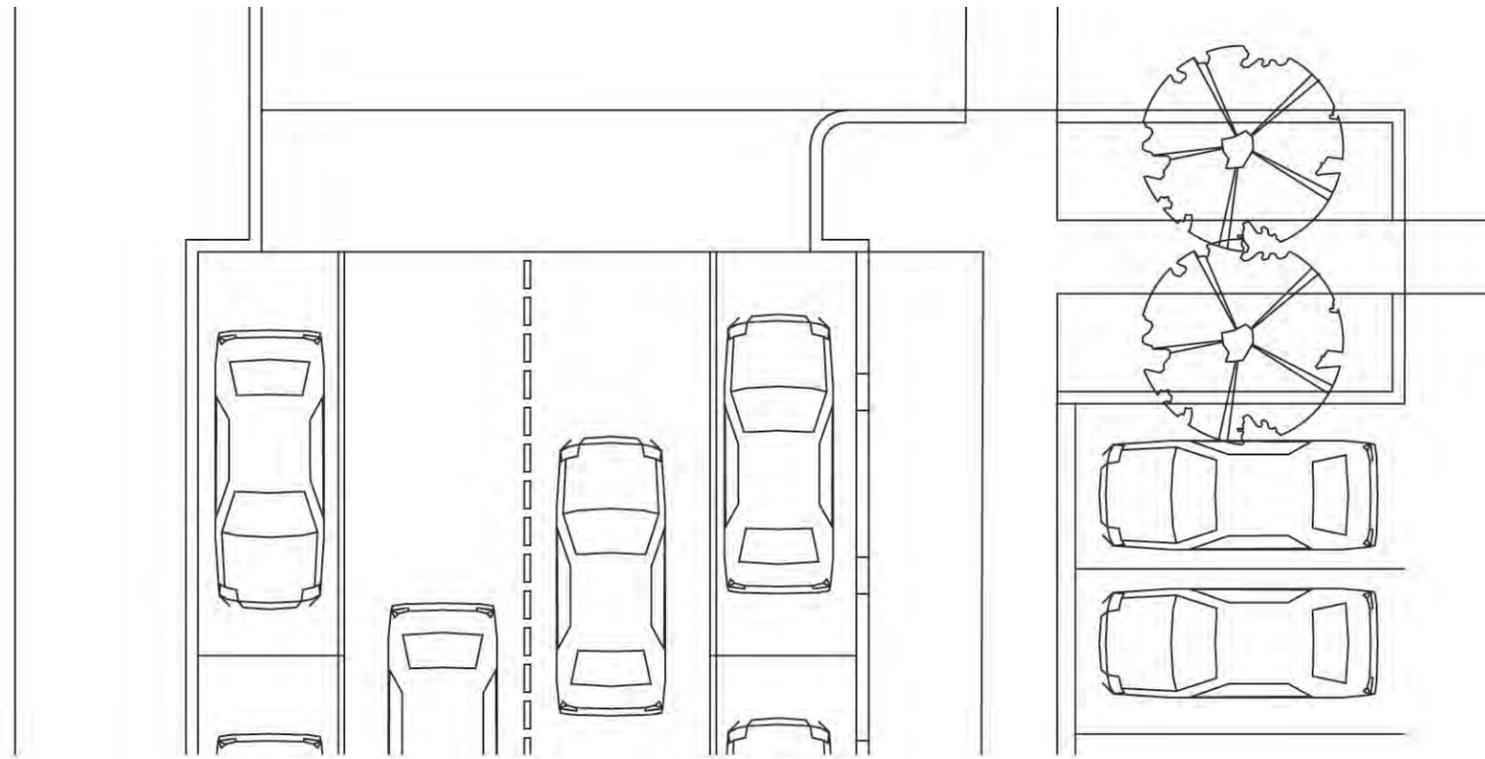


CHICAGO AVENUE EXTENSION (A)

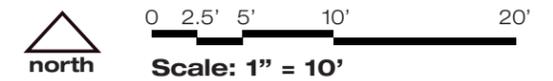
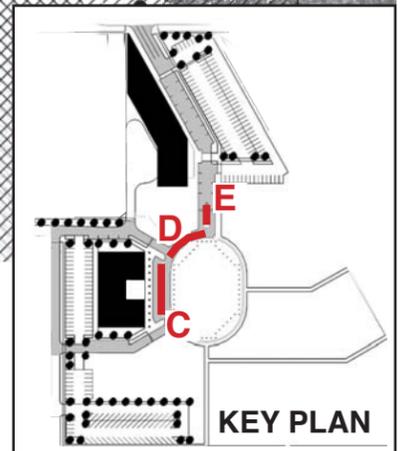
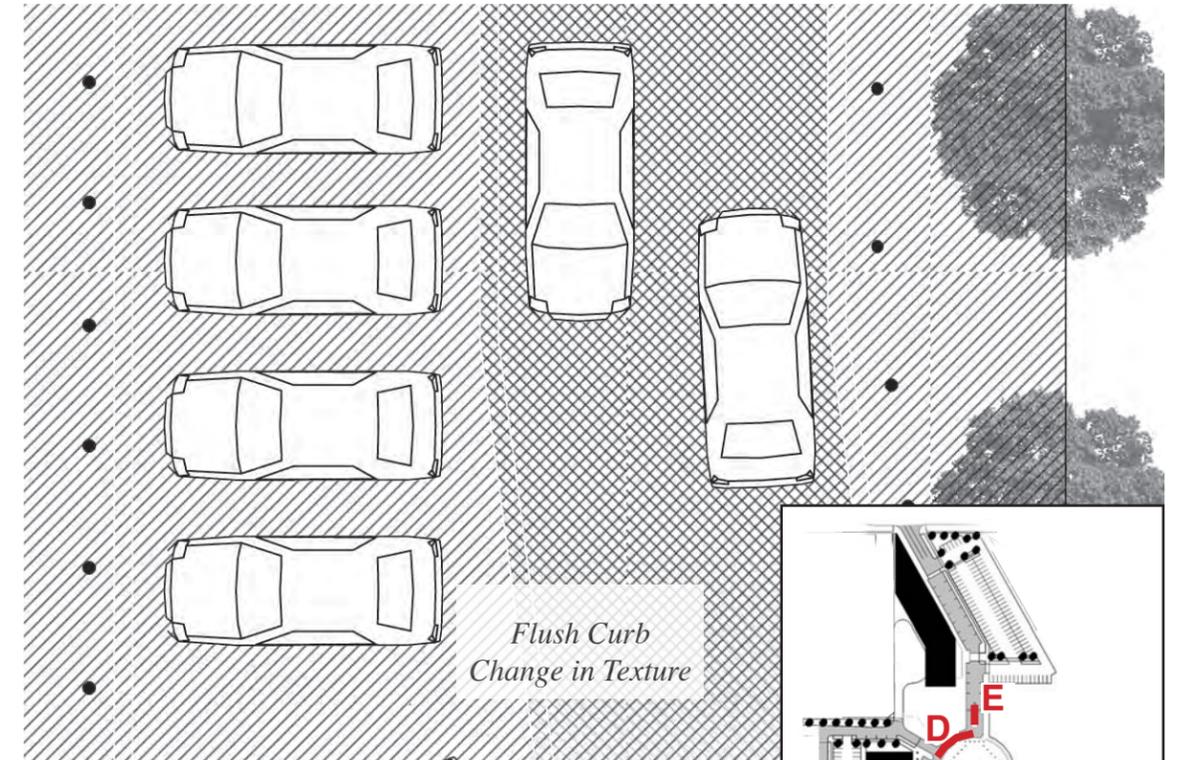
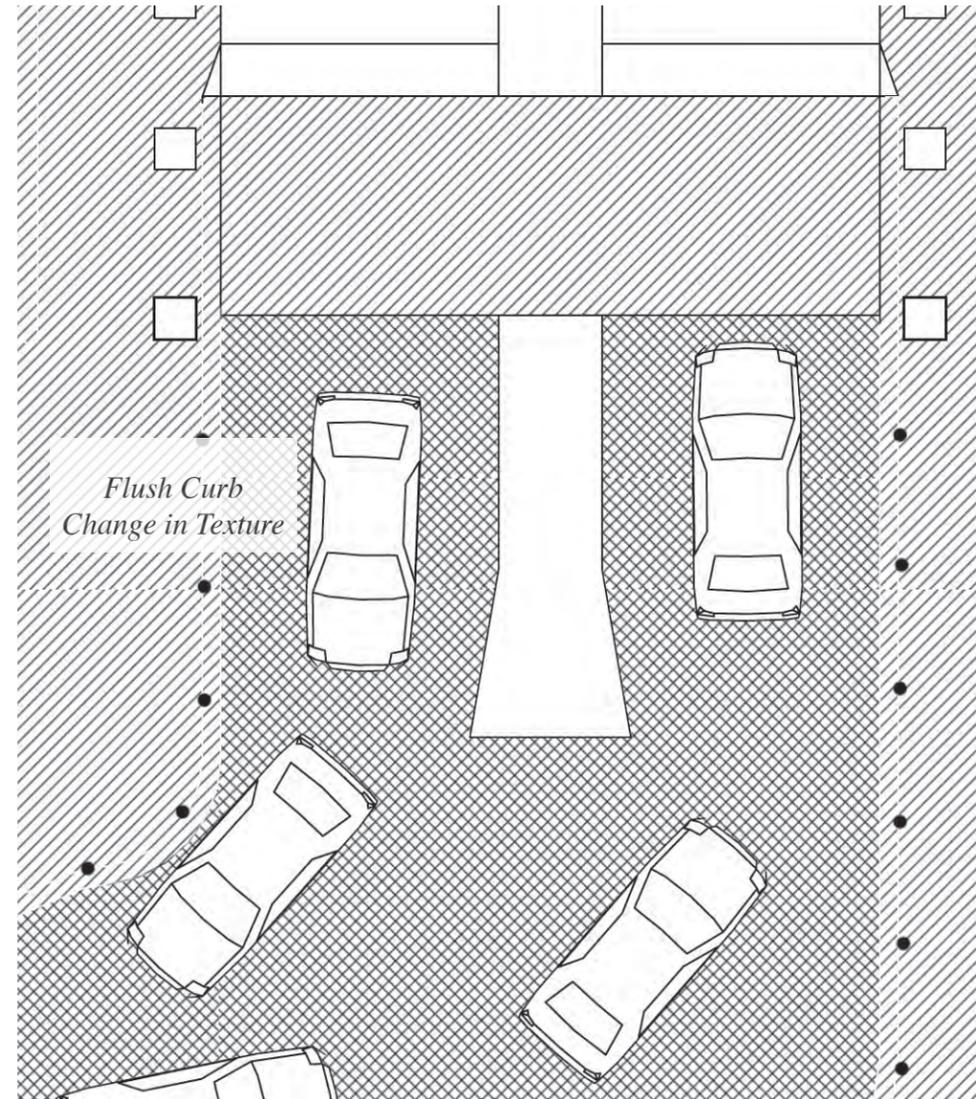
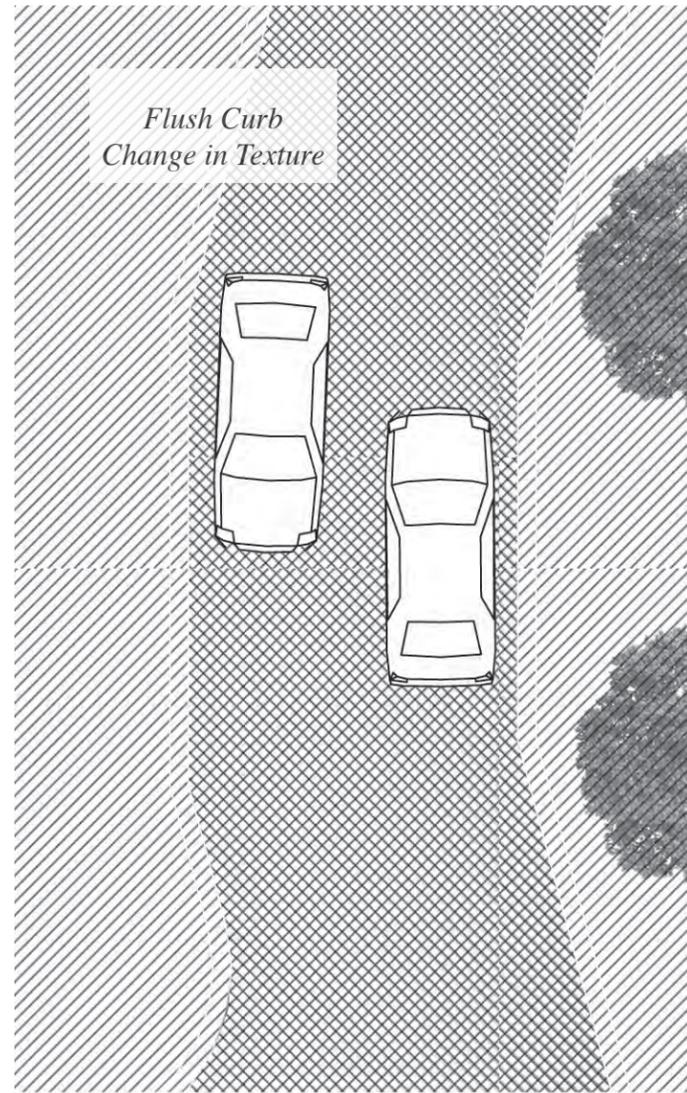
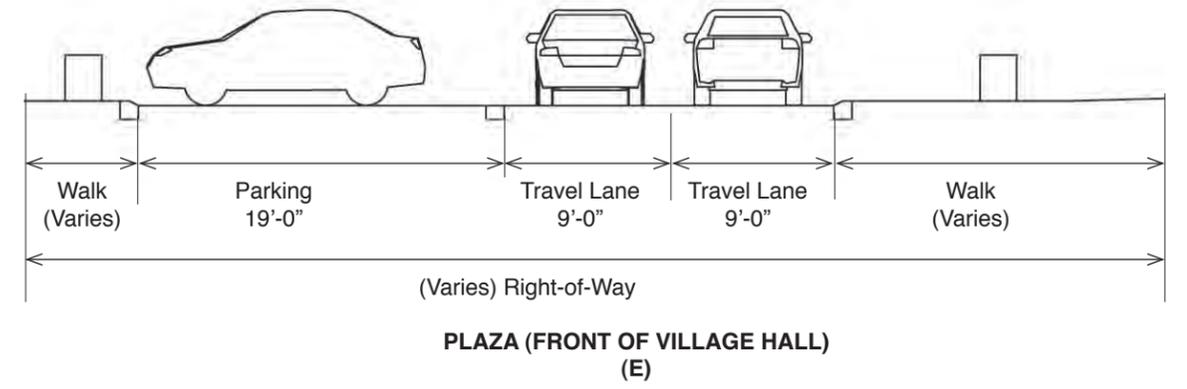
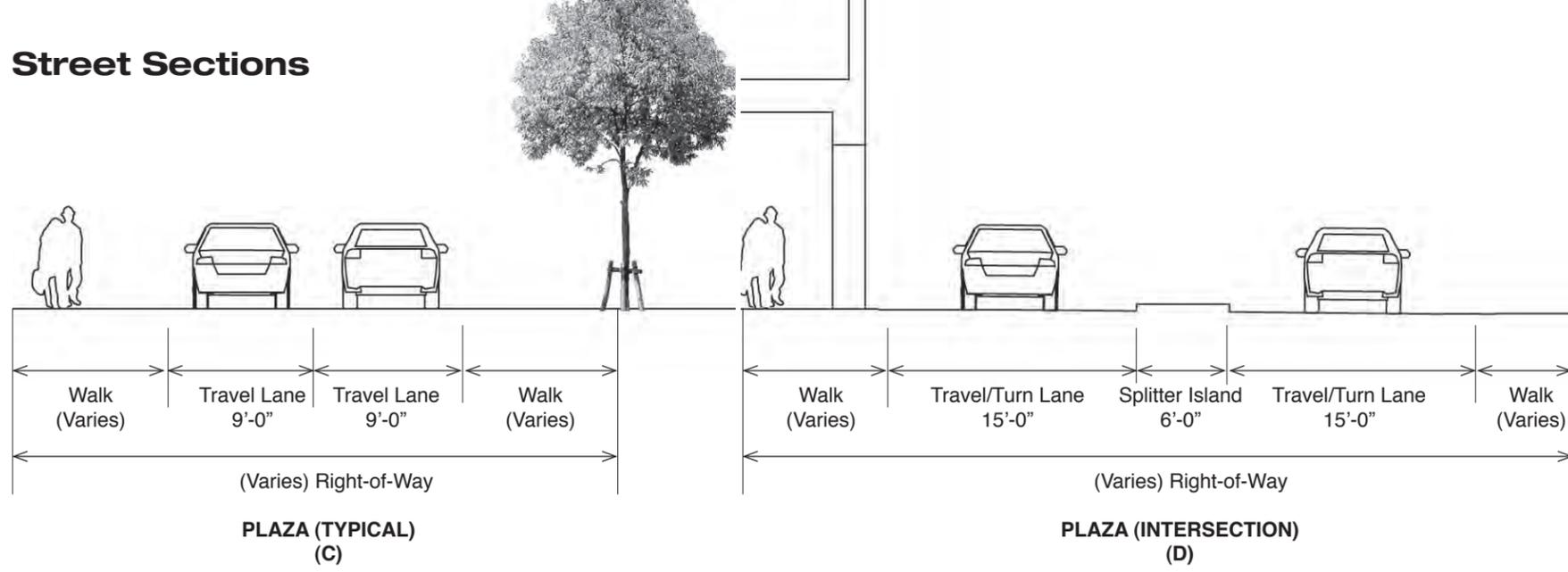


(Varies) Right-of-Way

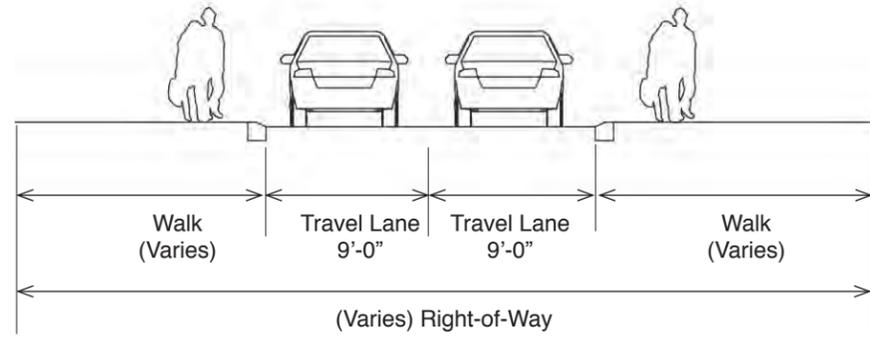
ARCHER AVENUE (B)



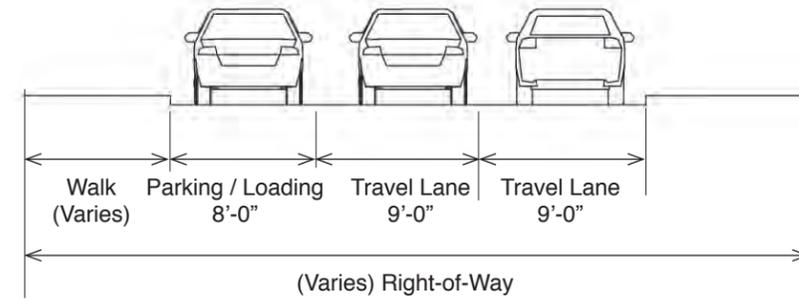
Street Sections



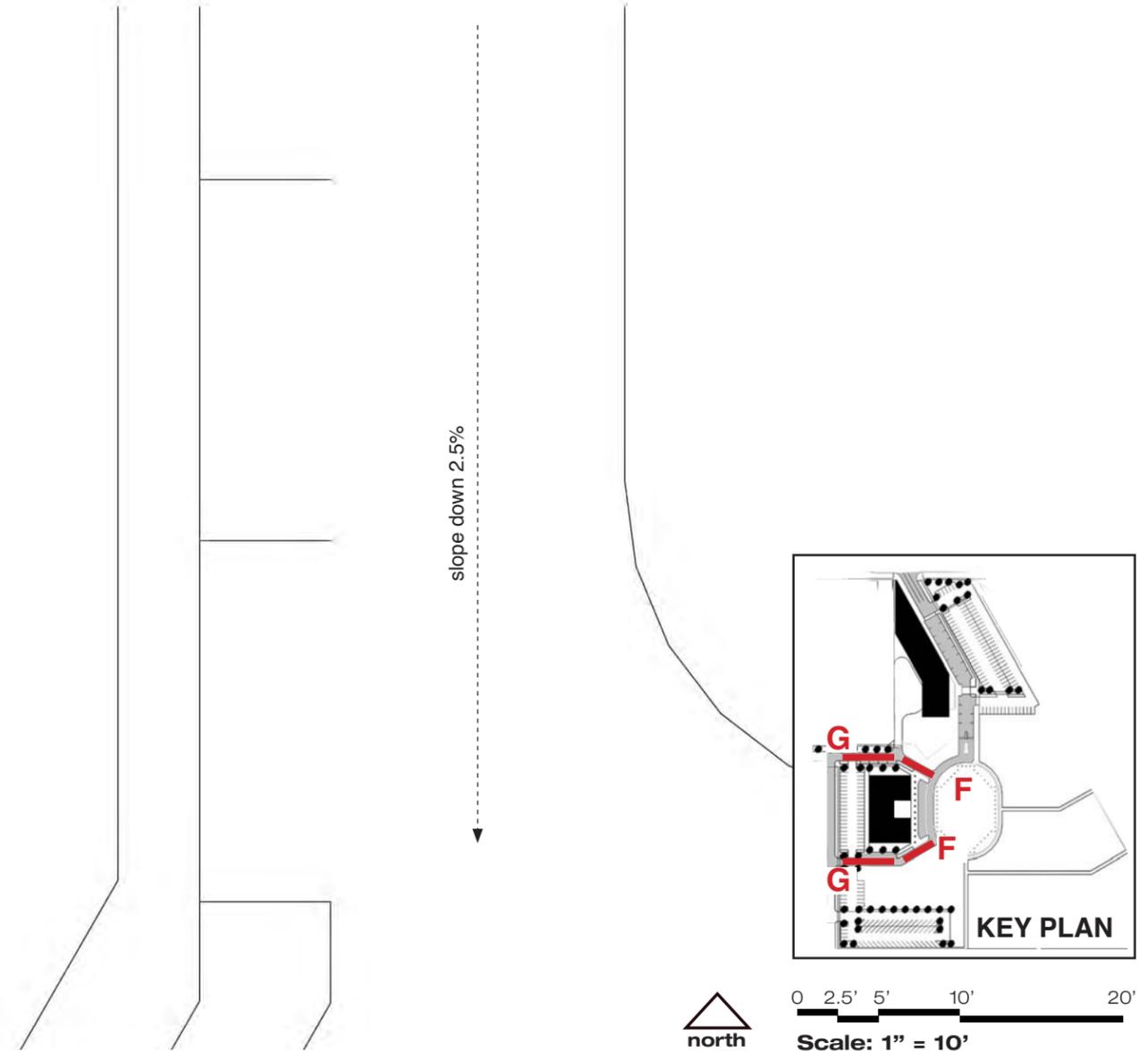
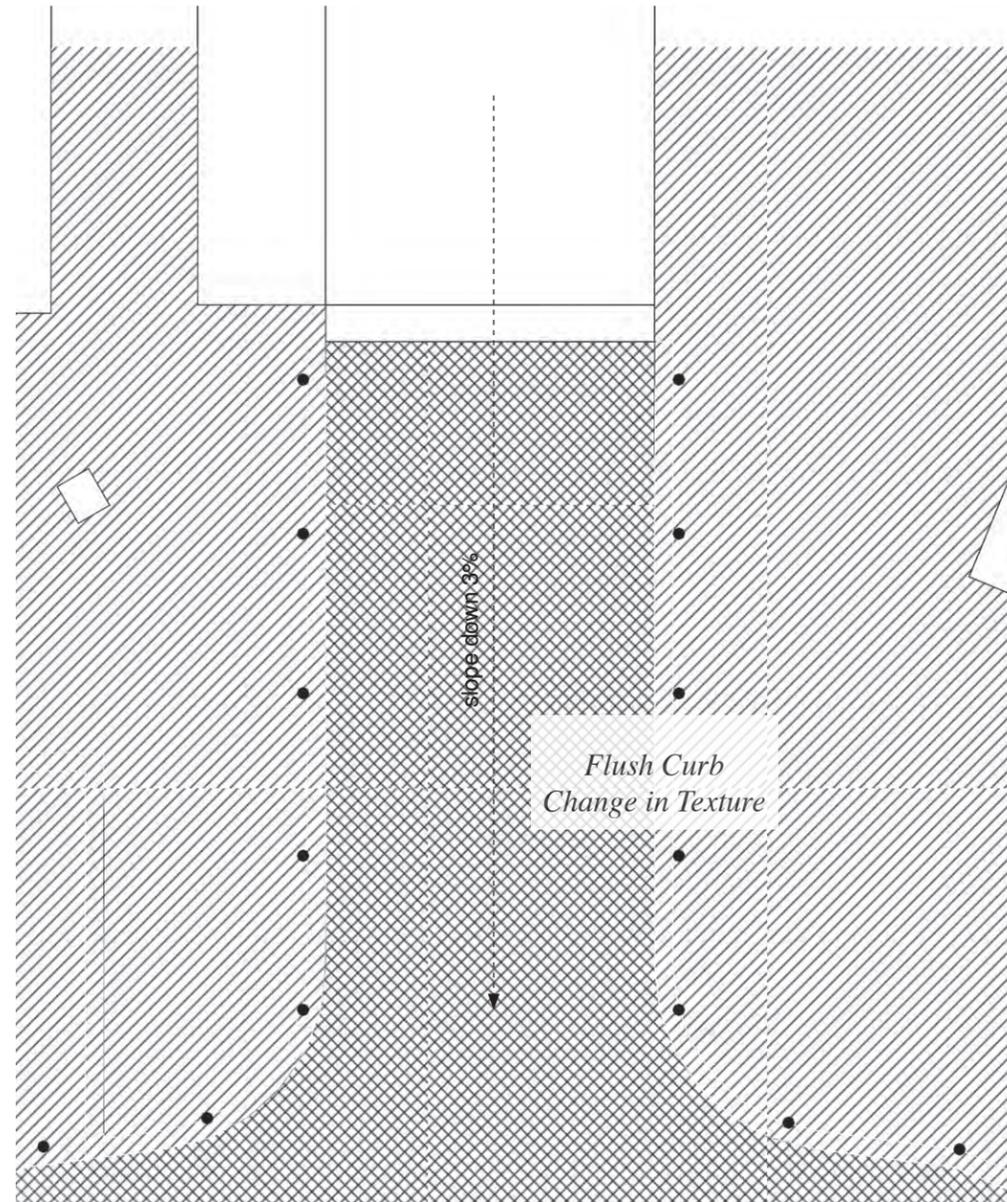
Street Sections



**HAMMOND EXTENSION / PLAZA INTERSECTION
(MIRROR OF NEW ROAD SOUTH OF VILLAGE HALL)
(F)**



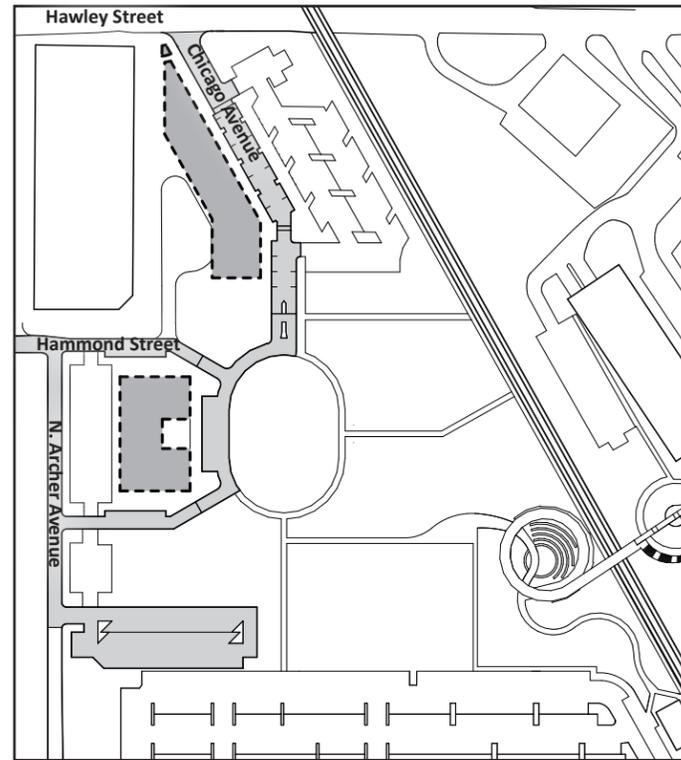
**HAMMOND EXTENSION
(MIRROR OF NEW ROAD SOUTH OF VILLAGE HALL)
(G)**



Phase I Staging

Phase I is anticipated to develop in stages over a 25-year timeframe. Details for each stage is provided below and on the following pages.

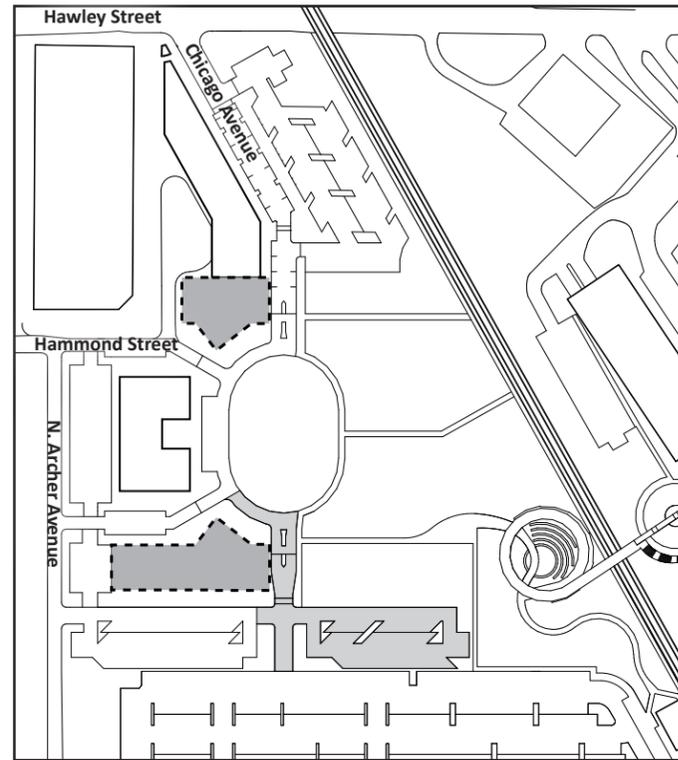
STAGE 1-A



Stage 1-A begins with construction of the Village Hall and extends Chicago Avenue south from Hawley with connections to Archer via a Hammond extension and a new southern street. Rockefeller Square begins to take shape through the street construction. The street surrounding the central public space is envisioned to be one-way counterclockwise but will be two-way as an interim condition of this phase. The east half of the square is “roughed in” with a pedestrian path that indicates the final goal. The retail-oriented, mixed-use lot toward the north of the site is also part of this phase.

Build Out: 2-3 years

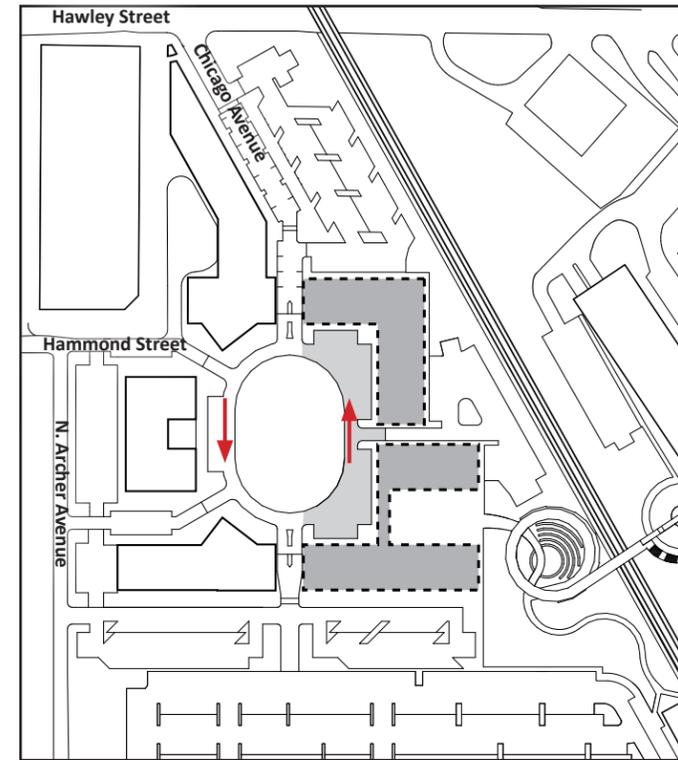
STAGE 1-B



Stage 1-B consists of a further extension of Chicago Avenue to connect to the Metra parking lot. A professional office building is constructed on the southwestern portion of the site. The three buildings together help to shape Rockefeller Square. At this point, the site successfully provides new east-west and north-south connectivity to major streets, Hawley and Lake.

Build Out: 7 years

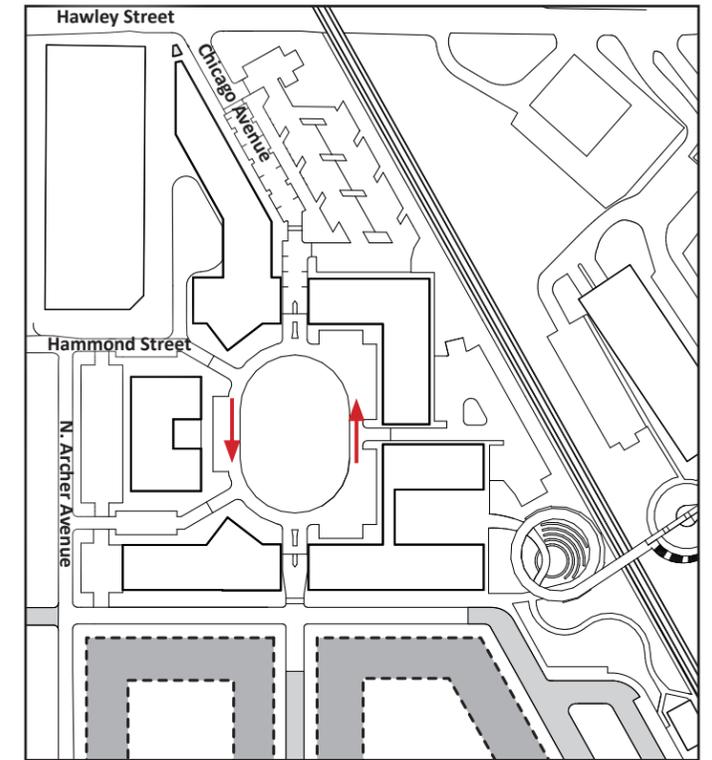
STAGE 2



Stage 2 includes the remaining buildings that shape Rockefeller Square. Completion of the circular road occurs with construction of the first building east of the Chicago Avenue extension. New on-street parking is provided on the east side of the square.

Build Out: 15 years

STAGE 3

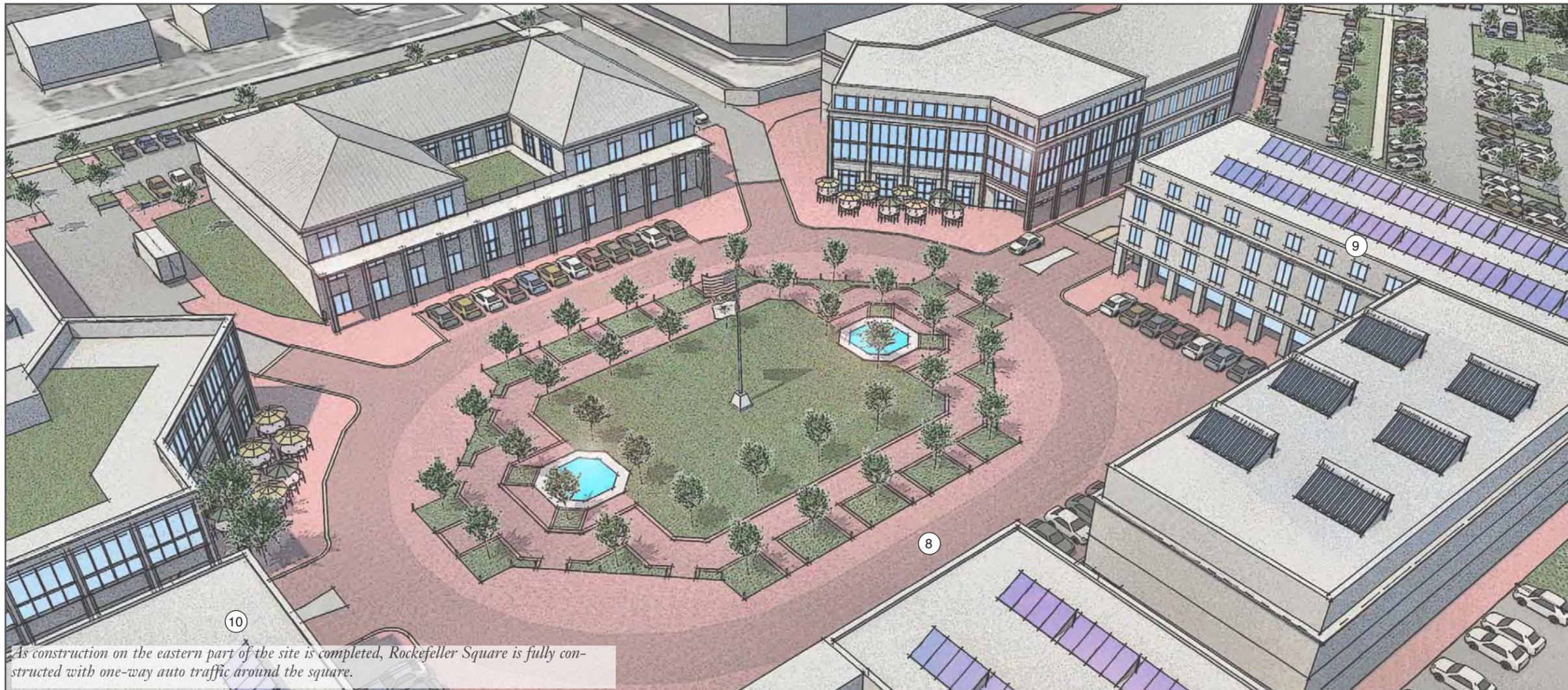
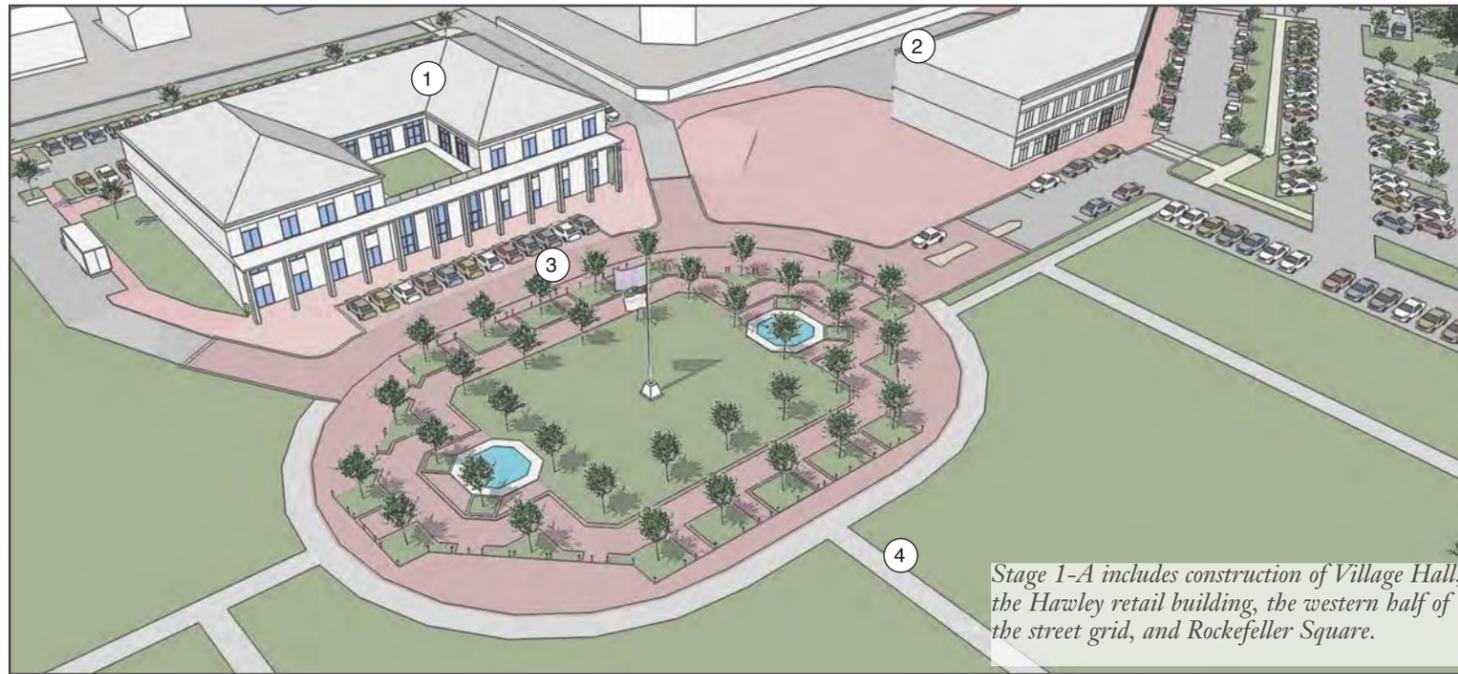


Stage 3 continues the pattern of development to the south with the further extension of Chicago Avenue and a new east-west street to provide additional connectivity to Lake Street. Given the grade change between the site and Lake Street, this connection may continue west of Archer Street as a dedicated street or a multi-use path for pedestrians and cyclists with an emphasis on connecting to the police station.

Build Out: 25 years

■ Stage Buildings and Streets

→ One Way Street



- Staged Development**
(view looking northwest)
1. Village Hall
 2. Lot B Development-Phase I
 3. Stage 1-A Road (2-Way Traffic)
 4. Pedestrian Paths to Metra
 5. Lot B Development-Phase II
 6. Lot C Development
 7. Stage 1-B Road (2-Way Traffic)
 8. Stage 2 Road (1-Way Traffic)
 9. Lot E Development
 10. Lot F Development

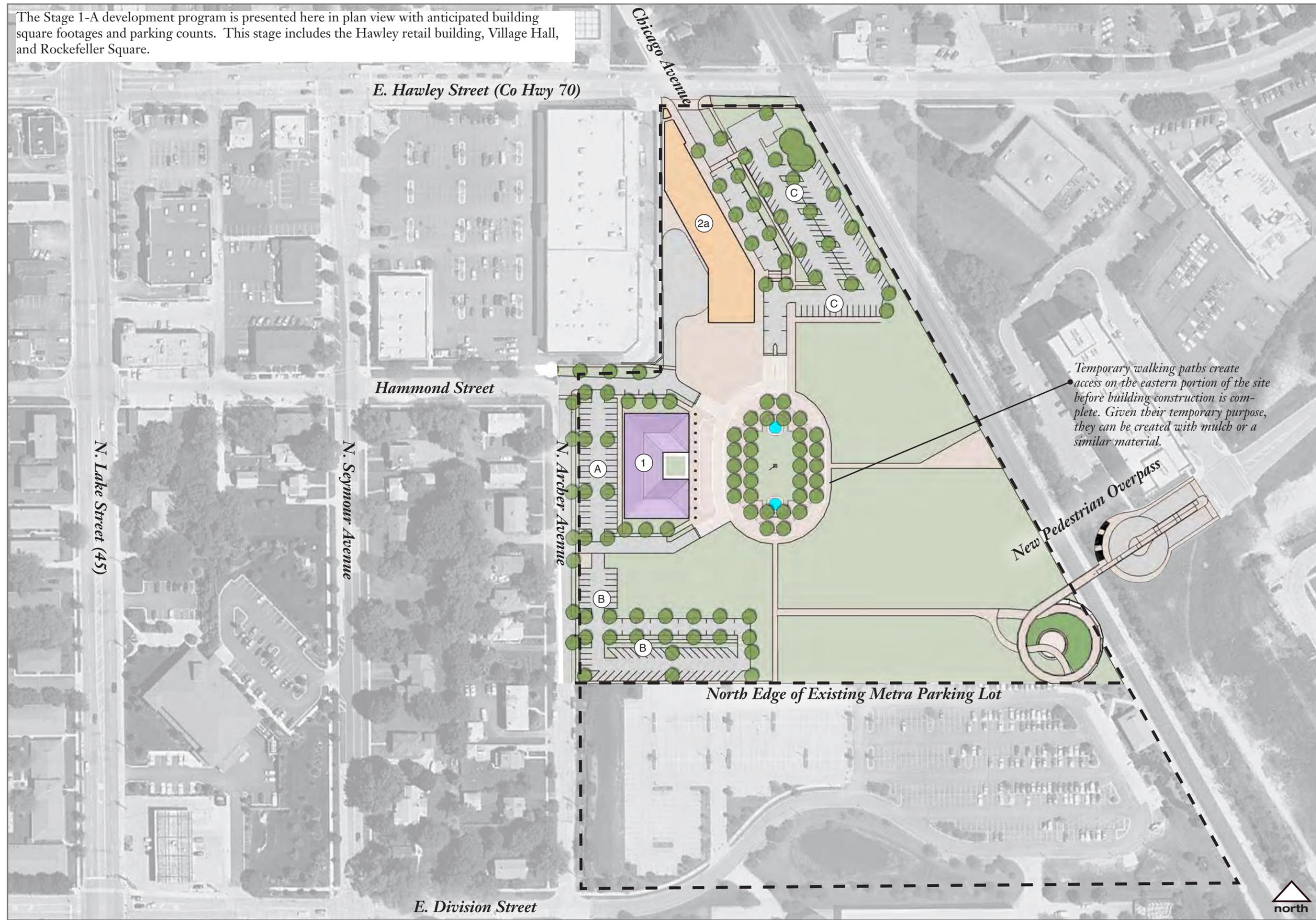


Staged Development

(view looking southeast)

1. Village Hall
2. Lot B Development-Phase I
3. Stage 1-A Road (2-Way Traffic)
4. Pedestrian Paths to Metra
5. Lot B Development-Phase II
6. Lot C Development
7. Stage 1-B Road (2-Way Traffic)
8. Stage 2 Road (1-Way Traffic)
9. Lot E Development
10. Lot F Development

The Stage 1-A development program is presented here in plan view with anticipated building square footages and parking counts. This stage includes the Hawley retail building, Village Hall, and Rockefeller Square.



STAGE 1-A

BUILDING AREA (sf)

1. Village Hall - 35,000 total

2a. Northwest Lot - 18,800*
*per floor

PARKING

A. Village Hall - 38 off-street
17 on-street
4 ADA
59 total

B. Southwest Lot - 59 off-street
3 ADA
62 total

C. Northeast Lot- 92 off-street
4 ADA
21 on-street
117 total

■ Hawley Retail Building

■ Village Hall

Temporary walking paths create access on the eastern portion of the site before building construction is complete. Given their temporary purpose, they can be created with mulch or a similar material.

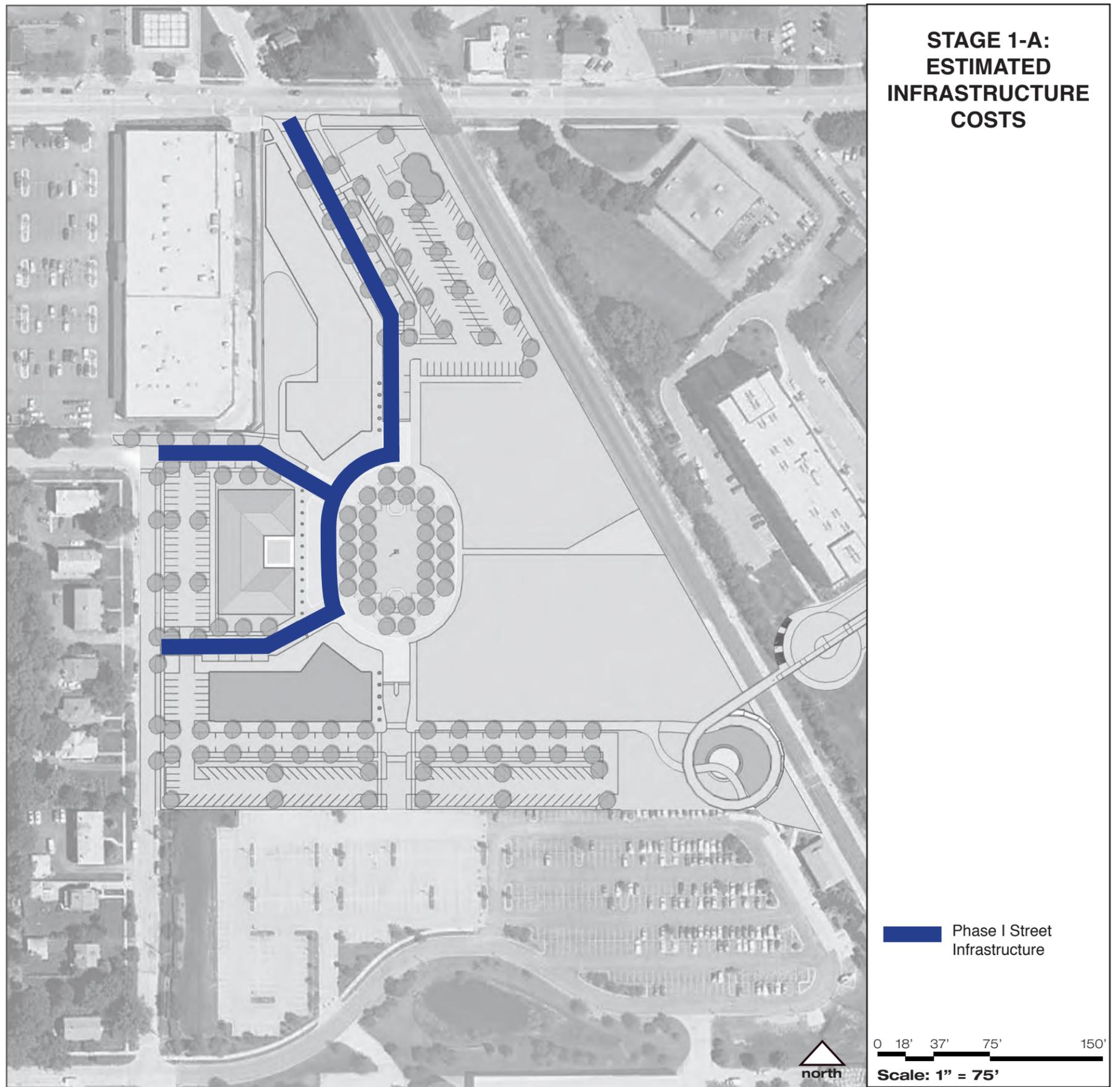


Scale: 1" = 150'

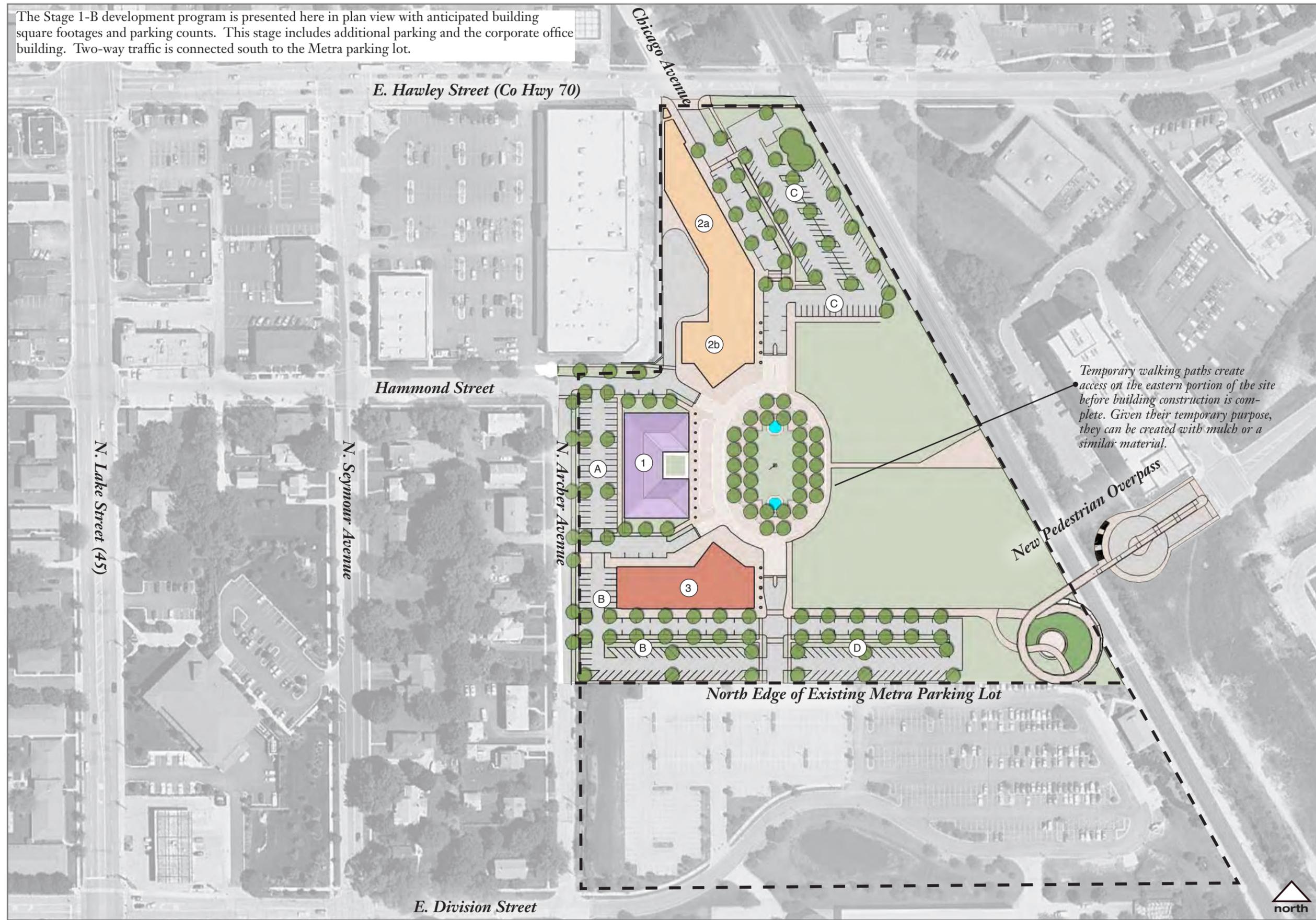
Street Name	Description	Estimated Cost	Comments
Chicago	~460 LF, 36' wide, 57' ROW	\$828,000	Does not include Hawley St. costs
Hammond	~270 LF, 42' ROW	\$343,000	Water, sewer, storm, street lighting, parking
Archer Connection	~200 LF, 42' ROW	\$237,000	No water or sewer
Chicago "Square"	~400 LF	\$610,000	
	Bond	\$63,000	
	Subtotal	\$2,081,000	

Table 17

Cost estimates based on figures provided by Weston Solutions



The Stage 1-B development program is presented here in plan view with anticipated building square footages and parking counts. This stage includes additional parking and the corporate office building. Two-way traffic is connected south to the Metra parking lot.



STAGE 1-B

BUILDING AREA (sf)

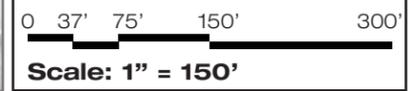
- 1. Village Hall - 35,000 total
- 2a. Northwest Lot - 18,800*
- 2b. Northwest Lot - 7,300*
- 3. Southwest Lot - 15,000*

*per floor

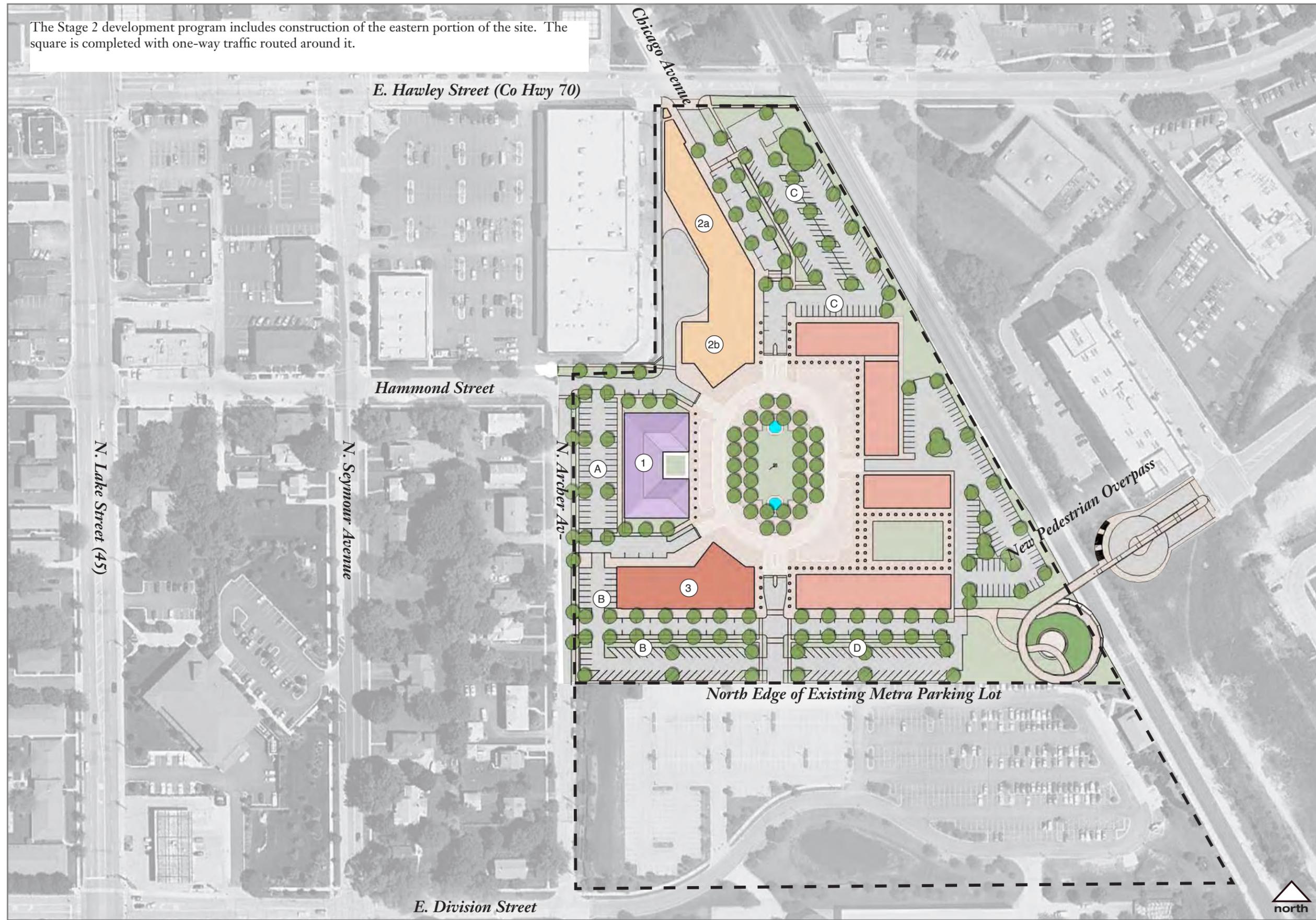
PARKING

- A. Village Hall - 38 off-street
17 on-street
4 ADA
59 total
- B. Southwest Lot - 59 off-street
3 ADA
62 total
- C. Northeast Lot - 92 off-street
4 ADA
21 on-street
117 total
- D. Southeast Lot - 39 off-street
2 ADA
41 total

- Hawley Retail Building
- Village Hall
- Corporate Office Building



The Stage 2 development program includes construction of the eastern portion of the site. The square is completed with one-way traffic routed around it.



STAGE 2

BUILDING AREA (sf)

- 1. Village Hall - 35,000 total
- 2a. Northwest Lot - 18,800*
- 2b. Northwest Lot - 7,300*
- 3. Southwest Lot - 15,000*

*per floor

PARKING

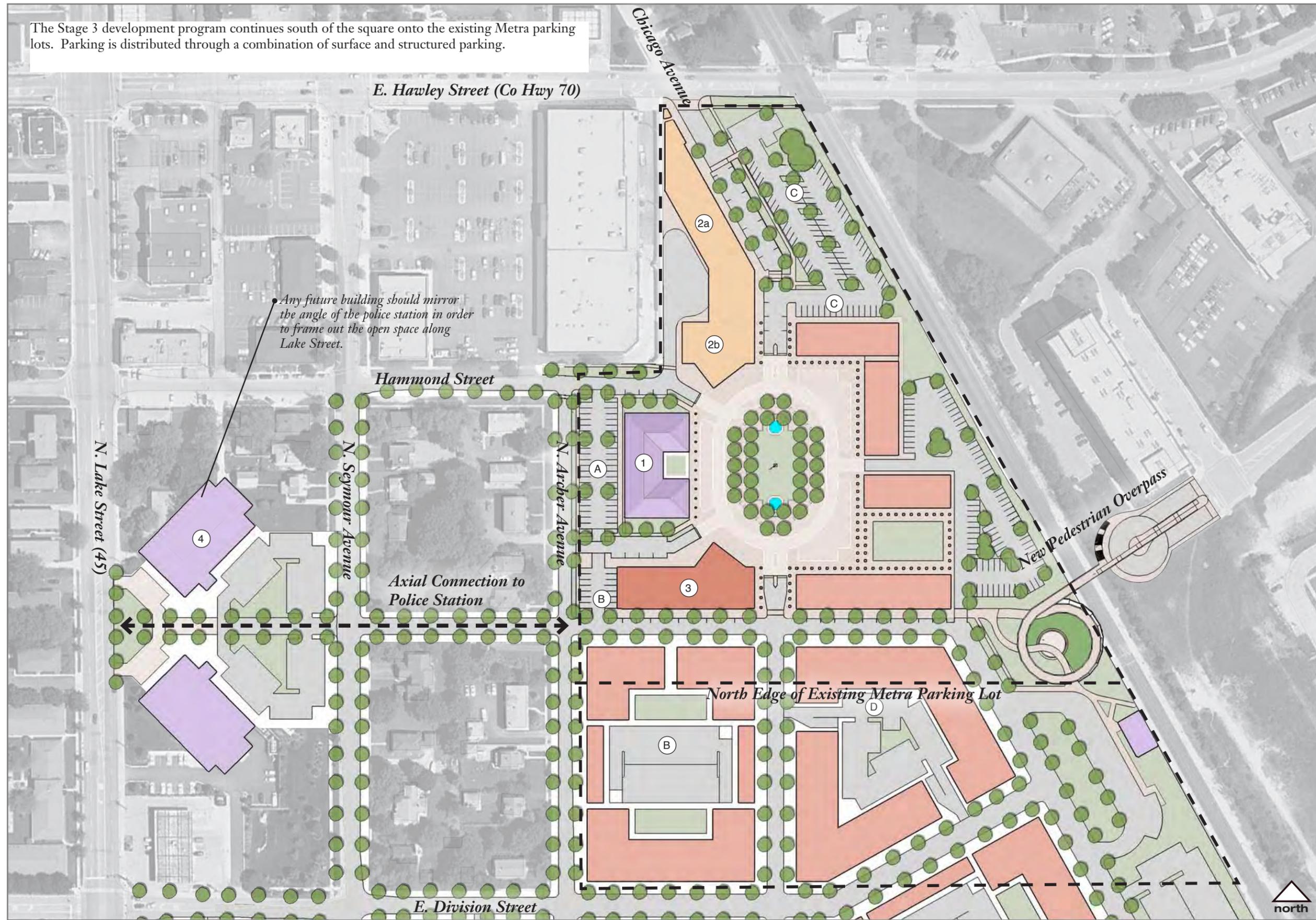
- A. Village Hall - 38 off-street
17 on-street
4 ADA
59 total
- B. Southwest Lot - 59 off-street
3 ADA
62 total
- C. Northeast Lot - 115 off-street
5 ADA
21 on-street
141 total
- D. Southeast Lot - 39 off-street
2 ADA
41 total

- Hawley Retail Building
- Village Hall
- Corporate Office Building
- Office/Mixed-use

0 37' 75' 150' 300'

Scale: 1" = 150'

The Stage 3 development program continues south of the square onto the existing Metra parking lots. Parking is distributed through a combination of surface and structured parking.



Any future building should mirror the angle of the police station in order to frame out the open space along Lake Street.

STAGE 3

BUILDING AREA (sf)

- 1. Village Hall - 35,000 total
- 2a. Northwest Lot - 18,800*
- 2b. Northwest Lot - 7,300*
- 3. Southwest Lot - 15,000*

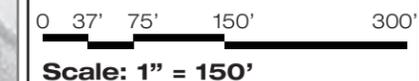
*per floor

- 4. Future Civic Building

PARKING

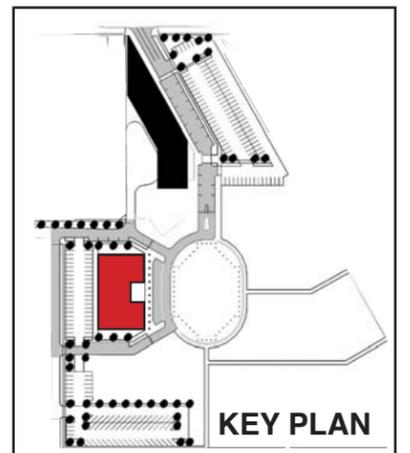
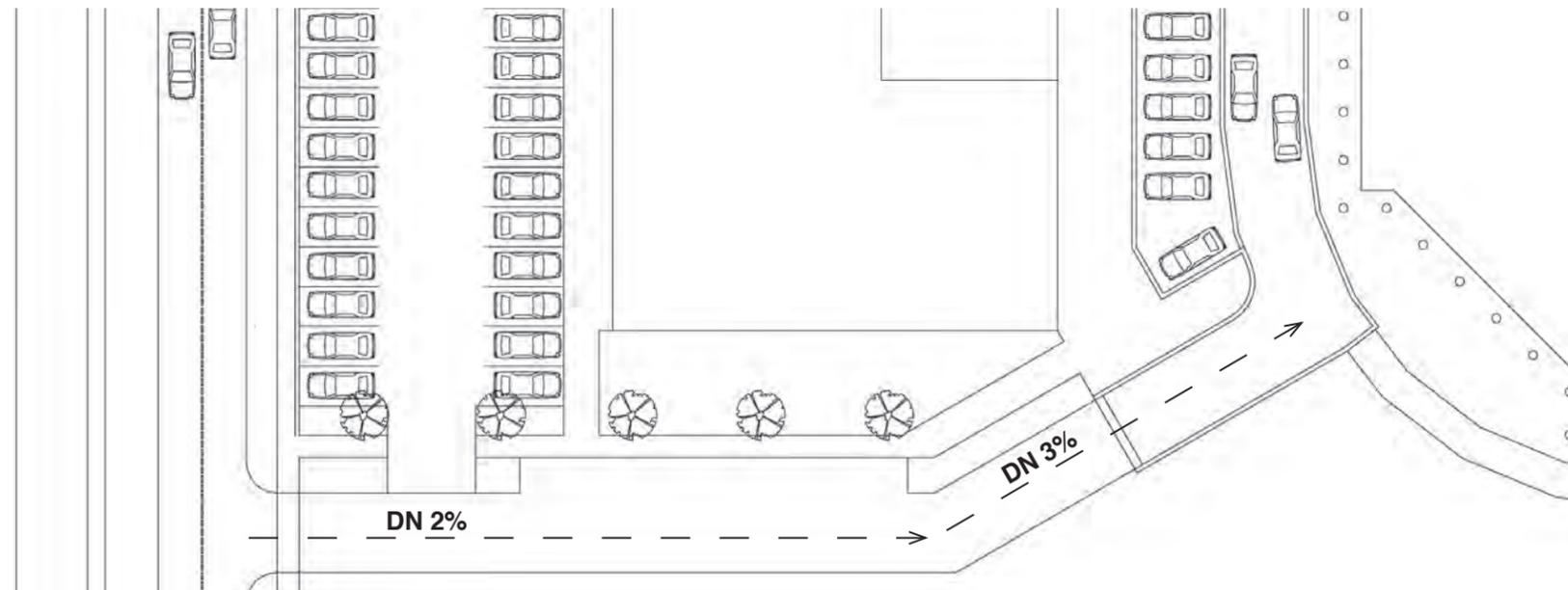
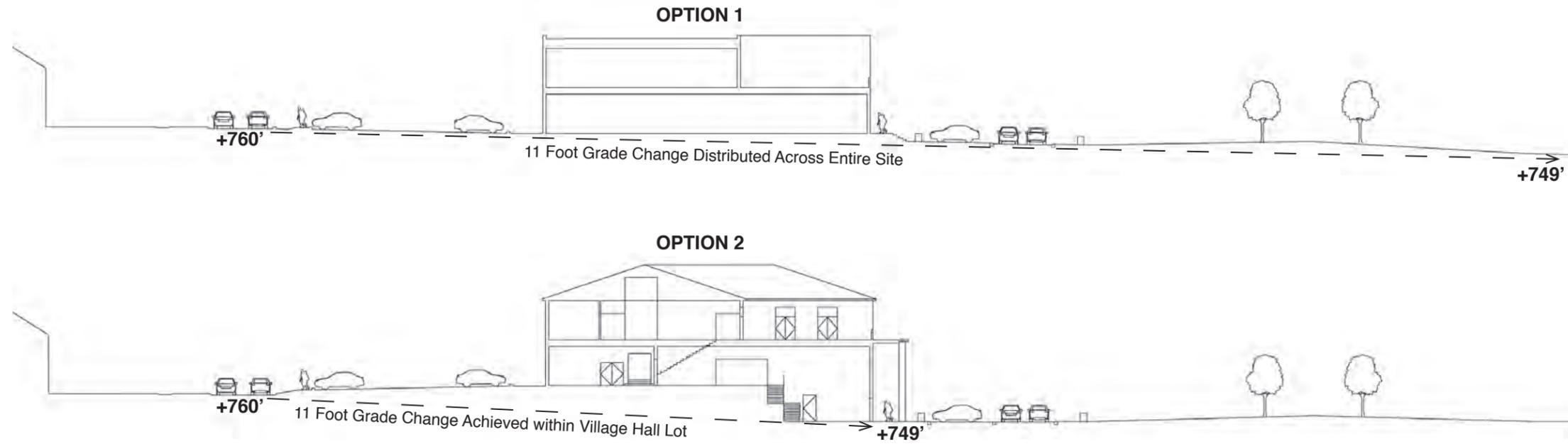
- A. Village Hall - 38 off-street
17 on-street
4 ADA
59 total
- B. Southwest Lot - 59 off-street
3 ADA
62 total
- C. Northeast Lot - 115 off-street
5 ADA
21 on-street
141 total
- D. Southeast Lot - 39 off-street
2 ADA
41 total

- Hawley Retail Building
- Village Hall
- Corporate Office Building
- Office/Mixed-use



Site and Building Sections: Village Hall

These site sections help to demonstrate how Village Hall can be constructed with the existing grade change. Option 1 regrades the site while option 2 works with the existing grade.

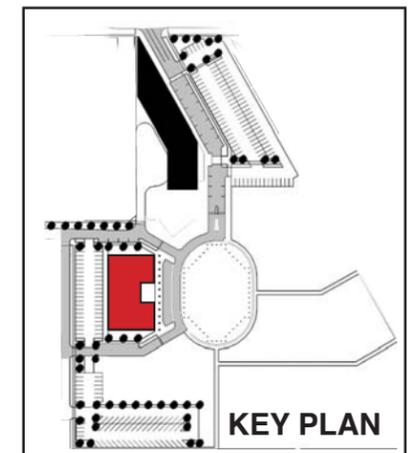
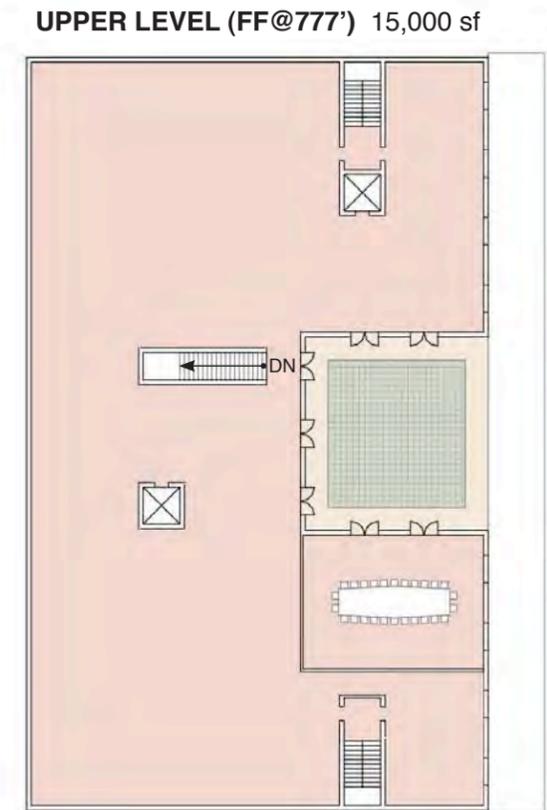
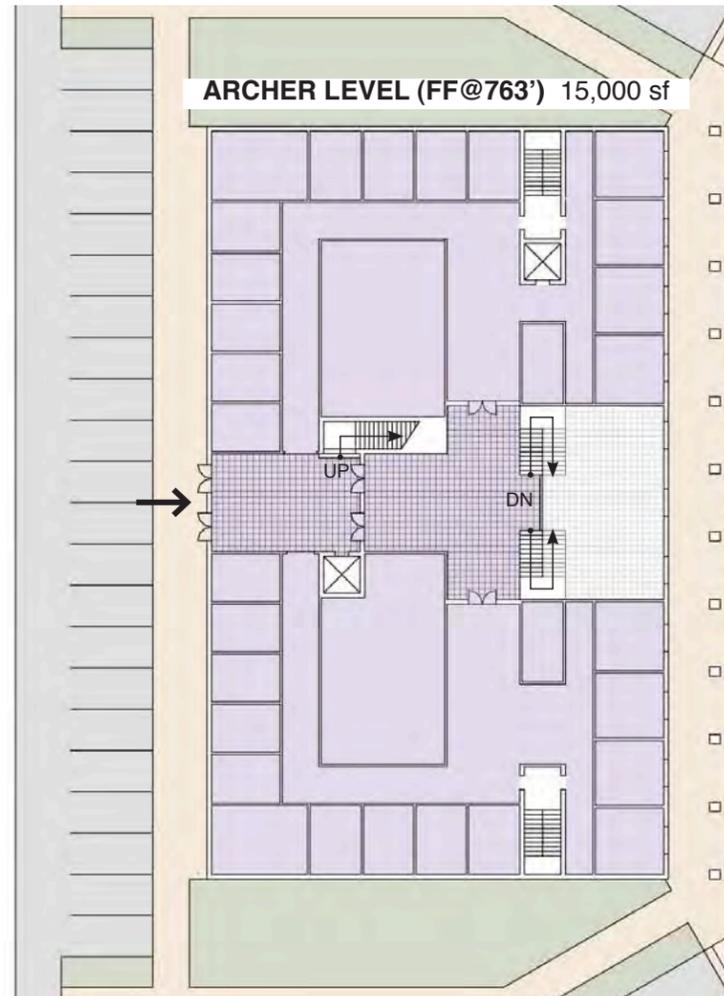
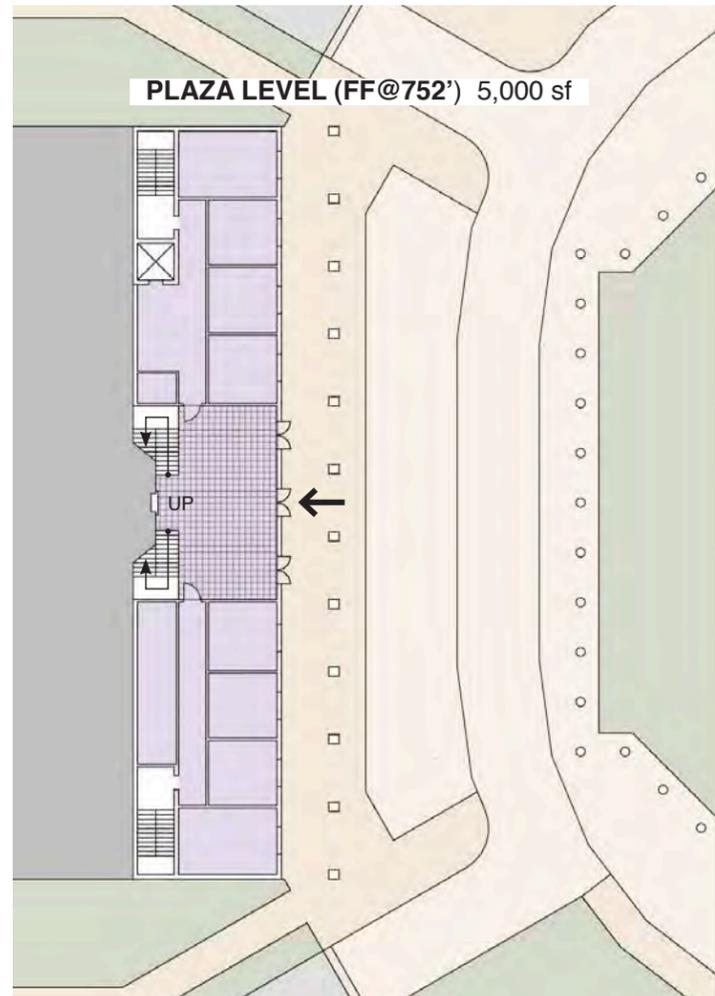


0 10' 25' 40' 80'

Scale: 1" = 40'

Floor Plans: Village Hall

These conceptual floor plans further demonstrate a multi-level Village Hall that makes use of the existing grade which minimizes the need for excavation and grading.



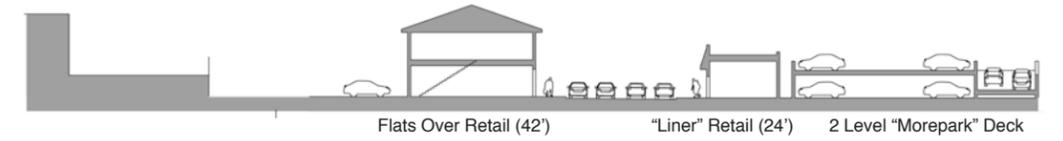
0 10' 25' 40' 80'

Scale: 1" = 40'

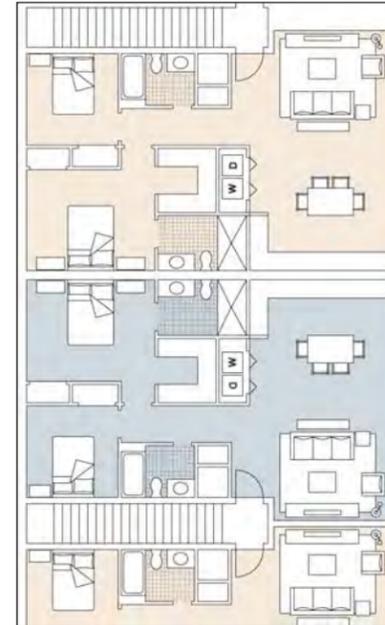
Site and Building Sections: Hawley Retail Building

These site sections help to demonstrate options for how the Hawley retail building may develop. Considerations include parking (type, location, proximity) and market potential at the time of design/construction. These options show the needed flexibility given current market conditions.

Option 1: Flats Over Retail



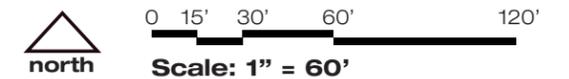
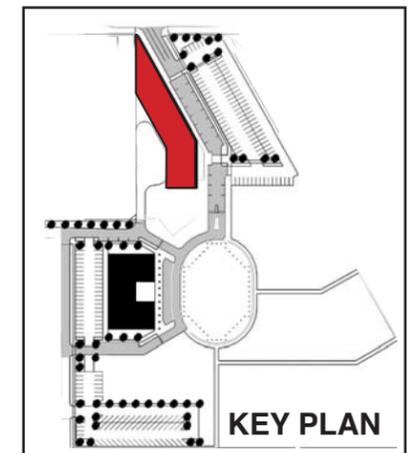
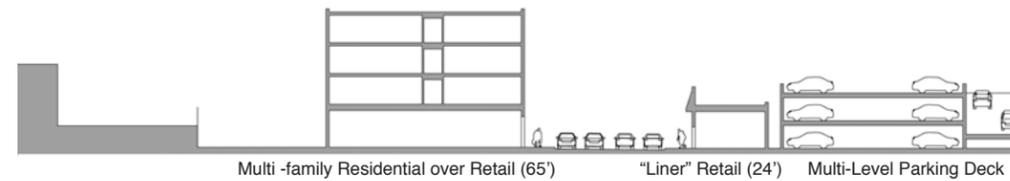
CONCEPTUAL 2 BR FLAT



Option 2A: Multi-family with Parking Over Retail



Option 2B: Multi-family Over Retail



Turning a Space into a Place: Placemaking

Rockefeller Square is a development vision that aims to achieve the ambitious goal of making a new place. This vision currently exists only on paper. The market justification behind this vision is located elsewhere in this report and demonstrates modest demand for many of the proposed land use elements. However the core strategy for marketing the proposed Rockefeller Square development is to make it a special place. A destination that attracts people to shop, work, live and play.

The strategy for achieving this is urban design; using buildings to shape public space and being purposeful in locating specific tenants and uses in key locations. To achieve this requires a heightened level of specificity in the design of private buildings and public rights of way. In addition Rockefeller Square aspires to be a model of sustainable development, positioning itself to be eligible to certify under the LEED-Neighborhood Development standard.

Placemaking does not happen overnight. The world's best places evolved over time and were influenced by the people and businesses that use, formally and informally, public spaces. This extends to the architectural review of individual buildings. While some regulatory guidance is provided for building materials and building elements, there is no one preferred architectural style for this site. Different architectural styles should be encouraged and welcomed. This creates a more visually interesting place that develops organically over time. The following pages include renderings of what Rockefeller Square will feel like once complete.

Placemaking through Form-Based Coding

The foundation of placemaking is a two-dimensional plan that is translated into vertical development over several years. Many municipal redevelopment projects prepare exciting two-dimensional illustrative master plans and make the mistake of leaving the vertical development to chance. In the case of Rockefeller Square, placemaking is a top priority. In order to implement this strategy this report proposes the adoption of a form-based code governing the Phase I area.

Fortunately the Village of Mundelein had previously contracted with a consulting firm to update the zoning code and to incorporate a form-based approach in the vicinity of the Metra tracks. This regulatory guidance will inform the code being written by the Village's consultant.

Stormwater

A key strategy envisioned by the plan is the proper filtration and detention of stormwater on-site using a comprehensive set of storm water Best Management Practices (BMP's). These strategies are conceived to be implemented at each scale of development:

- The individual building;
- Streets, rights-of-way, and parking lots;
- The Square itself; and,
- Larger facilities and subareas located along the Metra tracks and in other appropriate locations.

Individual buildings can implement rain gardens at the points where water first hits the ground and roof. Streets and parking lots can feature pervious pavers and incorporate bioswales (ditches designed to hold water no longer than 24 hours and infiltrate a high percentage of it). The Square can feature both pervious surfaces and subsurface storage volumes. Linear facilities parallel to the Metra tracks can both filter and store stormwater prior to discharge.

Flexibility

Achieving a long-term vision requires persistence and commitment but it also requires flexibility. The desirable uses may not be the first ones that come. Buildings should be designed to accommodate a range of uses and certainly the desired ones. The plan demonstrates buildings that will work with residential or office on upper floors to provide flexibility.

Screening

Landscape, walls, and fences are useful in providing security and privacy in urban settings. Screening elements in urban areas are subject to greater wear and tear than those in more suburban or rural settings and must be conceived to be durable and low maintenance. Screening of mechanical elements should be required. Fences may be used on the sides or rears of buildings to accomplish screening.



Normal, Illinois



Westlake, Ohio



Chicago, Illinois

Sense of Enclosure

Dating back to the ancient Greeks and Romans, mathematical formulas have been produced to derive the perfect sense of enclosure—or ratio of building height to open space. There are many theories on the precise ratio required to make a successful public space but no specific standards that have been accepted industry-wide. Regardless of whether experts can agree on a precise ratio, there are certain, more subjective considerations. For example, a successful public space can be considered an “outdoor room” with buildings providing the “four walls”. This provides comfort to pedestrians and slows down automobile traffic resulting in a place that people want to visit for longer periods of time and more frequently. The idea is to introduce vertical elements to balance out the horizontal nature of a flat open space. In addition to buildings, this can be accomplished by other vertical elements such as colonnades, arcades, trees, and streetlights.

Traditional and historic downtowns typically achieve this sense of enclosure through placement of buildings, right-of-way distances and street trees. Street trees should be spaced no greater than 30 feet apart. This provides an appropriate visual “rhythm” and anticipates growth over time to adequately define the street.

Active Space

The site has been carefully designed to provide flexibility in uses and promote a vibrant, pedestrian-oriented area. This includes active uses on the ground floor and dispersed parking.

William H. Whyte, one of the world’s experts on public spaces is quoted as saying, “if people do not see a space, they will not use it.” This simple maxim has been taken to heart in the design of Rockefeller Square as users are drawn in to the space, punctuated by arcades that open up to the plaza.

Attracting private investment to this area requires distinguishing this site in the marketplace. Three major components of this are the planning efforts that have been conducted, infrastructure improvements that are forward-thinking, and quality of life amenities that are attractive to those who may decide to locate or reside here.

First Impressions: Hawley Street

The development of Rockefeller Square is intended to be unlike any other in the Village of Mundelein and over the long-term it should develop into a destination. With the consideration that Hawley Street is the “front door” to this development, it is important to signify the stature and uniqueness of the place within. There are two ways to achieve this along Hawley Street: a vertical feature and gateways.

Vertical Feature

Hawley Street provides visibility and traffic counts needed to support future businesses within the development. If a tall building cannot be achieved at the intersection of Hawley and Chicago, a vertical feature can help to accomplish the same effect by catching the eye of passersby and making a statement that this is a special place. A vertical feature may be purely aesthetic, such as a tower or rotunda, or may also provide function as a staircase or sign. Given that this development is a form of public-private partnership, it will be essential to get consensus on design, financing, and purpose of such a feature before construction begins. This will help to ensure the vertical feature benefits the entire development as opposed to only one building.

Gateways

Gateways are distinctive, free-standing structures that mark the entrance to a special place or district. Gateways can include signage or can be aesthetic sculptural elements. The new intersection that will be created through the extension of Chicago Avenue provides an ideal location for gateway features either as a pair or on either side of Chicago Avenue.



Lake Forest, Illinois



Milwaukee, Wisconsin



Kenosha, Wisconsin



Glenview, Illinois



Carmel, Indiana

Plaza Photoboard

These photos of existing plazas provide inspiration for the layout, amenities, and considerations in creating a truly active and interesting open space.



1



2



3



4



5



6



7



8



9



10

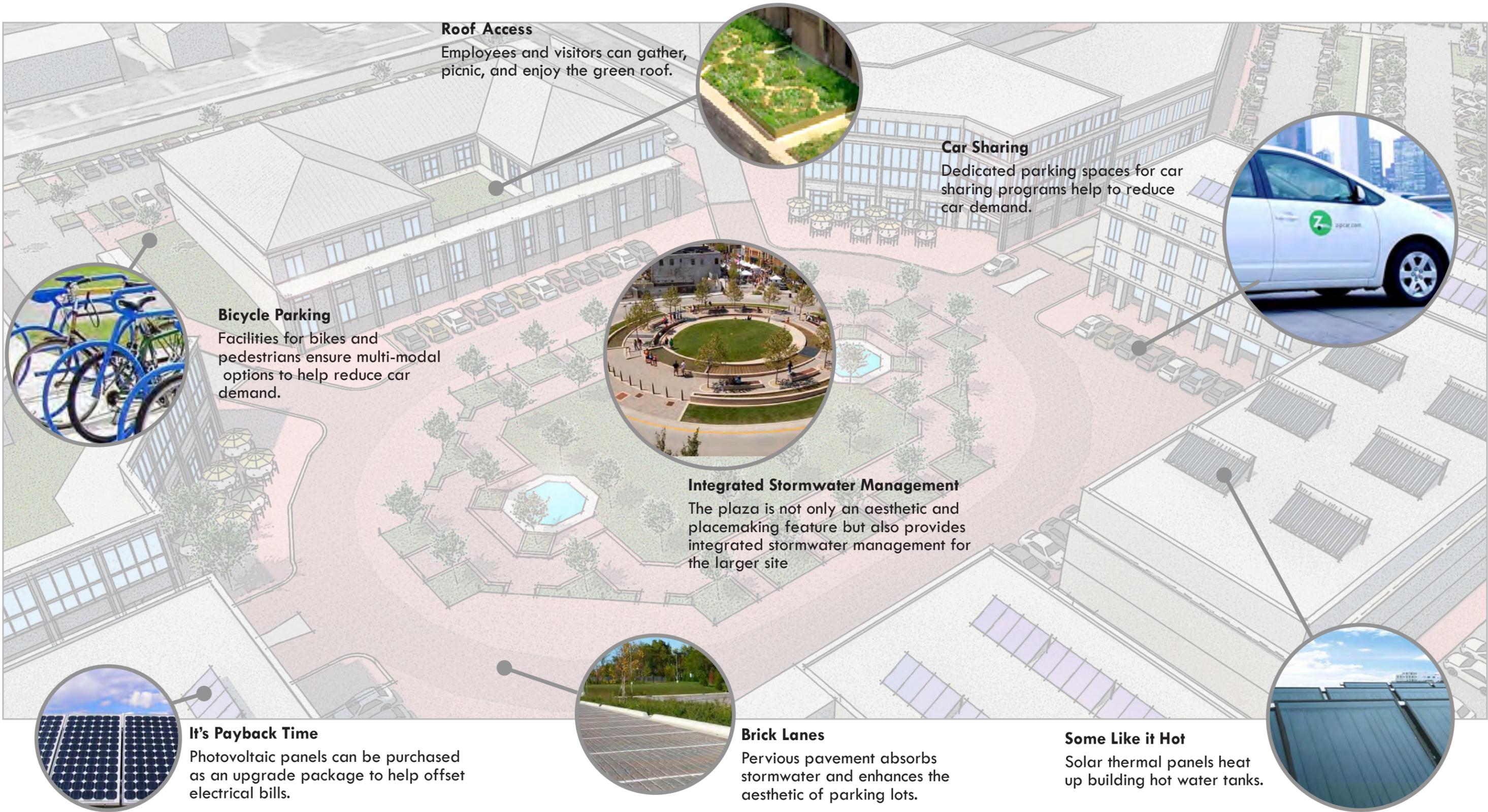


11

Photo Key:

- 1. Plaza, Osaki, Japan
- 2. City Plaza, Chico, California
- 3. Pervious Paver
- 4. Concrete Bollard
- 5. Plaza Mayor, Madrid, Spain
- 6. McGinley Plaza, West Lafayette, Indiana
- 7. Silver Plaza, Silver Springs, Maryland
- 8. Retractable Bollard
- 9. Town Square, Prague, Czech Republic
- 10. Uptown Circle, Normal, Illinois
- 11. Plaza Murillo, La Paz, Bolivia

Green Opportunities



Roof Access
Employees and visitors can gather, picnic, and enjoy the green roof.



Car Sharing
Dedicated parking spaces for car sharing programs help to reduce car demand.



Bicycle Parking
Facilities for bikes and pedestrians ensure multi-modal options to help reduce car demand.



Integrated Stormwater Management
The plaza is not only an aesthetic and placemaking feature but also provides integrated stormwater management for the larger site

It's Payback Time
Photovoltaic panels can be purchased as an upgrade package to help offset electrical bills.



Brick Lanes
Pervious pavement absorbs stormwater and enhances the aesthetic of parking lots.



Some Like it Hot
Solar thermal panels heat up building hot water tanks.



Rockefeller Square in the Summer

Seasonality and programming are essential to maintaining an active and inviting public space. This rendering demonstrates a summer market in the square.



Carnival

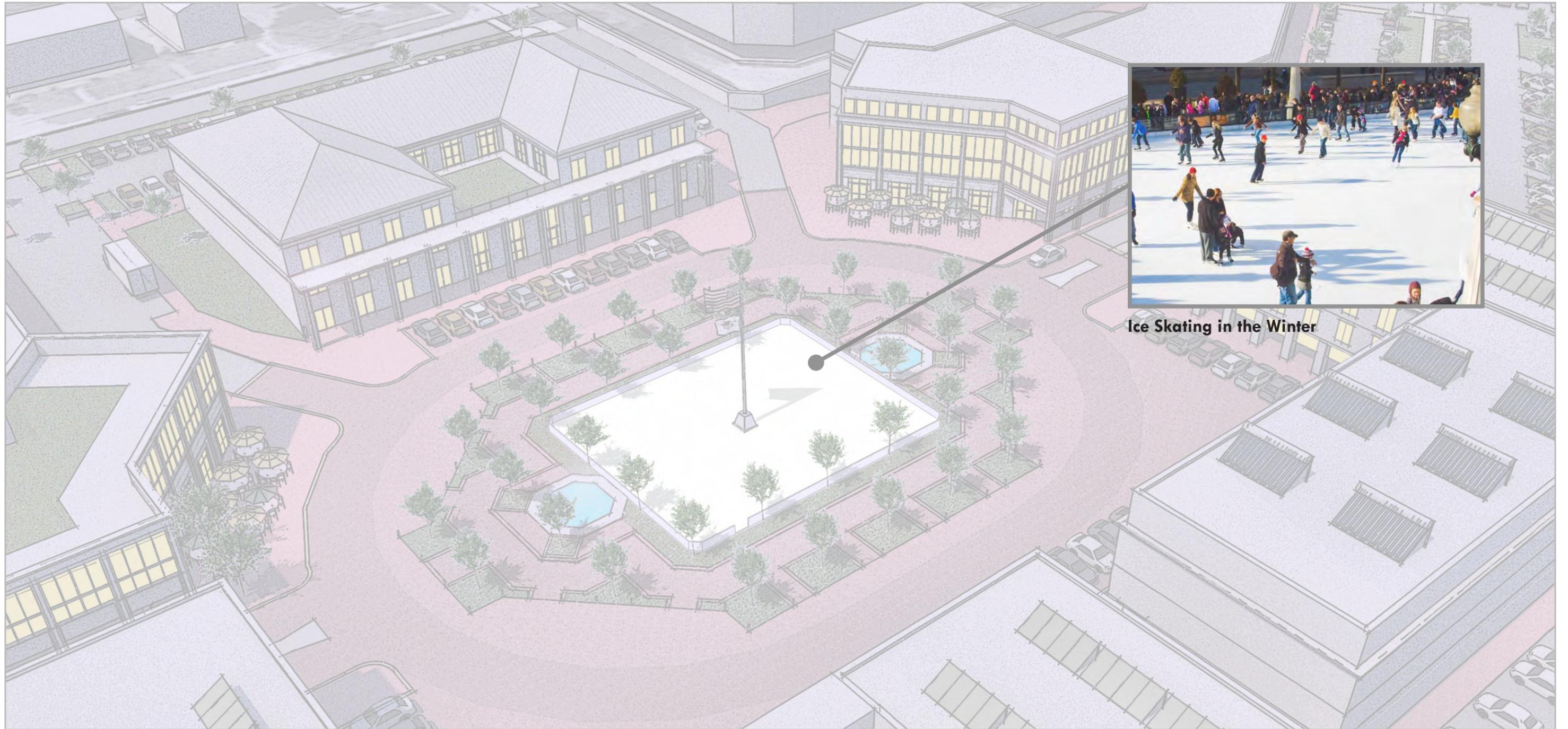


Farmers Market in the Spring, Summer and Fall



Rockefeller Square in the Winter

Seasonality and programming are essential to maintaining an active and inviting public space. This rendering demonstrates a winter scene with a public ice skating rink.



Ice Skating in the Winter

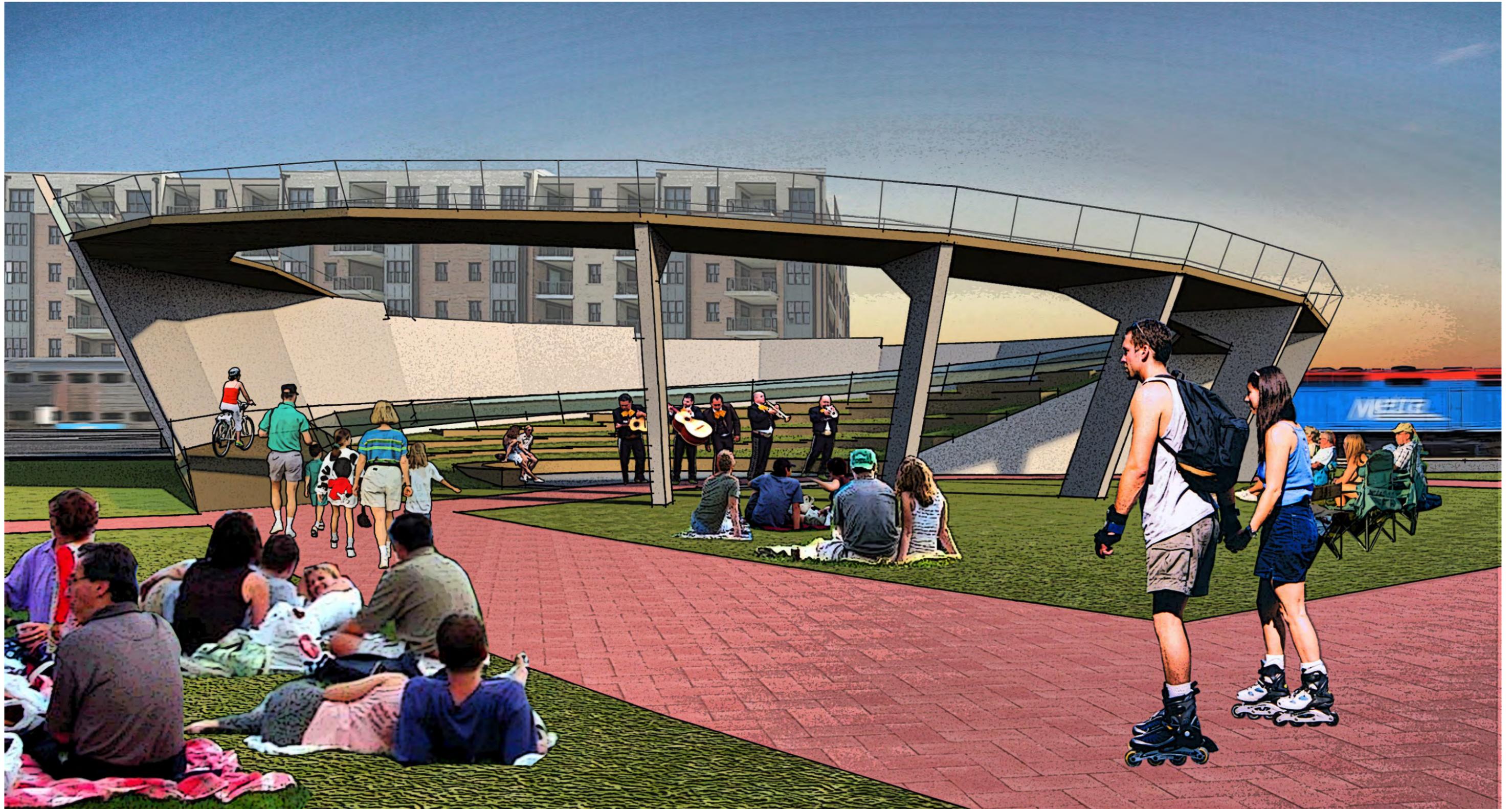


Rockefeller Square

View From Chicago Avenue Extension Looking South



Rockefeller Square
View From Plaza Looking North



Rockefeller Square View of Pedestrian Overpass

Note: Drawing is conceptual. Further engineering and design required for pedestrian overpass.

Pedestrian Overpass

The conceptual overpass design creates a distinctive landmark for the study area. The design accommodate pedestrians, bicyclists and people with disabilities and does so without the need for elevators which frequently become a maintenance issue. On the east side of the tracks, the option of stairs or a switchback ramp is provided to accommodate all types of users. On the west side of the tracks, the ramp is more dramatic and encloses a multi-purpose amphitheater space.

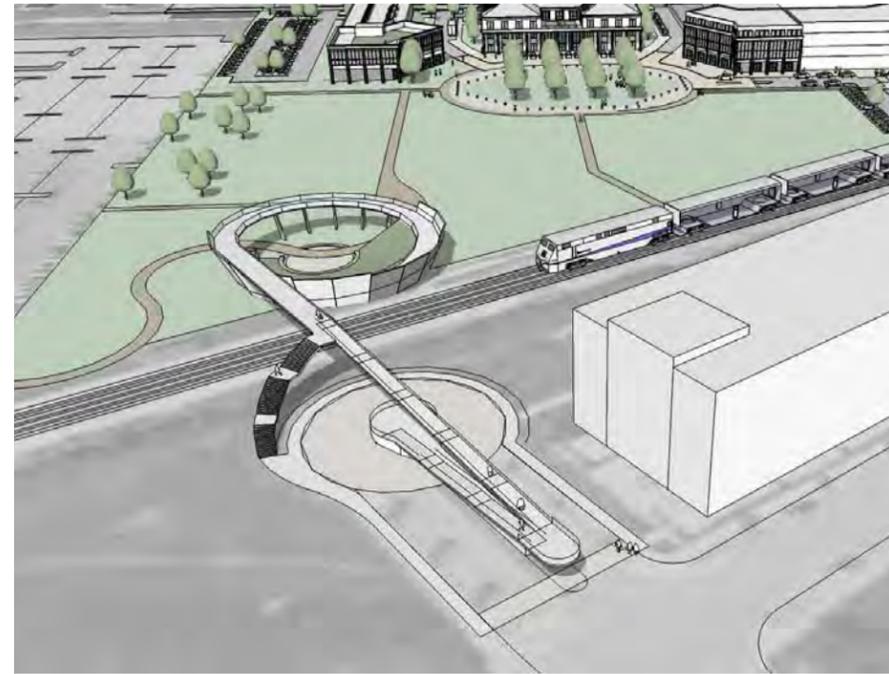
A preliminary order-of-magnitude cost estimate revealed that a standard pedestrian overpass (Table 18) would be approximately \$2 million. The pedestrian overpass as proposed (Table 19) would cost approximately \$4 million.

	Unit	Quantity	Unit Cost	Total Cost
Elevated Walkways	Square Foot	6,240	\$200	\$1,248,000
Bridge over Railroad ROW	Square Foot	840	\$225	\$189,000
Retaining Walls	Foot	0	\$700	\$0
Utility Relocation	Lump Sum	1	\$100,000	\$100,000
Aesthetic Treatments (Allowance)	% of Construction Cost		10%	\$153,700
			<i>Subtotal</i>	<i>\$1,690,700</i>
Contingency			20%	\$338,140
			TOTAL	\$2,028,840

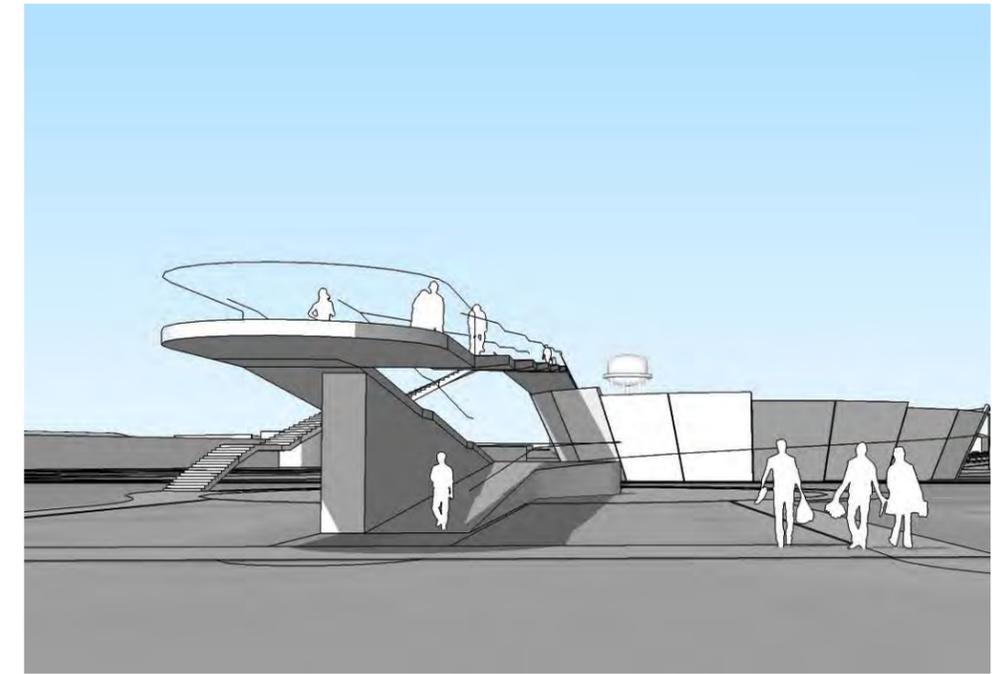
Table 18

	Unit	Quantity	Unit Cost	Total Cost
Bridge, Elevated Walkways, Stairs	Square Foot	9,460	\$225	\$2,128,500
Bridge over Railroad ROW	Square Foot	1,272	\$250	\$318,000
Retaining Walls	Foot	250	\$700	\$175,000
Utility Relocation	Lump Sum	1	\$100,000	\$100,000
Aesthetic Treatments (Allowance)	% of Construction Cost		10%	\$272,150
			<i>Subtotal</i>	<i>\$2,993,650</i>
Contingency			20%	\$598,730
			TOTAL	\$3,593,000

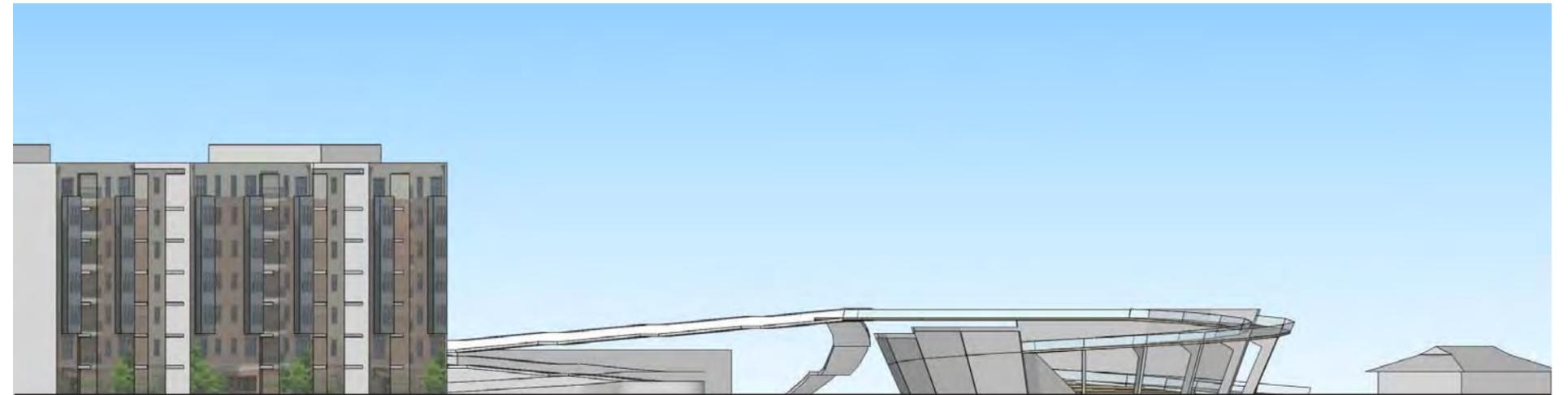
Table 19



Aerial View Looking West



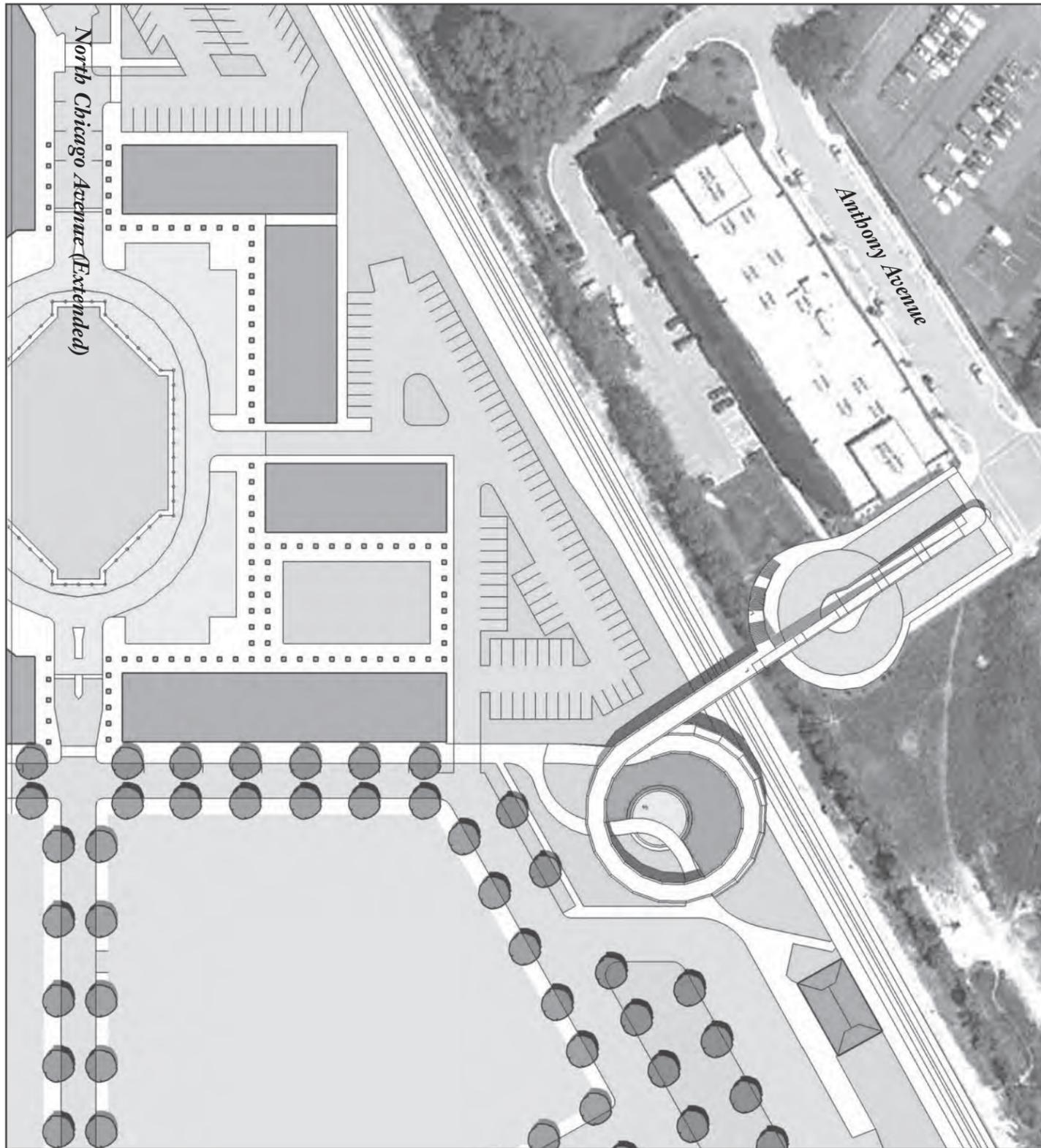
View Looking West From McKinley Ave



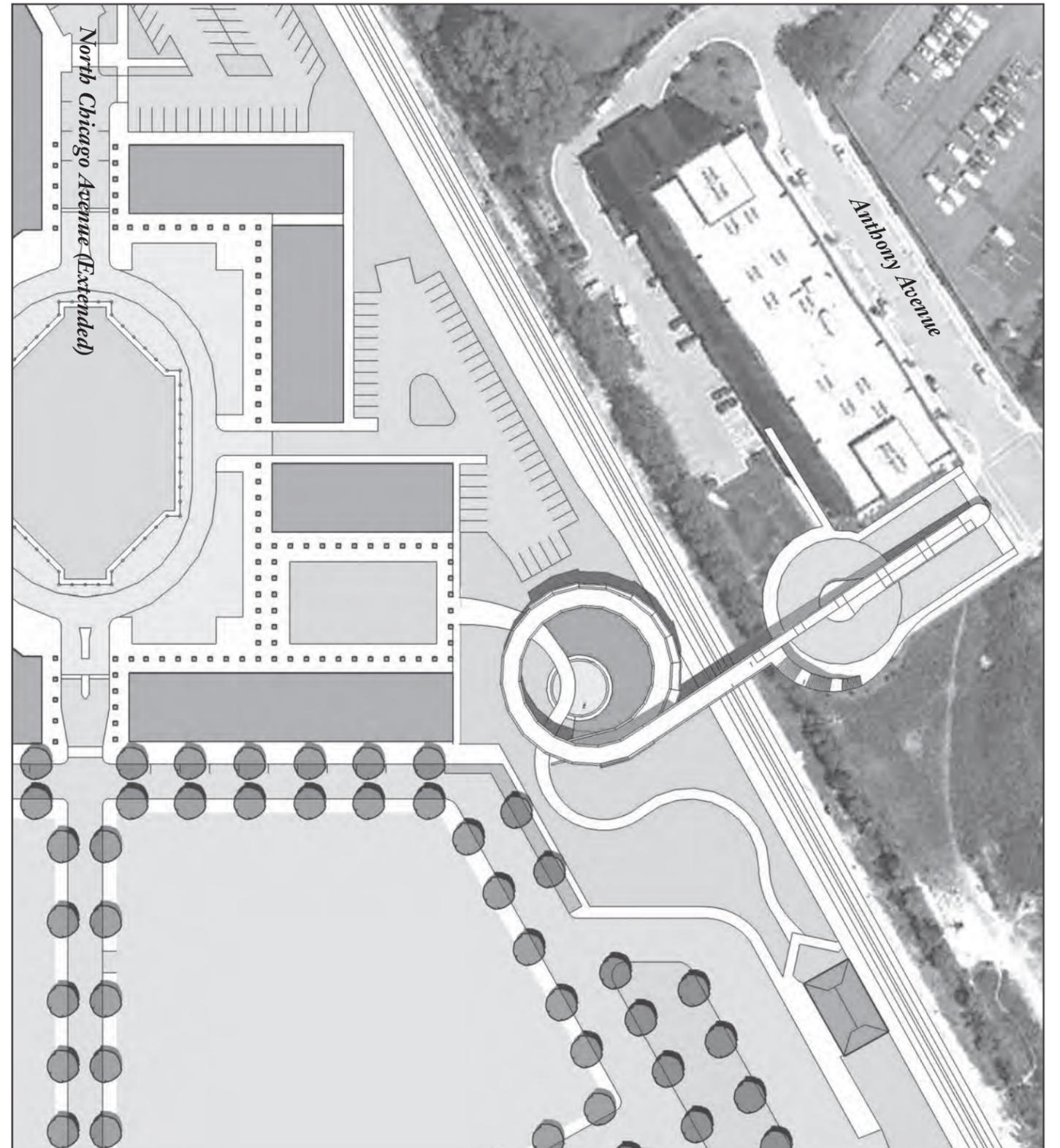
Overpass Elevation as Compared to Cardinal Square Building

GENERAL NOTES:

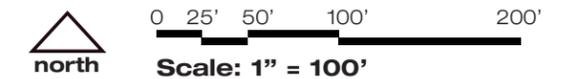
1. The spiral ramp on the west side is minimum 10' wide to accommodate combined pedestrian and bicycle traffic
2. The ramp on the east side is minimum 8' wide to accommodate bicycles and pedestrians with disabilities.
3. The stairs on the east side are minimum 6' wide to accommodate pedestrian traffic.
4. All ramps slope 8.33% with landings at 30' intervals to comply with ADA guidelines.
5. Overpass structures are not to encroach on the railroad right of way.
6. Overpass materials shall be selected with consideration to their resistance to vandalism, public safety, and ease of maintenance.
7. Final design will meet all Canadian National Railroad, Metra, and other relevant requirements.



Overpass Configuration Option 1
(preferred)



Overpass Configuration Option 2



LEED Neighborhood Development

LEED Neighborhood Development is a first-ever tool for certifying the sustainability of master planned developments. It was launched as a pilot program in 2007 and formally launched in 2009. More than 300 projects have registered under the system globally. LEED-ND has been used to design and certify a number of diverse urban projects in northeast Illinois. These include Block 37, Southworks and Harper Court in Chicago, Whistler Crossing in Riverdale, Emerson Square in Evanston and Prairie Crossing in Grayslake among others.

The Master Redevelopment Implementation Plan is an ideal project to seek certification using the LEED-Neighborhood Development criteria. As a TOD infill redevelopment project incorporating green buildings and high performance infrastructure, the project appears well suited to use this tool. Weston's corporate commitment to sustainability further strengthens the link to sustainability.

Benefits

Certifying Rockefeller Square under LEED-ND offers a number of tangible and intangible benefits. LEED certified buildings, encouraged by LEED-ND, use on average 25 – 30% less energy than typical buildings. This saves money. In addition green buildings have been demonstrated to increase productivity and reduce absenteeism producing even greater financial value to a city or company's bottom line.

As certified green communities have only existed for a few years, market information is somewhat anecdotal. Jacky Benson, a nationally recognized real estate marketing consultant believes sustainable community developments are more profitable because they sell or rent faster than conventional development, reducing interest carrying costs. The ability to sell faster comes from the heightened interest that early-adopter projects generate in the marketplace. Pursuing LEED-ND certification would make Rockefeller Square unique among competing developments in the northwest suburbs.

Plan Versus Project

Starting with LEED 2012, scheduled to be issued later in 2012, LEED-ND will be divided into LEED-ND Plan and LEED-ND Project. "Plan" is designed to certify projects that are going through entitlements, are not yet built or will not be built for a number of years. "Project" is designed to certify built projects. Rockefeller Square would likely certify under "Plan."

Project Boundary

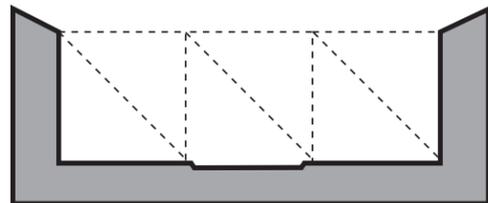
Setting the project boundaries is a key consideration in certifying a project under LEED-ND. For purposes of an initial rating the boundaries are those pictured at the right side of the page. In the future the project boundaries can be adjusted to optimize the project's certification potential. Setting the project boundaries is a key consideration for certifying a project under LEED-ND. Every prerequisite and credit must calculate its performance based on the entire project boundary. For purposes of evaluating the viability of achieving a LEED-ND certification an initial project boundary has been established shown in the diagram on the right.

How LEED Works

All LEED products must meet prerequisites, absolute requirements and earn sufficient credits or points to achieve a certain threshold. LEED is based on a 100-point scale (with some bonus or extra credit points as well). The levels of certification are Certified – 40 points (min.), Silver – 50 points (min.), Gold – 60 points (min.), Platinum – 80 points (min.).

Potential LEED-ND Rating

While there are many unknowns at this early stage of the process, it is nonetheless possible to use professional judgement to assess a project's certification potential. This assessment makes a number of assumptions based on credits that other Chicago area projects are able to achieve. At this early stage these assumptions have not been listed in any rigorous way. Instead select topics are discussed below that may have a material affect on the project's certification potential.



NPD prerequisite 1: Walkable Streets requires a minimum of 15% street frontage with a minimum building-height-to-street ratio of 1:3

Prerequisites

There are 12 prerequisites in LEED-ND. Five ND prerequisites pertain to a project's location, three to its planning and urban design and four to how it is built and maintained. The project appears likely to confidently meet the prerequisites with the exception of two. If the buildings turn out to be all one or two story buildings the project will be challenged to meet NPD Prerequisite 1: Walkable Streets and NPD Prerequisite 2: Compact Development discussed elsewhere herein.

Smart Location and Linkage (SLL)

Of the location prerequisites, LEED-ND gives wide latitude to previously developed land. This allows Rockefeller Square to likely achieve all five of these prerequisites with the one question pertaining to the presence of floodplains along the south edge of the larger site. If a floodplain exists and is currently undeveloped land, building on it would fail to meet the prerequisite.

It is worth noting that despite meeting the standard there are aspects of the site planning that can and perhaps should go above and beyond. For instance while many municipalities allow construction on floodplains it is generally a bad idea as it can cause erosion and downstream flooding. If any of the development in the project area is proposed on a floodplain the recommendation would be against rebuilding there.

Neighborhood Pattern and Design (NPD)

Of the three prerequisites in the Neighborhood Pattern and Design section two may prove challenging to meet. This is due to the weak economy and the difficulty it adds to developing multistory commercial buildings. NPD Prerequisite 2: Walkable Streets requires 15% of the total project street frontage to meet a minimum spatial enclosure of three units of width to a minimum one unit of height. If the project were all built at a height of one story it would most certainly fail to meet this prerequisite. There are two strategies that can help the project to meet this requirement: drawing a tight project boundary and requiring, where possible, minimum two story height requirements. The second prerequisite that may prove challenging is NPD Prerequisite 2: Compact Development. For transit served locations such as Rockefeller Square it requires a minimum development density for 12 units per acre for residential developments and .8 FAR for commercial development. Unless multiple multistory buildings are built this minimum density will prove difficult to achieve. The same strategies that help the project meet the Walkable Streets

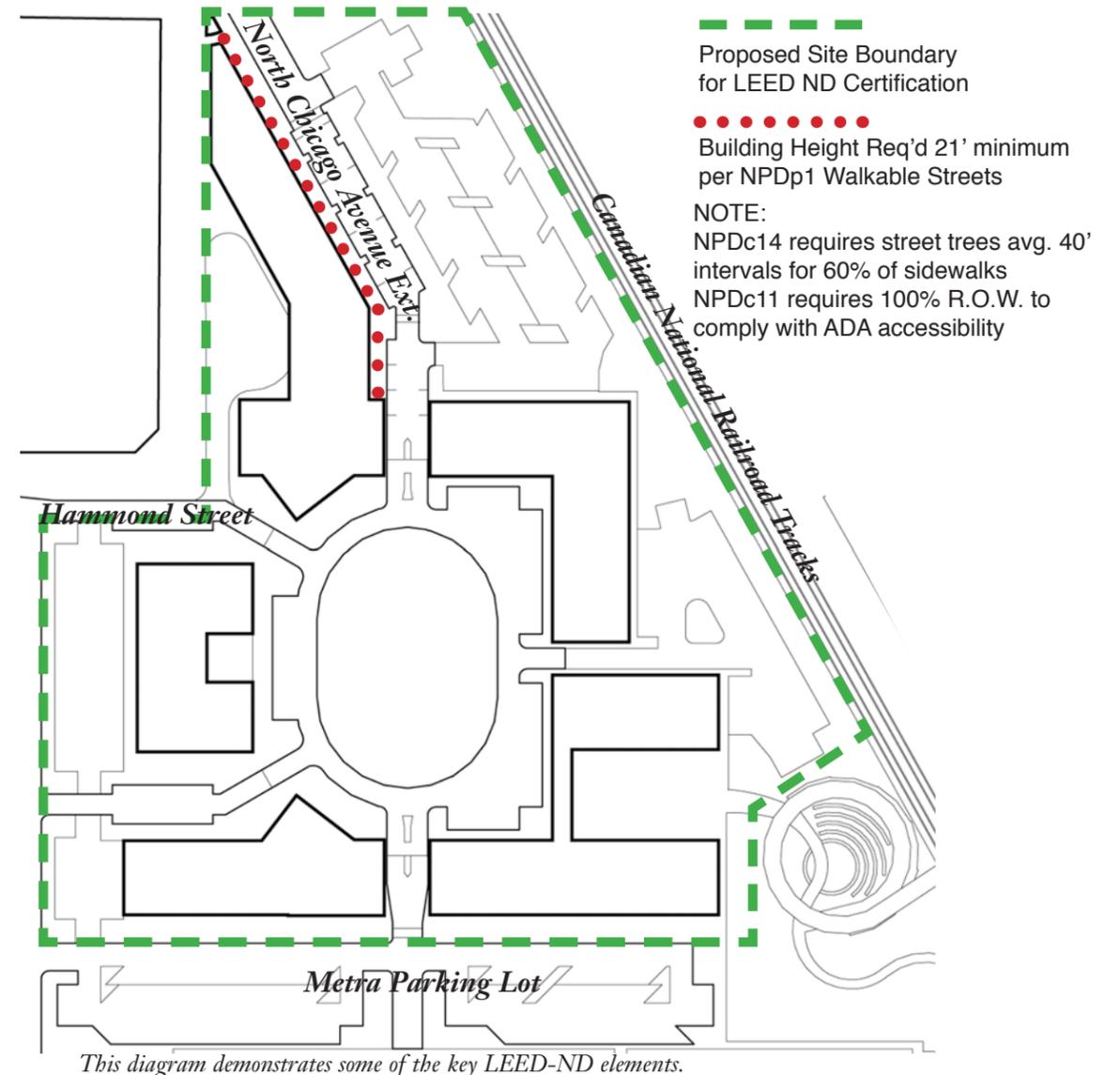
prerequisite help achieve this one too.

Green Infrastructure and Building (GIB)

Three of the four prerequisites in GIB all pertain to green and high performance building attributes. A minimum of one green building is required, assumed to be met by Village Hall. The minimum requirements for energy and water efficiency establish something akin to an energy and water efficiency overlay on the entire project area.

Credits

The LEED-ND scorecard assesses the number of credits that the project is likely to achieve by providing a range based on an understanding of the project at this time. The project appears to be able to earn sufficient credits to achieve a LEED-ND Certified or Silver rating. As the project advances the accuracy of these assessments will be improved.



Regulatory Guidelines

The Village is in the process of updating its zoning code village-wide. The code will adopt specific requirements for the Rockefeller Square redevelopment area based on recommendations in this study. The success of the master plan proposed herein relies on the ability to coordinate the built form of individual projects developed over many years to create a special place. The recommended strategy to achieve this outcome is to adopt a form-based code. Form-based codes are particularly useful in areas where a walkable, urban form is desired. Additionally, recommendations are based heavily on prerequisites and achievable credits for LEED-ND (as referenced below). Achieving LEED-ND eligibility is a goal of this project.

LEED-ND Neighborhood Pattern and Design (NPD): Prerequisite 1 Walkable Streets

The following are recommendations to meet LEED-ND Neighborhood Pattern and Design.

Building Heights

Building heights are a key strategy in the urban design of desirable places. Minimum heights, in addition to maximum heights need to be established in order to optimize Rockefeller Square as a development of mixed-use buildings in a compact, walkable place. To achieve this effect the façade of all buildings that face the square should be a minimum of 34' and a maximum of 70'.

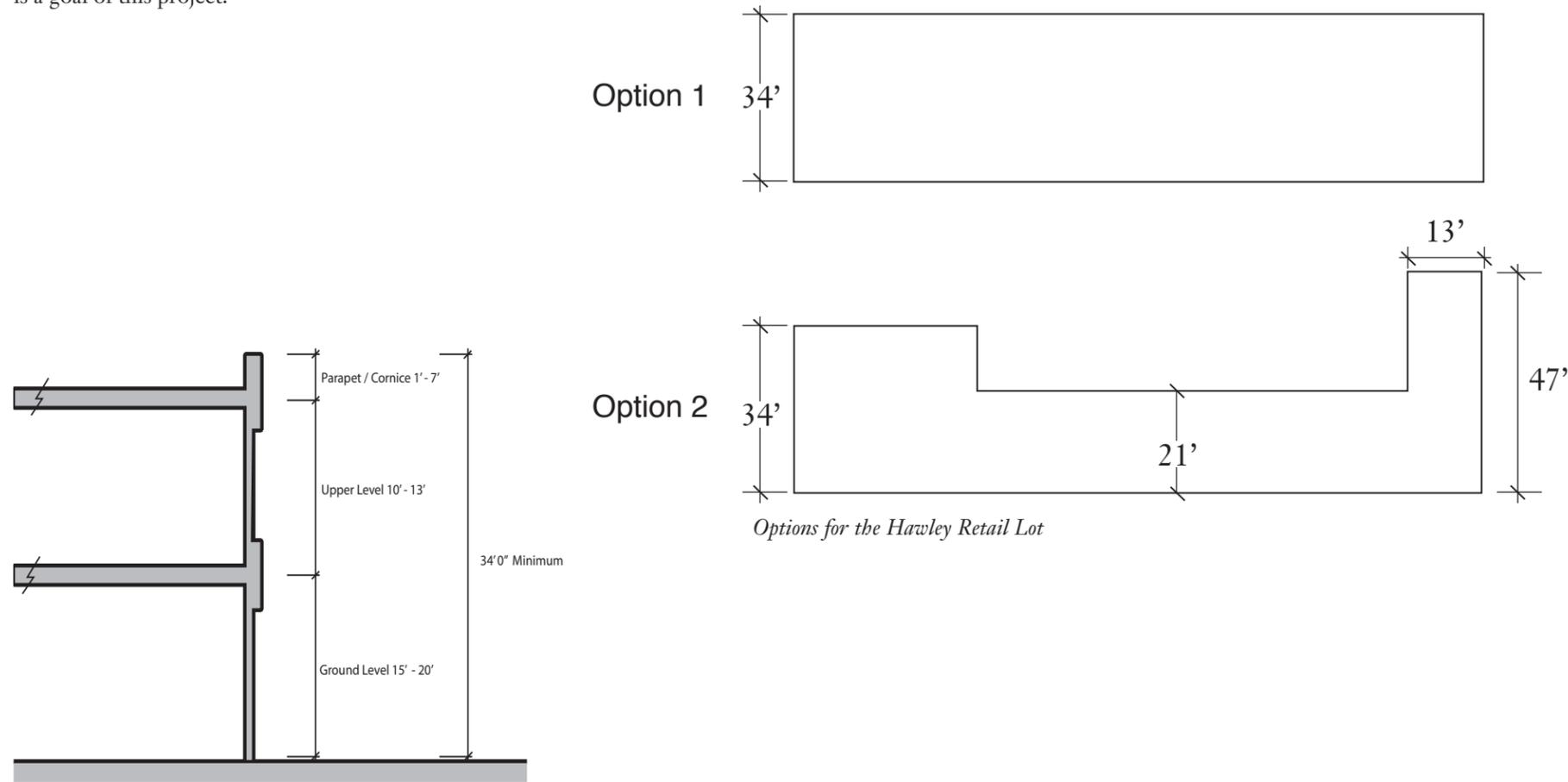
In an effort to provide flexibility for development of the Hawley retail lot, an alternative to meeting the 34' building height requirement is proposed. In this case, a 21' minimum building height is required plus a vertical feature on the Hawley frontage. Requirements of the vertical feature are demonstrated below. A minimum width of 13' for a vertical feature is required with a minimum height of 47'. These dimensions are provided to ensure visibility for eastbound traffic on Hawley.

Arcades

Arcades are an architectural pattern so potent that strategically-placed small stretches can add immense character to a place. The master plan uses arcades to frame the view into Rockefeller Square. The regulating plan identifies these framing areas as places where arcade features are required. To provide a comfortable and safe pedestrian experience, arcades shall follow height proportions and column spacing requirements specified in the diagram below.

Canopies and Awnings

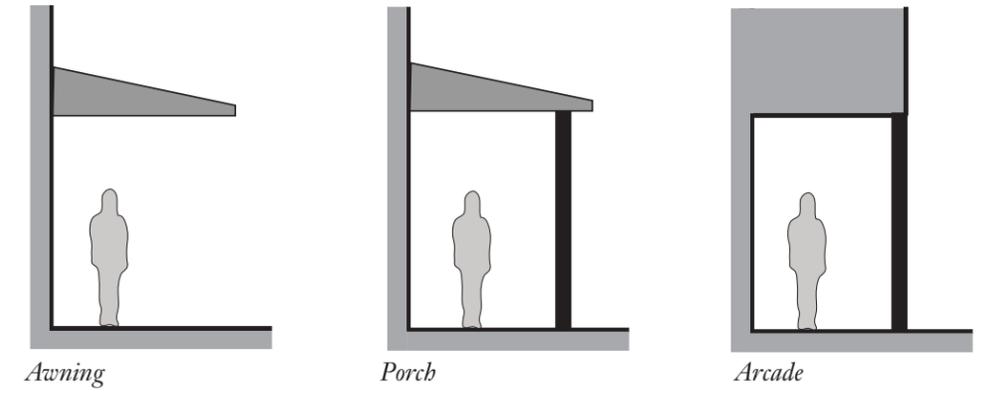
Rockefeller Square should be allowed to evolve over time to become a dynamic and diverse destination. Buildings facing Rockefeller Square that are not required to have an arcade are encouraged to incorporate canopies and awnings. These non-conditioned shelters help to achieve maximum shade and weather protection for pedestrians and sidewalk commerce. Canopies and awnings shall have a minimum clear (wall to back of post) depth of 8'-0" and will be subject to design review by staff.



Option 1

Option 2

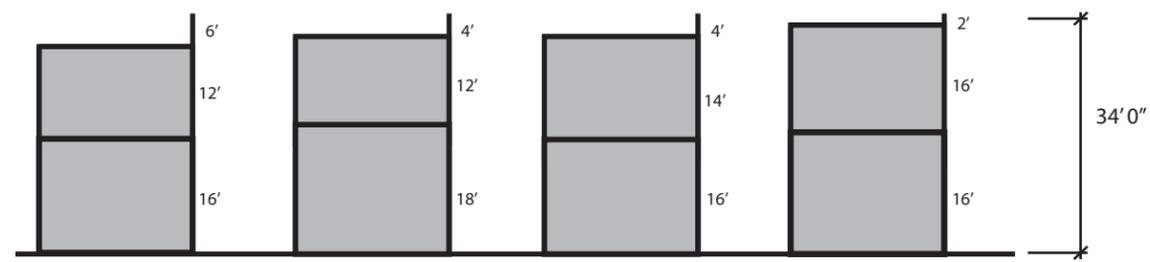
Options for the Hawley Retail Lot



Awning

Porch

Arcade



Floor Height Alternatives to Achieve Minimum Building Height

Articulating Non-Primary Facades

Non-primary facades shall provide architectural articulation with a maximum spacing of 20’ between pilasters that project a minimum of 4”. Wall-mounted lighting fixtures shall be spaced to match the required pilaster spacing. In addition side and rear facades that are primarily used for service and loading should have display windows representing a minimum of 15% of the linear footage of the relevant frontage.

Entrances

To add vitality to streets, public entrances must be located facing the street (rather than side or rear parking lots). Relying on the walkable streets metrics established by LEED-ND, public entrances are recommended to be located every 25’-30’ but in any case shall be located no less than every 75’ of street frontage.

Sidewalk Cafes

Private use of the public way should be granted for specific uses such as sidewalk cafes. The Village should establish a permit process to allow private use of the public way. Fees may be charged for this permit.

Build-to Line/Zone

A build-to line or build-to zone is a basic strategy of form based codes that requires building fronts to be located on or very near their front lot lines. Buildings that are adjacent to Rockefeller Square shall conform to a build-to line with a setback of 0’. Buildings south of Rockefeller Square shall conform to a build-to zone with a setback range of 0’ to 5’ for commercial buildings or mixed-use buildings and 0’ to 10’ for residential townhouses. To allow for some flexibility, only 90% of the overall length of a building frontage within the form-based code boundaries must comply with this requirement.

Building Facade Transparency

Pedestrian-friendly environments rely on a visual link between pedestrians and occupants of adjacent buildings. To achieve this link all buildings shall have a minimum required percentage of facade transparency. For the ground floor of buildings adjacent to the square, windows shall cover a minimum of 70% of the façade of mixed-use retail and office buildings with a height of 2’ to 8’. For buildings south of the square, windows shall cover a minimum of 50% of the facade of mixed-use retail and office buildings. For upper floors of all buildings, windows shall cover a minimum of 30% and a maximum of 50% of the façade along streets. Transparency is defined as glass that is neither mirrored nor opaque and allows a minimum visible transmission of light (VLT) of .50. Glass with light transmission at lower levels are called semi-transparent and are not counted toward the minimum transparency percentage.

LEED-ND Green Infrastructure and Buildings (GIB)

The following are recommendations to meet LEED-ND Green Infrastructure and Buildings.

Service and Loading

Buildings need service areas in order to function properly. Loading docks, building mechanicals and dumpsters shall be screened to their full height to minimize their visibility and to dampen noise they produce.

Parking

For decades zoning codes have established minimum off street parking requirements. This has resulted in the oversupply of off-street parking. Each individual project and especially the private market is best suited to determining parking need. Consequently the recommendation is for no parking minimums or maximums to be established for this site.

Stormwater

Individual buildings should be required to provide features that contribute to sustainable stormwater management (e.g., green roofs). Visible water management features should be strongly encouraged.

Stormwater infrastructure should be minimized by adding bioswales along the east side of Chicago Avenue (extended) and the east side of the northernmost parking lot.

The square will provide a district approach to stormwater detention through the use of underground vaults.

Renewable Energy

Buildings should be required to be high-performance buildings that employ energy efficient and green building practices. To encourage property owners to make use of renewable energy sources, roof-mounted photovoltaic panels are permitted on all buildings. Wind turbines, both ground and roof-mounted, should be permitted by special use.

The following pages include a map, building sections and building perspectives that further illustrate these guidelines.

Public Lighting

Public lighting is undergoing a design and technology revolution. Generally public lighting is not thoughtfully designed resulting in overlighting and a lack of visual distinction. Today lighting can be highly energy efficient and dimmable, a unique opportunity to enhance the distinction of Rockefeller Square. In designing lighting for the Square lamps mounted high above the street should be kept to a minimum. Lower scale lighting such as bollards can help with both navigation and spatial definition. Lighting building facades can define space and take the place of more generic high-pole lighting. Square lighting should be dark-sky compliant.

Other Considerations

Other considerations factor into site and building design without directly relating to LEED-ND.

Building Materials

In order to establish and maintain a high quality of development within the study area, certain building materials should be prohibited including vinyl, corrugated metal, cast-in-place concrete, unarticulated pre-cast concrete, utility block, drivit, mirrored glass, opaque glass, and EIFS.

Architectural Style

In order to maintain a high level of architectural integrity, each building should have no more than one identifiable architectural style. Specifically, the architecture of an individual building should not contain elements of more than one architectural style.

Signage

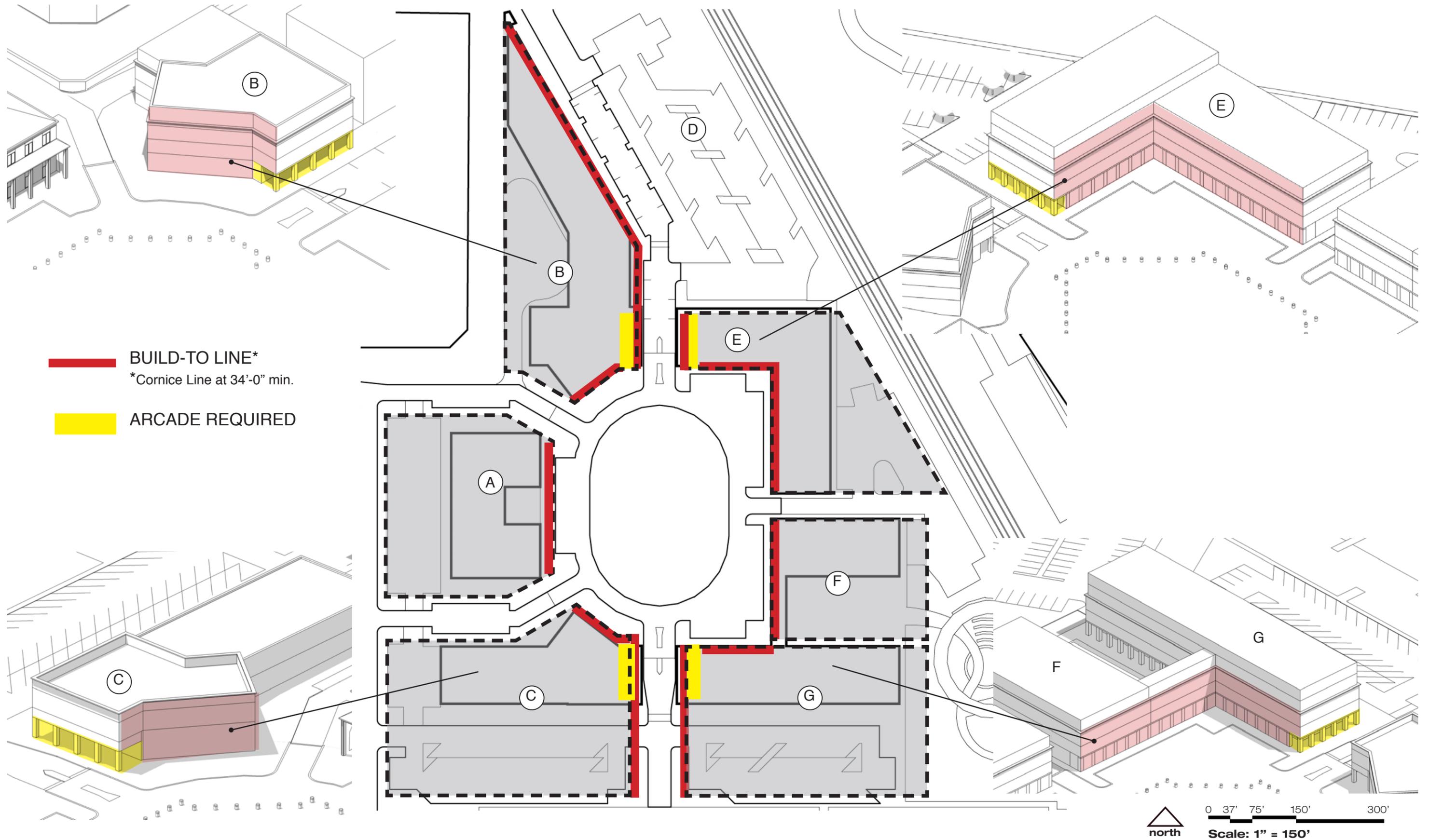
Signage along major corridors (e.g., Hawley) and the train tracks are permitted to be auto-oriented meaning that they may be larger than those along interior streets. Wall signs for large tenants are permitted along the railroad tracks. For interior streets, signs should be pedestrian-oriented and close to their respective entrances.

The following types of signage should be prohibited:

- Backlit box signs
- Roof Signs
- “Moving” Electronic Message Board Signs

The following types of signage should be permitted:

- Blade signs
- Neon- special use permit
- Informational/directional/wayfinding signs
- Sandwich boards
- Window signs (painted glass)
- Awning signs



Implementation

The Village of Mundelein has expended significant resources and conducted thorough planning for the study area. The Master Redevelopment Implementation Plan builds off of these efforts and recommends a preferred master plan. Realizing this plan will involve leadership, partnerships, and incentives to private sector developers.

This plan involves creating something entirely new—constructing buildings where none currently exist, creating market potential where none naturally exists, and creating a development pattern unlike any other in the Village.

Successful implementation of this plan will require continued cooperation between the Village and the private sector to stimulate transit-supportive development and discourage uses that detract from true TOD. The following implementation tasks provide a “checklist” to monitor progress and prioritize initiatives. The implementation tasks are presented as a matrix that includes recommended phasing. Phasing is broken down into short-term, mid-term, and long-term as follows:

Short-term: 0-3 years

Mid-term: 3-5 years

Long-term: 5+ years

On-going: For the duration of construction.

The Implementation Matrix is categorized into:

- Administration
- Business and Developer Attraction
- Circulation and Parking
- Infrastructure
- Promotion and Marketing

Category	Implementation Task	Phasing
Administration	Update the zoning ordinance to reflect the plan's guidance.	Short-term
	Formalize subdivision plan for the site and create promotional materials based on it.	Short-term
	Consider the creation of a Special Service Area (SSA) to pay for and administer streetscaping, parking, and special events.	Mid-term
	Organize staff/council tours of regional examples of TODs to better understand the elements of success.	Short-term
	Use permit fee waivers and expedited approvals processes to incentivize green building practices.	Short-term
	Ensure that the revised zoning ordinance allows mixed-use by right.	Short-term
	Incorporate planning for this site into 5-year Capital Improvement Plans.	
	Update the plan once Phase I obtains a critical mass of development.	Long-term
	Create a sidewalk café permitting program.	Short-term
	Acquire land to extend the proposed street to Seymour Avenue.	Mid-term
	Plan for a western connection to Lake Street near the police station.	Mid-term
	Business and Developer Attraction	Publicize progress of the development through press releases, articles, and social media.
Create a "Developer Kit" of promotional materials that includes a map, information on incentives, market information, FAQ, and contact information.		Short-term
Create a website for the site to post updates, announcements and site materials.		Short-term
Promote the project at professional and trade organizations such as Urban Land Institute (ULI), the American Planning Association (APA) and International Council of Shopping Centers (ICSC).		Mid-term
Provide site tours to developers and brokers to answer questions, educate, and demonstrate opportunity.		On-going
Create and distribute a developer RFP to solicit development proposals for following stages and phases		Mid-term
Educate the public (including potential developers and tenants) about the plan and its goals for the site.		On-going
Compile developer and broker information for regular, targeted communication (e.g., quarterly email blasts).		Short-term
Regularly update market information.		On-going
Assemble testimonials from past partners such as Cardinal Square and Weston Solutions.		Short-term
Maintain open channels of communication with local developers who are familiar with the Village.		On-going
Advertise incentives, including the TIF district.		Short-term
Promote "early successes" to local media and trade organizations.	Short-term	
Circulation and Parking	Brief and maintain open channels of communication with Metra and the Canadian National Railway about plans for a pedestrian overpass and potential funding sources.	Short-term
	Meet regularly with area businesses to assess potential for increased transit ridership, and potential business expansion or relocation.	On-going
	Create long-term advocacy for increased commuter rail service by creating a list of residents and employees that are interested in using transit, and consider strategic alliances with advocacy groups such as the Active Transportation Alliance.	Mid-term
	Continue to monitor parking counts on a regular basis.	On-going
	Continue to plan for a connection near or through this site to the North Shore Bike Trail.	Short-term
	Require bicycle parking with all new developments.	Short-term
	Conduct a detailed traffic study of the Hawley Street/Chicago Avenue intersection.	Short-term
	Create a Village-wide bicycle plan.	Mid-term

Category	Implementation Task	Phasing	
Circulation and Parking (continued)	Create a Village-wide bicycle plan.	Mid-term	
	Develop an improved pedestrian crossing at Chicago Avenue and Hawley Street.	Mid-term	
	Create a Transportation Demand Management (TDM) plan for the Phase I.	Long-term	
	Explore the possibility for carsharing in the station area by meeting with iGo, Zipcar and similar providers.	Long-term	
	Work with Metra to identify locations for relocating parking.	Long-term	
	Formalize shared parking arrangements with Metra.	Mid-term	
	Review on-street parking pricing and policies as development occurs.	On-going	
	Create a pedestrian connection from Courtland Street to the Metra Station.	Mid-term	
	Require sidewalks on both sides of all streets throughout the site.	On-going	
	Create Complete Streets by striping areas appropriate for bicycle lanes.	Mid-term	
	Promote participation in "Bike to Work Week".	Long-term	
	Prohibit curb cuts for individual driveways.	Short-term	
	Establish a parking-in-lieu fee program.	Mid-term	
	Create an interim walking path until Chicago Avenue is completed.	Short-term	
	Engage a landscape architect to design Rockefeller Square as an active space, a destination, and an integrated stormwater feature.	Short-term	
	Infrastructure	Complete site infrastructure.	Short-term
		Update streetscape design standards to reflect contemporary design practices and green technology.	Short-term
	Ensure that the design and engineering of the streets and sidewalks within the site accommodate special events (e.g., adequate space for large groups of pedestrians, utility needs for vendors).	Short-term	
	Engage a design firm to create a distinctive brand and identity for Rockefeller Square including brochures, website, banners, etc.	Short-term	
Promotion and Marketing	Design a comprehensive gateway and wayfinding signage system to further enhance a distinct identity for the area.	Short-term	
	Install distinctive identification signage at the intersection of Hawley and Chicago that promotes Rockefeller Square as a unique destination.	Short-term	
	Seek LEED certification for Village Hall and pursue grants for LEED-NC (new construction).	Short-term	
	Seek LEED-ND certification for the project as a whole.		
	Designate a responsible party for actively programming the square throughout the year.	Mid-term	
	Consider relocating Mundelein Days to the square.	Mid-term	
	Identify opportunities for public art. If these areas are likely to be on private property, establish easements for their future construction.	Short-term	
	Consider relocating the Village's farmers market to the square.	Mid-term	
	Consider interim uses until the square is fully constructed (e.g., community gardens).	Short-term	
	Schedule ribbon-cuttings and grand openings with each new project and tenant.	On-going	
	Partner with local arts groups, the public library, chamber of commerce, and similar organizations to program new public spaces.	On-going	
	Create visible or interpretive displays to demonstrate the site's green features.	Mid-term	
	Seek local, state, and national awards for the project once under construction.	Mid-term	

APPENDIX 1: Technical Memorandum for Pedestrian Grade Separation

The scope of this Technical Memorandum is to develop and evaluate feasible design alternatives for a proposed pedestrian grade separation structure at the Wisconsin Central Limited (WCL) Railroad tracks in the vicinity of the existing Mundelein Metra Station between Hawley Street to the north and Courtland Street to the south. Two alternate concepts have been prepared for this pedestrian grade separation structure, including 1) an underpass option and 2) an overpass option. This grade separation is being developed within the context of a Master Redevelopment Implementation Plan and would provide a safe, attractive, and useful path for the users of this community.

Background

A Mundelein Transit-Oriented Plan was developed in 2004 by URS Corporation. At present, Farr Associates is taking the 2004 Plan and preparing a Master Plan that includes a detailed implementation plan to proceed with the development of public infrastructure. The current effort includes Revising, Implementation, and a Phase I Plan that comprises a 17 acre area to include a new Village Hall, additional buildings, a conceptual street network, and the pedestrian grade separation structure at the railroad.

Purpose & Need

The concept of a pedestrian crossing at the Mundelein Metra Station has been considered for some time. Due to strict requirements, the Village is pursuing a grade-separated crossing. The purpose of this structure is to enhance public safety by eliminating pedestrian/train conflicts along the WCL Railroad to serve the station and facilitate other east-west access. There is a current need for a safe, grade-separated crossing due to the 44 trains per day (22 commuter and 22 freight) that traverse this area at maximum timetable speeds of 60 mph. In addition, there is existing residential development to the east of the tracks with the Metra Station on the west side of the tracks. This need will be exacerbated in the future due to the redevelopment plan for this area, which calls for some additional high-density residential development in a transit oriented manner east of the tracks and more residential, commercial, and green space west of the tracks. The WCL Railroad is in full support of a grade-separated pedestrian structure at this location provided it is designed to meet their current standards.

Existing Conditions

The WCL Railroad tracks are oriented in a north-west-southeast direction as they travel through Mundelein. There are two existing tracks along this line on 15 foot centers. The tracks are on a tangent alignment and a relatively flat profile in this area. The Mundelein Metra Station is situated on the west side of the tracks approximately midway between Hawley Street on the north and Crystal Street on the south. Parking for the station extends to the west and south of the station and comprises 475 spaces, which is based on a 2020 projection of need.

Design Parameters

A coordination meeting with the WCL was held on January 30, 2012. At the meeting, the grade separation was discussed and the WCL provided their design standards and requirements. It is unlikely that the vertical profile of the rail tracks in this area will be modified given the maximum allowable grades of the track and the minimal benefit that would be gained from a slight elevation change. The minimum recommended opening for a bike path is 10 feet wide by 8 feet high inside dimensions. Per the Americans with Disabilities Act (ADA) guidelines, a maximum grade of 8.33% is allowed as long as a 10' flat area is provided every 30' along the ramp. The required vertical and horizontal clearances for the grade separation structure are noted as follows:

Vertical Clearance:

Overpass = minimum of 23 feet from top of rail to bottom of structure + 5 feet structure depth

Underpass (assumed 15 feet) = 5 feet clearance + 10 feet inside opening

Horizontal Clearance:

Minimum 33 feet to any overhead structures (measured at a right angle to the centerline of the tracks). Also, any overhead abutments will need to be placed outside of the railroad right-of-way (ROW). The railroad ROW is assumed to be a 100 foot wide corridor.

It was further noted during the meeting that the design of any grade-separated structure should incorporate space for a future third mainline track on a 25 foot center, likely to the east of the existing tracks, through this area. This in effect, increases the railroad ROW to 106'. This assumes a 33' distance to the west from the centerline of the westernmost track, 15' separation between the existing tracks, an additional 25' spacing between the existing easternmost track to the potential proposed future track, and a 33' distance from the centerline of the potential proposed easternmost third track to the ROW line. Further, the WCL will require fencing to be provided along the tracks to direct pedestrians to use the grade separation and not cross the tracks at grade. Drainage from any overpass structure would need to be diverted away from the tracks and not be discharged onto the tracks or roadbed.

Utilities

There are multiple utilities that cross the site. A Design JULIE locate was performed on February 6, 2012. Potential utilities located in the vicinity of this site include AT&T, ComEd, Comcast, Village of Mundelein, North Shore Gas Company, and West Shore Pipeline. The most significant of the utilities is the jet fuel pipeline owned by West Shore Pipeline. Based on verbal information received from the owner, it is our understanding that the facility is a 16 inch steel petroleum pipeline which runs parallel to the railroad tracks on the east side at approximately a 35 foot offset. The pipe is anywhere from 4 to 7 feet deep, is pressurized at 800 psi, and carries ~ 300,000 gal/hr. Other utilities including storm sewer, sanitary sewer and a water-main exist in the vicinity of the crossing. A 24 to 30 inch storm sewer runs along the west side of the tracks at an approximate depth of 16 feet.

This sewer is estimated to be 100 years old and has recently been videotaped to assess its condition. This sewer outlets to the Seavy Drainageway. Between the tracks and the storm sewer exists an 18 inch gravity sanitary sewer within an easement at a similar depth. There are also overhead power lines on the east side of the tracks that will likely be in conflict and require relocation with any overpass structure option. While a ½ million gallon water tower exists in the vicinity of the site, there are no water mains known along the tracks, however, smaller service connections are likely in the vicinity. The storm and sanitary sewers will likely require relocation in the vicinity of the grade separation depending on the final layout and design of the structure.

Potential Location

There is some open space that exists just north of the station and parking west of the tracks that is available for the ramp structures for the grade separation. Open space also exists along the east side of the tracks across from this location and just south of the McKinley Avenue cul-de-sac. Based on discussions with the Village, this cul-de-sac can be modified as part of the redevelopment of this area, allowing more room for the ramp structures for the grade separation.

In coordination with the development of the overall Master Plan to the west of the tracks, the grade separation structure is proposed to be located at the mid-point of the McKinley Avenue cul-de-sac to the east. On the east side, the ramps as proposed will be parallel to the railroad tracks and head to the southeast, with one switchback so that the touchdown point from the structure to the existing grade will occur at the end of the cul-de-sac. On the west side, the ramps are also proposed also be parallel to the tracks, however, they will head northwest, with one switchback to allow the touchdown point to be aligned with a sidewalk connecting it to the redevelopment area and also be able to access the existing loading platform at the Metra Station. On each side, a stairwell can also be provided, for use by those who would not choose to traverse the distance of the ramps. The stairwell on each side would be placed opposite of the ramps structure, i.e., to the north on the east side and to the south on the west side. More specific details of the proposed overpass and underpass options are provided in the following sections.

Overpass Structure

The first pedestrian grade-separated structure evaluated is an overpass of the WCL tracks. This is shown on Exhibit #1. The profile (elevation) view is shown on Exhibit #2. Using a ground elevation of 742.35, a minimum length of 440 feet of ramp at an 8.33% grade with landings is required to achieve the clearance path elevation of 770.35. As shown on the exhibits, the first 240 foot ramp section extends out from the physical overpass on each side of the railroad and the remaining 200 foot ramp section switches back to land near the base of the overpass structure at ground level. For the overpass option, a second alternative has been developed which includes a circular ramp configuration on the west side with a 100' inside diameter. This is shown on Exhibit 5. The east side would remain as a straight ramp extending outward from the railroad tracks with one switchback needed to tie down to existing ground, as discussed above.

Underpass Structure

The second pedestrian grade separation structure evaluated is an underpass of the WCL tracks. This is shown on Exhibit #3. The profile (elevation) view is shown on Exhibit #4. Given the lesser vertical clearance requirements for traversing under the railroad as opposed to traversing over it, the underpass options theoretically have a much shorter ramp distance needed to meet the existing ground grades. However, there is a constraint. As discussed above, the West Shore Pipeline owns a jet fuel pipeline along the east side of the WCL tracks in this area. It has been determined that the cost of relocating this pipeline is prohibitive to this project, and as such the proposed underpass would need to be designed to traverse below the existing pipeline.

Given this additional depth needed, depth of the underpass is essentially equivalent to the height of the overpass, resulting in very similar ramp lengths among the two options. Using a ground elevation of 742.35 at the platform, a minimum length of 440 ft. of ramp at an 8.33% grade with landings is required to achieve the clearance path elevation of 727.35. As shown on the exhibits, the first 240 foot ramp section extends out from the physical underpass on each side of the railroad and the remaining 200 foot ramp section switches back to daylight near the actual underpass structure at ground level.

Construction Staging

The staging and method of construction is a major consideration not only in terms of cost, but in operations as well.

For the construction of the overpass, most of the work will be performed outside of the railroad ROW and clearance area, and as such, should not have an impact on railroad operations. Track outage windows will need to be coordinated with the railroad during the erection of the portion of the structure directly over the tracks, as there can be no live traffic beneath the area where cranes are swinging structural elements into place. These outages are anticipated to be reasonably acceptable to the WCL.

For the construction of the underpass, the following methods were investigated:

1. Open-cut excavation with a rail run-around;
2. Jacking the box sections under the rail embankment; and,
3. Jump Span for the rail line.

Open-cut excavation was not feasible since the rail line must stay in operation during the construction of the underpass and there is no space within the railroad right-of-way for a rail run-around. There are existing switches immediately to the north and south of the study area. Jacking the box sections is not practical at this location since there is not enough embankment to retain the ballast and track during jacking operations. In order to minimize the length of portal required, the distance between the top of rail and bottom of tunnel should be minimized. Building a jump span for the rail line appears to be the best method of construction at this site. Sheeting, piling and the jump span could be installed over multiple track windows. Once the sheeting and jump span are in-place, the area beneath the track could be excavated and the box sections placed. Some items such as lighting and traffic control/railroad flagging could not explicitly be addressed due to lack of specific details, however they appear reasonable.

Railroad Considerations

Based on coordination with the WCL, they expressed their position that they would not want to be the owner of any new pedestrian grade-separated structure, however, a license agreement will be needed with the WCL to allow for the crossing of the tracks. Further coordination with the WCL should yield a more definitive future third track layout. Geotechnical borings will be required in future phases of this project for either alternative.

Recommendation and Next Steps

As described above, both an overpass and an underpass option have been developed to a conceptual level. Both options appear feasible within the constraints of the site and considering WCL requirements. While the theoretical underpass option would have much smaller grade differential between the tracks and the structure resulting in much shorter ramps, utility conflicts exist with the West Shore Pipeline that require major revisions to this option. Given the prohibitive cost involved to relocate the pipeline, and the additional depth needed to design the underpass below the pipeline, any advantage that would have been gained with a shallower underpass when compared to the height of an overpass is lost. As such, it is our recommendation that the overpass option be carried further as the preferred alternative for more detailed study. The recommended next steps would be for a full topographic survey and geotechnical borings to be completed at the project site so that more precise engineering can be developed including layout elevations and dimensions for a detailed design of the overall structure. This will allow for more in-depth earthwork, structural, and drainage analysis, leading to a preliminary construction cost estimate and assessment of impacts and utility conflicts.

Grade Separation Photoboard

Pedestrian grade separations come in many variations. Function, aesthetics, and budget are all considerations. This page provides examples of existing grade separations to spark conversation about what type of grade separation is appropriate for this site.



Photo Key:

1. Providence, Rhode Island
2. Sturtevant, Wisconsin
3. Seattle, Washington
4. Chicago, Illinois (Millennium Park)
5. Minneapolis, Minnesota
6. Prototypical Metra Tunnel, Illinois
7. Lombard, Illinois (Proposed Metra Tunnel)
8. Omaha, Nebraska
9. Chicago, Illinois (Grant Park)
10. Kassel, Germany

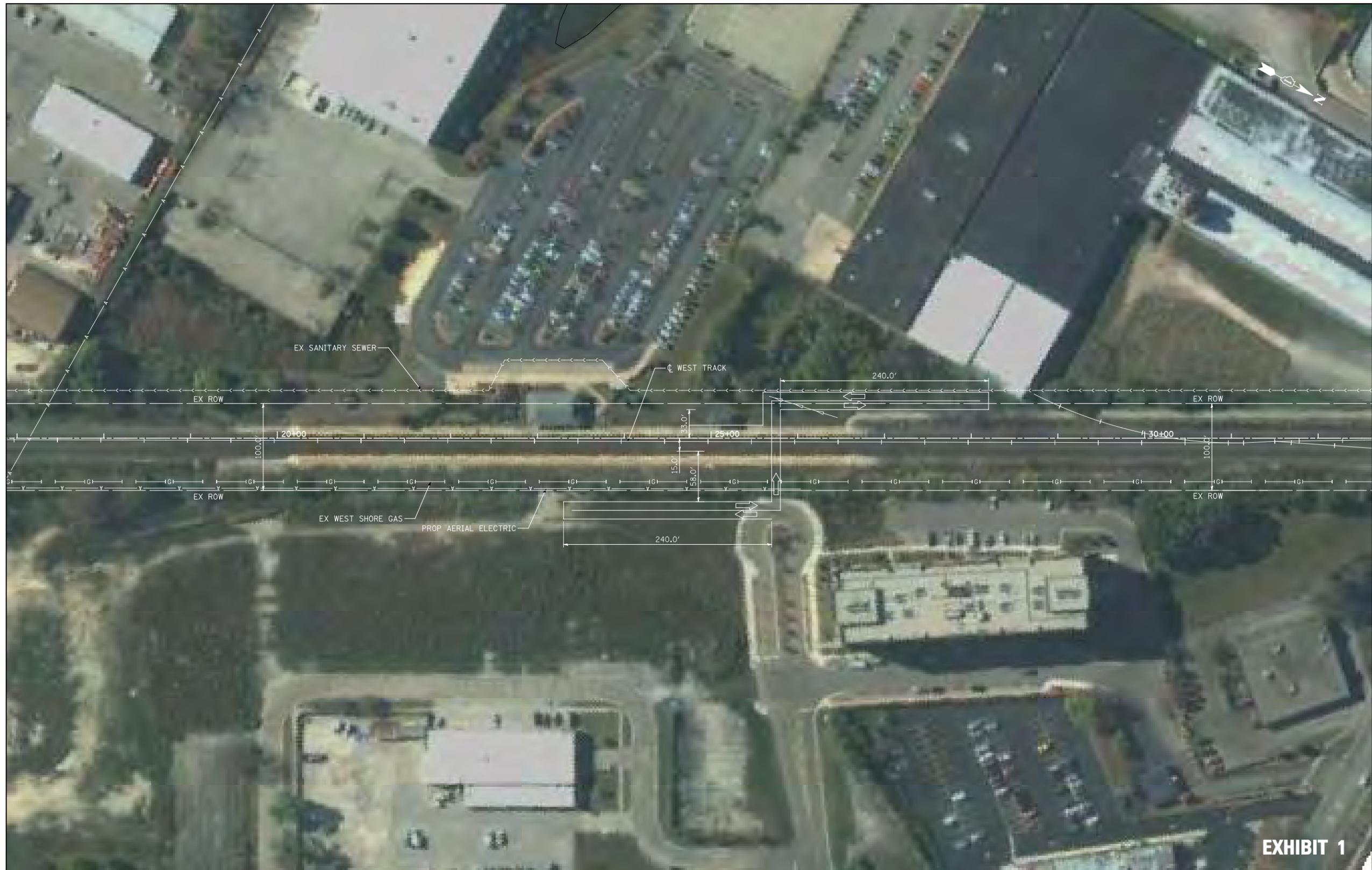


EXHIBIT 1

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE Lisle, IL 60532 patrickengineering.com	USER NAME = ckersten(Lisle_R)	DESIGNED -	REVISED -	VILLAGE OF MUNDELEIN REDEVELOPMENT PLAN	OVERPASS OPTION	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT CONFIG = PDFIGreg.Small.plt	DRAWN -	REVISED -			LAKE	4	1		
	PLOT SCALE = 1:100	CHECKED -	REVISED -			CONTRACT NO.				
	PLOT DATE = 5/21/2012 10:01:26 AM	DATE = 02-17-2012	REVISED -			FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
SCALE: 1"=50' SHEET * OF * STA. TO STA.										

q:\Mundelein\IL_Villageof\21250_001\Exhibits\21250_001_PR_Over.dgn

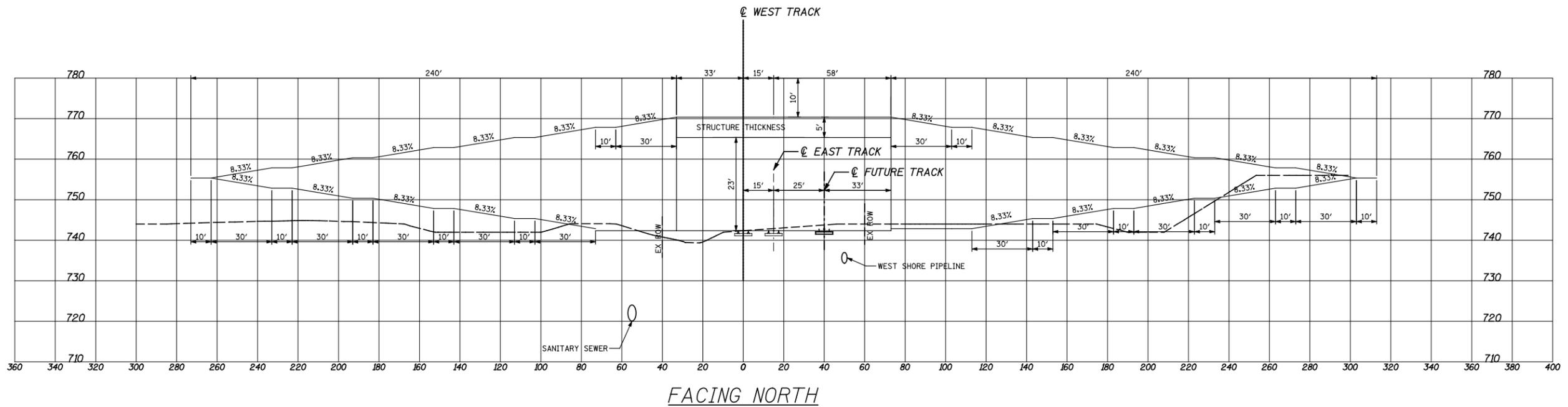


EXHIBIT 2

USER NAME = ckersten(Lisle.R)	DESIGNED -	REVISED -	PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	THE VILLAGE OF MUNDELEIN	OVERPASS OPTION		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT CONFIG = PDF(Grey_Small).plt	DRAWN -	REVISED -			SCALE: 1"=50'	SHEET * OF *	STA. TO STA.	LAKE	4	2	
PLOT SCALE = 1:50	CHECKED -	REVISED -			CONTRACT NO.		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
PLOT DATE = 4/24/2012	DATE -	REVISED - 02-17-2012									

G:\Mundelein\IL_VillageofMundelein\Exhibits\S_21250_001.X_see.dgn



EXHIBIT 3

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = ckersten@lisle.pr	DESIGNED -	REVISED -	VILLAGE OF MUNDELEIN REDEVELOPMENT PLAN	UNDERPASS OPTION			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT CONFIG = PDF\Gray-Small.plt	DRAWN -	REVISED -		SCALE: 1"=50'	SHEET	OF	STA.	TO STA.	LAKE	4	3
	PLOT SCALE = 1:100	CHECKED -	REVISED -							CONTRACT NO.		
	PLOT DATE = 5/18/2012 2:28:04 PM	DATE - 02-17-2012	REVISED -							FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

G:\Mundelein\1_Villageof\21250_001\Exhibits\S.21250_001.PR.Under.dgn



EXHIBIT 5

PATRICK ENGINEERING INC. 4670 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = ckersten@lisle.p PLOT CONFIG = PDF(Grey_Small).plt PLOT SCALE = 1:100 PLOT DATE = 5/21/2012 10:03:23 AM	DESIGNED - DRAWN - CHECKED - DATE - 02-17-2012	REVISED - REVISED - REVISED - REVISED -	VILLAGE OF MUNDELEIN REDEVELOPMENT PLAN	OVERPASS OPTION ALT.	F.A.U. RTE. SECTION COUNTY LAKE CONTRACT NO.	TOTAL SHEETS 5	SHEET NO. 5
	SCALE: 1"=50' SHEET # OF # STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						

g:\Mundelein\IL_Villageof\21250_001\Exhibits\5_21250_001_PR_Over2.dgn

Appendix 2: Downtown Retail Market Development Action Plan

The following Action Plan identifies Village of Mundelein's opportunities for enhance existing downtown businesses and attract new businesses. The recommended tasks include key activities and programs to be completed in tandem with the working group noted in the Organizational Action Plan.

Objective: Strengthen property management and reinvestment.

1. Become a resource in making downtown properties more profitable

- Meet individually with owners in the downtown core to share study results Work with downtown's business and property owners to develop private sector leaders within the district to work with fellow property owners
- Identify owner objectives for each property
- Provide interested tenant lists to property owners on a bi-monthly basis
- Improve tenant sales to reduce turnover and support higher rents
- Work with property owners to recruit established businesses with experience operating downtown locations
- Monitor property listings and asking rents

2. Undertake a broker outreach program to area (Mundelein and Lake County) commercial real estate brokers

- Identify successful, independent brokers aiding Mundelein and area property owners with independent tenant recruitment
- Provide interested independent brokers with property and owner information to market their services
- Meet biannually to learn about market conditions and review tenant requirements

Objective: Improve sales and profitability of existing businesses.

1. Provide training on best operating practices in conjunction with MCC and the GLMV Chamber

- Accounting and financial
- Merchandising
- Advertising and promotion
- Hiring

2. Support co-marketing efforts, supplementing MCC's special event calendar

- Encourage 'ad hoc' efforts by similar or complementary businesses to advertize and publicize businesses to consumers
- Meet with business owners 2-3 times per year to identify joint marketing opportunities and potential joint programming to support sales growth
- Consider retail promotions specific to downtown's business clusters (such as dining, ethnic foods, etc.)

3. Enhance the Village's communications about Mundelein businesses to Village residents

- Include information about successful downtown businesses in Village communications (print and electronic)
- Include placements for downtown information through the Village's public information efforts
- Include information about business openings in all print and electronic publications

Objective: Manage business mix and vacancies to enhance the market position and visibility of the downtown core.

1. Create screened list of potential Mundelein tenants, applying survey results

- Spend four hours per month calling businesses identified by consumer survey or potential tenants recommended by other downtown Mundelein businesses
- Identify potential tenant location requirements
- Host one-on-one visits for potential tenants
- Call screened tenant prospects bi-monthly to describe vacancies

2. Monitor mix and vacancy changes

- Update property data as businesses turnover
- Calculate vacancy and mix percentages annually
- Continue to improve database quality by seeking additional information on sales and square footage

3. Encourage downtown's key business owners to expand product lines per survey results

- Identify complementary businesses for products of interest
- Meet with business owners to share survey data about product line interest
- Assist owners, as appropriate, with any line expansion

4. Track peer communities and nearby downtown districts

- Visit peer communities and neighboring districts during peak selling times
- Maintain files of peer and district community collateral materials (print and electronic)
- Invite good businesses in peer communities to consider another location in Mundelein
- Call identified tenant prospects as part of the screened list described in 1 above

Objective: Develop recruitment materials for the downtown core.

1. Include study results on the Village and MCC websites

2. Develop materials applying key study demographics, survey results, business opportunity profiles, and conclusions in user-friendly format

3. Add electronic versions of materials to an identifiable page on the websites

4. As needed, develop materials targeted to attract specific business types, such as restaurants

5. Provide materials to the screened list of potential downtown tenants

Objective: Evaluate the opportunity for a dining cluster in the downtown core.

1. Meet with current downtown restaurateurs and identify plans for expansions or new restaurant concepts

2. Ask for their suggestions of experienced restaurant operators located near Mundelein that may consider an additional location

3. Add the suggestions to the screened list of prospective tenants

4. Monitor prospect interest, and provide assistance, as needed, to add restaurants to the core's mix

Objective: Prepare for future development as the broader economy improves.

1. Encourage office uses, and work to retain current downtown employers within the core boundaries

2. Encourage business uses that can financially succeed in downtown Mundelein

3. Identify existing downtown spaces and sites downtown suitable for redevelopment, and use the core as a catalyst location for business success

4. Work to create clusters and activity in evaluating future development opportunities

5. Ensure that future developments include strong tenancies

