



TRANSIT - ORIENTED COMMUNITIES (TOC)

IDENTIFYING OPPORTUNITIES TO IMPROVE
ACCESS AT AND AROUND STATIONS

2023



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INTRODUCTION

1.



- 1.1 PROJECT SCOPE
- 1.2 HOW TO NAVIGATE THIS DOCUMENT

1. PROJECT SCOPE

WHAT THIS PROJECT IS

The KOP Transit-Oriented Communities (TOC) Plan, which is grounded in an understanding of the current market demand in King of Prussia, Upper Merion Township, and Montgomery County, aspires to guide development in station areas while preserving existing neighborhoods. The plan identifies improvements linked to future development while taking into consideration community needs collected through the public engagement process.

WHAT THIS PROJECT IS NOT

While this plan acts as a guidebook to KOP Rail station-area design, it cannot change rail design and alignment, which were approved by SEPTA and the Federal Transit Administration (FTA). It also cannot promise specific development to the area.

STATION DESIGN AND ALIGNMENT

- › Cannot change station location
- › Cannot change rail alignment

DEVELOPMENT

- › Cannot promise specific development
- › Cannot bring any specific businesses or homes to the community

PROJECT GOALS



PUBLIC OUTREACH

Engage the public to foster a collaborative process for station area plans



AFFORDABLE HOUSING

Propose a mix of housing types that promote affordability



FUTURE DEVELOPMENT

Respond to market demand while preserving existing neighborhoods



STATION AREA URBAN DESIGN & STREETSCAPE

Conceptualize interventions that improve walkability

2. HOW TO NAVIGATE THIS DOCUMENT

The KOP Transit-Oriented Communities (TOC) Plan includes station area plans for potential development around the future KOP rail stations. The approach is to recognize current market conditions in King of Prussia and station locations to provide directions to SEPTA, Township staff, residents, stakeholders, and developers to identify and leverage opportunities to create an environment that is sustainable in the long term while preserving existing neighborhoods.

Station area plans draw from a detailed market study done by Econsult Inc. and outreach sessions that took place throughout the project and are the base for the value capture analysis. Chapters of this document tries to answer the "WHY" and "WHAT", of this project:

- › **"WHY"** we are doing this to identify market factors and dynamics that support development around KOP Rail stations
- › **"WHAT"** we propose to accommodate market demand through station area plans and improvements at the human scale
- › **"HOW"** we could accomplish these recommendations through phased improvements over time

CHAPTER 1: INTRODUCTION

WHY

CHAPTER 2: MARKET STUDY SUMMARY

CHAPTER 3: VISION & GUIDING PRINCIPLES

CHAPTER 4: HENDERSON RD STATION AREA PLAN

WHAT

CHAPTER 5: KOP MALL STATION AREA PLANS ALLENDALE RD STATION MALL BLVD STATION

CHAPTER 6: FIRST AVE STATION AREA PLANS FIRST & AMERICAN STATION FIRST & MOORE STATION

HOW

CHAPTER 7: CONCLUSION



2. **MARKET STUDY SUMMARY**

- 2.1 EXISTING MARKET CONDITIONS
- 2.2 MARKET CAPACITY

1. EXISTING MARKET CONDITIONS

King of Prussia (KOP) is Montgomery County's economic hub and the largest employment center in the southeastern Pennsylvania region, outside of Philadelphia. Recent and ongoing developments provide strong evidence of growth in King of Prussia before and during the pandemic period. While King of Prussia's many existing assets and strong public and private investment pipeline point to a bright future for the area, limited transportation choices adversely affect KOP's ability to adapt to changing trends, which can present obstacles to sustained growth. Addressing these challenges and accommodating future growth will require strategic, ongoing collaboration from area leaders.

DEMAND DRIVERS

Two main trends reinforce the growing market demand in King of Prussia:



A GROWING RENTER COMMUNITY

Recent growth in renter households is notably stronger in KOP than countywide, and the demand from renter households will continue to bolster market demand in the area's multifamily housing stock. Currently, many households in KOP are choosing to live in apartments, regardless of their ability to purchase a home. This suggests continued demand for the types of amenity-rich residential developments completed in recent years and currently underway.



A SIGNIFICANT LABOR BASE IN KOP

With a relatively small residential base, the KOP area is one of the most significant net importers of labor in the region—many workers in the study area commute from elsewhere. While KOP offers employment opportunities across skill and income levels, limited transit service on congested highways makes commutes difficult for workers without reliable access to a vehicle.

SUPPLY DRIVERS

Within King of Prussia, there are 52 new and recent developments across different types of uses. Most of the developments are residential, followed by office and retail.



RESIDENTIAL

More than 4,270 housing units have been added to the KOP housing market, of which 3,720 are multifamily units, which indicates the demand of this type of housing.



OFFICE

More than 3.4 million square feet of office space have been added to the area. The KOP market is well positioned to prosper as we overcome the pandemic and as the suburban office market improves. While KOP's rental rates have notably increased by 16.1 percent over this period, rates are still competitive with the overall suburban market and the Philadelphia Central Business District (CBD)—creating an opportunity for the submarket to leverage in the future with the introduction of transit amenities to the area.



RETAIL

Retail is a core real estate component for the study area given the presence of the KOP Mall and Town Center. More than 420,000 square feet of retail space were added in the area, covering entertainment, restaurants, sports and recreation. With the growing mixed-use residential and office markets, there is an ongoing potential for retail, especially smaller format ground floor stores that supplement the national tenants in the KOP Mall and future developments.

2. MARKET CAPACITY

OPTIMAL DENSITY ANALYSIS

The optimal density shows the development that could be built within the context of existing demand, supply, and cost curves. **The analysis concluded that the economics of the area indicate that the five station areas along the proposed KOP extension could accommodate up to 7,200 residential units and at least 5 million square feet in commercial space (office, retail, and other uses).**

These future demand projections will impact various communities within KOP if not properly planned. The aim of the KOP Transit-Oriented Communities Plan is to identify strategic areas, usually within a walking distance from the future KOP Rail stations. In this study, these areas are identified as parcels likely to develop within a half-mile radius from each of the five stations. Likelihood of development of these parcels depends on their current conditions and their adjacency to the rail stations. Hence, parcels immediately near the station are identified for development in the near (0-10 years) and mid (10-20 years) terms, whereas parcels located near the limit of the half-mile radius are for the long term (20+ years).

The benefit of planning for future development is to have a coherent vision that incorporates lessons learned from national precedents in mixed-use developments around transit.

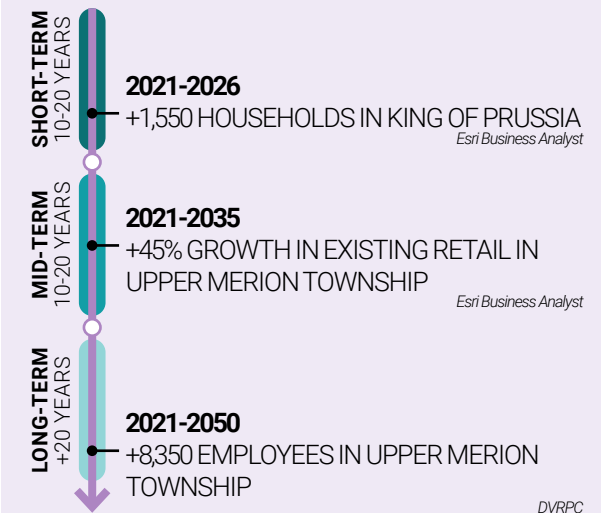
While induced demand in residential and commercial spaces from the rail project may seem high, guiding development to targeted areas near stations will ultimately preserve existing residential neighborhoods while creating pedestrian-friendly communities with healthy lifestyles and access to opportunities in KOP. Overall, areas of change estimate through this study, over the span of 20 to 30 years, represent only 7% of KOP's area.

TRANSIT-ORIENTED COMMUNITIES

These optimal density calculations show what station areas can accommodate in terms of development, which the Transit-Oriented Community Plans, shown in next chapters, will illustrate.

HOW TO GUIDE DEMAND TO KEEP WHAT WE LIKE ABOUT KING OF PRUSSIA?

CURRENT DEMAND METRICS



OPTIMAL DENSITY ANALYSIS RESULTS



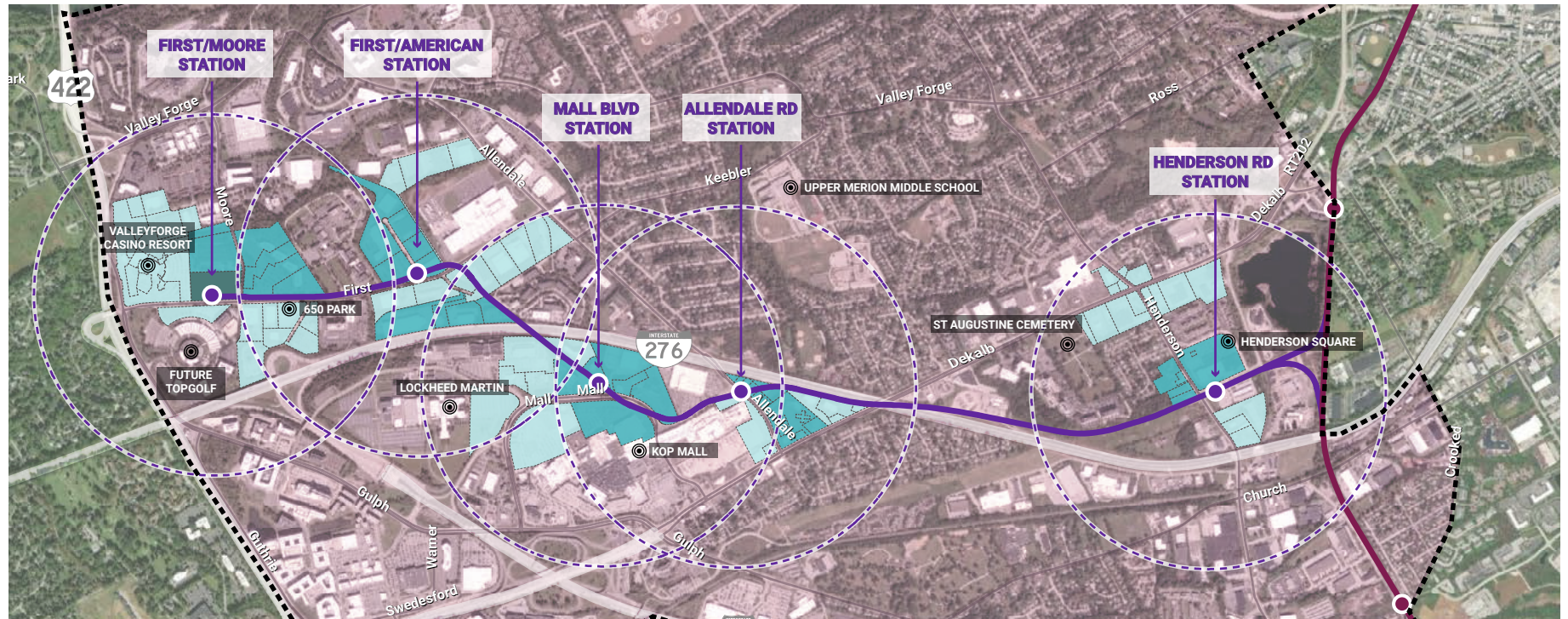
7,200
HOUSING
UNITS



5M SQFT
COMMERCIAL
SPACE



MARKET STUDY SUMMARY



PLAN 1.

DEVELOPMENT IN TARGETED AREAS

--- KING OF PRUSSIA BOUNDARY

— KOP RAIL LINE

● KOP RAIL STATION

○ 1/2 MILE RADIUS

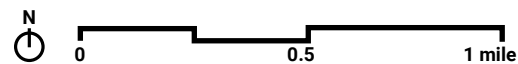
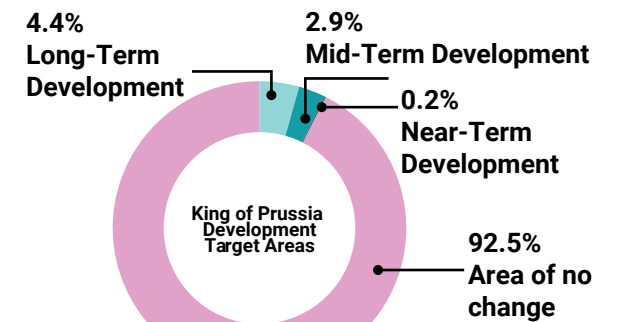
— NHSL

■ AREAS OF NO CHANGE

■ NEAR-TERM CHANGE

■ MID-TERM CHANGE

■ LONG-TERM CHANGE





VISION & GUIDING PRINCIPLES

3.

- 3.1 WHAT WE HEARD
- 3.2 VISION STATEMENT
- 3.3 GUIDING PRINCIPLES
- 3.4 PROJECT BENEFITS

1. WHAT WE HEARD

ENGAGEMENT APPROACH

Over the course of three months, public engagement was designed to support the work of the station area concepts around the future KOP Rail project. Three public meetings and one survey were used to gather community input. At Meeting 1, the project team shared project scope as well as opportunities and constraints pertaining to each station area. At Meeting 2, first drafts of concepts and potential projected growth around stations were presented to the community. Building on the foundations of feedback received, Meeting 3 further refined concepts and potential future growth with specific improvements that would occur in station areas. Concurrently, additional feedback was collected through a survey to reach the community that could not be present during the virtual and in-person engagement sessions.

MEETING 1: **ORIENTATION & BROAD THINKING**

The first meeting was a virtual meeting held on **March 7th, 2022**. At this meeting, attendees were introduced to the transit-oriented communities study, which looks forward 15 to 20 years to identify how the communities around the stations should develop to meet the goals of the community and maximize the benefits of KOP Rail.

SURVEY: **COMMUNITY PRIORITIES**

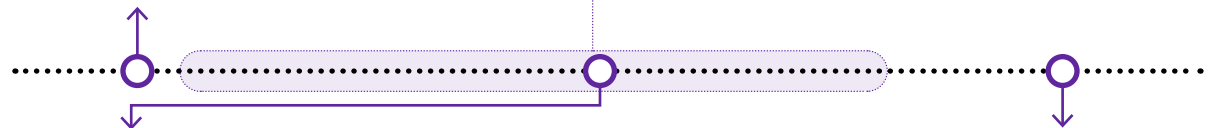
The main objective of the survey was to reach participants who could not attend public meetings. Questions in the survey aimed to collect suggestions and ideas about community priorities for station concepts and improvements.

MEETING 2: **STATION AREA CONCEPT PRESENTATION & FEEDBACK**

The second meeting was an in-person meeting held on **April 6, 2022**. Approximately 50 people attended. There were 11 boards available for the public to review. Attendees were re-introduced to the transit-oriented communities study and were able to ask questions and provide comments to the project team members.

MEETING 3: **REPORT BACK, NEXT STEPS, PUTTING IT ALL TOGETHER**

This meeting, held on **May 3, 2022**, presented final considerations and changes to prior draft plans; it also discussed next steps. Final community input about station area concepts and improvements was collected to be considered for final station area plans.



ENGAGEMENT SUMMARY

Four themes emerged from outreach activities:



1. IMPROVE MULTIMODAL TRANSPORTATION

Improvements to walking and biking infrastructure were a top concern. KOP is a car-oriented place, with many roads exhibiting heavy traffic that prompt safety concerns. Suggestions included traffic calming measures along with improvements to create a safe environment for pedestrians and cyclists. Connections to infrastructure under construction such as the Chester Valley Trail extension and the First Avenue Linear Park were suggested as well.

2. CREATE NEW OPEN SPACE AND AMENITIES

Participants highlighted the necessity of placemaking and creating additional amenities in station areas. Station-area parks should prioritize visibility, safety, and openness.

3. DESIGN A MIXED-USE COMMUNITY AROUND TRANSIT

The potential for mixed-use development, and possible zoning changes to allow it, were of interest to area stakeholders. Participants emphasized development that is pedestrian friendly, with access to retail shops and open space amenities targeted at daily needs and commuters. Some concerns arose regarding the possibility of increased traffic and speed along existing roadways.

4. INTEGRATE GREEN INFRASTRUCTURE

Stormwater management was of particular concern near the Allendale Rd and Mall Blvd stations. Concerns centered on topography, the proximity of natural creeks, and the fear of creating an impervious cover that would cause flooding issues.

2. VISION STATEMENT

The KOP Transit-Oriented Communities vision focuses on creating a living environment that prioritizes **multimodal connections, amenities for all, as well as housing, commercial, and office opportunities** that reflect national trends and future market demand. The vision anticipates growth around the new KOP Rail in areas immediately adjacent to stations, which means that **existing residential neighborhoods are preserved and are not altered without a long-term vision**. Growth anticipated around station areas aims to absorb this need while being part of one uniting vision and consistent guiding principles.

Vision and guiding principles integrate the themes considered in the opportunities and constraints analysis for each station: mobility, built form and land use. Building from these vision and principles, station areas concepts serve as a structure for future development.



3. GUIDING PRINCIPLES



MOBILITY

Create an accessible, connected environment offering safe, multi-modal transportation options for residents and visitors alike.

1 ROAD IMPROVEMENTS

- › Introduce traffic calming measures on arterial roads.
- › Create high-visibility crosswalks at main intersections.
- › Line streets with trees and green infrastructure to enhance the pedestrian experience.

2 EXISTING TRANSIT CONNECTIONS

- › Create bus stops and/or reroute bus lines, when possible, to align with new KOP Rail stations and facilitate transfers.

3 NEW CONNECTIONS

- › Introduce new streets to increase connectivity within the station area.
- › Use new streets to break large blocks into smaller, walkable units.

4 ACTIVE TRANSPORTATION

- › Close gaps in the existing sidewalk system, with priority to sidewalks within the 10-minute walkshed.
- › Widen existing sidewalks along main pedestrian arterials.
- › Create new protected bike lanes or multi-use paths to encourage multimodal mobility.
- › Delineate clear, landscaped pedestrian walkways within surface parking lots to promote pedestrian safety.
- › Connect to existing natural areas through trail extensions.



SHARED USE PATH ON CARRALL STREET, VANCOUVER, CANADA
SOURCE: PAUL KRUEGER



BIKE LANE ON PENN STREET, PHILADELPHIA, PA
SOURCE: PHILLYMAG



LAND USE

Encourage a mix of land uses to ensure proximity to retail and work opportunities while enhancing the pedestrian experience around station areas.

1 RESPOND TO HOUSING DEMAND

- › Promote residential land uses that increase ridership for the rail extension.

2 INTRODUCE MIXED-USE BUILDINGS

- › Introduce mixed-use buildings with store fronts fronting pedestrian arterials.

3 PLACEMAKING

- › Create opportunities for placemaking around stations as a way to improve user experience.

4 REVIEW PARKING REQUIREMENTS

- › Get creative with parking.
- › Reduce off-street parking requirements for new development when possible; consider parking maximums instead of minimums.
- › Encourage shared district parking to reduce the amount of land used for parking and make space for other land uses.
- › Create the opportunity for restricted on-street parking in newly created streets.

5 GREEN INFRASTRUCTURE

- › Integrate green infrastructure into the station areas' water management approach.
- › Connect natural areas to planned green open spaces.



STRUCTURED PARKING NEAR INTERMODAL CENTER, MINEOLA, NY
SOURCE: Stantec



STORMWATER MANAGEMENT INTEGRATED INTO PARKING, MANSFIELD, CT
SOURCE: Stantec

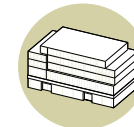


BUILT FORM

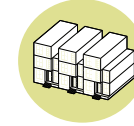
Use a variety of building types to promote human scale and walkability around the station area.

- 1 BUILDING SETBACKS AND ORIENTATION**
 - › Bring built form to parcel edge to help frame streets and create human scale.
- 2 INFILL STRATEGIES**
 - › Promote 'gentle infill' opportunities such as accessory dwelling units (ADUs) to help diversify housing types while maintaining neighborhood character.

- 3 INTRODUCE NEW BUILDING TYPES**
 - › Embrace more than just one or two building types. Low-scale residential development can be compact and walkable.
 - › Include walkups, townhomes, and stacked flats that fit within the character of the area.
 - › Activate the public realm and encourage walkability through mixed-use buildings.
 - › Introduce live-work spaces and mixed-use buildings with store fronts adjacent to sidewalks.



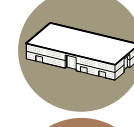
A: Mid-Rise Building



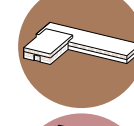
B: Townhomes or Stacked Flats



C: Main Street Commercial



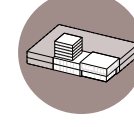
D: Light Industrial / Maker Space



E: Institutional / Community Building

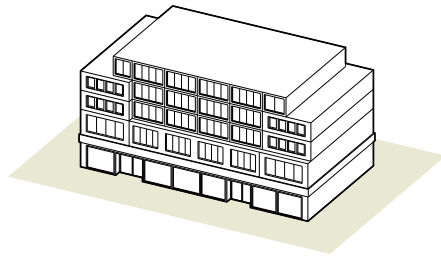


F: Tower Building



G: Entertainment Venue

Ⓐ MID-RISE BUILDING



Mid-rise buildings are defined as any building between 3 and 6 stories in height. The height and scale of buildings are proportional to the scale of the street that borders them. They frame the public realm and contribute to a pedestrian-friendly urban environment. Mid-rise buildings may have a single use, such as office or residential, or can support a mix of uses that could include retail, office, community services and residential in the same building.

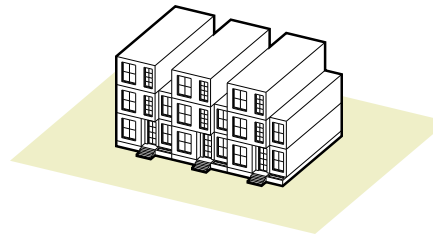


MIXED-USE BUILDING RENDERING, BOSTON, MA
SOURCE: BOSTON REAL ESTATE TIMES



MOSAIC DISTRICT, FAIRFAX, VA
SOURCE: EDENS PROPERTIES

Ⓑ TOWNHOME - STACKED FLATS



A townhouse is a contiguous dwelling unit, which shares party walls with neighboring houses. Each of the dwellings generally has a street entrance. Townhouses can be stacked, where two units are usually built on top of each other. This type of building is two to three stories high.

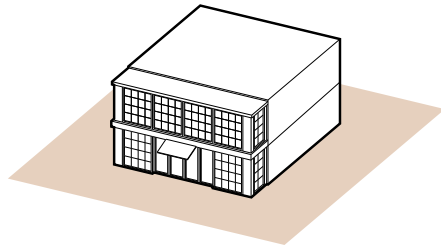


TOWNHOUSE RENDERING, TORONTO, CANADA
SOURCE: GLOBE AND MAIL



10 ARROS, RALEIGH, NC
SOURCE: JDAVIS ARCHITECTS

© MAIN STREET COMMERCIAL



Main Street commercial refers to buildings occupied by retail, service or small office establishments. These are buildings that have a façade animated by storefront windows and signage, contributing to the vibrancy of the street and the pedestrian experience.

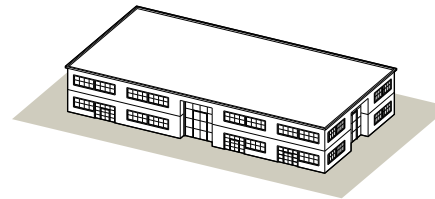


MONON BOULEVARD & MIDTOWN PLAZA, CARMEL, IN
SOURCE: REASITE



CHOP HOUSE ROW SHOPS, SEATTLE, WA
SOURCE: ARCHELLO

Ⓓ LIGHT INDUSTRIAL / MAKER SPACE



Light industrial buildings and maker spaces are buildings that allow for the production and creation of products that require relatively few resources and space, and whose activities result in little impact on the neighborhood in terms of noise, odors, or other issues. They are generally 1-2 story buildings with little architectural detail.

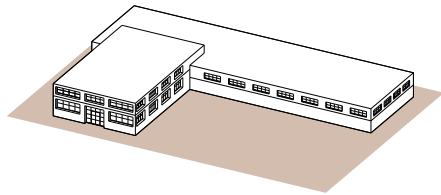


IHUB - LIGHT INDUSTRIAL
SOURCE: IHUB WAREHOUSE



MIXED-USE LIGHT INDUSTRIAL SPACE, KELOWNA, BC
SOURCE: KELOWNA NOW

Ⓔ COMMUNITY BUILDING



Community buildings house public uses open to the public, such as sports, cultural or administrative facilities. The built form and landscaping of these buildings is generally adapted to the activities that take place there.

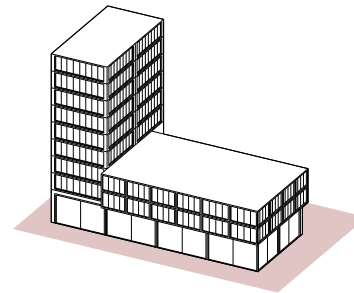


ROBERTSON RECREATION CENTER, LOS ANGELES, CA
SOURCE: KEVIN DALY ARCHITECTS



WESTERN NEW YORK WELCOME CENTER
SOURCE: STANTEC

Ⓕ TOWER BUILDING



Towers are high-rise buildings. They may have a single use, such as office or residential, or can support a mix of uses that could include retail, office, community services and residential in the same building. Typically, these buildings include a podium that is a few stories wider than the tower that sits on it. This base provides a framing of the public realm and offers a built environment that contributes to the pedestrian experience.

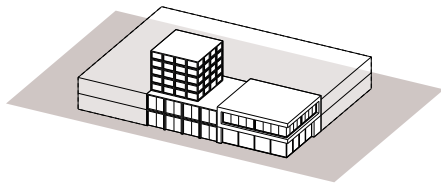


ARCHETYPE IN VANCOUVER
SOURCE: GBL Architects



6TH/SERRANO MIXED-USE IN LOS ANGELES
SOURCE: AXIS/GFA Architecture + Design

© ENTERTAINMENT VENUE



Entertainment facilities can accommodate a range of recreational, cultural, sports and leisure uses. The built form and landscaping of these buildings is generally adapted to the activities that take place there.



LUCKY STRIKE - SOMERVILLE, MA
SOURCE: Google Earth 2022



THE REC ROOM - TORONTO, ON
SOURCE: Indie 88

4. PROJECT BENEFITS



HOUSING CHOICES AND AFFORDABILITY

Creating and preserving housing choice and affordability near transit for all income brackets and ages can reduce combined housing and transportation expenses, allowing savings for homeownership, investment in education and job training, improved financial access to health care, and an ability to afford other living expenses – in turn improving the household's standard of living. Housing choices offers a diversity of housing types and price points to meet the needs of a community's varying demographic groups. The lack of affordable housing in what would be considered desirable areas is a significant and growing problem that communities across the country are grappling with every day. Many lower- and middle-income households are too often limited in their housing choices when trying to find housing in the type of clean and safe neighborhoods that will allow access to high-quality education and amenities that produce positive life outcomes for their children and themselves.



HUMAN SCALE DEVELOPMENT

Human scaled development focuses on the connection between the built environment and peoples' activities in and around the station. At some point, every transit rider is a pedestrian, and human scale development is an important part of the pedestrian experience for transit-oriented communities. Building scale, orientation, detail, texture, transparency, as well as the width and articulation of the physical elements of the streetscape should address human scale and the pace of walking. This study responds to this need by identifying building typologies, heights and setbacks that respond to human scale and create more personal, comfortable, safe, protected, connected, and intimate environments for pedestrians in and around transit stations. Designing developments with human scale in mind is also based on creating comfortable walking distances between points of arrival and destination.



ACCESS TO NATURE

Having access to nature in parks, trails and open space near home and work generates higher levels of health and well-being across people from all age groups. Access to nature is linked to living longer, having less illness, stress reduction and an improved sense of well-being, enjoyment, vitality, and energy. The American Public Health Association supports the protection and restoration of nature in places where people live, work, and play and has also been active on land-use planning's key role in shaping public health outcomes. In addition to a greater sense of well-being, access to nature can create a greater sense of satisfaction with where people live and work. Responding to this need and the benefits of access to nature, new public open spaces and connections to existing trails and parks are introduced at all of the KOP Rail Station Area Plans to increase the station areas' sense of place and generate new community gathering and activity spaces of different use, scale, and type.

VISION & GUIDING PRINCIPLES



SMALL BUSINESS GROWTH

Mixed-use communities provide small and local businesses with a broader base of daily traffic past a store or business – both workers present during the day and residents who are around in the evenings and on the weekends— which provides a consistent and reliable source of customers for new and growing businesses. Location and accessibility to a large population base are key factors in where businesses choose to locate, and creating places with clusters of workers and residents is an inviting opportunity for businesses that provide supporting services to those population bases. By cultivating a diversity of uses and people within a community, small businesses are better positioned for successful and resilient growth.



ACCESS TO JOB OPPORTUNITIES

Studies have shown a connection between expanded transit access and improved employment opportunities. Transit is seen as a critical investment in expanding access to employment for lower income households, the elderly, and the disabled, as well as those who commute daily between the city and the suburbs for work. For many low- to moderate-income households, car ownership costs make owning a vehicle out of reach, while at the same time needing access to employment in care-centric locations where no or limited transit exists. With limited access to a car created by high ownership, fuel, insurance, and maintenance costs, living close to transit and access to transit is important for accessing employment and education leading to improved employment options.



RESILIENCY

Communities can become more resilient and sustainable through transit-oriented planning. Resiliency and sustainability can be improved by creating walkable, multimodal, connected communities where people can own and drive fewer cars, take fewer vehicle trips, and therefore reduce greenhouse gas emissions. This in turn reduces the community's carbon footprint and other negative impacts on the environment. These interventions can also be a useful strategy for climate mitigation and climate resilience. The introduction of new parks and open spaces creates opportunities to filter groundwater, reduce stormwater runoff, and alleviate negative impacts on sewer systems, and public and private water systems. Additionally, the preservation of existing open space and protection of environmentally sensitive areas can help preserve sensitive habitat, and these areas in turn can become high quality open spaces adjacent to new development and redevelopment. New trees, landscaping and vegetation capture carbon dioxide, cool the environment, and reduce heat islands.



HENDERSON RD STATION AREA PLAN

4.

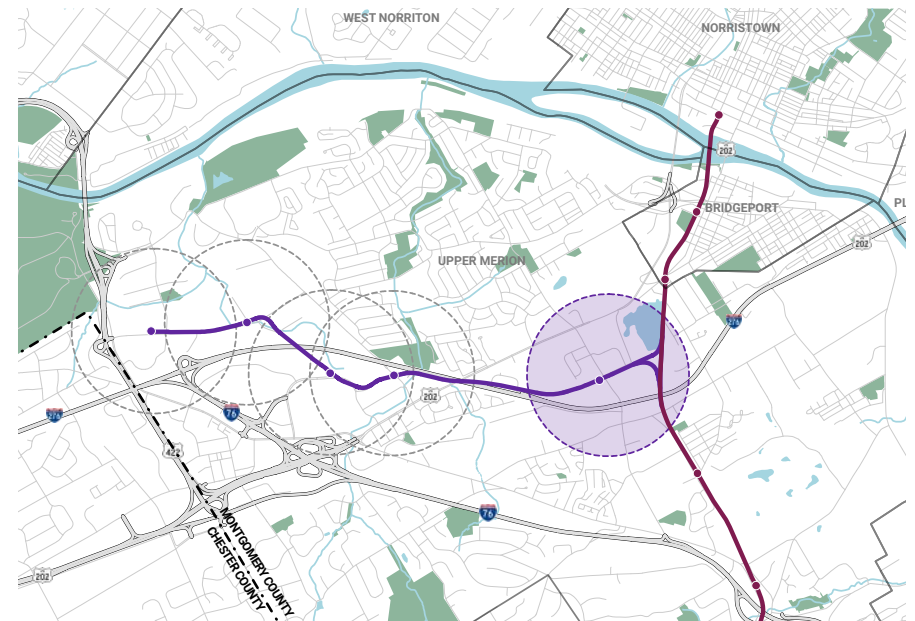
- 4.1 CONSTRAINTS & OPPORTUNITIES
- 4.2 DESIGN STRATEGY
- 4.3 OVERALL CONCEPT
- 4.4 DETAILED PLAN

1. CONSTRAINTS & OPPORTUNITIES

The Henderson Rd station area is characterized by a series of uses ranging from residential to retail and small-scale industrial sites. Due to the boundaries of existing major transportation and utility infrastructure bifurcating the study area, sites that are likely to redevelop center on the retail development immediately adjacent to the station area. Further opportunities exist south of the utility easements and north at the intersection of Henderson Rd and Dekalb Pike.

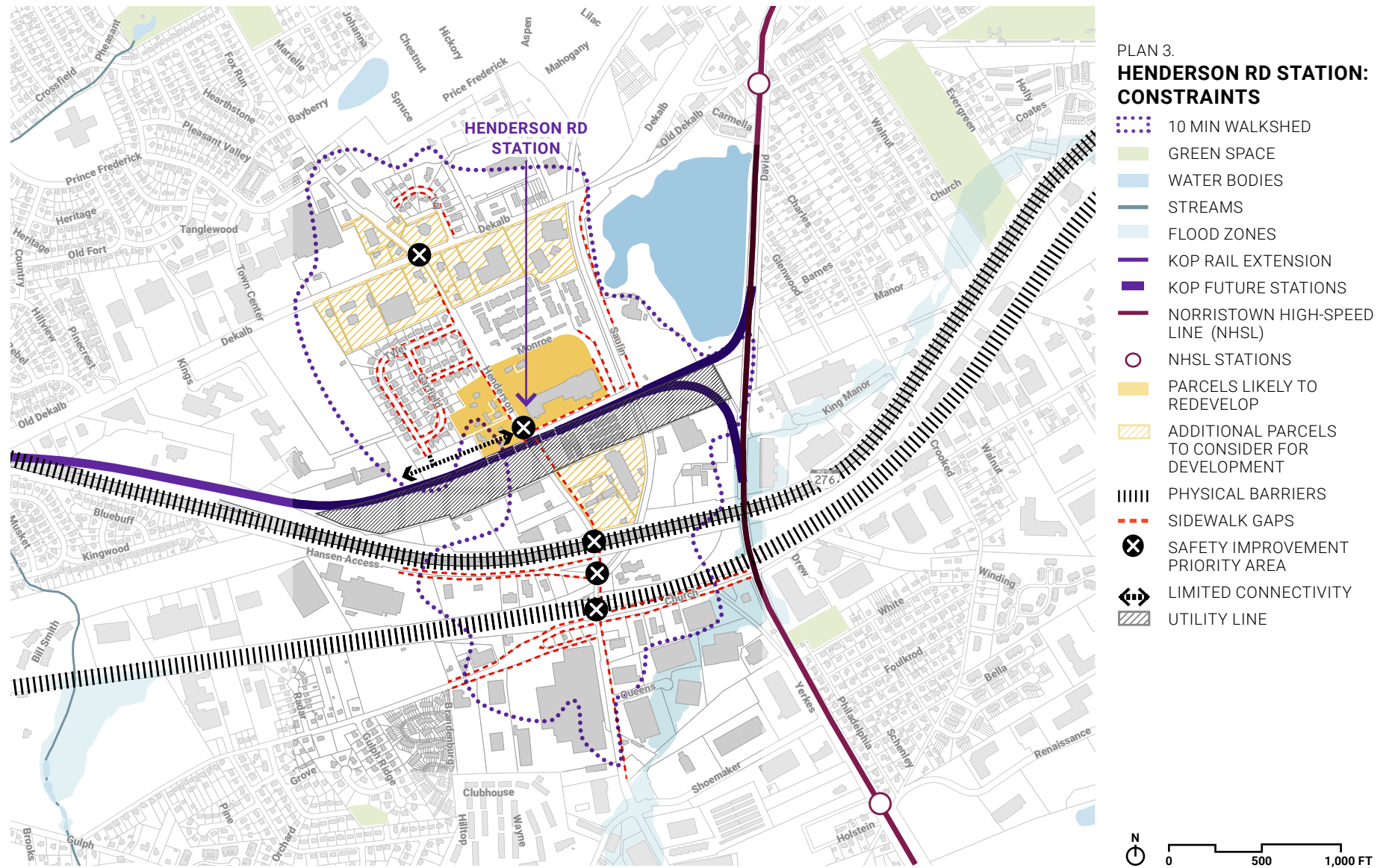
For the Henderson Road Station, the total area likely to redevelop over the next 20 to 30 years is **57 acres**.

PARCEL TYPE	AREA (ACRES)	ZONING	EXISTING LAND USE
PARCELS LIKELY TO REDEVELOP IN THE MID-TERM (10-20 YEARS)	18	SC SHOPPING CENTER CG COMMERCIAL GENERAL	COMMERCIAL
PARCELS LIKELY TO REDEVELOP IN THE LONG-TERM (20+ YEARS)	39	SC SHOPPING CENTER CG COMMERCIAL GENERAL CO COMMERCIAL OFFICE HI HEAVY INDUSTRIAL	RESIDENTIAL INDUSTRIAL WOODED OR UNDEVELOPED



PLAN 2.
HENDERSON RD STATION LOCATION

HENDERSON RD STATION



CONSTRAINTS



MOBILITY

- Sidewalk gaps, traffic volumes, and vehicle speeds negatively impact the walking experience.
- The disconnected street network shrinks the station area's 10-minute walkshed.
- The PA Turnpike, the Morrisville Line and the PECO electric utility line divide the station area and restrict the street grid creating limited routes to choose from.
- Many intersections are challenging for pedestrians due to missing crosswalks or long crossing distances.



LAND USE

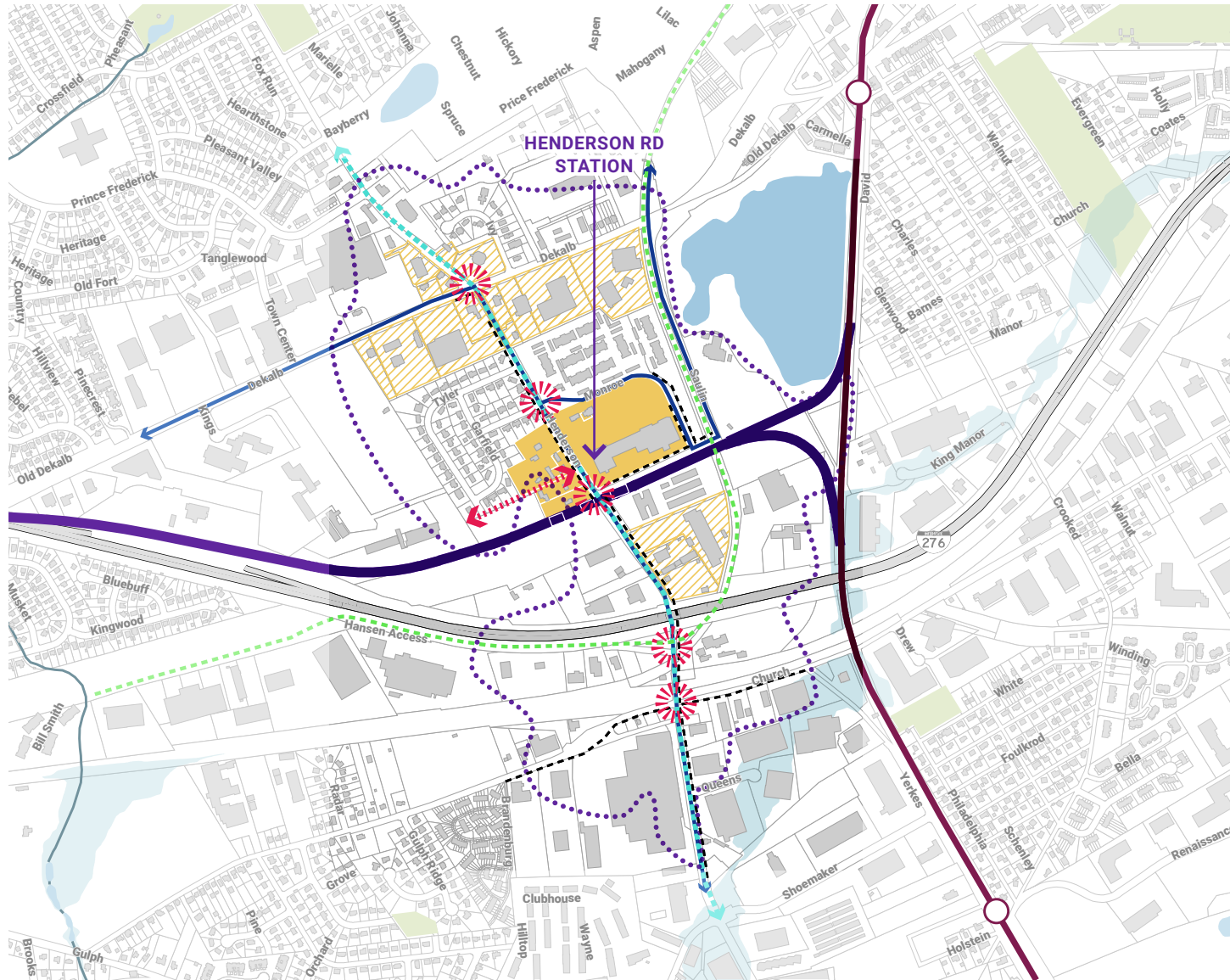
- Parking requirements could lead to even more surface parking areas in a growing transit-oriented community.
- Single-use buildings are the dominant development pattern in the station area.



BUILT FORM

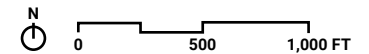
- Most building typologies within the station area do not contribute to walkability.
- Existing residential neighborhoods tend to be located away from bike and pedestrian facilities.
- Existing building setbacks do not support a transit-friendly environment.
- Adjacent to the station, the Henderson Square Shopping Center is oriented toward a surface parking on the opposite side and will not face the station.
- Large surface parking areas front on the station area's major bike and pedestrian facilities.

HENDERSON RD STATION



PLAN 4. HENDERSON RD STATION: OPPORTUNITIES

- 10 MIN WALKSHED
- GREEN SPACE
- WATER BODIES
- STREAMS
- FLOOD ZONES
- KOP RAIL EXTENSION
- KOP FUTURE STATIONS
- NORRISTOWN HIGH-SPEED LINE (NHSL)
- NHSL STATIONS
- PARCELS LIKELY TO REDEVELOP
- ADDITIONAL PARCELS TO CONSIDER FOR DEVELOPMENT
- CLOSE SIDEWALK GAP
- CREATE COMPLETE STREETS
- ENHANCE INTERSECTIONS
- NEW CONNECTION
- CHESTER VALLEY TRAIL: UNDER CONSTRUCTION
- EXISTING TRANSIT LINES



OPPORTUNITIES



MOBILITY

- ⊕ Henderson Rd, Dekalb Pike, and Church Rd are bike and pedestrian facilities that provide access to the proposed station.
- ⊕ The proposed Chester Valley multi-use trail extension will enhance the bike and pedestrian infrastructure.
- ⊕ The Dekalb Pike infrastructure investments have improved walkability.



LAND USE

- ⊕ A mix of uses already exists in the station area.
- ⊕ There are a number of underutilized and vacant parcels within walking distance of the proposed station.
- ⊕ Retail mixed-use buildings in parcels likely to redevelop could enhance the pedestrian experience.



BUILT FORM

- ⊕ Several multi-family buildings are within walking distance of the station, including the 251 Dekalb and the Henderson Square Luxury Apartments.
- ⊕ Multi-family and 'missing middle' infill within predominantly single-family neighborhoods could help bring densities to a transit-supportive level.

2. STATION AREA PLAN APPROACH



MOBILITY

The mobility network is organized around Henderson Rd as a central multimodal spine, with key connections to new development and the Chester Valley Trail. The proposed mobility improvements will make it safer for people walking and biking to access the proposed KOP transit station and new development. A handful of new streets are proposed to create a more logical, denser street grid. The street grid additions include new links from Monroe Blvd to E DeKalb Pike, from Henderson Rd at the transit station to I-276 westbound, and circulation for new development sites.

Henderson Rd is the front door to the proposed KOP transit station; it is a critical link for all modes because it is the only roadway that crosses the proposed KOP rail line and I-276. The current configuration prioritizes throughput, with multiple lanes for higher speed vehicle travel. Improvements focus on accommodating multimodal users. These improvements include both linear facilities along Henderson Rd (e.g. sidewalks, shared-use path) as well as new and enhanced crossings.

The Chester Valley Trail extension represents a significant regional asset. This 3.8-mile trail segment is under construction as of April 2022. When complete, it will connect to the existing 14.5-mile portion of the Chester Valley trail, running from Exton to King of Prussia and to the Schuylkill River Trail in Norristown. This 10-12' wide paved trail represents a high-quality last-mile connection for transit users, significantly expanding the transit catchment area for bike-to-transit trips.

The Chester Valley Trail extension will include a bridge over Henderson Rd and at-grade connections to Saulin Blvd, and E DeKalb Pike. Therefore, Saulin Blvd and E DeKalb Pike are high priority streets for walking and biking enhancements because people need a comfortable facility between the trail and the transit station. Trail users will be able to exit the trail at the Saulin Blvd at-grade crossing and proceed along Saulin Blvd for only 0.2 mile before they reach the proposed KOP station location. This short connection is only four minutes

walking and less than one minute by bike, but the infrastructure needs to support these users so they can do so safely and comfortably. The proposed cross-section for Saulin Blvd includes a shared use path on the south side of the street, and sidewalk on the north side of the street.

E DeKalb Pike is also a priority for walking and biking improvements as it offers a high concentration of existing destinations, will have an at-grade trail crossing, and is a target area for transit-oriented development. Vehicle throughput will continue to be a priority, but improvements should be made to accommodate a more multimodal environment. Sidewalk along new development should be widened and buffered from traffic with landscape and/or hardscape buffer, with specific design treatments in accordance with the land use activity type.

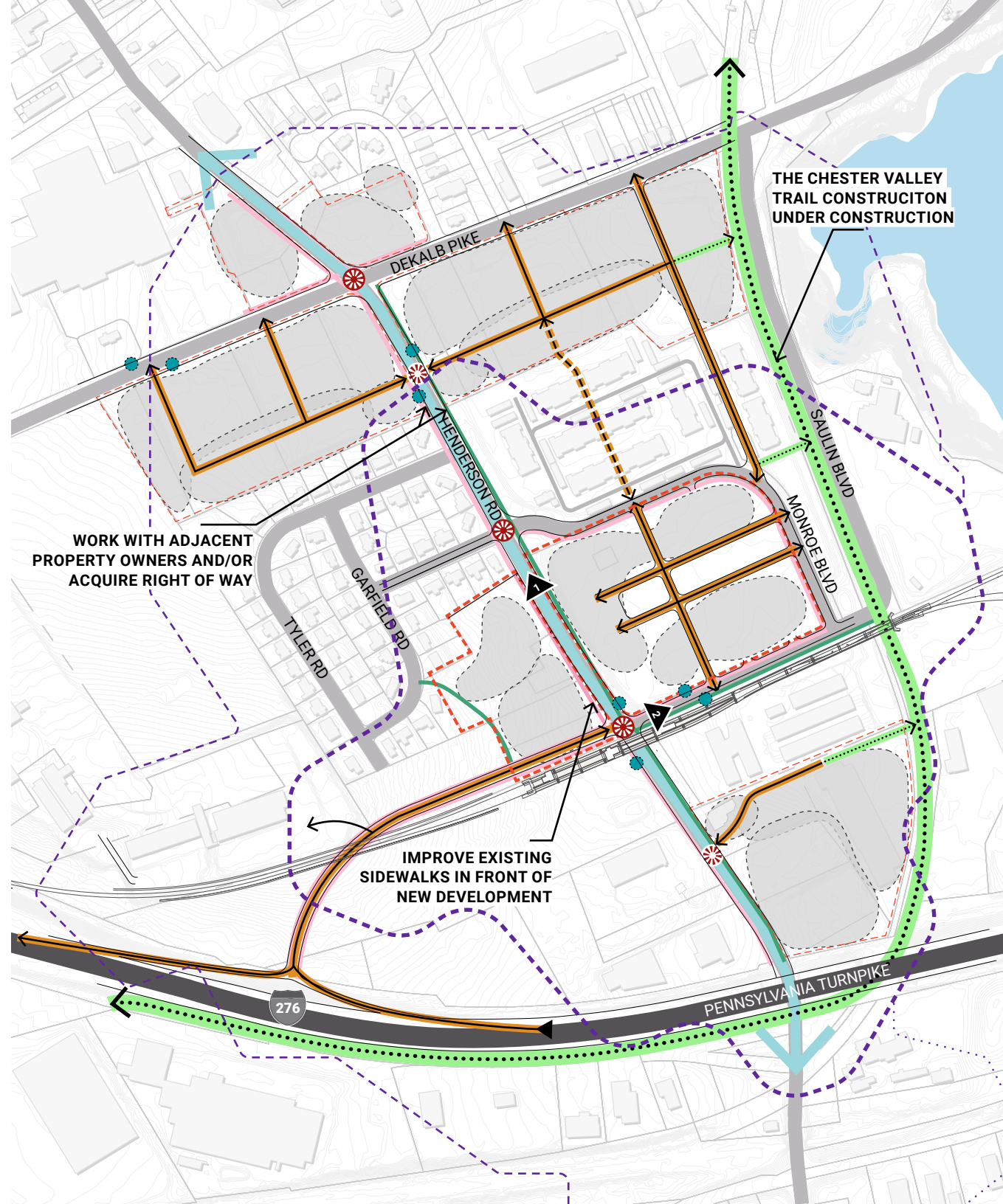
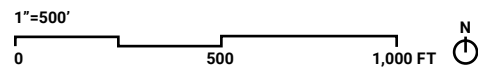
PLAN 5.
HENDERSON RD STATION
 MOBILITY STRATEGY

LEGEND

- PARCELS LIKELY TO REDEVELOP
- 5-10 MIN WALKSHEDS
- PENNSYLVANIA TURNPIKE
- EXISTING STREETS
- HENDERSON RD - PRIORITY ACCESS CORRIDOR
- PROPOSED STREETS
- PROPOSED PRIVATE LANES
- PARKING STRUCTURES
- SURFACE PARKING
- CHESTER VALLEY TRAIL EXTENSION
- SIDEWALK (NEW AND/OR ENHANCED)
- SHARED USE PATH
- BIKE LANE
- RECOMMENDED BUS STOPS & CONNECTIONS
- ⊗ INTERSECTION: TRAFFIC LIGHT
- ⊗ INTERSECTION: STOP SIGN

CROSS-SECTIONS

- ▲ **1** S HENDERSON RD - CROSS SECTION
- ▲ **2** SAULIN BLVD - CROSS SECTION



HENDERSON RD STATION

1

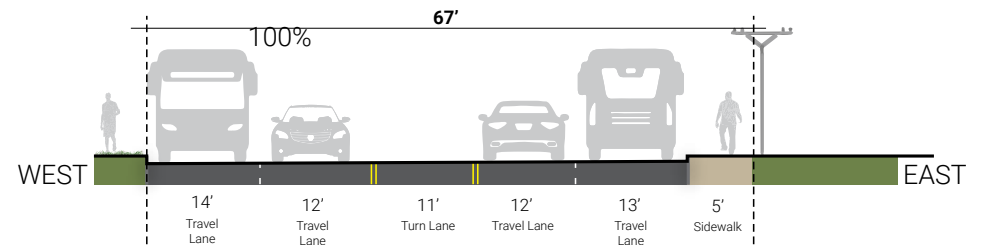
HENDERSON RD. THE MAIN BOULEVARD

Henderson Rd is the priority access corridor for the area. The new cross-section proposes a shared-use path on the east side of the street and a sidewalk on the west side. The shared-use path on the east side of Henderson Rd should be 12-feet wide. There should be a 3-foot buffer between the building face and the walking and biking through-zone. Landscape buffers are proposed between the walking and biking through-zone and the roadway. The Township and SEPTA should work with private developers to implement these improvements through redevelopment. New development will bring building façades closer to the street edge, creating a more urban context where access is oriented toward the sidewalk rather than vehicle parking.

In the more constrained area on the west side of the street, a 7-foot sidewalk should be added. There are some constrained segments where sidewalk width may need to be reduced to 5-feet (minimum).

There is no proposed change to the travel lanes.

EXISTING CONDITIONS



PROPOSED CONDITIONS

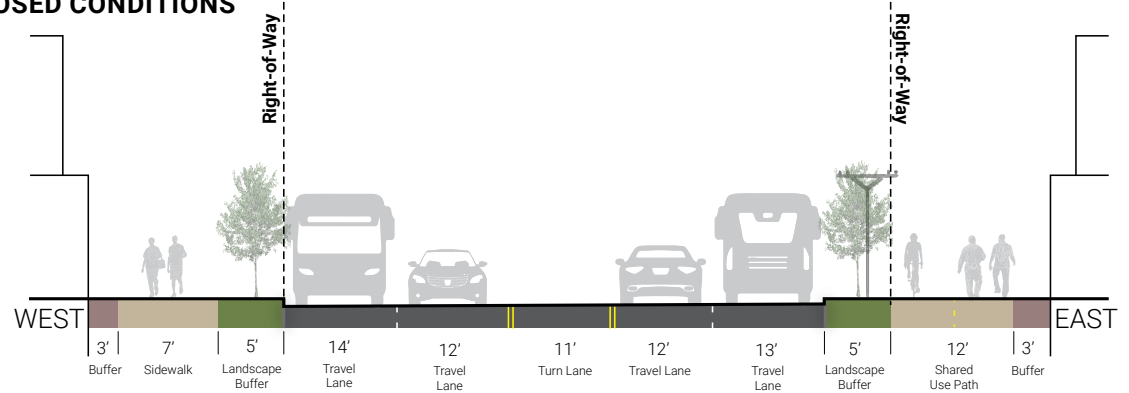


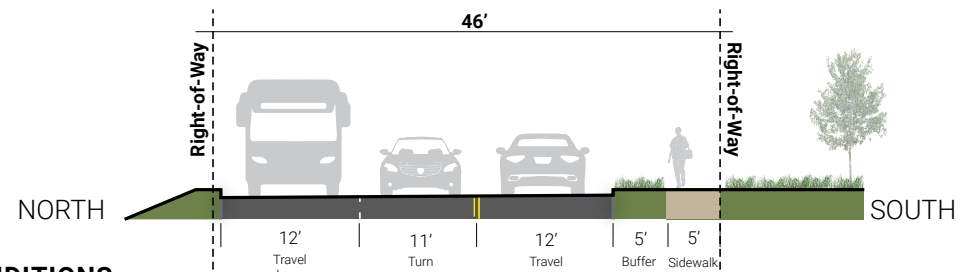
FIGURE 1
HENDERSON RD CROSS SECTIONS

2

SAULIN BLVD IMPROVEMENTS

The proposed Saulin Blvd improvements will support multimodal connectivity to the transit station, Chester Valley Trail, and adjacent redevelopment sites. Proposed improvements include adding sidewalk where it does not exist today (in front of future, proposed development) and widening the existing sidewalk to 12-feet to convert it to a shared-use path. New sidewalk on the north side will be outside of the public right-of-way and construction should be completed as part of private development. Landscape buffers (5-feet wide) are proposed on both sides of the street. Shared-use path construction will require removal of one existing travel lane. Left-turn pockets should be included in intersections with higher turning volumes.

EXISTING CONDITIONS



PROPOSED CONDITIONS

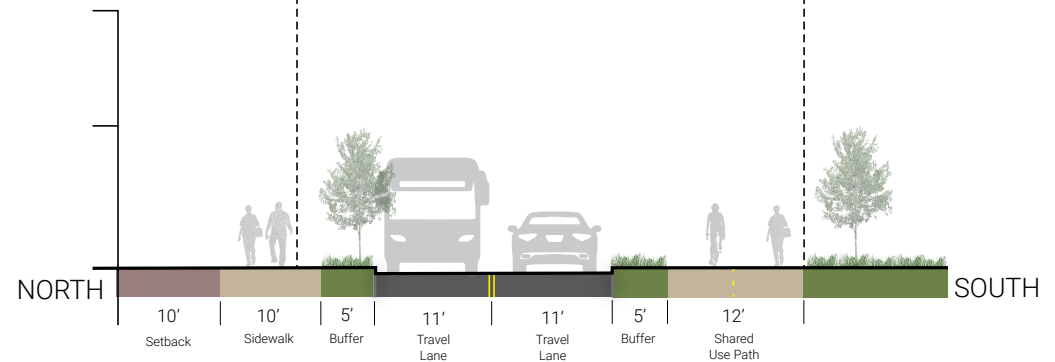


FIGURE 2
SAULIN BLVD CROSS SECTIONS

HENDERSON RD STATION



LAND USE

A balanced land use approach is proposed for the Henderson Road station area. In some zones no redevelopment is anticipated; in other zones targeted and managed growth areas are identified to increase mixed-use development near the station. These areas of change include parcels immediately adjacent to the station, and areas around the intersection of Henderson Rd and Dekalb Pike.

The concept plan illustrates existing land uses which contribute to a transit-oriented community within the station walkshed, including multi-family residential (Henderson Square Apartments) and sports and recreation businesses (Competitive Edge Sports). Responding to the community's desire to retain existing detached single-family neighborhoods, land use for the existing residential neighborhood west of Henderson Rd and north of the station is not changed.

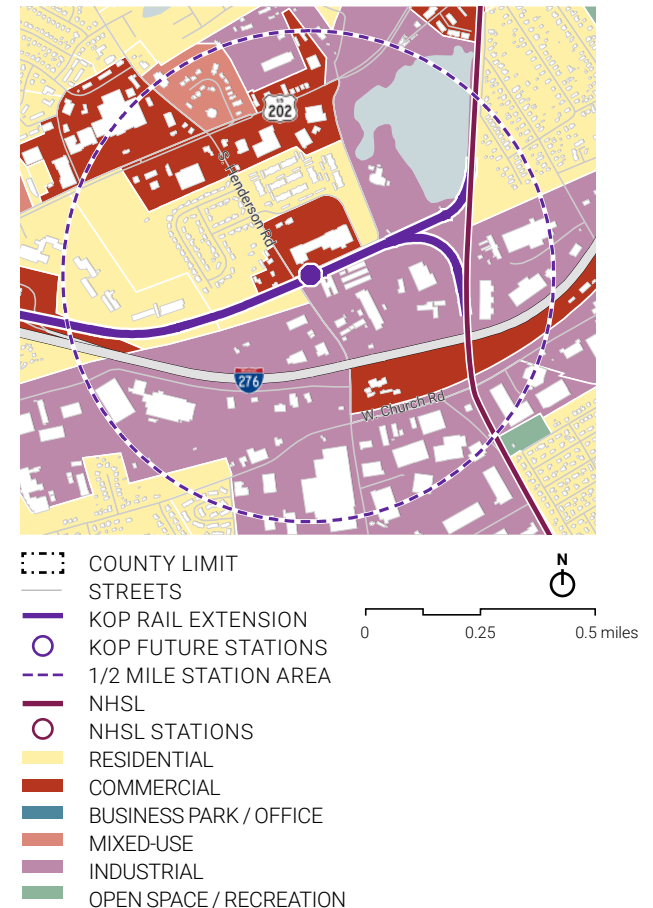
The envisioned mix of uses proposed within the station area include residential, residential mixed-use, office mixed-use, commercial, light industrial/maker spaces, community facilities, parking, and open space.

New public open spaces within potential redevelopment areas aim to increase the station area's sense of place. These spaces include the Henderson Station Market near the station, the Station Ascent – a new type of gathering/ open space for the community (as described in the following page), and a true Henderson Square in a reimagined redevelopment of the Henderson Square shopping center.

Current zoning does not provide for a mix of uses at this time to guide development to other parts of the community. However, as these development patterns and focus areas change over time, the KOP Rail project is designed in a way to support it.

PLAN 6.

HENDERSON RD STATION EXISTING ZONING



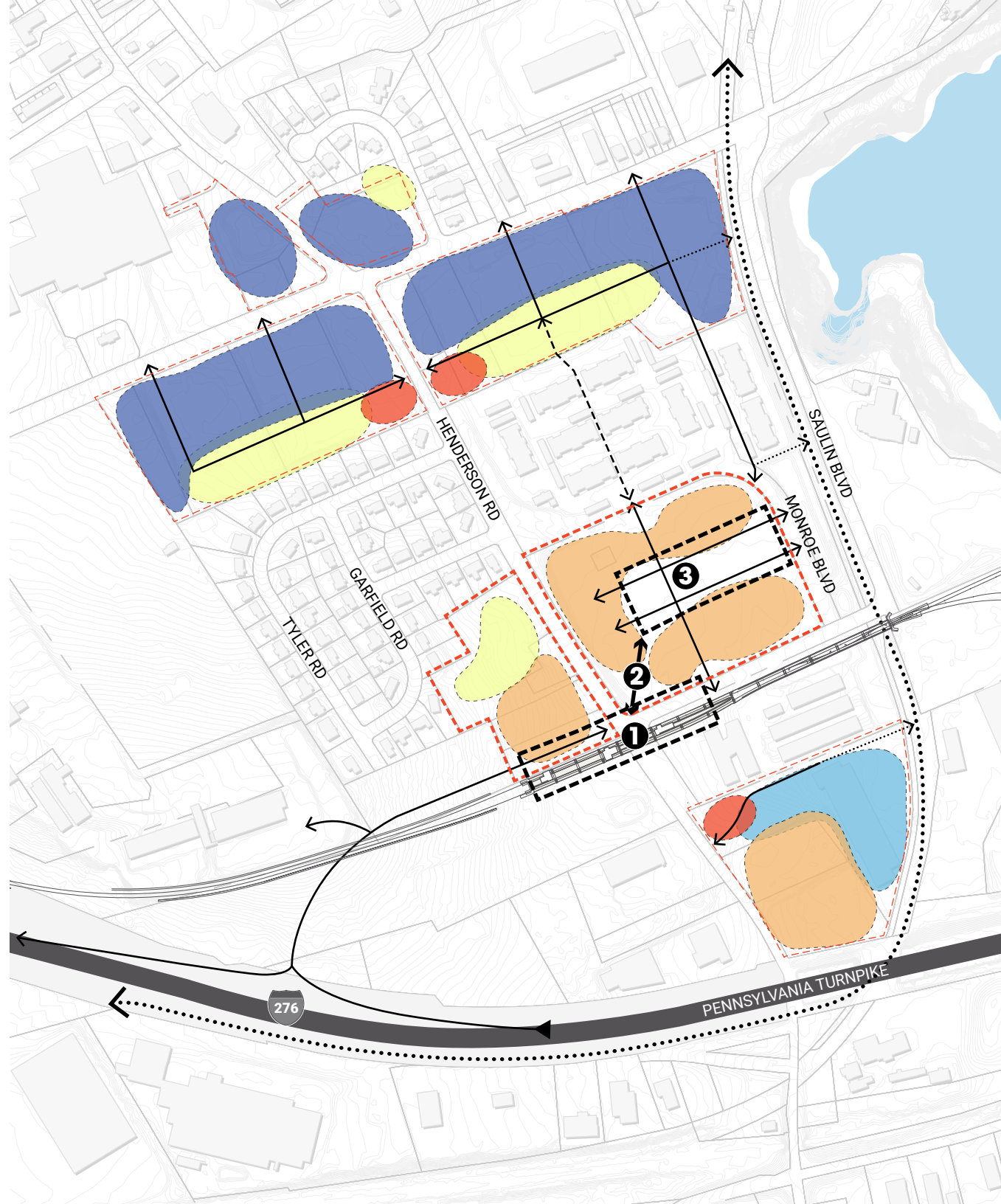
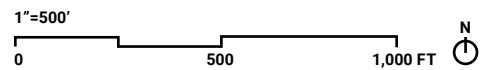
PLAN 7.
HENDERSON RD STATION
LAND USE STRATEGY

LEGEND

- PARCELS LIKELY TO REDEVELOP
- RESIDENTIAL
- RESIDENTIAL MIXED-USE
- OFFICE MIXED-USE
- COMMERCIAL
- LIGHT INDUSTRIAL / MAKER SPACE
- COMMUNITY FACILITY
- PARKING
- OPEN SPACE

PLACEMAKING OPPORTUNITIES

- 1** HENDERSON STATION PLAZA
- 2** STATION ASCENT
- 3** HENDERSON SQUARE



PLACE MAKING OPPORTUNITIES

1 HENDERSON STATION PLAZA

Immediately adjacent to the station, a plaza is imagined that is a combination of hardscape and softscape and that contains urban furniture for transit patrons. This space is aligned with store fronts, coffee shops and restaurants.



ONE CITY PLAZA, GREENVILLE, SC
SOURCE: CIVITAS

2 STATION ASCENT

Station Ascent introduces a new type of gathering/open space and would become a main pedestrian connection between the station and the reimagined Henderson Square mixed-use development. Station Ascent rises 16 feet creating dramatic views between the station and the potential redevelopment area. Places of respite, seating, trees, landscaping, and creative details are imagined to create this new community space.



WALLER PARK, SAN FRANCISCO, CA
SOURCE: MSLA

3 HENDERSON SQUARE PLAZA

The concept plan illustrates creation of a true Henderson Square in the center of a redeveloped Henderson Square shopping center. This new open space could be used for various passive and active recreational purposes. Open spaces included within mixed-use developments bring significant environmental and social benefits toward creating healthy and livable communities.



ASSEMBLY ROW, BOSTON, MA
SOURCE: COPLEY WOLFF DESIGN GROUP



BUILT FORM

Urban form and building massing at Henderson Rd Station includes multi-story buildings fronting existing and new streets, as well as new open spaces. Along these frontages, building massing includes active ground floor uses with multiple stories of office and/or residential wrapping or lining surface and structured parking. In potential redevelopment areas adjacent to single family homes, 3- to 4-story townhouses or stacked flats create a buffer between new development and single-family residential zones. Blocks of buildings are broken up to allow for access, daylight, and visibility both to and from the station. Setbacks are designed to provide a relationship between streets and buildings that creates a comfortable, safe, walkable mixed-use zone around the station.

Building articulation, façade design, transparency, and entry features are all intended to respond to human scale and facilitate a pedestrian-oriented environment. New mixed-use development would introduce enhanced architectural style and character as well. Building massing and density are illustrated on figure 7 and are designed to give the station area a walkable character and unique sense of place.

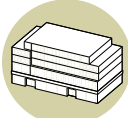


SANTANA ROW, SAN JOSE, CA
SOURCE: CBRE

PLAN 8.
HENDERSON RD STATION
BUILT FORM STRATEGY

LEGEND

--- PARCELS LIKELY TO REDEVELOP



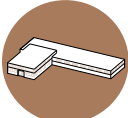
A: MID-RISE BUILDINGS



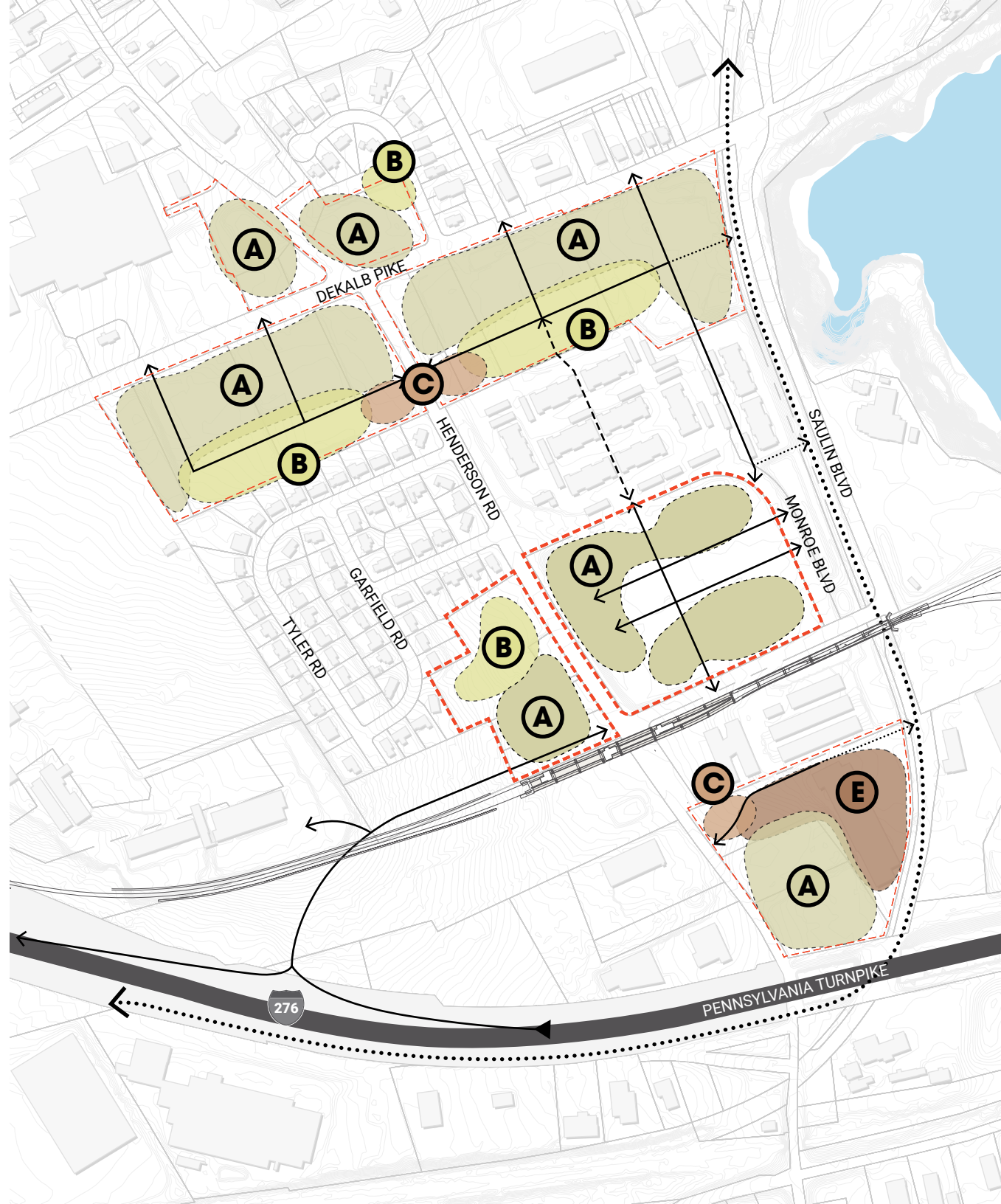
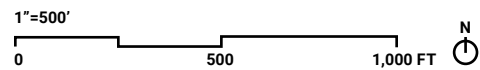
B: TOWNHOMES - STACKED FLATS



C: MAIN STREET COMMERCIAL



E: INSTITUTIONAL / COMMUNITY



3. OVERALL CONCEPT

The concept for the Henderson Rd Station aims to transform the area into a pedestrian and transit-friendly environment, that offers a mix of residential and enhanced retail opportunities. Retail such as groceries, coffee shops and restaurants will occupy the ground floor of mixed-use buildings. Priority actions include repositioning existing retail shops, such as the Giant grocery shop in Henderson Square, in a multiphase process that converts the Henderson Rd station area from a car-oriented to a pedestrian and transit-friendly place.

Street improvements will go hand in hand with land use and built-from changes in the area. These enhancements will focus on closing sidewalk gaps, introducing new shared-use paths, and creating high visibility crosswalks. The idea is to prioritize the pedestrian experience within the station area, encourage other active transportation modes to and from the station, and activate the station area through mixed-use buildings and placemaking opportunities. Collaboration with local landowners, approving authorities, and community groups will be essential to accomplish the proposed station area plans and to make these outcomes possible.

POTENTIAL BUILD-OUT

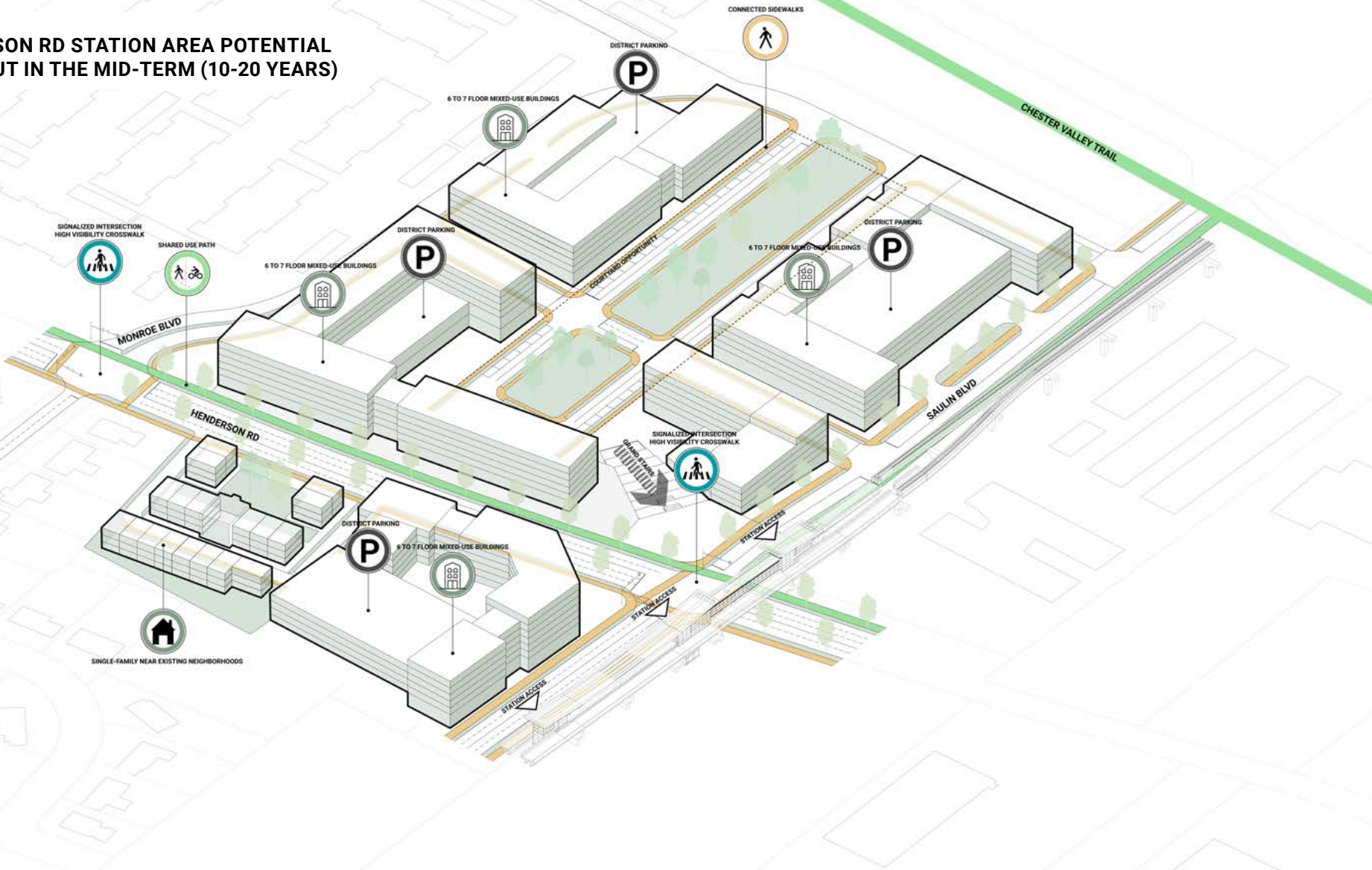
NEAR-TERM (0-10 YEARS)	No near-term development
MID-TERM (10-20 YEARS)	Residential: 600-800 units Retail: 150,000-240,000 sq ft
LONG-TERM (20+ YEARS)	Residential: 800-1,000 units Retail: 150,000-200,000 sq ft Office: 100,000-150,000 sq ft Community: 100,000-150,000 sq ft

KEY PRIORITY IMPROVEMENTS IN THE NEAR-TERM

- 1 HENDERSON RD IMPROVEMENTS**
 - › Shared use path
 - › Sidewalk
 - › Tree planting
 - › Street lighting
 - › Urban furniture
- 2 SAULIN BLVD IMPROVEMENTS**
 - › Shared use path
 - › Sidewalk
 - › Tree planting
 - › Street lighting
 - › Urban furniture
- 3 INTERSECTION IMPROVEMENTS**
 - › Henderson Rd / Saulin Blvd intersection crosswalks
 - › Henderson Rd / Monroe Blvd intersection crosswalks

➔ **\$2.7M to \$3.3M**

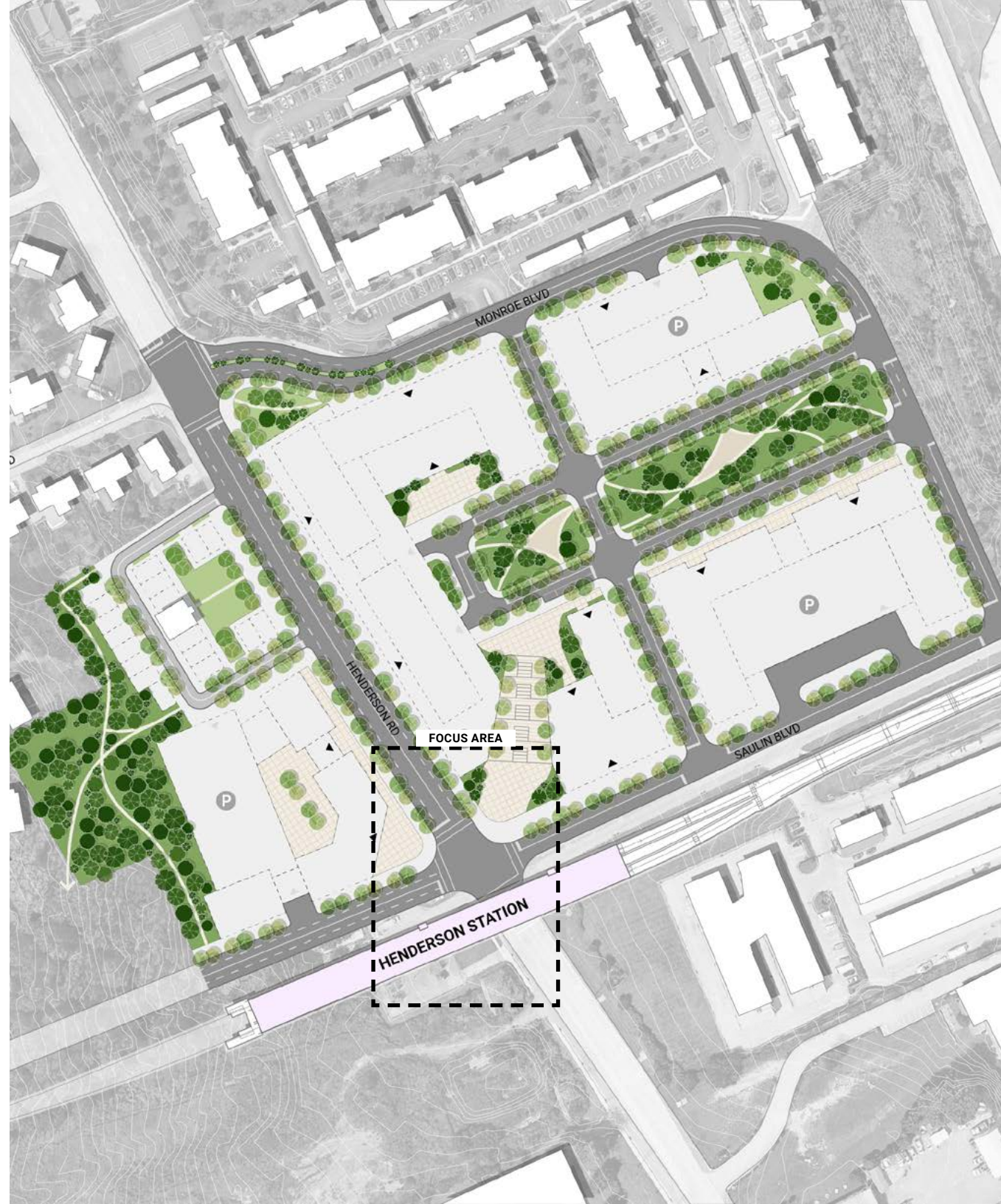
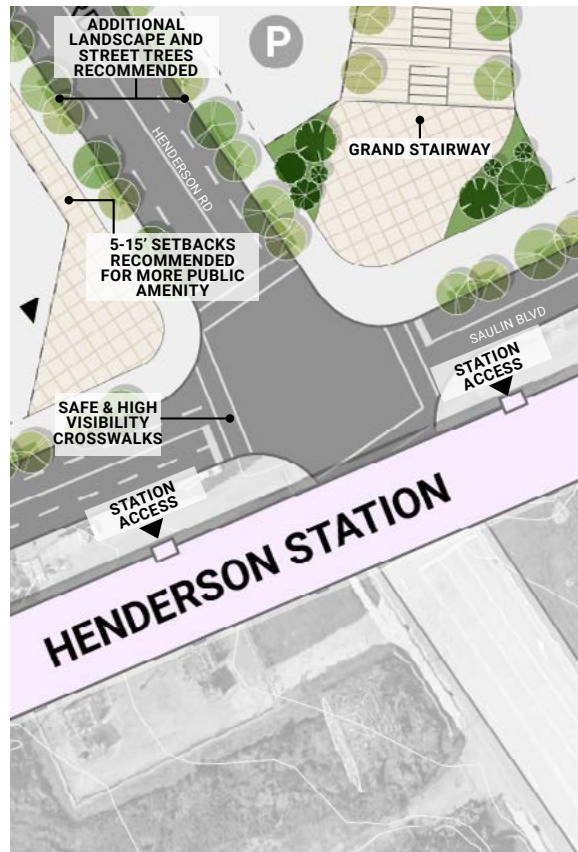
FIGURE 3
**HENDERSON RD STATION AREA POTENTIAL
 BUILD-OUT IN THE MID-TERM (10-20 YEARS)**



HENDERSON RD STATION

4. DETAILED PLAN

PLAN 9.
HENDERSON RD STATION
SITE PLAN





KOP MALL STATION AREA PLANS

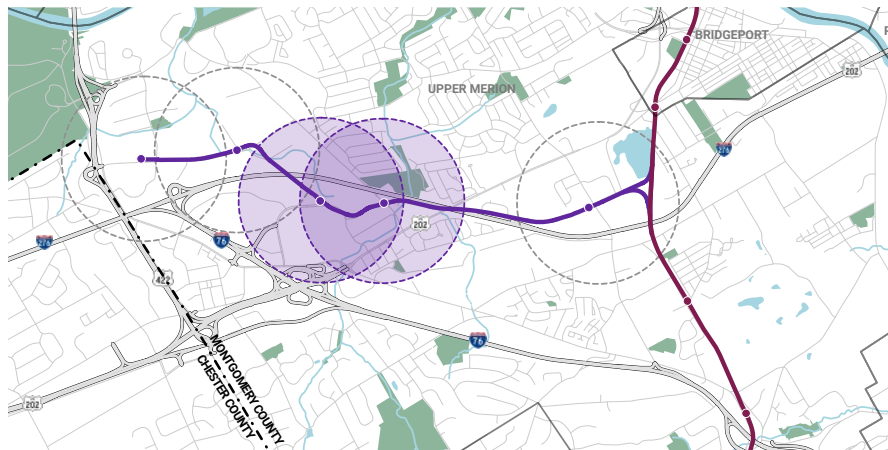
5.

- 5.1 CONSTRAINTS & OPPORTUNITIES
- 5.2 ALLENDALE RD STATION CONCEPT
- 5.3 MALL BLVD STATION CONCEPT

1. CONSTRAINTS & OPPORTUNITIES

The stations closest to the KOP Mall are ideal opportunities for new mixed-use development that would be complementary to KOP Mall operations. Due to existing auto-centric patterns of development, however, a new walkable framework will be required to support a mix of uses. Potential redevelopment areas will require consideration of multimodal access to/from the station. Additional considerations include topographical challenges, ownership interest in change, and alternate uses that could be incorporated into the mall's diversity of offerings.

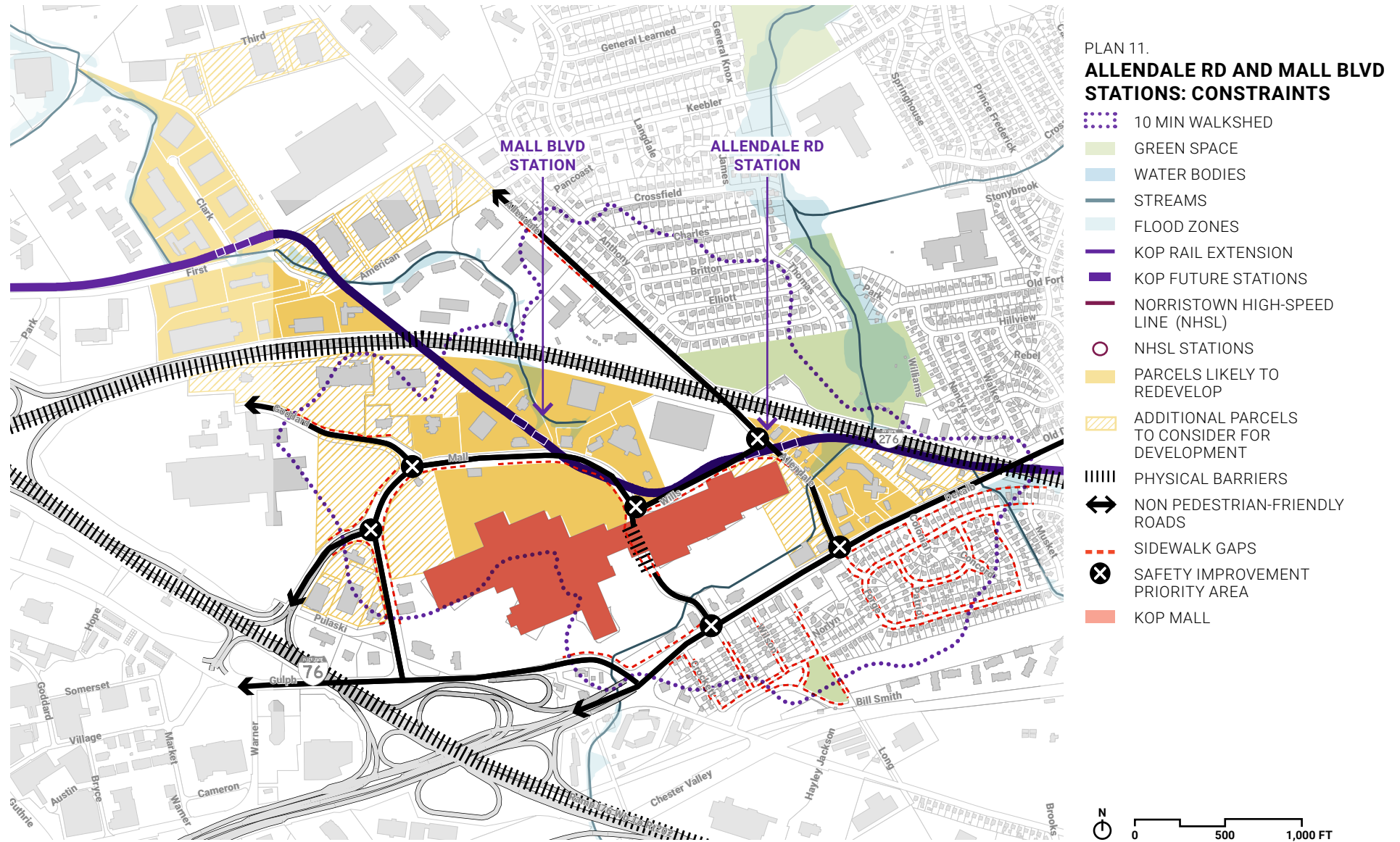
For the KOP Mall Stations, the total area likely to redevelop over the next 20 to 30 years is **130 acres**.



PLAN 10.
ALLENDALE RD AND MALL BLVD STATIONS

STATION AREA	PARCEL TYPE	AREA (ACRES)	ZONING	EXISTING LAND USE
ALLENDALE RD	PARCELS LIKELY TO REDEVELOP IN THE MID-TERM (10-20 YEARS)	14	CG COMMERCIAL GENERAL	
	PARCELS LIKELY TO REDEVELOP IN THE LONG-TERM (20+ YEARS)	14	CG COMMERCIAL GENERAL	COMMERCIAL
			SC SHOPPING CENTER	RESIDENTIAL
MALL BLVD	PARCELS LIKELY TO REDEVELOP IN THE MID-TERM (10-20 YEARS)	44	CG COMMERCIAL GENERAL	INSTITUTIONAL
			SC SHOPPING CENTER	WOODED OR UNDEVELOPED
	PARCELS LIKELY TO REDEVELOP IN THE LONG-TERM (20+ YEARS)	58	CG GENERAL COMMERCIAL LI LIGHT INDUSTRIAL	

KOP MALL STATIONS



CONSTRAINTS



MOBILITY

- Highway and interchanges are major physical barriers.
- High-volume streets are uncomfortable for pedestrians and cyclists.
- Many intersection are challenging for cyclists and pedestrians due to long crossing distances, wait times, and crossing restrictions.
- Lack of bicycle facilities, narrow shoulders, high vehicular speeds, and high traffic volumes create an uncomfortable cycling environment.



LAND USE

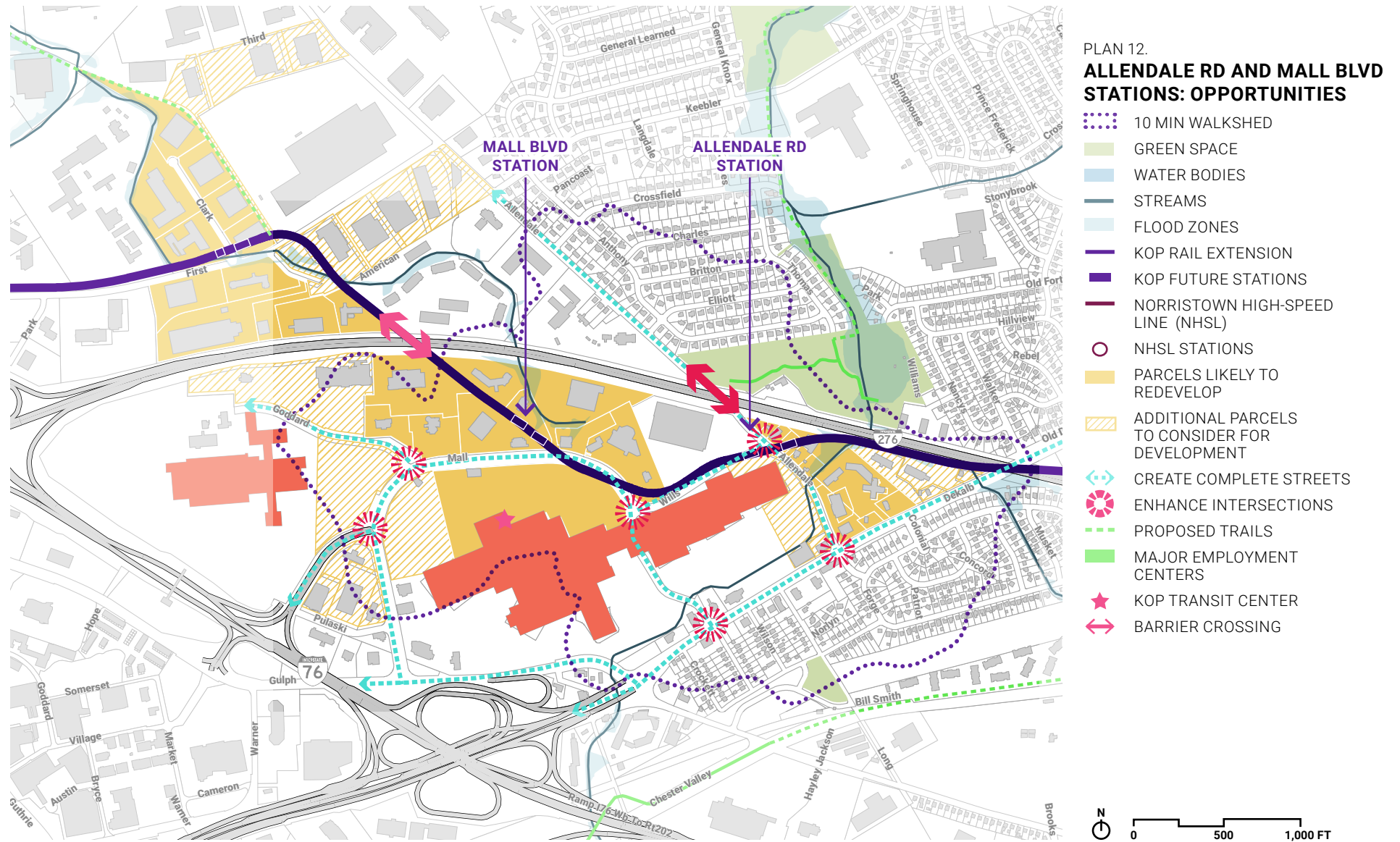
- Existing land uses are largely not transit-supportive. Land immediately adjacent to stations is occupied by commercial uses, while land slightly further away is dominated by low-density residential uses.
- Residential land uses are located north of the PA Turnpike and south of the W Dekalb Pike, two major arterials with few crossing possibilities.



BUILT FORM

- Large footprint of KOP Mall and the nature of the street grid makes walking distances long.
- Large parking lots prevent comfortable walking to and from stations, especially those around the KOP Mall.

KOP MALL STATIONS



OPPORTUNITIES



MOBILITY

- ⊕ Mall Blvd, Wills Blvd, Allendale Rd, Goddard Blvd, and Dekalb Pike are bike/pedestrian corridors, on which improvements will lead to better connectivity to stations, key employment and retail centers.
- ⊕ The KOP Transit center, serving 6 SEPTA buses, is located in the KOP Mall.
- ⊕ Crow Creek and Chester Valley Trail extensions offer opportunities to connect stations to adjacent residential neighborhoods.



LAND USE

- ⊕ These two stations serve the KOP Mall area, one of the largest malls in the US and KOP's largest employer.
- ⊕ Lockheed Martin, a KOP major employer, is within a walking distance.



BUILT FORM

- ⊕ Several multi-family developments are within walking distance of stations, including Courtside Square, KOP Arms Apartments, Abrams Run Apartments, and Valley Forge Suites.

2. ALLENDALE RD STATION

STATION AREA PLAN APPROACH



MOBILITY

The main access to the station will occur at the intersection of Wills Blvd and Allendale Rd. Allendale Rd is the primary access corridor, connecting residents on the north side of I-276 and the south of W DeKalb Pike, bus stops along W DeKalb Pike, and redeveloped sites along Allendale Rd itself. Wills Blvd acts as the main connection for retail employees and visitors. Both roads will be a high priority for walking and biking improvements to help people connect to the station.

A shared-use path is proposed on the east side of Allendale Rd, along the proposed redevelopment sites. This will require a wider bridge to be constructed over the Crow Creek crossing (parallel to Allendale Rd). Sidewalk is proposed on the west side of the street. Because of grade challenges, the sidewalk is

proposed to run between the existing parking and landscape buffer. Improvements on both sides will need to be coordinated with property owners. Traffic signals should have high-visibility crosswalk markings, pedestrian signal heads, and accessible ramps at all legs of the intersection. Consider leading pedestrian indicators (LPIs) or exclusive pedestrian phases where high volumes of turning vehicles are expected.

Along Wills Blvd, sidewalk is proposed on both sides of the street. The existing concrete median can be reconstructed with landscaping to beautify the corridor and provide an opportunity for green infrastructure. It is important to provide continuous access on both sides of Wills Blvd because there are limited opportunities for pedestrian crossings.

PLAN 13.

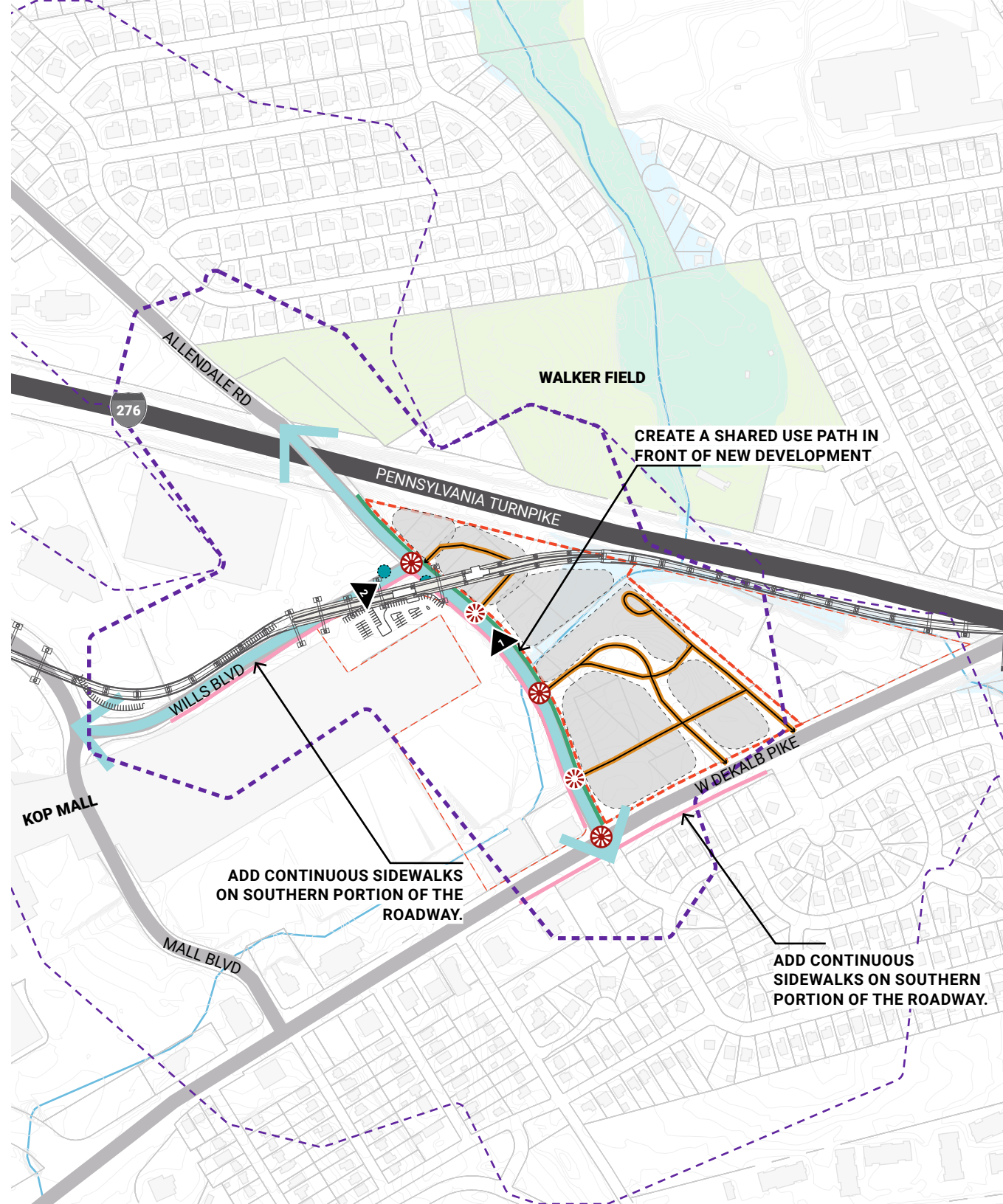
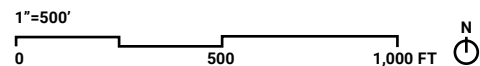
ALLEDALE RD STATION MOBILITY STRATEGY

LEGEND

- PARCELS LIKELY TO REDEVELOP
- 5-10 MIN WALKSHEDS
- PENNSYLVANIA TURNPIKE
- EXISTING STREETS
- ALLEDALE & WILLS- PRIORITY ACCESS CORRIDORS
- PROPOSED STREETS
- PROPOSED PRIVATE LANES
- PARKING STRUCTURES
- SURFACE PARKING
- SIDEWALK (NEW AND/OR ENHANCED)
- SHARED USE PATH
- BIKE LANE
- ⊗ INTERSECTION: TRAFFIC LIGHT
- ⊗ INTERSECTION: STOP SIGN

CROSS-SECTIONS

- ▲ 1 ALLEDALE RD - CROSS SECTION
- ▲ 2 WILLS BLVD - CROSS SECTION



ALLENDALE RD STATION

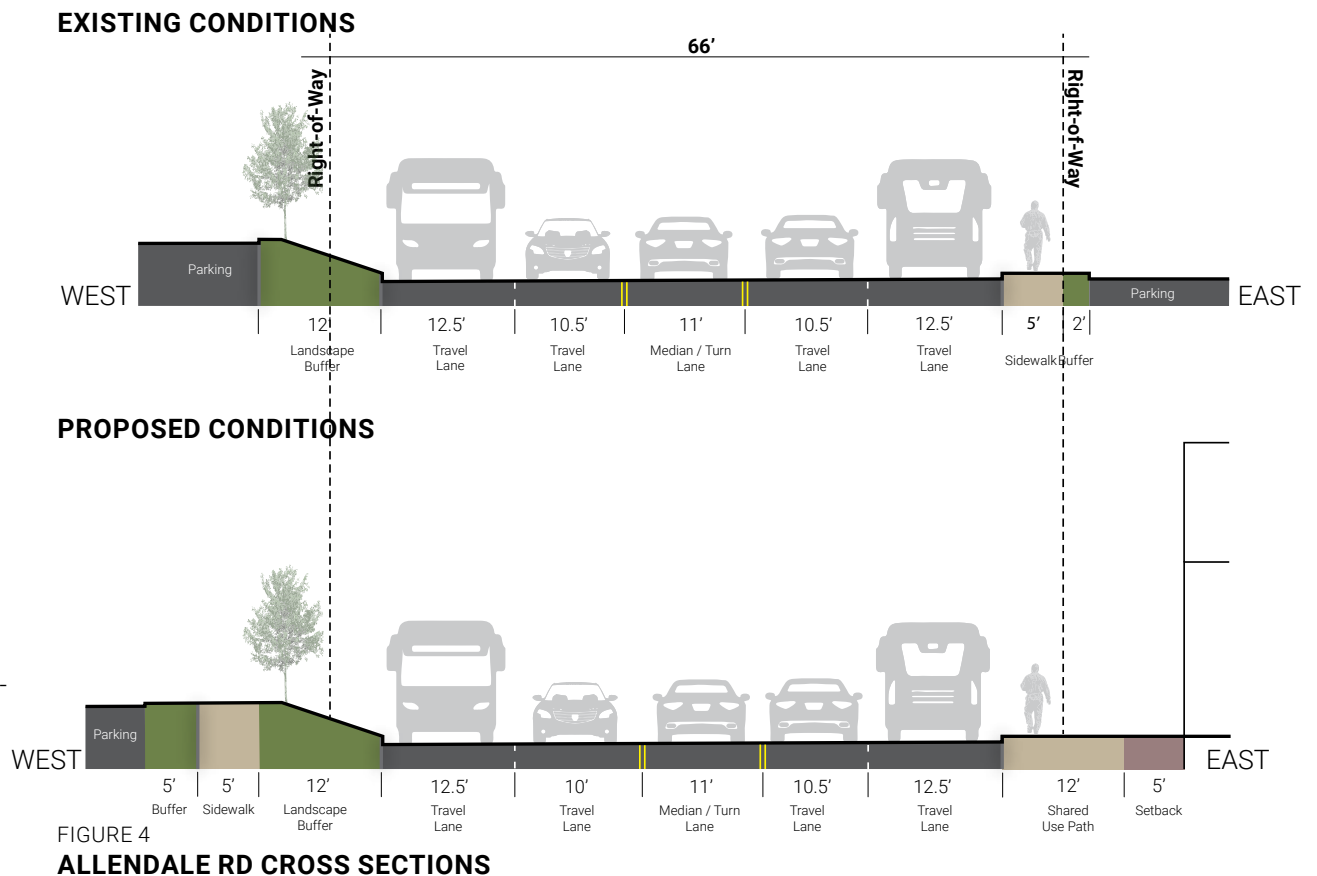
1

ALLENDALE RD IMPROVEMENTS

Allendale Rd improvements include a new sidewalk on the west side and a shared-use path on the east side. On portions of the west side where there is no sidewalk today, a 5-foot sidewalk is proposed between the landscape buffer and the existing parking area. Configuring the sidewalk on the outside of the existing landscape buffer is safer and more comfortable for pedestrians, as well as more constructable given the grade challenges.

On the east side of the street, the existing 5-foot sidewalk should be widened to a 12-foot shared-use path with a 5-foot buffer from the building face. There is not enough width in this section to accommodate a landscape buffer. A new shared use path bridge will need to be built over Crow Creek to maintain the width of the path.

There is no proposed change to the existing curb-to-curb roadway configuration.

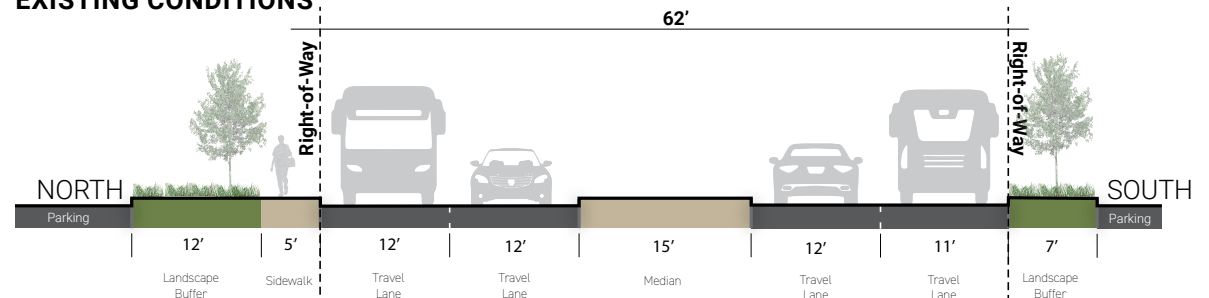


2

WILLS BLVD IMPROVEMENTS

Wills Blvd improvements include adding sidewalk on the north side and reconfiguring the sidewalk and landscaping on the south side. Walkways on both sides of the street are essential here because there are limited opportunities for crossings. The new 7-foot sidewalk on the north side should be constructed on the outside of the existing landscape buffer, on private property. Parking will need to be reconfigured. The sidewalk on the south side should be reconfigured to run within the center of the landscape buffer, with at least 5-feet between the pedestrian through-zone and the curb. There is no change to the existing travel lanes.

EXISTING CONDITIONS



PROPOSED CONDITIONS

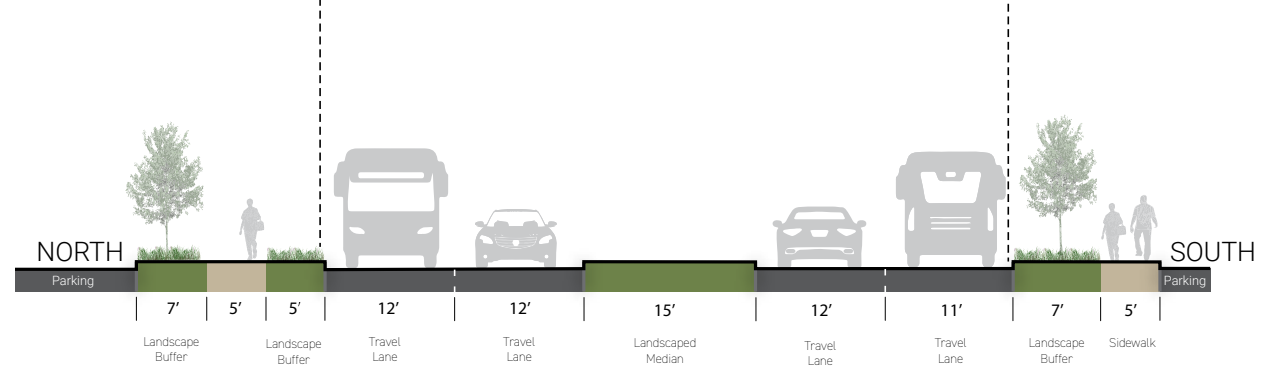


FIGURE 5
WILLS BLVD CROSS SECTIONS

ALLENDALE RD STATION



LAND USE

The existing land use within the Allendale station area is mixed-use. Parcels include multi-family residential (Courtside Square Apartments), office, retail, commercial service, and community facilities. Courtside Square was built in 1961 and has 5 stories with 74 units. During stakeholder engagement it was stated that this site was KOP's first mixed-use development, demonstrating mixed-use's long success at this location.

The height and density suggested in the concept plan may be allowed under current zoning; rezoning may not be needed provided that parking and dimensional requirements are met.

This conceptual redevelopment would further support the needs of employees and local residents, stimulate new high quality mixed-use redevelopment with multiple multistory mid-rise buildings, and one high-rise building plus parking. The redevelopment would help to retain and attract commercial businesses and multifamily residences; improve architectural character and signage design; expand community open space; and better integrate sidewalks, paths, and trails within the study area.

The envisioned mix of uses in the station area range from residential and residential mixed-use to office mixed-use, commercial, parking, and open space.

The station site is situated in an area of complex existing conditions bounded by Allendale Road, the PA Turnpike, and Crow Creek. The site is further complicated by the need to maintain emergency vehicle access to the PA Turnpike. The result is a site with no real sense of place. The plan concept illustrates a reimagined series of driveways that allows for passenger drop off and retains Turnpike access while creating a plaza around the station itself.

Station area redevelopment includes affordable multi-family housing and another residential mixed-use development with associated parking. All redevelopment would need to provide appropriate setback from Crow Creek and be elevated out of the floodplain.

PLAN 14.
ALLENDALE RD STATION
EXISTING ZONING



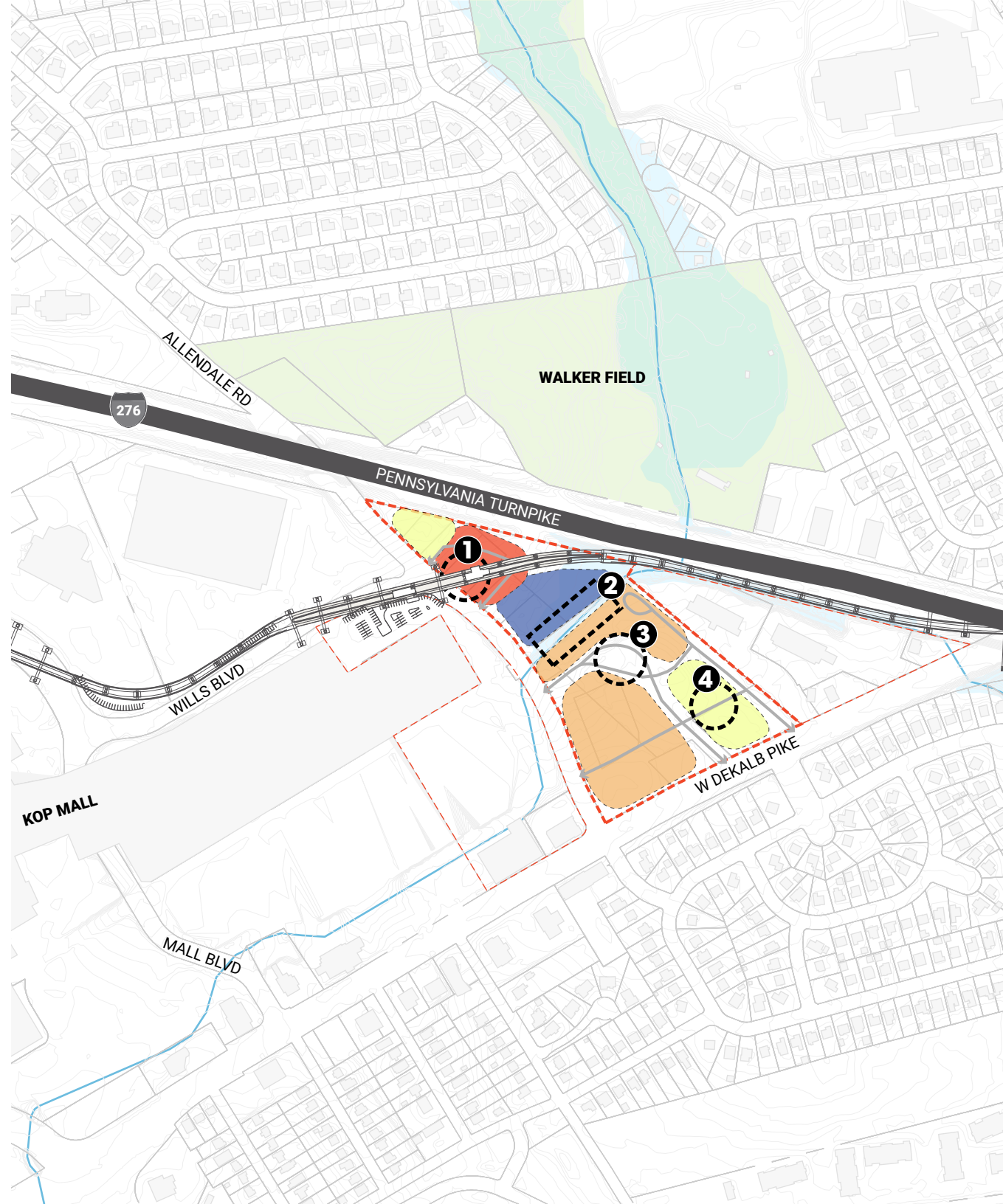
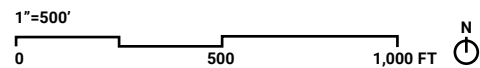
PLAN 15.
ALLENDALE RD STATION
LAND USE STRATEGY

LEGEND

- PARCELS LIKELY TO REDEVELOP
- RESIDENTIAL
- RESIDENTIAL MIXED-USE
- OFFICE MIXED-USE
- COMMERCIAL
- LIGHT INDUSTRIAL / MAKER SPACE
- COMMUNITY FACILITY
- PARKING
- OPEN SPACE

PLACEMAKING OPPORTUNITIES

- 1** ALLENDALE PLAZA
- 2** CREEKSIDE NATURAL AREA
- 3** COURTSIDE SQUARE
- 4** COURTSIDE YARD



ALLENDALE RD STATION

PLACE MAKING OPPORTUNITIES

1 ALLENDALE PLAZA

In the center of the reimagined network of driveways and sidewalks is Allendale Plaza. The plaza is a combination of hardscape and softscape elements including lighting, trees, planters, seating, and other amenities. The plaza will be a high-quality public open space and station gateway. Since Allendale Station will function primarily as a kiss-n-ride station, the

plaza will provide riders a place to arrive, pause, and orient themselves before they move on to their destination. A small, free-standing structure adjacent to the station could accommodate a coffee shop or other vendor.



METROLINE, EDMONTON, AL
SOURCE: MetroLine



LAKEVIEW LOW-LINE, CHICAGO, IL
SOURCE: Landscape Forms

2 CREEKSIDE NATURAL AREA

Crow Creek runs between Allendale Station and the existing Courtside Square mixed-use development. The concept plan reserves 1.6 acres of land as public open space and keeps development out of the flood plain. This existing naturalized and environmentally sensitive area will become a high-quality open space, providing amenity for both riders and development.



CORKTOWN COMMON PARK, TORONTO, CANADA
SOURCE: Michael Van Valkenburgh Associates

3 COURTSIDE SQUARE

Interior to the reimagined Courtside mixed-use development is Courtside Square. Courtside Square is a small park intended to give a sense of arrival and place within this redevelopment area, offering some respite from the high trafficked streets of Allendale Road and the DeKalb Pike. The square would include lighting, trees, planters, seating, and other amenities.



SHOEMAKER GREEN, PHILADELPHIA, PA
SOURCE: Andropogon Associates

4 COURTSIDE YARD

An additional open space is illustrated on the interior of the reimagined Courtside mixed-use development. Courtside Yard is another small park space along the back side of the DeKalb Pike frontage. The space is intended to be a place of calm and respite within this redevelopment area, using the mixed-use redevelopment as buffer

from the loud and highly trafficked streets of Allendale Rd, DeKalb Pike, and the PA Turnpike. Courtside Yard would include lighting, trees, planters, seating, and other amenities.



JOEL WEEKS PARK, TORONTO, ON
SOURCE: World Architects



BUILT FORM

Urban form and building massing at Allendale Rd Station include multi-story buildings fronting existing and new streets, as well as new open spaces. Along these frontages, building massing includes active ground floor uses with multiple stories of office and/or residential wrapping or lining surface and structured parking. The concept plan imagines one residential tower, increasing housing choice close to the station. Blocks of buildings are broken up to allow for access, daylight, and visibility both to and from the station. Setbacks are designed to provide a relationship between streets and buildings that creates a comfortable, safe, walkable mixed-use zone around the station.

Building articulation, façade design, transparency, and entry features are all intended to respond to human scale and to facilitate a pedestrian-oriented environment around the station area. New mixed-use developments would introduce enhanced architectural style and character around the stations. Building massing, and density are illustrated on figure 14 and designed to give the station area a walkable character and unique sense of place.

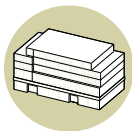


GARDENSTATE PLAZA, NEW JERSEY, NJ
SOURCE: North Jersey

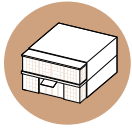
PLAN 16.
ALLENDALE RD STATION
BUILT FORM STRATEGY

LEGEND

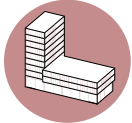
--- PARCELS LIKELY TO REDEVELOP



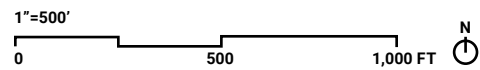
A: MID-RISE BUILDINGS



C: MAIN STREET COMMERCIAL



F: TOWER BUILDING



OVERALL CONCEPT

The concept for the Allendale Rd station area is to transform the suburban, auto-centric commercial development pattern into a pedestrian-friendly environment with an enhanced mix of uses including residential. Connectivity improvements will include closing sidewalk gaps, public/private partnerships that allow additional space for multimodal infrastructure, and crosswalk improvements. Redevelopment will increase land use diversity and enrich the public realm, including ground floor retail space to activate the street. Depending on need and recognizing that parking demand may drop as transit and active transportation increase, structured parking may replace surface lots and make more land available for redevelopment.

POTENTIAL BUILD-OUT

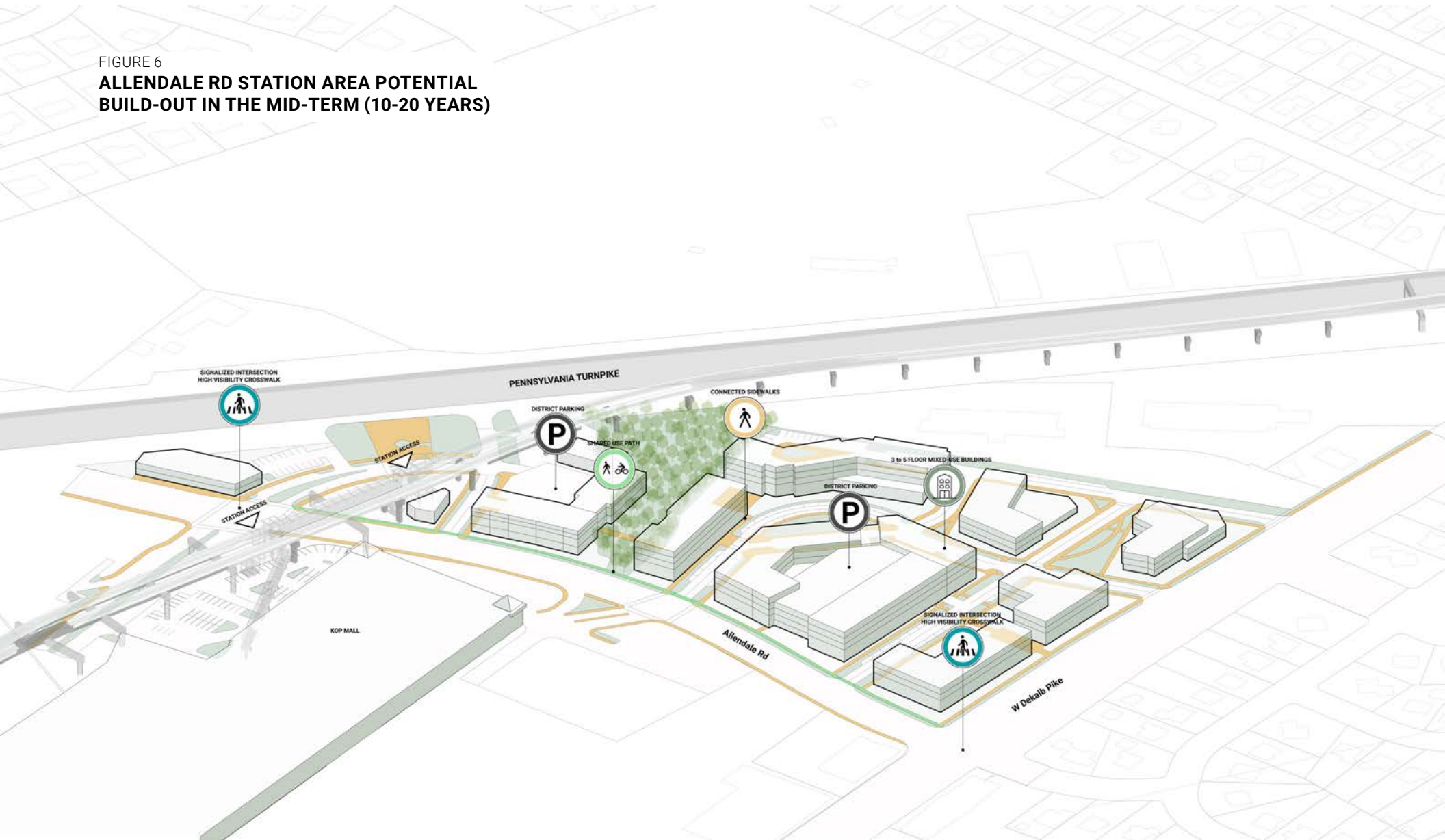
NEAR-TERM (0-10 YEARS)	No near-term development
MID-TERM (10-20 YEARS)	Residential: 200-300 units Retail: 100,000-150,000 sq ft Office: 25,000-40,000 sq ft
LONG-TERM (20+ YEARS)	Market demand

KEY PRIORITY IMPROVEMENTS IN THE NEAR-TERM

- 1 ALLENDALE RD IMPROVEMENTS**
 - › Shared use path
 - › Sidewalk
 - › Tree planting
 - › Street lighting
 - › Urban furniture
- 2 WILLS BLVD IMPROVEMENTS**
 - › Sidewalk
 - › Tree planting
 - › Street lighting
 - › Urban furniture
- 3 INTERSECTION IMPROVEMENTS**
 - › Allendale Rd / Wills Blvd intersection
 - › Allendale Rd / Dekalb Pike intersection

➔ **\$2.1M to \$3.1M**

FIGURE 6
**ALLENDALE RD STATION AREA POTENTIAL
BUILD-OUT IN THE MID-TERM (10-20 YEARS)**

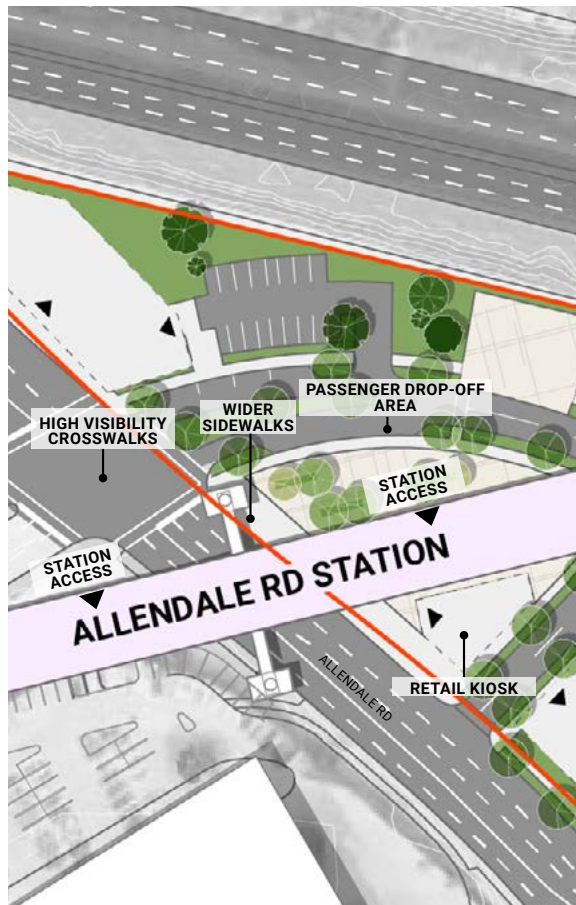


ALLENDALE RD STATION

DETAILED PLAN

PLAN 17.

ALLENDALE RD STATION SITE PLAN



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3. MALL BLVD STATION STATION AREA PLAN APPROACH



MOBILITY

Proposed Mall Blvd Station mobility enhancements include new streets organized around Mall Blvd as the central access corridor. The existing bus service that stops along Mall Blvd will turn into the station and stop at a new bus platform so users can easily connect to rail service.

Development and streetscape improvements will create a more walkable character along Mall Blvd. A shared-use path and new sidewalk is proposed to connect to the many destinations along the corridor. The existing median should be enhanced with landscaping to beautify the corridor and provide opportunities for green infrastructure.

New, defined walkways and paths within existing parking lots will create a logical, linear street grid that enhances pedestrian wayfinding and safety. These walkways will connect to the larger

station area and will cross from the station on the north side of Mall Blvd to redevelopment sites to the south via two signalized intersections and two stop-controlled intersections. Signalized crossings will prioritize pedestrian and ADA functionality, including high-visibility crosswalks, pedestrian signal heads, and accessible ramps. Other traffic signal features like leading pedestrian indicators (LPIs) and exclusive pedestrian phases should be considered where high volumes of conflicting turning movements are anticipated. The new complete streets are proposed as local access streets, with sidewalk, shared use path, and on-street parking. Inclusion of the shared use path ensures first and last mile access for people on bikes and other micro-mobility devices who do not feel comfortable sharing the travel lanes.

PLAN 18.

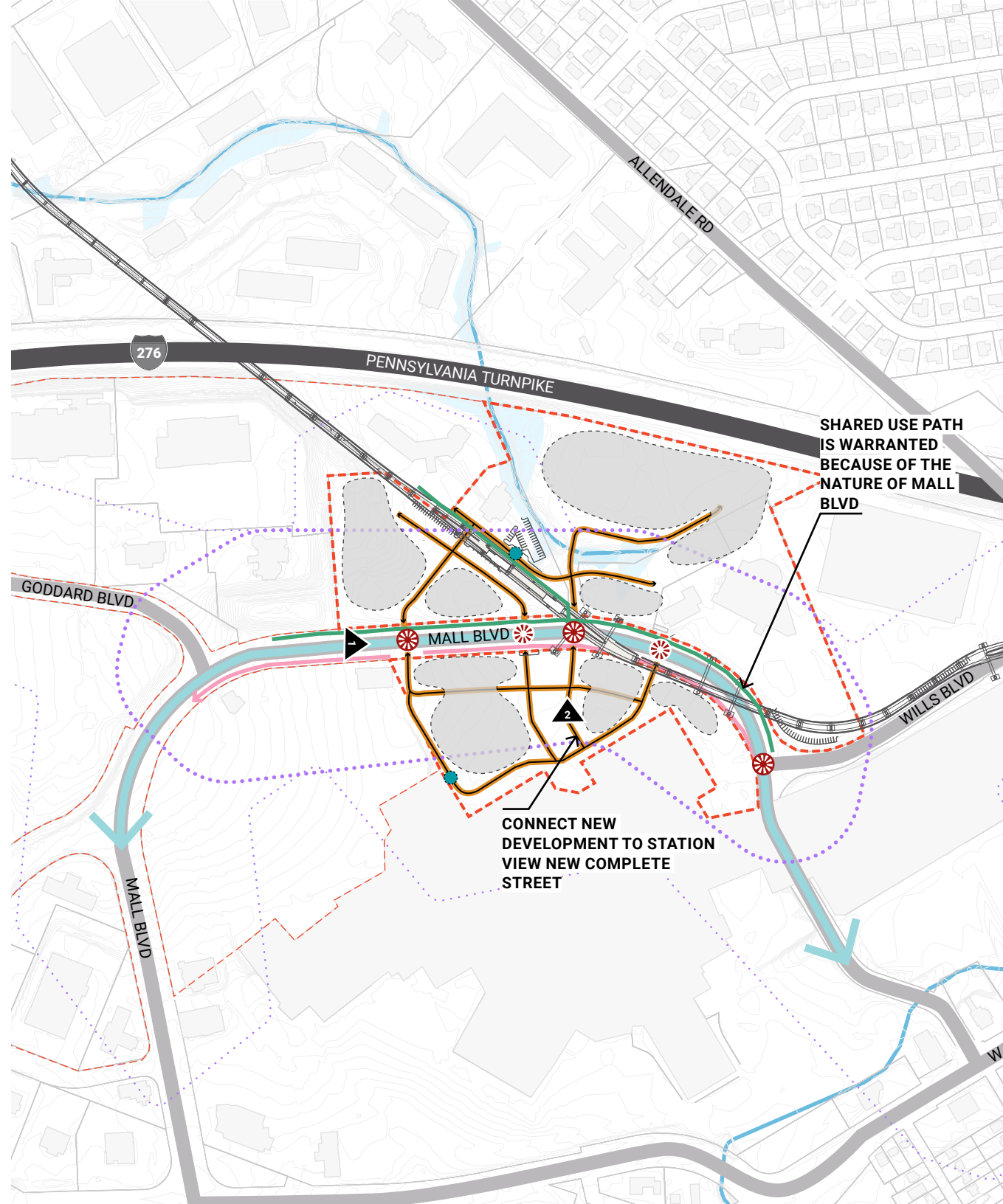
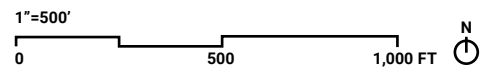
MALL BLVD STATION MOBILITY STRATEGY

LEGEND

- PARCELS LIKELY TO REDEVELOP
- ... 5-10 MIN WALKSHEDS
- PENNSYLVANIA TURNPIKE
- EXISTING STREETS
- MALL BLVD- PRIORITY ACCESS CORRIDORS
- PROPOSED STREETS
- PROPOSED PRIVATE LANES
- PARKING STRUCTURES
- SURFACE PARKING
- SIDEWALK (NEW AND/OR ENHANCED)
- SHARED USE PATH
- BIKE LANE
- RECOMMENDED BUS STOPS & CONNECTIONS
- ⊗ INTERSECTION: TRAFFIC LIGHT
- ⊗ INTERSECTION: STOP SIGN

CROSS-SECTIONS

- 1 MALL BLVD - CROSS SECTION
- 2 NEW COMPLETE STREET - CROSS SECTION



MALL BLVD STATION

1

MALL BLVD IMPROVEMENTS

The proposed Mall Blvd cross-section includes a shared-use path on the north side of the street and a sidewalk on the south side of the street. The 10-foot shared-use path should be built on the outside of a 10-foot landscape strip. The landscape strip will be within the existing right-of-way, while the shared-use path will be constructed on private property. On the side south, a new 6-foot sidewalk will be constructed on the outside of the existing 2-foot landscape strip. There would be a 6-foot buffer between the pedestrian through-zone and the building façade to accommodate space for building activities. The existing landscape median should be enhanced with trees and other landscaping to beautify the corridor.

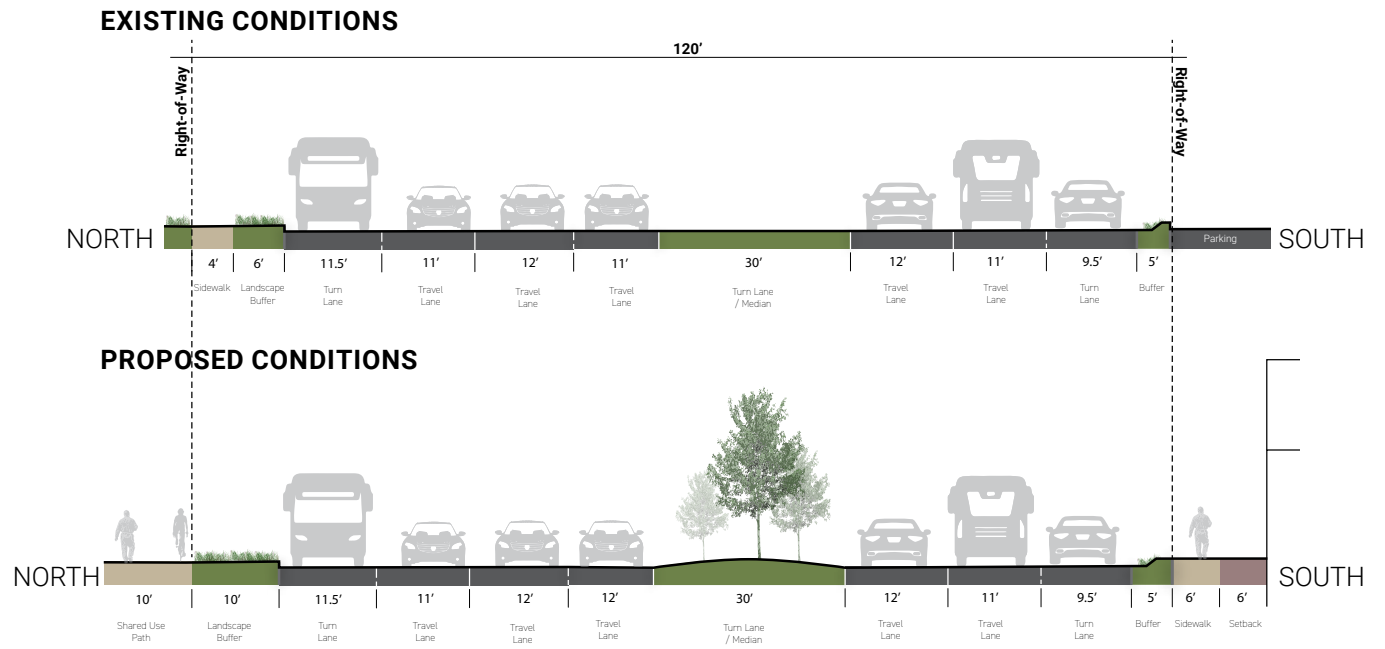


FIGURE 7
MALL BLVD CROSS SECTIONS

2

NEW COMPLETE STREET

The network of new streets should accommodate all users, including people walking, biking, and accessing destinations. A sidewalk is proposed on one side, with a shared-use path on the other side. The street should have two travel lanes and on-street parking on both sides of the street. Landscape buffers are also proposed for both sides of the street, and should have shade trees, green infrastructure, and a step-out strip for people accessing parked vehicles.

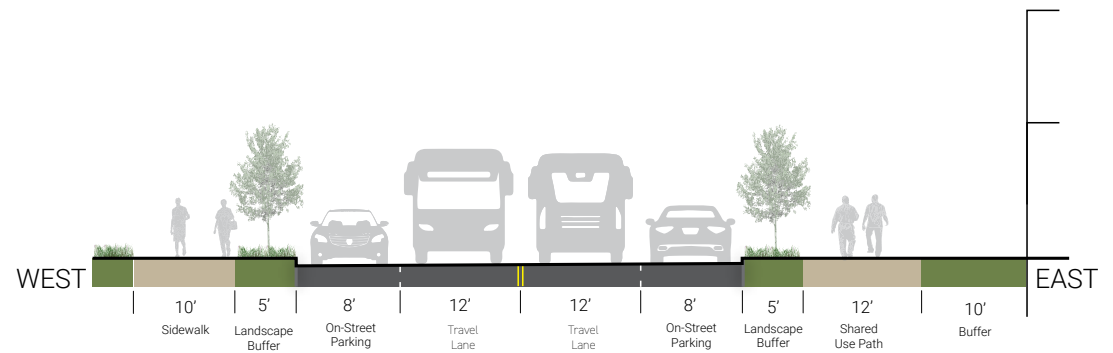


FIGURE 8
PROPOSED STREET CROSS SECTION

MALL BLVD STATION



LAND USE

The land use approach for the Mall Blvd Station area is centered around repositioning existing development, placemaking and infill in the Mall's large surface parking lots, and redevelopment opportunities around the station. It also emphasizes increasing open space and opportunities for sustainable stormwater management, as well as better connectivity between new development/redevelopment and the Mall.

Existing land use within the Mall Blvd station area is not mixed-use, following current zoning classifications GC – General Commercial District, and SC – Shopping Center District. Uses include restaurant, retail, office, commercial, hospitality, and commercial services.

The envisioned mix of uses ranges from residential and residential mixed-use to office mixed-use, commercial, parking, and open space.

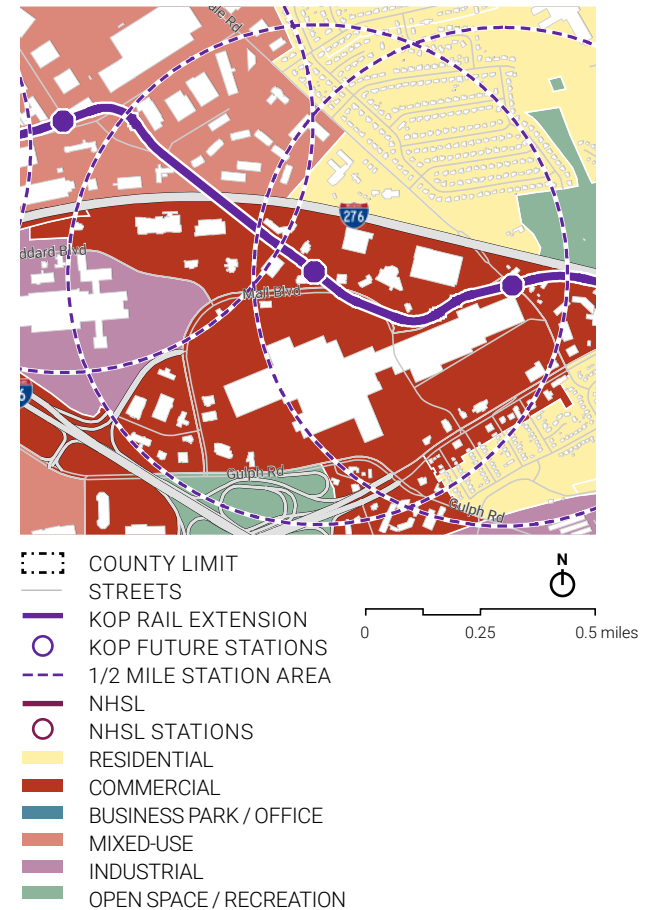
This conceptual redevelopment would further support the needs of employees and local residents by stimulating new high quality mixed-use redevelopment with multi-story mid-rise

buildings and parking. The redevelopment would help to retain and attract commercial businesses and new multifamily residences, and would improve architectural character and signage design.

The concept plan illustrates a slightly reimagined series of driveways and road intersections that better integrates with parking for kiss and ride passengers and creates a central plaza place at the station itself (Mall Station Plaza). Land directly around the station and plaza will transition to mid-rise residential mixed-use and commercial with associated parking.

The concept plan also expands community open space by introducing a series of central open spaces (KOP Mall Garden) that provide a strong visual and physical connection between the station and the Mall. New active and passive open spaces underneath the rail create new types of open spaces for the community and will better integrate sidewalks, paths, and trails to create a vibrant mixed-use village around the Mall Blvd Station.

PLAN 19.
MALL BLVD STATION
EXISTING ZONING



PLAN 20.

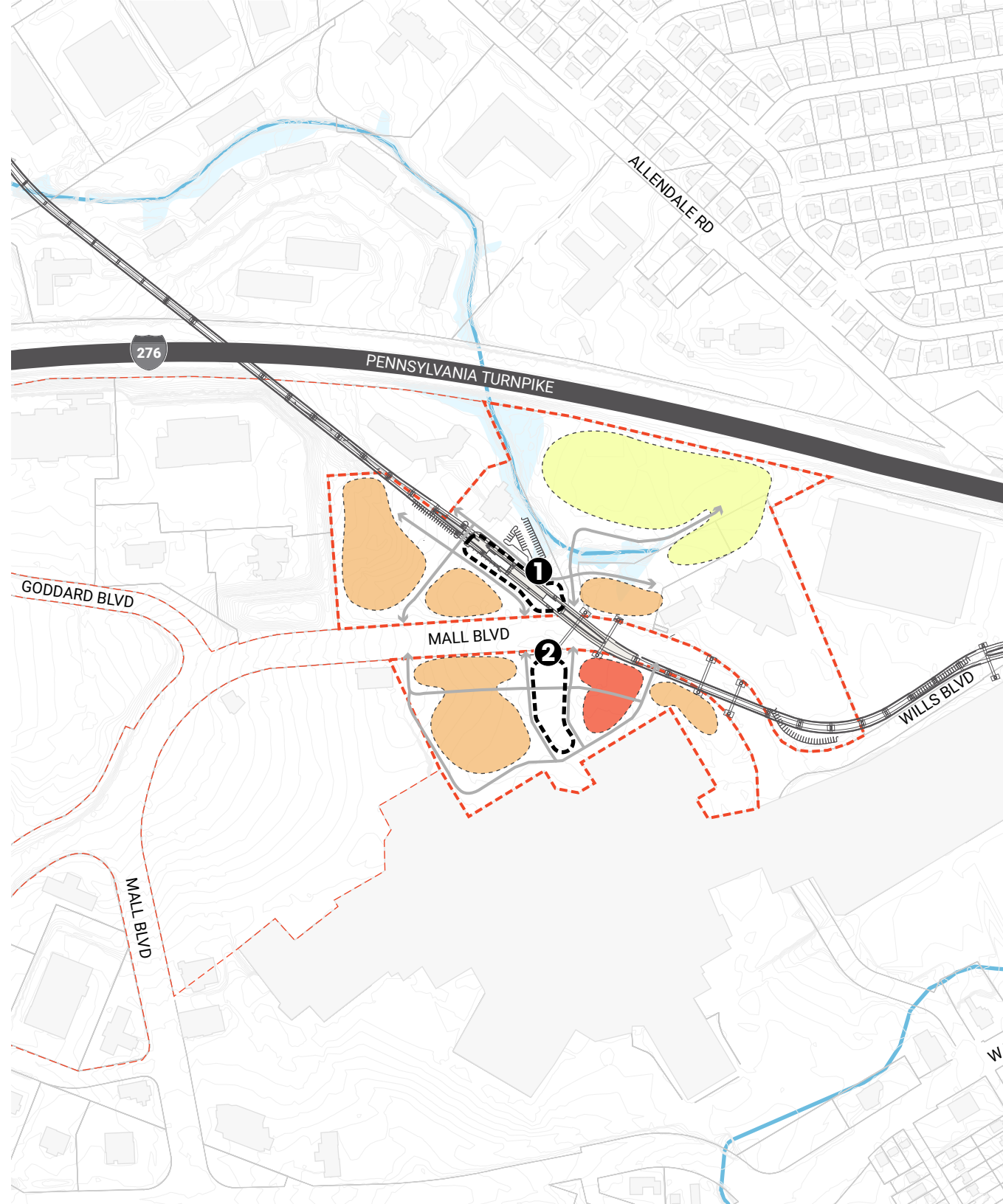
MALL BLVD STATION LAND USE STRATEGY

LEGEND

- PARCELS LIKELY TO REDEVELOP
- RESIDENTIAL
- RESIDENTIAL MIXED-USE
- OFFICE MIXED-USE
- COMMERCIAL
- LIGHT INDUSTRIAL / MAKER SPACE
- COMMUNITY FACILITY
- PARKING
- OPEN SPACE

PLACEMAKING OPPORTUNITIES

- 1 MALL STATION PLAZA
- 2 KOP MALL GARDEN



MALL BLVD STATION

PLACE MAKING OPPORTUNITIES

1 MALL STATION PLAZA

Mall Station Plaza is intended to be a high-quality public open space, a creatively designed welcoming point. As the main access point to the King of Prussia Mall from Mall Blvd Station - primarily a kiss and ride station - it will offer a direct line of sight and maximize pedestrian connection to the mall's entry. The plaza is a combination of hardscape and softscape elements, including lighting, trees, planters, seating, and other amenities. The plaza allows riders a place to arrive, pause, and orient themselves before they move to their destination.



PRELIMINARY ARTISTIC RENDERING FOR THE WILLOWBROOK STATION, VANCOUVER, CANADA
SOURCE: Translink

2 KOP MALL GARDEN

Mall Garden will offer a central, linear open space on axis between Mall Blvd Station and one of the main entry points to the mall. This area of the mall parking lot has been improved to handle ongoing stormwater management issues in this area of the site, and the concept plan builds on that need by creating a park and open space that is a combination of passive recreation and sustainable storm water management. Mall Garden should include pedestrian pathways, lighting, trees, seating, and other amenities. Additionally, Mall Garden can become an ideal location for programming and outdoor events.



CLOVERDALE MALL, TORONTO, ON
SOURCE: Quad Real



BUILT FORM

Urban form and building massing at Mall Blvd Station includes multi-story buildings fronting existing and new streets, as well as new open spaces. Along these frontages, building massing includes active ground floor uses with multiple stories of office and/or residential wrapping or lining surface and structured parking. One larger single-use residential development is envisioned on the current Toys“R”Us site, further increasing housing choice close to the station. Blocks of buildings are broken up to allow for access, daylight, and visibility both to and from the station. Setbacks are designed to provide a relationship between streets and buildings that creates a comfortable, safe, walkable mixed-use zone around the station.

Building articulation, façade design, transparency, and entry features are all intended to promote human scale and to facilitate a pedestrian-oriented environment around the station area. New mixed-use developments would introduce enhanced architectural style and character around the stations. Building massing, and density are illustrated on figure 18 and are designed to give the station area a walkable character and unique sense of place.

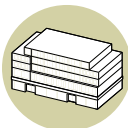


DOWNTOWN SILVER SPRING, MARYLAND
SOURCE: CNU

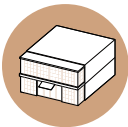
PLAN 21.
MALL BLVD STATION
BUILT FORM STRATEGY

LEGEND

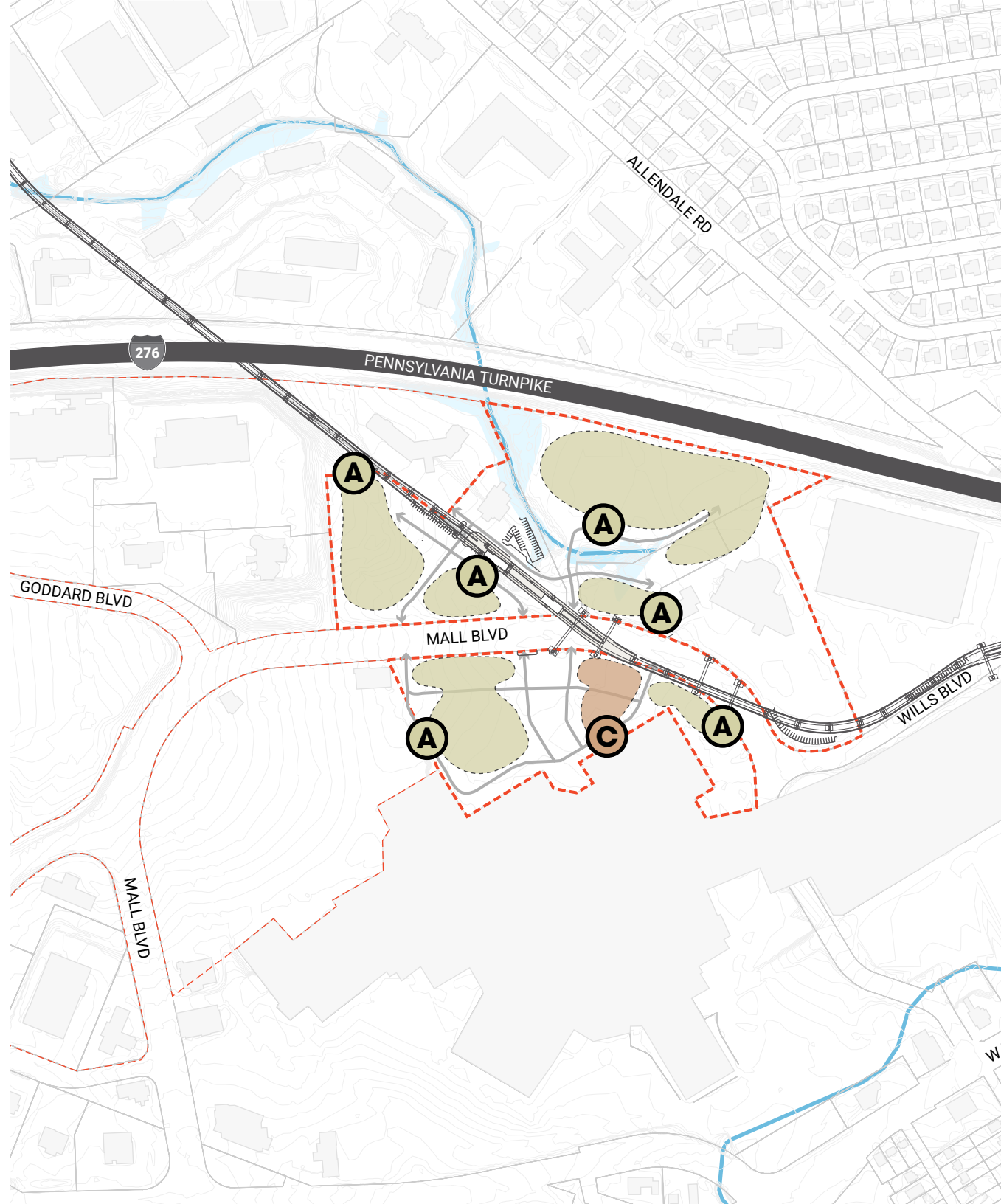
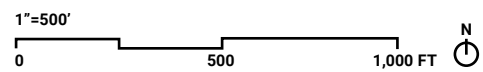
--- PARCELS LIKELY TO REDEVELOP



A: MID-RISE BUILDINGS



C: MAIN STREET COMMERCIAL



OVERALL CONCEPT

Similar to Allendale Rd Station, the concept for the Mall Blvd station area is to transform the suburban, auto-centric commercial development pattern into a pedestrian-friendly environment with an enhanced mix of uses, including residential. Station area improvements include closing sidewalk gaps along Mall Blvd and creating high-visibility crosswalks at intersections. Mall Boulevard will become a pedestrian-friendly boulevard rather than a high-speed vehicular- and parking access-oriented corridor.

Redevelopment will provide increased land use diversity and an enriched public realm, especially in areas immediately adjacent to the station and in areas where surface parking disrupts the connection between the future station and the KOP Mall. Proximity to natural areas and the nature of the topography provides additional opportunity for off-road multimodal infrastructure, recreational uses, and stormwater management.

POTENTIAL BUILD-OUT

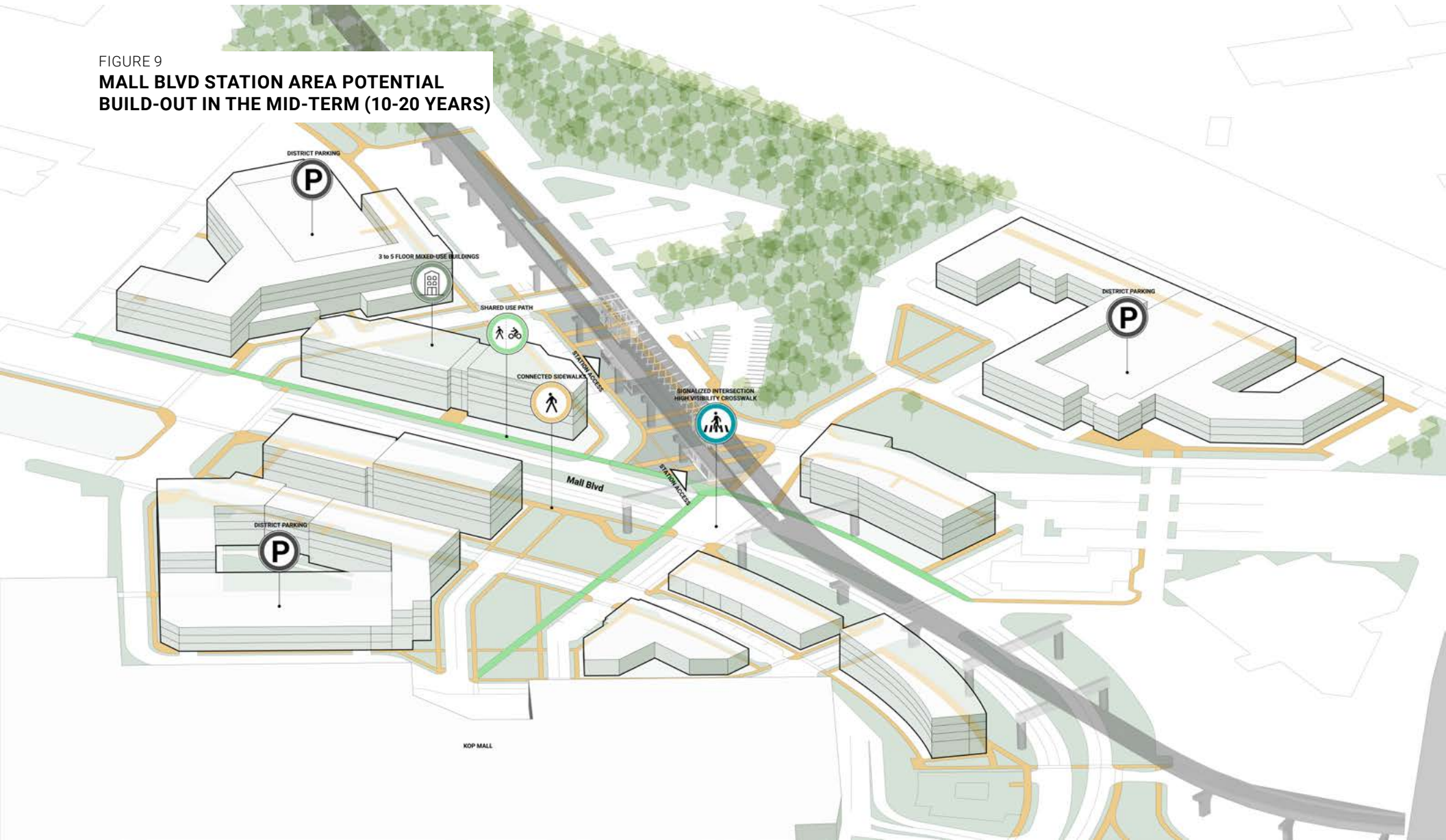
NEAR-TERM (0-10 YEARS)	No near-term development
MID-TERM (10-20 YEARS)	Residential: 400-500 units Retail: 100,000-150,000 sq ft Office: 30,000-50,000 sq ft
LONG-TERM (20+ YEARS)	Market demand

KEY PRIORITY IMPROVEMENTS IN THE NEAR-TERM

- 1 MALL BLVD IMPROVEMENTS
 - › Shared use path
 - › Sidewalk
 - › Tree planting
 - › Street lighting
 - › Urban furniture
- 2 INTERSECTION IMPROVEMENTS
 - › Mall Blvd / New street leading to KOP Mall entry

➔ **\$1.7M to \$2.1M**

FIGURE 9
**MALL BLVD STATION AREA POTENTIAL
BUILD-OUT IN THE MID-TERM (10-20 YEARS)**

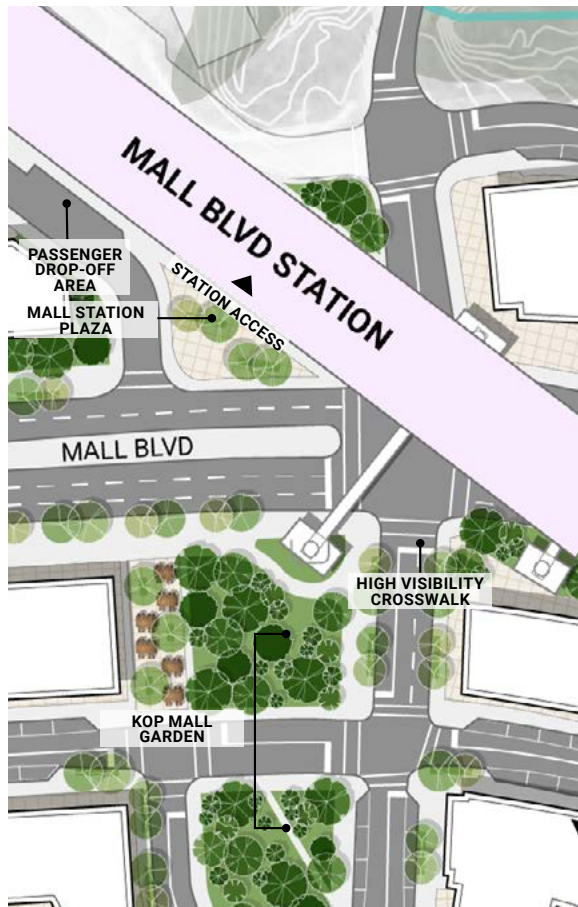


MALL BLVD STATION

DETAILED PLAN

PLAN 22.

MALL BLVD STATION SITE PLAN





FIRST AVENUE STATION AREA PLANS

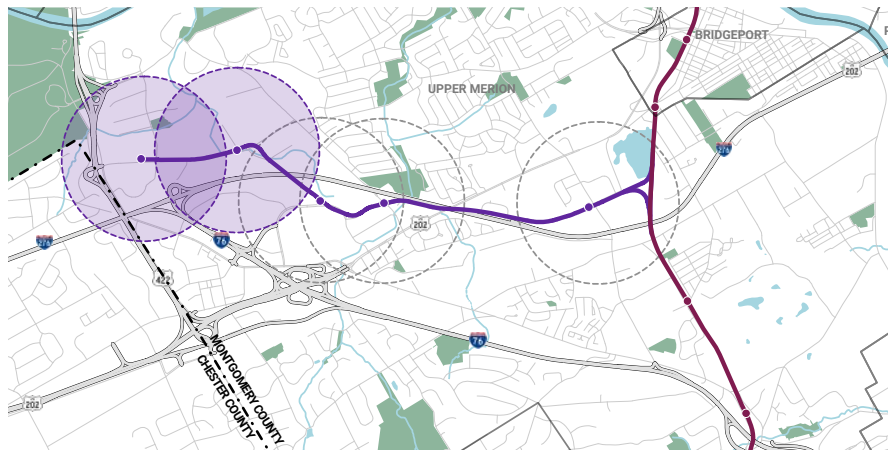
6.

- 6.1 CONSTRAINTS & OPPORTUNITIES
- 6.2 FIRST & AMERICAN STATION CONCEPT
- 6.3 FIRST & MOORE STATION CONCEPT

1. CONSTRAINTS & OPPORTUNITIES

Two stations along First Avenue represent the western terminus of the KOP Rail extension. This station area is characterized by single-use office parks, some trail connections and natural open spaces. The area also enjoys proximity to Valley Forge National Historical Park, a regional and national destination. The end-of-line First & Moore Station represents the largest opportunity for TOD within the KOP Rail corridor and would require new bike/pedestrian infrastructure and a new grid of streets to fully realize the area's potential. This area is considered a near-, mid- and long-term growth opportunity for a transit-supportive, amenity-rich community.

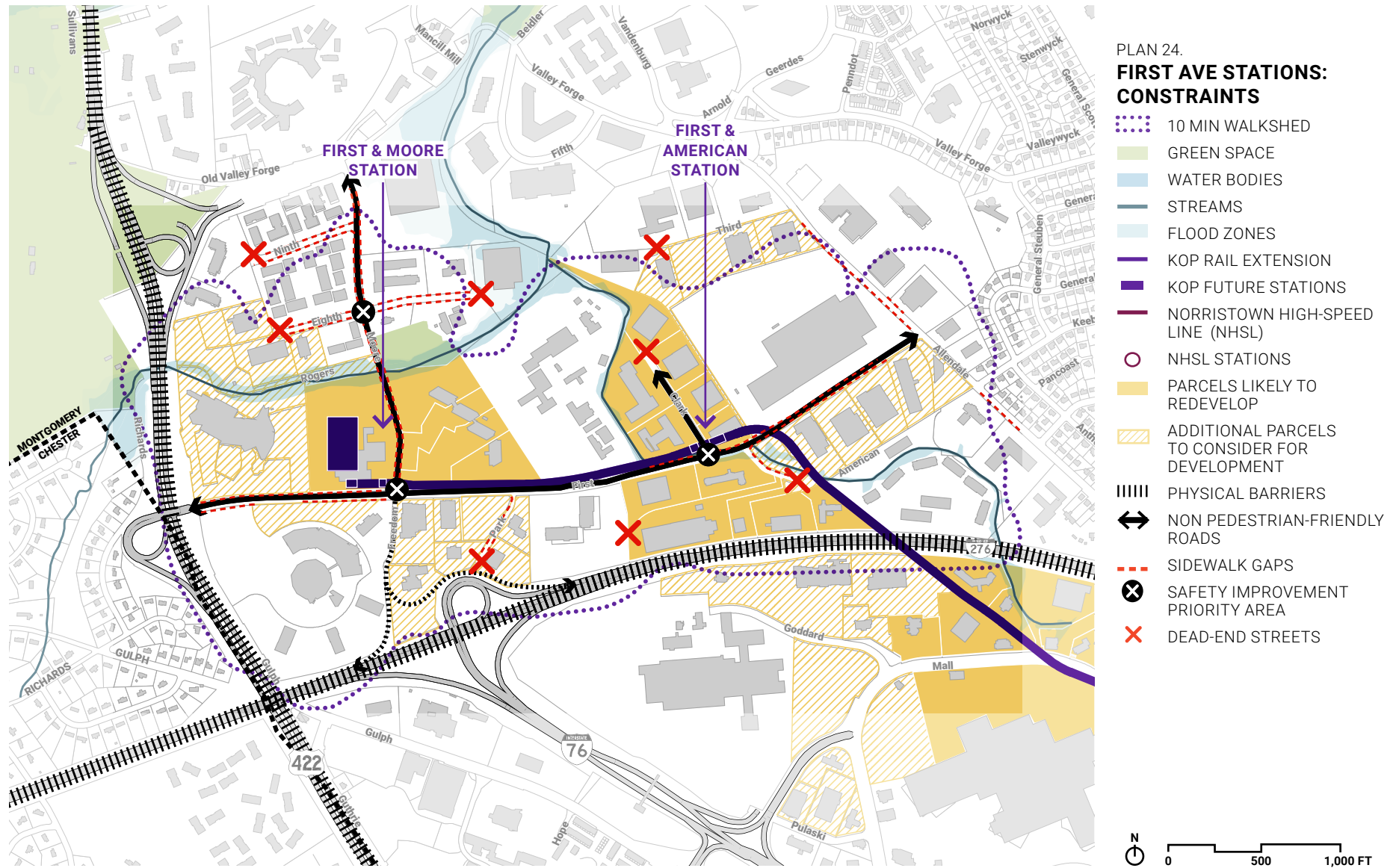
For the First Ave Stations, the total area likely to redevelop over the next 20 to 30 years is **203 acres**.



PLAN 23.
FIRST AVENUE STATIONS

STATION AREA	PARCEL TYPE	AREA (ACRES)	ZONING	EXISTING LAND USE
FIRST & AMERICAN	PARCELS LIKELY TO REDEVELOP IN THE MID-TERM (10-20 YEARS)	43	KPMU KING OF PRUSSIA MIXED-USE	
	PARCELS LIKELY TO REDEVELOP IN THE LONG-TERM (20+ YEARS)	47	KPMU KING OF PRUSSIA MIXED-USE	COMMERCIAL
	PARCELS LIKELY TO REDEVELOP IN THE NEAR-TERM (0-10 YEARS)	8	KPMU KING OF PRUSSIA MIXED-USE	INDUSTRIAL INSTITUTIONAL
FIRST & MOORE	PARCELS LIKELY TO REDEVELOP IN THE MID-TERM (10-20 YEARS)	40	KPMU KING OF PRUSSIA MIXED-USE RECREATIONAL	UTILITY WOODED OR UNDEVELOPED
	PARCELS LIKELY TO REDEVELOP IN THE LONG-TERM (20+ YEARS)	65	KPMU KING OF PRUSSIA MIXED-USE	

FIRST AVENUE STATIONS



CONSTRAINTS



MOBILITY

- Converging highways create significant physical barriers to active mobility.
- Discontinuous sidewalks, dead-end streets, and limited crossings limit connectivity in the area.
- Cyclists and pedestrians can cross First Ave at only two locations: Moore Rd and American Ave. Many illegal crossings of First Ave occur as a result of this limited connectivity.
- Topographic change makes pedestrian connectivity difficult in certain locations.



LAND USE

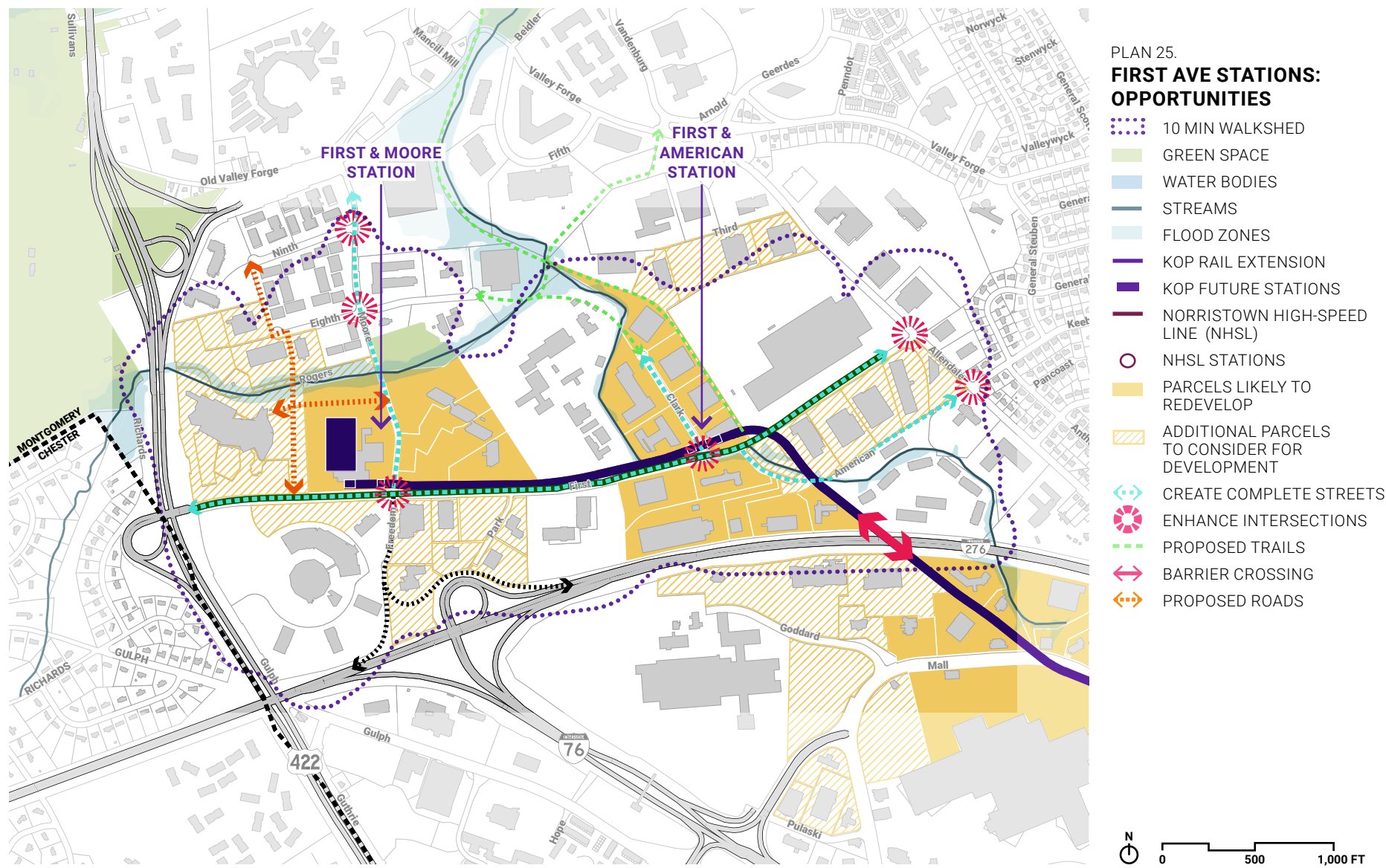
- Existing low-density, commercial and industrial land-use mix is not transit supportive.
- The station area lacks a residential component that could make the station area a community.



BUILT FORM

- Station area development includes a variety of large-scale warehousing, distribution, and light manufacturing building types.
- Existing building type and massing does not provide welcoming or intuitive pedestrian access.

FIRST AVENUE STATIONS



OPPORTUNITIES



MOBILITY

- ⊕ The stations are ~3/4-mile apart and could be part of one vision and station area plan.
- ⊕ The 1-mile First Avenue Linear Park with its multi-use park links Moore Rd to Allendale Rd.
- ⊕ N. Gulph Road could potentially act as a link to the Valley Forge National Historic Park.



LAND USE

- ⊕ Moore Park KOP is a major employment center with 20,000 employees, five hotels, and over 3.5 million square feet of commercial office space.
- ⊕ The station area includes apartment complexes, established residential neighborhoods, shopping centers, and attractions such as the Valley Forge Casino Resort.
- ⊕ Valley Forge National Historic Park offers significant open space within close proximity to the station areas.



BUILT FORM

- ⊕ The station area includes a number of vacant and underutilized parcels that offer significant opportunity for transit-oriented redevelopment.

2. FIRST & AMERICAN STATION STATION AREA PLAN APPROACH



MOBILITY

The mobility network for First and American Station is organized around First Ave as the central access corridor, with connections to new development via Clark and American Aves. A new street grid will be built from Clark and American Aves to serve redevelopment and create a walkable, logical network. There is a proposed street connection between Clark and 3rd Aves. The new street segment will jog to the northeast to avoid the creek. This new connection will create another outlet to Allendale Rd to the east.

This area benefits from two existing/planned mobility assets: a planned shared-use path that runs perpendicular to First Ave, just east of the station; and planned/existing bike lanes and a shared-use path along First Ave. The vision for this station's mobility network includes completion of both improvements.

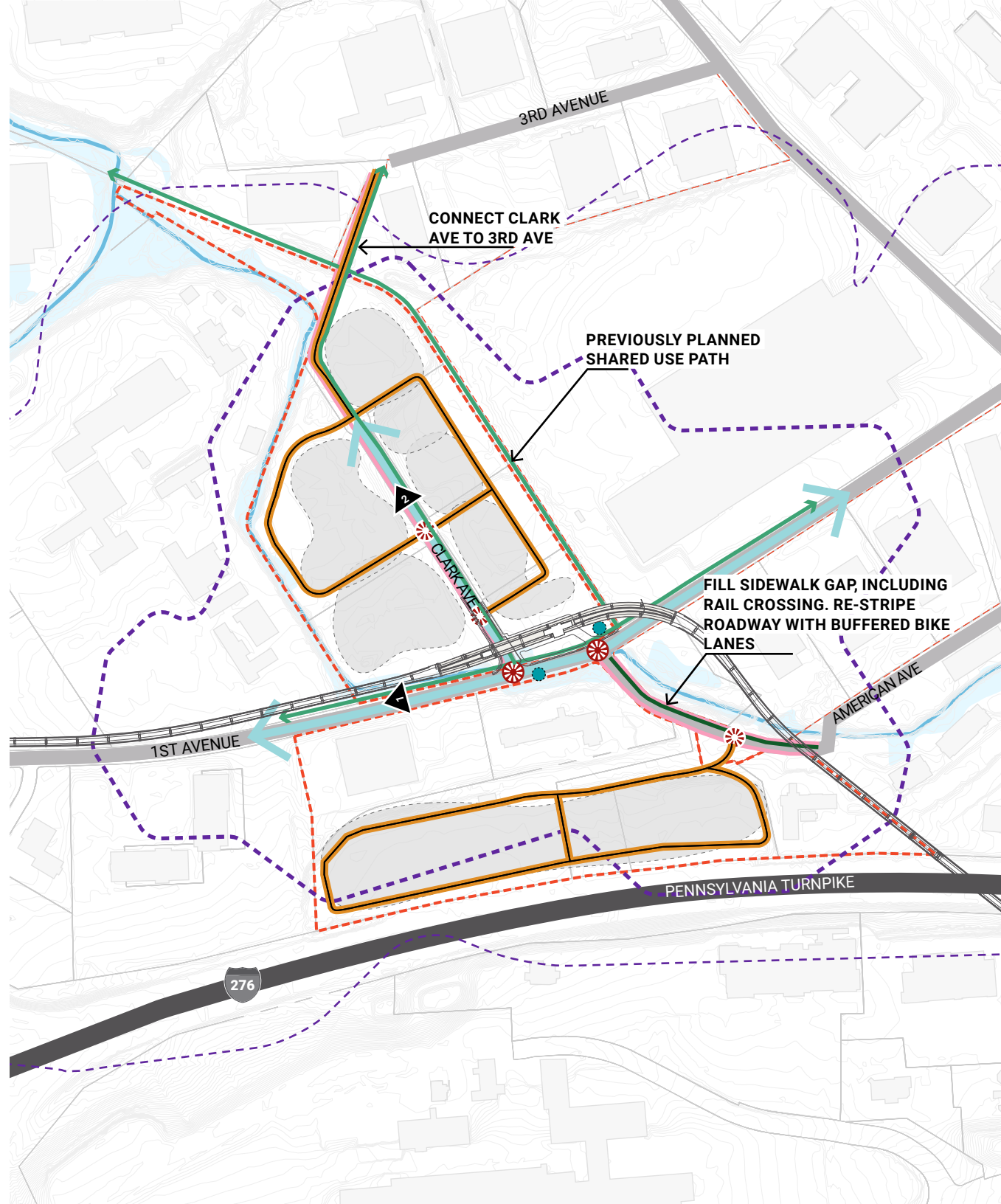
PLAN 26.
FIRST & AMERICAN STATION
 MOBILITY STRATEGY

LEGEND

- PARCELS LIKELY TO REDEVELOP
- 5-10 MIN WALKSHEDS
- PENNSYLVANIA TURNPIKE
- EXISTING STREETS
- 1ST AVE & CLARK AVE- PRIORITY ACCESS CORRIDORS
- PROPOSED STREETS
- PROPOSED PRIVATE LANES
- PARKING STRUCTURES
- SURFACE PARKING
- SIDEWALK (NEW AND/OR ENHANCED)
- SHARED USE PATH
- BIKE LANE
- RECOMMENDED BUS STOPS & CONNECTIONS
- ⊗ INTERSECTION: TRAFFIC LIGHT
- ⊗ INTERSECTION: STOP SIGN

CROSS-SECTIONS

- ▲ 1 1ST AVE - CROSS SECTION
- ▲ 2 CLARK AVE - CROSS SECTION

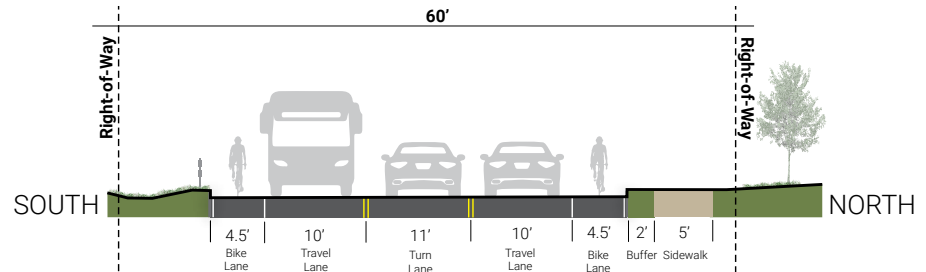


1

1ST AVE IMPROVEMENTS

The proposed cross-section for First Ave is consistent with the other portions of First Ave that have been planned and implemented. It includes 5-foot sidewalk and 5-foot landscape buffer on the south side, and 10-foot shared use path with a 5-foot landscape buffer on the north side of the street. This configuration is within the right-of-way, with the narrowing of the roadway and removal of the on-street bike lanes.

EXISTING CONDITIONS



FIRST AVE FUTURE CONDITIONS

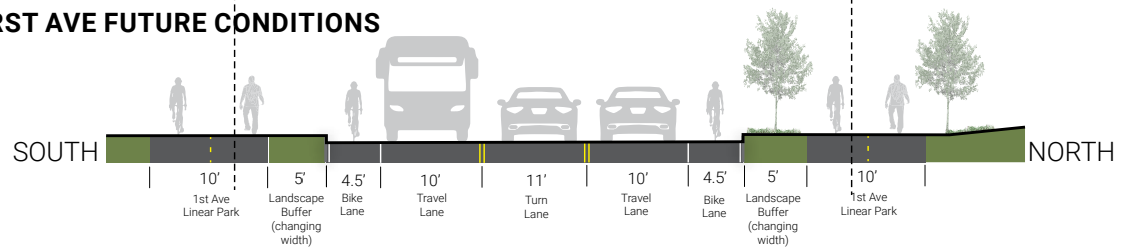


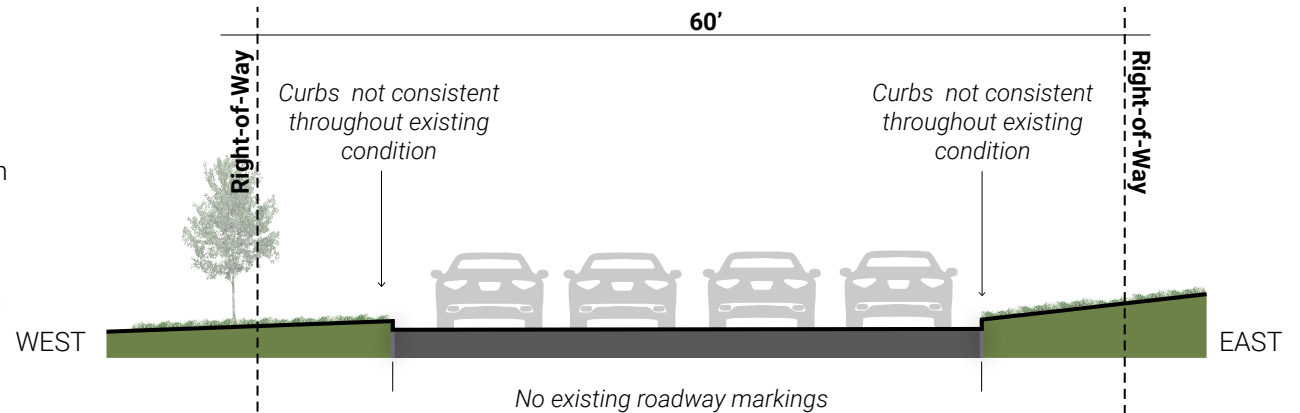
FIGURE 10
FIRST AVE CROSS SECTIONS

2

CLARK AVE IMPROVEMENTS

Clark Avenue is proposed as a two-lane road with on-street parking on both sides, sidewalk on the west side, and shared use path on the east side. The shared use path on the east side provides a direction connection to the transit platform. Both sides will also be built with a 5-foot landscape buffer between the curb and the pedestrian and bicyclist through-zones.

EXISTING CONDITIONS



PROPOSED CONDITIONS

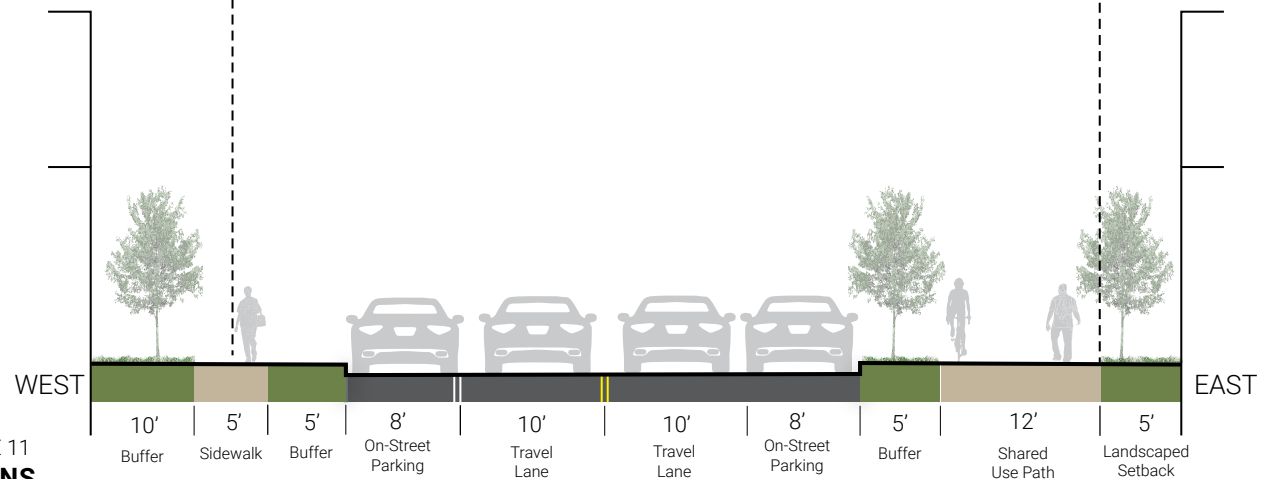


FIGURE 11
CLARK AVE CROSS SECTIONS



LAND USE

The land use approach for the First and American Station area is centered around repositioning existing low-rise, lower density development into higher intensity mixed-use development around the station. The concept also prioritizes increasing open space and connectivity to the station site, as well as creating opportunities for sustainable stormwater managements.

Existing land use within the First and American station area is mixed-use. Uses include office, warehousing, manufacturing, hotel, retail, multi-family residential office, and commercial.

The proposed mix of uses in the station area range from residential and residential mixed-use to office mixed-use, light industrial/maker space, a combination of on-street, surface and structured parking, and new open space.

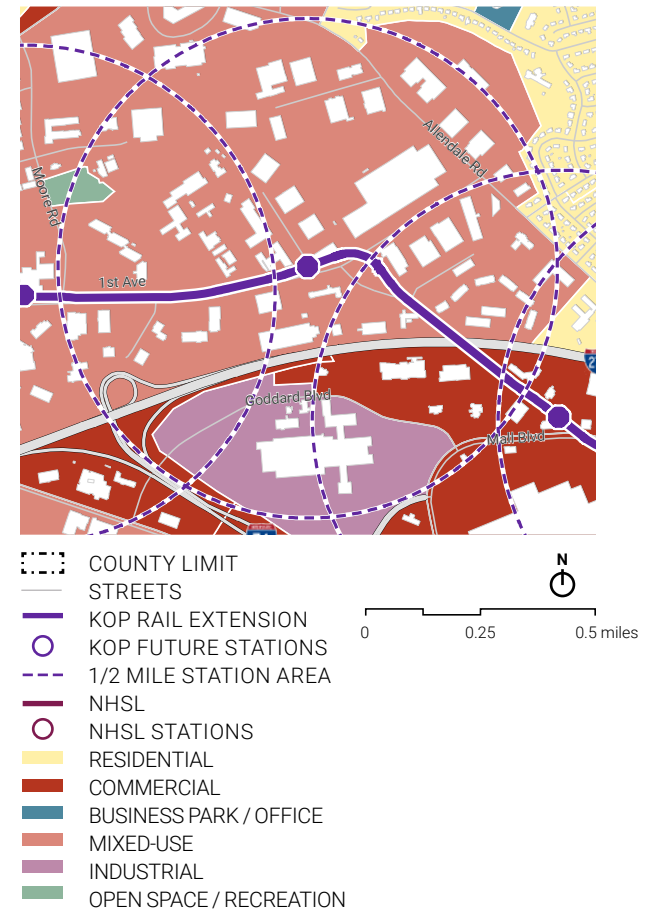
Future use, height and density suggested in the plan concept would most likely be allowed under current zoning, with a variance for the 50' foot front yard setback requirement in the existing King of Prussia Mixed-use District (KPMU).

The concept plan also expands community open space by introducing a new community plaza in front of the station (First and American Plaza). This enhancement sets the stage for future redevelopment to the north of the station. Land will also be retained for new community space and sustainable stormwater management along the former rail corridor east of Clark Avenue (Trout Creek Commons).

A new trail connection is also envisioned along the former rail line. Active and passive open spaces underneath the rail will create new types of open spaces for the community and connect directly to the First Avenue Linear Park being implemented by the KOP District. These open spaces and new sidewalks within the station area will better integrate multi-modal connectivity to create a vibrant mixed-use village around the First and American Station.

PLAN 27.

FIRST & AMERICAN STATION EXISTING ZONING



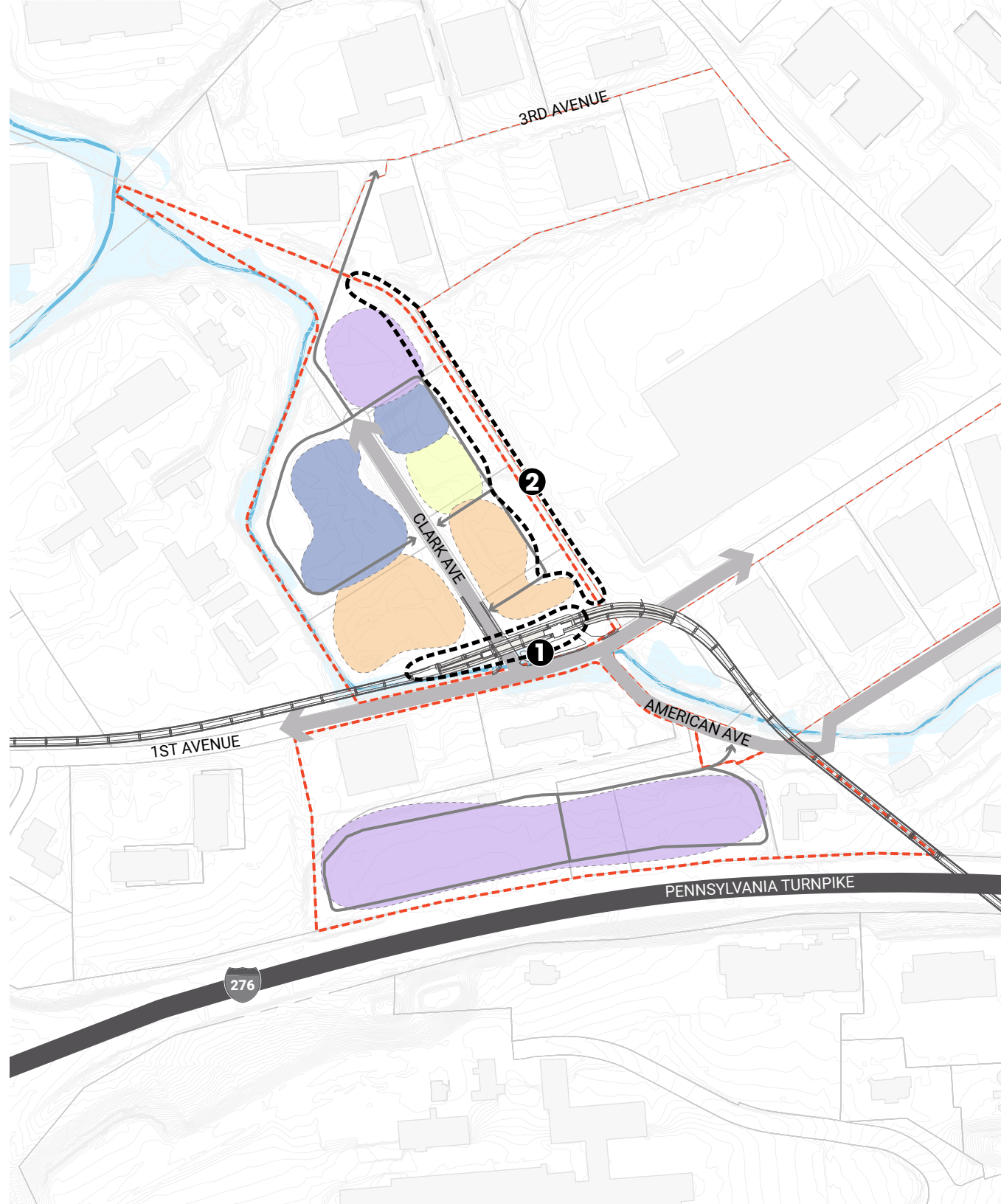
PLAN 28.
FIRST & AMERICAN STATION
LAND USE STRATEGY

LEGEND

- PARCELS LIKELY TO REDEVELOP
- RESIDENTIAL
- RESIDENTIAL MIXED-USE
- OFFICE MIXED-USE
- COMMERCIAL
- LIGHT INDUSTRIAL / MAKER SPACE
- COMMUNITY FACILITY
- PARKING
- OPEN SPACE

PLACEMAKING OPPORTUNITIES

- 1** FIRST & AMERICAN PLAZA
- 2** TROUT CREEK COMMONS



FIRST & AMERICAN STATION

PLACE MAKING OPPORTUNITIES

1 FIRST & AMERICAN PLAZA

First and American Plaza sits in the station foreground and will include both a hard surface plaza, as well as significant areas for sustainable stormwater management. The plaza is intended to be a high-quality public open space, and a creatively designed station gateway and access point. The plaza is a combination of hardscape and softscape elements, including lighting, trees, planters, seating, and other amenities.



METROPOLITAN EXPRESS RAIL (REM), MONTREAL, QC
SOURCE: REM

2 TROUT CREEK COMMONS

Trout Creek Commons is a linear green corridor along the eastern edge of the station area. It provides for sustainable stormwater management as well as a physical buffer between existing industrial land use and future mixed-use development. The green corridor is a network of spaces - passive park areas, landscaping and trees that will beautify the station area, and a variety of green infrastructure interventions such as bioswales and areas of permeable pavement. The commons should also include a network of pedestrian connections to further link people to the places where they work, play, live, and connect to transit.



FDR PARK GOLF COURSE MEADOWS, PHILADELPHIA, PA
SOURCE: Philly Mag



BUILT FORM

Urban form and building massing at First & American Station includes multi-story buildings fronting existing and new streets, as well as new open spaces. Along these frontages, building massing includes active ground floor uses with multiple stories of office and/or residential wrapping or lining surface and structured parking. Farther from the station, multi-story massing continues and diversifies to include maker spaces or light industrial uses; this enhanced mix of uses provides transit-accessed employment opportunities. Blocks of buildings are broken up to allow for access, daylight, and visibility both to and from the station. Setbacks are designed to provide a relationship between streets and buildings that creates a comfortable, safe, walkable mixed-use zone around the station.

Building articulation, façade design, transparency, and entry features are all intended to provide human scale and to facilitate a pedestrian-oriented environment around the station area. New mixed-use developments would introduce enhanced architectural style and character around the stations. Building massing, and density are illustrated on figure 25 and designed to give the station area a walkable character and unique sense of place.

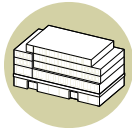


THE GRID A MIXED-USE DEVELOPMENT IN HOUSTON
SOURCE: The Houston Business Journal

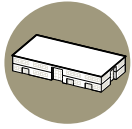
PLAN 29.
FIRST & AMERICAN STATION
BUILT FORM STRATEGY

LEGEND

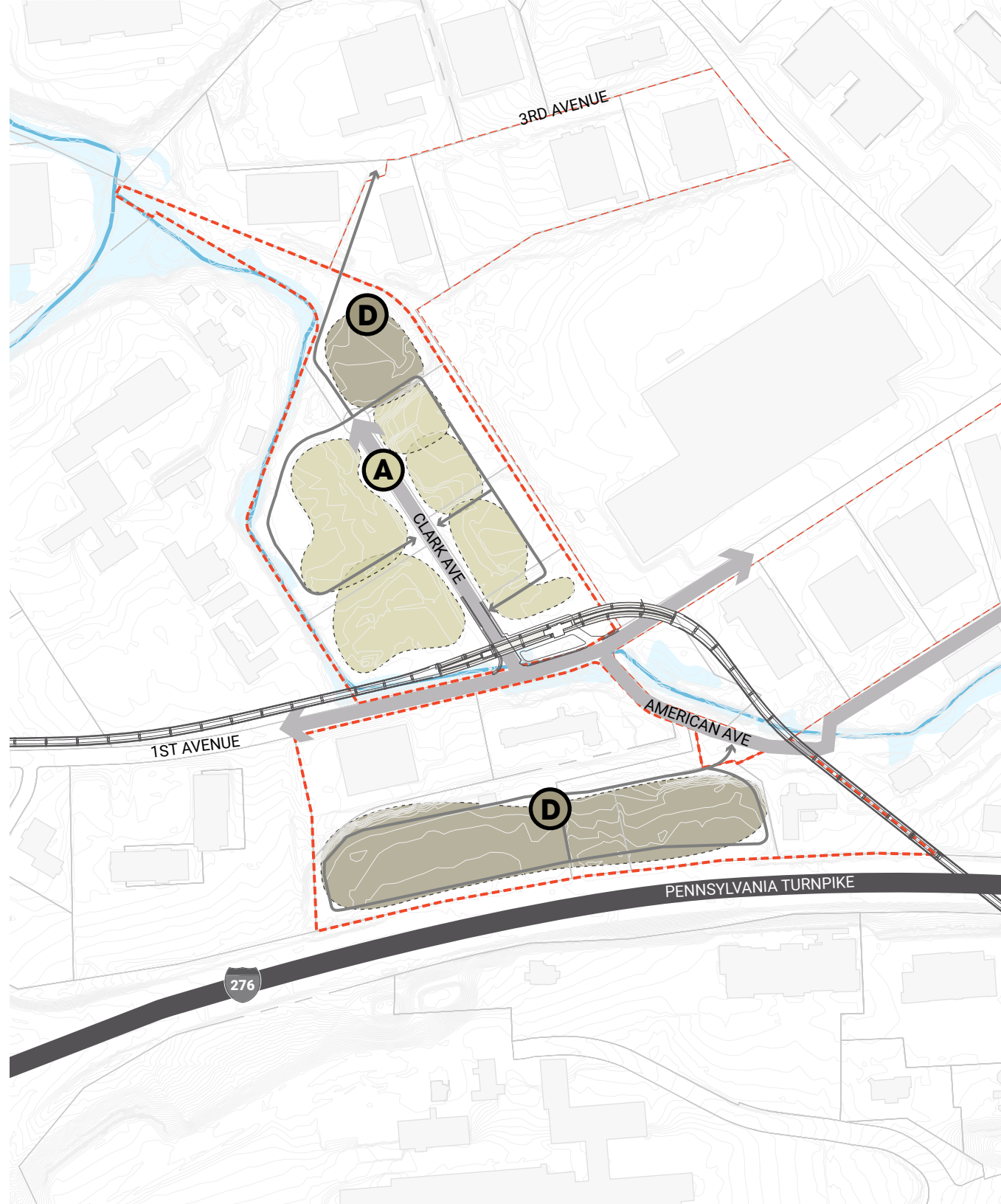
--- PARCELS LIKELY TO REDEVELOP



A: MID-RISE BUILDINGS



D: LIGHT INDUSTRIAL / MAKER SPACE



OVERALL CONCEPT

The First & American station serves the Moore Park KOP, formerly known as the KOP business park. Following current office space trends, Moore Park KOP displays a layout that moves from more traditional suburban forms to an urban office park that gives priority to walkability, active transportation, and transit access. The First & American station area plan builds on these efforts to rebrand and revitalize the Moore Park KOP.

The concept outlines street improvements along Clark and American Aves, and at their intersections with First Ave where a multimodal linear park is proposed and under construction. Clark Ave could potentially be extended to 3rd Ave creating more connectivity in the district. Traffic calming measures will be introduced to First Ave and new high visibility crossings will be added at the intersection of First Ave with American and Clark Aves. Development in the area aims to create a mixed-use community with residential products targeted at young professionals and people looking to downsize but stay within their community as well as integrated retail and maker space.

POTENTIAL BUILD-OUT

NEAR-TERM (0-10 YEARS)	No near-term development
MID-TERM (10-20 YEARS)	Residential: 400-500 units Retail: 80,000-100,000 sq ft Office: 90,000-120,000 sq ft Light Industrial: 300,000-400,000 sq ft
LONG-TERM (20+ YEARS)	Market demand

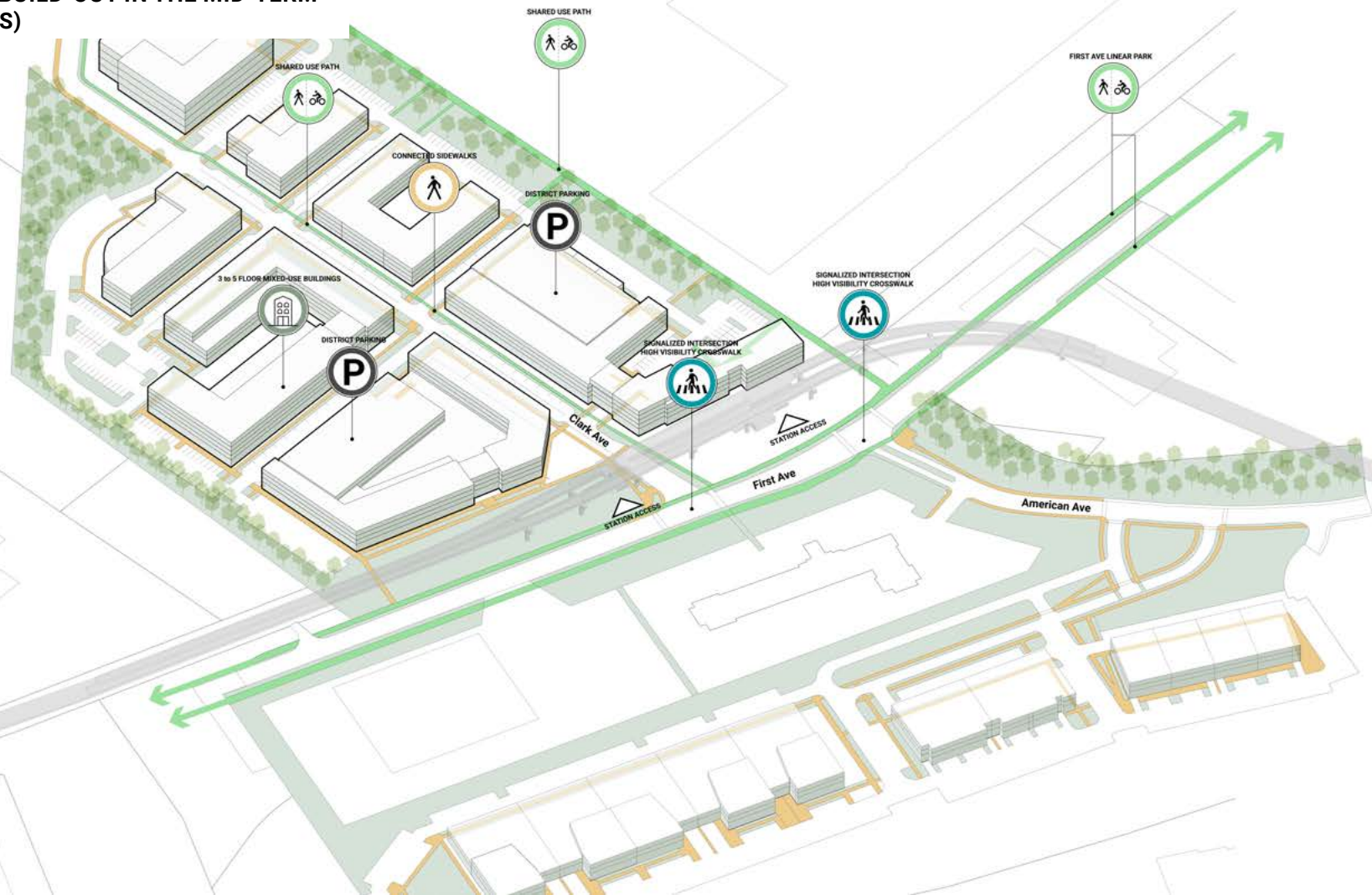
KEY PRIORITY IMPROVEMENTS IN THE NEAR-TERM

- 1 CLARK AVE IMPROVEMENTS & EXTENSION
 - › Shared use path
 - › Sidewalk
 - › Tree planting
 - › Street lighting
 - › Urban furniture
- 2 AMERICAN AVE
 - › Sidewalks
 - › Bike lane
 - › Tree planting
 - › Lighting
 - › Urban furniture
- 3 INTERSECTION IMPROVEMENTS
 - › First Ave / Clark Ave intersection
 - › First Ave / American Ave intersection

➔ **\$2.3 M to \$2.8 M**

FIGURE 12

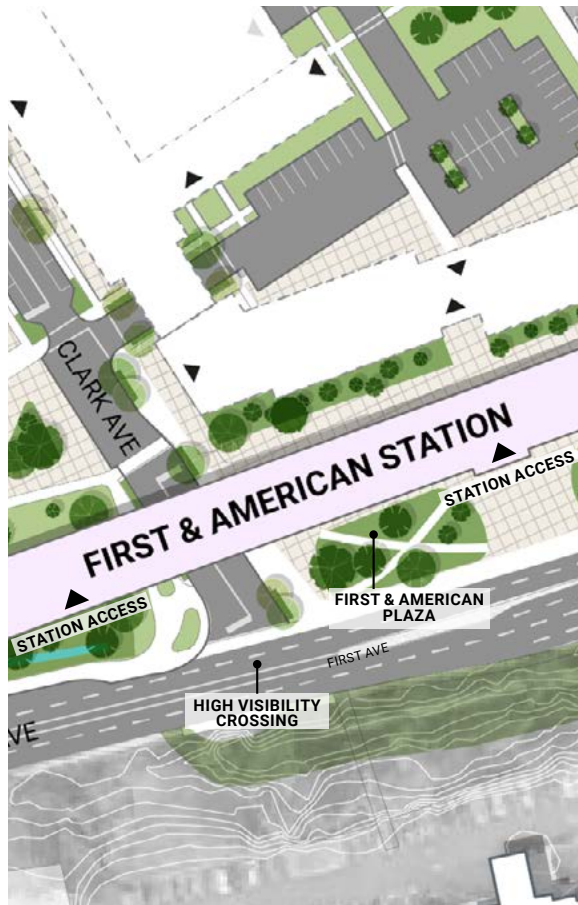
**FIRST & AMERICAN STATION AREA
POTENTIAL BUILD-OUT IN THE MID-TERM
(10-20 YEARS)**



FIRST & AMERICAN STATION

DETAILED PLAN

PLAN 30.
FIRST & AMERICAN STATION
SITE PLAN



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3. FIRST & MOORE STATION STATION AREA PLAN APPROACH



MOBILITY

The mobility network surrounding First and Moore Station will be organized around First Ave and Moore Rd as the main streets, with a shared-use path on the sides adjacent to the station. New streets will be added to create a more linear, logical street grid with access to the station and new development. The station is also designed with a central courtyard that will serve as a connection for people walking and biking, as well as space for placemaking and outdoor activities. To the north of the station, shared use path is also proposed to run along Trout Creek as a connection to Valley Forge Park and other natural resources.

First Ave will have a linear park on both sides, including a 10-foot shared-use path. This will connect to the other segments of First Ave linear park that are planned and completed. The improvements along First Ave and Trout Creek will connect users toward Valley Forge Park, an immense asset that draws recreational bicyclists. Moore Road is proposed with new shared use path, sidewalk, landscape buffers, and café/activity zones to invite building users into the streetscape.

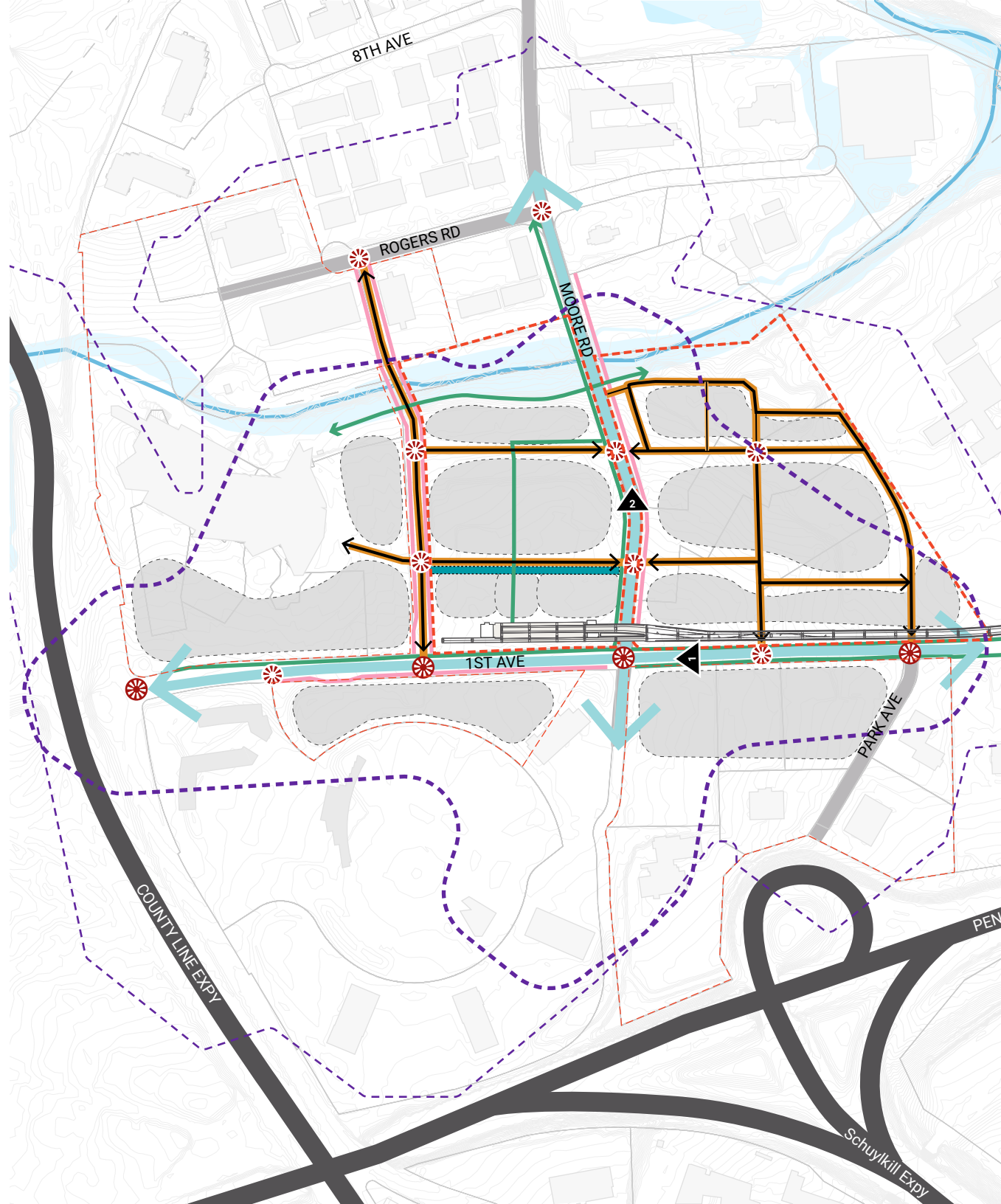
PLAN 31.
FIRST & MOORE STATION
 MOBILITY STRATEGY

LEGEND

- PARCELS LIKELY TO REDEVELOP
- 5-10 MIN WALKSHEDS
- PENNSYLVANIA TURNPIKE
- EXISTING STREETS
- 1ST AVE & CLARK AVE- PRIORITY ACCESS CORRIDORS
- PROPOSED STREETS
- PROPOSED PRIVATE LANES
- PARKING STRUCTURES
- SURFACE PARKING
- SIDEWALK (NEW AND/OR ENHANCED)
- SHARED USE PATH
- BIKE LANE
- RECOMMENDED BUS STOPS & CONNECTIONS
- ⊗ INTERSECTION: TRAFFIC LIGHT
- ⊗ INTERSECTION: STOP SIGN

CROSS-SECTIONS

- ▲ 1 1ST AVE - CROSS SECTION
- ▲ 2 MOORE RD - CROSS SECTION



FIRST & MOORE STATION

1

1ST AVE IMPROVEMENTS

First Ave is the priority access corridor for this station. The proposed cross section for First Ave shows continued implementation of the linear park, with 10-foot shared use path with asphalt surface and dashed centerline striping on both sides. The roadway configuration remains as-is, with three westbound lanes and two eastbound lanes. Because the shared use paths will encroach into private land, they should be implemented in partnership with property owners.

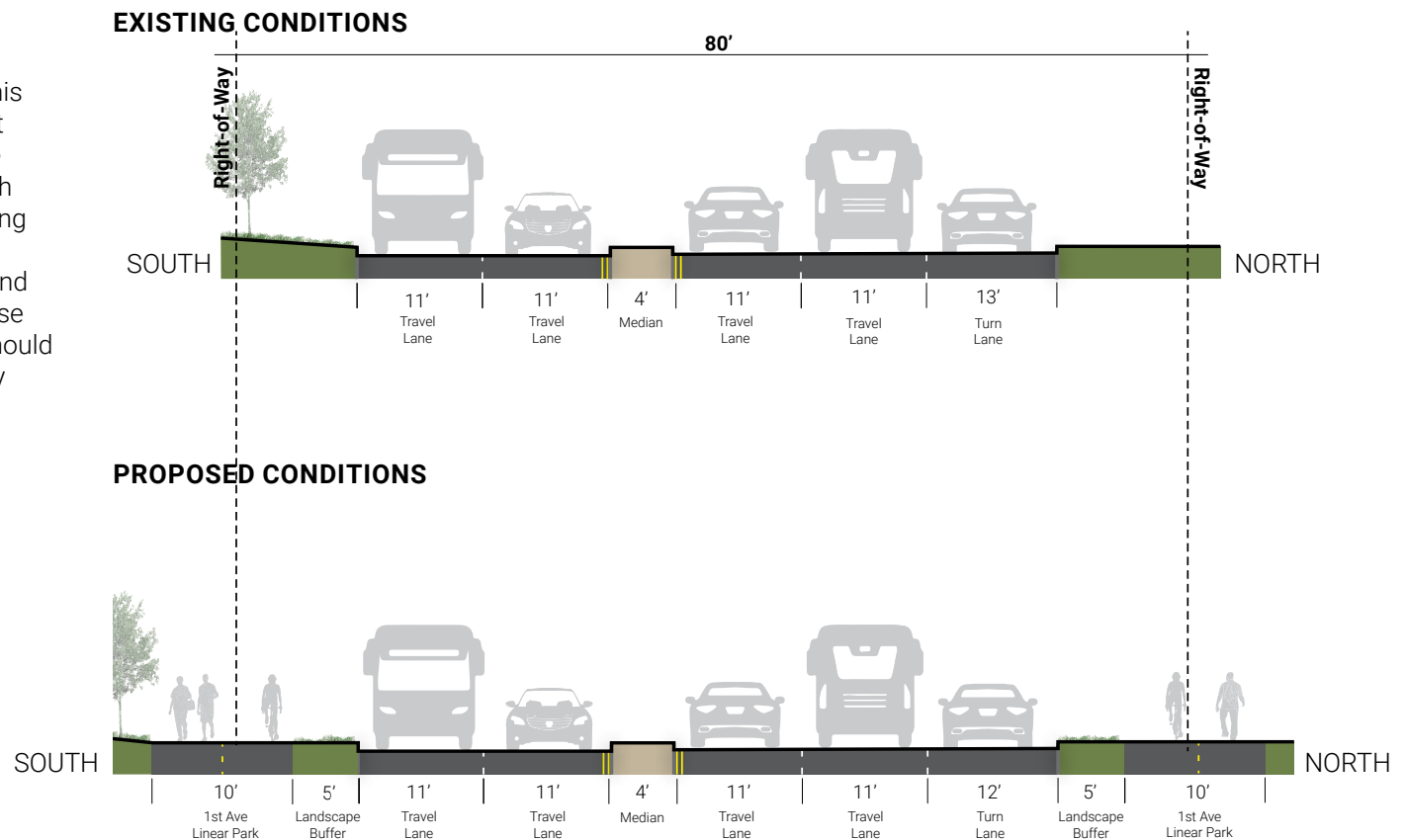
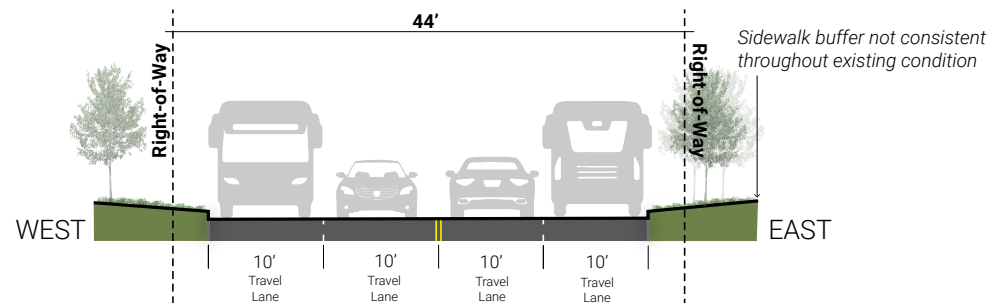


FIGURE 13
FIRST AVE CROSS SECTIONS

2 MOORE RD IMPROVEMENTS

Moore Rd is proposed to have redevelopment on both sides, with entrances and activity oriented toward the streetscape. A 10-foot café/activity zone is proposed on both sides in front of the buildings to provide outdoor space for the businesses without encroaching into the walking and biking zones. On the west side of Moore Rd, the proposed cross-section shows a 10-foot shared-use path, designed with an asphalt surface and dashed centerline to match First Ave improvements, and a 5-foot landscape buffer between the path and the road. This shared-use path will connect to the station platform and should be a priority for support infrastructure like wayfinding signage and lighting.

EXISTING CONDITIONS



PROPOSED CONDITIONS

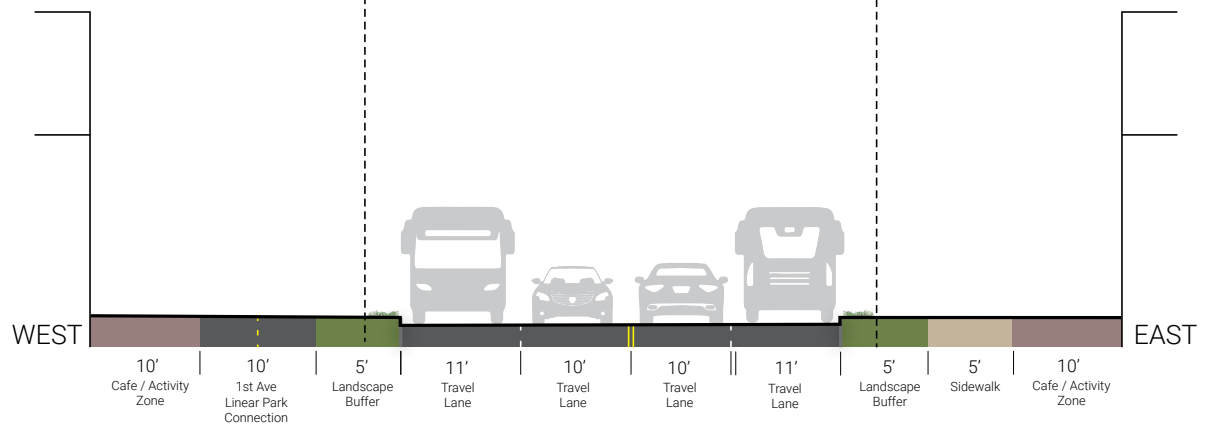


FIGURE 14
MOORE RD CROSS SECTIONS



LAND USE

The land use approach for the First and Moore Station area proposes a complete transformation of the station area site and surrounding parcels into a mixed-use live, work, entertainment, and hospitality district. The concept plan repositions existing low-rise, lower density development and existing mid-rise office into higher intensity mixed-use development around the station.

This transformation is facilitated by increasing community recreation and open space, and increasing connectivity to regional assets such as Valley Forge National Historical Park and the Schuylkill River trail via a future Moore Road linear park. This dual emphasis on increased density and recreational connectivity contributes to the station as a landmark destination, and a model transit village.

Existing land use within the station area is mixed-use. Uses include office, entertainment, hotel, retail, sports and recreation (Topgolf), commercial, parking and open space.

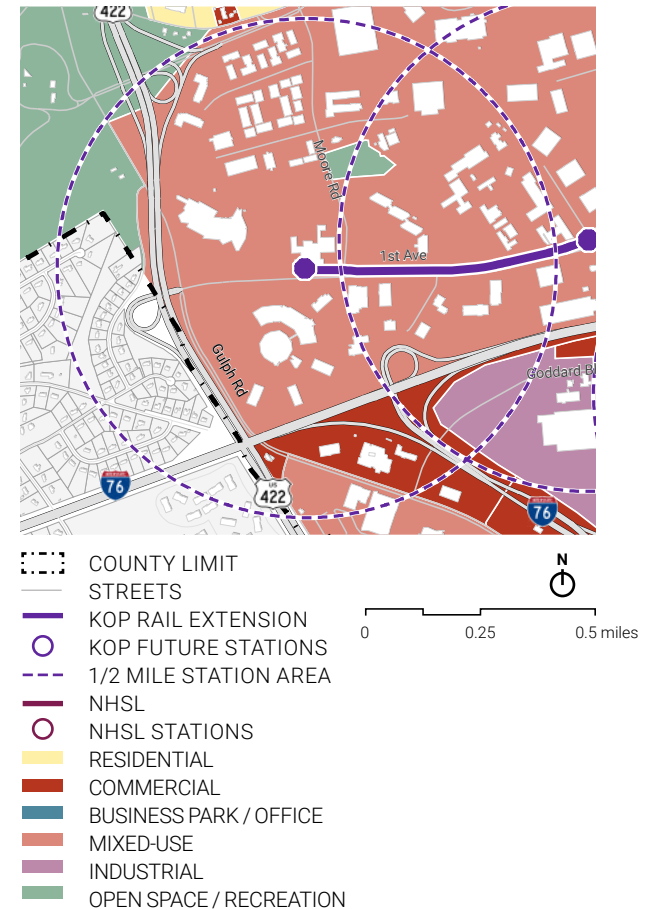
The proposed mix of uses range from residential and residential mixed-use to office mixed-use, commercial, new community open space, and combination of on-street, surface, and structured parking.

Future land-use and density illustrated in the concept plan would likely be permitted under current King of Prussia Mixed-use District (KPMU) zoning, with two exceptions: setback requirements would require a variance and the proposed height of the two towers - while not prohibited - would not be a use-by-right.

The plan also expands community open space by introducing a new community plaza in front of the station (Moore Plaza); this new space will provide early-phase transit amenity and set the stage for future redevelopment to the north of the station. The northern portion of the redevelopment area is laid out to allow views along the naturalized areas adjacent to Trout Creek and envisions connectivity to the Moore – Irwin House & Open Space. Also central to the first phase of redevelopment is another new community open space (Trout Lawn) providing a center of activity for Moore Park. Similar to the First and American station, new active and passive open spaces underneath the rail create new types of open spaces for the community and connect directly to the First Avenue Linear Park being implemented by the King of Prussia District.

PLAN 32.

FIRST & MOORE STATION EXISTING ZONING



PLAN 33.

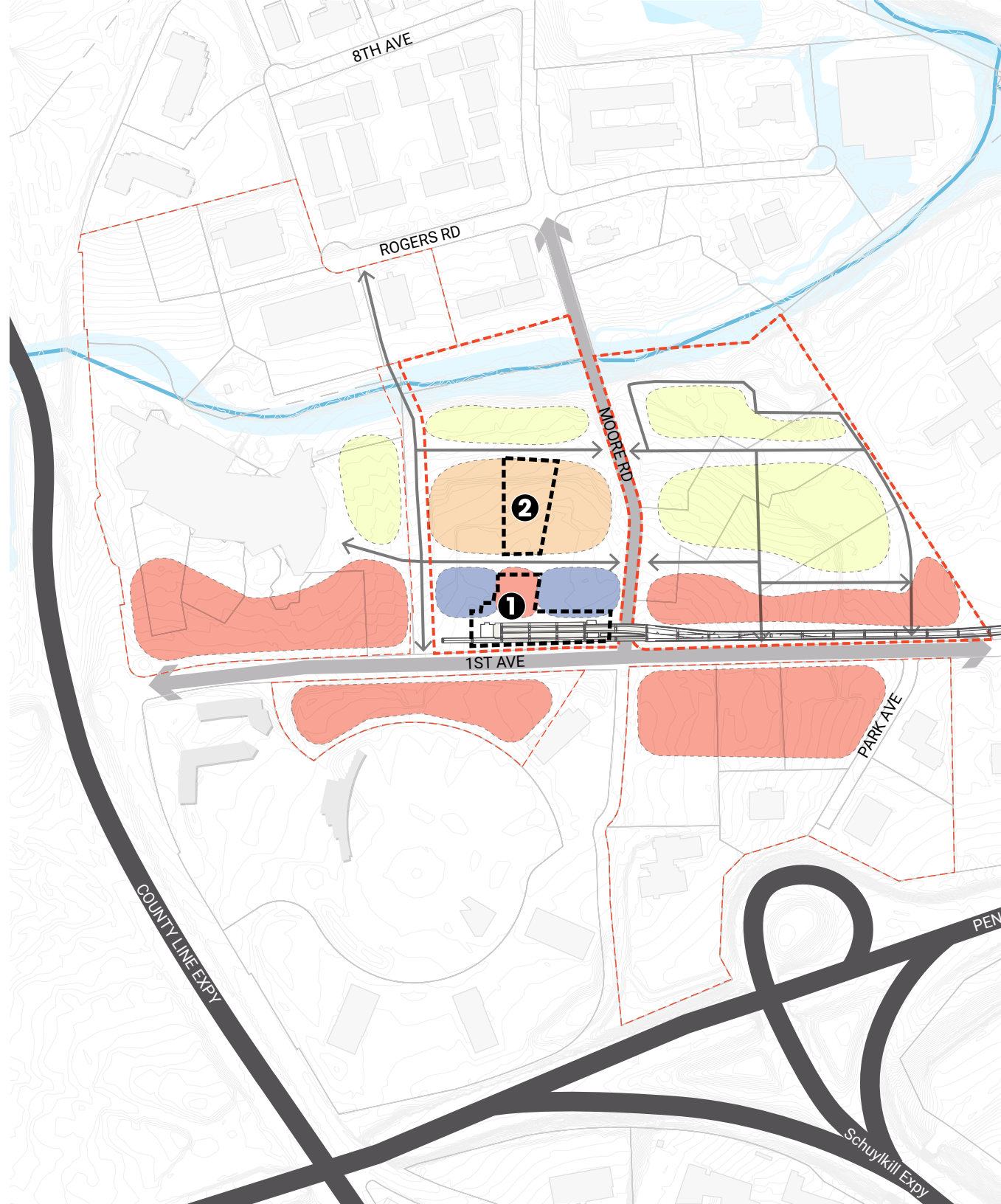
FIRST & MOORE STATION LAND USE STRATEGY

LEGEND

- PARCELS LIKELY TO REDEVELOP
- RESIDENTIAL
- RESIDENTIAL MIXED-USE
- OFFICE MIXED-USE
- COMMERCIAL
- LIGHT INDUSTRIAL / MAKER SPACE
- COMMUNITY FACILITY
- PARKING
- OPEN SPACE

PLACEMAKING OPPORTUNITIES

- ① MOORE PLAZA
- ② MOORE LAWN



FIRST & MOORE STATION

PLACE MAKING OPPORTUNITIES

1 MOORE PLAZA

Moore Plaza will be a modern, urban plaza connecting the terminal station to new development around the First and Moore Station. The ground-level plaza is a combination of hardscape and softscape elements, including lighting, trees, planters, seating, and other amenities. The Plaza offers potential to become a world-class front door for KOP Rail, as well as a gathering place and an attractive hub for for intermodal transfer. A café and canopy structures add activation to the plaza and create opportunities for outdoor and seasonal events.



LINCOLN YARDS STATION - CHICAGO, IL
SOURCE: Archdaily

2 MOORE LAWN

Moore Lawn will be a modern open space offering a variety of passive and active areas, including the opportunity for year-round event programming. The lawn acts a north-south spine connecting the station with adjacent development, and could include features such as a small amphitheater, an open lawn, and a splash pad.



GREENWAY - BOSTON, MA
SOURCE: Rose Kennedy Greenway Organization



BUILT FORM

Urban form and building massing at the First and Moore Station includes multi-story buildings fronting existing and new streets, as well as new open spaces. Along these frontages, building massing includes active ground floor uses with multiple stories of office and/or residential wrapping or lining surface and structured parking.

Two residential towers combine with townhomes/stacked flats and accessory dwelling units (ADU's) to diversify housing choices in the station area. Two single-use office buildings welcome alighting passengers and frame views to Moore Plaza and the Trout Lawn. Throughout the development, development blocks are broken up to allow for access, daylight, and visibility both to and from the station. Setbacks are designed to provide a relationship between streets and buildings that creates a comfortable, safe, walkable mixed-use zone around the station.

Building articulation, façade design, transparency, and entry features are all intended to respond to human scale and to facilitate a pedestrian-oriented environment around the station area.



ASSEMBLY ROW IN SOMMERVILLE, MA
SOURCE: DM Associates

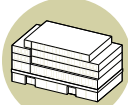
New mixed-use developments would introduce enhanced architectural style and character around the stations. Building massing, and

density are illustrated on figure 29 and designed to give the station area a walkable character and unique sense of place.

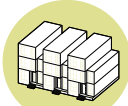
PLAN 34.
FIRST & MOORE STATION
BUILT FORM STRATEGY

LEGEND

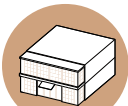
--- PARCELS LIKELY TO REDEVELOP



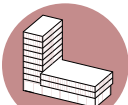
A: MID-RISE BUILDINGS



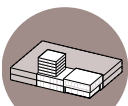
B: TOWNHOMES OR STACKED
FLATS + ADUS



C: MAIN STREET COMMERCIAL



F: TOWER BUILDING



G: ENTERTAINMENT VENUE



OVERALL CONCEPT

The First and Moore station area plan will continue the urban transformation begun with the rebranding of Moore Park KOP. New development will focus on promoting a pedestrian- and transit-friendly business park oriented toward a reconfigured First Ave.

This station area is the most likely opportunity for near-term joint development, particularly the station block itself. This terminal station will include an east-west busway, allowing easy transfers between the future KOP rail line and SEPTA buses. The concept suggests mixed-use office buildings immediately adjacent to the station and mixed-use at the back of the block with residential towers. First and Moore represents a particularly attractive development opportunity due to its placemaking potential, where plazas and gardens could be anchor the development area and connect to Trout Creek natural area.

Overall, the concept aims to create a mixed-use entertainment district with a variety of office and residential products.

POTENTIAL BUILD-OUT

NEAR-TERM (0-10 YEARS)

Retail: **50,000-70,000 sq ft**
Office: **150,000-250,000 sq ft**

MID-TERM (10-20 YEARS)

Residential: **900-1,200 units**
Retail + entertainment + hospitality :
150,000-200,000 sq ft
Office: **250,000-350,000 sq ft**

LONG-TERM (20+ YEARS)

Residential: **900-1,200 units**
Retail + entertainment + hospitality :
150,000-200,000 sq ft
Office: **250,000-350,000 sq ft**

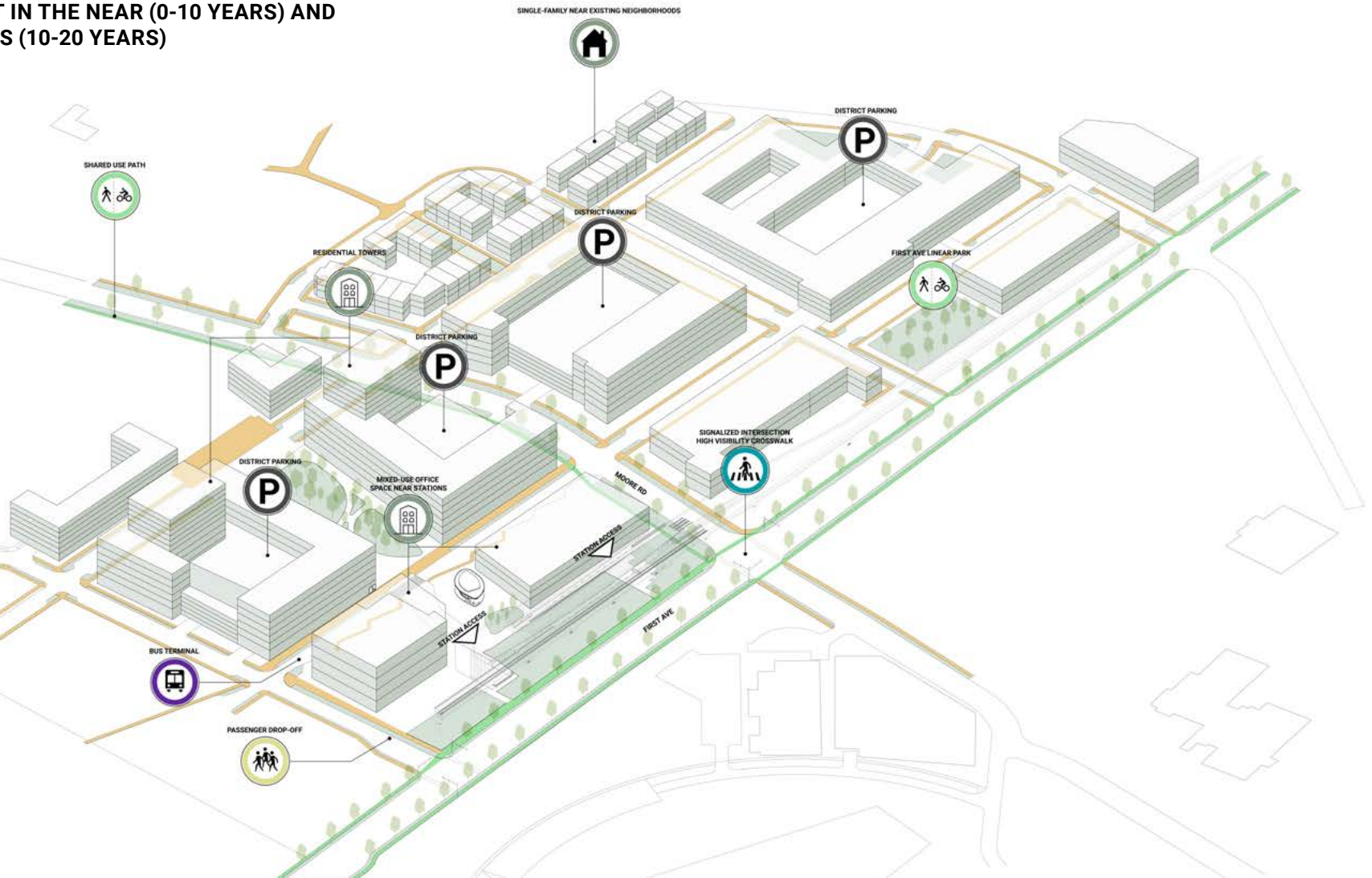
KEY PRIORITY IMPROVEMENTS IN THE NEAR-TERM

- 1** MOORE RD IMPROVEMENTS
 - › Shared use path
 - › Sidewalk
 - › Tree planting
 - › Street lighting
 - › Urban furniture
- 2** INTERSECTION IMPROVEMENTS
 - › First Ave / Moore Ave intersection
 - › First Ave / New street for bus loops

➔ **\$1.4M to \$1.7M**

FIGURE 15

**FIRST & MOORE STATION AREA POTENTIAL
BUILD-OUT IN THE NEAR (0-10 YEARS) AND
MID-TERMS (10-20 YEARS)**





FIRST & MOORE STATION

DETAILED
PLAN

PLAN 35.
FIRST & MOORE STATION
SITE PLAN

Render Point of View **X**

PASSENGER
DROP-OFF
AREA

3

2

1

FIRST & MOORE STATION

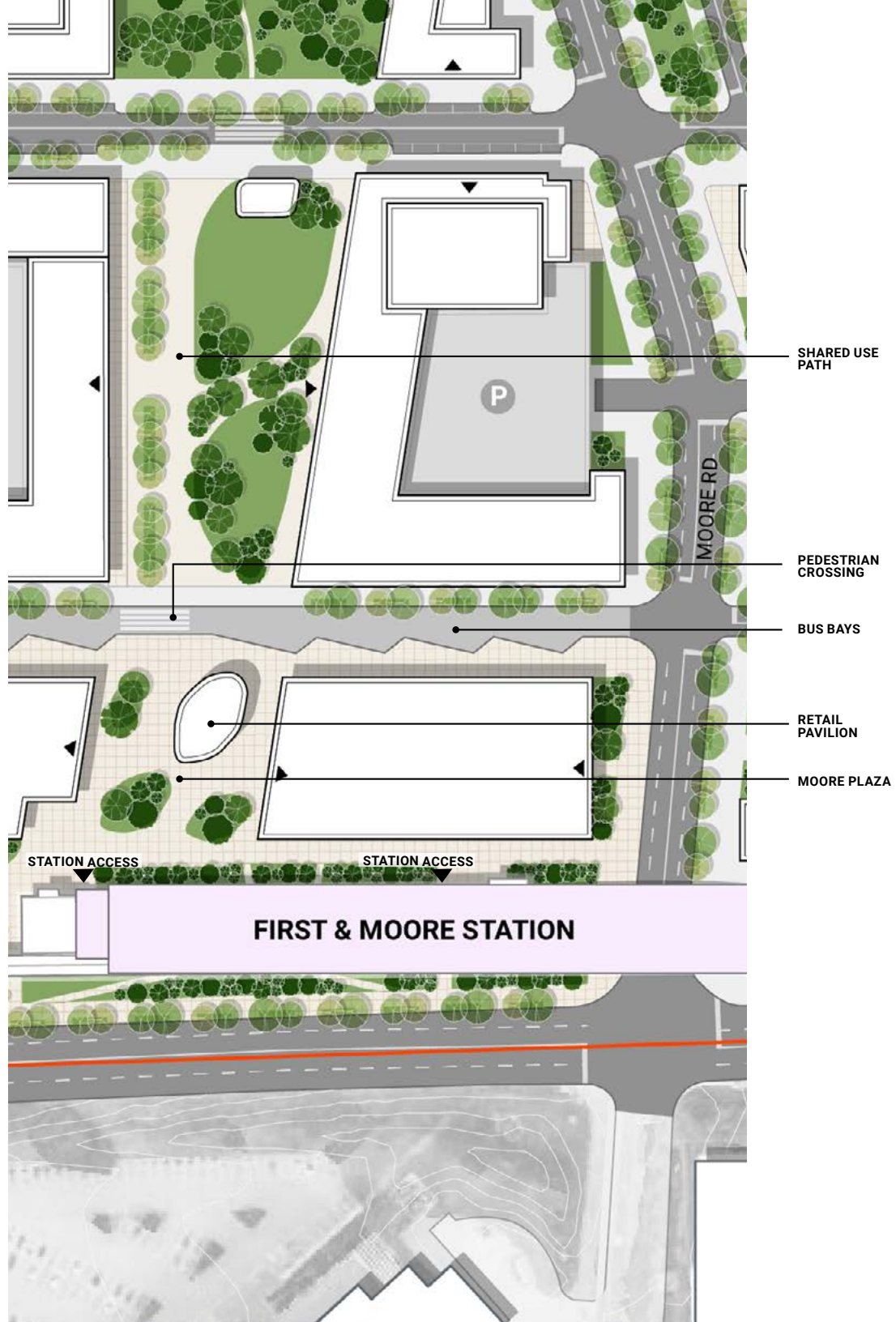
MOORE RD.

FIRST AVE

FREEDOM
BUSINESS
CENTER

AMERICAN
BAPTIST
HOME
MISSION
SOCIETIES

650 PARK





1 FIGURE 16
RENDERING OF MOORE PLAZA AND LAWN LOOKING SOUTH



2 FIGURE 17
RENDERING OF MOORE PLAZA AND LAWN LOOKING NORTHEAST



3

FIGURE 18
OVERALL STATION AREA AERIAL RENDERING FROM FIRST AVENUE LOOKING NORTHEAST



7. **CONCLUSION**



CONCLUSIONS

The aim of the KOP Transit-Oriented Community (TOC) Plan is to provide insight pertaining to the potential opportunity to provide more walkable, connected communities around the future KOP Rail extension. This plan does not promise any specific development, nor does it act as a regulatory document. It does analyze, however, the following elements:

- › The integration of stations into existing neighborhood contexts to maximize TOC potential and support future KOP rail ridership
- › High-level recommendations for first- and last-mile improvements in station areas

Accomplishing this Plan's recommendations relies on two main elements:



IMPLEMENTATION

The vision and guiding principles of this Plan aim to establish a pathway to implementation. Target setting is useful, especially when the market study demonstrates a continual rise of real estate pressure in Upper Merion Township and King of Prussia area that could be focused around each station area. Additionally, as the market evolves in the next 20 years, identifying these targets by establishing levels of development intensity and land use mix that can be absorbed is essential to Upper Merion Township as it updates regulations to align with transit and transit-oriented community strategies.



PHASING

Because this Plan's recommendations could be time and resource intensive, a phased approach should be adopted to ensure long-term success. The integration of stations with a TOC context and first- and last-mile improvements could be scheduled based on priority and resource availability. First- and last-mile improvements, for instance, are high priority and could be accomplished in the short-term horizon while new transit-focused development could be achieved gradually and subject to readiness for development and land availability. This Plan highlights some of those possibilities but requires continued collaboration and refinement before, during and after construction of the KOP rail extension.

CONCLUSION

The KOP Rail extension has a unique potential for both preserving a community character highly regarded while anticipating the evolution of spaces near station areas that would be likely to redevelop over time based on the history of land development and natural evolution of communities like KOP. This TOC plan helps build a continue foundation of consideration and vision and should serve as a guide for future development in and around each station area.

NEXT STEPS

1. Federal Transit Administration entry into engineering through the New Starts Program
2. Final design of the KOP Rail culminating in construction plans
3. Continued consultation with the local community on TOC implementation
4. Construction and operation of the new rail line concurrently to first and last mile improvement and TOC development.

