





Valley Township W. Lincoln Highway Corridor Master Plan

Prepared by:

Pennoni

Christiana Executive Campus 121 Continental Drive, Suite 207 Newark, DE 19713 Prepared for:

Valley Township

1145 W. Lincoln Highway Coatesville, PA 19320

December 2023



Acknowledgments

Valley Township Board of Supervisors

Patrice Proctor, Chairwoman Kathy O'Doherty, Vice-Chairwoman Casey Leidy Sharon Yates Linda Baugher

Task Force

Jim Druecker

Glenn Eckman

Casey Leidy

Kris Lenhart

Dr. Stephanie McGann

Janis Rambo

Greg Vietri

Samuel Young Jr.

Jamie Magaziner, Pennoni Associates

Michael Ellis, PE, Pennoni Associates

Other Consultation

Thomas Comitta Associates, Inc.

Mark Gallant, Chester County Planning Commission



This study is financed in part by a grant from Chester County's Vision Partnership Grant Program.

Valley Township W. Lincoln Highway Corridor Master Plan

Table of Contents

| Chapter 1: Executive Summary | 5 |
|---|----|
| Chapter 2: Background and Existing Conditions | 6 |
| Chapter 3: Key Issues and Opportunities | 28 |
| Chapter 4: Vison and Goals | 29 |
| Chapter 5: Recommendations: Goals & Actions | 34 |
| Chapter 6: Implementation – Achieving the Vision for the Corridor | 51 |
| APPENDICES: | |
| A: Lighting Specifications | 65 |
| 3: Concept Plan | 70 |

Chapter 1

Executive Summary

The W. Lincoln Highway Corridor Master Plan was completed in order to provide a guide for the future of the corridor within Valley Township. It was funded through Chester County's Vision Partnership grant program. Collaboration with a Task Force comprised of Township officials and stakeholders, along with coordination with PennDOT, took place between 2021 and 2023. A public involvement session was held in February of 2023 to present the recommendations of the plan and receive any feedback the public may have.

The plan took into consideration the many land developments and local transportation projects that impact the area. For the purpose of determining major issues and providing recommendations, the corridor was broken into three character areas which made up the western, central, and eastern areas of W. Lincoln Highway. The first character area at the western edge of the Township, is characterized by the presence of the airport and the concentration of industrial and commercial uses located there. Character Area 2 is characterized by less commercial uses but does contain a small number of businesses. Finally, Character Area 3 represent the eastern edge of the Township, with more residential uses and a different level of density along the corridor. Goals and associated actions were applied to the entire corridor as well as to each individual character area. Overall recommendations resulted from shared characteristics along the corridor, while individual actions were a result of unique characteristics of each area.

Through work with the Task Force and public input, issues and opportunities along the corridor were discussed. These issues helped to guide recommendations for the corridor overall and each individual character area. The overall issues could be grouped into three categories: Safety Improvements, Beautification Enhancements, and Access Management. These covered mitigation efforts related to congestion and issues with the transportation and pedestrian network, streetscaping and landscaping efforts to improve the pedestrian experience and provide traffic calming, and reduction of driver, pedestrian, and cyclist conflicts by creating a plan for reducing the number of driveways along the corridor.

The intent of this plan is to provide a guide for projects that can be implemented to mitigate issues that the corridor faces and how to improve conditions for drivers and pedestrians. The implementation section of this plan serves to show how projects may be prioritized, how long term they may be, what their cost range is, and what potential funding sources are available to get projects in place. Shorter term projects may be more affordable and have less of an overall impact, but they can help to get the ball rolling and obtain further funding down the line.

Chapter 2

Background and Existing Conditions

Introduction and Study Area

Valley Township is located 46 miles west of Philadelphia and is situated between the City of Coatesville and Sadsbury Townships. These municipalities are connected via W. Lincoln Highway, which continues to the east and turns into Lancaster Avenue. It is a vital corridor for the region which is why improvements to this route are important for Valley Township and

surrounding areas. There are many significant transportation projects proposed in the area that will directly impact Valley Township. This also supports the importance of putting this plan in place at this time. The Township is characterized by industrial uses tucked back away from the corridor, some commercial, office, scattered and residential uses fronting directly on W. Lincoln Highway along with the Township Building and Rainbow Elementary, and the Chester County Airport. The area is prime for development and redevelopment as seen in the recent land development activity in the Township.



Photo 1. View of the Corridor

Character Areas

The corridor was evaluated and broken up into three character areas in order to determine the most appropriate recommendations for each area.

Character Area 1 is the Business Center Zone and is bound by the western edge of the Township to the small commercial center in which Venice Pizza & Pasta is located, just before Washington Avenue. It is characterized by the airport and industrial development to the south of the airport, the Airport Village Shopping Center, Township Municipal Complex, and additional planned mixed-use, commercial, and industrial development.

Character Area 2 is the Main Street Downtown Zone and continues from Venice Pizza and Pasta to Front Street. It is the central core of the corridor, has a mix of uses, and the most potential of the three areas to replicate a suburban main street area.

Character Area 3 continues from Front Street to the eastern edge of the township near Old Lincoln Highway. The characteristics of this area are different from the other two, with a curve in the road, steep slopes, and less available area at the edge of the roadway. Character Area 3 is called the Well Established Eastern Edge for the purposes of this plan.



Figure 1. Character Areas

Population and Employment

Valley Township has a population of approximately 7,985 people. Based on DVRPC's population forecast, Valley Township will grow by 1,784 people between 2025 and 2045. This is a percent change of 20.4%, compared to Chester County's forecasted population growth of 16%. While this is not the highest population growth rate compared to other suburban municipalities, the Township will need to prepare for the increase in use of the transportation network as well as community facilities.

| Population Forecast | | | | |
|---------------------|--------|--|--|--|
| Year of | Total | | | |
| Forecast | | | | |
| 2025 | 8,740 | | | |
| 2030 | 9,301 | | | |
| 2035 | 9,787 | | | |
| 2040 | 10,186 | | | |
| 2045 | 10,524 | | | |
| Source: DVRPC | | | | |

Table 1. Population Forecast for Valley Township

Based on DVRPC's municipal-level employment forecasts, Valley will potentially see an absolute increase in employment of 634 people, which is a percent change of approximately 26% over the 20-year period between 2025 and 2045. This may not seem like a high number of new workforce but based on the total number of workers in the Township, this will make a significant impact. For reference, Chester County overall is expected to experience a 15% employment growth between 2025 and 2045. This growth should be accounted for when planning for the future of the W. Lincoln Highway corridor.

| Employment Forecast | | | | |
|----------------------------|-------|--|--|--|
| Year of | Total | | | |
| Forecast | | | | |
| 2025 | 2,440 | | | |
| 2030 | 2,633 | | | |
| 2035 | 2,787 | | | |
| 2040 | 2,915 | | | |
| 2045 | 3,074 | | | |
| Source: DVRPC | | | | |

Table 2. DVRPC Employment Forecast for Valley Township

Land Use

Valley Township overall has a healthy mix of residential, industrial, and wooded land use. Commercial uses are fewer and are generally scattered along W. Lincoln Highway. This being said, commercial land developments are on the horizon and will continue to redevelop underutilized parcels along the highway. Some institutional uses, such as Rainbow Elementary School are along the corridor as well. Residential and undeveloped lots are scattered in between these other uses, while transportation uses such as the airport and industrial uses are located slightly back from the corridor, where they do not have existing building frontage.

The existing land use and knowledge of land development proposals in the Township shows that there is room for continued growth along the corridor and in certain areas throughout the rest of the Township, and this growth is expected to continue over the next decade. As this growth occurs, there will be more people utilizing the transportation network. Taking action now to implement recommendations can help to prepare the Township for future growth. Land Use in Valley Township can be seen in Figure 2.

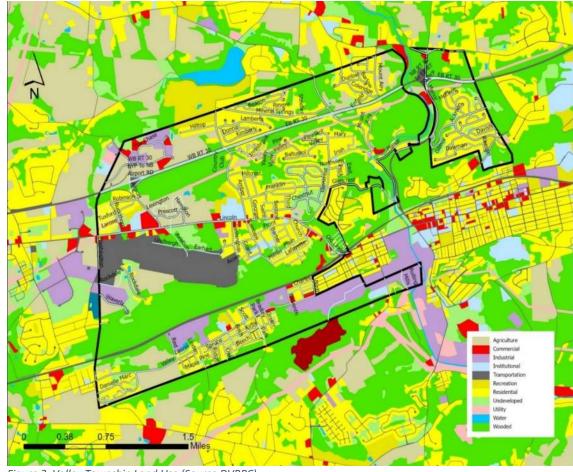


Figure 2. Valley Township Land Use (Source DVRPC)



Zoning

The Township's zoning districts can be seen in Figure 3. Understanding the zoning districts which line the W. Lincoln Highway corridor can help to provide context for future planning and development. Most zoning districts have some presence along the corridor, except for the Industrial Districts. R-1 Residential Zoning (seen in yellow on the map in Figure 3.) accommodates detached residential uses at a lower density with the possibility of cluster developments. The R-2 Residential District (seen in orange) accommodates medium-to-high density residential uses along with the possibility of cluster developments. The purpose of the Conservation (C) Zone (seen in green) is to preserve open space, provide passive and action recreation, public uses, and to provide land for single family detached dwellings.

The Regional Commercial (RC) Zone (seen in brown) is situated north of the airport on the north side of the corridor. This district permits a wide range of commercial uses including those compatible with the airport. Neighborhood Commercial Office (NCO) Zone (seen in pink) promotes new commercial development and redevelopment of existing uses into commercial uses that coexist with an overall mix of uses. The purpose of the NCO Zone is to enhance W. Lincoln Highway to create a more corridor-friendly environment that promotes business development. Highway Commercial (HC) (seen in blue) provides areas for higher-scale highway oriented retail, service, and entertainment uses. Permitted uses include offices, banks, restaurants, retail, hotels, churches, funeral homes, and medical clinics. Lastly, the Planned Development (PD) Zone (seen in dark gray), which includes but is not limited to the entire airport parcel, accommodates mixed-use employment centers through a wide range of commercial, manufacturing, service enterprises, and other uses.





Figure 3. Valley Township Zoning

Review of Existing Plans and Planning Documents

This section contains a summary of background research related to the W. Lincoln Highway Corridor Master Plan. This information is used to guide a discussion on vision, goals, recommendations, and potential planning issues that are a focus for the project.

The following documents and resources were reviewed and a summary of each and its relevance to this plan follow:

- 1. Route 30 Multimodal Transportation Study by the Western Chester County Chamber of Commerce
- 2. PennDOT's Route 30 Bypass Projects Planning and Design
- 3. DVRPC Access Management Study
- 4. Development Traffic Studies
- 5. PennDOT Speed Study
- 6. Intelligent Transportation Systems (ITS) Projects
- 7. Chester Valley Trail Feasibility Study by Chester County Planning Commission
- 8. Valley Township Open Space, Recreation, and Environmental Resources Plan (OSRER)
- 9. Chester County's Landscapes3
- 10. Crash Data and Traffic Counts (DVRPC and PennDOT)

Route 30 Multimodal Study (Western Chester County Chamber of Commerce)

The Route 30 Multimodal Transportation Study was a coordinated land use and transportation plan for the Route 30 corridor in Western Chester County. The project was supported by funding from the Delaware Valley Regional Planning Commission (DVRPC), Chester County, several sponsor municipalities (Caln Township, City of Coatesville, Sadsbury Township, West Sadsbury Township, and Valley Township), and other project partners. The study focused on identifying transportation and land use recommendations for six US 30 Bypass Interchange Areas between US 322 and PA 10, W. Lincoln Highway (Business Route 30) between Lloyd Avenue and the Chester/Lancaster County boundary, and extension of the Chester Valley Trail and regional trail connections.

This study includes a review of existing conditions (roadways and intersections, land use and zoning) and ongoing and future transportation projects. The corridor is broken down into seven areas (three of which include portions of Valley Township) and the study includes recommendations and implementation strategies for each of these areas, which are



established using location and characteristics. A review of the transportation work that has been performed and the remaining goals to accomplish can inform the recommendations and implementation plan in this Corridor Plan.

The study concluded that the main issues along the corridor include: the need for sidewalk improvements and connections, bicycle facilities and amenities, public transportation improvements and amenities, access management, roadway maintenance and improvements, and economic development in accordance with existing zoning, land use, street conditions, and appropriateness for the corridor.

The Route 30 Multimodal Study contains an extensive evaluation of the conditions of the corridor today, the main issues of the corridor, a vision for different segments of Route 30, and recommendations and implementation strategies. All of these can assist us in our Master Plan process and some of these are outlined below.

This study was prepared in 2014 via a Transportation and Community Development (TCDI) grant through DVRPC and Vision Partnership Program (VPP) grant to develop "coordinated multimodal transportation and future land use plan for the Route 30 corridor" with one of the three focus areas of the study being the US 30 Bypass Interchange area. Business Route 30, also known as Lincoln Highway, was the nation's first toll road with some segments built in the late 1700s. This road remains the main street or commercial corridor for many communities within the study area with (at the time of the study) 7,900-14,000 vehicles per day utilizing the road. Significant gaps and deficiencies in infrastructure for bicyclists, pedestrians, and transit riders were noted.

Project Purpose and Focus

Business Route 30 parallels US 30 Bypass and serves as a "Main Street" or commercial corridor for the study area. It provides access to local and regional transit services. Goals in the study for this area include reducing congestion, improving safety, enhancing facilities for non-motorized and public transportation, and supporting economic development.

The study recommended that Valley Township should ensure improvements are made to Business Route 30 through coordination between PennDOT, municipalities, and other partners to serve the needs of community and region. High visibility and access to the regional highway system make this area attractive to commercial development. This can also threaten the viability of "main street" businesses along Business Route 30. There is a need to develop diverse and distinctive places along both corridors to minimize competition and maintain vibrant communities.



Top issues identified in the study for Business Route 30 include congestion and access management, signal timing and improvements at key intersections, beautification, uniformity, and consistency, establishing sense of place, walkability, and sidewalk connections, increase transit ridership and enhance bus stops, and support retail development.

Important takeaways from the study are that there is an imbalance between jobs and housing in the study area that impacts traffic congestion, commute times, and housing affordability and these issues are expected to intensify with population growth. Also, greater diversity and choices in both jobs and housing will enable people to both live and work in study area.

Recommendations were focused in three categories: corridor vision, US 30 interchanges, and the Business 30 corridor. For the Corridor Vision section, the three areas that pertain to Valley are the Airport Road area (industrial and business), Central/East Valley (Neighborhood Commercial), and Eastmost Valley (suburban mixed use). Focused goals and implementation actions are listed for each below.

Business Center Goals: The goals for the Business Center area include access management, planning for a well-connected roadway network, and to have a plan for improved access at the US 30 Bypass. Because of the high level of truck traffic accessing industrial uses in this area, a goal is to minimize conflicts between heavy vehicles and other vehicular and nonmotorized transportation. The Township should aim to support development or redevelopment of vacant or underutilized lots as well as existing and future industrial and business development.

Main Street Downtown Goals: Goals for the Main Street Downtown character area include access management as there are a high number of driveways for businesses and other uses, improving bicycle facilities, enhancements to the sidewalk and streetscape, small business development, and planning for the future use of Township-owned properties.

Well Established Eastern Edge Goals: The goals for the Character Area 3 from the study are access management, sidewalk connections, bicycle facilities, preservation of areas of open space, and to support development and redevelopment of vacant or underutilized lots.



Priority Projects

Priority transportation projects in the plan include completion of the US 30 Bypass/Airport Road interchange (PennDOT) with additional turning lanes and traffic control such as signalization, traffic improvements along the Airport Road corridor from Business Route 30 through the interchange to Highland Blvd, and construction of a second eastbound Business Route 30 left-turn lane at Airport Road, with a second lane to continue northbound along Airport Road and drop as a right-turn lane at the eastbound Bypass on-ramp.

Conceptual Bicycle, Pedestrian, and Transit Plan

The plan recommends continuous sidewalk along the north side of the Business Route 30 corridor, both east and west of the Airport Road intersection along with ADA-compliant pedestrian facilities and signal equipment at the intersection of Airport Road and Business Route 30, and at the intersection of Airport Road and the Airport Village Shopping Center if signalized in the future (Note: at the time of this current Corridor Plan, PennDOT has determined that this intersection will not be signalized). Sidewalk was also recommended along the east side of Airport Road from Business Route 30 to the north, connecting to a potential multi-use trail system to be provided within Township property envisioned for regional recreation. Also, the plan recommended that the Township provide expanded bus route and facilities to serve existing and future development.

PennDOT's Route 30 Bypass Planning and Design

There are several PennDOT transportation projects planned for the Route 30 Bypass extending from the west of PA 10 to just west of the Reeceville Road intersection. One of the projects directly impacts Business Route 30 within Valley Township and has informed our Master Plan:

Airport Road Project

The existing interchange of the US 30 Bypass and Airport Road provides only a partial interchange with a westbound offramp and eastbound on-ramp. The project proposes to improve connectivity for the area by completing the interchange with the addition of a westbound on-ramp and an eastbound off-ramp. The purpose of this project is to provide safe and efficient transportation system improvements by reducing future congestion, accommodating planned growth, improving facility deficiencies, and improving connectivity.



This project is intended to mitigate issues related to facility deficiencies and congestion/anticipated growth. Facility deficiencies include substandard roadway conditions, pavement in need of replacement, deteriorating and narrow/absent shoulders, deficiencies within the interchange configuration, and short ramps lacking vertical clearance.

Congestion/anticipated growth issues include congestion from inefficiency of Airport Road interchange and higher traffic volumes, congestion and delay anticipated delay. The US 30 eastbound and westbound off-ramps currently operate over capacity during certain periods of the day, resulting in congestion and driver delay.

Facility deficiencies relate to substandard roadway conditions exist throughout the project corridor. The existing pavement within the project area is approaching the end of its useful service life. The outer (right) shoulders are narrow and deteriorated. The interchange ramps have short acceleration and deceleration lengths. The westbound off-ramp has an insufficient, tight turning radii. One structure is currently insufficient in width, and one structure currently has insufficient vertical clearance.

The project improvements are planned to extend south along Airport Road from the US 30 Bypass to Business Route 30. The Business Route 30 / Airport Road intersection is proposed to be upgraded with the addition of a second eastbound left turn lane on Business Route 30 and an associated second northbound lane on Airport Road. The second northbound lane will end at the Airport Village Shopping Center access drive and Prescott Road intersection with Airport Road. Airport Road will only have one northbound travel lane from that intersection to the US 30 Bypass.

DVRPC Access Management Study

DVRPC's Access Management Case Study, prepared in 2010, addresses the emerging US 30 Corridor in West Sadsbury, Sadsbury, and Valley Townships in Chester County. In Valley Township, the study is focused on Business Route 30.

The study notes that the corridor has seen an influx of recent development, and the development trend is expected to continue. Because of this, the timing is right for the corridor's municipalities to adopt access management regulations. Implementing good access management now is much simpler than correcting poor access management practice in the future.

The study provides a conceptual access management plan for the corridor that was developed through coordination with municipal and county staff and PennDOT. In addition to providing conceptual access plans, the study provides an



assessment of the existing access management-related regulations and enabling devices and analyzes traffic safety at key intersections. All current ordinances and plans were reviewed for each municipality and where needed, recommendations to fill in regulatory gaps were presented.

The study suggests that access management ordinance regulations for Valley Township are missing several core access management regulations: a statement regarding nonconforming driveways, driveway alignment, driveway spacing, and internal access to outparcels. Likewise, the existing corner clearance regulation is insufficient for major roads. Adopting more stringent regulations in the SALDO instead of the Zoning Ordinance would allow regulations not necessary for certain geographic situations to be waived.

Goals of access management in Valley Township should include connecting Franklin Street to Airport Road, improving the Glencrest Road/Business Route 30 intersection, and continuing development in an orderly manner. Improving existing access deficiencies along Business Route 30 will be beneficial and can be accomplished during changes or expansions of use.

Township Access Management Ordinances

Valley's Zoning Ordinance and Subdivision & Land Development Ordinance were amended in 2015 and 2019 respectively to incorporate applicable recommendations of the DVRPC's access management recommendations and model ordinance provisions.

Development Traffic Studies

A traffic study was conducted for the Valley Suburban Center project, last updated in 2022 as of the time of this Plan, and traffic signal upgrades are planned by both that developer and PennDOT, including installation of video detection on the eastbound Business Route 30 left turn phase. The Airport conducted a traffic study, last updated in 2023 as of the time of this Plan, for their proposed land development, and that study recommended additional geometric revisions to the Business Route 30/Airport Road intersection, and it also identified that warrants will be met for a new traffic signal at the intersection of Business Route 30 and Walter Johnson Boulevard due to proposed developments.

Another traffic study was conducted for the JG Petrucci Land Development of Valley View Business Park Lot 8, last updated in 2022 as of the time of this Plan, and it identified that warrants are currently met for a new traffic signal at the intersection of Business Route 30 and Washington Lane.



PennDOT Speed Study

The Township requested PennDOT perform a speed study along the length of Business Route 30 that is currently 45 mph, from the western Township boundary to approximately Country Club Road, to evaluate potential reduction to 35 mph as it is to the east. PennDOT did so in 2021 and concluded that it did not warrant a speed limit reduction.

Intelligent Transportation System (ITS) Projects

At the request of Chester County and in cooperation with the Pennsylvania Department of Transportation (PennDOT), the Delaware Valley Regional Planning Commission (DVRPC) conducted a review of PennDOT's existing Intelligent Transportation Systems (ITS) for the US 30 Bypass corridor in Chester County from US 202 to PA 10. The main focus of the US 30 ITS Master Plan–Chester County (the Plan) was to identify potential locations where new ITS assets may be deployed. The Plan presents a regional vision for investment in ITS applications over the next two decades and provides strategic guidance for deployment over the coming years. The Plan was adopted in May 2016.

The Plan evaluates the area's existing conditions and ITS elements, such as closed-circuit television (CCTV) cameras, dynamic message signs (DMSs), incident and travel-time detectors, and traffic signal systems. Most of the devices that are currently deployed are located on the eastern portion of US 30 Bypass. At the time of the Plan, PennDOT did not have any ITS devices west of PA 82, which leaves their Regional Traffic Management Center (RTMC) virtually blind of any incidents occurring on the western end of US 30 Bypass unless the center is contacted by local responders. To help alleviate that situation, the Plan presents a vision of deploying additional CCTV, DMS, and detectors, as well as the fiber that will support this equipment. The W. Lincoln Highway Corridor Master Plan will account for these improvements when formulating goals and recommendations for the corridor. Some of the proposed improvements are described below.

The US 30 ITS Master Plan lists Route 82 and Airport Road as the most important arterials in the Township. Several ITS projects are recommended in the plan including approximately five CCTV projects along US 30 Bypass and Business Route 30, several DMSs, several EZ pass tag readers and remote traffic microwave sensors, and proposed fiberoptic traffic signal vision along all major roads.

Chester Valley West Feasibility Study (Chester County Planning Commission)

The Chester Valley West Feasibility Study was commissioned by the Chester County Planning Commission and adopted in December 2018. The plan reviews the existing conditions of the areas where the trail is proposed to be located along with



opportunities and constraints for its development. Trail plans will be incorporated into the Plan where goals and recommendations for non-vehicular circulation are concerned. The main takeaways from the Study pertaining to Valley Township and the W. Lincoln Highway corridor are discussed below.

The area studied in this plan included an area of 22 sq miles and 16 linear miles and included 8 municipalities in Chester County: Downingtown Borough, Caln Township, Coatesville City, **Valley Township**, Sadsbury Township, Parkesburg Borough, West Sadsbury Township, and Atglen Borough. Amtrak Keystone Corridor and SEPTA's Paoli Thorndale line, much of the US 30 Bypass, Business Route 30, and multiple population centers are located within the Chester Valley. A multiuse trail would serve many people, but land use patterns present constraints to trail development.

The purpose of the project was to identify a feasible alignment between the western terminus of the planned Chester Valley Trail (CVT) extension and the eastern terminus of the in-progress Enola Low Grade Trail at the Chester-Lancaster County line and create a Master Plan and implementation strategies for completion of recommendations. This segment would be an important regional trail connection to a planned network. CVT West is envisioned to be part of a 100+ mile trail connection between Harrisburg and Philadelphia. DCNR is considering designating this corridor as Statewide major greenway.

The plan recommends that the CVT be bounded by the Keystone Corridor to the north and Rt 372 to the south. Topography is steep on both sides, but the trail would be utilizing the flat, linear Amtrak Keystone corridor. This alignment would allow for unbroken 1.5 miles of trail. This overall trail segment would be 3.6 miles and include parts of Coatesville, Valley, and Sadsbury. Overall, this would include 2.5 miles of multiuse trail, 1 mile of split mode with existing sidewalk, and 0.2 miles of split mode with proposed sidewalk. 1.2 miles of the trail would be in the public right-of-way and 2.4 miles would be in private property.

Although the CVT is not proposed along W. Lincoln Highway, the shared-use trail proposed along W. Lincoln Highway provides a related benefit as a trail through the entirety of Valley Township, connecting the City of Coatesville to Sadsbury Township. Additionally, there may be opportunities to connect the CVT to the proposed W. Lincoln Highway trail in the future.



Valley Township Open Space, Recreation, and Environmental Resources Plan

The Valley Township Open Space, Recreation, and Environmental Resources Plan (OSRER) is a blueprint for how the Township can protect and improve its parks, recreation, open space, and environmental resources to enhance the quality of life for current and future Township residents. The plan lays out overall goals and specific objectives for the park and open space system. A map of the existing parks system is provided in Figure 4.

One of the highest priority recommendations in the plan includes the acquisition of land adjacent to the elementary school and Valley Square (aka Valley Suburban Center) property to develop active and passive recreation land and a trail system that will provide important interconnections between Township destinations. The Recreation Improvements exhibit shows the conceptual plan for this site which can be seen in Figure 5. The recommendations discussed later in this Corridor Master Plan include a shared-use path which would connect to the trails in this park plan.





These were considered when establishing the goals and recommendations for the W. Lincoln Highway Corridor Master Plan. It is of great value to tie the goals and priorities of the OSRER plan with those of the various transportation studies and the trail feasibility study to ensure that the Corridor Plan accounts for the overall vision established thus far.

The overall goals of the plan are to provide for current and future recreation needs of the community, conserve natural resources and to develop an effective implementation strategy. Some of the specific objectives in the plan to meet these goals are to provide a variety of recreation opportunities for people of all ages and interests, identify opportunities to expand walking and biking trails, identify natural and scenic areas to be protected and enhanced, examine ways that the Township can more effectively partner with outside entities to Figure 5. Proposed Park Plan provide programs and facilities for active and passive recreation, and identify funding sources to make improvements.



The Plan also summarized the park and recreation resources located in the Township. Hayti Park is a 1.5-acre neighborhood park located adjacent to the former township building, with which it shares parking. It has a playground with updated play structures, asphalt basketball court, picnic pavilion, and small lawn area. It is centrally located in the Township along Business Route 30, easily accessible, and heavily used.



The Rainbow Elementary School within Coatesville Area School District is located on W. Lincoln Highway. It is the only school from the School District in the Township. The school and its grounds are a hub of community activity and recreation. The grounds include three separate playgrounds available for public use, a little league sized baseball field, and large lawn areas utilized for youth soccer. The school allows use by residents and youth sports organizations, subject to schedule coordination and other limitations.

The main takeaway of the plan is how the park system can be expanded and how connectivity to and from can be improved through connections to existing and proposed sidewalks and trails. The Township should evaluate open space opportunities along the corridor and take an inventory of municipally owned properties. Highest priority recommendations in the plan are to partner with the School District to develop the parcel adjacent to the school for active recreation and to acquire and develop land dedicated from Valley Suburban Center property.

Consistency with Chester County's Landscape3 Plan

Chester County's Comprehensive Plan, Landscapes3, adopted in 2018, lays out the vision, goals, objectives, and related implementation for the County. Balancing preservation and growth continues to be the main goal of the plan. The following core principles are considered necessary to achieve that vision: resource protection, revitalized centers, housing diversity, transportation choices, collaboration, and resiliency. The plan is divided into protection (natural resources), appreciation (historic and cultural resources), living (housing, community facilities, parks, and recreation), prosperity (economic development), and connection (transportation systems and utilities).

The goal for connections is to "advance efficient, reliable, and innovative transportation, utility, and communications infrastructure systems that responsibly serve thriving and growing communities". Objectives for this goal include meeting travel needs and reducing congestion through roadway improvements and transportation demand management, providing universally accessible sidewalk and trail connections to create a continuous active transportation network within growth areas and connecting communities, and ensuring that highway facilities provide for a safe efficient and competitive transport of freight, goods, and people through and within the county. Landscapes 3 recognizes the importance of trails as a part of the transportation network and a critical aspect of recreation and community health.

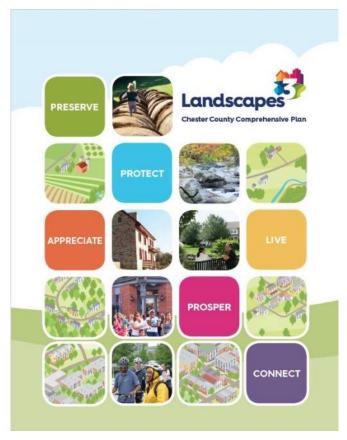


Figure 6. Chester County Landscapes 3 Plan

The Landscapes3 objectives relevant to the W. Lincoln Highway Corridor Master Plan in Valley Township are supported in this Plan. This Plan aims to provide a guide for improving roadway and pedestrian conditions through making the highway a safer and more pleasant place to drive, bike, walk, work, and live.



DVRPC Crash Data

DVRPC provides data related to crashes in the region. The data was compiled between 2015 and 2019 and is shown by location, measured by injury severity, mode of travel, and injury type. This data helps to show where the areas of major conflict and concern are along the W. Lincoln Highway corridor. Locations of conflict fall between Airport Road and Washington Lane on the western edge of the corridor. Crashes also occurred just west of Glencrest Road, and near Old Lincoln Highway at the far eastern edge of the Township. When evaluating proposed projects, goals and recommendations, these areas were considered in order to help develop a safe and efficient multimodal transportation network. There are recommendations in close proximity to each of these areas to improve visibility, calm traffic, and increase safety for drivers and pedestrians.

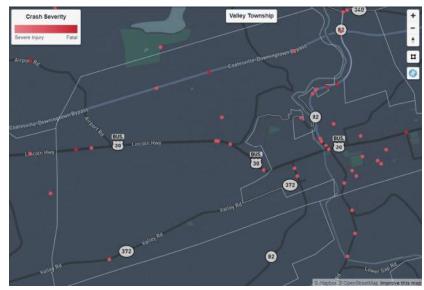


Figure 8. DVRPC Crash Severity Map (Source: DVRPC)

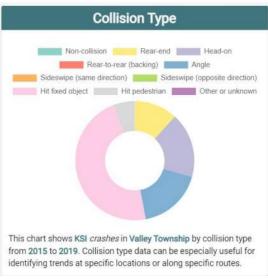


Figure 7. Crash Data Collision Type (Source DVRPC)

Figure 9. Crash Data 2015-2019 (Source DVRPC)

| Valley Township Crash Data 2015-2019 | | | | |
|--------------------------------------|----|--|--|--|
| Crashes | 17 | | | |
| Fatalities | 3 | | | |
| Suspected Serious Injuries | 18 | | | |
| Pedestrians Involved | 1 | | | |
| Bicycles Involved | 0 | | | |
| Source: DVRPC | | | | |



Traffic Counts

The below map shows traffic counts for Valley Township. Vehicle count data is available from PennDOT and DVRPC. Their numbers are generally consistent with the easternmost portion of the corridor having an average daily traffic count of approximately 8,100-8,200 vehicles and the westernmost area of the corridor having approximately 11,800-12,000 average vehicles per day. DVRPC's 2019 value shows the western edge of the Township having a volume of 11,944 and the intersection of Glencrest Road and W. Lincoln Highway having a volume of 8,236 (also a 2019 value). These values were an important guide in developing recommendations for the corridor.

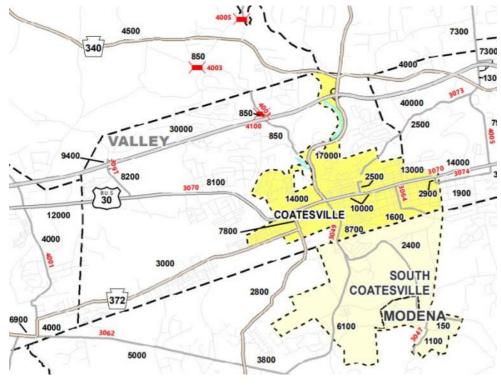


Figure 10. Traffic Counts (Source: PennDOT)





Photo 2. Public Involvement Session Workshop

Background Summary

There is a breadth of resources available to help inform the Master Planning process and help it to be as comprehensive as possible. By drawing from the existing vision, goals, recommendations, projects, and land developments, we will be able to ensure that nothing essential to meeting the vision of the corridor is left out. The vision, goals, and proposed projects in each of the reviewed documents are consistent with the goals outlined in the grant application, including but not limited to: revitalization of underutilized properties, encouraging suburban center investments and transportation amenities to maximize community assets, meet travel needs and reduce congestion, and provide universally accessible sidewalks, trails, and public transit connections, creation of a continuous active transit network, and encourage new investments and redevelopments in the area for residential and commercial growth.

Project Process and Schedule

This plan process began in October 2021 and was moved forward through coordination with a task force. The task force was comprised of consultants, Township staff and officials, residents, business owners, and planning commission members. The group met eight times between October 2021 and March 2023. Meetings involved presentations and discussions related to overall goals, opportunities and constraints, vision, character areas, and recommendations. A public meeting was held in February 2023 and the plan was presented twice to the Township Planning Commission in November and December 2023. Public notification was made for the December 12, 2023 meeting in accordance with Pennsylvania Municipalities Planning Code (MPC) procedures. Additionally, a meeting was held early on in the process





Photo 3. Public Involvement Session Workshop

with representatives from PennDOT to ensure that the goals and vision for the plan were feasible and consistent with PennDOT standards.

Public and Stakeholder Involvement

A public involvement session was held on February 27, 2023. It was advertised on the Township's website and sent out via mail to all residents. The meeting involved a presentation on plan background, goals, and recommendations, which were also displayed on plan exhibits which can be seen in this plan. The meeting was well attended and feedback from attendees helped to inform plan recommendations and implementation. Input was overwhelmingly positive, and few changes were needed as a result of the meeting. This helped to reinforce the recommendations proposed in the plan exhibits. Overall, the expansion of the sidewalk network and addition of the shared-use path was seen extremely favorably. Intersection improvements, and the addition of traffic calming measures and lighting were also clearly seen as major needs along the corridor based on input from the group.



Chapter 3

Key Issues and Opportunities

Introduction

The corridor has a unique set of issues and opportunities based on the existing density, land use, pedestrian, and road networks. These were ascertained through our evaluation of the area, proposed land developments, and task force and public input. The issues identified helped to guide the goals and actions outlined in this master plan.

Key Issues

Key Issues in the study area include lack of pedestrian connections, prominence of vacant lots, an unappealing landscape and haphazard streetscape, intersection issues, especially at the intersection of Airport Road and W. Lincoln Highway, traffic and congestion, truck traffic and its impact on intersection efficiency, truck parking along the corridor and on some side streets, intersection signal timing, proposed development leading to more congestion, inadequate drainage in specific locations, insufficient lighting, lack of wayfinding and sense of "place", safety concerns with bus stops particularly of the eastern intersection of Old Lincoln Highway and W. Lincoln Highway, and speeding. There are some sidewalks present in the area, but they are lacking in key areas that would be necessary to create safe connections to destinations.

Opportunities

Opportunities in the study area include accessibility in terms of its location and proximity to highways, existing infrastructure, potential for expansion of the sidewalk and trail network, opportunities for redevelopment and economic development, availability of funding for project implementation, and the proposed work associated with the US 30 Bypass. The infrastructure available helps to establish a framework for future improvements.

Chapter 4

Vision and Goals

Introduction

Discussions and meetings with the task force helped to provide the framework for the vision and goals discussed in this chapter. Feedback from the public involvement session also helped to inform and guide these items, particularly through the visioning exercise. These goals helped to formulate the recommendations in this plan and to ensure that all issues and opportunities lead to implementable actions.

Overall Goals

A list of goals was determined for the overall corridor. These were broken into three categories: Safety Improvements, Beautification Enhancements, and Access Management. These goals serve as a guide for recommendations and aim to mitigate issues and capitalize on the opportunities discussed in this plan. The goals for each category are as follows:

Safety Improvements

Making improvements to walkability and mobility overall along the corridor would go a long way to enhance safety and connectivity in Valley Township. The installation of a shared use path along the entire stretch of W. Lincoln Highway in the Township on its northern side is the primary recommendation to achieve this goal.



Photo 4. Example of Shared Use Path



Installation of traffic calming measures can also make a significant impact on safety. The addition of street trees planted along W. Lincoln Highway can create a traffic calming effect while also making walking a more enjoyable and pleasant experience. The narrowing of lanes through landscape and curbing bump outs and medians can also slow the speed of vehicles. Additionally, lighting and signage can improve visibility and help guide vehicles and drivers more safely through the Township.

Creating a more interconnected street network, particularly in the airport area, can help reduce traffic congestion and conflicts at intersections along W. Lincoln Highway. Intersection improvements such as addition of traffic signals and pedestrian crosswalks, signal timing, adjustments to stop bars, and ensuring that turning radii are adequate can improve safety in the transportation network.



Photo 5. Sidewalk and Streetscape Example

Supporting proposed and ongoing transportation projects can also aim to make the area safer for drivers, pedestrians, and bicyclists. Coordination with PennDOT on current and future projects, issues, and solutions is recommended. Support of other projects such as the CVT West extension and the proposed ITS projects will also assist the Township in meeting their goals. Finally, it is a goal of this plan to outline possible solutions to the truck parking issues along W. Lincoln Highway.

Beautification Enhancements

Beautification Enhancement goals aim to enhance the streetscape to provide a safe and attractive environment for pedestrians, cyclists, motorists, and the surrounding community. Some ways to do this are to create a buffer between pedestrian walkways and the street where space allows and through the addition of the following: landscaping, lighting, street trees, street furniture and wayfinding signage.

Vacant lots are common on the highway through Valley Township, so supporting the development of these lots can help to improve the streetscape and make it much more inviting. This can also aid with business attraction, creating a sense of place and identity and a sense of consistency along the corridor.

Access Management

Access management refers to the reduction of curb cuts throughout the corridor to reduce impacts to traffic flow, congestion, and vehicular and pedestrian safety. It is a goal of this plan to find possible solutions to this problem. Valley's Subdivision & Land Development Ordinance already includes provisions to limit curb cuts per parcel, encourage and even require shared access and parking for development and redevelopment where feasible, and establish minimum distance between curb cuts and intersections. The provisions are considered to be adequate, and it is recommended the Township be steadfast in implementation of the standards along W. Lincoln Highway and avoid granting waivers or relief from such criteria unless a specific situation absolutely does not create conflict with access management goals and objectives. The Township should also utilize their right, via the ordinances, to require shared access along W. Lincoln Highway for development and redevelopment activities, including developer/property owner creation of easements and agreements to allow for abutting parcels to utilize shared access if those adjacent parcels develop or redevelop in the future.



Character Area Vision

Following the goals and vision of the entire corridor in Valley Township, a vision for each character area was determined. This further aided in establishing specific, location-based recommendations for these areas.

Business Center Zone

The vision for Character Area 1 is to focus non-residential development, such as mixed-use development, into a more concentrated business focused area with appropriate traffic accommodations. A shared use path on the northern side of W. Lincoln Highway for the entire area and a focused stretch of sidewalk on the south side along the Airport's frontage will help connect potential future businesses to other destinations along the corridor, such as Valley Suburban Center, Airport Village Shopping Center, and the potential future park adjacent to the Township Building. Goals for this area include improvements to the Airport Road intersection, signalization at other critical intersections that meet warrants, pedestrian improvements, and connectivity to destinations. These improvements are expected to serve as a jumping off point for the corridor improvements and to encourage implementation in the other character areas to provide an attractive appearance and consistency along the corridor.

Main Street Downtown

The vision for Character Area 2 is to focus on creating a "Main Street" feel, like adjacent Thorndale, with smaller scale commercial and office uses. A primary focus is on streetscape improvements and beautification such as landscaping, shared use path and sidewalks and buffer along the roadway, lighting, signage, etc. Provisions to accommodate existing and increasing truck traffic and speed control should also be made. Another major focus of this area is to install storm sewers and drainage infrastructure to reduce flooding issues near 2nd Avenue. Goals for this area thereby include mitigation of stormwater issues, improvement and enhancement of streetscape conditions, pedestrian improvements, and installation of traffic calming measures.

Well Established Eastern Edge

The vision for Character Area 3 is to maintain and improve upon the older character of this area, such as density and scale, the relationship between buildings and the street, while also improving visibility for drivers and pedestrians and improving pedestrian facilities. A major focus of this area is to install drainage infrastructure towards the eastern end and determine the best methods for improving pedestrian visibility through signage, lighting, shared use path and sidewalks, and crossings



where appropriate. Goals for Character Area 3 also includes traffic calming and a potential traffic signal at the Glencrest Road intersection, if warranted.



Chapter 5

Recommendations: Goals & Actions

Introduction

The actions and recommendations proposed for W. Lincoln Highway in Valley Township are outlined in the section below. Some recommendations are applicable to the entire corridor while others are only applicable to only one of the three character areas. These recommendations in totality serve as a guide for how to make the corridor safer, more pleasant, attractive, and functional for vehicular, pedestrian, and cyclist users of the network. The overall concept plan including all of these recommendations is provided in Appendix B.

Recommendations

Safety Improvements

Goal 1.1: Improve walkability and bike-ability through pedestrian and bicycle connections.

Actions:

A shared use asphalt path is proposed on the north side of W. Lincoln Highway for the entirety of the corridor. It is specifically proposed on the north side because of the availability of land and frontage along the highway on that side, to create consistency in pedestrian connectivity, and to tie into the proposed Recreation Plan trail network (between Airport Road and Country Club Road). In addition, the path on this side of the corridor makes the most sense since the majority of destinations are located on the north side, including but not limited to shopping centers, the future Valley Suburban Center commercial uses, the Township Building, proposed park, and school.

Character Area 1

A 5-foot wide concrete sidewalk is proposed for the south side of the corridor in a focused area that is projected to have increased pedestrian demand. This sidewalk is proposed along the Airport frontage from Airport Road to Walter Johnson Boulevard to provide pedestrian accessibility between the proposed Airport industrial and commercial buildings, the shopping center and Valley Suburban retail/restaurants, the existing bus stop on the north side, and potential future bus stop on the south side.

Recommendations: Goals and Actions

An 8 to 10-foot wide asphalt shared use path is proposed along the entire north side of W. Lincoln Highway through this character area. In general, 10 feet is the industry guideline for a shared use path; however, 8 feet is acceptable where conditions prevent a wider path. The specific width of the path throughout the entire corridor will be determined during future engineering design. There is one anticipated exception to the width of the shared-use path, which is along the frontage of the Valley Suburban development where the developer has agreed to install a 7-foot wide path instead of a 4-foot wide sidewalk that was previously approved through Land Development. The path will be narrower there due to road setback and utility pole conflict constraints. That portion of the path will be owned and maintained by the developer/property owner. While 8 to 10-foot width is the goal elsewhere, there may be other segments that need to be slightly narrower once engineering design is performed.

Character Areas 2 & 3

The shared use asphalt path is proposed to be 8 to 10 feet wide for its full length in Character Area 2 and for a small section in Character Area 3. In Character Area 3, the width of the path is proposed to be no more than 8 feet from Glencrest Road to Mt. Pleasant Street due to the steep slopes along the edge of road, residential frontages with less depth, and limited resultant available width for improvements. Additionally, less pedestrian traffic is projected in this area since the only sidewalk across the bridge to and from the City of Coatesville is on the south side and there are no neighborhoods on the north side in this stretch. Bicyclists would likely use the wide north side shoulder across the bridge to and from the City and transition to use the shared use path through Valley.



Photo 6. Bicyclists Using Trail



Recommendations: Goals and Actions

In addition, 5-foot sidewalk is proposed on the south side from Washington Avenue to the Valley/Coatesville municipal line near Old Lincoln Highway for pedestrian accessibility to and from the Hayti neighborhood and to provide safe pedestrian connectivity between proposed crosswalks at Country Club Road and Glencrest Road for pedestrians traveling to and from northern points, to the Hayti Park and redeveloped use of the former Township building, to Dollar General, and to connect to the sidewalk over the bridge into the City, amongst other destinations. This recommendation

includes most of Character Areas 2 and 3.



Photo 7. Rectangular Rapid Flashing Beacon Examples



Photo 8. Rectangular Rapid Flashing Beacon Examples



Other pedestrian control measures throughout all three character areas are also proposed. Signal-controlled crosswalks are proposed at Airport Road and Walter Johnson Boulevard, and at Glencrest Road if a signal can be warranted there. Alternative pedestrian treatments (such as rectangular rapid flashing beacons (RRFB) or high intensity activated crosswalks (HAWK)) are proposed for the crosswalk at Country Club Road (Character Area 2), which will not have a traffic signal, and at Glencrest Road if a signal is not warranted there.

Corridor-Wide

The path and sidewalk are proposed entirely within the right-of-way (ROW) to the maximum extent practical to minimize the need for ROW acquisition or permanent easements. Existing sidewalks on the south side will be re-used, such as along the Terry Funeral Home and Dollar General frontages.

The shared use path is proposed to replace existing sidewalks on the north side, such as at Rainbow Elementary School and across the Round Hill frontage, and will be installed in the same general location as those sidewalks (outside the ROW in the case of the school). The shared use path is also aligned to avoid conflicts with utility poles, fire hydrants, drainage swales, and wetlands to the maximum extent possible.

Parking

Parking was considered along the shared use path to provide access to the shared use path for users that do not live within walking distance of it. However, on the eastern end of the shared use path to the east of Country Club Road, there are generally no opportunities to install a parking area given existing development and site constraints. There is limited existing parking at the Hayti Park though. New parking areas are not considered viable to the west of Airport Road either, since there is little to no viable land for a parking area along the north side of W. Lincoln Highway there. There is undeveloped land on the south side of the roadway towards the west end of the Township but that would necessitate another crosswalk that is not otherwise proposed or desired. Further, it is not expected that the east and west ends of the shared use path would be desirable starting and ending points for walking or biking since the path does not loop back to those areas and there are generally no recreational destinations in those areas.

Significant parking is available in the central portion of the shared use path, between Country Club Road and Airport Road, which is the focus area in the Township for recreation growth and is also proposed to have a looped trail system. This is anticipated to be a location that users would be inclined to park to access the shared use path and trail system.



That parking is currently available at the Township Building and Rainbow Elementary School, and additional parking is envisioned at the proposed recreational park adjacent to the Township Building.

Goal 1.2: Improve visibility and access.

Actions

Safety issues have been documented near the bus stop at Old Lincoln Highway due to the slope of the road and lack of visibility. To mitigate these issues, road markings and signage are proposed in both directions of approach of the school bus stop at Old Lincoln Highway (Character Area 3). This should improve driver awareness and caution regarding pedestrian conditions at this section of W. Lincoln Highway.

Street lighting is currently very limited along the corridor and of an inconsistent design. In order to provide increased visibility for drivers and pedestrians and create consistency along the corridor and the surrounding area,

it is recommended that a standard design of street lighting is used and is installed approximately every 150 feet. The lighting should be on the north side of the roadway to provide for illumination of both the shared use path and roadway. Street lighting is not anticipated to be necessary on the south side. Exact spacing and locations will be determined as part of future engineering design. Specifications of recommended street lighting are in Appendix A.

Goal 1.3: Add traffic calming measures along the corridor.

Actions

A road diet should be implemented along the corridor through reducing W. Lincoln Highway's shoulder widths to approximately 2 feet on the north side for most areas via curbing to provide for perception of a narrower vehicular travel lane. This also will allow as much room as possible within the ROW for the shared use path. Existing shoulder widths should be maintained near intersections and other locations to allows for truck turning and other vehicular movements.



Photo 9. Example of Street Light Design in Thorndale



Figure 11. Recommended Lamp Head Design



The addition of white striping along edges of Glencrest Road should also be added (Character Area 3). Edge striping will have the potential to slow traffic and improve visibility and awareness along the roadway near its intersection with W. Lincoln Highway.

See Figures 13 through 15 for cross sections depicting the conceptual vision for key locations within each character area.

Medians and Curb Bump Outs

Median islands are effective traffic calming measures. However, due to the high number of driveways and curb cuts along the corridor, this recommendation is limited. Landscaped medians should be added in locations wherever feasible. However, the only location identified in this plan for a landscaped median is just west



Photo 10. Example of Road Diet

of the Township Building in Character Area 2. Viable locations are very limited due to the number of existing access drives, driveways, and roads on both sides of the street and need to maintain left turn ingress and egress. In addition, landscaped curb bump outs on both sides of road in several locations throughout Character Areas 1 and 2 to narrow perceived road width should be added to contribute to traffic calming.

Goal 1.4: Improve intersections.

Actions

There are several intersections where the addition of traffic signals could significantly improve traffic flow and vehicular and pedestrian safety along the corridor. The addition of traffic signals, improvements to signal timing, and other intersection improvements can greatly improve conditions for all users of the transportation network. Improvements align with areas identified through coordination with the Task Force, the public involvement session, DVRPC crash data, and developments' traffic studies and warrant analyses.

One signal to be added is at Washington Lane and W. Lincoln Highway in Character Area 1. Addition of this traffic signal is a commitment of the Valley View Business Park development per their Land Development Plan approvals, and their traffic studies conclude that the signal is warranted.



The addition of a traffic signal at Walter Johnson Blvd and the future Airport access drive is also proposed (also in Character Area 1). This signal has been identified through development traffic studies as being warranted and is a very high priority given the amount of ongoing and planned development that will utilize it.

Finally, the addition of a traffic signal at Glencrest Road in Character Area 3 should be explored. A signal warrant analysis will need to be conducted in order to make a determination for that intersection. In addition, a dedicated eastbound left turn lane should also be added at the Glencrest Road intersection.

Photo 11. Example Signalized Intersection

Goal 1.5: Implement solutions for truck parking.

Actions

The use of W. Lincoln Highway for tractor trailer parking has been an ongoing policing concern within Valley Township. When trucks are parked and/or idling on the shoulder, they pose a serious risk for other motorists on the road while also eliminating the shoulder to be used by motorists to maneuver as needed, creating a noise disturbance to adjacent residences, and leaving behind litter and other objectionable waste. The Township recognizes that truck drivers are not able to control driving time regulations, businesses loading and unloading processes, and various other mechanical issues that may occur; however, it is not the responsibility



Photo 12. Example of Tractor Trailer Parking on the Side of the Road

of the municipality to provide parking for private business operations. Given the safety and welfare concerns regarding trucks parking along W. Lincoln Highway, the Township desires a permanent solution to address the aforementioned concerns.

The proposed curbing along the majority of the north side of the corridor will narrow the shoulder and physically prevent tractor trailer and truck parking and idling. This was the only structural solution identified in the process of drafting this plan that is considered feasible. The same curbing is also proposed in this plan to accommodate a shared use path and as a road diet.

Through the task force coordination and community outreach process, it was determined that truck parking was not a known issue on the south side of the corridor.

Goal 1.6: Support existing and proposed transportation projects.

Actions

The Township should facilitate success of transportation related projects in the Township through coordination with the County and PennDOT on current and future projects, issues, and solutions. Applicable PennDOT projects summarized in the background section of this report include the US Route 30 / Airport Road project and ITS projects. Planned ITS projects include CCTV, dynamic signage, and fiber/traffic signal vision along the corridor. Finally, the Township should ensure transportation improvements associated with land developments support this plan's vision. Support of planned trail projects including the Chester Valley Trail extension, the proposed trail from the Recreation Plan, and trails and sidewalks associated with land developments will help to improve safety and accessibility for pedestrians and bicyclists. These also improve walkability, recreational opportunities, connectivity, and create a draw to Valley Township.

Goal 1.7: Add stormwater infrastructure to mitigate flooding issues.

Actions

Drainage improvements can help to improve conditions where flooding has been an issue while also serving as a preventative measure for any future stormwater that may be generated due to an increase in storm intensity or development. There are two specific focus areas for stormwater mitigation as described below.



Plans are underway to add a storm sewer system from 2nd Avenue to the east (near the car wash) as per a separate concept design, seen in Figure 12. The storm sewer system concept plan implementation is currently being pursued through multiple grant applications and is expected to come to fruition in the coming years.

A second problematic drainage condition occurs on the south side of W. Lincoln Highway to the immediate west of the western Old Lincoln Highway intersection (in Character Area 3). This location has been experiencing significant drainage and erosion problems over the past 15 years that have compromised the southern edge of road during multiple large storm events. PennDOT has recently repayed this stretch of shoulder. The condition of the shoulder should be monitored in this area to determine additional improvements, such as storm sewers or retaining walls, are needed to further stabilize and protect the road at this location.

Other areas of the W. Lincoln Highway Corridor may also need to have storm sewers added in strategic locations where curbing



Figure 12. Drainage Plan



is added. Any such storm sewer systems will be determined during engineering design of the applicable Corridor Master Plan component.

Additionally, stormwater <u>management</u> will need to be evaluated on a project-by-project basis while implementing the proposed shared use path and sidewalk improvements. A portion of the proposed shared use path and sidewalk improvements are anticipated within existing impervious areas; however, any portion of the proposed improvements not proposed within existing impervious areas may be subject to stormwater management and the need for water quality facilities and quantity reduction. The need for stormwater management will be based on the Valley Township Stormwater Ordinance standards at the time of the applicable project component and will be determined during applicable engineering design.



Photo 13. Example of Attractive Streetscape

It is recommended that any proposed drainage improvements to mitigate flooding or proposed stormwater management be completed before implementing any shared use path, sidewalk, or roadway improvements at that section of W. Lincoln Highway to avoid disturbing new pavement to install utilities.



Beautification Enhancements

Goal 2.1: Enhance the streetscape to provide a safe and attractive environment for all users.

Actions

Several actions can be taken to make walking and biking feel safer and more appealing for pedestrians and bicyclists, while also improving conditions for drivers. Landscaped islands and curb bump outs (referenced in Goal 1.3) can not only result in traffic calming but also create a more attractive environment for traversing the corridor. Landscaping in general can make the corridor a more pleasant place to be. Coordination with property owners and/or developers to implement sidewalks and streetscape enhancements as part of land development processes will be necessary in some cases. Wayfinding signage can also help to direct people throughout the township and to destinations such as the proposed recreation plan trail.

Trees and landscaping will be planted along the frontage of the future Valley Suburban Center development and have already been committed by the developer. This will enhance the streetscape for a significant portion of the northern side of the corridor. A consistent pedestrian pathway, curbing, roadway line painting, landscaping, lighting, signage, and other elements such as street furniture can make a major impact on improving the quality of the streetscape overall. Other elements such as banners and flags also aid in streetscape enhancement.

Following is a list of recommended street trees and plantings. Street trees are generally recommended every 50 feet to ensure that a sufficient amount of shade is developed over time. The Township's Subdivision & Land Development Ordinance should also be amended to add these requirements and species for streets trees for development Photo 14. Examples of Character and Identity in Thorndale and redevelopment projects with frontage along the corridor.



Large Canopy Trees:

Acer rubrum 'October Glory' – Red Maple
Acer rubrum 'Bowhall' – Columnar Red Maple *
Fagus sylvatica 'Fastigiata' – Pyramidal Beech*
Gleditsia triacanthos inermis 'Skyline'
Serviceberry
Nyssa sylvatica – Sourgum / Black Tupelo
Quercus phellos – Willow Oak

Quercus robur 'Fastigiata' – Pyramidal English Oak*
Platanus x acerifolia – London Planetree
Tilia americana 'Redmond' – Redmond Linden
Ulmus americana 'Valley Forge' – American Elm
(disease resistant)
Ulmus parviflora – Lacebark Elm
Zelkova serrata 'Village Green' – Japanese Zelkova

Small Ornamental Trees:

Acer ginnala 'Flame' – Amur Maple
Acer tataricum – Tartarian Maple
Amelanchier laevis 'Cumulus' – Cumulus Serviceberry
Amelanchier x grandiflora 'Robin Hill' – Shadblow
Crataegus lavallei – Lavalle Hawthorn
Crataegus viridis 'Winter King' – Winter King Hawthorn



Photo 15. Example of Street Trees (Creator: Adrian Higgins/ Credit: TWP)



^{*}Species acceptable where overhead wires or other nearby obstructions are in conflict

Goal 2.2: Create a sense of place, identity, and consistency along the corridor.

Actions

Developing a sense of place and identity for Valley Township and the W. Lincoln Highway corridor will help to make Valley a more desirable and known place to live, walk, bike, drive, and visit. It can also help to attract businesses and residents to the community through making it a more vibrant place to live and work. This can be developed partially through the actions discussed under Goals 1.1, 1.2, 1.3, and 2.1.

A well connected, attractive, and safe pedestrian network and streetscape, if applied across the entire corridor within Valley Township, can help to develop a consistent character for the community. Consistent street lighting, landscaping, and street trees can also do this.

In addition, gateway signage near the borders of the community will help define the Township boundaries and welcome people to Valley Township. This can help to solidify its character as an attractive place to live, work, and visit. It also helps to embed this stretch of corridor through Valley Township as a "place" and potential destination rather than another segment of W. Lincoln Highway that must be traversed to get to/from another destination. Other elements such as street furniture (i.e. benches), banners, and flags can also be utilized for this purpose.



Photo 16. Examples of Character and Identity in Thorndale



Photo 17. Example of Street Furniture



Access Management

Goal 3.1: Improve access management along the corridor.

Actions

The total number of curb cuts along the corridor should be minimized to reduce impacts to traffic flow, congestion, and vehicular and pedestrian safety. The existing number of driveways and access points presents challenges to traffic calming measures such as landscaped medians, as ingress and egress is necessary for each turn. The Neighborhood Commercial Office (NCO) District has existing Zoning standards related to common or connected parking lots. The standard requires that wherever possible, two or more existing or proposed Photo 18. Examples of Wayfinding Signage noncommercial uses on separate lots should provide any required



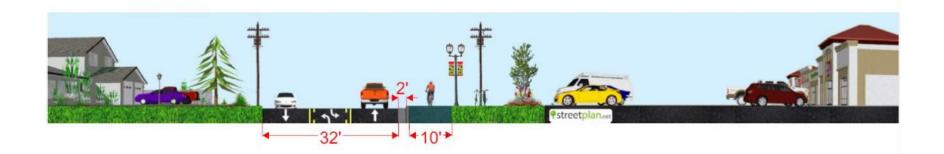
parking in a shared parking lot. This is a common strategy to reduce the total number of curb cuts along a roadway. There are similar general Access Management standards in the Subdivision & Land Development Ordinance. The Township should explore the potential for expanding the NCO district to other areas along the corridor or adding similar shared access and parking provisions to other zoning districts along W. Lincoln Highway to further protect the corridor from additional conflicts.

Character Area Cross Sections

Figures 13 through 15 show conceptual cross sections for each Character Area. Character Area 1 shows a 32-foot wide cartway, a 2-foot shoulder, and a 10-foot wide shared use path on the north side of the corridor. Character Area 2 shows the same road width and conditions on the north side with the addition of a 2-foot wide shoulder and 5-foot wide sidewalk on the south side. This sidewalk is only proposed in key locations to link neighborhoods to destinations and/or crosswalks. Character Area 3 shows the same south side conditions and road width, with a reduction in width of the shared use path from 10 to 8 feet wide.



CHARACTER AREA 1 STREETSCAPE CROSS SECTION

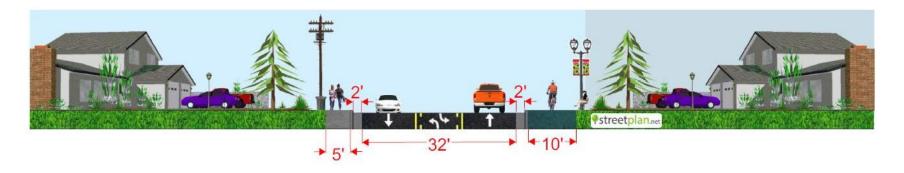


AIRPORT VILLAGE SHOPPING CENTER AND 1208 W LINCOLN HIGHWAY SR: 3070/0060/2400

Figure 13. Character Area 1 Streetscape



CHARACTER AREA 2 STREETSCAPE CROSS SECTION

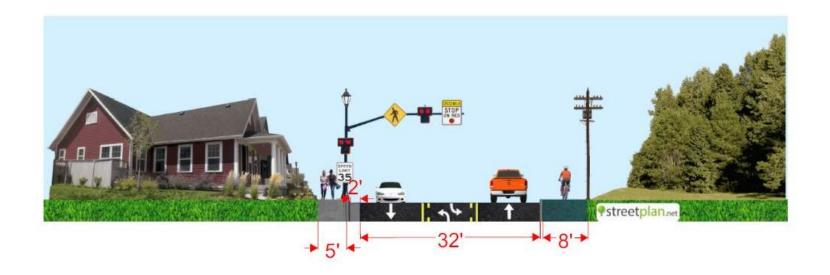


946 W LINCOLN HIGHWAY AND 977 W LINCOLN HIGHWAY SR: 3070/0090/0000

Figure 14. Character Area 2 Streetscape



CHARACTER AREA 3 STREETSCAPE CROSS SECTION



INTERSECTION OF W LINCOLN HIGHWAY AND GLENCREST ROAD SR: 3070/0090/1450

Figure 15. Character Area 3 Streetscape



Chapter 6

Implementation – Achieving the Vision for the Corridor

To ensure successful implementation of the actions in this plan, estimated costs, collaborative partners, funding, and timelines need to be well understood. The implementation phase is the accumulation of public engagement, work with the task force, and visioning to provide a guide for how to move forward and ensure that recommended projects are carried through to the finish line. These recommendations can be prioritized depending on cost, urgency of need, and the length of time it will take to complete the project. Short-term, more affordable projects can help to get the ball rolling and put improvements in place quickly. These projects can also help to build momentum and improve the chances of funding for other projects. Long-term projects will be more costly but also typically have a greater impact on the corridor; therefore planning should have the long-term vision in mind when mapping out future implementation goals.

The following implementation table outlines a summary of the responsible entities, timeline (short or long term), estimated cost order of magnitude, and potential funding sources for each goal in Chapter 5. It provides a guide for how quickly and affordably projects can be completed. Short term recommendations are within 0-5 years, medium term recommendations are 5-10 years, and long-term recommendations are 10+ years. Long term recommendations should be revisited for prioritization over time.

Key partners are generally PennDOT, the Township, developers, property owners along the corridor, and the Coatesville Area School District.

| <u>Timeline</u> | Cost | |
|---------------------|----------------------------|--------------------------------|
| Short = 0-5 years | \$ = Up to \$5,000 | \$\$\$ = \$50,000 to \$300,000 |
| Medium = 5-10 years | \$\$ = \$5,000 to \$50,000 | \$\$\$\$ = Over \$300,000 |
| Long = 10+ years | | |

Figure 16. Implementation Table

| Goal | Action | Responsible Agencies/ Key Partners | Potential Funding Sources | Timeframe | Cost |
|---|---|--|---|-----------|----------|
| 1.1 Improve walkability and bike-ability through pedestrian and bicycle connections | Install 8 to 10-foot shared use path on north side of corridor and install 5-foot wide sidewalk on south side of corridor in specific locations | Township; PennDOT; Developers; Property Owners | PennDOT or DCED MTF; DCED GTRP; Developers; Property Owners; County CDBG; DCNR C2P2 grants | Long | \$\$\$\$ |
| 1.2 Improve visibility and access | Install lighting approximately every 150 feet and paint roadway near Old Lincoln Highway to delineate bus stop | Township | DVRPC Municipal Street Lighting Program; PennDOT or DCED MTF; DCED GTRP; Township | Medium | \$\$\$\$ |
| 1.3 Add traffic calming measures along the corridor | Implement road diet, medians, and curb bump outs | Township; PennDOT | PennDOT or DCED MTF; DCED GTRP; DCNR | Long | \$\$\$\$ |
| 1.4 Improve intersections | Add traffic signals at Washington Lane and Walter Johnson Blvd, and conduct signal warrant analysis at Glencrest Road | Developers; Township; PennDOT | Developers; Township | Short | \$\$\$\$ |
| 1.5 Implement solutions for truck parking | Reduce shoulder width on north side of corridor with curbing | Township; PennDOT | Township; PennDOT or DCED MTF; DCED GTRP; | Long | \$\$\$\$ |



| Goal | Action | Responsible Agencies/ Key Partners | Potential Funding Sources | Timeframe | Cost |
|--|---|--|--|-----------|----------|
| 1.6 Support existing and proposed transportation projects | Coordinate with PennDOT and relevant groups to ensure successful completion of proposed transportation projects | PennDOT; County | N/A | Long | N/A |
| 1.7 Add stormwater infrastructure to mitigate flooding issues | Implement storm sewer project at 2 nd Avenue, and monitor need for drainage project on south side near Old Lincoln Highway | Township; PennDOT | PA DCED Small Water and Sewer; PennDOT; County CDBG | Short | \$\$\$\$ |
| 2.1 Enhance the streetscape to provide a safe and attractive environment for all users | Addition of street trees and landscaping, street furniture, banners, and flags | Township; Developers; Property Owners | Developers; Property Owners; DCNR; Township | Medium | \$\$\$ |
| 2.2 Create a sense of place, identity, and consistency along the corridor | Install gateway signage at strategic locations | Township | Township | Short | \$\$ |
| 3.1 Improve access management along the corridor | Evaluate if NCO District shared access standards should be expanded to other areas along the corridor | Township | Township | Short | \$ |



Grant Funding Sources

Following are a list of notable grant funding sources that are particularly applicable for implementation actions. This is not a comprehensive list of all potential grants.

Community Development Block Grant (CDBG)

The Chester County Department of Community Development (DCD) administers this program, which provides federal funds from the U.S. Department of Housing and Urban Development for activities that install, construct, or rehabilitate public facilities within Chester County. Funds may be used for street lights, curbs, sidewalks, and stormwater infrastructure. However, funded projects must be located in Character Area 2 or 3.

DCED/CFA – Greenways, Trails, and Recreation Program (GTRP)

The PA Department of Community and Economic Development (DCED) and Commonwealth Financing Authority (CFA) administer this program, which provides funding for project that involve the renovation and development of public facilities, such as bicycle, walking, and nature trails. Funds may be used to acquire land or easements for development of a trail or sidewalk and for nearly all of the proposed action items including public sidewalk, shared use path, traffic calming, etc.

DCED/CFA - Statewide Local Share Account (LSA)

The PA Department of Community and Economic Development (DCED) and Commonwealth Financing Authority (CFA) distribute gaming revenues from the PA Race Horse Development and Gaming Act to support projects in the public interest within Pennsylvania. Funds may be used to acquire land or easements for development of a trail and/or to construction a trail for recreational activities including any lighting landscaping or signage.

DCED/CFA - Multimodal Transportation Fund (MTF)

The PA Department of Community and Economic Development (DCED) and Commonwealth Financing Authority (CFA) administer this program, which provides grants to encourage economic development and ensure that a safe and reliable system of transportation is available to the residents of the Commonwealth. Funds may be used for the development, rehabilitation, and enhancement of transportation assets to existing communities, including lighting, sidewalk enhancement, pedestrian safety, bicycle circulation, connectivity of transportation assets and transit-oriented development.



DCNR – Community Conservation Partnership Program (C2P2)

The PA Department of Conservation and Natural Resources (DCNR) administers this program, which provides grants to support the enhancement and expansion of non-motorized and motorized trails to met their goal to have a trail within 10 minutes of every Pennsylvania citizen. Funds may be used to acquire land or easements for development of a trail and/or to construction a trail for recreational activities.

PennDOT - Multimodal Transportation Fund (MTF)

Separate of the DCED program noted above, PennDOT administers an independent funding allocation of the Multimodal Transportation Fund. The program purpose and intent are the same: to encourage economic development and ensure that a safe and reliable system of transportation is available. Funds may be used for a variety of community enhancement projects, including pedestrian and bicycle improvements.

PennDOT - Transportation Alternatives Program (TAP)

The TAP program utilizes federal funds authorized through the Moving Ahead for Progress in the 21st Century (MAP-21) legislation. Funding is awarded by PennDOT as the authorized state agency, with program administration at the local region provided by DVRPC. Each local County recommends to DVRPC its top priority projects requesting funding. TAP grants are intended for pedestrian and bicycle facilities, improved access to public transportation, safe routes to school, and trails projects that serve a transportation purpose, while promoting safety and mobility.

PennDOT – Transportation Improvement Program (TIP)

The "TIP" is the 12-year budget and forecast for the full range of transportation projects planned by PennDOT and funded through federal transportation money. It addresses all transportation modes, including highways and bridges, public transit, aviation, rail freight, as well as bicycle and pedestrian facilities. Projects become funded through the TIP by recommendation of the local county and DVRPC and are evaluated in light of competing project needs across the state.



Action Plan

To ensure successful implementation of the goals and actions listed above, the goals and actions need to be prioritized depending on cost, available funding sources, and the length of time it will take to complete the project. It should be noted that some of the goals, such as "Goal 1.5: Implement solutions for truck parking", will be achieved through several different projects throughout the corridor and will not have a specific project action item or prioritization.

The following Action Plan prioritization table is a strategically planned approach that breaks down action items into smaller pieces or smaller segments. Tackling implementation of such a large overall undertaking in many small pieces is the most realistic method to accomplish the larger goals. The smaller Action Items are prioritized into planning horizons of 0-5 years, 5-10 years, and greater than 10 years. Years 0-5 focus on tasks and projects that can achieve results quickly and effectively that will build momentum and/or are of a very high priority. Years 5-10 focus on more complex projects that need substantial funding, design, and permitting to be ready for construction. Greater than 10 years focuses on projects that require development or redevelopment of existing parcels along W. Lincoln Highway, are of a less urgent priority, and items that are the last steps regarding implementation of the Corridor Plan.

Figure 17. Action Plan

| Years 0 | to 5 | | |
|---------------------|---|--|---|
| General Priority | Goal | Action | Responsible Party |
| 1 | 1.3 Add traffic calming measures along the corridor | Restripe W. Lincoln Hwy from Airport Road to Rainbow School including addition of eastbound left turn lane into the Township complex | Valley Suburban Center (VSC) Developer |
| 2 | All goals including, 3.1 Improve access management along the corridor | Evaluate expansion of NCO District shared access standards to other Zoning Districts. Update SALDO to require proposed shared use path, street trees, street lighting, and other plan recommendations for development along corridor | Township |
| 3 | 1.1 Improve walkability and bike-ability through pedestrian and bicycle connections | Construct 7-foot wide shared use path along VSC frontage with W. Lincoln Highway and 4-foot wide sidewalk along frontage with Airport Road | VSC Developer |
| 4 | 1.4 Improve Intersections | Install traffic signal at Walter Johnson Blvd | VSC Developer; Airport |
| 5 | 1.4 Improve Intersections | Install traffic signal at Washington Lane | Valley View Business Park Developer |
| 6 | 1.1 Improve walkability and bike-ability through pedestrian and bicycle connections | Construct 8-foot wide shared use path along Municipal Complex frontage including any necessary stormwater management and curbing | Township |



| General Priority | Goal | Action | Responsible Party |
|---------------------|--|---|----------------------|
| 7 | 1.1 Improve walkability and bike-ability through pedestrian and bicycle connections | Coordinate with CASD for potential acquisition of proposed park property | Township |
| 8 | 2.1 Enhance the streetscape to provide a safe and attractive environment for all users | Install "Welcome to Valley Township" signs at City of Coatesville and Sadsbury Township boundaries | Township |
| 9 | 1.7 Add stormwater infrastructure to mitigate flooding issues | 2 nd Ave Drainage Improvements | Township |
| 10 | 1.2 Improve visibility and access | Construct lighting from Washington Lane to Country Club Road | Township; Developers |
| 11 | 1.2 Improve visibility and access | Construct lighting at Glencrest Road intersection | Township |
| 12 | 1.3 Add traffic calming measures along the corridor | Move Airport Road left turn lane pavement marking stop bar from its existing location to the north at the intersection with W. Lincoln Hwy to accommodate truck turning movements until intersection is widened in future | VSC Developer |
| 13 | 1.2 Improve visibility and access | Install "Bus Stop Ahead" pavement markings near Old Lincoln Hwy | Township |



| General Priority | Goal | Action | Responsible Party |
|---------------------|---|--|---|
| 14 | 1.4 Improve Intersections | Widen Airport Road intersection | PennDOT (as part of US 30 Bypass project) |
| 15 | 1.4 Improve Intersections | Perform traffic signal warrant analysis for Glencrest Road | Township, or Developer if an applicable development is proposed in area |
| 16 | 1.7 Add stormwater infrastructure to mitigate flooding issues | Drainage Improvements and road stabilization on southern side near Old Lincoln Hwy | PennDOT |



Years 5 to 10

| General Priority | Goal | Action | Responsible Party |
|---------------------|---|--|---|
| 17 | 1.1 Improve walkability and bike-ability through pedestrian and bicycle connections | Construct 10-foot wide shared use path from the east side of the Municipal Complex to Country Club Road including any necessary stormwater management and replacement of sidewalk on school property (approximately 2,300 feet) | Township |
| 18 | 1.1 Improve walkability and bike-ability through pedestrian and bicycle connections | Construct shared use path on north side from Airport Road to Buckthorn Drive including Buckthorn crosswalk markings, curbing, and any necessary stormwater management (approximately 3,000 feet) | Township; Airport Village Shopping Center and Business Owners along W. Lincoln Hwy; Developers (i.e. Redevelopment) |
| 19 | 1.1 Improve walkability and bike-ability through pedestrian and bicycle connections | Construct sidewalk along south side from Dollar General to Front Street including any crosswalk markings, curbing, and necessary stormwater management (approximately 2,400 feet) | Township; Developers (i.e. Redevelopment) |
| 20 | 1.4 Improve Intersections | Install pedestrian crossings at Country Club Road intersection | Township or PennDOT |
| 21 | 1.1 Improve walkability and bike-ability through pedestrian and bicycle connections | Construct sidewalk on south side from Front Street to Coatesville including any crosswalk markings, curbing, and necessary stormwater management (approximately 3,300 feet) | Township; Developers (i.e. Redevelopment) |



| General Priority | Goal | Action | Responsible Party |
|---------------------|---|---|---|
| 22 | 1.1 Improve walkability and bike-ability through pedestrian and bicycle connections | Construct sidewalk on south side in front of Airport property including any necessary stormwater management and landscaping | Airport at time of industrial development |
| 23 | 1.4 Improve Intersections | Perform Pedestrian Traffic Study for potential crosswalk at Mt. Pleasant Street | Township |

| Years > | • 10 | | |
|---------------------|---|---|-----------------------|
| General Priority | Goal | Action | Responsible Party |
| 24 | 1.1 Improve walkability and bike-ability through pedestrian and bicycle connections | Construct shared use path on north side from Washington Lane to Buckthorn Drive including any necessary curbing, bump outs, stormwater management, and remove the existing sidewalk (approximately 1,000 feet) | Township |
| 25 | 1.1 Improve walkability and bike-ability through pedestrian and bicycle connections | Construct shared use path on north side from Country Club Road to Glencrest Road including any necessary crosswalk markings, curbing, and landscaping. Install lighting along this segment of shared use path (approximately 2,600 feet) | Township |
| 26 | 1.4 Improve Intersections | Construct crosswalks at Glencrest Road intersection and install a signal if warranted | Township |
| 27 | 1.1 Improve walkability and bike-ability through pedestrian and bicycle connections | Construct shared use path on north side from Glencrest Road to City of Coatesville including curbing, landscaping, and any necessary stormwater management. Install lighting along this segment of shared use path (approximately 2,800 feet) | Township or Developer |
| 28 | 3.1 Improve access management along the corridor | Construct median, curbing, and bump outs not already installed along W. Lincoln Hwy | Township |



| General Priority | Goal | Action | Responsible Party |
|---------------------|--|---|--|
| 29 | 2.1 Enhance the streetscape to provide a safe and attractive environment for all users 2.2 Create a sense of place, identity, and consistency | Install street trees, benches, shared use path markers, and any other beautification enhancements along the shared use path on the north side that have not already been installed | Township; Developers (i.e. Redevelopment); Property Owners |
| 30 | along the corridor 1.1 Improve walkability and bike-ability through pedestrian and bicycle connections 2.1 Enhance the | Construct sidewalk on south side from Washington Ave to Dollar General including any necessary landscaping, curbing, and access drive reconstruction at the Auto Body shop (approximately 400 feet) | Developers (i.e. Redevelopment) at the time of any redevelopment of the subject properties |
| | streetscape to provide a safe and attractive environment for all users | | |



APPENDIX



APPENDIX A – Lighting Specifications

February 25, 2020

Project:

Sadburyville Village Enhancement

Sadsbury Township

Owner:

Sadsbury Township 2920 Lincoln Hwy.

Sadsburyville, PA. 19369

Engineer:

Herbert MacCombie, Jr. PE

PO Box 118

Broomall, PA, 19008 610-356-9550

Electrical Contractor:

Lenni Electric Corporation

1020 Andrew Drive West Chester, PA. 19380

610-436-9922

Material Submittal

Lighting

Spec/Dwg Description

Sheet 19 of 40 Hadco/Philips Urban Hagerstown Post Top LED Head Section 850

TX03 32 G2 B A 1 A 3 H W A 5 NNNN SP1-H

Sheet 19 of 40

Hadco/Philips Urban Hagerstown Pole

Section 850 P2555 16 A

Note: 8 week lead time from release









| Project: | | |
|----------|-----|---|
| Location | | Ī |
| Cat No: | | Ī |
| Tipes | | Ī |
| Lines | GEV | Ī |
| Notes | | |

Haddo's Hagerstown LED post top gives you the ability to create a unique style through our modular post top concepts to blend into any residential and historic urban settings. With the latest LED technology you can seamlessly replace traditional HID technology to maximize energy savings and significantly reduce total cost of ownership. The Hagerstown luminaire provides excellent uniformity, traditional customizable look, with the benefits of modern technology.

example; TX0348G2BA2A5EWA5DDASTCLONSP1H Ordering guide LEDs Pinishes Optics G2 TX03 TXD3 Button eye photo controls 32 32 62 Gen2 A Octagonal fitter Hagerstown 48 48* LED post top 64 64* E 120 VAC G Vende 3W Type 3 Wide H Bionze J Green Smooth tapered hourglass filter* Tapered fluted filter w/scalloped n Differbit F Ffinial G Gfinial H H finial Sower petals* R: Twist-lock-receptacle⁴ Tall round fluted fitter* Round contemporary fitter Tapered fluted whound stepped fitter N No photo control N No firrial Round fluted long filter Decorative loaf filter w/scalloped pet

| Ordering guide | continued | | | Optional prog | NATYS . | | | |
|----------------|--|--|---|---|---|--|--|-----------------------|
| Color Temps | Voltages | Currents | Optional dimming? | fst option ² | 2nd option/ | 3rd op Ecel | Surge protection | Options |
| W 3000K | A 120-277 WAC B 347-490 UAC ²³ | 3 350mA 5 530 mA 7 708mA 1 1050mA | DA 4hrs 25% reduction DB 4hrs 50% reduction DC 4hrs 75% reduction DD 6hrs 25% reduction DD 6hrs 25% reduction DF 6hrs 75% reduction DF 6hrs 75% reduction DH 8hrs 50% reduction | AST Adjustable Start Up N No Et option | CI/O Constant Light Output N No 2nd option | OTL Over The Life N No 3rd option | SPI KW/JOka (standard) SP2 20kV/20kX (optional) | H BSS N No options |

Urban_Spec Sheet_TXD3.pdf 12/38 page 1 of 5



TX03 Hagerstown

Post top



TX03 Hagerstown

Post top

| | HUGH | |
|--|------|--|
| | | |

| | 100 | Section 1 | | Average | | Type 3 | | | Type 3W | | 1000 | Type 5 | |
|-----------------------|------------|-----------|---------------|-------------------|-----------------|---------------|----------|-----------------|---------------|----------|-----------------|---------------|----------|
| LED Module: N - 4000K | LE0 qty | System | Color Temp | System Waltage | Lumen Gutput | BUG Rating | Efficacy | Lumen Output | 805 Rating | Efficacy | Lumen Output | BUG Rating | Efficacy |
| TX0332-G2-N3-46 | 32 | 350 mA | 4000K | 35 | 4023 | 81-U3-G1 | 114 | 3995 | B1-U3-G1 | 113 | 4139 | B3-U3-GI | 107 |
| TX0332-G2-N5-16 | 32 | 530 mA | 4000K | 52 | 5712 | B1-U3-G1 | 100 | 5672 | B1-U3-G2 | 110 | 5877 | 83-U3-GI | 113 |
| TX0332-G2-N7-16 | 32 | 700 mA | 4000K | 71 | 7483 | B2-03-G2 | 105 | 7430 | 82-U3-G2 | 104 | 7698 | 83-03-62 | 108 |
| 1X0332-G2-N1-16 | 32 | 8050 mA | 4000K | 108 | 10335 | B2-U3-G2 | 96 | 10262 | B2-U3-G2 | 95 | 10632 | 84-U3-G2 | 99 |
| TX0348-G2-N3-16 | .68 | 350 mA | 4000K | 51 | 6031 | 81-U3-G1 | 117 | 6188 | B1-U3-G2 | 120 | 6247 | 83-U3-GI | 122 |
| TX0348-G2-N5-16 | 48 | 530 mA | 4000K | 76 | 8509 | B2-03-G2 | 113 | 8731 | B2-U3-G2 | 116 | 8815 | B3-U3-G2 | 117 |
| TX0348-62-N7-16 | 48 | 700 mA | 4000K | 104 | 1032 | B2-U3-G2 | 106 | 11323 | B2-U3-G2 | 109 | 18431 | 84-U3-G2 | 110 |
| TX0364-G2-N3-16 | - 64 | 350 mA | 4000K | 69 | 8029 | B2-U3-G2 | . 117 | 8238 | B2-U3-G2 | 120 | 8307 | 83-U3-G2 | 121 |
| TX0364-G2-NS-16 | 64 | 530 mA | 4000K | 106 | 10742 | 82-84-G2 | 801 | 12049 | 82-U3-G2 | 24 | 12164 | 84-03-62 | 115 |
| TX0364-62-N7-16 | 64 | 700 mA | 4000K | 137 | 14414 | 83-04-63 | 105 | 14789 | H3-U3-G3 | 108 | 34931 | 84-U3-G2 | 109 |
| LED Module: N-4000X - | W_HSS | | | | | Type 3 | | g-1 | Type 3W | | | | |
| TX0312-G2-N3-H-16 | 32 | 350mA | 4000K | 35 | 3312 | 81-03-G1 | 94 | 3273 | B1-U3-G8 | 92 | 11 | | |
| TXXX332-G2-N5-H-16 | 32 | 530 mA | 4000K | 52 | 4703 | 81-U3-G1 | 91 | 4647 | 81-U3-G2 | 90 | | | |
| TX03332-G2-N7-H-16 | 32 | 700 mA | 4000K | -71 | 6160 | 81-U3-G2 | 87 | 6087 | 81-03-62 | 85 | 17 | | |
| TXXX332-G2-NT-H-16 | 32 | 1050 mA | 4000K | 108 | 8508 | B1-03-G2 | 79 | 8408 | B1-U3-G2 | 78 | | | |
| TX0348-G2-N3-H-16 | 48 | 350 mA | 4000K | 51 | 4999 | 81-U3-G1 | 97 | 4940 | 81-1/3-62 | 96 | 13 | | |
| TX0348-G2-N5-H-16 | 48 | 530 mA | 4000K | 76 | 7054 | 81-U3-G2 | 93 | 6971 | 81-03-62 | 92 | | | |
| TX0348-G2-N7-H-16 | 48 | 700 mA | 4000K | 104 | 9147 | BI-03-G2 | 58 | 9040 | B2-U3-G2 | 87 | | | |
| TXXX364-62-N3-H-16 | - 64 | 350 mA | 4000K | 69 | 6656 | B1-U3-G2 | 97 | 6577 | B1-U3-G2 | 95 | | | |
| TX0364-G2-N5-H-I6 | - 64 | 530 mA | 4000K | 106 | 9734 | B2-U1-G2 | 92 | 9519 | B2-U3-G2 | 91 | | | |
| TX0364-G2-N7-H-16 | 64 | 700 mA | 4000K | 137 | 11948 | 82-U4-G2 | 87. | 11807 | B2-1/3-G2 | 86 | | | |

| | | 100 | Average Type 3 Type 3W | | | Type 5 | | | | | | | |
|---------------------|------------|---------|------------------------|-------------------|-----------------|---------------|----------|-----------------|---------------|----------|-----------------|---------------|----------|
| | LED qty | System | Celor Temp. | System Waltage | Lumen Output | BUG Rating | Efficacy | Lumen Output | BUG Rating | Efficacy | Lumen Output | BUS Rating | Efficacy |
| 1X0332-G2-W3-16 | 32 | 350 mA | 3000K | 35 | 3527 | BI-U3-GI | 100 | 3503 | BI-UII-GE | 99 | 3545 | 82-U3-GI | 103 |
| TX0332-G2-W5-16 | 32 | 530 mA | 3000K | 52 | 5009 | BI-U3-GI | 97 | 4974 | BI-U3-GI | 95 | 5154 | 83-U3-GI | 99 |
| TX0332-G2-W7-16 | 32 | 700 mA | 3000K | 71 | 6562 | B1-U3-G2 | 92 | 6515 | 82-U3-G2 | 92 | 6750 | B3-U3-G2 | 95 |
| TX0332-G2-W1-16 | 32 | 1050 mA | 3000K | 108 | 9063 | 82-03-G2 | 84 | 8999 | 82-U3-G2 | 84 | 9094 | B4-83-G2 | 84 |
| TX0348-G2-W3-16 | 48 | 350 mA | 3000K | . 51 | 5288 | BI-83-GI | 103 | 5426 | 81-03-62 | 106 | 5478 | 83-U3-GI | 107 |
| TX0348-G2-W5-16 | 48 | 530 mA | 3000K | 76 | 7461 | 82-03-62 | 99 | 7657 | 82-U3-G2 | 101 | 7730 | B3-U3-G2 | 102 |
| TX0348-G2-W7-I6 | 48 | 700 mA | 3000K | 104 | 9674 | 82-U3-G2 | 93 | 9929 | B2-U3-G2 | 96 | 10024 | B4-U3-G2 | 97 |
| TX0364-G2-W3-16 | 64 | 350 mA | 3000K | 69 | 7046 | Bt-03-G2 | 102 | 7224 | B2-03-G2 | 105 | 7293 | 80-03-G2 | 106 |
| TX0364-G2-W5-96 | 64 | 530 mA | 3000K | 106 | 10297 | 82-13-62 | 98 | 10566 | B2-U3-G2 | 100 | 10667 | B4-U3-62 | 101 |
| TX0364-G2-W7-16 | 64 | 700 mA | 3000K | 137 | 12640 | B2-84-62 | 92 | 12969 | B3-U3-G3 | 95 | 13093 | B4-U3-G2 | 96 |
| LED Module: N-3000K | W_HSS | | | | | Type 3 | | | Type 3W | | | | |
| TX0332-G2-W3-H-16 | 32 | 350 mA | 3000K | 35 | 2904 | 81-U3-GI | 82 | 2870 | BI-U3-GI | 81 | | | |
| TX0332-G2-W5-H-16 | 32 | 530 mA | 3000K | 52 | 4124 | 81-93-61 | 80. | 4075 | BI-83-GI | 79 | | | |
| TV0022-C2-M2-M-46 | 32 | 700 m 8 | 20008 | 73 | 5403 | 01.10.61 | TC | 6110 | PE-10-01 | 25 | | | |

| TX0364-G2-W7-16 | 64 | 700 mA | 3000K | 137 | 12640 | B2-84-62 | 92 | 12969 | B3-U3-G3 | 95 |
|---------------------|-------|---------|-------|-----|-------|----------|-----|-------|-----------|----|
| LED Module: N-3000K | -w_HS | | | | | Type 3 | | | Type 3W | |
| TX0332-G2-W3-H-16 | 32 | 350 mA | 3000K | 35 | 2904 | 81-U3-GI | 82 | 2870 | BI-U3-GI | 81 |
| TX0332-G2-W5-H-16 | 32 | 530 mA | 3000K | 52 | 4124 | 81-U3-GI | 80. | 4075 | BI-83-G) | 79 |
| TX0332-G2-W7-H-16 | 32 | 700 mA | 3000K | 71 | 5402 | 81-U3-GI | 76 | 5338 | B1-U3-G2 | 75 |
| TX0332-G2-W1-H-16 | 32 | 1050 mA | 3000K | 108 | 7461 | B1-03-G2 | 69 | 7373 | B1-U3-G2 | 68 |
| TX0348-G2-W3-H-16 | 40 | 350 mA | 3000K | 51 | 4384 | B1-03-G5 | 85 | 4332 | RI-113-G3 | 84 |
| TX0348-G2-W5-H-16 | 48 | 530 mA | 3000K | 76 | 6/85 | BI-U3-G2 | 82 | 6113 | B1-U3-G2 | 81 |
| TX0348-G2-W7-H-I6 | 48 | 700 mA | 3000K | 104 | 8021 | B1-03-G2 | 77 | 7927 | B1-U3-G2 | 76 |
| TX0364-G2-W3-H-16 | 64 | 350 mA | 3000K | 09 | 5836 | श-धा-द | 85 | 5767 | 81-03-62 | 84 |
| TX0364-G2-W5-H-16 | 64 | 530 mA | 3000K | 106 | 8536 | BI-U3-G2 | 81 | 8435 | BI-U3-G2 | 80 |
| TX0364-G2-W7-H-16 | 64 | 700 mA | 3000K | 137 | 10478 | B2-U3-G2 | 76 | 10354 | B2-U3-G2 | 76 |

System wortage or total turninaire wortage includes the LED module and the LED dilver.
Note: Explored-not should always be confirmed by a photometric layeut.
Due to night and experience advances in LED exclosings, LED burstening data is subject to change without notice and at the discretion of Philips.

TX03 Hagerstown

Post top

Housing Specifications

Roof: Roof is 0.090* thick spun aluminum (121/W"H x 161/W"W). Easy future replacement of either roof or bottom globe section if required. Globe: Narrow body globe is constructed of clear injection-molded vertically ribbed U.V. stabilized acrysic. The bottom section of the globe has a neck opening of 71/4" and an oursideneck diameter of 8°. Globe (less roof) has a 13%"H x 14%"W.

Cage: Cage for narrow body globes (15" dia.) is constructed of die-cast 360 aluminum alloy. Cage has 4 legs each with square decorative flower block. Solid rectangular band around top of cage. Height of cage is 17" and width of cage is 15°. Finish is polyester thermoset powdercoat. Pods: Wiring block to accept three #8 solid or stranded wires heavy cast aluminum post fitter utilizes three 5/16-18 black cadmium stainless steel set screws (Hex head or Allen head as specified) for mounting to 3° O.D. post tenon. Globe holder has an internal water trap to prevent water from entering ballast compartment. Globe is held by utilizing four 5/16-18 black cadmium stainless steel fasteners (Hex head or Allen head as specified). All hardware to be stainless steel and captive

Octagonal fitter (A) is constructed of die-cast 360 aluminum alloy with bottom-hinged door providing I35" entry into the fitter assembly for easy access to the electrical components. Optional internal twist-tock photo eve receptacle or optional button eye photocell. Easy access to photo eye through the door on the pod (10°4" H x 10°4" W). Round fitter with scalloped petals (8) is constructed of die-cast 360 aluminum alloy with side-hinged door providing 180° entry into the fitter assembly for easy access to the electrical components. Optional internal twist-lock photo eye receptacle or optional button eye photocell. Easy access to photo eye through the door on the god (121/4"H x 111/4"W). Fluted tapered hourglass fitter (C) is constructed of 356 HM High-Strength Low-Copper cast aluminum. Optional interna button eye photocell (8"H x 8"A"W). Smooth tapered hourglass fitter (D) is constructed of 356 HM High-Strength. Low-Copper cast aluminum. Optional internal button eye photoceil. (8"H x 9"/4"W) Tapered fluted fitter with scalloped flower petals (E) is constructed of 356 HM High-Strength, Low-Copper cast aluminum. Optional

Internal button eye photocell (IO"H x 111/2"W).

Tall round fluted fitter (G) is constructed of diecast 360 aluminum alloy with removable door providing entry into the fitter assembly for easy access to the electrical components. Optional internal button eye photocell. Easy access to photo eye through door on the pod (9"H x 9"W). Round contemporary fitter (H) is constructed of 356 HM High-Strength, Low-Copper cast aluminum. Optional Internal twist-lock photo eve receptacle or optional internal button eve photocell. Easy access to photocell through tool-less door on pad (10°H x 10°W)

Tapered fluted with round stepped fitter (J) is constructed of 356 HM High-Strength, Low-Copper cast aluminum. Optional internal twistlock photo eye receptacle. Tool-less access to photo eye through the door on the pod (14"H x 10*W).

Round Ruted long fitter (L) is constructed of 356 HM High-Strength, Low-Copper cast aluminum with a side-hinged door providing entry into the fitter assembly for easy access to the electrical components. Optional internal twist-lock photo eye receptacle or button eye photocell. Tool-less access to photo eye through the door on the pad (121/6"H x 10 5/4"W). Decorative leaf fitter with scalloped petals (T) is constructed of 356 HM High-Strength, Low-Copper cast aluminum with side-hinged door providing 180 degrees entry into the fitter assembly for easy access to the electrical components. Optional internal twist-lock photo eye receptacle or optional button eye photocell. Easy access to photo eye through the door on the pod 05\A"H x 11\b"W).



Finials: All finials are cast aluminum mounted. with 1/4-20 stainless steel threaded studs. Standard finial finish will match fixture finish



Fasteners: Used to secure post fitter to post tenon and globe to globe holder. Hex Head (1) and Allen Head (2) bolts feature Black cadmium stainless steel.

Light Engine

LEDgine is composed of five main components: Heat Sink, Lens, LED lamp, Optical System, and Driver. Electrical components are RoHS compliant,

LED type Philips Lumileds LUXEON T. Composed of high-performance white LEDs. Color temperature as per ANSI/NEMA bin -Neutral White, 4000 Kelvin nominal (3985K 4/- 275K or 3710K to 4260K) or Warm White 3000 Kelvin nominal (3045K +/- 175K or 2870K to 3220K), CRI 70 Min. 75 Typical.

Heat Sink

Made of cast aluminum optimizing the LEDs efficiency and life. Product does not use any cooling device with moving parts (only passive

Optical System

Type 3, 3W and Type 5 are composed of high performance optical grade PMMA acrylic refractor lenses to achieve desired distribution. optimized to get maximum specing, target lumens and a superior lighting uniformity. Optical system is rated IP66. Performance shall be tested per LM 63, LM 79 and TM IS (IESNA) certifying its photometric performance. Street

Hagerstown

Post top

Driver

Driver comes standard with 0-10V dimming capability. High power factor of 95%, Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral. Class I. THO of 20% may Maximum ambient operating temperature from 40°F (4°C) to 130°F (55°C). Certified in compliance to UL1310 cULus requirement (dry and damp location). Assembled on a unitized removable tray with Tyco guick disconnect plug resisting to 221°F (105°C). The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction, Standard built in driver surge protection of 2.5kV (min).

Driver Options

AST: Pre-set driver for progressive start-up of the LED module(s) to optimize energy management and enhance visual comfort at start-up.

CLO: Pre-set driver to manage the lumen depreciation by adjusting the power given to the LEDs offering the same lighting intensity during the entire lifespan of the LED module OTL: Pre-set driver to signal end of life of the

Dimming Options

DA: 4 Hrs 25% Reduction DB: 4 Hrs 50% Reduction DC: 4 Hrs 75% Reduction

DD: 6 Hrs 25% Reduction DE: 6 Hrs 50% Reduction DE: 6 Hrs 75% Reduction

DG: 8 Hrs 25% Reduction DH: 8 Hrs 50% Reduction

DJ: 8 Hrs 75% Reduction

DALI: Pre-set driver compatible with the DALI logarithmic control system

Surge protector tested in accordance with ANSI/IEEE C62,45 per ANSI/IEEE C62,41,2 Scenario I Category C High Exposure 10kW/10kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA, Option for SP2 20kV/20kA

Color in accordance with the AAMA 26D3 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils / 24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish In accordance with the ASTM D2244 standard as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. The surface treatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM BII7 standard.

Luminaire Useful Life

Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thormal testing in accordance with UL359B and UL8750, using LM-80 data from LED manufacturers and engineering prediction methods, the luminaire useful life is expected to reach 100,000+ hours with >L70 tumen maintenance @ 25°C, Luminaire useful Ofe accounts for LED lumen maintenance and additional factors, including LED life, driver life. PCB substrate, solder joints on/off cycles and burning hours for nominal applications

LED products manufacturing standard

The electronic components sensitive to electrostatic discharge (ESD) such as fight emitting clodes (LEDs) are assembled in compliance with IEC61340 51 and ANSI/ ESD 520,20 standards so as to eliminate ESD events that could decrease the useful life of the product.

Quality Control

The manufacturer must provide a written confirmation of its ISO 9001 2008 and ISO 14001 2004 International Quality Standards Certification

Vibration Resistance

Meets the ANSI C136.31 2001, American National Standard for Roadway Luminaire Abration specifications for normal Applications

Certifications and Compliance

cETL listed to Canadian safety standards for wet locations. Manufactured to ISO 9001:2008 Standards. UL8750 and UL1598 compliant. ETL listed to U.S. safety standards for wet locations cETL listed to Canadian safety standards for wet locations, LM80 & LM29 tested. IP Rating: The LED optics chamber is IP66 rated. The LED driver is IP66 rated. Warranty: 5 year extended warranty.

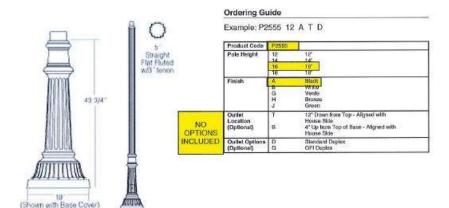
LED Performance

| Predicted lumen depreciation data! | | | | | | | | |
|------------------------------------|---------------|---|---|---------------------------------------|--|--|--|--|
| Ambient Temperature (°C) | Driver mA | Calculated L ₇₀ hours ¹³ | L ₇₀ per TM-21 ²³ . | Lumen Maintenance % @ 60,000 hours | | | | |
| 25°C | up to 1050 mA | +100,000 | >60,000 | 88% | | | | |

- Predicted performance decised from LEO manufacturer's data and engineering detalp estimate based on LESNA LSR-80 matheddetegs. Actual expenience may vary due to field application con 2. Light the predicted fram when LSD performance dependents for DSR-of which barns output.
 Colonization of ESNA MOVIP In Stationary Control Interest of Arms exhault LSB test boxes.







HOUSING: 356 HM high-sizergth, low-copper, proprietary cast aluminum alloy - 9005-T5 extruded aluminum. Anchor rods are not clopped galvanized steel . Tenon is 356 HM sond cast

A dutable polyure/hane enamel tinish is applied after assemblies are shot blasted to create a sortoce profile which allows for the highest level of paint exhesion. Laboratory twished for superior wealtheatably and take resistance in accordance with ASTM B-117-64 and ANSIASTM 033-77 specifications. For legger projects where a custom color is required, contact the feature plant of promise in the contact the feature of the contact the contact the feature of the contact the feature of the contact the co

WARRANTY: Three-year limited warranty.

OUTLET:
Standard Deplox Cutlet has universal metal weatherproof cover. Weatherproof while in use. Heavy-duty all-metal construction, Lockable security cover. Meets NEC 406.9 (8), Weather resistant, GFI Duglax Cutlet has dual-function inciteator light, universal metal weatherproof cover. Weatherproof while in use, Heavy-duty all-metal construction, Lockable security cover. Meats NEC 405.9 (8), Weather resistant.

P2555 P2555

Pole

Specifications

Tenon/Top:

Bolt Circle:

Anchor Rods: (4) 3/4" da. x 19"

Base Dimensions: 12 3/4 sq. x 43 3M*

Base Cover:

(Included) 19" dia, x 9 1/4"

Hand Hole: 4.38° x 5.36°

5" Straight Flat Fluted

Wall Thickness: 8.188 - 0267 Aluminum

Height: 12', 14', 16', 16'

Pole EPA Values

Height

| Windspeed(mph) | 12 | 14" | 16" | 19 |
|----------------|---------|---------|---------|---------|
| 80 | 23.4200 | 15.2900 | 12.7600 | 10.6500 |
| 100 | 14.4800 | 9,1900 | 7.4600 | 5.9900 |



APPENDIX B - Concept Plan



W. LINCOLN HIGHWAY CORRIDOR MASTER PLAN

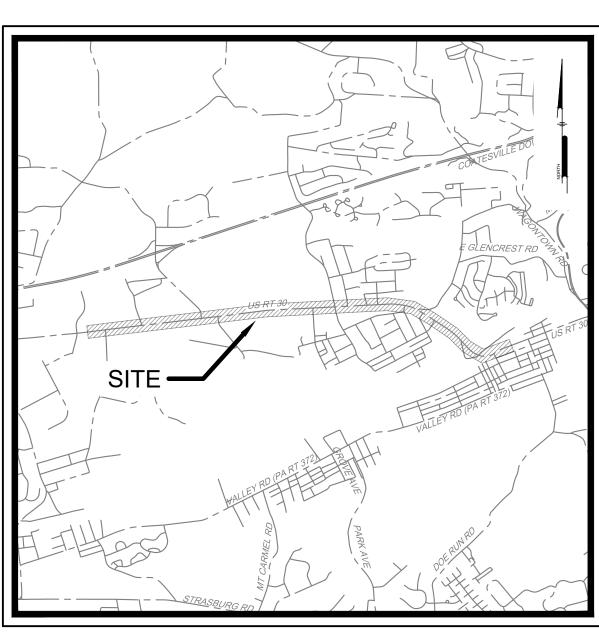
CHESTER COUNTY, PENNSYLVANIA

PREPARED FOR:

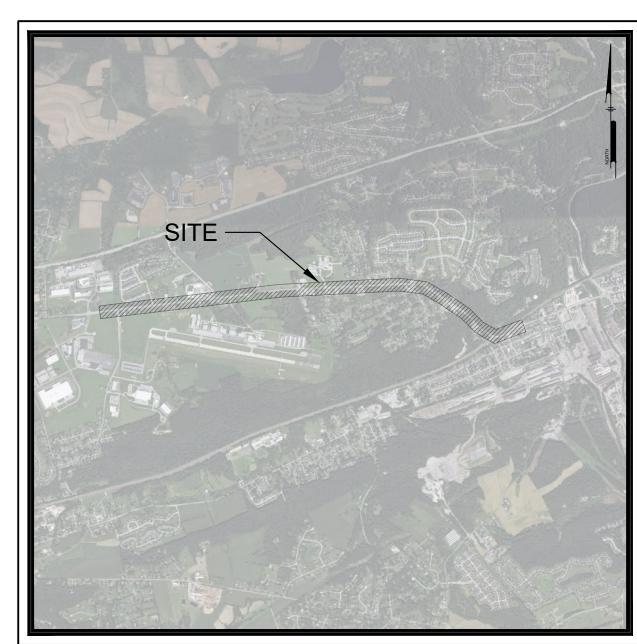
VALLEY TOWNSHIP

1145 WEST LINCOLN HIGHWAY **COATESVILLE, PA 19320** (610)-384-5751

| | | SHEET LIST | | | | | |
|------|--------|---|--|--|--|--|--|
| SHT. | DWG. | TITLE | | | | | |
| 1 | CS0001 | COVER SHEET | | | | | |
| 2 | CS0002 | INDEX PLAN | | | | | |
| 3 | CS0201 | SITE PLAN SEG: 0060 OFF: 0000 TO SEG: 0060 OFF: 1800 | | | | | |
| 4 | CS0202 | SITE PLAN SEG: 0060 OFF: 1800 TO SEG: 0070 OFF: 0990 | | | | | |
| 5 | CS0203 | SITE PLAN SEG: 0070 OFF: 0990 TO SEG 0070 OFF: 3270 | | | | | |
| 6 | CS0204 | SITE PLAN SEG:0070 OFF: 3270 TO SEG: 0090 OFF: 0070 | | | | | |
| 7 | CS0205 | SITE PLAN SEG: 0090 OFF: 0070 TO SEG: 0090 OFF: 2300 | | | | | |
| 8 | CS0206 | SITE PLAN SEG: 0090 OFF: 2300 TO SEG: 0100 OFF: 1310 | | | | | |



LOCATION MAP Scale: 1" = 3000'



LINCOLN HIGHWAY Scale: 1" = 3000'

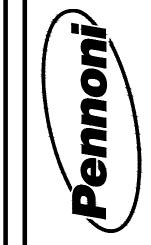
PREPARED BY: PENNONI ASSOCIATES INC.



Christiana Executive Campus Newark, DE 19713-4310 **T** 302.655.4451 **F** 302.654.2895

121 Continental Drive, Suite 207

NOT FOR CONSTRUCTION



ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SOLE RISK AND WITHOUT LIABILITY OR LEGAL FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSE ARISING OUT OF OR RESULTING THEREFROM.

VLTWP2101

AS NOTED

CS0001

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA CALL 1-800-242-1776 PA. ACT 287 OF 1974 REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL OR BLAST PENNSYLVANIA ONE-CALL SYSTEM, INC.

SERIAL NUMBER(S):

CALL BEFORE YOU DIG



LEGEND

| FEATURE | DESCRIPTION |
|------------------------|--------------------------------------|
| | PROPOSED TRAIL |
| | ROAD |
| | PROPOSED SIDEWALK |
| | - CURB |
| | EXISTING CURB |
| | PROPOSED BUILDING |
| | STORMWATER BASIN |
| | GREEN SPACE/TRAFFIC CALMING FEATURES |
| | PROPOSED SIGNALIZED INTERSECTION |
| | EXSTING SIGNALIZED INTERSECTION |
| | EXISTING TRAFFIC SIGNAL |
| $\odot \odot \bigcirc$ | PROPOSED LANDSCAPING/ TREES |
| * | PROPOSED STREET LIGHT |

NOT FOR CONSTRUCTION

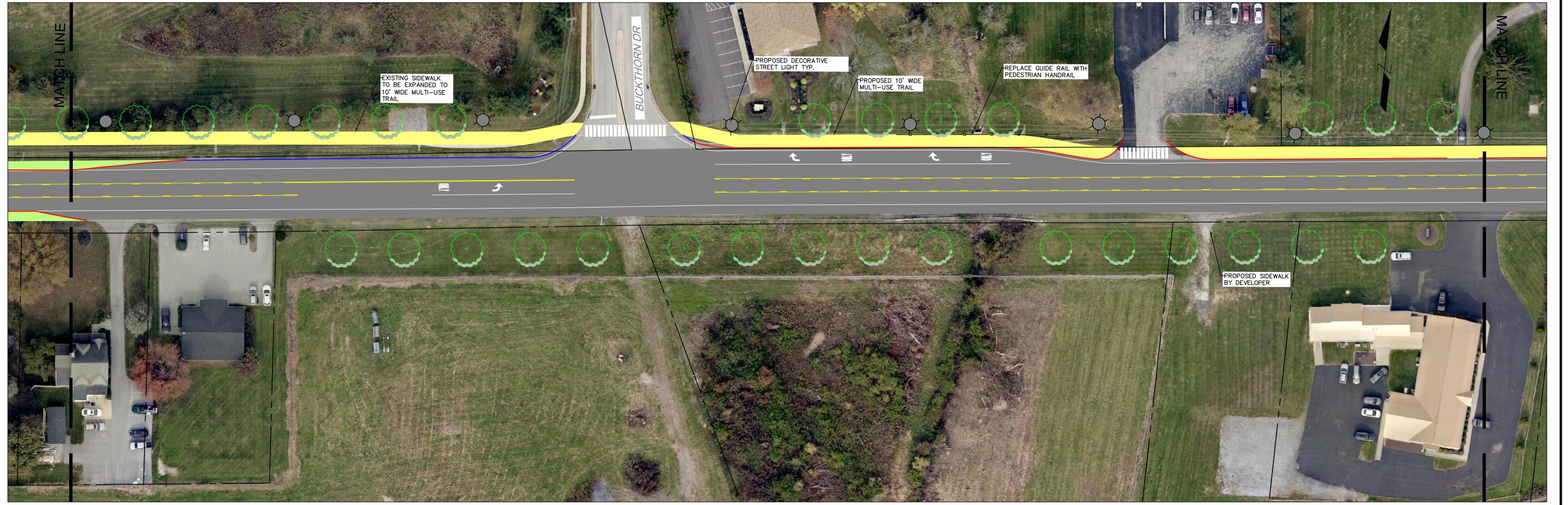
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND
EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

VLTWP21011 2023-01-12 1"=300'



WEST LINCOLN HIGHWAY (SR 3070) WASHINGTON LANE

SEG: 0060 OFF: 0000 TO SEG: 0060 OFF: 0650



ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIEY AND HOLD HARMLESS DENNONI SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AN EXPENSES ARISING OUT OF OR RESULTING THEREFRO

VLTWP21011

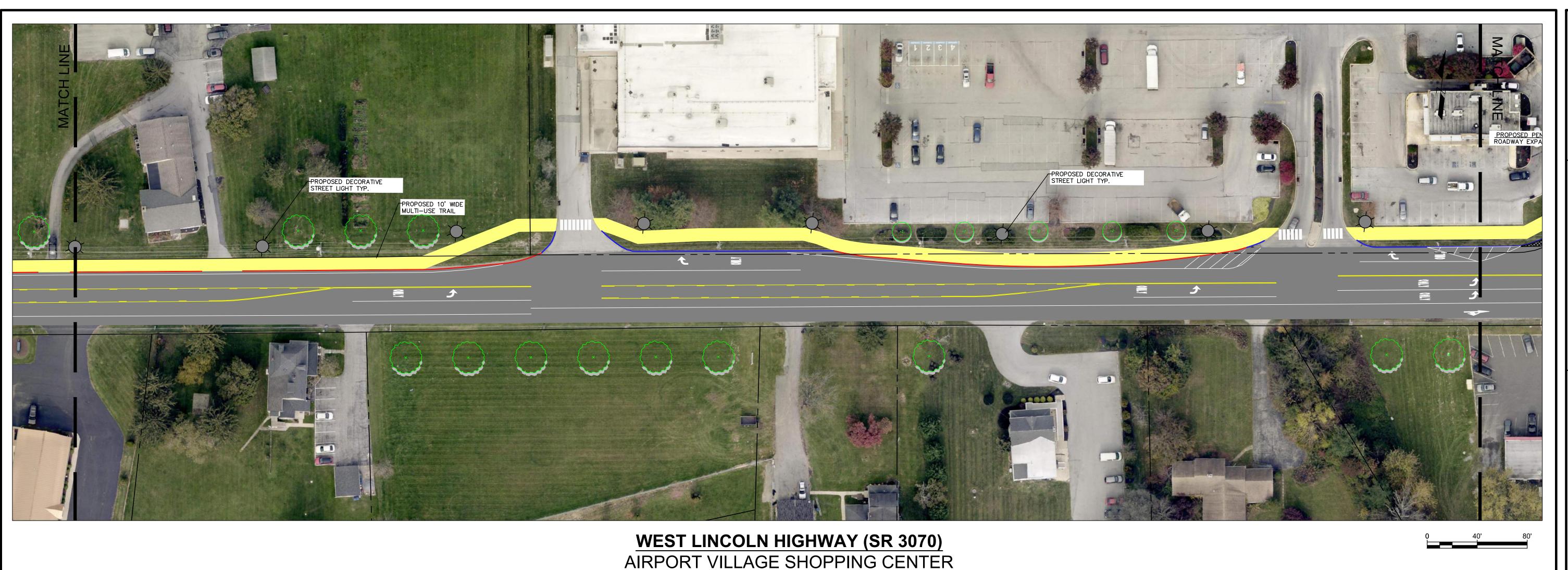
CS0201

NOT FOR CONSTRUCTION

WEST LINCOLN HIGHWAY (SR 3070)

BUCKTHORN DRIVE

SEG: 0060 OFF: 0650 TO SEG: 0060 OFF: 1800



AIRPORT VILLAGE SHOPPING CENTER SEG: 0060 OFF: 1800 TO SEG: 0060 OFF: 2910



WEST LINCOLN HIGHWAY (SR 3070) EARHART DRIVE

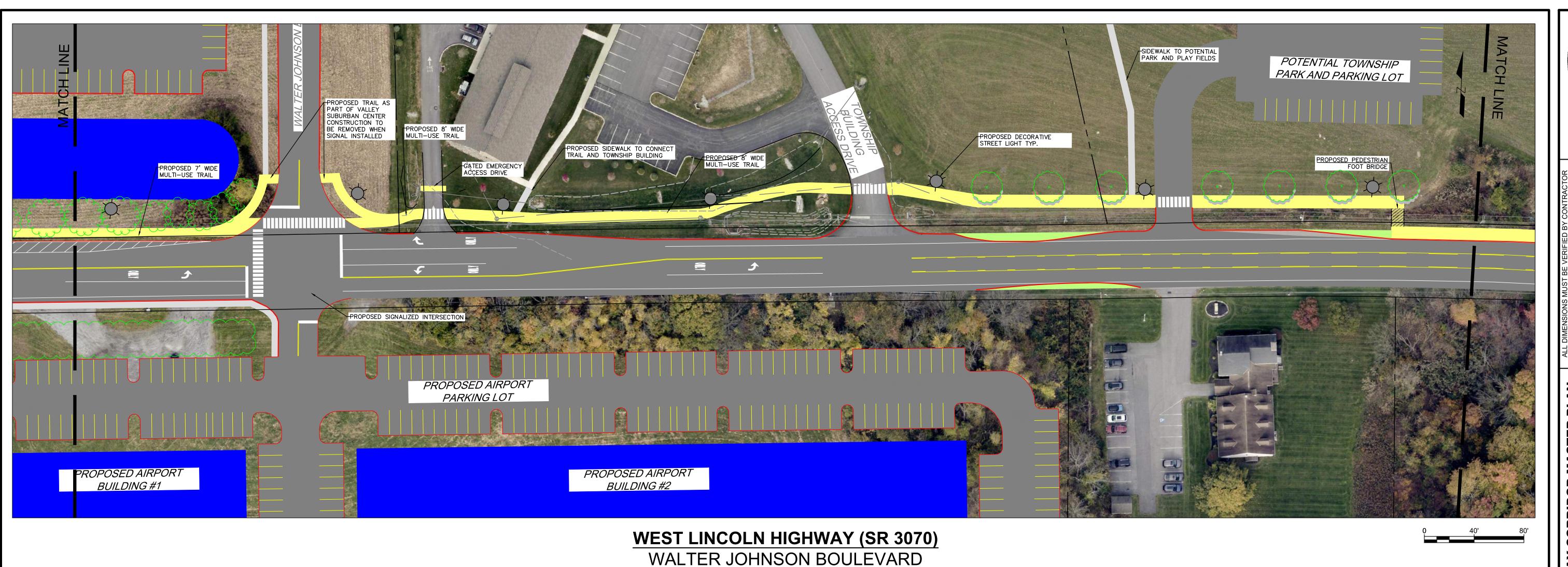
SEG: 0060 OFF: 2910 TO SEG: 0070 OFF: 0990

NOT FOR CONSTRUCTION

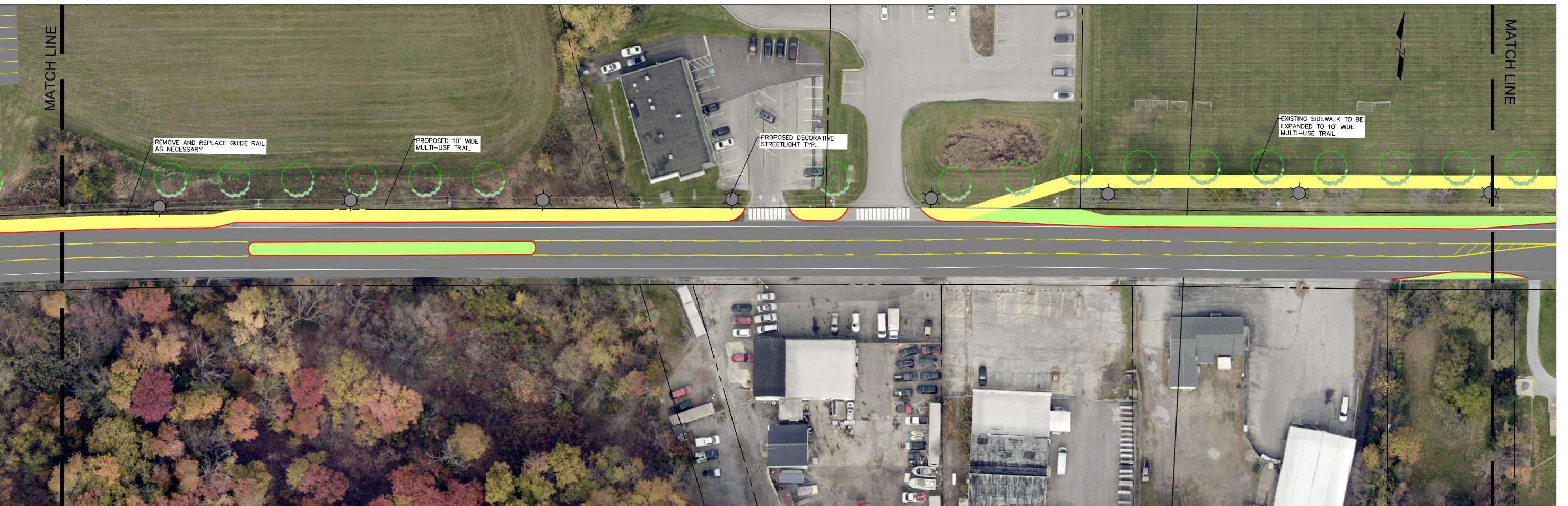
| | | | TET | GBR | MRW | ВУ |
|----------|--------|--------|--------------------|-------------------------|--|-----------|
| | | | ACT 247 SUBMISSION | ADD STREET TREES/LIGHTS | REVISIONS PER 1-24-23 TASK FORCE MEETING | REVISIONS |
| | | | 3 | 2 | 1 | NO. |
| | | | 12-07-2023 | 3-23-2023 | 1-30-2023 | DATE |
| L DOCUMI | ENTS P | REPARE | D BY PE | NNONI A | ASSOCIA | ATES |

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIELD RUPPOSE INTENDED WILL BE AT OWNERS SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AN EXPENSES ARISING OUT OF OR RESULTING THEREFRO

VLTWP21011



SEG: 0070 OFF: 0990 TO SEG: 0070 OFF: 2110



WEST LINCOLN HIGHWAY (SR 3070)

BETWEEN TOWNSHIP BUILDING AND WASHINGTON AVENUE

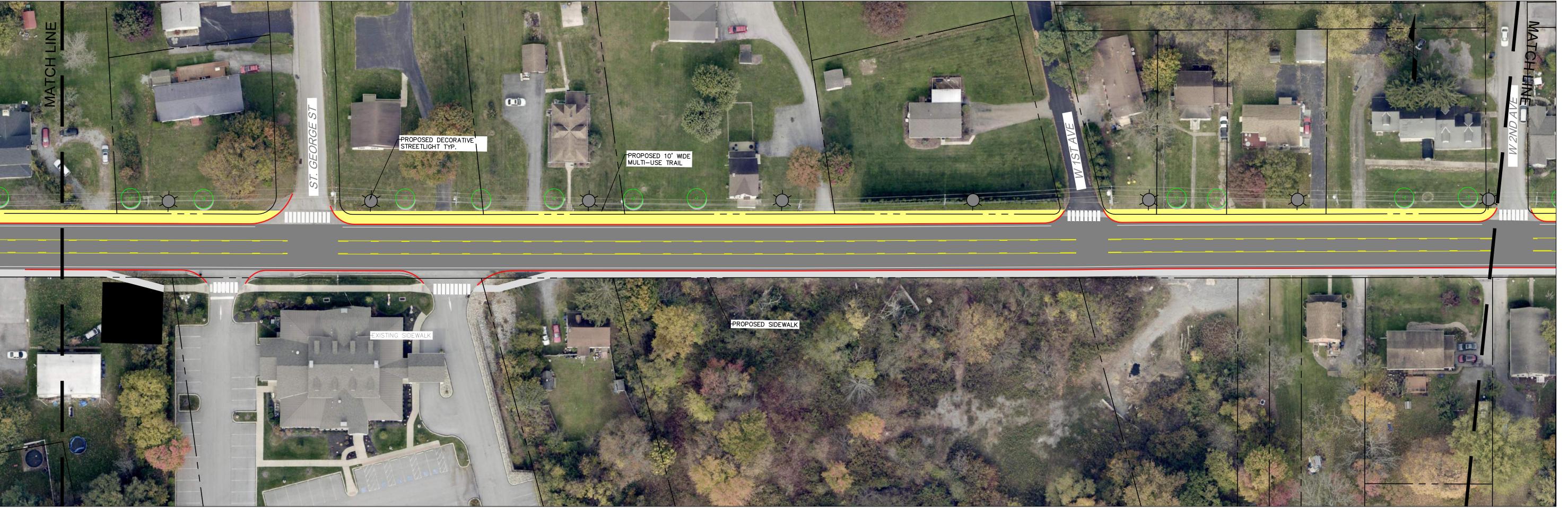
SEG: 0070 OFF: 2110 TO SEG: 0070 OFF: 3270

NOT FOR CONSTRUCTION

VLTWP2101



SEG: 0070 OFF: 3270 TO SEG: 0080 OFF: 0880



WEST LINCOLN HIGHWAY (SR 3070)

ST GEORGE STREET SEG: 0080 OFF: 0880 TO SEG: 0090 OFF: 0070

NOT FOR CONSTRUCTION

Pennoni ASSOCIATES INC.

PENNONI ASSOCIAT
Christiana Executive C
121 Continental Drive, S
Newark DF 19713-2

AND OWNER MUST BE NOTIFIED OF ANY
DISCREPANCIES BEFORE PROCEEDING WITH WORK

NCOLN HIGHWAY
NNSHIP, PENNSYLVANIA

TE PLAN
TO SEG: 0090 OFF: 0070

SITE PLAN SEG:0070 OFF: 3270 TO SEG

12-07-2023 3 ACT 247 SUBMISSION
12-07-2023 2 ADD STREET TREES/LIGHTS
STATE OF THE S

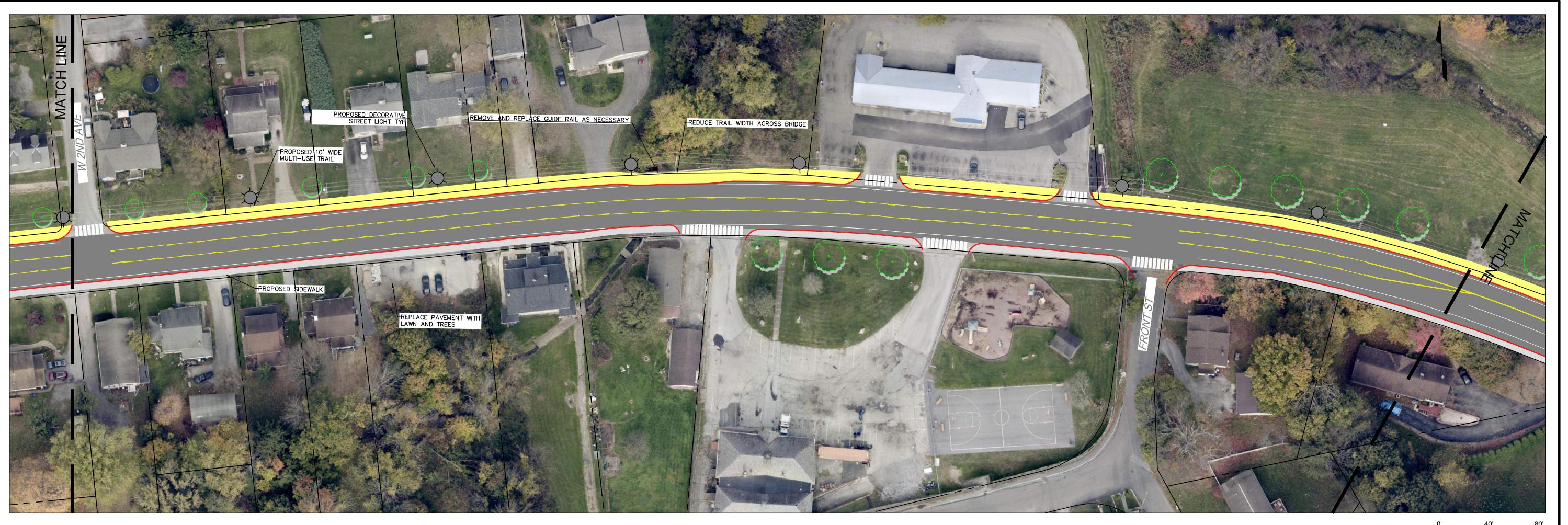
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATIC OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FOR MALL CLAIMS, DAMAGES, LOSSES AN

VLTWP21011

E 2023-01-12

WING SCALE 1"=40'

WN BY MRW



WEST LINCOLN HIGHWAY (SR 3070)

FRONT STREET

SEG: 0090 OFF: 0070 TO SEG: 0090 OFF: 1180



GLENCREST ROAD

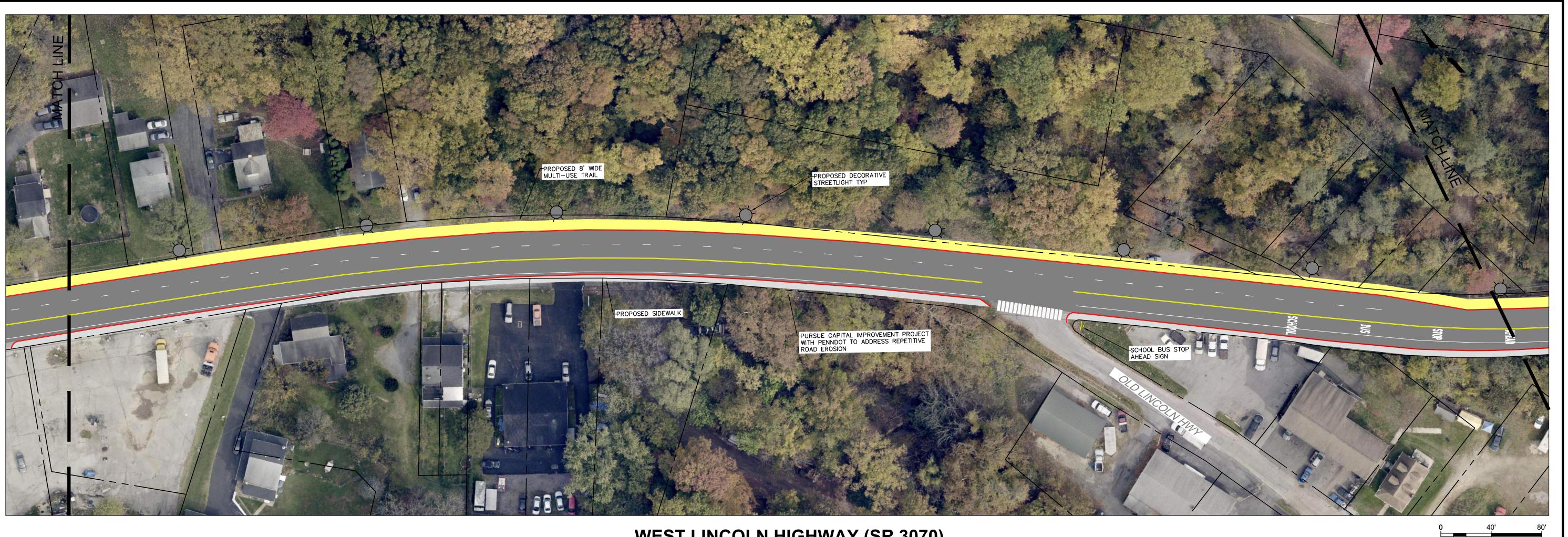
SEG: 0090 OFF: 1180 TO SEG: 0090 OFF: 2300

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AN EXPENSES ARISING OUT OF OR RESULTING THEREFRO

VLTWP21011

CS0205

NOT FOR CONSTRUCTION



WEST LINCOLN HIGHWAY (SR 3070)

OLD LINCOLN HIGHWAY
SEG: 0090 OFF: 2300 TO SEG: 0100 OFF: 0440



WEST LINCOLN HIGHWAY (SR 3070)

MT PLEASANT STREET

SEG: 0100 OFF: 0440 TO SEG: 0100 OFF: 1310

NOT FOR CONSTRUCTION

Pennoni

PENNONI ASS Christiana Exe

AND OWNER MUST BE NOTHED OF ANY
DISCREPANCIES BEFORE PROCEEDING WITH WORK

NSHIP, PENNSYLVANIA

TE PLAN

TO SEG: 0100 OFF: 1310

SITE PLAN SEG: 0090 OFF: 2300 TO SEG

12-07-2023 3 ACT 247 SUBMISSION LEL
3-23-2023 2 ADD STREET TREES/LIGHTS GBR
1-30-2023 1 REVISIONS PER 1-24-23 TASK FORCE MEETING MRW
DATE NO. REVISIONS BY

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND
EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

 DJECT
 VLTWP21011

 TE
 2023-01-12

 AWING SCALE
 1"=40'

 AWN BY
 MRW