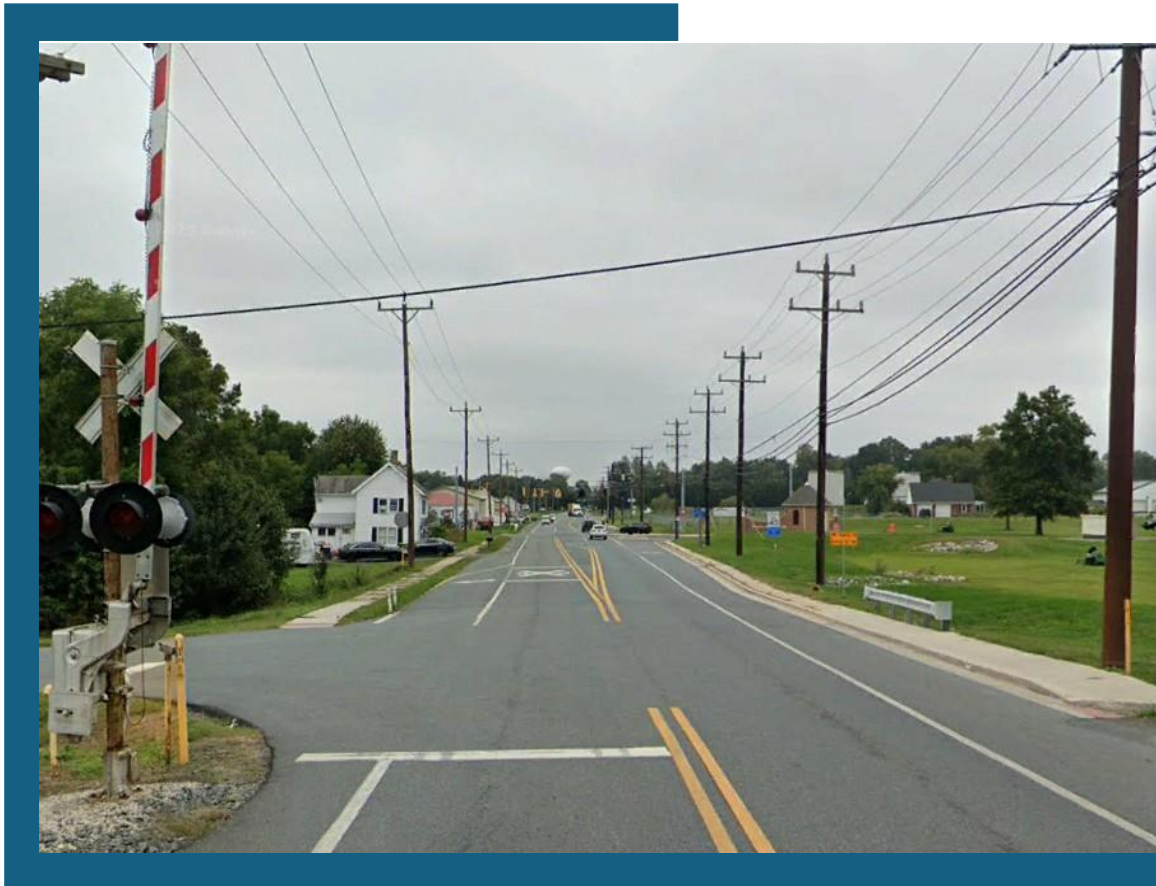


Wheatley's Pond Road Corridor and Intersection Improvements



Prepared for:
Dover/Kent County MPO

&

Town of Clayton

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Executive Summary (to be completed)

Introduction

This study is in Clayton, Delaware which is in both New Castle and Kent Counties, but most of the Town lies almost entirely in Kent County (*Figure 1*). Incorporated in 1887 Clayton was originally known as Smyrna Station. Clayton officially changed its name in 1860 in honor of US Secretary of State John M. Clayton.

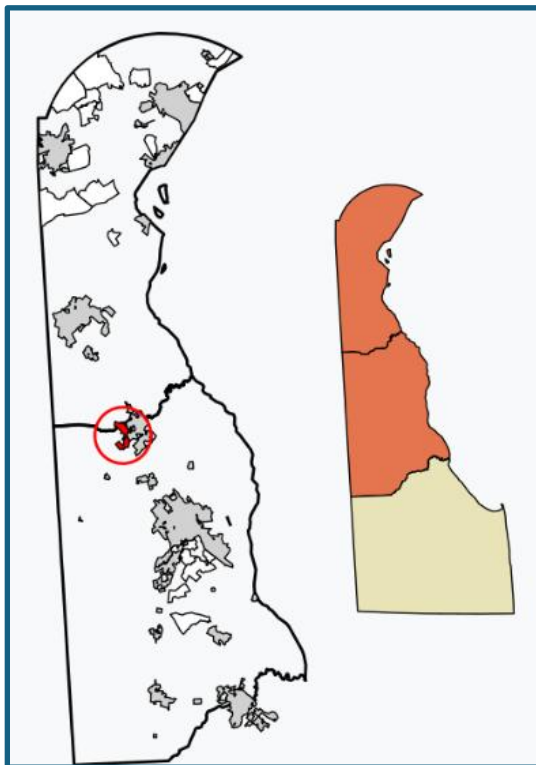


Figure 1 Project Location

The study was initiated to examine the Wheatleys Pond Road corridor between Huntington Drive and Baynard Farm Lane with a focus on three key intersections along the corridor, School Lane, S. Bassett Street, and S. Rodney Street (*Figure 2*).

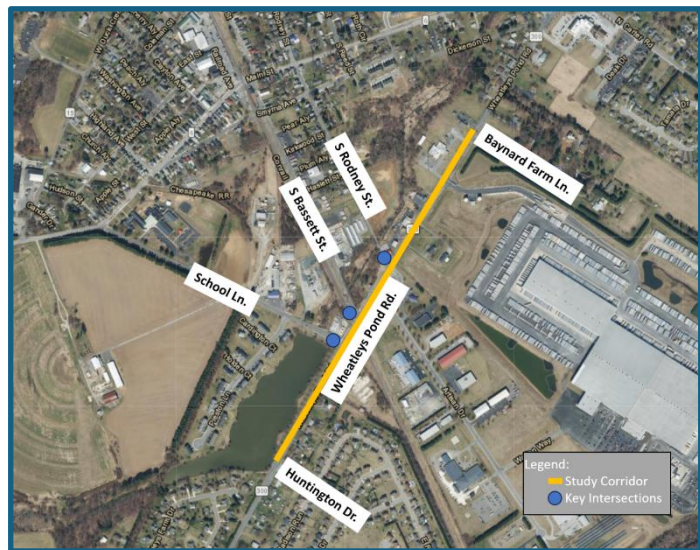


Figure 2 Study Area

However, the study area was revised to extend approximately 1,043 feet south to tie-into an existing shared use path (SUP) in the Providence Crossing Development. Extending the study area would create a connected SUP network of approximately 4,593 feet from Coldwater Drive in Providence Crossing to Baynard Farm Lane along the east side of Wheatley’s Pond Road. *Figures 3 and 4* depict this SUP network.



Figure 3 Existing Shared Use Path

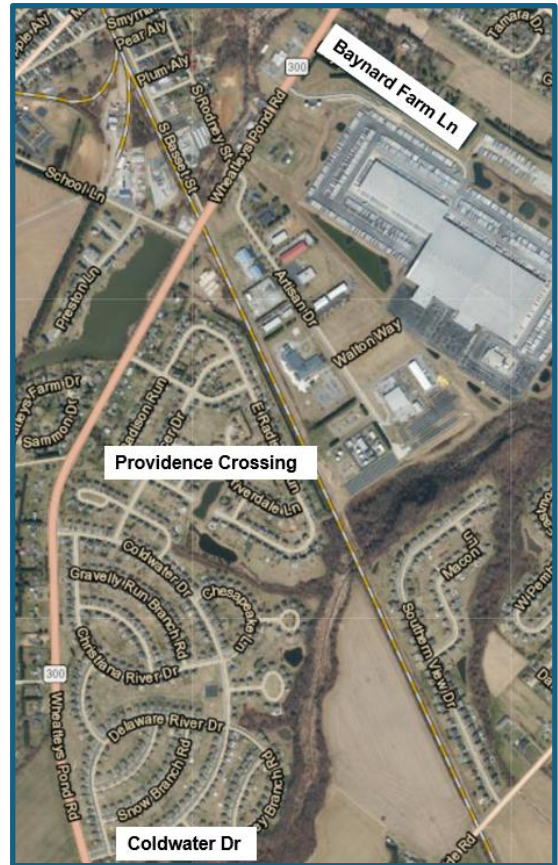


Figure 4 Shared Use Path Network

Existing Conditions

Demographics

According to the US Census Bureau, Clayton’s estimated 2020 population was 3,961. The Town saw a huge jump in their population between 2000 and 2010 by over 129%, and another significant increase of almost 36% between 2010 and 2020. Understandably, this population growth spurred an increase in residential development, as well as commercial and industrial development in and around the Town. Most of the residential development fronting Wheatleys Pond road was in place by the early 2000’s and was followed by commercial and industrial development behind those residences. As a result of this development, by the mid-2000’s the Wheatley Pond Road Corridor resembled what it does today.

Environmental

The western side of Wheatleys Pond Road between Huntington Road and School Lane is designated in the Federal Emergency Management Act’s (FEMA) as Flood Zone A which is a flood zone hazard area designation as having a one percent annual chance of flooding. This is also

known as the 100-year flood designation.

Traffic

Wheatleys Pond Road is classified as a principal arterial roadway. Wheatleys Pond Road and School are DeLDOT roads, and S. Bassett Street and S. Rodney Street are municipal roads. Huntington Drive and Baynard Farm Lane are private roads. The Average Annual Daily Traffic (AADT) on Wheatleys Pond Road is 9,664, and the AADT on School Lane is 2,168. The posted speed limit on Wheatleys Pond Road is 40 MPH, School Lane is 35 MPH, and most other study area streets are 25 MPH. There are Americans with Disabilities Act (ADA) issues along Wheatleys Pond Road at S. Bassett Street, S. Rodney Street, Baynard Farm Lane, and at the railroad. A review of the three-year crash history between December 2021 to December 2024 shows there were crash clusters at each of the key intersections, as well as at the railroad, however there were no fatalities during that period (*Figure 5*).

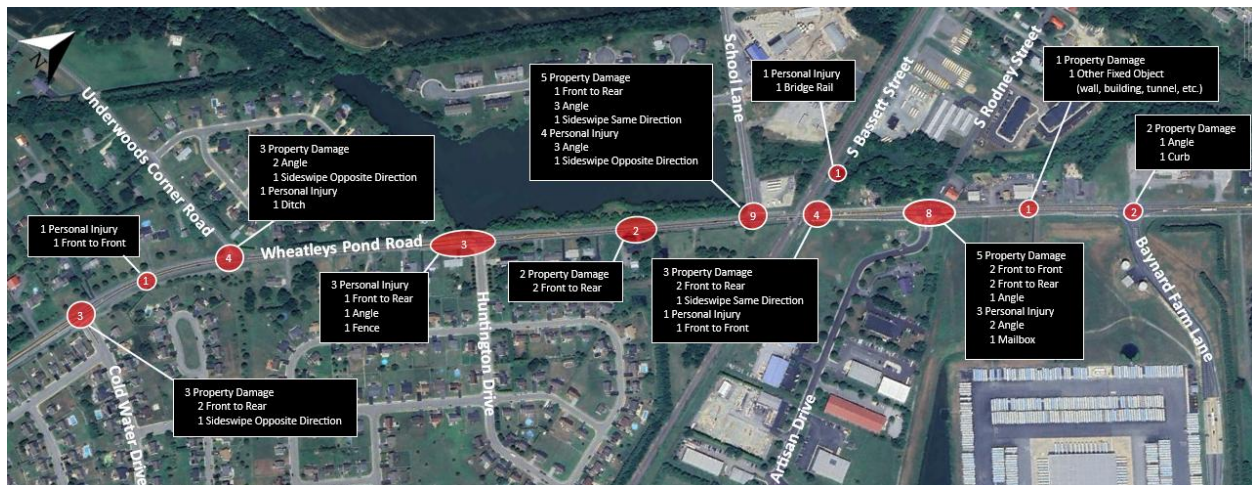


Figure 5 Crash History Dec 2021 - Dec 2024

Wheatleys Pond Road is a mix of Bicycle Levels of Traffic Stress 3 and 4 (*Figure 6*). Bicycle Level of Traffic Level is a metric for determining the suitability of a roadway for cycling based on a scale from 1 (least stressful) to 4 (most stressful). Bicycle Levels of Traffic Stress are defined as follows:

- LTS1 - Suitable for all riders including children.
- LTS2 - Typical person able to ride a bike.
- LTS3 - Enthusiastic rider and will tolerate some stressful roadways and intersections.
- LTS4 - Aggressive rider willing to bike anywhere.



Figure 6 Bicycle Level of Traffic Stress & Pathways

Purpose & Need

The existing Wheatley's Pond Road corridor, including the intersections with School Lane, S. Bassett Street, and S. Rodney Street were originally developed to facilitate vehicular traffic and do not accommodate other modes of travel very efficiently or effectively. However, with a growing population, many of whom prefer alternate travel modes for commuting and/or recreation, the Town of Clayton initiated this study to improve the Wheatley's Pond Road corridor to address

travel for all modes of transportation.

Purpose: The purpose of this study is to develop recommendations to improve the Wheatley’s Pond Road corridor, intersections and the surrounding transportation network to provide safe vehicle and pedestrian movements for all modes of transportation.

Need: The need for this study arises from the lack of bicycle and pedestrian facilities along the Wheatley’s Pond Road corridor, intersections and the surrounding transportation network, and the Town’s vision to improve the transportation network to facilitate safe and efficient travel for all modes of transportation.

Community Outreach

To ensure the recommended improvements were understood and fully supported by Town officials and the public, a community outreach program was established. This program included meetings with local officials, the full Clayton Town Council, the public at large, an individual business owner meeting, and coordination with two additional businesses. The following is a summary of those meetings.

Project Kick-off Meeting with Town & MPO

August 26, 2024

The study officially began with a Kick-off meeting that included the Clayton Mayor and Town Manager on August 26, 2024. The purpose of this meeting was for the Town officials and consultant team to discuss the Town’s concerns that led to requesting the study, the purpose and goals of the study, and develop a project workplan and schedule for completing the study.

Progress Meeting with Town & MPO

October 16, 2024

At this meeting, the consultant team reported on their progress to date, including data gathering efforts and the beginning of developing conceptual improvements, and a date was established to meet with the full Clayton Council.

Council Meeting 1

October 29, 2024

The conceptual improvements were presented to the full Town Council. The Council supported the improvements and agreed that the next step was to introduce the study to the public and present the conceptual improvements developed to date at a Public Workshop. To help ensure a good turnout at the Workshop, the Council recommended the workshop be in conjunction with the Town’s meeting soliciting input on their Comprehensive Plan on November 6, 2024. A Workshop announcement was developed and mailed to the project mailing list which was comprised of addresses along Wheatley’s Pond Road within the study area limits, as well as along School Lane, S. Bassett Street, and S. Rodney Street. The announcement was also posted on the Town’s and Dover/Kent MPO websites.



Public Workshop 1

November 6, 2024

Public Workshop 1 was held on November 6, 2024 at the Clayton Fire House, 300 East Street in Clayton, DE starting at 6:30 pm and running to about 8:30 pm. Twenty-seven (27) people signed in at the Workshop, and overall, there was support for the proposed improvements. Some minor revisions were requested by the public which were noted by the consultant team with an agreement to evaluate further for to determine if they were feasible and in line with the goals of the study.

Public Workshop 2

March 25, 2025

Public Workshop 2 was held on March 25, 2025 at the Clayton Fire House, 300 East Street in Clayton, DE from 5:00 pm to 7:00 pm, and was advertised as a drop-in, open house format. A Workshop announcement was developed and mailed to the project mailing list. The project mailing list was updated with names and addresses from the Sign-In Sheet from Public Workshop 1, and some minor revisions were made to the proposed improvements based on feedback received at the first Workshop. A Questionnaire was distributed at the Workshop 2 soliciting input from the public on the proposed recommendations. Eleven (11) Questionnaires were completed the night of the Workshop and left with the consultant team. There were also options to complete and mail back to the consultant team or complete on-line. The comment period was open for thirty (30) days, until April 25, 2025. Three (3) additional Questionnaires were completed and mailed back during the 30-day comment period. A total of fourteen (14) Questionnaires from all response options were completed and returned to the consultant team. The majority of the responses to the Questionnaire supported the recommendations. The completed questionnaires can be found in [Appendix A](#).

Council Meeting 2

April 14, 2025

Several of the Town officials attended Public Workshop 2, however the purpose of this Council Meeting 2 was to report the findings from Public Workshop 2 to the full Town Council. A power point presentation was made to the full Town Council including the feedback from the Public Workshop. Council Meetings are open to the public and a property owner attended this meeting and expressed some concerns with the proposed improvements to Wheatley's Pond Road in front of his property. Some of the property owner's concerns were addressed at the Council Meeting, but there were other requests that were going to require additional analysis to address. It was agreed that a separate meeting with this property owner would be arranged.

Business Owner Meeting

April 23, 2025

This meeting was held on April 23, 2025, starting at 10:00 am and lasting to about 12:00 pm. The purpose of this meeting was to address concerns this property owner raised at Council Meeting 2 related to the proposed improvements to Wheatley's Pond Road in front of his property. The property

in question Barkley Heating and Air, LLC located at 4739 Wheatley's Pond Road. The property owner's concern revolved primarily around access and egress of his fleet trucks at his business. The property owner also was concerned that the proposed improvement would move the road too close to his property. Working together, we were able to address these issues and revise the improvements to everyone's satisfaction.

Concepts & Costs

Concepts were developed to address the purpose and need of this study, which was to develop recommendations to improve the intersections and roadway network to provide safe vehicle and pedestrian movement in the study area. Based on this, improvements were developed to improve safety and capacity for vehicles, and facilitate pedestrian and bicycle travel in the study area.

Wheatley's Pond Road Shared Use Path

This concept involves extending the existing ten (10) foot shared use path (SUP) at Providence Crossing north with an eight (8) foot SUP on the east side of Wheatley's Pond Road through the Artisan Drive intersection. Then, continue with a ten (10) foot SUP north to Baynard Fam Lane. This concept also includes connecting to the existing six (6) foot sidewalk on Artisan Drive to Wheatley's Pond Road (*Figures 7 & 8*).



Figure 7 SUP Providence Crossing to School Lane



Figure 8 SUP School Ln to Baynard Farm Ln

Costs associated with the Shared Use Path concept are included as part of the overall Wheatley's Pond Road Widening improvements concept.

Wheatley's Pond Road Sidewalk

This concept involves a six (6) continuous sidewalk on the west side of Wheatley's Pond Road from School Lane to Baynard Farm Lane (Figure 9).



Figure 9 School Ln to Baynard Farm Ln

Costs associated with the Sidewalk concept are included as part of the overall Wheatley's Pond Road Widening improvements concept.

Wheatley's Pond Road Widening

As part of this concept, the existing travel lanes on Wheatley's Pond Road would be maintained, but the roadway would be widened to accommodate left and right turn lanes, shoulders, and pedestrian facilities. The widening would start approximately 600 feet south of School Lane and extend to approximately 300 feet of S. Rodney Street (Figure 10).



Figure 10 Wheatley's Pond Rd Widening

The original widening did not extend the existing shared center turn lane beyond its current limits (Figure 11).



Figure 11 Wheatley's Pond Rd Widening without Extending Center Turn Lane

However, a business owner located at 4739 Wheatley's Pond Road (Barkley Heating and Air, LLC) expressed concerns about his fleet trucks making left turns in and out of his business. Trucks would be required to stop in the travel lane and wait for a gap in oncoming traffic to turn left into his business, and trucks turning left out of his business would have to cross two lanes of traffic and immediately get into the existing left travel lane. After meeting with the business owner on-site, an alternate concept was developed that extends the existing shared center turn lane to provide a refuge for fleet trucks to make left turns to and from the business (Figure 12).



Figure 12 Wheatley's Pond Rd Widening with Extending Center Turn Lane

Costs associated with the Wheatley's Pond Road Widening concept, including the Shared Use Path concept on the east side of the road and Sidewalk concept on the west side of the road include the following:

Wheatley's Pond Road Widening & Alternate Widening

Design	\$200,650
Row	\$450,000
Construction	\$4,300,000
*Total	\$4,950,650

*All costs are based on concept designs and are rounded.

Wheatley's Pond Road Rail Crossing Improvement

The section of Wheatley's Pond Road where the railroad tracks cross would be widened and improved, as part of this concept to including improving the railroad crossing, a left turn lane to School Lane, and bicycle and pedestrian facilities (*Figure 13*).



Figure 13 Wheatley's Pond Rd RR Crossing

Cost will be developed for the Wheatley's Pond Road Rail Crossing Improvement concept as a stand-alone improvement or will be incorporated into the overall Wheatley's Pond Road Widening Improvement concept.

School Lane Pedestrian Improvements

This concept involves the replacement of the existing six (6) foot sidewalk on the south side of School Lane with a ten (10) foot shared use path (SUP) from Main Street to Wheatley’s Pond Road. The existing five (5) foot sidewalk in adjacent to th spillway would be improved but remain the same width (Figure 14).



Figure 14 School Ln Pedestrian Improvements

School Lane Improvements

Design	\$TBD
Row	\$TBD
Construction	\$TBD
*Total	\$TBD

*All costs are based on concept designs and are rounded.

School Lane at Wheatley’s Pond Road Intersection

This concept would entail a new traffic signal at School Lane and Wheatley’s Pond Road, including a protected left-turn phase from Wheatley’s Pond Road to School Lane, and pedestrian signals. It would also include new right and left turn lanes from Wheatley’s Pond Road to School Lane, as well as new pedestrian crosswalks at School Lane and Wheatley’s Pond Road (Figure 15).



Figure 15 School Ln at Wheatley's Pond Rd Intersection

School Lane at Wheatley's Pond Road Intersection

Design	\$TBD
Row	\$TBD
Construction	\$TBD
*Total	\$TBD

*All costs are based on concept designs and are rounded.

S. Bassett Street at Wheatley's Pond Road Intersection

This concept includes the relocation of approximately 370 feet of S. Bassett Street north to create a new intersection with Wheatley's Pond Road. This relocation would include replacing the structurally deficient culvert on s. Bassett Street. It would also include new right and left turn lanes from Wheatley's Pond Road to S. Bassett Street, as well as new pedestrian crosswalks at S. Bassett Street and Wheatley's Pond Road (Figure 16).



Figure 16 S. Bassett St at Wheatley's Pond Rd Intersection

S. Bassett Street at Wheatley's Pond Road Intersection

Design	\$40,000
Row	\$450,000
Construction	\$1,000,000
*Total	\$1,490,000

*All costs are based on concept designs and are rounded.

S. Rodney Street & Artisan Drive at Wheatley's Pond Road Intersection

The improvements associated with this concept include a sight realignment of S. Rodney Street to provide improved turning radius with Wheatley's Pond Road. This realignment would include widening the bridge on S. Rodney Street to accommodate two travel lanes and shoulders. The existing traffic signal would be converted to a full time signal and would include a protected left turn phase from Wheatley's Pond Road to S. Rodney Street & Artisan Drive, as well as pedestrian signals. It would also include new left and right turn lanes from Wheatley's Pond Road to S. Rodney Street and Artisan Drive, and new pedestrian crosswalks at Wheatley's Pond Road, S. Rodney Street and Artisan Drive (Figure 17).



Figure 17 S Rodney St & Artisan Dr at Wheatley's Pond Rd Intersection

S. Rodney Street & Artisan Drive at Wheatley's Pond Road Intersection

Design	\$25,000
Row	\$450,000
Construction	\$740,000
*Total	\$1215,000

*All costs are based on concept designs and are rounded.

[Appendix B](#) provides individual concepts on full pages, and [Appendix C](#) provides itemized conceptual cost estimates for each concept.

Appendix A Completed Questionnaires (to be completed)



Appendix B Individual Concepts (to be completed)



Appendix C Itemized Cost Estimates (to be completed)

