



ENHANCING ELTHAM

An approach to
developing village
character in eastern
New Kent





Introduction

Virginia Counties
New Kent County

The Eltham area is a small unincorporated cluster of residential uses and highway commercial along Routes 30/33 at the easternmost edge of New Kent County just west of the bridge to West Point. The area has a reputation as a hazardous zone to automobiles, pedestrians and bicyclists. This document was prepared in order to make recommendations to increase the safety of the area while also enhancing the character and identity of the area.

Eltham is perceived to be an area dangerous to pedestrians, especially at the intersection of Eltham Road (Routes 30/33) and Farmers' Drive. Seasonal pedestrian desire lines (tracks made in grass along the side of the road where multiple people have walked) indicate that there is a need for a sidewalk to accomodate pedestrians already walking in the area.

Just across the Pamunkey, the town of West Point offers a close-at-hand example of how sidewalks and streetscape improvements can transform a thoroughfare into an environment welcoming to pedestrians and shoppers as well as automobiles.

Sidewalks would also help to promote the village feel described in the County comprehensive plan. However, sidewalks are not the only element missing from the area which needed to create a true village feel.

The Rural Long Range Transportation Plan (RRPDC 2011) lists the intersection of Farmers' Drive and 30/33 as a safety improvement project.

There is opportunity for infill development, for extended water and sewer service, safety signage and traffic streamlining measures.

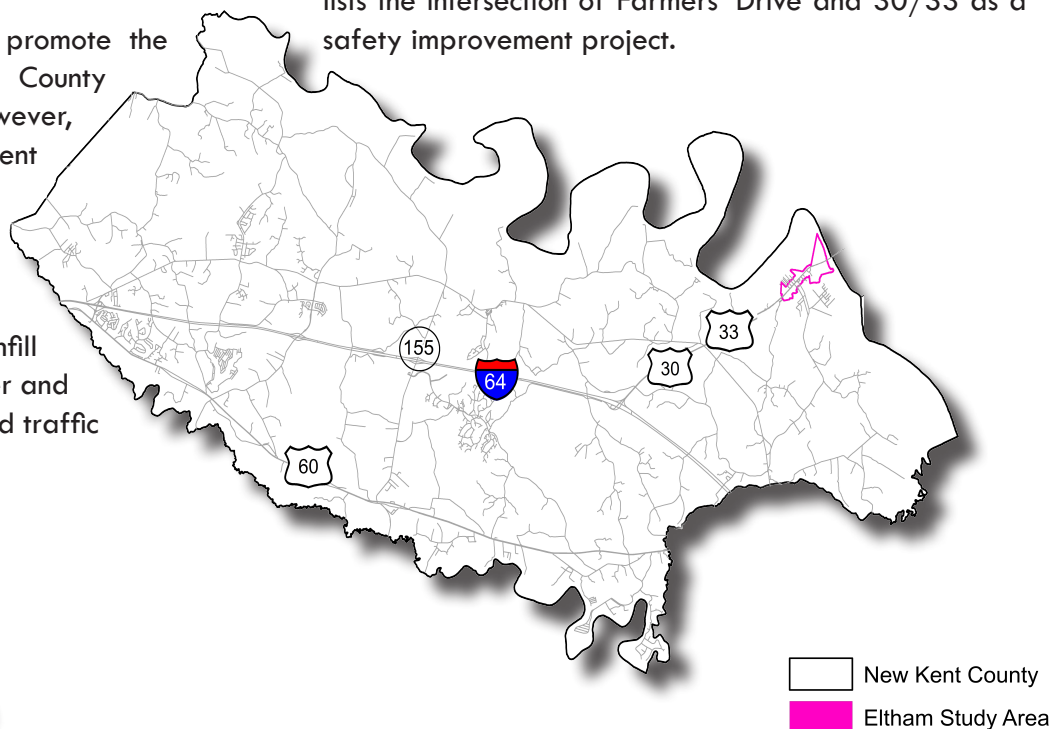




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Study Area Map

The Eltham area is home to approximately 800 people, in the immediate village and nearby farms. Ninety two of the 209 parcels in the study area are single-family residential. The rest are Commercial or Office, or yet to be developed (see map p8).

According to the Virginia Employment Commission, there are 13 businesses in the study area, employing more than 141 people.*

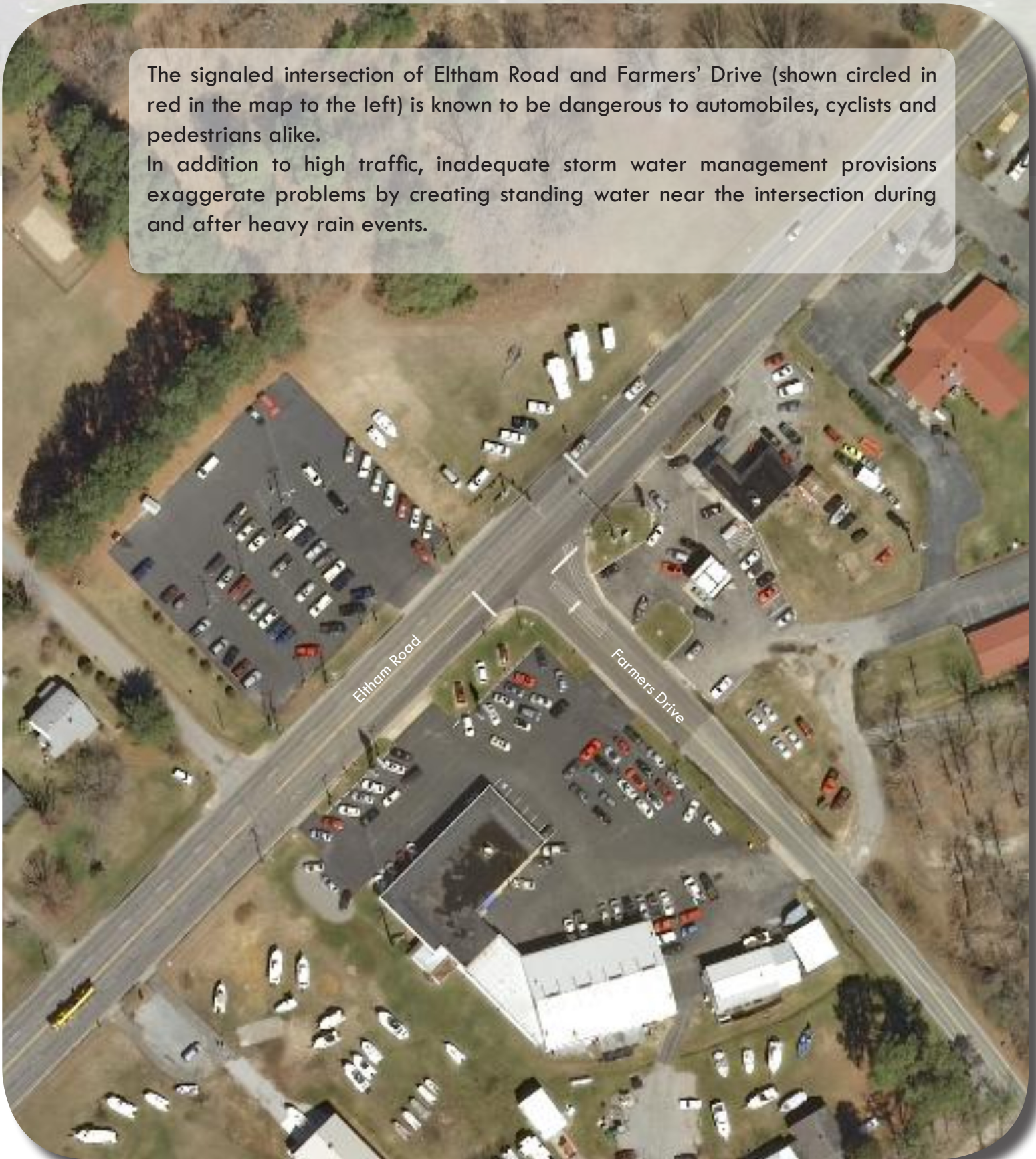
*Please note: the 7-11 store and the smaller in-home businesses are not included in the VEC data.

The approximately 450 acre study area was chosen by selecting all parcels which front the road within the Village boundaries. This includes several large parcels of marsh and farmland, which help shape the character of the area.

High Traffic Intersection

The signaled intersection of Eltham Road and Farmers' Drive (shown circled in red in the map to the left) is known to be dangerous to automobiles, cyclists and pedestrians alike.

In addition to high traffic, inadequate storm water management provisions exaggerate problems by creating standing water near the intersection during and after heavy rain events.



Crash Data

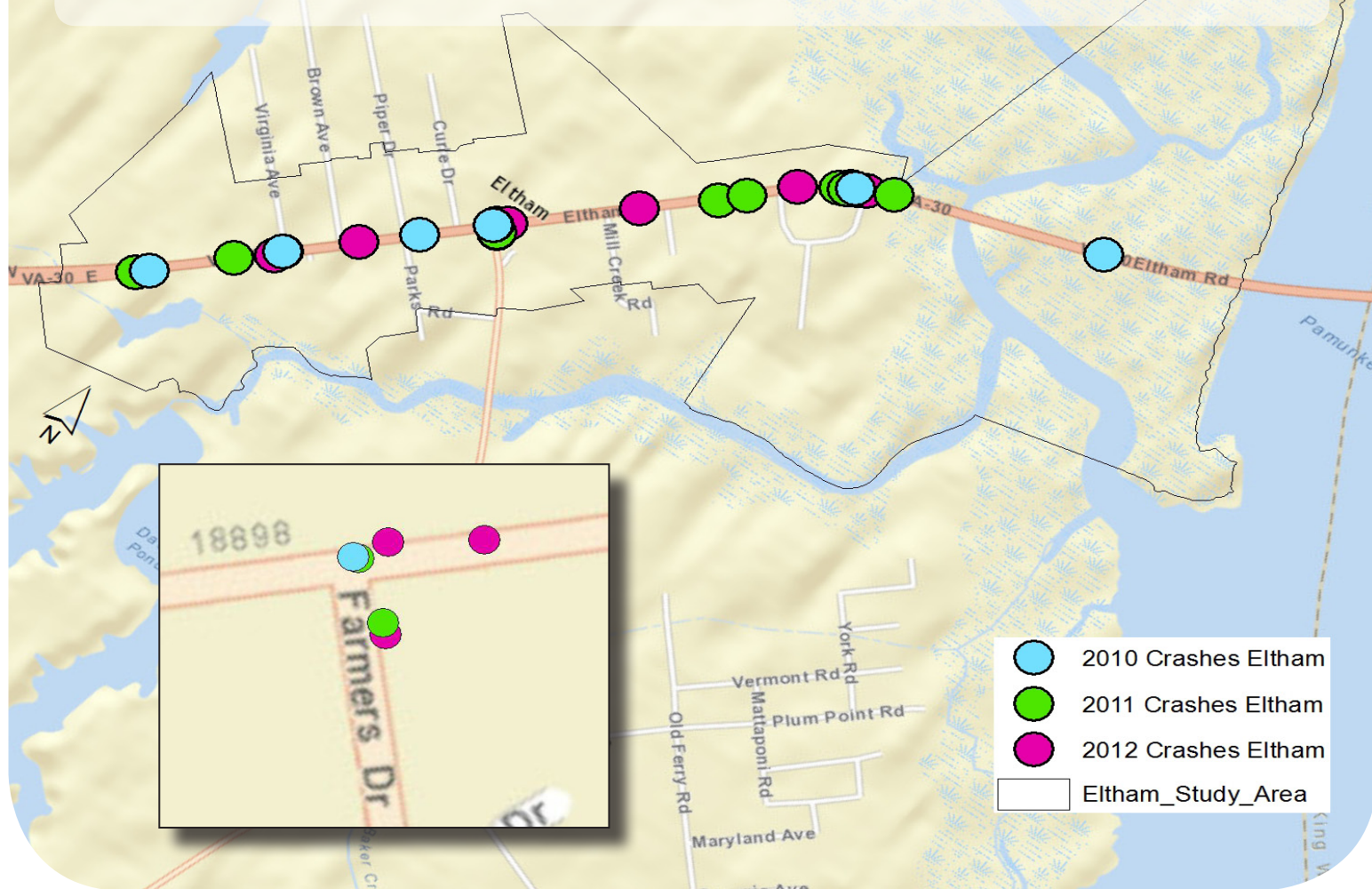
The Virginia Department of Transportation (VDOT), along with the Virginia Department of Motor Vehicles and state and local police, keeps track of crash information throughout the state.

When placed into a map, this information tells a picture over time of how unsafe an area is to drivers and to pedestrians, and where the problem areas are. The map below shows combined crashes from 2010 through 2012. Each dot represents one accident.

From the map, it becomes apparent that the intersection of Eltham Road and Farmers Drive is a relatively hazardous one, with six reported crashes in three years: one in 2010, two in 2011, and three in 2012. (See inset.)

Local perception indicates that the area is hazardous to pedestrians, though none of the reported crashes involved pedestrians. One crash was reportedly caused by a pedestrian. Four involved animals, two involved a stationary object (mailbox and jersey wall), and the remainder were caused by other moving vehicles. None of the crashes reported involved drivers under the influence of alcohol.

However, in order to accurately address the needs of the area, both data and local input need to be considered.



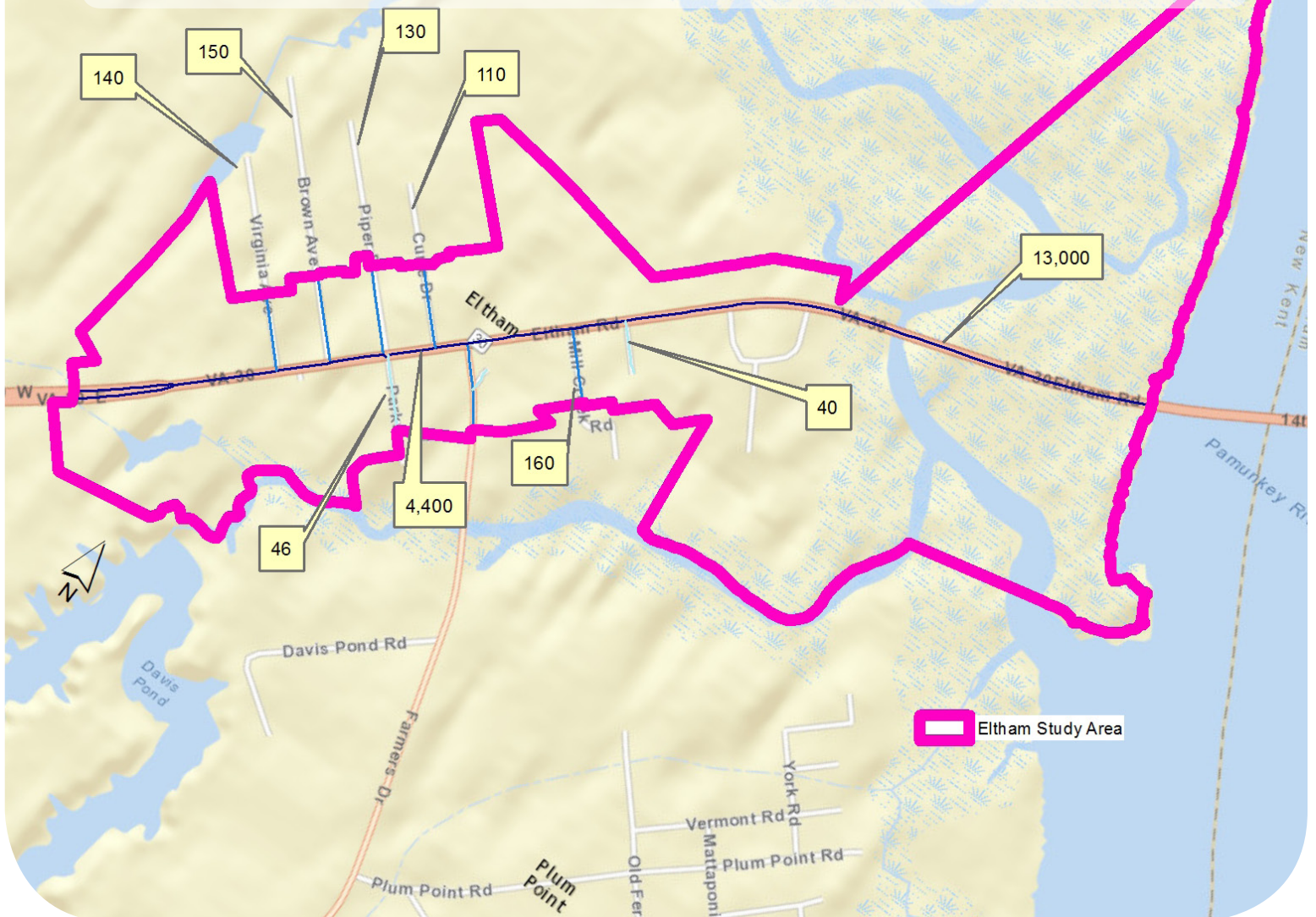
Annual Average Daily Traffic

The map below shows the Average Annual Daily Traffic (AADT) for the Eltham study area. In the study area, Route 30/33 is comprised of four 12-foot wide lanes in an approximately 70 foot wide right-of-way with no median or dedicated turn lanes. The road is lined with curb and gutter throughout the study area. The speed limit is 45 miles per hour.

The significant traffic is isolated to Route 30/33, with a lesser but still significant number on Farmers Drive.

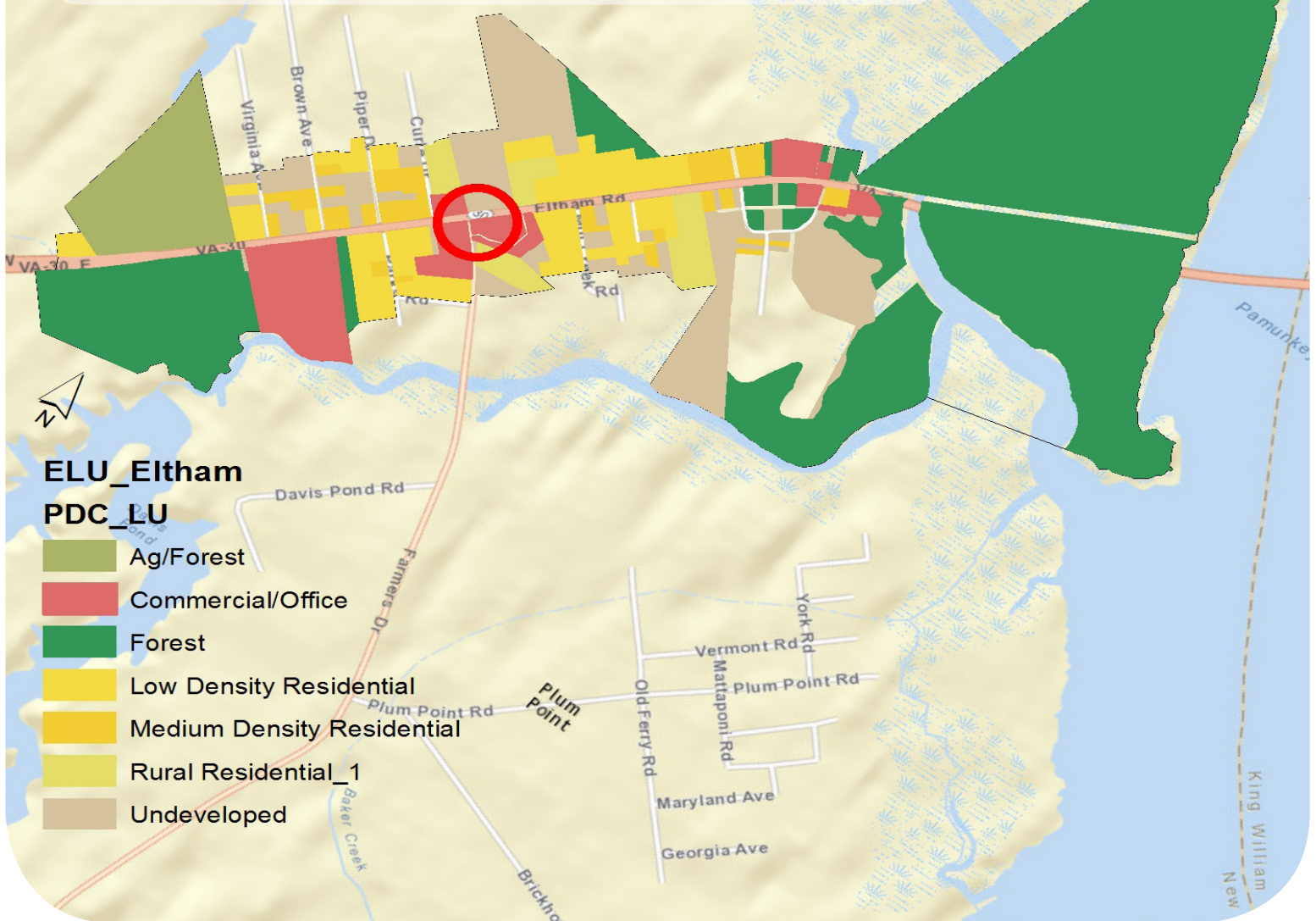
Eltham Road (30/33) in the study area sees about 13,000 vehicles pass in the typical day. Farmers Drive sees about 4,400 vehicles per day. The smaller local roads intersecting with Eltham Road see only small fractions of those numbers: from 40 to 160 vehicles in a typical day.

The road segment sees enough traffic to necessitate a safer pedestrian amenity, but is also designed to handle additional vehicular capacity. There is a traffic signal at the intersection of Eltham Road and Farmers Drive.

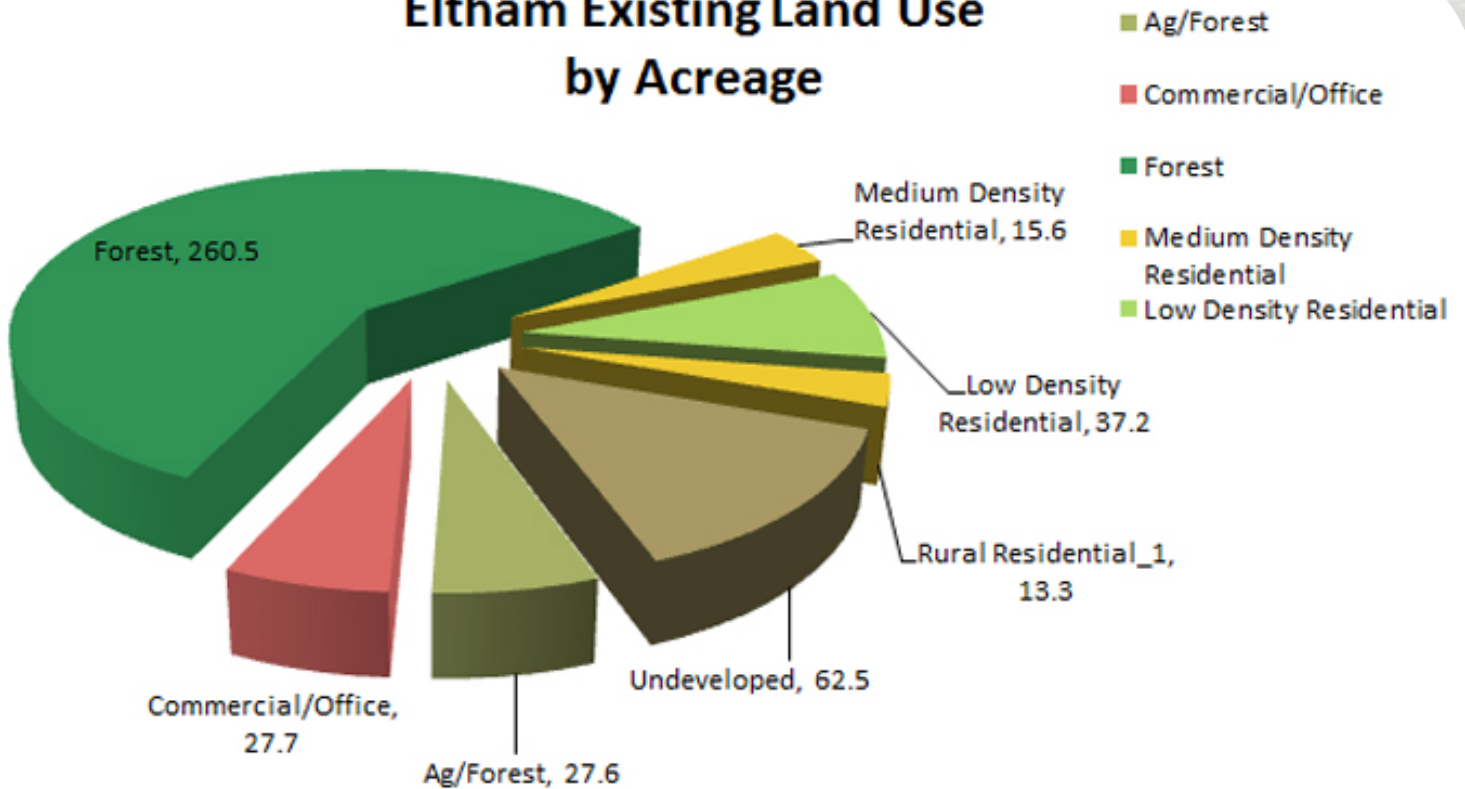


Existing Land Use

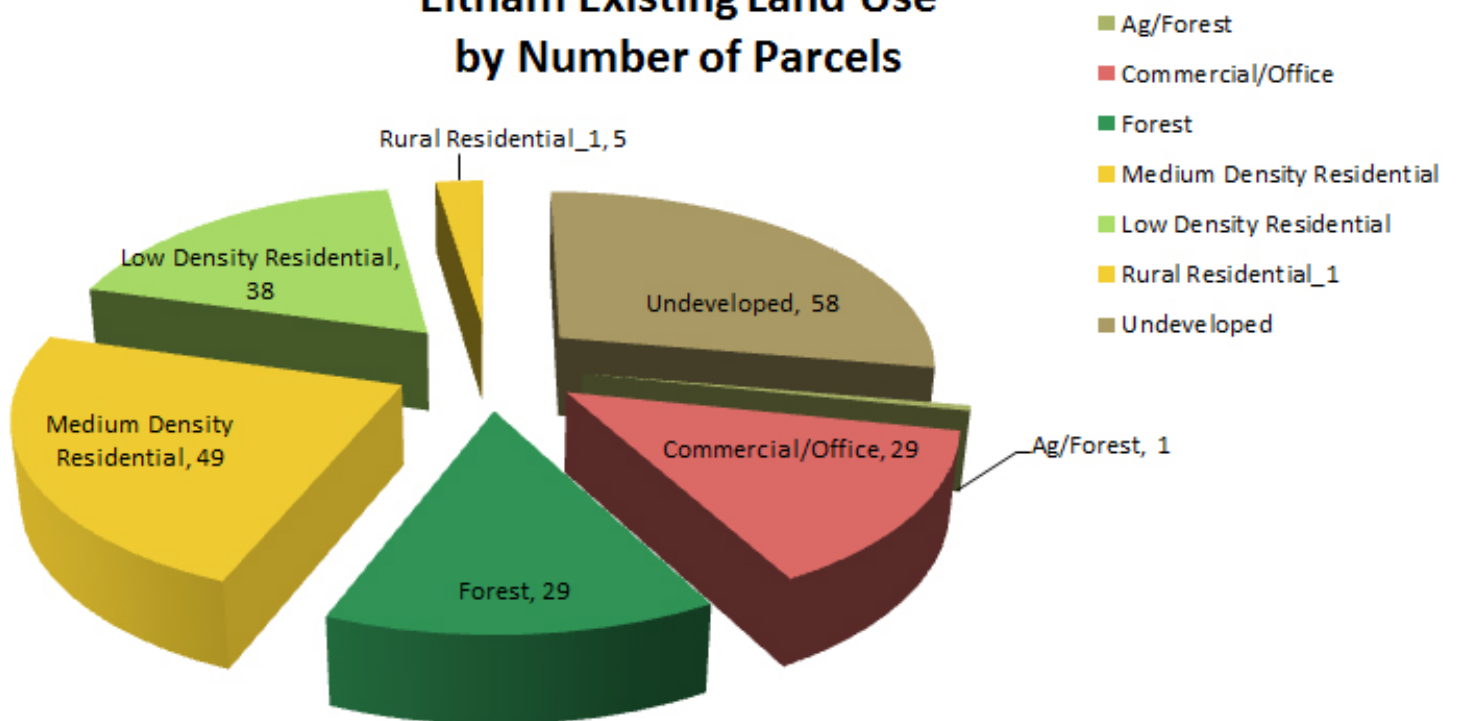
The developable portion of Eltham is predominantly residential, with the secondary land use being commercial. However, a drive down Route 30/33 gives the impression of a fairly even split between residential and commercial. The three car dealerships bring traffic from outside the area, and several other businesses, such as the Washington Burgess Inn and the 7-11, cater to through traffic. Other smaller businesses, such as knife sharpening shop and storage facility are more geared toward county or Eltham residents and would draw less traffic.



Eltham Existing Land Use by Acreage

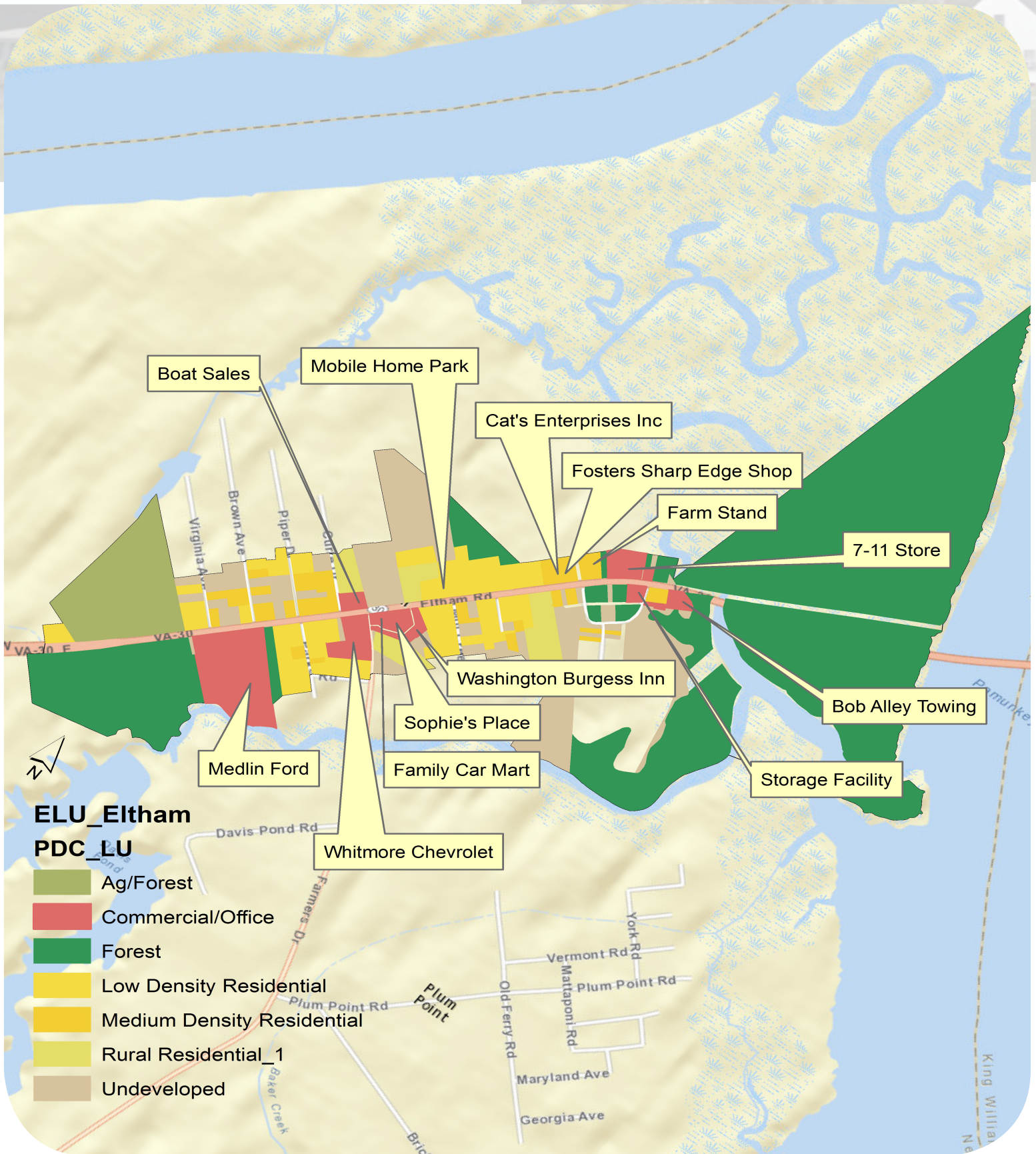


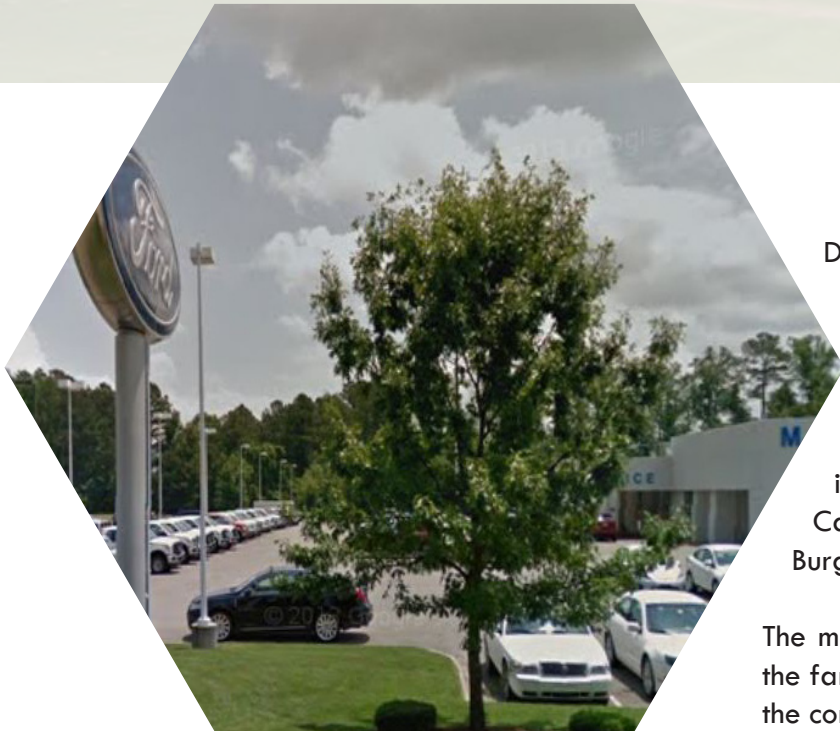
Eltham Existing Land Use by Number of Parcels



Source: Richmond Regional Planning District Commission's 2012 Regional Existing Land Use Inventory.

Area Destinations





Destinations in the area are commercial uses. The first evidence of development when approaching Eltham from the west is Medlin Ford on the right of the road (image on left). Next is Whitmore Chevrolet and Family Car Mart on either side of Farmers Drive as it intersects with Route 30/33. Adjacent to Family Car Mart is Sophie's Place and the Washington Burgess Inn.

The mobile home park serves as a landmark, as do the farm stand and the 7-11 store at the northeast of the corridor.

Shown below are: the farm stand, the Family Car Mart, and the Washington Burgess Inn.

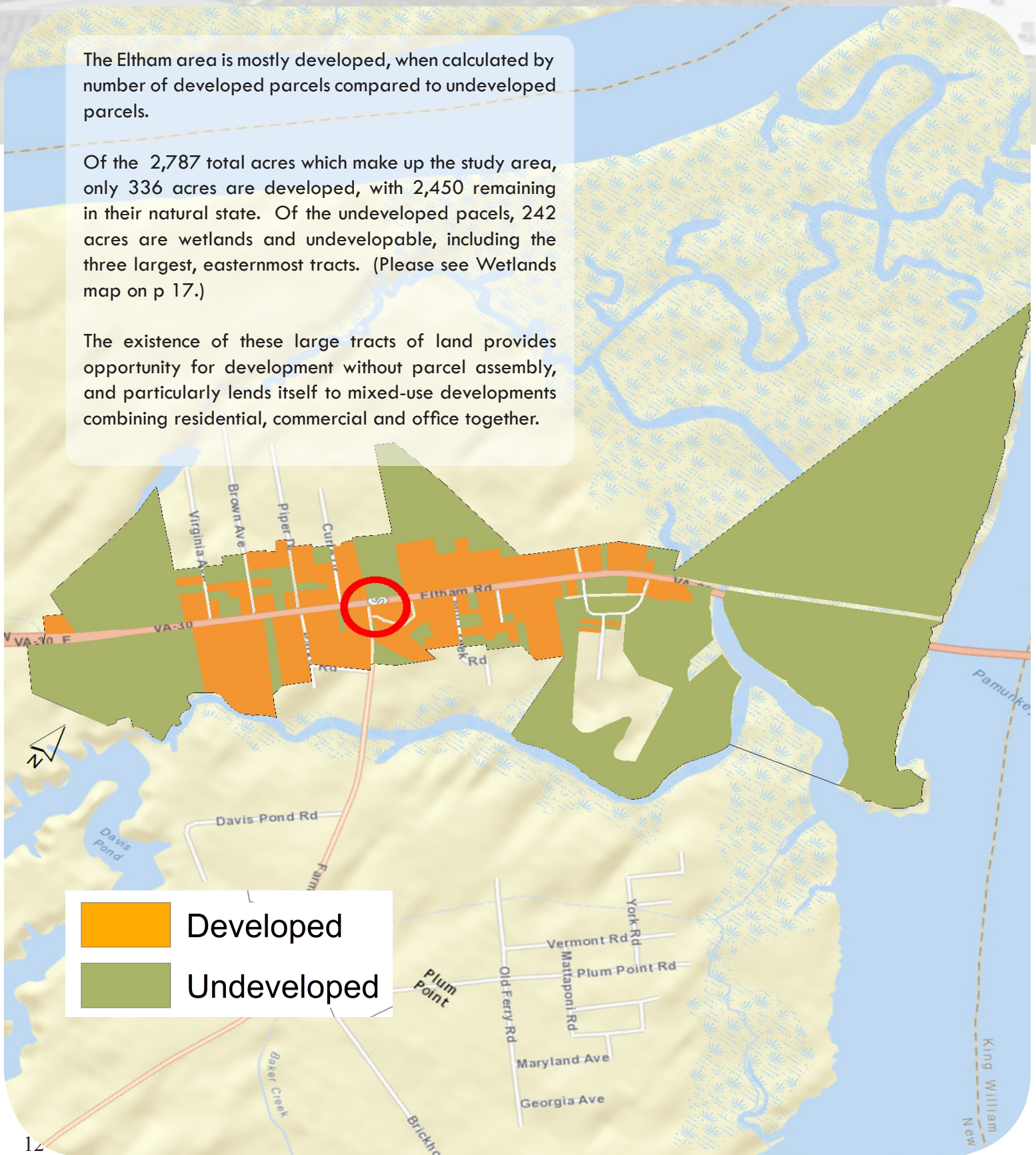


Developed/Undeveloped

The Eltham area is mostly developed, when calculated by number of developed parcels compared to undeveloped parcels.

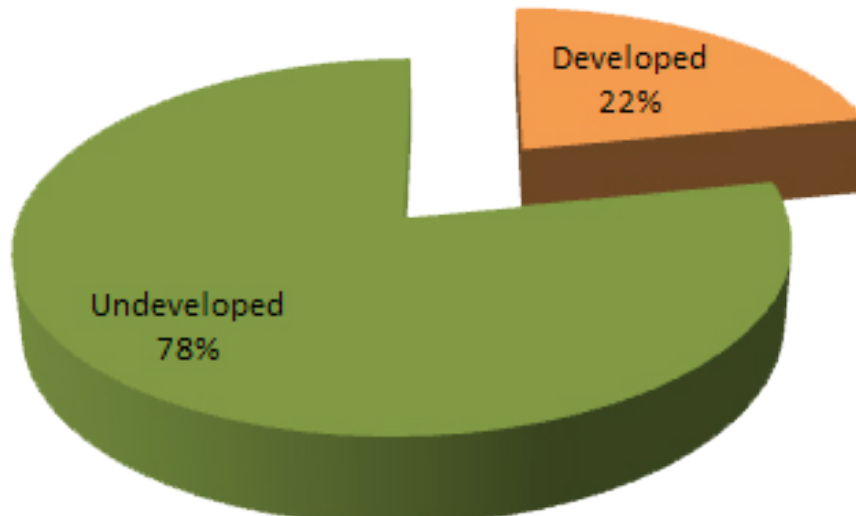
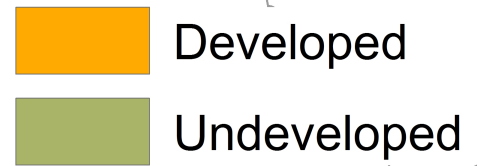
Of the 2,787 total acres which make up the study area, only 336 acres are developed, with 2,450 remaining in their natural state. Of the undeveloped parcels, 242 acres are wetlands and undevelopable, including the three largest, easternmost tracts. (Please see Wetlands map on p 17.)

The existence of these large tracts of land provides opportunity for development without parcel assembly, and particularly lends itself to mixed-use developments combining residential, commercial and office together.

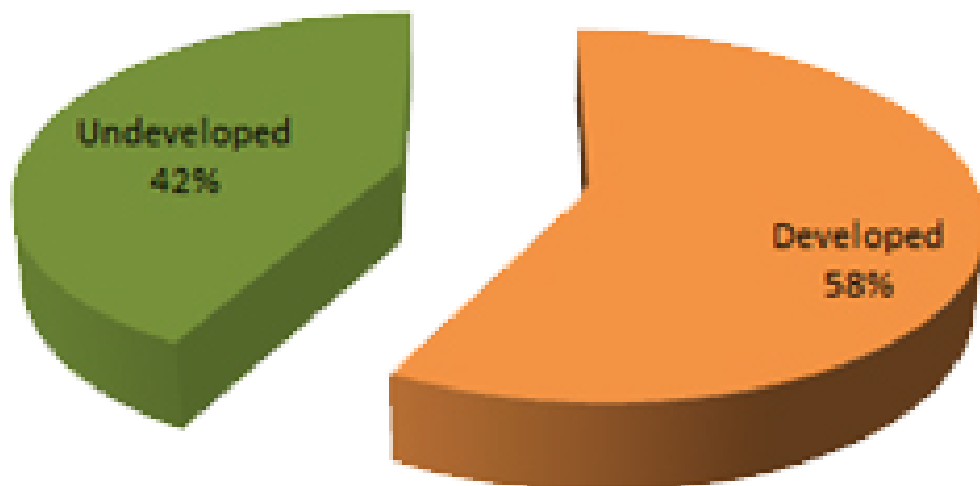


Developed/Undeveloped

Developed and Undeveloped by Acreage



Developed and Undeveloped by # of Parcels

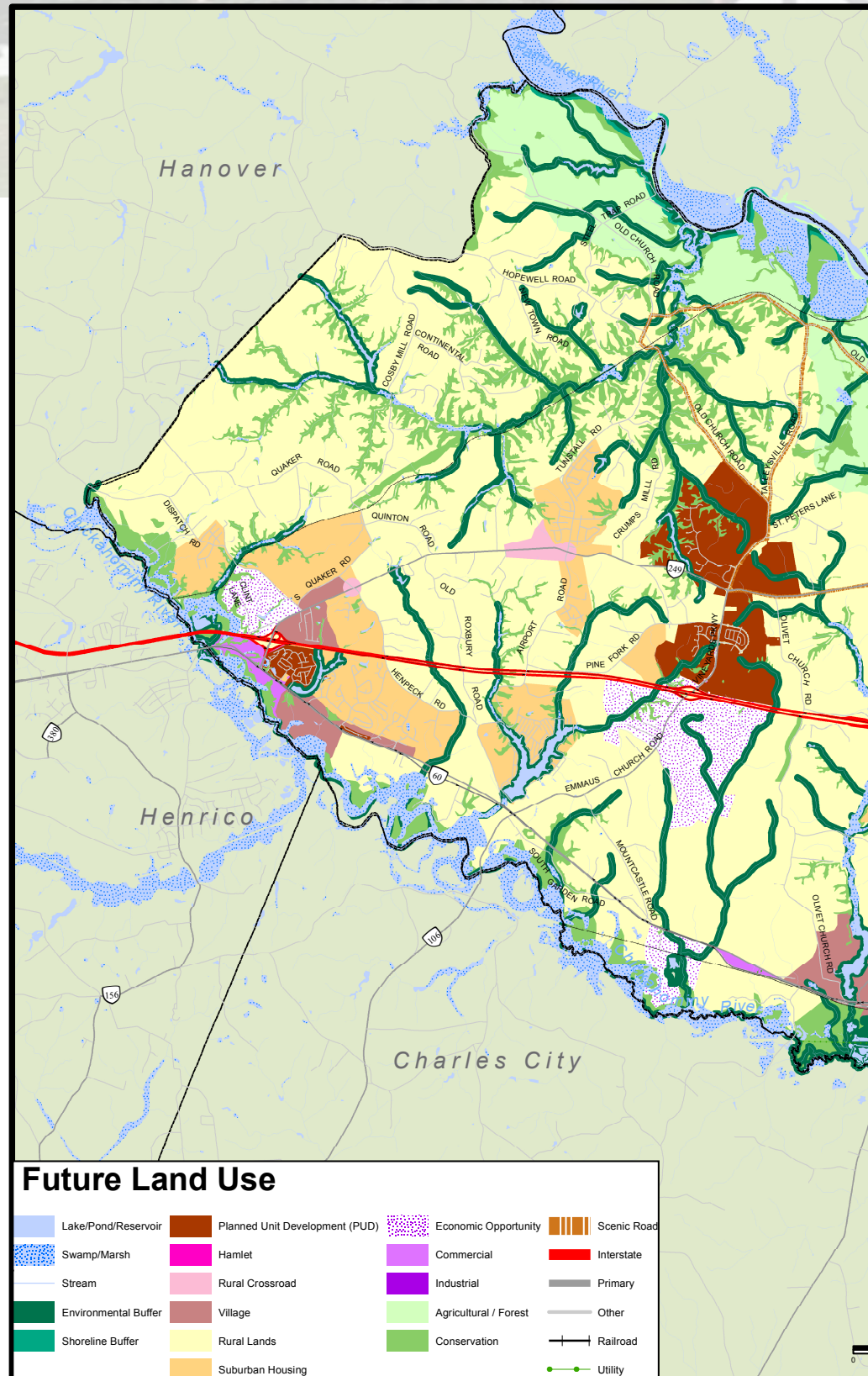


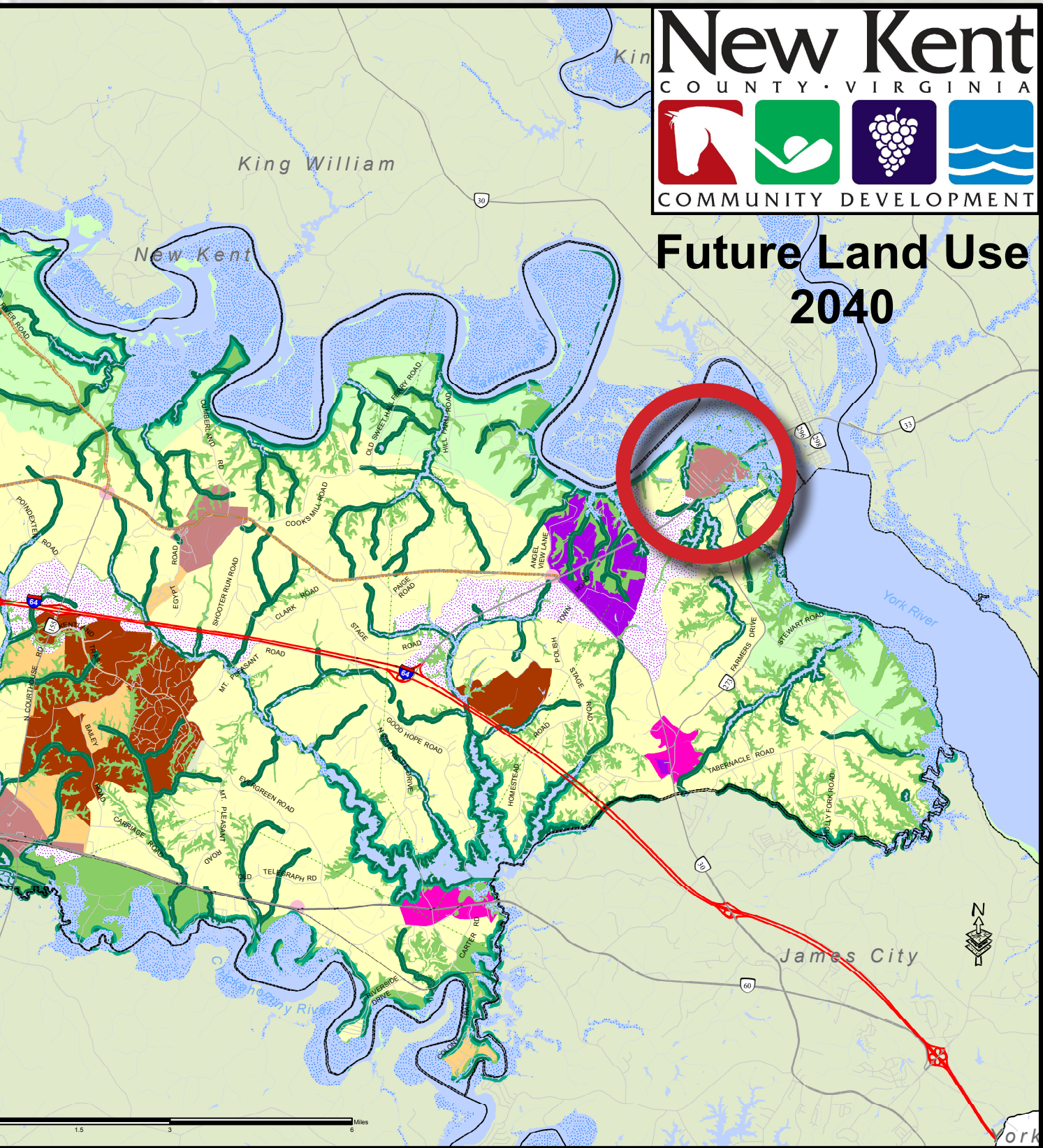
Future Land Use

New Kent's Comprehensive Plan, adopted October 9th, 2012, shows the Eltham area as a Village area.

According to the plan, Villages "are characterized by a mix of structures and uses, including residential, commercial and institutional. They are typically compact in size and pedestrian-oriented. They have historically functioned as social centers. They are served or intended to be served by public utilities".

Eltham currently has a mix of uses and acts as a social center. However, as of the fall of 2014, it is neither pedestrian-oriented nor is it served by public utilities.





New Kent

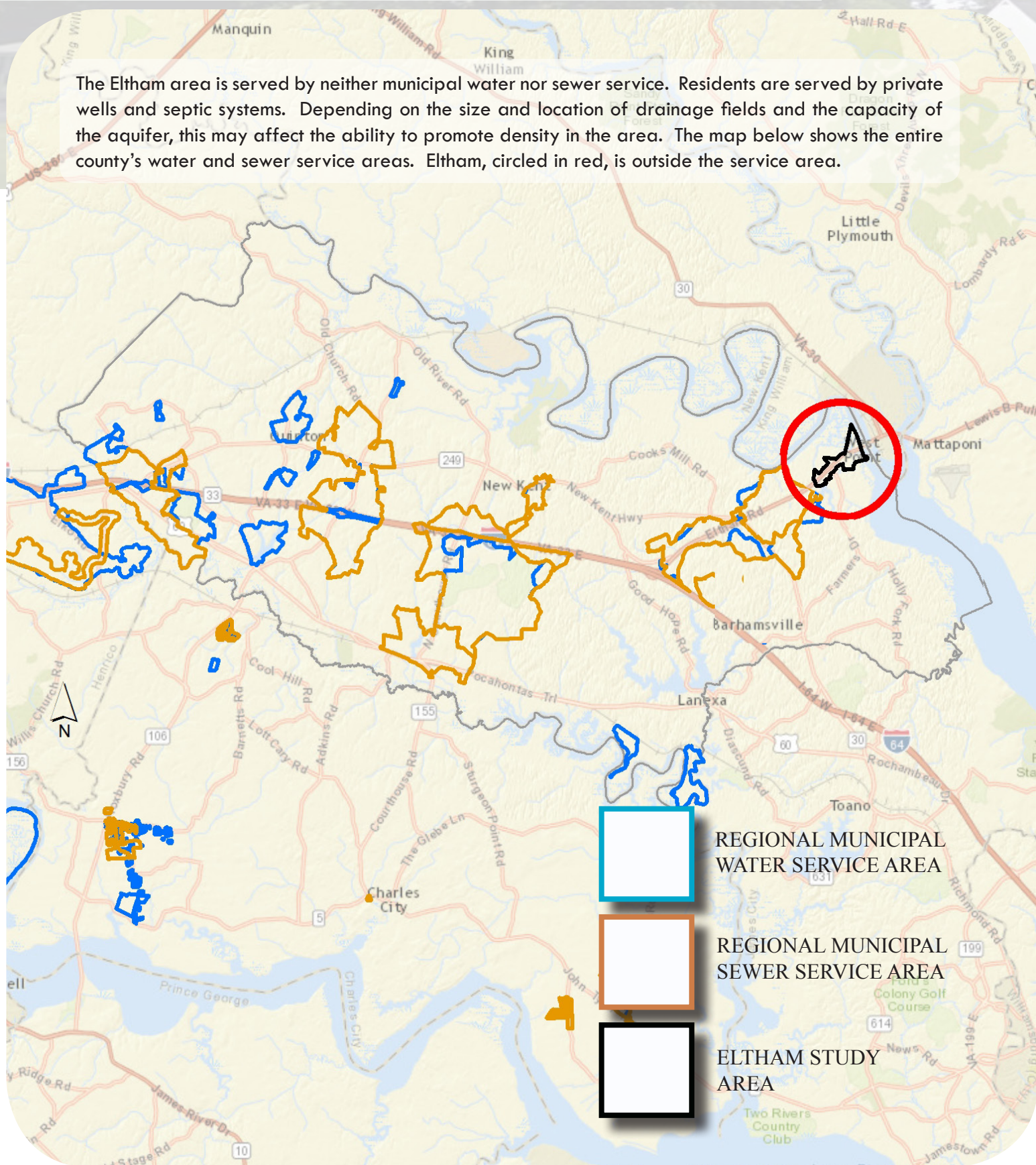
COUNTY · VIRGINIA

COMMUNITY DEVELOPMENT

Future Land Use 2040

Water and Sewer Service

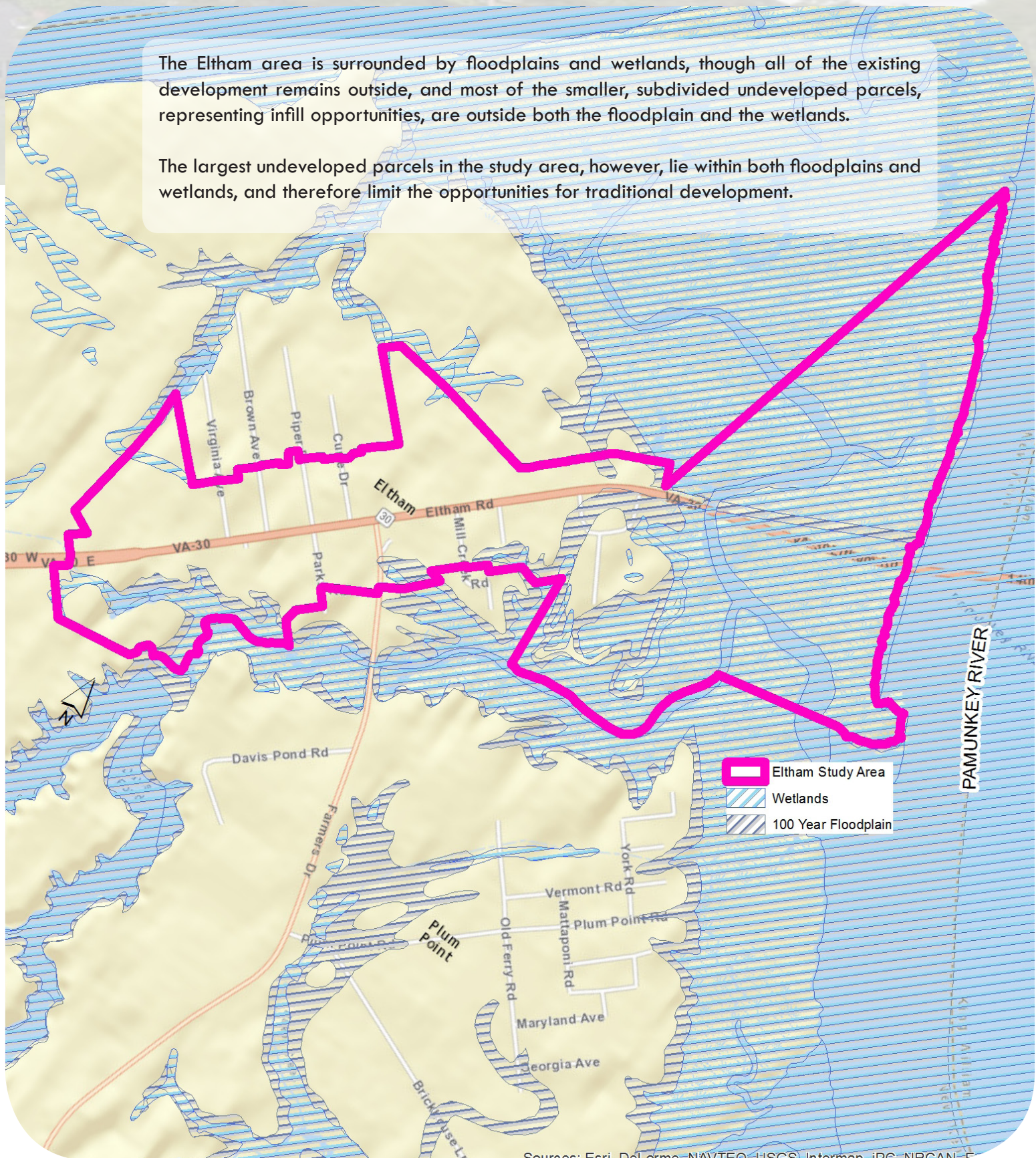
The Eltham area is served by neither municipal water nor sewer service. Residents are served by private wells and septic systems. Depending on the size and location of drainage fields and the capacity of the aquifer, this may affect the ability to promote density in the area. The map below shows the entire county's water and sewer service areas. Eltham, circled in red, is outside the service area.



Wetlands and Floodplains

The Eltham area is surrounded by floodplains and wetlands, though all of the existing development remains outside, and most of the smaller, subdivided undeveloped parcels, representing infill opportunities, are outside both the floodplain and the wetlands.

The largest undeveloped parcels in the study area, however, lie within both floodplains and wetlands, and therefore limit the opportunities for traditional development.



Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN

RECOMMENDATIONS

- 1 Add Safety Signage in the Corridor
- 2 Intersection Improvements at Farmers Drive
- 3 Decrease Curb Cuts and Discourage New ones
- 4 Encourage Infill Development in Eltham
- 5 Extend Water and Sewer Service to Eltham
- 6 Build Sidewalks Along Both Sides of Eltham Road
- 7 Implementation/Funding





Purpose Statement

The purpose of these recommendations is to outline several steps which will lead to the desired village character referenced by the County's comprehensive plan. First, because it is of most immediate concern and also because it is the most affordable and feasible, simple measures can be taken toward increasing the safety of the corridor, by adding safety signage, decreasing curb cuts and completing intersection improvements. On a later timeline, increasing the density of the area by encouraging infill development will make it a better candidate for infrastructure investments like extending water and sewer and adding sidewalks.

1 Add Safety Signage in the Corridor

Police have identified two major safety concerns which could be helped with additional signage. The first is speeding, which could be decreased with signage. The second is that cars do not stop for school buses in both directions. Though it is state law, cars do not stop, either because drivers do not know the law or they are unconcerned. Signage like that to the right (would have to be approved by VDOT) could help drivers know that they must stop for the safety of children crossing the street to and from school buses.



2 Intersection Improvements at Farmers Drive

The Virginia Department of Transportation (VDOT) and the Richmond Regional Planning District Commission published a Rural Long-Range Transportation Plan for the Richmond Region in 2011, noting improvements needed in the rural areas of the Richmond Region. The plan recommends that the intersection of Route 30/33 and Farmers Drive should be improved for safety. The mid-term recommendation is to introduce signalization changes to include right-turn overlap (which allows for cars turning right to have more time to do so) for Farmers Drive approach, and in the long term, more intersection improvements are recommended.



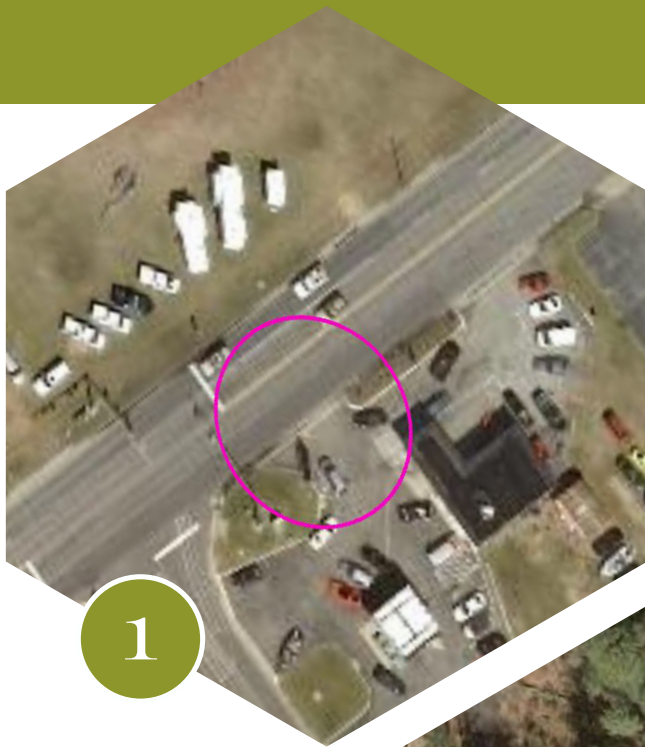
3 Decrease Curb Cuts and Discourage New ones

Reducing the number of opportunities for a vehicle to enter and exit the roadway ('curb cuts') not only creates safer and more free-flowing traffic conditions on the roadway, it increases pedestrian safety.

There are seven extraneous curb cuts in the study area, shown on the map below, which could be eliminated by working with each property owner to increase safety of the corridor.

To ensure that the curb cuts do not increase with infill development, the County can use available regulatory tools (zoning, subdivision ordinances) to limit the number of curb cuts.





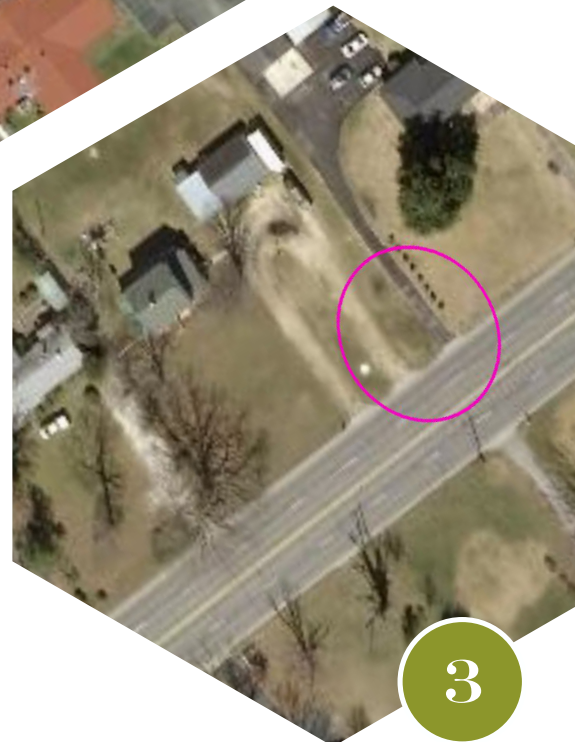
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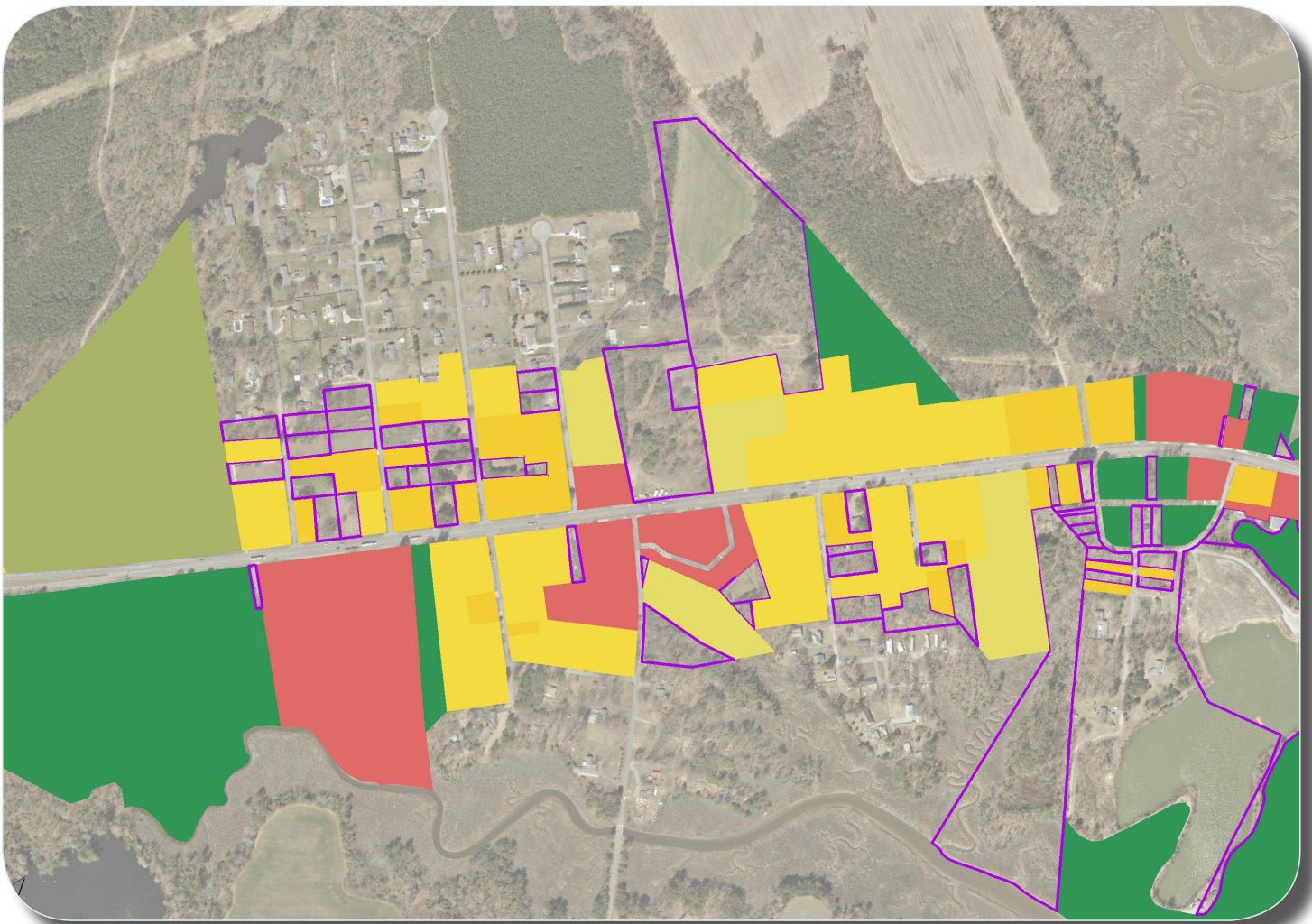
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The images this page show individual examples: clockwise from top left: 1) Family Car Mart, 2) Washington Burgess Inn, 3) private residence, 4) for sale/former church, 5) 7-11 store.

4 Encourage Infill Development in Eltham

In addition to providing amenities, the County can encourage infill development in Eltham by ensuring that both the zoning and the subdivision ordinances encourage small lot development, division of parcels to add another residence, secondary residence of family member on existing residential lots, and so forth. The more the area is developed, the more justification there will be for investing in the area.

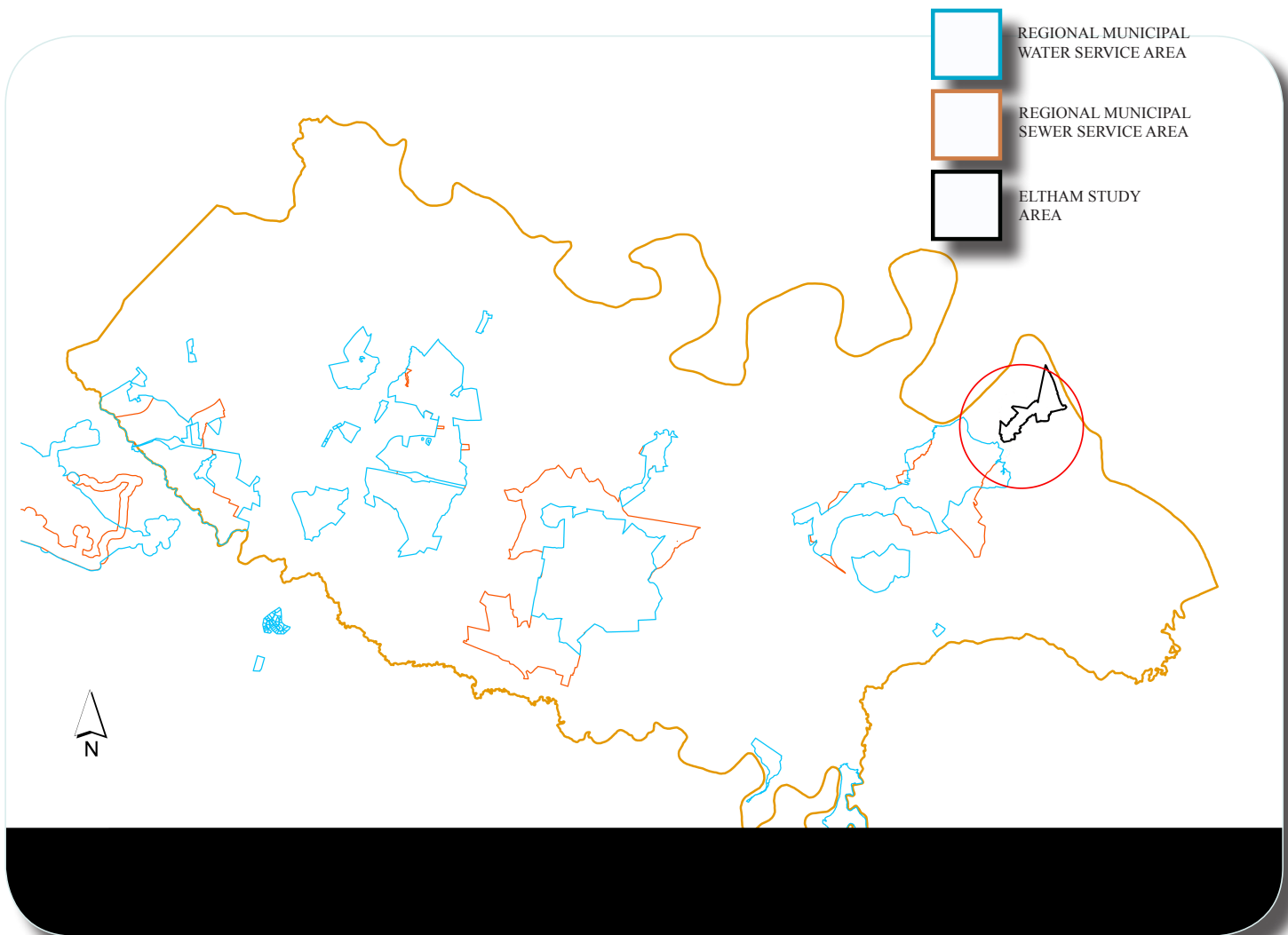
The map below shows 58 parcels possibly appropriate for new (“infill”) residential development outlined in purple. Currently developed parcels are colored in: yellows for residential, red for commercial, and greens for fields and forest. Infill opportunities that share access to Rte 30/33 should be encouraged to minimize additional curb cuts or access points.



5 Extend Water and Sewer Service to Eltham

Currently each residence and business in the Eltham area is served by its own well and septic system. Though infill development may be possible to some extent, the density is very limited by the lack of municipal amenities. In order for the area to become the Village described in the Future Land Use element of the County's comprehensive plan, increased density is needed. Furthermore, increased density would further justify County and State investment in amenities like sidewalks.

The closest residential area, West Point, is served by three large municipal wells and is part of the Hampton Roads Sewer District. West Point is only slightly more dense than Eltham, but it is an incorporated town which is more populous, covers a larger area, and has significant industrial land uses, which all may have factored in bringing municipal water and sewer to the area.



6 Build Sidewalks Along Both Sides of Eltham Road

The Eltham area would greatly benefit from the addition of safe, attractive sidewalks along both sides of Eltham Road.

Currently, pedestrian desire lines show evidence of pedestrian activity in the corridor, even with no amenities.

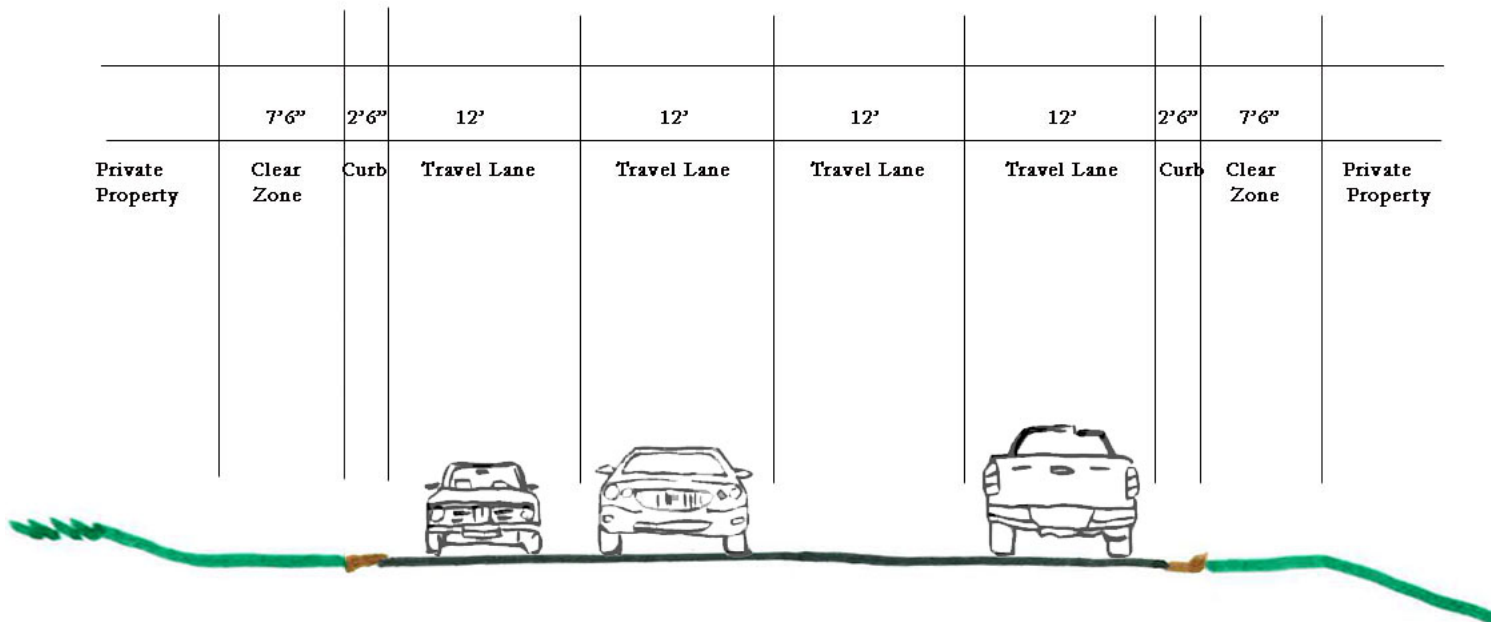
VDOT district staff has confirmed that there is enough room (7'6" in most places) in the state-owned right-of-way to build sidewalks with the desired two-foot vegetative buffer. There are some barriers, such as mailboxes or utility poles in the right-of-way, but they are small obstacles compared with the alternative of right-of-way acquisition.



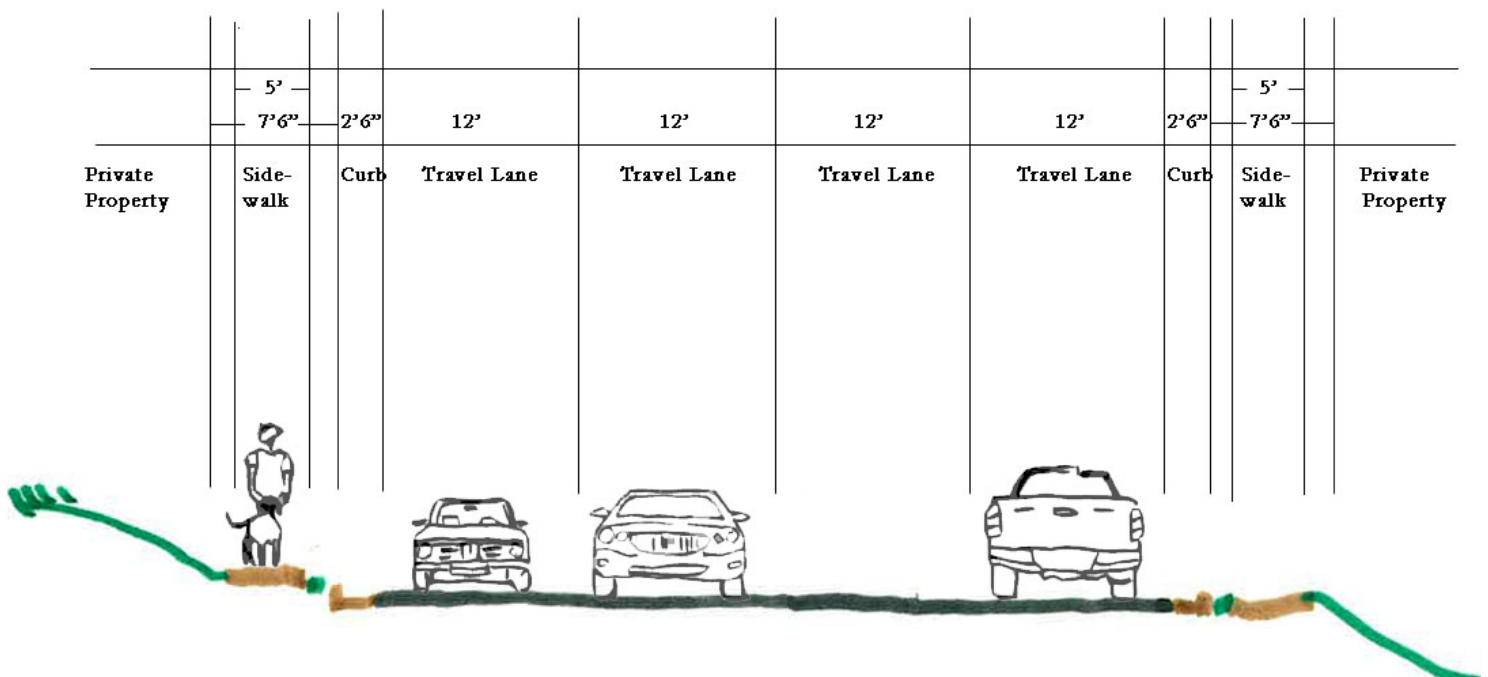
Just over the bridge, West Point has greatly enhanced the same corridor by adding brick sidewalks, pedestrian signals and crosswalks. The town has also provided benches, planters with flowers, and rows of daffodils. All these amenities work to make the corridor safer and more attractive, as well as provide an entrance to the town and an increased sense of place.



Typical Section of existing roadway



Potential Section with Sidewalks



7 Implementation/Funding

The Virginia Department of Transportation (VDOT) offers one potential source of grant funding for a sidewalk or walking trail improvement project along Eltham Road as one recommended alternative of this study. The VDOT Transportation Alternative Program (TAP) was authorized in the most recent federal transportation bill—Moving Ahead for Progress in the 21st Century, also known as MAP-21. The program is intended to help local sponsors fund community based projects that expand travel choices and enhance the transportation experience by improving the cultural, historical and environmental aspects of the transportation infrastructure. The program does not fund traditional roadway projects or provide maintenance for these facilities. Instead it focuses on providing for pedestrian and bicycle facilities, community improvements and mitigating the negative impacts of the highway system.

Key aspects of the TAP will require advance project planning should New Kent County consider submitting an application (typically November 1 submission date annually) for Eltham sidewalk/trail construction:

- Funds are available on a competitive basis annually, only on a reimbursement basis, and eligible costs must be matched a minimum of 20 percent by local funds (may include in-kind or some types of grant funds).
- Maximum grant request is \$1 million per project (historically average per funded application has been \$250,000); projects may be phased, but each phase needs to be under construction or substantially complete before additional phases are requested.
- Costs eligible for reimbursement cannot be incurred prior to execution of a project administration agreement and federal authorization, meaning the application needs to be developed enough to identify extent of the sidewalk improvement and preliminary costs. Work toward preliminary/final engineering, design work, environmental coordination, and final cost estimates are eligible costs, but cannot occur until approval of the application and requisite agreements are in place.
- A public review meeting about the application will need to be held prior to submission. This meeting will present concept drawings, general costs, right-of-way for the improvement, and phasing of the proposal. A resolution from the Board of Supervisors indicating approval of matching funds and maintenance of the project will also be required prior to submission.

