

STAFF REPORT

Transportation Plan Amendments

December 9, 2025 Town Council Meeting



Purpose of the Apex Transportation Plan

The Thoroughfare and Collector Street Plan Map, Transit Plan Map, and Bicycle and Pedestrian System Plan Map collectively represent a network of current and future facilities that provide guidance on what is likely to be suitable for long term growth, connectivity, recreation, and multimodal travel. The Transportation Plan does not provide a schedule for implementation, nor does it set aside funding for improvements. The purpose of the public hearing is to consider proposed amendments to the Thoroughfare and Collector Street Plan Map and Bicycle and Pedestrian System Plan Map in order to make a decision.

Overview of Proposed Amendments

A map of the proposed amendments to the Thoroughfare and Collector Street Plan Map is displayed in Figure 1.

A map of the proposed amendment to the Bicycle and Pedestrian System Plan Map is displayed in Figure 2.

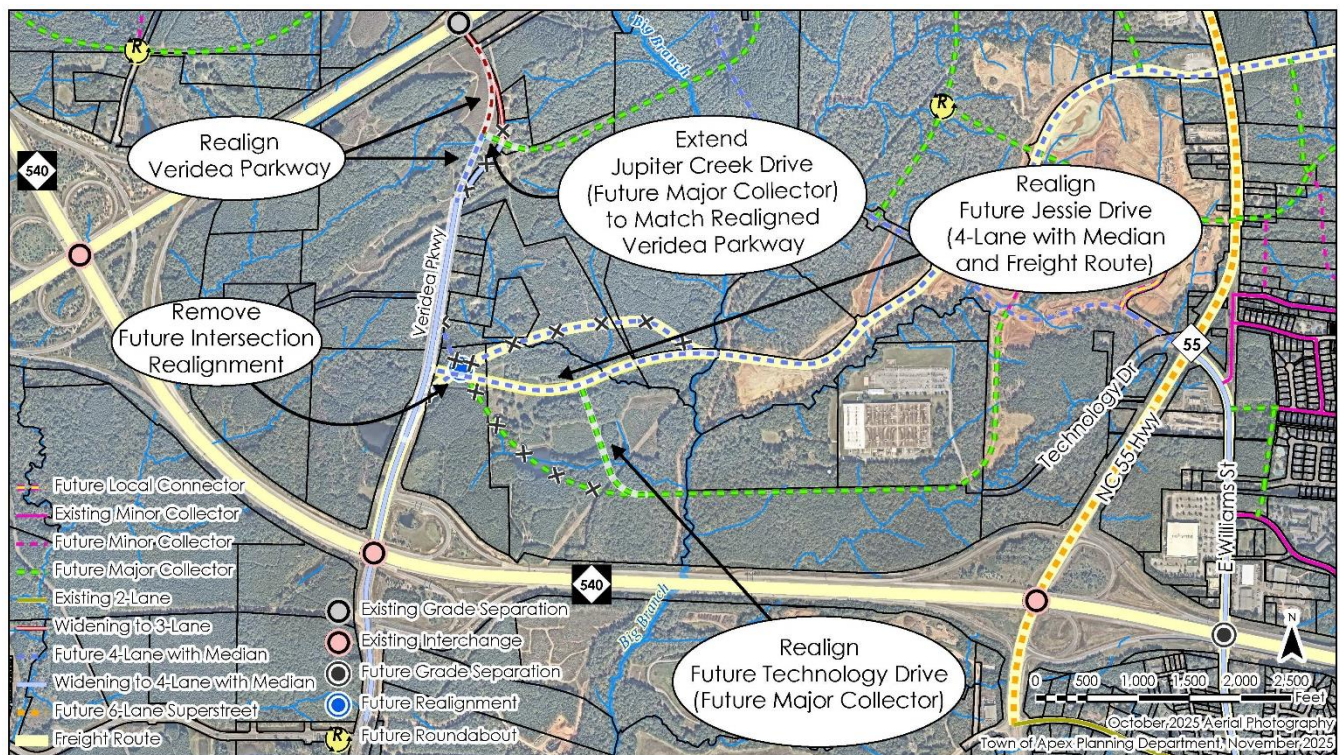


Figure 1. Proposed amendments to the Thoroughfare and Collector Street Plan Map

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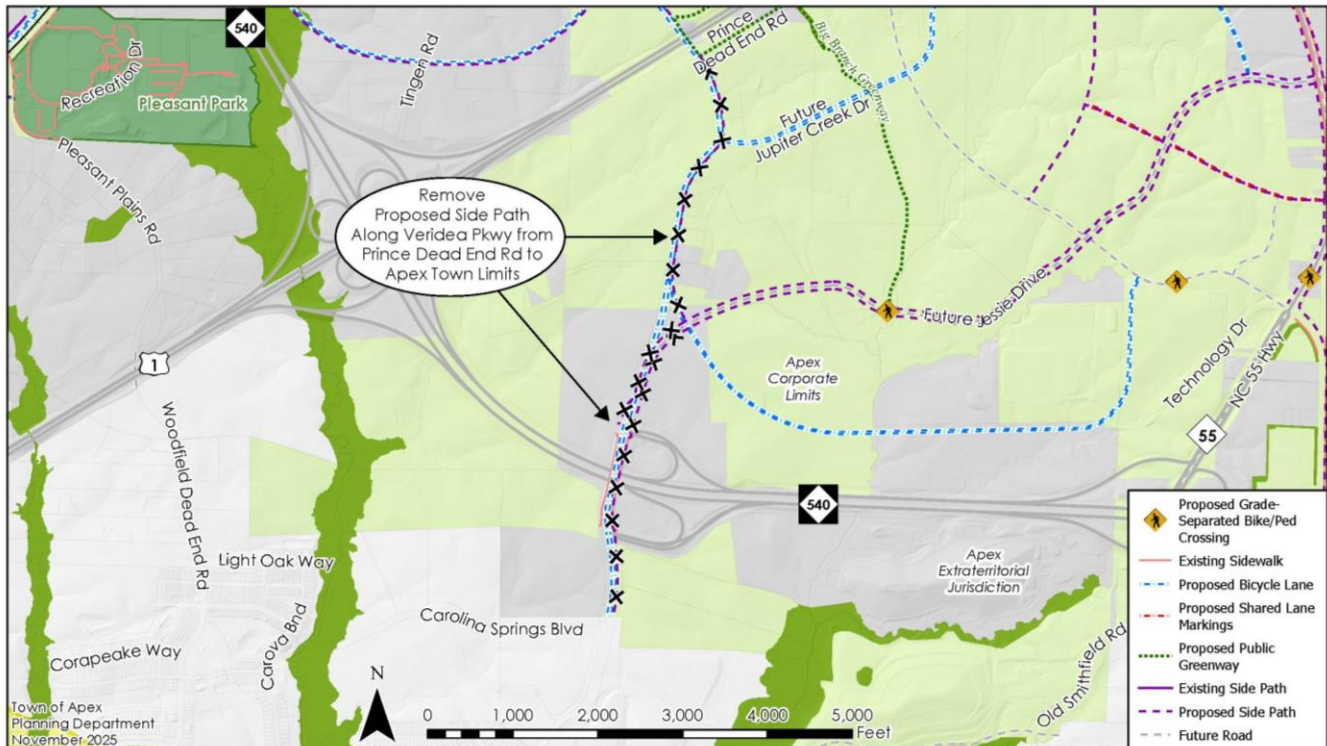


Figure 2. Proposed amendments to the Bicycle and Pedestrian System Plan Map

Explanation of Proposed Amendments

The amendments are associated with the proposed rezoning, 25CZ18 Veridea SD-CZ amendment.

The primary roadway amendment is to remove the planned intersection realignment of existing Veridea Parkway and future Jessie Drive. This amendment is requested because an updated Traffic Impact Analysis that includes the North Carolina Children's Hospital shows that there would be substantial left-turn movements from Jessie Drive onto Veridea Parkway. This left-turn movement is projected to be over 1,300 vehicles during the morning peak hour and over 500 vehicles in the afternoon peak hour. The turning movements would overwhelm this intersection and cause significant queueing on Veridea Parkway towards NC 540 based on the current plan to make Jessie Drive the through-movement between NC 55 and NC 540. These volumes would likely require a third left-turn lane and an additional receiving lane on Veridea Parkway north of the intersection. Instead, the north-south movement of Veridea Parkway should remain the through-movement, with a turn needed to get onto Jessie Drive. With this configuration, the turning volumes to and from Jessie Drive would be approximately 300 vehicles or less during each peak hour after construction of the NC Children's Hospital, a more manageable volume.

Due to the proposed removal of the intersection realignment at existing Veridea Parkway and future Jessie Drive; adjustments to the planned alignment of future Technology Drive extension are also needed. The proposed amendment shifts the alignment of future Technology Drive extension to the east, to provide sufficient spacing

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for a full-movement intersection along Jessie Drive. Further consideration of whether this major collector could intersect Jessie Drive even further east to avoid stream impacts is expected as part of Peak Plan 2055, but is not proposed at this time, given it would involve property outside of the rezoning case. Other amendments to the Thoroughfare and Collector Street Plan Map include minor adjustments to the alignment of Veridea Parkway and proposed Jupiter Creek Drive to reduce the curvature of Veridea Parkway in this section and improve sight distance at the intersection with Jupiter Creek Drive.

The proposed amendment to the Bicycle and Pedestrian System Plan Map is to remove the future side path along Veridea Parkway from approximately Carolina Springs Boulevard to Prince Dead End Road. This change is associated with feedback from the North Carolina Department of Transportation (NCDOT). NCDOT has indicated that they are not supportive of on-street bicycle lanes if a separated facility, like a side path, is provided. NCDOT also prefers vertically-separated facilities, especially along four-lane thoroughfares and higher-capacity, higher-speed roadways. Planning staff believe that a side path provides a different function than bicycle lanes given they mingle pedestrian and bicycle traffic and do not provide the same visibility for fast-moving bicycles along a roadway. During the public engagement process for Bike Apex, staff heard strong interest for bicycle facilities that would be separated from pedestrian traffic along specific roadways commonly used by road cyclists, including Veridea Parkway and Tingen Road. Given these considerations; the applicant, NCDOT, and Town staff agreed with a proposed amendment to remove the side path from the Bicycle and Pedestrian System Plan Map, but to construct the bicycle lanes as separated bicycle lanes, located behind the roadway curb. These lanes would be separated from both vehicular and pedestrian traffic. This configuration will also address potential conflicts between a stopped bus and bicycle lanes along this future transit route. Note, the existing bridges at US 1 and NC 540 will continue to be “pinch points” for bicycle and pedestrian facilities along Veridea Parkway until substantial infrastructure improvements can be made. A diagram representing the typical section for the three-lane section of Veridea Parkway between Jupiter Creek Drive and Prince Dead End Road is shown in Figure 3. A representative typical section for the four-lane section of Veridea Parkway is shown as Figure 4.

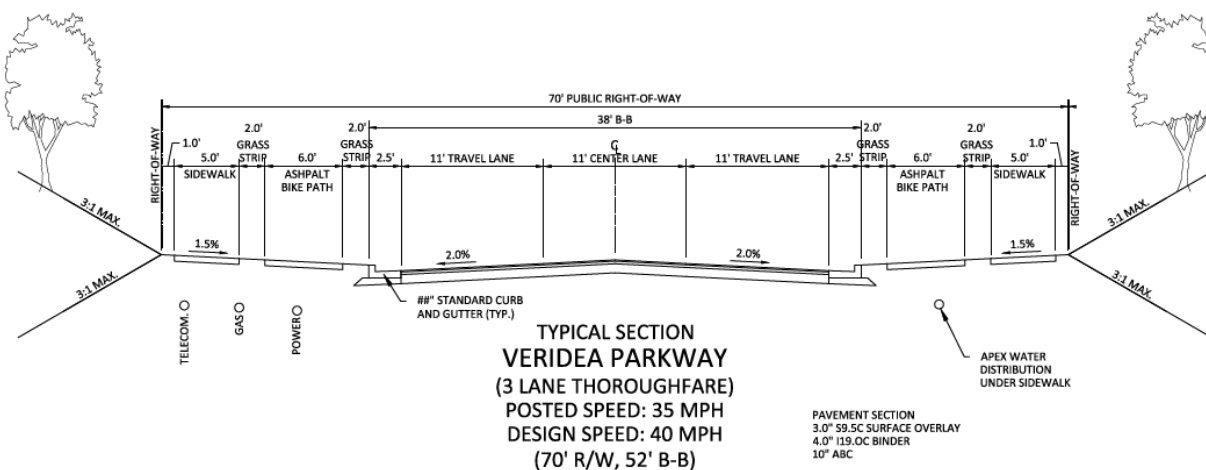


Figure 3. Typical Section for Veridea Parkway (3-lane) showing separated bicycle lane and sidewalk

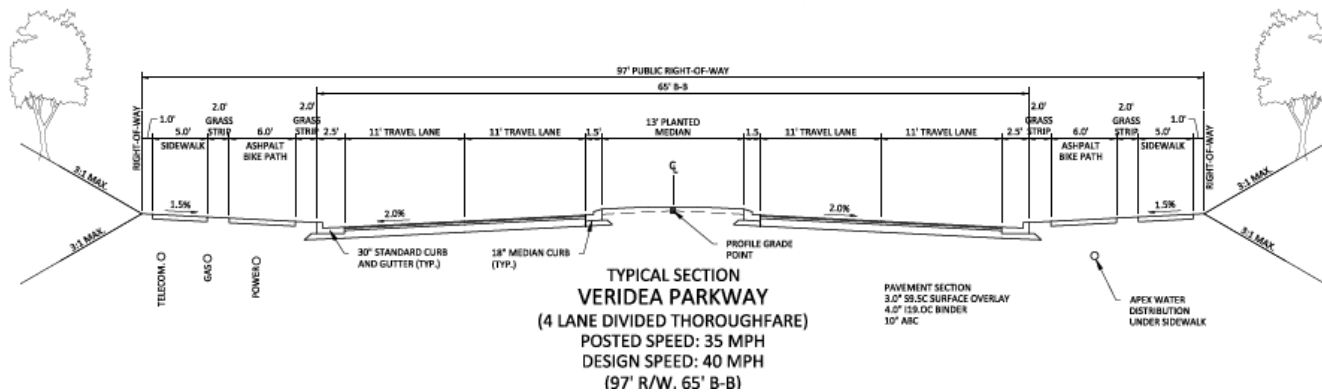


Figure 4. Typical Section for Veridea Parkway (4-lane) showing separated bicycle lane and sidewalk

Staff Recommendation:

Planning Department staff and Transportation and Infrastructure Development staff recommend approval of the proposed amendments. The amendments were reviewed by staff in Parks, Recreation, and Cultural Resources; Police; and Fire and there were no concerns. Water Resources staff expressed concern about a section of the planned alignment for Technology Drive extension that is outside of the area to be amended. The concern is regarding the necessity of a stream crossing in this location. Staff agreed this should be addressed with Peak Plan 2055, or sooner, if a site plan is submitted for this area.

Planning Board Recommendation:

The Planning Board will consider these amendments at their December 8, 2025 meeting. Their recommendation will be reported during the staff presentation.