

CONCLUSIONS

This traffic analysis has been prepared to evaluate the traffic impacts associated with the Maryville Odell Road multi-family residential development to be located on the south side of US 321, east of Odell Road in Blount County, Tennessee. The proposed development is expected to consist of 300 units which will be build by 2028.

The following is a summary of the study findings:

Trip Generation

- The proposed development is expected to generate 1,385 daily trips with 121 AM peak hour trips and 118 PM peak hour trips.

Proposed Access

- Access to the development will be provided via two driveways including a right-in/ right-out access meeting US 321 from the south and a full access, stop controlled driveway meeting Odell Road from the east.

Existing Conditions

- All roadway approach volume-to-capacity ratios meet level of service standards during the peak hours examined. The northbound and southbound approaches at US 321 and William Blount Drive are LOS F in the AM and PM peak hours due to coordinated signalization with a 170 second background cycle.

Background Conditions

- Existing volumes were increased by 2.7 percent annually for 3 years for background growth.
- The intersection capacity analysis shows all overall intersection volume-to-capacity ratios are under 1.0 for the peak hours examined. William Blount Drive and Big Springs Road westbound has a volume to capacity ratio of 0.99 and LOS E during the AM peak hour but has an overall intersection LOS C.

Recommended Improvements

- The following improvements are recommended:
 - Odell Road at access
 - Bring Odell Road to County standards with a width of 18 feet with two-foot shoulders from the access driveway north to William Blount Drive. This would necessitate a 25-foot right-of-way dedication from the centerline of the road along the entire length of the Pointe Grand Maryville Odell property (10' dedication if road is currently 30' ROW).
 - Widen Odell Road to a width of 18 feet with two-foot shoulders from the access driveway south to Big Springs Road. The widening on this segment is being done at the request of Boulnt County Highway Department. Similar to the segment above, this would necessitate a 25-foot right-of-way dedication from the centerline of the road along the entire length of the Pointe Grand Maryville Odell property (10' dedication if road is currently 30' ROW).
 - US 321 at access
 - A right turn lane is warranted at the right-in/right-out meeting US 321.
 - William Blount Drive at S Odell Road
 - A left turn lane is warranted in the southbound direction.
 - William Blount Drive at Big Springs Road
 - Change signal cycle length.

Buildout Conditions

- Under future buildout conditions, US 321 at William Blount Drive continues to operate with an overall LOS D in the AM and PM peak hours. US 321 at Old Glory Road continues to operate with an overall LOS E during the AM and PM peak hours. The overall delay for this intersection does not increase by greater than 10 percent of the overall delay under background conditions. The proposed development does not degrade overall intersection level of service.
- With recommended improvements, all levels of service for the overall intersections and intersection approaches meet minimum LOS goals.