

## Culver's Restaurant & Retail – Margate Traffic Comment



**Comment:** In regards to the traffic study, although it calculates trip generation it does not address LOS on the adjacent roadway network, show where we are at now and how the development will affect the LOS.

### Response:

**Background.** *There is a proposed restaurant and retail development to be located generally in the southeast quadrant of the intersection at State Road 7 / US 441 and W. Copans Road in Margate, Broward County, Florida. The subject site will be developed with a 4,443 square foot Culver's fast food restaurant with drive-through lane and a 4,000 square foot general retail building. Vehicular access will be provided to W. Copans Road, State Road 7 / US 441 and NW 55<sup>th</sup> Avenue.*

**Trip Generation.** *A trip generation analysis for this proposed development was performed in accordance with procedures and data contained within the Institute of Transportation Engineers (ITE) Trip Generation Manual (10<sup>th</sup> Edition). This analysis and the supporting documentation are presented on pages 4 and 5 of the traffic study; however, the net new trips to be generated by this project are summarized below:*

- *Net new daily vehicle trips = 1,167*
- *Net new AM peak hour vehicle trips = 3 (1 inbound and 2 outbound)*
- *Net new PM peak hour vehicle trips = 84 (43 inbound and 41 outbound)*

**Trip Distribution.** *All of the project traffic is expected to impact W. Copans Road / Royal Palm Boulevard and/or State Road 7 / US 441. The trips distribution presented in Figure 2 of the traffic study is summarized below:*

- *30% to and from the north on State Road 7 / US 441*
- *35% to and from the south on State Road 7 / US 441*
- *20% to and from the east on W. Copans Road*
- *15% to and from the west on Royal Palm Boulevard*

**Project Traffic Assignment.** *Based upon the preceding trip distribution and the driveway assignment presented in Figure 3 of the traffic study, the PM peak hour and daily traffic assignment (of net new trips) on the adjacent roadway segments were developed. The results of this analysis are as follows:*

- *W. Copans Road east of State Road 7: 39 PM peak hour trips / 569 daily trips*
- *State Road 7 north of Margate Boulevard: 28 PM peak hour trips / 394 daily trips*

**Existing Capacities, Volumes, & Levels of Service (LOS).** Broward County's latest Roadway Capacity and Level of Service Analysis 2017 & 2040 tables were consulted for this analysis. According to these tables, the existing traffic characteristics for the subject roadway segments are as follows:

- **Roadway ID 842 – W. Copans Road east of State Road 7**
  - Daily
    - Capacity = 37,810 vehicles per day (vpd)
    - Existing Daily Volume = 33,500 vpd
    - Existing LOS = C
  - PM Peak Hour
    - Capacity = 3,401 vehicles per hour (vph)
    - Existing PM Peak Hour Volume = 3,183 vph
    - Existing LOS = C
- **Roadway ID 527 – State Road 7 north of Margate Boulevard**
  - Daily
    - Capacity = 59,900 vehicles per day (vpd)
    - Existing Daily Volume = 51,000 vpd
    - Existing LOS = C
  - PM Peak Hour
    - Capacity = 5,390 vehicles per hour (vph)
    - Existing PM Peak Hour Volume = 4,485 vph
    - Existing LOS = C

**Future Conditions.** The traffic impacts of the subject restaurant and retail project on the adjacent roadway network were considered by adding the net new daily and PM peak hour volumes to the existing roadway volumes documented by Broward County. The resulting volumes and levels of service are documented below:

- **Roadway ID 842 – W. Copans Road east of State Road 7**
  - Daily
    - Daily Volume = 33,500 vpd + 569 vpd = 34,069 vpd
    - Resulting LOS = C
  - PM Peak Hour
    - PM Peak Hour Volume = 3,183 vph + 39 vph = 3,222 vph
    - Resulting LOS = C
- **Roadway ID 527 – State Road 7 north of Margate Boulevard**
  - Daily
    - Daily Volume = 51,000 vpd + 394 vpd = 51,394 vpd
    - Resulting LOS = C
  - PM Peak Hour
    - PM Peak Hour Volume = 4,485 vph + 28 vph = 4,513 vph
    - Resulting LOS = C

*As indicated by the foregoing analysis, the roadway segments adjacent to the subject retail and restaurant site at W. Copans Road and State Road 7 both have adequate capacity to accommodate the forecast project traffic and the existing Levels of Service (i.e. LOS "C") will not degrade as a result of this project. Additionally, it is noted that the project impacts on both segments are well below the applicable threshold of 3.0%. More specifically, the project impact on W. Copans Road is projected to be 1.5% on a daily basis and 1.1% in the PM peak hour. And, the project impact on State Road 7 is projected to be 0.7% on a daily basis and 0.5% in the PM peak hour.*