

MASTER PLAN TRAFFIC STUDY FINDINGS

McDonough & Rea Associates, in conjunction with Coppola & Coppola Associates and Donald Johnson, PE, special projects engineer, has prepared a *Southern Montgomery Township Master Plan Traffic Study* to accompany recommendations made by Coppola & Coppola Associates with respect to existing and proposed zoning in the southwest and northwest quadrants of the State Route 206/County Route 518 intersection. The *Southern Montgomery Township Master Plan Traffic Study* has analyzed the following scenarios:

1. *Development Option I:*
 - 248 Age-restricted residential units
 - 120 Bed-assisted living facility
 - 848,754 SF of office space
 - 326,330 SF of retail space
 - 31 Residential dwelling units

2. *Development Option II:*
 - 248 Age-restricted residential units
 - 120 Bed-assisted living facility
 - 946,137 SF of office space
 - 326,330 SF of retail space
 - 31 Residential dwelling units

3. *Development Option III* – Same as Development Option I, however with 714,140 SF of office space generating traffic at the current peak hour rate exhibited by occupancy of the *Route 518 Business Park* by *Bloomberg Financial Services*.

4. *Development Option IV* – Same as Development Option II, however with 811,523 SF of office space generating traffic at the current peak hour rate exhibited by occupancy of the *Route 518 Business Park* by *Bloomberg Financial Services*.

5. Traffic generation from existing zoning within the area.

The aforementioned development scenarios have been analyzed with respect to levels of service that can be anticipated at the 3 key signalized intersections in the Southern Montgomery Township study area where traffic volumes will be at their highest levels. These intersections are as follows:

1. The intersection of State Route 206 at County Route 518.
2. The intersection of State Route 206 at the exit from the *Princeton North Shopping Center* where a new Montgomery Township Master Plan Road will ultimately form a fourth leg to the intersection.
3. A new intersection on County Route 518 where 2 new Montgomery Township Master Plan Roads will intersect that roadway. From the north, the Route 518/Orchard Road connector through the *Sharbell Tract* will intersect Route 518. From the south, the new Montgomery Township “Outer Loop” roadway in the southwest quadrant of Route 206/518 will intersect opposite the Route 518/Orchard Road connector.

The 3 aforementioned intersections are the key intersections within the study area which will experience the highest amount of through traffic and turning traffic. This study has been performed in order to determine the required geometry at each of these intersections in order to achieve a reasonable level of service design parameter. Level of service “C/D” was sought as a reasonable design parameter.

The following report summarizes the anticipated levels of service, required geometry, etc., for each development option.

DEVELOPMENT OPTION I

For *Development Option I*, the 3 studied intersections will all operate at level of service “C” during the AM peak street hour and PM peak street hour. A *Level of Service Summary* for each development option showing overall levels of service for each intersection and for the various movements at each intersection is appended to this report along with intersection geometry sketches and projected future traffic volumes for each intersection.

DEVELOPMENT OPTION II

For *Development Option II*, the 3 studied intersections will all operate at level of service “C” during the AM or PM peak street hours, except for the Route 518 intersection at the Master Plan Road/Orchard Road connector that will operate at level of service “D” during the AM peak street hour.

DEVELOPMENT OPTION III

For *Development Option III*, the intersections of Route 206 at Route 518 and Route 206 at the *Princeton North Shopping Center*/Master Plan Road will operate at level of service “C” during the AM or PM peak street hours. The intersection of Route 518 at the Master Plan Road/Orchard Road connector will operate at level of service “D” during the AM and PM peak street hours.

DEVELOPMENT OPTION IV

For *Development Option IV*, the intersection of Route 206 at Route 518 will operate at level of service “D” during the AM or PM peak street hours. The intersection of Route 206 at the *Princeton North Shopping Center*/Master Plan Road will operate at level of service “C” during the AM peak street hour and level of service “D” the PM peak street hour. The intersection of Route 518 at the Orchard Road connector/Master Plan Road will operate at level of service “F” during the AM peak street hour and level of service “E” during the PM peak street hour.