



**ANDERSON, ECKSTEIN & WESTRICK, INC.**  
**CIVIL ENGINEERS    SURVEYORS    ARCHITECTS**

51301 Schoenherr Road  
Shelby Township, MI 48315

586.726.1234  
www.aewinc.com

June 27, 2019

Brandon Wagner  
Lombardo Homes  
13001 23 Mile Road  
Shelby Township, Michigan 48315

Reference: Cumberland Village - Rochester Hills, MI  
AEW Project No. 0546-0051

Dear Mr. Wagner:

This letter is provided in response to your request to evaluate whether a single entrance to the proposed Cumberland Village residential development will result in acceptable traffic operations.

**Project Summary**

The Cumberland Village development proposal includes 57 single family residential units on the east side of Livernois Road, south of Hamlin Road in Rochester Hills. The development is proposed to have a single "boulevard" entrance to S. Livernois Road, which is directly opposite Maple Leaf Drive. A second approach for fire access only is proposed at the north end of the site.

**Existing Conditions**

Livernois Road is a 2-lane asphalt roadway with a 45 mph posted speed limit. Southeast Michigan Council of Governments (SEMCOG) has reported the average daily traffic (ADT) for this segment at 15,200 vehicles per day in 2016. SEMCOG has projected a population increase of approximately 0.5% annually between 2015 and 2020 for Rochester Hills, however, the 2016 traffic volumes were projected to 2019 with a 2% annual growth rate to provide a conservative estimate, which results in a 2019 ADT of 16,130 vehicles per day. A bypass lane currently exists in this vicinity for NB and SB traffic, allowing thru vehicles to pass a slowing/stopped vehicle attempting to make a left turn.

**Trip Generation**

The number of peak hour AM and PM trips that may be generated by the proposed 57 unit development were forecasted based on data presented in ITE's *Trip Generation Manual*, 9<sup>th</sup> Edition.

Trip rates for the single family homes were based on the average rate presented by ITE for Land Use 210 (Single-Family Detached Housing). The table below shows the amount of trips for the AM and PM peak hours, an average weekday total, as well as the in and out distributions.



Brandon Wagner  
June 27, 2019  
Page 2

| Land Use                       | ITE Code | Amount | Units          | AM Peak Hour |           |           | PM Peak Hour |           |           | Average Weekday |            |            |
|--------------------------------|----------|--------|----------------|--------------|-----------|-----------|--------------|-----------|-----------|-----------------|------------|------------|
|                                |          |        |                | In           | Out       | Total     | In           | Out       | Total     | In              | Out        | Total      |
| Single Family Detached Housing | 210      | 55     | Dwelling Units | 14           | 38        | 52        | 42           | 23        | 65        | 313             | 313        | 626        |
|                                |          |        | <b>Total</b>   | <b>14</b>    | <b>38</b> | <b>52</b> | <b>42</b>    | <b>23</b> | <b>65</b> | <b>313</b>      | <b>313</b> | <b>626</b> |

### Conclusion

Based on the above information, it is our opinion that a single connection to Livernois will adequately serve the proposed residential development. Additionally, minimizing the number of connections to Livernois Road is consistent with good access management practice and reduces the number of potential conflict points.

Please advise if you have any questions or concerns.

Sincerely,

Michael A. Vigneron, PE, PTOE  
Senior Project Engineer

M:\0546\0546-0051\Gen\Letters\CumberlandVillageTraffic-mav\_190627.docx