Kimley»Horn

# MEMORANDUM

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| To: | Neil Dwyer, Mayor<br>Village of Monroe Board of Trustees Members |
| CC: | Alyse Terhune, Esq.<br>Kim Zahra<br>Natalie D. Barber, P.E. |
| From: | Andrea Connell, RSP1<br>John Canning, P.E.<br>Village of Monroe Traffic Consultant |
| Date: | April 23, 2024 |
| Subject: | Proposed Warehouse - Craigville Logistics<br>Craigville Road, Town of Blooming Grove, NY<br>Review of accepted DEIS |

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Per the Village of Monroe's request, Kimley-Horn has reviewed the traffic and transportation portions of the Draft Environmental Impact Statement (DEIS) for a proposed 562,450 square-foot warehouse (the "Project") to be located on Craigville Road (County Route 51) in the Town of Blooming Grove, Orange County, NY. Specifically, the following documents were reviewed by Kimley-Horn:

- DEIS for Craigville Logistics Warehouse (revision date of March 8, 2024) prepared by Engineering & Surveying Properties;
- DEIS Appendix H *Traffic Impact Study* (revision date of February 13, 2024), prepared by Creighton Manning Engineering, LLP;
- Site Plans, prepared by Arden Consulting Engineers, PLLC (Sheets 1 through 65, last revised February 26, 2024).

Our review focuses on the methodology used to determine the warehouse trip generations, assignment of warehouse trips to the roadways, and potential impacts from the added traffic on roadways in the Village of Monroe.

The Project site is located on the west side of Craigville Road (CR 51), and adjacent to the NYS Route 17 westbound off ramp (Exit 128) which borders the southern part of the site. The Heritage Trail runs along the northern side of the site. The Applicant (Chester SF, LLC) is proposing to construct a one-story, 45-foot tall warehouse building totaling 562,450 SF (515,888 SF of warehouse area and 36,256 SF of office space) with an additional 36,256 Sf of unfinished mezzanine space above the office space. Per the DEIS, the warehouse proposes up to four (4) tenants, although none have been identified. The warehouse will provide 88 loading bays, located on the north side of the building. Parking will consist of 60 additional trailer parking spaces and 349 employee car parking spaces (including 14 ADA parking spaces). Access to the development will be provided by one driveway, to be located on Craigville

Road, approximately 3,000 feet north of the NYS Route 17M intersection. The driveway will provide one entering lane and two exiting lanes.

Per the DEIS, the Project is to be completed in 2024, however, the traffic impact study ("TIS") analyzes two future Build condition years, 2024 and 2029.

As the proposed driveway is on a county roadway, the Applicant will need to obtain a highway work permit from the Orange County Department of Public Works.

The following summarizes our review of the DEIS and provides our comments on the Traffic Impact Study (TIS) and accompanying documents, as they relate to the Village of Monroe. As indicated below, the most critical item is the type of warehouse proposed as warehouse trip generations can vary widely depending on the tenant(s) proposed.

**Study Locations and Study Hours**

The TIS provides quantitative analyses (detailed intersection capacity analysis) for existing and future traffic operating conditions at 10 intersections, none of which are in the Village of Monroe. A qualitative analysis (identifying the number of Project trips at an intersection) has been provided at a further 4 intersections (2 in the Village). The TIS evaluated the weekday AM and PM peak hours and the Saturday peak hour. The study intersections are listed below (and shown on the attached Figure).

Quantitative Analysis Intersections

1. NYS Route 17M/Craigville Road
2. Craigville Road/Old Mansion Road
3. NYS Route 17 Northbound Exit 128 Off-Ramp/ Craigville Road
4. NYS Route 17M/NYS 17 Southbound Exit 127 On-Ramp
5. NYS Route 17M/Kings Highway/Lehigh Avenue
6. NYS Route 17M/NYS Route 94/Academy Avenue
7. NYS Route 94/NYS Route 17 Northbound Exit 126 On/Off- Ramp
8. NYS Route 94/NYS Route 17 Southbound Exit 126 On/Off- Ramp
9. NYS Route 17M/Museum Village Road
10. NYS Route 208/Museum Village Road

Qualitative Analysis Intersections

11. NYS Route 208 & NYS Route 17 Northbound Exit 130 On/Off Ramp
12. NYS Route 208 & NYS Route 17 Southbound Exit 130 On/Off Ramp
13. **NYS Route 208 & North Main Street/Schunnemunk Road (Village of Monroe)**
14. **NYS Route 208 & NYS Route 17M (Village of Monroe)**

The qualitative analysis identified the amount of Project traffic estimated to travel through the intersections and determined whether there would be an impact on traffic conditions.

**Project Trip Generations**

The trip generations for the proposed 562,450 SF warehouse were calculated based on trip rates contained in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition* for

Land Use Code (LUC) 150, "Warehousing". The warehouse is projected to generate a total of 91 trips (80 car trips, 11 truck trips) during the AM peak hour, 94 trips (77 car trips, 17 truck trips) during the PM peak hour and 28 trips (28 car trips, 0 truck trips) during the Saturday peak hour. The ITE description of LUC 150, "Warehousing" is: "A warehouse is primarily devoted to the storage of materials, but it may also include office and maintenance areas." The ITE description further notes that: "High-cube transload and short-term storage warehouse (Land Use 154), high-cube fulfillment center warehouse (Land Use 155), high-cube parcel hub warehouse (Land Use 156), and high-cube cold storage warehouse (Land Use 157) are related uses."

We note that ITE provides trip generation rates for the other warehouse types mentioned above, two of which would generate significantly more traffic than the trip generations analyzed in the TIS. The Applicant hasn't identified the tenant(s) of the warehouse, therefore, one or more of the future tenants may have operations that would more closely resemble one of the other warehouse types. We calculated the trip generations for the proposed 562,450 SF warehouse using the ITE rates for the other types of warehouses, as shown in the Table below.

| ITE Warehouse Uses - Trip Generation Comparison | | | |
|---|---|---|---|
| ITE Warehouse Type | LUC | Weekday Peak Hour Trips | |
| | | AM | PM |
| **Warehousing (Proposed Project)** | **150** | **91** | **94** |
| Mini-Warehouse | 151 | 51 | 84 |
| High-Cube Transload & Short-Term Storage Warehouse | 154 | 45 | 56 |
| High-Cube Fulfillment Center (Non-Sort) Warehouse | 155 | 84 | 90 |
| **High-Cube Fulfillment Center (Sort) Warehouse** | 155 | **489** | **675** |
| **High-Cube Parcel Hub Warehouse** | 156 | **394** | **360** |
| High-Cube Cold Storage Warehouse | 157 | 62 | 67 |

As can be seen in the Table, if the eventual tenant(s) of the warehouse were to be a High-Cube Fulfillment Center (Sort) Warehouse (such as an Amazon facility) or a High-Cube Parcel Hub Warehouse (such as a UPS or FedEx facility), the warehouse would generate significantly more peak hour trips than the warehouse evaluated in the TIS (up to 581 more trips as a Fulfillment Center - Sort (LUC 155) and up to 303 additional trips as a parcel hub warehouse (LUC 156)), and the impacts would likely be greater and would add more traffic to the Village of Monroe roadways. All other warehouse types shown in the Table generate at a similar rate as the evaluated warehouse. The Applicant should confirm that the higher-generating e-commerce warehouse types are not being considered. The Town of Blooming Grove Planning Board may want to set a volume threshold as part of any approval for the warehouse to ensure that the trips generated by the future tenants are not significantly higher than the trip generations analyzed in the TIS.

**It is suggested that the Board ask the Applicant to confirm that the proposed buildings will not be used as a High-Cube Fulfillment Center (Sort) Warehouse (such as an Amazon facility) or a High-Cube Parcel Hub Warehouse (such as a UPS or FedEx facility).**

**If the Applicant does not confirm that the proposed buildings will not be used as a High-Cube Fulfillment Center (Sort) Warehouse or a High-Cube Parcel Hub Warehouse, it is suggested that the Board request that the Applicant provide standard intersection capacity analyses for the intersections of NYS 17M with NYS 208, Lake Street and Stage Road.**

**Project Trip Distributions**

The TIS provides trip distribution percentages for the proposed warehouse, with separate passenger car and truck distributions. The trucks are all expected to use NYS Route 17 to travel to and from the site, with 60% to/from the east and 40% to/from the west. The trucks to/from the west would arrive and depart via Exit 126 (NY Route 94), traveling along Route 17M to Craigville Road. Trucks from the east would enter using Exit 128 (Craigville Road). Due to truck restrictions on Museum Village Road, exiting trucks to the east would use Exit 127, via Route 17M west, rather than Exit 129 (Museum Village Road/O&R Road). Assuming all truck traffic arrives and departs via Route 17, none of the trucks are expected to travel in the Village of Monroe.

The passenger car distributions estimate that 20% of the trips will come from the west, 30% from the east, 20% from the north, and 30% from the south (with 15% traveling on NYS Route 17M to/from the Village).

The Project trips were assigned to the study intersections based on the trip distribution percentages. The TIS (Figure 1 in Attachment F, copy appended herewith) shows the amount of truck and passenger car trips at 8 intersections, including the two intersections in the Village of Monroe. Per the Figure, it is estimated that up to 8 passenger car trips will travel through the NYS 17M intersection with NYS Route 208 and up to 4 passenger car trips will travel through the NYS Route 208 intersection with N. Main Street and Schunnemunk Road. No truck trips are projected to travel through either of these intersections.

Although the Route 208/N. Main Street intersection currently experiences significant delays, it is not anticipated that the warehouse will have a significant adverse impact at the intersection during the peak hours due to the low volume of traffic added (4 vehicles). Similarly, the 8 additional trips added to the Route 17M intersection with Route 208 is not expected to result in noticeable increases in delay. However, as discussed above, if the warehouse were to be used as a higher-generating facility, then

the Village intersections would experience a significantly higher volume of traffic along with increased delays and a quantitative analysis would be needed to identify Project impacts[1].

A review of travel times between the site and Southfields (Tuxedo) as well as between the site and the New Jersey State line on I-287 revealed a difference in southbound travel time of just 1 minute when traveling to Southfields and just 8 minutes when travelling to the NJ state line, with similar differences in travel time in the northbound direction. There are numerous instances throughout the year when there are delays much longer than this on NYS 17 and I-87. During these occasions, GPS devices direct traffic on these routes through the Village of Monroe on NYS 17M.

**It is suggested that the Board ask the Applicant to provide a justification for not performing an analysis of the three Route 17M intersections listed above during these busy periods on I-87 and NYS 17.**

**Project Impacts and Mitigation**

The TIS analyzed the 2022 Existing conditions and future 2024 No-Build, 2024 Build and 2029 Build conditions at the 10 quantitative analysis intersections. For the NYS Route 208 intersection with Museum Village Road, the No-Build and Build analyses assume that improvements (traffic signal and road widening) to be provided by a proposed commercial development near the intersection will be completed.

A review of the analysis results reveals that the Project will not have a significant impact at the study locations with the exception of the Route 17M intersection with Museum Village Road. During the weekday PM peak hour, this unsignalized intersection will see delays on the minor street (Museum Village Road) increase by more than 50 seconds due to the Project traffic added to this intersection. The Applicant has not proposed any mitigation to address these impacts. Although this intersection is not located within the Village, the significant increase in delays for drivers exiting from Museum Village Road could cause some drivers destined to the south on Route 17M to use other routes (Orange and Rockland Road, Route 208) which would add traffic to and potentially impact Village intersections.

**It is suggested that the Board request the developer to implement improvements at the intersection of Route 17M with Museum Village Road to prevent the increase in delays at this intersection from impacting other intersections in the Village.**

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[1] We note that the TIS states that the determination as to whether an intersection requires a quantitative analysis is based on NYSDOT guidance, which the TIS says is only needed at those locations where there are 100 or more site-generated trips entering the intersection on one approach. We note that this is general guidance typically used by NYSDOT for highway construction projects, and refers to the total volume (not just Project traffic) on one approach. The determination to conduct a quantitative analysis should account for an intersection's current operating conditions as well as the amount of Project traffic added. An intersection such as NYS Route 208 and N. Main Street currently experiences lengthy peak hour delays, and even adding 20 trips on one approach could result in a significant impact to the intersection.

In addition to the increased delays, the crash analysis provided in the TIS indicates that the intersection has experienced a crash rate that is above the statewide average for this type of intersection. The Applicant recommends that the "…NYSDOT investigate mitigation measures to reduce collisions at this intersection." Kimley-Horn agrees that the Applicant should work with NYSDOT to identify countermeasures that can be implemented to reduce the frequency of the crashes at the intersection.

The mitigation measures identified in the DEIS/TIS are summarized below:

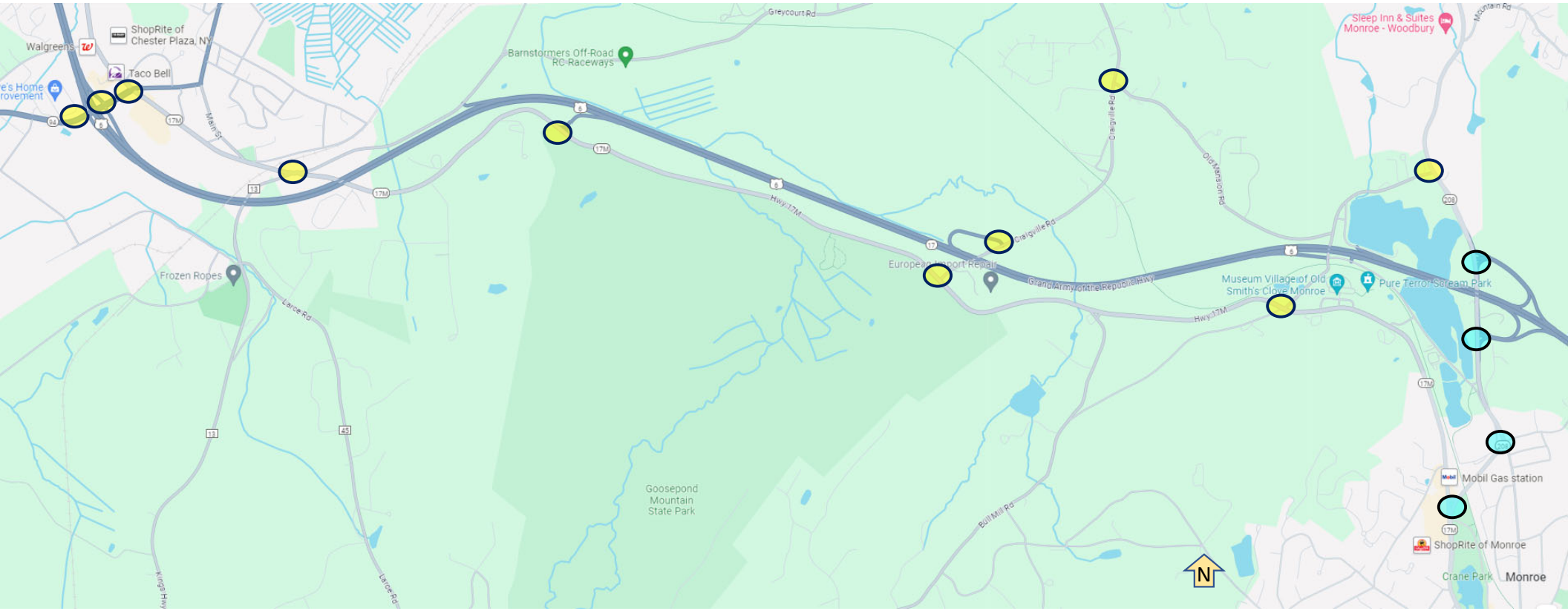
- Route 17M & Museum Village Road: NYSDOT should investigate mitigation measures to reduce collisions at the intersection.
- Route 17M & Craigville Road: Widen the shoulder on the northeast corner of the intersection to facilitate truck turning movements.
- Goosepond Parking & Trailhead: Add "Trail Crossing" and "Pedestrian Crossing" warning signs on either side of NYS Route 17M at the trailhead.

**Construction Traffic**

Section 7.0 of the TIS discusses the construction traffic and notes that the cut operation is anticipated to take three months (assuming 6 days/week) with 306 trips by dump trucks (153 entering and 153 exiting trips) each day, averaging 38 to 40 trips per hour. An average of 40 truck trips per hour means that in some hours there will be even more. This is a very substantial number of truck trips, which is likely to significantly interfere with traffic operating conditions. The TIS does not indicate the routes used by the dump trucks, nor does it discuss the number of other trucks (delivering materials) that would visit the site, or the number and routes taken by workers.

**It is recommended that the Board request the Applicant to identify dump truck routes, material delivery trucks/routes and worker trips/routes along with measures to ensure that, particularly, the construction truck trips do not come through the Village of Monroe.**

Quantitative Analysis Intersections
Qualitative Analysis Intersections



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CRAIGVILLE RD &
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NYS ROUTE 208 &
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LEGEND:
AM(PM)[SAT]
PV = PASSENGER VEHICLES
PH = PEAK HOUR

PROJECTED PEAK HOUR
SITE-GENERATED TRIP ASSIGNMENTS

CRAIGVILLE ROAD (CR51) COMMERICAL DEVELOPMENT
TOWN OF BLOOMING GROVE
ORANGE COUNTY, NY

Creighton Manning

PROJECT: 120-269 | DATE: 11/2022 | FIGURE: 1

FILE NAME = \\CME-FILE01\Company\Projects\2020\120-269 Indigo Contracting - Blooming Grove\Working\CADD\dgn\120-269_fig_traf_expanded.dgn
DATE/TIME = 11/3/2022
USER = PTorez