EXECUTIVE SUMMARY

This traffic study was prepared by Kimley-Horn of New York, P.C. to document the potential traffic impacts associated with the proposed Artis Senior Living residential memory care facility (the "Project") to be constructed at 153 White Plains Road in the Village of Tarrytown, NY. The traffic impact study quantifies existing and future traffic conditions surrounding the site, both with and without the Project.

a) Project Description

The proposed 35,952 square-foot (sf), Artis Senior Living residential memory care facility will have 64 and will provide communal dining, routine protective oversight, beds personalized assistance/supportive services and 24-hour care for people suffering from Alzheimer's Disease or Alzheimer's-like disorders resulting in dementia. The Project site is located at 153 White Plains Road (NYS Route 119) which is situated immediately to the northwest of the adjoining parcel at 155 White Plains Road. The subject site was originally part of the 155 White Plains Road parcel for which an Environmental Impact Statement was prepared and a Findings Statement adopted in 2006 to permit the development of a 60,000-sf office building. The 153 White Plains Road parcel was subsequently carved out from the 155 site and is currently undeveloped while 155 White Plains Road is developed with two office buildings. With the proposed change in use from office to residential memory care facility, and in order to be in compliance with New York State's Environmental Quality Review Act (SEQRA), the Village has indicated that a Supplemental Draft Environmental Impact Statement (SDEIS), based on the previous Environmental Impact Statement (EIS) prepared for the property in 2006, will need to be prepared. A Scoping document was prepared and accepted on July 23, 2018 which identifies the following four key intersections as requiring analysis:

- 1. US Route 9 (Broadway) at White Plains Road (NYS 119)
- 2. US Route 9 (Broadway) at I-287/I-87 Eastbound Ramps & Doubletree Hotel Driveway
- 3. White Plains Road (NYS 119) at the 155 Western Site Driveway/ I-287/I-87 Westbound Ramps
- 4. White Plains Road (NYS 119) at 155 Eastern Site Driveway

The adjoining parcel at 155 White Plains Road has two driveways along White Plains Road. Access to White Plains Road from the subject project is to be provided via a driveway connecting to the circulation road between these two driveways, however, the site will be most directly accessed via the 155 driveway opposite the westbound I-87/I-287 ramps. An emergency access will also be provided to Martling Avenue

b) Public Transportation

Bus service is provided along White Plains Road by Westchester County's Bee-Line bus system and by Coach USA. The Bee-Line system operates two bus routes; #13 provides weekday service between Ossining and Rye and route #1W provides service Monday through Saturday between the Bronx and White Plains. The Bee-Line bus stops are located in front of the subject site. Coach USA operates one bus route (OWL Express) which operates Monday through Friday during the peak morning and afternoon commuter periods. The OWL Express bus stop is located on White Plains Road adjacent to Meadow Street, approximately 0.15 miles from the subject property. The Bee-Line and Coach USA buses each connect to the White Plains TransCenter, a multi-modal transportation center which provides transfers to Metro-North Railroad's Harlem Line trains and other Bee-Line buses. Bee-Line bus #13 also connects to Metro-North Railroad's Tarrytown station. The Hudson Link bus (Routes H07 and H07X) operates seven days a week between the Palisades Center Mall in

Kimley »Horn of NY, P.C.

West Nyack and Metro-North Railroad's Tarrytown station with a bus stop located along US Route 9 at White Plains Road.

c) Proposed Improvements

The New York State Thruway Authority (NYSTA) is implementing improvements to US Route 9 as part of the New NY (Mario Cuomo) Bridge project. These improvements, which are expected to be completed prior to the opening of the proposed project, include providing an additional southbound left-turn lane on US Route 9 at the intersection with I-287/I-87 Eastbound Ramps and the Doubletree Hotel driveway and constructing a 10-foot wide, paved, shared use path on the west side of US Route 9. The northern end of the shared use path will connect to the New NY Bridge's shared use path (near 330 South Broadway) and continue southbound to the Doubletree Hotel driveway. Studies are underway to consider a possible extension of the shared use path to the south. The improvements also include the reopening of Ramp E, which provides access to the New NY Bridge from NY Route 9 southbound.

A complete streets study is being conducted for White Plains Road (NY Route 119) between Route 9 in Tarrytown and Route 22 in White Plains. This study, the *Route 119 Complete Streets Plan*, is evaluating measures to make the Route 119 corridor more pedestrian and bicycle friendly. The study, with specific recommendations, is anticipated to be completed by 2019.

d) Existing & Future Traffic Volumes

To assess existing traffic conditions in the vicinity of the site, peak-hour manual turning movement traffic volumes were recorded at the study intersections on Wednesday September 12, 2018 during the weekday peak afternoon period and on Thursday September 13, 2018 during the weekday peak morning period. The counted volumes were compared to 2005 existing volumes that were part of the 2006 SEQRA analysis for the formerly-approved 60,000 sf office building. Due to the current diversions of traffic associated with the new NY Bridge construction, which were not in place in 2005, only one intersection would provide a true comparison. At this intersection, White Plains Road at the eastern Site driveway, the comparison revealed that the 2005 existing volumes are higher than the 2018 existing volumes during the AM and PM peak hours (13 percent higher in the AM peak hour; 3 percent higher in the PM peak hour). A more detailed comparison to the 2006 application is provided later in this report.

The 2018 existing volumes were increased to account for anticipated increases in background traffic by the time the project is completed, establishing the future traffic volume conditions without the proposed Project ("No-Build" volumes). The future traffic volumes include increases associated with the contemplated 248-unit residential development at 200 White Plains Road, the remaining residential units at the Hudson Harbor development and the proposed Edge on Hudson development in Sleepy Hollow. Other developments, such as the Tarrytown Honda expansion, Doubletree Hotel, Montefiore, and the J.C.C. property have been completed and traffic associated with these developments are included in the counted traffic volumes. The No-Build volumes also include traffic volume reassignments associated with the future reopening of Ramp E and traffic from 5,000 sf of vacant office space at 155 White Plains Road. Compared to the existing volumes, peak-hour traffic activity at the study intersections is projected to increase by up to 9% in the No-Build conditions.

e) Project-Development Traffic

Traffic anticipated to be generated by the project was forecast based on published trip generation data and traffic surveys at a similar type memory care facility. Based on these projections, the

proposed development of the site is projected to add 14 vehicular trips to the surrounding roadways during the typical weekday AM peak hour and 17 trips during the typical weekday PM peak hour. Parenthetically, the site's previously-approved 60,000 sf office building was projected to generate 70 trips during the weekday AM peak hour and 69 trips during the weekday PM peak hour.

A summary of the Project's trip generation is presented in Table 1.

Table 1 - Peak Hour Trip Summary

Land Use	Weekday AM Peak Hour	Weekday PM Peak Hour
Proposed Artis Residential Memory Care Facility 35,952 sf / 64 beds	14	17

Source: ITE Trip Generation Manual, 10th Edition

The Build volumes include the No-Build volumes and the trips from proposed Artis residential memory care facility.

f) Existing and Future Traffic Operating Conditions

Capacity analyses were conducted at the study intersections to assess the quality of traffic flow in the study area under existing conditions and future conditions with and without the proposed action. The analyses indicate that all of the studied intersections currently experience acceptable traffic operating conditions during peak hours (overall intersection Level-of-Service "D" or better with no approaches experiencing "F" levels of service).

In the future under No-Build conditions (without the Proposed Action but with forecast increases in existing traffic volumes, the reopening of Ramp E from southbound Route 9 to I-87/I-287 westbound, the proposed modifications to the intersection of Broadway with the I-87/I-287 ramps, traffic from 5,000 sf of vacant office space and traffic from three nearby development projects), compared to the existing conditions, the overall intersection levels of service ("LOS") will remain at existing levels with one exception. At the US Route 9 intersection with the I-287/I-87 Eastbound Ramps/Doubletree Hotel the overall delays will be reduced resulting in a change in LOS during the AM peak hour from LOS "D" under existing conditions to LOS "C" under No-Build conditions. This improvement can be attributed to the proposed additional southbound left-turn lane and proposed signal phasing and timing modifications. At this intersection, although the overall intersection will operate with lower delays than under existing conditions, the changes in traffic volumes and signal phasing will result in delay increases of up to 27.9 seconds on some movements. The US Route 9 intersection with White Plains Road will experience a decrease in overall delays which can be attributed to the reopening of Rampe E and the removal of traffic from the eastbound approach.

At the intersection of White Plains Road with the I-287/I-87 Westbound Ramps and the western Site driveway, compared to existing conditions, there will be a slight increase in overall delays on the order of 6.2 seconds or less. Some individual movements will see delay increases ranging from 0.3 seconds to 6.6 seconds (the northbound ramp approach), while the eastbound right-turn lane on White Plains Road will see reduced delays due to the reassignment of traffic to the reopened Ramp E. The eastern Site driveway intersection with White Plains Road will see delay increases of less than one second on the driveway approach. The increases in delay can be attributed mainly to the added traffic from the vicinity developments.

Under Build conditions, with the addition of traffic from the proposed Artis residential memory care facility, there will be an imperceptible increase in overall intersection delays of up to 0.3 seconds

when compared to No-Build conditions. The intersection levels of service will remain at No-Build levels (LOS "D" or better). Most individual movements will experience either no change in delay or a slight increase in delay of up to 1 second compared to No-Build conditions.

Based on a review of these findings, it is concluded that the proposed action will not have a significant adverse impact on area traffic operating conditions.

g) Parking and Circulation

The proposed project includes 45 on-site parking spaces, which is consistent with Artis' experience that providing 37 spaces will be needed to accommodate their parking needs. Per the proposed zoning, a parking ratio of 0.5 parking spaces per patient bed is recommended, which results in a requirement of 32 parking spaces for the proposed 64-bed facility. Therefore, sufficient on-site parking will be provided to accommodate the project's parking needs.

To access the project, vehicles will travel along an access easement through the parking area at 155 White Plains Road. Signage will be provided to direct visitors to the Artis facility. The proposed facility will generate very low volumes and, thus, is not expected to have a significant adverse impact on visitors and employees using the circulation road and parking areas at 155 White Plains Road.

h) Potential Emergency Access and Vehicular Connections

The Applicant has been working with the Tarrytown Volunteer Fire department to ensure that adequate access will be provided to the site. The current site plan will provide the following three points of access to the building for emergency purposes:

- From Martling Avenue (and the north) via a gated, emergency-only access;
- From NYS 119 (and the south west) via the western driveway serving 155 White Plains Road and the site's primary access;
- From NYS 119 (and the south east) via the eastern driveway serving 155 White Plains Road and the site's secondary access.

A vehicle turning analysis was conducted which confirmed that emergency vehicles will be able to access, circulate through and exit the property from White Plains Road and Martling Avenue (Insite Engineering, Drawing No. MP-1).

i) Comparison to 2006 SEQRA analysis

A comparison to the 2006 SEQRA analysis for the formerly-approved 60,000 sf office building found that, ignoring movements impacted by the closure of Ramp E, traffic volumes in the study area today are 6.3% lower than they were in 2005. A comparison of the background traffic volumes revealed that the traffic volumes projected to prevail in 2011 without the office building were 10% to 20% higher than current projections. Furthermore, traffic volumes for the Artis Senior Living residential memory care facility will be 75% to 80% lower than the previously-approved office building traffic volumes. Due to a number of factors that have changed in the intervening 12 years, a comparison of projected intersection performance revealed that, with one exception, the overall intersection operations projected for the subject development will be similar to the intersection operations projected in the 2006 studies (overall LOS "C" or "D" at each intersection). The exception is at the intersection of Route 9 with the I-287/I-87 Eastbound Ramps and Doubletree Hotel driveway where the 2006 studies identified overall levels of service of "E" during the AM and PM peak hours with some movements operating at LOS "F", (compared to overall LOS "C" or "D" and individual

Kimley »Horn of NY, P.C.

movements LOS "E" or better for the subject project). The 2006 analysis was based on higher projected volumes and did not include a currently proposed additional southbound left-turn lane with signal timing modifications at this intersection.

j) Pedestrian/Bicycle Access and Impacts

There has been a significant rise in interest in walking and biking since 2006 which is reflected in improvements to the Old Croton Aqueduct Trail, and a new shared-use pedestrian and bicycle path set to open on the New NY (Mario Cuomo) Bridge project and ongoing studies to improve pedestrian and bicycle access on US Route 9 and NYS 119. The analysis performed for this study takes the projected impacts of these measures into account and has increased pedestrian and bicycle activity by an average of 30 and 25 pedestrians and cyclists per hour per intersection, respectively. New sidewalks will be provided on the subject property and a bicycle rack will be provided to accommodate those who might cycle to or from the facility.

k) Alternatives

Other than the No Action alternative, the Proposed Action will generally result in fewer trips than each alternative evaluated which include general office (36,000 sf and 54,000 sf) and medical office (36,000 sf). During the weekday peak hours, the Proposed Action will generate between 24 and 49 fewer trips than the office building alternatives and between 86 and 107 fewer trips than the medical office alternative. Throughout the course of an entire day on weekdays, the Proposed Action will generate between 200 and 375 fewer trips than an office building and 1,102 fewer trips than a medical office building.

On Saturdays, when office traffic is typically light, the Proposed Action will generate 5 more trips during the peak hour than a 36,000-sf office building, 5 fewer trips than a 54,000-sf office building and 88 fewer trips than a 36,000-sf medical office building. It will generate 27 more trips over the course of the entire day on a Saturday than a 36,000-sf office building, 13 fewer trips than a 54,000-sf office and 202 fewer trips than a 36,000-sf medical office.

Therefore, it can be concluded that, as a result of the significantly lower volumes, the Proposed Action will have less of an impact than the other development alternatives evaluated (except for the No Action alternative).

I) Conclusions

Based on the findings above, is concluded that the proposed Project will not have a significant adverse impact on area traffic operating conditions. The Project will only add 14 to 17 peak hour trips to the surrounding roadways on a weekday (which equates to approximately 1 new trip every 4 minutes during the peak hours), resulting in traffic operating conditions that will be similar to the future conditions without the project. Furthermore, the proposed access and parking will be sufficient for the Project.