

Memorandum

To: Bryan Healy, Village Manager, Village of Croton-on-Hudson
Mayor Brian Pugh, Village of Croton-on-Hudson
Village of Croton-on-Hudson Board of Trustees

From: AKRF, Inc.

Date: November 4, 2024

Re: **WBP Development LLC - 1 Croton Point (aka Lot A)**
WBP Development LLC (Applicant)

cc: Linda Whitehead (Village Attorney)
Dan O'Connor, P.E. (Village Engineer)

As requested, AKRF, Inc. has reviewed the following newly submitted documents and plans for the above referenced application. This memorandum provides our comments on those materials.

- Overall Plan drawing prepared by Insite Engineering, Surveying, and Landscape Architecture, P.C., submitted October 9, 2024 (showing revised entrance concept).
- Information on children residing at Chappaqua Crossings development, submitted October 9, 2024.
- Memorandum on Public School-Aged children (PSAC) Analysis prepared by KSCJ Consulting, revised October 16, 2024.
- Memorandum on Fiscal Analysis prepared by KSCJ Consulting, revised October 16, 2024.
- Traffic Comment Response Letter prepared by Kimley Horn, dated October 15, 2024.
- Traffic Impact Study prepared by Kimley Horn, dated October 21, 2024.
- Fire Apparatus Access Study drawing prepared by Insite Engineering, Surveying, and Landscape Architecture, P.C., submitted October 17, 2024.
- Preliminary Water Engineering Report prepared by Insite Engineering, Surveying, and Landscape Architecture, P.C., revised October 30, 2024.
- Site Cross Sections prepared by Insite Engineering, Surveying, and Landscape Architecture, P.C., revised October 30, 2024.

A. BACKGROUND / PROJECT DESCRIPTION

The Applicant, WBP Development, LLC, is seeking special use permit approval from the Village of Croton-on-Hudson (the "Village") Board of Trustees to construct a proposed 5-story, 100-unit affordable homeownership project with amenity space and on-site parking (the "proposed project") at the intersection of Croton Point Avenue and Veterans Plaza. The proposed project involves an assemblage of three existing tax parcels totaling approximately 1.76 acres (the "project site"): 79-17-1-3 (aka Lot 3), 79-17-1-4 (aka Lot 4) and 79-17-1-5 (aka Lot 5). Village-owned Lot 5, fronting on Croton Point Avenue, was most recently utilized as a parking lot for the Metro-North Railroad (MNR) Croton-Harmon station (commonly referred to as the "parking lot A"). Lot 4 is currently owned by Croton Point Realty, Inc., has frontage along Croton Point Avenue and contains portions of a two-story commercial building currently occupied by a law office.

Village-owned Lot 3 is located to the rear of Lot 4 and contains portions of the two-story commercial building noted above, and a parking lot. The owner of Lot 4, Croton Point Realty, Inc. has had a long-term land lease with the Village for the uses on Village-owned Lot 3. The Applicant has been selected by the Village as the purchaser of Lots 3 and 5 currently owned by the Village, and is in contract to purchase Lot 4 from Croton Point Realty, Inc.

In November 2022, the Village adopted Local Law No. 14 of 2022 to amend the provisions of the Zoning Code to allow for transit-oriented mixed-use and multifamily residential buildings in a specific portion of the LI zoning district including the project site. Local Law No. 14 of 2022 permits the project site to be redeveloped (through issuance of a special permit from the Village Board of Trustees) with transit-oriented multifamily housing or multifamily housing over ground floor commercial uses at a maximum Floor Area Ratio (FAR) of 1.2, a maximum height of up to 5-stories, and a parking ratio of 1 space per residential unit and 1 space per 400 square feet of commercial floor area. Following the adoption of Local Law 14 of 2022, the Village released a Request for Proposals (RFP) for Village-owned Lot 5, which in addition to requesting mixed-use development proposals with affordable housing solely for Lot 5, indicated that the Village was also willing to review alternative schemes that assume a larger land assemblage by incorporating adjacent lots 3 and 4.

The proposed project is a 5-story building with cellar level for parking below grade. It offers 100 residential units consisting of 46 one-bedroom and 54 two-bedroom units; the proposed FAR is 1.10, where 1.20 is the maximum allowed. The design includes 105 parking spaces (approx. 1 space per unit), provided via a combination of surface and below-building parking. No ground floor commercial space is proposed. Amenities within the building include a community room, fitness center, coworking lounge, bike storage room, and a rooftop deck. According to the Applicant, the exterior façade combines brick and metal panels for cladding. Sustainable building design features include full electrification, solar readiness, high efficiency HVAC equipment (cold climate air source heat pumps) and appliances (Energy Star Multifamily New Construction Program), Level 2 EV charging stations (1 per 20 parking spaces) and low-flow water fixtures.

In addition to approval of a special permit from the Village Board of Trustees, other local approvals for the proposed project include site plan approval from the Village Planning Board, Local Waterfront Revitalization Program (LWRP) consistency review by the Village Waterfront Advisory Committee, and visual/aesthetics review and comment by the Village Advisory Board on Visual Environment (following a referral by the Planning Board). The Village Board of Trustees is serving as the Lead Agency for the proposed project's environmental review pursuant to the State Environmental Quality Review Act (SEQRA).

B. COMMENTS

Newly submitted material, listed above, was reviewed in the context of our October 4, 2024 memorandum to the Village Board of Trustees, and discussions held during the October 16, 2024 Village Board of Trustees work session.

In an effort to focus on outstanding comments only, prior comments from our August 19, 2024 and September 23, 2024 memoranda that have been adequately addressed have been removed from this memorandum.

Comments shown in *italicized text* are from AKRF's 10/4/2024 memorandum and have been re-numbered/consolidated within this memorandum for ease of reference. Any new, or follow-up, comments are presented in **bold text** with the review date of 11/4/2024.

WATER / SEWER SERVICE

1. *10/4/24: The Applicant should provide an update with its next submission. The update should reference the results of any recent investigations and any recommended next steps from the Village Engineer.*

11/4/24: Water Service: According to the Applicant's updated Water Engineering Report, hydrant flow tests were completed on October 15, 2024. Three hydrant flow tests were performed including Wayne Street, and two locations on Croton Point Avenue. Based on this testing the existing 6" water main in Croton Point Avenue can supply the domestic needs for the project. However, for the fire flow, the 6-inch water main that feeds the 6-inch line in Croton Point Avenue provides less than 500 gpm at 20 psi thus not meeting the project fire flow

demand. Improvements would be required to provide the 750 gpm sprinkler demand. Two alternatives to mitigate this potential impact are presented by the Applicant's engineer:

1) Improvements to the distribution system via a connection between the existing Croton Point Avenue Water Main and the Wayne Street Water Main. While this connection has long been envisioned and desired by the Village, the Wayne Street extension requires an easement from a private property owner.

2) On-site water storage and pump system. Should the easement not be able to be secured, and the Wayne Street extension cannot be completed, an on-site water storage tank and pump system would be used to supplement the available flows from the existing 6" watermain in Croton Point Avenue to meet the fire sprinkler requirements. The MEP engineer has determined that a 60-minute duration is required for the 750 gpm sprinkler flow. For this flow rate and duration, a water use of 45,000 gallons is calculated. This water volume would be provided by a combination of the available flows from the existing system, the ability to supply the proposed hydrant, and a supplemental onsite storage tank that would be buried below grade. Pump(s) would be required to deliver water to the sprinkler system and such pumps would be provided with a backup generator.

11/4/24: Sewer Service: As documented in the Applicant's Wastewater Engineering Report, the project will connect to the existing Westchester County Department of Environmental Facilities sewer system, as follows: A gravity sewage collection and conveyance system consisting of 8-inch diameter PVC SDR 35 sewer mains and precast concrete manholes will be installed onsite and will connect the building to the proposed pump station. The sewage collection and conveyance system will flow by gravity to an onsite pump station. A duplex pump station is proposed to be installed and will connect to the 8-inch forcemain with a proposed connection manhole. A backup generator will be provided to power the pumps in the event of power failure.

The water and sewer service information above (and related reports) should be reviewed by the Village Engineer and input provided to the Village Board of Trustees, as necessary

FISCAL ANALYSIS

1. *10/4/24: The existing tax revenue table continues to present the estimated market value from the 2023 town tax roll (\$1,034,836); this should be updated to reflect the 2024 market value from the town tax roll (\$1,069,915) for the town, county, county refuse, Ossining sanitary, school, and library columns. It appears that calculations in the table are using the 2023 market value and equalization rate, please re-check the calculations, and their potential "ripple effect" when presenting net tax revenue estimates with the project.*

11/4/24: The table in question was corrected as part of the Applicant's revised Fiscal Analysis dated October 16, 2024. No further comment.

2. *10/4/24: The Applicant should provide an update to the Board on the outcome of any recent correspondence and/or meetings held with emergency service providers (police, fire, EMS).*

11/4/24: Based on discussions held at the October 16, 2024 Village Board of Trustees review session, the only EMS comment received was about the sizing of the elevators to accommodate a stretcher, which has been confirmed to be adequate. No concerns were provided by the Police Department. Regarding the Fire Department's review, the Village Manager has stated that email correspondence from the Fire Department was provided prior to a meeting that occurred with the Village Manager, the Applicant, and Fire Department representatives, at which that correspondence was discussed. The Village Manager intends to provide a written summary of meeting held with the Fire Department for the record.

PUBLIC SCHOOLS

1. 10/4/24: The PSAC memorandum now states on page 3 that the updated 2023-2025 CHUFSD local multifamily study resulted in a multiplier of 0.25 students per unit, but the table on top of page 4 continues to present the 0.20 rate and resulting 20 students. This table should be updated to match the text.

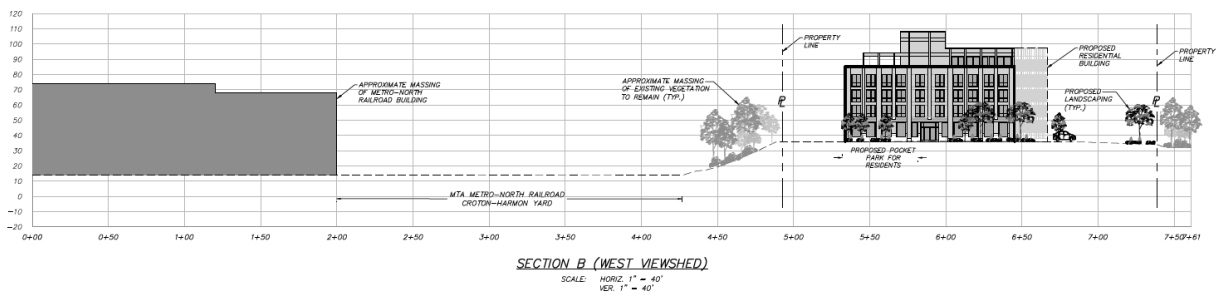
11/4/24: The table in question was corrected to match the text as part of the Applicant’s revised PSAC Analysis dated October 16, 2024. No further comment.

2. 10/4/24: If possible, the Applicant should examine one of their previously completed multifamily projects within desirable school district and provide the number of school-aged children residing in that building.

11/4/24: In response to this request, the Applicant has provided enrollment data from one of its own projects located outside of the Village of Croton-on-Hudson. The Chappaqua Crossings development, located in the Town of New Castle, Westchester County, New York, is a 63-unit mixed income rental development. Upon review of enrollment data collected, this development currently includes 12 students within grades K-12, or 0.19 students per unit. This per unit multiplier is comparable to the multiplier generated from the analysis of existing Village properties.

VISUAL IMPACTS

1. 11/4/24: At the request of the Village Board of Trustees, the Applicant has provided a revised version of the previously reviewed cross section depicting line of sight from points east/uphill from the project site, including public rights of way, such as Wayne Street and Young Avenue. The cross section was updated to address the Village Board’s request to include the approximate massing of the building within the MNR yard to the west. The drawing shows that the MNR building tops out at an elevation below the proposed project due to the grade change that exists within the MNR yard. AKRF’s conclusions on visual impacts from prior memoranda remain.



TRAFFIC

The following traffic-related comments (in *italics*) were included in AKRF’s October 4, 2024 memorandum under separate headings. For ease of reference, all prior comments requiring a response from the applicant and have been re-numbered and consolidated below. Applicant responses have been provided beneath each prior comment in underlined text, and all follow-up/new comments are presented in **bold** text with the review date of 11/4/2024.

1. *AKRF 10/4/24: The Traffic Impact Study (“TIS”) prepared by Kimley Horn (“KH”), dated September 25, 2024 states that updated traffic counts were conducted in September 2024 for the intersections of Croton Point Avenue & Veterans Plaza, Croton Point Avenue & Route 9/9A Northbound Ramps, and Croton Point Avenue & Route 9/9A Southbound Ramps as requested. However, the collected traffic count data should be included as part of the appendix of TIS so that the peak hours and traffic volumes presented in the TIS can be verified.*

Applicant Response: All traffic counts have been provided.

AKRF 11/4/24: Comment addressed.

2. *AKRF 10/4/24: The Applicant has not eliminated the eastern one-way site driveway along Croton Point Avenue as recommended based on input from the Croton Harmon Union Free School District Transportation Director. The School District indicated that they would like the opportunity to have school buses come onto the site to pick up/drop off children and use the traffic light at the main driveway to turn around. In addition, the Applicant would prefer to maintain this driveway as an emergency access point. The fire truck turning movement template drawing provided by the Applicant also shows fire trucks navigating entry to the site utilizing this driveway. The TIS has conservatively assumed that all project-generated traffic would only utilize the main central driveway (and not the eastern one-way site driveway) to enter and exit the site. However, it is recommended that the Applicant develop a comprehensive plan to demonstrate how limiting access to just emergency and school bus traffic at the eastern one-way driveway would function. While the Applicant has indicated that they will discuss this further during site plan review, it is AKRF’s position that the status of this driveway should be established prior to site plan review as it plays a significant role in vehicular circulation on-site. For example, the August 13, 2024 Traffic Impact Assessment (“TIA”) by KH shows this driveway being utilized by delivery vehicles and auto (taxi) drop-offs/pick-ups (which do not qualify as school buses or emergency vehicles).*

Applicant Response: The Applicant is working through this concept as a part of the site plan review to confirm the best configuration.

AKRF 11/4/24: Comment partially addressed. AKRF will review any further modifications to the site plan layout as they are developed.

3. *AKRF 10/4/24: The Applicant has indicated that the proposed tree at the southeast corner of the building has not been relocated in order to remain compliant with the Village Code (230-52E(1(b))). However, the Applicant has indicated that they will work with the Planning Board during site plan review to ensure that a tree species for this location is selected that will leaf out above line of sight to minimize its potential impact on motorists. This criteria for tree species should apply to all trees on-site adjacent to any parking spaces and/or parking aisles where sight lines may be impeded by trees.*

Applicant Response: Comment noted. This criterion will apply to all trees on-site where sight lines may be impeded by said trees.

AKRF 11/4/24: Comment addressed.

4. *AKRF 10/4/24: The Applicant has relocated the surface parking space adjacent to the garage entrance to the northern parking lot as requested.*

Applicant Response: No further response.

AKRF 11/4/24: Comment addressed.

5. AKRF 10/4/24: The Applicant has provided a set of truck turning path analysis (“AutoTURN”) drawings that demonstrate how the largest anticipated fire, garbage, and delivery vehicles would enter, exit, and navigate the project site. The Applicant has indicated that the provided fire truck turning path analysis drawing has been conservatively based on a 100-foot aerial ladder truck but will be updated with the Village’s fire truck templates once received. As trash would be picked up from the trash room (and not an outdoor dumpster) the turning path analysis drawing for the garbage truck (Figure 1 of the TIA by KH) should be modified to show how the garbage truck would maneuver to and from the loading dock/trash room door so that the truck’s rear is facing the loading dock. Similarly, the turning path analysis drawing for the SU-40 truck (Figure 2 of the TIA by KH) should show how the truck would maneuver to and from the loading dock door so that the truck’s rear is facing the loading dock. Figure 3 of the TIA by KH shows the turning paths of delivery vehicles and auto (taxi) drop-off and pick-up maneuvers, which utilize the eastern driveway that is proposed to be utilized for emergency and school bus traffic only. The revised plan set should include updated versions of each of these drawings once completed.

Applicant Response: The garbage and delivery trucks cannot reverse fully to the loading dock/trash room door without eliminating parking. The garbage and delivery trucks are available only a few days a week. The garbage dumpster will be rolled out of the building on wheels and turned so it can be emptied into garbage truck. Deliveries will be taken off the back of delivery trucks, turned and brought into the building, where they will have to be turned again multiple times to be delivered to their destination. See revised truck turning.

AKRF 11/4/24: AKRF understands that the Fire Chief reviewed the turning path analysis and agreed with the methodology.

AKRF would assist the Village in reviewing these movements during site plan review if material changes to the site plan were to occur.

6. AKRF 10/4/24: The turning path analysis drawing for the passenger car/delivery van (Figure 3) shows these vehicles utilizing the eastern driveway, which is being proposed for school bus and emergency vehicle use only. This drawing should be revised if the eastern driveway is indeed for school bus and emergency vehicle use only.

Applicant Response: The Applicant is working through this concept as a part of the site plan review to confirm the best configuration. The front of building turning analysis has been modified to show what it would look like if the eastern driveway were closed.

AKRF 11/4/24: Comment addressed. AKRF will review future modifications to the site plan that may be incorporated as a result of the site plan review.

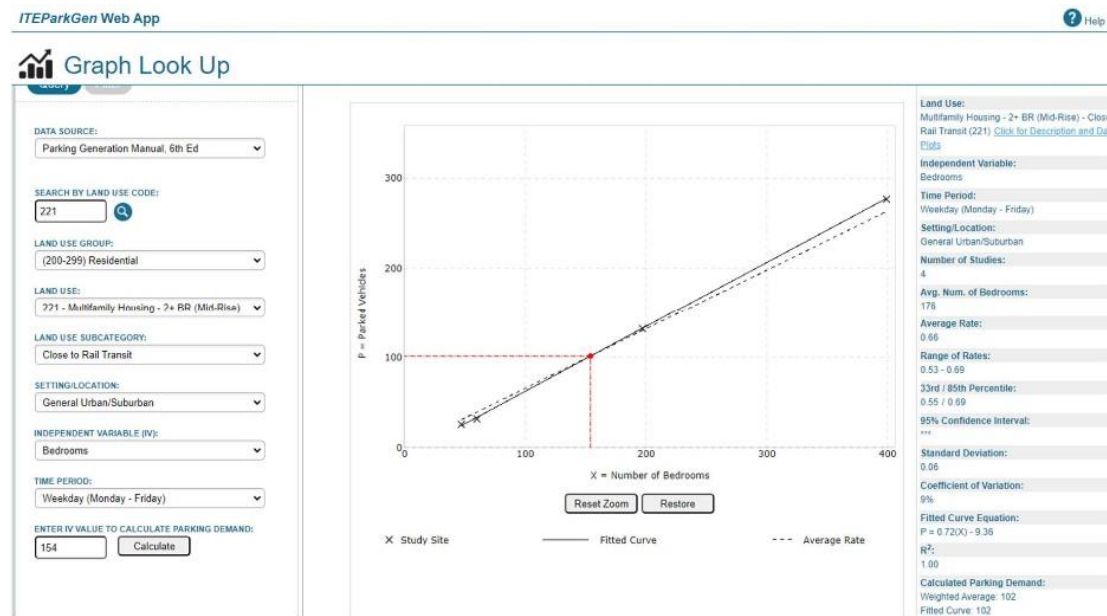
7. AKRF 10/4/24: The Village Manager clarified that the current parking count in Lot A is 122 spaces, not 134. This number should be verified and the revised TIS should update any references to the current capacity of Lot A accordingly.

Applicant Response: As indicated in the AKRF memo, dated August 31, 2022, there were 134 spaces in Lot A. However, the Village Manager has indicated that the Village terminated its lease of the spaces on DOT property next to the railroad, and the Village currently has 122 spaces in Lot A. As previously indicated in Kimley-Horn memo, dated September 13, 2024, these spaces will be eliminated but were more than compensated for by the addition of spaces in the Lot next to the train station and the elimination of these parking spaces will not have a significant adverse impact on area parking.

AKRF 11/4/24: Comment addressed.

8. AKRF 10/4/24: The parking demand calculations were based on ITE data for ITE Land Use 223 (“Affordable Housing”). These calculations should be revised to be based on ITE Land Use 221 (“Multifamily Housing – Mid-Rise”) so that they are consistent with the Land Use utilized to develop the trip generation traffic volumes. These changes should be incorporated into the revised TIS. The Village Manager noted that the number of current parking spaces in Lot A are 122 spaces, not 134. This number should be verified and the revised TIS should update any references to the current capacity of Lot A accordingly.

Applicant Response: While the project is an affordable housing development which has its own category in the ITE, for consistency, Kimley-Horn calculated parking demand based on ITE Land Use Code (LUC) 221. The project has 100 units with 154 bedrooms. Based on the ITE LUC 221, which is located close to rail, and using bedrooms as the independent variable, the parking demand will be 102 vehicles. The project has 105 parking proposed spots which satisfies the demand. Please see the image below for details.



AKRF 11/4/24: Comment addressed. The parking demand of 102 vehicles based on the ITE LUC 221 (located close to rail) is based on utilizing bedrooms, not units, as the independent variable. It is noted that the number of parking spaces provided also meets the zoning requirement.

9. AKRF 10/4/24: Please recheck the project-generated traffic volumes. Based on a review of the development of the Build volumes, the project-generated volumes appear to have been applied to the incorrect traffic movements at the Croton Point Avenue and Veterans Plaza intersection.

Applicant Response: Comment noted. It appears the discrepancy is the relocation of existing Lot A traffic, and we believe the traffic volume and analysis are correct.

AKRF 11/4/24: Comment substantively addressed. The final TIS should include figures that depict the traffic reassignments based on the relocation of existing Lot A traffic for clarity.

10. AKRF 10/4/24: The TIS should present the impact criteria utilized to identify traffic impacts.

Applicant Response: Previous studies in the Village of Croton-on Hudson (including the 2022 rezoning study) suggest that a change from ‘LOS D’ to ‘E’ or ‘F’, a change from ‘LOS E’ to ‘F’, or an increase in delay of more than 10% when the No-Build condition is ‘LOS F’ would be considered significant.

AKRF 11/4/24: Comment addressed.

- AKRF 10/4/24: For the PM peak hour, the change in level of service (LOS)/Delay from No Build to Build Conditions for the following approaches should be identified as impacts and improvements should be proposed; the southbound approach at the Croton Point Avenue and Veteran’s Plaza intersection (decline in LOS from LOS A to LOS E) and the northbound approach at the Croton Point Avenue and Route 9/9A Northbound On/Off Ramps intersection (increase in delay greater than 10 percent within LOS F).

Applicant Response: Kimley-Horn has corrected a delay calculation for the No Build site driveway (see attached). There is no longer a decline in LOS exiting the driveway (though there is a delay increase in approximately 16.8 secs). At the NB ramp, technically, the addition of 8 vehicles increases the delay by 15%, which is more than the 10% threshold used previously in past studies. While we believe this increase in delay, may be larger than what will occur, the calculated delay can be restored to No-build conditions by transferring 1.5 seconds from the protected left-turn phase onto the southbound Route 9/9A on-ramp (phase 11) to the northbound and southbound off-ramp phase (phase 3 and 7). To restore the delay on the southbound approach to no build conditions on the south driveway the amount of time on the north-south protected turn phases (phase 8) will need to be reduced by 27 seconds. Please see the attached synchro files for more details.

AKRF 11/4/24: Comment addressed.

- AKRF 10/4/24: The details of the signal timing changes that are assumed by KH to address the levels of service documented at the above locations should be presented in the text of the TIS, specifically within the discussion that references Table 4.

Applicant Response: This application is to construct affordable housing at the intersection that serves one of the busiest train stations on Metro-North’s Hudson line. Delays at this intersection are due to train station traffic and will prevail regardless of whether or not the affordable housing project is approved. However, based on a review of the signal timings it was determined if the timing changes listed below were implemented, all ‘LOS F’ conditions could be improved to at least ‘LOS E’ conditions. Timing Changes were implemented at the Croton Point Avenue & SB and NB On/Off Ramps as follows:

Improvement Notes	
AM Peak Hour	PM Peak Hour
<p style="text-align: center;">Reduce</p> <p>phase 1 from 26 seconds to 18 seconds (-8 secs) phase 2 from 40 seconds to 36 seconds (-4 secs) phase 4 from 20 seconds to 17 seconds (-3 secs) phase 6 from 66 seconds to 54 seconds (-12 secs) phase 8 from 20 seconds to 17 seconds (-3 secs)</p> <p style="text-align: center;">Increase</p> <p>phase 3 from 36 seconds to 51 seconds (+15 secs) phase 7 from 36 seconds to 51 seconds (+15 secs)</p>	<p style="text-align: center;">Reduce</p> <p>phase 1 from 26 seconds to 20 seconds (-6 secs) phase 6 from 66 seconds to 60 seconds (-6 secs)</p> <p style="text-align: center;">Increase</p> <p>phase 3 from 36 seconds to 42 seconds (+6 secs) phase 7 from 36 seconds to 42 seconds (+6 secs)</p>

AKRF 11/4/24: Comment addressed.

- AKRF 10/4/24: The following data/information should be included in the TIS Appendix: Agency (NYSDOT) traffic signal timing plan sheets for the signalized study area intersections, the September 2024 traffic count data (e.g., turning movement counts).

Applicant Response: The signal timing and traffic volume data are attached.

AKRF 11/4/24: Comment addressed.

14. AKRF 10/4/24: *The electronic Synchro (.syn) files should be provided to AKRF for further review.*

Applicant Response: Synchro files will be provided directly to the Village's traffic consultant; updated synchro printouts are attached.

AKRF 11/4/24: Comment addressed. A review of the NYSDOT traffic signal timing sheets indicate that the signalized intersections operate on the coordinated signal timings during the peak hours identified. While KH has utilized the non-coordinated signal timings in the Synchro models, those timings provide more conservative results than those of the coordinated signal timings and therefore there are no fundamental changes to the findings/conclusions presented in the KH study. However, it is recommended that the signal timings included in the Synchro models are reevaluated for any future uses or references to the TIS, including during permitting with NYSDOT. Similarly, AKRF recommends that an analysis of the most recent 3-years of NYSDOT crash data be included in the final TIS used to inform the permitting process.

15. AKRF 10/4/24: *The final revised TIS should incorporate the items listed above as well as the data and findings presented in the August 13, 2024 TIA and KH's 9/24/24 response memo. This includes key discussions and data on parking, trip generation, and circulation. The appropriate backup data from these documents should also be included as part of the TIS appendix.*

Applicant Response: The final revised TIS will include the data/findings requested.

AKRF 11/4/24: Comment partially addressed. See AKRF Conclusions above.

16. AKRF 10/4/24: *Efforts should be made to improve sight lines for the parking spaces adjacent to the northern garage entrance. Assuming both sides of the garage entrance are concrete foundation walls, sight lines for the adjacent parking spaces on both sides of the walls are limited. Options to be considered could include relocation of those parking spaces to areas on-site with better sight lines, or providing columns (rather than solid concrete walls) at this location so that vehicles exiting these spaces are easily visible to drivers in the travel aisle from both inside and outside the garage.*

Applicant Response: The Applicant is working to improve sight lines for parking spaces adjacent to the northern garage entrance.

AKRF 11/4/24: Comment partially addressed. AKRF will continue to review during the site plan review process.

C. RECOMMENDATIONS

At the November 6, 2024 Village Board work session, AKRF recommends that the Village Board discuss the latest materials submitted by the Applicant, the comments contained in this memorandum, and continue deliberations on FEAF Part 2.