



MEMO

TO: Steven Kleppin, Director of Planning and Zoning, City of Norwalk, CT; Bryan Baker, Principal Planner, City of Norwalk

FROM: William Melendez, PE, PTOE, PTP, AICP; Phillip Cherry, PE, PTOE, PTP

SUBJECT: Traffic Engineering Peer Review of iPark Expansion – Review of Applicant’s Revised Traffic Impact Study

DATE: May 27, 2021

WSP has performed an independent engineering evaluation and review of the traffic impact and access study submitted by Kimley Horn and Associates, Inc. on behalf of iPark II Norwalk, LLC. for the proposed expansion to the iPark development at 761 Main Avenue (US Route 7) on the border of the City of Norwalk, CT and the Town of Wilton, CT. The iPark property is currently developed with 250,000 square foot (sq. ft) of office space, 60,779 sq. ft of warehouse space, and 60,915 sq. ft of health club space for a total of 371,694 sq. ft of mixed-use space. The proposed expansion will consist of a 132-unit mid-rise residential building (164,750 gross sq. ft with approximately 117,00 sq. ft enclosed) in Norwalk and a 120-room hotel (80,000 sq. ft) on the Wilton side of the iPark complex. WSP’s focus on this technical review was to assess the accuracy and content of the technical traffic engineering information presented to the City. It is WSP’s objective that this engineering peer review will assist the City in making an informed judgement of the adequacy of this project design, and its mitigated impacts on the overall operations and safety of the surrounding roadway network.

WSP’s review of the transportation issues focused on the following application submittals:

- First, WSP reviewed the technical information presented in the applicant’s submitted reports and site plans and compared them with general industry standards for accuracy, approach, and application. Where inconsistencies existed, or further clarification was needed, an initial review technical memorandum was prepared and submitted on April 19th, 2021.
- Second, a thorough review of the conclusions and recommendations reached by the project team has been completed. If WSP was not able to reach the same conclusions and/or the analysis does not support a specific recommendation highlighted by the project team, the basis for the disagreement is presented for consideration by the City.
- Finally, WSP has offered findings and suggestions to help guide the process as it moves forward. These issues include specific conditions or implementations that the City may want to consider and/or highlight issues that are beyond the scope of the project design team to address but should be considered in the overall process.



SUBMISSION MATERIALS

In conducting the traffic engineering review of the proposed project, WSP has reviewed the following materials:

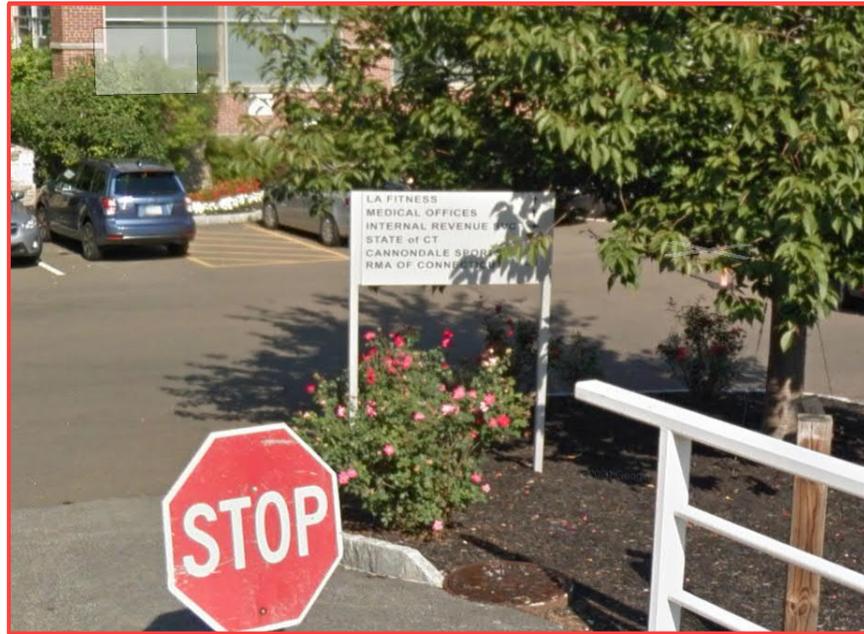
1. Initial Traffic Memo, prepared by Kimley-Horn and Associates, Inc., dated January 6th, 2021
2. iPark Site Plans, dated January 1st 2021 and February 25th, 2021
3. Traffic Impact Study, prepared by Kimley-Horn and Associates, Inc., dated March 2021
4. Architectural Drawings, dated on March 31st, 2021
5. Applicant's response to WSP's Preliminary Review, dated May 24th, 2021
6. Applicant's revised Traffic Impact Study, dated May 2021

Our traffic engineering review covered items such as the site access, site circulation, parking, existing roadway conditions, study area intersections, multimodal use, crash history, background conditions, future roadway improvements, trip generation and distribution, and traffic analysis. In addition, WSP conducted a field visit on April 20th, 2021, between 4:00-6:00 PM, and the findings from that site visit are described in this document.

SITE ACCESS, CIRCULATION AND PARKING

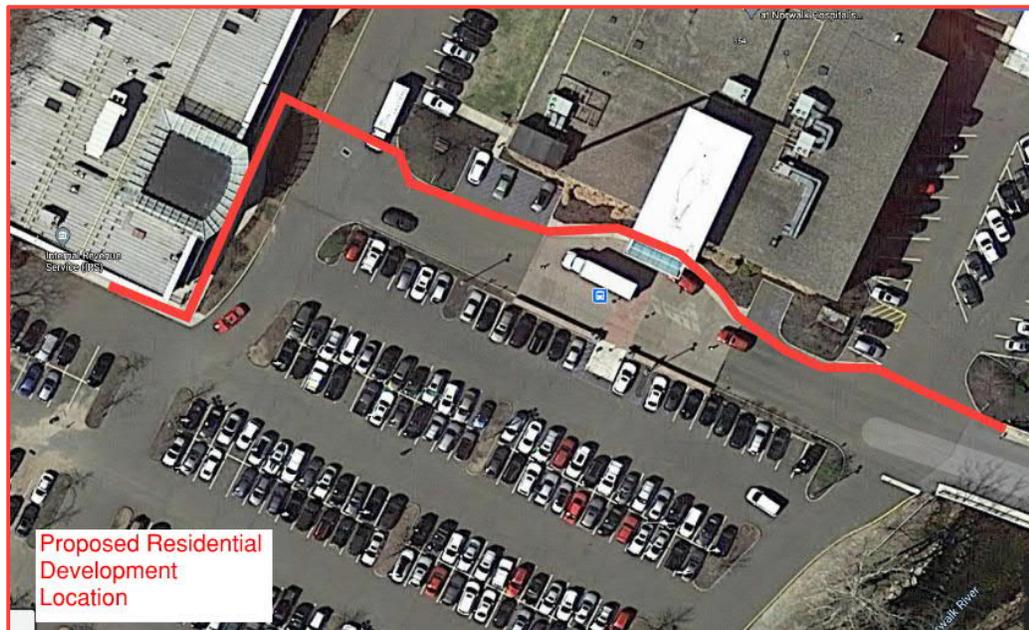
Access to the iPark complex is provided by the Main Avenue (US Route 7) and iPark Site Driveway/West Rocks Road intersection to the south and the Kent Road and Cannondale Road intersection to the north. Access from both intersections is provided via a single lane for ingress and a single lane for egress. The applicant's provided plans address the pavement markings for stop bar and parking spaces as well as "STOP" signage and handicapped parking stalls. The Site Plan shows Sign ID "B" (Van Accessible) and Sign ID "D" (Do Not Enter) in the Traffic Sign Legend, however, after the initial review, those signs are not shown in the plan.

After the initial review, WSP noted that the provided plans do not address the pavement markings and signage needed to guide the potential residents and other site visitors in/out of the complex, regardless of travel mode. The sign shown in the following image, located at the ingress from the Main Avenue (US Route 7) and iPark Site Driveway/West Rocks Road intersection, guides drivers around the complex depending on where they are going. WSP recommended that an updated sign should be developed to include both the proposed residential development and the proposed hotel, in coordination with the other businesses/offices in the iPark complex. Additional recommendations regarding the incorporation of signage and pavement markings into conceptual plans is included in the Traffic Analysis section of this memorandum.



Sign on Ingress from Main Ave (US Route 7)

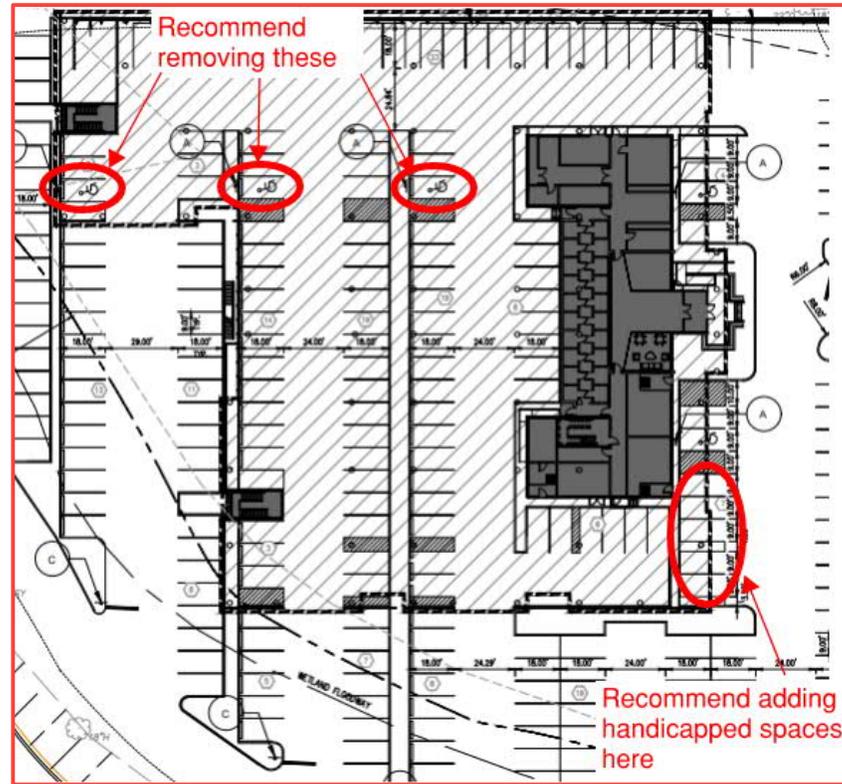
In the initial review, WSP commented that the Site Plan does not address pedestrian accessibility to/from the proposed residential development and Main Avenue (US Route 7). WSP recommended that marked crosswalks with ADA ramps be provided along the pedestrian path shown in the following image to connect to the existing sidewalks across from LA Fitness and the medical office building.



Recommended Pedestrian Path to/from Main Ave (US Route 7)

The Site Plan shows that there will be a total of 106 parking spaces, including six handicapped spaces provided at the proposed apartment. The total of handicapped spaces meets ADA requirements (five minimum). However, in the initial review, WSP commented that three of the handicapped spaces are

located away from elevators and recommended that these handicapped spaces be located closer to the building entrance to provide a safer access for handicapped residents as shown in the following image.



Handicapped Parking Spaces

The TIAS references the proposed hotel (located in the Town of Wilton side), but the hotel site plan was not provided in the initial materials. WSP recommended that the hotel site plan be included in the TIAS to better understand how all modes would access the hotel from within the site and how hotel visitors will circulate within the site.

WSP recommends the development of pavement markings and signage within the complex for better internal circulation in addition to an evaluation of the pedestrian accessibility to/from the proposed residential development and Main Avenue (US Route 7). It is also recommended that handicapped parking be located closer to the building entrance and elevators.

STUDY AREA INTERSECTIONS

The TIAS analyzed traffic operation condition at three (3) intersections.

- Main Avenue (US Route 7) and iPark Site Driveway/West Rocks Road (signalized)
- Danbury Avenue (US Route 7) and Kent Road (signalized)
- Kent Road and Cannondale Road (unsignalized)

As part of the initial review, WSP evaluated the Initial Traffic Memo (January 6th, 2021) and noticed that it includes traffic volumes for the Main Avenue (Route 7) and Grist Mill Road intersection but it was not analyzed in the TIAS. The proposed development (including the hotel) would add 46 new vehicle trips in the AM peak and 49 new vehicle trips in the PM peak. According to the City of Norwalk TIAS guidelines,

intersections with 25 new vehicle trips should be analyzed. WSP recommended that the Main Avenue (US Route 7) and Grist Mill Road intersection be included in the TIAS.

In the revised TIAS, the applicant incorporated the Main Avenue (US Route 7) and Grist Mill Road intersection.

WSP finds that the applicant's revised TIAS and response acceptable.

EXISTING ROADWAY CONDITIONS

Section 3 of the TIAS describes the existing roadway conditions in the study area. WSP performed a field visit of the existing roadway conditions within the study area, and the findings between the TIAS review and the field visit are described in this section.

US Route 7 (Main Avenue/Danbury Road) and the intersections at Kent Road and iPark Site Driveway/West Rocks Road

Section 3.1 states that Main Avenue (US Route 7) has a speed limit of 40 mph. However, a field review observed a 35-mph speed limit sign in the southbound direction just south of the Main Avenue (US Route 7) and iPark Site Drive/West Rocks Road intersection which would affect the traffic analysis results. In the initial review, WSP recommended that the TIAS should evaluate Main Avenue (US Route 7) with a speed limit of 35 mph.

The applicant revised the TIAS to indicate a speed limit of 35 mph, and indicated that the initial traffic analysis was based on the correct speed limit of 35 mph.

WSP finds the applicant's revised TIAS and response acceptable and confirmed the speed limit of 35 mph in the Synchro outputs.



Posted Speed Sign on Main Avenue (US Route 7)



For the Main Avenue (US Route 7) and iPark Site Driveway/West Rocks Road intersection described in the first paragraph of Section 3.2, WSP recommended that the southbound approach description be changed to indicate that the right lane is a shared through-right lane. WSP also recommended that the description includes the storage length of the turn lanes and a description of whether the crosswalk ramps are ADA compliant.

In the revised TIAS, the applicant provided the storage lengths for each of the exclusive turn lanes. The applicant also described the crosswalks; however, it was indicated that the ramps are not ADA-compliant and that CTDOT is evaluating improvements at this intersection.

WSP finds the applicant's revised TIAS and response acceptable regarding the storage length and crosswalks at the Main Avenue (US Route 7) and iPark Site Driveway/West Rocks Road intersection. WSP recommends that the wheelchair ramps and their respective landings be upgraded to be ADA compliant at this intersection.

For the Danbury (US Route 7) and Kent Road intersection described in the second paragraph of Section 3.2, WSP recommended that the southbound approach description be changed to indicate that the right lane is a shared through-right lane. WSP recommended that the description includes the storage length of the turn lanes. The TIAS states that there are no crosswalks, and although there are no marked crosswalks or ramps, a field visit observed a three-section signal head with a pedestrian "push button for green light", as shown in the following image. During the field visit, WSP noted that the signal head has a concurrent phase with the eastbound phase (Kent Road). WSP recommended that the TIAS evaluates the signal timings/phasing at this intersection.

In the revised TIAS, the applicant describes the pole-mounted pedestrian push button with a non-standard pedestrian display (three-section signal head used for vehicular approaches instead of a typical 16" pedestrian signal head) that is located on the south leg of the intersection. The applicant performed a field visit and indicated that the three-section signal head used for the pedestrian indication runs concurrent with the Kent Road green phase without pedestrian activation.

WSP finds the applicant's revised TIAS and response acceptable regarding the three-section head and pedestrian push button and it was confirmed during WSP's field visit. While this intersection is not located in the City of Norwalk, WSP notes that the existing 3-section vehicular signals that are serving as pedestrian signals may be confusing or unsafe, as they provide a non-standard indication for pedestrians to cross at a location without a crosswalk.



Pedestrian Push Button at Danbury Rd (US Route 7) and Kent Rd intersection

Kent Road

The fourth paragraph of Section 3.1 describes the existing roadway conditions on Kent Road. There is a railroad crossing approximately 70 feet west of the intersection with Cannondale Way. The railroad is signalized with railroad signal flashers and gates, as shown in the following image. During WSP's initial review, it was recommended that the applicant provide discussion regarding the usage of these rail tracks, whether it is freight or AMTRAK, and the frequency.

In the revised TIAS, the applicant indicated that the rail tracks are used by the Danbury Branch of Metro-North Railroad's New Haven Line with daily commuter rail service with eight trains in each direction during weekdays and six trains in each direction during weekends and holidays. The rail tracks are also used by Genesee and Wyoming Inc.'s Providence and Worcester Railroad for freight movement.

WSP finds the applicant's revised TIAS and response acceptable regarding the railroad tracks on Kent Road.



Kent Rd Railroad Crossing

MULTIMODAL USE

During the initial review, WSP noticed that the TIAS does not discuss multimodal transportation in the area, in particular, bicycles and transit. The Norwalk Transit District has both the Route 4 and Main Avenue Route providing service in the vicinity of iPark, including bus stops within the iPark complex. During the field visit, WSP noted that there are two bus stops in the complex, as shown in the following figure. The bus route enters the complex via Cannondale Way and leaves the complex via the iPark Site Driveway at Main Avenue (US Route 7). While performing the field visit, the bus stopped at both bus stops.

In the revised TIAS, the applicant provided a multimodal transportation section describing that the complex is being served by the Norwalk Transit District's WHEELS Route 4 with a total of 13 daily buses. The applicant did not provide the schedule, but WSP confirmed the 13 trips that range between 6:12 AM to 7:15 PM during the weekdays. There is no scheduled service on the weekends. The applicant also stated that Main Avenue Shuttle operates 7 days a week between South Norwalk and Walmart on Main Avenue.

The applicant states that there are no bicycle routes in the study area, however, it is also stated that the Norwalk River Valley Trail expansion will provide a one-mile section between Grist Mill Road and Kent Road which is scheduled to be constructed west on the railroad tracks in 2021.

The multimodal transportation section also describes the usage of the railroad tracks on Kent Road.

WSP finds the applicant's revised TIAS and response acceptable regarding the multimodal transportation within the study area.



Norwalk Transit District - Route 4 Bus Stops within the i-Park site

CRASH HISTORY

The TIAS evaluates the crashes at the three intersections for a three-year period between January 2018 through December 2020. Due to the COVID pandemic, the traffic volumes were lower than usual in 2020, therefore, the 2020 crashes may be an outlier in terms of annual crashes. In the initial review, WSP recommended that the crash evaluation be taken between January 2017 through December 2019. Additionally, given that the Main Avenue (US Route 7) and Grist Mill Road intersection would receive more than 25 new vehicle trips, WSP recommended that the crashes at this intersection be included as part of the crash evaluation.

In the revised TIAS, the applicant included crash data between January 2017 through December 2019. The Main Avenue (US Route 7) and Grist Mill Road intersection was also included in the evaluation. WSP spot checked the data provide in Table 1 against the backup data on the Appendix and found that Table 1 reflects the data provided in the Appendix. Additionally, WSP spot checked the four intersections and found that Table 1 and the raw data from the Appendix are reflective of the data found in the Connecticut Crash Data Repository (CCDR). Of the 48 crashes, the TIAS states that the most frequent crash type was rear end crashes and that there were seven injuries reported.

WSP finds that the applicant's revised TIAS and responses acceptable regarding the crash history and safety assessment.



BACKGROUND CONDITIONS GROWTH

The TIAS discusses the use of the traffic volumes prepared by the Connecticut Department of Transportation (CTDOT) improvement project on Main Avenue (US Route 7) as the basis of the volumes used in the TIAS. The CTDOT traffic volumes are from year 2025. The TIAS provides documentation and approval from CTDOT for the use the CTDOT year 2025 traffic volumes except for using the collected year 2019 volumes entering and exiting the iPark driveway at the Main Avenue (US Route 7) and iPark Site Driveway/West Rocks Road intersection while maintaining the year 2025 CTDOT traffic flows.

Correspondence between the applicant and the CTDOT Highway Management Unit were provided by the applicant confirming CTDOT's acceptance of the traffic volumes.

The TIAS states that there are two developments that will impact the traffic volumes: North 7 Master Plan mixed-use development, and the proposed expansion to Grist Mill Village. The volumes generated by these two developments were incorporated to develop the background traffic volumes. However, the Initial Traffic Memo (dated January 2021) stated different developments in the area: Wilton Corporate Park, Grist Mill Village, Building and Land Technology's (BLT) Glover Avenue mixed-used development, and an Innovation Center in Norwalk. In the initial review, WSP recommended clarification regarding the reason why these developments were not also included in the TIAS, given their proximity to this project.

In the applicant's responses, it was clarified that the BLT Glover Avenue mixed-use development is also known as BLT North 7 Master Plan. The City of Norwalk directed the applicant to follow the methodology used in the North 7 Master Plan development TIAS. The applicant indicated that based on the North 7 Master Plan traffic volume projections, vehicle trips for the Grist Mill Village, Grist Mill Village Expansion, Innovation Center, and Wilton Corporate Park were added to the Background and Combined traffic volumes. Given that the development's expected opening date is in year 2022, the revised TIAS also provided year 2022 Background Conditions volumes. Additionally, the applicant provided the expected vehicle trips generated by these developments in Figures 4 through 7 of the TIAS. WSP spot checked the Figures 4 through 7 of the revised TIAS and compared it against Figure 8 (2022 Background Volumes) and found that the Figure 8 reflects the Background Conditions volumes. However, it was noted that the westbound approach of the Main Avenue (US Route 7) and Grist Mill Road intersection has lower traffic volumes in year 2025 than year 2022 during the PM peak, with a similar difference observed for the eastbound through and northbound right turn movements. The TIAS does not explain the discrepancy and the reasoning.

WSP finds that the applicant's response acceptable regarding the vehicle trips from the nearby developments, however, the TIAS should confirm the discrepancy between the projected 2022 and 2025 traffic volumes in and out of the Department of Motor Vehicles (DMV) driveway.

FUTURE ROADWAY IMPROVEMENTS

Section 4.2 of the TIAS describes CTDOT's evaluation of improvements to US Route 7 between Grist Mill Road and Kent Road under Proposed Project ("PP") 102-006. CTDOT's project evaluates geometric improvements at Main Avenue (US Route 7) and iPark Site Driveway/West Rocks intersection, including widening West Rocks Road approach to accommodate an additional left turn lane and converting the northbound right turn lane into a shared through-right lane to provide three northbound through lanes. The TIAS states that the traffic analysis was performed with these proposed improvements, however, it was not clear whether these improvements are going to be implemented or if they are part of a range of alternatives in the CTDOT study. In the initial review, WPS recommended that the traffic analysis be performed under both existing geometric conditions and with the potential improvements being conducted



under PP 102-006. WSP also recommended that the applicant incorporates the proposed CTDOT plans, at least the preliminary plans, if the final design has not been completed.

In the revised TIAS and responses, the applicant indicates that the traffic analysis was performed with the existing geometry, but it was not indicated whether the proposed improvements are going to be implemented or if they are part of a CTDOT study. The preliminary plans were not provided.

WSP finds that the applicant's revised TIAS and responses acceptable regarding the incorporation and evaluation of the Main Avenue (US Route 7) and iPark Site Driveway/West Rocks intersection using the existing geometry, however, it is recommended further clarification regarding the proposed improvements and provide preliminary plans be provided.

TRIP GENERATION AND DISTRIBUTION

The TIAS used the ITE Trip Generation Manual Land Use 221 Multifamily Housing (Mid-Rise) to determine the vehicle trips that would be generated by the residential development. The TIAS also included the trips generated by the proposed hotel using the ITE Land Use 312 Business Hotel. The application of these ITE Trip Generation Manual Land Uses are appropriate. The ITE Trip Generation 10th Edition Supplement provides trip generation rates for expected pedestrian, bicycle, and transit trips; however, these were not included in the TIAS.

TRAFFIC ANALYSIS

The TIAS conducted capacity analysis at each of the study intersections in accordance with the Highway Capacity Manual (HCM), published by the Transportation Research Board using Trafficware Synchro 10, computer traffic analysis software that is acceptable. Based on the capacity analysis, WSP had the following comments in the initial review:

- The analysis includes the proper volume, peak hour factor, truck percentage, pedestrian calls, and geometric configuration for each condition.
- The results presented in Tables 4 and 5 and described in the text are representative of the Synchro 10 computer outputs in Appendix.
- In the initial review, WSP recommended the incorporation of the existing traffic conditions. The TIAS evaluated the operational conditions with both the year 2025 Background and Combined traffic, however, it was not evaluated under existing conditions (no Background traffic/not grown to year 2025). In the revised TIAS the applicant incorporated the traffic analysis for the existing conditions year 2019 as well as the year 2022 Background and Combined conditions.
- The initial TIAS stated the use of the a 120-second cycle length to be consistent with the cycle length used under the CTDOT project at the Main Avenue (US Route 7) and Grist Mill Road intersection. In the initial review, WSP requested supporting documentation regarding the existing signal timings. In the revised TIAS, the applicant provided the signal plans for the three signalized intersections within the study area. However, WSP was not able to confirm the clearance times used in the analysis given that the Synchro 10 computer outputs did not include the yellow and all-red times.
- In the initial review, it was noted that Table 4 only included delays and LOS, however, WSP recommended the addition of the v/c ratio to meet the City of Norwalk TIAS guidelines. The applicant provided the v/c ratio in the revised TIAS and the values are representative of the Synchro 10 computer outputs in the Appendix.

- The LOS results for the PM peak hour shows that both the Main Avenue (US Route 7) and iPark Site Driveway/West Rocks Road intersection would operate at an overall Level of Service (LOS) E under both the Background and Combined conditions. Given that the existing conditions was not provided, it is unclear whether the intersection currently operates at a LOS E. The City of Norwalk TIAS guidelines states that “If an intersection operates at a LOS D under the No-Build Conditions and the Build conditions degrades operations to LOS E/F, LOS D or better must be restored”. In the initial review, WSP recommended the evaluating of the existing conditions to determine if the intersection operate at a LOS E.

In the revised TIAS, the applicant evaluated the existing conditions (year 2019) with the existing geometry and the intersection operates at a LOS E. The applicant also evaluated the year 2022 conditions with existing geometry which degrades the intersection to LOS F. Geometric improvements at the intersection would improve operations to an LOS E equivalent in year 2025.

- Table 5 of the initial TIAS showed both the 50th percentile and the 95th percentile vehicle queue lengths under the Background and the Combined conditions. The vehicle queue length for EB approach (site driveway) at the Main Avenue (US Route 7) and iPark Site Driveway/West Road Roads intersection shows a 50th percentile vehicle queue length of 204 feet and a 95th percentile vehicle queue length of 568 feet. The TIAS stated that the storage length is 400 feet, however, the storage length to the first potential point of conflict within the site is approximately 110 feet, as shown in the following image. Given the long queues and the short storage length, WSP recommended the applicant to provide a discussion regarding how this queue would impact the internal circulation within the site and how it would be mitigated. The TIAS stated that the “projected driveway traffic volumes are 29 percent higher than counted in year 2019 during this period, so it is unlikely that this queue length will ever materialize”. Given the uncertainty, WSP also recommended the applicant to perform a sensitivity analysis with the year 2019 traffic volumes to evaluate the vehicle queue lengths at the iPark driveway.





iPark Site Driveway Storage

In the revised TIAS, Table 11 and Table 12 provided a comparison of the vehicle queue lengths between the existing conditions, year 2022 (Background and Combined), and year 2025 (Background and Combined). Based on the table, existing conditions queues (185 feet) already exceed the 110 feet length of the bridge during the PM peak hour. The analysis projects the vehicle queue length would increase to 510 feet in year 2025 under the Background Conditions traffic volumes, while the vehicle trips generated by the project would increase the vehicle queue by an additional 58 feet to 568 feet in year 2025. WSP spot checked the queues and confirmed that the reported queue lengths are representative of the Synchro 10 computer outputs.

To address these vehicle queue lengths and improve internal site circulation, the applicant provided the following recommendations:

- Install “Don’t Block the Box” markings at the first internal intersection
- Erect a directional wayfinding sign at the end of the landscaped island
- Stripe a walkway along the north side of the entrance driveway to the sidewalk in front of Building B
- Potentially change access to the parking on the north side of the driveway from two-way (current) to one-way northbound only

While WSP concurs with the recommendations, WSP recommends that the proposed recommendations be incorporated in a conceptual/preliminary plan to visually represent how the applicant proposes to mitigate the potential impacts in the internal circulation. Such a plan will allow for more accurate review by the City as well as review by abutting property owners and the general public.

- Table 5 in the initial TIAS indicated a storage length of 340 feet for the eastbound approach at the Danbury Road (US Route 7) and Kent Road intersection, however, the storage length is approximately 220 feet (distance between intersections). Given the proximity of the railroad crossing, WSP recommended the applicant to provide a discussion of the eastbound vehicle queue lengths and how it would impact the nearby railroad crossing.

In the revised TIAS, the applicant provided the existing vehicle queue lengths as well as the expected vehicle queue lengths in years 2020 and 2025 for the Background and Combined conditions. Based on Table 12, the Synchro 10 model projects the 95th percentile vehicle queue length would reach 257 feet in the AM Peak hour. The applicant provided the discussion regarding the vehicle queue lengths and its potential impacts to the railroad tracks indicating that the vehicle queue would not extend to the railroad tracks.



Kent Road EB Approach Storage

WSP finds that the applicant’s revised TIAS and responses acceptable regarding the incorporation of the existing traffic operational conditions, the incorporation of the v/c ratio in the operational results, and the evaluation of the LOS at the Main Avenue (US Route 7) and iPark Site Driveway/West Rocks Road intersection to determine if the intersection currently operates at a LOS E.

The applicant provided the existing signal plans, however, WSP was not able to confirm the clearance times used in the analysis given that the Synchro 10 computer model outputs did not include the yellow and all-red times.

The applicant provided recommendations regarding the internal circulation, however, WSP recommends that the proposed signage and marking recommendations be incorporated in a conceptual/preliminary plan to a get a visual representation of how the applicant proposes to mitigate the potential impacts in the internal circulation.

CONSTRUCTION PLAN/PHASING

The applicant should provide input on the construction plan and construction phasing should the site not be fully completed in year 2022 and anything that may impact traffic circulation/operations and parking capacity.

The revised May 2021 TIAS did not address construction phasing or provide commentary on potential traffic circulation or parking impacts generated by this phasing.



CONCLUSIONS AND RECOMMENDATIONS

In summary, WSP has found that the TIAS and subsequent responses to comment letters follow the standards steps of a Traffic Impact Study. WSP considers that TIAS and subsequent documentation were prepared in a professional manner consistent with transportation industry standard and applications regarding crash evaluation, trip generation, trip distribution, and traffic analysis.

In general, WSP's remaining concerns include the following:

- Traffic Signs - Revise the Sign ID "B" and Sign ID "D" which are not shown on the Site Plan or show these on the plan if they will be included.
- Signage and Vehicular Circulation – Provide description and conceptual/preliminary plan regarding the necessary pavement markings and signage for traffic circulation in within the Site.
- Pedestrian Circulation – Provide conceptual/preliminary plan regarding the pedestrian accessibility to/from the residential development and Main Avenue (US Route 7) and within the site.
- Handicapped Parking – Revise the location of handicapped parking spaces.
- Site Plan – Provide the site plan of the proposed hotel for context with respect to circulation
- Background Conditions – Discussion regarding the discrepancy between years 2022 and 2025 traffic volumes in and out of the Department of Motor Vehicles (DMV) driveway.
- Future Roadway Improvements – Clarification regarding the CTDOT project design at Main Avenue (US Route 7) and iPark Site Driveway/West Rocks Road intersection. Please confirm whether it will be incorporated, or if it is a proposed alternative as part of a study. If these improvements are not planned and programmed for construction, it is recommended that the future conditions traffic analysis also be performed under the existing geometric conditions.
- Recommended Intersection Improvements:
 - At the Main Street at West Rocks Road / Site Driveway intersection, WSP recommends upgrading the wheelchair ramps to be ADA compliant. The count data indicates there are existing pedestrian volumes and the apartments will likely add additional pedestrian volumes.
 - While not in the City of Norwalk, WSP notes that the pedestrian signal heads at the Kent Road at Danbury St / Main Road are non-standard and may be confusing and unsafe to pedestrians.
- Traffic Analysis – WSP considers that the traffic analysis was appropriate, in addition to the conceptual/preliminary plans described above. Please confirm the clearance times included in the Synchro 10 computer analysis.
- Construction Plan/Phasing – Provide input regarding the construction plan and phasing and identify how construction phasing, including the need for staging, storage, and lay-down areas, may impact traffic circulation as well as parking capacity.