

ASSESSMENT OF POTENTIAL PROJECT IMPACTS

A. PROPOSED ZONING ACTION

The proposed zoning amendment would add a new Special Permit to §60-430. The North Greeley Net Zero Carbon (NG-Zero) District would be incorporated into the Retail Business and Parking (B-RP) and Retail Business (B-R) District for parcels that are a minimum of 33,000 square feet in size on the westerly side of North Greeley Avenue, and not on a corner lot or a lot having frontage on lower King Street (Allen Place). The purpose of the NG-Zero District would be to encourage the redevelopment of vacant and underutilized property, foster a vibrant and walkable downtown, increase the diversity and affordability of housing types, and obtain the most environmentally and economically sound forms of residential development in accordance with modern planning design criteria and to otherwise achieve social, environmental and economic benefits in accordance with the Town Comprehensive Plan and for the benefit of all present and future residents of New Castle and the region.

It would also be the purpose and intent of the NG-Zero District to create a more sustainable community by incorporating exemplary green building measures into the design, construction, and maintenance of buildings that minimize short-term and long-term negative impacts on the environment. These measures shall include (but are not limited to): carbon neutral construction practices, resource conservation, reduction of construction waste and reduction in the use of energy; and promoting the health and productivity of residents, workers, and visitors by reducing the reliance on vehicles by providing easy access to public transportation, bicycle and pedestrian resources.

The proposed NG-Zero District would be consistent with the Town's Comprehensive Plan that stated that the revitalization of the Chappaqua Hamlet is a priority initiative. The goal of the amendment would be to enable the development of environmentally sustainable transit oriented mixed-use projects that promote the hamlet as a place for "... gatherings and civic events; a place where residents can live congregate and spend time comfortably; a place that is aesthetically pleasing and easy to navigate for pedestrians, cyclists and vehicles; and a place that offers exciting dining and entertainment options that attract community residents and visitors." ¹

B. POTENTIAL FOR DEVELOPMENT PURSUANT TO THE PROPOSED ZONING

Due to its parcel size and other requirements, the proposed NG-Zero special permit has a potential application to two (2) parcels in the Chappaqua Hamlet: 50 North Greeley (the location of the proposed project discussed below) and 136 North Greeley (owned by El-Kan Realty Co.). No development at 136 North Greeley has been proposed. Accordingly, the SEQRA assessment for the proposed zoning modification will assess the potential environmental impacts of the proposed project at 50 North Greeley. If development at 136 North Greeley were to be proposed at some time in the future, such proposal would be subject to its own independent review under SEQRA.

¹ New Castle 2017 Comprehensive Plan, pp. 4-5.

C. PROPOSED PROJECT

The proposed project would redevelop the .83-acre site at 50 North Greeley, formerly a Walgreens², with an environmentally sustainable mixed-use building. The proposed four-story, 55-foot average height building would have 45 rental units consisting of 3 studios, 21 one-bedroom units, and 21 two-bedroom units, 3,200 square feet of residential amenity space, and 4,300 square feet of ground floor commercial space. The residential units would be “life-style units” marketed to Chappaqua empty-nesters, new residents moving from New York City, or singles or young couples seeking a residential landscape that is convenient to public transportation, amenities, conveniences and social engagement. Four of the units (10%) would be affordable for those making 60% of Westchester Average Median Income, and one unit (2%) would be marketed as workforce housing.

53 parking spaces would be provided and located on the ground floor in the rear of the property behind the retail - one for each residential unit, and three spots for the electric car sharing program, five parking spaces for commercial uses. In addition, the proposed 50 North Greeley project would incorporate into the amenity package for residents, 3 on-site and on-demand electric car-sharing vehicles, bike parking and storage, and access to electric scooters to reduce parking demand. These alternate mobility offerings are consistent with the purpose and intent of the proposed NG-Zero special permit by supporting “...environmentally and economically sound forms of residential development in accordance with modern planning and design criteria...”.

Parking would be screened from view from North Greeley by the commercial use to enliven the pedestrian experience. The portion of the ground-floor commercial space would be configured as a community restaurant or a retail use, depending on market demand. The upper floors of the building would be residential and would include roof-top courtyards fronting North Greeley Avenue and shielded by the rear of the building from the elements of the passing trains. The building would include windows with high sound attenuation to limit noise intrusion for the residents. A development of this configuration in this downtown location would generate additional real property tax revenue and the number of public-school students that would be generated is estimated to be approximately nine (9) students, which would not adversely affect the capacity of the Chappaqua Central School District.

The proximity of the building to public transportation would attract people wanting to move away from car use, exactly the demographic that would increase the vitality of the downtown without increasing traffic or parking congestion.

The building is being designed to be a net zero carbon building and would be constructed with green building practices designed to minimize short-term and long-term negative impacts on the environment. The building materials would rely heavily on sustainably harvested timber, which sequesters the carbon that the trees removed from the atmosphere. The building would be 100% electric, with no gas or fossil-fueled fired equipment or appliances (except for emergency standby power). A recent analysis comparing CO₂ emissions of wood and conventional building concluded

² Walgreens took over the lease of the building from Rite Aid in October 2018 and closed the store in February 2019.

that substituting wood for conventional structural building materials reduces emissions by 69%. As New York State transforms its electric grid to be increasingly dependent on renewable energy, as required by the State's Climate Leadership and Community Protection Act, the building's carbon footprint would dwindle to zero.

D. POTENTIAL PROJECT IMPACTS

1. IMPACT ON LAND

Town Board approval of the proposed zoning text change would allow the project site to be redeveloped with a transit-oriented mixed-use development in a manner that is exemplary of green building practices and architecturally compatible with the diversity of architectural styles in the hamlet. The proposed project would be consistent with the Town's Comprehensive Plan and the proposed text amendment would introduce land uses that are consistent with the land uses surrounding the project site, land uses that would support the businesses in the Chappaqua Hamlet.

2. AVAILABILITY AND ADEQUACY OF UTILITIES

Water:

The proposed project would create an increase demand for water. The proposed water consumption is anticipated to be approximately 8,300 gallons per day (GPD) of water to serve the residence and the retail space. There is currently an 8-inch diameter water main along North Greeley Avenue. A hydrant flow test would be performed to determine the water system pressure and flow. Any deficiencies in the water main or supply would be considered for improvement by the Applicant. A Water System Engineer's Report will be prepared and submitted for the Project.

Sewer:

The proposed project would generate approximately 8,300 GPD of sanitary wastewater. There are two gravity sewer mains within the vicinity of the property. There is a 12-inch diameter cast iron pipe, which is a county owned sewer main, located at the northerly side of the site and an 8-inch diameter cast iron pipe, which is a Town owned sewer main, along North Greeley Avenue. The sanitary sewer system would collect the wastewater generated from the proposed Project and convey it by gravity to the existing 6-inch diameter PVC service lateral connected to the County-owned sewer main. This service line would replace the existing 6-inch line that exists today. If the site needs additional pipe capacity a second sewer service would be connected to the Town owned sewer main. Sanitary flows would be domestic in nature and are not anticipated to adversely impact the capacity of the existing system. The Applicant would consider contributing toward inflow and infiltration reduction at a rate of 3:1 to perform improvements within the system and to allow for increase capacity, if needed. A Sanitary Sewer System Engineer's Report will be prepared and submitted for the Project.

The sanitary sewer system would be designed in accordance with the requirements of the New York State Department of Environmental Conservation (NYSDEC) and the *Ten States Recommended Standards for Wastewater Facilities*, latest edition. The project is not expected to have an adverse impact on the sewer system.

Stormwater:

The project site is within the Saw Mill River Basin watershed. Drainage flows are generally from north to south. Surface runoff is collected in catch basins along North Greeley and drains into the municipal stormwater system. Stormwater is then conveyed via closed drainage pipes into existing watercourses. NYSDEC identified the Town of New Castle as a Municipal Separate Storm Sewer System (MS4) in accordance with the “urbanized area” definitions of the Census Bureau. Based on USDA “Web Soil Survey”, groundwater ranges from 2 feet below surface to 6-7 feet below surface.

The project site has approximately 31,909 sf (88%) of impervious area consisting of a building and asphalt paved parking surfaces. The site’s stormwater infrastructure includes existing catch basins connected by piping to the surrounding municipal stormwater system. There are no existing water quality or quantity controls in place. The proposed project would reduce the impervious coverage to 23,734 sf (65%) from 31,909 sf (88%). The reduction in impervious surfaces would be accomplished by providing decorative landscaped planters along the front of the site, increasing the landscaped buffer along the rear of the property, and providing green courtyards for residents of 50 North Greeley. Not included in the impervious calculations but would further stormwater mitigation are proposed green roofs, hydrodynamic separators, and below grade retention chambers. In accordance with the New York State Department of Environmental Conservation (NYSDEC) “Stormwater Management Design Manual” (SMDM), green roofs must be discounted as impervious area or counted toward water quality treatment if constructed to the NYSDEC SMDM guidelines. The Applicant has the option to choose which credit to apply. For this project, the Applicant is likely to apply the impervious area reduction; however, this will be described in detail once the project advances beyond the initial planning phase. Once constructed, the proposed stormwater system would improve the quality of stormwater and decrease the rate of runoff exiting the site, thus resulting in a beneficial impact.

The proposed project would not result in increased erosion from the site. Before construction, a temporary stabilized construction access would be installed to reduce the tracking of sediment onto adjacent roadways. The erosion control, sediment control, pollution-prevention, and stormwater management measures to be implemented during construction would minimize soil erosion and control sediment transport off-site, and after construction would control the water quality and quantity of stormwater runoff.

A Stormwater Report will be prepared for the project and will describe the proposed temporary erosion and sediment control measures to be used during construction, and permanent erosion and sediment control measures to be implemented after construction is completed.

3. SAFETY AND CAPACITY OF STREET SYSTEM AND PARKING DEMAND

Safety and Capacity of Street System:

Access to the proposed project would be from North Greeley Avenue. North Greeley Avenue is the northern segment of Greeley Avenue. Greeley Avenue runs from its intersection with Bedford Road in the south, through downtown Chappaqua to its terminus approximately 0.4 miles north of Bischoff Avenue. To the north of King Street, the roadway is known as North Greeley Avenue and is a Town road. North Greeley has a posted speed limit of 30 mph and provides one travel

lane per direction, with width variation from 9 to 11 feet. On-street parking, with time restrictions is permitted along most of North Greeley Avenue.

The North/South Greeley Avenue at King Street intersection was reconstructed as part of the recently completed downtown streetscape project, which included signalization, new sidewalks, crosswalks and pedestrian signal displays. King Street forms the east and west legs to this four-legged, signalized intersection with North and South Greeley Avenue. The westbound approach of King Street provides one shared left/through/right-turn lane. On the opposite side of the intersection, King Street is a one-way westbound roadway and has one receiving lane. North Greeley Avenue forms the southbound approach, providing a single shared left/through/right-turn lane. South Greeley Avenue forms the northbound approach, providing a single shared left-turn/through lane and an exclusive rightturn lane. The intersection is controlled by a two-phase traffic signal which has an overlap phase for the northbound right-turn movement. Crosswalks and pedestrian displays with countdown timers are provided on each leg of the intersection. Lead Pedestrian indications are provided for the crosswalks on the east and north sides of the intersection.

Sidewalks are provided along most of North Greeley with a pedestrian connection to the downtown commercial area and Chappaqua Metro-North train station – an exception being the westside of North Greeley Avenue north of the Post Office. There are also pedestrian connections in the downtown area connecting pedestrians to downtown businesses and parking lots.

Bus service for the site would be available from the Westchester County's Bee-line Bus Service, Route #19. The closest bus stop would be on King Street and South Greeley. Route #19 operates 6 days a week, excluding Sunday, and provides service between Ossining and Katonah. There are 10 northbound buses and 10 southbound buses on each weekday between approximately 6:30 AM and 6:15 PM, running every hour to hour and a half apart. On Saturdays, service is provided between 7:20 AM to 6:00 PM with 5 northbound buses and 6 southbound buses, running every hour or two hours apart.

Data collected for a Traffic Impact Study (TIS) was conducted in 2019 (pre Covid),with the release of the study in July 2020³. To assess existing traffic conditions in the hamlet, vehicular turning movement and pedestrian counts were conducted at ten study intersections – Greeley Avenue and King Street being one of the ten intersections. The PM hour was selected for analysis because a review of current and future traffic concluded that any potential traffic impacts that would occur in the weekday AM and Saturday Midday peak hours would also occur in the weekday PM Peak hour and that evaluating the PM peak-hour would be sufficient to ascertain what potential impacts would likely occur with future land uses actions. The TIS found that the weekday PM peak hour occurred from 5:00 to 6:00pm.

³ *Traffic Impact Study*, prepared by Kimley-Horn of New York, PC., dated July 2020.

As shown in the table below, the intersection proximate to the project site, Greeley Avenue and King Street, operates at level of service (LOS) C or better, based on the evaluation criteria in the 2019 Highway Capacity annual (“HCM”).⁴

Existing Traffic Conditions at North/South Greeley and King Street

| Intersection | Approach | Existing Condition | |
|------------------------------|---------------------|--------------------|----------|
| | | PM Peak Hour | |
| | | Delay (secs) | LOS |
| Greeley Avenue & King Street | WB LTR | 13.1 | B |
| | NB LT | 23.6 | C |
| | NB R | 11.7 | B |
| | NB | 14.8 | B |
| | SB LTR | 22.0 | C |
| | INTERSECTION | 14.8 | B |

Delay = Average delay per vehicle in seconds

The proposed project would add an additional 26 net-new vehicle trips during the Weekday AM peak hour and 22 net-new vehicle trips during the Weekday PM peak hour. Trip generation estimates and credits are based on trip rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. A table summarizing the 50 N Greeley Avenue Development Site Trip Generation is appended to this report.

Trip reductions to capture internal trips between the three complimentary land uses were calculated using the ITE *Trip Generation Handbook (3rd Edition)* and National Cooperative Highway Research Program (NCHRP) *Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments* methodology. Additionally, a conservative 10 percent transit trip credit was applied based on resident and worker data from the U.S. Census Bureau American Community Survey 2012-2016 Five-year Estimates which showed a transit usage of 11 to 36 percent. Similarly, previous studies utilized credits ranging from 2 to 20 percent. Following the methodology of previous studies, a 25 percent pass-by trip credit was taken for the retail land use and a 50 percent pass-by trip credit was taken for the restaurant land use.

The trips generated by the proposed project during the Weekday AM and PM peak hours would represent an approximately 2 percent increase over the existing (September 2019) traffic volumes at the N/S Greeley Avenue and King Street intersection. As a result, the intersection is anticipated to operate at similar acceptable level of service operating conditions compared to the existing conditions.

⁴ “Level of service” (“LOS”) is used to denote the different operating conditions that occur at an intersection under various traffic volume loads. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. For an urban business district, such as the Chappaqua Hamlet, acceptable traffic operating conditions during peak hours are generally defined as intersections with an overall intersection Level-of-Service of “D” or better with no approaches experiencing “F” levels of service.

Parking Supply and Demand:

Based on the Institute of Transportation Engineers (ITE) *Parking Generation Manual, 5th Edition*, the proposed project would generate a parking demand of 32 parking spaces for the 45 residential units, 2 parking spaces for the retail land use, and 30 parking spaces for the restaurant use. The 32-space non-residential parking demand would be well below the 50-space requirement calculated based on the Town Code.

To assess the adequacy of existing public parking adjacent to the proposed project, the applicant's traffic consultant (AKRF) collected parking data on November 16, 2022 during a typical weekday midday (11AM-1PM) and evening (6PM-8PM) time periods when demand for the commercial components would peak in conjunction with commuter parking demand.⁵ The study surveyed the number of vehicles parked on-street and in public surface lots, including the Chappaqua Metro-North Train Station, within both a 5- to 10-minute walk to the proposed project. The table below summarizes the findings:

Parking Supply Summary

| Location | Public Parking Supply (spaces) | | Regulations |
|--|--------------------------------|--------------|--|
| | Midday | Evening | |
| Within a 5-Minute Walk | | | |
| N Greeley Ave between Maple Ave and King St | 34 | 34 | 2 spaces: 30-minute parking any time 32 spaces: 3-hour parking, 9AM-5PM M-F |
| S Greeley Ave between King St and Woodburn Ave | 20 | 20 | 3-hour parking, 9AM-5PM M-F |
| King Street between Prospect Dr and N Greeley Ave | 26 | 26 | 3-hour parking, 9AM-5PM M-F |
| Allen Place between N. Greeley Ave and Woodburn Ave | 43 | 43 | 1 space: 15-minute parking 11 spaces: 3-hour parking, 9AM-5PM M-F 21 spaces: 3-hour customer/merchant parking 10 spaces: 3-hour parking |
| Senter Street | 5 | 23 | 5-spaces: 3-hour parking 18 spaces: School parking only, 6:30AM-4:30PM |
| N Greeley Ave Lot | 47 | 47 | 37 spaces: 1-hour parking 10 spaces: 2-hour and merchant parking |
| S Greeley Ave Lot | 168 | 168 | 3-hour customer and merchant parking |
| Allen Place Lot | 79 | 79 | 3- and 2-hour customer and merchant parking |
| Total within 5-Minute Walk | 422 | 440 | |
| Within a 5- to 10-Minute Walk | | | |
| S Greeley Ave between Woodburn Ave and Smith St | 33 | 33 | 5 spaces: 2-hour parking, 9AM-5PM M-F 4 spaces: 4-hour parking, 9AM-5PM M-F 24 spaces: 6-hour parking, 8AM-6PM M-F |
| King Street between and Prospect Dr and Orchard Ridge Rd | 13 | 13 | 10 spaces: 3-hour parking, 8AM-6PM M-F 3 spaces: 1-hour parking, 8AM-6PM M-F |
| Metro-North Lot 1 | 33 | 601 | 33 spaces: Non-resident metered parking 83 spaces: Resident metered parking 11 spaces: Temporary 15-minute parking 32 spaces: 3-hour customer/merchant parking 29 spaces: Handicap metered and permit parking 413 spaces: Permit only parking *Parking rules and permit only parking in effect 6AM-6PM M-F |
| Metro-North Lot 2 | 0 | 703 | 703 spaces: Permit only parking *Parking rules and permit only parking in effect 6AM-6PM M-F |
| Total Within 5- 10 Minute Walk | 79 | 1,350 | |
| Total within 10-Minute Walk | 501 | 1,790 | |

⁵ 50 North Greeley Avenue Parking Study, prepared by AKRF, Environmental, Planning, and Engineering Consultants, November 22, 2022.

The Parking Study found that there were three public parking lots within a 5-minute walk from the proposed project and on-street parking on several roadways. The parking survey showed that the weekday midday period had a parking utilization of 74% percent for on- and off-street parking. Expanding to a 10-minute walking radius would provide additional available parking. Although previous studies have represented that downtown parking is at capacity, the actual surveyed parking utilization is below what would be considered a typical 85% at-capacity threshold. A copy of the Parking Study is appended to this report.

The Town Code requirement of 50 parking spaces for the non-residential uses would be in excess of that estimated by ITE. Because this project would be a transit-oriented-development (TOD) located less than a half-mile from the Chappaqua Train Station with complementary residential, restaurant, and retail land uses, the parking requirements of the Town Code do not represent the actual parking demand of the site. Furthermore, the proposed project would be considered a non-destination retail/restaurant use walkable for patrons of other downtown businesses, thus the parking demand would likely be shared with other downtown commercial uses.

Although previous studies have represented qualitatively that parking capacity was not available in the downtown area, the results of this parking survey quantitatively show that the maximum parking utilization within the surveyed periods is approximately 74% during the weekday midday period, indicating that parking within downtown Chappaqua is below capacity and could accommodate additional parking demand.

A common theme to encourage TOD uses is to recalibrate required parking to support sustainable and pedestrian-friendly mixed-use projects where residents can live, work, and enjoy recreational activities without the need for cars. Providing the opportunity for shared mobility via car-sharing and reducing the required parking promotes pedestrian mobility, affordability, health, and reduces greenhouse gas emissions. More and more modern zoning codes are adjusting parking requirements in overlay districts, floating zones, or as part of special permits criteria to acknowledge the impact of these alternative mobility options on parking demand.

Many communities in the Hudson Valley are also revising required parking requirements to support transit-oriented development and decrease greenhouse gas emissions. These include:

- Village of Pelham – the Business District Floating Zone (BDFZ) was adopted in 2017 to *“...create a stronger and more competitive downtown and encourage redevelopment in the Village’s central core and main commercial corridors by facilitating appropriately scaled higher density mixed-use development in the Village’s downtown core which will allow a mix of residential and street-level commercial uses that are complementary to the existing community scale and fabric in areas of the Village with access to public transit, existing infrastructure, and community services*
 - Required parking is *“...one parking space per dwelling unit for residential uses and parking as required by §98-113 for nonresidential uses...”* (§98-106.3).
- City of New Rochelle – In the Central Parking Area (CPA) District 1.0 parking spaces per dwelling unit.
- City of White Plains – 1 per dwelling unit if in Central Parking Area (CPA) and over 3 stories.
- City of Yonkers - *“For new construction of apartments and live-work units with ¼ of a mile by available pedestrian routing of an active train station used for passenger rail-transportation*

purposes, the minimum number of required parking spaces shall be one parking space per apartment and/or live-work unit.” §43-138

This trend is being seen throughout the country where required parking is being reduced in communities with substantial public transportation to reduce the reliance of cars, encourage the use of alternate modes of transportation, decrease congestion and incentivize the construction of transit-oriented development. ⁶

Car sharing:

The proposed project would include three (3) on-site electric car shares to be rented as an amenity for 50 North Greeley residents. On-demand car sharing is an amenity being offered in many residential communities across the country. Car-sharing is a way to promote sustainable development and reduce greenhouse gas emissions by reducing the need for private-car ownership. In a comprehensive study on car-sharing done at UC Berkeley the study found that for every shared vehicle located within a multi-family development the demand for parking was reduced by up to five (5) parking spaces. McKinsey Consulting predicts a significant growth in car-sharing with a commensurate impact on local parking requirements inducing communities to modify required off-street parking. For example, in Santa Monica, CA the city’s off-street parking regulations were revised to permit a reduction of up to 25% of the required parking, not to exceed 10 spaces, for each car-share.

4. IMPACT ON AESTHETIC RESOURCES

The project site can be viewed from the single-family homes and duplexes on the east side of North Greeley Avenue and from the residential areas that are at an elevation higher than Greeley Avenue. The height of existing buildings ranges from one to three stories. Existing views include the project site (the former Walgreens building and parking lot), 26 North Greeley Avenue (the Susan Lawrence building), and the Metro North train tracks. Views from the higher elevations are of trees and buildings, and the school bus parking lot along Hunts Lane in the distance. As the hamlet exists as a business/commercial district, views from these elevated areas include HVAC and mechanical equipment on existing rooftops.

From the eastern side of North Greeley views would change from a vacant, single-story commercial building surrounded by asphalt surface parking with glimpses of Metro North railroad tracks and trees to a mixed-use four-story building with a stepped back street-wall creating an activated streetscape, awnings, outdoor seating, planters, bike racks, elevated planted courtyards, and a green roof.

From the residential areas at the higher elevations, views would change from a vacant, single-story commercial building surrounded by asphalt surface parking alongside Metro North railroad tracks, trees, surface parking lots along Hunts Lane, and school bus storage to a four-story building with a street-wall stepped back to create an activated streetscape, awnings, outdoor seating planters, bike racks, elevated planted courtyards, and a green roof.

An annual shadow study conducted by Gray Organschi Architecture identified March 27 as the date during which the proposed development would cast the longest shadows to the East,

⁶ See parking requirements for Charlotte, NC, San Antonio, TX, Nashville, TN, and Redmond, WA.

towards the existing single-family homes and businesses that line the eastern side of North Greeley Avenue (100.11-3-1 through 100.11.3-9).⁷ Shadows cast towards the north and west would only affect the adjacent Metro-North rail line, existing surface parking lots along Hunts Lane, and an adjacent vacant parcel (100.7-3-61).

As shown in the shadow study graphics that were included in the site plan application, the proposed development will shade the west-facing elevations of existing, neighboring structures across North Greeley at 5:00pm. By 6:00pm, the ridgeline to the West of Downtown Chappaqua casts a shadow over the entire North Greeley corridor. For the remainder of the year, the following times indicate when the proposed building will cast a shadow onto neighboring properties to the East of North Greeley:

| <u>Date</u> | <u>Shaded by 50 N Greeley</u> | <u>Shaded by Ridgeline (Sunset)</u> |
|-------------|-------------------------------|-------------------------------------|
| January 1 | 3:15pm | 4:15pm |
| February 1 | 3:45pm | 4:45pm |
| March 1 | 4:45pm | 5:30pm |
| April 1 | 5:15pm | 6:05pm |
| May 1 | 5:30pm | 6:25pm |
| June 1 | 6:00pm | 6:50pm |
| July 1 | 6:15pm | 7:00pm |
| August 1 | 6:00pm | 6:45pm |
| September 1 | 5:20pm | 6:10pm |
| October 1 | 4:30pm | 5:30pm |
| November 1 | 3:45pm | 4:40pm |
| December 1 | 3:30pm | 4:10pm |

Further shadow studies and graphics can be provided to assess additional dates and times as requested by the Town Board.

5. IMPACT ON HISTORIC AND ARCHEOLOGICAL RESOURCES

Historic and archaeological resources play an important role in the hamlet's historic and bucolic character. In the vicinity of the project site are the Horace Greeley House, Chappaqua Railroad Station and A.H. Memorial Park, and the Church of Saint Mary the Virgin.

The previously disturbed project site is like the broader hamlet which is primarily built up and previously disturbed (since the 1800's). Nonetheless, NYSOPRHP Cultural Resource Information System (CIS) and NYSDEC environmental mapping tools indicate that the entire hamlet is in an Archaeologically Sensitive Area. Correspondence has been submitted to OPRHP along with information on the proposed project requesting its assessment of cultural resources.

⁷ For reference, this study is located on sheet A3.00 in the Special Use Permit Application submitted on September 20, 2022.

6. IMPACT ON ENERGY

The energy and associated carbon impacts that accrue through the life cycle of the proposed project fall into two categories: (1) operational impacts associated with the period of the building's use by its occupants, attributed primarily to the consumption of energy and water; (2) embodied impacts generated by processes that contribute to the making of the building—the extraction and processing of raw materials into building components, their transport and assembly on site during construction as well as those same processes associated with the building's maintenance, repair, and refurbishment over the course of its functional lifespan.

The proposed project would be required to adhere to the proposed North Greeley Net Zero Carbon (NG-Zero) Special Permit that has been drafted to require sustainable development. Adhering to the proposed NG-Zero would be consistent with the goals of the Town of New Castle (a NYS Climate Smart Community) to incentivize more sustainable examples of development by requiring exemplary green building measures be incorporated into the design, construction, and maintenance of buildings to minimize operational and embodied energy consumption and association emissions. These measures shall include, but are not limited to: carbon neutral construction practices, resource conservation, reduction of construction waste and reduction in the use of energy; and promoting the health and productivity of residents, workers, and visitors by reducing the reliance on vehicles by providing easy access to public transportation, bicycle, and pedestrian infrastructure. Specifically, the proposed Special Permit includes the following regulations addressing building energy:

[a] Minimize on-site generation of carbon emissions: all buildings greater than 5,000 square feet of conditioned space shall be designed and constructed with no gas or fossil-fuel fired equipment, except as required for emergency standby power.

[b] Minimize operational carbon emissions: all new construction addressed by the International Energy Conservation Code must incorporate renewable energy systems of adequate capacity to achieve net zero carbon, per the requirements of the 2021 International Energy Conservation Code (IECC) Appendix CC: Zero Energy Commercial Building Provisions.

[c] Minimize embodied carbon in building products and materials: all buildings greater than 5,000 square feet of conditioned space must perform a whole building life cycle assessment (WBLCA) of the project's structure and enclosure prior to building permit approval. The project WBLCA must demonstrate a minimum 25% reduction in global warming potential (GWP) compared to a typical baseline building. Suitable WBLCA frameworks include LEED v4.1 Building Design & Construction and ANSI/GBI 01-2021 Green Globes Assessment Protocol for Commercial Buildings. Where possible, material reuse (salvaged material) is strongly encouraged, as these materials can be designated to have low/zero GWP.

In order to meet the proposed energy performance standards—in addition to the NYS Energy Conservation Construction Code and NYStretch Energy Code—the proposed development will utilize a wide range of strategies, including carbon-storing mass timber structural systems, low-carbon concrete in foundations and retaining walls, high performance building envelopes with

continuous exterior insulation and airtight construction, passive cross ventilation within residential units, on-site solar energy generation, all-electric building services and equipment, and high-performance glazing. Additionally, the proposed development will seek to reduce the energy impact of resident vehicles by limiting on-site parking to 1 space per apartment, encouraging the use of locally available mass transit, ensuring that no less than 50% of the provided on-site parking spaces shall be electric vehicle ready, establishing on-site electric car sharing program, and installing ample enclosed bicycle storage facilities for building residents and visitors.

7. IMPACT ON NOISE, ODOR, AND LIGHT

The project site is located near the northern terminus of the Downtown North Greeley corridor, abutted to the west by the Metro-North Harlem Line, to the south by a commercial building with professional and food-service tenants (100.11-2-2), to the east by North Greeley Avenue and a collection of mixed-use, low-rise buildings with retail and residential occupants (100.11-3-1 through 100.11.3-9), and to the north by a vacant industrial property (100.7-3-61). The proposed mixed-use development with ground floor commercial retail and food-service spaces and upper level multi-family tenants with private, on-site surface parking is consistent with existing uses on North Greeley.

Noise:

New York's Department of Environmental Conservation (NY DEC) identifies the three major categories of noise generation as (1) fixed equipment or process operations; (2) mobile equipment or process operations; and (3) transport movements of products, raw material or waste. Given that the proposed project is a mixed-use commercial and multifamily building, the majority of the project's potential noise generation will occur during the construction phase. During the building's operation, the only potential sources of noise generation per the DEC's metrics are vehicular traffic and solid waste pickup. The proposed building's operational noises are similar to those already present in the neighborhood, so the primary focus of noise mitigation will be the construction process.

[a] Construction Noise: Based on preliminary geotechnical data provided by the Town of New Castle engineering department, the project site likely does not contain any bedrock that would be impacted by the building's foundations. As such, no blasting is expected as part of the site preparation or construction scope. The proposed building's structure and enclosure is designed to take advantage of off-site prefabricated mass timber components that will reduce the overall timeline of construction, minimize the number of construction workers actively working on site, and reduces the number of noise-generation equipment typically found on construction sites. In addition, the building envelope will be fully enclosed within months and only require a crane with four (4) people to assemble.

[b] Operational Noise: The proposed building uses are allowed by the Town's zoning code and are like those of adjacent properties, which include mixed-use buildings with ground floor commercial or retail spaces and upper level multifamily and office uses, as well as a small number of single-family homes. The rhythm and intensity of noise levels generated

from the proposed project are expected to be synchronous with the existing neighborhood. By encouraging the use of electric vehicles and car-sharing programs, the proposed development will reduce the frequency and intensity of noise generated by residents' vehicular use. Additionally, the proposed building will create a audio screen between the Metro-North Harlem line and neighboring projects to the East of North Greeley, modestly reducing the noise pollution generated by trains which currently run every 15-30 minutes.

Odor:

The proposed building uses are allowed by the Town's zoning code and similar to those of adjacent properties, which include mixed-use buildings with ground floor commercial or retail spaces and upper level multifamily and office uses, as well as a small number of single-family homes.

The primary potential contributor to odor within the proposed building is a ground floor restaurant, diner, or food-service space located at the Southeast corner of the site. A diner or café catering to a local clientele, requested by members of the community, can contribute to odors during operation, but the proposed restaurant space is located proximate to an existing food service establishment (Susan Lawrence Gourmet Foods at 26 North Greeley Avenue) and would not significantly increase existing odors within the neighborhood.

As part of the development's energy reduction strategies, the building will be all-electric, with no on-site fossil fuel combustion or associated emissions from equipment. Resident and tenant solid waste will be collected within back-of-house spaces at the ground floor. Waste receptacles will not be brought outdoors except for as required by the contracted solid waste collection entity.

Light:

The proposed project site is located in an existing urban area with street lights and municipal lampposts along a public sidewalk. In addition to a vacant, single-story commercial building with limited exterior lighting, the project site includes a 50-space surface parking lot with exterior area lights. Both the existing building, surface parking, and exterior area lights will be removed for the proposed project.

The proposed building will feature dark sky compliant exterior lighting, as well as vegetation along the public sidewalk, side yards, and exterior courtyards to minimize light spillage onto neighboring properties and North Greeley Avenue. The building is designed with three inward-facing courtyards, which minimize light spillage outside of the property by focusing lighting into the center of the property and internalizing any incidental light spillage through windows and landscape features. The on-site parking spaces will be located within the building structure, concealing the parking lighting and vehicle headlights from the view of any neighboring properties. In general, exterior and public lighting will be set on automatic timers, to be controlled by property management.

8. School Impact

The project site is located within the Chappaqua Central School district (CCSD). The student enrollment in CCSD for the 2021-2022 school year is 3,553 which is a decrease of 188 students

compared to the 2019-2020 school year enrollment of 3,741. This decrease is consistent with the decrease in student enrollment over the last ten years.

Based on study of school capacity and projected enrollment prepared for the CCSD⁸, district multipliers were developed for likely “public school attendees” that would reside in market-rate and affordable housing units using income thresholds for each unit type per Westchester County’s affordable housing guidelines. As shown in the table below, the number of public-school attendees likely to be generated from the proposed project would be 9.

| Structure Type | Unit Detail | No. of Bedrooms | | Affordable Units | Market Rate Units | Multipliers | | Totals |
|----------------|-----------------|------------------|----|------------------|-------------------|-------------|-------------|----------|
| | | | | | | Affordable | Market Rate | |
| Multi-family | Renter-occupied | Studios & 1 bdrs | 24 | 3 | 21 | 0.14 | 0.04 | 1.26 |
| | | 2 bdrs | 21 | 2 | 19 | 0.68 | 0.33 | 7.63 |
| TOTAL | | | | | | | | 9 |

⁸ *Chappaqua Central School District Enrollment and Capacity Analysis*, prepared for the Chappaqua Central school District by ESI, KG&D and The Chazen Companies, January 13, 2021.

50 N Greeley Avenue Development Site Trip Generation Summary

| Building Component | Development Size ¹ | | ITE Data ² | | | | | Trip Generation | | | | | | | | | | | | | |
|--|-------------------------------|-------|-----------------------|-------------------------------------|---------------------------|-----------|---------------|-----------------|------|-------|-------------|-----|----------------|-----|---------------|-----|---------------|-----|-----------------------------------|-----|---------------------|
| | | | ITE Land Use | | Independent Variable | Peak Hour | ITE Trip Rate | Total Trips | % In | % Out | Total Trips | | Internal Trips | | Transit Trips | | Pass-by Trips | | Final Adjusted Trips ³ | | Total Net-New Trips |
| | | | # | Name | | | | | | | In | Out | In | Out | In | Out | In | Out | In | Out | |
| Chicken Island Site | | | | | | | | | | | | | | | | | | | | | |
| Residential | 45 | Units | 221 | Multi-Family Housing (Mid-Rise) | Dwelling Units | AM | 0.32 | 14 | 0.56 | 0.44 | 8 | 8 | 0 | 1 | 1 | 1 | 0 | 0 | 7 | 4 | 11 |
| | | | | | | PM | 0.29 | 13 | 0.43 | 0.57 | 6 | 7 | 2 | 1 | 1 | 1 | 0 | 0 | 3 | 5 | 8 |
| Retail | 1.05 | Ksf | 822 | Strip Retail Plaza (<40 Ksf) | 1,000 SF Gross Floor Area | AM | 2.36 | 2 | 0.80 | 0.40 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| | | | | | | PM | 6.59 | 7 | 0.50 | 0.50 | 3 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 2 | 3 |
| Restaurant | 3.17 | Ksf | 932 | High-Turnover (Sit-Down) Restaurant | 1,000 SF Gross Floor Area | AM | 9.57 | 31 | 0.55 | 0.45 | 17 | 14 | 1 | 0 | 2 | 1 | 7 | 7 | 7 | 6 | 13 |
| | | | | | | PM | 9.05 | 29 | 0.81 | 0.39 | 17 | 12 | 2 | 3 | 2 | 1 | 5 | 5 | 8 | 3 | 11 |
| AM Trips | | | | | | | | | | | 26 | 21 | 1 | 1 | 3 | 2 | 7 | 7 | 15 | 11 | 26 |
| PM Trips | | | | | | | | | | | 26 | 23 | 6 | 6 | 3 | 2 | 5 | 5 | 12 | 10 | 22 |
| Notes: Ksf = 1,000 square feet 1. Development sizes and uses are preliminary and are subject to change. 2. Rates shown are roadway peak hour rates from the <i>Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition</i> 3. Final Adjusted Trips are calculated by subtracting internal, transit, and pass-by trips from the Total Trips | | | | | | | | | | | | | | | | | | | | | |