FELLENZER ENGINEERING LLP

Consulting Engineers In: NY, NJ, PA, CT, VT, MA, RI

NEW CENTURY FILM
TOWN OF DEERPARK, NY

517 Neversink Drive
Port Jervis, NY 12771
Section 50- Block 1- Lot 38.23
+/- 40 Acres

FE Project No. 21-488

Prepared For:
New Century Film
517 Neversink Drive
Port Jervis, NY 12771

Attn: Peter Wei
COO

March 8, 2023

Prepared By:
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EXECUTIVE SUMMARY

As summarized in this report, the design of the site will include accommodations for the proposed use per the Town of Deerpark requirements and other local regulatory agency requirements.

Through guidance with the Town Planning Board and the various interested and involved agencies, the applicant has engaged with regional professionals to evaluate the potential impacts to the surrounding environment and nearby residents. These studies have analyzed traffic flow, sight lighting, sanitary wastewater discharge, historical and archeological resources, threatened and endangered species, significant natural communities, stormwater attenuation, and erosion and sediment control.

The goal of these studies is to provide appropriate mitigation measures for any identified environmental impacts that can be implemented into the overall design of the site plan and also be in compliance with town zoning requirements. Through these efforts, it will be demonstrated to the Board and public that these improvements will not have a significant environmental impact within the community and will not warrant a Draft Environmental Impact Study (DEIS) or Positive Declaration of Environmental Significance per SEQRA.

INTRODUCTION

EXISTING AREA

The applicant, New Century Film, is proposing improvements on the existing site located at 517 Neversink Drive in the Town of Deerpark, NY. Lot 50-1-38.23 is approximately 40 acres, within the HMU District (Hamlet Mixed-Use).

The property was originally used for equestrian events and shows in the 1990s prior to New Century Film ("NCF") occupying the site in the late 2010s. NCF currently uses the property as a film studio and offices, hosting events such as conferences, parties, and weddings, as well as organizing and hosting large community festivals, such as the Moon Festival. The goal of NCF is to create positive growth in the area while bridging both Eastern and Western culture. The NCF mission statement is *"Return to tradition and give to the community."*

Existing site features include a large horse show arena, barns and stables, two (2) residential dwellings, an underground rifle and pistol range, and asphalt parking. The site is bordered by the Neversink River to the South and NYS Route 209 to the North. The property is currently approved for the following uses:

- A - Residential (original to site)
- B2 - Multi-purpose building for film studio related activities (approved in 2017)
- B2 - Offices (approved in 2017)
- E - Flea market/vendor area with temporary parking (approved in 2018)
- B1 - Twenty-two (22) room hotel, retail store and restaurant (approved in 2021)
- B3 – Barn (original to site)

There are currently 132 paved parking spaces with an additional 500 grass spaces approved for temporary use for the flea market.

B-1 Hotel/Restaurant/Retail Building

NCF received conditional approval in 2021 from the Town of Deerpark to convert one of their existing office buildings into a mixed-use hotel with food service and retail space. As part of the conditions of approval, the applicant was required to obtain approval from the Orange County Department of Health for a

Public Water Supply and updated SPDES permit, which NCF is currently pursuing. Although the goal for B-1 is to receive final approval and construction permits concurrently with this application, the individual water, sewer, and parking requirements have been incorporated into this application so that an accurate and holistic SEQRA review can be conducted.

FLOODPLAIN

The provided FEMA FIRMette maps indicate that a portion of the project site is within the Neversink River floodway and the 100-year floodplain. There is no disturbance within the floodway currently proposed. A stormwater detention pond is being considered behind the residential structures within the 100-year floodplain. See appendix A.

SOILS

The provided USDA Web Soil Survey Map (appendix B) shows that the underlying soils of the project area are:

- Barbour Fine Sandy Loam (Ba)
- Basher Fine Sandy Loam (Be)
- Otisville Gravelly Sandy Loam (OtB)
- Otisville Gravelly Sandy Loam (OtC)
- Water (W)

ENVIRONMENTAL RESOURCES

Federal wetlands exist due to the Neversink River, and the project site is within the designated floodway and 100-year floodplain. Disturbance within the designated floodway will be avoided. The NYSDEC Environmental Resource Mapper also indicates that the site may contain or be adjacent to a significant natural community or threatened and endangered species. The existing site has experienced disturbance over the years and is mostly covered with maintained grass lawn. Any trees to be removed will be done within the NYSDEC parameters to avoid potential disturbance to the Indiana Bat. Also provided is a copy of the latest Threatened and Endangered Species Report conducted by Peter Torgersen, Environmental Sciences, which evaluated the proposed improvements and surrounding area. Based on this assessment, no significant impact to these resources is anticipated at this time. Refer to Appendix D for the long form EAF and Appendix F for the Torgersen report.

HISTORIC

The proposed site has been indicated as being located in or adjacent to an archeologically sensitive area. Based on the years of prior disturbance to the site, no significant impact to these resources is anticipated. However, The New York State Office of Parks, Recreation and Historic Preservation has been consulted and they have requested that a Phase IA/IB archeological study be conducted to confirm the absence of these resources. This study will be conducted by the applicant through a professional outfit and provided to the Town and SHPO for review.

PROPOSED DESIGN

SITE

The proposed site will consist of:

- A - Residential (original to site)
- B1 - Eight (8) room hotel, retail store and restaurant (approved in 2021)
- B2 - Multi-purpose building (to now include a film screening hall)
- B3 – Eighty-five room (85) hotel and costume workshop (with use of existing subterranean shooting range)
- B4 – Restaurants (New construction)
- C – Film Studios (New construction)
- D- Wastewater Treatment Plant (New construction)
- E - Flea market/vendor area with temporary parking (approved in 2018)

PARKING

Parking has been calculated using the Town of Deerpark municipal code:

- A - Residential (original to site)
  (2) Spaces per DU x 2 DU = 4 spaces
- B1 - Eight (8) room hotel/Restaurant/Retail
  Hotel: (1) Space per room x 8 rooms = 8 spaces
  Restaurant: (1) Space per 50 SF floor area = 900SF / 50SF = 18 spaces
  Retail: (1) Space per 250SF floor area = 1650SF/250SF = 7 spaces
- B2 - Multi-purpose building

Screening Hall: (1) Space per 5 seats = 3,556 seats / 5 = 712 spaces

- B3 – Eighty-five room (85) hotel/Costume Workshop/Shooting Range

  Hotel: (1) Space per room x 85 rooms = 85 spaces

  Workshop: (1) Space per employee x 20 employees = 20 spaces

  Shooting Range: (1) Space per booth x 10 booths = 10 spaces
- B4 – Restaurants (New construction)

  (1) Space per 50 SF floor area = 11,400SF / 50SF = 228 spaces
- C – Film Studios (New construction)

  (1) Space per 50 SF floor area = 10,000 SF / 300 SF = 34 Spaces x 2 = 68 spaces
- D- Wastewater Treatment Plant (New construction)

  (1) Space per employee x 2 employee = 2 spaces
- E - Flea market/vendor area with temporary parking (approved in 2018)

  (2.5) Spaces per vendor x 60 vendors = 150 spaces

Total Required: 1,312 spaces

Total Provided: 1,329 spaces

TRAFFIC

Access to the site will be provided via two (2) existing entrances off of Neversink Drive (CR 80) and one (1) proposed entrance. An existing emergency access driveway will also be utilized off of NYS Route 209 on the West side of the parcel. A traffic analysis has been conducted by Stephen A. Mafia, PE, to analyze the potential impacts to the surrounding transportation infrastructure with the anticipated traffic conditions. Based on the provided study, there is currently no mitigation needed as the existing capacity can accommodate the projected traffic counts. Review and approval for this improvement will be required by Orange County DPW and the New York State Department of Transportation. Refer to Appendix C for the traffic analysis report.

WATER

The property contains three (3) existing wells for potable use. As part of the conditional approval for B1, a public water supply system will be designed and submitted to the Orange County Department of Health for approval. A similar system will be developed to handle the rest of the structures on site and will provide the necessary treatment for the anticipated demand.

Design flows have been developed using hydraulic loading rates listed in the NYSDEC Design Standards for Intermediate-Sized Wastewater Treatment Systems (2014) that are most closely related to the proposed uses:

- A - Residential (original to site)
  110 GPD/Bedroom x 8 bedrooms + 400 GPD kitchen = 1,280 GPD
- B1 - Eight (8) room hotel/Restaurant/Retail
  Hotel: 110 GPD/Bedroom x 8 bedrooms = 880 GPD
  Restaurant: 35 GPD/seat x 50 seats = 1,750 GPD
  Retail: 0.1 GPD/SF x 1,650 SF = 165 GPD
- B2 - Multi-purpose building
  Screening Hall: 5 GPD/seat x 3,556 seats = 17,780 GPD
- B3 – Eighty-five room (85) hotel/Costume Workshop/Shooting Range
  Hotel: 110 GPD/Bedroom x 85 bedrooms = 9,350 GPD
  Workshop: 15 GPD/employee x 20 employees = 300 GPD
  Shooting Range: 15 GPD/employee x 2 employees = 30 GPD
- B4 – Restaurants (New construction)
  35 GPD/seat x 500 seats = 17,500 GPD
- C – Film Studios (New construction)
  15 GPD/employee x 50 employees =750 GPD
- D- Wastewater Treatment Plant (New construction)
  N/A
- E - Flea market/vendor area with temporary parking (approved in 2018)
  Portable toilets to be used

Total = 49,785 Gallons per Day

WASTEWATER TREATMENT

EXISTING WASTEWATER CONDITIONS

Existing buildings on site are currently served by subsurface septic systems. These systems will be decommissioned and abandoned will all sanitary wastewater conveyed to a new waste water treatment plant (WWTP).

WASTEWATER FLOW PROJECTIONS

The proposed development will serve a multi-purpose screening hall, hotel, costume sewing workshop, shooting range, restaurants, and film studios. The projected Average Daily Flow (ADF) of wastewater for the development at full buildout is 50,000 gallons per day (GPD).

The wastewater will be strictly domestic in nature with the following anticipated characteristics:

Table 1 Influent Characteristics

Parameter	**Concentration (mg/l)**
BOD5	250
TSS	250
Ammonia-N	30
TKN	45
Total Phosphorous	10
TDS	600

Treated effluent from the proposed WWTP will be a surface discharge to the Neversink River to southeast of the site. The Neversink River is within the Delaware River Basin, and while draft effluent limits have not yet been obtained from either the New York State Department of Environmental Conservation (NYSDEC) or the Delaware River Basin Commission (DRBC), the following effluent

limits are assumed based on similar sized treatment facilities within the Delaware River Basin:

Table 2 Projected Treated Effluent Limits

Parameter	**Concentration (mg/l)**
CBOD5	30
TSS	30
Ammonia-N	6.20
NO3 & NO2	3.12
TKN	6.20
TN	9.32
Total Phosphorous	0.5
TDS	1000

WASTEWATER TREATMENT PROCESS

The wastewater treatment system has not been definitively selected at this time, but it is likely to be that of a Moving Bed Biofilm Reactor (MBBR). The MBBR process is a fixed-film (or attached growth) biological process used for wastewater treatment at both municipal and industrial facilities for BOD removal, nitrification, denitrification and phosphorus removal.

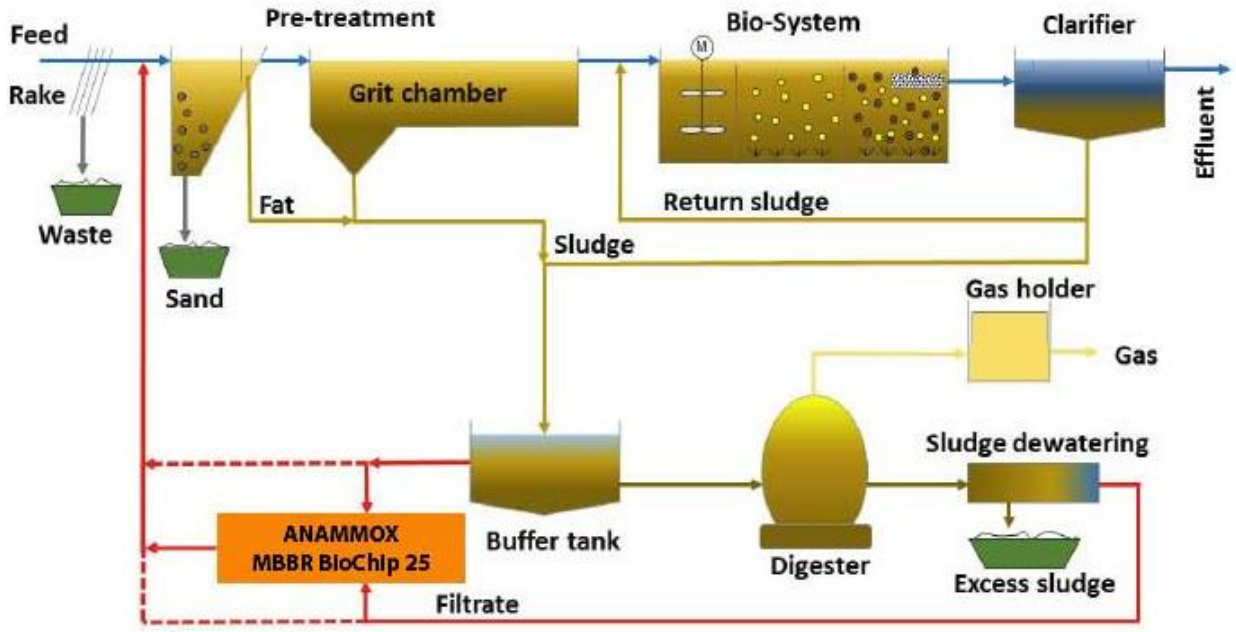
The microorganisms that carry out the treatment are attached to small, plastic, floating media carriers. The processes take place in an aeration tank where the carrier media are kept suspended via a diffused air aeration system. The carrier media is designed to have a high surface area per unit volume to ensure there is enough surface area on which the microorganisms attach and grow.

Screens are used at the outlet of the aeration tanks to keep the carrier media contained within it.

Prior to the MBBR tank, primary clarification is typically used to remove settleable and floatable solids. Within the MBBR tank, as the density of the attached microorganisms increases, it separates via sloughing from the floating media. The bacteria that slough off of the media is settled downstream of the MBBR tank via secondary clarification and removed from the treatment process.

Additional treatment can be added to the secondary effluent depending on the permit limits for the facility. Such additional treatment can include sand filtration, chlorination, dichlorination, ultra-violet disinfection and post-aeration to meet more stringent effluent limits. Phosphorous removal can be obtained using the additional of a metal salt in the MBBR tank with tertiary filtration downstream of secondary clarification.

The MBBR treatment process requires pretreatment to remove gross solids, settable and floatable solids prior to primary treatment.



REGULATORY COMPLIANCE

The wastewater collection and treatment systems will be designed and permitted in conformance with regulations and standards including but not limited to the Federal Clean Water Act and State Environmental Conservation Law as well as the latest editions of NYSDEC Design Standards, Recommended Standards for Wastewater Facilities and TR-16 as published by New England Interstate Water Pollution Control Commission (NEIWPCC).

A State Pollutant Discharge Elimination System (SPDES) permit will be obtained as required by 6 NYCRR Part 750.1 prior to design approval and the initiation of any construction. The issuance of the SPDES permit

will be by the NYSDEC in coordination with the DRBC. In addition, final engineering plans will be reviewed and approved by NYSDEC prior to construction as required by 6 NYCRR Part 750.2. All aspects of wastewater collection and treatment will be subject to review under the State Environmental Quality Review Act (SEQRA). As a result, the Town can be confident that the handling of wastewater generated by the site activities will be reviewed, approved and permitted in such a manner as to mitigate negative effects on the environment.

SYSTEM OWNERSHIP

A New York State transportation corporation will have ownership and be responsible for the operation and maintenance of the collection system and the treatment plant proposed for the development. This entity will be responsible to comply with all applicable water quality standards and the effluent limits set forth by the NYSDEC in the SPDES Permit.

STORMWATER

Stormwater design shall follow the requirements of the New York State Stormwater Design Manual, latest revision. The design will account for the proposed impervious surfaces by adding multiple stormwater detention ponds for water quality treatment, water quantity treatment and runoff reduction before discharging to grade. Storage to accommodate runoff generated from the 100-year storm is being provided. Since the proposed site disturbance is greater than one acre, a full Stormwater Pollution Prevention Plan (SWPPP) will be generated and submitted to the Town of Deerpark for review and approval. A draft SWPPP has been included with this submission.

SITE LIGHTING

Proposed site lighting consists of illuminating the parking lots and driveways. Lighting shall consist of down lighting LED fixtures so that no light source can spill over the property lines greater than allowed per Town Code. A site lighting plan with proposed photometrics will be included at a later date. Refer to Appendix E for manufacturer cut sheets of the proposed fixtures:

Type of Light Source	Maximum Illumination Permitted at Property Line (footcandles)	Maximum Permitted Height of Light (feet)
Globe light	0.20	15
>90% cutoff	0.75	25
<90% cutoff	2	30

LANDSCAPING

Landscaping will consist of utilizing a mixture of existing site features and new plantings throughout the site. The property currently has multiple rows of staggered evergreens and shrubs along the property lines including the road frontage along NYS 209 to provide visual buffering. Additional buffering will be provided adjacent to the residential properties to the West. Plantings will be provided around the various buildings to enhance aesthetics and to provide areas for stormwater runoff infiltration and the reduction of impervious surfaces. Grading of the site is expected to be limited to the southern portion of the site for parking and the stormwater pond. Removal of material is not anticipated at this time. The proposed landscaping will consist of various native trees, bushes and shrubs and will be in accordance with the Town of Deerpark landscaping requirements.

CONCLUSION

As summarized in this report, the design of the site will include accommodations for the proposed use per the Town of Deerpark requirements and other local regulatory agency requirements.

Through guidance with the Town Planning Board and the various interested and involved agencies, the applicant has engaged with regional professionals to evaluate the potential impacts to the surrounding environment and nearby residents. These studies have analyzed traffic flow, sight lighting, sanitary wastewater discharge, historical and archeological resources, threatened and endangered species, significant natural communities, stormwater attenuation, and erosion and sediment control.

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zoning requirements. Through these efforts, it will be demonstrated to the Board and public that these improvements will not have a significant environmental impact within the community and will not warrant a Draft Environmental Impact Study (DEIS) or Positive Declaration of Environmental Significance per SEQRA.

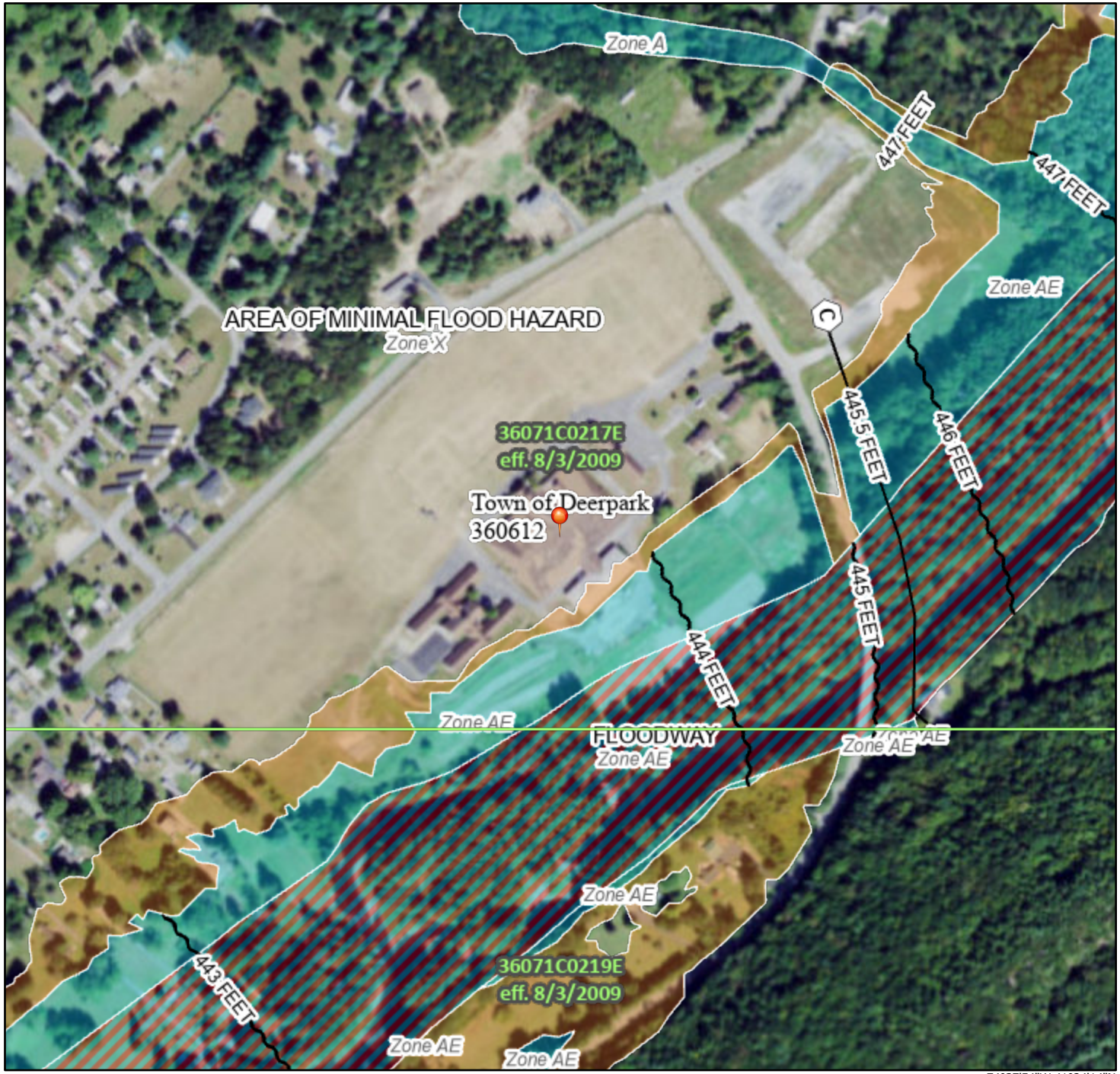
APPENDIX A

FEMA FIRMETTE FLOOD PLAIN MAP

National Flood Hazard Layer FIRMette

FEMA

74°38'32"W 41°24'41"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

74°37'54"W 41°24'14"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/26/2022 at 12:21 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX B

USDA WEB SOIL SURVEY MAP

Soil Map—Orange County, New York
(New Century Film)

Map Scale: 1:4,250 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Orange County, New York
Survey Area Data: Version 22, Aug 29, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ba	Barbour fine sandy loam	6.2	15.1%
Be	Basher fine sandy loam	8.0	19.6%
OtB	Otisville gravelly sandy loam, 0 to 8 percent slopes	19.5	47.6%
OtC	Otisville gravelly sandy loam, 8 to 15 percent slopes	6.8	16.6%
W	Water	0.5	1.1%
Totals for Area of Interest		**41.1**	**100.0%**

Orange County, New York

Ba—Barbour fine sandy loam

Map Unit Setting

National map unit symbol: 9vtl
Elevation: 250 to 1,500 feet
Mean annual precipitation: 42 to 52 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 135 to 215 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Barbour and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Barbour

Setting

Landform: Flood plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy over sandy and gravelly alluvium derived mainly from areas of acid, reddish sandstone, siltstone, and shale

Typical profile

H1 - 0 to 11 inches: fine sandy loam
H2 - 11 to 28 inches: fine sandy loam
H3 - 28 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 36 to 72 inches
Frequency of flooding: OccasionalNone
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: B
Ecological site: F140XY013PA - High Floodplain

Hydric soil rating: No

Minor Components

Udifluvents
Percent of map unit: 5 percent
Hydric soil rating: No

Chenango
Percent of map unit: 5 percent
Hydric soil rating: No

Tioga
Percent of map unit: 5 percent
Hydric soil rating: No

Basher
Percent of map unit: 5 percent
Hydric soil rating: No

Middlebury
Percent of map unit: 5 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Orange County, New York
Survey Area Data: Version 22, Aug 29, 2021

Orange County, New York

Be—Basher fine sandy loam

Map Unit Setting

National map unit symbol: 9vtm
Elevation: 400 to 800 feet
Mean annual precipitation: 42 to 52 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 135 to 215 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Basher and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Basher

Setting

Landform: Flood plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Loamy alluvium derived from acid, reddish sandstone, siltsone, and shale

Typical profile

H1 - 0 to 13 inches: fine sandy loam
H2 - 13 to 30 inches: fine sandy loam
H3 - 30 to 60 inches: very fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: OccasionalNone
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Ecological site: F140XY014NY - Low Floodplain
Hydric soil rating: No

Minor Components

Udifluvents
Percent of map unit: 5 percent
Hydric soil rating: No

Barbour
Percent of map unit: 5 percent
Hydric soil rating: No

Middlebury
Percent of map unit: 5 percent
Hydric soil rating: No

Tioga
Percent of map unit: 5 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Orange County, New York
Survey Area Data: Version 22, Aug 29, 2021

Orange County, New York

OtB—Otisville gravelly sandy loam, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9vw1
Elevation: 100 to 1,180 feet
Mean annual precipitation: 42 to 52 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 135 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Otisville and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Otisville

Setting

Landform: Deltas, outwash plains, terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy and gravelly glaciofluvial deposits

Typical profile

H1 - 0 to 6 inches: gravelly sandy loam
H2 - 6 to 28 inches: gravelly loamy sand
H3 - 28 to 60 inches: very gravelly sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Hoosic
Percent of map unit: 5 percent
Hydric soil rating: No

Fredon
Percent of map unit: 5 percent
Hydric soil rating: No

Chenango
Percent of map unit: 5 percent
Hydric soil rating: No

Oakville
Percent of map unit: 5 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Orange County, New York
Survey Area Data: Version 22, Aug 29, 2021

Orange County, New York

OtC—Otisville gravelly sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9vw2
Elevation: 360 to 900 feet
Mean annual precipitation: 42 to 52 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 135 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Otisville and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Otisville

Setting

Landform: Deltas, outwash plains, terraces
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy and gravelly glaciofluvial deposits

Typical profile

H1 - 0 to 6 inches: gravelly sandy loam
H2 - 6 to 26 inches: gravelly loamy sand
H3 - 26 to 60 inches: very gravelly sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Oakville
Percent of map unit: 5 percent
Hydric soil rating: No

Fredon
Percent of map unit: 5 percent
Hydric soil rating: No

Chenango
Percent of map unit: 5 percent
Hydric soil rating: No

Hoosic
Percent of map unit: 5 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Orange County, New York
Survey Area Data: Version 22, Aug 29, 2021

APPENDIX C

SAMPE TRAFFIC ANALYSIS

Stephan A. Maffia, P.E.
Consulting Engineer

TRAFFIC IMPACT STUDY

NEW CENTURY FILM

Neversink Drive at NYS Route 209

Town of Deerpark
Orange County, New York

January 25, 2023

Stephan A. Maffia, P.E.

103 South Vacation Drive : Wappingers Falls, NY 12590 : (914) 475–2466 : stephanmaffia@gmail.com

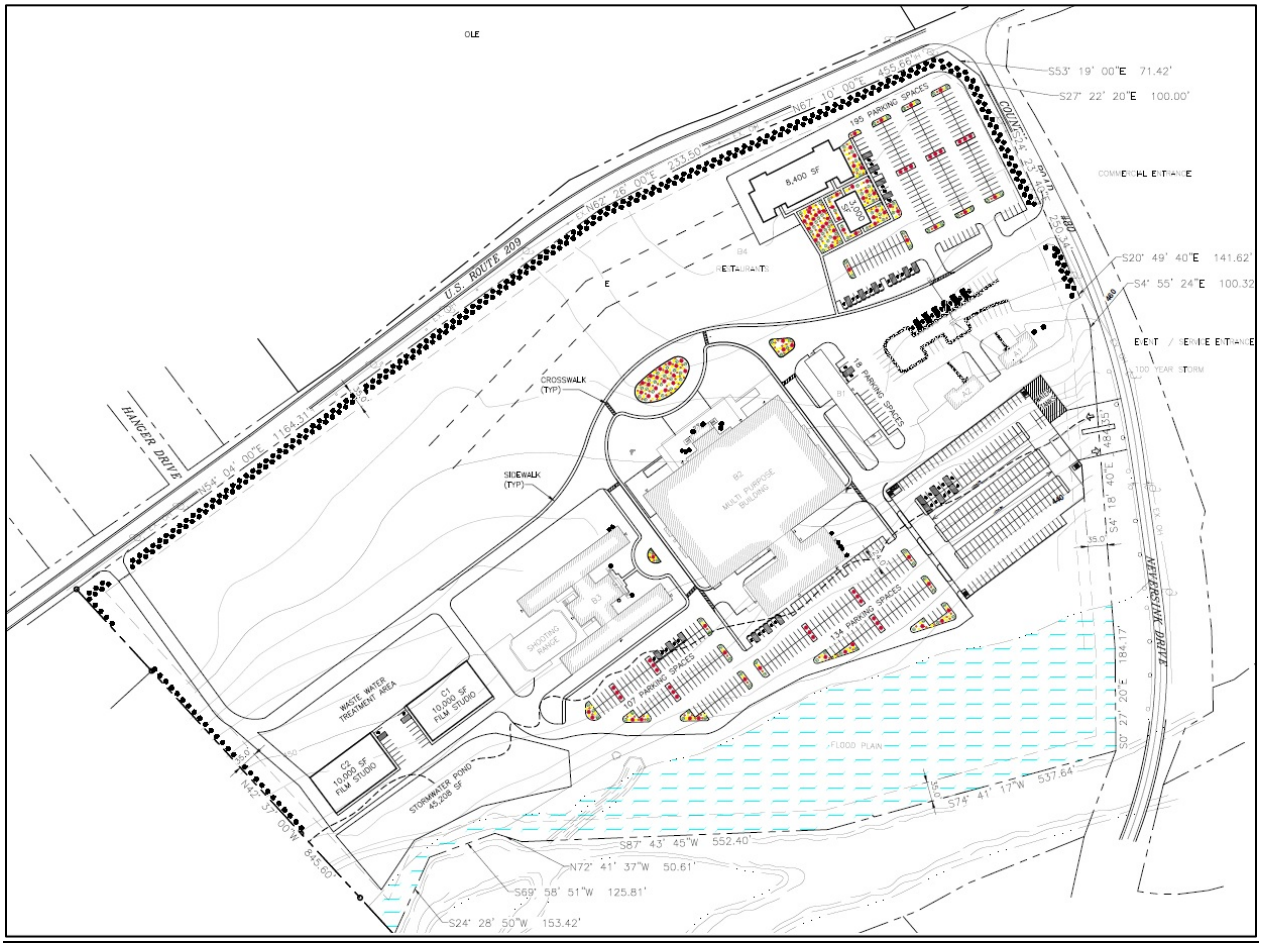
The purpose of this Traffic Impact Study is to identify potential adverse traffic issues that may result due to the development of various improvements and expansions of an existing film studio on property located on Neversink Drive and Route 209 in the Town of Deerpark, New York. The proposed project would include hotel rooms, a multi-purpose building and new restaurants and film studio. The entire site will maintain its existing access from driveways on Neversink Drive. The access to Route 209, which is under the jurisdiction of the New York State Department of Transportation (DOT), will be for emergency use only. Neversink Drive is a designated County Road – CR-80. The project build-out is estimated to be about three years, i.e., completed and occupied in 2025.

The site and its environs are shown in the following map and plan – a Google Earth aerial map showing the approximate boundaries of the site and a plan from the application plan set prepared by Fellenzer Engineering LLP:

SITE LOCATION MAP

Source: Google Earth

SITE PLAN



Source: Fellenzer Engineering LLP

Existing Conditions

The following is a description of existing travel conditions near the site of the New Century Film site:

Roadways

Route 209 is a two-lane generally northeast/southwest major arterial running through the Town, lying just northwest of the project site. Route 209 directly serves both residential and commercial uses. Some residential uses have direct access to Route 209 and in the vicinity of the site there are several intersecting side roads – including Peenpack Trail to the north of the site and Hangar Drive to the south in Deerpark.

There is no on-street parking on Route 209 and the pavement is in good condition. There are two different posted speed limits – 45 mph at the project site starting northeast of the Huguenot property and continuing northeastward, and 40 mph to the southwest through Deerpark and past Hanger Drive. At the intersections of Route 209 with Neversink and Hangar Drives, traffic on the side roads is controlled by a Stop sign while Route 209 traffic is

free flowing. Travel lanes are 12 feet in width and there are 5-foot wide shoulders on both sides.

Neversink Drive is a two-lane County Road (CR-80) that intersects Route 209 at the project site. Its alignment at Route 209 is generally east/west, however, farther south, Neversink Drive curves to a more north/south alignment. It serves primarily residential land uses. The pavement is in good condition and the posted speed limit is 45 mph.

At one time, the speed limit on Neversink Drive was 55 mph and was the subject of a 2015 resolution from the Town Council to the Orange County DPW to review speeds and safety conditions that residents and the Town felt were excessive. That study led to the reduction of the limit to the now posted 45 mph and a number of curve warning signs accompanied by lower advisory speed limits.

Parking is not prohibited on Neversink Drive; however, street parking is rare as virtually all abutting properties have driveways and off-street parking spaces. The roadway width is 22 to 24 feet near the approach to Route 209.

Peenpack Trail is a two-lane local road that intersects Route 209 to the north of the project site. Its alignment at Route 209 is generally east/west. It serves primarily residential land uses. The pavement is in good condition and the posted speed limit is 45 mph.

Parking is not prohibited on Peenpack Trail; however, street parking is rare as virtually all abutting properties have driveways and off-street parking spaces. The roadway width is 22 to 24 feet near the approach to Route 209.

Hangar Drive is a two-lane local road that intersects Route 209 to the south of the project site. Its alignment at Route 209 is generally east/west. It provides partial access to a large residential trailer park property known as the Huguenot. The pavement is in good condition and the posted speed limit is 30 mph at Route 209 and lowers to 25 mph within the Huguenot.

Parking is not prohibited on Hangar Drive; however, street parking is rare as virtually all abutting properties have driveways and off-street parking spaces. The roadway width is ±28 feet near the approach to Route 209.

Traffic Volumes

As proposed, the development will include hotel, restaurant and film studio uses. To evaluate the potential "worst-case" impacts of this type of development, manual turning movement counts were conducted at four key intersections on typical weekday (i.e., non-holiday/recess, school in session) mornings and evenings. The times were 7:00 to 9:00 AM and 4:00 to 6:00 PM on Thursday, October 27, 2022. The counted intersections were as follows:

1. Route 209 and Peenpack Trail
2. Route 209 and Neversink Drive

3. Route 209 and Hanger Drive
4. Neversink Drive and New Century Film Driveway

At all study intersections the minor side-streets are controlled by Stop signs. The AM and PM peak hour volumes (i.e., the highest 60-minute periods) were reduced from the collected 2-hour volumes, which are contained in **Appendix A**. The peak hour volumes are shown graphically in Figures 1 and 2 in **Appendix B** for the AM and PM peak hours, respectively.

Level of Service Analysis – Existing Conditions

The *2016 Highway Capacity Manual – 6th Edition* (HCM), published by the Transportation Research Board, defines Level of Service (LOS) for signalized and unsignalized intersections as a function of the average vehicle control delay. LOS may be calculated per movement or per approach for any intersection configuration, but LOS for the intersection as a whole is only defined for signalized and all-way stop configurations. In this analysis, the study locations are both two-way Stop controlled intersections with "T" shaped configurations.

Delay is defined in the *HCM 2016* as "the additional travel time experienced by a driver, passenger, bicyclist, or pedestrian beyond that which is required to travel at the desired speed."

For unsignalized intersections (i.e., Stop sign controlled), the major road has free through movements while movements from the minor road are controlled by a stop sign. The movements that are subject to control delays are rated on a scale of "A" to "F," with LOS "A" exhibiting very short delays – 10 seconds or less on average – and LOS "F" exhibiting much longer delays – 50 seconds or more per vehicle on average. The relationship of LOS to delay times is shown in the following table:

TABLE 1: LEVEL OF SERVICE VS. DELAY TIMES
STOP/YIELD SIGN CONTROLLED INTERSECTIONS

LOS (Unsignalized Intersections)	Average Control Delay (sec/vehicle)
A	≤10 sec
B	>10–15 sec
C	>15–25 sec
D	>25–35 sec
E	>35–50 sec
F	>50 sec

In the two-way Stop controlled Level of Service analyses, the through movements on the major road and right turns from the major road are assumed to have no delay. LOS for those movements is not an integral part of the analysis, because LOS is determined by control delay, and for these "free" movements, the control delay is zero.

Movements that are subject to small to moderate control delays include left turns from the major road, through movements on the minor road and right turns from the minor road. Movements that are most affected by control delay include left turns from the minor road.

Generally accepted software (Synchro) was used to compute control delays and Levels of Service. Synchro uses the methodologies published in the Highway Capacity Manual and requires input from the user specific to the intersections being studied. Among other items, that input information includes the following:

1. Traffic Volumes – from the manual counts noted above.
2. Speeds – from field observations of posted limits and advisories as noted above.
3. Lane Configuration and Width – from field measurements.
4. Traffic Control – from field observations that included Stop/Yield control or timings and phasing if signal controlled.
5. Peak Hour Factor – from the manual counts noted above.
6. Vehicle Mix/Classification – from NYSDOT counts, which indicate 7% heavy trucks/buses on Route 209, 5% heavy vehicles on Neversink Drive and the default 2% heavy vehicles on the local streets.
7. Buses – from field observations indicating no route buses with stops any study street.
8. Pedestrians/Bicycles – from field observations indicating few if any pedestrians and bicycles.

The Levels of Service and corresponding control delays for the study locations are summarized in the following Table for the AM and PM peak hours. The detailed LOS summary reports are contained in **Appendix C**.

TABLE 2: LEVEL OF SERVICE SUMMARY – EXISTING CONDITIONS

INTERSECTION	MVMT.	EXISTING			
		AM		PM	
		DELAY (SEC)	LOS	DELAY (SEC)	LOS
Route 209 at Peenpack Trail (stop sign control)	NB Left	7.3	A	7.3	A
	SB Left	7.3	A	7.3	A
	EB	11.5	B	12.3	B
	WB	10.7	B	11.0	B
Route 209 at Neversink Dr (stop sign control)	NWB	10.3	B	12.2	B
	SWB Left	7.8	A	7.9	A
Route 209 at Hanger Dr (stop sign control)	SEB	10.2	B	11.1	B
	NEB Left	7.5	A	7.8	A
Neversink Dr at Site Dr (stop sign control)	NB Left	7.4	A	7.4	A
	EB	9.0	A	9.4	A

Upon review of the summary table for existing LOS at the key intersection, it is noted that control delays are low – all below 12.5 seconds with all Levels of Service A and B. These results are indicative of very good operating levels with little or no delay at the intersections.

Future Traffic Conditions

Background Traffic

As noted above, the project is scheduled to be completed and occupied by the year 2025 – about three years from the date of data collection. We would expect that general background traffic growth would occur to account for some minor increases in traffic volumes. This study included a background growth factor, increasing all existing traffic volumes by 4.0 percent. There were no other planned or on-going new developments in the area of the New Century site.

The resulting traffic volumes – projected future traffic without the proposed project – are shown in Figures 3 and 4 in **Appendix B** for the AM and PM peak hours, respectively. This study refers to this future condition as the "No Build" scenario.

The Proposed Project

The site is proposed to have the following uses that are expected to generate peak hour traffic:

1. Hotel – 118 rooms
2. Restaurants – 500 seats
3. Studio Space (for fabrication and set construction) – 50 employees
4. Studio Space (for film sets) – 50 employees
5. Multi-Purpose Building – for internal meetings and screenings on weekdays, with larger screenings, theatre shows, live events/festivals and conferences primarily on weekends.

The industry standard trip generation reference (*The Trip Generation Manual – 11th Edition*) from the Institute of Transportation Engineers (ITE) was referenced to estimate traffic for the proposed project. The ITE Land Uses (LU) that best fit the proposed uses are as follows:

1. Hotel – LU310: Hotel – 118 rooms
2. Restaurants – LU931: Fine Dining Restaurant – 500 seats
3. Studio Space (for fabrication and set construction) – LU140: Manufacturing – 50 employees
4. Studio Space (for film sets) – LU150: Warehousing – 50 employees
5. Multi-Purpose Building (weekday use: small screenings and meetings) – LU 445 Movie Theater – one screen

Note: ITE does not have the specific land uses for the proposed "studio" spaces (Items 3 & 4 above). However, ITE does have other uses that can be considered applicable for set construction and other fabrication work associated with filming – ITE's Manufacturing land use. Also, indoor film sets are basically warehousing space that is used for filming. ITE's Manufacturing and Warehousing data were considered applicable for the New Century Film use.

The results of the ITE data and the application of that information as used in this study, with the trip volumes used in the subsequent analyses at the key study intersections, are summarized as follows:

TABLE 3: TRIP GENERATION

ITE 11th Edition LU310: Hotel		Trip Generation Rate (trips/ksf)		118 rooms Volume	
Period	Time Frame	Enter	Exit	Enter	Exit
AM	Peak Hour of the Adj. Street	0.25	0.20	29	23
PM	Peak Hour of the Adj. Street	0.25	0.25	30	29

ITE 11th Edition LU931: Fine Dining Restaurant		Trip Generation Rate (trips/ksf)		500 seats Volume	
Period	Time Frame	Enter	Exit	Enter	Exit
AM	Peak Hour of the Adj. Street	0.01	0.01	5	5
PM	Peak Hour of the Adj. Street	0.19	0.09	94	46

ITE 11th Edition LU140: Manufacturing		Trip Generation Rate (trips/ksf)		50 employees Volume	
Period	Time Frame	Enter	Exit	Enter	Exit
AM	Peak Hour of the Adj. Street	0.60	0.22	30	11
PM	Peak Hour of the Adj. Street	0.32	0.56	16	28

ITE 11th Edition LU150: Warehousing		Trip Generation Rate (trips/ksf)		50 employees Volume	
Period	Time Frame	Enter	Exit	Enter	Exit
AM	Peak Hour of the Adj. Street	0.44	0.18	22	9
PM	Peak Hour of the Adj. Street	0.24	0.42	12	21

ITE 11th Edition LU 445: Movie Theater		Trip Generation Rate (trips/ksf)		1 screen Volume	
Period	Time Frame	Enter	Exit	Enter	Exit
AM	Peak Hour of the Adj. Street	0.00	0.00	0	0
PM (Friday)	Peak Hour of the Adj. Street	14.00	11.00	14	11

				Total Volume	
Period	Time Frame			Enter	Exit
AM	Peak Hour of the Adj. Street			86	48
PM (Friday)	Peak Hour of the Adj. Street			166	135

Note that the traffic totals shown above do not account for "internal" trips made between uses within the site. For example, guests at the hotel can visit a restaurant during their stay or be involved in filming on a temporary basis. Also, hotel guests, diners and company employees may visit the screening room (movie theater) without leaving the site, thus not accounting for additional external trips. Such internal trips could be as high as 25% to 30%. To be conservative, this study uses a 20% reduction factor to account for internal trips. The resulting net new external trips are estimated as follows:

TABLE 4: NET NEW EXTERNAL TRIP GENERATION

		Internal Trip Reduction	Volume	
Period	Time Frame		Enter	Exit
AM	Peak Hour of the Adj. Street	20%	69	38
PM (Friday)	Peak Hour of the Adj. Street		133	108

Traffic from the proposed development was distributed to the surrounding street network generally in accordance with the existing travel patterns exhibited in the recent manual counts. The resulting trip volume distributions are shown in Figures 5 and 6 of **Appendix B** for the AM and PM peak times, respectively.

The traffic generated by the site was then added to the above-described No Build traffic scenario resulting in the Build scenario – the future traffic volumes with both other background growth traffic and traffic from the proposed development. The resulting Build traffic is shown in Figures 7 and 8 in **Appendix B** for the AM and PM peak hours, respectively.

Level of Service (LOS) analyses were run for the No Build and Build traffic scenarios, using the same methodology as used for the existing condition analysis. The results are summarized in the following table:

TABLE 5: LEVEL OF SERVICE SUMMARY – NO BUILD TO BUILD COMPARISON

INTERSECTION	MVMT.	NO BUILD				BUILD			
		AM		PM		AM		PM	
		DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS
Route 209 at Peenpack Trail (stop sign control)	NB Left	7.3	A	7.3	A	7.3	A	7.3	A
	SB Left	7.3	A	7.3	A	7.3	A	7.3	A
	EB	11.7	B	12.5	B	11.9	B	13.5	B
	WB	10.8	B	11.2	B	11.0	B	11.6	B
Route 209 at Neversink Dr (stop sign control)	NWB	10.4	B	12.5	B	11.3	B	17.0	C
	SWB Left	7.8	A	7.9	A	8.0	A	8.2	A
Route 209 at Hanger Dr (stop sign control)	SEB	10.3	B	11.2	B	10.5	B	12.0	B
	NEB Left	7.5	A	7.8	A	7.6	A	7.9	A
Neversink Dr at Site Dr (stop sign control)	NB Left	7.4	A	7.4	A	7.5	A	7.7	A
	EB	9.0	A	9.4	A	9.7	A	11.5	B

The Build scenario shows a minor change in Level of Service during the PM peak hour on the site driveway at Neversink Drive. Also, during the PM peak hour, there is one other change in Level of Service: a "B" to "C" on the Neversink Drive approach to Route 209 with a minor delay increase of 4½ seconds. This increase is not considered significant.

Except as noted at the site entrance and on Neversink Drive during the PM peak hour, delay times increase by no more than one second from no-build to build conditions. Therefore, with such minimal changes in delay time, the impacts at the study intersections would not be noticeable in terms of LOS. This is an indication that traffic related impacts for the proposed development generally will be minimal.

Multi-Purpose Building (B-2)

As noted above, Building B-2 is proposed to accommodate multiple uses such as internal meeting space and film screenings on weekdays, and screenings, theatre shows, live events/festivals and conferences intended for larger attendance and held primarily on weekends. Those larger events would be accommodated in ±3,500 seats and would be scheduled in advance and held on Saturdays and Sundays.

While the seating appears to represent B-2 as a significant traffic generator, there are many factors that result in much lower trip generation. For example, the proposal for use as a movie/live theater would still provide a single screen/stage. Statistics for movie theater occupancy has rates averaging between 15% and 20%. Applying that rate to the 3,500 seats gives an audience of ±700. That audience would generate just under 300 trips – assuming each vehicle carries between 2 and 3 riders. Moreover, several showings/shows per weekend would spread out the audiences, which ultimately would reach a finite limit. Festivals and conferences, which tend to unfold over the course of many hours throughout the weekend, would further reduce the generated trips during a single hour.

For the reasons stated above, the traffic impact of the proposed Multi-Purpose Building would be limited to weekends and is not expected to negatively impact peak weekend traffic conditions.

Accident Assessment

The NYSDOT provided accident data for the section of Route 209 from Peenpack Trail to Hangar Drive for the last three years – starting June 1, 2019 and ending May 31, 2022. The DOT Summary is shown in Table 6.

There were totals of 2, 8, 9 and 1 accidents in the four years provided by DOT at the intersection and non-intersection locations in the above-described sections of roadways. During that study period, there were three injury accidents and 16 property-damage-only accidents. One accident resulted in a fatality. There were no accidents that were non-reportable.

Table 6: Accident Severity Summary

NYSDOT QRA ACCIDENT SEVERITY SUMMARY					
Query Number/Name FMO-22-20592	Accident Date Range		6/1/2019	To	5/31/2022
	Attribute Query				
Case Year	Injury	Fatality	Property Damage	Non-Reportable	Total
2019	0	1	1	0	2
2020	0	0	8	0	8
2021	3	0	6	0	9
2022	0	0	1	0	1
Totals:	3	1	16	0	
Grand Total:					20

Source: NYSDOT

Detailed summaries of all accidents are included in **Appendix D**. Those summaries include information about each accident, such as location, date and time, severity, type, weather and roadway conditions, and apparent contributing factors. Regarding the accident that resulted in a fatality, the contributing factor was given as "Failure to Yield Right of Way, Turning Improper." These factors are considered driver error.

Data for specific locations were extracted from the detailed summaries and are shown in the following Table:

Table 7: Accident Summary by Location

ACCIDENT SUMMARY BY LOCATION					
ON STREET	AT OR NEAR CROSS-STREET	NUMBER OF ACCIDENTS			
		6/30/19 to 12/31/19	2020	2021	1/1/22 to 5/31/22
ROUTE 209	PEENPACK TRAIL	0	1	1	0
	CORA ROSE LANE	0	0	1	0
	TUFANO LANE	0	1	0	0
	NEVERSINK DRIVE	2	4	4	1
	PRIVATE DRIVEWAY	0	1	1	0
	HANGAR DRIVE	0	0	2	0
NEVERSINK DRIVE	Route 209	0	1	0	0

There are two methods of measuring the relative safety history of each study intersection:

1) Frequency = Number of Accidents/Year
2) Rate = Number of Accidents per annual Vehicular Volume

Frequency is simply read from the Summary Table for each location and year. For example, in 2021 there were four (4) accidents at the Route 209/Neversink Drive intersection, described in the detailed summaries as follows:

Table 8: 2021 Accident Details – Route 209 at Neversink Drive

Case Number	Crash Severity	Case Year	Collision Type	Crash Date	Crash Time	Crash Type	Apparent Contributing Factor
38827009	INJURY	2021	REAR END	4/17/2021	11:45 AM	COLLISION WITH MOTOR VEHICLE	V1:(FOLLOWING TOO CLOSELY,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
38835503	PDO	2021	OTHER	4/29/2021	9:38 PM	COLLISION WITH DEER	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
38998030	INJURY	2021	OTHER	8/8/2021	12:26 PM	RAN OFF ROAD ONLY	V1:(UNSAFE SPEED,DRIVER INEXPERIENCE)
39163190	PDO	2021	REAR END	12/22/2021	12:45 PM	COLLISION WITH MOTOR VEHICLE	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(CELL PHONE (HAND HELD),FOLLOWING TOO CLOSELY)

One accident – a "ran off the road" crash – resulted in injury and was attributed to "unsafe speed and driver inexperience." Another accident – a deer strike – resulted in property damage only. The remaining two crashes were rear end type and were attributable to following too closely (tailgating) and distracted driving (cell phone).

In this assessment, contributing factors were primarily driver error related or unknown, as no physical roadway or operational issues were reported. This is an indication of good safety conditions.

Frequencies of five to six or more accidents per year – and a consistent frequency in that range for several consecutive years - are typically indicative of a possible unsafe condition that would bear further study. As shown in Table 7, above, none of the studied intersections meet those thresholds.

Accident rates for State highways are determined by calculating the number of accidents that occurred in the study period per million entering vehicles (MEV) in the section of roadway during that period. The number of accidents is the total number shown for the one-year period for all intersection and non-intersection locations listed in the Table above. The MEV is computed from the recent DOT counts as summarized in Appendix A. The 3-year accident total, the MEV for that period, the resulting rates and the comparable Statewide average rate are summarized in the following Table:

Table 9: Accident Rate Comparison

ROUTE 209 ACCIDENT RECORD COMPARED TO STATEWIDE AVERAGE					
FULL CALANDER YEAR	ROADWAY	NUMBER OF ACCIDENTS IN THE STATE RIGHT-OF-WAY	MILLION ENTERING VEHICLES (MEV)*	CALCULATED RATE (ACCIDENTS/MEV)	STATEWIDE AVERAGE RATE** (ACCIDENTS/MEV)
2020	ROUTE 209	7	2.04	3.43	3.73
2021		9	2.04	4.41	

SED ON NYSDOT ESTIMATED AADT VOLUME OF 5,600 ENTERING VEHICLES/DAY X 365 DAYS
ee APPENDIX E for the applicable State DOT rate statistics

Since there were totals of seven and nine accidents in the two full calendar years on Route 209, the calculated rates are 3.43 (2020) and 4.41 (2021). These rates are consistent with the statewide average of 3.73.

Moreover, note the following:

1. Accident frequencies are low – generally four (4) or fewer accidents per year at all intersections in the study area.
2. Yearly accident rates are consistent with the statewide average.
3. There are no indications that there are unsafe conditions within the study area.

It is concluded that the proposed New Century Film development will not adversely impact the accident history in the study area. The added volume from the site will be distributed in several different directions thereby spreading out the potential increases. No safety issues are expected due to site generated traffic.

Traffic Impacts During Construction

Impacts due to construction traffic will be temporary in nature, lasting for the duration of the on-going building program at the site. Traffic would consist of occasional heavy trucks delivering building materials to the project site and daily traffic from vehicles belonging to construction workers. Typically, large pieces of construction equipment such as bulldozers and excavators are brought to the site (if needed) at the beginning of the project and kept on-site until no longer needed. Construction may also require the temporary, short-term closure of traffic lanes and flagging to direct traffic during the closure. This will be coordinated with the local Police Department if required. Construction workers' vehicles would be parked on-site.

Conclusions

This Traffic Impact Study and, in particular, the Level of Service and accident analyses summarized above indicate that, while there will be increases in traffic volumes on the adjacent streets and minor increases in control delay times at key intersections, traffic flows and Levels of Service generally would not be negatively impacted. It is concluded that the proposed project will not adversely impact traffic conditions on the adjacent streets and at intersections in the study area.

APPENDIX A

DOT TRAFFIC VOLUME DATA

2022 INTERSECTION TURNING MOVEMENT COUNTS

NYSDOT TRAFFIC VOLUMES				
Route 209				
FUNCTIONAL_CLASS	14			
FACTOR_GROUP	40			
MONTH	10			
DAY_OF_FIRST_DATA	1			
YEAR	2018			
SPECIFIC_RECORDER_PLACEMENT 400' E OF TRI STATES CAMP RD				
SEASONAL_FACTOR	1.034			
AXLE_FACTOR	1			
Time Period		Average Hourly Volume		
From	To	Eastbound	Westbound	Total
12:00AM	1:00 AM	18	11	29
1:00 AM	2:00 AM	14	10	24
2:00 AM	3:00 AM	6	8	14
3:00 AM	4:00 AM	6	11	17
4:00 AM	5:00 AM	18	16	34
5:00 AM	6:00 AM	42	73	115
6:00 AM	7:00 AM	115	128	243
7:00 AM	8:00 AM	149	212	361
8:00 AM	9:00 AM	141	181	322
9:00 AM	10:00 AM	132	192	324
10:00 AM	11:00 AM	145	163	308
11:00 AM	12:00 PM	155	171	326
12:00 PM	1:00 PM	171	174	345
1:00 PM	2:00 PM	164	190	354
2:00 PM	3:00 PM	250	190	440
3:00 PM	4:00 PM	242	254	496
4:00 PM	5:00 PM	262	245	507
5:00 PM	6:00 PM	276	206	482
6:00 PM	7:00 PM	180	163	343
7:00 PM	8:00 PM	136	132	268
8:00 PM	9:00 PM	114	72	186
9:00 PM	10:00 PM	68	46	114
10:00 PM	11:00 PM	50	41	91
11:00 PM	12:00 AM	25	34	59
	AADT	**2784**	**2827**	**5611**

Station	FC	County Order	End Mile Point	Section Length	Road Name	Beginning Description	End Description	2019 Estimate AADT	2019 Estimate % Trucks	<<< Previous Counts YEAR	AADT	YEAR	AADT	YEAR	AADT	YEAR	AADT
83_0516	16	01	1689	0039		START 207/300 OLAP	END 207/300 OLAP	27166	4.4	2019	27166	2016	24921	2013	23699	2010	23938
83_0517	16	01	1907	0218		END 207/300 OLAP	RT 17K END RT 207	9080	4.1	2016	9119	2013	8797	2010	8598	2007	9125
Route	**NY208**	**County**	**071**	**Orange**		**Region**	**08**										
83_0032	16	01	0087	0087		RT 17M	RTS 6 & 17	15848	3.9	2016	15915	2010	16887	2007	20697	2004	18134
83_0031	16	01	0381	0294		RTS 6 & 17	CR 27 CLOVE RD	17231	3.3	2018	17255	2011	16022	2008	17198	2005	16999
83_0522	16	01	0741	0360		CR 27 CLOVE RD	RT 94 WASHINGTONVILLE	7479	3	2018	7490	2012	7798	2008	9050	2005	9342
83_0523	14	01	0953	0212		RT 94 WASHINGTONVILLE	CR 8/SARAH WELLS TR	5800	4.9	2018	5821	2015	6456	2012	6278	2009	6952
83_0524	14	01	1105	0152	NY 208	CR 8/SARAH WELLS TR	START NY 207/NY 208 OLAP	2888	5	2016	2920	2012	3125	2009	3354	2006	3679
83_0514	14	01	1118	0013		START NY 207/NY 208 OLAP	END 207/208 OLAP	6245	5.6	2018	6268	2015	6377	2009	6242	2006	7405
83_0525	14	01	1319	0201		END 207/208 OLAP	CR 4/MAYBROOK RD	3182	5.6	2018	3193	2014	2154	2011	3205	2008	3552
83_0057	14	01	1568	0249	HOMESTEAD AVE N	CR 4/MAYBROOK RD	RT 84I OVER	6742	6.2	2017	6791	2011	7095	2008	7474	2005	8532
83_0526	16	01	1681	0113		RT 84I OVER	RT 17K	17100	7.2	2019	17100	2016	16817	2013	17049	2010	14536
83_0289	16	01	1945	0264		RT 17K	END NY 52/NY 208 OLAP/MAIN S	11268	4.7	2018	11284	2014	10519	2011	9825	2008	10030
83_0299	16	01	1951	0006		END NY 52/NY 208 OLAP/MAIN S	START NY 52/NY 208 OLAP/MAIN	13513	4.4	2018	13532	2014	20448	2011	18609	2008	14700
83_0290	16	01	2044	0093	ULSTER AVE NY 2	START NY 52/NY 208 OLAP/MAIN	LAKE OSIRIS RD	6008	6.1	2016	6034	2013	5351	2010	5422	2007	5606
83_0828	16	01	2209	0165		LAKE OSIRIS RD	Orange/Ulster Co Line	4265	7.2	2017	4277	2011	4804	2008	4345	2002	5021
Route	**NY208**	**County**	**111**	**Ulster**		**Region**	**08**										
86_0529	16	02	0169	0169		Orange/Ulster Co Line	RT 300	8000	12.2	2019	8000	2009	8574	2006	7806	2003	9032
86_0531	6	02	0696	0527		RT 300	RTS 44 & 55	5685	6.8	2017	5650	2011	5681	2008	5925	2005	6380
86_0532	16	02	1269	0573		RTS 44 & 55	RTS 299 & 32 SB END RT 208	6275	5.3	2018	6284	2015	5995	2012	6175	2009	5512
Route	**US209**	**County**	**071**	**Orange**		**Region**	**08**										
83_0012	14	01	0061	0061	PIKE ST	PENN STATE LINE START 6/209	BEGIN 6/209 OLAP PIKE ST	9375	3.5	2018	9409	2015	10536	2009	10567	2004	12094
83_0013	14	01	0086	0025	EAST MAIN ST	BEGIN 6/209 OLAP PIKE ST	END 6/209 OLAP FOWLER ST	10544	4.8	2018	10582	2014	10429	2011	8189	2008	11878
83_0533	14	01	0185	0099	KINGSTON AVE	END 6/209 OLAP FOWLER ST	PORT JERVIS CL / DEERPARK TL	7959	6.9	2018	7988	2014	7053	2008	9498	2002	7753
83_0534	14	01	0440	0255		PORT JERVIS CL / DEERPARK TL	CR 80 NEVERSINK DR	5591	7.6	2018	5611	2015	5941	2011	5861	2007	6784
83_0128	14	01	0888	0448		CR 80 NEVERSINK DR	RT 211 CUDDEBACKVILLE	5181	8.8	2018	5200	2014	4924	2011	4503	2008	4955
83_0535	4	01	1204	0316		RT 211 CUDDEBACKVILLE	Orange/Sulliv Co Line	2785	8.7	2018	2791	2014	2803	2011	2767	2007	3012
Route	**US209**	**County**	**105**	**Sullivan**		**Region**	**09**										
96_0283	4	02	0546	0546		Orange/Sulliv Co Line	ACC RT 17	3848	7.8	2017	3854	2011	2785	2007	3005	2004	3497

	Project	New Century Film														
	Intersection	Route 209 at Peenpack Trail														
AM PEAK HOUR																
Day/Date	Thursday	10/27/2022														
		1	2	3	4	5	6	7	8	9	10	11	12			
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R			
	Field #	**4**	**5**	**6**	**10**	**11**	**12**	**7**	**8**	**9**	**1**	**2**	**3**			
7:00 AM	7:15 AM	4	46	1	1	33	1	0	0	1	2	0	14			
7:15 AM	7:30 AM	4	48	2	1	31	1	0	0	1	2	0	11			
7:30 AM	7:45 AM	5	49	1	0	37	2	0	1	1	3	0	10			
7:45 AM	8:00 AM	4	58	1	1	30	1	0	0	2	5	0	14			
8:00 AM	8:15 AM	6	47	1	2	33	3	0	0	0	4	0	10			
8:15 AM	8:30 AM	6	44	2	2	30	1	1	1	1	5	0	10			
8:30 AM	8:45 AM	5	39	1	1	36	4	1	0	2	5	1	8			
8:45 AM	9:00 AM	4	44	1	1	30	1	1	0	1	4	0	7			
9:00 AM	9:15 AM															
9:15 AM	9:30 AM															
9:30 AM	9:45 AM															
9:45 AM	10:00 AM															
7:00 AM	7:15 AM	4	46	1	1	33	1	0	0	1	2	0	14	103		7:15 AM
7:15 AM	7:30 AM	4	48	2	1	31	1	0	0	1	2	0	11	101		7:30 AM
7:30 AM	7:45 AM	5	49	1	0	37	2	0	1	1	3	0	10	109		7:45 AM
7:45 AM	8:00 AM	4	58	1	1	30	1	0	0	2	5	0	14	116	429	8:00 AM
8:00 AM	8:15 AM	6	47	1	2	33	3	0	0	0	4	0	10	106	432	8:15 AM
8:15 AM	8:30 AM	6	44	2	2	30	1	1	1	1	5	0	10	103	434	8:30 AM
8:30 AM	8:45 AM	5	39	1	1	36	4	1	0	2	5	1	8	103	428	8:45 AM
8:45 AM	9:00 AM	4	44	1	1	30	1	1	0	1	4	0	7	94	406	9:00 AM
9:00 AM	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	300	9:15 AM
9:15 AM	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	197	9:30 AM
9:30 AM	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	94	9:45 AM
9:45 AM	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10:00 AM
		21	198	5	5	130	7	1	2	4	17	0	44	116	434	
														7:30 AM	8:30 AM	
															PHF	0.94
											PEAK HOUR SUMMARY			EB	L	21
														EB	T	198
														EB	R	5
														WB	L	5
														WB	T	130
														WB	R	7
														NB	L	1
														NB	T	2
														NB	R	4
														SB	L	17
														SB	T	0
														SB	R	44

	Project	New Century Film														
	Intersection	Route 209 at Peenpack Trail														
PM PEAK HOUR								FILL IN BLUE FIELDS ONLY								
Day/Date	Thursday	10/27/2022														
		1	2	3	4	5	6	7	8	9	10	11	12			
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R			
	Field #	**4**	**5**	**6**	**10**	**11**	**12**	**7**	**8**	**9**	**1**	**2**	**3**			
4:00 PM	4:15 PM	11	47	1	0	37	2	0	0	0	4	0	11			
4:15 PM	4:30 PM	11	55	0	1	41	3	0	0	1	5	0	10			
4:30 PM	4:45 PM	15	50	0	0	40	4	0	0	1	6	0	14			
4:45 PM	5:00 PM	10	49	0	0	40	2	1	0	0	6	0	11			
5:00 PM	5:15 PM	10	47	0	0	37	3	0	0	0	7	0	11			
5:15 PM	5:30 PM	15	47	0	0	39	6	0	0	0	6	1	3			
5:30 PM	5:45 PM	9	50	0	0	45	2	0	0	0	6	0	5			
5:45 PM	6:00 PM	9	47	0	0	40	2	0	0	0	8	0	7			
6:00 PM	6:15 PM															
6:15 PM	6:30 PM															
6:30 PM	6:45 PM															
6:45 PM	7:00 PM															
4:00 PM	4:15 PM	11	47	1	0	37	2	0	0	0	4	0	11	113		4:15 PM
4:15 PM	4:30 PM	11	55	0	1	41	3	0	0	1	5	0	10	127		4:30 PM
4:30 PM	4:45 PM	15	50	0	0	40	4	0	0	1	6	0	14	130		4:45 PM
4:45 PM	5:00 PM	10	49	0	0	40	2	1	0	0	6	0	11	119	489	5:00 PM
5:00 PM	5:15 PM	10	47	0	0	37	3	0	0	0	7	0	11	115	491	5:15 PM
5:15 PM	5:30 PM	15	47	0	0	39	6	0	0	0	6	1	3	117	481	5:30 PM
5:30 PM	5:45 PM	9	50	0	0	45	2	0	0	0	6	0	5	117	468	5:45 PM
5:45 PM	6:00 PM	9	47	0	0	40	2	0	0	0	8	0	7	113	462	6:00 PM
6:00 PM	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	347	6:15 PM
6:15 PM	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	230	6:30 PM
6:30 PM	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	113	6:45 PM
6:45 PM	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7:00 PM
		46	201	0	1	158	12	1	0	2	24	0	46	130	491	
														4:15 PM	5:15 PM	
															PHF	0.94
											PEAK HOUR SUMMARY			EB	L	46
														EB	T	201
														EB	R	0
														WB	L	1
														WB	T	158
														WB	R	12
														NB	L	1
														NB	T	0
														NB	R	2
														SB	L	24
														SB	T	0
														SB	R	46

	Project	New Century Film														
	Intersection	Route 209 at Neversink Drive														
AM PEAK HOUR																
Day/Date	Thursday	10/27/2022														
		1	2	3	4	5	6	7	8	9	10	11	12			
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R			
	Field #		**3**	**4**	**1**	**2**		**5**		**6**						
7:00 AM	7:15 AM		47	8	12	33		3		10						
7:15 AM	7:30 AM		55	10	10	26		3		13						
7:30 AM	7:45 AM		48	5	11	31		3		11						
7:45 AM	8:00 AM		41	6	13	37		4		12						
8:00 AM	8:15 AM		42	7	10	28		5		13						
8:15 AM	8:30 AM		38	5	13	27		5		18						
8:30 AM	8:45 AM		40	5	11	31		6		14						
8:45 AM	9:00 AM		10	8	11	28		7		11						
9:00 AM	9:15 AM															
9:15 AM	9:30 AM															
9:30 AM	9:45 AM															
9:45 AM	10:00 AM															
7:00 AM	7:15 AM	0	47	8	12	33	0	3	0	10	0	0	0	113		7:15 AM
7:15 AM	7:30 AM	0	55	10	10	26	0	3	0	13	0	0	0	117		7:30 AM
7:30 AM	7:45 AM	0	48	5	11	31	0	3	0	11	0	0	0	109		7:45 AM
7:45 AM	8:00 AM	0	41	6	13	37	0	4	0	12	0	0	0	113	452	8:00 AM
8:00 AM	8:15 AM	0	42	7	10	28	0	5	0	13	0	0	0	105	444	8:15 AM
8:15 AM	8:30 AM	0	38	5	13	27	0	5	0	18	0	0	0	106	433	8:30 AM
8:30 AM	8:45 AM	0	40	5	11	31	0	6	0	14	0	0	0	107	431	8:45 AM
8:45 AM	9:00 AM	0	10	8	11	28	0	7	0	11	0	0	0	75	393	9:00 AM
9:00 AM	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	288	9:15 AM
9:15 AM	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	182	9:30 AM
9:30 AM	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	75	9:45 AM
9:45 AM	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10:00 AM
		0	191	29	46	127	0	13	0	46	0	0	0	117	452	
														7:00 AM	8:00 AM	
															PHF	0.97
											PEAK HOUR SUMMARY			EB	T	191
														EB	R	29
														WB	L	46
														WB	T	127
														NB	L	13
														NB	R	46

	Project	New Century Film														
	Intersection	Route 209 at Neversink Drive														
PM PEAK HOUR																
Day/Date	Thursday	10/27/2022														
		1	2	3	4	5	6	7	8	9	10	11	12			
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R			
	Field #		**3**	**4**	**1**	**2**		**5**		**6**						
4:00 PM	4:15 PM		47	7	10	48		10		11						
4:15 PM	4:30 PM		60	6	15	45		15		15						
4:30 PM	4:45 PM		50	8	15	41		14		17						
4:45 PM	5:00 PM		38	15	12	38		8		22						
5:00 PM	5:15 PM		41	11	13	39		8		10						
5:15 PM	5:30 PM		41	12	11	46		7		10						
5:30 PM	5:45 PM		43	11	18	59		9		11						
5:45 PM	6:00 PM		47	8	17	43		9		12						
6:00 PM	6:15 PM															
6:15 PM	6:30 PM															
6:30 PM	6:45 PM															
6:45 PM	7:00 PM															
4:00 PM	4:15 PM	0	47	7	10	48	0	10	0	11	0	0	0	133		4:15 PM
4:15 PM	4:30 PM	0	60	6	15	45	0	15	0	15	0	0	0	156		4:30 PM
4:30 PM	4:45 PM	0	50	8	15	41	0	14	0	17	0	0	0	145		4:45 PM
4:45 PM	5:00 PM	0	38	15	12	38	0	8	0	22	0	0	0	133	567	5:00 PM
5:00 PM	5:15 PM	0	41	11	13	39	0	8	0	10	0	0	0	122	556	5:15 PM
5:15 PM	5:30 PM	0	41	12	11	46	0	7	0	10	0	0	0	127	527	5:30 PM
5:30 PM	5:45 PM	0	43	11	18	59	0	9	0	11	0	0	0	151	533	5:45 PM
5:45 PM	6:00 PM	0	47	8	17	43	0	9	0	12	0	0	0	136	536	6:00 PM
6:00 PM	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	414	6:15 PM
6:15 PM	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	287	6:30 PM
6:30 PM	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	136	6:45 PM
6:45 PM	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7:00 PM
		0	195	36	52	172	0	47	0	65	0	0	0	156	567	
														4:00 PM	5:00 PM	
															PHF	0.91
											PEAK HOUR SUMMARY			EB	T	195
														EB	R	36
														WB	L	52
														WB	T	172
														NB	L	47
														NB	R	65

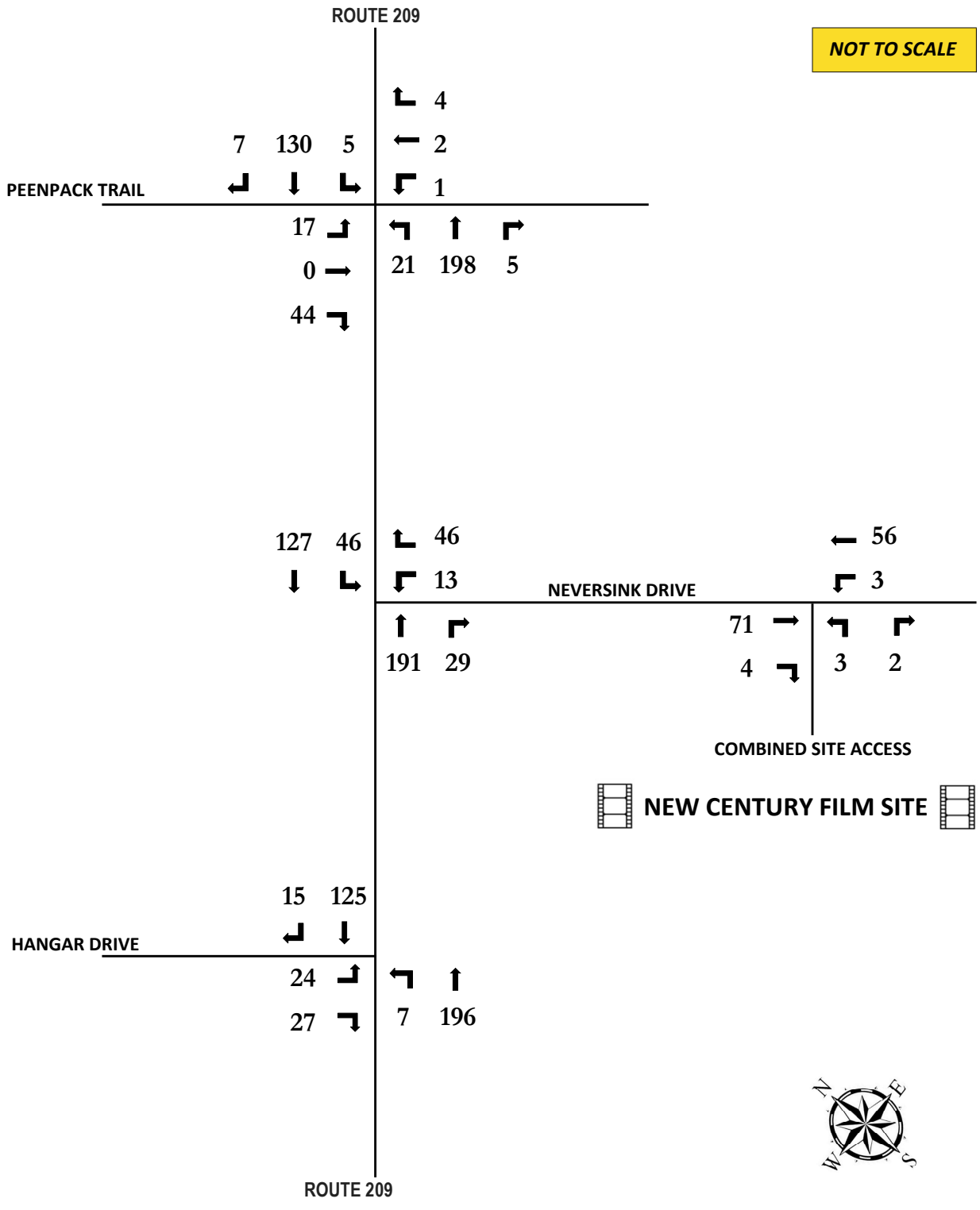
	Project	New Century Film															
	Intersection	Route 209 at Hangar Drive															
AM PEAK HOUR																	
Day/Date	Thursday	10/27/2022															
		1	2	3	4	5	6	7	8	9	10	11	12				
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R				
	Field #	**4**					**1**				**2**		**3**				
7:00 AM	7:15 AM	1					4				4		5				
7:15 AM	7:30 AM	2					1				5		5				
7:30 AM	7:45 AM	0					2				5		7				
7:45 AM	8:00 AM	1					3				2		7				
8:00 AM	8:15 AM	2					3				2		6				
8:15 AM	8:30 AM	1					2				8		3				
8:30 AM	8:45 AM	3					6				10		10				
8:45 AM	9:00 AM	1					4				4		8				
9:00 AM	9:15 AM																
9:15 AM	9:30 AM																
9:30 AM	9:45 AM																
9:45 AM	10:00 AM																
7:00 AM	7:15 AM	1	0	0	0	0	4	0	0	0	4	0	5	14		7:15 AM	
7:15 AM	7:30 AM	2	0	0	0	0	1	0	0	0	5	0	5	13		7:30 AM	
7:30 AM	7:45 AM	0	0	0	0	0	2	0	0	0	5	0	7	14		7:45 AM	
7:45 AM	8:00 AM	1	0	0	0	0	3	0	0	0	2	0	7	13	54	8:00 AM	
8:00 AM	8:15 AM	2	0	0	0	0	3	0	0	0	2	0	6	13	53	8:15 AM	
8:15 AM	8:30 AM	1	0	0	0	0	2	0	0	0	8	0	3	14	54	8:30 AM	
8:30 AM	8:45 AM	3	0	0	0	0	6	0	0	0	10	0	10	29	69	8:45 AM	
8:45 AM	9:00 AM	1	0	0	0	0	4	0	0	0	4	0	8	17	73	9:00 AM	
9:00 AM	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	60	9:15 AM	
9:15 AM	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	46	9:30 AM	
9:30 AM	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	17	9:45 AM	
9:45 AM	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10:00 AM	
		7	0	0	0	0	15	0	0	0	24	0	27	29	73		
														8:00 AM	9:00 AM		
															PHF	0.63	
											PEAK HOUR SUMMARY			EB	L	7	
														EB	T	196	
														WB	T	125	
														WB	R	15	
														SB	L	24	
														SB	R	27	

	Project	New Century Film														
	Intersection	Route 209 at Hangar Drive														
PM PEAK HOUR																
Day/Date	Thursday	10/27/2022														
		1	2	3	4	5	6	7	8	9	10	11	12			
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R			
	Field #	**4**					**1**				**2**		**3**			
4:00 PM	4:15 PM	2					3				4		1			
4:15 PM	4:30 PM	2					3				3		4			
4:30 PM	4:45 PM	3					3				3		3			
4:45 PM	5:00 PM	4					4				1		2			
5:00 PM	5:15 PM	5					5				4		1			
5:15 PM	5:30 PM	6					6				1		1			
5:30 PM	5:45 PM	4					5				2		2			
5:45 PM	6:00 PM	4					5				2		3			
6:00 PM	6:15 PM															
6:15 PM	6:30 PM															
6:30 PM	6:45 PM															
6:45 PM	7:00 PM															
4:00 PM	4:15 PM	2	0	0	0	0	3	0	0	0	4	0	1	10		4:15 PM
4:15 PM	4:30 PM	2	0	0	0	0	3	0	0	0	3	0	4	12		4:30 PM
4:30 PM	4:45 PM	3	0	0	0	0	3	0	0	0	3	0	3	12		4:45 PM
4:45 PM	5:00 PM	4	0	0	0	0	4	0	0	0	1	0	2	11	45	5:00 PM
5:00 PM	5:15 PM	5	0	0	0	0	5	0	0	0	4	0	1	15	50	5:15 PM
5:15 PM	5:30 PM	6	0	0	0	0	6	0	0	0	1	0	1	14	52	5:30 PM
5:30 PM	5:45 PM	4	0	0	0	0	5	0	0	0	2	0	2	13	53	5:45 PM
5:45 PM	6:00 PM	4	0	0	0	0	5	0	0	0	2	0	3	14	56	6:00 PM
6:00 PM	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	41	6:15 PM
6:15 PM	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	27	6:30 PM
6:30 PM	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	14	6:45 PM
6:45 PM	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7:00 PM
		19	0	0	0	0	21	0	0	0	9	0	7	15	56	
														5:00 PM	6:00 PM	
															PHF	0.93
											PEAK HOUR SUMMARY			EB	L	19
														EB	T	222
														WB	T	198
														WB	R	21
														SB	L	9
														SB	R	7

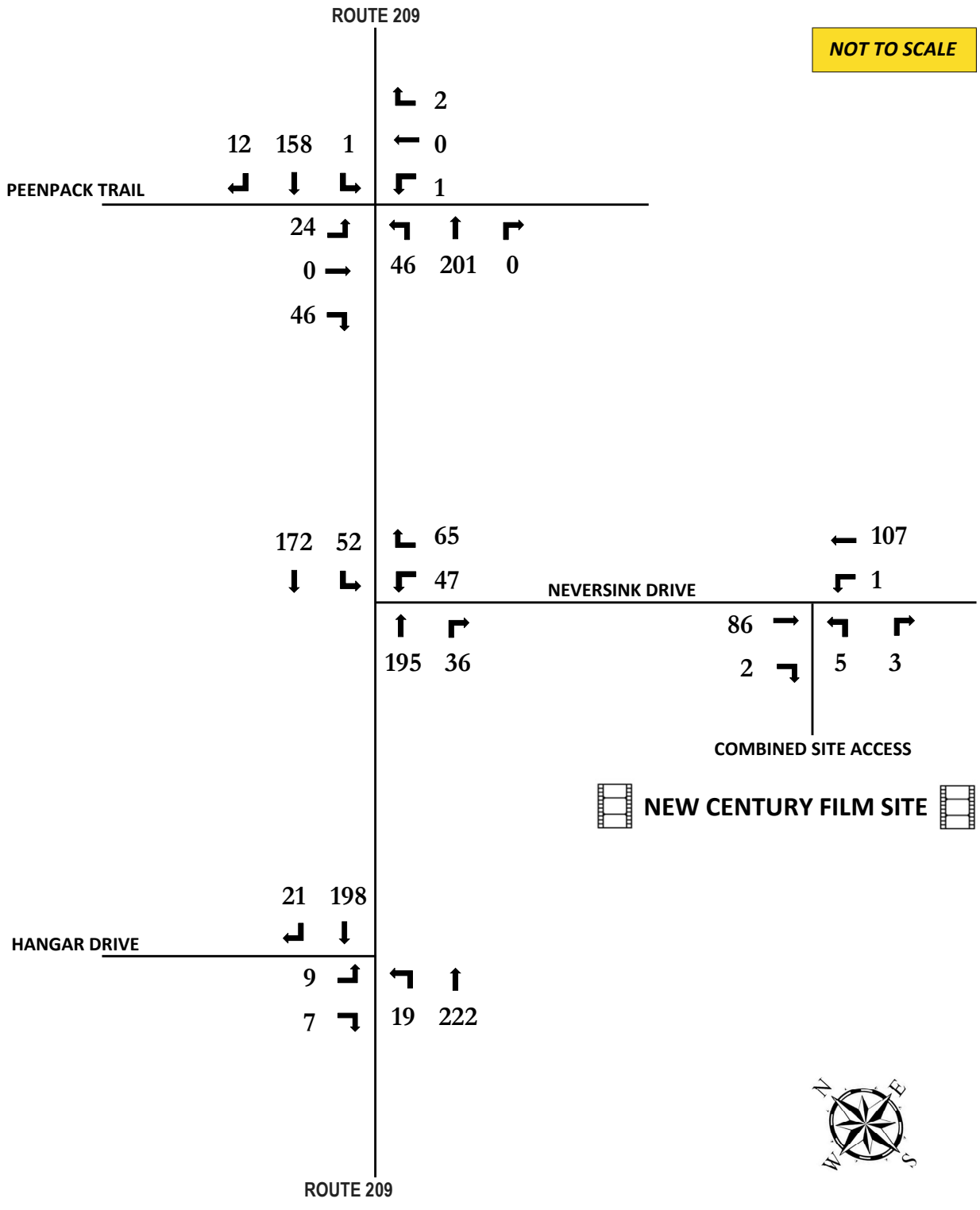
APPENDIX B

TRAFFIC VOLUME DIAGRAMS

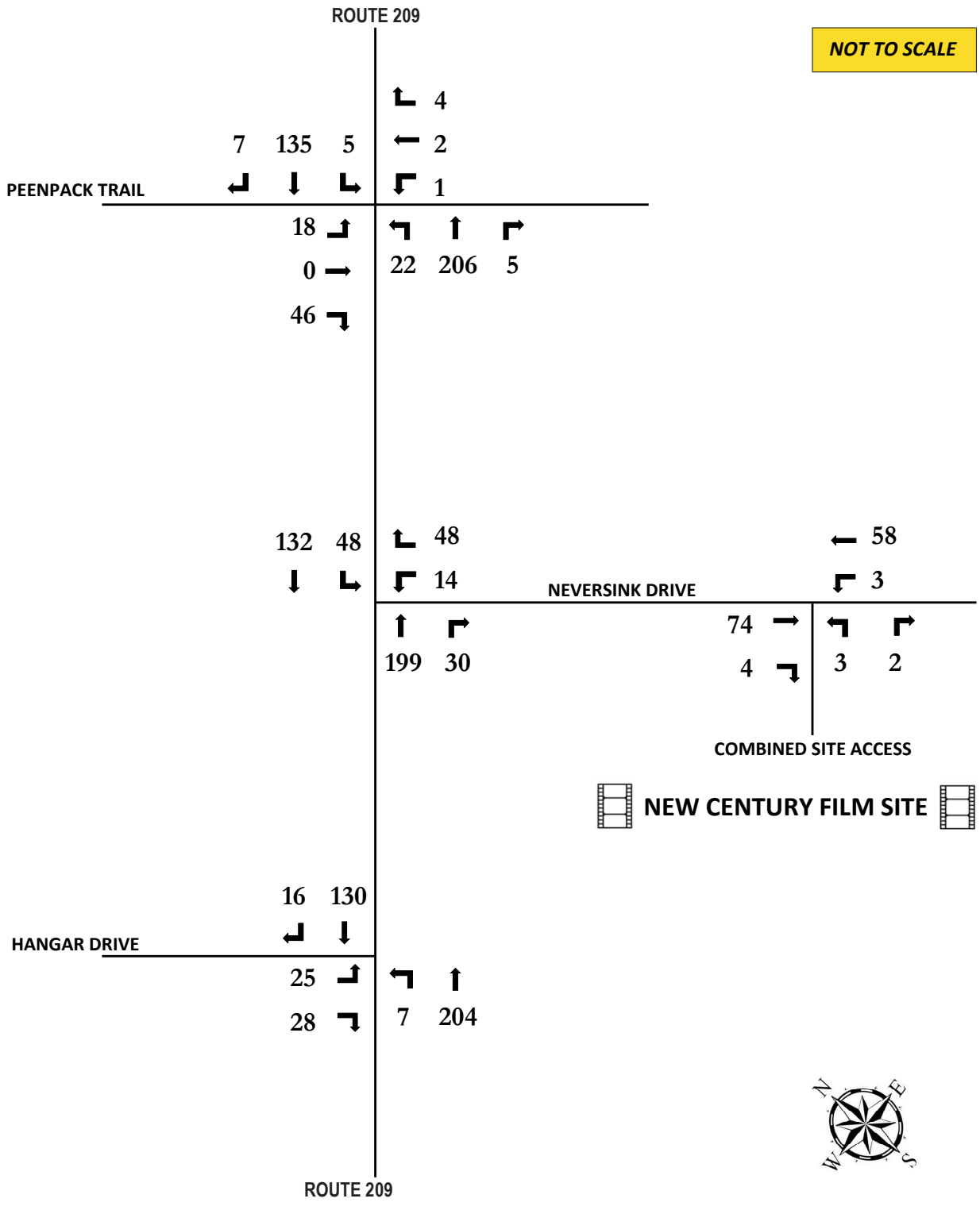
FIGURE	TITLE	
1	AM Peak Hour	2022 Existing Volumes
2	PM Peak Hour	2022 Existing Volumes
3	AM Peak Hour	2025 No Build Volumes
4	PM Peak Hour	2025 No Build Volumes
5	AM Peak Hour	Site Generated Traffic Volumes
6	PM Peak Hour	Site Generated Traffic Volumes
7	AM Peak Hour	2025 Build Volumes
8	PM Peak Hour	2025 Build Volumes



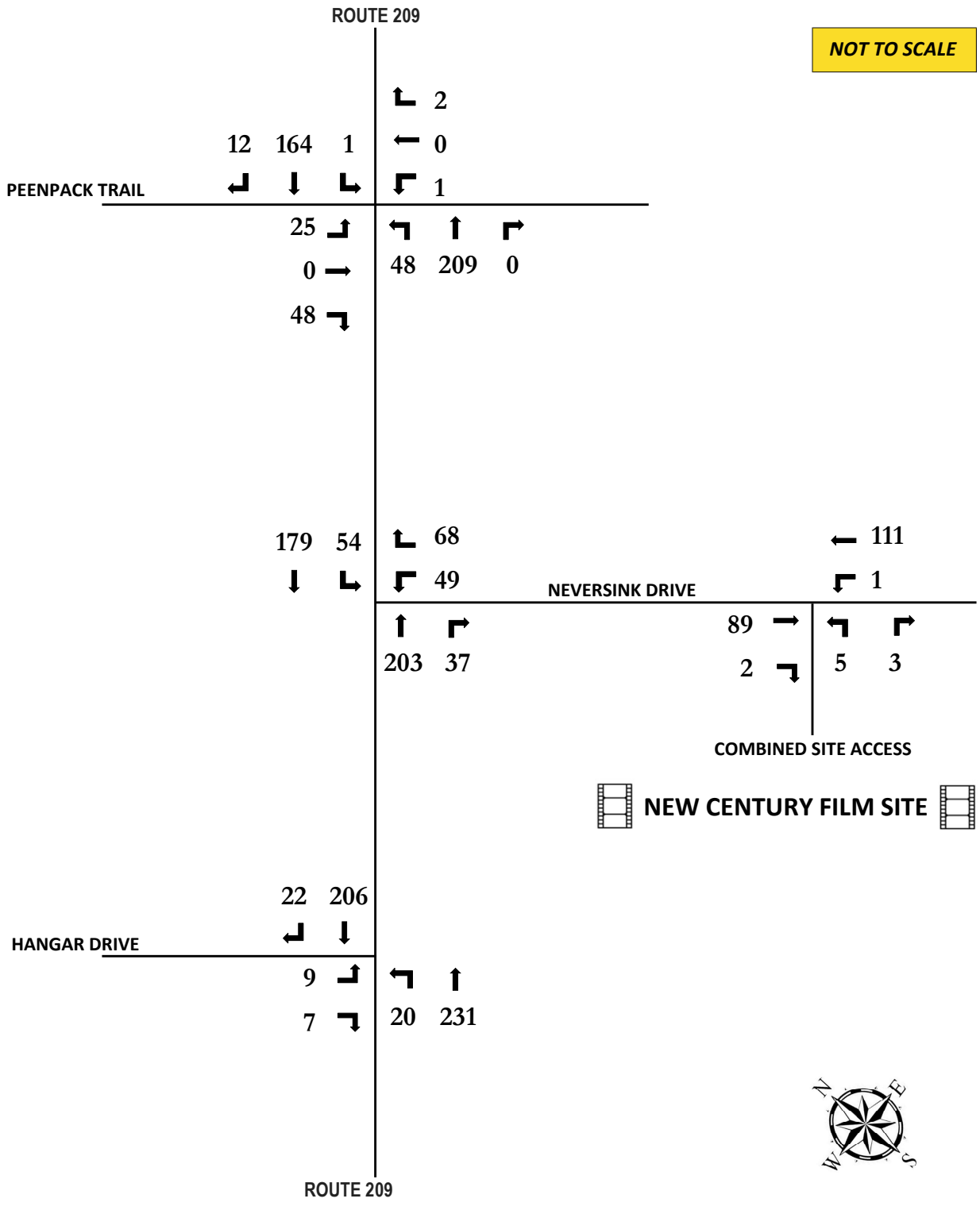
NEW CENTURY FILM	
DEERPARK, NEW YORK	
Prepared by: STEPHAN A. MAFFIA, P.E.	
	FIGURE 1
	SCENARIO: AM PEAK HOUR 2022 EXISTING
	TRAFFIC VOLUME CONDITIONS



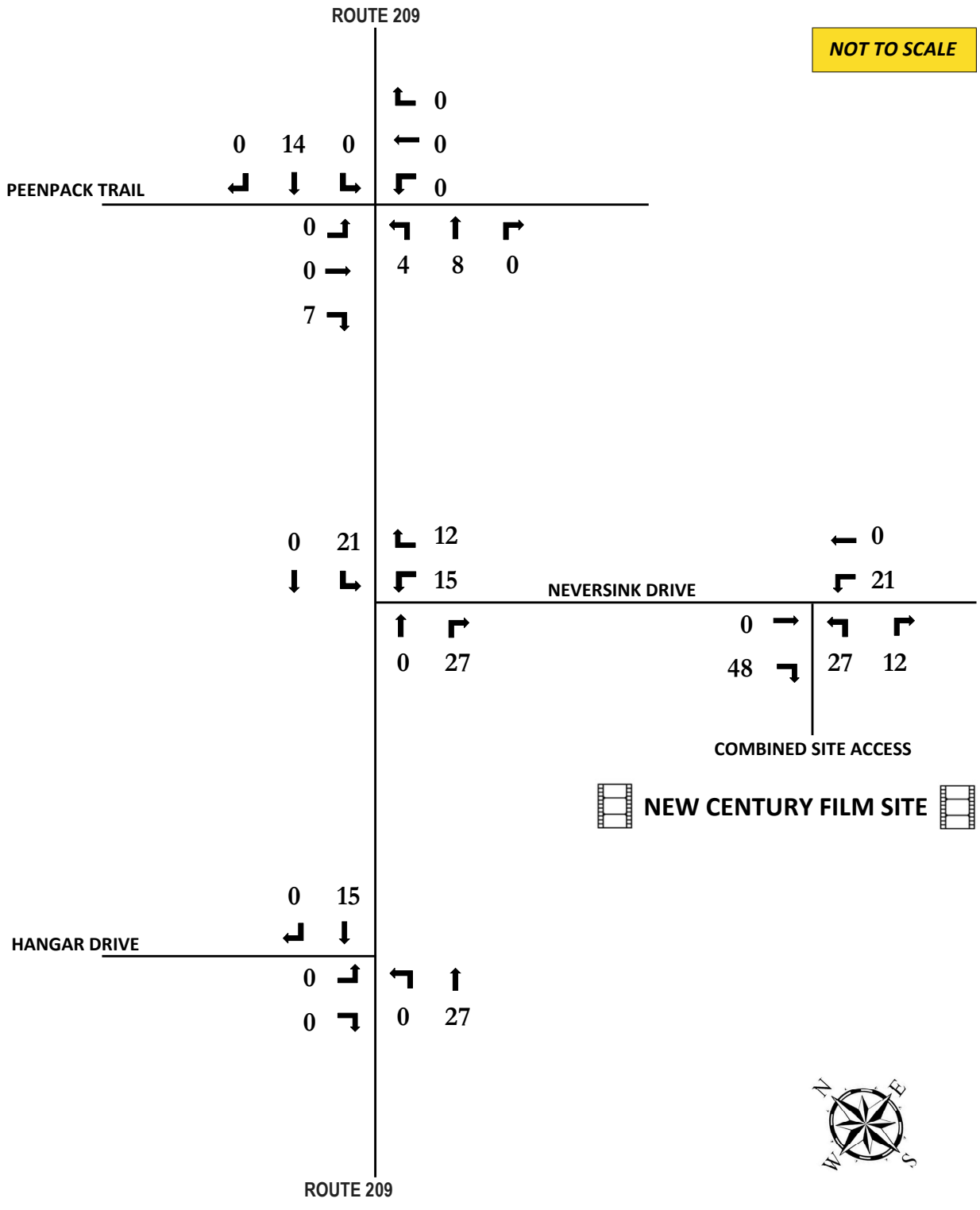
NEW CENTURY FILM	
DEERPARK, NEW YORK	
Prepared by: STEPHAN A. MAFFIA, P.E.	
	FIGURE 2
	SCENARIO: PM PEAK HOUR 2022 EXISTING
	TRAFFIC VOLUME CONDITIONS



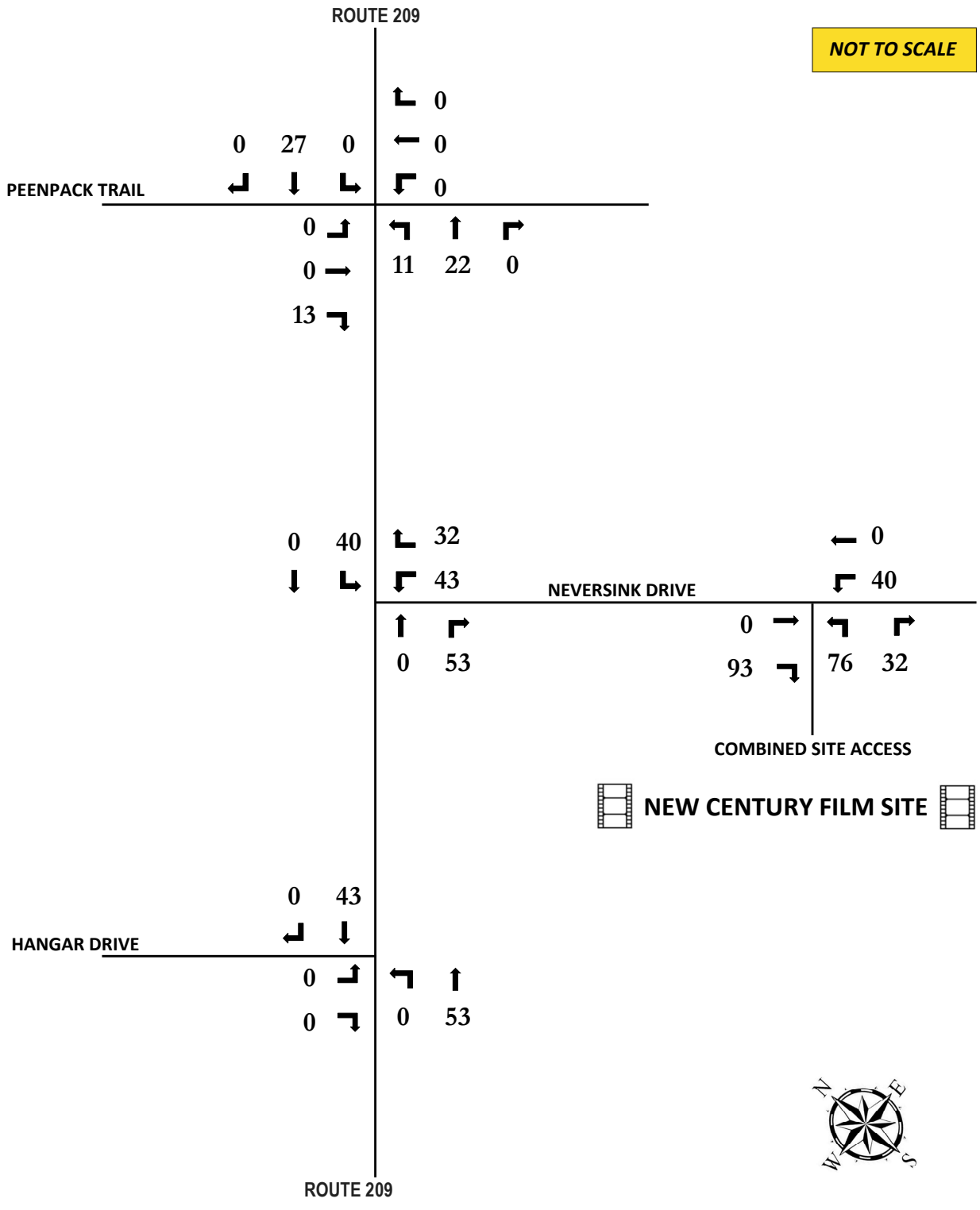
NEW CENTURY FILM	
DEERPARK, NEW YORK	
Prepared by: STEPHAN A. MAFFIA, P.E.	
	FIGURE 3
	SCENARIO: AM PEAK HOUR 2025 NO BUILD
	TRAFFIC VOLUME CONDITIONS



NEW CENTURY FILM	
DEERPARK, NEW YORK	
Prepared by: STEPHAN A. MAFFIA, P.E.	
	FIGURE 4
	SCENARIO: PM PEAK HOUR 2025 NO BUILD
	TRAFFIC VOLUME CONDITIONS



NEW CENTURY FILM	
DEERPARK, NEW YORK	
Prepared by: STEPHAN A. MAFFIA, P.E.	
	FIGURE 5
	SCENARIO: AM PEAK HOUR SITE GENERATED
	TRAFFIC VOLUME CONDITIONS

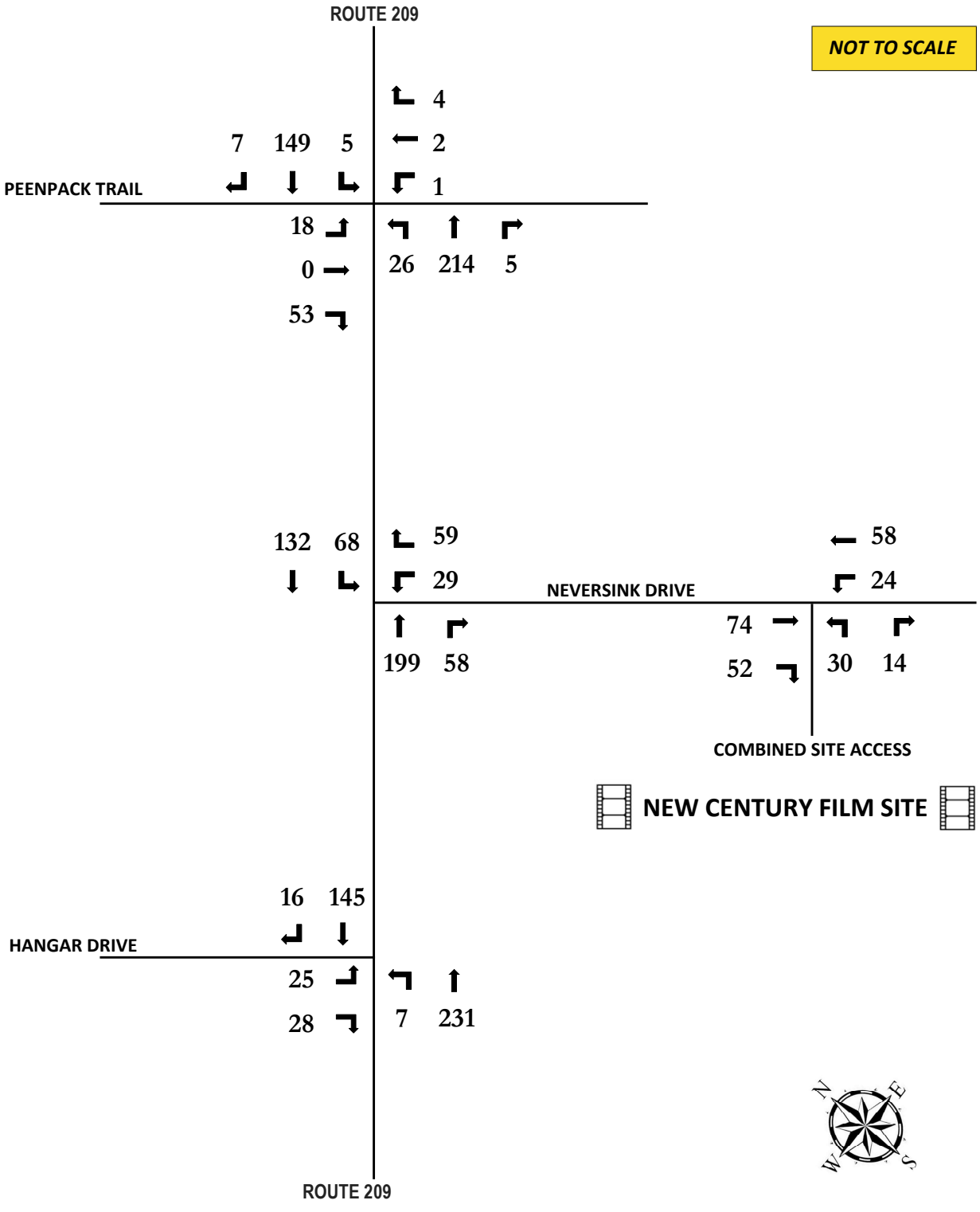


NEW CENTURY FILM	
DEERPARK, NEW YORK	
Prepared by: STEPHAN A. MAFFIA, P.E.	

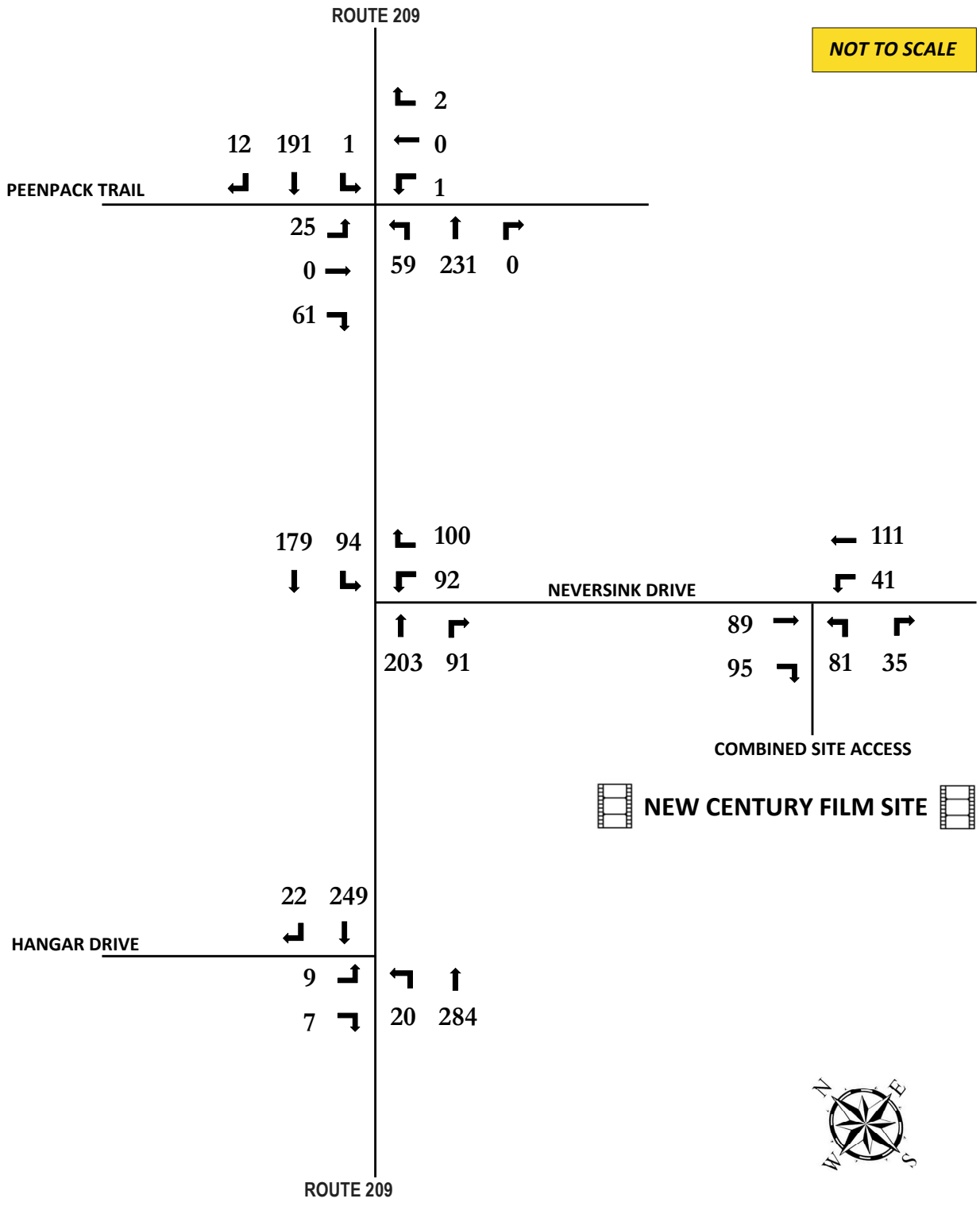
FIGURE 6

SCENARIO: PM PEAK HOUR SITE GENERATED

TRAFFIC VOLUME CONDITIONS



NEW CENTURY FILM	
DEERPARK, NEW YORK	
Prepared by: STEPHAN A. MAFFIA, P.E.	
	FIGURE 7
	SCENARIO: AM PEAK HOUR 2025 BUILD
	TRAFFIC VOLUME CONDITIONS



NEW CENTURY FILM	
DEERPARK, NEW YORK	
Prepared by: STEPHAN A. MAFFIA, P.E.	
	FIGURE 8
	SCENARIO: PM PEAK HOUR 2025 BUILD
	TRAFFIC VOLUME CONDITIONS

APPENDIX C

DETAILED LEVEL OF SERVICE SUMMARIES

Intersection	
Int Delay, s/veh	9.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	198	5	5	130	7	1	2	4	17	0	44
Future Vol, veh/h	21	198	5	5	130	7	1	2	4	17	0	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	10	2	2	10	2	2	2	2	2	2	2
Mvmt Flow	22	211	5	5	138	7	1	2	4	18	0	47

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	139	68	24	174	89	4	47	0	0	6	0	0
Stage 1	60	60	-	6	6	-	-	-	-	-	-	-
Stage 2	79	8	-	168	83	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.6	6.22	7.12	6.6	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.6	-	6.12	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.6	-	6.12	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.09	3.318	3.518	4.09	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	831	807	1052	789	786	1080	1560	-	-	1615	-	-
Stage 1	951	829	-	1016	875	-	-	-	-	-	-	-
Stage 2	930	873	-	834	811	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	706	797	1052	619	776	1080	1560	-	-	1615	-	-
Mov Cap-2 Maneuver	706	797	-	619	776	-	-	-	-	-	-	-
Stage 1	950	819	-	1015	874	-	-	-	-	-	-	-
Stage 2	777	872	-	609	801	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	10.7	1	2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1560	-	-	792	780	1615	-	-
HCM Lane V/C Ratio	0.001	-	-	0.301	0.194	0.011	-	-
HCM Control Delay (s)	7.3	0	-	11.5	10.7	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.3	0.7	0	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	191	29	46	127	13	46
Future Vol, veh/h	191	29	46	127	13	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	5	5	7	5	5
Mvmt Flow	197	30	47	131	13	47

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	227	0	437	212
Stage 1	-	-	-	-	212	-
Stage 2	-	-	-	-	225	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1324	-	571	821
Stage 1	-	-	-	-	816	-
Stage 2	-	-	-	-	805	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1324	-	549	821
Mov Cap-2 Maneuver	-	-	-	-	549	-
Stage 1	-	-	-	-	816	-
Stage 2	-	-	-	-	774	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	740	-	-	1324	-
HCM Lane V/C Ratio	0.082	-	-	0.036	-
HCM Control Delay (s)	10.3	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.5

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	24	27	7	196	125	15
Future Vol, veh/h	24	27	7	196	125	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	7	7	2
Mvmt Flow	26	29	8	213	136	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	373	144	152	0	-	0
Stage 1	144	-	-	-	-	-
Stage 2	229	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	628	903	1429	-	-	-
Stage 1	883	-	-	-	-	-
Stage 2	809	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	624	903	1429	-	-	-
Mov Cap-2 Maneuver	624	-	-	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	809	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	10.2	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1429	-	746	-	-
HCM Lane V/C Ratio	0.005	-	0.074	-	-
HCM Control Delay (s)	7.5	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	2	3	56	71	4
Future Vol, veh/h	3	2	3	56	71	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	3	2	3	58	73	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	139	75	77	0	-	0
Stage 1	75	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	854	986	1522	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	852	986	1522	-	-	-
Mov Cap-2 Maneuver	852	-	-	-	-	-
Stage 1	946	-	-	-	-	-
Stage 2	959	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1522	-	901	-	-
HCM Lane V/C Ratio	0.002	-	0.006	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	10.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	46	201	0	1	158	12	1	0	2	24	0	46
Future Vol, veh/h	46	201	0	1	158	12	1	0	2	24	0	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	7	2	2	7	2	2	2	2	2	2	2
Mvmt Flow	49	214	0	1	168	13	1	0	2	26	0	49

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	171	81	25	187	104	1	49	0	0	2	0	0
Stage 1	77	77	-	3	3	-	-	-	-	-	-	-
Stage 2	94	4	-	184	101	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.57	6.22	7.12	6.57	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.57	-	6.12	5.57	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.57	-	6.12	5.57	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.063	3.318	3.518	4.063	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	792	800	1051	774	777	1084	1558	-	-	1620	-	-
Stage 1	932	821	-	1020	883	-	-	-	-	-	-	-
Stage 2	913	883	-	818	802	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	642	786	1051	604	763	1084	1558	-	-	1620	-	-
Mov Cap-2 Maneuver	642	786	-	604	763	-	-	-	-	-	-	-
Stage 1	931	807	-	1019	882	-	-	-	-	-	-	-
Stage 2	730	882	-	591	788	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.3	11	2.4	2.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1558	-	-	754	778	1620	-	-
HCM Lane V/C Ratio	0.001	-	-	0.348	0.234	0.016	-	-
HCM Control Delay (s)	7.3	0	-	12.3	11	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.6	0.9	0	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	195	36	52	172	47	65
Future Vol, veh/h	195	36	52	172	47	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	7	5	5	7	5	5
Mvmt Flow	214	40	57	189	52	71

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	254	0	537	234
Stage 1	-	-	-	-	234	-
Stage 2	-	-	-	-	303	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1294	-	500	798
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	742	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1294	-	476	798
Mov Cap-2 Maneuver	-	-	-	-	476	-
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	706	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	12.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	622	-	-	1294	-
HCM Lane V/C Ratio	0.198	-	-	0.044	-
HCM Control Delay (s)	12.2	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.7

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	9	7	19	222	198	21
Future Vol, veh/h	9	7	19	222	198	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	7	7	2
Mvmt Flow	10	8	21	241	215	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	510	227	238	0	-	0
Stage 1	227	-	-	-	-	-
Stage 2	283	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	523	812	1329	-	-	-
Stage 1	811	-	-	-	-	-
Stage 2	765	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	514	812	1329	-	-	-
Mov Cap-2 Maneuver	514	-	-	-	-	-
Stage 1	796	-	-	-	-	-
Stage 2	765	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	11.1	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1329	-	612	-	-
HCM Lane V/C Ratio	0.016	-	0.028	-	-
HCM Control Delay (s)	7.8	0	11.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	3	1	107	86	2
Future Vol, veh/h	5	3	1	107	86	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	5	3	1	118	95	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	216	96	97	0	-	0
Stage 1	96	-	-	-	-	-
Stage 2	120	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	772	960	1496	-	-	-
Stage 1	928	-	-	-	-	-
Stage 2	905	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	771	960	1496	-	-	-
Mov Cap-2 Maneuver	771	-	-	-	-	-
Stage 1	927	-	-	-	-	-
Stage 2	905	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1496	-	832	-	-
HCM Lane V/C Ratio	0.001	-	0.011	-	-
HCM Control Delay (s)	7.4	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	9.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	206	5	5	135	7	1	2	4	18	0	46
Future Vol, veh/h	22	206	5	5	135	7	1	2	4	18	0	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	10	2	2	10	2	2	2	2	2	2	2
Mvmt Flow	23	219	5	5	144	7	1	2	4	19	0	49

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	145	71	25	181	93	4	49	0	0	6	0	0
Stage 1	63	63	-	6	6	-	-	-	-	-	-	-
Stage 2	82	8	-	175	87	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.6	6.22	7.12	6.6	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.6	-	6.12	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.6	-	6.12	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.09	3.318	3.518	4.09	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	824	804	1051	781	782	1080	1558	-	-	1615	-	-
Stage 1	948	827	-	1016	875	-	-	-	-	-	-	-
Stage 2	926	873	-	827	807	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	695	794	1051	605	772	1080	1558	-	-	1615	-	-
Mov Cap-2 Maneuver	695	794	-	605	772	-	-	-	-	-	-	-
Stage 1	947	817	-	1015	874	-	-	-	-	-	-	-
Stage 2	768	872	-	595	797	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.7	10.8	1	2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1558	-	-	788	775	1615	-	-
HCM Lane V/C Ratio	0.001	-	-	0.315	0.202	0.012	-	-
HCM Control Delay (s)	7.3	0	-	11.7	10.8	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.4	0.8	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	199	30	48	132	14	48
Future Vol, veh/h	199	30	48	132	14	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	5	5	7	5	5
Mvmt Flow	205	31	49	136	14	49

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	236	0	455	221
Stage 1	-	-	-	-	221	-
Stage 2	-	-	-	-	234	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1314	-	558	811
Stage 1	-	-	-	-	809	-
Stage 2	-	-	-	-	798	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1314	-	536	811
Mov Cap-2 Maneuver	-	-	-	-	536	-
Stage 1	-	-	-	-	809	-
Stage 2	-	-	-	-	766	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	727	-	-	1314	-
HCM Lane V/C Ratio	0.088	-	-	0.038	-
HCM Control Delay (s)	10.4	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.5

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	25	28	7	204	130	16
Future Vol, veh/h	25	28	7	204	130	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	7	7	2
Mvmt Flow	27	30	8	222	141	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	388	150	158	0	-	0
Stage 1	150	-	-	-	-	-
Stage 2	238	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	616	896	1422	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	802	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	612	896	1422	-	-	-
Mov Cap-2 Maneuver	612	-	-	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	802	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	10.3	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1422	-	735	-	-
HCM Lane V/C Ratio	0.005	-	0.078	-	-
HCM Control Delay (s)	7.5	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	2	3	58	74	4
Future Vol, veh/h	3	2	3	58	74	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	3	2	3	60	76	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	144	78	80	0	-	0
Stage 1	78	-	-	-	-	-
Stage 2	66	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	849	983	1518	-	-	-
Stage 1	945	-	-	-	-	-
Stage 2	957	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	847	983	1518	-	-	-
Mov Cap-2 Maneuver	847	-	-	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	957	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1518	-	897	-	-
HCM Lane V/C Ratio	0.002	-	0.006	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	10.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	48	209	0	1	164	12	1	0	2	25	0	48
Future Vol, veh/h	48	209	0	1	164	12	1	0	2	25	0	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	7	2	2	7	2	2	2	2	2	2	2
Mvmt Flow	51	222	0	1	174	13	1	0	2	27	0	51

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	177	84	26	194	108	1	51	0	0	2	0	0
Stage 1	80	80	-	3	3	-	-	-	-	-	-	-
Stage 2	97	4	-	191	105	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.57	6.22	7.12	6.57	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.57	-	6.12	5.57	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.57	-	6.12	5.57	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.063	3.318	3.518	4.063	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	785	797	1050	765	773	1084	1555	-	-	1620	-	-
Stage 1	929	819	-	1020	883	-	-	-	-	-	-	-
Stage 2	910	883	-	811	799	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	630	783	1050	589	759	1084	1555	-	-	1620	-	-
Mov Cap-2 Maneuver	630	783	-	589	759	-	-	-	-	-	-	-
Stage 1	928	805	-	1019	882	-	-	-	-	-	-	-
Stage 2	721	882	-	577	785	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.5	11.2	2.4	2.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1555	-	-	749	773	1620	-	-
HCM Lane V/C Ratio	0.001	-	-	0.365	0.244	0.016	-	-
HCM Control Delay (s)	7.3	0	-	12.5	11.2	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.7	1	0.1	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	203	37	54	179	49	68
Future Vol, veh/h	203	37	54	179	49	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	7	5	5	7	5	5
Mvmt Flow	223	41	59	197	54	75

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	264	0	559	244
Stage 1	-	-	-	-	244	-
Stage 2	-	-	-	-	315	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1283	-	485	787
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	733	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1283	-	460	787
Mov Cap-2 Maneuver	-	-	-	-	460	-
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	695	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	606	-	-	1283	-
HCM Lane V/C Ratio	0.212	-	-	0.046	-
HCM Control Delay (s)	12.5	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.7

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	9	7	20	231	206	22
Future Vol, veh/h	9	7	20	231	206	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	7	7	2
Mvmt Flow	10	8	22	251	224	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	531	236	248	0	-	0
Stage 1	236	-	-	-	-	-
Stage 2	295	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	509	803	1318	-	-	-
Stage 1	803	-	-	-	-	-
Stage 2	755	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	499	803	1318	-	-	-
Mov Cap-2 Maneuver	499	-	-	-	-	-
Stage 1	788	-	-	-	-	-
Stage 2	755	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	11.2	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1318	-	598	-	-
HCM Lane V/C Ratio	0.016	-	0.029	-	-
HCM Control Delay (s)	7.8	0	11.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	3	1	111	89	2
Future Vol, veh/h	5	3	1	111	89	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	5	3	1	122	98	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	223	99	100	0	-	0
Stage 1	99	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	765	957	1493	-	-	-
Stage 1	925	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	764	957	1493	-	-	-
Mov Cap-2 Maneuver	764	-	-	-	-	-
Stage 1	924	-	-	-	-	-
Stage 2	902	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1493	-	827	-	-
HCM Lane V/C Ratio	0.001	-	0.011	-	-
HCM Control Delay (s)	7.4	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	10

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	26	214	5	5	149	7	1	2	4	18	0	53
Future Vol, veh/h	26	214	5	5	149	7	1	2	4	18	0	53
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	10	2	2	10	2	2	2	2	2	2	2
Mvmt Flow	28	228	5	5	159	7	1	2	4	19	0	56

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	155	74	28	189	100	4	56	0	0	6	0	0
Stage 1	66	66	-	6	6	-	-	-	-	-	-	-
Stage 2	89	8	-	183	94	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.6	6.22	7.12	6.6	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.6	-	6.12	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.6	-	6.12	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.09	3.318	3.518	4.09	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	812	801	1047	771	775	1080	1549	-	-	1615	-	-
Stage 1	945	824	-	1016	875	-	-	-	-	-	-	-
Stage 2	918	873	-	819	802	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	672	791	1047	591	765	1080	1549	-	-	1615	-	-
Mov Cap-2 Maneuver	672	791	-	591	765	-	-	-	-	-	-	-
Stage 1	944	814	-	1015	874	-	-	-	-	-	-	-
Stage 2	746	872	-	580	792	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.9	11	1	1.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1549	-	-	780	768	1615	-	-
HCM Lane V/C Ratio	0.001	-	-	0.334	0.223	0.012	-	-
HCM Control Delay (s)	7.3	0	-	11.9	11	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.5	0.9	0	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	199	58	68	132	29	59
Future Vol, veh/h	199	58	68	132	29	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	5	5	7	5	5
Mvmt Flow	205	60	70	136	30	61

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	265	0	511	235
Stage 1	-	-	-	-	235	-
Stage 2	-	-	-	-	276	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1282	-	517	797
Stage 1	-	-	-	-	797	-
Stage 2	-	-	-	-	764	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1282	-	486	797
Mov Cap-2 Maneuver	-	-	-	-	486	-
Stage 1	-	-	-	-	797	-
Stage 2	-	-	-	-	719	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.7	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	658	-	-	1282	-
HCM Lane V/C Ratio	0.138	-	-	0.055	-
HCM Control Delay (s)	11.3	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.3

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	25	28	7	231	145	16
Future Vol, veh/h	25	28	7	231	145	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	7	7	2
Mvmt Flow	27	30	8	251	158	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	434	167	175	0	-	0
Stage 1	167	-	-	-	-	-
Stage 2	267	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	579	877	1401	-	-	-
Stage 1	863	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	575	877	1401	-	-	-
Mov Cap-2 Maneuver	575	-	-	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	778	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	10.6	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1401	-	703	-	-
HCM Lane V/C Ratio	0.005	-	0.082	-	-
HCM Control Delay (s)	7.6	0	10.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	14	24	58	74	52
Future Vol, veh/h	30	14	24	58	74	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	31	14	25	60	76	54

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	213	103	130	0	-	0
Stage 1	103	-	-	-	-	-
Stage 2	110	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	775	952	1455	-	-	-
Stage 1	921	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	761	952	1455	-	-	-
Mov Cap-2 Maneuver	761	-	-	-	-	-
Stage 1	904	-	-	-	-	-
Stage 2	915	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	2.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1455	-	813	-	-
HCM Lane V/C Ratio	0.017	-	0.056	-	-
HCM Control Delay (s)	7.5	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	11.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	59	231	0	1	191	12	1	0	2	25	0	61
Future Vol, veh/h	59	231	0	1	191	12	1	0	2	25	0	61
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	7	2	2	7	2	2	2	2	2	2	2
Mvmt Flow	63	246	0	1	203	13	1	0	2	27	0	65

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	198	91	33	213	122	1	65	0	0	2	0	0
Stage 1	87	87	-	3	3	-	-	-	-	-	-	-
Stage 2	111	4	-	210	119	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.57	6.22	7.12	6.57	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.57	-	6.12	5.57	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.57	-	6.12	5.57	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.063	3.318	3.518	4.063	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	761	790	1041	744	759	1084	1537	-	-	1620	-	-
Stage 1	921	813	-	1020	883	-	-	-	-	-	-	-
Stage 2	894	883	-	792	788	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	586	776	1041	554	745	1084	1537	-	-	1620	-	-
Mov Cap-2 Maneuver	586	776	-	554	745	-	-	-	-	-	-	-
Stage 1	920	799	-	1019	882	-	-	-	-	-	-	-
Stage 2	679	882	-	539	775	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.5	11.6	2.4	2.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1537	-	-	728	758	1620	-	-
HCM Lane V/C Ratio	0.001	-	-	0.424	0.286	0.016	-	-
HCM Control Delay (s)	7.3	0	-	13.5	11.6	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	2.1	1.2	0.1	-	-

Intersection	
Int Delay, s/veh	5.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	203	91	94	179	92	100
Future Vol, veh/h	203	91	94	179	92	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	7	5	5	7	5	5
Mvmt Flow	223	100	103	197	101	110

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	323	0	676	273
Stage 1	-	-	-	-	273	-
Stage 2	-	-	-	-	403	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1220	-	414	759
Stage 1	-	-	-	-	766	-
Stage 2	-	-	-	-	668	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1220	-	375	759
Mov Cap-2 Maneuver	-	-	-	-	375	-
Stage 1	-	-	-	-	766	-
Stage 2	-	-	-	-	605	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.8	17
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	509	-	-	1220	-
HCM Lane V/C Ratio	0.415	-	-	0.085	-
HCM Control Delay (s)	17	-	-	8.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.6

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	9	7	20	284	249	22
Future Vol, veh/h	9	7	20	284	249	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	7	7	2
Mvmt Flow	10	8	22	309	271	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	636	283	295	0	-	0
Stage 1	283	-	-	-	-	-
Stage 2	353	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	442	756	1266	-	-	-
Stage 1	765	-	-	-	-	-
Stage 2	711	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	433	756	1266	-	-	-
Mov Cap-2 Maneuver	433	-	-	-	-	-
Stage 1	749	-	-	-	-	-
Stage 2	711	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	12	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1266	-	533	-	-
HCM Lane V/C Ratio	0.017	-	0.033	-	-
HCM Control Delay (s)	7.9	0	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	81	35	41	111	89	95
Future Vol, veh/h	81	35	41	111	89	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	89	38	45	122	98	104

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	362	150	202	0	-	0
Stage 1	150	-	-	-	-	-
Stage 2	212	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	637	896	1370	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	823	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	615	896	1370	-	-	-
Mov Cap-2 Maneuver	615	-	-	-	-	-
Stage 1	847	-	-	-	-	-
Stage 2	823	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	2.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1370	-	679	-	-
HCM Lane V/C Ratio	0.033	-	0.188	-	-
HCM Control Delay (s)	7.7	0	11.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-

APPENDIX D

ACCIDENT DATA

Case Number	Crash Severity	Case Year	Collision Type	Crash Date	Crash Time	Crash Type	Light Conditions	Road Characteristics	Road Surface Conditions	Weather Conditions	Closest Cross Street	On Street	Apparent Contributing Factor
38352159	FATAL	2019	HEAD ON	7/27/2019	11:19 AM	COLLISION WITH MOTOR VEHICLE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	NEVERSINK DR	ROUTE 209	V1:(FAILURE TO YIELD RIGHT OF WAY,TURNING IMPROPER) / V2:(NOT APPLICABLE,NOT APPLICABLE)
38160055	PDO	2019	OTHER	11/1/2019	11:40 AM	COLLISION WITH DEER	DARK-ROAD UNLIGHTED	STRAIGHT AND LEVEL	DRY	CLOUDY	NEVERSINK DR	ROUTE 209	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
38346834	PDO	2020	HEAD ON	2/24/2020	7:45 AM	COLLISION WITH MOTOR VEHICLE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	PEENPACK TRL	ROUTE 209	V1:(TRAFFIC CONTROL DEVICES DISREGARDED,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
38379442	PDO	2020	OTHER	3/18/2020	7:00 AM	COLLISION WITH SIGN POST	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	NEVERSINK DR	ROUTE 209	V1:(UNKNOWN,NOT APPLICABLE)
38401499	PDO	2020	OTHER	4/28/2020	12:45 AM	COLLISION WITH DEER	DARK-ROAD UNLIGHTED	STRAIGHT AND LEVEL	DRY	CLEAR	NEVERSINK DR	ROUTE 209	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
38405337	PDO	2020	OTHER	4/29/2020	7:45 PM	COLLISION WITH GUIDE RAIL	DUSK	CURVE AND LEVEL	DRY	CLOUDY			V1:(TIRE FAILURE/INADEQUATE,NOT APPLICABLE)
38406255	PDO	2020	OTHER	5/2/2020	11:10 PM	COLLISION WITH DEER	DARK-ROAD LIGHTED	CURVE AND LEVEL	DRY	CLOUDY	NEVERSINK DR	ROUTE 209	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
38560939	PDO	2020	OTHER	9/19/2020	7:35 PM	COLLISION WITH DEER	DARK-ROAD UNLIGHTED	STRAIGHT AND LEVEL	DRY	CLEAR	DRIVEWAY	ROUTE 209	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
38741943	PDO	2020	OTHER	12/10/2020	8:05 AM	COLLISION WITH CURBING	DAYLIGHT	CURVE AND LEVEL	SNOW/ICE	CLEAR	ROUTE 209	NEVERSINK DR	V1:(PAVEMENT SLIPPERY,NOT APPLICABLE)
38689739	PDO	2020	OTHER	12/29/2020	11:00 PM	COLLISION WITH DEER	DARK-ROAD UNLIGHTED	STRAIGHT AND LEVEL	DRY	CLEAR	NEVERSINK DR	ROUTE 209	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
38736105	PDO	2021	OTHER	1/9/2021	9:21 AM	COLLISION WITH OTHER FIXED OBJECT	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	HANGER DR	ROUTE 209	V1:(GLARE,NOT APPLICABLE)
38827009	INJURY	2021	REAR END	4/17/2021	11:45 AM	COLLISION WITH MOTOR VEHICLE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLOUDY	NEVERSINK DR	ROUTE 209	V1:(FOLLOWING TOO CLOSELY,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
38835503	PDO	2021	OTHER	4/29/2021	9:38 PM	COLLISION WITH DEER	DARK-ROAD UNLIGHTED	STRAIGHT AND LEVEL	DRY	CLOUDY	NEVERSINK DR	ROUTE 209	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
38865188	INJURY	2021	OTHER	5/20/2021	1:20 PM	COLLISION WITH SIGN POST	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	HANGER DR	ROUTE 209	V1:(REACTION TO OTHER UNINVOLVED VEHICL,NOT APPLICABLE)
38998030	INJURY	2021	OTHER	8/8/2021	12:26 PM	RAN OFF ROAD ONLY	DAYLIGHT	CURVE AND LEVEL	DRY	CLEAR	NEVERSINK DR	ROUTE 209	V1:(UNSAFE SPEED,DRIVER INEXPERIENCE)
38985901	PDO	2021	LEFT TURN	8/14/2021	7:25 AM	COLLISION WITH MOTOR VEHICLE	DAYLIGHT	STRAIGHT AND LEVEL	WET	RAIN	PEENPACK TRL	ROUTE 209	V1:(FAILURE TO YIELD RIGHT OF WAY,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
39040077	PDO	2021	OTHER	9/9/2021	3:41 AM	COLL. W/EARTH ELE./ROCK CUT/DITCH	DARK-ROAD UNLIGHTED	CURVE AND LEVEL	WET	RAIN	DRIVEWAY	ROUTE 209	V1:(UNSAFE SPEED,FELL ASLEEP)
39105779	PDO	2021	OTHER	11/14/2021	9:05 AM	COLLISION WITH DEER	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	CORA ROSE LN	ROUTE 209	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
39163190	PDO	2021	REAR END	12/22/2021	12:45 PM	COLLISION WITH MOTOR VEHICLE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	NEVERSINK DR	ROUTE 209	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(CELL PHONE (HAND HELD),FOLLOWING TOO CLOSELY)
39357018	PDO	2022	OTHER	5/22/2022	6:00 AM	COLL. W/LIGHT SUPPORT/UTILITY POLE	DAWN	STRAIGHT AND LEVEL	DRY	CLEAR	NEVERSINK DR	ROUTE 209	V1:(ALCOHOL INVOLVEMENT,PASSING OR LANE USAGE IMPROPERLY)

APPENDIX E

DOT STATEWIDE AVERAGE ACCIDENT RATE

URBAN FUNCTION CLASS				MAINLINE & JUNCTURE ACCIDENTS		
				ALL TYPES		
UNDIVIDED				ACC/MVM		
2 LANES	2.38	0.44	0.34	3.73	0.68	0.44
3 LANES	3.34	0.6	0.28	5.31	0.95	0.38
4 LANES	3.57	0.69	0.19	6.41	1.22	0.31
ALL LANES	2.64	0.49	0.32	4.27	0.79	0.43
DIVIDED						
2 LANES	3.45	0.64	0.2	5.56	1.02	0.32
4 LANES	2.99	0.56	0.18	4.63	0.87	0.25
6 LANES	4.14	0.77	0.15	5.53	1.01	0.18
7 LANES	3.51	0.6	0.06	3.82	0.69	0.07
ALL LANES	3.36	0.63	0.17	5.02	0.94	0.26

PARTIAL CONTROL OF ACCESS		MAINLINE ACCIDENTS ONLY					
RURAL FUNCTION CLASS	ALL TYPES	WET ROAD	FIXED OBJECT	ALL TYPES	WET ROAD	FIXED OBJECT
UNDIVIDED	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM
2 LANES	1.94	0.43	0.42	2.41	0.54	0.49
ALL LANES	1.92	0.43	0.41	2.41	0.54	0.49
DIVIDED						
4 LANES	1.79	0.35	0.75	1.88	0.37	0.78
ALL LANES	1.8	0.36	0.75	1.89	0.38	0.77
URBAN FUNCTION CLASS						
UNDIVIDED						
2 LANES	2.07	0.56	0.49	2.76	0.68	0.6
ALL LANES	2.48	0.62	0.44	3.42	0.82	0.51
DIVIDED						
4 LANES	1.69	0.33	0.26	2.16	0.42	0.29
6 LANES	1.85	0.33	0.21	2.22	0.39	0.24
ALL LANES	1.88	0.35	0.25	2.36	0.44	0.28

APPENDIX D

LONG FORM EAF

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: New Century Film Site Plan		
Project Location (describe, and attach a general location map): 517 Neversink Drive, Port Jervis, NY 12771		
Brief Description of Proposed Action (include purpose or need): New Century Film is seeking an amended site plan from the Town of Deerpark for approval of a theater and music hall (3,556 seats), hotel (85 units), restaurants (500 seats), two film studios and use of an existing subterranean pistol and rifle shooting range. The site will also maintain existing residential buildings, film studio offices, and a previously approved motel with food service and retail accessory uses. Water and sewer utilities will be utilized with a proposed wastewater treatment plant and public water supply system of approximately 50,000 GPD.		
Name of Applicant/Sponsor: New Century Film	Telephone: 845-236-5525 E-Mail: peter.wei@newcenturyfilm.com	
Address: 517 Neversink Drive		
City/PO: Port Jervis	State: NY	Zip Code: 12771
Project Contact (if not same as sponsor; give name and title/role): Ryan Fellenzer - Fellenzer Engineering	Telephone: 845-343-1481 E-Mail: rdf@fellp.com	
Address: 22 Mulberry St		
City/PO: Middletown	State: NY	Zip Code: 10940
Property Owner (if not same as sponsor):	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)		
Government Entity	**If Yes: Identify Agency and Approval(s) Required**	**Application Date (Actual or projected)**
a. City Counsel, Town Board, or Village Board of Trustees ☐Yes ☑No		
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Town of Deerpark Planning Board	
c. City, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☐Yes ☑No		
e. County agencies ☑Yes ☐No	OCDOH	
f. Regional agencies ☐Yes ☑No		
g. State agencies ☑Yes ☐No	NYSDEC	
h. Federal agencies ☐Yes ☑No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes ☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☐Yes ☑No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes ☑No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes ☐No

If Yes, identify the plan(s):

NYS Major Basins:Upper Delaware

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes ☑No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
HM-U - Hamlet/Mixed Use

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Port Jervis

b. What police or other public protection forces serve the project site?
Town of Deerpark

c. Which fire protection and emergency medical services serve the project site?
Huguenot Fire Company

d. What parks serve the project site?
Town of Deerpark

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Commercial - Film Studio, Hotel and Restaurants

b. a. Total acreage of the site of the proposed action? 40.7 acres
b. Total acreage to be physically disturbed? 15.1 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 40.7 acres

c. Is the proposed action an expansion of an existing project or use? ☑ Yes ☐ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % 34 Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: TBD months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? ☐Yes ☑No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				
At completion of all phases				

g. Does the proposed action include new non-residential construction (including expansions)? ☑Yes ☐No

If Yes,

i. Total number of structures 4

ii. Dimensions (in feet) of largest proposed structure: <75 height; 80 width; and 135 length

iii. Approximate extent of building space to be heated or cooled: 31,400 square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☑Yes ☐No

If Yes,

i. Purpose of the impoundment: Stormwater Retention

ii. If a water impoundment, the principal source of the water: ☑ Ground water ☑ Surface water streams ☐Other specify:

iii. If other than water, identify the type of impounded/contained liquids and their source.

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: 2.1 acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? ☑Yes ☐No
(Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)

If Yes:

i .What is the purpose of the excavation or dredging? Excavation for new buildings, parking lot and stormwater pond

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): TBD
- Over what duration of time? TBD

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

iv. Will there be onsite dewatering or processing of excavated materials? ☐Yes ☐No
If yes, describe.

v. What is the total area to be dredged or excavated? TBD acres

vi. What is the maximum area to be worked at any one time? TBD acres

vii. What would be the maximum depth of excavation or dredging? TBD feet

viii. Will the excavation require blasting? ☐Yes ☑No

ix. Summarize site reclamation goals and plan:

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☑Yes ☐No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): PFO1A

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

No proposed action is planned to disturb or affect any waterbody or wetlands.

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐ Yes ☑ No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☑ No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? ☑ Yes ☐ No

If Yes:

i. Total anticipated water usage/demand per day: 49,785 gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐ Yes ☑ No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No
- Do existing lines serve the project site? ☐ Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project? ☐ Yes ☐ No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☐ No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: TBD gallons/minute.

d. Will the proposed action generate liquid wastes? ☑ Yes ☐ No

If Yes:

i. Total anticipated liquid waste generation per day: 49,785 gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

Sanitary Wastewater

iii. Will the proposed action use any existing public wastewater treatment facilities? ☐ Yes ☑ No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No

- Do existing sewer lines serve the project site? ☐Yes ☑No
- Will a line extension within an existing district be necessary to serve the project? ☐Yes ☑No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes ☑No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

A SPDES Permit will be obtained for an on-site wastewater facility located on the property.

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

TBD

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☑Yes ☐No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or 14.5 acres (impervious surface)

_____ Square feet or 40.7 acres (parcel size)

ii. Describe types of new point sources. _____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

Stormwater Ponds

- If to surface waters, identify receiving water bodies or wetlands: _____

Neversink River

- Will stormwater runoff flow to adjacent properties? ☐Yes ☑No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☑Yes ☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐Yes ☑No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes ☑No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes ☐No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☑ Yes ☐ No

If Yes:

i. Estimate methane generation in tons/year (metric): TBD

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): TBD

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐ Yes ☑ No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐ Yes ☑ No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐ Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐ Yes ☐ No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐ Yes ☐ No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐ Yes ☐ No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐ Yes ☐ No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐ Yes ☑ No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐ Yes ☐ No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 7am - 5pm
- Saturday: _____
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: 8am - 5pm
- Saturday: 8am - 5pm
- Sunday: _____
- Holidays: _____

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☐ Yes ☑ No

If yes:

i. Provide details including sources, time of day and duration:

_____

_____

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☐ No

Describe: _____

_____

n. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

Lights for the parking lots, locations and heights TBD

_____

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe: _____

_____

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

_____

_____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities:_____

_____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

_____

_____

_____

_____

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☑ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____

  _____
- Operation: _____

  _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____

  _____
- Operation: _____

  _____

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

_____

_____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

_____

_____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

_____

_____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

_____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

_____

_____

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☐ Commercial ☑ Residential (suburban) ☑ Rural (non-farm)
☑ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe:

_____

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	6.8	14.5	7.7
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	33.9	26.2	7.7
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____ _____			

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☑ No

i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☐ Yes ☑ No

If Yes,

i. Identify Facilities:

_____

_____

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

_____

_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Has the facility been formally closed? ☐ Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____

_____

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

_____

_____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐ Yes ☑ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐ Yes ☐ No

☐ Yes – Spills Incidents database Provide DEC ID number(s): _____

☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures:_____

_____

_____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐ Yes ☑ No

If yes, provide DEC ID number(s): _____

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

_____

_____

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? TBD feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site:

OtB/OtC	66 %
Be	19 %
Ba	15 %

d. What is the average depth to the water table on the project site? Average: _____ feet

e. Drainage status of project site soils:

☑	Well Drained:	81 % of site
☑	Moderately Well Drained:	19 % of site
☐	Poorly Drained	_____% of site

f. Approximate proportion of proposed action site with slopes:

☑	0-10%:	100 % of site
☐	10-15%:	_____% of site
☐	15% or greater:	_____% of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☑ Yes ☐ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name 815-3 Classification B
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal Waters, Federal Waters, Federal Waters,... Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☑ Yes ☐ No

j. Is the project site in the 100-year Floodplain? ☑ Yes ☐ No

k. Is the project site in the 500-year Floodplain? ☑ Yes ☐ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☑ Yes ☐ No
If Yes:

i. Name of aquifer: Principal Aquifer

m. Identify the predominant wildlife species that occupy or use the project site:
Deer
Squirrels

n. Does the project site contain a designated significant natural community? ☑ Yes ☐ No
If Yes:
i. Describe the habitat/community (composition, function, and basis for designation): Red Cedar Rocky Summit, Hemlock-Northern Hardwood Forest, Floodplain Forest
ii. Source(s) of description or evaluation:
iii. Extent of community/habitat:
- Currently: 12.07, 2121.0, 564.25 acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☑ Yes ☐ No
If Yes:
i. Species and listing (endangered or threatened): Timber Rattlesnake, Bald Eagle, Dwarf Wedgemussel, Brook Floater

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☑ Yes ☐ No
If Yes:
i. Species and listing: Inland Barrens Buckmoth

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No
If yes, give a brief description of how the proposed action may affect that use:

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☑ Yes ☐ No
If Yes, provide county plus district name/number: ORAN002

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No
i. If Yes: acreage(s) on project site?
ii. Source(s) of soil rating(s):

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No
If Yes:
i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent:

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No
If Yes:
i. CEA name:
ii. Basis for designation:
iii. Designating agency and date:

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☐ Yes ☑ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☐ Historic Building or District

ii. Name: _____

iii. Brief description of attributes on which listing is based:

_____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☑ No

If Yes:

i. Identify resource: _____

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____

iii. Distance between project and resource: _____ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Ryan Fellenzer Date 3/8/2023

Signature Ryan Fellenzer Title Project Engineer

PRINT FORM

EAF Mapper Summary Report

Thursday, June 23, 2022 9:58 AM

Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYS Major Basins:Upper Delaware
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	815-3
E.2.h.iv [Surface Water Features - Stream Classification]	B
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	Yes
E.2.j. [100 Year Floodplain]	Yes

E.2.k. [500 Year Floodplain]	Yes
E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer
E.2.n. [Natural Communities]	Yes
E.2.n.i [Natural Communities - Name]	Red Cedar Rocky Summit, Hemlock-Northern Hardwood Forest, Floodplain Forest
E.2.n.i [Natural Communities - Acres]	12.07, 2121.0, 564.25
E.2.o. [Endangered or Threatened Species]	Yes
E.2.o. [Endangered or Threatened Species - Name]	Timber Rattlesnake, Bald Eagle, Dwarf Wedgemussel, Brook Floater
E.2.p. [Rare Plants or Animals]	Yes
E.2.p. [Rare Plants or Animals - Name]	Inland Barrens Buckmoth
E.3.a. [Agricultural District]	Yes
E.3.a. [Agricultural District]	ORAN002
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

APPENDIX E

LED LIGHTING

Consistent with LEED® goals & Green Globes™ criteria for light pollution reduction

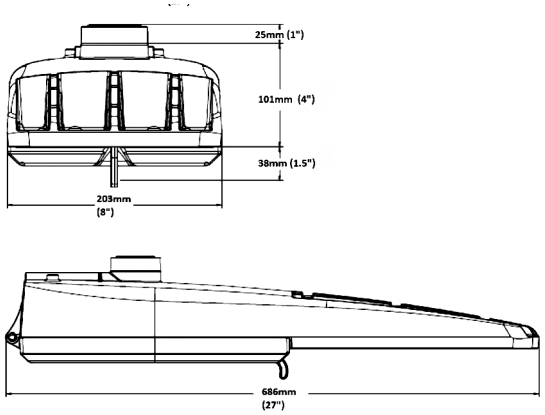
Autobahn Series ATB0
Roadway Lighting

PRODUCT OVERVIEW

Applications:

- Roadways
- Off ramps
- Residential streets
- Parking lots

DIMENSIONS



Effective Projected Area (EPA): The EPA for the ATB0 is 0.76 sq. ft.
Approx. Wt. = 14 lbs.

STANDARDS

DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Color temperatures of ≤ 3000K must be specified for International Dark-Sky Association certification.

Rated for -40°C to 40°C ambient
CSA Certified to U.S. and Canadian standards
Complies with ANSI: C136.2, C136.10, C136.14, C136.31, C136.15, C136.37

BUY AMERICAN Act — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/buy-american for additional information.

Features:

OPTICAL

The Autobahn's new molded silicone optics provide exceptional performance. Silicone optics are superior to other polymeric materials in the areas of; optical efficiency, thermal performance, and reduction in dirt accumulation, all of which can lead to long term lumen degradation and a shift in optical distribution. Also, because silicone allows for the molding of fine details as well as thick sections, it produces the most crisp, clean and well-defined lighting distributions available. Silicone optics paired with modern LED's allow the Autobahn to take full advantage of both technologies.

Same Light: Performance is comparable to 100 - 400W HPS roadway luminaires.

White Light: Correlated color temperature - 4000K, or optional 2700K, 3000K or 5000K, all 70 CRI minimum.

Unique IP66 rated LED light engines provided 0% uplight and restrict backlight to within sidewalk depth, providing optimal application coverage and optimal pole spacing. Available in Type II, III, IV, and V roadway distributions.

ELECTRICAL

Expected Life: LED light engines are rated >100,000 hours at 25°C, L70. Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Lower Energy: Saves an expected of 40-60% over comparable HID luminaires.

Robust Surge Protection: Two different surge protection options provide a minimum of ANSI C136.2 10kV/5kA protection. 20kV/10kA protection is also available.

Luminaire ships with a 0-10v dimmable driver. Luminaire is continuous and step dimming capable via A0 option or controls installed on P7 photocontrol receptacle option.

MECHANICAL

Includes standard AEL lineman-friendly features such as tool-less entry, 3 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easily leveling at installation.

Rugged die-cast aluminum housing and door are polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 7 (per ASTM D1654) after over 5000 hours exposure to salt fog chamber (operated per ASTM B117).

Mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter. Provides a 3G vibration rating per ANSI C136.31

Wildlife shield is cast into the housing (not a separate piece).

CONTROLS

NEMA 3 pin photocontrol receptacle is standard, with the Acuity designed ANSI standard 7 pin receptacle optionally available.

Premium solid state locking style photocontrol - PCSS (10 year rated life) Extreme long life solid state locking style photocontrol - PCLL (20 year rated life).

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and also can allow a single fixture to be flexibly applied in many different applications.

Note: Specifications subject to change without notice. Actual performance may differ as a result of end-user environment and application.

American Electric Lighting

Autobahn Series ATB0
Roadway Lighting

ORDERING INFORMATION

Series

ATB0 Autobahn LED Roadway

Performance Packages

P201	5,369 lumens nominal[6]
P202	6,943 lumens nominal[6]
P203	10,056 lumens nominal
P204	12,176 lumens nominal
P205	13,767 lumens nominal
P301	10,367 lumens nominal
P302	12,185 lumens nominal
P303	15,351 lumens nominal
P304	17,714 lumens nominal
P305	19,893 lumens nominal
P451	16,320 lumens nominal
P452	19,087 lumens nominal
P453	23,592 lumens nominal
P454	25,070 lumens nominal
P455	27,091 lumens nominal
P456	28,347 lumens nominal
P457	29,715 lumens nominal

Voltage

MVOLT	Multi-volt, 120-277V
347	347V[5]
480	480V[5]
XVOLT[7]	277V-480V

Optics

R2	Roadway Type II
R3	Roadway Type III
R4[3]	Roadway Type IV
R5	Roadway Type V

Options

Color Temperature (CCT)

(Blank)	4000K CCT, 70 CRI Min.
27K	2700K CCT, 70 CRI Min.
3K	3000K CCT, 70 CRI Min.
5K	5000K CCT, 70 CRI Min.

Paint

(Blank)	Gray (Standard)
BK	Black
BZ	Bronze
DDB	Dark Bronze
GI	Graphite
WH	White
GN	Green

Surge Protection

(Blank)	Standard 20kV/10kA SPD[4]
MP	MOV Pack 10kV/5kA

Terminal Block

(Blank)	Terminal Block (Standard)
T2	Wired to L1 & L2 Positions

Misc.

BL	External Bubble Level
HSS	House-Side Shield
NL	Nema Label
XL	Not CSA Certified
BAA	Buy America(n) Act Compliant

UMR-XX	8" Horizontal Arm for Round Pole, Painted to match Fixture
UMS-XX	8" Horizontal Arm for Square Pole, Painted to match Fixture
UMR-GALV	8" Horizontal Arm for Round Pole, Galvanized
UMS-GALV	8" Horizontal Arm for Square Pole, Galvanized

Controls

(Blank)	3 Pin NEMA Photocontrol Receptacle (Standard)
P7[2]	7 Pin Photocontrol Receptacle (Dimmable Driver Included)
NR	No Photocontrol Receptacle
AO	Field Adjustable Output
PCSS[1]	Solid State Lighting Photocontrol (120-277V)
PCLL	Solid State Long Life Photocontrol
SH	Shorting Cap

Packaging

(Blank)	Single Unit (Standard)
JP	Job Pack (42/Pallet)

Accessories:

House Side Shields for field installation

ATB0P20XR2/R5HSS	for use with P201 - P205, R2 & R5 distributions
ATB0P20XR3/R4HSS	for use with P201 - P205, R3 & R4 distributions
ATB0P30XR2/R5HSS	for use with P301 - P305, R2 & R5 distributions
ATB0P30XR3HSS	for use with P301 - P305, R3 distribution
ATB0P30XR4HSS	for use with P301 - P305, R4 distribution
ATB0P45XR2/R5HSS	for use with P451 - P457, R2 & R5 distributions
ATB0P45XR3HSS	for use with P451 - P457, R3 distribution

Notes

1 Not available in 347 or 480V.
2 Not available with NR.
3 Not available with P451 - P457 performance packages
4 Not available with P201 performance package + 347V or 480V
5 Not available with P456 or P457 performance package options
6 Not available with XVOLT option
7 XVOLT option only available with P452, P453 and P454 performance packages

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PERFORMANCE PACKAGE

ATB0	Distribution	Input Watts	2700K		3000K		4000K/5000K	
			Lumens	LPW	Lumens	LPW	Lumens	LPW
P201	R2	36	4,983	137	5,473	151	5,488	150
	R3		4,952	136	5,107	140	5,553	152
	R4		5,045	139	5,130	141	5,346	147
	R5		5,084	142	5,384	148	5,387	150
P202	R2	49	6,429	132	7,100	147	7,203	148
	R3		6,390	131	6,679	137	7,237	148
	R4		6,517	136	6,749	140	6,906	144
	R5		6,560	137	6,988	146	6,951	146
P203	R2	70	9,005	130	10,050	144	10,150	147
	R3		8,951	129	9,471	134	10,260	148
	R4		9,494	137	9,673	139	10,060	145
	R5		9,188	134	9,784	142	9,736	142
P204	R2	88	11,007	125	11,800	136	12,410	141
	R3		10,940	124	11,490	132	12,470	141
	R4		11,485	132	11,900	136	12,170	139
	R5		11,230	131	11,780	137	11,900	138
P205	R2	102	12,339	121	12,650	125	13,920	137
	R3		12,264	120	13,110	139	14,130	138
	R4		13,051	130	13,680	136	13,830	138
	R5		12,589	127	13,080	132	13,340	135
P301	R2	67	9,527	140	10,450	154	10,460	153
	R3		9,469	139	10,590	158	10,820	158
	R4		9,579	144	10,210	152	10,150	152
	R5		9,720	145	10,370	154	10,300	154
P302	R2	83	11,118	135	11,790	142	12,300	149
	R3		11,050	134	12,290	150	12,520	152
	R4		11,589	140	12,720	153	12,280	148
	R5		11,343	137	12,120	147	12,020	145
P303	R2	106	14,152	130	15,090	140	15,420	141
	R3		14,066	131	15,230	142	15,950	148
	R4		14,514	136	15,720	146	15,380	144
	R5		14,439	136	15,140	142	15,300	144
P304	R2	124	16,705	130	17,180	136	18,010	141
	R3		16,603	131	17,890	141	18,230	144
	R4		16,845	135	18,160	145	17,850	143
	R5		17,043	137	17,670	142	18,060	145
P305	R2	145	18,388	124	19,720	134	20,160	136
	R3		18,276	124	20,070	135	20,440	138
	R4		18,695	129	20,050	138	19,810	137
	R5		18,761	130	19,350	135	19,880	138

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Warranty Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions
Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

PERFORMANCE PACKAGE

ATB0	Distribution	Input Watts	2700K		3000K		4000K/5000K	
			Lumens	LPW	Lumens	LPW	Lumens	LPW
P451	R2	105	14,827	138	15,760	148	16,570	154
	R3		14,737	137	16,790	157	16,640	155
	R5		15,128	144	17,150	162	16,030	153
P452	R2	125	18,277	146	18,270	147	19,370	155
	R3		18,166	146	19,420	151	19,470	156
	R5		18,648	148	19,140	151	19,760	157
P453	R2	159	22,227	139	22,570	143	23,900	150
	R3		22,092	139	24,090	151	23,550	148
	R5		22,677	141	23,920	148	24,030	149
P454	R2	170	24,585	144	23,580	139	25,060	147
	R3		24,436	143	25,340	148	25,200	148
	R5		25,084	147	25,360	148	26,580	156
P455	R2	187	25,732	138	25,270	136	26,750	143
	R3		25,576	137	27,430	145	27,020	145
	R5		26,254	143	27,730	149	27,820	152
P456	R2	203	27,277	135	26,560	132	28,230	139
	R3		27,111	134	28,600	142	28,950	143
	R5		27,830	143	28,740	146	29,490	151
P457	R2	211	27,656	131	27,270	130	28,900	137
	R3		27,488	130	29,750	142	29,680	140
	R5		28,217	137	29,790	146	29,900	145

Note: Individual fixture performance may vary.

ATB0 LLD Multiplier	15C	20C	25C	30C	35C	40C
	1.02	1.01	1.00	0.99	0.98	0.97

To calculate the LLD for a temperature other than 25°C, multiply the LLD @ 25°C (shown in the performance package table) by the LLD multiplier for the selected temperature.

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Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

PERFORMANCE PACKAGE

LLD @ 25°C									
ATB0	R2, R3 Distributions 3000K & 4000K CCT			R2, R3 Distributions 2700K & 5000K CCT*			R4 & R5 Distributions Any CCT		
	50k Hours	75k Hours	100k Hours	50k Hours	75k Hours	100k Hours	50k Hours	75k Hours	100k Hours
P201	0.96	0.95	0.94	0.92	0.88	0.85	0.92	0.88	0.85
P202	0.96	0.95	0.94	0.92	0.88	0.85	0.92	0.88	0.85
P203	0.96	0.95	0.93	0.91	0.88	0.85	0.91	0.88	0.85
P204	0.96	0.95	0.93	0.91	0.88	0.84	0.91	0.88	0.84
P205	0.96	0.95	0.93	0.91	0.87	0.83	0.91	0.87	0.83
P301	0.96	0.95	0.93	0.92	0.88	0.85	0.92	0.88	0.85
P302	0.96	0.95	0.93	0.92	0.88	0.85	0.92	0.88	0.85
P303	0.96	0.95	0.93	0.92	0.88	0.84	0.92	0.88	0.84
P304	0.96	0.95	0.93	0.91	0.87	0.83	0.91	0.87	0.83
P305	0.96	0.95	0.93	0.9	0.86	0.82	0.9	0.86	0.82
P451	0.96	0.94	0.93	0.92	0.88	0.85	0.92	0.88	0.85
P452	0.96	0.94	0.93	0.91	0.88	0.84	0.91	0.88	0.84
P453	0.96	0.94	0.93	0.91	0.87	0.83	0.91	0.87	0.83
P454	0.96	0.94	0.93	0.9	0.86	0.82	0.9	0.86	0.82
P455	0.96	0.94	0.93	0.9	0.85	0.81	0.9	0.85	0.81
P456	0.94	0.93	0.91	0.89	0.84	0.79	0.89	0.84	0.79
P457	0.94	0.93	0.91	0.88	0.83	0.79	0.88	0.83	0.79

*** Also includes any custom (non-catalog) CCT**

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B.U.G. Ratings

ATB0	Distribution	2700K			3000K			4000/5000K		
		B	U	G	B	U	G	B	U	G
P201	R2	1	0	1	2	0	2	2	0	2
	R3	1	0	1	1	0	1	1	0	1
	R4	1	0	2	1	0	2	1	0	2
	R5	3	0	1	3	0	1	3	0	1
P202	R2	2	0	2	2	0	2	2	0	2
	R3	1	0	2	1	0	2	1	0	2
	R4	1	0	2	1	0	2	1	0	2
	R5	3	0	1	3	0	2	3	0	2
P203	R2	2	0	2	2	0	2	2	0	2
	R3	2	0	2	2	0	2	2	0	2
	R4	2	0	3	2	0	3	2	0	3
	R5	3	0	2	4	0	2	4	0	2
P204	R2	3	0	3	3	0	3	3	0	3
	R3	2	0	2	2	0	2	2	0	2
	R4	2	0	3	2	0	3	2	0	3
	R5	4	0	2	4	0	2	4	0	2
P205	R2	3	0	3	3	0	3	3	0	3
	R3	2	0	2	2	0	2	2	0	2
	R4	2	0	3	2	0	3	2	0	3
	R5	4	0	2	4	0	2	4	0	2
P301	R2	2	0	2	2	0	2	2	0	2
	R3	2	0	2	2	0	2	2	0	2
	R4	2	0	3	2	0	3	2	0	3
	R5	4	0	2	4	0	2	4	0	2
P302	R2	3	0	3	3	0	3	3	0	3
	R3	2	0	2	2	0	2	2	0	2
	R4	2	0	3	2	0	3	2	0	3
	R5	4	0	2	4	0	2	4	0	2
P303	R2	3	0	3	3	0	3	3	0	3
	R3	2	0	2	2	0	3	2	0	3
	R4	2	0	3	3	0	3	3	0	3
	R5	4	0	2	4	0	2	4	0	2
P304	R2	3	0	3	3	0	3	3	0	3
	R3	2	0	3	3	0	3	3	0	3
	R4	3	0	3	3	0	4	3	0	3
	R5	4	0	2	4	0	2	4	0	2
P305	R2	3	0	3	3	0	3	3	0	3
	R3	3	0	3	3	0	3	3	0	3
	R4	3	0	4	3	0	4	3	0	4
	R5	5	0	3	5	0	3	5	0	3

American Electric Lighting®
AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com

Warranty Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions
Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

B.U.G. Ratings

ATB0	Distribution	2700K			3000K			4000/5000K		
		B	U	G	B	U	G	B	U	G
P451	R2	3	0	3	3	0	3	3	0	3
	R3	2	0	2	2	0	3	2	0	3
	R5	4	0	2	4	0	2	4	0	2
P452	R2	3	0	3	3	0	3	3	0	3
	R3	3	0	3	3	0	3	3	0	3
	R5	5	0	3	5	0	3	5	0	3
P453	R2	3	0	3	3	0	3	3	0	3
	R3	3	0	3	3	0	3	3	0	3
	R5	5	0	3	5	0	3	5	0	3
P454	R2	3	0	3	3	0	3	3	0	3
	R3	3	0	3	3	0	3	3	0	3
	R5	5	0	3	5	0	3	5	0	3
P455	R2	3	0	3	3	0	3	3	0	3
	R3	3	0	3	3	0	4	3	0	4
	R5	5	0	3	5	0	3	5	0	3
P456	R2	4	0	4	3	0	3	4	0	4
	R3	3	0	4	3	0	4	3	0	4
	R5	5	0	3	5	0	4	5	0	4
P457	R2	4	0	4	4	0	4	4	0	4
	R3	3	0	4	3	0	4	3	0	4
	R5	5	0	4	5	0	4	5	0	4

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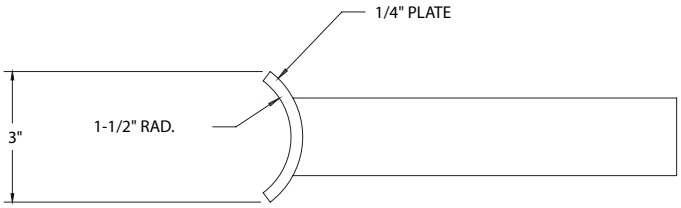
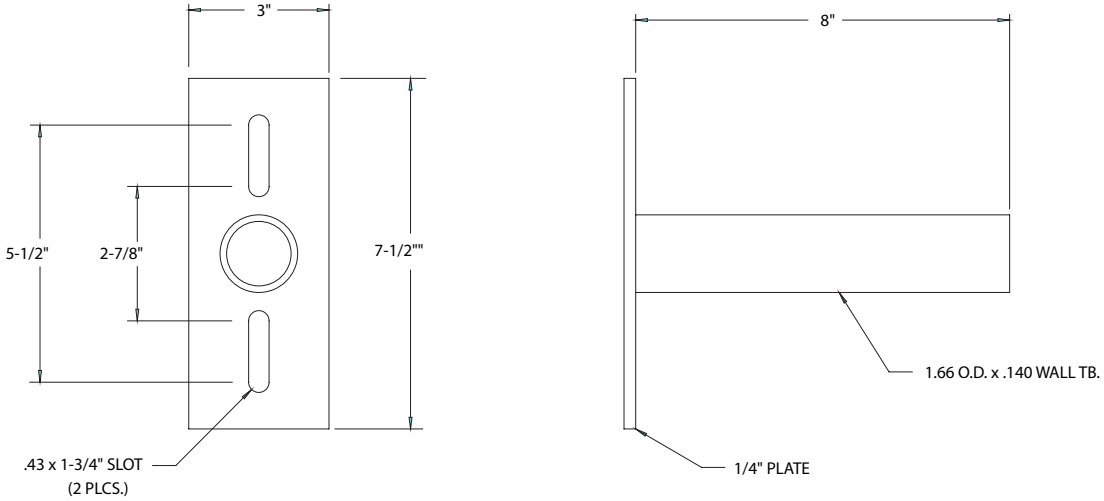
UMR POLE ADAPTOR

RECOMMENDED FOR USE WITH POLES OF 4" DIAMETER OR SMALLER





UMS POLE ADAPTOR

Warranty Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions
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Please contact your sales representative for the latest product information.

Catalog Number	
Notes	Type

HLWPC2

Wallpack® Full Cutoff LED

Mechanical

- Heavy grade A360 cast aluminum (aluminum with <1% copper)
- Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering
- Mounts to a standard junction box
- Wet location listed
- IP65 rated housing, down light only
- ¾" painted threaded entry(¾" - 14 NPT) on each side and on top, accepts ¾" and ½" conduit
- ¾" threaded plugs are painted on each side
- Vibration tested to 1.5G per ANSI C136.31.

Electrical

- Certified by UL or CSA
- Rated for -40°C (-40°F) minimum ambient
- A programmable electronic driver with 0-10V control leads
- Available in: 120-277V 50/60 Hz and 347-480V 50/60 Hz,
- Standard: 3000K, 4000K and 5000K CCT (>70 CRI)
- Optional >80 CRI (3000K, 4000K and 5000K CCT)
- Internally mounted emergency battery backup for operation in an ambient temperature ranging from -20°C (-4°F) to 30°C (86°F), available with P10 thru P40 performance packages, non CEC compliant
- All surge protection meets ANSI/IEEE C62.41.2 10kV/10kA
- Standard surge protection is 20kV/10kA per ANSI C136.2
- Optional surge protection is 10kV/5kA per ANSI C136.2

Optical

- Light engine housing is IP66 rated
- Acrylic optical system
- Type V: E (entry), M (medium), R (rectangle) & W (wide)
- Asymmetric

Controls

- Field adjustable output (AO)
- Button style photocontrol (PE)
- Motion sensor & ambient photocontrol combination for mounting low (8-15') (MASL) and high (15-30') (MASH) mounting heights

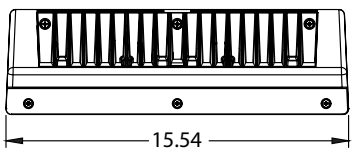
Certification and Standards

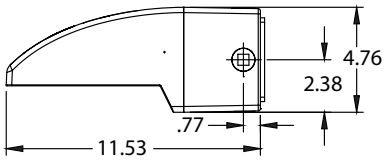
- Luminaire is CSA listed, US and Canada
- Suitable for operation in an ambient temperature up to 40°C/104°F per UL or CSA certification
- Design lights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.
- LM-79 compliant
- The projected LED Lumen Maintenance shall be based only on IES LM-80-08 and TM-21

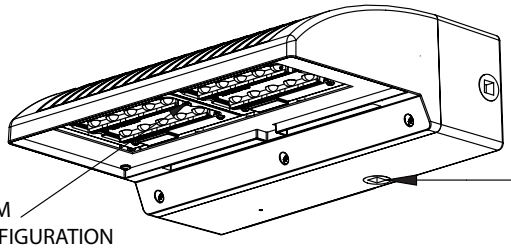
Warranty

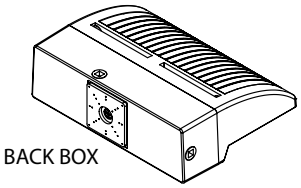
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions.

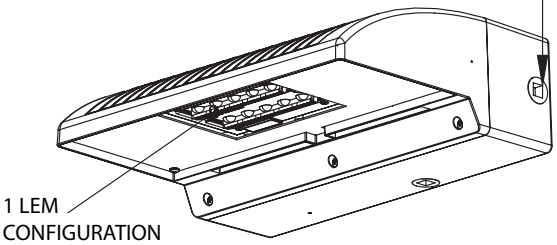
Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.











Note: Maximum weight 22 lbs.

HLWPC2

Wallpack® Full Cutoff LED

ORDERING INFORMATION

Example: HLWPC2 P20 40K AS T3M BZSDP

Series	Lumen Package	Color Temperature	Voltage	Optics	Color	CRI
HLWPC2 Wallpack Full Cutoff LED	1 LEM Package P10 3,100 lm P20 5,600 lm 2 LEM Package P30 7,800 lm P40 9,900 lm P50 11,700 lm (Nominal Lumens, 4000K)	AMB True Amber 30K 3,000 K CCT 40K 4,000 K CCT 50K 5,000 K CCT	120 120 volts 208 208 volts 240 240 volts 277 277 volts 347 347 volts 480 480 volts HVOLT 347/480 volts MVOLT 120-277 volts	T2S Type 2 Short T2M Type 2 Medium T3S Type 3 Short T3M Type 3 Medium T4M Type 4 Medium TFTM Forward Throw Medium ASYDF Asymmetric Diffuse SYMDF Symmetric Diffuse	BKSDP Black BZSDP Bronze GYSDP Grey WHSDP White	Blank 70 CRI (STD) 80CRI 80 CRI

Options:

Adjustable/Programmable Options

AO Field Adjustable Output

Circuit Options

2CI 2 Independent Circuits

Control - Motion Sensor Options

MASL Motion / Ambient Sensor, 8-15' Mounting Height Ambient Sensor Enabled at 1 FC

MASH Motion / Ambient Sensor, 15-30' Mounting Height Ambient Sensor Enabled at 1 FC

Control - Photocontrol Options

PE Button Style Photocontrol

P3 N.E.M.A. Twistlock Receptacle Mount -3 PIN

P7 N.E.M.A. Twistlock Receptacle Mount -7 PIN

PCLL DTL Long Life Twistlock Photocontrol for Solid State

PSC Shorting Cap

Fuse Option

SF Single Fuse

DF Double Fuse

Safety Option

EM Integral Emergency Battery

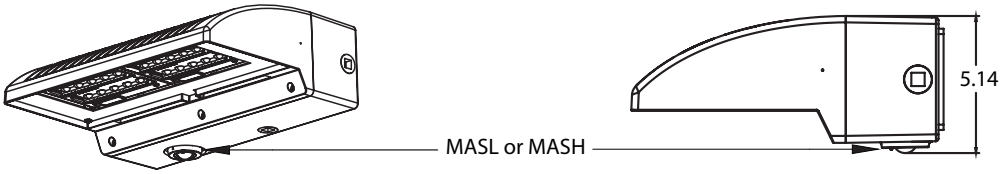
TP Tamper Resistant Hardware

Surge Protection Option - 20kV/10kA is Standard

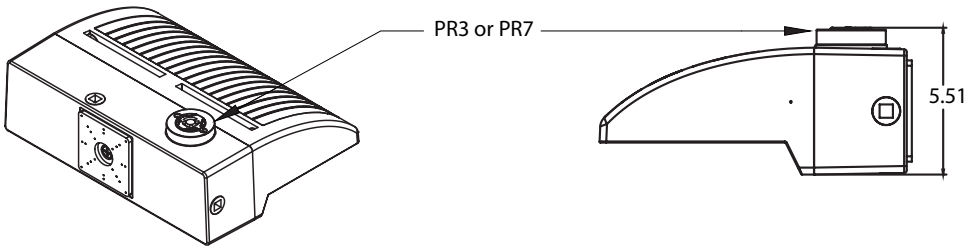
10KV 10kV/5kA Surge Protection, in place of 20kV/10kA

Options Location

Motion/Ambient Sensor mount options for Low (8-15') (MASL) and Height (15-30') (MASH) applications

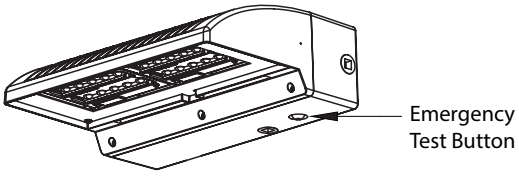


N.E.M.A. Twistlock Receptacle P3 and P7 Options, P7 Shown

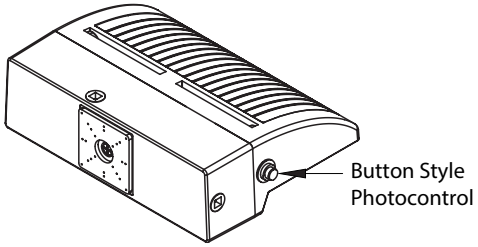


Internal Emergency Battery Test Button - EM Option

Test Button - EM Option



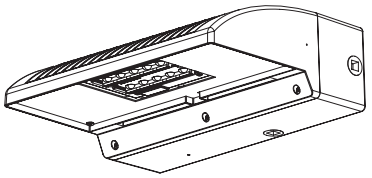
Button Style Photocontrol - PE Option



Driver & LEM Configuration Based on Circuit Options

Number of LEMs & Drivers / Circuit		Sinlge Circuit (std.)		Two Circuit (2CI option)	
		LEMs	Drivers	LEMs	Drivers
Lumen Maintenance Factor	P10	1	1	-	-
	P20	1	1	2	2
	P30	2	1	2	2
	P40	2	1	2	2
	P50	2	1	-	-

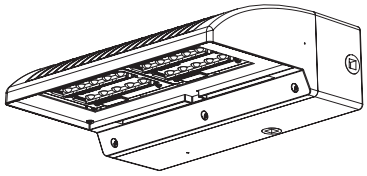
1 LEM Luminaire



SPD Based on Circuit Options

Number of LEMs & Drivers / Circuit		Sinlge Circuit (std.)				Two Circuit (2CI option)			
		LEMs	Drivers	No. of SPDs	SPD	LEMs	Drivers	No. of SPDs	SPD
Lumen Maintenance Factor	P10	1	1	1	20kV/10kA	-	-	-	-
	P20	1	1	1	20kV/10kA	2	2	2	10kV/5kA
	P30	2	1	1	20kV/10kA	2	2	2	10kV/5kA
	P40	2	1	1	20kV/10kA	2	2	2	10kV/5kA
	P50	2	1	1	20kV/10kA	-	-	-	-

2 LEM Luminaire



Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platform noted in a 25°C ambient, based on 6,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

The italicized data is extrapolated beyond the TM-21 standard.

E = (LM) x (CU) x (LAT) x (LLD)
LM and CU are obtained from published photometry.

Operating Hours (Standard)		0	25,000	30,000	36,000	45,000	50,000	60,000	75,000	100,000
Lumen Maintenance Factor	P10	1	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.92
	P20	1	0.97	0.95	0.94	0.93	0.92	0.90	0.88	0.85
	P30	1	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.92
	P40	1	0.97	0.95	0.94	0.93	0.92	0.90	0.88	0.85

Operating Hours (2CI Option)		0	25,000	30,000	36,000	45,000	50,000	60,000	75,000	100,000
Lumen Maintenance Factor	P10	1	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	P20	1	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	P30	1	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
	P40	1	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Single Circuit Application

Ambient		P10	P20	P30	P40	P50
0°C	32°F	1.02	1.03	1.03	1.04	1.05
10°C	50°F	1.01	1.02	1.02	1.03	1.03
20°C	68°F	1.01	1.01	1.01	1.01	1.01
25°C	77°F	1.00	1.00	1.00	1.00	1.00
30°C	86°F	0.99	0.99	0.99	0.99	0.99
40°C	104°F	0.98	0.97	0.98	0.97	0.97

Optional Two Independent Circuit (2CI) Application

Ambient		P20	P30	P40
0°C	32°F	1.02	1.02	1.02
10°C	50°F	1.01	1.01	1.02
20°C	68°F	1.00	1.01	1.01
25°C	77°F	1.00	1.00	1.00
30°C	86°F	0.99	0.99	0.99
40°C	104°F	0.98	0.98	0.98

Electrical Load

Single Circuit Application

LEDs	Drive Current (mA)	System Watts/ Circuit	Current (A)					
			120	208	240	277	247	480
P10	700	28	0.23	0.13	0.12	0.10	0.08	0.06
P20	1400	47	0.41	0.24	0.20	0.18	0.14	0.10
P30	1050	71	0.63	0.37	0.32	0.29	0.22	0.18
P40	1420	95	0.78	0.45	0.40	0.35	0.27	0.20
P50	1720	115	0.95	0.55	0.48	0.42	0.33	0.24

Optional Two Independent Circuit (2CI) Application

LEDs	Drive Current (mA)	System Watts/ Circuit	Current (A)					
			120	208	240	277	247	480
P10	-	-	-	-	-	-	-	-
P20	700	22	0.10	0.06	0.05	0.04	-	-
P30	1000	32	0.14	0.08	0.07	0.06	-	-
P40	1250	47	0.18	0.10	0.09	0.08	-	-
P50	-	-	-	-	-	-	-	-

Operating Characteristics

LED Package	Distribution	System Watts	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P10	T2S	28	2,904	104	1	0	1	3,128	112	1	0	1	3,168	113	1	0	1
	T2M	28	2,887	103	1	0	1	3,110	111	1	0	1	3,149	112	1	0	1
	T3S	28	2,964	106	1	0	1	3,194	114	1	0	1	3,234	116	1	0	1
	T3M	28	2,801	100	1	0	1	3,017	108	1	0	1	3,055	109	1	0	1
	T4M	28	2,858	102	1	0	1	3,079	110	1	0	1	3,118	111	1	0	1
	TFTM	28	2,979	106	1	0	1	3,209	115	1	0	1	3,250	116	1	0	1
	SYMDF	28	2,771	99	1	0	1	2,986	107	1	0	1	3,023	108	1	0	1
	ASYDF	28	2,756	98	1	0	1	2,969	106	1	0	1	3,007	107	1	0	1
P20	T2S	47	5,303	113	1	0	1	5,713	122	1	0	1	5,785	123	1	0	1
	T2M	47	5,272	112	1	0	2	5,680	121	1	0	2	5,751	122	1	0	2
	T3S	47	5,414	115	1	0	2	5,832	124	1	0	2	5,906	126	1	0	2
	T3M	47	5,115	109	1	0	2	5,510	117	1	0	2	5,580	119	1	0	2
	T4M	47	5,220	111	1	0	2	5,623	120	1	0	2	5,694	121	1	0	2
	TFTM	47	5,440	116	1	0	2	5,861	125	1	0	2	5,935	126	1	0	2
	SYMDF	47	5,062	108	2	0	2	5,453	116	2	0	2	5,522	117	2	0	2
	ASYDF	47	5,033	107	1	0	1	5,422	115	2	0	1	5,491	117	2	0	1
P30	T2S	71	7,319	103	2	0	2	7,884	111	2	0	2	7,984	112	2	0	2
	T2M	71	7,276	102	2	0	2	7,838	110	2	0	2	7,937	112	2	0	2
	T3S	71	7,472	105	1	0	2	8,049	113	2	0	2	8,151	115	2	0	2
	T3M	71	7,059	99	2	0	2	7,604	107	2	0	2	7,700	108	2	0	2
	T4M	71	7,203	101	2	0	2	7,760	109	2	0	2	7,858	111	2	0	2
	TFTM	71	7,508	106	1	0	2	8,088	114	2	0	2	8,190	115	2	0	2
	SYMDF	71	6,985	98	2	0	2	7,525	106	3	0	3	7,620	107	3	0	3
	ASYDF	71	6,946	98	2	0	2	7,483	105	2	0	2	7,578	107	2	0	2
P40	T2S	95	9,320	98	2	0	2	10,041	106	2	0	2	10,168	107	2	0	2
	T2M	95	9,266	98	2	0	2	9,982	105	2	0	3	10,108	106	2	0	3
	T3S	95	9,515	100	2	0	2	10,251	108	2	0	2	10,381	109	2	0	2
	T3M	95	8,989	95	2	0	2	9,684	102	2	0	2	9,807	103	2	0	2
	T4M	95	9,174	97	2	0	2	9,883	104	2	0	3	10,008	105	2	0	3
	TFTM	95	9,561	101	2	0	2	10,300	108	2	0	2	10,431	110	2	0	2
	SYMDF	95	8,896	94	3	0	3	9,583	101	3	0	3	9,705	102	3	0	3
	ASYDF	95	8,846	93	2	0	2	9,530	100	2	0	2	9,650	102	2	0	2
P50	T2S	115	10,972	95	2	0	2	11,820	103	2	0	2	11,969	104	2	0	2
	T2M	115	10,908	95	2	0	3	11,751	102	2	0	3	11,900	103	2	0	3
	T3S	115	11,202	97	2	0	2	12,067	105	2	0	2	12,220	106	2	0	2
	T3M	115	10,582	92	2	0	2	11,400	99	2	0	3	11,544	100	2	0	3
	T4M	115	10,799	94	2	0	3	11,634	101	2	0	3	11,781	102	2	0	3
	TFTM	115	11,256	98	2	0	2	12,126	105	2	0	2	12,279	107	2	0	2
	SYMDF	115	10,472	91	3	0	3	11,282	98	3	0	3	11,424	99	3	0	3
	ASYDF	115	10,414	91	2	0	2	11,219	98	3	0	2	11,361	99	3	0	2

Use the following to scale 70CRI to 80CRI.

CCT	Multiplier
3000K	0.909
4000K	0.886
5000K	0.865

All IES files available on product web page

Operating Characteristics (continued)

LED Package	Distribution	System Watts	30K + 2CI Option (3000K, 70 CRI)					40K + 2CI Option (4000K, 70 CRI)					50K + 2CI Option (5000K, 70 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P20	T2S	49	5,015	102	1	0	1	5,402	110	1	0	1	5,471	112	1	0	1
	T2M	49	4,985	102	1	0	2	5,371	110	1	0	2	5,439	111	1	0	2
	T3S	49	5,120	104	1	0	1	5,515	113	1	0	2	5,585	114	1	0	2
	T3M	49	4,837	99	1	0	2	5,210	106	1	0	2	5,276	108	1	0	2
	T4M	49	4,936	101	1	0	2	5,317	109	1	0	2	5,385	110	1	0	2
	TFTM	49	5,144	105	1	0	2	5,542	113	1	0	2	5,612	115	1	0	2
	SYMDF	49	4,786	98	2	0	2	5,156	105	2	0	2	5,222	107	2	0	2
	ASYDF	49	4,760	97	1	0	1	5,127	105	1	0	1	5,192	106	1	0	1
P30	T2S	70	6,769	97	1	0	1	7,293	104	2	0	2	7,385	106	2	0	2
	T2M	70	6,730	96	2	0	2	7,250	104	2	0	2	7,342	105	2	0	2
	T3S	70	6,911	99	1	0	2	7,445	106	1	0	2	7,539	108	1	0	2
	T3M	70	6,529	93	2	0	2	7,033	100	2	0	2	7,123	102	2	0	2
	T4M	70	6,663	95	2	0	2	7,178	103	2	0	2	7,269	104	2	0	2
	TFTM	70	6,945	99	1	0	2	7,481	107	1	0	2	7,576	108	2	0	2
	SYMDF	70	6,461	92	2	0	2	6,960	99	2	0	2	7,049	101	2	0	2
	ASYDF	70	6,425	92	2	0	2	6,922	99	2	0	2	7,009	100	2	0	2
P40	T2S	89	8,370	94	2	0	2	9,017	101	2	0	2	9,131	103	2	0	2
	T2M	89	8,321	93	2	0	2	8,964	101	2	0	2	9,078	102	2	0	2
	T3S	89	8,545	96	2	0	2	9,205	103	2	0	2	9,322	105	2	0	2
	T3M	89	8,073	91	2	0	2	8,696	98	2	0	2	8,807	99	2	0	2
	T4M	89	8,238	93	2	0	2	8,875	100	2	0	2	8,987	101	2	0	2
	TFTM	89	8,586	96	2	0	2	9,250	104	2	0	2	9,367	105	2	0	2
	SYMDF	89	7,989	90	3	0	3	8,606	97	3	0	3	8,715	98	3	0	3
	ASYDF	89	7,944	89	2	0	2	8,558	96	2	0	2	8,666	97	2	0	2

Use the following to scale 70CRI to 80CRI.

CCT	Multiplier
3000K	0.909
4000K	0.886
5000K	0.865

All IES files available on product web page

LED Package	Distribution	System Watts	AMB (Wavelength)					LED Package	Distribution	System Watts	AMB (Wavelength)				
			Lumens	LPW	B	U	G				Lumens	LPW	B	U	G
P10	T2S	28	1,061	38	0	0	1	P30	T2S	28	1,975	71	0	0	1
	T2M	28	1,054	38	0	0	1		T2M	28	1,964	70	0	0	1
	T3S	28	1,083	39	0	0	1		T3S	28	2,016	72	0	0	1
	T3M	28	1,023	37	0	0	1		T3M	28	1,905	68	0	0	1
	T4M	28	1,044	37	0	0	1		T4M	28	1,944	69	0	0	1
	TFTM	28	1,088	39	0	0	1		TFTM	28	2,026	72	0	0	1
	SYMDF	28	1,012	36	1	0	1		SYMDF	28	1,885	67	1	0	1
	ASYDF	28	1,007	36	0	0	1		ASYDF	28	1,875	67	0	0	1

Options Matrix

Parameters		LED AMB	Options (Start with SF, DF, 2CI or EM if being used)													
			PE	P3	P7	PSC	PCLL	MASH	MASL	SF	DF	TP	10kV	AO	2CI	EM
LED Performance Package	P10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
	P20	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P30	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P40	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P50	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Voltage	AS	Y	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y
	AH	Y	N	Y	Y	Y	N	N	N	N	N	Y	Y	Y	N	N
	12	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
	20	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
	24	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
	27	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
	34	Y	Y	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y	N	N
	48	Y	N	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	N	N
Options	PE	Y		N	N	N	N	N	N	Y	Y	Y	Y	Y	N	Y
	P3	Y	N		N	M	Y	N	N	Y	Y	Y	Y	N	N	N
	P7	Y	N	N		M	Y	N	N	Y	Y	Y	Y	N	N	N
	PSC	Y	N	M	M		N	N	N	Y	Y	Y	Y	N	N	N
	PCLL	Y	N	Y	Y	N		N	N	Y	Y	Y	Y	N	N	N
	MASH	Y	N	N	N	N	N		N	Y	Y	Y	Y	N	N	N
	MASL	Y	N	N	N	N	N	N		Y	Y	Y	Y	N	N	N
	SF	Y	Y	Y	Y	Y	Y	Y	Y		N	Y	Y	Y	Y	Y
	DF	Y	Y	Y	Y	Y	Y	Y	Y	N		Y	Y	Y	Y	Y
	TP	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y
	10kV	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	M	M
	AO	Y	Y	N	N	N	N	N	N	Y	Y	Y	Y		N	N
	2CI	P30	N	N	N	N	N	N	N	Y	Y	Y	M	N		N
	EM	Y	Y	N	N	N	N	N	N	Y	Y	Y	M	N	N	

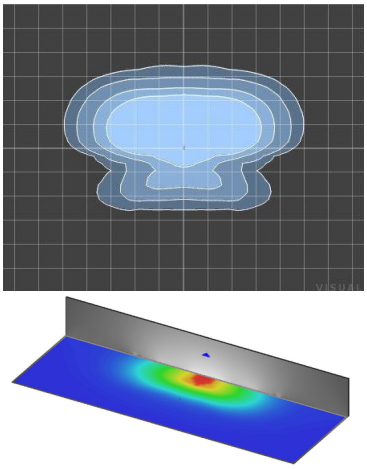
Notes
I = Included with option
M = Must have: one of these must be installed for the luminaire to operate
N = Combination Not available
P30 = Valid Option Combination, not available with P10 Performance Packabe
Y = Valid Option Combination

Photometric Diagrams

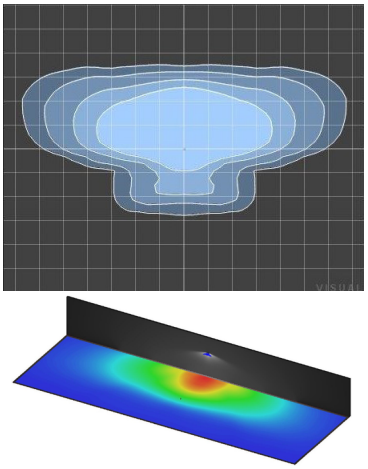
To see complete photometric reports or download .ies files for this product, visit the Holophane's Wallpack FCO LED homepage. Isofootcandle plots for the HLWPC2 P30 40K. Distance are in units of mounting height (12"). Grid is 10'x10'.

0.1 fc	1 fc	0.2 fc	0.5 fc

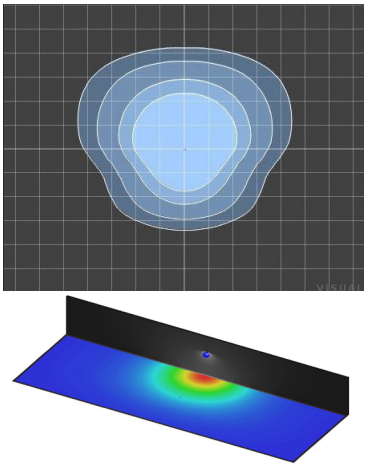
HLWPC2 P30 40K XX T2S



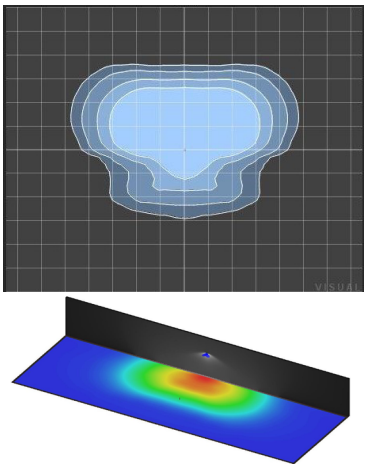
HLWPC2 P30 40K XX T2M



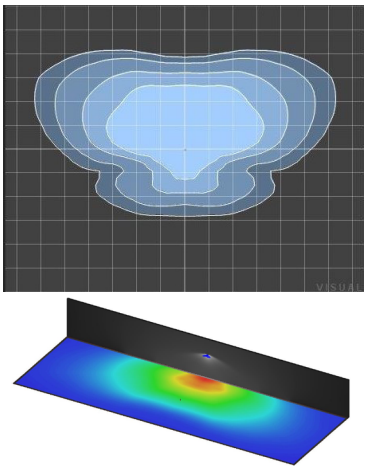
HLWPC2 P30 40K XX ASYDF



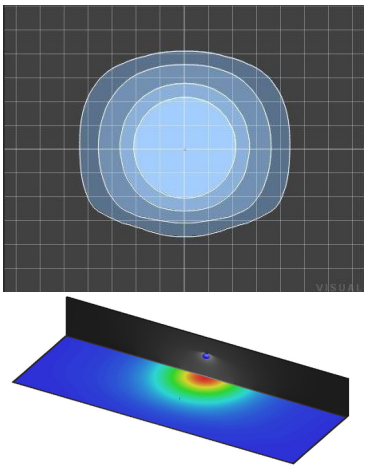
HLWPC2 P30 40K XX T3S



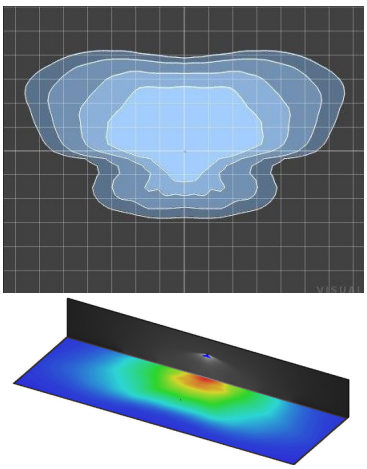
HLWPC2 P30 40K XX T3M



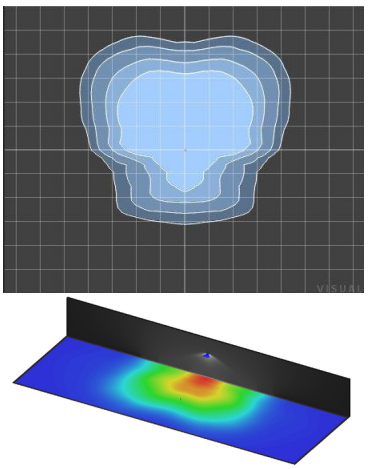
HLWPC2 P30 40K XX SYMDF



HLWPC2 P30 40K XX T4M

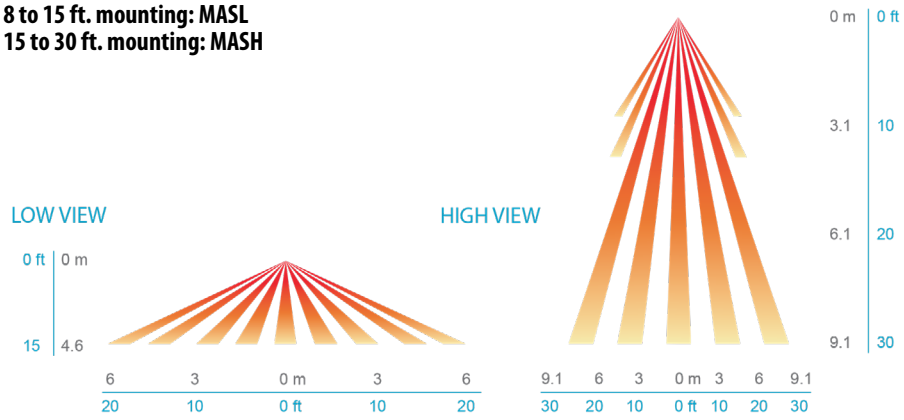


HLWPC2 P30 40K XX TFTM



Coverage Pattern

8 to 15 ft. mounting: MASL
15 to 30 ft. mounting: MASH



Control Options

Button Style Photocontrol

PE

N.E.M.A. Receptacle

P3

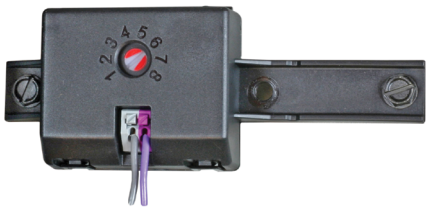
P7

Motion & Ambient Combined Sensor

MASL/MASH

Field Adjustable Output Module

The Field Adjustable Output (AO) module is an onboard device that adjusts the light output and input voltage to meet specific requirements, allowing a single fixture configuration to be flexibly applied in many different applications. The AO option is available on the HLWPC2 series.



P10 - AS and AH		
AO Position	% Lumens	% Wattage
8	100%	100%
7	94%	95%
6	83%	82%
5	71%	69%
4	59%	57%
3	46%	45%
2	34%	33%
1	21%	21%

P20 - AS and AH		
AO Position	% Lumens	% Wattage
8	100%	100%
7	95%	94%
6	84%	80%
5	73%	67%
4	61%	54%
3	48%	42%
2	35%	30%
1	21%	18%

P30 - AS and AH		
AO Position	% Lumens	% Wattage
8	100%	100%
7	95%	94%
6	84%	80%
5	73%	67%
4	61%	54%
3	48%	42%
2	35%	30%
1	21%	18%

P40 - AS and AH		
AO Position	% Lumens	% Wattage
8	100%	100%
7	95%	95%
6	85%	82%
5	74%	68%
4	62%	55%
3	49%	43%
2	36%	30%
1	21%	17%

P50 - AS and AH		
AO Position	% Lumens	% Wattage
8	100%	100%
7	96%	95%
6	86%	81%
5	75%	68%
4	64%	55%
3	51%	42%
2	37%	29%
1	22%	17%

APPENDIX F

2023 THREATENED AND ENDANGERED SPECIES REPORT

PETER D. TORGERSEN,
ENVIRONMENTAL SCIENCES
110 Town Line Road, Pearl River New York 10965, 845 642 8939 petertorger271@gmail.com

John D. Fuller PE
4 South Street
Port Jervis, New York,12771

July 13, 2021

Re: Endangered Species Report for New Century Film

Dear Mr. Fuller,

The above 40.66 acre site is bordered to the north by Route 209, to the east by Neversink Drive, to the west by existing residential development and to the south by the Neversink River. This site previously was used as an equestrian facility and there currently is a barn, a large indoor riding area, an office and two private residences. Much of the site is either lawn or private use agriculture field/gardens. Very little of the site has not been impacted by man, even the narrow band of floodplain forest along the riverbank appears to have been somewhat cleared of brush. The proposed development is limited to renovating the existing indoor riding area into a professional office/ film studio type of use. There are no proposed outdoor disturbances, site clearing or grading to occur.

The NYSDEC has provided the names of 5 animals and one type of a rare natural community as being located at or around this specific location. These species are the Bald Eagle, Dwarf Wedgemussel, The Brook Floater, The Timber Rattlesnake and Floodplain Forest. While onsite I saw a Bald Eagle flying along the river 3 times in three hours. Odds are it was the same bird. I saw no nests in any onsite trees. The Bald Eagle has made a successful comeback and is no longer listed as federally rare or endangered; in fact the population is steadily increasing with documented nest sites now located in both Orange and Rockland County. The proposed renovation of the riding arena will have no impacts to either eagle roost trees or eagle feeding areas.

The Timber Rattlesnake has been documented within 1 mile of this site. During the site review I saw a Black Snake approximately 36" long as well as 2 Garter Snakes, no rattlesnakes were observed. Located just to the north is a steep, stony hillside between Big Pond Road and Peenpack Trail that is textbook rattlesnake habitat. The hillside faces to the south so it receives the maximum amount of sunlight. There are cracks and fissures in the rocks as well as small tallus piles that can provide winter den sites. Across the Neversink River is also a steep stony hillside that also meets almost all requirements for optimum snake habitat, the only negative is that the hillside faces to the north. Perfect habitat or not the Neversink River represents an insurmountable obstacle for any snakes that wander that far from their winter den. While male snakes are known to travel a few miles from their winter den sites females usually stay very close to the den.The snakes located to the north must cross 4 or 5 roads as well as numerous residential yards to ever make it to the project site. While not

impossible this seems highly unlikely because suitable habitat is to be found much closer with much less risk or effort. I feel that the project site does not represent potential snake habitat in any useful way.

The Dwarf Wedgemussel, Brook Floater and the Alewife Floater are freshwater mussels that are listed as endangered, threatened and critically imperiled respectively. All three have been documented in the Neversink River. While conducting my review I found what I believe to be Alewife Floater shells just upstream from the project site. The stretch of river this property fronts appears to be quite suitable habitat for the three species of mussels mentioned by DEC. The main threats to these species are pollution and siltation caused by riverbank development. This project has no proposed outside disturbances and there are no buildings or paved areas within 300 to 400 feet of the existing banks. The onsite agriculture use is organic in philosophy and does not use any chemicals that could potentially impact any water quality. This current proposal will not impact any freshwater mussels locate directly next to or downstream from the project site.

Along the riverbank is a narrow band of what is called floodplain forest. While there mature trees remain it would appear that this area has been somewhat impacted by the removal of brush. The forest is wider at the east end of the site and is quite narrow at the west end. There are no signs of invasive species such as Phragmites, Japanese Knotweed, Purple Loosestrife or Barberry, 4 plant species that are present on the adjacent property just east across Neversink Drive. There are no proposed impacts to the existing onsite floodplain forest.

Yours truly,

Peter Torgersen