Regeneron Pharmaceuticals Tempel Lane Campus

East Greenbush, NY

VISUAL IMPACT ASSESSMENT

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Prepared for:

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CHA File: 33295

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I. INTRO/PROJECT DESCRIPTION

Regeneron Pharmaceuticals, Inc. is proposing new manufacturing and warehousing facilities on a site in East Greenbush, NY. The site is located on Tempel Lane, north of Red Mill Road (NY Route 151), south of 3rd Ave Extension and west of US Route 4 (shown on figure below). The parcel is part of what was previously proposed as the Mill Creek Development Planned Development District. The proposed site includes a 187,000 SF manufacturing/warehouse and associated parking and access drives, a science/office building, a parking garage and a new substation to service the proposed project.

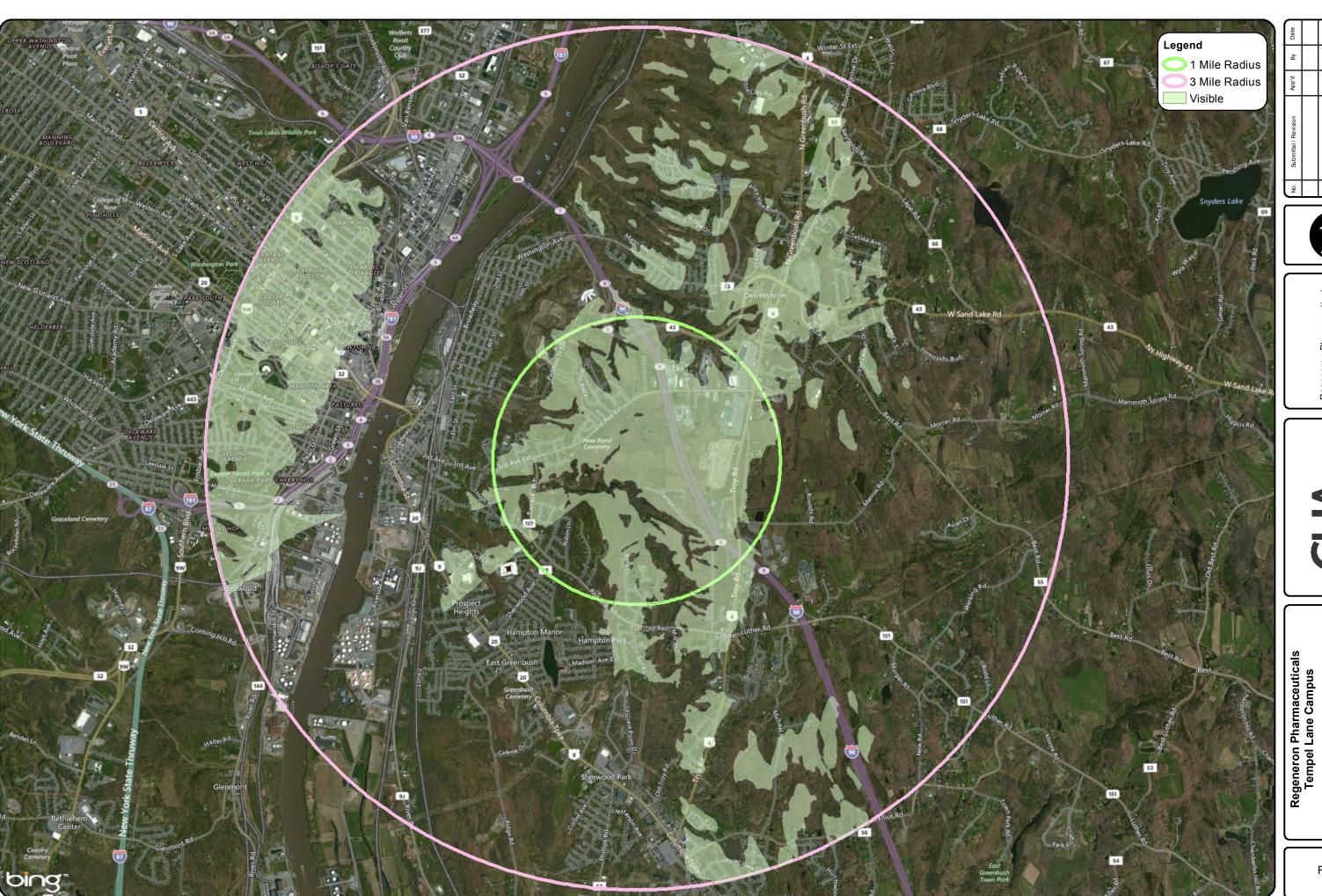
The Visual Impact Assessment is intended to evaluate the potential impacts to viewers engaged in varying activities within the study area. The New York State Department of Environmental Conservation (NYSDEC) Policy DEP-00-2, Assessing and Mitigating Visual Impacts, was used as a guideline in the preparation of this report. The Visual Resources Assessment Procedure for US Army Corps of Engineers, Instruction Report EL-88-1 (VRAP), March 1988, prepared by State University of New York, Syracuse for US Army Engineers Experiment Station, Vicksburg, Mississippi was also referenced for terminology used in completion of the study.

II. VISUAL IMPACT ASSESSMENT PROCEDURES

The methodologies used to complete the visual impact assessment are described below.

A. Creation of Preliminary Viewshed Map

The initial task in the visual impact assessment is to define the "study area" surrounding the project site and to eliminate areas from which topography would completely obstruct the viewer's ability to see the building. To accomplish this, a preliminary viewshed map was developed to identify the maximum theoretical limits of the viewshed (Figure 1). In this context, the preliminary viewshed map is prepared by evaluating line-of-site sections from the vantage point (viewer) to the proposed object (target) considering only existing topography. Obstructions from vegetation are not considered at this point, since the locations and heights of trees vary over the study area. A three mile radius was chosen as the outer boundary of the study area, in accordance with the protocol established in the scoping document. The target was chosen as a point 60 feet above ground located at the approximate center of the proposed manufacturing/warehouse building on site. Choosing a target higher than the proposed building is conservative in that it produces a larger study area to be more thoroughly evaluated during the field assessment stage of the study. Using these parameters, ArcGIS was utilized to produce the preliminary viewshed map.







Draft Viewshed Map

Figure 1

C. Field Investigation Procedures

An initial field investigation for this project occurred on July 20, 2016. This investigation was utilized as a baseline for this study, as described at the end of this section. During the initial field investigation, a 60-foot high target (5-foot diameter helium balloon) was raised at the proposed manufacturing/ warehouse building location and each potential aesthetic resource and road within the study area was visited to determine if the target was visible from that location. In many instances, the actual topography combined with the dense vegetation in the vicinity of the resource and surrounding the project site, obstructed any potential views to the project.

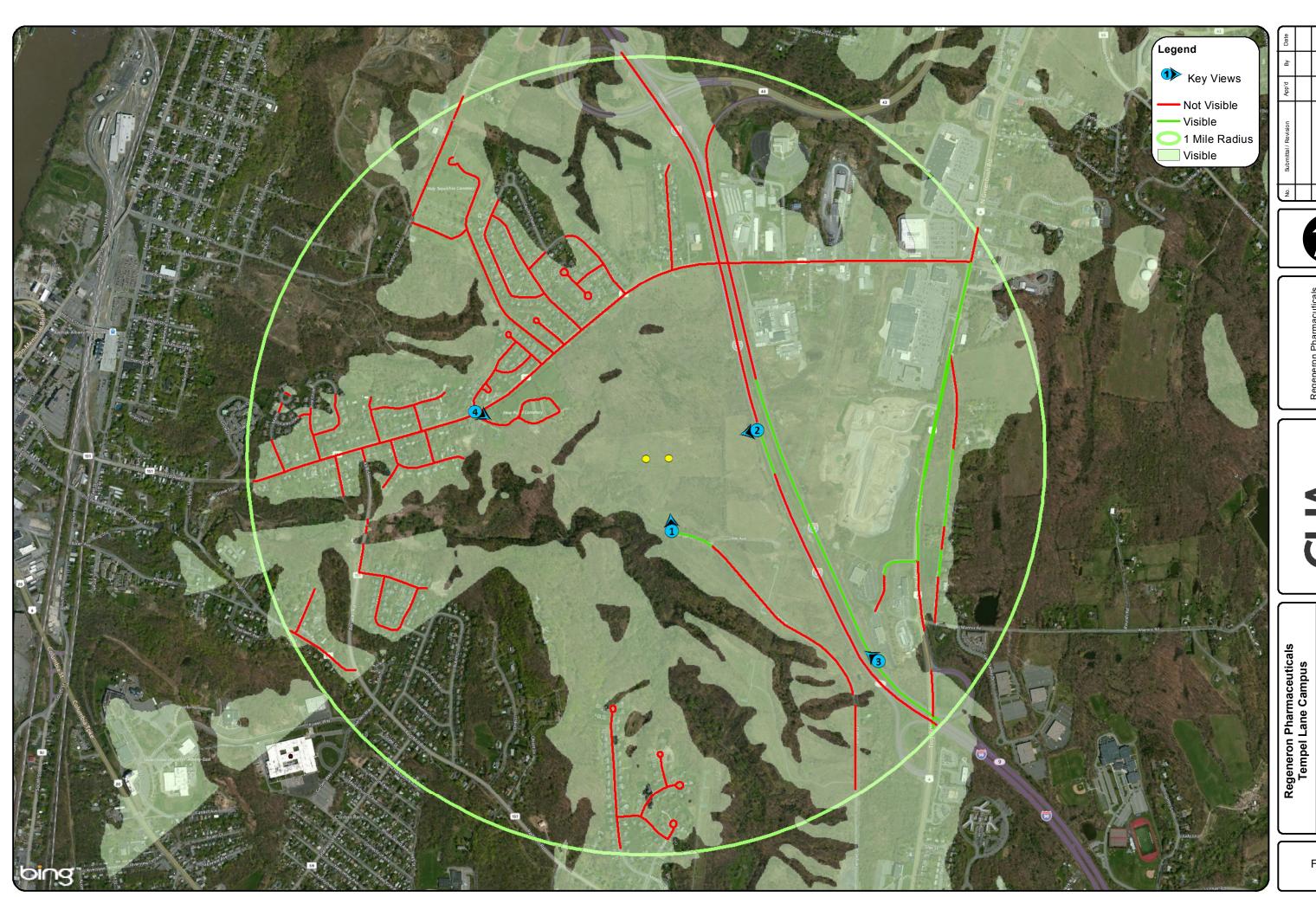
The balloon test methodology is consistent with the NYSDEC guidelines as a means of determining visibility. The test typically involves flying a 5-foot diameter helium filled weather balloon at the final as-built condition height. In this case, the balloon test was conducted at a highest point of the manufacturing/warehouse building on site. The existing grade was approximately 223.0 above mean seal level (AMSL), with the final finished floor elevation (FFE) proposed for 223.5. The proposed building height was anticipated at approximately 60' so the target elevation of the balloon was flown at 283.5 AMSL. It should be noted that since the 2016 study, the final design of the manufacturing/warehouse has placed the building height at 50 feet, therefore the top elevation of the building would be 273.5 AMSL for the purposes of this evaluation. For comparison, the proposed science/office building will be approximately 69' tall with an FFE of 235 AMSL (at the higher FFE of the proposed building) for a total height elevation of approximately 304.0 AMSL, while the proposed parking garage is anticipated to be approximately 55 feet high, and have an FFE of 235 for a total height elevation of 290 AMSL.

With the balloon in place, the study area was evaluated by the field team to identify the locations and extent of visibility. Camera and tablet GPS units were used during the field investigation to assist the field team with directing their orientation toward the balloon in areas where the balloon was not readily visible. Only the public right-of-way and public places (parks, schools, etc.) were physically visited. Potential views from private properties were interpolated based on public right-of-way conditions and the preliminary viewshed analysis.

The field team collected photo documentation from each location where the balloon was visible. Knowing the height of the balloon and the distance from the vantage point, these photos were then evaluated to determine the extent of visibility of the proposed building at each location.

D. Creation of Final Viewshed Map

The Final Viewshed Map represents the results of the field investigation superimposed on the preliminary viewshed map (Figure 2). The red lines indicate areas where the balloon was not actually visible due to vegetative and/or manmade obstructions. The green lines indicate the balloon was visible at the 60 foot height.



Final Viewshed Map

II Winners Circle, P.O. Box 5269 • Albany, NY 12205-Main: (518)453-4500 • www.chacompanies.com

Figure 2

III. VISUAL IMPACT ASSESSMENT DEFINITIONS

A. Landscape Setting

Four components are considered in the identification of the landscape setting: topography, land use, vegetation and water resources. The specific nature of these components can vary throughout the study area; however, the repetition of these characteristics within the study area defines the landscape setting from other areas. Resource combinations reflect the visual character and expose potential visual impacts due to the introduction of new design elements. A visual impact is caused when a project results in a significant change from the landscape setting and is not consistent with viewer expectations.

Landform, or topography, defines the limits of views to and from the site as well as defining the physical and visual character of the study area. The topography contributes to the regional landscape by enclosing spaces, defining viewing distances and creating different viewer opportunities.

Land Use and Use Intensity affect the viewer's visual experience. Land uses are defined in the *VRAP* as industrial, commercial, residential, agricultural, recreational, forest, grass land and barren land. The land use defines the landscape setting by identifying both natural and man-made influences on an area. Land Use Intensity can be characterized as urban, suburban, rural and undeveloped. Some, or all, of the characteristics may be reflected in the landscape.

Vegetation distribution can range from densely wooded areas, providing a year round buffer, to deciduous areas which limit or enhance views on a seasonal basis. Also, vegetation distribution includes open areas where the vegetation does not define or enhance a view.

Water resources such as rivers, lakes, streams and wetlands may contribute significantly to the visual environment by expanding views toward the water or conversely, providing views from the water.

After the landscape was defined, the landscape quality and subsequent visual quality objectives were determined. Visual quality is defined in the *VRAP* as "The visual significance given to a landscape determined by professional, public or personal values and intrinsic physical properties of the landscape." Visual quality within the city is generally of a higher standard, given the sensitivity of the area, than sites located outside of the city. There are three levels of visual quality used to define a visual resource:

<u>Distinct</u> – something that is considered unique and is an asset to the area. It is typically recognized as a visual/aesthetic asset and may have many positive attributes. Diversity and variety are characteristics in such a resource.

<u>Average</u> – something that is common in the area and not known for its uniqueness, but rather is representative of the typical landscape of the area.

<u>Minimal</u> – something that may be looked upon as a liability in the area. It is basically lacking any positive aesthetic attributes and may actually diminish the visual quality of the surrounding areas.

The visual quality assessment identifies if the proposed project would cause a change in some or all of the attributes within the regional landscape; however, the factor having the greatest influence in this determination is contrast, or the ability of an object to be readily recognized when placed in the existing visual environment.

B. Viewer Groups

The evaluation of the potential visual impacts is dependent upon factors such as who is viewing the project and their location, the activity the viewers are involved in when viewing the project, the duration of the view, viewer expectations and the overall scale of the project. Identification of the viewer groups allows the project to be evaluated in sub-categories, applicable to the user group, which defines the length of the view.

For the purposes of this proposed project site, the potential viewer group visibility, viewer location, the type of viewer group, the length of the viewer's visibility of the building, duration of visibility and the distance from the viewing location to the building were identified.

Four different viewer groups, their potential activities and viewer locations have been identified as follows:

The motorist's group would include commuters, tourists, commercial traffic and those doing errands and the potential viewing locations would be from county and local roads. Motorists would generally have filtered views of the project site due to their speed, topographic changes and vegetation. This viewer group would be engaged in an activity that requires focusing on the road, signage and other vehicles so views would be secondary and enjoyed peripherally. Inattention could cause an accident. The exception to this would be tourists who are more likely to have passengers who expect to enjoy the views and are drawn to the area for the views.

The bicyclist group would include tourists on casual rides expecting to enjoy the views and those riding for exercise. The potential viewing locations would be from State, County and local roads. Bicyclists would have filtered and unfiltered views of the project site due to their speed, topographic changes and vegetation. This viewer group would be engaged in an activity that requires focusing on the route but also permits being able to enjoy the views as conditions allow (vehicular traffic, shoulder conditions, etc.).

The pedestrian group would include adjoining residents, tourists expecting to enjoy the views and those walking for exercise. The potential viewing locations would be from county and local roads. Pedestrians would have filtered and unfiltered views of the project site; however, due to the average pedestrian speed (3 m.p.h.) the views would be longer than when engaging in other activities. This viewer group would need to focus on surrounding traffic but would have opportunities to enjoy the views unless vegetation and/or manmade obstructions intervene.

The property owner/resident group would include surrounding properties with the group engaging in both indoor and outdoor daily activities (lawn mowing, snow blowing, recreation, etc.) The property owner group would have both filtered and unfiltered views due to vegetation. The views would be during daylight hours would likely be intermittent depending on the viewer's activity.

The duration of visibility was determined using the posted speed limit for motorists and by using generally accepted standards for bicyclists and pedestrians as follows:

Duration of Visibility = Distance \div Speed, therefore:

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Motorists @ 30 mph = 0.008 mi./sec. (44 ft/sec.)

Motorists @ 65mph = 0.18mi./sec (95.3 ft/sec.)

Bicyclists @ 12 mph = 0.003 mi./ sec (17.6 ft/sec.)

Pedestrians @ 3 mph = 0.001 mi./sec. (4.4 ft/sec.)
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For example, a car traveling at 45 mph with a view of a building for 0.5 miles (2,640 feet) would have a view duration of 38 seconds ($0.5 \div 0.013 = 38.46$ seconds).

In calculating the duration of the visibility on roadways, the length of visibility represents the point at which the site becomes visible to when the viewer is perpendicular with the site, or the view is obstructed by vegetation. The viewing limit was defined in this manner, since the viewer's focus is considered to be generally forward. The use of this limit does not indicate that the overall limits of visibility end at this point but rather that the impact to the viewer group is substantially diminished thereafter.

C. Key Views

Key views are representative of the relationship between the major viewer groups and the project site; locations which best represent the visual character of the area and locations that most clearly demonstrate the project's visual impact on the environment. Some key views indicate the building would be visible, so a photosimulation was generated to show the visual impact. Other key views were chosen to indicate that although the preliminary viewshed map indicated this location had a potential for visibility, in fact, the building would not be visible as verified during the balloon test.

The *VRAP* provides the following definitions of foreground, midground and background in discussing the view:

<u>Foreground</u> – "The area that can be designated with clarity and simplicity not possible in middle and background because the observer is a direct participant. Maximum detail and color intensity are characteristic of this zone."

<u>Midground</u> – "The distance in the landscape where elements begin to join. Conflicts of form, color, shape or scale become evident. Although colors are unmistakable, they appear softer and bluer. Visual detail is also lessened."

<u>Background</u> – "The distance in the landscape where elements lose detailed distinctions. Emphasis is on the outline, or edge, of one land mass or water resource against another with a strong skyline element."

Also, each key view analysis evaluates intervening vegetation which would reduce the visibility of the building as well as the potential visibility based on the field investigation.

It should be noted that the visual impact of an object is influenced by atmospheric perspective as well. As defined in the NYSDEC guidelines, atmospheric perspective states that "even on the clearest days, the sky is not transparent because of the presence of atmospheric particulate matter. The light scattering effect of these particles causes atmospheric perspective … there is a reduction in the intensity of the colors and the contrast between light and dark as the distance of objects from the observer increases. Contrast depends upon the position of the sun and the reflectance of the object … the net effect is that objects appear "washed out" over great distances." Atmospheric perspective begins to influence visibility in the midground distance.

D. Visual Contrast

Visual contrast is defined in the *VRAP* as "the difference in appearance between two (or more) elements and/or an element and its background." Contrast compares the pattern elements and the character of the existing environment against the proposed building elements to determine the compatibility with the existing visual setting. Pattern elements are defined as "man-made or natural elements" and the pattern character defines how the elements relate to themselves and the

surrounding environment. At this site the pattern elements include pavement for roads and parking areas, deciduous and evergreen vegetation, buildings (commercial and residential) and utility poles.

Spatial dominance is defined in the *VRAP* "the prevalent occupation of a space in a landscape by an object(s) or landscape element." As follows, this definition is further categorized to allow for further clarification of the level of contrast within the visual environment.

<u>Dominant</u> – the modification is the major object or area in a confined setting and occupies a large part of the setting

<u>Co-dominant</u> – the modification is one of the major objects or areas in a confined setting and its features are of equal visual importance

Subordinate – the modification is insignificant and occupies a minor part of the setting

<u>Inconspicuous</u> – the modification has no impact on the setting

Visual absorption is defined in the *VRAP* as "the physical capacity of a landscape to screen proposed development and still maintain its inherent visual character. The degree of visual penetration and the complexity of the landscape affect this capacity" (i.e. the building would be noticeable in its surroundings but would not be outstanding or in substantial contrast from what presently exists).

The greatest visual impacts result when the viewer is exposed to the building view for an extended period of time and the project itself contrasts with its surrounding visual environment. To compare the potential changes in visibility and contrast within the study area, each viewer group that could be affected by the construction of the proposed building is evaluated.

IV. EXISTING CONDITION AND VISUAL RESOURCES

The site is located north of Red Mill Road (NY Route 151), south of 3rd Ave Extension and west of Interstate 90. Primary access to the site is proposed on Tempel Lane. The project site consists of undeveloped abandoned agricultural and forested land. Mill Creek runs throughout the property. It should be noted that consistent with former agricultural fields, there is dense hedgerows and forest surrounding the site especially along the norther and western boundaries of the project site.

The visual quality consists of the following classifications which define the visual character:

Distinct – The commercial developments along Route 4 (Walmart, Target, &Home Depot Plazas).

Average – The vegetated and open space areas and residential and commercial development are representative of the area.

Minimal – There are no minimal elements in this study area.

The Potential Aesthetic Resources are identified as follows:

Name of Resource	Type of Resource	Visibility
Aiken House	Cultural	Not visible due to topography.
Albany Academy	Institutional	Not visible due to vegetation and built environment.
Albany City Hall	Institutional	Not visible due to vegetation and built environment.
Albany Institute of History and Art	Institutional	Not visible due to vegetation and built environment.
Albany Union Station	Institutional	Not visible due to topography.
Arbor Hill Historic DistrictTen Broeck Triangle (Boundary Increase)	Residential	Not visible due to vegetation.
Beverwyck Manor	Cultural	Not visible due to vegetation and built environment.
BroadwayLivingston Avenue Historic District	Residential / Commercial	Not visible due to topography.
Buildings at 744, 746, 748, 750 Broadway	Cultural	Not visible due to topography.
Carner, John, Jr., House	Cultural	Not visible due to topography.
Cathedral of All Saints	Cultural	Not visible due to vegetation and built environment.
Cathedral of the Immaculate Conception	Cultural	Not visible due to vegetation and built environment
Center Square/Hudson-Park Historic District	Residential	Not visible due to vegetation.
Cedar Crest Drive & 3 rd Ave Extension	Roadway	Not visible due to vegetation.
Cherry Hill	Cultural	Not visible due to vegetation and built environment.
Church of the Holy Innocents	Cultural	Not visible due to topography.
Clark-Dearstyne-Miller Inn	Cultural	Not visible due to topography.
Clinton Avenue Historic District	Residential	Not visible due to vegetation.
Corning City Preserve	Recreation	Not visible due to topography.
Defreest Homestead	Cultural	Not visible due to vegetation.
Delaware and Hudson Railroad Company Building	Cultural	Not visible due to topography.

Name of Resource	Type of Resource	Visibility
Downtown Albany Historic District	Residential / Commercial / Institutional	Not visible due to vegetation.
Empire State Plaza	Institutional	Potentially not visible due to vegetation.
First Reformed Church	Cultural	Not visible due to topography.
First Trust Company Building	Cultural	Not visible due to vegetation and built environment.
Fort Crailo	Institutional	Not visible due to topography.
Hall, James, Office	Cultural	Not visible due to vegetation and built environment.
Hampton Lake Town Park	Recreation	Not visible due to topography.
Harmanus Bleecker Library	Institutional	Not visible due to vegetation and built environment.
Hoffman Park	Recreation	Not visible due to vegetation and built environment.
Holroyd, James, Residence	Cultural	Not visible due to vegetation and built environment.
I-90	Roadway	Visible
Irwin, W. P., Bank Building	Cultural	Not visible due to topography.
Lafayette Park Historic District	Institutional / Recreational	Not visible due to vegetation.
Lil's Diner	Cultural	Not visible due to topography.
Lincoln Park	Recreation	Not visible due to vegetation and built environment.
Mansion Historic District	Residential	Not visible due to vegetation.
Mendelson, A., & Son Company Building	Cultural	Not visible due to topography.
Merchant, Walter, House	Cultural	Not visible due to vegetation and built environment.
Myers, Stephen and Harriet, Residence	Cultural	Not visible due to vegetation and built environment.
New York Executive Mansion	Institutional	Not visible due to vegetation and built environment.
New York State Capitol	Institutional	Not visible due to vegetation and built environment

Name of Resource	Type of Resource	Visibility
New York State Court of Appeals Building	Institutional	Not visible due to vegetation and built environment.
New York State Department of Education Building	Institutional	Not visible due to vegetation and built environment.
Nut Grove	Cultural	Not visible due to vegetation and built environment.
NYS Route 151	Roadway	Not visible due to vegetation.
Old Post Office	Institutional	Not visible due to topography.
Palace Theatre	Cultural	Not visible due to topography.
Pastures Historic District	Residential	Not visible due to topography.
Patroon Agent's House and Office	Cultural	Not visible due to topography.
Quackenbush House	Cultural	Not visible due to topography.
Quackenbush Pumping Station, Albany Water Works	Cultural	Not visible due to topography.
Rensselaer Rural Cemetery	Recreation / Institutional	Not visible due to vegetation.
Riverfront Preserve	Recreation	Not visible due to topography.
Schuyler, Philip, Mansion	Cultural	Not visible due to vegetation and built environment.
Sharpe Homestead and Cemetery	Cultural	Not visible due to vegetation.
South End-Groesbeckville Historic District	Residential	Not visible due to vegetation.
St. Mary's Church	Cultural	Not visible due to vegetation and built environment.
St. Peter's Church	Cultural	Not visible due to vegetation and built environment.
Tempel Lane	Roadway	Visible
Ten Broeck Mansion	Cultural	Not visible due to vegetation and built environment.
United Traction Company Building	Cultural	Not visible due to topography.
US Route 4	Roadway	Visible
USS SLATER (Destroyer Escort)	Institutional	Not visible due to topography.
Van Alen, John Evert, House	Cultural	Not visible due to vegetation.
Washington Avenue (10th Battalion) Armory	Institutional	Not visible due to vegetation and built environment.

Name of Resource	Type of Resource	Visibility
Washington Park	Recreation	Not visible due to vegetation and built environment.
Washington Park Historic District	Residential	Not visible due to vegetation and built environment.
Young Men's Christian Association Building	Cultural	Not visible due to vegetation and built environment.

The potential resources noted above were visited prior to the balloon test to determine if the project may be visible or if intervening vegetation would prevent views to the project. Based on the field investigation, only three (3) potential resources were determined to be potentially visible (I-90W, I-90E, and Tempel Lane) and one (1) other resource would need confirmation (Empire State Plaza). As noted within the table only those four (4) views were determined to have potential views to the project and were therefore visited during the balloon test for further investigation and confirmation of visibility.

V. PROPOSED CONDITION AND VISUAL IMPACTS

The One Mile Viewshed Analysis Map (Figure 1) depicts those areas, from which the proposed project may or may not be visible, determined by field verification. Using the initial viewshed map as a guide, only roads within areas that were determined to be visible based on topography were driven and field verified.

Based on the target height of and subsequent field visit, the roads with red lines in Figure 2 indicate the proposed project is not visible from that location. The remaining roads with green lines indicate the proposed project may be visible based on the field visit. Based on this information three key view locations were chosen to represent the overall character of the area and potential visibility of the building and project improvements. The Key Views are as follows:

Key View	Location*	Associated Figures
1	Tempel Lane	3, 4
2	I-90 E	5, 6
3	I-90 W	7, 8

^{*}Please refer to Figure 2 for locations of Key Views.

It should be noted that while it was not noted as a key view, there was visibility for a short distance along Thompson Hill Road for approximately 5-6 residential structures. The views of the site would generally be in the closer midground of the site and considerably lower in the field of view, similar to the views of the Fed Ex Facilty, Garelick Farms and Mabey's Moving and Storage, currently visible within the view. Due to its lower setting in the field of view, the longer and more exposed views of the city of Albany and the Helderberg Mountains to the west, will remain uninterrupted, having the full views available as they are today. The project will be viewed at a distance of approximately 3,000 ft from these residences, further reducing the potential views of the project.

Overall Visibility and Contrast

The following tables document the amount of the proposed manufacturing/warehouse building (for Key Views 1 and 2) and the science/office building (Key View 3) that would be visible from the key views, with a building height of 50 feet and 69 feet, respectively, to the top of the roof deck. These buildings were chosen due to their location on the site plan and their potential visibility on site, whether there is intervening vegetation that would screen the project at the key views that was confirmed during the field work. It is important to review both the tables and photosimulations to understand the impacts and how they would be perceived from these locations.

1. Potential Project Visibility:

The potential project visibility at each key view is discussed below to evaluate the amount of the project that would be visible and the amount of the proposed building that would be silhouetted against the sky, thereby creating a contrast in the visual environment.

Key View	Distance from Proposed Project	Amount of Project Visible	Amount of Project Silhouetted Against the Sky
Key View 1 (Tempel Lane)	±975°	100%	0%
Key View 2 (I-90E)	±1,230°	25%	25%
Key View 3 (I-90W)	±2,810°	50%	5%

2. Intervening Vegetation:

The amount of intervening vegetation at each Key View is discussed below to evaluate the impact of vegetation in screening views of the project site.

Key View	Intervening Vegetation? (Yes/No)	Height of Vegetation	Type of Vegetation
Key View 1 (Tempel Lane)	Yes	50-60'	Mixed evergreen and deciduous vegetation
Key View 2 (I-90E)	Yes	50-60'	Mixed evergreen and deciduous vegetation
Key View 3 (I-90W)	Yes	50-60'	Mixed evergreen and deciduous vegetation

3. Potential Visibility:

The table below discusses the viewer groups which may be affected by the project, the length of visibility and the amount of time the viewer would be exposed to views of the proposed project. This table provides a quantitative analysis of the duration that each viewer group would be able to see the project from specific viewer locations. The viewer locations are public right-of-ways and places from which the project would be visible based on the field investigation.

Viewer Location	Viewer Group	Length of Visibility	Duration of Visibility* (min:sec)	Distance	Number of Viewers	
	Motorists		0:15	0.15		
Key View 1	(30mph)	±650' 2:28 ±975' 0:37	⊥650 '	0.13	±975'	n/a
(Tempel Lane)	Pedestrians			2:28		11/ a
	Bicyclists		0:37			
Key View 2	Motorists	±710°	0:07	±1,230°	50285	
(I-90 E)	(65mph)	±/10	0.07	±1,230	30283	
Key View 3	Motorists	±5,250°	0:55	+2810'	50285	
(I-90 W)	(65mph)		0.33	±∠810	30283	

^{*} Duration of Visibility was determined at the posted speed limit or by using generally accepted standards.

Duration of Visibility = Distance ÷ Speed, therefore:

Motorists @ 30 mph = 0.008 mi./sec. (44 ft/sec.) Motorists @ 65 mph = 0.018 mi./sec. (95.3 ft/sec.) Bicyclists @ 12 mph = 0.003 mi./ sec (17.6 ft/sec.) Pedestrians @ 3 mph = 0.001 mi./sec. (4.4 ft/sec.)

As noted within the Key Views and on the viewshed map, a significant vegetative buffer exists within the site, along the eastern property line which effectively screens the proposed development from views to the east. This vegetative buffer is proposed to remain and continue to provide screening once the site development has occurred.

The one project element that will likely be more visible from the I-90 corridor will be the substation and the science office building for a very short viewing window. This will be located close to the existing transmission line and with the clear area requirements these project elements will more visible from the ground level. It should be noted that while the facility will be visible from the I-90 corridor it will not be visible from the Route 4 corridor based on its lower profile and limited height (less than 30 feet for the ground level substation elements). It should be noted that while the taller elements of the substation and wired connection back to the grid will visible, they will be lower than the existing transmission towers and wires located directly adjacent to project site

A perspective rendering provided by Jacobs using the Chazen Companies imagery (CHA Figure 9), provides a potential view of the substation and science/office building from the I-90 Corridor. As noted the facility will be visible and screening will be provided to reduce the potential impacts of the ground level element of the substation. It should be noted that this view of the facility will be visible for approximately 7-10 seconds when traveling eastbound and less than 25 seconds when traveling westbound along the I-90 corridor.





EXISTING VIEW I

PROJECT NO. **33295**

DATE: 11/01/18

FIGURE





PROPOSED VIEW I

PROJECT NO. **33295**

DATE: 11/01/18

FIGURE





EXISTING VIEW 2

PROJECT NO. **33295**

DATE: 11/01/18

FIGURE





PROPOSED VIEW 2

PROJECT NO. 33295

DATE: 11/01/18

FIGURE





EXISTING VIEW 3

PROJECT NO. **33295**

DATE: 11/01/18

FIGURE





PROPOSED VIEW 3

PROJECT NO. **33295**

DATE: 11/01/18

FIGURE



PERSPECTIVE RENDERING PROVIDED BY JACOBS ENGINEERING BASED ON A CHAZEN COMPANIES IMAGERY



REGENERON
PHARMACEUTICALS
TEMPEL LANE CAMPUS

VIEW OF PROPOSED SUBSTATION

PROJECT NO. 33295

DATE: 11/01/18

FIGURE 9

5. Contrast:

The contrast of the project is determined by the pattern elements and pattern character within the study area. The pattern elements identified during the field analysis would be the existing interstate highways, state highways and local roadways, commercial and warehouse development along Route 4 and the I-90 corridors, residences, electrical transmission towers and lines, and deciduous and evergreen vegetation. The pattern character aids in reducing the contrast of the project since the project would be visually absorbed and appear consistent with the other commercial development within the corridors in terms of building architecture, colors, height and character. Additionally, the surrounding landform pattern and vegetation will further assist in helping to visually absorb the project by limiting views to the site within the existing viewshed and softening the views.

6. Impact to Historic District:

Although the initial inventory of aesthetic resources revealed several historic districts and sites within a three-mile radius of the proposed project, the topographical analysis indicated that most of the resources would not be impacted by the project due to topography. Further investigation during the site visits revealed that either due to vegetation and/or the built environment the project site could not be seen from any of the historic districts or sites, including the Empire State Plaza.

VI. MITIGATION MEASURES

In accordance with the New York State DEC Policy DEP-00-2, *Assessing and Mitigating Visual Impacts*, reasonable and necessary measures to either eliminate, mitigate or compensate for adverse aesthetic effects must be considered. The potential mitigation strategies discussed in the guidelines include screening, relocation, camouflage/disguise, low profile, downsizing, alternate technologies, non-specular materials and lighting.

In reviewing the potential impacts of the proposed project, the following mitigation measures have been taken into consideration:

- •Screening- A noted within the photosimulations, a significant vegetative buffer exists along the eastern property boundary, providing screening of the proposed development. Conservation of this buffer will continue to reduce and limit views of the project. It should be noted that the electrical substation will be visible and may require screening to minimize views of the lower elements of the facility. A screening plan should consist of both evergreen and deciduous vegetation to be consistent with the surrounding vegetation.
- •Low Profile- The buildings have been designed to be lowest practicable height for the uses envisioned.
- •Non-Specular Materials and Lighting The project has proposed materials which are within the warm light greys and earthtones, similar to other projects within the corridor, such as the Fed Ex Facility. These colors and materials are non-reflective with only accent glass being moderately reflective. Lighting will consist of downlight style lighting with cutoffs which will provide even lighting and reduce uplighting. Wallpack lighting will also be downlight style.