Downey Energy Company Liquid Propane Storage Facility

199 Old Route 9
Town of Wappinger, Dutchess Co., New York

Draft Environmental Impact Statement (DEIS)

Lead Agency:
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September 2023

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FOR THE

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LIST OF FIGURES

LIST OF APPENDICES

ACRONYMS AND ABBREVIATIONS

Acronym / Abbreviation	Definition / Denotation
APE	Area of Potential Effect
BMP	Best Management Practices
CDRPC	Capital District Regional Planning Commission
CFR	Code of Federal Regulations
DEIS	Draft Environmental Impact Statement
FEIS	Final Environmental Impact Statement
GHG	Greenhouse Gas
GIS	Geographic Information Systems
GPD	Gallons Per Day
GPH	Gallons Per Hour
GPS	Global Positioning System
LOS	Level of Service
MGD	Million Gallons Per Day
MPH	Miles Per Hour
MS4	Municipal Separate Storm Sewer System
NLEB	Northern Long-eared Bat
NRCS	Natural Resources Conservation Services
NRHP	National Register of Historic Places
NYCRR	New York Code of Rules and Regulations
NYNHP	New York Natural Heritage Program
NYSDEC	New York State Dept of Environmental Conservation
NYSDOT	New York State Dept of Transportation
NYSTA	New York State Thruway Authority
NYSSMDM	New York State Stormwater Management Design Manual
OSHA	Occupational Safety and Health Administration
RRv	Runoff Reduction Volume
SEQRA	State Environmental Quality Review Act
SHPO	New York State Historic Preservation Office
SPDES	State Pollution Discharge Elimination System
SWPPP	Stormwater Pollution Prevention Plan
USACOE	United States Army Corp of Engineers
USDA	United State Department of Agriculture
USFWS	United State Fish and Wildlife Services
USGS	United States Geological Survey
WQv	Water Quality Volume

1.0 EXECUTIVE SUMMARY

1.1 Introduction, Purpose of Document

This Draft Environmental Impact Statement (DEIS) has been prepared for the proposed Downey Energy Company Liquid Propane Storage Facility (herein, the Project) being proposed by Downey Energy Company (herein, the Project Sponsor). This DEIS contains relevant and material facts and analysis upon which an agency decision on a particular project is made. The DEIS is intended to convey general and technical information regarding the potential environmental impacts of the Proposed Project to the Lead Agency, as well as other agencies involved in the review of the Proposed Project as described below. The DEIS is also intended to convey the same information to the interested public.

1.2 Summary Description of the Site and Its Environmental Setting

The proposed Downey Energy Company Underground Liquid Propane Storage Facility project is located on a parcel at 199 Old Route 9, on the west side of the street, south of Cooper Road. The property is abutted on the north side by N&S Plumbing Supply and on the south side by a truck repair shop. The property extends to the west to US Route 9. The parcel is currently vacant and is wooded. No utilities currently serve the parcel.

The project will result in a disturbance of 1.8 acres. The proposed improvements will require the disturbance of 3,050 sf of an ACOE-regulated wetland and 10,120 sf of a 100 ft. regulated adjacent area of a NYSDEC-regulated wetland located on the east side of Old Route 9. These disturbances are related to the construction of the entrances and bioretention area and will require permits from NYSDEC and ACOE.

1.3 Summary Description of the Proposed Action

1.3.1 Proposed Zoning

The Proposed Action evaluated in the DEIS includes (1) the Applicant's petition to amend the zoning text by adding 'Liquid Propane Storage Facilities (§240-81.9), a new special permit and a new use under the heading 'Warehouse and Storage' in the Schedule of Use Regulation- Nonresidential Districts (the "Proposed Zoning"), (2) approval of a special permit for the location of an underground Liquid Propane Storage Facility at the Subject Property and the approval of the physical redevelopment of the Project Site in accordance with the submitted Site Plans inclusive of all state, county and local discretionary approvals necessary for the proposed development (the "Proposed Project"). Together the Proposed Zoning and the Proposed Project constitute the "Proposed Action." As both actions are interrelated, the potential environmental impacts of both actions will be evaluated in this DEIS, pursuant to Section 617.3(g) of the SEQRA regulations.

1.3.2 Proposed Project

The proposed project will consist of the construction of two underground two 45,000 gallon liquid propane storage tanks, gravel truck maneuvering area and 24' x 48' (1,152 sf) building. A subsurface sewage disposal system and private well will serve the building and a 30,000-gallon underground water storage tank will provide fire-fighting water supply. Storm water management features will include an underground detention area and bioretention area to provide water quality and quantity treatment. Landscaping will be provided in the bioretention area and along the perimeter of the property.

1.4 Summary Statement of Project Purpose and Need

The Proposed Project would create a productive use for the owner and the Site's various property taxing jurisdictions. According to the Applicant, the Proposed Project would also serve a market need. As noted in a legal deposition of Steven P. VanBuren dated March 17, 2023 (Appendix E), the on-site 30,000-gallon water tank represents a benefit to local fire response in a section of the Town of Wappinger that is not served by municipal water utility infrastructure.

1.5 Summary of Environmental Impacts Identified in Each Subject Area of the Positive Declaration

The SEQRA Determination of Significance adopted by the Planning Board found that the Proposed Action, when compared to the SEQR criteria of environmental effects listed in Section 617.7 of the SEQR regulations, may have significant impacts on the environment by virtue of the following, which potentially should be assessed in a DEIS.

Surface Water

The Proposed Action may have a significant adverse environmental impact on surface water quality or quantity.
As specified in the Full Environmental Assessment Form, a substantial wetland exists adjacent to the subject property as well as flood plains and the potential habitat of the endangered Blanding's Turtle. The Planning Board believes that the potential may exist for contamination of the water table and/or wetland due to seepage and/or stormwater runoff of the accidental spillage or leakage of propane.

Groundwater

The Proposed Action may have a significant adverse environmental impact on groundwater quality or quantity.
As specified in the Full Environmental Assessment Form, not only will the proposed action require additional use of ground water, but a substantial wetland exists adjacent to the subject property as well as flood plains and the potential habitat of the endangered Blanding's Turtle. The Planning Board believes that the potential may exist for contamination of the water table and/or wetland due to seepage and/or stormwater runoff of the accidental spillage or leakage of propane.

Vegetation

The Proposed Action may have a significant adverse impact on vegetation.
As specified in the Full Environmental Assessment Form, a substantial wetland exists adjacent to the subject property as well as flood plains and the potential habitat of the endangered Blanding's Turtle. The Planning Board believes that the potential may exist for contamination of the water table and/or wetland due to seepage and/or stormwater runoff of the accidental spillage or leakage of propane.

Transportation

The Proposed Action may have a significant adverse environmental impact on transportation.
The Planning Board is concerned that a propane leak from the proposed site storage facility or in the transportation to or from the proposed site storage facility could cause an emergency situation that would affect the traffic on and around US Route 9 and require an emergency evacuation of the surrounding area. The Planning Board feels that there has not been sufficient analysis into the implications of the effects on traffic in an emergency situation would cause nor has enough study been conducted to demonstrate an emergency evacuation of the surrounding area could be conducted effectively and that would thereby potentially cause a significant adverse impact on transportation systems.

Human Health

The Proposed Action may have a significant adverse environmental impact on human health.

The Planning Board believes that the potential may exist for a significant emergency requiring emergency response associated with the storage of hazardous materials. Due to limited access points, the challenging topography of the Site, the lack of municipal water supply on the Site, the adequacy of the proposed water storage facility on site for the purposes of fire suppression, and the capabilities and available equipment of emergency responders, the Planning Board is concerned that an emergency would not be able to be suitably responded to and that the proposed propane storage facility would thereby potentially cause significant adverse impairment to human health by creating a potential emergency situation that could not be adequately responded to.

Consistency with Community Plans

The Proposed Action may have a significant adverse environmental impact because it is inconsistent with some of the adopted community plans. The Planning Board believes that there may be conflict between the zoning change proposed to allow the use of propane storage facility in the Highway Business (HYB) and Airport Industrial (AI) zoning districts and existing land use plans. The Planning Board feels that there has not been sufficient analysis of the wide-reaching implications such a zoning change could carry and that would thereby potentially cause significant adverse impairment to the existing land use and community plans.

Consistency with Community Character

The Proposed Action may have a significant adverse environmental impact because it is inconsistent with community character. The Planning Board believes that the potential may exist for significant impact to character and quality of existing communities associated with the zoning change proposed to allow the use of propane storage facility in the Highway Business (HB) and Airport Industrial (AI) zoning districts. The Planning Board feels that there has not been sufficient analysis of the wide-reaching implications such a zoning change could carry and that would thereby potentially cause significant adverse impairment to the character or quality of the existing community.

1.6 Summary Description of All Alternatives Analyzed

The following alternatives were analyzed:

No Action

If the proposed action is not approved, this will result in the underutilization of commercially-zoned land in the Town of Wappinger. Economic development efforts to grow the tax base within the Town, as recommended in the Comprehensive Plan, will lose a potential revenue opportunity. Energy costs within the Town may be unnecessarily elevated due to increased transport costs and decreased commercial competition. A future site developer may propose removing woodland on the western portion of the parcel, thereby degrading community character along the US-9 corridor. In the event that the proposed action is not approved, the opportunity to further define parameters for safe and responsible use of commercially-zoned land in the Town by energy businesses will go unrealized.

Above Ground Storage Facility

As initially proposed, this project was configured to feature above-ground storage tanks. However, in response to concerns expressed by the Hughsonville Fire District, the project sponsor commissioned a revised site plan

featuring two buried storage tanks. As stated in a letter dated October 7, 2021 (Appendix I), Theodore Lemoff, PE noted that "burial is recognized in the 2017 edition of NFPA 58, Liquefied Petroleum Gas Code, as the most appropriate method to provide fire protection." From Mr. Lemoff's professional perspective, the previous concern expressed by the Hughsonville Fire District "are no longer relevant" given the amended site plan. In order to mitigate any foreseeable hazards to the greatest extent possible, the approach of burying the storage tanks was selected for the current project proposal.

Multiple Access Points

The proposed project site plan contains a vehicle movement plan (Appendix D, Sheet S-9) that identifies separated one way entrance and exit driveways accessed via Old Route 9. An alternative involving additional access points would entail curb cuts on US-9 to the west of the project site. The posted speed limit on this section of US-9 is 55 MPH; large trucks entering or exiting the roadway into fast-moving traffic poses significant safety concerns. Former Town Planner David Stolman suggested no access off US-9 to eliminate potential safety concerns. Furthermore, the creation of one or more additional access points on the western side of the project site would necessitate significant tree removal, grading, and excavation, which would magnify impacts on the natural environment including adjacent wetland areas.

Municipal Water

As the project site is not currently served by municipal water infrastructure, this alternative was deemed both cost prohibitive as well as undesirable due to the potential for growth-inducing impacts that would be misaligned with community character. Based upon the deposition of Steven VanBuren (Appendix E), the proposed on-site 30,000-gallon water tank would not only address any potential fire incident at the project site but would also serve to bolster fire response in the surrounding area, which is unserved by municipal water utilities.

1.7 List of All Approvals Required

Agency	Description of Permit or Approval Required
Town of Wappinger Planning Board	Site Plan approval; Special Permit approval; Wetland/Watercourse Buffer Disturbance Permit; MS4/SWPPP approval
Town of Wappinger Town Board	Adopt Local Law for Zoning Text
Town of Wappinger Highway Department	Driveway Permit
Town of Wappinger Building Department	Building Permit
New York State Dept of Environmental Conservation	Wetland Permit
Dutchess County Department of Health	Water Supply and Sewage Disposal

This DEIS has been prepared by M. J. Engineering and Land Surveying, P.C. (MJ) of Clifton Park, New York on behalf of Downey Energy. This DEIS is intended to facilitate the environmental review process and provide a basis for informed public comment and decision-making, in accordance with the requirements of SEQRA.

The SEQRA process for the proposed Project has or will include the following actions:

- On March 30, 2020, the Town Planning Board circulated a Notice of Intent to be Lead Agency.
- On April 4, 2022, the Town Planning Board issued a Positive Declaration, requiring the preparation of an environmental impact statement (EIS) for this Action.
- On November 10, 2022, the Town Planning Board distributed the draft scope document received from the applicant to the identified Involved and Interested entities.
- On January 11, 2023, the draft scope and public scoping session notice was published on the Environmental Notice Bulletin and to the Town Newspaper of Record, as well as the Town's website. The notice was posted at Town Hall with the Proposed Scoping Document available for review at the Town Clerk's office, the Department of Building, Planning & Zoning, and the Town's website. Notice of the public scoping session was also posted at the project site and circulated to neighboring residents.
- On January 18, 2023, the Town Planning Board conducted a Public Scoping Session.
    - During the Scoping Session, public input was obtained on the Draft Scoping Document. A subsequent period of written public comment occurred as part of the scoping process from January 18, 2023 to January 25, 2023. All public comments received will be available for public review.

Site specific studies that have been prepared in support of this DEIS include the following:

- Stormwater Pollution Prevention Plan (SWPPP)
- Fire Safety Analysis
- Operational Procedures, Safety Features and Training Practices Report
- Fire and Safety Code Review

In accordance with requirements of the SEQRA process, potential impacts arising from the proposed action were evaluated with respect to an array of environmental, social and cultural resources. The analysis of potential impacts is summarized in Table 1-1.

Table 1-1: Summary of Potential Negative and Positive Environmental Impacts

Topic	Potential Impact
Geology, Soils, and Topography	• The proposed project may impact soils through tree cutting and stormwater runoff resulting from the increase of impervious surfaces both during construction and operation.
Waters and Wetlands	• Excavation during the construction phase of the proposed project will result in a 32,327 SF disturbance within the Town wetland buffer, a 10,392 SF disturbance within a NYS DEC Jurisdictional Adjacent Area, and a 3,010 SF disturbance within an Army Corps of Engineers (ACOE) Jurisdictional Wetland.
Stormwater Management	• The post-development drainage area will be modified by the proposed improvements by converting existing wooded areas to impervious surfaces related to the building, gravel maneuvering area, paved access drives and to landscaped areas associated with the bioretention area and along the development perimeter.
Vegetation and Wildlife	• Construction of the proposed project will result in the removal of existing maple and locust trees on the portion of the project site abutting Old Route 9.
Community Character	• Given that the proposed on-site storage tanks will be buried, the visual impact of the proposed project will not detract from community character along Old Route 9, and the preservation of existing trees along US Route 9 will leave the visual resources of that corridor unchanged. • Lighting will be installed on site for visibility and security.
Human Health	• Construction of the proposed Project will not have a significant adverse impact on public health. While under construction, the Project Site may pose typical safety concerns for construction personnel, a small increase in demand for police, fire, or medical services.
Emergency Services	• The proposed project includes an on-site 30,000-gallon water tank to be used for fire suppression that is available to all the local firefighters for other purposes. The proposed project presents a net benefit to emergency service response for fire incidents in the surrounding area.
Traffic and Transportation	• An estimated 5-6 authorized propane transport trucks will access the project site on a daily basis.

The Project will include various measures to avoid, minimize and/or mitigate potential environmental impacts, as described in Table 1-2.

Table 1-2: Summary of Measures to Avoid, Minimize, and/or Mitigate Impacts

Topic	Proposed Avoidance / Mitigation Measure
Geology, Soils, and Topography	• A series of erosion and sediment control measures are proposed and identified in the erosion control plan including: stabilized construction fence; temporary soil stockpile; silt fencing; temporary seeding; dewatering; truck washing; permanent vegetation; final seeding and planting; impervious surface stabilization measures.
Waters and Wetlands	• Impacts to jurisdictional wetlands and adjacent areas will be minimized to the greatest extent possible. All required permitting and permitting requirements will be adhered to.
Stormwater Management	• The project will require the implementation of erosion controls during construction to reduce the impacts of erosion and sedimentation. Stormwater management facilities have been planned to meet the requirements of GP-0-20-001. • Stormwater runoff from the proposed gravel maneuvering area and entrances will sheet flow to catch basins located along the curb lines and will pass through one of three hydrodynamic pre-treatment structures.
Vegetation and Wildlife	• The landscaping plan identifies the planting of 11 trees, as well as a variety of shrubs and grasses on the project site to mitigate the tree removal associated with the construction phase of the project.
Community Character	• The elements of the landscaping plan mitigate the impact on the visual resources along Old Route 9. • On-site lighting will incorporate features – down lighting for the road sign and automatic shut off for other lighting – designed to mitigate light pollution beyond the project site.
Human Health	• To address fire safety concerns, the site plan for the proposed project was revised to reflect the burial of the two 45,000-gallon storage tanks.
Emergency Services	• The proposed project includes an on-site 30,000-gallon water tank to be used for fire suppression that is available to all the local firefighters for other purposes. The proposed project presents a net benefit to emergency service response for fire incidents in the surrounding area. • Access to the project site is from Old Route 9, a configuration that mitigates disruption to emergency vehicle traffic on S Route 9 between the Towns of Fishkill and Wappinger.
Traffic and Transportation	• Deliveries to the project site would be made by authorized and scheduled propane transports. Such energy transport trucks are required to meet State and Federal Motor Carrier regulations.

2.0 PROJECT DESCRIPTION

2.1 Project Identification

This Draft Environmental Impact Statement (DEIS) has been prepared for the proposed Downey Energy Company Liquid Propane Underground Storage Facility (herein, the Project) being proposed by Downey Energy Company (herein, the Project Sponsor). This DEIS contains relevant and material facts and analysis upon which an agency decision on a particular project is made. The DEIS is intended to convey general and technical information regarding the potential environmental impacts of the Proposed Project to the Lead Agency, as well as other agencies involved in the review of the Proposed Project as described below. The DEIS is also intended to convey the same information to the interested public.

The proposed Downey Energy Company Liquid Propane Underground Storage Facility project is located on a parcel at 199 Old Route 9, on the west side of the street, south of Cooper Road (see Figure 2). The property is abutted on the north side by N&S Plumbing Supply and on the south side by a truck repair shop. The property extends to the west to NYS Route 9. The parcel is currently vacant and is wooded. No utilities currently serve the parcel.

The proposed project will consist of the construction of two underground 45,000 gallon liquid propane storage tanks, gravel truck maneuvering area and 24' x 48' (1,152 sf) building. A subsurface sewage disposal system and private well will serve the building and a 30,000-gallon underground water storage tank will provide fire-fighting water supply. Storm water management features will include an underground detention area and bioretention area to provide water quality and quantity treatment. Landscaping will be provided in the bioretention area and along the perimeter of the property.

The project will result in a disturbance of 1.8 acres. The proposed improvements will require the disturbance of 3,050 sf of an ACOE-regulated wetland and 10,120 sf of a 100 ft. regulated adjacent area of a NYSDEC-regulated wetland located on the east side of Old Route 9 (see Figure 6). These disturbances are related to the construction of the entrances and bioretention area and will require permits from NYSDEC and ACOE.

The project will require the implementation of erosion controls during construction to reduce the impacts of erosion and sedimentation. Stormwater management facilities have been planned to meet the requirements of GP-0-20-001.

The site, proposed action, purpose, benefit and need, project construction and anticipated approvals are discussed below.

2.2 Project Site

Location

The parcel proposed to be disturbed for this development project comprises approximately 6.3 acres of land on the west side of Old Route 9,500 ft. south of Cooper Road, Town of Wappinger, Dutchess County (see Figure 1). The improvements are proposed on Tax Parcel 6156-02-763656.

The land in the area surrounding the site is generally commercial and vacant land.

Topography

The site contains a ridge that runs north to south with moderate slopes of 10% to 15% falling east and west from this ridge. The proposed development is on the east side of the ridge close to the street. The portion of the lot closest to the street flattens to slopes less than 5%.

Land Cover

The construction project is proposed on property that is currently vacant and is wooded.

Soils

According to maps from the National Cooperative Soil Survey for Dutchess County, the on-site soils are classified into the following mapping unit(s):

Punzit silt loam (PzA): The Dutchess County Soil Survey describes Punzit silt loam soils as somewhat poorly drained, with densic material at 15 to 30 inches and depth to water table at 6 to 18 inches. The permeability is low. The complex is classified in Hydrologic Soil Group D.

Bernardson silt loam (BeC): The Dutchess County Soil Survey describes Bernardson silt loam soils as well drained, with densic material at 15 to 30 inches and depth to water table at 18 to 24 inches. The permeability is moderately low. The complex is classified in Hydrologic Soil Group C/D.

Watercourses and Drainage Patterns

The site contains a ridge that runs north to south with moderate slopes of 10% to 15% falling east and west from this ridge. Surface water drainage from the project area flows to the east via sheet flow to a small wetland located along Old Route 9. Runoff is transmitted beneath Old Route 9 through a culvert to a NYSDEC-regulated wetland on the east side of the road. There are no water courses on the property.

The property is part of an approximately 11.9-acre watershed that drains to the culvert located on-site that transmits storm flows to the wetland located on the east side of the road. The overall watershed includes impervious areas associated with developed commercial properties, wooded and grass ground covers.

Regulated Wetlands

An ACOE-regulated wetland is located on the property adjacent to Old Route 9. This wetland discharges runoff to a NYSDEC-regulated wetland on the east side of the road. The wetlands were flagged by Ecological Solutions and validated by NYSDEC on 9/13/2019. The off-site NYSDEC-regulated wetland has a 100 ft. regulated adjacent area that crosses the street onto the project property.

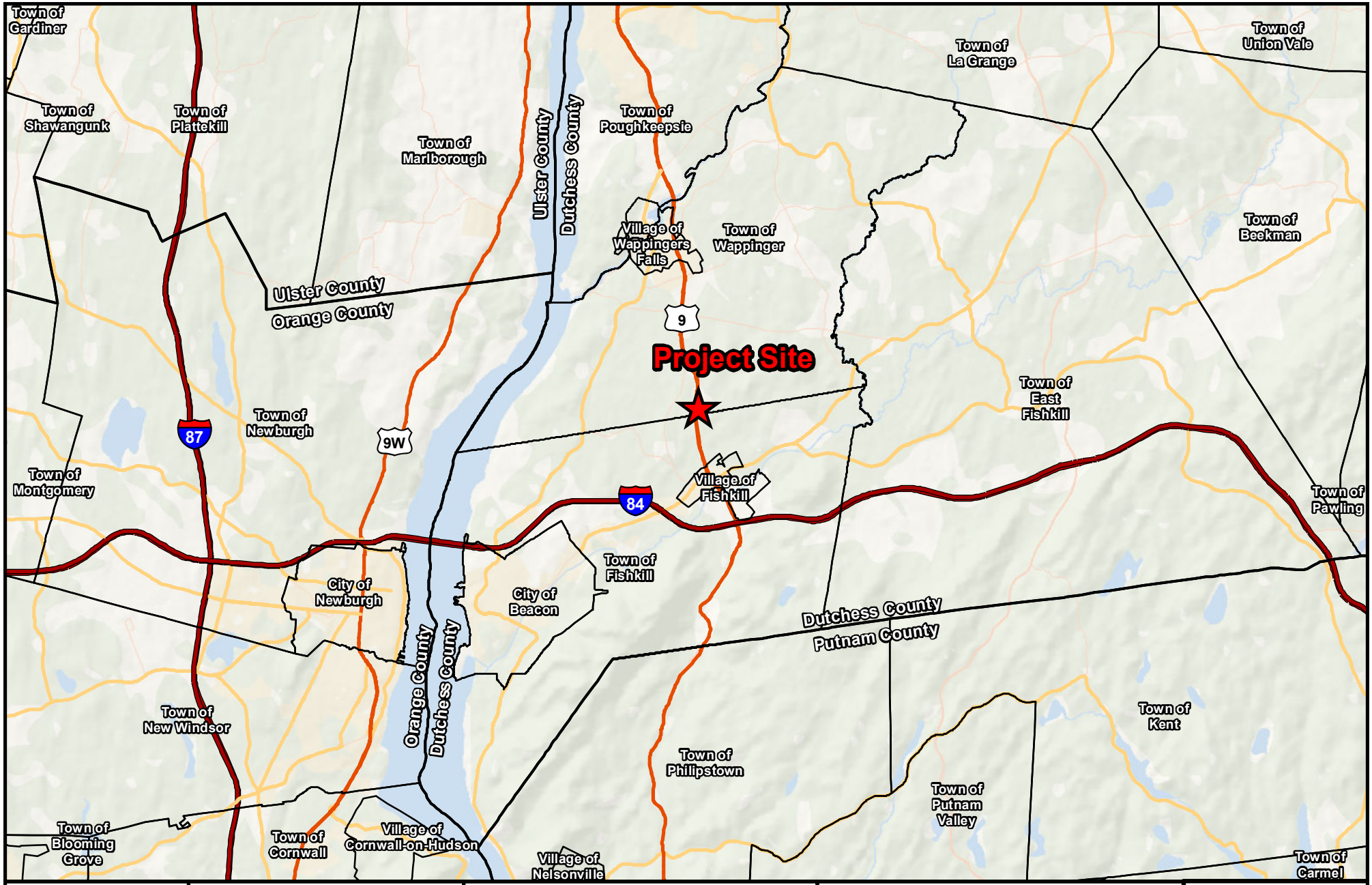
Floodplains

No designated floodplains have been identified for the project site as determined from current FEMA mapping.

Historic Places

The project is not located within an Archaeologically Sensitive Area and is not in the vicinity of a historic landmark or site according to the NYS CRIS website.

Figure 1: Regional Project Location



This map was prepared for illustrative purposes only and is not suitable for engineering, surveying, or legal purposes.

Engineering and Land Surveying, P.C.

Legend

- Project Site
- County
- Municipality

Roadways

- Interstates
- US Routes
- State Routes

0 2 4 Miles

N W E S

Downey Energy

Environmental Impact Statement
Regional Project Location

199 Old Route 9
Town of Wappinger, Dutchess Co, NY

Sources: Esri

MJ Project No.: 1731

Date: April 2023

FIG-1

Figure 2: Project Site Location

This map was prepared for illustrative purposes only and is not suitable for engineering, surveying, or legal purposes.

Engineering and Land Surveying, P.C.

Legend

Project Boundary
Project Tax Pacel
Tax Parcels
Municipality

0 150 300 Feet

N W E S

Downey Energy

Environmental Impact Statement
Project Site Location

199 Old Route 9
Town of Wappinger, Dutchess Co, NY

Sources: Dutchess Co, Esri

MJ Project No.: 1731

Date: April 2023

FIG-2

2.3 Proposed Zoning

The Proposed Action evaluated in the DEIS includes (1) the Applicant's petition to amend the zoning text by adding 'Liquid Propane Storage Facilities (§240-81.9), a new special permit and a new use under the heading 'Warehouse and Storage' in the Schedule of Use Regulation- Nonresidential Districts (the "Proposed Zoning"), (2) approval of a special permit for the location of a Liquid Propane Storage Facility at the Subject Property and the approval of the physical redevelopment of the Project Site in accordance with the submitted Site Plans inclusive of all state, county and local discretionary approvals necessary for the proposed development (the "Proposed Project"). Together the Proposed Zoning and the Proposed Project constitute the "Proposed Action." As both actions are interrelated, the potential environmental impacts of both actions will be evaluated in this DEIS, pursuant to Section 617.3(g) of the SEQRA regulations.

On April 22, 2019, the Applicant petitioned the Town Board of Wappinger for certain zoning amendments to facilitate the development of the Proposed Action. Based on comments made by the Town Board, Planning Board, Town staff, and consultants, the proposed Local Law has been revised since its original submittal. The Proposed Zoning would amend the zoning text by adding 'Liquid Propane Storage Facilities (§240-81.9), a new special permit and a new use under the heading 'Warehouse and Storage' in the Schedule of Use Regulation – Nonresidential Districts with the following criteria:

A. The minimum lot area for this use shall be 5 acres.
B. The lot on which the facility is located shall not have vehicular access to US Route 9.
C. The minimum setback between the tanks and all side and rear property lines, and between the tanks and any on-site building(s) shall be 75 feet. The minimum front yard setback for the tanks and for any on-site building(s) shall be 100 feet. The minimum distance between tanks shall be 10 feet but the distance must also comply with the National Fire Protection Association 58 Edition 2014 Code separation requirements.
D. All tanks shall be located above ground and shall be designed to American Society of Mechanical Engineers standards. The tanks shall be surrounded by bollards which are no more than 6 feet from bollard to bollard. Further, the construction and operation of the facility shall follow the National Fire Protection Association 58 Edition 2014 Code for Liquefied Petroleum Gas or the current equivalent, as well as all other applicable state and federal requirements.
E. All personnel at the site shall have successfully competed a Certified Employee Training Program for the propane industry.
F. The facility shall be completely enclosed by a 6-foot-high security fence with locked gates at all access points.
G. Site lighting shall conform to the standards in this chapter and may include lower-level overnight security lighting as deemed appropriate by the Planning Board.
H. There shall be no retail sale of product on the premises.
I. There shall be no outdoor storage of equipment or materials on the site.
J. The use shall be screened from adjoining streets and properties to the extent deemed appropriate by the Planning Board.
K. The owner of the facility shall be obligated to provide annual training to local emergency services personnel relative to appropriate responses by said personnel in case of an emergency at the site.

2.4 Proposed Project

2.4.1 New Buildings and Uses

Site improvements of the proposed project include the construction of a 24' x 48' (1,152 sf) building, two underground 45,000 gallon propane storage tanks, an underground 30,000-gallon water storage tank for fire suppression, an underground storm detention system, a subsurface sewage disposal area, a bioretention area for stormwater, a gravel truck maneuvering area, paved entrance/exit driveways with concrete curbs, a perimeter chain-link fence, and a site sign with down lighting.

As indicated in the site plan drafted by Alfred A. Cappelli, Jr. and last revised in May, 2023 (see Appendix D), the proposed 1,800-square-foot building will have a 115-foot setback from the parcel boundary on Old Route 9.

2.4.2 Site Operation

The facility will be operated solely by Downey Energy and would not serve as a wholesale terminal to other surrounding energy companies. It will not serve the general public for filling barbecue tanks or other small tanks. Tanks for feature customers will be stored on site. These tanks are to be installed as Downey adds new customers in the community.

Deliveries to the project site would be made by authorized and scheduled propane transports, to fill the storage tanks. Delivery trucks, commonly referred to as bobtails would then load and make deliveries to homes and businesses within the community. Bobtails can vary in size but typically hold just under 3,000 gallons and would make trips in to the facility 5 to 6 times per day in the winter months. Fewer trips would be required during the summer. Filling would occur in the morning and mid-day. There are required safeties on delivery trucks and transports to reduce the risk of accidental releases. These safety features include: range inhibitors, internal valves, smart hoses, emergency shut off valves, excess flows and back checks. These delivery trucks are required to meet State and Federal Motor Carrier regulations.

2.4.3 Parking and Circulation

Delivery trucks will enter the project site via Old Route 9, using a 1-way paved driveway located in the northern portion of the project site. After completing product transfer, delivery trucks will exit the site via a 1-way paved exit driveway, returning to Old Route 9. This circulation is depicted on the Vehicle Movement Plan included in the full plan set prepared by Alfred A. Cappelli, Jr. AIA and last revised in May 2023 (Appendix D, Sheet S-9).

2.4.4 Proposed Landscaping Plan

As detailed in the landscaping plan (Appendix D, Sheet S-7) of the plan set prepared by Alfred A. Cappelli, Jr. AIA, last updated in May 2023, the work of finishing and planting trees, shrubs and vines as shown on the plans and as approved by the Planning Board will be accomplished in accordance with accepted, established horticultural practices. The planting schedule for the project site includes the following: 2 red maples (*Acer rubrum*), 4 flowering dogwoods (*Cornus florida*), 5 rosebuds (*Cercic canadiensis*), and shrubs (dwarf English boxwood and Bella bellisima, to be kept at a height of no greater than 30" above finished grade). Species and quantities to be planted in the on-site bioretention area include: 3 silky dogwood (*Coranus amomium*), 80 switchgrass (*Panicum virgatum*), and 6 arrowwood viburnum (*Viburnum dentatum*). Switchgrass shall be spaced 10' o.c. over the entire bottom of

the retention area (170 contour). The area disturbed by the planting operation shall be restored to an orderly condition as approved by the architect.

2.4.5 Grading, Drainage, and Stormwater Management Plans

Per the erosion control plan (Appendix D, Sheet S-5) of the plan set prepared by Alfred A. Cappelli, Jr., AIA, last updated in May, 2021, the proposed project will incorporate the following erosion and sediment control measures:

Stabilized Construction Entrance

Prior to construction, stabilized construction entrances will be installed, as shown on the detailed plan, to reduce the tracking of sediment onto public roadways. Construction traffic must enter and exit the site at the stabilized construction entrance. The intent is to trap dust and mud that would otherwise be carried off-site by construction traffic.

The entrance shall be maintained in a condition, which will control tracking of sediment onto public rights-of-way or streets. When necessary, the placement of additional aggregate atop the filter fabric will be done to assure the minimum thickness is maintained. All sediments and soils spilled, dropped, or washed onto the public rights-of-way must be removed immediately. Periodic inspection and needed maintenance shall be provided after each substantial rainfall event.

Temporary Soil Stockpile

Materials, such as topsoil, will be temporarily stockpiled (if necessary) on the site during the construction process. Stockpiles shall be located in an area away from storm drainage, water bodies and/or courses, and will be properly protected from erosion by a surrounding silt fence barrier.

Silt Fencing

Prior to the initiation of and during construction activities, silt fencing shall be established along the perimeter of areas to be disturbed as a result of the construction which lie up gradient of water courses or adjacent properties. These barriers may extend into non-impact areas to ensure adequate protection of adjacent lands.

Clearing and grubbing will be performed only as necessary for the installation of the sediment control barrier. To ensure effectiveness of the silt fencing, daily inspections and inspections immediately after significant storm events will be performed by site personnel. Maintenance of the fence will be performed as needed.

Temporary Seeding

Within seven (7) days after construction activity ceases on any particular area of the site, all disturbed areas shall be temporarily seeded and mulched to minimize erosion and sediment loss.

Dewatering

Dewatering, if required, shall not be discharged directly into wetlands, water courses, water bodies, and storm sewer systems. Proper methods and devices shall be utilized as specified by NYSDEC such as pumping water into temporary sediment basins, providing surge protection at the inlet and outlet of pumps, floating the intake of the pump, or other methods to minimize and retain the suspended solids.

Truck Washing

Should tracking of sediment off-site by truck tires not be reduced to a suitable level by the stabilized entrance anti-tracking stone, additional measures shall be employed to reduce the sediment tracking. Manual washing of exiting truck tires or a low-speed wash bay installed before the stabilized construction entrance shall be implemented.

Permanent erosion and sediment control measures to be utilized after construction generally include the following:

Establishment of Permanent Vegetation

Disturbed areas that will be vegetated must be seeded in accordance with the contract documents. The type of seed, mulch, and maintenance measures as described in the contract documents shall also be followed.

All areas at final grade must be seeded and mulched within seven (7) days after completion of the major construction activity. All seeded areas should be protected with mulch.

Final site stabilization is achieved when all soil-disturbing activities at the site has been completed and a uniform, perennial vegetative cover with a density of 80 percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

Final Seeding and Planting

Final seeding and planting shall be installed as shown and detailed on the accompanying plans. Final seeding and planting will help minimize erosion and sediment loss. In general, areas directly adjacent to the building will be planted with a seed mix to establish a maintained lawn. The other areas of the property will be planted with a meadow mix that will require less maintenance.

Bituminous Asphalt, Concrete, and other hard-surface (impervious) stabilization measures

Final hard-surface stabilization shall be installed as shown and detailed on the accompanying plans. Final hard-surface will help minimize erosion and sediment loss.

2.4.6 Improvements to On-Site Water and Sewer Infrastructure

The project includes a proposed on-site water supply well and 30,000-gallon underground water storage tank for fire suppression. As noted in a legal deposition of Steven P. VanBuren dated March 17, 2023 (Appendix E, pp. 28-30), the on-site well represents a benefit to local fire response in a section of the Town of Wappinger that is not served by municipal water utility infrastructure. A subsurface sewage disposal area is proposed to the west of the buried propane storage tanks.

2.5 Purpose and Need

The Proposed Project would create a productive use for the owner and the Site's various property taxing jurisdictions. According to the Applicant, the Proposed Project would also serve a market need. As noted in a legal deposition of Steven P. VanBuren dated March 17, 2023 (Appendix E, pp. 28-30), the on-site 30,000-gallon water tank represents a benefit to local fire response in a section of the Town of Wappinger that is not served by municipal water utility infrastructure.

2.6 Required Approvals

Following the Lead Agency's responsibility to comply with SEQRA regulations and requirements, implementation of the Project will require certain approvals from local and state agencies. The approvals that are expected to be required are listed in Table 2-3.

Table 2-3: Anticipated Approvals for Project

Agency	Agency SEQRA Status	Description of Permit or Approval Required
Town of Wappinger Planning Board	Lead Agency	Site Plan approval; Special Permit approval; Wetland/Watercourse Buffer Disturbance Permit; MS4/SWPPP approval
Town of Wappinger Town Board	Involved/Interested	Adopt Local Law for Zoning Text
Town of Wappinger Highway Department	Involved/Interested	Driveway Permit
Town of Wappinger Building Department	Involved/Interested	Building Permit
New York State Dept of Environmental Conservation	Involved/Interested	Wetland Permit
Dutchess County Department of Health	Involved/Interested	Water Supply and Sewage Disposal
New York State Dept of Transportation	Interested Agency	
United States Army Corp of Engineers	Involved/Interested	Jurisdictional Determination Permit for potential temporary / permanent wetland impacts
Dutchess County Department of Public Works	Interested Agency	
Hughsonville Fire District	Interested Agency	
New Hackensack Fire District	Interested Agency	

Pursuant to General Municipal Law §239-m, the Proposed Zoning, Special Permit and Site Plan must also be referred to the Dutchess County Planning Department for comment.

2.7 SEQRA Process

The basic purpose of State Environmental Quality Review Act (SEQRA) is to incorporate the consideration of environmental factors into the existing planning, review, and decision-making processes of state, regional, and local government agencies at the earliest possible time. To accomplish this goal, SEQRA requires a determination of whether a proposed action may have a significant impact on the environment, and if it is determined that the action may have a significant adverse impact, prepare or request an Environmental Impact Statement (EIS). It was the intention of the State Legislature that protection and enhancement of the environment, human, and community resources should be given appropriate weight with social and economic considerations, and that those factors be considered together in reaching decisions on proposed actions. It is not the intention of SEQRA that environmental factors be the sole consideration in decision-making.

The SEQRA process for the proposed Project has or will include the following actions:

- On March 30, 2020, the Town Planning Board circulated a Notice of Intent to be Lead Agency.
- On April 4, 2022, the Town Planning Board issued a Positive Declaration, requiring the preparation of an environmental impact statement (EIS) for this Action.
- On November 10, 2022, the Town Planning Board distributed the draft scope document received from the applicant to the identified Involved and Interested entities.
- On January 11, 2023, the draft scope and public scoping session notice was published on the Environmental Notice Bulletin and to the Town Newspaper of Record, as well as the Town's website. The notice was posted at Town Hall with the Proposed Scoping Document available for review at the Town Clerk's office, the Department of Building, Planning & Zoning, and the Town's website. Notice of the public scoping session was also posted at the project site and circulated to neighboring residents.
- On January 18, 2023, the Town Planning Board conducted a Public Scoping Session.
    - During the Scoping Session, public input was obtained on the Draft Scoping Document. A subsequent period of written public comment occurred as part of the scoping process from January 18, 2023 to January 25, 2023. All public comments received will be available for public review.

Pursuant to New York State Environmental Conservation Law Article 8, SEQRA; and Part 617 of Chapter 6 of the New York Code of Rules and Regulations (NYCRR). accordance with SEQRA, the DEIS will address specific adverse environmental impacts which can reasonably be anticipated.

Opportunities for detailed agency and public review in relation to this specific action will continue to be provided throughout the SEQRA process. This DEIS, along with a copy of the public notice, will be distributed for review and comment to the public and to the agencies and parties listed below. In addition to a public comment period (during which time written comments will be accepted), a duly noticed public hearing concerning the DEIS will be organized and held, in accordance with SEQRA requirements. Additionally, a 2005 amendment to SEQRA (Chapter 641 of the NYS Laws of 2005; "Ch. 641") requires every Environmental Impact Statement to be posted on a publicly accessible internet website, as of February 26, 2006. A draft EIS is to be posted as soon as it is accepted and remain posted until the FEIS is accepted. The FEIS should be posted when completed and must remain posted until one (1) year after all final approvals have been issued for the Project that is the subject of the FEIS. In accordance with this amendment to SEQRA, the DEIS will be posted to: http://www.townofwappingerny.gov.

3.0 LAND USE, PUBLIC POLICY, AND ZONING

3.1 Introduction

This section is intended to summarize the land use, public policy, zoning issues, and potential impacts to be presented and analyzed in the section, and the zoning and land uses proposed for thesite. Identify and discuss the applicable public policies to be reviewed and analyzed,including those of New York State, Dutchess County, and the Town of Wappinger.

3.2 Zoning and Land Use

3.2.1 Current Conditions

The project site is located within the HB Commercial – Highway Business zoning district (see Figure 4), according to the zoning map of the Town of Wappinger, which was last revised on April 27, 2015. Parcels immediately adjacent and across Old Route 9 from the project site have commercial land use classification (see Figure 3), according to the most recent tax parcel data in the Town of Wappinger.

There are no known existing easements, covenants or restrictions on the project site.

3.2.2 Potential Impacts of the Proposed Action

The proposed project site is bordered to the west by US Route 9 and to the east by Old Route 9. In both the Town of Wappinger – where the project site is located – and in the Town of Fishkill a short distance to the south, the area between US Route 9 and Old Route 9 is zoned Commercial – Highway Business. Immediately to the north of the project site is an HVAC and plumbing supply business; to the south is a heavy truck repair and inspection business. Other nearby businesses that use Old Route 9 for access are a solar energy equipment supplier, an air conditioning repair service, multiple general building contractors, and an indoor batting cage/fitness facility. Within a half-mile radius of the project site, there are residential uses along Osborne Hill Road (to the west), Cooper Road (to the northeast), as well as scattered residential properties along Old Route 9. Large tracts of land to the west of US Route 9 and to the east of Old Route 9 are vacant, owing to the presence of known wetland areas. At the extreme southern end of the half-mile radius is a recreational water park, located across US Route 9 and across the municipal boundary with the Town of Fishkill.

Per a report entitled *Operational Procedures, Safety Features & Training Practices* prepared by Jody Pratt Ameden Energy Consulting, LLC dated June 10, 2019 (Appendix H), an estimated 5-6 authorized propane transport trucks will access the project site on a daily basis. This level of use is consistent with truck access to neighboring HVAC, repair, contracting, and energy businesses.

3.3 Public Policy

3.3.1 Town's Comprehensive Plan

The Comprehensive Plan for the Town of Wappinger was adopted by the Town Board on September 27, 2010. The Proposed Action advances several of the enumerated recommendations put forth in the Comprehensive Plan. Among recommendations to strengthen the economic base of the Town, the Plan notes the need to "re-evaluate zoning requirements that may deter business development." In addition, the Plan emphasizes the role that landscaping along US Route 9 plays in maintaining or enhancing "Community Appearance and Character."

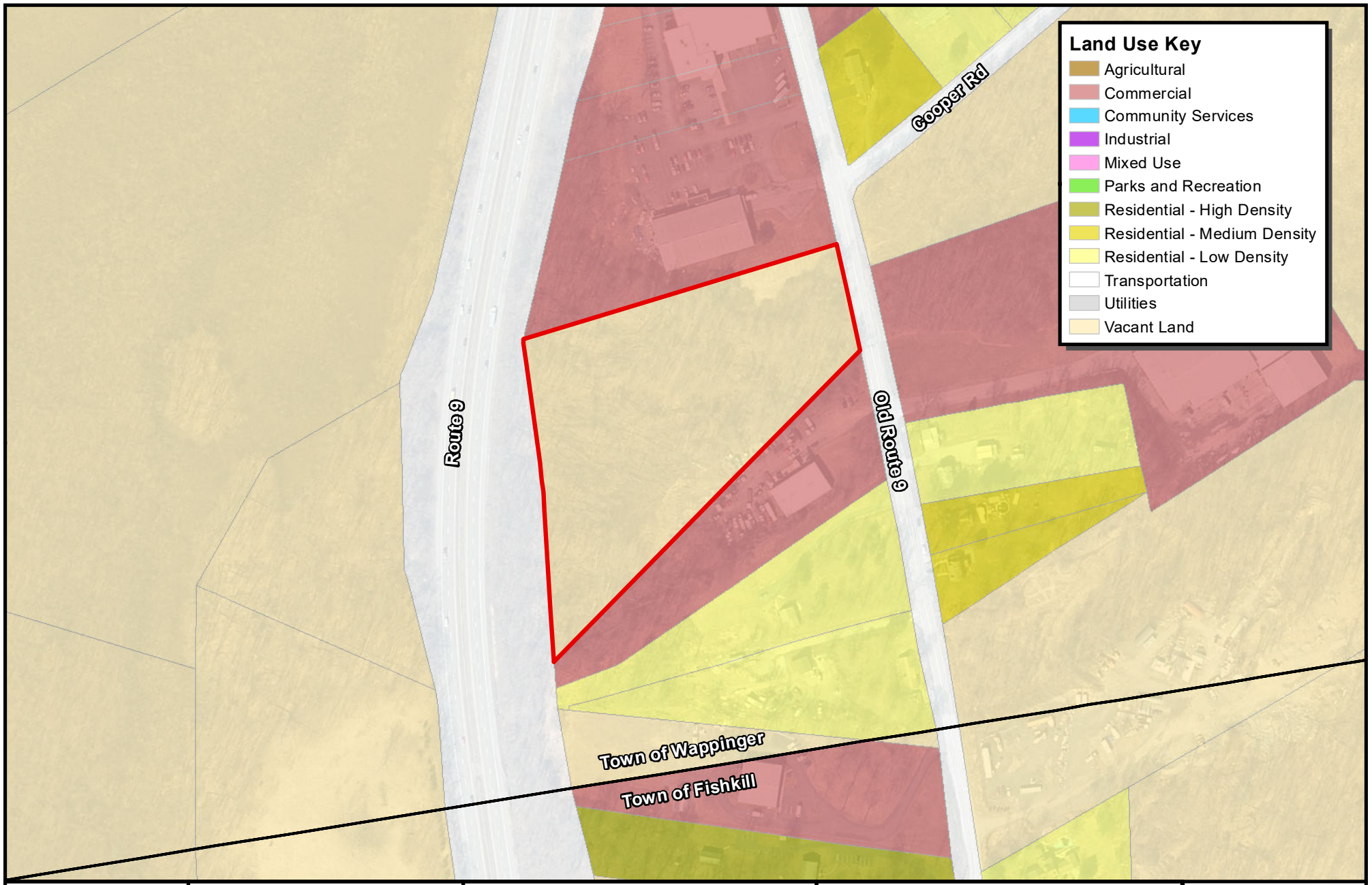
Recommendations to this end include “encourage development design which hides parking from plain view on Route 9” and “require that parking areas be landscaped well.” Since trees on the western portion of the Project Site facing US Route 9 will not be cleared, the character of this stretch of roadway will be preserved. In the Comprehensive Plan’s treatment of land use along the US Route 9 corridor, there is an emphasis on more efficient use of existing commercially zoned areas:

> Due to the Town’s interest in protecting and enhancing the character and appearance of the community, the areas planned for commercial use along Route 9 have not been expanded. Businesses will be encouraged to make more efficient use of existing commercial areas.

3.3 Mitigation

The proposed project is consistent with the Town’s Comprehensive Plan’s emphasis on the importance of maintaining the “Community Appearance and Character” along US Route 9. The proposed project will preserve the exiting tree and vegetative buffer along US-9. Additionally, the Comprehensive Plan indicates an interest in encouraging businesses to make more efficient use of existing commercial areas, which the proposed project does by locating on Old Route 9 where several commercial and light industrial businesses already exist.

Figure 3: Existing Land Use



This map was prepared for illustrative purposes only and is not suitable for engineering, surveying, or legal purposes.

Engineering and Land Surveying, P.C.

Legend

Project Boundary

Municipality

0 150 300 Feet

N W E S

Downey Energy

Environmental Impact Statement
Land Uses

199 Old Route 9
Town of Wappinger, Dutchess Co, NY

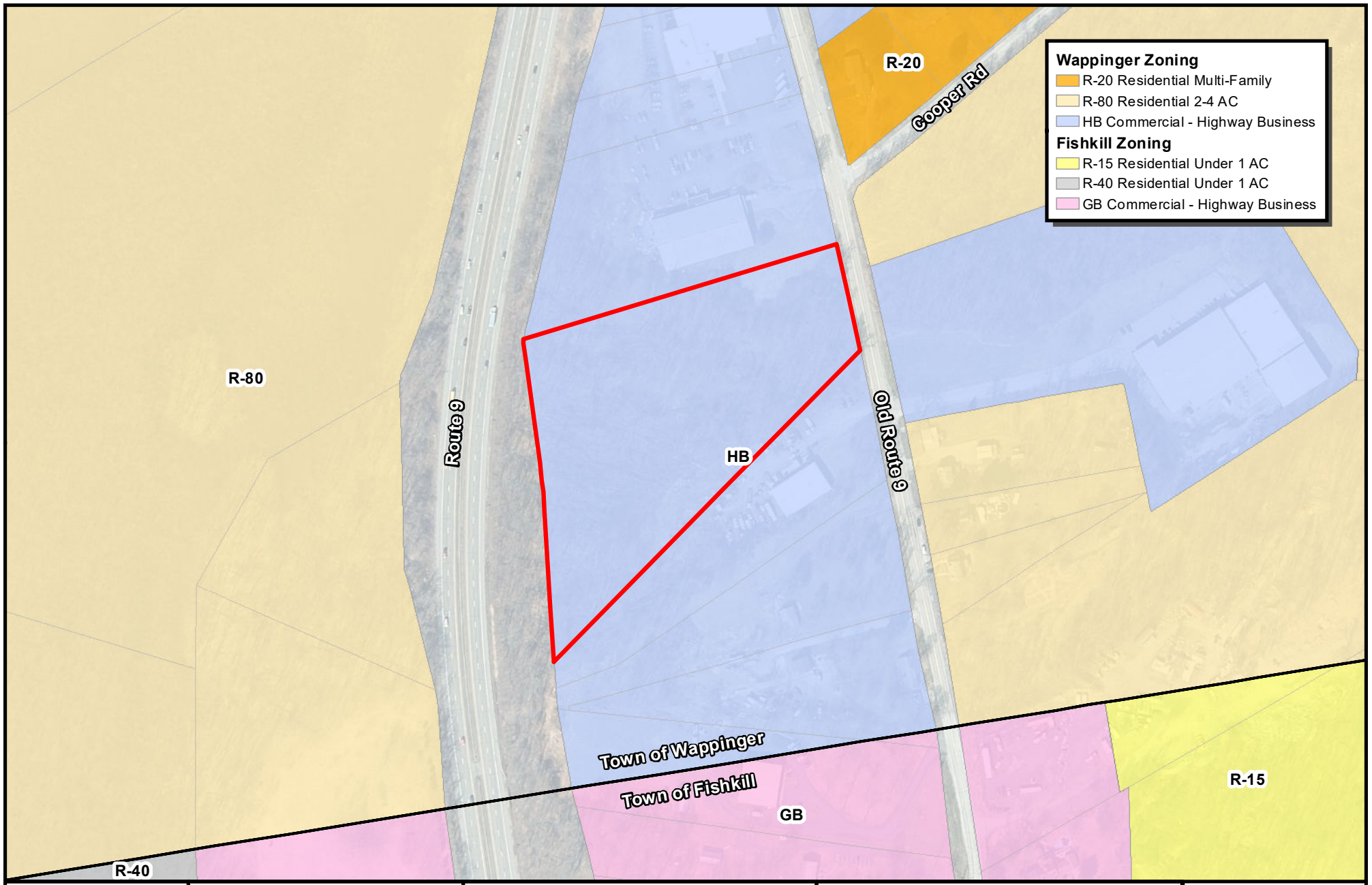
Sources: Dutchess Co, Esri

MJ Project No.: 1731

Date: April 2023

FIG-3

Figure 4: Existing Zoning



This map was prepared for illustrative purposes only and is not suitable for engineering, surveying, or legal purposes.

Engineering and Land Surveying, P.C.

Legend

Project Boundary
Municipality
Tax Parcels

0 150 300 Feet

N W E S

Downey Energy

Environmental Impact Statement Zoning

199 Old Route 9
Town of Wappinger, Dutchess Co, NY

Sources: Dutchess Co, Esri

MJ Project No.: 1731

Date: April 2023

FIG-4

4.0 GEOLOGY, SOILS, TOPOGRAPHY

4.1 Introduction

Summarize the existing conditions regarding the geology, soils and topography of the site within the context of a surrounding area of a ¼ mile. Summarize the disturbance to subsurface geology, and site soils and topography caused by the Proposed Project. Summarize the potential impacts of the Proposed Project and how the Proposed Project avoids or minimizes the impacts. Summarize proposed measures to mitigate the impacts that are not avoided or minimized.

4.2 Existing Conditions

The site contains a ridge that runs north to south with moderate slopes of 10% to 15% falling east and west from this ridge. The proposed development is on the east side of the ridge close to the street. The portion of the lot closest to the street flattens to slopes less than 5%.

The soils throughout the Project Site are deep and the depth to bedrock is greater than 96 inches, per the Full Environmental Assessment Form (EAF, Appendix A).

According to maps from the National Cooperative Soil Survey for Dutchess County, the on-site soils are classified into the following mapping unit(s):

Punzit silt loam (PzA): The Dutchess County Soil Survey describes Punzit silt loam soils as somewhat poorly drained, with densic material at 15 to 30 inches and depth to water table at 6 to 18 inches. The permeability is low. The complex is classified in Hydrologic Soil Group D.

Bernardson silt loam (BeC): The Dutchess County Soil Survey describes Bernardson silt loam soils as well drained, with densic material at 15 to 30 inches and depth to water table at 18 to 24 inches. The permeability is moderately low. The complex is classified in Hydrologic Soil Group C/D.

Punzit silt Loam (PzA) comprises 27.9% of the soil on the project site; the remaining 72.1% of the soil on the site is composed of Berndardson silt loam (see Figure 5). All soils on the project site are classified as Well Drained.

4.3 Potential Impacts of the Proposed Project

The proposed project is not anticipated to have significant impacts related to geology and will work with the existing topography to minimize any potential impacts related to the construction and operation phases. The proposed project may impact soils through tree cutting and stormwater runoff resulting from the increase of impervious surfaces both during construction and operation. Mitigation measures are identified below and also in Section 6.0 – Stormwater Management and Section 7 – Vegetation and Wildlife.

4.4 Mitigation Measures

Per the erosion control plan (Appendix D, Sheet S-5) of the plan set prepared by Alfred A. Cappelli, Jr., AIA, last updated in May, 2021, the proposed project will incorporate the following erosion and sediment control measures:

Stabilized Construction Entrance

Prior to construction, stabilized construction entrances will be installed, as shown on the detailed plan, to reduce the tracking of sediment onto public roadways. Construction traffic must enter and exit the site at the stabilized construction entrance. The intent is to trap dust and mud that would otherwise be carried off-site by construction traffic.

The entrance shall be maintained in a condition, which will control tracking of sediment onto public rights-of-way or streets. When necessary, the placement of additional aggregate atop the filter fabric will be done to assure the minimum thickness is maintained. All sediments and soils spilled, dropped, or washed onto the public rights-of-way must be removed immediately. Periodic inspection and needed maintenance shall be provided after each substantial rainfall event.

Temporary Soil Stockpile

Materials, such as topsoil, will be temporarily stockpiled (if necessary) on the site during the construction process. Stockpiles shall be located in an area away from storm drainage, water bodies and/or courses, and will be properly protected from erosion by a surrounding silt fence barrier.

Silt Fencing

Prior to the initiation of and during construction activities, silt fencing shall be established along the perimeter of areas to be disturbed as a result of the construction which lie up gradient of water courses or adjacent properties. These barriers may extend into non-impact areas to ensure adequate protection of adjacent lands.

Clearing and grubbing will be performed only as necessary for the installation of the sediment control barrier. To ensure effectiveness of the silt fencing, daily inspections and inspections immediately after significant storm events will be performed by site personnel. Maintenance of the fence will be performed as needed.

Temporary Seeding

Within seven (7) days after construction activity ceases on any particular area of the site, all disturbed areas shall be temporarily seeded and mulched to minimize erosion and sediment loss.

Dewatering

Dewatering, if required, shall not be discharged directly into wetlands, water courses, water bodies, and storm sewer systems. Proper methods and devices shall be utilized as specified by NYSDEC such as pumping water into temporary sediment basins, providing surge protection at the inlet and outlet of pumps, floating the intake of the pump, or other methods to minimize and retain the suspended solids.

Truck Washing

Should tracking of sediment off-site by truck tires not be reduced to a suitable level by the stabilized entrance anti-tracking stone, additional measures shall be employed to reduce the sediment tracking. Manual washing of exiting truck tires or a low-speed wash bay installed before the stabilized construction entrance shall be implemented.

Permanent erosion and sediment control measures to be utilized after construction generally include the following:

Establishment of Permanent Vegetation

Disturbed areas that will be vegetated must be seeded in accordance with the contract documents. The type of seed, mulch, and maintenance measures as described in the contract documents shall also be followed.

All areas at final grade must be seeded and mulched within seven (7) days after completion of the major construction activity. All seeded areas should be protected with mulch.

Final site stabilization is achieved when all soil-disturbing activities at the site has been completed and a uniform, perennial vegetative cover with a density of 80 percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

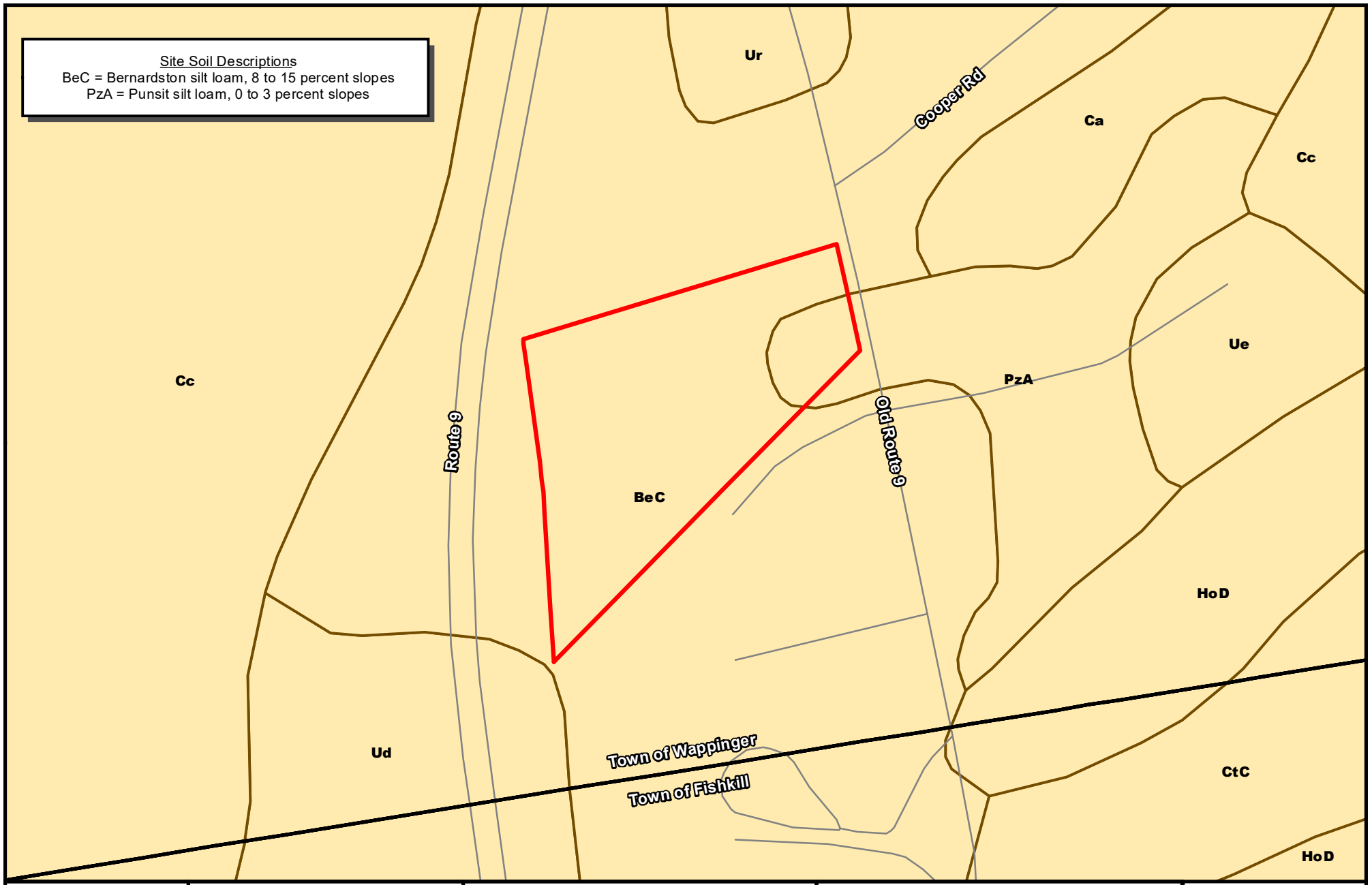
Final Seeding and Planting

Final seeding and planting shall be installed as shown and detailed on the accompanying plans. Final seeding and planting will help minimize erosion and sediment loss. In general, areas directly adjacent to the building will be planted with a seed mix to establish a maintained lawn. The other areas of the property will be planted with a meadow mix that will require less maintenance.

Bituminous Asphalt, Concrete, and other hard-surface (impervious) stabilization measures

Final hard-surface stabilization shall be installed as shown and detailed on the accompanying plans. Final hard-surface will help minimize erosion and sediment loss.

Figure 5: Project Site Soils



This map was prepared for illustrative purposes only and is not suitable for engineering, surveying, or legal purposes.

Engineering and Land Surveying, P.C.

Legend

- Project Boundary
- Municipality
- Soil Map Units
- Roads

0 150 300 Feet

N W E S

Downey Energy

Environmental Impact Statement
Project Site Soils

199 Old Route 9
Town of Wappinger, Dutchess Co, NY

Sources: USDA, Esri

MJ Project No.: 1731

Date: April 2023

FIG-5

5.0 WATERS AND WETLANDS

5.1 Introduction

This section is intended to summarize the results of the existing conditions survey, and the wetlands delineations and functional analyses. Well and delineations will be performed in accordance with the definition of wetlands and the delineation methodology requirements of Chapter 137 of the Wappinger Code.

5.2 Existing Conditions

There are federal and state-regulated wetland areas in the vicinity of the project site (see Figure 8). Wetlands on the project site were delineated by Michael Nowiki, Wetland Biologist, in July 2019 and validated by the New York State Department of Environmental Conservation (NYSDEC) on September 13, 2019 (Appendix A, Sheet S-1).

There are no surface waters present on the project site. An ACOE-regulated wetland is located on the portion of the project site adjacent to Old Route 9. This wetland discharges runoff to a NYSDEC-regulated wetland on the east side of the road. The wetlands were flagged by Ecological Solutions and validated by NYSDEC on 9/13/2019. The off-site NYSDEC-regulated wetland has a 100 ft. regulated adjacent area that crosses the street onto the project property.

No designated floodplains have been identified for the project site as determined from current FEMA mapping.

5.3 Potential Impacts of the Proposed Project

Per the detailed site plan prepared by Alfred A. Cappelli, Jr. AIA, last revised in May, 2023 (Appendix D, Sheet S-3), excavation during the construction phase of the proposed project will result in a 32,327 SF disturbance within the Town wetland buffer, a 10,392 SF disturbance within a NYS DEC Jurisdictional Adjacent Area, and a 3,010 SF disturbance within an Army Corps of Engineers (ACOE) Jurisdictional Wetland.

5.4 Mitigation Measures

Impacts to jurisdictional wetlands and adjacent areas will be minimized to the greatest extent possible. Additionally, all required permitting and permitting requirements will be adhered to.

Figure 6: Mapped Wetlands, Water Bodies and Streams

This map was prepared for illustrative purposes only and is not suitable for engineering, surveying, or legal purposes.

Engineering and Land Surveying, P.C.

Legend

- Project Boundary
- Municipality
- National Wetland Inventory (NWI)
- NYSDEC Wetlands
- NYSDEC Classified Streams (none in map extent)

0 150 300 Feet

N W E S

Downey Energy

Environmental Impact Statement
Mapped Wetlands, Water Bodies & Streams

199 Old Route 9
Town of Wappinger, Dutchess Co, NY

Sources: NYSDEC, NWI, Esri

MJ Project No.: 1731

Date: April 2023

FIG-6

6.0 STORMWATER MANAGEMENT

6.1 Introduction

This section is intended to summarize the existing conditions, the analysis of the potential impacts of the Proposed Project, and measures proposed to mitigate impacts resulting from the Proposed Project in regards to stormwater management.

6.2 Existing Conditions

The site contains a ridge that runs north to south with moderate slopes of 10% to 15% falling east and west from this ridge. Surface water drainage from the project area flows to the east via sheet flow to a small wetland located along Old Route 9. Runoff is transmitted beneath Old Route 9 through a culvert to a NYSDEC-regulated wetland on the east side of the road. There are no water courses on the property.

The property is part of an approximately 11.9-acre watershed that drains to the culvert located on-site that transmits storm flows to the wetland located on the east side of the road. The overall watershed includes impervious areas associated with developed commercial properties, wooded and grass ground covers.

The project will result in a disturbance of 1.8 acres. The proposed improvements will require the disturbance of 3,050 sf of an ACOE-regulated wetland and 10,120 sf of a 100 ft. regulated adjacent area of a NYSDEC-regulated wetland located on the east side of Old Route 9. These disturbances are related to the construction of the entrances and bioretention area and will require permits from NYSDEC and ACOE.

6.3 Potential Impacts of the Proposed Project

The post-development drainage area will be modified by the proposed improvements by converting existing wooded areas to impervious surfaces related to the building, gravel maneuvering area, paved access drives and to landscaped areas associated with the bioretention area and along the development perimeter.

6.4 Mitigation Measures

The project will require the implementation of erosion controls during construction to reduce the impacts of erosion and sedimentation. Stormwater management facilities have been planned to meet the requirements of GP-0-20-001.

The proposed stormwater management system for the project has been designed to minimize the alteration of existing drainage patterns and will result in a net decrease in peak flow rates discharged to the Off-Site Design

Point. The study areas were broken into sub-catchments that contribute runoff to the off-site discharge point (ODP) via various management features on-site. These sub-catchments are detailed below.

Post development runoff rates to the Design Point will be reduced from pre-development rates as the result of the proposed underground detention system.

The underground detention system is proposed to manage runoff peak rates for larger storms. The system will consist of 48" diameter aluminized perforated pipes in a gravel envelope.The system will include a precast concrete outlet structure with multiple flow control openings. The system will connect to a structure in the bioretention area and ultimately discharhe to the roadside gutter.

The project will provide channel protection (Cp), Overbank Flood Control (Qp), and Extreme Flood Protection (Qf) by use of the proposed underground detention system.

A 24 hour extended detention of the one-year storm event is used to protect steam channels from erosion. The required and proposed stream Channel Protection Volume (CPv) for each basin is shown within the summary tables below. The Channel Protection Volume requirement has been met for the design point.

The water quality volume is directly related to the amount of impervious surface created at a site. The water quality volume (WQv) is designed to improve water quality by treating 90% of the average annual stormwater runoff volume.
Stormwater runoff from the proposed gravel maneuvering area and entrances will sheet flow to catch basins located along the curb lines and will pass through one of three hydrodynamic pre-treatment structures. The stormwater management system is as follows:

1. Bioretention (F-5)

One (1) bioretention area is proposed for the project to provide treatment of runoff from impervious surfaces. Bioretention areas provide stormwater reduction and treatment by infiltrating collected stormwater through a conditioned soil planting bed in a shallow depression. Perforated underdrains are proposed to assist in the removal of collected water in the bioretention area because of the moderate to slow infiltration rates found on the site. The bioretention area satisfy 100% of the RRv.
The bioretention areas have been designed with overflow structures that allow runoff from larger storm events to flow into these structures and be transmitted to the dry detention basins for quantity control. Pre-treatment of runoff that is directed will be provided by three (3) hydrodynamic separators (Hydro International First Defense FD-3HC).

2. Underground Detention System

One (1) underground detention system is proposed to control peak runoff rates from the site. The system is located on the east side of the gravel maneuvering area. Runoff is transmitted to the basins via culverts after collection within catch basins and routing through a splitter structure. The splitter structure will divert flows upto the water quality storm to the bioretention area. All flows that exceed the water quality flow will be diverted to the underground detention system. The system will be connected to a pre-cast outlet structure with various openings to control flow rates during the various storms. The outlet structure will discharge directly to the bioretention area outlet structure and subsequently to the roadside ditch.

Rip rap is provided at the outlet of all culverts to minimize potential erosion. Worst case conditions were used in the analysis of minimum rip rap stone size and rip rap apron length to simplify construction by minimizing variations in the aprons. Worst case flow conditions were selected for the proposed 15-inch culverts.

The site storm systems will discharge to existing storm pipes located along the Town road. The hydraulic analysis prepared for the project indicates that peak flows to the existing road culverts will be reduced once construction is complete as a result of the proposed detention facilities.

Several types of permanent and temporary stormwater pollutant controls have been designed as part of the system to be installed and implemented pre-construction and during construction for this project to minimize soil erosion and to control sediment transport off-site during construction, to control the quality and quantity of stormwater runoff from the developed site. The SWPPP and Project Plans indicate the measures that are anticipated to adequately minimize soil erosion and control sediment transport. These measures have been designed per the NYSDEC SPDES General Permit (GP-0-20-001) and the "New York State Standards and Specifications for Erosion and Sediment Control (August 2010)."

The contractor should anticipate that the measures shown on the Project Plans and included in the SWPPP will need to be supplemented and modified as conditions change on the construction site. The types of controls will depend on the specific conditions of the site. Since site characteristics can change significantly during construction, it is important to monitor the site regularly to ensure the proper selection and implementation of the necessary controls. These controls include, but are not limited to silt fence, stone construction entrances and seed and mulch.

Temporary erosion and sediment control measures to be utilized during construction generally include the following:

1. Stabilized Construction Entrance

   Prior to construction, stabilized construction entrances will be installed, as shown on the detailed plan, to reduce the tracking of sediment onto public roadways.
   Construction traffic must enter and exit the site at the stabilized construction entrance. The intent is to trap dust and mud that would otherwise be carried off-site by construction traffic.
   The entrance shall be maintained in a condition, which will control tracking of sediment onto public rights-of-way or streets. When necessary, the placement of additional aggregate atop the filter fabric will be done to assure the minimum thickness is maintained. All sediments and soils spilled, dropped, or washed onto the public rights-of-way must be removed immediately. Periodic inspection and needed maintenance shall be provided after each substantial rainfall event.

2. Temporary Soil Stockpile

   Materials, such as topsoil, will be temporarily stockpiled (if necessary) on the site during the construction process. Stockpiles shall be located in an area away from storm drainage, water bodies and/or courses, and will be properly protected from erosion by a surrounding silt fence barrier.

3. Silt Fencing

   Prior to the initiation of and during construction activities, silt fencing shall be established along the perimeter of areas to be disturbed as a result of the construction which lie up gradient of water courses or adjacent properties. These barriers may extend into non-impact areas to ensure adequate protection of adjacent lands.
   Clearing and grubbing will be performed only as necessary for the installation of the sediment control barrier. To ensure effectiveness of the silt fencing, daily inspections and inspections immediately after significant storm events will be performed by site personnel. Maintenance of the fence will be performed as needed.

4. Temporary Seeding

   Within seven (7) days after construction activity ceases on any particular area of the site, all disturbed areas shall be temporarily seeded and mulched to minimize erosion and sediment loss.

5. Dewatering

   Dewatering, if required, shall not be discharged directly into wetlands, water courses, water bodies, and storm sewer systems. Proper methods and devices shall be utilized as specified by NYSDEC such as pumping water into temporary sediment basins, providing surge protection at the inlet and outlet of pumps, floating the intake of the pump, or other methods to minimize and retain the suspended solids.

6. Truck Washing

   Should tracking of sediment off-site by truck tires not be reduced to a suitable level by the stabilized entrance anti-tracking stone, additional measures shall be employed to reduce the sediment tracking. Manual washing of exiting truck tires or a low-speed wash bay installed before the stabilized construction entrance shall be implemented

Permanent erosion and sediment control measures to be utilized after construction generally include the following:

1. Establishment of Permanent Vegetation

   Disturbed areas that will be vegetated must be seeded in accordance with the contract documents. The type of seed, mulch, and maintenance measures as described in the contract documents shall also be followed. All areas at final grade must be seeded and mulched within seven (7) days after completion of the major construction activity. All seeded areas should be protected with mulch. Final site stabilization is achieved when all soil-disturbing activities at the site has been completed and a uniform, perennial vegetative cover with a density of 80 percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

2. Final Seeding and Planting

   Final seeding and planting shall be installed as shown and detailed on the accompanying plans. Final seeding and planting will help minimize erosion and sediment loss. In general, areas directly adjacent to the building will be planted with a seed mix to establish a maintained lawn. The other areas of the property will be planted with a meadow mix that will require less maintenance.

3. Bituminous Asphalt, Concrete and other hard-surface (impervious) stabilization measures

   Final hard-surface stabilization shall be installed as shown and detailed on the accompanying plans. Final hard-surface will help minimize erosion and sediment loss.

Best management practices will also be utilized. Throughout construction, care shall be taken to minimize the amount of sediment that enters surface water bodies and the amount of chemicals that enter stormwater, potentially contaminating surface and groundwater supplies. The following Best Management Practices (BMP) shall be observed to maintain responsible environmental practices on the construction site.

<u>Good Housekeeping</u>

Good housekeeping practices are essential to reducing the risk of contaminating runoff waters during all stages of construction. The General Contractor shall ensure that supervisors train each employee in good housekeeping practices as they pertain to implementing the SWPPP.

Immediately following mobilization, the General Contractor shall take an inventory of all equipment and containers that contain hazardous or toxic materials. The inventory must be submitted to the Owner to keep on-site with the

SWPPP. This inventory shall be kept updated to reflect any changes in quantity or type of hazardous and toxic materials stored on site. The inventory can be referred to by a Spill Response Team in the event of a spill.

All equipment on-site shall be free of leaks and inspected regularly to ensure that oils and grease do not come in contact with soil or stormwater. Portable equipment such as chain saws, generators, drills as well as hand tools must be stored in safe and secure locations under cover at the end of each work day.

All hazardous and toxic materials shall be stored in a designated area that is safe and secure. Employees shall return the materials to the designated area following use. The use of approved containers for all chemicals including oil, grease, solvents and detergents shall be adhered to. The containers shall be inspected regularly to ensure their integrity.

At the end of each workweek a scheduled clean-up shall take place. During this clean-up all empty containers of hazardous or toxic materials shall be disposed of properly. Empty containers shall not be permitted on the ground. All gasoline shall be placed in a safe and secure place where they will not come in contact with stormwater and the inventory shall be updated.

Preventative Maintenance

All on-site vehicles shall be inspected on a regular basis for fluid leaks. All leaks shall be repaired immediately. If the leak can not be repaired immediately, it shall be temporarily mitigated to prevent contamination of any soil or stormwater. If necessary, the reservoir will be drained to stop the flow of contaminants or the vehicle shall be moved under cover.

Spill Prevention and Response

Throughout construction, care shall be taken to minimize the amount of sediment that enters surface water bodies and the amount of chemicals that enter stormwater, potentially contaminating surface and groundwater supplies. The following Best Management Practices (BMP) shall be observed to maintain responsible environmental practices on the construction site.

Controls of other pollutants will also be put into place as follows:

Paints and Solvents

During construction, temporary structures such as construction trailers may be moved on site to store items such as paints, solvents and gasoline pertinent to the continuation of construction activities. The intention of these structures is to shelter potential contaminants from stormwater and reduce the potential of toxic chemicals from entering the stormwater runoff due to construction activities.

Solvents and detergents that will be used for regular cleaning and maintenance of construction vehicles or temporary structures may be stored on-site. Solvents shall be used in cleaning machinery pursuant to 6 NYCRR Part 750. After use, solvents shall be disposed of in approved containers and removed from site at scheduled intervals. Vehicle wash water that contains detergents must be disposed of into the sanitary sewer if permitted by the municipality or disposed of off-site.

Fuels

Fuel for construction equipment shall either be obtained from a licensed distributor of petroleum products or from an approved above ground storage tank on site. A distributor may be contracted to arrive on site periodically and fill all equipment as necessary. All distributors of petroleum products must have adequate liability insurance to mitigate and clean up any spills that occur on site as well as obtain appropriate permits and licenses from the NYSDEC. All above ground storage tanks with a combined capacity of 1,100 gallons shall be installed pursuant to 6 NYCRR Part 614 Standards for New and Substantially Modified Petroleum Storage Facilities.

Fuel from construction vehicles may come into contact with stormwater when vehicles are stored outside. Good housekeeping and preventative maintenance procedures shall be implemented to ensure fuel spills and leaks are

minimized during refueling and storage. Any small-scale fuel or oil spills must be remedied immediately and contaminated soils shall be disposed of appropriately. The designated spill prevention and response team shall handle large-scale gasoline spills.

Oil and other petroleum products may be stored on site in limited quantities to ensure the continued operation of construction equipment in the event a scheduled delivery is unavailable. Items shall be stored in their original containers within temporary structures and shall not be exposed to stormwater. Used oil and petroleum products shall be stored in approved containers until recycled or disposed of at an approved disposal facility.

Concrete Washout

As concrete is delivered and placed on site, a centrally-located concrete washout area approximately 15-feet square and 2.5-feet deep shall be provided. This washout area shall be enclosed by silt fence, located next to a paved road and situated a minimum of 50-feet from a watercourse. If required, temporary diversion dikes shall be constructed around washout area to prevent stormwater from entering washout location.
Waste material from concrete washout operations shall be periodically removed and legally disposed of when two-thirds of the washout storage area has accumulated with material At the end of construction all material from the washout area shall be removed and disposed of.

Material Stockpile Area

Materials utilized for construction or equipment storage areas shall be constructed to prevent runoff from coming in contact with stored items/equipment. Contractor shall clear area(s) indicated on construction plans and excavate into native material a minimum of 6-inches for placement of geotextile fabric and 6-inch stone pad. The Contractor is to verify that the area to be utilized is dry and stable and notify Engineer if area shown on the project plans is not adequate. No materials/equipment shall be constructed within 50-feet of a water course.

If necessary, temporary perimeter dikes shall be constructed to prevent runoff from entering the stone pad. Silt fencing shall be installed a minimum of 5-feet down-slope of storage area. Should additional area be required, the contractor shall construct additional storage areas as necessary in conformance with this SWPPP and any additional areas are to be documented by the contractor in the on-site SWPPP.

Soil Stockpile Area

During cut and fill operations topsoil and other excavated material will be stockpiled on site for placement in fill areas as construction progresses. In an effort to prevent runoff from coming in contact with stockpiled soils or soils from entering existing watercourses, managed stockpile areas shall be constructed in the areas indicated on the construction plans. The contractor shall verify that the proposed areas are dry and stable, and to notify the Engineer if an area is not adequate. No soils or excavated materials shall be stockpiled within 50-feet of a watercourse.

Contractor shall install silt fence 5-feet down-slope of each pile and construct any perimeter diversion dikes if required. Material shall be stabilized with seed and mulch if not to be utilized/disturbed within 14 days unless the stockpile is projected to be disturbed within 21 days.

Temporary Sanitary Facilities

Temporary sanitary facilities may be located on site for construction workers. These facilities shall be located in an accessible and visible location. These facilities shall be leak and tip proof. A waste management company shall be contracted to arrive on site and provide the routine pumping and sanitization of the facility. Such a company shall have adequate liability insurance to mitigate and clean up any spills that occur on site as well as appropriate permits and licenses from the NYSDEC.

Dust Control

The general contractor shall provide dust control in accordance with the “NYS Standards and Specifications for Erosion and Sediment Control, November 2016. Construction vehicles shall enter and exit the site at the stabilized

construction entrance. The construction entrance will trap dust and mud that would otherwise be carried off-site by construction traffic. Water trucks shall be used as needed during construction to reduce dust generated on the site.

Solid Waste

No solid waste materials are allowed to be discharged from the site with storm water. All solid waste shall be collected and placed in containers. The containers shall be emptied periodically by a contract trash disposal service and hauled away from the site.

Permanent stormwater management practices will also be in place. The majority of the new developed areas will convey runoff to stormwater treatment and/or detention by sheet flow with the exception of the two access drives. The All Angels Hill Road drive will collect runoff via rip rap lined swales and the Old Hopewell Road drive will collect runoff via grass-lined swales. Roof runoff will be conveyed via roof drain leader pipes. Conveyance piping will generally be smooth interior corrugated polyethylene pipe (SICPP).

Catch basins are proposed within the gravel truck loading area and paved access drives at the lowest point possible to collect runoff for conveyance to the bioretention area. These will be 24"x30" precast concrete structures. A yard drain is proposed within the bioretention area to convey overflows to the roadside swale. This will be 24"x24" precast concrete catch basin structure.

One (1) permanent bioretention area will treat the water quality volume from the proposed hard surfaces. The bioretention area will also provide a minor amount of peak flow attenuation, particularly during small storm events. Large storm events will be diverted to an underground detention system via a splitter structure.

One (1) permanent underground detention system consisting of 48" perforated aluminized corrugated pipes within stone bedding will provide peak flow controls for the project. The underground detention system will have a precast concrete outlet control structure.

Stormwater practice locations are shown more specifically on the construction plans. These structures have been designed to comply with the following criteria:

1. Provide for storage and/or treatment of post-development water quality volume at the required flow rate, channel protection release requirements, overbank flood protection volume and extreme storm flood protection volume for each drainage area that requires mitigation and release of these stormwater volumes at the required rates; and
2. Post-development peak discharge rates will be equal to or less than the pre-development peak discharge rates.

7.0 VEGETATION AND WILDLIFE

7.1 Introduction

This section summarizes the existing conditions, the tree survey, tree preservation plan, vegetation to be removed, and existing wildlife on the site. Summarize how the Proposed Plan minimizes and avoids removal of mature trees and vegetation from the site, preserves existing trees, and minimizes long-term effects to wildlife.

7.2 Existing Conditions

The parcel of land comprising the project site is vacant and wooded. An Existing Conditions Survey was prepared by Robert Oicle, LS. The original survey, dated June 6, 2019, was revised on December 11, 2020 (Appendix D,

Sheet S-1). The Existing Conditions Survey identifies specific trees for removal on the side of the property abutting Old Route 9. The identified trees are maple and locust species of various size.

To determine the presence of any threatened or endangered species in the vicinity of the project site, the New York Natural Heritage Program (NYNHP) database was accessed. This search identified that the Project Site is located within a large, multi-state migratory area of endangered bat species. In addition to the NYNHP database search, the USFWS Information for Planning and Conservation (IPaC) system was consulted for information pertaining to federally-listed wildlife species (Appendix G). The IPaC system identified the federally endangered Northern Long-eared Bat (*Myotis septentrionalis*), the federally endangered Indiana Bat (*Myotis sodalis*) and the federally threatened Bog Turtle (*Glyptemys muhlenbergii*) as potentially being present within the Project Site. The IPaC system identified that there are no critical habitats within the Project Site. Habitat requirements, distribution, and threats are assessed below for the listed species.

Indiana Bat

The Indiana Bat (*Myotis sodalis*) has been listed as an endangered species since 1966 and is found across most of the eastern half of the United States, according to the U.S. Fish and Wildlife Service's website. The NYNHP entry for Indiana Bats notes that the bats hibernate in caves and mines during winter; at other times of the year, "these bats show a strong preference for woodland and wooded riparian habitat over cropland." Indiana Bats roost in living, dying and dead trees in both suburban and rural landscapes.

Northern Long-earned Bat (NLEB)

As discussed on the NYNHP Conservation Guide for the NLEB (NYNHP, 2016), the NLEB is a federally-listed threatened bat species that is endemic to North America. The NLEB will hibernate in caves or mines in the winter months and roost singly or in colonies under bark or in tree crevices during the late spring, summer and early fall. Suitable habitats for this species consists of a wide variety of forested and wooded habitats that can range from dense to loose aggregates of trees. Habitat selected by individuals tend to contain potential roost sites which are living or dead trees or shrubs with diameter at breast height (D.B.H.) measurements of three inches or greater which also have exfoliating bark, cracks, crevices, and hollows. A variety of tree species are used for roosting. The most severe threat to the NLEB is disease (white-nose syndrome). Although white-nose syndrome has been responsible for the dramatic decline in the bat's populations, major factors affecting bat viability also include habitat loss or degradation, impacts to hibernacula, and collisions with man-made structures (NYNHP, 2016).

Bog Turtle

The Bog Turtle (*Glyptemys muhlenbergii*),one of the smallest turtles in North America, is classified as Endangered in the State of New York and is classified as Threatened at the Federal level. According to the New York Natural Heritage Program listing for this species, "bog turtles occur in open-canopy wet meadows, sedge meadows, and calcareous fens…In the Hudson River Valley, bog turtle habitats may be isolated from other wetlands or they may exist as part of larger wetland complexes. These wetlands are often fed by groundwater and the vegetation always includes various species of sedges."

7.3 Potential Impacts of the Proposed Project

Construction of the proposed project will result in the removal of existing maple and locust trees on the portion of the project site abutting Old Route 9, as outlined in the Existing Conditions Survey prepared by Robert Oicle, LS last revised on December 11, 2020 (Appendix D, Sheet S-1).

7.4 Mitigation Measures

The landscaping plan prepared by Alfred A. Cappelli, Jr. AIA (Appendix D, Sheet S-7) calls for the planting of 11 trees, as well as a variety of shrubs and grasses on the project site to mitigate the tree removal associated with the construction phase of the project.

8.0 COMMUNITY CHARACTER

8.1 Introduction

This section summarizes existing conditions survey, the existing visual resources and community character of the site and the surrounding area. Summarize how the Proposed Plan and the Proposed Zoning minimizes and avoids impacts to community character of the surrounding area (1/2 mile) and areas affected by the Proposed Zoning.

8.2 Existing Conditions

The parcel comprising the project site is situated immediately to the east of US Route 9 a short distance north of the municipal boundary between the Towns of Wappinger and Fishkill (see Figure 7). This section of US-9 that forms the western boundary of the project site is a highway with two travel lanes in either direction divided by a grass median and railing. Woodland along US-9 contributes to the community character of this area; the landscaping plan for the proposed project does not call for tree removal in the western portion of the project site, thereby maintaining the visual resources of the US-9 corridor. There will be no driveway access to the project site from US-9, thereby maintaining present traffic patterns.

Access to the proposed project will be via Old Route 9, which forms the eastern boundary of the project site. Old Route 9 has a posted speed limit of 30 MPH and provides access to a number of existing businesses, including a solar energy company, a plumbing and HVAC supply company, a truck repair and inspection business, multiple construction general contractor yards, a personal fitness business, and an indoor batting cage facility. Old Route 9 also provides access to New Road, Cooper Road, Helen Court, Pet Cemetery, and a small number of detached residences. Large trucks currently use Old Route 9 to make deliveries to neighboring business – the N&S Supply HVAC business immediately to the north has a two-truck loading dock to facilitate these deliveries – and to access the large truck repair/inspection shop immediately to the south of the project site.

Commercial building types in the immediate vicinity of the project site are predominantly large, single-story construction, many with metal exterior siding. Chain link fences provide access control to parking and delivery areas at both the HVAC supply business to the north and the large truck repair/inspection business to the south of the project site.

8.3 Potential Impacts of the Proposed Project

The 1,800-square-foot building and fencing included in the proposed project are of a height and type in keeping with existing buildings elsewhere in the zoning district. Given that the proposed on-site storage tanks will be buried, the visual impact of the proposed project will not detract from community character along Old Route 9, and the preservation of existing trees along US Route 9 will leave the visual resources of that corridor unchanged.

As identified in the Photometric Analysis included in the full plan set for the proposed project (Appendix D), lighting will be added to the project site for visibility and security. The Analysis, dated June 4, 2021, notes that parking area lights will be on a motion sensor and will turn off after ten minutes of inactivity. Only the security light identified next to the storage tank area will remain on after dark for security purposes. Road signage for the project site will feature down lighting.

8.4 Mitigation Measures

The planting schedule of the landscaping plan for proposed project (Appendix D, Sheet 7) calls for the planting of 11 trees of different varieties on project site, as well as shrubs and grasses as part of an on-site bioretention area. Taken together, the elements of the landscaping plan mitigate the impact on the visual resources along Old Route 9.

As noted above in section 8.3, on-site lighting will incorporate features – down lighting for the road sign and automatic shut off for other lighting – designed to mitigate light pollution beyond the project site.

Figure 7: Building Coverage within 0.5-Mile Radius

This map was prepared for illustrative purposes only and is not suitable for engineering, surveying, or legal purposes.

Engineering and Land Surveying, P.C.

Legend

- Project Boundary
- Project Tax Pacel
- Half Mile Site Radius
- Tax Parcels
- Municipality

0 500 1,000 Feet

N W E S

Downey Energy

Environmental Impact Statement
Half Mile Site Radius

199 Old Route 9
Town of Wappinger, Dutchess Co, NY

Sources: Dutchess Co, Esri

MJ Project No.: 1731

Date: April 2023

FIG-7

9.0 HUMAN HEALTH

9.1 Introduction

This section will summarize the existing conditions survey, the analysis of the potential impacts of the Proposed Project, and measures proposed to mitigate impacts from the Proposed Project on human health.

9.2 Existing Conditions

According to the Fire Safety Analysis prepared by Jody Pratt Ameden Energy Consulting, LLC last revised on September 21, 2021 (Appendix C, Form 7.1), there are no educational, institutional, or assembly occupancies (e.g., libraries, places of worship, theaters) within the hazard distance from the proposed facility.

9.3 Potential Impacts of the Proposed Project

National standards help to ensure that propane storage facilities such as the proposed project are as safe as possible. Propane storage facilities follow two fire safety codes developed by the National Fire Protection Association (NFPA):

- NFPA 54 (National Fuel Gas Code)
- NFPA 58 (Standard for the Storage and Handline of Liquefied Petroleum Gas)

The initial Fire Safety Analysis for the proposed project was prepared by Jody Pratt Ameden Energy Consulting, LLC, dated June 10, 2020. A subsequent revised Fire Safety Analysis was prepared by the same firm, dated September 21, 2021 (Appendix C) to account for the reduction of risk associated with covered storage tanks.

The proposed project includes an on-site 30,000-gallon water tank to be used for fire suppression. During a deposition dated March 17, 2023 (Appendix E), Steven VanBuren, identified as fire inspector for the Town of Fishkill and deputy coordinator for the Hughsonville Fire District, stated that the provision of the on-site water tank would bolster fire response for the surrounding area. When asked if “a 30,000-gallon water tank that is at the site that is available to all the local firefighters for other purposes; would that address your water concerns about the Downey project,” Mr. VanBuren replied, “It would.”

Construction of the proposed Project will not have a significant adverse impact on public health. While under construction, the Project Site may pose typical safety concerns for construction personnel, a small increase in demand for police, fire, or medical services.

9.4 Mitigation Measures

In order to address fire safety concerns, the site plan for the proposed project was revised to reflect the burial of the two 45,000-gallon storage tanks. As stated in a letter to the Town of Wappinger Planning Board from TLemoff Engineering dated October 7, 2021 (Appendix I), "burial is recognized in the 2017 edition of the NFPA 58, Liquefied Petroleum Gas Code, as the most appropriate method to provide fire protection."

The proposed project includes an on-site 30,000-gallon water tank to be used for fire suppression. During a deposition dated March 17, 2023 (Appendix E), Steven VanBuren, identified as fire inspector for the Town of Fishkill and deputy coordinator for the Hughsonville Fire District, stated that the provision of the on-site water tank eliminated all concerns for fire response to the site.

10.0 EMERGENCY SERVICES

10.1 Introduction

This section summarizes the existing conditions, the analysis of the potential impacts of the Proposed Project, and measures proposed to mitigate impacts from the Proposed Project.

10.2 Existing Conditions

The public safety services specifically serving the area around the proposed Project Site are currently provided through the combined efforts of the following agencies and institutions:

- Hughsonville Fire Department
- Dutchess County Sheriff and NY State Police

10.3 Potential Impacts of the Proposed Project

The proposed project includes an on-site 30,000-gallon water tank to be used for fire suppression. During a deposition dated March 17, 2023 (Appendix E), Steven VanBuren, identified as fire inspector for the Town of Fishkill and deputy coordinator for the Hughsonville Fire District, stated that the provision of the on-site water tank would bolster fire response for the surrounding area. When asked if "a 30,000-gallon water tank that is at the site that is available to all the local firefighters for other purposes; would that address your water concerns about the Downey project," Mr. VanBuren replied, "It would." Therefore, the proposed project presents a net benefit to emergency service response for fire incidents in the surrounding area.

10.4 Mitigation Measures

To address concerns expressed by the Hughsonville Fire District, the site plan was revised to feature buried storage tanks, thus mitigating the risk of an on-site fire emergency. The 30,000-gallon water tank in the proposed project was deemed sufficient for fire suppression at the project site by Steven VanBuren, fire inspector for the Town of Fishkill and deputy coordinator for the Hughsonville Fire District in a legal deposition dated March 17, 2023 (Appendix E).

Access to the project site is from Old Route 9, a configuration that mitigates disruption to emergency vehicle traffic on S Route 9 between the Towns of Fishkill and Wappinger.

11.0 TRAFFIC AND TRANSPORTATION

11.1 Introduction

This section will summarize the project in terms of location, land use, size and expected build year. Summarize the existing conditions survey, the analysis of the potential impacts of the Proposed Project, and measures proposed to mitigate impacts from the Proposed Project on the traffic and transportation systems.

11.2 Existing Conditions

Access to the project site is from Old Route 9, which is categorized as an Urban Local roadway by the New York State Department of Transportation (NYSDOT). The Town speed limit on Old Route 9 is 30 miles per hour, as posted in the vicinity of the project site.

Transit service is in Dutchess County is provided by Dutchess County Public Transit. There are no designated bus stops near the project site, but Route A (Poughkeepsie Transit Hub to Fishkill/Walmart & Dutchess Mall) utilizes US Route 9, just to the west of the project site. Sidewalks are not provided on Old Route 9 near the project site and the shoulders are relatively narrow, so pedestrians and bicyclists share the road with vehicles.

A visual count of truck traffic occurring at the project site on Thursday, February 16, 2023 between 10:00 am – 11:00 am indicated five delivery/box truck vehicles (including one garbage truck) making stops at various locations along Old Route 9 and six large trucks entering and existing N & S Supply just north of the project site.

11.3 Future Conditions without the Proposed Project (No Build Conditions)

Without the proposed project, future conditions would remain as currently experienced with some additional traffic anticipated as existing businesses continue to grow and buildout of the available buildable land continues along Old Route 9.

11.4 Future Conditions with the Proposed Project (Build Conditions)

Per a report entitled *Operational Procedures, Safety Features & Training Practices* prepared by Jody Pratt Ameden Energy Consulting, LLC dated June 10, 2019 (Appendix H), an estimated 5-6 authorized propane transport trucks will access the project site on a daily basis. This level of use is consistent with truck access to neighboring HVAC, repair, contracting, and energy businesses. Transport trucks will access the project site via

Old Route 9. An existing signalized intersection of Old Route 9 and US-9 to the south of the project site can facilitate safe navigation off of/onto US-9 for transport trucks.

11.5 Mitigation Measures

Deliveries to the project site would be made by authorized and scheduled propane transports, commonly referred to as bobtails. Such energy transport trucks are required to meet State and Federal Motor Carrier regulations.

11.6 Regulations and Emergency Response

Per a report entitled *Operational Procedures, Safety Features & Training Practices* prepared by Jody Pratt Ameden Energy Consulting, LLC dated June 10, 2019 (Appendix H), deliveries to the project site would be made by authorized and scheduled propane transports, commonly referred to as bobtails. Such energy transport trucks are required to meet State and Federal Motor Carrier regulations. Among applicable regulations is the requirement for energy transport trucks to feature safeties – including range inhibitors, internal valves, smart hoses, emergency shut-off valves, excess flows and back checks – to reduce the risk of accidental releases.

12.0 ALTERNATIVES

12.1 No Action

If the proposed action is not approved, this will result in the underutilization of commercially-zoned land in the Town of Wappinger. Economic development efforts to grow the tax base within the Town, as recommended in the Comprehensive Plan, will lose a potential revenue opportunity. Energy costs within the Town may be unnecessarily elevated due to increased transport costs and decreased commercial competition. A future site developer may propose removing woodland on the western portion of the parcel, thereby degrading community character along the US-9 corridor. In the event that the proposed action is not approved, the opportunity to further define parameters for safe and responsible use of commercially-zoned land in the Town by energy businesses will go unrealized.

12.2 Above Ground Storage Facility

As initially proposed, this project was configured to feature above-ground storage tanks. However, in response to concerns expressed by the Hughsonville Fire District, the project sponsor commissioned a revised site plan featuring two buried storage tanks. As stated in a letter dated October 7, 2021 (Appendix I), Theodore Lemoff, PE noted that “burial is recognized in the 2017 edition of NFPA 58, Liquefied Petroleum Gas Code, as the most appropriate method to provide fire protection.” From Mr. Lemoff’s professional perspective, the previous concern expressed by the Hughsonville Fire District “are no longer relevant” given the amended site plan. In order to mitigate any foreseeable hazards to the greatest extent possible, the approach of burying the storage tanks was selected for the current project proposal.

12.3 Multiple Access Points

The proposed project site plan contains a vehicle movement plan (Appendix D, Sheet S-9) that identifies separated one way entrance and exit driveways accessed via Old Route 9. An alternative involving additional access points

would entail curb cuts on US-9 to the west of the project site. The posted speed limit on this section of US-9 is 55 MPH; large trucks entering or exiting the roadway into fast-moving traffic poses significant safety concerns. Furthermore, the creation of one or more additional access points on the western side of the project site would necessitate significant tree removal, grading, and excavation, which would magnify impacts on the natural environment including adjacent wetland areas.

12.4 Municipal Water

As the project site is not currently served by municipal water infrastructure, this alternative was deemed both cost prohibitive as well as undesirable due to the potential for growth-inducing impacts that would be misaligned with community character. Based upon the deposition of Steven VanBuren (Appendix E), the proposed on-site 30,000-gallon water tank would not only address any potential fire incident at the project site, but would also serve to bolster fire response in the surrounding area, which is unserved by municipal water utilities.

13.0 UNAVOIDABLE ADVERSE IMPACTS

The proposed action and zoning amendment would occur such that adverse temporary and permanent environmental impacts will be minimized, avoided, or mitigated to a degree possible in accordance with applicable laws and regulations. Potential impacts and mitigation are detailed within Sections 4.0, 5.0 and 7.0. Temporary impacts due to construction activities are anticipated. The impacts may include but are not limited to construction noise, vibrations, and smells. These activities are unavoidable; however they are anticipated to be temporary in nature. Specific mitigation for these activities is detailed within Section 4.3. Adverse impacts that have been identified that cannot be minimized, avoided, or mitigated include the following:

- The conversion of vacant land to developed land.
- Removal of existing vegetation as a result of development.
- Increase in impervious surfaces.

While these impacts are unavoidable, the proposed action and zoning amendment would create a productive use for otherwise vacant land and serve a market need.

14.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Land development pursuant to the proposed action will result in the removal of vegetation and the development of currently vacant land. Once constructed, the development of vacant land cannot be reversed and would be unavailable for future uses. The future development is, from a practical perspective, an irreversible and irretrievable commitment of resources (however, any future development could conceivably be demolished, and the land reclaimed for alternative uses or returned to a natural state).

Various types of construction materials and building supplies will be committed to the development. The use of these materials will represent a long-term commitment of these resources, which will not be available for other projects. Although some of these materials (e.g., steel, glass) could be recovered and recycled if future development were demolished, the use of these materials from a practical perspective represents an irreversible and irretrievable commitment of resources. At this time, such resources are considered to be readily available and should not present a burden upon scarce materials or resources.

15.0 GROWTH-INDUCING IMPACTS

Through the SEQRA process, New York State requires an analysis of growth-inducing aspects of proposed actions when the action may lead to new development. The proposed action is not anticipated to directly result in future development or redevelopment outside of the proposed liquid propane storage facility. Therefore, no adverse impacts related to growth are anticipated.

16.0 CUMULATIVE IMPACTS

The proposed action and zoning change described within Section 2.0 would allow the special permit use of a propane storage facility in the Highway Business (HB) and Airport Industrial (AI) zoning districts in areas outside of the project areas. This zoning amendment allows the potential for other facilities in these zones. However, any new facility would be subject to review and approval by the Planning Board as well as the rules and regulations of the State Environmental Quality Review Act (SEQR). It is anticipated that any cumulative impacts due to the construction of other facilities would be adequately addressed through these reviews. Potential impacts related to land use are further discussed within Section 3.2.2.

17.0 SUMMARY OF IMPACTS AND MITIGATION

In accordance with requirements of the SEQRA process, potential impacts arising from the proposed action were evaluated with respect to an array of environmental, social and cultural resources. The analysis of potential impacts is summarized below in Table 17-1.

Table 17-1: Summary of Potential Negative and Positive Environmental Impacts

Topic	Potential Impact
Geology, Soils, and Topography	• The proposed project may impact soils through tree cutting and stormwater runoff resulting from the increase of impervious surfaces both during construction and operation.
Waters and Wetlands	• Excavation during the construction phase of the proposed project will result in a 32,327 SF disturbance within the Town wetland buffer, a 10,392 SF disturbance within a NYS DEC Jurisdictional Adjacent Area, and a 3,010 SF disturbance within an Army Corps of Engineers (ACOE) Jurisdictional Wetland.
Stormwater Management	• The post-development drainage area will be modified by the proposed improvements by converting existing wooded areas to impervious surfaces related to the building, gravel maneuvering area, paved access drives and to landscaped areas associated with the bioretention area and along the development perimeter.
Vegetation and Wildlife	• Construction of the proposed project will result in the removal of existing maple and locust trees on the portion of the project site abutting Old Route 9.
Community Character	• Given that the proposed on-site storage tanks will be buried, the visual impact of the proposed project will not detract from community character along Old Route 9, and the preservation of existing trees along US Route 9 will leave the visual resources of that corridor unchanged. • Lighting will be installed on site for visibility and security.
Human Health	• Construction of the proposed Project will not have a significant adverse impact on public health. While under construction, the Project Site may pose typical safety concerns for construction personnel, a small increase in demand for police, fire, or medical services.
Emergency Services	• The proposed project includes an on-site 30,000-gallon water tank to be used for fire suppression that is available to all the local firefighters for other purposes. The proposed project presents a net benefit to emergency service response for fire incidents in the surrounding area.
Traffic and Transportation	• An estimated 5-6 authorized propane transport trucks will access the project site on a daily basis.

The Project will include various measures to avoid, minimize and/or mitigate potential environmental impacts, as described in Table 17-2.

Table 17-2: Summary of Measures to Avoid, Minimize, and/or Mitigate Impacts

Topic	Proposed Avoidance / Mitigation Measure
Geology, Soils, and Topography	• A series of erosion and sediment control measures are proposed and identified in the erosion control plan including: stabilized construction fence; temporary soil stockpile; silt fencing; temporary seeding; dewatering; truck washing; permanent vegetation; final seeding and planting; impervious surface stabilization measures.
Waters and Wetlands	• Impacts to jurisdictional wetlands and adjacent areas will be minimized to the greatest extent possible. All required permitting and permitting requirements will be adhered to.
Stormwater Management	• The project will require the implementation of erosion controls during construction to reduce the impacts of erosion and sedimentation. Stormwater management facilities have been planned to meet the requirements of GP-0-20-001. • Stormwater runoff from the proposed gravel maneuvering area and entrances will sheet flow to catch basins located along the curb lines and will pass through one of three hydrodynamic pre-treatment structures.
Vegetation and Wildlife	• The landscaping plan identifies the planting of 11 trees, as well as a variety of shrubs and grasses on the project site to mitigate the tree removal associated with the construction phase of the project.
Community Character	• The elements of the landscaping plan mitigate the impact on the visual resources along Old Route 9. • On-site lighting will incorporate features – down lighting for the road sign and automatic shut off for other lighting – designed to mitigate light pollution beyond the project site.
Human Health	• To address fire safety concerns, the site plan for the proposed project was revised to reflect the burial of the two 45,000-gallon storage tanks.
Emergency Services	• The proposed project includes an on-site 30,000-gallon water tank to be used for fire suppression that is available to all the local firefighters for other purposes. The proposed project presents a net benefit to emergency service response for fire incidents in the surrounding area. • Access to the project site is from Old Route 9, a configuration that mitigates disruption to emergency vehicle traffic on S Route 9 between the Towns of Fishkill and Wappinger.
Traffic and Transportation	• Deliveries to the project site would be made by authorized and scheduled propane transports. Such energy transport trucks are required to meet State and Federal Motor Carrier regulations.