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CIVIL & STRUCTURAL ENGINEERING

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**FARMHOOD FIELDS SUBDIVISION  
CRANS MILL ROAD, NYS ROUTE 302, COUNTY ROAD 48  
SECTION 13 BLOCK 1 LOTS 10.1, 11.21, 11.22 & 13.11  
SECTION 18 BLOCK 1 LOT 10.1  
SECTION 18 BLOCK 3 LOT 11.12  
SECTION 19 BLOCK 1 LOTS 3.1, 29.3, 66 & 67.1  
TOWN OF CRAWFORD  
ORANGE COUNTY, NY**

**FINAL ENVIRONMENTAL IMPACT STATEMENT (FEIS)**

**Lead Agency:** Ms. Linda Zwart, Chair  
Town of Crawford Planning Board  
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**Owner of Property:** Mr. Zeke Alenick  
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## I. EXECUTIVE SUMMARY

### A. Description of Proposed Action

The applicant and project sponsor, Farmhood Fields, LLC, is proposing a 30-lot single family detached dwelling residential subdivision on a 563.57± acre site consisting of ten (10) separate parcels defined on Orange County Tax Maps as parcels 13-1-10.1, 11.21, 11.22 & 13.11; 18-1-10.1; 18-3- 11.12; 19-1-3.1, 29.3, 66 & 67.1. The existing tax parcels shall be combined and then subdivided into 31 lots. The proposed thirty (30) residential lots vary in size from 2.5 to 3.96 acres and the remaining lands (proposed lot 31) is approximately 485 acres. There is one existing dwelling and twenty-nine (29) proposed single-family residences. [A reduction in project acreage, parcels and proposed building lots revises the DEIS.]<sup>1</sup>

The project site is bounded by Crans Mill Road, NYS Route 302 and County Road 48 in the Town of Crawford, Orange County, NY, approximately 200 feet north of the Burlingham, Crans Mill Road intersection. The coordinates of the site at the property known as 330 Crans Mill Road (section 18 Block 3 Lot 11.12) are 41.5693, -74.3677.

The applicant's preferred alternative proposes that each dwelling be served by individual on-site drilled wells and septic disposal systems. Approximately 35,000 linear feet (6.6 miles) of private roadways shall be constructed. Access to the site shall be a Gated Main Entrance (Gateway Dr) from NYS Route 302; two (2) Gated Main Entrances from Crans Mill Road (Iron Gate Way and Honey Lane); a Gated Main Entrance (Coyote Ct.) from County Highway 48; and a Gated Main Entrance (Red Barn Trl) from Andrews Road; for a total of five (5) gated entrances. Each lot shall direct stormwater from the roof leaders and driveways to raingardens and/or swales. The swales shall direct the runoff to drainage swales along the roads which direct the stormwater to bioretention basins.

The project site is located within the Residential Agricultural (RA) Zoning District, as designated on the Town of Crawford Zoning Map. A portion of the project also lies within the Town's Scenic Corridor Overlay (SC-O) District. The proposed project is consistent with the Use and Dimensional Regulations of the RA Zoning Tables.

Currently the site is a combination of forests, pastures, meadows, farmland, agricultural buildings, single family dwellings, ponds, and dirt/gravel farmroads.

The following properties, identified by section, block and lot number, directly abut the project site according to the Orange County Tax Maps: 13-1-15, 13-1-14.1, 13-1-14.2, 13-1-11.1, 13-1-11.23, 19-1-53, 19-1-52, 19-1-51, 19-1-50, 19-1-49, 19-1-41, 19-1-54, 19-1-55, 19-1-64, 19-1-46, 19-1-45, 19-1-87, 18-1-9.221, 18-1-9.21, 18-1-8.3, 18-1-9.1, 18-1-17, 18-1-69, 18-1-68.22, 18-1-13, 18-1-12.23, 18-1-12.1, 18-3-8.1, 18-3-7, 18-3-6, 18-3-5, 18-3-4, 18-3-3, 18-3-2, 18-3-1, 19-1-30.11, 19-1-34, 13-3-3.2, 13-3-2,

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<sup>1</sup> After acceptance of the DEIS and prior to completion of this FEIS the applicant removed one proposed building lot from the subdivision application and subdivision plat. Therefore, references in this FEIS to the project acreage, number of proposed building lots, tax parcels, number of lots located within the Scenic Corridor, the length of the private roadways, areas of proposed disturbance, deletion of references to the two subject tax parcels (14-1-111.12 and 111.2), and similar numeric facts revise the DEIS. All such revisions are deemed incorporated in this footnote, and each such revision will not be noted each time such revision was made.

13-3-1, 13-3-4.2, 13-3-5, 13-3-6, 13-1-8.1, 13-1-8.21, 13-1-87, 13-1-10.2, 13-1-86, 14-1-110, 14-1-58.1, 14-1-109, 14-1-108, 14-1-58.21, 14-1-53, 19-1-4, 19-1-2.221, 19-1-65, 18-1-66, 19-1-68, 13-1-12, and 19-1-69.12, 14-1-11.12 and 14-1-111.2.

The applicant is not currently pursuing any plans for development of abutting properties.

## **B. Project Purpose, Need & Benefits**

The purpose of the project is to construct 30 residential lots with individual wells and septic systems on lots which range from 2.5 to 3.96 acres in accordance with adopted plans and laws of the Town of Crawford, with which the applicant believes the plans conform. The proposed subdivision is intended to meet a specific desire for professionals looking to begin a family or families currently living in a more urban area who may be looking to move to a more rural environment in an agricultural community. Farmhood Fields is a unique gated community amidst a farm-centric backdrop. Members shall have access to farmers' markets, recreational activities, community-driven events and extensive hands-on educational opportunities with livestock and farm-table living. Dwellings will range between 3,000 and 5,000 square feet in livable floor area and will not be identical in appearance. The applicant believes there is a market for this type of housing.

The Town (not including special districts) will benefit economically from the proposed subdivision via the generation of tax revenue. There is also potential for local businesses to see a small increase in economic activity due to the proposed project. There is potential for the number of students in the school to increase. It has been noted that the school population in this district has been in decline. In addition, the farm will continue its operation which will also protect the scenic byway. The community will be private and the maintenance of the roadways will be the responsibility of the property owner(s), Homeowner's Association or similar private entity. The roadways will be subject to a road maintenance agreement to assure that roadways remain accessible to emergency vehicles.

## **C. List of Involved Agencies and Permits Required**

The proposed action requires approvals from the following involved agencies:

- Lead Agency, Town of Crawford Planning Board – Completion of SEQR process; Subdivision approval
- Orange County Department of Planning – General Municipal Law Review
- Orange County Department of Health – Water supply wells; Sewage disposal system design approval; Subdivision approval
- Town of Crawford Department of Public Works – Road Access approval
- Orange County Department of Public Works – Road Access approval
- New York State Department of Transportation – Road Access approval
- New York State Department of Environmental Conservation – Stormwater SPDES permit, Water Quality Certificate [This line revised the DEIS by deleting the requirement for a Freshwater Wetlands Permit and adding the requirement to obtain a DEC Water Quality Certificate.]
- Army Corp of Engineers – Federal Wetlands Permit

## **D. List of Interested Agencies**

The following agencies have no permitting authority, but have expressed an interest or concern regarding the environmental impacts of the proposed action:

- New York State Office of Parks, Recreation and Historic Preservation (SHPO)
- Town of Crawford Supervisor and Town Board

## **E. Summary of Potential Impacts and Mitigation Measures**

### Soils and Geology

This project will result in the permanent regrading and disturbance of approximately 62 acres of which 16 acres are existing impervious surfaces such as existing gravel roads and buildings. The proposed impervious surfaces including roadways, structures and driveways are a total of approximately 22 acres.

An Erosion and Sediment Control measures have been designed to limit erosion and any impacts to on site and off sites surface water resources. Best Management Practices will be followed. All construction will not occur at the same time, and no more than 5 acres shall be disturbed at a time.

### Wetlands, Waterbodies and Water Resources

The Pakanasink Creek,, Class C; 15-acres of Freshwater Wetlands PB-66, Class III; 13-acres of Freshwater Wetlands PB-23, Class II and patches of state-regulated wetlands exist on the site. The potential exists for impacts to federal wetlands and other proximate surface water resources due to roadway construction.

The proposed wetlands disturbance has been reduced to less than one-tenth of an acre of federal wetlands within the project site. The proposed disturbance would comply with the US Army Corps of Engineers Nationwide Permit 18, Minor Discharges and must comply with all conditions of Nationwide Permit 18. There will be no disturbance of State wetlands or State wetlands buffer. [The reduction in proposed wetlands disturbance revises the DEIS.]

### Stormwater

On site drainage will be changed by the proposed development due to land grading and the addition of impervious surfaces. Overall general onsite drainage patterns will remain unchanged as post developed stormwater discharges will follow their pre development natural course of drainage.

Stormwater management infrastructure consisting of multiple raingardens, stormwater management ponds, diversion swales and other measures consistent with current NYSDEC SPDES permit criteria will be implemented. A Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the project and is attached hereto in Appendix B. The SWPPP has not been fully reviewed by the Planning Board's professional engineer and might require supplement or revision. The Board's engineer has advised the Board that the SWPPP is adequate for purposes of approval of this FEIS. [These statements revise the

DEIS.] This plan includes water quality and erosion and sediment control measures and must be strictly adhered to.

### Endangered or Threatened Species

A biological assessment has been completed by the NYSDEC which concluded that the site is located within or near known occurrences of the Indiana Bat and the Northern Long-Eared Bat.

All tree removal associated with this project shall occur within the appropriate time of year work window, from November 1st through March 31<sup>st</sup>, to avoid adverse impacts to Indiana bats and Northern long-eared bats.

### Cultural Resources

The New York State Department of Environmental Conservation states in its March 23, 2018 letter, that the DEC reviewed the statewide inventory of archaeological resources maintained by the New York State Museum and the New York State Office of Parks, Recreation, and Historic Preservation, which indicate that the project is not located within an area considered to be sensitive with regard to archaeological resources. In addition, a Historic Architectural Resources Survey was conducted by Hudson Valley Cultural Resource Consultants, Ltd., of buildings near the project site that are fifty (50) years of age or older. The survey also identifies nearby structures listed on the National Register of Historic Places or identified as National Register Eligible, and concludes that these properties will not be impacted by the development. Therefore, no mitigation is proposed. [The Historic Architectural Resources Survey supplements the DEIS.]

### Farmland Protection

Farmland of statewide importance and prime farmland is found within the limits of the project site. Currently, approximately 225 acres of the site are actively farmed. Existing farming operations shall remain and may be enhanced due to the nature of the project being an agricultural community.

### Visual

The proposed development will permanently change the existing physical characteristics of the project site. Of the 30 proposed lots, 17 are located within the Scenic Corridor Overlay District. Based on a visual analysis the proposed subdivision will be visible from public roadways and nearby residences, but visibility will be obscured from some of those locations. (see Visual Impact Photos in Appendix C). [This statement supplements the DEIS.]

Dwellings have been proposed away from the existing roadways. Existing mature trees will remain and be maintained to protect the existing viewshed to the greatest extent possible. Homes will be designed in a manner which is consistent with the local vernacular (see proposed architectural renderings in Appendix C). All dwellings to be located in the Scenic Corridor Overlay District are subject to review by the Planning Board prior to the disturbance of the particular lot.

### Traffic

The proposed subdivision will create an insignificant amount of increased traffic on local roads. The traffic generated for this development is mainly from the proposed 30 new single family dwellings. According to the Institute of Transportation Engineers, 30 dwelling units shall generate 286 trips per day,

with 23 during the AM peak hour and 30 during the PM peak hour. There is a slight anticipated increase in the number of trips per day with regards to the farm operation of 20 trips per day.

The existing public road infrastructure in the vicinity of the project site is capable of handling the additional traffic. It is anticipated that the Orange County Department of Public Works and New York State DOT will provide additional comments during subsequent project review. The Planning, in consultation with the Orange County DPW, will assess the width of Andrews Road at its intersection with County Route 48.

#### Roadway Design

All internal roads and associated drainage and stormwater controls shall be designed in accordance with the Town road and AASHTO standards.

A request for a waiver of private roads serving more than four lots has been submitted to the Town of Crawford Town Board. However, the four-lot limitation does not apply to this proposed subdivision and no waiver is required.

#### Land Use and Zoning

The project is consistent with surrounding land uses and existing zoning regulations including additional regulations for overlay zones in which portions of the project site are included. The project is consistent with Town and County goals and recommendations found in their existing Comprehensive Plans. The proposed lots meet minimum lot size and setback requirements in the zoning code.

#### Police, Fire and Emergency Medical Services

The project will increase the number of residents in the community service districts by less than 1%. No impacts are anticipated to the public water supply as water for firefighting will be obtained by water tanker trucks as is the current practice for the site and all areas of the Town with no public water or fire hydrants.

Existing emergency services can accommodate this increase in the number of households as it is less than the average growth rate for the Town of Crawford, according to the Town of Crawford Comprehensive Plan.

#### School District Services

The project can be expected to generate approximately 27 public school students which is less than 1% of the approximate 5,000 students enrolled in the Pine Bush School District. It is expected that the district can accommodate this additional growth.

No mitigations regarding school district services are proposed.

#### Recreation and Open Space Resources

The proposed subdivision will increase usage of local parks and recreation facilities. A list of such facilities is provided in Section III-K.

Approximately 438 acres, or 77% of the project site will remain in its existing state. Since the subdivision will be an agricultural community, this will provide opportunity for passive recreation for residents of the

project. In addition, a payment will be made to the Town by the applicant in lieu of providing public park land in the amount of \$45,400. [This dollar amount revises the DEIS.]

#### Utilities – Water

The estimated average daily water demand for the 30 proposed single-family residences is 440 gallons per day (gpd) per residence (0.3 gallons per minute), for a total of 13,200 gpd. The New York State Department of Health (NYSDOH) requires that the available water supply for the proposed development produce a sustainable flow rate for an extended period of time and to quantify that flow rate.

The proposed individual wells shall have the capacity to produce a minimum of 5 gallons per minute. Water saving plumbing fixtures will be used in all homes.

#### Utilities – Wastewater

The estimated average daily wastewater demand for the 30 proposed single-family residences is 440 gallons per day (gpd) per residence based on Orange County Health Department Standards.

Proposed dwelling units will be served by septic tanks and adequately sized absorption fields on individual lots.

#### Other Utilities

The proposed subdivision is anticipated to use a total of 180,330 kwh per year to provide power to individual homes. It is expected that the current condition of the electrical services in the area is adequate to meet these requirements.

The project sponsor will encourage the use of solar energy, as is already used to provide electrical service for portions of the farm.

#### Construction Impacts

Top soil will be stockpiled for re-use upon completion of construction activities and the soil erosion and sediment control devices will be implemented in accordance with the approved plan. Noise generation will be that typically associated with a construction site of this type with no extraordinary noise mitigation measures proposed. A Stormwater Pollution Prevention Plan which includes an Erosion Control Plan has been prepared for the project in accordance with the NYS Department of Environmental Conservation and a SPDES Permit for General Construction Activities.

### **F. Summary of Project Alternatives Considered**

The No Build Alternative, in which no change would take place on the property, and a conventional subdivision design alternative are discussed in the Alternatives Section of this report.

## **II. DESCRIPTION OF PROPOSED ACTION**

### **A. Site Location and Description**

The project site is approximately 563.57 acres bounded by Crans Mill Road, NYS Route 302 and County Road 48 in the Town of Crawford, Orange County, NY, approximately 200 feet north of the Burlingham, Crans Mill Road intersection. The site is made up of ten (10) tax parcels in the Town of Crawford which are:

Section 13 Block 1 Lots 10.1, 11.21, 11.22 & 13.11

Section 18 Block 1 Lot 10.1

Section 18 Block 3 Lot 11.12

Section 19 Block 1 Lots 3.1, 29.3, 66 & 67.1

These parcels are located in NYSDEC Region 3. The coordinates of the site at the property known as 330 Crans Mill Road (section 18 Block 3 Lot 11.12) are 41.5693, -74.3677.

The project site is located within the Residential Agricultural (RA) Zoning District, as designated on the Town of Crawford Zoning Map. A portion of the project also lies within the Town's Scenic Corridor Overlay (SC-O) District. Single family dwellings and Agricultural operations are permitted uses within the RA district. The proposed subdivision shall meet all of the required dimensional regulations for the RA district including the minimum lot area of 2.5 acres and lot width of 250-feet. Most proposed lots shall exceed the minimum requirements. Each proposed home shall be approximately 3,000 sf to 5,000 sf and be provided with a minimum of two off-street parking spaces.

Section 13 Block 1 Lot 10.1 is approximately 167.4 acres, is currently a cattle farm and contains a pole barn. The site is wooded with cleared areas that are pastures and farmland. Section 13 Block 1 Lot 11.21 is approximately 34.8 acres and is currently vacant. The site is mainly wooded with some dirt roads that traverse the property. Section 13 Block 1 Lot 11.22 is approximately 6.02 acres and contains a single family dwelling. The site is mainly wooded with a cleared area for the driveway and a small yard. Section 13 Block 1 Lot 13.11 is approximately 17.77 acres and is currently vacant. The site is mainly wooded. Section 18 Block 1 Lot 10.1 is approximately 36.16 acres and is currently vacant. The property is mainly wooded with some dirt roads that run through the property. Section 18 Block 3 Lot 11.12 is approximately 144.17 acres and contains a single family dwelling, several barns and sheds, a greenhouse, and fences. The site has large farm fields and meadows for cattle. It also has a wooded area and three small ponds with a stream that connects two of them. Section 19 Block 1 Lot 3.1 is approximately 103.61 acres and contains a single family dwelling. The site is both wooded and cleared with farm fields and meadows. Section 19 Block 1 Lot 29.3 is approximately 7.01 acres and contains a single family dwelling. It has a driveway and grass lawn. The remainder of the property is wooded. Section 19 Block 1 Lot 66 is approximately 13.53 acres and is currently vacant. The site is both wooded and cleared for farming. Section 19 Block 1 Lot 67.1 is approximately 33.10 acres and is currently vacant. It contains a few sheds for farm equipment. The site is mainly wooded but an area has been cleared for the site of a future single family dwelling.

Currently electric infrastructure is available to the project site. No other utility infrastructure is available.

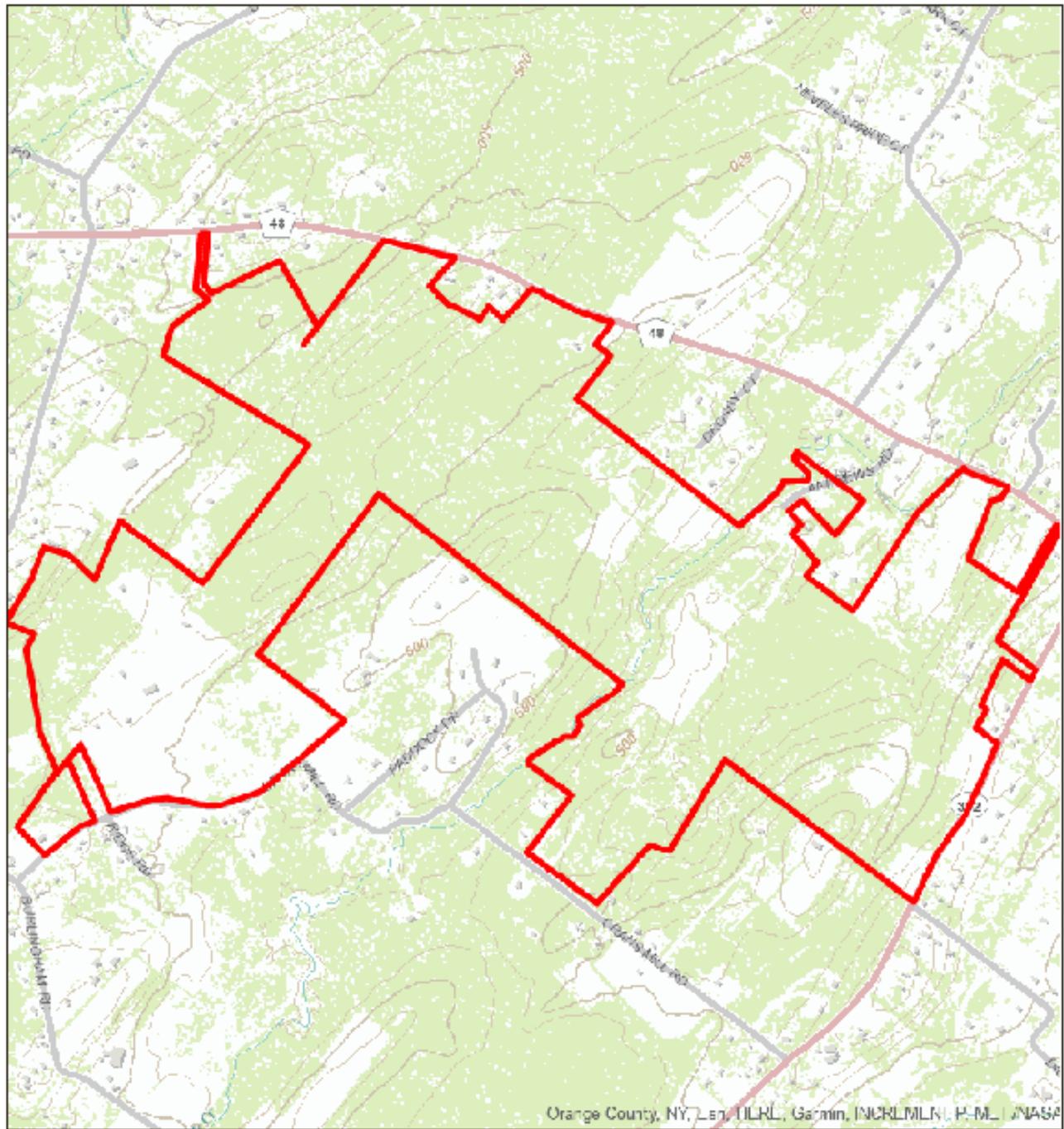
The site is accessed by two entrances from Crans Mill Road, one entrance from New York State Route 302, one entrance from County Road 48, and a driveway from Andrews Road.

The name of this project is Farmhood Fields. The nature of this project is a new 30-lot residential subdivision with lots varying in size from 2.5 to 3.96 acres and remaining lands (proposed lot 31) of approximately 486 acres. The lots shall be serviced by on-site septic system and wells. The proposed improvements include a series of private road to access the 31-lots and the existing and proposed farming operations. Each lot shall direct stormwater from the roof leaders and driveways to raingardens and/or swales. The swales shall direct the runoff to drainage swales along the roads which direct the stormwater to bioretention basins. No runoff will enter a combined sewer system.

The proposed area to be disturbed on the project site is approximately 62 acres, of which approximately 16 acres are existing impervious surfaces such as roads and buildings which were surveyed in the Fall of 2017 by Jeff Roberts, Land Surveyor. According to the applicant, the roads were farm roads and traveled paths that were in existence with the exact year when they were constructed unknown. The basis for the pre-development conditions are measured from survey data established from the Roberts Survey and represented in the Existing Conditions of the site drawings at the time of subdivision application. This baseline is acceptable to the Board's professional consulting engineer. The proposed impervious surfaces are a total of approximately 22 acres, of which approximately 19 acres are made up of the subdivision roadways. No more than 5 acres shall be disturbed at a time. It is anticipated that construction will be completed within three (3) to five (5) years after and if subdivision approval is granted.

Approximately 35,000 linear feet (6.6 miles) of private roadways shall be constructed. Access to the site shall be a Gated Main Entrance (Gateway Dr) from NYS Route 302; two (2) Gated Main Entrances from Crans Mill Road (Iron Gate Way and Honey Lane); a Gated Main Entrance (Coyote Ct.) from County Highway 48; and a Gated Main Entrance (Red Barn Trl) from Andrews Road; for a total of five (5) gated entrances.

Agricultural buildings shall meet the supplemental regulations for permitted uses as described in Section 137-13 of the Zoning Law, including the installation of adequate fencing to contain all livestock and buildings used to stable domestic animals shall be 150 feet from any property lines. The proposed fencing shall be in accordance with the supplemental regulations for accessory uses as described in Section 137-14 of the Zoning Law.



*Site Location Map*

# Farmhood Fields



Orange County G.I.S. Division 255 Main St Goshen, New York 10924 Phone: 845.615.3790

DISCLAIMER: This map is a product of Orange County Real Property GIS Division. The data depicted here have been developed with extensive cooperation from other County departments, as well as other Federal, State and Local government agencies. Orange County make no representations as to the accuracy of the information in the mapping data, but rather, provide said information as is. Orange County expressly disclaim responsibility for damages or liability that may arise from the use of this map.

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**B. Construction & Operation**

Construction will take place Monday through Saturday 7:00 AM to 6:00 PM exclusive of holidays. Construction will take place in three phases. The first phase would entail construction of the roadways, drainage and individual lots east of the Pakanasink Creek. The second phase would include the development of the roadways, drainage and individual lots between the Pakanasink Creek and the proposed roads Coyote Court, Cattle Alley and Haven Heights. The third phase would include the development of the roadways, drainage and individual lots on the remaining lands. Total construction of the project is anticipated to take approximately three (3) to five (5) years with completion anticipated in year 2023.

Top soil will be stockpiled for re-use upon completion of construction activities and the soil erosion and sediment control devices will be implemented in accordance with the approved plan. Noise generation will be that typically associated with a construction site of this type with no extraordinary noise mitigation measures proposed. A Stormwater Pollution Prevention Plan which includes an Erosion Control Plan has been prepared for the project in accordance with the NYS Department of Environmental Conservation and a SPDES Permit for General Construction Activities.

Farming operations that are existing shall continue to take place on the site. Residents of the proposed project will be made aware that these operations will take place and that occasionally said operations may cause noises and, or odors which are above the levels of a typical residential subdivision. Currently, there is one greenhouse that is being used to grow fruits and vegetables. There will be a root cellar for winter storage of vegetables to minimize the need for refrigerated storage. The milking parlor supports cow, sheep and goat milking. There is also a milk processing room for all productions of milk, cheese, and yogurt. All equipment and supplies will be stored in the main barn. This includes all greenhouse and milking processing supplies, tractors and any other farm equipment. There are extra barns throughout the property for extra storage of equipment. All animals are raised on pastures and are species diverse. There is a facility for special needs, such as illness or injury. While on pasture, all animals have access to water, feed and shade. Hay is housed in the main barn and grain is stored in feed bins. All of the above listed farming operations shall be located within existing buildings. No additional agricultural buildings are proposed at this time.

**III. EXISTING SETTING, POTENTIAL ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION MEASURES**

**A. Soils and Geology**

According to the USDA Natural Resources Conservation service soil survey, the parcel contains the following soils:

	Hydrologic Soil Group	
• Ab - Alden silt loam.	40.0 acres	C/D (7.1%)
• AC – Alden extremely stony soils.	27.6 acres	C/D (4.9%)
• Ca - Canandaigua silt loam	16.8 acres	B/D (3.0%)
• CnB - Chenango gravelly silt loam, 3 to 8 percent slopes	38.3 acres	A (6.8%)

• CnC - Chenango gravelly silt loam, 8 to 15 percent slopes	7.3 acres	A (1.3%)
• ErA - Erie gravelly silt loam, 0 to 3 percent slopes	1.6 acres	D (0.3%)
• ErB - Erie gravelly silt loam, 3 to 8 percent slopes	46.5 acres	D (8.3%)
• ESB - Erie extremely stony soils, gently sloping	84.5 acres	D (15.0%)
• HH - Histic Humaquepts, ponded	1.4 acres	A/D (0.2%)
• HoD - Hoosic gravelly sandy loam, 15 to 25 percent slopes	2.6 acres	A (0.5%)
• MdB - Mardin gravelly silt loam, 3 to 8 percent slopes	113.9 acres	D (20.2%)
• MdC - Mardin gravelly silt loam, 8 to 15 percent slopes	53.6 acres	D (9.5%)
• MdD - Mardin gravelly silt loam, 15 to 25 percent slopes	5.4 acres	D (1.0%)
• Pg - Pits, gravel	1.4 acres	- (0.2%)
• SXC - Swartswood and Mardin soils, sloping, very stony	122.6 acres	C (21.8%)

The soil makeup of the site is visually depicted in the following Soil Map. The Swartswood and Mardin soils occupy approximately 50% of the site and are characterized as moderately well to well drained. Proposed wastewater treatment systems shall be located in areas with these types of soils. These soils are within the Town of Crawford Soil Group IV which may be used for on-site septic systems. Buildings with and without basements may be installed on these soils.

In addition, the project site does not contain any unique or unusual land forms such as cliffs, dunes or mineral fossils.



Elevations within the site vary from 390 feet to 570 feet generally sloping up and down northwest to southeast at varying locations.

The proposed subdivision will result in changes to the site's natural topography. Proposed grading plans have been completed for the subdivision at a scale of 1" = 50' and are located on sheets S-7 through S-17 of the Subdivision Plans. It is anticipated that cuts and fills will be balanced across the site which will alleviate the need to transport or remove soils to and from the site and top soil will be stockpiled for re-use upon completion of the construction activities. There will be no construction on slopes of 15% or greater and there is no area where bedrock is exposed.

There is an area on Section 13 Block 1 Lot 10.1 referred to as a gravel pit which is approximately 20,000 sf. The soils in that area are very stony and gravelly and are being used as a borrow pit for granular fill to shore up the existing gravel roads. This area will ultimately be graded and reclaimed with clean fill, topsoil, seed and hay. The use of this area will be for cattle grazing.

Total area of disturbance is computed at 62 acres which includes disturbance associated with the construction of the roadways, associated stormwater management ponds and other infrastructure, as well as disturbance associated with the individual lots including houses, driveways, septic construction as well as modest yard areas. The 62 acres of disturbance encompasses the full extent of the project site that will be developed for the 31-lot subdivision and it includes the areas of existing roadways serving the subdivision that were previous farm roads and that require design improvement for the project site to meet compliance with Town Road regulations.

Several members of the public commented at the DEIS public hearing and in written submissions that construction of project roadways occurred prior to and during the application review process and that the DEIS should have described site and environmental conditions prior to the site disturbance or alterations for any of those elements included in this proposed subdivision development. The project site is an active farm and will continue to be farmed. The applicant has stated that improvements made prior to and during application were made to improve the function of the existing farm roads and to facilitate operations of the farm. These improvements to farm roads still require further enhancement to meet compliance with Town road requirements. [This paragraph supplements and revises the DEIS.]

Soils with high erosion potential will need special consideration to ensure that surface water is not negatively impacted. Soils identified by the Orange County Soil Survey as having a high potential for erosion if top cover is removed are the Erie gravelly silt loam (ErB). The potential impacts due to erosion include loss of soil, downstream siltation build up and decreased light infiltration to waterbodies impacting vegetative growth and other habitats. The proposed development of this project avoids areas with these soils so mitigation is not necessary.

Based on Deep Pit and Percolation Soil Testing for each lot in the area of the proposed septic systems, no subsurface conditions were encountered which are expected to adversely affect septic use. Results of these tests have been included in the Subdivision Plans. Areas of shallow bedrock were not encountered. The available depth of soil is found to be adequate to support conventional or shallow type sewerage disposal systems in accordance with NYS Department of Health Appendix 75A standards. All proposed sewerage disposal systems are situated a significant distance from any existing, proposed, known well or

public water supply wellheads. Separation distances are greater than the minimum required distances established by the state.

The Erosion and Sediment Control plan for the proposed development utilizes Best Management Practices (BMPs) such as sediment traps, silt fences, temporary swales and stabilized construction entrances which are to be installed prior to and during construction. These BMPs will contain the silt and sediment on site. They shall be maintained during construction by the contractor and will remain in place throughout the period of construction until vegetation is established and the site is stabilized.

In addition to the above mentioned BMPs the contractor will be required to stage work consistent with NYS DEC requirements and will seed and stabilize all disturbed land within 14 days. Erosion control measures shall be inspected by a qualified professional at least once every seven days and after rainfall events of one half inch within a 24-hour period.

## **B. Wetlands, Waterbodies and Water Resources**

The Pakanasink Creek (DEC Water index Number H-139-13-19-9) runs from County Road 48 along the perimeter of and through Section 13 Block 1 Lot 10.1 to the edge of Section 19 Block 1 Lots 66 & 67.1. It extends down to and crosses under Crans Mill Road. The creek has a classification of C, fresh surface water, best used for fishing and is a “non-protected” stream. Section 18 Block 1 Lot 10.1 contains approximately 15-acres of Freshwater Wetlands PB-66, Class III. Section 18 Block 3 Lot 11.12 contains approximately 13-acres of Freshwater Wetlands PB-23, Class II. There are patches of other federal and state-regulated wetlands on the project site. The wetlands on the site are visually depicted on the below Wetlands Map. State and Federal wetlands boundaries have been delineated on the subdivision plans by a wetlands specialist, although not yet confirmed by state or federal officials.

No dredging or other work will occur in the Pakanasink Creek. There will be no construction of an intake for the withdrawal of surface water nor the construction of an outfall for the discharge of wastewater to surface water. Bioretention J was relocated in the design drawings to eliminate construction within 20 feet of the Pakansink Creek within tax parcel Section 13 Block 1 Lot 10.1. Erosion control measures and stormwater management controls shall be installed prior to, during and after construction to assure there is no increase to peak discharge to the Creek.

There are state-regulated wetlands on the tax parcel known as Section 18 Block 3 Lot 11.12. The previously proposed road named Homestead Manor has been eliminated from the subdivision design so a permit for wetlands disturbance will not be required from the New York State Department of Environmental Conservation. [This statement revises the DEIS.]

There are federal wetlands on the tax parcels known as Section 19 Block 1 Lots 3.1 and 67.1. The proposed road named Forest Edge will cross through the wetlands. Less than one-tenth of an acre of wetlands shall be disturbed which is conformance with the US Army Corps of Engineers Nationwide Permit 18, Minor Discharges. The project environmentalist shall submit a pre-construction notification to the USACOE as required. The construction work shall comply with all conditions of Nationwide Permit 18. A Water Quality Certificate issued by NYSDEC will be required. [These two sentences revise the DEIS.] No other wetlands disturbance is proposed.

Written submissions were made by members of the public questioning prior wetlands disturbance on the site. The applicant had prior permit applications for wetlands disturbance activities on the project site which involved installing culvert pipes within the wetlands on Section 18 Block 1 lot 10.1. [This paragraph supplements the DEIS.]

All proposed wells on the project site will be constructed in compliance with the Orange County Health Department standards. See Section K below for further information regarding Utilities – Water.

### **C. Stormwater**

Drainage patterns on the site will be altered due to site grading and the construction of additional impervious surfaces. For instance, homesites and driveways will employ the use of drainage swales to direct stormwater to roadway ditches as opposed to prior sheet flow runoff when the sites were vacant. Post development stormwater runoff patterns from the site to other properties will remain unchanged as stormwater runoff will follow its natural, pre-development, course of drainage. Post-construction stormwater management practices shall control runoff so that it does not increase peak rates of runoff to adjoining properties. The SWPPP identifies post development peak flow rates to be below pre development levels.

There is potential for contamination and sedimentation in on site water resources as a result of on-site construction. These potential stormwater contaminants are identified in the SWPPP. Any on-site contamination shall be mitigated to the greatest extent practicable with erosion and sedimentation control measures. Such measures include silt fence, mulch/hay, stone tracking pads and other measures consistent with NYSDEC standards

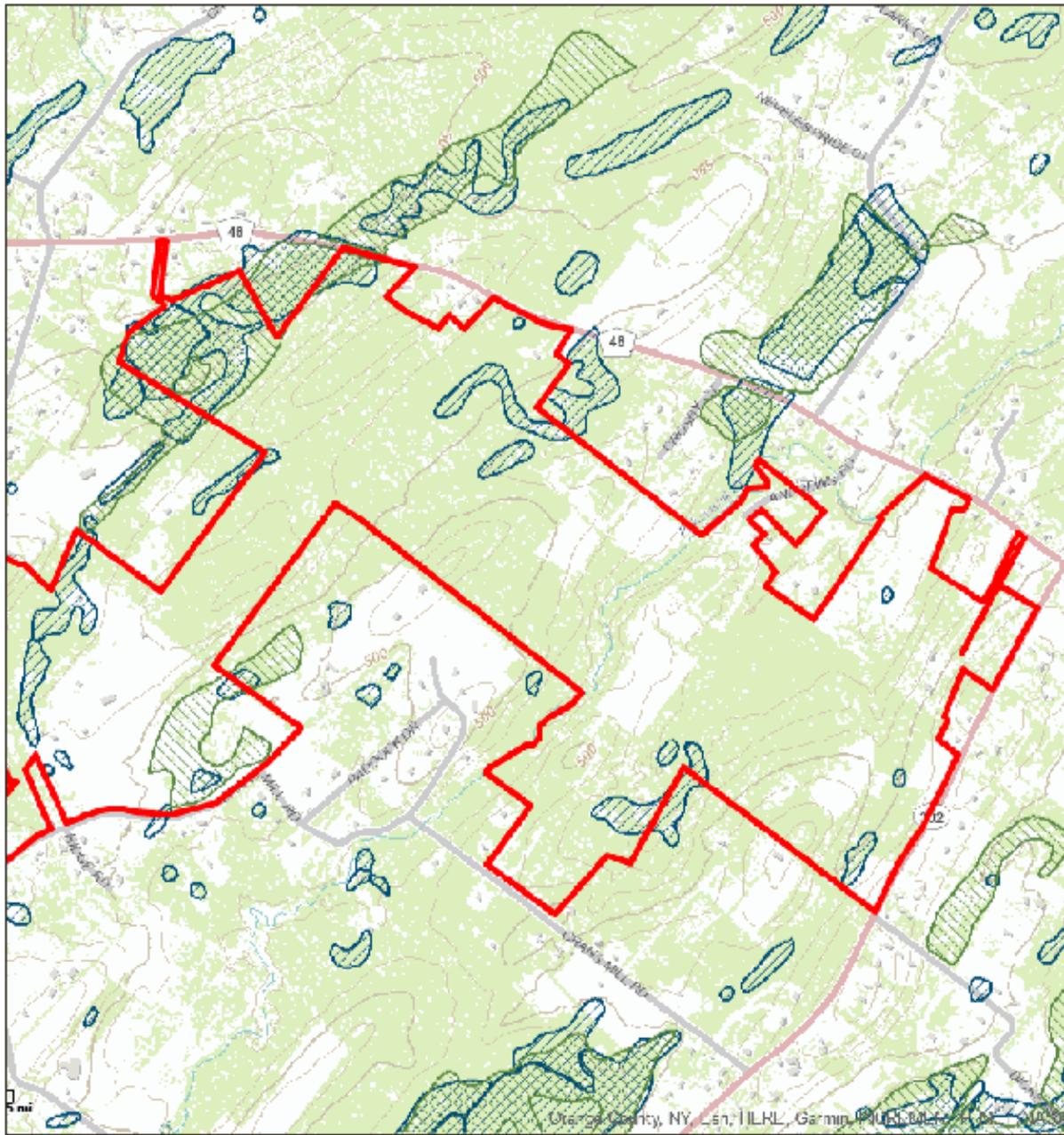
The standard stormwater management practices for this project consist of rain gardens, drainage swales and bioretention ponds which have been designed to fit in with the topography of the site and to be part of the landscape features. The ponds will be topsoiled and seeded with fine lawn so that they can be mowed and maintained. The drainage swales pre-treat the stormwater runoff. The ponds have been designed to handle a 100-year storm and are equipped with an outlet structure and emergency spillway to prevent overtopping of the pond.

[The following supplements the DEIS.] The Orange County Department of Planning, in its reports dated November 8, 2018, and May 8, 2019, commended the applicant's proposed use of rain gardens and bioretention ponds, and also encouraged the use of curbless parking areas and permeable pavement to allow stormwater to infiltrate into the ground rather than channeling stormwater to bioretention ponds. The project design does not propose curbs and impervious surfaces are designed to convey stormwater across vegetated areas to comply with NYSDEC water quality designs. The final design of bioretention ponds and other stormwater controls are subject to review and approval by the Planning Board's professional consulting engineer and the Board.

[The following supplements the DEIS.] Bruce Dunn, Sr., Esq., submitted a letter, dated November 14, 2018, on behalf of his client Lynn Butler, stating that the applicant had installed a buried pipe to divert the flow of water directly onto the neighbor Butler's property. The Board's consulting engineer

inspected the site to investigate this comment with the applicant's engineer. The pipe in question replaced an older pipe designed to convey the water of an existing drainage stream that traverses the property of Farmhood Fields and flows onto the Butler property. This stream has always existed and the flow of the stream has not been altered by the applicant. The stream collects stormwater from uphill properties. SWPPP includes bioretention ponds that shall maintain water quality and control quantity so peak stormwater discharges are not increased.

Mr. Dunn and another commenter, Charles Bazydlo in his letter dated November 14, 2018, state that roadway construction, drainage works and other site disturbance previously occurred, and that the EIS should address the "pre-development" or "pre-existing" conditions prior to such disturbance. The basis for the pre-development conditions are measured from survey data established from the Roberts Survey in the Fall of 2017 and represented in the Existing Conditions of the site drawings at the time of this subdivision application. The project site is an active farm and will continue to be farmed. According to the applicant, improvements made prior to and during application review were made to improve the function of the existing farm roads and to facilitate operations of the farm. These improvements to farm roads still require further enhancement to meet compliance with Town private road requirements.



*Wetlands Map*

**Farmhood Fields**



Orange County G.I.S. Division 255 Main St Goshen, New York 10924 Phone: 845.615.3790

DISCLAIMER: This map is a product of Orange County Real Property GIS Division. The data depicted here have been developed with extensive cooperation from other County departments, as well as other Federal, State and Local government agencies. Orange County makes no representations as to the accuracy of the information in the mapping data, but rather, provide said information as is. Orange County expressly disclaims responsibility for damages or liability that may arise from the use of this map.

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#### **D. Endangered or Threatened Species**

A biological assessment has been completed by the NYSDEC which, upon review of the State's Natural Heritage records, concluded that the site is located within or near known occurrences of the Indiana Bat and the Northern Long-Eared Bat. Although the proposed project will result in the loss of flora and may result in the loss of fauna, there are no other endangered, threatened or rare plants or animals or species of special concern within the site. The site is not identified as a significant natural community.

The proposed project may result in the loss of flora or fauna. All tree removal associated with this project shall occur within the appropriate time of year work window, from November 1st through March 31<sup>st</sup>, to avoid adverse impacts to Indiana bats and Northern long-eared bats. A certification by the applicant's professional engineer stating that no more than 10 acres of forest will be removed in order to develop the subdivision and home sites, which is about 1.8% of the entire site. Therefore, it is expected that the effect on bat habitat will be none or minimal. The certification is in Appendix D. [This certification supplements the DEIS.]

Ecological Analysis, LLC, prepared a report dated November 26, 2018, stating that its staff reviewed public records and the subdivision plan and inspected the project site. The report determines that most of the proposed roads follow existing farm roads and that most of the proposed lots are in areas of open field. The report states that trees will be removed from a lot on an as-needed basis as each lot is sold and, therefore, lots will be cleared in phases over time, and states that only that portion of the lot necessary for the proposed house and accessory structures will be cleared. Therefore, the report concludes that the project should not have any adverse effects on either the Indiana Bat or the Northern Long-Eared Bat. The Planning Board's professional planning consultant, Alan J. Sorensen, AICP, submitted a memorandum to the Board, dated December 18, 2018, stating his agreement with this assessment. [The preceding material supplements the DEIS.]

#### **E. Cultural Resources**

The New York State Department of Environmental Conservation has informed the Planning Board in its March 23, 2018 letter that the statewide inventory of archaeological resources maintained by the New York State Museum and the New York State Office of Parks, Recreation, and Historic Preservation indicate that the project is not located within an area considered to be sensitive with regard to archaeological resources. According to the NYSDEC EAF Mapper, there is no Natural National Landmark on or near the site. SHPO, via the CRIS website, requested the applicant to conduct a Phase 1A archeological background and sensitivity assessment investigation, although no basis for this request was provided. Given the DEC letter, the limited site disturbance and the absence of any evidence or other basis to conduct an archeological investigation, no study or mitigation is required. The Board's professional planning consultant recommends that the FEIS can be approved without an archeological investigation.

The New York State Office of Parks, Recreation and Historic Preservation requested the applicant to prepare a survey of above-ground properties 50 years of age or older located within and adjacent to the project area. Hudson Valley Cultural Resources Consultants completed a Historic Architectural Resource Survey dated December 2018. The Survey identified one building on the project site and 38 buildings

adjoining the project site that are more than 50 years of age. These buildings include five (5) properties that are listed on the National Register of Historic Places - the Hopewell Presbyterian Church, the Shorter House, the Alexander Thompson House, the Andrew Thompson House and the Robert Thompson House. The survey found that the Shorter House is visible from within the project site. The survey found that the other four National Register buildings are located along the opposite (eastern) side of State Route 302 from the project site, and that based on the subdivision design plan and the existing vegetation and topography, that these building are not visible from the boundaries of the proposed residential lots. The survey concluded that these properties and the John Crawford property will not be impacted by the proposed subdivision. The report also found that there are no National Register eligible properties near the project site. [The preceding material supplements the DEIS.]

The Planning Board's professional planning consultant agrees with this assessment that there will be no adverse impact on historic structures. No mitigation is necessary.

## **F. Farmland Protection**

Farmland classification identifies prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland and identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. The Natural Resources Conservation Service (NRCS) policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

The following soils that are within the project site are classified as farmland of statewide importance: Ca, CnC, ErA, ErB, MdB and MdC. These soils make up approximately 239.7 acres of the site and are currently a mixture of impervious surfaces, forest and agricultural lands.

The following soils that are within the project site are classified as prime farmland: CnB. These soils make up approximately 38.3 acres of the site and are currently a mixture of impervious surfaces, forest and agricultural lands.

In some areas that are not identified as having national or statewide importance, land is considered to be farmland of local importance for the production of food, feed, fiber, forage, and oilseed crops. The soils on this site are already classified as farmland of statewide importance so farmland of local importance does not exist within the site.

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. This type of farmland does not exist on the site.

Approximately 225 acres of the site are actively farmed and cover a mixture of the soils which are both classified as farmlands soils and unclassified. Farming operations that are existing shall continue to take place on the site. Residents of the proposed project will be made aware that these operations will take place and that occasionally said operations may cause noises and, or odors which are above the levels of a typical residential subdivision. The applicant represents that active farming operations will increase as the subdivision is occupied. The residential lots and private roads will disturb approximately ten percent

of the entire site; therefore, it is estimated that ten percent of the soils classified as farmlands will be disturbed for a total of approximately 24 acres. The applicant represents that the proposed development will not decrease the existing farming operations. The Planning Board believes that the loss of 24 acres of farmland on this large farm will not cause a significant adverse impact on the extent of farming or on farm operations.

The Orange County Department of Planning, in its November 8, 2018, and May 8, 2019, reports and public commenters recommended that Lot 31, consisting of 485 ± acres, be permanently preserved via a conservation easement. The applicant has repeatedly stated that it will not consent to the imposition of a conservation easement on Lot 31. However, the applicant has also repeatedly stated that the applicant commits to no further subdivision of the property if and when twelve (12) lots are sold. If the subdivision application is approved, the Planning Board will impose a condition of approval that, upon the sale of the twelfth (12<sup>th</sup>) lot, there shall be no further subdivision of the property, no more than thirty (30) residence lots in total may be sold or issued a building permit, and Lot 31 shall remain in agricultural use, which condition can be enforced by the Town of Crawford and owners of lots in the subdivision. This restriction will achieve a similar purpose as a conservation easement. [This paragraph supplements the DEIS.]

There is currently one greenhouse that is being used to grow fruits and vegetables. There will be a root cellar for winter storage of vegetables to minimize the need for refrigerated storage. The milking parlor supports cow, sheep and goat milking. There is also a milk processing room for all productions of milk, cheese, and yogurt. All equipment and supplies will be stored in the main barn. This includes all greenhouse and milking processing supplies, tractors and any other farm equipment. There are extra barns throughout the property for extra storage of equipment. All animals are raised on pastures and are species diverse. There is a facility for special needs, such as illness or injury. While on pasture, all animals shall have access to water, feed and shade. Hay is housed in the main barn and grain is stored in feed bins.

## G. Visual

Photographs of the site have been taken from Route 302 which is within the Town of Crawford Scenic Corridor Overlay District and are included in **Appendix C** of this report. As seen in the images and in the provided aerial photograph below, the site is characterized by wooded areas, grass land and existing farmlands. Topography varies widely across the project site and adjacent lands which is beneficial for shielding development from surrounding properties.

The existing visual character of the surrounding area is rural with clusters of residential developments scattered among dense vegetation and agricultural land. Visibility of the project site from County Road 48 or Burlingham Road is obscured by vegetative cover, separation distance from the road and the topography of the land. The views from Crans Mill Road and Andrews Road are provided in the Visual Impact Assessment, Appendix C. The views from Crans Mill are obscured by existing treelines and forest vegetation (View F in Appendix C). The views from Andrews Road were also considered by the Planning Board during its previous review and approval of the applicant's application to construct a new barn off Andrews Road; views of the proposed subdivision from Andrews Road will not be significantly disturbed (View G in Appendix C). According to the NYSDEC EAF Mapper application, there are no

State or Federally identified aesthetic resources or any sensitive places of statewide concern within five miles of the project site.

According to the NYS DEC Program Policy on Assessing and Mitigating Visual Impacts dated July 31, 2000, an aesthetic impact, “Occurs when there is a detrimental effect on the perceived beauty of a place or structure. Significant aesthetic impacts are those that may cause a diminishment of the public enjoyment and appreciation of an inventoried resource, or one that impairs the character or quality of such a place”.

The proposed subdivision will result in a physical change to the existing characteristics of the project site. However, since development of the site shall be limited to 31 lots and since 90% of the site shall be maintained in its existing state, the proposed development will not destroy the overall character of the site, diminish the public enjoyment of the site, nor will it be a detriment to the overall rural character of the surrounding areas.

The Orange County Department of Planning’s November 8, 2018, and May 8, 2019, reports recommend preparation of a tree inventory and recommend that the Planning Board require the applicant to plant a replacement tree, on or off site, for each tree removed. Since approximately 90% of the site will remain undisturbed and tree removal is not substantial and limited to the removal necessary to construct the residences and required associated infrastructure, tree removal will not have a significant adverse environmental impact, and a tree inventory is not necessary. For the same reasons, the Board will not require the applicant to replace trees on a one-to-one basis, but may require the applicant to plant screening trees where practical and deemed desirable or necessary by the Board, such as to screen existing residences from subdivision roadways and to mitigate potential visual impacts in the Scenic Corridor.



The proposed development will permanently change the existing physical characteristics of the project site. Of the 30 proposed lots, 17 are located within the Scenic Corridor Overlay District. Based on a visual analysis the proposed subdivision will be visible from NYS Route 302 (see Visual Impact Photos in **Appendix C**). State Route 302 at this location is part of the Shawangunk Ridge Scenic Byway. The project site slopes away from NYS Route 302, which will reduce potential impacts of new homes on the viewshed. In addition the applicant is proposing and representing to keep matured trees around each homesite, which will significantly screen new homes from the NYS Route 302 viewshed. Proposed homesites are located a considerable distance from NYS Route 302.

According to the NYS DEC Program Policy on Assessing and Mitigating Visual Impacts dated July 31, 2000, a properly sited and designed project is the best way to mitigate potential visual impacts. One mitigation recommended in this report is location and taking advantage of natural mitigating effects of a site's topography and vegetation. The locations of the proposed homes are intended to accomplish this. Dwellings are sited so they blend into the landscape settling into lower lying areas of the site. Existing site features will be preserved to act as natural buffers along all property boundaries. In addition, dwelling units have been sited back from public roadways and property boundaries.

Building materials and colors will be chosen that blend with the natural landscape, as recommended by the DEC's policy report. To further mitigate visual impacts and ensure the homes blend in with the existing character and vernacular of the Town, homes will be designed consistent with the Town's Design Guidelines, for example: garages will be attached but will not be a predominant feature of the structure; they will be placed on the side of the home, or if facing the front, will be recessed from the main façade of the dwelling, roofs will feature front and side gables, windows will be either double hung, casement or bay windows, faux wood clapboard siding or similar will be used and may be supplemented by brick or stone detailing and height will be similar to surrounding properties. (See proposed architectural examples in Appendix C). Open space and vegetation will be allotted between proposed dwelling units so new residents have views of natural scenic landscapes.

[The following paragraphs supplement and revise the DEIS.]

The applicant constructed a wooden fence and planted a long row of spruce trees inside the fence prior to submitting this subdivision application. The trees are located within the Town's Scenic Corridor Overlay District, the primary purpose of which is to preserve the excellent view of the Shawangunk Ridge. This segment of State Route 302 is part of a State-designated Scenic Byway. The Town's zoning code states that a "scenic corridor is an area adjoining and in the vicinity of a roadway that affords exceptional view determined to be of local, regional or statewide significance. A Scenic Corridor Overlay District in the Town of Crawford is designated by the Town Board following careful study and is shown on the Town Zoning Map." Public comments were made requesting the Board to address the purpose of the Scenic Corridor Overlay District and preserve the views of the Ridge. The Board's attorney has advised that the Board possesses authority to mitigate potential impacts on the scenic view and to preserve the scenic view of the Ridge. Photographs contained in the December 18, 2018, memorandum prepared by the Board's planning consultant, in the Visual Impact Assessment prepared by the applicant's consultant, and the undated report prepared by the applicant's consultant based on his inspection on March 26, 2019 (all included in Appendix C) show that trees are already starting to obscure the Ridge view. Based on the inspection by Board members, the trees are currently approximately thirteen (13) feet high. The Board's planning consultant Mr. Sorensen estimates in his memorandum that the trees are approximately fifteen (15) feet high.

The applicant has not offered any credible reason for planting the trees or keeping the trees. The trees serve no purpose for the subdivision; for example, the trees do not screen residences from State Route 302. The Board's planning consultant, Alan Sorensen, the Board members and the applicant's consultant inspected the site to evaluate the existing conditions and assess potential mitigation measures. Mr. Sorensen recommended that the trees, depending on their location along the roadway, should be cropped at a maximum height of 20 to 25 feet, except on the northern end of this road segment, where the terrain slopes down and away from the road, Sorensen recommended that no height limitation was necessary. The applicant agreed to follow Sorensen's recommendation. After a second site inspection by Board members, the Board found that the view of the Ridge could be preserved if the trees, depending on location, were cropped at a height of seven (7) to fifteen (15) feet. The applicant's consultant, in his undated March 2019 report, stated that cropping the trees will severely injure and probably kill the trees. This conclusion is supported by Google searches. Accordingly, the only mitigation that will preserve the views of the Shawangunk Ridge is removal or relocation of the trees.

When the Board's attorney advised the applicant's attorney of the Board's prior findings that the trees should be cropped at a height of seven (7) to fifteen (15) feet, the applicant decided to remove the proposed building lot containing the trees from the subdivision application and from the proposed subdivision plat. The Board's attorney advised the Board that since this building lot is no longer part of the subdivision application, the Board does not have jurisdiction to require removal of the trees or other mitigation to preserve the views of the Ridge.

Mr. Sorensen and Board members also inspected the fencing constructed by the applicant along State Route 302 and determined that the fencing is similar to other fencing constructed by others along State Route 302 and that the applicant's fencing does not and will not obstruct views of the Ridge. [This paragraph supplements the DEIS.]

## H. Traffic

The increase in traffic generated for this development is mainly from the proposed 30 single family dwellings. According to the Institute of Transportation Engineers, 30 dwelling units shall generate 286 trips per day, with 23 during the AM peak hour and 30 during the PM peak hour. These trips shall be dispersed to the proposed five (5) entrances to the development, thereby minimizing any effect to the existing roads. According to the New York State Traffic Data Viewer, the average daily traffic along NYS Route 302 between Crans Mill Road and County Road 48 is 8,736 vehicles. The total increase in traffic of 286 trips per day is an increase of approximately 3.2%.

It is estimated that the 286 generated number of vehicle trips will be distributed at each of the four (4) entrances/exits intended for residential access based on the number of proposed dwellings each entrance/exit will primarily serve, as follows:

- Gated Main Entrance from NYS Route 302 (Gateway Drive) – 6 Lots 57 trips
- Gated Main Entrance from Crans Mill Road (Honey Lane) – 4 Lots 38 trips
- Gated Main Entrance from County Highway 48 (Coyote Court) – 13 Lots 124 trips
- Gated Main Entrance from Andrews Road (Red Barn Trail) – 7 Lots 67 trips

[The above vehicle trip distribution supplements the DEIS.]

There is a small anticipated increase in the number of trips per day with regards to the farm operation. The truck deliveries currently enter and exit the development at the Crans Mill Road entrance ("Iron Gate Way"). This entrance is intended for use only for the farm operation, although it may be utilized for residence access. This truck route shall remain the same upon completion of the development. The applicant represents that the existing volume of trucks is approximately two trips per day. The applicant represents that the volume of trucks for the farm operation is expected to remain at approximately two trips per day. These bring in feed and other supplies related to the farm operation. There are existing houses on site for the farmhands. These workers will remain living on site. However, with the completion of the proposed subdivision, there may be an increase in the number of workers. It is estimated that these trips will increase by approximately 20 trips per day.

- Gated Main Entrance from Crans Mill Road (Iron Gate Way) – Farm Use Only 20 Trips

Therefore, the total number of trips generated by this project is 306.

The sight distances for each of the proposed entrances is provided on the subdivision plans and meet the minimum AASHTO requirements. Each entrance will be reviewed by the appropriate agency including the Town Highway Superintendent, Orange County Department of Public Works and the New York State Department of Transportation.

Commenter Charles Bazydlo, in his letter dated November 14, 2018, states that the traffic impact assessment in the DEIS does not provide information on the existing geometry of the current roadway system and does not assess whether the local Town roads can accommodate increased two-way traffic volumes for residences of the subdivision and during construction of the subdivision. His letter also states that the DEIS lacks a formal capacity analysis of the intersections and roadway segments potentially impacted by the project. The Planning Board, as advised by its professional consulting engineer, does not believe that traffic generated by the built-out subdivision or during construction warrants an analysis of the geometry of the current roadway system or a formal capacity analysis of the area intersections and roadway segments. Given the multiple entrances to the proposed subdivision, the minimal number of lots and the expectation that construction will occur over a three to five year period, the local roadways can accommodate the increased vehicular and construction traffic. No evidence or information to the contrary has been submitted. Project documents have been submitted to the New York State DOT and the Orange County DPW.

Commenter Mr. Dunn's November 14, 2018 letter states that Andrews Road is an old dead end road, barely wide enough for two passing cars, and that there is an old bridge which "surely has its limits as to weight and use." His letter also states that even a few more cars on that road would cause a large traffic increase. Mr. Dunn's letter states that the applicant wrongly suggests that Andrews Road would only be used during Phase II, states that Andrews Road is not an acceptable means of a Main Entrance to the proposed subdivision, and objects that the use of Andrews Road was not studied. Andrews Road is an existing Town highway, which terminates at the applicant's property. The road currently serves five (5) single family residences and two (2) farms (including the applicant's farm) that regularly receive deliveries by feed trucks and other vehicles. Andrews Road is one of the past and continuing access roads for farming-related purposes. The subdivision proposes that seven (7) additional residences will use Andrews Road for regular access, although access to those residences will also be available from any other of the project's entrances/exits. Although the number of residences served by Andrews Road will double, it is anticipated that the additional vehicle trip generation, during peak hours, will average only 6-8 vehicles. Emergency vehicle access will be available to those proposed new residences via Andrews Road and the other entrances to the subdivision. As set forth above, the Planning Board, as advised by its professional consulting engineer, does not believe the traffic generated by the built-out subdivision warrants a formal capacity analysis or study. However, the Planning Board, in consultation with the Orange County DPW, will assess the width of Andrews Road at its intersection with County Route 48. The bridge on Andrews Road is not posted for a weight limit. Andrews Road terminates at the Farmhood Fields property and for many years has been used for farming access, including delivery trucks and equipment. A neighbor (Mr. Dunn's client) regularly receives feed delivery to her property from trucks that, according to the applicant, are similar to those trucks that make deliveries to Farmhood Fields. The reference to Phase II is a construction phase as opposed to an occupancy phase.

The Orange County Department of Public Works has expressed its view in a letter dated November 14, 2018, that new subdivision roadways should not access to and from County Route 48. This matter will be discussed with the County DPW. In addition, NYS DOT has not approved the proposed access to/from State Route 302. If proposed access roads are eliminated by the State or County, given the small number of lots and multiple access points, no significant adverse impact or need for mitigation is anticipated. However, depending on the number and location of eliminated access roads, the Planning Board will reconsider this issue, if necessary.

The proposed subdivision will not create a significant amount of increased traffic on local roads. In the opinion of the Board's professional consulting engineer, there will be no adverse traffic impact. The existing road infrastructure in the vicinity of the project site is capable of handling the additional traffic without any upgrades. Therefore, no mitigation is necessary regarding existing roadways.

## **I. Roadway Design**

The proposed project involves a network of several private roads that will service thirty (30) new lots and the farming operation. All internal roads and associated drainage and stormwater controls shall be designed in accordance with the Town road standards. The maximum speed limit of the proposed roads throughout the development is 20 mph. The roadway design was based on AASHTO standards for a design speed of 20 MPH, a Stopping Sight Distance of 115 ft, the Design Rate of Vertical Curvature,  $K$  (Crest) = 7 and  $K$  (Sag) = 17. The minimum slope of the proposed roads is 1% and the maximum slope is 10%. [The information in this paragraph revises the DEIS.]

Section 121-8.E(1) of the Town Subdivision Code was revised in September 2018 to state that regardless of the width of the private road right-of-way, a private road shall be a minimum width of twenty feet (20') and shall have three-foot wide compacted shoulders on each side of the road. The proposed roadways are in accordance with this section.

Some of the subdivision roadways are or will be constructed very close to adjoining properties, at a higher elevation than the adjoining property, and supported by a retaining wall. The Planning Board's professional consulting engineer has recommended that the roadway design plans are sufficiently complete to warrant approval of this final EIS. However, the location and design of such roadways must be further reviewed by the Planning Board and its professional consultant engineer during the continuing review of the proposed subdivision plans.

Mr. Dunn's letter states that a subdivision roadway has been constructed directly on Ms. Butler's property line and that consideration should be given to eliminating proposed Longhorn Lane as a subdivision roadway and eliminating the four proposed residential lots "that virtually encroach on existing properties of which Lynn Butler's is one . . ." The proposed Longhorn Lane is not constructed directly on Ms. Butler's property and a buffer of approximately 10 feet exists between the proposed roadway and her property. During the Planning Board's continuing review of the proposed subdivision plans, the Board will determine whether screening is necessary. The proposed lots do not encroach on the Butler property.

## **J. Land Use and Zoning**

Currently the site is a combination of forests, pastures, meadows, farmland, agricultural buildings, single family dwellings, ponds, and dirt/gravel farm roads. The surrounding lands are either vacant or developed with single family residences on lots of varying sizes or used for agricultural purposes.

The project site is located within the Residential Agricultural (RA) Zoning District, as designated on the Town of Crawford Zoning Map. A portion of the project also lies within the Town's Scenic Corridor Overlay (SC-O) District. Single family dwellings and Agricultural operations are permitted uses within the RA district. The proposed subdivision meets all of the required dimensional regulations for the RA district including the minimum lot area of 2.5 acres and lot width of 250 feet. The applicant has stated that each proposed home shall have approximately 3,000 sf to 5,000 square feet of floor area and have a minimum of two off-street parking spaces.

The following are goals related to residential growth as stated in the Town of Crawford Comprehensive Plan, January 1, 2017 under "Overall Objectives":

- New growth should be guided in such a manner as to preserve and protect the existing character of the Town. To help accomplish this goal, selected areas of scenic beauty should be protected. The present character of the Town and this Plan indicates that growth should continue in the hamlets of Pine Bush and Bullville. However, the development of a major urban core is not anticipated, as Crawford will continue to encourage small, family-owned businesses as well as residential and agricultural activities that should minimize impacts on the existing rural streetscape and community character.
- Residential densities should relate to the character and density of surrounding developed areas, topography and natural features, utilities, and other community services and facilities, while incorporating natural features and open spaces. Measures should be taken to protect the rural appearance of the Town's streetscape.
- Since the Town's earliest settlement, the economic role of agriculture has been important to the Town and the Town's agricultural lands remain a treasured part of its beauty and character. The need to preserve the Town's agricultural lands and character was identified as a priority issue from opinion surveys and by the Town's leaders. This plan acknowledges that agricultural activity provides multiple values, not only the direct economic benefits of jobs, retail purchases and tax benefits, but also the aesthetic and open space benefits to the community at large. Agricultural land use is affected by many factors and has changed over the centuries: the Town understands that not all factors affecting agriculture can be influenced at the town level, yet understands that it is important to do whatever is possible to preserve and re-vitalize agricultural activities in the town for the 21st Century. The Town's proximity to the New York Metropolitan area provides opportunities for specialty crops and livestock as well as tourism; these should be promoted.
- The agricultural and scenic streetscape of New York State Route 302 north of Bullville has long been recognized by Crawford's local and regional Scenic Road. After these local efforts, the roadway was designated as a New York State Scenic Byway. The viewshed of the Scenic Byway

contains not only the dramatic views of the Shawangunk Mountains, but also a patchwork of woodlots, houses, farm fields and buildings typical of the region.

The following are applicable goals related to residential development as stated in the Orange County Comprehensive Plan, updated in 2010:

- Subdivision planning should be imaginative and responsive to the natural environment and the community as a whole.
- Subdivision regulations should not require roads and cul-de-sacs of excessive width. Narrow, curvy roads are one of a series of potential traffic calming techniques. Cul-de-sacs with planted islands are attractive.
- Homes in new residential developments should incorporate energy and environmentally efficient building techniques such as those promoted by Hudson Valley Builder's Association "Green Buildings" should be encouraged.

[Two bullet items that appeared in the DEIS are deleted in this FEIS.]

The project is consistent with Town and County goals and recommendations found in their existing Comprehensive Plans.

#### **K. Police, Fire and Emergency Medical Services**

According to the Town of Crawford Comprehensive Plan dated January 1, 2017, the Town of Crawford is divided into two fire districts. The Pine Bush Fire District in the northern part of town is served by the Pine Bush Hook and Ladder Company, which has stations both in the hamlet of Pine Bush and in the hamlet of Thompson Ridge. The southern part of the town is served by the Bullville Fire Company, which has a single station in the hamlet of Bullville. Both districts participate in the Orange County Mutual Aid system and both rely on volunteer firefighters. Fire flows are available from hydrants only within the Pine Bush Water District. Elsewhere, water is obtained from streams and ponds. This project shall be serviced by the Pine Bush Fire District and ponds are available for water.

The Town of Crawford has its own municipal police force. The municipal police station is located within the Town Hall in Pine Bush. In addition, Troop F of the New York State Police provides coverage within the Town. Troop F is headquartered in Middletown, but also has a substation in Pine Bush.

The Pine Bush Volunteer Ambulance Corps is located in the hamlet of Pine Bush and offers emergency medical care as well as transport to the hospital.

This project will increase the number of residents in the community service districts by less than 1%. It is expected that the existing emergency services can accommodate this increase in the number of households as it is less than the average growth rate for the Town of Crawford.

**L. School District Services**

According to the Town of Crawford Comprehensive Plan dated January 1, 2017, most of the Town of Crawford is included within the Pine Bush Central School District. The Pine Bush Central School District is extensive, incorporating lands within parts of three different counties. It includes most of the Town of Crawford and a large, heavily populated section of the Town of Wallkill, as well as portions of the Towns of Shawangunk and Mamakating.

District facilities include four elementary schools, two middle schools, and one high school. Two of the elementary schools and one middle school are located on Route 302 in the hamlet of Circleville in the Town of Wallkill. The remaining buildings are located in the hamlet of Pine Bush, which is also home to the District administration building.

The following table shows the decrease in school enrollment in the Pine Bush School District since 1990 per the New York State Education Department:

<b>Pine Bush Central School District Enrollment</b>				
<b>Year:</b>	<b>2006</b>	<b>2009</b>	<b>2011</b>	<b>2017</b>
<b>Total Enrollment:</b>	<b>6,115</b>	<b>5,850</b>	<b>5,649</b>	<b>5,033</b>

According to Rutgers University Center for Urban Policy Research Residential Demographic Multipliers, June 2006, page 8, the multiplier for all public school age children in a four-bedroom home valued at more than \$329,500.00 is 0.87. 30 new single family dwellings will result in 27 public school age children. It is expected that the district can accommodate this increase because of the decline in enrollment and available capacity in district buildings. [The 2017 enrollment data supplements the DEIS.]

No mitigation measures regarding schools are necessary.

**M. Recreation and Open Space Resources**

The Town of Crawford owns a 65 acre park located north of the hamlet of Pine Bush. The park includes ball fields, basketball courts, pickleball courts, a playground, and an extensive picnic area set in a pine grove. In Bullville the Town has 30 acres of parkland and has built a multi-use field, two pavilions and restrooms. In addition to Municipal parks and recreation facilities, the Pine Bush School District also maintains a number of facilities with recreational uses such as football fields, baseball and softball fields, tennis courts, basketball courts, tracks and playgrounds.

It is assumed that the increased number of residents (111) will increase usage of local parks and recreation facilities.

While 79% of the Project Site will remain undeveloped, this land is not suited for active recreation such as playgrounds. Much of the land is used for agricultural purposes and some of it is wetlands.

Although the project site might provide passive recreation for subdivision residents in the form of farm activities, the site is not suited for park/recreation purposes. The applicant will make a payment in lieu of providing park or recreation land in accordance with the Town requirements in the amount of \$45,400.

#### **N. Utilities – Water**

The estimated average daily water demand for the 30 proposed single-family residences is 440 gallons per day (gpd) per residence (0.3 gallons per minute), for a total of 13,200 gpd. The New York State Department of Health (NYSDOH) requires that the available water supply for the proposed development produce a sustainable flow rate for an extended period of time and to quantify that flow rate.

Each proposed lot shall be serviced by an individual well. The proposed wells shall have the capacity to produce a minimum of 5 gallons per minute. A water yield test shall be performed on each new well.

The developer will ensure that all dwelling units are equipped with water saving plumbing fixtures in accordance with New York State Environmental Conservation Law standards.

The Planning Board's engineer has recommended that, given the limitation of 30 lots on a 563 + acres site, a hydrologic study is not warranted and since much of the project site will remain available for ground water recharge, withdrawal of ground water for the project's residential water wells will not cause an adverse impact on wells within the project site or the surrounding area. The Orange County Department of Health, by letter dated November 2, 2018, requires the applicant to construct wells on proposed lots 6, 11, 18 and 27 and perform pump tests in accordance with New York State Department of Health Appendix B of Subpart 5-1 of the NYS Sanitary Code and water quality testing as required for subdivision. [This paragraph supplements the DEIS.]

#### **O. Utilities – Wastewater**

Currently the existing dwellings on the project site are serviced by individual subsurface sanitary disposal systems for wastewater treatment. No public sewer infrastructure is available at the site.

Individual septic systems are proposed for the new dwelling units. Based on the Orange County Health Department standard of 440 gallons of wastewater per day, per four-bedroom dwelling unit, the proposed subdivision would generate approximately 13,200 gallons of wastewater per day.

Each septic tank will have a 1,250 gallon capacity. Proposed leach fields will use either conventional stone or pipe or Eljen In-drain matting to promote biological processes and reduce suspended solids thereby further mitigating potential impacts to groundwater resources.

Based on Deep Pit and Percolation Soil Testing in the area of the proposed septic systems, no subsurface conditions were encountered which are expected to adversely affect septic use. The available depth of soil is found to be adequate to support conventional or shallow type sewerage disposal systems in accordance with NYS Department of Health Appendix 75A standards.

The septic fields have been carefully placed in accordance with NYS Health Department Standards. Each septic field is at least 100 feet from existing and proposed wells. Separation distances are greater than the minimum required distances established by the state. Septic design is based on the slowest percolation rates in the area of the proposed system. All percolation tests and deep tests performed on the site are acceptable. [This sentence supplements the DEIS.]

## **P. Other Utilities**

Electricity is provided in the Town of Crawford, including the project site, by Orange and Rockland Utilities. Currently Orange and Rockland Utilities purchases its power for New York and Pennsylvania customers from the power market administered by the New York State Independent System Operator (NYISO).

According to the NYISO 2018 Load and Capacity Data Gold Book reporting on load forecasts and capacity for the NYS electrical grid for 2018-2028 reports the 2017 energy requirement of this grid was 156,795 GWh.

It is estimated by Orange and Rockland Utilities that on an annual basis, a single family home uses approximately 6,011 kwh of electricity per residence. Therefore, the proposed subdivision is anticipated to use a total of 180,330 kwh per year (equal to 0.180330 GWh). Compared to the total amount of energy produced by the NYSISO the project site will require an extremely small (approximately 0.00001%) percentage.

Due to the extremely small percentage of increase in electrical use compared to the system generation, no mitigation measures are proposed regarding electrical supply.

The Orange County Department of Planning, in its November 8, 2018 and May 8, 2019, reports, states that the FEIS should explain the extent of green building technologies and materials, such as geothermal heating and cooling, energy-efficient fixtures, water conservation measures, and rooftop photovoltaic arrays. The applicant intends to and shall encourage subdivision residents to implement green building technologies, such as solar energy (subject to restriction/regulation in the Scenic Corridor), energy efficient fixtures and recycled materials. Solar energy currently provides electric service for portions of the farm operation. All dwellings will also have water-saving plumbing facilities.

## **Q. Construction Impacts**

Construction will take place Monday through Saturday 7:00 AM to 6:00 PM exclusive of holidays. Construction will take place in three phases. The first phase would entail construction of the roadways, drainage and individual lots east of the Pakanasink Creek. The second phase would include the development of the roadways, drainage and individual lots between the Pakanasink Creek and the proposed roads Coyote Court, Cattle Alley and Haven Heights. The third phase would include the development of the roadways, drainage and individual lots on the remaining lands. Total construction of the project is anticipated to take approximately three (3) to five (5) years with completion anticipated in year 2023.

During construction, large trucks will deliver materials related to the construction of the roadways and housing. These will include deliveries of stone, concrete, lumber, sheetrock, roofing, siding, and other construction materials for the completion of the homes. Workers will also be coming to and from the site. The entrances used will be dependent on the phase of construction. During Phase I, the entrance off of NYS Route 302 (Gateway Drive) will be used. During Phase II, the entrances off of Andrews Road (Red Barn Trail) and off of County Highway 48 (Coyote Court) will be used. During Phase III, the entrance off of County Highway 48 (Coyote Court) will be used. If any proposed entrances are not ultimately approved, the Planning board will further review the construction entrances. [This sentence supplements the DEIS.]

The estimated number of truck trips will be an average of 20 trips per day during the peak construction season. The estimated number of workers during the peak construction season will be an average of 25 which will equate to 50 trips per day. Therefore, the total number of trips generated during construction will be 70.

The total amount of material to be brought in for the proposed road construction will be approximately 35,000 yards. The material shall be supplied by licensed vendors and not from the on-site area referred to as a gravel pit. The amount of stone to be brought in for the houses will be dependent on the design of the homes. Top soil will be stockpiled for re-use upon completion of construction activities and the soil erosion and sediment control devices will be implemented in accordance with the approved plan. Noise generation will be that typically associated with a construction site of this type with no extraordinary noise mitigation measures proposed. A Stormwater Pollution Prevention Plan which includes an Erosion Control Plan has been prepared for the project in accordance with the NYS Department of Environmental Conservation and a SPDES Permit for General Construction Activities.

#### **IV. ADVERSE UNAVOIDABLE ENVIRONMENTAL IMPACTS IF PROJECT IS IMPLEMENTED**

Development of the Farmhood Fields Subdivision site will have some unavoidable impacts. Although these impacts cannot be avoided, many can, to some extent be mitigated as noted in Section III.

- Alterations to the sites natural topography in areas of home sites, roads and other required infrastructure.
- Increased susceptibility to erosion from the loss of natural vegetation on the site. A summary of the measures in the Erosion Control Plan to mitigate such impacts can be found in Section III-A. Details are shown on the full set of plans and in the SWPPP.
- An approximate 0.08-acre portion of a federal wetlands will be permanently disturbed (subject to compliance with Army Corps of Engineers Nationwide Permit 18).
- The project will permanently alter the visual appearance of the project site. See Section III-H for a discussion of potential visual impacts and mitigation measures.

- The project will lead to an increased, but not significant, amount of traffic on local roads. See Section III-G for a description of current and anticipated traffic volumes.
- The project will cause an increased, but not significant, use of local groundwater. See Section III-N.
- The project will cause an increase, but not significant increase, in population within the emergency service areas and the Pine Bush Central School District. See Sections III-K and III-L.
- The proposed subdivision will produce 13,200 gallons of residential wastewater per day. For means of wastewater management to treat and mitigate wastewater, see Section III-M.

[This Section IV supplements and revised the DEIS.]

## **V. ALTERNATIVES**

### **A. No Action**

The No Action alternative essentially means that the property would remain as it exists today. The site impacts related to physical development would not exist, and the benefits of the proposed project would not be realized. The development potential of the site would remain the same. This alternative is not consistent with the objectives of the Project Sponsor.

### **B. Alternative Conventional Design**

An Alternative Conventional Design would include the maximum potential lot yield of the property including infrastructure and public roadways to access existing town, state and county roadways. The design involves evaluation of the minimum lot development standards in Residence Agriculture (RA) zoning district. The site evaluation includes assessment of the following:

- Amount of net usable land of the parcel discounted for state and federal wetlands, buffers, waterbodies, steep slopes, and other unbuildable portions of the project site. As it relates to this project site, an approximate amount of usable land is 75% of the property area.
- The net usable land with efficient roadways and other infrastructure to allow for maximum amount of roadway to front new lots. The current road configuration has approximately 6.6 miles of frontage. The current configuration has potential for additional roadway and cul-de-sacs.
- The minimum lot development standards including lot area of 2.5 acres and lot width of 250 feet with frontage on public roadways.

Using the subdivision proposed roadways, the alternative conventional design would yield approximately 75 lots along the 6.6 miles of road. This is without additional proposed roads. Using the current configuration, an additional 2.5 miles of road frontage can be reasonably achieved with infrastructure. This additional roadway would increase the lot yield to 100+ residential buildings lots.

Dwellings and lots would be spread out across the property. Less of the natural topography would be preserved with increased amounts of onsite grading, increased tree removal and increased potential for erosion. Increased impacts to water resources would likely result from a reduced buffer area between surface water resources and dwellings units. Increased surface water runoff would occur due to the increased amount of impervious surfaces for roadways. More than 62 acres of the property would have to be cleared resulting in the loss of additional vegetation and the potential loss of habitats. Dwelling units would be sited closer to property lines. Additional trees would be cut down for home sites and roadways, resulting in the diminution of the natural viewshed. The development of 100 dwelling units would generate 950 trips per day, with 75 during the AM peak hour and 100 during the PM peak hour. The number of homes, lots sizes and bulk dimensions are consistent with zoning. Impacts on police, fire and emergency services would increase. Impacts on the school district services would increase as there would be an increase of approximately 85 school children. The project sponsor would be required to pay additional fees in lieu of providing public parkland. The groundwater consumption would increase from 13,200 gallons per day to 44,000 gallons per day. At the same time, the amount of wastewater would also increase. The electrical usage would also increase to 601,100 kWh.

## **VI. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

Some areas of existing undeveloped land will be committed to development of residences, roads, and landscaped areas. Some existing soils will be altered or removed and replaced with paving.

### **A. Geology**

As a result of grading activities, the upper geological formation on portions of the site will be irreversibly converted.

### **B. Soils**

As a result of grading and filling activities, the soil composition and characteristics of portions of the site will be irreversibly converted.

### **C. Topography**

As a result of grading and filling activities, the topography of portions of the site will be irreversibly converted.

### **D. Water Resources**

The Proposed Action will result in an increased use of ground water. This water will come from individual water supplies and not reduce another district's supply or draw down ground water on surrounding properties.

## **E. Utilities**

The Proposed Action will result in an increased demand for energy for heating, air conditioning, and electricity.

## **VII. EFFECTS ON THE USE AND CONSERVATION OF ENERGY RESOURCES**

Energy consumption will occur during the construction and operation of the proposed subdivision. During the construction phase, energy will be used to power equipment and various construction vehicles. Once construction is completed, the proposed subdivision would require energy for heating and electricity. Effects of this use will be similar to those associated with all residential construction projects.

The proposed primary energy source for the project is electricity. Electricity will be provided to the project site by Orange and Rockland Utilities. Orange and Rockland and its two subsidiaries currently serve approximately 745,000 customers in seven counties within New York, New Jersey and Pennsylvania. It is estimated that on an annual basis, the 30 new single family residences will use approximately 6,011 kwh of electricity per residence per year for a total of 180,330 kwh per year.

Orange and Rockland now purchases all of its power for its New York and Pennsylvania customers from the power market administered by the New York State Independent System Operator (NYISO). Comparatively, this subdivision will produce an extremely small percentage of increase in electrical use in the overall supply. Therefore, it is anticipated that Orange and Rockland Utilities will remain able to provide sufficient electric service to the proposed subdivision.

During the construction phase of the project energy will be conserved by not permitting construction vehicles to idle when not in use, and keeping all vehicles and machinery in good repair. Also, limiting construction to 6 PM eliminates the need to provide construction site lighting typically used for night work.

Residential energy will be conserved because each home will be constructed in accordance with the New York State Energy Conservation Construction Code which mandates energy efficient and water saving standards in new construction. The project sponsor will encourage compliance by homeowners with New York Energy Smart Programs or use of Energy Star Appliances to increase the amount of energy conservation. In addition to energy efficient fixtures, the project sponsor will encourage the use of solar energy, as is already used to provide electrical service for portions of the farm.