UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

JUN - 6 2007

To All Interested Government Agencies and Public Groups:

In accordance with the U.S. Environmental Protection Agency's (EPA) procedures for the preparation of environmental impact statements (EIS), an environmental review has been performed on the proposed agency action below:

Project Name:	Town of Halfmoon-Dunsbach Road Sewer Improvement Project.
Purpose of Project:	This project involves connection of the Springbrook Community mobile home park to Saratoga County Sewer District No. 1, to alleviate water quality issues associated with an inadequate on-site treatment plant.
Project Originator:	Town Of Halfmoon
Project Location:	Saratoga County, New York
Project Description:	The proposed project involves construction of 2,075 linear feet of gravity sewer along Dunsbach Road. In addition, due to topography, a pump station along with 1,650 of sewer force main will be installed. This infrastructure will be tied into the Saratoga County Sewer District No. 1.
Estimated Eligible Project Costs:	$ 1,245,500
EPA Grants:	$ 470,500

Our environmental review of this project indicates that no significant adverse environmental impacts will result from the proposed action. Consequently, we have made a decision not to prepare an EIS on the project. This decision is based on a careful review of the project's environmental information document and other supporting information. All of these documents, along with the Environmental Assessment (copy enclosed), are on file at the offices of the EPA Region 2 and the Town of Halfmoon, New York, where they are available for public scrutiny upon request. The EA is also available on EPA Region 2's website at http://www.epa.gov/region02/spmm/r2nepa.htm#r2docs.

Comments supporting or disagreeing with this decision may be submitted to EPA for consideration. All comments must be received within 30 calendar days of the date of this finding of no significant impact (FNSI). Please address your comments to: Grace Musumeci, Chief, Environmental Review Section, at the above address. No administrative action will be taken on the project for at least 30 calendar days after the date of this FNSI.

Sincerely,

Alan J. Steinberg

Alan J. Steinberg
Regional Administrator

Enclosure

Environmental Assessment

I. Project Identification

Project Name: Town of Halfmoon-Dunsbach Road Sewer Improvement Project

Grant Applicant: Town of Halfmoon
111 Route 236
Halfmoon, New York 12065

Project Location: Dunsbach Road
Town of Halfmoon
Saratoga County, New York

II. Description of the Facility Planning Area

The planning area for this project, Dunsbach Road, is located in the Town of Halfmoon, New York (Figure 1). The Town of Halfmoon is located in the southeastern corner of Saratoga County. It is located to the north of the Mohawk River, which forms the boundary between Saratoga County and Albany County. Dunsbach Road lies less than a mile east and roughly parallel to Interstate 87, which is the main north/south corridor in eastern New York State (Figure 2). The project area is approximately fifteen miles north of the city of Albany, and is approximately ten miles to the northeast of Schenectady.

III. Purpose and Need for the Project

Currently, the Springbrook Community operates an activated sludge plant treating wastewater from approximately 131 mobile homes. This wastewater treatment plant discharges to an intermittent stream and currently has difficulty meeting the treatment requirements of the stream as regulated by the New York State Department of Environmental Conservation (NYSDEC). As a result of the failures of the current plant to meet required plant effluent limits, the NYSDEC has issued Springbrook Community a Consent Order to make improvements to their existing sanitary sewer service. Accordingly, the purpose for this project is to provide sanitary sewer service to the Springbrook Community.

IV. Detailed Description of Selected Plan

The Town of Halfmoon is proposing to construct approximately 2,075 linear feet of gravity sewer along Dunsbach Road. In addition, due to topography, a pump station and approximately 1,650 linear feet of sewer force main will be needed. The sewer forcemain will tie into an existing Saratoga County Sewer District No. 1 (SCSD No. 1) gravity sewer located on Cambridge Avenue in the Town of Halfmoon.

V. Estimated Project Costs

Total Project Costs:	$1,245,500
EPA Grant-Eligible Cost	$ 470,500
EPA Grant No. XP98264301	$ 470,500

Existing Yearly Household User Charge: $ 0.00 (no existing system)
Estimated Yearly Household User Charge: $231.62

VI. Evaluation of Alternatives

A. No Action Alternative

The No Action alternative is unacceptable because existing deficiencies in the Springbrook Community wastewater treatment plant would not be corrected, resulting in the continuation of the existing deleterious situation. In addition, the NYSDEC Consent Order would not be met during periods of high flow, and untreated sewage would enter the intermittent stream. Continued deterioration of the existing facility will further result in more frequent water quality violations. This alternative was rejected because it is neither environmentally sound nor legally allowable.

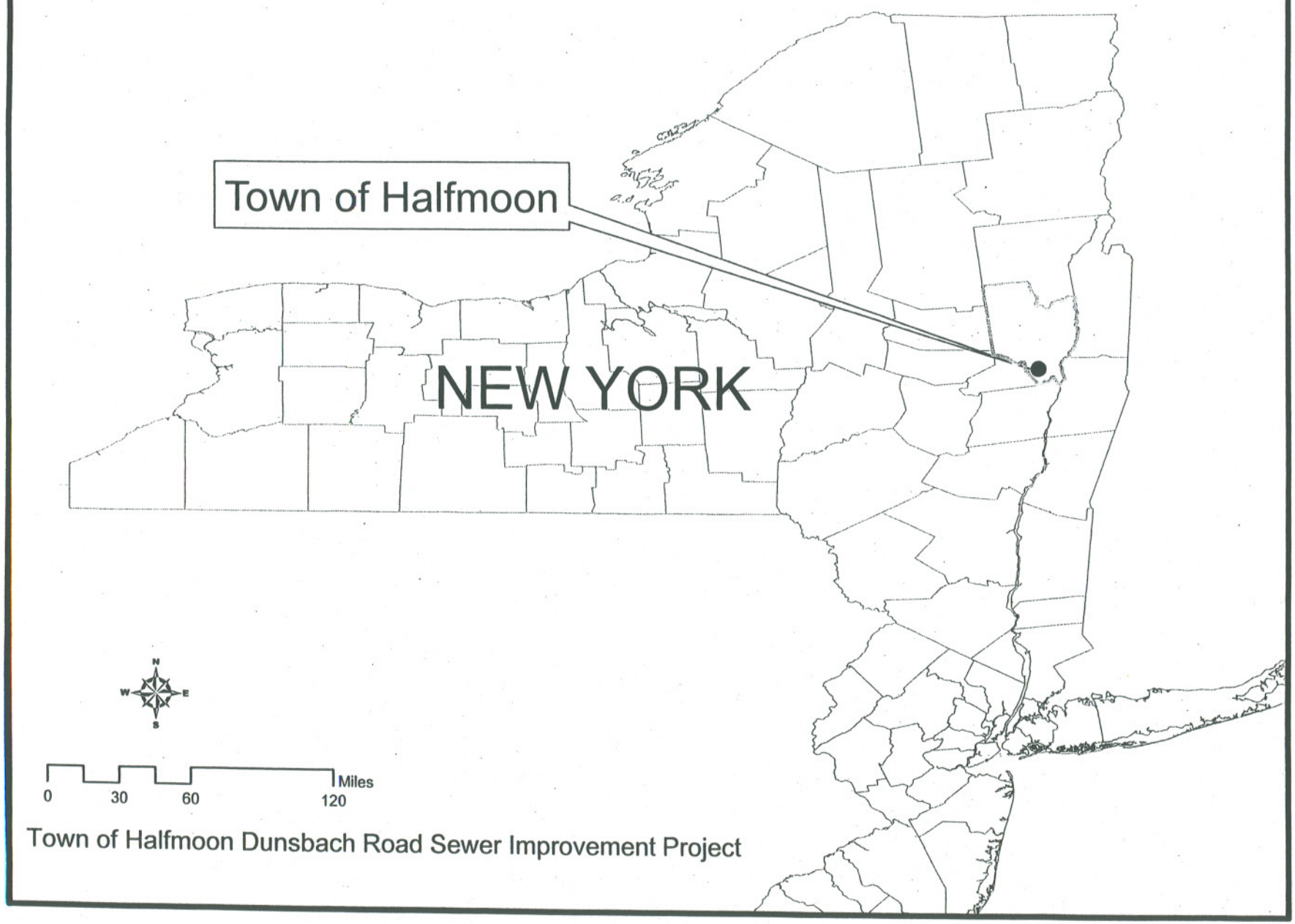
B. Modify the existing plant to meet NYSDEC Standards.

The Springbrook Community has made minor pipe modifications and performed sludge removal from their activated sludge plant to facilitate operating the existing system to the best of its current limitations. Additional capital expenditures would be needed to meet the NYSDEC requirements. An evaluation of installing a new tertiary treatment plant to ensure compliance with the NYSDEC Consent Order, has been completed. However, Saratoga County, the Town of Halfmoon, the NYSDEC, and the Springbrook Community itself would prefer connecting into the SCSD No . 1 collection system.

C. Connect the Springbrook Community to SCSD No. 1. collection system.

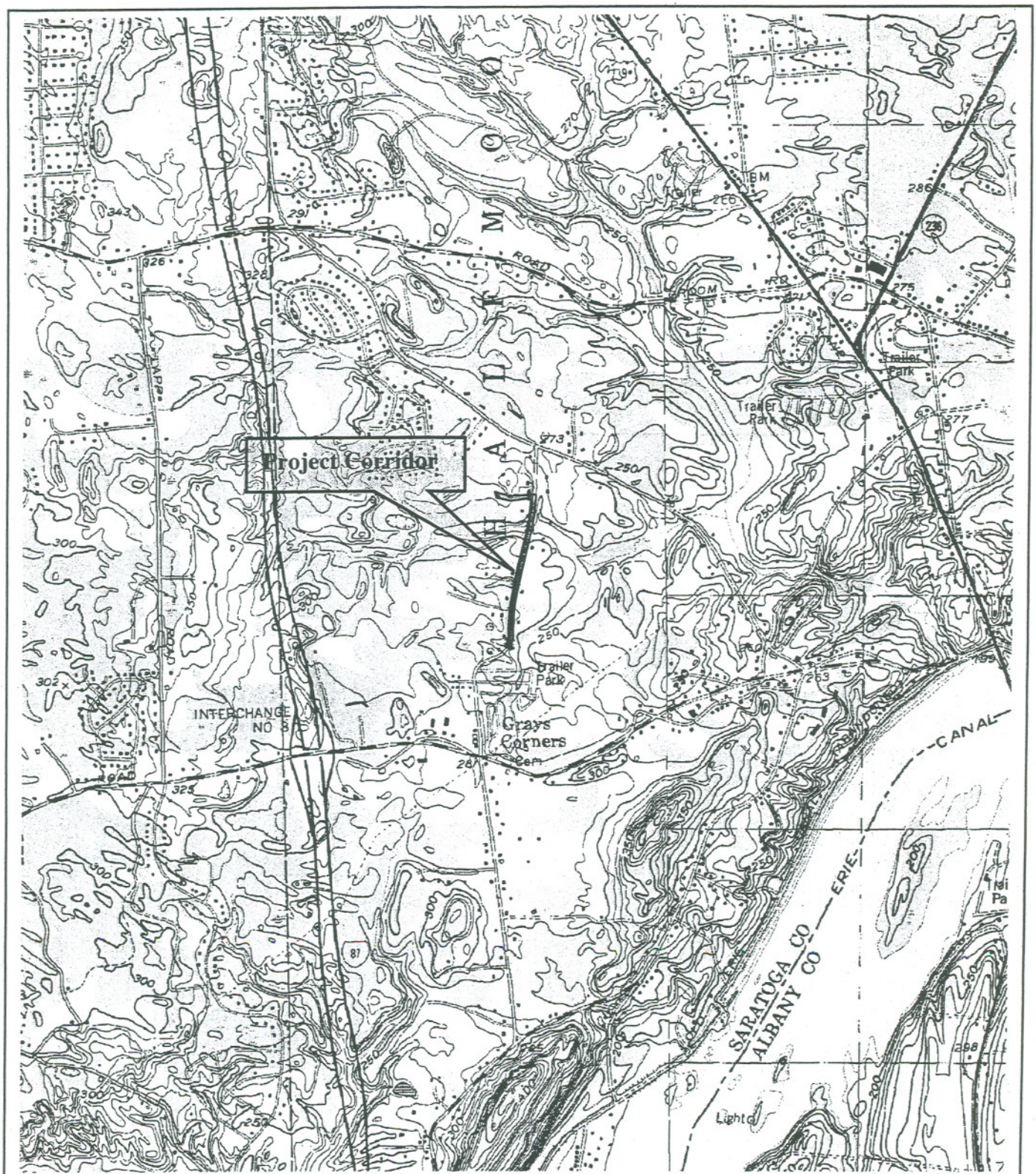
This is the selected alternative described in the project description above. It was selected as the most economical, environmentally sound, and implementable means to achieve water quality, land use, and public health goals.

Figure 1: Project Location



Town of Halfmoon Dunsbach Road Sewer Improvement Project

Figure 2



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Project Location Map

Scale 1" = 2000'

CHA File No: 15369

Dunsbach Road Sewer & Pump Station
Dunsbach Road, Town of Half Moon, Saratoga Co., NY

During the conceptual layout of the proposed sanitary sewer improvement, there were three alternatives identified for the location of the proposed pump station (see Figure 3):

1) Alternative C-1 (*Tax Map Parcel No.: 284-1-13.12, Marianne V Geleta, 128 Dunsbach Road*).

   This alternative would require a substantial amount of fill, permanently impacting +/- 0.07 acres of wetlands.

2) Alternative C-2 (*Tax Map Parcel No 284-1-17.1, Irene E. and Robert H. Brown, 121 Dunsbach Road).*

   This alternative would result in permanent impacts to +/- 0.001 acres of wetlands.

3) Alternative C-3 (*Tax Map Parcel No. 284-1-60, Elliot R. and Bonnie L. Hughes, 117 Dunsbach Road).*

   This alternative is located north of Alternative C-2, adjacent to the west side of Dunsbach Road. This alternative is located within an emergent/scrub-shrub wetland with fringe forested wetlands area. A stream located within this wetland may provide a hydrological connection with a National Wetlands Inventory (NWI) wetland located outside the project area. Construction of the pump station on this parcel would impact 0.05 acres of wetlands.

D. The Selected Plan

The preferred alternative is Alternative C-2, "Connection of the Springbrook community to SCSD No. 1. collection system," with construction of the required pump station on Tax Map Parcel No 284-1-17.1, 121 Dunsbach Road. This alternative was selected based on minimal wetlands disturbance, constructability, and amenability of the existing property owner to the construction of the pump station. Treatment will be provided at the SCSD wastewater treatment plant located in Mechanicville, New York. Alternative C-1 was eliminated based upon the magnitude of wetland disturbance and fill needed to construct the pump station. Alternative C-3 was eliminated based on wetland disturbance and constructability issues associated with the existing topography and the proximity to the existing stream.

VII. Environmental Consequences of the Selected Plan/Mitigation Measures

A. Surface Water and Groundwater Quality

The only surface water located in the vicinity is contained within the intermittent stream to which the current onsite treatment plant discharges. Operation of the proposed project will eliminate this discharge, which should improve surface water quality within the stream. It is not anticipated that the project will impact groundwater resources; in addition, the project area is not located within a Sole Source Aquifer.

During construction of the project, measures will be implemented to minimize any potential adverse impacts of storm water runoff during construction of the project. Thus, water quality will be maintained as a result of sedimentation and erosion control practices during the short term of construction related impacts. These controls include erosion control blankets, stone, mulch, grasses, sediment control (silt fencing), and other devices.

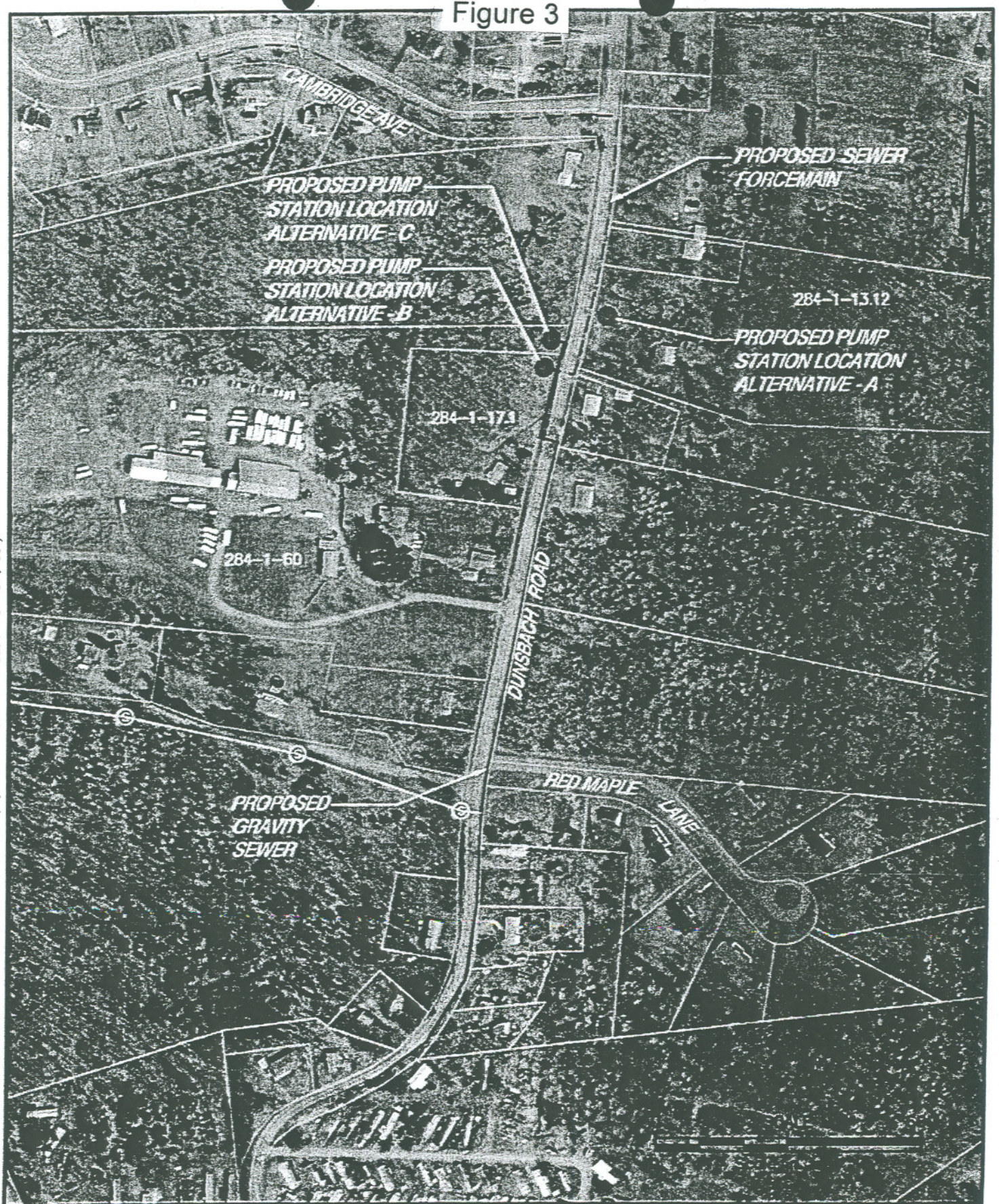
B) Wetlands/Floodplains

An emergent/scrub-shrub wetland, located adjacent to the proposed pump station, will be slightly affected by the construction of the pump station, the sanitary sewer, and force main installation. In addition to protecting water quality, temporary erosion and sediment controls will also minimize impacts to the wetland. As previously stated, these controls include erosion control blankets, stone, mulch, grasses, sediment control (silt fencing), and other devices. Directional drilling and boring equipment will be used to install the sewer below the wetland, eliminating disturbance caused by the open trench and backfill method, and decreasing impacts to wetlands.

However, a portion of the emergent/scrub-shrub wetland will be filled with crushed stone to allow for the construction of a pair of access drives located adjacent to the pump station. Total wetlands impacts project-wide are expected to be less than 0.1 acre. A culvert will be constructed under the proposed access road(s), to ensure that there will be no secondary impacts due to isolation of existing wetlands. Preconstruction contours will be established once construction is completed. This project is eligible for Nationwide Permit No. 12 from the U.S. Army Corps of Engineers.

According to Federal Emergency Management Agency mapping, the project area is located outside of the 100-year and 500-year floodplain. A map of the 100 year floodplain and NWI wetlands in the project vicinity has been included as Figure 4.

Figure 3



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TOWN OF HALFMOON
DUNSBACH ROAD
SANITARY SEWER AND PUMP STATION
PRELIMINARY LAYOUT

PROJECT NO. 15369

DATE: 4/13/06

ATTACHMENT 4

C) Air Quality

The Town of Halfmoon is located in Saratoga County, which is a part of the Albany-Schenectady-Troy, New York nonattainment area. The area fails to meet the national ambient air quality standard for ozone. Accordingly, EPA performed a general conformity applicability analysis for the major ozone precursors, and found the emissions of nitrogen oxides (NOx) and volatile organic compounds (VOC) in each year of construction to be below the applicable deminimis threshold values. Table 1 below shows these results. Therefore, the project is presumed to conform with the State Implementation Plan and no further action is necessary.

CONSTRUCTION EMISSIONS SUMMARY FOR GENERAL CONFORMITY				
YEAR	2005		2006	
POLLUTANT	VOC	NOx	VOC	NOx
EMISSIONS FROM OFF-ROAD VEHICLES & EQUIPMENT (tons/year)	0.044	0.016	0.057	0.257
EMISSIONS FROM ON-ROAD VEHICLES (tons/year)	0.005	0.009	0.014	0.020
TOTAL CONSTRUCTION PHASE EMISSIONS (tons/year)	0.048	0.025	0.071	0.277
GENERAL CONFORMITY THRESHOLD (tons/year)	50	100	50	100

D. Vegetation and Wildlife

Impacts to vegetation will be minimal and/or temporary. In areas where the sewer installation will be completed by conventional trenching, disturbed areas will be replanted. Some native vegetation including trees will also be removed in order to construct the proposed pumping station and access road over an area of less than 0.25 acres. Impacts to wildlife will be minimal; any transient or residential species within the vicinity of the proposed pump station will likely relocate themselves out of the project impact area during construction. Consequently, it is anticipated that there will be no significant adverse impacts to vegetation and wildlife in the project area.

E. Noise

During construction of the pump station and gravity sewer, ambient noise levels will increase as a result of the heavy equipment needed for construction. This effect will be temporary and localized, and will be minimized by requiring machinery to be equipped with proper mufflers and by limiting construction operations to normal work hours.

F. Endangered/Threatened Species

The NYSDEC and the U.S. Fish and Wildlife Service (USFWS) were consulted regarding the presence of endangered and threatened species and/or critical habitats. The NYSDEC indicated that the Alewife Floater (*Anodonta implicata*) is found within several miles of Dunsbach Road, but outside of the project area. The USFWS has indicated that the Indiana bat (*Myotis sodalis*), Karner blue butterfly (*Lycaeides melissa samuelis)* and Bald eagle (*Haliaeetus leucocephalus*) are all found within Saratoga County. However, our review of the project impact area indicates that no habitat for the aforementioned species exists; it is likely that any transient individual would avoid the project area during construction activities. In addition, there are no Federally-listed critical habitats with the project area. Consequently, impacts to endangered or threatened species or critical habitats is not anticipated as a result of this action.

G: Cultural Resources

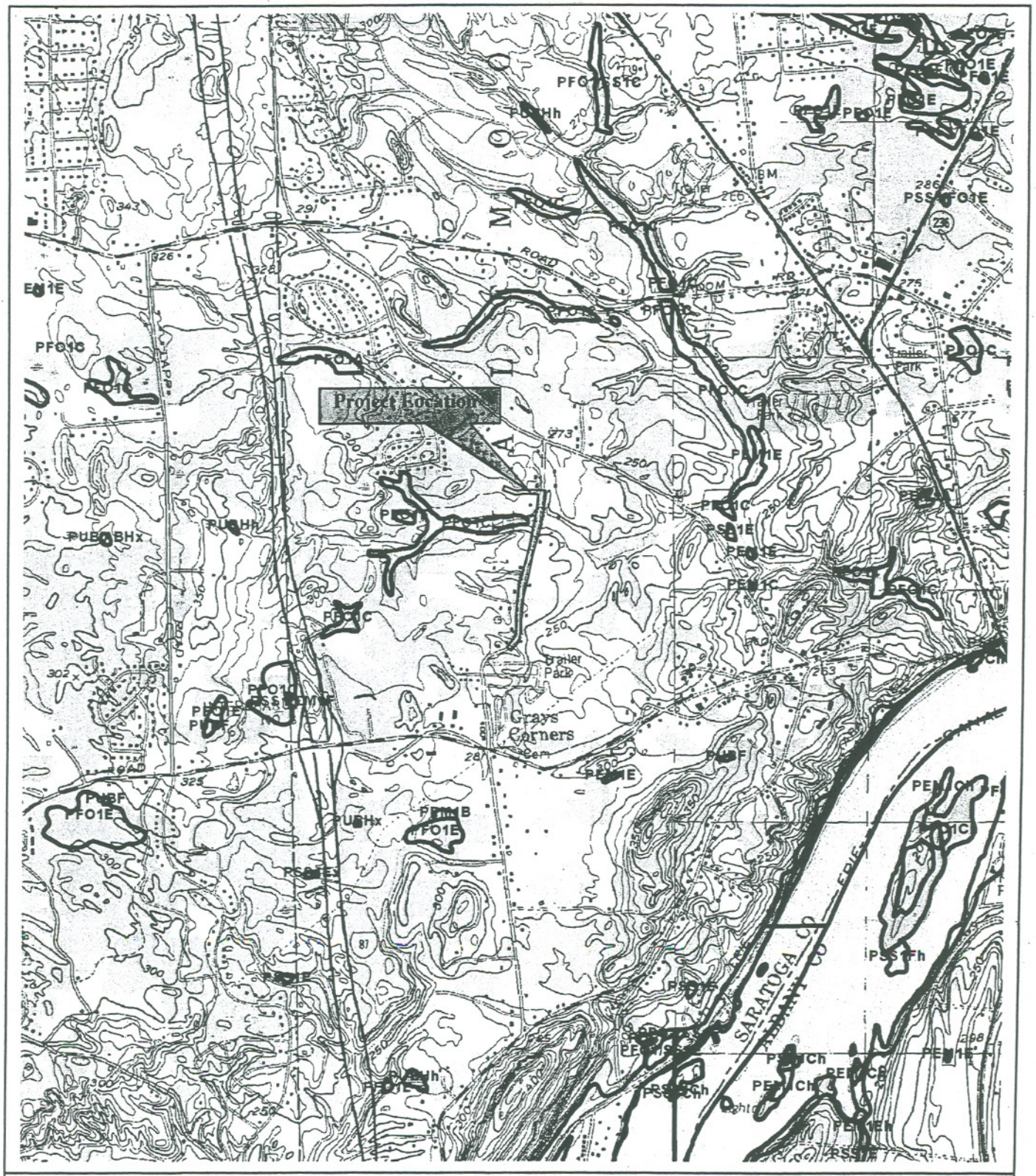
Phase 1A and 1B cultural resources investigations and archeological studies were completed for the project area. Based on the potential sensitivity of the project area as determined by the Phase IA CRS, it was determined that a Phase IB survey was needed for a portion of the project area.

The Phase IB survey determined the presence of an historic period site, the Stah Site, located at the base of the road bed for Cambridge Avenue, near 133 Dunsbach Road. Additional tests were carried out in proximity to the initial discovery, leading to the assignment of a mid-19th century date for its occupation. Discussions with the project managers lead to the development of a realignment for the proposed sewer line in the vicinity of the historic site, which was tested to confirm avoidance of the Stah site. Based on the results of the Phase IB survey, and the effective consultations, it can be determined that the proposed construction will have no effect on resources on or eligible for nomination to the National Register of Historic Places.

H. Growth/Secondary Impacts Of Induced Growth

According to NYSstatistics.org, Saratoga County is the fourth fastest growing county in New York. A study conducted by the Capital District Transportation Committee Quality Region Task Force concluded that Saratoga County will continue to experience the highest growth rate within the Capital District (Saratoga, Schenectady, Rensselear and Albany Counties). The majority of this growth is predicted to be

Figure 4



Key: 100 Year Flood Plain (typ) NWI Wetland (typ) State Wetland (typ)

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Environmental Constraints Map

Scale 1" = 2000'	CHA File No: 15369	Dunsbach Road Sewer & Pump Station Dunsbach Road, Town of Half Moon, Saratoga Co., NY

within Halfmoon and Clifton Park. From 2000 to 2040, Halfmoon is expected to gain 11,581 residences. Consequently, the population of Halfmoon will likely continue to increase regardless of the proposed project.

This project will not directly generate an increase in population since it is intended to serve the existing Springbrook Community, and does not directly involve the construction of new homes or businesses. However, there will be capacity in the sewer to serve existing houses along Dunsbach Road and some new development, should it occur.

The available capacity in the proposed sewer will be limited by the capacity of the existing sewer downstream of the tie-in point on Cambridge Avenue. The existing downstream sewer capacity has been determined to be 539,000 gallons per day (gpd), recorded at peak flows. The current usage at peak flow is 220,675 gpd, with a remaining capacity of 318,325 gpd. A reserve of 131,040 gpd has been placed on a portion of this remaining 318,325 gpd for a future housing development (outside of the project corridor) which leaves an available 187,285 gpd that could be accessed. It is anticipated that Springbrook Community will use an estimated 119,250 gpd of the remaining 187,285 gpd, which leaves a capacity of 67,765 gpd to service existing homes and potential new homes. Using assumptions of 400 gpd with a peak flow of 1200 gpd per home, there is potential treatment capacity for an additional 56.5 homes in the project area, which is currently zoned residential. There are 23 existing homes within the project corridor, which only leaves a potential to serve 35.5 new homes. Therefore, the growth potential created by this sewer project is minimal when compared to the anticipated growth in the Town itself, and is consistent with current zoning and the Town of Halfmoon's Comprehensive Plan.

Secondary impacts to growth related impact analysis typically focus on air and water quality, transportation and environmental resources, demand on public services, and housing. Since, as noted previously, the proposed project will have a very small potential to increase population, there will not be any significant induced adverse affects on environmental resources, public services or traffic. In addition, extending sewer service to the Springbrook Community will have a beneficial secondary impact on the water quality of the intermittent stream located adjacent to the Springbrook Community by eliminating the need for the failing activated sludge plant.

I. Traffic

The project is being constructed primarily to serve the needs of existing homes by providing adequate wastewater disposal to parcels with existing structures on them. As a result, the presence of new sanitary sewers is not expected to result in any significant increase in traffic in the area.

J. Odors

To address local odor control issues, a potassium permanganate feed system will be installed within a building to be located adjacent to the proposed pump station. Potassium permanganate will be released directly into the wet well via a diaphragm metering pump.

If odor downstream of the pump station becomes an issue, additional floor space is provided in the proposed building for the future installation of a Biozide Odor Control System.

K. Aesthetics

The aesthetics of the project area will not be significantly affected. The proposed pump station will require the removal of trees within an area of less than one quarter acre.

L. Socioeconomic Impacts

The project will have a positive impact on the project area by providing an effective solution to the on-site wastewater problems. There are no existing municipal sewer services in the project area, so there is no current rate paid for sewer service. The total projected annual cost for a typical residential user in the project area is estimated at $232. This represents 0.5% of the Town's median household income of $46,234 (2000 Census).

M. Environmental Justice

The project area has been reviewed in accordance with EPA's criteria for identifying potential Environmental Justice (EJ) areas. In performing the assessment, the Town of Halfmoon, New York, was identified as the community of Concern (COC), the geographic area as defined for the purposes of an EJ assessment. Analysis of the project area indicates that minorities comprise less than 4.4% percent of the population (compared to 51.3%, the percentage for determining minority areas in urban areas of New York State), and that less than 4.6% percent of residents have income below the poverty level (compared to 23.6%, which is the percentage that EPA uses in New York State to identify low income areas). Accordingly, the area does not meet the EPA criteria for being classified an EJ area and no additional EJ analysis is necessary.

N. Cumulative Impacts

This project will be constructed in accordance with all local, state and federal laws. Disturbed areas will be reclaimed; permanent impacts will be limited to the pump station footprint and access drive.

As noted previously, this project will have limited capacity to spur additional growth in the project area due to limited additional unused capacity in the sewer system downstream of this project. The maximum number of homes outside of the Springbrook Community that could be connected to the Dunsbach Road sewer line is less than 60, and it is anticipated that existing homes in the project areas outside of the Springbrook Community will have the first opportunity to connect. Even if all available additional capacity was directed to new construction, the resulting increase in population would be very small, and likely would not reach thresholds necessary to spur the need for an increase in services, etc. in the project area. Finally, this project appears to compatible with the goals of the Town of Halfmoon's Draft Comprehensive Plan.

VIII. Coordination of Environmental Review

A. Tribal Nations and Federal, State and Local Agencies Consulted

New York State Department of Environmental Conservation
New York State Office of Parks, Recreation and Historic Preservation
Saratoga County Public Health
U.S. Department of Agriculture
U.S. Fish and Wildlife Service

B. Significant Correspondence

1. USFWS consultation letter relative to threatened or endangered species, July 24, 2006
2. NYSDEC letter relative to threatened or endangered species, July 14, 2006
3. Environmental Information Document for the Town of Halfmoon-Dunsbach Road Sewer Improvements Project Additional Information Request; Clough Harbour & Associates LLP; March 07, 2007
4. Comments on a Phase IA and Phase IB Cultural Resources Survey by Hartgen Associates, Inc; John Vetter; 3/19/07

C. Reference Documents

- *Dunsbach Road Sewer Improvement Project Environmental Review Record*, Town of Halfmoon, January 2007
- *Town of Halfmoon Dunsbach Road Sanitary Sewer and Pump Station Design Report*; Clough Harbour & Associates LLP; January 2007
- *Phase IA Literature Review And Sensitivity Assessment and Phase IB Archeological Field Reconnaissance, proposed Dunsbach Road Sanitary Sewer and Pump Station, Town of Halfmoon, Saratoga County, New York*; Hartgen Archeological Associates, Inc, November 2006
- *FEMA FIRM Map No 36091C0660 E, August 18, 1995*
- *Town of Halfmoon Draft Comprehensive Plan and Draft Generic Environmental Impact Statement*; March 2003
- EPA Region 2 Environmental Justice Screening Tool: *http://r2oraapps.r02.epa.gov/pls/nepa/ej_entry.runEJReport?zipCode=&city_name=&muni_name=Halfmoon&mcd_code=3609131489&state=36&buffer=0&mapreport=getreport&cmd=General*

D. Tables

1) General Conformity Applicability Analysis. Prepared by the U.S. Environmental Protection Agency Region 2.

E. Appendices

A: Air Analysis

Appendix A

General Conformity Determination

Dunsbach Road Sewer Project

Town of Halfmoon, NY

Prepared by:
U.S. Environmental Protection Agency Region 2
290 Broadway
New York, NY 10007-1866

1. Introduction

The Town of Halfmoon is proposing to construct approximately 2,075 linear feet of gravity sewer, a pump station, and approximately 1,650 linear feet of sewer force main along Dunsbach Road, in order to connect the Springbrook Community to an existing Saratoga County Sewer District No. 1 (SCSD No. 1) gravity sewer located on Cambridge Avenue. Currently, the Springbrook Community operates an activated sludge plant treating wastewater from approximately 131 mobile homes. This wastewater treatment plant discharges to an intermittent stream and currently has difficulty meeting the treatment requirements of the stream as regulated by the New York State Department of Environmental Conservation (NYSDEC). As a result of the failures of the current plant to meet required plant effluent limits, the NYSDEC has issued Springbrook Community a Consent Order to make improvements to their existing sanitary sewer service. Accordingly, the purpose for this project is to provide sanitary sewer service to the Springbrook Community.

This project is located in Saratoga County, NY, part of the Albany-Schenectady-Troy, NY basic 8-hour ozone nonattainment area. Because the project is funded through a Federal grant by the Environmental Protection Agency (EPA) the project is subject to the general conformity regulations (40 CFR 93 Subpart B). This report documents the general conformity applicability analysis.

2. Background

The Clean Air Act Amendments of 1990 (CAAA) established the concept of conformity as a way to ensure that Federal actions do not interfere with air quality goals set by a state in its State Implementation Plan (SIP). The conformity regulations were divided into two parts: transportation conformity, covering projects initiated with Federal Highway Administration or Federal Transit Administration funding or approval; and general conformity, covering all other Federal agencies.

Conformity to a SIP means that a project will not cause or contribute to violations, worsen existing violations, or delay timely attainment of the National Ambient Air Quality Standards (NAAQS). The NAAQS have been set for six "criteria pollutants": ozone (O_3), carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and particulate matter (both <10 microns [PM_{10}] and <2.5 microns [$PM_{2.5}$]). An area that violates one or more of the NAAQS may be designated as a nonattainment area by EPA. Areas that do not have violations but may contribute to nearby violations can also be designated as nonattainment areas.

States with nonattainment areas must develop SIPs to show how the areas will attain the NAAQS as expeditiously as practicable. An area that was previously in

nonattainment and has been re-designated to attainment by EPA becomes a "maintenance area." States must develop SIPs for maintenance areas to show how they will maintain the applicable NAAQS for a period of 20 years.

General conformity applies only to Federal actions in nonattainment and maintenance areas. The Dunsbach Road/Town of Halfmoon project in Halfmoon, NY lies within the Albany-Schenectady-Troy, NY basic 8-hour ozone nonattainment area. The area was designated by EPA as nonattainment for the 8-hour ozone standard effective June 15, 2004 (the area was previously a marginal nonattainment area under the 1-hour ozone standard, which was revoked when the 8-hour designation became effective). The "basic" classification is based on the severity of the air quality problem in the area and means that the Albany-Schenectady-Troy nonattainment area has until no later than 2009 to attain the 8-hour ozone standard. New York must submit a SIP to EPA by June 15, 2007 detailing how the area will attain the standard.

3. General Conformity Applicability and Analysis

Because this project is subject to general conformity, EPA conducted an analysis of pollutant emissions from the project. Ozone is not directly emitted from vehicles and equipment, but rather it forms through a chemical reaction in the atmosphere in the presence of sunlight. Therefore, for the analysis we determined the emissions of the ozone precursors, oxides of nitrogen (NO_X) and volatile organic compounds (VOC). These precursors result from combustion and are directly emitted by vehicles and engines.

The general conformity rule identifies "deminimis levels" (40 CFR 93.153(b)(1)), or threshold values of emissions below which projects are presumed to conform without further mitigation of emissions or other action on the part of the project sponsor. These deminimis levels are based on annual pollutant emissions.

The deminimis levels for the Albany-Schenectady-Troy ozone nonattainment area are 100 tons per year of NO_X and 50 tons per year of VOC (40 CFR 93.153(b)(1)). In the analysis, we considered only the emissions from the construction of the project. Emissions from the operation of the project are considered indirect emissions (40 CFR 93.152). We have deemed that EPA does not have continuing program responsibility for the indirect emissions and therefore have not included those emissions in the analysis.

Emission estimates were based on emission factors taken from a number of sources and vehicle/equipment types and activity levels supplied by the project sponsor. Tables A1 through A4 in Appendix A detail the emission factors and the calculation of total project emissions.

4. Conclusion

Table 1 below shows the results of the general conformity applicability analysis. Emissions of NO_X and VOC in the project's construction year are below the applicable deminimis threshold values; therefore, the project is presumed to conform and no further action is necessary.

TABLE 1

DUNSBACH ROAD PROJECT 2007 CONSTRUCTION EMISSIONS SUMMARY FOR GENERAL CONFORMITY		
POLLUTANT	NO_X	VOC
OFF-ROAD CONSTRUCTION EMISSIONS (tons/year)	0.053	0.219
ON-ROAD CONSTRUCTION EMISSIONS (tons/year)	0.056	0.016
TOTAL CONSTRUCTION EMISSIONS (tons/year)	0.109	0.236
GENERAL CONFORMITY THRESHOLD (tons/year)	100	50

The DC Circuit recently vacated certain aspects of EPA's phase 1 rule implementing the 8-hour ozone NAAQS (South Coast Air Quality Management District v. EPA, 472 F.3d 882 (D.C. Cir. 2006)). EPA and other parties are seeking rehearing from the court on several aspects of the decision, including conformity. The final position adopted by the DC Circuit could have implications for any action taken with respect to conformity programs in areas that were 1-hour nonattainment or maintenance at the time of revocation of the 1-hour standard.

As a result, we have evaluated VOC and NO_X emissions for the project against the 1-hour ozone marginal area deminimis levels, which are the same as for a basic 8-hour ozone area. Therefore, the project would be presumed to conform under the 1-hour ozone standard as well.

Emission Factors and Emission Calculations

TABLE A1

CONSTRUCTION EMISSION FACTORS FOR NO_x									
EQUIPMENT	FUEL TYPE	HP	LOAD FACTOR[1]	NO_x EF (Tier 1) g/hp-hr[2]	TAF	A	Fraction of Useful Life Expended	DF[3]	NO_x EF_{adj} g/hp-hr[4]
Chain Saw	GASOLINE	11	0.7	4.5	1.00	N/A	N/A	N/A	4.50
Drill	DIESEL	67	0.43	5.5988	1.00	0.024	0.5	1.012	5.67
Backhoe	DIESEL	65	0.21	5.5988	1.10	0.024	0.5	1.012	6.23
Crane	DIESEL	85	0.43	5.5988	1.00	0.024	0.5	1.012	5.67
Backhoe	DIESEL	90	0.21	5.5988	1.10	0.024	0.5	1.012	6.23

CONSTRUCTION EMISSION FACTORS FOR VOC									
EQUIPMENT	FUEL TYPE	HP	LOAD FACTOR[1]	VOC EF (Tier 1) g/hp-hr[2]	TAF	A	Fraction of Useful Life Expended	DF[3]	VOC EF_{adj} g/hp-hr[4]
Chain Saw	GASOLINE	11	0.7	207.92	1.00	N/A	N/A	N/A	207.92
Drill	DIESEL	67	0.43	0.5213	1.00	0.036	0.5	1.018	0.53
Backhoe	DIESEL	65	0.21	0.5213	2.29	0.036	0.5	1.018	1.22
Crane	DIESEL	85	0.43	0.5213	1.00	0.036	0.5	1.018	0.53
Backhoe	DIESEL	90	0.21	0.5213	2.29	0.036	0.5	1.018	1.22

Notes:

1. Load factor is the fraction of rated horsepower at which the equipment typically operates over its duty cycle. Load factors were taken from *Median Life, Annual Activity, and Load Factor Values for Nonroad EngineEmissions Modeling* (EPA420-P-04-005)

2. All diesel equipment was assumed to be Tier 1 compliant (model years 1996-2001 for most equipment) with the emission factors (EF), transient activity factors (TAF) and relative deterioration factors (A) taken from *Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling--Compression-Ignition* (EPA420-P-04-009)
   Gasoline emission factors were taken from *Exhaust Emission Factors for Nonroad Engine Modeling: Spark-Ignition* (EPA420-R-05-019). To be conservative, the greatest emission factor for each pollutant for a given piece of equipment was chosen.

3. Diesel equipment was assumed to have reached half of its useful life. The deterioration factor (DF) is then:
   DF = 1 + A * (Fraction of useful life expended)
   Deterioration factors were not available for the gasoline-powered equipment.

4. Adjusted emission factors were determined by:
   $EF_{adj} = EF_{Tier1} * TAF * DF$

TABLE A2

ON-ROAD VEHICLE EMISSION FACTORS						
EQUIPMENT	FUEL TYPE	GVWR	VEHICLE CLASS	LOCATION	2007	
					NO_X EF (g/mi)[1]	VOC EF (g/mi)[1]
Truck	DIESEL	31,000	HDDV7	OFF-SITE	6.71	0.38
Truck	DIESEL	44,000	HDDV8a	OFF-SITE	10.27	0.47
Truck	GASOLINE	1/2 Ton PU	LDGT1	OFF-SITE	0.50	0.70
Auto	GASOLINE	Auto	LDGV	OFF-SITE	0.58	0.77

Notes:

1. Emission factors for NO_X and VOC taken from *MOBILE6.2 Emission Factors (Arterial, Collector, and Local Road) For Albany, Rensselaer, Saratoga, and Schenectady Counties*, prepared by the New York State Department of Transportation and available at https://www.nysdot.gov/portal/page/portal/divisions/engineering/environmental-analysis/repository/albanya.pdf. Vehicles were assumed to travel at an average speed of 40mph.

TABLE A3

CONSTRUCTION EMISSIONS FROM OFF-ROAD EQUIPMENT									
YEAR	ACTIVITY	EQUIPMENT	FUEL TYPE	NO.	HP	LOAD FACTOR	TOTAL HRS	NO_x EMISSIONS (g)	VOC EMISSIONS (g)
2007	Site clearing	Chain Saw	GASOLINE	3	11	0.7	120	4158.00	192118.08
	Site clearing	Backhoe	DIESEL	1	65	0.21	40	3402.99	663.53
	Excavation	Backhoe	DIESEL	2	65	0.21	200	17014.95	3317.67
	Directional Drill Machine	Drill	DIESEL	1	67	0.43	40	6529.48	611.56
	Landscaping	Backhoe	DIESEL	1	90	0.21	40	4711.83	918.74
	Construction Material Placement	Crane	DIESEL	1	85	0.43	60	12425.51	1163.79
TOTAL 2007 OFF-ROAD CONSTRUCTION EMISSIONS (g/year)								48242.77	198793.38
TOTAL 2007 OFF-ROAD CONSTRUCTION EMISSIONS (tons/year)								0.053	0.219

TABLE A4

CONSTRUCTION EMISSIONS FROM ON-ROAD VEHICLES								
YEAR	ACTIVITY	EQUIPMENT	NO.	VEHICLE CLASS	MILES PER VEHICLE	TOTAL MILES	NO_x EMISSIONS (g)	VOC EMISSIONS (g)
2007	Worker transportation to/from job	Auto	5	LDGV	1760	8800	5104	6776
	Worker transportation to/from job	Truck	5	LDGT1	1760	8800	4400	6160
	Deliver Wetwell	Truck	1	HDDV7	100	100	671	38
	Deliver Pump Station	Truck	1	HDDV7	1300	1300	8723	494
	Deliver Building Supplies	Truck	1	HDDV7	50	50	335.5	19
	Deliver Electrical Supplies	Truck	1	HDDV7	100	100	671	38
	Deliver Bedding Material	Truck	1	HDDV8a	2500	2500	25675	1175
	Deliver Directional Drill Machine	Truck	1	HDDV8a	500	500	5135	235
TOTAL 2007 ON-ROAD CONSTRUCTION EMISSIONS (g/year)							50714.50	14935.00
TOTAL 2007 ON-ROAD CONSTRUCTION EMISSIONS (tons/year)							0.056	0.016