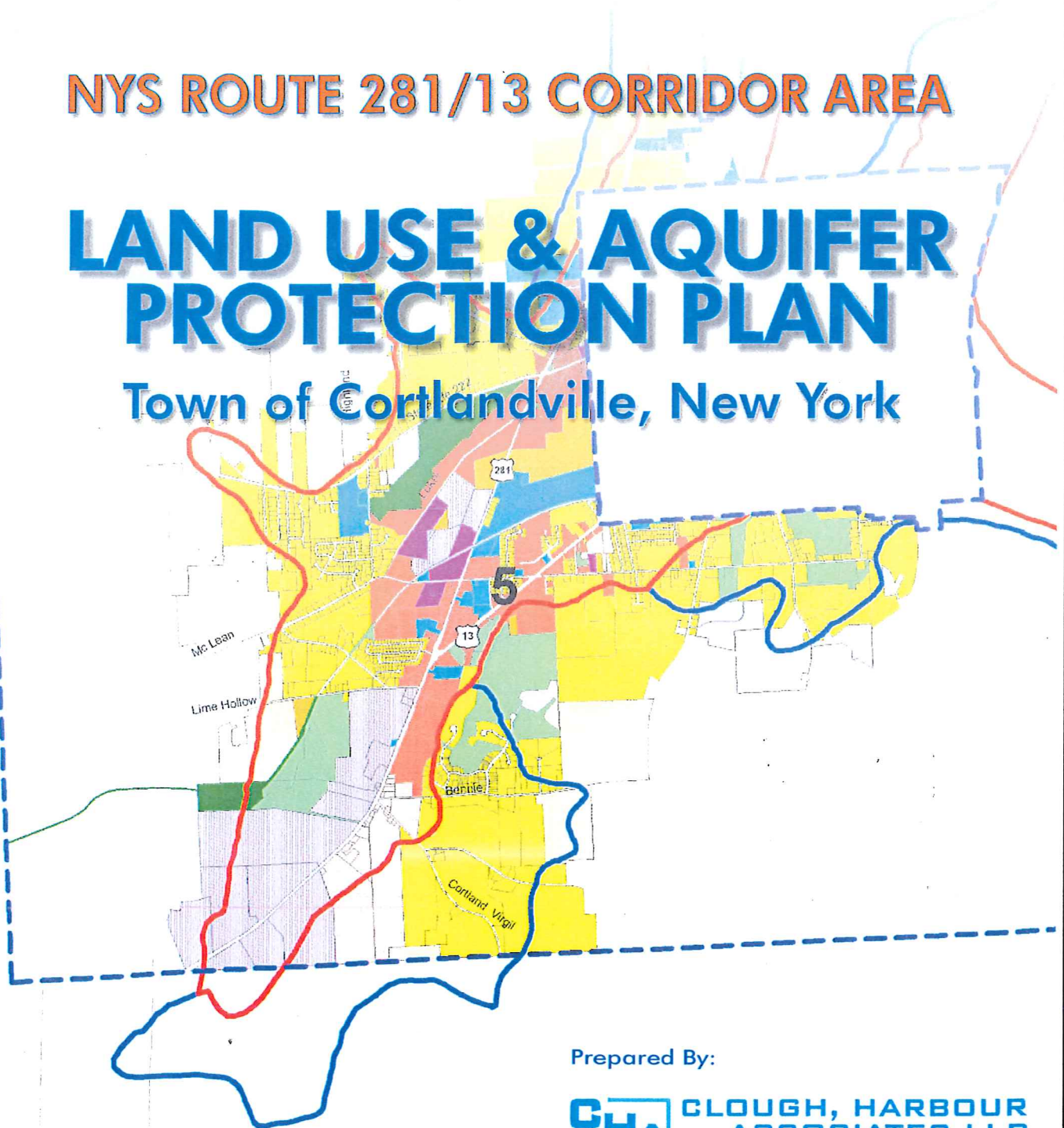


FINAL

NYS ROUTE 281/13 CORRIDOR AREA

LAND USE & AQUIFER PROTECTION PLAN

Town of Cortlandville, New York



Prepared By:



**CLOUGH, HARBOUR
ASSOCIATES LLP**
ENGINEERS, SURVEYORS, PLANNERS
& LANDSCAPE ARCHITECTS

June 19, 2002

ACKNOWLEDGMENTS

The following individuals played an important role in the development of this Plan. Gratitude is also extended to the citizens who participated in project meetings and the planning process.

TOWN SUPERVISOR
RAYMOND THORPE ✓

TOWN BOARD MEMBERS
DEPUTY SUPERVISOR, THEODORE TESTA ✓
COUNCILMAN, EDWIN O'DONNELL ✓
COUNCILMAN, JOHN PILATO ✓
COUNCILMAN, RON ROCCO ✓

ADVISORY COMMITTEE MEMBERS
KATHY WICKWIRE, CO-CHAIRPERSON ✓
RAY THORPE, CO-CHAIRPERSON ✓
SETH BURGESS
ED O'DONNELL ✓
NICK RENZI ✓
DAVID VEROSTKO
BRUCE WEBER ✓

PUBLIC AGENCIES

CORTLAND COUNTY HEALTH DEPARTMENT
AUDREY V. LEWIS, R.S. DIRECTOR OF ENVIRONMENTAL HEALTH
JOHN T. HELGREN, P.E. PUBLIC HEALTH ENGINEER

CORTLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT
AMANDA BARBER, MANAGER
PATRICK J. REIDY, WATER QUALITY SPECIALIST

CORTLAND COUNTY PLANNING DEPARTMENT
DANIEL S. DINEEN, DIRECTOR

CORTLAND WATER BOARD
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EXECUTIVE SUMMARY

New York State Route 281 and its junction with NYS Route 13 is the primary area of commercial and industrial activity within the Town of Cortlandville. These major highway corridors presently contain a varied mix of land uses including residential, commercial, industrial, recreational, institutional, agricultural, as well as vacant and undeveloped areas. The area surrounding these major corridors has been experiencing a substantial amount of development and redevelopment pressure in recent years. This type of development pressure is somewhat unique to this area when compared to many other locations in and around the City of Cortland and Cortland County.

The development of certain types of land use along the Route 281/13 corridor has posed concerns on the part of Town officials regarding the safety of public drinking water supplies and protection of a sole source aquifer in this region. The Otter/Dry Creek Aquifer provides the only source of potable drinking water to the Town of Cortlandville and the City of Cortland. Recent development and increasing development pressure along the Route 281/13 corridor and concern over the long-term health of the Otter/Dry Creek Aquifer caused Cortlandville Town officials to institute a moratorium on further development in August 2001. The moratorium was instituted along the NYS Route 281/13 corridor and within the Town's present Aquifer Protection District in the western part of the Town.

The purpose of this Route 281/13 Land Use and Aquifer Protection Plan is to encourage orderly and managed growth within the Route 281/13 study area while protecting the quantity and quality of drinking water available to local residents. The Plan has been developed by an Advisory Committee specifically established to identify issues and opportunities within the study area particularly in regards to the potential implications of future development on the sole source aquifer and other local resources. During a comprehensive planning process issues were identified that are most critical to protecting

public health, safety and welfare within the Town of Cortlandville. The Plan provides a series of recommended actions to achieve established planning goals and objectives.

The goals for this Plan were developed to address a number of significant issues specific to the study area. These goals include:

- Protecting the Otter/Dry Creek Aquifer for current residents and future generations in the Cortlandville area
- Encouraging desirable and compatible land uses in the study area consistent with aquifer protection and protection of other local resources
- Encouraging orderly growth and development, particularly along the NYS Route 281/13 corridor by anticipating growth and identifying transportation and local infrastructure needs
- Encouraging high quality design and development that enhances the appearance and function of the Route 281/13 corridor

The primary issues, opportunities and recommended actions specific to meeting the goals of the study area have been grouped into four general categories. They are: 1.) Aquifer Protection and Stormwater Management, 2.) Land Use and Zoning, 3.) Transportation and 4.) Design and Aesthetic Character.

In the Town of Cortlandville more than 4,000 individuals are served by public water supplied by the aquifer. Water use by these individuals is estimated to range between 650,000 to 750,000 gallons per day. The City of Cortland is also served by the aquifer. More than 20,000 residents in the City also get their drinking water from the Otter/Dry Creek Aquifer.

Actions for protecting the quality of the aquifer include preparing and adopting a Wellhead Protection Plan for the Town of Cortlandville and modifying the Town's present Stormwater Management Ordinance to be consistent with the recommendations of this Plan and the Wellhead Protection Plan. The Wellhead Protection Plan will include

delineating wellhead protection zones and establishing a list of prohibited land uses and land use activities within wellhead protection areas.

As part of a Wellhead Protection Plan consideration will be given to designating all wellhead protection zones as Critical Environmental Areas, thus requiring increased environmental review under the State's Environmental Quality Review Act (SEQRA) for any development and redevelopment actions taken in such areas that exceed established thresholds.

The planned reconstruction of NYS Route 281 by the New York State Department of Transportation was also considered and several potential issues and opportunities relating to aquifer protection and other concerns along the corridor were identified. Reconstruction of Route 281 through Cortlandville is tentatively scheduled for 2005-2006. Design approval of the project is expected in late 2002. Reconstruction will include the addition of new travel lanes, turning lanes and related drainage improvements.

Many issues that were identified pertaining to the Route 281/13 corridor during the planning process are being considered by the NYSDOT as part of the reconstruction of Route 281. These issues and opportunities include improved traffic flow, improved pedestrian circulation via new sidewalks, and stormwater drainage improvements. Under this Plan the Town will closely coordinate with the NYSDOT to achieve these and other planning objectives relating to access management along the corridor and right-of-way acquisition by the State that may provide additional land use opportunities.

The Town of Cortlandville will need to modify its current Zoning Ordinance and Zoning Map and adopt those modifications in order to accomplish the planning goals and objectives described in this Plan. Zoning modifications will be necessary to achieve the land use objectives illustrated by the Future Land Use Map for the study area as presented in the Plan.

Zoning modifications include altering the current Business District and Industrial District classifications into additional classifications. These modifications include altering the present Industrial classification into two separate categories, I-1 for Light Industrial and Office Park use and I-2 for General Industrial use. Modification of the Town's Business District is also necessary. The current Business District will be modified into three separate classifications designated as B-1 Neighborhood Business and Professional Office, B-2 Highway Commercial and B-3 Planned Commercial District. These modifications will enable the Town to better encourage desirable growth in certain locations of the Route 281/13 study area to achieve local planning objectives related to aquifer protection, land use compatibility, transportation and aesthetic character.

The Plan also provides design and development guidelines for the Route 281/13 study area and elsewhere within the Town. These guidelines describe various planning objectives and design techniques to enhance the overall function and visual appearance of the corridor. Guidelines are provided that address site design, building orientation, building materials, architectural features, access management and parking, pedestrian circulation, landscape design and public spaces. Some or all of these guidelines will be established as required standards to be met under the Town's Zoning Ordinance and Site Plan Review and approval process.

The Plan concludes with an implementation strategy for accomplishing planning goals and objectives. A detailed planning summary and implementation matrix that identifies issues, opportunities and recommended actions within the study area is provided as part of the Plan. This matrix is useful as a guide to future land use decisions by local officials and residents. Major implementation actions of the Plan include:

- Adoption of the Route 281/13 Land Use and Aquifer Protection Plan
- Preparation and adoption by the Town of a Wellhead Protection Plan
- Modification of the Town's Stormwater Management Ordinance consistent with the above plans

- Establishment and adoption of Access Management and Design Standards based upon the guidelines presented in the Route 281/13 Land Use and Aquifer Protection Plan
- Modification of the Town's Zoning Ordinance and Map consistent with the Route 281/13 Land Use and Aquifer Protection Plan

The implementation actions described above are designed to achieve the overall purpose of the Route 281/13 Land Use and Aquifer Protection Plan which is protection of the community's water supplies. These actions, however, will provide additional and very important benefits to the community by enhancing quality of life for all the residents of the Cortlandville area.

CHAPTER 1

INTRODUCTION

Background

New York State Route 281 and its junction with NYS Route 13 is the primary area of commercial and industrial activity within the Town of Cortlandville. These highway corridors contain a mix of land uses including residential, commercial, industrial recreational, institutional, agricultural, as well as vacant and undeveloped areas. This part of Cortlandville has been experiencing a substantial amount of development and redevelopment pressure in recent years which is somewhat unique relative to other areas in and around the City of Cortland and Cortland County.

Many of the land uses that have developed along the Route 281/13 corridor are highway-oriented to meet the specific needs of the driving public. These uses include fast food restaurants, retail sales, auto dealerships, auto service centers, and convenience mart/gas stations.

The development of certain types of land use along the Route 281/13 corridor has posed concerns on the part of Town officials regarding the safety and protection of a sole source aquifer in this region of New York State. This aquifer, referred to as the Otter/Dry Creek Aquifer, is part of the Cortland-Homer-Preble Sole Source aquifer system. The Otter/Dry Creek Aquifer provides the only source of potable drinking water to the Town of Cortlandville and the City of Cortland.

Recent development and increasing development pressure along the Route 281/13 corridor and concern over the long-term health of the Otter/Dry Creek Aquifer caused Cortlandville Town officials to institute a moratorium on further development in August

2001. The moratorium was instituted along the NYS Route 281/13 corridor and within the Town's Aquifer Protection District in this part of the Town.

The purpose of the moratorium was to delay further development along the corridor until issues of aquifer protection and land use compatibility could be addressed and resolved. This NYS 281/13 Land Use and Aquifer Protection Plan (hereinafter referred to as the Plan) has been prepared in response to the concern over protection of the aquifer and other existing and future land use issues presently confronting public officials in Cortlandville.

Study Area

The study area extends linearly along the NYS Route 281 highway corridor in the Town of Cortlandville from the northern Town boundary with the Village of Homer, near the access road of Exit 12 of Interstate 81, southward to the junction of NYS Route 13. The study area then follows Route 13 south to the southern Town boundary with the Town of Virgil, a total distance of approximately 5.5 miles. A short stretch of Route 281 (approximately 0.6 miles) runs through the extreme northwestern portion of the City of Cortland. The study area also extends in an eastward and westward direction to encompass all those areas identified on the Town's Aquifer Protection District Map as being either within primary or principal aquifer areas (see Figure 1-1 Study Area).

In an effort to service the entire study area and address all the diverse issues and needs therein the full study area was divided into eight smaller planning areas (see Figure 1-1). This facilitated the identification of areas where land use issues are specific to a particular location or that offer a particular planning opportunity. These eight planning areas are described in Chapter 2.

Purpose and Need

The purpose of this Plan is to encourage orderly and managed growth within the entire study area while protecting the quantity and quality of drinking water available to Town of Cortlandville residents. This Plan was developed by an Advisory Committee specifically established to identify issues and opportunities within the study area particularly in regards to the potential implications of future development on the sole source aquifer and other local resources. During a comprehensive planning process the Committee identified the issues that are most critical to protecting public health, safety and welfare within the Town of Cortlandville. The planning process resulted in this Plan which provides a series of actions necessary to achieve the established project goals and objectives.

The Plan encourages new growth and redevelopment within the study area by identifying desirable land use planning practices that will protect local resources and promote development that is compatible with local planning goals. The Plan is not intended to restrict growth and change, but rather encourage development that will accomplish the goal of protecting both the natural and man-made environments of the area to the benefit of all Town residents.

Methodology

As part of the development of this Plan, the Advisory Committee and its planning and engineering consultant Clough, Harbour & Associates LLP (CHA) met with several local public agencies to discuss the purpose and goals of this Plan as well as to solicit input into addressing identified issues. Meetings were held with the New York State Department of Transportation (NYSDOT), the Cortland County Planning Department, the Cortland County Health Department and the Cortland County Soil and Water Conservation District. These agencies have been an invaluable source of information and have provided valuable input into the planning process.

During the series of meetings with the New York State Department of Transportation, the Advisory Committee and CHA had an opportunity to discuss and review the ongoing design process for the planned reconstruction of Route 281 tentatively scheduled for the 2005-6 construction seasons. Discussions centered on drainage issues, protection of the aquifer and water quality as well as pedestrian and motorist safety along the highway.

The Advisory Committee and CHA also had meetings with the County Health Department. The Health Department and other agencies identified the need for defining wellhead protection areas within the Town in the vicinity of its two municipal wells in order to protect the Town's water supply as well as the contributing area in Cortlandville for the City of Cortland wells. Likewise, meetings with the County Soil and Water Conservation District identified possible improvements in local stormwater management. Cortland County Planning has been instrumental in providing information that was used to develop existing land use maps, natural feature maps, empire zone information and zoning information as presented in this Plan.

In addition to obtaining information from local agencies, the Advisory Committee and CHA obtained and reviewed past and present local planning initiatives and documents including the Town's 1976 Development Plan, as well as its current Zoning Ordinance, Aquifer Protection Ordinance and Stormwater Management Ordinance. Information was also collected in the field. This included verification of the existing land use information that went into preparation of an existing land use map of the study area.

After collecting all the data the Advisory Committee identified a number of land use and planning issues relevant to the study area as follows.

- Identification of land uses and planning practices that are consistent and necessary with protection of the area's sole source aquifer
- Identification of land uses that may be incompatible with aquifer protection
- Stormwater management practices and local drainage issues that need to be consistent with aquifer protection

- Transportation and access management issues related to pedestrian and motorist safety along the Route 281/13 highway corridor and in light of the planned reconstruction of the highway by the State of New York
- Land use and zoning implications of the reconstruction of Route 281
- Land use development trends and opportunities in the study area
- Aesthetic and design related issues as they relate to the appearance of the Route 281/13 corridor

Public Participation

Public input and participation has been encouraged throughout the development and preparation of this Plan. More than a dozen meetings between the Advisory Committee and CHA were held between August 2001 and March 2002. These meetings were held during evening hours at the Town Hall and/or Fire Hall. All meetings were open to the public and public discussion of issues was encouraged. Additionally, a public meeting was held in December 2001 to provide a status report of the planning process and provide another opportunity for public comment and input. A public hearing will be held for additional review and comment prior to the adoption of this plan by the Cortlandville Town Board.

Goals and Objectives

While developing this Plan, the Advisory Committee identified several planning goals for the study area. These goals were developed to address a number of significant issues specific to the study area that presently confront Town officials. These goals include:

- Protecting the Otter/Dry Creek Aquifer in terms of both its water quality and quantity for current residents and future generations in the Cortlandville area.
- Encouraging desirable and compatible land uses in the study area consistent with aquifer protection and protection of other local natural and man-made resources.

- Encouraging orderly growth and development, particularly along the NYS Route 281/13 corridor by anticipating growth and identifying transportation and local infrastructure needs.
- Encouraging high quality design and development that enhances the appearance and function of the Route 281/13 corridor for all Town residents, property owners, merchants and visitors to the area.

To achieve these identified goals the Advisory Committee identified several planning objectives. These objectives which form the basis for this Plan include:

- To review past and present planning initiatives undertaken by the Town of Cortlandville that address land use planning, zoning and aquifer protection within the Route 281/13 study area. The intent of the review was to identify the interrelationships among existing plans and regulations and determine their effectiveness in managing growth and development consistent with aquifer protection.
- To recommend ways to strengthen the interrelationships among the Town's planning initiatives and land use regulations in managing growth and aquifer protection.
- To obtain public input and consensus into the planning process and development of this Plan.
- To identify and categorize land uses as compatible or incompatible with aquifer protection and identify appropriate locations for both.
- To make recommendations to modify current zoning and other land use regulations and administrative procedures to facilitate growth management and aquifer protection.

Summary

Due to recent concerns for the safety and protection of the Otter/Dry Creek Aquifer, the Town of Cortlandville prepared this Route 281/13 Land Use and Aquifer Protection Plan. The focus of this Plan is to encourage development within the study area while protecting the sole source aquifer as well as enhancing community character. This Plan includes background information and detailed discussion of the planning process followed by the Advisory Committee and CHA. This introduction is followed by a discussion of the study area's existing conditions. This Plan then focuses on the issues and concerns specific to the study area.

The primary concerns specific to the Plan's study area have been grouped into four general categories. They are: 1.) Aquifer Protection and Stormwater Management, 2.) Land Use and Zoning, 3.) Transportation and 4.) Design and Aesthetic Character. Under each category issues and opportunities are identified and implementation actions for improvements, where necessary, are provided. The Plan concludes by setting forth an implementation strategy summary by which the Town of Cortlandville can realize this Plan's goals and objectives.

CHAPTER 2

EXISTING CONDITIONS

Natural Features

The Town of Cortlandville is located in the northern part of the Appalachian Mountain Range within the Alleghany Plateau Province of central New York State. Altitudes in this region range from approximately 1,100 to 2,000 feet above sea level. The hill and valley landforms that are predominant throughout this area were affected by the Wisconsin Stage glaciation that ended more than ten thousand years ago.

Weather experienced in the area is consistent with a humid continental type of climate. Precipitation in the area averages approximately 40 inches per year and is fairly evenly distributed throughout the year. Average snowfall in winter is approximately 60 inches. Wintertime temperatures average approximately 24 degrees Fahrenheit. Summertime temperatures average approximately 66 degrees Fahrenheit.

Landforms in the study area have been highly eroded by local climatic conditions over thousands of years and are distinguished by a relatively rugged terrain exemplified by steep hills and valleys. In fact, approximately one-third of the Town of Cortlandville has steep slopes exceeding 15 percent that are unsuited to development. As is common in this region the soil and physical characteristics of the area make the flat valley areas such as the Route 281/13 corridor much more suited to both agriculture and urban development than areas of higher terrain.

Bedrock in the Cortland-Homer-Preble area is predominantly shale with minor siltstone and sandstones. Depth to bedrock ranges from near or at the surface in some places to

more than 500 feet below the surface. Bedrock is deepest in valley areas and most shallow at the hilltops.

The varied terrain within the study area is illustrated on Figure 2-1 Natural Features. Elevations in the study area generally range from approximately 1,100 feet above mean sea level in the flatter valley areas along Route 281 to approximately 1,600 feet above mean sea level on the higher hilltops in the southern parts of the Town.

As indicated on Figure 2-1 there are few surface water features within this part of the Town. Two important water features are located in the study area west of the City of Cortland. These features are Dry Creek and Otter Creek each flowing perpendicular to Route 281. Areas of higher terrain drain into the flatter Route 218/13 corridor. Significant floodplains are associated with both creeks as they each flow in an easterly direction to the City of Cortland.

A series of ecologically significant wetland areas are located about one-half mile west of the Route 28/13 highway corridor in the southwestern part of the Town. According to the Town's Development Plan, in 1974 one of these wetlands was designated as a rare and valuable ecosystem by the Cortland County Planning Board. This environmentally sensitive area of wetlands and ponds encompasses more than 300 acres and includes the Lime Hollow Nature area.

The most important natural feature within the study area is, however, the Otter/Dry Creek Sole Source Aquifer that underlies most of the development that has occurred along the Route 281/13 corridor. The most productive aquifers in this region of the state are the outwash sand and gravel areas found in the major stream valleys, such as the Otter/Dry Creek Aquifer.

In the Homer-Preble valley region the surficial aquifers provide the majority of drinking water to the area. The saturated thickness of the aquifers average approximately 55 feet.

The water table in the Cortland-Homer-Preble area generally occurs at depths of less than 25 feet below the surface. In upland hill areas, however, the water table may be as deep as 100 feet below the surface of the land.

In upland areas recharge of the aquifers is derived from precipitation. In valley areas recharge includes infiltration from precipitation, and infiltration from surface waters and runoff from upland areas. Infiltration to the aquifers may occur miles from the Town's two municipal well locations at Terrace Road and Lime Hollow Road and the City of Cortland wells located in the western part of the City just east of Route 281.

Overall quality of ground water derived from local aquifers is considered to be good to excellent. There have, however, been reported instances of contamination of some private wells by organic solvents in the past including some in the southwestern part of the Town. Nevertheless, all public water supplies in the Town meet or exceed State and Federal drinking water standards. More information about the sole source aquifer in the study area is provided in Chapter 3.

Population

According to the 2000 Census of Population the total population of the Town of Cortlandville was 7,919. This total compares to a population of 6,070 thirty years earlier in 1970. This lower population was used as the basis for the Town's present Development Plan.

Of the total Town's year 2000 population, approximately 6,082 individuals in Cortlandville (approximately 77 percent) were 18 years of age or older. Median age was 39.3 years and the number of females outnumbered the number of males by 4 percent or 52 percent compared to 48 percent. The number of individuals over the age of 65 was 1,184 or approximately 15 percent of the Town's total population. Households in the Town in 2000 numbered 3,166 with approximately 67 percent recorded as family

households. Average household size in Cortlandville was 2.49 individuals and average family size was 2.89 individuals.

Total housing units recorded in the Town in 2000 was 3,431. This compares to 1,891 housing units in 1970 indicating substantial growth over thirty years of approximately 45 percent in total housing units. Approximately 92 percent of housing units were occupied in the Town in 2000. Only 8 percent were recorded as vacant units. Of these vacant units approximately 40 units were listed as seasonal, recreational or for occasional use. Seventy percent of all housing units in the Town were owner occupied. Approximately 30 percent were renter-occupied units.

Population projections for the Town of Cortlandville were provided by County Planning. These projections indicate a relatively stable population of approximately 8,000 residents over the next two decades within the Town. These projections do not anticipate the type of growth the Town experienced in the years between 1970 and 1990.

Town of Cortlandville Population Projections

Year	1990	2000	2005	2010	2015	2020
Totals	8,054	7,919	8,012	7,985	8,002	8,038

Source: Cortland County Planning 2002

Existing Land Use and Zoning

Cortlandville comprises more than 31,000 acres and is one of the larger towns in Cortland County. The Town is bordered by the Town and Village of Homer to the north, the Town of Solon to the east, the Town of Freetown and the Town of Virgil to the south and Tompkins County to the west. The City of Cortland and the Village of McGraw are both within the boundaries of Cortlandville. A small portion of the Village of Homer

extends into the Town of Cortlandville on the north along NYS Route 11 and just east of Route 281 and west of Interstate 81.

Land use patterns within the study area are diversified and include a mix of residential, commercial, industrial, institutional, recreational, agricultural and open space. The most densely developed land uses in Cortlandville are west of the City of Cortland and concentrated in radial patterns along the primary commercial corridors of NYS Route 281 and NYS Route 13.

Existing land uses within the Town are illustrated on Figure 2-2A. Existing land uses within the Route 281/13 study area is presented on Figure 2-2B. As Figure 2-2B also illustrates, the study area has been divided into eight smaller planning areas for study purposes only and to facilitate the identification of current land use patterns and issues relative to achieving the goals of this Plan.

Current zoning districts within the Town of Cortlandville are illustrated on Figure 2-3A. Zoning within the Route 281/13 study area is illustrated on Figure 2-3B.

The boundaries of each of the eight planning areas identified on Figures 2-2B and 2-3B have been defined according to similarities in natural features, land use, and zoning. These boundaries have no legal implications and are simply for study purposes.

The natural and man-made characteristics and conditions of the study area are described below by planning area. As previously mentioned the entire study area falls within the Town's present Aquifer Protection District, which is a special overlay district with the intent to protect the quality of the Town's groundwater resources in order to ensure for the residents of the Town a safe and healthy drinking water supply.

Planning Area 1

This planning area begins at the intersection of the Exit 12 off-ramp and access road from Interstate 81 and NYS Route 281 and continues south along Route 281 towards Kinney Gulf Road. Planning Area 1 is mostly characterized by a mix of open space, undeveloped and vacant lands, agricultural land and single family residential use. The predominant character of this area is rural residential. This area serves as a gateway of sorts into the Town of Cortlandville for motorists exiting I-81 on their way to Cortland, Cortlandville, Homer and surrounding communities.

The I-81 Exit 12 off-ramp and access road at the Route 281 intersection area is characterized by open field and some agricultural use, both past and present. At the southeast corner of the Route 281 intersection there is a dairy farm. Parcels directly west of Route 281 near the intersection are currently for sale and considered prime real estate. This land has been cleared and used as agricultural fields. Directly north of this land, in the Village of Homer some recent professional office development has occurred on the west side of Route 281. Homer Central High School is located just north of the I-81 ramp northeast of the Route 281 intersection.

South of the I-81 Exit 12 off ramp and access road and the Route 281 intersection there are agricultural, recreational and residential land uses. An existing golf course, the Cortland Country Club, is located to the east of Route 281 just north of Belle Drive.

The majority of developed land use along the Route 281 corridor in Planning Area 1 is single-family residential. Residential development is a mix of rural and suburban style single-family homes, including the Renaissance subdivision located just west of Route 281 approximately one-quarter mile south of the I-81 access road.

A significant amount of undeveloped or vacant land remains within this planning area, particularly in the vicinity of Fisher Avenue. The Cortland County Fairgrounds are located south of Fisher Avenue east of Route 281.

The topography in this planning area is very different on the western side of Route 281 than on the eastern side. The land east of Route 281 consists of gently rolling areas and relatively flat land. Some of the area in the vicinity of Fisher Avenue includes low-lying areas that exhibit some wetland characteristics.

The western side of Route 281 slopes increasingly to the west, which represents the eastern side of a relatively steep drumlin. The steep slopes taper off at Kinney Gulf Road.

Planning Area 1 is primarily zoned Residential R-1 with a few large parcels zoned Agricultural as illustrated in Figure 2-3B. A small area of Residential-3 is zoned for medium to high-density residential development where water and sewer are available just south of the I-81 Exit 12 off-ramp and east of Route 281. The general character of this planning area, however, is single-family residential surrounded by rural/open land.

Planning Area 2

Planning Area 2 is located along the NYS Route 11 corridor just south of the Village of Homer and west of Interstate 81. This area contains a mix of residences, utilities, community services, commercial use and small businesses. Much of the commercial activity is related to automotive repair, outdoor utility storage areas, gas stations and fuel storage areas. Much of this area exhibits a degraded quality. The general visual quality of the area is poor with the exception of the area in the vicinity of Fisher Avenue.

The predominant zoning district in this planning area is Business. Single-Family Residential zoning is located in the easternmost part of this planning area.

The topography in this area is flat to gently rolling. This area is situated in the most northeast portion of the aquifer study area.

Planning Area 3

The land within this planning area is mostly single-family residential mixed with agriculture and vacant lands. In many cases fairly extensive agricultural lands in the vicinity of Kinney Gulf Road remain intact and have not been subdivided. The residential character of this planning area is primarily single-family homes on relatively large lots, which are not contiguous in many cases. Residential uses on somewhat smaller lots are located north of McLean Road. A small area of commercial use is also located in this planning area on the north side of Route 222.

This planning area is zoned primarily as Residential R-1. Two areas of Residential R-2 are zoned in the vicinity north of McLean Road and north of Lime Hollow Road. Areas in the extreme northern and western portions of the planning area are zoned Agricultural.

The topography of this area is generally gently rolling hills. The western edge of this planning area meets and/or includes the steep slopes of several drumlins that rise just west of the study area. Storm water runoff from this entire area drains eastward towards the City of Cortland and municipal well No. 3.

Planning Area 4

Land use in this planning area is complex and includes a mix of commercial, industrial, public and utility uses, vacant lands, institutional uses and several small parcels of residential use along Route 281. The predominant land use is commercial activity along Route 281.

Many of businesses in this area are auto-oriented and associated with either automobile sales or servicing. There are several gas stations at major intersections, as well as many

car dealerships and multiple auto repair and retail shops located along each side of Route 281.

The industrial use in this planning area includes several large lumber yards and lumber processing, storage and sales facilities located to the west of Route 281. Also, the Cortland County Municipal Airport is located south of Route 222 west of the Route 281 corridor. Commercial uses along this section of the Route 281 corridor include fast food restaurants, grocery stores, family restaurants and general retail stores.

A large wooded area referred to as the City of Cortland Water Works is located along both sides of Route 281 and traverses Otter Creek south of the Luker Road intersection. Adjacent to this area to the south of the Water Works is land owned by the State University of New York (SUNY) at Cortland. This land immediately east of Route 281 is used for parking and recreational uses associated with the SUNY stadium and campus.

This planning area includes the following zoning districts:

- Residential R-1 District
- Business District
- Business Transitional District
- Industrial District

The topography in this area is relatively flat to gently rolling. This is perhaps one of the most environmentally sensitive planning areas in the study area as it relates to the glacial aquifer since it provides drinking water to the residents of the City of Cortland as well as the Town of Cortlandville. This planning area is within the area contributing recharge to the City of Cortland municipal groundwater wells. Additionally, the municipal well for the City of Cortland is located just beyond the eastern edge of this planning area in the City.

Planning Area 5

Planning Area 5 primarily contains a mix of commercial, residential, community service uses and vacant lands. Many of these land uses appear to have developed over time in a somewhat haphazard pattern leading to some incompatibilities between land uses including commercial activity and residential use. The area is densely developed with little vacant and undeveloped land remaining.

This planning area includes the Town of Cortlandville offices and other municipal services including one of the Town's two municipal groundwater wells. The residential use that remains in this planning area is concentrated in relatively small disjointed clusters often interspersed among encroaching commercial and business uses. The area is best characterized as lacking visual and functional continuity. Large-scale retail use, so called "big box retail", is located on larger parcels of land at the southern portion of this planning area along the eastern side of Route 281.

This planning area includes the following zoning districts:

- Residential R-2 District
- Residential R-3 District
- Business District
- Business Transition District

The topography in this area is relatively flat or gently rolling. This planning area is environmentally sensitive as one of the municipal wells that provide drinking water to the Town of Cortlandville is located along Terrace Road.

Planning Area 6

Planning Area 6 is predominantly residential. This residential use begins to mix with agriculture uses and vacant lands as you move farther eastward and southward from the City of Cortland and Routes 281 and 13. Residential use is characterized primarily by

single-family homes although a few apartment complexes are scattered throughout this area. Planning area 6 is zoned for both Agricultural and Residential R-2 uses.

A municipal water storage tank is located along Starr Road in the eastern part of this planning area. Public recreation park areas are being planned in this same general vicinity.

The southern portion of this planning area includes increasingly steep slopes associated with a series of drumlins that occur south of the City of Cortland. Stormwater runoff in this area generally flows north and west from these hills in the general direction of the Town's municipal well locations and the Route 281 corridor.

Planning Area 7

The predominant land use within Planning Area 7 is industrial although sizable areas of vacant land and agricultural fields exist east and west of Route 13. An area of vacant land adjacent to commercial development abuts a few older residences, some of which were once farmhouses along Route 13. This area also includes an old rural cemetery that may be of local historic value.

Industrial areas include the former Smith Corona Typewriter facility located southwest of the intersection of Route 13 and Lime Hollow Road. The second of two of Cortlandville's municipal wells is located south of Lime Hollow Road approximately one-half mile west of Route 13.

There are only three designated zoning districts that presently control land use in this planning area. The zoning districts include an Industrial district along both the east and west sides of the Route 281/13 corridor, Agricultural designations adjacent to these industrial areas and a small Business area along the east side of Route 13 near the intersection of Bennie Road.

The topography of this planning area is relatively flat to gently rolling with slopes increasing in a southerly direction. This area is located in the aquifer recharge area for the Town's Lime Hollow Road municipal well.

Planning Area 8

Planning Area 8 is currently a mix of residential, recreational, agricultural and vacant land use. The single-family residences juxtaposed with the open and agricultural land define the mostly rural visual character of the area. This planning area includes the study area's only existing Planned Use Development at Walden Oaks north of Bennie Road. This residentially planned community includes an existing golf course. Vacant parcels may still allow for further development in this area.

This planning area includes two zoning districts: the Planned Use Development district and an Agricultural district.

The topography of this area is relatively flat near Route 13, but rising terrain eventually leads to steep slopes to the east and south. This area likely contributes to the recharge of the Town's municipal well along Lime Hollow Road via runoff from these hills.

CHAPTER 3

AQUIFER PROTECTION & STORMWATER MANAGEMENT

The focus of this chapter is to identify the issues and opportunities unique to aquifer protection and stormwater management within the Route 281/13 study area. The discussion of the issues and opportunities is followed by implementation actions for addressing aquifer protection and stormwater management concerns and realizing the opportunities for the area.

Issues and Opportunities

Municipal Wellhead Protection

Protection of the Otter/Dry Creek Aquifer is a primary concern of Town of Cortlandville public officials and the overriding issue identified throughout the planning process for this Plan. The responsibility of protecting and managing the aquifer for present and future generations is a local responsibility that must be aggressively supported by the community.

The aquifer is potentially vulnerable to contamination due in large part to existing physical characteristics of the region including shallow depths to groundwater and highly permeable soils. The water table in the aquifer area generally occurs at depths of 25 feet or less in lowland and valley areas where most development has or is likely to occur.

Groundwater quality in the aquifer area is generally considered to be good to excellent, although contamination of some private wells has occurred in the past. Nevertheless, all public water supply wells in the area meet or exceed State and Federal drinking water

standards and the intent of this Plan is to maintain healthy groundwater supplies in the Cortlandville region.

According to estimates by the USGS the average capacity of the Otter/Dry Creek Aquifer is approximately 15 million gallons per day. Public water supplies within the Otter/Dry Creek Aquifer area serve an estimated population of approximately 30,000 people, two-thirds of which are in the City of Cortland. Total water usage is approximately 5 million gallons per day. Private wells serve approximately 5,300 people using an estimated 525,000 gallons of water per day.

In the Town of Cortlandville more than 4,000 individuals are served by public water supplied by the aquifer. Water use by these individuals is estimated to range between 650,000 to 750,000 gallons per day.

Potential contamination of the aquifer may derive from a variety of sources within the study area. Generally, contamination concerns include:

- Transportation routes (highway and rail) and the potential for accidental spills in areas overlying the aquifer
- Existing commercial and industrial uses and activities that may leak or spill potential chemical and petroleum-based contaminants
- Agricultural and land use practices that utilize fertilizers, pesticides and herbicides
- On-site septic systems and/or sanitary sewer systems
- Stormwater runoff from developed areas and impervious surfaces (parking areas)
- Contamination concerns from future industrial, commercial and residential development within the area

The following is a list of specific concerns that have been identified and are both corridor and study area wide in their scope. Some of these concerns are specific in terms of location and type of land use activity associated with them.

- Existing land uses that use chemicals as preservatives in treating wood products such as at existing lumber yards
- The use of salt, chloride and other de-icer products in winter on roadways and parking areas throughout the study area
- The use of de-icers at the Cortland County Airport at Chase Field west of Route 281
- Stormwater runoff from impervious surfaces at commercial strip and industrial development along the Route 281/13 corridor
- Contaminant concerns associated with snowmelt, snow storage and snow dumping areas from roads and parking areas
- Inactive landfills (Stupke Road) and hazardous waste sites (SCM)

Regulatory Planning Tools

Regulatory planning tools exist that can be implemented through the Town's Zoning Ordinance, Subdivision and Site Plan Review processes to enhance local aquifer protection practices. Some of these planning tools have been utilized by the Town and incorporated into Town codes including the Town's Aquifer Protection Overlay District developed in 1988. However, the Town needed to revisit the objectives of the Overlay District and wishes to better regulate land uses in aquifer sensitive areas of the Town by prohibiting uses without discretion on the part of the Town in granting Special Use Permits.

Planning tools that remain available to the Town in regulating and managing land uses in aquifer sensitive areas of the Town may include:

- Utilization of additional overlay zoning techniques
- Increased limitations and prohibition of specific land uses and land use activities

- Strengthening special permit and conditional permit administrative procedures
- Utilization of strict performance standards and limitations on impervious surfaces
- Utilization of transfer and/or purchase of development rights
- Registration of toxic and hazardous materials in use or storage
- Increased utilization of cluster development, open space protection, critical environmental areas, and planned unit development techniques

Non-Regulatory Planning Tools

Non-regulatory planning tools that do not regulate the specific use of private property for aquifer protection may include:

- Land acquisition by the municipality by purchase, easement and donation
- Utilization of “Best Management Practices” for agriculture and forestry activities, including possible limitations on the use of manure land-spreading techniques in aquifer sensitive areas
- Public education programs, including encouraging active participation by school age children
- Intergovernmental cooperation and agreements with adjacent communities
- Managing water pumping rates and withdrawals from municipal wellheads

Stormwater and Drainage

In 1997, the Town of Cortlandville adopted Article XVI, Stormwater Management and Erosion and Sediment Control Ordinance. Recently, discussions between the Town and local agencies have considered possible modifications to the Town’s Stormwater Ordinance. Those suggestions and additional recommendations have been considered throughout the planning process of this Plan and are reflected below under stormwater management implementation actions.

In addition, New York State has completed a new Stormwater Management Design Manual that provides guidance on the selection and design of the most effective stormwater management practices for new development sites. The manual includes information on permit requirements, stormwater management practices, performance criteria, construction specifications, landscaping methods and design examples. The Town's Stormwater Ordinance shall incorporate by reference the State's new Stormwater Management Design Manual that is reflected in part by many of the implementation actions described below.

Issues related to stormwater management apply to aquifer recharge areas as well as other locations and land uses within the study area, particularly along and near the Route 281/13 corridor, the area of greatest urban development. One issue that was identified, for example, involves the commonly used stormwater management practice of groundwater infiltration. This practice is used throughout the study area primarily because of high infiltration capacities. This is particularly true in the South Cortlandville area near identified aquifer recharge locations. Infiltration, however, as a stormwater management practice is not sufficient as a sole technique with regard to long-term aquifer and groundwater quality protection.

Conclusions

Wellhead Protection

Implementation actions include establishing a Wellhead Protection Plan for the Town of Cortlandville. The Wellhead Protection Plan will include delineating wellhead protection zones (with the suggestion of including primary and secondary contributing areas that feed into wellhead protection zones) to prevent potential contamination of the aquifer.

Wellhead protection zones are defined as “the surface and subsurface area surrounding a water well or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield.” (EPA 1995).

A Wellhead Protection Plan will involve both regulatory and non-regulatory approaches as discussed previously in this chapter. The regulatory requirements will involve passing new laws and perhaps establishing a new overlay protection district or modifying the present overlay district to establish stricter land use controls in wellhead protection zones.

Wellhead protection zones can be delineated from several methods. The most preferred method, the numerical modeling method may be the most complex, but also the most defensible if challenged. Delineation methods include:

- Arbitrary Fixed Radius
- Calculated Fixed Radius
- Simplified Variable Shapes
- Analytical Method
- Numerical Method (based on hydrogeologic mapping)

The Wellhead Protection Plan should include the following:

- A map(s) that delineates the area of contribution to the well(s) for both the Terrace Road municipal well and the Lime Hollow Road municipal well location and the area of contribution for the City of Cortland wells.
- Updated map boundaries using current United States Geological Survey (USGS) aquifer boundary delineation and data.
- Two types of designated wellhead protection zones using the USGS numerical method modeling and mapping techniques.
- The first zone, designated as ZONE 1 - Well Contribution Zone, will delineate the lands within the zone of direct contribution to the well. ZONE 2 – Watershed Zone, will delineate those lands that contribute recharge to the well via overland runoff and/or surface waters and streams.

- An inventory and identification of potential contamination sources in both Zones 1 and 2 will be included based upon previous Source Water Assessment Program (SWAP) information available from the County Health Department.
- Designation of a Remedial Action Area (RAA) within a 200 foot radius of the municipal wells within which emergency response activities are prioritized in the event of an accidental spill or other contamination threat in the area.
- Creation of a new or modified overlay district that incorporates both Zones 1 and 2 and that further restricts the types of activities and/or land uses allowed in the wellhead protection zones.
- Establishing limitations on the amount of impervious surfaces allowed within wellhead protection Zone 1. These limitations may be expressed as percent impervious surface per total site acreage or lot coverage allowed under the Town's Zoning District or minimum green space requirements.
- Designation of the wellhead protection Zone 1 or portions of such zone as Critical Environmental Areas (CEA).

ZONE 1 – Well Contribution Zone

In developing a Wellhead Protection Plan certain land uses and land use activities must be prohibited due to their potential for contamination of local municipal wells. The following land uses and activities shall be considered in the development and preparation of a Wellhead Protection Plan. All of the following uses may not be deemed appropriate to local conditions and may not necessarily be included in a final Wellhead Protection Plan. This information is provided solely as a framework for developing a Wellhead Protection Plan that will be based upon more detailed study of the aquifer and delineation of wellhead protection zones.

Specific land uses and land use activities shall be considered for possible prohibition within Zone 1 - Well Contribution Zones. These prohibited uses and activities may include, but not necessarily be limited to:

- (i) Disposal of any solid waste, petroleum products, radioactive materials, brine, solvents, hazardous materials or wastewater onto land or surface waters
- (ii) Manufacturing, processing, or storage of bulk quantities of any hazardous material, hazardous waste or toxic substances
- (iii) Underground and above ground outdoor fuel storage of petroleum and petroleum-based chemicals will be prohibited except for those used for on-site consumption. Use must meet standards of Article 19, 20 and 21 of the County Sanitary Code. All use must meet bulk storage regulations for residential and non-residential uses. Use of such materials of less than 1,100 gallons are still subject to County Health Department Review procedures.
- (iv) Commercial use, storage, and/or application of pesticides, herbicides, and/or fungicides without applicable certification permits from the New York State Department of Environmental Conservation (NYSDEC) will be prohibited.
- (v) New mining or commercial excavation or extraction of soils, sands and gravel except for on-site construction purposes or expansion allowed by existing permit specifications
- (vi) Introduction into existing disposal systems of any material potentially hazardous to groundwater quality
- (vii) Establishment and/or operation of any solid waste management facility or hazardous waste treatment, storage, or disposal facility
- (viii) Establishment and/or operation of any underground storage facility
- (ix) Internment of human and/or animal remains
- (x) Installation of new, private on-site septic systems including new single family and two family dwellings on lots of less than two acres
- (xi) Dumping and disposal of snow and/or ice collected from roadways and parking areas from outside of Zone 1, the well contribution zone

- (xii) Application, disposal or discharge of sewage, septage, sludge and animal waste
- (xiii) Bulk storage of fertilizers, herbicides and pesticides for other than normal residential use or garden type retail sales stored in enclosed facilities
- (xiv) Bulk storage of de-icing materials except in watertight, ventilated structures located on impervious surfaces
- (xv) Construction of commercial pipelines that carry petroleum or liquid hazardous materials
- (xvi) Construction of municipal or industrial sewage treatment facilities

ZONE 2 – Watershed Zone

Specific land uses and land use activities shall be considered for possible prohibition within Zone 2 - Watershed Zones. These prohibited uses and activities may include, but not necessarily be limited to:

- (i) Discharge or disposal of any hazardous material, toxic substance or radioactive materials
- (ii) Manufacturing, processing, or storage of bulk quantities of any hazardous material, hazardous waste or toxic substances
- (iii) Underground and above ground outdoor fuel storage of petroleum and petroleum-based chemicals will be prohibited within one hundred feet of any water body. Use must meet standards of Article 19, 20 and 21 of the County Sanitary Code. All use must meet bulk storage regulations for residential and non-residential uses. Use of such materials of less than 1,100 gallons are still subject to County Health Department Review procedures.
- (iv) Application, discharge, disposal, burial and/or application of any septage, sewage, sludge, animal waste, human excreta within one hundred feet of any waterbody

- (v) Dumping or disposal of snow and/or ice collected from roadways or parking areas within one hundred feet of a waterbody
- (vi) Open storage of agricultural chemicals and fertilizers within one hundred feet of a waterbody
- (vii) Commercial or agricultural use, storage and/or application of pesticides, herbicides and/or fungicides without applicable certification/permits from the NYSDEC
- (viii) Open storage of deicing materials within one hundred feet of any water body
- (ix) Establishment of any solid waste management or waste management facility for waste treatment, storage or disposal

Critical Environmental Areas

Part 617, Section 617.4(h) of Title 6 of the New York Code Rules and Regulations provides the process by which a local agency can determine a geographical area as a Critical Environmental Area (CEA). The purpose for designating an area as a CEA is to cause the area to be classified as a Type I action under the New York State Environmental Quality Review Act (SEQRA) process that would require an increased level of review for environmental impacts. At a minimum the classification as a Type I Action under SEQRA will require any development applicant to prepare a Full Environmental Assessment Form, perhaps an Environmental Impact Statement and coordinated agency review for a proposed development.

According to Part 617, to be designated as a CEA, an area must have an exceptional or unique character covering one or more of the following:

- (i) a benefit or threat to human health;
- (ii) a natural setting (e.g. fish and wildlife habitat, forest and vegetation, open space and areas of important aesthetic or scenic quality);

- (iii) agricultural, social, cultural, historic, archeological, recreational or educational values; or
- (iv) an inherent ecological, geological or hydrological sensitivity to change that may be adversely affected by any change.

As part of a Wellhead Protection Plan all ZONE 1 - Well Contribution Zones shall be considered for designation as Critical Environmental Areas, thus requiring increased environmental scrutiny for actions taken in such areas under SEQRA.

Additional Aquifer Protection Actions

Other actions include:

- Determining future use levels of the aquifer based on projected growth in the Town to insure withdrawals do not overburden the aquifer or its recharge capabilities or otherwise threaten public water supplies. This may also require consideration of future municipal well locations.
- Coordinating land use decision-making in Cortlandville with the City of Cortland, perhaps through intermunicipal agreements, particularly in zones of direct influence of the City's Water Works along Route 281 that are under the land use jurisdiction of the Town.
- Incorporating drainage requirements within Town subdivision regulations and site plan review processes that ensures that roadway drainage and drainage from parking surfaces is directed outside the delineated boundaries of the ZONE 1 - Well Contribution Zone.
- Incorporating a requirement for periodic inspection (e.g. perhaps every two years) in coordination with the County Health Department per its Sanitary Codes and required upgrading of septic systems in ZONE 1 - Well Contribution Zone upon transfer of property or title.
- Developing a contingency plan to ensure appropriate response to potential contamination releases or other emergencies within or near wellhead protection Zones 1 and 2.

- Considering establishing additional critical environmental areas or acquisition of properties beyond ZONE 1 to include wetland complexes in the southwestern part of the Town west of Gracie Road and in the vicinity of the County's Linear Park, Lime Hollow Nature Center and the Tunison Fish Laboratory.
- Continuing to educate the public and property owners with community awareness and educational campaigns about the use of herbicides, pesticides and fertilizers in sensitive areas that potentially feed into wellhead protection zones via underground transmission and overland drainage processes.
- Investigating opportunities to work with surrounding communities and Cortland County to develop a watershed protection plan for the region that encompass all of the aquifer area, the Tioughnioga River, Dry Creek, Otter Creek and areas outside the boundaries of the Town's designated Aquifer Protection District. Grant monies are available for purposes of addressing watershed protection issues related to agricultural practices, residential, open space, recreational, and other land uses.

Stormwater Management

As indicated previously, the Town has had ongoing discussions with State and local agencies regarding its present Stormwater Management Ordinance. The intent here is to not duplicate the review of the Ordinance by others, but to summarize some of the more critical issues and actions needed to address those issues. The Cortland County Soil and Water Conservation District and the New York State Soil and Water Conservation Committee have provided recommendations to the Town of Cortlandville which will be considered for incorporation into the Town's Stormwater Ordinance and management practices. These actions include:

- Encouraging the use of stormwater ponds and wetlands as well as the use of filtering practices as described in the State's Stormwater Design Manual.

These practices shall be encouraged throughout the Aquifer Protection District for water quality treatment, but most importantly in known and delineated wellhead protection areas, in lieu of relying solely on infiltration practices.

- Requiring increased management and storage of meltwaters from snow. Management and storage shall be considered in all project design development and the treatment of meltwaters using practices such as those mentioned above rather than reliance on infiltration alone within the Aquifer Protection District and most importantly in known and delineated aquifer recharge and wellhead protection areas.
- Considering amending the Town's Stormwater Ordinance to account for potential cumulative impacts on flooding and stormwater management from redevelopment projects as well as new development. This can be accomplished through such means as the Town's site plan review process and requirements for an applicant to indicate no net change in a site's water budget for pre- and post-development conditions.
- Providing a means through some form of pre-application meeting whereby a developer can get preliminary guidance (from Town officials or the Town Engineer) on the preparation of stormwater management plans.
- Reviewing all site plans with stormwater components and potential stormwater issues by qualified professionals, including the Town's Engineer during the site plan review process. Fees may be assessed to the developer. The review must consider the appropriateness of a particular stormwater management technique in meeting water quality and quantity requirements using the State's Stormwater Design Manual as a guide for proper sizing and performance criteria.
- Establishing a means by which stormwater management facilities are inspected and monitored regularly by a qualified professional (for example, the Town Engineer) to determine its overall condition and effectiveness in meeting water quality and quantity standards. At a minimum the installation

of stormwater management facilities shall be monitored by a qualified professional.

- Reducing the amount of impervious surfaces (concrete, asphalt, roofs, etc.) allowed within aquifer recharge and wellhead protection areas according to established limitations on the amount of impervious surfaces per site development. These limitations shall be established as a percent required of green space, limit on impervious acreage or other such requirements and incorporated into the Town Zoning Ordinance and Wellhead Protection Plan.
- Considering efforts to reduce the amount of impervious surfaces within the Aquifer Protection District, recharge areas and wellhead protection zones wherever and whenever opportunities to do so are identified, particularly through site plan review of new developments and redevelopment projects.
- Stormwater management plans for large scale development and redevelopment projects as determined by the Town in Wellhead Protection ZONES 1 and 2 shall demonstrate that stormwater recharged to groundwater will not result in violating ambient groundwater quality standards at the property boundary for proposed developments. This may be accomplished by implementing a monitoring plan pre- and post-development that monitors influent and effluent from a site.
- Restricting development and redevelopment that would raise flood event levels from pre-development conditions.
- Restricting the use of infiltration devices and techniques in industrial or petroleum-related sites in aquifer recharge or wellhead protection zones.
- Protecting existing natural environments (wetlands, woodlands, streams, steep slopes) to the greatest extent possible, particularly in aquifer recharge and wellhead protection zones. Possible considerations include: limiting the amount of disturbance and removal of vegetation within 25 feet of the top of streambanks; and restricting development along stream corridors within 100 feet as measured from the average high water mark.

- Encouraging cluster development of large areas to preserve open space. New development shall be discouraged on slopes greater than 12 percent by employing cluster development techniques to avoid steep slopes and to reduce erosion and drainage problems.

CHAPTER 4

LAND USE and ZONING

Issues and Opportunities

A number of comments identifying issues and opportunities relating to land use in the study area were made throughout the public planning process that was used in developing this Plan. Those comments of a more general nature included:

- The northern and southern portions of the study area should remain mostly residential to maintain the rural residential character of these areas.
- The Town of Cortlandville needs to identify future municipal wellhead locations prior to more development and redevelopment in the study area.
- The Town of Cortlandville needs to set aside more land for open space, parks and recreation.
- The Town needs to encourage clustering, planned use development (PUD) and the use of Purchase and/or Transfer of Development Rights (PDR/TDR) to maintain open space and wisely use developable lands.

Additional comments identifying issues and opportunities were received that are more location specific. These issues and opportunities are presented below by planning study areas (see Figure 1-1). Comments included:

Planning Area 1

- There is a need to establish minimum lot sizes and other design and site development requirements such as modified setbacks, hidden parking, landscaping, height and size limits to preserve the rural residential character of this area as a gateway to the community. Maintain the area as residential or

for small office use that appears consistent with the mostly residential character of the area.

- Encourage the construction of sidewalks and planting strips along the Route 281/13 corridor. Ensure that planting strip areas between the street curb and sidewalk are green space and not paved with asphalt or other paving materials.
- Future land use in this part of the corridor should be mostly residential, including the possibility for more dense residential uses that may be comprised of apartments and/or planned use development (PUD).
- Land should be set aside as open space and included as part of new residential development projects.

Planning Area 2

- A 75,000 square foot sports complex plus parking area is proposed off of Fisher Avenue near the Cortland County Fairgrounds. This use needs to be consistent with land use goals in the area to protect local character, traffic flow and groundwater quality of the aquifer.
- Current land use in this area includes junkyards and petroleum storage areas along NYS Route 11. These uses pose water quality and aquifer protection concerns particularly due to their proximity to the Tioughnioga River.
- There are waterfront and floodplain issues and opportunities in this area. The area is susceptible to flooding. However, recreation and redevelopment opportunities in this area may stem from future development of the Tioughnioga River Trail through the eastern portion of this planning area.
- Commercial uses in this area are appropriate. Future uses may include mixed use development, possibly two story structures that include retail, office or other compatible uses. This area also benefits from its proximity to a hospital in Cortland.
- Improved river access should be a priority for this area. Green space areas near the river which are currently used as recreation fields should be maintained and enhanced.

- The presence of billboards and the overall neglected appearance of the area continues to be a problem that negatively influences community character.
- The area needs to be cleaned-up. Toughening “grandfathered” clauses in local land use regulations are needed since existing loopholes permit current undesirable and non-conforming land uses to remain, thereby, raising concerns over pollution of the aquifer and other general health related and aesthetic issues.

Planning Area 3

This area is primarily residential in character. Undeveloped areas offer future development potential, however, no specific comments were raised for this planning area.

Planning Area 4

- The extension of railroad use to existing lumber yards in this area poses some concern over aquifer protection and protection of the City of Cortland’s Water Works. Concern centers around increased pollution potential from the use of arsenic used in pressure treated lumber, and the subtle, but potentially cumulative effects of leakage or other chemical or petroleum discharges from trains and railroad cars in the area.
- Some development pressure exists west of Route 281 across from the SUNY Cortland campus. Future development of this site may come from its proximity to the SUNY Cortland campus. Some of this area is being considered as a possible location for a detention pond by the NYSDOT as part of the reconstruction of Route 281. However, low-lying portions of this site were recently filled that may preclude its use as a detention area. Presently, it is possible that a portion of a streambed on this site will be relocated to gain additional developable acreage along Route 281. The cumulative impact of

development in this area on downstream flooding potential needs to be assessed especially since this area is adjacent to Cortland's Water Works.

Planning Area 5

- There is a need to investigate possible zoning modifications to business uses within this area including possibly establishing additional zoning categories within established business districts.
- Development of trailer parks and manufactured homes in this area in the past have contributed to erosion and flooding problems resulting from relatively dense residential development.

Planning Area 6

- The granting of variances and enforcement of non-conforming land uses needs to be addressed in this area, particularly as it relates to certain uses such as the sale of automobiles on residential properties that may degrade the character of the area and pose concerns for aquifer protection.
- Possible opportunities in this area exist for future park development and open space uses. Clustering of new residential developments should be encouraged to create open space with possible trail linkages to parks and natural areas.
- Future development in this area must be sensitive to and address drainage and erosion problems created by developing on steep slopes.

Planning Area 7

- This area is seen as one of the gateways into the Town of Cortlandville from the south.
- The amount of impervious surfaces allowed by future development and redevelopment of the area should be limited to protect aquifer recharge.

- Light industrial and business uses that do not use chemical processes should be encouraged over other less desirable uses to better protect public water supplies.
- The Town's municipal well along Lime Hollow Road has a higher capacity than the Terrace Road well. Future development must consider associated water use needs and the impact of development in this area on public water supplies.
- Investigate possible zoning modifications to the current business district to make sure zoning is consistent with land use planning objectives and aquifer protection. Future land use in this area should undergo increased levels of scrutiny before development is allowed to occur to safeguard the aquifer and its recharge areas. Land use, land use activities, and operational activities may need to be more thoroughly regulated.
- Appropriate uses for the former Smith Corona site need to be identified since it is presently being subdivided.

Planning Area 8

- Development pressure along Route 13 is presently focused on the east side of the highway across from Monarch Industries.
- There are potential conflicts in land uses between existing and future commercial and residential development in this area. There may be opportunities to develop this area as a PUD with commercial or mixed commercial /residential use along the Route 13 corridor.
- Future residential use in this area could be placed on public water and sewer. The first 200-300' east of Route 13 could be developed as a mixed use buffer with possible residential use farther to the east, although steep topography is a limiting factor for development to the east.
- Residential development is occurring south of this planning area in the Town of Virgil and appears to be moving northward toward Cortlandville.

- Additional residential development of the PUD along Bennie Road is possible in the near future.

Conclusions

Land Use

The following land use and zoning actions considered comments received during the planning process and are presented below by planning area and illustrated in Figure 4-2 Future Land Use Map of the Study Area. Many of the actions presented below are based on planning principles that may be applicable and appropriate beyond the Route 281/13 study area for use elsewhere within the Town of Cortlandville.

Planning Area 1

Planning Area 1 offers numerous future development opportunities due to its proximity and direct access to Exit 12 (Homer exit) of I-81 and the availability of undeveloped and vacant parcels in the area. Approximately 400 acres of vacant land exist within this planning area. Approximately 175 acres of agricultural land use exist in this area and may be available for future development. Little if any industrial or commercial use presently exists within this planning area.

Future land use in this portion of Cortlandville shall remain consistent with the mostly rural and residential character that exists in this area. This is particularly significant because this area is considered a gateway location into the Town.

New non-residential development in this area, particularly near the intersection of Route 281 with the I-81 Exit 12 access road and off ramps shall be designed and constructed to have a residential style or character. This may include building design features such as peaked roofs, nicely landscaped grounds and sidewalks, buried utilities, curbed and paved

driveways and access roads, well-designed and landscaped drainage and stormwater management facilities, and parking areas to the sides or preferably to the rear of buildings (see Chapter 6). The emphasis of new development in this area shall remain sensitive to nearby residences and small scale rural uses.

Presently, this planning area is zoned primarily for residential uses. Future development shall encourage these uses or compatible uses such as professional offices or limited small-scale businesses, particularly along northern portions of the Route 281 corridor north of the City of Cortland limits. Commercial uses, such as fast food restaurants, shall be discouraged from northern parts of the corridor. Industrial uses in this area may be out of scale and character with residential uses and therefore, shall also not be encouraged.

This planning area is suitable for some type of residential or mixed-use type of development, including planned use development (PUD). Mixed use shall come in the form of business/office uses rather than commercial uses that are more likely to create undesirable increases in traffic, noise and parking.

Residential use, including apartments or other higher density, but compatible uses, may be most appropriate near the intersection of Route 281 and eastward along the south side of the I-81 Exit 12 access road. Areas close to the interchange may be more suited to non-housing/non-residential types of development simply because of the generation of traffic and other factors associated with being near Interstate 81.

The density of development that occurs in this planning area should decrease as distance from the Exit 12 interchange increases as a transition to existing residential neighborhoods. In other words, the more dense types of development should occur near the interchange area where potential traffic generation may be greatest. This will eliminate some generation of higher traffic volumes along Route 281 itself.

Regardless of the type of use, new development shall be encouraged to be designed and developed with a sensitivity to local residents as well as the rural and desirable open space (golf course) characteristics of this portion of the study area. Clustered development and planned unit development that preserves some of the open space characteristics of the area shall be encouraged over more conventional forms of development.

Planning Area 2

Planning Area 2 is comprised of a mix of land uses including commercial, residential, vacant and undeveloped/underutilized lands. Approximately 46 acres of commercial use exists within this planning area, while only 14 acres are considered agricultural. There is no industrially classified land within this planning area. Approximately 100 acres are considered to be vacant.

The area has an inconsistent and often neglected appearance. Due to its location along a major roadway (NYS Route 11) this area should receive increased attention for development and redevelopment opportunities and emphasis on a general clean-up of commercial and non-conforming uses. Continuation of non-conforming uses shall be discouraged.

This planning area may offer some mixed-use development opportunities, perhaps a mix of compatible office, commercial/retail, entertainment and residential uses. Given the proximity of this area to the Tioughnioga River and a section of the future Tioughnioga River Trail now being planned, this area is potentially attractive to types of redevelopment that are associated with river and trail use as well as other recreational forms of entertainment. There may be future opportunities to consolidate many existing small parcels into larger parcels that offer increased redevelopment possibilities.

Planning Area 3

Planning Area 3 is primarily comprised of single-family residential neighborhoods, agricultural land and vacant and undeveloped parcels. Over 650 acres of land are classified as agricultural in this planning area with another 290 acres of vacant land. Less than 30 acres are classified as commercial and these exist in a few scattered parcels. No industrial land is present.

Residential development, agricultural use and open space uses shall be encouraged over other forms of development to protect and stabilize residential neighborhoods and the natural environment in this area. Commercial and industrial uses and other potential large generators of traffic shall be discouraged from being developed near existing or future areas that are more conducive to residential use. New residential development shall be clustered to preserve open space within this planning area to benefit aquifer protection and protect against drainage and erosion problems.

Planning Area 4

Planning Area 4 is one of the two primary commercial and business areas within the study area, the other being Planning Area 5. This area is comprised of a mix of land uses including commercial, industrial, residential, community services and the City of Cortland Water Works. Approximately 212 acres are classified as commercial land use within this planning area, compared to approximately 57 acres of industrial use and 14 acres of agricultural use. Approximately 100 acres of land are classified as vacant.

Of the 100 acres of vacant land in this planning area only 6% or about 6 acres are zoned for industrial use. By comparison 91 acres of vacant land and 14 acres of agricultural land is zoned for business use. At full build-out the industrial acreage represents approximately 130,000 square feet of potential industrial space based upon 50% lot coverage. In comparison at full build-out the commercial (business zoned) acreage

represents approximately 2.3 million square feet of potential commercial/business space at 50% lot coverage or 1.1 million square feet of potential commercial/business space at 25% lot coverage.

There is future development potential in this area particularly west of Route 281 where considerable amounts of undeveloped and vacant parcels exist. Additionally, several State Empire Zones are located west of Route 281 (see Figure 4-1).

This area is zoned for Residential (R-1), Industrial and Business uses. Future development with any of the permitted uses under present zoning must consider potential impacts of development upon the aquifer, and in particular the effects of development and redevelopment in this area upon the City's Water Works and Cortland's municipal well recharge areas. As the build-out potential described above shows, the implications of full build-out could have considerable future effects on water use and the generation of traffic along the Route 281/13 corridor.

Development and redevelopment activities in this area must receive increased scrutiny on the part of the Town and in coordination with the City (perhaps through intermunicipal agreements) with regards to site plan review. Increased attention must be given to projects that may pose potential aquifer protection concerns either because of the type of land use proposed, land use activities involved and/or increases in impervious surfaces or water use.

Redevelopment that occurs in stages may not at first appear to cause concern over aquifer protection, stormwater runoff, traffic, etc.. However, the cumulative effects of redevelopment may be far more serious than new development projects and this needs to be addressed during Site Plan Review or the State Environmental Quality Review (SEQR) processes. Emphasis on stormwater management techniques and controlling the quality and quantity of runoff from impervious surfaces including parking areas is particularly important in this planning area due to the City's Water Works and existing flooding potential along the drainageways of Dry Creek and Otter Creek.

Planning Area 5

Planning Area 5 is a complex mix of uses including commercial, residential, industrial and community services. This area, along with Planning Area 4, functions as a primary location of business and commercial development within the study area and along the Route 281/13 corridors. Approximately 168 acres of land are classified as commercial in this planning area while only a little more than 3 acres are classified as industrial. There are no agricultural uses. Approximately 53 acres are vacant or undeveloped. Approximately 60%, or 32 acres of the vacant land, is zoned for business use. No acreage is zoned for industrial use. At full build-out these 32 acres of land represent approximately 700,000 square feet of potential commercial/business space at 50% lot coverage or 350,000 square feet at 25% lot coverage.

The above uses are not inconsistent with aquifer protection as long as new development and redevelopment in the planning area considers and adequately addresses the cumulative effects of increased amounts of impervious surfaces and other concerns already expressed relative to aquifer protection and stormwater management. However, as the build-out potential shows new development or redevelopment of vacant acreage as presently zoned could create additional concerns for the area perhaps in the form of additional traffic generation.

Residential uses exist in small clusters and may undergo increasing development pressure from non-residential types of use. The Town must decide (preferably through community input) to either allow these residential areas to continue and if so, then take appropriate measures to stabilize these small neighborhoods. Efforts to stabilize these neighborhoods may include preventing zoning change requests to non-residential uses, establishing buffer areas between residential and non-residential uses, and promoting new residential infill development as well as upgrading general care and maintenance of the area.

Other future development opportunities exist within this planning area. One possibility is to continue establishing a civic area for municipal services in the vicinity of Terrace Road and Route 13. The existence of present municipal services could be expanded in this general area in the future to perhaps include such civic uses as libraries, health care facilities, community centers and other compatible institutional/community service types of use. These types of public civic uses are best consolidated in one centrally located and accessible area of the Town. The design and development of such uses shall be consistent with the guidelines presented in Chapter 6 or those design and development standards then established by the Town under its local ordinances.

Property acquisition by the Town shall be considered if desirable properties in this area become available for civic uses especially since many forms of civic use are not detrimental or pose concerns for aquifer protection. There may however, be additional infrastructure needs if civic uses are promoted such as the need for municipal parking areas.

Planning Area 6

This portion of the Town, directly south of the City of Cortland, is primarily residential and open space. More than 330 acres of land is considered vacant in this area although its development potential is limited by local topography. Approximately 90 acres are considered agricultural. There is no industrial use in this area and approximately 11 acres of commercial use.

New parkland is being developed south of Starr Road Extension and Saunders Road. Residential and recreational/open space uses shall continue to be encouraged in this area. Commercial and industrial types of land use shall not be encouraged and may result in undesirable issues related to traffic and other potential incompatibilities with residential and recreational use.

The use of residential properties for the sale of vehicles and other business-related uses shall be discouraged. The granting of zoning variances shall be considered carefully with regard to planning objectives for this area. For example, vehicle sales may be incompatible with desirable residential and open space/recreational uses. This is true not only in this planning area, but in other study area locations where compatibility with aquifer and groundwater protection and enhancing aesthetic and community character are concerns.

Development of steep slopes (exceeding 12 percent) shall be discouraged in this planning area due to potential problems with drainage and erosion caused by stormwater runoff. New residential development shall be encouraged to consider cluster types of development to maintain open space opportunities, particularly where steep slopes are present. Opportunities may also exist in this area to eventually develop a network of trails linking other nearby open space areas and parklands. Under a clustered type of development, for example, areas of open space, woodlands, ponds, etc., could be linked to other area amenities (parks) via an eventual continuous network of pedestrian pathways or trails.

Planning Area 7

Planning Area 7 provides opportunities for sensible economic development and redevelopment consistent with aquifer protection and desirable land uses. Approximately 97 acres of land classified as industrial presently exist within this planning area west of Route 13. Approximately 29 acres are commercial. Agricultural land use accounts for approximately 231 acres. An additional 153 acres are considered as vacant.

Of the 153 acres of vacant land in this area approximately 105 acres (69%) of vacant land and 72 acres (31%) of agricultural land is presently zoned for industrial use. Thus, a total of 177 acres of vacant and agricultural land is zoned for industrial use. At full build-out this represents approximately 3.8 million square feet of potential industrial space at 50%

lot coverage. As is the case in other areas along the Route 281/13 corridor, future development of this scale may have significant implications associated with water use, the creation of impervious surfaces, and the generation of traffic in this area.

By comparison only 3 acres of vacant land are zoned for business use in this area. At full build-out this represents approximately 65,000 square feet of potential business space at 50% lot coverage.

Redevelopment opportunities exist in this area. This planning area includes the former Smith Corona site, portions of which are included in a NY State Empire Zone (see Figure 4-1). It is important that future redevelopment of this area is encouraged to create desirable land uses that are consistent with aquifer protection and protection of aquifer recharge areas, particularly as the Smith Corona site is subdivided and redeveloped. Because this area is available and part of an Empire Zone redevelopment shall be directed to this location first rather than encouraging new development in present agricultural or vacant lands.

In addition to aquifer protection the southern portions of this planning area are seen as a gateway into the Town from locations south and west of Cortlandville. Therefore, future development of this area shall also be consistent with desirable land use and design objectives that enhance the visual appearance of this part of the Route 13 corridor as compared to the more highly developed areas to the north (see Chapter 6).

Areas within and near aquifer recharge and wellhead areas need to attract "clean" industries and businesses that are non-chemical based and that do not pose potential contamination concerns over aquifer protection (see Chapter 3). In addition, the types of development and redevelopment that occur need to limit the amount of impervious surfaces that are created in order to enhance and protect wellhead and aquifer recharge areas. The creation of desirable land uses and limits on the creation of impervious surfaces, setback requirements and other related issues, such as stormwater management

need to be addressed administratively through the Town's Zoning Ordinance, Site Plan Review, and Wellhead Protection Plan (see Chapter 3).

Undeveloped lands and parcels that have redevelopment opportunities within this planning area are prime candidates for clustered development or development under PUD's for industrial, commercial, and/or mixed uses. In general, the Town shall consider encouraging mixed use development of these areas as part of larger industrial and/or business/office parks.

Commercial development of smaller individual parcels, perhaps subdivided from larger parcels, along Route 13 shall be discouraged because these uses will create the need for driveways and new curb cuts along the highway. If commercial use develops along Route 13 within this planning area it shall utilize shared driveways and cross access with adjoining parcels perhaps as part of larger developments that are developed around internal service roads to prevent new multiple access points directly on to Route 13.

Master plans for prime development sites within this planning area shall be developed to conceptually illustrate possible layout of buildings, roads, parking areas, landscaping and open space areas as well as other infrastructure needs that are consistent with aquifer protection and local land use goals. Master plans would help in local decision-making and the marketing of these areas especially when development opportunities arise.

Planning Area 8

This planning area, not unlike Planning Area 7, also affords development opportunities. This area, however, may be somewhat more constrained to development due to increasingly steep slopes to the east and south. Presently, approximately 400 acres of land are classified as agricultural. Another 366 acres are vacant. Approximately 81 acres are classified as industrial and 3 acres are commercial. None of the land in this area east of

Route 13 is presently zoned for industrial use and only a minimal amount of land (less than 3 acres) is zoned for business.

The most developable lands in this planning area are located alongside Route 13. Most of this area is presently zoned Agricultural that permits agricultural and residential forms of development.

This planning area may be a good candidate for PUD and clustered forms of development. As is the case with Planning Areas 1 and 7 Planning Area 8 is seen as a gateway area into the Town from the south and west. Future development in this area shall consider the effect of new development on the overall appearance of this part of the Route 13 corridor.

As is the case with Planning Area 7 growth in development of this part of the Route 13 will include increased traffic and the possibility that at some point in the future NYS Route 13 may need to be widened from 2 lanes to 4 or more lanes. As a result, the Town shall consider increased setback requirements for all new development along both the east and west sides of this section of Route 13. This would allow for a potential increase in highway right-of-way width to approximately 120 feet or more to accommodate four 12 foot wide travel lanes, one 12 foot wide turn lane, 10 foot shoulders and 20 feet along each side of the road beyond the edge of pavement.

An opportunity may exist in this area for mixed-use development, possibly including some form of compatible commercial and residential use along the Route 13 corridor. However, as is the case in Planning Area 7 particularly with large-scale developments, the use of cross access of adjoining parcels and internal service roads shall be encouraged. These access management techniques will limit multiple new curb cuts and driveways from being created along this stretch of the highway, thereby reducing potential traffic flow problems in the future. Limiting access directly on to Route 13 by using service roads or shared access points will also enhance the appearance of the area and afford increased opportunities for open space and landscaping.

Overland runoff from this planning area may potentially affect aquifer recharge down slope to the north and west. Therefore, future land use proposals must address this issue during Site Plan Review for both large-scale residential and non-residential development.

Zoning

An issue identified early in the planning process was to investigate the need for dividing the Town's Business Zoning District into two or more separately designated districts such as B-1 and B-2. Part of the reasoning for separate designations would be to remove some uses from the business district because the land in the district was seen as too valuable to allow projects that do not adequately meet the objectives of business district.

The basic difference in the intent of dividing the existing business district into two or more districts focuses on the variety and scale of uses allowed. While some uses may be included in separate business districts lot coverage, traffic generation, parking, employment, building size and other factors will be considered in distinguishing the appropriateness of use between districts.

For example, the B-1 Business District would permit single- and two-family dwellings. Permitted uses subject to site plan review approval such as:

- Multiple dwellings; up to four dwelling units in a single structure
- Professional offices
- Business offices

Religious institutions; educational institutions; recreational and social activities; and health, medical and care services would be subject to conditional permits. Small-scale neighborhood uses such as limited retail may also be appropriate, but subject to special use or conditional permit. These uses may be limited to serving the daily needs of local residents and reachable within walking distance of residential neighborhoods. This district would serve as a transition area designed to accommodate a mixture of residential uses and relatively low-intensity office and professional or service uses. This district may

be applied to those areas that no longer are viable as single-family residential areas but remain viable for multiple family use or limited office or business developments.

The B-2 Business District for example, will by comparison allow retail sales and business enterprises on a somewhat larger, more dense scale and variety than the B-1 district.

Permitted uses would include:

- Indoor retail sales (less than 15,000 SF GFA)
- Financial businesses (banks, savings and loans, credit bureaus)
- Professional
- Business offices
- Indoor restaurants and taverns
- Personal services
- Hotels, motels, tourist homes and rooming houses;
- Veterinary clinics and pet shops
- Indoor theaters
- Indoor commercial recreation facilities
- Auto and vehicular sales; used vehicles permitted only in combination with new vehicle sales.

Uses subject to conditional permit under the B-2 District would include: residential (multiple family with over four dwelling units); religious institutions; businesses such as commercial garages, auto repair shops, gasoline service stations, car washes, outdoor and drive-in restaurants, outdoor sales of boats, house trailers, recreational vehicles, horticultural products and supplies, used car sales, and retail sales over 15,000 square feet, shopping centers and malls; educational institutions; some recreational and social activities such as miniature golf; and transportation and utility uses such as utility substations, bus terminals and communication towers and antennae.

A third category of business district designated as a B-3 Planned Commercial District is also being considered. This district would include large-scale retail in a large planned

environment such as shopping centers, malls, and other “big box” types of development. This type of district is better able to manage the design and development of uses consistent with aquifer protection and other land use planning goals and objectives of this Plan.

With respect to the compatibility of land use and aquifer protection, the concept of a B-1 type of district that is focused on residential and limited office use is most compatible with aquifer protection of the many forms of business uses that may be possible. With respect to a B-2 district certain land uses as described above remain a concern due to potential negative impacts on the aquifer. These uses include commercial garages, automotive repair shops, gasoline service stations, and used car sales, all of which require the use and disposal of petroleum and chemical-based products. However, the operation of any permitted businesses must fall within the stated regulations of the Town’s Aquifer Protection District and Wellhead Protection Plan, once established, and all potential environmental hazards that may stem from waste products must be controlled if not eliminated.

The Town is also considering modifying its present Industrial zoning classification into two categories, such as I-1 and I-2. Industrial I-1 uses would include so-called “clean” types of industry, light industrial use, warehouse and distribution uses, assembly, office park and flex space uses. These uses would be encouraged to locate in a large planned environment that requires appropriate building setbacks from State highways, internal traffic and pedestrian circulation patterns and appropriate amounts of open space and landscaping to enhance stormwater management, aquifer protection and aesthetic character. I-2 zoning classifications would be general industry and manufacturing types of uses such as existing lumber operations within the study area.

Careful consideration will be given to the future location of all business and industrial uses within the traditional business and industrial areas along the Route 281/13 corridor. Some uses may not be desirable in other areas of the corridor where they do not presently

occur, particularly because of potential negative impacts on groundwater quality. These uses, nevertheless, must fully comply with aquifer protection and stormwater management standards as discussed in this Plan.

The Town will consider the location of business uses and other land uses for their potential implications on other aspects of the Route 281/13 corridor and study area beyond aquifer protection issues. These other implications include traffic flow along major roadways and aesthetic character. Therefore, the location of business and industrial-oriented zoning districts must take into account the scale of proposed developments and the cumulative effects on aquifer protection, stormwater management, traffic and the appearance of the corridor. Opportunities need to be identified to allow such uses within planned use developments (PUD) and/or the utilization of other land use planning techniques that manage lot coverage and access on to the highway and that have the overall benefit of improving the function and appearance of the area (see Chapters 5 and 6).

The dimensional controls and bulk requirements of the Town's Zoning Ordinance need to consider the planning objectives for dividing the business and industrial districts into two or more classifications. The dimensional controls need to be modified to reflect the acceptable scale of businesses and uses allowed. This is important to achieve desired objectives in limiting the amount of impervious surfaces created by new development and redevelopment, stormwater management objectives, traffic and access management objectives, as well as design and aesthetic objectives.

Business and industrial districts can be distinguished more by controlling bulk regulations than by types of use. For example, there are many examples of small retail sales businesses that are compatible with either business or professional offices that could be developed as part of a mixed-use development or planned unit developments. In this way the community encourages small businesses, but is better able to manage site development in order to achieve the planning goals and objectives of this Plan.

CHAPTER 5

TRANSPORTATION

NYS Route 281/13 is the primary transportation corridor through Cortlandville between Interstate 81 and Ithaca. Access to areas south and west of Cortlandville is via Exit 11 of I-81 along NYS Route 13 through the City of Cortland to the Route 281/13 junction. Access to the Route 281/13 corridor is also available via Exit 12 of I-81 at Homer.

The Route 281 portion of the Route 281/13 highway corridor through Cortlandville is tentatively scheduled for reconstruction by the New York State Department of Transportation (NYSDOT) in 2005-2006. Design approval of the project is expected in late 2002. Reconstruction will include the addition of new travel lanes, turning lanes and related drainage improvements. These improvements will require increased public right-of-way and the acquisition of a number of properties by the NYSDOT. The number of acquisitions will vary by the type of design alternative chosen, but preliminary estimates range between 6 and 14 properties along the corridor. Portions of the Route 13 near its junction with Route 281 were reconstructed by the DOT during the past three years.

A variety of transportation related issues along the Route 281/13 corridor were identified during the planning process used in developing this Plan. The following issues and opportunities addressing vehicular traffic movement, access management, and pedestrian circulation were considered in developing this Plan, particularly relating to the planned reconstruction of Route 281.

Issues and Opportunities

A number of general comments relating to traffic and transportation along the Route 281/13 corridor through the study area were identified during a public meeting held in

December 2001. Many issues were identified previously through public hearings held by the NYSDOT during its preliminary design phase and public hearing process for the Route 281 reconstruction project. Some of these issues are reiterated below.

Issues of a more general nature that were raised during the public meeting/hearing process included the following:

- The need to enable trucks to bypass Route 281 in Cortlandville. The issue of truck traffic on Route 281 was raised as it relates to potential impacts along the corridor, particularly threatening the aquifer due to the possibility of a spill from vehicles that transport hazardous/toxic materials on the highway.
- Some individuals spoke in favor of building sidewalks along Route 281 as part of its reconstruction, while others spoke against the idea. Opponents to sidewalks along Route 281 cited issues of increased liability and maintenance, while those in support of the idea cited increased pedestrian safety and the ability to walk to areas rather than drive which could alleviate some traffic congestion.
- There are ongoing discussions on the need to limit the use of salt and de-icing materials along the highway given concerns over the potential effect of these materials on groundwater quality and the aquifer.
- There is concern over increased development along the highway and the potential impacts of increased local and through traffic on Route 281 by non-residents of the area.

A variety of more specific issues and opportunities related to traffic and transportation within the study area were also identified during the planning process. Because many of these issues and opportunities identify specific locations along the corridor each is addressed separately by planning area.

Planning Area 1

- A comment was made for a need to line up Blue Creek Road at a right angle to Route 281 directly across from Fisher Avenue. This is presently being considered by the NYSDOT as part of the reconstruction of Route 281. The new intersection may also be signalized.
- A comment was made for the need to coordinate the design of the planned reconstructed portions of Route 281 to include development of stormwater detention/drainage improvements within the study area. The opportunity may exist to coordinate the construction of drainage pond(s) in this area with new development(s) planned in the area. The DOT is presently considering developing 4 stormwater detention pond areas as part of the reconstruction of Route 281. These would include a detention pond east of Route 281 near Fisher Avenue, a lined detention pond west of Route 281 near Gutches Lumber, a lined detention pond west of Route 281 on the former Gunzenhauser property, and a detention pond east of Route 281 behind Tops Plaza. Stormwater design may include open ditches from Fisher Avenue north to the I-81 access road and closed drainage and catch basins from Fisher Avenue south to Route 13.

Planning Area 2

- A comment was made for a need to fully address potential traffic impacts of a proposed 75,000 square foot sports complex and parking area being considered for construction in the vicinity of the Cortland County Fairgrounds south of Fisher Avenue.

Planning Area 3

- Concern was expressed that McLean Road to Fairview Drive is used extensively as a shortcut to Route 222 and Route 281 causing disruption and traffic-related problems for residential neighborhoods in the area.

Planning Area 4

- A comment was made that the present configuration of the Luker Road intersection with Route 281 is difficult to use when heading eastbound to enter Route 281. Reconstruction plans should consider bringing the road in at a perpendicular angle to Route 281 and installing a traffic signal to solve the safety problem. This is presently being considered by the NYSDOT as part of the reconstruction project of Route 281.
- Several comments were made noting that turning left from businesses and roads on the west side of Route 281 to go northbound is a problem. Examples cited include turning left (northbound) out of the Eckerd's Drug Store at Route 222 and from the Commons area. A suggestion was also made to investigate whether constructing a small road at Madison Street would help alleviate the problem.
- A comment was made to investigate the need for a new traffic signal or some other traffic control measures to alleviate traffic flow and turning movement problems in the vicinity of the SUNY Cortland Stadium parking area, particularly during special events.

Planning Area 5

- A suggestion was made to investigate the implications and opportunities regarding future use of rail transportation and existing rail lines in the area. This includes the possible extension of spur lines, for example, from Pall Trinity to Luker Road.

- There was a suggestion to study possible traffic flow and turning movement problems and improvements in the vicinity of Starr Road and Tompkins Street. In fact, a traffic study of this area by the Town has been undertaken.
- A suggestion was made to investigate the need for an additional turning lane at the junction of Route 281 and Route 13, particularly for southbound traffic on Route 281 turning left or northbound on to Route 13.
- A comment was made that turning left (northbound) out of the McDonald's on to Route 13 is difficult and potentially unsafe.

Planning Area 6

- There was a statement that the intersection of Route 215 (Owego Street) and Starr Road and the intersection of Saunders Road and Page Green Road have traditionally been dangerous intersections due to sight line problems. It was also noted that there will be increased traffic and safety concerns in this area due to park development planned for this area in the near future. Stop signs have been used at these intersections, but this area needs further investigation.

Planning Areas 7 and 8

- A comment was made that service roads should be developed in the vicinity of the Smith Corona site and to the rear of other industries that empty traffic out on to Lime Hollow Road.
- A comment was made that recent development in the study area, particularly in the vicinity of Bennie Road, is contributing to increased traffic along the corridor. Further development in this area will add to existing traffic levels.

Many of the issues that were identified along the Route 281/13 corridor are presently being considered and addressed by the NYSDOT as part of the reconstruction of Route

281. The following is a brief summary of present design alternatives being considered by the DOT as presented in a public hearing on February 28, 2002.

Present design alternatives being considered would include two travel lanes in each direction with a raised center median along Route 13 from Lime Hollow Road to the Route 281 intersection. North from this intersection a continuous five lane (two travel lanes in each direction and continuous center turning lane) would be provided to McLean Road with additional turn lanes at the Route 281/McLean Road intersection. Between McLean Road and Luker Road two travel lanes in each direction would be provided with widening of the Route 222 intersection. Two travel lanes in each direction and a center turn lane would be provided from Route 222 north to West Main Street. From West Main Street north to the I-81 access road, one travel lane would be provided in each direction with a continuous center turn lane.

Reconstruction would also address stormwater drainage by providing for development of four detention pond areas and a closed drainage system with catch basins from Route 13 north to Fisher Avenue. An open drainage system with ditches for the most part would be provided from Fisher Avenue to the I-81 access road.

Curbing would be provided from Route 13 to Fisher Avenue along both sides of Route 281. Paved shoulders would be provided north of Fisher Avenue to the I-81 access road. Five foot sidewalks would be provided along the west side of Route 13 between Lime Hollow Road and the Route 281 intersection and then continue northward to McLean Road. The sidewalk would then be provided on the east side of Route 281 northward to Route 222. Sidewalks would then be provided on both sides of Route 281 between Route 222 and Commons Avenue. A sidewalk would then continue only on the east side of Route 281 to Wheeler Avenue where it would terminate. The project would also replace the four lane bridge over Dry Creek with a wider bridge and raised sidewalks on each side of the structure.

Conclusions

Reconstruction of Route 281

There is an immediate need for the Town of Cortlandville to continue to coordinate with the NYSDOT in the design and reconstruction of Route 281 as a means to achieve several planning objectives discussed in this Plan. These objectives include:

- Improved stormwater drainage and detention pond areas. Improved drainage and stormwater management could have very positive effects on the function and appearance of the corridor. Improvements will benefit aquifer protection, reduce erosion and siltation problems, and improve aesthetic character. Detention ponds need to be designed and constructed as local amenities and appear as natural as possible. These detention areas must be well landscaped with native plant species and maintained on a regular basis to provide proper stormwater function and an attractive appearance. These areas must be kept free of debris and should not be fenced, if at all possible, unless there are substantial safety concerns.
- A local objective is to improve pedestrian safety along the Route 281/13 corridor. To achieve this objective a continuous network of sidewalks along the corridor will need to be provided. The reconstruction of Route 281 provides an opportunity to provide sidewalks along the entire length of Route 281 within the Town of Cortlandville beyond the DOT's present plans to terminate the sidewalk at Wheeler Avenue. The area near the Route 281/I-81 access road may develop in the future for office or other similar land uses. With this possibility in mind, the presence of sidewalks in this area would enhance pedestrian safety and enable pedestrian activity to occur safely between Homer to the north (including Homer Central School) and points south along Route 281 in Cortlandville including residential neighborhoods, commercial shopping areas and restaurants.
- The acquisition of properties by the NYSDOT needs to consider local planning objectives including what remains of these properties once acquired. The acquisition of new rights-of-way need to consider future land use opportunities consistent with this Plan and the potential to induce changes from existing residential uses to non-

residential uses. Changes in land use due to right-of-way acquisition is a possibility as some existing uses may have reduced front yards and become less viable as residential or business uses. These induced changes could be either positive or negative from an economic development perspective, but nevertheless may create potential implications for traffic, parking, consolidation of parcels, access management, and community character and appearance along the corridor.

Future Land Use

Coordination between the Town and NYSDOT is essential with regards to the acquisition and maintenance of public rights-of-way required for the reconstruction of Route 281. This coordination is needed to determine future development and land use opportunities for remaining portions of parcels that may not be acquired by the State and the potential impact on adjoining parcels. Where remaining parcels may not be large enough for redevelopment or sufficient in size to maintain their current use, unless perhaps through the consolidation of small parcels into larger, more developable parcels, these otherwise undevelopable parcels could be useful as open space areas. These open space areas could be developed and maintained through some form of agreement between the Town and the State.

As newly created open space areas along the corridor develop there would be increased opportunities to allow for drainage and landscaping improvements to further protect the Otter/Dry Creek aquifer and groundwater quality as well as the rural character of the area. To develop such parcels as open space with drainage improvements would create added benefits by being better able to contain stormwater and contaminated runoff in the event of some type of spill along the highway.

If small remaining parcels are not fully acquired by the NYSDOT, and if consolidation of smaller parcels into larger, more developable parcels is a possibility, then their consolidation must be consistent with local land use goals. For example, in Planning Area

1, to maintain the rural residential character of this area new development shall be consistent with local character. Consolidated parcels in this area are best adapted to office or professional uses rather than commercial uses. Commercial uses may be greater traffic generators and therefore, not consistent with local objectives to keep this area more residential in character (see Chapters 4 and 6 for more discussion of this planning area).

Access Management

Limiting the degree of direct ingress and egress onto the Route 281/13 corridor from new development and redevelopment is an important concern that will be carefully and thoroughly considered administratively by the Town of Cortlandville and the New York State Department of Transportation. This requires increased coordination between the Town and NYSDOT to make sure that the issuance of permits is consistent with both State and local objectives. The appropriate means to deal with these concerns is during the site plan review process and through local regulatory requirements, for example, under Town subdivision regulations. The Town's site plan review process will consider the cumulative impacts of increased traffic from proposed development and redevelopment projects affecting the Route 281/13 corridor and adjoining roadways (see Chapter 4).

The issue of cross access along adjacent parcels must also be resolved at the Town level in order to limit the amount of new curb cuts and driveways allowed to be developed along Routes 281 and 13. The use of shared driveways and service roads, particularly in large-scale residential and non-residential developments, will reduce the amount of curb cuts and new driveway access needed on to the Route 281/13 corridor. This is especially important in those areas of the Route 13 corridor south of Route 281 where considerable development and redevelopment opportunities exist.

Establishing access management standards in concert with recommended design standards (see Chapter 6) will limit direct access on to Route 281 and 13 as development

and redevelopment projects occur. Standards, unlike guidelines, will be regulatory and enforced through local zoning ordinances and site plan review. Standards will not only result in a safer and more efficient flow of traffic, but there will be additional benefits such as an overall more consistent and improved appearance along the corridor, particularly when well-designed and landscaped service roads are integrated into new development. Access management standards must require the use of service roads and shared access points in large-scale developments wherever possible. This is most important in southern parts of the study area (Planning Areas 7 and 8) where substantial development and redevelopment potential exists. Standards must also require maximum distances for ingress and egress locations from nearby intersections to increase safety and sight distances of motorists and pedestrians.

Access management standards along major highways (Routes 281 and 13) in the study area must consider the following to enhance safety and traffic flow:

- Establishing a policy to promote the interconnection of adjacent developments and circulation patterns along the Route 281/13 corridor.
- Limiting the amount of driveways to one per parcel for most lots. For lots with large frontages or lots requiring separate right and left turn entrances, more than one driveway may be permitted in accordance with driveway spacing standards.
- Establishing larger minimum lot sizes for corner lots to provide greater distances between driveways and the intersections and more space for vehicles to turn or merge safely across traffic lanes.
- Requiring driveways to be placed on side roads where possible to eliminate the need for curb cuts on State highways.
- Connecting parking lots and consolidating driveways between neighboring properties by allowing cross access for vehicles to circulate internally without having to re-enter the Route 281/13 corridor.
- Encouraging or requiring shared residential access through neighborhood streets. Subdivisions shall be designed so that internal access roads provide

direct access to major highways. Stub roads shall be part of site development to allow for possible future connections between subdivisions.

- Increasing minimum lot frontages on major highways relative to lot frontages on local roadways. Narrow lots promote closely spaced driveways and shall be discouraged. Lots should be deeper and wider along major roadways to allow greater flexibility in site design and increase the separation distances between driveways and access points. Minimum driveway spacing standards shall be consistent with State and local goals.
- Promoting the interconnection of neighborhood street patterns and discouraging the use of cul-de-sacs, so-called gated communities, and dead end streets that force traffic back on to major roadways (see Chapter 6). Interconnected streets provide improved emergency access, alternative routes in the event of emergencies, provide safer and more efficient school bus routes and reduce overall demand on major highways.
- Treating development/redevelopment sites under one ownership or consolidated parcels as one site to encourage development of an internal circulation plan to control access points to outparcels located along the Route 281/13 corridor and to reduce the need for separate ingress and egress to each outparcel.
- Encouraging increased communication of local access management goals with the public and increased coordination with the NYSDOT for review of access permits along Routes 281 and 13. An informal concept review process with developers would enable the Town to inform applicants about required local and State approvals.

Additional Transportation Related Actions

- There is a need to coordinate local efforts by the Town, County and the State Department of Transportation to limit the use of salt and other de-icing materials along major highways, roadways and public parking areas in aquifer recharge and wellhead areas. A portion of Route 281 is already considered a “salt free” zone for aquifer protection. This effort must be expanded to include additional portions of the Route 281/13 corridor and other sensitive aquifer recharge areas. These recharge areas include the Town of Cortlandville’s municipal well locations along Lime Hollow Road and Terrace Road and the City of Cortland’s Water Works along Route 281. Limiting the use of these materials will be required under a Town Wellhead Protection Plan.
- There is a need to continue to coordinate with the NYSDOT to install sidewalks along additional portions of Route 281 as part of the State’s planned reconstruction of the highway. Sidewalks in residential areas shall be at least five feet wide and constructed of concrete with a minimum three to eight foot wide planting strip or snow storage area (grass, not paved) between the edge of pavement and the inside (roadside) edge of the sidewalk wherever possible. Utilities shall be buried within the planting strip, if possible, to reduce future disruption and replacement to the sidewalks when repairs are needed.
- There is a need to continue to coordinate with the NYSDOT to develop comprehensive drainage and stormwater management plans along the Route 281 corridor as part of its reconstruction that are consistent with local aquifer protection, planning and development goals in the area. This is particularly important as the Town develops a Wellhead Protection Plan for local municipal wellhead locations within the Route 281/13 study area.

CHAPTER 6

DESIGN and AESTHETIC CHARACTER

Issues and Opportunities

The Route 281/13 corridor is one of the primary routes of travel through the Town of Cortlandville, often utilized by motorists as an alternative route to Interstate 81. The corridor attracts local commuters and regional travelers because it offers many auto-oriented services including fast-food restaurants, retail sales, auto sales and auto servicing centers. The corridor also functions as a major State route between Syracuse, Ithaca and other nearby communities in the Finger Lakes area and the Southern Tier region of New York State.

As a major thoroughfare, there are a variety of design and appearance-related issues along the corridor that were identified during the planning process and need to be addressed. These issues include building placement, setbacks and building design, building appearance and materials, landscaping, signage, lighting, fencing, parking areas and pedestrian features.

An opportunity was identified through the planning process to consider the northernmost and southernmost parts of the Route 281/13 corridor as gateways into Cortlandville. Presently, these areas depict a rural character that exists in much of Cortlandville outside of its major highway corridors. These gateway locations are important to maintain and enhance through proper land use and design considerations so that they illustrate the type of community character that Cortlandville desires to portray to its residents, property owners and visitors.

Developing design and development guidelines and standards will enable the Town to achieve several planning objectives. These objectives include:

- Promoting new development and redevelopment along the Route 281/13 corridor study area that enhances the economic vitality of the area, thereby protecting property values and preventing the creation of visual blight.
- Encouraging development and redevelopment that is sensitive to residents and property owners by creating an identifiable character for Cortlandville that fosters a sense of community among neighbors, merchants, businesses and property owners.
- Creating a safe and attractive physical environment for both motorized and non-motorized uses, including encouraging increased pedestrian use along the Route 281/13 corridor.
- Encouraging high quality design for all new development and redevelopment projects that protects and enhances open space, rural characteristics and the natural environment of the area acknowledging the fact that maintaining and enhancing natural characteristics along the corridor also provides additional benefits for aquifer protection, recreation and visual enjoyment.

Conclusions

The Town of Cortlandville shall encourage the use of the following design and development guidelines within the Route 281/13 study area. The design and development guidelines as presented below shall be considered in all new development and redevelopment projects under the Town's site plan review process. Design and development standards based upon the guidelines presented in this chapter may also be incorporated into the Town's Zoning Ordinance and Site Plan Review process as determined to be necessary by the Town.

A separate design manual, which is not a part of this Plan may be prepared by the Town as a guide to local officials, developers, property owners and citizens. In implementing design guidelines and preparing the manual it will be important to establish a vision for the Route 281/13 study area to guide decision-making and achieving desired aesthetic goals. The manual would depict this vision for the community and include photos, sketches and other graphic illustrations. The manual would illustrate and describe desirable building styles, site design and landscaping treatments to help guide developers in preparing project concepts and achieving desired design objectives for the community.

Design and development guidelines must allow for flexibility in design without sacrificing creativity, but still enable Town officials to achieve desirable design objectives through the site plan review process. The Town will be considering the guidelines presented in this plan and may modify them, if necessary, in the future for possible incorporation into the Town's Zoning Ordinance and other local land use codes.

Design guidelines and the means to implement them must be developed in consultation with professionals trained in one or more of the design disciplines, such as architecture, urban design and landscape architecture. Areas for which the guidelines apply also need to be well defined. Design and development guidelines may be applied Town-wide or for specific areas and corridors.

Design and Development Guidelines

The following design and development guidelines shall be considered in all new non-residential and non-agricultural development and redevelopment projects. These guidelines shall also be considered in all new residential development and redevelopment projects that consist of three or more dwelling units.

Site Design and Building Orientation

Site planning and design need to address a variety of aesthetic issues that consider not only the development site itself, but the site's relationship to its surroundings. Along the Route 281/13 corridor, it is important to address design issues not only along the sides of the roadway itself in immediate view of the public right-of-way, but any development parcels that are visible from the corridor. Building location and building orientation, the exterior appearance of buildings, parking lot orientation and appearance, landscaping, signage, lighting and vehicular as well as pedestrian circulation all need to be considered as part of the overall site design and site plan review process.

Building location and orientation on a development or redevelopment site are significant design considerations that have a direct relationship to how buildings look and function relative to their surroundings. The location and orientation of buildings shall consider their overall visual impact on the Route 281/13 corridor. New development or redevelopment along the corridor shall not be visually intrusive, dominate views or contrast sharply to the existing and/or desirable character of the various planning areas identified within the Route 281/13 study area (see Chapter 2).

Orientation of Buildings

- The orientation of new buildings and their rooflines shall be compatible and consistent with existing and desirable patterns of residential, commercial and industrial development in the Route 281/13 study area. The height, scale and proportion of new buildings shall be consistent and/or compatible with surrounding buildings on adjacent properties.
- Buildings shall be oriented to maximize views of the front, not the sides or rear of buildings from Route 281/13. Care must also be taken to minimize undesirable views

from Route 281/13 of large parking areas, service areas, outdoor storage and utility areas, and delivery locations.

- New buildings shall be sensitive to views from adjacent and off-site uses. Buildings shall be oriented so as not to create undesirable views of the sides or rear portions of buildings from nearby uses, particularly residential properties.
- New buildings and parking areas shall be oriented to provide for safe, separate and efficient circulation patterns between pedestrians, non-motorized and motorized vehicles.

Building Design and Architectural Features

The following criteria are not intended to restrict creativity or variety in building design, but rather assist in focusing on traditional design and architectural principles. These principles are intended to encourage creative design solutions that will result in projects with an attractive visual appearance.

Non-residential Buildings

Large-scale, non-residential development and redevelopment projects including professional office, commercial, light industrial and institutional uses must be compatible in scale and character with nearby developments, particularly residential uses.

- Traditional architectural styles are encouraged over highly ornate and/or ultra modern styles.
- Corporate franchise-style and “cookie cutter” architecture shall be discouraged in favor of building styles that complement neighborhood character and design objectives particularly where residential uses are nearby.
- Peaked roofs and varied rooflines may be more appropriate for some non-residential buildings to mimic nearby residential characteristics, particularly near established and

possible future residential areas at both the northern and southern ends (gateway areas) of the Route 281/13 corridor in Cortlandville.

- All building facades visible from public streets, public areas and residential neighborhoods shall have features of suitable scale and utilize construction materials that integrate consistently and compatibly with the visual characteristics of surrounding areas.
- The rear facades of buildings that are visible from public streets and viewpoints shall have a finished quality utilizing materials and colors that are consistent with the remainder of the building.
- Public spaces shall be considered for integration into the design of large-scale non-residential developments where public use is expected or encouraged. These spaces may include seating areas, gardens and plazas. This is especially true for institutional uses and large-scale businesses that are open to the public.
- Loading and delivery areas, outdoor storage facilities/areas, trash collection areas and employee parking areas shall incorporate suitable site and landscaping features. These areas shall not be located in full public view of the Route 281/13 corridor. Landscaping features shall include appropriately sized deciduous and evergreen plant materials to mitigate the effects from year-round public exposure of fencing, lighting and noise.

Residential Development

New single family residential development projects shall be compatible in scale, form and mass with surrounding residential uses and in other areas of the study area. New infill residential development shall be sensitive to adjacent properties and not introduce housing styles that are inconsistent in patterns of development, scale, mass, form, or style with surrounding residential units or neighborhoods, unless such changes are desired by the community.

- Houses that are identical in appearance, building elevation, floor plans, etc. shall be discouraged from locating in view of Route 281/13, on adjacent lots, or directly across the street from each other if significantly visible from Route 281/13. If a single house design is used repeatedly, the use of varying materials, colors, window treatments and other design details shall be encouraged to distinguish one unit from another.
- The orientation of new houses in view of Route 281/13 shall follow established patterns where either the fronts or sides of homes are seen. The rear façade of new houses shall not be the predominant view of the structure as seen from Route 281/13.
- New housing developments shall avoid consistent use of styles that emphasize garages as a visual focal point of a house's design.
- New development shall avoid to the greatest extent possible, visual monotony caused by long, straight lines of similar looking houses along a street. Variation in roofline, roof features (peaks, dormers), porches, doors, windows and paint details are encouraged.
- New development shall be encouraged to extensively use landscaping elements to help distinguish housing units, subdivisions and neighborhoods. Landscaped entranceways into subdivisions and neighborhoods are encouraged.

Building Materials

- Materials shall have desirable architectural character and quality. Materials shall be selected for harmony in color and texture with adjoining buildings. Brick, native stone and high quality wood treatments are encouraged over the use of metal materials as the principal non-residential building material.
- Buildings shall make use of the same materials, or those that are architecturally harmonious and visually compatible, for all building walls and exterior building components that are either wholly or partly visible from Route 281/13.

- Materials shall be considered for their durable quality, longevity and ease of maintenance. Inappropriate use of materials, for which they are not intended, and questionable construction practices in their installation shall be avoided.
- Front and side building façade materials shall be of subtle colors and low reflectance to prevent glare. Colors that are classic in appearance, neutral, timeless, and of an earthen tone shall be encouraged over non-traditional, bright or neon colors.

Windows and Doors

- Building components such as windows and doors shall be compatible in scale and proportion to one another and to desirable patterns established along Route 281/13.
- A well-designed building entrance shall be visible from the street and provide the focal point of the building's front façade. Recessed entrances are encouraged particularly when such entrances add to the overall appearance of the façade.
- Colors for framing shall be harmonious with other building elements and the use of compatible accent colors is encouraged.
- There shall be no long, blank, featureless building facades. Building wall appearance can be enhanced with windows or other architectural design and/or landscape features such as recessed areas and projections, or well landscaped with trees and shrubs in order to avoid monotony in design and appearance.

Utilities and Storage

- All gas and electric meters and other appurtenances shall either be incorporated internally into the structure or be of similar color and materials to the principal structure so as not to be visually distinct.
- Mechanical equipment or other utility hardware on the roof, ground level, or buildings themselves shall be screened from public view with materials that are harmonious with the building, or located in such a manner as not to be visible from residential uses, public areas, walkways and streets. Landscaping of potentially visible utility boxes located along or near the Route 281/13 public right-of-way shall

be screened to the greatest extent possible using plant materials and landscaping while still allowing for access and maintenance.

- All accessory buildings (garages, sheds, storage buildings, etc.) and structures shall be compatible with the materials and colors of the principal building(s).

Vehicular Access Management and Parking

The objective with regards to vehicular access management and traffic circulation is to maintain an acceptable level-of-service on roadways for efficient traffic flow by limiting unnecessary turning movements, curb cuts, sight line problems and other potentially unsafe roadway conditions (see Chapter 5). Access management must also provide for safe, separated pedestrian circulation patterns in relation to vehicular movement. New site entrances, curb cuts and driveways along Route 281/13 shall be avoided as much as possible to eliminate additional turning movements that may cause further restrictions in traffic flow and decreased levels-of-service. The following guidelines have a direct bearing on defining the character of an area.

Street Patterns

- A connected street system that provides residential access through neighborhood streets to the greatest extent possible shall be encouraged.
- New streets shall be interconnected in clearly discernable patterns. New streets shall connect to existing streets wherever possible and in a grid or other pattern that follows traditional street patterns in the community. Street patterns shall be simple and direct to provide the shortest and most direct routes to destinations.
- Curvilinear street patterns and cul-de-sacs generally increase construction and maintenance costs, gas consumption, and the amount of impervious areas of pavement and shall be avoided wherever possible. These uses shall be considered only where topography or other natural or man-made conditions require their use.

- Street design shall encourage slower traffic in neighborhoods and areas of pedestrian activity.

Service Roads and Driveways

- The use of service roads in large-scale developments, both residential and non-residential development and redevelopment projects, shall be thoroughly considered during project design to limit unnecessary curb cuts along the Route 281/13 corridor.
- Site entrances and exits shall be clearly delineated and designed to provide for smooth traffic flow into and out of a site and within parking areas utilizing curbing and landscaping to delineate traffic movement patterns.
- Internal access to out parcels is encouraged over new ingress and egress points along Route 281/13.
- Connecting parking lots and consolidating driveways for cross access of parcels is encouraged in site design and layout.
- Restricting the number of driveways per lot to reduce potential traffic and pedestrian conflicts is encouraged. Driveways shall intersect adjoining roads at a right angle for maximum driver and pedestrian visibility and safety.
- Locating access driveways away from intersections at maximum distances possible is encouraged.
- Increased minimum lot frontages along Route 281/13 and other major roads is encouraged in order to limit access points on the highway.
- Entrances and exits shall be attractively designed, signed, landscaped, and well-maintained to better delineate driveways as access locations. Delineation of driveways in interior portions of sites shall be accomplished using trees and other plant materials rather than bollards or other man-made, less attractive materials. Entrances to large residential and non-residential developments are encouraged to have landscaped medians and tree-lined access roads for better delineation and appearance.

Parking Areas

- Off-street parking areas that consolidate rear parking lots are encouraged as well as the use of service roads and shared driveways to limit the number of access points to a site or new curb cuts that may otherwise be needed along Route 281/13. Internal circulation of shared parking areas and driveways shall be clearly delineated by curbing, green areas (snow storage areas) and landscaping.
- Off-street parking areas shall be screened from street frontages and adjoining residential properties by low walls, earthen berms, dense landscape plantings or combinations of these elements. Fencing shall be discouraged in favor of more permanent, natural and durable screens.
- Parking to the rear or sides of buildings shall be encouraged over parking areas between the building's front façade and Route 281/13 or other major public roads.
- The design of large parking lots shall include perimeter landscaping and landscaped islands. Green space and landscaping shall be provided between highway rights-of-way and parking areas where possible. Landscaped buffers and islands shall consider the use of a variety of plant materials for visual appeal and year-round effect. Plant materials shall include deciduous and evergreen trees, shrubs and/or perennial flowers.

Pedestrian and Non-motorized Circulation

It is the goal of the Town of Cortlandville to create a safe atmosphere throughout the Route 281/13 corridor for pedestrians and non-motorized uses such as bicycles. A series of long-term actions will need to be taken to improve the pedestrian scale of the corridor and provide certain pedestrian amenities to accommodate non-motorized and pedestrian activity.

Eventually an interconnected network of walkways and pathways along the Route 281/13 corridor study area will encourage pedestrian activity and the use of non-motorized means of travel. The benefits realized by creating a more "walkable" community will

include less reliance on the automobile, decreased traffic congestion, a healthier citizenry, greater social interaction among neighbors and businesses, and a strengthened sense of community. The result will be residential neighborhoods and business areas that are not isolated from each by Route 281/13 or other major roadways.

Sidewalks and Crosswalks

Land uses along the Route 281/13 corridor must support pedestrian and non-motorized activities. Therefore, it becomes very important that the design of new development and significant redevelopment projects within the corridor study area create physical linkages between different adjoining land uses via an eventual continuous network of sidewalks and/or trails.

The design of new developments and redevelopment projects must provide for a safe and attractive pedestrian and non-motorized environment. Street networks shall be designed to be pedestrian-friendly by providing adequate separation of pedestrians and non-motorized means of transportation from vehicular traffic circulation patterns.

- Sidewalks and curbs shall be provided along both sides of the Route 281/13 public right-of-way wherever possible. This is particularly important in high traffic commercial sections of the corridor. Where this is not practical or where the public right-of-way is limited sidewalks shall be provided on at least one side of Route 281/13.
- Sidewalks shall be constructed of concrete with a minimum width of five (5) feet. Widths of up to eight feet may be more appropriate in some high traffic commercial areas.
- Sidewalks shall provide landscaped areas between the street curb or paved shoulder of the road and the street side edge of the sidewalk, particularly in residential areas. Planting strips (green space or snow storage areas) of at least five feet in width where practical between the edge of pavement and the inside (roadside) edge of sidewalks

shall be provided rather than paved asphalt or concrete surfaces, particularly in residential areas. This planting strip may be substituted for compatible paved materials in commercial and business areas.

- Sidewalks shall be provided at all new development or redevelopment projects along Route 281/13, including business and residential areas, to connect to adjacent land uses.
- All sidewalks, pedestrian and non-motorized pathways shall be designed to be barrier-free and accessible to the public and meet State and local standards.
- Interior sidewalks outside the public right-of-way shall be provided at all new development or redevelopment projects as connections between the public sidewalk and primary entrances to non-residential buildings.
- Well-defined crosswalks to connect sidewalks along Route 281/13 are of paramount importance for public safety. In most cases, crosswalks shall be defined by signage, painting and striping.

Street Trees, Furnishings and Pedestrian Amenities

Street trees, streetscape furnishings and pedestrian amenities shall be considered as part of an integrated, well-conceived streetscape plan for the Route 281/13 corridor. A streetscape plan may include street trees, for shade and comfort, and street lighting for safety and security. However, the placement of any materials within the public right-of-way will need to be permitted by the jurisdictional agency. In the case of Route 281/13 this agency is the NYSDOT. In the likely event that no plant or other materials may be placed within the public right-of-way, the placement of trees, plant materials and furnishings (benches) may be possible alongside the public right-of-way with the support and permission of the private property owner. The placement of these amenities may be part of an overall development or redevelopment project.

- The provision of streetside amenities shall be encouraged along all pedestrian sidewalks where possible including the placement of trees, lighting and flower beds. The placement of materials in the public right-of-way of Route 281/13 must be

coordinated with and receive permission from the State Department of Transportation. Trees, shrubs and flowers shall not restrict views of or from pedestrian areas or cause the creation of unsafe situations.

- In addition to sidewalks, new development and redevelopment shall consider the use of trees and other vertical design elements just outside the public right-of-way (lampposts, plant materials, etc.). The use of these materials may create effective physical and visual buffers between sidewalks, vehicular traffic and parking areas as well as a means to better define the edges of the Route 281/13 public right-of-way.
- The planting of street trees along the Route 281/13 corridor shall be a long-term objective with a consistent appearance in the use of tree species and spacing inside or outside the public right-of-way. However, the placement of any materials within the public right-of-way must be coordinated with and receive approval by the NYS Department of Transportation.
- For all development in non-residential areas street trees shall be installed outside the public right-of-way of Route 281/13 typically at 30 to 40 foot intervals where practical. Street trees shall be required in addition to any additional on-site landscaping.
- Tree species shall be selected that have root growth habits that do not cause damage to pavements, sewer or water lines. Trees shall be planted no closer than 5 feet from sidewalks, 5 feet from streets, and 8 feet from driveways.

Lighting

Lighting objectives are different for motorists and pedestrians. High intensity lighting mounted on poles of considerable height are meant to illuminate roadways for safe vehicular travel. However, lighting intended for motorists may create an uncomfortable or undesirable pedestrian atmosphere. Lighting in pedestrian areas shall include low-angle pedestrian-scale lampposts that illuminate full color spectrum light for more realistic nighttime colors and prevention of glare. Pedestrian lighting in certain

commercial and institutional areas of the Route 281/13 corridor may be a long-term objective for the community.

Lighting features shall complement building design and be consistent in appearance throughout a development site. However, as with the use of other design elements, creativity in design shall be encouraged to avoid too much uniformity that results in visual monotony.

- Lighting shall be used to enhance landscaping, building features and textures, pedestrian areas, public spaces, building entrances and site entry points.
- Illumination shall be consistent with neighborhood ambient light levels.
- Lighting fixtures shall direct light downward in most applications to limit the amount of light escaping off-site, except in situations where low level lighting is used specifically to highlight landscape features, buildings and pedestrian walkways.
- Exterior lighting shall be considered as part of the design concept for a building and site. Light fixtures, standards, and all exposed accessories shall be harmonious to a building's design and not result in undesirable lighting off-site.
- Adequate lighting shall be provided for safety and security reasons and incorporated into the site and building design process.
- Floodlights and the use of other high intensity lighting shall be discouraged.
- Vandal resistant light fixtures shall be used to the greatest extent practical.
- Lighting elements in pedestrian areas as part of site design shall be pedestrian-scale, typically 12 to 15 feet in height, made of durable metal and vandal-proof materials and ornamental in appearance.
- Any ornamental lighting used in site design and in view of the public right-of-way shall be consistent in style and street lighting patterns acceptable to the Town's design objectives.

Signage

The location, size, design, materials and lighting of signs shall be considered as an important part of a development site's overall design. Signage shall enhance a building's architecture and complement a site in terms of its consistency with building scale and architectural styles. Signs shall not appear as an afterthought to a building or site's design or be visually dominant.

- Signs shall complement their surroundings and convey its message clearly and simply. Signs shall be weather and vandal proof to the greatest extent practical.
- Signs shall be well-landscaped and maintained using plant materials of suitable scale, numbers and form.
- Roof-mounted signs shall be avoided. Wall signs or low-profile signs are preferred over pole-mounted or projecting signs. Freestanding signs shall incorporate the architectural style and character of the building(s) it identifies. Large-scale freestanding signs shall be discouraged.
- Signs shall have appropriate scale and proportion to a site and its use. Signs shall be designed as an integral part of the architectural features of the building. Sign size must be consistent with the Town's Zoning Ordinance requirements. Sign height shall be proportional to local zoning districts and permitted uses. Ground sign height in professional office use B-1 districts (real estate, attorney, insurance, physician) shall be six (6) feet in height or less from the top of finished grade. Ground sign height in commercial highway use B-2 districts (fast food restaurants, retail less than 15,000 square feet, etc.) shall be six (6) feet in height or less from the top of finished grade. Ground sign height in planned commercial use B-3 districts (retail greater than 15,000 square feet, auto dealerships, etc.) shall be eight (8) feet in height or less from the top of finished grade. Ground sign height in industrial I-1 and I-2 districts shall be six (6) feet in height or less from the top of finished grade. All ground (monument) signs shall be attractively landscaped and maintained.

- Neon tubing and other high intensity accent treatments shall not be used in sign, façade or building design.
- Wall signs incorporated into a building's façade shall be framed and limited to one sign for each side of the structure to prevent visual clutter.
- Colors and materials used for signs shall be consistent with building colors and materials.
- Lighting shall be adequate to enhance the sign's overall appearance. Intense lighting that produces glare or off-site impacts shall be avoided.
- Exposed supports to stabilize signs, including wires and cables shall be avoided.

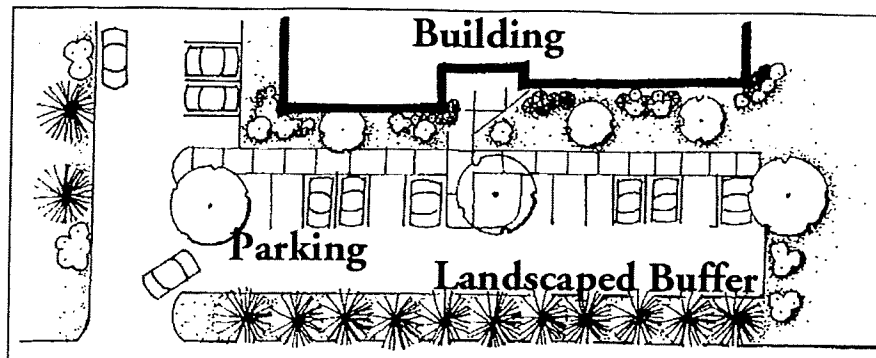
Landscape Design

Landscape design not only improves the appearance of a development site, but also enhances both pedestrian and vehicular access and management. Plant materials and landscaping features, such as masonry walls, can serve to highlight points of entry to a site or a neighborhood as well as identify pedestrian and vehicular circulation routes.

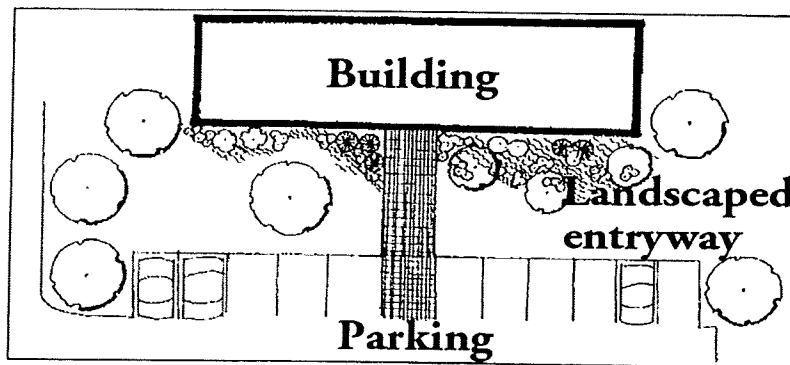
Landscape designs often do not realize their full potential and effectiveness for a variety of reasons. Some of these reasons may include using an insufficient amount of landscaping materials, primarily plants; poorly designed landscape plans using incompatible or inappropriately sized materials; and a lack of adequate maintenance that may include irrigation or regular removal and replacement of dead or diseased plant materials.

- All new development and redevelopment shall include landscaping as part of the overall site design process. Landscaping shall not be an afterthought to site development or building design process, but integrated as a primary design consideration.
- Landscaping shall be used to accentuate building entrances, pedestrian corridors and building features. Foundation plantings shall be used around all buildings.

- Plant materials and man-made elements (brick pavers, concrete, etc.) shall be used creatively to delineate and highlight building and site entry points and serve to act as gateways into development areas, business and office parks, and residential neighborhoods.
- Landscaping shall be used to define parking areas, vehicular and pedestrian circulation routes.
- Perimeter landscaping shall be provided along property lines where there is a change in land use, primarily between non-residential uses and adjoining residential properties.
- The use of native plant materials shall take precedence over exotic or non-native plant species. Invasive plant species shall not be used.
- All plant materials shall be sized to create an attractive appearance within three to five years of installation. Trees and shrubs shall be creatively grouped together to form visual focal points of interest. Irrigation is encouraged to maintain plants in healthy condition.
- Excessive varieties of plant materials shall be avoided in favor of creating an attractive, cohesive landscape design. Year-round effectiveness of plantings must be considered and shall include a mix of deciduous and evergreen trees and shrubs.
- Landscape designs shall incorporate existing, desirable trees and shrubs found on site as much as practicable. In particular, healthy mature trees and woodland areas shall be preserved and maintained to the greatest extent possible.
- Grading under the drip line of mature and protected trees is discouraged to avoid soil compaction and root damage.
- Grading of a site shall blend in with existing contours of adjacent parcels and not result in abrupt changes in grade. Earthen berms, if used, shall not appear overly engineered or linear, but have a more natural, non-linear, undulating appearance.
- Developers are encouraged to use the services of professional landscape architects and landscape designers.



Landscaping shall define parking areas and pedestrian areas.



Landscaping shall accentuate building entrances.

Buffers and Screens

Physical buffers and visual screens between different, adjoining land uses are critical design elements that shall be utilized to reduce undesirable visual impacts. In developed areas, visual screens may be a combination of structural elements (walls) and non-structural natural elements (earthen berms and plant materials). The use of some types of wooden fencing (for example, stockade) and particularly those requiring regular maintenance, and chain link fencing along or in the immediate view of the Route 281/13 public right-of-way is discouraged.

- Structural screening walls shall appear as extensions of a building's design that repeat architectural features including building materials, textures and colors. For example, red brick buildings shall be encouraged to use matching red brick materials if structural screening walls are used.
- Screening walls shall not be painted since painting requires considerable maintenance to keep its appearance. Rather screening walls constructed of high quality, long lasting, but not necessarily high cost, materials are preferred.
- A combination of structural screens, such as low walls, and/or natural landscape plant materials shall be provided where possible between parking lots and sidewalks or other pedestrian use areas.
- The use of chain link fencing as buffers and screens is discouraged. The use of barbed wire fencing is also discouraged, particularly in areas that are readily visible from Route 281/13. In some areas chain link or barbed wire fencing is necessary for safety and security reasons. The appearance of security fencing shall be enhanced by landscaping along the fence line with evergreen and deciduous plant materials.
- Berms, if used, shall be a minimum 36 inches high in combination with plantings and no greater than 1 foot vertical rise to a 3 foot horizontal run ratio and shall appear as natural as possible.
- All screening walls 50 feet or greater in length that are visible from Route 281/13 shall be designed to minimize visual monotony through changes in height, material, texture and the use of plant materials.
- Dense landscaping and structural materials shall be used to screen unattractive views of outdoor storage areas, trash enclosures and ground level mechanical and electrical equipment.

Utilities and Storage

Utility facilities and areas may include electrical and gas distribution facilities, transformers, meters and air-conditioning units. Utilities may be located at ground level or rooftops.

Storage areas may include trash collection locations (dumpsters), loading and unloading docks and bays, services bays and outdoor storage areas or storage facilities/buildings. Ideally all utilities and storage areas shall be located at the rear of buildings and visually hidden from Route 281/13, residential uses, public streets and public view.

- Private and public utilities shall be buried underground wherever possible.
- Rooftop utilities shall be effectively hidden from the view of motorists, residents and pedestrians at street level. Rooftop screens shall be constructed from materials that are consistent in color and texture with the building's exterior design materials.
- The use of natural plant materials, including trees, shrubs and perennials shall be encouraged to screen ground level utilities and outdoor storage buildings and areas as part of an overall site landscaping plan.
- High quality, decorative fencing and/or masonry materials shall be used to screen trash disposal and collection areas (dumpsters) and other outdoor storage areas from adjoining residential properties.

Maintenance

Continual maintenance and upkeep of buildings and grounds is necessary to realize the full potential and benefits of good site and building design. The selection of materials during site and building design must consider their maintenance requirements as perhaps one of the most important phases in the design process.

- Materials shall be selected for their longevity, durability and ease of maintenance as well as their appearance.

- Detailed site and building design shall consider and avoid design configurations and features that accumulate debris, leaves, trash, dirt and rubbish or otherwise may create long-term maintenance problems.
- Building facades and landscaped grounds shall be maintained, repaired and replaced, if necessary, on a regular, year-round basis. Maintenance requirements shall include removal and replacement of dead or diseased plant materials on an annual basis.

Public Spaces

The provision of public spaces and open space areas becomes a more important social issue as land use density in developed areas increases. The need for public and open spaces are especially significant to the elderly and children since they often do not have either complete mobility or the ability to travel any length of time or distance.

Public spaces include parks, sidewalks, plazas, atriums, courtyards, terraces, parking areas, and public gardens. Design guidelines shall consider public areas that are not only available to the public, but that are safe, comfortable, and accessible to all citizens. Above all, public spaces must be useable since they contribute positively to an area by encouraging social interaction and promoting a sense of community.

- Small parks, pocket parks, and plazas shall be an important consideration in overall building and site design as places for public gatherings and socializing, particularly at institutional sites such as municipal buildings, schools, libraries, meeting halls, etc..
- The design of public use areas shall consider views, climate, protection from weather extremes, solar angles, shade and shadow effects, public safety and security.
- In large-scale residential and non-residential development projects, open space and natural areas are encouraged through clustering and other land use techniques. Woodland, wetlands and areas of steep slope exceeding 12 percent shall be preserved to the greatest extent practical and preserved as public open space.



Photo 6-3 Appropriate setbacks for these residential apartment buildings and institutional uses such as the adjacent church allow for more green space along this stretch of the West Genesee St./Route 5 corridor in the Town of Camillus. Compatible adjacent uses and landscaped green space along the roadway help maintain a somewhat rural character in an otherwise developed suburban area.



Photo 6-4 The use of service roads (above right), particularly in large-scale developments that generate significant traffic, and cross access on adjacent parcels help minimize access onto busy roadways as along the West Genesee St./Route 5 corridor (above left) in the Town of Geddes. The green space between the highway and service road provides additional benefits for stormwater management and landscaping.



Photo 6-1 Professional office use along the West Genesee St./Route 5 corridor in the Town of Camillus, Onondaga County has been designed to be consistent with the residential character of the area. This site includes a shared driveway with an adjacent medical office and shared parking to the rear of the buildings.



Photo 6-2 New commercial development along the West Genesee St./Route 5 corridor in the Town of Camillus includes sidewalks and planting strips along the roadway. Note the placement and appropriate scale of signage outside the public right-of-way that helps to minimize visual clutter along the corridor.

CHAPTER 7

IMPLEMENTATION PLAN

The following steps are required to implement the actions presented in the previous chapters of this Plan.

Step One:

Adoption of the Route 281/13 Land Use and Aquifer Protection Plan

Implementation of the actions presented in this Plan will require this document to be officially adopted by the Town of Cortlandville. Prior to its adoption a Public Hearing will be held as another opportunity for public input. Once adopted this Plan will be used as a guide by Town officials, administrators and residents in making future land use planning decisions and in reviewing development and redevelopment projects within the Route 281/13 study area. It is particularly important that this Plan be used to guide decision-making until Zoning District and Zoning Ordinance modifications are made consistent with the actions presented in this document.

Step Two:

Preparation and Adoption of a Wellhead Protection Plan

The preparation of a Wellhead Protection Plan must include limitations on land use types and land use activities within municipal wellhead protection areas in Cortlandville. The Wellhead Protection Plan will identify the wellhead protection zones critical to protecting local public water supplies within the study area. Limitations will be placed on the amount of impervious surfaces that can be developed in wellhead protection zones.

Additionally, stormwater management practices will be required to control the quality and quantity of stormwater treated within wellhead protection zones.

Increased environmental scrutiny of development and redevelopment proposals within the study area will be necessary. One method that will ensure that this level of increased scrutiny will be accomplished is by establishing wellhead protection zones as officially designated Critical Environmental Areas. As Critical Environmental Areas all development and redevelopment activity beyond an established threshold will require increased environmental review under the State's Environmental Quality Review Act (SEQRA).

Step Three:

Modification of the Town's Stormwater Management Ordinance

The Town must consider modifying its present Stormwater Management Ordinance to make it consistent with this Plan, a Wellhead Protection Plan, once established, and the New York State's new Stormwater Management Design Manual.

Step Four:

Adoption of Access Management and Design Standards

By officially adopting this Plan, the Town of Cortlandville will be able to encourage new development and redevelopment projects within the Route 281/13 study area to consider the access management and design and development guidelines presented in Chapters 5 and 6 of this document. However, to be fully enforceable as regulatory requirements the Town will need to consider establishing important components of the access management and design and development guidelines presented in this Plan as part of the Town's land use and zoning ordinances. This will require establishing some or all of the guidelines provided in this document on a more location and action specific basis as required standards to be met under Site Plan Review or Zoning Ordinance compliance. For

example, access management standards will need to address specific distance and spacing requirements for driveways by category of land use along the Route 281/13 corridor.

The guidelines and standards developed by the Town must emphasize redevelopment of existing available areas over the development of new areas within the corridor to promote the preservation of open space, particularly in the southern portions of the Town near aquifer recharge and wellhead protection areas. To meet the planning goals and objectives identified in this Plan the will also encourage the use of planning tools such as cluster development, planned use development and transfer of development rights as techniques to preserve open space as well as the natural and rural characteristics of the Town.

Step Five:

Modification and Adoption of Zoning Ordinance and Map

The Town of Cortlandville will need to modify its current Zoning Ordinance and Zoning Map and adopt those modifications in order to accomplish the planning goals, objectives and actions described in this Plan. Zoning modifications will also be necessary to achieve the objectives illustrated by the Future Land Use Map for the study area as presented in this Plan.

Zoning modifications as described in this Plan include altering the current Industrial District and Business District classifications into additional sub-categories of use. Actions include modifying the present Industrial classification into two separate categories, I-1 for Light Industrial and Office Park use and I-2 for General Industrial use. Modification of the Town's Business District is also necessary. The current Business District shall be modified into three separate classifications designated as B-1 Neighborhood Business and Professional Office, B-2 Highway Commercial and B-3 as Planned Commercial District. These modifications will enable the Town to better encourage desirable growth in certain locations of the Route 281/13 study area to achieve

local planning objectives related to aquifer protection, land use compatibility, transportation and aesthetic character.

IMPLEMENTATION MATRIX

A planning summary and implementation matrix is provided on the following page. This matrix summarizes the issues and opportunities identified by planning area as discussed throughout the planning process used in the development of this Plan. In addition, the matrix identifies and prioritizes the actions that are necessary to achieve the many planning goals and objectives for the Route 281/13 study area as described previously in Chapter 1 of this Plan. It will be necessary to use this matrix as a guide to land use and planning decisions by the Town as issues and new development and redevelopment opportunities arise in the various planning locations within Route 281/13 study area.