CNU CHARTER AWARDS 2011 ACADEMIC SUBMISSION

STRATEGIES *for* SUSTAINABLE SKANEATELES

A. PROJECT INFORMATION SHEET

Location of project (city, state, and country): Skaneateles, New York, USA

Submission Category – Check the most appropriate box for one of the three Charter categories. This selection does not constrain your project in an absolute category but rather serves as a reference point for our jurors.

- ☒ I. The region: metropolis, city, and town
- ☐ II. The neighborhood, the district, and the corridor
- ☐ III. The block, the street, and the building

Project Characteristics
Check all those that apply to your submission:

- ☒ Public policy program
- ☒ Regional/town plan
- ☒ Transit-oriented development **(limited)**
- ☒ Greenfield/previously undeveloped site
- ☒ Qualifies for LEED-ND certification
  If so, which level? **Platinum**
- ☒ Infill/previously developed site
- ☒ Incorporates universal design principles
- ☒ Placemaking plan (exclusively public space, civic buildings, or infrastructure)
- ☒ Includes affordable/subsidized/social housing – if so, how much? **Full integration throughout scheme**

Has your plan been adopted or your project broken ground?

☐ Adopted ☐ Broken Ground ☒ Neither

If neither, why? The design services provided to our client are of their nature only suggestive and visionary.

What percentage has been built/implemented? N/A

Estimated date of completion, if applicable: TBD

Land Area (in acres): 31,212 acres (48 square-mile town and village) / approximately 980 acres designed in village intervention sites (infill & greenfield) and 340 acres designed in different hamlet interventions (infill & greenfield)

Project Cost (optional): N/A

Civic Uses (indicate type and size): Sites for five civic buildings (2.5 acres): Village-and-Town hall on a civic square (Village - Fennell Street), church and historical society (hamlet of Shepard Settlement), church (hamlet of Mottville), market hall (hamlet of Willow Glen)

Parks/Open Space (indicate type and size): We propose 65% of Skaneateles be preserved as Natural or Agricultural land. Proposed developed areas include four new plazas (0.9 acres), eight new squares (3.9 acres), four new parks (33 acres), thirty-eight (dry surface) constructed wetlands wastewater treatment cells and biofields (41 acres), and two hiking trails (13.5 miles), for a total of 78+ acres of proposed new parks and open space

Number of Residential Units: 1,500 - 6,000 units permitted as-of-right, per regulating plan and code

Residential Unit Types: single-family detached / single-family attached / 2-6 unit multi-family / mixed use (attached and detached) apartments-over-retail / carriage houses

Retail, Office, Industrial Square Footage: Retail and Office: 26 acres zoned T-5

Transect zone(s): T-1 (natural), T-2 (rural), T-4 (general, with gradients), T-5 (center, with gradients), Civic

B. PROJECT DESCRIPTION

Introduction
This work was commissioned jointly by the Town of Skaneateles and the Village of Skaneateles in the fall of 2010. Our major premise is that the rural character of the Town and the traditional urban character of the Village are connected historically, and must continue to be connected in the future if each are to retain their respective rural and traditional urban character.

Our first design investigations took place during a six-day on-site September 2010 public charrette. This project represents work undertaken subsequent to that charrette, and proposes images of and guidelines for future development in both the Town and the Village as a supplement to and in support of the *Town and Village of Skaneateles Joint Comprehensive Plan* adopted in July 2005.

Situated on the easternmost Finger Lake in central New York State, with a population of approximately 7,500 residents and an area of 48 square miles, Skaneateles is blessed with a great locale, a history of good building, and a strong sense of itself as both a village and as a natural and agricultural landscape related to an extraordinary lake. For most of its history, Skaneateles has grown slowly to become a model of good, mixed-use, walkable, and sustainable human settlement in a natural and agricultural landscape. Nevertheless, as a consequence of sprawl development, the landscape in the Town of Skaneateles is increasingly compromised; and---less visibly, but no less truly---the historic character of the Village of Skaneateles itself is threatened.

Challenges Facing Skaneateles
The challenges to Skaneateles' historic character and identity are inter-related. These are:

- protecting the water quality of Skaneateles Lake, which provides the drinking water for both Skaneateles and the City of Syracuse;
- preventing the consumption of rural land by conventional residential and commercial sprawl development;
- treating wastewater generated by new development in both the Town and the Village;
- addressing Skaneateles' lack of housing diversity, and allowing by right in both the Village and the Town a wider variety of traditional village housing types to make housing more affordable;
- increasing retail diversity in the Village, at the Village "Gateways," and in Town hamlets to better accommodate local residents;
- maintaining the high quality of the Skaneateles public schools, which currently face declining enrollment and which will be aided by an increase in family-affordable housing; and
- correcting deficiencies in both the Village's existing *Skaneateles Code* and the *Code of the Town of Skaneateles*, both of which together contradict in numerous places the objectives of the *Joint Comprehensive Plan*, actively promote conventional sprawl development, make new compact, walkable mixed use settlements impossible, and make the developer permit application process long, expensive, arbitrary, and irrational.

The Proposal
Our work focuses on ten key areas in the Village and in the Town's hamlets, illustrating strategies for possible growth based on the creation of dense, mixed-use, and walkable neighborhoods. We address the challenges facing Skaneateles by proposing:

- Village development and Town hamlet development to promote walkable, mixed-use, and affordable neighborhoods with increased retail diversity;
- *sending areas* to preserve rural land, and *receiving areas* for compact mixed-use settlements;
- alternative new wastewater treatment in the form of constructed wetlands;
- new public parks to increase passive and active recreational opportunities;
- new hiking trails to link green corridors and take advantage of natural landscapes for public use;
- shuttle bus transit to increase options for public transit and lessen automobile dependency.

Our work includes an analysis of existing conditions, a comprehensive master plan with supporting illustrations, a regulating plan, sample pages of a form-based code calibrated to Skaneateles, and publication of these materials in a book format with additional recommendations for implementing the design strategies. Skaneateles is a wonderful place at an important moment in its history,

possessing an abundance of natural and communal assets threatened by a sluggish regional economy and a default institutional complex---including its own zoning ordinances---that cumulatively promote sprawl culture. We hope our proposals will help local leaders and residents to maintain, extend, and recover--maintain and extend *by* recovering---the traditional qualities and character of Skaneateles that everyone who knows Skaneateles so rightly cherishes.

C. RESPONSE TO CHARTER PRINCIPLES

Though it is being submitted in the category of "The Region: Metropolis, City and Town," this project, as a comprehensive strategy for sustainable growth in Skaneateles, strives to meet the goals of the *Charter of the New Urbanism* on all scales.

Like many historic rural communities in the United States today, Skaneateles faces the challenge of increased land consumption in the form of sprawl despite the fact that its population has not been increasing. Located on Skaneateles Lake, water quality in the face of expansion is of utmost concern. Additionally, low-density, automobile-dependent development in the form of single-family residences on two acre lots is consuming the natural and agricultural landscape so important to the sustainable future of the region. Our strategy in facing these challenges is to promote compact, mixed-use, walkable neighborhoods located in existing centers of historical development both in the Village and in the Town's hamlets.

Key among the policies of the *Charter* advanced by this proposal is the preservation of farmland and natural land through the creation of *sending and receiving areas*. Utilizing incentives for the transfer of development rights from natural and agricultural land to more urban areas, the proposal allows for growth consistent with the historic scale and character of the Village center and the Town's hamlets. The hamlets and village neighborhoods are designed with their own identifiable centers and edges, careful to limit growth in the existing Lake Watershed Overlay District while maximizing the amount of preserved open land and scenic views (Principles 1,3). In order to achieve densities of development consistent with historical patterns of growth, we propose constructed wetlands as an economically competitive alternative to conventional wastewater treatment systems – one that can be built incrementally over time, returning environmentally clean water to the natural landscape (Principles 1,3,6).

New transit and recreation proposals (see Page 11) include a new shuttle route running from the Eastern Gateway through the Village to the Western Gateway and back, to encourage visitors to use satellite parking for special events. We propose an expanded bus route from the Village to the hamlets of Willow Glen, Mottville, and Skaneateles Falls as an additional means of commuting, especially to jobs located along the main northwest - southeast (Jordan Street) corridor. Paralleling this corridor, we also propose a five-mile hiking trail along the beautiful Skaneateles Creek. We propose another recreational amenity in the form of a nine-mile ridge walk that connects current conservation land in the northeast of the Town with open land in the southeast and provides scenic views to the lake en route (Principles 8,18). Four new neighborhood parks---three in the Village and one in the hamlet of Skaneateles Falls---add to recreational space now concentrated in the Village primarily around the Skaneateles public schools (Principle 18).

Principle 1
Metropolitan regions are finite places with geographic boundaries derived from topography, watersheds, coastlines, farmlands, regional parks, and river basins. The metropolic is made of multiple centers that are cities, towns, and villages, each with itws own identifiable center and edges.

Principle 3
The metropolis has a necessary and fragile relationship to its agrarian hinterland and natural landscapes. The relationship is environmental, economic, and cultural. Farmland and nature are as important to the metropolis as the garden is to the house.

Principle 6
The development and redevelopment of towns and cities should respect historical patterns, precedents, and boundaries.

Principle 8
The physical organization of the region should be supported by a framework of transportation alternatives. Transit, pedestrian, and bicycle systems should maximize access and mobility throughout the region while reducing dependence upon the automobile.

Principle 18
A range of parks, from tot-lots and village greens to ballfields and community gardens, should be distributed within neighborhoods. Conservation areas and open lands should be used to define and connect different neighborhoods and districts.

Infill development consistent with the historic character of the Village is targeted for Fennell Street, the focus of which is a new civic square and a proposed Town-and-Village Hall. We propose a new church in Mottville and another in Shepard Settlement, the latter sited adjacent to an historic 200-year-old cemetery. We also propose a historical society building in Shepard Settlement, and a market hall in Willow Glen. We propose further infill in the Eastern and Western Gateways, changing them from sprawl commercial strips to automobile-oriented retail with mixed-use, walkable centers and their own identifiable character, further reinforced by the transformation of US Route 20 by short quarter-mile long boulevards at each end. The proposal for Skaneateles Falls further increases housing opportunities in proximity to jobs by creating a new neighborhood embracing the currently stand-alone businesses of Welch Allyn to the north and Honeywell and General Electric to the south (Principles 4,16,25).

New Village development creates an expanded network of connected streets, allowing for increased pedestrian movement and alternative and multiple routes for drivers. Variable lot sizes in the Village and the hamlets and a range of allowable building types are intended to provide housing for a spectrum of price points, especially for young families, young couples, young professionals, and the elderly. The location of these lots provides proximity to jobs, commercial activity, civic institutions, and a variety of uses that all together make a pedestrian-friendly environment (Principles 7,11,12).

D. LESSONS LEARNED

The six architecture students in this studio came to it with prior experiences of good urbanism, but this project immersed them in their first community design charrette and its developmental aftermath. Their learning curve therefore was steep less in urban formal concepts and principles than in urban design details, but here the lessons learned were many. Most prominent among them were their first exposures to:

- community politics;
- the details (and dimensions) and implications of street / block / lot design;
- the challenges of infill and smaller scale green-field urban design within a larger American natural and agrarian context;
- the formal and environmental consequences of conventional use-based zoning codes;
- formulating (and explaining) alternative form-based codes; and
- the role of wastewater management in an environmentally sensitive watershed and its implications for traditional small-town urbanism.

With respect to water quality and zoning, the students discovered that existing zoning codes ostensibly aimed at protecting the water quality of Skaneateles Lake are inadvertently promoting single-use, automobile dependent (i.e., sprawl) development.

Specifically, in spite of the fact that the *Town and Village of Skaneateles Joint Comprehensive Plan* calls for compact mixed-use development in both the Town and the Village, the current Village code prescribes 3/4-acre minimum lots in deference to its existing sanitary sewage capacity; and the current code in the Town prescribes two-acre minimum lots for all single family dwellings (the only building type permitted by right without review), based on leach-field requirements for conventional private septic systems. This constitutes a legally mandated recipe for sprawl; and we propose instead a new form-based Master Plan,

Principle 4
Development patterns should not blur or eradicate the edges of the metropolis. Infill development within existing urban areas conserves environmental resources, economic investment, and social fabric, while reclaiming marginal and abandoned area. Metropolitan regions should develop strategies to encourage such infill development over peripheral expansion.

Principle 7
Cities and towns should bring into proximity a broad spectrum of public and private uses to support a regional economy that benefits people of all incomes. Affordable housing should be distributed throughout the region to match job opportunities and to avoid concentrations of poverty.

Principle 11
Neighborhoods should be compact, pedestrian-friendly, and mixed-use. Districts generally emphasize a special single use, and should follow the principles of neighborhoods design when possible. Corridors are regional connectors of neighborhoods and districts; they range from boulevards and rail lines to rivers and parkways.

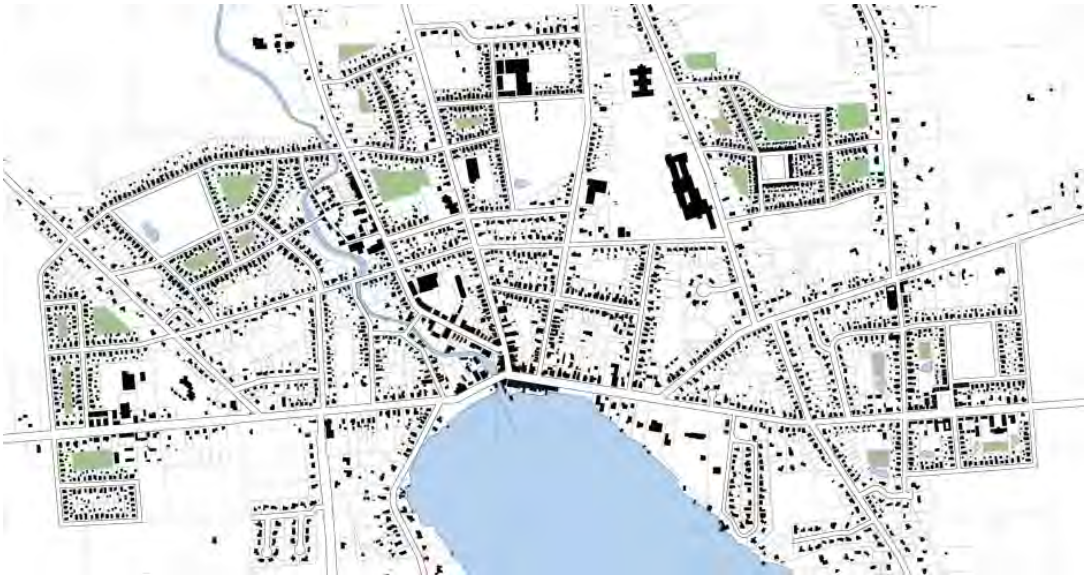
Principle 12
Many activities of daily living should occur within walking distance, allowing independence to those who do not drive, especially the elderly and the young. Interconnected networks of streets should be designed to encourage walking, reduce the number and length of automobile trips, and conserve energy.

Principle 16
Concentrations of civic, institutional, and commercial activity should be embedded in neighborhoods and districts, not isolated in remote, single-use complexes. Schools should be sized and located to enable children to walk or bicycle to them.

Principle 25
Civic buildings and public gathering places require important sites to reinforce community identity and the culture of democracy. They deserve distinctive form, because their role is different from that of other buildings and places that constitute the fabric of the city.

Regulating Plan and Code for both the Village and the Town--designed specifically to fulfill the professed traditional urban intentions of the *Joint Comprehensive Plan*--and graphic representations of what our several proposed interventions might look like.

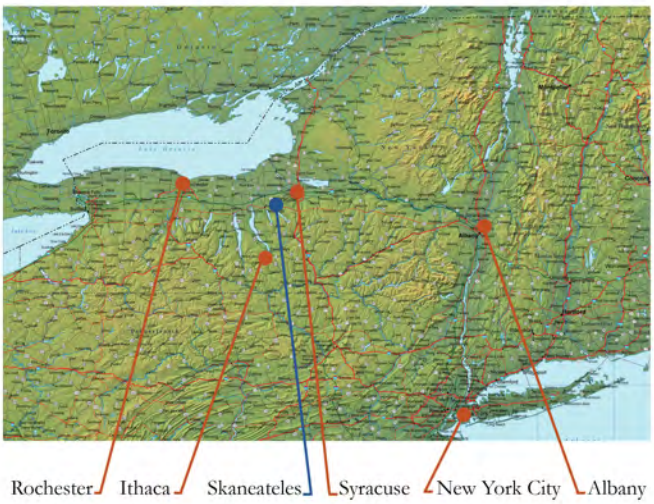
Critical to our proposal is innovative wastewater treatment by means of environmentally friendly constructed wetlands (see below). At first skeptical of this relatively new technology, following a site visit to a fifteen-year old operating constructed wastewater wetland---located, like Skaneateles, in a lake-effect snow-belt region---our clients soon realized the sustainable development potential of a constructed wetlands wastewater treatment system. In addition to being dry, odorless, and (potentially) beautiful, the constructed wetland cells allow a great degree of municipality, developer and builder flexibility because they can be built incrementally, can serve relatively high-density developments, return clean water to the ground, are low maintenance, and employ cost-competitive operational technology (especially when gravity-fed). A constructed wetlands wastewater treatment system would allow the Village and the Town to go beyond their current conventional sprawl zoning requirements to permit traditional compact, walkable mixed-use hamlets and neighborhoods as-of-right; and exploring this issue with initially skeptical clients was itself a valuable experience in cooperative investigation and learning.



Proposed Skaneateles constructed wetlands wastewater cells and bio-fields - 26.8 acres in Village, plus 14.2 acres in Town hamlets (not shown)

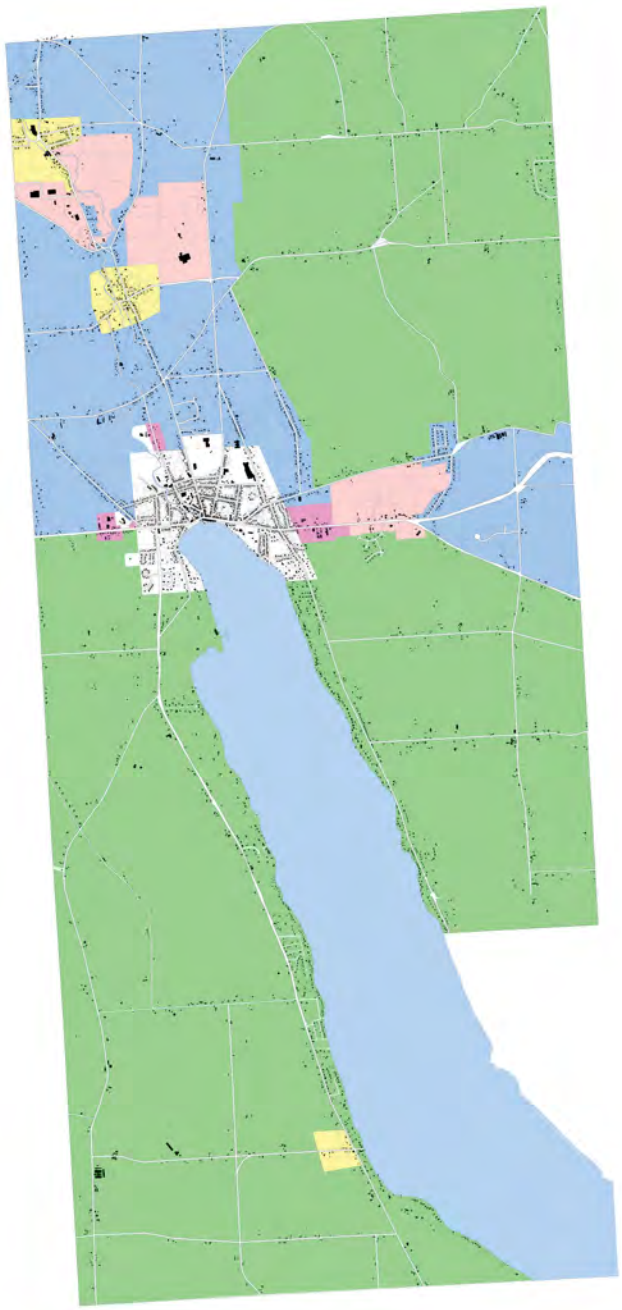
Photos of existing constructed wetlands wastewater cells and bio-fields in a fifteen-year-old development in a lake-effect snow-belt region

Skaneateles, New York: Regional Context



Location Map, New York State

Village of Skaneateles

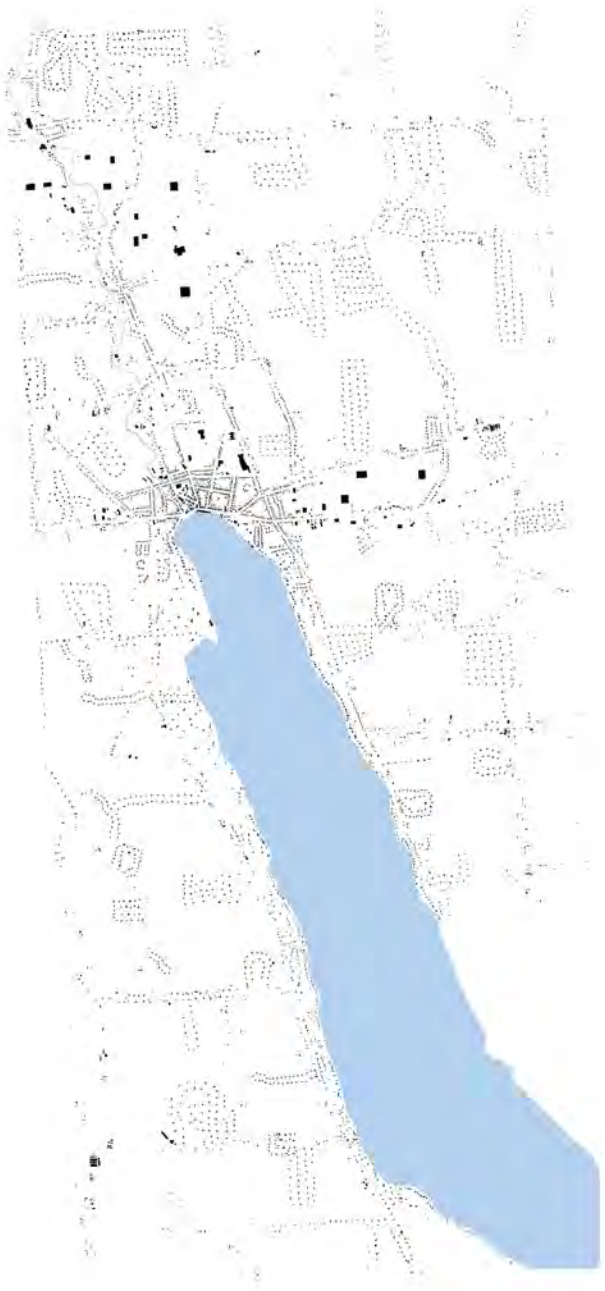


Town of Skaneateles
Existing Zoning Map

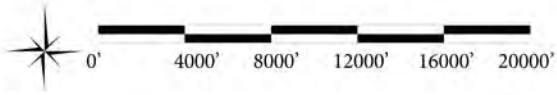
- Rural Farming and Forest
- Rural Residential
- Highway Commercial
- Hamlet District
- Industrial/Research/Office District

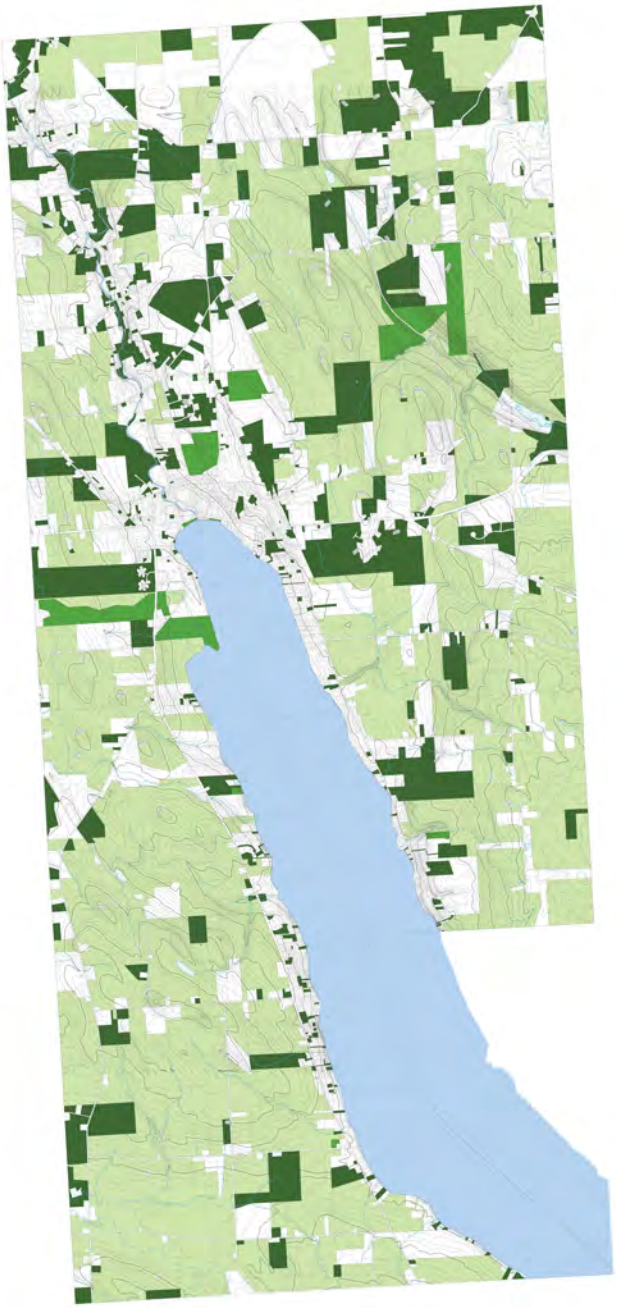
0' 4000' 8000' 12000' 16000' 20000'

Skaneateles Building 2010



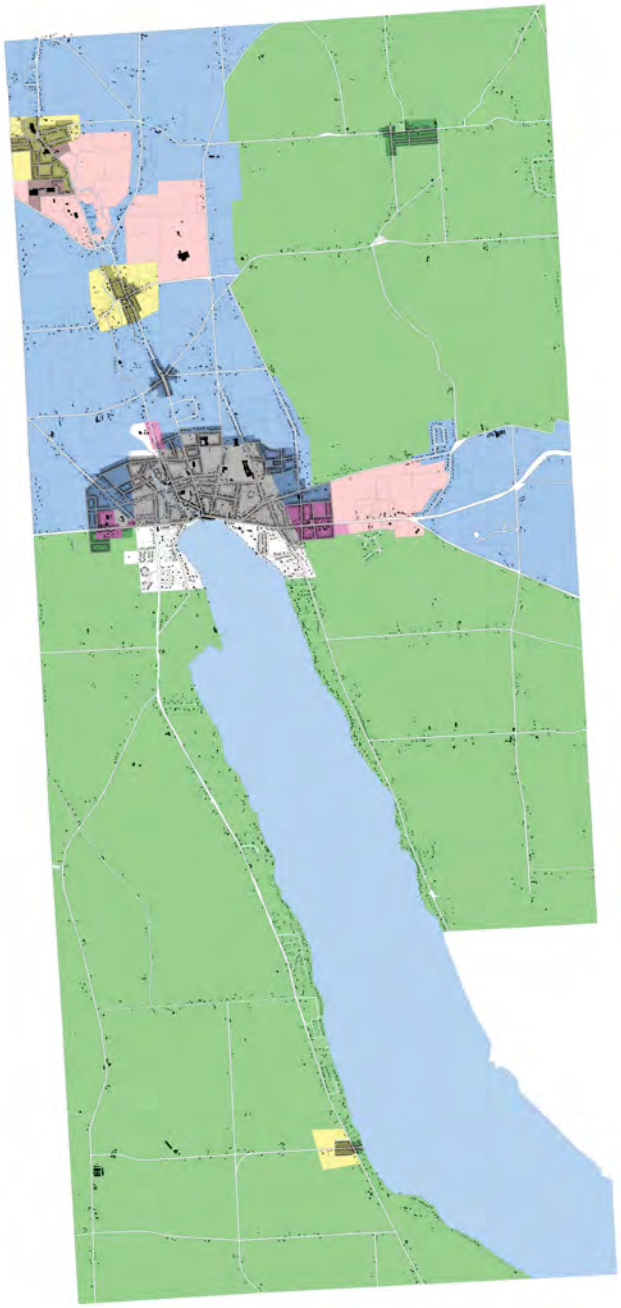
Skaneateles Building Permitted by Existing Zoning





Town of Skaneateles
Rural Land

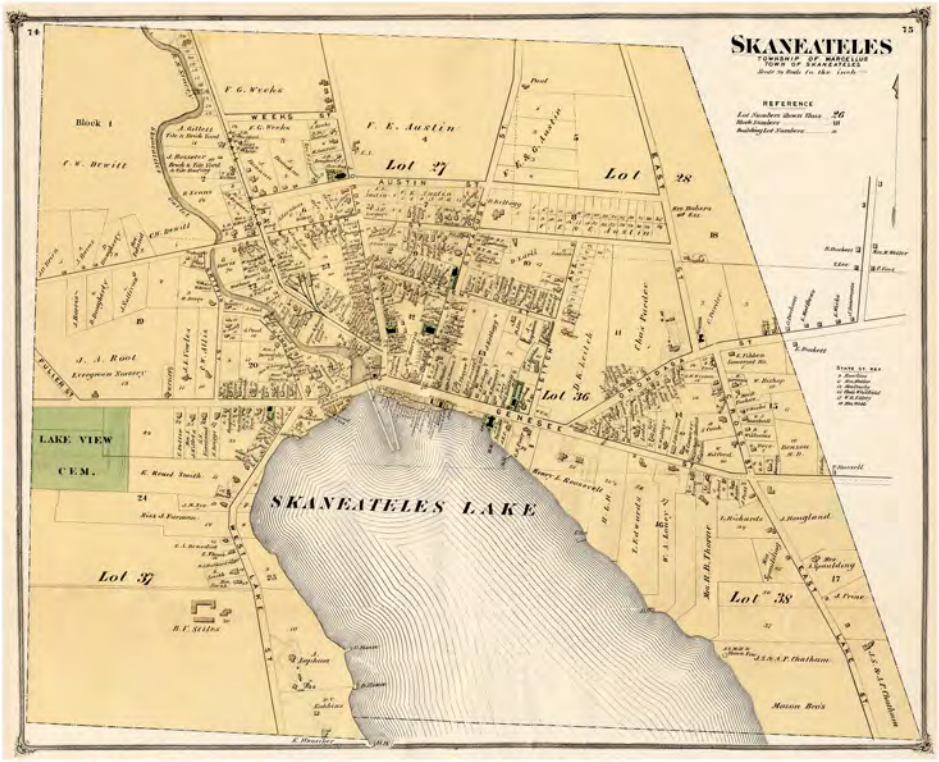
- Wood
- Parks & Conservation
- Agriculture



Existing Zoning Map with
Proposed Receiving Areas

- Receiving Area Overlay
- Rural Farming and Forest
- Rural Residential
- Highway Commercial
- Hamlet District
- Industrial/Research/Office District

0’ 4000’ 8000’ 12000’ 16000’ 20000’



Village of Skaneateles 1874, with proposed street, block and lot plan

Village of Skaneteles 2010, with proposed street, block and lot plan

Village of Skaneateles - Proposed Neighborhood Designs

Upper Fennell Street

Lower Fennell Street

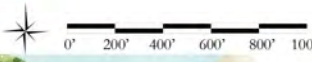
Northeast Neighborhood

West Gateway

East Gateway

Existing Plan

Proposed Plan



Existing View Looking Southeast

Proposed View Looking Southeast

Proposed View Looking North

Exisiting View Looking Northwest

Proposed View Looking Northwest

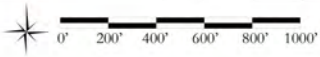
Existing View Looking Northeast
(on Kelly Street)

Proposed View Looking Northeast
(on Kelly Street)

Proposed Section Looking Northwest

Existing Plan

Proposed Plan



Existing Condition

Proposed View Looking Northeast

Proposed Section Looking West

Town of Skaneateles - Hamlets

Shepard Settlement

Skaneateles Falls

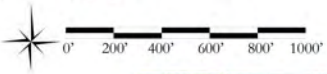
Mottville

Willow Glen

Mandana

Existing Plan

Proposal Plan



Existing Condition

Proposed View of Creek-side Plaza Looking North

Proposed Section Looking East

Existing Plan

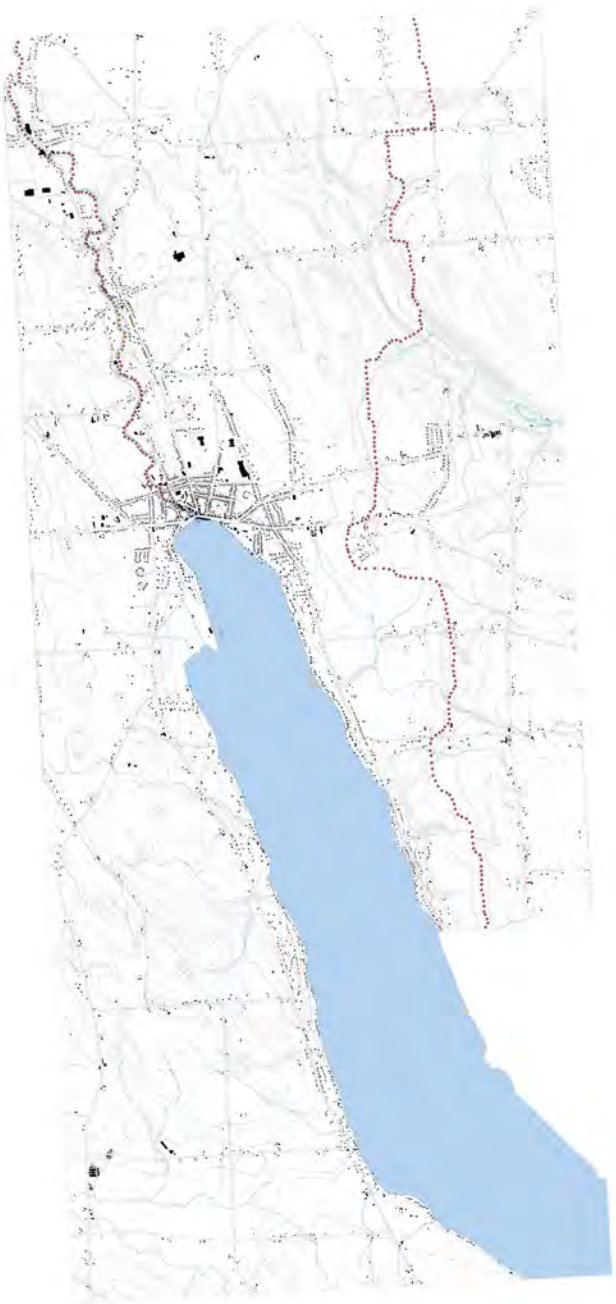
0' 200' 400' 600' 800' 1000'

Proposed Plan

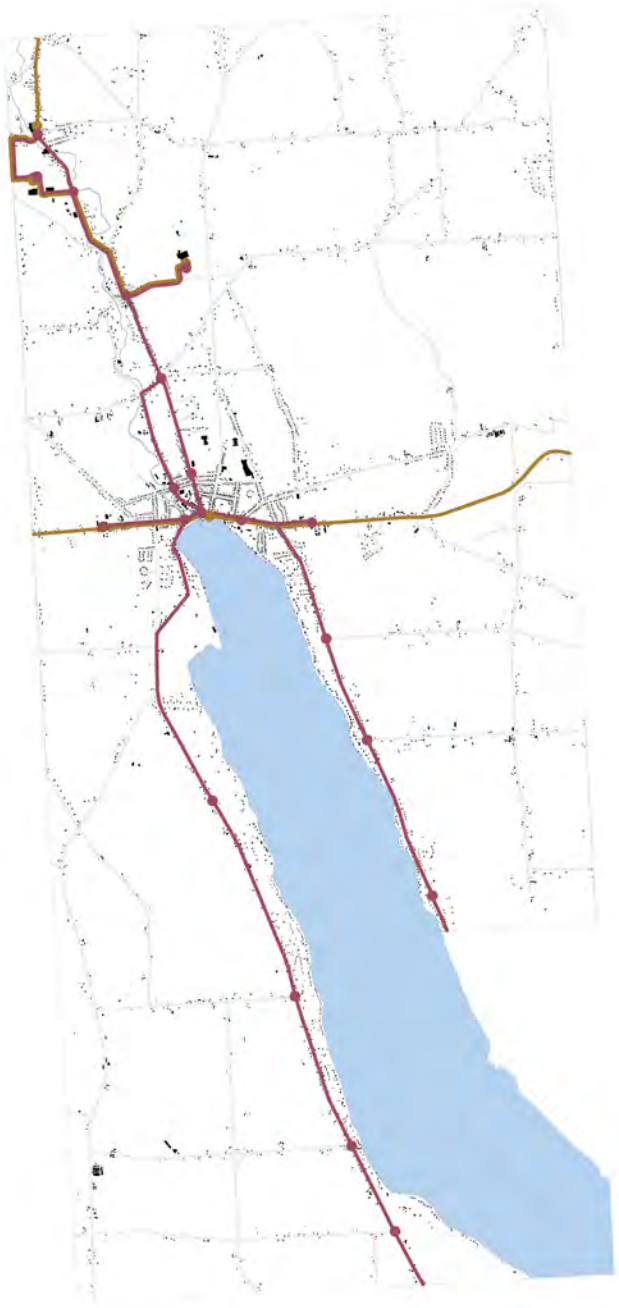
Proposed View Looking North

Existing Condition

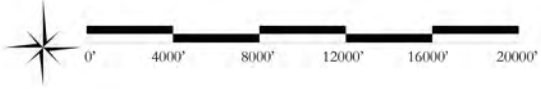
Proposed Section Looking East



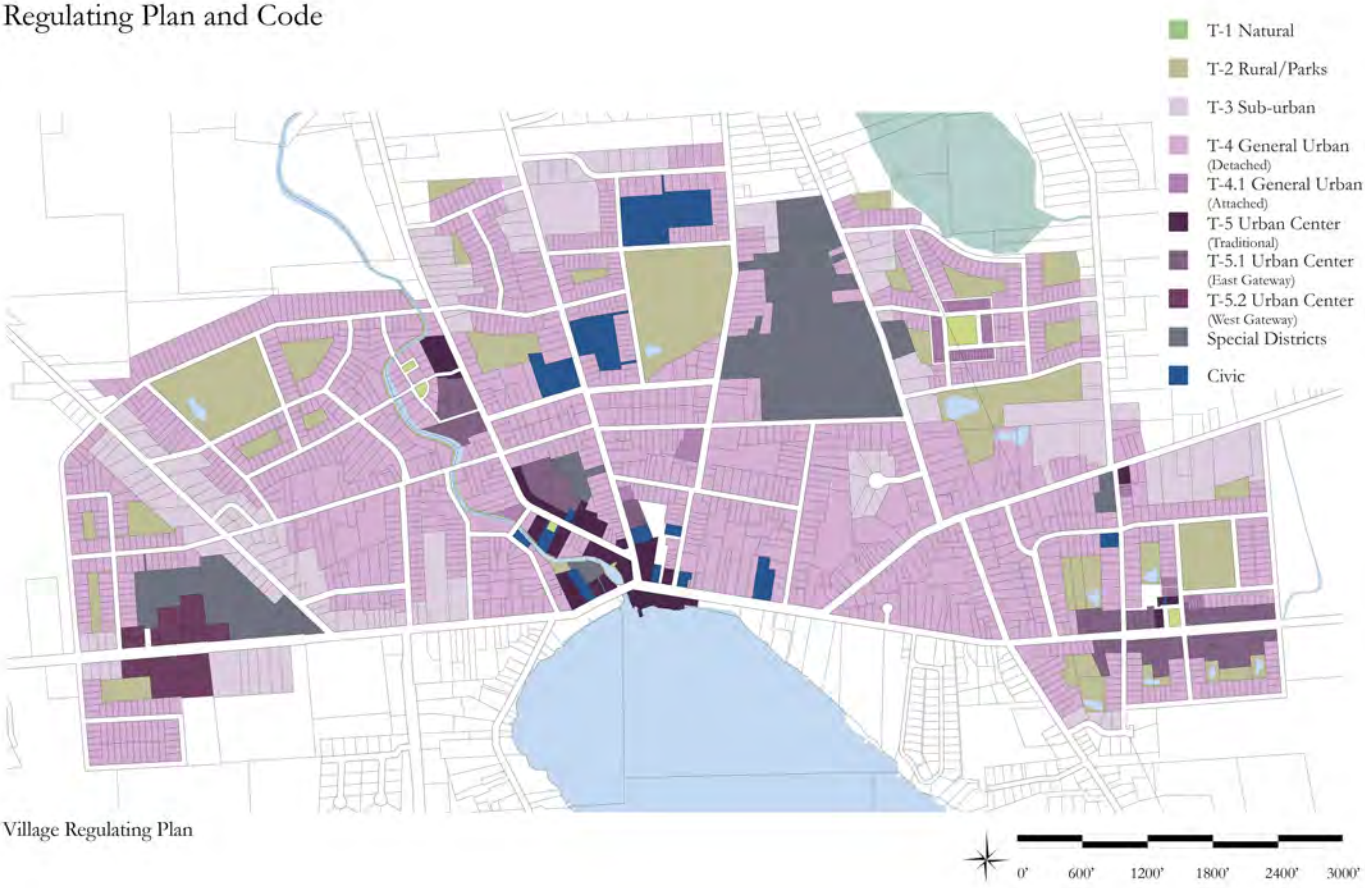
Proposed Trail Network:
Skaneateles Creek Trail (north west)
Ridge Line Trail (east)



Transit Network:
Existing (yellow)
Proposed (red)



Regulating Plan and Code



Village Regulating Plan

Form Based Code

T-4: TYPE I-GENERAL URBAN DETACHED SINGLE FAMILY

BUILDING HEIGHT & USE

HEIGHT: T-4 Type I buildings shall have a maximum of three (3) stories, not including a basement or an attic, with an optional tower. An optional ancillary building may be one (1) or two (2) stories in height and shall not exceed the height of the primary building. First floor height shall not exceed six (6) feet above grade.

USE: This is a residential building type, but other uses are permitted that are not forbidden (see full code for list of forbidden uses).

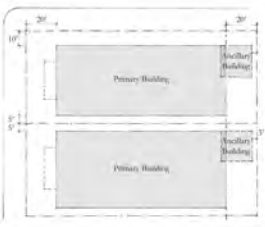
BUILDING LOCATION

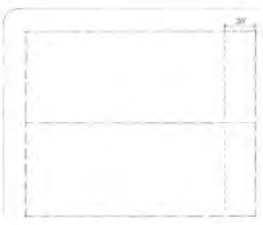
CORNER BLOCK LOTS
T-4 Type I buildings shall be built to a build-to line twenty (20) feet back from the front property line. Corner lots shall have a ten (10) foot setback on the long property frontage; a five (5) foot setback on the side property line; and a twenty (20) foot rear setback. Stairs and porches and upper floor bay windows and balconies may project beyond the front build-to-line, but may not encroach on the side or rear-yard setbacks. There shall be a maximum lot coverage of 60%, including ancillary building. Ancillary building shall have a 40-foot minimum setback from the front property line. Ancillary building shall follow the side setbacks for the main house, and have a three (3) foot rear setback requirement.

MID BLOCK LOTS
T-4 Type I buildings shall be built to a build-to line twenty (20) feet back from the front property line. Mid-block lots shall have a five (5) foot side set back and a twenty (20) foot rear setback. Stairs and porches and upper floor bay windows and balconies may project beyond the front build-to-line, but may not encroach on the side or rear-yard setbacks. There shall be a maximum lot coverage of 60%, including ancillary building. Ancillary building shall follow the side setbacks for the main house, and have a three (3) foot rear setback requirement.

PARKING REQUIREMENT

T-4 Type I lots shall have a minimum of one off-street parking space per dwelling unit, including ancillary building. No location specifically designated for parking is required, but parking and ancillary building must be accessed from a driveway.





BUILDING FUNCTION		
	Residential	Allowed
	Lodging	Allowed
	Office	Allowed
	Retail	Allowed Where Not Forbidden(Ground Floor Only)
BUILDING HEIGHT		
	Principle Building	3 Stories Maximum
	Outbuilding	2 Stories Maximum (Not to Exceed Height of Primary Building)
LOT OCCUPATION		
	Lot Width	Varies
	Lot Coverage	60% Maximum
BUILDING LOCATION		
	Front	20 foot Build-To-Line
	Side	5 foot Setback
	Rear	20 foot Setback

Form-based Code/Sample Page