Guide to Developing a Municipal Wastewater Project

for small, rural communities
in
New York State

Lamont Engineers
ENGINEERS • PLANNERS • FACILITY OPERATIONS

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Municipal Wastewater Project

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New York State

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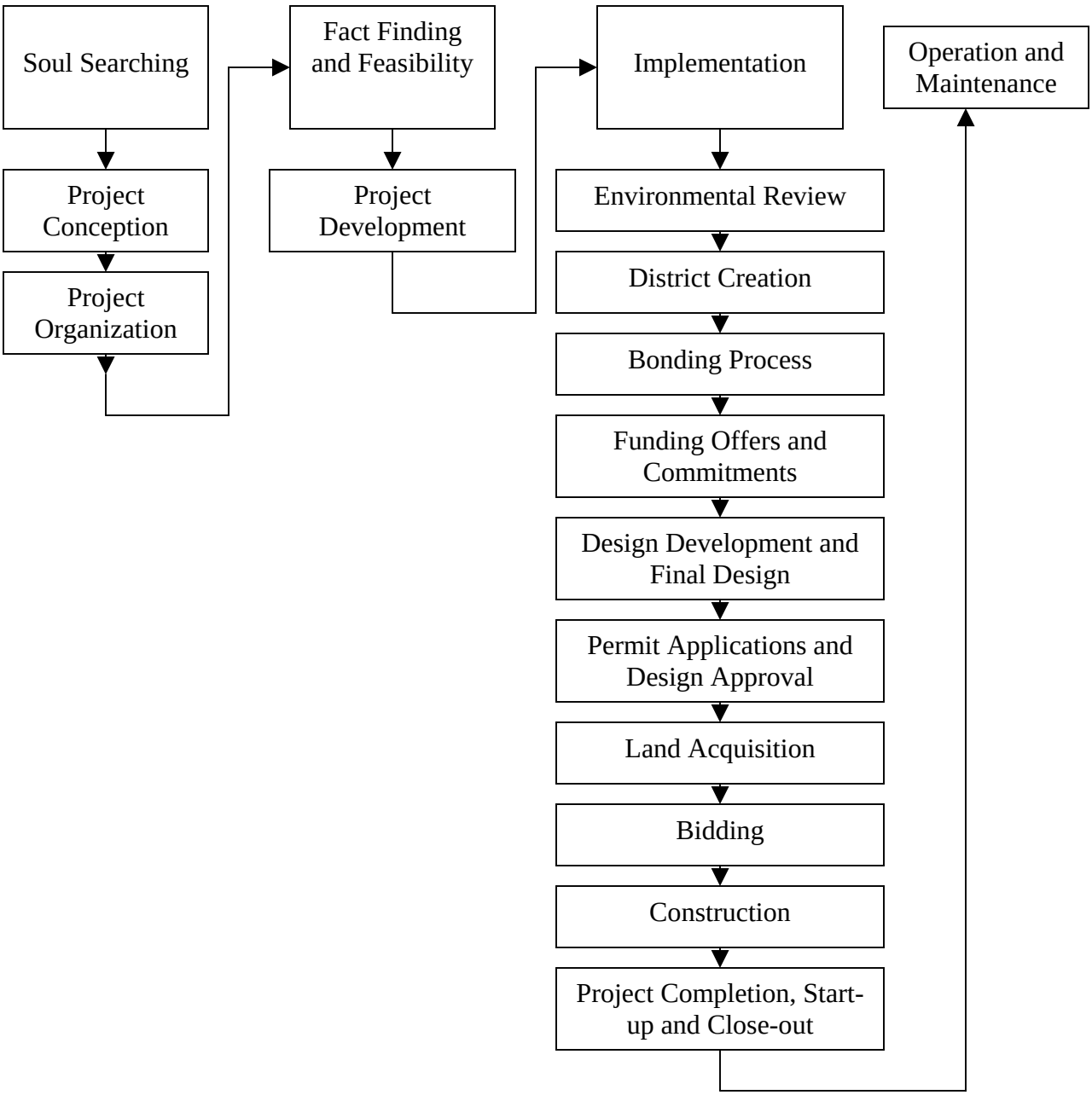
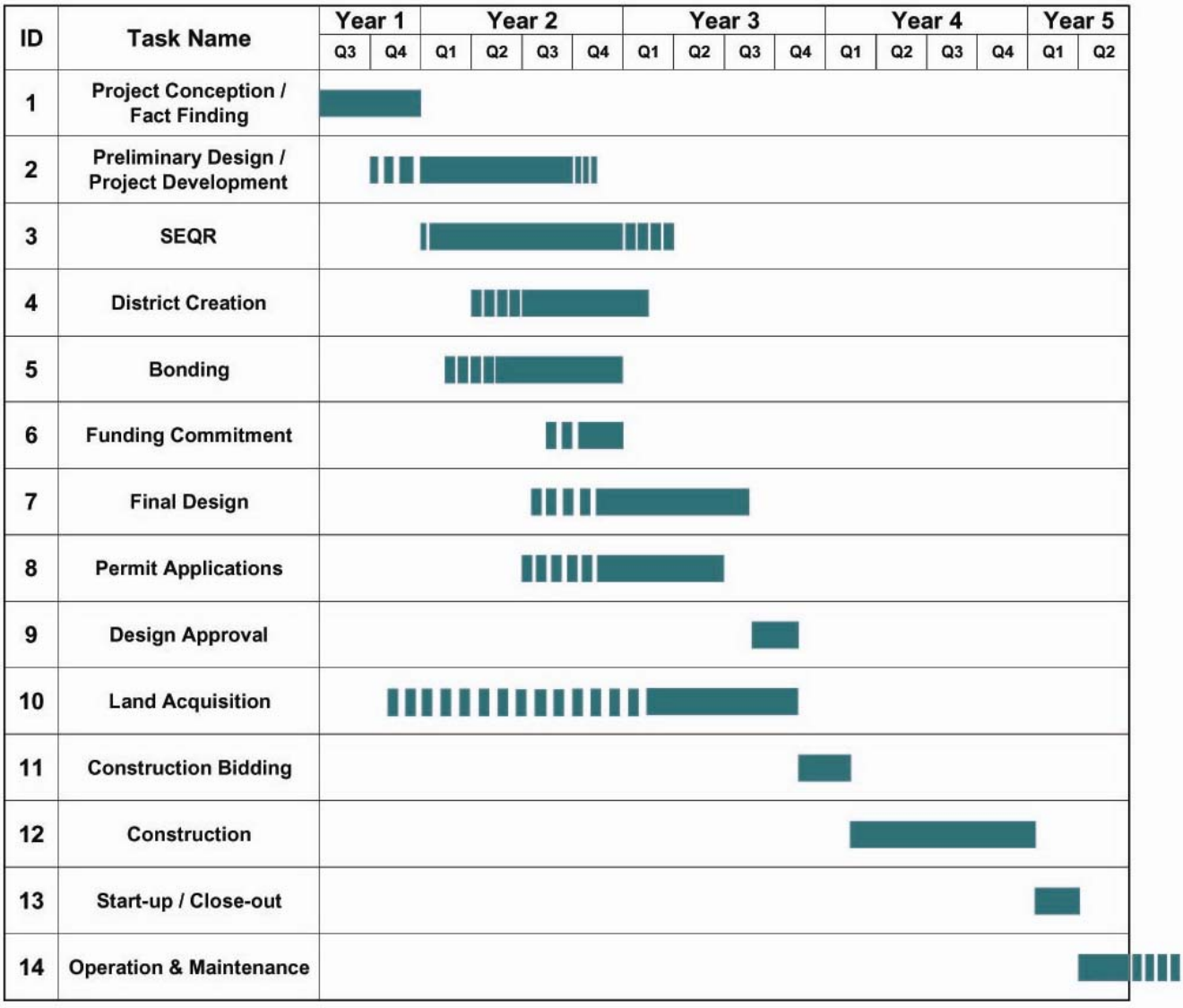


Sample Project Schedule
With Approximate Time Frames



Executive Summary

This manual is intended to help municipal officials do a wastewater infrastructure project.

Soul Searching. (See Chapters 1, 2, and 3.) The process begins when a municipality identifies a wastewater problem. Immediately officials begin to develop a very preliminary definition of the project. The municipality must ask itself if it has the staff, technical expertise and monetary resources necessary to undertake a wastewater project. Since most municipalities require grant and loan assistance to complete a wastewater project, funding considerations will often influence the overall approach to project development, design and construction. The municipality should encourage public participation throughout the project.

The municipality assembles the project team, with the supervisor or mayor typically the project team leader. The municipality may decide to work with state or federally-funding technical assistance providers (such as Resources for Communities and People (RCAP Solutions) or the New York State Environmental Facilities Corporation) to develop the project. The elected officials may decide to assemble an advisory committee made up of various team members, the public, and regulatory and funding agency staff. The elected officials, with the technical assistance providers and the advisory committee if applicable, select a NYS licensed professional engineer who typically designs and manages the project. The municipality selects an attorney to assist with all legal aspects of the project. Additional project team members may include bond counsel, regulatory and funding agency staff, surveyors, archeologists, wetland specialists, stormwater specialists, and other consultants.

Fact Finding and Feasibility. (Chapters 3 and 4) The next step is to study the problem and present possible solutions. Alternatives are identified and the feasibility of each is determined. Once the alternative(s) are agreed on, a preliminary project scope, project budget, and operation and maintenance budget are developed. Acquisition of property can begin during the design phase, especially for land that will be used for critical project

components. Environmental review can also begin during the study phase. If assistance from funding agencies will be needed, funding agency interests and scoring priorities are considered as the project is developed to assure the highest possible funding potential. The fact finding and feasibility process culminates in a Preliminary Engineer's Report, the "Map, Plan and Report." This report is required for district establishment or extension purposes. The Preliminary Engineer's Report is submitted to regulatory agencies for conceptual approval.

Projects within the NYC Watershed are usually funded in full or in part by a combination of New York City Department of Environmental Protection (NYCDEP), Catskill Watershed Corporation (CWC), and/or the US Army Corps of Engineers (ACOE). For projects outside the NYC Watershed, if funding assistance is needed, the municipality submits the Preliminary Engineer's Report to the basic wastewater funding agencies, USDA Rural Development (USDA RD) and the NY Clean Water State Revolving Fund (CWSRF), so they can determine initial eligibility, and provide an offer for a preliminary funding package.

Implementation. For projects that are funded, project implementation can begin as soon as the Preliminary Engineer's Report is approved. For projects that require funding assistance, the municipality will usually begin implementation only after the funding agencies have determined an affordable funding package.

- Environmental Review (Chapter 4). The municipality conducts an environmental review pursuant to 6 NYCRR Part 617 State Environmental Quality Review (SEQR), and other state or federal regulations as required by the regulatory and funding agencies. The approach described in the manual is one in which the municipality conducts a coordinated review, completes a long environmental assessment form, takes a thorough look at potential negative impacts, and determines the project's environmental significance.

- District Creation (Chapter 5). If the municipality is a Town, it establishes or extends a sewer district. There are three alternatives to proceeding with the formation of a sewer district. The Town follows the procedures under New York State Town Law Article 12.

- Bonding Process (Chapter 6). If the municipality plans to borrow funds to finance the project, certain bonding requirements must be met and those requirements depend on the type of financing to be obtained. Typically, the municipality hires a bond counsel that prepares a bond resolution authorizing the total project cost and the amount that will be borrowed to pay for the project. The bond resolution may be subject to permissive referendum, wherein the residents have 30 days from publication of the notice to submit a petition to the municipality requesting a referendum. If a petition is received, a vote must be held that complies with New York State law. If the permissive referendum period expires without a petition,

the bond resolution is subject to estoppel, a period in which the validity of the bond resolution and borrowing authority can be challenged.

- Obtain Funding Offers and Commitments (Chapter 7). For projects that have received preliminary eligibility determinations, funds are not yet committed to the project. With the preliminary engineer's report and the environmental review complete and the bond resolution in place, the municipality can submit complete funding applications to the funding agencies and obtain actual funding commitments.

  For projects within the NYC Watershed, the funding programs may pay for project development as it occurs, and once the project budget is determined during the study phase and agreed upon by the municipality and funding agencies, block grant funds are dedicated and made available to the project.

- Design Development and Final Design (Chapter 8). The engineer prepares the Facility Plan and obtains approval of the Facility Plan from regulatory and funding agencies, assists the owner in obtaining permits, identifies the properties required and assists the municipality in obtaining property and easements, completes final design drawings and specifications, and obtains plan approval from regulatory and funding agencies. The design process creates the drawings and specifications from which the project is constructed and the contract documents that are needed to obtain competitive bids and then to contract for construction of the project.

- Permit Applications and Design Approval (Chapter 9). Early in the design phase, the engineer applies for permits and submits the final design to regulatory and funding agencies for approval.

- Land Acquisition (Chapter 10). After potential sites are identified in the study phase, the municipality initiates discussions with the owners of potential sites. The municipal attorney assists the municipality in negotiations with landowners to secure purchase options or purchase agreements on the land.

- Construction Bidding (Chapter 11). When the project construction documents have been approved by the funding and regulatory agencies, and funds are committed to the project, the project can be bid. After bids are received, reviewed, and accepted, a Notice of Award is issued by the municipality for each contract.

- Construction (Chapter 12). After a pre-construction meeting is held to review the project with the contractors and construction contracts are executed, a Notice to Proceed is issued and construction begins. The engineer oversees all aspects of construction and project administration. The engineer's resident project

representative observes construction in the field on behalf of the municipality and the engineer. Monthly bills, budgets and reports are submitted to regulatory and funding agencies. Monthly progress meetings are held, and construction proceeds through substantial completion and then final completion.

- Project Completion, Start-up and Close-out (Chapter 13). When the project is ready for its intended use, the project is deemed complete. The systems are started, final payments are made, long-term financing is put in place, the project books are closed, and operation starts.

- Operation and Maintenance of Facility (Chapter 14). With the facility in place and operational, the engineer and contractors turn the operation over to the municipal operations staff (or contracted operator). The engineers and municipal operators implement a plan of operation and start-up procedures for the system.

This manual serves as a supplement to the experienced career professionals (engineers, planners, attorneys, surveyors and contractors) needed to help the municipality through the process. This manual also identifies agencies that assist municipal officials with this complex process.

Introduction

The reward for implementation of a municipal wastewater project is an improved environment and standard of living. Yet, the process of planning, designing, permitting, constructing and operating a community wastewater management system is complex, time-consuming, contentious, expensive, and challenging. This manual is intended to help local government officials, their municipal and professional staff and their citizens understand the overall process of developing community wastewater management systems. The manual will not replace the experienced career professionals that a community needs to help them with the process—particularly professional engineers, planners, municipal attorneys, environmental attorneys, bond counsel, surveyors, and construction contractors—but it will help the local official to better understand the process and therefore better manage, plan, build and operate the project.

A municipal wastewater project can be as simple as providing community management of individual on-site septic systems, or as complex as installing a new treatment and collection system for a large service area. It may be entirely funded through an existing grant program, or it may begin with no funding in place. Some residents in the service area may be very much in favor of the project, or be adamantly opposed. Whether the project is small or large, simple or complex, most of the steps a municipality must take to successfully implement a wastewater project in New York State are the same.

Reality Check

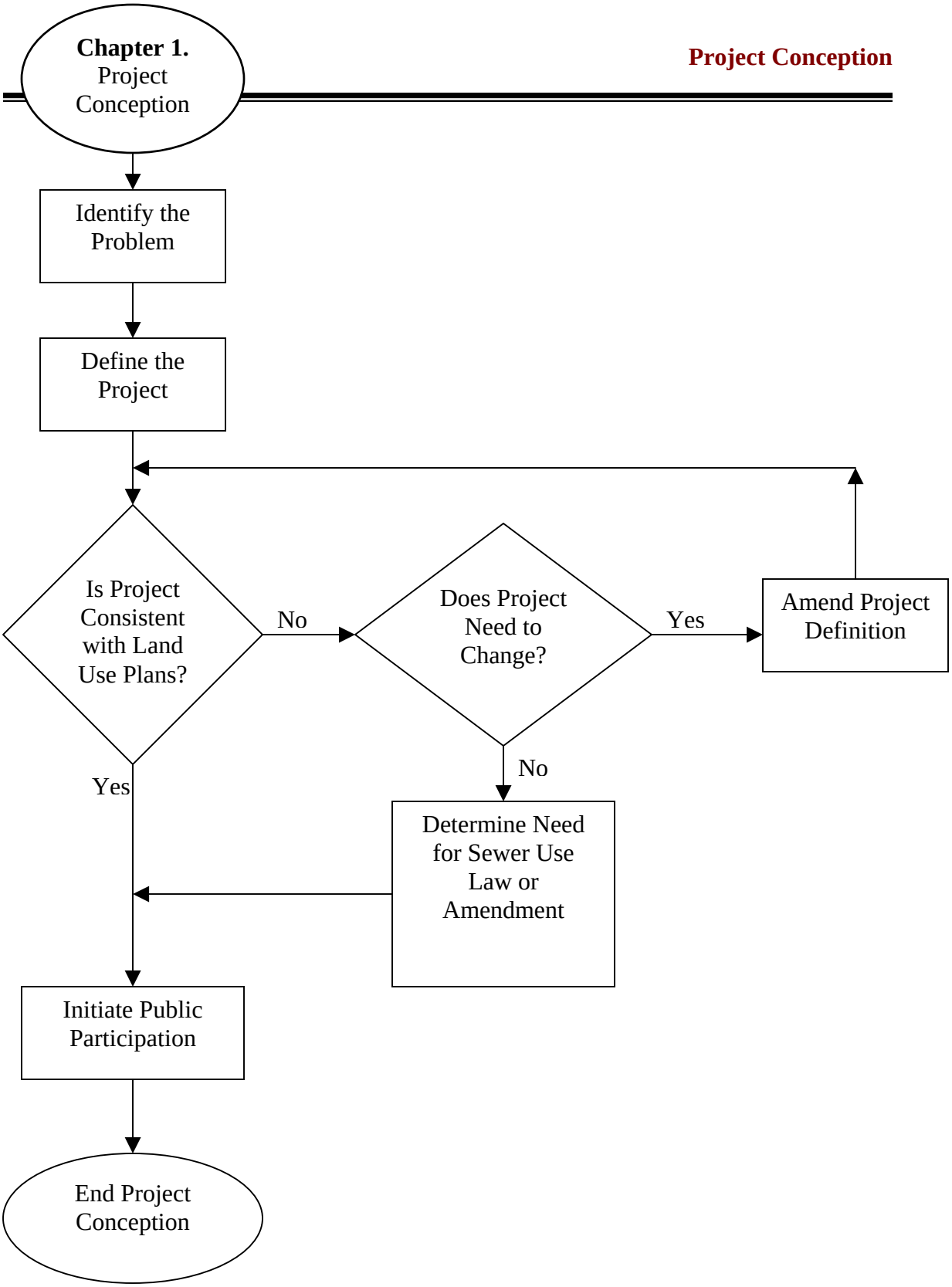
These boxes remind elected officials of items that are of particular importance during the process.

The symbol identifies key concepts throughout the manual.

This guidance manual seeks to assist municipal officials as they navigate the process of implementing a municipal wastewater project. The manual addresses selecting the project team, environmental review, permitting, design, construction bidding and management, all the steps involved in moving the project through the development stage and into actual construction and system start-up.

For those projects that do not have funding in place at the beginning, the primary funders are the NYS Clean Water State Revolving Fund (CWSRF) and United States Department of Agriculture Rural Development (USDA RD). Other funding agencies may be involved instead of or in addition to these agencies.

This manual was initiated as a pilot guidance document for a project in the New York City Watershed, the Hamden Community Wastewater Management Project. Funding in the NYC Watershed may be obtained from a combination of the following agencies: New York City Department of Environmental Protection (NYCDEP), Catskill Watershed Corporation (CWC), and the United States Army Corps of Engineers (ACOE).


Chapter 1.
Project
Conception
Identify the
Problem
Define the
Project
Is Project
Consistent
with Land
Use Plans?
No
Does Project
Need to
Change?
Yes
Amend Project
Definition
No
Yes
Determine Need
for Sewer Use
Law or
Amendment
Initiate Public
Participation
End Project
Conception

The Board's To Do List

- Discuss the problem at board meetings
- Define the project
- Investigate if project is consistent with local and regional plans
- Review municipality's ability to finance a project
- Initiate public participation

Chapter 1

Project Conception

Municipal officials will do a great deal of soul searching during the project. In the earliest stages, the questions they will ask themselves will be focused on what the problem is, how to solve it, whether the community will be able to afford it, and whether the project will have community support.

Because every project has specific design elements, location issues, and public concerns, the suggestions in this manual should not be substituted for project-specific professional planning, legal, and engineering advice .

1.1 Identify the Problem. A municipal wastewater project is conceived when a municipality wants to correct a wastewater problem. Anyone, a local citizen, the wastewater superintendent, a community planner, a group of community residents, a regulatory agency staff person, an environmentalist, a board member, or a wastewater program administrator, can identify a problem with the existing system and bring that problem to the attention of the local municipal board. The method of notifying the board of the problem can be as simple as telling a board member, as formal as property owners filing a petition requesting a study, or as mandatory as the New York State Department of Environmental Conservation (NYSDEC) filing a consent order to correct the problem.

Reality Check
The municipality can conduct a needs assessment survey to gather information about the specific problems, determine resident attitudes and level of support for municipal wastewater systems in general, determine the problems and opportunities in order of importance and urgency, and give residents a voice in determining policy, goals and priorities.

1.2. Define the Project. In the very early stages of project conception, not much may be known. To keep the project on track in its initial stages, a preliminary project definition should be developed that gives an overview of the existing situation and covers at least the basics: 1) identify the problems that the project will correct, and 2) develop an initial list of elements of a proposed solution(s). This

project definition will be expanded and refined as the project develops, and will eventually become the project scope. This definition will serve as a guide for the project during the initial public participation efforts.

> **Reality Check**
>
> As municipal board members develop a clearer understanding of the community's wastewater problems and start work on defining the project, they should also begin to review the municipality's (or service area's) ability to finance a municipal wastewater project. **Funding, or the lack of funding, will drive many aspects of the project, especially the overall schedule, and particularly the timing of the design.**

1.3. Review Project Relationship to Existing Local and Regional Land Use Plans. As an initial step, local officials need to investigate whether the project is consistent with local and regional plans. To the extent that the project is merely addressing the existing failing septic systems, it may not raise significant planning issues. In general, however, a community wastewater treatment system will allow for more dense development. Such dense development may or may not be consistent with local land use plans. In addition, the sizing of the plant will be dependent upon the potential build-out of the area to be served by the system. The potential build-out will be governed by the local zoning and land use regulations. Local and regional land use plans might include comprehensive plans, watershed management plans and regulations, subdivision regulations, and other land use laws and ordinances such as sewer use ordinances, site plan review laws, zoning laws, and building permits.

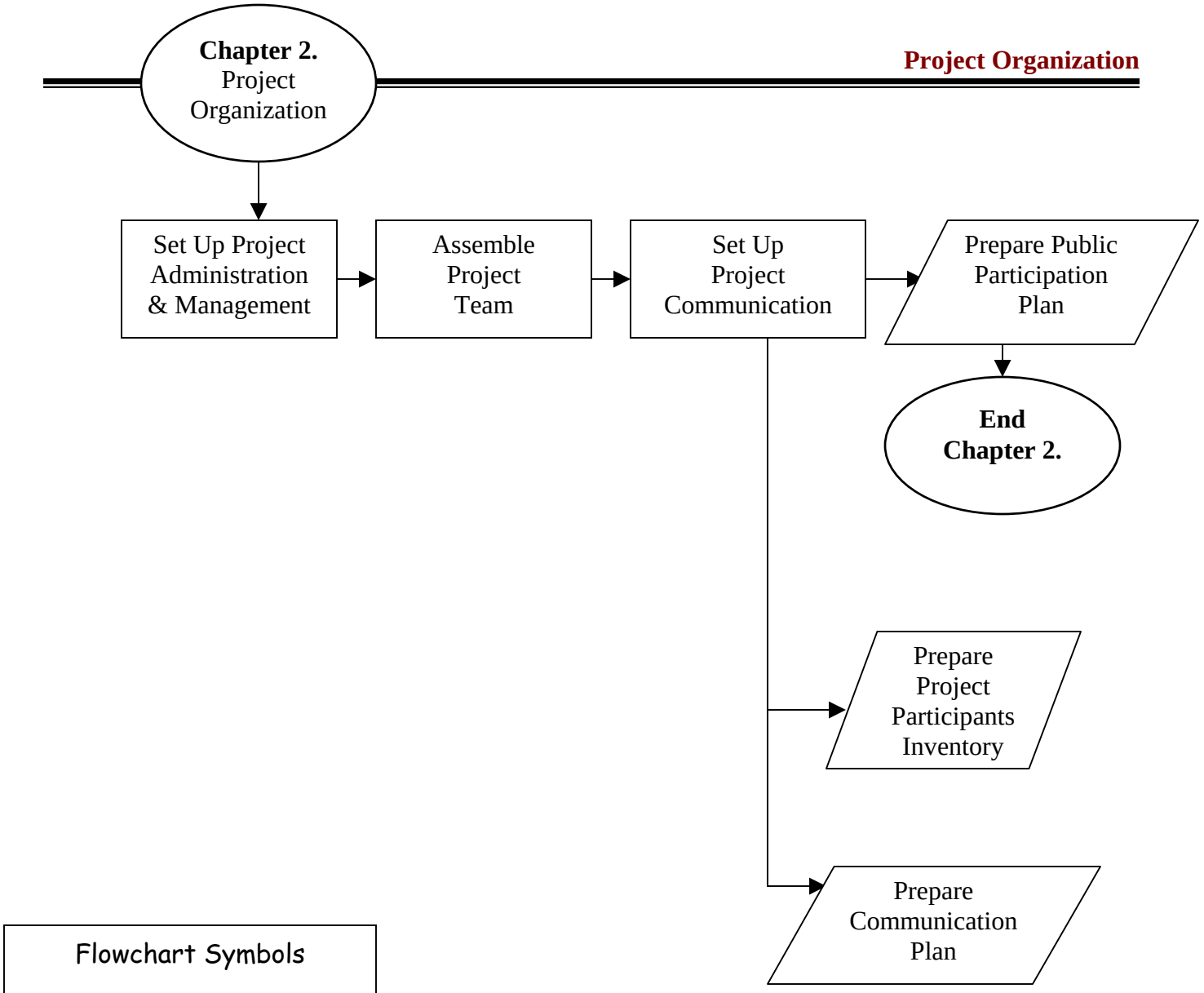
> *Example Initial Wastewater Project Definition*
>
> *Dodge City's stormwater drainage system smells like raw sewage because failed on-site septic systems are leaking sewage into the stormwater pipelines which then convey the water to Dodge Creek. Dodge Creek is murky and smelly, too. Dodge City proposes to consider solving these problems by reviewing community wastewater management options such as municipal wastewater collection and treatment facilities or community management of on-site septic systems.*

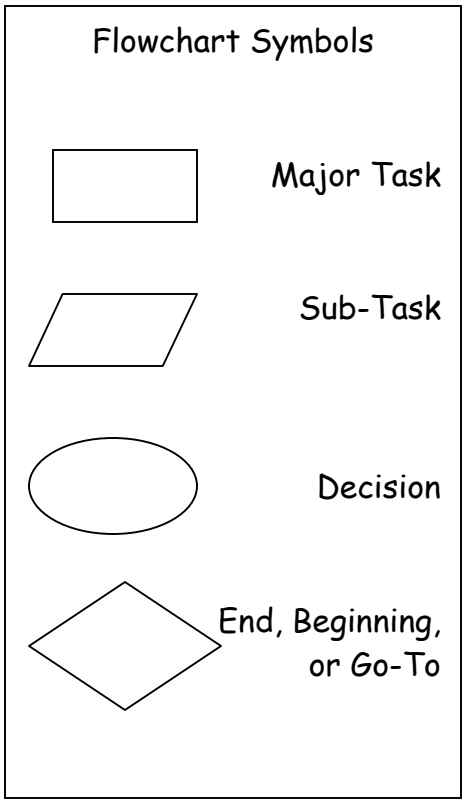
The lack of local or regional land use plans or regulations does not necessarily eliminate this step since the project itself may serve as a catalyst for a local or regional land use planning effort.

Municipalities in New York State with municipal wastewater systems must adopt a sewer use law.

For projects located in the NYC Watershed, the funding agreements will require that the town or village adopt and maintain a sewer use ordinance that is at least as stringent as the model sewer use ordinance then in use by NYSDEC. The watershed funding agencies will also require that the municipality adopt and maintain appropriate laws and ordinances assuring that future growth within such area(s) can be adequately serviced by and will not exceed the capacity of the sewerage collection system and the WWTP to which it is connected.

1.4. Initiate Project Public Participation. The public should be included early in the process. Often, the more residents know about the problem, the more likely they are to assist with and support the solution. Effective ways to encourage public participation include open discussions about the project at regular municipal board meetings, public information meetings, newsletters, mailings, and press releases.


Chapter 2.
Project
Organization
Set Up Project
Administration
& Management
Assemble
Project
Team
Set Up
Project
Communication
Prepare Public
Participation
Plan
End
Chapter 2.
Prepare
Project
Participants
Inventory
Prepare
Communication
Plan


Flowchart Symbols
Major Task
Sub-Task
Decision
End, Beginning,
or Go-To

The Board's To Do List

- Assign municipal project team leader
- Set up advisory committee, if applicable
- Hire engineer
- Assemble project team
- Set up project communication system
- Keep project records
- Continue with public participation efforts

Chapter 2

Project Organization

The soul searching continues as municipal officials ask themselves how to obtain the resources needed to undertake a solution to the problem. Do they have the staff, time, and technical expertise needed to solve the problem? What additional resources are needed? How can they encourage public support for the project?

2.1. Project Administration and Management. Very early in the process, the municipality will need to apply for financing, do project studies, and set up accounting systems for the project. As a practical matter, the typical small, rural community does not have a staff with sufficient free time to organize and manage a project of this magnitude. A typical rural community will have to retain professional assistance.

Reality Check

Municipal officials that have completed wastewater projects stress the importance of choosing engineering consultants and attorneys that have experience on municipal wastewater projects, enough staff to do the work, and the time to devote to the project.

2.2. Project Team. The role of the project team is to develop and guide the project, keep it on schedule, on budget, and overcome the many obstacles that will occur along the way. The project team will likely include municipal representatives, community residents, county or regional planners, state or federal agency-sponsored technical assistance providers, regulatory and funding agency representatives, and professional service providers such as a municipal attorney, a consulting engineer, a bond counsel, etc. Not all members of the project team will be in place at the earliest stages of the project, and some members will join the team to complete specific work items and then will not be needed again. The core members of the project team are the municipal officials, its consulting engineer, its attorney, the regulatory agencies, and the funding agencies. A Project Team Work Sheet is included in Exhibit 1.

2.2.1. Project Team Leader. The overall project team leader is typically the supervisor, mayor or other member of the municipal board, a director, or a departmental

commissioner or superintendent. The project team leader is usually empowered with authority to make executive decisions and sign project-related documents. Once the consulting engineer is hired, the engineering project manager becomes the assistant to the team leader. The municipal board, acting through its team leader, is still the ultimate decision-maker and authority on the project, and the engineering project manager is responsible for the day-to-day execution of the entire project.

2.2.2. Engineering Consultant. The project must be designed and certified by a NYS Licensed Professional Engineer, so a private consulting engineering firm providing such services will be required, unless the municipality has a professional engineering design team on staff. The chosen engineer should be experienced in wastewater infrastructure projects and should have adequate time and staff available to complete the project. The choice of engineering firm may be the most important single decision that the community will make during the process of developing its wastewater management system.

Usual services of the engineering consultant include: feasibility study, preliminary design, final design, opinion of cost, bidding phase coordination, construction administration, and construction observation. Full service engineering consulting firms may also provide environmental review, grant writing and funding application development, project administration, permit application, and surveying. A staff stormwater specialist will determine the need for a stormwater pollution prevention plan (SWPPP) pursuant to SPDES General Permit GP02-01 (or current GP) in accordance with the latest guidance from NYSDEC. Bookkeeping and reporting services are typically provided since the funding agencies usually require monthly budget updates, grant or loan drawdown requests, affirmative action compliance reports, and monthly status reports. This work is in addition to the project-specific accounting system the municipal clerk or treasurer must set up to track the project internally.

Note that municipal finance law requires that actual project funds be handled directly by the municipality; bookkeeping and reporting services performed by non-municipal individuals or firms are strictly record-keeping in nature for the purpose of tracking the project budget and project funds. The actual project funds (usually in the form of wire transfers) go directly to a project-specific municipal account and are handled only by authorized municipal employees.

The engineering project manager provides a very active leadership and will be responsible for all phases of the project, from project development through construction, start-up and operation. The engineering project manager and other members of the engineering team will also work closely with the attorney and bond counsel throughout the project.

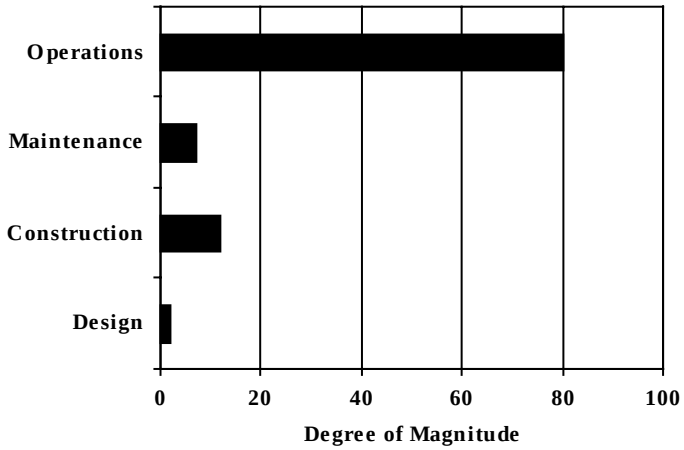
2.2.2.1. Qualifications Based Selection Process for Selecting Professional Services. A report by the Committee on Federal Procurement of Architectural and Engineering (A/E) Services in 2000 concluded as follows:

Reality Check

The most important decision a municipality will make on a wastewater project is who to hire as their engineer.

"The quality of A/E services will have a considerable impact on the ultimate efficiency, economy and effectiveness of a facility. While the direct design cost of A/E service represents only a small part of the total project cost, these design services have a profound effect on the construction, maintenance and operations costs as well as the useful life of the structure of facilities."

Comparison Of Elements Of Life-Cycle Cost



The report presents the above graph with the note, "total life-cycle cost approximates 100 times design cost." Because of this the quality of engineering services are far more important than the cost of engineering services, within reason, and the Federal Government and many states and municipalities practice qualifications-based selection of engineering services. Obviously price of engineering services may be considered in addition to considering an engineer's qualifications, experience and character, but comparable prices are very difficult to obtain because engineering services are needed very early in the project development, certainly before the project is well defined. In fact, because each municipal wastewater system is a custom, one-of-a-kind project, the engineer's primary task is to define the project by designing it with the input of community leaders, funders, and regulators. The successful design of a project involves a multitude of issues besides those of applied science, including communications, management, and leadership skills. Furthermore, the best engineers are open and honest, and they recognize their position of subordinate service to their client community.

Engineering and other professional services are not required by law to be publicly bid, but municipalities are required by Section 104-b of the General Municipal Law to adopt procurement policies for such services. The following is an excerpt from the New York Conference of Mayors (NYCOM) Sample Procurement Policy:

> "Pursuant to General Municipal Law Section 104-b(2)(f), [a municipal] procurement policy may contain circumstances when, or types of procurements for which, in the sole discretion of the

governing body, the solicitation of alternative proposals or quotations will not be in the best interest of the municipality. In the following circumstances it may not be in the best interests of the [CITY/VILLAGE] of [NAME] to solicit quotations or document the basis for not accepting the lowest bid.

a. Professional services or services requiring special or technical skill, training or expertise. The individual or company must be chosen based on accountability, reliability, responsibility, skill, education and training, judgment, integrity, and moral worth. These qualifications are not necessarily found in the individual or company that offers the lowest price and the nature of these services are such that they do not readily lend themselves to competitive procurement procedures.

In determining whether a service fits into this category the [CITY COUNCIL/BOARD OF TRUSTEES] shall take into consideration the following guidelines: (a) whether the services are subject to State licensing or testing requirements; (b) whether substantial formal education or training is a necessary prerequisite to the performance of the services; and (c) whether the services require a personal relationship between the individual and municipal officials. Professional or technical services shall include but not be limited to the following: services of an attorney; services of a physician; technical services of an engineer or architect engaged to prepare plans, maps and estimates; securing insurance coverage and/or services of an insurance broker; services of a certified public accountant; investment management services; printing services involving extensive writing, editing or art work; management of municipally owned property; and computer software or programming services for customized programs, or services involved in substantial modification and customizing of pre-packaged software."

The municipality develops a Request for Qualifications that may include a Request for Proposals (RFP) and scope of work, provided the scope of work is thorough, consistent, especially in required proposal structure, and very clearly stated.

- Announce Proposed Project
- Receive qualifications submittals
- Evaluate Submittals
- Develop a Short List of firms to be interviewed
- Interview Firms
- Rank Firms. A sample project scoring sheet developed by the Catskill Watershed Corporation is included in Exhibit 16 that can be adapted for a specific project.

- Select and Notify Firms
- Negotiate Contract

A thorough discussion of the qualifications based selection process is included in Chapter 2 of the Federal Compensation for Architectural/Engineering Services report by the Council on Federal Procurement of Architectural and Engineering Services, 2002, available at http://www.acsm.net/cofrpt2000.doc. RCAP Solutions and NYSEFC technical assistance providers are very well versed in and often assist communities with the RFP and qualifications-based selection process.

2.2.3. Advisory Committee. A community advisory committee is an option that can be helpful and will encourage public participation. An advisory committee can be instrumental in gaining public support for district creation or permissive referendum purposes, and can become involved in the environmental review process. Usually the project team leader appoints the advisory committee.

A municipal sewer advisory committee may include some or all of the following members:

- Project Team Leader
- Engineering Project Manager (see section 2.2.2)
- Town or Village Board member(s)
- WWTP Superintendent or equivalent, if available
- Town or Village staff engineer, if available
- County Planner or other representative
- Local or regional watershed protection organization staff
- Interested municipal residents and business owners
- Regional regulatory and funding agency staff (see section 2.2.7)
- Technical Assistance Providers (see section 2.2.4)
- Town of Village Planning Board Members

2.2.4. Technical Assistance Providers. Many state and federal regulatory and funding agencies offer technical assistance providers who are available to assist communities (usually at no charge) with many aspects of the project. Technical assistance providers often assist the community with project conception, needs assessment, and the process to select the professional engineering consultant. These agencies do not recommend who to hire; the actual hiring decision is made by the municipal officials. The following agencies typically provide technical assistance, project development, and funding assistance for wastewater projects in New York:

- New York State Environmental Facilities Corp. (NYSEFC), website: www.nysefc.org.
- RCAP Solutions (Resources for Communities and People), website: www.rcap.org.

- County and Regional Planning Departments.

2.2.5. Legal Counsel. The regular municipal attorney often handles all of the legal work required by the project. On a complex or controversial project, or a project located in a regional watershed, the municipality may hire, in addition to the local municipal attorney, an attorney experienced in forming sewer districts, drafting sewer use and rent laws, construction contracts, eminent domain, contracts for plant operation and maintenance, and environmental permitting. The attorney(s) will assist the municipality with land acquisition, reviewing contracts and agreements, district creation, legal opinions for loan closings, creating or amending local laws relative to sewer use and growth, various funding, regulatory and environmental review, negotiations, and other legal issues, including the procurement of outside legal assistance, if necessary, throughout the project.

2.2.6. Bond Counsel. If the municipality will need to borrow funds for the project, bond counsel will be needed. Bond counsel will prepare the bond resolution, assist with interim financing, bond closings, and loan closings. Bond counsel will also provide assistance with project financing and fiscal issues throughout the project.

2.2.7. Regulatory and Funding Agencies. Including regulatory and funding agency staff as part of the project team throughout the project will help ensure a successful project. Regulatory and funding agency staff involvement and buy-in on project issues and resultant decisions is critical.

For wastewater projects in New York State, the main regulatory agency is the New York State Department of Environmental Conservation (NYSDEC). In addition, the New York City Department of Environmental Protection (NYCDEP) is the regulatory agency for projects within the NYC Watershed.

The main funding agencies for wastewater projects in New York State are the New York Clean Water State Revolving Fund (CWSRF), administered by the Environmental Facilities Corporation, and the United States Department of Agriculture Rural Development program (USDA RD). For projects within the NYC Watershed, the main funding agencies are: NYCDEP, the Catskill Watershed Corporation, and the US Army Corps of Engineers.

2.2.8. Surveyors. The project will require topographic surveys for preliminary and design phase mapping and may require property boundary surveys if land acquisition is involved. Usually a local surveying firm prepares boundary surveys and conventional ground topographic surveys, control surveys, and field edit surveys required for aerial mapping. In addition, an aerial mapping firm may conduct aerial photography-based topographic surveying and mapping of the overall project area.

2.2.9. Other. The proposed project may involve archeology studies, wetland delineations, threatened or endangered species studies, subsurface investigations, flood studies, seismic investigations, laboratory testing, audits, and other services. These services are typically

provided by consultants as subcontractors under the engineering contract or as direct contracts with the municipality.

2.2.9.1 Archeologist. The project may require that archeological studies be conducted to determine the impact on cultural resources. In this case, an experienced archeologist will be needed. Archeologists may be individual private consultants, a consulting firm, or individuals affiliated with a university program.

2.2.9.2 Wetland Specialists. The project may require that a wetland specialist determine the need for wetland delineations or permits. Wetland specialists may be private consultants, staff members of an engineering or environmental consulting firm, or individuals associated with environmental conservation organizations. Staff members of the New York State Department of Environmental Conservation (NYSDEC) and the New York City Department of Environmental Protection (NYCDEP) may also provide assistance.

2.2.9.3. Biologists and Botanists. These specialists may be required if there is a potential project impact on threatened or endangered plant and animal species. Typically, engineering consulting firms either have a qualified biologist and botanist on staff, or will provide the service as a subcontract with an environmental consultant. Other sources for this expertise may include local university programs or state and federal regulatory agencies.

2.2.9.4. Auditor. Most federal agencies and some state agencies require that an audit(s) be conducted after the project is complete. The type of audit usually depends on the amount of funds obtained from the agency in a given year. A certified public accountant will be required to complete the audit(s). Check with each funding agency to determine audit requirements early in the project.

2.3. Project Communication. Setting up effective communication channels and protocol, and insisting on regular communication between all of the parties involved in a project is important. The expectations, goals, opinions and financial capabilities of the municipality must be clearly communicated to the project team. Having a strong communication network in place for all members of the team is important and is critical among the team's core members.

2.3.1. Inventory of Project Participants. The easiest way to ensure good communication is to develop a list of all project participants and their contact information and make it available to the project team. This list should be updated regularly throughout the project. This is a very simple yet effective concept, but if it is neglected, members of the project team quickly fall out of the communication loop and good communication becomes impossible.

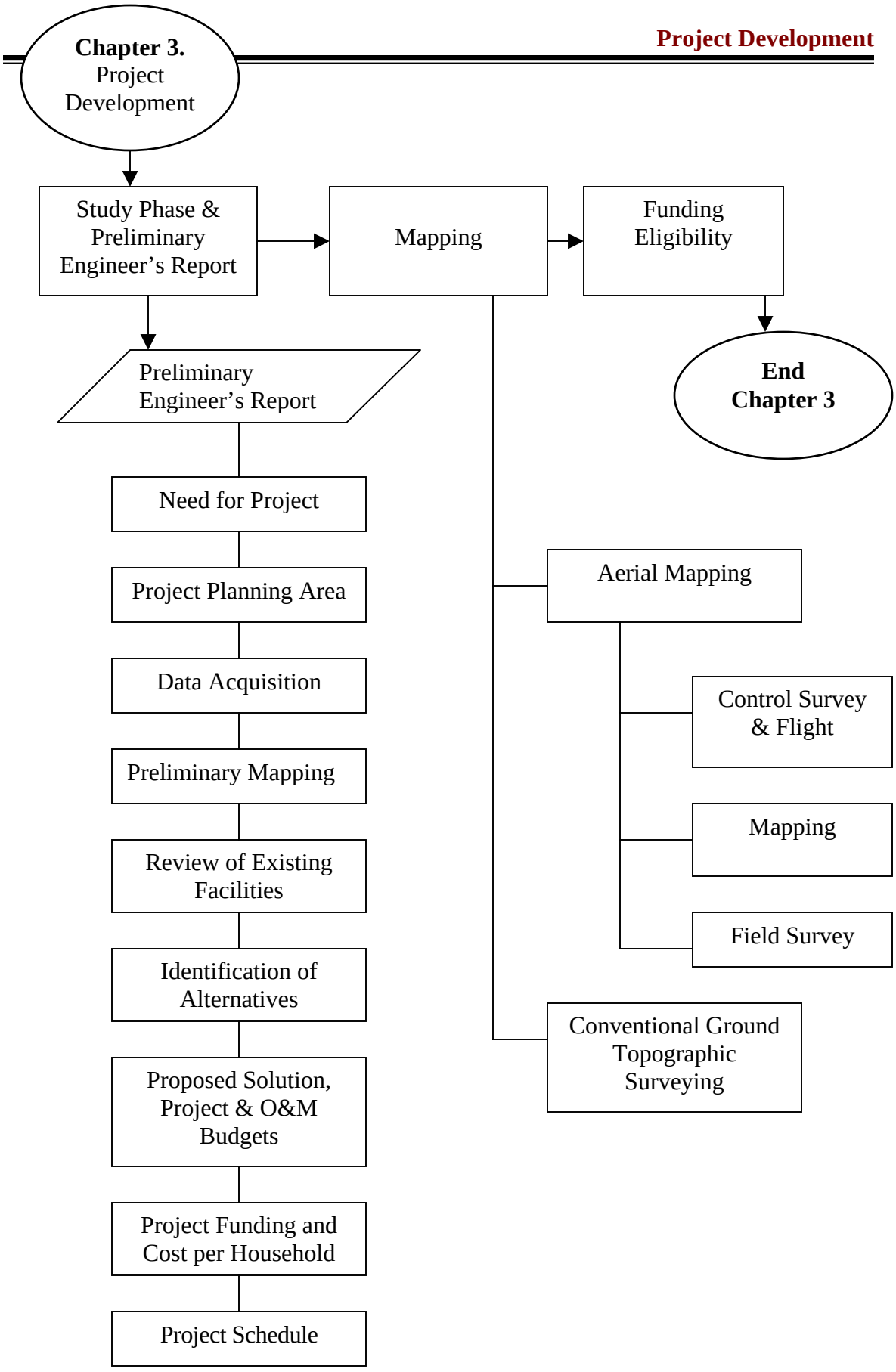
2.3.2. Communication Methods. Emails, conference calls, copies of project-related correspondence, faxes, and project meetings are all effective ways to communicate during a project. The project manager will typically take the lead to ensure that there is

effective communication and that project team members are copied with pertinent correspondence and included in project meetings, conference calls, email lists, and other methods of communication.

2.4. Record Keeping. The municipality and consulting engineer maintain a complete set of project files that includes all project-related correspondence, reports, studies, maps, surveys, budgets, funding and financial information, and legal documents.

2.5. Public Input. With the project team established and the project defined, the project team can begin developing a plan to involve and inform the public about the project. Issues such as who will lead the public input efforts, where and when public information meetings or public hearings will be held, who will prepare articles for the community newsletters or newspapers, and how often information is mailed to the residents could be addressed in the plan (see Exhibit 3. Public Input Work Sheet). Public participation should start early in the project and continue until the project is complete. The public will have many questions about the project. Providing accurate and timely answers in public will help ensure open communication.

At the first public information meeting, the project team will introduce the project to the public. It will also review the problem and how to solve it. The municipality's future and how the project relates to it should also be covered.


Chapter 3.
Project
Development
Study Phase &
Preliminary
Engineer's Report
Mapping
Funding
Eligibility
Preliminary
Engineer's Report
End
Chapter 3
Need for Project
Project Planning Area
Data Acquisition
Preliminary Mapping
Review of Existing
Facilities
Identification of
Alternatives
Proposed Solution,
Project & O&M
Budgets
Project Funding and
Cost per Household
Project Schedule
Aerial Mapping
Control Survey
& Flight
Mapping
Field Survey
Conventional Ground
Topographic
Surveying

The Board's To Do List

- Provide existing data and information about the existing system to the engineer
- Assist engineer with developing project planning and service area
- Discuss community needs and project affordability issues with engineer
- Participate in budget development process
- Sign funding offer request documents
- Hold a public information meeting to review the Preliminary Engineer's Report and preliminary funding offers with the public

Chapter 3

Project Development

The municipality and its consultants conduct fact-finding studies to determine the best way to solve the problem.

3.1. Study Phase and Preliminary Engineer's Report. The engineer gathers information about the existing conditions, studies the problem, and presents possible solutions. A preliminary project scope, project budget, and operation and maintenance budget are developed. The study phase culminates in preparation of a Preliminary Engineer's Report.

3.1.1. Preliminary Engineer's Report. The Preliminary Engineer's Report is intended to be used by regulatory and funding agency staff to determine if a project is needed, if the proposed approach will solve the problem, and what level of funding assistance is needed to make the project economically feasible. Consultations with regulatory and funding staff during the study phase are recommended.

This report provides an overview of the community, describes the existing conditions and a proposed solution to the problem, discusses the need for the project and how the project will address future growth, includes the proposed project budget and anticipated operation and maintenance budget, and describes the anticipated funding package and the resulting costs to an average household.

Reality Check

Most funding agencies use a project scoring system that impacts the project's fundability. Developing the project service area and the scope of the project with consideration of the funding agency's scoring priorities can improve the score and the potential to get the project funded. A few examples of funding agency priorities that score well are: resolving a water use impairment identified on the New York State Department of Environmental Conservation's (NYSDEC) Priority Waterbodies List, a raw wastewater discharge identified in an enforcement order, or addressing regional or water basin management plan objectives.

The Preliminary Engineer's Report serves as the technical report required by funding agencies to make preliminary funding decisions, and, if district formation is required, is the Map, Plan and Report required for district formation purposes. When the Preliminary Engineer's Report is complete, the municipality submits it to regulatory agencies for approval. It is also submitted with requests to funding agencies for funding offers. If regulatory and funding agencies have specific requirements for what should be included in the Preliminary Engineer's Report, those requirements must be met (see Exhibit 4 for USDA RD's requirements). For most wastewater projects, the following items are usually considered when preparing a Preliminary Engineer's Report.

3.1.1.1. Need for Project. Identify the needs, goals and purpose of the proposed project. Describe the problem and discuss needs to be addressed by the project in order of priority: health, sanitation, security, environmental protection, system operation and maintenance, and growth. Discuss how the project will address the issues raised in an enforcement order, if applicable, and include the order as an exhibit in the Preliminary Engineer's Report.

3.1.1.2. Project Planning Area. Describe the proposed project area. This area is not necessarily the final service area and is usually larger than the final service area. During development of the project, the planning area may be pared down to a smaller service area as a result of topography issues, needs issues, or cost issues. For a Town sewer district, the report must delineate and describe the district boundaries, and list all tax parcels located within the district.

3.1.1.3. Data Acquisition. The engineer acquires and reviews existing information, such as previous wastewater studies, topographic maps, soil surveys, flood maps, engineering reports, code enforcement and operator reports, regulatory agency reports and correspondence, notices of failures and/or violations, water use records, operation and maintenance records and logs, and pipe inspection reports and videos, if available, to gain a complete understanding of the existing situation. If not already completed, a needs assessment survey can be conducted to gather information from residents. Current and former municipal staff are invaluable resources when learning about the situation and locating existing system components.

3.1.1.4. Preliminary Mapping. Prepare a general location map showing existing facilities and proposed improvements. Obtain geographic information system (GIS) mapping and data, if available, that show property locations, soil types, drainage patterns and topography. NYSDOT corridor maps are helpful for areas located along certain NYS highways. USGS Quads are otherwise usually the only topographical mapping available. The type and quality of the mapping prepared at this stage is often very dependent on the availability of funds. As the project progresses and funds are obtained, detailed aerial mapping and topographic surveys will be prepared, as described in Section 3.2.

3.1.1.5. Review of Existing Facilities. Describe existing wastewater facilities (or lack thereof) including a location map, history, condition of facilities, and financial status of any existing facilities, with current rate schedules, annual operations and maintenance cost, other capital improvement programs, number of users, gallons used, and development potential. The public drinking water facilities should also be reviewed and will help provide an accurate estimate of water use and wastewater needs.

3.1.1.6. Identification and Feasibility of Alternatives. Describe the reasonable alternatives that were considered in developing a solution to the problem. For each alternative, provide some or all of the following: description, design criteria, map, environmental impacts, land requirements, construction problems, cost estimates, and advantages/disadvantages. How well the proposed solution meets the funding agency program priorities and scoring system must be considered when determining the feasibility of each alternative.

3.1.1.7. Proposed Solution and Project Budget and O & M Budgets. Provide a description of the proposed project and components, including, as applicable, the service area, preliminary collection system layout, pumping station locations, treatment plant location and process, outfall location, and other project components. Discuss how the proposed project will address health and safety issues, growth, operation and maintenance, or other factors. Prepare a preliminary project budget, and a first-year operating budget that covers operation and maintenance costs, debt repayments, and reserves. When developing the project budget and schedule, it is important to have realistic expectations. Major infrastructure projects are expensive and lengthy and many factors impact the project budget and schedule. Projects without funding in place at the beginning may take two to five years or more, depending on funding availability, before construction begins. Even a funded project can take two years or more before construction begins. Remember that labor and material costs will continue to rise each year.

Reality Check

Unrealistic expectations for a high level of funding, and a low level of costs to the average household can result in a project sitting on hold for many years while the municipality waits for the "ideal" funding package that may never be offered. Typically, a project is considered affordable by the funding agencies if total costs (project costs plus existing operation and maintenance and debt service) for an average single-family residence falls between 1-1/2 to 2 percent of the municipality's median household income (using current Census data). Another useful gauge is the NYS Comptroller's annual cost threshold for "low cost" sewer districts ($573 per year in 2005).

3.1.1.8. Project Funding and Cost to an Average Residence. Once the project budget is decided, a proposed funding package is determined and an analysis and discussion of the costs to a typical household is included in the Preliminary Engineer's Report. The project funding plan and how it is addressed in the Preliminary Engineer's Report merits meeting with the municipal board and holding a public information meeting during the draft report stage to focus specifically on this aspect of the project.

For projects without initial funding, the basic funding agencies, USDA Rural Development (USDA RD) and the NY Clean Water State Revolving Fund (CWSRF), offer enough information in their program guidance materials about their levels of funding to allow the engineer to make a realistic estimate as to the likely funding package. The engineer discusses the project with funding agency staff during this stage to obtain an idea of both the level and timing of funding that may be anticipated.

Both CWSRF and USDA RD calculate the project's affordability based on a target service charge, although their methodology and formulas are different. The target service charge is what the entire cost of the wastewater system, including debt service and all operation and maintenance costs, will cost a typical residential household (also called an equivalent dwelling unit, or EDU). When the project is submitted to one of the above funding agencies, the agency will determine what level of funding it can provide. If the project is submitted to both USDA RD and CWSRF, they will work together to offer a combined grant and/or loan package to bring the costs of the project to or below the target service charge. These agencies may not have enough grants or low-interest loans available to bring the costs below the target service charge. In this case, the municipality will need to seek additional funding, reduce project scope, or implement other measures to bring the project within an affordable level.

For District formation purposes, the Preliminary Engineer's Report (also called the Map, Plan and Report) must show the cost to a typical property and, if different, the cost to a typical one- or two-family home. If the cost to a typical property is higher than the annual threshold amount published by the New York State Comptroller for a "low cost" sewer district, the Comptroller's approval of the district formation or extension is required (Chapter 5).

3.1.1.9. Project Schedule. Prepare a preliminary schedule of major project milestones taking into consideration regulatory and funding agency review and approval periods. Some of the major milestones are, submit funding requests, environmental review, adopt bond resolution, submit funding applications, complete design, plan review and approvals, permitting, bidding and award, construction, construction close-out, and loan closings.

3.2. Mapping. Detailed topographic surveys are needed to design all the wastewater facilities, including the sewage collection system. For most projects, aerial mapping is the preferred method. For very small projects, a conventional ground topographic survey may be adequate

3.2.1. Aerial Mapping. The overall aerial mapping process consists of three steps that are completed by the project surveyors and the aerial mapping firm. If funds are available, the entire process can be completed during the study phase. If funds are not available, depending on the project schedule and funding availability, this level of mapping may wait until the design phase begins. During the study phase, the municipality may be able to afford completing just the flight and control survey, and wait to complete the mapping when project funds are available. Typically, the local surveyor

will set up a control survey on the ground to provide known coordinates of mapping points for the aerial mapping flight crew (though many aerial mapping firms can and will provide the control survey). The flights are typically conducted in the spring or fall when the leaves are off the trees and there is no snow on the ground. The aerial mapping firm completes the detailed mapping that will form the base maps for the project construction drawings.

Once the aerial mapping firm has completed the mapping, a field survey is conducted to locate underground utilities, visible property markers, and other features to verify the accuracy of the aerial mapping. This may require the participation of the municipal staff. The mapping will be further verified by the engineer during design.

On smaller projects, the municipality may choose to forego aerial mapping and have a local surveying firm complete a conventional topographic survey. This work may be dependent on the availability of funds as described above and may wait until funds are obtained and design is ready to begin.

3.3. Funding Eligibility. When the Preliminary Engineer's Report is complete, the funding process can begin for projects without funding. The first step is to submit the project to the basic funding agencies (USDA RD and CWSRF) so they can determine initial eligibility and provide an offer for a preliminary funding package. The overall funding process is described in detail in Chapter 7.

To begin the funding process, the municipality submits the Preliminary Engineer's Report to the basic funding agencies (see section 3.1.1.8. above and Chapter 7), along with other requested items, for consideration of a funding offer, as follows:

- USDA RD. Submit a request for a Preliminary Eligibility Determination (PED) to the local USDA RD office (see submission instructions in Exhibit 5).

- CWSRF. The project must be listed on the annual Intended Use Plan and it must score above the annual funding line (see Chapter 7 for a complete description of the scoring system). Submit a Project Listing Form to list the project on the annual CWSRF Intended Use Plan (IUP). If the project scores at or above the annual IUP funding line, it is eligible to be considered for a hardship (reduced or no-interest rate) loan and a financial hardship application may then be submitted to determine the actual loan terms. CWSRF forms are included in Exhibit 6.

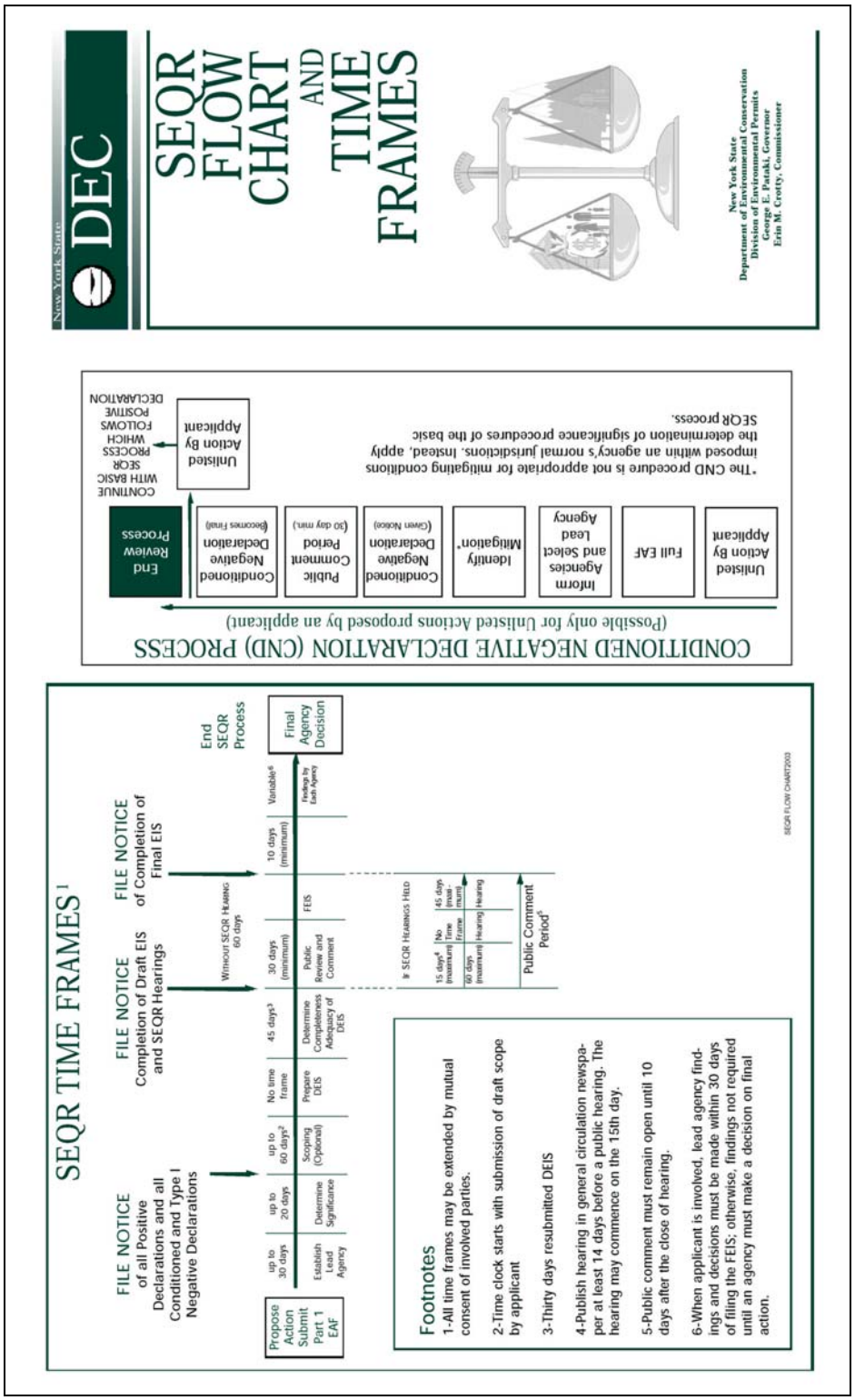
These basic funding agencies will work together to determine a projected funding package and will issue separate funding offer letters to the municipality, usually within a few months. After funding offers have been received, environmental review is completed, and a bond resolution has been adopted, the municipality can submit complete funding applications. The overall funding process is described in detail in Chapter 7.

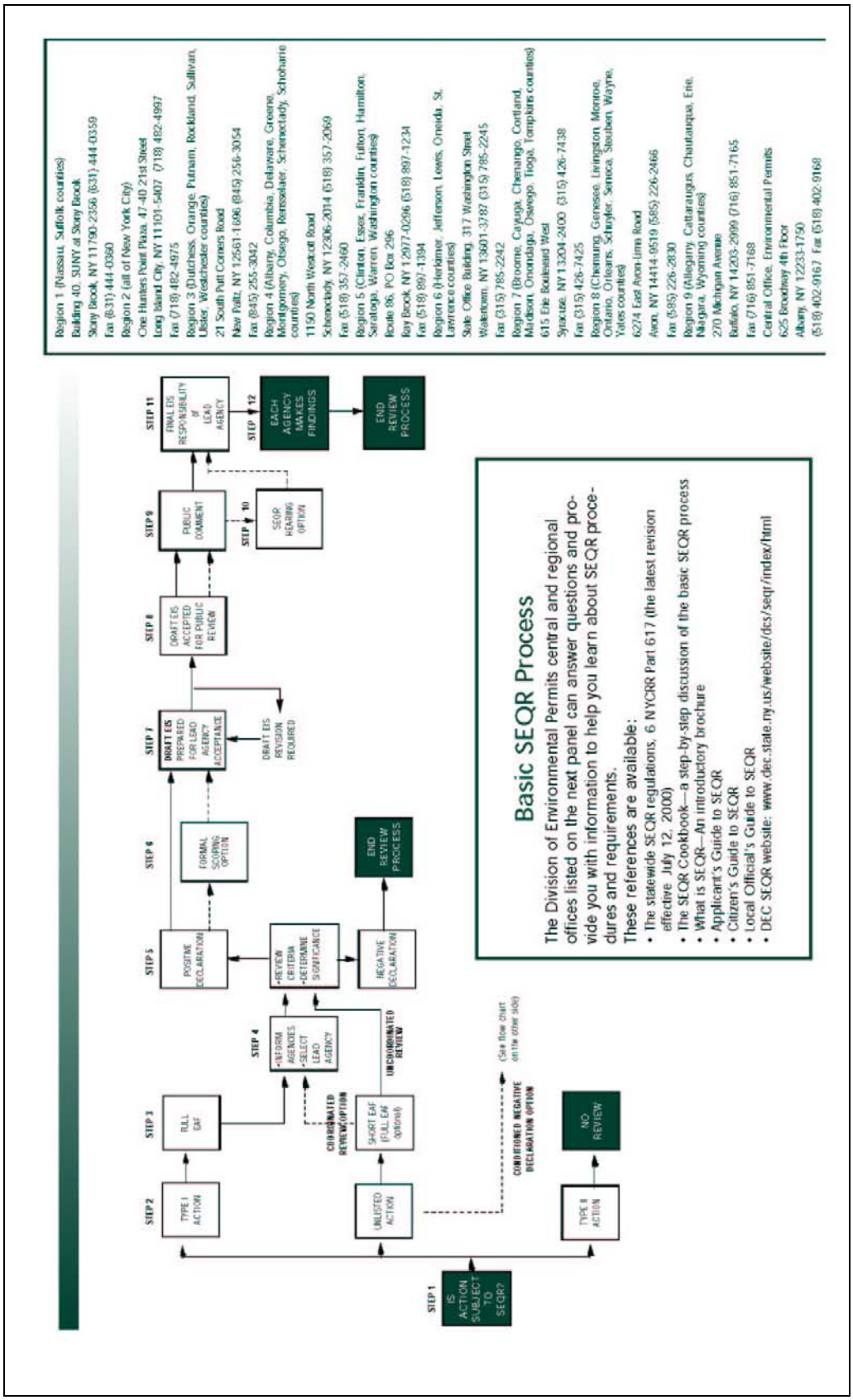
3.4. Public Participation. When the Preliminary Engineer's Report is finished and the funding agencies have responded with preliminary eligibility determinations, the

municipality should hold a public information meeting to review the project status with the public.

NOTES

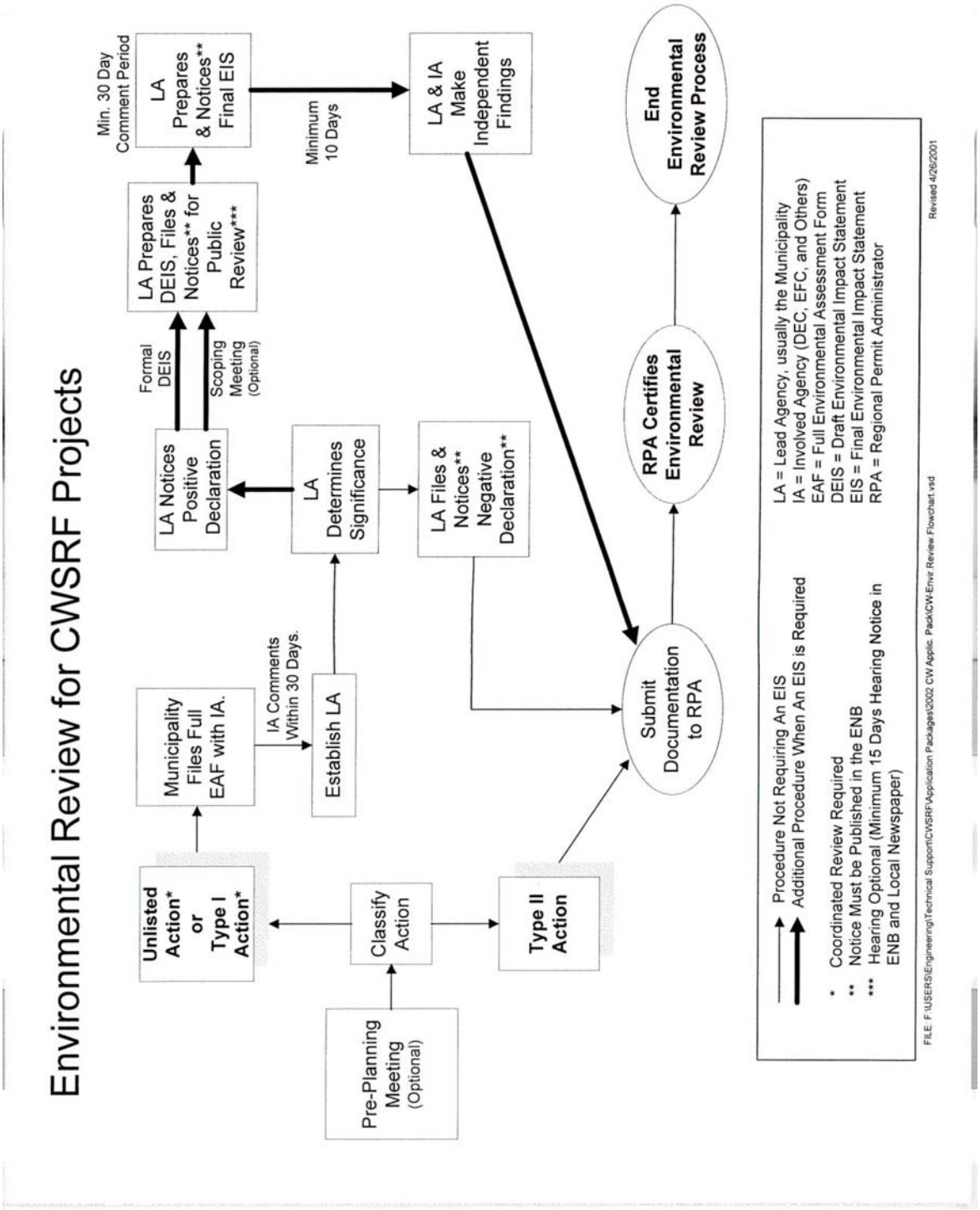
SEQR Flow Chart available for download at: http://www.dec.state.ny.us




Region 1 (Nassau, Suffolk counties)
Building 40, SUNY at Stony Brook
Stony Brook, NY 11790-2356 (631) 444-0359
Fax (631) 444-0360
Region 2 (all of New York City)
One Hunters Point Plaza, 47-40 21st Street
Long Island City, NY 11101-5407 (718) 482-4997
Fax (718) 482-4975
Region 3 (Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester counties)
21 South Putt Corners Road
New Paltz, NY 12561-1696 (845) 256-3054
Fax (845) 255-3042
Region 4 (Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie counties)
1150 North Westcott Road
Schenectady, NY 12306-2014 (518) 357-2069
Fax (518) 357-2460
Region 5 (Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington counties)
Route 86, PO Box 296
Ray Brook, NY 12977-0296 (518) 897-1234
Fax (518) 897-1394
Region 6 (Herkimer, Jefferson, Lewis, Oneida, St. Lawrence counties)
State Office Building, 317 Washington Street
Watertown, NY 13601-3787 (315) 785-2245
Fax (315) 785-2242
Region 7 (Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins counties)
615 Erie Boulevard West
Syracuse, NY 13204-2400 (315) 426-7438
Fax (315) 426-7425
Region 8 (Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates counties)
6274 East Avon-Lima Road
Avon, NY 14414-9519 (585) 226-2466
Fax (585) 226-2830
Region 9 (Allegany, Cattaraugus, Chautauqua, Erie, Niagara, Wyoming counties)
270 Michigan Avenue
Buffalo, NY 14203-2999 (716) 851-7165
Fax (716) 851-7168
Central Office, Environmental Permits
625 Broadway 4th Floor
Albany, NY 12233-1750
(518) 402-9167 Fax (518) 402-9168
STEP 1
IS ACTION SUBJECT TO SEQR?
STEP 2
TYPE I ACTION
UNLISTED ACTION
TYPE II ACTION
NO REVIEW
STEP 3
FULL EAF
SHORT EAF (FULL EAF OPTION)
COORDINATED REVIEW OPTION
STEP 4
•INFORM AGENCIES •SELECT LEAD AGENCY
UNCOORDINATED REVIEW
(See flow chart on the other side)
CONDITIONED NEGATIVE DECLARATION OPTION
STEP 5
POSITIVE DECLARATION
•REVIEW CRITERIA •DETERMINE SIGNIFICANCE
NEGATIVE DECLARATION
STEP 6
FORMAL SCOPING OPTION
END REVIEW PROCESS
STEP 7
DRAFT EIS PREPARED FOR LEAD AGENCY ACCEPTANCE
DRAFT EIS REVISION REQUIRED
STEP 8
DRAFT EIS ACCEPTED FOR PUBLIC REVIEW
STEP 9
PUBLIC COMMENT
STEP 10
SEQR HEARING OPTION
STEP 11
FINAL EIS RESPONSIBILITY of LEAD AGENCY
STEP 12
EACH AGENCY MAKES FINDINGS
END REVIEW PROCESS
Basic SEQR Process
The Division of Environmental Permits central and regional offices listed on the next panel can answer questions and provide you with information to help you learn about SEQR procedures and requirements.
These references are available:
• The statewide SEQR regulations, 6 NYCRR Part 617 (the latest revision effective July 12, 2000)
• The SEQR Cookbook—a step-by-step discussion of the basic SEQR process
• What is SEQR—An introductory brochure
• Applicant's Guide to SEQR
• Citizen's Guide to SEQR
• Local Official's Guide to SEQR
• DEC SEQR website: www.dec.state.ny.us/website/dcs/seqr/index/html

SEQR Flowchart for projects funded by CWSRF available for download at:

http://www.nysefc.org



The Board To Do List

- Review, approve and adopt State Environmental Quality Review (SEQR) documents
- Act as Lead Agency for SEQR review
- Oversee review process
- Make determination of significance
- File and publish SEQR documents

Chapter 4

Environmental Review

The project's potential impacts on the environment are reviewed so that the project may be altered to eliminate, reduce or mitigate environmental impacts. This must be done before project implementation can begin.

As with any project, the environmental consequences of a proposed wastewater project must be reviewed by project sponsors, owners, state and federal funding agencies, and regulators. Alternatives and mitigation measures must be considered in advance of construction of the project. For a community wastewater project, the project sponsor and owner is the municipality.

4.1. Purpose of the New York State Environmental Quality Review Act (SEQR). Although long, the following excerpt from 6 NYCRR Part 617 State Environmental Quality Review (SEQR) perfectly states the purpose of the environmental review process:

"…(b) In adopting SEQR, it was the Legislature's intention that all agencies conduct their affairs with an awareness that they are stewards of the air, water, land, and living resources, and that they have an obligation to protect the environment for the use and enjoyment of this and all future generations.

"It is the purpose of this act to declare a state policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and enhance human and community resources; and to enrich the understanding of the ecological systems, natural, human and community resources important to the people of the state."

Environmental Conservation Law, §8-0101

Reality Check

Because every project has specific design elements, location issues, and public concerns affecting environmental review , the suggestions in this chapter should not be substituted for project-specific professional planning, legal, and engineering advice.

(c) The basic purpose of SEQR is to incorporate the consideration of environmental factors into the existing planning, review and decision-making processes of state, regional and local government agencies at the earliest possible time. To accomplish this goal, SEQR requires that all agencies determine whether the actions they directly undertake, fund or approve may have a significant impact on the environment, and, if it is determined that the action may have a significant adverse impact, prepare or request an environmental impact statement.

(d) It was the intention of the Legislature that the protection and enhancement of the environment, human and community resources should be given appropriate weight with social and economic considerations in determining public policy, and that those factors be considered together in reaching decisions on proposed activities. Accordingly, it is the intention of this Part that a suitable balance of social, economic and environmental factors be incorporated into the planning and decision-making processes of state, regional and local agencies. It is not the intention of SEQR that environmental factors be the sole consideration in decision-making."

-- 6 NYCRR Part 617.1(b)-(d)

Acronyms Used in this Chapter

CWSRF	Clean Water State Revolving Fund
EAF	Environmental Assessment Form
EIS	Environmental Impact Statement
ENB	Environmental Notice Bulletin
EPA	US Environmental Protection Agency
MOA	NYC Memorandum of Agreement
NEPA	National Environmental Policy Act
NRCS	USDA Natural Resource Conservation Service
NYSDEC	NYS Department of Environmental Conservation
NYSEFC	NYS Environmental Facilities Corp. (administers CWSRF)
RPA	NYSDEC Regional Permit Administrator
SEQR	State Environmental Quality Review
SHPO	NYS Office of Parks, Recreation and Historic Preservation
SPDES	State Pollutant Discharge Elimination Permit
SWPPP	Stormwater Pollution Prevention Plan
USDA RD	USDA Rural Development
USDOI	US Department of the Interior

SEQR review ensures that the design of the project is protective of the environment. Potential impacts discovered during environmental review must be kept in mind while preparing the engineering studies that define the project since they may require a modified design or relocation of project elements. The environmental review should be broad enough and flexible enough to allow for these design and site location changes.

SEQR procedure must be followed to the letter. The procedure was designed to ensure that the environmental review is adequate, so two elements are critically important:

1. Do an honest, objective and thorough environmental review.

2. Do the review strictly in accordance with the required procedures.

The SEQR flowcharts located at the beginning of this chapter provide a helpful visual guide to the procedure and consist of:

- SEQR Flowchart. The New York State Department of Environmental Conservation (NYSDEC) SEQR Flowchart with time frames that shows the steps in the environmental review process.
- Environmental Review for New York Clean Water State Revolving Fund (CWSRF) Projects. This flowchart is intended for projects that are funded through the CWSRF.

4.2. Recommended Approach to SEQR. There are many different ways to complete the environmental review process. The approach described in this chapter is one which has been developed and followed successfully by many municipalities. The steps taken in each wastewater project may vary from this approach. The bottom line is that the overall environmental review process must meet the intent of the law, and it must comply with regulatory and funding agency criteria so that plan approvals and permits can be obtained.

For a project that is not funded, the environmental review is typically completed after the initial determination of eligibility is made and before funding applications are submitted. Since project funds are not yet available, the municipality uses its own funds; these are later reimbursed with project funds.

The environmental review is also completed before the design and permitting phases have begun, so much of the specific site information needed for a thorough environmental review is unknown. The timing problem is recognized and understood by most regulatory and funding agencies.

Reality Check

If the lead agency attempts to include involved and interested agencies in the process, investigates known and potential environmental impacts, discusses and commits to mitigation measures (especially those that address worst-case possibilities that may arise once detailed site data is available), and makes commitments relative to further study and mitigation, the lead agency can proceed with the environmental review process with limited investment in detailed work, provided the detailed work is done later and mitigation is achieved in the construction phase.

Until SEQR is completed, no involved agency can take any final action or make any final decision. As an example, the municipality may not purchase or acquire title to any land or property rights necessary for the project until the environmental review process is completed.

Moreover, no involved agency may issue any discretionary permit or approval prior to SEQR being completed. Similarly, the municipality cannot enter into any agreement which will obligate it to complete the project. As a result, SEQR needs to be completed early in the planning process. At the present time, most (if not all) of the potential environmental impacts are also regulated under one or more state, federal or local regulatory program or land-use regulations (i.e., clean air act, clean water act, resource conservation and recovery act, wetland regulation, historic preservation, site plan, state and federal stormwater regulations, stream disturbance permit, stream crossing permits, endangered species act, toxic substance and control act, pesticide regulation, laws to protect agricultural uses, etc). These regulatory programs, as a general matter, require the applicant to mitigate the regulated impact to the extent economically feasible. The project's compliance with these regulatory programs makes it easier to ensure that the project will not have a significant environmental impact on the areas subject to regulation.

4.2.1. Resolution Establishing Lead Agency. The municipality prepares and adopts a resolution (sample resolutions are included in Exhibit 7) that includes the following information:

- The municipality determines that the proposed community wastewater project is an "action" subject to SEQR as defined by the law and regulations. (The entire set of project activities must be considered the action; considering only a part or segment of an action is contrary to the intent of SEQR.)

- The municipality declares its intention to be the lead agency, or the agency principally responsible for approving the action. The municipality is almost always the lead agency since it usually is the project sponsor, owns the facilities, and is where the project is located. Exceptions to this are regional or county projects or projects with regional impacts. When more than one agency is involved,

the lead agency declaration is subject to review during coordinated review (see section 4.2.2.).

- The municipality decides what type of action the project is: Type I, Type II, or Unlisted, as follows:

  - A Type I action is an action for which there is a strong likelihood that the project may have a significant adverse impact on the environment. Type 1 actions are listed in 6 NYCRR Part 617.4.

  - A Type II action is not subject to further review under 6 NYCRR Part 617. Type II actions are listed in 6 NYCRR Part 617.5. If the project is a Type II action, the municipality should adopt a resolution stating that no additional environmental review is required. A community wastewater treatment system is almost never within the classification of a Type II Action.

  - An Unlisted Action is an action not listed in 6 NYCRR 617 as either Type I or Type II.

  CWSRF Requirement. Unlisted Actions that are funded through the CWSRF must follow the procedures of a Type 1 action, including preparation of a long environmental assessment form and a coordinated review. For Type II actions that are funded with CWSRF, NYSDEC must concur that the project is a Type II action. See Exhibit 8 for CWSRF Environmental Review Requirements.

- The municipality authorizes the engineer to proceed with a coordinated review and complete a full environmental assessment form (EAF), and authorizes the project team leader to execute all documents related to the environmental review.

4.2.2. Establishing Lead Agency When More Than One (1) Agency is Involved (6 NYCRR Part 617.6(b)(3)). Develop a list of involved agencies (state or local agencies that fund, approve or directly undertake an action) and interested agencies (state or local agencies other than involved agencies that wish to participate in the review process). Transmit the following items to the involved agencies and notify them that a lead agency must be agreed upon within 30 calendar days of the date the EAF was transmitted to them. This information should also be sent to the interested agencies for their information.

- Full EAF, with Part 1 completed (see form in Exhibit 9).
- Lead Agency information form (see Exhibit 10).
- Lead Agency notice (see Exhibit 10).
- Involved and Interested Agencies List (see Exhibit 10).
- Project description and map.

If, after 30 days, none of the involved agencies objects to the lead agency status, the municipality assumes lead agency status and continues the environmental review. Often, involved agencies do not submit comments and lead agency status is assumed by default. If the involved agencies are unable to agree on lead agency status, they may submit a request to the commissioner of NYSDEC that a lead agency be designated. After completing the process outlined in SEQR 6 NYCRR Part 617.6(b)(5), the commissioner designates a lead agency.

4.2.3. Coordinated Review. During the coordinated review comment period, the municipality proceeds with obtaining information necessary to take a *hard look* to determine if the project will have significant adverse environmental impacts.

The engineer will complete the Full EAF, parts 2 and 3, and consider the potential environmental impacts on (this list is not all-inclusive):

- Surface Water and Groundwater. Determine the impacts the project may have on surface and ground water. For most community wastewater systems, there will be a positive environmental benefit since the project will likely replace either deficient septic systems, or will resolve problems with an existing community wastewater collection and treatment system.

- Wetlands. Conduct a site walkover with a wetland specialist and obtain a letter report detailing potential impacts and required permits for state and federal wetlands.

- Cultural, Historic and Aesthetic Impacts. Request comments from the New York State Office of Parks, Recreation and Historic Preservation (SHPO) relative to the impacts of the project on cultural, historical and visual impacts, using the Project Review Cover Form (download at www.nysparks.state.ny.us). SHPO must concur with the project before construction begins. If a NYSDEC permit is required, NYSDEC cannot proceed to completeness or issue a permit until the SHPO final concurrence letter is obtained.

  SHPO will respond to the request for comments by letter. If they state that the project will have no impact on cultural resources, simply refer to their concurrence letter in this section of the EAF, Part 2.

  SHPO may respond that further archeological review is required to determine impacts on cultural resources. In that case, an archeologist will need to complete a Phase 1A Literature Search and Sensitivity Study, and a Phase 1B Field Investigation of the proposed project site(s). The combined Phase 1 study is then forwarded to SHPO for comments. If the study finds and SHPO concurs that no additional studies are required and the project will have no impact, simply refer to their concurrence letter in the appropriate section of the EAF, Part 2. If the Phase 1 study recommends additional studies, those studies should be conducted early in

the design phase since the archeologists will need accurate site locations, mapping, and field data to complete the study.

For a project that does not have funding, the funding schedule may require that the environmental review be completed before detailed archeology studies (additional studies recommended in the Phase 1 study described above) are complete and final concurrence is reached with SHPO relative to the impacts on cultural resources. In this case, thoroughly discuss known and potential impacts relative to cultural resources in Part 3 of the EAF and discuss mitigation measures that will be implemented prior to construction. Obtain a letter from SHPO agreeing to this approach. Then make sure that concurrence with SHPO is obtained prior to beginning construction.

- Threatened and Endangered Species. Request comments from United States Department of the Interior (USDOI) and the New York State Department of Environmental Conservation (NYSDEC) (see sample letters, Exhibit 11) relative to the presence of threatened or endangered plant and animals species in the project area. If potential impacts exist, a biologist or botanist should be consulted to determine the extent and to develop a plan to mitigate the impacts.

- Stormwater. The project stormwater specialist determines the extent of a stormwater pollution prevention plan (SWPPP) that will be required pursuant to SPDES General Permit GP02-01, administered by NYSDEC, and in accordance with the latest NYSDEC guidance and permit requirements. If the project is located within the NYC Watershed, a stormwater permit is also required by the New York City Department of Environmental Protection (NYCDEP). Discuss impacts and mitigation measures, such as erosion control techniques, that will be used to minimize environmental consequences during construction.

- Floodplains. Request comments from the local floodplain administrator relative to required permits and approvals. Locate the project area on flood maps. If sites are in the floodplain, discuss impacts and mitigation measures. Special considerations, construction, and permits are required when working in flood plains. Avoid sites in the floodway.

- Agricultural Land. Contact the County Planning Department or Farmland Protection Board if the proposed action is in an agricultural district or may impact agricultural lands. Include the County Planning Department and the County Farmland Protection Board as involved agencies (follow the notification procedures in NYS Agriculture and Markets Law, Article 25-AA).

- Soils. Request comments from the United States Department of Agriculture Natural Resources Conservation Service (NRCS) district office, the County Soil and Water Service, and the County Planning Department to determine impacts on prime farmland or other soil restrictions.

- Growth and Character of Community or Neighborhood, Land Use, etc. Determine if the project is consistent with existing local and regional land use plans and regulations, whether it will impact growth, land use density, community services, employment, etc.

- Transportation. Determine impacts on transportation routes and traffic patterns in and around the project area and on the site in consultation with the regional NYSDOT planning engineer. Driveway entrance permits are required on most county and state roads.

- Noise. Determine if there will be temporary or permanent increases in noise levels as a result of the project. NYSDEC provides a link on their website (www.dec.state.ny.us, subject search for SEQR) to the Assessing and Mitigating Noise Impacts guidance document. If noise potential exists, discuss prevention or mitigation measures.

- Odor. Discuss if the project will result in a permanent or temporary increase in odor, how odor problems will be mitigated, etc.

- Air Quality. Discuss whether the project will have a permanent or temporary impact on air quality.

- Other. Discuss other items that may be impacted and the associated mitigation measures.

4.3 Determine Significance (6 NYCRR Part 617.7). The lead agency must determine the significance of any Type 1 or Unlisted Action in writing in accordance with 6 NYCRR Part 617.7(a)-(c). This is done in a municipal board resolution and with the associated SEQR form(s). The lead agency must consider reasonably related long-term, short-term, direct, indirect and cumulative impacts. (SEQR forms are available for download at http://www.dec.state.ny.us.)

4.3.1. Negative Declaration. If the lead agency concludes that the project will not have a significant adverse environmental impact, the lead agency prepares a Negative Declaration that meets the requirements of 6 NYCRR Part 617.12. The Negative Declaration must present reasons for the determination and provide references to any supporting documentation.

(Note: In some situations, a lead agency may decide to issue a Conditioned Negative Declaration (CND) for an unlisted action. This may occur when an action that may result in one or more significant adverse environmental impacts can be mitigated with measures identified and required by the lead agency such that the proposed action will result in no significant adverse environmental impacts. Conditioned Negative Declarations apply only to Unlisted Actions involving an applicant. *A CND cannot be used for projects where the municipality is doing the project, is the lead agency, and no applicant is involved.* An example of when a CND might be used is when a developer is the

applicant, and the municipality, as lead agency, identifies and requires mitigation measures that will result in the project having no significant environmental impacts.)

4.3.2 Positive Declaration. To require an environmental impact statement (EIS) for a proposed action, the lead agency must determine that the action may include the potential for at least one significant adverse environmental impact and proceed with the scoping and EIS process outlined below (see 6 NYCRR 617, §617.8, §617.9, etc.).

4.4. Environmental Impact Statement Process. If the lead agency determines that the action may include the potential for at least one significant adverse environmental impact, an environmental impact statement (EIS) is required. *The lead agency is assumed to be the project sponsor in the following discussion.*

4.4.1. Scoping (6 NYCRR Part 617.8). Scoping focuses the EIS on potentially significant adverse impacts and eliminates consideration of those impacts that are irrelevant or not significant. Scoping is not required, but it is recommended.

4.4.1.1. Draft Scope (6 NYCRR Part 617.8(b)). The lead agency initiates scoping, prepares a draft scope, submits it to all involved agencies, and makes it available to individuals or interested agencies. The draft scope must contain the items identified in 6 NYCRR Part 617.8(f)(1) through (5). Involved agencies submit written comments to ensure that the EIS will be adequate to support the involved agencies' SEQR findings.

Scoping must include public participation, either by soliciting written comments, or through the use of meetings, exchanges of written materials or other means.

4.4.1.2. Final Scope (6 NYCRR Part 617.8(f)). The lead agency provides the final written scope to all involved agencies and all interested individuals or agencies within 60 days of its receipt of a draft scope.

The final scope must include:

- a brief description of the proposed action.
- the potentially significant adverse impacts identified both in the positive declaration and as a result of consultations with involved agencies and the public.
- the extent and quality of information needed for the preparer to adequately address each impact.
- an initial identification of mitigation measures.
- the reasonable alternatives to be considered.
- an identification of the information that should be included in an appendix, rather than the body of the EIS.
- issues raised during scoping and determined not relevant or environmentally significant or that have been addressed in a prior environmental review.

4.4.2 Environmental Impact Statement (EIS) Procedures (6 NYCRR Part 617.9). The following describes how to prepare an EIS.

4.4.2.1. Draft EIS. The lead agency prepares the draft EIS in accordance with 6 NYCRR Part 617.9. After the lead agency has prepared the draft EIS, it must prepare, file and publish a notice of completion of the draft EIS and file copies of the draft EIS in accordance with the requirements in 6 NYCRR Part 617.12. The minimum public comment period on the draft EIS is 30 days. The comment period begins with the first filing and circulation of the notice of completion.

The lead agency will determine whether or not to conduct a public hearing concerning the action. In making this determination, the lead agency will consider the degree of interest in the action shown by the public and involved agencies, whether significant adverse environmental impacts have been identified, if the mitigation measures and proposed alternatives are adequate, and the extent to which a public hearing can aid the decision-making process. If a public hearing is held, a notice of hearing must be prepared and filed in accordance with 6 NYCRR Part 617.12(a) and (b) and must be published at least 14 calendar days in advance of the public hearing in a newspaper of general circulation in the area of the potential impacts of the action. The hearing will commence no less than 15 calendar days and no more than 60 calendar days after the filing of the notice of completion of the draft EIS. Comments will be received and considered by the lead agency for no less than 30 calendar days from the first filing and circulation of the notice of completion, or no less than 10 calendar days following a public hearing, whichever is later.

4.4.2.2. Final EIS. The lead agency must prepare or cause to be prepared and must file a final EIS within 45 calendar days after the close of any hearing or within 60 calendar days after the filing of the draft EIS, whichever occurs later.

A final EIS need not be prepared if, on the basis of the draft EIS, the lead agency has determined that the action will not have a significant adverse impact on the environment. A negative declaration must then be prepared, filed and published in accordance with 6 NYCRR Part 617.12.

After the final EIS is complete, the lead agency must prepare, file and publish a notice of completion of the final EIS and file copies of the final EIS in accordance with 6 NYCRR Part 617.12.

4.4.3. Decision-making and Findings Requirement (6 NYCRR Part 617.11). Prior to the lead agency's decision on an action subject to a final EIS, it shall give the public and agencies a reasonable time period not less than 10 days to consider the final EIS before issuing its written findings statement. Findings must be in accordance with 6 NYCRR Part 617.11(d).

4.5 Preparation, Filing and Distribution of Documents (6 NYCRR Part 617.12). The negative declaration, positive declaration, notice of completion of an EIS, notice of

hearing, and findings must state that they have been prepared in accordance with Article 8 of the Environmental Conservation Law and must contain:

- the name and address of the lead agency
- the name, address and telephone number of a person who can provide additional information
- a brief description of the action
- the SEQR classification
- the location of the action

A Type 1 negative declaration must be filed with:

- the chief executive officer of the political subdivision in which the action will be principally located.
- the lead agency.
- all involved agencies.
- any person who has requested a copy.
- if the action involves an applicant, with the applicant.
- a negative declaration for an unlisted action must be filed with the lead agency. If CWSRF funding is involved, treat the Unlisted Action as a Type I for filing and distribution purposes.

All SEQR documents and notices must be maintained in files that are readily accessible to the public and made available on request.

4.6 Publication of Notices. The municipality must meet the requirements for publication of notices in 6 NYCRR Part 617.12(c), as summarized below:

- Type 1 negative declaration must be published in the Environmental Notice Bulletin (ENB). Instructions for submitting to the ENB are at http://www.dec.state.ny.us. For Unlisted Actions with CWSRF funding, publish the negative declaration in the ENB.

- Notice of a negative declaration must be incorporated once into any other subsequent notice required by law. This requirement can be satisfied by indicating the SEQR classification of the action and the agency's determination of significance. The district creation notice or the bond resolution is typically the first notice required by law following completion of the SEQR process.

4.7. NY Clean Water State Revolving Fund (CWSRF) Requirements. The NYSDEC Regional Permit Administrator (RPA) is required to undertake an independent review of the documentation of the municipality's environmental review and certify to New York State Environmental Facilities Corp. (NYSEFC) that an environmental review that meets all regulatory requirements, including permitting, has been conducted. This certification completes the environmental review process and is a prerequisite to Clean Water State Revolving Fund financing. See CWSRF Environmental Review Requirements, Exhibit 8, for environmental review procedures for CWSRF-funded projects.

4.8. USDA Rural Development (USDA RD) Requirements. IF USDA RD funds are involved, in addition to the SEQR requirements, National Environmental Policy Act (NEPA) requirements must be met since federal funds are involved. Much of the NEPA requirements can be met if a thorough review is conducted during the SEQR process. Contact USDA RD's environmental specialist in the Syracuse office for project-specific questions and requirements. Proceed with the NEPA process as follows:

- Conduct a thorough coordinated review following SEQR regulations as outlined above.

- Follow procedures for the USDA RD environmental report. See sample environmental report format, Exhibit 12. Also see *Guide for Preparing the Environmental Report for Water and Waste Project*, RUS Bulletin 179A-602, available at: http://www.usda.gov.

- Follow USDA RD's instructions for publication of environmental notices (Findings of No Significant Impact (FONSI) or other).

4.9. Other Federal Agency Requirements. See specific agency requirements and NEPA regulations. The Environmental Protection Agency website has a great deal of information on the NEPA regulations and process: http://www.epa.gov.

4.10. Permits and Approvals. Compile a preliminary list of local, state, and federal permits and approvals that will be needed to address issues discovered during the environmental review process. See Chapter 9 for a thorough discussion of the permit and approval process.

4.11. Environmental Review Regulations and References.

4.11.1. New York State:

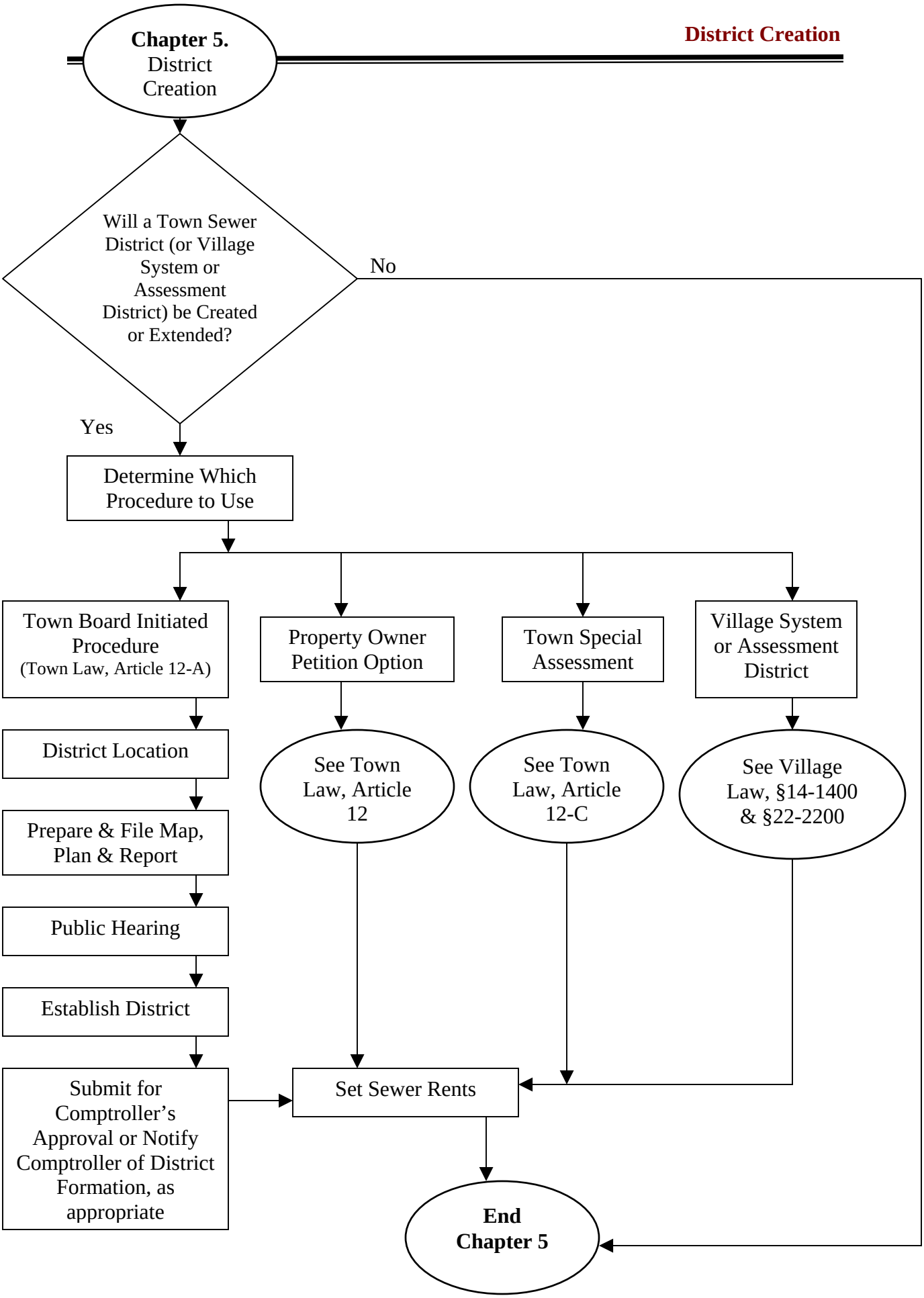
- New York State Environmental Conservation Law, Article 8. http://www.assembly.state.ny.us
- New York State Department of Environmental Conservation. http://www.dec.state.ny.us
- Clean Water State Revolving Fund (CWSRF). http://www.nysefc.org
- State Historic Preservation Office (New York State Office of Parks, Recreation and Historic Preservation) http://nysparks.state.ny.us
- ENVIRONMENTAL IMPACT REVIEW IN NEW YORK, Michael B. Gerrard, Esq., Daniel A. Ruzow, Esq., Philip Weinberg, Esq., 2004. http://www.lexis.com

4.11.2. Federal:

- National Environmental Policy Act (NEPA) regulations. http://www.epa.gov
- USDA Rural Development. http://www.usda.gov

- EFFECTIVE ENVIRONMENTAL ASSESSMENTS—HOW TO MANAGE AND PREPARE NEPA EAS, Charles H. Eccleston, 2001, Lewis Publishers

Other state and federal funding and regulatory agencies involved with the project may have additional environmental review requirements or guidance materials.


Chapter 5. District Creation
Will a Town Sewer District (or Village System or Assessment District) be Created or Extended?
No
Yes
Determine Which Procedure to Use
Town Board Initiated Procedure (Town Law, Article 12-A)
Property Owner Petition Option
Town Special Assessment
Village System or Assessment District
District Location
Prepare & File Map, Plan & Report
Public Hearing
Establish District
Submit for Comptroller's Approval or Notify Comptroller of District Formation, as appropriate
See Town Law, Article 12
See Town Law, Article 12-C
See Village Law, §14-1400 & §22-2200
Set Sewer Rents
End Chapter 5

The Board's To Do List

For Village system or assessment district, see Village law, Sections 14-1400 and 22-2200.

For Town Board Initiated Sewer District Formation Process pursuant to Article 12-A:

- Pass a resolution appropriating a specific amount to pay the cost of preparing a general map, plan and report
- After a New York State licensed engineer has prepared the map, plan and report, it must be filed in the town clerk's office
- Adopt by resolution and publish an order for a public hearing
- Hold the public hearing
- Determine by resolution whether to establish or extend the district
- Adopt final order establishing or extending the district, if applicable.
- Meet the State Comptroller's requirements for approval of the district
- Record final resolution
- Establish sewer rent laws

Chapter 5

Establishment or Extension of Assessment or Sewer District

If required, a sewer district is established or extended to provide the legal and organizational entity that will implement, operate and maintain the project. If required, this must be done before the project is implemented.

The state has empowered Villages to establish complete sewer systems (Village Law §14-1400). Villages are able to make local improvements at Village expense or to be assessed against benefited lands (Village Law §22-2200). A Village can undertake improvements for specific areas within a Village and assess the costs to those improvements against the benefited areas only. These areas are referred to as "assessment districts." A detailed discussion of this process and the relevant laws and Comptroller's opinions is included in Exhibit 17.

The process for a Town sewer district is different. Once a Town has made the decision to move forward with the construction of a wastewater treatment facility, has determined approximately what municipal residents will be provided with this service and how the project will be funded, the Town should begin the process of establishing or extending a sewer district. There are three alternatives to proceeding with the formation of a Sewer District. The first alternative is for the Town Board to commence the formation of a

Sewer District under New York State Town Law Article 12-A. The second alternative is for property owners within the area to be served by the proposed Sewer District to submit a petition to the Town Board seeking the creation of a Sewer District under New York State Town Law Article 12. The third alternative is for the town to make improvements and provide the same services without the formal creation of sewer District under New York State Town Law, Article 12-C. All three options are subject to most of the same procedural requirements. All three alternatives are discussed below.

The purpose of forming a district is to ensure that the property owners that are benefited by the sewer system also pay for the sewer system, and that households that are within the town that are not benefited by the sewer system are not unfairly burdened with its cost. In all cases, the district can not be formed nor can the commitment be made to construct the improvements without prior compliance with SEQR. If debt financing is required and the project exceeds certain financial thresholds, the Town's sewer district formation will also have to be approved by the New York State Comptroller. With the exception of the property owners petition alternative, there is generally an opportunity for a permissive referendum. All three options require the preparation of a somewhat detailed engineering report that describes the sewage collection system, the boundaries of the designated service area, the treatment technology, cost of construction, the cost of operation and maintenance, funding alternatives, projected annual fees and management structure. All three options require a public hearing and public education. The goal of all three options is to identify the area that needs service, identify the properties that will be benefited by the service, ensure that the services and capital improvements are in the best interest of the community and ensure that the impacted property owners have the opportunity to provide input to the process. As a result, the district formation process is often the critical step in the project implementation where the project either terminates or decision is made to complete the project.

The critical difference between the three options is the level of control exercised by and the level of cooperation required of the impacted property owners. The highest level of property owner control is with the traditional Article 12 property owner petition process. Under that procedure, the petition must have authenticated signatures of the owners of at least one half of the aggregate assessed value of taxable property within the proposed district and the petition must also include resident owners of one half of the total assessed value of taxable property owned by resident owners within the proposed district. The petition must specify the boundaries of the district and the maximum anticipated expenditures as well as other technical information required by the statute. In this process, there is no opportunity for a permissive referendum because the petition itself demonstrates that the impacted property owners are in support of the project. The requirement that the petition include the owners of one half of the aggregate assessed value of taxable property owned by resident owners assures that a large commercial taxpayer will not control the process. The petition must be signed in the same manner as a deed. In order to proceed with this process, one needs to obtain a copy of the most recent assessment roll and identify all the property owners of the tax parcels within the proposed service area. The process of going door-to-door to collect individual signatures

from property owners can help ensure that the property owners within the district are making an informed decision in support and/or in opposition to the project.

The second highest level of control/cooperation exercised by property owners is the Town Board Initiated Procedure under New York State Town Law Article 12-A. In 1959, the Legislature enacted Article 12-A of the Town Law to permit improvement districts to be established by direct action of the Town Board, subject to a permissive referendum on the petition. Under that procedure, after the public hearing, if the Town Board determines all properties in the district are benefited and the district formation is in the public interest, it may adopt a resolution establishing the district, notice of which must be published within 10 days, summarizing the action and noting that it is subject to a permissive referendum. Permissive referendums are governed by Article 7 of the Town Law. A petition for a permissive referendum must be submitted within 30 days after the Town Board resolution. To require a referendum, the petition must contain the authenticated signatures of at least 5% of the property owners or a 100 property owners within the district, whichever is less. Corporate owners are entitled to only one signature on a petition and only one vote on the referendum, while joint tenants and tenants by the entirety are each entitled to sign the petition as well as vote. Approval requires the affirmative vote of the owners of a majority of taxable real property in the district that voted on the referendum. Under this procedure, each property owner within the proposed district (regardless of assessed value) has a vote. The referendum is either conducted in a special election or, depending on the timing, as part of the normal annual election. In order for this process to work, an extensive public education procedure must be implemented. The issues involving whether it is in the best interest of the public to proceed with the project are complex and require a lot of information to make an informed decision. Such a procedure is subject to a potential misinformation campaign by those in opposition to the project, and the voting could be swayed due to a disproportionate turnout of highly motivated opponents taking the time to vote at the special election. If there is a large service area with many property owners, this procedure is often the best method for determining the public support and/or opposition to the project.

The method which involves the least control/cooperation from property owners within the impacted area is the method created under Article 12-C. This method is referred to as the "special assessment" option. Under this method, the Town Board begins the process of committing to undertake the "improvement" by adopting a resolution appropriating a specific amount to pay the cost of preparing a "general plan, report and map" for providing an improvement in the town or specific area of the town (outside any village). At its option, the Town Board may make this decision subject to a permissive or mandatory referendum. The procedure may also be initiated upon petition of five resident property owners of taxable real property in the town. The report is prepared and a hearing is scheduled and noticed. After the hearing, the Town Board must determine whether the improvement would be in the public interest. If it so determines, the Town Board may authorize the improvement. The authorization is subject to State Comptroller approval if the estimated expense of the improvement will be financed by indebtedness that exceeds 1/10 of 1% of the assessed valuation of the town (outside any village). The

Town Board may apportion any cost so as to be incurred solely by the benefited property, or on a town-wide basis (outside any village), or a combination of both approaches. If the Town Board passes a resolution authorizing that any part of the cost of the improvement to be borne by the entire area of the town (outside any village), that resolution is subject to a permissive referendum. In order for there to be a valid petition for a permissive referendum, the petition must be properly authenticated by at least 10% of the owners of taxable real property in the town (outside any village). A proposition subject to referendum requires the affirmative vote of a majority of the owners of taxable real property within the town (outside any village). Under this method, however, if the costs of the sewer system are to be borne by the property properties benefited thereby, there is no opportunity for a permissive referendum and/or a mandatory referendum unless, in the discretion of the Town Board, the Board elects by resolution to require a mandatory referendum or allow a permissive referendum. Under Town Law Section 209-q 12-a, for the special assessment area, the Town Board may establish sewer rents in accordance with General Municipal Law 14-F. The annual operation maintenance cost may be addressed or covered by the sewer rent to the users of the sewer system and/or as an assessment against the whole town (outside any village).

The use of special assessment areas to provide sewer service is rare. The procedures and restrictions on the town's ability to extend services and/or to replace capital improvements are not clear under the law. Also, due process questions have been raised regarding the ability of the Town Board to impose an improvement and costs against properties without a process for approval by the impacted property owners.

A step-by-step process for forming a sewer district pursuant to Article 12-A (i.e., Town Board initiated process) is set forth below.

(The procedure for forming a special district by petition under Article 12 is essentially the same except that there's no opportunity for a permissive referendum and initiation of the process requires a petition executed by the requisite number of property owners.)

5.1 District Location. The district cannot extend beyond the town's boundaries. However, in the event that a town is establishing a sewer district that may be within the boundaries of an incorporated village, all or part of an incorporated village may be included with the consent of the village board. The village's consent has to be expressed in a local law, ordinance, or resolution and that consent is subject to a permissive referendum by village residents.

5.2. Appropriation for Preparation of Map, Plan and Report. After making the determination that the wastewater treatment facility project should be considered, the town board has to pass a resolution, subject to a permissive referendum, appropriating a specific amount to pay the cost of preparing a general map, plan and report of the facilities, improvements, and/or services to be provided in the proposed district. The town board should determine that the map, plan and report will be prepared by or under the supervision of town officers and employees to be designated by the town board, and/or the town board may contract for the preparation of the map, plan and report with a

private engineer or engineering firm. The cost of the preparation is limited to the amount the town board has appropriated for the preparation. The expense incurred by the town for the preparation of the map, plan and report will be a town charge that will be charged to all town residents, and has to be assessed, levied and collected in the same manner as all other town charges. If the town board does establish or extend the sewer district and construct the improvements or contract for the required services, the town's expenses for preparing the map, plan and report will be deemed part of the improvement costs, and the town can be reimbursed for those costs by the district. For projects with the New York City Watershed fully funded under the Memorandum of Agreement, the cost of the study is fully funded by the grant funds and thus the initial resolution is not subject to a permissive referendum.

5.2.1 Requirements for Map, Plan and Report. The map, plan and report must be prepared by a New York State licensed engineer. The Town Law provides several requirements for the preparation of these items. The map, plan and report must show the boundaries of the proposed district and include a general plan of the proposed sewer district. The map must show all outlets and the terminus and course of each proposed main sewer together with the location and general description of all sewage disposal plants, pumping stations and other public works, if any. In addition, if the town had previously developed a comprehensive sewer plan, then the project should be consistent with, so far as possible, that comprehensive plan.

5.2.2. Filing of Map, Plan and Report. After the engineer has completed the map, plan and report pursuant to the Town Law, the map, plan and report must be filed in the town clerk's office.

5.3. Requirements Prior to Holding Public Hearing. After the map, plan and report have been filed in the town clerk's office, the town board should adopt by resolution an order and enter the following information in the minutes of the town board meeting:

a) reciting a description of the boundaries, using the same type of description as used for a deed conveyance, of the proposed district or extension or such other manner that is sufficient to identify the proposed district;

b) the proposed improvements;

c) the maximum amount proposed to be expended for the improvement;

d) the estimated cost of hook-up fees, if any;

e) the cost of the district or extension for the typical property, and if different from the typical property, the cost for the typical one or two-family home;

f) the proposed method of financing the project;

g) the fact that the map, plan and report are on file with the Town Clerk;

h) the time when and the place where the town board will meet and hold a public hearing to hear all persons interest in the establishment or extension of the sewer district; and

i) whether the map, plan and report are filed at an additional location so that they can be examined prior to the public hearing. The map, plan and reports should be on file at an additional location only if the town board determines that, in the public interest, some other additional place is necessary or desirable to review them.

Prior to the publication of the order, a detailed explanation of how the estimated cost of hook-up fees to the typical property and, if different, the typical one or two family home was computed. In addition, the town should provide a detailed explanation of how the cost of the district or extension to the typical property and, if different, the typical one or two family home was computed. A copy of the order shall be published at least once in the town's official newspaper and shall be posted on the town's sign-board in the town hall. The first publication cannot be less than 10 days nor more than 20 days before the date of the public hearing and the posting of the order on the town's sign-board shall also be placed not less than 10 days nor more than 20 days before the date of the public hearing.

For purposes of the above, the "**typical property**" is the benefited property having assessed value that approximates the assessed value of the mode (i.e., the most frequently occurring valuation as shown on the latest completed assessment roll) of the benefited properties in the district or extension that will be required to finance the cost of the proposed improvements. The "**typical one or two-family home**" is the benefited property having assessed value that approximates the assessed value of the mode (i.e., the most frequently occurring valuation as shown on the latest completed assessment roll) of the benefited properties improved by one or two-family dwellings in the district that will be required to finance the cost of the proposed improvements. The "**cost of the district**" to the typical property, or one or two-family home, is the amount that it is estimated that the owner of the typical property or home will be required to pay for debt service and, operation maintenance and other charges, such as user charges, related to the improvements in the first year following formation of the district. As of 2005, the State Comptroller listed the average cost for the typical property obtaining sewer service as $573, exclusive of hookup fees.

5.4. Establishment of District. After the hearing and upon evidence given at the hearing, the town board shall determine by resolution:

(a) Whether the notice of hearing was published and posted as required by law, and is otherwise sufficient;

(b) Whether all of the property and property owners within the proposed district or extension are benefited thereby;

(c) Whether all of the property and property owners benefited are included within the limits of the proposed district or extension; and

(d) Whether the establishment or extension of such a district is in the public interest.

If the town board determines that the notice of hearing was not properly published and posted or was not sufficient, or the town board determines that the establishment or extension of the proposed district is not in the public interest, the town board shall adopt a resolution stating the reasons for its determination not to establish or extend the district.

If the town board determines that the notice of public hearing was properly published and posted and that the proposed district is in the public interest, but determines that any portion of the property or property owners within the proposed district or extension are not benefited by the district or that certain property or property owners that will be benefited by the district are not included, then the town board shall specify the necessary changes to the boundaries of the proposed district or extension so that all property and property owners included in the district will benefit from the district. If this situation occurs, the town board has to hold another public hearing. The hearing has to be held not less than 15 days nor more than 25 days after the town board made the determination to add or remove property or property owners. Except for the time of the hearing, the notice and publishing of the hearing has to be conducted in the same manner as set forth above at Section 5.3.

If the town board resolves issues (a)-(d) in the affirmative, then the town board may adopt a resolution approving the establishment or extension of the district as the boundaries are finally determined. This resolution is subject to a permissive referendum. Within ten days of the resolution adopting the district, the town clerk has to publish a notice in the town's official newspaper and post the notice on the town's sign-board. The notice has to set forth the date of the adoption of the resolution and contain an abstract of the resolution stating concisely the purpose and effect of the resolution. The notice also has to specify that the resolution was adopted subject to a permissive referendum.

5.4.1. Requirements for a Permissive Referendum. A petition for a referendum has to be filed with the town clerk within 30 days after the adoption of the resolution establishing or extending the district. A petition requesting a referendum will be sufficient if (i) signed and acknowledged in the same manner as a deed to be recorded or authenticated in the manner prescribed by the election law for the authentication of a nominating petition; (ii) by the owners of the taxable real property located in the proposed district or proposed extended district, as shown upon the latest completed assessment-roll of the town, the number of signatures required is the lesser of the following: at least five percent (5%) of the total number of real property owners in the district or 100 such owners. Corporate owners are entitled to only one signature on a petition and only one vote on the referendum, while joint tenants and tenants by the entirety are each entitled to sign the petition as well as vote. The petition may be made on separate sheets. If these sheets are fastened together and offered for filing, they will constitute one petition. The town clerk should have petition forms available and should distribute them to any requesting party.

5.4.1.1. Objections to Petition for Referendum. If, within five days after the filing of the petition, a written objection is filed with the town clerk, and a verified petition setting forth the objections is presented to the court or judge of the judicial district in which the town is located, the court or judge shall, within 20 days, determine any question arising from the petition and make an order as justice may require.

5.4.1.2. Proposition. The proposition for the approval of the sewer district has to contain an abstract of the resolution stating the purpose and effect of the resolution. The town clerk has to prepare the abstract and transmit the proposition to the town board in the form that will be submitted at the annual or special election.

5.4.1.3. When to Hold Referendum. If a valid petition is filed not more than 75 days nor less than 60 days prior to the biennial town election, a proposition for the approval of the district has to be submitted at the biennial election. If the petition is filed at any other time, a proposition for the approval of the district shall be submitted at a special town election to be held not less than 60 days nor more than 75 days after the filing of the petition. Approval requires the affirmative vote of a majority of the owners of taxable real property in the area of the proposed district that voted on the referendum.

5.4.1.4. After Referendum is Held. After the referendum is held, the town clerk has to prepare and file with the office of the county clerk, a certificate stating that a petition was filed and a referendum was held and certify the result of the vote on the proposition. In the event that the town was required to obtain the permission of the State Comptroller (see below, Section 5.6), then this certificate must also be filed with the NYS State Department of Local Government Services.

5.4.2. Expiration for Filing Petition for Referendum. If after the expiration for the time for filing a petition requesting a referendum, a petition was not filed with the town clerk, the town clerk has to file with the office of the county clerk, a certificate stating that no petition was filed. In the event that the town was required to obtain the permission of the

State Comptroller (see below Section 5.6), then this certificate must also be filed with the NYS State Department of Local Government Services.

5.5. Adoption of Final Order Establishing or Extending District. After the time period for filing the petition for a referendum has elapsed or the referendum was held and a majority of the property owners in the district voted in favor of the establishment or extension of the sewer district, then the town board has to adopt a final order establishing the sewer district. The final order has to include a description of the boundaries of the district. Note, that the final order cannot be issued or filed unless SEQR has been completed.

5.6 Application for Permission of State Comptroller to Establish or Extend District. At a minimum, the NYS Comptroller must be notified of the establishment of a sewer district by sending a certified copy of the notice of hearing to the Comptroller. If the town is to finance the cost of the district by the issuance of bonds, notes, certificates or other evidences of indebtedness of the town and if the State Comptroller's average estimated cost for similar types of districts is less than the cost of the district to the typical property or to the typical one or two family home as stated in the notice of hearing (5.3, above), the town is required to obtain the permission of the State Comptroller for the establishment of a district. As of 2005, the Comptroller listed the average cost for the typical property obtaining sewer service as $573, exclusive of hookup fees. This amount changes annually. Note, this step occurs after the final order of the Town Board establishing the district.

Within 10 days after the adoption of a resolution by the town board approving the establishment or extension of the district, the town clerk has to file a certified copy of the resolution, in duplicate, in the office of the State Comptroller, together with an application, in duplicate, for permission to create or extend the district. The application shall be executed and verified by the town supervisor and shall include the following information:

a) a certified copy of the notice of public hearing, with proof of publishing and posting, and a copy of the map, plan and report filed with the town clerk's office;

b) an itemized statement of the (i) then outstanding indebtedness of the town for all purposes, as evidenced by bonds, bond anticipation notes, capital notes, deferred payment notes and budget notes; (ii) the amount of budgetary appropriations for the payment of any such outstanding indebtedness, whether or not such appropriations have been realized as cash; (iii) the amount of indebtedness proposed to be contracted for the improvement and the amounts, purposes and probable dates of

issuance of any bonds, bond anticipation notes, capital notes, deferred payment notes and budget notes which the town has authorized to be issued but which in fact have not been issued on the date of such application;

c) a statement of the aggregate assessed valuation of the real property located in the proposed district or extension. The town should use the last completed assessment roll of the town prior to the date of this application;

d) a statement of the average full valuation of the taxable real property of the town; and

e) a statement as to the manner in which it is proposed to finance the cost of the improvement.

Once the town submits the application with the State Comptroller, the Department will file a copy of the application with the county board of supervisors. Within 15 days of the filing of the application, the board of supervisors may file an objection, in writing, with the State Comptroller.

Once the time period for the board of supervisors to respond to the application has elapsed, the State Comptroller shall make an order granting or denying permission for the establishment or extension of the district. After reviewing the application, the State Comptroller has to determine whether the public interest will be served by the establishment or extension of the district and whether the cost will be an undue burden upon the property of the proposed district or extension. A copy of the State Comptroller's order shall be on file with the town clerk's office. The town clerk shall present the order to the town board at its next scheduled meeting.

If the State Comptroller grants permission for the establishment or extension of the district, then the town board shall adopt a final order establishing the district as set forth below in Section 5.7. If the State Comptroller denies permission for the establishment or extension of the district, the town board has to adopt an order terminating the proceeding in connection with the proposed establishment or extension of the district.

5.7. Recording Final Resolution. Within 10 days after the adoption of the final order establishing or extending the district, the town clerk has to file a certified copy of the final order with the office of the county clerk and the NYS State Comptroller. Once the final order is recorded in the office of the county clerk, it will be presumptive evidence that the town properly conducted the proceedings for the establishment or extension of the district.

5.8. Increase in Maximum Amount Allotted for District Improvements. At any time after the establishment of the sewer district, the maximum amount proposed to be expended for the improvement of the district as stated in the initial public hearing on the establishment or extension of the district, may be increased by an order of the town board. The town board has to hold another public hearing in the same manner as set forth above in Section 5.3.

5.8.1 Application for Permission of State Comptroller for Increase. If the town was required to obtain permission from the State Comptroller as set forth in Section 5.6, then the town has to submit an amended application to the State Comptroller. The application has to include the reason for the increase in the maximum amount expended and include the items listed in Section 5.6. The public hearing on this increase cannot be held until the State Comptroller has issued an order approving the increase in the maximum amount to be expended. A copy of the order has to be filed with the town clerk's office.

5.8.2. Adopting Final Order Increasing the Maximum Amount Allotted for District Improvements. After the public hearing, the town board has to determine whether it is in the public interest to authorize an increase of the maximum amount to be spent for the improvements. The order of the town board increasing the maximum amount is subject to a permissive referendum. The requirements for a permissive referendum are set forth above in Section 5.4.1.

5.9. Increase in Maximum Amount to be Expended Annually for Sewer Service. The annual costs to provide sewer service can be increased by an order of the town board. Even if the town was required to obtain permission of the State Comptroller as set forth above in Section 5.6 and 5.8.1, the town is not required to obtain permission from the State Comptroller for an increase in the maximum amount to be expended annually.

The town board has to hold a public hearing to increase the annual amount to be expended before it can make a decision to increase that amount. The notice of the hearing has to be published in the town's official newspaper specifying the time when and the place where the hearing will be held and stating the reason for the hearing is the proposed increase in the maximum amount to be expended annually. The notice has to be published at least 10 days prior to the date of the hearing.

After the hearing, the town board can adopt a final order authorizing the increase in the annual amount to be expended if it determines that the increase is in the public interest.

5.10. Judicial Review. Any interested person aggrieved by any final determination of the town board may commence an Article 78 proceeding within 30 days from the date of the recording of the certified copy of the order with the office of the county clerk. The final order will be conclusive unless a proceeding to review is commenced within 30 days from the date of the recording. The party seeking to review the final determination has to provide a bond. The amount of that bond will be set by the court or judge of the judicial district in which the town is located. The amount of the bond will take into the consideration the costs and expenses to be incurred by the town because of the Article 78

proceeding. The town board would be entitled to that amount only if the court rules in its favor and dismissed the Article 78 petition. If the court modifies the final order, the court's judgment will be final and conclusive and the town board will have to record and file the judgment in the same manner as set forth in Section 5.7.

5.11. Alternative Wastewater Approaches Can Be Implemented through Sewer Districts. Sewer districts can be developed that implement alternative approaches to centralized wastewater collection and treatment. Not everyone needs to be connected to a centralized sewer system. Districts can be formed with one or more of the properties connected to a septic tank and providing a pump out septic tanks, or a combination of a centralized sewage system and individual septic systems, or consist of numerous clustered system within the district itself. These systems may be located on public or private property. Sewer districts do not have to be contiguous; sewer districts can have separate sections or areas that are not contiguous. The charges imposed within a sewer district can vary in direct proportion to the benefit of the service provided.

5.12 Wastewater Disposal Districts. Under Town Law section 190–e, town boards are authorized to establish improvement districts with the purpose of administration and planning, including educational programs, design, installation, construction, rehabilitation, replacement, operation and maintenance, including pumping, inspections, monitoring, residual treatment and disposal, and regulation of private on-site wastewater disposal systems. In other words, rather than some form of centralized sewage disposal, a town can take responsibility of individual septic systems serving private property. Under Town Law section 198 1-b, the Town Board is authorized to exercise all powers with respect to wastewater disposal districts, which are provided for sewer districts, to the extent that such powers are consistent with the purposes of a wastewater disposal district. The charges for all wastewater disposal district services shall be sufficient to pay all estimated annual cost of operation maintenance and all annual installments of principal and interest on obligations issued on behalf of the wastewater disposal district. To the extent that revenue is in any year are insufficient, the excess cost over the revenues may be assessed against the real property of the district in the following year. A wastewater disposal district cannot include any portion of a sewer district. A sewer district can, however, include the maintenance of individual on-site septic systems.

5.13 Sewer rents.

All of the sewer districts identified above are entitled and required to charge sewer rent. Article 14-F of the General Municipal Law §§450 et. seq., entitled "Sewer Rent Law," forms the legal basis for the collection of sewer rents. "Sewer rents" are defined as a scale of annual charges established and imposed in a city or village or in a sewer or wastewater disposal district in a county or town pursuant to Article 14-F for the use of a sewer system or any part or parts thereof. Such charges may be based on either:

> (a) the consumption of water on the premises connected with and served by the sewer system or such part or parts thereof,

> (b) the number and kind of plumbing fixtures on the premises connected with and served by the sewer system or such part or parts thereof,
>
> (c) the number of persons served on the premises connected with and served by the sewer system or such part or parts thereof,
>
> (d) the volume and character of sewage, industrial waste and other waste discharged into the sewage system or such part or parts thereof, or
> (e) upon any other equitable basis determined by the local legislative body, including but not limited to any combination of the foregoing.

The Town Board on behalf of a sewer district or wastewater disposal district may establish and impose sewer rent in accordance with the provisions of Article 14-F as a means of producing revenue. GML §452(1). Sewer rents may be imposed by local law, ordinance, or resolution by towns on behalf of sewer districts or wastewater disposal districts. A resolution establishing and imposing sewer rent shall be adopted only after a public hearing upon five days' public notice. In the case of a sewer district or wastewater disposal district in a town which has a Board of Sewer Commissioners, any such local law, ordinance or resolution may be enacted only in conformance with the recommendation of the Board of Sewer Commissioners. Further, the provisions of Sections 130 and 133 of the Town Law, as amended from time to time, shall apply to the adoption of such ordinances in towns.[1] GML §452(2).

Sewer rents shall constitute a lien upon real property served by the sewer system or such part or parts thereof for which sewer rents shall have been established and imposed. The lien shall be prior and superior to every other lien or claim except the lien of an existing tax, assessment or other lawful charge imposed by or for or a political subdivision or district thereof. GML §452(3). GML §452(4) describes how a municipality may enforce the sewer rent law by bringing an action, or foreclosing liens or by adding the amount owed on a separate column in the annual tax rolls.

Under GML §452(5), the local law or ordinance establishing and imposing sewer rents:

> (a) shall describe the sewer system or the part or parts of the sewer system for which such rent shall be established and imposed,
>
> (b) shall prescribe the basis of the charge for such rents,

[1]Town Law § 130 provides for the enactment of town ordinances for certain purposes. Town Law § 133 governs when an ordinance takes effect.

> (c) shall provide for the date or dates on which sewer rent shall become due and payable,
>
> (d) may provide for penalties for sewer rents in arrears or for such discounts for the prompt payment of such rents, or for both penalties and discounts.

Revenue derived from sewer rents, including penalties and interest, shall be credited to a special fund, to be known as the "sewer rent fund." Pursuant to GML §453, monies in such fund shall be used in the following order:

> (1) For the payment of the cost of operation, maintenance and repairs of the sewer system or such part or parts thereof for which sewer rents have been established and imposed.
>
> (2) For the payment of the interest on and amortization of, or payment of, indebtedness which has been or shall be incurred for the construction of the sewer system or such part or parts thereof for which sewer rents have been established and imposed (other than indebtedness, and the interest thereon, which is to be paid in the first instance from assessments upon benefited real property).
>
> (3) For the construction of sewer treatment and disposal works with necessary appurtenances including pumping stations, or for the extension, enlargement, or replacement of, or additions to, such sewer systems, or such part or parts thereof.

Such revenues from sewer rents shall not be used (1) to finance the cost of any extension of any part of a sewer system (other than any sewage treatment and disposal works with necessary appurtenances including pumping stations) to serve unsewered areas if such part has been constructed wholly or partly at the expense of real property especially benefited, or (2) for the payment of the interest on, and the amortization of, or payment of, indebtedness which is to paid in the first instance from assessment upon benefited real property. GML §453(3).

In adopting sewer rent laws, the following principles apply: (1) while water and sewer rents may appear on a single bill, they should be separately indicated since they represent separate contracts for separate services; (2) sewer rents may be collected in advance, provided that the advance payment is based on a method which permits calculation in advance and where water meters are utilized, the advance billing may be based on a percentage of the metered water consumption of the previous year, provided that the

meters are read at the end of the year and appropriate adjustments made on next year's bill to reflect actual usage; (3) sewer rents may be used to pay for improvements including financing the cost of the construction, extension, enlargement or replacement of sewage treatment or disposal works, subject to the order priority established in GML Section 453; and (4) surplus funds may be a accumulated from year-to-year in a sewer rent fund.

It is highly recommended that town boards consider imposing a "capital charge" on property owners as part of the annual sewer rent charge. The purpose of the capital charge is to develop a fund for the cost of major repairs and replacement of existing equipment. The capital fund will avoid or mitigate the need to seek financing in order to fund major repairs and/or replacements. Funds reserved for repair or replacement should be separated from funds reserved for expansion and/or for extension of the sewer system. Under certain circumstances, it may be improper to impose a capital charge on existing users to fund an extension of the sewer system to unsewered areas.

5.14. Sewer rent for those plants being funded under MOA within the New York City Watershed. Sewage treatment plants and/or community septic systems that are funded under the New Infrastructure Program as set forth in the Memorandum of Agreement, or funded under the Community Wastewater Management Program, which is a condition of the November 2002 Filtration Avoidance Determination, are entitled to certain subsidies that alter the sewer rent calculation. Prior to the wastewater treatment plant (or community septic system) commencing operations, the Town will execute an agreement with New York City Department of Environmental Protection relating to the operation and maintenance of the plant. Under the terms of that agreement, the City will agree to subsidize the plant operation, such that each household will pay no more than $100 per year per residential dwelling unit. A household is a place where a person lives on a permanent basis. The term does include rental property and Bed and Breakfasts containing less than six guest rooms. It does not cover motels or hotels where customers stay on a transient basis. The sewer rate to a household is fixed at a $100 for the first three years and thereafter adjusts with inflation/deflation.

New York City is also responsible for the operating and maintenance cost incurred due solely to the New York City Watershed Rules and Regulations. For communities numbered 1 through 7 in the MOA, except Roxbury, each community is getting a new wastewater treatment plant and the city has also agreed to a subsidy for non-households in the amount of $10,000 per year. In Roxbury, the project consisted of a force main to a New York City-owned WWTP and the subsidy is $5,000 per year. In the Operation and Maintenance Agreement executed by and between the City and the community, the community is obligated to adopt a sewer rent law that allocates operation maintenance cost in a fair and equitable manner consistent with applicable law. Under the typical proposed sewer rent law for the New Infrastructure Communities, the total operating costs are divided into three categories: (1) those costs due solely to the New York City Watershed Rules and Regulations (hereinafter the “Watershed Cost”); (2) those costs allocated to households; and (3) those costs allocated to non-households. Below is a

summary of a typical sewer rent law for new infrastructure community. For purposes of this discussion, we have named the community the Town of Utopia.

Under Utopia's Sewer Rent Law, the Town develops a budget for operation and maintenance in June/July for the next calendar year. For purposes of this analysis, the total estimated budget is $375,000. The Town then subtracts from the budget the Watershed Cost (using 22% as the percentage for Watershed Cost, the Watershed Cost allocable to the City would be $82,000). The remainder of the costs (i.e., $375,000-$82,000=$292,500) are divided between households and non- households in proportion to flow. The flow assigned to the households is 300 gallons per day for each EDU. At the present time, the Town estimates that it has approximately 295 EDUs for a total residential flow of 88,500 gallons per day. The flow assigned to non- households is based on actual meter readings from the prior year. Based upon those meter readings, the Town estimates that the flow from non-households as 18,758 gallons per day. The non-household portion of the costs is calculated by multiplying the remainder of the cost by the percentage of flow assigned to non-households [i.e., {$292,500 * (18758/107258)=$51,154]. The City has agreed to pay an additional $10,000 towards the non- households costs to reduce the overall share of costs applicable to non- households (i.e., $51,154 - $10,000=$41,154). The proposed Sewer Use Law imposes a minimum annual charge of $200 per non-household. The Town estimates that there are approximately 46 non-households and thus the minimum annual charge will raise approximately $9,200 (i.e., $200* 46). The remainder of the non household costs (i.e., $41,154 - $9,200 = $31,954) is allocated to non-household users based upon their actual flow (i.e., $31,954/18758 = $1.70 gallons per day). As a result, a non-household averaging 250 gallons per day (or 91250 gallons per year) would pay approximately $625 per year (i.e., $200 + ($1.7*250) = $625. The households will each pay $100 per year per dwelling unit (a one-family house pays $100 a year; a two-family house pays $200 per year).

5.15. Sewer Use Law. Prior to the construction of the wastewater treatment plant, the municipality must adopt a Sewer Use Law. Typically, the funding agreement with the Environmental Facilities Corporation, will require the Sewer Use Law to be adopted by the Municipality to be as least as stringent as the Model Sewer Use Law published by the New York State Department of Environmental Conservation. The purpose of the Sewer Use Law is to provide the Municipality with control over the quantity and quality of the sewage discharged. A typical sewer use law includes regulations governing the use of the sewage system, establishes a sewer rate structure and a sewer allocation procedure.

The Model Sewer Use Law has 13 different articles or chapters and consists of over 60 pages. Some of the more important sections of the Model Sewer Use Law are described below.

The Sewer Use Law will require that any property that is within a certain distance of a sewer main must connect to the sewer main. Similarly, all existing improved property that has a sanitary system will be obligated to connect to the sewer system within the time period defined by the Board. Residents prohibited from disposing of storm water, roof

drains, basement sumps, swimming pool water and ground water in the sanitary sewer. Once the connection has been made to the public sewer, any cesspool, septic tank, and similar wastewater disposal facility has to be cleaned of septage by a licensed septage hauler and finally filled with clean sand, gravel or dirt or removed from the property.

Any person seeking to construct a new building within the Sewer District must first obtain an allocation of sewage capacity from the Municipality. If the Municipality refuses to grant a person an allocation, that person can still develop the property provided he/she can arrange for some other means of approved sewage disposal (i.e., septic system). The Sewer District has authority to enter into agreements with property owners outside the Sewer District to accept sewage subject to a written contract.

The Model Sewer Use Law contains detailed specifications for the construction of new sewer mains and for the construction of a sewer laterals. It is advisable for the municipality to establish a program requiring the property owner to use a contractor licensed by the Municipality to install sewer laterals. There are two types of sewer laterals: Street Lateral and Building Lateral. The Street lateral runs from the sewer main to the property line and is generally owned by the Municipality. The building lateral runs from the property line to the house and is generally owned by the property owner. As part of the construction of the sewer system, a stub is typically installed in the sewer main for each property. The property owner will be responsible for the cost of the lateral connecting the sewer main to his internal plumbing. Some general restrictions on sewer laterals in the Model Sewer Use Law include the following:

A. a separate independent building lateral shall be provided for every building;

B. lateral shall not go under building basements or any enclosed structure and likewise, a building shall not be constructed over an existing lateral;

C. building laterals shall enter the basement through the basement wall at no less than 12 inch above the basement floor;

D. building laterals must be of uniform grade in a straight alignment, to the extent practical.

E. the maximum distance between cleanouts is 100 feet.

F. laterals should be installed at least 4 feet below the ground surface. If four (4) feet is not practical, in no case should the lateral be installed less than 2 feet.

G. it is the responsibility of the property owner to maintain, repair and replace any building lateral.

H. the Municipality must be notified prior to any installation of the lateral, and given an opportunity to inspect the lateral trench prior to backfilling the trench. The owner must also submit as-built drawings to the Municipality

showing the location of the sewer lateral.

I. lateral shall have an interior clean-out fitting at a readily accessible location just inside the basement wall.

Grease traps will be required, if in the opinion of the Municipality's Inspector (see below) grease traps are necessary for the proper handling of wastewater containing excessive amounts of grease. In particular, grease traps are required for all foodservice and restaurant establishments. Solid waste grinders are typically not allowed at commercial establishments.

The Municipal Board must appoint an inspector that will be responsible for the enforcement of the Sewer Use Law and for making determinations under that law. If a person violates the Sewer Use Law, the inspector will be able to issue an order noting the violation and requiring compliance. If a property owner objects to the order, a property owner is entitled to a hearing before the Municipal Board or in a local court. The Municipal Board or Judge will then make a decision whether the violation occurred and, if so, whether the penalty amount and compliance schedule in the abatement order was proper. Any intentional or willful violation of the Sewer Use Law could be enforced as a criminal misdemeanor subject to a year in jail and $1,000 penalty.

The Sewer Use Law should also contain a chapter providing the Municipal Board authority to make future decisions regarding allocation of capacity to expansion of existing facilities and new development. The treatment plant will be designed to handle the wastewater flow from the existing development within the Sewer District with an allocation for growth. As new development occurs or as existing parcels are modified, there may be a need for additional capacity at the wastewater treatment plant to treat the additional flow and maintain a buffer between actual and permitted flows. The Municipality should consider the treatment capacity at the sewage treatment plant as a valuable asset to be used for the betterment of the community. Applicants for new sewer connections and/or existing users making modifications to the existing improvements that result in significant additional wastewater flow should need to obtain an allocation of sewer capacity from the Board.

In certain situations, the Board may require a sewer connection fee for new development. The purpose of the sewer connection fee is to provide a capital fund that can be used for the periodic replacement of equipment and any necessary expansions. The connection fee compensates the Sewer District for the treatment capacity being absorbed by the new development.

5.16 Providing Services Outside the Sewer District. A Sewer District may provide sewer services outside the Sewer District either by expanding the district boundaries or pursuant to the sewer connection contract. Typical sewer connection agreement would require the property owner to comply with the Sewer Use Law and to pay a sewer rent at least equivalent to the sewer rent paid by property owners within the Sewer District. The agreement should make clear that the Sewer District should not be required to incur

additional capital costs that would otherwise be avoided but for the service to the property outside of the Sewer District. The agreement should set forth in detail each party's respective obligations regarding sewer mains and laterals. As part of the Sewer Connection Agreement, a person outside the district should compensate the district for its imbedded costs.

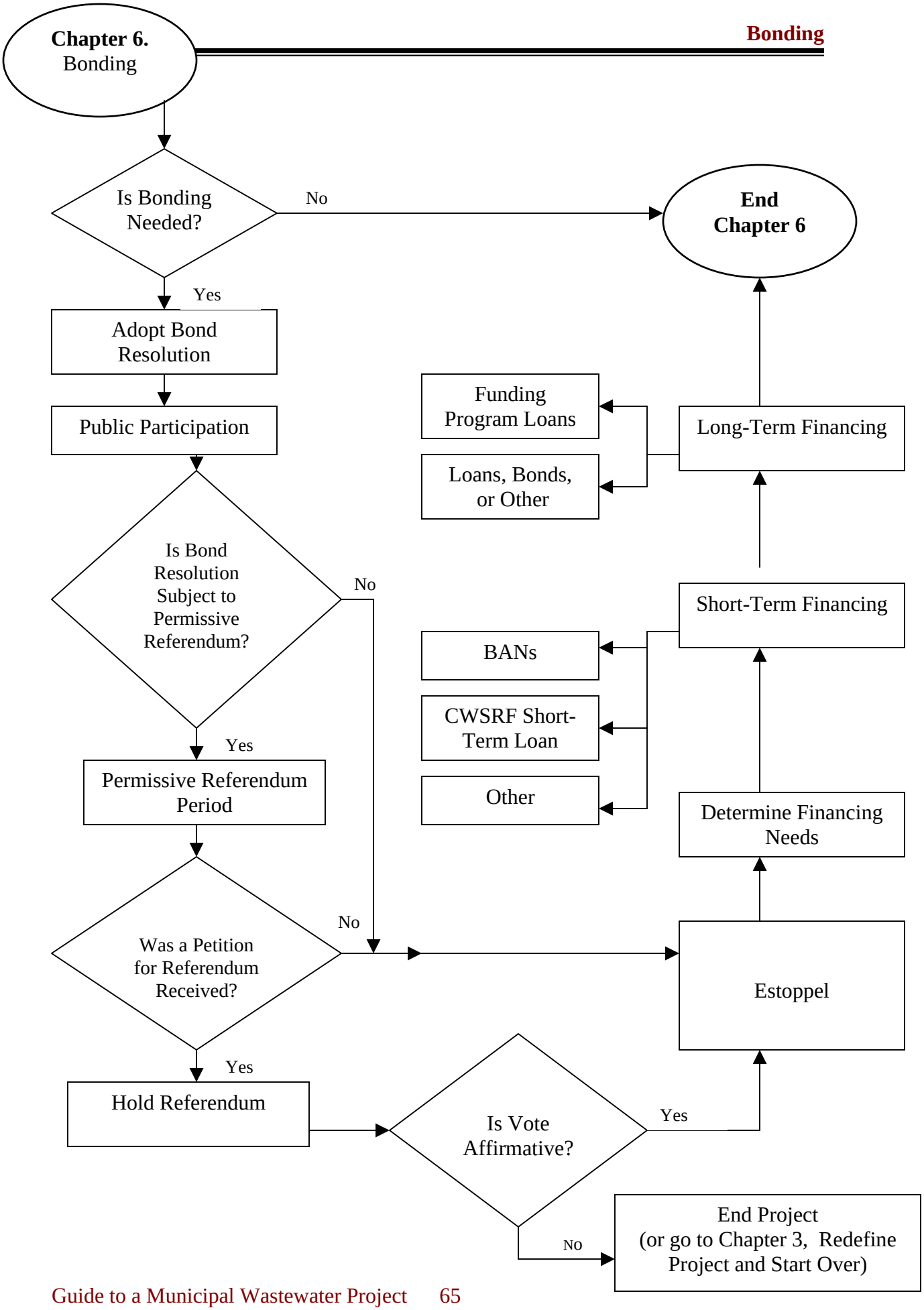
New York State Town Law Section 198(1)(f) provides that a Town Board has the power, on behalf of a sewer district, to:

> enter into a contract or contracts with another sewer district or with any incorporated city or village or with one or more corporations or individuals for the joint disposal of sewage, and the expense of such joint disposal of sewage shall be apportioned between the contracting parties in proportion to the areas served, volumes of sewage disposed of or the benefits received by each contracting party.

Town Law §198 (1)(f) (Mckinney's 2004). The New York State Comptrollers' Office has expressed the opinion that §198(1)(f) authorizes a town board, on behalf of a sewer district, to enter into contracts to provide sewer services to other sewer districts, cities villages, corporations or individuals outside the district. 1971 Opns. St. Comp. No. 71-358, unreported; 10 Opns. St. Comp. 1954, p 52; 4 Opns. St. Comp. 1948, p 83. This application of Town Law §198(1)(f) is entirely consistent with prior judicial interpretation. *Geller v. O'Neill*, 57 A.D.2d 865, 866 (2d Dep't 1977)(stating that section 198(1)(f) "allows a Town Board to contract to dispose of sewage from property outside of a sewer district").

The Comptroller's Office has further explained that the provision of service to outside users under section 198 (1)(f) is in the nature of a contractual transaction and the terms and conditions of the contract, including the consideration to be paid, are matters which, in the first instance, must be determined by the contracting parties. *See* 1986 Opns. St. Comp. No. 86-33, p 54; 1991 Opns. St. Comp. 24. Amounts paid by outside users, including other sewer districts, pursuant to contracts may properly include those capital and operation and maintenance costs attributable to the provision of the outside service.1973 Opns. St. Comp. No. 73-776, unreported; 1971 Opns. St. Comp. No. 71-358, *supra*; 4 Opns. St. Comp. 1948, *supra*).

5.17. Intermunicipal Agreement(s). The project may involve more than one municipality, or two or more municipalities may share responsibility for ownership, construction, operation or maintenance of the project. The project may convey wastes to, or treat wastes from facilities owned or operated by another municipality. In these cases, the municipality will need to prepare and execute an intermunicipal agreement or service contract. The agreement/service contract will include items such as applicable rate schedules, maintenance agreements, reference to local laws governing the construction and/or operation of the project, and other terms and conditions.


Chapter 6.
Bonding
Is Bonding Needed?
No
End
Chapter 6
Yes
Adopt Bond Resolution
Public Participation
Is Bond Resolution Subject to Permissive Referendum?
No
Yes
Permissive Referendum Period
Was a Petition for Referendum Received?
No
Yes
Hold Referendum
Is Vote Affirmative?
Yes
No
End Project
(or go to Chapter 3, Redefine Project and Start Over)
Estoppel
Determine Financing Needs
Short-Term Financing
Long-Term Financing
Funding Program Loans
Loans, Bonds, or Other
BANs
CWSRF Short-Term Loan
Other

The Board's To Do List

- Hire bond counsel
- Adopt the bond resolution
- The board can hold a public information meeting or public hearing to inform the public about the project (optional).
- Work with the bond counsel and engineer to obtain short-term financing.
- When the project is nearing completion, work with the bond counsel and engineer to close long-term loans.

Chapter 6

Bonding

This chapter describes the requirements that must be met if the municipality plans to borrow funds to finance the project. As used in this manual, the term "bonding" refers to any borrowing on the project, regardless of the type of financing (loans or bonds) that will be used. The specific process depends on how the project will be financed, where the project is located, how revenues will be collected, etc. Generally, the bonding process begins after funding offers are received and the municipality knows how it will pay for the project. The following describes the process for a typical wastewater project located outside the NYC watershed and funded with NYSEFC and/or USDA RD funds.

The bonding process results in the municipality obtaining the authority to undertake the borrowing for the project. For projects that have loans, whether from local, state or federal sources, bonding requirements must be met according to New York State law. If funding agencies are involved, the municipality must hire a bond counsel to assist with the bonding process. The bond resolution must be in effect prior to submittal of funding applications.

For many projects, especially those located in a village, the actual decision to complete the project is made during this phase—up to this point, the project has been in the development stage, but a formal decision has not yet been made to go beyond the planning stage and actually construct the project.

For projects in a Town that involve a sewage district creation or extension, the decision to move ahead with the project is made during the district creation process and is described in detail in Chapter 5.

Reality Check

If the municipality needs to borrow funds to complete the project:

- Adopt Bond Resolution
- Obtain short-term financing (usually short-term loans or bond anticipation notes) to design and construct the project
- When construction is substantially complete, close long-term loans.

6.1. Bonding Process. The bonding process on a typical wastewater project begins with hiring a bond counsel and adopting a bond resolution. The

bond counsel will determine the need for and the content of the bond resolution and whether it is subject to permissive referendum. Bond counsel will guide the preparation, adoption, notice and publication of the bond resolution and will assist in obtaining proof of publication and other information as required by New York State law and the funding agencies. The engineering staff will coordinate with the bond counsel throughout the project and will provide all necessary information and documentation so that the bond counsel can adequately provide bonding services. The bond counsel is involved throughout the project and will help with the bonding process, make sure interim financing is available during completion of the project, assist with rate structures and methods for generating revenue to repay the loans, and assist with bonding and loan closings at project completion.

6.1.1. Bond Resolution. The bond counsel will prepare the bond resolution in accordance with Local Finance Law (Title 3, Section 32). The bond resolution typically describes the project, authorizes the total project cost, the amount that will be borrowed to pay for the project, and bond anticipation notes or other forms of interim financing. The environmental review is completed prior to adopting the bond resolution. The municipality typically adopts the bond resolution at a regular monthly municipal board meeting. The bond resolution must be published and posted according to NYS law.

Once the bond resolution is in effect, the municipality is authorized to borrow for the project, both to obtain interim, short-term financing to complete the project and to replace the interim, short-term financing with long-term financing when the project is complete.

Bonding Terms

Referendum: a vote on a specific issue.

Permissive Referendum: a vote on a specific issue pursuant to a petition from at least 20% of the qualified electors of a Village requesting such a vote.

Estoppel Period: a period during which the validity of the bond resolution and borrowing authority can be challenged by residents.

6.1.2. Public Participation. The municipality may hold a public information meeting or a public hearing prior to adopting the bond resolution to inform the public about the project and costs. This is not required, but is highly recommended since it is vitally important to include the residents of the project service area in the decision-making process. Often, the more the residents know about the project, the more likely they are to agree that the project is needed. This is a good time to prepare a newsletter mailing for the residents that describes the project and issue a press release for the local newspaper.

6.1.3. Permissive Referendum. Permissive referendum is a vote on a specific issue pusurant to a petition from at least 20% of the qualified electors of a Village requesting such a vote. The option of petitioning for a permissive referendum is open to the electors for a limited period of time following passage of the bond resolution. It is important that the municipality, engineer and bond counsel discuss the permissive referendum prior to preparing the bond resolution.

If the bond resolution is subject to permissive referendum, a permissive referendum clause is included in the bond resolution, and the bond resolution will take effect thirty (30) days after its adoption if no petition for referendum is filed. If a petition for referendum is filed within 30 days of publication of the bond resolution, the bond resolution will take effect after it is approved by an affirmative vote according to NYS law.

Notes on permissive referendum:

- If the municipality chooses to hold a referendum so that the residents can decide if they want the project, the bond resolution can be adopted subject to such a mandatory referendum, instead of a permissive referendum.

- There are some instances when the bond resolution is not subject to permissive referendum. A bond resolution for a project located in a village is not subject to permissive referendum if the capital improvement is chargeable primarily to benefited real property (Local Finance Law, §36.00.2.). A bond resolution for a project located in a town is not subject to permissive referendum for any district or special improvement authorized by Town Law, Article 12, 12-A and 12-C of the Town Law or for any improvement where the cost is to be assessed upon benefited real property (see NYS Local Finance Law, Title 3, §35.b.1.) A wastewater project located in a Village that is the result of an order of enforcement, such as a NYSDEC Order-on-Consent, does not require that the bond resolution be subject to permissive referendum (NYS Local Finance Law, Title 3, §36.5); however, the bond resolution is subject to estoppel (see 6.1.6. for explanation of the estoppel clause).

6.1.4. Petition for a Referendum. For a bond resolution subject to permissive referendum for a project located in a village, the petition requesting a public referendum, i.e. vote, must be signed and acknowledged by at least twenty (20) percent of the qualified electors of the village (Village Law, §9-902.1). For a project located in a town improvement district, see Chapter 5 for a discussion of the process. For the rare project that is located in a town, but not in a special improvement district, the petition must be signed and acknowledged by at least five (5) percent of the total qualified electors in the town that cast a vote for governor at the last general election of state officers (Town Law, §91). The petition must be filed with the village clerk or the town clerk within thirty (30) days of adoption of the bond resolution.

6.1.5. Referendum. In a village, unless the ownership of real property is otherwise required by law as a qualification for voting on a proposition, any person qualified to vote at a general village election may vote upon any proposition submitted at a village election. The process for referendum is included in Village Law, §9-902. The process for a referendum in a town improvement district is described in Chapter 5.

6.1.6. Estoppel. The bond resolution will contain an estoppel clause. The estoppel clause states that the validity of such bonds or notes or any bond anticipation notes issued in anticipation of the sale of such bonds may be contested only if:

1. Such obligations are authorized for an object or purpose for which the municipality, school district, or district corporation is not authorized to expend money, or
2. The provisions of law which should be complied with at the date of the publication of such resolution or summary thereof, or certificate, as the case may be, are not substantially complied with, and an action, suit or proceeding contesting such validity, is commenced within twenty days after the date of such publication, or
3. Such obligations are authorized in violation of the provisions of the Constitution of New York.

A summary of the resolution and the full estoppel clause is published after the bond resolution takes effect in the municipality's official newspaper. According to NYS law (Local Finance Law, Title 6, §84.00), the validity of the action as stated above can be contested within twenty (20) days from the date of publication. When the estoppel period expires without challenge, the bond resolution is in effect.

6.2. Short- and Long-Term Financing. For most projects, two types of financing are used. Short-term or interim financing is used to provide funds to design and construct the project, and long-term financing is used to replace the short-term financing and finance the project for a term close to the useful life of the project (typically 20 to 40 years).

6.2.1. Short-Term Financing. Many times, there is a long delay in getting funds actually committed to the project. This is discussed in greater detail in Chapter 7. Since it can take months and even years to actually obtain funding commitments for a project, care must be taken to determine the timing of obtaining interim financing. Bond anticipation notes can be taken for a period of up to five years before they must be turned into long-term financing. Short-term loans with the CWSRF program have a term of three years and then they must be rolled into long-term loans. Principal payments are due (in an amount based on the short-term funds expended) two years after the short-term financing is obtained and annually thereafter. Short-term financing should be timed so that construction can occur during the short-term financing period, otherwise, principal payments may become due long before the project is actually constructed.

6.2.1.1. Bond Anticipation Notes (BANs). BANs are short-term notes taken from a local bank to pay for project costs during design and construction. Usually, a BAN will be taken for a one-year term on a callable basis. Callable means that the BAN can be repaid during the term without penalty. At the end of the one-year term, if the BAN is still needed, it can be rolled over for a new one-year term. At the end of the second year, a portion of the principal must be repaid. Interest is payable when the BAN comes due. Most funding agencies will consider interest paid on BANs used for interim financing an eligible project cost and encourage that unspent BAN proceeds be placed in an interest-

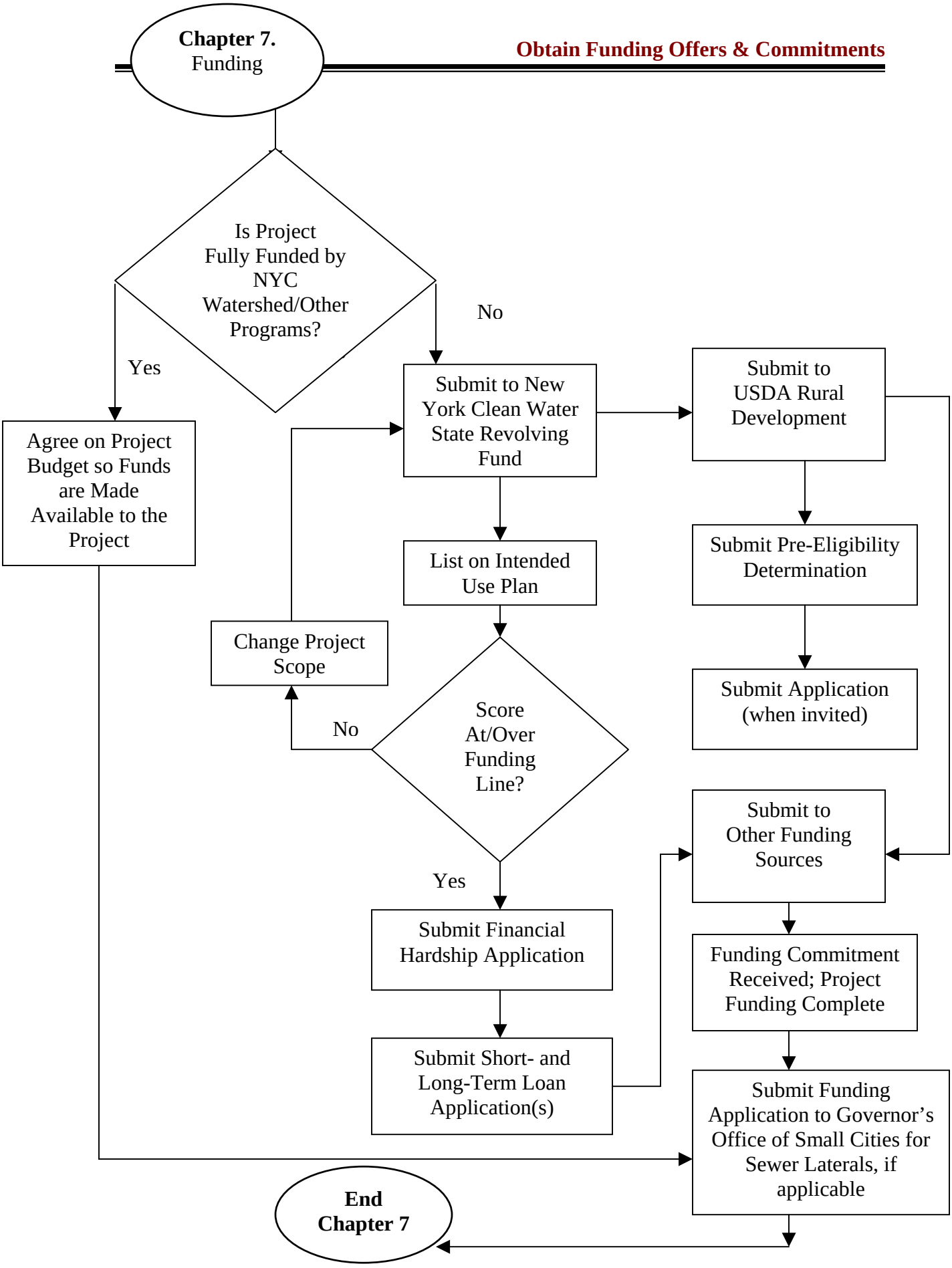
bearing account to reduce project-related interest costs (consult bond counsel about the regulations governing earned interest on BAN proceeds). After five years, the BAN must be replaced with long-term financing.

6.2.1.2. CWSRF Short-Term Loan. Another form of short-term or interim financing is the no-interest, short-term loan from NYSEFC. This loan, subject to availability, is for eligible projects listed above the funding line on the annual Intended Use Plan (IUP). If funds are available and if the project has qualified for a hardship loan, the short-term loan amount for the entire loan portion of the project is set aside by the NYSEFC program and is made available to the project after the short-term loan application has been approved. If the project does not qualify for a hardship loan, the short-term loan can be no more than one-half of the CWSRF-eligible amount. The short-term loan term is limited to a maximum of three years. Review the current IUP carefully since program rules are subject to change. See Chapter 7 for a detailed discussion of CWSRF financing.

6.2.2. Long-Term Financing. The long-term financing for the project could take the form of a bond or a direct loan with the Clean Water State Revolving Fund with a term of 20 or 30 years, serial bonds with USDA RD for a 38-year term, a combination of both, or another form of borrowing, depending on the funding source. When the long-term loans are closed, the short-term financing is repaid with the proceeds. Long-term loans are typically closed after the project has reached substantial completion.

In some cases, NYSEFC will allow a long-term loan to be closed early in the project and the loan funds can be drawn on a monthly basis as project expenses are incurred. The drawback to this approach is that principal payments may become due while the project is still in construction, so a repayment stream must be in place prior to the work actually being done. New system users tend to not like this approach since they may be paying for the capital improvement long before they are connected to the system. Also, the interest on a long-term loan is not considered an eligible project expense and will not be reimbursed with grant or loan funds.

A detailed description of the USDA RD and the CWSRF loan closing process is included in Chapter 13.


Is Project Fully Funded by NYC Watershed/Other Programs?
Yes
No
Agree on Project Budget so Funds are Made Available to the Project
Submit to New York Clean Water State Revolving Fund
Submit to USDA Rural Development
List on Intended Use Plan
Submit Pre-Eligibility Determination
Change Project Scope
Score At/Over Funding Line?
No
Submit Application (when invited)
Yes
Submit to Other Funding Sources
Submit Financial Hardship Application
Funding Commitment Received; Project Funding Complete
Submit Short- and Long-Term Loan Application(s)
Submit Funding Application to Governor's Office of Small Cities for Sewer Laterals, if applicable
End Chapter 7

The Board's To Do List

- Oversee funding application(s) preparation and submission.
- Clerk or other municipal staff provides financial reports, cost documentation, and other application materials to the application preparer.
- Adopt funding application authorizing resolutions and sign application documents.

Chapter 7

Obtain Funding Offers and Commitments

Under New York City watershed funding programs an amount is set aside to fund a number of targeted wastewater projects. Once the project budget is accepted, funds are dedicated to the project.

Projects that need funding submit formal applications to the funding agencies to obtain actual funding commitments. The following steps are needed to obtain funding commitments from the basic wastewater infrastructure funding sources, United States Department of Agriculture Rural Development (USDA RD) and the NY Clean Water State Revolving Fund (CWSRF).

Although initial determinations of eligibility have been requested from state and federal funding agencies (see Chapter 3), and responses may have been received, funds are not yet actually committed to the project. Up to this point, the municipality has invested its own funds to complete project development (most of these costs are typically eligible for reimbursement when project funds are actually received, however). Since most municipalities do not have the funds available to proceed with design, the next step in the process is to complete funding applications and obtain funding commitments from the funding agencies.

Reality Check

Steps in the Process:

- NYC Watershed Projects. NYC funds the project development to determine the scope of the project and then the parties negotiate and agree to a proposed budget & funds are dedicated to the project.
- Non-NYC Watershed Projects. The municipality submits requests to funding agencies to determine eligibility. When pre-eligibility determination letters are received, the municipality submits complete applications to funding agencies.
- Most funding agencies require a complete environmental review prior to committing funds to the project.
- Funds must be committed prior to bidding & construction.

Costs incurred to prepare funding applications are typically not eligible for reimbursement from CWSRF or USDA RD. While these costs are the burden of the municipality, the investment is well worth it to ensure funding applications are prepared correctly and that the municipality has the best chance to receive an affordable funding package. Very often the county planning department or the state government may be able to provide assistance in drafting grant applications.

For most small communities, sewer projects will not be possible without some form of grant funding. Federal and state budget constraints, funding program initiatives, funding levels, and schedules dictate when funds are actually available. Obtaining funding commitments can take months to years from the time applications are submitted. Once funds are committed to the project, the municipality can proceed with design and construction. To pay for this work, the municipality will need short-term funds to cover expenses until the project is constructed and long-term financing is in place. See Chapter 6 Bonding for a discussion of short-term financing methods.

If a municipality has its own funds available, it can proceed with design and those costs can be reimbursed with project funds once they are available. This overall approach is not without risk. There is no guarantee that project funds will be available at all—funding offers do not guarantee that the project is actually funded—and should project funds not be available, the municipality will be responsible for these costs. This requires consultation with the municipal attorney or bond counsel to make sure that the proper resolutions are adopted that allow for the transfer of funds. The municipality must wait to bid the project until funds are committed since the funding agencies will require plan approval, and will not review plans until the funding is committed. If the municipality awards the construction contract without having plan approval first, design, bidding and construction costs <u>will not</u> be eligible for funding.

Reality Check

Except for projects that are funded from their beginning by special programs such as those in the NYC Watershed,, there are two very distinct stages in the funding process. The first stage is when funding offers and commitments are requested, and the second stage begins after funding is actually committed to the project.

It is important to understand that a great deal of work needs to be accomplished prior to having any funding committed to the project. Funding offers are requested after project development is complete. Once funding offers are obtained, environmental review, district establishment or extension, bond resolution, and funding applications must be completed prior to the funding agencies actually committing funds to the project. This means the municipality must pay for these items before receiving any assistance from the funding agencies.

Obtaining funding is a very expensive and lengthy process that can extend for a number of years from the time that project development begins until funds are actually committed. This requires a great deal of patience, perseverance, and a willingness to take risks on the part of elected officials.

7.1. Projects Without Special Up-Front Program Funding. The main funding agencies are the New York Clean Water State Revolving Fund (CWSRF) and USDA Rural Development (USDA RD). The initial step in obtaining funding from these agencies is to request an eligibility determination as summarized in Chapter 3.

Both CWSRF and USDA RD calculate the project's affordability based on a target service charge, although their methodology and formulas are different. The target service charge is what the entire cost of the wastewater system, including debt service and all operation and maintenance costs, will cost a typical residential household (also called equivalent dwelling unit or EDU). The target service charge is calculated as a percentage of the median household income (MHI) using the municipality's most recent Census data (or income survey if the Census data does not accurately reflect the MHI in the project service area). Generally, the lower the median household income is in a community, the lower the target service charge.

Once a target service charge is determined, the agencies work together to offer a combined grant and/or loan package to bring the costs of the project at or below the target service charge.

The following sections describe these basic funding programs in more detail.

7.1.1. New York Clean Water State Revolving (CWSRF) Fund**.** The CWSRF is a federally-subsidized loan program that is administered by the New York State Environmental Facilities Corporation (NYSEFC). The CWSRF offers long-term, reduced interest rate (hardship) loans for wastewater projects for eligible projects. These are direct loans. If the project does not qualify for a direct loan, it may qualify for a pooled loan that is obtained from the bond market. **This manual assumes the project qualifies for a direct, reduced-interest rate loan. For details about pooled CWSRF loans, see the current annual Intended Use Plan available at www.nysefc.org.**

The program also offers eligible communities short-term no-interest loans for interim financing during construction. The program currently does not offer grant funds. An applicant must have a Preliminary Engineer's Report approved by the regulatory agencies to obtain CWSRF financing.

7.1.1.1. Intended Use Plan. To be eligible for funding with the CWSRF, a project must be listed on the annual Intended Use Plan (IUP) and the project score (discussed below) must place the project above the annual funding line. The IUP is issued by CWSRF and includes an annual project priority list, a multi-year project priority list (PPL), current CWSRF program information, and application deadlines. To be listed on the IUP, the municipality submits a Project Listing Form (see Exhibit 6). Projects are scored and ranked according to the CWSRF program's scoring criteria. The current annual Intended Use Plan is available at www.nysefc.org and includes the Priority Ranking System Scoring Criteria and the target service charge formula. With this information, the

municipality can determine the target service charge, estimate the project score, and make preliminary projections of the level of funding it may receive.

7.1.1.2. Financial Hardship Application. Reduced interest rate or hardship financing is only available for wastewater projects that serve predominantly residential areas, is only for projects that cost ten million dollars or less, and is provided only for environmentally significant projects, as determined by the Commissioner of the NYS Department of Environmental Conservation (NYSDEC).

If the project score is at or above the funding line on the annual IUP, the municipality can submit a financial hardship application (see Exhibit 6) to EFC to determine if the project qualifies for a direct loan with a reduced (as low as 0%) interest rate and a term of 20 or 30 years. Staff at EFC will take into account other financing on the project and will discuss the project with USDA Rural Development or other funding sources prior to issuing the funding offer letter. The funding offer remains valid for two years from the date of the letter. Submittal of the hardship application is subject to the deadline included in the current IUP.

Currently, a project that has a hardship determination and has demonstrated readiness for financing within the effective period of the IUP will be placed on the Category D Annual Project Priority List on the IUP. The project then is eligible for short- and long-term financing as available. Carefully review each IUP update since policies often change.

7.1.1.3. Short- and Long-Term Loan Application(s). The municipality can choose to prepare and submit a combined short- and long-term loan application, or separate applications for each type of loan. The application used for each is the same, but more information may be required if using it for the long-term or combined applications.

7.1.1.3.1. Short-Term Loan Application, minimum requirements:

- Project must be listed in the final IUP's Annual Project Priority List with a score above the funding line.
- Project must be determined to be environmentally significant by the Commissioner of NYSDEC.
- Project planning must be completed and the applicant must have submitted an approvable Preliminary Engineer's Report.
- State environmental review process must be complete.
- If applicable, a special improvement district must have been formed.
- The municipality must have legal authority to borrow the project funds. Bond resolution, permissive referendum, if applicable, and estoppel notices and proof of publication must be submitted with the application. The bonding process is described in Chapter 6.
- Submit applicable portions of the application (see Exhibit 6, and next section).

7.1.1.3.2. Long-Term Loan Application. If a short-term loan was closed, much of the information required for the long-term loan application will be completed as the project progresses towards completion.

The most straight-forward way to prepare the long-term loan application is to follow the application checklist when compiling the documentation and attachments (see Exhibit 6). The first sections of the application include information about the municipality and its finances and project-specific information such as funding sources and a detailed project budget. Documentation that is required includes a resolution authorizing CWSRF application and agreement for project financing, district creation documentation, bond resolution and publications, professional service agreements, certificates of title for project sites, municipal financial reports and operating budget, environmental review documentation, permit screening checklists, equal employment opportunity program documentation, and cost documentation. Additional items will be required as they are completed after the application is submitted, including plans and specifications with regulatory agency approval, permits, executed construction contracts, notice to proceed, and certification of project completion.

7.1.2 USDA Rural Development**.** This program offers grants and low-interest loans to small, rural communities for wastewater projects.

7.1.2.1. Pre-Eligibility Determination. To be considered for a grant/loan package, a municipality must submit a request for a pre-eligibility determination to the regional USDA Rural Development (USDA RD) office (also discussed in Chapter 3). The USDA RD staff will advise what items are needed in the request for a pre-eligibility determination (see Exhibit 5). If the project qualifies, USDA RD will issue a pre-eligibility determination letter to the municipality with a funding offer and will invite the municipality to submit a complete application.

7.1.2.2 Application. The items required in a typical Rural Development application are listed in

Reality Check

What is the difference between how the funding agencies determine project affordability and the NYS Comptroller's cost threshold for district creation purposes?

CWSRF & USDA RD calculates project affordability as a percent of the community's median household income. Typically, USDA RD considers a project affordable if the cost per average household is 1.75% to 2% of the median household income and CWSRF's calculation is usually lower. For example, in a community with a $30,000 MHI (based on the most recent Census), costs in the $525 to $600 per year per average household are considered affordable.

For District establishment or extension purposes, the NYS Comptroller issues an annual average estimated cost for sewer districts ($573 in 2005). If the cost to a typical property is less than the Comptroller's threshold, the community does not need the Comptroller's approval to establish or extend the District (a certified copy of the notice of hearing must be sent to the Comptroller). If the costs exceed the Comptroller's annual thresholds, the formal application process must be followed. See Chapter 5 for a discussion of the process.

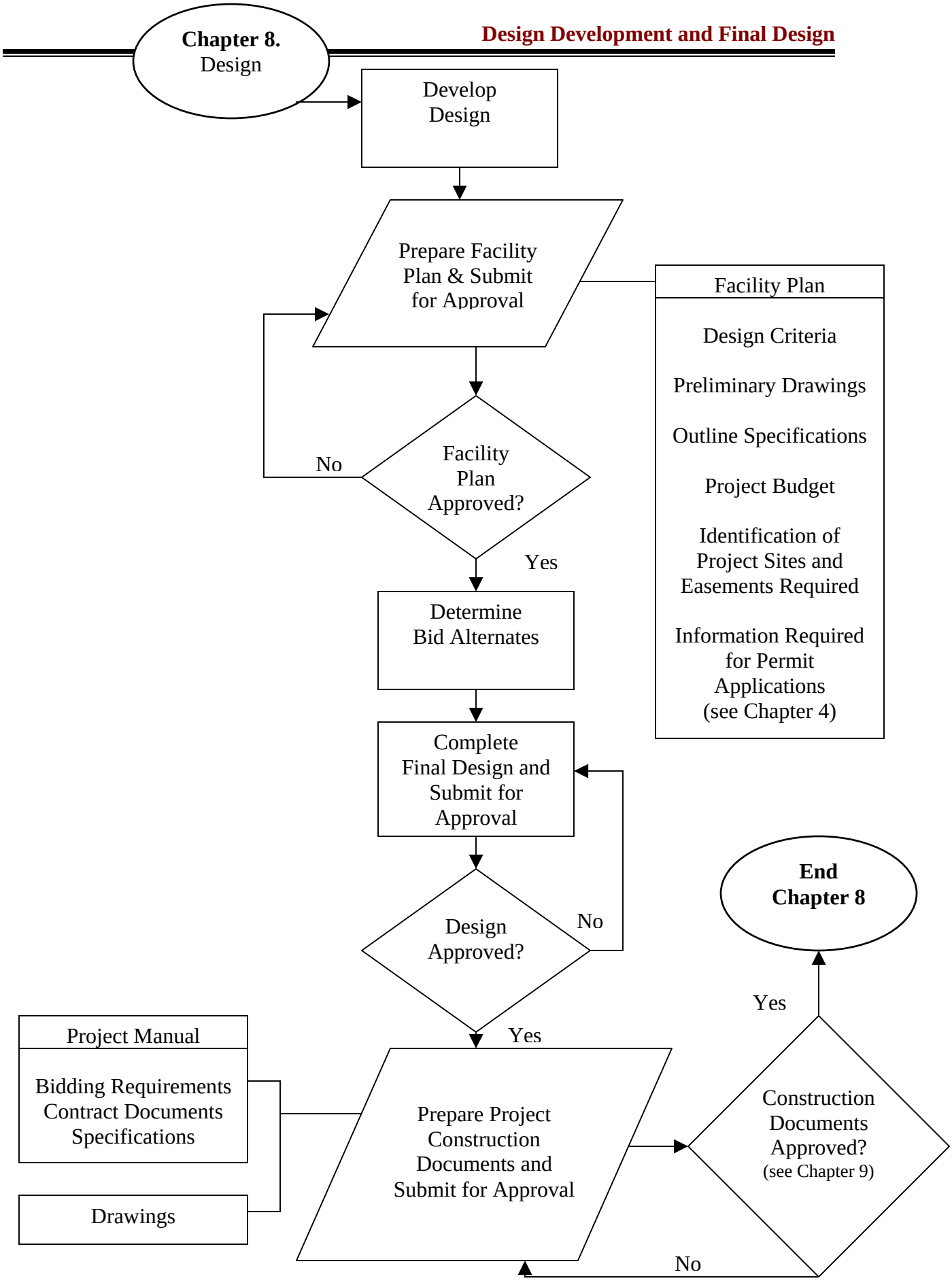
Exhibit 13. The regional Rural Development office that oversees the project will issue an invitation to submit an application that will list the actual items required, and will include current forms and submittals. Discussions with regional Rural Development staff during the application preparation and submittal process will ensure that the application is complete and is reviewed in a timely fashion.

7.1.3. Other Funding Sources. In addition to the basic funding agencies, additional funding sources may include: NYS Governor's Office of Small Cities, NYS Department of Transportation Industrial Access Program, US Environmental Protection Agency, US Economic Development Administration, and other sources. The municipality's local, state and federal legislators are invaluable advocates and can help with funding and regulatory issues.

Each funding source will have its own application requirements. Make contact early and often with these agencies to coordinate the funding and timing of submissions with USDA RD and CWSRF funding, and notify USDA RD and CWSRF if additional funding sources become available.

7.2. Projects with NYC Watershed Funding. Capital costs for projects within the NYC Watershed may be eligible for funding through a combination of: New York City Department of Environmental Protection (NYCDEP), Catskill Watershed Corporation, and the US Army Corps of Engineers through Water Resources Development Act (WRDA) grants. If the project is an eligible program the municipality is eligible for a lump sum amount for a specific project. The funding programs pay for project development. Once the project budget is determined during the study phase and agreed upon by the municipality and funding agencies, funds are dedicated and made available to the project.

7.3 Lateral Funding. The funding sources available for installation of laterals for eligible property owners include the Governor's Office of Small Cities for low to moderate income homeowners, and the USDA RD for income-eligible senior citizens. Within the NYC Watershed, lateral installation costs are eligible for NYC New Sewage Infrastructure Program (NIP) but cannot be included in the project budget that forms the basis of the block grant. The Catskill Watershed Corporation (CWC) may ahve additional lateral funding available for communities participating in the Community Wastewater Management Program (CWMP).


Develop Design
Prepare Facility Plan & Submit for Approval
Facility Plan
Design Criteria
Preliminary Drawings
Outline Specifications
Project Budget
Identification of Project Sites and Easements Required
Information Required for Permit Applications (see Chapter 4)
Facility Plan Approved?
No
Yes
Determine Bid Alternates
Complete Final Design and Submit for Approval
Design Approved?
No
Yes
End Chapter 8
Project Manual
Bidding Requirements
Contract Documents
Specifications
Drawings
Prepare Project Construction Documents and Submit for Approval
Construction Documents Approved? (see Chapter 9)
Yes
No

The Board's To Do List

- The engineer discusses design issues with the Board throughout the design process and during preparation of construction documents.

Chapter 8

Design Development and Final Design

The Design Development and Final Design phase (completed in conjunction with Land Acquisition described in Chapter 10, and Permit Applications and Design Review described in Chapter 9) results in approved plans and specifications that will be used to obtain construction bids for and then build the project. The engineering team is responsible for the bulk of the work related to design and permitting and will consult with the municipality regularly throughout the process.

In the design phase, the engineer will prepare the Facility Plan, assist the owner in obtaining permits as described in Chapter 9, identify the properties required and assist in obtaining easements as described in Chapter 10, complete final design drawings and specifications, and obtain plan approval from regulatory and funding agencies. The design process will result in the documents that are needed by the municipality to obtain competitive bids (described in Chapter 11) for construction of the project.

Reality Check

The Design Phase results in the documents needed to obtain competitive bids for construction of the project. During this phase, the engineer will prepare the:

- Facility Plan
- Bid Alternates, if any
- Final Design
- Project Construction Documents with bidding requirements, contract documents, specifications and drawings.

8.1. Design Development. During this phase, the engineer reviews the recommendations made during the study phase described in Chapter 3, verifies or modifies them, finalizes all design calculations, identifies alternate bid items, if any, and prepares the draft Facility Plan report.

8.1.1. Facility Plan. During preparation of the draft Facility Plan, the engineer will consult with funding and regulatory agencies and include their requirements in the design. The draft Facility Plan includes preliminary design documents consisting of final design criteria, preliminary drawings and outline specifications, and a

project budget based on the information contained in the preliminary design documents. During this phase, the engineer will identify the properties and easements required (Land Acquisition is described in detail in Chapter 10). The engineer will present and review the draft Facility Plan and preliminary design documents with the municipality and will forward them to regulatory agencies for review. Comments will be incorporated in the final Facility Plan, and it will be resubmitted to funding and regulatory agencies for final approval.

8.1.2. Bid Alternates. As the Facility Plan is prepared and more detailed information is available on specific project components and design, the project cost estimate is updated. If there are budget and/or funding constraints, the engineer will begin to consider alternate bid items that can be separated during the bidding process. As the budget allows, these alternate bid items can be added to or deducted from the base bid. It is important that these items be clearly identified early in the process so that funding and regulatory agencies are aware of them and can consider them in their review process.

8.2. Final Design. After the regulatory agencies have approved the Facility Plan, the engineer completes the final design work, including specifications and detailed drawings for all facilities.

Details in the final design may include:

- On-site individual or clustered septic systems layout and details.
- Collection system: sewer plan and profiles, individual grinder pump stations, sewer pump stations, specifications, site plans and profiles, and cost estimates.
- Wastewater treatment plant (WWTP) with appurtenances: equipment decisions, specifications, site plan design and drawings, and cost estimates.
- Deductive or additive bid alternatives: items that can be added or deducted to the base bid should budget or funding constraints force the municipality to reduce the scope of the project after bids have been received. Funding and regulatory agencies will review and comment on alternate bid items.
- If the project is a NYC Watershed project, a Draft Operation and Maintenance Manual is required by NYCDEP.

8.3 Project Construction Documents. The engineer presents the final design in the form of the project construction documents that consist of the project manual and the drawings. The engineer will prepare the project manual and drawings for review and approval by the municipality, its legal counsel, and other advisors.

8.3.1. Project Manual. The project manual includes the bidding requirements, contract documents, and technical specifications that are needed to construct the project.

8.3.1.1 Bidding Requirements. A detailed description of the bidding process is included in Chapter 11. The engineer includes the following bidding requirements in the Project Manual:

- Advertisement for Bids
- Instruction to Bidders
- Bid Forms

8.3.1.2. Contract Documents. Contract forms typically used for municipal wastewater projects are the Engineer's Joint Construction Documents Committee (EJCDC) documents (available at http://www.nspe.org. In addition to the regular EJCDC construction documents, there is also a funding agency version. Both types of EJCDC construction documents are described at USDA Rural Development's website at http://www.usda.gov and links are provided to other sites where the documents are available. USDA Rural Development (USDA RD) requires the use of the EJCDC funding agency construction documents. The engineer will contact USDA RD staff for the most current list of contract documents they require and submit the completed drawings, specifications and contract documents to regulatory and funding agencies for review.

Allow a minimum of three (3) months for review, corrections and final approvals by regulatory authorities.

Common contract document sections are:

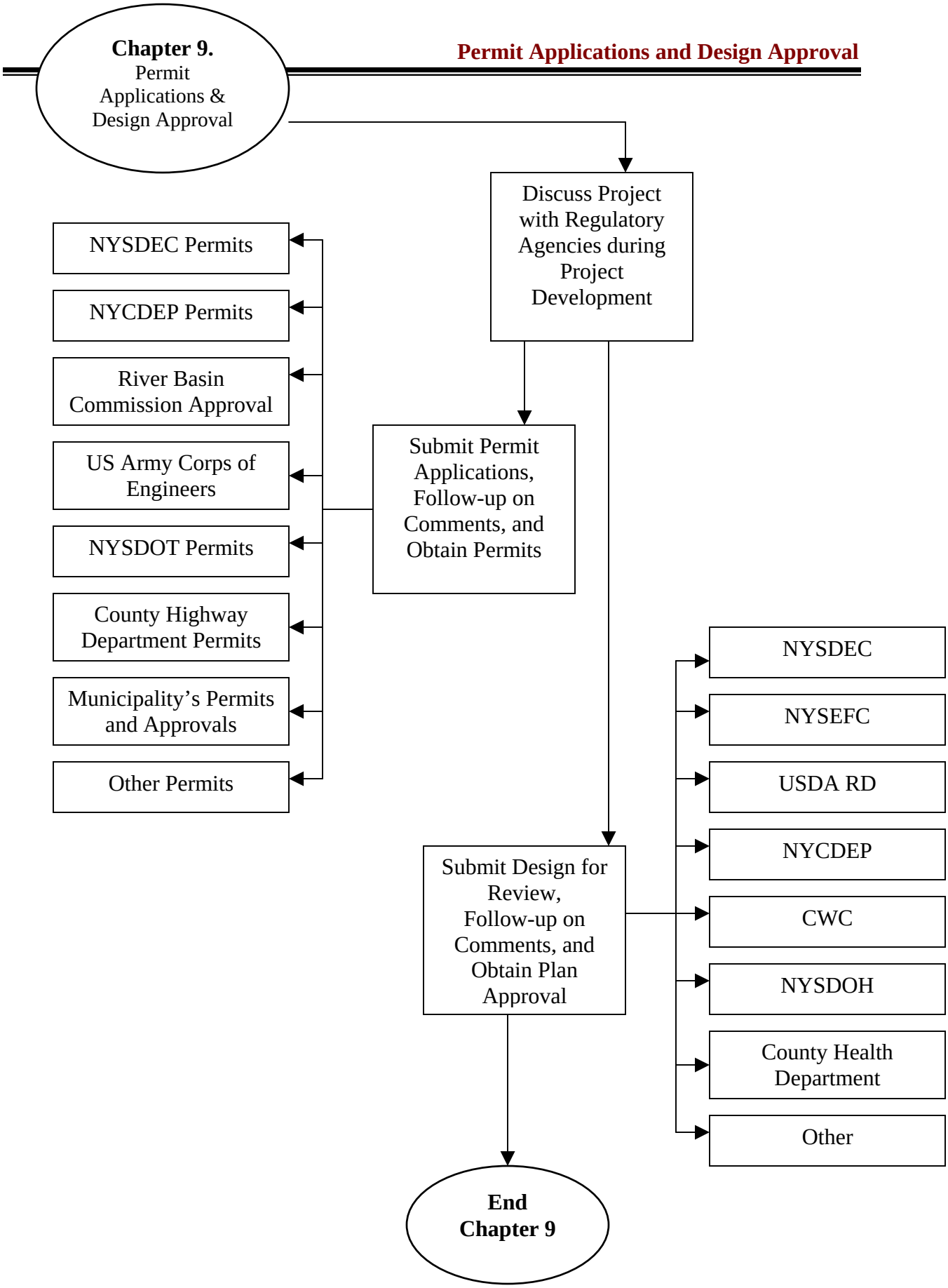
- Contract Forms
  - Agreement
  - Commentary To Accompany Construction Bonds
  - Construction Performance Bond
  - Construction Payment Bond
  - Supplements to Bond Forms
  - Certificates of insurance
  - Approval Certificate of Owner's Attorney
- Conditions of the Contract.
  - Standard General Conditions
  - Supplementary Conditions
  - Funding Agency Supplemental Conditions with affirmative action requirements, if applicable
  - NYS Department of Labor Contract Requirements and State or Federal Wage Rates
  - Vendor Information Exchange (VENDEX) Questionnaire (for NYC Watershed projects)
  - Drawings Index
  - Addenda & Modifications
- General Requirements
  - Administration

- Payment Procedures
- Change Order Procedures
- Coordination and Meetings
- Spill Prevention Plan
- Submittals
- Progress Schedules
- Quality control
- Traffic regulation, etc

8.3.1.3 Specifications. Technical specification divisions for a wastewater project might include:

- Sitework
- Concrete
- Masonry
- Metals
- Wood & Plastic
- Thermal & Moisture Protection
- Doors & Windows
- Finishes
- Specialties
- Existing Service Data
- Plan/Profiles
- Grinder Pump Station
- Conventional Pump Station
- Equipment
- Special Construction
- Mechanical
- Electrical

8.3.2. Drawings. The importance of well-crafted and detailed specifications and drawings cannot be overstressed. Clear and precise plans and specifications will attract good contractors who will in turn provide more competitive bids and produce higher quality work. Also, fewer claims and change orders will result.


Chapter 9.
Permit Applications & Design Approval
Discuss Project with Regulatory Agencies during Project Development
NYSDEC Permits
NYCDEP Permits
River Basin Commission Approval
US Army Corps of Engineers
NYSDOT Permits
County Highway Department Permits
Municipality's Permits and Approvals
Other Permits
Submit Permit Applications, Follow-up on Comments, and Obtain Permits
Submit Design for Review, Follow-up on Comments, and Obtain Plan Approval
NYSDEC
NYSEFC
USDA RD
NYCDEP
CWC
NYSDOH
County Health Department
Other
End Chapter 9

The Board's To Do List

- Attend meetings, as needed, with the engineers and permitting agencies.
- Approve and sign permit applications.

Chapter 9

Permit Applications and Design Approval

The permitting of the project starts in the study phase (see Chapter 3) during which early consultations with regulatory agency staff are recommended and at the end of which a preliminary engineer's report is submitted to those regulatory agencies with authority to approve that report.

Permits are usually applied for early in the design phase (at the Facility Plan stage) since many of the permit applications require at least preliminary design drawings, or at a minimum, that the actual location of project components is known. Comments received from permitting agencies during the permit review and approval process are incorporated in the final design. Final plans and specifications, when complete, are then submitted to the regulatory and funding agencies that have project plan approval. Plan approval is required prior to award of contracts.

Reality Check

Involving NYSDEC and other regulatory agencies very early in the process will identify potential issues before a design is finalized. Giving NYSDEC a "heads up" and a chance to raise a red flag if needed is really important in the beginning, long before actual permit applications are prepared. NYSDEC suggests allowing at least 4-6 months lead time before construction to obtain all of their permits. Other agencies may take even longer to issue permits.

The permits anticipated for the project were identified in the study phase (Chapter 3), in the environmental review process (Chapter 4), and in the funding application permit screening checklists (described in Chapter 7). The list of permits and approvals should be updated and used to track the status of permit applications. When the actual locations of sites and project components

are determined and project plans are developed, permit applications can be completed and submitted to regulatory and funding agencies for review.

Permits that may be needed for a municipal wastewater project include: wetland disturbance or destruction, stream disturbance, floodplain, state, county or local highway work, State Pollutant Discharge Elimination System (SPDES), building permits, Canal Corporation, river basin commissions, utility crossings, NYCDEP, and others. Many agencies will take a preliminary look at the submittals and request additional information before making comments. Regulatory agency comments are incorporated in design drawings and resubmitted. Typically agencies are required to act in a timely manner and may have adopted maximum time periods for their review. Such review periods typically do not begin until the permit application is deemed complete by the regulatory agency.

9.1. Permits. If the project involves wetlands, floodplains, stream crossings, buildings, or a myriad of other issues, permits will be needed from local, state and federal agencies. Because the permits that may be needed vary for each project and regulations governing permits and approvals can change at any time, this manual provides an overview of the most common permits that may be needed on a municipal wastewater project. Wherever possible, websites or contact information for regulatory agencies is provided. The permit process is complex, time-consuming, and at times, frustrating. Most regulatory agencies encourage municipalities to discuss the project with review staff prior to submitting permit applications. Frequent contact with regulatory agency staff is strongly encouraged. Most regulatory agency staff have specific permit turn-around response times.

The following is a sample list of permits and approvals for a wastewater collection and treatment system project located in the NYC watershed, where the wastewater treatment plant (WWTP) is located in a floodplain, and work will be conducted in state and county highway rights-of-way (ROW). Review and approval times are approximate from the date applications are deemed complete by the regulatory agencies, and many will run concurrently.

9.1.1. NYSDEC. The following permits will be required (refer to www.dec.state.ny.us/website/dcs/index.html):

A. Article 24 Freshwater Wetland Permit. Disturbance or fill in or within 100 feet of a state regulated wetland requires an Article 24 Freshwater Wetland Permit. The wetland should be delineated by a wetland specialist and verified by NYSDEC staff. Submittals to NYSDEC include:

- Joint Application for Permit (New York State and US Army Corps of Engineers).
- Delineation report.
- Construction plans and details including details of how the wetland will be protected from disturbance during construction.

- Description of compensatory mitigation for any wetlands permanently destroyed by the project.

Review and approval time: 1-3 months.

B. Article 15 Stream Disturbance of Bed and Banks Permit. This permit is required if construction in, under or adjacent to a state regulated stream is anticipated. The stream should be delineated by a wetland specialist. Submittals to NYSDEC include:

- Joint Application for Permit (New York State and US Army Corps of Engineers).
- Construction plans and details including dewatering procedure and plan for stream protection.
- A description of maintenance of fish habitat may be required.
- Specific construction details when working in or near a regulated stream.

Review and approval time: 1-3 months.

Both the Article 15 and the Article 24 permit require the submission of a Joint Application for Permit (New York State and US Army Corps of Engineers) to the NYSDEC Regional Permit Administrator. NYSDEC will distribute the application to the appropriate review agencies who will comment back to NYSDEC. Once all comments are received, the NYSDEC will either issue the permit or request that changes be made to the design and the materials be resubmitted.

C. SPDES General Permit for Stormwater Discharges from Construction Activities (GP-02-01). Construction that results in the disturbance of one or more acres of land must meet the requirements of the SPDES General Permit for Stormwater Discharges from Construction Activities.

Under this general permit, the municipality must prepare a formal written Stormwater Pollution Prevention Plan (SWPPP) in accordance with the latest NYSDEC guidelines. Submittals to NYSDEC include:

- Notice of Intent (NOI) must be submitted to NYSDEC before construction begins.
- NYSDEC may request that the SWPPP be submitted for review.

Review and approval time: coverage under the general permit begins either five (5) days or sixty (60) business days after receipt of a completed NOI by NYSDEC. If the SWPPP complies with the latest guidelines, permit coverage begins after 5 days. Designs that do not comply with the latest guidelines must detail exceptions to guidelines. The proposed modifications require approval which should occur within 60 business days after receipt of a completed NOI by NYSDEC.

D. State Pollution Discharge Elimination System (SPDES) Permit. Any discharge to surface waters (referred to as a "point source") requires a SPDES permit. Any discharge in excess of 1,000 gpd to ground waters requires a SPDES permit. Wastewater flows should be calculated and NYSDEC should be contacted for specific information required for the project. Submittals to NYSDEC include:

- Application form for municipalities.
- Requires inventory of significant industrial users, if any.
- Other specific information required by NYSDEC.

Review and approval time: 3-6 months.

9.1.2. NYCDEP Watershed Protection Authority Permits. The NYCDEP has plan approval over projects located in the NYC Watershed as described in Section 9.2.1. In addition, NYCDEP requires the following permit, if applicable.

Stormwater Permit. If a NYSDEC Stormwater Permit (GP-02-01) is required, a stormwater permit may also be required by NYCDEP. An SWPPP must be prepared in accordance with NYSDEC and NYCDEP standards. These standards are different and the project is required to meet both criteria. At the time of this publication, DEP requires that the SWPPP be prepared in accordance with the DEC Phase I Stormwater Guidance. Submittals to NYCDEP include:

- SWPPP.
- Erosion and Sediment Control Plans.
- Construction plans.
- Permit Application.

Review and approval time: 10 days to determine if the application is complete and 45 days to review the SWPPP.

9.1.3. River Basin Authorities. Permits may be required if the project is located within a river basin authority. Contact NYSDEC and the specific river basin authority to determine what permits, if any, may be required.

A. Delaware River Basin Commission (DRBC). For projects located in the Delaware River Basin, permits are required if the proposed project removes wastewater permanently from the Delaware River basin or if the project wastewater flows are over 10,000 gallons per day. NYSDEC will copy DRBC with the SPDES permit information. Submittals to DRBC include:

- Plans, technical specifications and Engineer's Report.

- If the project is in the Delaware River basin, but not in the NYC watershed, the Stormwater Pollution Prevention Plan must be submitted.

Review and approval time: 3-6 months. The Commission meets on a quarterly basis; therefore, timing of submittals is crucial.

B. Susquehanna River Basin Commission (SRBC). A permit is required if wastewater is permanently removed from the basin.

9.1.4. US Army Corps of Engineers (ACOE). Disturbance of any waters of the United States (wetlands, streams, ponds, lakes, ditches, etc.) may require a permit. Wetlands and waters should be delineated by a wetland specialist and field verified by ACOE. During this visit to the site, the ACOE staff will perform a Jurisdictional Determination (JD) indicating which waters will require a permit for disturbance.

A. Nationwide Permit. This is a general permit that does not require an individual permit specific to the project. It is required for minor disturbances and fills associated with projects. Submittals include:

- Delineation report.
- Plans, profiles and details of construction in or near wetlands.
- A Pre-Construction Notification prepared in accordance with the applicable regulations.
- Joint Application for Permit if waters are also under state jurisdiction.

Review and approval time: 10 days for complete application, 45 days for submittal review.

B. Individual Permit. This is a project-specific permit required when the project is over the individual permit thresholds and is not authorized under the Nationwide Permit program. An individual permit may be required if there are major fills in wetlands or if wetlands are drained and destroyed. Submittals include:

- Delineation Report. Delineations must be scheduled with US ACOE and reviewed at the site during the spring/summer.
- Plans, profiles, and details of construction in or near wetlands on 8-1/2" x 11" paper.
- A report detailing efforts to avoid and minimize disturbance, alternatives that were explored, and the reason that no other option exists but to destroy the wetland. Emphasize the net environmental benefit of the project.
- A plan for compensatory mitigation for the destroyed wetland.

Review and approval time: 4-6 months.

C. Section 10 Permit. A Section 10 Permit is required for construction through, over or under navigable water. The local ACOE field office should be contacted if the project area includes any navigable rivers or lakes.

9.1.5. NYSDOT

A. Utility Work Permit (NYSDOT Regional Office). This permit is required for pipeline installation in the state road or within the right-of-way. A permit may also be required for preliminary work, such as subsurface investigation and survey, in the right-of-way. Submittals include:

- Permit application form.
- Proof of insurance.
- Traffic maintenance and control plan.
- Plans and profiles of all work within the state right-of-way.

Review and approval time: 3-6 months.

B. Non-Utility Work Permit (NYSDOT Regional Office and County Residency). The Non-Utility Work Permit is required when constructing new driveways on state roads. Submittals include:

- Permit application form.
- Proof of insurance.
- Plans, profiles, and details of driveway entrances.

Review and approval time: 1-2 months.

9.1.6. County Highway Department. A permit is required for construction in a county highway or right-of-way. Each County will have specific requirements. Submittals may include:

- Plans, profiles and details of work within the right-of-way.

Review & approval time: 1-2 months.

9.1.7. Municipality. The municipality may have regulations in place that must be followed, such as:

A. Building Permit

- Submit plans and details of the project buildings and structures. See municipal regulations for specific items required.
- Permit Application.

Review and approval time: 1-2 months.

B. Site Plan Review

- Submit plans and details of the WWTP buildings and structures. See municipal regulations for specific items required.
- Review and approval time: 1-3 months.

9.1.8. Work in the Floodplain. Work in the floodplain will require various approvals.

A. Floodplain Work Permit. Construction in the flood plain will require approval from the local floodplain administrator. The local floodplain administrator is usually the municipality's code enforcement officer or other municipal employee. Items to be submitted to the local floodplain administrator:

- Plans, profiles and details of work to be constructed within the floodplain, including piping.
- Determination of base flood elevation if that information does not currently exist.
- The local floodplain administrator will advise if the project requires additional permits at the state or federal level (State Emergency Management Office (SEMO) or Federal Emergency Management Administration (FEMA)).

Review and approval time: 1-3 months.

B. State and/or Federal Flood Control Lands: ACOE/NYSDEC joint permit for Use of State (and/or Federal) Maintained Flood Control Lands (ACOE Flood Control & NYSDEC Flood Control).

- Plans and profiles and grading plan for project components located in flood control lands.

Review & approval time: 8 months.

9.1.9. Other. In addition to the above examples, permits may be needed for work in or near utilities, agricultural land, canals, watersheds, railroad crossings, state or federal flood control lands, etc.:

- New York State Canal Corporation
- Railroad Crossing: Underground Utility Crossing Permit from railroad.

- Submit plan, profile and details of railroad crossing.

Review & approval time: 2-3 months, or longer.

For work in areas that may require permits or approvals that are not listed in this section, such as scenic or wild rivers, coastal areas, crossing gas transmission mains, and others, contact the appropriate regulatory agency for guidance.

9.2. Design Review and Approval. When design is complete, the final plans and specifications are prepared and submitted to the regulatory and funding agencies that have project plan approval. The funding agencies and regulatory agencies with plan approval may be in addition to the regulatory agencies that will issue permits. The permits and plan approvals should be treated as two separate and distinct steps—even though a permit is applied for or obtained from an agency, it does not necessarily mean that the project has received plan approval.

9.2.1. The following agencies must grant plan approval for projects located within the NYC watershed:

- NYCDEP and NYSDEC must approve the Preliminary Engineer's Report, the Facility Plan, and the final design documents. Incorporate NYSDEC and NYCDEP comments into the final design documents. When the design is 100% complete, submit the project manual and final drawings to NYSDEC and NYCDEP and provide CWC with copies of any submissions made to NYSDEC and NYCDEP.

  - Preliminary Engineer's Report. The Preliminary Engineer's Report is submitted to NYCDEP and NYSDEC for review and approval when complete.

  - Facility Plan Approval. The Facility Plan is submitted to NYCDEP and NYSDEC for review and approval when complete.

  - Plan Approval – 65%. When design reaches 65% complete, submit the following items to NYSDEC and NYCDEP: identification of properties and easements required, design development drawings of all facilities including collection sewers, grinder pumps and associated small diameter force mains, central sewage pumping stations, force main, WWTP, draft specifications for all facilities, and draft detail drawings. NYCDEP has 45 days to respond.

  - Plan Approval – 100%. The Project Manual and contract drawings and Engineer's Report are submitted to NYSDEC and NYCDEP for review and approval when they are 100% complete. The NYCDEP has 45 days to respond.

  - Access Permits and Easements are submitted to NYSDEC and NYCDEP for review and approval when complete.

- NYSDEC
  - Conceptual Approval of design alternatives discussed in the Preliminary Engineers' Report.
  - Approval of Preliminary Engineer's Report.
  - Facility Plan Approval

- Final Plan Approval.
- Review & approval time: 1-2 months.

- County or State Health Department
  - Conceptual Approval of design alternatives discussed in Technical Report.
  - Approval of Final Technical Report.
  - Plan Approval.
  - Review & approval time: 1-2 months.

- CWSRF, if applicable
  - Plan Approval.
  - Review of and concurrence with engineering agreement.

- USDA RD, if applicable
  - Contract Documents, Specifications and Plan Approval.
  - Approval of all Professional Services Agreement.

- Catskill Watershed Corporation (CWC). If the project is within the NYC Watershed west of the Hudson River, provide CWC with copies of any submissions made to NYSDEC and NYCDEP. If CWC is funding the project, they will have:

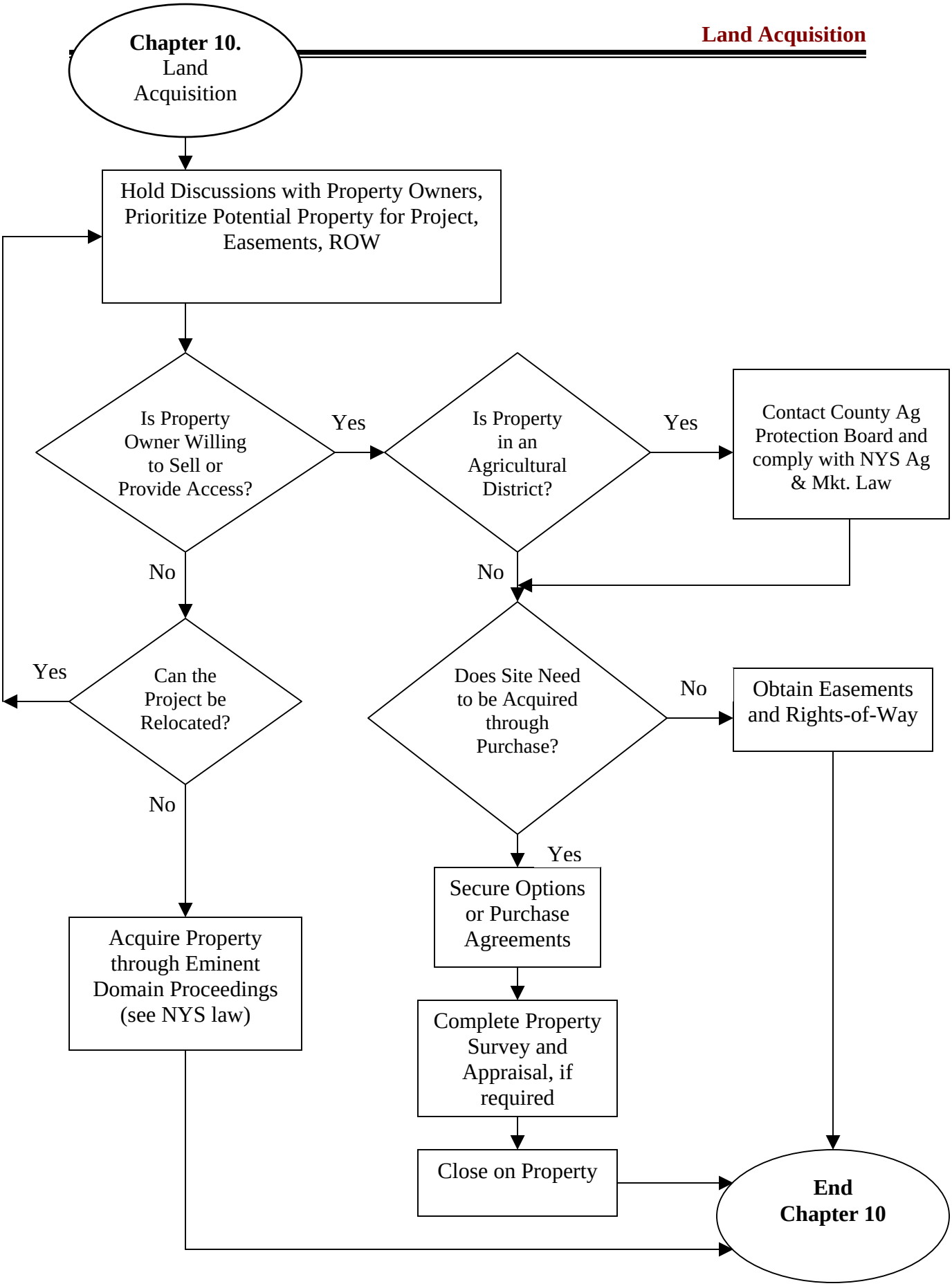
  - Conceptual Approval of Design Alternatives discussed in Preliminary Engineer's Report.
  - Approval of Preliminary Engineer's Report.
  - Facility Plan Approval
  - Final Plan Approval.

9.2.2. Agencies that grant plan approval for projects outside the NYC Watershed include:

- NYSDEC
  - Plan Approval.
- CWSRF, if applicable
  - Plan Approval.
  - Review of & Concurrence with Engineering Agreement.
- USDA RD, if applicable
  - Contract Documents, Specifications, and Plan Approval.
  - Approval of all Professional Services Agreements.
- Other Funding Agencies, if applicable.

9.3. Permit Websites and Resources

NYSDEC http://www.dec.state.ny.us
NYSDOT http://dotweb2.dot.state.ny.us
USACOE http://www.usace.army.mil/


Chapter 10.
Land
Acquisition
Hold Discussions with Property Owners, Prioritize Potential Property for Project, Easements, ROW
Is Property Owner Willing to Sell or Provide Access?
Yes
Is Property in an Agricultural District?
Yes
Contact County Ag Protection Board and comply with NYS Ag & Mkt. Law
No
No
Yes
Can the Project be Relocated?
Does Site Need to be Acquired through Purchase?
No
Obtain Easements and Rights-of-Way
No
Yes
Secure Options or Purchase Agreements
Acquire Property through Eminent Domain Proceedings (see NYS law)
Complete Property Survey and Appraisal, if required
Close on Property
End
Chapter 10

The Board's To Do List

- Work with the attorney and engineer to acquire project sites and easements.
- Initiate discussions with owners of potential sites.
- Negotiate with landowner to secure options or a purchase agreement on the preferred site.
- Hold a public information meeting to discuss location of pipelines and project structures, and easement locations.
- Once easements are prepared by the attorney and engineer, the municipality gets them signed by property owners.
- If eminent domain is necessary to acquire property for the project, the municipality and its attorney follows the Eminent Domain Proceedings in New York State Law.

Chapter

10

Land Acquisition

The availability of potential project sites is critical to the success of the project. This will effect an accurate project scope and budget. Land acquisition procedures should begin during the study phase.

Discussions with landowners can begin and options can be secured on potential sites as soon as they are identified, especially for land that will be used for wastewater treatment facilities, pump stations, and other critical project components. In addition to acquiring sites for major system components, all easements and rights-of-way must be in place prior to starting construction. The funding agencies may require certification of title to project sites prior to releasing construction funds. Most funding agencies consider land acquisition costs, including legal and closing fees, to be eligible project expenses.

Reality Check
Land acquisition, especially for critical project components, must begin very early in the project during the study phase.

The project's attorney will work closely with the engineer and municipality to acquire project sites and easements. The attorney will assist the municipality in obtaining options on land, easements, and rights of way, preparing for and attending closings for land purchase, and other tasks as needed to acquire the land. The attorney will certify title to project sites for funding agencies.

10.1. Property Acquisition. After the preliminary identification of site requirements and potential sites during the study phase, the municipality can initiate discussions with the owners of potential sites. The municipality should consider alternative sites, if possible, if a property owner us unwilling to participate in the process. The municipality, with assistance from the attorney and the engineer, negotiates with the landowner to secure options or a purchase agreement on the land. Real estate appraisals are required. To the extent possible, the municipality should obtain an option as soon as it has identified the preferred site. At that time, the municipality will not have enough information to close on the site. Prior to closing, the municipality will have to conduct a

significant amount of additional investigation and complete the SEQR process. In the meantime, it is planning and engineering its sewer collection system around a plant at that location. The more time and money the municipality invests in a site without an option, the more time and money it is risking in preparation of studies and plans that may prove useless, and the more bargaining power it is granting to the seller. Though most communities prefer to avoid taking a citizen's property through eminent domain, it is important in the negotiation process to never rule out the possibility of eminent domain. The power of eminent domain ensures that the municipality will not have to pay more than fair market value and thus prevents a seller from extracting an exorbitant purchase price. The municipality generally cannot close any property needed for the sewer system prior to completing SEQR. In acquiring property, the municipal board, with advice from the municipal attorney and engineer, must decide on the level of due diligence necessary to purchase the property without environmental liability, must satisfy SEQR requirements and must make determinations on construction costs and permitting. Title insurance is usually a necessity to meet funding obligations.

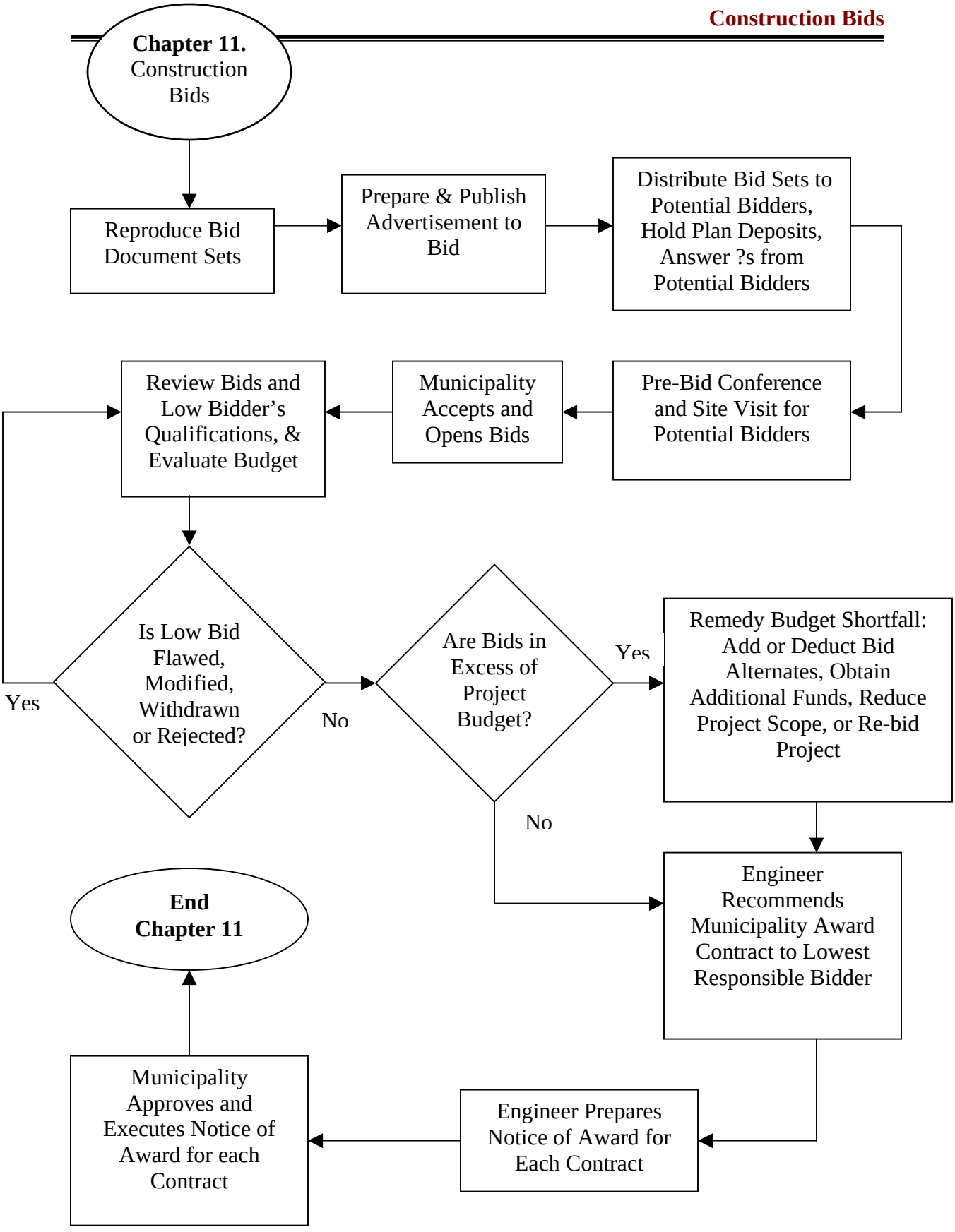
10.2. Easements, Rights of Way. The engineer identifies properties over which right-of-way easements are needed and works with the attorney to prepare easement descriptions. Some attorneys use information obtained from tax maps or may require a more detailed survey. Usually the municipal officials, with assistance from an attorney, are responsible for getting easements signed by property owners. Easements can be one of the most time consuming tasks of the entire process. In designing the sewer collection system, the engineer will usually have an option of installing the sewer main in the right of way of the road and/or installing the sewer main in backyards or along natural rights of way like stream corridors. The cost of installing sewer mains in backyards is often less expensive than constructing in a road right of way. In many cases, the septic systems are in the backyards and thus the sewer lateral installation will also be easier. Installing sewer mains in individual backyards requires an easement from the property owner both for the construction and the maintenance and repair of the sewer main. The homeowner will not be able to construct over the easement area. Generally, the easement will be a straight line about 20 to 25 feet wide. The municipality agrees to hold the homeowner harmless from any damage that occurs due to the installation and maintenance and agrees to restore the property to a comparable condition. The easement will include a temporary easement for construction that will include an area wider than the permanent easement to facilitate construction. For a project with a lot of sewer mains in the backyards, over a hundred easements could be necessary. Each easement has to be negotiated with the property owner who is going to be concerned about the landscaping, driveway, swimming pool, fence, garage, shed and garden. The engineer is very often requested to review with the homeowner the option for the sewer main location and measures that could be taken to minimize the impact. In general, the municipality needs to obtain the easement without charge or as an exchange for sewer service. Sewer service will usually improve the value of a home and make it easier to finance and sell. If the property owner is not willing to provide an easement, then the municipality will have no alternative other than to take it by eminent domain. That procedure is discussed below. Even when the easement is given for free, the transaction cost can easily be in excess of $1000 per easement after paying the engineer and the attorney and the filing costs. To start the

easement process, it is usually good to have a public information session in which the public is invited to see the easement location and to understand the easement process. Copies of the easements with a written explanation are distributed and the property owner is requested to sign the easement and mail or deliver it to the municipal office. This process is repeated over and over until such time as the municipality determines that it has obtained all the easements that it can obtain without going to eminent domain. It is usually a good idea to meet with the county clerk to obtain an understanding of the easement form and level of property description required for filing and to see if the county will waive the filing fee.

10.3. Property Survey. A property boundary survey completed by a licensed surveyor is usually required for a property closing of a land purchase.

10.4. Eminent Domain. When property owners refuse to sell or grant an easement for property required for the project, the municipality can acquire the property by following the Eminent Domain Proceedings in the New York State Law. This method of land acquisition is a last resort for most municipalities since the public is so often opposed to the concept of Eminent Domain. If this process is necessary, hiring an attorney that specializes in Eminent Domain should be considered. The eminent domain process is generally quite straight forward and relatively quick to obtain title. A step-by-step guide to conducting an eminent domain proceeding is included in Exhibit 15. Eminent domain requires a public hearing notifying the public that easements will be required, making a formal written offer for the fair market value of the easement, commencing litigation to obtain court approval and demonstrating to the court that all of the procedural requirements of the process have been followed. From when the court proceeding is commenced, the process of obtaining title could be completed within 60 days. The process is completed when the easements are filed with the county clerk pursuant to the court order. If at the time the court order is filed granting title to the municipality, the parties have not reached an agreement with the property owner on a price, the property owner is given a specified time to file a claim for compensation. If a property owner fails to file within the requisite time, his or her claim for compensation is waived.

10.5. Appraisal. In dealing with easements, one of the most expensive aspects is obtaining an appraisal. As a matter of law, a municipal party is obligated to pay fair market value as determined through an appraisal. Even though the sewer system may enhance the value of the property, many appraisers will allocate a portion of the actual value of the land (such as 50%) covered by the easement to the purchase price. For example, if the property is worth as vacant land $10,000 per acre and the easement will encumber .1 acres, appraiser will consider the decrease to the overall market value of the land due to the easement to be $500 (i.e., $10,000 x .1 acres x .50). That purchase price compensates the property owner for not being able to develop or construct that portion of his yard that is subject to the easement. Because the property owner will still own fee title and be able to use the easement area, the appraiser will only assign a portion of the fair market value (e.g., 50%) of the property to the easement. Because of the cost of attorneys and appraisers, the cost of the eminent domain process is expensive.


Chapter 11. Construction Bids
Reproduce Bid Document Sets
Prepare & Publish Advertisement to Bid
Distribute Bid Sets to Potential Bidders, Hold Plan Deposits, Answer ?s from Potential Bidders
Pre-Bid Conference and Site Visit for Potential Bidders
Municipality Accepts and Opens Bids
Review Bids and Low Bidder's Qualifications, & Evaluate Budget
Is Low Bid Flawed, Modified, Withdrawn or Rejected?
Yes
No
Are Bids in Excess of Project Budget?
Yes
No
Remedy Budget Shortfall: Add or Deduct Bid Alternates, Obtain Additional Funds, Reduce Project Scope, or Re-bid Project
Engineer Recommends Municipality Award Contract to Lowest Responsible Bidder
Engineer Prepares Notice of Award for Each Contract
Municipality Approves and Executes Notice of Award for each Contract
End Chapter 11

The Board's To Do List

- The municipality receives and opens bids at the municipal office.
- The engineer recommends bid alternates be included in or excluded from the project, and the municipality makes the final decision.
- If additional funds are needed, the municipality requests them from funding agencies, or provides them from municipal funds. If there is still a budget shortfall, the municipality may reduce the project scope or rebid the project.
- If the low bidder's references are questionable, the Board meets with its attorney to discuss the proper course of action.
- The engineer makes recommendations for award of contracts to the lowest responsible bidder, and the municipality approves and executes the Notice of Award.

Chapter

11

Construction Bids

With the project funding committed and the contract documents complete and approved by the regulatory and funding agencies, the project is ready to go to bid.

The engineer guides the bidding phase, from advertising for bids, to fielding questions from contractors, to evaluating bids and issuing award documents. The following describes the process in more detail.

11.1. Bidding. When plan approval has been received from funding and regulatory agencies, the engineer arranges for the reproduction of the bid document sets and prepares the legal advertisement announcing the upcoming bid. To attract qualified contractors, the Advertisement to Bid is published in the municipality's designated legal newspaper and in newspapers that reach nearby population centers, sent directly to reputable general contractors in the region, and sent to contractors' organizations and plan houses in the area.

The goal of the bidding process is to obtain a competitive low bid from a qualified contractor. If many reputable contractors in the area submit bids on the project, it is more likely that the bids will be competitive, and hopefully, reputable contractors will be among the lowest bidders.

As the bidding process proceeds, the engineer arranges handling of plan deposits, distributes bid sets to potential bidders, answers technical questions raised by contractors during the bidding period, and prepares and distributes addenda to bid documents. In addition, the engineer holds a pre-bid conference to meet with bidders to review the project, and conduct a site visit.

Potential bidders are expected to read and understand the contract documents when they submit their bids. Information for the bidding process is provided in the contract documents in the Instructions to Bidders section. Contractors are expected to submit their bids using the Bid Form. Items typically required to be submitted with the Bid include:

- Bid form
- Bid security, in the form of a certified check, bank check, or a bid bond in accordance with the instructions to bidders
- Non-Collusion Certificate
- Bidder's Qualification Statement

11.2. Bid Opening, Review, and Budget Evaluation. Bids are received and opened at the municipal office. Once the municipality opens the bids, the engineer reviews the bids for accuracy, low bidder's qualifications, bonding limits, and evaluates the overall project budget. If the low bids are in excess of the budget, the engineer makes recommendations to address the budget shortfall. If bid alternates were included in the bidding process, the engineer recommends and the municipality decides which bid alternates will be included in or excluded from the project. The municipality also may request additional funds from funding agencies, or the municipality may be able to provide additional municipal funds to cover the shortfall. If none of these remedies meet the budget shortfall, the municipality may consider reducing the scope of the project and rebidding the project.

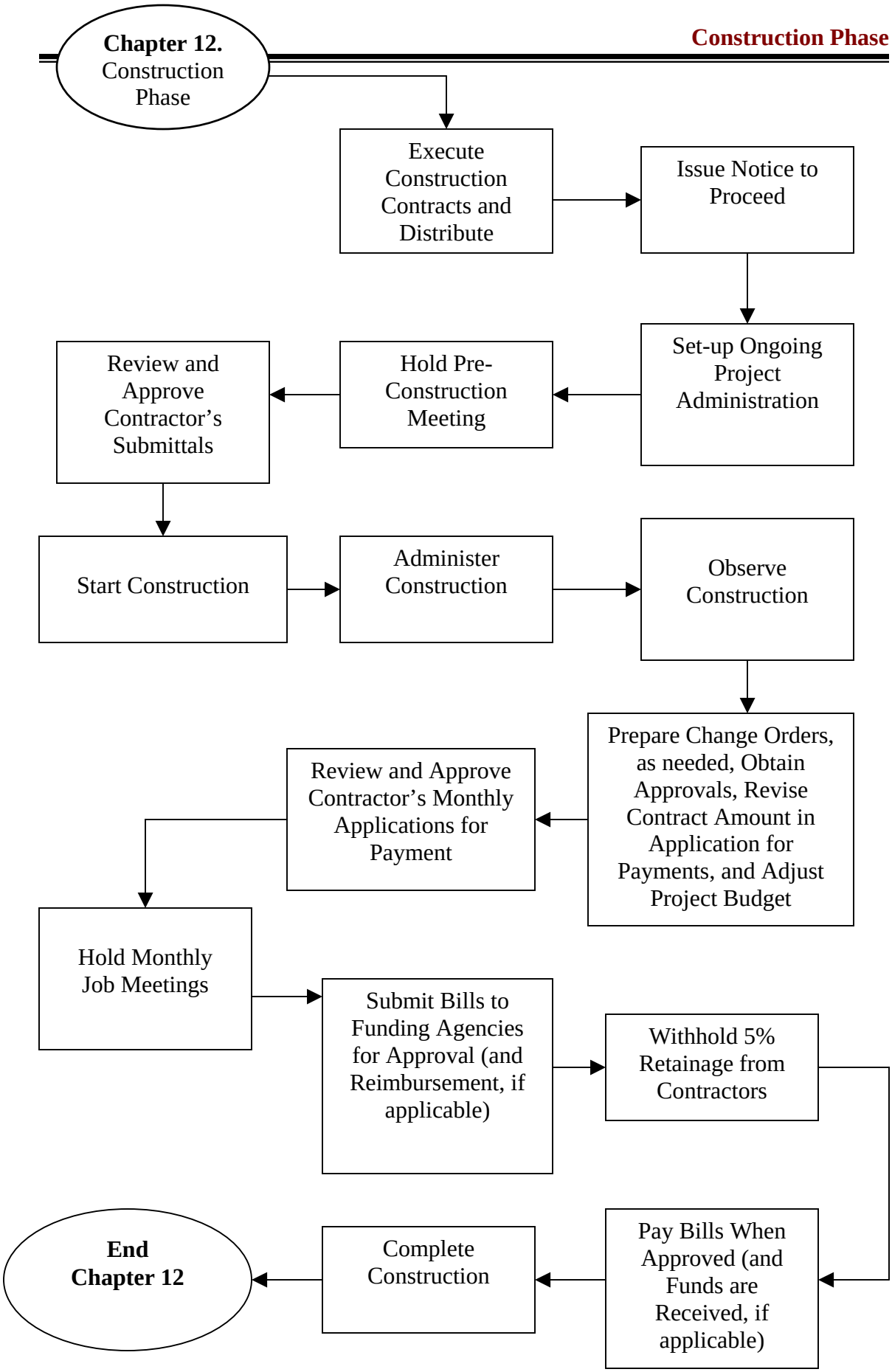
11.3. Bid Modification, Withdrawal or Rejection. The low bidder may modify or withdraw the bid within 72 hours after bids are opened, as provided in the Instructions to Bidders. For example, if the low bid is considerably lower than the next lowest bid, the project engineer may request the low bidder to confirm their numbers. If a mistake is found and the low bidder decides not to pursue the project, he can withdraw within 72 hours of the bid without penalty.

If a review of contractor references indicates questionable experience, a meeting should be held with the municipality and its attorney to discuss the proper course of action. One option would be rejecting the bid, but the low bidder's reaction to that (e.g. potential for a lawsuit) does need to be weighed.

11.4. Bid Acceptance/Notice of Award. After the engineer has reviewed the bids and the budget and all issues have been resolved, the engineer makes recommendations to the municipality for award of contracts to the lowest responsible bidder. The engineer completes the Notice of Award for each contract and submits it to the municipality for approval and execution.

11.5. References. The National Society of Professional Engineers offers the Engineers Joint Contract Documents Committee (EJCDC) bidding and construction documents and document sets at their website at http://www.nspe.org, including the following:

- Guide to the Preparation of Bid Form, EJCDC No. 1910-18. A detailed description of the bidding process.
- Instruction to Bidders, EJCDC Document 1910-12
- Bid Form, EJCDC Document 1910-18
- Notice of Award, EJCDC No. 1910-22


Chapter 12. Construction Phase
Execute Construction Contracts and Distribute
Issue Notice to Proceed
Set-up Ongoing Project Administration
Hold Pre-Construction Meeting
Review and Approve Contractor's Submittals
Start Construction
Administer Construction
Observe Construction
Prepare Change Orders, as needed, Obtain Approvals, Revise Contract Amount in Application for Payments, and Adjust Project Budget
Review and Approve Contractor's Monthly Applications for Payment
Hold Monthly Job Meetings
Submit Bills to Funding Agencies for Approval (and Reimbursement, if applicable)
Withhold 5% Retainage from Contractors
Pay Bills When Approved (and Funds are Received, if applicable)
Complete Construction
End Chapter 12

The Board's To Do List

- Inform the public of construction status
- Approve and execute construction contracts
- Attend project-related meetings
- Approve and sign Notice to Proceed
- Address issues and assist as necessary during construction
- Approve and pay bills
- Approve and sign change orders
- Hire or contract with system operators, as needed, and encourage them to receive adequate training.

Chapter

12

Construction Phase

The Construction Phase at last! This is when all the planning and hard work by the project team pays off and the wastewater system is actually constructed.

In the construction phase, the project moves through the execution of construction contracts to actually constructing the project. The construction phase may be completed within a matter of months or may span more than one construction season.

Throughout the process, the municipal team leader, the project manager, project engineer (if different), resident project representative, contractors, and other team members work together to complete the project as efficiently and cost-effectively as possible.

There is a great deal of project activity during the construction phase, so it is vital that members of the project team understand their roles and regularly communicate. The following is a summary of the primary project team members' roles during construction:

Municipal Team Leader: The municipal team leader will make sure that the appropriate municipal representatives approve and execute construction contracts, attend project-related meetings, and address issues as necessary during construction. The municipal staff will provide assistance, as necessary, to the contractors and engineers throughout the construction process. The municipality will hire or contract with system operator(s), as needed, and encourage them to receive adequate training to be able to successfully operate the wastewater system.

Project Manager: The project manager will communicate with the contractor and municipality when issues arise during construction. The project manager works to keep the project on schedule and on budget. The project manager must communicate openly and often with the municipality, the project engineer, the contractors, the regulatory and funding agencies, and the resident project representative throughout the construction process. A good project manager will be able to quickly and effectively address and solve problems as they arise during construction.

Project Engineer: The project engineer represents the municipality while administering the project, approves contractor's payment requests, makes recommendations for payment, and reports to the regulatory and funding agencies. The Project engineer works closely with the resident project representative to ensure that the project is constructed according to the contract documents. The project engineer is not the contractor and is not responsible for the actual construction of the project.

Resident Project Representative. The resident project representative is responsible for observing that the project is being constructed in accordance with the contract documents. The resident project representative is the municipality's agent and the project engineer's on-site representative during construction (see Chapter 12.10.2 for description of construction observation).

Project Bookkeeper. The project bookkeeper ensures that the project funds are available when needed and that regulatory and funding agencies are kept apprised of the project status. The project bookkeeper assists the municipality with project payments and record-keeping, prepares monthly budget updates, funding reimbursement requests, affirmative action compliance reports, and periodic status reports to the municipality and funding and regulatory agencies.

A detailed discussion of the construction process and the project team's role is provided in the following sections.

12.1. Construction Contracts. After the Notice of Award has been issued (see Chapter 11, Section 11.4), construction contracts can be executed. The contract documents that comprise the agreement between the municipality and the contractor may include:

- The Agreement
- Bonds and Certificates
    - Commentary to Accompany Construction Bonds
    - Construction Performance Bond
    - Construction Payment Bond
    - Supplements to Bond Forms
    - Certificates of Insurance
    - Approval Certificate of Owner's Attorney
- Notice to Proceed
- General Conditions
- Supplementary Conditions
    - Modifications to General Conditions
    - Additional Articles, if applicable
    - Affirmative Action requirements, if applicable
    - Funding agency requirements, if applicable
    - New York State Department of Labor Contract Requirements and Wage Rates
    - Federal Wage Rates, if applicable
- Project Specifications

- Project Drawings
- Addenda, if applicable
- Contractor's bid
    - Bid Form
    - Supplements to Bid Form Documents
        - Bid Security
        - Bidder's Qualification Statement
        - Non-Collusive Bidding Certification
        - Performance Bond Information Form
- Documentation submitted by contractor prior to Notice of Award
- All written amendments and other documents amending, modifying, or supplementing the Contract Documents

Once construction contracts are executed, signed contracts with original signatures are provided to the municipality, the engineer, the contractors, and funding and regulatory agencies, as required. If plans are returned by bidders in good condition, the plan deposits are returned.

12.2. Notice to Proceed. Once the construction contracts are executed, the municipality notifies the contractor that work can begin by issuing the Notice to Proceed. The Notice to Proceed defines the actual start and completion dates of the contract, based on the contract duration stipulated in the contract. Note that funding agencies may require that the Notice to Proceed be issued at the Pre-Construction Meeting.

12.3. Pre-Construction Meeting. The pre-construction meeting is required by the funding and regulatory agencies to be held prior to beginning construction. Attendance at the pre-construction meeting is mandatory for the contractors, and includes the regulatory and funding agencies, the municipality, and the engineer. The engineer reviews with the contractors the project administration and communication methods to be used on the project, required submittals, construction schedule, schedule of values, payment application forms, affirmative action requirements, if any, and construction issues, as needed. The procedures are outlined in the administrative memorandum included in Exhibit 14. The Notice to Proceed may be issued at the pre-construction meeting with copies provided to all attendees. The meeting minutes are typed and sent to all meeting participants.

12.4. Monthly Job Meetings. The engineer holds a job meeting each month with attendance mandatory for the contractors. If USDA RD is funding the project, the USDA RD District Construction Inspector will attend the monthly job meeting to inspect the project and review and approve the construction bills. (Construction bills must be approved by USDA RD before payment is made by the municipality.) The municipality, regulatory agencies, and other funding agencies may wish to attend as well. Meeting minutes should be typed and sent to all meeting participants.

12.5. Project Administration. The project bookkeeper (usually a municipal or engineering staff person) is responsible for regulatory and funding agency financial

reporting requirements, and affirmative action requirements. The project bookkeeper assists the municipality with preparing monthly project budget updates and reimbursement requests for funding agency review and approval.

On a monthly basis, the bookkeeper inputs the monthly project bills on the funding agency budget form and submits the budget form with the bills attached to the municipality for review and approval at the monthly board meeting. The budget packet is then submitted to the funding agency for review and approval. If the funding agency has control of the short-term project funds (i.e. a CWSRF short-term loan), the project budget packet is submitted with a request for project funds in the amount of the monthly expenditures to be released to the municipality. Once project funds are released, usually in the form of a wire transfer directly to a project-specific municipal account, an authorized municipal employee, such as the clerk/treasurer, writes the checks and pays the bills. If the municipality is financing the design and construction with a bond anticipation note, the funds should be in the project account and bills can be paid once the funding agencies have approved the bills.

> **Reality Check**
>
> Most funding agencies require that they approve project bills, especially construction invoices, before the municipality pays them.

12.6. Submittals. Administrative, product and equipment information must be submitted by the contractor to the engineer for review and approval.

12.6.1. Administrative Submittals. These submittals include a list of suppliers, subcontractors and others the general contractor intends to use on the project, the proposed construction schedule, and affirmative action requirements. If the project is a lump sum project, the contractor will submit the proposed schedule of values. If the project is based on unit price, the schedule is already included in the bid form.

12.6.2. Products and Equipment Submittals. These submittals allow the engineer to compare the products and equipment the contractor proposes to use to the items called for in the specifications. For instance, the construction specifications typically specify products and equipment to be used by brand, model number, or “approved equivalent.” Submittals are prepared by the contractor, submitted to the engineer for review, and contain detailed information on the specific products and equipment that the contractor intends to use on the project. The submittals give the engineer a chance to review and approve the proposed products and equipment before they are purchased and incorporated into the work. Even if the contractor proposes to use the exact specified product, the submittals give the engineer one last chance to catch any design problems. If the contractor proposes a significantly different product or piece of equipment, it may be termed a substitution. The cost for the engineer to evaluate a substitution can be deducted from the contract price.

The contractor prepares submittals for the engineer’s review after the construction contracts have been signed and the Notice to Proceed has been issued. If the engineer

does not approve the submittal, the contractor makes revisions and resubmits until the engineer gives approval.

12.7. Application for Payments. Contractor applications for payment are to be submitted on the form approved by the funding agencies (typically AIA form G702; USDA RD requires the EJCDC No. 1910-8-E form). Applications for payment are submitted on a monthly basis to coincide with the project bookkeeping and reporting process and approval at the municipal board meeting.

12.8. Retainage. The municipality retains 5% of the cost of the work completed from the contractor's payment until the end of the project. This retainage is usually eligible to be partially released when substantial completion is reached, and released in full when the project is complete. The funding and regulatory agencies must authorize the release of retainage. It is then partially released as the contractor completes outstanding items on a punch list.

12.9. Change Order Procedure. Change orders that increase or decrease the contract amount must be approved by the regulatory and funding agencies prior to submitting applications for payment that include the change order. If the change order results in a scope increase or a major scope decrease, the regulatory and funding agencies must approve it, and it may result in the need to modify the overall project budget and pursue additional sources of funds.

The change order procedure is summarized in the following sections (proposed document in Section 12.11. References).

12.9.1. USDA RD requirements**.** USDA RD requires that change orders be approved by the USDA RD engineer prior to submitting the change order for payment. The change order procedure when USDA RD funds are involved is described in Exhibit 14.

12.9.2. CWSRF Requirements. Three copies of each proposed change order are submitted to NYSEFC for review. Change orders are submitted in a standard format, such as AIA or EJCDC, allowing for signature by the municipality, engineer, and contractor (if USDA RD is involved, use USDA-RUS 1910-8-B form and see section 12.9.1). NYSEFC will forward approval or denial of each change order to the municipality and will copy the engineer. Payment will not be made by NYSEFC until two copies of each fully executed change orders are received by NYSEFC.

12.9.3. Other Regulatory and Funding Agencies**.** Check with other regulatory and funding agencies that are involved with the project to determine their change order procedures and modify the administrative memo (see Exhibit 14) and instructions to contractors accordingly.

12.10. Construction Administration and Construction Observation.

12.10.1. Construction Administration. The project engineer acts as the municipality's professional technical representative during construction. The project engineer, with assistance from the resident project representative, endeavors to get the project constructed in accordance with the contract documents. The project engineer is not the contractor and *cannot* undertake any of the contractor's responsibilities.

The project engineer administers construction and performs the following tasks:

- keeps the municipality updated and informed about the construction progress and any issues that arise during construction (issues will arise during construction).
- maintains open and effective communication with the contractors, resident project representative, funding and regulatory agencies, and others involved with the project.
- interprets plans and specifications and answers questions.
- conducts regular status meetings with contractor and project team.
- reviews shop drawings and submittals.
- conducts site visits.
- reviews reports from testing laboratories.
- submits progress reports to the municipality, as needed.
- reviews requests for progress payments from contractor.
- forwards requests for progress payments to municipality with recommendations.
- reviews and negotiates change orders with contractor.
- reviews change orders with the municipality and funding agencies, and obtains authorization to proceed.
- prepares and issues field orders.

12.10.2. Construction Observation. The resident project representative (also known as the construction inspector) is the person charged with observing construction to endeavor to get the work constructed in accordance with the contract documents. The resident project representative is the municipality's agent and the project engineer's representative at the site and is the first person to identify problems and bring them to the attention of the contractors, engineer and municipality. The resident project representative is typically an employee of the project engineer. Large projects may have more than one construction observer who report to the resident project representative. Typical duties of the resident project representative are:

- Confer with the engineer as needed regarding work at the site.
- Review progress schedules, schedule of shop drawing submittals and schedules of values.
- Attend project meetings with contractors and engineer.
- Serve as the engineer's liaison with the contractor.
- Communicate with contractors and engineers.
- Conduct on-site observations of the work in progress to assist engineer in determining if the work is proceeding in accordance with the contract documents.

- Verify that testing, system startup, and operation and maintenance training are conducted in the presence of appropriate personnel, that the contractor maintains adequate records, and report to engineer details relative to test procedures and startups.
- Interpret contract documents.
- Consider and evaluate the contractors' suggestions for modifications in drawings or specifications and report the resident project representative's recommendations to the engineer. Transmit to contractor decisions as issued by engineer.
- Records
    - Maintain project records at the job site.
    - Keep a daily observation log.
    - Record contact information for all contractors, subcontractors, and major suppliers of materials and equipment.
    - Prepare project progress photographs.
    - Update record drawings.
- Determine in-place quantities of work (for unit price contracts).
- Review payment requests.
- Assist owner with preparation of a list of items requiring completion or correction (punch list).
- Conduct final review of the work in the company of engineer, municipality, and contractors and assist engineer in preparing final punch list.
- Observe that all items on the final punch list have been completed or corrected and make recommendations to engineer concerning acceptance.

Note that the resident project representative *observes* the work. This role is not to take on any of the responsibilities of the contractor, advise on or assume control over safety precautions in connection with the work, or exceed limitations of the engineer's authority as set forth in the contract documents.

Duties of the resident project representative are described in detail in Exhibit 15.

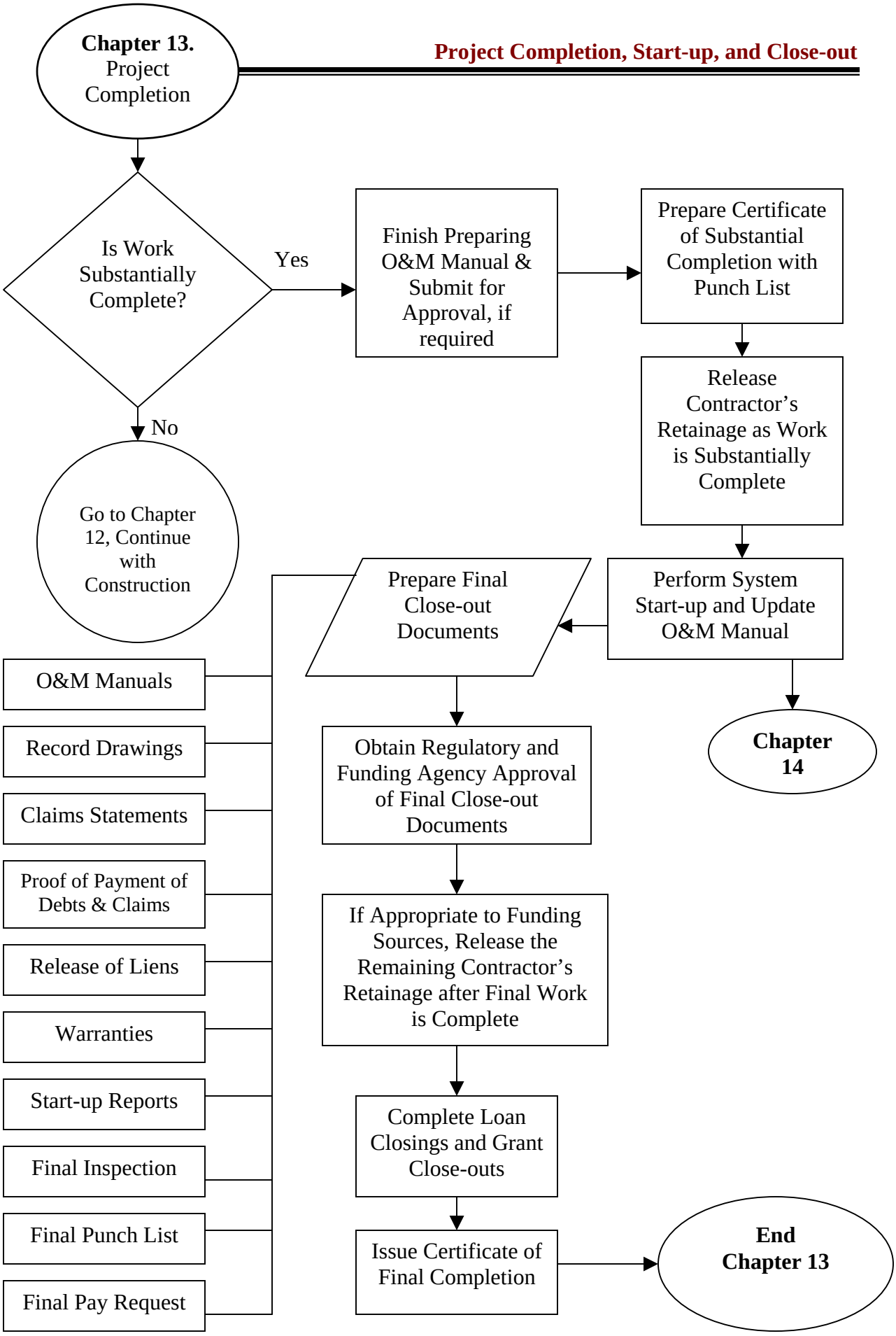
12.11. References

The National Society of Professional Engineers offers the Engineers Joint Contract Documents Committee (EJCDC) construction documents and document sets for purchase at their website at http://www.nspe.org, including the following:

- Notice to Proceed, EJCDC 1910-23.
- Construction Documents and Funding Agency editions of Construction Documents
- Change order procedure is included in Article 10 and Article 12 of the Engineer's Joint Contract Documents Committee (EJCDC) Standard General Conditions of the Construction Contract, EFCDC No. 1910-8
- Contractor's Application for Payment, EJCDC 1910-8-E

Other Forms referenced in this section includes:

- Contractor's Application for Payment. AIA form G702
- Change Order Form. USDA RUS 1910-8-B
- Work Change Directive. USDA RUS 1910-8-F


Chapter 13. Project Completion
Is Work Substantially Complete?
Yes
No
Finish Preparing O&M Manual & Submit for Approval, if required
Prepare Certificate of Substantial Completion with Punch List
Release Contractor's Retainage as Work is Substantially Complete
Perform System Start-up and Update O&M Manual
Chapter 14
Go to Chapter 12, Continue with Construction
Prepare Final Close-out Documents
O&M Manuals
Record Drawings
Claims Statements
Proof of Payment of Debts & Claims
Release of Liens
Warranties
Start-up Reports
Final Inspection
Final Punch List
Final Pay Request
Obtain Regulatory and Funding Agency Approval of Final Close-out Documents
If Appropriate to Funding Sources, Release the Remaining Contractor's Retainage after Final Work is Complete
Complete Loan Closings and Grant Close-outs
Issue Certificate of Final Completion
End Chapter 13

The Board's To Do List

- Approve and sign project completion documents.
- Municipal operators begin training and conduct start-up procedures.
- The Board works with the engineer and bond counsel to complete grant and loan closings.

Chapter

13

Project Completion, Start-up, and Close-out

When the project is ready for its intended use, the project is deemed complete, systems are started, final payments are made, long-term financing is put in place, and the project is ready for operation.

When construction is deemed substantially complete, treatment and collection systems can be started and tested. As construction is finalized, so too is the project funding, although it may take some months after construction is finished for the long-term loan closings to be completed.

For a NYC Watershed Project, prior to commencing operation, NYCDEP will enter into an Operation and Maintenance Agreement with the municipality for the continuing operation and maintenance costs of the project, with the residential units charged a fixed annual fee of $100 (adjusted for inflation) and nonhouseholds charged a fee based upon usage and total cost as determined by the municipality pursuant to its sewer rent law. The engineer and municipality commence startup and performance testing and proceed with project close-out once they receive authorization from NYCDEP (and as appropriate, NYSEFC or CWC) to proceed as defined in the Operation and Maintenance Agreement. The completed construction close-out documents are submitted to NYCDEP (and as appropriate NYSEFC or CWC).

The following close-out documents must be submitted:

- Final Operation and Maintenance Manual
- Final complete change orders
- Final verified statement of potential claims
- As-built drawings
- Contractors' final close-out documents

Since regulatory and funding agencies each have specific procedures that must be followed and requirements that must be met, regular contact with regulatory and funding agency staff to determine specific requirements is encouraged. The following sections provide a general overview of the process.

13.1. Substantial Completion. When the contractor considers the project ready for its intended use, the contractor notifies the municipality and engineer in writing that the entire project is substantially complete (also called functionally complete), and requests that the engineer issue a Certificate of Substantial Completion. The municipality, contractor and engineer inspect the work to determine the status of completion. If the engineer does not consider the work substantially complete, the engineer will notify the contractor in writing and give the reasons. If the engineer considers the work substantially complete, the engineer will prepare and deliver to the municipality a Certificate of Substantial Completion that includes the date of Substantial Completion. A list of items to be completed or corrected before final payment will be made is attached to the Certificate. This list is called the "punch list." The owner has seven days to make written objections to the engineer as to any provision of the Certificate or attached list. If, after considering those objections, the engineer considers the work substantially complete, the engineer will execute and deliver to the municipality and contractor the final Certificate of Substantial Completion (with a revised punch list of items to be completed or corrected within a specified time).

For upgrade projects in the NYC Watershed, NYCDEP must review and approve the draft Operation and Maintenance (O&M Manual), as defined in Section 18-36(a)(1) of the Watershed Rules and Regulations prior to submission of the Certificate. Other regulatory and funding agencies may require that a draft Operation and Maintenance Manual (O&M Manual) be reviewed and approved prior to the submission of the Certificate of Substantial Completion.

After the Certificate of Substantial Completion is issued, long term loans can be closed. Steps in the funding close-out process are included in Section 13.4.

13.2. System Start-up. During system start-up, the wastewater systems are put into operation. This occurs after the Certificate of Substantial Completion has been issued, but while the contractors are still on site. The engineer gathers all of the involved engineers, contractors, equipment representatives, technicians, the municipal operations staff (or contracted operator), and those regulatory agencies that wish to participate in the start-up process. This team trains municipal or contract operators, reviews operation and maintenance manuals, starts-up and fine-tunes project systems, and makes any final modifications to processes.

The wastewater system, including any pumps, flow meters, aeration system, chemical feed system, electrical controls, emergency generator, water system, disinfection system, filters, clarifiers, solids handling, and other system components are tested. Usually the systems are tested with clean water initially. Testing for the collection system includes low-pressure air testing, manhole vacuum testing, pump station run testing, and pipeline

deflection (Mandrel) testing (required by NYCDEP for NYC watershed projects). When the overall system has been tested and start-up is considered complete, the treatment system is drained of clean water, and once regulatory approvals are obtained, the system can be restarted and put into service with raw sewage. A wastewater treatment plant may require a seeding process (addition of septage waste or sludge from another facility) to begin and maintain the biological treatment process until process control can be optimized. Start-up is an ongoing process that occurs during a period several weeks or months.

During the start-up period, the engineer updates the Operation and Maintenance Manual, record drawings, and equipment operation manuals.

13.3. Final Completion. As the project reaches final completion, the regulatory and funding agencies will require that the engineer submit final close-out documents which may include:

- Operation and Maintenance Manuals
- Recorded Drawings
- Claims Statements
- Affidavit of Payment of Debts and Claims with attachments
- Contractor's release of liens and consent of surety to final payment
- Warranties
- Certificates of inspections, testing and start-up field reports
- Final inspection report with final punch list items, if necessary
- Final payment request

Some regulatory and funding agencies require completion of the final approval process before allowing operation of the system. Once the regulatory and funding agencies are satisfied that the project is complete, the funding agencies will release the contractors' remaining retainage to the municipality and authorize the municipality to release the retainage to the contractors.

This begins a one-year guarantee/correction period by the contractors with payment and performance bonds being held by the municipality.

13.4. Grant Close-outs and Loan Closings. When the project reaches substantial completion and the final project costs are known, long-term loans can be closed and the proceeds used to repay the short-term financing. The funding agencies will require an anticipated final project budget. If the project has USDA RD grant funds, grant funds can be drawn, even after the loan is closed, to pay for project expenses until the project is closed. After construction is complete and retainage has been released to the contractors, the last costs to be paid with USDA RD grant funds are usually for bond counsel costs, bookkeeping and reporting services, interest, if any, on the short-term financing, and audits, if required. The following sections describe the loan closing process for the CWSRF and USDA RD programs.

13.4.1. CWSRF. This section describes the loan closing process for a direct loan (see Chapter 7.2.1 for a discussion of a direct loan). If a short-term loan is involved, the short-term loan period is three years. In most cases, the municipality closes on the short-term CWSRF loan, constructs the project, reaches substantial completion, closes the long-term CWSRF loan, and repays the short-term CWSRF loan. Occasionally, the project is delayed and the short-term loan period expires before the project reaches substantial completion. In this case, the municipality must take out another form of short-term financing, such as bond anticipation notes, to repay the short-term loan, then when the project reaches substantial completion, the long-term loan is closed and the proceeds are used to repay the bond anticipation note.

When the project is complete, CWSRF requires an executed Certification of Project Completion. Contact CWSRF staff for a list of any additional items they may require to approve project close-out. CWSRF staff gather all of the documentation they need to close the loan from the municipality, bond counsel, and engineer and then complete the loan closing (usually they close the loan without the municipality in attendance).

13.4.2. USDA Rural Development. Once a project reaches substantial completion, the municipality contacts USDA RD and requests the list of items that are required for the loan closing and project close-out.

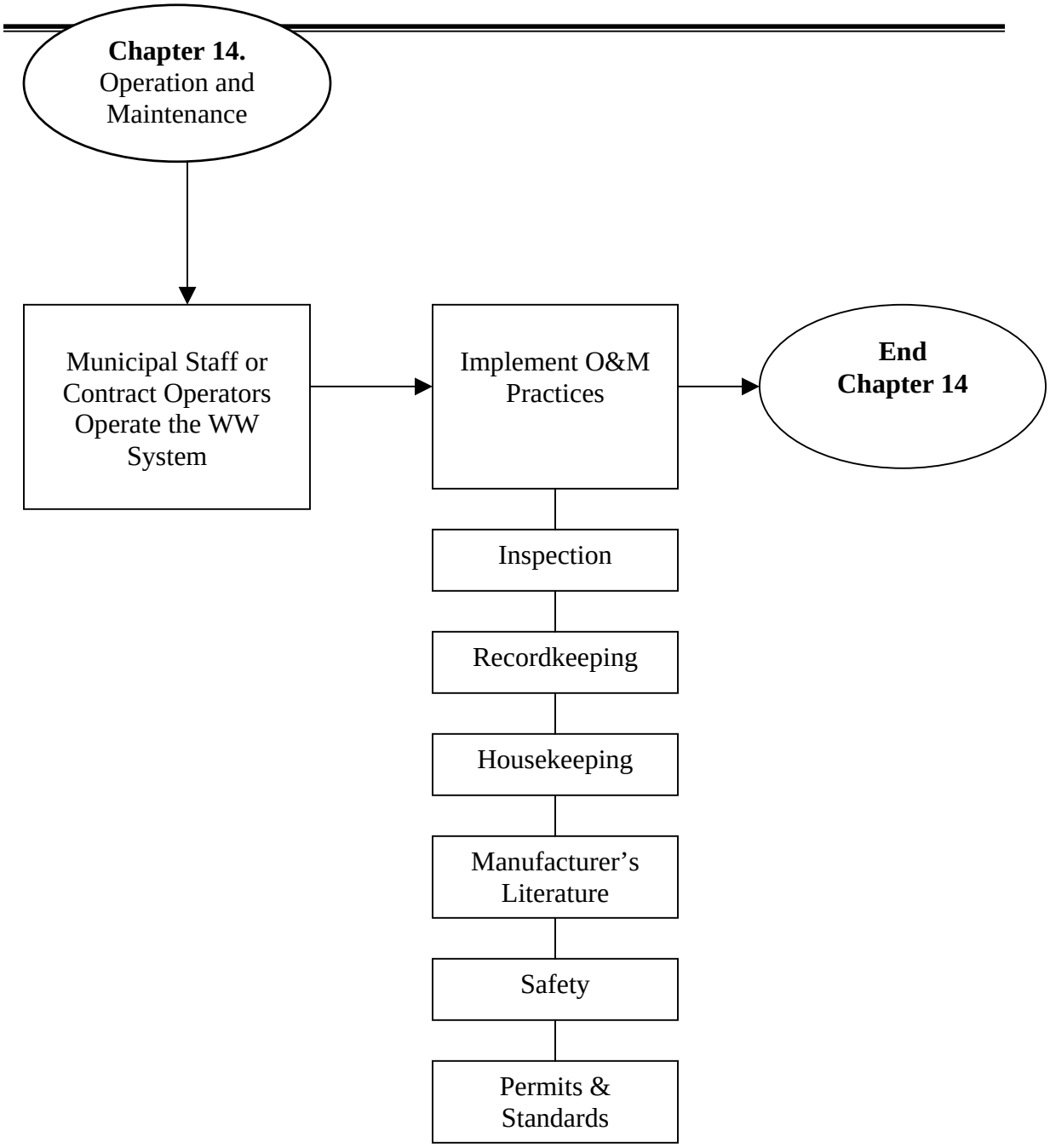
For projects with both CWSRF and USDA RD funding, often the USDA RD loan is closed first, and if the USDA RD loan is to be refinanced by the CWSRF long-term loan, a refunding resolution is prepared by bond counsel and adopted by the municipal board. Once the permissive referendum period, if applicable, and estoppel period for the refunding resolution are complete, the loan closing with CWSRF can be scheduled. If the USDA RD loan will not be refinanced with CWSRF funds, the CWSRF loan closing can be scheduled as soon as all of the required close-out documents are accepted by CWSRF.

USDA RD usually conducts a pre-loan closing a few days before the actual loan closing. At the pre-loan closing, the municipality, engineer, and bond counsel meet with USDA RD staff to review and execute final loan closing documents and bonds that are post dated with the actual loan closing date. If all goes well at this meeting, and all of the bond paperwork is in order, the loan is considered closed once the date of the loan closing is past. If there is a problem with the paperwork, it is corrected, and the loan closing is held on the actual loan closing date.

13.4.3. Other Funding Sources. Other funding agencies have specific requirements for grant and loan closings that may differ from the above process. Contact those agencies directly to determine the information they will need to approve project close-out.

13.5. References.

The project completion procedure that covers project close-out is more fully explained in Article 14 of the Engineer's Joint Contract Documents Committee (EJCDC) Standard General Conditions of the Construction Contract, EFCDC No. 1910-8.


Chapter 14.
Operation and Maintenance
Municipal Staff or Contract Operators Operate the WW System
Implement O&M Practices
End
Chapter 14
Inspection
Recordkeeping
Housekeeping
Manufacturer's Literature
Safety
Permits & Standards

The Board's To Do List

- The Board, with assistance from the engineer, oversees the day-to-day operation of the wastewater system as the operators take charge of all operations.
- Maintain goodwill with property owners where the municipality holds permanent easements.
- Keep operation and maintenance records at the wastewater facilities and at the municipal office.

Chapter

14

Operation and Maintenance of Facility

Up to this point, the engineer, contractor, and operators have been responsible as a team for start-up of the wastewater system. Now it is time for the municipal operations staff (or contracted operator) to take over its operation. To ensure that the completed wastewater system is in regulatory compliance, and that the municipality understands how the system works and can operate it properly in the future, the team implements a plan of operation and start-up procedures for the system. The overall operation and maintenance process begins during construction of the project as system components are installed, tested, and operated.

Operation and Maintenance of the facilities commences when the operators start running the wastewater system, using it for its intended functions. The operators use the operation and maintenance manual for guidance to operate on a day-to-day basis. As events such as high flows, industrial waste influences, temperature changes and other changes specific to the system that may affect the performance of the system occur, the operators must make adjustments necessary to maintain successful performance. The operators take charge of all operations including equipment maintenance, repairs or replacement, ordering chemicals and supplies, maintaining operating budgets, reporting to regulatory agencies, safety requirements, and staffing schedules.

14.1. Operational Phase. During the construction start-up phase when project components are being installed and tested, the engineer and the contractor assist municipal operators with refining, adjusting and troubleshooting equipment or systems to ensure that the overall system performs in accordance with the intended design. Equipment performance testing, process control testing and effluent quality testing is performed as necessary to achieve the satisfactory performance of the wastewater system. The engineer may also assist the municipality in training staff and developing procedures and record keeping for the operation and maintenance of the system.

The Operation and Maintenance Manual describes the wastewater collection and treatment system, and the steps required to operate and maintain it. For NYC watershed projects, a draft Operation and Maintenance Manual is required to be reviewed and approved by the regulatory and funding agencies when the Certificate of Substantial Completion is issued, and the final version must be submitted to agencies when the project reaches final completion.

14.2. Operation and Maintenance Practices. Operation and maintenance practices play a crucial role in the success of any facility. Possible consequences of neglected operation and maintenance include unsatisfactory performance or premature failure of equipment, increased operating costs, replacement costs, poor public relations and special attention and/or legal actions from regulatory agencies. In contrast, well-kept facilities are easier to maintain, have lower operating costs, have fewer public complaints and are a source of pride for their owners and operators.

Much of the wastewater collection and conveyance system may be located on private property with permanent easements held by the municipality. While the easements grant access to municipal employees for the purpose of inspecting and maintaining the wastewater system, special care must be taken at these sites to maintain a sense of goodwill between the municipality and the residents. For example, operators should notify residents, even those on adjacent parcels, before entering upon and performing work at a particular site. When possible, operators should perform work during normal business hours (obviously, such notice and scheduling will not always be possible, such as when a resident is unreachable or emergency repairs are required).

14.2.1. Inspection. Regular inspection of equipment and piping systems is an important part of operation and maintenance activities because it allows early identification of potential problems. Repairs are scheduled to minimize the disruption to customers and to other operation activities. Scheduled repairs are typically easier and much less costly than those performed as the result of an emergency.

Inspections can be “active”, consisting of a site walk with a notepad or checklist, or “passive”, in which the operator is merely observant while going about other activities, or both. Passive inspections should become habitual. Active inspections are strongly recommended, and should be consciously scheduled and executed on a routine basis.

The frequency of inspection will vary depending on the type of equipment, the ease and cost of the inspection, and the local operating conditions. Rotating equipment, such as pumps, should be inspected on a regular basis. Gravity sewers, however, may be thoroughly inspected just every few years because special equipment is required and the likelihood of catastrophic failure is relatively low. The frequency of inspection can and should be adjusted as the operators become familiar with the wastewater system.

14.2.2. Recordkeeping. Written records of operation and maintenance activities are kept at the wastewater facilities. Duplicate records are kept at the municipal offices. Records

include operating parameters like influent flow, pump flow and pressure, maintenance activities such as generator exercising or pump seal replacement, results of all laboratory analyses and notations of any unusual conditions such as a power outage, equipment failure, utility bills, etc. Additionally, any modifications to the wastewater system should be noted on the record drawings for the project. At a minimum, two sets of record drawings should be kept for the system at the above locations and updated whenever modifications occur.

There are several compelling reasons to establish and maintain a record keeping program:

1. Records are a resource for troubleshooting operational problems that manifest slowly over time.
2. Records provide a permanent documentation that the facility operates within applicable regulatory guidelines.
3. Historical operating cost data can demonstrate that a particular piece of equipment should be replaced or modified.
4. Provide evidence of proper upkeep should equipment fail while under warranty.
5. Modified record drawings will be valuable during maintenance or modification projects.
6. Since operations and maintenance costs may be partially reimbursed by NYCDEP for projects located within the NYC Watershed, all operation and maintenance activities are subject to audit and review.
7. The operators need to provide full managerial status over all of the facilities including reporting, coordination, and communication with regulatory agencies.

14.2.3. Housekeeping. Municipal wastewater is by nature a dirty, corrosive and odorous fluid. Thus, good housekeeping will be necessary to maintain a safe, clean and aesthetically-pleasing work environment. Simply cleaning up after a repair or a spill will not be sufficient in such an environment; regular hose-downs and wipe-downs will be required. If liquid sewage and/or chemicals are allowed to dry on equipment or building surfaces, cleaning will be much more difficult and premature failure of protective coatings can occur.

Housekeeping will also include general maintenance and painting of buildings and piping to protect these surfaces against corrosion. Field/lawn and shrub care is also required. The operator should develop a housekeeping schedule.

14.2.4. Manufacturer's Literature. Literature and instructions provided by the equipment manufacturers are collected and included as appendices to the Operation and Maintenance Manual. Should equipment be changed or substituted during the operational life of the facilities, new literature and instructions should be obtained and appended to the Operation and Maintenance Manual. Operators should refer to those instructions prior to operating or maintaining any equipment. If a particular manual does not offer the desired information, the manufacturers and/or their local representatives have a wealth of knowledge about their products. This is available via telephone, fax, internet or even a site visit should that prove necessary.

14.2.5. Safety. An annual inspection of all facilities should be conducted to ensure that compliance with all the United States Occupational Safety and Health Administration (OSHA) regulation requirements, including operational procedures and workplace signage are met. A detailed Safety Guide is developed as part of the Operation and Maintenance Manual.

14.2.6. Permits and Standards. Copies of all current permits and standards are kept on file and readily accessible at the wastewater treatment plant.

Acronyms

ARC	Appalachian Regional Commission
BAN	Bond Anticipation Note
CWC	Catskill Watershed Corporation
CWSRF	Clean Water State Revolving Fund
DEIS	Draft Environmental Impact Statement
EAF	Environmental Assessment Form
EDU	Equivalent Dwelling Unit
EIS	Environmental Impact Statement
EJCDC	Engineer's joint Construction Documents Committee
ENB	Environmental Notice Bulletin
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Administration
FONSI	Findings of No Significant Impact
GEIS	Generic Environmental Impact Statement
GIS	Geographic Information Systems
IUP	Intended Use Plan (CWSRF)
MOA	New York City Watershed Memorandum of Agreement
NEPA	National Environmental Policy Act
NRCS	United States Department of Agriculture Natural Resources Conservation Service
NYCDEP	New York City Department of Environmental Protection
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOS	New York State Department of State
NYSDOT	New York State Department of Transportation

NYSEFC	New York State Environmental Facilities Corp.
NYSOPRHP	New York State Office of Parks, Recreation and Historic Preservation (also referred to as SHPO)
O&M	Operation and Maintenance
PM	Project Manager
PPL	Project Priority List on the Intended Use Plan
RCAP Solutions	Resources for Communities and People
ROW	Right of Way
RPA	Regional Permit Administrator, NYSDEC
SEQR	New York State Environmental Quality Review Act
SHPO	New York State Office of Parks, Recreation and Historic Preservation
SPDES	State Pollutant Discharge Elimination System
SWPPP	Stormwater Pollution Prevention Plan
TAP	Technical Assistance Provider
TSC	Target Service Charge
UPA	Uniform Procedures Act (NYSDEC permit process)
US ACOE	United States Army Corps of Engineers
USDA RD	United States Department of Agriculture Rural Development
USDOI	United State Department of the Interior
VENDEX	Vendor Information Exchange (for NYC Watershed projects)
WWTP	Wastewater Treatment Plant

Definitions

Action. For state environmental review purposes, projects or physical activities that may affect the environment by changing the use, appearance or condition of any natural resources or structure that are directly undertaken by an agency, involve funding by an agency, or require one or more new or modified approvals from an agency or agencies. (A complete definition is available in 6 NYCRR Part 617 State Environmental Quality Review, §617.2)

Agency. For state environmental review purposes, a state or local agency.

Article 15 Stream Disturbance of Bed and Banks Permit. A permit program administered by the New York State Department of Environmental Conservation to minimize the disturbance of streams and water bodies to prevent unreasonable erosion of soil, increased turbidity of the waters, irregular variations in velocity, temperature and level of waters, the loss of fish and aquatic wildlife, the destruction of natural habitat, and the danger of flood or pollution.

Article 24 Freshwater Wetland Permit. A permit program administered by the New York State Department of Environmental Conservation to preserve, protect, and conserve freshwater wetlands, consistent with the general welfare and beneficial economic, social, and agricultural development of the state.

Bid Alternates. Alternates to the base bid that are keyed to specified and explicitly stated changes in the project scope, materials, or construction techniques. Alternates may be used when it is anticipated that the amount of the low bid will exceed the amount of funds available to award a contract, and the municipality must make adjustments to the project to reduce costs in order to award a contract within the funds available. “Add” alternates will make it possible to incorporate necessary features that otherwise would not have been included in the project. Alternates that are selected may be included in determining the low aggregate bid.

Bond Anticipation Note (BAN). Short-term notes taken from a local bank to pay for project costs during design and construction. Must be authorized by the bond resolution.

Bond Counsel. An attorney that specializes in municipal borrowing. Bond counsel is required if the municipality will need to borrow funds for the project.

Bond Resolution. A municipal resolution that describes the project, authorizes the total project cost, the amount that will be borrowed to pay for the project, and bond anticipation notes or other forms of interim financing.

Catskill Watershed Corp. (CWC). The CWC is a not-for-profit corporation dedicated to protecting the water resources of the New York City Watershed west of the Hudson River, while preserving and strengthening communities located in the region.

Community Septic System. A septic system that serves more than one building within a legally formed district, also referred to as a cluster system.

Environmental Impact Statement (EIS). A document prepared during the environmental review process that provides a way for agencies, project sponsors and the public to consider significant adverse environmental impacts, alternatives and mitigation.

Equivalent Dwelling Unit (EDU). Relates all water system usage proportionately to that equivalent to a typical single family residence. EDUs are calculated for commercial, industrial and institutional users based on water usage from flow data, number of employees, fixture units, or other factors that equate usage to that of an equivalent number of residential users.

Estoppel Period. A period during which the validity of the bond resolution and borrowing authority can be challenged by residents.

Facility Plan. A plan and study related to the construction of treatment works necessary to comply with the Clean Water Act. A facilities plan investigates needs and provides information on the cost-effectiveness of alternatives, a recommended plan, design calculations, an environmental assessment of the recommendations, and descriptions of the treatment works, costs, and a completion schedule.

Financial Hardship. Financial Hardship Assistance is available from the NY Clean Water State Revolving Fund for eligible projects that are listed on the annual Intended Use Plan with a score at or above the funding line. Specific requirements are included in the annual Intended Use Plan.

Floodplain. The flat or nearly flat land along a river or stream or in a tidal area that is covered by water during a flood.

Floodway. For most waterways, the floodway is where the water is likely to be deepest and fastest. It is the area of the floodplain that should be reserved (kept free of obstructions) to allow floodwaters to move downstream. Placing fill or buildings in a floodway may block the flow of water and increase flood heights, and therefore is not permitted.

Funding Agency. A federal, state, or local agency that administers a program to fund municipal wastewater projects.

Intended Use Plan (IUP). The annual program document for the NY Clean Water State Revolving Fund. The IUP provides the anticipated funds to be available and projected uses, a annual project list, a multi-year list of projects expected to use future CWSRF financing, the project scoring and ranking system, program goals, and the anticipated financing schedule.

Interested Agency. An agency that lacks the jurisdiction to fund, approve or directly undertake an action but wishes to participate in the environmental review process.

Interim Financing. Obtaining the funds needed to plan, design and construct the project. Interim, or short-term, financing is replaced with long-term financing when construction is substantially complete.

Involved Agency. For state environmental review purposes, an agency that has jurisdiction by law to fund, approve or directly undertake an action. The lead agency is also an involved agency.

Land Acquisition. Obtaining control of the sites needed for the project through purchase, lease, or easements.

Lead Agency. For state environmental review purposes, an involved agency that is principally responsible for undertaking, funding or approving an action, and is responsible for determining whether an environmental impact statement is required in connection with the action, and for the preparation and filing of the statement if one is required.

Long-term Financing. Loans or bonds that are typically taken after the project has reached substantial completion. Long-term financing replaces the interim, or short-term, financing used to pay for costs during planning, design and construction. The long-term financing terms are determined by the funding agencies and agreed to by the municipality during the funding process.

MOA or Watershed MOA. The New York City Watershed Memorandum of Agreement dated January 21, 1997.

Negative Declaration. For environmental review purposes, a written determination by a lead agency that the implementation of the action as proposed will not result in any significant adverse environmental impacts.

New York City Department of Environmental Protection (NYCDEP) the NYC department responsible for development, operation and maintenance of environmental facilities owned by NYC including its water supply. NYCDEP is the regulatory agency responsible for approvals and permitting of work within the NYC Watershed.

New York Clean Water State Revolving Fund (CWSRF). Administered by the New York State Environmental Facilities Corp, the funding agency that provides low- or no-interest loans for eligible municipal wastewater project.

New York State Department of Environmental Conservation (NYSDEC). The regulatory agency responsible for approvals and permitting for municipal wastewater projects.

New York State Environmental Facilities Corp. (NYSEFC). The agency that administers the NY Clean Water State Revolving Fund.

Operation and Maintenance (O&M). Actions taken after construction to ensure that municipal wastewater facilities are properly operated and maintained to achieve optimum efficiency levels and meet effluent limits.

Operation and Maintenance Budget. The estimated annual cost to operate and maintain municipal wastewater facilities.

Permissive Referendum. A vote on a specific issue pursuant to a petition requesting a vote on a specific issue.

Permitting. An authorization, license, or equivalent control document issued by a federal or state agency to implement the requirements of an environmental regulation.

Positive Declaration. For environmental review purposes, a written statement prepared by the lead agency indicating that implementation of the action as proposed may have a significant adverse impact on the environment and that an environmental impact statement will be required.

Preliminary Engineer's Report. Prepared during the study phase, this report includes a preliminary project scope, project budget and operation and maintenance budgets. This report is used by regulatory and funding agencies to determine if a project is needed, if the proposed approach will solve the problem, and to determine the level of funding assistance needed to make the project economically feasible. The report is also called a Map, Plan and Report for sewer district establishment or extension purposes.

RCAP Solutions (Resources for Communities and People). A state and federally funded program that offers Technical Assistance Providers to assist communities in developing municipal wastewater projects.

Referendum. A vote on a specific issue.

Regulatory Agency. A federal, state, or local agency that administers an approval or permit process for some aspect of the municipal wastewater project.

Septic System. A system for on-site (or clustered) treatment and disposal of human waste.

Septic District. Municipal improvement district for operation, inspection, maintenance and repair or replacement of on-site and clustered sewage treatment systems.

Sewage. The waste and wastewater produced by residential and commercial sources and discharged into sewers.

Sewer District. An area of a Town that will be served by a municipal wastewater system and is established pursuant to Town Law.

Sewer Laterals. The sewer line that connects the home or business to the municipal sewer line. Typically, the homeowner owns the line and is responsible for hookup and maintenance of the line.

Sewer Rents. A scale of annual charges established and imposed in a city or village or in a sewer or wastewater disposal district in a county or town pursuant to Article 14-F for the use of a sewer system or any part of parts thereof.

Sewer Use Ordinance. Local law(s) governing the use of the municipal sewerage collection system.

Short-term Financing. See Interim Financing.

State Environmental Quality Review Act (SEQR). A regulatory framework for the implementation of SEQR pursuant to Article 8 of the Environmental Conservation Law.

State Pollutant Discharge Elimination System (SPDES). A regulatory/permit program administered under Article 17 of the Environmental Conservation Law, by the New York State Department of Environmental Conservation to control point source discharges of water pollution.

SPDES General Permit for Stormwater Discharges from Construction Activities (GP-02-01). A permit program administered by the New York State Department of Environmental Conservation for stormwater discharges from construction activities that result in the disturbance of one or more acres of land.

Stormwater Pollution Prevention Plan (SWPPP). A plan for controlling runoff and pollutants from a site during and after construction activities.

Technical Assistance Providers (TAP). State, federal, or local agency staff that are available, usually for free, to assist the municipality with developing a municipal wastewater project. Agencies that have TAPs on staff for wastewater projects include: he NYS Environmental Facilities Corp., RCAP Solutions,

Typical Property. For district creation purposes, the benefited property having assessed value that approximates the assessed value of the mode (i.e., the most frequently

occurring valuation as shown on the latest completed assessment roll) of the benefited properties in the district or extension that will be required to finance the cost of the proposed improvements.

Typical One- or Two-Family Home. For district creation purposes, the benefited property having assessed value that approximates the assessed value of the mode (i.e., the most frequently occurring valuation as shown on the latest completed assessment roll) of the benefited properties improved by one- or two-family dwellings in the district that will be required to finance the cost of the proposed improvements.

US Army Corps of Engineers (US ACOE). The federal agency that regulates and administers the federal permit process for waters of the United States.

US Department of Agriculture Rural Development (USDA RD).

Wetland Compensatory Mitigation Plan. Compensatory wetland mitigation is the restoration or creation of wetlands to replace wetland functions that would be otherwise lost as a result of an activity permitted by the U.S. Army Corps of Engineers.

Wetland Delineation. The procedure used to determine the existence and physical limits of a wetland for purposes of Section 404 of the Clean Water Act.

Wetlands. An area that is saturated by surface or ground water with vegetation adapted for life under those soil conditions, such as swamps, bogs, fens, marshes, and estuaries.

Exhibits. The exhibits are included on the enclosed CD located at the front of the document sleeve.

	Location
Combined Flowchart	Document Sleeve
Exhibits	CD

Exhibit 1:	Project Team Worksheet
Exhibit 2:	Selecting Professional Services
Exhibit 3:	Public Participation Work Sheet
Exhibit 4:	USDA RD Preliminary Engineer's Report Requirements
Exhibit 5:	USDA RD Pre-Eligibility Determination List
Exhibit 6:	CWSRF Forms
Exhibit 7:	Sample SEQR Resolutions
Exhibit 8:	CWSRF Environmental Review Requirements
Exhibit 9:	SEQR Full Environmental Assessment Form
Exhibit 10:	Sample Lead Agency Forms
Exhibit 11:	Sample Endangered Species Letters
Exhibit 12:	USDA RD Sample Environmental Report
Exhibit 13:	USDA RD Application List
Exhibit 14:	Sample Administrative Memo
Exhibit 15:	Eminent Domain Guide
Exhibit 16:	Consultant Score Sheet
Exhibit 17:	Village Special Assessment District Discussion

Chapter 2:	Exhibit 1, Exhibit 2, Exhibit 3, Exhibit 16
Chapter 3:	Exhibit 4, Exhibit 5, Exhibit 6
Chapter 4:	Exhibit 7, Exhibit 8, Exhibit 9, Exhibit 10, Exhibit 11, Exhibit 12
Chapter 7:	Exhibit 5, Exhibit 6, Exhibit 13
Chapter 10:	Exhibit 15
Chapter 14:	Exhibit 14

EXHIBIT 1

Project Team Work Sheet

Team Leader(s)

1. _____
2. _____
3. _____

Core Team

1. _____
2. _____
3. _____
4. _____
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6. _____
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8. _____
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10. _____

Project Team

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(use additional sheets as needed)

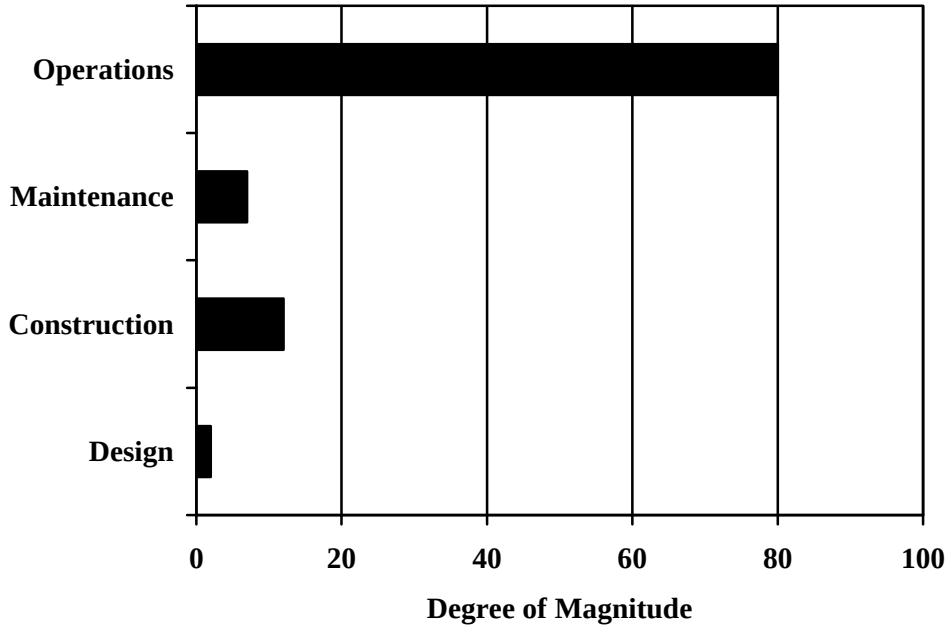
EXHIBIT 2

Selecting Professional Services

1.1. Qualifications Based Selection Process for Selecting Professional Services. The quality of engineering services has a great impact on a project in terms of efficiency, economy and effectiveness of the facility. A report by the Committee on Federal Procurement of Architectural and Engineering (A/E) Services in 2000 concluded as follows:

"The quality of A/E services will have a considerable impact on the ultimate efficiency, economy and effectiveness of a facility. While the direct design cost of A/E service represents only a small part of the total project cost, these design services have a profound effect on the construction, maintenance and operations costs as well as the useful life of the structure of facilities."

Comparison Of Elements Of Life-Cycle Cost



The report presents the above graph with the note, "total life-cycle cost approximates 100 times design cost." Because of this the quality of engineering services are far more important than the cost of engineering services, within reason, and the Federal Government and many states and municipalities practice qualifications-based selection of engineering services. Obviously price of engineering services may be considered in addition to considering an engineer's qualifications, experience and character, but comparable prices are very difficult to obtain because engineering services are needed very early in the project development, certainly before the project is well defined. In fact, because each municipal wastewater system is a custom, one-of-a-kind project, the engineer's primary task is to define the project by designing it with the input of

community leaders, funders and regulators. The successful design of a project involves a multitude of skills including, besides those of applied science, communications, management, and leadership skills. Furthermore, the best engineers are open and honest, and they recognize their position of subordinate service to their client community.

The choice of engineering firm may be the most important single decision that the community will make during the process of developing its wastewater management system.

1.2. Procuring Engineering Services. Engineering and other professional services are not required by law to be publicly bid, but municipalities are required by Section 104-b of the General Municipal Law to adopt procurement policies for such services. The following is an excerpt from the New York Conference of Mayors (NYCOM) Sample Procurement Policy:

> "Pursuant to General Municipal Law Section 104-b(2)(f), [a municipal] procurement policy may contain circumstances when, or types of procurements for which, in the sole discretion of the governing body, the solicitation of alternative proposals or quotations will not be in the best interest of the municipality. In the following circumstances it may not be in the best interests of the [CITY/VILLAGE] of [NAME] to solicit quotations or document the basis for not accepting the lowest bid.
>
> a. Professional services or services requiring special or technical skill, training or expertise. The individual or company must be chosen based on accountability, reliability, responsibility, skill, education and training, judgment, integrity, and moral worth. These qualifications are not necessarily found in the individual or company that offers the lowest price and the nature of these services are such that they do not readily lend themselves to competitive procurement procedures.
>
> In determining whether a service fits into this category the [CITY COUNCIL/BOARD OF TRUSTEES] shall take into consideration the following guidelines: (a) whether the services are subject to State licensing or testing requirements; (b) whether substantial formal education or training is a necessary prerequisite to the performance of the services; and (c) whether the services require a personal relationship between the individual and municipal officials. Professional or technical services shall include but not be limited to the following: services of an attorney; services of a physician; technical services of an engineer or architect engaged to prepare plans, maps and estimates; securing insurance coverage and/or services of an insurance broker; services of a certified public accountant;

> investment management services; printing services involving extensive writing, editing or art work; management of municipally owned property; and computer software or programming services for customized programs, or services involved in substantial modification and customizing of pre-packaged software."

1.3. Qualifications-Based Selection. Develop Request for Qualifications (RFQ). This may include a Request for Proposals (RFP) and scope of work, provided the scope of work is thorough, consistent, especially in required proposal structure, and very clearly stated.

- Announce Proposed Project
- Receive qualifications submittals
- Evaluate Submittals
- Develop a Short List of firms to be interviewed
- Interview Firms
- Rank Firms
- Select and Notify Firms
- Negotiate Contract

A thorough discussion of the qualifications based selection process is included in Chapter 2 of the Federal Compensation for Architectural/Engineering Services report by the Council on Federal Procurement of Architectural and Engineering Services, 2002, available at http://www.acsm.net/cofrpt2000.doc. RCAP Solutions and NYSEFC technical assistance providers are very well versed in and often assist communities with the RFP and qualifications-based selection process.

NOTES

EXHIBIT 3

Public Input Work Sheet

This work sheet serves as a starting point for developing a plan to encourage public input throughout the project.

Methods of Soliciting Public Input:

- **Board Meeting Discussions**
- **Public Information Meetings**
- **Public Hearings**
- **Newsletters/Mailings**
- **Press Releases**
- **Other**

_____
_____
_____
_____

Public Input Committee Members:

_____
_____
_____
_____

Use spaces below to note ideas about when the above methods of soliciting public input may be used. For instance, near the end of the project development phase, the municipality may want to mail a newsletter to potential users and hold a public information meeting to describe the project.

Project Development

_____
_____

Design

_____
_____

Environmental Review

_____
_____

Bidding & Award

_____
_____

District Creation / Bonding

_____
_____

Construction

_____
_____

EXHIBIT 4

USDA Rural Development Requirements for Preliminary Engineer's Report

The following is the USDA Rural Development bulletin, in its entirety, that describes what must be included in a Preliminary Engineer's Report for a project that will be funded by Rural Development:

USDA Rural Development Bulletin 1780-3:
Preliminary Engineering Report – Wastewater Facilities.

Available on the Rural Utilities Services' website at www.usda.gov/rus/water. This Bulletin provides applicants and their consultants with instructions on how to prepare a Preliminary Engineering Report for a wastewater system application. (Bulletin prepared by Gary J. Morgan, Assistant Administrator, Water and Environmental Programs, 10/2/03.)

TABLE OF CONTENTS

INDEX:

ABBREVIATIONS

O&M – Operations and Maintenance
PER – Preliminary Engineering Report

RUS – Rural Utilities Service [USDA Rural Development]

1. GENERAL. A Preliminary Engineering Report (PER) should clearly describe the owner's present situation, analyze alternatives, and propose a specific course of action from an engineering perspective. The level of effort required to prepare the report and the depth of analysis within the report are proportional to the size and complexity of the proposed project. Rural Utilities Service (RUS) projects must be modest in design, size and cost, and be constructed and operated in an environmentally responsible manner.

Pursuant to 7 CFR Part 1794, guidance in RUS Bulletin 1794A-602, "Guide for Preparing the Environmental Report for Water and Waste Projects", and the Agency's environmental State Supplement, the applicant shall perform the environmental review concurrently with the project engineering planning. This document must indicate that environmental issues were considered as part of the engineering planning. Information provided in the PER will be used to process the funding request, therefore completeness and accuracy are essential for timely processing of the application. Other outlines may be utilized, but the essential information must be readily identifiable. Contact the Rural Development office for further guidance. The following should be used as a guide for the preparation of PERs for RUS financed wastewater systems.

2. PROJECT PLANNING AREA. Describe the area under consideration. The project planning area may be larger than the service area determined to be economically feasible. Service may be provided by a combination of central, cluster, or individual facilities. The description should include information on the following:

a. Location. Maps, photographs, and sketches. These materials should indicate legal and natural boundaries, major obstacles, elevations, etc.

b. Environmental Resources Present. Maps, photographs, studies and narrative. This section should provide information on the location and significance of important land resources (farmland, rangeland, forestland, wetlands and 100/500 year floodplains, including stream crossings), historic sites, endangered species/critical habitats, etc., that were identified in the applicant's environmental information (normally an Environmental Report) and that must be considered in project planning. A narrative summary with reference to the applicant's environmental submittal is adequate.

c. Growth Areas and Population Trends. Specific areas of concentrated growth should be identified. Population projections for the project planning area and concentrated growth areas should be provided for the project design period (typically 20-years). These projections should be based on historical records with justification from recognized sources.

3. EXISTING FACILITIES. Describe the existing facilities including at least the following information:

a. Location Map. Provide a schematic layout and general service area map (may be identified on project planning area maps).

b. History. Provide a brief description of when major system components were constructed or renovated.

c. Condition of Facilities. Describe present condition; suitability for continued use; adequacy of current facilities; and, if any existing central facilities, the treatment, storage, and disposal capabilities. Note the quantity of inflow and infiltration/exfiltration associated with the existing collection system. Also, describe compliance with Clean Water Act and applicable State requirements.

d. Financial Status of any Existing Facilities. (Note: Owner will be submitting most recent audit or financial statement as part of the application package.) Provide information regarding current rate schedules, annual operations and maintenance (O&M) cost, other capital improvement programs, and tabulation of users by monthly usage categories for the most recent typical fiscal year. Give status of existing debts and required reserve accounts.

4. NEED FOR PROJECT. Describe the needs in the following order of priority:

a. Health, Sanitation, and Security. Describe concerns and include relevant regulations and correspondence from/to Federal, and State regulatory agencies.

b. System O&M. Describe the concerns and indicate those with the greatest impact. Investigate infiltration and inflow, management adequacy, inefficient designs, and problem elimination prior to adding additional capacity.

c. Growth. Describe the reasonable growth capacity that is necessary to meet needs during the planning period. Facilities proposed to be constructed to meet future growth needs should generally be supported by additional revenues. Consideration should be given to designing for phased capacity increases. Provide number of new customers committed to this project.

5. ALTERNATIVES CONSIDERED. This section should contain a description of the reasonable alternatives that were considered in planning a solution to meet the identified need. Documentation of alternatives considered is often a PER weakness. The following alternatives should be considered, if practicable: building new centralized facilities, optimizing the current facilities (no construction), interconnecting with other existing systems, and developing centrally managed small cluster or individual facilities. These alternatives should be consistent with those considered in the environmental review. Mitigation measures necessary to avoid or minimize any adverse environmental effects must be integrated into project design. The description should include the following information on each alternative:

a. Description. Describe the facilities associated with the alternative. Describe all feasible wastewater treatment technologies and provide comparison of such. Also, describe collection facilities. A feasible system may include a combination of centralized and decentralized (on-site or cluster) units.

b. Design Criteria. State the design parameters used for evaluation purposes. These parameters must comply with RUS design policies (7 CFR 1780.57) and state regulatory requirements.

c. Map. Schematic layout.

d. Environmental Impacts. Do not duplicate the information in the applicant's submittal of environmental information. Describe only those unique direct and indirect impacts on floodplains, wetlands, other important land resources, endangered species, historical and archaeological properties, etc., as they relate to a specific alternative. RUS must conduct an environmental assessment prior to project approval.

e. Land Requirements. Identify sites and easements required. Further specify whether these properties are currently owned, to be acquired, or leased.

f. Construction Problems. Discuss concerns such as subsurface rock, high water table, limited access, or other conditions which may affect cost of construction or operation of facility.

g. Cost Estimates. Provide cost estimates for each alternative, including a breakdown of the following costs:

(1) Construction.

(2) Non-Construction.

(3) Annual Operations and Maintenance.

h. Advantages/Disadvantages. Describe how the specific alternative meets the owner's needs with respect to financial, managerial, and operational resources. Explain how the proposal complies with regulatory requirements and existing comprehensive area-wide development plans. Explain how the proposal satisfies public and environmental concerns.

6. SELECTION OF AN ALTERNATIVE.

a. Present Worth (life cycle) cost analysis (an engineering economics technique to evaluate present and future costs for comparison of alternatives) should be completed to compare the feasible alternatives. All of the items from the cost estimate should be included in the analysis. The "real" federal discount rate from Appendix C of OMB Circular A-94 should be used for determining the present worth of the uniform series of O & M values (in today's dollars) and the salvage value. This rate may be found at: www.whitehouse.gov/omb/circulars/a094/a94_appx-c.html

b. A matrix rating system could be useful in displaying the information on each alternative.

c. Note that if the range of present worth values is small, then non-monetary factors should be considered in determining which alternative should be selected.

7. PROPOSED PROJECT (RECOMMENDED ALTERNATIVE). This section should contain a fully developed description of the proposed project based on the preliminary

description under the evaluation of alternatives. At least the following information should be included:

a. Project Design.

(1) Collection System Layout. Identify general location of line improvements: lengths, sizes, and key components.

(2) Pumping Stations. Identify size, type, site location, and any special power requirements.

(3) Treatment. Describe process in detail and identify location of any treatment units and site of any discharges.

b. Total Project Cost Estimate. Provide an itemized estimate of the project cost based on the stated period of construction. Include development and construction, land and rights, legal, engineering, interest, equipment, contingencies, refinancing, and other costs associated with the proposed project. The engineer may rely on the owner for estimates of cost for items other than construction, equipment, and engineering. (For projects containing both water and waste disposal systems, provide a separate cost estimate for each system.)

c Annual Operating Budget. Provide itemized annual operating budget information. The owner has primary responsibility for the annual operating budget, however, there are other parties that provide assistance. This information will be used to evaluate the financial capacity of the system. The engineer will incorporate information from the owner's accountant and other known technical service providers.

(1) Income. Provide a proposed rate schedule. Project income realistically for existing and proposed new users separately, based on existing user billings, wastewater treatment contracts, and other sources of income. In the absence of historic data or other reliable information, for budget purposes, base residential wastewater generation on 60 gallons per capita per day, or 150 gallons per residential-sized connection per day, or 4,500 gallons per residential-sized connection per month. Higher per person or per EDU flows may be used with adequate justification. When large agricultural or commercial users are projected, the report should identify those users and include facts to substantiate such projections and evaluate the impact of such users on the economic viability of the project.

(2) Operations and Maintenance (O&M) Costs. Project costs realistically. Provide actual costs for existing systems and projected costs for operating the system as improved. In the absence of other reliable data, base on actual costs of other existing facilities of similar size and complexity. Include facts in the report to substantiate operation and maintenance cost estimates. Include salaries, benefits, water purchase, taxes, accounting and auditing fees, legal fees, interest, utilities, oil and fuel, insurance, annual repairs and maintenance, supplies, chemicals, office supplies and printing , and miscellaneous.

(3) Debt repayments. Describe existing and proposed financing from all sources. All estimates of RUS funding should be based on loans, not

grants. RUS will evaluate the proposed project for the possible inclusion of RUS grant funds.

(4) Reserves. Describe the existing and proposed loan obligation reserve requirements for the following:

- Debt Service Reserve - Unless otherwise required by State statute the debt service reserve should be established at one-tenth (1/10) of annual debt repayment requirement (amount of debt that must be repaid to government in a given fiscal year).

- Short-Lived Asset Reserve - Additional reserve amounts may be needed to provide for timely replacement of short-lived assets. Prepare a schedule of short-lived assets and a recommended annual reserve deposit recommended to fund replacement of short-lived assets. Examples of short-lived assets include pump/motor overhaul or replacement, painting, and small equipment replacement. Short-lived assets include those items not included under O&M, however, it should not include long-lived assets such as pump station or treatment facility replacement that should be funded with long-term financing.

8. CONCLUSIONS AND RECOMMENDATIONS. Provide any additional findings and recommendations that should be considered in development of the project. This may include recommendations for special studies, highlight the need for special coordination, a recommended plan of action to expedite project development, etc.

EXHIBIT 5

USDA Rural Development Pre-Eligibility Determination Item List.

The following is a list of items required in a typical request for a Pre-Eligibility Determination. Contact the regional USDA Rural Development staff for a project-specific list.

Provide two (2) complete packages of the below mentioned items

1) A letter requesting a "Pre-Eligibility Determination" which includes the Federal Tax Identification Number for the municipality. The letter should be in the format of the enclosed sample.

2) A Fact Sheet completed on the enclosed Form I.

3) Number of users information completed on the enclosed Form A.

4) Complete the enclosed Form B showing Long-Term Indebtedness on the existing water/sewer system that will not be refinanced.

5) A Preliminary Engineering Report as per enclosed RUS Bulletin 1780-2, 1780-3, 1780-4 or 1780-5.

6) An "estimated" Project Budget completed on the enclosed Form E "Project Budget/Cost Certification". Complete only column 1.

7) Regulatory agency (DOH or DEC) comments covering concerns, inspections, orders, mandates, and review of the Preliminary Engineering Report.

8) Applicants must certify in writing on the enclosed RUS Bulletin 1780-22, that they are unable to obtain financing for the proposed project at "reasonable rates and terms".

9) Map showing existing service areas in relation to new service areas, corporate limits of the community and developed/undeveloped areas.

10) Estimate of the number of homes, population and businesses served by the new project.

11) Review of Town/Village's building records and growth/development factors addressed.

12) Discussion of new and/or existing discharges to or a withdrawal from surface or groundwaters.

13) Discussion of increases in volume or the loading of pollutants from existing discharge to receiving waters.

Please Note:

A. Applicants shall publicly announce all requirements for engineering and architectural services, and negotiate contracts for engineering and architectural services on the basis of demonstrated competence and qualifications for the type of professional services required and at a fair and reasonable price.

B. Selection of an Engineer or Architect for project design services is to be done by requesting "Qualification-Based Proposals".

C. The RUS Instructions and Bulletins are available from the water and waste home page, which can be accessed at http://www.usda.gov/rus/water.

EXHIBIT 6

CWSRF Forms

CWSRF Project Listing Form (also available for download at www.nysefc.org)

(Form starts on next page)

New York State Environmental Facilities Corporation
625 Broadway, Albany NY 12207-2997
(800) 882-9721 within New York State (518) 402-7433
Fax (518) 402-7456 www.nysefc.org
Division of Engineering and Program Management

PROJECT LISTING
June 2004

NEW YORK STATE CLEAN WATER STATE REVOLVING FUND

Project listing is the first step to obtaining financing through the Clean Water State Revolving Fund (CWSRF). A separate, second step is the submission of a completed application package. The attached Project Listing Form (CWSRF) provides the information necessary for staff at the New York State Environmental Facilities Corporation (EFC) to accurately score your project and list it on the Project Priority List as required by state regulations. The Project Priority List is published annually in the CWSRF Intended Use Plan (IUP).

When and where to submit the Project Listing Form: These forms are accepted continuously for the Multi-Year portion of the IUP's Project Priority List. For listing on the Annual Project Priority List, please refer to the current IUP for deadlines. Please send forms and attachments to the address shown below or fax to EFC at (518) 402-7456.

Robert Davis, P.E., Director
Division of Engineering and Program Management
New York State Environmental Facilities Corporation
625 Broadway
Albany, New York 12207-2997

Who to contact: Should you have questions concerning the completion of this form, please contact the Division of Engineering and Program Management at EFC's toll-free information line 1-800-882-9721 (within NYS only) or 518-402-7433:

Instructions: Please complete the attached Project Listing Form (CWSRF) and return it with the information requested under "Project Description" to EFC. Without the information requested, your project cannot be accurately scored and listed on the Project Priority List of the IUP nor can financing for your project be properly targeted. If you are requesting the listing of more than one project, please submit a separate listing form for each. In addition, please complete the municipal authorization at the end of the form. Without municipal authorization, your community's project will not be included on the Project Priority List of the IUP.

FOR EFC USE ONLY:
Date Received: ____/_____/_____
CWSRF Project No.: C__-_____-___-___

Project Listing Form (CWSRF)

CWSRF Applicant: _____ County: _____

Project Name: _____ Population Served By Project: _____

Project Location (Attach Map If Available): _____

_____

Is the municipality under an enforcement order or permit requiring the construction of the project? ❑ Yes ❑ No
If yes, please attach a copy of the order or permit.

Do you intend to or have you already applied to other funding sources? ❑ Yes ❑ No
If yes, please indicate source(s) and status of your application(s): _____

_____

Municipal Contact Information:

_____ _____
Name of Municipal Contact Title

_____
Mailing Address

_____
City, State, Zip Code

(____)_____ (____)_____
Phone Number Fax

_____
(Municipal E-Mail)

Consulting Engineer Information:

_____
Engineering Firm

_____ _____ _____
Name of Contact Person Title

_____
Mailing Address

_____
City, State, Zip Code

(____)_____ (____)_____ _____
Phone Number Fax E-mail

Project Listing Information: The following information is needed to accurately score your project. Please refer to the "Project Ranking System Scoring Criteria" contained in the IUP for details. ***Absent the information requested, the project will receive a Project Priority Score of <u>zero</u>.***

Project Description: On a separate piece(s) of paper, please provide a clear, concise project description. Also describe the overall project objectives by providing the information requested below:

1. Describe existing conditions and how surface water and/or groundwater quality is being impacted. For point source projects, provide location of wastewater discharge. For nonpoint source projects, describe the water body affected (e.g., name of river tributary, "private wells on Jay Street," groundwater, etc.)
2. What will be constructed?
3. How will the project protect or improve surface water and/or groundwater quality?

If an engineering/technical report is available which contains the information requested above, please submit it with this form.

Project Budget & Funding Sources:

The accuracy of project costs will vary depending upon the stage of the project development. Please use the best estimate available and include estimates for all anticipated project expenses so that sufficient monies may be included in the IUP.

- **Construction:** List total estimated construction costs on this line.
- **Equipment:** Enter equipment costs not included in the Construction Costs above.
- **Force Account:** Enter technical (e.g., engineering, construction, etc.) costs associated with work done by municipal employees.
- **Engineering:** List fees according to category: preliminary/planning, design and construction-related (including resident inspection) fees.
- **Other Expenses:**

  Local Counsel - Enter legal fees associated with eligible project costs. Costs associated with consent orders and easements are ineligible and should not be included.
  Bond Counsel - The services of a nationally recognized bond counsel are required for CWSRF financing. Enter the costs associated with such services.
  Fiscal Services - Enter costs associated with professional accounting and/or financial advisory services (if applicable).
  Miscellaneous - Enter costs (e.g., training, photocopying, insurance, telephone, equipment rental, advertising, travel, etc.) not included above.
- **Contingencies:** As a general rule, the contingency amount should be no more than 10% of construction cost estimates or 5% of bid amounts.
- **Total Project Cost:** This should reflect all costs associated with the implementation of your project.
- **Other Funding Sources:** If you have received or expect to receive funding from other sources please indicate the source and amounts on the lines provided. Examples of other funding sources include USDA Rural Development (RD), NYS Governor's Office for Small Cities (GOSC) (previously HUD), DEC Environmental Protection Fund (EPF), Economic Development Administration (EDA) and Clean Water/Clean Air Bond Act. Add all funds from other funding sources to obtain the "Other Funding Subtotal".
- **Issuance Costs:** As described in the IUP under Application Process, these costs are made up of Direct Expenses and a State Bond Issuance Charge. Direct expenses represent the borrower's proportionate share of EFC's costs to complete the transactions necessary for a bond sale and include bond counsel costs, financial advisor fees, printing costs, rating agency fees and trustee fees. Public Authorities that sell bonds (including EFC) must collect the State Bond Issuance Charge.
- **Total CWSRF IUP Amount:** The "Total CWSRF IUP Amount" is the "Total Project Cost" (A) minus "Other Funding Subtotal" (B) plus "Issuance Costs" (D).

Project Budget & Funding Sources

Construction Costs:	$_____
Equipment Costs:	$_____
Force Account Costs:	$_____
Engineering Fees:	
Planning	$_____
Design	$_____
Construction	$_____
Other Expenses:	
Local Counsel	$_____
Bond Counsel	$_____
Fiscal Services	$_____
Miscellaneous	$_____
Contingencies:	$_____
Total Project Cost (A):	$_____
Deduct Other Funding Sources: Specify source and type (e.g., RD, GOSC, EPF, EDA, CW/CA Bond Act, etc.)	
_____	$_____
_____	$_____
_____	$_____
_____	$_____
Other Funding Subtotal (B):	($_____)
Subtotal (A - B) = (C):	$_____
Issuance Costs (D): (approx. 1.9% of (C))	$_____
Total CWSRF IUP Amount (C + D) :	**$_____**

Project Schedule:

Instructions*	Indicate (T) Target or (A) Actual Completion or Submittal Date Below
1. Please indicate whether or not the implementation of your project requires the formation of a Special Improvement District. ☐ Yes ☐ No If yes, indicate the target or actual date of district formation.	( ) __/__/__
2. Enter the date by which you anticipate submitting an engineering/technical report for review and approval by the appropriate reviewing agency. If you have already done so, indicate the actual date submitted. Please allow a minimum of two (2) months for completion of regulatory review of document(s). **PLEASE NOTE: A municipality must have an approvable engineering report or technical report to be listed for long-term financing in the Annual List of an IUP or to submit an application for any type of CWSRF financing.**	( ) __/__/__
3. A municipality must complete environmental review requirements for its project before it can receive either short-term or long-term financing. This process can take several months to complete. Enter the date you anticipate completing your environmental review or the date it was completed.	( ) __/__/__
4.a) Enter the date by which you anticipate submitting a CWSRF short-term loan application.	( ) __/__/__
4.b) Enter the date by which you anticipate submitting a CWSRF long-term financing application.	( ) __/__/__
5. Enter the date by which you anticipate submitting plans and specifications for review and approval by the appropriate reviewing agency. If you have already done so, indicate the actual date submitted. Please allow a minimum of two (2) months for completion of regulatory review of documents.	( ) __/__/__
6. Enter the anticipated or actual construction start date (Issuance of the Notice to Proceed).	( ) __/__/__
7. Enter the anticipated or actual construction completion date.	( ) __/__/__

* See Page 4 for additional guidance in preparing the Project Schedule.

Municipal Authorization: Our community requests the listing of the project described here in on the CWSRF Project Priority List (PPL) of the Intended Use Plan (IUP). We are interested in the following type(s) of CWSRF financing for the project:

- ❒ Short-Term Financing Only (maximum 3 years; up to one-half of project's Annual PPL IUP amount);
- ❒ Long-Term Financing Only (maximum 30 years);
- ❒ Both Short & Long-Term Financing.

Completed by:

_____ _____
(Signature of Authorized Municipal Official) (Date)

_____
(Please Print Name)

_____
(Title)

Additional Project Schedule Guidance/Instructions:

1. According to State Law, projects that involve Town or County special improvement districts may require the Office of the State Comptroller's approval prior to the municipality incurring certain debt. The regulations of the Office of the State Comptroller explain when and how to apply for approval. You should consult your local counsel to determine the need for the State Comptroller's approval to implement the project. When developing your project schedule, please take into consideration the time involved in securing an approval from the State Comptroller.

2. EFC staff review and approve engineering reports for CWSRF eligible wastewater treatment facilities. Please allow two (2) months for EFC's technical review and approval. For non-hazardous Municipal Solid Waste landfill closure projects, technical reports, known as Closure Investigation Reports, are approved by the Division of Solid and Hazardous Materials in the DEC Regional offices. For inactive hazardous waste sites, technical reports, known as Remedial Investigation/Feasibility Studies, are approved by the Division of Environmental Remediation in DEC's Albany office. Please contact the DEC staff for those programs for anticipated approval times. Review times for other nonpoint source projects should be discussed with EFC.

☞ **PLEASE NOTE: A municipality must have an approvable engineering report or technical report to be listed for long-term financing in the Annual List of an IUP or to submit an application for any type of CWSRF financing.**

3. CWSRF environmental review procedures, which will also satisfy the municipality's responsibilities under SEQR, are explained in a guidance document available from the Division of Environmental Permits in the local DEC office or from EFC upon request. Because environmental review activities vary depending on the type of action undertaken, please refer to the guidance for applicable time frames. You should contact the DEC Regional Permit Administrator for assistance.

4.a) Determine if you need the short-term loan for your project financing needs. Short-term applications must be submitted no later than March 1st of each CWSRF financing period. One application can be submitted at the same time for both short-term and long-term financing.

4.b) The anticipated application due dates for each CWSRF IUP financing period are published in the draft and final IUPs. Applications for the leveraged financing pools are generally due by October 1st and March 1st.

5. EFC staff review and approve plans and specifications for CWSRF eligible wastewater treatment facilities. Please allow two (2) months for EFC's review and approval. For other projects noted in Item 2 above, please contact the appropriate DEC office for estimated approval times.

6&7. Although the construction schedule may be very tentative when you complete this schedule, it is important to set target dates as it indicates when short-term and long-term financing is needed. Please allow sufficient time between receiving regulatory approval of your plans and specifications and the start of construction to account for the bidding and contract award process (generally 2 to 3 months).

4.2. CWSRF Hardship Application Request (also available for download at www.nysefc.org)

New York State Environmental Facilities Corporation
625 Broadway Albany, New York 12207-2997
(800) 882-9721 within New York State
(518) 402-7433 Fax (518) 402-7456
Division of Engineering & Program Management

FINANCIAL HARDSHIP POLICY
NEW YORK STATE CLEAN WATER STATE REVOLVING FUND (CWSRF)

Effective October 1, 2004

Policy:

Municipalities with high cost wastewater treatment works projects that serve residential areas may qualify for reduced interest rate or interest-free financing through the Clean Water State Revolving Fund (CWSRF). This document describes the reduced interest rate financing program and the procedures used by the Environmental Facilities Corporation (EFC) in determining financial hardship and is intended to provide consistency in performing financial hardship determinations. The procedures and computations outlined in this policy are to manage CWSRF funds with regard to hardship expenditures based on a measure of an applicant's financial resources. They are not intended to establish a user charge system to be used by a municipality.

Hardship Eligibility Criteria:

Reduced interest rate or hardship financing:

1) is only available for wastewater treatment works projects that serve predominantly residential areas.

2) is only for projects costing ten million dollars or less. Reduced interest rate financing will not be provided to a municipality for a segment of a project if the total cost of all segments of the project exceeds ten million dollars (reference: 21 NYCRR 2602.4(d)(3)). "Project cost" includes all costs associated with the erection, building, acquisition, alteration, reconstruction, improvement, enlargement or extension of a project; the inspection and supervision thereof; and the engineering, architectural, legal, fiscal, and economic investigations and studies, surveys, design, plans, working drawings, specifications, procedures, and other actions necessary for the construction of the project.

3) is provided only for Environmentally Significant Projects, as determined by the Commissioner of the NYS Department of Environmental Conservation (DEC) (reference: 21 NYCRR 2602.2(a)(21) & 2602.4(d)(3)). When determining environmental significance, the Commissioner will consider all relevant factors which shall include an assessment of (1) public health and safety; (2) protection of environmental resources; (3) population affected; (4) attainment of state water quality goals and standards; and (5) compliance with state and federal law, rules and regulations.

Hardship Determination Criteria:

Hardship determinations are based upon the estimated first year sewer service charge (total debt service plus operation and maintenance, minus any offsetting revenues) for a typical household compared to a Targeted Service Charge (TSC). The TSC is a value based on the Median Household Income (MHI) of the service area. The TSC is calculated by using the following formula:

$$TSC = [(MHI/10,000)^2 \times 22] + [(MHI/10,000) \times 25] + 11$$

Table A shows examples of the TSC amounts calculated for various MHIs using this formula.

Table A
TSC Chart

Median Household Income (MHI)	Target Service Charge (TSC)
$10,000	$58
$15,000	$98
$20,000	$149
$25,000	$211
$30,000	$284
$35,000	$368
$40,000	$463
$45,000	$569
$50,000	$686
$55,000	$814
$60,000	$953

The estimated first year sewer service charge will be calculated on an Equivalent Dwelling Unit (EDU) basis. The use of EDUs standardizes the way the estimated first year sewer service charge is calculated and provides comparable results and consistency in the financial hardship review process. It also enables equitable treatment of systems that include significant commercial, industrial, or institutional wastewater flows and/or loadings. If a project serves predominantly (greater than 50% of the total EDUs) commercial, industrial, and/or institutional users, it will not be eligible for reduced interest rate financing. For the purpose of this policy, primary and secondary public schools are not to be included as part of the commercial, industrial, institutional percentage. Facilities such as nursing homes and hospitals may be evaluated on a case by case basis to determine if these facilities should be included in the EDU count. If the facility is primarily local, serving the same local community and system users, then it may also be excluded from the commercial, industrial, institutional percentage. Factors effecting this determination may include, but are not limited to: size, number of beds, type of care provided, primary residence of facility users, and facility's proximity to larger facilities. **The EDU method is utilized only to determine financial hardship in the CWSRF program. Municipalities are not required to use this system to determine actual rates charged.**

The MHI to be utilized in the hardship determination will be based on the 2000 Census Year data published by the U.S. Department of Commerce Bureau of the Census. For special districts or other areas for which accurate census data is not available, other income data, including income surveys, may be provided by the municipality and considered by EFC. The income survey must

be in a form acceptable to EFC (guidance is available from EFC). If the project service area encompasses municipal jurisdictions which have different MHIs, a "weighted average" MHI, based on residential EDUs served by the project, will be calculated and used in the financial hardship determination.

A municipality is eligible for reduced interest rate financing when the estimated first year sewer service charge, calculated using the non-hardship CWSRF interest rate, exceeds the TSC. Hardship financing will be offered at an interest rate and term which brings the estimated first year sewer service charge down to or as close as possible to the TSC.

An example of how the interest rate determination is made is included in Table B. In situations where the ability of the recipient to repay the financing amount is questionable, even with interest-free financing, the municipality will be encouraged to examine cost reduction alternatives and to seek other funding sources which could be used in combination with a CWSRF financing.

Table B: Example Of Interest Rate Determination For CWSRF Hardship Financing

Assumptions:	Median Household Income	$30,000
	CWSRF Financing Amount	$2,000,000
	Annual Operation & Maintenance Costs	$40,000
	Equivalent Dwelling Units	365
	Unsubsidized Interest Rate (net interest cost)	5%
	Non-Hardship Interest Rate (at 50% Subsidy)	2.5%
	Debt Service Structure based on Level Principal Annual Payments	
Calculations:	**Target Service Charge (TSC) per EDU**:	
	$[(\$30,000/\$10,000)^2 \times 22] + [(\$30,000/\$10,000) \times 25] + 11$	**$284**
	Estimated First Year Sewer Service Charge at 50% Subsidy:	
	Annual Debt Service on $2,000,000 at 2.5% interest and 20 year repayment	$150,000
	Plus O&M Costs	$40,000
	Estimated First Year Sewer Service Charge at 50% Subsidy	$190,000
	Estimated First Year Sewer Service Charge per EDU =	**$521**

In this example, the calculated total costs per EDU after EFC's 50% subsidy is $521, which is $237 above the TSC. This indicates qualification for Hardship Financing. The next step is to calculate the interest rate and term which brings the estimated service charge down to or as close as possible to but not below the TSC.

Estimated First Year Sewer Service Charge with 0% Financing & 20 year term:	
Annual Debt Service on $2,000,000 at 0% interest and 20 year repayment	$100,000
Plus O&M Costs	$40,000
Estimated First Year Sewer Service Charge with 0% Financing	$140,000
Estimated First Year Sewer Service Charge per EDU =	**$384**
Estimated First Year Sewer Service Charge with 0% Financing & 30 year term:	
Annual Debt Service on $2,000,000 at 0% interest and 30 year repayment	$66,667
Plus O&M Costs	$40,000
Estimated First Year Sewer Service Charge with 0% Financing	$106,667
Estimated First Year Sewer Service Charge per EDU =	**$292**

Based on the assumptions cited above, the example municipality would qualify for interest -free financing for a term of 20 years since the Estimated First Year Sewer Service Charge per EDU ($384) exceeds the TSC ($284). It may also qualify for 30 year term interest-free financing since the Estimated First Year Sewer Service Charge per EDU ($292) also exceeds the TSC. However, 30 year financing would be conditioned upon confirmation by the municipality's Bond Counsel that the project's period of probable usefulness allows financing for a 30 year term.

Note: The interest rates and subsidy cited above are for illustrative purposes only. These factors will vary.

Confirmation of Availability of Financial Hardship Assistance:

The EFC will provide a written confirmation to a municipality if it meets the hardship eligibility criteria and the hardship determination criteria. The letter will include the basis for the determination, the interest rate which the municipality qualifies for, and the term of the financing (either 20 and/or 30 years). It should be noted, however, that if a municipality qualifies for hardship financing at a term of 30 years, it will be conditioned upon confirmation by the municipality's Bond Counsel that the project's period of probable usefulness allows financing for a 30 year term.

Written confirmation of a reduced interest rate determination for financial hardship will remain valid for two (2) full years from the date of the confirmation letter. Written notification of expiration dates of confirmation letters issued prior to this date will be mailed to applicants that have not closed on short-term or long-term direct financing. Submittal of a short-term application and closing of a short-term financing will qualify as meeting the submittal and approval dates stated within the CWSRF hardship confirmation letter. If a project has not received CWSRF financing by the expiration date identified in the confirmation letter, the project will be removed from Category D and will have to reapply for hardship consideration.

Should the information which was used in the hardship determination change significantly (project costs, commitments from other funding sources, changes in the designated project service area, etc.), financial hardship eligibility will be re-evaluated. If the interest rate or the financing term for which the municipality qualifies changes or if the municipality no longer qualifies for hardship financing, EFC will inform the municipality in writing.

A hardship confirmation letter shall not be issued unless a municipality's project is listed in the IUP, on the Annual or Multi-Year PPL, with a priority score that places it at or above the funding line score of the applicable project category of the final CWSRF Intended Use Plan (IUP) in the year in which such confirmation is to be provided. If funds become available for a project that is below the funding line on the Annual PPL (contingency project), that project may then be issued a hardship confirmation letter. To ensure there will be sufficient CWSRF funds to provide financings to municipalities which have received written hardship confirmations, funds are reserved in Category D of the CWSRF IUP Annual Project Priority List for all such projects that demonstrate their readiness for financing within the effective period of the IUP. Any additional funds needed to finance projects issued confirmation letters during a current IUP period would be allocated in the next IUP financing period unless there is an amendment to the current IUP.

Applicants who receive financial hardship confirmation letters, but have not closed on their financings, and whose project costs increase, will be eligible for reduced interest financings to cover the cost increases. This is allowable if direct financing funds are available in the current IUP funding period. As an alternative, applicants may submit entire revised projects for reconsideration in a subsequent IUP.

Applicants who received financial hardship confirmation letters, but have closed on their financings, and whose project costs increased may apply during the next IUP funding period for reduced interest financing, possibly down to zero percent, to cover cost increases. In these cases, the applicant must file a new project listing form to list the project in the next IUP.

Financial Hardship Application Form:

A CWSRF Financial Hardship Application Form must be submitted to EFC for review and determination of your municipality's hardship qualifications. Hardship application forms are accepted on a continuous basis, but no later than the date indicated in the CWSRF Intended Use Plan (IUP) to ensure that a qualifying project can be placed in Category D of the final IUP. The EFC will perform a financial hardship determination for your municipality when a completed Financial Hardship Application Form and supporting information are received. The information will be reviewed to determine if the project meets the hardship criteria. If so, the municipality's financial capabilities will be evaluated.

The Financial Hardship Application Form is attached. To assist you in completing this form, the following instructions are provided:

Section 1. This section provides the basic information about your municipality and the project for which you are seeking a financial hardship determination.

Section 2. The information provided in this section outlines the municipality's long-term financing plan for the project. If you have applied for or have received a written commitment from other funding sources (i.e. USDA Rural Development, Governor's Office for Small Cities, etc.) they should be identified here. Although your project may qualify for interest-free financing, there may be cases where EFC may not be in a position to participate in the financing of your project unless formal commitments from other funding agencies have been received.

Section 3. Any outstanding sewer debt should be identified in this section. Please show principal and interest payments separately where requested, and provide a copy of the amortization schedule for each type of debt listed.

Section 4. Median Household Income (MHI) means the MHI published in the 2000 Year Census by the U.S. Department of Commerce Bureau of the Census (BOC). For special districts or other areas for which accurate census data is not available, other income data, including income surveys, may be considered or may be required by EFC. The income survey must be in a form acceptable to EFC (please contact EFC for guidance). If the municipality has performed an income survey in accordance with the NYS Governor's Office for Small Cities (Housing and Urban Development) guidelines, and the survey computes and documents the service area MHI, EFC will accept the survey results.

If the project service area encompasses municipal jurisdictions which have different MHIs, a "weighted average" MHI, based on residential EDUs served by the project, will be calculated, unless an income survey is conducted.

If the total number of EDUs to be served by the project comprise greater than 50% seasonal residential units (defined as those users in the project service area that would not have been included in the Bureau of the Census MHI data), an income survey may be required by EFC to determine the actual MHI of the service area.

Section 5. An EDU represents a system user that produces a wastewater flow (measured in gallons per day) and/or strength (measured in pounds per day of various pollutants) equivalent to a typical single family residence and serves as a means of proportioning system usage and costs. Please estimate wastewater discharges from the specified types of users of the system in terms of

EDUs and provide an explanation of your methodology. The EFC will review this information for reasonableness.

If the project serves predominantly (greater than 50% of the total EDUs) commercial, industrial, and/or institutional users, it will not be eligible for reduced interest rate financing. For the purpose of this policy, primary and secondary public schools are not to be included as part of the commercial, industrial, institutional percentage. Facilities such as nursing homes and hospitals may be evaluated on a case by case basis to determine if these facilities should be included in the EDU count. If the facility is primarily local, serving the same local community and system users, then it may also be excluded from the commercial, industrial, institutional percentage. Factors effecting this determination may include, but are not limited to: size, number of beds, type of care provided, primary residence of facility users, and facility's proximity to larger facilities.

When determining EDUs, all users who are responsible for paying for the project (debt service, operation and maintenance) during the first year of operation are to be included in the calculation. Should the project only benefit a portion of the entire service area and only those who receive the benefit are responsible for paying for the project, then the EDU calculation should be limited to only those receiving the benefit. Future extensions to the service area should not be included in the EDU calculation.

Since financial hardship determinations are based on first year capital, operation and maintenance costs, vacant parcels of land within the project service area should not be included in the EDU calculation.

Section 6. The municipality's most current Operating and Maintenance Budget should be used to identify existing operation and maintenance cost to be included in this section.

The amount that existing operation and maintenance costs will change as a result of this project are to be identified under "O&M Associated with the Project". Should the project result in a decrease to the municipality's existing operation and maintenance costs, it should be shown as a negative amount.

Section 7. Offsetting revenues are funds received in lieu of standard user charges for the future use of the facilities or payments from other municipalities or sewer districts for transportation and treatment of its wastewater. If you will receive revenues of this nature for the project, it should be identified here.

Section 8. EFC must establish that the municipality has the ability to repay CWSRF financing. The information requested in this section is needed in order to make this determination. It is recognized that some of the information requested may be preliminary since your project may only be in the planning stages. It should, however, be submitted if available.

The CWSRF Hardship Application and supporting documentation should be sent to:

New York State Environmental Facilities Corporation
Division of Engineering & Program Management
625 Broadway
Albany, New York 12207-2997

FAX #: (518) 402-7456

For more information on CWSRF assistance and financial hardship financing, please call EFC's toll-free number at (800) 882-9721 (within New York State only) or (518) 402-7433.

NEW YORK CLEAN WATER STATE REVOLVING FUND (CWSRF)
FINANCIAL HARDSHIP APPLICATION

1. CWSRF Project No.: C__-_____-___-___ Project Score:_____ Project Category:_____

Name of Applicant: _____ County: _____

Mailing Address: _____
_____

Completed by: _____ Contact Person (if different): _____

Phone Number: _____ FAX: _____ E-Mail: _____

Project Description:
_____

_____

Population of Area to be Served: _____

2. Long-Term Financing Plan:

Funding Sources	**Amount**
a) Municipal Contribution (specify source):	
_____	$ _____
_____	$ _____
Total Municipal Contribution:	$ _____

b) Other Sources of Funding (Please indicate whether other funding has been applied for, approved, or received. Please provide evidence of the status of these other sources if they have been approved or received):

Rural Development
❒ Application Pending ❒ Approved ❒ Received
Grant Amount: $ _____
Loan Amount: $ _____

Governor's Office for Small Cities
❒ Application Pending ❒ Approved ❒ Received
Grant Amount: $ _____

NYS Department of Environmental Conservation (CW/CA Bond Act)
❒ Application Pending ❒ Approved ❒ Received
Grant Amount: $ _____

Other (please specify)
Funding Source: _____
❒ Application Pending ❒ Approved ❒ Received
Grant Amount: $ _____
Loan Amount: $ _____

Funding Source: _____

❒ Application Pending ❒ Approved ❒ Received

Grant Amount: $ _____

Loan Amount: $ _____

c) **Long-Term CWSRF Financing Amount:** $ _____

d) **Total Project Costs** (sum of a, b, and c above) $ _____

3. List all current outstanding debt of the sewer system (Please Provide a copy of the amortization schedule(s)):

Type of Debt (Bonds, BANs, etc.)	Debt Issuance Date (mm/dd/yy)	Maturity Date (mm/dd/yy)	Amount Issued ($)	Payments for Current Fiscal Year (Principal + Interest) (Show separately) ($)	($)	Specify Purpose, Call Provisions & Who Currently Holds the BAN or Bond

If the sewer system has no outstanding debt, please check here ❒

4. Median Household Income (MHI) of Service Area:

2000 U.S. Census MHI: _____ (or) MHI from Income Survey: _____*

*(Income Survey must be approved by EFC. Please contact EFC for Guidance)

5. Number of Equivalent Dwelling Units (EDUs) to be Served:**

a) Number of single family residential EDUs _____

b) Number of multi-family residential EDUs _____

c) Number of seasonal residential EDUs _____

d) Number of commercial EDUs _____

e) Number of institutional EDUs _____

f) Number of industrial EDUs _____

Total Number of EDUs = _____

**Please provide methodology and calculation to support EDU numbers.

6. Annual Operation and Maintenance (O&M) Costs:

Existing Annual O&M (if applicable):
$_____
(Please submit a copy of your most current Capital & Operating Budget)
O&M Associated with the Project:
$_____
(A decrease to the existing O&M should be shown as a negative (-))
Total O&M =
$_____

7. Offsetting Revenues:

Please indicate the amount and source of any offsetting revenues which the recipient will receive for the project: $_____ Source:
_____

8. Please Provide Copies of the Following Documents if Available:

- Copy of existing or proposed intermunicipal service agreements relating to the project or sewer district;
- Copy of all existing or proposed contracts with major commercial, industrial, or institutional users each comprising 10% or more of the municipality's revenue;
- Official statement or other offering document for most recent debt issuance, if in the past three years;
- Current adopted budget; and
- Co-funding documentation (letter of commitment, grant award documents, etc.)

_____
_____
(Signature of Municipal Authorized Representative) (Date)

_____
(Name & Title)

_____
(Phone Number, include area code)

4 3. CWSRF Application Checklist (also available for download at www.nysefc.org)

Applicant: _____ **CWSRF Project No.:** C - - -

Date Prepared: _____

New York State Environmental Facilities Corporation
625 Broadway Albany, New York 12207-2997
(800) 882-9721 within New York State
(518) 402-7085 Fax (518) 402-7086

APPLICATION CHECKLIST
NEW YORK CLEAN WATER STATE REVOLVING FUND
MUNICIPAL OTHER THAN LAND ACQUISITION

This document lists all of the items which form a complete Clean Water State Revolving Fund (CWSRF) financial assistance application. A summary of these items can be found in the Description of Application Components. Please review the Checklist with EFC at the beginning of the application process since some items may not apply to your project. This Checklist should be used to verify that your application package is complete. The completed Checklist must be submitted to EFC as part of the application package.

PART 1. The items in Part I must be submitted by the applicant in order to have a complete application. Check the appropriate boxes below. If these items have already been submitted, please indicate.

No.	Item	Submitted Earlier	Submitted with this Application	EFC Contacts (for more information)
1.	Application Form[1]	☐	☐	Finance
2.	Resolution Authorizing CWSRF Application and Agreement for Project Financing[1]	☐	☐	Finance
3.	Municipal Bond Resolution(s)			
	a) Bond Resolutions (Certified Copy)	☐	☐	Legal
	b) Proof of Publication of Permissive Referendum	☐	☐	Legal
	c) Proof of Publication of Estoppel Notice	☐	☐	Legal
4.	Engineering/Technical Report	☐	☐	Program Management
5.	Regulatory Agency's Approval of Engineering/	☐	☐	Program

[1] Form included in Application Package.

No.	Item	Submitted Earlier	Submitted with this Application	EFC Contacts (for more information)
	Technical Report			Management
6.	Environmental Review Documents and Findings[2]	☐	☐	Program Management
7.	M/WBE-EEO Program Documents[1,2]			
	a) Work Plan (Policy Statement, Officer, Goals)	☐	☐	Program Management
	b) Project Description	☐	☐	Program Management
8.	Financial Information			
	a) Current adopted capital and operating budgets	☐	☐	Finance
	b) For applicants other than counties, cities, towns and villages, financial statements (audited if available) for the three (3) most recent fiscal years.	☐	☐	Finance

PART II. The nature of the applicant's project will determine if the following items are required for a complete application. Please call EFC to discuss whether the following items apply. Check the appropriate boxes below.

No.	Item	Submitted Earlier	Submitted with this Application	Not Applicable	EFC Contacts (for more information)
9.	Municipal Certification for Technical Force Account[1]	☐	☐	☐	Program Management
10.	Agreements for Professional Services				
	a) Engineering Planning Services	☐	☐	☐	Program Management
	b) Engineering Design Services	☐	☐	☐	Program Management
	c) Engineering Construction Services	☐	☐	☐	Program Management
	d) Local Counsel	☐	☐	☐	Finance
	e) Bond Counsel	☐	☐	☐	Finance
	f) Financial	☐	☐	☐	Finance
	g) Other Specify	☐	☐	☐	Finance
11.	Plans and Specifications	☐	☐	☐	Program

[2] Guidance included in Application Package.

No.	Item	Submitted Earlier	Submitted with this Application	Not Applicable	EFC Contacts (for more information)
					Management
12.	Regulatory Agency's Approval Letter of Plans and Specifications	☐	☐	☐	Program Management
13.	Permits and Other Regulatory Approvals				
	a) DEC SPDES Permit	☐	☐	☐	Program Management
	b) _____	☐	☐	☐	Program Management
	c) _____	☐	☐	☐	Program Management
	d) _____	☐	☐	☐	Program Management
14.	Certification as to Title to Project Site[3]	☐	☐	☐	Legal
15.	Lease Agreement to Project Site	☐	☐	☐	Legal
16.	Municipal Service Agreements				
	a) Intermunicipal Agreements	☐	☐	☐	Legal
	b) Private Operating Agreements	☐	☐	☐	Legal
	c) Private Use Agreements	☐	☐	☐	Legal
17.	Executed Construction Contracts	☐	☐	☐	Program Management
18.	Notice to Proceed	☐	☐	☐	Program Management
19.	Certification of Project Completion[1]	☐	☐	☐	Program Management
20.	Prefinancing/Co-Funding Documentation	☐	☐	☐	Finance
21.	Other Financial Information				
	a) Applicant's Official Statement or other offering document for most recent debt issuance	☐	☐	☐	Finance

[3] Form included in Application Package.

No.	Item	Submitted Earlier	Submitted with this Application	Not Applicable	EFC Contacts (for more information)
	b) Applicant's Annual Financial Reports submitted to the Office of the State Comptroller for the three (3) most recent fiscal years, only if requested	☐	☐	☐	Finance
	c) Applicant's Audited Financial Reports for the three (3) most recent fiscal years	☐	☐	☐	Finance
	d) Submittal to Office of the State Comptroller for Improvement District formation, if submitted within the last two (2) years	☐	☐	☐	Finance
	e) Financial Reports for the System for the three (3) most recent fiscal years (if available)	☐	☐	☐	Finance
	f) NYS Office of the State Comptroller Approval of Debt Exclusion	☐	☐	☐	Finance
22.	For Refinancing of Existing Debt (please attach the following supporting documents as applicable):				
	a) Municipal Resolution Authorizing Debt (Original)	☐	☐	☐	Finance
	b) Bond Anticipation Note (BAN)	☐	☐	☐	Legal
	c) Opinion Of Bond Counsel	☐	☐	☐	Legal
	d) Official Statement	☐	☐	☐	Finance
	e) Refunding Resolution (Copy)	☐	☐	☐	Legal
	f) Proof of Publication of Estoppel Notice for Resolution	☐	☐	☐	Legal
	g) Cost Documentation (Refinancing)	☐	☐	☐	Finance
	h) Statement Specifying Net Interest Earned Or Anticipated During Construction	☐	☐	☐	Finance
23.	For Reimbursement of Interfund Borrowings:				
	a) Municipal Resolution Authorizing Interfund Borrowing (Copy)	☐	☐	☐	Legal
	b) Cost Documentation (Interfund	☐	☐	☐	Finance

EXHIBIT 7

Sample SEQR Resolutions

Sample Municipal SEQR Resolution for a Type II Action:

SEQR Resolution
Municipal Resolution #_____
Date:

WHEREAS, the (governing board) of the (municipality) has determined the necessity of a (project name); and

WHEREAS, said (project name) is subject to the requirements of Article 8 of the New York Environmental Conservation law and its implementing regulations, and the State Environmental Quality Review Act (SEQR), 6 NYCRR Part 617 and regulations enacted pursuant thereto; and

WHEREAS, the Board of Trustees has carefully considered the likely environmental impacts of the (Project Name);

THEREFORE BE IT RESOLVED by the (governing board) of the (municipality) that the (project name) is a Type II Action pursuant to SEQR and no further environmental review is required.

_____	_____
Name	Name
Mayor/Supervisor	Clerk
_____	_____
Date	Date

Sample Municipal SEQRA Resolution for Type 1 or Unlisted Action:

SEQR Resolution
Municipal Resolution #_____
Date:

WHEREAS, the (governing board) of the (municipality) is undertaking the (project title) (hereinafter referred to as "the Project") to (describe project purpose); and

WHEREAS, the project includes (describe project and project components); and

WHEREAS, the (governing board) is applying to funding agencies, including the (list potential funding agencies), for funding assistance; and

WHEREAS, the (governing board) (add item here if other permits are required that should be included in this resolution);

NOW, THEREFORE BE IT RESOLVED BY THE (GOVERNING BOARD) OF THE (MUNICIPALITY) AS FOLLOWS:

1. The (governing board) intends to proceed with the (project title) to (project purpose); and
2. The (governing board) intends to seek funding assistance from various funding agencies, including the (potential funding agencies); and
3. The (governing board) hereby determines that the project is a (Type 1 or Unlisted Action) pursuant to the State Environmental Quality Review Act (SEQR), Article 8 of the New York Environmental Conservation law and its implementing regulations, 6 NYCRR Part 617; and
4. The (governing board) hereby declares itself SEQR Lead Agency, provided that no involved agency objects within 30 days of the date of this resolution; and
5. The (governing board) hereby instructs the (Mayor or Supervisor), with the assistance of the consulting engineer, to prepare a full Environmental Assessment Form and notify involved agencies of the (governing board's) intent to serve as SEQR lead agency and to further initiate the coordinated review of the Project under the SEQR regulations
6. (INCLUDE THIS ITEM IF FEDERAL FUNDING IS INVOLVED): The (governing board) hereby instructs the (Mayor or Supervisor), with the assistance of the consulting engineer, to prepare an Environmental Report and such other documentation as needed to comply with the National Environmental Policy Act (NEPA); and
7. The (governing board) hereby authorizes the (Mayor or Supervisor) to sign environmental review and funding documents for the Project on their behalf.

By (unanimous/majority) vote of the (governing board) of the (municipality) at its meeting of _____, 20__.

_____	_____
Mayor or Supervisor	Clerk
_____	_____
Date	Date

EXHIBIT 8

New York Clean Water State Revolving Fund (CWSRF) Environmental Review Requirements

The most current version is available for download at www.nysefc.org. Before a municipality can submit an application for either a short-term or a long-term Clean Water State Revolving Fund (CWSRF) financing, it must complete an environmental review of its project. Compliance with the State Environmental Quality Review (SEQR) Act regulations, Title 6 of the New York Code of Rules and Regulations (NYCRR) Part 617, will satisfy the municipality's environmental review responsibilities for CWSRF-funded projects, with the exceptions discussed below. Copies of the Part 617 regulations are available upon request.

The environmental review is an integral part of the facility planning and design process, and must be coordinated with the permitting process for the project. This document provides an overview of the environmental review requirements applicable to CWSRF projects. It does not contain detailed guidance and therefore is not a substitute for understanding the underlying environmental review and permitting requirements.

I. RESOURCES

A flowchart showing the major steps an applicant must follow for projects to be financed by the CWSRF is attached to this guidance as a road map to guide you through the environmental review process. A list of Regional Permit Administrators is also attached.

II. PROCEDURES

The municipality should consider the following to successfully apply SEQR to its CWSRF project:

A. MAKE EARLY CONTACT WITH PROGRAM REPRESENTATIVES

The municipality should contact the DEC Regional Permit Administrator (RPA) as soon as project planning begins. The RPA is responsible for DEC's environmental review and permitting programs in the local regional office. The RPA can guide the municipality through project-specific environmental review requirements, identify any DEC permits which may be required, arrange meetings with DEC staff to coordinate interdisciplinary reviews, and facilitate sharing of documents and information.

The municipality should also contact EFC staff as soon as project planning begins to discuss CWSRF program requirements. An EFC staff person can also help you to coordinate with appropriate EFC staff and DEC regional staff. Early contact during planning is very important for environmental review, especially if co-funding by other agencies is anticipated.

B. CLASSIFY THE ACTION AND REVIEW THE CLASSIFICATION WITH THE RPA

IN ALMOST ALL CASES, the municipality will be the Lead Agency. As a result the municipality, as Lead Agency, must ascertain how SEQR applies to the project to be financed through the CWSRF. Although the RPA cannot approve the Lead Agency's classification of the action, discussion of the classification with the RPA at the initial contact can help avoid a problem with misclassification of the action.

Exception: For a project classified as a SEQR Type II action, the municipality must submit a letter and supporting information to the RPA, with a copy to EFC, to document why the project is a Type II action. If DEC concurs with this designation, this completes the municipality's environmental review process for a project classified as a Type II action. If DEC's analysis indicates the Type II classification may be inappropriate, the DEC may suggest the municipality reconsider its SEQR classification to avoid any unnecessary delays.

Note: A municipality located within the Adirondack Park must coordinate its environmental review with the Adirondack Park Agency. Although classified as Type II actions under SEQR, all projects located within the Adirondack Park are subject to Adirondack Park Agency environmental review requirements. A municipality must complete the Adirondack Park Agency review process, and submit documentation of this review to the DEC and EFC, prior to submitting a CWSRF financing application.

Exception: Although a CWSRF-financed project may be any of the three classes of actions (Type II, Type I or Unlisted), any project for which an environmental review is required (Type I or Unlisted) must be treated as a Type I action.

Therefore, for a CWSRF-financed project, the following procedures that apply under SEQR to a Type I action also apply to an Unlisted action:

- The Full Environmental Assessment Form must be completed;
- The Coordinated Review process must be undertaken. All correspondence should state that CWSRF financing is involved;
- Filing, publication and distribution of documents must follow the requirements applicable to a Type I action; and
- Any determination of no significant adverse environmental impact (referred to as a negative declaration) must be published in the Environmental Notice Bulletin (ENB).

C. A MUNICIPALITY SEEKING A CWSRF FINANCING MUST FURNISH ENVIRONMENTAL REVIEW DOCUMENTATION TO THE DEC AND TO EFC AT APPROPRIATE TIMES IN THE SEQR PROCESS.

The DEC is an involved agency on CWSRF projects due to its authority to approve technical aspects of and permits for a project. EFC is an involved agency on CWSRF projects due to its authority to approve the financing. The RPA is required to undertake an independent review of the documentation of the municipality's environmental review and certify to EFC that an environmental review that meets all regulatory requirements, including permitting, has been conducted. This certification completes the environmental review process, and is a prerequisite to Clean Water SRF financing.

III. FOR MORE INFORMATION

A. FOR ADDITIONAL INFORMATION AND ASSISTANCE WITH PROJECT ENVIRONMENTAL REVIEW AND PERMITS

Please contact the Regional Permit Administrator in your local Department of Environmental Conservation office (see attached map).

B. FOR GENERAL CWSRF INFORMATION

Please contact the EFC Program Management Division at (518) 402-7433 or call the EFC toll-free number at (800) 882-9721 (within New York State only).

Attachments

- Map with DEC Regions and RPA names
- Environmental Review Flowchart for CWSRF
- CWSRF ENB Environmental Review Notice Form

Other

- SEQR Cookbook (at www.dec.state.ny.us/ website/dcs/seqr/index.html)

EXHIBIT 9

SEQR Full Environmental Assessment Form (EAF)

For most current version, see www.dec.state.ny.us. The EAF form begins on the next page.

617.20
Appendix A
State Environmental Quality Review
FULL ENVIRONMENTAL ASSESSMENT FORM

Purpose: The full EAF is designed to help applicants and agencies determine, in an orderly manner, whether a project or action may be significant. The question of whether an action may be significant is not always easy to answer. Frequently, there are aspects of a project that are subjective or unmeasurable. It is also understood that those who determine significance may have little or no formal knowledge of the environment or may not be technically expert in environmental analysis. In addition, many who have knowledge in one particular area may not be aware of the broader concerns affecting the question of significance.

The full EAF is intended to provide a method whereby applicants and agencies can be assured that the determination process has been orderly, comprehensive in nature, yet flexible enough to allow introduction of information to fit a project or action.

Full EAF Components: The full EAF is comprised of three parts:

Part 1: Provides objective data and information about a given project and its site. By identifying basic project data, it assists a reviewer in the analysis that takes place in Parts 2 and 3.

Part 2: Focuses on identifying the range of possible impacts that may occur from a project or action. It provides guidance as to whether an impact is likely to be considered small to moderate or whether it is a potentially-large impact. The form also identifies whether an impact can be mitigated or reduced.

Part 3: If any impact in Part 2 is identified as potentially-large, then Part 3 is used to evaluate whether or not the impact is actually important.

DETERMINATION OF SIGNIFICANCE -- Type 1 and Unlisted Actions

Identify the Portions of EAF completed for this project: ☐ Part 1 ☐ Part 2 ☐ Part 3

Upon review of the information recorded on this EAF (Parts 1 and 2 and 3 if appropriate), and any other supporting information, and considering both the magnitude and importance of each impact, it is reasonably determined by the lead agency that:

☐ A. The project will not result in any large and important impact(s) and, therefore, is one which **will not** have a significant impact o ment, therefore **a negative declaration will be prepared.**

☐ B. Although the project could have a significant effect on the environment, there will not be a significant effect for this Unlisted A the mitigation measures described in PART 3 have been required, therefore **a CONDITIONED negative declaration will be prepared.***

☐ C. The project may result in one or more large and important impacts that may have a significant impact on the environment, there **declaration will be prepared**.

*A Conditioned Negative Declaration is only valid for Unlisted Actions

_____
Name of Action

_____
Name of Lead Agency

_____

_____ _____
Print or Type Name of Responsible Officer in Lead Agency Title of Responsible Officer

_____ _____
Signature of Responsible Officer in Lead Agency Signature of Preparer (if different from responsible officer)

_____
Date

PART 1--PROJECT INFORMATION
Prepared by Project Sponsor

NOTICE: This document is designed to assist in determining whether the action proposed may have a significant effect on the environment. Please complete the entire form, Parts A through E. Answers to these questions will be considered as part of the application for approval and may be subject to further verification and public review. Provide any additional information you believe will be needed to complete Parts 2 and 3.
It is expected that completion of the full EAF will be dependent on information currently available and will not involve new studies, research or investigation. If information requiring such additional work is unavailable, so indicate and specify each instance.

Name of Action		
Location of Action (include Street Address, Municipality and County)		
Name of Applicant/Sponsor	Business Telephone ( )	
Address		
City/PO	State	Zip Code
Name of Owner(if different)	Business Telephone ( )	
Address		
City/PO	State	Zip Code
Description of Action		

Please Complete Each Question--Indicate N.A. if not applicable

A. SITE DESCRIPTION

Physical setting of overall project, both developed and undeveloped areas.

1. Present land use: ☐Urban ☐Industrial ☐Commercial ☐Residential(suburban) ☐Rural(non-farm)
☐Forest ☐Agriculture ☐Other_____

2. Total acreage of project area: _____acres.

APPROXIMATE ACREAGE	PRESENTLY	AFTER COMPLETION
Meadow or Brushland (Non-agricultural)	_____acres	_____acres
Forested	_____acres	_____acres
Agricultural (Includes orchards, cropland, pasture, etc.)	_____acres	_____acres
Wetland(Freshwater or tidal as per Articles 24,25 of ECL)	_____acres	_____acres
Water Surface Area	_____acres	_____acres
Unvegetated (Rock, earth or fill)	_____acres	_____acres
Roads, buildings and other paved surfaces	_____acres	_____acres
Other (Indicate type)_____	_____acres	_____acres

3. What is predominant soil type(s) on project site?_____
a. Soil drainage: ☐Well drained_____% of site ☐Moderately well drained_____% of site
☐Poorly drained_____% of site
b. If any agricultural land is involved, how many acres of soil are classified within soil group 1 through 4 of the NYS Land Classification System? _____acres (See 1 NYCRR 370).

4. Are there bedrock outcroppings on project site? ☐Yes ☐No
a. What is depth to bedrock? _____(in feet)

5. Approximate percentage of proposed project site with slopes: ☐0-10%_____% ☐10-15%_____%
☐15% or greater_____%

6. Is project substantially contiguous to, or contain a building, site, or district, listed on the State or the National Registers of Historic Places?

☐Yes ☐No

7. Is project substantially contiguous to a site listed on the Register of National Natural Landmarks? ☐Yes☐No

8. What is the depth of the water table?_____(in feet)

9. Is site located over a primary, principal, or sole source aquifer? ☐Yes ☐No

10. Do hunting, fishing or shell fishing opportunities presently exist in the project area? ☐Yes ☐No

11. Does project site contain any species of plant or animal life that is identified as threatened or endangered?

☐Yes ☐No According to_____

Identify each species_____

12. Are there any unique or unusual land forms on the project site?(i.e., cliffs, dunes, other geological formations)

☐Yes ☐No Describe_____

_____

13. Is the project site presently used by the community or neighborhood as an open space or recreation area?

☐Yes ☐No If yes, explain_____

14. Does the present site include scenic views known to be important to the community?

☐Yes ☐No

15. Streams within or contiguous to project area:_____

a. Name of Stream and name of River to which it is tributary_____

16. Lakes, ponds, wetland areas within or contiguous to project area:

a. Name_____ b. Size (In acres)_____

17. Is the site served by existing public utilities? ☐Yes ☐No

a) If Yes, does sufficient capacity exist to allow connection? ☐Yes ☐No

b) If Yes, will improvements be necessary to allow connection? ☐Yes ☐No

18. Is the site located in an agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐Yes ☐No

19. Is the site located in or substantially contiguous to a Critical Environmental Area designated pursuant to Article 8 of the ECL, and 6 NYCRR 617? ☐Yes☐No

20. Has the site ever been used for the disposal of solid or hazardous wastes? ☐Yes ☐No

B. Project Description

1. Physical dimensions and scale of project (fill in dimensions as appropriate)

a. Total contiguous acreage owned or controlled by project sponsor _____acres.

b. Project acreage to be developed: _____acres initially;_____acres ultimately.

c. Project acreage to remain undeveloped _____acres.

d. Length of project, in miles: _____(if appropriate).

e. If the project is an expansion, indicate percent of expansion proposed _____%.

f. Number of off-street parking spaces existing _____; proposed_____.

g. Maximum vehicular trips generated per hour _____(upon completion of project).

h. If residential, Number and type of housing units:

	One Family	Two Family	Multiple Family	Condominium
Initially	_____	_____	_____	_____
Ultimately	_____	_____	_____	_____

i. Dimensions (in feet) of largest proposed structure _____height; _____width; _____length.

j. Linear feet of frontage along a public thoroughfare project will occupy is? _____ft.

2. How much natural material (i.e., rock, earth, etc.)will be removed from the site?_____tons/cubic yards.

3. Will distrubed areas be reclaimed? ☐Yes ☐No ☐N/A

a. If yes, for what intended purpose is the site being reclaimed?_____

b. Will topsoil be stockpiled for reclamation? ☐Yes ☐No

c. Will upper subsoil be stockpiled for reclamation? ☐Yes ☐No

4. How many acres of vegetation (trees, shrubs, ground covers) will be removed from site? _____acres.

5. Will any mature forest (over 100 years old) or other locally-important vegetation be removed by this project?

☐Yes ☐No

6. If single phase project: Anticipated period of construction _____months, (including demolition).

7. If multi-phased:

a. Total number of phases anticipated _____(number).

b. Anticipated date of commencement phase 1 _____month_____year,(including demolition).

c. Approximate completion date of final phase _____month_____year.

d. Is phase 1 functionally dependent on subsequent phases? ☐Yes ☐No

8. Will blasting occur during construction? ☐Yes ☐No

9. Number of jobs generated: during construction? _____; after project is complete?_____.

10. Number of jobs eliminated by this project? _____.

11. Will project require relocation of any projects or facilities? ☐Yes ☐No If yes, explain_____

_____

12. Is surface liquid waste disposal involved? ☐Yes ☐No

a. If yes, indicate type of waste (sewage, industrial, etc.) and amount _____

b. Name of water body into which effluent will be discharged _____

13. Is subsurface liquid waste disposal involved? ☐Yes ☐No Type_____

14. Will surface area of an existing water body increase or decrease by proposal? ☐Yes ☐No

Explain_____

15. Is project, or any portion of project, located in a 100 year flood plain? ☐Yes ☐No

16. Will the project generate solid waste? ☐Yes ☐No

a. If yes, what is the amount per month? _____tons.

b. If yes, will an existing solid waste facility be used? ☐Yes ☐No

c. If yes, give name _____; location_____

d. Will any wastes **not** go into a sewage disposal system or into a sanitary landfill? ☐Yes ☐No

e. If Yes, explain _____

17. Will the project involve the disposal of solid waste? ☐Yes ☐No

a. If yes, what is the anticipated rate of disposal? _____tons/month.

b. If yes, what is the anticipated site life? _____years.

18. Will project use herbicides or pesticides? ☐Yes ☐No

19. Will project routinely produce odors (more than one hour per day)? ☐Yes ☐No

20. Will project produce operating noise exceeding the local ambient noise levels? ☐Yes ☐No

21. Will project result in an increase in energy use? ☐Yes ☐No

If yes, indicate type(s)_____

22. If water supply is from wells, indicate pumping capacity _____gallons/minute.

23. Total anticipated water usage per day _____gallons/day.

24. Does project involve Local, State or Federal funding? ☐Yes ☐No

If yes, explain _____

25. Approvals Required:

			Type	Submittal Date
City, Town, Village Board	☐Yes	☐No	_____	_____
City, Town, Village Planning Board	☐Yes	☐No	_____	_____
City, Town Zoning Board	☐Yes	☐No	_____	_____
City, County Health Department	☐Yes	☐No	_____	_____
Other Local Agencies	☐Yes	☐No	_____	_____
Other Regional Agencies	☐Yes	☐No	_____	_____
State Agencies	☐Yes	☐No	_____	_____
Federal Agencies	☐Yes	☐No	_____	_____

C. ZONING and PLANNING INFORMATION

1. Does proposed action involve a planning or zoning decision? ☐Yes ☐No

If Yes, indicate decision required:

☐zoning amendment ☐zoning variance ☐special use permit ☐subdivision ☐site plan

☐new/revision of master plan ☐resource management plan ☐other_____

2. What is the zoning classification(s) of the site?_____

3. What is the maximum potential development of the site if developed as permitted by the present zoning?

_____

4. What is the proposed zoning of the site?_____

5. What is the maximum potential development of the site if developed as permitted by the proposed zoning?

_____

6. Is the proposed action consistent with the recommended uses in adopted local land use plans?☐Yes☐No

7. What are the predominant land use(s) and zoning classifications within a 1/4 mile radius of proposed action?

_____

8. Is the proposed action compatible with adjoining/surrounding land uses within a 1/4 mile?☐Yes☐No

9. If the proposed action is the subdivision of land, how many lots are proposed?_____

a. What is the minimum lot size proposed?_____

10. Will proposed action require any authorization(s) for the formation of sewer or water districts?☐Yes☐No

11. Will the proposed action create a demand for any community provided services (recreation, education, police, fire protection)? ☐Yes ☐No

a. If yes, is existing capacity sufficient to handle projected demand? ☐Yes ☐No

12. Will the proposed action result in the generation of traffic significantly above present levels?☐Yes☐No

a. If yes, is the existing road network adequate to handle the additional traffic? ☐Yes ☐No

D. Informational Details

Attach any additional information as may be needed to clarify your project. If there are, or may be, any adverse impacts associated with your proposal, please discuss such impacts and the measures which you propose to mitigate or avoid them.

E. Verification

I certify that the information provided above is true to the best of my knowledge.

Applicant/Sponsor Name _____Date_____

Signature_____Title_____

If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment.

Part 2 - PROJECT IMPACTS AND THEIR MAGNITUDE

Responsibility of Lead Agency

General Information (Read Carefully)

- In completing the form, the reviewer should be guided by the question: Have my responses and determinations been **reasonable?** The reviewer is not expected to be an expert environmental analyst.
- The **Examples** provided are to assist the reviewer by showing types of impacts and, wherever possible, the threshold of magnitude that would trigger a response in column 2. The examples are generally applicable throughout the State and for most situations. But, for any specific project or site other examples and/or lower thresholds may be appropriate for a Potential Large Impact response, thus requiring evaluation in Part 3.
- The impacts of each project, on each site, in each locality, will vary. Therefore, the examples are illustrative and have been offered as guidance. They do not constitute an exhaustive list of impacts and thresholds to answer each question.
- The number of examples per question does not indicate the importance of each question.
- In identifying impacts, consider long term, short term and cumulative effects.

Instructions (Read carefully)
a. Answer each of the 20 questions in PART 2. Answer **Yes** if there will be **any** impact.
b. **Maybe** answers should be considered as **Yes** answers.
c. If answering **Yes** to a question then check the appropriate box(column 1 or 2)to indicate the potential size of the impact. If impact threshold equals or exceeds any example provided, check column 2. If impact will occur, but threshold is lower than example, check column 1.
d. Identifying that an Impact will be potentially large (column 2) does not mean that it is also necessarily **significant**. Any large impact must be evaluated in PART 3 to determine significance. Identifying an impact in column 2 simply asks that it be looked at further.
e. If reviewer has doubt about size of the impact, then consider the impact as potentially large and proceed to PART 3.
f. If a potentially large impact checked in column 2 can be mitigated by change(s) in the project to a small to moderate impact, also check the **Yes** box in column 3. A **No** response indicates that such a reduction is not possible. This must be explained in Part 3.

IMPACT ON LAND

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact be Mitigated by Project Change
1. Will the proposed action result in a physical change to the project site? ☐Yes ☐No **Examples** that would apply to column 2 • Any construction on slopes of 15% or greater,(15 foot rise per 100 foot of length), or where the general slopes in the project area exceed 10%.	☐	☐	☐Yes ☐No
• Construction on land where the depth to the water table is less than 3 feet.	☐	☐	☐Yes ☐No
• Construction of paved parking area for 1,000 or more vehicles.	☐	☐	☐Yes ☐No
• Construction on land where bedrock is exposed or generally within 3 feet of existing ground surface.	☐	☐	☐Yes ☐No
• Construction that will continue for more than 1 year or involve more than one phase or stage.	☐	☐	☐Yes ☐No
• Excavation for mining purposes that would remove more than 1,000 tons of natural material (i.e., rock or soil)per year.	☐	☐	☐Yes ☐No
• Construction or expansion of a sanitary landfill.	☐	☐	☐Yes ☐No
• Construction in a designated floodway.	☐	☐	☐Yes ☐No
• Other impacts:_____ _____	☐ ☐ ☐	☐ ☐ ☐	☐Yes ☐No ☐Yes ☐No ☐Yes ☐No
2. Will there be an effect to any unique or unusual land forms found on the site?(i.e., cliffs, dunes, geological formations, etc.) ☐Yes ☐No • Specific land forms:_____ _____	☐	☐	☐Yes ☐No

IMPACT ON WATER

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact be Mitigated By Project Change
3. Will proposed action affect any water body designated as protected? (Under Articles 15, 24, 25 of the Environmental Conservation Law, ECL) ☐Yes ☐No			
Examples that would apply to column 2	☐	☐	☐Yes ☐No
• Developable area of site contains a protected water body.	☐	☐	☐Yes ☐No
• Dredging more than 100 cubic yards of material from channel of a protected stream.	☐	☐	☐Yes ☐No
• Extension of utility distribution facilities through a protected water body.	☐	☐	☐Yes ☐No
• Construction in a designated freshwater or tidal wetland.	☐	☐	☐Yes ☐No
• Other impacts:_____ _____			
4. Will proposed action affect any non-protected existing or new body of water? ☐Yes☐No			
Examples that would apply to column 2	☐	☐	☐Yes ☐No
• A 10% increase or decrease in the surface area of any body of water or more than a 10 acre increase or decrease.	☐	☐	☐Yes ☐No
• Construction of a body of water that exceeds 10 acres of surface area.	☐	☐	☐Yes ☐No
• Other impacts:_____ _____			
5. Will Proposed Action affect surface or groundwater quality or quantity? ☐Yes ☐No			
Examples that would apply to column 2	☐	☐	☐Yes ☐No
• Proposed Action will require a discharge permit.	☐	☐	☐Yes ☐No
• Proposed Action requires use of a source of water that does not have approval to serve proposed (project) action.	☐	☐	☐Yes ☐No
• Proposed Action requires water supply from wells with greater than 45 gallons per minute pumping capacity.	☐	☐	☐Yes ☐No
• Construction or operation causing any contamination of a water supply system.	☐	☐	☐Yes ☐No
• Proposed Action will adversely affect groundwater.	☐	☐	☐Yes ☐No
• Liquid effluent will be conveyed off the site to facilities which presently do not exist or have inadequate capacity.	☐	☐	☐Yes ☐No
• Proposed Action would use water in excess of 20,000 gallons per day.	☐	☐	☐Yes ☐No
• Proposed Action will likely cause siltation or other discharge into an existing body of water to the extent that there will be an obvious visual contrast to natural conditions.	☐	☐	☐Yes ☐No
• Proposed Action will require the storage of petroleum or chemical products greater than 1,100 gallons.	☐	☐	☐Yes ☐No
• Proposed Action will allow residential uses in areas without water and/or sewer services.	☐	☐	☐Yes ☐No
• Proposed Action locates commercial and/or industrial uses which may require new or expansion of existing waste treatment and/or storage facilities.	☐	☐	☐Yes ☐No
• Other impacts:_____ _____			
6. Will proposed action alter drainage flow or patterns, or surface water runoff? ☐Yes ☐No			
Examples that would apply to column 2	☐	☐	☐Yes ☐No
• Proposed Action would change flood water flows.			

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated By Project Change
• Proposed Action may cause substantial erosion.	☐	☐	☐Yes ☐No
• Proposed Action is incompatible with existing drainage patterns.	☐	☐	☐Yes ☐No
• Proposed Action will allow development in a designated floodway.	☐	☐	☐Yes ☐No
• Other impacts:_____ _____	☐	☐	☐Yes ☐No
IMPACT ON AIR			
7. Will proposed action affect air quality? ☐Yes ☐No			
Examples that would apply to column 2			
• Proposed Action will induce 1,000 or more vehicle trips in any given hour.	☐	☐	☐Yes ☐No
• Proposed Action will result in the incineration of more than 1 ton of refuse per hour.			
• Emission rate of total contaminants will exceed 5 lbs. per hour or a heat source producing more than 10 million BTU's per hour.	☐	☐	☐Yes ☐No
• Proposed action will allow an increase in the amount of land committed to industrial use.	☐	☐	☐Yes ☐No
• Proposed Action will allow an increase in the density of industrial development within existing industrial areas.	☐	☐	☐Yes ☐No
• Other impacts:_____ _____	☐	☐	☐Yes ☐No
IMPACT ON PLANTS AND ANIMALS			
8. Will Proposed Action affect any threatened or endangered species? ☐Yes ☐No			
Examples that would apply to column 2			
• Reduction of one or more species listed on the New York or Federal list, using the site, over or near site, or found on the site.	☐	☐	☐Yes ☐No
• Removal of any portion of a critical or significant wildlife habitat.	☐	☐	☐Yes ☐No
• Application of pesticide or herbicide more than twice a year, other than for agricultural purposes.	☐	☐	☐Yes ☐No
• Other impacts:_____ _____	☐	☐	☐Yes ☐No
9. Will Proposed Action substantially affect non-threatened or non-endangered species? ☐Yes ☐No			
Examples that would apply to column 2			
• Proposed Action would substantially interfere with any resident or migratory fish, shellfish or wildlife species.	☐	☐	☐Yes ☐No
• Proposed Action requires the removal of more than 10 acres of mature forest (over 100 years of age) or other locally important vegetation.	☐	☐	☐Yes ☐No
IMPACT ON AGRICULTURAL LAND RESOURCES			
10. Will the Proposed Action affect agricultural land resources? ☐Yes ☐No			
Examples that would apply to column 2			
• The proposed action would sever, cross or limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc.)	☐	☐	☐Yes ☐No

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated By Project Change
• Construction activity would excavate or compact the soil profile of agricultural land.	☐	☐	☐Yes ☐No
• The proposed action would irreversibly convert more than 10 acres of agricultural land or if located in an Agricultural District, more than 2.5 acres of agricultural land.	☐	☐	☐Yes ☐No
• The proposed action would disrupt or prevent installation of agricultural land management systems (e.g.,subsurface drain lines, outlet ditches, strip cropping); or create a need for such measures (e.g., cause a farm field to drain poorly due to increased runoff).	☐	☐	☐Yes ☐No
• Other impacts:_____	☐	☐	☐Yes ☐No

IMPACT ON AESTHETIC RESOURCES

11. Will proposed action affect aesthetic resources? ☐Yes ☐No
(if necessary, use the Visual EAF Addendum in Section 617.20, Appendix B.)

Examples that would apply to column 2			
• Proposed land uses, or project components obviously different from, or in sharp contrast to current surrounding land use patterns, whether man-made or natural.	☐	☐	☐Yes ☐No
• Proposed land uses, or project components visible to users of aesthetic resources which will eliminate, or significantly reduce, their enjoyment of the aesthetic qualities of that resource.	☐	☐	☐Yes ☐No
• Project components that will result in the elimination, or significant screening, of scenic views known to be important to the area.	☐	☐	☐Yes ☐No
• Other impacts:_____	☐	☐	☐Yes ☐No

IMPACT ON HISTORIC AND ARCHAEOLOGICAL RESOURCES

12. Will Proposed Action impact any site or structure of historic, pre-historic or paleontological importance?☐Yes☐No

Examples that would apply to column 2			
• Proposed Action occurring wholly or partially within or substantially contiguous to any facility or site listed on the State or National Register of historic places.	☐	☐	☐Yes ☐No
• Any impact to an archaeological site or fossil bed located within the project site.	☐	☐	☐Yes ☐No
• Proposed Action will occur in an area designated as sensitive for archaeological sites on the NYS Site Inventory.	☐	☐	☐Yes ☐No
• Other impacts;_____	☐	☐	☐Yes ☐No

IMPACT ON OPEN SPACE AND RECREATION

13. Will proposed Action affect the quantity or quality of existing or future open spaces or recreational opportunities? ☐Yes ☐N0

Examples that would apply to column 2			
• The permanent foreclosure of a future recreational opportunity.	☐	☐	☐Yes ☐No
• A major reduction of an open space important to the community.	☐	☐	☐Yes ☐No
• Other impacts:_____	☐	☐	☐Yes ☐No

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated By Project Change
IMPACT ON CRITICAL ENVIRONMENTAL AREAS			
14. Will Proposed Action impact the exceptional or unique characteristics of a critical environmental area (CEA) established pursuant to subdivision 6 NYCRR 617.14(g)? ☐Yes ☐N0 List the environmental characteristics that caused the designation of the CEA. _____ _____ _____ _____ _____			
Examples that would apply to column 2			
• Proposed Action to locate within the CEA?	☐	☐	☐Yes ☐No
• Proposed Action will result in a reduction in the quantity of the resource?	☐	☐	☐Yes ☐No
• Proposed Action will result in a reduction in the quality of the resource?	☐	☐	☐Yes ☐No
• Proposed Action will impact the use, function or enjoyment of the resource?	☐	☐	☐Yes ☐No
• Other impacts:_____	☐	☐	☐Yes ☐No
_____			
IMPACT ON TRANSPORTATION			
15. Will there be an effect to existing transportation systems? ☐Yes ☐No			
Examples that would apply to column 2			
• Alteration of present patterns of movement of people and/or goods.	☐	☐	☐Yes ☐No
• Proposed Action will result in major traffic problems.	☐	☐	☐Yes ☐No
• Other impacts:_____	☐	☐	☐Yes ☐No
_____			
IMPACT ON ENERGY			
16. Will proposed action affect the community's sources of fuel or energy supply? ☐Yes ☐No			
Examples that would apply to column 2			
• Proposed Action will cause a greater than 5% increase in the use of any form of energy in the municipality.	☐	☐	☐Yes ☐No
• Proposed Action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two family residences or to serve a major commercial or industrial use.	☐	☐	☐Yes ☐No
• Other impacts:_____	☐	☐	☐Yes ☐No
_____			

NOISE AND ODOR IMPACTS

	1 Small To Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated By Project Change
17. Will there be objectionable odors, noise, or vibration as a result of the Proposed Action? ☐Yes ☐No			
Examples that would apply to column 2			
• Blasting within 1,500 feet of a hospital, school or other sensitive facility.	☐	☐	☐Yes ☐No
• Odors will occur routinely (more than one hour per day).	☐	☐	☐Yes ☐No
• Proposed Action will produce operating noise exceeding the local ambient noise levels for noise outside of structures.	☐	☐	☐Yes ☐N0
• Proposed Action will remove natural barriers that would act as a noise screen.	☐	☐	☐Yes ☐No
• Other impacts:_____	☐	☐	☐Yes ☐No

_____

IMPACT ON PUBLIC HEALTH

18. Will Proposed Action affect public health and safety? ☐Yes ☐No			
Examples that would apply to column 2			
• Proposed Action may cause a risk of explosion or release of hazardous substances (i.e. oil, pesticides, chemicals, radiation, etc.) in the event of accident or upset conditions, or there may be a cronic low level discharge or emission.	☐	☐	☐Yes ☐No
• Proposed Action may result in the burial of "hazardous wastes" in any form (i.e. toxic, poisonous, highly reactive, radioactive, irritating, infectious, etc.).	☐	☐	☐Yes ☐No
• Storage facilities for one million or more gallons of liquified natural gas or other flammable liquids.	☐	☐	☐Yes ☐No
• Proposed action may result in the excavation or other disturbance within 2,000 feet of a site used for the disposal of solid or hazardous waste.	☐	☐	☐Yes ☐No
• Other Impacts:_____	☐	☐	☐Yes ☐No

_____

IMPACT ON GROWTH AND CHARACTER OF COMMUNITY OR NEIGHBORHOOD

19. Will proposed action affect the character of the existing community? ☐Yes☐No			
Examples that would apply to column 2			
• The permanent population of the city, town or village in which the project is located is likely to grow by more than 5%.	☐	☐	☐Yes ☐No
• The municipal budget for capital expenditures or operating services will increase by more than 5% per year as a result of this project.	☐	☐	☐Yes ☐No
• Proposed Action will conflict with officially adopted plans or goals.	☐	☐	☐Yes ☐No
• Proposed Action will cause a change in the density of land use.	☐	☐	☐Yes ☐No
• Proposed Action will replace or eliminate existing facilities, structures or areas of historic importance to the community.	☐	☐	☐Yes ☐No
• Development will create a demand for additional community services (e.g. schools, police and fire, etc.).	☐	☐	☐Yes ☐No
• Proposed Action will set an important precedent for future projects.	☐	☐	☐Yes ☐No
• Proposed Action will create or eliminate employment.	☐	☐	☐Yes ☐No
• Other impacts:_____			☐Yes ☐No

_____

20. Is there, or is there likely to be, public controversy related to potential adverse environmental impacts? ☐Yes ☐No

If any action in Part 2 is identified as a potential large impact, or if you cannot determine the magnitude of impact, proceed to Part 3

Part 3 - EVALUATION OF THE IMPORTANCE OF IMPACTS

Responsibility of Lead Agency

Part 3 must be prepared if one or more impact(s) is considered to be potentially large, even if the impact(s) may be mitigated.

Instructions
Discuss the following for each impact identified in column 2 of Part 2:
1. Briefly describe the impact.
2. Describe (if applicable) how the impact could be mitigated or reduced to a small to moderate impact by project change(s).
3. Based on the information available, decide if it is reasonable to conclude that this impact is **important**.

To answer the question of importance, consider:
- The probability of the impact occurring
- The duration of the impact
- Its irreversibility, including permanently lost resources of value
- Whether the impact can or will be controlled
- The regional consequence of the impact
- Its potential divergence from local needs and goals
- Whether known objections to the project relate to this impact.

(Continue on attachments)

EXHIBIT 10

Sample Lead Agency Information Forms

(developed by the New York State Environmental Facilities Corporation)

Date

(addressee)

Re: (**Project Name**)
(**Municipality**), (**County**)
Establishment of lead agency pursuant to SEQR

Dear Involved and Interested Agencies (see Attached List):

The (municipality), in (County), plans to construct and operate a (insert project description) to serve the residents in the (insert location). Pursuant to state regulations 6 NYCRR Part 617 which implement the State Environmental Quality Review Act (SEQR), this is to notify you that the (municipality) intends to act as Lead Agency in conducting the environmental impact review.

Enclosed are a map locating our project and a completed Part 1 of the SEQR Full Environmental Assessment Form which provides a description of the proposed project and the project area. The (municipality) considers this project to be a SEQR (Type 1 or Unlisted, treated as Type I) action and will conduct a coordinated review.

Involved and interested agencies have been identified to include:
(**modify list as needed—see potential list for assistance**)

New York State Department of Environmental Conservation
New York State Environmental Facilities Corporation
New York State Department of Health
New York State Department of Transportation
New York State Office of Parks, Recreation and Historic Preservation

County Highway Department
County Health Department

United States Department of Agriculture - New York Rural Development
United States Army Corps of Engineers
United States Department of the Interior, Fish and Wildlife Service

Please use the enclosed form to indicate your interest and concerns regarding your agency's role as lead agency and the potential environmental impacts of our proposed project. If you do not respond by ***(insert date which provides recipient 30 days to respond)***, the (**insert municipality**) will assume that your agency has no interest in the choice of lead agency and no comments on the project. It is understood that your agency may have already provided comments on the project.

If you have any questions, please contact (**contact person)** at (**phone #)**.
Sincerely,

Sample Lead Agency Notice:
(developed by New York State Environmental Facilities Corporation)

ESTABLISHMENT OF LEAD AGENCY

PURSUANT TO THE NEW YORK STATE ENVIRONMENTAL QUALITY REVIEW ACT

Proposed Lead Agency: (Municipality) located in (County)

Proposed Action/Project: (Project Name)

Project Sponsor: (Municipality)

On behalf of _____ (agency name), I acknowledge receipt of the (municipality)'s notice of intent to be lead agency with respect to the project noted above, issued pursuant to the State Environmental Quality Review Act. I hereby:

1. ( ) endorse the (municipality) acting as lead agency

OR

( ) do not endorse the (municipality) acting as lead agency and desire _____ serve as lead agency instead

OR

( ) take no position on who acts as lead agency

2. ( ) provide comments on the proposed project (as an attachment)

OR

( ) have no comments on the proposed project

Agency Name (please print) _____

Signature _____

Date _____

Please return this form by (date) to:

Name
Title
Address

Sample List of Potential Involved/Interested Agencies.

Involved=state and local agencies
Interested=federal, other agencies

Include contacts, title and addresses in actual list.

- USDOI Fish and Wildlife
- NYSDEC Fish and Wildlife
- NYSDEC Permit Administrator
- NYSDEC Regional Office
- NYS Ag & Markets, if in ag district, or impacting ag land
- NRCS for soils, ag district
- County Planning Agency (for regional planning, ag district, etc.)
- NYSDOH
- County Health Dept.
- NYSDOT
- County Highway Dept.
- Town Highway Dept., if applicable
- NYSOPRHP
- US Army Corps of Engineers (ACOE)
- NYC Department of Environmental Protection (NYCDEP)
- Local Floodplain Administrator
- Catskill Watershed Corp.
- Appalachian Regional Commission (NYSDOS)
- NYSEFC
- USDA RD
- Other funding agencies
- Other
  - Regional Planning Boards
  - River Basin Commissions
  - Local, regional or state environmental organizations

EXHIBIT 11

Sample Endangered Species Letters

Sample USDOI Fish and Wildlife Service letter seeking comments relative to the presence of threatened or endangered species in the project area:

Date

United States Dept. of the Interior
Fish and Wildlife Service
3817 Luker Rd.
Cortland, NY 13045

RE: Project name
Municipality
County, New York

Gentlemen:

The (Municipality) is in the process of performing an environmental review pursuant to the State Environmental Quality Review Act (SEQR) in order that it may assess the environmental impacts of the (Project Name). The project will (short description). Enclosed is a topographic map that shows the project area along with a project description.

We request a list of any Federally-listed or proposed threatened or endangered species and designated or proposed critical habitat that may be present in the project area. In addition, please advise us of any present concerns you may have related to possible effects of the project listed above on such species or critical habitat, as well as any other wildlife concerns.

We would appreciate a response within 30 days. If you need any further information or wish to discuss the project, please contact (contact name, company, and phone no.).

Sincerely,

Sample NYSDEC Fish, Wildlife and Marine Resources letter seeking comments relative to the presence of threatened or endangered species in the project area:

Date

NYS Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
625 Broadway, 5th Floor
Albany, NY 12233-4757

RE: Project Name
Municipality
County

Gentlemen:

The (municipality) is in the process of performing an environmental review pursuant to the State Environmental Quality Review Act (SEQR) in order that it may assess the environmental impacts of the (Project Name) in the (Municipality). The project will (short project description). Enclosed is a topographic map that shows the project area along with a project description.

We request a list of any Federally-listed or proposed threatened or endangered species and designated or proposed critical habitat that may be present in the project area. In addition, please advise us of any present concerns you may have related to possible effects of the project listed above on such species or critical habitat, as well as any other wildlife concerns.

We would appreciate a response within 30 days. If you need any further information or wish to discuss the project, please contact (contact name, company and phone no.).

Sincerely,

EXHIBIT 12

Sample Environmental Report Format for Rural Development (fulfills NEPA requirements)

Environmental Report:

1.0 Purpose and Need of Project

- 1.1 Project Description (Proposed Action or Proposed Project)
- 1.2 Purpose and Need of Project

2.0 Alternatives to the Project Action

3.0 Affected Environment/Environmental Consequences

- 3.1 Land Use/Important Farmland/Formally Classified Lands
  - 3.1.1 Affected Environment
  - 3.1.2 Environmental Consequences
  - 3.1.3 Mitigation
- 3.2. Floodplains
  - 3.2.1 Affected Environment
  - 3.2.2 Environmental Consequences
  - 3.2.3 Mitigation
- 3.3 Wetlands
  - 3.3.1 Affected Environment
  - 3.3.2 Environmental Consequences
  - 3.3.3 Mitigation
- 3.4 Cultural Resources
  - 3.4.1 Affected Environment
  - 3.4.2 Environmental Consequences
  - 3.4.3 Mitigation
- 3.5 Biological Resources
  - 3.5.1 Affected Environment
  - 3.5.2 Environmental Consequences
  - 3.5.3 Mitigation
- 3.6 Water Quality Issues
  - 3.6.1 Affected Environment
  - 3.6.2 Environmental Consequences
  - 3.6.3 Mitigation
- 3.7 Coastal Resources
  - 3.7.1 Affected Environment
  - 3.7.2 Environmental Consequences
  - 3.7.3 Mitigation
- 3.8 Socio-Economic/Environmental Justice Issues
  - 3.8.1 Affected Environment
  - 3.8.2 Environmental Consequences

- 3.8.3 Mitigation
- 3.9 Miscellaneous Issues
  - 3.9.1 Affected Environment
  - 3.9.2 Environmental Consequences
  - 3.9.3 Mitigation

4.0 Summary of Mitigation

5.0 Correspondence

- 5.1 Agricultural District correspondence.
- 5.2 Floodplain Administrator Letter
- 5.3 NRCS and NYSDEC letter relative to the impacts on wetlands.
- 5.4 NYSOPRHP letter relative to the impacts on cultural and historic resources.
- 5.5 USDOI and NYSDEC letters relative to threatened and endangered species.
- 5.6 SEQR Status and Negative Declaration
  - 5.6.1 SEQR resolution
  - 5.6.2 Long form Environmental Assessment Form, Part 1 with coordinated review of lead agency forms
  - 5.6.3 Coordinated Review of Lead Agency responses
  - 5.6.4 NYSOPRHP Comments
  - 5.6.5 Negative Declaration and Environmental Notice Bulletin publication

6.0 Exhibits/Maps

- 6.1 Overall Project Map
- 6.2. Ag District Map
- 6.3 NYS Freshwater Wetlands Map
- 6.4 National Wetlands Inventory Map
- 6.5 Flood Insurance Rate Map
- 6.6 Soil Map
- 6.7 NYSDOT Topographic Quad Map
- 6.8 Transaction Screen Questionnaire

EXHIBIT 13

USDA Rural Development Application Items

After the Preliminary Eligibility Determination is made, the regional RD office issues a letter to the municipality inviting an application and listing the current application items required. The following lists items required for a typical RD application. Two complete application packages bound in a 3-hole binder should be sent to the regional Rural Development office. Contact the regional Rural Development office to obtain an application list specific to the project.

1. An Application for Federal Assistance, completed on the enclosed form SF-424.

2. A copy of the Public Notice of Intent to file an application (see enclosed sample) with our agency, plus an "Affidavit of Publication" from the newspaper. Please note: within 60 days of filing an application with our Agency, the applicant must public a Notice of Intent to apply for a RUS loan and/or grant. The Notice of Intent must be published in a newspaper of general circulation in the proposed area to be served.

3. Evidence of Public Support such a public meetings, public hearing, referendums, resident discussions with the municipal board, petitions, as applicable.

4. A Certification of Non-Lobbying Activities, completed on the enclosed Form G. The form should be signed and dated by the Mayor/Supervisor.

5. A statement identifying and reporting Rural Development Assistance to Rural Development Employees, Relatives and Associates as per attached Form F. The statement should be signed and dated by the Mayor/Supervisor.

6. If the environmental assessment classification is determined by RD to be a categorically excluded proposal requiring an Environmental Report, the municipality is to provide a report completed in accordance with RUS Bulletin 1794, "Guide for Preparing the Environmental Report for Water and Waste Projects" and should include the following:
(**see** **http://www.usda.gov/rus/water/ees/index.htm** for bulletin)

a) A site location map, showing the location of all project construction.

b) A copy of the Regional Intergovernmental Clearinghouse comments. Attached find instruction and a list of the clearinghouses.

c) A USGS Topographic Map, showing the location of the proposed project.

d) FEMA Form 81-93. If a building is involved complete Section I, item 2 and Section II, items A, B, C, and D as per the enclosed instructions.

e) The FEMA Flood Insurance Rate Map, showing the location of all project construction.

f) A copy of the Federal Freshwater Wetlands Map(s) showing the location of all project construction.

g) A copy of the New York State Freshwater Wetlands Map(s) showing the location of all project construction.

h) A copy of the Archeological Sensitivity Area Map, if applicable. If not, please indicate same.

i) Copy of contract letter to archeologist contracted to conduce Cultural Resources Survey (if applicable).

j) A copy of the Historical and Archaeological comments provided by the New York State Office of Parks and Recreation.

k) Two copies of Archeological Survey once completed.

l) A copy of the Agricultural District Map, if applicable. If not, please indicate same.

m) A copy of the Soil Survey Map for buildings only.

n) A copy of the comments from the U.S. Department of the Interior, Fish and Wildlife Service, in regards to the presence of endangered or threatened species within the project area. The address and telephone number are: 3817 Luker Road, Cortland, NY 13045 (607) 753-9334.

o) A copy of the comments from the NYS Department of Environmental Conservation, Division of Fish, Wildlife & Marine Resources, New York Natural Heritage Program, in regard to the presence of endangered species within the project area. The address and telephone number are: 625 Broadway, Albany, NY 12233-4757 (518) 402-8935.

p) A copy of the comments from Ag & Markets, if applicable. **If not, please indicate same.**

q) New York State Environmental Quality Review (SEQR) status, along with a copy of the Resolution adopting same.

r) A copy of the comments from the United States Forest Service regarding Prime Forest Land, if applicable. If not, please indicate same.

s) Indicate if any project construction will take place outside Village/City limits, if not, please indicate same. If so, please provide your local USDA, Natural Resource Conservation Service Office with location maps, a brief description of proposed construction and any additional information that may be needed. Then ask them to provide a statement indicating whether the project will have any negative or major impact on important farmland (prime, unique farmland of statewide or local importance).

t) Farmland Conversion Impact Rating, if applicable. If not, please indicate same.

u) A copy of the Department of Army Corp of Engineers comments regarding wetlands, stream crossings and permits, if applicable. If not, please indicate same.

v) A copy of the Environmental Protection Agency comments regarding Sole Source Aquifer and/or Watershed information, if applicable. If not, please indicate same.

w) NYS Department of Environmental Conservation comments regarding State wetlands and/or applicable permits.

x) Coastal Zone Area information, if applicable. If not, please indicate same.

y) A Water Conservation Plan, if applicable. If not, please indicate same.

z) A Comparative Alternative Table, including Engineering Design Alternatives, Siting Locations and System Capabilities.

aa) A Growth Projection Table.

bb) FAA and DOT Comments regarding Transportation issues, if applicable. If not, please indicate same.

cc) Comments from Local/Regional/State Planning Agencies regarding noise issues, if applicable. If not, please indicate same.

dd) State Agency Comments regarding Air Quality issues, if applicable. If not, please indicate same.

ee) Advise of mitigation Issues, if applicable. If not, please indicate same.

7. An Operating Budget completed on the enclosed form RD 442-7 (Complete only Column 5).

8. Other agency funding status, if applicable.

9. An Equal Opportunity Agreement completed on the enclosed form RD 400-1.

10. An Assurance Agreement completed on the enclosed form RD 400-4.

11. A copy of the latest audit report completed by the New York State Department of Audit and Control.

12. A Legal Service Agreement, completed on the enclosed Form RD 1780-7.

13. A copy of the agreement with Bond Counsel.

14. A copy of the agreement with your Fiscal Advisor, if applicable.

15. Two (2) copies of the Bond Resolution.

16. Tow (2) copies of the Referendum Results. If the Bond Resolution was adopted subject to a Permissive Referendum, we will need a certification from the _____ Clerk stating that the Resolution was adopted subject to a permissive referendum and that the period of time has elapsed for the submission and filing of a petition for such referendum without a valid petition having been submitted and filed.

17. Two (2) copies of the Estoppel Notice plus an "Affidavit of Publication" from the newspaper.

18. A copy of the _____ District Formation documents, if applicable. The formation documents should include the following:

    a) A copy of the Resolution Planning to establish the District.

    b) A copy of the "notice" to NYS Dept. of Audit & Control that the Comptroller's approval is not needed, or the NYS Comptroller's authorization to establish the District.

    c) A copy of the final Resolution establishing the District.

19. Two (2) copies of the Estimated Project Budget, completed on the enclosed Form E "Project Budget/Cost Certification". Complete only Column 1.

20. A statement from the municipality advising if any major civil rights is likely to result when the proposed project is implemented. If so, give specifics.

21. An original and three (3) copies of the Agreement for Engineering Services (all with original signatures on each), completed on the enclosed form RD 1942-19 or Standard Form of Agreement between Owner and Engineer for Professional Services funding agency edition number EJCDC No. 1910-1-FA, including Exhibits A through I (check with RD staff for which edition to use). The EJCDC

documents are available from the National Society of Professional Engineers at http://www.nspe.org or 1800-417-0348.

Please Note:

A. Applicants shall publicly announce all requirements for engineering and architectural services, and negotiate contracts for engineering and architectural services on the basis of demonstrated competence and qualifications for the type of professional services required and at a fair and reasonable price.

B. Selection of an Engineer or Architect for project design services is to be done by requesting "Qualification-Based Proposals."

C. Audits will be required as per the attached Audit Guidance for Borrowers of Community Programs.

D. Loan approval will depend on availability of funds and meeting all procedural requirements.

E. You are advised against taking any actions or incurring any obligations which would either limit the range of alternatives to be considered, or which would have an adverse effect on the environment. Satisfactory completion of the environmental review process must occur prior to the issuance of the "Letter of Conditions."

EXHIBIT 14

Sample Administrative Memorandum

(Typically prepared by the engineer or bookkeeper and distributed to all parties at the pre-construction meeting.)

To be sure that the drawdown process and field review goes smoothly, this memo will outline the procedure under which we must all operate.

I. Drawdown Procedure

A. Payment Requests

1. Contractor's Payment Requests

A. Contractor submits 6 original signature copies of Progress Payment/Monthly Estimate with Town voucher to Project Engineer, 10 days before each regular scheduled monthly municipal board meeting.

B. After review and corrections, all six copies of the recommended progress payments will be signed by Project Manager.

C. All six copies with original signatures are then given to Project Bookkeeper to include in the USDA RD Cost Certification Packet (consists of the RD Form E budget, tab sheets, and invoices).

2. Miscellaneous Payment Requests

A. All miscellaneous invoices received or incurred by the municipality are to be vouchered.

B. At least one copy of the invoice and voucher with original signatures are forwarded to Project Bookkeeper for inclusion in the USDA RD Cost Certification packet.

B. Upon review of all payment requests, Project Bookkeeper will complete 5 original signature copies of the USDA RD Project Budget/Cost Certification form.

Project Manager or Principal-in-Charge will sign the Cost Certification as the Certifying Official.

C. At the subsequent monthly municipal board meeting, the Board approves payment by resolution and the authorized official signs all 6 USDA RD Project Budget/Cost Certification forms as Applicant and all 6 municipal vouchers.

D. Once construction is underway, monthly project meetings will be held after which the District Construction Inspector for USDA RD will take all six Cost Certification packets for approval and signature.

E. The Project Budget/Cost Certification packets will be distributed as follows:

1. Three (3) to USDA RD.
2. One (1) to the Engineer.
3. One (1) retained for municipal files.
4. One (1) to the contractor.

F. **On approval and receipt of the signed USDA RD Cost Certification packets from USDA RD, the municipality can pay invoices.**

II. Change Order Procedures

A. If the need for a change in work is recognized by the Contractor that requires a change in Contract Price or Contract Time, the Contractor shall immediately notify the Engineer, in writing.

B. If the Engineer agrees with the Contractor's position above, or if the Engineer recognizes the need for a Change Order, he will notify the Municipality and USDA RD and request approval to proceed.

C. Where time allows, a formal Change Order Form (USDA-RUS 1910-8-B) will be prepared by the Engineer (with supporting documentation supplied by the Contractor), and executed as outlined below, prior to initiation of the work.

Where time does not allow, the Engineer will prepare a Work Change Directive (EJCDC Form 1910-8-F) for execution by the Municipality. If possible, the actual price for the work, as agreed to by the Engineer and the Contractor, will be indicated on the Form. If an estimated amount is used, this amount is not to be exceeded without written authorization by the Municipality. This Work Change Directive is to be followed by a formal Change Order as outlined below.

D. When requesting a formal Change Order, the Contractor shall submit five original signature requests, with supporting documentation, to the Engineer.

E. Project Engineer reviews the request and, if in agreement, recommends approval by preparing five copies of the Change Order form, which are all then signed by Contractor and Engineer.

F. Project Engineer also prepares five copies of Form USDA-RUS 1910-8-B "Contract Change Order." All five copies are signed by both Engineer and Contractor.

G. All five original signature copies of both USDA-RUS 1910-8-B and Change Order forms are delivered to the Town.

H. Upon approval by the municipal board, the authorized municipal official signs all five copies of both forms. USDA-RUS 1910-8-B is to be attached on top of the balance of the change order materials and documentation. All five copies are then returned to the Engineer for forwarding to USDA RD during site visits.

I. Upon receipt of the USDA RD-approved change order materials, the Project Bookkeeper will adjust the project budget figures to reflect any change in price and use the revised figures in all future Project Budget/Cost Certification Forms preparation, and the Engineer will notify the Contractor that the revised contract amount, if appropriate, may be included in any subsequent payment request.

III. Site Visits by USDA RD and Job Meetings

The District Construction Inspector for USDA RD will visit the project site monthly to sign the current payment request. IT IS IMPERATIVE THAT ALL PAYMENT MATERIALS (SIX (6) COPIES WITH ORIGINAL SIGNATURES ON EACH) ARE READY. The DCI will also attend the monthly job meeting, where he will review job progress and related matters. The job meeting will be attended by the Municipality, Engineer and Project Representative, the Contractors, and the USDA RD DCI. Attendance is essential. The first job meeting is scheduled for _____ am/pm on _____at _____(location)_____.

EXHIBIT 15

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF [NAME]

[NAME OF PETITIONER(S)],	:	
	:	**AFFIDAVIT OF SERVICE**
Petitioner(s),	:	
		Index No.:
-against-		
	:	
[NAME OF RESPONDENT(S)],		
Respondent(s).	:	

STATE OF NEW YORK)
:ss.:
COUNTY OF [NAME])

[NAME] being duly sworn, deposes and says as follows:

1. I am over the age of eighteen years and is not a party in this proceeding.

2. On [DATE], I served the Notice of Acquisition By Eminent Domain upon [NAME], [ADDRESS] by depositing a true copy of the same by mail, enclosed in a post paid properly addressed wrapper, in a depository under the exclusive care and custody of the United States Postal Service located at [ADDRESS].

_____
[NAME]

Sworn to before me this
{DATE] day of [MONTH, YEAR]

_____
Notary Public

RESOLUTION FOR THE [NAME OF TOWN]

WHEREAS, the Town Board of the Town of [NAME] has entered into a contract for the construction of a wastewater collection and treatment system (the Project); and

WHEREAS, this Board has previously determined that the Project will benefit the health and welfare of the residents of [NAME OF TOWN] by providing them with safe and reliable municipal sewer services, that the Project will aid in the development of the Town of [NAME] and that the Project will be beneficial to the environment by the elimination of aging and/or failing subsurface septic systems and other water systems; and,

WHEREAS, the Project engineers have completed planning and design of the collection and treatment systems; and

WHEREAS, several utility easements are needed from property owners for the Town for the location of wastewater collection lines; and

WHEREAS, these utility easements are de minimus in nature and will have no visible effect on the property, and the property owner's use and enjoyment of the property will not be significantly impaired by the utility easement, and that the public interest will not be prejudiced by construction of the project; and,

WHEREAS, property owners have refused to, or have otherwise failed to, provide the requested Utility Easements in exchange for the availability for municipal wastewater service to the property.

WHEREFORE, be it resolved, that the Board authorizes the use of the Town's eminent domain authority to secure the necessary utility easements; and

Be it further resolved that the Town Board authorizes the Supervisor to execute and file the necessary Offers, Petitions, Acquisition Maps, Notices of Pendency and related procedures as are required to secure the necessary utility easements by eminent domain.

WHEREUPON, the Resolution was put to a vote, recorded as follows:

Ayes ____ Nays____ Abstentions ____

SO APPROVED:

_____

Secretary/Clerk

Date: [DATE]
[COUNTY, STATE]

[DATE]

[PROPERTY OWNER]
[ADDRESS]

Re: Formal Offer for Permanent Easement on Property located in [CITY, STATE] for location of Utility Pipeline - Tax Lot No. [NUMBER]

Dear [PROPERTY OWNER]:

As you may be aware, the Town of [NAME] is in the process of constructing water and sewer transmission lines to service specified sections of the Town. The Project engineer has determined that easements across your property (Tax Map No. [NUMBER]) will be needed for the construction of both sewer and water lines. Public meetings have been held in the Town of [NAME] to review those pipeline routes and to discuss any public concerns over the Project.

OPTION #1:

Under the law, you are entitled to fair compensation for the Town and County's use of your property. Utilizing the [NAME OF APPRAISAL], both the Town and County have established the fair market value of property being acquired within the Town for the project. The [NAME OF APPRAISAL] valuation has assessed land value in this area at [AMOUNT] per square foot. [DISCUSSION OF APPRAISAL FINDINGS]

OPTION #2:

The Town is willing to improve and maintain that access at its own expense in exchange for an easement from you allowing the Town to make use of the access during construction, and thereafter for repair and maintenance of the pipelines. The access will be used little by the Town after initial construction of the Project. The permanent improved access will provide you with [LIST].

By this letter, both the County and Town are making a formal final offer to purchase the necessary utility easements from you for the amount stated above. In the opinions of the County and Town, this offer is just compensation for the easements and payment of the offered amount will be made, together with appropriate interest from the date of this letter, upon transfer of the easements. In the alternative, you may reject this offer as payment in full for the easements, but accept the County and Town's offer as an "advance payment" on the easements. You can then file a claim for additional consideration in accordance with Sections 503/601 of the State's Eminent Domain Procedure Law. Be advised that it will be your burden to prove to the court that you are entitled to more for the easements. Failure to file a claim within the time specified in Section 503 (A) of the Eminent Domain Procedure

Law shall be deemed acceptance of the amount paid as full settlement of any claim. Further, upon written acceptance of the written offer, the County and Town shall enter

into an agreement with you for payment under the agreement, either as payment in full or as an advance payment. Your right to the advance payment shall not be conditioned on the waiver of any other right.

Please let me know by [DATE] that you accept this offer for the easements. The easements requested by the County and Town are enclosed with this letter for your review. If the document is acceptable, please execute the easements (with notary) and return the document to my attention. However, failure to respond by [DROP DEAD DATE] shall be deemed a rejection of this offer. While prior offers of compensation for these easements have been expressly rejected by you, we hope that you will reconsider and accept this final offer. If you prefer, you may contact [NAME OF TOWN CLERK] to make arrangements to come to the Town Hall and execute it there. Her number is [TELEPHONE NUMBER].

If you have any questions, do not hesitate to contact me. Thank you for your help in this matter.

Sincerely,

[NAME OF OFFICIAL]
[POSITION OF OFFICIAL]

Enclosure

[DATE]

[COUNTY CLERK]
[ADDRESS]

Re: [CAPTION]
[INDEX NO.:]

Dear County Clerk:

Please find enclosed for filing, on behalf of Petitioners in the above-referenced actions, Notices of Entry of the Order of the Court. Also included is the appropriate affidavit of service to the Court showing that the adversarial party has been served.

Kindly stamp my letter and return it to me in the self-addressed stamped envelope provided for proof of service.

Thank you for your courtesy and cooperation.

Very truly yours,

[NAME]

Enclosures

[DATE]

[COUNTY CLERK]
[ADDRESS]

Re: ***[CAPTION]***
[INDEX NO.:]

Dear [COUNTY CLERK]:

Enclosed please find for filing, relative to the above-referenced matter, the original and three (3) copies of the Order dated [MONTH, DAY, YEAR].

Kindly date-stamp the copies and return them to our offices in the included self-addressed stamped envelope.

Thank you for your courtesy and cooperation.

Very truly yours,

[NAME]

Enclosures

[DATE]

[COUNTY CLERK]
[ADDRESS]

Re: ***[CAPTION]***

Dear County Clerk:

Enclosed for filing, please find the original and two (2) copies of each of the following documents relative to the above-referenced matters:

1. Application for Index Number;
2. Request for Judicial Intervention;
3. Notice of Petition;
4. Verified Petition with supporting exhibits;
5. Proposed Order; and
6. Notice of Pendency to Acquire Property By Eminent Domain.

Additionally, attached is a check in the amount of [AMOUNT] representing the fees for purchasing an Index number, a Request for Judicial Intervention and for filing a Notice of Pendency to Acquire Property By Eminent Domain., Kindly time-stamp each of the copies and return to our offices in the included self-addressed stamped envelope.

Thank you for your courtesy and cooperation. Should you have any questions, please feel free to contact the undersigned.

Very truly yours,

[NAME]

Enclosures

[DATE]

[COUNTY CLERK]
[ADDRESS]

Re: ***[CAPTION]***

Dear County Clerk:

Enclosed for filing, please find the original and two (2) copies of each of the following documents relative to the above-referenced matters:

1. Application for Index Number;
2. Request for Judicial Intervention;
3. Order to Show Cause;
4. Affidavit in Support of Order to Show Cause;
5. Notice of Petition;
6. Verified Petition with supporting exhibits;
7. Proposed Order; and
8. Notice of Pendency to Acquire Property By Eminent Domain.

Additionally, attached is a check in the amount of [AMOUNT] representing the fees for purchasing an Index number, a Request for Judicial Intervention and for filing a Notice of Pendency to Acquire Property By Eminent Domain., Kindly time-stamp each of the copies and return to our offices in the included self-addressed stamped envelope.

Thank you for your courtesy and cooperation. Should you have any questions, please feel free to contact the undersigned.

Very truly yours,

[NAME]

Enclosures

[DATE]

[NAME OF PROCESS SERVER]
[ADDRESS]

Re: [CAPTION]
[INDEX NO.:]

Dear [PROCESS SERVER]:

Enclosed please find the following documents relative to each of the above-referenced matters: [ITEMIZE DOCUMENTS]. Kindly personally serve same on each of the parties no later than **[MONTH, DAY, YEAR]** and return the affidavits of service to our office as soon as possible thereafter. We have been instructed to return the affidavits of service to the Court no later than **[MONTH, DAY, YEAR]**.

Thank you for your courtesy and cooperation in this matter. If you should have any questions, please feel free to contact the undersigned.

Very truly yours,

[NAME]

Enclosures

[DATE]

[NAME OF RESPONDENT]
[ADDRESS]

Re: ***[CAPTION]***
[INDEX NO.:]

Dear [NAME OF RESPONDENT]:

Please find enclosed for service upon you Notice of Entry of the [MONTH, DAY, YEAR] Order of this Court (with a copy of said Orders attached thereto).

Very truly yours,

[NAME]

Enclosure

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF [NAME]

[NAME OF PETITIONER(S)], :
:
AFFIDAVIT OF SERVICE
Petitioner(s), :
Index No.:
-against-
:
[NAME OF RESPONDENT(S)],

Respondent(s). :

STATE OF NEW YORK)
:ss.:
COUNTY OF [NAME])

[NAME] being duly sworn, deposes and says as follows:

1. I am over the age of eighteen years and is not a party in this proceeding.

2. On [DATE], I served the Notice of Entry of the Order of the Court upon [NAME], [ADDRESS] by depositing a true copy of the same by mail, enclosed in a post paid properly addressed wrapper, in a depository under the exclusive care and custody of the United States Postal Service located at [ADDRESS].

_____
[NAME]

Sworn to before me this
{DATE] day of [MONTH, YEAR]

_____
Notary Public

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF [NAME]

[NAME OF PETITIONER(S)]	:	
Petitioner(s),	:	**NOTICE OF VERIFIED PETITION**
	:	Index No.: _____
-against-	:	
[NAME OF RESPONDENT(S)]	:	
Respondent(s).	:	

PLEASE TAKE NOTICE, that upon the annexed petition of the Town of [NAME OF TOWN], verified on the [DATE] day of [MONTH, YEAR] an application will be made to this Court to be held at the courthouse thereof, located at [ADDRESS], on the [DATE] of [MONTH, YEAR] at [TIME] o'clock in the forenoon of that day, or as soon thereafter as counsel can be heard, for an order to acquire by eminent domain the real property described in the petition therein and for permission to file the acquisition map thereof in the office of the County Clerk of [NAME OF COUNTY] County, and for such other and further relief as may be just and proper.

PLEASE TAKE FURTHER NOTICE that annexed hereto is a copy of that portion of the proposed acquisition map affecting your property and a copy of the legal description of the property.

PLEASE TAKE FURTHER NOTICE that pursuant to CPLR §§ 403(b) and 2214(b), answering papers, if any, must be served upon the attorneys for Petitioner(s), [NAME], at least seven (7) days prior to the return date.

DATED: [DATE]

[NAME OF LAW FIRM]

By: _____
[NAME OF ATTORNEY]
Attorneys for Petitioner(s)
[ADDRESS]
[TELEPHONE NUMBER]

To: [NAME OF RESPONDENT(S)]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF [NAME]

[NAME OF PETITIONER(S)],	:	
Petitioner(s),	:	**NOTICE OF ACQUISITION**
	:	**BY EMINENT DOMAIN**
-against-	:	Index No.: [INSERT INDEX NO.]
[NAME OF RESPONDENT(S)]	:	
Respondent(s).	:	

NOTICE IS HEREBY GIVEN that on [DATE], an order of this Court, dated [MONTH, DAY, YEAR], vesting title in [NAME OF TOWN] to an easement to the real property hereinafter described pursuant to the Eminent Domain Procedure Law, and the acquisition map pertaining thereto, were entered and filed in the office of the County Clerk of the County of [NAME].

The real property so acquired is described as follows:

LEGAL DESCRIPTION

NOTICE IS FURTHER GIVEN that any written claim for damages or notice of appearance that you wish to file pursuant to EDPL § 503, must be filed with the clerk of this court on or before [DATE], and a copy of same shall be served upon [TOWN OFFICIAL], at the following address: [ADDRESS].

DATED: [DATE]

_____

[NAME OF ATTORNEY]
Attorney for Petitioner Town of [NAME]
FIRM NAME
ADDRESS
TELEPHONE NUMBER

TO: [COUNTY]
[ADDRESS]

[NAME OF OPPOSING COUNSEL]
[ADDRESS]

[DATE]

[COUNTY CLERK]
[ADDRESS]

Re: ***[CAPTION]***
[INDEX NO.:]

Dear [COUNTY CLERK]:

Please find enclosed for filing, on behalf of Petitioners in the above-referenced actions, the Notice of Acquisition. The appropriate affidavit of service to the Court showing that the adversarial party has been served will be forthcoming under separate cover.

Kindly stamp my letter and return it to me in the self-addressed stamped envelope provided for proof of service.

Very truly yours,

[NAME.].

Enclosures

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF [NAME]

[NAME OF PETITIONER(S)],	:	
Petitioner(s),	:	**NOTICE OF ENTRY**
	:	
-against-		Index No.:
	:	RJI No.:
[NAME OF RESPONDENT(S)],		
	:	
Respondent(s).	:	

PLEASE TAKE NOTICE, that the within is a true copy of the Order of this Court (Hon. [NAME OF JUDGE]) entered in the office of the Clerk of the County of [NAME] on [MONTH, DAY, YEAR].

Dated: [MONTH, DAY, YEAR]
[CITY, STATE]

_____
[NAME OF ATTORNEY]
[NAME OF FIRM]
[ADDRESS]
[TELEPHONE NUMBER]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF [NAME]

[NAME OF PETITIONER(S)] :

Petitioner(s), :

NOTICE OF PENDENCY TO ACQUIRE PROPERTY BY : **EMINENT DOMAIN**

-against-

Index No.: _____

:

[NAME OF RESPONDENT(S)] :

Respondent(s). :

NOTICE IS HEREBY GIVEN that a proceeding has been commenced in the Supreme Court of the State of New York by the above-named Petitioner(s)-Condemnor(s) against the above-named Respondent(s)-Condemnee(s) and is now pending in said Court, and the object of said action is that it may be adjudged that public use requires the condemnation of a perpetual easement through Respondents' real property described in the petition in the above-entitled proceeding, and that the Condemnor(s), Town of [NAME], is entitled to take and hold such perpetual easement for the public use specified in said petition, upon making compensation therefor, and may have such other and further relief as may by just and equitable; and the real property, located in the Town of [NAME] County of [NAME], State of New York, affected by said proceeding is as described in the legal description on **EXHIBIT A** hereto attached and made a part hereof as if herein set forth in full. The property affected by this petition is located on [ADDRESS] (Tax Map Parcel No. [INSERT NUMBER]), and was acquired by Respondent(s) by deed recorded at Liber [NUMBER], Page[NUMBER] of the [NAME OF COUNTY] County Clerk's Office.

The reputed owners of aforesaid real property are Respondent(s)-Condemnee(s), [INSERT NAME(S)].

Dated: [DATE]
[CITY & STATE]

[NAME OF TOWN & STATE]

By: _____

[TOWN OFFICIAL]
[ADDRESS]

To the Clerk of [NAME OF COUNTY]:

You are hereby directed to index the foregoing Notice of Pendency of this proceeding to the name of the following condemnee(s): [NAME OF CONDEMNEE(S)].

Dated: [CITY & STATE]
[DATE]

[NAME OF TOWN & STATE]

By: _____
[TOWN OFFICIAL]
[ADDRESS]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF [NAME]

[NAME OF PETITIONER(S)]	:	
Petitioner(s),	:	**ORDER TO SHOW CAUSE**
	:	
-against-		Index No.: RJI No.: _____
	:	
[NAME OF RESPONDENT(S)]		
Respondent(s).	:	

Upon the reading and filing of the attached affidavit of [ATTORNEY'S NAME], of [NAME OF LAW FIRM], attorneys for Petitioner(s) _____, sworn to on [DATE], the Verified Petition, verified on [DATE], and upon all other papers and proceedings in this case, Respondent(s) are hereby ORDERED to SHOW CAUSE, before the Hon. _____, at [ADDRESS], on [DATE] at [TIME] in the forenoon of that day or as soon thereafter as counsel may be heard, why an Order should not be entered in this action pursuant to the Eminent Domain Procedure Law, granting the following relief:

1. Allowing Petitioner(s) to acquire by eminent domain the real property described in the verified petition and supporting papers; and

2. Permitting Petitioner(s) to file the acquisition map effecting the acquisition by eminent domain in the office of the [COUNTY] County Clerk; and

3. Granting Petitioner(s) such other and further relief as to the Court may seem just and proper.

SUFFICIENT CAUSE APPEARING THEREFOR, let service of a copy of this Order and the papers upon which it is based, by personal service upon Respondents, on or before [DATE] be deemed good and sufficient service thereof.

Dated: [DATE]
[CITY,STATE] JUSTICE OF THE SUPREME COURT

ENTER:

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF [NAME]

[NAME OF PETITIONER(S)]	:	
Petitioner(s),	:	**AFFIDAVIT IN**
	:	**SUPPORT OF ORDER**
-against-		**TO SHOW CAUSE**
	:	
		Index No.: _____
	:	RJI No.: _____
[NAME OF RESPONDENT(S)]		
	:	
Respondent(s).		
	:	

STATE OF NEW YORK)
):SS.:
COUNTY OF [NAME])

[NAME OF ATTORNEY], being duly sworn, deposes and says as follows:

1. I am an attorney with the law firm [NAME OF LAW FIRM] Young, Sommer, Ward, Ritzenberg, Baker & Moore, attorneys for Petitioner(s) {NAME OF PETITIONER(S)] in the above entitled action. I am fully familiar with all the facts and circumstances of this case.

2. No previous application for the relief herein prayed for has been made.

3. An order to show cause has been sought rather than proceeding by a notice of motion due to the constraints of time imposed by the project and by the Court's calendar.

WHEREFORE, deponent respectfully asks for an order directing that Respondents show cause why an order should not be entered in this action allowing Petitioners to acquire by eminent domain the real property described in the attached verified petition and supporting papers, and for

permission to file the acquisition map effecting the eminent domain acquisition in the office of the [NAME OF COUNTY] County Clerk, and granting Petitioner(s) such other and further relief as may seem just and proper by this Court.

_____
[NAME OF ATTORNEY]

Sworn to before me this
[INSERT DATE] day of [MONTY,YEAR]

_____
Notary Public

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF [NAME]

[NAME OF PETITIONER(S)]	:	
Petitioner(s),	:	**VERIFIED PETITION**
	:	Index No.: _____
-against-	:	
[NAME OF RESPONDENT(S)]	:	
Respondent(s).	:	

1. Petitioner is a town created and existing under the laws of the State of New York.

2. Petitioner seeks to acquire by eminent domain a perpetual easement through Respondents' property hereinafter described for the purpose of constructing a certain public project thereon, to wit: Petitioner is engaged in a public project to construct a wastewater collection system and a wastewater treatment plant through the hamlet of [NAME], Town of [NAME] serve residential, commercial and industrial properties in the hamlet of [NAME]. A copy of the easement is attached as **Exhibit A**.

3. Petitioner provided Respondent(s) with the requested easement in [MONTH, DAY, YEAR], and again in [MONTH, DAY, YEAR]. In exchange for the requested easement, Petitioner

offered to pay to Respondents the sum of [AMOUNT]. That sum was calculated as the fair market value of the easement based upon an appraisal. As of the date of this petition, Respondents have rejected Petitioner's offer, and have not granted Petitioner the requested easement.

4. Petitioner is exempt from the requirements of Article 2 of the Eminent Domain Procedure Law under Section 206(D) because "the acquisition is *de minimis* in nature so that the public interest will not be prejudiced by the construction of the project." However, as part of the public review of the project, a public hearing was held on the project on [MONTH, DAY, YEAR] and notice of the hearing was given to affected property owners. See **Exhibit D** attached hereto. In addition, the plans for the sewer collection system have been available for review at the [NAME] Town Hall.

5. A copy of the proposed acquisition map is attached hereto as **Exhibit B.**

6. A copy of the Notice of Pendency is attached hereto as **Exhibit C**.

7. The name and place of business of the owner of the real property where the perpetual easement is to be acquired is:[NAME & PLACE]. The property affected by this petition is located on [ADDRESS](Tax Map Parcel[NUMBER]), and was acquired by Respondents by deed recorded at Liber [NUMBER], Page [NUMBER] of the [NAME OF COUNTY] County

Clerk's Office. A legal description of the real property where the perpetual easement is to be acquired is attached hereto as **Exhibit E**.

8. The description and location of the perpetual easement to be acquired is shown by the highlighted area on the attached Acquisition Map (Exhibit B).

9. The public use, benefit or purpose for which the easement is required is to provide access for the construction of a sewer collection system and Petitioner's wastewater transmission line.

WHEREFORE, Petitioner requests that the Court direct entry of an order authorizing the filing of the acquisition map herein in the office of the County Clerk of the County of [NAME OF COUNTY], and that upon such filing title to the perpetual easement across Respondents' property described above shall vest in the Petitioner.

Dated: [CITY, STATE]
[DATE]

[CITY, STATE]

By: _____
[TOWN OFFICIAL]
[ADDRESS]

VERIFICATION

STATE OF NEW YORK)
) ss.:
COUNTY OF [NAME])

[NAME], being duly sworn, deposes and says:

I am the [POSITION] for the Town of [NAME OF TOWN]. Accordingly, I am acquainted with the facts and circumstances of this matter.

I have read the foregoing Verified Petition and know the contents thereof. The same is true to my own knowledge except as to the matters therein stated to be alleged on information and belief, and as to those matters, I believe them to be true.

This verification is made pursuant to the provisions of CPLR 3020(d)(2).

_____
[NAME OF OFFICIAL]

Sworn to before me this
[DATE] day of [MONTH, YEAR]

_____
NOTARY PUBLIC

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF [NAME]

[NAME OF PETITIONER(S)] :

Petitioner(s), :

ORDER

: Index No.: _____

-against-

:

[NAME OF RESPONDENT(S)] :

Respondent(s) :

Petitioner Town/Village of [NAME], having commenced a proceeding to obtain an order to acquire by eminent domain certain real property described in the petition herein and for permission to file the acquisition map pertaining thereto in the office of the County Clerk of [NAME OF COUNTY],

NOW, upon reading the notice of petition dated [DATE], and the petition verified on [DATE] , and the exhibits thereto with due proof of service thereof, and the answer of [NAME OF RESPONDENT(S)], verified [DATE], and the court having found to its satisfaction that the procedural requirements of the Eminent Domain Procedure Law have been met, it is

ORDERED, that this order shall be immediately filed and entered, and it is further

ORDERED, that the petitioner shall file and enter this order together with the acquisition map herein, in the office of the County Clerk of [NAME OF COUNTY], and it is further

ORDERED, that upon the filing of this order and the acquisition map in the office of the County Clerk of [NAME OF COUNTY], acquisition of the property in such map shall be complete

and title thereto shall then be vested in the petitioner.

Enter,

_____
J.S.C.

DATED: [DATE]

UTILITY EASEMENT

THIS EASEMENT is made and entered into this [DATE] day of [MONTH, YEAR] between _____ (hereinafter referred to as "Owner"), of [CITY, STATE], and the TOWN OF [NAME] (hereinafter referred to as "Grantee"), a public benefit corporation with offices at [ADDRESS].

W I T N E S S E T H

WHEREAS, pursuant to a deed filed in the Clerk's Office in [NAME] County at Liber [NUMBER], page [NUMBER], the Owner is the sole owner of a parcel of property located at [location] in the Town of [NAME], County of [NAME], New York (hereinafter referred to as the "Property"); and

WHEREAS, Grantee wishes to construct a sewer main across and under the Property. The sewer main is hereinafter referred to as the "Piping"; and

WHEREAS, a portion of the Piping will extend through the Property in a 20-foot wide area identified as the "Access Way," the centerline of said strip of land being the location of the Piping, as shown in the attached drawing, and more particularly described as follows:

[DESCRIPTION]

NOW, THEREFORE, in consideration of the covenants herein, and the payment by Grantee to the Owner of the sum of One and 00/100 Dollars ($1.00) and other good and valuable consideration, receipt of which is acknowledged, the parties agree as follows:

1. Owner hereby gives and grants to the Grantee, its employees and contractors, the right to enter upon and use the Access Way for the following purposes:

A. To install and place the Piping including any bedding and ancillary equipment as necessary to install such Piping in the Access Way.

B. To engage in such excavation, filling and grading as may be necessary to complete construction and installation of the Piping in and through the Access Way and Grantee agrees and promises to make such installation and to restore the Access Way to a condition substantially equivalent to the condition of the Access Way immediately prior to the commencement of the work, including the grading, reseeding and mulching of all disturbed areas.

C. To engage in such excavation, filling, grading, inspections and/or other work as may be necessary to maintain the Piping in the Access Way for as long as the Grantee shall actively pass water through the Piping.

2. The Owner, his successors and assigns, shall have the right to make use of the Access Way in such manner as shall not be inconsistent with the use of this Easement by the Grantee, but

shall place no buildings within said Access Way, and shall place no other structures, trees, permanent walls or fences, or other improvement within said Easement that shall prevent or unreasonably interfere with the Grantee's ability to construct, reconstruct, replace, enlarge, maintain or repair the Piping.

3. The Easement herein conveyed, during such time as any excavation is done while exercising rights granted hereunder, shall be temporarily expanded by in additional fifteen (15) feet on either side of said Easement limits for the temporary location of fill, placement of equipment, disruption of earth and such other activity as shall be incidental to the work. During construction, repair and maintenance of the Piping, Grantee shall (i) provide the Owner with reasonable access to his property, at all times, (ii) use appropriate and generally accepted dust control measures, and (iii) repair, replace or reimburse Owner for the repair or replacement of any personal property damaged or destroyed by Grantee, except where said damage or destruction is caused, in any material part, by the negligence or wilful act of the Owner.

4. Grantee shall make reasonable efforts to accommodate any request by Owner to relocate any shrub(s) or tree(s) located within the Access Way, provided said relocation can be accomplished with equipment on-site, and without undue cost or delay to the Project.

5. Grantee, or its designee, shall be responsible, at its sole cost and expense, to construct, reconstruct, replace, enlarge, maintain or repair the Piping, as may be necessary from time to time.

6. Grantee agrees to hold the Owner harmless, including reasonable attorney's fees, from any and all liability arising out of any activities conducted on the Property by the Grantee or its employees or contractors pursuant to this easement including any damage or liability arising from a leak or release from the Piping installed in the Access Way. The liability of the Grantee resulting from such activities or the use of this easement shall be all inclusive and shall include the direct or indirect liability of the Owner for damage occurring on or off the Property resulting from the Grantee's use of the Property or the fluids or other substances carried in the Piping regardless of their source except to the extent of damages resulting from the negligent acts of Owner or its agents.

7. Grantee covenants that nothing contained in this Easement shall obligate Owner to be responsible or to pay for any costs or expenses for work to be performed hereunder.

8. This Easement shall inure to the benefit of and shall bind the grantees, distributees, legal representatives, successors, heirs, and assigns of the Owner.

[SIGNATURES TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Easement on the day and year first above written.

[OWNER]

_____

TOWN OF [NAME]

By: _____
[TOWN OFFICIAL]

[NOTARIZATIONS]

STATE OF NEW YORK)
: ss.:
COUNTY OF [NAME])

On the [DATE] day of [MONTH, YEAR], before me personally came [NAME], to me known and known to me to be the same persons described in and who executed the within instrument and they acknowledged to me that they executed the same.

_____
NOTARY PUBLIC

STATE OF NEW YORK)
: ss.:
COUNTY OF [NAME])

On this [DAY] day of [MONTH] in the year [YEAR], before me, the undersigned, personally appeared, [TOWN OFFICIAL], personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument.

_____
NOTARY PUBLIC

EXHIBIT 16

_____ Project Consultant Scoring Sheet

Consultant: _____

Consultant Experience	**Raw Score** (rank low - high, 1-10)	**Weight**	**Total** (RS X W)
Similar projects/Related work		10	
Experience of personnel		10	
Amount of work done in NYS		6	
NYC Watershed Project Experience		10	
Reputation and quality of work previously performed		8	
Qualifications of proposed sub-consultants		9	
Amount of time company has been in business		5	
Project Team Qualifications			
Education and experience of project team		10	
1. Engineering team (P.E., hydrologists, wastewater engineer, etc.)		10	
2. Environmental review team (soils scientists, environmental planners, etc.)		9	
3. Planning team (community planners, socio-economists, etc.)		6	
4. Legal team (land use attorney)		4	
Previous work on related projects		7	
Availability of team		8	
Proposal Evaluation			
Technical Plan for providing services		10	
Statement of the project		10	
Management summary		10	
Work plan		10	
Proposed schedule		5	
Cost Estimate		3	
Presentation of Proposal		2	
Other			
Interview		7	

Total Consultant Score _____

EXHIBIT 17

Guide to a Municipal Wastewater Project

Exhibit 17. Village Special Assessment District

Re: Villages' ability to create "special assessment districts" similar to towns creating a special use district, i.e., a sewer district

Issue:

Whether a village can create a special assessment district similar to a town creating a special use district, i.e., a sewer district.

Discussion:

1. Improvements

Under Village Law §22-2200, villages are able to make local improvements at village expense or to be assessed against "benefited" lands. Village Law §22-2200 (1). Specifically, that provision states:

> Whenever the board of trustees of any village shall make local improvements at the expense of the owners of the lands benefited thereby, or partly at the expense of such owners and partly at the expense of the village at large, the board, before making any such local improvements . . .

Section 22-2200 continues by addressing the mode of assessing costs for an improvement. That provision explains that villages shall:

> determine the portion of the cost to be assessed upon the lands benefited thereby and the portion, if any, to be borne by the village at large, and also determine what lands will be benefited by such local improvements, and shall prepare and file in the office of the village clerk a map or plan of the proposed assessment district, showing the lands so determined to be benefited

Id. (emphasis added). Therefore, in regard to "improvements", the Village Law expressly contemplates villages undertaking "improvements" for specific areas within a village and assessing the costs of those improvements against the benefited areas only. These areas are directly referred to as "assessment district[s]" Id. (again referring to "assessment

district" in section 22-2200 (2)). As such, villages can create special assessment districts for "improvements", with the costs of the "improvements" being assessed against the benefited properties.

Such a reading of the Village Law provision is consistent with the holding of a 1976 Second Department case reviewing actions taken by a village under section 22-2200. Scarsdale Chateaux RTN v. Steyer, 53 A.D.2d 672, 673-74. In that case the Village of Scarsdale constructed a parking facility and subsequently assessed the construction costs against "benefited" property owners surrounding the facility, i.e. lands in the assessment district. Id. The Second Department upheld the validity of the village's actions.

2. Sewer/Water Districts

Pursuant to Village Law §14-1400, the state has empowered villages to establish complete sewer systems. Specifically, that section states that "The board of trustees of any village may . . . cause a map and plan to be prepared for a complete sewerage system for the village." Village Law §14-1400 (emphasis added). The Comptroller has issued an opinion stating that the language employed in section 14-1400 clearly "contemplates the establishment of a waste disposal system which will serve the entire area of the village, rather than distinct areas thereof". Opns St Comp, 1983 No. 83-16, *citing* Opns St Comp, 1980, No. 80-533. Therefore, based upon the plain language of section 14-1400 itself, as further endorsed by the Comptroller, villages acting under Village Law §14-1400 alone cannot create special assessment districts for sewer systems. Any sewer system plans created under that section must encompass the entire village. However, villages may supercede Village Law §14-1400 and establish a sewer district by local law.

The Comptroller has explained that while Village Law §14-1400 "contemplates a comprehensive, village-wide sewer system", a village "may adopt a local law pursuant to Municipal Home Rule Law, §10 (1)(ii)(e)(3) superseding the provisions of Article 14 of the Village Law and authorizing [a village] to . . . establish and /or operate and maintain a separate sewer system, constituting a sewer district", for a limited portion of a village. Opns St Comp, 1980 No. 80-533; Opns St Comp, 1985 No. 85-24 (stating that under the MHRL, a "village may provide a specific area in a village, designated either as a district or as an area of assessment, with water or sewer service and assess the cost thereof to properties therein which are benefited by the service").

In opinion 80-533, the Comptroller noted that if a village acted under the MHRL to supercede Village Law §14-1400, that the village would also have to address financing by a local law enactment under the MHRL. Noting the lack of authority to "authorize a village to finance the capital and/or operation and maintenance costs of a sewer system established for a portion of the village by general taxation" or authority to adopt a local law to authorize such tax, the Comptroller explained that a local law superceding Village Law §14-1400 "could also provide for assessing the costs of such establishment and/or maintenance against the properties benefited by the system". Opns St Comp, 1980 No. 80-533. Therefore, if a village acts consistent with the foregoing procedures, it would be able to create a "special assessment district" for sewer and water systems.

Young, Sommer...LLC

Five Palisades Drive

Albany, NY 12205

(518) 438-9907 x240

Fax: (518) 438-9914

COMBINED FLOWCHART

Chapter 1. Project Conception
Identify the Problem
Define the Project
Is Project Consistent with Land Use Plans?
No
Does Project Need to Change?
Yes
Amend Project Definition
No
Yes
Determine Need for Sewer Use Law or Amendment
Initiate Public Participation
End Project Conception

Chapter 2. Project Organization
Set Up Project Administration & Management
Assemble Project Team
Set Up Project Communication
Prepare Public Participation Plan
Prepare Project Participants Inventory
Prepare Communication Plan
End Chapter 2.
Go to Page 9.
Advisory Committee
Project Team Leader
Project Manager
Town or Village Board Member
WWTP Superintendent
Municipal Engineer
Technical Assistance Providers
County Planner or Rep.
Watershed Protection Organization Staff
Interested Residents
Regulatory & Funding Agencies
Town or Village Board
Technical Assistance Providers
Legal Counsel
Bond Counsel
Regulatory and Funding Agencies
Surveyors
Other
Auditor
Project Bookkeeper
Team Leader (Director, Supervisor, Mayor, or Other)
Engineering Project Mgr.
Consulting Engineering Staff
Archeologist
Wetland Specialist
Biologist & Botanist
Stormwater Specialist

Chapter 3. Project Development
Study Phase & Preliminary Engineer's Report
Mapping
Funding Eligibility
End Chapter 3.
Aerial Mapping
Control Survey & Flight
Mapping
Field Survey
Conventional Ground Topographic Surveying
Preliminary Engineer's Report
Need for Project
Project Planning Area
Data Acquisition
Preliminary Mapping
Review of Existing Facilities
Identification of Alternatives
Proposed Solution, Project & O&M Budgets
Project Funding and Cost per Household
Project Schedule

Chapter 4. Environmental Review
See NYSDEC & CWSRF Flowcharts in Manual
End Chapter 4.

Chapter 5. District Creation
Will a Sewer District be Created or Extended?
Yes
No
Determine Which Procedure Will be Used
Town Board Initiated Procedure (Town Law, Article 12-A)
District Location
Prepare & File Map, Plan & Report
Public Hearing
Establish District
Submit for Comptroller's Approval or notify Comptroller of District formation, as appropriate
Property Owner Petition Option
See Town Law, Article 12
Special Assessment Option
See Town Law, Article 12-C
Set Sewer Rents
End Chapter 5.

Chapter 6. Bonding
Is Bonding Needed?
No
Yes
End Chapter 6.
Adopt Bond Resolution
Public Participation
Is Bond Resolution subject to Permissive Referendum?
No
Yes
Permissive Referendum Period
Was a Petition for Referendum Received?
No
Yes
Estoppel
Yes
Is Vote Affirmative?
No
Hold Referendum
End Project (or go to Chapter 3, Redefine Project and Start Over)
Determine Financing Needs
Short-Term Financing
Long-Term Financing
Loans, Bonds, or Other
Funding Program Loans
BANs
CWSRF Short-Term Loan
Other

Chapter 7. Funding
Is Project Fully Funded by NYC Watershed/Other Programs?
No
Yes
Agree on Project Budget so Funds are Made Available to the Project
Submit to New York Clean Water State Revolving Fund
List on Intended Use Plan
Change Project Scope
Score At/Over Funding Line?
No
Yes
Submit Financial Hardship Application
Submit Short- and Long-term Loan Application(s)
Submit to USDA Rural Development
Submit Pre-Eligibility Determination
Submit Application (when invited)
Submit to Other Funding Sources
Submit Funding Application To Governor's Office of Small Cities for Sewer Laterals, if applicable
End Chapter 7.

Chapter 8. Design
Develop Design
Prepare Facility Plan & Submit for Approval
Facility Plan Approved?
Yes
No
Determine Bid Alternates
Complete Final Design and Submit for Approval
Design Approved?
Yes
No
Prepare Construction Documents and Submit for Approval
Construction Documents Approved? (see Chapter 9)
Yes
No
End Chapter 8.
Facility Plan
Design Criteria
Preliminary Drawings
Outline Specifications
Project Budget
Identification of Project Sites and Easements Required
Information required for permit application (see Chapter 4)
Project Manual
Bidding Requirements
Contract Documents
Specifications
Drawings

Chapter 9. Permit Applications & Design Approval
Discuss Project with Regulatory Agencies during Project Development
Submit Permit Applications, Follow-up on Comments, and Obtain Permits
Submit Design for Review, Follow-up on Comments, and Obtain Plan Approval
End Chapter 9.
NYSDEC Permits
NYCDEP Permits
River Basin Commission Approval
US Army Corps of Engineers
NYSDOT Permits
County Highway Department Permits
Municipality's Permits and Approvals
Other Permits
NYSDEC
NYSEFC
USDA RD
NYCDEP
CWC
NYSDOH
County Health Department
Other

Chapter 10 Land Acquisition.
Hold Discussions with Property Owners
Is Property Owner Willing to Sell or Provide Access
Yes
No
Can Project be Relocated?
Yes
No
Is Property in an Agricultural District?
Yes
No
Contact County Ag. Protection Board and Comply with N.Y.S. Ag. & Mkt. Law
Does Site Need to be Acquired through Purchase?
Yes
No
Obtain Easements and Rights-of-Way
Secure Options or Purchase Agreements
Acquire Property through Eminent Domain Proceedings (see NYS law)
Complete Property Survey and Appraisal, if required
Close on Property
End Chapter 10.

Chapter 11. Bidding
Reproduce Bid Document Sets
Prepare & Publish Advertisement to Bid
Distribute Bid Sets to Potential Bidders, Hold Plan Deposits, Answer ?s from Potential Bidders
Pre-Bid Conference and Site Visit for Potential Bidders
Municipality Accepts and Opens Bids
Review Bids and Low Bidder's Qualifications, & Evaluate Budget
Is Low Bid Flawed, Modified, Withdrawn or Rejected?
No
Yes
Are Bids in Excess of Project Budget?
No
Yes
Remedy Budget Shortfall: Add or Deduct Bid Alternates, Obtain Additional Funds, Reduce Project Scope, Re-bid Project, or other
Engineer Recommends Municipality Award Contract to Lowest Responsible Bidder
Engineer Prepares Notice of Award for Each Contract
Municipality Approves and Executes Notice of Award for Each Contract
End Chapter 11.

Chapter 12. Construction Phase
Execute Construction Contracts and Distribute
Return Plan Deposits to Bidders that Return Plans
Issue Notice to Proceed
Setup Ongoing Project Administration
Hold Pre-Construction Meeting
Review and Approve Contractor's Submittals
Start Construction
Administer Construction
Observe Construction
Prepare Change Orders, as needed, Obtain Approvals, Revise Contract Amount in Application for Payments, and Adjust Project Budget
Review and Approve Contractor's Monthly Applications for Payment
Hold Monthly Job Meetings
Submit Bills to Regulatory/Funding Agencies for Approval (and Reimbursement, if applicable)
Withhold 5% Retainage from Contractors
Pay Bills When Approved (and Funds are Received, if applicable)
Complete Construction
End Chapter 12.

Chapter 13. Project Completion
Is Work Substantially Complete?
Yes
No
Go to Chapter 12, Continue with Construction
Furnish Preparing Draft O&M Manual & Submit for Approval, if required
Prepare Certificate of Substantial Completion with Punch List
Release Contractor's Retainage as Work is Substantially Complete
Perform System Startup and Update O&M Manual
Prepare Final Close-out Documents
Obtain Regulatory and Funding Agency Approval of Final Close-out Documents
If Appropriate to Funding Sources, Release Contractor's Retainage as Final Work is Complete
Complete Loan Closings and Grant Close-outs
Issue Certificate of Final Completion
End Chapter 13.
O&M Manuals
Record Drawings
Claims Statements
Proof of Payment of Debts & Claims
Release of Liens
Warranties
Startup Reports
Final Inspection
Final Punch List
Final Pay Request

Chapter 14. Operation and Maintenance
Municipal Staff Operate the WW System
Implement O&M Practices
End Chapter 14.
Inspection
Recordkeeping
Housekeeping
Manufacturer's Literature
Safety
Permits & Standards

ISSUE	REV.	LOCATION	DATE	AP'D	REMARKS

ISSUE	REV.	LOCATION	DATE	AP'D	REMARKS

SCALE	N.T.S.
DRAWN	MVC
DATE	5/1/05
DESIGNED	JP
CHECKED	HL

Guide to Developing a Municipal Wastewater Project for small, Rural Communities in New York State

May 2005

FLOWCHART

Lamont Engineers
ENGINEERS · PLANNERS · FACILITY OPERATIONS
548 MAIN ST., COBLESKILL, N.Y. 12043 (518) 234-4028

PROJECT NO.	FILE NAME	SHEET NO.
2004051	FLOWCHART	2004051.FC

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