



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

Rockaway Valley Regional Sewerage Authority
Morris County, New Jersey
Preliminary Treatment Facilities Improvements
Project No. S340821-05

RECEIVED

APR 04 2011

R.V.R.S.A.

BOB MARTIN
Commissioner

MAR 30 2011

To All Interested Government Agencies and Public Groups:

The Rockaway Valley Regional Sewerage Authority (RVRSA) is pursuing financial assistance from the New Jersey Environmental Infrastructure Financing Program for improvements to the distributor box and siphon screening chamber, located in Boonton and the preliminary treatment facility, located in Parsippany-Troy Hills. The facilities are experiencing degradation due to age and exposure to hydrogen sulfide.

The Department of Environmental Protection (Department) has reviewed the proposed action for potential environmental impacts in accordance with N.J.A.C. 7:22-10. Based on planning information submitted in support of the proposed action, the Department has determined that it qualifies for a Level 1 environmental review. The rules provide that this level applies to certain categories of actions that are expected to have little or no adverse environmental impact.

Based on the Level 1 environmental review, the Department has made a decision to approve the planning information for the proposed action. This decision is a part of the financial assistance application process, but is not a commitment of federal or state funds. An environmental summary of the proposed action, including the basis for determining that it qualifies for a Level 1 environmental review, is enclosed. The applicant is responsible for advertising this decision and for making the planning and decision documentation available for public review.

Project Cost: \$4,948,000

Proposed Loan: \$4,948,000

Comments supporting or disagreeing with this determination should be addressed to: Anthony Puniello, Ph.D., Section Chief, Mail Code 401-03D, Office of Technical Services, Municipal Finance and Construction Element, P. O. Box 420, Trenton, New Jersey, 08625-0420.

Very truly yours,

for Eugene J. Chebra, P.E.
Acting Assistant Director
Municipal Finance and Construction Element
Division of Water Quality

Enclosure

ENVIRONMENTAL SUMMARY

Rockaway Valley Regional Sewerage Authority
Morris County, New Jersey
Preliminary Treatment Facilities Improvements
Project No. S340821-05

I. Proposed Action

The Rockaway Valley Regional Sewerage Authority (RVRSA) service area encompasses approximately 101 square miles, serving a population of approximately 112,568 people. The member municipalities served by the RVRSA include the Town of Boonton, the Township of Boonton, the Township of Denville, the Borough of Rockaway, the Township of Rockaway, the Township of Randolph, The Borough of Victory Gardens, the Town of Dover and the Borough of Wharton (Figures 1 and 2). The Township of Mine Hill and the Picatinny Arsenal are served as customers.

The RVRSA operates a 12 million gallon per day (mgd) wastewater treatment plant (WWTP) located in Parsippany-Troy Hills and an upstream siphon screening chamber located in Boonton. The plant was originally constructed in the early 1920's and upgrades were put into service in September 1985. Installation of a 2,167 foot interceptor siphon under the Rockaway River, construction of Preliminary Treatment (PT) and Secondary Treatment (ST) Facilities were included in the 1985 upgrades (Figure 3). The PT facilities consist of the distribution box, influent pipes and a PT building which houses influent channels, screening facilities, slide gates and grit removal equipment.

The interceptor siphon originates at the siphon screening chamber located approximately 1,491 feet north of the Rockaway River and travels south to the siphon cleanout chamber located on the north side of the River. On the south side of the river the interceptor siphon travels 306 feet to the distribution box at the head of the PT facilities. The ST facilities are located approximately 700 feet north of the PT facilities.

Failure of the PT building's HVAC system and elevated hydrogen sulfide concentrations have led to the corrosion of piping and exposed steel within the building. The mechanical bar screens have reached the end of their useful life and undergo frequent repairs. The chain drives in the aerated grit chambers frequently break and lead to the accumulation of grit in the grit chambers which need to be removed by vacuum equipment. Existing conditions at the preliminary treatment facilities has led to accumulation of screenings and grit throughout the ST facilities and within the distribution box. The siphon screening chamber has also been subject to hydrogen sulfide deterioration, requiring rehabilitation.

A description of work to be done at each facility as part of the proposed project is as follows (Figures 4 and 5):

Siphon Screening Chamber

- Remove all loose concrete, repair interior walls and ceilings, and coat with any epoxy surface which will protect the concrete against hydrogen sulfide concentrations.
- Install an odor treatment system at the siphon screening chamber to treat the hydrogen sulfide concentrations.

Distribution Box

- Install motorized operators on the two main influent sluice gates at the Distribution Box to facilitate cleaning of grit accumulations.
- Replace the existing aluminum grating at the Distribution Box with fiberglass plates to contain hydrogen sulfide odors within the Distribution Box. Piping will convey the area under the plates to a proposed odor treatment system located within the PT building.

PT Building

- Replace all existing aluminum grating over the channels with fiberglass plates.
- Install an odor treatment system which will remove the air from the Distribution Box, under the channels and from the aerated grit chambers and treat the hydrogen sulfide before discharging the air.
- Replace the existing grit removal systems in the three aerated grit chambers with new chain-driven systems.
- Replace the two existing mechanical bar screens with new mechanical bar screens. The new screens will discharge into new washer compactors which will discharge into bags.
- Install a new HVAC system for the building.
- Install a new roof on the PT building.
- Install an aluminum stair on the exterior of the PT building to provide access to equipment on the roof. The stairs will be constructed on a 7-foot by 4-foot, 7-inch slab adjacent to the building.
- Replace the existing sluice gates within all four aerated grit chambers.
- Provide motorized operators on two influent channel sluice gates.
- Modify existing slide gates replacing plates and stems.
- Replace the existing City water, and service water hose bib assemblies.
- Replace the existing roof drain piping.
- Replace all gas detection and O₂ monitoring instrumentation.
- Clean and paint all exposed steel.
- Remove existing 5-ton hoist, and replace existing 1-ton hoist.
- Clean the existing tile walls and remove the existing rest room.
- Replace existing aluminum doors with new fiberglass access doors.
- Replace the existing temporary truck dewatering pad located outside the PT building with a new 20 feet by 13 feet permanent structure that includes an 8-inch thick

concrete slab which slopes in order to collect runoff by a slotted grate trench drain and 4-foot high walls.

All work will occur on or within existing structures with the exception of construction of the proposed truck dewatering pad, pad for the PT building stairs and the siphon screening chamber odor control system which will disturb approximately 533 square feet of grassed area of which approximately 392 square feet is permanent. All disturbed areas will be restored to predisturbance conditions. There will be no impacts to wetlands, 100-year floodplains, steep slopes, important farmlands or locations of endangered or threatened species or designated habitats. Based on the information provided, it has been determined that the proposed project will have no significant adverse impact on the environment.

This project was reviewed to determine if it will affect significant cultural resources. At the siphon inlet, improvements will include a new concrete pad in a disturbed area between two existing buildings. At the treatment facility, all improvements will take place within the existing buildings. The project area is within the Jersey City Waterworks Historic District, which has been determined eligible for listing on the National Register of Historic Places. However, because no portion of this project will affect previously undisturbed areas, the Department has determined that this project will have no effect on significant cultural resources, as it is currently proposed.

The proposed facilities will be owned and operated by the RVSRA. The year 2010 median annual household income was estimated to range from \$60,039 for Victory Gardens to \$132,038 for the Township of Randolph, based on 2000 U.S. Census data which was updated using the consumer price index. The sewer costs are not expected to increase as a result of the proposed project.

II. Alternatives Considered

A. No Action

Under the no action alternative, no improvements would be made to the distributor box, siphon screening chamber and the PT facility. The facilities would continue to degrade from age and exposure to hydrogen sulfide continuing to require frequent repairs and becoming unreliable and unsafe. Therefore, this alternative was rejected.

B. Preliminary Treatment Facilities Improvements (Selected Plan)

This is the selected plan as described in the Project Description section of this document. Improvements to the distributor box, siphon screening chamber and the PT facility will eliminate the problems from hydrogen sulfide exposure and aged equipment, ensuring that the facilities are safe and continue to run reliably without the need for frequent, costly repairs. For these reasons, this alternative was selected.

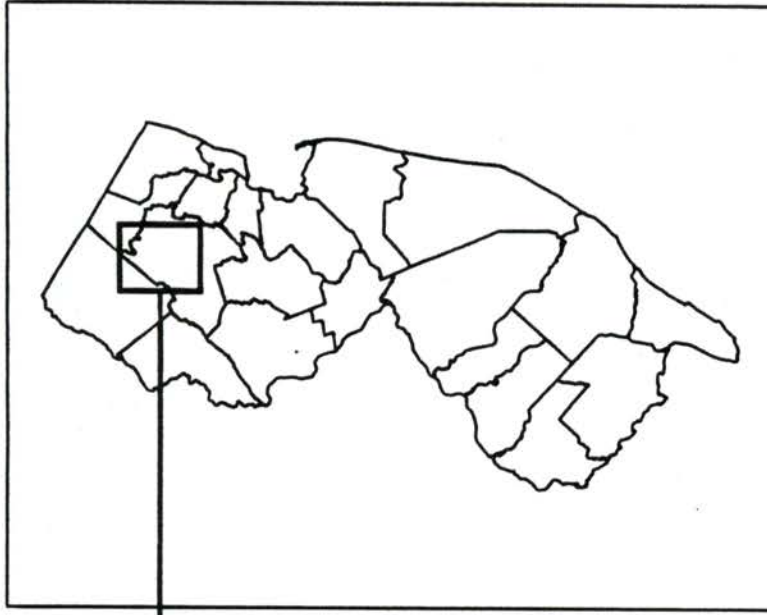
III. Eligibility for Level 1 Environmental Review

- A. The proposed project conforms to a category of actions eligible for a Level 1 environmental review. These categories include the rehabilitation, repair and replacement of existing environmental infrastructure facilities and the construction of ancillary facilities or minor improvements to environmental infrastructure facilities which do not create a new discharge, reduce the level of treatment, or result in an increase in the quantity of flow of an existing discharge.
- B. Information regarding the proposed project leads to the conclusion that none of the criteria for disqualifying an eligible category for a Level 1 environmental review are present: 1) the project is not expected to have a permanent adverse or a significant temporary adverse effect on the human environment; 2) the project is not expected to have a permanent adverse or a significant temporary adverse direct or indirect impact on cultural resources, wetlands, important farmlands or other environmentally critical areas; 3) the residential user cost for the project will be below 1.75 percent of the median annual household income; and 4) the project is not expected to result in significant adverse public comment.

IV. Conclusion

The environmental review of this project indicates that it conforms to a category of actions eligible for a Level 1 environmental review and no disqualifying circumstances are present. Project documentation submitted in support of this project and reviewed by the Department indicates that the potential for environmental impacts will be minor. The potential for impacts will be further minimized by incorporating the standard environmental protection measures contained in the "Environmental Assessment Requirements for State Assisted Environmental Infrastructure Facilities" (N.J.A.C. 7:22-10) into the design and construction of the project.

New Jersey



Legend



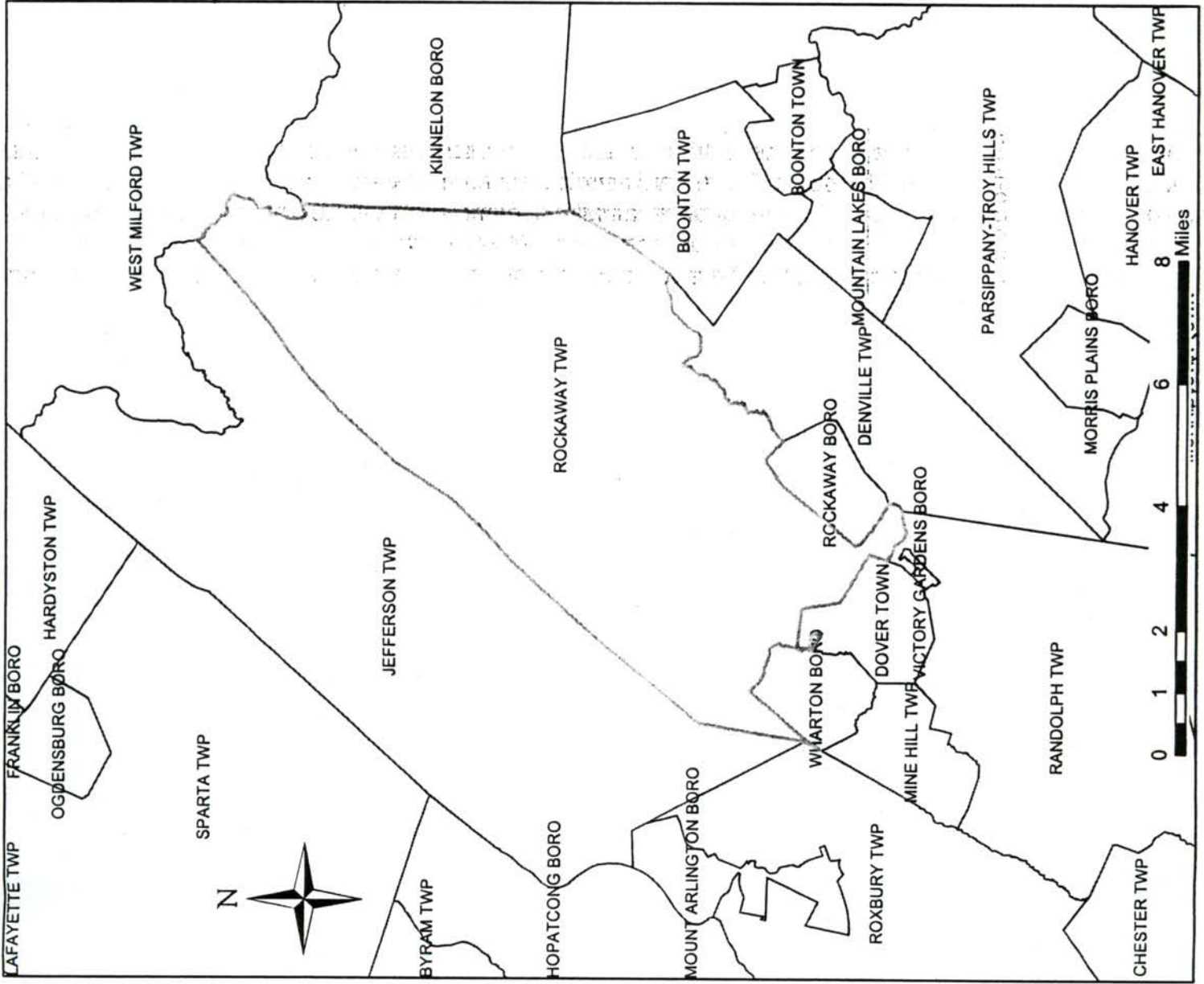
-  Municipalities
-  Counties

Figure 1

Rockaway Valley Regional Sewerage Authority
Morris County, New Jersey
Preliminary Treatment Facilities Improvements
Project No. S340821-05



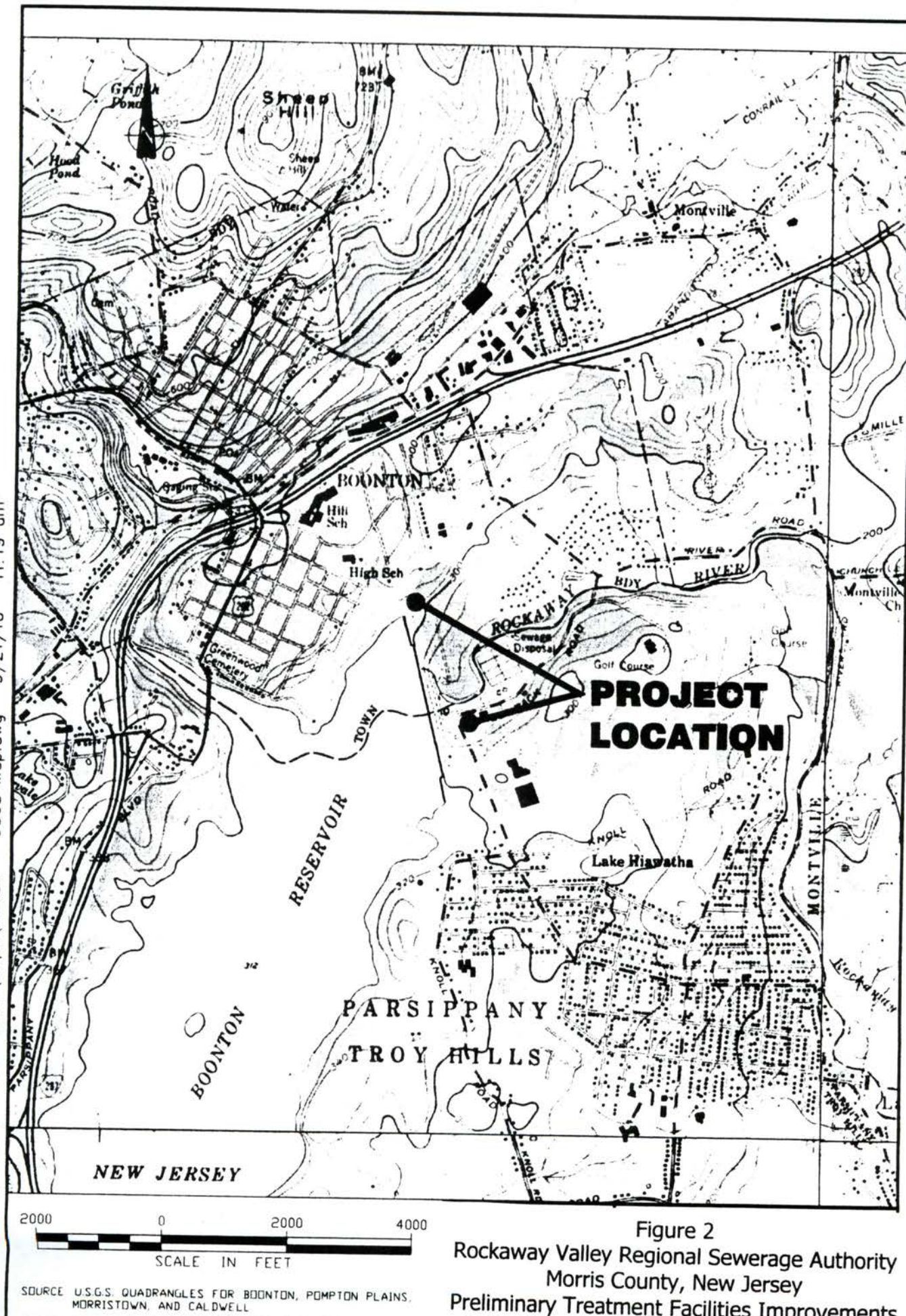


Figure 2
Rockaway Valley Regional Sewerage Authority
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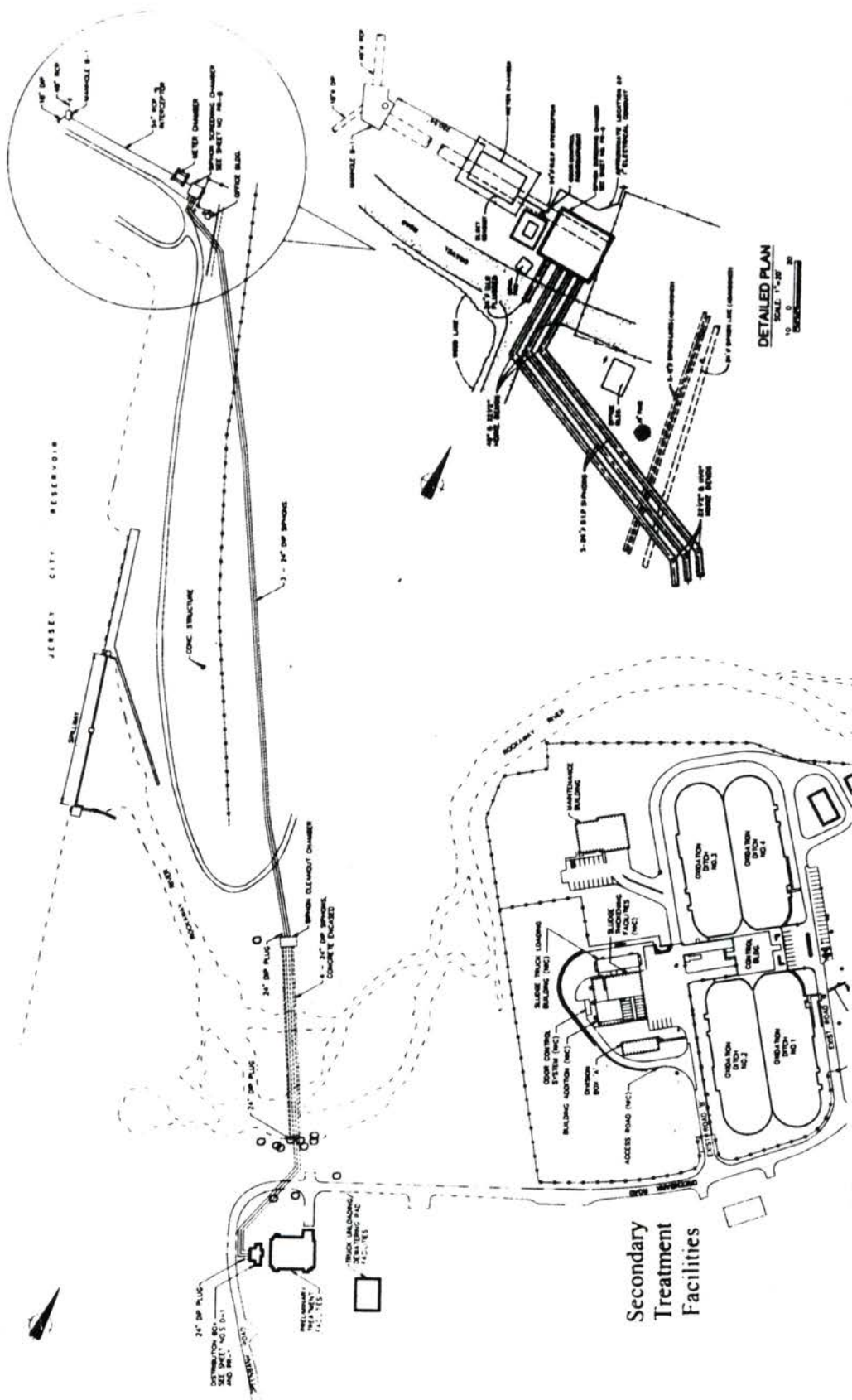


Figure 3
 Rockaway Valley Regional Sewerage Authority
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FIGURE 3 - PROPOSED SITE PLAN

ROCKAWAY VALLEY REGIONAL SEWERAGE AUTHORITY
 MORRIS COUNTY, NEW JERSEY
 PRELIMINARY TREATMENT FACILITIES
 SITE
 OVERALL SITE PLAN

27 South Street
 Morristown, New Jersey 07960
 (609) 261-1111
 Fax: (609) 261-1112
 E-mail: info@rockawayvalley.org

ROBERT A. CURT
 Registered Engineer - N.J. Lic. No. 27113

DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____
 APPROVED BY: _____

LEGEND

--- FLOOD HAZARD AREA LIMIT
--- 100-YR FLOOD LIMIT

100 0 100 200

SCALE IN FEET

Figure 4
Rockaway Valley Regional Sewerage Authority
Morris County, New Jersey
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P:\281088 RVRSA\dwg\ (S-1)B OVERALL SITE PLAN.dwg 2/23/11 10:55 am

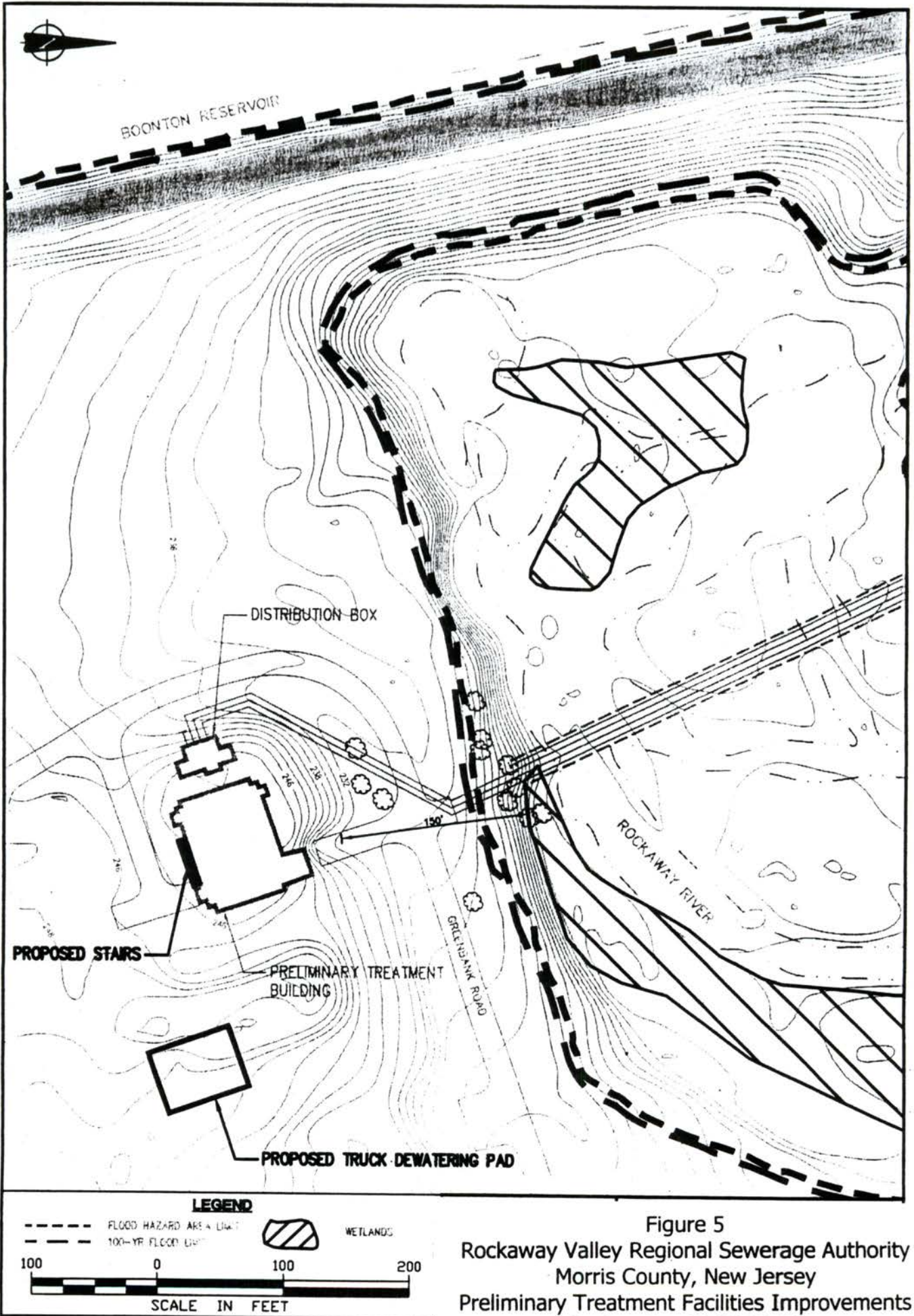


Figure 5
Rockaway Valley Regional Sewerage Authority
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