

WRRDA 7001 Submissions Package
U.S. Army Corps of Engineers

Proposal Name: East Hartford Flood Reduction System (Connecticut River LB & Hockanum River RB Levee) – Rehabilitation Study

Submission Date: 09/16/2016

Proposal ID Number: bf55eb05-1b10-4883-9757-f628133873ae

Purpose of Proposal: The purpose of the rehabilitation study is to investigate potential modifications of the existing flood reduction system to improve levee performance and further reduce the risk of failure of the levee system along the Connecticut and Hockanum Rivers. The flood reduction project was authorized by the Flood Control Act approved June 28, 1938, House Document No. 455, 75th Congress, 2nd Session, as modified by Public No. 859, 76th Congress, approved October 15, 1940. The Town has completed a series of system modifications and repairs to address seepage and stability issues. Additional efforts are currently underway to design various repairs and modifications to the System including upgrades to the two original closure structures and the levee toe/collector drain system. Elements associated with the interior drainage system for the System must be analyzed to determine the most appropriate modifications required to handle the increased runoff and alterations of the interior drainage system resulting from the construction of the state highway network. The increased storm water runoff associated with climate change and development have resulted in impacts to the three original pump stations. Modification of the Meadow Hill Storage pond is also recommended. Sediment accumulation has occurred within the original limits of the storage pond. The original design of the storage pond does not account for the normal low flows and tidal influences of the Connecticut and Hockanum Rivers. The lowest elevation of the storage pond is approximately 0.7' (1929 NGVD) but even during periods of low flows river elevations fluctuate between 1' and 3' (1929 NGVD). The typical low flow river elevations along with the pump inlet elevations result in the loss of effective storage in bottom of the storage pond. The design of the storm water storage pond should be modified based on the upgrades of the storm water pumping station and associated typical low flow river elevations.

1. Administrative Details

Proposal Name: East Hartford Flood Reduction System (Connecticut River LB & Hockanum River RB Levee) – Rehabilitation Study

by Agency: Town of East Hartford

Locations: CT

Date Submitted: 09/16/2016

Confirmation Number: bf55eb05-1b10-4883-9757-f628133873ae

Supporting Documents

File Name	Date Uploaded
EH letter of support 091416.pdf	09/16/2016
System Overview Map Drainage.pdf	09/16/2016
application supporting doc study 083116.pdf	09/16/2016

2. Provide the name of the primary sponsor and all non-Federal interests that have contributed or are expected to contribute toward the non-Federal share of the proposed feasibility study or modification.

Sponsor	Letter of Support
Town of East Hartford(Primary)	The Town of East Hartford is the non-Federal sponsor and will be an active participant in the Rehabilitation Study. The Town views the study as an important element in the overall rehabilitation of the flood reduction system and is fully supportive of its implementation. The Town continues to explore all options to ensure that the flood reduction system protects its residents and business community by ensuring the System provides its intended level of protection. The Town is prepared to provide the required local cost share of the recommended study.

3. State if this proposal is for a feasibility study, a modification to an authorized USACE feasibility study or a modification to an authorized USACE project. If it is a proposal for a modification, provide the authorized water resources development feasibility study or project name.

Feasibility Study

4. Clearly articulate the specific project purpose(s) of the proposed study or modification. Demonstrate that the proposal is related to USACE mission and authorities and specifically address why additional or new authorization is needed.

The purpose of the rehabilitation study is to investigate potential modifications of the existing flood reduction system to improve levee performance and further reduce the risk of failure of the levee system along the Connecticut and Hockanum Rivers. The flood reduction project was authorized by the Flood Control Act approved June 28, 1938, House Document No. 455, 75th Congress, 2nd Session, as modified by Public No. 859, 76th Congress, approved October 15, 1940. The Town has completed a series of system modifications and repairs to address seepage and stability issues. Additional efforts are currently underway to design various repairs and modifications to the System including upgrades to the two original closure structures and the levee toe/collector drain system. Elements associated with the interior drainage system for the System must be analyzed to determine the most appropriate modifications required to handle the increased runoff and alterations of the interior drainage system resulting from the construction of the state highway network. The increased storm water runoff associated with climate change and development have resulted in impacts to the three original pump stations. Modification of the Meadow Hill Storage pond is also recommended. Sediment accumulation has occurred within the original limits of the storage pond. The original design of the storage pond does not account for the normal low flows and tidal influences of the Connecticut and Hockanum Rivers. The lowest elevation of the storage pond is approximately 0.7' (1929 NGVD) but even during periods of low flows river elevations fluctuate between 1' and 3' (1929 NGVD). The typical low flow river elevations along with the pump inlet elevations result in the loss of effective storage in bottom of the storage pond. The design of the storm water storage pond should be modified based on the upgrades of the storm water pumping station and associated typical low flow river elevations.

5. To the extent practicable, provide an estimate of the total cost, and the Federal and non-Federal share of those costs, of the proposed study and, separately, an estimate of the cost of construction or modification.

	Federal	Non-Federal	Total
Study	\$1,000,000	\$1,000,000	\$2,000,000
Construction	\$0	\$0	\$0

Explanation (if necessary)

6. To the extent practicable, describe the anticipated monetary and nonmonetary benefits of the proposal including benefits to the protection of human life and property; improvement to transportation; the national economy; the environment; or the national security interests of the United States.

The existing flood reduction system protects approximately 756 structures with an estimated value of \$859,800,000 and an estimated population ranging from 6,410 (daytime) to 2,177 (night). Failure or overtopping of the System could result in loss of life and the economic losses estimated at \$364,200,000 with areas of inundation over 20 feet deep. The Town of East Hartford is eager to complete the rehabilitation of the flood reduction system to ensure it provides the appropriate level of protection to residents and others working and living within the protected area of the levee.

7. Does local support exist? If 'Yes', describe the local support for the proposal.

Yes

Local Support Description

The attached correspondence outlines the local sponsor's support for the Rehabilitation Study and our financial capability to provide the local cost share necessary for the study. We understand that the inclusion in the WRDA 7001 Report is the first step in the process and that additional authorizations and appropriations are required to enter into an agreement for the study. The Town is committed to making the necessary improvements and modifications to the flood reduction study to protect lives, property and infrastructure located behind the flood reduction system.

8. Does the primary sponsor named in (2.) above have the financial ability to provide for the required cost share?

Yes

Primary Sponsor Letter of Support

(As uploaded)

EH letter of support 091416.pdf

MARCIA A. LECLERC
MAYOR

TOWN OF EAST HARTFORD

Phone: 860 291-7200
Fax: 860 289-0831

740 Main Street
East Hartford, Connecticut 06108



Office of the Mayor

September 15, 2016

John Kennelly
Department of the Army
New England District, Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751

RE: Proposal from Non-Federal Sponsor for inclusion in the Annual Section 7001 Report to Congress for WRRDA - East Hartford Flood Reduction System

Dear Mr. Kennelly,

The Town of East Hartford takes our responsibility for the protection of the community as it relates to the Flood Protection System (System) very seriously. Since 2006 the Town has invested over \$21 million for repairs, modifications and upgrades to the System in order to meet Federal Emergency Management Agency (FEMA) and the United States Army Corps of Engineers (USACE) standards, maintain levee accreditation, active status and to ensure the protection of lives and property for those who live and work adjacent to the System. The Town has been working closely with FEMA, USACE and the Connecticut Department of Energy and Environmental Protection (CT DEEP) through every stage of the multi-phase rehabilitation of the System.

The Town of East Hartford requests a rehabilitation study of the interior drainage system, three storm water pump stations, associated levee penetrations and the Meadow Hill storage pond. The first step in a comprehensive rehabilitation of the interior drainage system would be an evaluation of the existing facilities and operations. Consideration should be given for various alternatives for rehabilitation, modification and /or upgrades to the System during the development of a facilities plan. A review of the Meadow Hill storm water storage pond is also desired; this component of the study would evaluate the operation of and explore design modifications to improve sedimentation management as well the impacts of the tidal influences of the Connecticut River.

On behalf of the citizens and business community, The Town of East Hartford gives it full support for the requested rehabilitation study and is committed to provide our local cost share for the project. We appreciate the technical support of the USACE in assisting the Town on the project.

Thank you for the opportunity to submit the Town's request along with our support of the project.

Sincerely,

A handwritten signature in blue ink that reads "Marcia A. Leclerc". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

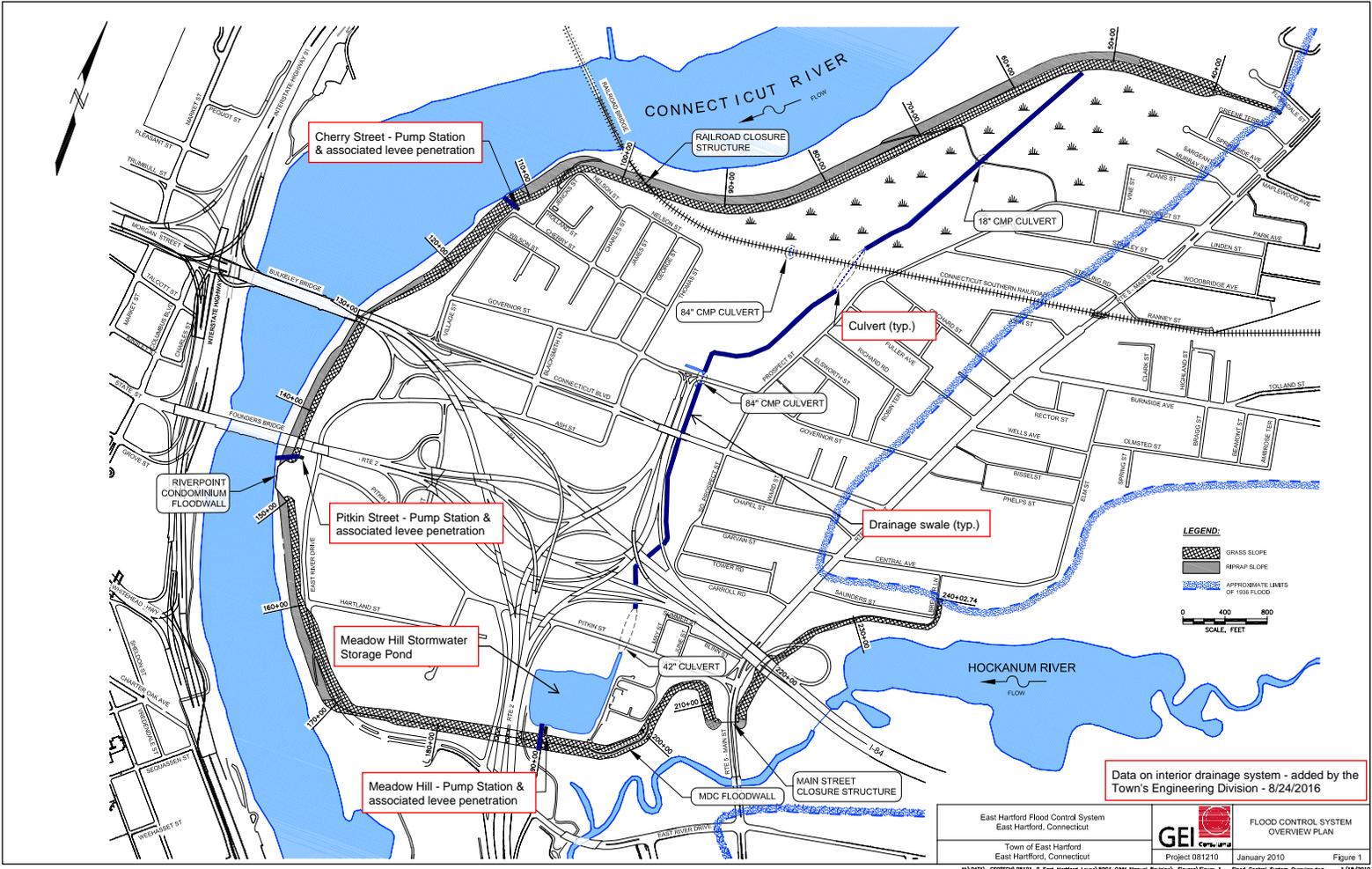
Marcia A. Leclerc
Mayor

EH Letter of support 091416

Map Document

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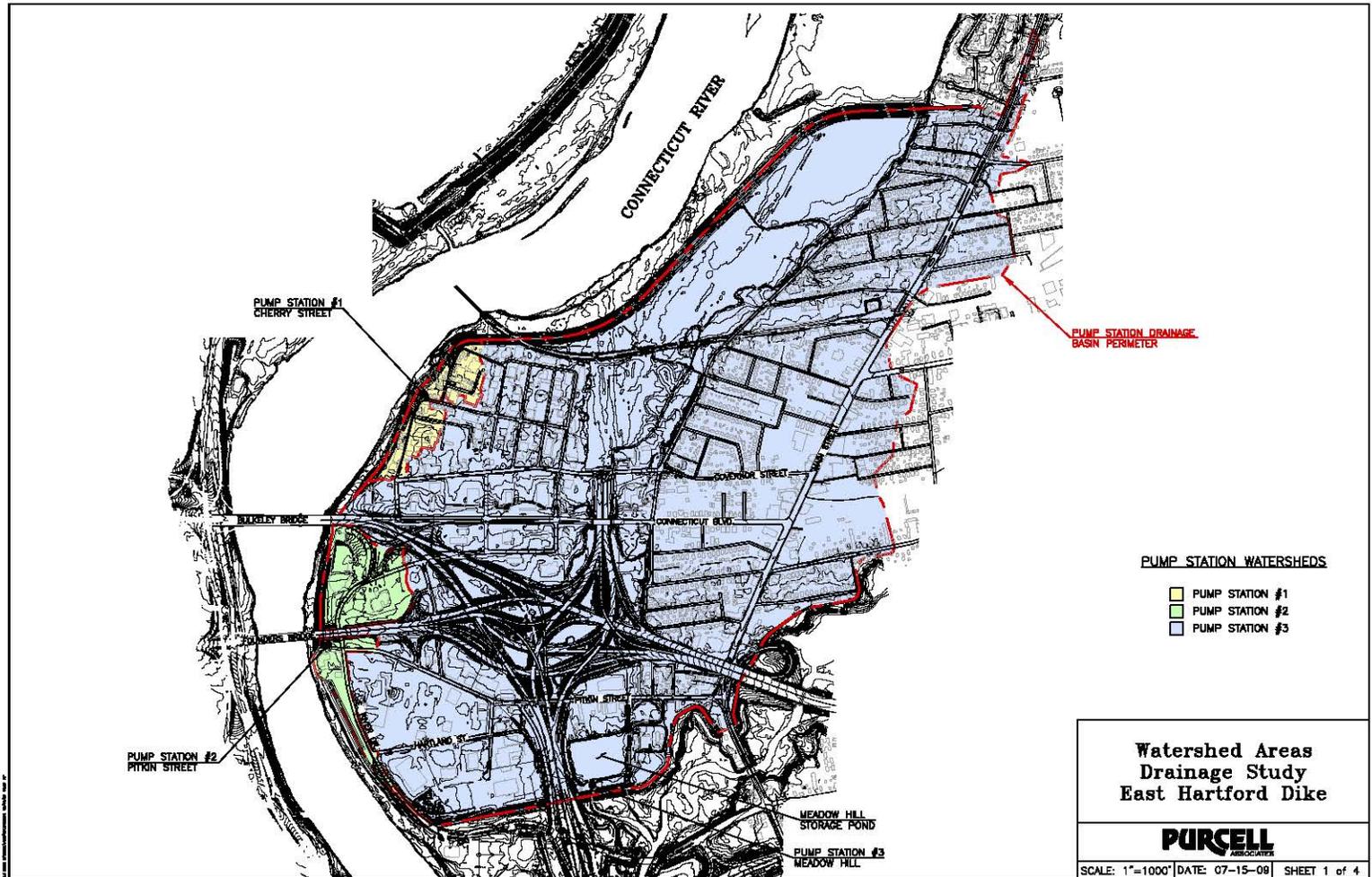
System Overview Map Drainage.pdf



Additional Proposal Information

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application supporting doc study 083116.pdf





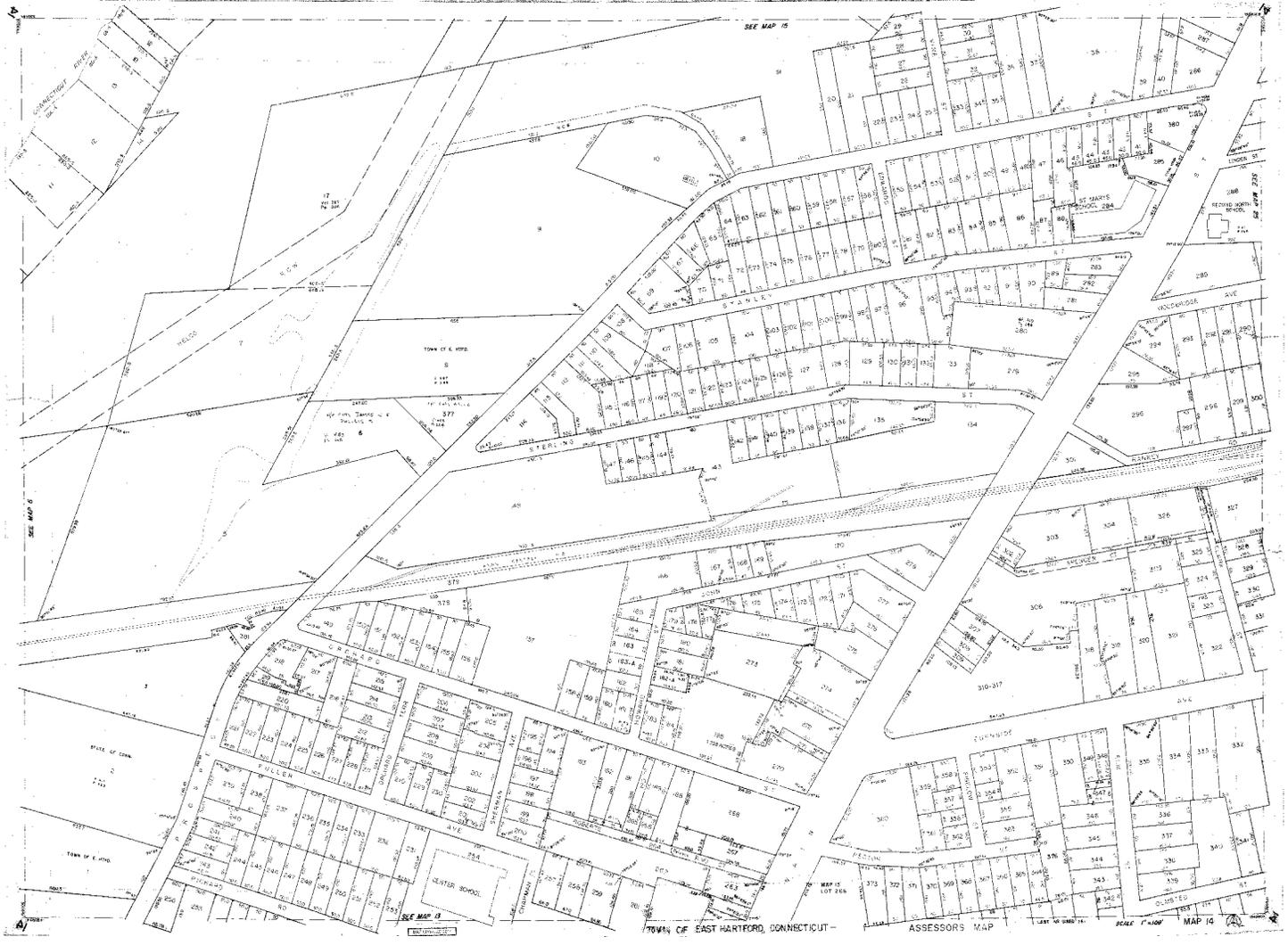
SEE MAP 20

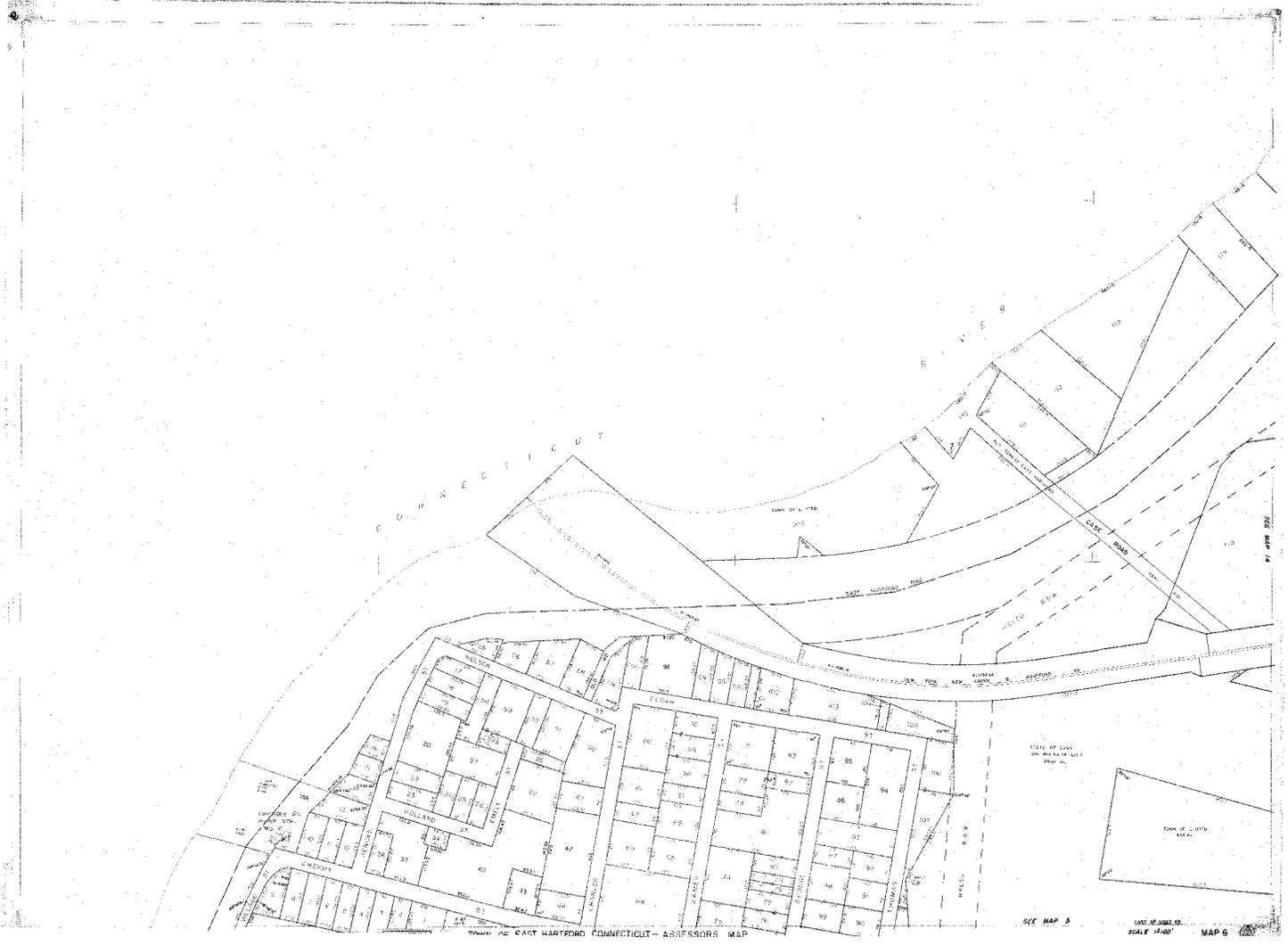
MAP 20
LOT 171

CONVELLUS MIDDLE SCHOOL PARK

JONAS S. BARRETT SCHOOL

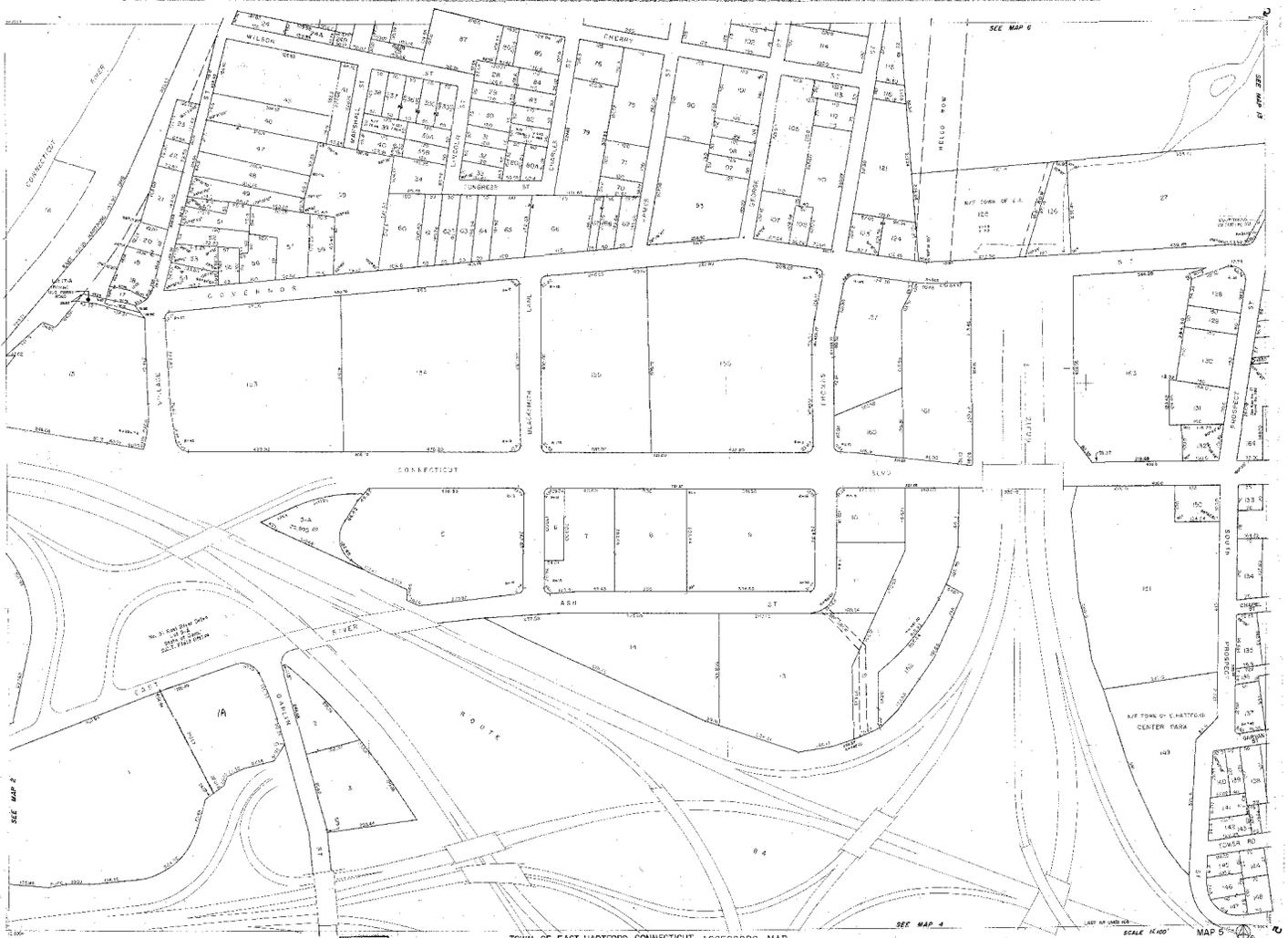
TOWN OF EAST HARTFORD, CONNECTICUT
SEE MAP 20
MAP 20
LOT 171





TOWN OF HARTFORD, CONNECTICUT - ASSESSORS MAP

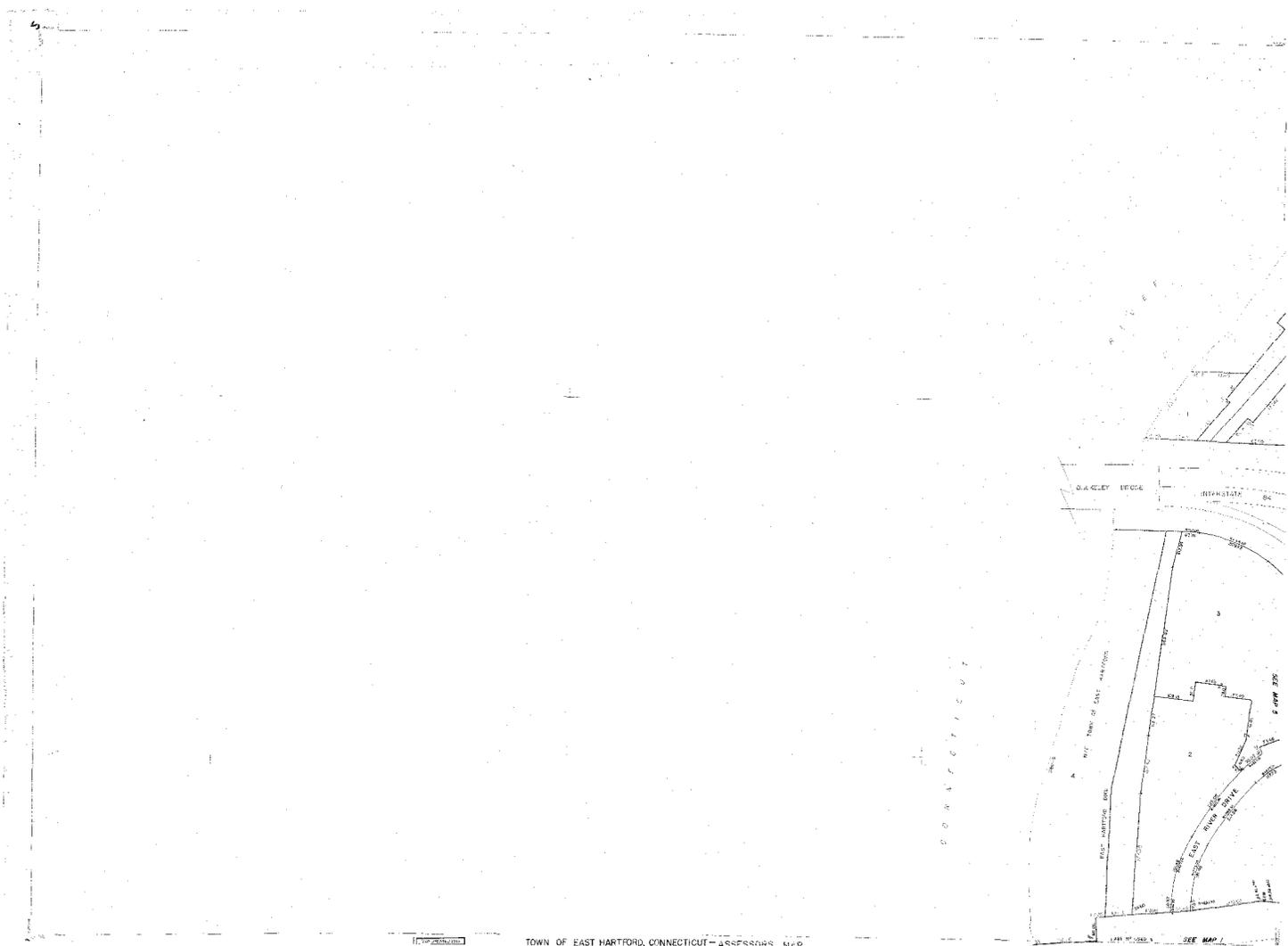
SEE MAP 5
 SCALE 1/400
 MAP 6



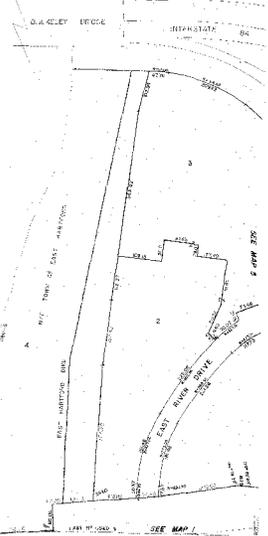
TOWN OF EAST HARTFORD, CONNECTICUT ASSESSORS MAP

SCALE 1:1000

MAP 5



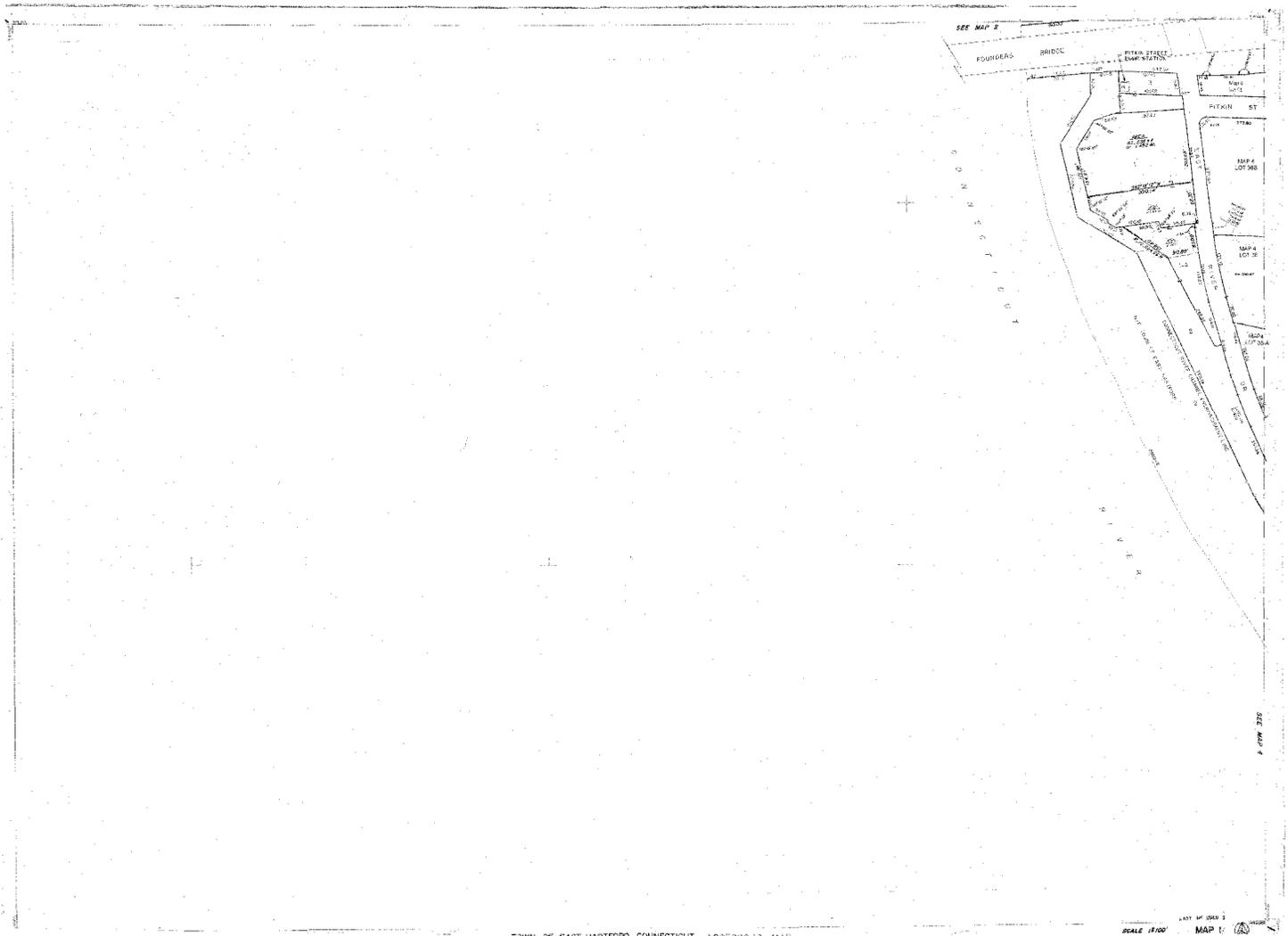
CONNECTICUT



1000000000

TOWN OF EAST HARTFORD, CONNECTICUT - 1965

SEE MAP 1



SEE MAP 2

FOURBERS BRIDGE

RITKIN STREET

RITKIN ST

MAP 4 LOT 100

MAP 4 LOT 101

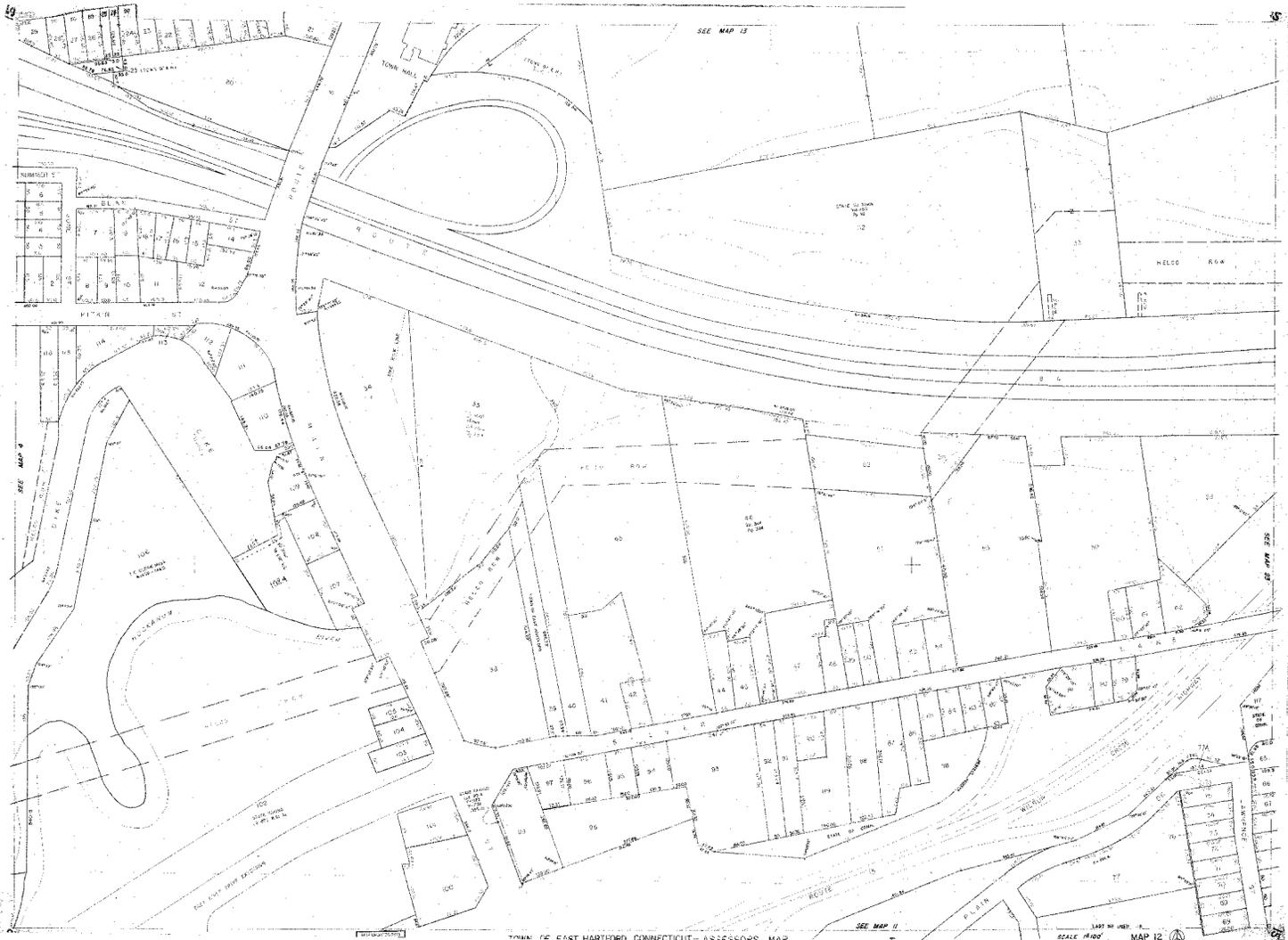
MAP 4 LOT 102

RIVER

SEE MAP 4

SCALE 1/100'

MAP 1



TOWN OF EAST HARTFORD, CONNECTICUT - RESUBDIVISION MAP

SEE MAP 11

SCALE 1"=40'

MAP 12



TOWN OF EAST HARTFORD, CONNECTICUT - ASSESSORS MAP

SCALE: 1" = 100'
MAP 13