



Shipping Street Waterfront Redevelopment Study

Norwich, Connecticut
December 2003

NORWICH HARBOR MANAGEMENT COMMISSION
NORWICH REDEVELOPMENT AGENCY

**CITY OF NORWICH
SHIPPING STREET WATERFRONT
REDEVELOPMENT STUDY:
FINAL REPORT**

Prepared By:

NORWICH HARBOR MANAGEMENT COMMISSION
City of Norwich, Connecticut

In Association With:

NORWICH REDEVELOPMENT AGENCY

December 31, 2003

Funding for this project was provided by a grant through the Connecticut Department of Environmental Protection's Office of Long Island Sound Programs made available by the Coastal Zone Management Act of 1972, as amended, and administered by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration.

FOREWORD

This report summarizes the results of the Norwich Shipping Street Waterfront Redevelopment Study conducted in 2003 by the Norwich Harbor Management Commission in association with the Norwich Redevelopment Agency.

The study was conducted as part of the City's efforts to achieve well-planned redevelopment of underutilized waterfront properties; expanded public use of its waterfront; Downtown revitalization linked with the Norwich Harbor; protection and enhancement of the natural environment; and other City goals for beneficial use and conservation of the City's coastal resources.

Principal goals of the study were to: 1) identify the economic, environmental, and regulatory considerations affecting redevelopment of the group of waterfront properties collectively known as the Shipping Street Waterfront Redevelopment Area (WRDA) on the Thames River; 2) establish the City's goals and objectives for redevelopment of the Shipping Street WRDA; 3) prepare a conceptual redevelopment plan for the WRDA that will provide the basis for a formal redevelopment plan to be prepared by the Redevelopment Agency; and 4) establish an implementation framework for the redevelopment plan.

The Shipping Street Waterfront Redevelopment Study was undertaken with recognition that the Norwich Harbor and waterfront comprise the City's most valuable natural resource—now and throughout the City's exceptional history. The study has demonstrated the commitment of City leaders and agencies to establish a long-range Waterfront Vision for the City of Norwich and to pursue the most active involvement and thoughtful planning needed to achieve that vision. The study has also resulted in increased awareness by Norwich residents of the substantial opportunities for economic growth and community development associated with the Norwich Harbor and waterfront at the beginning of the 21st century.

ACKNOWLEDGMENTS

A number of persons contributed to the Shipping Street Waterfront Redevelopment Study conducted by the Norwich Harbor Management Commission (HMC) in association with the Norwich Redevelopment Agency. Members of the Norwich HMC who contributed to the study are:

Ronald D. Aliano, Chairman	
Richard Benoit	James Paulsen
Alderman John Paul Mereen	City Manager Richard A. Podurgiel
Alderwoman Sofee Noblick	Edward Seder

Funding for the study was provided by the Connecticut Department of Environmental Protection's Office of Long Island Sound Programs (DEP OLISP) through the DEP OLISP's "New Directions in Coastal Planning" grant program. From the DEP OLISP, David Kozak provided valuable assistance and advice throughout the study. The application for the planning grant received by the City of Norwich was prepared by the HMC supported by the Norwich City Council.

The study was managed by the Norwich Interagency Planning and Coordination Committee consisting of: Ronald D. Aliano, Chairman of the Norwich HMC; Stanley Israelite, Norwich Community Development Corporation; Thomas Marien, Chairman of the Norwich Redevelopment Agency; William R. Sweeney, Norwich City Planner; Jennifer Kolonick, formerly Director of the Norwich Tourism and Main Street Office; and Thomas Wendland, citizen participant. The Committee met monthly throughout 2003 to review work in progress and otherwise direct the efforts of its consultants who were retained to assemble, analyze, and present information and prepare a conceptual redevelopment plan for the Shipping Street Waterfront Redevelopment Area.

Mayor Arthur L. Lathrop and all members of the Norwich City Council deserve special recognition for their vital contributions for setting and advancing the City's waterfront redevelopment goals and supporting the Shipping Street Waterfront Redevelopment Study.

LandWorks Collaborative of Worcester, Massachusetts served as master planning consultant to the HMC for the study, responsible for economic and site analysis and preparation of the Shipping Street conceptual redevelopment plan. Robert Mulcahy, principal of LandWorks, worked with the Interagency Planning and Coordination Committee throughout the project and prepared Section 3 of the Study Report. The HMC's planning consultant, Geoffrey Steadman of Westport, Connecticut, assisted the HMC with preparation of the grant application and prepared the other sections of the Study Report. Aerial photographs are provided by Mr. Steadman and are from July 31, 2002; all other graphics are by LandWorks Collaborative.

Finally, special thanks are due to the citizens of Norwich who attended the HMC's public meetings during the study and otherwise demonstrated their interest and commitment for achieving the opportunities for economic growth, community development, and environmental enhancement associated with the Norwich waterfront.

1

INTRODUCTION AND OVERVIEW

CITY OF NORWICH, CONNECTICUT
SHIPPING STREET
WATERFRONT
REDEVELOPMENT
STUDY

SECTION ONE: INTRODUCTION AND OVERVIEW

The City of Norwich is one of the oldest and most historic communities in southeastern Connecticut. (See Figure 1-1.) Much of the City's historical growth and development has been directly tied to its location on Norwich Harbor at the head of the Thames River, where the Yantic and Shetucket rivers converge. This historic confluence of the three rivers gives shape to Downtown Norwich—the City's nucleus today and for much of its history. (See photo 1-1.) The three rivers also provide the constant and prominent waterfront theme that runs through any description of the City's social and economic history, from the first settlement to the present day.

In the year 2003 Norwich has continued to evolve as it seeks its optimum role in the economic and development structure of the State. As the City moves forward, public attention is naturally focused once again on the opportunities for economic growth and community development presented by the Harbor and waterfront. Achievement of those opportunities will require active involvement, long-term commitment, and thoughtful planning on the part of a number of City agencies.

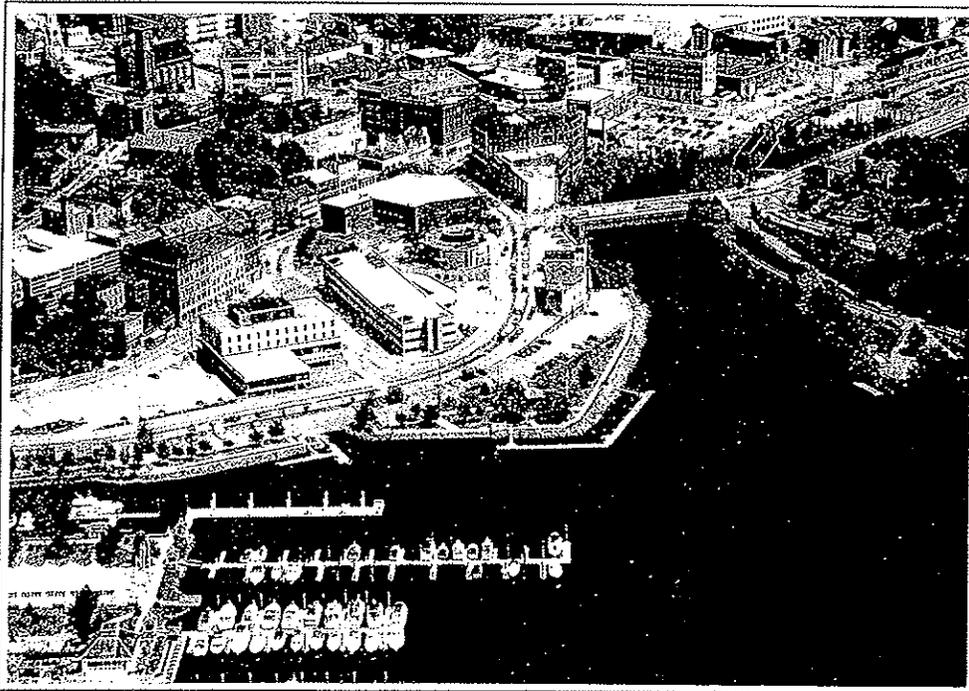


Photo 1-1: Downtown Norwich at the head of the Thames River (the mouth of the Shetucket River is to the right).

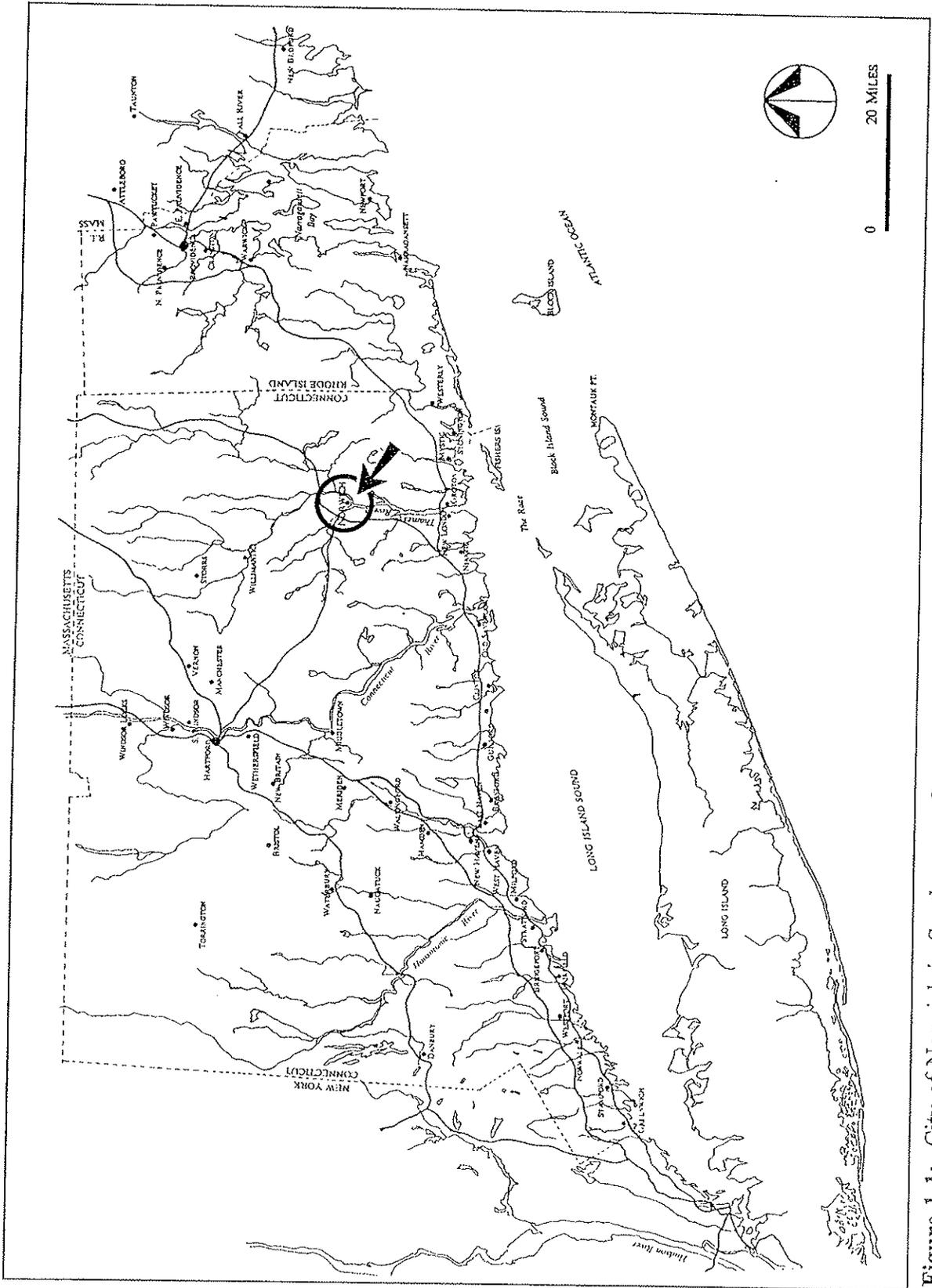


Figure 1-1: City of Norwich in Southeastern Connecticut.

Overall, the City has about ten miles of waterfront along the Thames, Yantic, and Shetucket rivers in the Norwich Harbor Management Area. This area, delineated in the *Norwich Harbor Management Plan*, encompasses the Thames River downstream to the City boundary with the towns of Montville and Preston; the tidal portion of the Yantic River upstream to the base of Yantic Falls; and the Shetucket River upstream to the base of the Greeneville Dam.

Several City plans, including the *Norwich Harbor Management Plan*, *Norwich Plan of Conservation and Development*, and *Downtown Norwich Redevelopment Plan*, establish the City's basic goals and policies for use and development of the Harbor, waterfront, and Downtown. To best serve the public interest and meet the City's needs at the beginning of the 21st century, the Plan of Conservation and Development has recently been updated; the Harbor Management Plan and Downtown Redevelopment Plan are scheduled for amendment in the near future.

A WATERFRONT VISION AND IMPLEMENTATION STRATEGY FOR THE CITY OF NORWICH

In the course of the above-noted planning efforts, representatives of the Norwich Community Development Corporation, Department of Planning and Neighborhood Services, Harbor Management Commission, and Redevelopment Agency have been working together since November of 2001 as the City's Waterfront Interagency Planning and Coordination Committee for the purpose of preparing a long-range Waterfront Vision and implementation strategy for the City of Norwich. (A representative of the former Tourism and Main Street Office was an active participant on the Committee.) The Waterfront Vision, to be reflected and implemented through the provisions of the various City plans, codes, and ordinances affecting the Harbor and waterfront, is based on specific City goals for: expanded public use of the waterfront; redevelopment of underutilized properties; Downtown revitalization linked with the Harbor; protection and enhancement of the natural environment; and other goals for beneficial use and conservation of Harbor and waterfront resources.

The Norwich City Council, during its meeting of June 17, 2002, reviewed a draft Waterfront Vision report prepared by the Committee and encouraged the Committee to proceed with development of the Waterfront Vision and implementation strategy. That encouragement was given with the understanding that the Committee would ultimately submit its recommendations to the Council and request the Council's endorsement.

On August 7, 2002 the Committee held a public workshop to involve all interested citizens and community leaders in: 1) formulation of a common vision for redevelopment and public use of the Norwich waterfront; and 2) development of an effective implementation strategy. To this purpose, a revised draft Vision Statement for public review was prepared and distributed to interested citizens and agencies prior to the public meeting; public comments on the document were then heard at the meeting.

Following the public meeting, the Committee continued to develop its recommendations through additional investigations and consideration of citizen input and prepared a revised Vision Statement for the Council to consider. On May 5, 2003, the Committee presented "A Waterfront Vision and Implementation Strategy for the City of Norwich" (dated March 24, 2003) to the City

Council. That document consists of basic principles, area-specific elements, and a recommended strategy for implementation.

The Council considered the Committee's recommendations and requested that additional consideration be given to elements of the implementation strategy, specifically with regard to designation of a lead agency for implementation. This issue concerning designation of a lead agency was subsequently addressed through proposed amendments to the bylaws of the Norwich Community Development Corporation (see below). As a result, the Committee anticipates submitting an amended Waterfront Vision document to the Council for Council endorsement in the early part of 2004.

The Waterfront Vision document identifies key waterfront sites and areas of opportunity for achieving the City's waterfront development goals, including currently underutilized waterfront properties providing opportunities for redevelopment and expanded public use of the waterfront. (See Figure 1-2.)

The two highest priority areas identified for preparation of waterfront redevelopment plans are: 1) the New Wharf area on the east bank of the Thames River near the Downtown; and 2) the Shipping Street area downstream on the west bank of the River. (See Figure 1-2 and Photo 1-2.) These targeted areas are identified in both the *Norwich Harbor Management Plan* and *Norwich Plan of Conservation and Development* as opportunity areas for redevelopment and expanded public use.

SHIPPING STREET WATERFRONT REDEVELOPMENT STUDY

During the August 7, 2002 public meeting to hear comments on the draft Vision Statement, a representative of the Connecticut Department of Environmental Protection's Office of Long Island Sound Programs (DEP OLISP) encouraged the City of Norwich to apply for funds available through the DEP OLISP's "New Directions in Coastal Planning" grant program to study issues affecting the redevelopment of the targeted waterfront redevelopment areas.

Subsequently, the Harbor Management Commission, Redevelopment Agency, and Community Development Corporation formally resolved to pursue funding through this available grant program. The City Council also passed a resolution supporting a grant request. The Harbor Management Commission in association with the Redevelopment Agency then applied for and received a grant to study the waterfront redevelopment potential associated with either the New Wharf or Shipping Street area.

Due to its greater potential to support water-dependent uses, the 36-acre Shipping Street area with a three-quarter mile waterfront along the Thames River was selected by the Waterfront Interagency Planning and Coordination Committee as the area of study. The selected study area is herein referred to as the Shipping Street Waterfront Redevelopment Area (WRDA). Photos 1-3 through 1-9 provide aerial views of this area on the Thames River. Downtown Norwich at Brown Memorial Park is a little more than one-half mile upriver from the northern boundary of the Shipping Street WRDA; the Mohegan Sun Casino is about one mile downriver from the southern boundary of the WRDA.

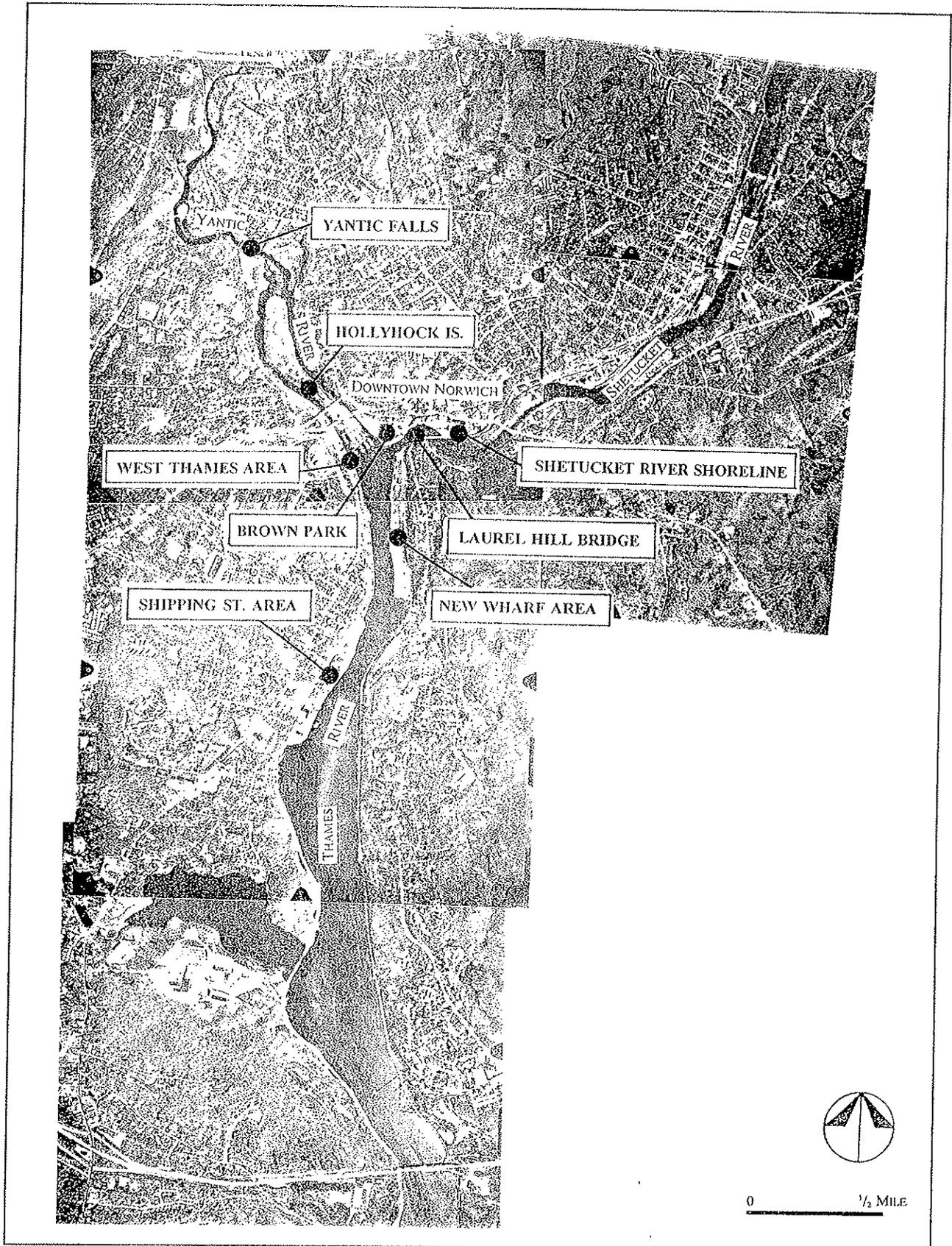


Figure 1-2: Areas of interest and opportunity for implementing the Waterfront Vision.

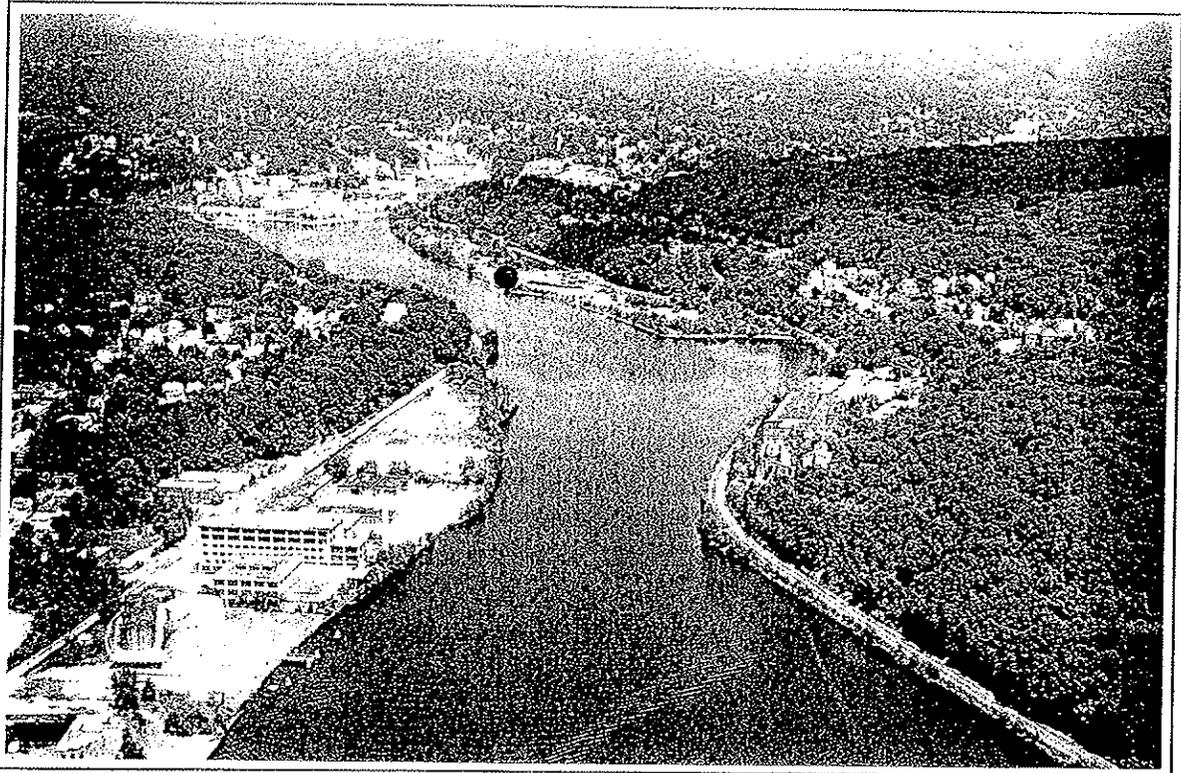


Photo 1-2: Thames River looking upstream toward Downtown Norwich. The Shipping Street Waterfront Redevelopment Area is in the left foreground on the west bank of the River; the New Wharf area (marked by ●) is upstream, on the east bank.

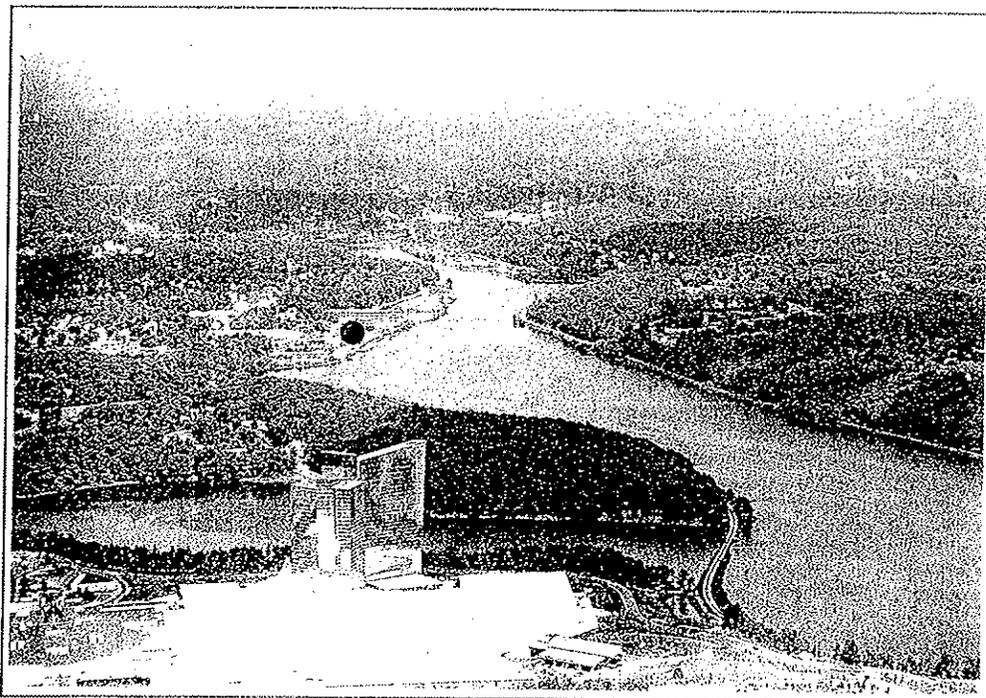


Photo 1-3: Looking north on the Thames River over the Mohegan Sun Casino in the foreground and the Shipping Street WRDA (marked by ●) toward Downtown Norwich.

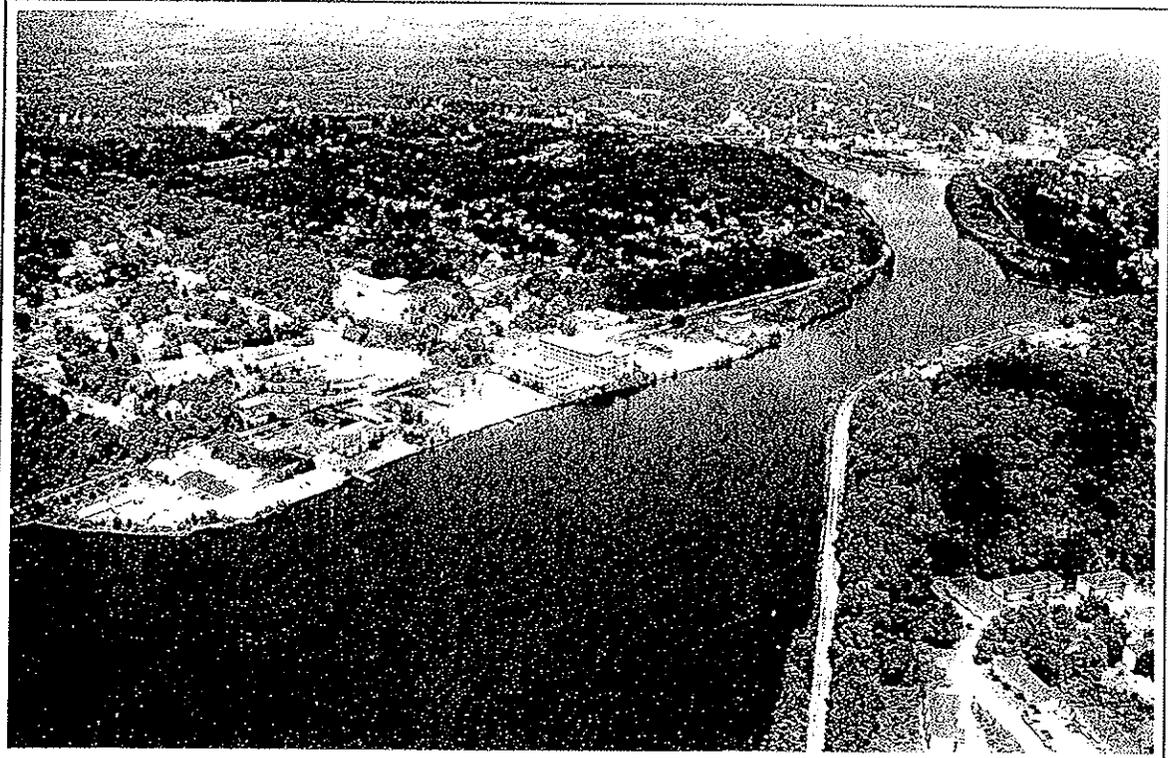


Photo 1-4: Shipping Street WRDA on the west bank of the Thames River at Norwich; looking upstream toward Downtown Norwich.

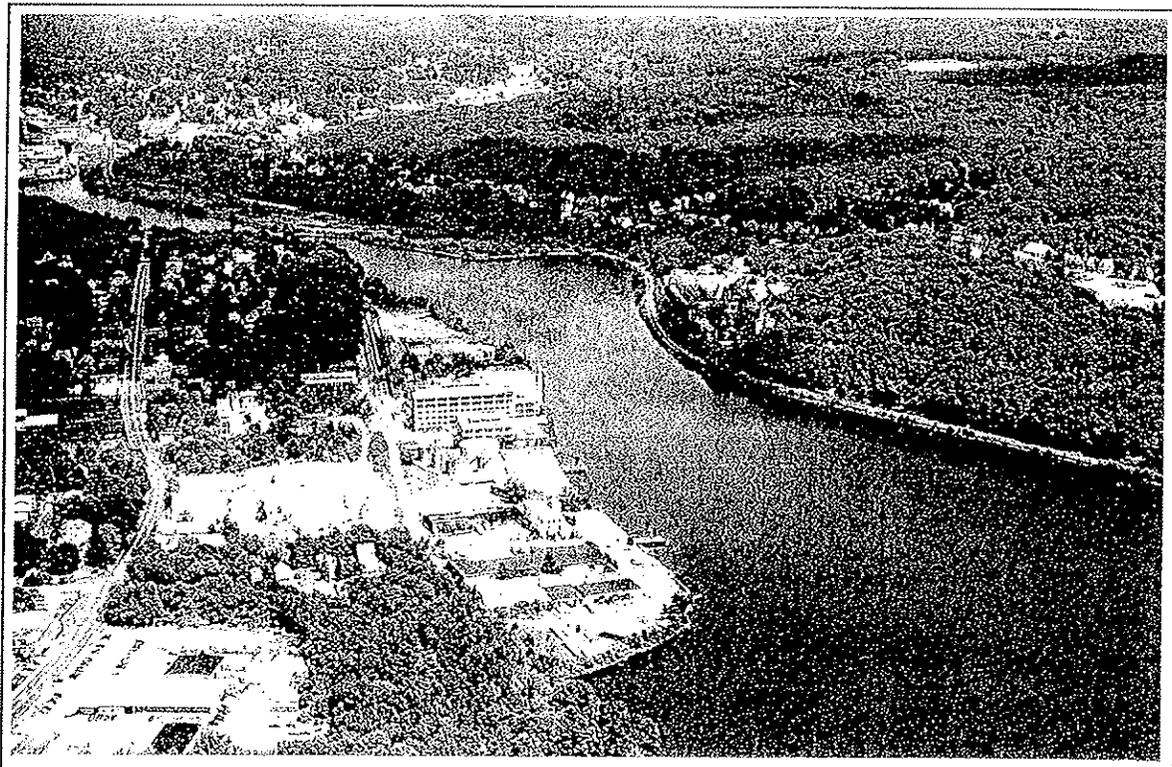


Photo 1-5: Shipping Street WRDA on the Thames River; West Thames Street to left.

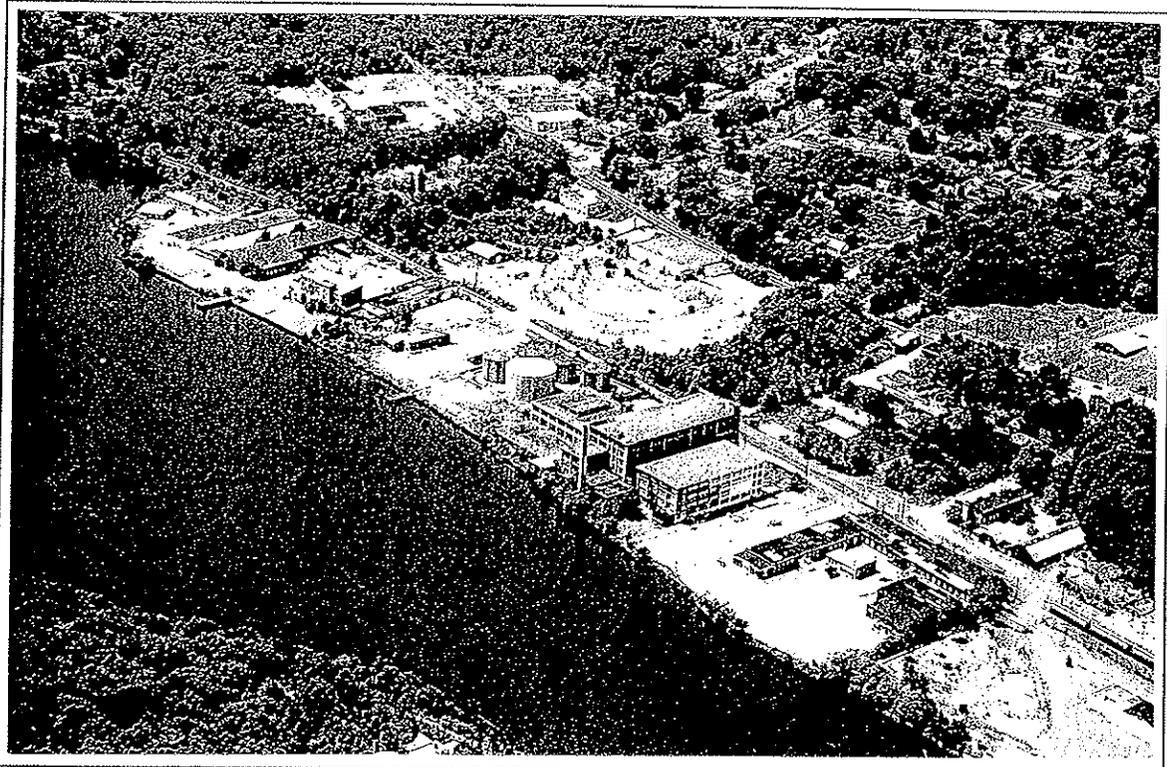


Photo 1-6: Shipping Street WRDA looking southwest with docking facilities of former oil terminals visible on waterfront; Central Vermont rail line runs through the site.

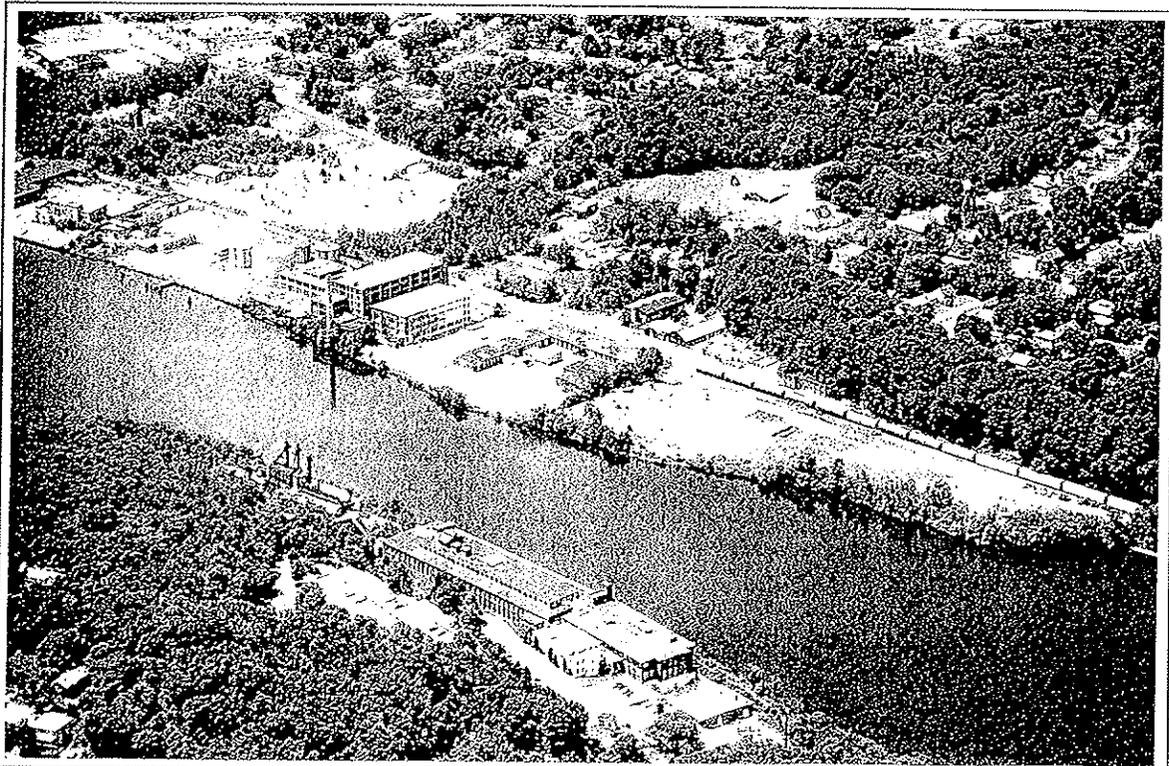


Photo 1-7: Looking southwest over northern part of Shipping Street WRDA; Thermos site on east bank of Thames River in the foreground.

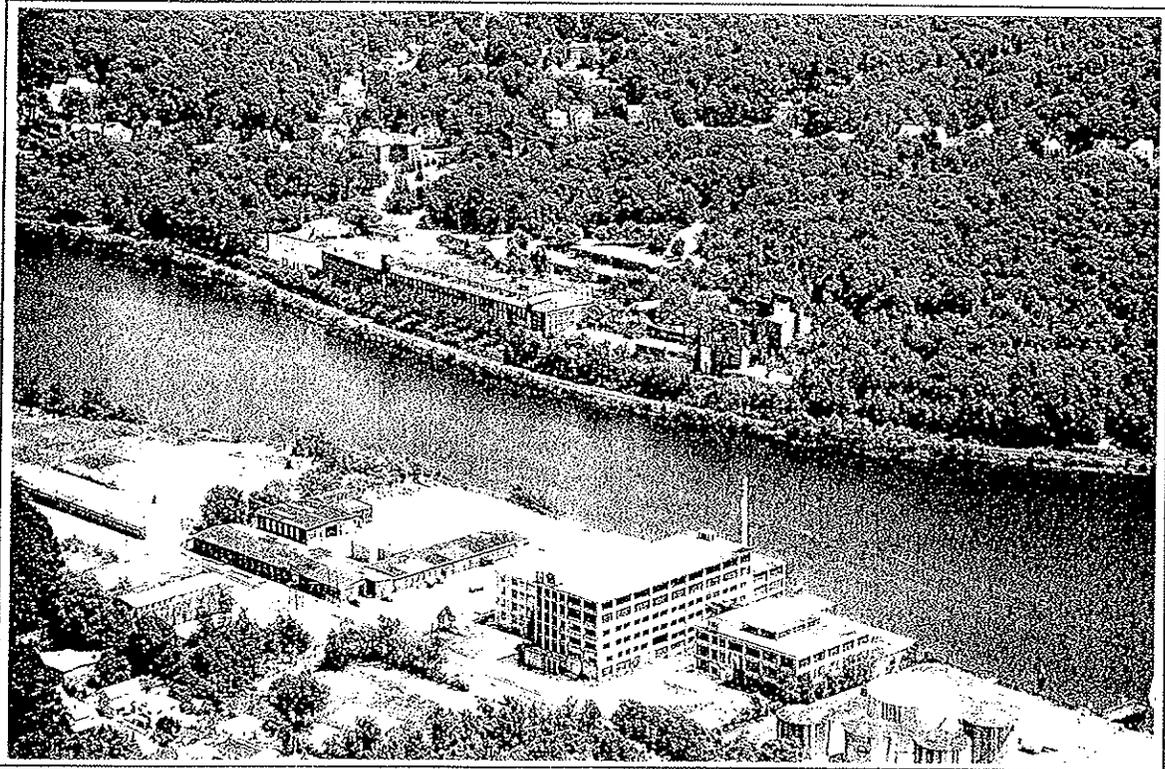


Photo 1-8: Looking east over Shipping Street WRDA and former manufacturing building; Thermos site on east bank of Thames River.

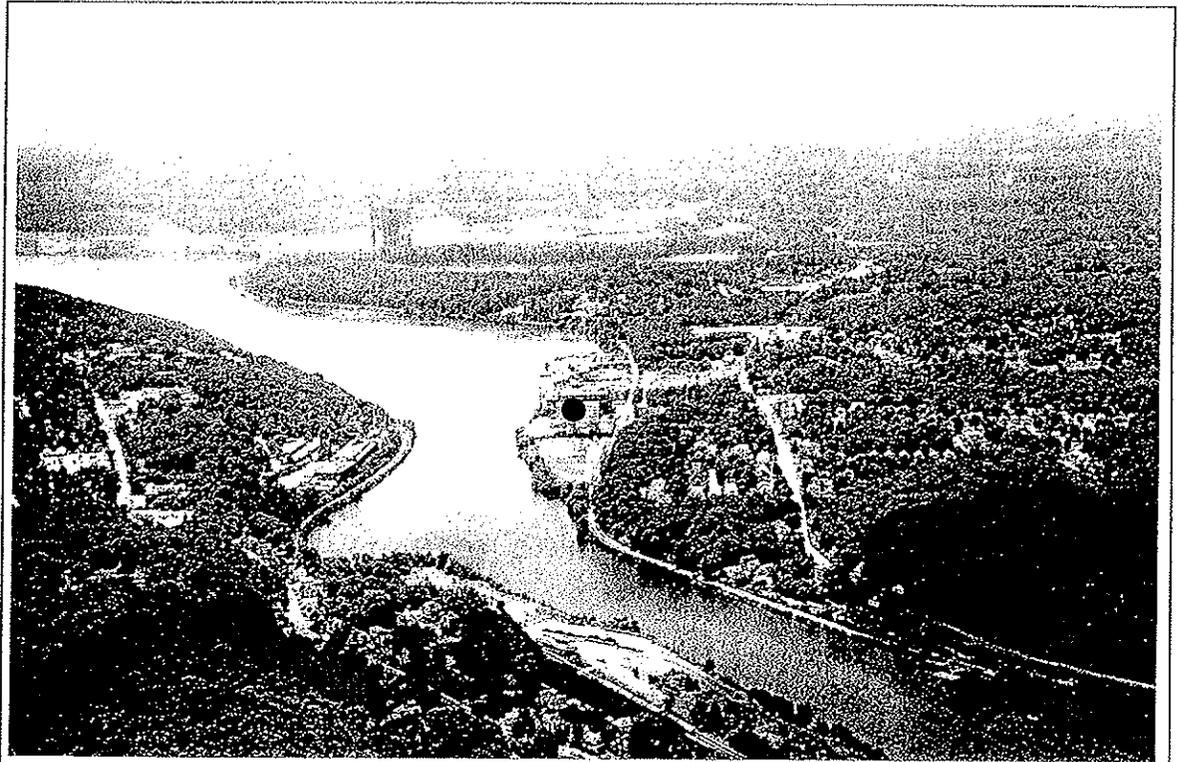


Photo 1-9: Looking south on the Thames River over the Shipping Street WRDA (marked by ●) toward the Mohegan Sun Casino.

The Shipping Street Waterfront Redevelopment Study was conducted at the direction of the Waterfront Interagency Planning and Coordination Committee which met monthly throughout 2003 to review work in progress and otherwise direct the efforts of the Committee's consultant team of landscape architects and planners. The project involved identification of the economic, environmental, and regulatory considerations affecting redevelopment of the Shipping Street WRDA. Based on an assessment of those considerations, including the need for achieving consistency with the legislative goals and policies of the Connecticut Coastal Management Act (Sections 22a-90 through 22a-112 of the Connecticut General Statutes), target land uses for redevelopment have been identified and a conceptual redevelopment plan has been prepared. The City's Geographic Information System (GIS) data base was utilized to prepare maps of existing site conditions and redevelopment opportunities.

In summary, a mix of commercial, residential, and recreational uses of the Shipping Street WRDA are envisioned, replacing the previous industrial uses which included oil storage and distribution terminals. Architectural and landscape design will maximize the beneficial impact of the new development on waterfront scenic quality. The new development will have a substantial water-dependent component, including amenities for public access to the Thames River and Norwich Harbor along the entire waterfront. Existing bulkheads will be repaired and maintained to support water access amenities including, but not limited to, a Riverwalk promenade and linkage with other waterfront sites and the Downtown Norwich via water transportation. The study has provided information and recommendations needed to form the basis for a formal redevelopment plan to be prepared by the Norwich Redevelopment Agency pursuant to Section 8-127 of the Connecticut General Statutes.

On October 14, 2003 a public meeting was held to present and discuss the findings of the Shipping Street Waterfront Redevelopment Study. Those findings include recommendations for the next phase of work to advance redevelopment of the Shipping Street WRDA according to a comprehensive plan. On September 16, 2003 the City Council resolved to support the efforts of the Harbor Management Commission and Redevelopment Agency to pursue available economic development grants to take the next steps needed to realize the City's waterfront redevelopment goals for the WRDA.

Over the course of 2003, the City has made substantial progress with respect to establishing and advancing its waterfront redevelopment goals. In addition to the Waterfront Vision document and implementation strategy prepared by the Waterfront Interagency Planning and Coordination Committee and the Committee's work on the Shipping Street Waterfront Redevelopment Study, an update of the *Norwich Plan of Conservation and Development* including provisions for waterfront redevelopment was adopted; the City's Waterfront Development Zone encouraging mixed use development was significantly extended and now includes all of the Shipping Street WRDA, replacing the former industrial zoning; the Harbor Management Commission has made significant progress in updating the *Norwich Harbor Management Plan* to incorporate elements of the Waterfront Vision and the Shipping Street Waterfront Redevelopment Study; and the Norwich Community Development Corporation is expected to create a new waterfront division to oversee implementation of the Waterfront Vision, including implementation of the Shipping Street conceptual redevelopment plan.

In addition, the Shipping Street Waterfront Redevelopment Study has resulted in increased awareness on the part of City officials and the general public concerning the opportunities for economic growth and community development presented by the Norwich Harbor and waterfront, including opportunities that may be realized through carefully planned redevelopment of the Shipping Street WRDA. Along with that increased awareness, there is now greater recognition of the need for active involvement on the part of the City if those opportunities are to be realized.

The following section of this report sets forth the basic goals of the City of Norwich with respect to redevelopment of the Shipping Street WRDA on the Thames River.

2

REDEVELOPMENT GOALS AND OBJECTIVES

CITY OF NORWICH, CONNECTICUT
SHIPPING STREET
WATERFRONT
REDEVELOPMENT
STUDY

SECTION TWO: REDEVELOPMENT GOALS AND OBJECTIVES

The following goals and objectives are set forth to provide the basis for preparation of a Waterfront Redevelopment Plan for the Shipping Street Waterfront Redevelopment Area (WRDA). The goals and objectives follow from the basic principles for guiding beneficial use and preservation of the Norwich waterfront as presented in “A Waterfront Vision and Implementation Strategy for the City of Norwich” (March 24, 2003) prepared by the Waterfront Interagency Planning and Coordination Committee; they are also consistent with the basic provisions of the *Norwich Plan of Conservation and Development* and *Norwich Harbor Management Plan*.

1. **COMPREHENSIVE AND MIXED-USE REDEVELOPMENT:**

The currently underutilized waterfront properties comprising the Shipping Street Waterfront Redevelopment Area will be redeveloped to advance City goals for economic growth and community development while providing opportunities for increased public use and enjoyment of the Norwich Harbor and waterfront. Redevelopment will encompass a mix of residential, commercial, and recreational uses in accordance with a comprehensive redevelopment plan encompassing the entire Shipping Street WRDA adjoining the Thames River. That plan will be known as the Shipping Street Waterfront Redevelopment Plan.

Redevelopment will follow the highest site planning and architectural design standards to: a) protect and enhance the scenic quality associated with the Norwich Harbor and waterfront; and b) reflect and enhance the maritime heritage associated with the City of Norwich on the Thames River. Architectural design standards will reflect the historic 18th and 19th century character of the City.

The City of Norwich will be an active and aggressive participant in the redevelopment process through application of all appropriate means and authority, including acquisition of targeted redevelopment properties through eminent domain and negotiations with property owners.

2. **ECONOMIC GROWTH AND DEVELOPMENT LINKED TO THE THAMES RIVER AND NORWICH HARBOR:**

Substantial and sustainable economic growth and community development will be achieved through comprehensive redevelopment of the Shipping Street Waterfront Redevelopment Area. That growth and development will be linked to the Thames River and Norwich Harbor and be in harmony and balance with conservation and enhancement of the natural coastal environment of the River and Harbor. (See no. 8 below.)

3. **COORDINATION AMONG CITY AGENCIES:**

The Commission on the City Plan, Community Development Corporation, Harbor Management Commission, Redevelopment Agency, and other City agencies will cooperate in the preparation and implementation of the Shipping Street Waterfront Redevelopment Plan. Coordination and cooperation among these agencies will be ongoing and effective for the purpose of achieving opportunities for economic growth and community development associated with redevelopment of the Shipping Street Waterfront Redevelopment Area. (See the Implementation Strategy in Section Five of this report.)

4. **WATER-DEPENDENT FACILITIES AND USES:**

Redevelopment of the Shipping Street Waterfront Redevelopment Area will provide for a diversity of water-dependent facilities and uses that individually and collectively enhance the quality of the Norwich Harbor environment, the local and regional economy, and the overall quality of life in the City of Norwich. Included will be water-dependent facilities enhanced by proximity to the Thames River Federal navigation channel. High priority will be given to waterfront uses and facilities that provide well-designed, meaningful, and coordinated public access to the Harbor and along the waterfront and are therefore water-dependent as defined in Section 22a-93 of the Connecticut General Statutes.¹ (See no. 5 below.)

The water-dependent component of the Shipping Street Waterfront Redevelopment Plan will also include recreational boating-related facilities and services such as boat berthing, docking, and launching facilities for resident and visiting boaters, including facilities to support hand-paddled craft such as canoes and kayaks using water trails identified and promoted in the Norwich Harbor Management Area. (See no. 6 below.) Those facilities and services will complement the existing boating facilities provided at the American Wharf Marina adjoining Downtown Norwich at Hollyhock Island. The Redevelopment Plan will also include docking and other support facilities for excursion boat operations. (See no. 7 below.)

In addition, the water-dependent component of the Redevelopment Plan will include commercial facilities for the building, storing, repairing, selling, or servicing of boats as permitted in the City's Waterfront Development District zoning regulation.

5. **PUBLIC WATERFRONT AREAS AND FACILITIES:**

Redevelopment of the Shipping Street area will provide long-term opportunities for safe and enjoyable public access to the Thames River and Norwich Harbor and along the waterfront for active and passive recreational uses. A well-designed, well-maintained, safe, and interconnected system of public waterfront areas, walkways, and other facilities

¹ Sec. 22a-93(16) of the Connecticut General Statutes defines water-dependent uses as "uses and facilities which require direct access to, or location in, marine or tidal waters..., including... uses which provide general public access to marine or tidal waters."

will be provided for use by persons of all ages, interests, and abilities. That system of public areas and facilities will be linked with Downtown Norwich and other Thames River locations, including the Mohegan Sun Casino, via water transportation. Waterfront areas and facilities will be designed for use and enjoyment by persons of all ages and abilities and according to the requirements of the Americans with Disabilities Act. Included will be waterfront areas and facilities providing opportunities for walking, jogging, picnicking, fishing, bicycling, boating, and quiet enjoyment of water views. Waterfront areas and facilities also will be suitable for supporting a variety of special events (see no. 7 below). The redeveloped waterfront will serve as a focal point of community activities throughout the year.

6. **RECREATIONAL BOATING FACILITIES:**

The redeveloped waterfront of the Shipping Street Waterfront Redevelopment Area will support a variety of public and commercial boating services and facilities, including boat berthing, docking, and launching facilities for resident and visiting boaters, helping to make Norwich the preeminent center supporting recreational boating activity on the Thames River and a regional destination point for visiting boaters. Boating-related services and facilities will be carefully planned to complement, not compete with, the boating-related facilities and services provided at the American Wharf Marina at Hollyhock Island adjoining Downtown Norwich. Facilities to support hand-paddled craft such as canoes and kayaks will be provided. Recreational boating facilities will also include a public boat launching area to replace the City's existing boat launching facility at Howard T. Brown Memorial Park. Ample parking for users of the boat launching ramp will be provided and the launching facility will be designed so as to avoid traffic congestion and conflicts between launching ramp users and other users of public water access areas and facilities at the Shipping Street WRDA.

7. **WATER-BASED TOURISM:**

Redevelopment of the Shipping Street Waterfront Redevelopment Area will stimulate water-based tourism activities in Norwich Harbor and the associated economic, recreational, and other benefits associated with tourism activities. The redeveloped waterfront will be designed for hosting a variety of special water and waterfront events, programs, and activities that attract City residents and visitors to the WRDA, provide public enjoyment, and stimulate public interest and community involvement in matters pertaining to the Norwich Harbor. Waterfront areas and facilities will be provided to help make Norwich a popular destination for visitors throughout the year.

Redevelopment will include docking and other support facilities for excursion boat operations that will provide significant opportunities for beneficial public use and enjoyment of the Thames River, attract visitors to the City and region, and provide tourism linkages between Norwich and other locations on the River and Long Island Sound. Linkage with Downtown Norwich and other Thames River locations, including the Mohegan Sun Casino, will be by water transportation and serve to advance the City's tourism goals.

8. **ENVIRONMENTAL CONSERVATION AND ENHANCEMENT:**

Redevelopment of the Shipping Street Waterfront Redevelopment Area will enhance the environmental quality of the natural coastal environment of the Thames River and Norwich Harbor, including water quality and scenic quality. Redevelopment will cause no significant adverse impacts on coastal resources.

Redevelopment of the Shipping Street WRDA will be planned and implemented in a manner consistent with the capability of coastal land and water resources to support that redevelopment without the occurrence of any significant adverse impacts on natural resource functions and values. Preparation of the Shipping Street Waterfront Redevelopment Plan will be based on recognition that: a) opportunities for waterfront redevelopment are in large part provided by and dependent on the natural environment, including the water quality and scenic quality, of the Thames River and Norwich Harbor; and b) there are limits to the amount of growth and development that the Norwich Harbor waterfront can absorb without the occurrence of adverse impacts on the environmental quality associated with the River and Harbor.

Redevelopment of the Shipping Street WRDA will be planned and implemented to enhance the surface water quality of the Thames River and Norwich Harbor. Redevelopment will eliminate any existing point and nonpoint sources of pollution (including stormwater runoff from roads, parking areas, and other surfaces) from the Shipping Street WRDA into the River and Harbor. Appropriate buffers and other suitable best management practices will be provided to manage, reduce where feasible, or otherwise control stormwater runoff into the River and Harbor. Redevelopment will include application of appropriate stormwater treatment systems and technology, including swirl-type grit chambers where necessary, to reduce the potential for nonpoint source pollution to enter the River and Harbor. All such systems and technology will be properly maintained and operated in accordance with regularly scheduled maintenance procedures and all accumulated residue will be properly disposed of.

Recreational boating-related services to be provided will include a vessel waste pump-out facility with adequate capacity to serve the needs of boaters using the berthing, docking, and launching facilities established pursuant to the Shipping Street Waterfront Redevelopment Plan.

Any contamination associated with past industrial uses of the Shipping Street WRDA will be identified and evaluated; appropriate remedial actions will be undertaken as necessary to implement redevelopment plans and protect public health, safety, and welfare.

9. **PUBLIC HEALTH, SAFETY, AND WELFARE:**

Redevelopment of the Shipping Street Waterfront Redevelopment Area will be planned and implemented in a manner to ensure the most orderly and efficient use of the area and to provide for the health, safety, and welfare of all who use the redeveloped area.

The Shipping Street Waterfront Redevelopment Plan will emphasize fire prevention and preparedness in a waterfront location, including proper access for emergency vehicles and on-site water supply for fire-fighting purposes. Redevelopment will include waterfront facilities providing access to the Thames River and Norwich Harbor for emergency response and rescue purposes by duly authorized emergency services departments and agencies.

Water-dependent uses and facilities will be planned and managed to avoid congestion in Norwich Harbor and potential conflicts among vessels operating in the Harbor, including vessels using water-dependent facilities at the Shipping Street WRDA and other vessels using the Harbor and the Thames River Federal navigation channel. Attention will be given to avoiding conflicts between motorized and nonmotorized vessels.

The Redevelopment Plan will conform to all applicable floodplain regulations and construction standards, including regulations and standards contained in Chapter 14 of the City Zoning Ordinance (see no. 12 below). Existing deteriorated bulkheads will be replaced and/or repaired as necessary to stabilize the shoreline, support public waterfront areas and facilities, and improve the visual appearance of the redeveloped waterfront. Structural measures including, but not limited to, new bulkheads and riprap to stabilize the shoreline and protect developed areas from flooding and erosion will be carefully planned and constructed so that the application of those measures will not result in any significant adverse impacts on natural resources and ecological functions.

10. EDUCATIONAL AND SCIENTIFIC USES:

Redevelopment of the Shipping Street Waterfront Redevelopment Area will include facilities to support educational programs and scientific studies of the natural environment of the Thames River watershed. Redevelopment also will provide specific opportunities for access to the River and Norwich Harbor for educational and scientific purposes, including River- and Harbor-related field studies by primary and secondary schools, universities, conservation and natural history groups, and others.

11. PUBLIC INTEREST, SUPPORT, AND AWARENESS:

The Shipping Street Redevelopment Plan will be prepared and implemented with substantial input from City residents and the general public during all stages of Plan formulation and implementation.

12. COASTAL MANAGEMENT CONSISTENCY:

Redevelopment of the Shipping Street Waterfront Redevelopment Area will be carefully planned, designed, and implemented to ensure compliance and consistency with all applicable City, State, and Federal policies, laws, and regulations affecting waterfront use and development, including but not limited to the provisions of the Connecticut Coastal Management Act (Sections 22a-90 through 22a-112 of the Connecticut General Statutes),

3

SHIPPING STREET FEASIBILITY PLAN

CITY OF NORWICH, CONNECTICUT
SHIPPING STREET
WATERFRONT
REDEVELOPMENT
STUDY



Shipping Street Waterfront Development Plan

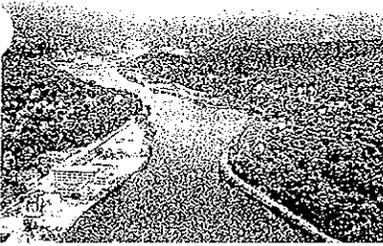
Shipping Street
Norwich, Connecticut

October 2003

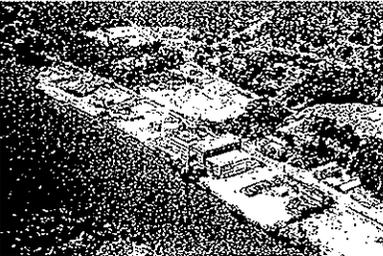
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Shipping Street Waterfront Development Plan Introduction and Overview:



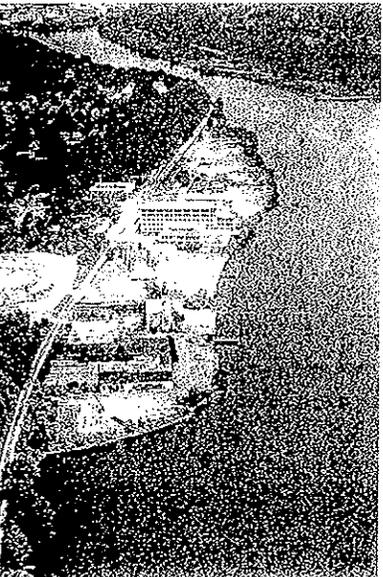
Many would agree that Norwich is typical of small American Cities of today, and that the importance of its historic core as the focus of a growing suburban population is diminishing. After all, few people live in the downtown, main street no longer functions as a retail core, vacancy rates are at all time highs and a once thriving waterfront is significantly under utilized.



The City of Norwich is committed to reversing these trends as outlined in the basic goals and policies of the Waterfront Vision which positions its precious waterfront as a catalyst in revitalizing the downtown. As financial resources are becoming more restricted at all levels of government, federal, state and local communities will need to look at their land resources and especially their waterfronts, and position them to maximize their value to the community. In return, City's like Norwich will increase their tax base, expand municipal services, create housing for a growing and diverse population and become proactive, not reactive, in today's highly competitive market place in attracting business and directing the City's future growth in a responsible and sustainable manner.



The Shipping Street Waterfront Development Plan is intended to bring together these objectives into a compelling *market driven* vision that inspires confidence and certainty in development while; providing a coherent frame work and specificity for the approximately 21.0 acres of waterfront area referred to here as "Shipping Street East" (see Parcel Plan). The master plan encourages complimentary, water dependant, commercial mix-use development linked to the harbor; enhances public access to the waterfront by way of a riverwalk, a community park and boat launch facility; and proposes a redevelopment strategy that replaces the previous industrial uses and oil storage and distribution terminals with waterfront residential, commercial/retail and water-dependent industrial uses aimed at achieving the highest site planning and architectural standards consistent with the City's historic character and traditions.



Market Driven Planning

It is our experience that successful developments reflect and responds directly to how the larger market area functions. This has influenced the subsequent program formulation for a mixed use waterfront development for the Shipping Street parcel. Based on our, research the recommended program elements can be supported within the local market and reinforce the goals and objectives of the Norwich Waterfront Vision Strategy.

While market data on relevant residential, commercial/retail and marina uses are readily available; the water dependant industrial uses may require

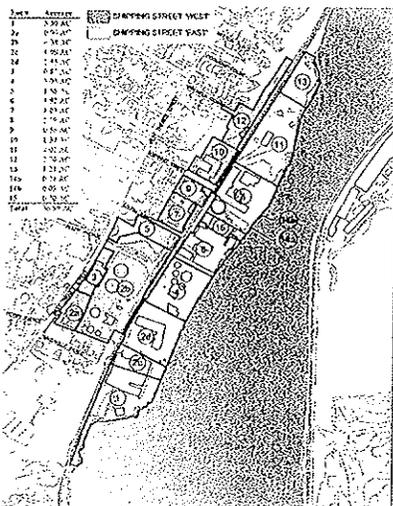


additional research and public support through marketing and promoting of viable maritime economic activities and the promotion and expansion of maritime industries or water dependant uses with growth potential. Coordinated planning among state and local officials and a reduced regulatory burden for maritime industries, including the development of pre-permitted development sites may be necessary. A targeted business recruiting and retention strategy would help to achieve the necessary synergy among waterfront commercial and industrial uses and result in an economically vibrant harbor and waterfront.

Recent census data indicates that while the Norwich market has experienced a contraction in overall population as compared with the state of Connecticut and New London County; Norwich has experienced a net gain in the number of households. This is due to a shift away from traditional single family living and toward single person and double person households. This change in household characteristics actually increases the demand for apartment living. This change in the local housing market has been verified by a number of interviews with local real estate brokers and consultants (6) active in the southeastern Ct. market, which were conducted to confirm some of our basic program assumptions for the Shipping Street Development Program.

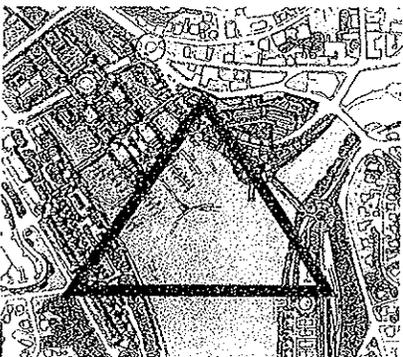
According to the Rental Housing Market Overview prepared by the Downes Group of New Brittan, CT; "the City of Norwich has the demographic characteristics that are conducive to a healthy rental housing market. Shrinking household size, a stable economy, and continued availability of entry-level casino related jobs all make rental housing an attractive option for many people. This in turn creates a robust demand for apartments; particularly apartments with extensive amenity packages, attractive design and a convenient location".

Employment projections also indicate that while manufacturing (10,000 jobs from large regional employers) is still an important source of employment for residents of Norwich; there will also be a growth in demand for retail and casino related jobs such as Foxwoods Casino which is projecting 3,000 new hires annually which creates a great deal of fluidity of people moving within the Norwich housing market.

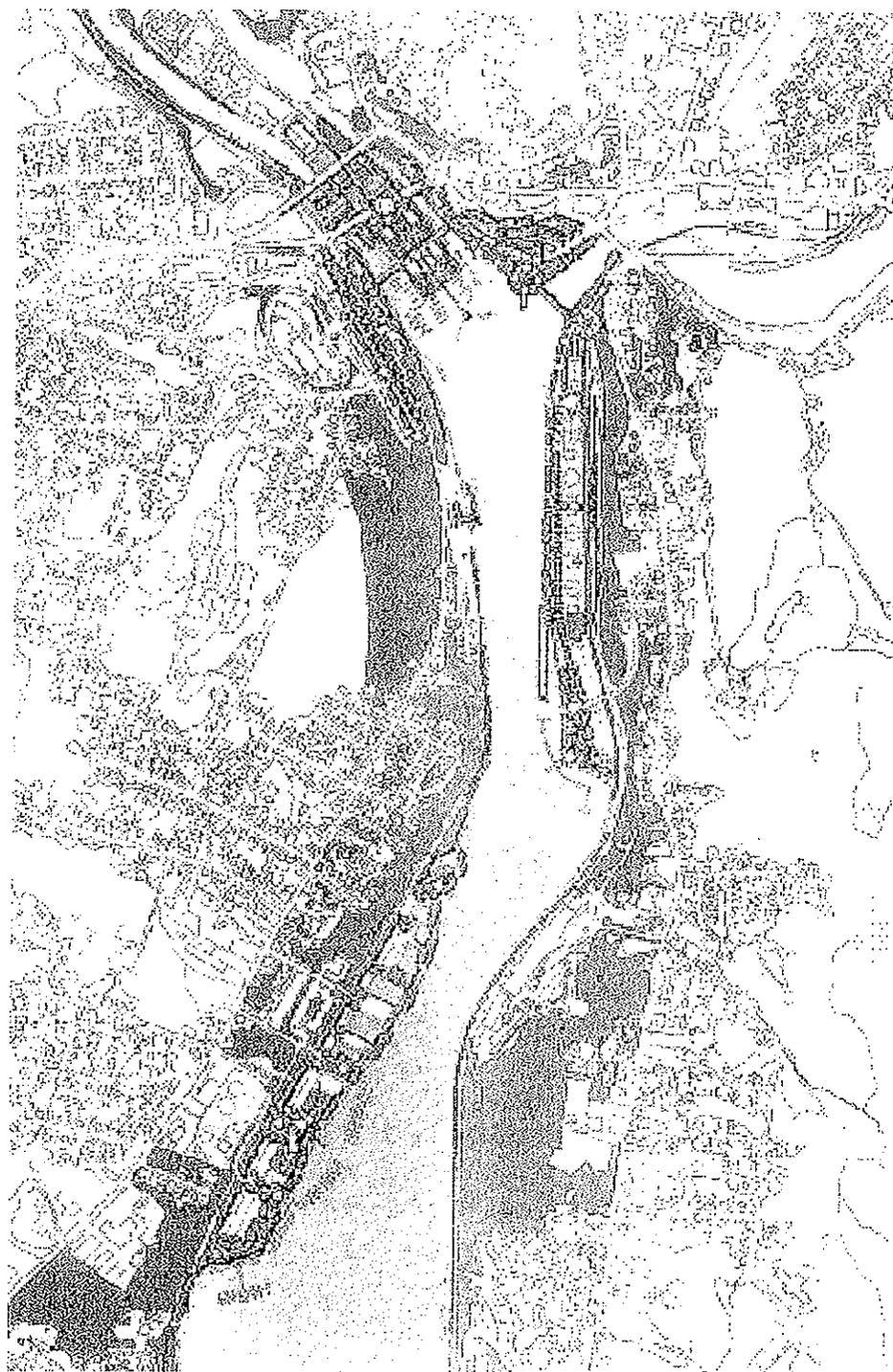


Development Summary

Strategically located on the Thames River, the Shipping Street Parcel provides an excellent gateway opportunity to the Harbor and the Downtown Norwich. With over 21 acres of waterfront property the Shipping Street East Parcel will play a key role in determining the visual quality and development impact of an overall waterfront development strategy. Redevelopment strategies for this key waterfront parcel should be linked to a larger comprehensive revitalization strategy which should

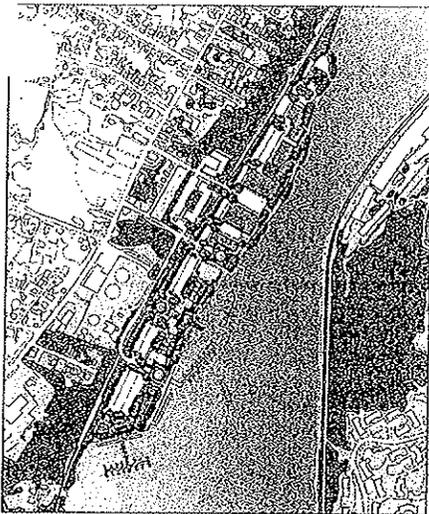


include the New Wharf Area, Hollyhock Island and Brown Park in achieving the necessary synergy of waterfront uses in establishing the



historically appropriate image and character to the Norwich Waterfront.

With over two thirds of a mile of waterfront, the Shipping Street parcel enjoys excellent access along the Thames River. Existing bulkheads will



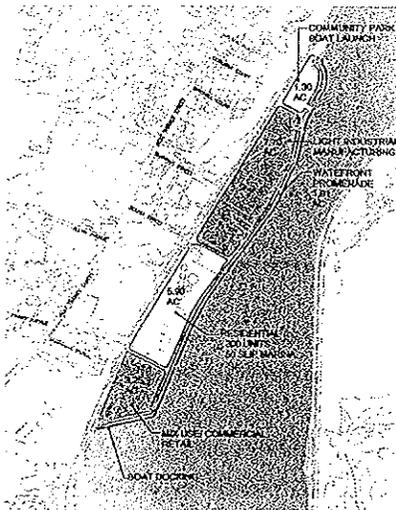
need to be repaired and maintained to support water access and a pedestrian *riverwalk* which is proposed to run the length of the parcel and is intended to ultimately connect, via a series of pedestrian bridges, Hollyhock Island to Browns Park and the Heritage Riverfront Walkway along the Shetucket and Yantic Rivers. The Shipping Street site could provide a vital link in completing a regionally significant *riverwalk* system connecting Downtown Norwich to the Mohegan Sun Casino along the west bank of the Thames River.

The proposed Shipping Street Waterfront Development consists five program elements, which include 300 market rate, waterfront apartment units with parking for 600 cars; 80,000 sf of ground floor retail/shops/restaurants with boutique office space above; 90,000 sf of water dependant industrial use such as boat manufacturing, repair and storage, a 10,000 sf community center and boat launch facility; totaling over 800,000 sf of new development with a stabilized value of approximately \$56 million and projected development profits expected at \$7.4 million or 12 percent. (See attached Development Summary, Financial Analysis and Operating Proformas).

DEVELOPMENT SUMMARY

<u>Mixed-Use Program</u>											
	Units; Spaces	Gross SF	RentableSF	All-in Cost	Cost PSF (Gross)	Cost PSF (Rentable)	Valuation Cap Rate	Stabilized Value (Net)	Value PSF (Rentable)	Development Profit	Pctg. Profit
Residential	300	414,949	360,825	\$24,300,000	\$59	\$67					
Structured Parking	600	210,000		\$7,200,000	\$34	\$20					
Community Center		10,000		\$800,000	\$80	\$2					
Common Area Land				\$1,500,000		\$4					
Subtotal - Residential + Prkg		634,949	360,825	\$33,800,000	\$53	\$90	7.5%	\$39,227,000	\$109	\$5,426,986	13.8%
Office		40,000	34,000	\$5,120,000	\$128	\$151					
Retail		40,000	38,000	\$4,320,000	\$108	\$114					
Subtotal - Office + Retail		80,000	72,000	\$9,440,000	\$118	\$131	9.0%	\$10,654,721	\$148	\$1,214,721	11.4%
Industrial		90,000	90,000	\$5,400,000	\$60	\$60	8.5%	\$6,162,000	\$68	\$762,000	12.0%
TOTAL/AVERAGE		804,949	522,825	\$48,640,000	\$60	\$93		\$56,043,721	\$107	\$7,403,707	13.2%
<u>Proposed Development Phases</u>											
Project Phases	Phase I	Phase II	Phase III	TOTAL							
Residential	300 units			300 Units	414,949						
Parking Garage	600 spaces			600 Sp.	210,000						
Marina	50 Slips			50 Slips	N/A						
Community Center	10,000 SF			10,000 SF	10,000						
Retail		40,000 SF		40,000 SF	40,000						
Office		40,000 SF		40,000 SF	40,000						
Industrial			90,000 SF	90,000 SF	90,000						
TOTAL					804,949						

The detailed spread sheet analysis of the five program elements including detailed project descriptions, lease rental assumptions, cash flow projections, lease-up analysis, development budgets, land cost and acquisition analysis, hard and soft cost itemization, projected values based

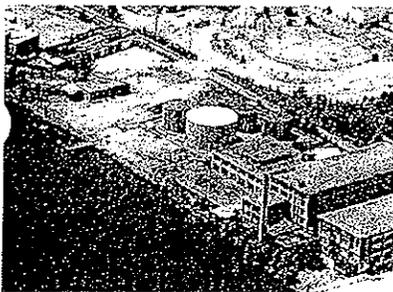


on stabilized cash flow and preliminary analysis of development profit have been compared with several comparable, recently completed development projects in Eastern Connecticut.

Any successful redevelopment strategy of the Shipping Street Parcel will have to take into consideration site environmental remediation and cleanup as an essential first step in positioning the Shipping Street Parcel for subsequent redevelopment.

Environmental Contamination and Brownfield Issues

Over the past decade federal, state and local agencies have established an array of programs providing grants, loans, tax incentives, and liability relief to encourage municipal and private sector investment in the assessment, cleanup and redevelopment of brownfields sites. In addition to public sector programs, the private sector has responded with insurance tools, indemnifications, and an array of legal and deal structuring mechanisms and marketing tools to accomplish this goal. Each of these mechanisms and tools focuses on a specific problem in an attempt to overcome obstacles to development on contaminated sites.



The key to using these tools is to develop a solid understanding of the problems that that need to be addressed and then select the best tools to overcome these specific problems. For example, it is necessary to determine who will acquire the land, who will do the assessment and/or cleanup and who will ultimately own the redeveloped site. This is important because certain grants are only available to the public sector or non-profit entities. Most, but not all loans are available to private sector business. Since most brownfields tax incentives cannot be transferred to another party, these tax incentives are only useful to entities subject to taxation. It is also important to determine who will assume liability for the cleanup and understand that entity's tolerance for environmental risk. Understanding this element will determine whether it will be necessary to seek a covenant not to sue from the state and it will guide the type of environmental insurance coverage that will be needed. Although Norwich is at the beginning stages of developing the information needed for a comprehensive brownfields program, there are some critical steps that should be taken at this point in time.

Currently, a master plan is being formulated for the Norwich Harbor Front. This vast area includes numerous private parcels, some abandoned and some active. It includes municipally owned land, railroad beds, and tidal areas. The current land uses are residential as well as industrial. Potential future uses include residential, mixed use, industrial and open space. A substantial amount of public sector infrastructure investment will be required to facilitate and encourage the master plan's vision.



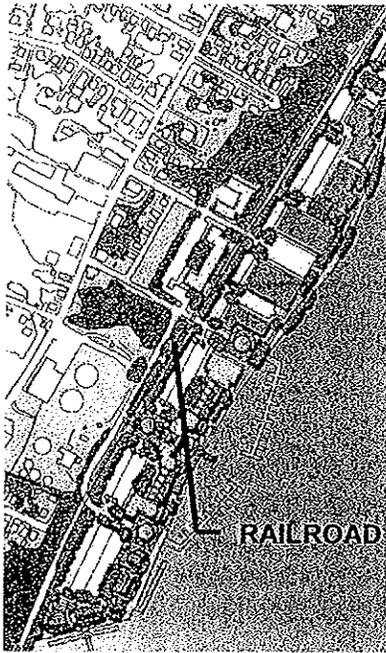
What is not fully formulated at this time is a mechanism to execute the overall development plan. These mechanisms can include everything from a simple zoning overlay to encourage private and public redevelopment to the creation of a development authority with the powers of eminent domain, or hybrid combinations of public and private sector development. Once the development plan is defined, a definitive strategy must be created for the overall development plan and then tailored to the specific projects within the master plan area. The brownfields strategy will include everything from assessment and cleanup to marketing, liability and financial relief.

Although it may be premature to develop the core of the brownfields strategy, at this point in the project life cycle, it is extremely useful to conduct a comprehensive environmental assessment of the areas suspected to be the most contaminated. This site assessment would target the areas with known or perceived contamination. Performing these assessments now is critical for shaping the overall development plan. It will enable Norwich to identify areas most appropriate for residential or recreational use and those heavily contaminated areas that are best left for industrial use. The site assessment results would also allow Norwich to make informed judgments regarding future use and ownership based on expected remediation cost and potential liability. In turn, these decisions, together with the results of the site assessments, will help to develop the overall brownfields strategy.

In order to conduct these assessments now, it will be necessary to identify appropriate public and private sector funding sources and may require assistance to public and private landowners in applying for state and federal assessment grant and/or loans. It will also be necessary to gain site access from property owners for the purpose of conducting the assessments. While these assessments should be targeted towards site characterization for the redevelopment, any level of environmental assessment work will ultimately facilitate the progress of the overall project.

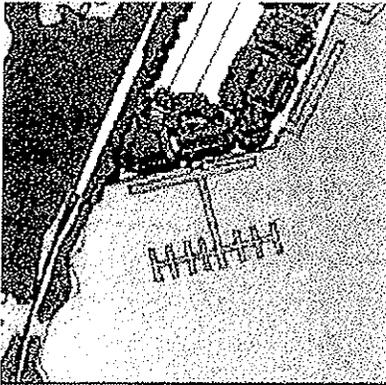
Site Access and Infrastructure

Waterfront access needs to be viewed more broadly in the positioning and planning of the Norwich waterfront. The unique environmental setting of its harbor and its historical significance can best be enjoyed from the Thames River. Like many New England waterfront communities landside access to the waterfront has been limited by historic industrial development patterns and by the construction of railway corridors which parallel the Thames River restricting waterfront access and enjoyment of the rivers by residents and visitors.



West Thames Street (Route 32) provides the primary vehicular access and utility service to the Shipping Street area. The available water supply consists of 2- 4" lines servicing the Lehigh Building, a 6" water line on Shipping St. and a 10" water line on South St. There is existing gas supply on South St. to Rose St.; and a 6" cast iron gas line on Shipping St. and a 4" gas line on Terminal Way. There appears to be a 24" City storm sewer on the east parcel and a 16" ductile force main and pump station. The local road network while having limited capacity and without a direct connection to the regional interstate highway system functions well with the current level of traffic; however truck access to the site is difficult and was a consideration in the program formulation for industrial /water dependant uses.

The Shipping Street Parcel is bisected north/south by the New England Central Railroad which restricts east/west access to the existing South Street crossing and isolates the east parcel from the adjacent industrial and residential neighborhood. Further study will be required to determine if the South Street Crossing can be maintained as an improved at-grade crossing. The proposed development program and resultant traffic capacities may require the elimination of an at-grade crossing and the construction of a tunnel or bridge to access the eastern waterfront parcel. Development proformas and cash flow analysis will have to be conducted to determine the feasibility of integrating a tunnel or bridge with the current development program.



Waterfront access to the Shipping Street Parcel could be significantly enhanced via the development of a transient slip marina at the southern end of the parcel which would compliment the proposed mix-use development program and the opportunity for a dynamic southern gateway to Norwich Harbor (See commercial wharf sketch). A small 50 slip marina is proposed for the residential program would create additional synergy among waterfront uses and provide for a stronger amenity package to leverage apartment rentals. Ultimately a marina market study will need to be conducted to determine the feasibility and sizing of the marina element.

NEXT STEPS

Design Guidelines

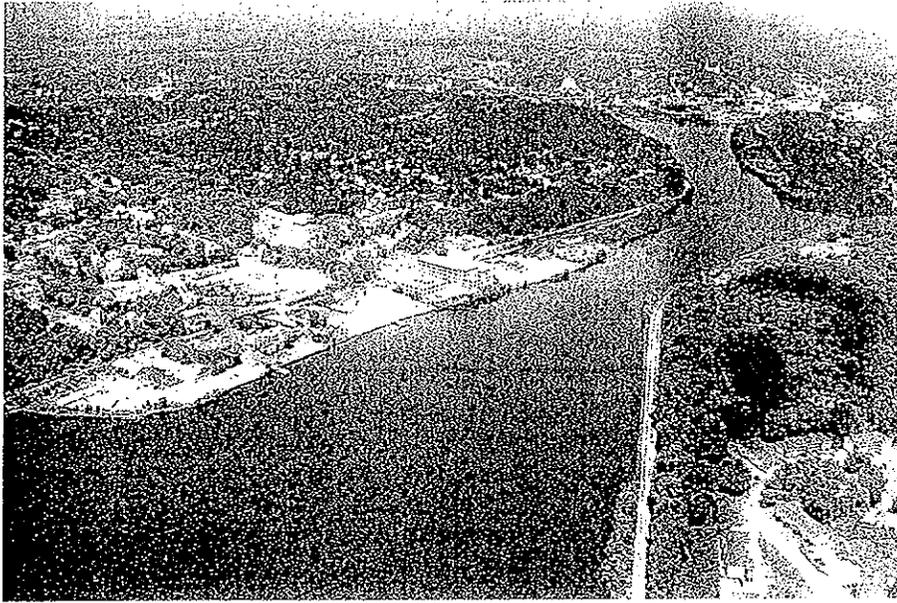
Development Guidelines and Master Plan Criteria For the Shipping Street Parcel will serve two primary purposes. The first is to insure that existing buildings to remain, as well as, planned development will express it's own unique image and identity within the Norwich Waterfront. It should provide for mixed-use waterfront development in a physical setting that ensures long term economic viability. The second purpose is to insure the

successful integration of the Shipping Street Parcel within Norwich Waterfront District, thereby mutually reinforcing a larger harbor identity.

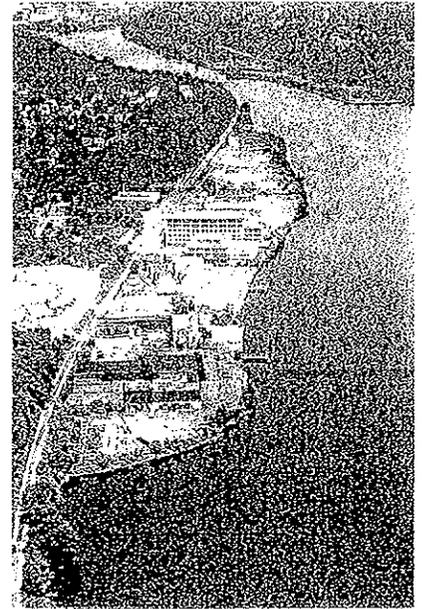


Guidelines for future development will define a planning and regulatory framework which will guide subsequent design decisions and convey the level of quality that will be expected to be met. Architectural and site development guidelines will identify the primary qualities of the organizing elements to the Shipping Street Parcel as a way to give structure buildings and spaces within a harmonious framework. In addition it provides the larger community of Norwich with assurances that the type, design and quality of buildings and landscape will be compatible and consistent within their waterfront.

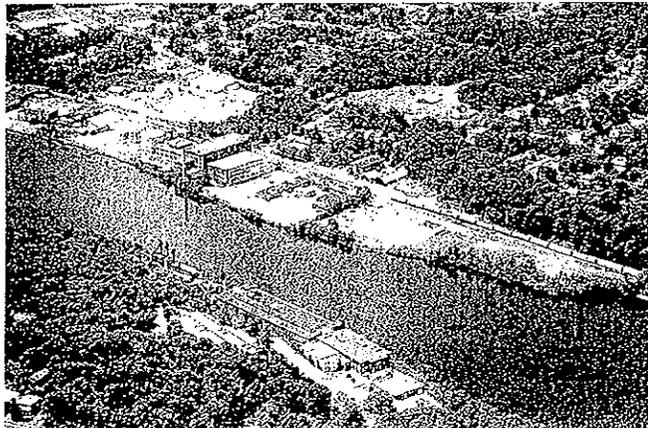
APPENDIX



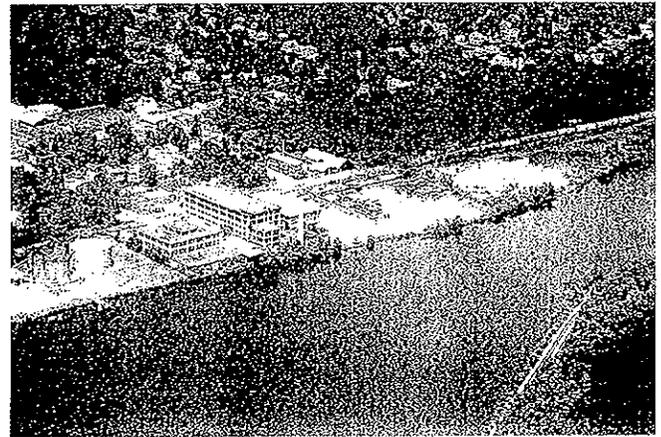
LOOKING NORTH



LOOKING NORTH



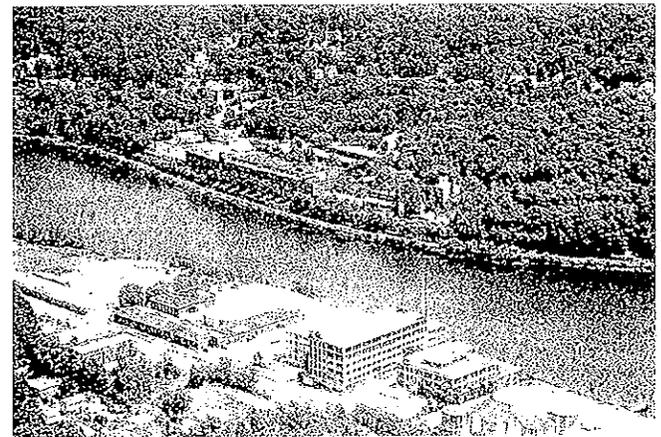
LOOKING EAST



LOOKING NORTHWEST

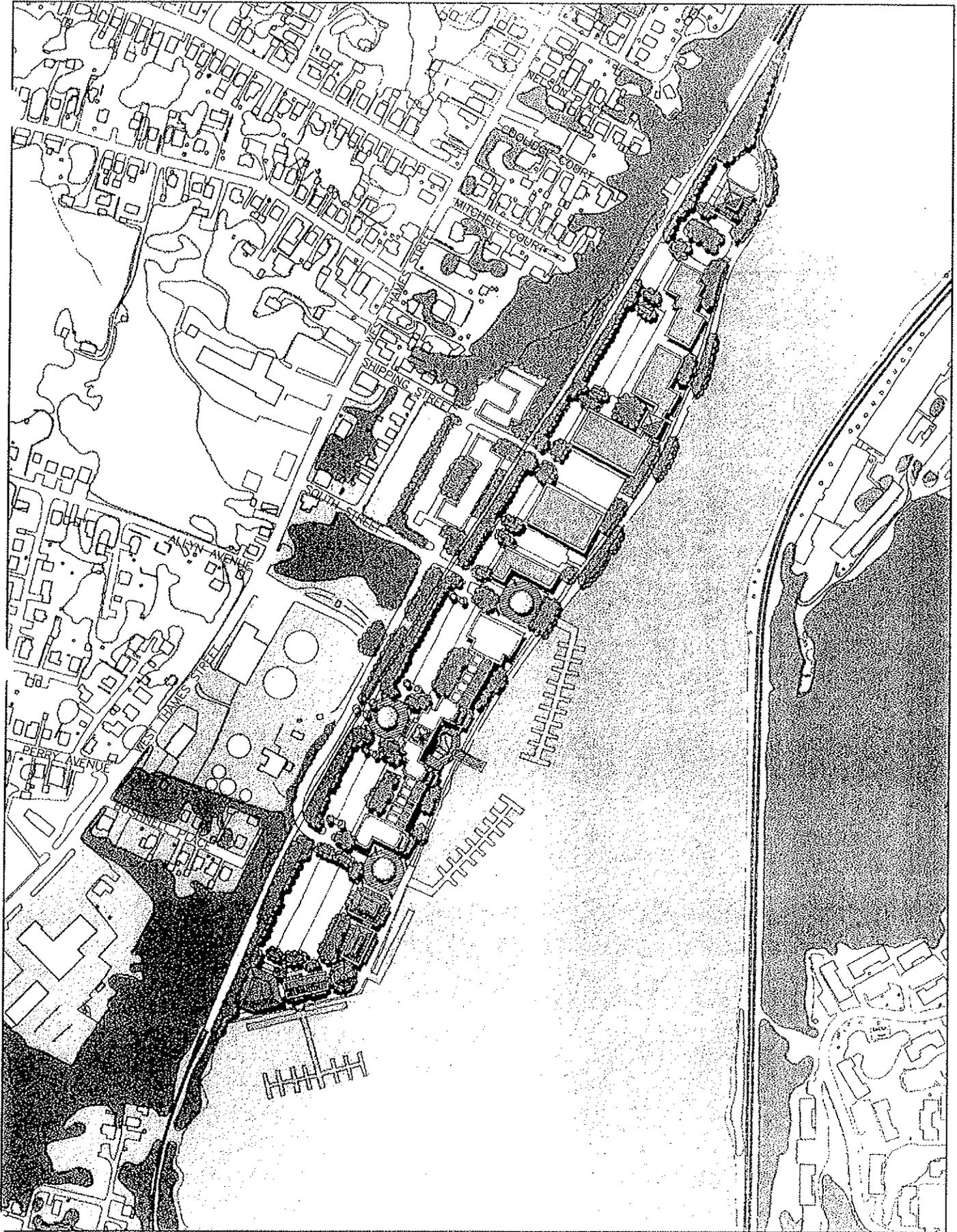


LOOKING SOUTHWEST



LOOKING EAST





LANDWORKS
COLLABORATIVE

51 FIVE SCORY STREET
WORCESTER, MA 01606
P (508) 770-0000
F (508) 770-4577

Master Plan
Shipping Street
Norwich, Connecticut



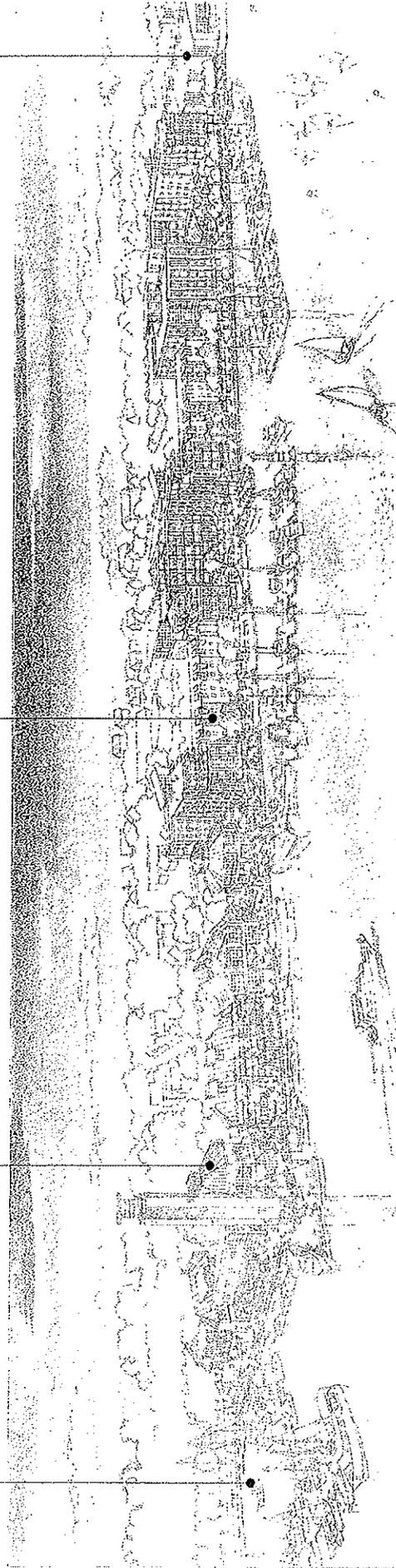
SCALE 1"=400'

TRANSIENT
BOAT DOCKING

WATERFRONT
COMMERCIAL/RETAIL

RESIDENTIAL/
50 SLIP MARINA

WATER-DEPENDENT
INDUSTRIAL/LIGHT
MANUFACTURING



LANDWORKS
COLLABORATIVE

61 PERCOTT STREET
NORWICH, CONNECTICUT 06258
P. (860) 724-0260
F. (860) 735-4332

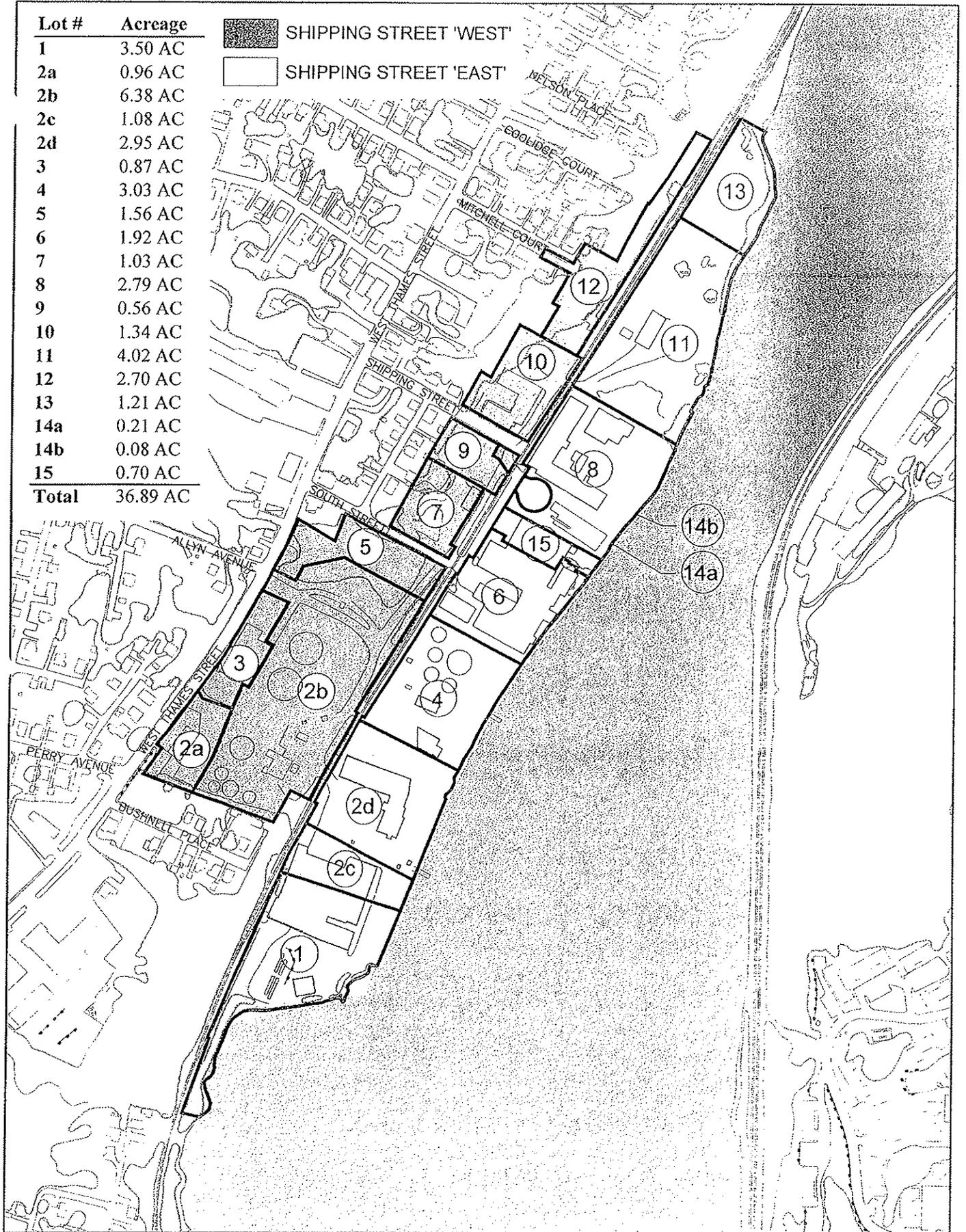
Waterfront Development

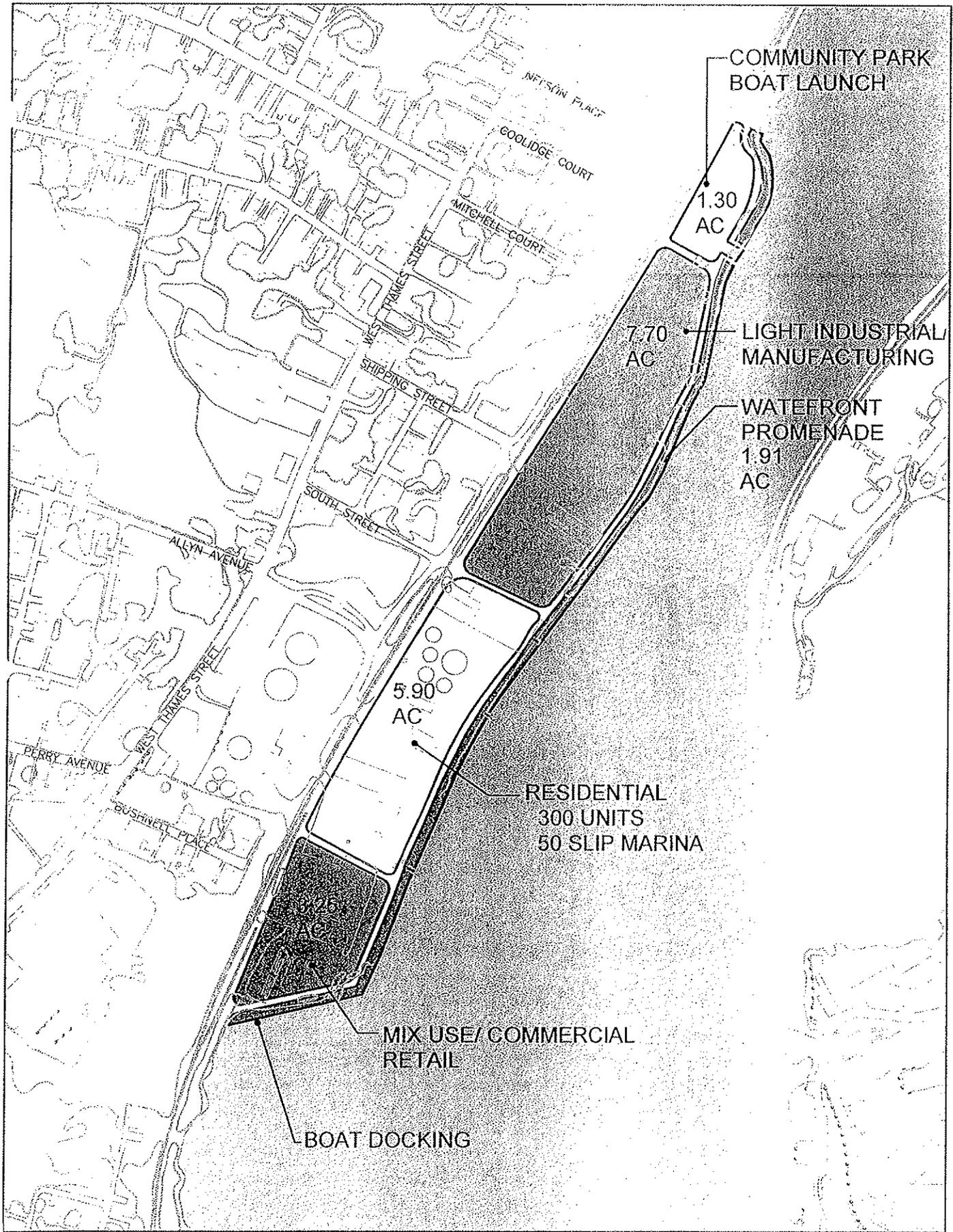
Shipping Street
Norwich, Connecticut

December 2003

Lot #	Acres
1	3.50 AC
2a	0.96 AC
2b	6.38 AC
2c	1.08 AC
2d	2.95 AC
3	0.87 AC
4	3.03 AC
5	1.56 AC
6	1.92 AC
7	1.03 AC
8	2.79 AC
9	0.56 AC
10	1.34 AC
11	4.02 AC
12	2.70 AC
13	1.21 AC
14a	0.21 AC
14b	0.08 AC
15	0.70 AC
Total	36.89 AC

 SHIPPING STREET 'WEST'
 SHIPPING STREET 'EAST'





COMMUNITY PARK
BOAT LAUNCH

1.30
AC

LIGHT INDUSTRIAL
MANUFACTURING

7.70
AC

WATERFRONT
PROMENADE
1.91
AC

5.90
AC

RESIDENTIAL
300 UNITS
50 SLIP MARINA

MIX USE/COMMERCIAL
RETAIL

BOAT DOCKING

Development Program Summary

Mixed-Use Program	Units; Spaces	Gross SF	Rentable SF	All-In Cost	Cost PSF (Gross)	Cost PSF (Rentable)	Valuation Cap Rate	Stabilized Value (Net)	PSF (Rentable)	Value Development Profit	Pctg. Profit
Residential	300	414,949	360,825	\$24,300,000	\$59	\$67					
Structured Parking	600	210,000		\$7,200,000	\$34	\$20					
Community Center		10,000		\$600,000	\$80	\$2					
Common Area Land				\$1,500,000	\$4	\$4					
Subtotal - Residential + Prkg		634,949	360,825	\$33,800,000	\$53	\$90	7.5%	\$39,227,000	\$109	\$5,426,986	13.8%
Office		40,000		\$5,120,000	\$128	\$151					
Retail		40,000		\$4,320,000	\$108	\$114					
Subtotal - Office + Retail		80,000	72,000	\$9,440,000	\$118	\$131	9.0%	\$10,654,721	\$148	\$1,214,721	11.4%
Industrial		90,000		\$5,400,000	\$60	\$60	8.5%	\$8,162,000	\$68	\$762,000	12.0%
TOTAL/AVERAGE		804,949	522,825	\$49,640,000	\$60	\$63		\$56,043,721	\$107	\$7,403,707	13.2%

Proposed Development Phases

Project Phases	TOTAL GROSS SF		
	Phase I	Phase II	Phase III
Residential	300 units		
Parking Garage	600 spaces		
Marina	50 Slips		
Community Center	10,000 SF		
Retail		40,000 SF	
Office		40,000 SF	
Industrial			90,000 SF
TOTAL			804,949

Land Acquisition Analysis

Project Component	Elements	Land Area (Acres)	Cost Per Acre	Total Cost	Gross SF	FAR	Rentable SF	\$/Gross SF	\$/Rentable SF
Residential	Apartments				414,949		360,825		
	Structured Parking				210,000		0		
	Subtotal - Residential	5.90	\$508,475	\$3,000,000	624,949	2.4	360,825	\$4.80	\$8.31
	Amenities & Common:								
	Community Center	1.30			10,000				
Waterfront Promenade	2.50			0					
Open Space (misc.)	0.76			0					
Subtotal - Common		4.56	\$330,000	\$1,500,000	10,000	0.1	0	\$150.00	N/A
	Subtotal - Res. & Common	10.46	\$430,210	\$4,500,000	634,949	1.4	360,825	\$7.09	\$12.47
Mixed Use Commercial	Office				40,000		34,000		
	Retail				40,000		38,000		
	Subtotal - Mixed Use	3.25	\$200,000	\$650,000	80,000	0.6	72,000	\$8.13	\$9.03
Industrial									
	Subtotal - Industrial	7.70	\$50,000	\$385,000	90,000	0.3	90,000	\$4.28	\$4.28
TOTAL PROJECT		21.41	\$258,524	\$5,535,000	804,949	0.9	522,825	\$6.88	\$10.59

Development Component: Residential

Preliminary Design Proposal

Units	300
Average Unit Size	1,203 SF
Average Monthly Rent/Unit	\$1,336
Structured Parking Spaces	600
Structure Parking Sp/Unit	2
Community Center	10,000

Proposed Unit Mix

Unit Type	SF	Pctg.	No.	Total SF	Monthly Rent/Unit	Annual Rent/SF	Monthly Rent/SF	Spaces Per Unit	Parking Spaces
Studio	625	5%	15	9,375	\$750	\$14,40	\$1.20	2	30
1 Bdrm	790	15%	45	35,550	\$925	\$14,05	\$1.17	2	90
2 Bdrm	1175	60%	180	211,500	\$1,325	\$13,53	\$1.13	2	360
3 Bdrm	1740	20%	60	104,400	\$1,825	\$12,59	\$1.05	2	120
Total/Avg.	1,203	100%	300	360,825	\$1,336				600

Projected Revenue

Unit Type	No.	Rent/Mo./Unit	Total Rent/Mo./SF	Total Rent/Yr.
Studio	15	\$625	\$11,250	\$135,000
1 Bdrm	45	\$790	\$41,625	\$499,500
2 Bdrm	180	\$1,175	\$238,500	\$2,862,000
3 Bdrm	60	\$1,740	\$109,500	\$1,314,000
Total/Avg.	300	\$1,336	400,875	\$4,810,500

Shipping Street Mixed Use Development Plan
Norwich, CT

File #: Residential Shipping St 1
Last Revised: 12/31/2003 12:55

Development Component: Residential

Preliminary Operating Proforma

Assumptions:	Units	300
	Avg Rent/Mo	\$1,336
	Other Income	None
	Capex/Yr/SF	\$0.25
	Annual Infl.	4.0%

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11
RENTAL INCOME											
Studio	67,500	133,380	138,715	144,264	150,034	156,036	162,277	168,768	175,519	182,540	189,841
One Bedroom	249,750	493,506	513,246	533,776	555,127	577,332	600,426	624,443	649,420	675,397	702,413
Two Bedroom	1,431,000	2,827,656	2,940,762	3,058,393	3,180,728	3,307,958	3,440,276	3,577,887	3,721,002	3,869,942	4,024,636
Three Bedroom	657,000	1,298,232	1,350,161	1,404,168	1,460,334	1,518,748	1,579,498	1,642,678	1,708,385	1,776,720	1,847,789
Subtotal	2,405,250	4,752,774	4,942,885	5,140,600	5,346,224	5,560,073	5,782,476	6,013,775	6,254,326	6,504,499	6,764,679
OTHER INCOME											
None	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	2,405,250	4,752,774	4,942,885	5,140,600	5,346,224	5,560,073	5,782,476	6,013,775	6,254,326	6,504,499	6,764,679
OPERATING EXPENSES											
Projection @ 35%	841,838	1,663,471	1,730,010	1,799,210	1,871,179	1,946,026	2,023,867	2,104,821	2,189,014	2,276,575	2,367,638
NET OPERATING INCOME	1,563,413	3,089,303	3,212,875	3,341,390	3,475,046	3,614,048	3,758,610	3,908,954	4,065,312	4,227,925	4,397,042
CAPITAL EXP.	36,083	56,289	72,165	90,206	93,815	97,567	101,470	105,529	109,750	114,140	118,705
CASH FLOW	1,527,330	3,033,014	3,140,710	3,251,184	3,381,231	3,516,481	3,657,140	3,803,425	3,955,562	4,113,785	4,278,336

Development Component: Residential

Initial Financial Structure and Investment Value

Total "All-In" Development Costs		\$33,800,000
Debt Financing @	85%	\$28,730,000
Equity Investment @	15%	\$5,070,000

Year 2 Projected Value (capping first stabilized year)

	@ 7.0%	@ 7.5%	@ 8.0%
NOI (after recurring capex)	\$3,033,014	\$3,033,014	\$3,033,014
Cap Rate	7.00%	7.50%	8.00%
Gross Sale Value	\$43,328,777	\$40,440,192	\$37,912,680
Less Sales Costs 3.0%	\$1,299,863	\$1,213,206	\$1,137,380
Net Sale Proceeds	\$42,028,914	\$39,226,986	\$36,775,300
Less: Development Costs	\$33,800,000	\$33,800,000	\$33,800,000
Development Profit	\$8,228,914	\$5,426,986	\$2,975,300
Pctg. Profit	19.6%	13.8%	8.1%

Shipping Street Mixed Use Development Plan
Norwich, CT

File #: Residential Shipping St 1
Last Revised: #####

Development Component: Residential

Assumptions:	Site Acreage	5.9
No. of Units	300	
Total Rentable SF	360,825	
Total Gross SF	414,949	
Pctg. Debt	85.0%	
Pctg. Equity	15.0%	
Avg. Construction Cost (H&S)/Unit	\$95,000	
Average Land Cost/Unit	\$10,000	
Community Center \$/SF	\$80	

Preliminary Development Budget

	Total	Average Per Unit	Average Per Rentable SF	Average Per Gross SF	Average Per Gross SF w/ Parking @350 SF/Sp.
HARD COSTS					
Land Acquisition	TBD				
Site Preparation	TBD				
Building Construction	TBD				
Common Amenities	TBD				
Structured Parking Cost	TBD				
Contingency	TBD				
Subtotal - HC w/Community Ctr	\$26,655,000	\$88,850	\$74	\$64	\$43
Plus: Community Center HC	\$800,000				
Subtotal - HC w/Community Ctr	\$27,455,000	\$91,517	\$76	\$65	\$43

SOFT COSTS

Architectural	TBD				
Engineering	TBD				
Permits and other Legal	TBD				
Survey	TBD				
Mun. Fees (sewer, etc.)	TBD				
Insurance	TBD				
Real Estate Taxes	TBD				
Marketing	TBD				
Administrative Overhead	TBD				
Title	TBD				
Public Relations	TBD				
Financing	TBD				
Points	TBD				
Pre-Construction Int.	TBD				
Construction Per. Int.	TBD				
Construction Management	TBD				
Developer's Profit	TBD				
Contingency	TBD				
Subtotal - Soft costs	\$4,845,000	\$16,150	\$13	\$12	\$8
8 mos:8.5% ; 6draw					
16mos:8.5% ; 6draw					
1.5% H&S					
5.0% H&S					
@ 10% Soft Costs					
15.0%					
SUBTOTAL RESIDENTIAL & COMMUNITY CTR	\$32,300,000	\$107,667	\$90 #	\$76	\$51
PLUS: COMMON AREA LAND	\$1,500,000	\$5,000	\$4	\$4	\$2
TOTAL RESIDENTIAL & LAND (Res. & Common)	\$33,800,000	\$112,667	\$94	\$80	\$53

Development Component: Industrial

<u>Assumptions</u>	
Land Area (7.7 acres)	335,412 SF
Building Area	90,000 RSF
Percentage Office	10%
Coverage Factor	26.8%
Stories	1
Parking Spaces	180 Surface Sp.
Parking Ratio (sp/1000 SF)	2
Building Clear Height	20-30 Ft.
Construction Cost (H&S)	\$55 PSF (Excluding land)
All-in Cost	\$60 PSF; assuming land roughly \$50K/acre
Industrial Rental Rate (NNN)	\$6.00

Projected Development Costs

	Cost PSF	Total Cost
Hard Costs**	\$51	\$4,590,000
Soft Costs	\$9	\$810,000
All-in Costs	\$60	\$5,400,000

** Includes estimated land costs of \$50,000/acre or \$4.27 per buildable SF

Development Profit (Assumes sale of stabilized building in Yr 2)

	@ 8.0% Cap	@ 8.5% Cap	@ 9.0% Cap
Rent: assumes NNN @ \$6.00	\$540,000	\$540,000	\$540,000
Cap Rate	8.0%	8.5%	9.0%
Gross Sale Proceeds	6,750,000	6,352,941	6,000,000
Less 3.0% Sales Cost	202,500	190,588	180,000
Net Sale Proceeds	6,547,500	6,162,353	5,820,000
Less: Construction Costs	\$5,400,000	\$5,400,000	\$5,400,000
Development Profit	1,147,500	762,353	420,000
Pctg. Profit	18%	12%	7%

Development Component: Office/Retail

<u>Assumptions</u>	
Land Area (3.2 acres)	139,392 SF
Land Cost (\$200K/acre)	\$640,000 (\$8 per buildable SF)
Building Footprint	40,000 SF
Total Gross Building Area	80,000 GSF
Retail GLA (5% loss factor)	38,000 RSF
Office SF (rentable; 15% loss fact)	34,000 RSF
Coverage Factor	28.7%
Stories	2
Parking Spaces	400 Surface Sp.
Parking Ratio	5 Sp./1000 SF
Parking Area (230 SF/sp.)	92,000 SF
Retail Construction (H&S; w/land)	\$108 PSF (incl. \$30 PSF interior fit-up)
Office Construction (H&S; w/land)	\$128 PSF (incl. \$25 PSF interior fit-up)

<u>Projected Development Costs</u>			
	Per Gross SF	Per Rentable SF	Total Cost
Hard Costs	85%	\$100	\$8,024,000
Soft Costs	15%	\$18	\$1,416,000
All-in Costs	100%	\$118	\$9,440,000

Shipping Street Mixed Use Development Plan
Norwich, CT

File #: Office Retail Shipping St 1
Last Revised: 12/31/2003 12:54

Development Component: Office/Retail

Assumptions:
Retail SF 38,000
Office SF 34,000
Other Income None
Capex/Yr/SF \$0.15
Annual Infl. 4.0%
Office Exp. \$7.50

Preliminary Operating Proforma

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11
Assumptions:											
Retail Occupancy	50%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
Office Occupancy	40%	70%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Annual Inflation	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Retail Rent PSF	\$20.00	\$20.80	\$21.63	\$22.50	\$23.40	\$24.33	\$25.31	\$26.32	\$27.37	\$28.47	\$29.60
Office Rent PSF	\$15.00	\$15.60	\$16.22	\$16.87	\$17.55	\$18.25	\$18.98	\$19.74	\$20.53	\$21.35	\$22.20
RENTAL INCOME											
Retail Rent (NNN)	380,000	750,880	780,915	812,152	844,638	878,423	913,560	950,103	988,107	1,027,631	1,068,736
Office Rent (Gross)	204,000	371,280	496,454	516,313	536,965	558,444	580,781	604,013	628,173	653,300	679,432
Subtotal	584,000	1,122,160	1,277,370	1,328,464	1,381,603	1,436,867	1,494,342	1,554,115	1,616,280	1,680,931	1,748,169
OTHER INCOME											
None	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	584,000	1,122,160	1,277,370	1,328,464	1,381,603	1,436,867	1,494,342	1,554,115	1,616,280	1,680,931	1,748,169
OPERATING EXPENSES (Office Only)											
RE Tax and General Operating	255,000	265,200	275,808	286,840	298,314	310,246	322,656	335,563	348,985	362,945	377,462
NET OPERATING INCOME	329,000	856,960	1,001,562	1,041,624	1,083,289	1,126,621	1,171,685	1,218,553	1,267,295	1,317,987	1,370,706
CAPITAL EXP.											
Reserve Replacement	12,000	12,480	12,979	13,498	14,038	14,600	15,184	15,791	16,423	17,080	17,763
Commissions				32,600	32,600	32,600	32,600	32,600	32,600	32,600	32,600
Tenant Improvements				137,500	137,500	137,500	137,500	137,500	137,500	137,500	137,500
CASH FLOW	317,000	844,480	988,582	858,026	899,151	941,921	986,402	1,032,662	1,080,772	1,130,807	1,182,843

Development Component: Office/Retail

Capital Expense Assumptions

Reserve for Replacement

\$0.15 PSF

Tenant Fit-Up (annualized; after Year 3)

	Retail Space		
	New Tenant	Renewed Tenant	Total
Releasing Probability	0.5	0.5	
Fit-Up PSF	\$10.00	\$2.50	
Releasing Frequency	2	2	
Period Averaged Over	10	10	
Weighted Avg. (annualized)	\$1.00	\$0.25	\$1.25

	Office Space		
	New Tenant	Renewed Tenant	Total
Releasing Probability	0.5	0.5	
Fit-Up PSF	\$20.00	\$5.00	
Releasing Frequency	2	2	
Period Averaged Over	10	10	
Weighted Avg. (annualized)	\$2.00	\$0.50	\$2.50

Leasing Commissions (annualized; after Year 3)

	Retail Space		
	New Tenant	Renewed Tenant	Total
Releasing Probability	0.5	0.5	
Average Rent PSF	\$22.50	\$22.50	
Leasing Commission	18.0%	4.5%	
Releasing Frequency	2	2	
Period Averaged Over (Yrs.)	10	10	
Weighted Avg. (annualized)	\$0.41	\$0.10	\$0.51

	Office Space		
	New Tenant	Renewed Tenant	Total
Releasing Probability	0.5	0.5	
Average Rent PSF	\$17.50	\$17.50	
Leasing Commission	18.0%	4.5%	
Releasing Frequency	2	2	
Period Averaged Over (Yrs.)	10	10	
Weighted Avg. (annualized)	\$0.32	\$0.08	\$0.39

**Shipping Street Mixed Use Development Plan
Norwich, CT**

File #:
Last Revised:

Office Retail Shipping St 1
12/31/2003 12:54

Development Component: Office/Retail

Initial Financial Structure and Investment Value

Total "All-In" Development Costs	\$9,440,000
Debt Financing @ 85%	\$8,024,000
Equity Investment @ 15%	\$1,416,000

Year 3 Projected Value (first stabilized year)

	@ 8.0%	@ 9.0%	@ 10.0%
NOI (After recurring Capex)	\$988,582	\$988,582	\$988,582
Cap Rate	8.00%	9.00%	10.00%
Gross Sale Value	\$12,357,280	\$10,984,249	\$9,885,824
Less Sales Costs 3.0%	\$370,718	\$329,527	\$296,575
Net Sale Proceeds	\$11,986,562	\$10,654,721	\$9,589,249
Less: Development Costs	\$9,440,000	\$9,440,000	\$9,440,000
Development Profit	\$2,546,562	\$1,214,721	\$149,249
Pctg. Profit	21.2%	11.4%	1.6%

4

REGULATORY AND POLICY ANALYSIS

CITY OF NORWICH, CONNECTICUT
SHIPPING STREET
WATERFRONT
REDEVELOPMENT
STUDY

SECTION FOUR:

REGULATORY AND POLICY ANALYSIS

This section describes the existing “institutional framework” for redevelopment of the Shipping Street Waterfront Redevelopment Area (WRDA), including preparation and implementation of the Shipping Street Waterfront Redevelopment Plan. Redevelopment must adhere to a number of City, State, and Federal laws, regulations, and policies, including the legislative policies for use and conservation of coastal resources established in the Connecticut Coastal Management Act (Sections 22a-90 through 22a-112 of the Connecticut General Statutes). Several City, State, and Federal agencies have responsibilities affecting redevelopment of the Shipping Street WRDA, including responsibilities to be applied in the course of preparing and implementing the Waterfront Redevelopment Plan and responsibilities for ensuring that the Plan is in compliance with all applicable laws, regulations, and policies.

The Norwich City Council, Community Development Corporation, Redevelopment Agency, Commission on the City Plan, and Harbor Management Commission, for example, have important authorities and responsibilities to be applied. These authorities and responsibilities pertain to not only advancing the City’s waterfront redevelopment goals for the Shipping Street WRDA but also to reviewing redevelopment plans to ensure their compliance with the Norwich City Code and other City requirements.

On the State and Federal levels, the Connecticut Department of Environmental Protection (DEP) and U.S. Army Corps of Engineers (Corps) will have an important role in reviewing and approving elements of the Redevelopment Plan, particularly the water-dependent elements that will involve work in navigable water.

Private entities such as the Central Vermont Railroad Company whose rail line runs through the Shipping Street WRDA are also stakeholders in the redevelopment process. In addition, the general public has important water-related rights to use the Thames River and Norwich Harbor adjoining the Shipping Street WRDA.

CITY OF NORWICH

The City Council, Mayor, City Manager, Harbor Management Commission, Redevelopment Agency, Community Development Corporation, Commission on the City Plan, and several other City agencies have responsibilities affecting preparation and implementation of the Shipping Street Waterfront Redevelopment Plan.

The Norwich City Charter and City Code establish the powers, duties, and regulations that guide the functions and operations of City government. Redevelopment of the Shipping Street area must conform to a number of City regulations contained in the Charter and Code, including the City’s Zoning Ordinance. In addition to the requirements of the Waterfront Development (WD)

Zoning District which is applied to the Shipping Street WRDA, the Zoning Ordinance contains important "Floodplain and Floodway Zoning" provisions to minimize public and private losses in floodprone areas, including the Shipping Street WRDA adjoining the Thames River. Other ordinances may also affect the use as well as the appearance of waterfront properties, such as the Ordinance to apply minimum maintenance standards to commercial property.

Redevelopment of the Shipping Street WRDA must also be consistent with the provisions of the Norwich Harbor Management Plan and the Norwich Plan of Conservation and Development.

HARBOR MANAGEMENT COMMISSION

On October 4, 1991, the City Council created the Norwich Harbor Management Commission by amending Chapter 3^{1/2} ("Boats, Docks and Waterways") of the Norwich Code of Ordinances. The Harbor Management Commission was established with authority provided by the Connecticut Harbor Management Act. (Section 22a-113k through 22a-113t of the Connecticut General Statutes; authority for local establishment of harbor management commission is provided by Section 22a-113k.)

The jurisdiction of the Commission is defined in Section 3^{1/2}-1.4 of the Norwich Code as "the area located in or contiguous to the waters of the Thames River and bounded by the projection of the boundary line of the Town of Montville and Town of Preston. In addition, the Commission shall have jurisdiction within the area located in or contiguous to the waters of the Shetucket River up to the existing Route 2 bridge and Yantic River up to the base of the existing falls." As authorized by the Harbor Management Act, this area of jurisdiction — the Harbor Management Area — is below the mean high water line. The Harbor Management Commission, however, can have important influence on the actions of other City commissions and departments, such as the Commission on the City Plan, whose jurisdiction is above the mean high water line and whose actions can affect the HMA.

Section 3^{1/2}-1.5 of the Norwich Code specifies that the purpose of the Harbor Management Commission is to prepare a harbor management plan in accordance with Section 22a-113m through 22a-113o of the Connecticut General Statutes. The Norwich Harbor Management Plan was prepared by the Commission and duly approved by the State of Connecticut and adopted by the Norwich City Council in 1996. The Plan includes City goals and policies for stimulating economic growth through beneficial use and water-dependent development of the Norwich waterfront. The Plan is being updated by the Commission in 2003.

The Plan also establishes a "Harbor Management Consistency Review" process whereby the Commission reviews all proposals potentially affecting the Norwich HMA to determine the consistency of those proposals with the Harbor Management Plan.

Section 22a-113m of the Connecticut General Statutes enables the Commission to plan for the most desirable use of the Norwich HMA for recreational, commercial, industrial, and other purposes; Section 22a-113p of the General Statutes enables the Harbor Management Commission to review and make recommendations, consistent with the Norwich Harbor Management Plan,

on any proposals affecting the real property on, in, or contiguous to the Norwich HMA that is received by other Norwich agencies, including the Commission on the City Plan.

Pursuant to this authority and the authority provided by Section 3¹/₂-6.1 of the Norwich Code, the Commission reviews proposals referred to it by: 1) City commissions and departments; 2) the Connecticut Department of Environmental Protection; and 3) the U.S. Army Corps of Engineers.

With respect to applications to and by City of Norwich commissions and departments, all proposals involving activities on, in or contiguous to the Harbor Management Area *submitted to or prepared by* the Commission on the City Plan, Zoning Board of Appeals, Inland Wetlands, Watercourses and Conservation Commission, Historic District Commission, Norwich Sewer Authority, Redevelopment Agency, and any other City agencies are to be referred by these City authorities to the Harbor Management Commission for review. Proposals to be submitted to the Commission for review should include:

- i. All proposals requiring a Coastal Site Plan Review (in accordance with the Connecticut Coastal Management Act) and affecting real property on, in or contiguous to the HMA.
- ii. All activities involving placement of temporary or permanent structures (e.g., docks, floats, piers), dredging, filling, or other activities seaward of the mean high water line.
- iii. All proposed revisions or amendments to City plans, rules and regulations affecting real property on, in or contiguous to the HMA.

In accordance with authority provided by Section 22a-113p of the Connecticut General Statutes and as specified in Section 3¹/₂-1.6 of the Norwich Code, each City commission or department must refer all proposals subject to the Harbor Management Consistency Review process to the Harbor Management Commission at least thirty-five days prior to any City hearing on the proposal. If no hearing is to be held, the City commission or agency must notify the Harbor Management Commission at least thirty-five days prior to taking any final action on the proposal.

The Harbor Management Commission reviews such proposals for consistency with the Harbor Management Plan and provides comments and recommendations to the approving agency within the thirty-five day period and prior to or during the public hearing on the proposal. If a public hearing is not held, the Commission provides its comments prior to final action by the approving agency. Failure of the Commission to provide a recommendation to the approving agency is considered, in accordance with Section 22a-113p of the Connecticut General Statutes, as approval of the proposal.

When reviewing a proposal for consistency with the Harbor Management Plan, the Harbor Management Commission considers whether the proposal is consistent with the Plan's goals, objectives, policies, guidelines, and recommendations.

The approving agency must consider the comments and recommendations of the Harbor Management Commission. If the Commission judges a proposal to be inconsistent with the Harbor Management Plan, a two-thirds vote of the approving agency (instead of a simple

majority) will be required to over-ride the Commission's findings and approve the proposal. This "two-thirds" requirement, however, does not alter the authority of the agency having primary jurisdiction over the proposal to deny, modify or condition a proposal that has received an unfavorable recommendation from the Harbor Management Commission.

It is the responsibility of project applicants to provide the Harbor Management Commission with the information necessary to adequately assess the potential impacts of proposed projects on the HMA and the consistency of such proposals with the Harbor Management Plan. The Commission may request that an applicant provide specific information addressing the conformance of the proposal with the Harbor Management Plan.

All applicants whose proposals are reviewed by the Commission are provided an opportunity to describe the proposal to the Commission and answer any questions posed by Commission members. Members of the public are afforded an appropriate opportunity to speak in favor of, or in opposition to, a proposal as it relates to the Harbor Management Plan.

Whenever possible, the Commission, along with its recommendation for approval or disapproval, prepares written comments on any proposal it reviews for consistency with the Harbor Management Plan. A recommendation may include suggested conditions or modifications that would make an otherwise unacceptable proposal consistent with the Plan. All recommendations by the Commission, including suggested modifications and conditions, are to be prepared with reference to the relevant sections of the Harbor Management Plan.

The Harbor Management Consistency Review process also includes the review of applications to the State Department of Environmental Protection and to the U.S. Army Corps of Engineers for permits to fill, dredge, or place structures in the Norwich HMA. The Commission reviews copies of the permit applications for consistency with the Harbor Management Plan and comment to the DEP and Corps of Engineers (in a manner similar to that just described with respect to proposals submitted to or prepared by City agencies) on the consistency of each proposal with the Harbor Management Plan.

Pursuant to these powers and duties, the Harbor Management Commission will have a key role in the review and approval of all plans and proposals affecting redevelopment of the Shipping Street Waterfront Redevelopment Area (WRDA).

REDEVELOPMENT AGENCY

The Redevelopment Agency will have the specific responsibility to prepare the formal redevelopment plan for the Shipping Street WRDA and to exercise the State-authorized redevelopment powers under Section 8-127 of the Connecticut General Statutes, including acceptance of State-granted aid, exercise of eminent domain, and public acquisition, rehabilitation and demolition of property for redevelopment purposes in the Shipping Street WRDA.

**COMMISSION ON THE CITY PLAN;
CITY PLANNING DEPARTMENT**

The jurisdictions of the Harbor Management Commission and the Commission on the City Plan intersect at the mean high water line on the Thames River shoreline of the Shipping Street WRDA. The authorities, decisions, and plans of the Commission on the City Plan will have particular significance with respect to redevelopment of the Shipping Street WRDA.

Chapter XV of the City Charter specifies the powers and duties of the Commission on the City Plan, including the powers and duties conferred on municipal planning commissions by State statute. The responsibilities of the Commission on the City Plan include preparing, amending and updating the City's Plan of Conservation and Development (updated in 2003), and authorizing development in accordance with the City's Subdivision Regulations.

The Commission on the City Plan is also responsible for proposing regulations concerning the use and occupancy of land and buildings, and for review and comment on zoning map changes and zoning text amendments for adoption by the City Council.

In addition, the Commission on the City Plan has important responsibilities for overseeing Norwich's Municipal Coastal Program in accordance with the provisions of the Connecticut Coastal Management Act of 1979 (Sections 22a-90 through 22a-112 of the Connecticut General Statutes, as amended). The Connecticut Coastal Management Act (CCMA) requires that municipalities undertake reviews of all major activities or projects proposed within the coastal area for consistency with the coastal policies established by the Act. This is the mandatory process of Coastal Site Plan Review (CSPR). Coastal site plan review applications for properties contiguous to the Norwich Harbor Management Area, including applications concerning redevelopment of the Shipping Street WRDA, must be provided to the Harbor Management Commission for review and comments in accordance with the City's Harbor Management Consistency Review process.

In addition to the Coastal Site Plan Review Process, the CCMA also provides for the voluntary development and adoption of a "municipal coastal program" to guide land use and protect coastal resources in each coastal community. The Norwich municipal coastal program is reflected in the coastal management policies and waterfront zoning regulations included in the Plan of Conservation and Development and Zoning Ordinance, respectively. The "Waterfront Development (WD)" waterfront zoning districts applied to the Shipping Street WRDA enables redevelopment of the properties in accordance with the City's land- and water-use policies established in the Plan of Conservation and Development and Harbor Management Plan.

The City Planning Department provides necessary staff support for the Commission on the City Plan. The Planning Director is to serve as an ex-officio member of the Harbor Management Commission, without vote. Within the Planning Department, the City's Zoning Office handles all City zoning matters, including issuance of zoning permits, enforcement of zoning regulations and provision of staff assistance to the Zoning Board of Appeals

OTHER CITY AGENCIES

Other City agencies, including the Norwich Inland Wetlands, Water Courses and Conservation Commission, Department of Public Works, Police Department, and Fire Department will also have important roles in the review and approval process for redevelopment of the Shipping Street WRDA.

The Inland Wetlands, Watercourses and Conservation Commission is responsible for the protection, preservation, maintenance, and use of the inland wetlands and watercourses of the City, for their conservation, economic, aesthetic, recreational, and other public and private uses and values, and reviews applications to conduct regulated activities within inland wetland areas and the "100-year" floodplain of the City. Such authority will be applied to the review of plans and proposals for redevelopment of the Shipping Street WRDA.

The Department of Public Works is responsible for construction, maintenance and repair of streets, sewers, bridges, docks, wharves, buildings, and all other structures and works not specifically assigned by the City Charter to some other department or agency, including the City docks and boat launching ramp at Howard T. Brown Memorial Park. The DPW will be involved in the planning for relocation of that launching ramp to the Shipping Street WRDA.

The Norwich Police Department and Fire Department will be involved in reviewing plans and proposals for redevelopment of the Shipping Street WRDA to ensure that public safety requirements are properly addressed.

STATE OF CONNECTICUT

A number of State laws, regulations, and policies affect redevelopment of the Shipping Street WRDA. Principle legislation of interest includes the Connecticut Coastal Management Act (CCMA) which establishes legislative goals and policies for the beneficial use and conservation of the States' coastal resources, including its developed shorefront resources as constitute the Shipping Street WRDA.

CONNECTICUT COASTAL MANAGEMENT ACT

In Connecticut, impetus for municipalities to consider issues of water-dependency and public access to tidal waters is provided by the Connecticut Coastal Management Act (CCMA). This legislation, included in Connecticut General Statutes Sec. 22a-90 to Sec. 22a-112, took effect on January 1, 1980 and establishes a State-wide program for coastal resources management. The CCMA establishes legislative goals and policies for coastal management; it defines coastal resources, a coastal management boundary, and State and local responsibilities for implementing the legislation. The CCMA gives the coastal municipalities broad duties and responsibilities for implementation, largely through local land use authorities.

The Connecticut Commissioner of Environmental Protection is responsible on an ongoing basis for assisting the coastal municipalities with carrying out their responsibilities for implementing the CCMA. This assistance generally is provided through the Office of Long Island Sound Programs (OLISP) of the Department of Environmental Protection (DEP).

Coastal Boundary

The coastal boundary established by the CCMA marks the inland extent of the area within which the provisions of the Act apply. This boundary is a continuous line delineated by a 1,000-foot setback from mean high water, or by a 1,000-foot setback from the inland boundary of State-regulated tidal wetlands, or by the inland boundary of the "100-year" floodplain, whichever is farthest inland. (Connecticut General Statutes Sec. 22a-94.) The Shipping Street WRDA is within the coastal boundary of the City of Norwich.

Coastal Site Plan Review

The CCMA requires that municipalities undertake "coastal site plan reviews" of all major projects or activities proposed within the coastal boundary. (Connecticut General Statutes Sec. 22a-115.) Planning commissions, zoning commissions, and zoning boards of appeal conduct these reviews in the course of their normal responsibilities for reviewing site plans and applications. In addition to determining the consistency of a proposed action with respect to local planning and zoning requirements, the municipal commission or board reviewing a coastal site plan must determine whether or not the potential adverse impacts of the proposed action on both coastal resources and future water-dependent development activities (see below) are acceptable. The City of Norwich's requirements for coastal site plan review, carried out in accordance with the CCMA, are established in the City Zoning Ordinance. Applications for building permits, subdivisions, rezoning, special permits, and municipal improvements are among the activities subject to coastal site plan review by the Commission on the City Plan.

A municipality is not required by the CCMA to provide the DEP with the applications received by the municipality for coastal site plan review, excepting applications for shoreline flood and erosion control structures (including bulkheads, canals, and breakwaters) received by the zoning commission; those applications must also be reviewed by the OLISP. (Connecticut General Statutes Sec. 22a-109(d).) Norwich planning and zoning officials may seek input from the OLISP in the course of reviewing specific coastal site plan review applications. The OLISP's comments are often helpful in the course of such local review. In some instances, the OLISP may express disagreement with a municipal decision and may consider appealing such decision. The Commissioner of Environmental Protection (acting through the OLISP) is empowered to appear at any hearing on a coastal site plan review and appeal any coastal site plan review decision by a municipality. (Connecticut General Statutes Sec. 22a-110.) While the OLISP has intervened in coastal site plan review decisions, to date all disagreements with municipal decisions have been resolved short of court action.

Planning and Zoning Revisions and the Municipal Coastal Program

In addition to the mandatory coastal site plan review process, the CCMA provides for the voluntary development, by each coastal municipality, of a Municipal Coastal Program (MCP). (Connecticut General Statutes 22a-101.) The purpose of the MCP is to implement the policies and provisions of the CCMA through local land use plans and regulations, thereby reflecting local conditions and providing more specific guidance to coastal area property owners and developers. If a municipality chooses to develop a MCP, it must revise its plan of conservation and development as well as its zoning and other land use regulations affecting the area within the coastal boundary. The CCMA specifies the criteria and process for such revisions. For example,

a municipal planning commission may revise the local plan of conservation and development by modifying policies and recommendations for coastal land use; zoning regulations must then be amended to conform to and effectuate the revised planning provisions.

Proposed planning and zoning revisions affecting the area within the coastal boundary are not subject to the coastal site plan review process. Any proposed revisions, however, regardless of whether the municipality has developed a MCP, must be consistent with the goals and policies of the CCMA. Also, any proposed revisions must be submitted to the Commissioner of Environmental Protection for review and comments. (Connecticut General Statutes Sec. 22a-104(e).) The Commissioner is empowered to appeal any municipal decision concerning such revisions if he or she judges the revisions to be contrary to the CCMA. (Connecticut General Statutes Sec. 22a-110.) While the Commissioner (acting through the OLISP) comments on proposed planning and zoning revisions, there is no instance of the Commissioner bringing any legal action brought by the Commissioner against a municipality with respect to a zoning decision.

Described in the preceding section on the City of Norwich, the coastal management policies and requirements of the City of Norwich are incorporated in the City's Plan of Conservation and Development and Zoning Regulations. Amendments to the Plan and Zoning Regulations in 2003 included new provisions to encourage and guide mixed use redevelopment of the Shipping Street WRDA.

Water-Dependent and Public Access Provisions of the CCMA

One of the most significant provisions of the CCMA concerns the priority and preference that must be given to water-dependent uses. A basic legislative policy is "To give high priority and preference to uses and facilities which are dependent upon proximity to the water or the shorelands immediately adjacent to marine and tidal waters." (Connecticut General Statutes Sec. 22a-92(a)(3).) Another basic policy is "To manage uses in the coastal boundary through existing municipal planning, zoning and other local regulatory authorities and through existing state... siting and regulatory authorities, giving highest priority and preference to water-dependent uses and facilities in shorefront areas." (Connecticut General Statutes Sec. 22a-92(b)(1).)

The CCMA contains the following definition of "water-dependent uses":

Water-dependent uses means those uses and facilities which require direct access to, or location in, marine or tidal waters and which therefore cannot be located inland, including but not limited to: Marinas, recreational and commercial fishing and boating facilities, finfish and shellfish processing plants, waterfront dock and port facilities, shipyards and boat building facilities, water-based recreational uses, navigation aids, basins and channels, industrial uses dependent upon water-borne transportation or requiring large volumes of cooling or process water and which cannot reasonably be located or operated at an inland site and uses which provide general public access to marine or tidal waters. (Connecticut General Statutes Sec. 22a-93(16).)

A notable feature of this definition is that a use or facility is water-dependent if it provides general public access to marine or tidal waters.

In accordance with the CCMA, when a local commission or board reviews a coastal site plan, it must “determine whether or not the potential adverse impacts of the proposed activity on both coastal resources and future water-dependent development activities are acceptable.” (Connecticut General Statutes Sec. 22a-106(a).)

Adverse impacts on future water-dependent development activities are defined by the CCMA as including but not limited to:

(A) locating a non-water-dependent use at a site that (i) is physically suited for a water-dependent use for which there is a reasonable demand or (ii) has been identified for a water-dependent use in the plan of development of the municipality or the zoning regulations; (B) replacement of a water-dependent use with a non-water-dependent use, and (C) siting of a non-water-dependent use which would substantially reduce or inhibit existing public access to marine or tidal waters.
(Connecticut General Statutes Sec. 22a-93(17).)

Evaluating Water-Dependency

It is through the coastal site plan review process that development proposals for shorefront areas are evaluated locally to determine if they are water-dependent and therefore consistent with the CCMA and any applicable planning and zoning requirements. Evaluating water-dependency, however, (and determining whether or not the potential adverse impacts of a proposed project on future water-dependent development activities are acceptable) may require some difficult decisions and interpretations by the responsible commission or board. The difficulty arises in large part because: 1) the CCMA defines water-dependent uses to include “uses which provide general public access to marine and tidal waters”; and 2) current economic and regulatory conditions in Connecticut may limit the possibilities for development of truly water-dependent uses as the principal uses of waterfront sites. (“Truly water-dependent uses” are not defined by the CCMA, but are often described as marinas, boatyards, fishing facilities, and other water-dependent uses that are distinguished from uses that are water-dependent by virtue of providing public access.)

As a result, the CCMA policies favoring water-dependent use of shorefront areas have been the subject of some controversy and different interpretations in Connecticut municipalities. Officials of the OLISP have stated that proposals for nonwater-dependent uses (such as waterfront condominiums and offices) should not automatically be considered water-dependent simply because opportunities and facilities for public access are provided. (In other words, those officials seemed to say the public access provisions must be substantial and meaningful enough for the proposal to be considered water-dependent.) Also, some OLISP officials have interpreted the CCMA as requiring that public access in a waterfront development proposal can only be considered if the particular site is not suitable, because of topographic or resource constraints, for other types of water-dependent uses. (The CCMA, however, requires only that local commissions or boards consider site characteristics when determining adverse impacts on future water-

dependent development opportunities.) Some OLISP officials have stated that public access does not make a nonwater-dependent use water-dependent, but rather adds a water-dependent component that may render a project approvable. (This statement is not reflected in the language of the CCMA.) More recently, OLISP officials have acknowledged the constraints imposed by land values and other economic considerations on opportunities for development of truly water-dependent uses.

Two significant issues of concern to municipal officials evaluating the water-dependency of proposed waterfront development projects are: 1) how to ensure that well-designed and meaningful provisions for public access are incorporated into development that is otherwise not water-dependent; and 2) how to retain and encourage truly water-dependent uses such as recreational boating, commercial fishing, and other uses that require direct access to the water.

The conceptual redevelopment plan for the Shipping Street WRDA will provide not only substantial and meaningful public amenities for passive recreational use on the Thames River waterfront but also provide facilities for supporting truly water-dependent uses such as recreational boating and excursion vessels providing connection between the Shipping Street WRDA and other waterfront locations.

Obtaining Public Access

Through application of the CCMA's water-dependent use policies and local zoning requirements, municipalities have the opportunity to obtain substantial public access provisions from private developers, including, but not limited to, public access walkways and boardwalks, fishing piers, and recreational boating facilities and services. This is a particularly significant opportunity since current economic, regulatory, and other conditions may function as major constraints to the development of truly water-dependent uses as new principal uses of waterfront land. A number of important questions pertinent to the review of future waterfront development proposals and the provision of public access must be addressed. These questions include: How much access should be required? How to ensure that it is well-designed? How to link and coordinate public amenities provided at different sites into a useful and meaningful waterfront experience? How to ensure that access provided remains open to the public in the future?

It should be pointed out that the CCMA does not include specific standards or guidelines for answering these questions. In the absence of pre-established answers, local officials responsible for reviewing waterfront development proposals for consistency with CCMA policies must seek to answer the key questions as best they can, usually on a case-by-case basis. Also, developers required to provide public access typically express legitimate concerns over costs, site planning considerations, security, liability, and other issues.

These issues will all be addressed in the course of reviewing plans and proposals for redevelopment of the Shipping Street WRDA.

There is one case decided in the Connecticut courts which addresses a municipality's requirement for public access as a condition of coastal site plan approval. This is the case of *Louis DeBeradinis v. Zoning Commission of the City of Norwalk et al.* In this case, decided in January

1994, the plaintiff had filed an application with the Norwalk Zoning Commission for coastal site plan approval. The application was to expand a construction materials recycling operation on a waterfront site. The DEP commented that the proposed expansion was not a water-dependent use but could be made water-dependent by addition of a public access walkway along the Norwalk River. The Zoning Commission granted approval, subject to several conditions, including the plaintiff's immediate granting of a 15-foot wide public access easement. Construction of the actual walkway was to be delayed until a future date after the plaintiff finished using its property as a recycling operation. The plaintiff appealed that decision, arguing in part that the Zoning Commission's public access requirement was a taking without compensation in violation of the U.S. Constitution. The Superior Court reversed the Zoning Commission's decision, but not in the manner that the plaintiff argued for. The Court voided approval of the plaintiff's entire application for the reason that the Zoning Commission's public access condition did not mitigate the potential adverse impacts of the plaintiff's plan on future water-dependent activities as required by the CCMA. The plaintiff then appealed the Superior Court's decision which was subsequently upheld by the Appeals Court. Since the plaintiff failed to show that the Zoning Commission would not allow any reasonable use of the subject property, the Appeals Court held there was no merit to the plaintiff's claim that the imposition of the public access condition resulted in an unconstitutional taking of property. The Appeals Court also found there was substantial evidence to support the Zoning Commission's finding, in accordance with the CCMA, that the plaintiff's plan for a nonwater-dependent use had potential adverse impacts on future water-dependent development opportunities. Further, the Appeals Court held that the Superior Court's invalidation of the public access condition (because that condition was insufficient to mitigate the potential adverse impacts on future water-dependent development opportunities) required reversal of the Commission's entire decision.

Liability issues associated with coastal public access provisions are also of particular interest, following the July 1996 ruling by the Connecticut Supreme Court in the *Conway v. Wilton* case. That decision removed the previously enjoyed municipal immunity from lawsuits arising from injuries sustained on municipally owned recreational land. Prior to the Court's ruling, municipalities had enjoyed immunity under the State's recreational use statutes which hold, in part, that "an owner of land who, directly or indirectly, invites or permits without charge, rent, fee or other commercial service any person to use the land, or part thereof, for recreational purposes does not thereby: 1) make any representation that the premises are safe for any purpose; 2) confer upon the person who enters or uses the land for recreational purposes the legal status of an invitee or licensee to whom a duty of care is owed; or 3) assume responsibility for or incur liability for any injury to person or property caused by an act or omission of the owners." (Connecticut General Statutes Sec. 52-557g.) (This statute does not limit liability for wilful or malicious failure of the owners to guard or warn against a dangerous condition.) Past interpretations had deemed that municipalities enjoyed the same protection under this statute as private landowners. In *Conway v. Wilton*, however, the Supreme Court ruled that the statute did not apply to municipalities.

According to representatives of the DEP, the immunity provided to private landowners who do not charge a fee for recreational use of their property remains in effect, and this immunity covers waterfront property owners who provide waterfront walkways and other opportunities for public access to marine and tidal waters.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Within the Department of Environmental Protection, important responsibilities affecting approval of plans and proposals for redevelopment of the Shipping Street WRDA are carried out by the Office of Long Island Sound Programs and other DEP bureaus. Some of the principal responsibilities are noted below.

Office of Long Island Sound Programs

The Office of Long Island Sound Programs has the important responsibilities for implementing the Connecticut Coastal Management Act noted above as well as the Connecticut Harbor Management Act which authorizes the Norwich Harbor Management Commission and Harbor Management Plan. In addition, the OLISP reviews coastal area development proposals and regulates structures and other work affecting the coastal and navigable waters of the State, including the Thames River, in accordance with other applicable State statutes. The OLISP also administers several State grant programs that can be used to fund harbor management and waterfront improvement projects.

The OLISP's responsibilities for reviewing applications for coastal area development and issuing or denying permits for that development will have an important bearing on the water-dependent components of the Shipping Street redevelopment Plan. The OLISP issues or denies permits for the following activities: placement of structures such as docks, piers, pilings, bulkheads, and commercial moorings below the high tide line; placement of structures in tidal wetlands; filling in tidal wetlands; filling in coastal, tidal, or navigable waters; dredging for navigation and disposal of dredged material; and construction and maintenance of nonfederal channels.

Anyone proposing any of the above activities must submit an application to the OLISP which, if it finds the application to be tentatively approvable, sends a public notice of that application to relevant Federal, State, and local agencies and to adjacent property owners for review and comment. Those agencies, property owners, and others have 30 days following receipt of the application to submit comments to the OLISP. If, based on the comments received, the OLISP determines that the activity is consistent with all applicable laws and regulations and will have no significant adverse impacts, a permit for the proposed activity is issued. The minimum time required to process a permit application is generally 60 days from receipt of the application. There is no maximum time limit, and some applications may require a number of months to process, depending on the workload at a particular time, the complexity of the project, and the comments received. Also, an extension of the comment period may be granted if a reviewing agency requests additional time for review.

If, based on its review of the proposed activity and comments received from the reviewing agencies and other parties, the OLISP determines there may be significant adverse impacts associated with the proposed activity, a public hearing is scheduled.

Proposed work involving filling, dredging, or structures in wetlands or coastal and navigable waters in Connecticut is also subject to Federal regulatory programs administered by the Corps of Engineers (see the later section on the U.S. Army Corps of Engineers). The OLISP attempts

to coordinate its review of permit applications requiring Corps permits to the greatest degree possible with the Corps.

The OLISP also processes applications for Certificates of Permission. Applicants proposing specific minor activities defined in Public Act 90-111 (An Act Concerning Structures and Dredging) may apply to the OLISP for a Certificate of Permission in lieu of a Structures and Dredging Permit. The review period for issuing a Certificate of Permission is shorter than the review period for an individual permit application.

In addition, the OLISP may issue general permits which authorize activities with only minimal environmental impacts. Any person conducting an activity for which the OLISP has issued a general permit is not required to obtain an individual permit or Certificate of Permission. Routine maintenance and repair of existing in-water structures, for example, may be approved through a general permit. The OLISP utilizes three basic types of general permits. These apply to: 1) those specific minor activities for which no registration with the DEP is required for authorization of the activity; 2) those specific activities for which registration with the DEP is required before the activity is authorized; and 3) those activities for which registration and approval from the DEP are required before the activity is authorized. There are fees associated with most of the general permits administered by the OLISP.

Proposals received by local zoning commissions for shoreline flood and erosion control structures, including bulkheads, seawalls, and breakwaters defined in Section 22a-109(c) of the Connecticut General Statutes, must also be reviewed by the OLISP as required by Sec. 22a-109(d) of the General Statutes.

FEDERAL GOVERNMENT

The principal Federal agency with responsibilities and authorities affecting redevelopment of the Shipping Street Waterfront redevelopment Area is the U.S. Army Corps of Engineers. Also, there are several sources of Federal funds potentially available to the City for advancing waterfront redevelopment goals.

U.S. Army Corps of Engineers

The Norwich Harbor Management Area and Shipping Street WRDA are within the jurisdiction of the New England District of the U.S. Army Corps of Engineers (USACE). The USACE has several important responsibilities relating to approval of plans for redevelopment of the Shipping Street WRDA, particularly the water-dependent elements of those plans. The most prominent of these responsibilities are related to: 1) programs for regulating development in navigable water and wetlands; and 2) responsibilities for maintaining the Federal Navigation Project in the Thames River.

The Corps' principal regulatory authorities pertinent to review of Shipping street redevelopment plans harbor management originate from Section 10 of the Federal Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. Under Section 10, the Corps regulates structures in or affecting navigable water, as well as excavation or deposition (dredging or filling) of

materials in navigable waters. Under Section 404, the Corps is responsible for evaluating applications for Department of the Army permits for any activities that involve placement of dredged or fill material into waters of the United States, including adjacent wetlands.

The Corps may issue two types of permits — individual permits and general permits — for structures and work subject to the Section 10 and 404 regulatory programs.

An individual permit is issued following evaluation of a specific proposal and involves public notice of the proposed activity, review of comments and, if necessary, a public hearing. In general, an individual permit must be obtained from the Corps for most activities that involve:

- Filling in wetlands and navigable water;
- Placement of structures in navigable water; and
- Dredging and disposal of dredged material.

A general permit is an authorization issued for categories of activities that are judged to be substantially similar in nature and to cause only “minimal individual and cumulative adverse environmental impacts.” The Corps’ New England District is now implementing a Programmatic General Permit (PGP), developed jointly with the Connecticut Department of Environmental Protection in 1996, that applies within the State of Connecticut. An important purpose of the PGP is to expedite the permit process for activities that have the potential for little or no adverse impacts. The PGP eliminates the need for an individual Corps permit for: a) work or structures of minimal impact in or affecting navigable water; and b) minimal impact discharges of dredged or fill material into waters of the U.S. A State permit is still needed and projects with more than minimal impacts on the aquatic environment continue to be subject to individual permit review and require an individual permit from the Corps.

Docks, piers, pilings, bulkheads, floats, aids to navigation, and moorings are all structures in navigable water that require either an individual or general Corps permit.

To reduce potential adverse impacts on navigation, the Corps has established guidelines for the placement of fixed and floating structures subject to its permitting authorities. These “Guidelines for the Placement of Fixed and Floating Structures in Navigable Waters of the United States Regulated by the New England District, U.S. Army Corps of Engineers” (dated July 1996) do not have the force of regulation, but when used to design projects in navigable waters of the United States, impacts to navigation are generally not expected. Included are guidelines concerning the distance that docks and other structures may extend from the shore toward Federal navigation projects (channels and anchorages; see below).

In addition to its regulatory authorities, the Corps of Engineers is also responsible for constructing and maintaining Federal navigation projects, most of which are authorized by Acts of Congress. Federally authorized and maintained navigation projects may consist of designated channels and anchorages. The Corps maintains navigation projects in a reported 28 Connecticut waterways, including the Thames River. Since construction, operation, and maintenance of Federal navigation projects are funded by Federal tax dollars, the Corps has a policy that navigation

projects must be “open to all on equal terms.” This policy is to ensure that all citizens have an equal opportunity to benefit from the project.

The Congressionally authorized Federal channel in the Thames River has an authorized width of 200 feet and extends the entire length of the River to Norwich. The channel provided access to the dock and terminal facilities of the oil companies formerly located on properties now within the Shipping Street WRDA. The Corps’ Section 10 regulatory program prohibits placement of piers, docks, moorings, or other obstructions within the Federal channel.

It should be noted that the Thames River Federal navigation channel upstream of the Shipping Street area in Norwich Harbor was modified by the Federal Water Resources Development Act of 1996 in accordance with the interests of the City expressed through the Norwich Harbor Management Plan. Such modifications to Federal navigation projects authorized by Federal legislation must be accomplished through new Federal legislation; a procedure involving the municipality, Corps, DEP, and U.S. Senators and Representatives has been established to achieve such legislation as necessary.

5

IMPLEMENTATION FRAMEWORK

CITY OF NORWICH, CONNECTICUT
SHIPPING STREET
WATERFRONT
REDEVELOPMENT
STUDY

SECTION FIVE: IMPLEMENTATION FRAMEWORK

The following implementation framework sets forth a strategy for implementing the City's goals and objectives for comprehensive redevelopment of the Shipping Street Waterfront Redevelopment Area (WRDA). Included are recommended responsibilities of the several agencies with the most direct roles and authorities for preparation and implementation of the Shipping Street Waterfront Redevelopment Plan. The strategy follows from the Recommended Strategy for Implementation presented in "A Waterfront Vision and Implementation Strategy for the City of Norwich" (March 24, 2003) prepared by the Waterfront Interagency Planning and Coordination Committee.

1. **REVISION OF THE WATERFRONT VISION TO INCORPORATE THE FINDINGS AND RECOMMENDATIONS OF THE SHIPPING STREET WATERFRONT REDEVELOPMENT STUDY; PRESENTATION TO THE NORWICH COMMON COUNCIL:**

The Waterfront Interagency Planning and Coordination Committee should revise the report "A Waterfront Vision and Implementation Strategy for the City of Norwich" (March 24, 2003) to incorporate the final report of the Shipping Street Waterfront Redevelopment Study including the conceptual redevelopment plan for the Shipping Street Waterfront Redevelopment Area. The Committee should present the revised report to the Council for endorsement.

2. **ENDORSEMENT BY THE NORWICH CITY COUNCIL OF THE WATERFRONT VISION INCORPORATING THE FINDINGS AND RECOMMENDATIONS OF THE SHIPPING STREET WATERFRONT REDEVELOPMENT STUDY:**

The Norwich City Council should endorse, by Council resolution, the revised report "A Waterfront Vision and Implementation Strategy for the City of Norwich." That report should include, as an attachment, the final report of the Shipping Street Waterfront Redevelopment Study including the conceptual redevelopment plan. The Council's resolution of endorsement should include reference to the Waterfront Division of the Norwich Community Development Corporation (NCDC) as the lead agency for implementation of the Waterfront Vision and conceptual redevelopment plan for the Shipping Street Waterfront Redevelopment Area (see no. 2 below), and encourage the Commission on the City Plan, NCDC, Harbor Management Commission, Redevelopment Agency, and other appropriate City agencies to apply their existing powers and authorities to achieve the City's goals for waterfront redevelopment.

3. **DESIGNATION OF THE NORWICH COMMUNITY DEVELOPMENT CORPORATION AS THE LEAD AGENCY FOR IMPLEMENTATION:** The Board of the Norwich Community Development Corporation (NCDC) should amend its bylaws to establish a Waterfront Division with specific responsibilities for implementing the City's Waterfront Vision endorsed by the Common Council. The NCDC Waterfront Division should be responsible for making recommendations to the NCDC Board pertaining to administration and coordination of all waterfront redevelopment actions, consistent with the Waterfront Vision, along the Norwich waterfront. The area of jurisdiction for this purpose should encompass the City's entire waterfront along the Thames River downstream to the City boundary with the towns of Montville and Preston, as well as the entire waterfront along the Yantic River upstream to the base of Yantic Falls and the Shetucket River upstream to the base of the Greeneville Dam.

Representatives from the Redevelopment Agency, Commission on the City Plan, and Harbor Management Commission should be ex officio members of the new Waterfront Division. The Waterfront Division will thereby formally assume and continue the current ad hoc functions of the Waterfront Interagency Planning and Coordination Committee.

The Waterfront Division's first priority should be to advance the waterfront redevelopment goals for the Shipping Street Waterfront Redevelopment Area, including pursuit of available grants to: a) fund a Phase I Environmental Site Assessment (see no. 6 below); and b) prepare architectural and site design guidelines, including a preliminary master plan, to guide redevelopment of the Shipping Street WRDA in accordance with the conceptual plan for waterfront redevelopment (see no. 7 below).

4. **REVISION OF THE HARBOR MANAGEMENT PLAN AND OTHER CITY PLANS TO INCORPORATE THE WATERFRONT VISION AND WATERFRONT REDEVELOPMENT GOALS FOR THE SHIPPING STREET WRDA:**

The Norwich Harbor Management Plan, Plan of Conservation and Development, and other City plans affecting the Norwich waterfront and Harbor should incorporate the basic principles and area-specific elements of the Waterfront Vision as well as the recommended strategy for implementation. The basic principles of the Waterfront Vision should be incorporated in chapters four and five of the Harbor Management Plan which set forth the City's harbor management goals, objectives, and policies; the area-specific elements of the Waterfront Vision, including waterfront redevelopment provisions for the Shipping Street Waterfront Redevelopment Area, should be incorporated in Chapter Five of the Harbor Management Plan; and the implementation strategy and framework for the Waterfront Vision and Shipping Street Waterfront Redevelopment Plan should be incorporated in Chapter Six of the Harbor Management Plan.

No additional revisions to the Norwich Plan of Conservation and Development are recommended at this time. The Plan of Conservation and Development was amended in 2003 to identify, as recommended by the Waterfront Interagency Planning and

Coordination Committee, the Shipping Street WRDA as a proposed redevelopment area pursuant to Section 8-127 of the Connecticut General Statutes.

5. **REVISION OF CITY CODES AND ORDINANCES TO FACILITATE IMPLEMENTATION OF THE WATERFRONT VISION AND WATERFRONT REDEVELOPMENT GOALS FOR THE SHIPPING STREET WRDA:**

All existing City codes and ordinances, including the City Zoning Regulations, affecting redevelopment of the Shipping Street Waterfront Redevelopment Area and other targeted properties identified in the Waterfront Vision should be reviewed to identify opportunities for changes to facilitate implementation of the Waterfront Vision and waterfront redevelopment goals for the Shipping Street WRDA. Appropriate changes should be adopted by the City Council. In 2003, the City Council amended the Zoning Map, as recommended by the Waterfront Interagency Planning and Coordination Committee, to apply the existing Waterfront Development (WD) District to the Shipping Street WRDA and other waterfront properties targeted by the City for redevelopment. Additional modifications to text of the WD District should be considered as necessary to implement the final Shipping Street Waterfront Redevelopment Plan.

6. **BROWNFIELDS STUDIES OF THE SHIPPING STREET WRDA AND OTHER TARGETED PROPERTIES:**

The Waterfront Division of the Norwich Community Development Corporation (see no. 3 above) should oversee City-sponsored "brownfields" studies to identify and evaluate any contamination affecting redevelopment of the Shipping Street Waterfront Redevelopment Area and other targeted properties and to determine cost-effective strategies for cleanup and re-use of those properties should be planned and conducted.

The first priority for brownfields study should be the Shipping Street redevelopment WRDA. A Phase I Environmental Site Assessment (ESA) report should be prepared to summarize the available environmental information for the area with emphasis placed on identified areas of environmental concern. The report will include copies of the record search information, site photographs, and copies of any pertinent plans, maps, or other documents obtained during the assessment.

7. **PREPARATION OF ARCHITECTURAL AND SITE DESIGN GUIDELINES FOR THE SHIPPING STREET WRDA:**

The Waterfront Division of the Norwich Community Development Corporation (see no. 3 above) should oversee the preparation of architectural and site design guidelines, including a preliminary master plan, to guide redevelopment of the Shipping Street WRDA in accordance with the conceptual redevelopment plan prepared through the Shipping Street Waterfront Redevelopment Study. The architectural and site design guidelines will help to articulate a clear vision and identity for the redevelopment area that

will reinforce the unique character, history, and traditions of Norwich. Preparation of architectural and site design guidelines should include:

- 7(a) Draft Architectural and Site Design Guidelines Report: This report will present recommended architectural and site design guidelines and standards for redevelopment and be illustrated with section drawings, sketches, and other illustrative material to convey the desired theme and character of the physical form of redevelopment.
- 7(b) Draft Streetscape and Public Access Guidelines Report: This report will present recommended guidelines and standards for pedestrian and vehicular circulation to, from, and within the Shipping Street WRDA, with an emphasis on the public access areas and facilities outlined in the conceptual redevelopment plan. Consideration will also be given to linkage with other waterfront sites and the Downtown via water transportation.
- 7(c) Landscape Image Package: A series of enlarged plan drawings (typically 1"=20') and schematic elevations/sections (typically 1"=10') will be prepared showing application of the recommended streetscape and public access guidelines and standards.
- 7(d) Prototypical Development/Zoning Studies: The results of a series of prototypical site development studies for selected parcels within the overall WRDA will be presented. These studies will depict the character of alternative development scenarios based on various density rates, parking requirements, building height and massing standards, setback requirements, service requirements, and other relevant development standards.
- 7(e) Perspective Sketches: Perspective sketches conveying the desired theme and character of the overall redevelopment plan will be prepared to generate public comment and interest.
- 7(f) Final Design Guidelines Report: The final report will incorporate the final versions of the work products described in nos. 7(a) through 7(e) above. Included will be a preliminary master plan for redevelopment to advance the conceptual redevelopment plan for the Shipping Street WRDA.

8. PREPARATION OF FORMAL REDEVELOPMENT PLAN FOR THE SHIPPING STREET WRDA AND OTHER TARGETED REDEVELOPMENT AREAS:

In coordination with the brownfields studies of targeted properties, the Redevelopment Agency should prepare and approve redevelopment plans for the Shipping Street Waterfront Redevelopment Area and other identified redevelopment areas pursuant to Section 8-127 of the Connecticut General Statutes. Those plans will be prepared with assistance from the Harbor Management Commission and other members of the Norwich

Community Development Corporation Waterfront Division. The first priority for redevelopment plan preparation should be the Shipping Street WRDA. Redevelopment plans should be prepared for the following areas according to an order of priority to be established by the NCDC Waterfront Division: 1) New Wharf area; 2) West Thames area; 3) Shetucket Riverwalk area; and 4) Hollyhock Island area. The redevelopment plans should address opportunities for linkage between the identified redevelopment areas and Downtown Norwich.

Following completion of the Shipping Street Waterfront Redevelopment Plan, the Redevelopment Agency should actively publicize, advertise, and otherwise promote that plan for the purpose of attracting private investment for plan implementation.

9. **ACQUISITION OR RENTAL OF REAL PROPERTY IN THE SHIPPING STREET WRDA AND OTHER IDENTIFIED REDEVELOPMENT AREAS:**

Within a reasonable time after its approval of the Shipping Street Waterfront Redevelopment Plan, the Redevelopment Agency should proceed with the acquisition or rental of real property in the Shipping Street WRDA as necessary for plan implementation. Acquisition or rental of real property by the Redevelopment Agency may be by purchase, lease, exchange, or gift. As necessary, the Redevelopment Agency may acquire real property in the Shipping Street WRDA and other redevelopment areas by eminent domain with the approval of the Norwich City Council and in accordance with the provisions of sections 8-129 to 8-133 of the Connecticut General Statutes.

10. **FUNDING FOR IMPLEMENTATION OF THE SHIPPING STREET WATERFRONT REDEVELOPMENT PLAN AND WATERFRONT VISION:**

The City of Norwich, through the budgetary and capital improvement decisions of the City Council, through the actions of the Waterfront Division of the Norwich Community Development Corporation, and through the actions of the involved City agencies, should pursue all appropriate sources of funds to achieve planned redevelopment and implementation of the Waterfront Vision including the Shipping Street Waterfront Redevelopment Plan. Conventional and innovative funding strategies should be developed, with an emphasis on creating public/private partnerships and appropriate incentives for private investment in the identified redevelopment areas. The City's State and Federal legislators should provide assistance for identifying and pursuing available sources of State and Federal funds. Those sources should be actively pursued by the Norwich Community Development Corporation Waterfront Division.

