

Rhode Island Interstate 195 Relocation Surplus Land: Redevelopment and Marketing Analysis



Sponsors:



Prepared by:



Real value in a changing world

Code Studio



September 2009

CONSULTANT TEAM

Chan Krieger Sieniewicz

Team Lead; Urban Design and Planning

Alex Krieger, FAIA

Patrick Tedesco, AIA

Maria Arquero

David Gamble, AIA, AICP

Cambridge, MA

Project Director

Principal in Charge / Project Manager

Project Planner

Project Planner

Jones Lang LaSalle

Economic, Real Estate and Marketing Analysis

Pamela Wessling

John Gibb

John Linell

Andrew Jones

Lauren Piccariello

Amelia Lim

Washington and Boston

Managing Director

Managing Director

Senior Vice President

Managing Director

Vice President

Senior Vice President

Fuss and O'Neill

Civil and Environmental Engineering

John Chambers, PE

Shawn Martin, PE

Leslie Burton, PE

Brian E. Kortz

Providence, RI

Project Director / Environmental Analysis

Project Manager / Infrastructure Analysis

Senior Engineer / Infrastructure Analysis

Senior Geologist / Environmental Analysis

Code Studio

Zoning and Code Analysis

Lee Einsweiller, AICP

Colin Scarff,

Austin, TX

Principal in Charge

Project Planner



I. Introduction.....05-10

- Executive Summary
- Summary of Process

II. Summary of Existing Planning Documents.....11-17

- Old Harbor Plan, 1992
- Jewelry District Concept Plan, 1999
- Providence 2020 Plan, 2006
- Providence Knowledge Economy, 2004
- Providence Tomorrow: The Interim Comprehensive Plan, 2007
- Jewelry District/ Old Harbor Planning Framework Study, 2008

III. The Real Estate Market.....18-25

- Conclusions
- National and Global Economic Conditions
- Providence Market

IV. Zoning Recommendations.....26-33

- Bulk and Mass Considerations
- Urban Form Considerations
- Parking Considerations
- Map and Summary of Existing / Proposed Zoning per 2020 Plan

V. Environmental Summary.....34-37

- Background
- Proposed Environmental Assessment Approach
- Regulatory Jurisdiction
- Potential Funding Opportunities
- Conclusions and Recommendations

VI. Existing Conditions Analysis.....38-87

- General Regulatory And Infrastructure Analysis
 - Floodplain
 - Wetlands & Regulatory Permitting
 - Soil Conditions
 - Utilities
- Parcel by Parcel Analysis
 - Adjacent Uses / Abutters
 - Topography / Post-Highway Demolition Condition
 - Possible Adjacent Property Assemblies
 - Utilities: Capacity and Easement Issues

VII. Parcel Planning and Capacity Studies.....88-117

- Observations about the Proposed Realignment
- Parcel by Parcel Analysis
 - Development Capacities Studies
 - Potential Uses / Highest and Best Use Summary
 - Potential Interested Parties
 - Possible Parcel Realignment Scenarios
 - Strategic Assembly / Property Acquisition

VIII. Disposition Strategy Options.....118-129

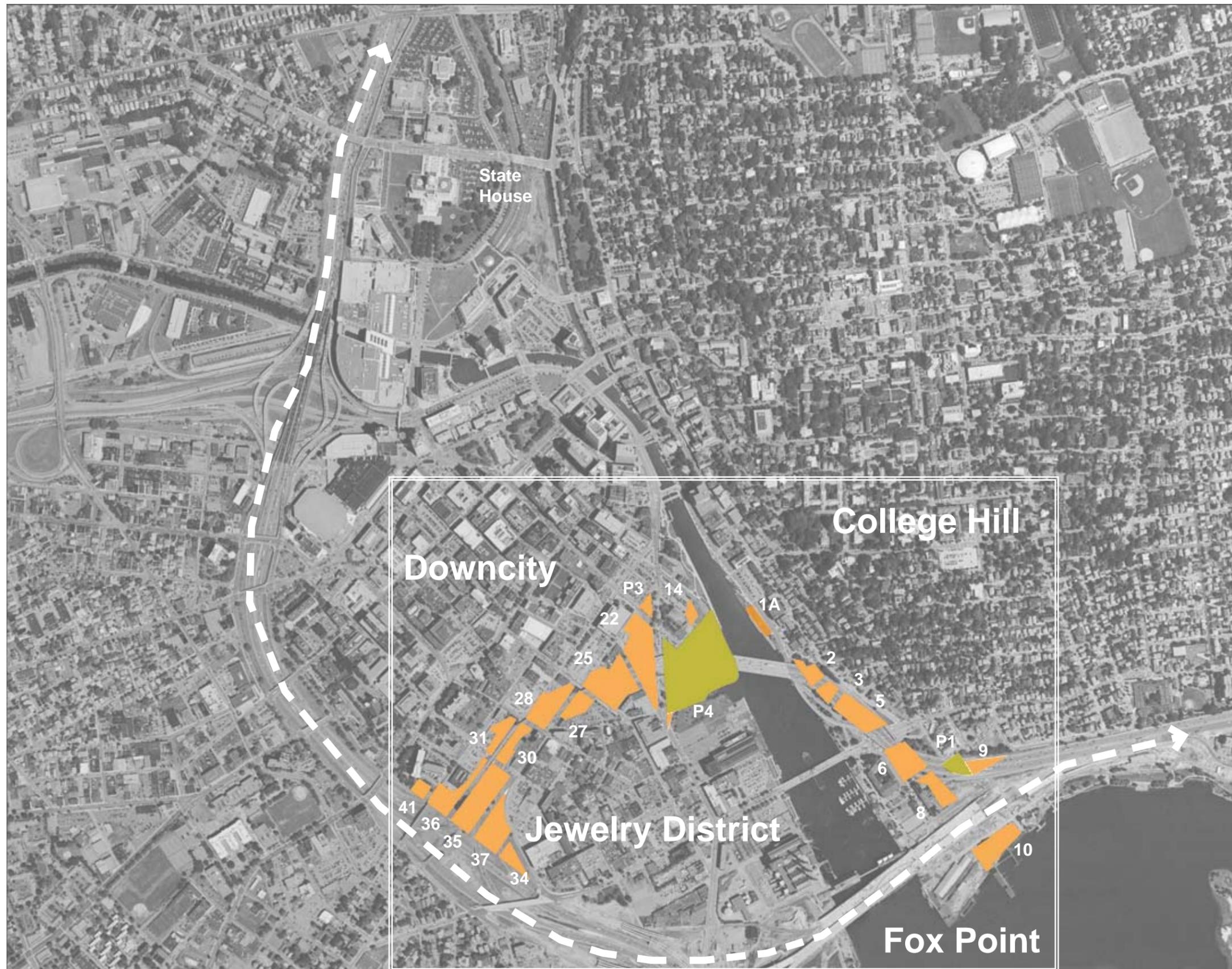
- Objectives
- Potential Roles
- Case Studies of Relevance for Providence
- Disposition Methods
- Potential Buyers
- Development economics
- Parcel Availability
- Development Economics

Recommendations

- Governance: The Project Champion
- Disposition Timing
- Disposition Methods
- Parcel Assembly
- Incentives
- Marketing the Parcels
- Parcel Disposition Strategy

Appendices130-169

- Acknowledgments and Sources
- A. Rhode Island Coastal Resources Management Plan
- B. Urban Coastal Greenway Policy
- C. Section 423 of the Providence Zoning Ordinance
- D. Interim Condition Drawings from Maguire Group [30%]
- E. Historical heritage regulations relevant to the parcels under study
- F. I-Way Parcels: Proposed Design Guidelines [11/12 /2008]. Neighborhood Charrette
- G. Proposed development update I-195 Parcels, Maguire Group [25 February 2009]



I-195 PARCELS AREAS

Parcel	Area [square feet]	Area [acres]
1A	12,378	0.28
2	22,211	0.51
3	16,271	0.37
5	58,711	1.35
6	58,704	1.35
8	36,698	0.84
9	20,264	0.47
10	59,561	1.37
P4	257,301	5.90
17	104,369	2.40
22	113,704	2.61
25	97,951	2.25
27	28,386	0.65
28	58,931	1.35
30	27,645	0.63
31	24,536	0.56
34	67,481	1.55
35	100,383	2.30
36	49,980	1.15
37	23,443	0.54
41	13,037	0.30

Introduction: Executive Summary

The overall city-building opportunities presented by the realignment of a segment of Interstate 195 (I-195) passing through Providence are well documented and have been the subject of several planning processes and documents over a period of almost two decades. This report builds upon the significant thought and energy already devoted to the planning of the surplus land and the neighborhoods impacted by the highway. The potential redevelopment of the parcels that will become available when the highway relocation is complete- I-Way Parcels- and the new streets and open space afforded by the highway's removal - present tremendous opportunities to reconnect DOWNCITY and the Jewelry District, as well as contribute to the ongoing transformation of the relationship between Providence and its riverfront.

The bold and enlightened planning that has transformed Providence over the past generation is noteworthy, not only for its vision but for its implementation. The actual realignment of I-195 is but the latest example of this planning success. However, the full benefits of the project will be judged by how successful the reuse of the parcels is and how well their redevelopment catalyzes reinvestment of adjoining areas over time. Without a thoughtful approach to guiding the infill of the parcels and the creation of meaningful patterns of public open space, the post-highway condition may, for years to come, prove to be nearly as much of a deterrent to redevelopment as the overhead highway itself. This must be avoided.

This report summarizes issues related to the disposition of the land created by the ensuing demolition of the existing I-195 highway corridor and makes recommendations for the redevelopment of the parcels as a result of a collaborative economic, market and planning analysis. In total, these parcels comprise 36 acres of new land in Providence's Jewelry District, Old Harbor, Fox Point and College Hill on either side of the Providence River north of the Fox Point Hurricane Barrier. Individually and collectively, the 18 potential development parcels represent an unprecedented opportunity to re-knit Central Providence while enabling downtown neighborhoods to better connect to the Providence River.

The purpose of this study is not to present a new master plan for the area. Such has been established through years of deliberative and expert local planning efforts. Nor is it intended to establish a precise valuation of each parcel. The report's principal purpose is to serve as a guide to inform the process of disposition of the I-Way parcels, keeping foremost in mind conditions that may affect implementation.

The process described below and the findings that follow in this report do not represent the level of scrutiny or analysis required for the due diligence that a potential buyer may conduct. Nor are the studies and recommendations the result of detailed urban design and site planning exercises that would be precipitated by a redevelopment effort. Rather, the intent of the report is to serve as a preliminary, corridor-wide analysis and set of working tools to inform and guide the land disposition process, shepherd the successful implementation of the parcel development over time, and encourage the realization of the of the neighborhood revitalization promised by the removal of the I-195 corridor.

The analysis was conducted by a multi-disciplinary team of planners, real estate advisors and engineers whose varied expertise represents the complex nature of the issues associated with implementation. The process represents a collaboration among the Rhode Island Department of Transportation (RIDOT), the City of Providence and the Rhode Island Economic Development Corporation (RIEDC), which oversaw the effort, together with the advisory group which involved City Council Members Seth Yurdin and Balbina Young, Daniel Baudouin from The Providence Foundation, Edward F. Sanderson Executive Director, Deputy State Historic Preservation Officer, and Clark Schoettle from the Providence Revolving Fund.



**OLD HARBOR PARCELS
POTENTIAL AVAILABILITY**

Parcel	Construction Completion	Potential Site
1A	N/A	N/A
2	Fall 2012	Mid 2011
3	Fall 2012	Mid 2011
5	Fall 2012	Mid 2011
6	Fall 2010	Fall 2010
8	Fall 2010	Fall 2010
9	Fall 2010	Fall 2010
10	Spring 2008	Mid 2008
14	N/A	N/A
P1		
P3		
P4		
22	Fall 2012	Early 2012
25	Fall 2012	Mid 2011
27	Fall 2012	Mid 2011
28	Fall 2012	Mid 2011
30	Fall 2012	Mid 2011
31	Fall 2012	Mid 2011
34	Fall 2012	Mid 2009
35	Fall 2012	Late 2009
36	Fall 2012	Fall 2010
37	Fall 2010	Fall 2010
41	Fall 2010	Fall 2010

EXECUTIVE SUMMARY

OBJECTIVES

The State of Rhode Island Department of Transportation (RIDOT), the City of Providence and the Rhode Island Economic Development Corporation (RIEDC) have expressed common objectives for the disposition and re-use of the I-195 parcels. The analyses and recommendations of this report are intended to maximize the potential for meeting those objectives. The objectives include the following:

1. Tax Revenue

- Increase the commercial tax base in the City
- Increase income, sales and corporate taxes to the State

2. Economic Development

- Leverage the presence of area institutions to promote the commercialization of research and development including consideration of economic development as part of institutional master plan evaluation
- Attract knowledge-based industries
- Create high wage jobs

3. Urban Revitalization

- Contribute to the ongoing revitalization of great neighborhoods through thoughtful urban design and encouraging the development of high quality mixed use space
- Address the historic character of surrounding properties
- Establish connections to parkland
- Take advantage of the waterfront, transit, highway access, and neighboring institutions
- Address relationships to adjacent districts and Downcity

RIDOT also has objectives that are unique to its mission. RIDOT, which plans to use the proceeds of property sales to fund a portion of the I-195 relocation project, seeks to maximize the value of the properties and to receive compensation for them in the near term.

PURPOSE OF THE REPORT

The report's principal purpose is to guide the disposition and re-use of the I-195 parcels, keeping foremost in mind the above goals, as well as conditions that may affect implementation. Such an unusual urban infill opportunity may take years to be developed fully. This is especially so given the current economic downturn which lowers confidence about immediate redevelopment prospects, and thus may skew decisions away from ultimate highest and best use scenarios. Current market conditions will diminish the potential for the short term redevelopment of much of the surplus land, and therefore realistic expectations for redevelopment are important.

Likewise, it is critical to recognize the likeliest near term opportunities to facilitate redevelopment of some parcels. The disposition and implementation of certain key parcels can serve to stimulate development on adjacent parcels and diminish the effects what may otherwise be long-term vacancies for some of the parcels. A continuous corridor of vacant parcel may adversely affect the recent improvements seen in Downcity and the Jewelry District if efforts are not made to encourage significant development in the near term. It is critical that the initial redevelopment projects establish a standard that is worthy of the principles of the planning goals for the I-195 corridor. In its recommendations, this report attempts to calibrate immediate and longer-term opportunities for each parcel and the project as a whole.

Given the conditions described above, RIDOT, the City and RIEDC agree that the following underlying principles should guide development of the I-195 parcels:

- Providing as much certainty as possible about the conditions for redevelopment is a fundamental aspect of planning for a parcel's disposition. Aspects of planning that are clearly articulated and broadly supported will contribute to a positive environment for development. These include zoning (height, massing, density

and uses), street patterns, parcel configurations, open space, environmental conditions, financing and subsidies, parking strategies, and timing.

- Encourage expansion of the knowledge economy in the near term. It is important to capitalize on institutional growth and expansion to redevelop the I-195 parcels at the outset, particularly west of the river. Interest expressed by Brown University and Johnson & Wales University developing some of the parcels creates an opportunity to engage these large employers as leaders in the redevelopment of the district. Given that it may take 20 years or more to fully develop all of these new parcels and given the current real estate market conditions, expansion of the knowledge economy now is the best way to create jobs and attract development. It is important to structure arrangements with institutions in such a way that their space needs can help to leverage private investment, as can be done with joint ventures between institutions and private developers and institutions serving as lead tenants in new buildings.

- Future development will benefit from a strong vision for the public realm that can be implemented through individual projects. The public realm should be planned and designed to enhance the development potential of individual parcels as well as the character of the Jewelry District and downtown. Initially, the public realm will create the area's character until development projects infill and create the new build environment that will knit together Downcity and the Jewelry District.

- Managing the development of this corridor over time to best serve the local community and to attract and retain businesses and institutions requires well coordinated and collaborative decision-making. An entity charged with governance of the parcels can become the public champion for the area, helping to build consensus and supporting and making adjustments to the goals and vision over the years it will take for development to be com-

pleted. This entity can bring parties together to execute the vision, addressing such matters as parking strategies, public realm plans and implementation, and incentives and subsidies.

SUMMARY OF RECOMMENDATIONS

Recommendations in this report recognize the goals and underlying principles that are so important to RIDOT, the City and RIEDC. The recommendations address the following:

- Highest and best use of the parcels;
- Zoning changes and design guidelines to support the recommendations pertaining to urban form, bulk and mass and parking;
- Environmental conditions and permitting;
- Disposition timing and methods;
- Development incentives; and
- Potential roles of the public and institutional sectors in the disposition, management and development of the surplus parcels.

1. Highest and Best Use of Parcels

In the near term, there is likely to be little or no private sector development given the recession, lack of demand and constrained capital markets. Therefore, this report takes a longer term view to determine highest and best use of parcels based on historic conditions, adjacencies and parcel configurations. The parcels to the east of the river, located near residential and mixed use neighborhoods, are best suited for residential uses with some hotel use, office and ground floor commercial. Publicly accessible open space is encouraged on Parcel P1 with the potential for open space and waterfront access on Parcels 10 and 1A. Parcels to the west of the river should be developed to capitalize on the presence of strong institutions with office/research and development and hotel uses complementing the institutions. Residential use is recommended next to the park that will be created on Parcel P4, and near Johnson & Wales University. There will be demand for a small amount of retail, which should be located to enliven main streets, and for parking structures.

The report includes recommendations for each parcel, and explores

options for realigning some streets and combining some adjacent parcels.

2. Zoning Changes and Design Guidelines

Implementing the recommended urban design and parking recommendations will necessitate zoning revisions. The recommended changes address bulk and mass of buildings, urban form and parking. In addition, plans and studies completed prior to this report made recommendations that also merit implementation. It is important to ensure that zoning is written to encourage flexibility but that expectations are aligned with market conditions

Bulk and Mass

- Select one of two methods for controlling height by either mandating height or setting height limits that may be increased in exchange for public benefits;
- Calibrate incentive based regulations with demand to ensure that the public benefits are likely to be exercised;
- Remove minimum lot area per dwelling requirements to reflect the urban context;
- Regulate height by stories, rather than feet, to allow for flexibility for developers and variation in the sky line. This will also be beneficial for research and development uses, a use that is encouraged on some of the parcels. Research and development facilities typically have higher floor-to-floor heights than do office buildings.

Urban Form

- Limit on-site surface parking along the street edge;
- Control surface parking as a principal use;
- To create more vibrant neighborhoods, encourage mixed use buildings and districts; require active elements along the street edge; and limit surface parking along the street edge of parcels;
- Use design review, through the existing Downcity District Design Review Committee or a new committee for this area, to maximize the quality of development;

- Codify the urban design guidelines recommended in the Jewelry District Framework Study, the Providence 2020 and Providence 2000 Comprehensive Plans to further encourage active, ground floor uses; mixed use development; and sustainable design. These studies and plans also address guidelines for bulk and mass and the design of structured parking facilities.

Parking

- Consider creating a Parking Management District.
- Allow off-site parking to count towards on-site parking requirements.
- Offer parking reduction credits in tandem with measures that reduce parking demand.
- Extend restaurant parking exemption to additional uses.
- Enable parking models that encourage mixed use development.
- Utilize fee in-lieu of providing off-street parking spaces.
- Consider unbundling residential parking requirements.

3. Environmental Conditions

As may be expected for parcels of land that housed industrial uses as well as support a highway, releases of oil and/or hazardous materials may be present. There is no information available indicating that an environmental assessment was ever undertaken to identify the presence of hazardous materials or of the associated costs or schedule ramifications required to address potential clean up. The value of a parcel will be impacted by the actual environmental conditions, and the uncertainty can be an impediment to the real estate transactions potentially delaying financing. This impediment can be alleviated through an environmental assessment of the parcels to better understand the costs, regulatory requirements and schedule ramifications that any contamination may present. This report suggests that the Phase I and if needed, Phase II, Environmental Site Assessment process may begin as soon as possible. Details of the process are included in the Environmental Summary section of this report. The assessment activities are all potentially eligible for

brownfield assessment funding through the United States Environmental Protection Agency (USEPA) and RIDEM, and RIEDC or the City of Providence would be eligible for funding. RIEDC has already applied for to USEPA for two grants for fiscal year 2009 that could be used for these parcels.

4. Disposition Timing and Methods

RIDOT should sell when parcels are available if it needs all projected revenue immediately. However, given the current deep recession, the value of the land is likely to be substantially less than it will be when market conditions improve. If RIDOT can be patient, it is recommended that sales transpire when market conditions are favorable for the proposed use of each parcel, as shown in the parcel by parcel recommendations in the Disposition Strategies section of this report, rather than sell immediately to private parties which may hold the land for a long time before developing. Depending on the timing of sales, it is also suggested that RIDOT offer some parcels together in the same offering to allow for bids to be made for the assemblage and/or for parcels individually.

That said, there are some parcels that Brown University and Johnson and Wales University have expressed interest in acquiring. In order to leverage the institutional presence to encourage private sector development and occupancy, especially for life sciences, those parcels should be committed to the institutions when they become available.

This report recommends that an entity such as the RIEDC or the City of Providence be designated as the project champion for developing the I-195 parcels. If that recommendation is pursued, an arrangement could be made whereby RIDOT transfers land to that entity or engages the entity as its agent.

5. Development Incentives

Financial analyses prepared for the parcel options shown in this study indicate the need for economic incentives, especially for hotel,

office/research and development, and parking uses. It is assumed that residential development can proceed without incentives when the residential market had stabilized, except for any affordable housing that may be desired. The Disposition Strategies section of this report lists a number of possible incentives. Some of these are available through standard channels, such as bond financing, loans and equity investments; grants; or income tax incentives. Others, such as partnerships with institutions and a parking strategy, will take creative collaborations among parties dedicated to achieve the common goals for the project.

6. Roles for Public and Institutional Sectors

The report explores a range of possible roles for government, ranging from low to high level of involvement, and describes possible roles for institutions. However, successful projects are driven by entities with vision, drive, expertise and focus, and it is essential to have one entity serve as a highly involved project champion. The same will be true for Providence. It is recommended that RIDOT consider naming a lead entity to provide the overall coordination for the redevelopment of the parcels on its behalf. Both RIEDC and the City of Providence have the capabilities to take on this responsibility and the project is well within the scope of their missions. Each governmental entity would, of course, carry out its traditional responsibilities for activities relating to development, such as zoning, permitting and the disposal of properties. The project champion would bring all the players together and advance the plan for the project.

The City or RIEDC might acquire all or only key parcels from RIDOT, buying those parcels where public involvement can make a significant difference to achieving public benefits. These include parcels that institutions are interested in acquiring, parcels slated for open space and parking structures. The City or RIEDC will then have the flexibility to negotiate the terms of subsequent sales to encourage institutions to partner with the private sector, to arrange Payment in Lieu of Tax Agreements, to promote a parking management plan and help to develop a parking garage, and for other arrangements de-

scribed herein.

RIDOT can control the timing of the sale of the parcels and their interim management. If it needs to sell as soon as parcels are available, it can cooperate to sell parcels to the City or RIEDC and to simplify the process of addressing the rights of former owners. RIDOT, with RIEDC and the City, can also play a significant role in marketing the parcels to ensure that there is broad and strong competition and to attract buyers sympathetic to the goals for the project.

RIEDC can also assist with marketing the properties, providing economic development incentives and financing, and coordinating the parties, as it has for this report.

Institutions can also play a key role by coordinating their planning with the plans and goals for these parcels and other city plans, creating partnerships with developers or serving as lead tenants in privately-developed buildings, marketing to life sciences companies, perhaps sharing facilities among institutions, and coordinating transportation management activities.

To succeed, a collaborative effort is essential, and that effort should be led by a single entity capable of building consensus and bringing to reality Rhode Island's long-term vision for the I-195 corridor and its role in the ongoing revitalization of the city.

SUMMARY OF THE PROCESS

The scope of work to conduct the analysis represents an approximately three-month effort which consisted of the following process:

DATA GATHERING

The team began the process by reviewing the planning documents to date to formulate an informed foundation for the exercise. The report includes a list and summary of the documents reviewed as background material. In a parallel effort, the team assembled the most recent base map information of the I-195 corridor and the abutting districts, and conducted its own field surveys and existing conditions analysis along the highway and the adjoining neighborhoods.

The consulting team conducted a number of fact-finding meetings/ interviews with public and non-profit constituencies within the city and state including:

- RIEDC
- RIDOT
- City of Providence Department of Planning and Development
- The Providence Foundation

The team also met with members of the Advisory Committee which consisted of City Council Members Seth Yurdin and Balbina Young and Edward F. Sanderson, Executive Director, Deputy State Historic Preservation Officer.

In addition, the team met early in the process with representatives of Brown University and Johnson & Wales University to discuss their respective interests in some of the Jewelry District parcels and to get a better understanding of each institution's planning initiatives relative to the parcels and the broader urban context.

This initial phase of the process also included the assembly of economic data and market research to identify the current and historic economic conditions for Providence and the study area in particular. The team also interviewed parties that have developed mixed use and life sciences projects in other cities. This information was then

used to formulate the parcel planning and capacity analysis, the evaluation of potential uses and densities, the potential models for public, private and institutional partnerships in development and the recommended disposition strategies for each parcel.

Another key element in the data gathering stage of the process was public input the team garnered from its participation in the Downtown public charrettes held in late October, 2008. These forums, part of the "Providence Tomorrow: the Interim Comprehensive Plan 2007" update proved to be an informative backdrop to the study and a useful synthesis of the planning issues affecting the redevelopment of the surplus land. The charrettes also provided a sense of other Downtown planning initiatives that may influence the I-195 parcels and the effort to rezone the areas around the corridor. The session that focused on the current state of the proposed riverfront park also helped identify the goals and opportunities for the planned open space parcels and their relationship to the broader array of development parcels.

PARCEL PLANNING, CAPACITY AND HIGHEST AND BEST USE ANALYSIS

With the findings from the data gathering and existing conditions summary phases, the team undertook a preliminary planning study of each parcel with the intent of determining the following:

- Potential development scenarios;
- The opportunities and limits on development given the proposed parcel dimensions and configurations;
- The potential capacity and range of relative densities of each parcel;
- Preferable land uses given the context, site dimension, zoning regulations and prior planning studies; and
- Likely frontages, orientations and potential development patterns for parcels.

As part of these studies, the team explored potential adjustments to the proposed street alignment and parcel delineation and assessed

of the potential pros and cons of alternative parcel and street layouts.

These capacity and highest and best use studies were also informed by, and in turn tested against, the findings of the economic and market analysis to suggest how the market may respond to the redevelopment opportunities presented by the surplus land. In particular, the studies focus on and how issues of zoning, absorption, timing of disposition and potential development mechanisms may influence valuation and implementation.

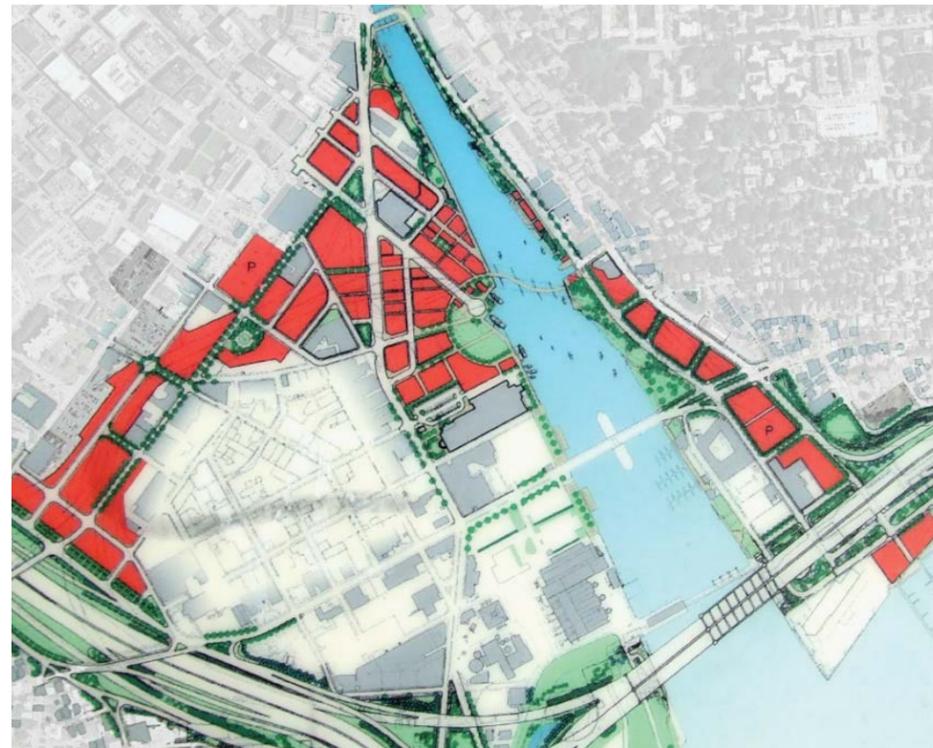
Summary of Existing Planning Documents

Chronology of Studies and Plans Related to the I-195 Relocation,

1989	Initial RIDOT proposal to reconstruct in place
1990	Providence Foundation/City of Providence hire W. D. Warner, Architects & Planners
1990	Governor directs RIDOT to include relocation option
1992	I-195 Old Harbor Plan, W. D. Warner. Adopted by CPC and Council as part of Comprehensive Plan, later cited in Final EIS as guiding document.
1991-1996	Environmental Impact Statement [EIS] Process
1993	Providence 2000: The Comprehensive Plan
1996	Memorandum of Agreement [MOA] with RIHPHC and Secretary of Interior
1999	Jewelry District Concept Plan
2000	Amended MOA
1997-2002	Old Harbor Project Advisory Committee- Old Harbor Plan revisited [not adopted]
2006	Providence 2020, by Sasaki
2006	Design Competition for Eddy's Point Park
2007	Providence Tomorrow: The Interim Comprehensive Plan
2008	Jewelry District Framework Study
2008	Fox Point / College Hill / Wayland Neighborhood Planning Charrette
2008	Downtown Neighborhood Planning Charrette

OLD HARBOR PLAN, 1992 [and updates]

by William D. Warner, Architects and Planners



Sponsors – City of Providence, State of Rhode Island, The Providence Foundation

[Images from the original plan document]

The I-195/Old Harbor Plan basic concept was 'to return the old harbor to its historical status as unifying focus and gateway of the city'. As such, the plan established a continuous street pattern with a balanced mix of land uses, guaranteed access to the waterfront, and included a program of implementation and funding.

The Plan elaborated on ten lines of action:

1. There should be low density for the waterfront development;
2. Residential development should be encouraged;
3. The plan should build on previous plans' recommendations;
4. Office space should be limited to the fringe area of the financial district;
5. The western area should be available to accommodate the expansion of institutions as the Rhode Island Hospital and Johnson & Wales University;
6. The east side development should expand the existing residential and commercial uses;
7. Sites for public attractions should be identified;
8. The need of increased public transportation by land and water
9. The need of walkways and corridors to link adjacent districts;
10. Dedicate significant portions of the land for open space uses.



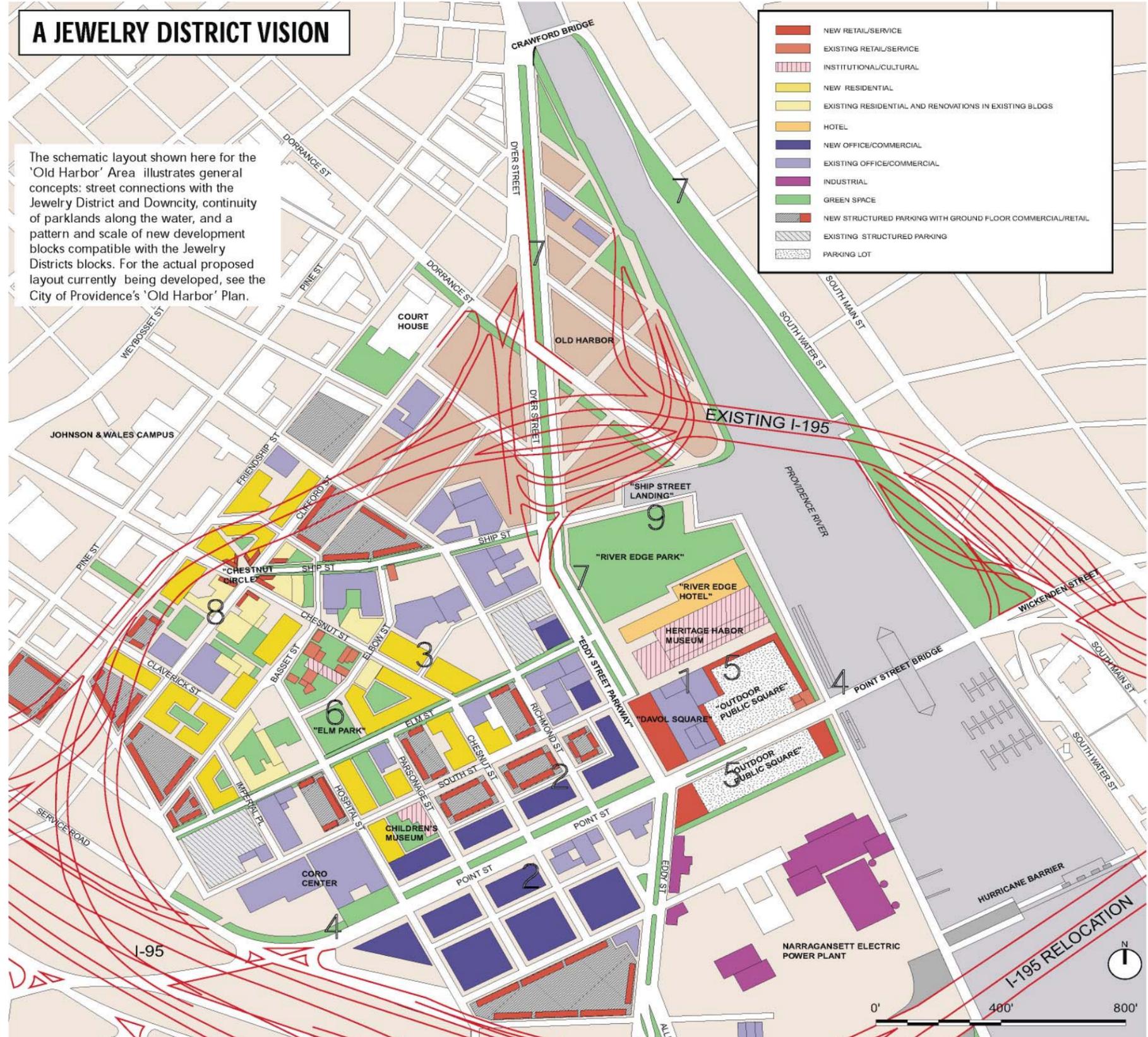
The plan identified 44 acres of right of way to be liberated by the relocation of I-195, and proposed to enlarge the area by an additional 26 acres of land for potential development. The development potential of the I-195 /Old Harbor Plan included 1.6 million square feet of office and retail space, a 300-room waterfront hotel, 620 dwellings, 400,000 sf of institutional space, parking garages for 5,000 cars, and 700,000 sf of multipurpose flexible space.

Although the I-195 Old Harbor Plan did not include a marketing study, it referred to the 1986 Providence Strategy Plan in its development comparisons.

East to the Old Harbor, the plan identified 19 acres of land in the I-195 ROW, nine targeted as parks. In addition, commercial uses along both sides of Wickenden Street, residential uses north along South Main Street, and mixed use, commercial or residential development north the hurricane barrier were the main features proposed by the plan. A municipal parking garage was targeted as key for the development of the area [serving Wickenden Street business during the day, Corliss Landing restaurants in the evenings, and the church on Sundays], and also allowing housing development in the surface parking lot close to the church.



by Thompson Design Group + Community Design Partnership in association with Howard/Stein-Hudson Associates, Inc. • Melvin F. Levine & Associates • Boelter & Associates



This drawing illustrates the major concepts proposed for the *New Jewelry District*. They are described on the following pages and reinforced with further development and recommendations in the Technical Report.

NOTE: Opportunity for new development and concepts for land use are shown here. It is not a proposal for the development of specific sites. Market forces, district goals, commitment and leadership over time will determine the intensity of new construction.

NOTE: Concepts for development of any specific block do not assume the relocation or demolition of existing uses on that block. Markets, specific project feasibility and goals of owners and developers will determine whether existing buildings and businesses are integrated into any new project.

PROPOSED DEVELOPMENT THEMES

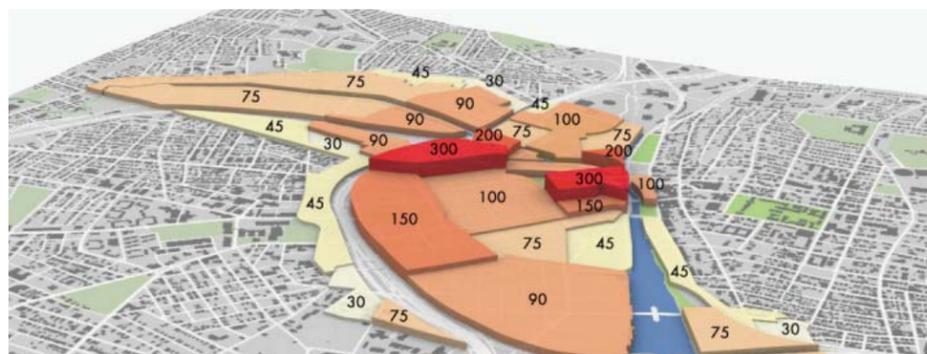
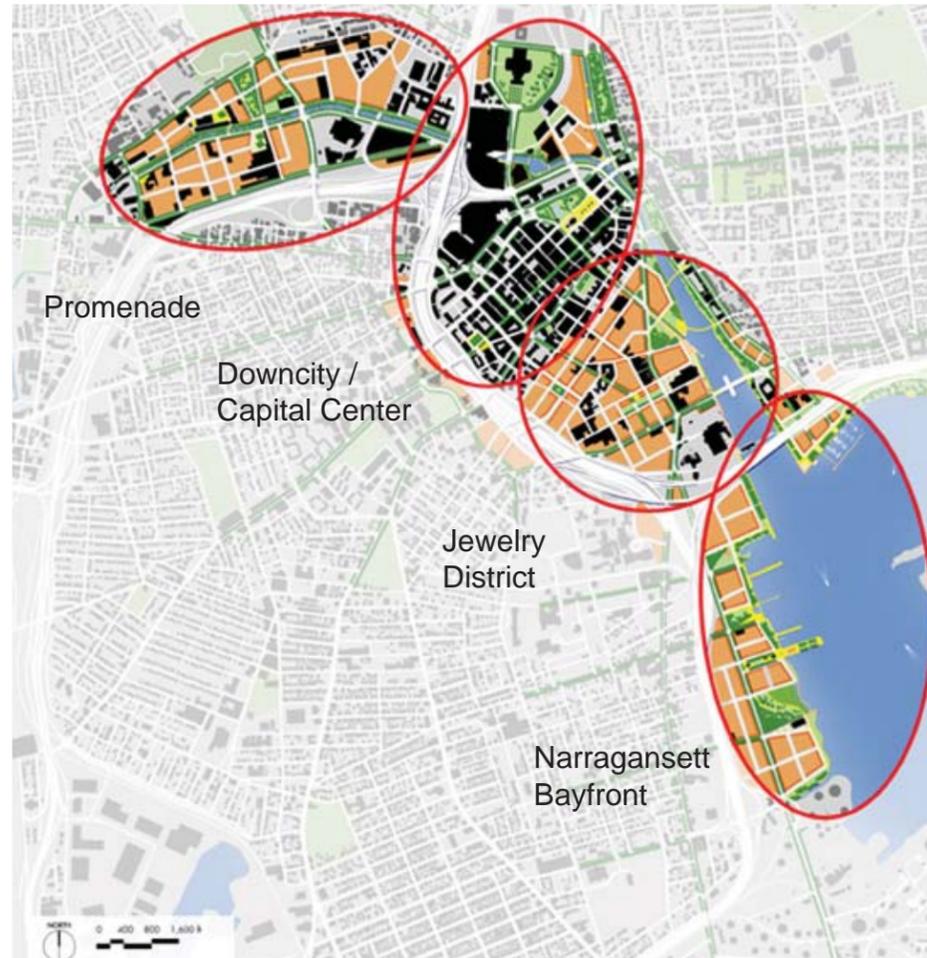
1. Davol Square: New Wave Design Exchange
2. Commercial Development: Opportunity for District Growth
3. The Core: Residential Scale Places and Streets

PUBLIC REALM CONCEPTS: GREAT PLACES

4. Gateway: Point Street Bridge to I-95 Crossing
5. A Public Square: Outdoors at Davol Square
6. Elm Park: The District's Jewel Box
7. Providence River Parkway: Eddy Street Segment
8. Chestnut Circle: A Major Hub of Activity
9. Ship Street Landing: Doorway from the Ocean

Opportunities as stated in the plan:

- Create a regionally competitive area for new businesses and employment including medical support businesses and design arts businesses.
- Fill a market niche for live/work loft style residences in a flexible, eclectic district.
- Undertake adaptive reuse projects in historical industrial buildings to create a rich mix of old and new architecture and to provide diversity and choice for residences and businesses.
- Add a cultural dimension to Providence in the form of a design arts oriented district that further integrates local educational institutions with the commercial and cultural life of the community.
- Provide access to the waterfront, extending and expanding Providence's waterfront identity.
- Create strong public spaces, street and walkway networks that restore connections between the District, Downcity and surrounding neighborhoods, and that integrate new infill developments with the existing context.
- Create pedestrian-focused streets and introduce multiple modes of transportation.



Existing and proposed building heights



The plan aimed to articulate common objectives for the metropolitan area, focussing on four main areas. Seven principles were set up as guiding features:

1. Connect the neighborhoods to downtown and the waterfront;
2. Link the Valley to the Bay with transit and a continuous waterfront esplanade;
3. Position each district according to its unique assets to promote diverse mixed use environments;
4. Create a network of pedestrian-friendly streets;
5. Design parks and surrounding development as an integral place;
6. Celebrate great architecture in both old and new buildings;
7. Develop shared parking in strategic locations;

The section referring to the Jewelry District proposed a mix of office, research, and academic uses balanced with residential and service retail uses at ground level. In this sense, the plan identified opportunities for both the public and the private sectors. The plan identified the following public projects:

- Ship Street Harbor Landing Park, the five acre park at the convergence of Dorrance and Ship Streets was the major civic space proposed. As such, the plan proposed to maximize its perimeter to get the highest value for the parcels surrounding it;
- Waterfront edge parks and a smaller park were proposed in the Interstate right of way between Clifford, Friendship and Claverick Streets to serve as gathering space for residents and students.
- The Garrahy public parking garage was proposed;
- A pedestrian bridge was included, and
- Multimodal access to the site, with a central transit spine along Eddy and Dyer Streets was also part of the Plan.

The plan suggested possible private/institutional partnerships:

- Institutional expansion: The plan identified Brown University, Johnson and Wales University, Rhode Island Hospital, and Women and Infants Hospital as potential future re-investors on site.

- Economic Development Strategy: Knowledge/Creativity/Innovation targeting five Industry Clusters: Arts and Culture, Knowledge Creation, Biomedical Science, Creative and Information Technology, and Design and Business Innovation;
- A heritage harbor museum was suggested; and
- Private Development of office/mixed use space was included

The plan developed addressed implementation strategies and possible funding sources. City incentives could include new zoning and allowances for application of density bonuses; parking waivers, negotiated parking ratios, and public financing of parking structures; land and capital improvements through tax increment financing (TIF), creating public/private partnerships; and tax abatement on a project-by-project basis to trigger private projects, usually by short-term tax abatements and implementation of a schedule for gradual increase over a 10-year period.

The plan mentioned other programs available, like the combined federal and state historic tax credits program, the federal low-income tax credits, the State's 10 percent investment tax credit for enterprise-zone tax credits, or grants for brownfields remediation.

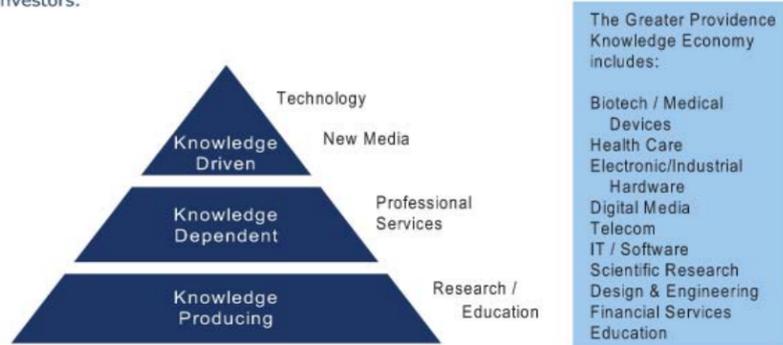


by New Economy Strategies, LLC.

	Environmental & Alternative Energy Technologies	Product Safety and Design	Facility / Spatial Design	Medical Devices and Rehabilitation	Behavioral and Preventative Healthcare
Description	Solutions to Climate Change and Alternative Energy Challenges	Product Design, health impact, and logistics	New or improved environments for consumers, business, and government	Create unique rehabilitation therapies around new medical devices	Behavioral and Preventative Medicine with focus on weight control & exercise; health public policy
Relevant Industry Sectors	IT, Financial Services, Manufacturing, Energy, Professional Services	Design, Consumer Products, Logistics, Manufacturing, Healthcare	Healthcare, Aerospace, Marine, IT, Infrastructure	IT, Healthcare, Medical Devices, Genetics	Healthcare, Consumer Nutrition and weight loss products
Relevant Participants	Higher Education: Brown, URI Private Sector: TPI, Vestas	Higher Education: Brown, URI, RISD, J&W Hospitals Private Sector: CVS, Hasbro State Government	Hospitals RISD, J&W NASA OGS (Robotics), Gilbane, FM Global	Higher Education: Brown, RISD Hospitals Private Industry: Neurotech, Amgen	Higher Education: Brown, URI, PC, J&W Hospitals Private: CVS, Blue Cross, nationwide corporate adopters
TACTIC 1: Strengthening Academic & Research Alliance	-Increased Slater Fund investment in clean technology -Coordinated joint research initiatives -Integration of new technologies into mature businesses	-Toy Design Program -Annual Conference on Consumer Health and Safety -Better outreach of Center for Design and Business (RISD) -Faculty Networking Program	-Redesign of hospital facilities for consumer benefit -Design a 21 st Century kitchen with new technology and design elements -Integration of new technology and design elements	- More clinical trials - More commercialization	- Support and programs of Centers for Behavioral & Preventative Medicine - State government programs linking health care to exercise and prevention
TACTIC 2: Economic Leadership	- Annual Conference - Role of start-up and established firms in local leadership	- Develop civic champions in this industry	-Make Providence a center of expertise and leadership	- Have target strength facilitate leadership development	- Call to Medical/Academic leaders for civic engagement
TACTIC 3: Workforce Continuum	-Workforce working group -Industry liaisons -Focused students internship/ externship program	-Workforce working group (industry has to recruit outside of region despite assets within region) -Regional institute	- Design professional networking events	-Workforce working group -Relevant community college programs	-Relevant community college programs -Workforce working group

Defining the Providence Knowledge Economy

The Knowledge Economy can be defined as the industries and workers in a local community that rely on the discovery and application of knowledge to increase their competitiveness. This is a more broad concept than the "new economy" or "innovation economy" that is primarily focused on the development of new technology. In other words, the Knowledge Economy is the know-how, know-what and know-whom that drives employers and employees as well as entrepreneurs and investors.



Knowledge Sector	Projected U.S. Employment Growth, 2007-2012
Biotech / Medical devices	6.2%
Health Care	13.3%
Electronic/Industrial Hardware	-2.9%
Digital Media	4.1%
Telecom	-1.9%
IT / Software	19.0%
Scientific Research	6.5%
Design & Engineering	15.0%
Financial	2.1%
Education	7.0%
Total Knowledge Economy	9.3%
Total Economy	5.7%

The Providence Knowledge Economy Initiative targeted the following primary objectives:

- Fostering collaboration among academic, medical, industrial and civic assets;
- Boosting the commercialization of research conducted in the region;
- Increasing jobs and tax base for Providence;
- Increasing competitiveness for knowledge-based industries in attracting and retaining skilled workers to meet the demands of the Knowledge Economy; and
- Delivering a sustainable governance structure for the Providence Knowledge Economy

- Environmental and Alternative Energy;
- Preventative Medicine and Behavioral Sciences;
- Medical Devices and Rehabilitative Services;
- Facility and Spatial Design (including Logistics); and
- Product Safety and Design

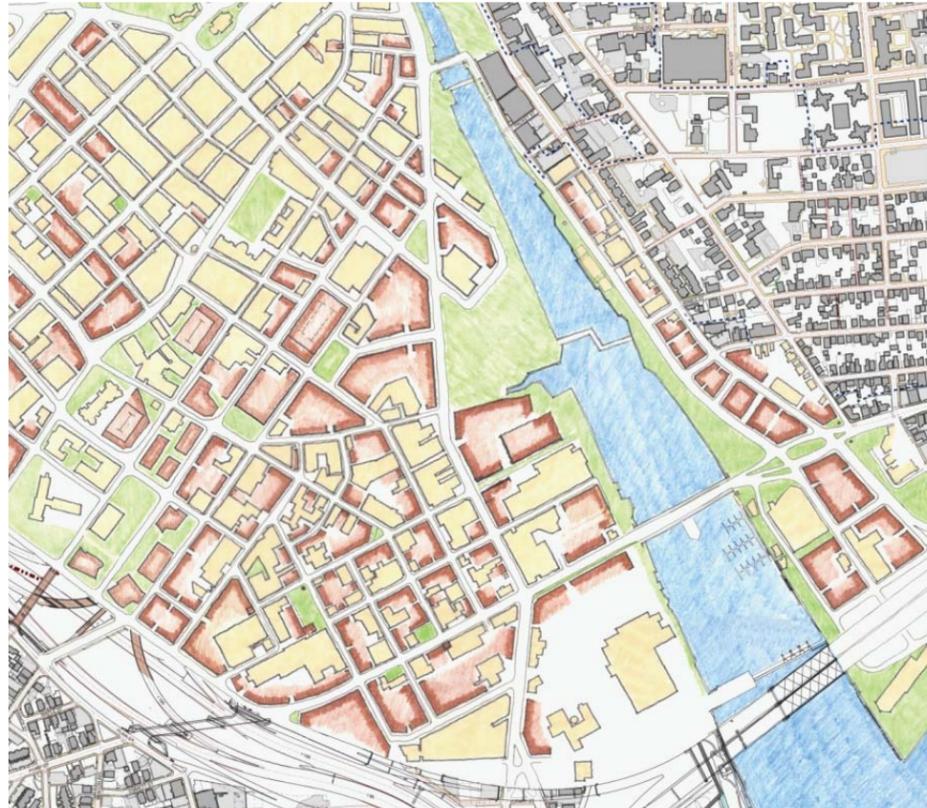
As main issues incorporated, the study included:

- Report 1A: Knowledge Data Analysis
- Report 1C: Case Studies:
 1. The Role of Universities in the Larger Economic Development Agenda of the Region: Philadelphia and the University of Pennsylvania
 2. Formation of Regional Knowledge/ Technology Initiatives: Detroit
 3. Synergies with other New England Urban Knowledge Economies: Boston, Silicon Valley, Washington DC
 4. Regions that are working to attract jobs and investment despite high taxes, high cost.
 5. Case Study 5: The Successful Integration of a Hospital Complex into a Larger Biomedical Cluster
- Report 3: Knowledge Asset Inventory [highlighting each of the relevant assets based on their areas of strength, and their roles in the current Providence Knowledge Economy
- Report 4: Targets of Opportunity & Implementation Strategy

The study followed several steps collecting:

- Qualitative Data Collection and Analysis
 - Literature review of recent reports produced by EDOs and others in the state and city;
 - Asset inventory of all educational and research institutions;
 - Mindset Survey of several hundred people, representing multiple industries across Greater Providence.
- Quantitative Data Collection and Analysis
 - Federal Funding Data from all Federal Agencies for the last six years;
 - Private sector research & development data for the last six years;
 - Patent data for Providence and Rhode Island over the last ten years; and
 - Venture capital data and industry investment areas for the last six years.
- Interviews & focus groups of over 60 individuals
- Competitive Landscape Analysis, including Case Studies on Global Best Practices
- Opportunity Identification & Strategic Recommendations

The study identified five unique targets of opportunity to leverage assets and capacities across academic, industrial, entrepreneurial, public sector, and investor areas:



Above, Image from the Downtown Neighborhood Charrette, October 2008, by Design Collective.

Bellow, Image of the winning proposal for the East Side Park, 2006, by Brown, Richardson, and Rowe.

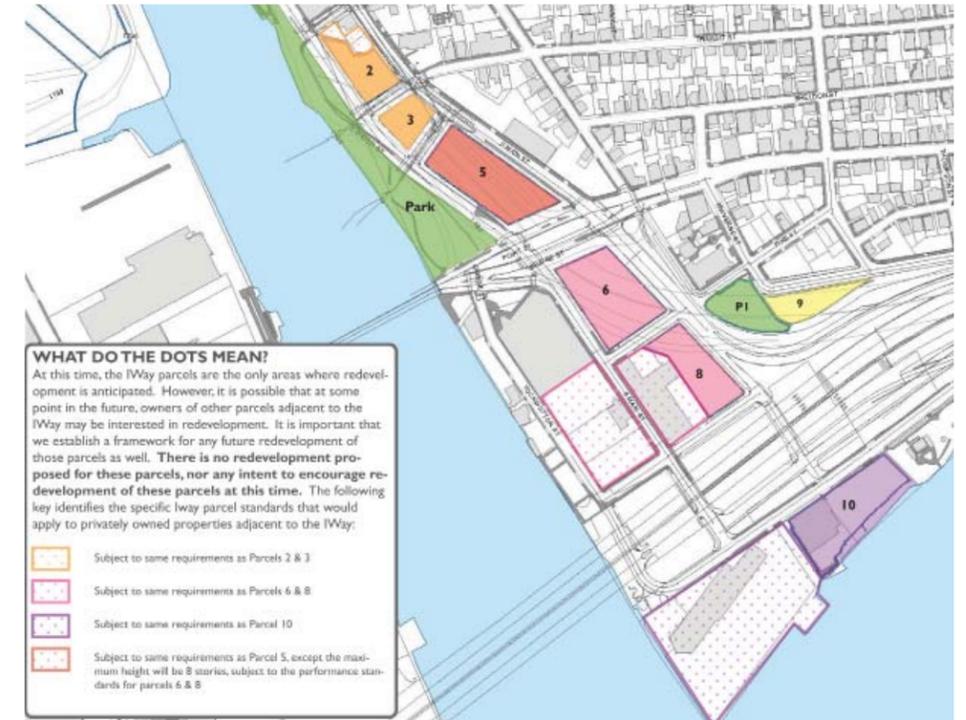


WATERFRONT PARK DESIGN COMPETITION ID #9

Providence Tomorrow: The Interim Comprehensive Plan was adopted by the City in December 2007, replacing the previous comprehensive plan [Providence 2000]. Providence Tomorrow sets out a planning framework that requires the creation of neighborhood plans for every neighborhood in the City over a period of two-three years. Once neighborhood plans have been completed, Providence Tomorrow will be updated to reflect the more detailed analysis conducted through the neighborhood planning process, particularly with regard to changes in land use and zoning.

The neighborhood planning charrette for the downtown was held in October 2008. At the conclusion of that charrette, a series of guiding principles was proposed to guide the future development of downtown, including:

- Maintain unique identity of diverse block sizes, eclectic urban fabric, and varied building sizes, mass, and character;
- Improve connections to the waterfront and to adjacent neighborhoods and districts;
- Strengthen urban fabric of important corridors – Dyer, Richmond, Chestnut;
- Establish building heights: new infill development should respect scale and proportion of context, but with a contemporary and “hip” design aesthetic;
- Improve streets and circulation, and pedestrian safety and connectivity at Point Street and Clifford Street bridges
- Improve open space
- Encourage retail;
- Provide parking;
- Improve transit;
- Encourage a mix of office, institutional, residential, and mixed-use development to Support Knowledge Economy;
- Promote sustainability;
- Create opportunities for the knowledge industry; and
- Support the notion of culture, museums, visual arts, and performance arts shared with residents, universities, and the city.



Above, Image from the Fox Point / College Hill / Wayland Neighborhood Charrette, November 2008

PARCELS 6 & 8

Parcel 6: 1.35 acres
Parcel 8: 0.84 acres

Vision:
Mixture of uses with active street level and parking for surrounding area

Use:

- Ground floor: active uses (retail, etc.)
- Upper floors: office, hotel, residential, structured parking

Design and Massing:

- 2-6 story base, with tower up to 12 stories on southern portion of site
- Performance standards for buildings over 6 stories (shadow studies, maximize views from neighborhood to water, minimize tower footprint, stepback at 6 stories, “green building”)

- Vehicular access from Pike or Tockwotten
- Encourage green design (6 stories or less)
- Pedestrian oriented design at street level

-Encourage green design (6 stories or less)

-Pedestrian oriented design at street level

-Encourage green design (6 stories or less)

-Pedestrian oriented design at street level

-Encourage green design (6 stories or less)

-Pedestrian oriented design at street level

-Encourage green design (6 stories or less)

-Pedestrian oriented design at street level

-Encourage green design (6 stories or less)

-Pedestrian oriented design at street level

-Encourage green design (6 stories or less)

-Pedestrian oriented design at street level

-Encourage green design (6 stories or less)

-Pedestrian oriented design at street level

-Encourage green design (6 stories or less)

-Pedestrian oriented design at street level

-Encourage green design (6 stories or less)

-Pedestrian oriented design at street level

-Encourage green design (6 stories or less)

-Pedestrian oriented design at street level

-Encourage green design (6 stories or less)

-Pedestrian oriented design at street level

-Encourage green design (6 stories or less)

-Pedestrian oriented design at street level

-Encourage green design (6 stories or less)

-Pedestrian oriented design at street level

PARCEL 9

Size: 0.42 acres

Vision:
Neighborhood scale residential buildings fronting on George M. Cohen Boulevard

Use:

- 1-2 family dwellings, either detached or attached as townhouses
- Community use
- Surface parking
- Other uses allowed in R2

Design and Massing:

- 2-3 stories
- Buildings fronting on blvd. with parking to rear

-Buildings fronting on blvd. with parking to rear

PARCEL P1

Size: 0.58 acres

Vision:
Neighborhood pocket park to replace former Washington Square, eliminated as part of original I-195 construction

Programming Ideas:

- Community Garden?
- Dog Park?
- Passive open space?

Design and Massing:

- 2-6 stories, with height bonuses in exchange for community amenities (max 15 stories):
- Extension of South Main/Benefit Street in the form of a pedestrian plaza connecting to waterfront
- Provision of wider riverwalk with enhanced public amenities instead of minimum 25 ft. normally required
- Provision of public gathering space adjacent to India Point park with facilities for outdoor events
- Provision of space for non-profit organizations and community meetings
- Provision of public access to marina
- Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)
- Pedestrian-oriented design; no surface parking

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

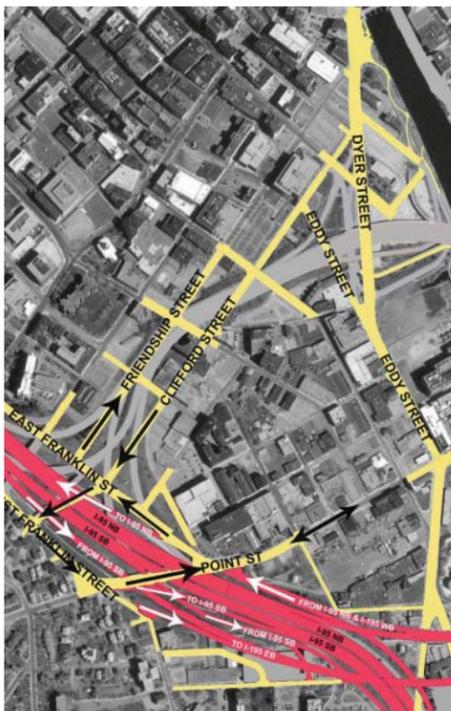
-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

-Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, step-back at 6 stories to frame view of waterfront, “green building”)

by The Cecil Group, Economics Research Associates, Maguire Group



The plan identified the Jewelry District/ Old Harbor as unique among Providence’s neighborhoods because its vital, balanced, and rich mixture of institutional, commercial, residential and cultural uses. The study area comprises some 146 acres of land, including streets and parcels in the Jewelry District/Old Harbor, land released in the I-195 relocation, and adjacent blocks impacted by realignments. There are nearly 4.3 million square feet of building area in the district, excluding the buildings that contain utility facilities, reaching a standard density measure for these existing uses of about 1.2 FAR. The study identified limited demand for new uses under current and projected conditions but pointed out substantial interest and opportunities for new and expanded institutional uses. The greatest demand and activity was expected to be generated by Johnson & Wales and Brown Universities.

The Jewelry District was positioned as a center for research and development in Providence. Due to its proximity to research universities and hospitals, the Jewelry District offers key locational advantages for creating flexible biotech space. The plan pointed out the need to incorporate both institutional and public sector commitments, involvement and incentives to the site to consolidate significant research and development activities or investment in facilities of this kind.

Regarding the I-195 Parcels in the Jewelry District/Old Harbor, the plan envisioned the incorporation of pedestrian and open space networks enhancing key connections with the surrounding areas. This way the future uses would serve as catalysts for other desirable development fulfilling the vision for the district.

The study identified three major planning topics:

1. Strategies to create and maintain a mixed-use district, like the definition of land use targets for mixed use, implementation tools like the creation of development incentives for desirable uses, and the use of performance standards;
2. Strategies for economic development, setting minimum devel-

opment goals as part of zoning or other mechanisms, reinforcing competitive advantage, and leveraging institutional investment. The importance of a successful parking strategy, and a clear phasing program are key in this concern; and

3. Improving connectivity at different levels [internal, external, open space] and setting design guidelines to produce a coherent and connected network of spaces.

The study recommended these future steps:

- Additional planning and rezoning for the district;
- A formal process to plan for the I-195 parcels;
- An open space plan and implementation strategy to create a connected parks and open spaces through the district;
- Creation of a signature pedestrian bridge across the river;
- A parking plan and development strategy to facilitate the provision of structured parking at key locations;
- Public and private partnerships to achieve the “shared vision”;
- Development incentives to create a use mix, including residential uses, neighborhood retail and cultural activities;
- Strategies for improving roadway, streetscape, and transit; and
- Management, maintenance and sustainability of public spaces and infrastructure

Table 15: Potential Critical Mass Program

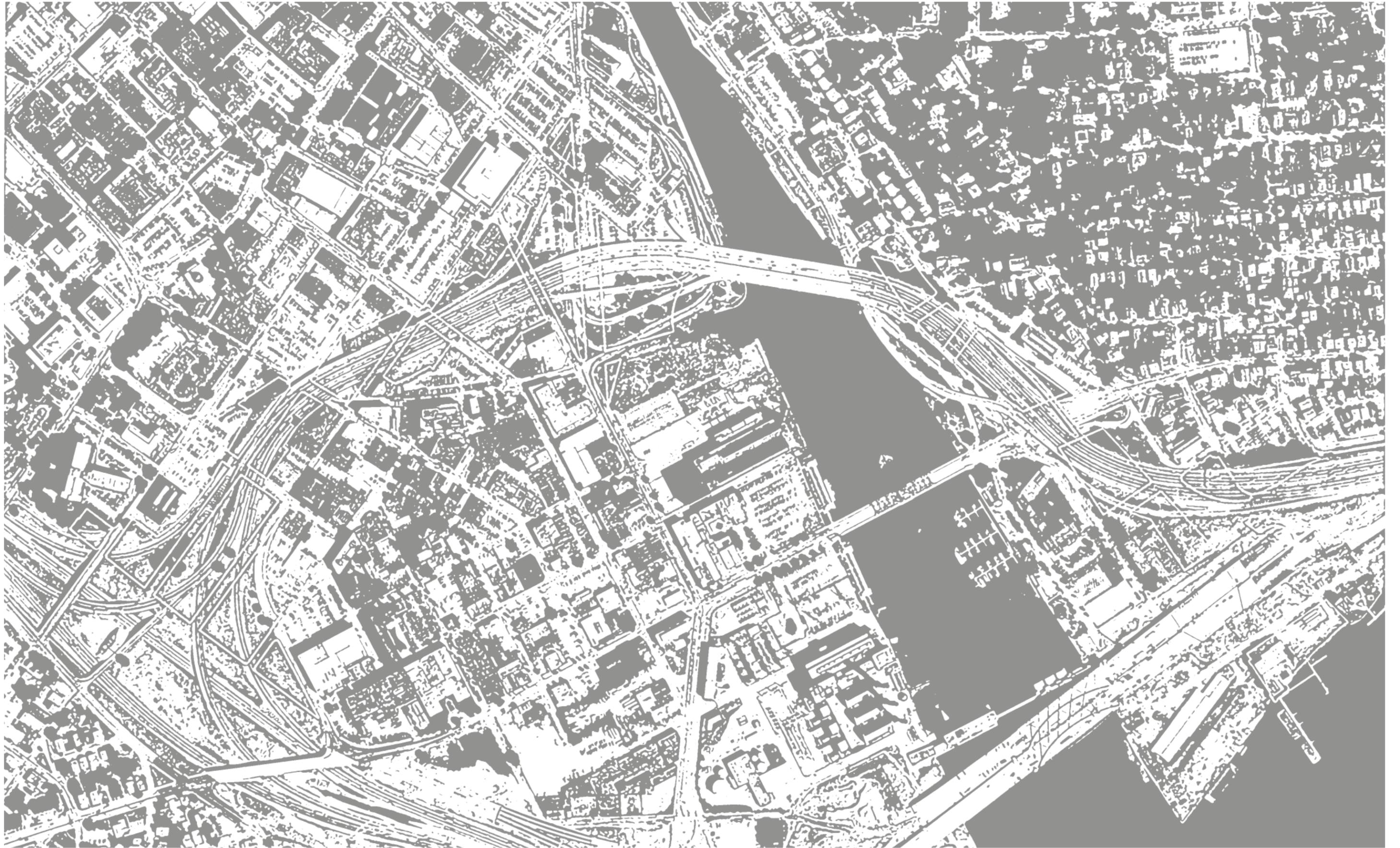
Use	Proportion	Square Feet
Market Housing	15%	112,500
Student/Employee Housing	15%	112,500
Academic/Health Care	30%	225,000
R&D	25%	187,500
Commercial Office	10%	75,000
Retail/Restaurants	5%	37,500
Parking Spaces (Including replacement)		2,700 to 3,100 spaces

Source: The Cecil Group; Economics Research Associates

Table 16: Phasing Assumptions

Use	Phase I	Phase II	Total Square Feet
Market Housing		112,500	112,500
Student/Employee Housing	112,500		112,500
Academic/Health Care	100,000	125,000	225,000
R&D	100,000	87,500	187,500
Commercial Office		75,000	75,000
Retail/Restaurants	18,000	19,500	37,500
Parking Spaces (Including replacement)			2,700 to 3100 spaces

Source: The Cecil Group; Economics Research Associates



The Real Estate Market

RIEDC's scope of work for this engagement called for an analysis of market conditions in light of target markets and highest and best uses of the properties. RIEDC provided recent planning and development studies, recommending that the CKS team draw on information that had already been provided as a base for the analysis.

The studies are listed in the appendices. Jones Lang LaSalle's Research Group and Capital Markets Group contributed to the national and regional analyses, and other industry sources, also listed in the appendices were consulted.

CONCLUSIONS

This study coincides with a national recession that will impact the marketability of the I-195 properties in the short term, given the limited availability of capital and downturns in real estate markets. When the economy comes out of the recession, the area may be very attractive for development, given its highway access, proximity to institutions, and vacant land that could be redeveloped.

However, demand for development needs to be put in context. Providence has been a steady, reliable office market over the past years in terms of investor interest and an increasingly attractive place to live, given the City's attention to urban revitalization. Nonetheless, over the past twelve years, Providence has absorbed only 641,000 square feet (SF) of office space, not including 1.395 million SF purchased by the institutions over the past ten years, for an average of 53,000 SF per year. Over 400,000 SF of office space may become available in the next few years as noted in the Office Market section below. If the absorption rate returns to that twelve-year average after the recession, it would take eight years for all that space to be occupied. However, the City of Providence is actively engaged in efforts to attract more companies and increase the office space absorption rate, and the City understands that its long-range physical planning needs to include room for that growth.

One of the great strengths of Providence and the area around the I-195 properties, especially those to the west of the river, is the presence of educational and health care institutions. The institutions can be key partners in attracting research and development companies seeking to locate near them. Brown University would like to acquire three of the parcels and plans to build a medical school nearby. Johnson & Wales University's master plan¹ outlines a program that includes some of the I-195 parcels, and the University hopes to develop educational facilities and to partner with private entities to create other space, such as a training hotel. The Disposition Strategy section of this report addresses the opportunity to leverage institu-

¹ Johnson & Wales University Providence Campus Master Plan, Sasaki, December 2007

tions for development of the I-195 parcels.

There is limited demand for new retail on the area surrounding the I-195 parcels but as development occurs, there will be opportunities for ancillary retail. Depending on the extent to which housing is developed in the Jewelry District and on the I-195 parcels, there could also be demand for a small grocery store.

Housing is currently overbuilt in Providence, and there is approximately 28-30 months of for-sale supply available at current absorption rates. The demand for the I-195 parcels for housing will likely be low in the near term but may increase over time as the Jewelry District becomes more attractive, the institutions expand, and a new park is built on the waterfront.

NATIONAL AND GLOBAL ECONOMIC CONDITIONS

Many economists entered 2009 predicting a very challenging year for economic performance around the globe, with recessionary trends continuing in the developed world at least through mid-year. Prospects for recovery later in 2009 or early 2010 still depend largely on continued improvement in the flow of credit and the success of the fiscal and economic stimulus packages created by central banks and governments around the world. A prerequisite to recovery is a restoration of confidence from businesses and households. This will require fewer shocks from the global financial system this year and a stabilization of the balance sheets of the world's major banks.

STIMULUS PLANS

Historically speaking, monetary and fiscal programs require 12 to 18 months to have their intended effect of stimulating economic growth. The various monetary and fiscal stimulus programs enacted in 2008 may have staved off depression and stabilized many financial institutions, but they have yet to affect recovery. In the United States (U.S.), a massive fiscal stimulus plan in excess of \$750 billion is in the works from the new Obama administration, and the Federal Reserve (Fed) is expanding its balance sheet to provide additional liquidity to the market.

However, unless banks are willing to lend, the monetary expansion alone will not have its intended effect. Under current conditions, banks have been reluctant to increase their lending due to the ongoing risk of asset price deflation, borrower default risk and the need to preserve capital for potential future write-offs. One way central banks are attempting to ease credit conditions involves the purchase of government bonds (or other assets) from banks to increase the money supply. The Fed is pursuing a version of this policy called "quantitative easing," effectively "printing money," providing the cash available for banks to loan and the private sector to borrow. However, for this monetary policy to take hold, there needs to be fiscal stimulus, which are spending programs by central governments that create demand by businesses for new funds and investment.

TRENDS

The economic recession continues to worsen. Consumer confidence, business investment, housing investment, consumer spending, industrial production and home prices continue to decline rapidly. The recession is on track to be the worst since the Great Depression.

GDP fell 3.8 percent in the fourth quarter of 2008 and may be revised downward. Total GDP growth for 2008 is expected to be only slightly over one percent. However, GDP is expected to contract 2.5 percent in 2009.

The Consumer Confidence Index declined 2.3 percent in January and is the lowest since it was first tracked in 1977. The Business Confidence Index is also at its lowest level since it began to be tracked in 1992.

EMPLOYMENT

In January 2009, the U.S. economy shed 589,000 jobs. Nearly three million jobs were lost in 2008 and another 3.5 million are expected to be lost in 2009. Unemployment reached 7.2 percent at year-end and is expected to trend upward throughout 2009, peaking above 9 percent in 2010. This recession is on track to post the worst job losses since World War II.

The only sector that continues to add jobs is health care services. All other sectors are seeing large job cuts with manufacturing and business professional services seeing the largest job losses. Geographically, the only job growth was in energy states (e.g., TX, OK, LA). Future job growth will continue to favor Sun Belt cities.

MARKET DEMAND

Real estate demand is very weak. All property types except apartments saw negative net absorption in 2008. Although each property type faces moderate levels of new supply in 2009, such weak demand will push effective rental rates down and vacancy rates up.

Apartment vacancies ran 6.6 percent in 2008 and are expected to climb to 7 percent in 2009. Job losses will limit new household formation, thereby hurting net absorption.

Demand for retail space is weak amid declining retail sales and retailer bankruptcies. The vacancy rate for non-mall retail centers was 8.9 percent at the end of 2008 and is projected to increase to ten percent in 2009 and continue to climb to eleven percent in 2010.

Hotel occupancy rates declined to 60.4 percent in 2008 and are projected to drop to 58 percent in 2009 and 2010. Revenue per Available Room (RevPar) declined to \$64.37 in 2008 and is projected to decline to \$60 in 2009 and 2010.

The U.S. office vacancy rate already increased by two full percentage points in 2008 to 15.4 percent at year-end, with effective rents declining by a range of ten to thirty percent, depending on the market. This decline easily could continue in 2009.

LENDERS AND INVESTORS

Banks have recorded significant losses and, as a result, have tightened credit conditions (e.g., requiring lower loan-to-values, increasing debt service coverage, etc.). The Commercial Real Estate Mortgage Rate has risen to seven percent and most likely will continue to increase in 2009. Commercial Mortgage Backed Security (CMBS) issuance in 2008 was down 95 percent from 2007 issuance. New issuance in the second half of 2008 and the first few months of 2009 was virtually non-existent. Apart from financing available for apartments from Fannie Mae and Freddie Mac, the secondary commercial mortgage market has evaporated.

Investors are now forced to begin the long and arduous process of renegotiating debt or attempting asset sales. Offers for the sale of distressed Real Investment Trust (REIT) portfolios in the retail and industrial segments have been met with cool receptions at best. It is unlikely that the owners of these portfolios will receive the prices

they are now asking. With no current alternative to securitized loans, many fear additional defaults will undermine future recovery.

CORPORATIONS

A rapid transition has occurred among corporate occupiers from growth mode at the end of 2007 and beginning of 2008 to what is now survival mode. Many major corporations around the world still are responding to the downturn in their businesses, and increasingly, their responses include significant workforce reductions that will likely continue for at least the first two quarters of 2009. In this uncertain environment, corporations remain apprehensive about committing to longer-term leases. Projects with longer payback periods are being abandoned in favor of options that emphasize short-term flexibility. Those corporations that are either in relatively strong financial shape, or will shortly be, are entering into an opportunistic mode.

Aggressive corporate real estate teams already are moving to minimize their company's overall space obligation by reducing space standards, cutting the size of offices and work stations and subletting space. There is no doubt that occupiers will become more "forensic" about their portfolios and the markets in which they are or wish to be situated.

RECOVERY?

While a clear forecast remains elusive, several key signs of economic progress are emerging. Contraction in output will continue through mid-year 2009, which would make this U.S. recession the longest in modern history, with a low recovery likely in 2010. Despite these challenges, 2009 is likely to bring some very important turning points and potential precursors to an ultimate recovery. There are a number of hopeful signs. The U.S. residential market could stabilize later this year, which is a necessary precondition of broad economic improvement. From a national standpoint, housing is becoming more affordable, and as prices fall, some of the most damaged markets will begin to see sales volumes increase.

PROVIDENCE MARKET

The U.S. government's investments in residential mortgage-backed securities and interest rate reductions mean lower mortgage rates are available for homeowners and buyers.

As 30-year fixed rates dip below 5 percent, applications for refinancings have increased rapidly, and some homeowners with adjustable-rate mortgages (ARMs) originated in 2004 through 2007 may actually benefit from mortgages that adjust at lower rates. This should stimulate the economy and slow the tide of foreclosures, slow the pace of housing price decline, and help bring unsold inventories back down from peak levels. Once this process begins, the existing residential securitized debt held on financial institutions' balance sheets can be revalued and monetized and/or upgraded to tier one capital, which should improve banks' ability to lend.

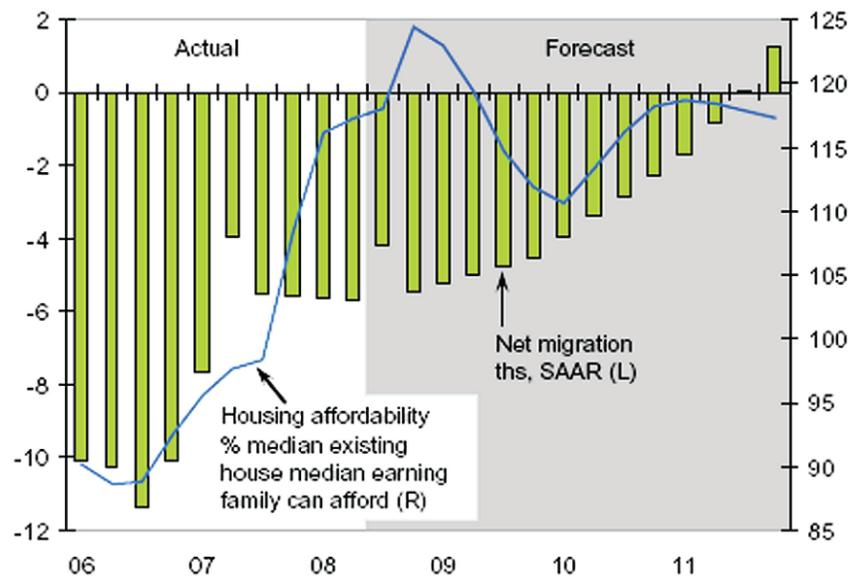
The U.S. took an important step on the regulatory front when the Fed introduced the Troubled Asset Relief Program (TARP) Reform and Accountability Act. This legislation granted authority to the U.S. Treasury Secretary to take any action "to establish or support facilities to support the availability of commercial real estate loans, including through purchase of asset-backed securities." This measure should aid the economy, repair the credit markets and provide liquidity to commercial real estate credit markets in the refinancing and liquidity needs coming this year from the wave of commercial loan maturities.

The first signal of improvement in the real estate sector is the improvement in the credit markets. The TED spread, which measures the difference between the three-month T-Bill interest rate and the three-month LIBOR, is an indicator of perceived credit risk in the general economy. While the TED spread remains elevated, it has fallen from its historical highs reached in September 2008 due to the massive amounts of liquidity injected into the financial system around the world.

ECONOMIC PERFORMANCE

According to Moody's Economy.com¹, Providence's economy is deteriorating and is "one of the worst performing areas in the country". The Rhode Island Seasonally adjusted unemployment rate at the end of February 2009 reached 10.5%, and the employment growth gained between 1999 and 2006 has dissipated. Providence has suffered net outmigration as a result of low median incomes but high utility costs and high income and sales taxes. One bright note is that housing affordability has improved, which could stem outmigration.

Demographics: Housing Affordability Matters



PROVIDENCE INDUSTRIES

"The Jewelry District/Old Harbor Planning Framework Study" noted that Health Care and Social Assistance, and Government are the largest employment sectors in Rhode Island and Providence. Educational Services represents a sizable share of the employment base in Providence with ten percent of citywide employment in this sector and it has grown by 3.5 percent annually from 2002 to 2006. Other growth industries in Providence noted in the study include Management of Companies and Enterprises; Real Estate and Rental and Leasing; Health Care and Social Assistance; and Professional, Scientific and Technical Services. Some of these sectors are or will

be impacted by the recession.

PROVIDENCE ECONOMIC PROJECTIONS

Moody's Economy.com projects the unemployment rate to increase to 12 percent in mid-2010, which will be the peak. Mortgage-related problems will continue until the middle of 2009, which will continue to impact the housing market into 2010. Problems for Providence to overcome include the high cost of living (except relative to New York and Boston) with high property and sales taxes, high energy costs, limited affordable housing, and net out-migration. On the bright side, as reported by Moody's Economy.com, there is a growing biotechnology sector, the financial sector and professional services grew for one year prior to the recession, and tax cuts in 2006 should help to make the city more competitive.

PROVIDENCE REAL ESTATE MARKET CHARACTERISTICS

Office Market

Office property investors have viewed the Providence office market as steady and solid, and over 1.8 million SF of office properties in seventeen buildings were traded in the recent past, including seven buildings totaling 230,000 SF in the Jewelry District. Investor interest was due to two noteworthy factors: 1) there was limited new supply with the 220,000 square foot GTECH Center property being the only new office building built since 1990 (GTech was reportedly incentivized by government to locate in Providence), and 2) several office buildings have been purchased by the educational and medical institutions, decreasing the supply of the conventional office space and increasing demand for the existing supply².

There may be some additional supply available in 2009 and 2010. Several buildings will become available once Blue Cross & Blue Shield of Rhode Island (BCBS) completes its new 325,000 square foot thirteen-story headquarters building in the Capital Center district of Providence. The building is slated for completion in the first quarter of 2010. When the move to the new headquarters is completed

¹ Moody's Economy.com, Providence Q 3 and Q4 2008

² Jones Lang LaSalle and Hayes & Sherry

(estimated for the first quarter of 2010), it is expected that the two largest buildings being vacated by BCBS will be available. LaSalle Plaza is 137,000 SF, and One Empire Street is 95,000 SF.

Gateway Center will have 117,000 SF available at year-end and The Foundry looks to develop its 180,000 square foot rehab project towards the end of the year, 100,000 SF of which may be office and conference space. If all of the projected supply of over 400,000 SF does materialize, it will increase competition among landlords, likely putting additional downward pressure on rent rates. Over the past twelve years, Providence has absorbed only 641,000 SF, not including 1.395 million SF purchased by the institutions over the past ten years.

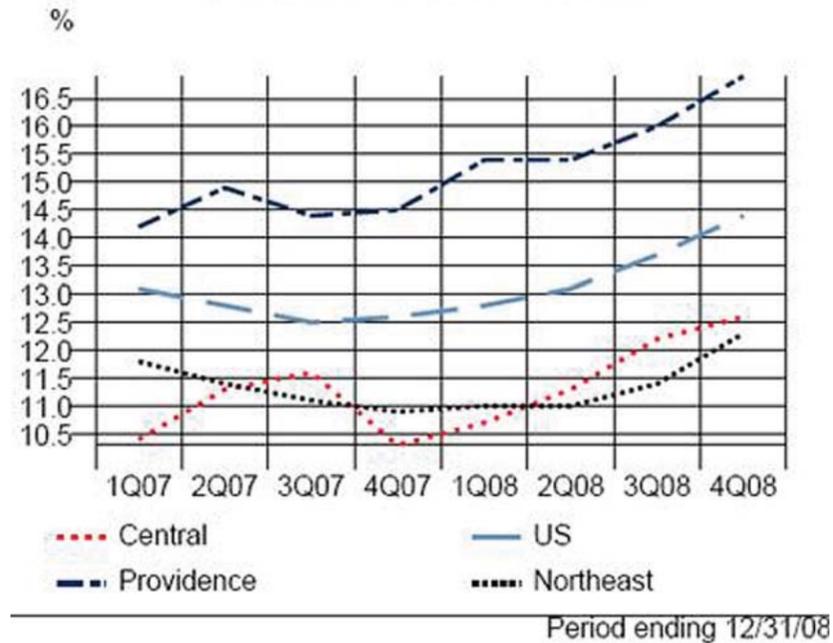
Office vacancy rates have already been increasing³. The overall vacancy rate for Providence at the end of 2008 was 16.9 percent and 12.6 percent for the submarket (Central) which includes the Jewelry

District (The map below indicates the submarkets used by REIS in



³ REIS Submarket Stats, 3rd and 4th Quarters 2008

Quarterly Vacancy Rates



its office market reports; area 1 is the Central submarket.) The vacancy rate for buildings built after 1999 in Providence (31.5 percent) is higher than for buildings built in the 1970s and 1980s (12.5-12.9 percent).

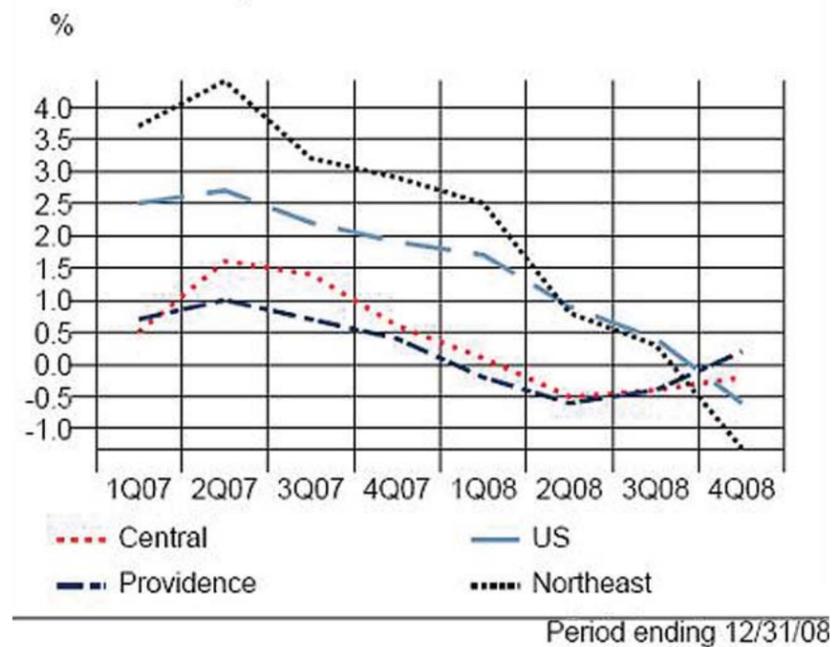
As of the end of 2008, office asking rents ranged from less than \$13.72 to \$31.85 per square foot for Providence and less than \$15.27 to \$35.20 for the Central submarket. In the recent past, with limited new office property development and a shrinking inventory, rental rates steadily increased but they declined slightly (one percent) between 2007 and 2008 for Providence and the Central submarket.

Jewelry District Office Market

“The Jewelry District/Old Harbor Planning Framework Study” provided an overview of existing conditions and market trends for the Jewelry District. The district includes 588,400 SF of office space, which is Class B space and located primarily in former industrial space. The buildings range in size from 3,500-116,000 SF, with the average being 35,000 SF. At Dynamo house, 160,000 SF of office/conference space is slated to come on line. Rents in this district are slightly lower than downtown and range from the high teens to the low twenties. The annual absorption ranges widely but from 2002-2007 averaged 8,500 SF. Tenants in office space in the district include creative firms, non-profit organizations and law, accounting, and high tech firms.

Advantages of locating here are the institutional presence of hospitals, Johnson & Wales University, and more recently, Brown University which has been acquiring properties in the area. Rents are inexpensive. The District has good highway access and ample parking in surface lots. Future development of office space in the district will be largely dependent on the plans of institutions (Johnson & University, Brown University, LifeSpan and Care New England) and companies that seek to locate near them. The universities have already expressed interest in expanding in the district on the I-195 parcels.

Quarterly Rent Growth Rate Trends



Housing

The Rhode Island Association of Realtors (RIAR)⁴ reported that the sales volume and median price for single family homes in Rhode Island dropped by 12.5 percent in the 2008 as compared to 2007. However, in the fourth quarter of 2008 and especially in December, sales increased from the prior year, largely due to sales of distressed properties. In December, over a third of the sales were distressed properties. The median price declined by 14.6 percent in 2008 from \$275,000 in 2007 to \$234,900.

RIAR also reported a decrease in the number of condominium sales, which fell 33 percent in 2008 compared to 2007, and a 3.8 percent decline in median sales price from \$221,000 to 212,700. Only 12.7 percent of the sales were distressed properties, most likely because developers are renting the units until the market improves.

Three new housing developments in Providence have suffered from the sluggish market, and condominiums are viewed as having been overdeveloped. In the downtown area, the 193-unit Waterplace Towers is offering apartments and condos and has sold just four units.



4 www.riarealtors.org, December 2008 and January 2009

It has rented approximately 50 percent of the units. The recently-completed Capital Cove has approximately 90 condominium units, but none have sold yet. As of the fall of 2008, the Residences at the Westin (103 condo units) was 60 percent occupied by owners and renters. The Providence Planning Department report “Economic Overview,”⁵ postulates that the housing market may take a decade to completely recover and that, excluding 600 units that were under construction at the time of the report, there were 28-30 months worth of single family supply housing inventory at then current absorption rates.

In the Providence apartment market⁶, vacancy rates increased in 2008, but they are declining substantially in the submarket (Providence submarket) that includes the Jewelry District. (The map below indicates the submarkets used by REIS in its multi-family market reports; area 1 is the submarket referred to as “Providence”. In the chart of quarterly vacancy rates below, Providence as a whole is shown by a dashed blue line and the Providence submarket is shown by a dotted red line.) Buildings in the submarket constructed after 1999 have the highest vacancy rates (15.7 percent) as compared to those built earlier, which have rates ranging from four to seven percent.

Rents dropped in both the city as a whole and the submarket between the second and third quarters on last year. REIS reported that, for the fourth quarter of 2008, asking rents ranged from \$1,041 to \$2,131, depending on the age of the building, with an average rent of \$1,388. Annualized rents declined last year by 0.4 percent for the submarket but grew by 1.3 percent for Providence.

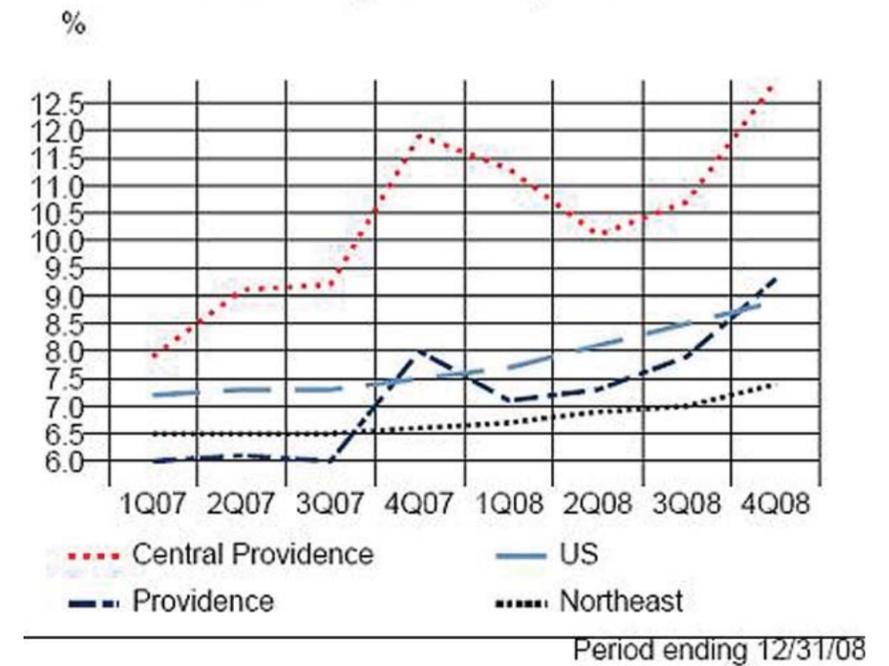
There is a large supply of housing on the market currently⁷, with approximately 28-30 months worth of single-family housing inventory at current absorption rates. This does not include 600 units under con-

5 “Economic Overview”, prepared by Ninigret Partners for the Providence Planning Department, June 9, 2008

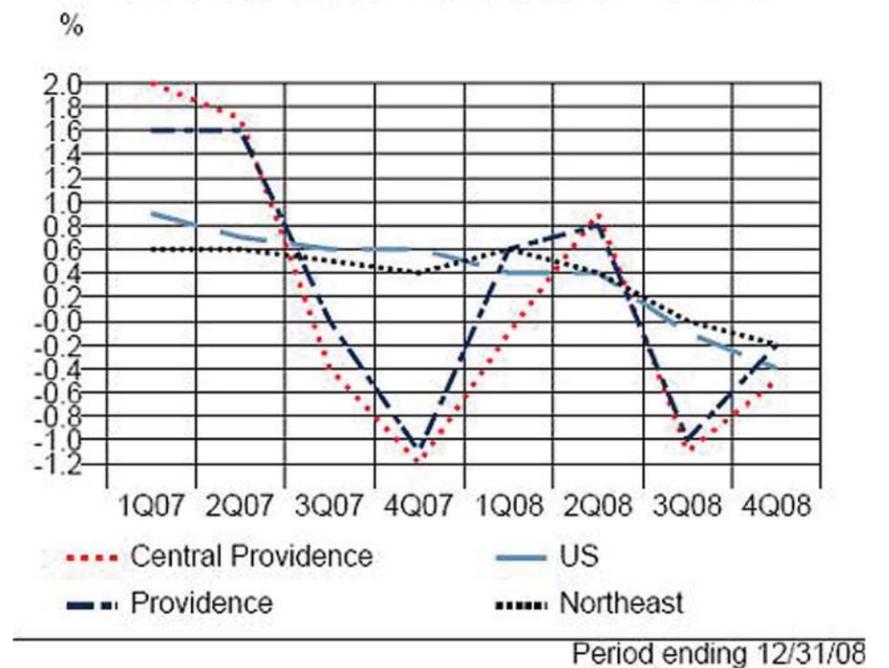
6 REIS Submarket Stats, 3rd and 4th Quarters 2008

7 Providence Planning Department Economic Overview, Ninigret Partners, June 9, 2008

Quarterly Vacancy Rates



Quarterly Rent Growth Rate Trends



struction as of the date of that report. The study noted that during the last housing bubble, it took a decade for housing prices to recover. Household formation is expected to rise by seven percent by 2030.

Jewelry District Residential Market

“The Jewelry District/Old Harbor Planning Framework Study” provided an overview of existing conditions in the Jewelry District. Residential use is limited; there are 45 condominium units in the district, and Johnson & Wales University has housing units for 100 students. As with office space, the units are located in converted industrial buildings, and some are in buildings which also contain office space. Residents include undergraduate and graduate students and “empty-nesters.” Residents are attracted to the district by the unique units, convenience to downtown, and low rents.

Retail Market

The I-195 parcels and Jewelry District are located in the Central Providence retail submarket⁸. The submarket has over two million SF of retail space in 23 properties, with non-anchor retail asking rents ranging from \$15.80 for properties built in the 1980’s to \$21.60 for those built after 1999. The highest asking rent -- \$31.79 -- is for properties built prior to 1970. Retail nationwide is in decline, as it is in Providence and the Central Providence submarket. Non-anchor asking rents have declined since 2007, and vacancy rates have risen, as shown on the charts below. Compared to retail rents for the U.S. as a whole and New England, retail rents for Providence and the submarket have been volatile, with some highs and lows as shown below.

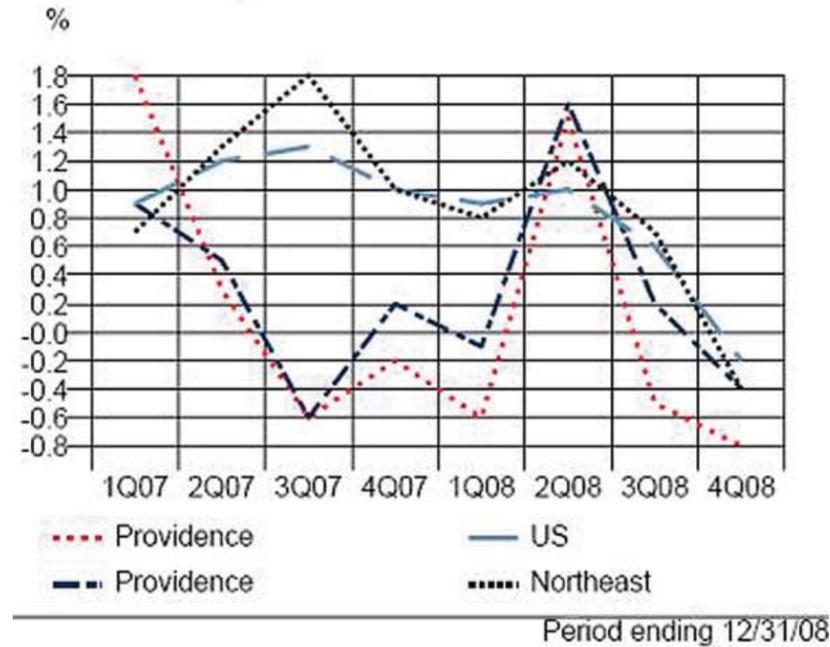
Jewelry District Retail Market

“The Jewelry District/Old Harbor Planning Framework Study” provided an overview of the retail market and demand for retail in the Jewelry District. Retail operations include food and beverage, entertainment (nightclubs), and some service-oriented retail. Many of the retail establishments are in small, free-standing structures. Projected new supply is extremely limited and includes only 9,000 SF for a restaurant/bar at the Dynamo House.

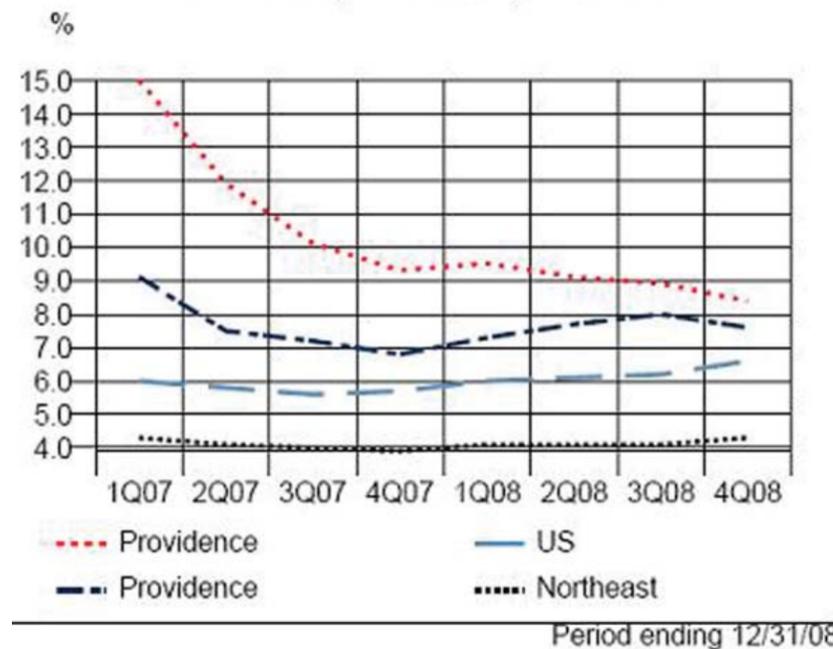
The study indicated that, in the trade area within a 20-minute of the

⁸ REIS Submarket Stats, Q3 and Q4 2008

Quarterly Rent Growth Rate Trends



Quarterly Vacancy Rates



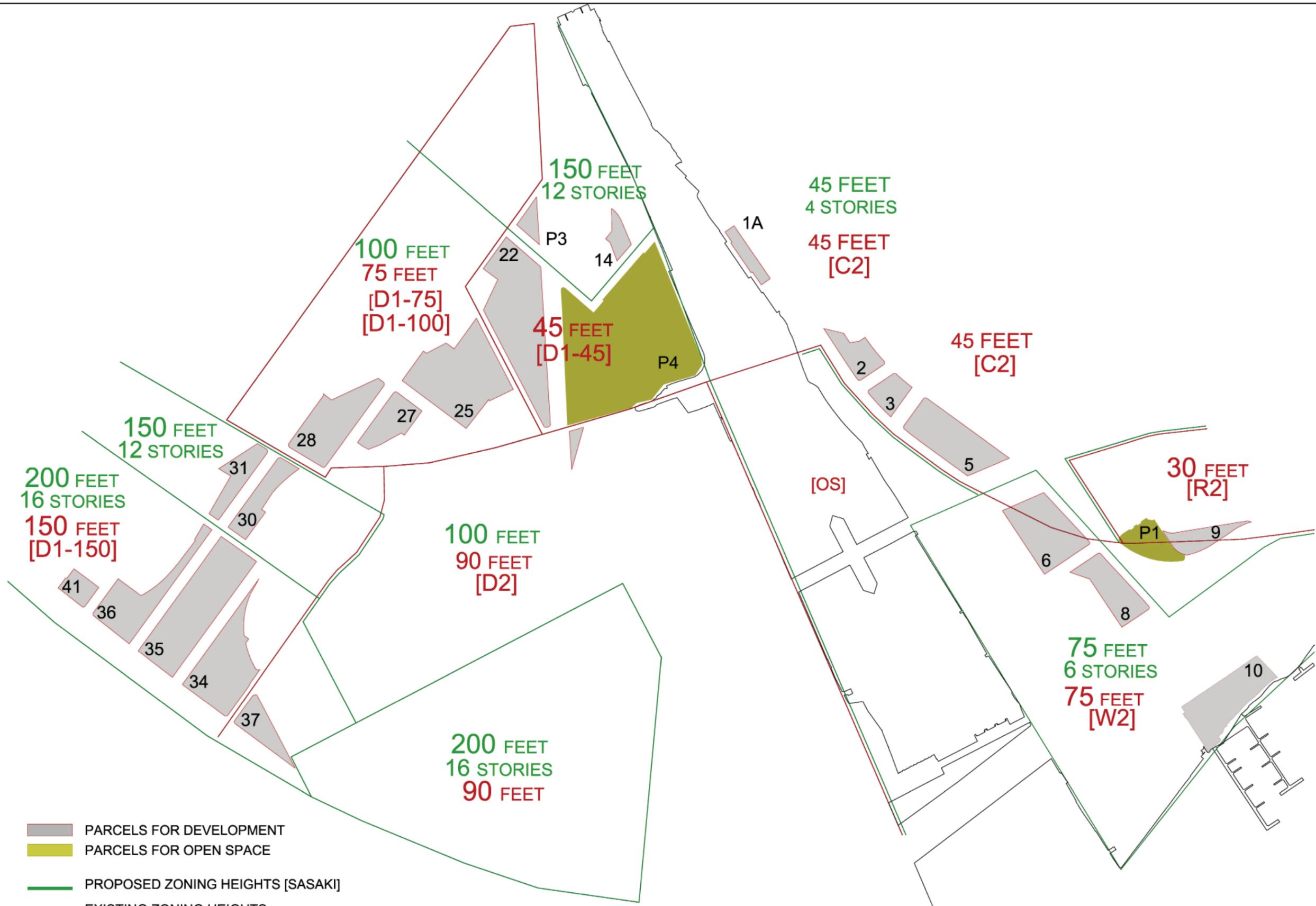
district, there is a demand for Food and Beverage Stores, including a grocery store, General Merchandise Stores (such as “big box” stores, and Miscellaneous Stores (office supplies, etc.). Brokers consulted for this report and the Jewelry District Study agree that there is insufficient demand to support new retail at this time.

Research and Development Space

“The Jewelry District/Old Harbor Planning Framework Study” provided an overview of research and development activity in the district, Providence and Rhode Island. The study noted that the industry is concentrated in California Michigan, Massachusetts, Maryland, Texas, New York and Pennsylvania but that Rhode Island has improved its position. Life sciences employment in the state exceeds 4,000 jobs. The study suggested that Rhode Island is well positioned to take advantage of Massachusetts strength in the industry, given the proximity of Providence and Boston and the labor pool in those areas.

Providence, with the tenth largest independent hospital system in the U.S. for National Institutes of Health-sponsored research, is an important location for the potential growth of the research and development industry in the state, given the growth in life sciences expenditures by Brown University and in federal research grants the university has received.

The Jewelry District, the study explained, is the center for research and development in Providence. Brown University has located laboratories at 70 Ship Street, a building it acquired and renovated. The Coro Center, located in the district, is a research facility for Lifespan, and Care New England (now merged with Lifespan) has three facilities in the district. To leverage the presence of these institutions, the study suggested that Providence look to the UMass-Worcester medical school and the Massachusetts Biotechnology Research Park adjacent to it as a precedent for leveraging the institutional presence in the Jewelry District to spur development. The Disposition Strategies section of this report addresses this issue.



- PARCELS FOR DEVELOPMENT
- PARCELS FOR OPEN SPACE
- PROPOSED ZONING HEIGHTS [SASAKI]
- EXISTING ZONING HEIGHTS

Zoning Recommendations

Prior to the redevelopment of the I-195 surplus parcels, the City of Providence, through the completion of its ongoing Comprehensive Planning Process, will amend its zoning regulations. The following zoning considerations are in part informed by the findings of the neighborhood planning charettes that were held in the fall of 2008 as part of the framework for the Providence Tomorrow Interim Comprehensive Plan.

The findings of this chapter are intended to identify general issues around zoning as related to the I-195 parcels. The purpose of these recommendations is to assist the City in finalizing the amended regulations. Included in this section are examples of general zoning tools and mechanisms that may be applicable to the corridor and its abutting districts. Many of these considerations build upon similar discussions found in the Jewelry District Framework Study and other previous planning efforts.

In order to bring economic and planning goals of this study closer to reality, the City of Providence should consider the following zoning recommendations which, for the purposes of this report, are divided into three categories: bulk and mass, urban form and parking. Recommendations for bulk and mass include the adjustment of maximum heights across the board and the concept of additional bonus height in exchange for community benefits. Urban form recommendations focus on creating a lively, walkable and pedestrian-friendly urban district. Recommendations for parking are designed to support a “park once” approach and an active, mixed use environment.

Bulk and Mass

- Select method for height regulation and community benefits
- Regulate height by stories and feet in all districts
- Remove minimum lot area per dwelling unit requirement
- Use design review appropriately to maximize quality of development

Urban Form

- Limit on-site surface parking along the street edge
- Pull buildings up to the street
- Require active elements along the street edge within the public realm
- Encourage mixed use buildings
- Control surface parking as a principal use

Parking

- Consider creating a Parking Management District
- Allow off-site parking to count towards on-site parking requirements
- Offer parking reduction credits in tandem with measures that reduce parking demand
- Extend restaurant parking exemption to additional uses
- Enable parking models that encourage mixed use development
- Utilize fee in-lieu of providing off-street parking spaces
- Consider unbundling residential parking requirements

BULK AND MASS CONSIDERATIONS

Issues involving bulk and mass are extremely important. If too much height is allowed, one or two new buildings may absorb much of the demand for the area. Conversely, if an area is too strictly regulated, no development will occur. The regulatory system in Providence should be carefully tailored to achieve desired effects and be supported by effective design review. It is important to note that the City's planning efforts for the surrounding neighborhoods are not yet complete, and zoning policy which will shape the scale and type of future development in these areas is in process of being determined.

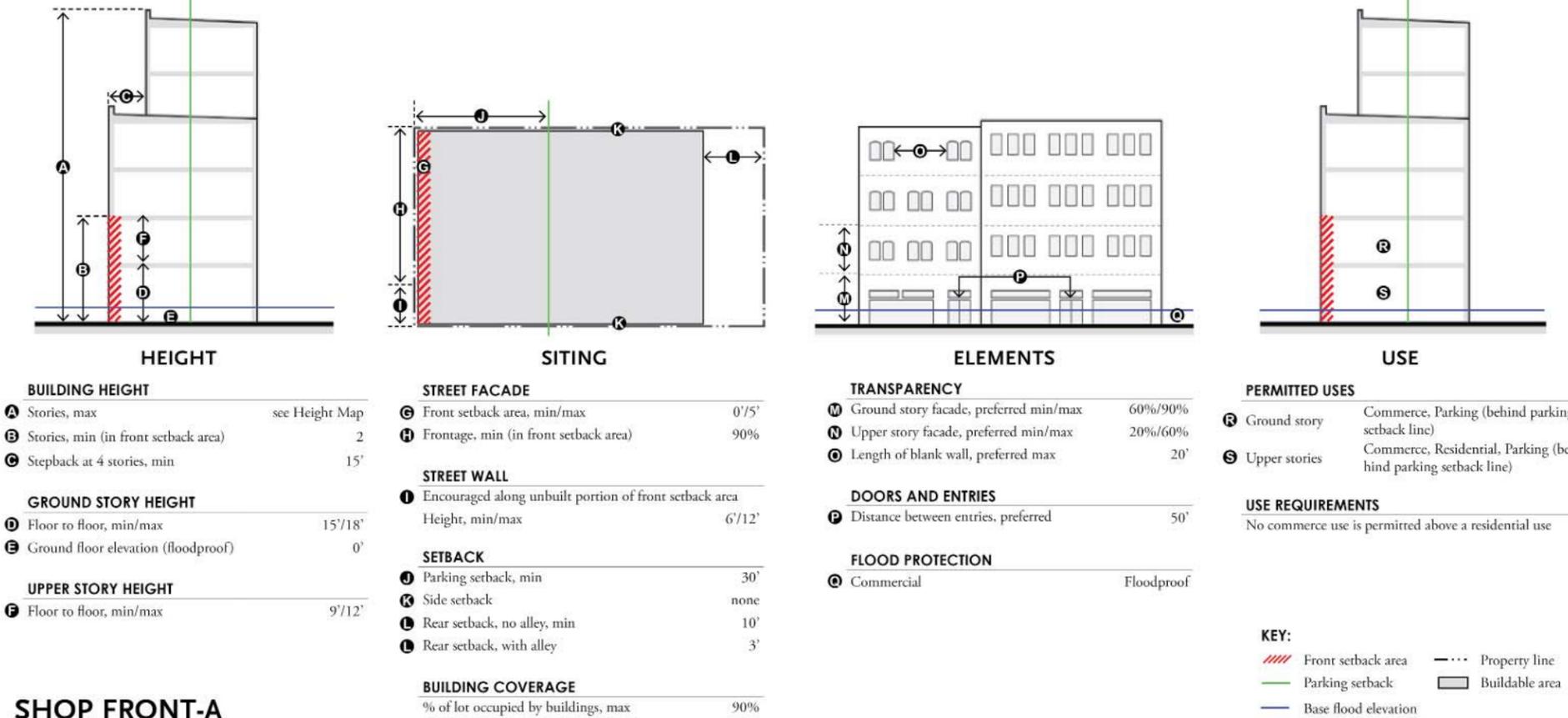
Select Method for Height Regulation and Community Benefits

There are two basic methods for height regulation, each with advantages and disadvantages. In the first method, height limits could be reestablished based on the outcomes of the on-going neighbor-

hood planning process. As part of the planning process, decisions could also be made about enhanced development standards, such as improved building, landscaping, parking, and streetscape standards. All new development would then be required to stay within the height limits and meet the improved development standards. This is the preferred method because it offers simplicity and predictability. Developers will always know their entitlement and what they are required to do. A disadvantage is that increased standards, if not applied uniformly across the city, may cause developers to build elsewhere in the community.

The second method involves the concept of a height bonus in exchange for enhanced development standards or for the provision of certain community benefits. Possible community benefits include

provision of affordable or student housing, active ground floor uses, preservation of view corridors, green roofs, additional open space, mid-block pedestrian access through larger parcels, and wider sidewalks. In this scenario, base height could be set less than, equal to, or greater than current height limits. For instance, they may be set from five to eight stories across the board. Bonuses could be one-story, two-stories, current heights, or heights from the Sasaki Plan. This method would give developers flexibility and would set up a mutually beneficial exchange with the City. However, it assumes that development pressure is great enough for developers to pursue height bonuses. If developers provide community benefits, they may do so at minimal cost, resulting in nominal development quality. If the City decides to award height bonuses for community benefits, there are several open questions to be worked out. In order for this system to work effectively, the quantity and type of benefits required should be carefully considered to ensure the right balance of trade-offs. Ongoing management would be needed to monitor the City's needs over time, and ensure community benefit requirements are likewise updated. The City should also be careful that community benefit requirements do not overburden the developer. An excessive burden, real or perceived, could cause developers to build within base entitlements, or simply build in other areas where requirements are not as stringent.



SHOP FRONT-A

Graphics are helpful for illustrating standards, especially those related to urban form, and can make even sophisticated zoning regulations easier to understand. Given the important role zoning plays in shaping community, zoning regulations should be clear, predictable, and easy to understand. Existing zoning regulations make limited use of tables and graphics. As the saying goes, a picture is worth a thousand words. For example, a flow chart showing development review procedures could provide a helpful overview. Sign types can be shown with photographs; lot layout standards can be shown in plan view; and form standards can be illustrated with elevations or isometric views.

For a bonus height system to be effective, exceptions should not be made in cases other than the provision of community benefits. For example, additional height should not be granted solely for financial reasons. To do so would offer a way for developers to circumvent the system. This recommendation applies to the Zoning Board of Review, DOWNCITY DISTRICT DESIGN REVIEW COMMITTEE or any body with the power to grant additional height entitlements.

A related concept is Transfer of Development Rights (TDR), the idea that height could be transferred from one zone- the contributing zone, to another-the receiving zone. For this strategy to be effective, heights must be set sufficiently low in the receiving zone that de-

URBAN FORM CONSIDERATIONS

mand pressure exceeds maximum height. This situation does not exist in Providence at this point. Transferring height entitlements from historic structures is a good idea and could be pursued.

Remove Minimum Lot Area per Dwelling Unit Requirement

The requirement of minimum lot area per dwelling unit should be removed. This type of requirement allocates a number of dwelling units to a parcel based on the total square footage of that parcel with little regard for the maximum allowed height of that parcel. This requirement has a tendency to force larger units (therefore more expensive ones) on parcels with permissive height controls and limit the overall number of units on parcels with more restrictive height controls. There are currently sufficient standards controlling the bulk and mass of buildings, and additional density controls in urban settings are unnecessary.

Use Design Review Properly to Maximize Quality Development

Design review provides an additional level of control over new development. Bulk and mass issues should not be considered in as part of design review; developers should be able to assume basic entitlements will remain intact during the review process. Design review is especially helpful when plans come forward which technically meet all code requirements, but do not meet the expectations of the city or conflict with the vision expressed through the neighborhood planning process. To fulfill this need, the territory of the existing Downcity District Design Review Committee could be expanded southward to cover the study area.

Regulate Height by Stories and Feet in All Districts

For the most part, the City already regulates height by stories and feet. The D-1 district is one area of exception, where height is regulated only by maximum feet only. This district should be changed to regulate stories as well as feet. For the great majority of people, the phrase “a three-story building” is more significant than “a forty-five-foot building.” Additionally, this method gives more flexibility to developers and has a tendency to create slight variation in rooflines.

The City of Providence has a conventional zoning ordinance, often termed “Euclidean” after the first significant zoning case, *Euclid v. Ambler Realty*. This type of ordinance is used in some form by most US cities and is more quantitative than qualitative. Euclidean zoning concentrates on separating incompatible uses. The approach was originally intended to resolve two separate concerns—placement of dangerous industry near residential areas, and the need for additional air and light in slum tenements.

Thus, the Euclidean model uses zoning districts to separate uses and control building height, bulk and mass to ensure public health and safety. Unfortunately, use separation has been taken to an extreme, and current development patterns are contrary to many people’s preferred lifestyle. Whereas Euclidean zoning is fundamentally about keeping things apart, zoning can also work to integrate various aspects of daily life, creating healthy neighborhoods, towns and cities. Form standards can be used to foster a greater integration of building uses and smoother transitions between uses. When form standards are employed, land use is de-emphasized and regulated using broad parameters which provide flexibility for changing market conditions. Socially and environmentally undesirable uses are still prohibited. While specific criteria may vary from place to place, many basic urban form considerations are fairly constant. Many of the following recommendations are already used in Downcity.

Limit On-Site Surface Parking Along the Street Edge

On-site surface parking along the street edge should be limited to reduce the “sea of parking” effect and bring active ground floor uses up to the street. Locating parking in front of buildings increases the cross-street distance between buildings and isolates pedestrians, creating an unattractive, possibly unsafe, walking environment. Parking setbacks help ensure that cars are tucked behind active street fronts. A parking setback acts just a like a building setback, but instead of requiring buildings to be located behind a specific line it requires parking spaces to be located behind a given line, perhaps 25 to 30 feet behind the property line.



Regulating height by stories gives more flexibility to developers and has a tendency to create slight variation in rooflines.

Pull Buildings Up to the Street

Moving surface parking back off the street edge is often enough to foster an active, mixed use environment. In order to facilitate such a setting, it is important that buildings line the street and sidewalk to the extent possible. Reduced front setbacks (or build-to lines) of limited depth help ensure a consistent street wall. A build-to line runs parallel to the front property line, along which a building must be located. It typically establishes the maximum distance away from the property line that the front building façade must be placed. The City’s current regulations establish a build-to line. However, they do not set any standard for the minimum percentage of the total lot width that must be occupied by a building façade. Regulations simply require that all buildings constructed on the lot be pulled up the street, but that building could be half the width of the lot (or even less). This means that significant portions of lot that front the street edge could remain parking or other inactive areas. The City should consider

establishing a minimum percentage of the total lot width that must be occupied by a street-facing building façade.

Require Active Elements Along the Street Edge within the Public Realm, and in some mid-block parcels

The public realm is often described as the space between the face of building on one side of the street to the face of building on the other side of the street. The public realm is outdoors, open and accessible to the general public. Blank building facades tend to be a monotonous, even intimidating part of the public realm. Large storefront windows enable interaction between pedestrians and ground story spaces and reinforce a human scale for the street. Functioning entrances generate activity at street level. Wide sidewalks provide added comfort to facilitate pedestrian activity. The addition of on-street parking can provide local businesses with convenient access to custom parking. Time restricted, metered parking can help ensure that an adequate supply of short-term parking is maintained for local retailers (see parking management districts below for additional parking discussion).

Although active streets are vital to the life of an area, every street need not be an active one. There is also a need for service streets



Active elements can contribute to the revitalization of the public realm.



Active elements can contribute to the revitalization of the public realm.

and alleys. The important thing is to designate active streets, distinguishing them from service streets for different types of regulation. Streets may even be assigned to various levels in a hierarchy, based on the level of desired activity.

Encourage Mixed Use Buildings

Buildings which have only one use tend to have less activity at street level. Variations in use within a building can add vitality to the street. Some uses complement and reinforce each other. Housing above office or institutional uses helps to ensure evening and weekend activity. Office, institutional or residential use above retail or restaurant activity helps to ensure that there are enough people within close proximity to support commerce activity. The City should consider requiring ground floor retail uses at strategic intersections or along certain streets. Incentives could be offered for institutional uses that add a significant housing or retail component to the mix.

Control Surface Parking as a Principal Use

As the I-195 parcels become available, it will take time to fully build them out. As they transition to active development, it would be possible to use them as commercial surface parking lots. If this option is

chosen, the use should be strictly controlled, allowed only on I-195 parcels, and only for a transition period. The advantage of this approach is that it would generate some revenue, perhaps to help subsidize a future parking garage, and provide some use as opposed to no use at all. The disadvantages are that large expanses of surface parking can have negative effects on the urban fabric, creating dead spaces and deterring walkability. Additionally, commercial surface parking is difficult to change once it is established, because start-up costs are low and income is profitable and steady. Although lots may be transitional, they will not help build the area's reputation as a collection of vibrant, walkable, mixed use urban neighborhoods. The City should carefully control surface parking as a primary use in D-1, D-2, C-2, and W-2 districts.

Some negative effects of surface parking could be mitigated with improved landscape standards, requiring landscaping both at the edges and internal to the lot. Requirements should be adequate so that results are significant, not merely cosmetic. For instance, a pervious cover requirement would reduce runoff, and a planting requirement would increase greenery in an asphalt-dominated area. The City should continue to allow commercial parking in structures which are appropriately wrapped with active uses.



Landscape standards to mitigate some negative effects of surface parking

PARKING CONSIDERATIONS

Parking is a significant issue in the discussion of redevelopment of the I-195 parcels. Adequate off-street parking together with some structured parking must be provided to support the mix and density of uses sought. Strategies for reduction of parking requirements may prove helpful in creating a dynamic urban environment, thus adding value to the area as a whole. These recommendations generally give flexibility to developers by reducing parking requirements or allowing requirements to be met in alternate ways. Many of these recommendations are quite similar to those in the Jewelry Concept



When planning a parking structure, physical elements should be considered such as location away from the hub of the district, shared use, positive adjacent relationships, and wrapping the garage with active uses.

Plan Technical Report, including fee in lieu of parking spaces and unbundling residential parking requirements.

Several recommendations were also mentioned in the Jewelry District/Old Harbor Planning Framework study.

Consider Creating a Parking Management District

An effective strategy for addressing physical and financial aspects of parking in a given area is the creation of a parking management district. This strategy allows parking revenues to be funneled back into the area where they are collected. These funds can then be used to finance parking structures and right-of-way improvements such as

sidewalks and street trees. Revenue collection can occur in parking structures, regular meters, or sophisticated meters which vary charges based on time of day.

Allow Off-Site Parking to Count Towards On-Site Parking Requirements

Off-site parking within a reasonable walking distance should be allowed for all uses, or alternately for office and employee uses only. The creation of a centralized parking structure would be one way to ensure adequate off-site parking is available to meet the needs of the immediate area. Candidates for the location of a parking structure include one of the I-195 parcels and an area close to the courthouse, east of parcel 28 and north of parcel 25. When planning the structure, physical elements should be considered such as location away from the hub of the district, shared use, positive adjacent relationships, and wrapping the garage with active uses. Financial elements should also be considered such as participation by institutions, the private sector, and the public sector. Financing a parking structure may work well as a public-private partnership.

Offer Parking Reduction Credits in Tandem with Measures that Reduce Parking Demand

The City of Providence requires a certain amount of parking spaces for all developments. Parking spaces contribute to development costs and excessive parking can make good urban form challenging. However, some parking spaces are needed to keep businesses running and allow convenient access to vehicles. Reductions in parking requirements can be given in tandem with measures which genuinely decrease parking demand. Parking reduction credits should be considered for proximity to transit including bus and shuttle stops, Transportation Demand Management programs, car sharing, transit pass programs, and bicycle parking.

Extend Restaurant Parking Exemption to Additional Uses

Currently, eating and drinking establishments are exempt from all parking requirements in the D- districts. One way to incentivize ac-

tive, street-facing retail would be to extend this exemption to all retail establishments, or at minimum, to night time entertainment uses that would be utilize some of the institutional parking that is mainly used during the day.

Enable Parking Models that Encourage Mixed Use Development

Shared parking, as defined by the Urban Land Institute, is parking space that can be used to serve two or more individual land uses without conflict or encroachment. Whereas parking requirements are generally based on peak-time demand for parking, shared parking has been shown to work because peak times differ for different uses. For instance, parking may be shared among an office use, whose peak parking demand is the work day, Monday through Friday, and a retail shop whose peak is on the weekends.

Utilize Fee In-Lieu of Providing Off-Street Parking Spaces

In its zoning code, Providence currently has in-lieu of fee for providing off-street parking spaces. It is unknown whether this provision is in use. It is recommended that this provision be publicized and used. As described in Jewelry Concept Plan Technical Report, this fee could be used to finance parking structures on site, a strategy which goes along with the parking management district recommendations.

Consider Unbundling Residential Parking Requirements

A strategy which has gained attention for multiple positive effects is the unbundling of residential parking requirements. For residential units, the full cost of parking can be “unbundled” from the cost of the housing itself by creating a separate parking charge. The cost of structured parking can run from \$15,000 to \$25,000 per space and higher, a cost which is passed onto residents in the form of higher prices and rents. Unbundling this huge cost will change parking from a required purchase to an optional amenity, so that residents can choose how many spaces they wish to utilize. For lower income residents with no car or only one car, this will provide substantial savings. Charging separately for parking is also the single most effective strategy to encourage households to own fewer cars.

HEIGHT

D1 allows 45, 75, and 150 feet; D2 allows 90 feet.
 Zoning Board of Review may increase maximum height up to 25%.
 No minimum height.

LOT DIMENSIONS

No minimum lot area or lot width.
 Front Setback is build-to line (articulations no more than 2 feet for no more than 30% of façade).
 No minimum side or rear setbacks, no maximum lot coverage.

DENSITY/INTENSITY

For residential, 250 square feet of lot area per unit, minimum. No maximum for nonresidential.

PARKING

Residential: 0.75 spaces per dwelling (citywide: 1.5).
 Office/Retail: 1 space per 1,000 sq feet of GFA, (50% reduction from citywide ratio).
 No parking required for eating and drinking establishments.

LANDSCAPING

Tree Canopy Cover: 15% of lot. City forester may allow requirement to be met ¼ mile off-site.

USE

Permitted: Multifamily, retail, restaurants, bars, hotels, offices, open space.
 Not Permitted: Higher education institutions; health care institutions (D-1 only).

HEIGHT

Maximum 45 feet, no minimum.
 Zoning Board of Review may increase maximum height up to 10 feet.

LOT DIMENSIONS

No minimum lot width.
 Residential lot area: minimum 5,000 square feet.
 Nonresidential lot area: No minimum.
 Front Setback is build-to line (articulations no more than 2 feet for no more than 30% of the façade).
 No minimum side or rear setbacks, no maximum lot coverage.

DENSITY/INTENSITY

Residential: Minimum 1,200 square feet lot area per unit, minimum of 400 square feet of lot area per rooming unit. Nonresidential: No maximum.

PARKING

Residential: 1.5 spaces per dwelling unit.
 Office/Retail: 1 space per 500 square feet of GFA.
 Eating and Drinking: 1 space per 4 seats.
 No reduction.

LANDSCAPING

Tree Canopy Cover: 15% of lot. City forester may allow requirement to be met ¼ mile off-site.

USE

Permitted: One-family, two-family, three-family, multifamily, retail, restaurants, hotels, office, open space. Not Permitted: Apartment dormitories, higher educational institutions, bars.

HEIGHT

Maximum 75 feet (in V-zone, habitable space must be raised above base flood elevation), no minimum.
 Zoning Board of Review may increase maximum height up to 20 feet.

LOT DIMENSIONS

Lot Area: 5,000 square feet minimum. Lot Width: 50 feet minimum.
 No minimum or maximum front setback, no build-to line. Waterfront Setback: 20 feet minimum, except docks. No minimum side or rear setbacks, no maximum lot coverage.

DENSITY/INTENSITY

Residential: minimum 600 square feet lot area per unit. Nonresidential: No maximum.

PARKING

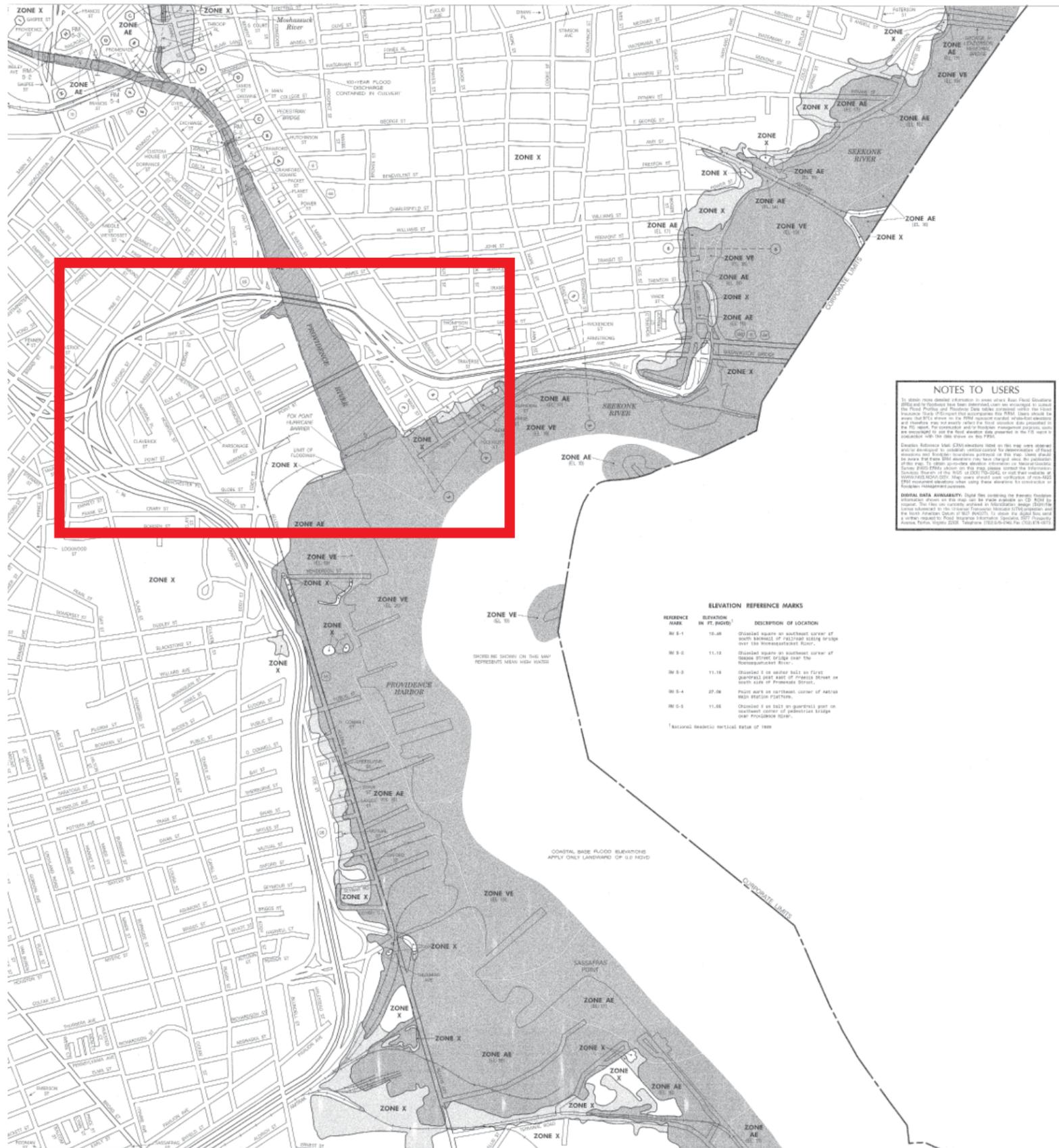
Residential: 1.5 spaces per dwelling unit.
 Office/Retail: 1 space per 500 square feet of GFA.
 Eating and Drinking: 1 space per 4 seats. No reduction.

LANDSCAPING

Tree Canopy Cover: 15% of lot. City forester may allow requirement to be met ¼ mile off-site.

USE

Permitted: Three-family, multifamily, retail, restaurants, hotels, office, open space, repair service, warehouse, outdoor storage. Not permitted: Apartment dormitories, higher educational institutions, bars.



Flood Rate Map for the subject area

Freshwater Wetlands Jurisdictional Boundary: Providence RI

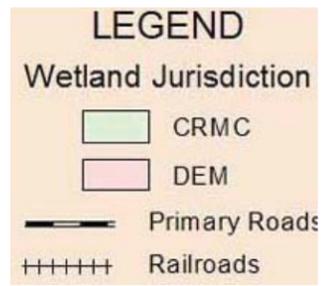


Determining Jurisdiction:

Wetlands seaward of the boundary are under the jurisdiction of the Coastal Resources Management Council.

Wetlands landward of the boundary are under the jurisdiction of the Department of Environmental Management.

These maps illustrate the jurisdictional boundary established per R.I.G.L. Chapter 46-23, that separates areas of DEM and CRMC freshwater wetlands authority. Other map features are illustrated as a general guide only. These maps should be used in conjunction with DEM and CRMC Regulations.



Environmental Summary

Regarding the environmental evaluation, this analysis includes a review of the improvements to I-195 Land Disposition Plans (Demolition Plans) prepared by Maguire Group, Inc. (not dated), which depict post-demolition roadway and topographical conditions in a conceptual manner and the preliminary Improvements to I-195 Section 4 existing utilities Plans (Utility Plans) prepared by Maguire Group, Inc. and dated February 8, 2008.

Additionally, this chapter includes a review of existing site conditions for each parcel, (i.e. floodplain, wetlands and regulatory permitting, soils, and utility availability).

ENVIRONMENTAL SUMMARY

BACKGROUND

Releases of oil and/or hazardous materials (OHM) may be present on the parcels at the site. Such releases, if present, pose both long term environmental liabilities and associated costs to owners and potential developers of the parcels. Fuss & O'Neill has not conducted research regarding previous environmental assessments at the site and is not aware if any assessment has been conducted to identify the absence or presence of OHM releases and the associated costs and schedule ramifications required to address potential releases.

The perceived value of a parcel within the subject site boundary will be substantially influenced by the understanding of environmental conditions at the parcel. Currently, because the absence or presence of OHM releases has not been determined, the environmental conditions are unknown. This uncertainty will pose an impediment to real estate transactions of the parcels. This impediment can be alleviated through assessment of the environmental conditions of the parcels to better understand the costs, regulatory requirements, and schedule ramifications of OHM releases that may be present.

This section documents our current knowledge of potential release conditions at the sites, potential regulatory jurisdictions that should be addressed to facilitate property disposition and redevelopment, and potential brownfield funding sources available to increase the marketability of properties and promote site redevelopment.

ENVIRONMENTAL ASSESSMENT APPROACH

Phase I Environmental Site Assessments conducted in accordance with Standard Practice E1527-05 issued in 2005 by the American Society for Testing and Materials (ASTM), will likely be required at each parcel to support financing of property transactions and mitigate environmental liabilities to purchasers. In addition, the likely conclusions of many if not all of the Phase I reports will include the recommendation for Phase II subsurface investigations of environmental media. The completion of these Phases I and II studies will better position properties for expedited property disposition and, therefore, Fuss & O'Neill suggests initiating the Phases I and II assessment process as soon as possible. However, once Phase II studies have been initiated, regulatory reporting of detected releases of OHM and subsequent regulatory response actions may be required.

The City of Providence, Rhode Island Economic Development Corporation (RIEDC), and Rhode Island Department of Transportation (RIDOT) have expressed interest in maximizing the value of the properties and rapid disposition of the properties while limiting direct costs of environmental assessment and remediation. In order to balance these interests, Fuss & O'Neill proposes a three-tiered approach to evaluate the environmental condition of the parcels, and, if possible, the acquisition of grant funding to cover environmental costs. As an overview, the lower tiers, Tier I and Tier II, will provide preliminary environmental information without triggering additional immediate regulatory requirements. The results of Tier I and Tier II may not be sufficient to quantify costs or identify regulatory requirements and schedules necessary to facilitate rapid property disposition. Tier III would likely provide the estimated costs and regulatory ramifications necessary to facilitate real estate transactions but would also trigger regulatory requirements for the property owner with the Rhode Island Department of Environmental Management (RIDEM).

Tier I – Historical Research: As an initial screening of potential environmental conditions, Fuss & O'Neill recommends a review of readily available historical documentation to evaluate whether previous uses of the parcels suggest the potential for OHM releases. This review would not trigger any further regulatory requirements or notification to RIDEM and would be a relatively inexpensive means to alleviate some of the uncertainty associated with unknown environmental conditions. The purpose of this screening would be to identify historical uses of the parcels that suggest OHM releases may or may not be present. Parcels with indicators of potential OHM releases would require additional assessment activities to address environmental uncertainty associated with those potential releases. If parcels with limited potential for releases of OHM are identified, a strategy of disposing of those parcels without further environmental assessment (or very limited environmental assessments) may be possible.

Tier II – Phase I Environmental Site Assessments: For the vast majority of property transactions, a Phase I conducted in accordance with the All Appropriate Inquiry (AAI) (e.g. completion of the aforementioned ASTM E1527-05 Phase I) standard will be necessary

prior to completing the property transaction. A Phase I is typically required to support financing applications and is also required for federal and state brownfield assessment and remediation grants. Performance of a Phase I for each parcel would likely reduce environmental uncertainty by providing a higher level of understanding of environmental conditions at the parcels and would help to expedite property transactions by proactively completing a required step in the transaction process. No regulatory RIDEM reporting requirements would likely be triggered by the completion of a Phase I, and the cost is relatively inexpensive. Similar to the Tier I approach, the results of a Phase I would be insufficient to quantify environmental costs and liabilities at sites where significant potential environmental issues were identified during the Phase I.

Tier III – Phase II Environmental Site Assessments: At parcels where significant potential environmental conditions were identified during the Tier I and Tier II activities, a Phase II will be necessary to understand and quantify the costs of environmental issues. Subsurface sampling and analysis would be conducted as part of a Phase II, and the results of the Phase II often trigger RIDEM regulatory requirements for additional assessment and remediation actions. However, unless the site poses a substantial risk to public health or environmental resources of the state, RIDEM typically does not enforce expedited or unreasonable schedules for the completion of those required response actions. Moreover, once full assessment of a site is completed in accordance with Section 7 of the RIDEM Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations), the owner is not required to initiate a remediation plan for three years, in accordance with Section 23-19.14-8 of the State of Rhode Island Industrial Property Remediation and Reuse Act. In our experience, unless a substantial risk to the public or environmental resource of the State is identified, the assessment and remediation of the sites can be scheduled out over many years and can be coordinated with the marketing and redevelopment schedules at the site.

The performance of a complete Phase II would yield accurate estimates of both the environmental remediation costs and regulatory schedule to address environmental issues. In our experience, once the environmental costs and schedule are determined accurately, environmental uncertainty is no longer an impediment to real estate

transactions.

REGULATORY JURISDICTION

Hazardous Material Releases: Once releases of OHM have been detected in soil or groundwater at the parcels, reporting to the RIDEM Office of Waste Management (OWM) will be required. Reporting will trigger the requirement for additional response actions. Typically, the initial response action required by RIDEM is the performance of a comprehensive Phase II Site Investigation in accordance with the RIDEM Remediation Regulations or the Rules and Regulations for Underground Storage Facilities Used for Petroleum Products and Hazardous Materials (UST Regulations). Unless the contamination poses a substantial and imminent threat to public health or the environment, RIDEM typically allows a property owner or other responsible party to negotiate a reasonable schedule to complete the required investigation.

Once the comprehensive Phase II Site Investigation is complete and RIDEM has approved the Site Investigation Report (SIR) documenting the Phase II results, remediation of OHM releases may be required by RIDEM. The RIDEM Brownfield Program allows substantial flexibility in the schedule of remedial implementation which can provide substantial extensions of time which can often aid in project financing and permitting. Unless expedited implementation of the required remediation is necessary to remedy a substantial and imminent hazard, RIDOT can defer remediation obligations at parcels for at least three years and longer, if necessary to facilitate property redevelopment. Section 23-19.14-8 of the Industrial Property Remediation and Reuse Act specifically allows the three year deferment via regulation. In addition, RIDEM will often approve the coordination of site remediation with site redevelopment which can allow the schedule of remediation to follow financing and permitting tracks outside the jurisdiction of RIDEM-OWM. In short, once Phase II is complete and an SIR is approved by RIDEM, the RIDEM Brownfield Program recognizes that the site redevelopment schedule can be a valid driver for remediation financing and scheduling.

Environmental Equity: On most of the parcels, reporting a release of OHM to RIDEM will also trigger compliance with the draft Guidance Policy Considering Environmental Justice in the Review of Investigation and Remediation of Contaminated Properties (Envi-

ronmental Justice Policy). The primary requirements of this policy involve increased public outreach efforts to solicit and incorporate public feedback in the assessment and remediation of contaminated sites. At a minimum, additional public meetings and evaluation of public input regarding the assessment, remediation, and approval process are required to obtain RIDEM approvals necessary for site remediation and redevelopment. According to available information, all or portions of parcels 1A, 2, 3, 5, 6, 8, 9, 10, 17 (including the unnumbered adjacent 0.1 acre triangle parcel), 25, 30, 31, 34, 35, 36, 37, 41 and P1 appear to be located within environmental justice areas, and releases reported to RIDEM on these parcels will trigger compliance with the Environmental Justice Policy.

POTENTIAL FUNDING OPPORTUNITIES

The environmental assessment activities described above in the proposed Tier I, II, and III approaches all are potentially eligible for brownfield assessment funding through the United States Environmental Protection Agency (USEPA) and RIDEM. Funding is only available to eligible parties who are not identified as the potentially responsible party for the cause of potential contamination. RIDOT, as the owner of the parcels and potentially responsible party, would likely not be eligible for the funding. Entities like RIEDC and the City of Providence, who are interested in the redevelopment of the parcels, could be eligible for the funding. Funding is awarded on a competitive basis. Based on our extensive experience in applying for and obtaining brownfield funding, Fuss & O'Neill believes these parcels would be relatively strong applicant sites for brownfield funding. A summary of the funding mechanisms includes the following:

- RIDEM Targeted Brownfield Assessments (TBA): RIDEM currently offers up to approximately \$50,000 for environmental assessment activities per parcel or site. The money is provided through USEPA and is managed by the RIDEM-OWM. Applications are typically due in October of each year. However, funding also becomes available throughout the year on a limited basis. RIDEM suggests that interested applicants submit an application at any time of year so that RIDEM will have the application on file when more funding becomes available.
- USEPA Brownfield Assessment Grants: Brownfield assessment funding is available directly from USEPA for as much as \$750,000 total if multiple grants are acquired. Applications to

USEPA are typically due in November each year, awards are announced the following Spring, and funds can start being drawn in October of the following year. For example, applications for fiscal year 2009 were due in November 2008. The awards are expected to be announced in Spring 2009, and the grant can be initiated in October 2009. We understand that RIEDC has applied to USEPA for two assessment grants of \$200,000 each for fiscal year 2009 that could be used at the site.

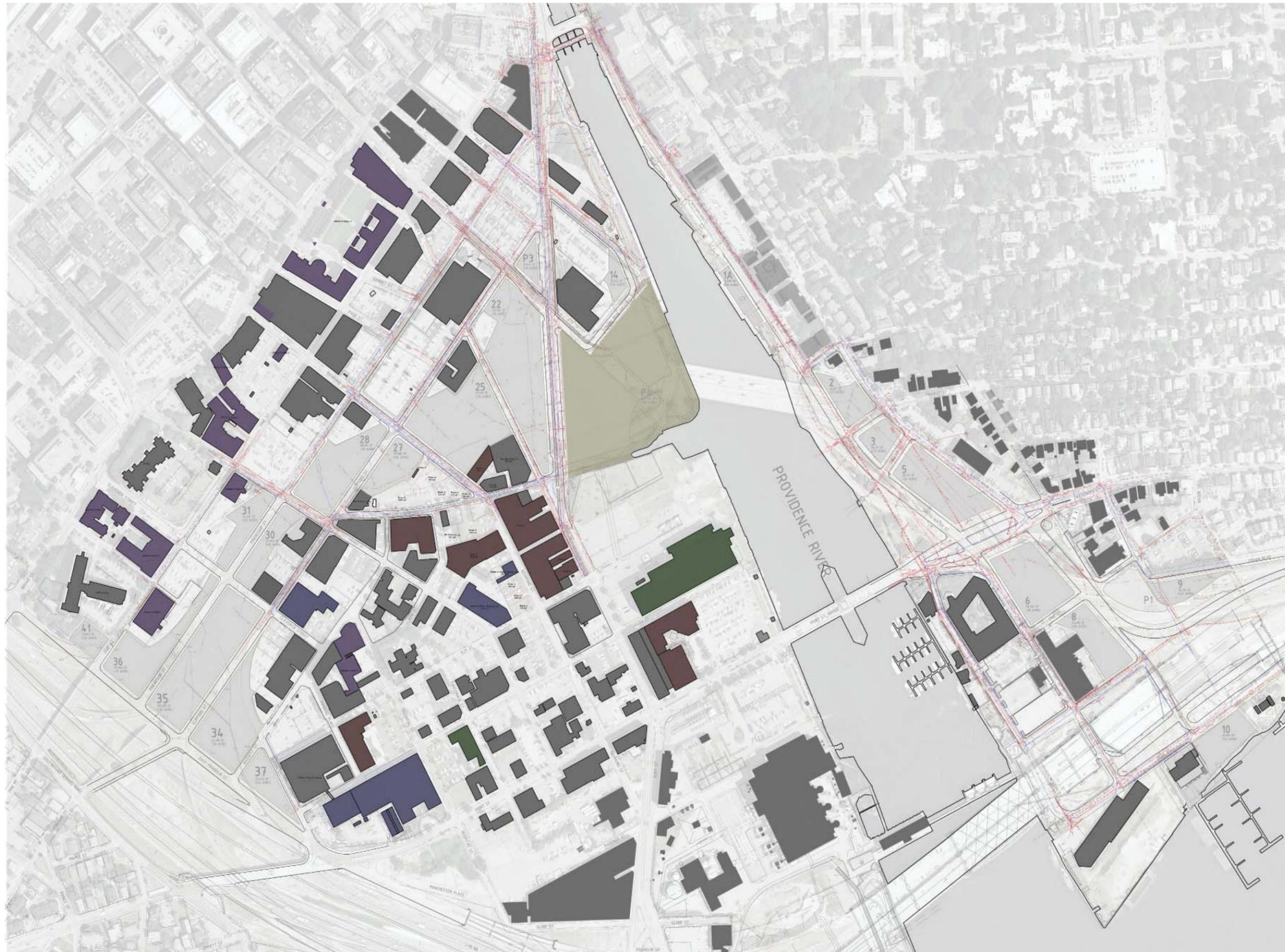
Use of USEPA assessment grant funding to complete Phase I and Phase II studies and quantify potential environmental costs is an approach that would yield better understanding of potential property values as well as positioning the properties for more rapid disposition.

CONCLUSIONS AND RECOMMENDATIONS

Additional assessment of environmental conditions at the parcels will be necessary before a transfer of property ownership can be completed. A Phase II (Tier III herein) would be the best means of thoroughly quantifying environmental costs and regulatory liabilities to facilitate property transactions. RIDEM regulatory and environmental equity requirements may be triggered by Phase II results but could likely be coordinated with property marketing and redevelopment schedules.

If implementation of Phase II is postponed, historical research (Tier I herein) and/or Phase I assessment (Tier II herein) would provide additional information regarding environmental uncertainty without triggering further RIDEM regulatory requirements. Additional understanding of environmental conditions even at the Tier I and Tier II levels may reduce environmental uncertainty and facilitate property disposition.

Brownfields funding is available on a competitive basis from RIDEM and USEPA for the types of activities required to evaluate the costs and regulatory requirements affecting potential real estate transactions. Fuss & O'Neill recommends that, at a minimum, a long-term funding strategy for assessment activities be evaluated immediately and that applications for brownfield funding be submitted to RIDEM and USEPA for the parcels.



I-195 Parcels Areas

Parcel	Area [square feet]	Area [acres]
1A	12,378	0.28
2	22,211	0.51
3	16,271	0.37
5	58,711	1.35
6	58,704	1.35
8	36,698	0.84
9	20,264	0.47
10	59,561	1.37
P4	257,301	5.90
17	104,369	2.40
22	113,704	2.61
25	97,951	2.25
27	28,386	0.65
28	58,931	1.35
30	27,645	0.63
31	24,536	0.56
34	67,481	1.55
35	100,383	2.30
36	49,980	1.15
37	23,443	0.54
41	13,037	0.30

Existing Conditions Analysis

The following section is a parcel by parcel inventory and existing and post-highway demolition conditions analysis of the surplus land.

The graphics and narratives represent a synthesis of the data assembled through the review of available documentation and site explorations by the team.

The summaries are intended to identify the physical and regulatory conditions of each parcel and its abutting context.

The general regulatory and infrastructure analysis included a review of the Improvements to Interstate 195 Land Disposition plans (30 % Demolition Plans) prepared by Maguire Group, Inc. and dated January 2009, which depict post-demolition roadway and topographical conditions in a conceptual manner and the preliminary Improvements to Interstate Route 195 Section 4 Existing Utilities plans (Utility Plans) prepared by Maguire Group, Inc. and dated February 8, 2008. Additionally, the following summarizes reviews of existing site conditions for each parcel, (i.e. floodplain, wetlands and regulatory permitting, soils, and utility availability).

The following section provides a general description and impact of the analysis criteria.

The parcel summaries establish a general background for examining the potential opportunities and/or challenges of redevelopment with respect to the following criteria:

- Parcel dimension, configuration and proposed street alignments;
- Scheduled date of availability;
- Relationship to and condition of abutting properties;
- Scope of Highway Demolition;
- Street frontages and access;
- Historic Districts;
- Potential Regulatory Jurisdictions;
- Topography; and
- Utility alignments and capacities (existing and proposed).

GENERAL REGULATORY AND INFRASTRUCTURE ANALYSIS

The following summary of the regulatory jurisdictions associated with the surplus land identifies particular reviews governing waterfront parcels.

FLOODPLAIN

As depicted on National Flood Insurance Rate Map Community Panel Number 4454060005F Panel 5 of 7 for Providence County, Rhode Island, dated June 6, 2000, the majority of the subject area is within Flood Zone X while some parcels are within Flood Zone AE, a special flood hazard area inundated by the 100-year flood and Flood Zone VE, an area of coastal flooding with velocity hazard (wave action). Parcels within Flood Zones AE and VE will need to be designed to conform to the National Flood Insurance Program (NFIP), which states:

- All new construction and substantial improvements of residential structures within Flood Zones A1-A30, AE and AH on the community's FIRM shall have the lowest floor (including basement) elevated to or above the base flood level.
- All new construction and substantial improvements of non-residential structures within Zones AI-A30, AE, and AH on the community's FIRM shall (i) have the lowest floor (including basement) elevated to or above the base flood level, or (ii) together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
- All new construction and substantial improvements in Zones V1-V30 and VE, and also in Zone V if base flood elevation data is available on the community's FIRM, shall be elevated on pilings and columns so that (i) the bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to or above the base flood level.
- Below-grade parking garages are prohibited beneath residential buildings in Zones A1-A30, AE, and AH.

- Below-grade parking garages are permitted beneath non-residential buildings in Zones A1-A30, AE, and AH provided the building (including the parking garage) are floodproofed to the base flood level in accordance with the design performance standards provided above in Section 60.3(c) (3)(ii) of the NFIP.
- Below-grade parking garages are prohibited beneath all residential and non-residential buildings in VE zones.
- At-grade parking is not prohibited in Zones AE and VE.

In addition to the NFIP standards, parcels will need to be designed to conform to Section 423 of the Providence Zoning Ordinance, which states:

- No manufactured home, as defined by the state building code, shall be located in any floodway or coastal high hazard area.
- All new construction shall be located landward of the reach of mean high tide in a velocity zone.
- Man-made alteration of sand dunes within a Velocity Zone (V-VE) shall be prohibited.
- Any encroachment in the regulatory floodway as identified on the FIRM is prohibited. This includes fill, new construction, substantial improvements to existing structures and other development. However, encroachment in the regulatory floodway may be permitted if the applicant shall provide a certification by a registered professional engineer demonstrating that such encroachment shall not result in any increase in flood elevations during a base flood (one hundred year flood).

Section 423 of the Providence Zoning Ordinance is currently being revised. The recommended revisions are provided in Appendix C.

WETLANDS & REGULATORY PERMITTING

Parcels located within 200 feet of the inland edge of the Providence River that are not separated from the inland edge of the river by a roadway, which include Parcels 1A, 10, and P4, will require an Assent from the Rhode Island Coastal Resources Management Council

(CRMC). Coastal and freshwater wetlands are not located within the subject parcels, according to the Rhode Island Department of Environmental Management (RIDEM) Geographic Data Viewer. However, if wetlands are identified during entitlement processes, approval from either RIDEM or CRMC will be required depending on which jurisdictional area the properties lie within.

The Providence River, in the vicinity of the subject area, is classified by CRMC as a Type 5 water with the exception of the portion of the Providence River adjacent to Parcel 10, which is a Type 6 water. CRMC defines Type 5 waters as "adjacent to waterfront areas that support a variety of tourist, recreational, and commercial activities." Type 6 waters are defined as "extensively altered in order to accommodate commercial and industrial water-dependent and water-enhanced activities." Refer to Appendix A for a list of regulated activities within the 200-foot CRMC jurisdictional area.

There are two methods of CRMC regulatory approaches for permitting of urbanized developments and determining the coastal buffer and setback requirements:

- Coastal Resources Management Program (CRMP)
- Urban Coastal Greenway Policy (UCG).

Under both regulatory approaches, all parcels are subject to a coastal buffer zone, measured from the inland edge of the Providence River, and an additional 25-foot construction setback. The CRMP regulations determine coastal buffer zones based on water classifications and parcel size. The UCG regulations classify the subject area as part of the Inner Harbor River Zone which stipulates a coastal buffer zone will ranging from 20 to 50 feet. Parcel 10 is located within the Development Zone which stipulates a coastal buffer zone ranging from 25 feet to 100 feet. Refer to Appendix B for documentation on determining coastal buffer zones.

The UCG regulations requires 15 percent of the parcel to be vegetated, low-impact development practices to meet water quality

standards and flood control for 100 percent of stormwater runoff, and compliance with all applicable CRMP regulations. Additionally, if development includes public access, the applicant must provide public parking spaces to facilitate the use of the urban coastal greenway; however, the Applicant may demonstrate that ample public parking is available adjacent to the parcel to satisfy this requirement.

The purpose of the UCG guidelines is to offer a method of redeveloping urban waterfronts in a manner that integrates economic development, expands public access along and to the shoreline, and provides for the management, protection, and restoration of coastal habitats. The most appropriate approach for CRMC permitting will depend on the proposed development and whether public access to the Providence River is available. Due to the developed conditions of the affected parcels, we do not foresee CRMC permitting to pose severe restrictions on development.

The Rhode Island Department of Environmental Management (RIDEM) classifies the Providence River as a Category 5 impaired waterbody with causes of impairment due to nitrogen, dissolved oxygen, and fecal coliform. All properties that will discharge stormwater to the Providence River, either directly or through a separate storm sewer, will require Water Quality Certification from RIDEM.

The Rhode Island Pollutant Discharge Elimination System (RIPDES) program regulates storm water discharges from construction activities greater than one acre to a separate storm sewer system or waters of the State. Authorization under the RIPDES General Permit will be automatically granted upon receipt of a CRMC Assent or Water Quality Certificate. Developments that disturb less than one acre do not require RIPDES authorization.

SOIL CONDITIONS

The subject area is underlain by Udorthents-Urban Land Complex (UD) and Urban Land Complex (Ur) according to the Soil Survey of Rhode Island (1981). UD and Ur classified soils have been previ-

ously built upon or have been modified by earth moving activities. Determining the soil characteristics of each parcel in the project area is not possible without conducting subsurface soil investigations or geotechnical studies.

UTILITIES

The Rhode Island Department of Transportation (RIDOT) plans for reconnecting city streets through the Route 195 corridor include separating combined storm sewers to the extent practicable. RIDOT understands that local utility companies will install electric, cable, and telephone utilities within the reconnected streets but will not install sewer and water utilities due to lack of funding. RIDOT intends to evaluate the possibility of installing water and sewer mains; however, funding may not be available.

The Jewelry District/Old Harbor Planning Framework Study prepared by The Cecil Group, Economics Research Associates, and the Maguire Group dated September 2008 states that the existing utilities meets the existing demand and are able to accommodate moderate growth.

The Narragansett Bay Commission (NBC) owns and operates combined sewers throughout the subject area. Parcels that require sanitary or storm sewer service will require a Sewer Connection Permit from the NBC. Stormwater and groundwater discharges to NBC sewers is prohibited unless the NBC determines that a combined sewer is the only reasonable means available for disposal and such connection receives NBC approval.

The NBC may require developers to monitor existing sewer flow and/or incorporate offsite mitigation, such as eliminating combined storm sewers or removing storm drain connections to combined storm sewers. The risk for offsite mitigation requirements will increase as the subject parcels are developed, potentially shifting a disproportionate development cost to projects that occur near the end of the build out period. Projected wastewater and stormwater flows, based on

future uses and density, should be completed as soon as possible in the predevelopment phase to allow potential capacity issues to be resolved, or alternately, to establish an equitable method for assessment to developers for offsite sanitary and storm sewer improvements.

Possible development obstacles or substantial increases in construction cost may result from eliminating stormwater connections to combined storm sewers. Stormwater mitigation measures may include installing municipal storm drains and onsite stormwater management systems. If infiltration techniques are incorporated into the onsite stormwater management plan for parcel development, a RIDEM Underground Injection Control Program permit will be necessary. If onsite soils are unsuitable for infiltration techniques, developers may be compelled to construct a separate storm drain system within adjacent roadways or consider opportunities for a consolidated stormwater management system designed to manage multiple parcels runoff.

Given the potential for academic, institutional and research & development space on the parcels, it should be noted that real value could be added to the parcels through investment in planning and installation of state of the art telecommunications infrastructure. As more detailed planning for the parcels themselves and the particular utility improvements- both public and private – it is logical that a synergy amongst the needs of the interested parties, including the Universities, might well be found through combining telecommunications planning for the new parcels. This type of investment could be a contributor to the economic development potential of the district.

East Side Parcels:

Fox Point / College Hill

Development area: 6.49 acres

Parks area: 0.58 acres



Parcel 10

Parcel 10 is located between India Street and the Naraganset Bay, to the east of the Fox Point Hurricane Barrier and the elevated highway I-195. One of the challenges for the future of this parcel is to minimize the isolation from the rest of the urban fabric due to the elevated highway and the surrounding uses, while ensuring public access and recreational uses along the water.

- **Topography:** The parcel is flat.
- **Historic Relevance:** Given that the parcel is in the College Hill National Historical District, its development will be subject to design review by the appropriate commission.
- **Zoning:** [W2] Its current allowable height is 75 feet. Bonuses in exchange for community amenities may increase the allowed height [as proposed in the City charrete]. A minimum easement of 25 feet from the existing shoreline is required for public cross site access [CRMC Urban Coastal Greenway regulations].
- **Interested Constituencies:** Several community groups advocate for increasing public access to the site [Friends of India Point Park].
- **Adjacent Uses / Abutters:** The parcel abuts the community boating facility which is to the east, and the Providence Steamship company maintenance facility which is to the west. The previous owner has the right of first refusal.

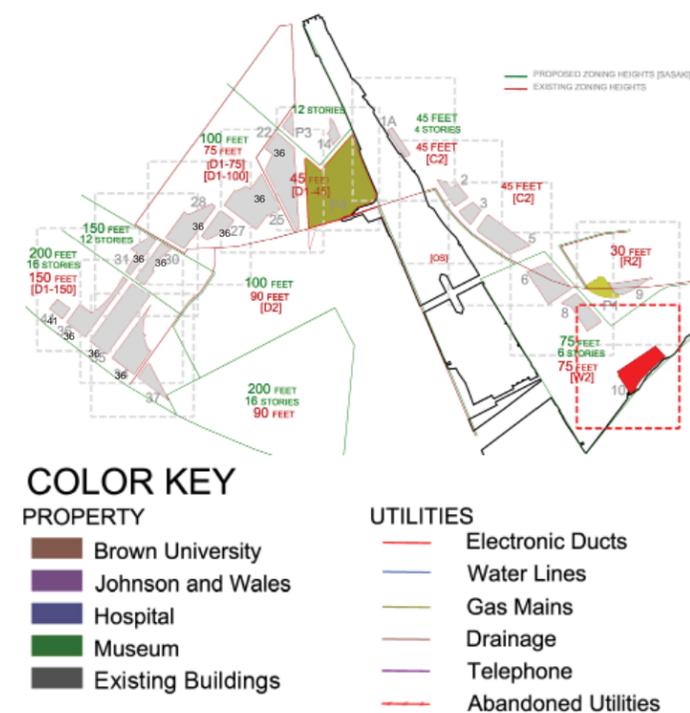
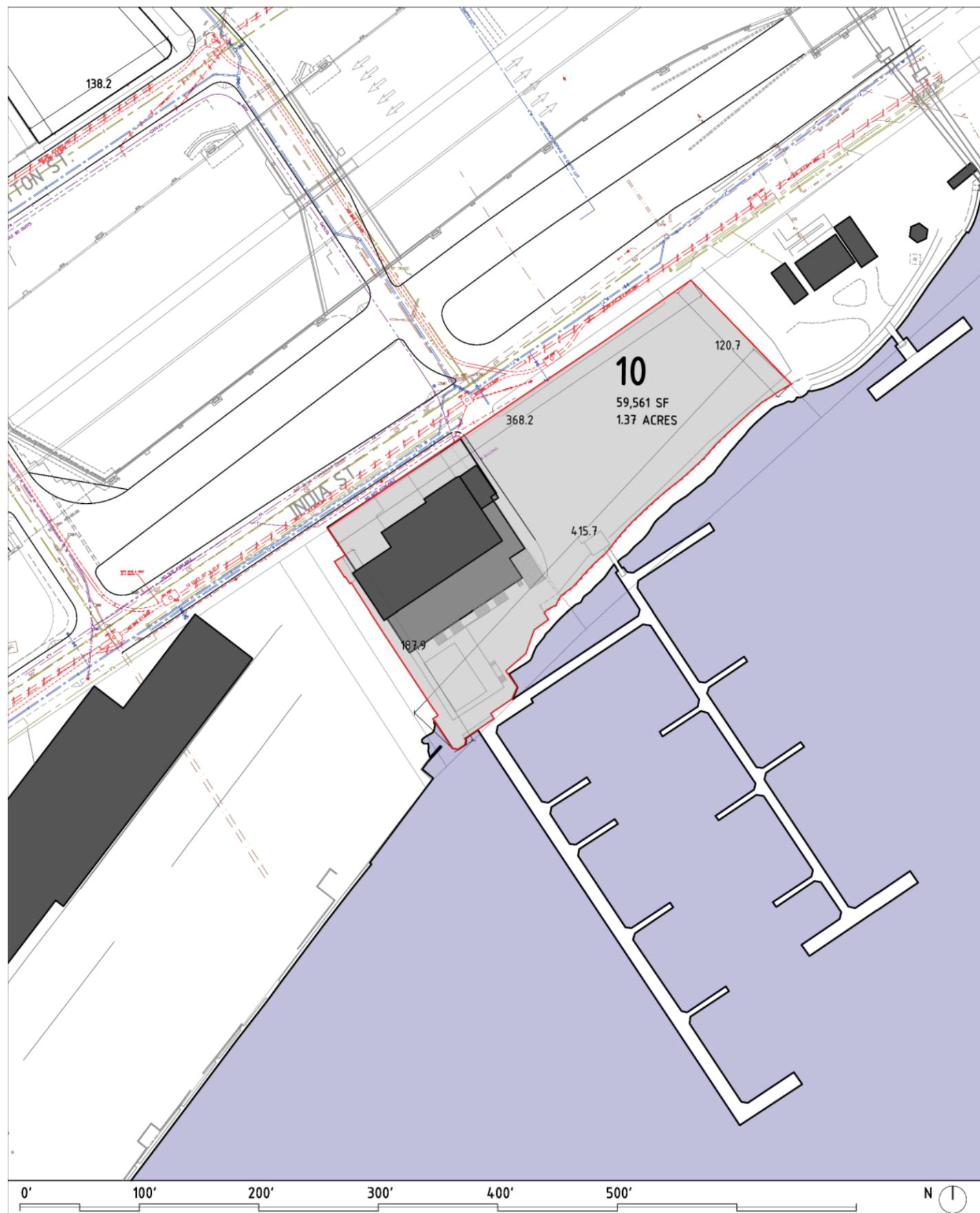
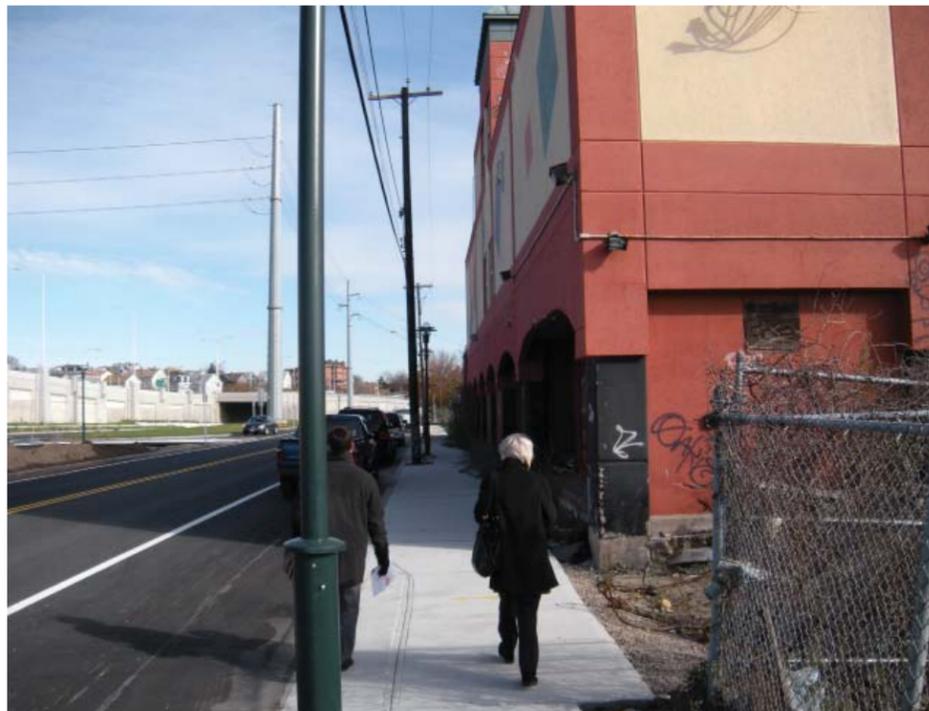




Image of Benefit St visual corridor under the new elevated I-195



Images of urbanization works [above] and existing building [bellow]



Rhode Island Interstate 195 Surplus Land: Redevelopment and Marketing Analysis

Parcel 10

Existing Conditions and Post-Highway Demolition Description

Parcel 10, a 1.37 acre parcel (59,561 sf), will be the first site offered for disposition by the RIDOT. The land sits directly on the Seekonk River to the east of the Fox Point hurricane barrier and is bound on the north by the new India Street alignment and the new elevated I-Way corridor at the edge of the Fox Point Neighborhood. The parcel abuts the community boating facility which is to the east and the Providence Steamship Company maintenance facility on the west. The site is regulated by the Rhode Island Coastal Resources Management Council and is subject to the requirements as defined by its frontage on a Type 6 Waterway (refer to CRMC regulatory description in Chapter VI.). CRMC is currently reviewing water type classification for this area; the classification may be revised as a result of this review. The parcel is also located in a Flood Plain as described in Chapter VI and therefore subject to occupancy prohibitions beneath the base flood level which is 19 feet. A required minimum easement of 25 feet from the existing shoreline must be maintained for public cross site access as dictated by CRMC Urban Coastal Greenway regulations. The site has in excess of 400 feet of shoreline frontage. An additional 10 feet easement perpendicular to the waterfront is also required along the western boundary of the property for public access across the site to and from India Street. The parcel is essentially flat and has utility service along the India Street frontage. Parcel 10, like all of the east side surplus parcels, is located in the College Hill National Historic District under the jurisdiction of the Rhode Island Historical Preservation and Heritage Commission (RIHPHC). The property is also subject to a right of first refusal by the previous owner from whom RIDOT purchased the land.

The site was not originally part of the highway corridor but was utilized by RIDOT for staging during construction. As a result, the property does not need to be prepared through a highway demolition contract and is available in the near term. The Interim Condition Plans do not indicate demolition, topographical, or grading work to be performed on Parcel 10. For the purpose of this analysis, we have assumed that the existing building will be razed and the land will be relatively level prior to the disposition of the property.

The United States Geological Survey(USGS) indicates that existing elevation of the parcel ranges from 3 feet to 10 feet. Parcel 10 is located within Flood Zone VE, as area of coastal flooding with velocity hazard (wave action) and a base flood elevation of 19 feet. Accurate topographical information is required to determine the full extend of the VE Flood Zone onsite.

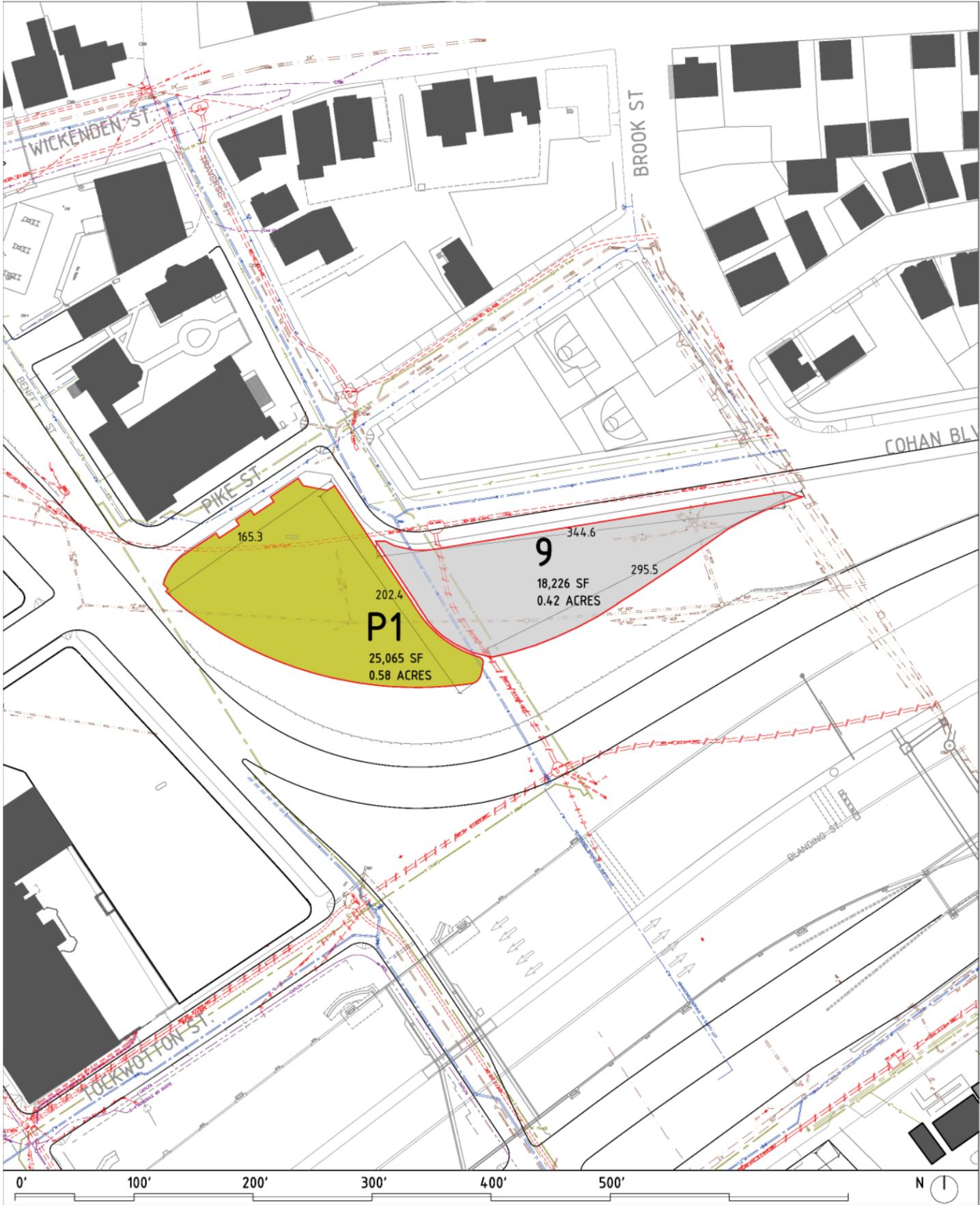
Site access will continue to be provided remain to be provided from India Street. The southeastern portion of Parcel 10 abuts the Seekonk River and the majority of the parcel is located within the 200-foot CRMC jurisdictional area. Regulated activities, listed in Appendix A, require Assent approval from CRMC, which classifies the adjacent section of the Seekonk River as a Type 6 water. Under the CRMP, Parcel 10 will be subject to a 75-foot buffer plus 25-foot construction setback.

Under the UCG, Parcel 10 qualifies for the “Small Lot Exception” because the parcel has a depth of less than 300 feet. Therefore, the parcel is subject to a 25-foot construction setback plus a 25-foot urban coastal greenway. In order to qualify for the “Small Lot Exception” the applicant must provide compensation for the reduction in UCG width. Compensation may include a fee determined by CRMC, the creation of non-stormwater wetlands, the restoration of wetlands, opportunities for public recreational use, the increase in public access amenities, or the purchase of land to establish UCG connections within the Metro Bay SAMP. If the applicant does not pursue the “Small Lot Exception,” Parcel 10 will be subject to a 25-foot construction setback plus:

- A 100-foot urban coastal greenway if public access or mitigation is provided; and
- A 50-foot urban coastal greenway if public access or mitigation is provided and the applicant compensates for the reduction in UCG area.

The Utility Plans indicate that natural gas, water (12-inch), telecommunications, electric utilities, a 50-inch combined sewer, and electric utilities are available in India Street adjacent to the site.

Parcels 9, P1



Parcels P1 and 9 are located between George M. Cohan Boulevard and the I-195. Both the proximity to the highway ramps and the irregular shape and small size of the parcels challenge the possibilities for development in one case and the adequacy for recreational use in the other.

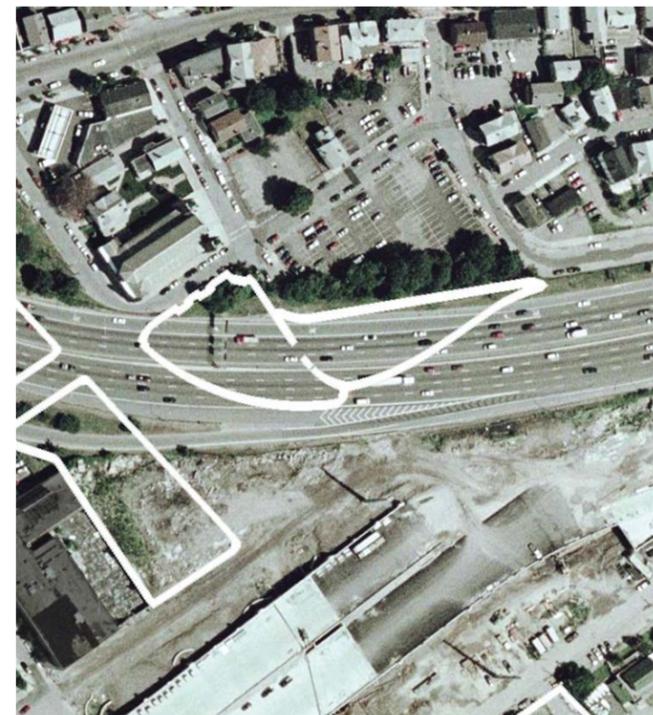
Parcel P1 is intended to replace Washington Park, which was eliminated with the construction of I-195. Its location is not exactly the same, as can be seen in the parcel overlay on the historical map in the next page.

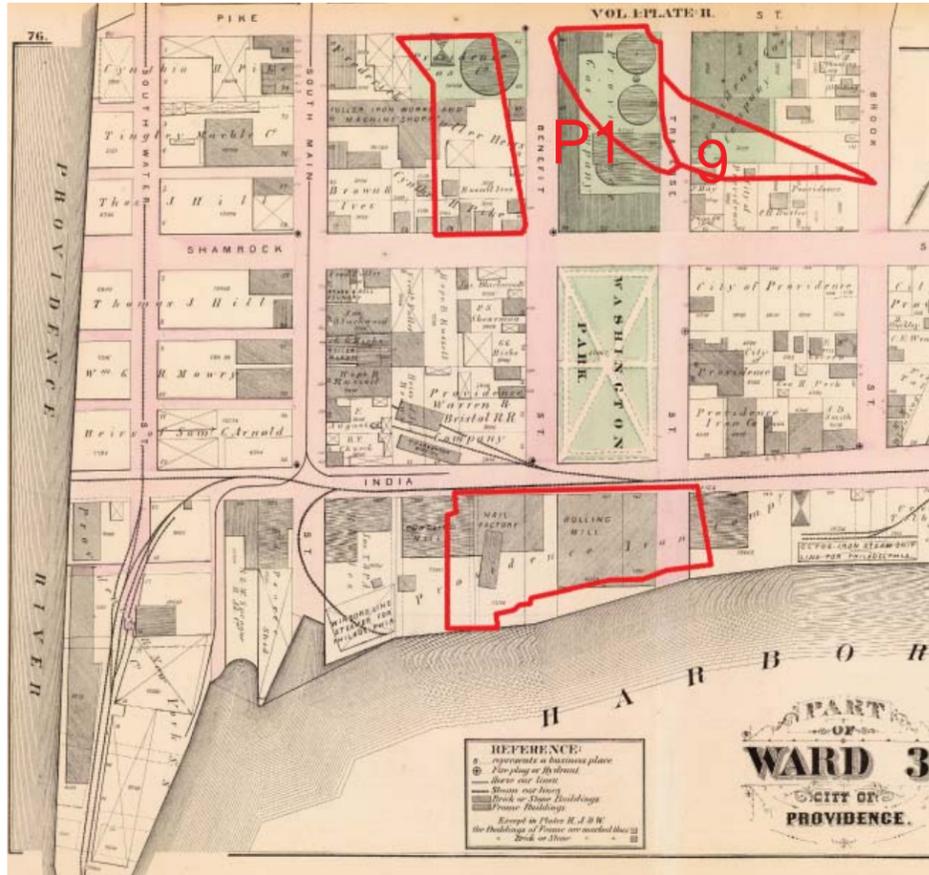
- **Topography:** The parcel is flat.
- **Historic Relevance:** Given that the parcel is located in the National Historic District of College Hill, its development will be subject to design review by the appropriate commission.
- **Zoning:** [R2/W2] Its current allowable height is 30 feet / 75 feet [the line of separation crosses the parcels].
- **Possible Adjacent Property Assemblies:** The surface parking lot north of Parcel 9 [currently used by RISD staff and the Rosary Church] could be part of a swap.



COLOR KEY

PROPERTY	UTILITIES
 Brown University	 Electronic Ducts
 Johnson and Wales	 Water Lines
 Hospital	 Gas Mains
 Museum	 Drainage
 Existing Buildings	 Telephone
	 Abandoned Utilities





Historic image of Washington Park [1875] with current I-195 Parcels overlapped

Images of the different uses in the surrounding area



Rhode Island Interstate 195 Surplus Land: Redevelopment and Marketing Analysis

Parcel 9

Existing Conditions and Post-Highway Demolition Description

Parcel 9 is a .42 acre parcel (18,226 sf) that is scheduled to be available for disposition in the fall of 2010. The triangular shaped site is defined on the north by the new extension of George M. Cohan Boulevard and to the south by a new west bound off-ramp constructed as part of the I-Way contract. The parcel directly abuts surplus parcel P1 to the west, a site designated as open space. The site is accessed from George M. Cohan Boulevard.

The Interim Condition Plans indicate that all abandoned above ground infrastructure associated with the relocation of Interstate 195 will be removed from Parcel 9. The proposed site grading will result in slopes ranging from 1 to 7 percent (approximately 4 feet of grade change).

Parcel 9 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

The Utility Plans indicate that existing natural gas (6 inch), water (12-inch), and electric utilities are located within proposed George M. Cohan Boulevard. A 48-inch storm sewer and a 48-inch sanitary sewer are located adjacent to the parcel in Brook Street. It appears that the 48-inch storm sewer remains separate and discharges directly to the Seekonk River.



Parcel P1

Existing Conditions and Post-Highway Demolition Description

Parcel P1 is a .58 acre parcel (25,065 sf) designated as open space. The parcel abuts parcel 9 to the east and fronts the existing Pike Street to the north. The western edge of the site curves following the proposed alignment of a new west bound off-ramp connecting to Benefit Street.

The Interim Condition Plans do not identify Parcel P1, but show post-demolition conditions in the area. All abandoned above ground infrastructure associated with the relocation of I-195 will be removed from the parcel. The proposed site grading will result in slopes ranging from 1 to 3 percent (approximately 2 feet of grade change). Site access is available from Pike Street. South Main Street will be reconfigured and provide additional site access.

Parcel P1 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

The Utility Plans indicate that existing natural gas (12-inch), water (6-inch), and electric utilities are located within Pike Street adjacent to the site. Additionally, existing natural gas (12-inch) and water (16-inch and 6-inch) utilities are located adjacent to the parcel, southeast of the intersection of Pike Street and Traverse Street. A 12-inch combined sewer is located at the northern corner of the parcel.





Parcel 8 is located between South Main Street and the extension of Benefit Street and the access ramps to the I-195 .

- **Topography:** The parcel slopes down to Northeast some 5 feet.
- **Historic relevance:** Given that the parcel is in the College Hill National Historical District, its development will be subject to design review by the appropriate commission.
- **Zoning:** [W2] Its current allowable height is 75'. As a result of the City charrette in preparation for the Comprehensive Plan, the heights in the southern portion of the site could reach 12 stories.
- **Adjacent Uses / Abutters:** The adjacent parcel contains two buildings that were once part of the Fuller Iron Works. The brick structure [A] was built in 1869. The steel and glass 90 feet x 200 feet structure [B] was built in 1893, with a foundry addition to the west built in 1901. Currently covered by a siding, building B needs to be fully surveyed to know its precise historical status [it was the first steel structure in the City of Providence]. The complex is included in the National Register of Historic Places.
- **Possible Adjacent Property Assemblies:** The possible assembly with the contiguous parcel will need to evaluate the existing historical structure sitting on it.



COLOR KEY

PROPERTY	UTILITIES
Brown University	Electronic Ducts
Johnson and Wales	Water Lines
Hospital	Gas Mains
Museum	Drainage
Existing Buildings	Telephone
	Abandoned Utilities





Above, Fuller Iron Works Complex,
Courtesy of the City of Providence - Department of Planning and Development



Rhode Island Interstate 195 Surplus Land: Redevelopment and Marketing Analysis

Parcel 8

Existing Conditions and Post-Highway Demolition Description

Parcel 8 is .84 acre parcel (36,698 sf) that is scheduled to be available for disposition in the fall of 2010. Adjacent to Parcel 6 which is directly to the north, Parcel 8 is bound in the east by the new continuation of the alignment of South Main Street across Wickenden (called Benefit Street) that is being constructed as part of the I-Way contract, to the north by the new Pike Street and the south by the new Tockwotton Street. The western boundary of the parcel is a mid-block, rear property line of an abandoned industrial property located on South Main Street between Pike and Tockwotton. This existing building runs the full north-south length of the parcel. All of the frontage defining Parcel 8 will be newly constructed streets. Site access will be available from Tockwotton Street and Pike Street. Benefit Street will provide limited access due to its proposed connection to I-195 exit ramp and is restricted to westbound, one-way traffic. Parcel 8, like all of the east side surplus parcels, is located in the College Hill National Historic District under the jurisdiction of the Rhode Island Historical Preservation and Heritage Commission (RIHPHC).

The parcel will be created only following the demolition of the highway alignment, the sloped fill of the embankments and the west bound on-ramp. The Interim Condition Plans indicate that all abandoned above ground infrastructure associated with the relocation of Interstate 195 will be removed from Parcel 8. The proposed site grading will result in slopes down from north to south toward the waterfront ranging from one to 12 percent (approximately 10 feet of grade change).

The abutting property is the former site of the Fuller Iron Works Complex which consists of a brick wing dating from 1869 on the Northeast corner of the block and the first steel framed building built in Rhode Island on the remainder of the site, which dates from 1893. The property is currently listed for sale. The existing structure is considered historic, however does not appear to have an official designation and the condition of the steel framed section of the complex and the feasibility of reuse is not known.

The boundary of the AE and VE Flood Zones are shown on the opposite side of Tockwotton Street on the FIRM with base flood elevations of 17 and 19, respectively. Finish grades on a small portion of Parcel 8 will range from 15 and 19 feet. Development of this portion of the parcel may be subject to the AE Flood Zone requirements and may require a fetch analysis to determine if the VE Zone extends onto the subject parcel.

The Utility Plans indicate that natural gas, water (12-inch), telecommunications, and electric utilities are available in Tockwotton Street adjacent to the site. A 22-inch by 36-inch combined sewer is located west of the parcel at the intersection of Pike Street and the proposed location of South Water Street.



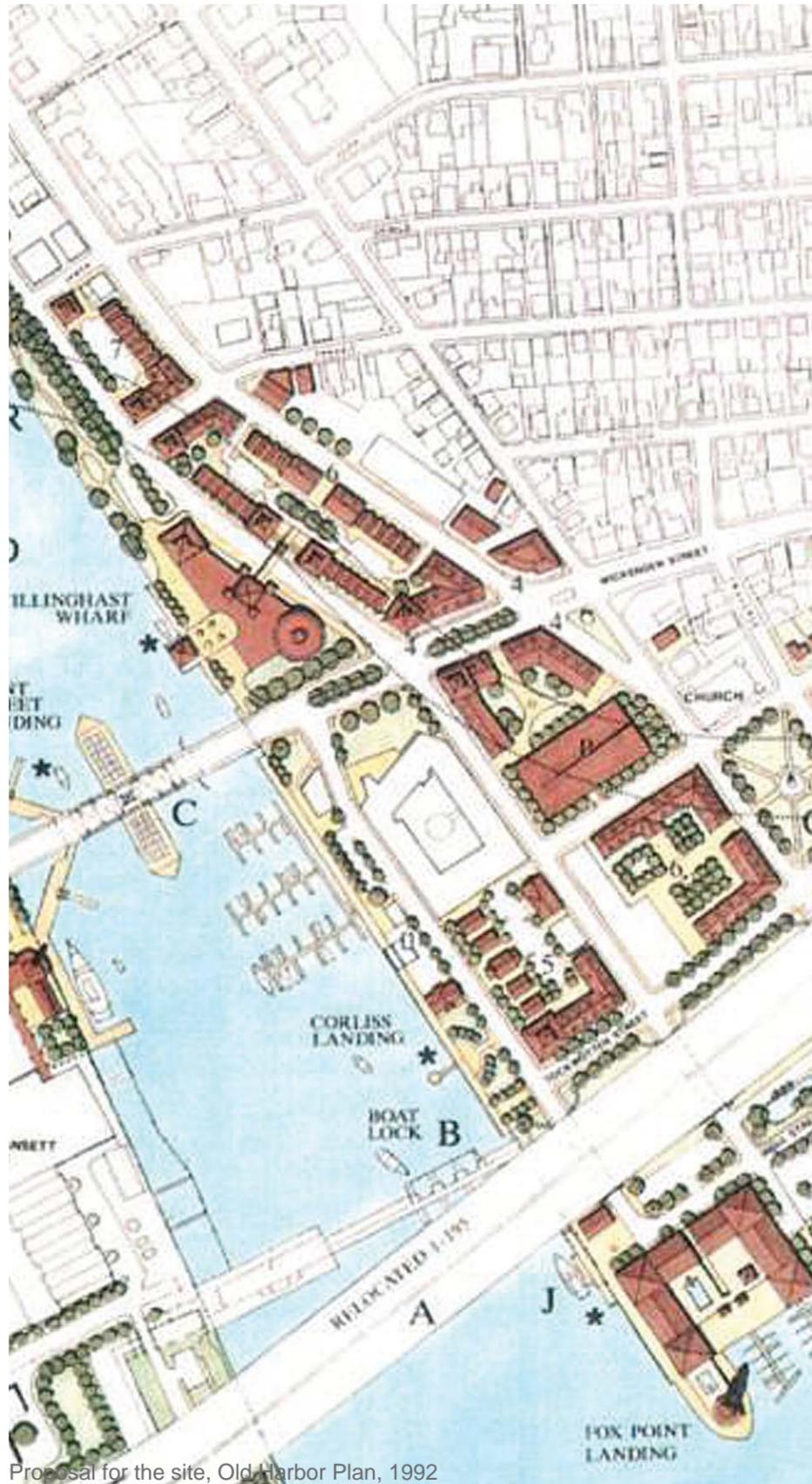
Parcel 6 is located between South Main, Pike, Wickenden, and the extension of Benefit Street.

- **Topography:** The parcel slopes down to the west an average of 10 feet.
- **Historic relevance:** Given that the parcel is in the College Hill National Historical District, its development will be subject to design review by the appropriate commission.
- **Zoning:** [W2/C2] Its current allowable height is 75 feet / 45 feet [the line of separation crosses the parcel].
- **Adjacent Uses / Abutters:** DOT owns the entire parcel.



COLOR KEY	
PROPERTY	
	Brown University
	Johnson and Wales
	Hospital
	Museum
	Existing Buildings
UTILITIES	
	Electronic Ducts
	Water Lines
	Gas Mains
	Drainage
	Telephone
	Abandoned Utilities





Proposal for the site, Old Harbor Plan, 1992

Parcel 6

Existing Conditions and Post-Highway Demolition Description

Parcel 6 is 1.35 acre parcel (58,704 sf) that is scheduled to be available for disposition in the fall of 2010. Adjacent to Parcel 8 directly to the south, Parcel 6 is bound to the east by the new continuation of the alignment of South Main Street across Wickenden (called Benefit Street) that is being constructed as part of the I-Way contract, to the north by the Wickenden Street along the section currently beneath the elevated highway, and to the south by the new Pike Street. The western boundary of the parcel is South Main Street, directly across from the Corliss Landing development.

Half of the frontage defining Parcel 6 will be newly constructed streets (Benefit and Pike Streets). It has contiguous single ownership and will be surrounded on all four sides by public streets. Site access will be available through South Water Street. Pike Street will be extended along the southeastern property line providing additional access. South Main Street will provide limited access due to its proposed connection to I-195 exit ramp and is restricted to westbound, one-way traffic. The parcel also abuts Wickenden Street (Bridge Street), but access will likely not be permitted given the complexity the traffic volumes and adjacency to intersections. In this sense, this study recommends the readjustment of this intersection with narrower sidewalks and a more urban character.

Parcel 6 is located in a national historic district under the jurisdiction of the Rhode Island Historical Preservation and Heritage Commission (RIHPHC).

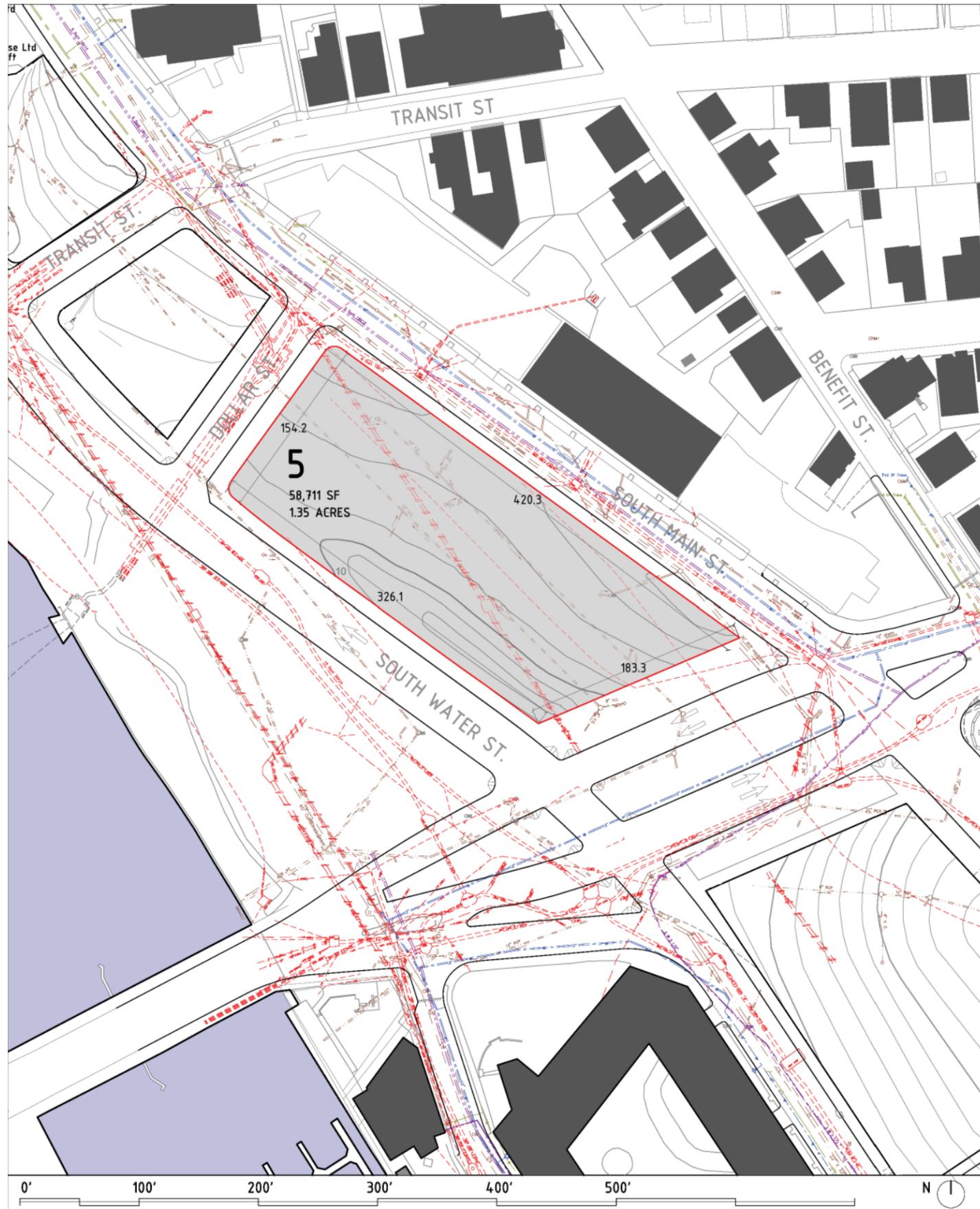
The parcel will be created only following the demolition of the highway alignment, the sloped fill of the embankments and the on and off-ramps. The Interim Condition Plans indicate that all abandoned aboveground infrastructure associated with the relocation of I-195 will be removed from Parcel 6. The proposed site grading will result in slopes from east to west ranging from one to ten percent (approximately 14 feet of grade change).

Parcel 6 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

The Utility Plans indicate that natural gas (10-inch), water (6-inch), telecommunications, and electric utilities are available in South Water Street and water (12-inch), telecommunications, and electric utilities are available in Bridge Street adjacent to the site. A 22-inch by 36-inch combined sewer is located within the adjacent sections of Bridge Street and the South Water Street. An abandoned electrical duct bank is located in the western portion of the site.

Image of the contiguous Corliss Landing Development





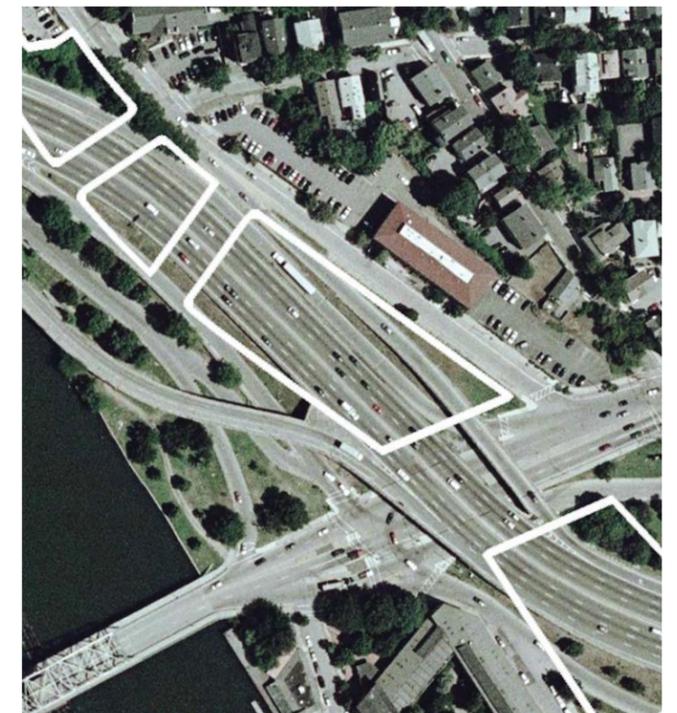
Parcel 5 is located between S Main and S Water Streets in its longer frontage, and Dollar and Wickenden Streets in the shorter ones.

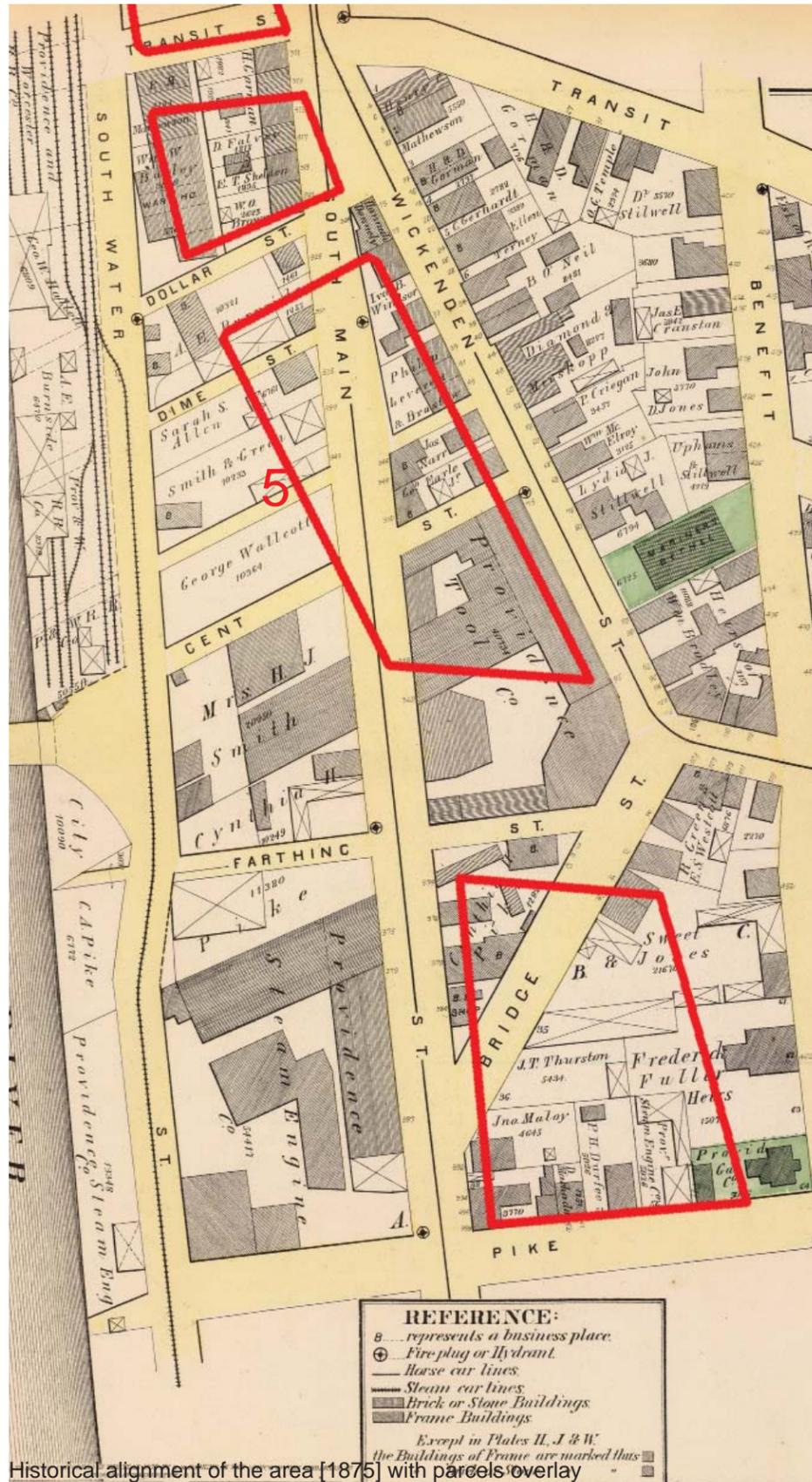
- **Topography:** The parcel has a 5 feet average slope down to the river.
- **Historic Relevance:** Given that the parcel is located in the College Hill National Historical District, its development will be subject to design review by the appropriate commission.
- **Zoning:** [C2] Its current allowable height is 45 feet.
- **Adjacent Uses / Abutters:** The parcel has no adjacent properties.



COLOR KEY

PROPERTY	UTILITIES
Brown University	Electronic Ducts
Johnson and Wales	Water Lines
Hospital	Gas Mains
Museum	Drainage
Existing Buildings	Telephone
	Abandoned Utilities





Parcel 5

Existing Conditions and Post-Highway Demolition Description

Parcel 5 is 1.35 acre parcel (58,711 sf) that is scheduled to be available for disposition in mid 2011. The parcel is defined on its southern edge by Wickenden Street along the section currently beneath the elevated highway, directly across the street from Parcel 6. The land is bound to the east by the extension of South Main Street (currently called Wickenden although a continuation of the alignment of South Main) and what will be a new continuation of the alignment of South Water Street to the west, parallel to the riverfront. The north edge of the site is the proposed Dollar Street running between South Main and South Water. Half of the frontage defining Parcel 6 will be newly constructed streets (Dollar and South Water). The land has contiguous single ownership and will be surrounded on all four sides by public streets with access available from all sides, although not likely on the Wickenden Street frontage given the complexity the traffic volumes and adjacency to intersections.

Parcel 5 is located in a national historic district under the jurisdiction of the Rhode Island Historical Preservation and Heritage Commission (RIHPHC).

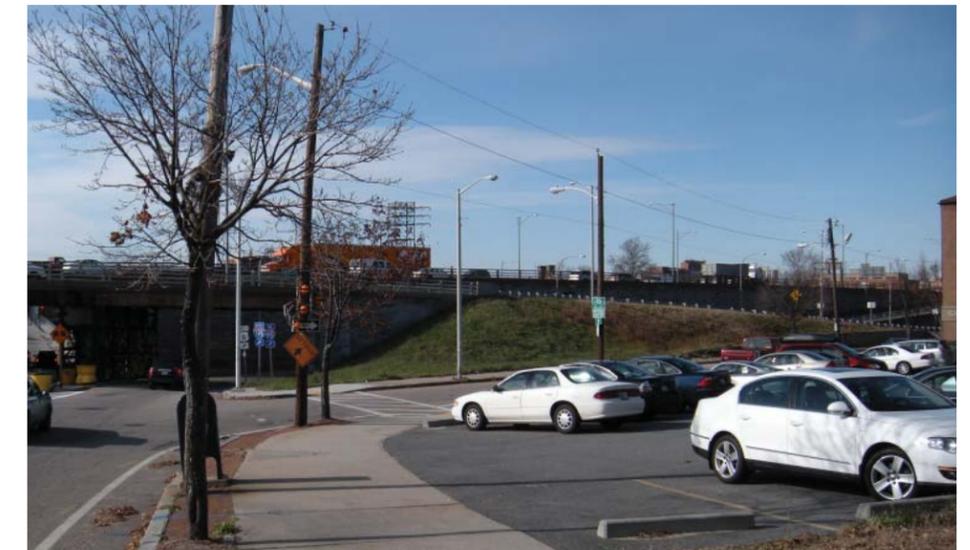
The parcel will be created only following the demolition of the highway alignment, the sloped fill of the embankments and the on and off-ramps. The Interim Condition Plans indicate that all abandoned above ground infrastructure associated with the relocation of Interstate 195 will be removed from Parcel 5. The proposed site grading will result in slopes ranging from 2 to 10 percent (approximately six feet of grade change between the South Main Street and South Water Street boundaries).

Parcel 5 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

The Utility Plans indicate that natural gas (6-inch), water (16-inch), telecommunications, and electric utilities are available in South Main Street. Utilities are also available in Bridge Street (12-inch water, telecommunications, and electric), but they are located on the op-

posite side of the street; therefore utility connections to South Main Street will be the most practical point of connection. A 30-inch combined sewer is located within the adjacent section of South Main Street and a 22-inch by 36-inch combined sewer is located within the adjacent section of Bridge Street. An abandoned electrical duct bank and manhole bisects the site.

Image of Parcel 5 facing the river



Parcel 3 is located between South Main and South Water Streets in its longer frontage, and Dollar and Transit Streets in the shorter ones.

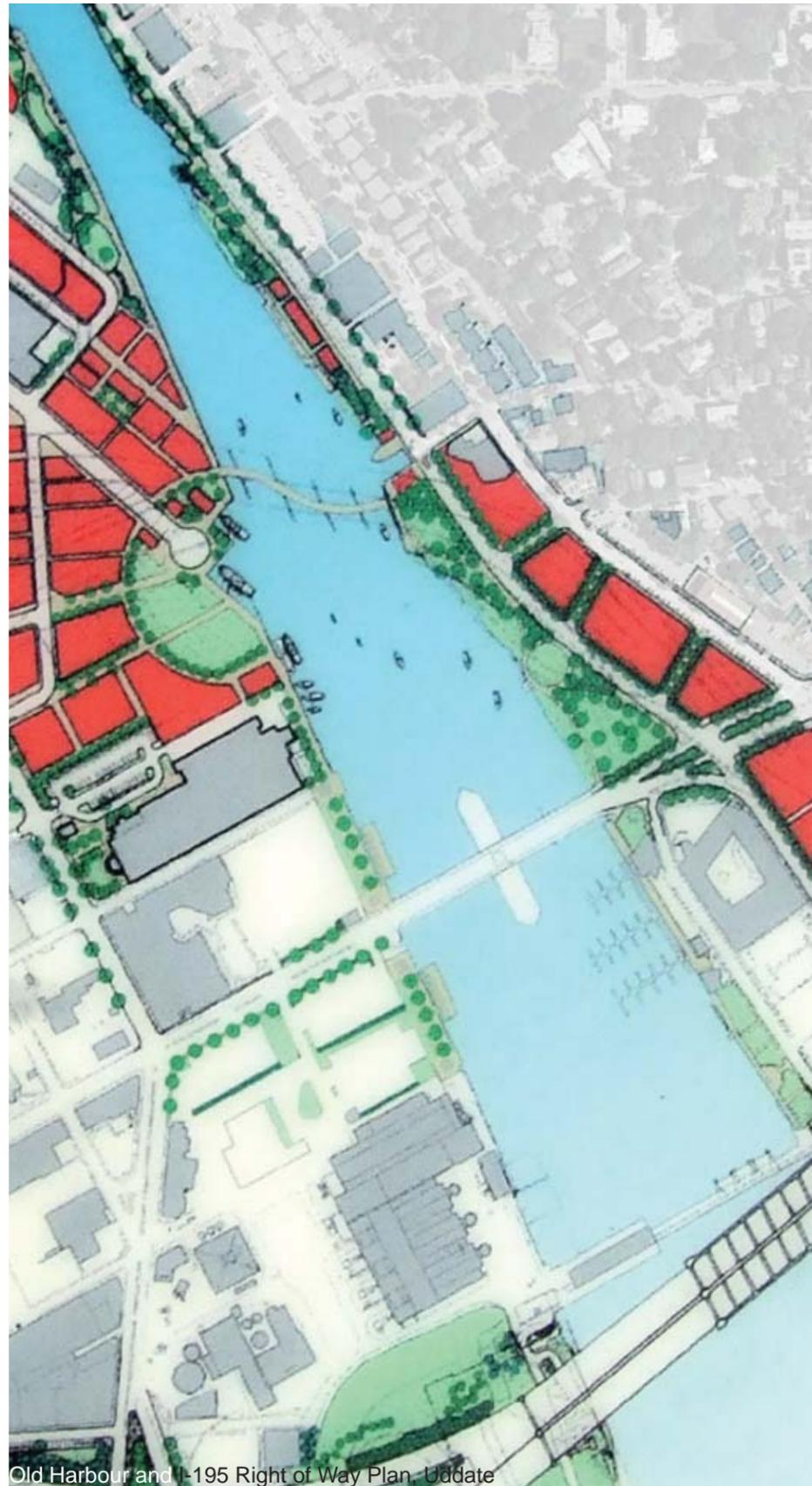
- **Topography:** The parcel has a 3 feet average slope down to the river.
- **Historic Relevance:** Given that the parcel is located in the College Hill National Historical District, its development will be subject to design review by the appropriate commission.
- **Utilities:** The number of utilities running along Dollar Street challenge any possible realignment to increase the size of Parcel 3.
- **Zoning:** [C2] Its current allowable height is 45 feet.
- **Adjacent Uses / Abutters:** The parcel has no adjacent properties.
- **Possible Adjacent Property Assemblies:** The recovery of the historic alignment of Dollar Street and the extension of Transit Street define the small size of Parcel 3. The number of utilities running along Dollar Street challenge any possible zoning realignment of Parcels 3 and 5 to homogenize their size.



COLOR KEY

PROPERTY	UTILITIES
Brown University	Electronic Ducts
Johnson and Wales	Water Lines
Hospital	Gas Mains
Museum	Drainage
Existing Buildings	Telephone
	Abandoned Utilities





Old Harbour and I-195 Right of Way Plan, Update



Old Harbour and I-195 Right of Way Plan, 1992

Parcel 3

Existing Conditions and Post-Highway Demolition Description

Parcel 3 is .37 acre parcel (16,271 sf) that is scheduled to be available for disposition in the mid 2011.

The parcel is defined by the proposed Transit and Dollar Street alignments running toward the river and the extended South Main Street and what will be a new continuation of the alignment of South Water Street to the west, parallel to the riverfront. All of the frontage defining Parcel 3 will be newly constructed streets with the exception of South Main.

The parcel has contiguous single ownership and will be surrounded on all four sides by public streets with opportunities for access from each side. Parcel 3 is the smallest developable parcel in the East Side and is a product of the reintroduction of the historic street grid that results in a block size that is smaller than even the traditional fabric of Fox Point and College Hill.

Parcel 3 is located in a national historic district under the jurisdiction of the Rhode Island Historical Preservation and Heritage Commission (RIHPHC).

The parcel will be created only following the demolition of the highway alignment, the sloped fill of the embankments and the on and off-ramps. The Interim Condition Plans indicate that all abandoned above ground infrastructure associated with the relocation of Interstate 195 will be removed from Parcel 3. The proposed site grading will result in slopes ranging from 1 to 4 percent (approximately four feet of grade change between the South Main Street and South Water Street boundaries).

Parcel 3 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

The Utility Plans indicate that natural gas (6-inch), water (16-inch), telecommunications, and electric utilities are available in South Main Street adjacent to the site. A 30-inch combined sewer is also located within the adjacent section of South Main Street.

Parcel 2 is located between South Main and South Water Streets in its longer frontage, and Dollar and Transit Streets in the shorter ones.

- **Topography:** The parcel slopes down to the river roughly 6 feet.
- **Historic Relevance:** Given that the parcel is located in the College Hill National Historical District, its development will be subject to design review by the appropriate commission.
- **Utilities:** The number of utilities running along Dollar Street challenge any possible realignment to increase the size of Parcel 3.
- **Zoning:** [C2] Its current allowable height is 45 feet.
- **Adjacent Uses / Abutters:** The contiguous parcels in the block are owned by the State of Rhode Island and the Dolphin House Ltd., and are being used as parking lots. The only existing structure, at 10 James Street, is the Tillinghast, Captain Joseph House [1770 ca], a building from the pre-revolutionary period included in the National Register of Historic Places. This building [A] has been recently incorporated to the Providence Preservation Society's Most Endangered Properties.



COLOR KEY	
PROPERTY	UTILITIES
 Brown University	 Electronic Ducts
 Johnson and Wales	 Water Lines
 Hospital	 Gas Mains
 Museum	 Drainage
 Existing Buildings	 Telephone
	 Abandoned Utilities





Captain Joseph Tillinghast House, 1770 [Flicker, by Marcfoto]

Captain Joseph Tillinghast House, 1770



Rhode Island Interstate 195 Surplus Land: Redevelopment and Marketing Analysis

Parcel 2

Existing Conditions and Post-Highway Demolition Description

Parcel 2 is .51 acre parcel (2,211 sf) that is scheduled to be available for disposition in the mid 2011.

The parcel is defined by the proposed Transit Street alignment running toward the river and the extended South Main Street and what will be a new continuation of the alignment of South Water Street to the west, parallel to the riverfront. The northern edge of the site is bound by an regular property line that consists of 4 separate parcels that extend along South Main Street and across James Street to South Water. While 3 of the parcels are vacant, the one on the corner of South Main and James is occupied by the historic the Captain Joseph Tillinghast House (ca. 1770), one of the only remaining buildings in the vicinity from the pre-Revolutionary period, and included in the National Register of Historic Places. The other contiguous parcels are used as surface parking and are owned by the Dolphin House Ltd. The triangular parcel on the corner of James and South Water Street is owned by the State of Rhode Island. All of the frontage defining Parcel 2 will be newly constructed streets with the exception of South Main. Site access will be available from all 3 streets.

Parcel 2 is located in the National College Hill Historic District under the jurisdiction of the Rhode Island Historical Preservation and Heritage Commission (RIHPHC).

The parcel will be created only following the demolition of the highway alignment, the sloped fill of the embankments and the on and off-ramps.

The Interim Condition Plans indicate that all abandoned above ground infrastructure associated with the relocation of Interstate 195 will be removed from Parcel 2.

A retaining wall is located in the northern corner, along abutting parcel Plat 16 Lot 44. If the wall remains, development adjacent to the wall may require reconstruction due to the unknown structural condi-

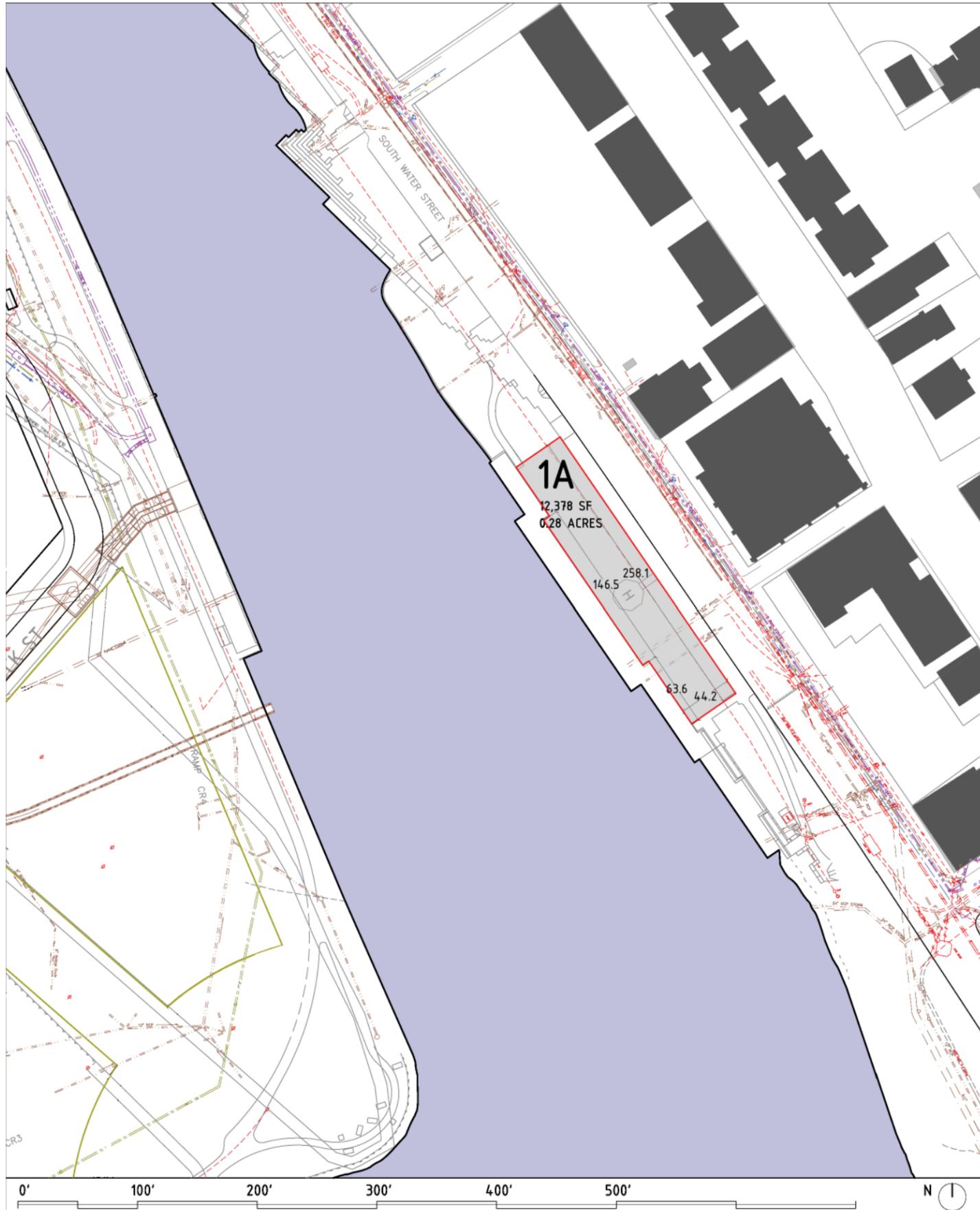
tion of the wall. The presence of the wall may prevent the physical connection of the Parcel 2 with the Lot 44. The proposed site grading will result in slopes ranging from 6 to 8 percent (approximately nine feet of grade change between the South Main Street and South Water Street boundaries).

Parcel 2 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

The Utility Plans indicate that natural gas (12-inch), water (16-inch), telecommunications, and electric utilities are available in South Main Street adjacent to the site. A 33-inch x 22-inch combined sewer is located within the adjacent section of South Main Street. A 24-inch storm sewer is located northwest of the site, within James Street. The plans do not include sufficient information to determine if the storm sewer remains separate or ultimately discharges to the combined sewer.

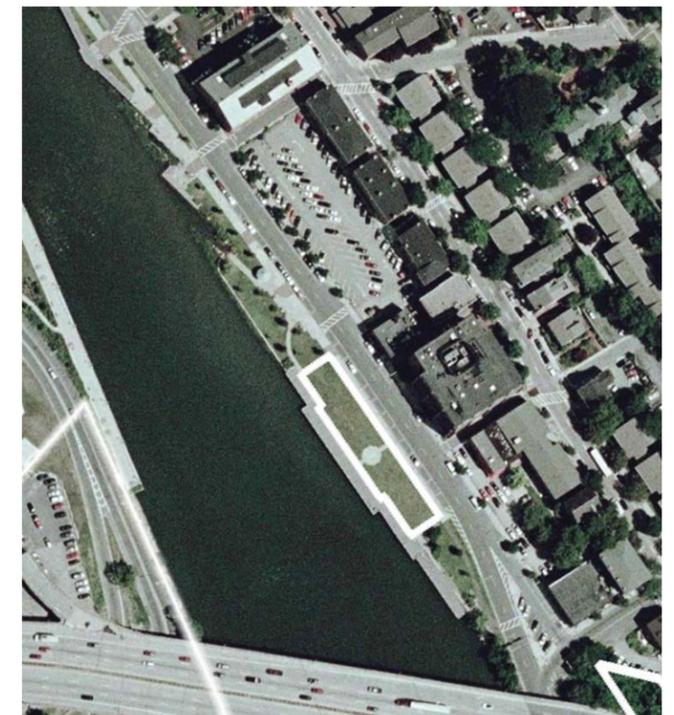
Parcel 1A is located between South Water Street and the Providence River. The parcel is used as an heliport and occasionally for cultural venues hosted by RISD.

- **Topography:** The parcel is flat.
- **Zoning:** Its current allowable height is 45 feet.
- **Adjacent Uses / Abutters:** The parcel sits in the stretch of the park along the east side of the river.



COLOR KEY

PROPERTY	UTILITIES
Brown University	Electronic Ducts
Johnson and Wales	Water Lines
Hospital	Gas Mains
Museum	Drainage
Existing Buildings	Telephone
	Abandoned Utilities





Old Harbour and I-195 Right-of-Way Plan, 1992

Parcel 1A

Existing Conditions and Post-Highway Demolition Description

Parcel 1A is .28 acre parcel (12,378 sf) that is scheduled to be available for disposition in 2009.

The parcel sits directly on the east bank of the Providence River with frontage along South Water Street to its east. A publicly accessible riverfront park extends on either end of the narrow site which was previously used as a helipad.

The Interim Condition Plans do not indicate demolition, topographical, or grading work to be performed on Parcel 1A. Based on visual observation, Parcel 1A is primarily covered with grass and improvements include walkways and a helipad. The elevation of the parcel is approximately 3 feet. The site is clear of structures and is relatively level. Site access is and will remain to be provided from South Water Street.

Parcel 1A may be located within Flood Zone AE, a special flood hazard area inundated by the 100-year flood with a base flood elevation of 5. Accurate topographical information is required to determine if the parcel is within the floodplain.

The western portion of Parcel 1A abuts the Providence River and the parcel is within the 200-foot CRMC jurisdictional area. Regulated activities, provided in Appendix A, require Assent approval from CRMC, which classifies the adjacent section of the Providence River as a Type 5 water. Under the CRMP, Parcel 1A will be subject to a 25-foot buffer plus a 25-foot construction setback. Under the UCG, Parcel 1A will be subject to a 25-foot construction setback plus:

- A 20-foot urban coastal greenway if public access to the Providence River is provided;
- A 50-foot urban coastal greenway if public access to the river is not provided; and
- A 20-foot urban coastal greenway if public access to the river is not provided and the applicant provides compensation. Compensation may include a fee determined by CRMC, the creation of non-stormwater wetlands, the restoration of wetlands, oppor-

tunities for public recreational use, the increase in public access amenities, or the purchase of land to establish UCG connections within the Metro Bay SAMP.

The Utility Plans indicate that natural gas (4-inch), water (8-inch), telecommunications, and electric utilities are available in South Water Street adjacent to the site. A 60-inch combined sewer crosses South Water Street adjacent to the Parcel 1A, and a 24-inch storm sewer is located southeast of the site, at the intersection of James Street and South Water Street. The plans do not include sufficient information to determine if the storm sewer remains separate or ultimately discharges to the combined sewer.

RISD Commencement in adjacent parcel, June 2008 [Flicker]





I-195 ROW PARCELS

- PARCELS FOR DEVELOPMENT
- PARCELS FOR OPEN SPACE

HISTORIC DISTRICTS

- ICBD [Industrial and Commercial Buildings District]
- LOCAL HISTORIC DISTRICTS [Jewelry]

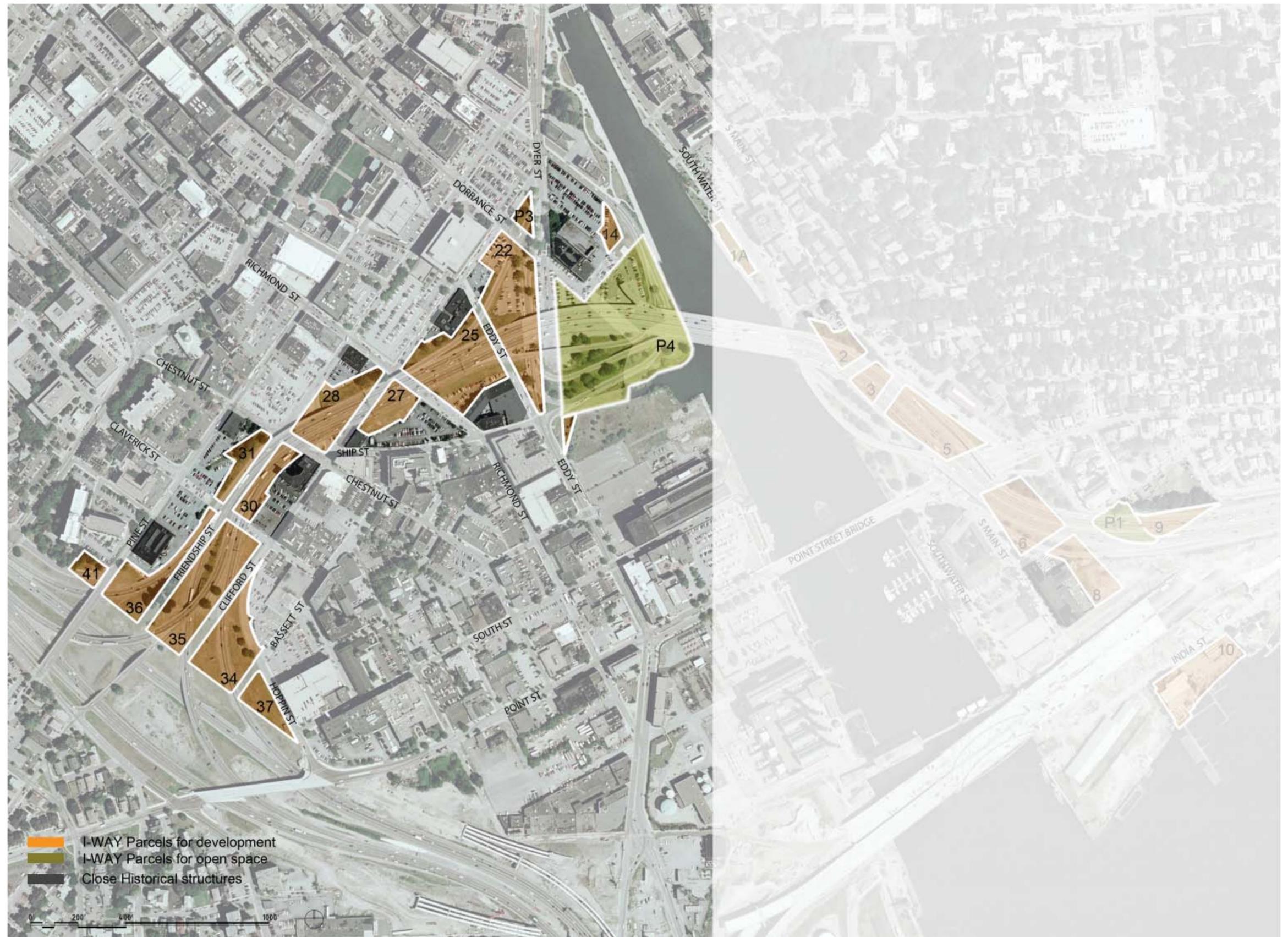
DOWNCITY DISTRICT

- NATIONAL REGISTER HISTORIC DISTRICTS [Jewelry District, Downtown]

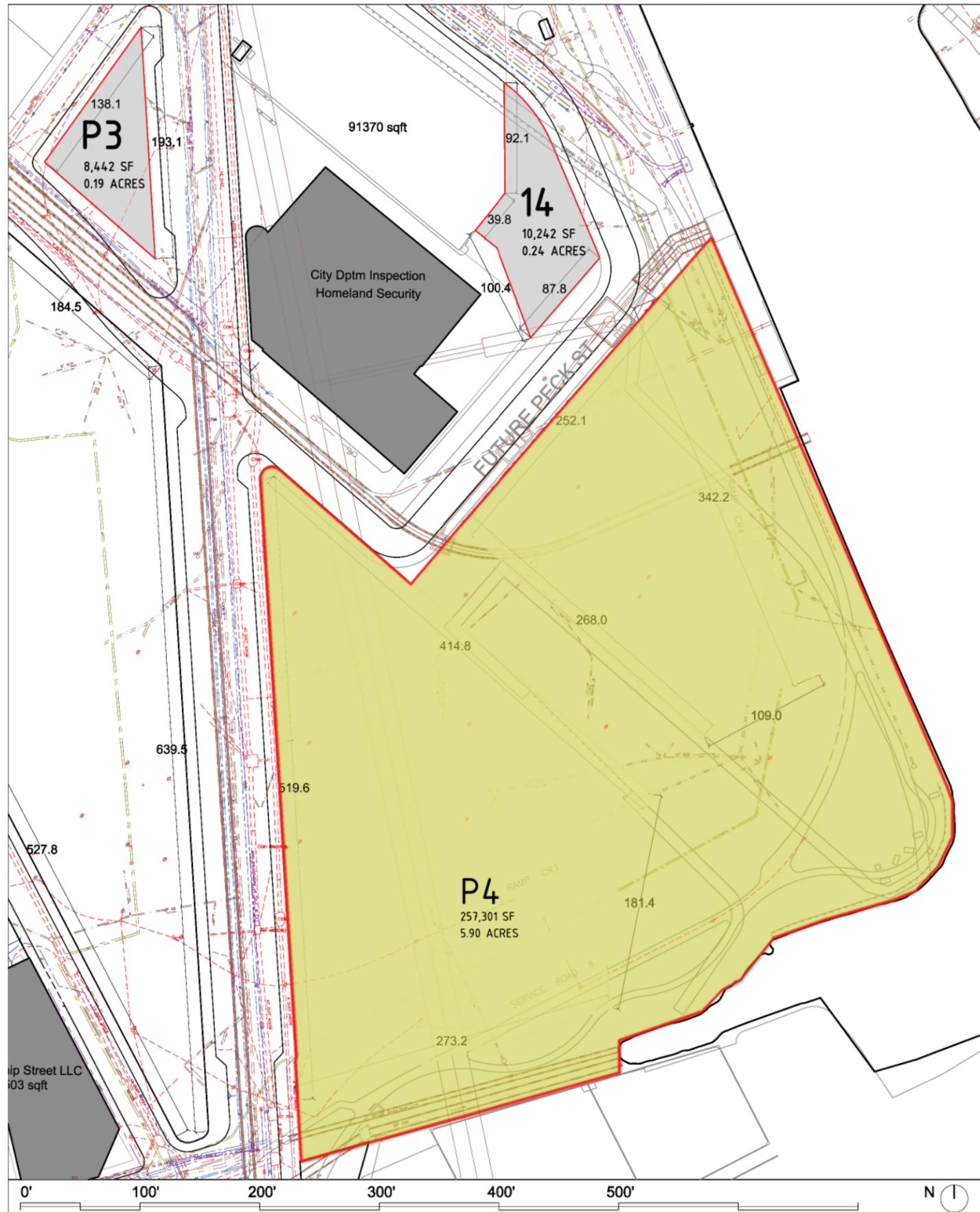
West Side Parcels: Jewelry District

Development area: 14.32 acres

Parks area: 5.90 acres



Parcels 14, P3



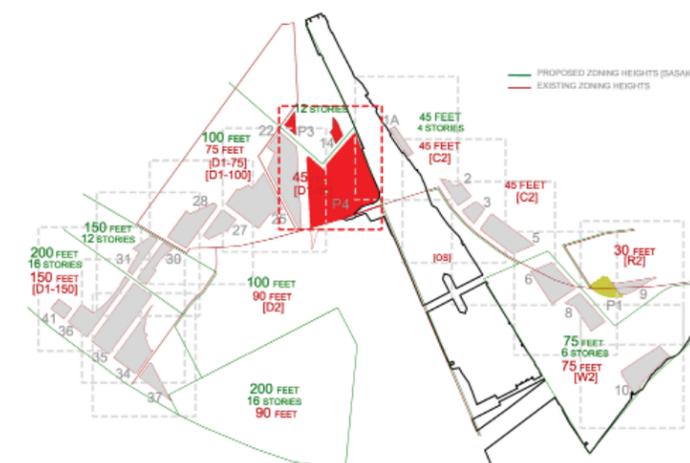
Parcel P3 is located between Dyer, Clifford, and Dorrance Street, and has been targeted as a public space.

- **Topography:** The parcel is flat.
- **Historic Relevance:** The parcel is located in the Downcity District and its development will be subject to design review by the Downcity Design Review Committee.
- **Zoning:** [D1] Its current allowable height is 45 feet, but the proposed Providence 2020 plan sets up 12 stories.
- **Adjacent uses / Abutters:** The parcel has no contiguous properties.

Parcel 14 is surrounded by the Future Peck Street on two sides, and is part of a swap with the contiguous parcel to construct the proposed alignment.

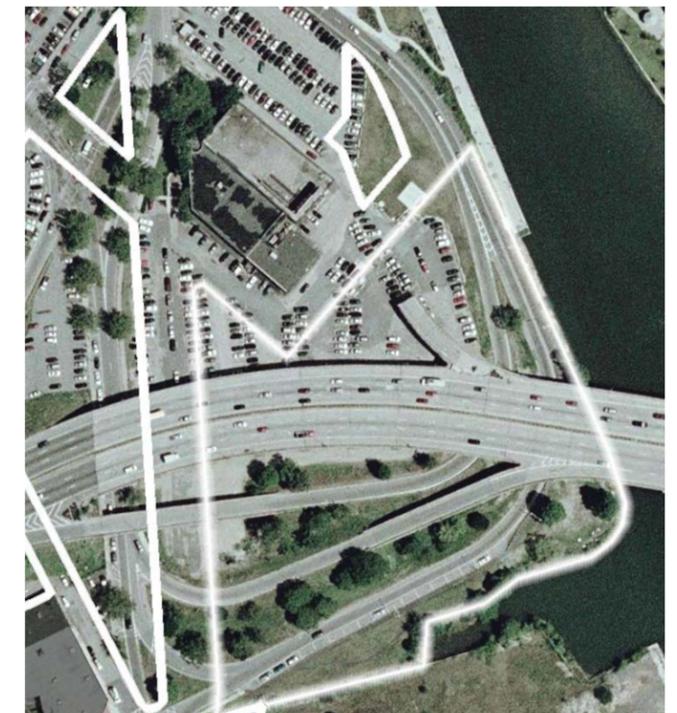
- **Topography:** The parcel is flat.
- **Historic Relevance:** The parcel is located in the Downcity District.
- **Zoning:** [D1] Its current allowable height is 45 feet, but the proposed Providence 2020 plan sets up 12 stories.
- **Adjacent Uses / Abutters:** The parcel is contiguous to a municipal and federal facility to the southwest.

Park design as presented in the City Charrette [Sept 08]



COLOR KEY

PROPERTY	UTILITIES
Brown University	Electronic Ducts
Johnson and Wales	Water Lines
Hospital	Gas Mains
Museum	Drainage
Existing Buildings	Telephone
	Abandoned Utilities



Parcel 14

Existing Conditions and Post-Highway Demolition Description

Parcel 14 is a .24 acre parcel (10,242 sf) that is scheduled to be available for disposition in 2009.

The small, irregular shaped site will be defined by the corner of a future Peck Street which will continue south from Duncity and turn to the west connecting to Dorrance Street. The parcel will site directly across from the proposed park on Parcel P4. Access to the eastern portion of the site will be provided from Peck Street. Parcel 14 directly abuts a 91,370 sf development parcel owned by National Grid. The parcel has been discussed as being part of a land swap on exchange for privately owned land required to construct the proposed alignment of Dyer Street.

The Interim Condition Plans do not indicate demolition, topographical, or grading work to be performed on Parcel 14. Based on visual inspection, we have assumed that the land will be relatively level prior to the disposition of the property. The United States Geological Survey indicates that the existing elevation of the parcel is approximately three feet.

Parcel 14 may be located within Flood Zone AE, a special flood hazard area inundated by the 100-year flood with a base flood elevation of five. Accurate topographical information is required to determine if the parcel is within the floodplain.

The Utility Plans indicate that existing natural gas (8-inch), water (8-inch), electric, and telecommunications utilities are located within Peck Street to the east of the site. A storm sewer located in Peck Street discharges directly to the Providence River. An 18-inch storm sewer parallel to the Providence River, adjacent to the parcel, has multiple discharges to the Providence River.

NBC owns and maintains a sewer interceptor, a chamber with a two-barrel discharge to the River, a deaeration chamber, a gate and screening structure, and above ground controls and generator south of the parcel. We assume it is unlikely that RIDOT will install utilities

in the extended portion of Peck Street based on the extensive NBC utilities in the area and the limited development potential of adjacent Parcels P4, which is planned for public park, open space, or recreational uses. In addition, extension of utilities, including sanitary sewer, from the south section of Peck Street may be impossible due to the location and extent of NBC infrastructure. Sanitary sewer could be extended from Dyer Street to the site through the north section of Peck Street, but would require excavation adjacent to existing utilities and pavement repair.

Parcel P3

Existing Conditions and Post-Highway Demolition Description

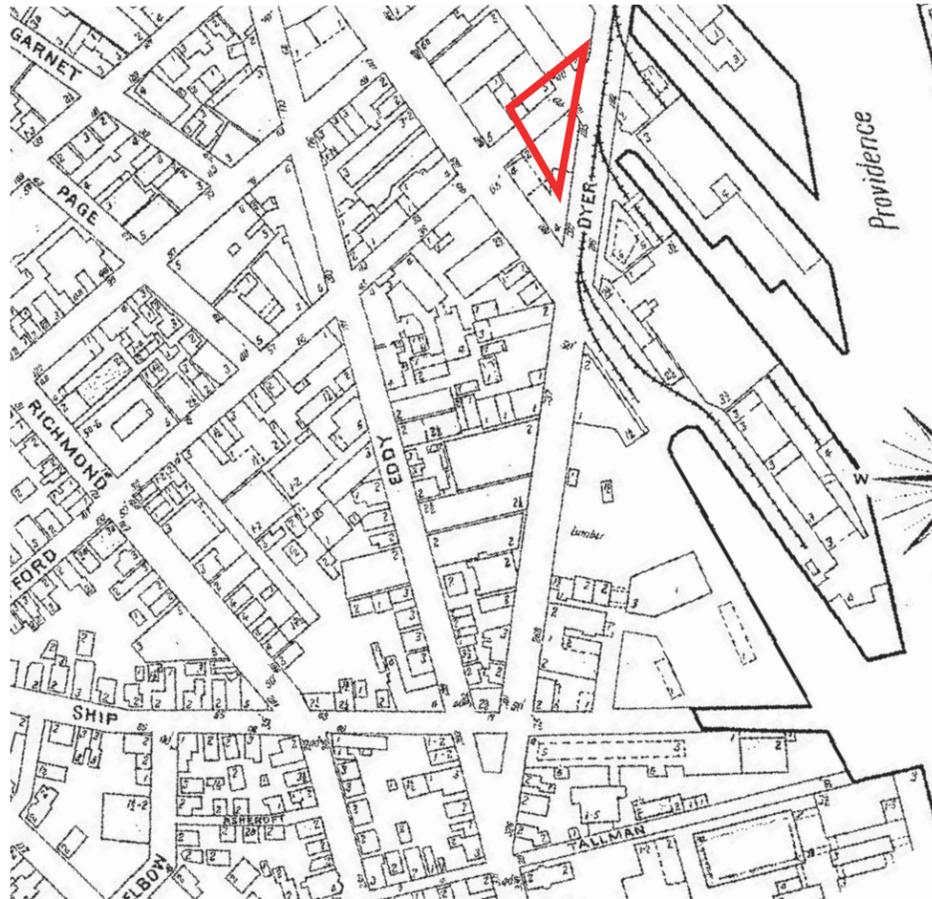
Parcel P3 is a .19 acre parcel (8,442 sf) that is scheduled to be available for disposition in 2009. The small, triangular shaped site will be defined by the intersection of Dyer, Clifford and Dorrance Streets. The parcel sites directly across from the proposed park on Parcel P4

The Interim Condition Plans indicate that Parcel P3 will be redeveloped into a public space consisting of landscape and hardscape improvements.

Parcel P3 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

The Utility Plans indicate that natural gas (6-inch), water (24-inch, 16-inch and 8-inch), telecommunications, and electric utilities are available in Memorial Boulevard. Natural gas (6-inch), water (8-inch), telecommunications, and electric utilities are available in Clifford Street. Water (16-inch, 6-inch), telecommunications, and electric utilities are available in Dorrance Street adjacent to the site.

A 66-inch combined sewer and 74-inch sewer interceptor are located in adjacent sections of Dorrance Street. An 18-inch combined sewer is located in Memorial Boulevard.



Sanborn Map [dates 1905]

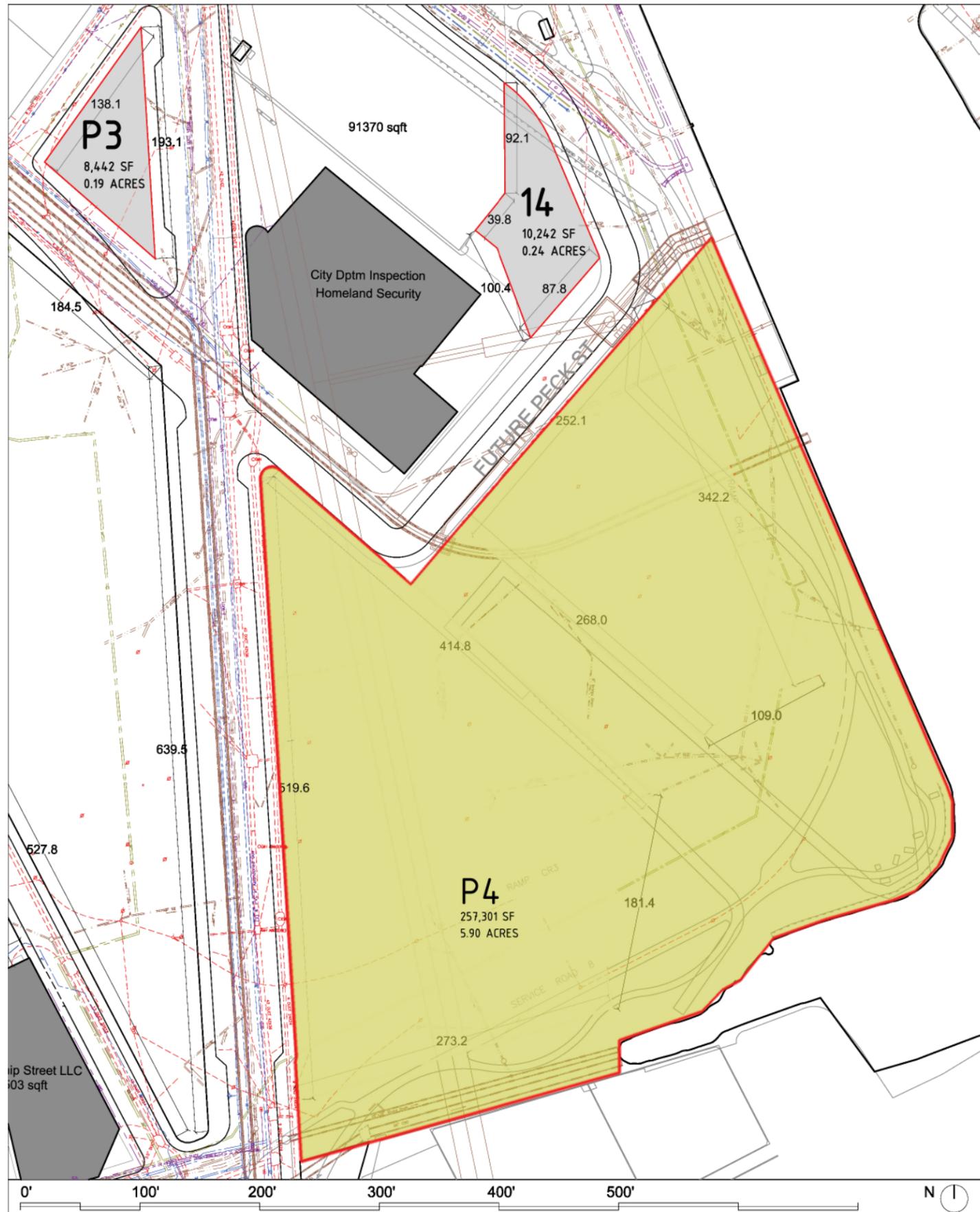
Image of Parcel 22 and P4, facing the river



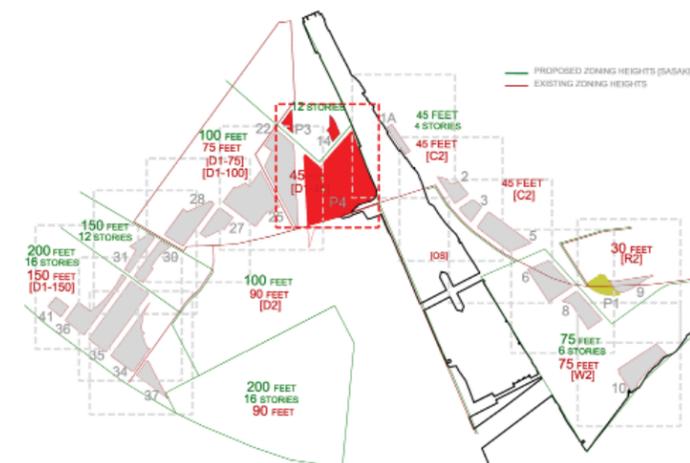
Parcel P4

Parcel P4 will be developed as an urban park on the waterfront. Its design has been commissioned to the firm Brown, Richardson and Rowe, the winners of the competition held in 2006 by the City of Providence.

- **Topography:** The parcel is flat.
- **Historic Relevance:** The parcel is located in the Downcity District and its development will be subject to design review by the Downcity Design Review Committee.
- **Zoning:** [D1-45] Its current allowable height is 45 feet, but the proposed Providence 2020 plan sets up 12 stories.

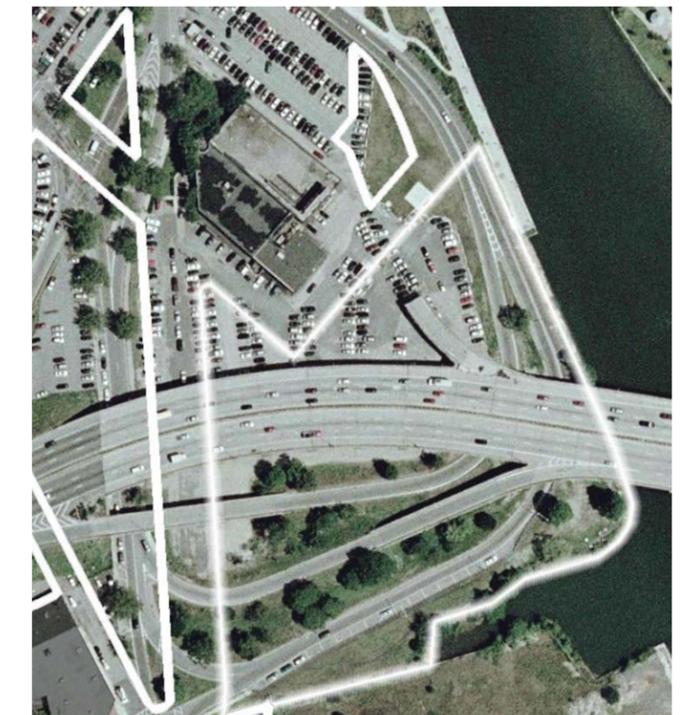


Park design as presented in the City Charrette [Sept 08]



COLOR KEY	
PROPERTY	UTILITIES
Brown University	Electronic Ducts
Johnson and Wales	Water Lines
Hospital	Gas Mains
Museum	Drainage
Existing Buildings	Telephone
	Abandoned Utilities

Rendering of the park, Providence 2020 [Sasaki]



Parcel P4

Existing Conditions and Post-Highway Demolition Description

Parcel P4 is a 5.9 acre parcel (257,301 sf) designated as open space the Old Harbor Riverfront Park.

The available plans do not provide demolition, topographical, or grading information. For the purpose of this analysis we have assumed that abandoned above ground infrastructure associated with the relocation of I-195 will be removed from Parcel P4 and the land will be relatively level prior to the disposition of the property for park construction.

The United States Geological Survey indicates that the existing elevation of the parcel ranges from approximately 3 to 6 feet. Access to the site will be provided from Memorial Boulevard and Peck Street.

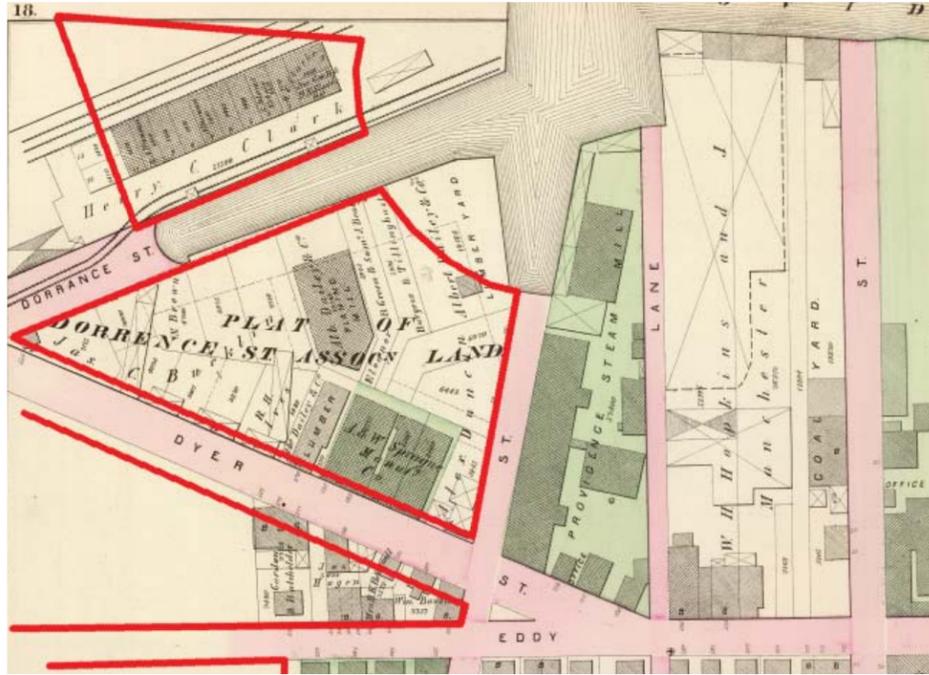
The development of Parcel P4 will require CRMC Assent for regulated work within the 200-foot jurisdictional area associated with the Providence River, which CRMC classifies as a Type 5 water. The Interim Condition Plans indicate that Service Road 8, currently separating Parcel P4 from the Providence River, will be removed and that Parcel P4 is located approximately 80 feet from the inland edge of the Providence River. Under the CRMP, Parcel P4 will be subject to a 75-foot buffer plus 25-foot construction setback. Because Parcel 16 is more than 20 feet from the inland edge of the Providence River, an urban coastal greenway is not required under UCG. All other requirements of UCG and CRMP will apply.

Parcel P4 may be located within Flood Zone AE, a special flood hazard area inundated by the 100-year flood with a base flood elevation of five feet. Accurate topographical information is required to determine if the parcel is within the floodplain.

The Utility Plans indicate that existing natural gas (16-inch) utilities are located within Service Road 8 adjacent to the site. If utility services are required for the waterfront park, water, sewer, telecommunications, and electric utilities would need to be extended from Memorial Boulevard. A 66-inch NBC sewer overflow culvert bisects

Parcel P4.

NBC owns and maintains an sewer interceptor, a chamber with a two-barrel discharge to the River, a deaeration chamber, and a gate and screening structure north of the parcel. Refer to the Parcel 14 summary regarding the availability of utilities.



Historical alignment of the area [1875] with parcels overlay [above]

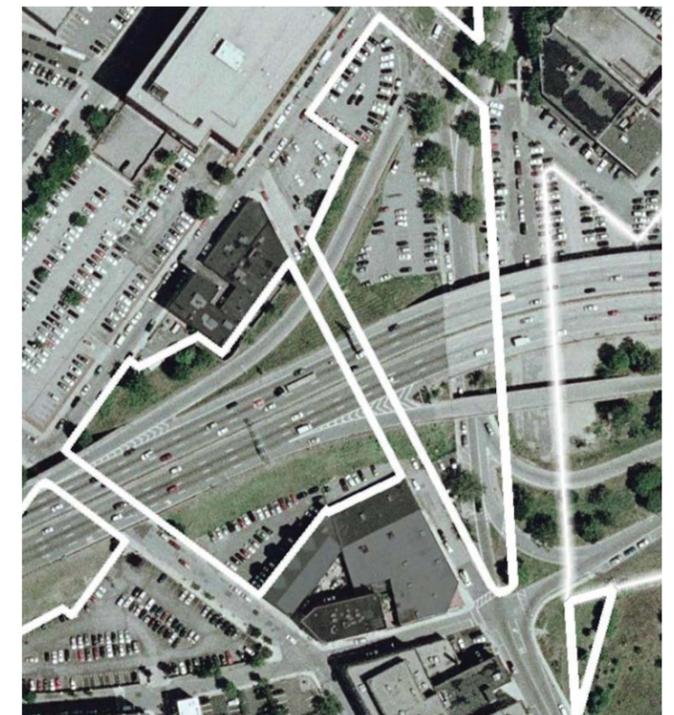
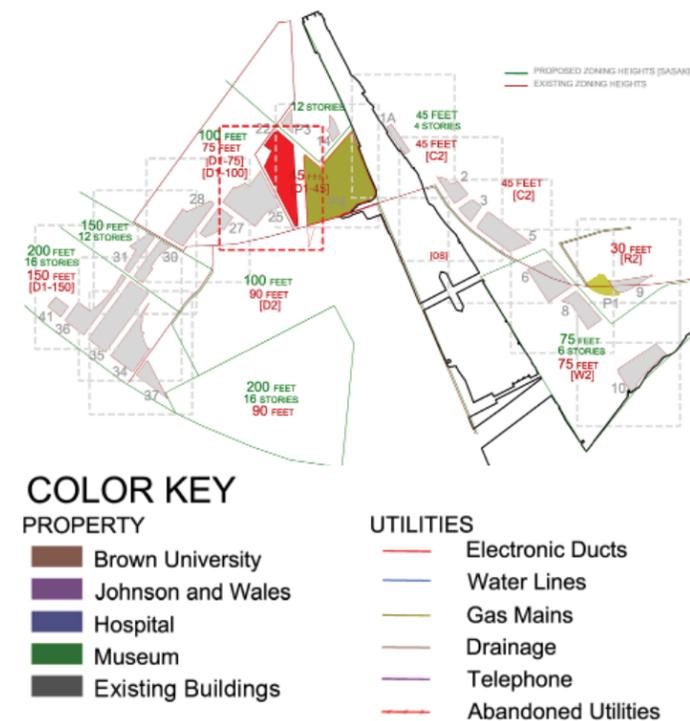
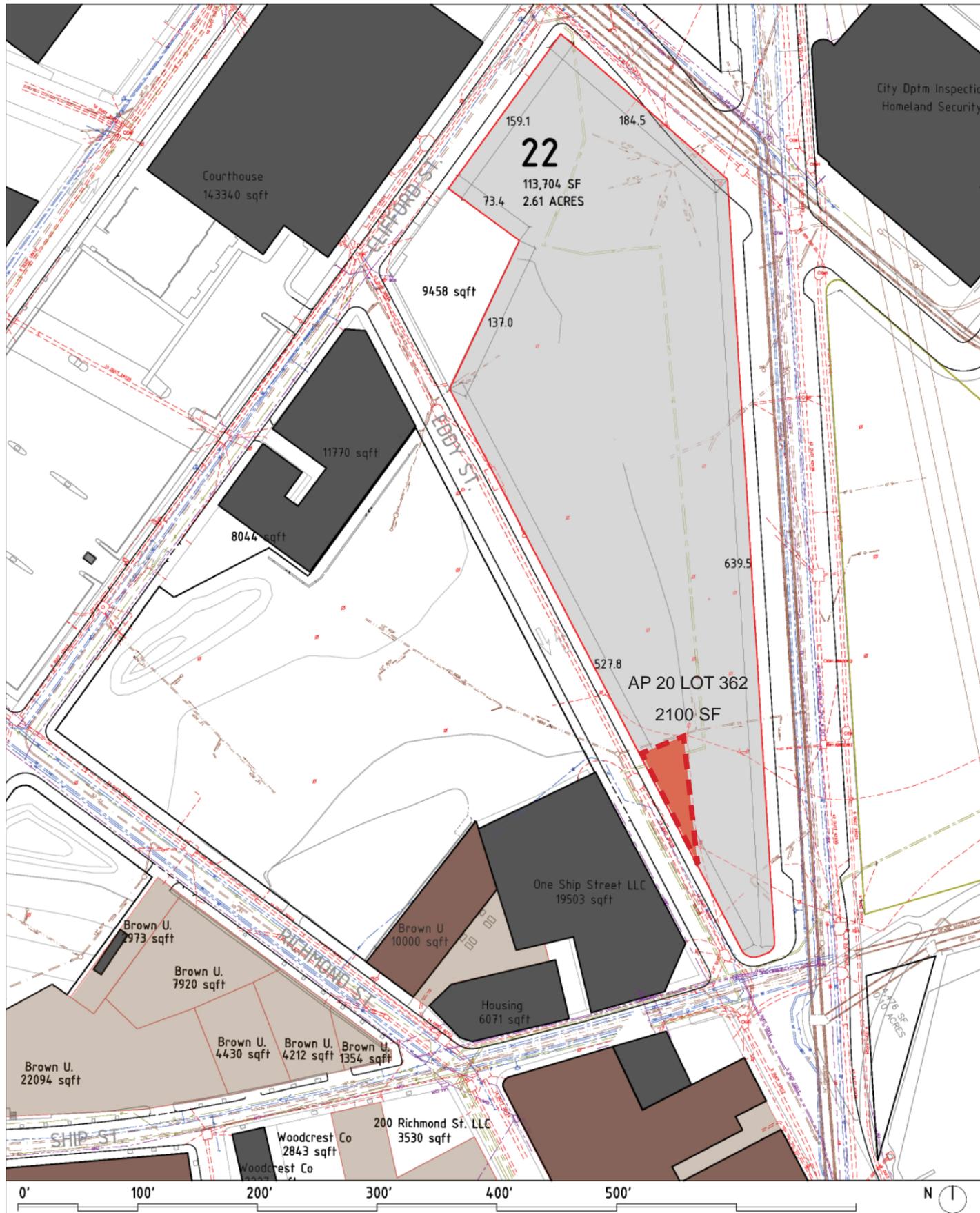


Images of the site



Parcel 22 is located between Clifford, Eddy, Dorrance and Dyer Streets, and after the I-195 relocation will face the park in Parcel P4. Its triangular geometry may be a challenge for development.

- **Topography:** The parcel is basically flat.
- **Historic Relevance:** The northern area of the parcel is located in the DOWNCITY DISTRICT, and its development will be subject to design review by the DOWNCITY DESIGN REVIEW COMMITTEE.
- **Zoning:** [D1-45] Its current allowable height is 45 feet, but the Providence 2020 Plan proposes 100 feet.
- **Adjacent Uses / Abutters:** There are two contiguous parcels, a parking lot in the Northwest corner, and the AP 20 LOT 362 located in the Southwest portion of the block.
- **Possible Adjacent Property Assemblies:** On one side, the incorporation of the contiguous parcels would help redevelopment. On the other side, the possible discontinuity of Eddy Street at Ship Street would allow the realignment with Parcel 25, and provide more regular parcels to ease the development of bigger building footprints.



Parcel 22

Existing Conditions and Post-Highway Demolition Description

Parcel 22 is 2.61 acre parcel (113,704 sf) that is scheduled to be available for disposition in the mid 2011. It is the largest surplus parcel created by the I-195 removal.

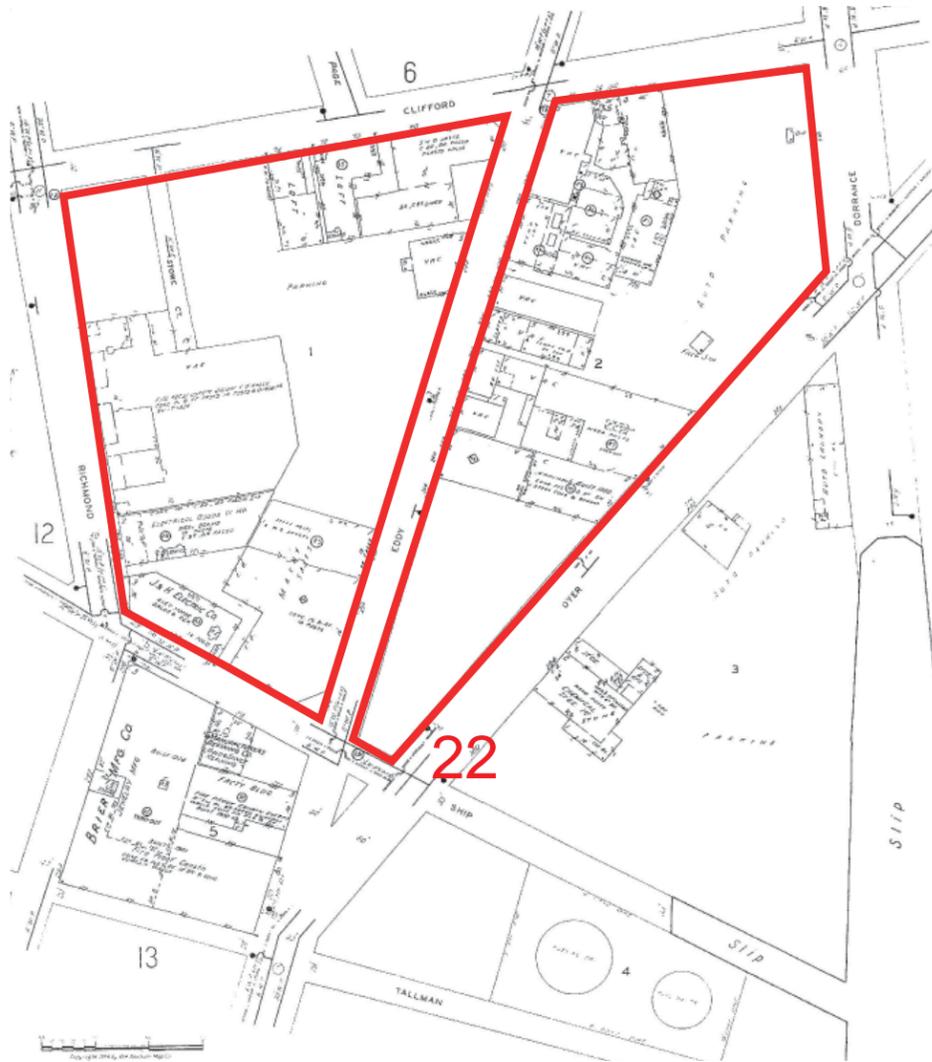
The parcel is defined on the east by reintroduction of the original alignment of Dyer Street from its current day configuration which was shifted slightly westward when the elevated highway was built. The western edge of Parcel 22 is delineated by the proposed extension of Eddy Street, which was interrupted by the I-195 corridor and currently dead ends north of Ship Street. The parcel is triangular in shape with its point at the proposed intersection of Dyer and Eddy. The north edges of the parcel are Clifford Street, directly across from the Garrahy Courthouse, and a small length of frontage on Dyer Street. All of the frontage defining Parcel 22 will be newly constructed streets with the exception of the Clifford Street frontage. The parcel is characterized by contiguous single ownership with the exception of an approximately quarter acre surface parking lot at the northwest corner of Clifford and a small triangular parcel [AP 20 LOT 362], property of One Ship St LLC. across Eddy Street in Parcel 25. The future development of Parcel 22 will require incorporating this parcel in the overall design.

Site access will be available from Clifford Street, Dyer Street and Dorrance Street. The extent of Eddy Street access is inconclusive due to grade and utility conditions (see below). Like many of the

surplus parcels, the site's geometry is largely the product of reintroducing the historic street alignment. The area of Parcel 22 north of the highway falls within the Downcity District.

The proposed parcel configuration will be created following the demolition of the highway alignment, the sloped fill of the embankments and the on and off-ramps, although close to half of the land is currently utilized as surface parking lots north of the Interstate alignment. An electrical duct bank is located west of Parcel 22 in Eddy Street. Based on the limited topographical information provided on the plans, it is possible that access to the site from Eddy Street may be limited by steep slopes or retaining walls needed provide cover over the duct bank.

The Utility Plans indicate that water (30-inch, 16-inch and 8-inch), telecommunications, and electric utilities are available in Memorial Boulevard. Water (16-inch and 6-inch), telecommunications, and electric utilities are available in Dorrance Street. A 20-inch natural gas line, connecting between Ship Street and Friendship Street, which bisects the site, will be relocated offsite according the RIDOT. A 66-inch combined sewer is located in Dorrance Street, 20-inch combined sewers are located in Memorial Boulevard and Clifford Street, a 12-inch combined sewer is located Memorial Boulevard Street, and a 74-inch sewer interceptor is located in Dorrance Street and Memorial Boulevard.



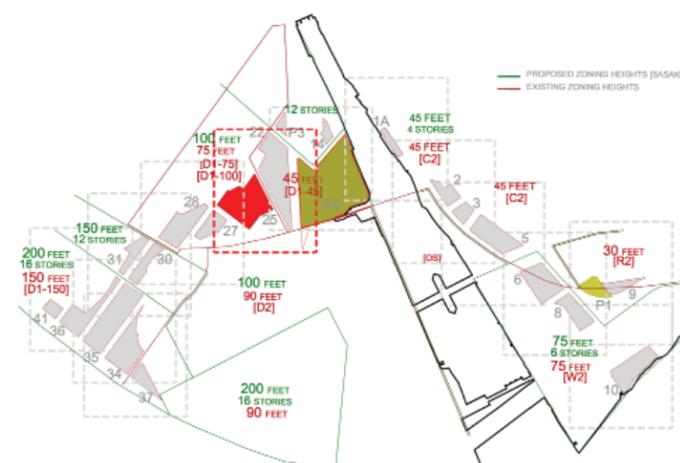
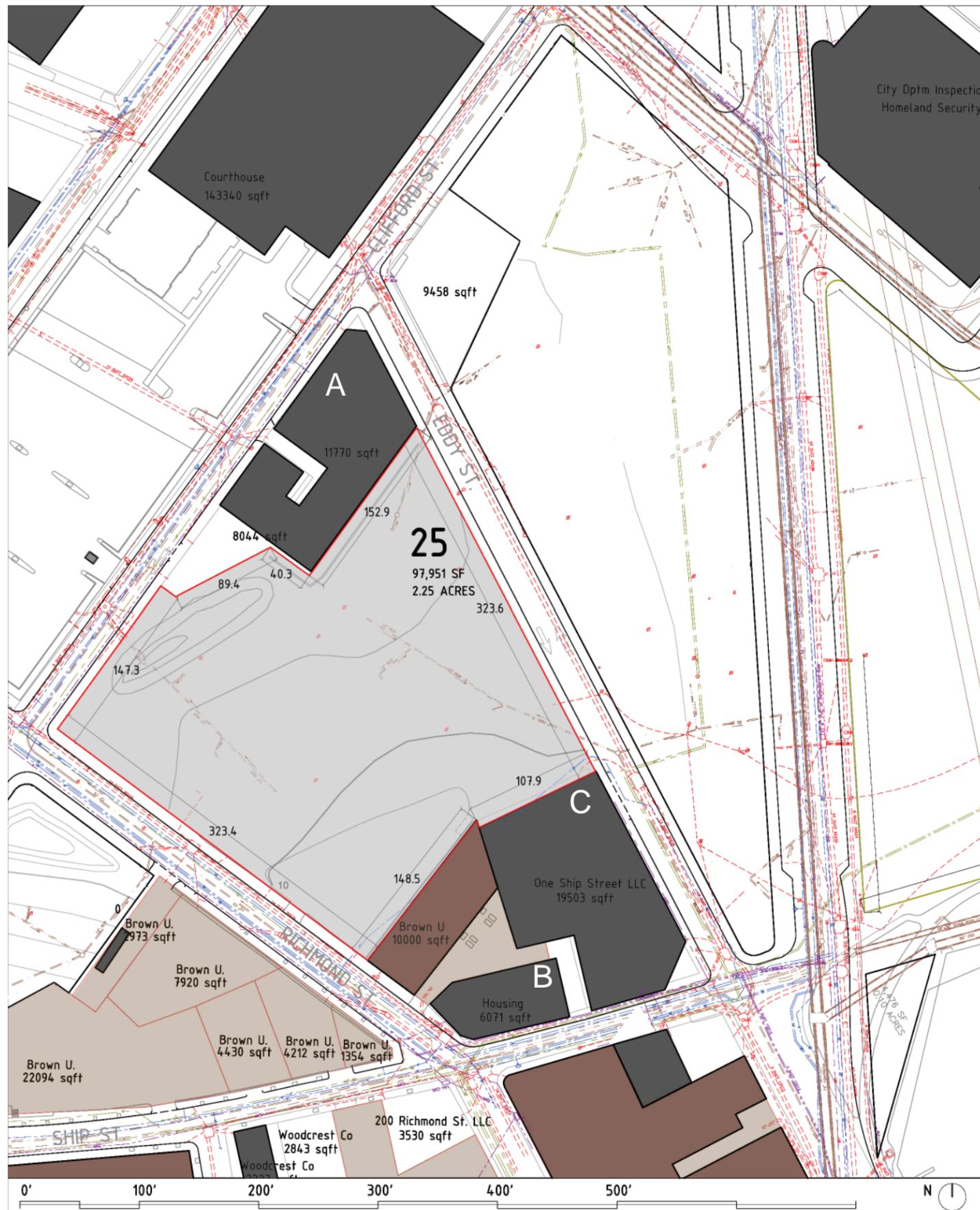
Sanborn Map [dates 1920 - 1956]

Image of the parcel facing the Courthouse

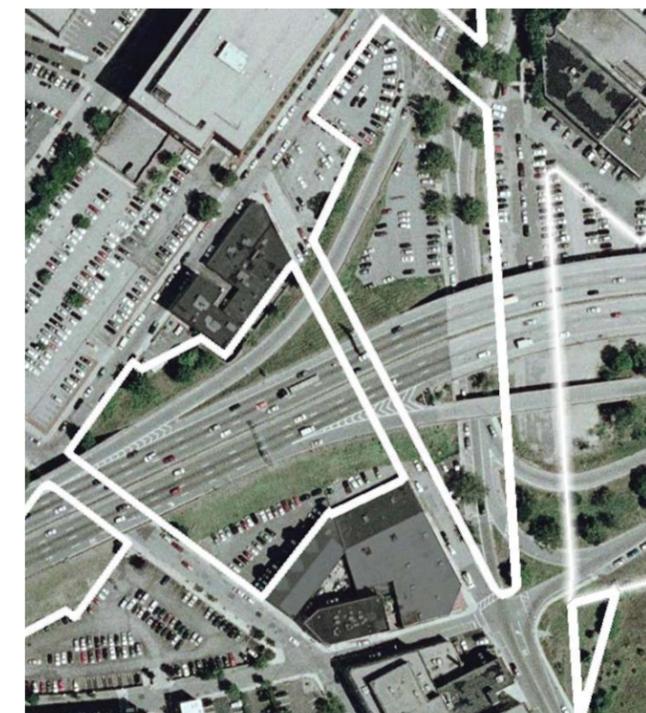


Parcel 25 is located between Clifford, Eddy, Richmond and Ship Streets.

- **Topography:** The parcel is basically flat.
- **Historic Relevance:** The northern area of the parcel is located in the DOWNCITY HISTORICAL DISTRICT, and its development will be subject to design review by the DOWNCITY DESIGN REVIEW COMMITTEE.
- **Zoning:** [D1-75] Its current allowable height is 75 feet, but the Providence 2020 Plan proposes 100 feet.
- **Interested Constituencies:** Brown University has shown some interest in Parcel 25 for institutional growth.
- **Adjacent Uses / Abutters:** Parcel 25 has several adjacent uses, some of them with structures of historical value, and any potential demolition/new construction would have to go through the appropriate process. Properties at 60 and 70 Clifford Street [A] fall in the DOWNCITY DESIGN REVIEW COMMITTEE DISTRICT JURISDICTION. Property at 200 Richmond, the J & H Electric Company Building [B], dates from 1922 and falls in the ICB [INDUSTRIAL & COMMERCIAL BUILDING DISTRICT] JURISDICTION. It is also listed in the NATIONAL REGISTER OF HISTORIC PLACES, BEING ITS CURRENT USE RESIDENTIAL. FINALLY, PROPERTY AT 216 EDDY STREET [C] FALLS ALSO WITHIN DRC/HDC JURISDICTION.
- **Possible Adjacent Property Assemblies:** Potential for realignment with Parcel 25.



COLOR KEY	
PROPERTY	UTILITIES
 Brown University	 Electronic Ducts
 Johnson and Wales	 Water Lines
 Hospital	 Gas Mains
 Museum	 Drainage
 Existing Buildings	 Telephone
	 Abandoned Utilities



Parcel 25

Existing Conditions and Post-Highway Demolition Description

Parcel 25 is a 2.25 acre parcel (97,951 sf) that is scheduled to be available for disposition in mid 2011. It is the second largest surplus parcel created by the I-195 removal following parcel 22.

The parcel is defined on the east by the reintroduction of the original alignment of Eddy Street, which was interrupted by the I-195 corridor and currently dead ends north of Ship Street. The western edge of Parcel 22 is delineated by the existing alignment of Richmond Street which currently passes beneath the elevated highway connecting the Jewelry District and Downcity. To the northwest, Parcel 25 has some Clifford Street frontage at the corner of Richmond Street, and to the northeast is abutted by an existing 1-story converted industrial building with commercial uses at 60 Clifford Street and a 3-story building at 72 Clifford Street which houses the Trinity Presbyterian Church and a small surface parking lot. The site is bounded on its southern property line by a commercial office building at One Ship Street and an office facility owned by Brown University at 196 Richmond. Both of these abutting properties are directly adjacent to residential properties at 100 Ship Street which is listed as a national and local historic district (The Industrial and Commercial Building District).

The parcel is characterized by contiguous single ownership across the full block between Richmond and Eddy Streets in spite of the adjacent properties to the north and south. Only the Eddy Street frontage on the east edge of Parcel 25 will be defined by a newly

constructed street. Site access is currently available from Richmond Street. Clifford Street will be reconnected and provide additional site access. Like most surplus parcels, the proposed configuration is a product of reintroducing the historic street pattern. The area of Parcel 25 north of the highway falls within the local Downtown Historic District as do the abutting properties on Clifford Street.

With the exception of a small existing surface parking lot along the southern boundary, the proposed parcel configuration will be created entirely by the demolition of the highway alignment, the sloped fill of the embankments and the on and off-ramps. The 30 percent Demolition Plans indicate that all abandoned above ground infrastructure associated with the relocation of I-195 will be removed from Parcel 27. The proposed site grading will result in slopes ranging from five percent to 20 percent (approximately ten feet of grade change).

Parcel 25 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

The Utility Plans indicate that natural gas (6-inch), water (6-inch and 16-inch), telecommunications, and electric utilities are available in Clifford Street. Natural gas (6-inch), water (6-inch, 16-inch, and 24-inch), telecommunications, and electric utilities are available in Richmond Street. An 18-inch combined sewer is located in Clifford Street and a 12-inch combined sewer is located in Richmond Street.



Site images of contiguous parcels



Site image along Clifford St [above] and Richmond St [bellow]

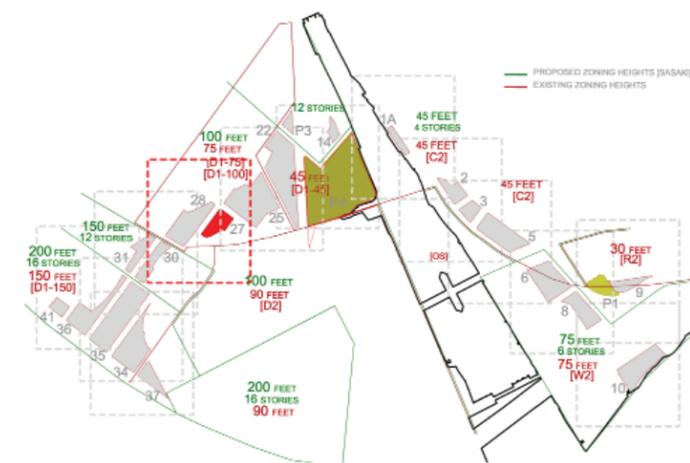
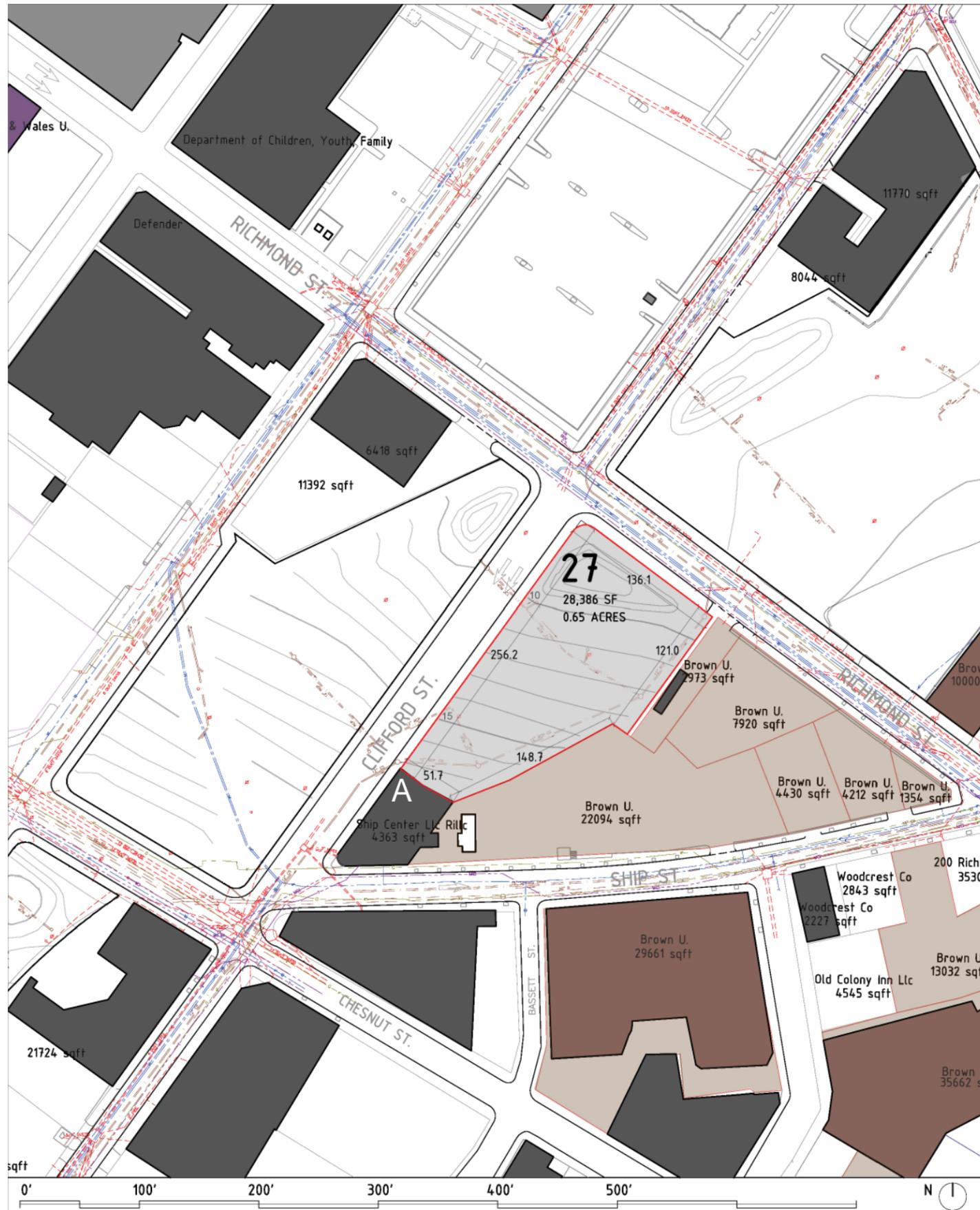


Site image edification in Ship with Eddy St.



Parcel 27 is located between Clifford and Richmond Streets and contiguous to the properties owned by Brown along Ship Street.

- **Topography:** The parcel slopes down to the Northeast an average of 8 feet.
- **Historic Relevance:** As part of the area being freed up by the 195 relocation, the development of this parcel will be subject to design review by the appropriate commission.
- **Zoning:** [D1-75] Its current allowable height is 75 feet, but the Providence 2020 Plan proposes 100 feet.
- **Interested Constituencies:** Brown University has shown some interest in parcel 27 for institutional growth.
- **Adjacent Uses / Abutters:** Parcel 27 has several adjacent uses, one of them with a structure of historical value, and any potential demolition/new construction would have to go through the appropriate process. Property at 89 Ship Street, the Coe W. H. Building [A, 1926], is listed in the National Register of Historic Places and lies in the Providence Jewelry Manufacturing Historical District. The rest of the parcels are owned by Brown University, and currently used as parking lots.
- **Possible Adjacent Property Assemblies:** The redevelopment of this parcel would benefit from the assembly of the existing Brown University properties.



COLOR KEY	
PROPERTY	UTILITIES
 Brown University	 Electronic Ducts
 Johnson and Wales	 Water Lines
 Hospital	 Gas Mains
 Museum	 Drainage
 Existing Buildings	 Telephone
	 Abandoned Utilities



Parcel 27

Existing Conditions and Post-Highway Demolition Description

Parcel 27 is a .63 acre parcel (28,386 sf) that is scheduled to be available for disposition in mid 2011. It is one of the smallest of the Jewelry District within the I-195 surplus parcels

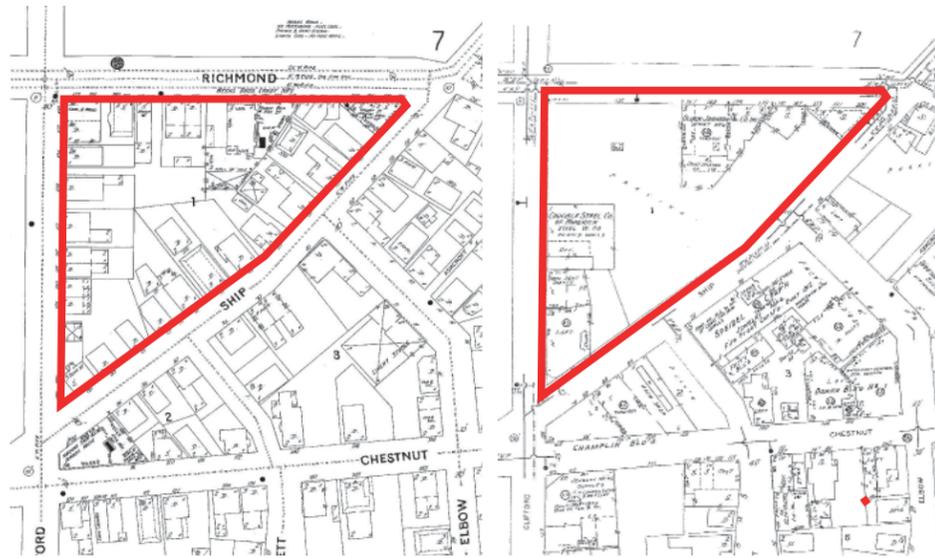
The parcel is defined by on the east by the existing alignment of Richmond Street and on the north by the proposed Clifford Street extension. The Richmond street frontage is defined by the area currently beneath the highway overpass connecting the Jewelry District and Downcity. The southern edge of the parcel directly abuts a collection of contiguous property owned by Brown University which fronts on Richmond and Ship Streets and is currently used for surface parking. Combined with the Brown parcels, Parcel 27 would occupy the entire triangular shaped block with the exception of a

small structure at 89 Ship Street which is listed as part of the Jewelry Manufacturing National Historic District. The Clifford Street frontage along the north edge of the parcel will be defined by a newly constructed street reconnecting the existing street alignments on either side of the right of way. Site access is currently available from Richmond Street. Clifford Street will be reconnected and provide additional site access.

The proposed parcel configuration will be created entirely by the demolition of the highway alignment and the sloped fill of the embankments. The Interim Condition Plans indicate that all abandoned above ground infrastructure associated with the relocation of Interstate 195 will be removed from Parcel 27. The proposed site grading will result in slopes ranging from five percent to 20 percent (approximately ten feet of grade change sloping up from east to west).

Parcel 27 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

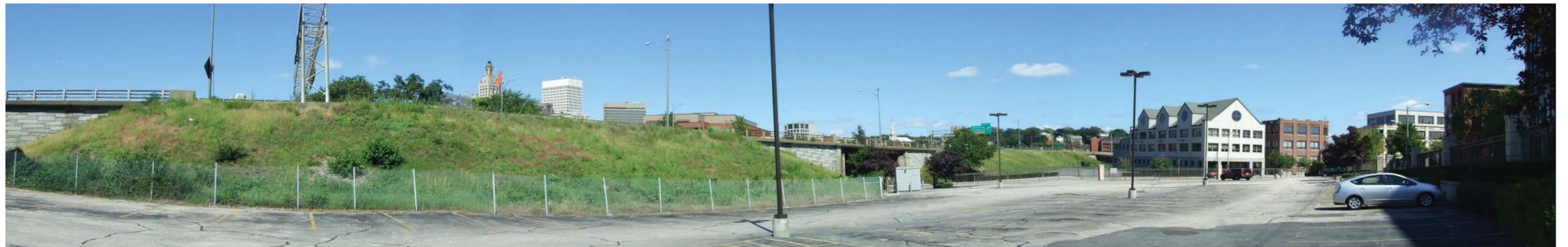
The property is serviced by utilities along its Richmond Street frontage only. The Utility Plans indicate that natural gas (6-inch), water (6-inch, 16-inch, and 24 inch), telecommunications, and electric utilities are available in Richmond Street. A 12-inch combined sewer is located in adjacent sections of Richmond Street.



Sanborn maps [dates 1899 and 1951]

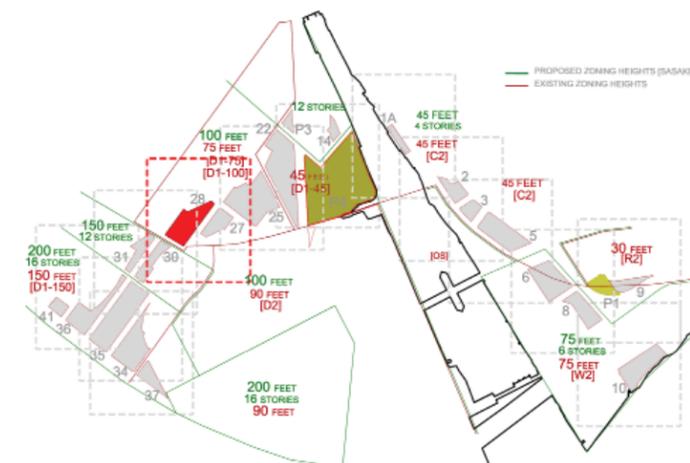
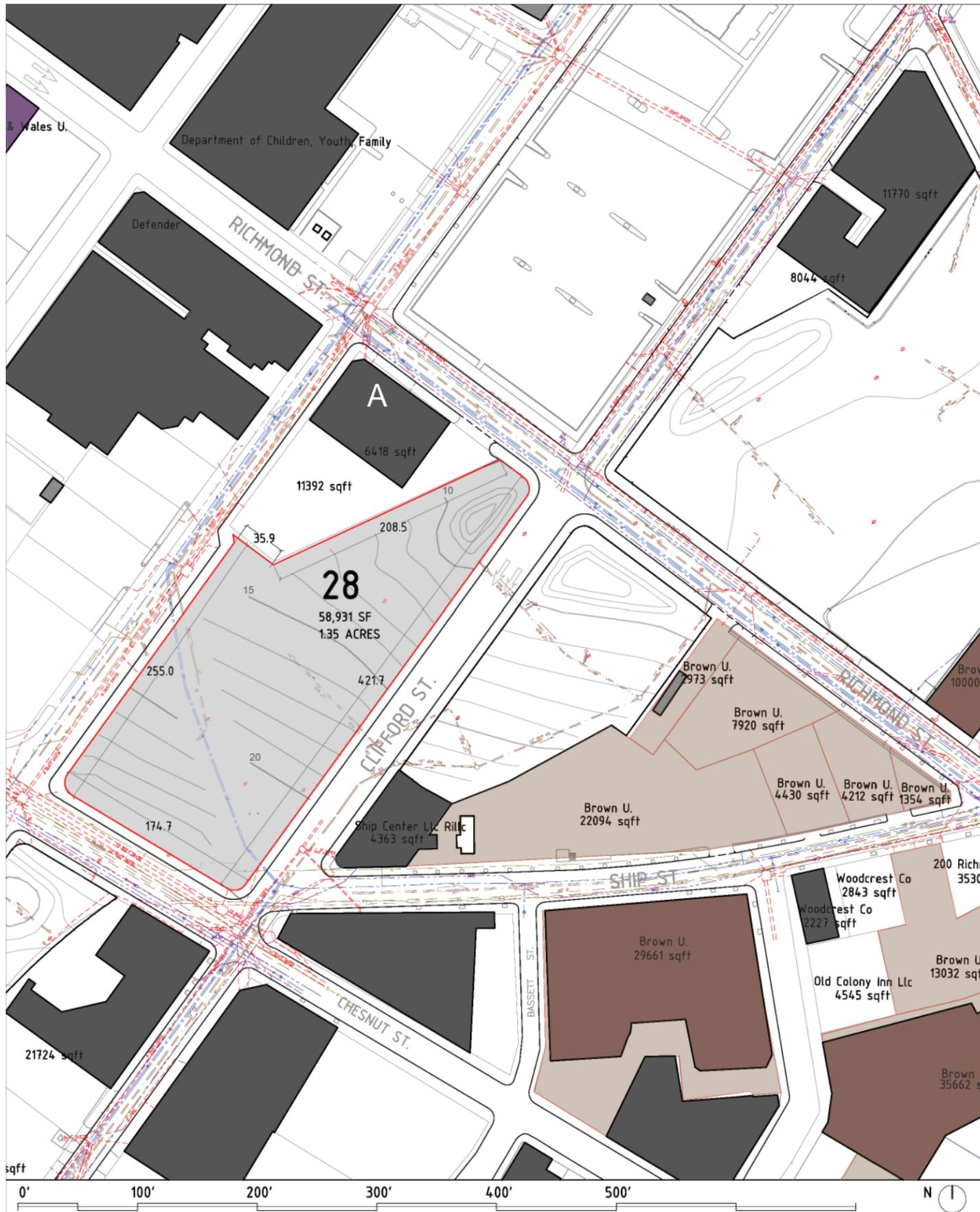


Images of the Coe W H Building [above] and College Hill from parcel 27 [right above and below]



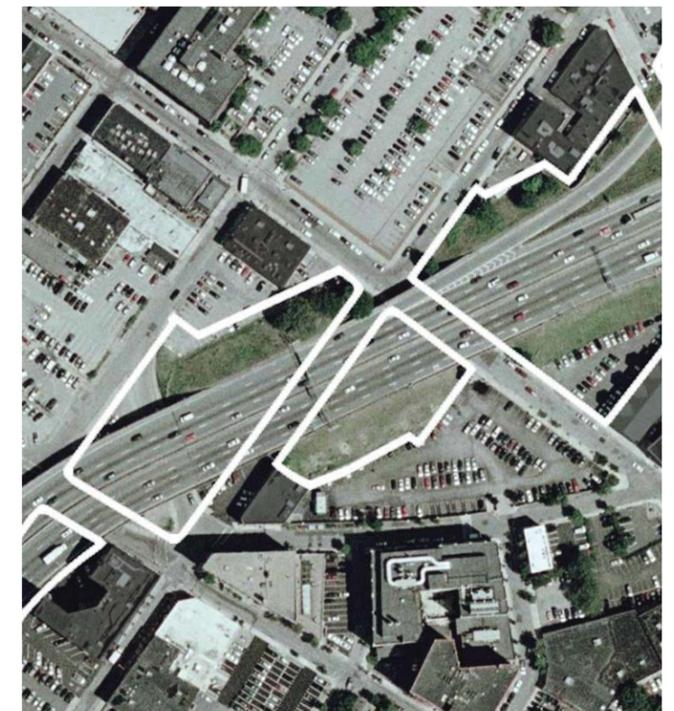
Parcel 28 is located between Friendship, Richmond, Clifford, and Chestnut Streets.

- **Topography:** The parcel slopes down to the Northeast an average of 16 feet.
- **Historic Relevance:** As part of the area being freed up by the 195 relocation, the parcel is located in the Downcity District, and its development will be subject to design review by the Downcity Design Review Committee.
- **Zoning:** [D1-75] Its current allowable height is 75 feet, but the Providence 2020 Plan proposes 100 feet.
- **Interested Constituencies:** Brown University has shown some interest in parcel 28 for institutional growth.
- **Adjacent Uses / Abutters:** Parcel 28 has several adjacent uses, one of them with a structure of historical value, and any potential demolition/new construction would have to go through the appropriate process. The Morris Clothes Shoppe Building [A] at 101 Richmond Street, dates from 1926 and it is listed in the National Register of Historic Places. The other contiguous parcel is a parking lot.



COLOR KEY

PROPERTY	UTILITIES
 Brown University	 Electronic Ducts
 Johnson and Wales	 Water Lines
 Hospital	 Gas Mains
 Museum	 Drainage
 Existing Buildings	 Telephone
	 Abandoned Utilities



Parcel 28

Existing Conditions and Post-Highway Demolition Description

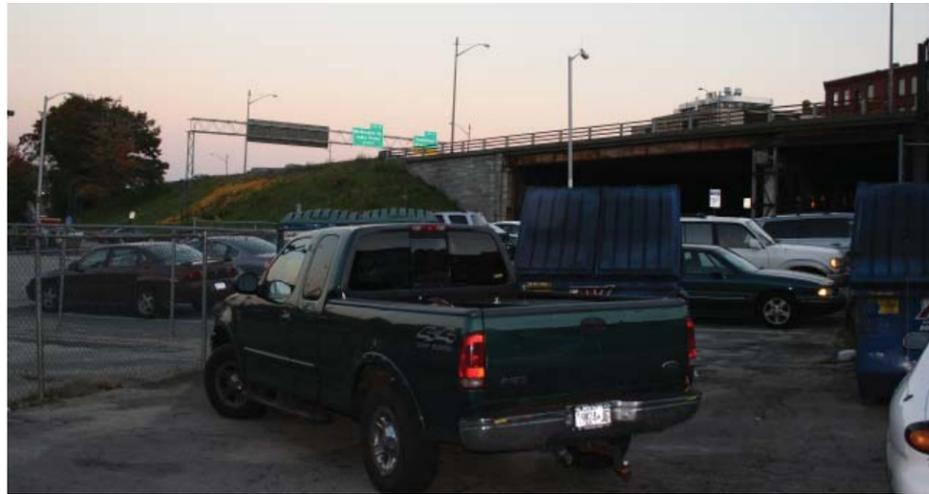
Parcel 28 is a 1.35 acre parcel (58,931 sf) that is scheduled to be available for disposition in mid 2011. The parcel is defined on the east by the existing alignment of Chestnut Street and on the west by a small sliver of Richmond Street frontage. The north edge of the site is the existing alignment of Friendship Street with the proposed Clifford Street extension defining the southern boundary, directly across the street from the proposed Parcel 27. The Richmond street frontage, just to the north of the existing overpass, abuts an existing 4-story brick structure on the corner of Richmond and Friendship. The triangular shaped adjacent property sits on a 0.25 acre site that includes a surface parking lot. Combined with the commercial property at the corner of Richmond and Friendship, Parcel 28 would encompass the entire rectangular between Clifford and Friendship Streets. The Clifford Street frontage along the south edge of the parcel will be defined by a newly constructed street reconnecting the existing street alignments on either side of the right of way. Site access is currently available from Richmond Street, Friendship Street, and Chestnut Street. The reconnected Clifford Street will provide additional site access. The northeast corner of the site, the area currently north of the highway right of way, appears to straddle the Local Downcity District.

The proposed parcel configuration will be created entirely by the

demolition of the highway alignment and the sloped fill of the embankments. The Interim Condition Plans indicate that all abandoned above ground infrastructure associated with the relocation of I-195 will be removed from Parcel 28. The proposed site grading will result in slopes ranging from three percent to 20 percent (approximately 14 feet of grade change up from east to west).

Parcel 28 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

The Utility Plans indicate that natural gas (8-inch and 6-inch), water (6-inch), telecommunications, and electric utilities are available in Chestnut Street. Natural gas (6-inch), water (8-inch and 16-inch), and electric utilities are available in Friendship Street. Natural gas (6-inch), water (6-inch, 16-inch, and 24-inch), telecommunications, and electric utilities are available in Richmond Street adjacent to the site. A 30-inch combined sewer is located in Chestnut Street and 12-inch combined sewers are located in Friendship and Richmond Streets. A 28-inch separate storm sewer is located within Chestnut Street; however, information is not available to determine if the separate storm sewer system remains separate or ultimately discharges to the combined sewer. A continuous water main and a partial gas line angle across the proposed parcel following the existing alignment that connects Clifford and Friendship streets beneath the highway overpass and is being discontinued.



Images of parking lot in Parcel 28 and along Clifford St.



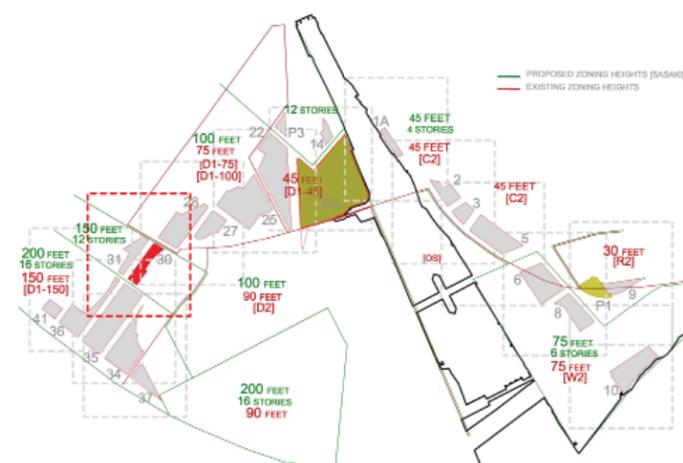
Image of the Morris Clothes Shoppe Building [bellow]





Parcel 30 is located between Claverick, Chestnut, and Friendship Streets, and it has a narrow dimension ranging from 75 feet to 95 feet.

- **Topography:** The parcel slopes down to the Northeast an average of 12 feet.
- **Historic Relevance:** The parcel falls contiguous to the Jewelry District, and as part of the area being freed up by the 195 relocation, the development of this parcel will be subject to design review by the appropriate commission.
- **Zoning:** [D1-150] Its current allowable height is 150 feet.
- **Adjacent Uses / Abutters:** Parcel 30 has several adjacent parcels, some of them with structures of historical value, and any potential demolition/new construction would have to go through the appropriate process. Property at 95 Chestnut Street, the Irons&Russell Building [1903], is listed in the National Register of of Historic Places, and incorporated to the Jewelry Local Historical District. Property at 157 Clifford, Claverick Building [A, 1948], is listed in the National Register of Historic Places, and incorporated to the Providence Jewelry Manufacturing Historical District. Two more properties contiguous to Parcel 30 are listed in the Local Register of the Jewelry District: 153 Clifford [garages], and 155 Clifford [Women’s City Missionary Society Laundry, B, 1903]. The rest of the parcels are currently used as parking lots.
- **Possible Adjacent Property Assemblies:** The development opportunities will be limited without incorporating adjacent parcels.



COLOR KEY	
	Brown University
	Johnson and Wales
	Hospital
	Museum
	Existing Buildings
	Electronic Ducts
	Water Lines
	Gas Mains
	Drainage
	Telephone
	Abandoned Utilities



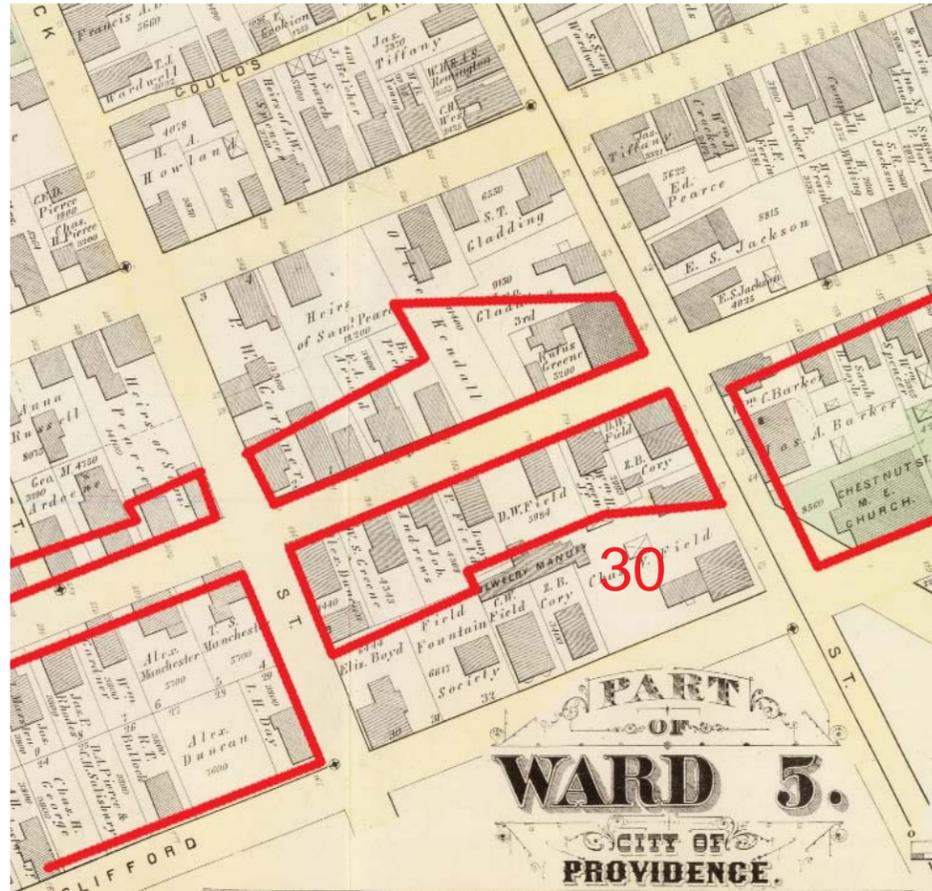


Fig. 39: Irons and Russell Building (1903); 95 Chestnut Street; illustration, 1903; Martin & Hall Architects. The Irons and Russell Building, a jewelry manufactory, was built on the site of the Home for Aged Men. Courtesy of the [Rhode Island Historical Society](#): RHI X3 2847.

Irons & Russell Building [1903], 95 Chestnut Street

Historical alignment of the area [1875] with parcels overlay [above]

Claverick Building [1948], 157 Clifford Street



Parcel 30

Existing Conditions and Post-Highway Demolition Description

Parcel 30 is a .63 acre parcel (27,645 sf) that is scheduled to be available for disposition in mid-2011.

The parcel is defined by on the north by the proposed alignment of Friendship Street which will extend to the west from the existing alignment that is interrupted by I-195. The site has limited east frontage on Chestnut Street and limited west frontage on Claverick Street. The southern boundary of the parcel is defined by the mid-block property lines of an abutting building located at 161 Clifford Street and the Irons and Russell Building at 151 Clifford Street. Parcel 30, and the abutting buildings to the south, straddles both the local and national historic districts. The Friendship Street frontage along the northern edge of the parcel will be defined by a newly constructed street connecting to the existing street alignment to the east. Site access is currently available from Chestnut Street. The reconnected Friendship Street and Claverick Street will provide additional site access.

The proposed parcel configuration will be created entirely by the demolition of the highway alignment and the sloped fill of the embankments. The Interim Condition Plans indicate that all abandoned above ground infrastructure associated with the relocation of I-195 will be removed from Parcel 30. The proposed site grading will result in slopes ranging from 2 percent to 20 percent (approximately 11 feet of grade change sloping up from east to west).

Parcel 30 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

The Utility Plans indicate that natural gas (6-inch), water (6-inch), telecommunications, and electric utilities are available in Chestnut Street along the narrow frontage of the site. A combined sewer and 28-inch separate storm sewer is located within the adjacent section of Chestnut Street. The plans do not include sufficient information to determine if the storm sewer remains separate or ultimately discharges to the combined sewer.

Parcel 31 is located between Claverick, Chestnut, and Friendship Streets and has a narrow dimension and irregular geometry.

- **Topography:** The parcel slopes down to the Northeast an average of 13 feet.
- **Historic Relevance:** The parcel is located in the Downcity Local Historic District and its development will be subject to design review by the Downcity Design Review Committee.
- **Zoning:** [D1-150] Its current allowable height is 150 feet.
- **Adjacent Uses / Abutters:** The contiguous parcels in the block are owned by Johnson & Wales University, including the recently rehabilitated building in the confluence of Chestnut and Pine Streets.
- **Interested Constituencies:** Johnson and Wales University [to develop student housing].
- **Possible Adjacent Property Assemblies:** Johnson & Wales University has targeted this parcel in its institutional Master plan to develop student housing.



COLOR KEY

PROPERTY

- Brown University
- Johnson and Wales
- Hospital
- Museum
- Existing Buildings

UTILITIES

- Electronic Ducts
- Water Lines
- Gas Mains
- Drainage
- Telephone
- Abandoned Utilities





Image of Chestnut with Pine St.

Sanborn map [dates 1899 -1900]



Rhode Island Interstate 195 Surplus Land: Redevelopment and Marketing Analysis

Parcel 31

Existing Conditions and Post-Highway Demolition Description

Parcel 31 is a .56 acre parcel (24,536 sf) that is scheduled to be available for disposition in mid-2011. The parcel is defined by on the south by the proposed alignment of Friendship Street which will extend to the west from the existing alignment that is interrupted by I-195. The site has limited east frontage on Chestnut Street and limited west frontage on Claverick Street. The northern boundary of the parcel is defined by the mid-block property lines of a Johnson and Wales surface parking lot and Johnson Hall, at the northeast corner of the block a mixed-use academic, office and food service building located on the corner of Chestnut and Pine. The Friendship Street frontage along the southern edge of the parcel will be defined by a newly constructed street connecting to the existing street alignment to the east. Site access is currently available from Chestnut Street to. The reconnected Friendship Street and Claverick Street will provide site additional site access. Parcel 31 is on the edge of the Downcity local historic district.

The proposed parcel configuration will be created entirely by the demolition of the highway alignment and the sloped fill of the em-

Image of Chestnut St. facing the Jewelry district



bankments. The Interim Condition Plans indicate that all abandoned above ground infrastructure associated with the relocation of I-195 will be removed from Parcel 31. The proposed site grading will result in slopes ranging from 5 percent to 30 percent (approximately 13 feet of grade change sloping up from east to west). Site access is currently available from Chestnut Street to. The reconnected Friendship Street and Claverick Street will provide site additional site access.

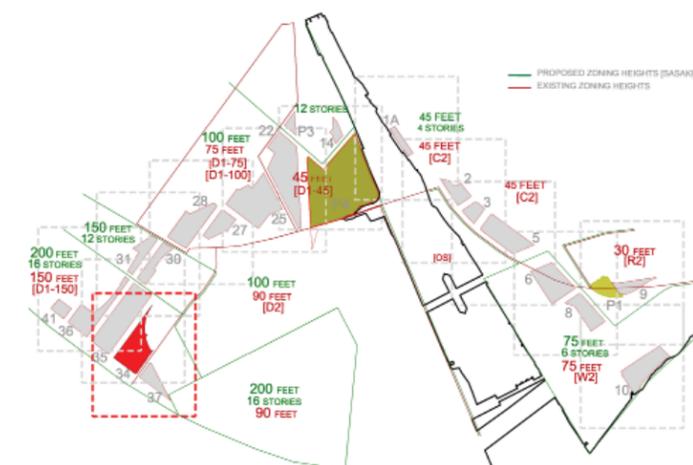
Parcel 31 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

The Utility Plans indicate that natural gas (6-inch and 8-inch), water (6-inch), telecommunications, and electric utilities are available in Chestnut Street along the narrow frontage of the site. A combined sewer and 28-inch separate storm sewer is located within the adjacent section of Chestnut Street. The plans do not include sufficient information to determine if the storm sewer remains separate or ultimately discharges to the combined sewer.



Parcel 34 is located between Bassett and Clifford Streets, with some frontage to the I-195 highway. After the construction of the new bridge [East Franklin Street], it will be directly connected to the area south of I-195.

- **Topography:** The parcel slopes down southwest to northeast an average of 9 feet.
- **Historic Relevance:** The parcel falls contiguous to the Jewelry District, and as part of the area being freed up by the 195 relocation, the development of this parcel will be subject to design review by the appropriate commission.
- **Zoning:** [D1-150]. Its current allowable height is 150 feet, but the proposed Providence 2020 plan sets up 200 feet.
- **Adjacent Uses / Abutters.** Parcel 34 has multiple abutting property owners. There are several brick buildings dating from the early 1950's under industrial use and surface parking lots. The property at the corner of Bassett and Claverick Streets [A] is being reevaluated to be locally designated. This, and the contiguous ones [B], could be added to the Jewelry Manufacturing National Register District, and also locally nominated.
- **Possible Adjacent Property Assemblies.** As an alternative, Parcels 34 and 37 could be merged eliminating the proposed extension of Bassett Street.



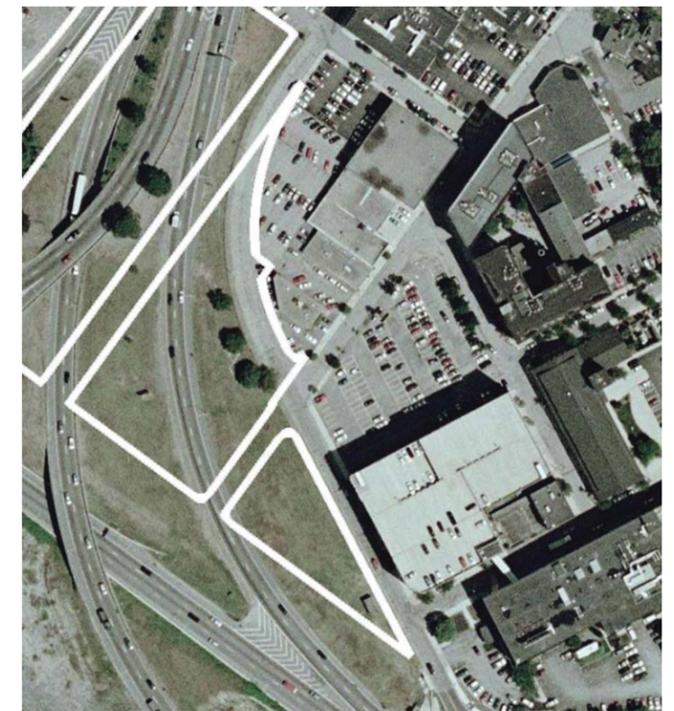
COLOR KEY

PROPERTY

- Brown University
- Johnson and Wales
- Hospital
- Museum
- Existing Buildings

UTILITIES

- Electronic Ducts
- Water Lines
- Gas Mains
- Drainage
- Telephone
- Abandoned Utilities





Images of contiguous structures to Parcel 34 along Basset Street
 Courtesy of the City of Providence-Dept. of Planning and Development



Parcel 34

Existing Conditions and Post-Highway Demolition Description

Parcel 34 is a 1.55 acre parcel (67,481 sf) that is scheduled to be available in mid-2009. The parcel is defined on the north by Clifford Street extending from East Franklin Street on the west to Claverick Street on the east. The southern edge of the site is defined by approximately 300 feet of frontage along Basset Street with the eastern property line curving to the northeast as defined by the existing alignment of Hoppin Street which follows the I-195 east bound on ramp. Hoppin Street will be discontinued north of Basset following the creation of Parcel 34. To the east, the Parcel 34 abuts surface parking lots and small commercial properties located at 33 and 41 Basset Street. All of the frontage defining Parcel 34 will be on newly constructed streets with East Franklin Street, Basset Street and Clifford Streets, all being reconnected to the existing grid and providing site access from 3 sides. Like most surplus parcels, the proposed configuration is a product of reintroducing the historic street pattern.

The proposed parcel configuration will be created entirely by the

demolition of the highway alignment and the sloped fill of the embankments. The Interim Condition Plans indicate that all abandoned above ground infrastructure associated with the relocation of I-195 will be removed from Parcel 34. The proposed site grading will result in slopes ranging from 2 percent to 5 percent (approximately 9 feet of grade change). East Franklin Street and Basset Street will be extended and Clifford Street will be reconfigured to provide site access.

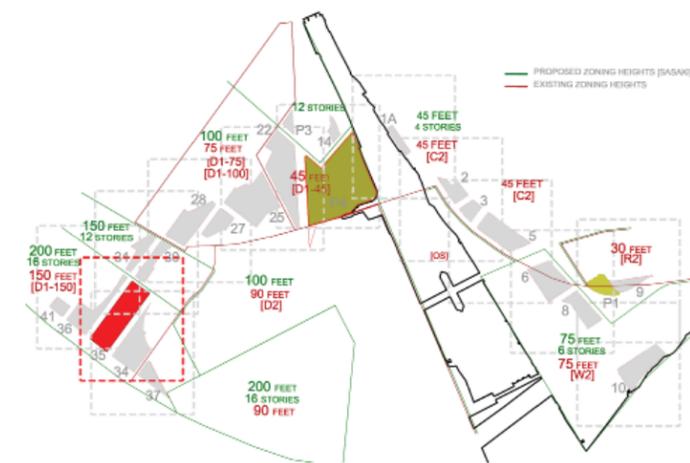
Parcel 34 is located within Flood Zone X, an area determined to be outside the 500-year floodplain. The Utility Plans indicate natural gas (6-inch), water (6-inch), telecommunication, and electric utilities are available at the northeast corner of the parcel at the intersection of Basset Street and Hoppin Street. A 12-inch combined sewer is located at the intersection of Clifford Street and Claverick Street. Extension of the combine sewer is necessary to provide sanitary sewer service to the parcel.





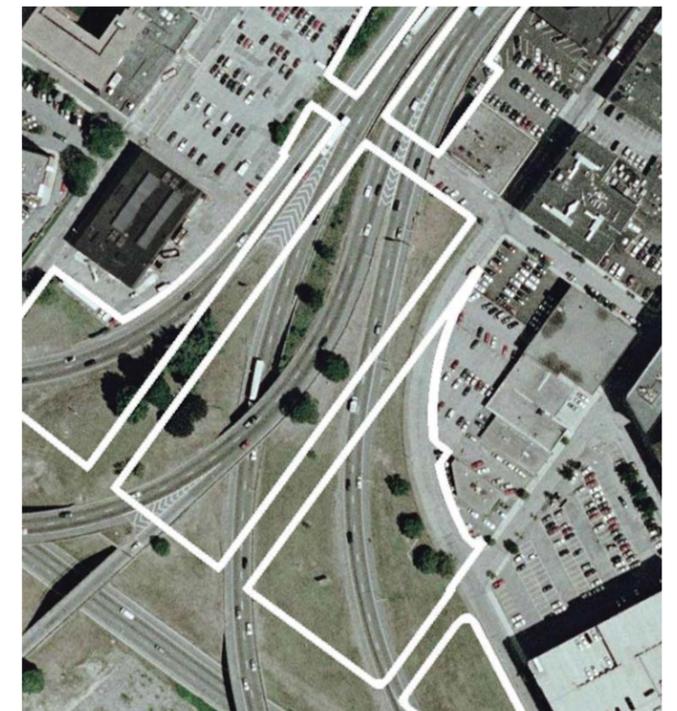
Parcel 35 is located between Friendship, Claverick, Clifford, and East Franklin Streets. It is one of the biggest parcels in the I-195 ROW, and its size and regular geometry make it suitable for the development of a wide variety of uses.

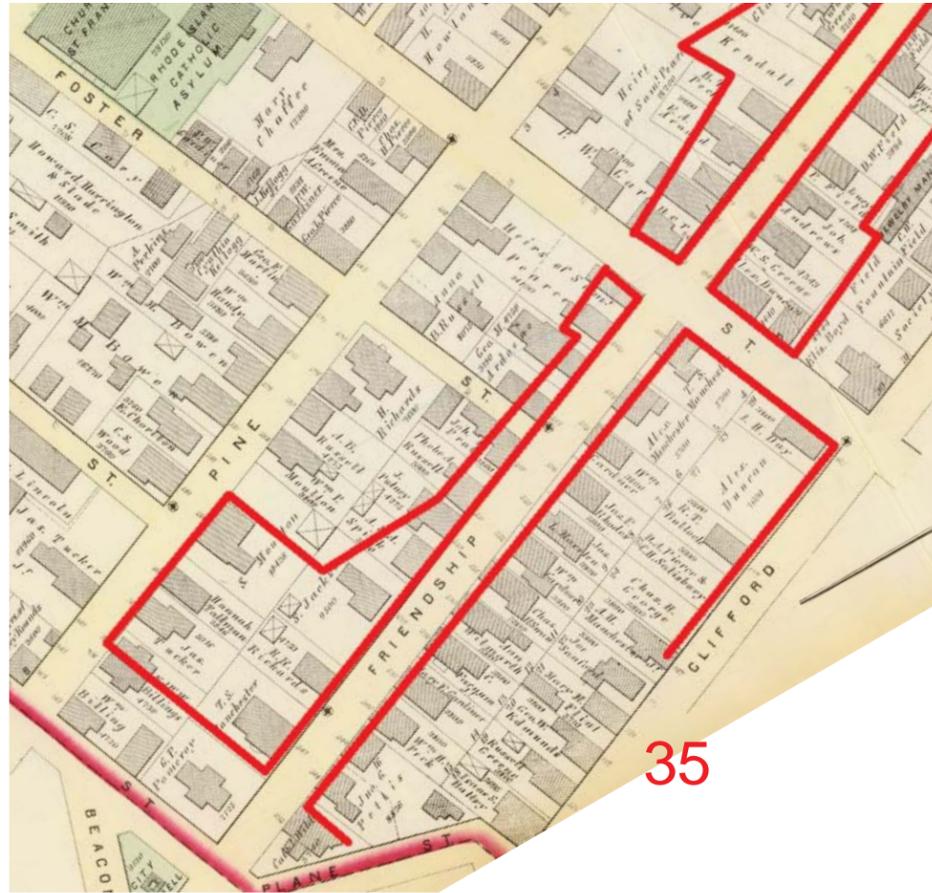
- **Topography:** The parcel slopes down southwest to northeast from 63 feet to 38 feet.
- **Historic Relevance:** The parcel is contiguous to the Jewelry District, and as part of the area being freed up by the I-195 relocation, the development of this parcel will be subject to design review by the appropriate commission.
- **Zoning:** [D1-150] Its current allowable height is 150', but the proposed Providence 2020 plan sets up 200'
- **Adjacent uses / abutters.** The entire block is owned by RIDOT.
- **Interested Constituencies:** Johnson and Wales University [to develop the Conference Hotel, a parking structure, and the College of Business].
The Johnson and Wales Campus Master plan University states: “The potential acquisition of land located within the I-195 ROW creates the opportunity to concentrate outlying buildings within a well defined campus...”.
- **Possible adjacent property assemblies.** Apart from the assembly strategy proposed in the Johnson and Wales Master plan, the parcel could be subdivided allowing different uses than institutional in the Southwest frontage to the highway.



COLOR KEY

PROPERTY	UTILITIES
Brown University	Electronic Ducts
Johnson and Wales	Water Lines
Hospital	Gas Mains
Museum	Drainage
Existing Buildings	Telephone
	Abandoned Utilities





Parcel 35

Existing Conditions and Post-Highway Demolition Description

Parcel 35 is a 2.3 acre parcel (100,383 sf) that is scheduled to be available for disposition in the late 2009. The parcel is the largest development parcel of all of the surplus land and represents the only entirely contiguous ownership block amongst the west side parcels. The parcel is defined by on the south by the proposed alignment of Clifford Street which will extend to the west from the existing alignment which currently curves into a frontage road along an I-195 on-ramp. The site has east frontage on the proposed reintroduction of Claverick Street which will reconnect northward through to Downcity. The north side is defined by the proposed extension of Friendship Street currently interrupted by I-195. The west edge of the block is the proposed East Franklin Street alignment which will connect between Point Street to the south and Broad Street to the north. All of the frontage of Parcel 35 will be defined by a newly constructed streets connecting to the historic grid pattern with access from all four sides. Parcel 35 is on the edge of the Downcity local historic district.

The proposed parcel configuration will be created entirely by the demolition of the highway alignment, the ramps and the sloped fill of the embankments. The Interim Condition Plans indicate that all abandoned above ground infrastructure associated with the relocation of I-195 will be removed from Parcel 35. The proposed site grading will result in slopes ranging from two to seven percent (approximately 26 feet of grade change sloping up from east to west).

Parcel 35 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

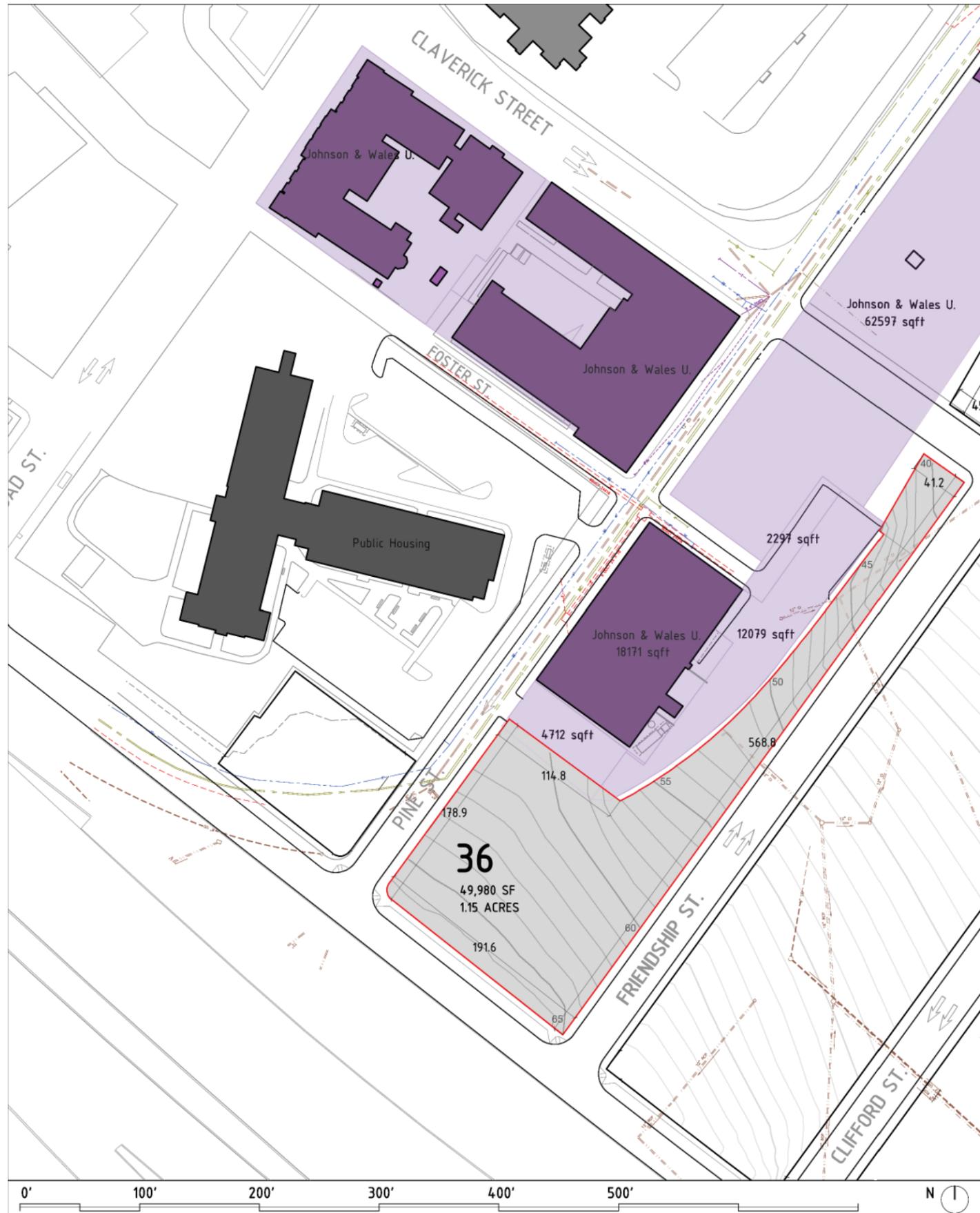
The property is not well served by utilities which run beneath Clifford Street, but terminate just west of Claverick Street where the existing alignment curves to the south. The Utility Plans indicate that natural gas, water (16-inch and 6-inch), sewer (12-inch combined sewer), electric, and telecommunication utilities are available at the eastern corner of the site in Clifford Street.

Image along Clifford Street [Parcel 35 to the left]

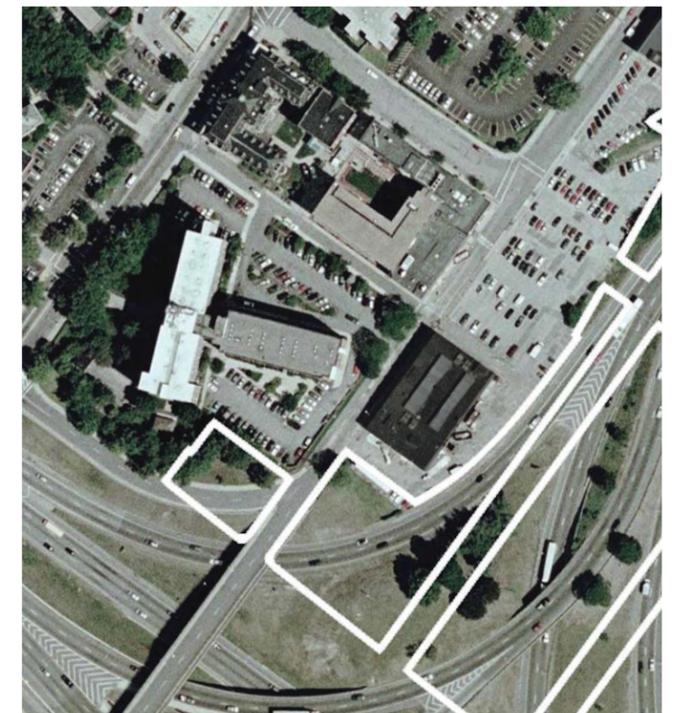


Parcel 36 is located between Friendship, Pine and East Franklin Streets, facing I-195 highway on one of its short sides.

- **Topography:** The parcel slopes down southwest to northeast from 66 feet to 40 feet.
- **Historic relevance:** The site is located in the Downcity District, and the contiguous Rolo Building dating from 1921 is classified as ICB [Industrial and Commercial Buildings District]. As part of the area being freed up by the I-195 relocation, the development of this parcel will be subject to design review by the appropriate commission.
- **Zoning:** [D1-150] Its current allowable height is 150', but the proposed Providence 2020 plan sets up 200' feet
- **Adjacent Uses / Abutters.** The adjacent property is owned by Johnson and Wales University; the Rolo Building [student services] and a surface parking are the main uses.
- **Interested Constituencies:** Johnson and Wales University [to develop the Hospitality College].
- **Possible Adjacent Property Assemblies.** Apart from the assembly strategy proposed in the Johnson and Wales Master plan, the parcel could be subdivided allowing different uses than institutional in the Southwest frontage to the highway.



COLOR KEY	
PROPERTY	
	Brown University
	Johnson and Wales
	Hospital
	Museum
	Existing Buildings
UTILITIES	
	Electronic Ducts
	Water Lines
	Gas Mains
	Drainage
	Telephone
	Abandoned Utilities



Parcel 36

Existing Conditions and Post-Highway Demolition Description

Parcel 36 is a 1.15 acre parcel (49,980 sf) that is scheduled to be available in the fall of 2010.

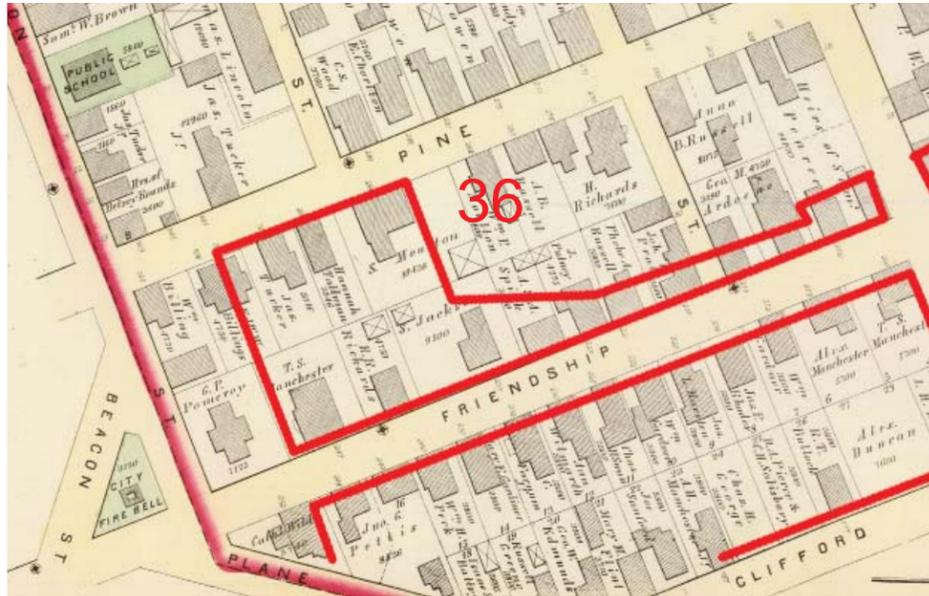
The parcel is defined on the north by the existing alignment of Pine Street connecting to the new extension of East Franklin Street which will define the west side of the parcel. The southern edge of the parcel is defined by the new extension of Friendship and runs the entire block east to Claverick Street. The parcel has a small extent of frontage on the corner of Claverick and Friendship. The parcel is characterized by a thin strip of remnant land along Friendship Street that abuts the Johnson and Wales student services building and a surface parking lot owned by the University. Combined with the University's ownership, Parcel 36 would be a contiguous block of single ownership. All of the frontage defining Parcel 36 will be newly constructed streets with the exception of the existing Pine Street frontage. East Franklin Street, Friendship Street and Claverick Streets are all being reconnected to the existing grid and providing site access from 3 sides. The existing Pine Street bridge across I-195 will be removed as part of the I-Way project. Like most surplus

parcels, the proposed configuration is a product of reintroducing the historic street pattern.

The proposed parcel configuration will be created entirely by the demolition of the highway alignment, the ramps and the sloped fill of the embankments. The 30 percent Demolition Plans indicate that all abandoned aboveground infrastructure associated with the relocation of I-195 will be removed from Parcel 36. The proposed site grading will result in slopes ranging from 3 to 14 percent (approximately 25 feet of grade change sloping up from east to west).

Parcel 36 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

The Utility Plans indicate that natural gas (20-inch) and water (6-inch) utilities are available in Pine Street. Electric and telecommunication utilities are available approximately 100 feet and 550 feet north of the parcel in Pine Street, respectively. A 12-inch combined sewer is located in Pine Street adjacent to the site.



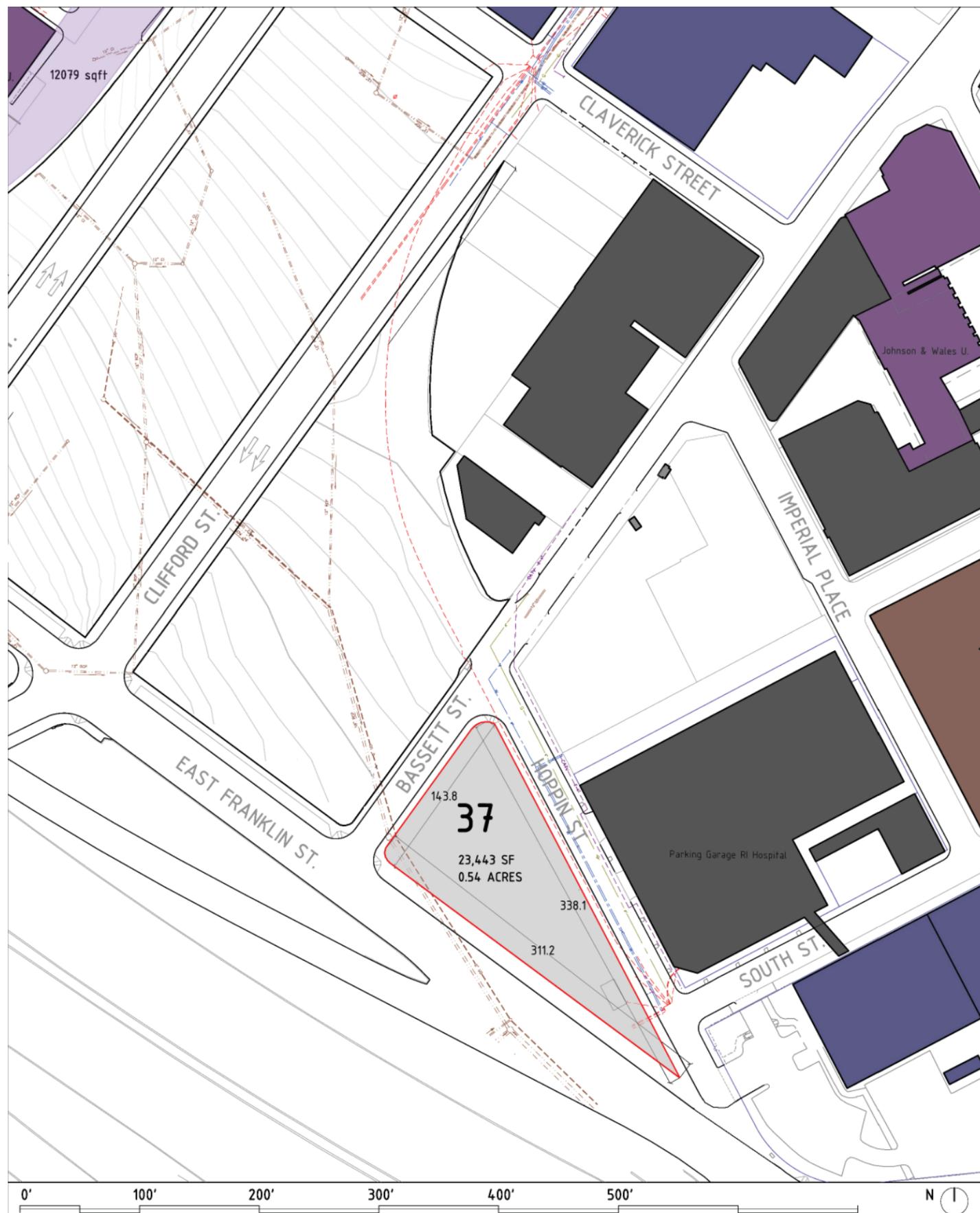
Historical alignment of the area [1875] with parcels overlay [above]

Image of Parcel 36 along Friendship Street [Rolo Building]



Image of Parcel 36 along Friendship Street [Parking lot]





Parcel 37 is located between Basset, Hoppin, and East Franklin Streets. It is one of the smallest parcels in the ROW. Both its size and irregular geometry offer a quite restricted development footprint. Its longer frontage faces the I-195.

- **Topography:** The parcel gently slopes down to Hoppin Street.
- **Historic Relevance:** The parcel falls contiguous to the Jewelry District, and as part of the area being freed up by the I-195 relocation, the development of this parcel will be subject to design review by the appropriate commission.
- **Zoning:** [D1-150] Its current allowable height is 150', but the proposed Providence 2020 plan sets up 200 feet.
- **Adjacent Uses / Abutters:** The entire block is owned by RIDOT.
- **Possible Adjacent Property Assemblies:** Given the challenging geometry and small size of the parcel, the assembly of Parcels 34 and 37 will offer some extra opportunities for development.



COLOR KEY

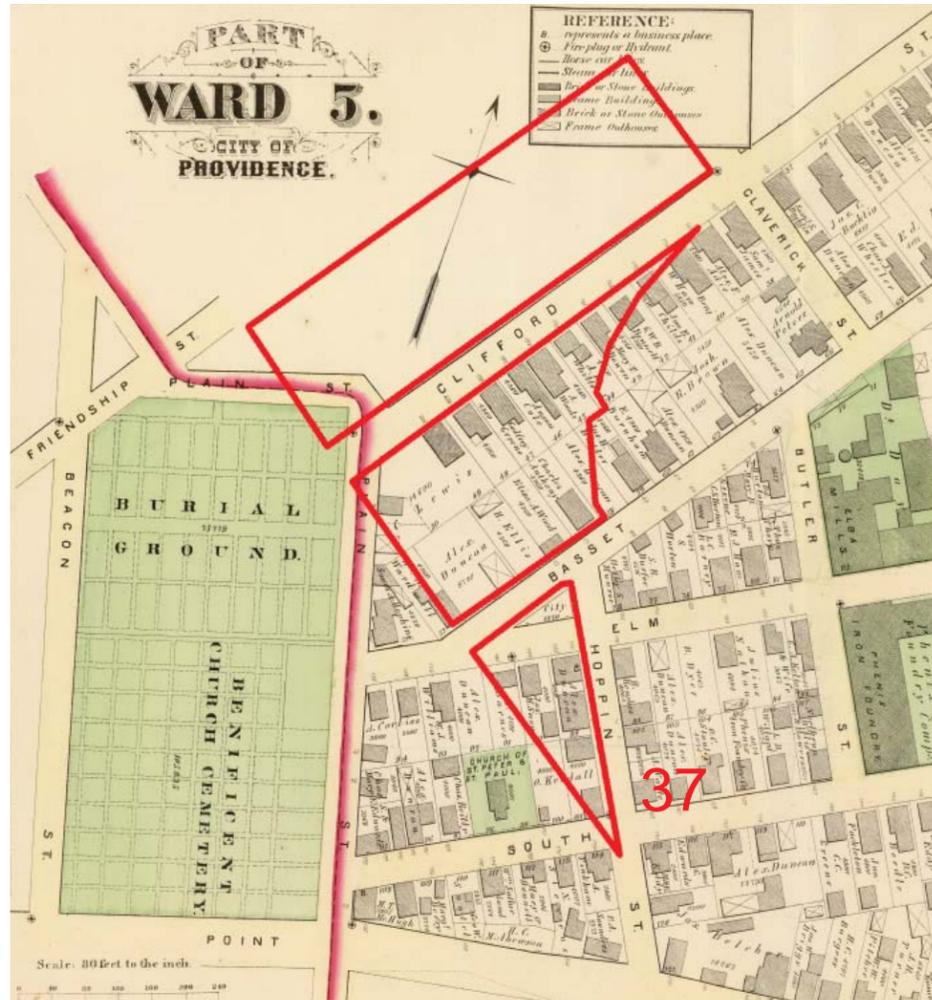
PROPERTY

- Brown University
- Johnson and Wales
- Hospital
- Museum
- Existing Buildings

UTILITIES

- Electronic Ducts
- Water Lines
- Gas Mains
- Drainage
- Telephone
- Abandoned Utilities





Parcel 37

Existing Conditions and Post-Highway Demolition Description

Parcel 37 is a .54 acre parcel (23,443 sf) that is scheduled to be available in the fall of 2010.

The triangular shaped parcel is defined on the north by the proposed Bassett Street extension connecting to the new extension of East Franklin Street which will define the west side of the parcel. The eastern edge of the parcel is defined by the existing Hoppin Street alignment which angles to the northeast and will be discontinued north of Bassett. Parcel 37 is a contiguous block of single ownership. Two sides of the frontage defining Parcel 36 will be newly constructed streets (Bassett and East Franklin) with the Hoppin Street frontage on an existing street. Hoppin Street will not connect through to East Franklin Street.

The parcel will have access from Bassett and Hoppin Streets. Site access from East Franklin Street may be restricted by steep slope or retaining wall, depending on the site design. Like most surplus parcels, the proposed configuration is a product of reintroducing the historic street pattern.

The proposed parcel configuration will be created entirely by the demolition of the highway ramps and the sloped fill of the embankments. The 30 percent Demolition Plans indicate that all abandoned aboveground infrastructure associated with the relocation of I-195 will be removed from Parcel 37. The site will be graded to match existing elevations at the property lines with a 2:1 (horizontal:vertical) slope, which will cover approximately 35-percent of the parcel. It may be possible to grade the property to remove the 2:1 slope. Alternatively, it may be desirable to construct a retaining wall to create a larger buildable area on the parcel. Site access is currently available from Hoppin Street. Bassett Street will be extended and provide additional site access. Site access from East Franklin Street may be restricted by steep slope or retaining wall, depending on the site design.

Parcel 37 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

The Utility Plans indicate that natural gas (6-inch), water (16-inch and 6-inch), electric, and telecommunication utilities are available in Hoppin Street adjacent to the site. A small portion of sanitary sewer (12-inch) is located in Bassett Street; however sufficient information is not provided on the plans to determine if sewer is available for connection.

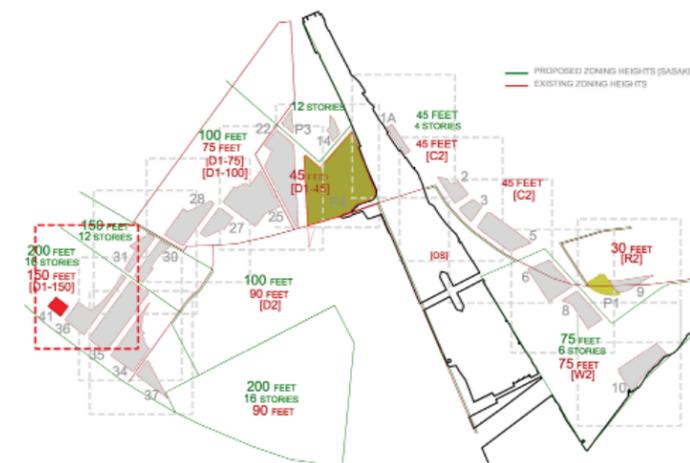
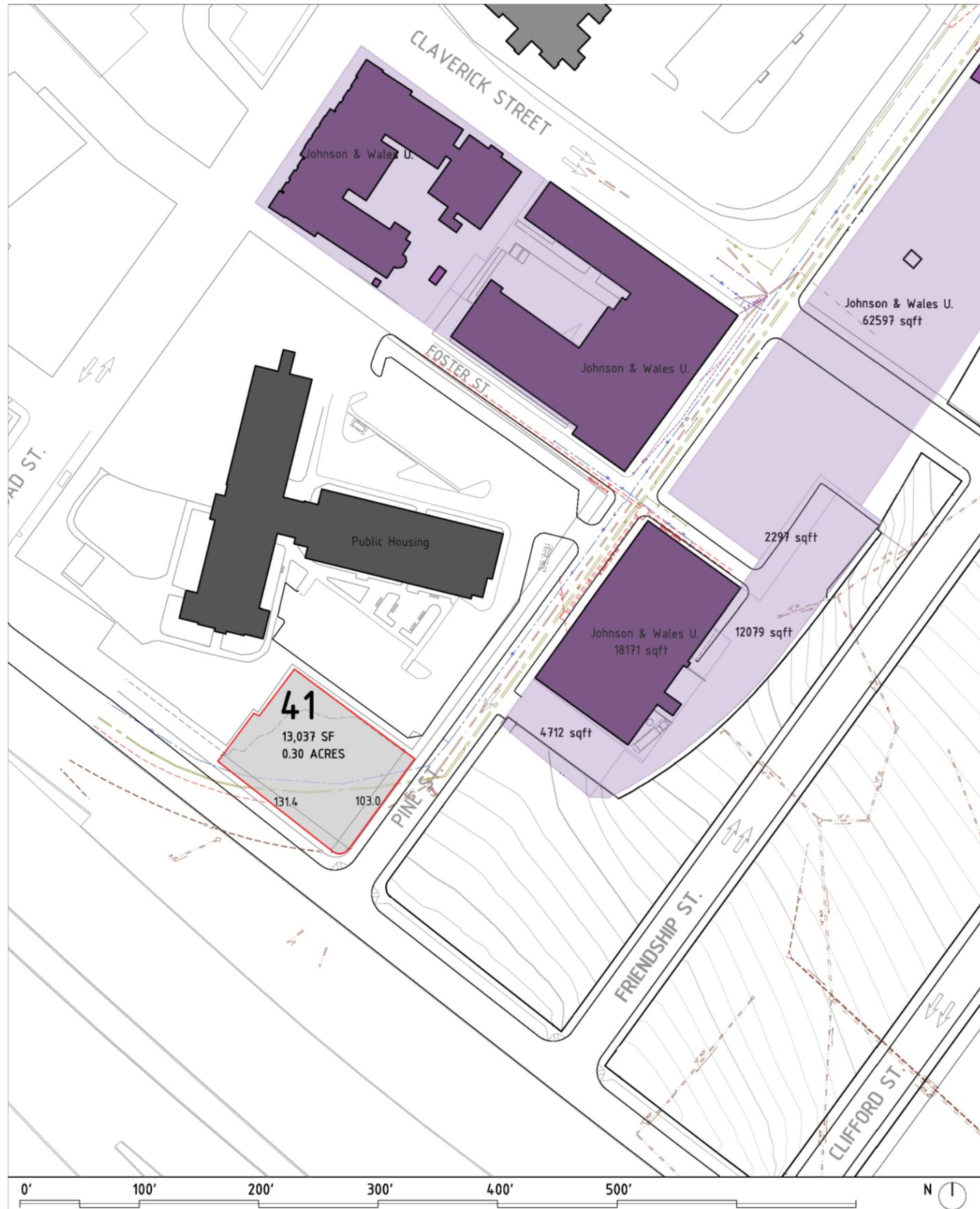
Image of access to garage in Hoppin St



Historical alignment of the area [1875] with parcels overlay

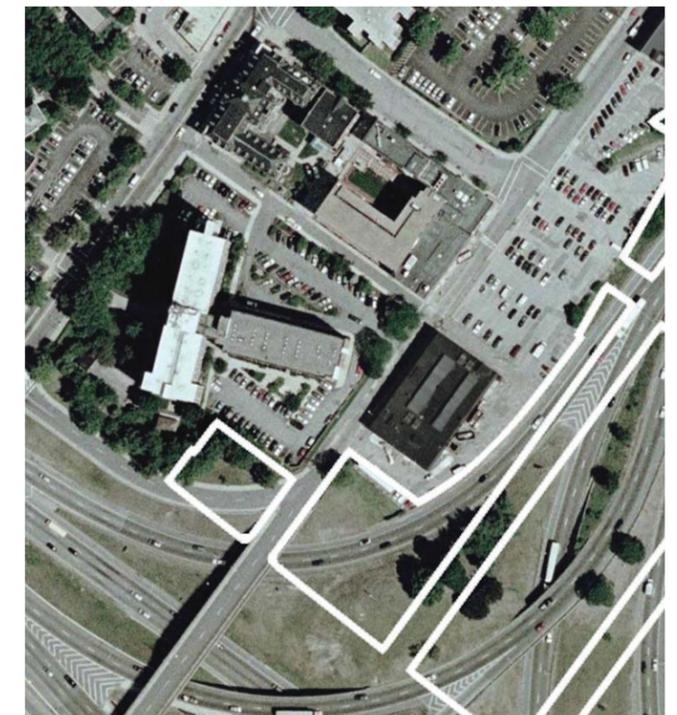
Parcel 41 is located between East Franklin and Pine Streets. It is one of the smallest parcels in the ROW, offering a quite restricted development footprint and facing I-195.

- **Topography:** The parcel slopes down southwest to northeast from 66 feet to 62 feet.
- **Historic Relevance:** The site is located in the DOWNCITY DISTRICT and as part of the area being freed up by the 195 relocation, the development of this parcel will be subject to design review by the appropriate commission.
- **Zoning:** Its current allowable height is 150 feet, but the proposed Providence 2020 plan sets up 200'
- **Adjacent Uses / Abutters.** The adjacent property is owned by the Providence Housing Authority, and a 9-story residential building and surface parking are the main uses.



COLOR KEY

PROPERTY	UTILITIES
 Brown University	 Electronic Ducts
 Johnson and Wales	 Water Lines
 Hospital	 Gas Mains
 Museum	 Drainage
 Existing Buildings	 Telephone
	 Abandoned Utilities



Parcel 41

Existing Conditions and Post-Highway Demolition Description

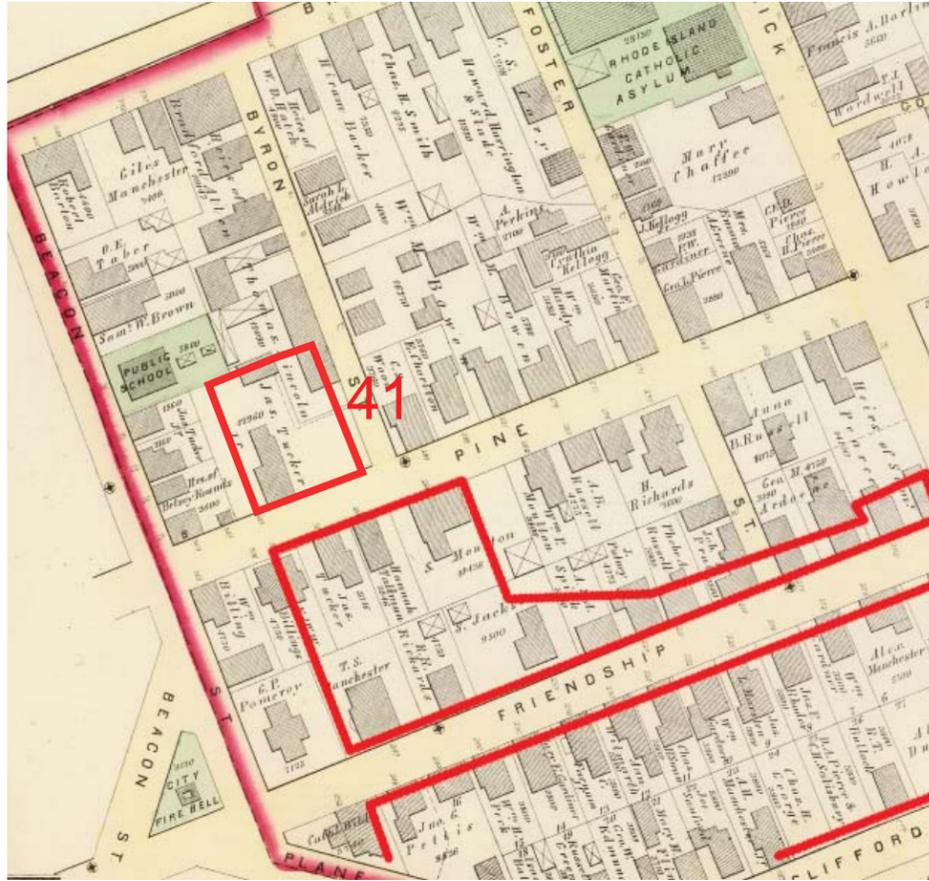
Parcel 41 is a 0.3 acre parcel (13,037 sf) that is scheduled to be available in the fall of 2010. The parcel is defined on the north and east by the abutting property owned by the Providence Housing Authority and an existing high-rise residential development. The southern boundary of the site is the existing Pine Street connecting to the new extension of East Franklin Street which will define the west side of the parcel. The parcel will have access from Pine and East Franklin Street.

The proposed parcel configuration will be created entirely by the demolition of the highway ramps and the sloped fill of the embankment. The 30 percent Demolition Plans indicate that all abandoned above ground infrastructure associated with the relocation of Interstate 195 will be removed. The site will be graded to match existing elevations at the property lines with a 2:1 (horizontal: vertical) slope, which will cover approximately 75 percent of the parcel. A retaining wall should be constructed to allow reasonable use of the parcel. A retaining wall is located along the northeastern property line, along abutting

parcel Plat 24 Lot 22. If the wall remains, construction adjacent to the wall may not be feasible due to the unknown structural condition of the wall. The presence of the wall may prevent the physical connection of the Parcel 41 with the Lot 22. Site access is currently available from Pine Street. East Franklin Street will be extended and provide additional site access.

Parcel 41 is located within Flood Zone X, an area determined to be outside the 500-year floodplain.

The Utility Plans indicate that natural gas (20-inch) and water (6-inch) utilities are available in Pine Street adjacent to the site. Electric and telecommunication utilities are available approximately 100 feet and 550 feet north in Pine Street respectively. A 12-inch combined sewer is located in Pine Street adjacent to the site.



Historical alignment of the area [1875] with parcels overlay

Image of the existing public housing building





Parcel Planning and Capacity Studies

With the findings of the data gathering and existing conditions summary phases, the team undertook a preliminary planning study of each parcel with the intent of determining the following:

- Potential development scenarios;
- Potential interested parties;
- Possible parcel realignment scenarios;
- Potential strategic assembly / property acquisition;
- General development and urban design principles;
- Opportunities and limits on development given the proposed parcel dimensions and configurations;
- Preferable land uses given the context, site dimension, zoning regulations and the findings of prior planning studies; and
- Likely frontages, orientations and potential development patterns for parcels

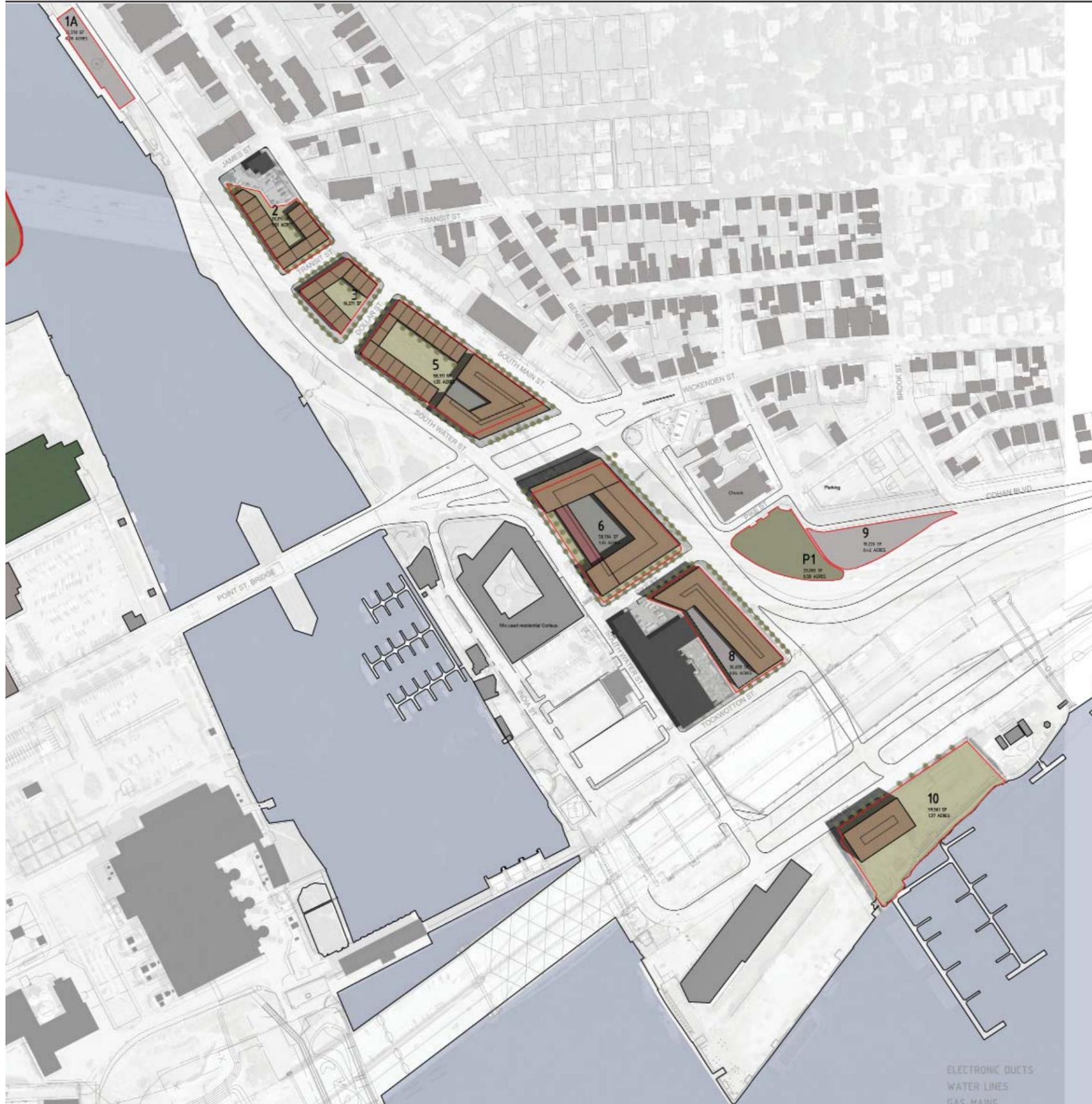
These exercises also resulted in the exploration of some potential adjustments to the proposed street alignment and parcel delineation and an assessment of the potential pros and cons of alternative parcel and street layouts. It should be noted that these alternative street realignments have potential utility, traffic and grading issues associated with them. It is recommended that further engineering assessment be conducted in order to evaluate these impacts and that RIDOT and the City of Providence continue to explore the pros and cons of the alternate street and parcel layouts. It is also worth noting that the timing of proposed utility installations and street construction needs to be considered within this alternate alignment evaluation process.

These studies were also informed by, and in turn tested against, the findings of the economic and market analysis to suggest how the market may respond to the redevelopment opportunities presented by the surplus land. In particular, the studies focus on how issues of zoning, absorption, and timing of disposition and potential and development mechanisms may influence valuation and implementation.

The process described above and the findings that follow in this section are not intended to represent the level of scrutiny or analysis required for the due diligence that a potential interested buyer may conduct. Nor are the studies and recommendations the result of a detailed urban design and site planning exercises that would be necessary for redevelopment. Rather, the intent of the report is to serve as a preliminary, corridor-wide analysis and set of working tools to inform and guide the land disposition process and, ultimately, the implementation of the parcel development over time.

Parcel Planning and Capacity Studies

East Side Parcels [Summary of proposed uses]



Option A

Option B

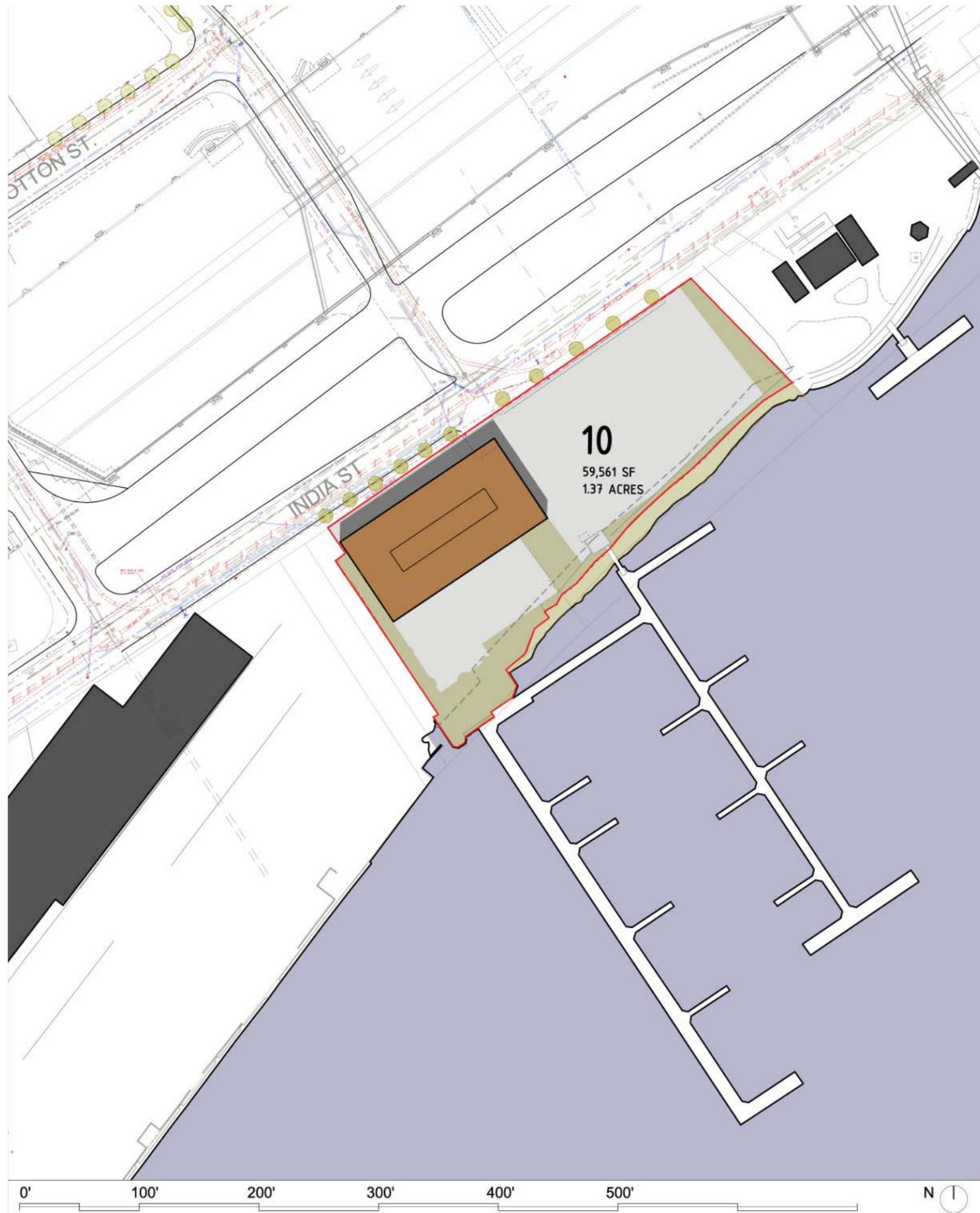
Parcel	Option A	Option B
Parcel 10	Residential 72,000 sf [60 units] Parking 24,000 sf [60 spaces]	Residential 120,000 sf [100 un] Parking 36,000 sf [100 sp]
Parcel 9		
Parcel 8	Residential 94,400 sf [80 units] Parking 49,400 sf [80 spaces] Commercial 15,600 sf	Residential 141,600 sf [120 un] Parking 49,400 sf [120 sp] Commercial 15,600 sf
Parcel 6	Residential 152,000 sf [128 units] Parking 66,300 sf [128 spaces] Commercial 43,000 sf	Residential 228,000 sf [192 un] Parking 87,650 sf [192 sp] Commercial 21,500 sf
Parcel 5	Residential 148,400 sf [18 t + 80 u] Parking 33,000 sf [18 + 82 spaces] Commercial 22,400 sf	
Parcel 3	Residential 30,000 sf [10 townhouse]	
Parcel 2	Residential 39,000 sf [13 townhouse]	
Parcel 1A		

EAST SIDE PARCELS

The proposed street alignments on the east side of the river are largely a response to the historic grid. With few exceptions, the parcels are defined as a north-south corridor between South Main and South Water Streets. This corridor, with an important cross axis at Wickenden Street, generally defines sites of adequate for dimension for development. In particular, the parcel configurations on the east side suggest housing and mixed use footprints appropriate for the context.

The proposed east-west streets that traverse this corridor are important physical and visual connectors between Fox Point, College Hill and the riverfront and their alignment also follows the historic street pattern. In one particular case, the proposed reintroduction of Dollar Street between South Main and South Water results in a small Parcel 3 that may inhibit flexibility of development. An alternative Dollar Street alignment is explored in this chapter. Unlike the Jewelry District parcels, the east side parcels are defined entirely by street frontage and are not encumbered by adjacent property ownership. The exceptions to this condition are Parcels 2, 8 and 10, although both are adequately dimensioned for development without additional parcel assembly.

The East Side parcels include Parcel P1 which is designated as open space and is contiguous with the small, irregularly shaped Parcel 9. Development opportunities for Parcel 9 are limited, although the .42 acre parcel could accommodate neighborhood scaled housing that fronts the open space at P1 or Cohan Boulevard. Other opportunities include possibly combining it with open space on P1 or incorporating a landscape buffer against the highway, or using the land to relocate the surface parking on the existing lot across the street which could then be redeveloped as housing or recreation space.



Parcel Number

10

Area Availability
59,561 sf
1.37 acres
Mid 2008

Residential Units: 1,200 sf gross area [85% = 1,000 sf net area]

12,000 sf floorplate
-height : **75' [6 floors]** above flood plane elevation
Residential: 6 floors x 12,000 sf = 72,000 sf = 60 units [10 units / floor]
Parking: 2 floors x 12,000 sf = 24,000 sf = 60 spaces

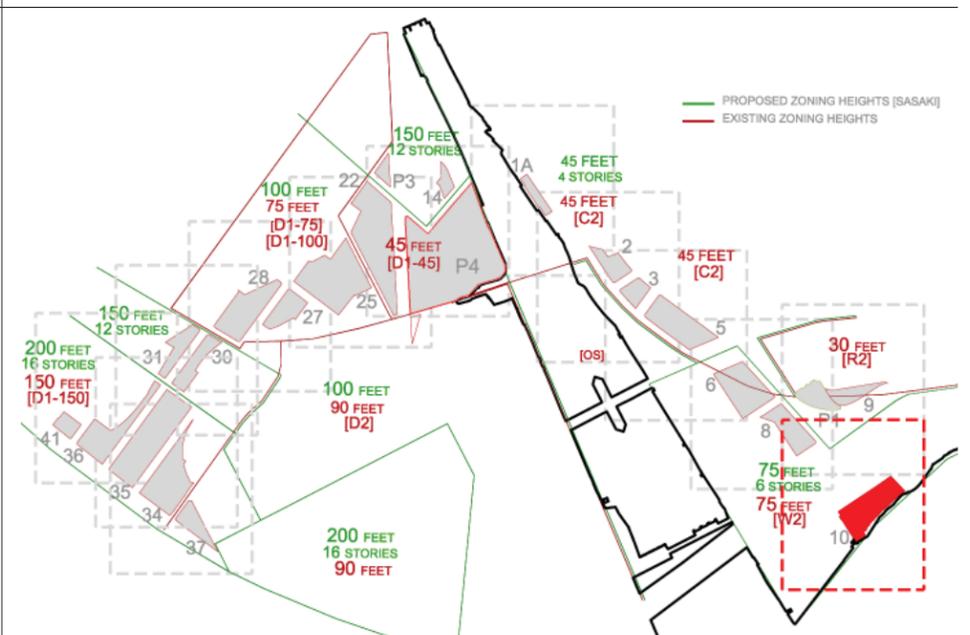
Total square footage **P10**
Residential: 72,000 sf
Parking: 24,000 sf
option A

Total square footage **P10**
Residential: 120,000 sf
Parking: 36,000 sf
option B

12,000 sf floorplate
-height : **125' [10 floors]** above flood plane elevation
Residential: 10 floors x 12,000 sf = 120,000 sf = 100 units [10 units / floor]
Parking: 3 floors x 12,000 sf = 36,000 sf = 100 spaces

COLOR KEY

- DOT parcels under study
- PROPOSED USES**
 - Institutional/Lab/Research
 - Housing
 - Offices
 - Commercial
 - Educational J&W University
 - Parking Garages
- PROPERTY**
 - Brown University
 - Johnson and Wales
 - Hospital
 - Museum
 - Historic structures
- UTILITIES**
 - Electronic Ducts
 - Water Lines
 - Gas Mains
 - Drainage
 - Telephone
 - Abandoned Utilities



Parcel 10

Planning Issues and Capacity Study

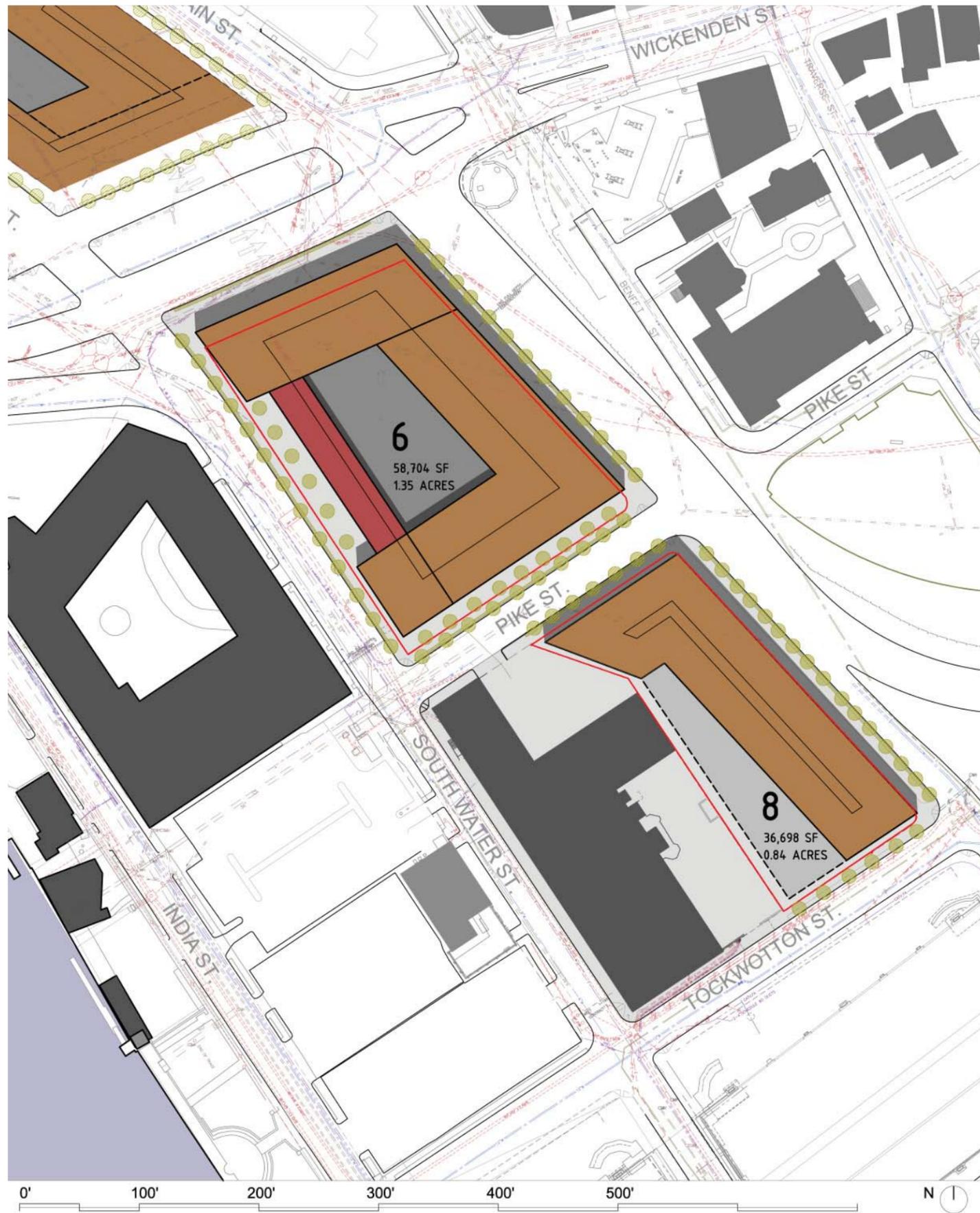
The development opportunities for Parcel 10 appear to mostly favor housing and potentially hotel use, although proximity to the elevated highway and the remote nature of the site make the location somewhat challenging for these uses. The unique bay frontage and the associated views suggest a marketable development opportunity as well as the amenity of adjacency to India Point Park. A great deal of community interest has centered on promoting the reuse of the site for public amenities and access, and with that there has been vocal opposition to housing, hotel or other private uses on the site. The dimensions and orientation of the site, with the proper regulatory controls, suggest that private development may well co-exist with public space and access, particularly if the lot coverage of the site is limited and open space is encouraged through potential trade-offs such as building height and parking limitations. Concerns over height, density and use on parcel 10 may well be mitigated with the following incentives which can be codified in the zoning regulations:

- Limiting lot coverage;
- Preserving publicly accessible open space adjacent to the Community Boating facility and establishing a buffer between the development and the existing park;
- Expanding the minimum waterfront access easement and the perpendicular easement on the west edge of the parcel;
- Maintaining a view and public access corridor aligning with Benefit Street to the north to the waterfront;
- Limiting the extent of or prohibiting surface parking on the site
- Providing public access to the docks; and
- Incorporating public amenities into the redevelopment of the site (i.e. market facilities, performance space, cultural and community facilities).

The limitation imposed by the flood plain that occupied spaces are not permissible beneath the base floor elevation would still allow for at-grade and structured parking to occur beneath a building footprint. This strategy will preserve open space elsewhere on the site as well as bring the first occupied floor of housing up above the elevated highway. The unique nature of the waterfront site and the commu-

nity interest in preserving public access suggest that the zoning for Parcel 10 may be well served by an incentive driven, form-based approach which would enable height beyond that currently allowed while still establishing the site as a public destination and waterfront access.

The site capacity analysis tested an 'as-of-right' approach that would utilize a larger development footprint (23,000 sf) but maintain the current allowable zoning height of 75 feet. This approach is not recommended since the expanded footprint prevents visual and physical access to the waterfront, but was explored in order to establish a base line density to test against the preferred approach of a smaller footprint (12,000 sf) utilizing the additional height of 125 feet. This exercise produces a comparable density between the 2 footprints, but the limited site coverage would logically produce more valuable units given the views and a greater degree of open space. Given the context of the adjacent highway and the site's remote location from the neighborhood fabric, this range of height is not an unreasonable prospect if it is combined with the proper community benefits, limited in site coverage and is accompanied by appropriate site improvements, open space preservation and public access.



Parcel

Number **Area Availability**

06 58,704 sf
1.35 acres
Fall 2010

Square footage P06 opt A
Residential: 228,000 sf
Parking: 87,650 sf
Commercial: 21,500 sf

Square footage P06 opt B
Residential: 152,000 sf
Parking: 66,300 sf
Commercial: 43,000 sf

08 36,698 sf
0.84 acres
Fall 2010

Square footage P08 opt A
Residential: 141,600 sf
Parking: 49,400 sf
Commercial: 15,600 sf

Square footage P08 opt B
Residential: 94,400 sf
Parking: 49,400 sf
Commercial: 15,600 sf

COLOR KEY

- DOT parcels under study
- PROPOSED USES**
 - Institutional/Lab/Research
 - Housing
 - Offices
 - Commercial
 - Educational J&W University
 - Parking Garages
- PROPERTY**
 - Brown University
 - Johnson and Wales
 - Hospital
 - Museum
 - Historic structures
- UTILITIES**
 - Electronic Ducts
 - Water Lines
 - Gas Mains
 - Drainage
 - Telephone
 - Abandoned Utilities

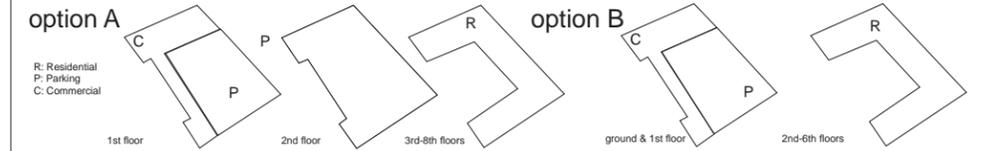
Residential Units: 1,200 sf gross area [85% = 1,000 sf net area]
54,500 sf floorplate

-height option A: 100' [8 floors]

Residential: 6 floorsx38,000 sf=228,000 sf=192 units [32 units/floor]
Parking: [1st + 2nd fl]= 33,150 sf + 54,500 sf= 192 spaces
Commercial:[1st floor S Water St] 21,500 sf

-height option B: 75' [6 floors]

Residential: 4 floorsx38,000 sf=152,000 sf=128 units [32 units/floor]
Parking: [1st+2nd fl] 2 floorsx33,150 sf=66,300 sf =164 spaces
Commercial: 2 floors x 21,500 sf = 43,000 sf[ground & 1st floor]



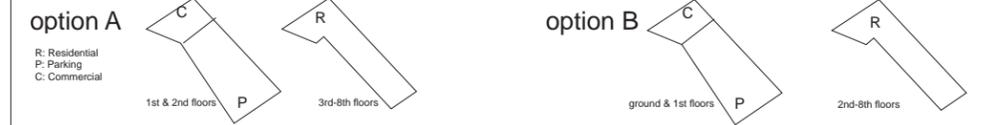
32,500 sf floorplate

-height option A: 100' [8 floors]

Residential: 6 floorsx23,600 sf=141,600 sf=120 units [20 units/floor]
Parking: 2 floors x 24,700 sf = 49,400 sf = 120 spaces
Commercial: [1st & 2nd floors Pike St] 15,600 sf

-height option B: 75' [6 floors]

Residential: 4 floorsx23,600 sf=94,400 sf=80 units [20 units / floor]
Parking: 2 floors x 24,700 sf = 49,400 sf > 80 spaces
Commercial: 2 floors x 7,800 sf = 15,600 sf



Parcel 6

Planning Issues and Capacity Study

The dimensions, location and contiguous definition of Parcel 6 make it one of the more desirable and developable parcels within the I-195 corridor. The site dimensions, context and proximity to the both the river and the bay suggest that development opportunities favor housing with ground floor commercial uses and possibly a hotel. In particular, the parcel benefits from Wickenden Street frontage and the opportunity to extend the vibrant mixed-use nature of that street across north frontage of the site, reinforcing the important connection to the Point Street Bridge. Like Parcel 5 across Wickenden Street, Parcel 6 has been described as a possible ‘gateway’ site anchoring the end of Wickenden Street at what will be important new intersections with South Main and South Water Streets. Parcel 6 also benefits from the frontage of the historic Corliss Landing development directly across South Main Street. The successful, active street frontage of this block, in spite of its current condition as a one sided street, underscores the opportunity for development of Parcel 6 to reinforce this existing fabric and complete the opposite side of the which is currently highway frontage.

Current zoning calls for a maximum height of 75 feet. It may be plausible to suggest that additional height is acceptable toward the south, stepping up away from Wickenden Street. The historic fabric within the north south corridor that defines Parcel 6 suggests that building footprints on this parcel should be built to the lot line – similar to the typology found in the adjacent Corliss Landing property directly across the street. However, given the size of the block, it is quite possible that the parcel could accommodate multiple buildings and mid-block pedestrian access might be achieved. The potential to combine the redevelopment of Parcel 6 with the redevelopment of Parcel 8 to the south may present an opportunity for greater flexibility and synergy as well as the potential for shared amenities, parking and site improvements. This approach does not suggest combining the parcels, but perhaps utilizing a single source development approach for both blocks.

The Downtown neighborhood charettes addressed the need to fur-

ther evaluate the final design of the Wickenden Street alignment to create a more pedestrian friendly environment. Currently, the proposed street design includes a wide vehicular corridor and median not in keeping with the typical scale of the street and the neighborhood fabric. A more refined street design may allow for Parcel 6 to be enlarged somewhat with Wickenden Street frontage shifting north beyond the proposed property line. Even if the street alignment is not adjusted, the Parcel 6 property line currently suggests an unnecessarily wide sidewalk that should be reconsidered in an effort to keep the distance between development on either side of Wickenden Street closer to the existing fabric further up the street.

The potential development diagram on the previous page shows a building footprint encroaching the street edge of the property line resulting in a narrower sidewalk – although a more refined traffic and urban design study is recommended.

Parcel 8

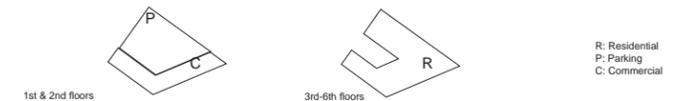
Planning Issues and Capacity Study

The street edges of Parcel 8 are somewhat challenged in that the partial frontage along the new Benefit Street will face the new west bound, at grade off ramp of the I-Way, but will also have a continuation of the street beneath the elevated highway to Parcel 10. The surplus Parcel 9 on the opposite side of Benefit and the off ramp is designated as open space. The southern frontage along Tockwotton Street will face the elevated highway. The site dimensions, context and proximity to the both the river and the bay suggest that development opportunities favor housing with ground floor commercial uses and possibly a hotel. Combining Parcel 8 with either the redevelopment or reuse of the Fuller Iron Works complex will greatly improve flexibility and development opportunities, including the introduction of South Main Street frontage and River views to the west

Current zoning calls for a maximum height of 75 feet on the site. The opportunities for river and bay views suggest that Parcel 8 presents marketable opportunities for housing. The design guidelines identified in the neighborhood charrette suggest that additional height is acceptable on the southern end of the site adjacent to the highway. As with Parcel 10, the trade-offs for taller development on this site would include limiting the footprint of the taller elements and limiting on site parking. The historic fabric within the north/south corridor of which Parcel 8 is the southernmost terminus, suggests that building footprints on this parcel should be built to the lot line – similar to the typology found in the adjacent Corliss Landing property. However, given the size of the block, it is quite possible that the parcel could accommodate multiple buildings and that mid-block pedestrian access to the riverfront might be achieved. The potential to combine the redevelopment of Parcel 8 with the redevelopment of Parcel 6 to the north may present an opportunity for greater flexibility and synergy as well as the potential for shared amenities, parking and site improvements. This approach does not suggest combining the parcels, but perhaps utilizing a single source development approach for both blocks.



Parcel Number	Area Availability	Residential Units: 1,200 sf gross area [85% = 1,000 sf net area]
02	22,211 sf 0.51 acres Mid 2011	39,000 sf floorplate -height : 45' [3 floors] Residential: 3 floors x 1,000 sf x 13 townhomes = 39,000 sf Parking: 1 space / townhome
03	16,271 sf 0.37 acres Mid 2011	30,000 sf floorplate -height : 45' [3 floors] Residential: 3 floors x 1,000 sf x 10 townhomes = 30,000 sf Parking: 1 space / townhome
05	58,711 sf 1.35 acres mid 2011	A : 54,000 sf floorplate -height : 45' [3 floors] Residential: 3 floors x 1,000 sf x 18 townhomes = 54,000 sf B : 32,500 sf floorplate -height : 75' [6 floors] Residential: 4 floors x 23,500 sf = 94,000 sf = 80 units [20 units / floor] Parking: 2 floors x 16,500 sf = 33,000 sf = 82 spaces Commercial: 2 floors x 11,200 sf = 22,400 sf
Total square footage P05 Residential: 148,400 sf Parking: 33,000 sf Commercial: 22,400 sf		



COLOR KEY

- DOT parcels under study
- PROPOSED USES**
 - Institutional/Lab/Research
 - Housing
 - Offices
 - Commercial
 - Educational J&W University
 - Parking Garages
- PROPERTY**
 - Brown University
 - Johnson and Wales
 - Hospital
 - Museum
 - Historic structures
- UTILITIES**
 - Electronic Ducts
 - Water Lines
 - Gas Mains
 - Drainage
 - Telephone
 - Abandoned Utilities



Parcel 2, 3 and 5

Planning Issues and Capacity Study

Parcels 2,3 and 5 are part of a proposed north-south corridor of parcels defined by South Main and South Water and together with Parcel 5, represent an unique opportunity to extend the vibrant character of the parallel north south streets that define the river edge of College Hill.

In both parcels, the site dimensions, context and proximity to the both the river and College Hill suggest that development opportunities favor housing with potentially ground floor commercial uses. The small site dimensions make it unlikely for any use other than housing and small scaled commercial activities, including street level retail and small scaled office space.

Current zoning calls for a maximum height of 45 feet, which seems appropriate for Parcels 2 and 3 to the south. The existing topography on the opposite side of South Main Street slopes up considerably to the west away from the river toward College Hill. The dimension of the site works well for housing and the planning study explores a townhouse development model with frontage on South Main, South Water and Transit Streets.

In **Parcel 2**, the dimension across the site is narrower than that of Parcels 3 and 5 which further challenges the ability to accommodate townhome footprints on either side of the block while maintaining adequate rear yard open space, however the site dimensions to enable this development pattern. The original Old Harbor plan recognized this fact and only proposed housing fronting along South Main Street. A 3 to 4 story small-scaled multi-family typology with commercial uses at the street level may also be accommodated on Parcel 2.

The adjacency of the existing historic Tillinghast House and the associated parcels present an opportunity to assemble the existing properties with Parcel 2 to improve planning flexibility and development potential. The opportunity to generate revenue from Parcel 2 development in order to fund preservation of the historic structure, which is currently not occupied and in a state of disrepair, is also an opportunity presented by Parcel 2. The preservation of the House and ultimately the quality, scale and character of development on the surplus parcels, are both critical to the success of extending the existing vibrant, mixed-use characteristics of South Main Street all the way down to Wickenden Street.

The potential to combine the redevelopment of Parcel 2 with, not only the preservation of the Tillinghast House, but with the redevelopment of Parcels 3 and 5 as well may present an opportunity for greater flexibility and synergy as well as the potential for shared amenities, parking and site improvements. This approach does not suggest combining the parcels, but perhaps utilizing a single source development approach for all 3 blocks.

In **Parcel 3**, frontage could also occur on Dollar Street, however the small block footprint does create challenges to achieving frontage on all 4 streets while maintaining any useful rear yard open space and parking access. A single, 4-sided internal courtyard housing might may be possible on this site as well.

The goal of introducing a mid-block connector / view corridor to the river across the broad dimension of Parcel 5 may also be achieved by shifting the proposed Dollar Street to the south resulting in a smaller Parcel 5 and a larger Parcel 3. This approach would create significant challenges with respect to existing utilities in the Dollar Street alignment, but might make for more evenly distributing the Parcel 3 dimension regarding pedestrian access to the river. A similar approach was suggested in the original alignment proposed by the Old Harbor Plan which did not include Dollar Street, but suggested a mid block pedestrian connector between a combined Parcel 3 and 5. The proposed extension of Transit Street is logical given the connection to the existing alignment heading up College Hill. The historic fabric within the north south corridor that defines Parcel 3 suggests that building footprints on this parcel should be built to the lot line – not only desirable but necessitated by the narrow east west dimension of the parcel.

The potential to combine the redevelopment of Parcel 3 with the redevelopment of Parcel 2 and 5 on other side may present an opportunity for greater flexibility and synergy as well as the potential for shared amenities, parking and site improvements. This approach does not suggest combining the parcels, but perhaps utilizing a single source development approach for all 3 blocks.

The Downtown neighborhood charettes addressed the need to further evaluate the final design of the Wickenden Street alignment to create a more pedestrian friendly environment. Currently, the proposed street design proposes a wide vehicular corridor and median not in keeping with the typical scale of the street and the neighborhood fabric. A more refined street design may allow for Parcel 5 to be enlarged somewhat with Wickenden Street frontage shifting south beyond the proposed property line, as discussed in the Parcel 6 section.

In **Parcel 5**, apart from housing with potentially ground floor commercial uses, the addition of office uses on upper floors along the Wickenden Street end of the site could be considered. In particular, the parcel benefits from Wickenden Street frontage and the opportunity to extend the vibrant mixed-use nature of that street across north frontage of the site, reinforcing the important connection to the Point Street Bridge. Like Parcel 6 across the street, Parcel 5 has been described as a possible ‘gateway’ site anchoring the end of Wickenden Street at what will be important new intersections with South Main and South Water Streets. The site also can be seen as an important transition from a smaller scaled fabric north of Wickenden to larger scaled development south of Wickenden.

In this sense, Parcel 5 may represent an opportunity to reconsider existing height restrictions. Current zoning calls for a maximum height of 45 feet, which seems appropriate for Parcels 2 and 3 to the north. However, with the prominence of the Wickenden Street location, and the proposed width of the street, it seems desirable to encourage development of greater height on Parcels 5 – particularly at the southernmost end. Concern about additional height on this parcel can be mitigated by not only the scale and character of Wickenden Street, but also the existing topography which slopes up considerably to the west away from the river. The dimension of the site works well for housing and the planning study explores a multi-family mixed-use building along the Wickenden Street end of the site with townhomes lining South Water and South Main, although a denser housing typology is also possible on the northern half of the site.

The broad dimension along South Main and South Water Streets favors the possible introduction of a mid-block connector to the river which would also serve as a view corridor across the site. This goal may also be achieved by shifting the proposed Dollar Street to the south resulting in a smaller Parcel 5 and a larger Parcel 3. This approach would create challenges with respect to existing utilities in the Dollar Street alignment, but might make for a more Parcel 3 dimension while creating more even distribution of cross site pedestrian access to the river. The historic fabric within the north south corridor that defines Parcel 5 suggests that building footprints on this parcel should be built to the lot line – not only desirable but necessitated by the narrow east west dimension of the parcel.

The potential to combine the redevelopment of Parcel 5 with the ones of Parcel 2 and 3 to the north may present an opportunity for greater flexibility and synergy as well as the potential for shared amenities, parking and site improvements. This approach does not suggest combining the parcels, but perhaps utilizing a single source development approach for all 3 blocks.

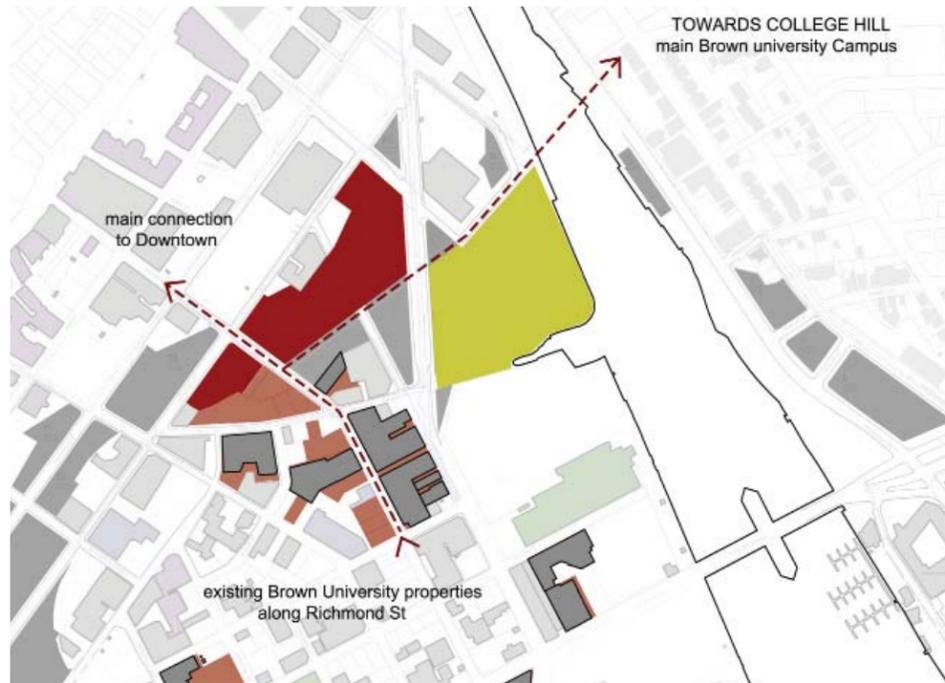
Parcel Planning and Capacity Studies



West Side Parcels [Summary of proposed uses]

	Option A	Option B
Parcel 22	Residential 241,500 sf [197 units] Parking 85,000 sf [215 spaces] Commercial 138,000 sf	Off/Lab/Res 466,200 sf Commercial 46,300 sf
Parcel 25	Off/Lab/Res 322,000 sf Commercial 138,000 sf	Residential 77,000 sf [64 u] Commercial 15,500 sf
Parcel 27	Off/Lab/Res/Acad 131,000 sf	Off/Lab/Res/Acad 131,000 sf
Parcel 28	Off/Lab/Res/Acad 193,000 sf	Off/Lab/Res/Acad 120,000 sf Garage 131,500 sf [325 sp]
Parcel 30	Residential 113,400 sf [90 units] Parking 44,000 sf [110 spaces] Commercial 17,000 sf	Stud Housing 200- 250 beds
Parcel 31	Residential 102,000 sf [78 units] Parking 34,000 sf [82 spaces] Commercial 13,000 sf	Stud Housing 200- 250 beds
Parcel 34	Residential 198,000 sf [162 units] Parking 67,800 sf [168 spa] Commercial 37,500 sf	
Parcel 35	Residential 144,000 sf [144 units] Parking 54,000 sf [135 spaces] Commercial 37,500 sf Garage 160,000 sf [400 spaces] Hotel 282,000 sf [340 rooms]	Inst/Academic 180,000 sf Garage 160,000 sf [400 sp] Hotel 282,000 sf [340 r]
Parcel 36	Residential 180,000 sf [144 units] Parking 60,000 sf [150 spaces]	
Parcel 37	Residential 120,000 sf [96 units] Parking 60,000 sf [150 spaces]	
Parcel 41	Residential 81,000 sf [56 units] Parking 27,000 sf [66 spaces]	

OBSERVATIONS ABOUT THE PROPOSED ALIGNMENT



Alternative alignment for possible Brown University parcels in the Jewelry District



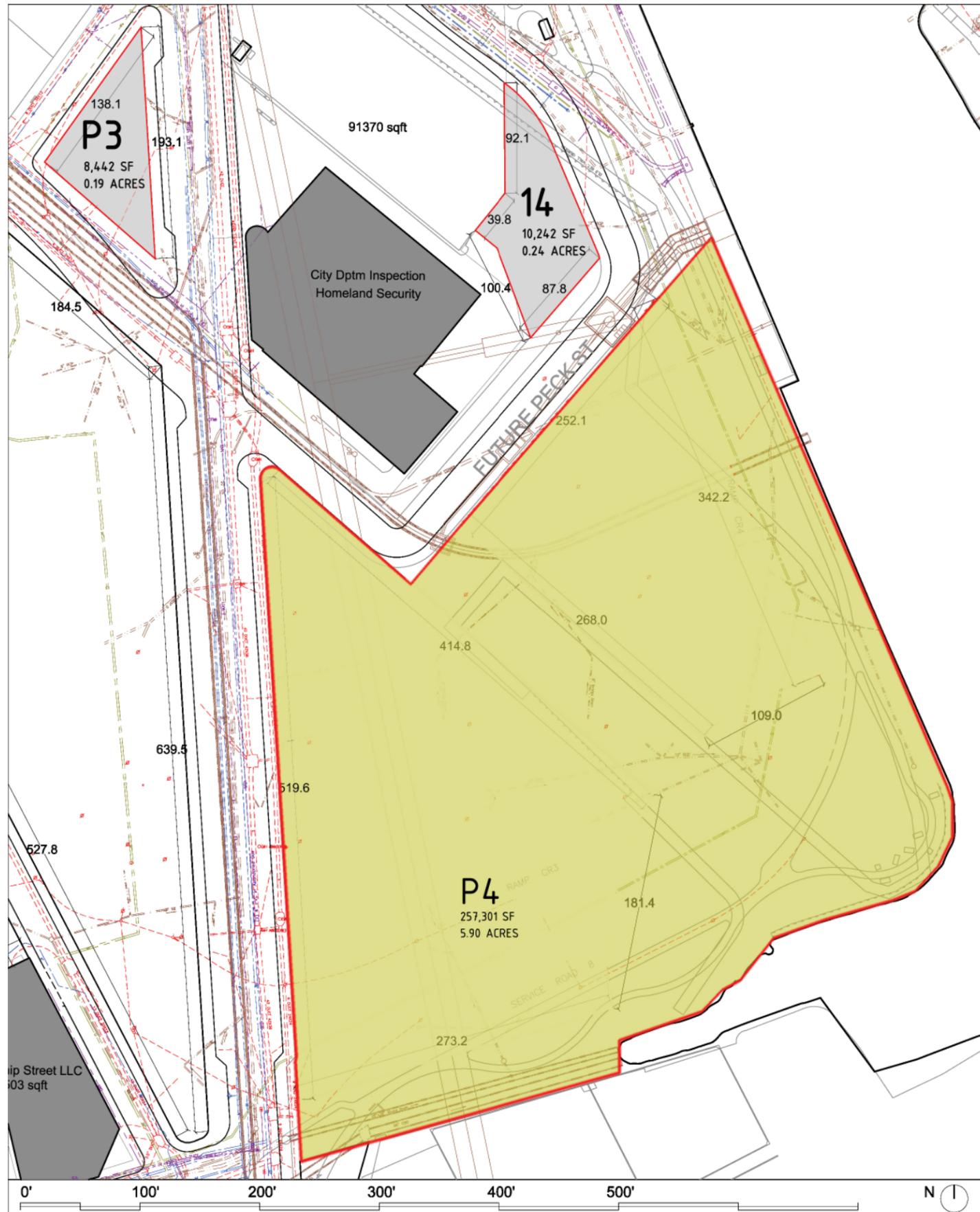
Alternative alignment for possible Johnson and Wales University parcels

Jewelry District Parcels

The urban patterns of the surplus land created by the I-195 realignment are generally defined by the historic street alignment that pre-existed the highway construction. In most cases, this approach logically achieves the goals of reconnecting Downcity and the Jewelry District on the west side of the river. This pattern also maintains the east west continuity of the Downcity grid (Clifford and Friendship Streets) and the connectivity toward the riverfront. The parcels along the Clifford and Friendship corridor (Parcels 27 – 41) are characterized by the existing narrow block pattern which hinders the flexibility of development to some degree, particularly where the surplus land is a remnant geometry and requires abutting ownership for redevelopment (e.g. Parcels 30 and 31). The parcels that negotiate the shift between the Downcity and Jewelry District grids (Parcels 25, 22 and Parcel P4) are larger, although slightly irregular in shape, and may allow for some alternative alignments, several of which have been proposed in previous planning studies. In general, the proposed parcelization and street alignment does create parcel configurations that can support development, although in some cases uses are limited and abutting parcels must be assembled. The proposed pattern does support the broader goals of restoring the historic street grid while encouraging a scale of development that will maintain the historic fabric of the District.

Abutting Ownership and Institutional Presence

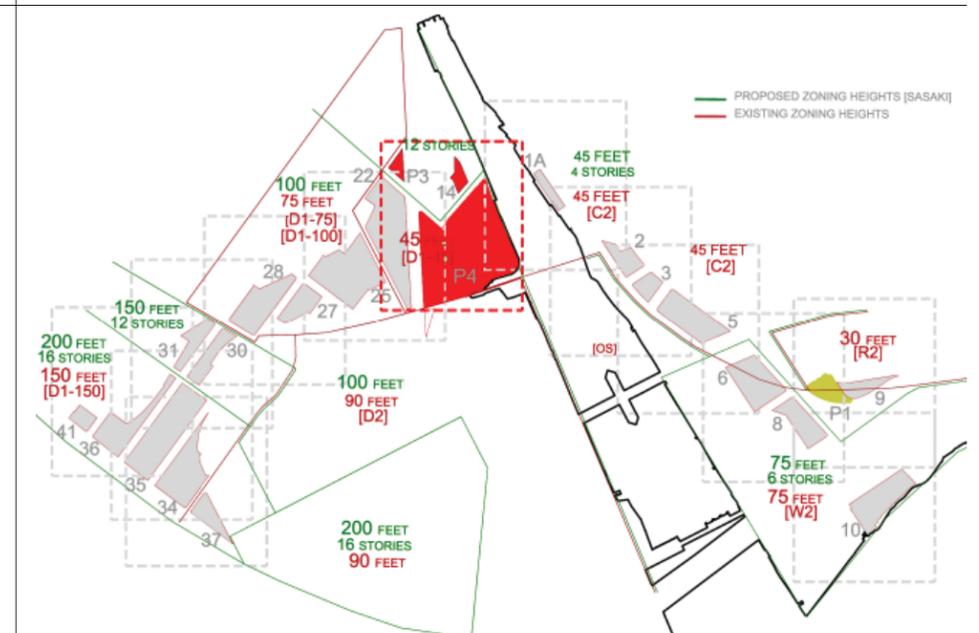
Part of the corridor and parcel analysis included mapping the ownership patterns adjacent to the I-Way parcels. At a neighborhood scale, the properties west of the river that are owned by Johnson and Wales and Brown University along the I-195 corridor present tremendous opportunities for institutional development of many of the parcels. The institutional presence in Downcity and the Jewelry District, and the stated commitments and interests of each institution, suggest that higher education uses – or uses with institutional partnerships - present viable prospects for the parcel redevelopment. In the case of Johnson and Wales, their institutional master plan proposes a development scenario for Parcels 31, 35 and 36. Brown University has also expressed an interest in Parcels 25, 27 and 28. In some cases, these parcels directly abut property owned by the 2 respective Universities and therefore would make non-institutional development more challenging (e.g. Parcel 30 & 36 for JWU and Parcel 27 for Brown). In the interest of advancing the mixed-use goals for the Jewelry District, institutional development need not consist of entirely academic uses, but would benefit from private development partnerships with supporting uses such as research, conference and hospitality facilities and incubator space that would benefit from institutional proximity.



Parcel Number	Area Availability	
P3	8,442 sf 0.19 acres	Open space
14	10,242 sf 0.24 acres	
P4	257,301 sf 5.90 acres	Open Space . Public Waterfront Park
1A	12,378 sf 0.28 acres	Commercial + Open Space

COLOR KEY

- DOT parcels under study
- PROPOSED USES**
- Institutional/Lab/Research
- Housing
- Offices
- Commercial
- Educational J&W University
- Parking Garages
- PROPERTY**
- Brown University
- Johnson and Wales
- Hospital
- Museum
- Historic structures
- UTILITIES**
- Electronic Ducts
- Water Lines
- Gas Mains
- Drainage
- Telephone
- Abandoned Utilities



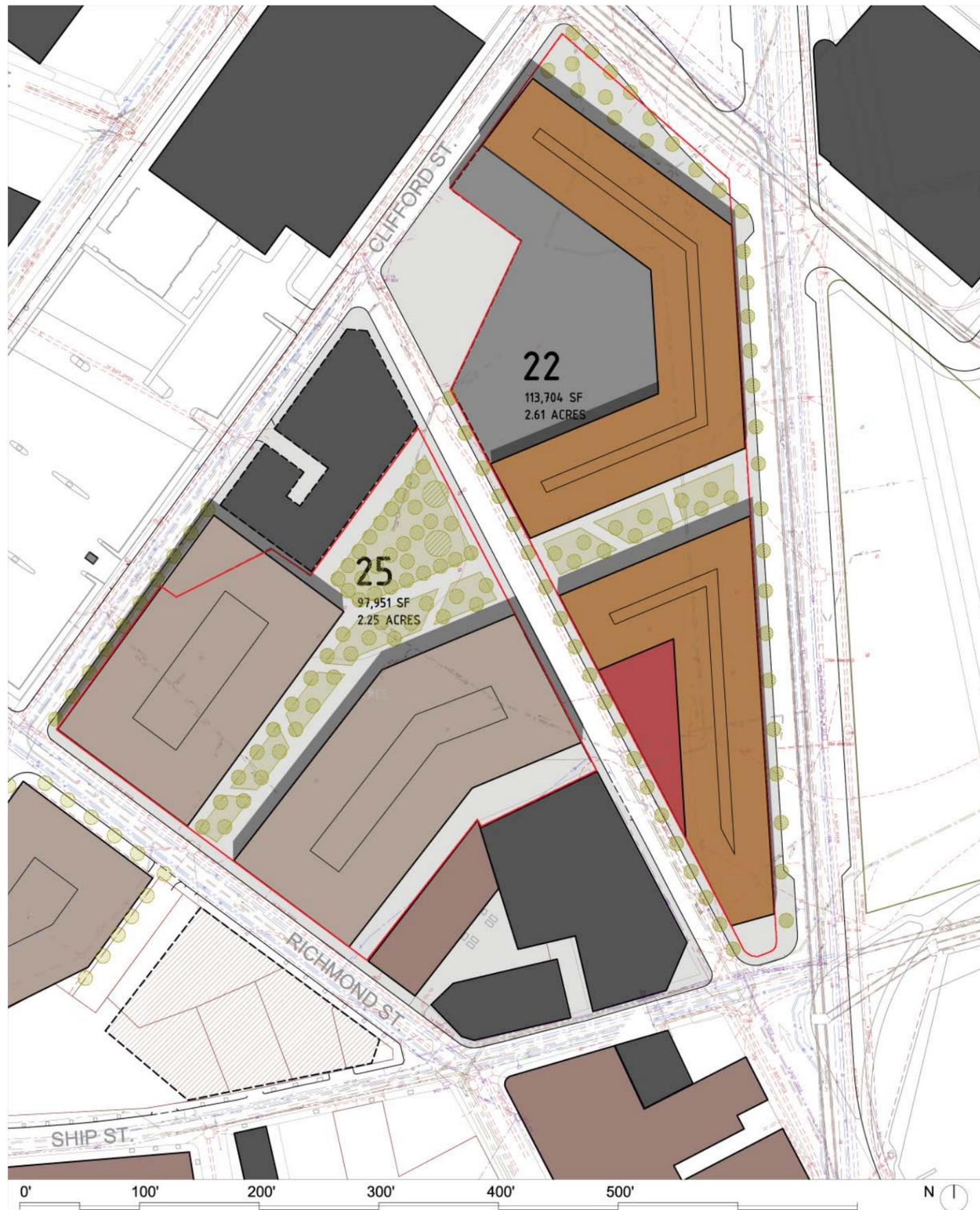
Parcels 1A, P3, 14, and P4

Planning Issues and Proposed Uses

Parcel 1A, is abutted on either end by the continuous open space along the east side of the Riverfront. The parcel's small dimension, and the regulatory controls imposed by its waterfront location, limit its development potential, however small scale commercial development is possible on the site. Any structures built on the Parcel 1A would have the potential to house temporary or seasonal market facilities, park structures supporting temporary or permanent exhibit or public art, or a small commercial space that could activate the riverwalk. The Rhode Island School of Design may be a potential interested party given its past use of the site for temporary outdoor installations and its current use of the parking lot across South Main Street for activities associated with commencement. Any use on Parcel 1A must be compatible with and add vitality to the Riverwalk.

Directly across the river, Parcel P4 is designated as open space and is proposed to be a public water front park, currently in the programming and schematic design phases and referred to as Harbor Landing Park. The siting of the park is a central theme of the planning goals for I-195 removal and has been since the concept was first explored through the Old Harbor Plan almost 2 decades ago. The opportunity for the highway demolition to open up the Old Harbor and re-establish connections between the Jewelry District and the Riverfront is one of the significant public benefits of the project. Development on Parcel 22 and 25 to the west and the east/west connections across the parcel to the parks are important considerations in the disposition and planning of those parcels. Other issues affecting the successful implementation of the parks include creating the desired pedestrian bridge connection to the east side of the river – potentially utilizing pilings from the highway infrastructure, the redevelopment and activation of the edges of the parcels on the north and south sides of the park – land not included in the RIDOT right of way, and the timing of disposition and development of abutting parcels in concert with the timing of the park construction - both for the benefit of the park's success and the added value of the parcels that the open space will create.



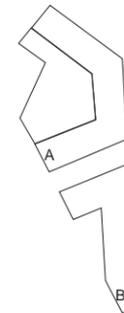


Parcel Number

22

Area Availability

113,704 sf
2.61 acres
Early 2012

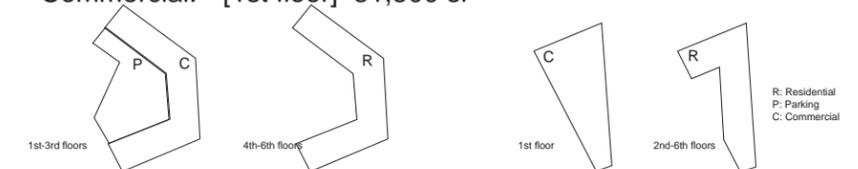


Total square footage **P22**
Residential: 241,500 sf
Parking: 85,500 sf
Commercial: 138,000 sf

Residential Units: 1,200 sf gross area [85% = 1,000 sf net area]

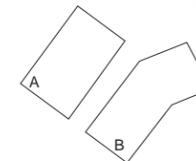
A : 63,800 sf floorplate
-height : **75' [6 floors]**
Residential: 3 floors x 35,500 sf = 106,500 sf = 87 units
[29 units / floor]
Parking: 3 floors x 28,500 sf = 85,500 sf = 215 spaces
Commercial: 3 floors x 35,500 sf = 106,500 sf

B : 31,500 sf floorplate
-height : **75' [6 floors]**
Residential: 5 floors x 27,000 sf = 135,000 sf = 110 units
[22 units / floor]
Commercial: [1st floor] 31,500 sf



25

97,951 sf
2.25 acres
Mid 2011



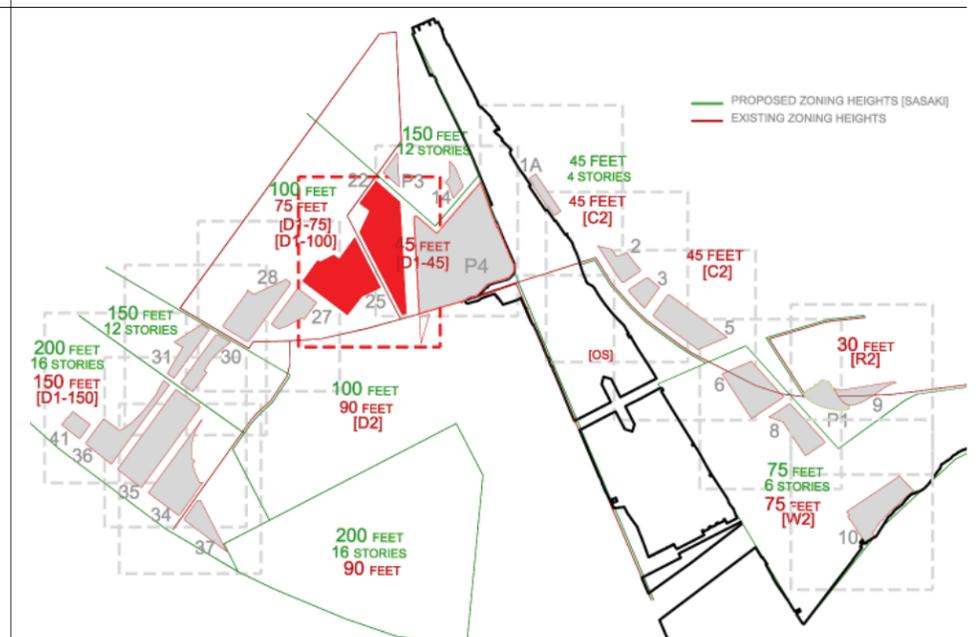
Total square footage **P25**
Off/Lab/Acd/Resrch: 322,000 sf

A : 30,000 sf floorplate
-height : **75' [5 floors]**
Office/Lab/Research: 5 floors x 30,000 sf = 150,000 sf

B : 34,500 sf floorplate
-height : **75' [5 floors]**
Office/Lab/Research/Academic: 5 floors x 34,500 sf = 172,000 sf

COLOR KEY

- DOT parcels under study
- PROPOSED USES**
 - Institutional/Lab/Research
 - Housing
 - Offices
 - Commercial
 - Educational J&W University
 - Parking Garages
- PROPERTY**
 - Brown University
 - Johnson and Wales
 - Hospital
 - Museum
 - Historic structures
- UTILITIES**
 - Electronic Ducts
 - Water Lines
 - Gas Mains
 - Drainage
 - Telephone
 - Abandoned Utilities



Parcel 22

Planning Issues and Capacity Study

Development on Parcel 22 will enjoy significant frontage across Dyer Street from the proposed Old Harbor riverfront park proposed on Parcels 16 and 17. The scale, quality, character and uses along this frontage will be critical to achieving the goal of appropriate and active park edges. For this reason, an active, mixed-use street frontage is encouraged. The park proximity, dimension and shape of the proposed parcel strongly suggest housing as a likely and desirable use, particularly on the southern portion of the site directly across from the proposed park. In this area, the triangular geometry of the parcel makes development other than housing a challenge.

The northern half of the site, squared off by Dorrance and Clifford Streets, could potentially support office space or institutional use with active commercial and retail ground floor uses. With the potential to combine the parcel with the adjacent surface lot on the Eddy and Clifford, the dimension of the northern half of Parcel 22 is typical of the larger Downcity block pattern and would support an office or research facility footprint. The proximity of the large, blank façade of the Courthouse on the opposite side of Clifford Street makes this frontage challenging, particularly for housing. Because of this condition, the Clifford Street frontage of Parcel 22 may also be ideal for structured parking, although that use may contribute further to the unfriendly character of this block of Clifford already challenged by the courthouse architecture.

Parcel 22 is distinguished within the alignment as having a unique potential given its position as being centered between the proposed park, the Jewelry District, Downcity and Old Harbor. With park frontage and views to the river and the east side, as well as significant frontage on a reconnected Dyer Street, Parcel 22 is well situated for redevelopment, in spite of the challenging geometry at its southern end. The site location also benefits from the proximity to the Jewelry District properties owned by Brown University and their current and future institutional presence within the district. Brown has expressed an interest in Parcel 25 to the west across Eddy Street. A potential alternate street alignment and parcel configuration for Parcels 22 and 25 is explored later in this section.

Parcel 25

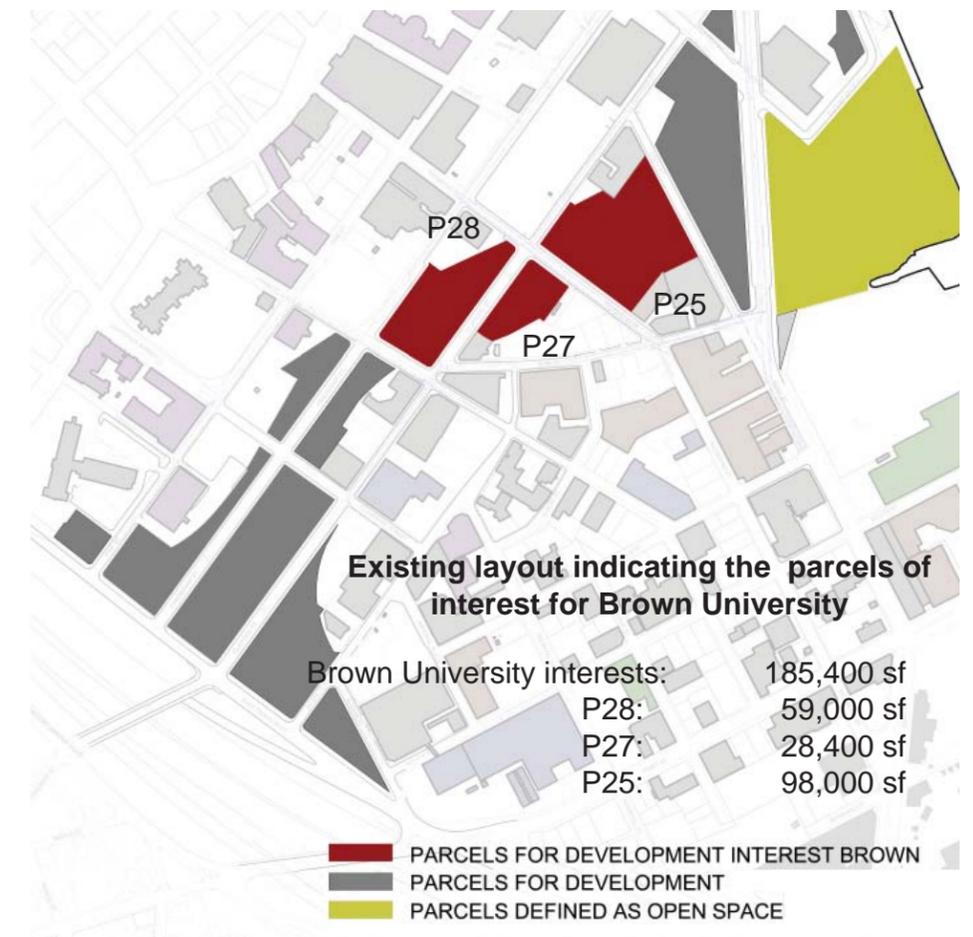
Planning Issues and Capacity Study

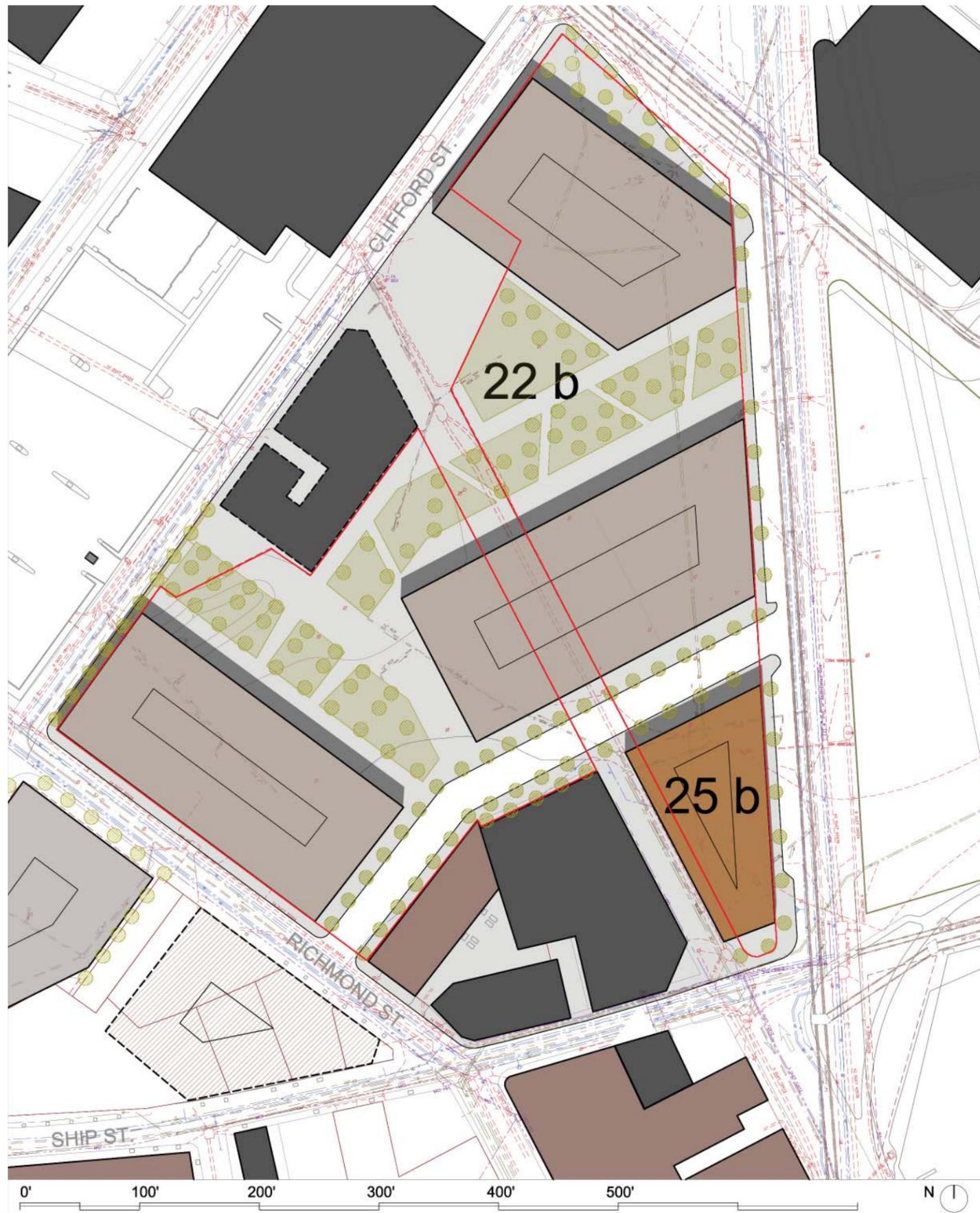
The dimension, configuration and location of Parcel 25 all suggest significant development opportunities. The central proximity to several of Brown University's properties gives the site the added potential to contribute to the institution's interests in expanding their presence in the Jewelry District and, in particular, bio-medical and life sciences facilities. The University has expressed an interest in Parcel 25 and the site offers a great deal of flexibility with respect to planning and development options with or without the assembly of the abutting properties. Development by Brown University or the private sector seeking proximity to the Institution, is well suited to the goals stated in the 2008 Providence Knowledge Based Economy report as well as the Jewelry District Framework Study.

The site also benefits from frontage along Richmond Street which has remained an important north-south connector between the Jewelry District and Downcity given its negotiation between the 2 different street grid geometries and its continuation beneath the highway toward Downtown. Undoubtedly this street will take on even greater importance following the highway removal, particularly if the Parcel 25 frontage of Richmond Street reinforces the importance of the street and is designed to promote activity at street level. While the Eddy Street frontage of the parcel is likewise important, its terminus at the Clifford Street wall of the Courthouse unfortunately dampens its significance as a major connector.

While the large dimensions of Parcel 25 present the potential to accommodate 2 or more buildings of adequate dimension for institutional or private research facilities (+/- 30,000 sf footprints), the width across the block does present some urban design challenges that must be carefully considered. The study explores the potential for 2 office/research facilities on Parcel 25 with housing and structured parking on Parcel 22. The long dimension of the blocks is mitigated by introducing a mid-block pedestrian corridor that would extend from Richmond Street, across Eddy Street to the Old Harbor Park. The initiative to introduce an east-west open space pedestrian corridor has been explored in several previous planning efforts

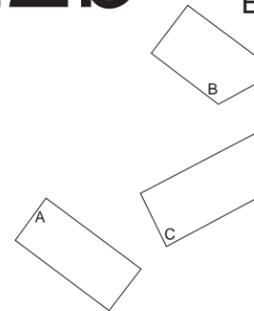
including the Providence 2020 Plan and recently the Comprehensive Plan Neighborhood Charettes. This concept was also referenced in the Jewelry District Framework Plan. All of these documents emphasize the goal of producing an open space network through the district and the importance of reinforcing the east-west connection to the Old Harbor. In the case of Parcel 25, this strategy can also help mitigate the scale of the potential research building footprints by providing mid-block frontage and the opportunity to reinforce a quasi campus environment. With this strategy, however, it remains important to attend to the street frontages and not design buildings which turn their backs to perimeter of the blocks.





Parcel Number 22b

Area
Availability
113,704 sf
4.48 acres
Early 2012



Total square footage **P22b**
Off/Lab/Acd/Resrch: 466,200 sf
Commercial: 46,300 sf

Residential Units: 1,200 sf gross area [85% = 1,000 sf net area]

A : 32,500 sf floorplate
-height : **75' [5 floors]**
Office/Lab/Research: 5 floors x 32,500 sf = 162,500 sf

B : 30,500 sf floorplate
-height : **75' [5 floors]**
Office/Lab/Research/Academic: 4 floors x 30,500 sf = 122,000 sf
Commercial: [1st floor] 30,500 sf

C : 39,500 sf floorplate
-height : **75' [5 floors]**
Office/Lab/Research/Academic: 4.5 floors x 30,500 sf = 181,700 sf
Commercial: [1st floor] 15,800 sf



25b

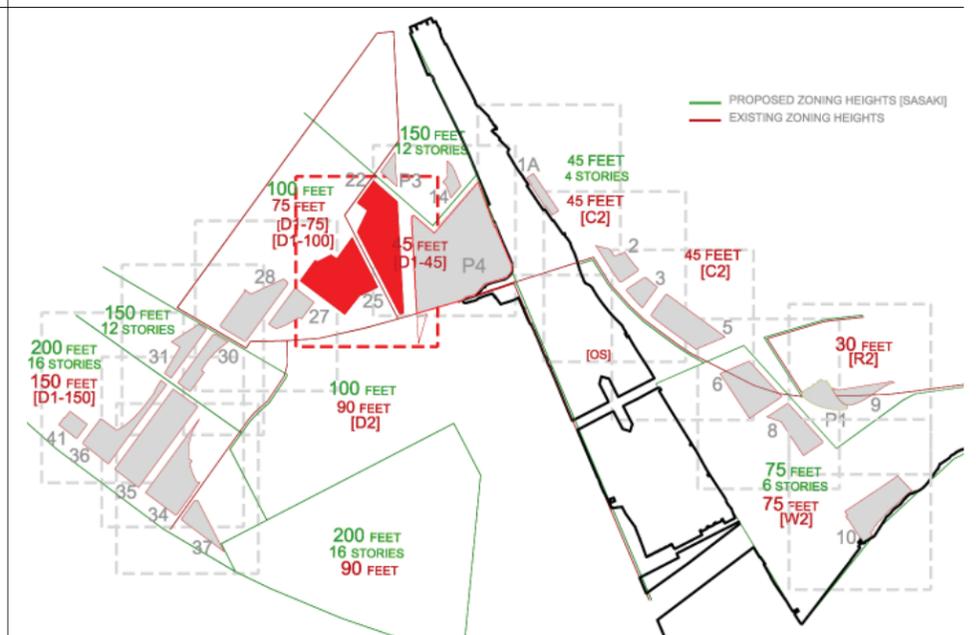
97,951 sf
0.38 acres
Mid 2011

Total square footage **P25b**
Residential: 77,000 sf
Commercial: 15,500 sf

A : 30,000 sf floorplate
-height : **75' [6 floors]**
Residential: 5 floors x 15,500 sf = 77,500 sf= 64 units
[12 units/floor]
Commercial: [first floor] 15,500 sf

COLOR KEY

- DOT parcels under study
- PROPOSED USES**
- Institutional/Lab/Research
- Housing
- Offices
- Commercial
- Educational J&W University
- Parking Garages
- PROPERTY**
- Brown University
- Johnson and Wales
- Hospital
- Museum
- Historic structures
- UTILITIES**
- Electronic Ducts
- Water Lines
- Gas Mains
- Drainage
- Telephone
- Abandoned Utilities



Parcels 22 and 25

An Alternate Configuration

The planning and capacity study for Parcels 22 and 25 include a potential alternative alignment for the two parcels in an effort to explore the potential for a more dispersed distribution of institutional development within the Jewelry District as well as address a challenging parcel configuration and street alignment [as shown in page 110]. The delineation of Parcel 22 is a product of reintroducing the historical alignment of Eddy Street and shifting Dyer Street to connect to its historical alignment to the north. The proposed extension of Eddy Street is ultimately prevented from continuing through to DOWncity, as it originally did, because of its termination on the blank, south facade of the Garrahy courthouse. The parcel configuration is further challenged by the extensive Dyer Street frontage of the park that does potentially challenge east-west connectivity between the proposed Old Harbor parks and the Jewelry District. While a mid-block pedestrian connection would alleviate this condition – as explored in the parcel analysis and discussed in previous planning efforts – a well designed, activated, pedestrian friendly public street connecting the neighborhood to the parks and riverfront may create a stronger sense of connectivity, physically and visually.

With these goals in mind, the alternative alignment suggests eliminating the Eddy Street extension (although maintaining access to the properties at 100 Ship Street) and introducing a new east/west street connecting Richmond and Dyer. This would result in a large contiguous parcel to the north, referred to in the study as Parcel 25B. A smaller, parcel would be maintained south of this new street within the point of the triangle. While the alternate alignment suggests the potential for institutional, research or office space on the northern part of the parcel, the assumption is that the parcel south of the new east/west street would still support housing. This would ensure a residential presence on the park frontage. The potential would also exist to introduce additional residential frontage along Dyer Street on Parcel 25B, with institutional/research development behind. The emphasis on east/west street connections to the river lieu of an Eddy Street extension is consistent with the proposed alignments in several planning studies including the Old Harbor Plan, the Providence

2020 Plan and the recent downtown neighborhood charettes.

One of the assumptions accompanying this alternate parcel configuration is that Brown University's interest in the surplus parcels would shift toward the east to include Parcel 25B, in lieu of Parcel 28, which Brown has expressed an interest in, to instead become available for a non-institutional, mixed-use parcel with the potential benefits as described above. From the standpoint of flexibility, Parcel 25B would be larger than the combination of Parcels 25 and 28 in their current configuration, by more than an acre depending on the location of the new east west street. Also, the creation of a larger, contiguous parcel would allow for the potential to create an urban campus environment with buildings centered around a common open space, not unlike the Johnson and Wales DOWncity campus and master plan.

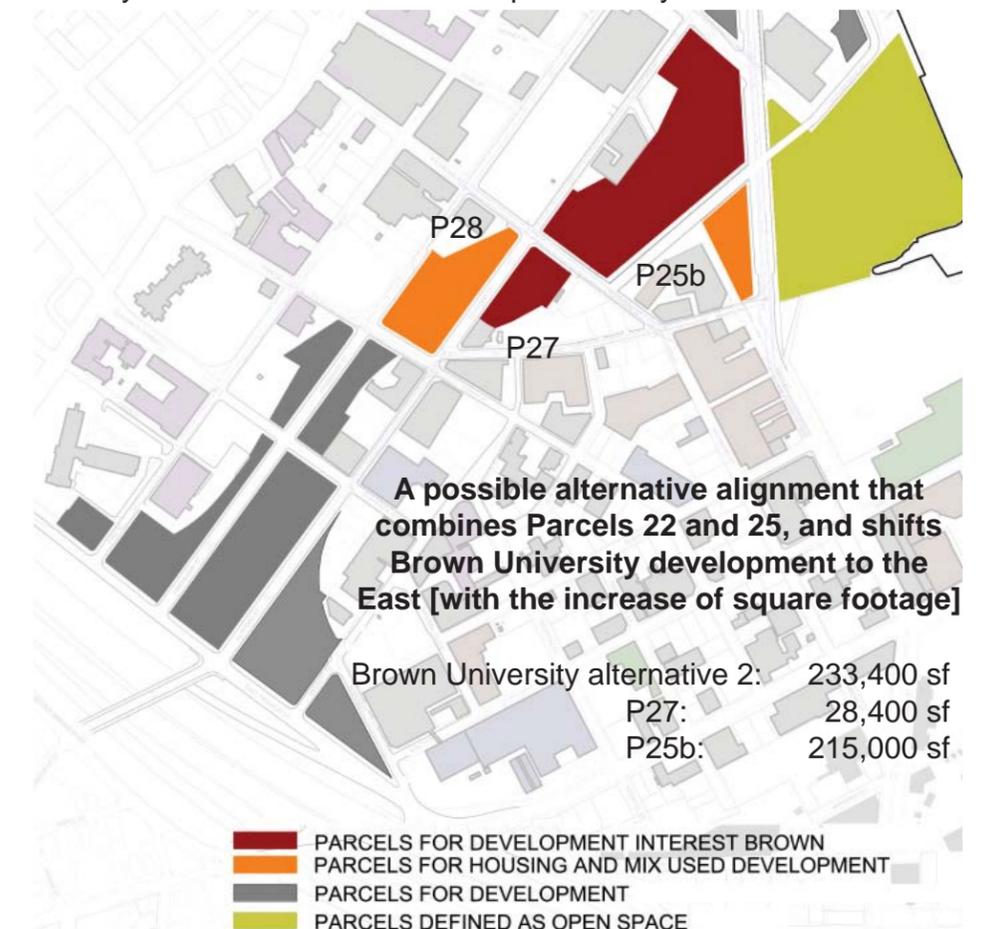
From an institutional perspective, another potential benefit that this alternate alignment may present would be that shifting the Brown affiliated development toward the east creates a closer physical proximity to the main campus on College Hill and the desired future pedestrian river crossing. In addition to being closer to the main campus, this improved proximity is a much about creating a visual connection to the east and a psychological perception about the relationship between the institutional presence on either side of the river.

While the alternative alignment would potentially limit opportunities for residential frontage along the proposed park, it may provide a greater assurance of a nearer term marketability of the surplus parcel and the creation of a critical density of development on Dyer Street. This could limit the risk that the park may be burdened with having vacant land along its edge for an extended period of time given the projected market conditions for substantial housing demand. Regardless of the final alignment of Parcel 22, any development along Dyer Street, whether residential or institutional, should have active retail and commercial frontage at the street level.

Some potential challenges to this alternate include:

- The need to address existing utilities beneath the historic Eddy Street alignment;
- The need to introduce a new east/west utility corridor;
- A perception that there may be too much of an institutional presence on the park, resulting in activity that is limited to typical working hours;
- Traffic impacts associated with creating an intersection on Dyer Street; and
- The impact of an East West Street on the existing properties located on the Richmond/Ship Street corner.

If the proposed alignment and parcel configuration are ultimately pursued, the opportunities for an east/west pedestrian connection to the park are still possible and desirable to reduce the scale of the both parcels and provide better connections to and from the river and the Jewelry District as examined in the parcel analysis above.





Parcel Number	Area Availability	Residential Units: 1,200 sf gross area [85% = 1,000 sf net area]
27	28,386 sf 0.65 acres Mid 2011	A : 26,200 sf floorplate -height : 75' [5 floors]
	Square footage Opt A: P27 Office/Lab/Research: 131,000 sf	Office/Lab/Research/Academic: 5 floors x 26,200 sf = 131,000 sf
28	58,931 sf 1.35 acres Mid 2011	A : 38,600 sf floorplate -height : 75' [5 floors]
	Square footage Opt A: P28 Off/Lab/Acd/Resrch: 193,000 sf	Office/Lab/Research/Academic: 5 floors x 38,600 sf = 193,000 sf
27	28,386 sf 0.65 acres Mid 2011	A : 26,200 sf floorplate -height : 75' [5 floors]
	Square footage Opt B: P27 Off/Lab/Acd/Resrch: 131,000 sf	Office/Lab/Research/Academic: 5 floors x 26,200 sf = 131,000 sf
28	58,931 sf 1.35 acres Mid 2011	A : 26,300 sf floorplate -height : 60' [5 floors] Garage: 5 floors x 26,300 sf = 131,500 sf = 325 spaces
	Square footage Opt B: P28 Off/Lab/Acd/Resrch: 120,000 sf Garage: 131,500 sf	B : 24,000 sf floorplate -height : 75' [5 floors] Office/Lab/Research/Academic: 5 floors x 24,000 sf = 120,000 sf

COLOR KEY

- DOT parcels under study
- PROPOSED USES**
 - Institutional/Lab/Research
 - Housing
 - Offices
 - Commercial
 - Educational J&W University
 - Parking Garages
- PROPERTY**
 - Brown University
 - Johnson and Wales
 - Hospital
 - Museum
 - Historic structures
- UTILITIES**
 - Electronic Ducts
 - Water Lines
 - Gas Mains
 - Drainage
 - Telephone
 - Abandoned Utilities



Parcel 27

Planning Issues and Capacity Study

Parcel 27 will play an important role in recreating the east-west link of the Clifford Street alignment which was severed by the I-195 construction but remains on either side of the right of way. The parcel configuration will restore the historic street grid and, together with the proposed Parcel 28 on the north side of Clifford Street, is a key to the successful realization of a new Clifford Street corridor. The scale, design and proposed uses of a Parcel 27 development along Clifford Street are important to the success of this new street corridor. Although challenged by being an entirely new street with no existing neighborhood fabric, the opportunity for new development on both sides of the street also presents a unique opportunity to envision a successful street.

The contiguous adjacency to the Brown University parcels makes Parcel 27 a logical candidate for Institutional or affiliated development, as does its location. The University's property abutting property has been considered as a potential site for a medical school academic facility for which Parcel 27 may be part of a plan, or a potential stand alone facility which could also be physically connected to the medical school. The dimensions and configuration of Parcel 27 do accommodate a footprint for a +/- 25,000 research or office development. The University has expressed an interest in Parcel 27 and the site offers flexibility with respect to planning and development options, particularly when assembled with their abutting properties. Development by Brown University or the private sector seeking proximity to the Institution, is well suited to the goals stated in the 2008 Providence Knowledge Based Economy report as well as the Jewelry District Framework Study.

Together with the Brown properties to the south, the Richmond Street frontage of Parcel 27 is an additional benefit to the site and underscores the important role it can play in reinforcing the corridor as an important north-south link between the Jewelry District and Downcity. This edge of the site is also the potential terminus or continuation of a possible mid-block connector across Parcel 25. Whether the pedestrian spine continues through the site to Ship Street, or terminates at Parcel 27, the treatment of this condition as a landscape or architecturally, is an important design consideration.

Parcel 28

Planning Issues and Capacity Study

Parcel 28 will play an important role in recreating the east-west link of the Clifford Street alignment which was severed by the I-195 construction but remains on either side of the right of way. The parcel configuration will restore the historic street grid and, together with the proposed Parcel 27 on the south side of Clifford Street, is a key to the successful realization of a new Clifford Street corridor. The scale, design and proposed uses of a Parcel 28 development along Clifford Street are important to the success of this new street corridor. Although challenged by being an entirely new street with no existing neighborhood fabric, the prospect of creating new development on both sides of the corridor also presents a unique opportunity to envision a successful street.

As a stand alone development parcel, or when combined with the commercial property on the corner of Richmond and Friendship Street, the dimension of Parcel 28 accommodates a +/- 30,000 sf footprint, which is well suited to office and/or research facilities. This typology is consistent with the type of development considered by Brown for the district and suggested on the Jewelry District Framework Plan. Strategically, the parcel is unique for its position at the center of the surplus parcels and an important transition between the Jewelry District and Downcity. Its definition by 2 important north-south corridors and 2 equally important east-west corridors, contributes to this reading of the strategic importance of development on Parcel 28, from a marketing perspective as well as an urban design perspective. It is also unique because it may also be seen as an east-west transition block between Brown University's neighborhood presence to the east and Johnson and Wales' precinct to the west.

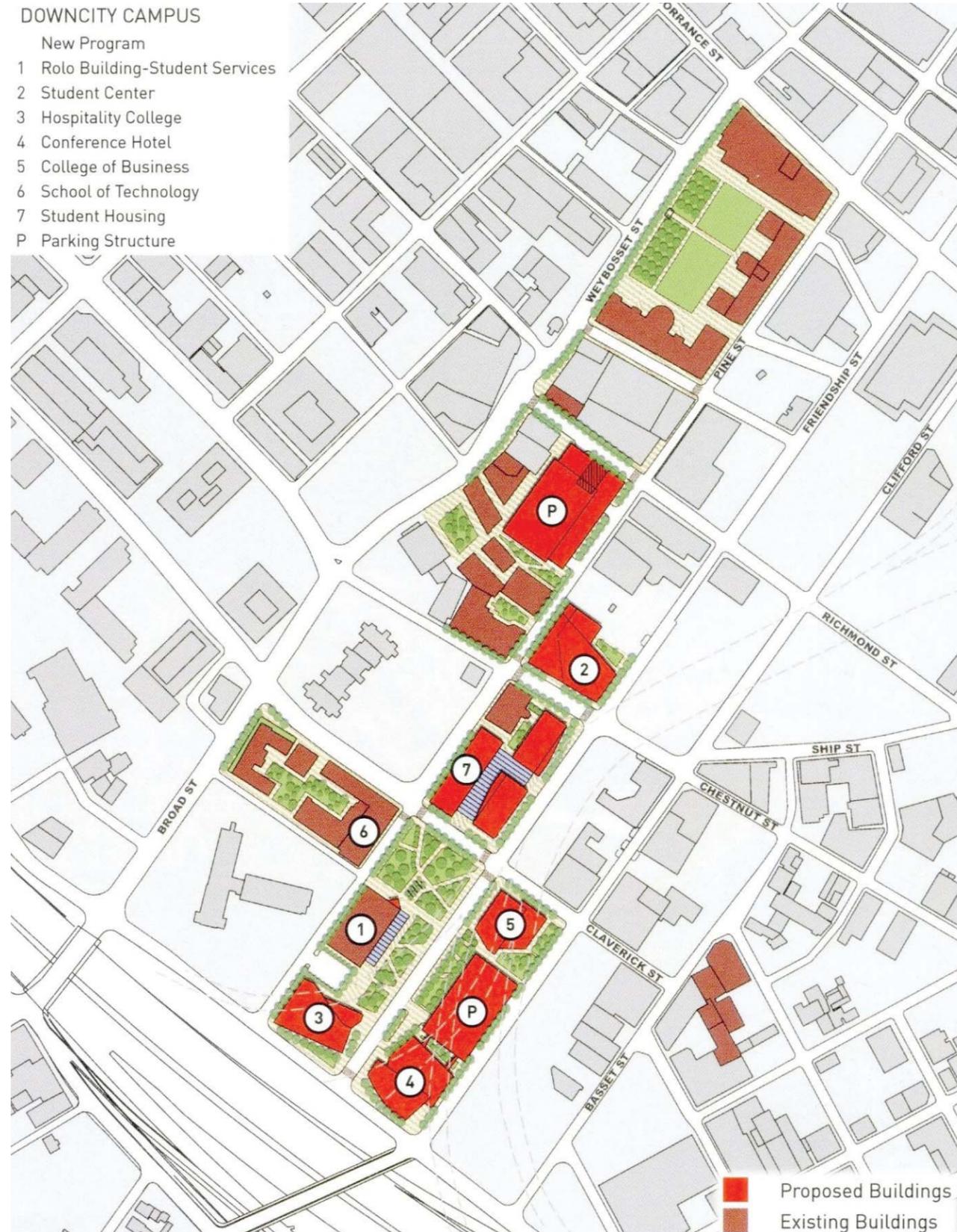
The alternative parcel alignment explored in later in this section recognizes Parcel 28's potential position as a transition between the 2 institutional developments. In this exploration, Brown's emphasis would shift toward the east which would preserve Parcel 28 for as a commercial / mixed-use development site. One of the potential benefits to this approach is to avoid the possible sense of an almost continuous institutional corridor along Friendship and Clifford Street.

A non-institutional use on Parcel 28 might serve to mitigate the potential impacts of institutional growth through a slight re-distribution of uses through the district. This approach may contribute more to the desirable goal of creating a truly mixed-use district – without sacrificing the significant contributions that the universities can offer to the success of the right of way redevelopment. Another potential benefit to this approach is that the strategic positioning of the institutional presence on either side of Parcel 28 may likely add value to the parcel in the long term. This alternative may also inform the broader thinking about the potential to create a centralized structured parking facility that can serve development on multiple parcels by multiple users. Parcel 28 may be well suited to playing a role in the exploration of a central parking facility combined with other commercial uses.

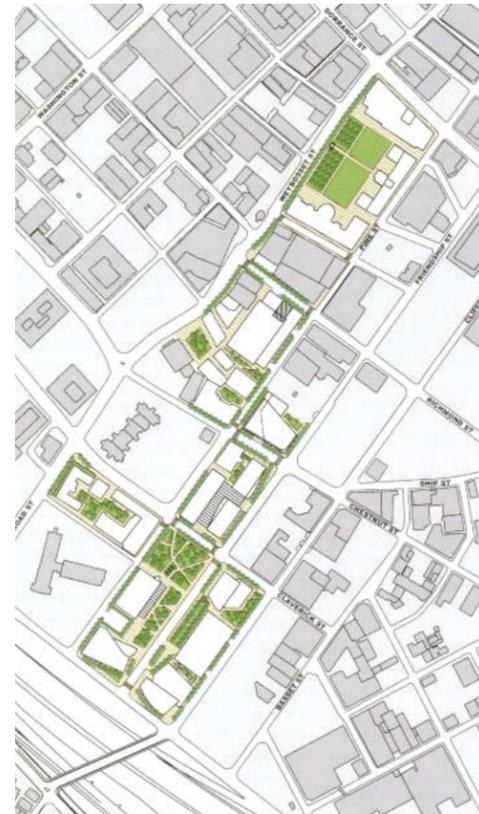
The Alternate Alignment for parcel 22 & 25 would reserving parcel 28 for commercial development.



Parcel Planning, Capacity and Highest and Best Use Analysis



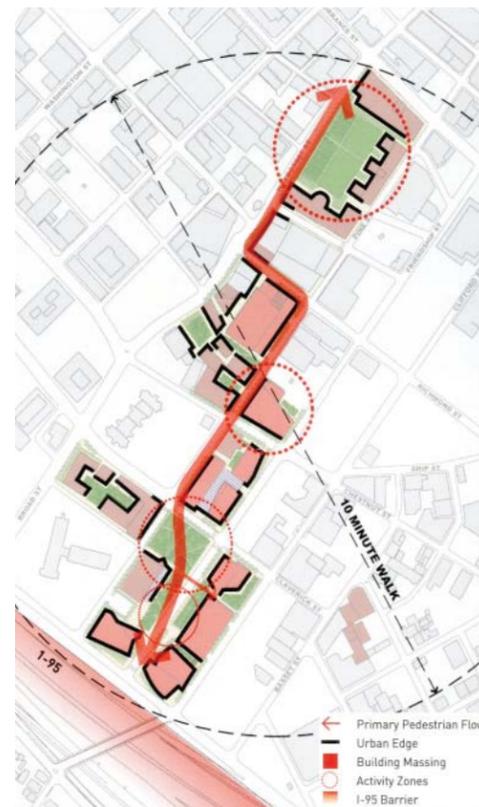
Images from the Johnson and Wales Master Plan



THE JOHNSON AND WALES UNIVERSITY MASTER PLAN

In the campus master plan completed a year ago, Johnson & Wales University carefully considered a future vision for its Downcity campus expanding westward to the interstate along a spine of campus buildings and open space between the Pine, Friendship and Clifford Street corridors. This proposal effectively utilizes the I-195 Parcels 31, 35 and 36. The plan is a thoughtfully conceived approach to infilling between the universities existing properties in the corridor and connecting the linear, urban campus with a series of integrated open spaces including quadrangles, courtyards and pedestrian ways. The plan centers around the creation of what is referred to as a new “Johnson and Wales Commons” proposed at the east end of Parcel 36. The uses proposed on the I-195 parcels within the master plan expansion include new facilities for the Hospitality College, the College of Business, the School of Technology, a Conference Hotel, student housing and structured parking.

The master plan suggests a positive utilization of the surplus parcels and is governed by urban design principles that are generally consistent with those identified in previous planning efforts for Downcity and the Jewelry District. The proposed growth of the university within the district supports the goals and initiatives described in the Knowledge Based Economy report and its future in the neighborhood offers the potential for a promising synergy with Brown University and the hospitals to contribute to the ongoing revival of the Jewelry District.



The proposed distribution of uses across the 3 surplus parcels identified in the Johnson & Wales University Master Plan can, within the 5 to 10 year time frame identified in the document, establish a critical density within the right of way across almost half the length of the corridor. This prospect, if realized in the projected time frame, will help avoid the potential for long-term vacancy over significant stretches of the corridor and can help serve as a catalyst for adjacent development as well as potentially add value to other RIDOT Parcels. While the proposed master plan achieves the positive attributes identified above, the study nonetheless explores a potential alternative to the approach which would have Johnson & Wales University utilize Parcel 30 and its abutting properties in exchange for maintaining the western most ends of Parcels 35 and 36 for private development.

THE ALTERNATE TO THE JOHNSON AND WALES UNIVERSITY MASTER PLAN

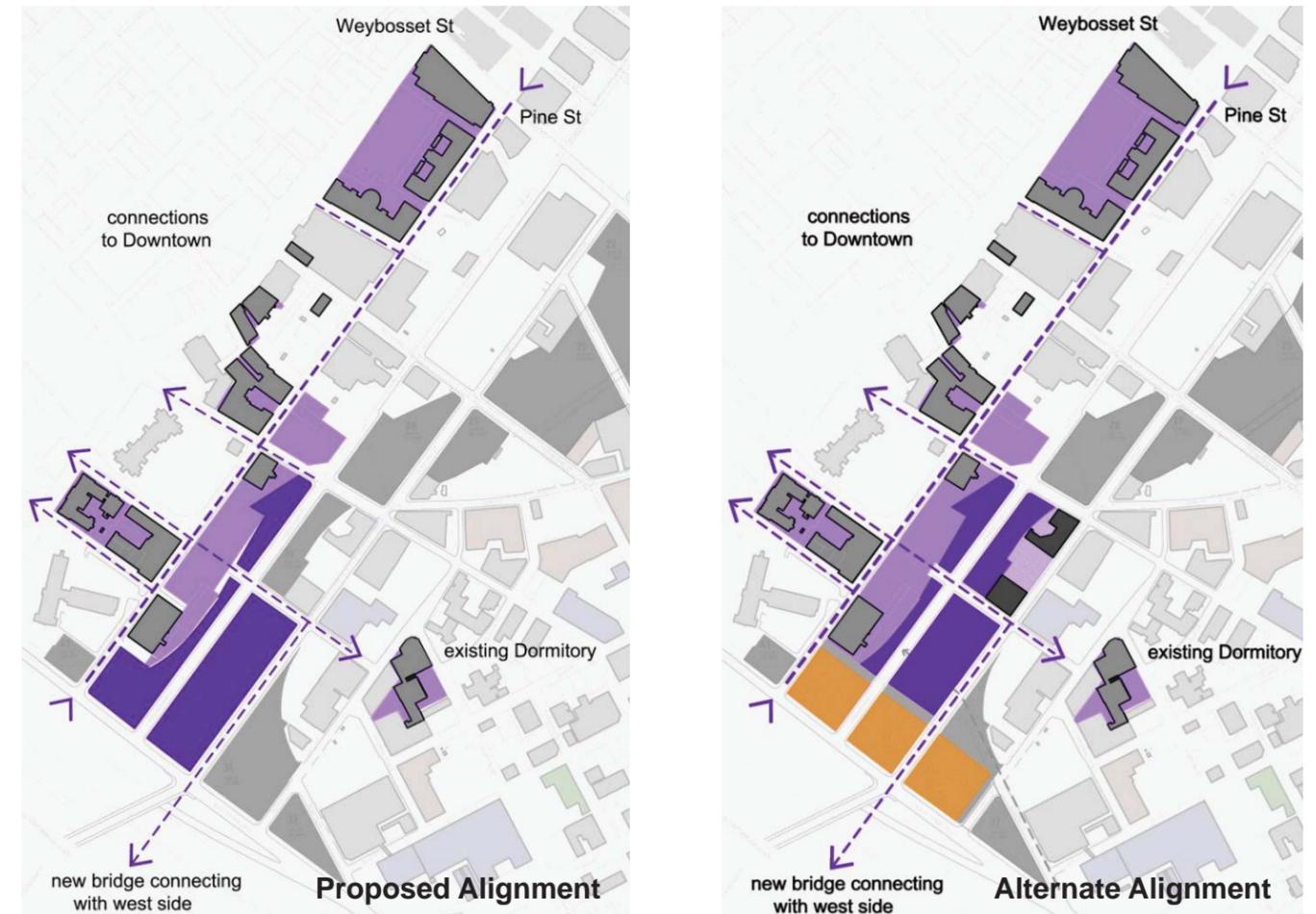
An alternative parcel distribution to the Johnson & Wales University master plan was explored within this study which looked at the impacts of maintaining western most end of Parcel 35 and Parcel 36 for a non-institutional development, most likely housing. The purpose of this exploration was not to suggest that the Parcel 35 and 36 uses and building locations proposed by the master plan are not appropriate, but rather to examine a scenario that would allow for development closer to the center of the Jewelry District. In this alternative diagram, Johnson and Wales would combine Parcel 30 within its master plan, in conjunction with the rehabilitation or redevelopment of the properties on the south side of the parcel. In turn, the East Franklin Street end of Parcel 35, and possibly Parcel 36, would support privately developed residential uses.

While this scenario might allow for a greater mix of non-institutional development distributed across the surplus parcels as well as a more centralized campus diagram, the downside to this alternative approach includes:

- The need for Johnson & Wales University to assemble additional properties;
- The potential impacts of a hotel closer to the historic district; and
- The loss of a potential mixed-use commercial development site on the Parcel 30 block in the heart of the Jewelry District.

Another challenge to this alternate plan is the fact that there are impediments to allowing traffic access off of the service road along the west edge of Parcels 34, 35 and 36 that make large scale development of these parcels difficult. The Johnson & Wales University master plan proposal addresses this issue through the proposed parking structure on Friendship Street that would provide vehicular access and queuing for without relying on the frontage road. Also, since Johnson & Wales University does not own the buildings adjacent to Parcel 30, the need for acquisition and the difficulties of re-use of the existing structures create additional challenges to the alternate planning scenario. It is also important to note that the proposed master plan has been approved by the City of Providence. If the Parcel 30 is not incorporated into the Johnson & Wales University expansion plans, which is unlikely, it may still serve to accommodate future institutional growth in conjunction with the abutting property – or potentially present opportunities for commercial development either affiliated with or in partnership with the university.

Parcels 30, 31, 35, 36, 37, and 41

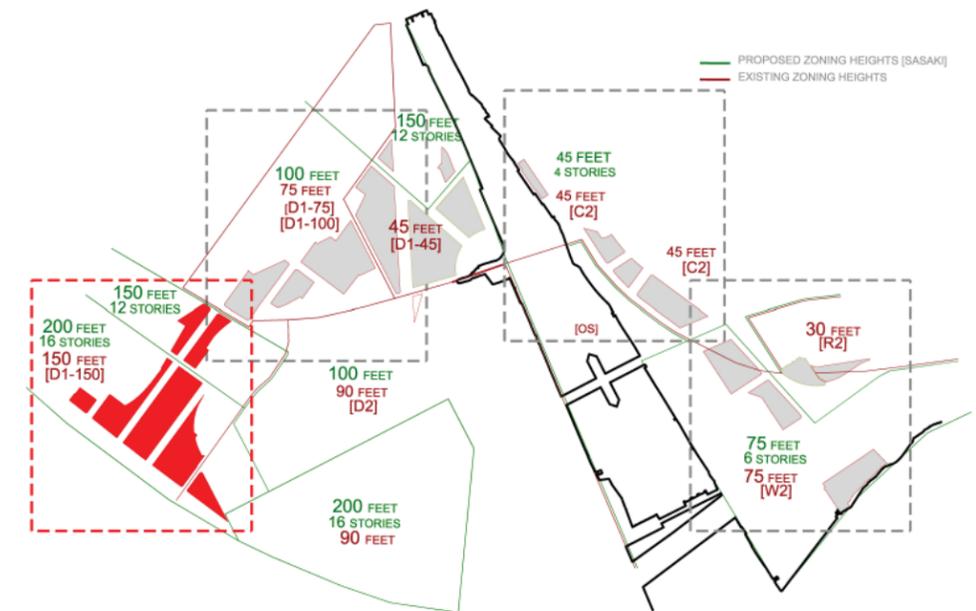


COLOR KEY

- DOT parcels under study
- PROPOSED USES**
 - Institutional/Lab/Research
 - Housing
 - Offices
 - Commercial
 - Educational J&W University
 - Parking Garages

- PROPERTY**
 - Brown University
 - Johnson and Wales
 - Hospital
 - Museum
 - Historic structures

- UTILITIES**
 - Electronic Ducts
 - Water Lines
 - Gas Mains
 - Drainage
 - Telephone
 - Abandoned Utilities



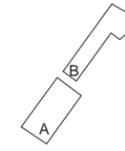


Parcel

Number **Area Availability**

30

27,645 sf
0.63 acres
Mid 2011

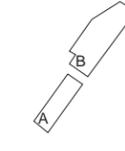


Total square footage **P30**
Residential: 113,400 sf
Parking: 44,000 sf
Commercial: 17,000 sf



31

24,536 sf
0.56 acres
Mid 2011



Total square footage **P31**
Residential: 102,000 sf
Parking: 34,000 sf
Commercial: 13,000 sf



COLOR KEY

- DOT parcels under study
- PROPOSED USES**
- Institutional/Lab/Research
- Housing
- Offices
- Commercial
- Educational J&W University
- Parking Garages
- PROPERTY**
- Brown University
- Johnson and Wales
- Hospital
- Museum
- Historic structures
- UTILITIES**
- Electronic Ducts
- Water Lines
- Gas Mains
- Drainage
- Telephone
- Abandoned Utilities

Residential Units: 1,200 sf gross area [85% = 1,000 sf net area]

A : 9,600 sf floorplate
-height : **110' [9 floors]**
Residential: 6 floors x 9,600 sf = 57,600 sf = 48 units [8 un/floor]
Parking: 2 floors x 9,600 sf = 19,200 sf = 48 spaces
Commercial: [1st floor] 8,000 sf

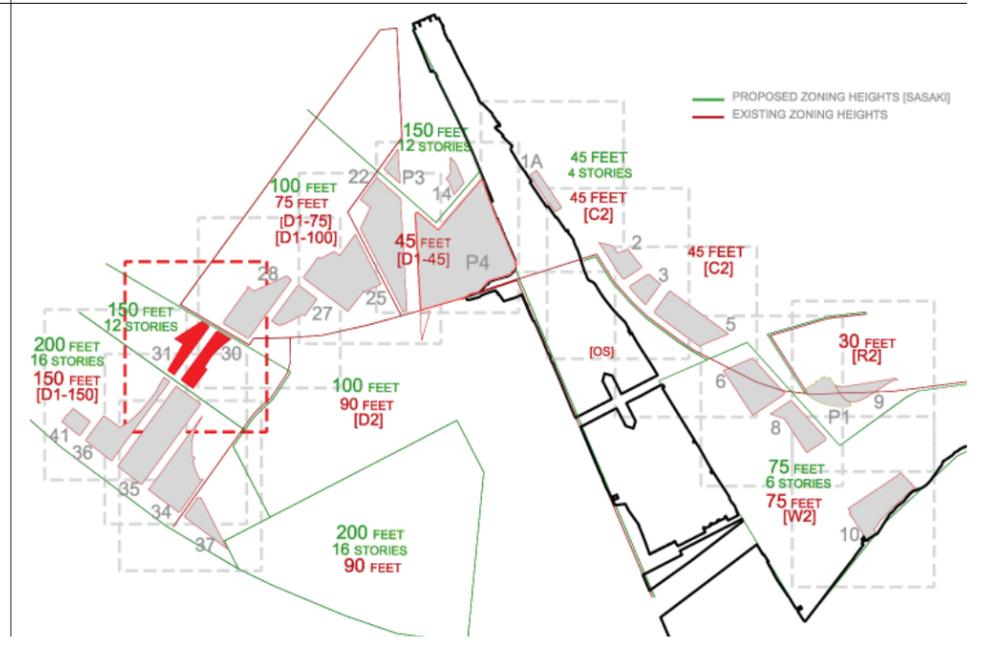
B : 12,400 sf floorplate
-height : **110' [9 floors]**
Residential: 6 floors x 9,300 sf = 55,800 sf = 42 units [7 un/floor]
Parking: 2 floors x 12,400 sf = 24,800 sf = 62 spaces
Commercial: [1st floor] 9,000 sf

If Option Housing Students: 120,000 sf = 200 - 250 beds

A : 11,500 sf floorplate
-height : **110' [9 floors]**
Residential: 6 floors x 11,500 sf = 69,000 sf = 54 units [9 un/floor]
Parking: 2 floors x 11,500 sf = 23,000 sf = 56 spaces
Commercial: [1st floor] 9,000 sf

B : 5,500 sf floorplate
-height : **110' [9 floors]**
Residential: 6 floors x 5,500 sf = 33,000 sf = 24 units [4 un/floor]
Parking: 2 floors x 5,500 sf = 11,000 sf = 26 spaces
Commercial: [1st floor] 4,000 sf

If Option Housing Students: 100,000 sf = 200 - 250 beds



Parcels 30 and 31

Planning Issues and Capacity Study

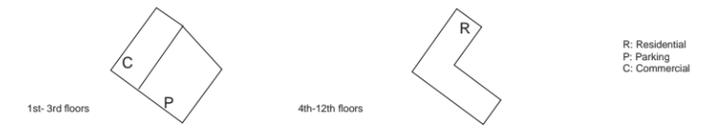
The narrow dimension of Parcel 30 makes development opportunities extremely limited, unless pursued in combination with either or both of the Clifford Street buildings on the southern half of the block. New development on the site could be combined with a historic rehabilitation of the Irons and Rusell Building, which dates from 1903 and is good example of traditional Jewelry District industrial building stock. Without the assembly of the adjacent properties, the dimension of Parcel 30 would accommodate multi-family or student housing, although on half the site would be limited to the inefficiencies of a single loaded corridor typology.

Parcel 31 is similarly challenged by the narrow dimension across the site, unless combined with the abutting properties to the north, as proposed by the Johnson and Wales campus master plan. Johnson and Wales owns the abutting property to the north which includes surface parking and Johnson Hall on the corner of Chestnut and Pine. The University's acquisition of the surplus parcel is logical and the only likely near term opportunity for development of Parcel 31. As a stand alone parcel, the dimension does allow for a multi-family or student housing typology, but would be limited to a single load corridor building over half of the site. The JWU campus plan proposes student housing fronting on both Friendship and Pine streets and connected mid block at ground level with common circulation.

Parcels 30 and 31 will ultimately play an important role in recreating the east-west link of the Friendship Street alignment which was severed by the I-195 construction but remains to the west of the ROW. The parcel configurations will restore the historic street grid and, collectively, are key to the successful realization of a new Friendship Street corridor. The scale, design and proposed uses of Parcel 30 and 31 developments along Friendship Street are important to the success of this street corridor. Although challenged by being an entirely new street with no existing neighborhood fabric west of Chestnut Street, the prospect of creating new development on both sides of the corridor also presents a unique opportunity to envision a successful street.



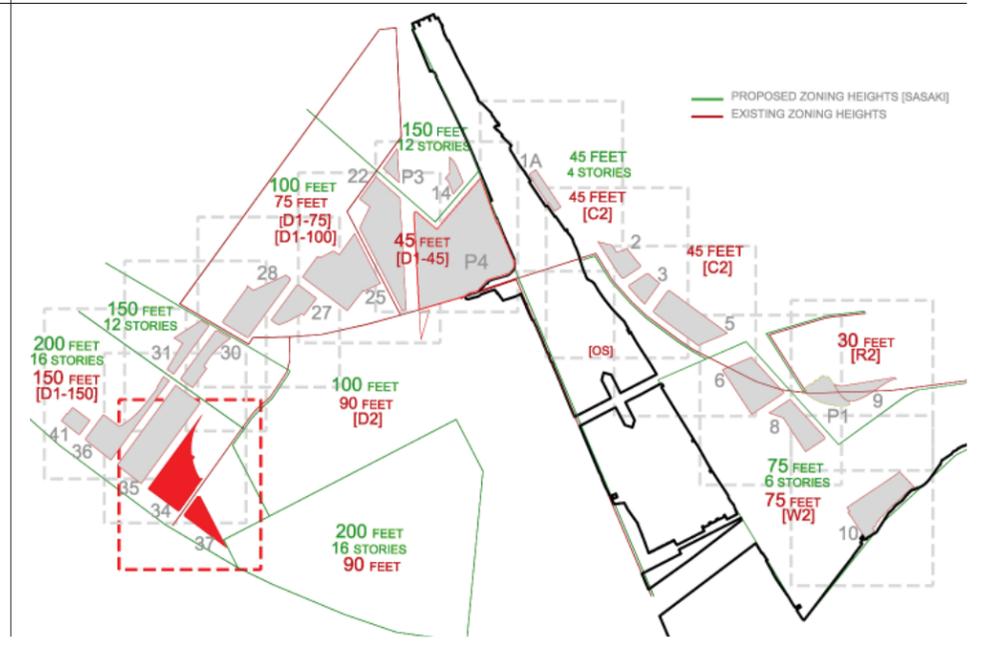
Parcel Number 34	Area Availability	Residential Units: 1,200 sf gross area [85% = 1,000 sf net area]
		A : 31,500 sf floorplate
	67,481 sf 1.55 acres Mid 2009	-height : 150' [12 floors]
		Residential: 9 floors x 22,000 sf = 198,000 sf = 162 units [18 units / floor]
		Parking: 3 floors x 22,600 sf = 67,800 sf = 168 spaces
		Commercial: 3 floors x 12,500 sf = 37,500 sf
	Total square footage P36	
	Residential: 198,000 sf	
	Parking: 67,800 sf	
	Commercial: 37,500 sf	



Parcel Number 37	Area Availability	15,000 sf floorplate
		-height : 150' [12 floors]
	23,443 sf 0.54 acres Fall 2010	Residential: 8 floors x 15,000 sf = 120,000 sf = 96 units [12 units / floor]
		Parking: 4 floors x 15,000 sf = 60,000 sf = 150 spaces
	Total square footage P37	
	Residential: 120,000 sf	
	Parking: 60,000 sf	

COLOR KEY

- DOT parcels under study
- PROPOSED USES**
 - Institutional/Lab/Research
 - Housing
 - Offices
 - Commercial
 - Educational J&W University
 - Parking Garages
- PROPERTY**
 - Brown University
 - Johnson and Wales
 - Hospital
 - Museum
 - Historic structures
- UTILITIES**
 - Electronic Ducts
 - Water Lines
 - Gas Mains
 - Drainage
 - Telephone
 - Abandoned Utilities



Parcel 34 and Parcel 37

Planning Issues and Capacity Study

Parcel 34 will ultimately play an important role in recreating the east-west link of the Clifford Street alignment which were severed by the I-195 construction but remain to the west of the right of way. The parcel configuration will restore the historic street grid and, together with the proposed Parcel 35 to the north, has the opportunity to anchor the west end of a new Clifford Street corridor. The scale, design and proposed uses of a Parcel 34 development along Friendship Street are important to the success of the new east/west corridors and the sense of arrival into the neighborhood. Although challenged by being defined by entirely new streets with little existing neighborhood fabric west of Claverick Street, the prospect of creating an entirely new precinct presents a unique opportunity to achieve successful streets that will define the new western edges of the district as well as mitigate the presence of I-195 from the rest of the neighborhood.

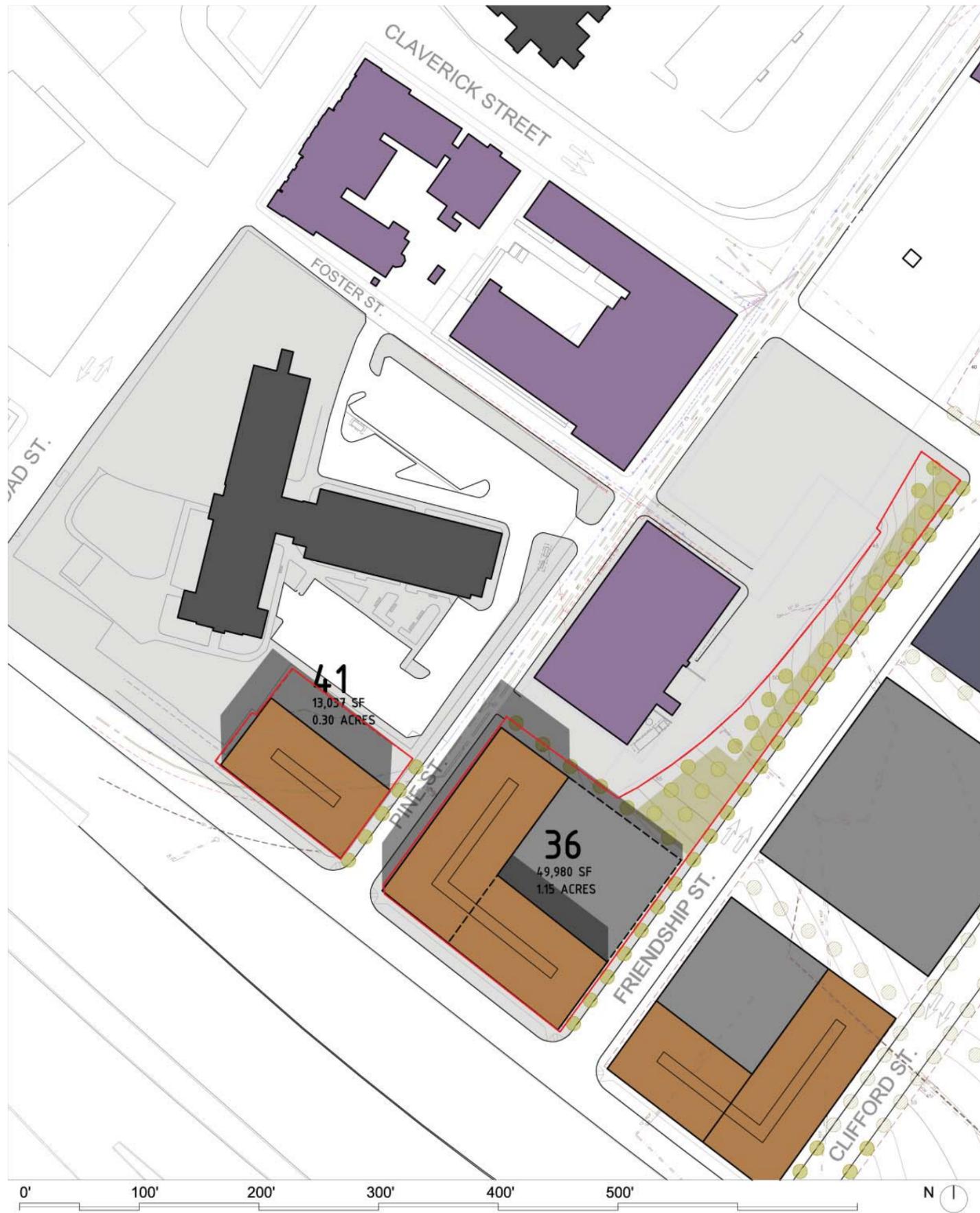
The dimension and frontages enjoyed by Parcel 34 suggest that the site has potential for redevelopment, particularly for housing. The proposed zoning heights in this edge of the Jewelry District would allow for high-rise housing and the potential to create a neighborhood 'gateway' scaled development. The proximity between the future Johnson and Wales campus expansion to the north and the hospital to the south further suggests its potential as a residential development site.

Directly to the south, Parcel 37 presents a more challenging condition given its triangular shape and small dimension. As currently configured, it does, however, accommodate a small multi-family footprint, but leaves little flexibility for planning open space, parking and building configuration. Some potential realignments were examined in an effort to potentially create more development potential Parcel 37. These alternatives include:

- Combining Parcel 34 and 37: This would eliminate the connection of Bassett Street to East Franklin Street which would have traffic impacts that would need to be further addressed. One potential solution would be to extend Hoppin Street north

across Parcel 34 all the way to Clifford Street;

- Eliminate all or part of Hoppin Street to enlarge Parcel 37 footprint: In the short term, this would impact garage access from Hoppin Street, but the access could still be maintained across the site. In the long term, it would enable combining Parcel 34 with the garage site and create a larger opportunity for hospital expansion; and
- Combine Parcel 37 with the surface parking lot behind the hospital garage by eliminating the upper part of Hoppin Street at Bassett: This would maintain part of Hoppin for garage access, but would enable redevelopment of the surface lot in conjunction with Parcel 34.



Parcel Number 36

Area Availability
49,980 sf
1.15 acres
Fall 2010

Total square footage **P36**
Residential: 180,000 sf
Parking: 60,000 sf

Residential Units: 1,200 sf gross area [85% = 1,000 sf net area]

A : 32,000 sf floorplate

-height : **150' [12 floors]**

Residential: 9 floors x 20,000 sf = 180,000 sf = 144 units
[16 units / floor]
Parking: 3 floors x 20,000 sf = 60,000 sf = 150 spaces

Parcel 41

13,037 sf
0.30 acres
Fall 2010

Total square footage **P41**
Residential: 81,000 sf
Parking: 27,000 sf

9,000 sf floorplate

-height : **150' [12 floors]**

Residential: 9 floors x 9,000 sf = 81,000 sf = 56 units
[7 units / floor]
Parking: 3 floors x 9,000 sf = 27,000 sf = 66 spaces

COLOR KEY

- DOT parcels under study
- PROPOSED USES**
- Institutional/Lab/Research
- Housing
- Offices
- Commercial
- Educational J&W University
- Parking Garages
- PROPERTY**
- Brown University
- Johnson and Wales
- Hospital
- Museum
- Historic structures
- UTILITIES**
- Electronic Ducts
- Water Lines
- Gas Mains
- Drainage
- Telephone
- Abandoned Utilities



Parcels 36

Planning Issues and Capacity Study

Parcel 36 will ultimately play an important role in recreating the east-west link of the Friendship Street alignment which was severed by the I-195 construction but remains to the west of the right of way. The parcel configuration will restore the historic street grid and, together with the proposed Parcel 35 to the south, has the opportunity to anchor the west end of a new Friendship Street corridor. The scale, design and proposed uses of a Parcel 35 development along Friendship Street are important to the success of the new east/west corridors and the sense of arrival into the neighborhood. Although challenged by being a slender dimension along the street frontage, the prospect of creating an entirely new precinct in conjunction with the Johnson and Wales student services building presents a unique opportunity to achieve successful streets that will define the new western edges of the district as well as mitigate the presence of I-195 from the rest of the neighborhood.

The Johnson and Wales campus plan proposes the Hospitality College at the west end of the Parcel 36. The remainder of the parcel, a narrow sliver of land along Friendship Street, directly abuts the Johnson & Wales University Rolo Building. The master plan's proposal to create a linear open space along the south side of the building is a good solution to what is essentially a remnant site with no real development potential. As discussed previously in the alternative campus diagram, the western end of Parcel 36 could be developed as housing if Johnson & Wales University shifted to the east and incorporated the Parcel 30 block into their planning. With respect to Parcel 36, another potential downside to this alternative would be that the existing Student Services Building would be less centered than it would be in the proposed master plan which extends west of what is now the edge of campus.

Parcel 41

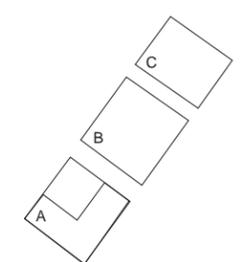
Planning Issues and Capacity Study

Parcel 41 is a small parcel, although it could accommodate a small multi-family residential footprint, or perhaps a townhome typology. Some other potential uses could include a community facility for health care, day-care or educational facility. Additional, smaller scale housing could be built to complete the street corridor and complement development on the south side of Pine Street. Other potential uses included expanded open space for the site. Additional surface parking at that corner should be discouraged.



Parcel Number 35

Area Availability
 100,383 sf
 2.30 acres
 Late 2009



Residential Units: 1,200 sf gross area [85% = 1,000 sf net area]

A : 30,500 sf floorplate
 -height : **150' [12 floors]**
 Residential: 9 floors x 19,600 sf = 144,000 sf = 144 units [16 units / floor]
 Parking: 3 floors x 18,000 sf = 54,000 sf = 135 spaces
 Commercial: 3 floors x 12,500 sf = 37,500 sf



B : 32,000 sf floorplate
 -height : **60' [5 floors]**
 Garage: 5 floors x 32,000 sf = 160,000 sf = 400 spaces

C : 23,500 sf floorplate
 -height : **150' [12 floors]**
 Hotel: 12 floors x 19,600 sf = 282,000 sf

Total square footage **P35**
 Residential: 144,000 sf
 Parking: 54,000 sf
 Garage: 160,000 sf
 Hotel: 282,000 sf
 Commercial: 37,500 sf

COLOR KEY

- DOT parcels under study
- PROPOSED USES**
- Institutional/Lab/Research
- Housing
- Offices
- Commercial
- Educational J&W University
- Parking Garages
- PROPERTY**
- Brown University
- Johnson and Wales
- Hospital
- Museum
- Historic structures
- UTILITIES**
- Electronic Ducts
- Water Lines
- Gas Mains
- Drainage
- Telephone
- Abandoned Utilities



Parcels 35

Planning Issues and Capacity Study

Parcel 35 will ultimately play an important role in recreating the east-west link of the Friendship Street and Clifford Street alignments which were severed by the I-195 construction but remain to the west of the right of way. The parcel configuration will restore the historic street grid and, together with the proposed Parcel 34 to the south and Parcel 36 to the north, has the opportunity to anchor the west end of a new Friendship and Clifford Street corridor. A new bridge across I-95 will connect Clifford Street to the west side of the highway and will present the opportunity for the west end of Parcel 35 to serve as a Jewelry District 'Gateway' site from the west. The scale, design and proposed uses of a Parcel 35 development along Friendship Street are important to the success of the new east/west corridors and the sense of arrival into the neighborhood. Although challenged by being defined by entirely new streets with no existing neighborhood fabric west of Claverick Street, the prospect of creating an entirely new precinct also presents a unique opportunity to achieve successful streets that will define the new western edges of the district as well as mitigate the presence of I-195 from the rest of the neighborhood.

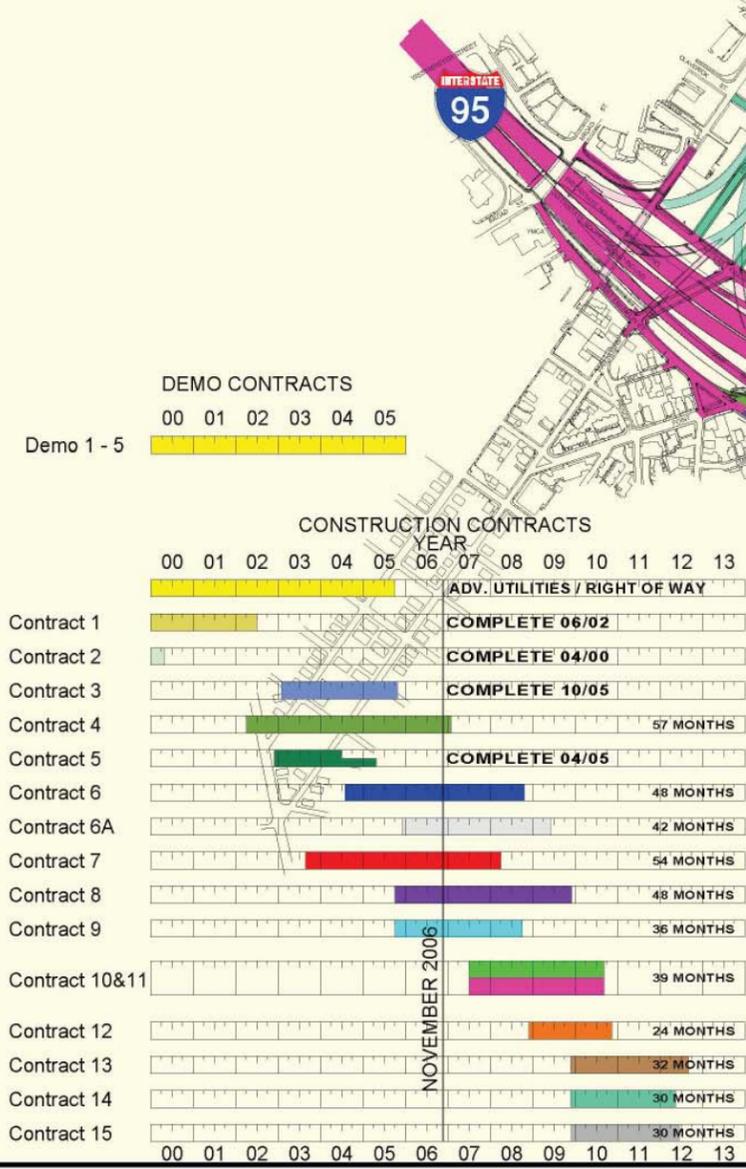
Parcel 35 is a central component of the proposed Johnson and Wales campus master plan. The dimension and layout as a contiguous block provides great flexibility in its redevelopment potential. JWU's plan proposes a Conference Hotel at the far west end of the site adjacent to the highway, a structured parking garage at the center of the site and the School of Technology at the east end of the site on Claverick Street opposite a proposed campus commons. The configuration of the block supports the linear structure of the master plan and contains an east/west pedestrian landscaped corridor along Friendship Street. The proposed zoning for Parcel 35 suggests heights in the 150 feet to 200 feet range. Although the proposed height of the hotel is not evident, the zoning envelope along the Interstate suggests that it is an appropriate location for a taller building. The hotel would also benefit from highway visibility.

As discussed previously in the alternative campus diagram, the

western end of Parcel 35 could be developed as housing if JWU shifted to the east and incorporated the Parcel 30 block into their planning.



- BUILDING DEMOLITION CONTRACTS**
- BUILDING DEMO CONTRACT 1
RI Contract No. 2000-CH-066 \$245,000 AS BID
 - BUILDING DEMO CONTRACT 2
RI Contract No. 2001-CH-054 \$737,885 AS BID
 - BUILDING DEMO CONTRACT 3
RI Contract No. 2003-CH-021 \$1,773,222 AS BID
 - BUILDING DEMO CONTRACT 4
RI Contract No. 2002-CH-007 \$157,935 AS BID
 - BUILDING DEMO CONTRACT 5
RI Contract No. 2003-CH-022 \$164,565 AS BID



- LEGEND**
- PROPERTY ACQUISITIONS - \$45.02 M (TO DATE)**
 - UTILITIES - \$30.03 M (TO DATE)**
 - CONTRACT 1 - \$4.44 M (AS BID) 1/99**
• SOUTH WATER STREET - CRAWFORD STREET BRIDGE TO JAMES STREET
RI Contract No. 9910
 - CONTRACT 2 - \$0.94 M (AS BID) 11/98**
• STORM DRAIN RETROFIT DEMONSTRATION PROJECT
RI Contract No. 9834
 - CONTRACT 3 - \$5.29 M (AS BID) 11/02**
• WEST RIVER WALLS, DYER & EDDY STREETS
• NBC OVERFLOW CULVERTS
RI Contract No. 2002-CH-060
 - CONTRACT 4 - \$9.59 M (AS BID) 2/02**
• POINT STREET OVERPASS
• UTILITY RELOCATIONS
RI Contract No. 2002-CB-023
 - CONTRACT 5 - \$2.89 M (AS BID) 8/02**
• PILE LOAD TEST PROGRAM
• RAMP WN PRELOAD
RI Contract No. 2002-CH-055
 - CONTRACT 6 - \$63.99 M (AS BID) 7/04**
• RAMP NE, WES & WS BRIDGES, H.B. CONSTRUCTION
• ALLENS AVE, BLACKSTONE ST, HENDERSON ST.
RI Contract No. 2004-CH-050
 - CONTRACT 6A - \$15.50 M (AS BID) 10/05**
• PUBLIC, O'CONNELL & OXFORD ST BRIDGES
• I-95 SOUTH - PUBLIC TO THURBERS
RI Contract No. 2005-CH-100
 - CONTRACT 7 - \$84.55 M (AS BID) 5/03**
• RELOCATED INTERSTATE 195
• PROVIDENCE RIVER BRIDGE
RI Contract No. 2003-CB-011
 - CONTRACT 8 - \$53.99 M (AS BID) 7/05**
• RAMP SE, WN, WP & NP
• FRANKLIN SQ.
RI Contract No. 2005-CH-051
 - CONTRACT 9 - \$26.11 M (AS BID) 5/05**
• PED. BRIDGE / EASTBOUND ON & OFF RAMP
• INDIA & GANO STREETS / 54" NBC SEWER
RI Contract No. 2005-CH-052
 - CONTRACT 10 & 11 - \$62.2 M (90% - 10/06)**
• I-195 RECONSTRUCTION
• CITY STREETS
• I-95 MAINLINE & ON / OFF RAMP
• SERVICE ROADS & RAMP PS BRIDGE
 - CONTRACT 12 - \$4.99 M ****
• I-95 NORTH - THURBERS TO EDDY
• DUDLEY ST CONNECTOR
 - CONTRACT 13 - \$22.23 M ****
• DEMO PROVIDENCE RIVER BRIDGE
• OLD HARBOR CITY STREETS
 - CONTRACT 14 - \$9.39 M ****
• DEMO EXISTING INTERCHANGE
• CONSTRUCT CITY STREETS
 - CONTRACT 15 - \$11.32 M ****
• DEMO I-195
• CONSTRUCT CITY STREETS
 - DREDGING - \$7.00 M**
• PROVIDENCE RIVER
- ** DENOTES CONTRACT ESTIMATE IN FUTURE DOLLARS BASED ON 2001 ESTIMATE INFLATED AT 2.5% PER YEAR

Maguire Group Inc.
Architects/Engineers/Planners
225 Chapman Street
Providence, Rhode Island 02905



RHODE ISLAND
DEPARTMENT OF TRANSPORTATION



NOVEMBER 21, 2006
UPDATE 12

IMPROVEMENTS TO INTERSTATE ROUTE 195
PROVIDENCE RHODE ISLAND
CONSTRUCTION CONTRACT SEQUENCE PLAN

Disposition Strategy Options

This section of the report addresses the public purpose objectives for the development of the I-195 parcels and recommends disposition strategies that can best help to achieve those objectives. In order to arrive at strategic recommendations, this section provides the following:

- Background information on the potential roles for government and institutions;
- Disposition methods that are available to RIDOT;
- Potential buyers who have expressed interest in the parcels;
- Schedule indicating when parcels will be available for development;
- Development economics that will impact the re-use of the land and incentives that may be needed as a result; and
- Information from similar projects in other cities to provide useful advice for the disposition strategy for the I-195 parcels; and
- Recommendations for a disposition strategy.

OBJECTIVES

The State of Rhode Island Department of Transportation (RIDOT), the City of Providence and the Rhode Island Economic Development Corporation (RIEDC) have expressed common objectives for the disposition and re-use of the I-195 parcels. The disposition strategy recommended herein is intended to maximize the potential for meeting those objectives. The objectives include the following:

1. Tax Revenue

- Increase the commercial tax base in the City
- Increase income, sales and corporate taxes to the State

2. Economic Development

- Leverage the presence of area institutions to promote the commercialization of research and development
- Attract knowledge-based industries
- Create high wage jobs

3. Urban Revitalization

- Create great neighborhoods with good urban design and high quality mixed use space
- Address the historic character of surrounding properties
- Establish connections to parkland
- Take advantage of the waterfront, transit, highway access, and neighboring institutions
- Address relationships to adjacent districts and Downcity

RIDOT also has objectives that are unique to its mission. RIDOT, which plans to use the proceeds of property sales to fund a portion of the I-195 relocation project, seeks to maximize the value of the properties and to receive compensation for them in the near term. If not, the State will need to identify other funding for its contribution to the I-195 relocation project, funding that will be difficult to obtain in the current fiscal climate.

POTENTIAL ROLES

Functions

Realizing the vision for the vibrant re-use of the I-195 parcels will engage a number of key stakeholders, including governmental entities (RIDOT, the City of Providence and RIEDC at minimum), elected offi-

cial, institutions (Brown University, Johnson & Wales University, and the medical institutions), non-profit organizations such as The Providence Foundation, adjacent communities, and developers. Some participants, such as the non-profits and community participants, will play a key role in providing input, as was done in the recent City-run design charrettes, and reviewing plans.

Significant activities to be undertaken by others include:

- Development and infrastructure planning,
- Re-zoning,
- Environmental analyses and clean-up (if needed),
- Creation of a parking strategy and implementation plan
- Financial plan to address parking strategy, infrastructure, environmental work, subsidies and incentives,
- Transportation management strategies,
- Marketing plan,
- Ongoing monitoring of real estate markets,
- Final disposition strategies for each parcel,
- Disposition process,
- Negotiations with developers and institutions,
- Property management prior to construction,
- Overall governance and coordination of the above activities, and
- Execution: detailed parcel planning, development and construction.

In other similar examples of public land disposition, governmental and institutional land owners have organized in their approaches to executing the planning and development functions in various ways. In some instances, the government or institutional landowner has assembled the land and then entered into a ground lease with a single developer to develop on its own account and/or oversee the execution of all development if there are multiple developers. In other cases, a governmental entity has retained the governance/coordination role and sold or entered into ground leases for parcels with multiple developers, corporations and institutions.

Typically, a developer is brought in to manage and develop a large, contiguous property that requires substantial new infrastructure and creation of multiple development parcels unless the land owner, such as a government redevelopment authority, has the mission, capabilities, and access to capital. In Providence, the major infrastructure is in place and the level of activity to prepare parcels for development will not be as extensive as in other settings.

Information on case studies of similar projects below illustrates the various approaches to their development and the roles of the parties.

CASE STUDIES

Both the Jewelry District and Knowledge-based Economy Studies included case studies with applicability to development in Providence. The Knowledge-based Economy Study focused on case studies where universities had a role in regional economic development. It noted that institutions can draw private sector entities, and institutional development does not necessarily mean that all projects will be tax-exempt.

The Jewelry District Study examined four successful mixed use districts, all of which included research institutions, and concluded that each case had an individualized approach to initiating, planning, financing and implementing development but that in all cases, there was a public consensus to develop around a central theme, such as life sciences, and there was a vision and master plan. The study also found that phased development took time (14-20 years) and that a long-term commitment and collaboration were necessary amongst various parties, with the level of involvement varying amongst the case study cities. In each case, an institution led the first phase of implementation and the private sector followed. In all cases, the redevelopment plans called for clustering institutional and related business uses, such as life sciences, so that the institutional space was an anchor for the private sector space. Finally, in several cases, residential, retail and open space were significant to the redevelopment plans and were also used in clustering activities to increase activity and create additional demand.

For this report, additional information was collected from several case study projects, including Science and Technology Park in East Baltimore, Maryland and University Park in Cambridge, Massachusetts.

Science & Technology Park, East Baltimore, MD

In East Baltimore, philanthropic organizations, state and municipal governments, JHU, the community and the private sector combined efforts to revitalize 88 acres. The project as a whole is well described in the Jewelry District Study. For this study, we focused on the elements needed to make the life sciences component of the program viable.

Roles of the various stakeholders include the following:

- The City assembled the land and transferred it to East Baltimore Development, Inc. (EBDI) and provided infrastructure funding;
- EBDI, a non-profit corporation, was established to receive the land through a Land Disposition and Development Agreement (LDDA) and sell it to a developer. EBDI oversees the development process to ensure public objectives are achieved;
- The State of Maryland established an Empowerment Zone to allow subsidies and also provided credits for tenant improvements;
- Foundations provide relocation assistance to residents displaced by the project, a K-8 school and various operating subsidies to EBDI;
- East Baltimore Development, Inc., formed by Forest City Enterprises and Presidential Partners, was selected as the developer to acquire the land, ensure public purposes are met, and sell individual parcels to Special Purpose Entities, which develop each parcel; and
- JHU is a lead tenant in the first office/research and development project and may be a tenant in future projects if it has demand for space.

Incentives available¹, in addition to the land assembly and infrastructure costs, include the following:

PROGRAM	POTENTIAL VALUE
Enterprise Zone Tax Credit 1. Real property tax credits: 10-year credit against local real property taxes on a portion of real property improvements. Credit is 80% for the first 5 years and decreases 10% annually thereafter to 30% in the 10 th and last year. 2. Income tax credits: 1 and 3 year credit for creating new jobs. General credit is a one-time \$1,000 credit per employee. For economically disadvantaged employees, the credit increases to a total of \$6,000 credit per employee distributed over 3 years.	\$100,000-600,000
One Maryland Tax Credit Programs 1. Project tax credit: Project tax credits of up to \$5 million based on qualifying costs and expenses incurred in connection with the acquisition, construction, rehabilitation, installation, and equipping of an eligible economic development project. Costs may include, among others, land acquisition, performance and contract bonds, insurance, architectural and engineering services, environmental mitigation, and utility installation. Eligible project costs must be at least \$500,000; project costs in excess of \$5 million are not eligible for the project tax credit. 2. Start-up tax credit: For the expense of moving from outside of Maryland and furnishing and equipping a new location, including fixed telecommunications and office equipment. May not exceed the lesser of \$500,000 of eligible start-up costs or \$10,000 times the number of new qualified positions created.	\$500,000 - 5 million
Baltimore Development Corporation Low interest loans for businesses currently located within, or willing to locate within, federally designated Empowerment Zones; employ zone residents; and obtain at least 50% of its financing from other sources. Funds can be used for improvement of land and existing facilities or for site preparation and working capital needs.	Up to \$200,000 or 50% of the project costs
Baltimore Gas & Electric Company Economic Development Incentive Rates Discounts offered for three to five years for qualifying companies considering locating new operations or expanding existing operations and employment opportunities within the Baltimore Gas & Electric Company's service territory.	Base rate discounts of up to 15%
Enhanced Job Creation Tax Credit State income tax credits for eligible businesses. Minimum qualification is the creation of 25 new permanent full time jobs.	\$1,000 – 1,500 per new qualified position
TEDCO: State Tenant Improvement Loans – Below Market Interest Rates As Maryland's leading source of funding for technology transfer and development programs and entrepreneurial business assistance, TEDCO offers a variety of low-interest, flexible term loans to qualified businesses.	Based on eligibility criteria

¹ Provided by Forest City Sciences & Technology Group

It should be noted that Maryland is a competitive state for technology, with the highest percentage of professional and technical workers in the workforce in the US, and is second nationally in the amount of federal obligations for research and development. Even with such strengths, the incentives listed above were necessary for development.

The developer has completed the first of five life sciences buildings, which includes 278,000 SF. Space is occupied by Johns Hopkins Institute for Basic Biomedical Sciences and Johns Hopkins Brain Science Institute & Neurology Lab, along with Howard Hughes Medical Institute and several private companies. Tenants have access to numerous of Hopkins' laboratories and facilities and collaborative relationships with Hopkins are encouraged. All the current tenants have located there because of the university.

Lenders require that 80 percent of such projects be pre-leased, and developers have advised that they would not undertake construction of buildings such as the life sciences project without a large tenant, such as a university, committed to take space. Other tenants, particularly at the early stages of a phased project, tend to be small, leasing spaces ranging from 1,200 – 2,000 SF.

In an emerging market, the building product needs to be very flexible space so that it can accommodate varying percentages of office and research and development uses. The space must be developed at a low cost, given the relatively low rents tenants are willing to pay. Subsidies are needed to keep costs low. Forest City developed its first building in East Baltimore to a LEED Silver standard and is able to pass on to tenants the operating costs that have resulted from this energy efficient construction.

Other development will include residential, graduate student housing, a hotel, office and research and development space, and a parking garage with a grocery store. Currently, parcels to be developed in the future are used for surface parking. Figuring out the best way

to keep parking costs low when structured parking is needed will be important.

University Park, Cambridge, MA

The Massachusetts Institute of Technology (MIT) has leased 27 acres for University Park to Forest City. The Jewelry District Study includes a comprehensive case study of this project. The mix of uses, including office/research and development, residential, hotel, grocery store, retail and open space, are similar to those envisioned for the I-195 parcels. The developer pays taxes to the City even though the land remains owned by MIT. In this report, we focus on the biotechnology component, given the common objectives of leveraging institutions and expand the knowledge-based economy. Massachusetts is one of the leading states for technology; Boston has a strong commercial real estate market; and Cambridge has attracted technology and biotechnology firms seeking proximity to area institutions such as MIT and Harvard University. As a result, University Park has not required the incentives that were needed for the Science & Technology Park in East Baltimore.

The office/research and development buildings at University Park are approximately 125,000-135,000 SF, smaller than the first building at Science & Technology Park, and thus more readily leased by the small tenants that were the first of University Park’s inhabitants. The average-size tenant in the first three buildings ranged from 1,000 – 50,000 SF and there were 18 tenants in 350,000 SF. As the park matured, there are now ten tenants in that same space. Some of the original tenants grew; some failed and left; and a few moved because there wasn’t enough space for them.

RELEVANCE FOR PROVIDENCE

The key elements of the Science & Technology Park and University Park experiences that are relevant for Providence and the I-195 parcels include the following:

- Mixed use development can help to attract tenants;
- Buildings of 125,000 – 135,000 SF are the appropriate size;

- Given that the market in Providence is more comparable to Baltimore than Cambridge, expect new development and related parking to require subsidies;
- Institutions are essential as lead tenants and to drawing related companies; and
- Developers can play a pivotal role in marketing to potential tenants and creating and maintaining a positive image for an area.

Potential Roles for Government

Governmental entities have assumed a range of roles, from minimal to a high level of engagement, in disposing of land to achieve public purpose objectives such as those listed above. The table below indicates the range of roles and activities that RIDOT, RIEDC and the City of Providence might consider. Those that are most likely to help achieve the objectives for the I-195 parcels are explained further in the disposal strategy recommendations.

Based on what we have learned, the Providence stakeholders anticipate a high level of government involvement, which will be to the benefit of the overall project as the entities collaborate to determine infrastructure and parking plans, subsidies, design objectives, and other aspects of marketing and developing the parcels. A strong governance mechanism is needed to advance the vision, coordinate the governmental stakeholders, ensure that the infrastructure and parking plans are created, work with the institutions and potential developers, monitor market conditions, create and execute a marketing plan and generally be the prime champion for redevelopment of the I-195 parcels. The City of Providence and RIEDC each have the capabilities and expertise to assume this lead role.

Role of Institutions

Johnson & Wales University and Brown University are each interested in acquiring some of the I-195 parcels, and there is speculation that health care institutions will want to expand in the Jewelry District. Leveraging the presence of the institutions is one of the common objectives for the project. As with other objectives, collabo-

ROLE	RIDOT	CITY OF PROVIDENCE	RIEDC
LOW INVOLVEMENT			
Sell land as soon as possible through competitive, open bidding	Advertise/sell		
Control development through zoning		Revise zoning	
MODERATE INVOLVEMENT			
Sell or lease land; base timing on market conditions; maintain property in the interim	Sell or lease; negotiate terms; monitor market for right timing; maintain property		
Control with guidelines relating to sale/lease and zoning	Cooperate with City on guidelines and include in transaction documents	Prepare guidelines with RIDOT; revise zoning	
Aggressively market properties	Work with City, RIEDC and brokers	Work with RIDOT, RIEDC and brokers	Work with RIDOT, City and brokers
Consider case-by-case development incentives	Participate and, coordinate with or assist City and RIEDC	Work with RIEDC and RIDOT; provide applicable incentives	Work with City and RIDOT; provide applicable incentives
HIGH INVOLVEMENT			
As above and actions listed below			
Sell specified parcels to City to achieve common objectives more readily; use eminent domain if needed in assemblage	Sell or lease; negotiate terms; monitor market for right timing; collaborate with City on sale of some parcels	Identify funds, acquire land; negotiate with institutions	
Pre-lease (or purchase as condo) space for public offices in new development to assist developers in obtaining financing	Determine if RIDOT or other state agency is a candidate; establish timing and amount of space	Determine need, the timing and amount of space for appropriate agencies	
Develop buildings for public agency occupancy	Possible	Possible	
Create a group, including institutions, to work collaboratively to achieve common objectives above	Participate	Participate or coordinate	Participate or Coordinate
Prepare incentive packages for physical development and jobs creation in advance and use in marketing efforts	Participate	Participate or coordinate; provide development (esp. for parking) and tax incentives	Participate or coordinate; provide financing and employment-related incentives; identify state-level incentives
Serve as main governance entity for planning, coordination and development oversight; primary project champion		Possible	Possible

ration among governmental entities and the institutions will be key to successful redevelopment of the parcels.

The institutional presence will help to encourage the mix of uses called for in the Jewelry District Plan and this report. Residential developers may be interested in constructing housing for undergraduates, graduate students and health care workers when market conditions are favorable. The Johnson & Wales University Master Plan has identified the need for 372 student beds and a 150-room hotel as part of a hospitality college, subject to market demand for such a hotel.

In addition to Johnson & Wales University's plans for the I-195 and adjacent parcels, Brown University announced it will construct a new medical school in the Jewelry District adjacent to the I-195 parcels, which will further strengthen this as an area for education and health care related activities .

Institutions can also join with government to help achieve the common economic development and revitalization objectives. In particular, institutions can serve as lead tenants or partners for private developers. If a hotel is built on the I-195 parcels, it will because Johnson & Wales University will partner with a hotel to create a hospitality college. Constructing office/research and development space will require a substantial lead tenant, the role that Johns Hopkins University (JHU) served in East Baltimore. Its presence enabled the developer to get financing and construct a building near JHU's Medical School which includes 278,000 SF in addition to the JHU space that start-ups and small biotechnology companies are leasing to benefit from the proximity to JHU. The same could occur in Providence with participation by Brown University and the health care institutions. This opportunity has been addressed by the Jewelry District Study and the Knowledge-based Economy Study².

The Knowledge-based Economy Study recommended that Providence and its institutions "Increase the commercialization of the institutional research and development and leverage the institutional competitive strengths in the development of for-profit commercial ventures; as well as to grow existing knowledge-based businesses in the City."³ The institutions can assist in this effort through efforts established to implement the recommendations of that study, and the institutions can also engage in marketing efforts to attract developers and targeted industries to locate in the Jewelry District and on I-195 parcels, joining with government to do so most effectively.

Institutions can also help to address the need for parking, as noted in the Jewelry District Study. That study called for the institutions to fund and finance structured parking needed for their missions and to consider shared structures. In its Master Plan, Johnson & Wales University has shown a 600-car parking garage for its use on an I-195 parcel. However, with the impact of the recession on their endowments, institutions may also need assistance to construct parking. Institutional demand for spaces can perhaps leverage development of structures to serve the public and institutions.

Expanding in close proximity to one another, the institutions may find opportunities to share space and various functions using innovative financial and investment strategies, as noted in the Jewelry District Study. Examples of such collaboration include sharing housing, perhaps each leasing space in a privately developed building; sharing laboratories, open space and parking garages; and creating and/or joining a Transportation Management Association that would serve the whole area.

Through its authorities, RIDOT may dispose of real estate through a sale or a ground lease. By practice, RIDOT typically offers property for sale through an open, competitive bid process but is not required by law to do so. RIDOT may put conditions on the sale, and conditions generally pertain to transportation or other public interests. Prior to advertising a property for sale, RIDOT orders an appraisal and must receive, at a minimum, the value as determined by the appraisal.

The allowable term of a ground lease is only twenty years, which is insufficient for a developer and investor to undertake the types of projects envisioned in this report. Ground lease terms for such projects are typically 60 to 90 years. To extend the potential term would require an act of the State legislature, and there is a precedent for this. The Legislature provided the RIDOT with the authority to enter into a 50-year ground lease with the Rhode Island Airport Corporation.

A sale is the simpler transaction and the form most commonly used by RIDOT. A sale is generally the preferred method in that provides immediate funds and no on-going administrative responsibilities. Developers and investors typically want to acquire property, rather than ground lease it, given that ownership allows them more control. Entities who plan to hold and use a property long term, such as institutions, want to own, not lease, land.

Ground leases have become more commonly used in recent years nationwide as governmental entities have entered into public-private partnerships, leveraging land to receive an ongoing revenue stream, spur economic development, and/or obtain other public benefits. A ground lease offers government the ability to regain full control of the property at the end of the term of the lease and use it in the future for other purposes, sell it or enter into another ground lease. Through a ground lease, the government owner may also set more conditions concerning the use of the parcel and the developer's obligations to fund amenities than would generally be used as conditions to a sale.

² Strengthening the Providence Knowledge Economy, January 2008, prepared for The Greater Providence Chamber of Commerce and The Providence Foundation by New Economy Strategies LLC

³ Ibid., Report 1A, Knowledge Data Analysis, p. 7

The ground lease can be used to structure a very flexible transaction as regards payment terms. It is possible to receive some or all of the anticipated rent at the outset by capitalizing the anticipated revenue stream and negotiating for it to be paid at the execution of the ground lease documents, at completion of construction or once the project is stabilized. Rent can be fixed at a certain amount with escalations, often pegged to changes in the Consumer Price Index, or the government owner may have some percent of the land value paid as fixed rent and receive participation in a percentage of the operating income and/or sale or refinancing of the ground lease interest.

Developers and investors have become more willing to enter into ground leases, if that is the only transaction type offered, and this is especially the case in strong markets. Lenders often charge a premium for loans for development under a ground lease. However, developers also achieve some benefit when not having to provide the upfront capital that would be required to acquire property. Ground leases are not commonly used for condominium developments since potential buyers are not usually familiar with ground leases, and this can make condominiums on ground leases more difficult to sell and if sold, are sold at a discounted value. Nonetheless, in some strong residential markets, such as San Francisco, residential condominium developments on ground leases have been successful.

POTENTIAL BUYERS

RIDOT currently must dispose of the properties through a statutory procedure set forth in Title 37 of the Rhode Island General Laws, a process that may result in interest from former owners or the City of Providence

City of Providence and RIEDC

Under the typical disposition powers, the City of Providence has the right to acquire the property before it is conveyed to another entity. The City has expressed interest in acquiring some of the western parcels in order to achieve many of the objectives listed above as it negotiates with potential institutional buyers. Other alternatives

include statutory changes to facilitate a more expeditious transfer, such as a transfer to or through RIEDC.

Institutions

Brown University has expressed interest in acquiring 4.25 acres of land and has identified three parcels adjacent to properties it currently owns, including land where it plans to construct a new medical school. Brown has not provided a specific program for the parcels. Johnson & Wales University's Master Plan, as noted earlier in this report, calls for expansion onto three I-195 parcels adjacent to properties the university already owns.

Other Interest

RIDOT has received expressions of interest in the parcels, especially in the in the future use of Parcel 10 for either private development or community use.

The table below lists all of the expressions of interest in the parcels.

PARCEL	PROPOSED USE
9	In 2007, abutter interested in merging parcel with his property for development.
10	In 2007, the Bay Gateway Committee interest in acquiring at less than fair market value. In 2008, there were several letters, one wanting to acquire the property to return it to its former use as a nightclub/marina. Former owner interested in developing it for residential use.
25	Brown University interested for institutional purposes. Require 20,000-40,000 SF floor plates, 4-7 stories; parking ratio of 2.5 spaces/1,000 SF
27	Brown University (same as above)
28	Brown University (same as above)
31	Johnson and Wales University interested for student housing.
35	Johnson and Wales University interested for a hotel, parking garage, business college and open space.
36	Johnson and Wales University interested for a hospitality college.

PARCEL AVAILABILITY

The parcels will become available for development at different times as RIDOT completes the highway project. Some are available now, and in January of 2009 RIDOT advertised Parcel 10 for sale. The table below shows when each parcel will be available.

DATE	PARCELS
Now	1A, 10, 14
Mid 2009	34
Late 2009	35
Fall 2010	6, 8, 9, 36, 37, 41
Mid 2011	2, 3, 5, 25, 27, 28, 30, 31
Early 2012	13, 22

DEVELOPMENT ECONOMICS

Financial analyses prepared for the parcel options shown in this study indicate the need for economic incentives, especially for hotel, office/research and development, and parking uses. It is assumed that residential development can proceed with incentives when the residential market had stabilized, except for an affordable housing that may be desired. This same finding regarding the development economics of commercial uses was made in the Jewelry District Study.

Options available to address the gap and otherwise encourage development envisioned for the I-195 parcels include the following:

- An incremental reduction in the corporate income tax rate to companies which create new employment in the state over a three-year period available because of the Rhode Island Jobs Development Act;
- Taxable bonds through the Rhode Island Industrial Facilities Corporation;
- Mortgage insurance through the Rhode Island Industrial – Recreational Building Authority;
- Loans and equity-like investments to developers and non-profits for commercial, urban revitalization projects through the Urban Revitalization Fund;
- Grants, loans and other investments through RIEDC's Renewable Energy Fund;
- Federal incentives and grants;
- Partnerships between institutions and the private sector for development and for sharing resources;
- Institutional tenancy in joint venture or private sector projects;
- Parking garage subsidies;
- Institutional participation in a parking strategy with either a commitment to lease spaces, finding an ownership of a garage to be available for institutional and public parkers;
- Temporary surface parking on I-195 parcels in the Jewelry District prior to construction of parking garage(s). While not a desirable permanent condition for the land, this could be con-

RECOMMENDATIONS

sidered as an interim condition for some parcels. If the lots are owned by the City or RIEDC, perhaps revenues could be directed to parking garage construction. If owned by the institutions, include controls on the duration of the temporary use. It is recommended that if interim surface parking is allowed, there be landscape design controls governing their appearance, such as landscaping standards currently proposed as a change to the City of Providence zoning code, and strict maintenance standards to ensure the lots are well maintained;

- Public investments in open space (Parcel P1, 16 and 17);
- Tax Increment Financing;
- Ground lease structures to provide low rent in early stages of a project for parcels if the City or RIEDC acquires properties from RIDOT for lease to the private sector; and
- Offering the land at below market value to encourage development if the City or RIEDC acquires the land from RIDOT.

The table at the end of this section summarizes the recommended disposition strategies that apply to each parcel. The narrative below provides the rationale for the recommendations and addresses strategies that extend beyond a single parcel.

GOVERNANCE: THE PROJECT CHAMPION

As can be seen from all the case studies, successful projects are driven by entities with vision, drive, expertise and focus. The same will be true for Providence. It is recommended that RIDOT consider naming a lead entity to provide the overall coordination for the redevelopment of the parcels on its behalf. Both RIEDC and the City of Providence have the capabilities to take on this responsibility and the project is well within the scope of their missions. Each governmental entity would, of course, carry out its traditional responsibilities for activities relating to development, such as zoning, permitting and the disposal of properties. The “project champion” would bring all the players together and advance the plan for the project. It would manage activities such as the following:

- Finalizing a plan for the parcels and ensuring that zoning is in place;
- Coordinating the development and implementation of a parking strategy;
- Coordinating the funding for and environmental review of parcels;
- Coordinating infrastructure and utilities plan and its funding and implementation;
- Addressing the development economics to determine, based in part of financial analyses for this study, where subsidies may be needed and how to best to fill the gaps;
- Monitor real estate markets to determine the best timing for sale of parcels;
- Create and execute a marketing plan to attract attention from corporations and qualified developers (this will need to address multiple property types);
- Communicate with elected officials, community groups and other interested stakeholders;

- Support RIDOT in the disposition of the parcels, assisting with solicitations and negotiations with potential buyers.

These activities should be carried out in collaboration with RIDOT , and a group including RIDOT, RIEDC and the City should convene on a regular basis. Other key participants should be included as appropriate. For example, development and implementation of a parking strategy could include Brown University, Johnson & Wales University and other potential institutional users of the facility.

As parcels are sold, government could consider convening a property owners group (or separate groups for east and west of the river) to communicate plans, arrange for shared activities such as transportation management and beautification efforts, and enhance the sense of engagement in the future of the districts amongst the new owners.

As seen in the case studies, there are other governance models. In some cases, projects are turned over to a single developer with the capability to execute all aspects of a project, provide most of the capital and assume most of the risk. In one case, a non-profit organization was created to receive land from the government, plan for development, manage the area over a long term, and serve as the vehicle to engage developers. In the first phase, which covers over 30 acres, the selected developer will develop some parcels on its own and also include additional developers for specific parcels. The non-profit receives significant funding from philanthropic organizations and payments for a set number of years from the developer.

In Providence, there does not appear to be a need to create a non-profit entity given the expertise and potential interest in managing the project that resides within the City of Providence and RIEDC. The City has a visionary and engaged Planning Department and a Redevelopment Agency whose capabilities could help to ensure that the collective objectives of leveraging the institutional presence in the Jewelry District and other economic development and urban design

objectives are met. Similarly, RIEDC is known for its strong economic development expertise, has tools for fostering economic development, and has already served successfully in the role of coordinating this study with RIDOT and the City. Further, a non-profit organization will need to be established and will require funding sources that may be difficult to obtain. RIDOT needs the proceeds of the sales for its use, and funds from foundations may be more constrained in the recession and there is strong competition for their funds.

Selecting a single developer also does not appear to be the correct model for the I-195 parcels. There is already substantial infrastructure in place to the parcels so there is no need for a development entity to take on that responsibility for all the land as there would be for a larger site in a less developed area. There will likely be a number of developers of the parcels, given that there are already two universities interested in much of the property west of the river and a former owner interested in Parcel 10 east of the river. The governmental entities seem prepared to take on a coordinating role and have the drive and passion to see them successfully developed. Given market conditions, the parcels will likely be released over time and the governmental entities seem well equipped to manage that disposition process. Outside support will be needed for tasks as the environmental studies, market plan and marketing of the parcels.

DISPOSITION TIMING

RIDOT has the competing objectives of selling the parcels as soon as possible and achieving the highest possible value. It may make most sense for RIDOT to sell when the parcels become available for development, given that:

- RIDOT needs the land disposition proceeds to pay for remaining I-195 improvements in the near term;
- Absorption in Providence has been steady but slow, and land is unlikely to appreciate in value quickly. The recession may make absorption rates even lower than in the past. In addition, endowments for institutions nationwide have lost significant value, and institutions have cancelled or delayed some capital construction projects. If this is the case for Johnson & Wales and

Brown Universities, their plans for development on I-195 parcels may also be delayed. In turn, this will likely slow any private sector development in the area; and

- Unlike a redevelopment agency, RIDOT may want to focus on its main transportation mission and not spend time monitoring market conditions to determine the best time to sell or to negotiate and monitor ground leases.

The table of recommendations for each parcel indicates the recommended timing for each transaction. If RIDOT does not need the sales proceeds as soon as parcels come available, it should consider monitoring market conditions and selling when they seem most advantageous.

We recommend below that RIDOT sell the parcels planned for institutional use or joint ventures between institutions and the private sector to the City or RIEDC as soon as the parcels become available. This will allow the City or RIEDC to target the re-sale of the parcels to the intended uses and negotiate conditions that will achieve common objectives. The immediate re-sale to the institutions will provide them with the certainty that the land will be available for their planned purposes.

DISPOSITION METHODS

The most straightforward disposition method for RIDOT, given its need for immediate capital, is to sell parcels. To achieve other common objectives, as noted above, some parcels could be sold to the City or RIEDC for one of them to lease short term, sell, or ground lease long term. Parcel 1A, which is used periodically by the Rhode Island School of Design, could be offered for sale or short or long term ground lease to be used for open space. Any parcel or sublease intended for public parking could be offered for sale or a ground lease at a discounted price to help subsidize that use. The City or another governmental entity, such as RIEDC, could structure a ground lease so that it receives participation rent. In the event that the development becomes profitable, it may no longer need to subsidize the project through a reduced ground rent. The City or RIEDC

could offer a reduction in sales prices for projects that include retail or a grocery store in order to encourage uses that help to achieve the common objective of a mixed use district but which are not economically feasible. Parcels intended for institutional or residential use are best offered for sale by the City or RIEDC, rather than handled as a ground lease, given the long-term presence of institutions and the difficulty of selling residential condominiums under ground leases. (This also creates more favorable conditions for apartment projects and allows for the flexibility to convert apartments to condominiums if market so dictate.) It is recommended land be sold, rather than leased, to institutions that will have a long-term need for the property and facilities constructed thereon and which present a positive, enduring presence in Providence.

Other conditions should be aimed at meeting the common objectives for the I-195 parcels. For example, transfer through the City or RIEDC would also help the City in its efforts to negotiate Payment in Lieu of Tax Agreements (PILOTs) and other conditions with the institutions interested in acquiring the property.

As regards to the terms of the transactions, the governmental entity which acquires the parcels should negotiate arrangements that will encourage and help enable private sector development that can be leveraged by the institutions' presence. In particular, the parties should consider if one or more parcels are best developed with a private sector partner. The institution could guarantee it would occupy a sufficient amount of space in an office/R&D building to enable the developer to get financing for a building large enough to accommodate say, life sciences companies with synergistic relationships with the area institutions. Without such pre-leasing commitments, developers will be unable to construct space speculatively. The City, State and RIEDC should consider what they can offer as incentives to spur such development. As noted in the background information on research and development projects, in markets comparable to Providence, governments have provided numerous forms of assistance to help bioscience businesses grow and thrive in their communities.

PARCEL ASSEMBLY

As noted in the Observations about Proposed Alignment section of this report, development of several parcels by a single entity may present an opportunity for great flexibility and synergy, leading to a cohesive urban design. However, the City can establish with design and development controls to accomplish some of the same aims. Given the importance of RIDOT receiving the maximum value for the parcels, RIDOT could consider requesting offers for the parcels individually and as an assemblage and selecting the offer(s) that provide the maximum value. That is, if selling to two buyers instead of one yields the highest price; RIDOT would select the two bidders' offers for each parcel rather than a lower offer from a single bidder for the two parcels. Potential offering packages could include the parcel assemblages shown in the table below.

PARCEL	RATIONALE
2, 3, 5	Proposed use for all three parcels is residential/mixed use; opportunity to develop all three may attract well established, regional residential/mixed use developers whereas a project on a single parcel would be too small for their consideration; single owner would likely keep the parcels to be developed in later phases in good condition; developer would have flexibility in locating commercial, parking/loading and residential uses to create a coherent streetscape.
6, 8	Same rationale as for Parcels 2, 3, and 5.
25, 26, 27	Facilitate coordinated development of proposed institutional/office/R&D uses; interest by Brown University. Consider if not acquired by City.
31, 35, 36	Facilitate coordinated development of proposed institutional/commercial uses; interest by Johnson & Wales University. Consider if not acquired by City.

INCENTIVES

Financial analyses of some of the uses envisioned in this report indicate that economic incentives will be needed to enable development to proceed, as noted in the Development Economics section above. All of the incentives described in that section should be explored, especially for parcels developed in the early stages of the revitalization of the Jewelry District. In particular, the government entities should finalize a parking strategy which will help to reduce the costs of development and attract developers and tenants to the properties.

MARKETING THE PARCELS

RIDOT advertises its real estate solicitations locally, but a more ex-

tensive marketing program may attract the greatest level of interest among developers, corporations and institutions. The project champion (coordinator described in the Governance section above) could attract the greatest interest with marketing plans tailored to specific uses that are envisioned for each parcel or group of parcels.

The project champion could establish a marketing committee to include the government entities and institutions. Other parties, such as the Providence Foundation and the Jewelry District Association, could be valuable partners in this effort too.

The committee should assist in determining what to include in marketing packages regarding incentives to draw potential developers and corporations. The package could include such information as the following:

- Incentives available at the federal, state and local level to spur economic development;
- Zoning and information on an expedited permitting process, if any;
- Improvements and development projects planned for the adjacent parcels and neighborhoods; and
- Strengths of Providence, its institutions and work force

In the marketing effort, the project champion with RIDOT could undertake a number of activities to attract interest, including the following:

- Create an interactive property brochure with all the relevant material and a website with controlled access for companies with significant interest to review more detailed property information;
- Create press releases for local and national markets;
- Develop direct marketing pieces for specific industries and developers of various property types;
- Distribute advertising material to all relevant local, national and global markets;
- Conduct industry forums to show the properties and explain the project to brokers and potential developers;

- Identify and target all relevant users for life science opportunities;
- For life science opportunities, advertise in relevant publications and through groups and organizations at their regular meetings and conferences;
- Advertise in relevant publications such as BIO, BioSpace, Biotech International, and CoStar, LoopNet;
- Continue to market aggressively, tracking tenants in the market and following up on contacts; and
- Track industry trends, news and mergers and acquisitions activity.

Brokers knowledgeable about particular development uses (life sciences, residential, retail and hotel) can help to identify and reach out to developers nationally and regionally and to prepare marketing plans for the parcels.

PARCEL DISPOSITION STRATEGIES

Parcel by parcel disposition strategy recommendations are included in the next page table.

PARCEL DISPOSITION STRATEGIES

PARCEL	TIMING	PARCELIZATION	DISPOSITION METHOD	USE	DENSITY Option A	DENSITY Option B	GOVERNMENT ROLE
1A	Now	Sole parcel	Sell or lease	Commercial & Open space			Potential acquisition by City for lease or re-sale; or market directly to institutions; revised zoning and guidelines
2 3 5	Available 2011; check market conditions and sell when favorable (after Parcels 6 and 8 are absorbed)	Offer collectively and as individual parcels; select highest value, responsible offer	Sale	Residential Residential Residential Parking Commercial	13 Town houses 10 Town houses 18 Town houses + 80 units 1 / townhouse + 80 spaces 22,400 SF		Revised zoning and guidelines; Affordable housing incentives if needed
6 8	Available Fall 2010; check market conditions and sell when favorable. If absorption is limited, consider selling one parcel before the other	If market is favorable, offer collectively and as individual parcels; select highest value, responsible offer	Sale	Residential Parking Commercial Residential Parking Commercial	128 Units 128 Spaces 43,000 SF 80 Units 80 Spaces 15,600 SF	192 Units 192 Spaces 21,500 SF 120 Units 120 Spaces 15,600 SF	Revised zoning and guidelines; Affordable housing incentives if needed; Marketing
9	Sell when available in Fall of 2010		Sale	Residential			Potential acquisition by City; park development and maintenance
10	Now	Sole parcel	Sale; Right of first refusal by former owner	Residential Parking	60 Units 60 Spaces	100 Units 100 Spaces	Revised zoning and guidelines; Affordable housing incentives if needed
14	Now	Sole parcel	Sale	Combine with abutter parcel for coordinated development			Revised zoning and guidelines
22 22 b	Option A: Available early 2102; check market conditions and sell when favorable Option B: Sell when available	Sole parcel Combine with Parcels 25 and 27	Sale	Residential Parking Commercial Off/Lab/Res/ Acad Commercial	197 Units 215 Spaces 138,000 SF	 466,200 SF 46,300 SF	Option A: Revised zoning and guidelines; Affordable housing incentives if needed; Marketing Option B: Acquisition by City and negotiated re-sale to institutions with conditions; revised zoning and guidelines; roadway realignment; incentives for garage and private development combined with institutional; Marketing
25 25b	Option A: Sell when available in mid 2011 Option B: Sell when available	Combine with Parcels 27 and 28 if institutional is preferred use Sole parcel	Sale	Institutional/ R&D Residential Commercial	322,000 SF 64 Units 15,500 SF		Option A: Acquisition by City and negotiated re-sale to institutions with conditions; revised zoning and guidelines; roadway realignment; incentives for garage and private development combined with institutional; Marketing Option B: Revised zoning and guidelines; Affordable housing incentives if needed; Marketing
27	Option A: Sell when available in mid 2011	Combine with Parcels 25 and 28 if institutional is preferred use	Sale	Institutional/ R&D	131,000 SF		
28	Option A: Sell when available in mid 2011	Combine with Parcels 25 and 27 if institutional is preferred use	Sale	Institutional/ R&D	193,000 SF		

PARCEL DISPOSITION STRATEGIES

PARCEL	TIMING	PARCELIZATION	DISPOSITION METHOD	USE	DENSITY Option A	DENSITY Option B	GOVERNMENT ROLE
	Option B: Same as for P22Opt B Hold Parcel 28 if for private sector acquisition; check market conditions and dispose when favorable If for shared/public garage use, sell to City when available	Parcel 28 as sole parcel	Sale	Shared/ public parking Office	325 cars 120,000 SF		Option B: Revised zoning and guidelines; consider incentives for private sector development and garage; marketing Possible acquisition of Parcel 28 by City if shared/public parking is part of site program. City could lease parcel for parking at reduced ground rent to subsidize garage development.
30	Option A: When available in mid 2011 Option B: Check market conditions and dispose when favorable	Sole parcel	Sale	Student housing Residential Parking Commercial	120,000 SF (200 - 250 beds)	90 Units 110 Spaces 17,000 SF	Option A: Acquisition by City and re-sale to institution; Revised zoning and guidelines Option B: Revised zoning and guidelines; Affordable housing incentives if needed; marketing
31	Option A: When available in mid 2011 Option B: Check market conditions and dispose when favorable	Combine with Parcels 35 & 36 Sole parcel	Sale Sale	Student housing Residential Parking Commercial	100,000 SF (200 - 250 Beds)	78 Units 82 Spaces 13,000 SF	Acquisition by City and re-sale to institution with conditions; revised zoning and guidelines Option B: Revised zoning and guidelines; Affordable housing incentives if needed; marketing
34	Option A: When available in mid 2009 Option B: Available Fall 2010; check market conditions and sell when favorable.	Sole parcel Combine w Parcel 37	Sale Sale	Residential Parking Commercial Office	162 Units 168 Spaces 37,500 SF	475,000 SF	Option A: Revised zoning and guidelines; Affordable housing incentives if needed; marketing Option B: Revised zoning and guidelines; consider incentives; marketing
35	Option A: Sell when available in late 2009 Option B: Sell institutional sub-parcel when available in late 2009; Check market conditions and sell remaining sub-parcel when favorable	Combine with Parcels 31 & 35 Sub-divide and sell in 2 transactions	Sale Sale	Hotel Freestanding Garage Institutional Hotel Freestanding Garage Residential Parking	282,000 SF [340 Rooms] 400 spaces 180,000 SF	282,000 SF [340 Rooms] 400 spaces 144 Units 135 Spaces	Option A: Acquisition by City and re-sale to institution with conditions. Revised zoning and guidelines; consider incentives Option B: Acquisition by City and re-sale to institution with conditions for institutional sub-parcel; Revised zoning and guidelines; consider incentives and marketing for sale to private entity of remaining sub-parcel
36	Option A: Check market conditions and sell when favorable. Option B: Sell when available in Fall 2010	Combine with Parcels 31 & 35	Sale	Residential Parking Institutional	144 Units 150 Spaces	180,000 SF	Option A: Revised zoning and guidelines; consider incentives; marketing Option B: Acquisition by City and transfer to institution with conditions; revised zoning and guidelines
37	Available Fall 2010; check market conditions and sell when favorable.	Sole parcel unless combined with Parcel 34 (see above)	Sale	Residential Parking	96 Units 150 Spaces		Revised zoning and guidelines; consider incentives; marketing
41	Available Fall 2010; check market conditions and sell when favorable.	Sole parcel	Sale	Residential Parking	56 Units 66 Spaces		Revised zoning and guidelines; Affordable housing incentives if needed; marketing

ACKNOWLEDGEMENTS

Rhode Island Economic Development Corporation

J. Michael Saul Interim Executive Director
 Michael Walker Senior Project Manager

Robert I. Stolzman, Attorney Adler Pollock & Sheehan, P.C.

Rhode Island Department of Transportation

Michael Lewis Director
 Richard Kalunian Chief Real Estate Specialist
 David Sasso Transportation Support Administrator
 Lambri Zerva, P.E. Design Project Manager

City of Providence

David N. Cicilline Mayor
 Richard C. Reed Office of the Mayor
 Thomas E. Deller, AICP Director, Department of Planning and Development
 Linda M. Painter, AICP Deputy Planning Director, Depart. of Planning and Development

Project Advisory Committee

Councilman Seth Yurdin Providence City Council Member
 Councilwoman Balbina Young Providence City Council Member
 Daniel Baudouin The Providence Foundation
 Edward F. Sanderson Executive Director,
 Rhode Island Historical Preservation & Heritage Commission
 Clark Schoettle Providence Revolving Fund

The project team met with the following individuals as part of the data gathering process

Johnson & Wales University

Merlin DeConti, P.E. Senior Vice President of Facilities Management
 Christopher Placco, AIA Vice President of Facilities Management

Brown University

Richard Spies Executive Vice President for Planning, Senior Advisor to the President
 Rebecca Barnes, FAIA Director of Strategic Growth, Office of the President

SOURCES

The following people provided assistance in researching development precedents and case studies

- Scott Levitan Senior Vice President/Development Director
Forest City - New East Baltimore Partnership, LLC
- Peter Calkins Senior Vice President, Forest City
- Peter Hayes Partner, Hayes & Sherry, Ltd.
- Karl Sherry Partner, Hayes & Sherry, Ltd.

Robert Azar AICP and Christopher Ise have been useful sources regarding the zoning / development review information

Jason D. Martin, Preservation Planner of the City of Providence- Department of Planning and Development has assisted the team with the information about the historical relevance of sites and structures.

The following sources were used in the production of the report:

- Strengthening Providence's Knowledge Economy, A Roadmap prepared for the Greater Providence Chamber of Commerce and the Providence Foundation,, New Economy Strategies, March 2008
- Jewelry District/Old Harbor Planning Framework Study, The Cecil Group, Economics Research Associates, MaguireGroup, December 2008
- Johnson & Wales University Providence Campus Master Plan, Sasaki, December 2007
- Research Parks and Biotech Facilities - Selected References, Urban Land Institute, November 2006
- Providence 2020 Plan, Sasaki Associates, May, 2006
- REIS Third and Fourth Quarter Market Reports for Providence
- Moody'sEconomy.com
- Providence Tomorrow: The Interim Comprehensive Plan, The City of Providence Department of Planning and Development, 2007
- The Jewelry District Concept Plan, The Thompson Group, 1999
- Providence I-195 Old Harbor Plan, William Warner Architects and Planners, 1992

Acknowledgments

Sources

- A. Rhode Island Coastal Resources Management Plan**
- B. Urban Coastal Greenway Policy**
- C. Section 423 of the Providence Zoning Ordinance**
- D. Interim Condition Drawings from Maguire Group [30%]**
- E. Historical Heritage Regulations Relevant to the Parcels Under Study**
- F. I-Way Parcels: Proposed Design Guidelines [11/12 /2008]. Neighborhood Charrette**

Table 1. Review Categories and Prohibited Activities in Tidal Waters and on Adjacent Shoreline Features (Water Type Matrices)

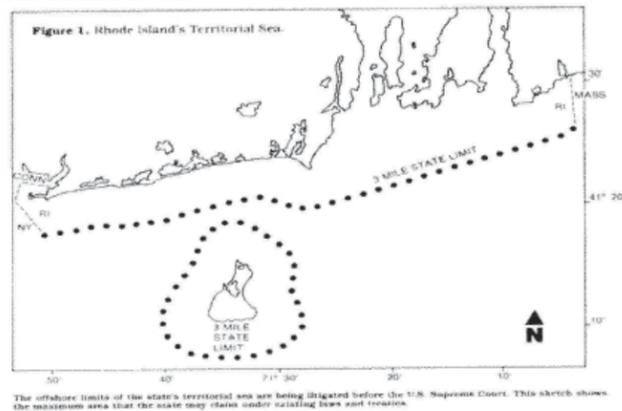
Review categories for activities within the 200-foot area contiguous to shoreline features are listed in Table 1A. All Category B activities and starred (*) Category A activities are put out to public notice. Maintenance of existing structures is treated in Section 300.14. Letter codes are as follows:

- A - Category A Assent required;
- B - Category B Assent required;
- P - Prohibited;
- n/a - Not applicable.

Footnotes appearing in Table 1 (Matrices)

- ¹See definitions in Section 300.2(A) for differentiation between Category A and B reviews.
- ²Municipal sewer lines are reviewed as Category B.
- ³Utility lines are reviewed as Category B.
- ⁴See Section 210.3(C)6; the review categories shown here for Type 3, 4, 5, and 6 waters apply to wetlands designated for preservation.
- ⁵For residential docks, piers, floats see Section 300.4.C.4 for review procedures.
- ⁶See Section 200.2.C.2 for pre-existing marinas in Type 2 Waters.
- ⁷Category A review for pre-existing marinas in Type 2 waters (See Section 300.9.A.1); Category B review for residential boating facilities in Type 2 waters (See Section 300.9.E.7).
- ⁸Structural shoreline protection facilities may only be permitted to protect historic structures which are currently listed in the National Register of Historic Places. Additionally, the proposal must meet all applicable standards contained within in Section 300.7.
- ⁹See Section 300.4.D.6

Figure 1. Rhode Island's Territorial Sea



The offshore limits of the state's territorial sea are being litigated before the U.S. Supreme Court. This sketch shows the maximum area that the state may claim under existing laws and treaties.

	Tidal Waters	Beaches and Dunes	Undeveloped Barriers	Moderately Developed Barriers	Developed Barriers	Coastal Wetlands	Headlands, Bluffs and Cliffs	Rocky Shores	Manmade Shorelines
Type 1 Waters									
Filling, Removal, and Grading of Shoreline Features	n/a	P	P	A ¹	A ¹	P	P	P	A ¹
Residential Structures	P	P	P	P	A	P	P	P	P
Commercial/Industrial Structures	P	P	P	P	B	P	P	P	P
Recreational Structures	P	P	P	P	B	P	P	P	B
Recreational Mooring Areas	P	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marinas	P	P	P	P	P	P	P	P	P
Launching Ramps*	P	P	P	P	P	P	P	P	P
Residential Docks,*Piers,*& Floats	P	P	P	P	P	P	P	P	P
Mooring of Houseboats	P	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a
Mooring of Floating Businesses	P	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a
Municipal Sewage Treatment Facilities	P	P	P	P ²	B	P	P	P	P
Individual Sewage Disposal Systems	P	P	P	P	A	P	P	P	P
Point Discharges - Runoff	B	A	A	A	A	A	A	A	A
Point Discharges - Other	P	P	P	P	B	P	P	P	P
Non-Structural Shoreline Protection	A	A	A	A	A	A	A	A	A
Structural Shoreline Protection	P	P	P	P	P	P	P	P	B
Energy-related Activities/Structures	P	P	P	P ³	B	P	P	P	B
Dredging - Improvement	P	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a
Dredging - Maintenance	P	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a
Open-Water Dredged Material Disposal	P	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a
Upland Dredged Material Disposal	n/a	P	B	B	B	P	P	P	B
Beach Nourishment	B	B	B	B	B	P	n/a	n/a	n/a
Filling in Tidal Waters	P	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a
Aquaculture	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a
Mosquito Control Ditching	A	n/a	n/a	n/a	n/a	A	n/a	n/a	n/a
Mining	P	P	P	P	P	P	P	P	P
Construction of Public Roads, Bridges, Parking Lots, Railroad Lines, Airports	P	P	P	P	B	P	P	P	B

	Tidal Waters	Beaches and Dunes	Undeveloped Barriers	Moderately Developed Barriers	Developed Barriers	Coastal Wetlands	Headlands, Bluffs and Cliffs	Rocky Shores	Manmade Shorelines	Areas of Historic/Archaeological Significance
Type 2 Waters										
Filling, Removal, and Grading of Shoreline Features	n/a	P	P	A ¹	A ¹	P	P	P	A ¹	B
Residential Structures	P	P	P	P	A	P	P	P	A	B
Commercial/Industrial Structures	P	P	P	P	B	P	P	P	B	P
Recreational Structures	P	P	P	P	B	P	P	P	B	B
Recreational Mooring Areas	B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marinas	P ⁶	P	P	P	P	P	P	P	P	P
Launching Ramps*	P	P	P	P	P	P	P	P	B ⁹	P
Residential Docks,*Piers,*& Floats	A/B ⁵	B	P	P	B	B	B	B	B	B
Mooring of Houseboats	P	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Mooring of Floating Businesses	P	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Municipal Sewage Treatment Facilities	P	P	P	P ²	B	P	P	B	B	B
Individual Sewage Disposal Systems	P	P	P	P	A	P	P	P	P	B
Point Discharges - Runoff	A	A	A	A	A	A	A	A	A	A
Point Discharges - Other	B	P	P	P	B	P	P	P	P	B
Non-Structural Shoreline Protection	A	A	A	A	A	A	A	A	A	A
Structural Shoreline Protection	B ⁶	B	P	P	P	P	B	B	B	B
Energy-related Activities/Structures	B	P	P	P ³	B	P	P	P	B	B
Dredging - Improvement	P	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Dredging - Maintenance	A/B ⁷	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Open-Water Dredged Material Disposal	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Upland Dredged Material Disposal	n/a	P	B	B	B	P	P	B	B	B
Beach Nourishment	B	B	B	B	B	P	n/a	n/a	n/a	B
Filling in Tidal Waters	P ⁹	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Aquaculture	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Mosquito Control Ditching	A	n/a	n/a	n/a	n/a	A	n/a	n/a	n/a	B
Mining	P	P	P	P	P	P	P	P	P	P
Construction of Public Roads, Bridges, Parking Lots, Railroad Lines, Airports	B	P	P	P	B	P	P	P	B	B

Rhode Island Coastal Resources Management Program

Rhode Island Coastal Resources Management Program

Rhode Island Coastal Resources Management Program

Type 3 Waters	Tidal Waters	Beaches and Dunes	Undeveloped Barriers	Moderately Developed Barriers	Developed Barriers	Coastal Wetlands	Headlands, Bluffs and Cliffs	Rocky Shores	Manmade Shorelines	Areas of Historic/Archaeological Significance
Filling, Removal, and Grading of Shoreline Features	n/a	B	P	A ¹	A ¹	P	P	B	A ¹	B
Residential Structures	P	P	P	P	A	P	P	P	A	B
Commercial/Industrial Structures	B	B	P	P	B	P	B	B	B	B
Recreational Structures	B	B	P	P	B	P	B	B	B	B
Recreational Mooring Areas	B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marinas	B	B	P	P	B	P	B	B	B	B
Launching Ramps*	B	B	P	B	B	P	B	B	B	B
Residential Docks,*Piers,*& Floats	A/B ⁵	A	P	P	A	A	A	A	A	B
Mooring of Houseboats	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Mooring of Floating Businesses	P	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Municipal Sewage Treatment Facilities	P	P	P	P ²	B	P	P	B	B	B
Individual Sewage Disposal Systems	P	P	P	P	A	P	P	P	B	B
Point Discharges - Runoff	A	A	A	A	A	A	A	A	A	A
Point Discharges - Other	B	B	P	B	B	P	P	P	B	B
Non-Structural Shoreline Protection	A	A	A	A	A	A	A	A	A	A
Structural Shoreline Protection	B	B	P	P	P	P	B	B	B	B
Energy-related Activities/Structures	B	P	P	P ³	B	P	B	B	B	B
Dredging - Improvement	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Dredging - Maintenance	A	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Open-Water Dredged Material Disposal	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Upland Dredged Material Disposal	n/a	B	B	B	B	P	B	B	B	B
Beach Nourishment	B	B	B	B	B	P	n/a	n/a	n/a	B
Filling in Tidal Waters	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Aquaculture	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Mosquito Control Ditching	A	n/a	n/a	n/a	n/a	A	n/a	n/a	n/a	B
Mining	P	P	P	P	P	P	P	P	P	P
Construction of Public Roads, Bridges, Parking Lots, Railroad Lines, Airports	B	P	P	P	B	P	B	B	B	B

Type 4 Waters	Tidal Waters	Beaches and Dunes	Undeveloped Barriers	Moderately Developed Barriers	Developed Barriers	Coastal Wetlands	Headlands, Bluffs and Cliffs	Rocky Shores	Manmade Shorelines	Areas of Historic/Archaeological Significance
Filling, Removal, and Grading of Shoreline Features	n/a	B	P	A ¹	A ¹	P	B	B	A ¹	B
Residential Structures	P	P	P	P	A	P	P	P	A	B
Commercial/Industrial Structures	B	B	P	P	B	P	B	B	B	B
Recreational Structures	B	B	P	P	B	P	B	B	B	B
Recreational Mooring Areas	B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marinas	B	B	P	P	B	P	B	B	B	B
Launching Ramps*	B	B	P	B	B	P	B	B	B	B
Residential Docks,*Piers,*& Floats	A/B ⁵	A	P	P	A	A	A	A	A	B
Mooring of Houseboats	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Mooring of Floating Businesses	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Municipal Sewage Treatment Facilities	B	B	P	P ²	B	P	B	B	B	B
Individual Sewage Disposal Systems	P	P	P	P	A	P	P	P	A	B
Point Discharges - Runoff	A	A	A	A	A	A	A	A	A	A
Point Discharges - Other	B	B	P	B	B	P	B	B	B	B
Non-Structural Shoreline Protection	A	A	A	A	A	A	A	A	A	A
Structural Shoreline Protection	B	B	P	P	P	P	B	B	B	B
Energy-related Activities/Structures	B	B	P	P ³	B	P	B	B	B	B
Dredging - Improvement	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Dredging - Maintenance	A	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Open-Water Dredged Material Disposal	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Upland Dredged Material Disposal	n/a	B	B	B	B	P	B	B	B	B
Beach Nourishment	B	B	B	B	B	P	n/a	n/a	n/a	B
Filling in Tidal Waters	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Aquaculture	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Mosquito Control Ditching	A	n/a	n/a	n/a	n/a	A	n/a	n/a	n/a	B
Mining	P	P	P	P	P	P	P	P	P	P
Construction of Public Roads, Bridges, Parking Lots, Railroad Lines, Airports	B	B	P	P	B	P	B	B	B	B

Type 5 Waters	Tidal Waters	Beaches and Dunes	Undeveloped Barriers	Moderately Developed Barriers	Developed Barriers	Coastal Wetlands	Headlands, Bluffs and Cliffs	Rocky Shores	Manmade Shorelines	Areas of Historic/Archaeological Significance
Filling, Removal, and Grading of Shoreline Features	n/a	B	P	A ¹	A ¹	P	B	B	A ¹	B
Residential Structures	P	P	P	P	A	P	B	B	A	B
Commercial/Industrial Structures	B	B	P	P	B	P	B	B	B	B
Recreational Structures	B	B	P	P	B	P	B	B	B	B
Recreational Mooring Areas	B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marinas	B	B	P	P	B	P	B	B	B	B
Launching Ramps*	B	B	P	B	B	P	B	B	B	B
Residential Docks,*Piers,*& Floats	A/B ⁵	A	P	P	A	A	A	A	A	B
Mooring of Houseboats	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Mooring of Floating Businesses	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Municipal Sewage Treatment Facilities	P	B	P	P ²	B	P	B	B	B	B
Individual Sewage Disposal Systems	P	P	P	P	A	P	B	B	A	B
Point Discharges - Runoff	A	A	A	A	A	A	A	A	A	A
Point Discharges - Other	B	B	P	B	B	P	B	B	B	B
Non-Structural Shoreline Protection	A	A	A	A	A	A	A	A	A	A
Structural Shoreline Protection	B	B	P	P	P	P	B	B	B	B
Energy-related Activities/Structures	B	B	P	P ³	B	P	B	B	B	B
Dredging - Improvement	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Dredging - Maintenance	A	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Open-Water Dredged Material Disposal	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Upland Dredged Material Disposal	n/a	B	B	B	B	P	B	B	B	B
Beach Nourishment	B	B	B	B	B	P	n/a	n/a	n/a	B
Filling in Tidal Waters	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Aquaculture	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Mosquito Control Ditching	A	n/a	n/a	n/a	n/a	A	n/a	n/a	n/a	B
Mining	P	P	P	P	P	P	P	P	P	P
Construction of Public Roads, Bridges, Parking Lots, Railroad Lines, Airports	B	B	P	P	B	P	B	B	B	B

Type 6 Waters	Tidal Waters	Beaches and Dunes	Undeveloped Barriers	Moderately Developed Barriers	Developed Barriers	Coastal Wetlands	Headlands, Bluffs and Cliffs	Rocky Shores	Manmade Shorelines	Areas of Historic/Archaeological Significance
Filling, Removal, and Grading of Shoreline Features	n/a	B	P	A ¹	A ¹	P	B	B	A ¹	B
Residential Structures	P	P	P	P	A	P	B	B	A	B
Commercial/Industrial Structures	B	B	P	P	B	P	B	B	B	B
Recreational Structures	B	B	P	P	B	P	B	B	B	B
Recreational Mooring Areas	B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marinas	B	B	P	P	B	P	B	B	B	B
Launching Ramps*	B	B	P	B	B	P	B	B	B	B
Residential Docks,*Piers,*& Floats	A/B ³	B	P	P	B	B	B	B	B	B
Mooring of Houseboats	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Mooring of Floating Businesses	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Municipal Sewage Treatment Facilities	B	B	P	P ²	B	P	B	B	B	B
Individual Sewage Disposal Systems	P	P	P	P	A	P	B	B	A	B
Point Discharges - Runoff	A	A	A	A	A	A	A	A	A	A
Point Discharges - Other	B	B	P	B	B	P	B	B	B	B
Non-Structural Shoreline Protection	A	A	A	A	A	A	A	A	A	A
Structural Shoreline Protection	B	B	P	P	P	P	B	B	B	B
Energy-related Activities/Structures	B	B	P	P ³	B	P	B	B	B	B
Dredging - Improvement	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Dredging - Maintenance	A	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Open-Water Dredged Material Disposal	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Upland Dredged Material Disposal	n/a	B	B	B	B	P	B	B	B	B
Beach Nourishment	B	B	B	B	B	P	n/a	n/a	n/a	B
Filling in Tidal Waters	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Aquaculture	B	n/a	n/a	n/a	n/a	P	n/a	n/a	n/a	n/a
Mosquito Control Ditching	A	n/a	n/a	n/a	n/a	A	n/a	n/a	n/a	B
Mining	P	P	P	P	P	P	P	P	P	P
Construction of Public Roads, Bridges, Parking Lots, Railroad Lines, Airports	B	B	P	P	B	P	B	B	B	B

Table IA. Review Categories in the 200-foot Area Contiguous to Shoreline Features.

Alteration or Activity	Review Category
Filling, Removal, and Grading of Shoreline Features	A/B ¹
Residential buildings	A ²
Commercial and Industrial Structures	A/B ³
Recreational Structures	A/B ³
Municipal Sewage Treatment Facilities	A/B ³
Individual Sewage Disposal Systems	A
Point Discharges - Runoff	A
Point Discharges - Other	B
Structural Shoreline Protection	B
Non-Structural Shoreline Protection	A
Upland Dredged Material Disposal	A/B ³
Energy-related Structures	B
Mining	B
Construction of Public Roads, Bridges, Parking Lots, Railroad Lines, and Airports	B
Associated Residential Structures	A/F (F-Finding of No Significant Impact)

NOTE: Setbacks from buffers and/or critical erosion areas as required in this program or any Special Area Management Plan are to be applied to these activities

Footnotes:

- Section 300.2(A)3 for differentiation between Category A and B reviews.
- See Section 320.D.2.
- For commercial and industrial structures, recreational structures, upland disposal of dredged material as part of an approved maintenance application, and municipal sewage treatment facilities, a Category "A" review may be permitted provided that the Executive Director determines that:
 - All criteria in Section 110.1A are met;
 - The proposed activity is determined to be a minor alteration with respect to potential impacts to the waterway, coastal feature, and in areas within RICRMP jurisdiction;
 - The proposed activity conforms with any and all applicable adopted CRMC special area management plans;
 - The proposed activity will not significantly conflict with existing uses and activities in the waterway, on the coastal feature, and in areas within RICRMP jurisdiction;
 - The proposed activity does not represent new development of a site within RICRMP jurisdiction along a Type 1, 2, or 4 waterway;
 - The applicant meets all applicable requirements of Section 300.9.

Table IB. Review Categories for Inland Activities (Section 320 and Section 325)

Alteration or Activity	Review Category
Statewide	
Power-generating plants (excluding facilities of less than a 40-megawatt capacity)	B
Petroleum storage facilities (excluding those of less than 2,400-barrel capacity)	B
Chemical or petroleum processing facilities	B
Minerals extraction	B
Sewage treatment and disposal facilities (excluding individual sewage disposal systems)	B
Solid waste disposal facilities	B
Desalination plants	B
Extending Onto Coastal Feature or Contiguous Area	
Subdivision, co-operative, or other multi-ownership facility 40,000 square feet of impervious surface	A/B ¹ A/B ²
Critical Coastal Areas	
Subdivision, co-operative, or other multi-ownership facility 40,000 square feet of impervious surface	A/B ¹ A/B ²
On-site sewage disposal system serving more than 2,000 gallons per day	A/B ²
Extension of municipal or industrial treatment facilities or sewer lines	B ³
Water distribution systems or the extension of supply lines	A/B ²

Footnotes

¹For residential subdivisions a Category "A" review may be permitted provided that the proposed subdivision is less than six (6) units.

²Determined based on the application of other requirements (e.g., Table 1 or 1A) or at the discretion of the Executive Director.

³Not including the extension of sewer lines that are recommended within a council-approved special area management plan

Figure 4. Decision Tree for Inner Harbor and River Zone.

INNER HARBOR AND RIVER ZONE REQUIREMENTS:

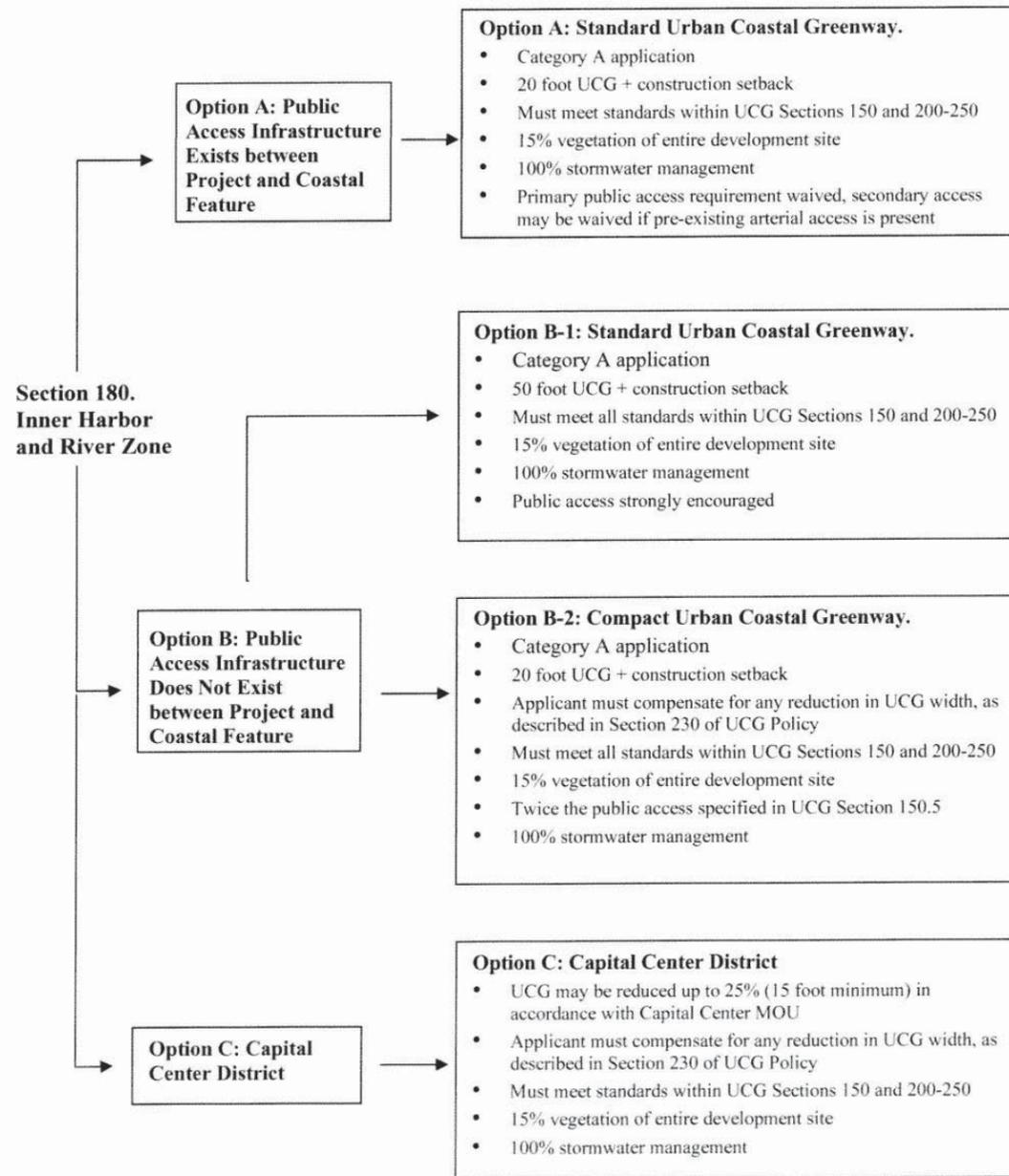
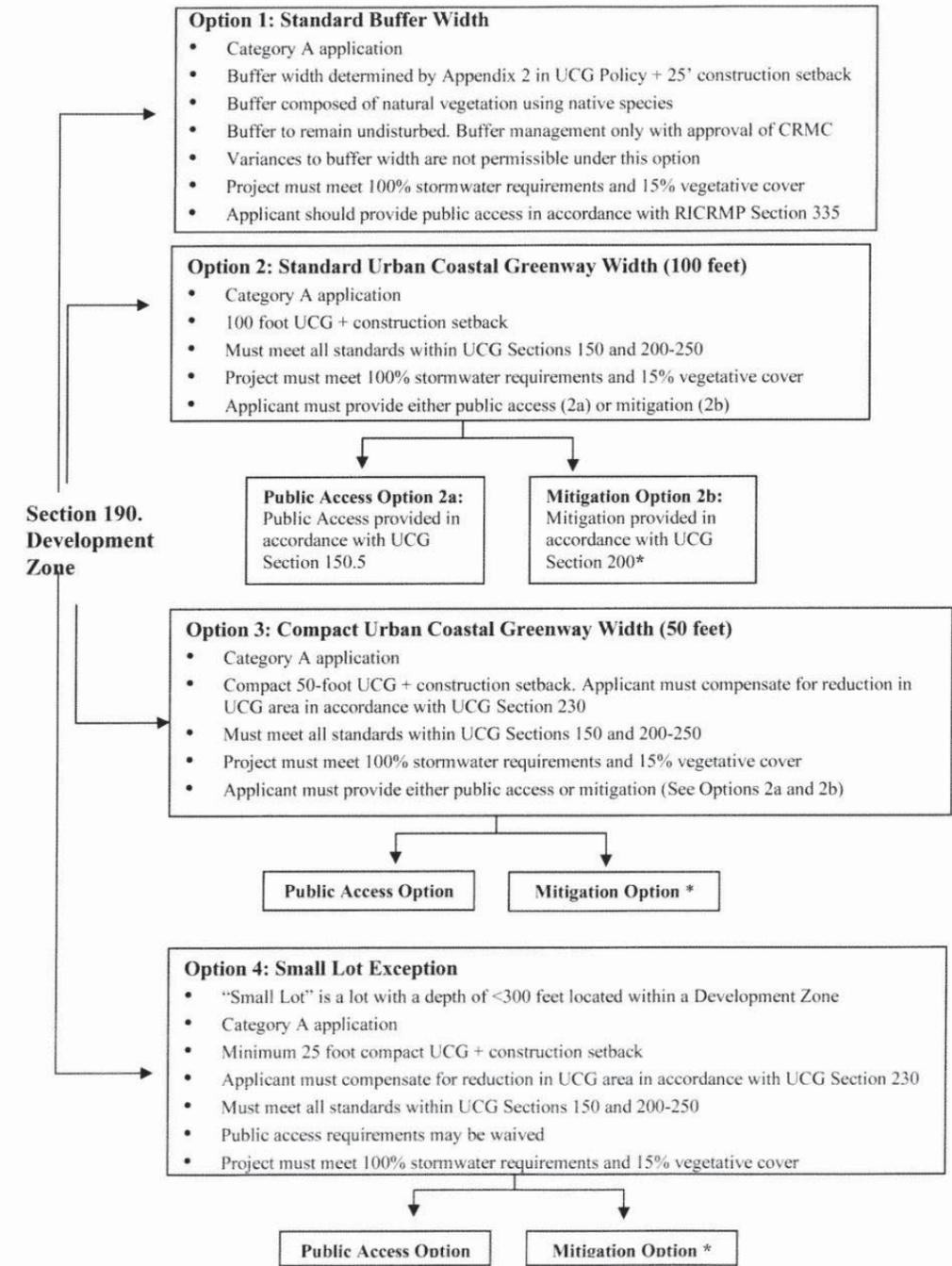


Figure 5. Decision Tree for Development Zone.

DEVELOPMENT ZONE REQUIREMENTS:



* - Mitigation: coastal wetland restoration projects require a separate Category B application

City of Providence

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

CHAPTER

No. AN ORDINANCE IN AMENDMENT OF CHAPTER 27 OF THE CODE OF ORDINANCES OF THE CITY OF PROVIDENCE ENTITLED "THE CITY OF PROVIDENCE ZONING ORDINANCE" APPROVED JUNE 27, 1994, AS AMENDED, TO AMEND SECTION 423 – SPECIAL FLOOD HAZARD AREAS AND ARTICLE X.

Approved

Be it ordained by the City of Providence:

Section 1: Article IV, Section 423 shall be deleted in its entirety and replaced with the following:

Section 423 – Special Flood Hazard Areas

423.1 – Purpose: The purpose of this Section is to ensure public safety; minimize hazards to persons and property from flooding; protect watercourses from encroachment; and to maintain floodplains' capability of retaining and carrying floodwaters.

423.2 – Applicability

- A) The City complies with the requirements of the National Flood Insurance Act of 1968 (P.L. 90-488, as amended). The National Flood Insurance Program (NFIP) established by said act provides that areas of the city having a special flood hazard be identified by the Federal Emergency Management Agency (FEMA) and that floodplain management measures be applied in such flood hazard areas. The requirements of this Section shall apply to any construction or other development that lies wholly or partly within an area of special flood hazard, as identified as Zone A, AE, AH, AO, A1-30, A99, V, V1-30, and VE on the Flood Insurance Rate Map (FIRM) and Flood Hazard Boundary Map (FHBM) prepared by FEMA, dated March 2, 2009. Said FIRM, including any subsequent adopted amendments, is hereby made part of this Article and Section. The exact boundaries of the District may be defined by the 100-year base flood elevations (BFE) shown on the FIRM and further defined by the Flood Insurance Study booklet revised March 2, 2009.
- B) The degree of flood protection required by the ordinance is considered reasonable but does not imply total flood protection. If any section, provision, or portion of this ordinance is adjudged unconstitutional or invalid by a court, the remainder of the ordinance shall control.
- C) For the purposes of this section, "other development" shall be defined as any action exclusive of that which requires the issuance of a building permit under the Rhode Island State Building Code. Such other development shall include, but not necessarily be limited to, the following:
 1. Earth, gravel or mineral removal or extraction.
 2. Alteration of the topography by cutting, filling or grading.
 3. Storage of bulk materials outside of a structure.
 4. Construction or placement of facilities or improvements not normally requiring a building permit.
- D) The requirements set forth in this Section shall be in addition to any applicable requirements in this Ordinance and any other regulation that may be applicable. Additionally, more stringent requirements shall apply to coastal high-hazard areas, which are defined as those special flood hazard areas along the city's coastline subject to high-velocity waters from hurricane

wave wash and wave run-up as designated as Zone V1-30 on the Flood map (hereinafter referred to as the "V-Zone").

423.3 – Permits Required

- A) In addition to all other required applications and approvals, application for a flood hazard development permit shall be submitted to the Director and shall include:
 1. The name and address of the applicant.
 2. An address or map indicating the location of the construction site.
 3. A site plan showing the location of existing and proposed structures, sewage disposal facilities; areas to be cut and filled, and the dimensions of the lot or parcel.
 4. A statement of the intended use of the structure.
 5. A statement as to the type of sewage system proposed.
 6. Specification of dimensions of the proposed structures.
 7. The elevation (in relation to mean sea level) of the lowest floor, including basement, and, if the lowest floor is below grade on one or more sides, the elevation of the floor immediately above.
 8. Base flood elevation (BFE) data for all new, relocated, or substantially improved structures.
 9. The elevation (in relation to mean sea level) to which the structure will be flood-proofed.
 10. A description of the extent to which any watercourse will be altered or relocated as a result of the proposed development; said description shall be prepared and stamped by a licensed professional engineer.
- B) Prior to the issuance of a building or development permit, the applicant shall submit evidence that all permits and approvals have been received from all government agencies from which approval is required by federal or state law.

423.4 – Review of Flood Hazard Development Applications: The Director or designee shall:

- A) Review all applications for development or construction in flood hazard areas to determine that all pertinent requirements as described in Section 423.5 have been or will be met;
- B) In the review of all flood hazard development permit applications utilize the data contained in the "Flood Insurance Study – City of Providence, Rhode Island, Providence County," as described in Section 423.2.
- C) Make interpretations of the location of boundaries of special flood hazard areas shown on maps described in Section 423.2.
- D) In A-Zones, in the absence of FEMA BFE data and floodway data, obtain, review and reasonably utilize other BFE and floodway data as a basis for elevating residential structures to or above the base flood level, and for flood-proofing or elevating non-residential structures to or above the base flood level.
- E) In review of flood hazard development permit applications, determine that all necessary permits have been obtained from those federal, state and local government agencies from which prior approval is required.
- F) Notify adjacent municipalities, the Rhode Island Department of Environmental Management (RI DEM), Rhode Island Emergency Management Agency (RIEMA), and the Coastal Resources Management Council (CRMC) prior to any alteration or relocation of a watercourse, and submit copies of such notifications to FEMA and maintain the carrying capacity of altered watercourses; and
- G) Maintain, as a permanent record, copies of all flood hazard development permits issued and data relevant thereto, including reports of the Zoning Board of Review on variances and special use permits.

423.5 – Development Standards: In addition to state and local codes and regulations, the following standards shall apply to any construction or other development located wholly or partly within an area of special flood hazard as defined in Section 423.2 A). The CRMC may also require permits for development on the coastal feature.

- A) No watercourse may be altered in a manner that will, in the opinion of the Director or designee, result in any decrease in the capacity of the watercourse, and no land shall be graded or altered in such a manner as to increase the BFE within the City of Providence. Where any alteration is permitted, the Director or designee, in consultation with the City Engineer, shall notify the adjacent communities, the Rhode Island Statewide Planning Program and FEMA.
- B) In a regulatory floodway, any encroachment is prohibited that would cause any increase in the Base Flood level unless hydrologic and hydraulic analyses prove that the proposed encroachment would not increase flood levels during the Base Flood discharge.
- C) The filling or excavation of land may be permitted only under the following conditions:
 - 1. Said action will not encroach upon a watercourse.
 - 2. Said action will not result in an increase in the potential flood level. Where it is determined that said action may result in an increase in the potential flood level, the Director or designee shall require appropriate measures to offset the potential increase. Adequate drainage shall be provided so as to reduce the exposure of the site or any other land to flood hazard.
- D) No outdoor storage of materials or equipment that is likely to cause damage to property, create a potential obstruction to floodwaters, create a potential fire hazard, or pollute waters during flood periods shall be permitted in any special flood hazard area. Such materials or equipment shall include but not necessarily be limited to lumber and other buoyant materials, water-soluble materials, volatile or flammable materials, acids, and poisons.
- E) Provisions shall be made for anchoring facilities, equipment or yard features that are capable of moving or floating in floodwaters. Such items shall include but not necessarily be limited to: fences, sheds, animal shelters, tanks, storage boxes, planters, vehicles, boats, and other items normally positioned or stored on a site outside of a structure.
- F) Flood-resistant materials shall be used for structures within areas of special hazard as defined in Section 423.2 (A).
- G) Construction methods and practices shall be used that minimize flood damage.
- H) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water entry accumulation.
- I) On-site waste disposal systems shall be designed to avoid impairment or contamination of the floodway.
- J) New and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration.
- K) BFE data is required for subdivision proposals or Land Development Projects.
- L) In addition to the foregoing, in a V-Zone, the following requirements shall apply to any proposed development:
 - 1. The alteration of sand dunes, where existing, is prohibited.
 - 2. All new construction shall be located landward of the reach of mean high tide (See also Section 425.3 for additional requirements).

423.6 – Specific Standards

- A) Construction Standards in Special Flood Hazard Areas (SFHA), Zones A, A1-30, AE.
 - 1. Residential Construction: All new construction, substantial improvement to and repair of structures that have sustained substantial damage shall have the bottom of the lowest floor, including basement, elevated above the BFE (refer to the Rhode Island State Building Code for more specific elevation requirements).
 - 2. Non-residential Construction: All new construction, substantial improvement to and repair of structures that have sustained substantial damage and which are commercial, industrial or otherwise non-residential shall meet the following standards:
 - a. The bottom of the lowest floor, including basement, shall be elevated above the BFE (refer to the Rhode Island State Building Code for more specific elevation requirements); or
 - b. In lieu of being elevated, non-residential structures may be dry flood-proofed to one (1) foot above the BFE, provided that, together with all attendant utilities and

sanitary facilities, the areas of the structure below the required elevation are watertight, with walls substantially impermeable to the passage of water, and provided that such structures are composed of structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A Rhode Island-registered professional engineer or architect shall review and/or develop structural design specifications and plans for the construction, and shall certify that the design and methods of construction are in accordance with the acceptable standards of practice or meet the provisions of this section. Such certification shall be provided to the Director or designee.

- 3. Fully Enclosed Areas Below the BFE of Elevated Buildings: All new construction, substantial improvement to or repair of substantial damage to a residential or non-residential structure that includes fully enclosed areas formed by a foundation and other exterior walls below the BFE of an elevated building shall be designed to preclude finished living space and allow for the entry and exit of flood waters to automatically equalize hydrostatic flood forces on exterior walls (wet flood-proofing). Designs for complying with this requirement must either be certified by a Rhode Island-registered professional engineer or architect, or meet the following criteria:
 - a. Provide a minimum of two (2) openings (hydraulic flood vents) having a total net area of not less than one square inch for every one square foot of enclosed area subject to flooding. These hydraulic openings must be located on at least two different walls. Only the area (square footage) that lies below the BFE can be used in the calculation of net area of vents required;
 - b. The bottom of all openings shall be no higher than one (1) foot above grade. At least one side of the structure's fully enclosed area must be at or above grade. Fill placed around the foundation walls must be graded so that the elevation inside the enclosed area is equal to or higher than the adjacent outside elevation on at least one side of the structure. The foundation slab of a residential structure, including the slab of a crawlspace, must be set equal to the outside finished grade on at least one side of the building;
 - c. Openings may be equipped with screens, louvers, valves, or other coverings or devices, provided they permit the automatic entry and exit of flood waters in both directions without any external influence or control, such as human intervention that includes electrical or non-automatic mechanical means. Other coverings may be designed and certified by an engineer or approved by the Director or designee;
 - d. The area cannot be used as a finished living space. Use of the enclosed area shall be the minimum necessary and shall only be used for the parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator). The enclosed area shall not be used for human habitation or partitioned into separate rooms;
 - e. All interior wall, floor and ceiling materials located below the BFE shall be unfinished and resistant to flood damage;
 - f. Electrical, plumbing, machinery or other utility equipment that services the structure (furnaces, oil or propane tanks, air conditioners, heat pumps, hot water heaters, ventilation, washers, dryers, electrical junction boxes, circuit breaker boxes, food freezers) are prohibited in the fully enclosed area below the BFE. Utilities or service equipment located in this enclosed area, even if elevated above the BFE in the space, will subject the structure to increased flood insurance rates;
 - g. A residential building with a structurally attached garage having its floor slab below the BFE is considered an enclosed area below the BFE and must meet the standards of Section 423.6(A)3. A garage that is attached to a residential structure and is constructed with the garage slab below the BFE must be designed to allow the automatic entry and exit of floodwaters in both directions. Flood openings or vents are required in the exterior walls of the garage or in the garage doors. The human intervention necessary to open garage doors when flooding occurs is not an acceptable means of meeting the openings requirements. In addition to the automatic entry of floodwaters, the areas of the garage below BFE must be constructed with flood-resistant materials. Garages attached to non-residential structures must also meet the aforementioned requirements or be dry flood-proofed per the requirements of Section 423.6(A)2.
- 4. Manufactured Homes (including Mobile Homes) and Recreational Vehicles (RVs).
 - a. In all Special Flood Hazard Areas (SFHA), any manufactured (mobile) homes to be newly placed, substantially improved or repaired as a result of substantial damage, shall be elevated so that the bottom of the lowest floor is at or above the

BFE. This includes SFHAs outside a manufactured home park or subdivision, in a new manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or on a site in an existing park in which a manufactured home has incurred substantial damage as a result of a flood.

- b. All manufactured and mobile homes within a SFHA shall be placed on permanent foundations, securely anchored so as to resist flotation, lateral movement and hydrostatic pressure. Anchoring may include, but not be limited to, the use of over-the-top or frame ties to ground anchors.
 - c. All manufactured and mobile homes within a SFHA shall be installed using methods and practices that minimize flood damage. Adequate access and drainage should be provided. Elevation construction standards include piling foundations placed no more than ten (10) feet apart, and reinforcement is provided for piers more than six (6) feet above ground level.
 - d. Recreational vehicles placed on sites within a SFHA shall (i) be on the site for fewer than 180 consecutive days and (ii) be fully licensed and ready for highway use or (iii) be elevated and anchored. An RV is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect-type utilities and security devices, and has no permanently attached additions.
 - e. Public utilities and facilities in manufactured and mobile homes or subdivisions within a SFHA shall be constructed so as to minimize flood damage.
5. Accessory Structures: Detached accessory structures (e.g. garages, sheds) in Zones A, AE, A1-30, AO, and AH are not required to meet elevation or dry flood-proofing requirements if the following standards are met:
- a. The structure is no more than 500 square feet and has a value less than \$3000.
 - b. The structure has unfinished interiors and is not used for human habitation. An apartment, office or other finished space over a detached garage is considered human habitation and would require the structure to be elevated.
 - c. The structure is used solely for parking vehicles and/or limited storage.
 - d. The accessory structure is wet flood-proofed and designed to allow the automatic entry and exit of flood water.
 - e. The accessory structure is firmly anchored to prevent flotation, collapse and lateral movement.
 - f. Service facilities such as electrical, mechanical and heating equipment must be elevated or flood-proofed to or above the BFE.
 - g. The structure complies with the floodway encroachment provision in Section 423.5(B).

B) Additional Construction Standards in Coastal V-Zones

1. Residential and Non-Residential Construction: In V1-30, VE and V-Zones, information specifying the elevation of the bottom of the lowest horizontal structural member of the lower floors of all new and substantially improved structures shall be provided by the property owner or developer to the Director or designee and such information shall be maintained on file. Further, for all new construction, substantial improvements:
 - a. Shall be elevated and secured to anchored pilings or columns so that the bottom of the lowest horizontal structural member is above the BFE (refer to the Rhode Island State Building Code for more specific elevation requirements).
 - b. Shall be certified by a registered professional engineer or architect that the design and methods of construction meet anchoring and elevation requirements.
 - c. Shall have space below the lowest floor that is either free of obstruction or constructed with breakaway walls.
 - d. Shall not use fill for structural support.
2. A manufactured home placed or substantially improved within V1-V30, VE, or V-Zones meeting any one of the following criteria shall meet V-Zone standards:
 - a. It is located outside of a manufactured home park or manufactured home subdivision;

- b. It is in a manufactured home park or manufactured home subdivision;
- c. It is an expansion of a manufactured home park or manufactured home subdivision; or
- d. It is on a site in an existing park in which a manufactured home has incurred substantial damage as the result of a flood.

C) Construction Standards in Special Flood Hazard Area Zones AO and AH

1. Drainage paths shall be required around structures on slopes to guide water away from structures.
2. Any new or substantially improved non-residential structure shall have its lowest floor elevated or completely flood-proofed above the highest adjacent grade to a level at least as high as the depth number on the FIRM.
3. Any new or substantially improved residential structure shall have its lowest floor (including basement) elevated or completely flood-proofed above the highest adjacent grade to a level at least as high as the depth number on the FIRM.

423.7 – Variance

- A) In addition to applying the criteria and requirements of this section, the Zoning Board of Review may hear and grant a variance only when the following conditions are met:
1. The decision describes the exact extent of the variance granted.
 2. The decision indicates that granting the variance may affect flood insurance rates up to as high as \$25 per \$100 of insurance coverage as they apply to the subject property, and that construction or other development below the BFE may increase risk to life and property.
 3. Copies of the decision shall be forwarded to the applicant, the Director or designee, the Rhode Island Statewide Planning Program, and the Federal Insurance Administration in the annual report of the City to the Administration.
- B) No variance shall be granted that will result in any increase in flood levels.

Section 2: Article X shall be amended to add the following definitions:

Accessory Structure, as used in Section 423 – A structure which is on the same parcel of property as the principal structure to be insured and the use of which is incidental to the use of the principal structure.

Area of Shallow Flooding, as used in Section 423 – A designated AO, AH, AR/AO, AP/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM)

Area of Special Flood Hazard – see definition for "Special Flood Hazard Area" (SFHA).

Base Flood – The flood having a one (1) percent chance of being equaled or exceeded in any given year; also referred to as the 100-year flood, as published by the Federal Emergency Management Agency (FEMA) as part of a Flood Insurance Study (FIS) and depicted on a Flood Insurance Rate Map (FIRM).

Base Flood Elevation (BFE) – The elevation of the crest of the base flood or 100-year flood. The height in relation to mean sea level expected to be reached by the waters of the base flood at pertinent points in the floodplains of coastal and riverine areas.

Basement, as used in Section 423 – Any area of a building having its floor sub-grade (below ground level) on all sides.

Building – see definition of "Structure."

Cost, as used in Section 423 – As related to substantial improvements, the cost of any reconstruction, rehabilitation, addition, alteration, repair, or other improvement of a structure established by a detailed written contractor's estimate. The estimate shall include but not be limited to: the cost of materials (interior finishing elements, structural elements, utility and service equipment); sales tax on materials, building equipment and fixtures, including heating and air conditioning and utility meters; labor; built-in appliances; demolition and site preparation; repairs made to damaged parts of the building worked on at the same time; contractor's overhead; contractor's profit; and grand total. Items to be *excluded* include: cost of plans and specifications; survey costs; permit fees; outside improvements, such as septic systems, water supply wells, landscaping, sidewalks, fences, yard lights, irrigation systems, and detached structures such as garages, sheds, and gazebos.

Development, as used in Section 423 – Any man-made change to improved or unimproved real estate, including but not limited to the construction of buildings or structures; the construction of additions, alterations or substantial improvements to buildings or structures; the placement of buildings or structures; mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment; the storage, deposition, or extraction of materials; and the installation, repair or removal of public or private sewage disposal systems or water supply facilities.

Dry Flood-proofing - Any combination of structural and non-structural protection measures incorporated in a building that is not elevated above the base flood elevation (BFE) that keeps water from entering the building to prevent or minimize flood damage. **Note:** For insurance purposes, a dry flood-proofed, non-residential structure is rated based on the elevation of its lowest floor, unless it is flood-proofed to one foot above the BFE.

Existing Manufactured Home Park or Manufactured Home Subdivision – A manufactured home park or manufactured home subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, as a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed before the effective date of this Section 423 as amended.

Expansion of an Existing Manufactured Home Park or Existing Manufactured Home Subdivision – The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Federal Emergency Management Agency (FEMA) - The federal agency that administers the National Flood Insurance Program (NFIP).

Finished Living Space – Finished living space can include, but is not limited to, a space that is heated and/or cooled, contains finished floors (tile, linoleum, hardwood, etc.), has sheetrock walls that may or may not be painted or wallpapered, and contains other amenities such as furniture, appliances, bathrooms, fireplaces, and other items that are easily damaged by floodwaters and are expensive to clean, repair or replace. Fully enclosed areas below the base flood elevation (BFE) that are not considered basements cannot have finished living space and need to be designed to be exposed to flood forces. These spaces can only be used for parking, building access or limited storage.

Flood or Flooding – A general and temporary condition of partial or complete inundation of normally dry land areas from either the overflow of inland or tidal waters or the unusual and rapid accumulation or runoff of surface waters from any source.

Flood Boundary and Floodway Map (FBFM) – The official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated the limits of the regulatory floodway and 100-year floodplain.

Flood Hazard Boundary Map (FHBM) – A map based on approximate data that identifies, in general, the Special Flood Hazard Areas (SFHA) within a community. It is used in the NFIP's Emergency Program for floodplain management and insurance purposes.

Flood Insurance Rate Map (FIRM) – The official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated both the special flood hazard areas (100-year floodplain) and the insurance risk premium zones applicable to a community. FIRMs published after January 1990 may also show the limits of the regulatory floodway.

Flood Insurance Study (FIS) – The official study of a community in which the Federal Emergency Management Agency (FEMA) has conducted a technical engineering evaluation and determination of local flood hazards, flood profiles and water surface elevations. The Flood Insurance Rate Maps (FIRM), which accompany the FIS, provide both flood insurance rate zones and base flood elevations (BFE), and may provide the regulatory floodway limits.

Floodway – The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot. For the purposes of these regulations, the term "Regulatory Floodway" is synonymous in meaning with the term "Floodway."

Functionally Dependent Use or Facility – A use or facility that cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and shipbuilding and ship repair facilities. The term does not include seafood processing facilities, long-term storage, manufacturing, sales, or service facilities.

Highest Adjacent Grade – The highest natural elevation, prior to construction, of the ground surface next to the proposed walls of a structure.

Historic Structure, as used in Section 423 – Any structure that is: (a) Listed individually in the National Register of Historic Places (maintained by the Department of the Interior) or preliminarily determined by

the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historic significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; (c) Individually listed on a state inventory of historic places in states with historic preservation programs that have been approved by the Secretary of the Interior; or (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either: (1) By an approved state program as determined by the Secretary of the Interior or (2) Directly by the Secretary of the Interior in states without approved programs.

Lowest Floor, as used in Section 423 – The lowest floor of the lowest enclosed area (including basement).

Manufactured Home – A structure, transportable in one (1) or more sections, that is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term also includes park trailers, travel trailers, recreational vehicles, and other similar vehicles or transportable structures placed on a site for one hundred and eighty (180) consecutive days or longer and intended to be improved property.

Manufactured Home Park or Manufactured Home Subdivision – A parcel or contiguous parcels of land divided into two (2) or more manufactured home lots for rent or sale.

Market Value, as used in Section 423 – Market value is the price of a structure that a willing buyer and seller agree upon. This can be determined by an independent appraisal by a professional appraiser; the property's tax assessment minus land value; the replacement cost minus depreciation of the structure; or the structure's Actual Cash Value.

Mean Sea Level (MSL) – The average height of the sea for all stages of the tide, usually determined from hourly height observations over a 19-year period on an open coast or in adjacent waters having free access to the sea. The National Geodetic Vertical Datum (NGVD) of 1929 (or other datum where specified) to which base flood elevations (BFE) shown on a community Flood Insurance Rate Map (FIRM) are referenced.

New Construction as used in Section 423 – Structures for which the "start of construction" commenced on or after the effective date of this Section 423, as amended, including any subsequent improvements to such structures.

New Manufactured Home Park or Manufactured Home Subdivision – A manufactured home park or manufactured home subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of this Section 423 as amended.

Recreational Vehicle – A vehicle that is: (a) built on a single chassis; (b) four hundred (400) square feet or less when measured at the largest horizontal projection; (c) designed to be self-propelled or permanently towed by a light duty truck; and (d) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Regulatory Floodway – see definition of "Floodway."

Sand Dunes – Naturally occurring accumulations of sand in ridges or mounds landward of the beach.

Sheet Flow Area – see definition of "Area of Shallow Flooding."

Special Flood Hazard Area (SFHA) – The land in the floodplain within a community subject to a one (1) percent or greater chance of flooding in any given year. SFHAs are determined utilizing the base flood elevations (BFE) provided on the flood profiles in the Flood Insurance Study (FIS) for a community. BFE provided on Flood Insurance Rate Maps (FIRMs) are only approximated (rounded up or down) and should be verified with the BFE published in the FIS for a specific location. SFHAs include, but are not necessarily limited to, the land shown as Zones A, A1-30, AE, AO, AH, and the Coastal High Hazard Areas shown as Zones V, V1-30, and VE on a FIRM. The SFHA is also called the Area of Special Flood Hazard.

Start of Construction, as used in Section 423 – The date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, substantial improvement, or other improvement was within one hundred and eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations, or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure, as used in Section 423 – A walled and roofed building that is principally above ground, including a manufactured home, a gas or liquid storage tank, or other man-made facility or infrastructure.

Substantial Damage, as used in Section 423 – Damage of any origin sustained by a structure, whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

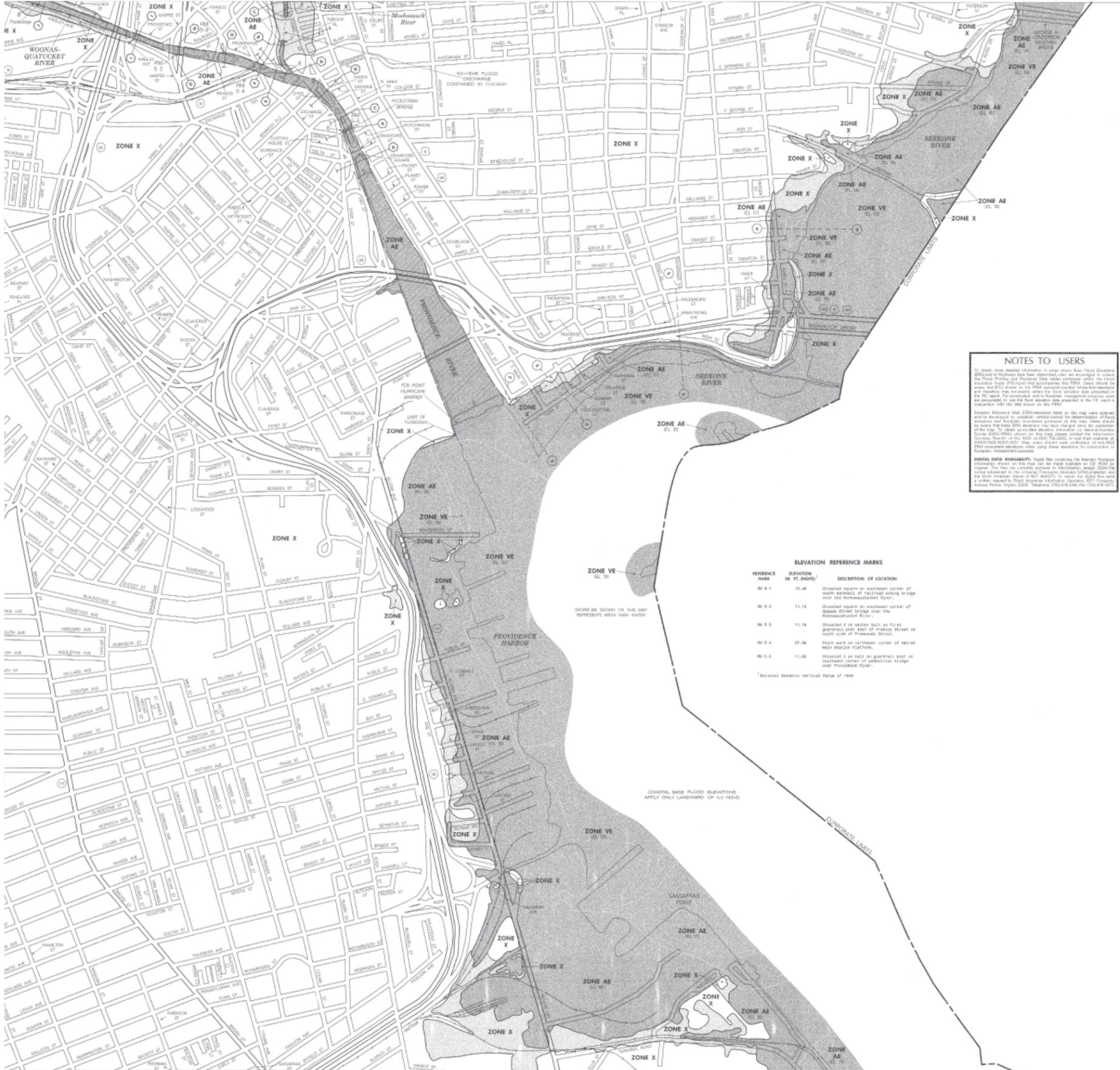
Substantial Improvement, as used in Section 423 – Any combination of repair, reconstruction, rehabilitation, alteration, addition, or other improvement to a structure taking place during a ten (10) year period, in which the cumulative cost equals or exceeds fifty (50) percent of the market value of the structure as determined at the beginning of such ten (10) year period. This term includes structures that have incurred "substantial damage," regardless of the actual repair work performed. For purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either: (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications identified by the Director or designee and which are the minimum necessary to assure safe living conditions; or (2) Any alteration of a "historic" structure, provided that the alteration will not preclude the structure's continued designation as a "historic structure."

Violation, as used in Section 423 – Failure of a structure or other development to be fully compliant with this Section 423 as amended. A structure or other development without required permits, lowest floor elevation documentation, flood-proofing certificates or required floodway encroachment calculations is presumed to be in violation until such time as that documentation is provided.

Water Surface Elevation – The height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

Wet Flood-proofing – Measures designed to minimize damage to a structure or its contents by water that enters the structure.

Section 3: This Ordinance shall take effect upon passage.



LEGEND

SPECIAL HAZARD AREAS INUNDATED BY 100-YEAR FLOODS

- ZONE X** - No flood insurance
- ZONE AE** - Flood insurance-discount
- ZONE AO** - Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined
- ZONE AH** - Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined; special flood hazard areas
- ZONE AV** - To be protected from 100-year flood by flood proofing; special flood hazard areas
- ZONE V** - Coastal flood with velocity hazard; base flood elevations determined
- ZONE VE** - Coastal flood with velocity hazard; base flood elevations determined

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- ZONE I** - Areas of 100-year flood, areas of 100-year flood with average depth of less than 1 foot and areas of 100-year flood with average depth of 1 foot or more and areas protected by levees from 100-year flood
- OTHER AREAS** - Areas determined to be outside 100-year flood
- ZONE D** - Areas in which flood hazards are undetermined, but possible

UNDEVELOPED COASTAL BARRIERS*

- Shaded area - Undeveloped coastal barrier
- Line with 'X' - Undeveloped coastal barrier
- Line with 'S' - Undeveloped coastal barrier

***Coastal barrier areas are generally located within or adjacent to Special Flood Hazard Areas.**

Other Symbols:

- Hurricane Boundary
- Shoreline Boundary
- Zone 17 Boundary
- Boundary (Shaded Special Flood Hazard Areas and Unshaded Shaded Areas of Special Flood Hazard Areas)
- Base Flood Elevation Line (Shaded in Feet)
- One Section Line
- Transit Line
- Base Flood Elevation in Feet (Below Uniform Water Depth)
- RMT X - Delineation Mark
- MFL 5 - Mile Mark

NOTES TO USERS

To obtain more detailed information on areas shown on this Flood Hazard Rate Map, please contact the Federal Flood Insurance Program, 1200 North 17th Street, Alexandria, Virginia 22304. For more information on the Flood Hazard Rate Map, please contact the Federal Flood Insurance Program, 1200 North 17th Street, Alexandria, Virginia 22304. For more information on the Flood Hazard Rate Map, please contact the Federal Flood Insurance Program, 1200 North 17th Street, Alexandria, Virginia 22304.

DIGITAL DATA AVAILABILITY: Digital data including the Flood Hazard Rate Map is available on CD-ROM from the Federal Flood Insurance Program, 1200 North 17th Street, Alexandria, Virginia 22304. For more information on the Flood Hazard Rate Map, please contact the Federal Flood Insurance Program, 1200 North 17th Street, Alexandria, Virginia 22304.

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION IN FEET (NGVD)	DESCRIPTION OF LOCATION
RI 8-1	10.48	Observed height on monument corner of south terminal of railroad bridge over the Woonasquatucket River.
RI 8-2	11.12	Observed height on monument corner of granite street bridge over the Woonasquatucket River.
RI 8-3	11.14	Observed 2nd order bolt on first granite pier east of Providence Street on south side of Providence Street.
RI 8-4	27.06	Point mark on southeast corner of Atlas Building on southeast corner of Federal Street on south side of Providence Street.
RI 8-5	11.08	Observed 2nd order bolt on granite pier on southeast corner of Federal Street over Woonasquatucket River.

* National Geodetic Vertical Datum of 1929

NOTES TO USERS

This map is for use in determining the Flood Hazard Rate Map. It does not represent a guarantee of insurance coverage. Flood insurance coverage is available through the Federal Flood Insurance Program. The Flood Hazard Rate Map is a general guide and should not be used as the sole basis for determining flood insurance coverage. For more information on the Flood Hazard Rate Map, please contact the Federal Flood Insurance Program, 1200 North 17th Street, Alexandria, Virginia 22304.

CAUTION: Flood insurance coverage is not available for areas shown on this Flood Hazard Rate Map as Special Hazard Areas. These areas are shown on this Flood Hazard Rate Map as Special Hazard Areas. These areas are shown on this Flood Hazard Rate Map as Special Hazard Areas. These areas are shown on this Flood Hazard Rate Map as Special Hazard Areas.

NOTE: The Flood Hazard Rate Map is based on the Flood Hazard Rate Map. It does not represent a guarantee of insurance coverage. Flood insurance coverage is available through the Federal Flood Insurance Program. The Flood Hazard Rate Map is a general guide and should not be used as the sole basis for determining flood insurance coverage. For more information on the Flood Hazard Rate Map, please contact the Federal Flood Insurance Program, 1200 North 17th Street, Alexandria, Virginia 22304.

ATTENTION: Flood insurance coverage is not available for areas shown on this Flood Hazard Rate Map as Special Hazard Areas. These areas are shown on this Flood Hazard Rate Map as Special Hazard Areas. These areas are shown on this Flood Hazard Rate Map as Special Hazard Areas. These areas are shown on this Flood Hazard Rate Map as Special Hazard Areas.

MAP REPOSITORY: Providence, Rhode Island, 475 Westminster Street, 5th Floor, Providence, Rhode Island 02903. For more information on the Flood Hazard Rate Map, please contact the Federal Flood Insurance Program, 1200 North 17th Street, Alexandria, Virginia 22304.

INITIAL IDENTIFICATION: DECEMBER 16, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS: NONE

FLOOD INSURANCE RATE MAP EFFECTIVE: DECEMBER 16, 1978

FLOOD INSURANCE RATE MAP REVISIONS: JULY 1, 1979; NOVEMBER 20, 1979; APRIL 16, 1979; JULY 23, 1979; APRIL 16, 1980

APPROXIMATE SCALE: 1" = 1000'

NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

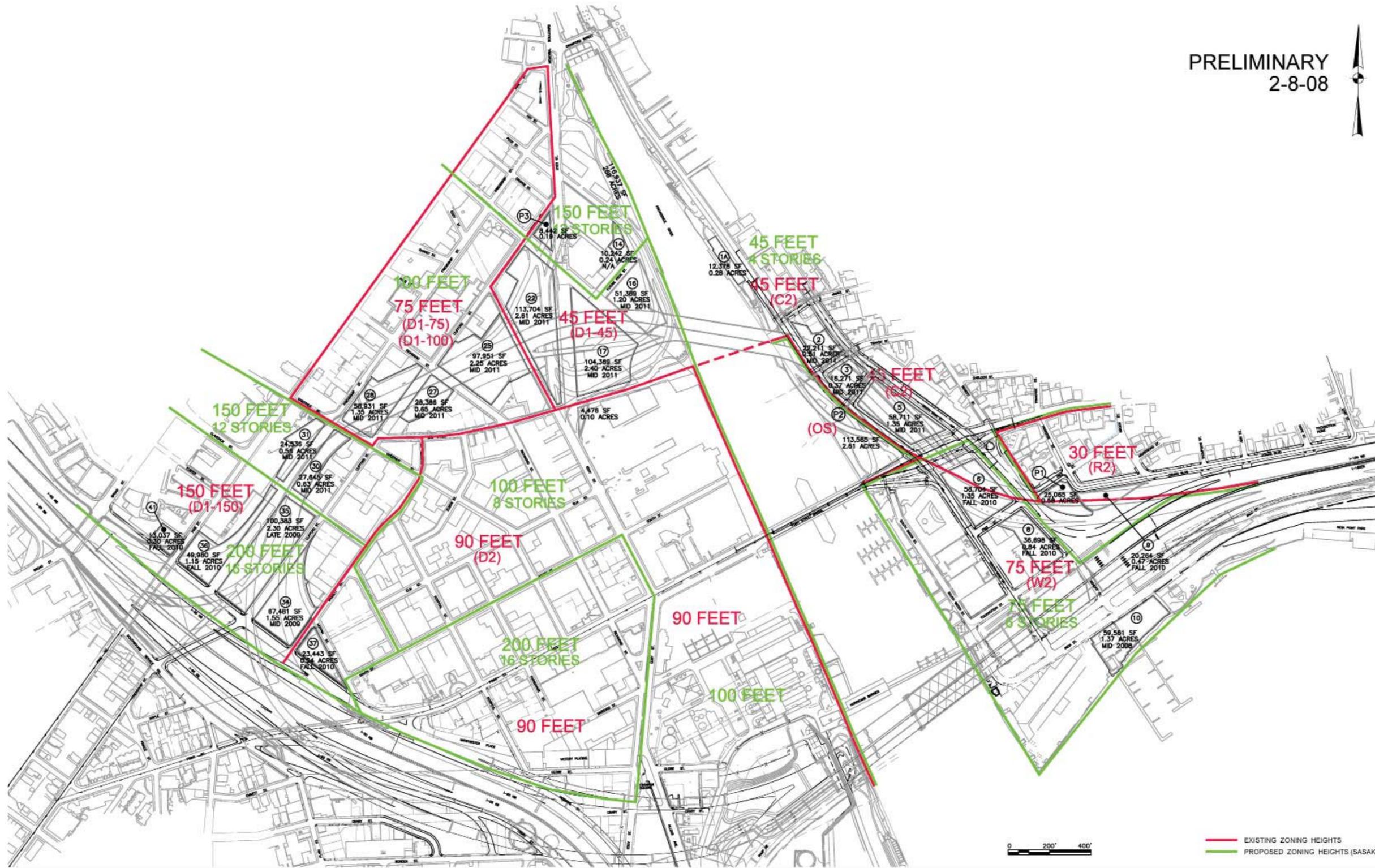
CITY OF PROVIDENCE, RHODE ISLAND PROVIDENCE COUNTY

PANEL 5 OF 7

COMMUNITY - PANEL NUMBER 445406 0005 F

MAP REVISED - JUNE 6, 2000

Federal Emergency Management Agency



MAGUIRE GROUP
Maguire Group Inc.
Architects/Engineers/Planners
225 Chapman Street
Providence, Rhode Island 02905



RHODE ISLAND
DEPARTMENT OF TRANSPORTATION



REVISIONS			SCALE:
NO.	DATE	BY	
1	6/07/07	DF	
2	8/08/07	DF	
DESIGNED BY:			DATE: 02-02-07
DRAWN BY:			CHECKED BY:

IMPROVEMENTS TO
INTERSTATE ROUTE 195
PROVIDENCE RHODE ISLAND
PROPOSED DEVELOPMENT PARCELS

PRELIMINARY
2-8-08



MAGUIRE GROUP
Maguire Group Inc.
Architects/Engineers/Planners
225 Chapman Street
Providence, Rhode Island 02905



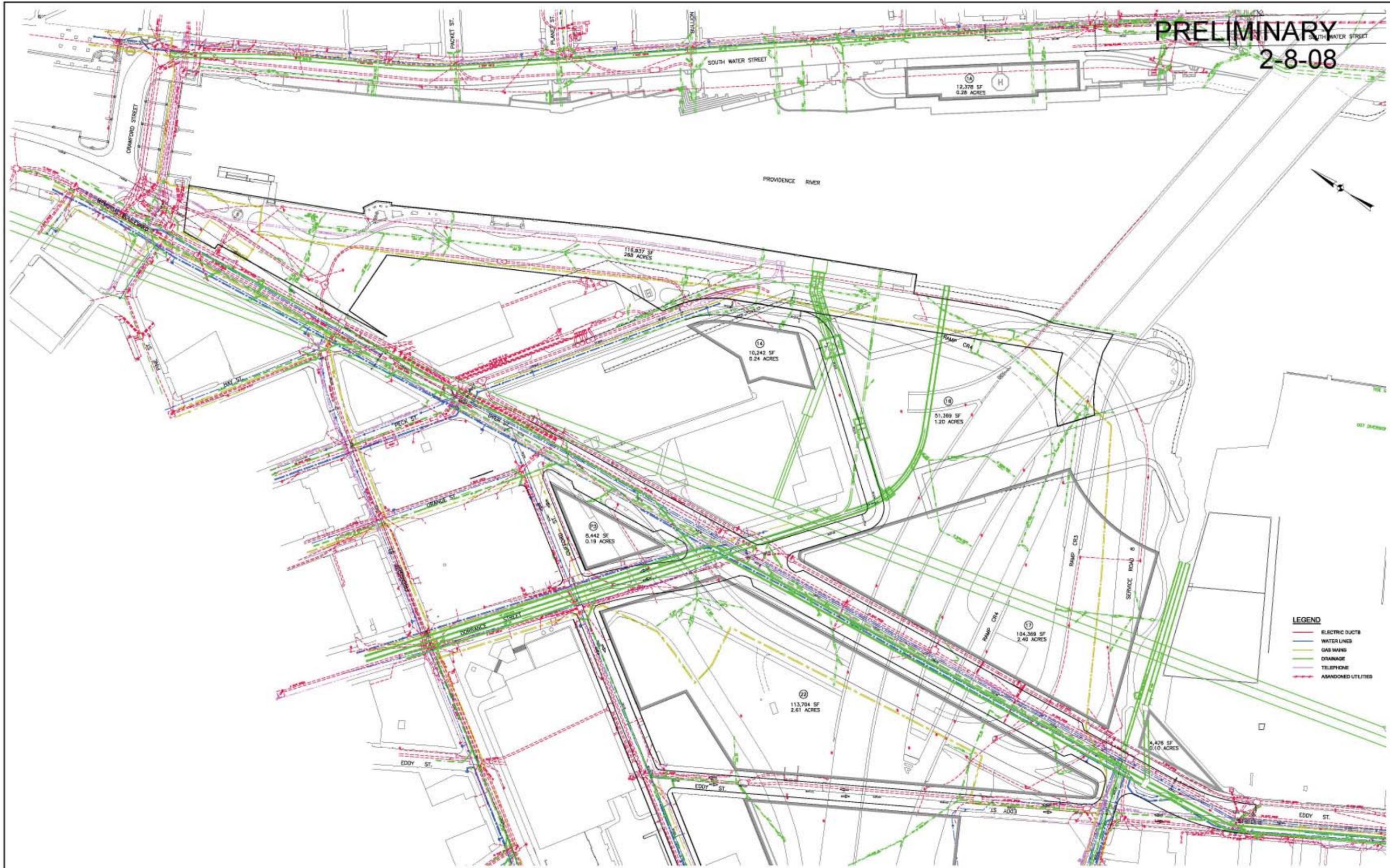
RHODE ISLAND
DEPARTMENT OF TRANSPORTATION



REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY
1	02-06-08	FW			

SCALE: 1"=40'
DESIGNED BY: DATE: 9-10-06
CHECKED: SHEET OF

IMPROVEMENTS TO
INTERSTATE ROUTE 195
PROVIDENCE RHODE ISLAND
SECTION 4 EXISTING UTILITIES
PLAN NO. 1



PRELIMINARY
2-8-08

- LEGEND**
- ELECTRIC DUCTS
 - WATER LINES
 - GAS MAINS
 - DRAINAGE
 - TELEPHONE
 - - - ABANDONED UTILITIES

Maguire Group Inc.
Architects/Engineers/Planners
225 Chapman Street
Providence, Rhode Island 02905



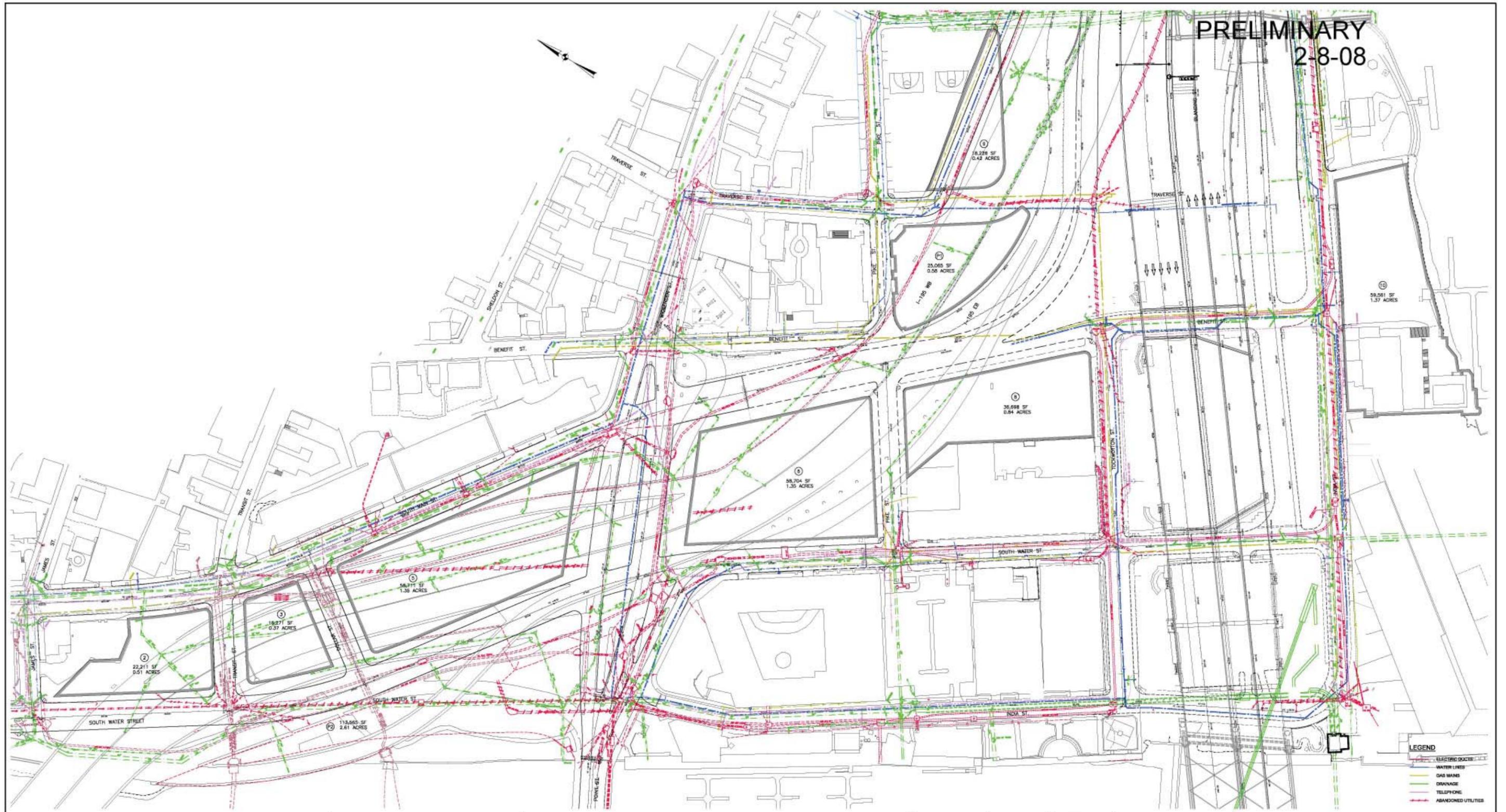
RHODE ISLAND
DEPARTMENT OF TRANSPORTATION



REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY
1	02-06-08	FW			

SCALE: 1"=40'
DESIGNED BY: DATE: 5-10-06
CHECKED: SHEET OF

IMPROVEMENTS TO INTERSTATE ROUTE 195
PROVIDENCE RHODE ISLAND
SECTION 4 EXISTING UTILITIES
PLAN NO. 2



PRELIMINARY
2-8-08

- LEGEND**
- ELECTRIC DUCTS
 - WATER LINES
 - GAS MAINS
 - DRAINAGE
 - TELEPHONE
 - ABANDONED UTILITIES

Maguire Group Inc.
Architects/Engineers/Planners
225 Chapman Street
Providence, Rhode Island 02905

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

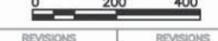


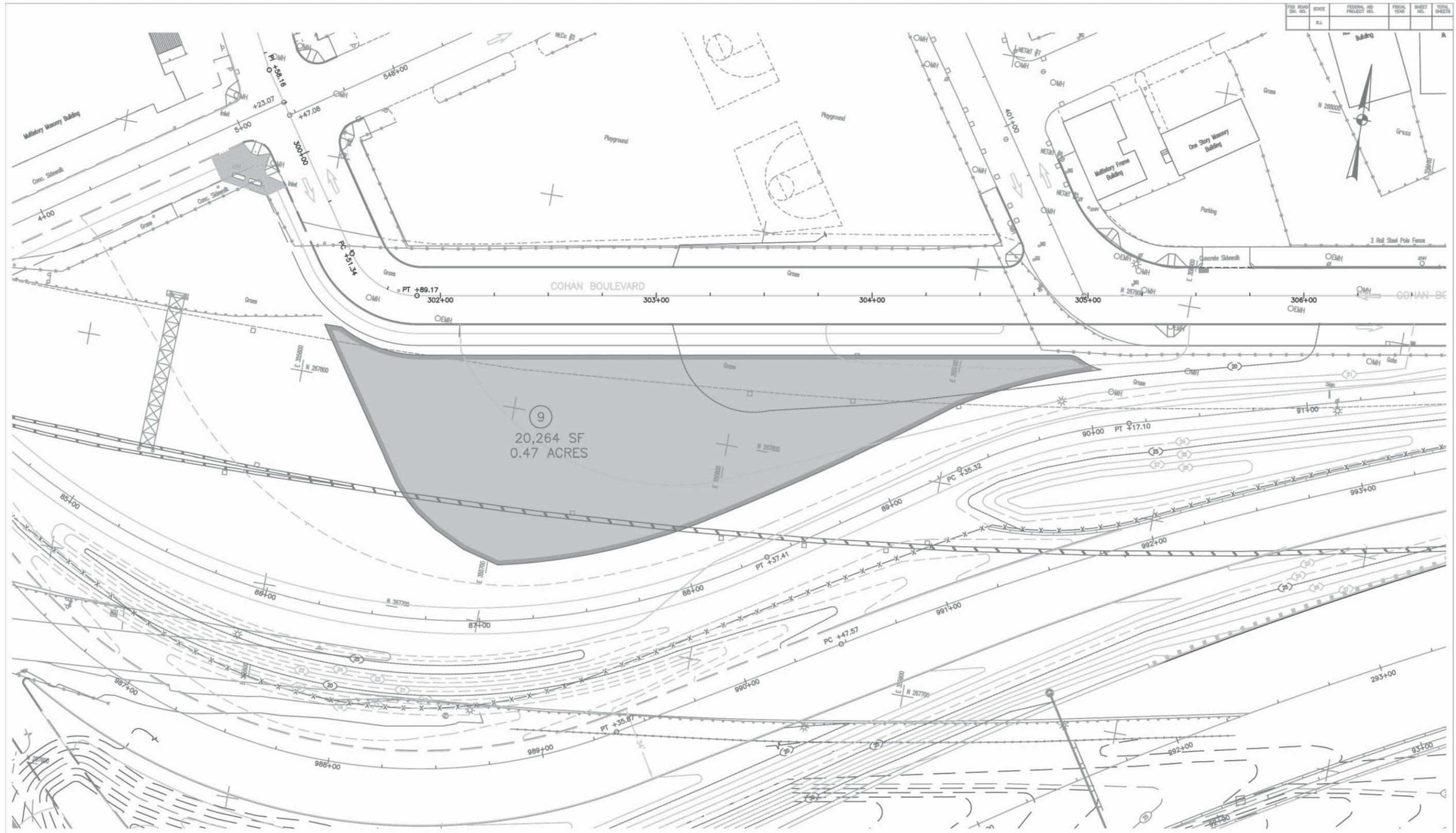
REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY
1	02-06-08	FW			

SCALE: 1"=40'
DESIGNED BY: _____ DATE: 5-10-06
CHECKED: _____ SHEET OF _____

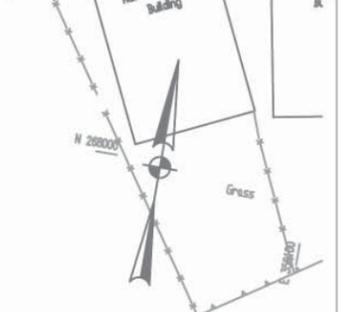
IMPROVEMENTS TO INTERSTATE ROUTE 195
PROVIDENCE RHODE ISLAND
SECTION 4 EXISTING UTILITIES
PLAN NO. 3



 Maguire Group Inc. Architects/Engineers/Planners 225 Chapman Street Providence, Rhode Island 02905	 RHODE ISLAND DEPARTMENT OF TRANSPORTATION		DESIGNED BY: CHECKED BY: DATE: SHEET: OF:	SCALE: 1"=200' 	IMPROVEMENTS TO INTERSTATE ROUTE 195 PROVIDENCE RHODE ISLAND																				
			<table border="1"> <thead> <tr> <th colspan="3">REVISIONS</th> <th colspan="3">REVISIONS</th> </tr> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>NO.</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS			REVISIONS			NO.	DATE	BY	NO.	DATE	BY										
REVISIONS			REVISIONS																						
NO.	DATE	BY	NO.	DATE	BY																				



FED. ROAD DIST. NO.	ROUTE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	195				



Maguire Group Inc.
Architects/Engineers/Planners
225 Chapman Street
Providence, Rhode Island 02905



RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

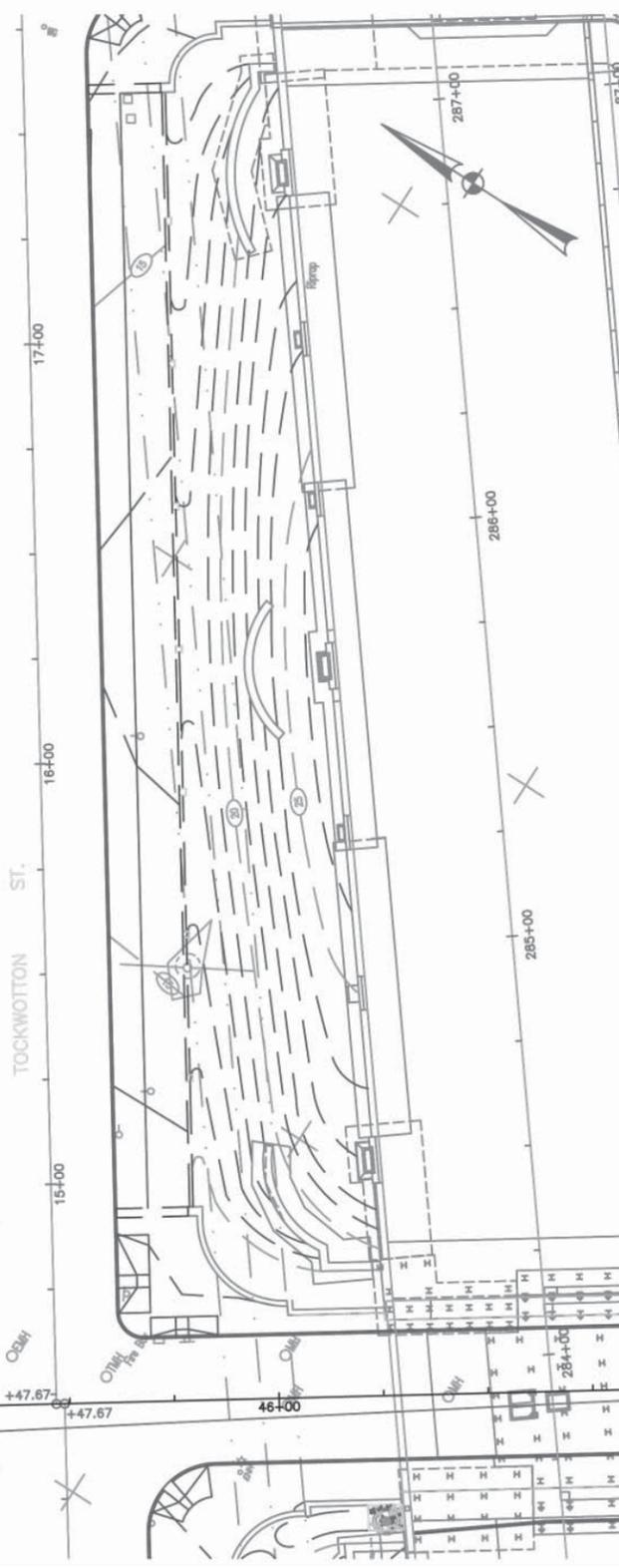
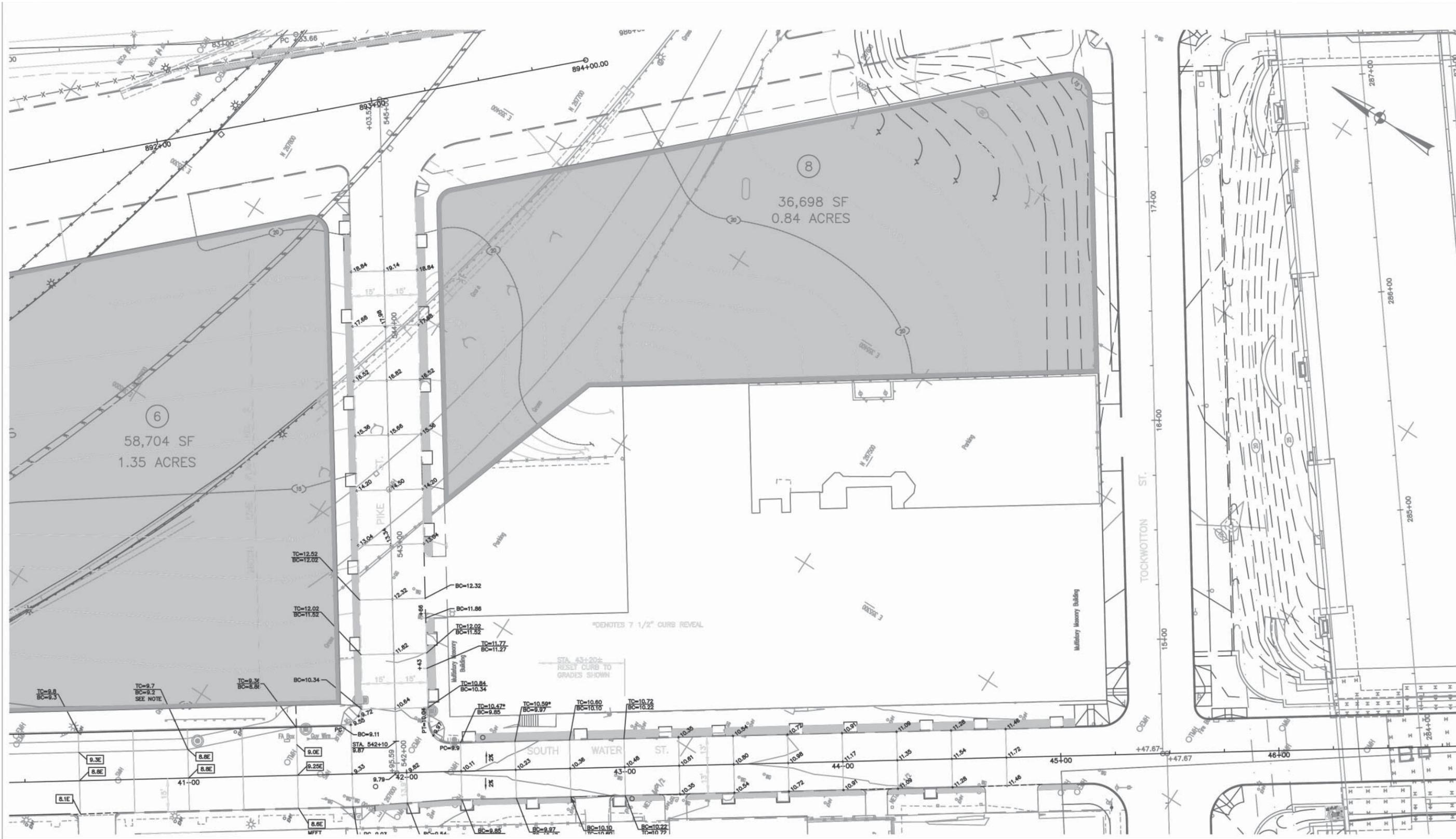


DESIGNED BY:
CHECKED:
DATE:
SHEET:
OF:

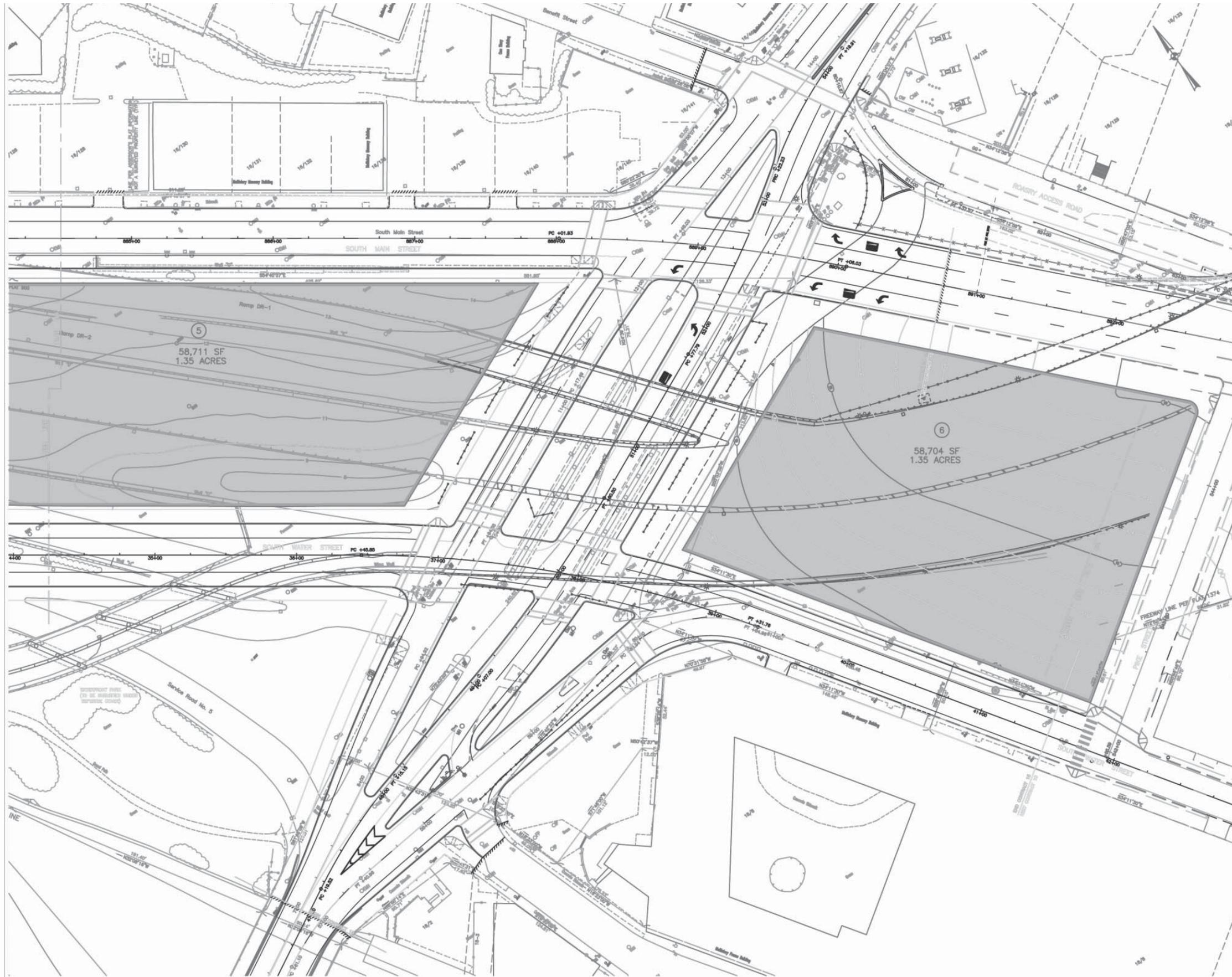
SCALE: 1"=20'

0 10' 20' 40'					
REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

IMPROVEMENTS TO
INTERSTATE ROUTE 195
PROVIDENCE RHODE ISLAND
LAND DISPOSITION EAST PLAN NO. 2B



<p>Maguire Group Inc. Architects/Engineers/Planners 225 Chapman Street Providence, Rhode Island 02905</p>	<p>RHODE ISLAND DEPARTMENT OF TRANSPORTATION</p>		<p>DESIGNED BY: CHECKED: DATE: SHEET: OF:</p>	<p>SCALE: 1"=20'</p> <p>0 10' 20' 40'</p> <table border="1"> <thead> <tr> <th colspan="3">REVISIONS</th> <th colspan="3">REVISIONS</th> </tr> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>NO.</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS			REVISIONS			NO.	DATE	BY	NO.	DATE	BY							<p>PROVIDENCE RHODE ISLAND</p> <p>IMPROVEMENTS TO INTERSTATE ROUTE 195</p> <p>LAND DISPOSITION EAST PLAN NO. 2A</p>
REVISIONS			REVISIONS																				
NO.	DATE	BY	NO.	DATE	BY																		



IMPROVEMENTS TO INTERSTATE ROUTE 195
LAND DISPOSITION EAST PLAN NO. 2

PROVIDENCE

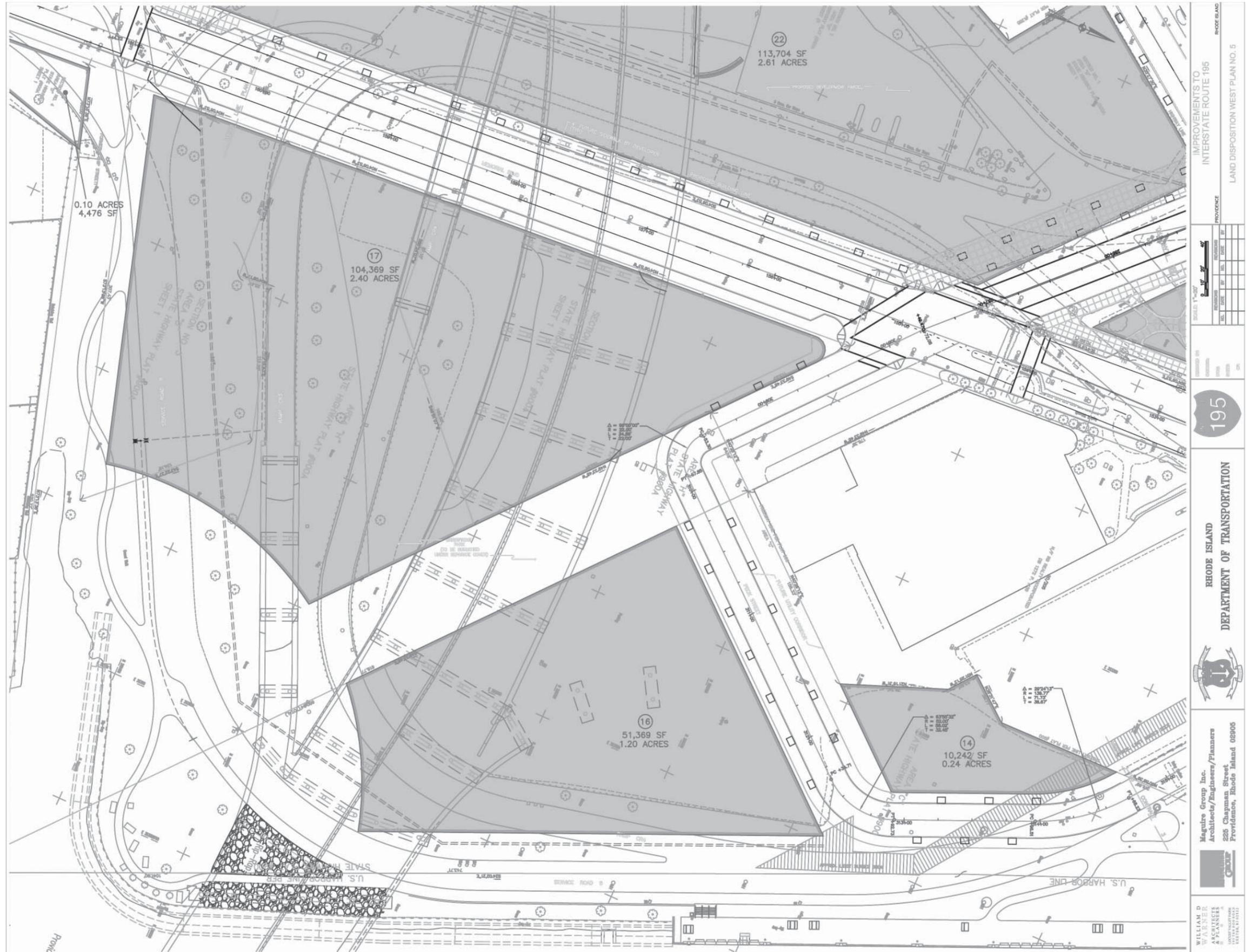
SCALE: 1" = 200'

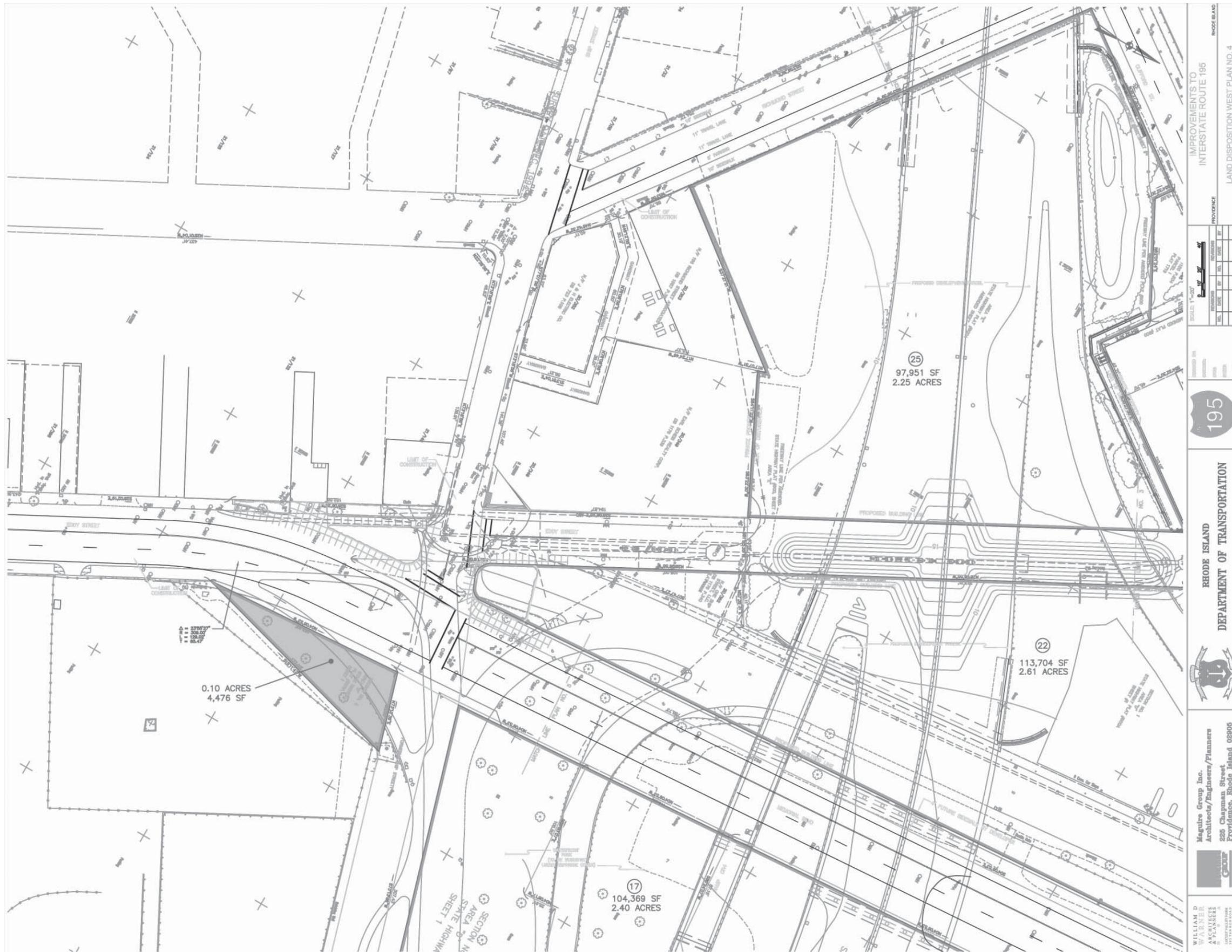
195

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

Maguire Group Inc.
Architects/Engineers/Planners
225 Chapman Street
Providence, Rhode Island 02906

WILLIAM D. WARNER
A PLANNERS
115 STATE STREET
PROVIDENCE, RHODE ISLAND 02902





WILLIAM D. WARDER & ASSOCIATES, INC.
 ARCHITECTS & PLANNERS
 225 CHAPMAN STREET
 PROVIDENCE, RHODE ISLAND 02906

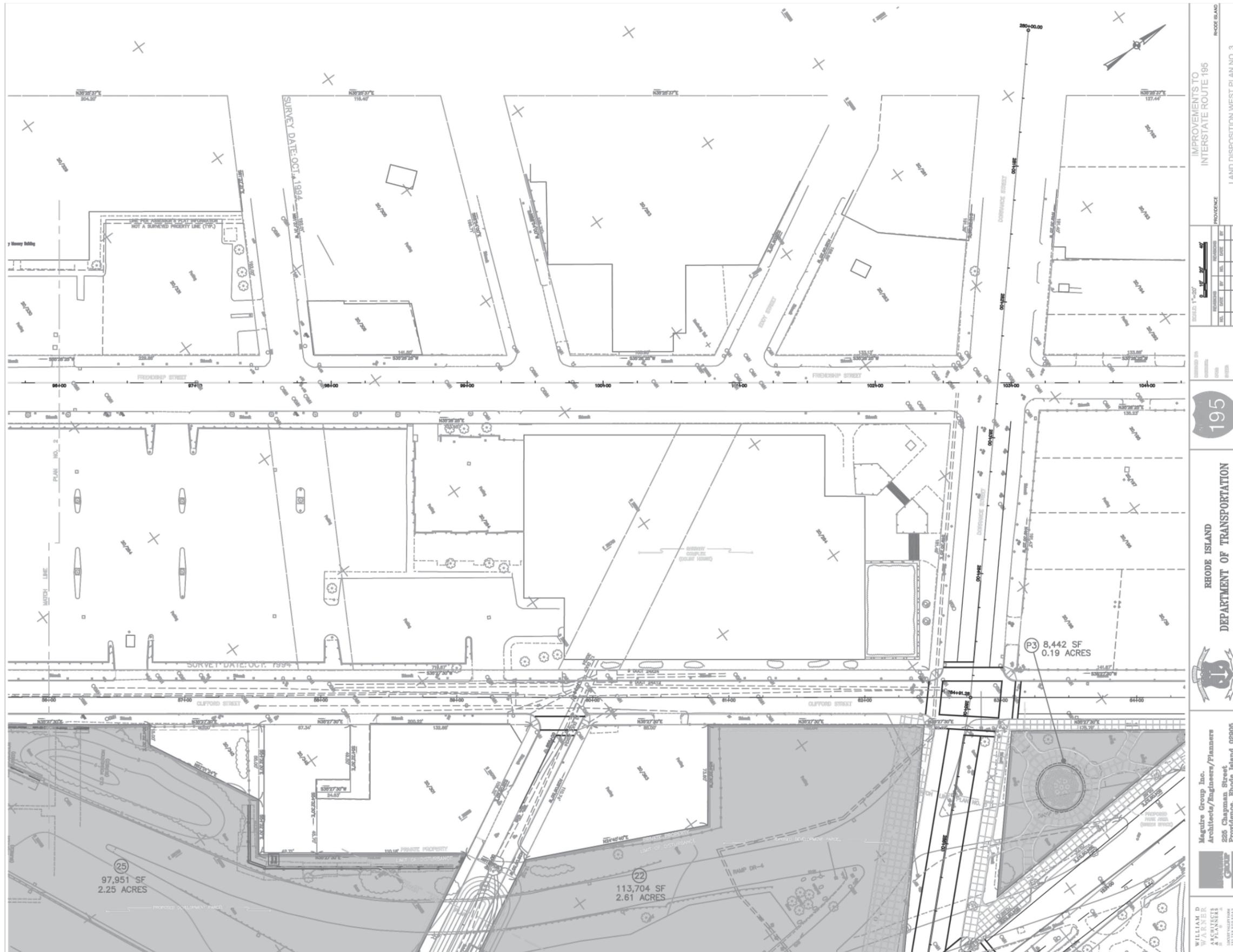
MEAGUIRE GROUP INC.
 ARCHITECTS/ENGINEERS/PLANNERS
 225 CHAPMAN STREET
 PROVIDENCE, RHODE ISLAND 02906

195
 RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO
 INTERSTATE ROUTE 195
 LAND DISPOSITION WEST PLAN NO. 4

SCALE: 1"=30'
 0 10 20 30 40
 FEET

NO.	DATE	BY	DESCRIPTION



IMPROVEMENTS TO
INTERSTATE ROUTE 195
LAND DISPOSITION WEST PLAN NO. 3

PROVIDENCE		PROVIDENCE	
NO.	DATE	NO.	DATE

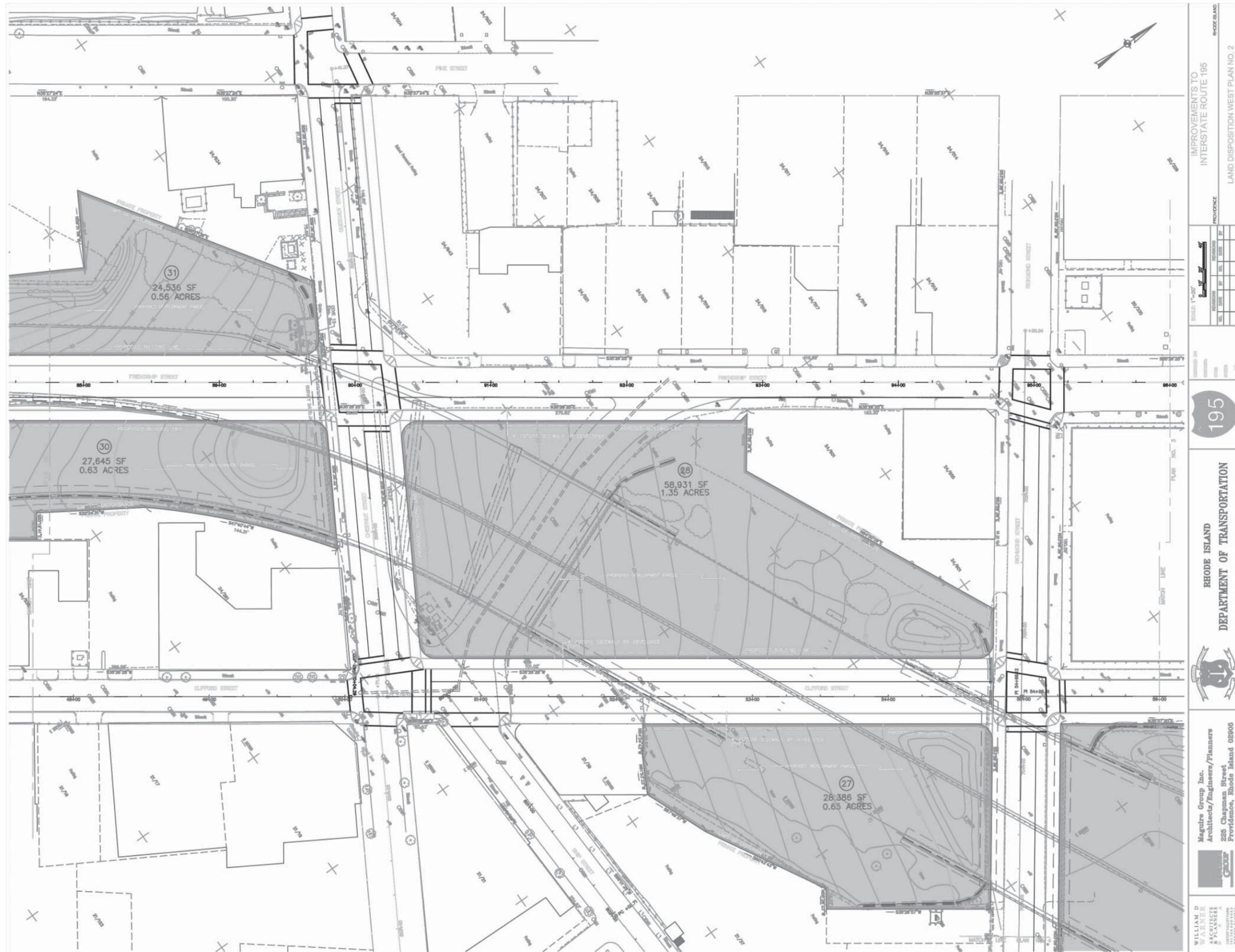
SCALE: 1"=50'
PROVIDENCE

195

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

Maguire Group Inc.
Architects/Engineers/Planners
295 Chapman Street
Providence, Rhode Island 02905

WILLIAM D.
WARNER
ARCHITECTS
& PLANNERS
1000 WASHINGTON
AVENUE
PROVIDENCE, RHODE ISLAND 02905



IMPROVEMENTS TO
INTERSTATE ROUTE 195
LAND DISPOSITION WEST PLAN NO. 2

PROVIDENCE

SCALE: 1"=40'

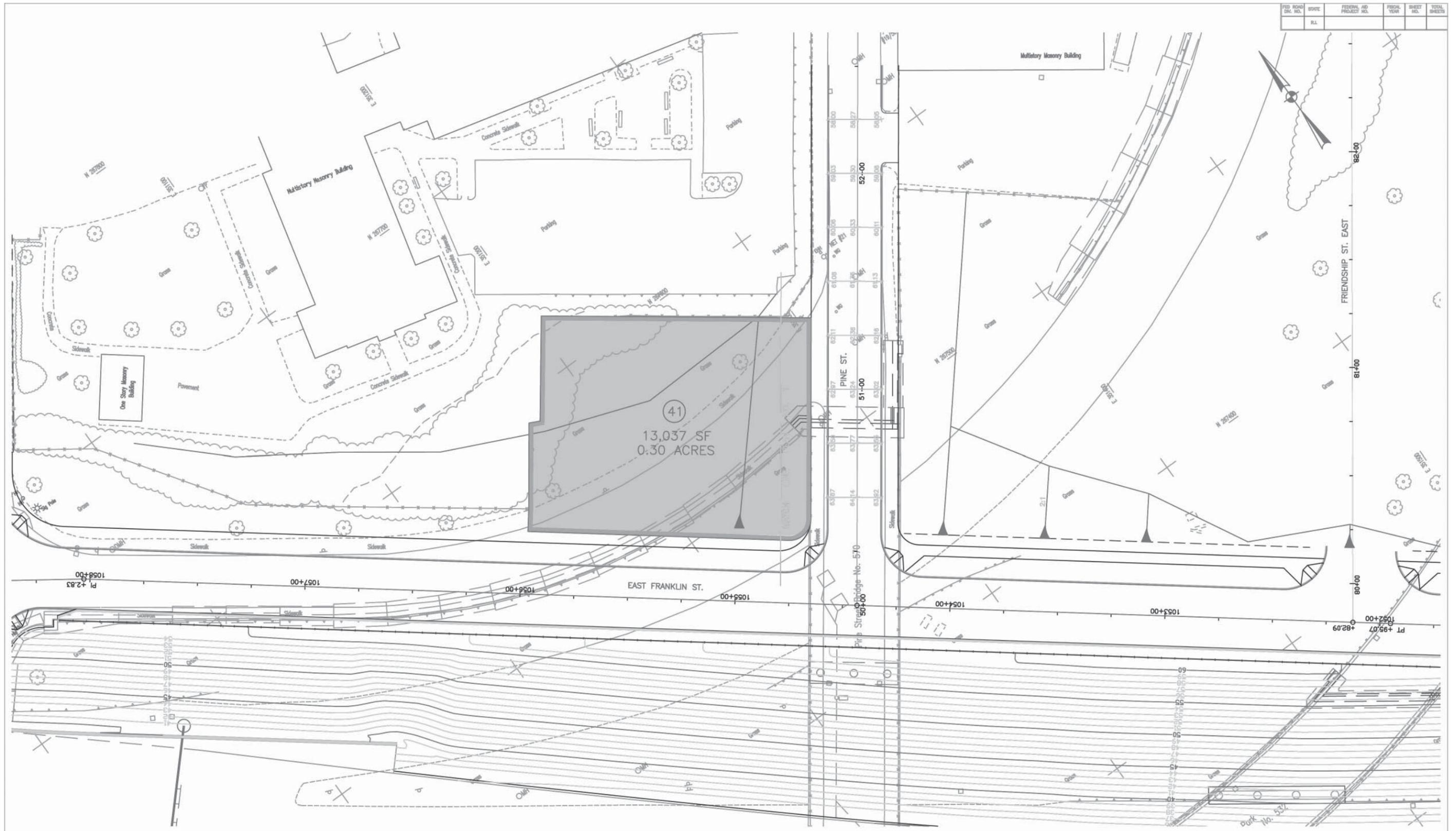
NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6	NO. 7	NO. 8	NO. 9	NO. 10

195

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

Maguire Group Inc.
Architects/Engineers/Planners
225 Chayman Street
Providence, Rhode Island 02906

WILLIAM D.
ARCHITECTS
& PLANNERS
100 WASHINGTON STREET
PROVIDENCE, RHODE ISLAND 02903



FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI				


Maguire Group Inc.
 Architects/Engineers/Planners
 225 Chapman Street
 Providence, Rhode Island 02905



RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION

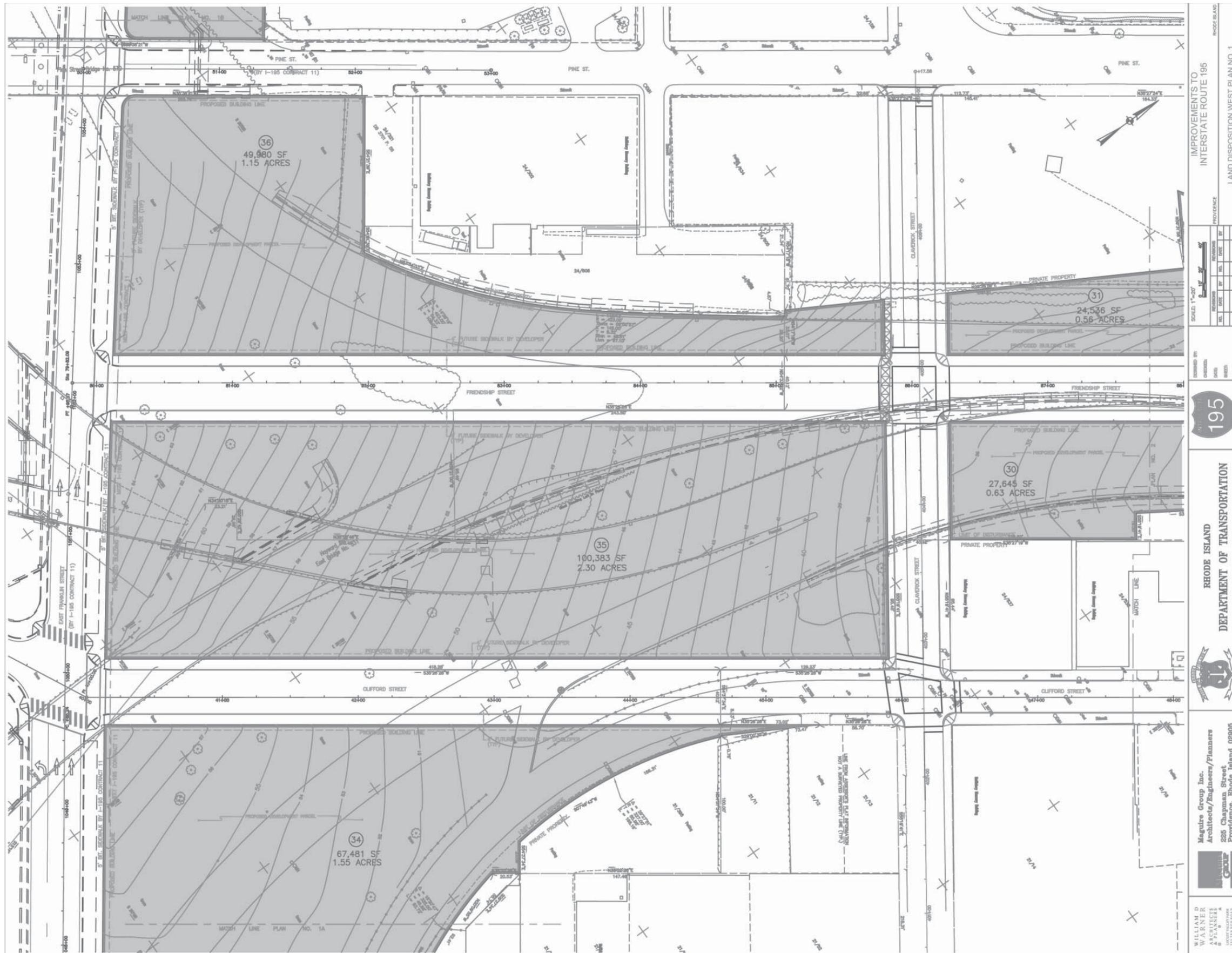


DESIGNED BY:
 CHECKED:
 DATE:
 SHEET:
 OF:

SCALE: 1"=20'

0			10'			20'			40'		
REVISIONS			REVISIONS								
NO.	DATE	BY	NO.	DATE	BY						

IMPROVEMENTS TO
 INTERSTATE ROUTE 195
 PROVIDENCE RHODE ISLAND
 LAND DISPOSITION WEST PLAN NO. 1B



IMPROVEMENTS TO INTERSTATE ROUTE 195
 LAND DISPOSITION WEST PLAN NO. 1

SCALE: 1"=20'
 REVISIONS BY DATE BY

NO.	DATE	BY	BY

DESIGNED BY: []
 CHECKED BY: []
 DATE: []
 SHEET: [] OF: []

195

RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION

Maguire Group Inc.
 Architects/Engineers/Planners
 295 Chapanas Street
 Providence, Rhode Island 02905

WILLIAM D. WARNER ARCHITECTS & PLANNERS
 100 WASHINGTON STREET
 SUITE 200
 PROVIDENCE, RHODE ISLAND 02903

DESIGN GUIDELINES

for the

INDUSTRIAL & COMMERCIAL BUILDINGS DISTRICT

Adopted January 29, 2002, Amended May 24, 2004.

**PROVIDENCE HISTORIC DISTRICT COMMISSION
DESIGN GUIDELINES for the JEWELRY HISTORIC DISTRICT**
Adopted January 27, 1992. Amended June 25, 1995.

“The Jewelry Historic District became effective in 1992. Early 19th century houses and numerous late 19th and early 20th century factory buildings reflect the district’s evolution from residential neighborhood to the heart of Providence’s costume jewelry industry. The Providence Historic District Commission (PHDC) reviews all proposed work affecting the exterior appearance of any structure, site or its appurtenances within the Jewelry Historic District, including construction, alteration, repair, moving of structures, demolition and signage. These Standards and Guidelines have been adopted to assist in the preparation and review of applications for Certificates of Appropriateness”.

DESIGN GUIDELINES

for the

JEWELRY HISTORIC DISTRICT

Adopted January 27, 1992. Amended June 25, 1995.

**PROVIDENCE HISTORIC DISTRICT COMMISSION
DESIGN GUIDELINES for the INDUSTRIAL & COMMERCIAL BUILDINGS DISTRICT [ICBD]**
Adopted January 29, 2002, Amended May 24, 2004.

“The intent of the Standards and Guidelines is to guide changes to the exteriors of landmark buildings and buildings within a district. This supplement to the PHDC Standards and Guidelines is intended to implement Section 501.14 of the Zoning Ordinance, also known as the Industrial and Commercial Buildings Zoning District (Landmark District). The Industrial and Commercial Buildings Zoning District established historic landmark status to certain lots throughout the City that were designated by the City Council by amendment to the zoning map. Unlike the seven districts, these sites are not in any contiguous zone, but nonetheless are subject to the regulations contained herein”.



STANDARDS AND GUIDELINES

for the

ARMORY, BROADWAY, COLLEGE HILL,
NORTHERN ELMWOOD, SOUTHERN ELMWOOD
AND STIMSON AVENUE HISTORIC DISTRICTS

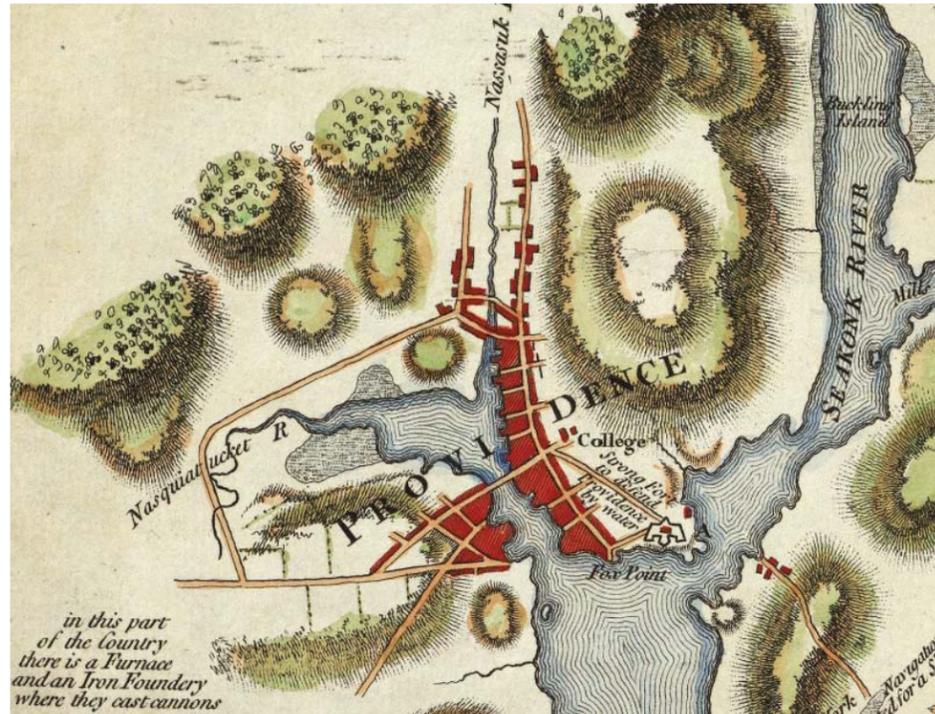
PROVIDENCE HISTORIC DISTRICT COMMISSION STANDARDS AND GUIDELINES for COLLEGE HILL HISTORIC DISTRICT
Adopted January 24, 1994 · Amended March 24, 1997

“The intent of the Standards and Guidelines is to guide the inevitable changes to the exteriors of structures and sites within the City’s designated historic districts. The most important features of historic buildings are roofs, exterior walls, windows and their openings and trim, doors and entries, porches, steps, stairs, railings, foundations, fences, storefronts, signage and setting. New additions, exterior alterations or new construction shall not destroy historic materials or general features that characterize the property. The new work may be differentiated from the old and shall be compatible with the massing, size, scale and architectural features of the property and the surrounding neighborhood”.

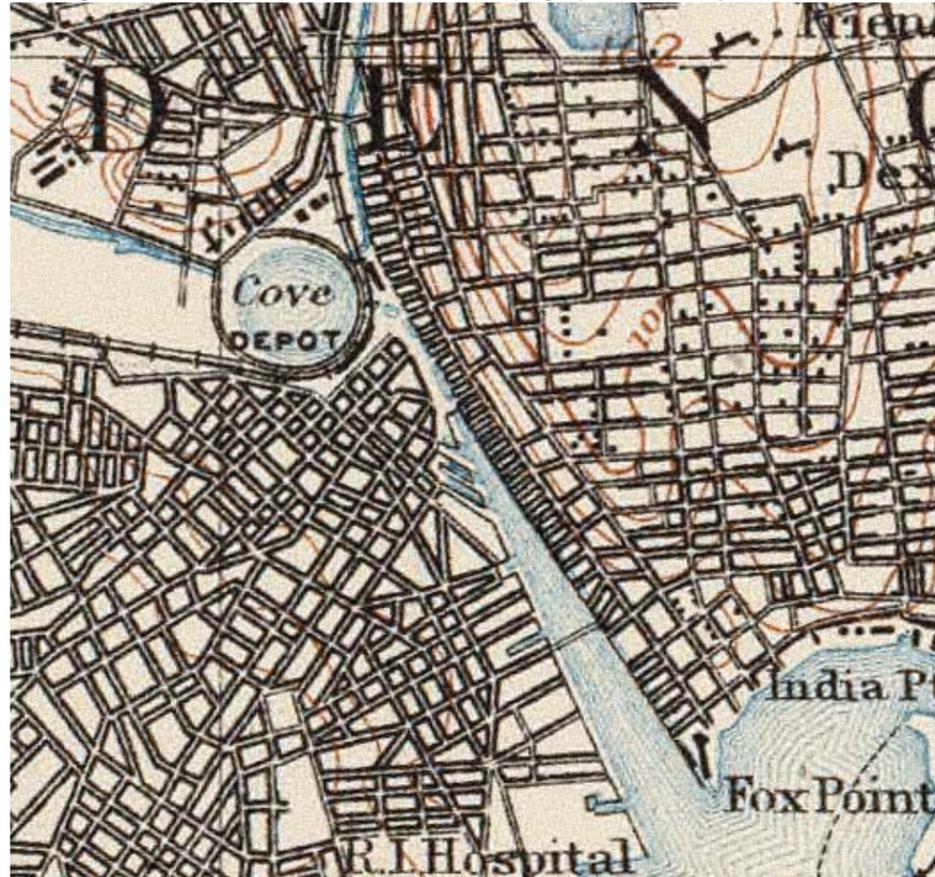
Historical Cartography Source: David Rumsey Collection

Historical Heritage Regulations Relevant to the Parcels under study

Topographical Chart of the Bay of Narraganset, 1777



Geological Survey (U.S.); Massachusetts. Topographical Survey Commission, 1890



Rhode Island Interstate 195 Surplus Land: Redevelopment and Marketing Analysis

The parcels under study due to the relocation of the I-195 fall into relevant historical areas and are adjacent to valuable historical heritage, both at the local and national levels. As such, they are subject to the review of the pertinent historic commissions.

At the local level, the city of Providence has passed ordinances to establish design review and identify areas for designation as historic districts.

- The **Historic District** overlay zone is intended to preserve structures of historic and architectural value by regulating the construction, alteration, repair, moving and demolition of such structures. This overlay can include neighborhoods or single buildings.

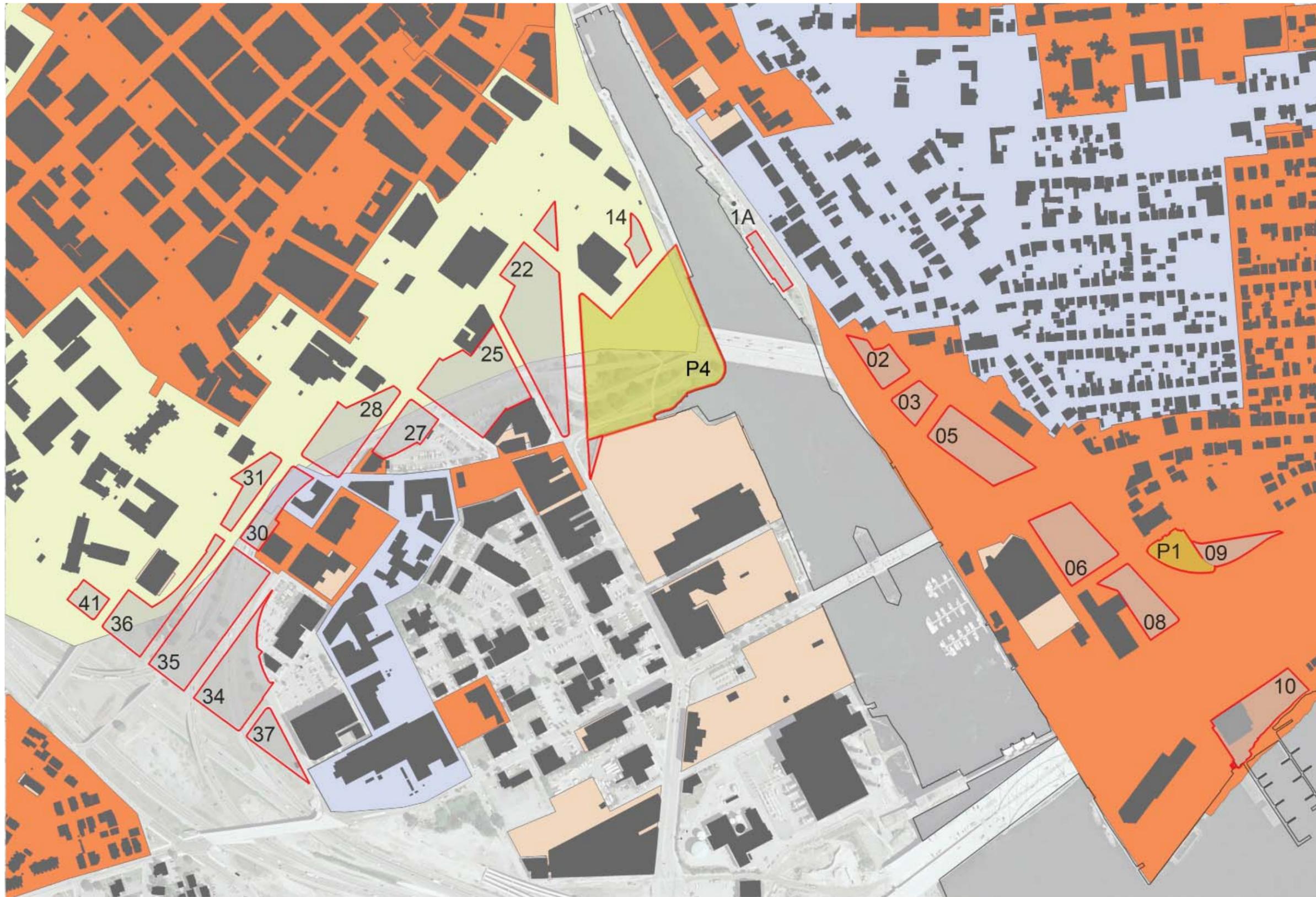
The Providence Historic District Commission (PHDC) was established by City Council in 1960 to safeguard and preserve buildings and districts which reflect elements of the City's cultural, social, economic, political and architectural history. The purpose of the Providence Historic District Commission is to establish procedures for processing applications for Certificates of Appropriateness, for enforcement, and for the internal management of the HDC. The HDC shall have the authority to regulate the construction, alteration, repair, demolition and moving of any structure or appurtenance which results in a change to the exterior of the structure and/or appurtenance within any Historic District in the City, as designated in accordance with the Providence Zoning Ordinance and shown on the official Zoning Map" [Article V, Section 501 of the Providence Zoning Ordinance].

- The **Downcity District** overlay zone aims to regulate the design of buildings and open spaces and to insure that new development are compatible with the existing historic building fabric and the historic character of downtown. The Downcity Design Review Committee (DRC) is established to carry out the purpose of the Downcity District.

At the national level, the **National Register of Historic Places** is the federal government's official list of properties that are significant in American history and worthy of preservation. Properties listed in the National Register include individual buildings, historic districts, and archaeological sites. Rhode Island also has its own State Register of Historic Places. The criteria for inclusion in the State Register are the same as those for the National Register".

Two Historic Districts [College Hill and Jewelry Manufacturing], and several structures adjacent to the parcels freed by the relocation of the I-195 are included in this Register.

"The Rhode Island Historical Preservation & Heritage Commission [RIHP&HC] is the state agency for historical preservation and heritage programs. The Commission operates a statewide historical preservation program that identifies and protects historic buildings, districts, structures, and archaeological sites.



I-195 ROW PARCELS

- PARCELS FOR DEVELOPMENT
- PARCELS FOR OPEN SPACE

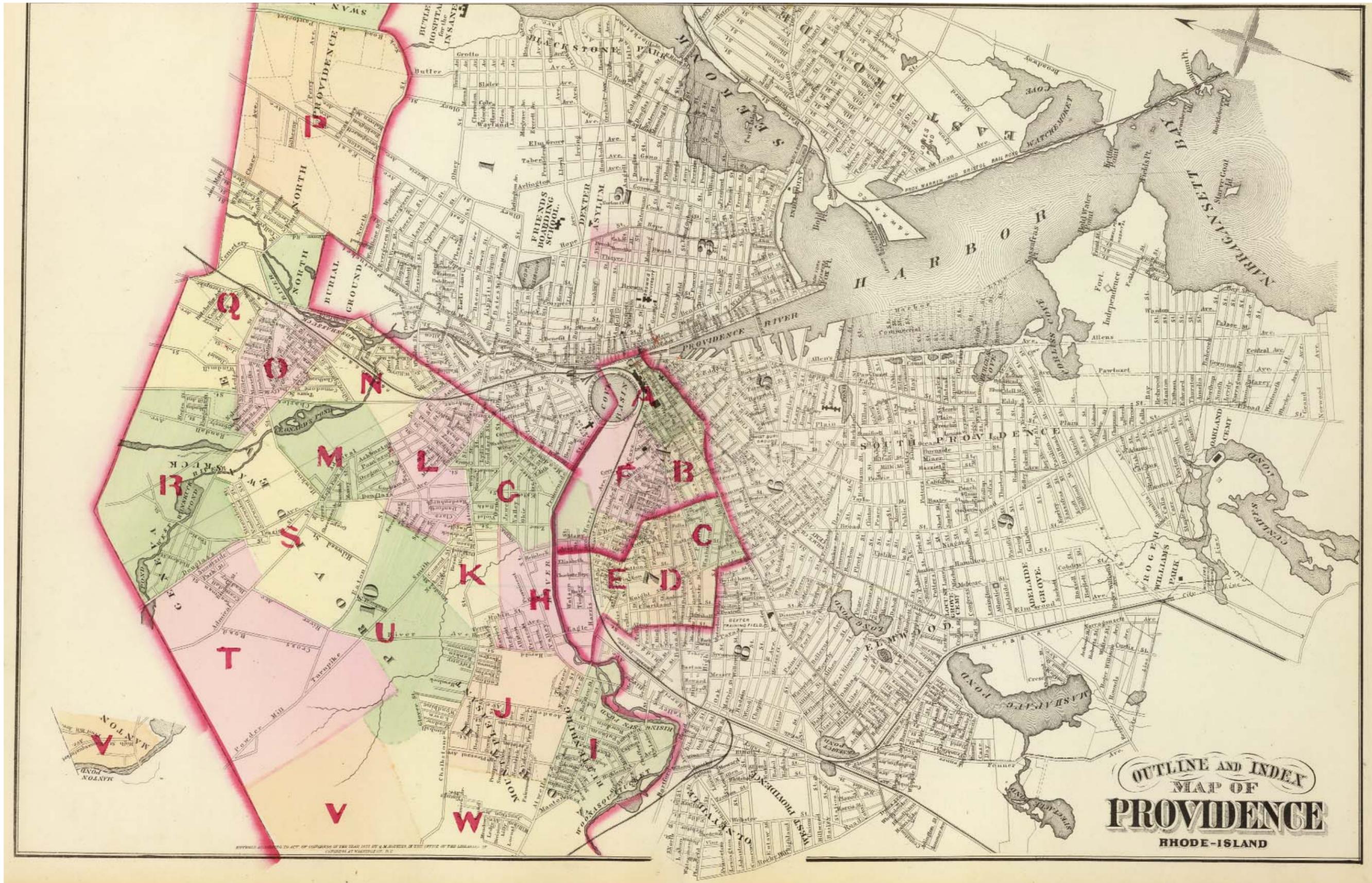
HISTORIC DISTRICTS

- ICBBD [Industrial and Commercial Buildings District]
- LOCAL HISTORIC DISTRICTS [Jewelry & College Hill]

DOWNCITY DISTRICT

- NATIONAL REGISTER HISTORIC DISTRICTS [Jewelry District, College Hill, Downtown]

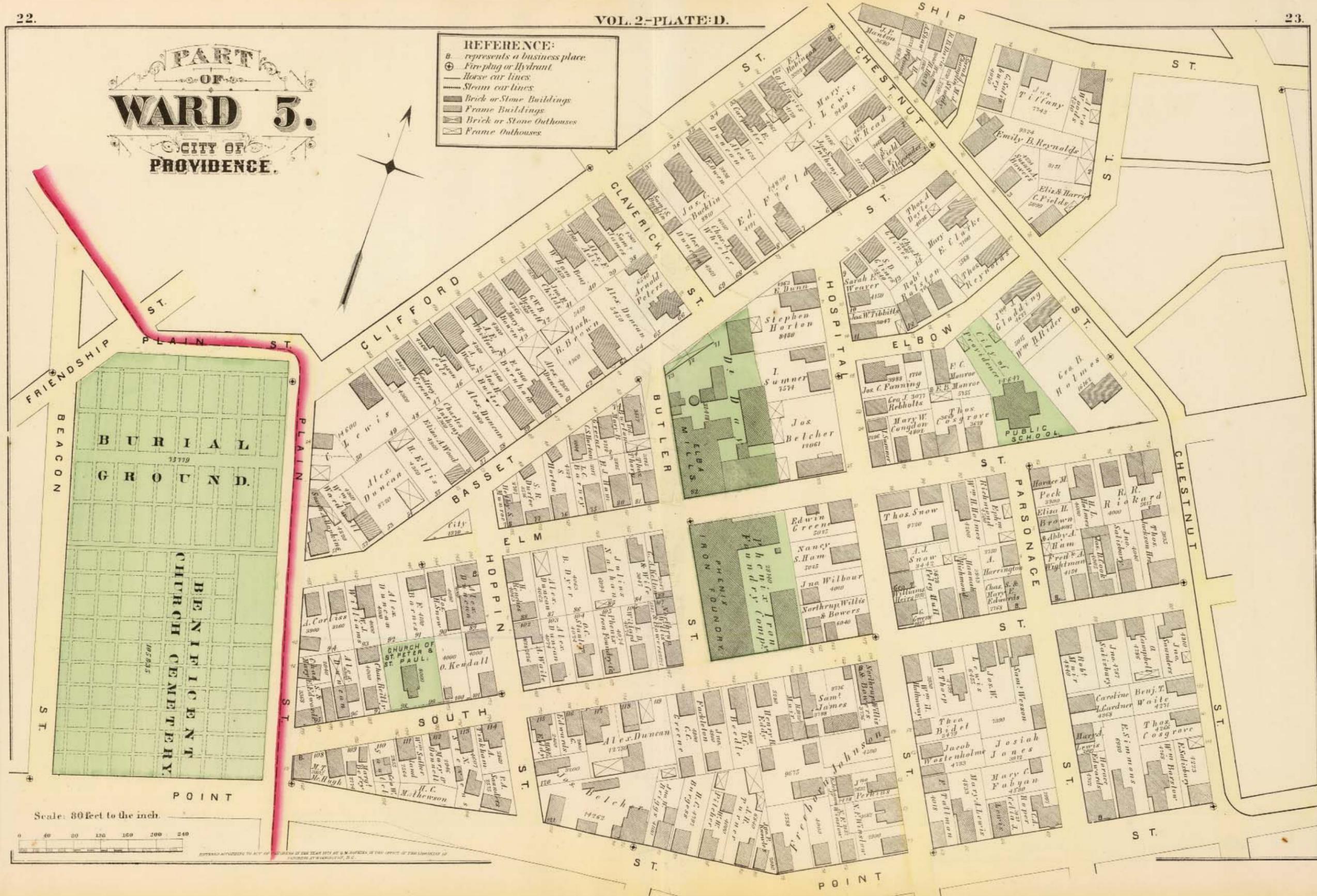
Overlay of the parcels under study over the Historic Districts in the area

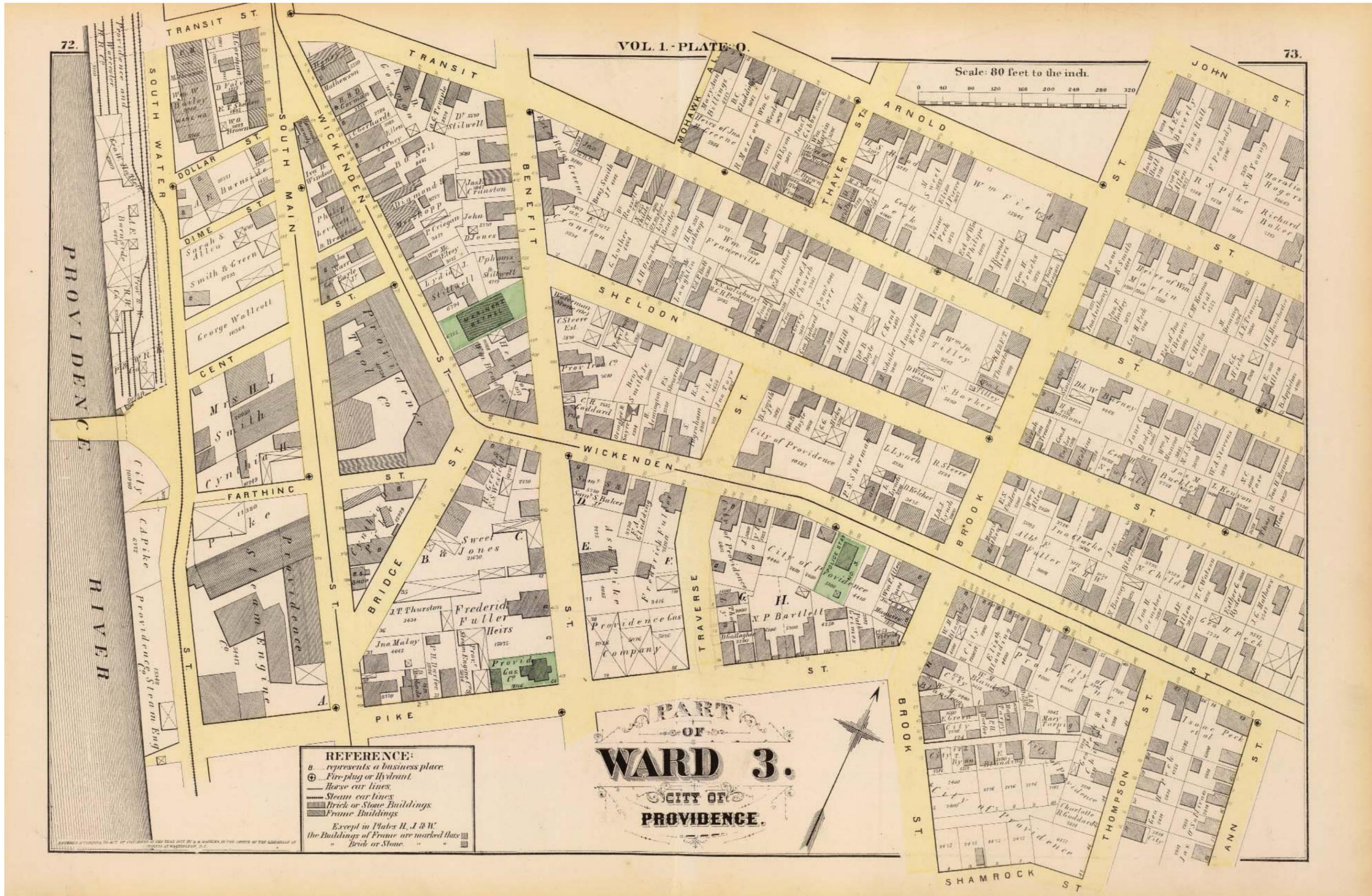


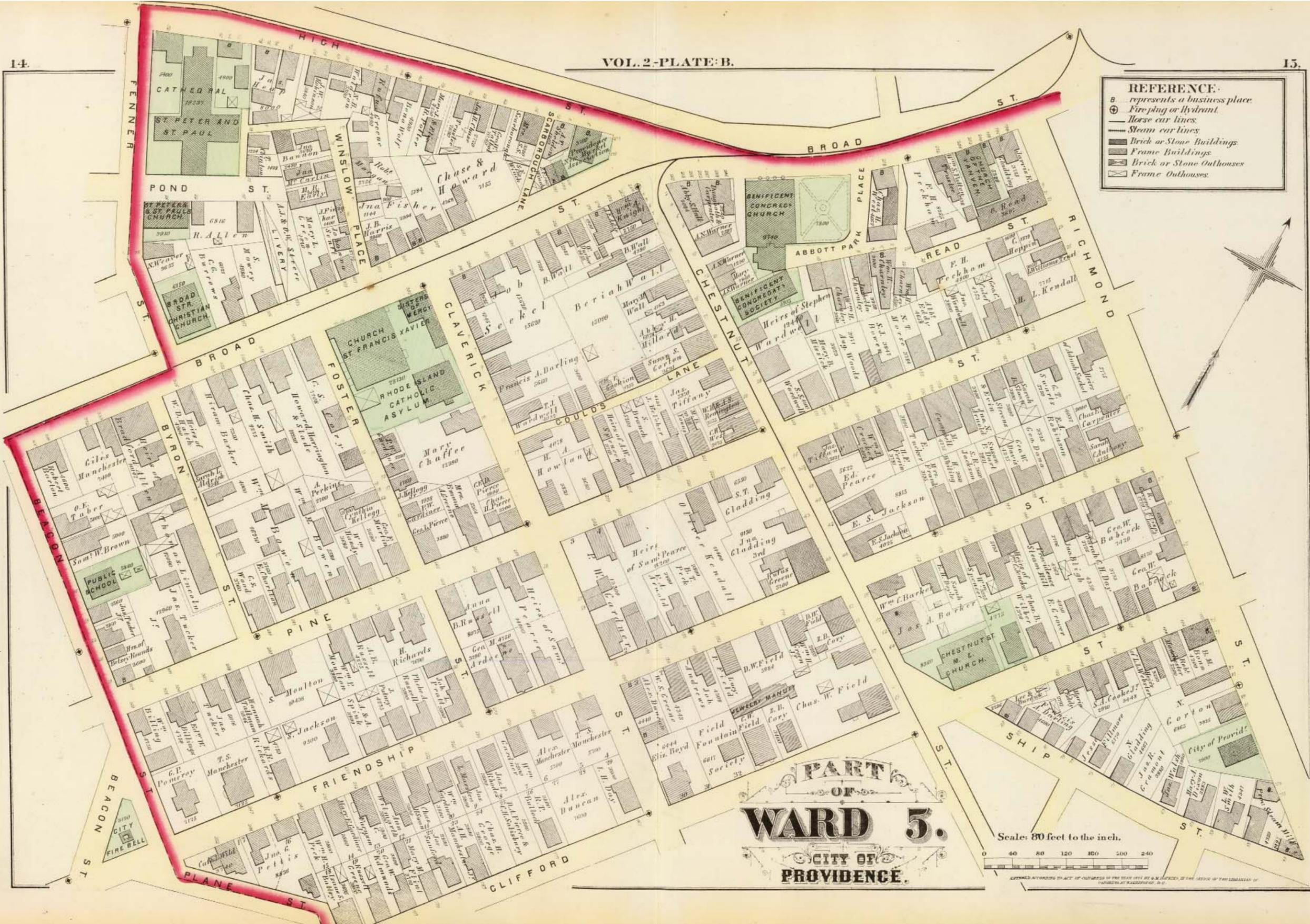
PART OF
WARD 5.
 CITY OF
PROVIDENCE.

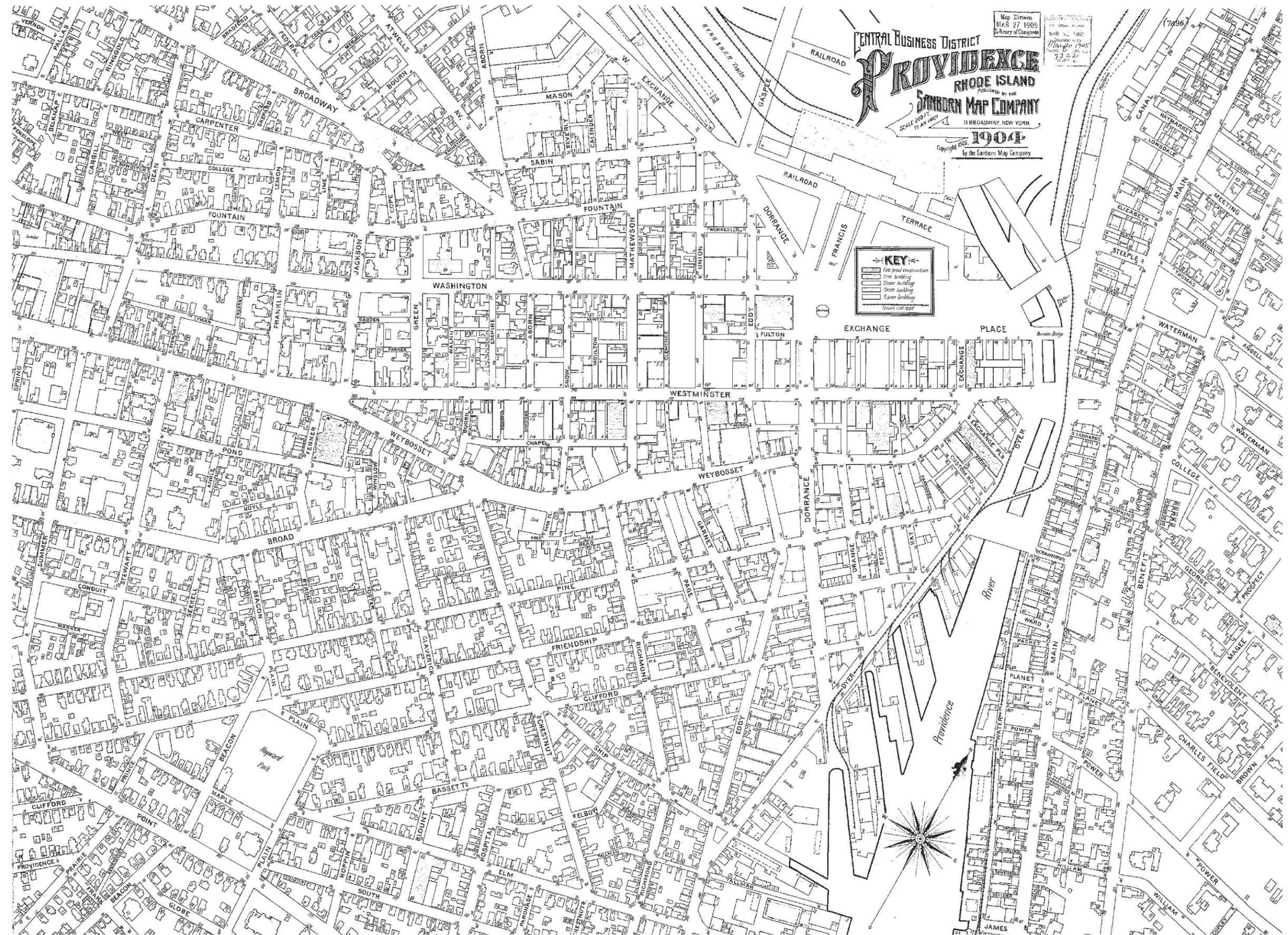
REFERENCE:

- B. represents a business place.
- ⊕ Fire-plug or Hydrant.
- Horse car lines.
- Steam car lines.
- ▒ Brick or Stone Buildings.
- ▒ Frame Buildings.
- ▒ Brick or Stone Outhouses.
- ▒ Frame Outhouses.









I-Way Parcels: proposed design guidelines [11/12 /2008]. Neighborhood Charrette



PARCELS 6 & 8
Parcel 6: 1.35 acres
Parcel 8: 0.84 acres
Vision:
 Mixture of uses with active street level and parking for surrounding area
Use:
 -Ground floor: active uses (retail, etc.)
 -Upper floors: office, hotel, residential, structured parking
Design and Massing:
 -2-6 story base, with tower up to 12 stories on southern portion of site
 -Performance standards for buildings over 6 stories (shadow studies, maximize views from neighborhood to water, minimize tower footprint, stepback at 6 stories, "green building")
 -Vehicular access from Pike or Tockwotten
 -Encourage green design (6 stories or less)
 -Pedestrian oriented design at street level

PARCEL 9
Size: 0.42 acres
Vision:
 Neighborhood scale residential buildings fronting on George M. Cohen Boulevard
Use:
 -1-2 family dwellings, either detached or attached as townhouses
 -Community use
 -Surface parking
 -Other uses allowed in R2
Design and Massing:
 -2-3 stories
 -Buildings fronting on blvd. with parking to rear

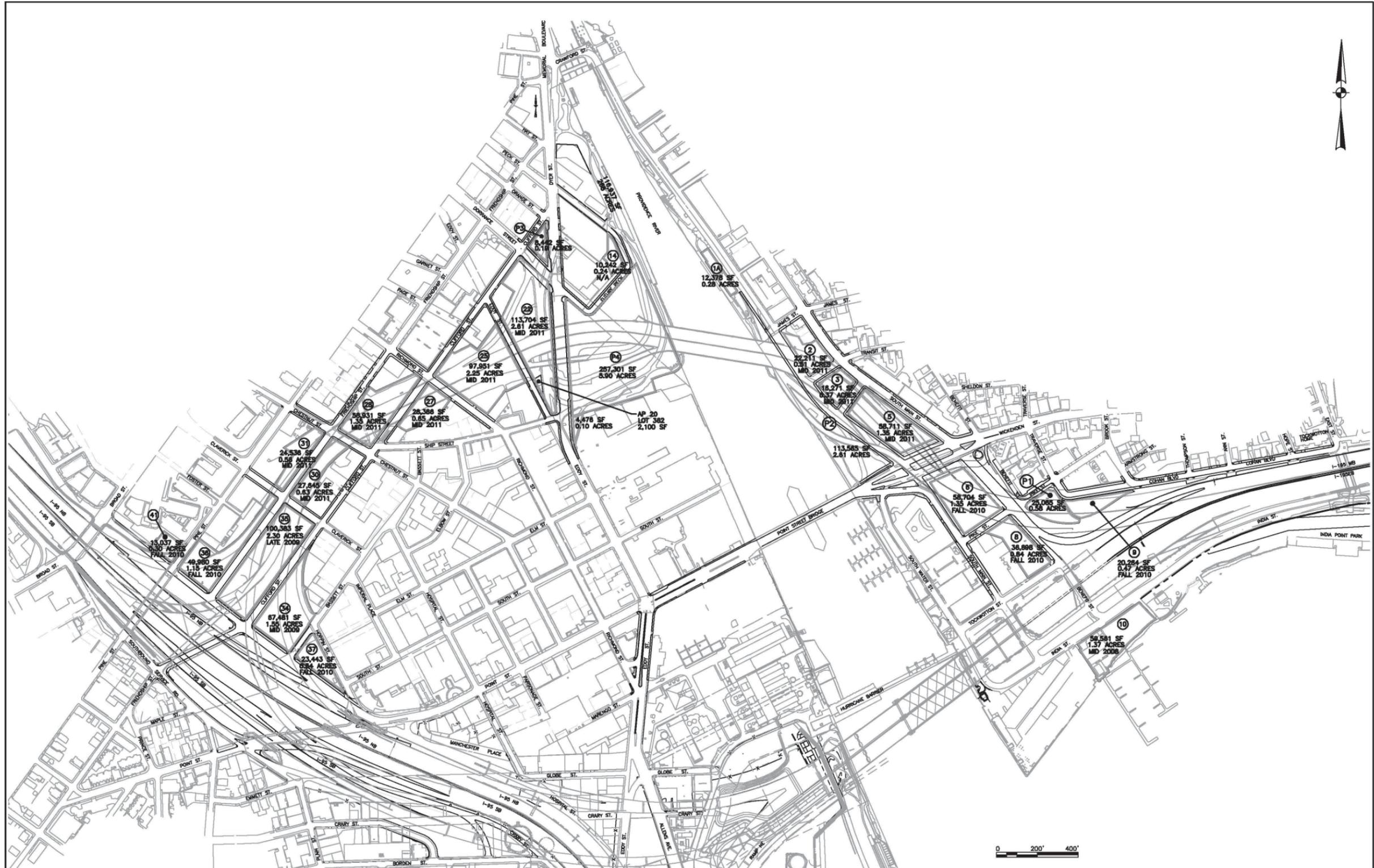
PARCEL P1
Size: 0.58 acres
Vision:
 Neighborhood pocket park to replace former Washington Square, eliminated as part of original I-195 construction
Programming Ideas:
 -Community Garden?
 -Dog Park?
 -Passive open space?

PARCEL 10
Size: 1.37 acres
Vision:
 -Mixture of uses that complement and activate waterfront and adjacent park
 -Restore neighborhood/river connections with continuation of riverwalk
 -Maximize open space and views to maintain open feel of waterfront
Allowable Uses:
 -Ground Floor: Active uses facing waterfront and India Point Park; parking along India Street
 -Upper floors: Office, hotel, residential
Design and Massing:
 -2-6 stories, with height bonuses in exchange for community amenities (max 15 stories):
 -Extension of South Main/Benefit Street in the form of a pedestrian plaza connecting to waterfront
 -Provision of wider riverwalk with enhanced public amenities instead of minimum 25 ft. normally required
 -Provision of public gathering space adjacent to India Point park with facilities for outdoor events
 -Provision of space for non-profit organizations and community meetings
 -Provision of public access to marina
 -Performance Standards for buildings that receive height bonuses (building oriented to minimize shadows and maximize views; minimize tower footprint, stepback at 6 stories to frame view of waterfront, "green building")
 -Pedestrian-oriented design; no surface parking

WHAT DO THE DOTS MEAN?
 At this time, the IWay parcels are the only areas where redevelopment is anticipated. However, it is possible that at some point in the future, owners of other parcels adjacent to the IWay may be interested in redevelopment. It is important that we establish a framework for any future redevelopment of those parcels as well. **There is no redevelopment proposed for these parcels, nor any intent to encourage redevelopment of these parcels at this time.** The following key identifies the specific Iway parcel standards that would apply to privately owned properties adjacent to the IWay:

- Subject to same requirements as Parcels 2 & 3
- Subject to same requirements as Parcels 6 & 8
- Subject to same requirements as Parcel 10
- Subject to same requirements as Parcel 5, except the maximum height will be 8 stories, subject to the performance standards for parcels 6 & 8

V:\I-195Hwy\Special Plans\ROW\S1-S4 Prop Dev Parcels.DWG, 2/25/2009 10:48:16 AM



 Maguire Group Inc. Architects/Engineers/Planners 225 Chapman Street Providence, Rhode Island 02905	 RHODE ISLAND DEPARTMENT OF TRANSPORTATION		REVISIONS NO. DATE BY 1 5/07/07 DF 2 8/08/07 DF 3 1/21/08 DF 4 2/20/09 DF	SCALE: DESIGNED BY: DATE: 02-02-07 CHECKED: SHEET OF	IMPROVEMENTS TO INTERSTATE ROUTE 195 PROVIDENCE RHODE ISLAND PROPOSED DEVELOPMENT PARCELS
			0 200' 400'	0 200' 400'	0 200' 400'