



COORDINATED DEVELOPMENT SPECIAL PERMIT APPLICATION

UNION SQUARE REDEVELOPMENT

Submitted to the City of Somerville | Revised — November 7, 2017

Union Square Station Associates LLC
31 Union Square, Somerville, MA 02143



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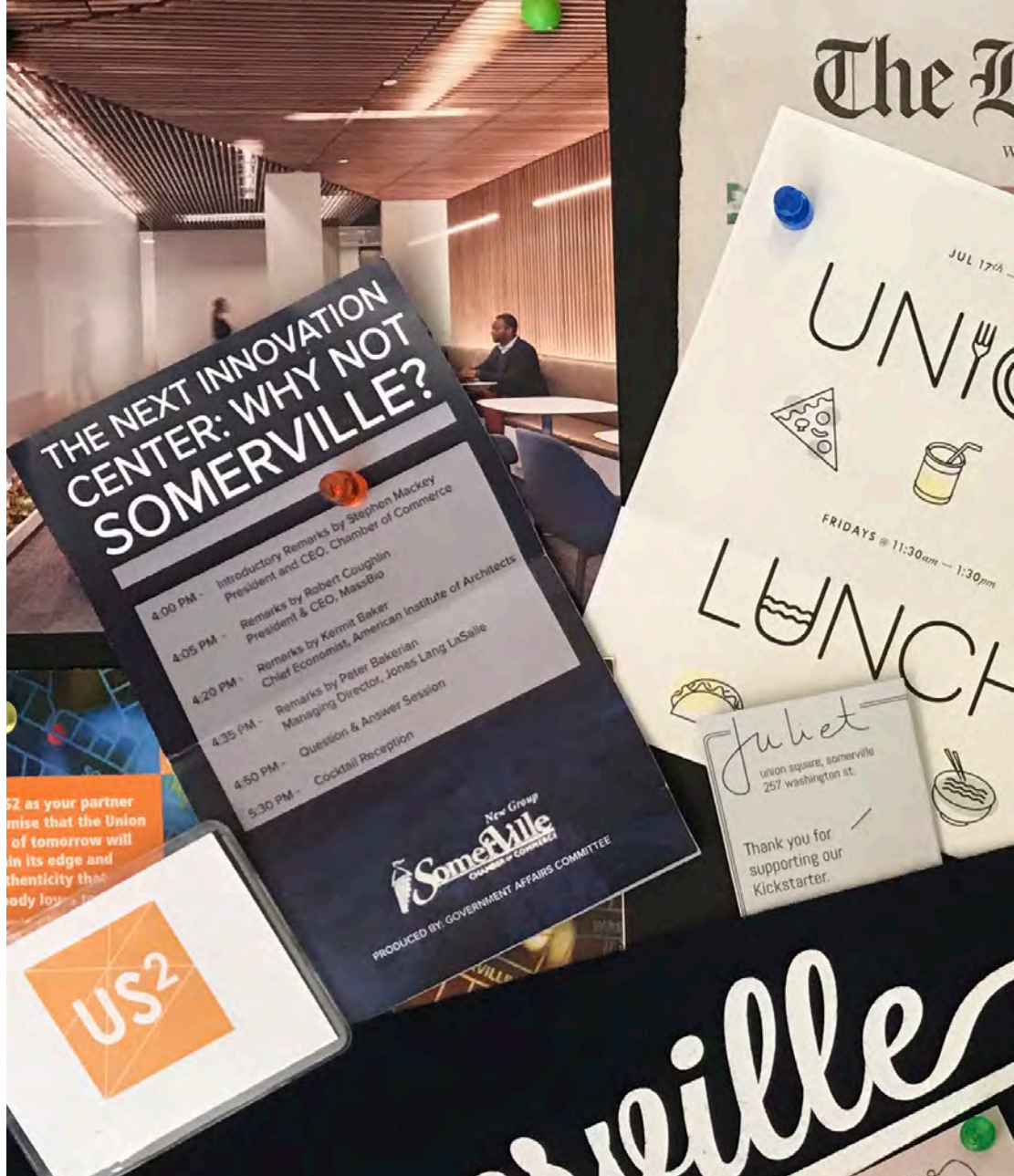
1. APPLICANT INFORMATION (UNDER SEPARATE COVER)

2. NEIGHBORHOOD MEETING MATERIALS (UNDER SEPARATE COVER)

3. CIVIC SPACE ANALYSIS (UNDER SEPARATE COVER)

4. TRANSPORTATION ANALYSIS & PLANS (UNDER SEPARATE COVER)

TRANSPORTATION IMPACT STUDY
MOBILITY MANAGEMENT PLAN



Somerville

**APPLICANT INFORMATION
PUBLIC PROCESS OVERVIEW
DEVELOPMENT SITE**



Boston Globe

WEDNESDAY, APRIL 5, 2017

Green Line extension gets back on track

US approves new cost estimate, paving way for scaled-back project

By Nicole Dungea
SENIOR STAFF WRITER

The long-planned Green Line extension into Somerville and Medford cleared a crucial milestone on Tuesday with the approval of the new cost estimate for the \$2.3 billion project that clears up uncertainty about when and if the project would move forward.

The federal government had previously earmarked nearly \$1.3 billion for the project.

on the new estimate before proceeding.

"It's an end to a long process," John Dalton, an MBTA manager hired last fall to oversee the project, said Tuesday. "It's a huge step in getting us ready to award construction contracts in the fall." The extension still needs a separate approval from the state.

\$2.3 billion
Cost of Green Line extension

OFFICE PROJECTS - 7.5+ million square feet

2nd Saturdays
UNION SQUARE

AUGUST 13TH
OFFERS & GUIDE

2ND SATURDAYS is an ongoing event series showcasing art, music, and food at Union Square. On the second Saturday of each month, local businesses open their doors to host activities at their locations. Look inside for this month's offers.

DECEMBER 13th 2015

UNION SQUARE

HOLIDAY STROLL

Out of the Shadow of Boston and

Like its narrow hilly streets, Somerville, just north of Cambridge, has seen its share of ups and downs. "Slumerville," as it was known among Bostonians for years, became synonymous to some with the mobster Whitey Bulger, whose Winter Hill gang was headquartered there. But this densely populated New England city of about 76,000 residents is coming into its own as a hip alternative to both Boston and Cambridge, with cheaper rents and cool mayoral initiatives like urban agriculture. The city's creative hub, Union Square, has been transformed with restaurant and bar openings, plus new businesses like the indoor farmers' market Somerville and the Aeronaut Brewing Co.

PROJECT INTRODUCTION



Union Square Donuts

A Union Square Donuts shop opened in February 2015. Inside there's a menu of donuts that range from classic to creative. The shop is a great place to grab a donut and a coffee.

Brooklyn Bouliars Somerville

Opened in July 2015, Brooklyn Bouliars is a creative and fun place to grab a burger and fries. The menu is creative and fun, with options like the 'Bouliars Burger' and 'Bouliars Fries'.

Where Ideas Go To Work



SEP 18th

to see future?
ideas?

US2

Green Line extension gets back on track

US approves new cost estimate, paving way for scaled-back project

By Nicole Dunigan
 The long-planned Green Line extension into Somerville and Madford cleared a crucial milestone on Tuesday with the approval of the new cost estimate for the \$2.3 billion project that clears up uncertainty about when and if the project would move forward.

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\$2.3 billion
Cost of Green Line extension

OFFICE PROJECTS - 7.5+ million square feet



DECEMBER 13th 2015

UNION SQUARE

HOLIDAY STROLL

Out of the Shadow of Boston and Somerville, MA

Like its narrow hilly streets, Somerville, just north of Cambridge, has seen its share of ups and downs. "Slumerville," as it was known among Bostonians for years, became synonymous to some with the mobster Whitey Bulger, whose Winter Hill gang was headquartered there. But this densely populated New England city of about 76,000 residents is coming into its own as a hip alternative to both Boston and Cambridge, with cheaper rents and cool cultural institutions like urban agriculture. The city's creative hub, Union Square, has been transformed with restaurant and bar openings, plus new businesses like the indoor farmers' market Something Good, and the Aeronaut Brewing Co.

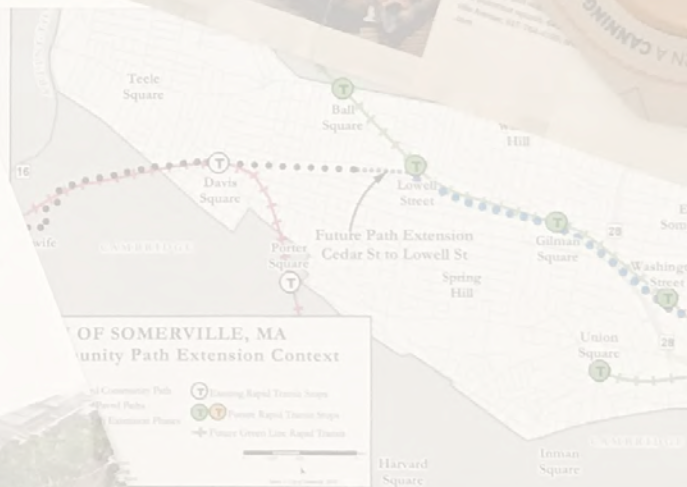
Union Square Donuts
 A food truck converted into a stand-up shop in 2015, Union Square Donuts has become a local favorite. The shop is located at 100 Union Square, Somerville, MA 02143. Phone: 617-552-2227.



Somerville's Creative Community
 A vibrant and growing creative community in Somerville, MA, is centered around Union Square. The area is known for its diverse mix of businesses, including art studios, galleries, and independent shops. The community is also home to several parks and public spaces, providing a high quality of life for its residents.



Where Ideas Go To Work



to see future? Ideas?



APPLICANT INFORMATION

Union Square Station Associates LLC (US2), the Applicant, is the Designated Master Developer for the *Union Square Revitalization Plan*, a M.G.L. Chapter 121B “Urban Renewal Plan”. US2 is a diverse group of industry experts located in Somerville and Boston assembled specifically for Union Square's revitalization. We have been working in partnership with the community, the Somerville Redevelopment Authority, and the City of Somerville since 2014 to realize the shared vision for the Union Square future that was envisioned in *SomerVision* and further refined in the *Union Square Neighborhood Plan*. We look forward to collaborating with you to implement the plans for Union Square. By bringing our shared vision to life, we can deliver on the goals of *SomerVision* and create a revitalized Union Square that we can all be proud of.



CONTACT INFORMATION

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LEGAL STANDING

Pursuant to Section 6.7.5.C.4.a. of the Somerville Zoning Ordinance, Applicant has demonstrated ownership or site control of the Property through a Master Land Disposition Agreement dated May 2, 2017 with the Somerville Redevelopment Authority (a copy of which is attached to this Application as Appendix 1) pursuant to the *Union Square Revitalization Plan* and the provisions for 760 CMR 12.05). Any existing legal judgments, actions, covenants, conditions, and/or restrictions that may control development of the Property are identified on the title reports attached as Appendix 1 as well as the MLDA and that certain Development Covenant dated June 8, 2017 by and between Applicant and the City of Somerville. Copies of the vesting deeds for the parcels comprising the Property are attached as Appendix 1.

APPLICATION FORM

Please find a copy of our completed Application Form on the following page (Figure 1).

ADDITIONAL APPLICANT INFORMATION

Please see Appendix 1: Applicant Information for the following additional required information:

- Title Commitments
- Deeds
- Beneficial Interests Disclosure
- Campaign Ordinance Disclosure



PUBLIC PROCESS OVERVIEW

Years ago, during the creation of the City of Somerville's first City-wide comprehensive plan (*SomerVision*), the City of Somerville and its residents had the foresight to plan for the future. Rather than allowing piecemeal residential development to gobble up underutilized properties, the community developed a more strategic approach to growth and envisioned Union Square as a vital, vibrant mixed-use and transit oriented employment center. A new Union Square Green Line transit stop would serve as a catalyst for commercial development that could shift the tax base and provide local job opportunity, add affordable housing, create new open spaces and help address critical infrastructure needs.

Since setting this goal for Union Square in *SomerVision* in 2012, the City has been working continuously and closely with community stakeholders through a series of related community-based processes focused on realizing its goals. The process started at a macro-level with the City-wide comprehensive plan and at each subsequent step in the process, is getting more detailed as it moves from City-wide to the Union Square neighborhood to the revitalization blocks (i.e. D Blocks) and ultimately, to specific building and civic space design review.

This Coordinated Development Plan (CDP) application, a zoning requirement, is the next step in the overall process and is focused on defining an

overall vision, program and phasing for the multi-lot D Blocks development. Once the Coordinated Development Plan is approved by the Planning Board, specific buildings will be reviewed through the Site Plan and Design Review public process before construction will begin. As the first project phase (Block D2) proceeds through Site Plan and Design Review, it is anticipated that Massachusetts Environmental Policy Act (MEPA) certification and community benefits agreement negotiation with the to-be-formed Neighborhood Council will proceed concurrently. Construction start for the first project phase (Block D2) is anticipated in mid-2018.

At US2's CDP Neighborhood Meeting, several participants asked how they can keep updated as the process moves forward. Both the City of Somerville (planning@somervillema.gov) and US2 (info@unionsquarestationassociates.com) maintain email distribution lists so periodic updates can be provided. Please email either or both emails in order to request to be added to the respective list.

In order to provide a foundation for the details of this Coordinated Development Plan application, summaries of the community-based process steps that preceded this application are described herein.



SOMERVISION

In 2012, the City of Somerville adopted its first City-wide comprehensive master plan, *Somerville Vision*, an award-winning community-driven plan. *Somerville Vision* built consensus around strategies to preserve Somerville’s identity as an accessible, mixed-income, multi-cultural City; while at the same time outlining an actionable policy agenda to invite and leverage

public and private investment in transit-oriented development. The Mayor’s Office of Strategic Planning & Community Development coordinated the four-year project with a 60-member Steering Committee comprised of residents, business owners, nonprofit agencies, and elected officials.

Somerville Vision provides a policy framework that captures community perspectives about diversity, community, economy, accessibility, sustainability, and innovation to guide future decisions made in neighborhood planning and capital projects. During the development of *Somerville Vision*, a series of public workshops helped the community articulate these shared values.

One of the goals in *Somerville Vision* is to “Transform key opportunity areas, such as...Union Square into dynamic mixed-use and transit oriented districts that serve as economic engines.”



Endorsed by the Somerville Board of Aldermen April 12th, 2012
Adopted by the Somerville Planning Board April 19th, 2012



UNION SQUARE REVITALIZATION PLAN

In 2012, the Somerville Redevelopment Authority (SRA), Somerville Board of Aldermen, and the Massachusetts Department of Housing and Community Development approved an Urban Revitalization Plan for Union Square pursuant to M.G.L. Chapter 121B. This plan provided the City with the tools to promote revitalization and to coordinate redevelopment of parcels within walking distance to future Union Square Green Line station in a manner that fully captures the value that new transit service can bring to the neighborhood. The plan prepared a path to fix sub-standard infrastructure, spur critical transit improvements and establish Union Square as a place for commercial development.

The *Union Square Revitalization Plan* identifies seven development parcels (the D Blocks) and initiated a process to select a master development partner that could guide redevelopment of those parcels into a mid- to high-density urban employment center. The plan also granted the SRA the power to acquire and dispose of property in order to realize the plan's goals.

MASTER DEVELOPER SELECTION

In June of 2014, after an extensive competition that included a public outreach and interview process, the SRA selected US2 as the designated Master Developer for the seven D Blocks identified in the 2012 *Union Square Revitalization Plan*. A Master Developer is a private real estate entity with the experience and capability to engage in public-private partnerships, to work with existing property owners, to finance and develop projects in order to realize the plan's goals, and to recruit commercial tenants through targeted marketing.

Selection of a Master Developer began in January 2013 through the issuance of a Request for Qualification. There were nine responses to the RFQ. With help from the Union Square Civic Advisory Committee (CAC), the SRA shortened the list to four teams. In the summer of 2014, City staff, CAC members, SRA members, and Aldermen toured featured projects of the remaining four development teams before selecting US2.

UNION SQUARE NEIGHBORHOOD PLAN

In May 2015, the Planning Board adopted the *Union Square Neighborhood Plan* after a 17-month community-based planning process that focused on implementing *SomerVision* at the neighborhood scale. The process included workshops, presentations and a three-day design charrette where different development alternatives and possibilities for both the neighborhood and the D Blocks were explored.

The award-winning plan provides a 20+ year strategic direction for the 400-acre Union Square neighborhood. A primary goal for the plan is to evolve Union Square into a mixed-use transit-oriented urban employment center. The plan explored policy approaches to minimizing displacement and capturing community benefits from the development. In order to improve access to open space, the neighborhood plan envisioned 15% of new development areas being dedicated to high-quality open spaces. Perhaps the most inventive portion of the plan focused on reimagining the public realm and converting existing right-of-ways into complete streets that prioritized pedestrians and cyclists over vehicles.

For the D Blocks, the neighborhood plan process led to a direction for program mix (60% commercial and 40% residential), individual site massing/height as well as overall program size (approximately 2.3 million square feet). Density and heights were carefully considered in order to capitalize on the economic growth and development that can come from development near the new transit while being sensitive to how the new development is woven into the existing neighborhood fabric. A critical mass of development density was desired in order to attract private investment as well as help fund community and public benefits (including the MBTA Green Line, infrastructure and community priorities).



MASTER LAND DISPOSITION AGREEMENT

In May 2017, after public review and discussion, the SRA executed the Master Land Disposition Agreement (MLDA) with US2 that sets the terms for acquisition and redevelopment of 15.7 acres of land designated in the Union Square Revitalization by US2. The agreement specifically outlines the purchase terms for the first phase of the development, the D2 Block that is currently owned by the City/SRA. It also identifies the process for acquisition and development of the other D Blocks, including schedule commitments related to overall development and construction of individual projects. The agreement also defines the SRA's recourse for US2 non-performance.

UNION SQUARE ZONING APPROVAL AND DEVELOPMENT COVENANT

Most recently, in June 2017, the Somerville Board of Alderman voted 9-1 to approve a zoning overlay district for the D Blocks in Union Square. The process began in mid-2016 and included many public meetings, presentations on topics of community or alderman interest and two public hearings. The zoning serves to codify the requirements of the Union Square Neighborhood Plan and regulate the development on the D Blocks. The details of the zoning were carefully considered resulting in requirements for a minimum of 60% commercial

development, 20% affordable housing, height and bulk regulations, ground floor use requirements, arts & creative economy uses and more. Based on community feedback, the final approved zoning requires 25% open space, an increase over the 15% contemplated in the neighborhood plan.

In parallel with the zoning process, US2 negotiated and executed a Development Covenant with the City of Somerville that addresses public and community benefits that were not part of the zoning or MLDA requirements. The covenant includes \$19.2 million of US2 cash contributions to the Green Line, infrastructure, jobs linkage and community benefits as well as US2's commitment to give priority to qualified Somerville residents and veterans for construction jobs. Additionally, in response to stakeholder feedback and to demonstrate US2's commitment to commercial development, US2 agreed that it would not start a residential project beyond D2 until the second commercial project on a D Block started construction. Finally, the covenant includes US2's written commitment to negotiate a community benefits agreement with the to-be-formed Neighborhood Council.

Community benefits have been a point of emphasis for the community throughout the planning process. Additional details about the project's community benefits are provided in the development proposal section of this application.

DEVELOPMENT SITE

PROJECT LOCATION

Union Square enjoys an enviable location just 2.5 miles northwest of downtown Boston and immediately north of and abutting Cambridge. Union Square is easily accessible from I-93 and from a number of local routes 1, 28 and 99 connecting it in all directions to the broader Boston metropolitan region. The location will become increasingly desirable as a result of significant infrastructure improvements that are part of the MBTA's Green Line Extension (GLX) project to build a new light rail station at Union Square and extend public transit service to the area and connect it to other economic centers. Union Square is well-situated to benefit from the spillover of commercial clustering activity in Kendall Square, as well as from its proximity to educational institutions (MIT, Harvard and Tufts). The area is also undergoing gradual transformation as the City implements progressive traffic management measures and invests in street improvement plans that will provide infrastructure support and maintain the connectivity needed as the neighborhood faces inevitable growth and aspires to evolve into Somerville's downtown.

The formation of the development site dates back to the *Union Square Revitalization Plan* in 2012, which identified an opportunity to redevelop the area and transform parts that contributed to decadence and

blight. This plan would take advantage of new transit to spur economic growth, create new jobs, upgrade infrastructure and secure new public open space. The development site is entirely located within the Union Square Revitalization Area and comprises multiple non-contiguous parcels, each made of one or more lots, that are interspersed around Union Square Plaza and across the MBTA railroad tracks to Webster Street, along the western edge of Boynton Yards. The parcels front onto Somerville Avenue, Washington Street, Warren Street, Prospect Street and Webster Street. Surrounding the development site, to the north, is the Prospect Hill neighborhood, which is predominantly residential with a historic identity and stunning views. To the east is McGrath Highway and the Inner Belt and blocks of largely industrial uses. To the west are the residential neighborhoods of Spring Hill and Ward Two. And to the south is the mixed-use Cambridge neighborhood of Inman Square.

The extensive planning for Union Square's revitalization included the community-driven planning process that resulted in the first City-wide comprehensive plan, *SomerVision*. Consistent with the Revitalization Plan, *SomerVision* identified the development site area as locations to be enhanced or transformed.

FIGURE 2: LOCUS MAP



DEVELOPMENT SITE

The following development site map (Figure 3) depicts the seven development parcels known as the “D Parcels” (hereinafter D Blocks) which were designated for redevelopment in the approved *Union Square Revitalization Plan*, an urban renewal plan pursuant to M.G.L. Chapter 121B. Each D Block consists of one or more lots, such as D1, D2, D3 and D6, and some D parcels represent an assemblage of non-contiguous lots, such as D4, D5 and D7. Many of the D Parcels currently have multiple owners. The Development Site as defined in the Union Square Zoning Ordinance for this application includes all of the parcels in aggregate and totals 683,493 square feet.

The **D1 Parcel** or **D1 Block** is referred to as the “Civic Block” and is bordered by Washington Street to the North, Prospect Street to the West, Somerville Avenue to the South and Merriam Street to the East. D1 has multiple owners and is currently owned and/or occupied by Ricky’s Flower Market, the City of Somerville Public Safety Building, Fred M. Susan & Sons Auto Painting shop and a two-family house.

The **D2 Parcel** or **D2 Block** is also referred to as the “North Prospect Block” and is bordered by Somerville Avenue to the North, Prospect Street to the West, the MBTA Fitchburg Line right-of-way to the South and several privately owned parcels facing Allen Street to the East. D2 is entirely owned by the Somerville Redevelopment Authority or the City and is largely vacant. The site is being prepped for the first phase of redevelopment.

The **D3 Parcel** or **D3 Block** is also called the “South Prospect Block” and is bordered by the MBTA Fitchburg Line right-of-way to the North, Prospect Street and Webster Avenue to the West/Southwest and Columbia Street/Windsor Place to the South. The D3 Parcel contains three lots occupied by Beacon

Sales (50 Webster Avenue) and Royal Hospitality Services (56 Webster Avenue and 520 Columbia Street).

The **D4 Parcel** or **D4 Block** is referred to as the “West Prospect Block” and contains three non-contiguous lots with frontage on Prospects Street and that are currently occupied by commercial auto lots and a Cross-Fit gym.

The **D5 Parcel** or **D5 Block** is also known as the “Washington Street North Block” and contains two non-contiguous lots with frontage on Washington Street currently occupied by the former United States Post Office Building a Union Gulf gas station and the former Monro Muffler auto shop. The two D5 lots straddle either side of Columbus Avenue.

The **D6 Parcel** or **D6 Block** is also known as the “Somerville Avenue South Block” as it is located on the south side of Somerville Avenue and is bordered by Prospect Street to the East, Everett Street to the South, and privately owned parcels fronting Webster Avenue to the West. D6 is comprised of five separate lots with commercial buildings owned and/or occupied by the following businesses: Angel Nails, Tech Auto Body, Buk Kyung Korean Restaurant, Mandarin Chinese Restaurant, Mike’s Automotive, Ebi Sushi and Dunkin Donuts.

The **D7 Parcel** or **D7 Block** is also called the “Warren Block” and contains two non-contiguous lots located on either side of Warren Avenue at Bow Street. One lot is located at the Northwest corner of Warren Avenue and Bow Street and is currently occupied by the Goodyear Auto Service Center. The second lot is a through-lot fronting Warren Avenue to the Northwest and Stone Avenue to the Southeast and is currently occupied by Citizens Bank.

FIGURE 3: DEVELOPMENT SITE PLAN

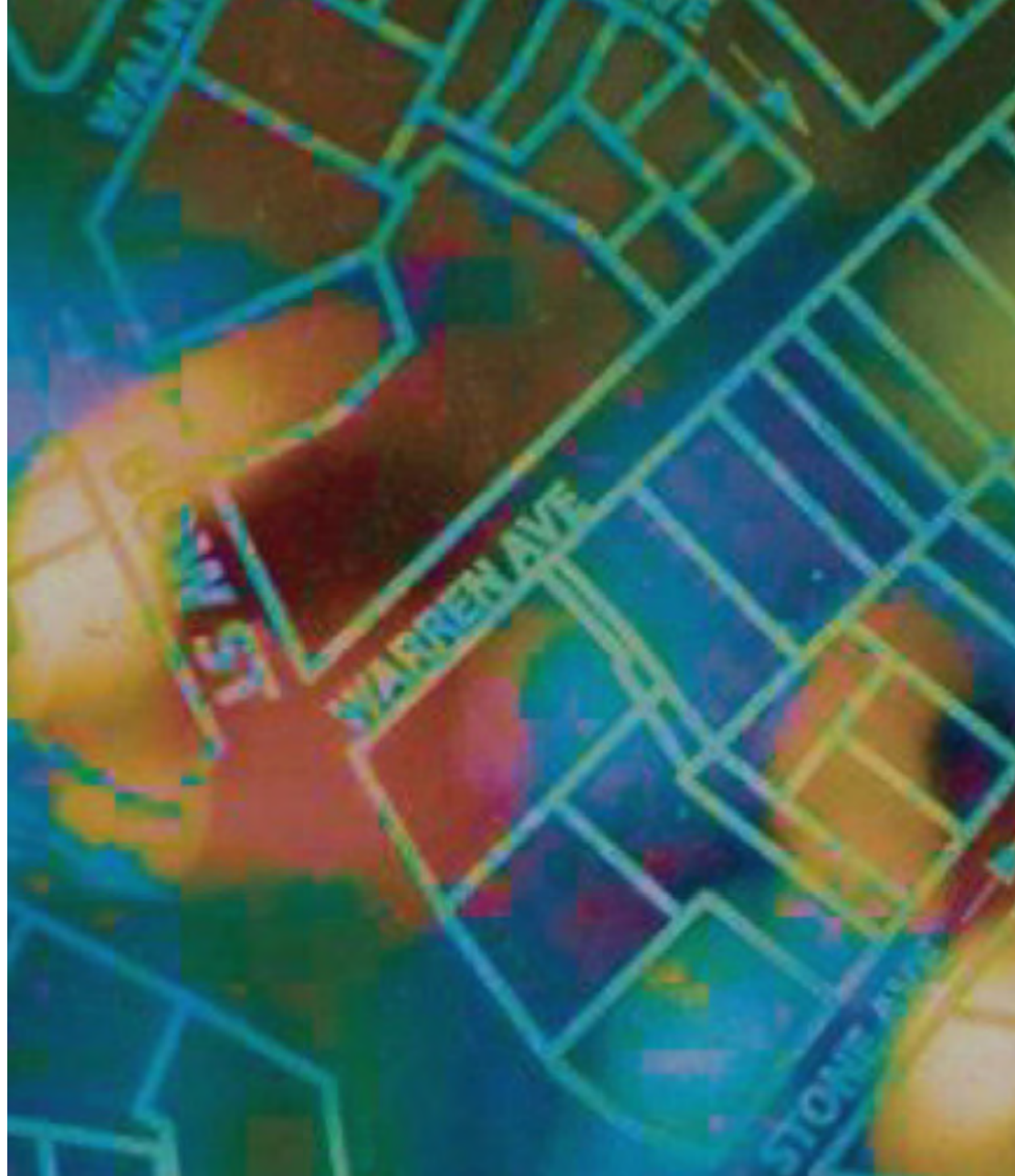


TABLE 1: THE DEVELOPMENT SITE

BLOCK / ADDRESS	LAND AREA (SF)	LAND AREA (ACRES)
D1 BLOCK "CIVIC BLOCK"		
238 Washington St. + 273 Somerville Ave.	9,739	0.22
269 Somerville Ave.	6,001	0.14
269 Rear Somerville Ave.	1,500	0.03
259 Somerville Ave. + 261 Somerville Ave	5,025	0.12
220 Washington Street	88,112	2.02
Sub-totals	110,377	2.53
D2 BLOCK "NORTH PROSPECT BLOCK"		
Multiple	182,212	4.18
Sub-totals	182,212	4.18
D3 BLOCK "SOUTH PROSPECT BLOCK"		
50 Webster Ave.	66,816	1.53
520 Columbia St.	52,581	1.21
56 Webster Ave.	59,993	1.38
Sub-totals	179,390	4.12
D4 BLOCK "WEST PROSPECT BLOCK"*		
41 Webster St.	6,578	0.15
45 Webster St.	15,667	0.36
47 Webster St.	7,264	0.17
48 Webster Ave.	5,976	0.14
35 Prospect St.	8,366	0.19
Modified property boundary	3,079	0.07
Sub-totals	46,930	1.07
D5 BLOCK "WASHINGTON STREET NORTH BLOCK"		
223 Washington St.	13,484	0.31
231 Washington St.	8,209	0.19
237 Washington St.	24,150	0.55
Sub-totals	45,843	1.05
D6 BLOCK "SOMERVILLE AVENUE SOUTH BLOCK"*		
9 Union Sq.	21,467	0.49
2 Union Sq.	15,599	0.36
298 Somerville Ave.	12,749	0.29
290 Somerville Ave.	5,270	0.12
286 Somerville Ave.	13,801	.32
Sub-totals	68,886	1.58
D7 BLOCK "WARREN BLOCK"		
41 Union Sq.	30,799	0.71
1 Bow St.	19,056	0.44
Sub-totals	49,855	1.14
TOTALS	683,493	15.69

* D4 and D6 areas calculated after Everett St. realignment as depicted on Block and Lot Plans

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PROJECT DESCRIPTION
NATURE OF APPLICATION
CIVIC SPACE
PROPOSED BUILD-OUT
TRANSPORTATION
INFRASTRUCTURE
IMPLEMENTATION OVERVIEW
PROJECT BENEFITS
BLOCK & LOT PLANS

An aerial photograph of a city street grid, likely in Somerville, Massachusetts. The streets are labeled with names such as Columbus Ave, Stone Place, Somerville Ave, and Washing. A red rectangle highlights a specific block in the center of the grid. The text "DEVELOPMENT PROPOSAL" is overlaid in white on the right side of the image.

DEVELOPMENT PROPOSAL

PROJECT DESCRIPTION

The revitalization of Union Square, outlined on the following pages, represents US2's strategy for fulfilling the multitude of goals of both the Union Square community and the greater City of Somerville identified through decades of thoughtful research and planning. It is the intent of this submission to establish a Coordinated Development Plan and subsequently return to the Planning Board for Design and Site Plan Review with detailed designs for each parcel in accordance with Section 6.7.5 of Union Square Zoning.

Utilizing the commitments set forth in Somerville's first comprehensive plan, *SomerVision*, together with the plans for implementation identified in the *Union Square Neighborhood Plan*, this coordinated development special permit application maintains as its foundation the unique values of the community that have informed this process from the beginning. These same values, for diversity, strength of community, sustainability, innovation, and a resilient economy have informed the Union Square zoning overlay, setting the framework for the transformative development that will establish Union Square as a new regional employment center while ensuring Union Square remains a place for everyone.

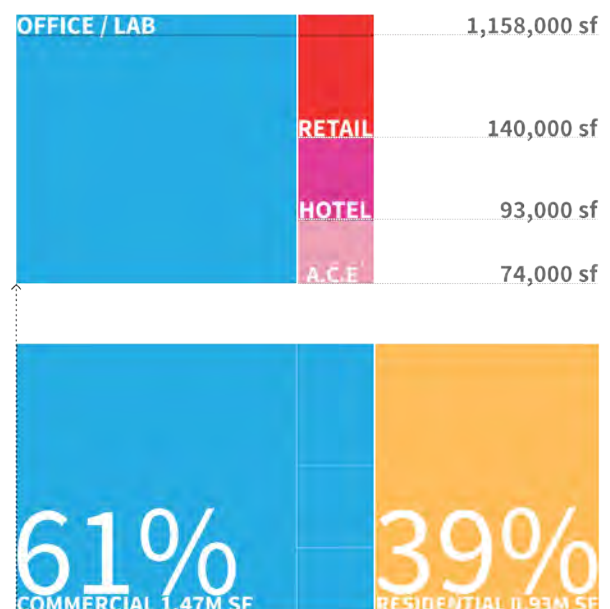
The redevelopment project is part of the state-approved *Union Square Revitalization Plan*, an urban renewal plan (M.G.L. Chapter 121B) that focuses on transit connectivity in order to prepare the area for economic development. The project area is defined by seven 'D Blocks' covering an area of approximately 15.7 acres, across which the project will prioritize the

achievement of planning objectives set forth in the *Union Square Neighborhood Plan*.

The proposed project will evolve Union Square into the transit-oriented, 18-hour, mixed-use urban employment center envisioned in *SomerVision*. At completion, the project will include 2.4 million square feet of new spaces in which to live, work, play and raise a family. Approximately 1.47 million square feet will be commercial spaces (61%) that will generate over 5,300 permanent jobs.

These work spaces will serve lab, office, retail, arts & creative enterprise and hotel uses that will establish Union Square as an employment center and offer a range of opportunities to local residents. Economic

FIGURE 4: PROJECT PLAN HIGHLIGHTS



research suggests that innovation job growth will stimulate job opportunities throughout the local economy. Every new innovation job has the potential to create five new local jobs (e.g. nurses, teachers, carpenters, accountants, etc.) and 60% of those new local jobs will be service jobs (*Enrico Moretti, Professor of Economics, University of California, Berkeley*).

As the neighborhood evolves, new residential units will be important to maintaining a vibrant environment, serving new workers and contributing to housing attainability for a range of residents and families. A proposed total of 933,000 SF of residential uses (39%) or approximately 900 to 1,000 new homes which will include 180 to 200 permanently affordable homes.

Over 157,000 SF of new open space, including 110,000 SF of new high-quality civic spaces, will be created as part of the development. These spaces will include a 27,000 square foot neighborhood park, a significant plaza that connects the new Green Line station to the neighborhood and a collection of other diverse and interesting civic space types that can serve a wide range of community needs.

Significant transit, infrastructure and public realm improvements will make Union Square a more complete neighborhood in which to live and work. The new Green Line station will provide transit connectivity throughout the Boston metro area, including other employment centers and areas of interest (e.g., North Station, Government Center, Copley Place, Fenway and Longwood Medical District). Updated public utility infrastructure constructed by the City of Somerville will improve service, mitigate flooding and create the capacity

for new land uses. The public right of way in Union Square will be significantly enhanced. It will prioritize the pedestrian and cyclist over the vehicle and will endeavor to implement the exciting streetscape vision included in the *Union Square Neighborhood Plan*.

The project will deliver the economic benefits that will enable the City of Somerville to better serve its residents and continue to grow as one of the most desirable places to live and work in the metro area. The project will deliver nearly \$475 million in revenue over the next 30 years in the form of permit fees, property taxes and land sale proceeds. Commercial taxes will outpace residential taxes by a ratio of 3:1 contributing to *SomerVision's* goal to reduce fiscal dependence on state aid and residential taxes.

Public and community benefits have been a priority since planning started in Union Square and the project includes a robust public and community benefits program which is valued at approximately \$100 million, and aims to address a range of community priorities (e.g. affordable housing, local jobs & workforce development, local business support, open space & sustainability, mobility and infrastructure). This includes \$19.2 million of US2 cash contributions to fund identified areas of neighborhood need, including the Green Line extension, infrastructure improvements, job linkage, and additional areas of community benefit need as identified and prioritized by the community. Lastly, US2 has committed to negotiating a community benefits agreement with the neighborhood council to address other means of collaborating to meet community objectives.

FIGURE 5: MASSING DIAGRAM

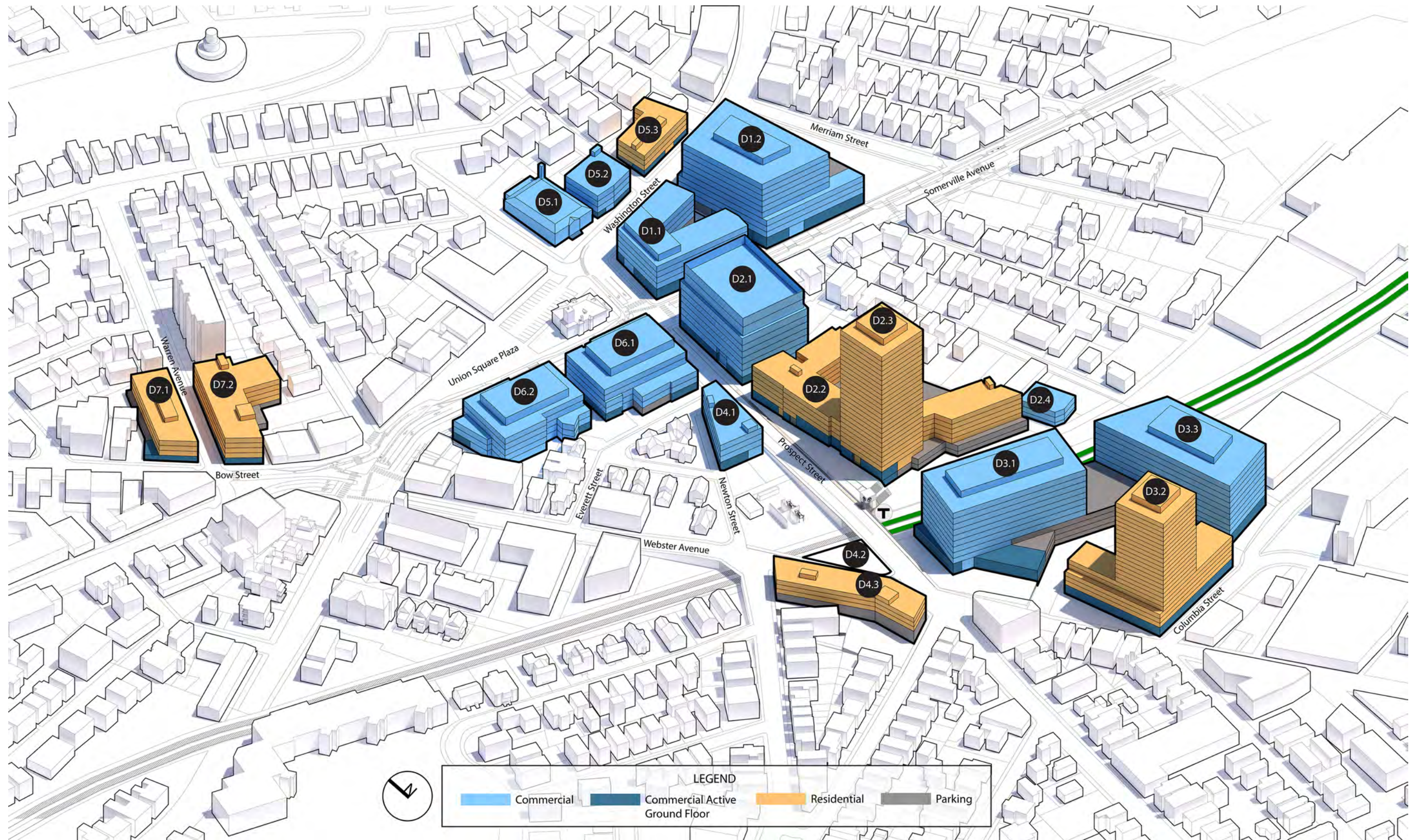
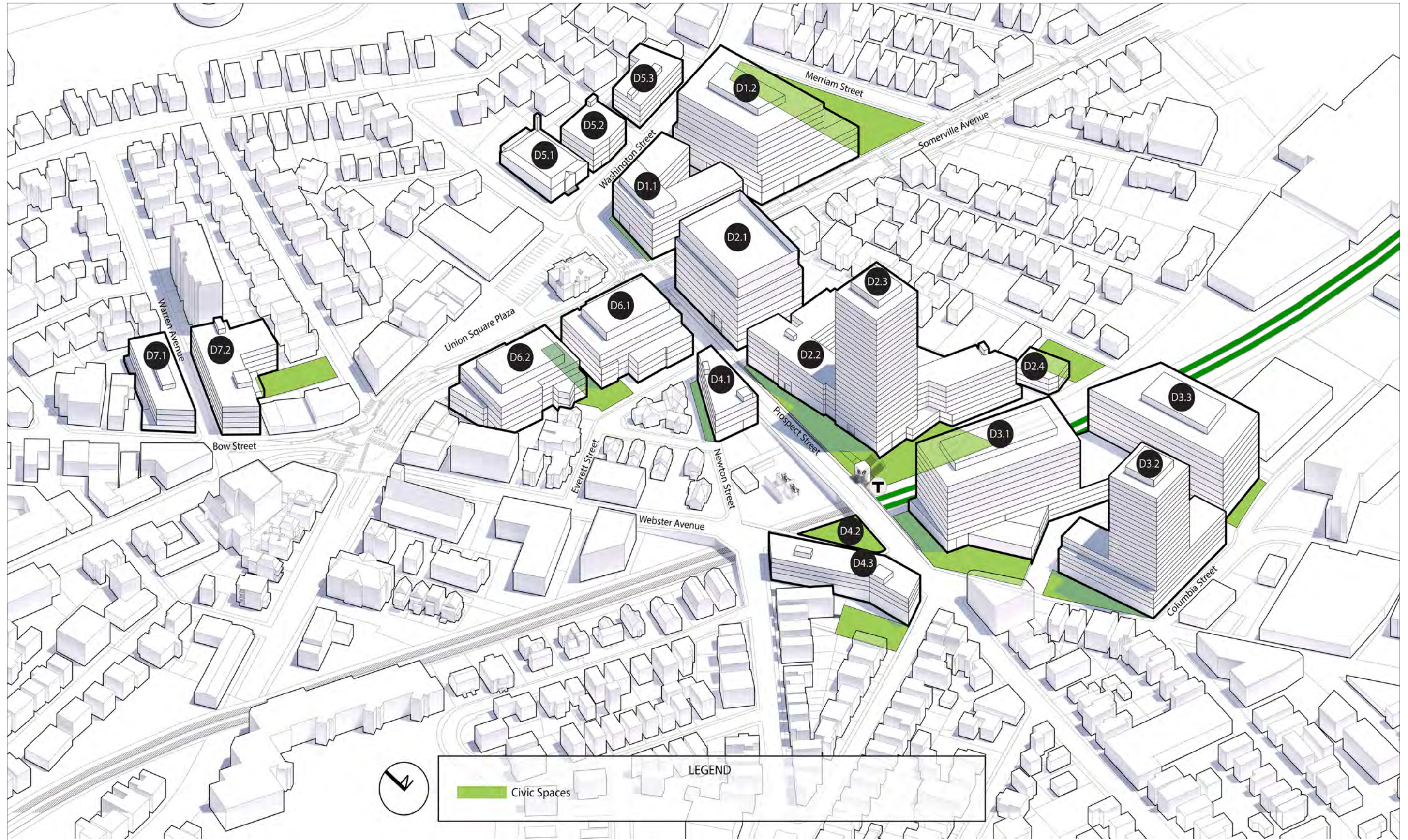


FIGURE 6: CDP CIVIC SPACE PLAN



SOMERVISION OBJECTIVES

CREATE AN EMPLOYMENT CENTER

While once a center of commerce (early 1900's), commercial development in Union Square has since been slow to occur due to a combination of factors. These range from poor transit connectivity, sub-standard infrastructure, and superior locations in the greater Boston area. The extension of the Green Line to Union Square is set to unlock the full potential of the area which boasts a highly educated workforce, 80% of which currently commutes out of Somerville for work. The redevelopment capacity of approximately 2.4 million square feet, (seen in the project overview diagram) sets as its primary focus the provision of employment opportunities by prioritizing the delivery of commercial uses. Allocating more than 60% of the planned area or 1.47M square feet to lab, office, retail, lodging, arts and other commercial service uses serves multiple purposes and provides a range of job opportunities. First, it provides opportunities for permanence for the innovators, entrepreneurs, and creative individuals that have become a defining characteristic of Union Square. The Union Square Zoning took the directive of *SomerVision*, to foster a creative economy, together with the ambitions of the Neighborhood Plan, to establish an Arts and Creative Enterprise (ACE) use category, a step further. Beyond creating a use type that could exist by-right, the ordinance requires that five percent of all commercial space created within the project support ACE users. As the greater area continues to evolve as an urban employment center, these area designations will ensure the creative economy continues to thrive.

Second, the prioritization of commercial space provides an abundance of opportunities for regional employers both large and small who are unable to find sufficient space for their operations. Somerville's favorable demographics and location paired with the supply of new space at a competitive rental rate will serve to attract and retain the businesses needed for fiscal self-sufficiency.

Similarly, the expansion provides much needed space for existing businesses that are uniquely positioned to benefit from increased commerce in the area. The synergistic nature of the overlapping uses that will share the Square will provide opportunities for existing businesses to grow and expand their footprint, evolving the square into an 18-hour urban commercial center.

In combination, the investment in commercial space will perpetuate opportunities for growth, resulting in a resilient and diverse economy that leverages the benefits that new access to transit provides. Across all commercial occupants, both those present and those to come, the objective of the revitalization remains the same: to provide opportunities for business to start, to grow, and to stay in Union Square.

NEW HOUSING WITH PERMANENTLY AFFORDABLE UNITS

The balance of the development capacity (39%) is used to deliver much needed new housing to Union Square. In likeness to neighboring communities, the desirability of the area paired with scarcity of land on which to develop has created enormous

pressure on the existing housing supply, directly impacting housing affordability. The development will address this prevailing shortage by adding to the existing housing stock, in service of both existing and future residents through market rate and permanently affordable units. Consistent with the objectives of the Neighborhood Plan, Somerville's inclusionary housing policy was expanded in 2016 to ensure that 20% of all housing provided will be permanently affordable. This policy expansion, designed to address affordability across a range of income brackets, will yield 180 to 200 new affordable units across three income tiers. Further, 15% of these affordable units will be 3-bedroom, deepening the City's commitment to families who desire to call Somerville, home — a key objective of Mayor Curtatone's Sustainable Neighborhoods Initiative.

PUBLICLY ACCESSIBLE OPEN SPACE

The combination of civic and open spaces contributing to public realm improvements achieve 25% of the total planned area. The more than 3.5 acres of publicly accessible open space are strategically distributed across the parcels and are set to support a wide range of programming in response to the needs of a diverse community. Nowhere is this direct response to need more evident

than the siting of the 27,000 SF Neighborhood Park, where the contextual analysis undertaken during this application highlighted a previously overlooked opportunity to serve an underserved part of the neighborhood. The approach to civic space is expanded in future detail in a later section of this document.

NEW TRIPS VIA TRANSIT, BIKE OR WALKING

The extension of the Green Line to Union Square will serve as the catalyst for this transformative project and stands to further promote walkability by reducing the prevailing reliance on personal vehicles. Streetscape improvements, including generous sidewalks, will also increase mobility. Integrating bike lanes onto the sidewalk along Somerville Avenue will increase safety and transit efficiency by distancing the mode away from the vehicle. Integrating the vertical projects with the public realm, street-level active uses will define the street wall, serving to enliven the expanded, pedestrian-friendly paths created throughout the project. Generous in space and public utility, these paths will serve the pedestrian first—providing ease of access to transit, to consumer experiences, and to places of employment—all in Union Square.

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NATURE OF APPLICATION

CITY POLICY CONSISTENCY REVIEW

The Coordinated Development Plan described herein is consistent with the City and community's goals and policies that are identified in *SomerVision* and the *Union Square Neighborhood Plan*, demonstrating US2's shared vision with the community for the revitalization of Union Square.

This section reviews the Coordinated Development Plan in the context of its consistency with and contribution towards policies established by *SomerVision* (2012) and recommendations reflected in the approved *Union Square Neighborhood Plan* (2016). Importantly, the more recent adoption of the Union Square Zoning in June 2017 codified many of the City policies to which the Union Square CDP

must comply and which was addressed in the Zoning Review section of this document.

The policies described below were direct citations from the *Union Square Neighborhood Plan*, including that document's references to *SomerVision* policies. The policies listed are comprehensive and cover all of the key areas of *SomerVision*, including Economic Development, Equity, Public Realm, Housing, Development and Mobility. Only the policies and recommendations that were relevant to the Union Square Revitalization development sites outlined in the Neighborhood Plan were included in what follows.

TABLE 2: ECONOMIC DEVELOPMENT POLICIES

SOMERVISION	NEIGHBORHOOD PLAN	COORDINATED DEVELOPMENT PLAN
<p>Setting new economic targets</p>	<p>Develop an innovation ecosystem</p>	<p>The CDP prioritizes commercial development. At least 60% of the development square footage or 1.4 million square feet being developed as commercial space. This includes more than 1.1 million square feet of office or lab space across five different parcels. The master planning process involved extensive test-fitting to ensure that the development sites could accommodate the anticipated space and dimensional needs of future office and lab tenants while also conforming to buildout standards under the SZO.</p>
<p>A.V.C. Infill development should contribute to the fiscal health of the City.</p>	<p>Actively work to attract office and lab tenants from the life sciences, biotech, financial services, and technology fields to Union Square and Boynton Yards.</p>	
<p>B.I.A. Utilize land use planning and zoning to increase the commercial tax base.</p>	<p>Increase the supply of commercial office and lab space in the Union Square plan area.</p>	
<p>New urban employment center</p>	<p>Actively pursue and incentivize at least one anchor institution to locate in the Union Square plan area.</p>	
<p>B.II.A. Promote job creation with a goal of reaching a 1:2 ratio between jobs and resident workforce in Somerville within the next 20 years.</p>	<p>Support the development of place based infrastructure needed by high tech companies (energy, utilities, broadband, transportation options, etc.)</p>	<p>The mix of uses, sizes of buildings and floorplates as well as their relatively broad distribution across the development area, are well-suited to attracting and addressing the varying needs of the users of an ‘innovation ecosystem’ and will help to lay the groundwork for the “economic gardening” described in the Neighborhood Plan. Yet, the sites are sufficiently close to enable clustering.</p>
<p>B.II.B. Promote growth in strategically targeted economic centers.</p>	<p>Facilitate the creation of non-traditional commercial spaces that are desirable to a variety of firms in different stages of their development.</p>	
<p>A.III.A. The City should establish policies, regulations and fees for small neighborhood businesses that are fair, clear, and designed to encourage entrepreneurship.</p>	<p>Practice economic gardening</p>	
<p>B.III.D. The City should support the development and retention of incubator, entry level and mid-level business space.</p>	<p>Expand business development and technical assistance resources toward attracting and supporting Stage 2 businesses.</p>	<p>US2 intends to pursue life sciences, technology and other office and lab users to occupy the commercial spaces in the development and is specifically targeting life sciences users for D2.1.</p>
		<p>In an effort to stimulate the local economy, US2 opened Workbar Union, a coworking center in the heart of Union Square that serves over 100 members.</p>
		<p>US2 worked with the D5.1 owners to attract Right Hand Robotics, a Greentown Labs Alumnus, to occupy the former post office on an interim basis and add 30 jobs to the square.</p>

SOMERVISION**The Arts & Creative Economy**

C.I.A. The City should foster a creative economy.

C.I.B. The City and its community arts partners should sustain and expand Somerville's prominence in the arts.

C.II.A. The City should use zoning and public policy to foster space for a creative economy, promote live/work spaces, and retain affordable artist work spaces.

Local food and ethnic grocers

NEIGHBORHOOD PLAN**Support collaborative workspaces**

Establish an Arts & Creative Enterprise use category in the Ordinance that permits these new types of workplaces by-right in the Union Square plan area.

Establish an Office use category in the Ordinance that permits co-working uses in addition to office, research and development laboratory-by-right in the Union Square plan area.

Space = Work

Permit uses from the Arts & Creative Economy by-right within the Union Square plan area.

Require 5% of commercial floor space to be set aside in new development for Arts & Creative Enterprise uses.

Consider allowing required floor space for Arts & Creative Economy Uses to be consolidated and relocated from individual 'sending sites' to one or more 'receiving sites.'

COORDINATED DEVELOPMENT PLAN

5% of the commercial area will be Arts & Creative Enterprise (ACE) uses. Such uses may include artisan production, arts sales & service, arts instruction, live/work space, design services and shared workspaces.

As the design for individual buildings and civic spaces unfolds, opportunities for incorporating arts into the designs of the public realm will be pursued.

The CDP takes advantage of the opportunity to use the offsite compliance in the zoning to create ACE clusters.

TABLE 3: EQUITY POLICIES

SOMERVISION	NEIGHBORHOOD PLAN	COORDINATED DEVELOPMENT PLAN
<p>Mitigating direct displacement E.I.B. The City should promote policies that protect tenant and landlord rights and clarify landlord and tenant responsibilities.</p>	<p>Mitigate direct displacement Provide relocation assistance for existing businesses on the D Parcels. Consider an anti-displacement program for qualifying renter households with children.</p>	<p>Existing businesses located on the redevelopment parcels are eligible to receive relocation assistance in accordance with the Revitalization Plan. Eight of these businesses, which are permitted uses within the new zoning and including Ricky’s Flower Market, will be offered an opportunity to relocate their businesses within the redevelopment.</p> <p>20% of all housing created in the development will be permanently affordable and an estimated \$6.6 million in housing linkage payments will offer additional resources to address housing displacement.</p>
<p>Increase economic mobility B.IV.A. The City should pursue the creation of a network of workforce development programs that train residents for jobs today and in the future.</p>	<p>Helping to raise real incomes Continue to advocate for the Job Creation and Retention Trust home rule petition with the State Legislature.</p>	<p>5,300 new jobs will be created as part of the development across a range of different skill sets that will provide opportunity and economic mobility. Over 4,000 construction jobs will result from the development. The community benefits program includes jobs linkage payments of at least \$1.9 million that will fund workforce development programs. US2 has committed to giving first priority to qualified local residents and then qualified veterans for construction jobs.</p>
<p>Supporting small businesses B.III.B. The City should continue efforts around streamlining to facilitate the process of opening a business in Somerville, while ensuring a transparent public review process.</p>	<p>Level the playing field Increase the supply of retail space, including ‘off main street’ and second floor spaces in the Union Square plan area. Limit the storefront width of first floor uses over 10,000 SF in floor area in the Ordinance so that they are lined by other active establishments.</p>	<p>Approximately 140,000 square feet of active ground floor/retail uses as well as approximately 74,000 square feet of Arts and Creative Enterprise uses will be created as part of this plan.</p> <p>The Union Square zoning requires that spaces over 10,000 square feet receive a special permit through the approval process. Further, the MLDA precludes retail uses exceeding 20,000 square feet.</p>

TABLE 4: HOUSING POLICIES

SOMERVISION	NEIGHBORHOOD PLAN	COORDINATED DEVELOPMENT PLAN
<p>Setting new housing goals E.II.A. The City should facilitate the development of additional housing in close proximity to transit stations.</p>	<p>Expand Inclusionary Zoning Increase the Inclusionary Zoning percentage to 20% for new development within 1/4 mile of the future Union Square station.</p>	<p>The development will create 900 to 1,000 new housing units within a ¼ mile of the MBTA Green Line station.</p>
<p>E.I.C. The City should encourage the development and preservation of rental housing throughout Somerville to maintain a balance between rental and home-ownership units tied to the Housing Needs Assessment.</p>	<p>Expand the scope of Inclusionary Zoning to produce units priced for moderate and middle income households (i.e. workforce housing).</p>	<p>20% of the proposed housing or 180-200 permanently affordable units will be provided across the three income tiers designated in the affordable housing ordinance.</p>
<p>Affordable housing C.III.A. The City should encourage preservation of affordability especially in the vicinity of transit stations.</p>	<p>Consider giving preference to Union Square renters that are severely cost-burdened when selecting a household for City-managed inclusionary housing units.</p>	<p>All of the affordable units will be provided on-site.</p>
<p>E.I.A. The City should adopt programs and regulations to increase affordable housing, in part through additional housing creation.</p>	<p>Prioritize on-site affordable dwelling units (ADUs) Prioritize the construction of on-site inclusionary housing units in the SZO.</p>	<p>15% of all affordable housing units will be 3 bedrooms to accommodate larger households and families.</p>
<p>Housing for families E.IV.A. The City should undertake efforts to ensure that a range of housing options and services exist so that families and individuals who are homeless or at risk of homelessness can be housed rapidly and successfully.</p>	<p>Consider allowing inclusionary housing to be provided off-site by Special Permit in the SZO.</p>	<p>The community benefits program includes approximately \$6.6 million in housing linkage payments that will address additional housing needs in the area.</p>
	<p>Consider allowing a payment-in-lieu of providing inclusionary units by Special Permit in the SZO.</p>	
	<p>Produce family-oriented housing Require the creation of multi-bedroom affordable units in larger redevelopment projects through Inclusionary Zoning.</p>	

TABLE 5: PUBLIC REALM POLICIES

SOMERVISION	NEIGHBORHOOD PLAN	COORDINATED DEVELOPMENT PLAN
<p>Creating public space B.V.B.3 Create a great civic space in Union Square.</p> <p>D.III.B. The City should ensure that every transportation project results in improved pedestrian access.</p>	<p>Regulate for new spaces Establish Civic Space Types in the SZO with different design standards for each different space type.</p> <p>Establish a 15% usable open space requirement for the D Parcels in the SZO.</p> <p>Preserve the Concord Avenue Community Space in the D4 Parcel.</p> <p>Get more from our streets Redesign the major streets of Union Square using a pedestrian-first modal hierarchy to rebalance their design for all users as complete streets.</p>	<p>Consistent with the vision of creating more public space and a great civic space in Union Square, the plan provides for the 25% open space, public realm and civic space requirement by the Union Square Zoning and exceeds the Neighborhood Plan target. This includes 17.5% high quality civic spaces which total over 110,000 square feet. These civic spaces include a range of civic space types: a 27,000 square foot neighborhood park, a significant plaza near the MBTA station, pocket parks, pocket plazas, community gardens, plazas and greens.</p> <p>The Concord Avenue Community Space on D4.3 is preserved as part of this CDP.</p> <p>The City is pursuing renovation of the streetscape and transportation networks to prioritize the pedestrian as part of the overall Union Square infrastructure program. The buildings, public realm and civic spaces designed with the CDP will be designed to work in concert with those improvements.</p>
<p>Designing public spaces C.VI.A. The City should partner with local neighborhood organizations on the design, programming and increased volunteer participation in public parks and open spaces.</p>	<p>Public involvement in space design Require Design Review for any new public space built as a result of redevelopment.</p> <p>Establish a cost effective, public engagement methodology for the design and programming of public spaces focused on placemaking.</p> <p>Identify the programmatic requirements, activities, uses and events that each public space will need to accommodate during planning and design phases.</p>	<p>The Union Square Zoning ordinance requires that all civic spaces in the CDP be subject to a Design & Site Plan Review process which will include neighborhood meetings and a hearing process.</p> <p>Wherever possible, US2 deferred the selection of civic space type for individual civic spaces so the community could contribute to the selection at design and site plan review.</p> <p>US2 will comply with all public engagement requirements in the design and programming of the civic spaces.</p> <p>The US2 CDP Neighborhood Meeting included an exercise to gain feedback about the types and locations of civic spaces proposed within the plan. These perspectives were considered in the development of the civic space plan herein.</p> <p>Based on community input, a second community meeting was held to discuss neighborhood park alternatives.</p>

SOMERVISION**Improving the pedestrian realm**

D.III.B. The City should ensure that every transportation project results in improved pedestrian access.

D.IV.B. The City should continuously strive to increase safety for all users on its roadways.

NEIGHBORHOOD PLAN**Enhance the pedestrian experience**

Establish street design standards in the SZO for redevelopment areas.

Establish block size standards in the SZO for redevelopment areas.

Establish Pedestrian Street standards in the SZO for street segments where active street life is desired.

Add art to the public realm

Include public art installations in the new public spaces created in Union Square.

Collaborate with Eversource to screen the electric distribution substation on Prospect Street with public art.

COORDINATED DEVELOPMENT PLAN

There are several examples where this plan implements pedestrian-friendly features including the creation of new thoroughfares, wider sidewalks and new civic spaces.

Connectivity between civic spaces was also an important planning consideration. D1, D2, D6 and D7 all propose to establish more walkable blocks through the introduction of pedestrian passageways or alleys.

D1 will be split into D1.1 to the west and D1.2 to the east by a proposed new alley connecting Washington Street to Somerville Avenue allowing for new pedestrian connections.

D2 provides critical pedestrian access to/ from the GLX station.

D6 will be split into D6.1 to the east and D6.2 to the west by a proposed through block plaza from Somerville Avenue, at Union Square Plaza, to Everett Street.

While the Neighborhood Plan included a narrow passageway between D6.1 and D6.2 and a small plaza located along Prospect Street, shifting the open space off of the corner and widening the through block connection allowed more sunlight and air to penetrate the D6 blocks, enabled the desire lines and connected more directly to the D4.1 linear pocket park.

In response to feedback from the CDP neighborhood meeting, pedestrian connections from the D7.2 civic space to the adjacent senior and disabled housing building and to Bow Street were incorporated into the plan.

TABLE 6: DEVELOPMENT POLICIES

SOMERVISION	NEIGHBORHOOD PLAN	COORDINATED DEVELOPMENT PLAN
<p>Human scale design standards A.II.A. The City should establish policies and regulations that support neighborhood development with a strong relationship to transit.</p>	<p>Context sensitive infill Increase the required side setbacks for properties directly abutting a designated Local Historic District.</p> <p>Consider contextual front setbacks for properties directly abutting a Local Historic District.</p> <p>Introducing new building types Establish building type standards in the SZO based on the objectives of this plan.</p> <p>Require development to be consistent with <i>SomerVision</i> and the <i>Union Square Neighborhood Plan</i>.</p> <p>Context Sensitive Façade Design Establish minimum design standards for facade articulation in the SZO.</p> <p>Ensure that the full diversity of architecture firms on the US2 development team are used for the D Parcels and beyond.</p>	<p>The master planning effort for the D Blocks began with the Neighborhood Plan objectives and in most cases, were able to maintain consistency.</p> <p>In terms of context, the Blocks that were treated with the greatest sensitivity to the Local Historic District and the surrounding buildings were D1.1, D2.1, D2.2, D5, D6 and D7, which all have important relationships to the core of Union Square. The context for each parcel is more fully described in the Context Analysis, but in each of the above cases, the building heights proposed conform to the Union Square Zoning.</p> <p>US2 plans to use different design architects for each building project as promised during our selection as master developer.</p>
<p>Regulating development A.V.A. Zoning regulations in Somerville should provide clear and consistent direction including design standards and guidelines for contextual infill development.</p>	<p>Rezone Union and Boynton Adjust existing districts as needed to reflect the recommendations of the <i>Union Square Neighborhood Plan</i>.</p> <p>Establish a Commercial Core Zoning District for properties where only commercial development is desired.</p> <p>Create a development review process to facilitate the coordinated redevelopment of the seven D Parcels.</p>	<p>New Union Square zoning was passed by the Board of Alderman in June 2017 that reflected the goals of the Neighborhood Plan and also established this Coordinated Development Plan review process.</p> <p>Over 60% of the development will be commercial uses and the Union Square zoning established a core of commercial uses that border Union Square plaza.</p>
<p>Strengthen the image of the City B.I.D. The City should expand the local economy by leveraging the arts and historic and cultural tourism.</p>	<p>Create an iconic skyline Require large redevelopment projects to submit context analysis and skyline view studies for development review.</p> <p>Ensure Design Review considers how tall buildings provide for a variety in detail and texture to the skyline.</p>	<p>This CDP application includes a context analysis and skyline view, consistent with the objectives of the Neighborhood Plan.</p> <p>The tallest buildings are located near the GLX station and provide a skyline presence for Union Square in the area.</p> <p>The heights and bulk of the buildings are varied throughout the D Blocks to ensure a diversity of scale and height.</p>

SOMERVISION**Sustainable design**

C.VIII.A. The City should meet energy reduction goals by undertaking or requiring efficiency and renewal projects.

C.VIII.C. The City and property owners should assist in reducing the urban heat island effect through the use of efficient roofing, reflection and shading choices.

D.V.B. The City should pursue the best available technologies when revisiting parking in commercial zones.

Updating infrastructure

C.IX.A. The City should identify funding to upgrade utilities in key economic development areas.

C.IX.B. The City should strongly encourage utility companies to provide services in a way that improves the urban environment and aesthetics, while meeting future needs.

C.IX.C. The City should prepare for the desired level of business and residential development in Transformational areas, in terms of power and connectivity capabilities.

D.VIII.A. The City should provide a stormwater and system that is able to accommodate extreme events without flooding or causing combined overflows (CSOs).

D.VIII.B. The City should create incentives and zoning regulations to infiltrate stormwater and to limit stormwater runoff from entering the wastewater system.

NEIGHBORHOOD PLAN**Sustainable design**

Adopt a performance-based landscape requirement like the Seattle Green Area Ratio in the Somerville Zoning Ordinance.

Require new buildings to be environmentally responsible and resource efficient.

Permit Green Roofs and Renewable Energy Production Systems by right in the Somerville Zoning Ordinance.

Require large parking structures to be Electric Vehicle ready.

Fixing the sewers

Secure funding for the Capital Improvements necessary to improve the stormwater infrastructure in the Union Square Plan Area.

Lessening stormwater's impact

Adopt a Stormwater Management Ordinance in the City's Municipal Code as replacement for Permeable Surface requirements in zoning.

Encourage depaving activities that reduce the amount of impermeable surfaces on residential lots, municipally owned properties, and public spaces.

The project will comply with the city's requirement to eliminate or reduce to the maximum extent practical or economically viable, any stormwater discharges to the public way or the city's sewer and drain system, particularly during rain events.

COORDINATED DEVELOPMENT PLAN

All buildings greater than 50,000 SF (95%) will be LEED Gold certifiable and all buildings less than 50,000 SF will be LEED Silver certifiable.

The City's Sustainability & Resiliency Questionnaire and goals will be considered as each building proceeds through the Site Plan and Design Review process.

As part of the community benefits program, US2 is making an investment of at least \$4.6 million in cash contribution or in-kind improvements to improve infrastructure and public realm.

The project will comply with inflow and infiltration policies that mitigate the project's wastewater contribution to the city's sanitary system by completing projects or providing funding to remove four times that volume of stormwater from the city's combined system.

US2 collaborated with the City to procure the \$16 million of MassWorks infrastructure grants that are partially being used to fund stormwater improvements beneath Somerville Avenue.

TABLE 7: MOBILITY POLICIES

SOMERVISION	NEIGHBORHOOD PLAN	COORDINATED DEVELOPMENT PLAN
<p>Complete the streets for all users D.II.A. The City should implement Transportation policies and programs that reduce automobile use.</p> <p>D.III.B. The City should ensure that every transportation project results in improved pedestrian access.</p> <p>D.III.E. The City should improve on-street bike infrastructure, prioritizing bike lanes over sharrows.</p> <p>D.IV.A. The City should efficiently manage traffic flow to reduce pollution and congestion.</p>	<p>Establish mode priorities Prioritize pedestrians-first modal hierarchy for all transportation projects and programs, from scoping to maintenance.</p> <p>A Green Light for 2-Way Streets Convert Somerville Avenue, Prospect Street, and Webster Street to two-way traffic flow.</p> <p>Embrace Protected Bikeways Prioritize the construction of protected bikeways on major streets when feasible within the right-of-way.</p> <p>Install bike traffic lights for cyclists at appropriate intersections.</p> <p>Implement Bicycle Boulevards in neighborhoods where appropriate.</p> <p>Establish a formal process for residents to establish a Neighborway, Playborhood, or PlayStreet.</p>	<p>US2 collaborated with the City to procure the \$16 million of MassWorks infrastructure grants that are partially being used to convert Prospect Street and Webster to two-way.</p> <p>US2 will be expanding sidewalks to improve the pedestrian experience throughout the square.</p> <p>US2 will be installing significant bike parking facilities throughout the development.</p>
<p>Embrace transit-orientation D.II.A. The City should implement Transportation policies and programs that reduce automobile use.</p> <p>D.V.C. The City should continue to reevaluate parking policy to reflect the needs of residents, visitors and businesses.</p> <p>Adopt smart parking policy</p>	<p>Implement mobility management Establish requirements for new commercial and multi-tenant residential development to implement Mobility Management policies and programs in the SZO.</p> <p>Create a Transportation Management Association for Union Square and Boynton Yards to efficiently manage and market mobility programs and services for members.</p> <p>Adopt transit-oriented parking standards Adopt new parking standards in the SZO for transit oriented development in the Union Square plan area.</p> <p>Consider establishing parking maximums instead of conventional minimum parking standards for transit-oriented development in the Union Square plan area.</p>	<p>This CDP includes a Mobility Management Plan, see Appendix 4.</p> <p>Shared parking approaches are being implemented.</p>

SOMERVISION	NEIGHBORHOOD PLAN	COORDINATED DEVELOPMENT PLAN
<p>Manage Parking as a Resource B.VII.B. The City should develop a parking policy that promotes commercial reuse and infill development.</p>	<p>Utilize shared parking Permit shared parking between uses and buildings in the Union Square plan area.</p>	<p>The parking garages proposed on D1, D2 and D3 will be shared parking facilities.</p>
<p>Establish new connections</p>	<p>Deliver the Green Line Extension Continue to work collaboratively with MassDOT and the MBTA to develop an appropriate solution to the current cost overruns.</p> <p>Invest in Bike Share Require development projects to provide and maintain service agreements for new Hubway stations strategically located throughout the Union Square plan area.</p> <p>Locate a Hubway station at or across the street from the Union Square station.</p> <p>Invite Worker Shuttles Encourage private services such as Bridj to provide service to Union Square from other locations in the region.</p> <p>Encourage employers to operate shuttle services to employment locations outside of a 1/4 mile from the future Union Square Station.</p>	<p>US2 continues to work with the City and the MBTA GLX team to ensure GLX completion. In an effort to close the budget gap, US2 agreed to privately fund critical MBTA station facilities including The Ride Drop Off, pedestrian access to the station from Prospect Street, and an employee lounge and restroom.</p> <p>US2's community benefits investments include \$5.5 million to offset the City of Somerville's GLX commitment.</p>

OPEN SPACE & RECREATION PLAN CONSISTENCY

Two of the four goals of the State Comprehensive Outdoor Recreation Plan are relevant to the D Blocks in Union Square, those being investing in recreation and conservation areas that are close to home for short visits and investing in racially, economically, and age diverse neighborhoods. Additionally, from the recently completed Somerville's *Open Space and Recreation Plan 2016-2023*, we understand that

goals for future open space in Somerville include an increase in green open space, spaces for seniors, and community gardens. Some of the early input we received directly from residents in the area relates to specific desires and opinions for aspects such as plantings, character and programming. We look forward to furthering discussions around specific landscape uses and design characteristics of the open space during the Design and Site Plan review stage.

SPECIAL PERMITS AND/OR VARIANCES REQUESTED

This Application requests the following Special Permits, Variances, and/or Waivers from the Somerville Planning Board:

1. Approval of a Coordinated Development Special Permit (“CDSP”) for development within the Union Square Overlay District (“USOD”) pursuant to Section 5.8 and Section 6.8.5.C (formerly known as Section 6.7.5.C) of the Somerville Zoning Ordinance (the “Ordinance”).
2. Approval of a Special Permit pursuant to Section 6.8.11.F (formerly known as Section 6.7.11.F) of the Ordinance, permitting Residential use as a principal use on Blocks D2, D3, D4, D5 and D7 as shown on Figure 3 Development Site Map.
3. Approval of a Special Permit pursuant to Section 6.8.6.A.3 (formerly known as Section 6.7.6.A.3) of the Ordinance, permitting up to ten percent (10%) or approximately 10,885 SF of the required Civic Space to be satisfied by a payment in lieu, and establishment of a fee schedule for such payment in lieu pursuant to the requirements of Section 6.8.6.A.4 (formerly known as Section 6.7.6.A.4).
4. Approval of a Special Permit pursuant to Section 6.8.6.E (formerly known as Section 6.7.6.E) of the Ordinance permitting the Arts & Creative Enterprise space requirement set forth in Section

6.8.6.B.3 (formerly known as Section 6.7.6.B.3) of the Ordinance to be satisfied through off-site compliance (enabling the Applicant to have the flexibility to provide higher quality and more useful commercial space for Arts & Creative Enterprise uses by consolidating the requirements at one or more larger Receiving Sites).

5. Waiver of the requirement under Section 5.1.2.2 of the Ordinance that the special permit application be accompanied by a plot plan certified by a land surveyor indicating total land area and area boundaries, angles and dimensions of the site and a north arrow.
6. Waiver of the requirement under Section 5.1.2.7 of the Ordinance that the special permit application be accompanied by a plan showing existing and proposed contour elevations in two foot (2’) increments

As permitted pursuant to Section 6.8.5.D.5(a)(i)(a) (formerly known as Section 6.7.5.D.5(a)(i)(a)) of the Ordinance, additional Special Permits, Variances or Waivers for individual Lots, Civic Spaces and/or Buildings may be requested as part of the Design and Site Plan Review applications to be filed for such Lots, Civic Spaces and/or Buildings.

CIVIC SPACE

PROPOSAL OVERVIEW

The civic space and public realm improvements that are included in this Coordinated Development proposal include over 157,000 square feet of new public open spaces that will provide existing as well as new residents, workers and visitors with a new Union Square public realm that adds much-needed new green space, enhances connectivity and addresses a multitude of community desires (play, sit, rest, read, exercise, gather, perform, watch, grow, move, discover and more). The spaces will include a variety of different space types and sizes. Central to the overall plan is a 27,000 square foot neighborhood park and a new plaza that creates a point of entry and access to the new transit station. This network of new civic space improvements will contribute to a Union Square that is a more livable place to live, work, play and raise a family.

The neighborhood planning process confirmed the community's desire for new, publicly accessible open spaces in Union Square, a longstanding goal of *SomerVision*. Upon its completion, the Neighborhood Plan introduced new ambitions for the area dedicated to open space and its implementation on the D Blocks, those new ambitions were then increased by over 60% with the adoption of the Union Square Zoning. Beyond solely the quantity of space, quality of space became central to the discussion regarding how to make sure the objectives of *SomerVision* were realized.

The opportunity to introduce new, quality civic space brings with it the great responsibility to be cognizant of the range of needs for these spaces within the existing geographical context in which they will be provided. To this end, the Civic Space Study included as "Appendix 3" includes an extensive analysis of existing conditions that serves to catalogue current opportunities afforded to those in the vicinity of Union Square. Park type, size, location, and relative accessibility are further understood through a demographic analysis, while level of service to environmental justice populations concurrently highlights opportunities to better serve, addressing matters of social equity directly.

These studies together, paired with feedback from city departments and sustained dialogue from community members throughout the planning process, comprise a needs assessment that has served to inform our direction for the master plan of high quality civic spaces depicted on the pages that follow.

Through the Coordinated Development Plan process, the scale and locations of particular civic spaces will be defined. At the subsequent Design and Site Plan review stage, the process will include public review and discussion of the design, program and character of each individual civic space proposed within the development.



“Create and program a network of vibrant public open spaces and shared use paths throughout the city that are multi-purpose, promote healthy living, and reflect changing recreational interests and cultural opportunities.”

—SOMERVISION

CIVIC SPACE TYPES GLOSSARY

The Mayor's Office of Strategic Planning & Community Development recently developed a new system for planning and regulating the creation of public spaces within Somerville. To create this new system, planners identified the characteristics that make spaces different from one another and then built a typological menu of spaces that meet different community needs. Additionally, the term "civic space" was chosen to name the system because it identifies the important role that public spaces play in community building. Together, these civic space types accommodate different needs in different ways, which provides the City with a flexible system that not only ensures the high quality design of each type, but also permits easy calibration to produce the appropriate types of spaces in different areas of the city to meet different community needs.

The Union Square Zoning requires that 25% of the net development site is improved as at least 70% civic space and up to 30% public realm improvements. The CDP civic space plan must include two or more civic spaces of differing types, sizes, and locations, including at least one Neighborhood Park of at least

27,000 SF and one Plaza. The required neighborhood park and plaza, as well as the balance of high quality civic spaces required to fulfill the objectives of zoning will all be developed to specific civic space design standards outlined in the adopted zoning.

In the Union Square Zoning, each civic space type has a unique set of design standards that guide certain qualities and parameters of the type, including the dimensions of the lot, the seating and tables to be provided, the quantity of tree planting and other planted surfaces, as well as the overall percentage perviousness of the site. Additionally, the design of each civic space will consider storm water management measures that are appropriate for the scale of the space and can reasonably be achieved given technical and financial requirements. Overall, the civic space requirements reflect the desire for permeable surfaces, substantial planting and significant tree canopy prioritized by the community. Many of these qualities were echoed by citizens who participated in the CDP community meetings. A summary of the nine unique civic space types permissible and their design intent follows.

CIVIC SPACE TYPES GLOSSARY

NEIGHBORHOOD PARK

Designed for active and passive recreation with features and facilities that support the immediate neighborhood. Local examples include Perry Park, Albion Street Park, Walnut Street Park and Ed Leathers Community Park.



ED LEATHERS COMMUNITY PARK, SOMERVILLE

POCKET PARK

Designed for passive recreation consisting primarily of vegetation and a place to sit outdoors. Local examples include Quincy Street Park and Stone Place Park.



STONE PLACE PARK, SOMERVILLE

GREEN

Designed for passive recreation with landscape consisting primarily of green space with lawns, planting beds, paths and trees. A nearby example is Winthrop Square in Cambridge.



WINTHROP SQUARE PARK, CAMBRIDGE

PLAZA

Designed for passive recreation, civic purposes, and commercial activities, with landscape consisting primarily of hardscape. They are located in areas of high pedestrian activity. Local examples include Statue Park Plaza and Union Square Plaza.



STATUE PLAZA, CAMBRIDGE

THROUGH BLOCK PLAZA

Designed for passive recreation and to provide a pedestrian connection between two thoroughfares on opposite sides of a block. Consists primarily of paving and a place to sit outdoors.



BETHESDA ROW, MARYLAND

POCKET PLAZA

Designed for passive recreation consisting primarily of paving and a place to sit outdoors. Local examples include the Bay Village Neighborhood Park and Temple Street Park.



PALEY PARK, NEW YORK CITY

PLAYGROUND

Designed primarily as a play area for children. They may be freestanding or incorporated as a subordinate feature of a neighborhood park. Local examples include Walnut Street Playground, Grimmons Park and Chuckie Harris Park.



ARGENZIANO PLAYGROUND, SOMERVILLE

DOG PARK

Designed for the active recreation of dogs and their owners. Dog parks may be freestanding or incorporated as a subordinate feature of a neighborhood park. A local example is the Nunziato Field Off Leash Recreational Area.



NUNZIATO FIELD REC AREA, SOMERVILLE

COMMUNITY GARDEN

Designed as individual garden plots available to residents for urban agriculture purposes, including storage facilities for necessary equipment. May be freestanding or a feature of a Neighborhood or Pocket Park. A local example is Albion Community Garden.



ALBION COMMUNITY GARDEN, SOMERVILLE

CIVIC SPACE STUDY OVERVIEW

As part of the CDP planning process, the city required the preparation of a Civic Space Study (CSS) (full detail is located in Appendix 3) in order to assess existing conditions and needs for civic space in Union Square. The intent of the analysis was to generate data on existing landscape amenities, the people who use civic spaces in the Union Square neighborhood and anticipate future needs as well as any local or city-wide civic space needs. The study acknowledges that the information is taken as a snapshot in time and is mindful of the evolution of conditions and the multitude of perspectives that need to be considered. With this in mind, the background provided by the CSS helped to inform the civic space plans for the revitalization of Union Square. During the Coordinated Development Plan process, the locations and sizes of particular civic spaces will be defined and at the Design and Site Plan Review stage, the public process will include a discussion of the design, program and character of each individual civic space proposed within the development.

This study focused on a defined area, identified by extending a ½ mile radius from each of the D Blocks (approximately a 10 minute walk). Existing conditions were assessed to provide important context for the plan and to identify areas of opportunity. The assessment contains an inventory of existing civic spaces, a walkshed analysis for each space type, as well as a review of the local demographics and environmental justice populations to help identify who the spaces served. The needs assessment portion of the study cataloged open space goals from other city processes, gained open space perspective via city department interviews, summarized the open space feedback from the CDP neighborhood meetings and outlined the findings from the existing conditions assessment. This work was then distilled into a series of conclusions that directly informed the CDP civic space approach that is outlined in greater detail in the pages that follow.

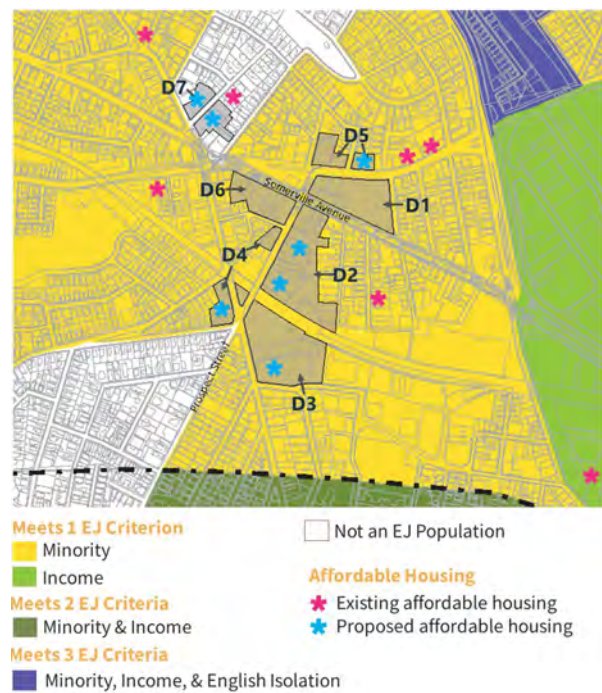
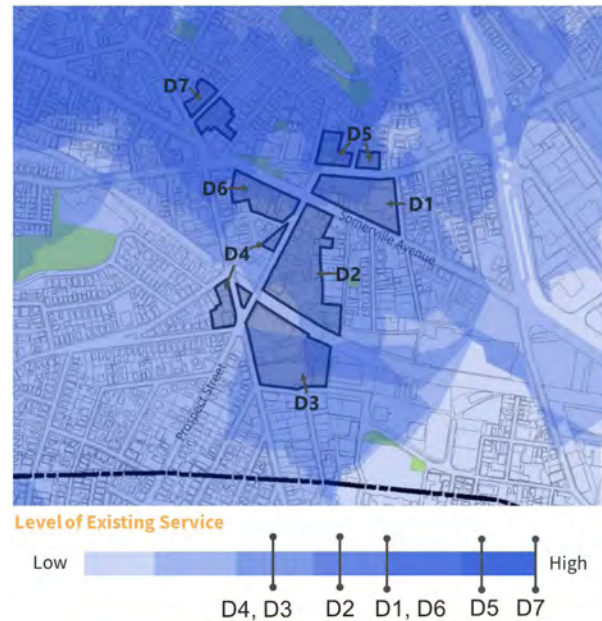
FIGURES 8-9: UNION SQUARE CIVIC SPACE STUDY AREA



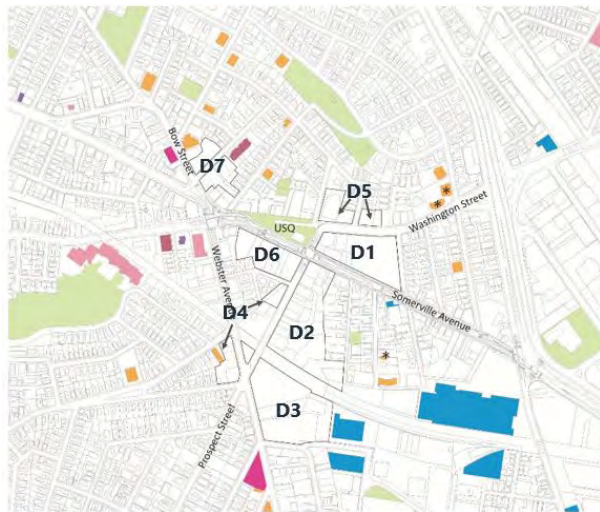
The existing conditions review inventoried 34 acres of existing open space within the study area comprised of 78.5% parks, 19.8% commons and 1.7% plazas. Closer inspection of the existing conditions noted that a majority of the existing spaces, 70% of locations and 62% of the area are located to the north and west of the D Blocks. Walkshed analyses were also performed on the six civic space types that were present in the study area. This analysis revealed that a majority of residents and workers in the study area can reasonably walk to one or more civic spaces and reinforced that the north central portion of the study area is best served by existing spaces. Walkshed analysis also identified D1, D2 and D4 as blocks that could fill neighborhood civic space gaps or provide higher levels of service.

In order to review another aspect of accessibility, Environmental Justice populations were examined within the study area based on 2010 Census data and the criteria provided by the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA). The EOEEA identifies criteria for vulnerable populations related to low income, minorities or English language isolation and seeks to promote the equitable distribution of environmental benefits. All of the D Blocks, with the exception of D7, fall within the environmental justice population areas. Further, the findings indicate that the populations that meet more than one of the three environmental justice populations are primarily located east of the D Blocks.

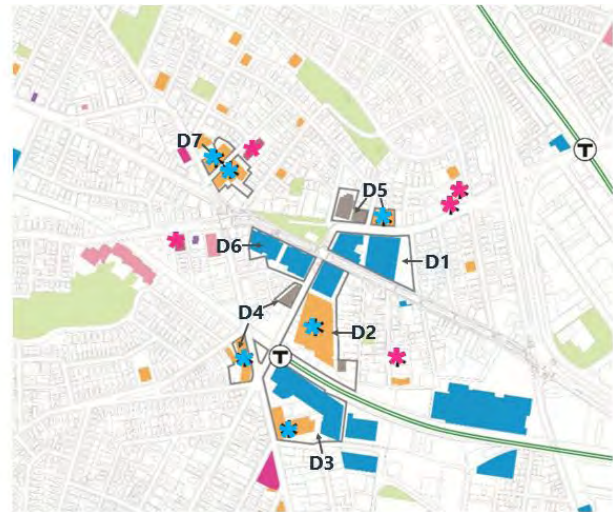
FIGURES 10-11: UNION SQUARE AREA WALKSHED AND ENVIRONMENTAL JUSTICE MAPS



FIGURES 12-13: PRESENT AND FUTURE CONDITIONS



- Large Employer
- Residential > 6 Units
- Schools
- ★ Existing affordable housing
- ★ Proposed market-rate and affordable housing



GLX is a catalyst for growth and D Block revitalization. 5,000 new workers, 1,000 new homes.

The needs assessment also considered the civic space needs of both existing and new populations of workers and residents as their use patterns will evolve with the neighborhood. With the introduction of the Green Line as a catalyst for growth, 5,000 new workers and 1,000 new homes will influence new centers of activity and planned civic spaces should anticipate and respond to that future. Moreover, a demographics review highlighted the need for spaces to serve a variety of ages and users, identifying opportunities to serve the needs of the largest population (ages 25-34) as well as a growing elderly population.

City department representatives from Parks and Recreation, Sustainability and Environment, Parks and Open Space were interviewed to get their feedback about the open space needs and priorities for the community. These conversations elevated the importance of considering open space's role in mitigating vulnerability to climate change, especially

related to urban heat island impacts and flood risk. Interviewees also cited the need for more open spaces and more multi-use open spaces throughout the city to serve a variety of users and uses. One use, the need for more athletic fields, was particularly identified as a pressing need. This resulted in an acknowledgment that the D Blocks can meet many civic space needs but are unable to respond to the need for athletic fields given their locations, their shape and the other economic development goals for the properties.

Community input was also important to understanding community needs and preferences and how they can guide the civic space planning. To that end, the following relevant community-driven planning processes and resulting reports were reviewed to understand the open space goals included therein: SomerVision, Union Square Neighborhood Plan, the Open Space and Recreation Plan and the Union Square Zoning. The detailed

results of this review are included in the CSS and the highlights of the open space goals include: creating multi-functional and multi-user spaces; supporting urban agriculture and community gardening; including sustainable features; focusing on pedestrian connectivity and experience; incorporating the arts and creativity; considering the needs of senior citizens; and ensuring that community input informs the civic space planning process.

In addition, US2 hosted two neighborhood meetings for the CDP and the team received many comments about open space, some of which coalesced, while others expressed differing views from each other. The first meeting on September 5, 2017, included over 140 community members and covered a wide array of project topics including open space. In general, there was a strong interest in open space and a fairly consistent desire for green planted spaces and “urban oasis” over hard spaces. There was also a lot of interest in sustainable measures and arts-directed spaces. The meeting also explored the connectivity of various spaces – both formal and informal.

Considerable discussion at the first meeting centered on the location of the neighborhood park. The original location suggested in the Neighborhood Plan was D4.3. At the request of community members during the zoning process, US2 considered D1 and D7 as alternative locations. Upon further analysis and consideration of a variety of factors, the D1 location emerged as the preferred location and was presented at the neighborhood meeting. D4.3 was only mentioned as a preference by one or two attendees; however, there was divided opinion as to whether D1.2 or D7.2 would be a better location for this neighborhood amenity.

Given the level of interest in the park location and at the encouragement of neighborhood residents, another meeting was hosted on October 18, 2017 to present the park alternatives analysis, provide additional detail about the proposed D1.2 location and discuss the ideas with community members.

The meeting was attended by over 50 people and the discussion was thoughtful and passionate. Several participants commented on the importance of adding new open space and doing it thoughtfully as well as ensuring that a broad group of residents could offer their input. During the discussion, there were divided views as to whether D1.2 or D7.2 was the best location. D7.2 advocates cited its solar orientation, location near existing neighborhood activity nodes and proximity to the senior housing building as clear advantages. Advocates of D1.2 highlighted its location in an underserved portion of the neighborhood, its location midway between the future MBTA stations and its proximity to affordable housing on Washington Street and Linden Street. More details about each of the neighborhood meetings are provided in Appendices 2 and 3.



The observations and findings from the CSS informed the approach to the civic space study included herein. Some of the highlights as to the manner in which the CSS influenced the civic space plan are as follows:

- The civic space plan responds to the important and detailed civic space zoning requirements including overall civic space area requirements, the need for a 27,000 square foot Neighborhood Park and Plaza and the defined design standards for the nine permitted civic space types (area, seating, tree count, green space, previous area, etc.).
- In order to address the breadth of users and use needs as well as the evolving use patterns in the neighborhood, six of the seven D Blocks include a civic space and the two main spaces, the D2 plaza and the D1.2 neighborhood park are centrally located to serve a breadth of users.
- Connectivity and linkages between civic spaces were a significant driver of the open space plan.
- The D1.2 neighborhood park was sited in order to address an open space inequity on the eastern portion of the neighborhood uncovered during the existing space inventory.
- For the group of residents that supported a more significant open space (ideally the neighborhood park) on D7.2, a 6,000 square foot open space was added on D7.2 and pathways to Bow Street and to the senior and young/disabled housing have been included to respond to the community interests.
- To address the stated need for community gardens, the D4.3 Concord Community Garden is being preserved.
- The D3.2 open space was relocated from the Windsor Place frontage to the Webster Street frontage to provide a better buffer from the existing residential neighborhood as requested by community members.
- In response to the expressed desire for significant community involvement in the type and character of each space, the development team has opted to defer the designation of the civic space type for civic space parcels that have type flexibility until the site plan review stage. This will give opportunity for the community, as well as specific building and streetscape design, to drive the design and character of the space. In addition, based on community feedback, sustainable design features and incorporation of arts and performance opportunities will be important themes as individual spaces are designed and programmed.

Additional details about the CSS findings and their influence on the open and civic space plan can be found in the conclusion section at the end of the CSS.

CIVIC SPACE PLAN

The proposed civic space plan creates a network of diverse civic spaces that can serve a multitude of users and support a range of different activities as envisioned in the Union Square Neighborhood Plan. The collection of civic spaces will serve existing residents, workers and visitors as well as new residents, workers and visitors that become part of the Union Square neighborhood as new transit, jobs and homes arrive.

The included ‘Proposed Civic Space Plan’ identifies the proposed location of civic spaces and, together with Table 8, provides a comprehensive overview of the composition of the more than 110,000 square feet of civic space carefully defined through the project. Among the highlights are a significant plaza that creates a moment of arrival for the new Green Line station and connects it to the neighborhood and a 27,000 square foot neighborhood park on the east side of D1 that will emerge as a new community

destination and anchor the east side of the neighborhood. These spaces are directly responsive to community-driven zoning requirements that ensure these critical spaces are part of the CDP. Delivered over time, the sum of the project’s unique and site specific civic spaces, will define a common thread throughout all the blocks, unifying and complementing the buildings by way of the public spaces between them.

The majority of civic spaces will receive their ‘type’ designation during individual Design and Site Plan Review, with the exception of the required identification of a Plaza and the Neighborhood Park. In order to ensure the spaces are responsive to community needs, the design and programming of each proposed civic space will be developed during the Design and Site Plan review process with multiple opportunities for public input.



“Union Square should have a greater number of public spaces strategically located throughout the neighborhood to create a denser network of parks, squares, playgrounds, gardens, farms, and pocket parks. Uses and activities in these spaces should match the needs of local residents. It is also important to ensure new spaces are created that fill in the gaps, resulting in a diverse network of public spaces throughout the neighborhood.”

—USQ Neighborhood Plan

FIGURE 14: PROPOSED CIVIC SPACE PLAN



TABLE 8: PROPOSED CIVIC SPACE BUILD OUT

MAP KEY	PARCEL / BLOCK	NET BLOCK AREA ¹	CIVIC SPACE			CIVIC SPACE TYPE
			SF	ACRES	% TOTAL	TYPE ALTERNATIVES ²
	D1	107,650	27,000	0.62	25%	
A	D1.1		-	-	-	
	D1.2		27,000	0.62	25%	Neighborhood Park
	D2	138,475	22,200	0.51	20%	
B	D2.1		-	-	-	
	D2.2-3		15,100	0.35	14%	Plaza
C	D2.4		7,100	0.16	7%	(2, 3, 6, 7, or 9)
	D3	171,775	27,900	0.64	26%	
D	D3.1		16,000	0.37	15%	(2, 3, 4, 6, 7, 8, or 9)
E	D3.2		8,200	0.19	8%	(2, 3, 4, 6, 7, or 9)
F	D3.3		3,700	0.08	3%	(2, 6, or 7)
	D4	47,354	15,900	0.37	15%	
G	D4.1		3,400	0.08	3%	(2, 6, or 7)
H	D4.2		6,000	0.14	6%	(2, 3, 6, 7, or 9)
I	D4.3		6,500	0.15	6%	(2, 3, 6, 7, or 9)
	D5	45,843	-	-	-	
	D5.1		-	-	-	
	D5.2		-	-	-	
	D5.3		-	-	-	
	D6	68,425	9,100	0.21	8%	
J	D6.1					
	D6.2		9,100	0.21	8%	(5)
	D7	49,855	6,500	0.15	6%	
K	D7.1		-	-	-	
	D7.2		6,500	0.15	6%	(2, 3, 6, 7, or 9)
TOTALS		629,377	108,600	2.49		

	SF	ACRES	% Net Block Area
Civic Space Direct	108,600	2.49	17.3%
Civic Space Fee-in-lieu ³	1,541	0.04	0.2
Total Civic Space	110,141	2.53	17.5
Public Realm Improvements	47,203	1.08	7.5
Total	157,344	3.61	25.0%

¹ Excludes alleys and MBTA easement area

² To be determined with community during Design and Site Plan Review

³ Payment in lieu detailed within Zoning Conformance section

ALTERNATIVE TYPE KEY

- | | | |
|---------------------|-----------------------|--------------------|
| 1 Neighborhood Park | 4 Plaza | 7 Playground |
| 2 Pocket Park | 5 Through Block Plaza | 8 Dog Park |
| 3 Green | 6 Pocket Plaza | 9 Community Garden |

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FIGURE 15: CDP CIVIC SPACE PLAN

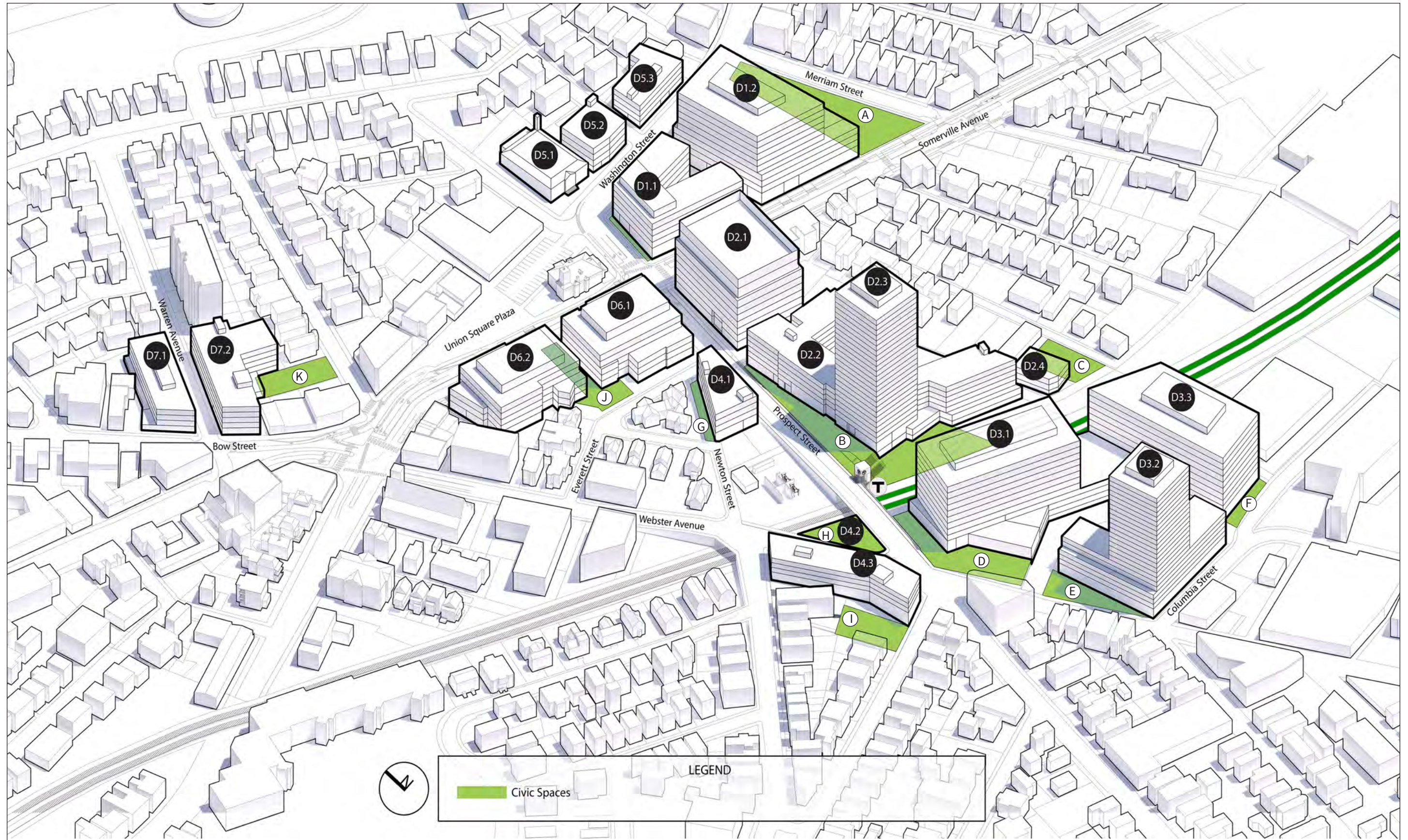
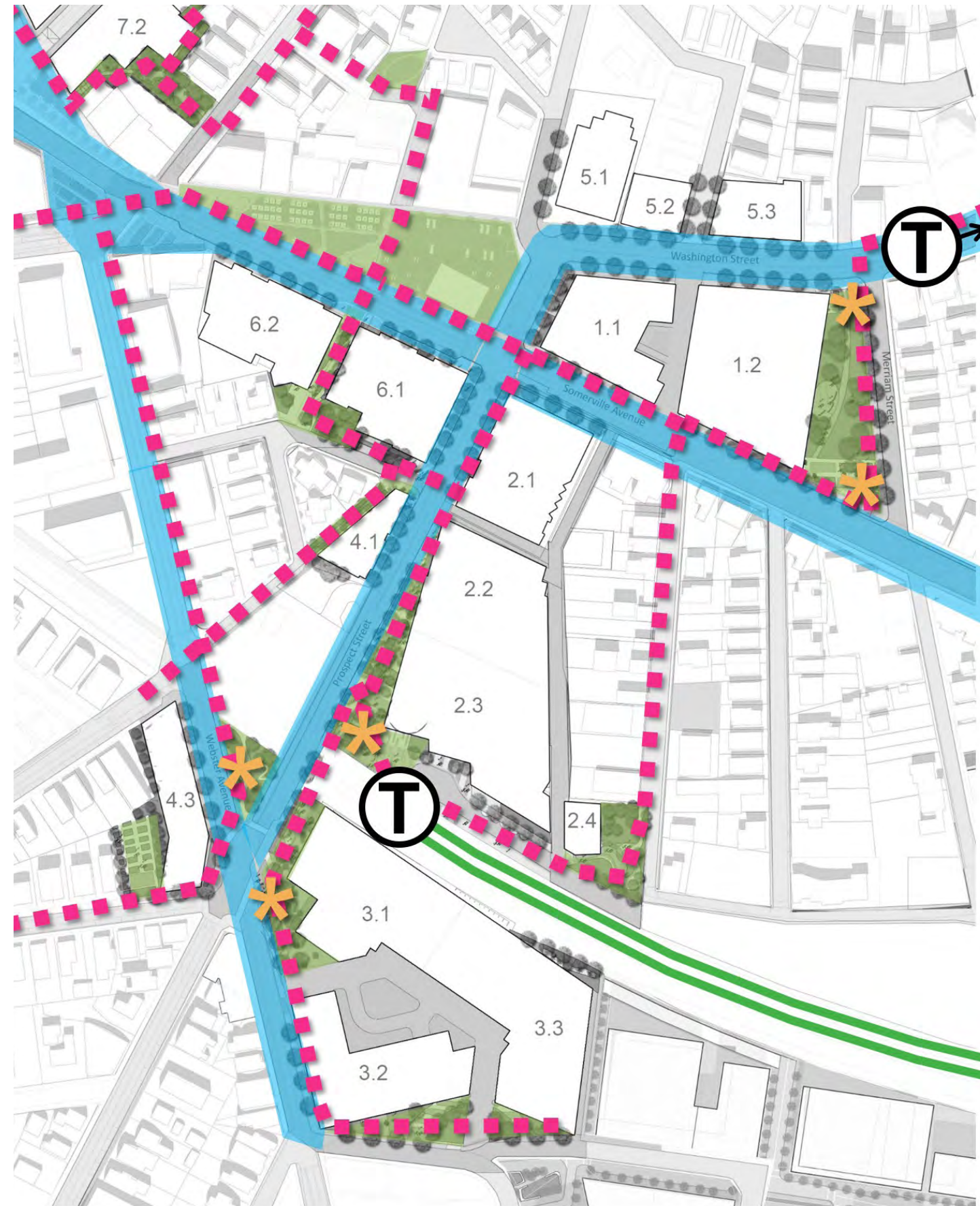


FIGURE 16: CONNECTED CIVIC SPACES



CIVIC SPACE BLOCK CONNECTIVITY

Throughout the planning process, members of the community highlighted importance of creating a network of civic spaces and ensuring connections between new and existing spaces in Union Square. The foundation of creating pedestrian connectivity between civic spaces is the improved streetscape program that is planned for the pedestrian streets in the square. Wider sidewalks and a friendlier pedestrian environment will encourage residents, workers and visitors to move throughout the square and discover the variety of spaces and experiences. Many of the proposed civic spaces are planned in locations that reinforced existing pedestrian desire lines (e.g. D4.1 and D6) or facilitate the creation of new pedestrian pathways that were cited by community members during neighborhood meetings (e.g. D7.2 or D2). The combination of the existing open spaces, a variety of new civic spaces and the strong pedestrian linkages between them will significantly improve Union Square’s public realm and improve the experience for residents, workers and visitors.

KEY

- Pedestrian connection
- Neighborhood gateway
- Pedestrian friendly streetscape area
- Civic space

CIVIC SPACE BLOCK DESCRIPTIONS

D1.2: NEIGHBORHOOD PARK | CIVIC SPACE A

The neighborhood park is envisioned as a multi-use space that can serve the existing and future residents, workers and visitors to Union Square and will become an important neighborhood destination. Its D1 location addresses an open space gap identified on the eastern side of the neighborhood while remaining central enough to benefit all.

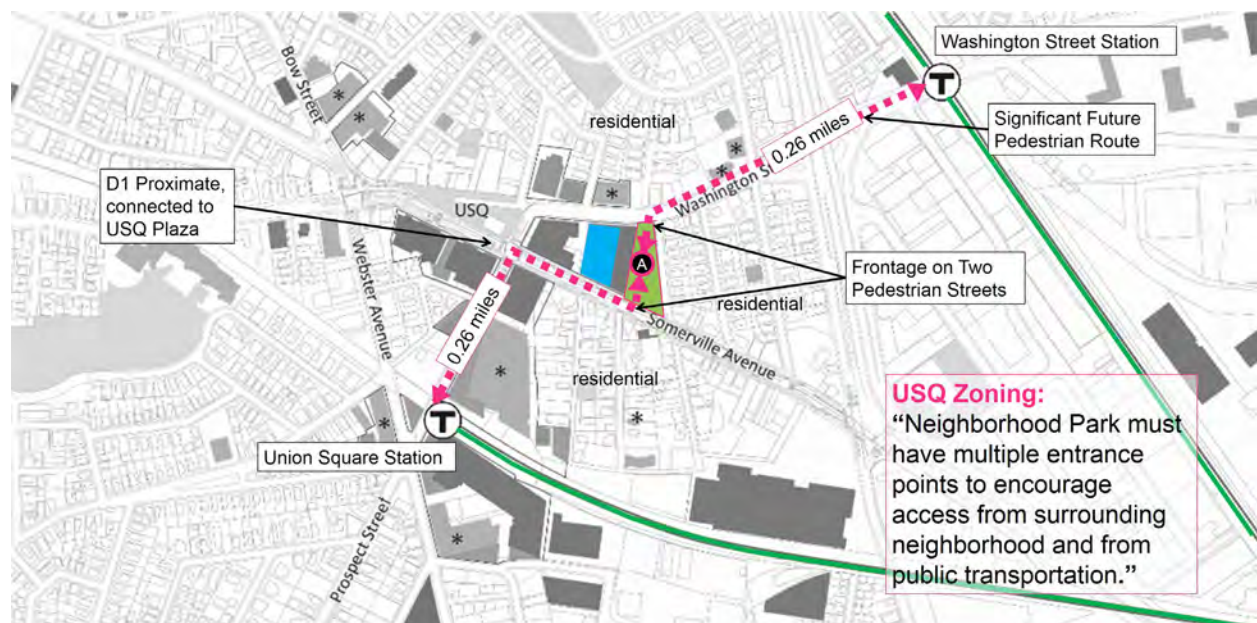
The neighborhood park is planned for the eastern side of the D1.2 block and will bridge two primary points of entry into Union Square along Washington Street and Somerville Avenue, two significant pedestrian streets. The park's most prominent and significant frontage will run the length of Merriam Street, achieving a total area of approximately 27,000 square feet in size. Entry from Washington Street will constitute the park's narrowest dimension, although still a generous fifty feet in width. Alternatively, the park's southern exposure along Somerville Avenue extends to 140 feet. The largest frontage of the park site is on Merriam Street, a uniquely quiet street considering its location near the center of Union Square, yet only a short walk (0.10 mile) from Union

Square plaza, the neighborhood's existing "living room", responding to community interest in building connections between different types of civic spaces.

The park's interfacing with two prominent streets will promote its visibility and ultimate utility. With the arrival of the new Washington Street Station through the Green Line to the north, Washington Street will evolve as a more significant pedestrian point of entry to the square. The park's location on D1.2 positions it as central between the future Union Square Station and Washington Street Station, presenting itself as central civic node that bridges access to the many jobs, services, and housing opportunities generated by the development. Enhancing connectivity between north and south, the increased pedestrian presence will have a calming effect on vehicular traffic entering the square, elevating the surrounding level of safety.

Contextually, the Neighborhood Park on D1.2 will provide a buffer between the higher densities central and west on the block and the residential homes on Merriam Street in a way not previously possible. The D1 use-mix and density proposed by the Neighborhood Plan created an ambitious project that

FIGURE 17: LOCATION AND CONNECTIVITY PROMOTE THE PARK'S SUCCESS



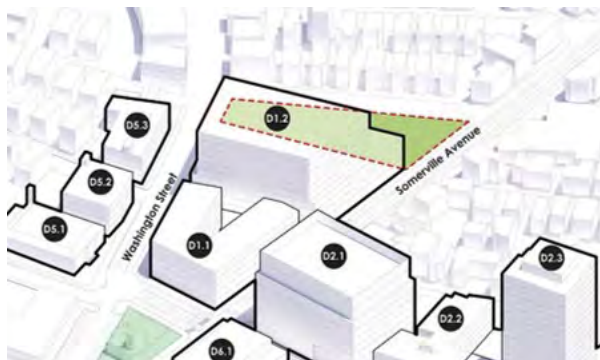
considered a five or six story structure on the west side of Merriam Street facing the existing homes. The D1 Neighborhood Park, introduced as intermediary resolves this contextual tension. The result is a park that will be ‘front-facing’ addressing the scale of Merriam Street. Framed by border buildings of three to five stories to east, west and north, the park will become a new neighborhood “living room”.

This sensitive height transition will be facilitated by a mixed use building that includes a parking podium, which will add an intermittent terrace level to negotiate the change in scales. Fronting a civic space, per the adopted zoning the future design of the parking structure will be subject to heightened levels of scrutiny, requiring the articulation of a building that disguises the use within. The need to disguise simultaneously presents opportunity, with early community feedback envisioning art or ‘living’ green walls to lend to the creation of a stronger sense of place. The location of the garage relative to two pedestrian streets will require the wrapping

of the garage with active uses on those frontages. Extending these uses around the planned corners at Washington Street and Somerville Avenue will provide another means of support to the park, as ground floor cafes or other businesses lend vitality to the space, further encouraging its continued activation.

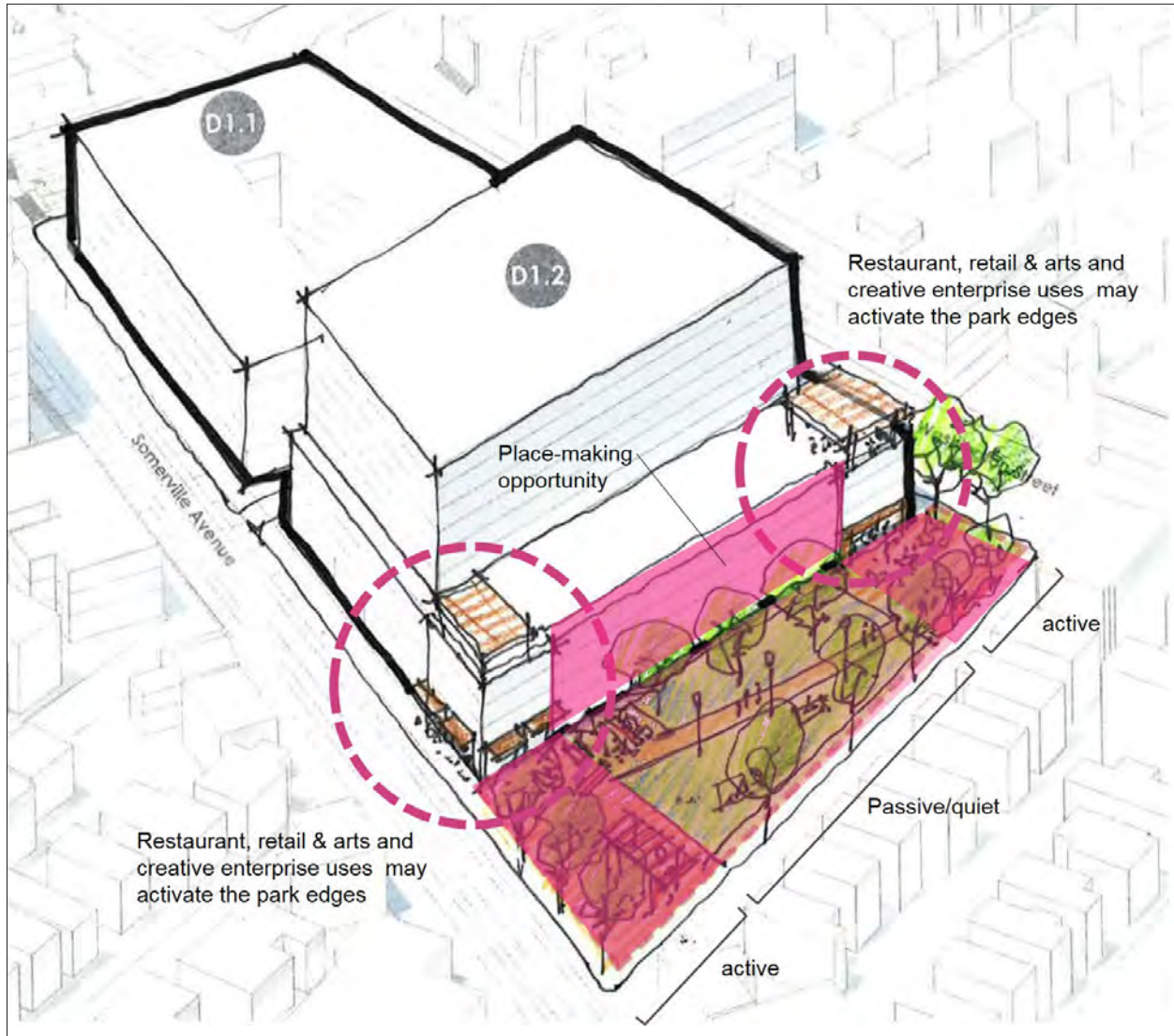
The D1 neighborhood park location also offers an opportunity for the civic space to address some of the sustainability and resiliency goals of the city. The recently published Climate Change Vulnerability Assessment (CCVA), which is discussed in more detail elsewhere in this application, identified D1 as a 'priority' area, in that it's location is vulnerable to high heat exposure and urban heat island effects. The opportunity to add 27,000 square feet of open space at this location and convert impervious area to pervious areas that include plantings, green space and permeable hardscape as well as storm water management measures can help mitigate this vulnerability.

FIGURES 18: CONTEXTUAL SENSITIVITY



Re-distributed program improves neighborhood connections. The contextual relief afforded to Merriam Street (left) viewed against the programmatic challenges from the Neighborhood Plan (right). The Neighborhood Park will act as an extended public "front porch" to Merriam Street homes (bottom).

FIGURE 19: ACTIVATED NEIGHBORHOOD PARK



The solar orientation of D1 was also evaluated during the planning process and the shadow studies are provided later in this section. During the summer, the D1 park is in sun most of the day and then experiences more shade later in the evening. In the winter, when the sun is lower, the space experiences increased shade. Some community members expressed concern about the shade during the evening in the summer and fall. From a resiliency perspective, the urban shade together with the shade resulting from the trees required by zoning, directly address the high heat exposure risk that make this block a 'priority' area in the Climate Change Vulnerability Assessment (CCVA 2017). Addressed in further detail later in this document, the CCVA identifies these 'priority' areas as opportunities to address localized vulnerabilities, in this instance, increased shade will provide for areas of cooler temperatures within a context in which high-heat days are projected to increase. During the design and programming of the park, the areas of sun/shade during different periods of the day and year will be further evaluated to find a design that appropriately balances park program and urban heat mitigation goals.

As heard and observed in neighborhood meetings held on September 5, 2017 and October 18, 2017, desired programming of the park is of great interest. Conducive to these desires, the rectilinear shape offers unique potential for multiple programming approaches as well as the ability to segment the space into different zones. This potential is unique in that the D Blocks are largely irregular in shape, especially those sites of sufficient size to accommodate an equivalent park. While the program and design of the park will be developed at a later design stage, ideas that we have heard from residents include a planted green vine wall along the building, public art, performance space, as well as shaded seating, lounging and flexible play space. In combination, the park will be able to accommodate active, passive, and social activities. In an effort to provide some early ideas about what is possible for the neighborhood park's design and program, three preliminary park concepts are provided herein. The community process during Site Plan and Design review process will present an opportunity to refine the programming goals as well as the design for this space.

FIGURE 20: LUSH GREENERY PARK CONCEPT



FIGURE 21: ARTISTS' GETAWAY PARK CONCEPT



FIGURE 22: KIDS PLAY PARK CONCEPT



D2 | CIVIC SPACES B AND C

The D2 site will connect the new Green Line T station to the heart of Union Square. The civic space type in the D2.2 location will be a significant linear plaza that will terrace gently down in concert with the slope of Prospect Street. The plaza will provide ample shade trees and seating opportunities, and will be lined with active retail frontage. The plaza will be ADA compliant with an accessible path provided through sloping walkways providing critical pedestrian infrastructure for the operation of the MBTA transit station. A generous terraced stair and elevator will connect Prospect Street to the new Green Line stop. At the platform level, the lower plaza connects the T, the vehicular drop off, bicycle parking and lower level retail.

To the east of D2.3 will be a green open space nestled within this predominantly residential neighborhood. Depending on the program of the D2.3 building and the ultimate size of this civic space, it could be a playground, green, pocket park or plaza.

D3 | CIVIC SPACES D, E AND F

The civic spaces on D3.1 and D3.2 continue the civic space environment planned for D2.2 southward, giving a cohesive pedestrian character to the street edge on east sides of Prospect Streets and Webster Avenue across D2 and D3. The synergy between active ground level uses in the proposed D3 buildings and these civic spaces will continue to build on the goal for a vibrant pedestrian environment envisioned in the Neighborhood Plan. In response to community comments from the September 18, 2017 neighborhood meeting seeking more buffer between the Webster Avenue residents and the new development on D3, civic space E on D3.2 was relocated from Windsor Street to Webster Avenue.

At the southern edge of D3.3, a smaller scaled civic space provides a point of connection between the proposed commercial building on D3.3 and the street environment. This space in combination with a larger open space planned to the south of Windsor Place as part of Boynton Yards redevelopment will create a generously scaled sun filled open space at the entry to Boynton Yards.

FIGURE 23: D2.2-3 CIVIC SPACE/ PLAZA



D4 | CIVIC SPACES G, H AND I

D4.3 was the location of the neighborhood park proposed during the Neighborhood Planning process. In response to community feedback that D4.3 was not a preferred site for the park, the park was relocated to D1 as part of this plan. Consequently, a portion of D1's residential building program was relocated to the D4.3 site; however, the proposed plan for D4.3 preserves the Concord Avenue Community Garden. Preservation of this community space was a priority identified by Union United in 2014 and was included in the Neighborhood Plan.

Across Webster Street, D4.2 provides an opportunity for a pocket park, green or pocket plaza. Located at a prominent position when entering from Cambridge into Union Square, this site could be a location for a gateway marker into Union Square.

Along the western edge of D4.1 is a civic space that lines the edge of the building providing a quiet green connection into the neighborhood as well as the potential for programs located in D4.1 to

spill out onto the passageway and further animate it. This civic space reinforces a pedestrian desire line expressed by community members as part of the interactive activity at the September 5, 2017 community meeting.

D5 | NO CIVIC SPACE PLANNED

No civic spaces will be located in the D5 parcels given their small scale. Fortunately, their proximity to the planned Neighborhood Park and Union Square Plaza will provide significant outdoor opportunities.

D6 | CIVIC SPACE J

The D6 Blocks are located along Somerville Avenue, directly opposite Union Square Plaza. While the Neighborhood Plan included a narrow passageway between D6.1 and D6.2 and a small plaza located along Prospect Street, the opportunity to widen the through block connection to allow for more sunlight and air to penetrate to the center of the block influenced the direction taken here. As a result, this planned civic passage is planned to capture pedestrian traffic for a quieter alley off of Prospect Street, providing a new point of entry to Union

FIGURE 24: D4.3 CIVIC SPACE



Square Plaza and fulfilling a pedestrian pathway desire expressed by community members throughout the planning process.

D7 | CIVIC SPACE K

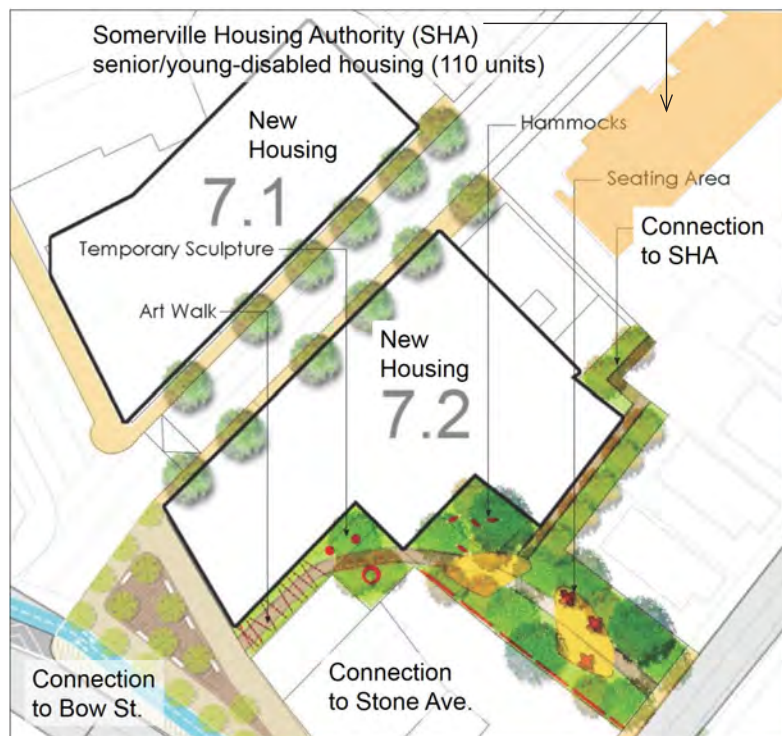
In alignment with community interests in serving Properzi Manor to the north of the Block and providing additional civic space for this portion of the neighborhood, a civic space of approximately 6,000 SF is planned for the D7 Block that will fulfill the neighborhood aspirations for increased connectivity. The D7.2 civic space which could be a pocket park or green can be designed as a green oasis that also provides inter-block connectivity between Stone Street, Somerville Avenue and Properzi Manor – a suggestion made by residents at the

CDP neighborhood meeting. Residents of both the new building on D7.2 and Properzi Manor could be provided with direct access to the park. The potential park is of a scale that can accommodate groups and individuals, offering a variety of seating and lounging spaces, as well as active areas that might include an art walk out to an expanded plaza area on Somerville Avenue.

CIVIC SPACE SCALE COMPARISON

In response to questions raised by community members at the CDP neighborhood meeting regarding the scale of the proposed civic spaces, the following scale comparison of existing civic spaces in Somerville was developed.

FIGURE 25: D7.2 CIVIC SPACE



FUTURE & EXISTING CIVIC SPACE SCALE COMPARISON

< 8,000 SF

QUINCY STREET PARK, SOMERVILLE, MA

5,100 SF



STONE PLACE PARK, SOMERVILLE, MA

6,100 SF



ALLEN STREET COMMUNITY GARDEN, SOMERVILLE, MA

5,100 SF



FUTURE & EXISTING CIVIC SPACE SCALE COMPARISON (CONT.)

8,000 - 17,400 SF

CHUCKIE HARIRIS PARK, SOMERVILLE, MA

14,400 SF



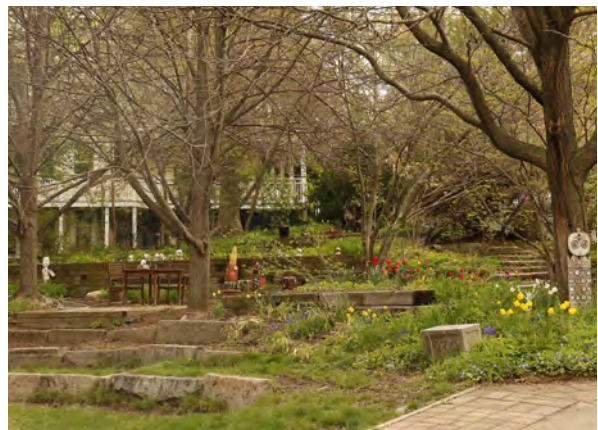
UNION SQUARE PLAZA, SOMERVILLE, MA

16,300 SF



SOMERVILLE COMMUNITY GARDEN CENTER, SOMERVILLE, MA

15,500 SF



FUTURE & EXISTING CIVIC SPACE SCALE COMPARISON (CONT.)

> 26,000 SF

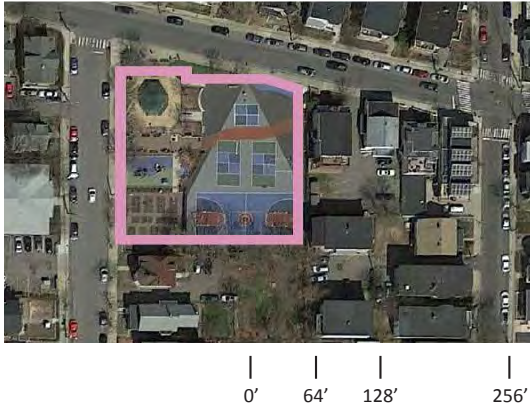
EDWARD LEATHERS PARK, SOMERVILLE, MA

32,300 SF



KELLY-MORSE PARK, SOMERVILLE, MA

27,000 SF



ALBION STREET PARK, SOMERVILLE, MA

30,000 SF



NEIGHBORHOOD PARK INVESTIGATIONS

The siting of the Neighborhood Park on D1 is an evolution in approach from the previous direction to provide it on D4.3 as contemplated by the Neighborhood Plan. This change is a direct result of Neighborhood Park alternatives investigations that the US2 team performed at the request of local residents who expressed concerns over the viability and success of a neighborhood park on D4.3 during the zoning process. These investigations were informed by the existing conditions and needs assessment carried out as required by this application (see Appendix 3: Civic Space Study); a site walk of each location; and review of the pros and cons of alternative sites. The investigations also considered not only what creates the best neighborhood park but also what balances the other goals of the overall plan to create jobs, repair infrastructure, provide affordable housing, deliver community benefits and address social equity, as all of the parts of the plan are inter-related.

Understandably, the process to define the Neighborhood Park location has been one of great importance to the community. As such, US2 hosted a second neighborhood meeting on October 18, 2017 to specifically present the findings of the neighborhood park investigations and discuss the proposed D1 neighborhood park location in greater detail. The meeting was attended by more than 50 community members and included a good discussion about the alternatives with most of the focus on the D1 and D7 locations. Appendix 2 provides details of the October 18, 2017 neighborhood park community meeting and includes the presentation deck that outlines the assessment of the three alternative locations. A summary of those findings is provided below.

INVESTIGATION 1 | D4.3

Identified within the Neighborhood Plan as the ideal location for a park, prevailing interest in this location resulted in its site area ultimately defining the size requirement included in the Union Square Zoning. D4.3 is spatially viable and benefits from a good

FIGURE 26: INVESTIGATED LOCATIONS FOR THE NEIGHBORHOOD PARK



solar orientation and proximity to the MBTA station; however, its adjacency to significant vehicular traffic along Webster Avenue resulted in voiced concerns from community members during the neighborhood planning and zoning processes. D4.3 is also within a 10 minute walk of 15 acres of existing open space, including a short walk from the improved Lincoln Park. These concerns were the impetus for considering alternatives in the interest of working collectively towards a better solution.

INVESTIGATION 2 | D7.2

Unlike D4.3, the D7.2 area was identified as one removed from traffic, and provided a viable alternative given its size. Conceptual review of this site surfaced several locational highlights. In principle, its orientation provides for good access to sunlight given current contextual conditions, and its adjacency to Properzi Manor (Somerville Housing Authority senior/young-disabled housing) provided an open space accessible to its residents. Through the public engagement process, community members reinforced these highlights and added

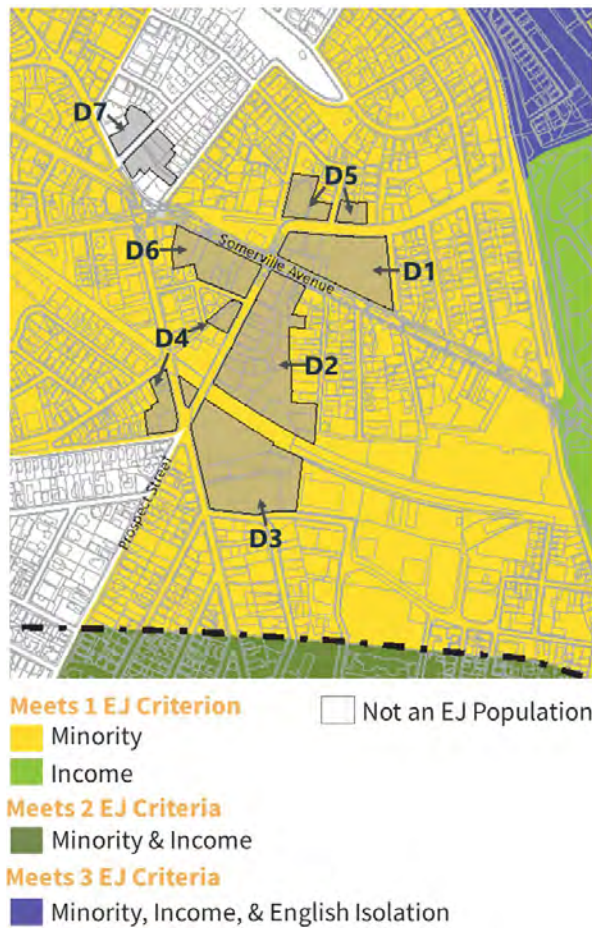
others – the adjacency to planned residential units, its proximity to an existing neighborhood activity node, and connectivity to other area open spaces among them.

The Neighborhood Plan identified the scale and context of D7 as “parcels well suited for residential development targeted towards families due to their close proximity to a number of public spaces, the Argenziano school, and various local businesses.” Revisiting the context, close proximity to an abundance of public spaces, many of which are open civic spaces is indeed a characteristic of this location in the neighborhood. It is served in abundance by open spaces, boasting close proximity to Union Square Plaza, Nunziato Field, Walnut Street Park, Prospect Hill, Lincoln Park, and Stone Place Park. These observations are supported by the Civic Space Study which highlighted that the estimated 10 minute walking radius around D7.2 provided access to 23 acres of open space – the most of the three park locations studied.

FIGURE 27: EXISTING CIVIC SPACE WITHIN 1/2 MILE OF INVESTIGATED LOCATIONS



FIGURE 28. ENVIRONMENTAL JUSTICE MAP



In order to review another aspect of accessibility, Environmental Justice populations were examined within the captured study area as required by the CDP Civic Space Study. The census block on which the group D7.2 parcel lies does not meet the criteria for environmental justice populations as it relates to either minority populations, language, or income hinting at a potential missed opportunity, considering all the other D Blocks directly serve environmental justice populations.

Upon closer review, the D7.2 neighborhood park siting also presented some implementation challenges. The irregular shape of D7.2 as it steps away from Bow Street, finds itself in the center of a block, behind Reliable Market and the backs of the residential homes on Stone Avenue. The resulting condition is one that would orient the park to the ‘backs’ of buildings – a

backdrop over which there would be little control. Additionally, while D1 is located in a climate change vulnerability zone, D7 is at a higher elevation and is not in a climate change vulnerability zone. From this perspective, the D7 location misses an opportunity to locate the open space, which mitigates urban heat island and flood risk, in a location where it will be most impactful to climate change risks.

From a development program standpoint, a D7.2 neighborhood park would eliminate more than half of the housing identified as best suited for D7 in the Neighborhood Plan. The plan’s goals to restore the Bow Street streetwall by extending the existing residential neighborhood to the south on D7 would need to be abandoned in order to make D7.2 the neighborhood park location.

Lastly, a long-term planning investigation warrants a more expanded view of service and utility imagined within the context of future conditions. To that end considering the distribution of development blocks around Union Square, it is apparent that the majority of increased density will occur away from D7 as new density is created closest to the new transit. Reference, for example, the future site context map on the following page that identifies the present and future context of schools, religious institutions, daycares, affordable housing, residential buildings, elderly housing, and large employers.

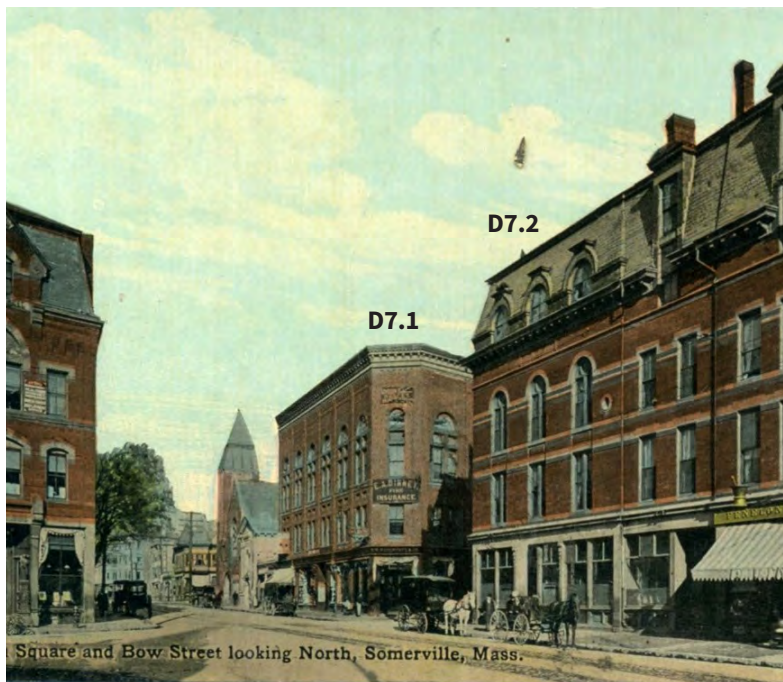
This increased density can be thought of in terms of its output: jobs, commercial services, arts & creative spaces, housing opportunities, all of which collectively will define new and robust activity centers in the neighborhood. These new populations of residents and workers will add to existing residents and workers to introduce new use patterns, and planned civic spaces should anticipate and respond to that evolution. From this perspective, a neighborhood park on D7.2 doesn’t appear to fulfill an existing gap in civic space service nor does it anticipate the likely future needs.

FIGURE 29: D7 EXISTING CONDITION

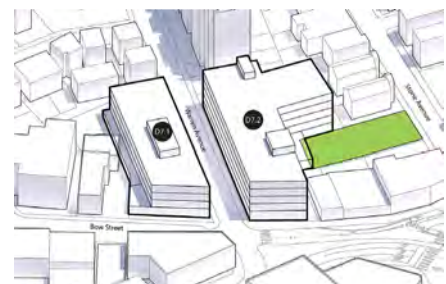


View looking southwest from D7.2, a less than ideal edge to a Neighborhood Park.

FIGURE 30: BOW STREET, PRE WORLD WAR II, LOOKING NORTH



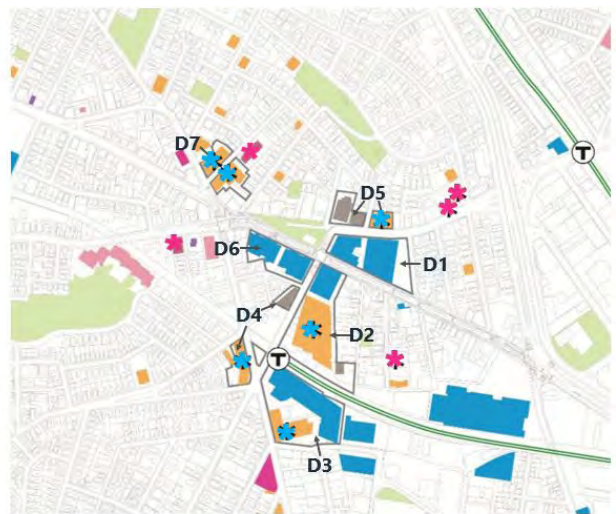
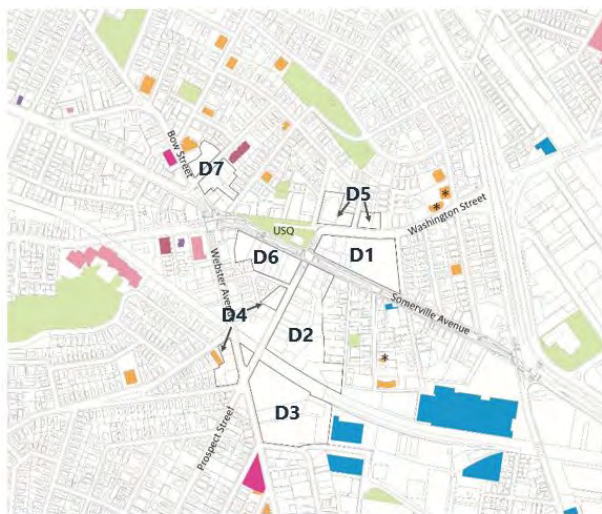
NEIGHBORHOOD PLAN



COORDINATED DEVELOPMENT PLAN

To execute on the vision of the Neighborhood Plan on D7, is to reintroduce the historical scale of the block in a way that has not existing since World War II.

FIGURE 31: WHO CIVIC SPACES SERVE



- Large Employer
- Residential > 6 Units
- Schools
- ★ Existing affordable housing
- ★ Proposed market-rate and affordable housing

GLX is a catalyst for growth and D Block revitalization. 5,000 new workers, 1,000 new homes.

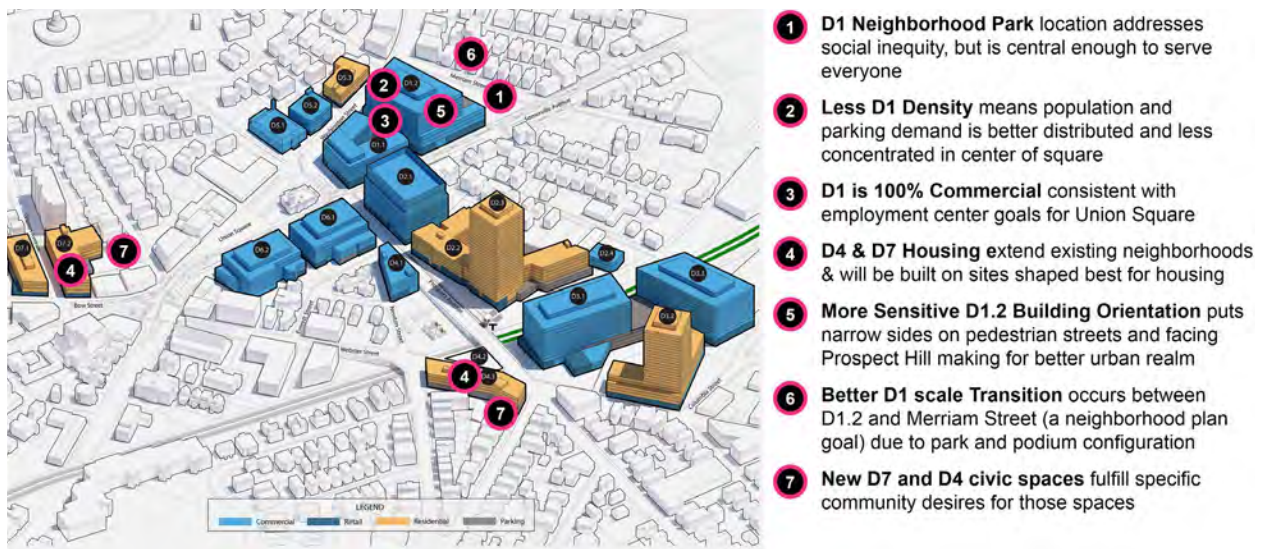
INVESTIGATION 3 | D1.2

As outlined earlier in this section in greater detail, the D1.2 site is uniquely suited to fulfill a present community need for open space, while serving a future development that will create new activity centers in the neighborhood. Better still, it is able to accomplish this while maintaining control of the character of its edge. The Civic Space Study required as part of this application was instrumental in highlighting the unique opportunity to fulfill open space needs in Union Square. While the location's flexible planning potential, scale buffer, location between the two transit stops, unique ability to address climate change challenges and promise to become a significant community node are outlined above, most significantly, the location addresses matters of equity in a way other locations are unable to. Whether a deep dive into the Civic Space Analysis,

or a quick glance at the Union Square Civic Space Study Area at the beginning of this section, the realities of civic space needs east of the development blocks are readily apparent; the east is underserved. Provision of a Neighborhood Park at this location addresses the inequity directly.

These investigations considered not only what creates the best neighborhood park but also what balances the other goals of the overall plan to create jobs, repair infrastructure, provide affordable housing, deliver community benefits, create a great urban realm and address social equity, as all of the parts of the plan are inter-related. Of the three potential park locations, the D1 neighborhood park contributes to the best coordinated development plan as depicted in the figure below.

FIGURE 32: D 1.2 PARK LOCATION, COORDINATED PLAN ADVANTAGES



PRELIMINARY SHADOW STUDY

A thorough shadow study was completed to analyze the impact of shading from the built improvements on all proposed civic space locations. The study comprised of two parts; the first an analysis of single times ranging from morning until afternoon, and the second a time-lapse hour by hour composite to gauge the magnitude of shadow impact on each space throughout the entire day informing which areas receive the least amount of daily sun. The dates

that were studied include March 21st, June 21st, September 21st and December 21st which accounts for the Vernal Equinox, Summer Solstice, Autumnal Equinox and Winter Solstice respectively. These days represent the shortest, longest and days of equal sun and darkness. The studies are organized by month on the pages that follow, and commence with the time-lapsed composite image followed by the analysis of single times.

FIGURE 33: SHADOW STUDY — MARCH COMPOSITE

March 21 - Time Lapse 9am-3pm EST.
(Vernal Equinox)

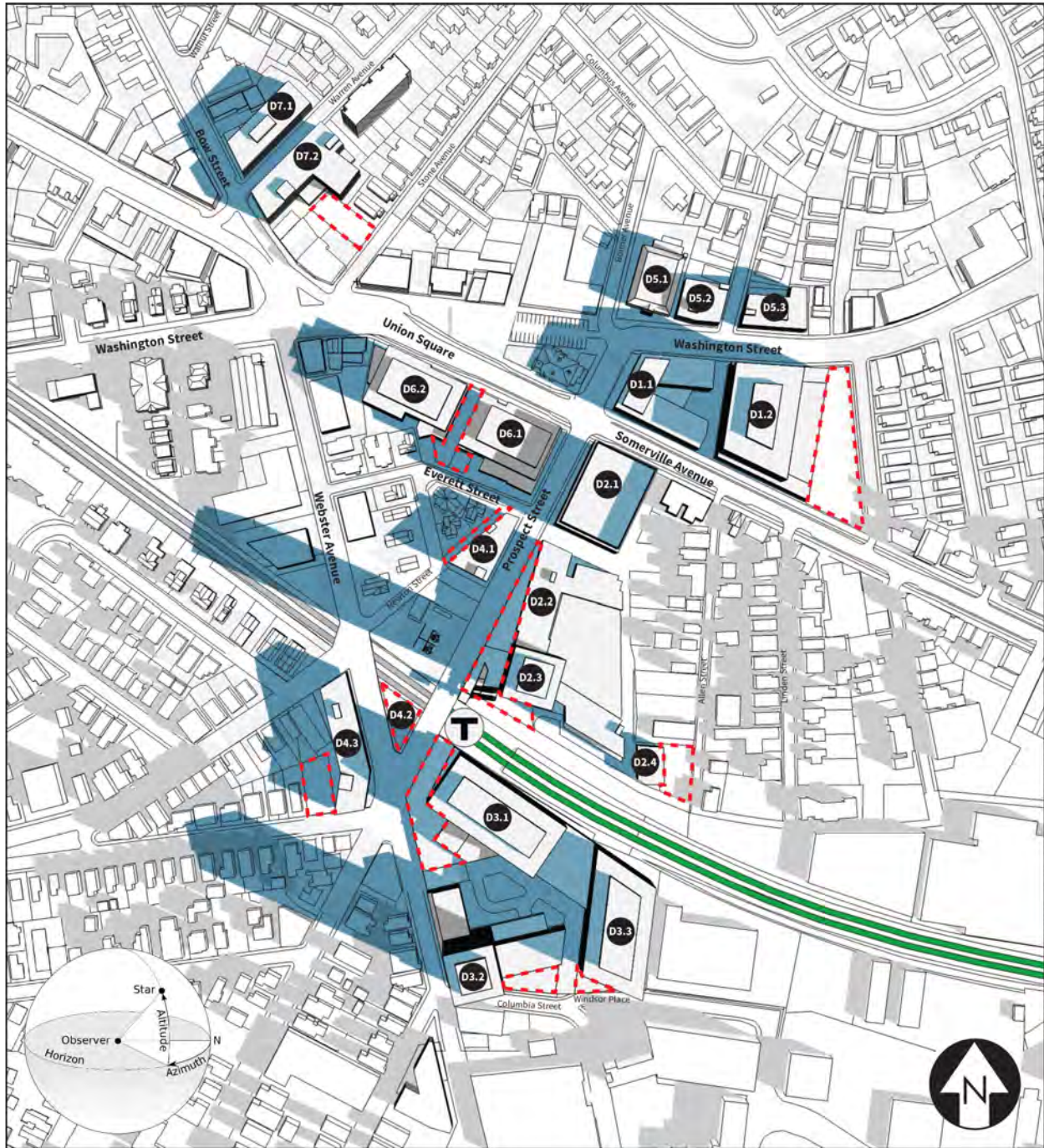


Somerville, Massachusetts (W 71.07, N 42.23)

- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 34: SHADOW STUDY

March 21 @ 9am EST.
(Vernal Equinox)

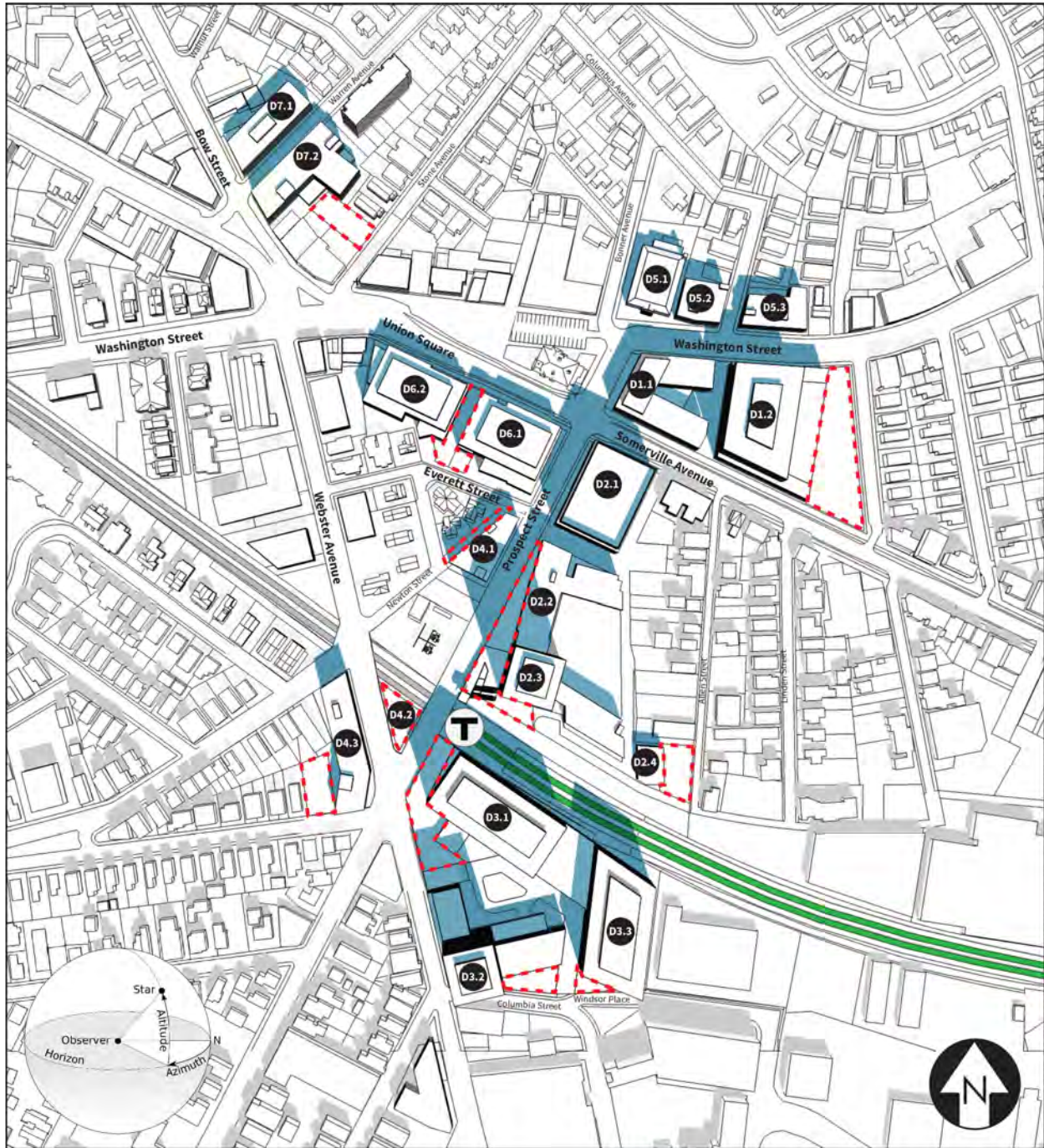


Somerville, Massachusetts (W 71.07, N 42.23)
Altitude: 33.2, Azimuth 125.6

- Existing shadows
- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 35: SHADOW STUDY

March 21 @ 12pm EST.
(Vernal Equinox)

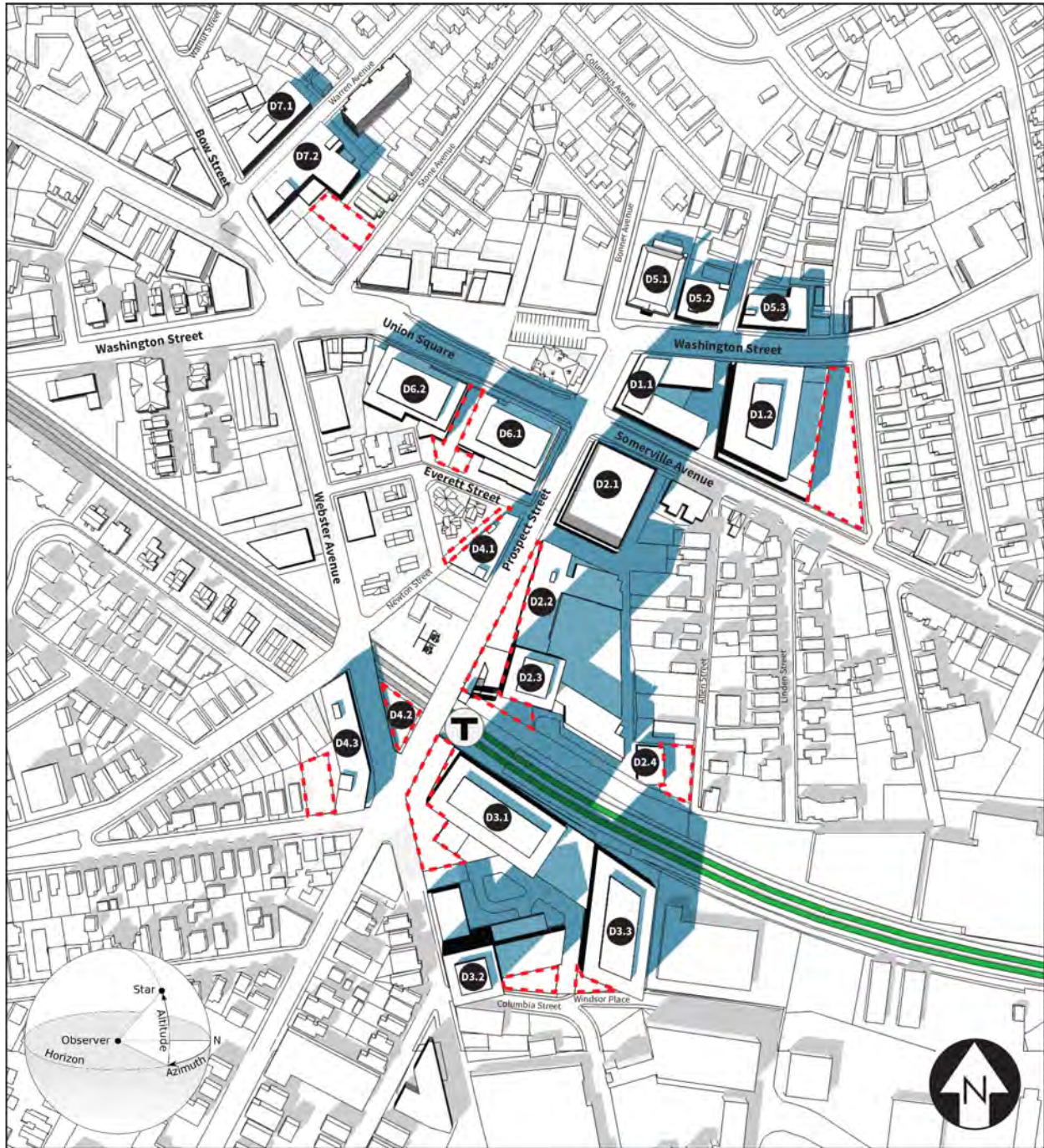


Somerville, Massachusetts (W 71.07, N 42.23)
Altitude: 48.2, Azimuth 183.2

- Existing shadows
- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 36: SHADOW STUDY

March 21 @ 3pm EST.
(Vernal Equinox)



Somerville, Massachusetts (W 71.07, N 42.23)
Altitude: 30.7, Azimuth 238.4

- Existing shadows
- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 37: SHADOW STUDY — JUNE COMPOSITE

June 21 - Time Lapse 9am-6pm EST.
(Summer Solstice)

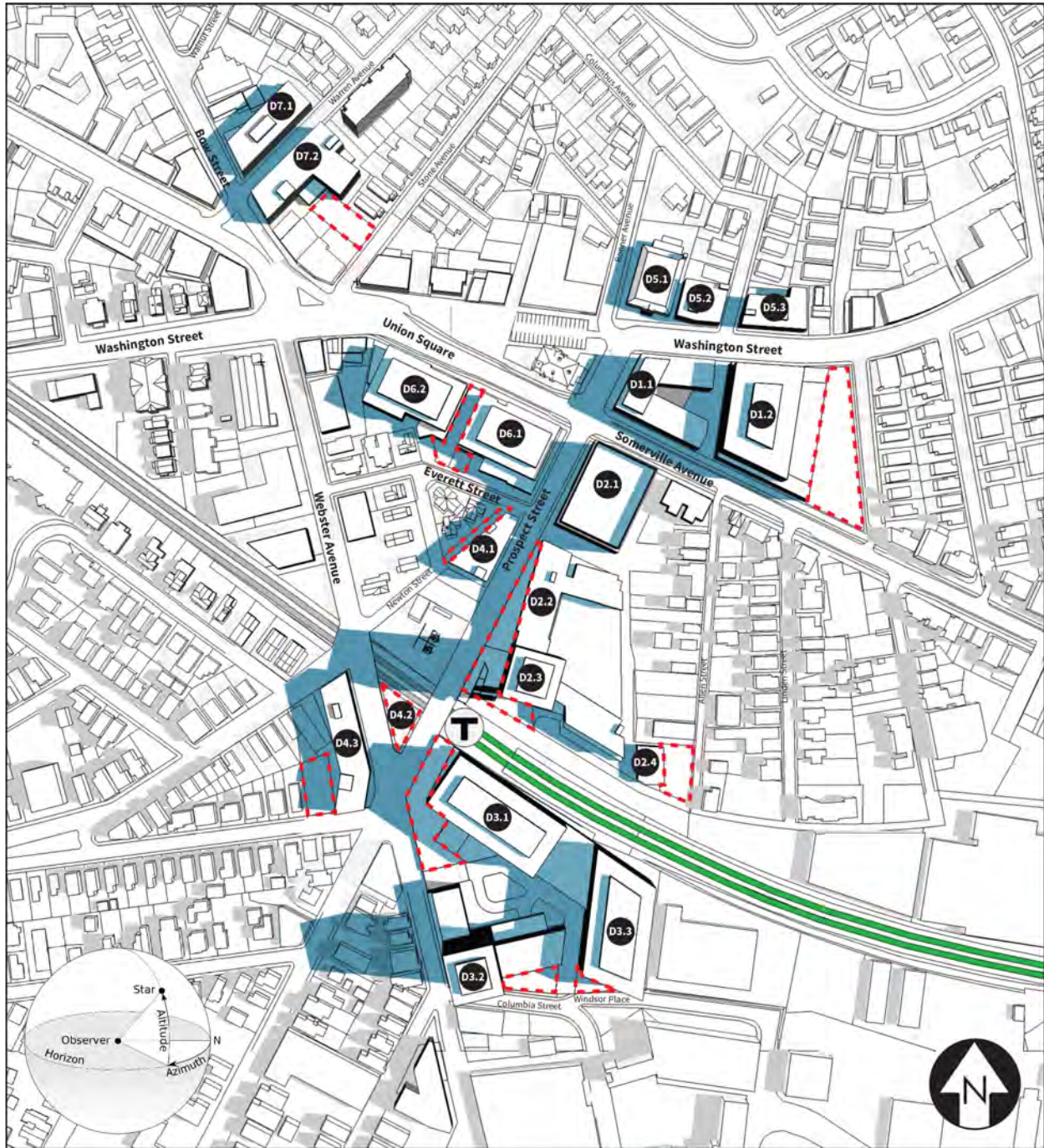


Somerville, Massachusetts (W 71.07, N 42.23)

- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 38: SHADOW STUDY

June 21 @ 9am EST.
(Summer Solstice)

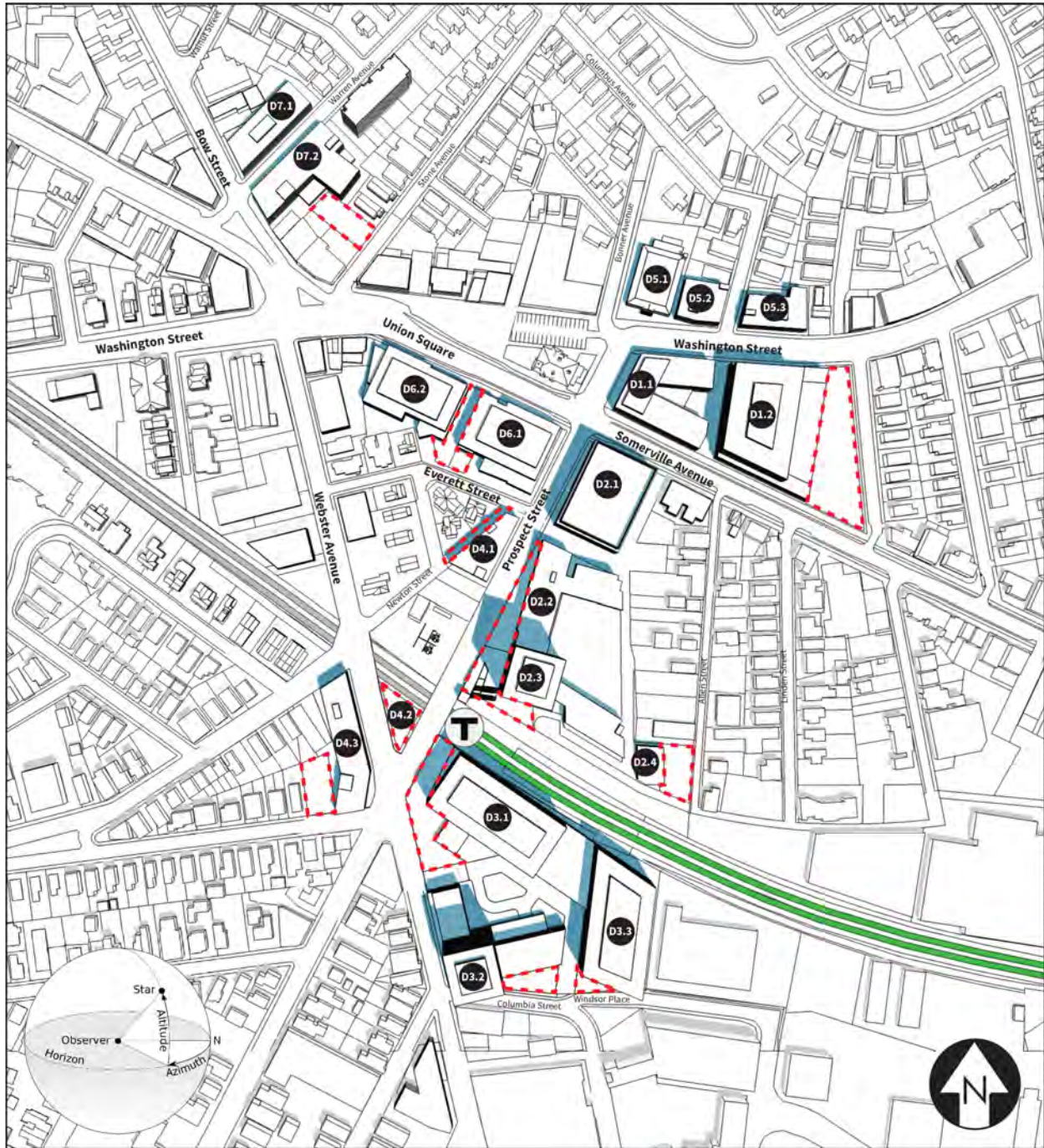


Somerville, Massachusetts (W 71.07, N 42.23)
Altitude: 50.8, Azimuth 105.5

- Existing shadows
- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 39: SHADOW STUDY

June 21 @ 12pm EST.
(Summer Solstice)

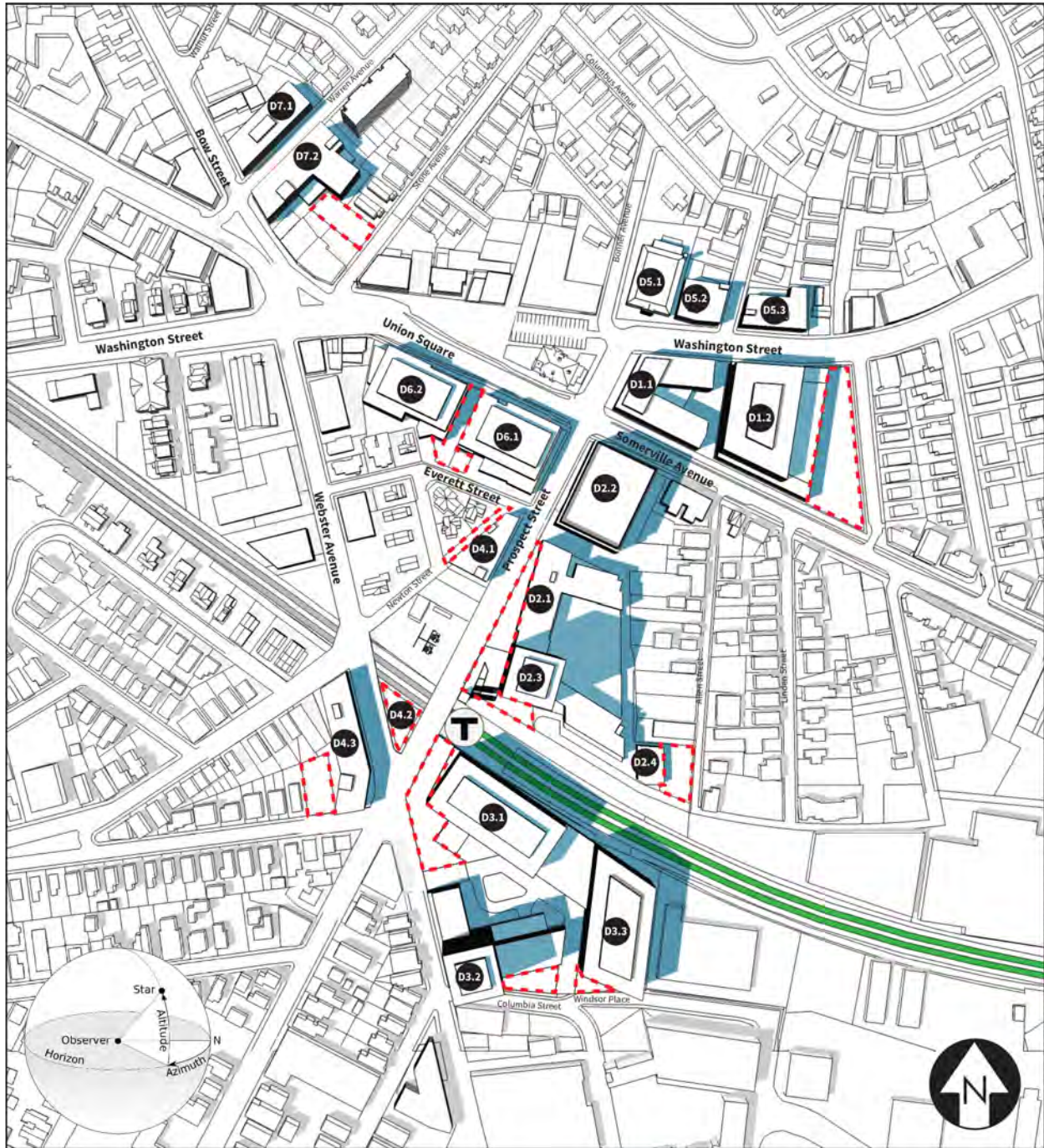


Somerville, Massachusetts (W 71.07, N 42.23)
Altitude: 70.8, Azimuth 189.6

- Existing shadows
- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 40: SHADOW STUDY

June 21 @ 3pm EST.
(Summer Solstice)

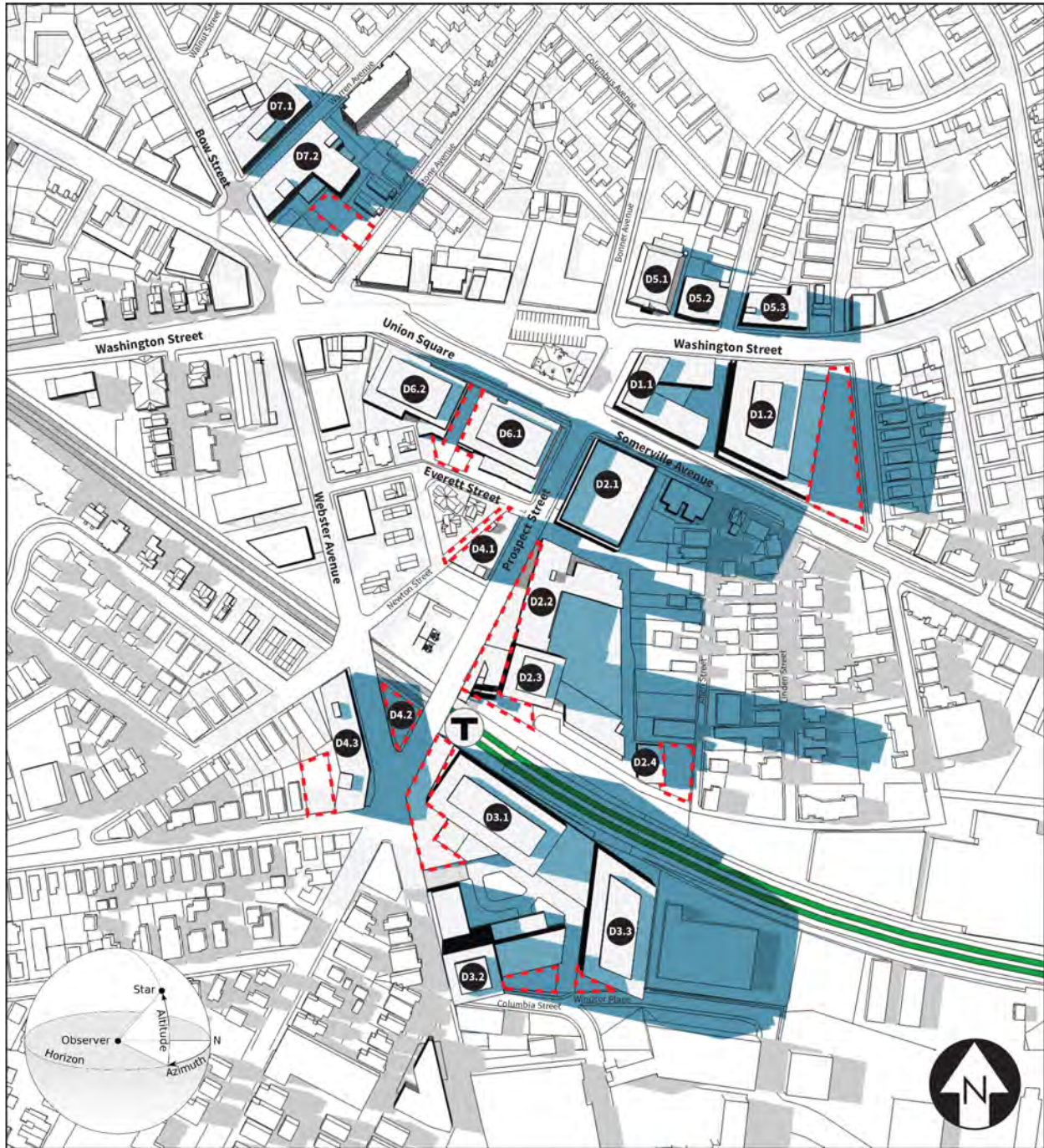


Somerville, Massachusetts (W 71.07, N 42.23)
Altitude: 45.9, Azimuth 260.3

- Existing shadows
- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 41: SHADOW STUDY

June 21 @ 6pm EST.
(Summer Solstice)



Somerville, Massachusetts (W 71.07, N 42.23)
Altitude: 13.2, Azimuth 289.8

- Existing shadows
- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 42: SHADOW STUDY — SEPTEMBER COMPOSITE

September 21 - Time Lapse 9am-6pm EST.
(Autumnal Equinox)

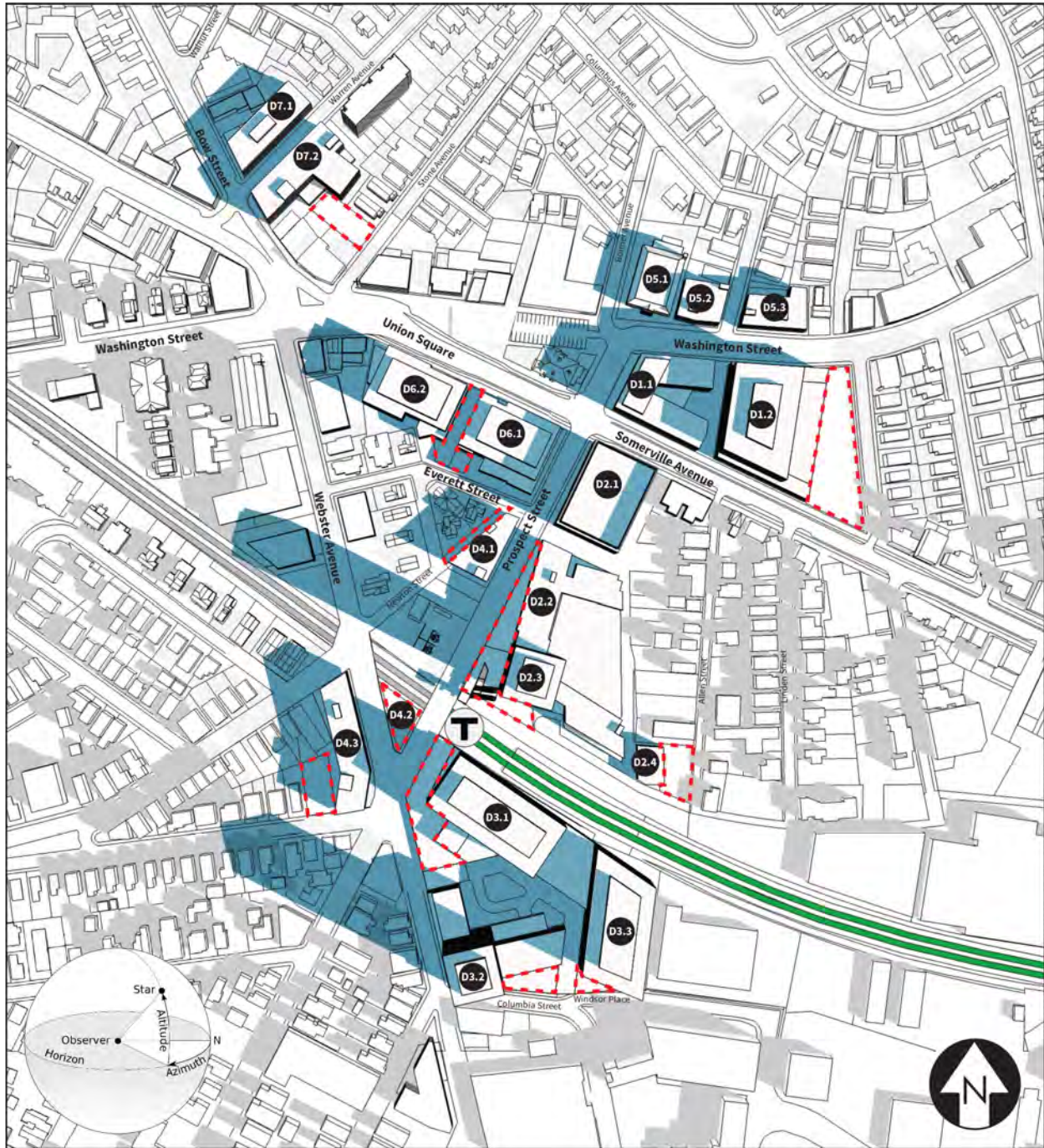


Somerville, Massachusetts (W 71.07, N 42.23)

- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 43: SHADOW STUDY

September 21 @ 9am EST.
(Autumnal Equinox)

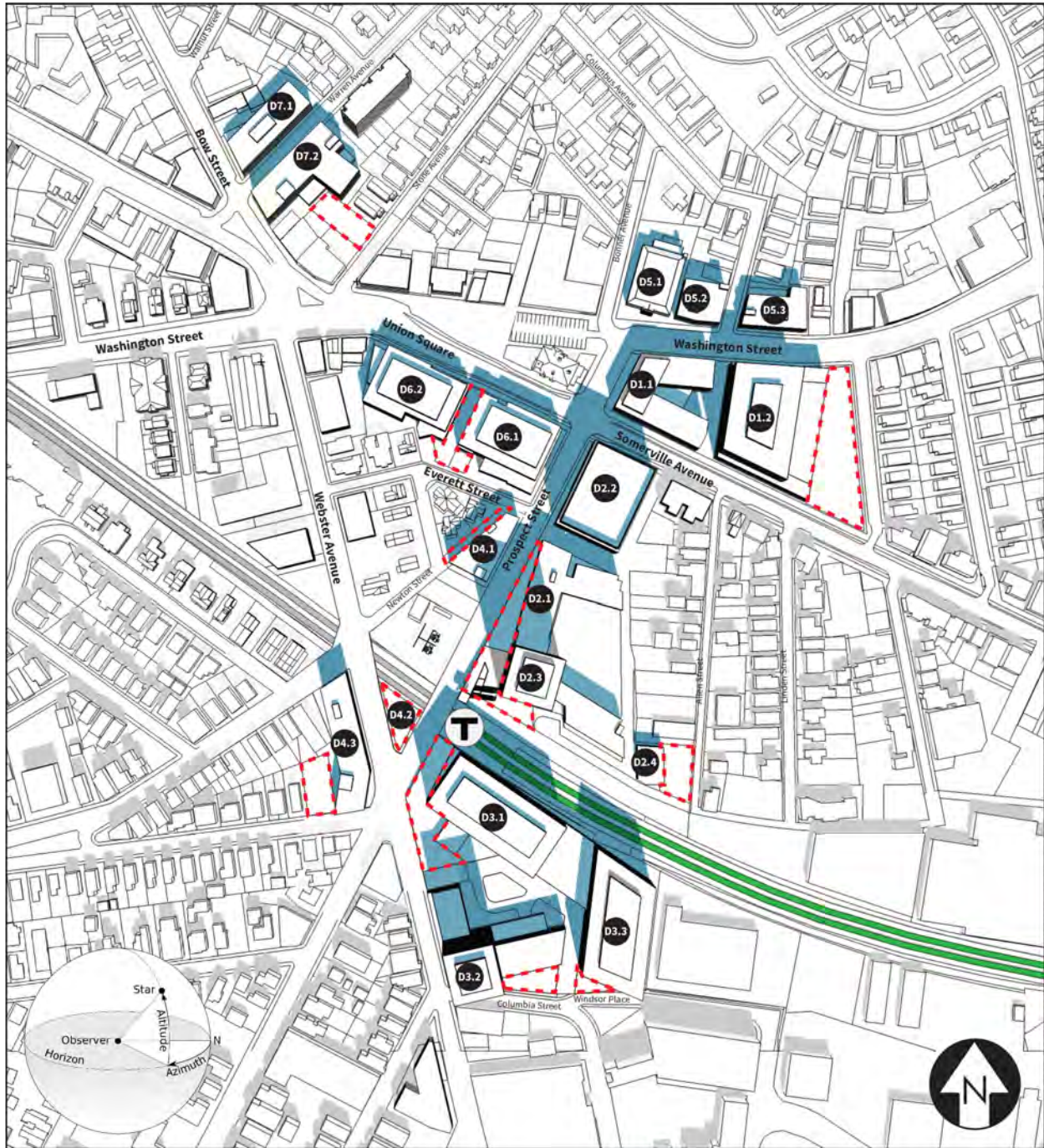


Somerville, Massachusetts (W 71.07, N 42.23)
Altitude: 35.2, Azimuth 129.2

- Existing shadows
- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 44: SHADOW STUDY

September 21 @ 12pm EST.
(Autumnal Equinox)

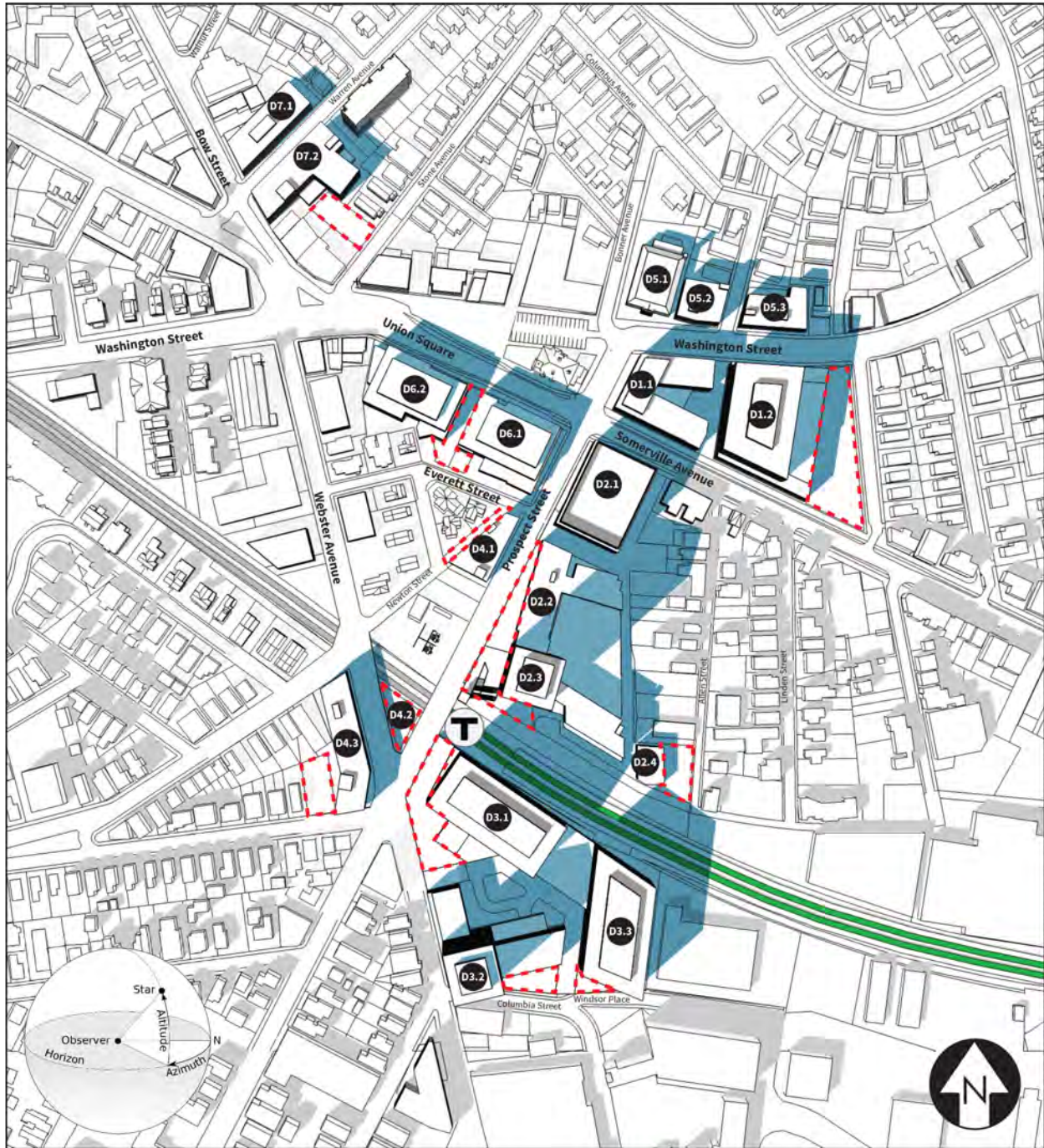


Somerville, Massachusetts (W 71.07, N 42.23)
Altitude: 47.7, Azimuth 188.4

- Existing shadows
- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 45: SHADOW STUDY

September 21 @ 3pm EST.
(Autumnal Equinox)

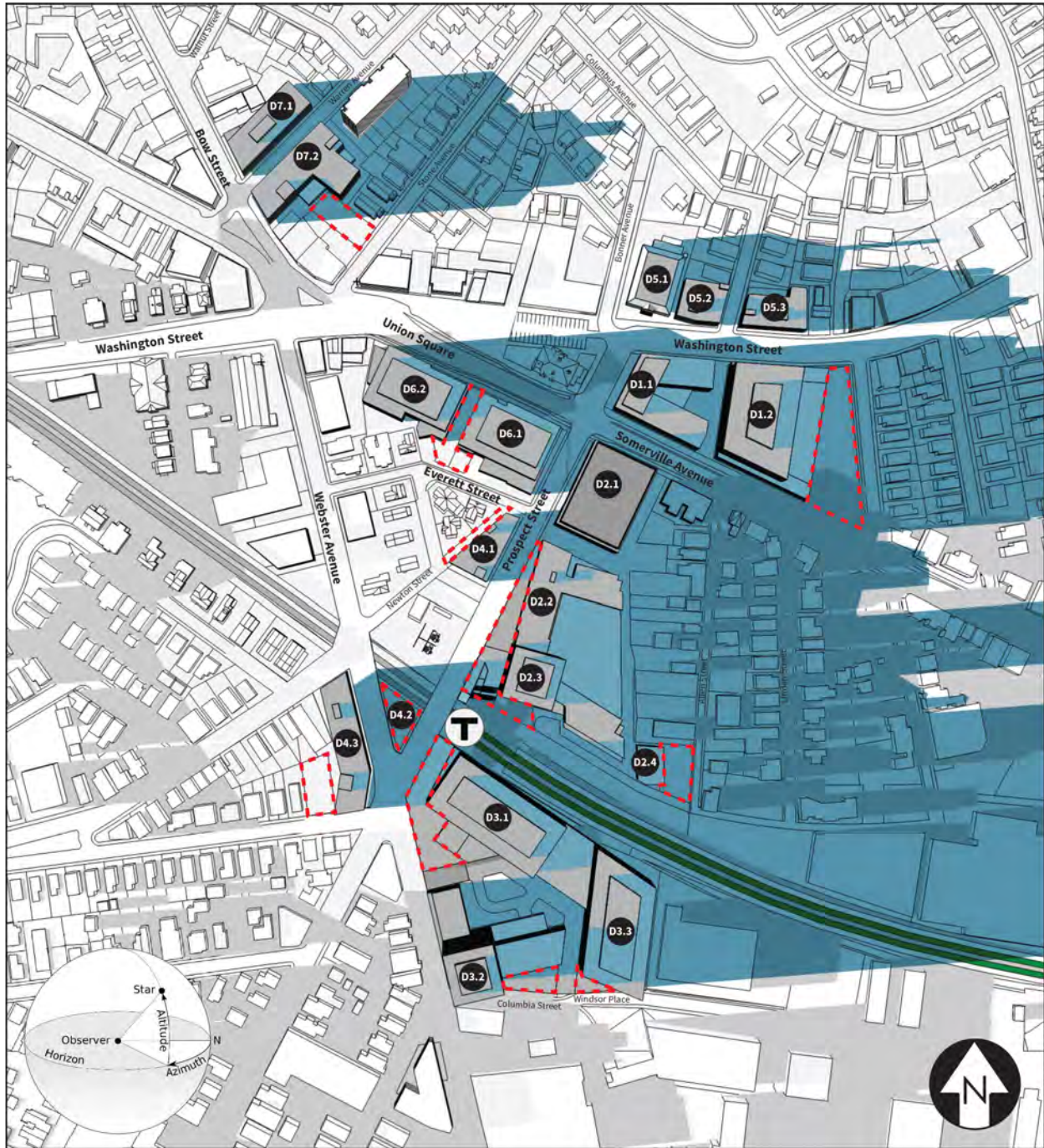


Somerville, Massachusetts (W 71.07, N 42.23)
Altitude: 28.2, Azimuth 241.3

- Existing shadows
- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 46: SHADOW STUDY — SEPTEMBER COMPOSITE

September 21 @ 6pm EST.
(Autumnal Equinox)



Somerville, Massachusetts (W 71.07, N 42.23)
Altitude: 14.3, Azimuth 141.9

- Existing shadows
- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 47: SHADOW STUDY — DECEMBER COMPOSITE

December 21 - Time Lapse 9am-3pm EST.
(Winter Solstice)

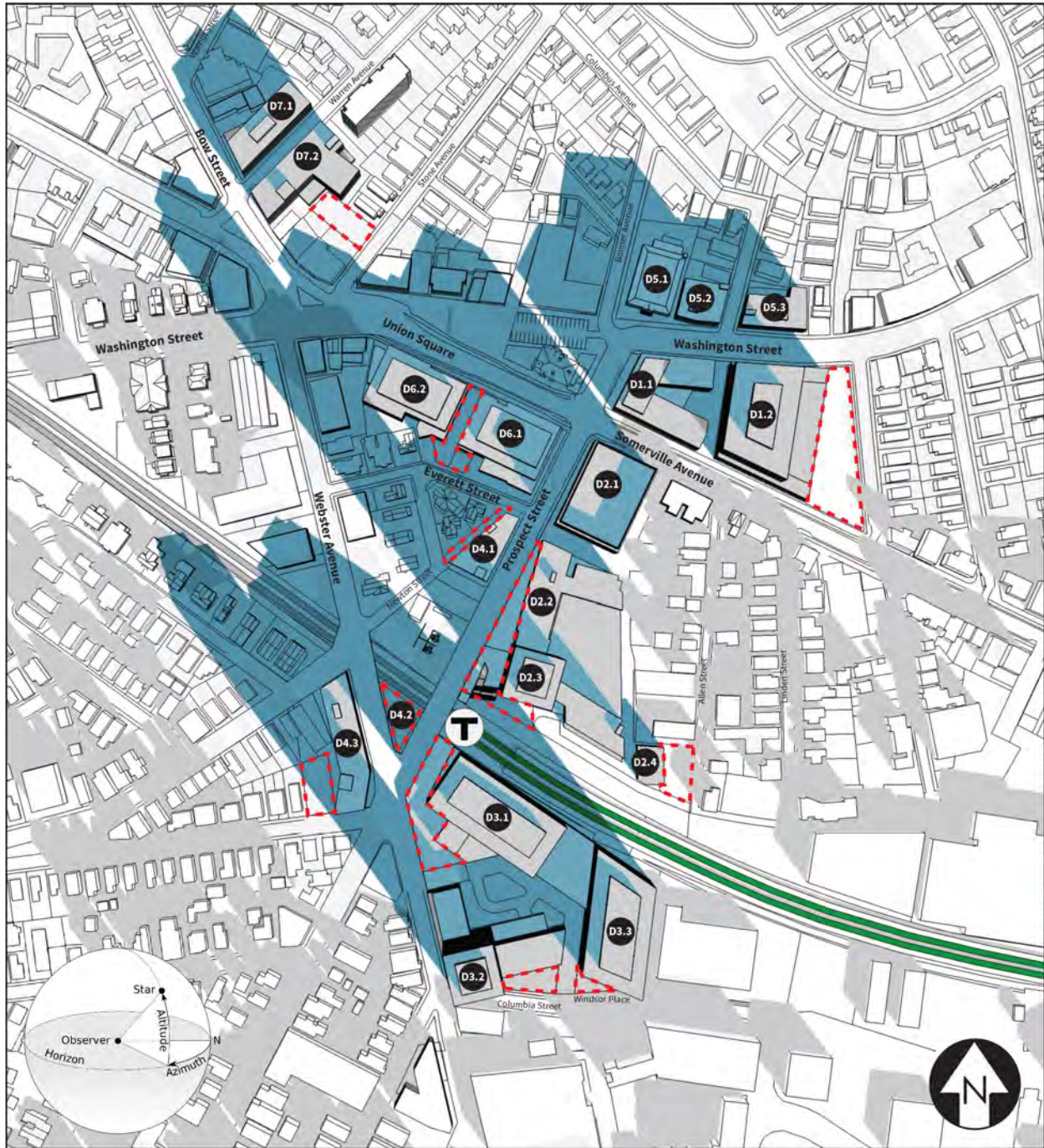


Somerville, Massachusetts (W 71.07, N 42.23)

- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 48: SHADOW STUDY

December 21 @ 9am EST.
(Winter Solstice)

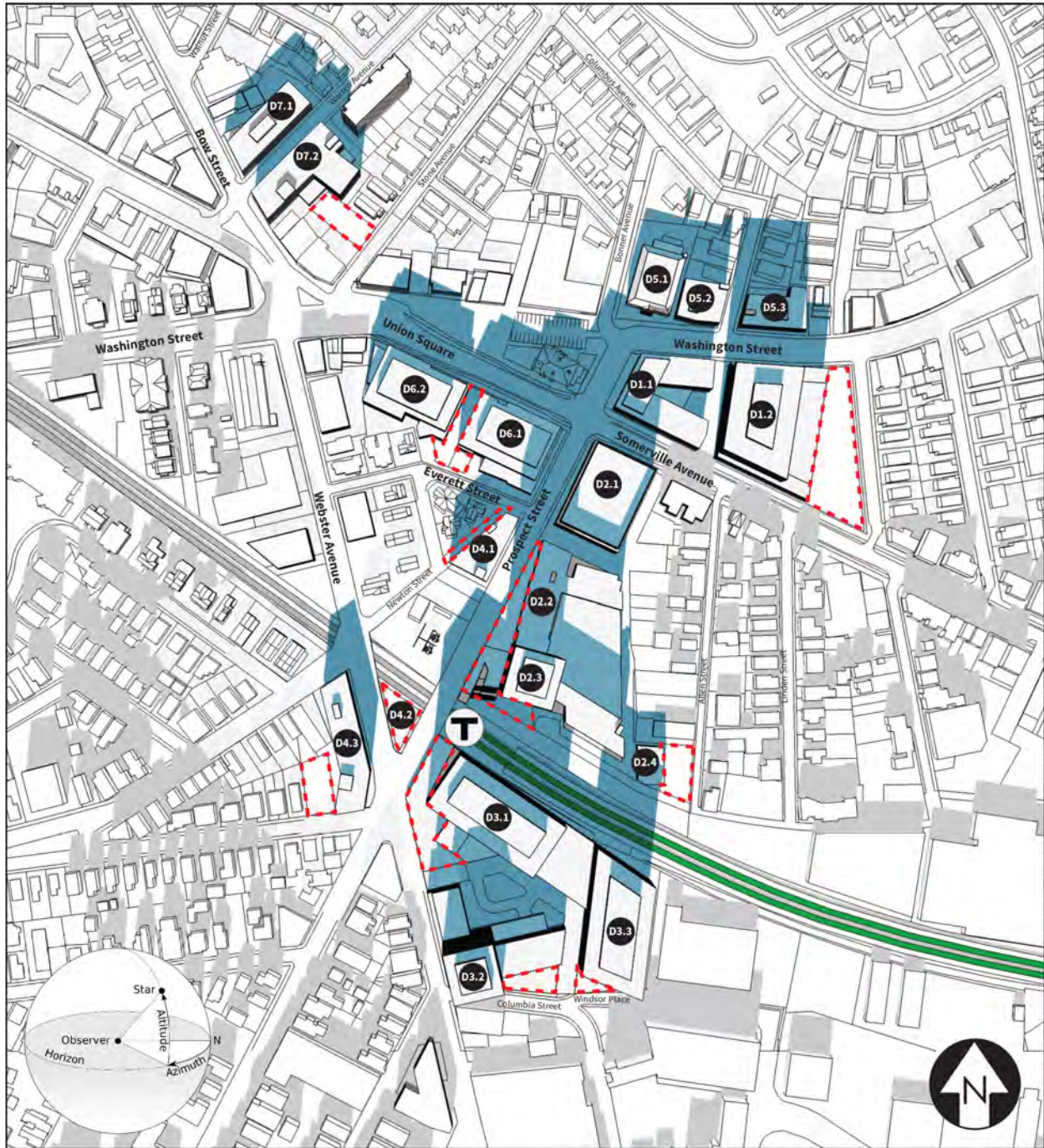


Somerville, Massachusetts (W 71.07, N 42.23)
Altitude: 14.3, Azimuth 141.9

- Existing shadows
- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 49: SHADOW STUDY

December 21 @ 12pm EST.
(Winter Solstice)

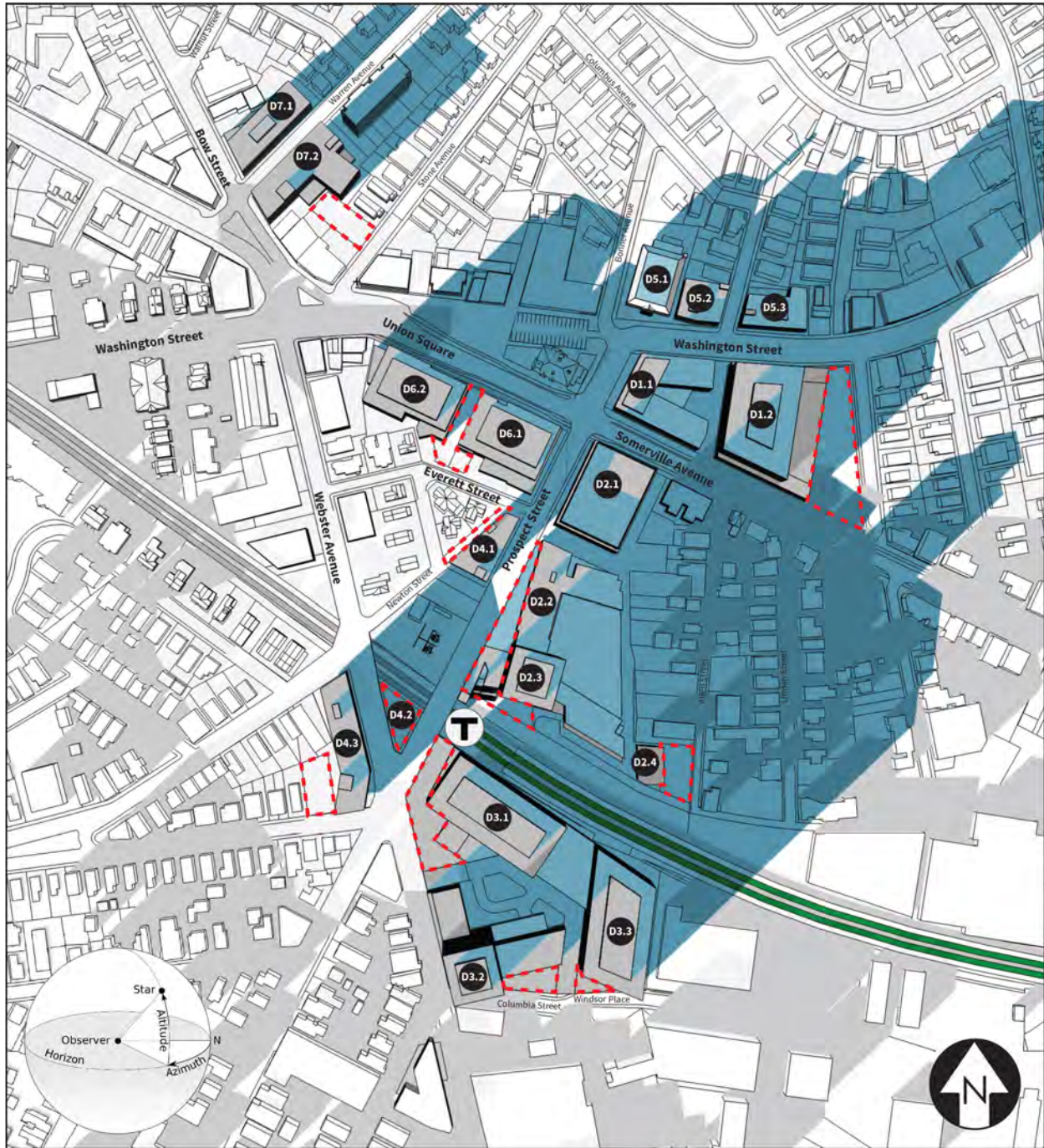


Somerville, Massachusetts (W 71.07, N 42.23)
Altitude: 24.1, Azimuth 184.3

- Existing shadows
- Net new shadows from proposed buildings
- Proposed Civic Spaces

FIGURE 50: SHADOW STUDY

December 21 @ 3pm EST.
(Winter Solstice)



Somerville, Massachusetts (W 71.07, N 42.23)
Altitude: 10.1, Azimuth 224.9

- Existing shadows
- Net new shadows from proposed buildings
- Proposed Civic Spaces

PROPOSED BUILD OUT

Beginning with *SomerVision* in 2012 and developed into the *Union Square Neighborhood Plan* in 2016, the urban design goals of Union Square's revitalization were outlined as follows:

- To create an employment hub that includes small, medium, and large commercial employers;
- To develop a range of housing options that support enhanced affordability (20% of the total units proposed);
- To enhance the public realm with wider sidewalks, landscaping, benches, and a variety of civic open spaces that greatly improve the current Union Square pedestrian experience;
- To activate the public realm with ground floor retail shops, building lobbies, and arts + creative uses;
- To connect the new MBTA Green Line station to existing neighborhoods around Union Square through various pedestrian paths; and
- To encourage biking and walking over vehicular use.

This section outlines in greater detail how the proposed 2.4 million SF mixed-use program will be realized on the development site in conformance with the zoning, following all formal building limitations including façade lengths, heights, and setbacks while providing corresponding civic spaces as required. It includes a site plan and massing diagram that depict how the 61% commercial uses and 39% residential uses are distributed across the sites. A design discussion and context analysis provide additional details related to the design, massing and proposed use mix. A build out program table details the mix of uses proposed for each block and building site. Character perspectives and a skyline view are provided to further illustrate the possibilities for the development.

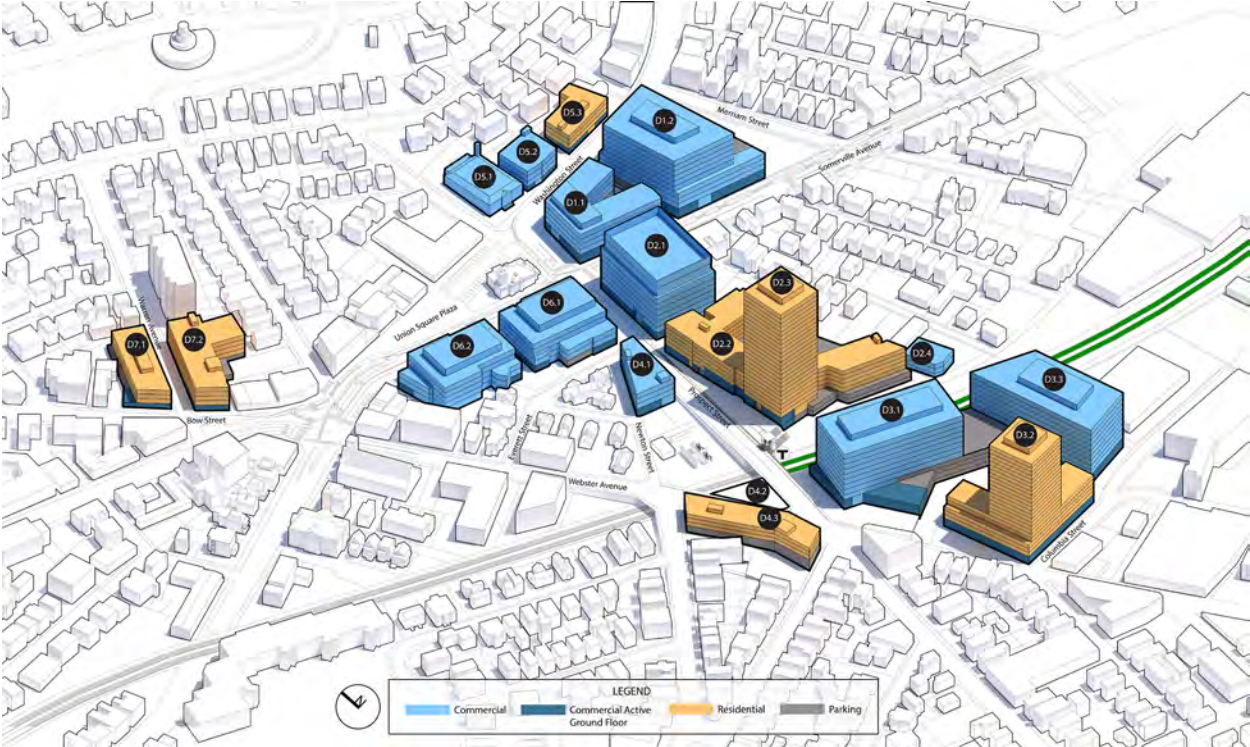
The last section includes a Block & Lot plan for each D Block which shows how each of the blocks will be sub-divided to accomplish the building, thoroughfare and civic space plans in compliance with the zoning requirements.

FIGURE 51: SITE PLAN



SITE PLAN OVERVIEW

FIGURE 52: MASSING & USES SITE AXON



Through the CDP planning effort, the following building program emerged for the development.

DESIGN NARRATIVE

In order to develop a vibrant commercial employment district in and around Union Square, every built site includes a mix of uses that complement each other and energize the district with places to discover and enjoy. For example, Phase 1 development on D2 provides for a landscaped open space that is activated by a residential lobby, active ground floor retail, a commercial lab/office building, and of course, the new MBTA station. D1 has a hotel, office/lab, arts & creative enterprise (ACE), parking, and ground floor retail, as well as a neighborhood park. Even D6, primarily office/lab, benefits from office/lab lobbies, shops, and ACE on the ground floor that will engage the neighborhood and create a new pedestrian passage as an alternative pathway to Union Square from areas south of D6.

This CDP represents the most current thinking about the massing, use mix and open spaces for the D Blocks based on the original principles of the Neighborhood Plan, subsequent feedback from neighbors, Aldermen, City Planning, Transportation, and other city departments; and the market driven requirements of desired users. It also takes into account studies by the US2 team to meet and service the program for office, residential, community, arts, and parking uses on each site and in total. Taken together, these inputs have resulted in some variations from the Neighborhood Plan, which are highlighted below for each of the D Blocks.

For each block below, the first diagram is taken directly from the Neighborhood Plan, while below that is the current massing as well as an explanation of the changes that have occurred.

D1 BLOCK

While D1 is still platted into two lots (D1.1 and D1.2), the block's open space has been increased to the size of a Neighborhood Park and consolidated onto D1.2 to address issues of equity on the eastern side of Union Square, an area underserved by open space (see Civic Space section). A portion of the residential program previously shown along Washington Street has been moved to - and replaces - the previous neighborhood park envisioned on D4.3 in the Neighborhood Plan. The result is a net loss of 25 to 30 units; however, this plan simplifies the built area on D1.2, improves the public realm and is sensitive to the existing residences along Merriam Street, who will now face onto a large new public park. The overall reduction in density on D1 results in a more open central core of the neighborhood. The D1 buildings also become 100% commercial, reinforcing the goal to add employment to Union Square.

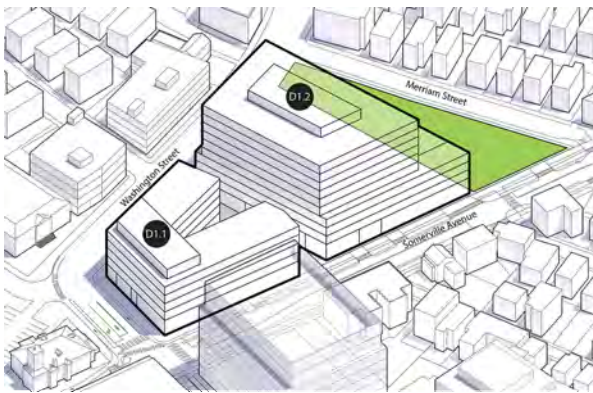
To accomplish such a sizable park, it was necessary to remove the open space facing Union Square in front of D1.1. Because of the way the Post Office is positioned on axis with the stair and elevator down to the MBTA platform, the view corridor to the Post Office down Prospect Street is still intact.

As discussed in the Civic Space section, green space, playgrounds, and/or art and leisure zones are all possible on the D1.2 park site. At the CDP neighborhood meeting, the team heard many ideas from neighbors about what uses and activities might be desired. Their feedback will be incorporated into the next level of design work when D1 goes through Design and Site Plan Review.

Consistent with the Neighborhood Plan, D1.1 is conceived as a 5-story hotel, fronting on the terminus of Prospect Street and Union Square Plaza. The widened sidewalk, created by setting the building



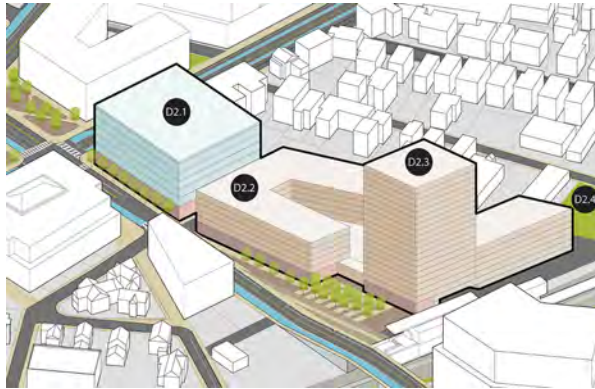
NEIGHBORHOOD PLAN



COORDINATED DEVELOPMENT PLAN

back from the property line, will support the hotel lobby and active retail uses that will occupy the base of the building. Unlike an office building, hotel guests will activate the building after normal work hours and will be able to take advantage of the vibrant night life and the many restaurants in the Square, supporting the local economy.

D1.2 will be developed as a 10-story commercial office/lab building wrapping a lined parking garage, with frontage on Washington Street, Somerville Avenue, a new thoroughfare running between D1.1 and D1.2, and a new civic space. Above the fourth floor, the building is set back 10' from the Somerville Avenue and Washington Street facades, and is approximately 50 feet from the facade that fronts the new civic space, creating a 4 story base wrapping 3 sides of the building. Ground floor uses that bookend the park will be carefully tenanted so those uses can enhance the vibrancy of the park. ACE uses will also be included in the overall programming of the building as part of the activated liner that fronts the parking garage on the pedestrian streets.



NEIGHBORHOOD PLAN



COORDINATED DEVELOPMENT PLAN

D2 BLOCK

Consistent with the Neighborhood Plan, D2 remains platted into four individual building lots. D2.1 will be developed as a 7-story commercial office/lab building, with ground floor retail fronting Somerville Avenue and Prospect Street. It will be the first major commercial building in Union Square and will start its evolution into an employment center. Located at the intersection of Prospect Street and Somerville Avenue, the 7-story building will serve as the corner stone to the commercial re-development of Union Square. Parking for the new commercial building will be provided in base of the residential building on D2.2.

D2.2 and 2.3 will be developed as residential buildings with ground floor retail fronting Prospect street and ACE spaces. D2.2 will be a 5-story General Building, separated by a hypothetical lot line from D2.3, which will be developed as a 25-story podium point tower. A significant plaza civic space will be provided along the Prospect Street frontage, with a landscape stair providing access to the new Union Square T Station. Because the MBTA is no longer providing a head house along the Prospect Street bridge, a preliminary design concept for the station area accommodates an elevator to provide accessible access to the platform and the enlarged drop-off plaza at the platform level. Continued collaboration with the MBTA GLX team is required to resolve the design and operation of this connection. The tower celebrates the new transit line to downtown and will provide an iconic landmark at the center of the Union Square neighborhood.

D2.4 will be developed as a 3-story commercial building with frontage on a new civic space. The height of the building is appropriately scaled to the adjacent residential buildings that line Allen and Linden streets, and is envisioned as a suitable location for an arts & creative enterprise hub.



NEIGHBORHOOD PLAN



COORDINATED DEVELOPMENT PLAN

D3 BLOCK

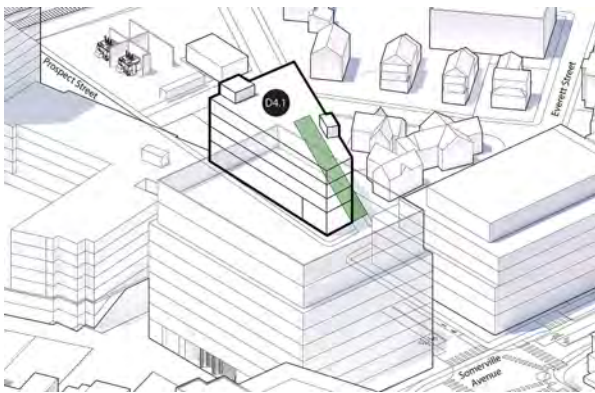
The master plan for D3 has evolved as US2 has studied the massing and layout of uses since the Neighborhood Plan was conceived. These improvements include:

- The expansion of open space along Prospect Street to facilitate pedestrian connections to the MBTA from the South;
- Shifting the commercial buildings and parking decks to the back of the site parallel to the rail line, in order to reduce the scale of development and lengths of building facades along Webster Avenue;
- Relocating the residential toward Webster so that the scale and use of the base of the building can relate to the residential character of the neighborhood; and
- Adding a new, sun filled open space at Columbia Street that sets the residential and commercial buildings back from the sidewalk behind a landscape buffer (a comment provided by several neighbors during the CDP Neighborhood Meeting).

The D3 Block will be platted into three individual zoning lots. D3.1 and D3.3 will be developed as 10-story commercial buildings for office/lab users. Parking is located on the lower levels of the buildings parallel to the train tracks. D3.2 will be developed as a 24-story podium point tower, with ground floor retail fronting Webster Avenue, and residential uses above. The height of the D3.2 point tower is consistent with the tower on D2.3, and when viewed from Prospect Hill, in conjunction with D2.3, will frame the new T station. ACE uses will be integrated into the building program for D3.2 and D3.3.



D4.1 NEIGHBORHOOD PLAN



D4.1 COORDINATED DEVELOPMENT PLAN



D4.3 COORDINATED DEVELOPMENT PLAN

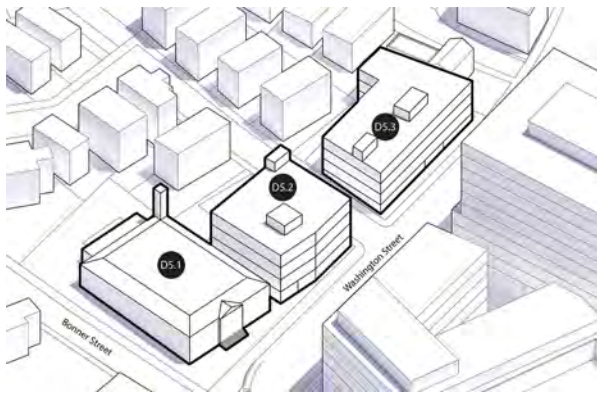
D4 BLOCK

As shown in the Neighborhood Plan, D4.1 and 4.2 remain as a building and open space respectively, while D4.3 has been changed to a 4-story residential building. As was mentioned in the D1 section above. US2 heard several concerns from neighbors that the park on D4.3 would be surrounded by vehicular traffic, yielding a less desirable environmental condition for children and the elderly. Thus, the Neighborhood Park was relocated to D1.2, and the residential use previously planned on D1.2 was moved to D4.3, despite a net loss of 25 to 30 residential units.

D4.1 will be a simple 4-story commercial building that will target emerging companies and will include retail space located along Prospect Street. A new pocket plaza will be created when a portion of Newton Street is improved into a civic space, creating a buffer to the adjacent single-family homes and a new open space that can be enjoyed by the entire community. D4.2 will be developed as a civic space. D4.3 will be developed as a 4-story general building, with ground floor retail facing Webster Avenue and residential units on the upper 3 floors. The new residential building will frame the multi-modal gateway open space on D4.2, and the existing community garden will remain along Concord Avenue.



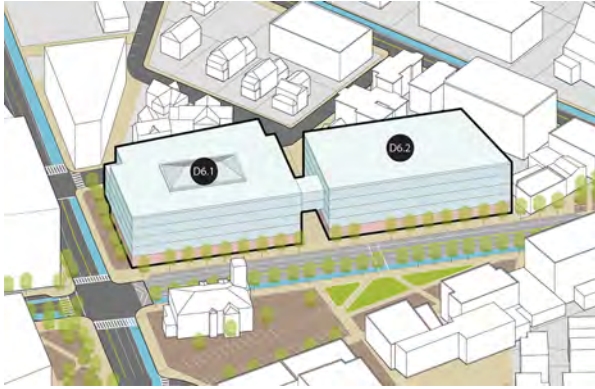
NEIGHBORHOOD PLAN



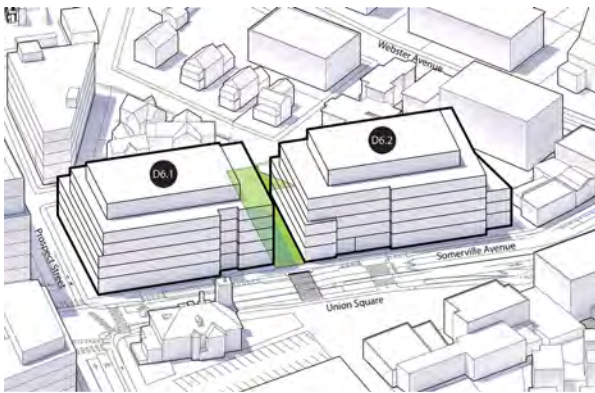
COORDINATED DEVELOPMENT PLAN

D5 BLOCK

Each of the three parcels shown in the Neighborhood Plan have remained and the historic former Post Office is being redeveloped into a vibrant mix of uses that will include a focus on ACE uses. The current concept contemplates a market place, an entertainment venue and coworking. D5.2 and D5.3 will be developed as 4-story buildings with ground floor retail. The former will be a commercial building, while the latter will be a general building with residential uses on the upper three floors. D5.2 has potential as a relocation opportunity for one of the existing D Block businesses (See Implementation section).



NEIGHBORHOOD PLAN



COORDINATED DEVELOPMENT PLAN

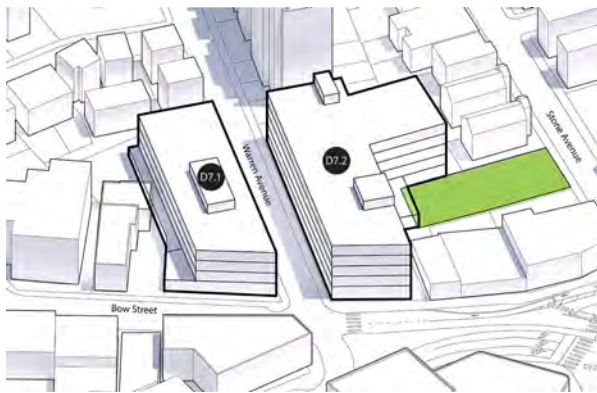
D6 BLOCK

Consistent with the Neighborhood Plan, parcels D6.1 and D6.2 will be developed as 5-story commercial buildings, with ground floor retail spaces and ACE spaces occupying ground floor locations. After considerable study of shadow impacts and general massing, these buildings and their penthouses have been reshaped to more sensitively respond to the character of each of the streets, open spaces and neighboring buildings that surrounds them.

The massing of the D6.1 reduces to three stories on the south side of the building to provide a better scale relationship to the residential buildings that front Everett Street. The pedestrian through-block passage, required by zoning because the overall block length exceeds 400', has been widened to allow more sunlight and air to penetrate the D6 and improve the pedestrian experience. Ground floor retail uses are planned for the through block passage, ensuring a lively and engaging civic space. The plaza that was located at the corner of Prospect Street and Somerville Avenue in the Neighborhood Plan has been removed to accommodate the widened through block passage.



NEIGHBORHOOD PLAN



COORDINATED DEVELOPMENT PLAN

D7 BLOCK

The D7 Blocks remain as residential buildings with ground floor retail fronting Bow Street. During the planning process, community members suggested a pedestrian connection between the new pocket park on 7.2 and Bow Street, and the team responded by pulling the building back from the adjacent lot. From there, neighbors thought a link to Stone Park and Sanborn Court could be achieved away from the activity of Union Square.

D7.1 will be a 4-story building, approximately the same height as the residential buildings at the western end of Bow Street. D7.2 steps up to 5 stories, relating to height of the residential buildings on Webster Avenue and taller apartment buildings on Warren Avenue and the D6 parcels. Together, the building volumes of D7.1 and D7.2 serve to define and restore a street edge, incomplete since World War II. Since the area around D7 is well served by parks and playgrounds for families with children, neighbors have suggested that the civic space create a quiet oasis of green space directed toward adults and the seniors living in the public housing on Warren Street.

CHARACTER PERSPECTIVES

D1 BLOCK: NEIGHBORHOOD PARK



D2 BLOCK: PLAZA



D2 BLOCK: STAIR

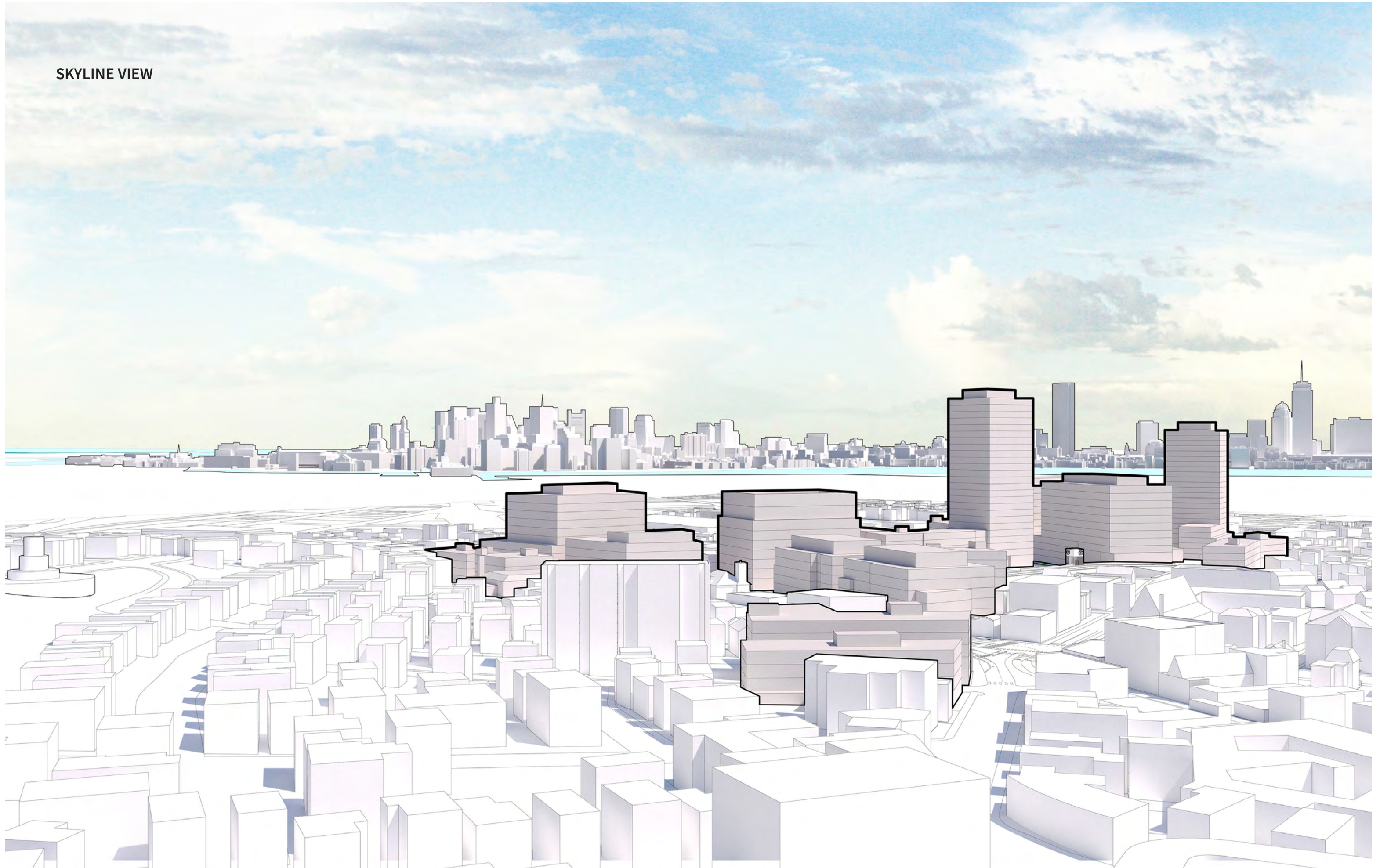


D6 BLOCK: THROUGH BLOCK PLAZA



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SKYLINE VIEW



BUILD OUT PROGRAM ESTIMATES

TABLE 9: BUILD OUT PROGRAM ESTIMATES

PARCEL / BLOCK	TOTAL AREA (SF)	COMMERCIAL USE DISTRIBUTION										RESIDENTIAL USE DISTRIBUTION							
		OFFICE / LAB		RETAIL		HOTEL AREA		HOTEL ROOMS		ARTS & CREATIVE		COMMERCIAL TOTAL		RESIDENTIAL TOTAL		UNITS*		AFFORDABLE UNITS	
		SF	% TOTAL	SF	% TOTAL	SF	% TOTAL	Rooms	% TOTAL	SF	% TOTAL	SF	% TOTAL	SF	% TOTAL	MIN	MAX	MIN	MAX
D1	354,000	231,000	20%	22,000	16%	93,000	100%	175	100%	6,000	8%	354,000	24%	-	-	-	-	-	-
D1.1	105,000	-	-	11,000	8%	93,000	100%	175	100%	-	-	105,000	7%	-	-	-	-	-	-
D1.2	249,000	231,000	20%	11,000	8%	-	-	-	-	6,000	8%	249,000	17%	-	-	-	-	-	-
D2	619,000	166,000	14%	29,000	21%	-	-	-	-	25,000	34%	220,000	15%	399,000	43%	389	456	78	91
D2.1	178,000	166,000	14%	12,000	9%	-	-	-	-	-	-	178,000	12%	-	-	-	-	-	-
D2.2-3	429,000	-	0%	17,000	12%	-	-	-	-	13,000	18%	30,000	2%	399,000	43%	389	456	78	91
D2.4	12,000	-	0%	-	0%	-	-	-	-	12,000	16%	12,000	1%	-	-	-	-	-	-
D3	888,000	522,000	45%	18,000	13%	-	-	-	-	15,000	20%	555,000	38%	333,000	36%	325	381	65	76
D3.1	280,000	271,000	23%	9,000	6%	-	-	-	-	-	-	280,000	19%	-	-	-	-	-	-
D3.2	351,000	-	-	9,000	6%	-	-	-	-	9,000	12%	18,000	1%	333,000	36%	325	381	65	76
D3.3	257,000	251,000	22%	-	0%	-	-	-	-	6,000	0	257,000	18%	-	-	-	-	-	-
D4	90,000	25,000	2%	12,000	9%	-	-	-	-	-	-	36,000	2%	54,000	6%	53	62	11	12
D4.1	29,000	25,000	2%	5,000	4%	-	-	-	-	-	-	29,000	2%	-	-	-	-	-	-
D4.2	-	-	0%	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D4.3	61,000	-	0%	7,000	5%	-	-	-	-	-	-	7,000	0%	54,000	6%	53	62	11	12
D5	95,000	21,000	2%	24,000	17%	-	-	-	-	20,000	27%	65,000	4%	30,000	3%	29	34	6	7
D5.1	37,000	-	0%	17,000	12%	-	-	-	-	20,000	27%	37,000	3%	-	0%	-	-	-	-
D5.2	25,000	21,000	2%	4,000	3%	-	-	-	-	-	-	25,000	2%	-	0%	-	-	-	-
D5.3	33,000	-	0%	3,000	2%	-	-	-	-	-	-	3,000	0%	30,000	3%	29	34	6	7
D6	225,000	193,000	17%	26,000	19%	-	-	-	-	8,000	11%	225,000	15%	-	-	-	-	-	-
D6.1	111,000	96,000	8%	12,000	9%	-	-	-	-	4,000	5%	111,000	8%	-	-	-	-	-	-
D6.2	114,000	97,000	8%	14,000	10%	-	-	-	-	4,000	5%	114,000	8%	-	-	-	-	-	-
D7	126,000	-	0%	9,000	6%	-	-	-	-	-	-	9,000	1%	117,000	13%	114	134	23	27
D7.1	45,000	-	0%	5,000	4%	-	-	-	-	-	-	5,000	0%	40,000	4%	39	46	8	9
D7.2	81,000	-	0%	4,000	3%	-	-	-	-	-	-	4,000	0%	77,000	8%	75	88	15	18
TOTALS	2,397,000	1,158,000		140,000		93,000		175		74,000		1,464,000		933,000		910	1,067	183	213
AS % OF TOTAL		48%		6%		4%				3%		61%		39%					
AS % OF COMMERCIAL		79%		10%		6%				5%									

*NOTE: at full build-out, total residential until shall not exceed 998 units.

CONTEXT ANALYSIS

BLOCK D1

D1.1 is conceived as a 5-story hotel, fronting on the terminus of Prospect Street and Union Square Plaza. The height of the building is approximately equal to the buildings on D6.1 and 6.2, providing a consistent datum on the south and east sides of Union Square Plaza.

D1.2 will be developed as a 10-story commercial building wrapping a lined garage, with frontage on Washington Street, Somerville Avenue, a new alley between D1.1 and D 1.2, and a new neighborhood park. Above the fourth floor, the building is set back 10' from the Somerville Avenue and Washington Street facades and 40' from the facade that fronts the new civic space, creating more than a 4-story plinth which wraps three sides of the building. The 4-story base of the building relates to the scale of the single-family homes that line Merriam Street, and the commercial and new residential buildings on Washington Street and Somerville Avenue. The neighborhood park provides a green buffer and scale transition from the Merriam Street homes to the 4-story commercial and parking podium and then to the 10-story commercial building on D1.2.

BLOCK D2

D2.1 will be developed as a 7-story commercial building, with ground floor retail fronting Somerville Avenue. The height of the building including the

potential mechanical penthouse will be comparable to the height of the commercial buildings that are planned for parcels D1.2 and D3.1.

D2.2 and D2.3 will be developed as residential buildings with ground floor retail fronting Prospect Street. D2.2 will be a 5-story general building, separated by a hypothetical lot line from D2.3, which will be developed as a 25-story podium point tower. Due to the rising grade of Prospect Street as it crosses the train tracks, the height of the D2.2 building and the podium of D2.3 will be approximately equal to the height of D6.1. The 25-story tower of D2.3 will provide an iconic landmark near the neighborhood train station, and will be approximately equal in height to the podium point tower planned for parcel D3.2.

BLOCK D3

D3.1 and D3.3 will be developed as 10-story commercial buildings. The height of these buildings will be consistent with the height of the commercial building on D1.2, and approximately the same height as the commercial building on D2.1 when the mechanical penthouse is included. D3.2 will be developed as a 24-story podium point tower, with ground floor retail fronting Webster Avenue, and residential uses above. The height of the point tower is consistent with the tower on D2.3.

BLOCK D4

D4.1 will be a 4-story commercial building, with retail space located along Prospect Street. The height of the building relates to the scale of the podium base of D2.2 and the south side of D6.1 and provides for a transition from the D2 density to the residential scale to the west and southwest.

D4.3 will be developed as a 4-story general building, with ground floor retail facing Webster Avenue and residential units on the upper 3 floors. The height of the building relates in scale to the residential neighborhood along Webster Avenue, and the podium base of D3.2 and provides for a transition in scale from the D3 density to the residential scale to the south and southwest.

BLOCK D5

D5.1 (the former post office) will remain a three story building. D5.2 and D5.3 will be developed as 4-story buildings with ground floor retail. The height of the buildings will be approximately equal to the height of the 4-story base of D2.2 and the new residential buildings that have been developed on Washington Street. The scale of the buildings on D5 was limited to 4-stories to provide for a transition in scale to the residential neighborhood to the north.

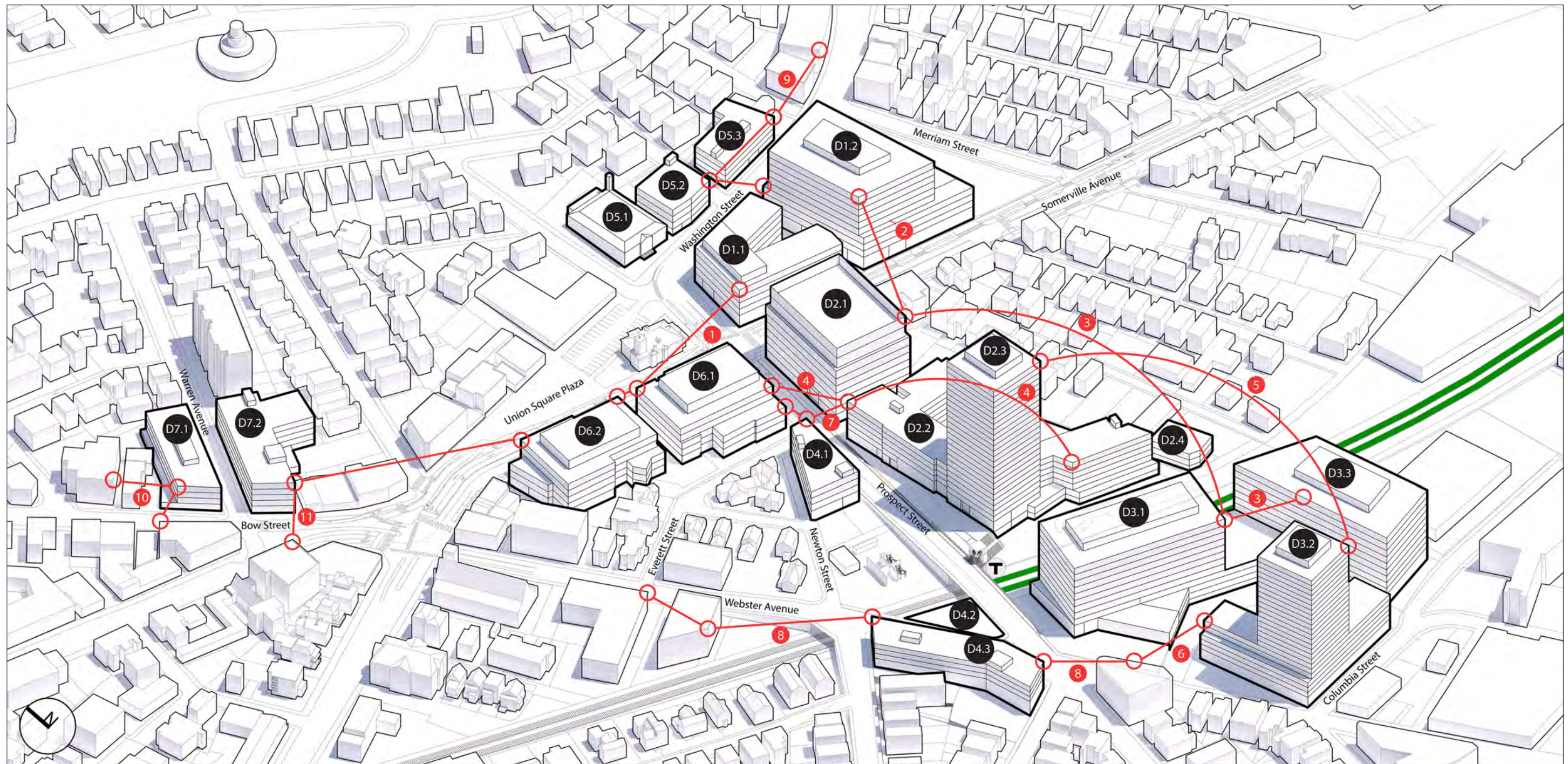
BLOCK D6

D6.1 and D6.2 will be developed as 5-story commercial buildings, with ground floor retail space fronting Somerville Avenue. The height of buildings will be approximately the same height as the hotel that is planned for D1.1. The massing of the D6.1 building reduces to 3 stories on the south side of the building to provide a better scale relationship to the residential buildings that front Everett Street.

BLOCK D7

D7.1 and 7.2 will be developed as residential buildings with ground floor retail space fronting Bow Street. D7.1 will be a 4-story building, approximately the same height as the commercial building across the street and close to the height of the eave of the former church adjacent to Bloc 11 cafe. D7.2 steps up to 5 stories, relating to the height of the 3-story commercial building on Somerville Avenue, the 11-story Somerville Housing Authority building to the north and the proposed commercial buildings that are planned for D6.

FIGURE 53: CONTEXT ANALYSIS, DIMENSIONAL RELATIONSHIPS



Dimensional Relationships

- 1 Similar building heights frame the South and East sides of USQ Plaza - D1.1 height approximately equal to D6.1 and D6.2 heights.
- 2 Building set back 10'-0" from Somerville Ave and Washington St facades creating 4 story plinth at base of building.
- 3 Similar building heights between D1.2, D2.1 (including penthouse) and D3.1 commercial buildings.
- 4 Height of D2.2 and D2.3 residential podium approximately equal to D6.1 and D6.2 buildings.
- 5 Height of D2.3 residential point tower approximately equal to D3.2 residential tower.
- 6 D3.2 tower is set back 10'-0" and low-rise height similar to new 5-story building at Prospect St and Webster Ave.
- 7 D4.1 building height relates in scale to podium base of D2.2 and south side of D6.1.
- 8 D4.3 residential building height similar to neighboring buildings on Webster Ave and the new 5-story building at Prospect St and Webster Ave.
- 9 D5.2 and D5.3 building heights approximately equal to the height of 4 story base of D2.2 and new residential buildings on Washington St.
- 10 D7.1 building height relates to commercial buildings across Bow St.
- 11 D7.2 building height similar to 3-story commercial building on Somerville Ave and the proposed buildings on D6.1.

NOTE:
All building heights will be subject to final design of individual buildings and will comply with the height and story limitations of the Union Square Zoning.

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CONNECTIVITY

In addition to regional connectivity that the Green Line will provide, the City of Somerville is planning significant improvements to the public right-of-ways within the Union Square neighborhood that will enhance mobility for pedestrians and cyclists. Through its Union Square infrastructure program, the City of Somerville is reconstructing the streetscape based on the vision outlined in the *Union Square Neighborhood Plan* and US2 will be contributing funds and/or providing in-kind improvements for infrastructure. A “complete streets” design approach will be implemented that prioritizes the pedestrian and cyclists over vehicles. Sidewalks will be widened (doubled in size in many instances) to allow

adequate space for pedestrians, new street trees, benches, and bike racks, and will include 3 different zones: a curb zone directly against the roadway, a furnishing zone with street trees, planting and site furniture, and a clear pedestrian walkway of at least 6 feet width. In some locations the sidewalks will expand further to provide space directly in front of the new buildings. The public realm improvements will enhance the overall pedestrian experience and encourage residents, office workers and visitors alike to stroll through a newly energized Union Square. These pathways will connect civic spaces, businesses, transit nodes, retail stores and homes making Union Square a more livable neighborhood.

FIGURE 54: COMPLETE STREETS AS ENVISIONED IN THE NEIGHBORHOOD PLAN



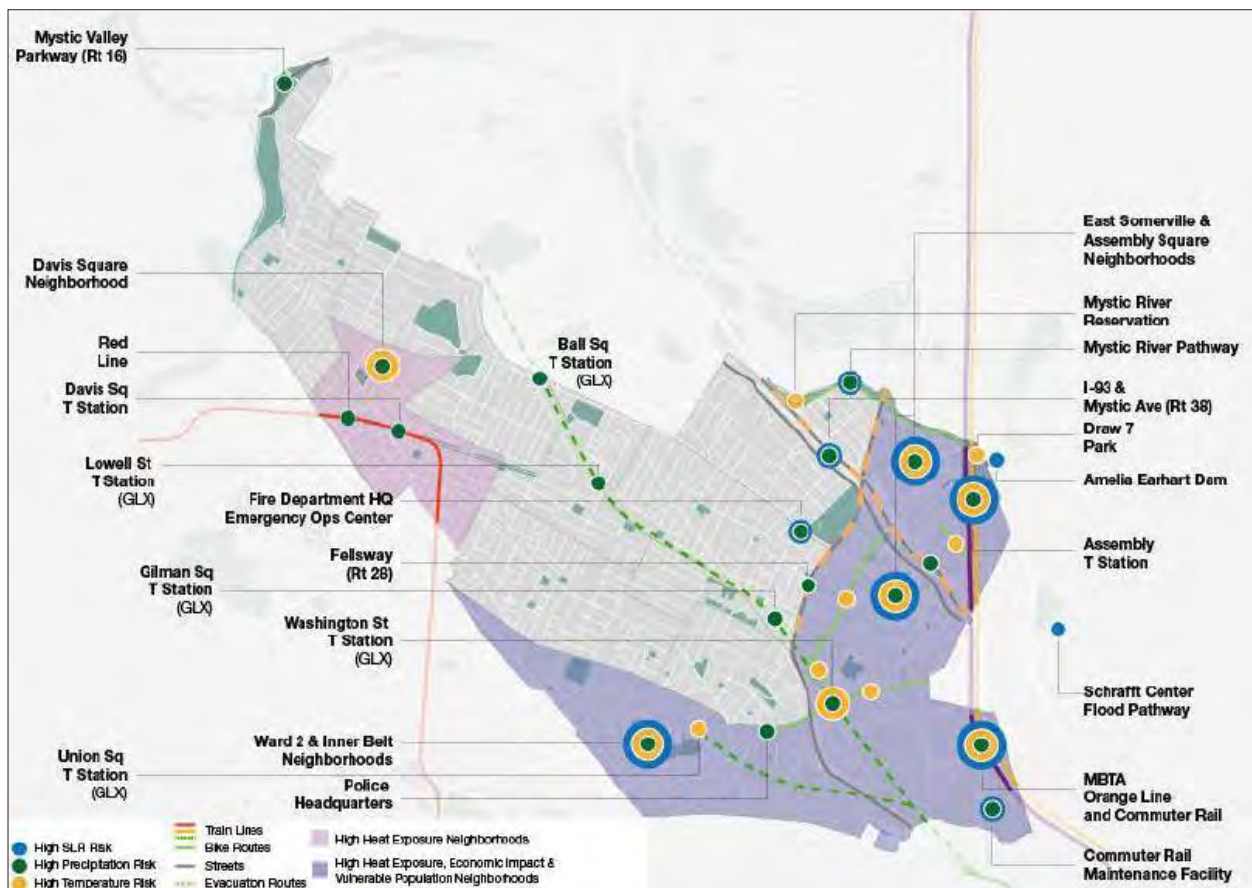
SUSTAINABILITY & RESILIENCY

IDENTIFIED VULNERABILITIES

With an eye to the future and an interest in protecting the newly created assets and the neighborhood that supports them, resilient planning will be an important consideration for each building project as it moves through Design and Site Plan Review. The City of Somerville has been proactive in identifying short term and long-term climate risks to the area as evidenced by the launch of the Sustainaville Initiative to achieve carbon neutrality and the release of the Climate Change Vulnerability Assessment (CCVA) in June of 2017. Key findings of the vulnerability assessment broadly identify climate exposure focused on sea level rise, storm surge, precipitation and temperature as the key stressors to the area.

These Somerville wide risks are also identified to be of localized concern in Union Square, and the development presents a unique opportunity to help prepare the neighborhood for future climate events. CCUA underscores the unique risks associated with the individual D Blocks and their continued susceptibility to the effects of climate change. The accompanying image identifies each of the D Blocks relative to the priority locations as described by the CCVA. Specifically, the shaded areas represent those areas best positioned to address high heat exposure, economic impacts, and vulnerable population neighborhoods directly.

FIGURE 55: IDENTIFIED CCVA KEY PRIORITIES (2017)



FLOOD RISK

As it relates to flood risk specifically, topographical conditions will influence mitigating design approaches on a site by site basis. For example, the D1, D2 and D3 building locations are relatively low-lying and more prone to flooding, while the southernmost portion of D4 and the entirety of D7, which are at a higher elevation, have less of a flood risk. In parallel with the early phase of development, the Somerville Avenue Utility and Streetscape Improvements Project will build in adaptive capacity to the drainage system, incorporating a storage box culvert as part of the complete streets restoration that will also introduce new green infrastructure into the square. Even with these proactive improvements, designing the buildings to be resilient to potential flooding will be important to both the project team delivering the building and the end user. Low level uses will consider the potential for flood impacts, and will be designed to protect building systems. Similarly, flood sensitive systems will not be located in areas that are deemed to be susceptible to flooding without the necessary precautions to protect them. Further bolstering long-term resiliency, the inclusion of emergency back-up systems, critical to future building occupants and their operations, will be addressed in more detail as specific occupant needs become known.

URBAN HEAT ISLAND EFFECT

Somerville's density, locational characteristics relative to urban centers, prevailing building typologies, and lack of open space all contribute to the Urban Heat Island Effect (UHI). UHI regions represent areas where temperatures are significantly warmer than adjacent areas due to how much heat is being absorbed, produced or shed in that immediate area. Climate forecasts indicate that Somerville is expected to get hotter as it relates to both average temperatures and temperature extremes. The CCVA observes that without significant changes to the physical environment, the increase

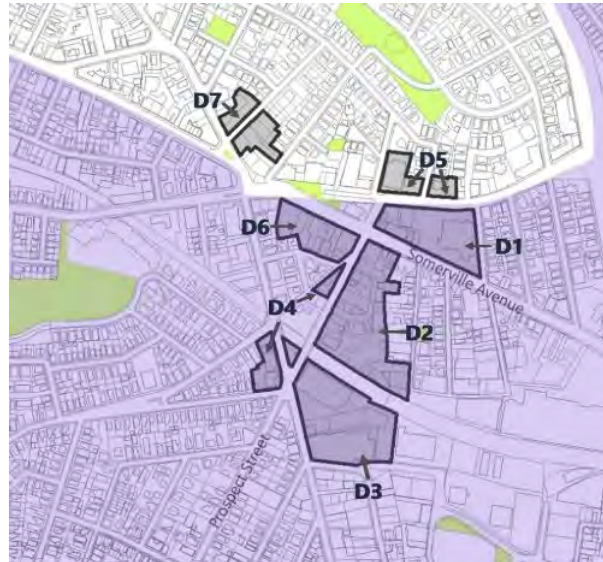


FIGURE 56: UNION SQUARE PRIORITY AREAS (CCVA 2017)

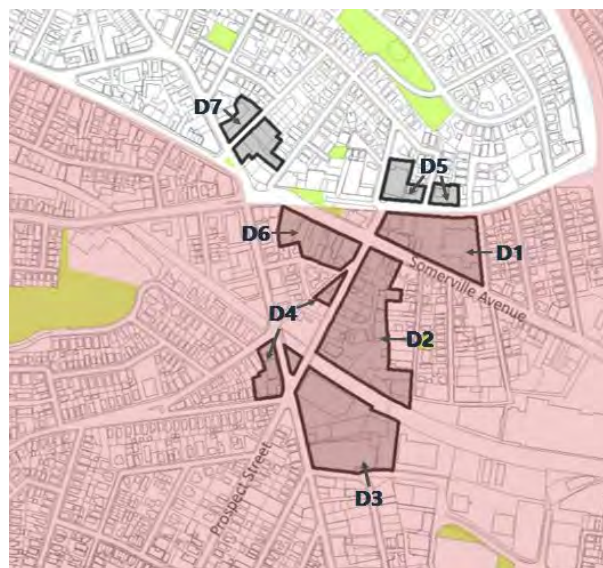


FIGURE 57: HIGH OUTDOOR HEAT EXPOSURE RISK (CCVA 2017)

in heat exposure will have harmful public health implications for Somerville residents. Further, the CCVA notes that this heat exposure is likely to be exacerbated amongst vulnerable populations. From a neighborhood perspective, the report found that Ward Two, Inner Belt, East Somerville, and Assembly Square have the highest level of social vulnerability. (This finding is consistent with the

applicant’s assessment of environmental justice populations within the study included in the Civic Space Appendix.)

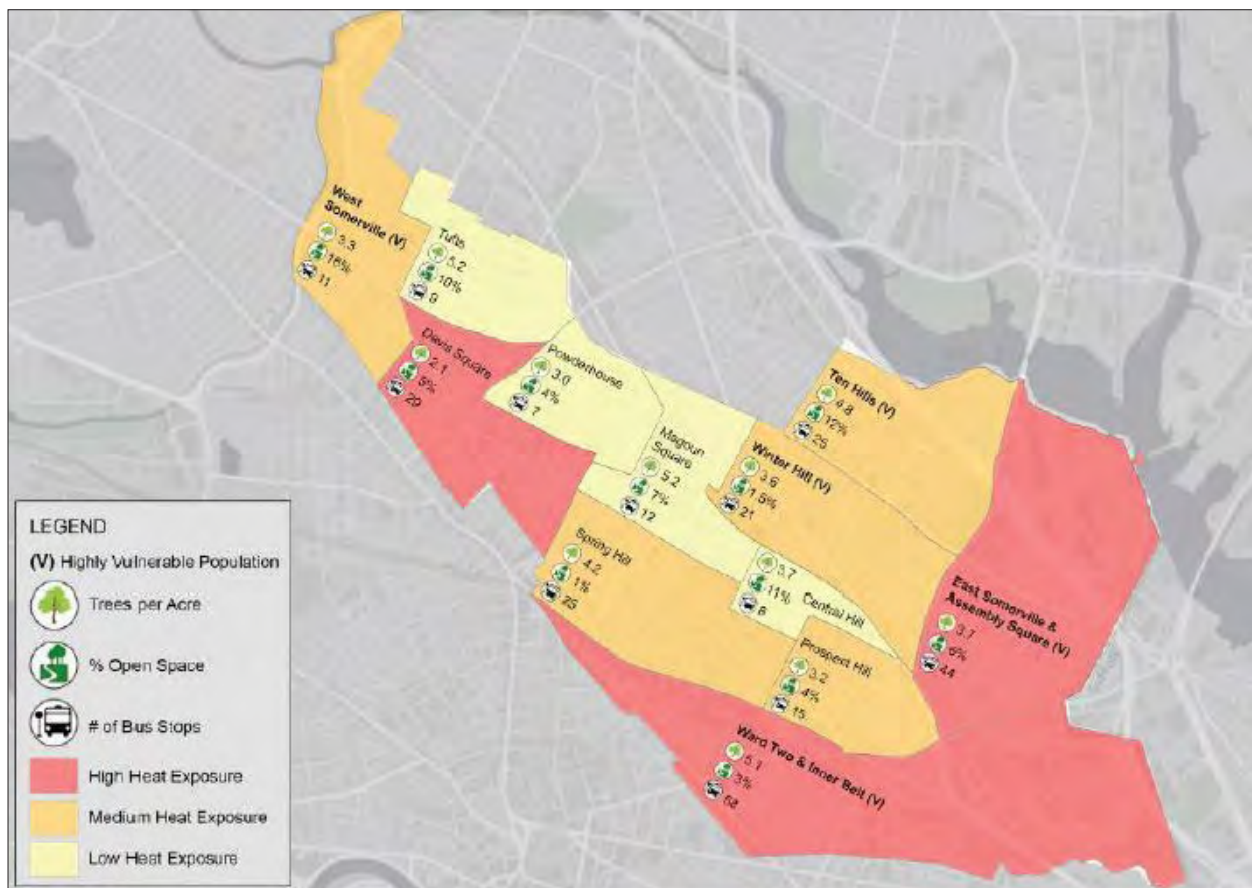
A map of the identified high heat exposure areas superimposed with the D Block locations has been provided here for reference. It is quickly evident that the development has an opportunity to directly address multiple high-priority, high-heat, and socially vulnerable areas, as five of the seven D Blocks figure in these locations (D1, D2, D3, D4 and D6). Beyond new construction, the new open public spaces provides the greatest opportunity to address the broadest user base and surrounding neighborhood. The open space plan as presented in the Civic Space portion of this document is the applicant’s assumption of this responsibility to

plan with present and future climate realities in mind, led demonstrably with the positioning of the Neighborhood Park on D1. Beyond the park, the entire network of planned open spaces will be subject to the requirements of the Union Square Zoning – regulations aligned with resilient planning practices that require vegetated areas, permeability, and the large trees that provide shade and cooling to reduce the Urban Heat Island.

SUSTAINABLE STRATEGIES

Sustainability will inform every design decision that is made throughout the continued planning process. Enduring and energy efficient buildings conserve embodied energy, preserve natural resources, and limit the amount of greenhouse gases that are

FIGURE 58: IDENTIFIED CCVA URBAN HEAT ISLAND EXPOSURE (CCVA 2017)



emitted in to the atmosphere. Newly created open spaces replace impervious pavement with new landscape areas, reducing storm water run-off, providing comforting shade and reducing the heat-island effect on a neighborhood scale. The project will embrace the opportunity to positively influence the urban environment and become a model for sustainability through thoughtful design that sets as its objective a more resilient future.

The project will follow the most current requirements from the U.S. Green Building Council's (USGBC) leadership in Energy and Environmental Design (LEED) rating system, and be at a minimum LEED Silver certifiable, and for all buildings larger than 50,000 square feet, LEED Gold certifiable.

One of the neighborhood scale items that will be reviewed relative to the identified flood risk is stormwater. The redevelopment of the parcels will benefit Union Square and the City of Somerville by increasing the amount of open space and plant material on each of the D blocks. New open space with pervious surfaces and materials will reduce the amount of stormwater runoff, and uptake of water by new plant materials will further reduce the amount that will be discharged from each parcel. Working in coordination with the City of Somerville, the project will investigate stormwater management infrastructure that will allow for detention and infiltration on site to reduce rates and volumes to the maximum extent practicable. These improvements will reduce the pressure on the City's stormwater managements systems, and will help reduce the duration and extent of flooding events in the Union Square area during significant storm events.

In addition to the reductions in the rate and volume of stormwater, the quality of stormwater will also be improved with the provision of best management practices that are consistent with current engineering practices. Water quality improvements will reduce the amount of sediment and pollutants that are

introduced to the City of Somerville's collection systems. Considering building and site improvements will ultimately be specific to the end user, the specificity of improvements will occur on a site by site basis during the Design and Site Plan Review process, in accordance with city's requirements for stormwater management.

On a building scale, sustainability measures that will be studied include:

- Energy efficient building envelopes with high performance glazing;
- Passive design opportunities to decrease energy consumption;
- Low flow water efficient plumbing fixtures;
- LED lighting sources;
- White roof membranes to reduce heat island effect;
- Energy efficient heating and air conditioning systems; and
- Low VOC materials.

Acknowledging the City of Somerville's stated objective for carbon neutrality by 2050, the applicant will make efforts to implement sustainable strategies that will contribute to this goal. The inclusion of natural gas infrastructure will be weighed against opportunities for electric or district energy systems that could potentially be more cost effective or more efficient. Among many others, these kinds of opportunities will be considered at the Design and Site Plan Review stage, when the increased specificity of program and user needs can better inform them. As individual building designs evolve, each of the sustainability and resiliency opportunities for the project, including those cited herein, will be evaluated for inclusion based on their perceived benefit, technical feasibility, user requirements and the need to deliver spaces that are competitive in the market.

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TRANSPORTATION

The Union Square Revitalization project is envisioned as a mixed-use, multimodal accessible destination, with ample and easy access to transit, dedicated bicycle infrastructure, safe and widespread pedestrian accommodations, and efficient parking, loading, and service access. The Union Square neighborhood plan's vision for the future transportation network in Union Square serves as the basis for the City of Somerville's proposed new roadways, bicycle and pedestrian facilities, and other future transportation improvements. While long serving as a regional crossroads, Union Square's roadways and thoroughfares prioritized through traffic to the detriment of its neighbors, residents, and businesses. As the earliest fulfillment of the Neighborhood Plan, Union Square's revitalization is helping to reclaim the roads, sidewalks, streets, and byways for people who want to live, work, and play in Union Square.

The arrival of the Green Line in Union Square serves as a catalyst for the development, allowing direct, single-seat service between Union Square, downtown Boston, Back Bay, and destinations further west such as Boston University and Boston College. This new connection allows for unprecedented access to and from Union Square. Green Line facilities are intended to interface directly with the new development, being located directly adjacent to D2. Motor vehicle pickup and drop-off access for the Union Square station takes place on D2 itself, while required MBTA facilities such as restrooms and break areas for MBTA employees will be provided within the D2 buildings. Promotion of the Green Line and emphasis on easy access to the Union Square station reinforces the vision of an accessible, transit-oriented development. Furthermore, access to premium transit promotes a greater alternative transportation mode share, reducing the number of vehicle on Union Square's roadways and, as a result, improving the pedestrian and cycling experience in the neighborhood.

TRANSPORTATION IMPACT STUDY SUMMARY

As anticipated during the Neighborhood Planning Process, the scale of the Union Square Revitalization project will produce new trips that will have a significant effect on the transportation network of the Union Square area and will need to be managed proactively. The Transportation Impact Study (TIS) is a required analysis of existing transportation infrastructure and anticipated impacts reasonably attributable to the proposed development, and

is provided within Appendix 4. The TIS study area includes nearby corridors and intersections expected to be effected by the increase in traffic from the development and covers four scenarios: existing conditions, base year built condition, base year built condition with mitigation, and future year built condition with mitigation. These analyses are studied for four transportation modes: pedestrian, transit, bicycle, and motor vehicle.

EXISTING TRANSPORTATION

Long serving as a regional crossroads for the Lower North Shore, Union Square’s roadways and thoroughfares have prioritized through traffic to the detriment of Somerville’s neighbors, residents and businesses. While well connected to many destinations by road, bus, bike and sidewalk, each of these modes converges in and around Union Square, competing for limited space. A circuitous street network routes vehicles through multiple intersections and the resulting delays and roadway space dedicated to vehicles crowds out local trips in Union Square. The City of Somerville has recognized these challenges, and through multiple efforts is directly addressing them. The recent conversion of Prospect Street and Webster Avenue to two-way streets will minimize unnecessary moves once

drivers adjust. The coming Green Line extension will take a neighborhood that is already using transit at high levels to amongst the highest in the Boston region. Consistent, persistent advances in the bicycle and pedestrian network, including ever improving facilities on Somerville Avenue and the Somerville Community Path, are providing better connections to the neighborhood and surrounding region. As the earliest fulfillment of the Union Square Neighborhood Plan, the Union Square Development has been carefully planned to help to reclaim the roads, sidewalks, streets and byways for people who want to live, work and play in Union Square, not just pass through it.

FIGURE 59: EXISTING ROADWAY NETWORK

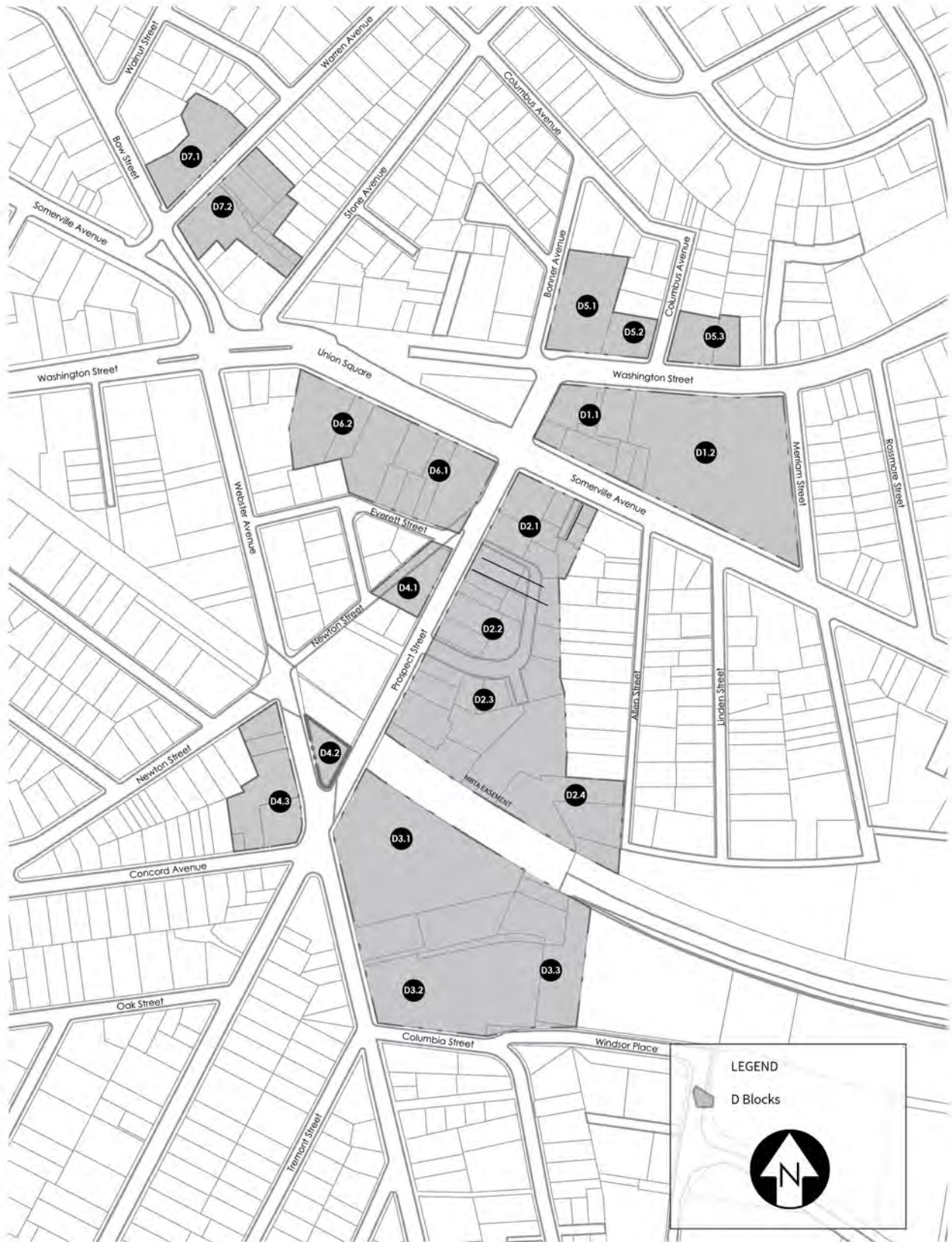


FIGURE 60: EXISTING BIKEWAY NETWORK

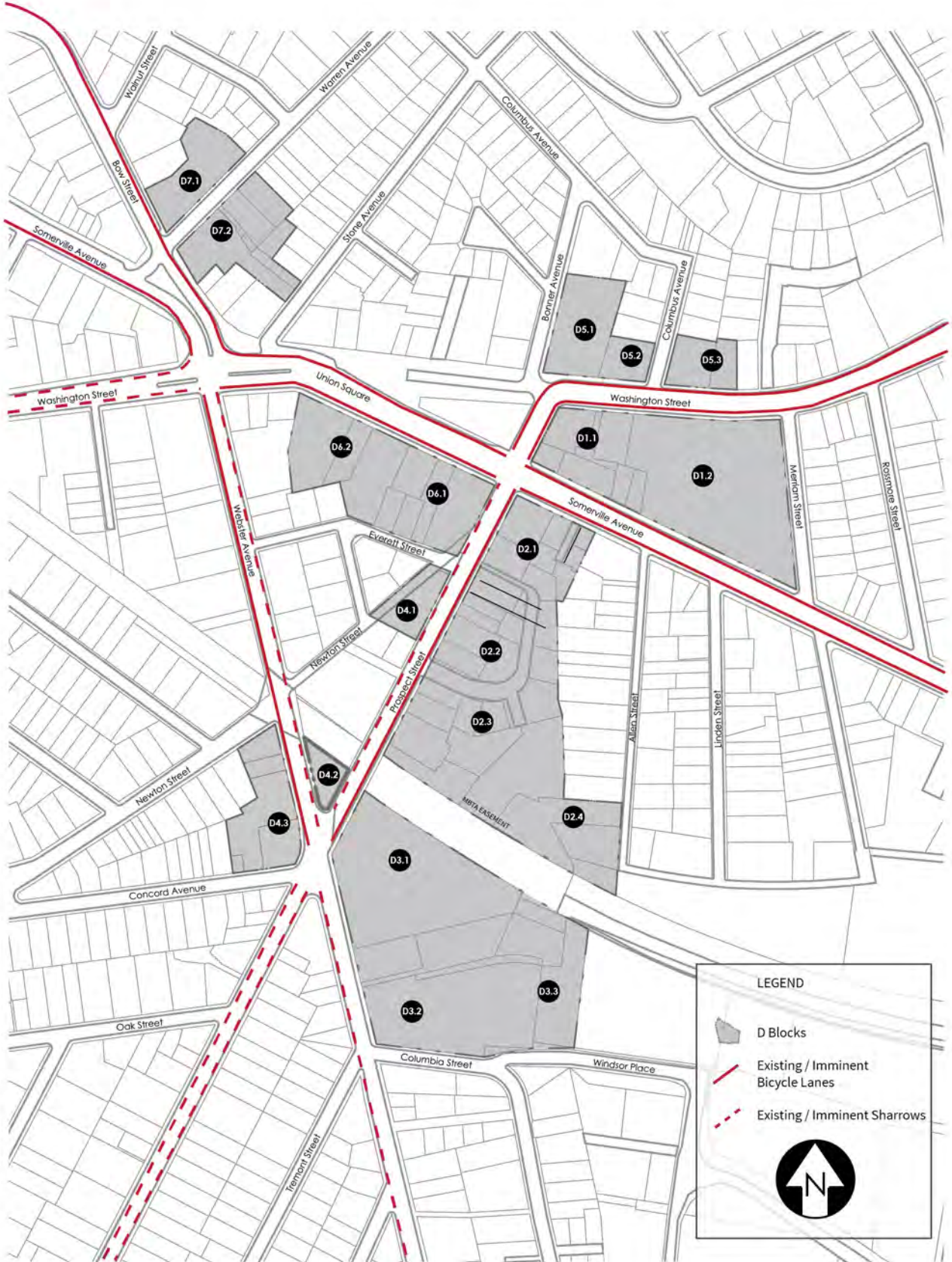


FIGURE 61: EXISTING PEDESTRIAN-WAY NETWORK



TRANSPORTATION NETWORK

PROPOSED NEW THOROUGHFARES

Multiple new thoroughfares are planned to provide effective access to the development blocks, allow passage through larger blocks, and minimize impacts on the surrounding transportation network. These new thoroughfares are intended to provide parking, loading, and service access away from the primary Union Square roadways, allowing traffic to flow more safely and easily. These new thoroughfares are consistent with the locations proposed in the Union Square Neighborhood Plan. Proposed new thoroughfares are displayed in Figure 62 and include:

- A new thoroughfare bisecting D1, allowing access to parking and loading areas at D1.1 and D1.2 from both Washington Street and Somerville Avenue. This thoroughfare is intended as a two-way alleyway, aligned with Columbus Avenue to allow through movements into the site. It is not envisioned as a new through roadway connection, and is not intended to provide a cut-through between Washington Street and Somerville Avenue.
- New thoroughfares are proposed within D2 which allow access to parking, loading, and service areas, as well as vehicle pickup and dropoff for the Green Line's Union Square station as part of the MBTA's The Ride paratransit program. The new thoroughfare on the eastern edge of D2 provides a north-south connection within the site, allowing access from Somerville Avenue into the parking and loading areas within D2, as well as the Green Line dropoff. An alleyway connecting this thoroughfare to Prospect Street passes between D2.1 and D2.2. An additional connection is made to the intersection of Allen

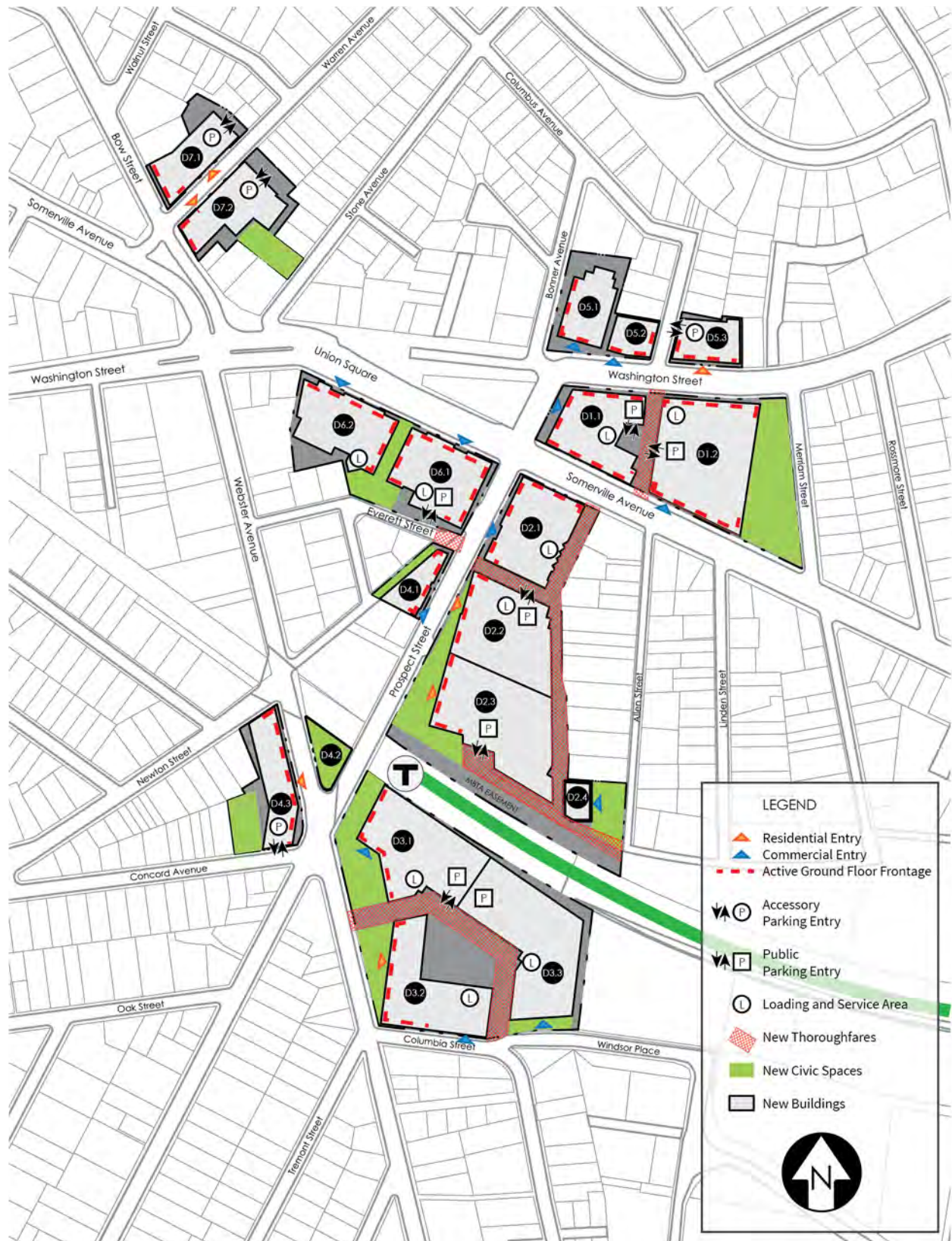
Street and Charlestown Street, allowing another option for access to the Green Line dropoff, and providing an additional entry/exit location for vehicles entering the D2 parking areas. The access points at Somerville Avenue and Allen Street are envisioned as two-way, while the Prospect Street access point is entrance-only.

- The intersection of Everett Street and Newton Street is proposed for realignment. Under existing conditions, Newton Street intersections with Prospect Street at a skewed angle, making exit and entry difficult. The proposed condition removes the portion of Newton Street east of Emerson Street, eliminating the intersection of Newton Street and Everett Street and extending Everett Street to intersect directly with Prospect Street. This creates a safe, more efficient, and more rational entry/exit point for vehicles entering the neighborhood South of D6 as well as the D6 site. Please see the Block & Lot Plan for D6, included later in this section, for a plan depicting the Everett Street and Newton Street realignment.
- A new thoroughfare is proposed within the D3 block, bisecting the site and extending between Columbia Street and Webster Avenue. This thoroughfare is envisioned as a two-way driveway allowing access to the parking and loading areas located within D3.

NEW THOROUGHFARES PLAN

A 1:50' scale new thoroughfare plans is provided digitally to accompany this application. These plans are consistent with those identified in figure 62.

FIGURE 62: PROPOSED NEW THOROUGHFARES



BICYCLE INFRASTRUCTURE

Bicycles play a critical role in the redevelopment plan, with ample bicycle parking scheduled for delivery at each project site. The City's ongoing improvements to roadways in the study area include significant enhancements to the existing bicycle network. Figure 63 displays existing / imminent (scheduled for construction) bicycle facilities, corridors identified for bicycle improvements per the City's Somerville Avenue utility and streetscape improvements and other potential corridors with room for bicycle improvements.

Existing / imminent bicycle lanes exist along both sides of Washington Street north of Somerville Avenue, along both sides of Somerville Avenue east of the Union Square intersection, and along one side each of Somerville Avenue and Bow Street west of Union Square.

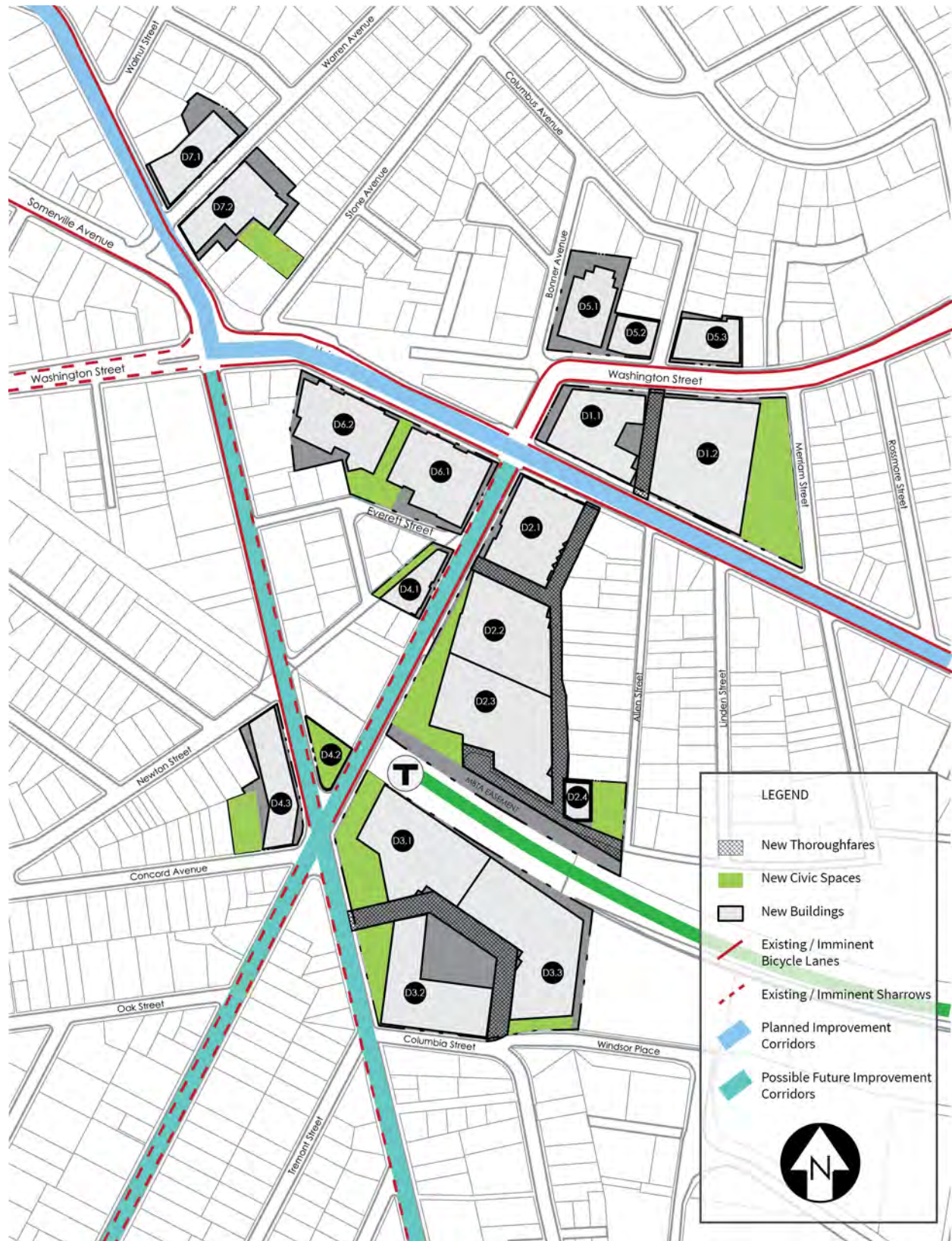
Shared lanes exist along both sides of Washington Street west of Union Square, as well as along both sides of Prospect Street south of the intersection with Webster Avenue. North of this intersection, a northbound bicycle lane and southbound shared lane exist along Prospect Street until the intersection with Somerville Avenue. Similarly, a northbound

shared lane and southbound bicycle lane exist along Webster Avenue between the Union Square intersection and the Prospect Street intersection.

The Somerville Avenue utility and streetscape improvements are scheduled to enhance bicycle facilities along Somerville Avenue and at the Union Square intersection. Corridors impacted by these improvements are highlighted in Figure 42 as "Planned Improvement Corridors." Scheduled improvements include:

- Improvements to striping at the Union Square intersection which provides clearer direction for bicycle turning movements between Somerville Avenue southbound, Somerville Avenue westbound, and Webster Avenue northbound. These include bike boxes and green striping indicating pathways for bicycles through the intersection
- A fully separated bicycle track is planned for Somerville Avenue between the Union Square intersection and Medford Street. This cycle track will be separated from the vehicle lanes of travel via placement on the sidewalk, adjacent to the pedestrian walkways. Eastbound and westbound cycle tracks will be placed on each side of the roadway.

FIGURE 63: EXISTING/IMMINENT BICYCLE INFRASTRUCTURE



PEDESTRIAN INFRASTRUCTURE

Pedestrian access to and from each development site is critical for Union Square residents, workers, and visitors. Existing sidewalks are displayed in Figure 64. All roadways adjacent to or near the development sites include sidewalks on both sides, with the exception of Newton Street between Webster Avenue and Prospect Street.

Crosswalks are present in some form at all major intersections, while mid-block crosswalks on Somerville Avenue and Washington Street enhance pedestrian connectivity.

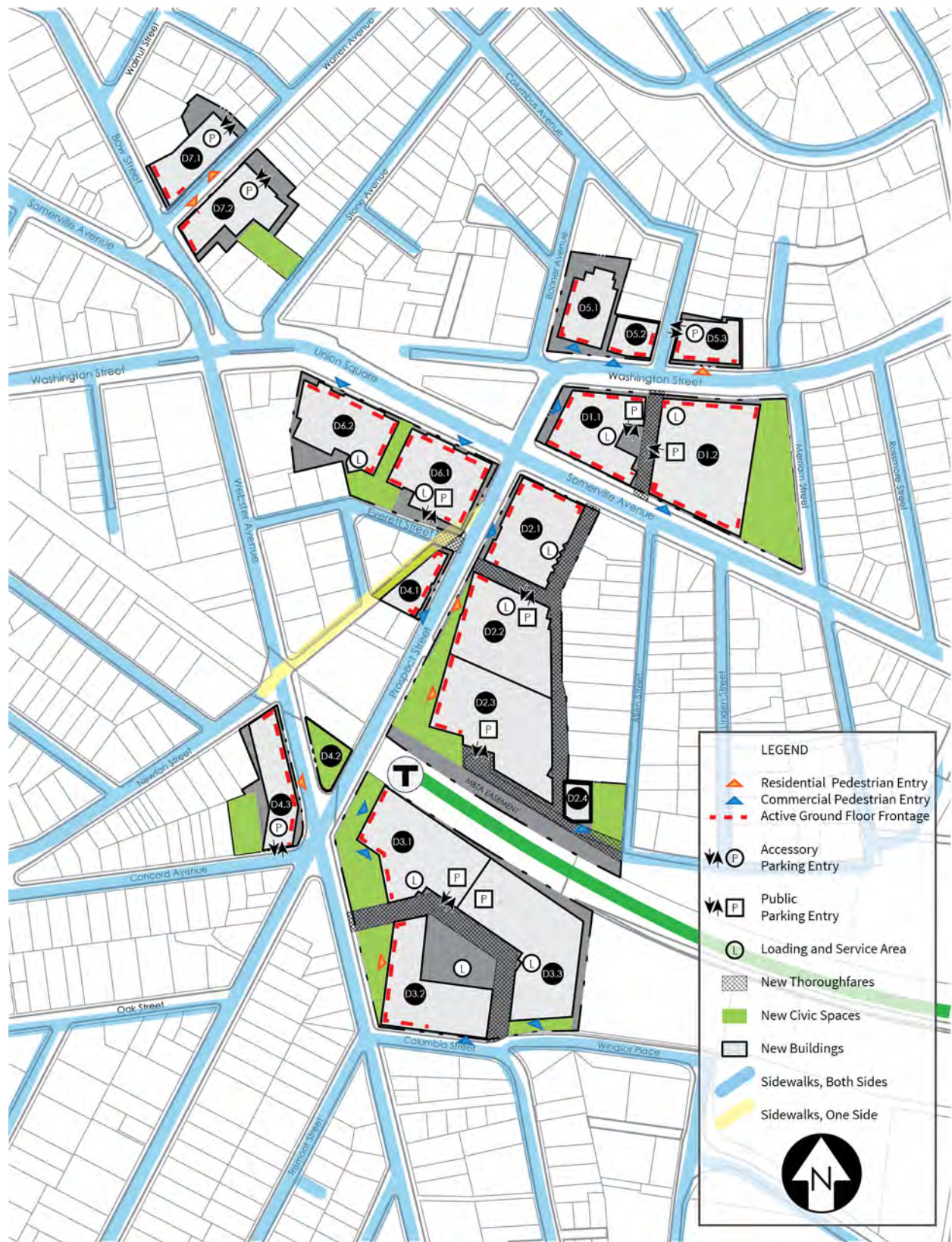
The D Blocks site plan enhances pedestrian connectivity by providing open space and links between and through buildings. These types of connections encourage pedestrian access by creating short paths between and to destinations. In particular, the D2 building is set back to accommodate a pedestrian connection to the Green Line station. Sidewalks impacted by changes to the D Blocks will be increased in width to further enhance pedestrian mobility.

As part of the City's ongoing and scheduled improvements to roadways within the study area, significant upgrades will be made to crosswalks along Somerville Avenue, Prospect Street, and Webster Avenue. These include:

- Updated parallel crosswalks at all intersection along Somerville Avenue between the Union Square intersection and Medford Street, with raised crosswalks at Linden Street, Merriam Street, Rossmore Street, and Mansfield Street.
- A mid-block crosswalk with signage and warning lights across Somerville Avenue between Union Square and the intersection with Prospect Street.
- New crosswalks across Washington Street at Merriam Street and Rossmore Street.
- Updated crosswalks at the intersection of Webster Avenue and Prospect Street which improve sight lines, increase safety, and enhance connectivity.

The comprehensive streetscape improvements in the Union Square neighborhood, with highlights detailed above, will greatly improve pedestrian safety and connectivity alongside the proposed development sites. Given the high percentage of pedestrian trips anticipated in association with the new development, these improved crosswalks and new mid-block crossings will provide significant value for the community. Furthermore, effective, safe, and ADA-compliant crosswalks facilitate access to the forthcoming Green Line extension, a significant pedestrian trip generator.

FIGURE 64: PEDESTRIAN INFRASTRUCTURE



LOADING/SERVICE ANALYSIS

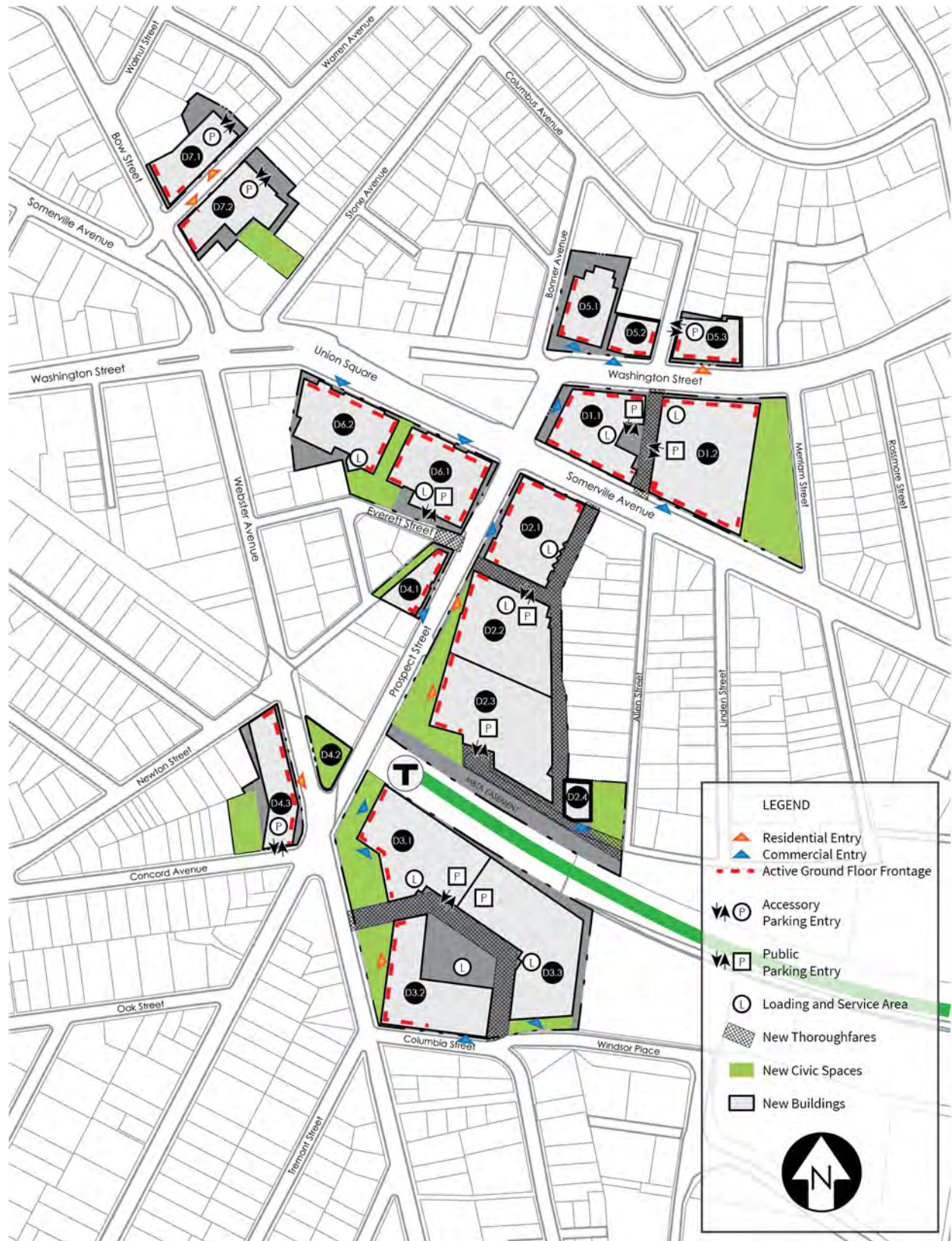
The separation of loading and service activities from pedestrian, cyclist, and other activity is a critical component of a well-functioning development.

Given the high level of activity expected across the Blocks, loading and service areas will be separated from pedestrian and public parking entryways.

Figure 65 displays the planned parking and loading areas, as well as pedestrian entryways. At all sites, loading areas are positioned in the rear or along the side of buildings, with active ground floor frontage preserved along all building faces adjacent to major thoroughfares. The area wide approach to loading and service is summarized as follows:

- Detail on the curbside regulations and management of areas to serve as pick-up/drop-off and loading zones will be developed on a parcel by parcel basis as part of the subsequent building permitting processes.
- The overall CDSP shows where curbside uses are allowed, and final determinations of regulation and management will be developed by the City and the applicant on a parcel by parcel and ongoing basis.
- Buildings are oriented with pedestrian entries near pedestrian crossings, new internal roadways or transit access. MBTA routing and bus stops are anticipated to continue to evolve with ongoing roadway changes and implementation of Green Line service. The applicant will work proactively with the City and MBTA to ensure bus stops are located in an accessible, convenient manner to serve the proposed buildings and surrounding neighborhood. Plans for loading on a parcel by parcel basis are described as follows:
 - » D1 includes loading areas on each side of the new thoroughfare which bisects the site. An open paved area is available on the western side of the new thoroughfare where loading and service vehicles may park or stand by during loading activity. Pedestrian entrances are removed from the loading areas and are present along the major corridors of Washington Street and Somerville Avenue.
 - » D2 includes two loading areas, both accessible from the new thoroughfare proposed within D2. These are positioned at the rear or side of the site's buildings, and do not conflict with the pedestrian entryways available along Prospect Street. The Green Line pickup and dropoff area in the southern portion of the site is separated from the loading areas, preventing conflicts between circulating vehicles and loading vehicles.
 - » D3 provides three dedicated loading areas, each accessible from the site's new thoroughfare. These loading areas are removed from the adjacent primary roadways, which preserve active ground floor frontage and pedestrian entryways.
 - » D4 contains no dedicated loading areas; however, a dedicated loading zone should be considered for D4.3 on Concord Avenue. Pedestrian entrances to D4.1 are available from Webster Avenue, while pedestrian entrances to D4.1 are available from Prospect Street. Parking entry is available from Concord Avenue.
 - » D5 contains no loading areas, and maintains active ground floor frontage and pedestrian entryways along Washington Street, with parking entry available from Columbus Avenue.
 - » D6 offers two dedicated loading areas in the rear of the site buildings. These are accessible from Everett Street, as is the D6.1 parking entry. Active ground floor frontage and pedestrian entryways are available in the front of the site buildings, along Somerville Avenue and Prospect Street.
 - » D7 contains no dedicated loading areas; however, dedicated loading zones should be considered on Warren Street for D7.1 and D7.2. Parking entries to D7.1 and D7.2 are available in the rear of each building, with active ground floor frontage along Bow Street, and pedestrian entrances along Warren Avenue.

FIGURE 65: PEDESTRIAN AND VEHICULAR ACCESS AND LOADING SITES



PARKING PLAN

The project seeks to provide parking that serves the proposed development and adjacent neighborhood without incentivizing driving, and is as efficiently utilized as possible in order to meet the goals of the *Union Square Neighborhood Plan*. To that end, management principles for parking at the D blocks include:

- The uses in the Union Square Redevelopment will share parking to the greatest extent possible, including between buildings. This recognizes that Union Square is a mixed-use development where, for example, one parking space can serve someone who is working in an office during the day and visiting a restaurant at night.
- Parking will generally be “unbundled,” i.e. sold separately from any lease or sale of another use within the development. This approach makes the cost of parking visible to the potential user, and gives them the opportunity to go without.
- Parking will be built in phases with the project. This will help the development team monitor use and adjust management accordingly.
- Dedicated parking will be limited. In accordance with recently adapted zoning, reserved parking will be limited to encourage the efficient use of all parking spaces.
- The estimated peak demand for the Union Square development is approximately 1,454 vehicles at midday. This is an estimate based on a model that is described in detail below.

TOTAL DEMAND ESTIMATE

Estimates of parking demand used the detailed model developed specifically for Union Square as part of the Union Square Neighborhood Plan. Based on Union Square’s mixed use and accessible context, the team used an adapted shared parking model based on Urban Land Institute's (ULI) Shared Parking Manual (2nd Edition, 2005), and the Institute for Transportation Engineers (ITE)'s Parking Generation (8th Edition, 2010) to model demand. This model accounts for the sharing of uses over the course of a day.

The model is based on the program depicted in Table 9 (Buildout Program Estimates).

Specifically, the parking demand model includes the following inputs:

- Land use in Union Square;
- Shared use by time of day;
- Mode shares in Union Square;
- Internal capture (trips that access multiple uses without generating additional parking demand, i.e. walking from a residence to a coffee shop, or from the office to a restaurant); and
- TDM program impacts.

Specifically, the model assumes the following reductions, shown in Table 10 on the following page.

TABLE 10: CONTEXTUAL REDUCTIONS IN PARKING DEMAND

REDUCTION	% REDUCTION	SOURCE	UNION SQUARE CONTEXT
Captive Market Effect: Commercial	32%	Internal capture rates for commercial land uses reported a 32% average reduction. (Trip Generation Handbook, 2nd Edition. ITE pg. 129 - Districtwide Trip Generation Study, Florida Department of Transportation, District IV, March 1995)	Union Square has an excellent mix of uses, ranging from retail to office to residential. This will only improve in the future. Thus, this model input set internal capture to the maximum.
Captive Market Effect: Residential	31%	Internal capture rates from various mixed-use studies --> 11% - 50% residential internal capture observed --> 31% - average residential internal capture (Trip Generation Handbook, 2nd Edition. ITE pg. 129 - Districtwide Trip Generation Study, Florida Department of Transportation, District IV, March 1995)	
Employee TDM Impact	24%	Transportation demand management effectiveness reducing # of commuter vehicles (Trip Generation Handbook, Second Edition. Appendix B - Page 123)	Union Square's accessibility by a mix of modes currently serves as excellent TDM for employees and residents alike. This will only improve in the future – thus the model set this input to the maximum.
Residential TDM Impact	30%	Unbundling the cost of parking from residential property sales/lease cost reduces household vehicle ownership by up to 30% (VTPI Parking Management. (2009))	Union Square is currently well-served by MBTA bus service and will have high-quality Green Line service. Therefore, this input is set to the maximum.
Transit Access Impact on Retail	8%	Shopping centers with access to transit services appeared to have lower peak parking demand than those sites without transit service. Range from 1-8% (ITE Parking Generation, 4th ed. P. 227)	In the future, Union Square will have both paid parking and high-quality transit service. The team used a range for this input.
Office Employee Mode Adjustment	35%	A mode adjustment of 0.3 to 0.6 is appropriate for downtown office space in areas with paid parking and high-quality transit service (ULI Shared Parking, Second Edition, p.91)	Employees respond differently to transportation context changes as they commute in similar patterns daily. Thus it is important to distinguish this group from customers at non-office uses. This was assumed to be consistent across uses.
Employee Parking Share (non-office)	20%	Average share of peak parking demand consumed by employees. (The True Cost of Free Parking. Shoup, Donald. Pg. 86)	Employees respond differently to transportation context changes as they commute in similar patterns daily. Thus it is important to distinguish this group from customers at non-office uses. This was assumed to be consistent across uses.
Office Visitor Parking Share	4%	Visitor parking accounts for 7-8% of office parking on a per space basis (ULI Shared Parking, Second Edition, p.91)	Visitor parking demand at offices is similarly broken out by the model as influenced by different factors than regular commuters. As the proportion of visitors to different offices varies (i.e. the difference between a call center and a lawyer who sees clients) this number was varied across scenarios.

DEMAND ESTIMATES BY USE

- **Employee:** The model assumes that at peak, the parking demand for employees at the office use will be 995 vehicles at midday. There will be additional parking for retail employees, which is assumed to be approximately 20% of peak parking demand for the hotel and retail, or a peak of approximately 50 employees at midday.
- **Resident:** Residential peak demand would occur at midnight, with approximately 570 parked vehicles.
- **Short- and Long-Term Visitor Parking Demand:** This demand is included in the parking generation rates by use. We note further that any proposed retail space will be primarily local servicing with limited demand or use of parking facilities.

These modeled results are close to what is happening on the ground today. As described later in this section, the Neighborhood Plan included a comprehensive study of parking inventory and utilization in the study area. This was compared to existing land uses in the Square. The team identified a peak parking demand ratio of 0.61 spaces per 1,000 square feet in Union Square. This proposed total of 1,500 spaces for 2.4 million square feet is providing parking at a similar rate (0.63 spaces per 1,000 square feet). Enhanced transit access, bicycle infrastructure, and Transportation Demand Management programs will support this ratio into the future.

PARKING LOCATION MAP

Figure 45 shows the location of accessory and public parking. Public parking will be concentrated on D1, D2, D6, and D3, while D7, D5, and D4 provide accessory parking only. The public parking can be accessed outside of the heart of the square, on Concord Avenue, Everett Street, Webster Avenue, and Somerville Avenue, a best practice that will intercept traffic before it gets to the square’s retail core.

NUMBER OF SPACES PROVIDED

Applicant proposes to provide parking as outlined in Table 11, below.

TABLE 11: PARKING PROVISION

LOT	ACCESSORY	COMMERCIAL	
D1.1	50		
D1.2		385	
D2.2		290	
D3.1		270	
D3.3		300	
D4.3	25		
D5.1	5		
D5.3	15		
D6.1	55		
D6.2	55		
D7.1	20		
D7.2	30		
TOTAL	255	1,245	1,500
PERCENTAGE	17%	83%	100%

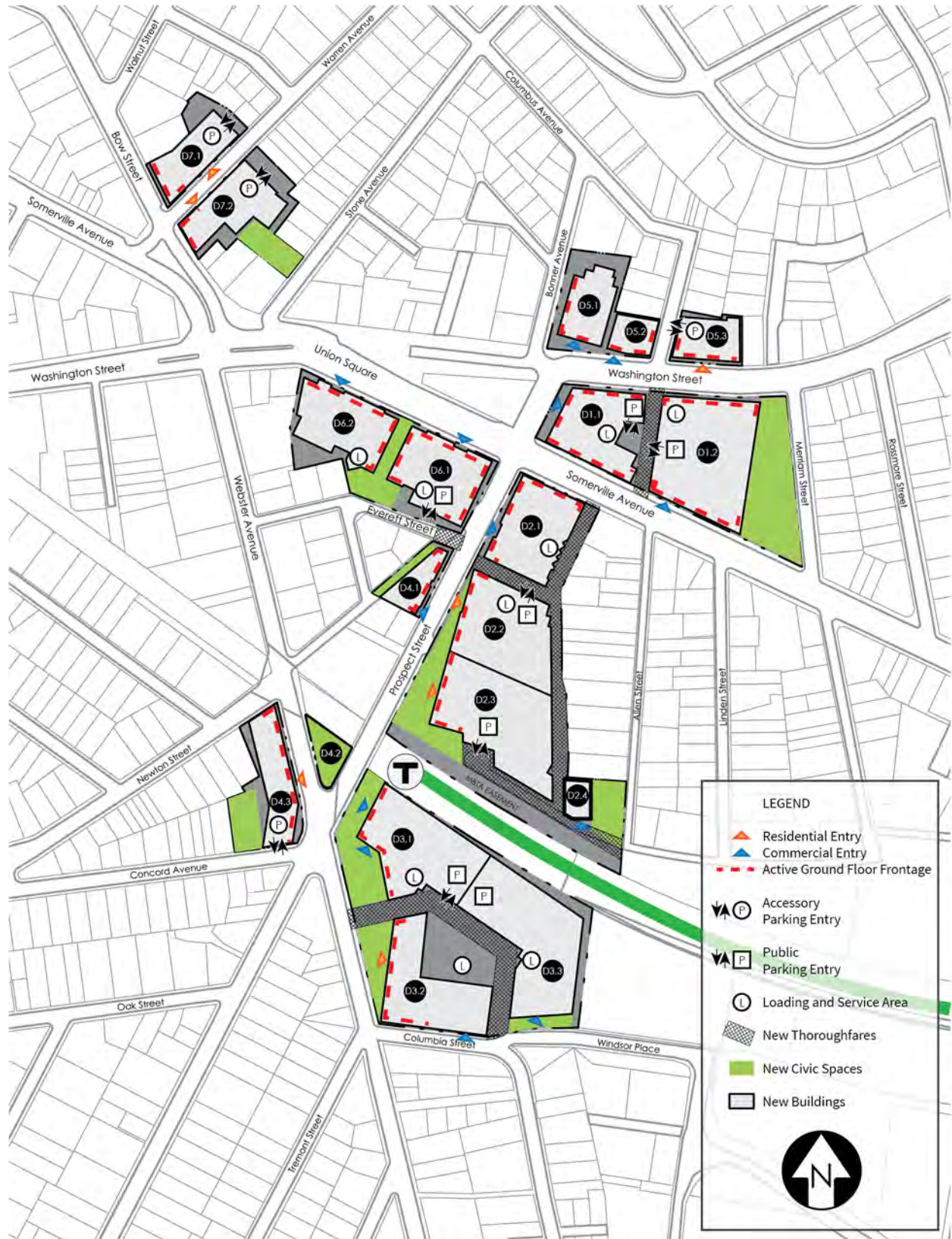
CHANGES IN PARKING FROM EXISTING CONDITION

The Union Square development will add significant parking on each site with the exception of D7. In total, the project will add just over 1,000 new parking spaces to Union Square, with most spaces concentrated on D1, D2, and D3. These parcels will have commercial parking that is open to all, while other parcels will have accessory parking to serve local uses. Table 12 provides an overview of the changes in parking supply by site.

TABLE 12: NET CHANGE IN PARKING SUPPLY

SIZE	EXISTING PARKING	PROPOSED PARKING	NET CHANGE
D1	87	435	348
D2	0	290	290
D3	46	570	524
D4	0	25	25
D5	11	20	9
D6	48	110	62
D7	110	50	-60
TOTAL	302	1,500	1,198

FIGURE 66: PARKING LOCATION MAP



PARKING UTILIZATION

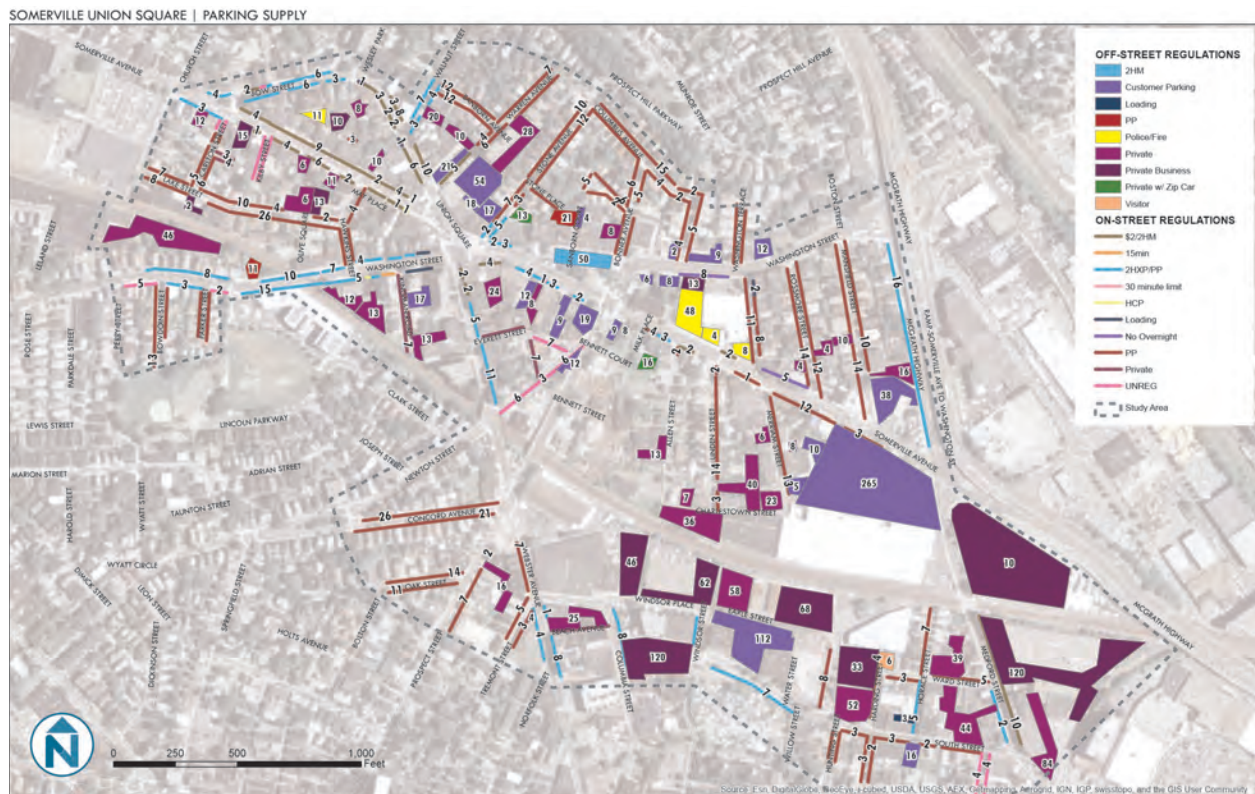
As part of the Union Square Neighborhood Plan, the team performed a comprehensive parking inventory and utilization study in Union Square. Utilization data was collected on the following days: Saturday, September 12th, 2015 and Thursday, September 17th, 2015. The study area is shown in Figure 67.

Key findings from the study are summarized below²:

- One third of the parking in Union Square is on-street, thus slightly dispersed.
- There is a limited and concentrated supply of off-street public parking, located near the heart of the square.
- 2/3 of the parking in Union Square is restricted to certain user groups, for example customers of a certain establishment.
- Peak parking occurs at 2PM on weekdays and at 6PM on Saturdays.

- Over the study area, parking is never more than 64% full on weekdays and 54% on weekends.
- Even at peak occupancy on a weekday, about 1,139 spaces are still available.
- During dinnertime on weekdays and during weekend peak (which also occurs at dinnertime), parking near the center of Union Square (near Bow, Somerville, and Washington Streets) is close to full whereas parking in the southeast area of the neighborhood (near Target and Boynton Yards) is quite empty.
- During weekday peak at 2pm, parking demand is somewhat evenly-distributed but slightly more concentrated near the intersection of Prospect, Somerville, and Washington Street.
- The public lot is well utilized around the lunch and dinner hours, but has availability throughout the day.

FIGURE 67: UNION SQUARE PARKING INVENTORY, 2015



²For more information, see “Technical Memorandum: DRAFT Parking Analysis” submitted to the Union Square Neighborhood Design Team 11/5/2015

The series of charts on the following pages show the public parking utilization profiles throughout the collection day in Union Square. The gray lines on the bar graphs indicate “functional capacity” of parking or the maximum practical capacity.³

FIGURE 68: THURSDAY OVERALL UTILIZATION

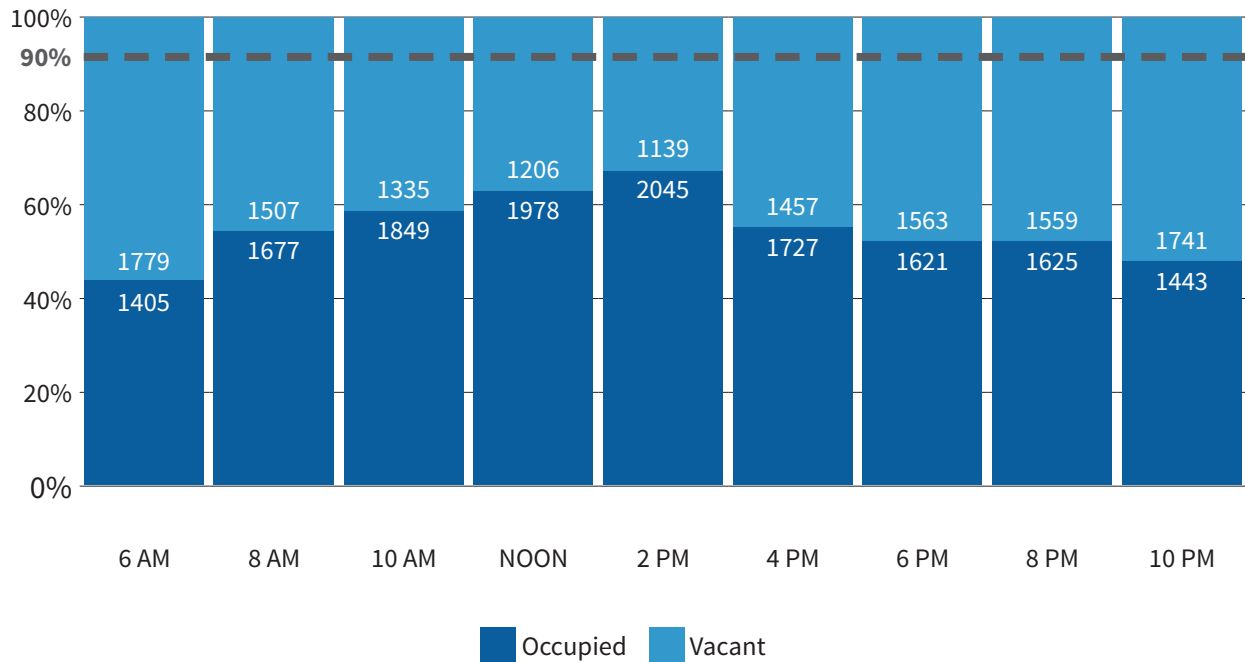
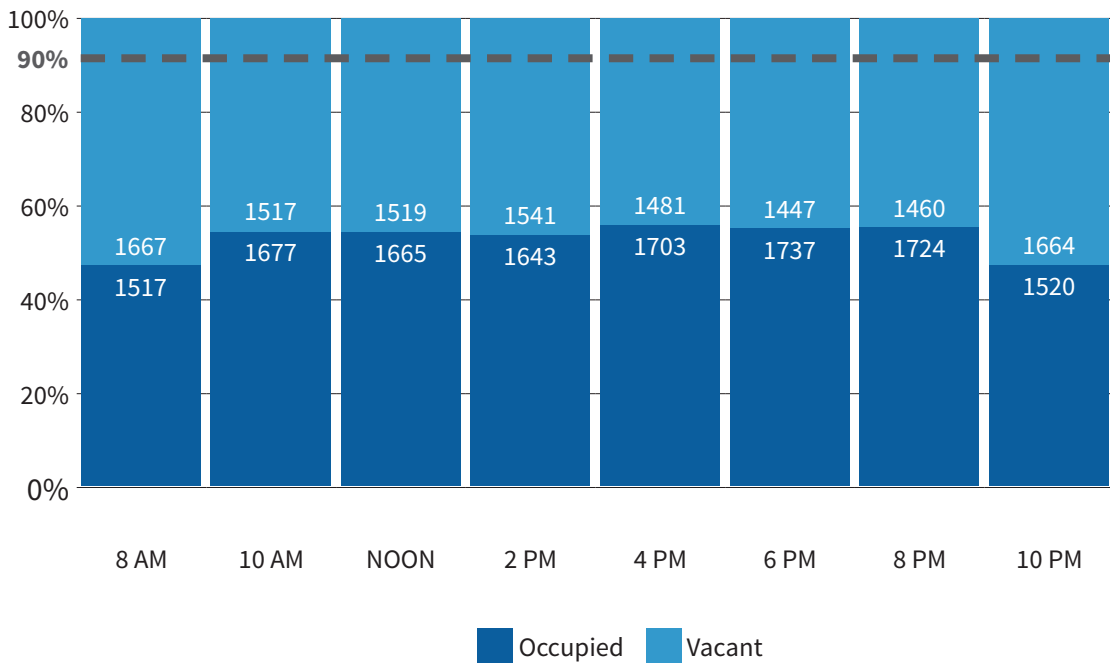
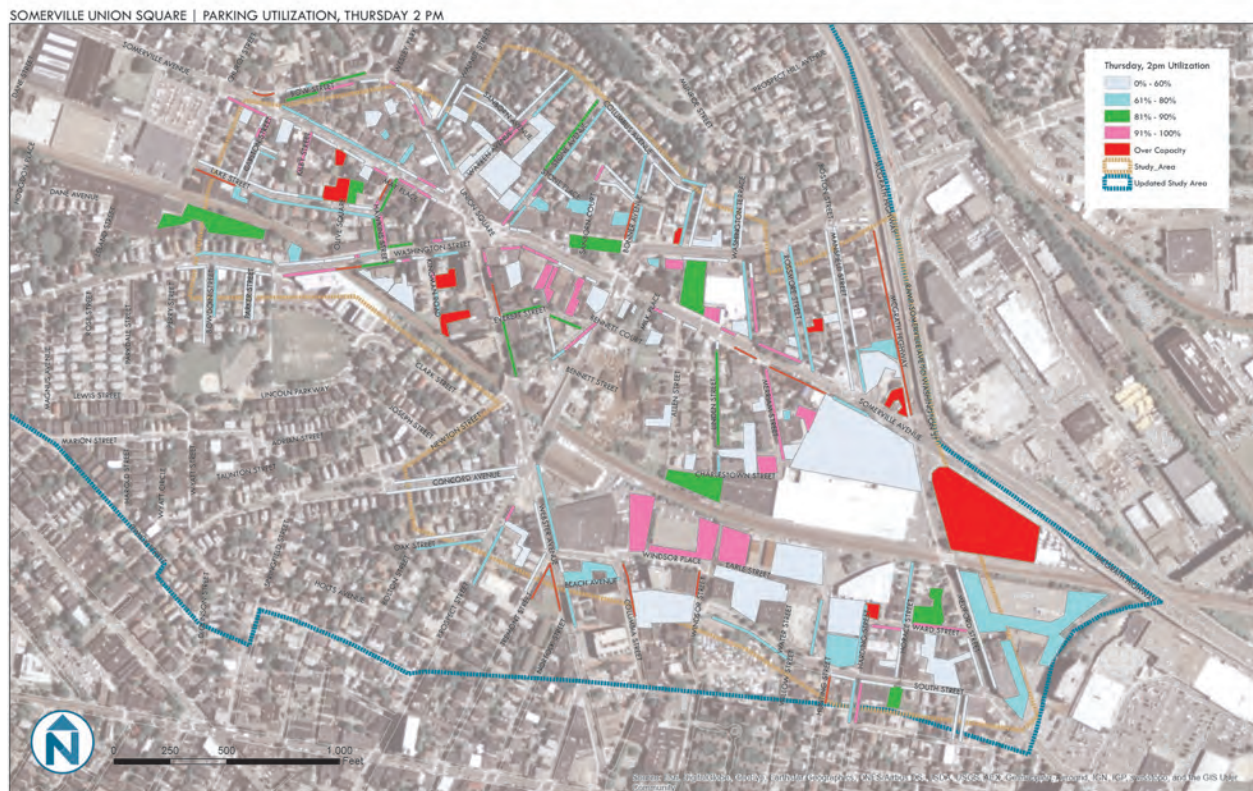


FIGURE 69: SATURDAY OVERALL UTILIZATION



³ Best national parking management practice suggests that parking is functionally full when utilization reaches 85% or greater on-street (about one of every seven spaces is available) and 90% off-street.

FIGURE 70: PEAK WEEKDAY UTILIZATION IN UNION SQUARE, 2015



MOBILITY MANAGEMENT PLAN SUMMARY

The Mobility Management Plan (MMP) is attached as Appendix 4. The MMP gives an overview of how the Union Square Redevelopment will provide both programs and infrastructure to encourage people to travel to and from the sites by walking, bicycling, and/or taking transit. These include:

- Financial Incentives
- Shared Vehicles Services
- Alternative Schedules
- Marketing and Education
- Parking Management
- On-Site Services

Minimizing impacts to the surrounding area and roadway network during construction will be an important part of the delivery of the D Blocks. We will work with the contractors and the City to encourage worker and employee shuttles as helpful to minimize parking and traffic impacts during construction.

The MMP also includes a commitment to monitoring and annual reporting to measure the effectiveness of these travel demand management (TDM) programs.

INFRASTRUCTURE

Infrastructure plans for the project are critical to ensuring that the future mixed-use, transit oriented development results in a neighborhood that is highly walkable and accessible for people of all ages. The Office of Strategic Planning and Community Development (OSPCD) has commenced improvements in the Union Square area that will continue as the initial phase of development begins. Recently completed lighter touch streetscape improvements and an early action project will be followed by utility upgrades that will parallel the installation of a storm-water box culvert and green streetscape along Somerville Avenue. In a collective effort to fulfill the infrastructure objectives established in the Neighborhood Plan, the applicant will work to integrate its improvements into the ongoing work of the City so as to achieve change in a way that will have the greatest positive impact on the people of Somerville.

Public and private utilities are present in the public ways adjacent to each of the development blocks. The City of Somerville's "Somerville Avenue Utility and Streetscape Improvements" project, scheduled to begin construction in 2018, will result in significant improvements to the water distribution, storm drainage, and communications infrastructure in Somerville Avenue, Bow Street, and Washington Street adjacent to parcels D1, D2, D6 and D7. Additionally, Eversource will be implementing improvements to the electric and natural gas systems that will provide adequate additional capacity to the infrastructure in the Union Square area.

UTILITY DESCRIPTIONS

The general locations of existing utilities are shown on Drawings C-101A through C-105D. The existing utilities and planned infrastructure improvements adjacent to each of the D Blocks are described below.

SEWER

Existing 36" brick sewers are located in Somerville Avenue and Prospect Street adjacent to D1 and D2. A 22" x 34" sewer is located in Newton Street adjacent to D4.1, and an 8" sewer is located in Concord Avenue

adjacent to D4.3. An 18" combined sewer is located in Bonner Avenue adjacent to D5.1, and a 20" combined sewer is located in Washington Street adjacent to D5.2 and D5.3. A 20" sewer is located in Somerville Avenue adjacent to D6.1 and D6.2. A 24" sewer is located in Bow Street adjacent to D7.

There is an existing 8" sewer in Webster Avenue adjacent to D3.1 and an existing combined sewer in Columbia Avenue adjacent to D3.2 and D3.3.

WATER

In 2016, the City of Somerville installed a new 12” water main in Prospect Street from Newton Street to the Prospect Street bridge, adjacent to D4 and D2. US2 coordinated with the City to provide water service stubs to the property line adjacent to the D2 parcels. The City’s “Somerville Avenue Utility and Streetscape Improvements” project will install a new 12” main adjacent to D1 and D6 in Somerville Avenue. A 20” water main is located in Webster Avenue adjacent to D3. An existing 20” water main is located in Newton Street adjacent to D4.1, and an existing 12” water main is located in Concord Avenue adjacent to D4.3. 12” and 20” water mains are located in Washington Street adjacent to D5, and 10” and 48” water mains are located in Bow Street adjacent to D7.

It is noted that each of these water lines are on the City’s low pressure system.

STORM DRAINAGE

The City’s “Somerville Avenue Utility and Streetscape Improvements” project will install a new 14’ x 6’ box culvert adjacent to D1, D2, and D6 in Somerville Avenue. Combined sewers are located in Webster Avenue and Columbia Street adjacent to D3. A 36” combined sewer is located in Newton Street adjacent to D4.1, and a 18” combined sewer is located in Concord Avenue adjacent to D4.3. An 18” combined sewer is located in Bonner Avenue adjacent to D5.1, and a 20” combined sewer is located in Washington Street adjacent to D5.2 and D5.3. A 51” combined sewer is located in Bow Street adjacent to D7.

ELECTRIC

Existing underground electric infrastructure exists in Bow Street adjacent to D7, in Somerville Avenue adjacent to D1, D2 and D6, in Washington Street adjacent to D5, in Webster Avenue and Windsor Place adjacent to D3, and in Prospect Street and Concord Avenue adjacent to D4.

TELECOMMUNICATIONS

Existing underground telecommunications infrastructure exists in Bow Street adjacent to D7, in Somerville Avenue adjacent to D1, D2 and D6, in Washington Street adjacent to D5, in Webster Avenue and Windsor Place adjacent to D3, and in Prospect Street and Concord Avenue adjacent to D4.

NATURAL GAS

The D Blocks are currently served by an aging infrastructure of natural gas piping. The gas infrastructure exists in Bow Street adjacent to the D7, and in Somerville Avenue which is adjacent to D1, D2 and D6 parcels. Other systems are located along Washington Street adjacent to D5, in Webster Avenue and Windsor Place adjacent to D3, and in Prospect Street and Concord Avenue adjacent to D4.

ANTICIPATED UTILITY DEMANDS

Anticipated utility demands are based on the buildout program estimates, and utilize methodologies and assumptions as summarized below. The projections assume an overall split of lab/office of 38% laboratory and 62% office uses. To the extent, there are more or fewer laboratory uses, the utility demands will fluctuate accordingly.

SEWAGE GENERATION

Sewage generation is based on 310 CMR 15.00, The State Environmental Code, Title 5. As Title 5 estimates peak day sewage generation which is considered to represent 200% of average daily flows, sewerage estimates have been calculated for average day conditions. In accordance with Title 5, the following sewage flow design criteria were utilized:

TABLE 13: SEWAGE DEMAND CRITERIA

USE	DEMAND
Retail	50 gallons per day per 1,000 square foot
Office/Laboratory	75 gallons per day per 1,000 square foot
Residential	110 gallons per day per bedroom. (1.5 bedrooms per unit was assumed)
Arts and Creative	75 gallons per day per 1,000 square foot (assumed to be the same as office space)
Hotel	110 gallons per day per room

Table 16 on the following page summarizes the estimated sewage generation for each development block. In total, the average sewage generation for the development is projected to be approximately 143,000 gallons per day.

WATER

Water demand is expected to closely mirror sewage generation, and is therefore expected to average 143,000 gallons per day.

ELECTRICITY

Electric demand is based on the following design criteria:

TABLE 14: ELECTRIC DEMAND CRITERIA

USE	DEMAND
Retail	12 watts per square foot
Office	10 watts per square foot
Laboratory	20 watts per square foot
Residential	5 watts per square foot
Arts and Creative	10 watts per square foot (assumed to be the same as office space)
Hotel	10 watts per square foot

Table 17 on summarizes the estimated electrical demand for each D Block. In total, the projected electric demand for the full buildout of the development parcels is projected to be approximately 24 MW.

NATURAL GAS

Natural gas demand is based on the below design criteria, and a summary of estimated demand can be found on Table 15.

TABLE 15: NATURAL GAS DEMAND CRITERIA

USE	DEMAND
Retail	40 Btu/hr per square foot
Office	30 Btu/hr per square foot
Laboratory	125 Btu/hr per square foot
Residential	50 Btu/hr per square foot
Arts and Creative	75 Btu/hr per square foot
Hotel	40 Btu/hr per square foot

TABLE 16: SEWAGE GENERATION ESTIMATE

PARCEL / BLOCK	RETAIL			OFFICE/LAB			RESIDENTIAL		
	50/1,000 SF			75/1,000 SF			110/BED; 1.5 BED/UNIT		
	AREA (SF)	TITLE 5 FLOW (GPD)	AVG. FLOW (GPD)	AREA (SF)	TITLE 5 FLOW (GPD)	AVG. FLOW (GPD)	# UNITS	TITLE 5 FLOW (GPD)	AVG. FLOW (GPD)
D1.1	11,000	550	275	-	-	-	-	-	-
D1.2	11,000	550	275	217,000	16,275	8,138	-	-	-
D2.1	12,000	600	300	166,000	12,450	6,225	-	-	-
D2.2/D2.3	17,000	850	425	-	-	-	457	75,405	37,703
D2.4	-	-	-	-	-	-	-	-	-
D3.1	9,000	450	225	271,000	20,325	10,163	-	-	0
D3.2	9,000	450	225	-	-	-	381	62,865	31,433
D3.3	-	-	-	258,000	19,350	9,675	-	-	-
D4.1	5,000	250	125	25,000	1,875	938	-	-	-
D4.3	7,000	350	175	-	-	-	62	10,230	5,115
D5.1	19,000	950	475	3,000	225	113	-	-	-
D5.2	4,000	200	100	21,000	1,575	788	-	-	-
D5.3	3,000	150	75	-	-	-	34	5,610	2,805
D6.1	12,000	600	300	96,000	7,200	3,600	-	-	-
D6.2	14,000	700	350	97,000	7,275	3,638	-	-	-
D7.1	4,000	200	100	-	-	-	88	14,520	7,260
D7.2									

	ARTS & CREATIVE			HOTEL			
	75/1,000 SF			110/ROOM			
	TITLE 5 FLOW	AVG. FLOW		TITLE 5 FLOW	AVG. FLOW	TOTAL TI- TLE 5 FLOW	TOTAL AVG. FLOW
AREA (SF)	(GPD)	(GPD)	# ROOMS	(GPD)	(GPD)	(GPD)	(GPD)
-	-	-	175	19,250	9,625	19,800	9,900
23,000	1,725	863	-	-	-	18,550	9,275
-	-	-	-	-	-	13,050	6,525
11,000	825	413	-	-	-	77,080	38,540
12,000	900	450	-	-	-	900	450
-	-	-	-	-	-	20,775	10,388
9,000	675	338	-	-	-	63,990	31,995
-	-	-	-	-	-	19,350	9,675
-	-	-	-	-	-	2,125	1,063
-	-	-	-	-	-	10,580	5,290
11,000	825	413	-	-	-	2,000	1,000
-	-	-	-	-	-	1,775	888
-	-	-	-	-	-	5,760	2,880
4,000	300	150	-	-	-	8,100	4,050
4,000	300	150	-	-	-	8,275	4,138
-	-	-	-	-	-	14,720	7,360
							0
				TOTAL		286,830	143,417

TABLE 17: ELECTRIC DEMAND ESTIMATE

PHASE	DESCRIPTION	SQUARE FOOTAGE	WATTS/SQFT	TOTAL KW	TOTAL KW FOR PHASE
D1.1	Retail	11,000	12	132	1,062
	Hotel (175 rooms)	93,000	10	930	
D1.2	Retail	11,000	12	132	2,532
	Office	217,000	10	2,170	
	Arts & Creative	23,000	10	230	
D2.1	Retail	12,000	12	144	3,464
	Laboratory	166,000	20	3,320	
D2.2 & D2.3	Retail	17,000	12	204	2,204
	Residential	400,000	5	2,000	
	Arts & Creative	11,000	10	110	
D2.4	Arts & Creative	12,000	10	120	120
D3.1	Retail	9,000	12	108	5,528
	Laboratory	271,000	20	5,420	
D3.2	Retail	9,000	12	108	1,863
	Residential	333,000	5	1,665	
	Arts & Creative	9,000	10	90	
D3.3	Office	258,000	10	2,580	2,580
D4.1	Retail	5,000	12	60	310
	Office	25,000	10	250	
D4.3	Retail	7,000	12	84	354
	Residential	54,000	5	270	
D5.1	Retail	19,000	12	228	368
	Office	3,000	10	30	
	Arts & Creative	11,000	10	110	
D5.2	Retail	4,000	12	48	258
	Office	21,000	10	210	
D5.3	Retail	3,000	12	36	201
	Residential	33,000	5	165	
D6.1	Retail	12,000	12	144	1,144
	Office	96,000	10	960	
	Arts & Creative	4,000	10	40	
D6.2	Retail	14,000	12	168	1,178
	Office	97,000	10	970	
	Arts & Creative	4,000	10	40	
D7.1	Retail	5,000	12	60	260
	Residential	40,000	5	200	
D7.2	Retail	4,000	12	48	433
	Residential	77,000	5	385	
TOTAL FITOUT KW					23,859
TOTAL FITOUT MW					24

TABLE 18: NATURAL GAS DEMAND ESTIMATE

PHASE	DESCRIPTION	(SF)	BTU/HR PER /SF	BTU/HR	CFH
D1.1	Retail	11,000	40	440,000	440
	Hotel	93,000	40	3,720,000	3,720
D1.2	Retail	11,000	40	440,000	440
	Office	217,000	30	6,510,000	6,510
	Arts & Creative	23,000	75	1,725,000	1,725
D2.1	Retail	12,000	40	480,000	480
	Laboratory	166,000	125	20,750,000	20,750
D2.2 & D2.3	Retail	17,000	40	680,000	680
	Residential	400,000	50	20,000,000	20,000
	Arts & Creative	11,000	75	825,000	
D2.4	Arts & Creative	12,000	75	900,000	900
D3.1	Retail	9,000	40	360,000	360
	Laboratory	271,000	125	33,875,000	33,875
D3.2	Retail	9,000	40	360,000	360
	Residential	333,000	50	16,650,000	16,650
	Arts & Creative	9,000	75	675,000	675
D3.3	Office	258,000	30	7,740,000	7,740
D4.1	Retail	5,000	40	200,000	200
	Office	25,000	30	750,000	750
D4.3	Retail	7,000	40	280,000	280
	Residential (62 Units)	54,000	50	2,700,000	2,700
D5.1	Retail	19,000	40	760,000	760
	Office	3,000	30	90,000	90
	Arts & Creative	11,000	75	825,000	825
D5.2	Retail	4,000	40	160,000	160
	Office	21,000	30	630,000	630
D5.3	Retail	3,000	40	120,000	120
	Residential	33,000	50	1,650,000	1,650
D6.1	Retail	12,000	40	480,000	480
	Office	96,000	30	2,880,000	2,880
	Arts & Creative	4,000	75	300,000	300
D6.2	Retail	14,000	40	560,000	560
	Office	97,000	30	2,910,000	2,910
	Arts & Creative	4,000	75	300,000	300
D7.1	Retail	5,000	40	200,000	200
	Residential	40,000	50	2,000,000	2,000
D7.2	Retail	4,000	40	160,000	160
	Residential	77,000	50	3,850,000	3,850
TOTAL FITOUT BTU/HR				137,935,000	
TOTAL FITOUT CFH					137,935
TOTAL SQUARE FOOTAGE		2,400,000			
AVERAGE BTU/SF		57.5			

EXISTING SYSTEMS EVALUATION

The adequacy of each utility system is addressed below.

SEWER

The existing sewers located in Bow Street and Somerville Avenue adjacent to parcels D1, D2, D6, and D7 have sufficient capacity for the projected flows from each of those parcels. The City’s “Somerville Avenue Sewer Separation & Water Main Improvements” project will remove stormwater runoff from combined systems in Somerville Avenue, which will result in improved capacity during storm events. The existing 8" sewer in Webster Avenue adjacent to D3.1, and the existing combined sewer in Columbia Avenue adjacent to D3.2 and D3.3, have sufficient capacity for those parcels. The existing 22" x 34" sewer in Newton Street adjacent to D4.1 and the existing 8" sewer in Concord Avenue adjacent to D4.3 have sufficient capacity for those parcels. The existing 18" combined sewer in Bonner Avenue adjacent to D5.1 and the existing 20" combined sewer in Washington Street adjacent to D5.2 and D5.3 have sufficient capacity for those parcels.

WATER

The 12" water main in Prospect Street installed in 2016 will provide sufficient capacity for D2. The new 12" mains adjacent to the D1 and D6 parcels in Somerville Avenue to be installed in the City’s “Somerville Avenue Sewer Separation & Water Main Improvements” project will provide sufficient capacity for these parcels. The 20" water main in Webster Avenue adjacent to D3 has adequate capacity for D3. The existing 20" water main in Newton Street adjacent to D4.1, and the 12" water main adjacent to D4.3 in Concord Avenue, have sufficient capacity for those parcels. The 12" and 20" water mains located in Washington Street have adequate capacity for D5, and the 10" water main in Bow Street will provide adequate capacity for D7.

STORM DRAINAGE

The City’s “Somerville Avenue Sewer Separation & Water Main Improvements” project will install a new 14' x 6' box culvert adjacent to the D1, D2, and D6 parcels in Somerville Avenue, and represents a significant improvement in the ability of the City’s infrastructure to store stormwater and reduce the magnitude and extent of surcharging events in the Union Square area. As detailed design plans for each of those parcels are developed, the design of the site and landscape and of the stormwater management systems will include appropriate measures to infiltrate stormwater where feasible and to detain stormwater to reduce the peak rates of runoff from existing conditions. The reduction in peak rates of runoff from each portion of the project will provide benefit to the municipal stormwater infrastructure.

The existing combined sewer in Webster Avenue adjacent to D3.1 has adequate capacity for that building. Long range plans being developed by the City of Somerville for the Boynton Yards area currently envision a new separated storm drain in Columbia Street that will provide improved capacity to the storm drainage system for the D3.2 and D3.3 parcels. Until those improvements are completed, the existing combined sewer system in Columbia Street has adequate capacity.

Although infrastructure improvements are not currently planned for the City’s stormwater infrastructure near D4, D5, or D7, the design of the site and landscape and of the stormwater management systems for each of those parcels will include appropriate measures to infiltrate stormwater where feasible, to detain stormwater, and to reduce the peak rates of runoff from existing conditions. The reduction in peak rates of runoff from each portion of the project will benefit the local stormwater infrastructure.

ELECTRIC

The applicant has been coordinating with Eversource to communicate projected electrical demands and requirements and proposed points of connection at each development parcel, over the past several months. Eversource will design and implement infrastructure improvements as necessary to satisfy the electrical demand to each development. As plans for each development progress, US2 and its team, in conjunction with the City of Somerville and the City's consultants, will work with Eversource to ensure that the necessary infrastructure improvements are coordinated with the City's infrastructure improvement plans and implemented accordingly.

TELECOMMUNICATIONS

The applicant will coordinate with private telecommunications companies to ensure that any required infrastructure improvements for the development are coordinated with the City's infrastructure improvement projects and implemented accordingly. The City of Somerville is also planning to install new fiber optic infrastructure in Somerville Avenue that will benefit parcels adjacent to Somerville Avenue and provide critical digital infrastructure to the employment center.

NATURAL GAS

The applicant has been coordinating with Eversource to communicate projected natural gas demands and requirements over the past several months. The existing infrastructure in the Union Square area does not have sufficient pressure or capacity for the planned spaces in several of the development parcels. Infrastructure improvements are required to provide the required pressure and capacity.

Based on preliminary coordination with Eversource, a new main from Mansfield Street will be installed in Washington Street and through the Washington Street / Prospect Street intersection that will service parcels D1, D2, D4.1, D5, and D6.

For D3 and D4.3, on the south side of the MTBA rail line, Eversource will bring a new 10 psi main from Columbia Street to Webster Street.

As plans for each development are developed further, US2 and its team, in conjunction with the City of Somerville and the City's consultants, will work with Eversource to ensure that the necessary infrastructure improvements are coordinated with the City's infrastructure improvement plans and implemented.

MITIGATION

To mitigate the impact of the Union Square Redevelopment on the local utility infrastructure, the following will be incorporated into the final design of the redevelopment:

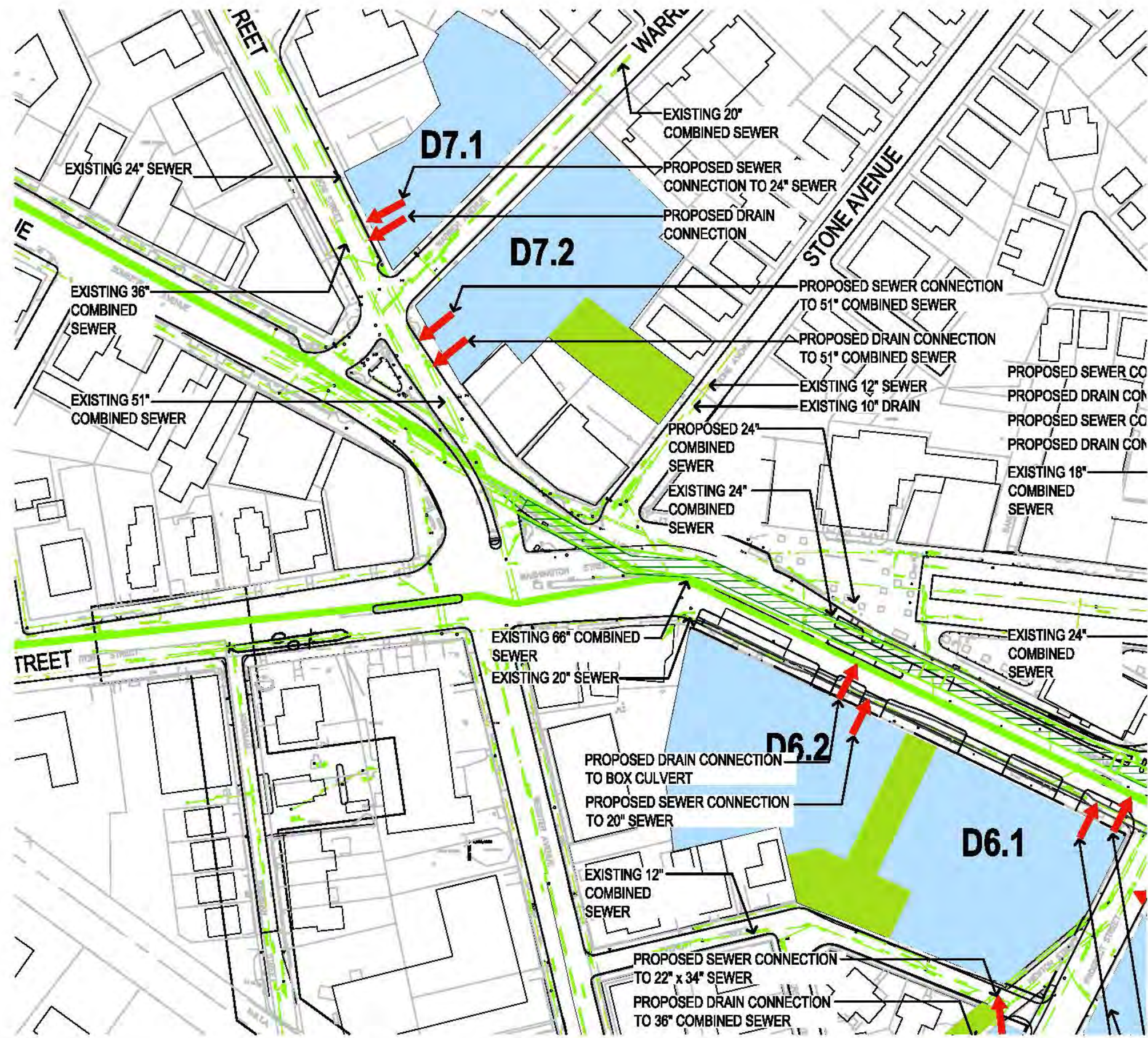
Stormwater detention and infiltration, where feasible and practicable, will be incorporated into the design of each site to reduce the rate and volume of stormwater discharged from the development for all storms up to and including the 100-year storm event. Reducing the rate and volume of stormwater discharge will reduce the pressure on the existing infrastructure and will help reduce the extent and duration of surcharging in the City's infrastructure during intense storm events.

Infiltration and inflow mitigation will be provided for increased sewage flows to the City of Somerville's sewage collection system. As the design of individual parcels advances, US2 will coordinate specific improvements to offset increased sewage flows with the


City of Somerville. Specific mitigation could include increased active storage on development parcels that will reduce peak rates and volumes of stormwater runoff to the City's combined sewer systems during storm events.


To reduce the amount of potable water utilized by the proposed developments, high efficiency plumbing fixtures that exceed code requirements for rate and volume of flow will be implemented. It is proposed that the volume of water saved from the incorporation of high efficiency plumbing fixtures be credited towards each development parcel's Infiltration and Inflow mitigation requirements. High efficiency plumbing fixtures will serve to reduce the amount of sanitary sewage generation, but also will reduce the demand of potable water.

Additionally, the approaches to sustainability and resiliency described elsewhere in this application will contribute to the overall mitigation approach.



Project:
 Union Square Redevelopment
 Union Square, Somerville, MA


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KEY PLAN

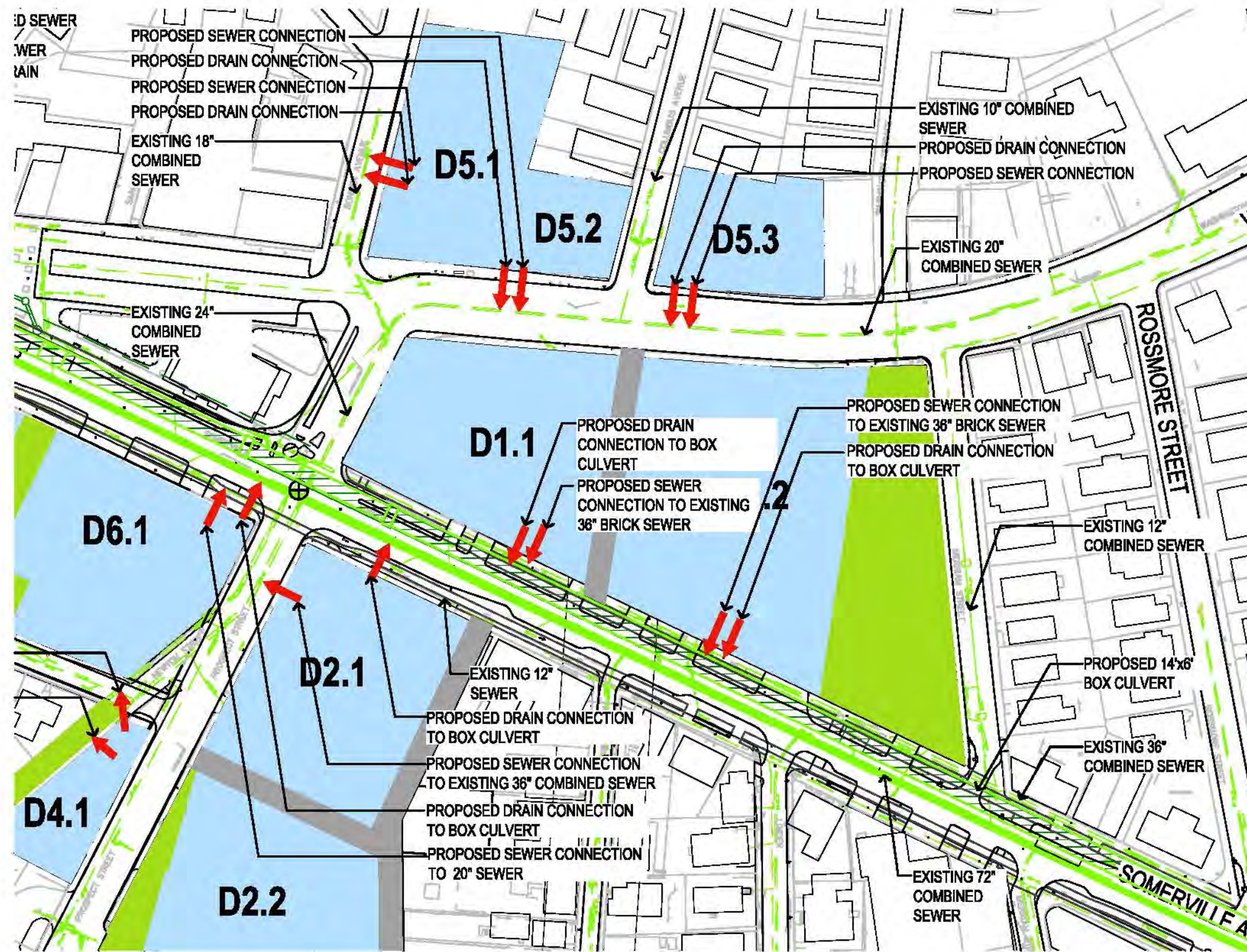
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TITLE
 OVERALL SEWER AND DRAINAGE PLAN
 C-101A


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 Union Square, Somerville, MA

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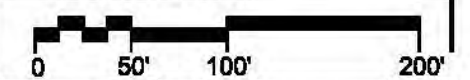
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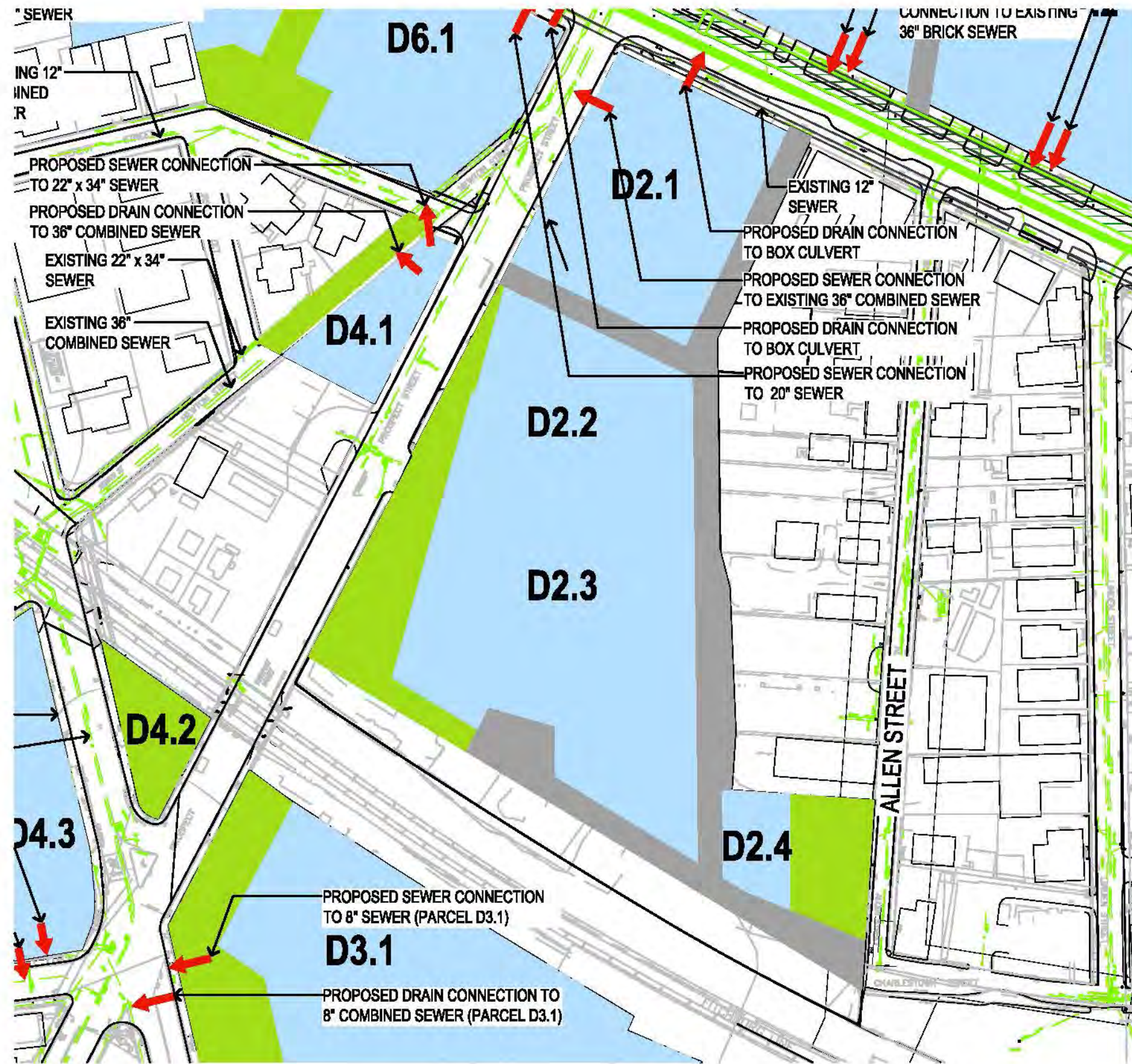
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 OVERALL SEWER AND
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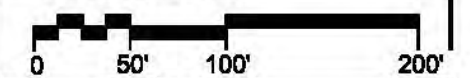


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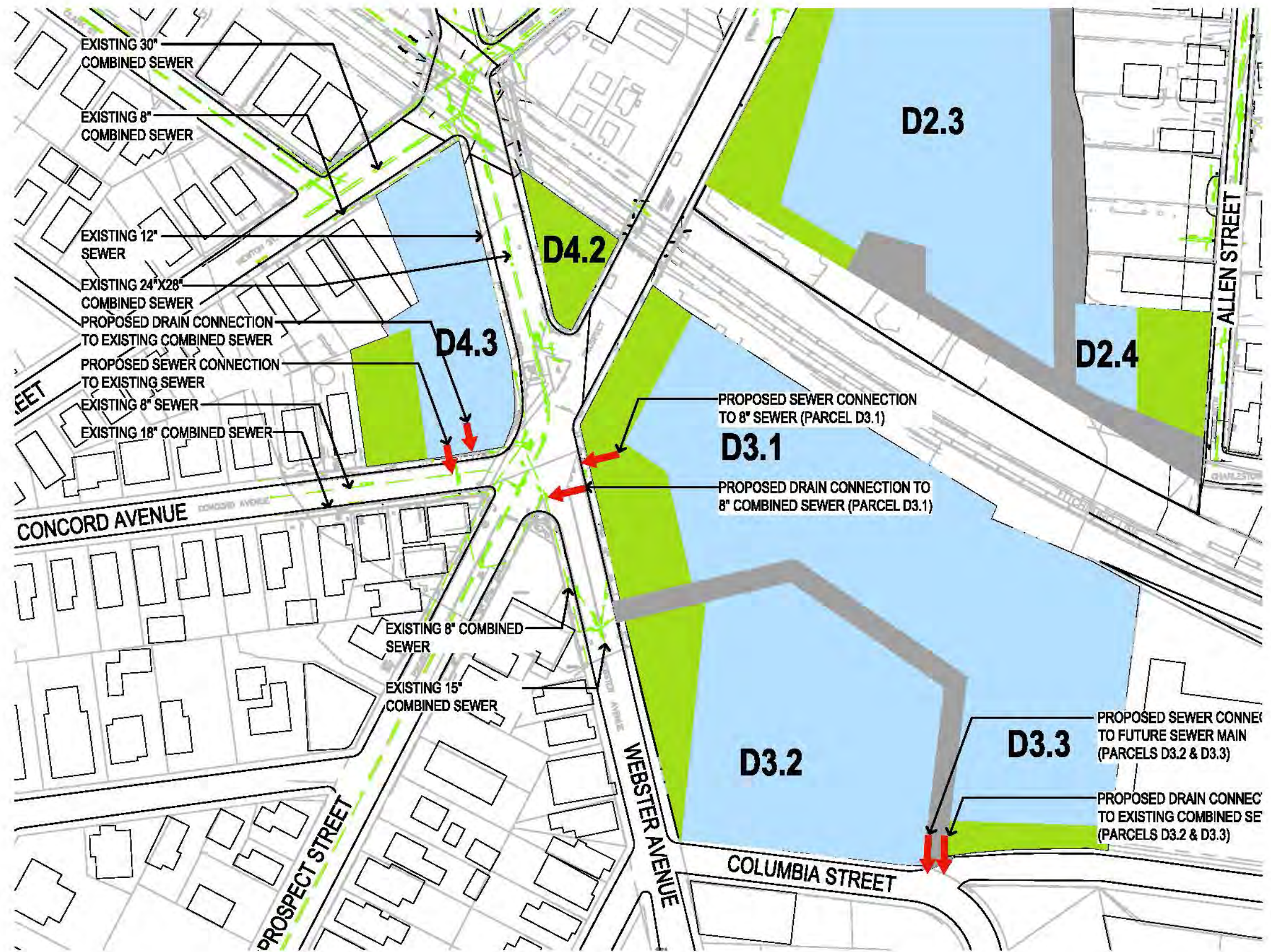
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 OVERALL SEWER AND
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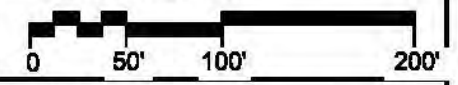
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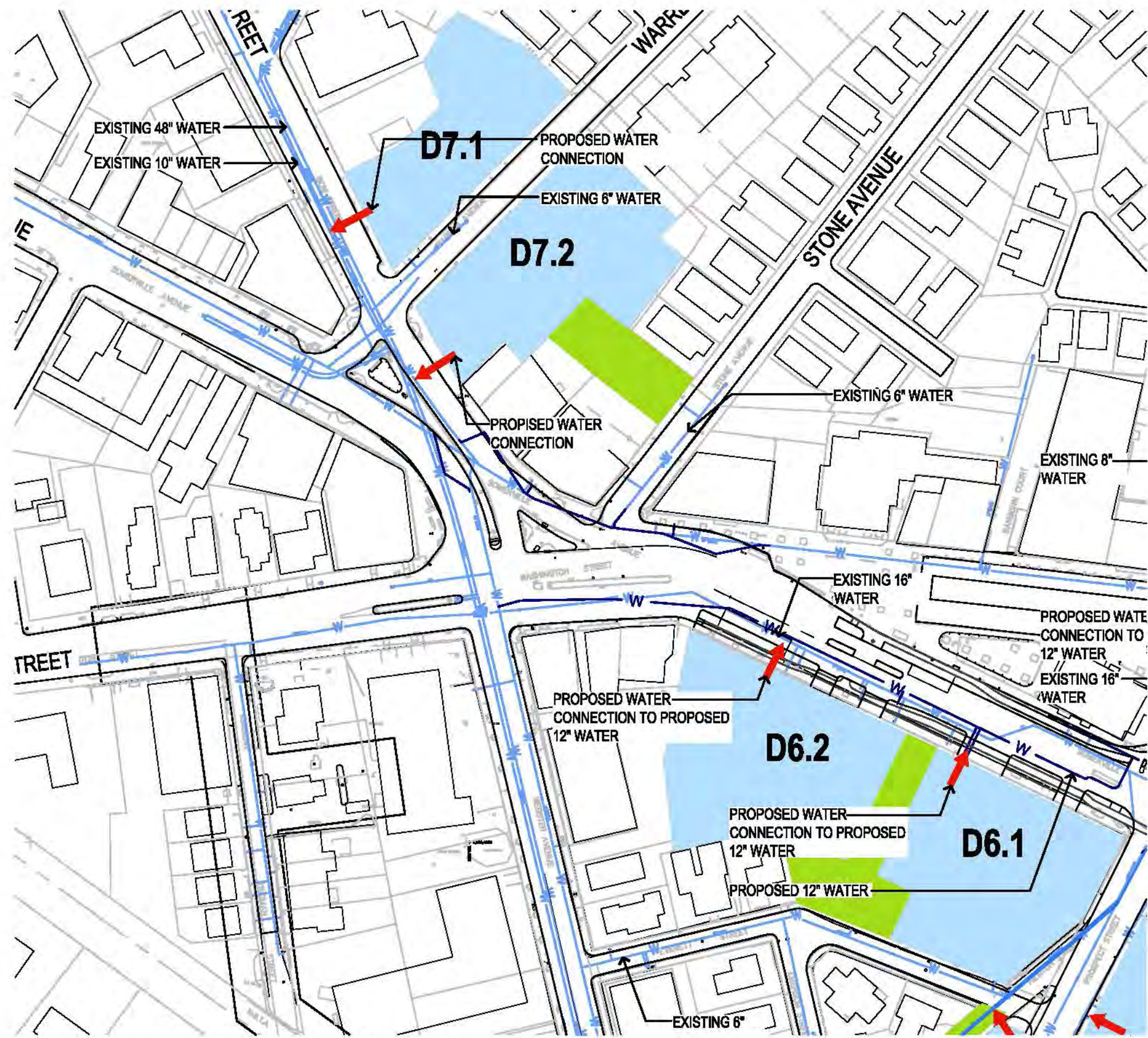
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 OVERALL SEWER AND
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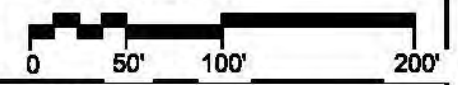
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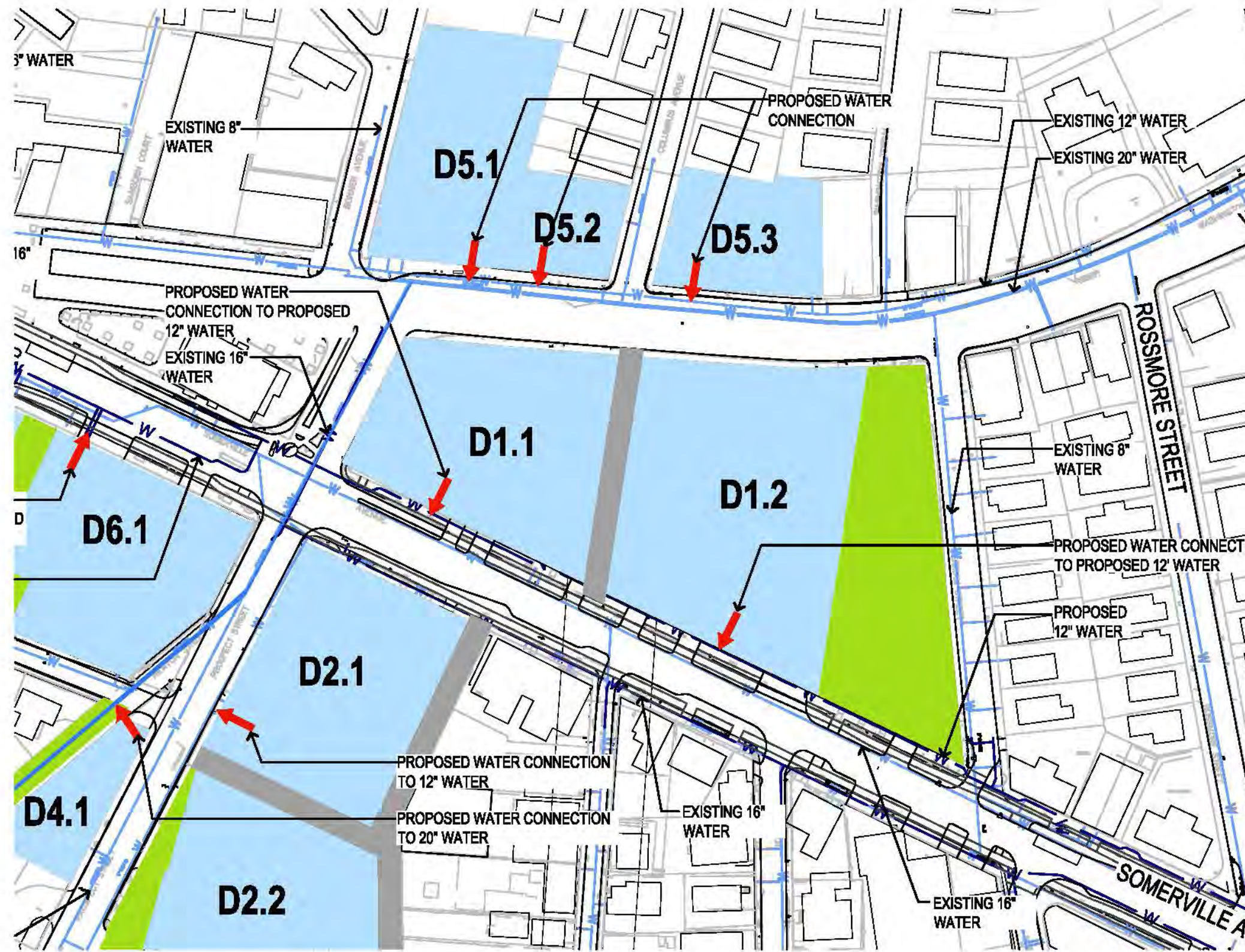
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 OVERALL WATER SYSTEM PLAN
 C-102A

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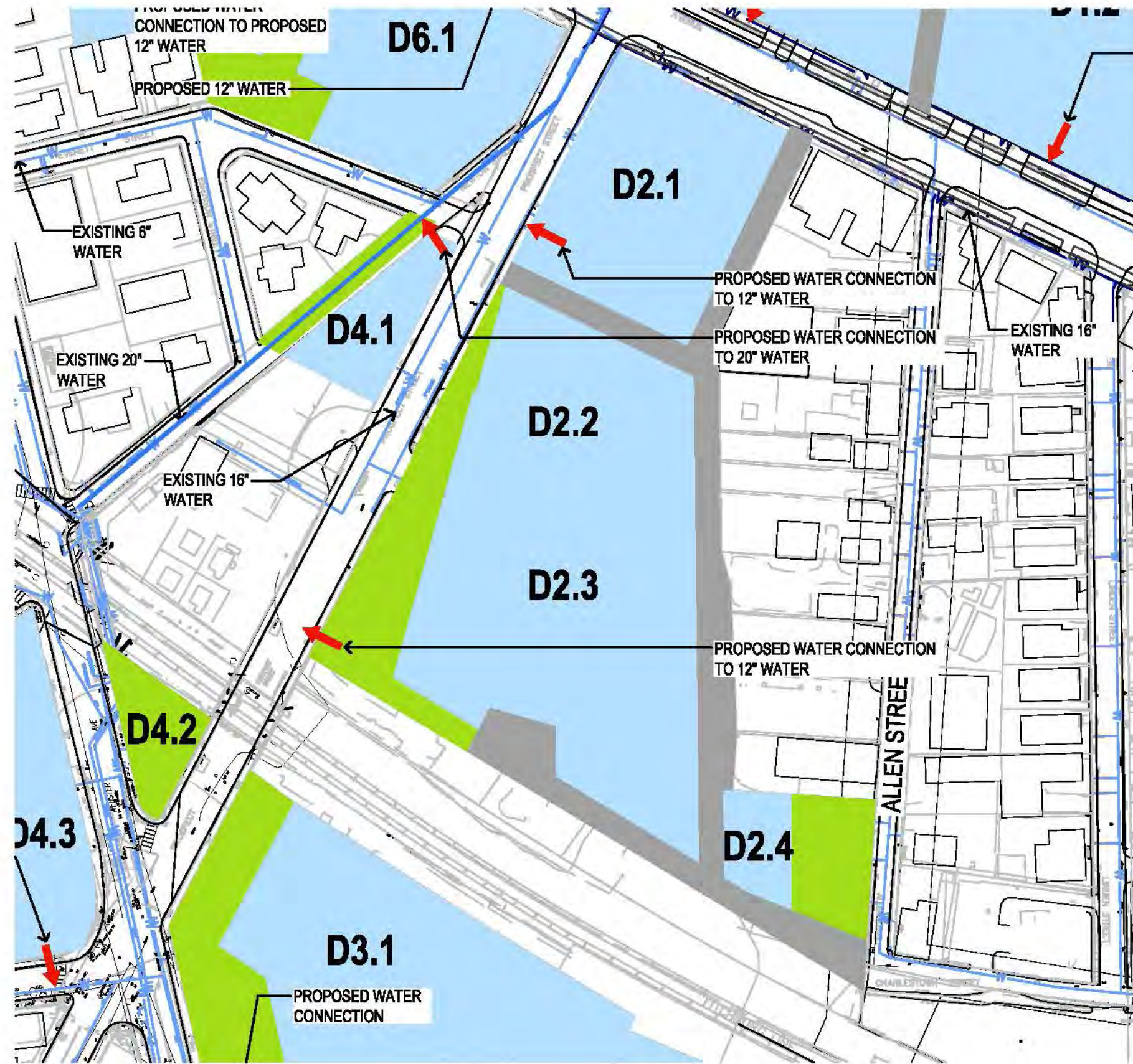
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 OVERALL WATER SYSTEM PLAN
 C-102B

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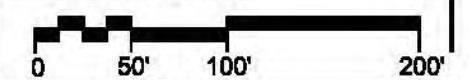
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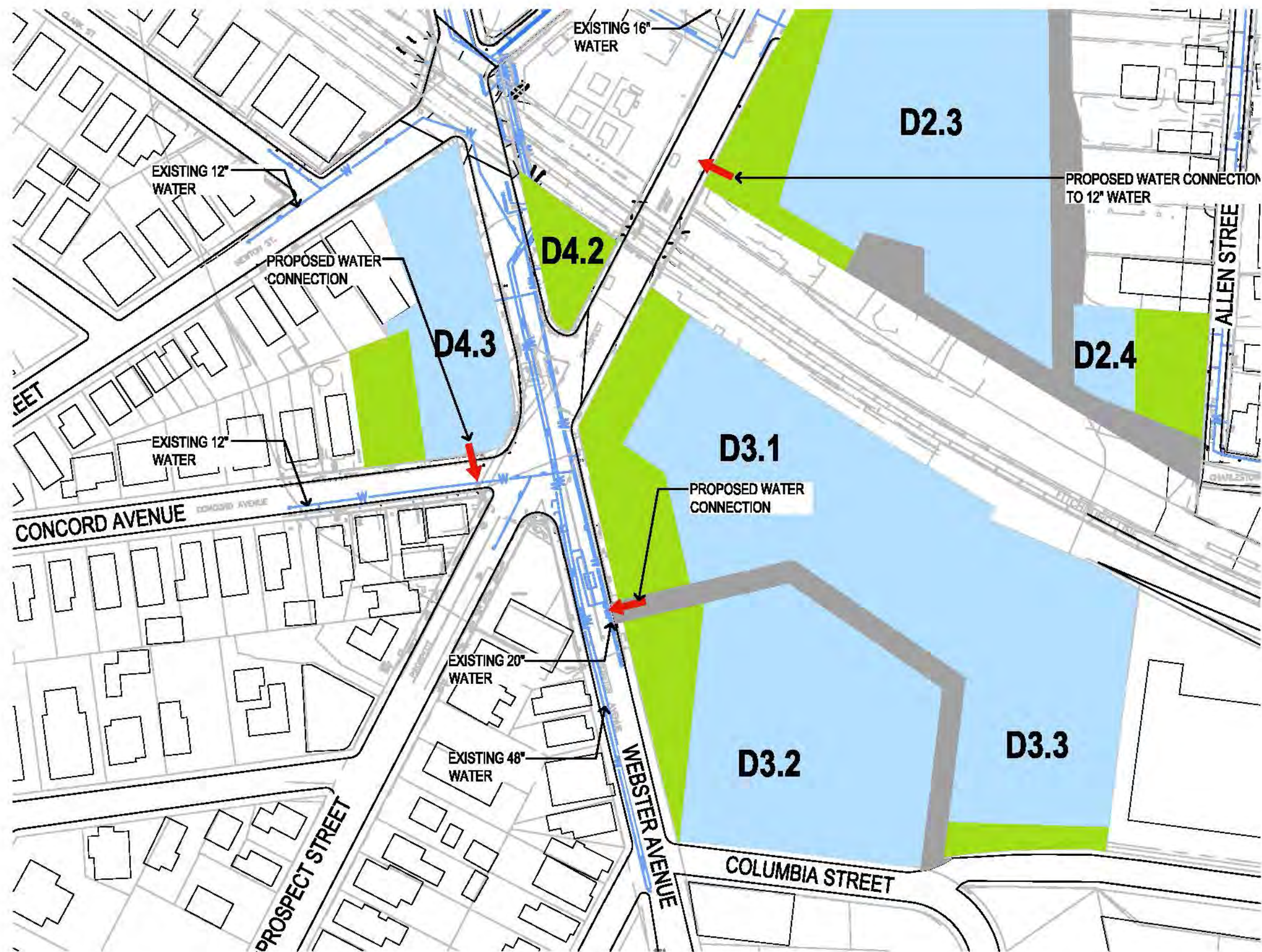
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TITLE
 OVERALL WATER SYSTEM PLAN
 C-102C

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Project:
 Union Square Redevelopment
 Union Square, Somerville, MA

PREPARED BY:

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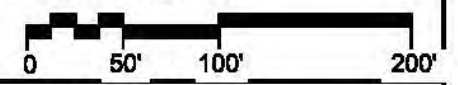
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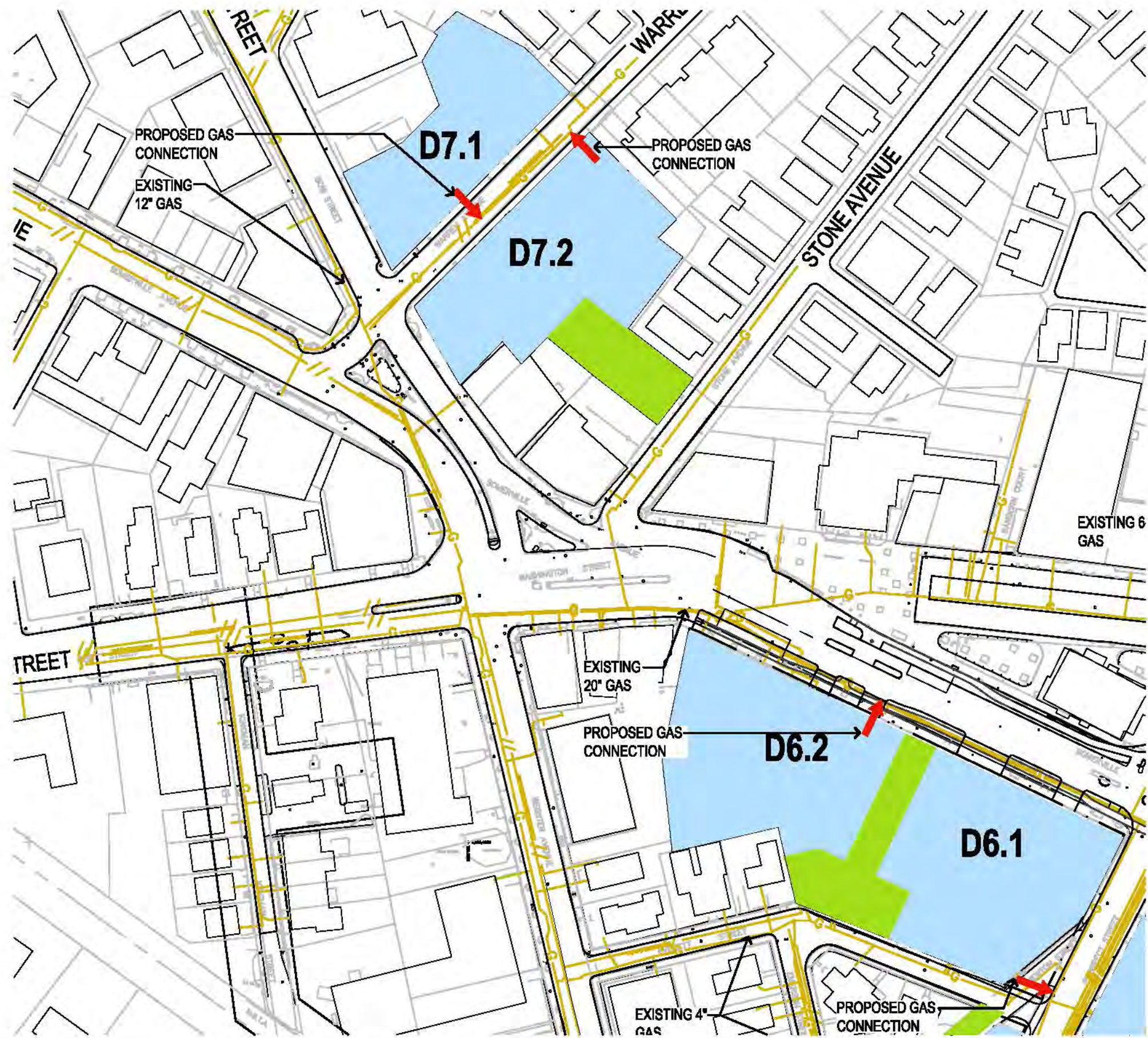
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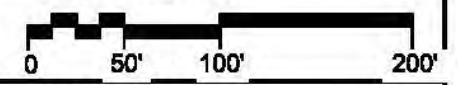
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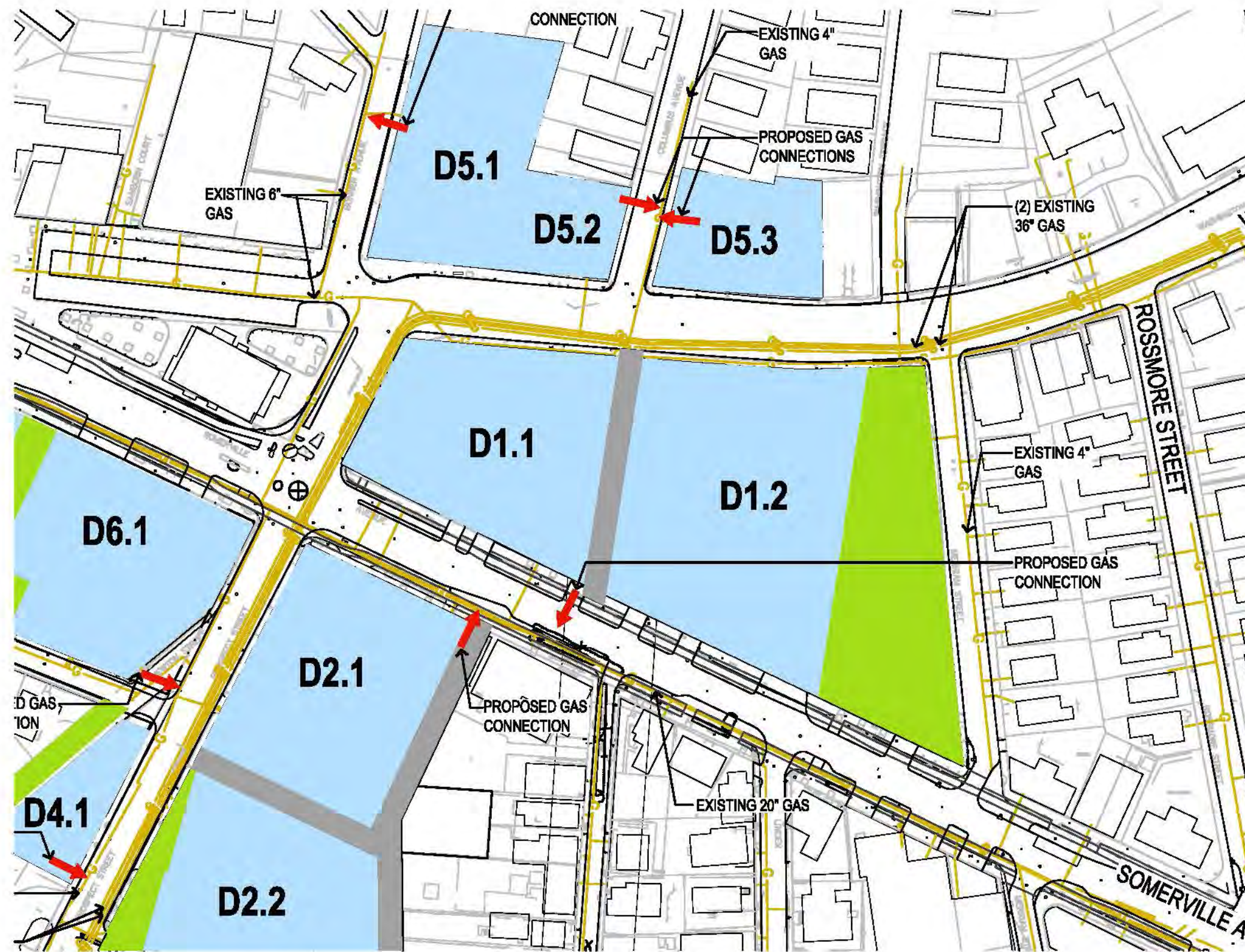
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 C-103A

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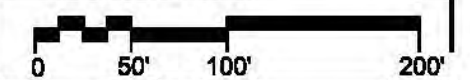
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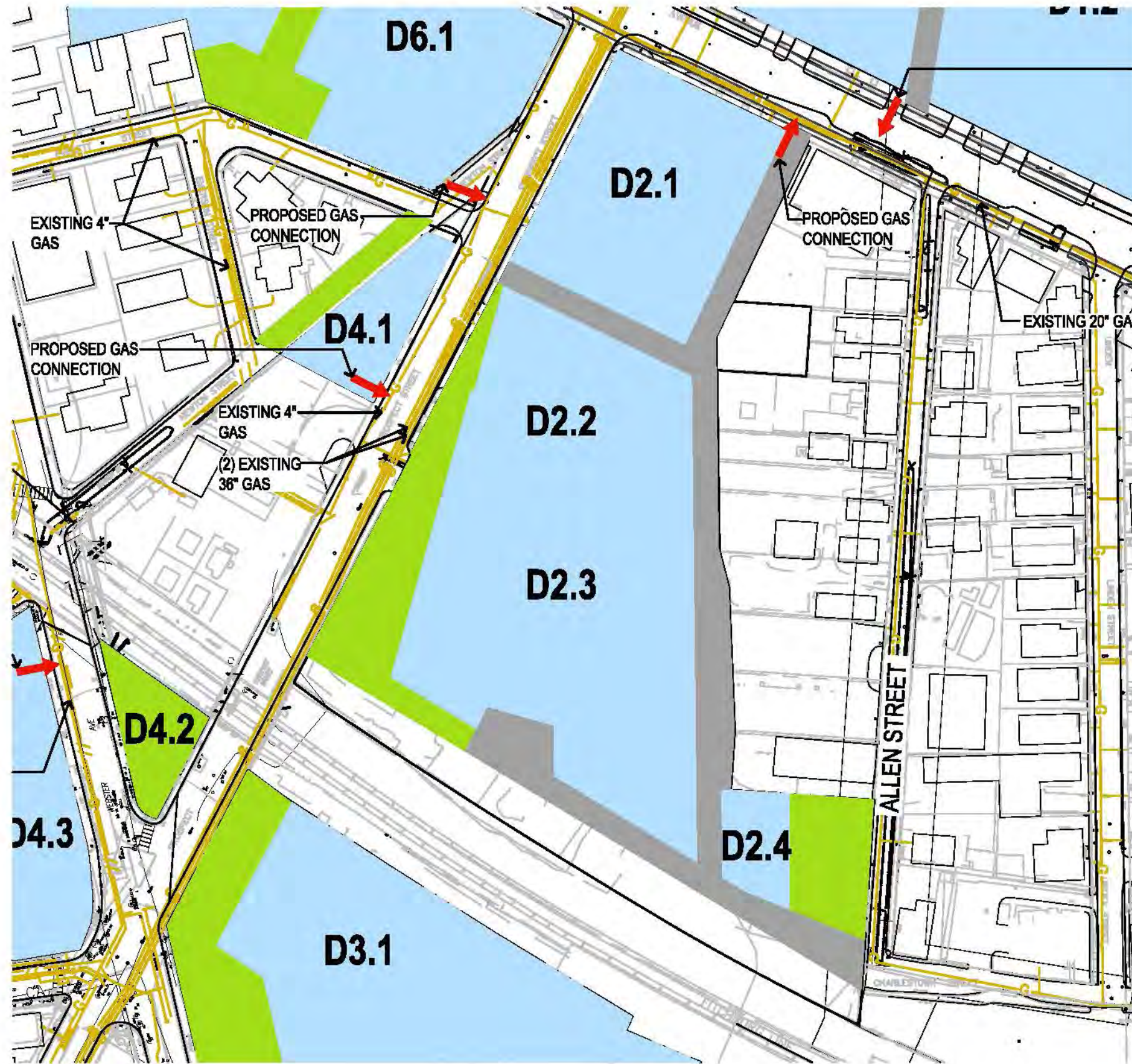
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 C-103B

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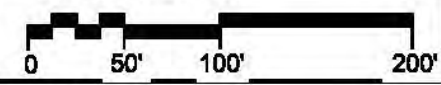
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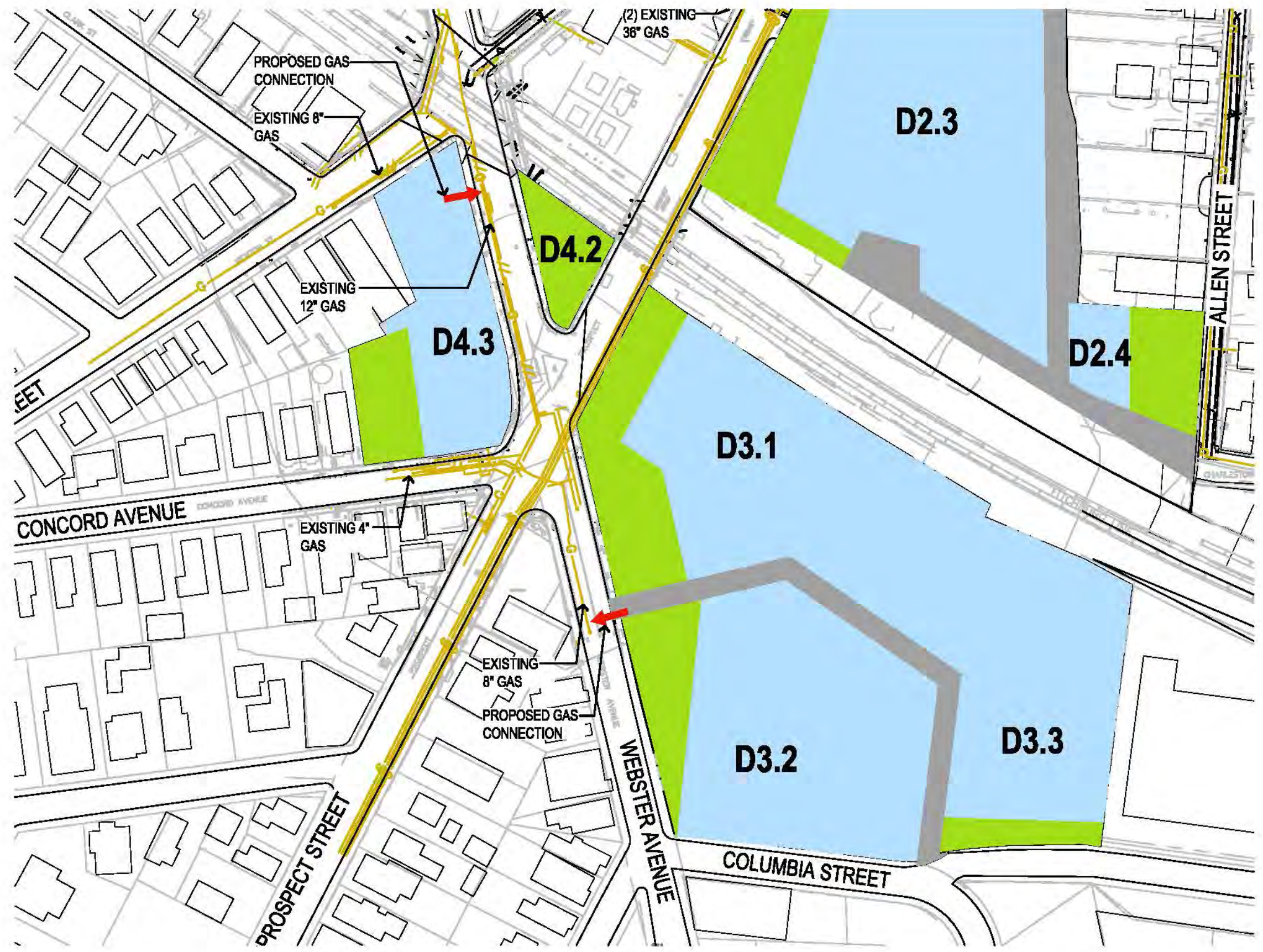
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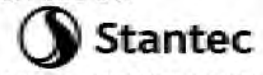



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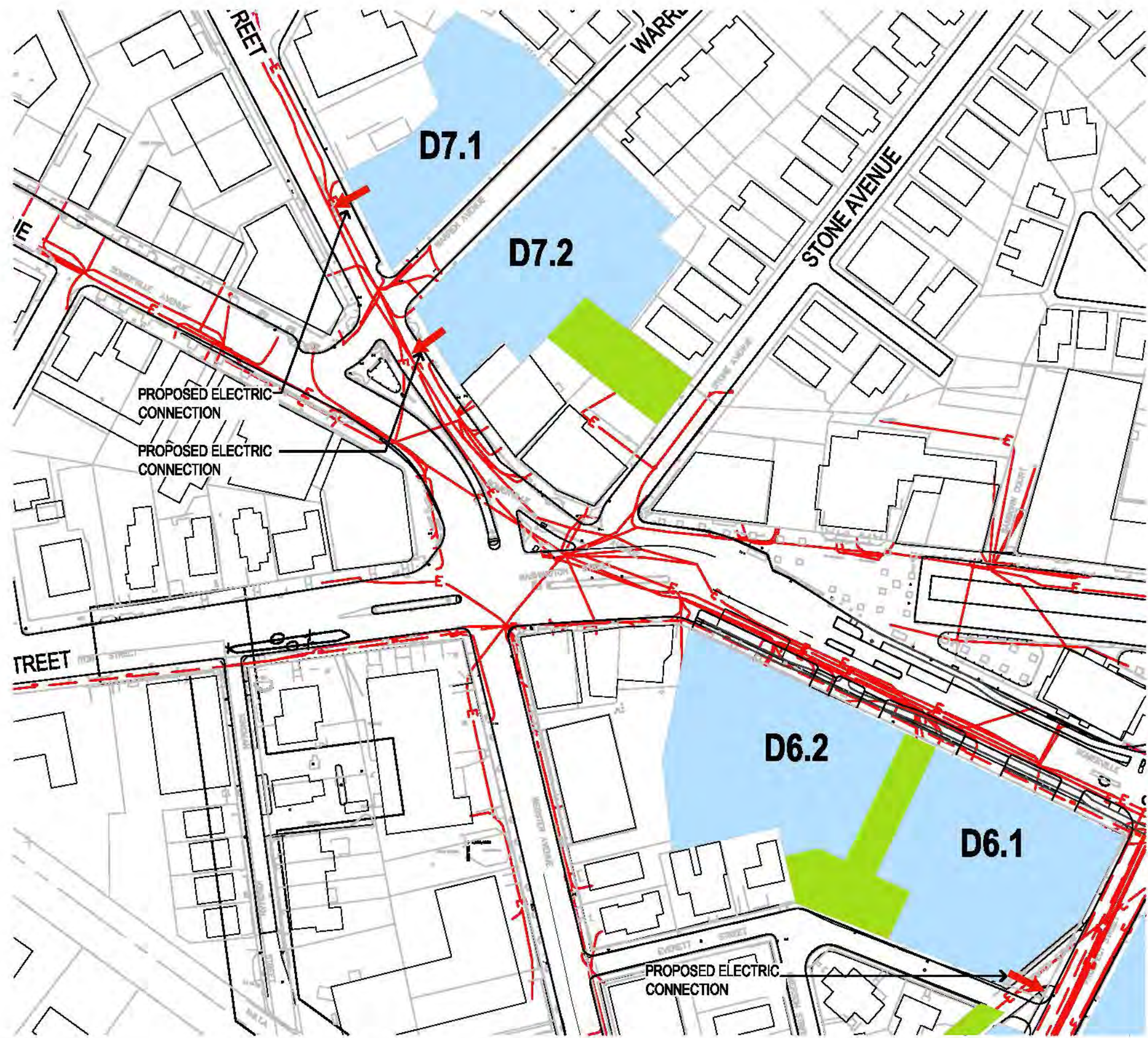
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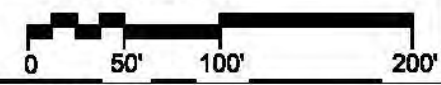
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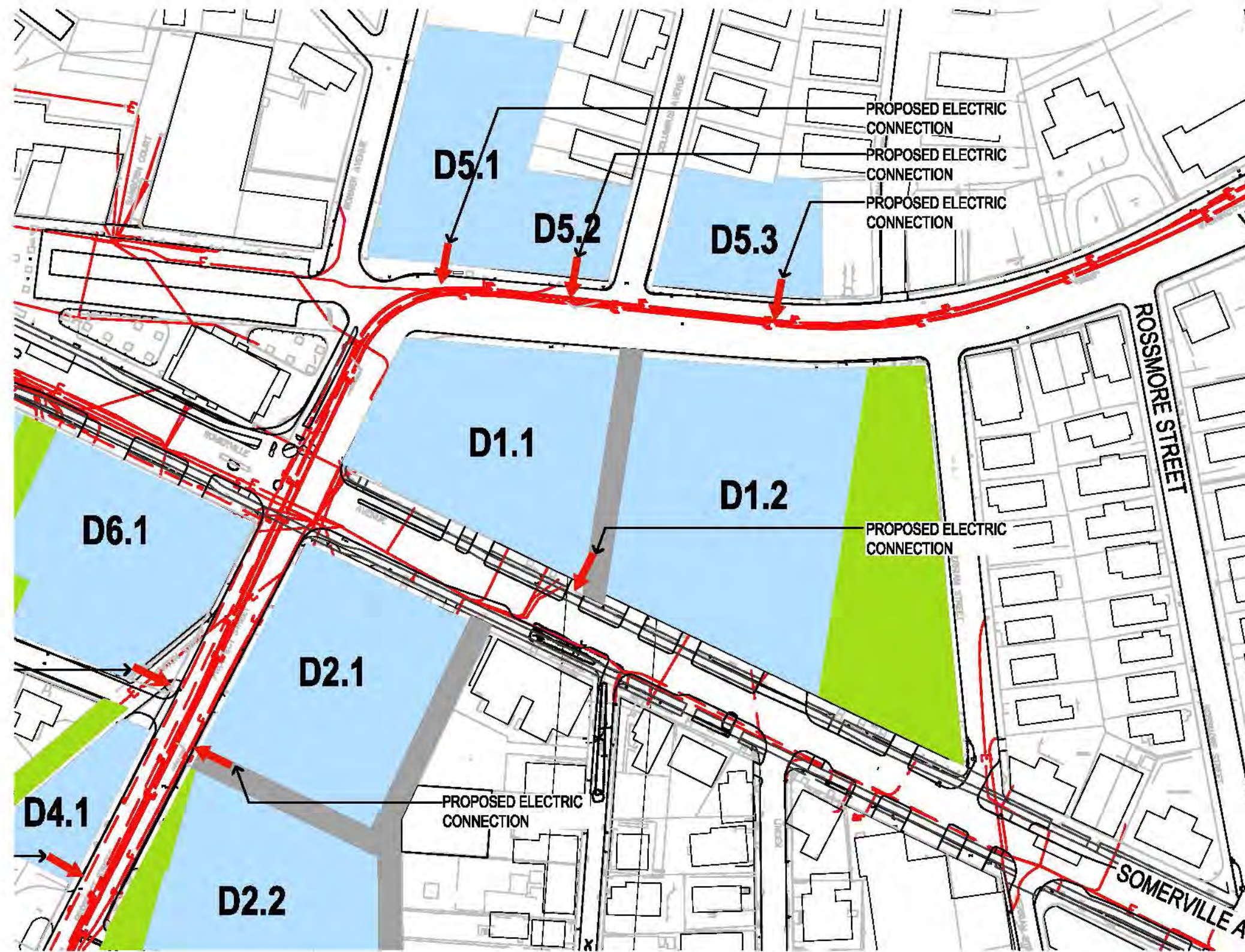
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TITLE
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 C-104A

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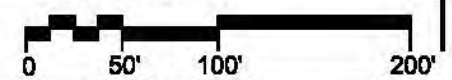
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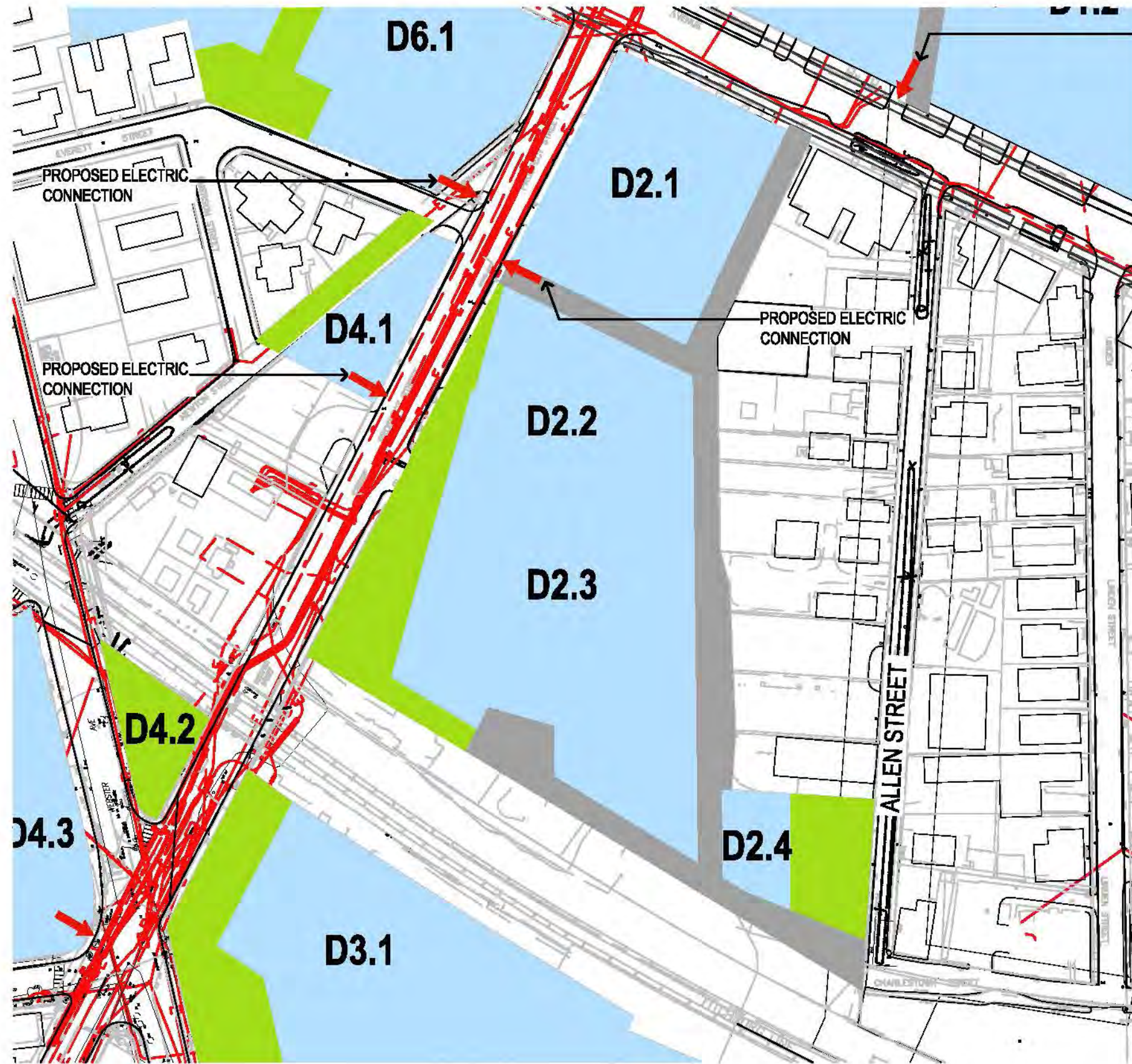
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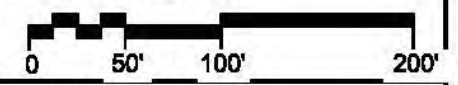
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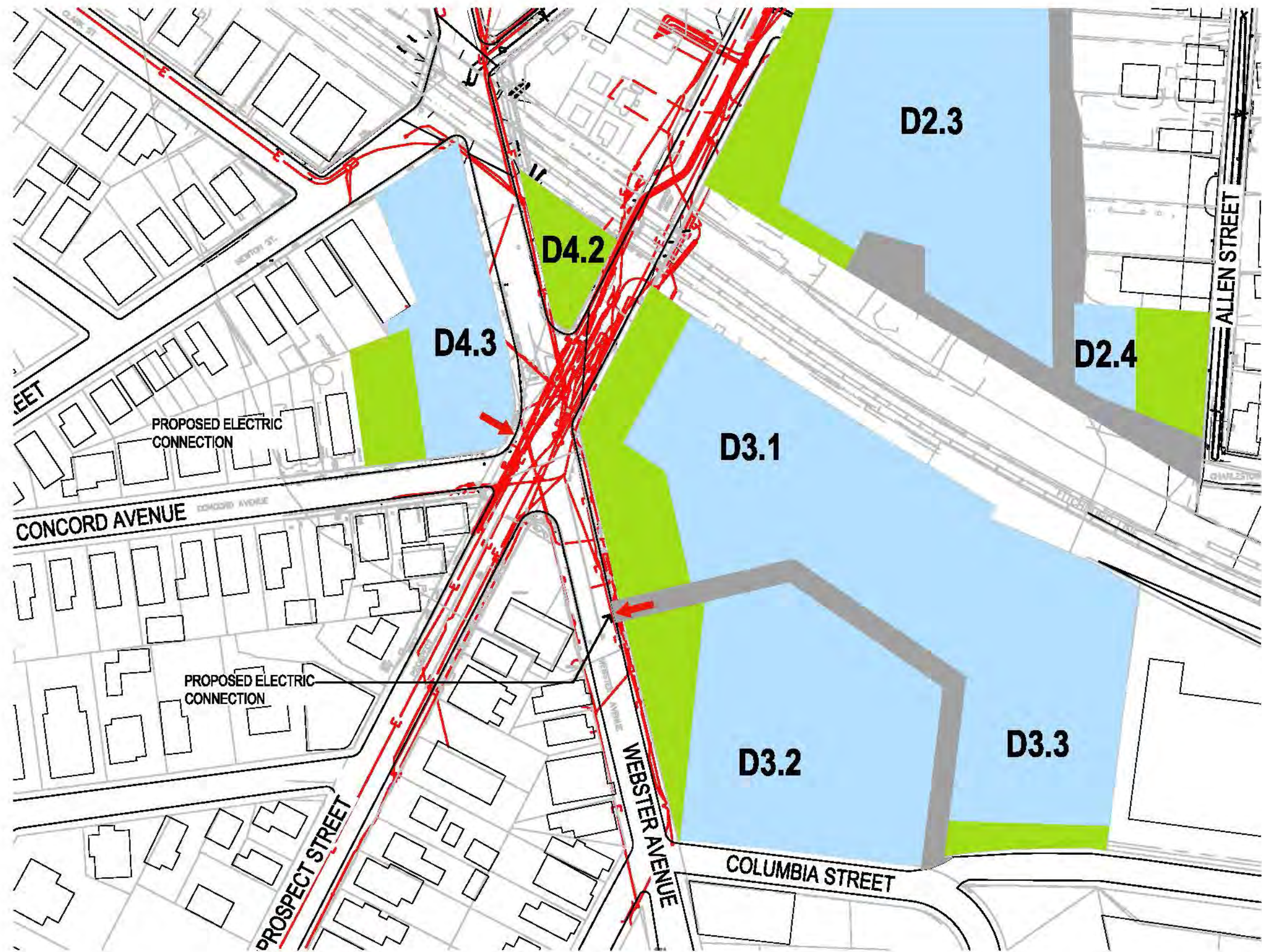
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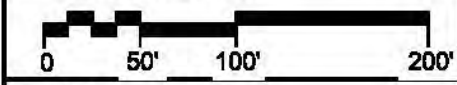
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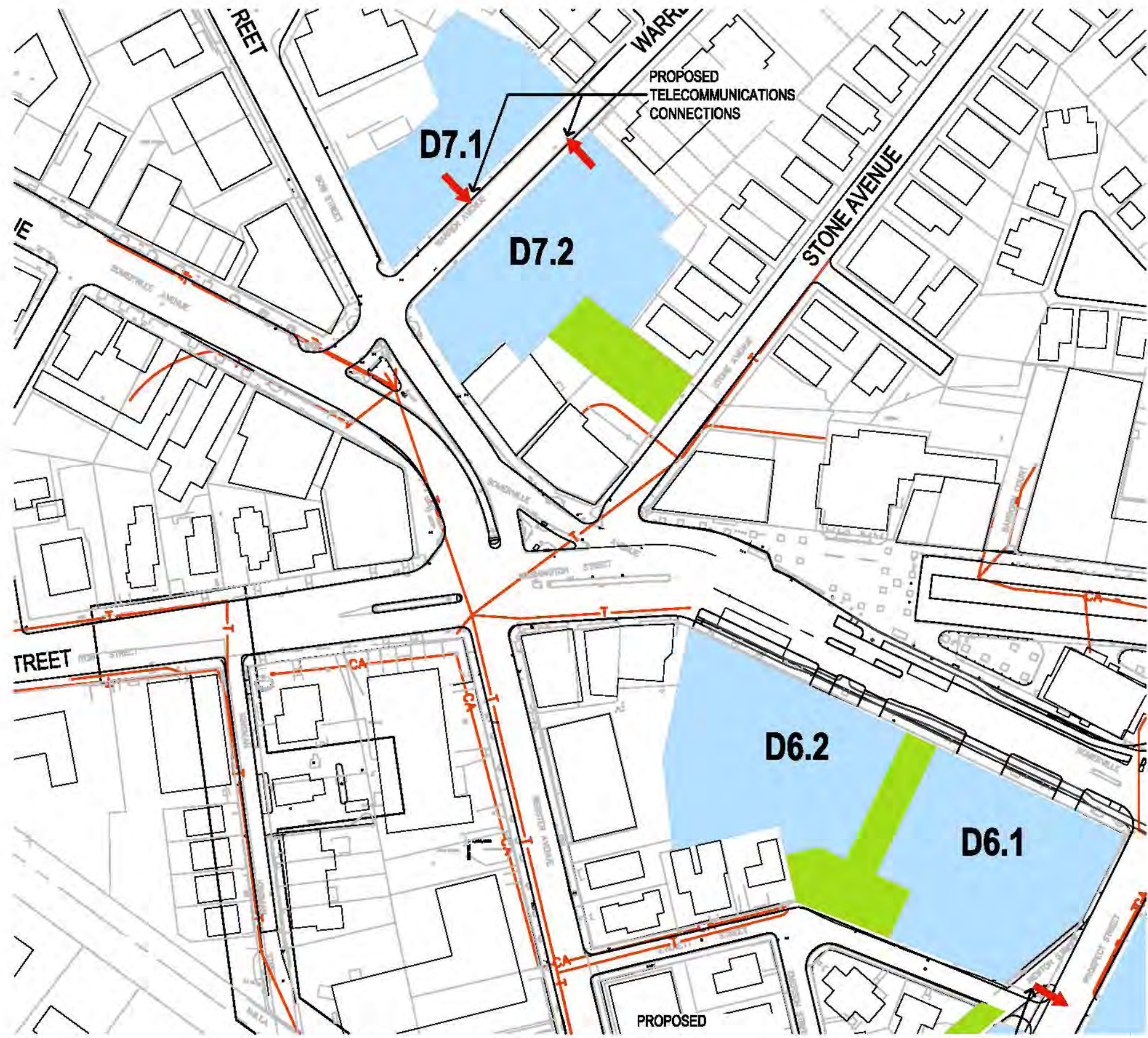
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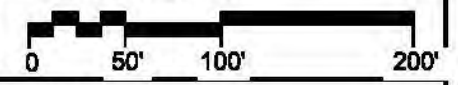
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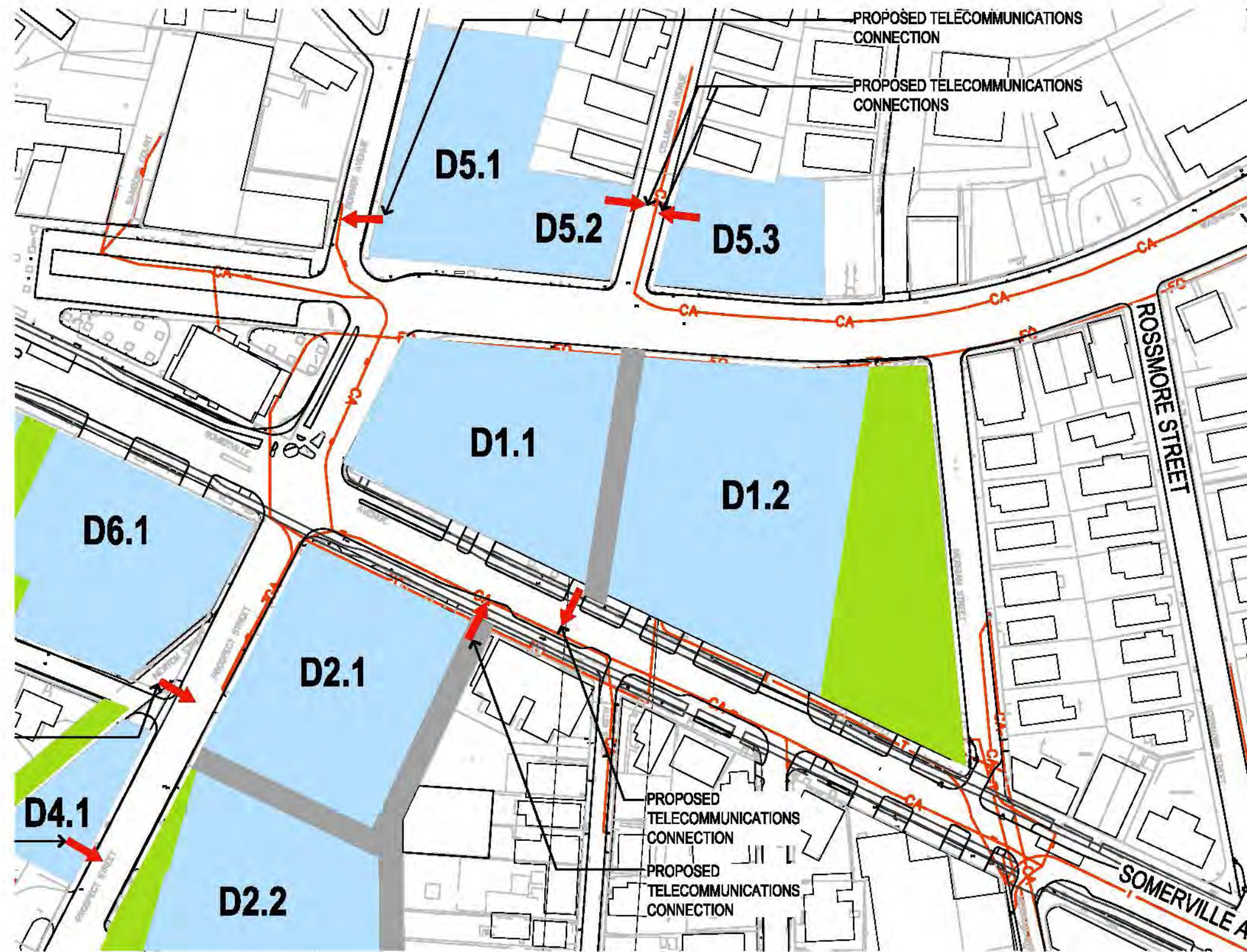
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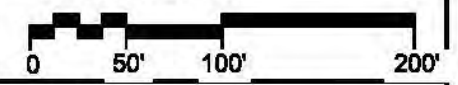
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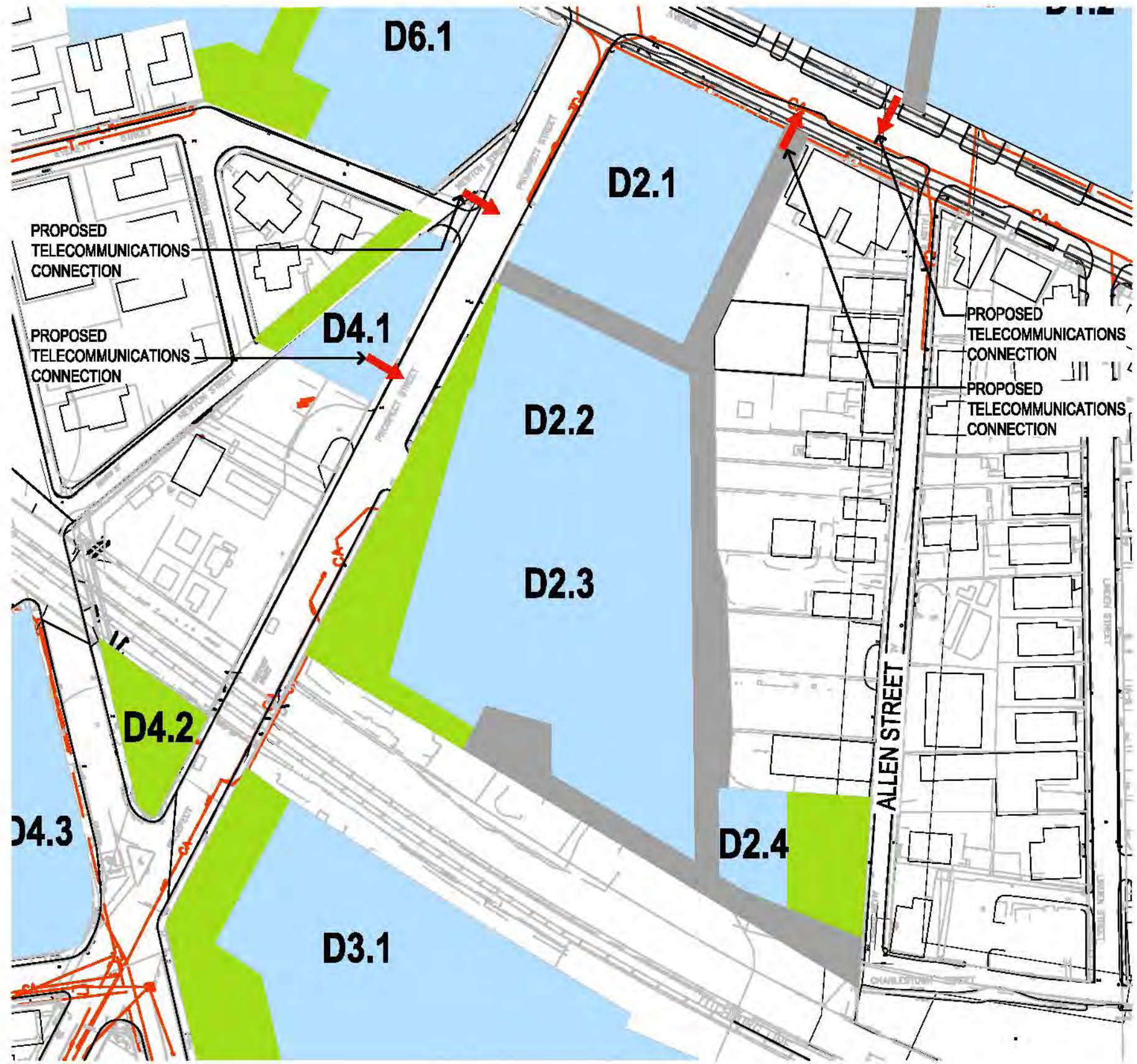
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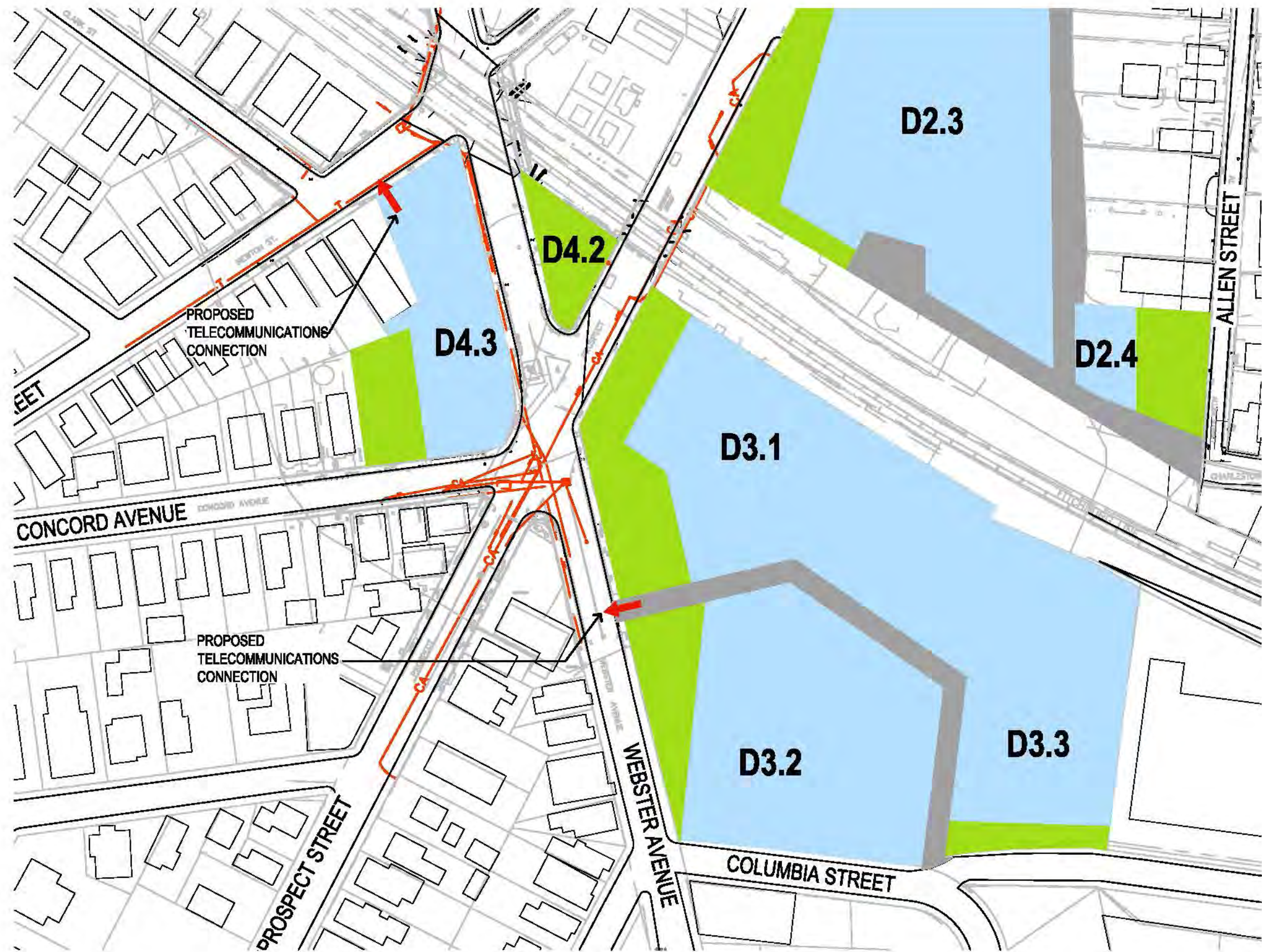
TITLE
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 PLAN
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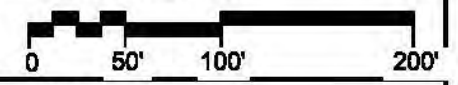
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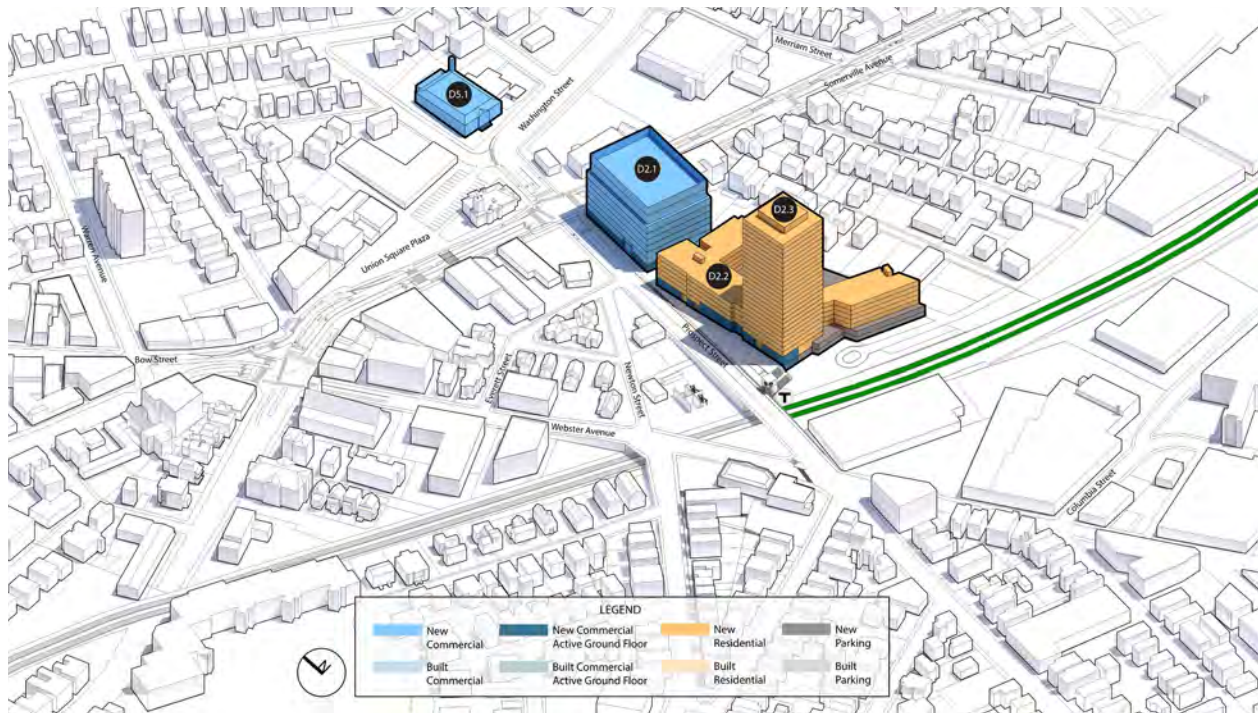
IMPLEMENTATION OVERVIEW

ANTICIPATED PHASING

It is anticipated that the phasing for the project will evolve as the development is implemented and as market conditions and user needs evolve. In any event, project phasing will meet the minimum requirements of the Master Land Disposition Agreement (MLDA) as it relates to overall development completion as well as construction start and completion requirements for individual project buildings. In summary of Exhibit C of the executed MLDA, 50% of the total project will be delivered no later than 10 years of the opening of the Green Line. Subsequently, 75% will be delivered no later than five years after that, with the totality of the project being delivered within an additional five years.

While the project delivery is subject to the MLDA requirements, careful consideration will be given throughout the project execution to the changing nature of user needs, and the viability of specific projects as informed by the broader market. Acknowledging the difficulty in predicting these variables, US2's strategy for delivering the requisite program elements is outlined through three project phases that are directed at infilling sites with opportunities that will advance Union Square's Revitalization in a manner consistent with the community's goals.

PHASE 1 (D5.1, D2)

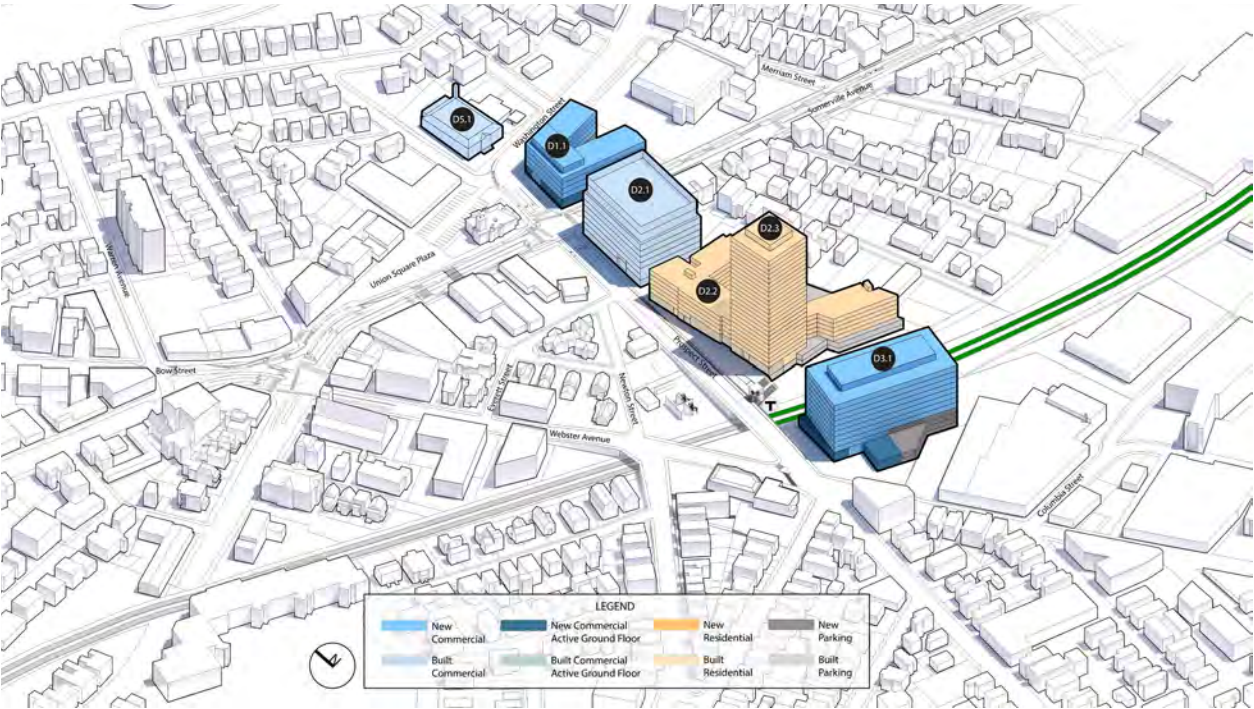


PROGRAM	ADDED		TOTAL	
	SF	%	SF	%
Commercial SF	245,000	38%	245,000	38%
Residential SF	399,000	62%	399,000	62%
CUMULATIVE TOTAL SF	644,000		644,000	

Project Phase 1 will mark the beginning of the transformation of Union Square into an urban employment center. This phase understands the current and future heart of the neighborhood, Union Square Plaza, as foundational – and works to bridge access to it from the new community node that will be the Green Line Station. To that end, Phase 1 anticipates the construction of the D5.1 Block, the former Post Office, and the D2 Block simultaneously as the spaces aim to be in operation on or before the arrival of the Green Line extension. The D2 Block is anticipated to start construction in 2018 and be completed in late-2020. The D5.1 Block will be redeveloped into a mixed use commercial

building that includes arts and creative uses as well as retail uses. The D2 Block will be comprised of multiple structures. Anchoring the corner of Prospect Street and Somerville Avenue, Union Square’s first significant commercial building will rise on D2.1. The balance of the site will support a residential building across parcels D2.2 and D2.3, and provide access to and from the MBTA Green Line platform. As the street wall is built out along the length of the D2 Block, active ground floor uses in combination with generous civic spaces will begin to establish a strong connection between the two landmark community nodes that are Union Square Plaza and its Transit Station.

PHASE 2 (ADDS D1.1, D3.1)



PROGRAM	ADDED		TOTAL	
	SF	%	SF	%
Commercial SF	385,000	100%	630,000	61%
Residential SF	-	0%	399,000	39%
CUMULATIVE TOTAL SF	385,000		1,029,000	

Phase 2 is focused on completing the Prospect street wall started in Phase 1 in order to secure a strong connection between the new MBTA Green Line station and Union Square plaza. South of the new Green Line station, D3.1 is envisioned as a 280,000 square foot commercial lab or office building. Across Somerville Avenue, facing Phase 1’s commercial project, D1.1 site will be transformed

into an approximately 175-room hotel, a use that will serve as a significant amenity to Union Square’s increasingly commercial user base and will be a significant commercial tax producer. In total, Phase 2 will add approximately 385,000 SF of commercial space at which point it is anticipated that the project will have realized a cumulative 61% commercial and 39% residential use mix.

PHASE 3 (ADDS D1.2, D3.2-3, D4, D5.2-3, D6, D7)



PROGRAM	ADDED		TOTAL	
	SF	%	SF	%
Commercial SF	834,000	61%	1,464,000	61%
Residential SF	534,000	39%	933,000	39%
CUMULATIVE TOTAL SF	1,368,000		2,397,000	

Phase 3 involves the build-out of the balance of the project. Considering the uncertainty of the future, each of these projects will be implemented individually as market conditions and user demands

permit. Definitive plans regarding the sequencing of the individual projects that comprise Phase 3 will be further developed as Phases 1 and 2 are underway.

OFF SITE COMPLIANCE

The Planning Board may permit off-site compliance for Arts & Creative Space, as described in Section 6.7.5.A.4 of the Union Square Zoning, and for affordable housing units required through Article 13 of the City of Somerville’s Zoning Ordinance. Off-site allocations for Arts and Creative Enterprise space will be pursued, while the entirety of required affordable units will be provided on their generating site. Implementation methods for each use are described below.

AFFORDABLE HOUSING

It is the intent of the applicant to fulfill the requirements for affordable units on-site for each residential project. The resulting distribution of affordable units by block can be seen in Table 9 (Build Out Program Estimate) and represents 20% of the total units delivered. Pursuant to article 6.7.6.D.a of the Union Square Zoning, the delivery and phasing of these units will be determined as individual buildings are built out. The affordable units will be provided in accordance with the requirements of Section 13 of the Somerville Zoning Ordinance.

ARTS & CREATIVE ENTERPRISE USES

A critical component of the City’s vision for economic development outlined in the Neighborhood Plan, the creative workforce will continue as a defining characteristic of the Union Square neighborhood. The prioritization of commercial uses in the Union Square Zoning, and by extension, its commitment to the creative economy, is evidenced by the requirement to dedicate 5% of the total commercial build out to uses within the Arts & Creative Enterprise (ACE) use category. While the area allocation is required of the total build-out, delivery of ACE space

per section 6.7.6.B.3.a is determined as individual lots are built out, tracking with the delivery of a generating commercial space on a site by site basis.

As mentioned above, it is the intent of this application to fulfill the ACE area requirement through off-site allocations (i.e. reallocated from one D Block development site to another D Block development site). This pursuit is rooted in the desire to provide higher quality, affordable and ultimately more useful space for a variety of end users. By design, as a use category the ACE designation represents a broad and diverse occupant group. Artisan Production, Arts Exhibition, Art Sales & Services, Arts Instruction, Live/Work Space, Design Services, and Shared Workspaces all have their place here. Figure 50 highlights the sites that will be arts and creative space. Table 19 (ACE Area Distribution) identifies those lots where a requirement for ACE space is generated along with the resulting area requirement. As can be observed, were ACE space to be delivered to track with commercial space as described above, smaller development sites, or those with limited commercial space would yield similarly small ACE areas, resulting in inefficient spaces of questionable utility.

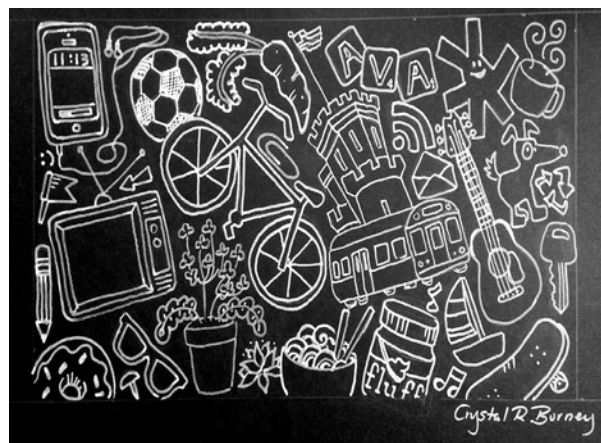


FIGURE 71: ARTS & CREATIVE ENTERPRISES (ACE)



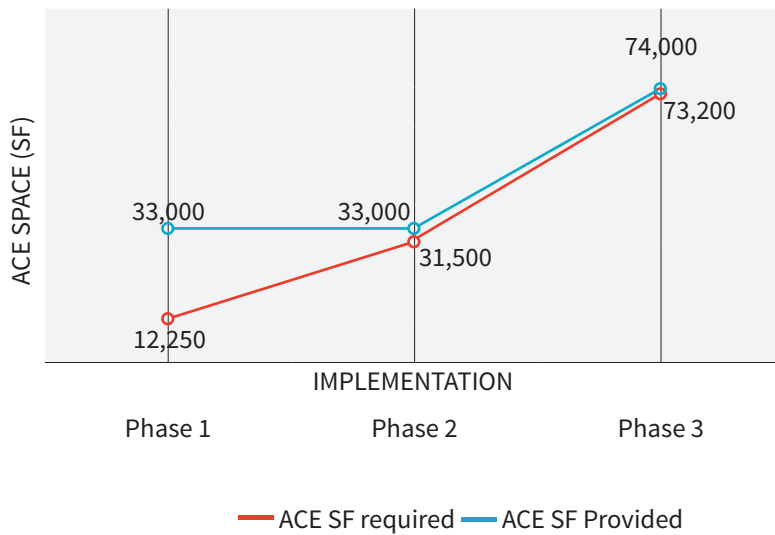
TABLE 19: ARTS & CREATIVE ENTERPRISE SPACE DISTRIBUTION

M/B/L	GENERATING (SF)	ACE REQUIRED (SF)	RECEIVING (SF)	ACE PROVIDED (SF)
BLOCK D1		17,700		6,000
D1.1	✓	5,250		-
D1.2	✓	12,450	✓	6,000
BLOCK D2		11,000		25,000
D2.1	✓	8,900		-
D2.2-3	✓	1,500	✓	13,000
D2.4		600	✓	12,000
BLOCK D3		27,750		15,000
D3.1	✓	14,000		-
D3.2	✓	900	✓	9,000
D3.3	✓	12,850	✓	6,000
BLOCK D4		1,800		-
D4.1	✓	1,450		-
D4.2		-		-
D4.3	✓	350		-
BLOCK D5		3,250		20,000
D5.1	✓	1,850		20,000
D5.2	✓	1,250		-
D5.3	✓	150		-
BLOCK D6		11,250		8,000
D6.1	✓	5,550	✓	4,000
D6.2	✓	5,700	✓	4,000
BLOCK D7		450		-
D7.1	✓	250		-
D7.2	✓	200		-
TOTALS		73,200		74,000

TABLE 20: ACE PHASE DISTRIBUTION

PROGRAM	PHASE 1 SF	PHASE 2 SF	PHASE 3 SF
Commercial SF	245,000	385,000	834,000
ACE SF Required (5%)	12,250	19,250	41,700
ACE SF Provided	33,000	-	41,000
Provision Detail	D5.1, D2.1-3	D1.1, D3.1	Balance
ACE Cumulative SF Required	12,250	31,500	73,200
ACE Cumulative SF Provided	33,000	33,000	74,000
ACE SF BALANCE / (DEFICIT)	20,750	1,500	800

FIGURE 72: ARTS & CREATIVE ENTERPRISES (ACE)



DEMOLITION

In order to fulfill the goals of approved Union Square Revitalization Plan and realize the vision expressed in the Union Square Neighborhood Plan, the existing buildings on a majority of the D Blocks will be demolished to make way for new uses. Approximately 299,419 square feet of existing

buildings and 302 parking spaces will be demolished. A majority of this demolition is lower density commercial property with automotive or industrial uses. Individual building sites will be demolished over a period of time as development plans for individual blocks are implemented.

TABLE 21: PROPOSED DEMOLITION PROPERTIES

M/B/L	ADDRESS	USE ¹	DWELLING UNITS ¹	FLOOR AREA (SF) ¹	PARKING SPACES ²
BLOCK D-1 "CIVIC BLOCK"					
81-D-1	238 Washington St.	Commercial - Shop		-	14
81-D-9	273 Somerville Ave.	Commercial - Shop		-	-
81-D-7	269 Somerville Ave.	Commercial - Auto		12,284	-
81-D-8	269 Rear Somerville Ave.	Commercial - Auto		-	-
81-D-5	259 Somerville Ave.	Vacant Land		n/a	-
81-D-6	261 Somerville Ave.	Residential - Two Family	2	4,190	-
81-D-4	220 Washington St.	Commercial - Public		89,595	73
Sub-totals				106,069	87
BLOCK D-2 "NORTH PROSPECT BLOCK"					
82-I-1	26 Prospect St.	Commercial - Outbuildings		-	-
82-I-2	30 Prospect St.	Commercial - Warehouse		2,934	-
Balance of D2	Multiple	Vacant Land		n/a	-
Sub-totals				2,934	-
BLOCK D-3 "SOUTH PROSPECT BLOCK"					
96-A-1	50 Webster Ave.	Commercial-Warehouse		34,161	-
96-A-31	520 Columbia St.	Commercial-Industrial		57,527	46
96-A-32	56 Webster Ave.	Commercial-Warehouse		20,310	-
Sub-totals				111,998	46
BLOCK D-4 "WEST PROSPECT BLOCK"					
82-E-15	41 Webster St.	Commercial - Auto		-	-
82-E-17	45 Webster St.	Commercial - Auto		6,516	-
82-E-18	47 Webster St.	Commercial - Auto		4,867	-
82-F-3	48 Webster Ave.	Outbuildings - Auto Lot		-	-
82-J-1	35 Prospect St.	Commercial - Gym		3,732	10
Sub-totals				15,115	10
BLOCK D-5 "WASHINGTON STREET NORTH BLOCK"					
81-A-31	223 Washington St.	Commercial - Auto		2,992	9
81-E-7	231 Washington St.	Commercial - Gas		2,288	2
Sub-totals				5,280	11

TABLE 22: PROPOSED DEMOLITION PROPERTIES (CONT.)

M/B/L	ADDRESS	USE ¹	DWELLING UNITS ¹	FLOOR AREA (SF) ¹	PARKING SPACES ²
BLOCK D-6 "SOMERVILLE AVENUE SOUTH BLOCK"					
82-C-4	9 Union Sq.	Commercial - Restaurant		21,265	12
82-C-6	2 Union Sq.	Commercial - Shop		7,786	8
82-C-7	298 Somerville Ave.	Commercial - Auto		5,358	-
82-C-8	290 Somerville Ave.	Commercial - Restaurant		4,355	9
82-C-10	286 Somerville Ave.	Commercial - Restaurant		2,168	19
Sub-totals				40,932	48
BLOCK D-7 "WARREN BLOCK"					
73-D-19	41 Union Sq.	Commercial - Bank		10,731	89
73-C-10	1 Bow St.	Commercial - Auto		6,360	21
Sub-totals				17,091	110
TOTAL ALL			2	299,419	302
TOTAL COMMERCIAL				295,229	302
TOTAL RESIDENTIAL			2	4,190	0

¹ Source: City of Somerville Assessor's Database

² Parking spaces are estimates based on counts as observed

237 WASHINGTON TO BE PRESERVED

The existing building at 237 Washington Street, the former United States post office building, will remain a key historic feature for Union Square as envisioned in the *Union Square Neighborhood Plan*. The property includes approximately 26,000 SF building and approximately 6 parking spaces. This vacant property is planned for redevelopment into an exciting mix of commercial and arts and creative enterprise uses.



EXISTING BUSINESS RELOCATION

Existing businesses that are located on redevelopment parcels will be provided relocation assistance in accordance with the Commonwealth-approved *Union Square Revitalization Plan* and Massachusetts General Laws Chapter 79A and Regulations at 760 CMR 27.00 et seq. as individual parcels are acquired. Table 21 lists the businesses that are located on redevelopment parcels as of the date of this filing.

The eight businesses annotated with (*) on Figure 52, including Ricky's Flower Market, are uses that are consistent with the vision for Union Square outlined in the *Union Square Neighborhood Plan* and are permitted uses in the Union Square Overlay District zoning. US2 will offer these businesses an opportunity to remain in Union Square and will work with these businesses to identify space for their business within the redevelopment.

FIGURE 73: EXISTING BUSINESSES



#	Parcel	Business Name	Address	Business Type	#	Parcel	Business Name	Address	Business Type
1	D1.1	Ricky's Flower Market	238 Washington St.	Garden Store	11	D6.2	Buk Kyung Korean Restaurant	9a Union Square	Food & Beverage
2	D1.1	Fred M Susan Autobody	269 Somerville Ave.	Autobody Shop	12	D6.2	Angel Nails	9 Union Square	Service
3	D3.1	BeaconSales	50 Webster St.	Building Supply	13	D6.2	Mandarin Chinese Restaurant	7 Union Square	Food & Beverage
4	D3.2/3.3	Royal Hospitality Services Inc.	520 Columbia St.	Commercial Laundry	14	D6.2	Tech Auto Body	9 Union Square	Auto Repair
5	D4.1	CrossFit Somerville	35 Prospect St.	Gym	15	D6.1	Mike's Automotive	1 Union Square	Auto Repair
6	D4.2	Webster Auto Sales	61 Prospect St.	Auto Sales	16	D6.1	Ebi Sushi	290 Somerville Ave.	Food & Beverage
7	D4.3	Inman Collision Center	45 Webster St.	Auto Repair	17	D6.1	Dunkin Donuts	286 Somerville Ave.	Food & Beverage
8	D4.3	JN Phillips Auto Glass	47 Webster St.	Auto Repair	18	D7.1	Goodyear Auto Service Center	1 Bow Street	Auto Repair
9	D5.2	Union Gulf	231 Washington St.	Auto Repair	19	D7.2	Citizen's Bank	40 Union Square	Retail Bank
10	D5.3	Vacant	223 Washington St.	Auto Repair					

FUTURE SALE/CONVEYANCE OF LAND

DEVELOPMENT LOTS

Union Square Station Associates LLC, the designated master developer for the Union Square Revitalization Project, intends to develop the project described herein. Any future plans to sell or lease developable lots will be done in accordance with the requirements of the USOD Zoning, the Master Land Disposition Agreement and the Development Covenant.

CIVIC SPACES

US2 intends to convey the improved Neighborhood Park as proposed on Block D1 to the City per the terms of the Development Covenant. For other Civic Spaces created on Block D1 and Block D2, US2 intends to convey the improved Civic Spaces to the

City per the terms of the Development Covenant for those spaces. It is intended that the balance of the Civic Spaces will be privately owned and maintained and will be accessible to the public 24 hours per day, 7 days per week and 365 days per year as required by the USOD zoning unless said hours are amended by the Planning Board as permitted in the USOD zoning.

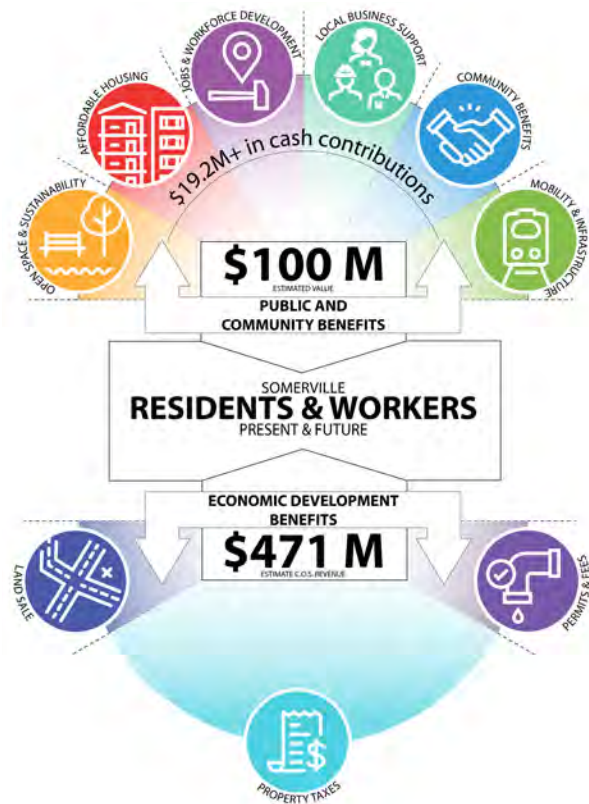
THOROUGHFARES

The roads, streets, alleys and other rights of way proposed within Blocks D1, D2 and D3 shall be open to the public and, US2 intends, at its election, either grant an easement or fee interest to all such roads to the City as described in the Master Land Disposition Agreement.

PROJECT BENEFITS

Union Square’s revitalization will offer qualitative and quantitative benefits, generating economic development benefits to the City of Somerville while concurrently generating public and community benefits over the long term. With a total value estimated to approach \$475M over thirty years, the economic development benefits to the City are comprised of the first development parcel’s land sale, building permit fees, and the cumulative property tax revenue generated by the development. Above and beyond the benefits to the City, additional public and community benefits will bridge matters of open space and sustainability, affordable housing, job creation and workforce development, support for local businesses, community benefits targeting local priorities, as well as mobility and infrastructure. The quantifiable portion of these many benefits are estimated at approximately \$100 million, with the total cash contribution exceeding \$19 million. These benefits are explained in further detail on the pages that follow.

FIGURE 74: PROJECT BENEFITS



ECONOMIC DEVELOPMENT BENEFITS

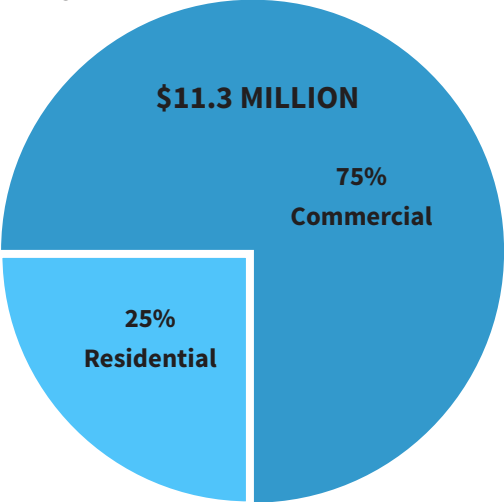
The evolution of the square into a significant employment center will realize many of the economic goals that were envisioned during the *SomerVision* planning process. At completion, the proposed plan will generate an estimated 4,000+ construction jobs and approximately 5,300 permanent new jobs in Somerville. The permanent jobs will range from professional, technology and life sciences opportunities to arts and creative pursuits to services jobs and part-time opportunities. The goal of the plan is to evolve the local Union Square economy such that it includes a continuum of job opportunities as well as a path for economic mobility.

The proposed mix of uses will generate over \$11 million in annual property taxes and approximately 75% of those taxes will be commercial property taxes. Commercial property tax generation will outpace residential property tax generation three to one. This will contribute significantly to *SomerVision*'s goal to "promote municipal financial self-determination and reduce fiscal dependence on state aid and residential taxes and fees". Over the next thirty years, it's estimated that the proposed project will expand the City's real estate tax revenue by nearly \$445 million.

In addition to expanding the tax base, the project is anticipated to create over \$20 million in permit

fee revenue, and the sale of the D2 land to US2 will return over \$9.3 million to the City. The tax generation, permit fees and land sales proceeds will all contribute to the City of Somerville's ability to expand infrastructure, improve the high school, fund its \$50 million Green Line commitment and expand city services. The cumulative generation of these economic development benefits by envisioned phase and category can be viewed across the tables that follow.

FIGURE 75: ESTIMATED ANNUAL GROSS PROPERTY TAXES



PHASE 1 (D5.1, D2)



PROGRAM	ADDED		TOTAL	
	SF	%	SF	%
Commercial SF	245,000	38%	245,000	38%
Residential SF	399,000	62%	399,000	62%
TOTAL SF	644,000		644,000	

ECONOMIC DEVELOPMENT ESTIMATES

Dwelling Units	423	423	
Permanent Jobs	634	634	
Property Taxes (annual gross)	\$2,601,000	\$2,601,000	
Permits & Fees	\$5,563,000	\$5,563,000	28%
Benefits & Contributions	\$3,863,000	\$3,863,000	20%
Future Phase Contribution	-	-	0%
Jobs Linkage	\$217,000	\$217,000	1%
Housing Linkage	\$798,000	\$798,000	4%
COS Land Sale Proceeds	\$9,300,000	\$9,300,000	47%
CUMULATIVE TOTAL (EXCLUDES ANNUAL TAXES)	\$19,741,000	\$19,741,000	100%

PHASE 2 (ADDS D1.1, D3.1)

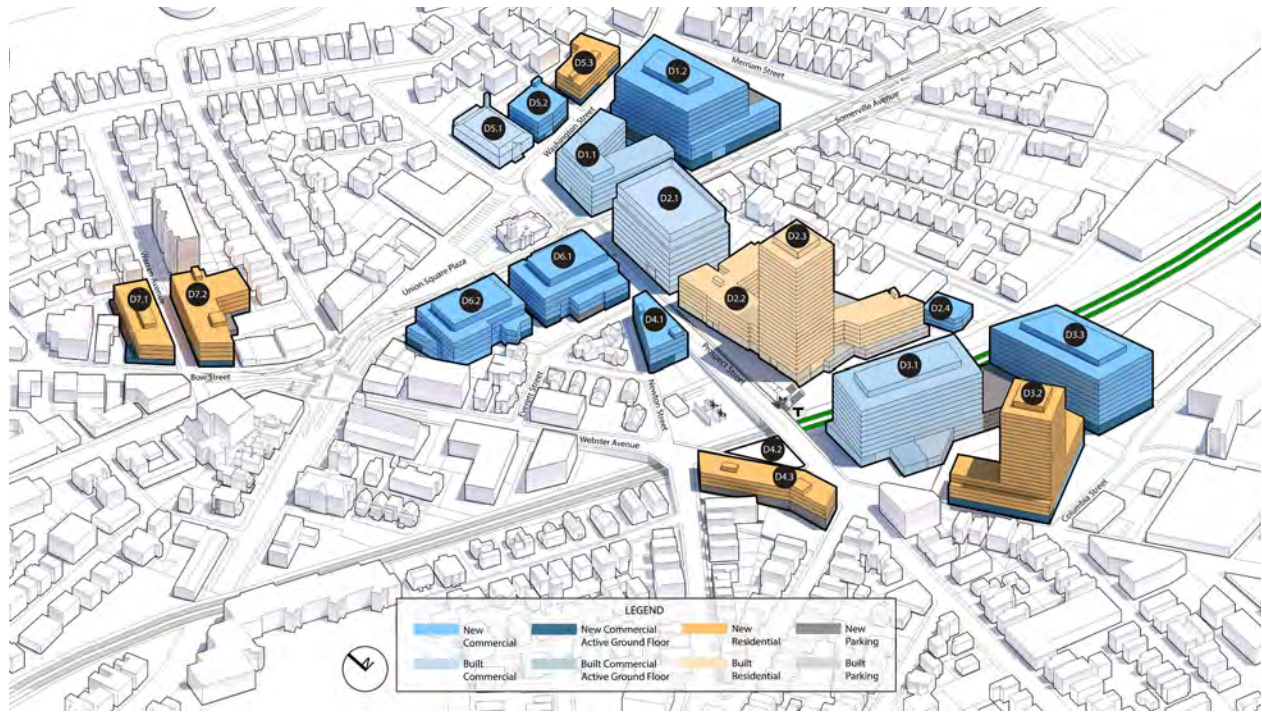


PROGRAM	ADDED		TOTAL	
	SF	%	SF	%
Commercial SF	385,000	100%	630,000	61%
Residential SF	-	0%	399,000	39%
TOTAL SF	385,000		1,029,000	

ECONOMIC DEVELOPMENT ESTIMATES

Dwelling Units	-	423	
Permanent Jobs	732	1,366	
Property Taxes (annual gross)	\$2,598,000	\$5,199,000	
Permits & Fees	\$3,724,000	\$9,287,000	32%
Benefits & Contributions	\$2,308,000	\$6,171,000	22%
Future Phase Contribution	\$769,000	\$769,000	3%
Jobs Linkage	\$455,000	\$672,000	2%
Housing Linkage	\$1,672,000	\$2,470,000	9%
COS Land Sale Proceeds		\$9,300,000	32%
CUMULATIVE TOTAL (EXCLUDES ANNUAL TAXES)	\$8,928,000	\$28,669,000	100%

PHASE 3 (ADDS D1.2, D3.2-3, D4, D5.2-3, D6, D7)



PROGRAM	ADDED		TOTAL	
	SF	%	SF	%
Commercial SF	834,000	61%	1,464,000	61%
Residential SF	534,000	39%	933,000	39%
TOTAL SF	1,368,000		2,397,000	

ECONOMIC DEVELOPMENT ESTIMATES

Dwelling Units	566	989	
Permanent Jobs	3,955	5,321	
Property Taxes (annual gross)	\$6,119,000	\$11,318,000	
Permits & Fees	\$11,114,000	\$20,401,000	37%
Benefits & Contributions	\$8,218,000	\$14,389,000	26%
Future Phase Contribution	\$2,715,000	\$3,484,000	6%
Jobs Linkage	\$856,000	\$1,528,000	3%
Housing Linkage	\$3,150,000	\$5,620,000	10%
COS Land Sale Proceeds		\$9,300,000	17%
CUMULATIVE TOTAL (EXCLUDES ANNUAL TAXES)	\$26,053,000	\$54,722,000	100%

PUBLIC & COMMUNITY BENEFITS

This proposed redevelopment plan is a product of collaborative, community-driven planning. As part of the planning process, project stakeholders stressed the importance of leveraging the revitalization of Union Square not only to address shared economic goals but also to capture additional public benefits from the project that could realize other important community objectives. Residents, businesses and other stakeholders identified a range of goals that included job creation; developing the local workforce; assisting local businesses; building affordable housing; improving new open space; pursuing sustainable development; improving transportation and infrastructure; bolstering social capital; enhancing community resilience; and mitigating displacement. In order to address public and community benefit needs, US2 collaborated with the City, the Board of Alderman and community members to develop a robust community benefits approach for the project that is organized around the neighborhood’s goals.

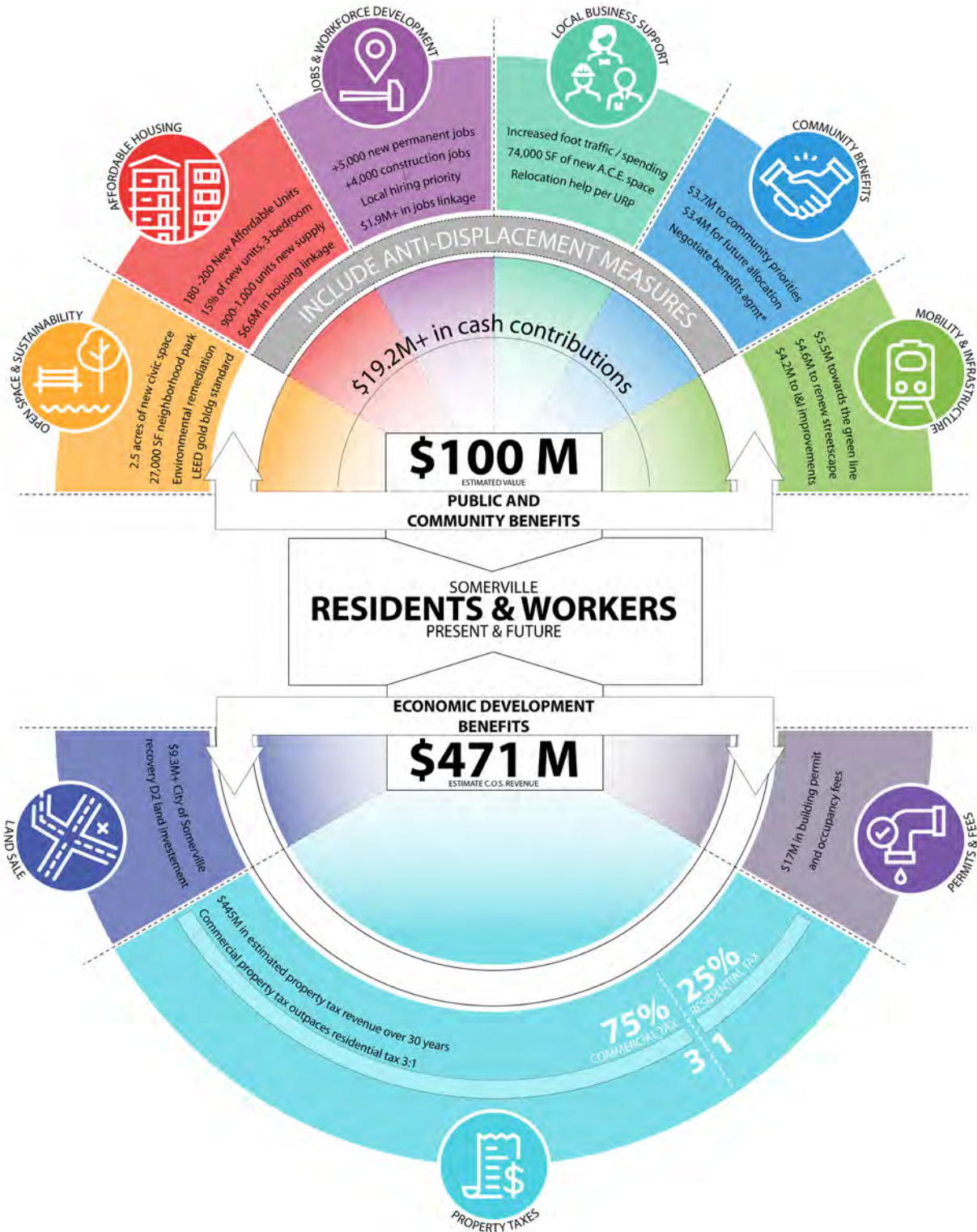
OPEN SPACE & SUSTAINABILITY

The longstanding goal of *SomerVision* for additional publicly accessible open spaces is delivered upon through the definition of new public and civic spaces throughout the development. In total, approximately 2.5 acres of new, high quality civic space will be provided from among the more than 3.5 acres of open space, civic space and public realm improvements. The largest concentration of open space will be provided by way of the new Neighborhood Park planned for D1. This 27,000 SF park is strategically positioned so as to deliver new outdoor opportunities for a currently underserved portion of the neighborhood. Beyond size, quality and utility of spaces is also addressed. Understanding each open space’s critical role in achieving long-term resiliency, programming functions and qualitative measures will be addressed in detail during the Site Plan and Design Review process. Supporting these future-focused strategies, the building projects themselves will complement the pursuit of the surrounding open spaces. The LEED Gold building standard prescribed through zoning will result in a collective of buildings that take a leading role in the sustainable future of Somerville.

AFFORDABLE HOUSING

Maintaining local housing attainability is an important underpinning of economic growth and an expressed goal in the Neighborhood Plan. The desirability of the area paired with scarcity of land on which to develop has created enormous pressure on the existing housing supply, directly impacting housing affordability. The development will add 900 to 1,000 units to the existing housing stock to begin to respond to the significant demand, helping ease the pressure on pricing through varied residential products. With D2 planned as rental units, future opportunities for ownership will be provided as the market permits. Provided the total estimated unit count, Somerville’s inclusionary housing policy dictates that 20% of all housing provided be permanently affordable resulting in 180 to 200 new affordable units. Similarly, this policy addresses affordability across a range of income brackets, assigning these units to three distinct income tiers. These tiers, designating units to earners of up to 50% of area median income (AMI) in tier 1, 80% AMI in tier 2, and 110% AMI in tier 3, will serve a broad range of incomes, expanding the way in which the City addresses matters of affordability. Further, 15% of these affordable units will be 3-bedroom, deepening

FIGURE 76: PROJECT BENEFITS



the City's commitment to families who desire to call Somerville home - a key objective of Mayor Curtatone's Sustainable Neighborhoods Initiative. Lastly, US2 will fund over \$6.6 million of housing linkage payments that can be utilized to address other local housing needs.

JOBS & WORKFORCE DEVELOPMENT

The project will create 1.4 million square feet of new work space that will provide new permanent jobs in a variety of fields. In addition, US2 will fund over \$1.5 million in jobs linkage payments that will support local workforce development initiatives. In response to the community's interest in creating local job opportunities, US2 will give first priority to qualified Somerville residents and then to qualified veterans for construction jobs.

In an effort to jumpstart the employment ecosystem and add day-time traffic to the square, US2 partnered with Workbar, a Boston-born company, to transform the vacant space at 31 Union into coworking center. In operation since 2015, Workbar Union is home to 100 start-ups, independent professionals and small businesses.

SUPPORTING LOCAL BUSINESSES, ARTS, & THE CREATIVE ECONOMY

The Neighborhood Plan highlights the importance of small, locally-owned businesses to Union Square's identity today and into the future. The new mixed use redevelopment will bring new opportunity to existing businesses by bringing workers and residents to the square and creating significant new spending. 74,000 square feet of space in the development will be leased to arts and creative enterprise uses to continue to promote a vibrant creative economy in Union Square. In order to help local small businesses take advantage of the evolution of the neighborhood, US2 partnered with Union Square Main Streets and the City of Somerville to implement a small

business assistance program. Eight Union Square small business were provided with professional retail expertise, recommendations specific to each business, and a \$1,000 grant to help owners implement improvements.

COMMUNITY BENEFITS AGREEMENT

In order to address other community needs or future community benefits not addressed by the benefits program outlined above, US2 has committed to invest \$3.7 million into a community benefits fund. The community will determine how those funds are used to tackle other community priorities. Another \$3.4 million dollars (\$2 per square foot on all Blocks other than D2) will be funded by US2 to the City of Somerville and can be allocated at the City's discretion to community benefits, infrastructure needs or to further offset GLX costs. In addition to these monetary contributions, US2 has committed to negotiating a community benefits agreement with the neighborhood council that is currently forming, in order to address other means of collaborating to meet community objectives.

TRANSPORTATION & INFRASTRUCTURE

Modernizing Union Square's infrastructure and the connectivity of new transit are the foundation of Union Square's revitalization. To support the Green Line, US2 committed \$5.5 million toward the GLX project and is also privately funding the construction of critical elements to the station's operation on D2 (i.e. The Ride drop-off, ADA access, restrooms and an employee lounge). US2 will also make a \$4.6 million contribution or in-kind improvements to support the renewal of the infrastructure and streetscape. Finally, the project is projected to generate over \$4 million of inflow and infiltration improvements that will further improve the areas ability to manage and storm water.

BLOCK & LOT PLANS

The following pages detail the seven (7) block and lot plans proposed.

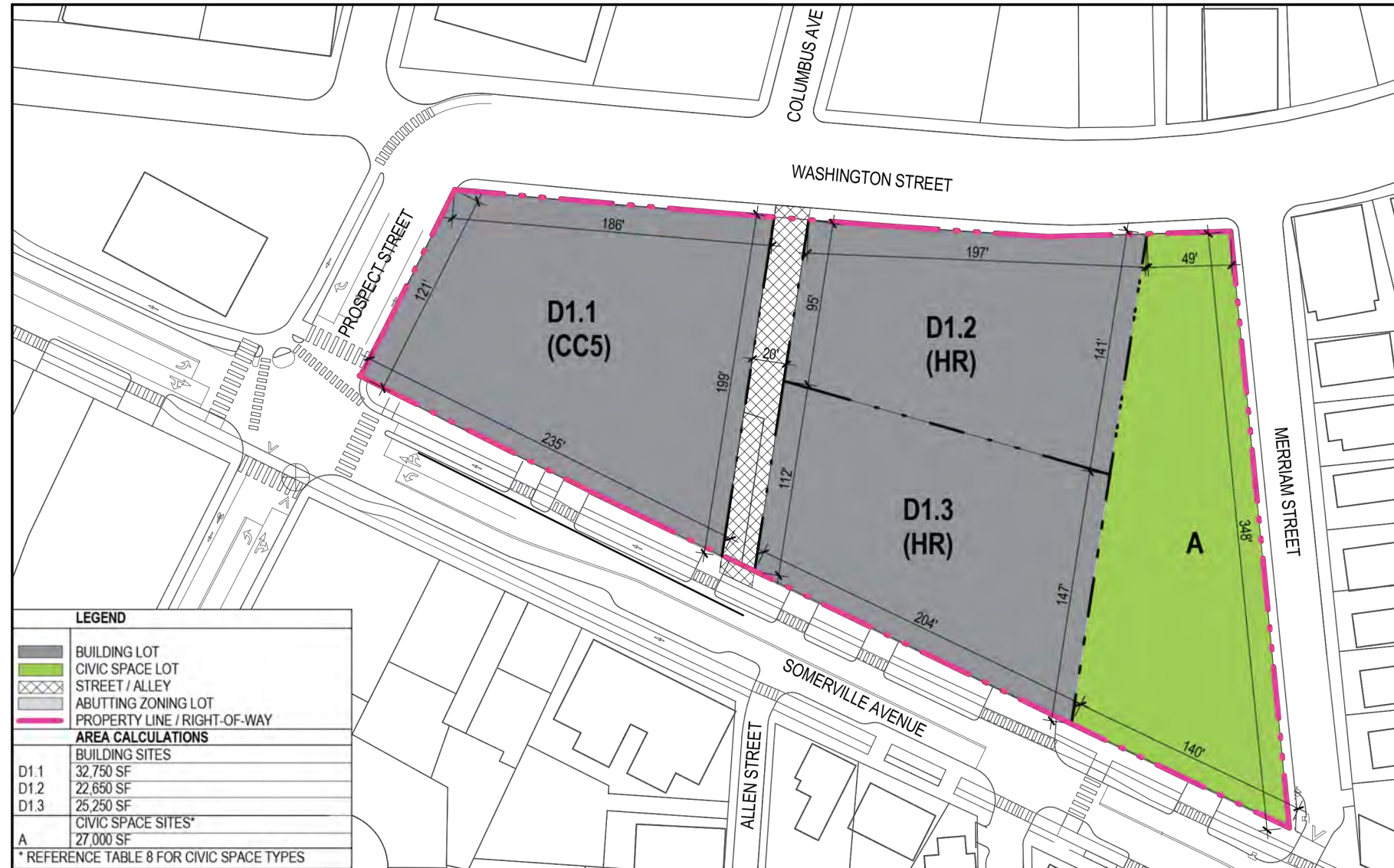
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Project:
Union Square Redevelopment
 Union Square, Somerville, MA

PREPARED BY:

 STANTEC ARCHITECTURE
 311 SUMMER STREET
 BOSTON, MA 02210
 617.234.3100

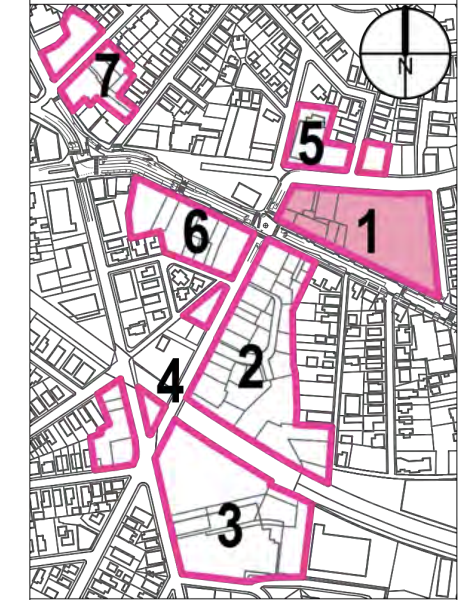
PREPARED FOR:
 UNION SQUARE
 STATION
 ASSOCIATES

LEGEND	
	BUILDING LOT
	CIVIC SPACE LOT
	STREET / ALLEY
	ABUTTING ZONING LOT
	PROPERTY LINE / RIGHT-OF-WAY
AREA CALCULATIONS	
BUILDING SITES	
D1.1	32,750 SF
D1.2	22,650 SF
D1.3	25,250 SF
CIVIC SPACE SITES*	
A	27,000 SF
* REFERENCE TABLE 8 FOR CIVIC SPACE TYPES	

DEVELOPMENT BLOCK 1

1" = 80'-0"



KEY PLAN

SOMERVILLE USE ONLY

CDSP APPLICATION R1	2017.11.07
CDSP APPLICATION	2017.09.15
Issued/Revision	YYYY.MM.DD



BLOCK & LOT PLAN

A-101 **D1**

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LEGEND	
[Grey Box]	BUILDING LOT
[Green Box]	CIVIC SPACE LOT
[Hatched Box]	STREET / ALLEY
[Light Grey Box]	ABUTTING ZONING LOT
[Dotted Box]	MBTA STATION AREA
[Pink Line]	PROPERTY LINE / RIGHT-OF-WAY
AREA CALCULATIONS	
BUILDING SITES	
D2.1	31,600 SF
D2.2	37,800 SF
D2.3	41,850 SF
D2.4	5,050 SF
CIVIC SPACE SITES*	
A	12,000
B	3,075
C	7,100 SF

* REFERENCE TABLE 8 FOR CIVIC SPACE TYPES

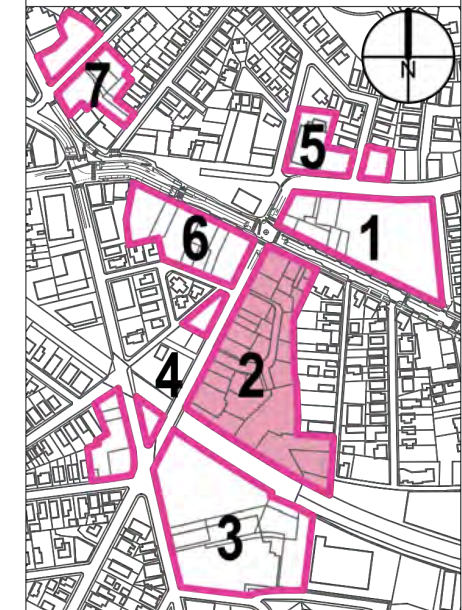
DEVELOPMENT BLOCK 2

Project:
Union Square Redevelopment
 Union Square, Somerville, MA

PREPARED BY:

 STANTEC ARCHITECTURE
 311 SUMMER STREET
 BOSTON, MA 02210
 617.234.3100

PREPARED FOR:
 UNION SQUARE
 STATION
 ASSOCIATES

KEY PLAN

SOMERVILLE USE ONLY

CDSP APPLICATION R1	2017.11.07
CDSP APPLICATION	2017.09.15
Issued/Revision	YYYY.MM.DD



BLOCK & LOT PLAN

A-201

D2

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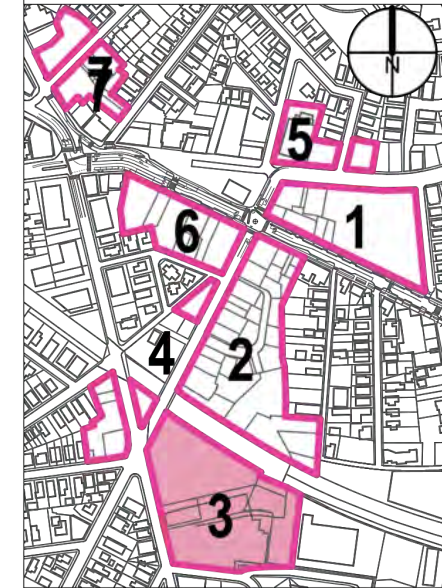
DEVELOPMENT BLOCK 3

1" = 80'-0"

Project:
 Union Square Redevelopment
 Union Square, Somerville, MA

PREPARED BY:
Stantec
 STANTEC ARCHITECTURE
 311 SUMMER STREET
 BOSTON, MA 02210
 617.234.3100

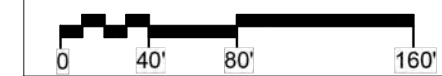
PREPARED FOR:
 UNION SQUARE
 STATION
 ASSOCIATES



KEY PLAN

SOMERVILLE USE ONLY

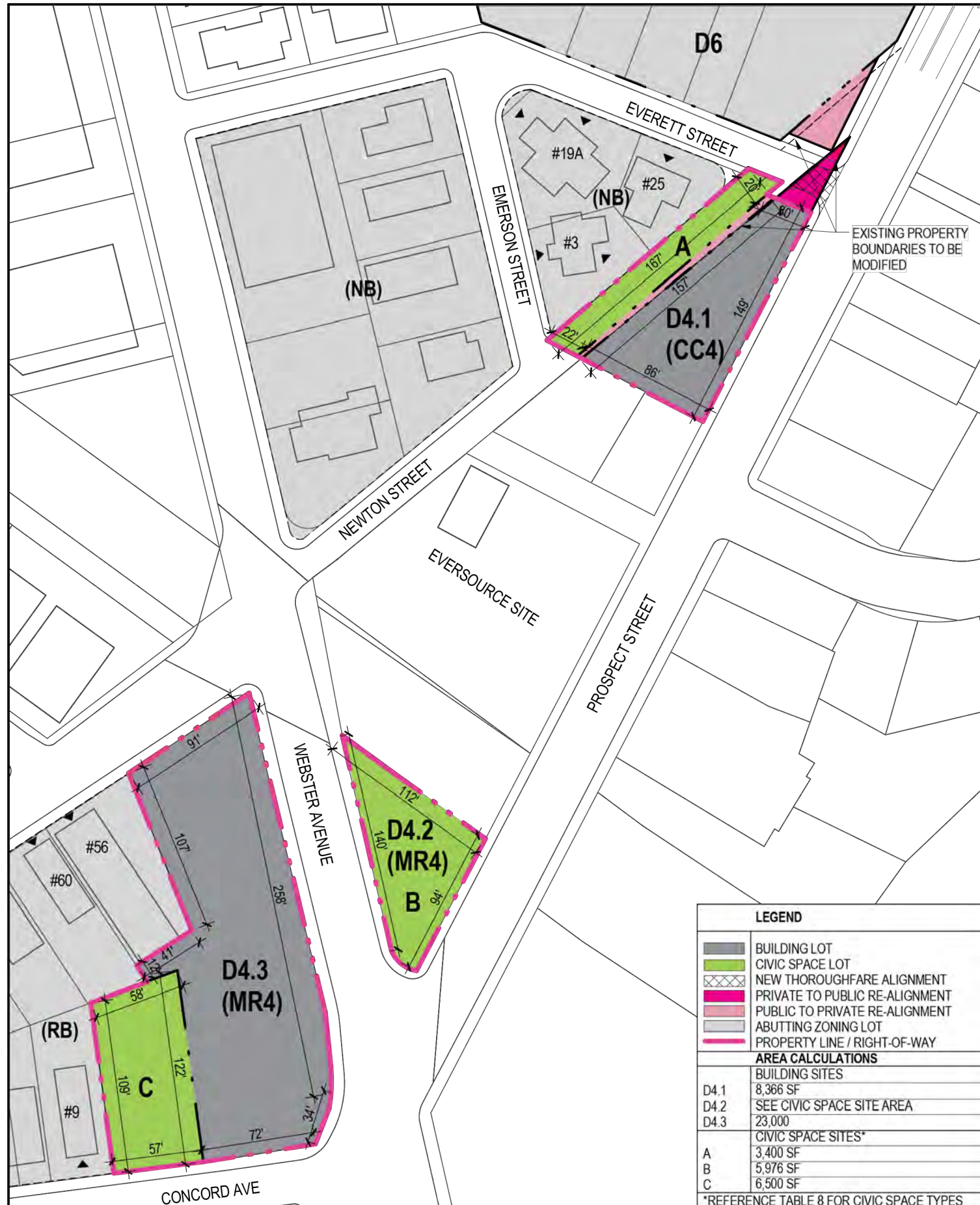
CDSP APPLICATION R1	2017.11.07
CDSP APPLICATION	2017.09.15
Issued/Revision	YYYY.MM.DD



BLOCK & LOT PLAN

A-301 **D3**

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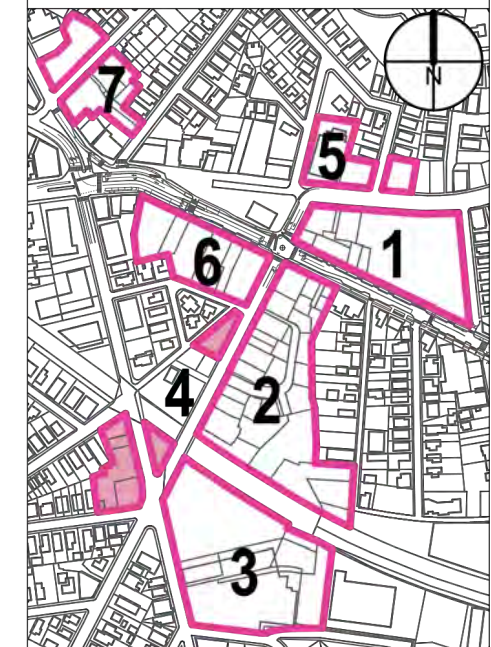
LEGEND	
[Grey Box]	BUILDING LOT
[Green Box]	CIVIC SPACE LOT
[Dashed Box]	NEW THOROUGHFARE ALIGNMENT
[Pink Box]	PRIVATE TO PUBLIC RE-ALIGNMENT
[Red Box]	PUBLIC TO PRIVATE RE-ALIGNMENT
[Light Grey Box]	ABUTTING ZONING LOT
[Pink Line]	PROPERTY LINE / RIGHT-OF-WAY
AREA CALCULATIONS	
BUILDING SITES	
D4.1	8,366 SF
D4.2	SEE CIVIC SPACE SITE AREA
D4.3	23,000
CIVIC SPACE SITES*	
A	3,400 SF
B	5,976 SF
C	6,500 SF
*REFERENCE TABLE 8 FOR CIVIC SPACE TYPES	

Project:
Union Square Redevelopment
 Union Square, Somerville, MA

PREPARED BY:

 STANTEC ARCHITECTURE
 311 SUMMER STREET
 BOSTON, MA 02210
 617.234.3100

PREPARED FOR:
 UNION SQUARE
 STATION
 ASSOCIATES

KEY PLAN

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CDSP APPLICATION R1 2017.11.07

CDSP APPLICATION 2017.09.15

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BLOCK & LOT PLAN

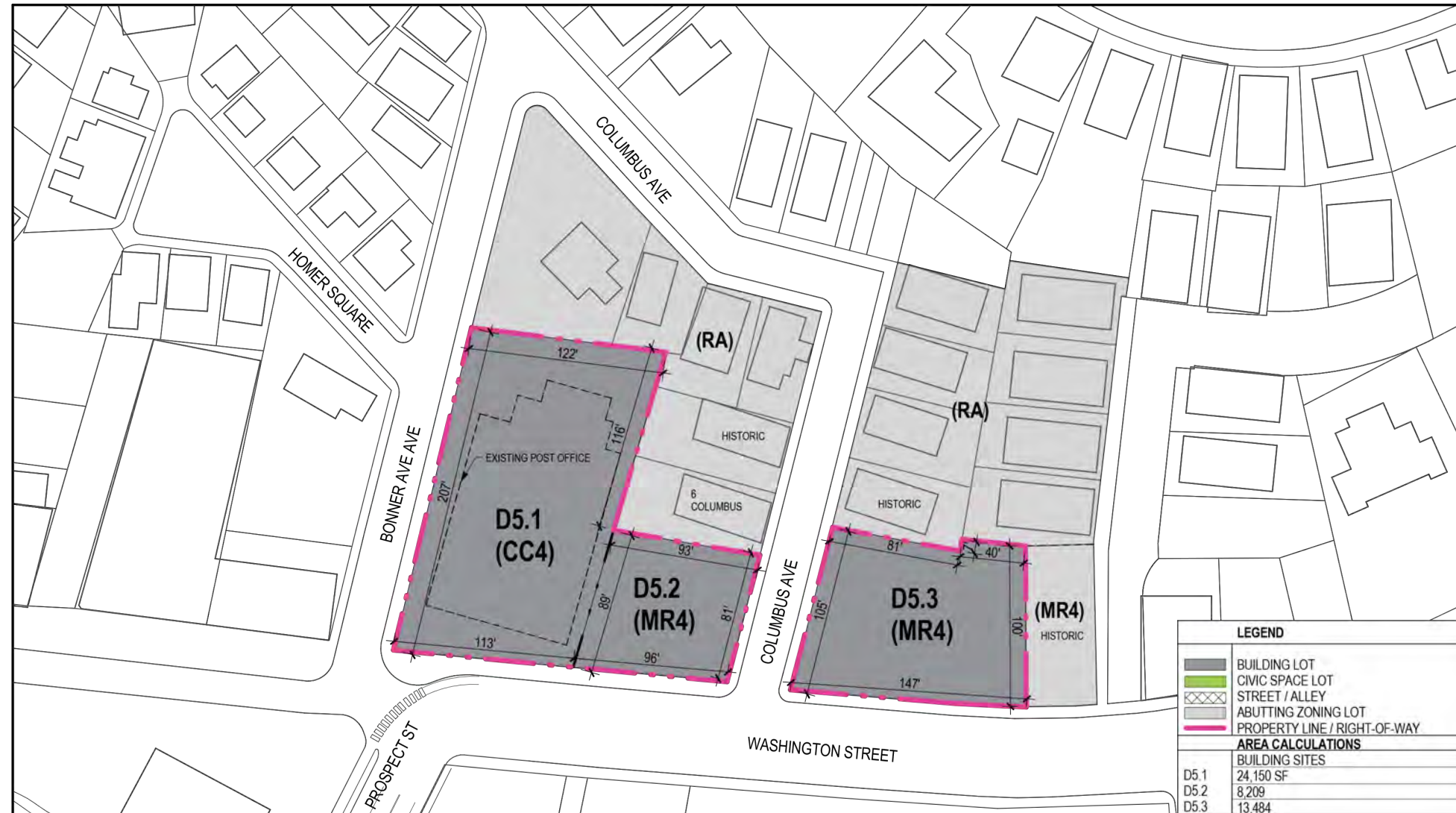
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Project:
Union Square Redevelopment
 Union Square, Somerville, MA

PREPARED BY:

 STANTEC ARCHITECTURE
 311 SUMMER STREET
 BOSTON, MA 02210
 617.234.3100

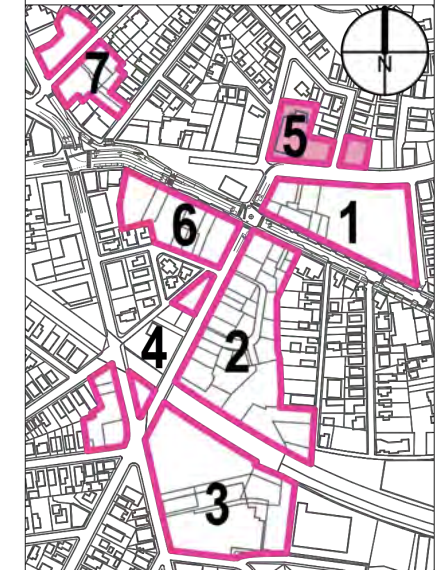
PREPARED FOR:
 UNION SQUARE
 STATION
 ASSOCIATES

LEGEND	
	BUILDING LOT
	CIVIC SPACE LOT
	STREET / ALLEY
	ABUTTING ZONING LOT
	PROPERTY LINE / RIGHT-OF-WAY
AREA CALCULATIONS	
BUILDING SITES	
D5.1	24,150 SF
D5.2	8,209
D5.3	13,484

DEVELOPMENT BLOCK 5

1" = 80'-0"



KEY PLAN

SOMERVILLE USE ONLY

CDSP APPLICATION R1 2017.11.07

CDSP APPLICATION 2017.09.15

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BLOCK & LOT PLAN

A-501 **D5**

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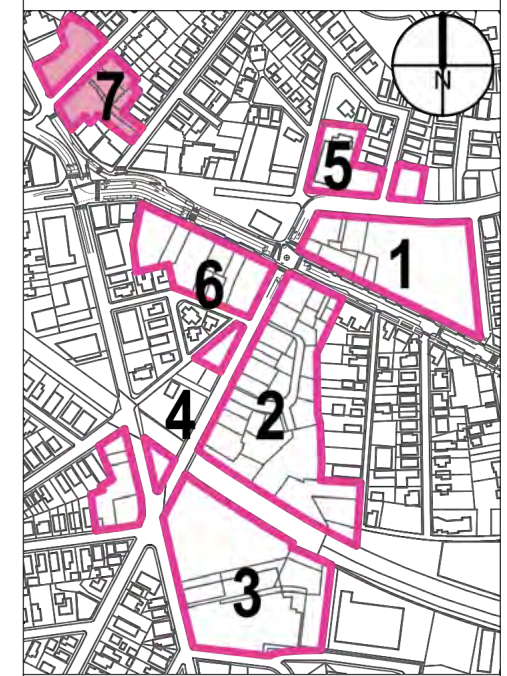


Project:
Union Square Redevelopment
 Union Square, Somerville, MA

PREPARED BY:

 STANTEC ARCHITECTURE
 311 SUMMER STREET
 BOSTON, MA 02210
 617.234.3100

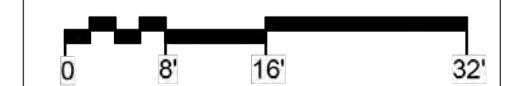
PREPARED FOR:
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 STATION
 ASSOCIATES

KEY PLAN

SOMERVILLE USE ONLY

CDSP APPLICATION R1	2017.11.07
CDSP APPLICATION	2017.09.15
Issued/Revision	YYYY.MM.DD

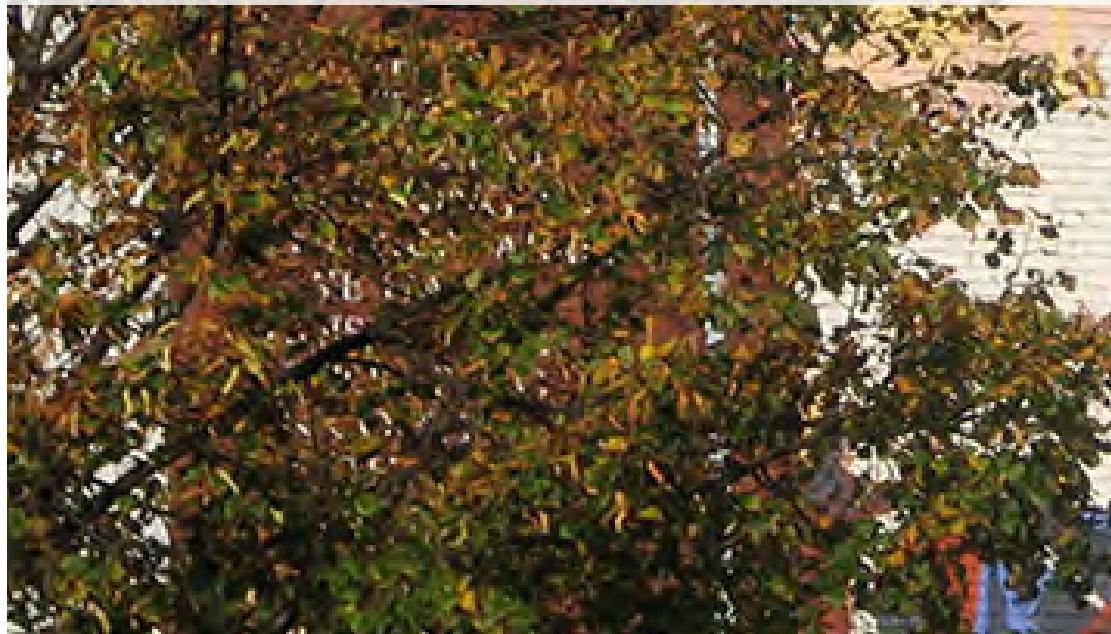


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ZONING CONFORMANCE REVIEW



TO SOMERVILLE
FIRST AMERICAN FLAG
OSPECT HILL, JAN. 1, 1776



**ZONING
REVIEW**

TO SOMERVILLE
FIRST AMERICAN FLAG
OSPECT HILL, JAN. 1, 1776



ZONING CONFORMANCE REVIEW

- A. General Review Considerations Applicable to all Special Permits Pursuant to Section 5.1
- B. Review Criteria for Coordinated Development Special Permit Pursuant to Section 5.8.5
- C. Requirements for Coordinated Development Planning Pursuant to Section 6.7.5
- D. Additional Review Criteria Pursuant to Section 6.7.5.C.6
- E. Compliance with Provisions of Section 6.7.6
- F. Additional Special Permits Requested as Part of CDSP Application Pursuant to Section 6.7.5.C.4.b and 6.7.5.D.6.a
 - Special Permit for Residential Principal Uses Pursuant to Section 6.7.11.A.1
 - » Review Criteria for Special Permits Pursuant to Section 6.7.5.D.6.a.ii
 - » Payment in Lieu of Civic Space Pursuant to Section 6.7.6.A.3
- G. Dimensional Compliance

The provisions of the Somerville Zoning Ordinance (the “Ordinance”) set forth below apply to the Special Permits requested in this Application. The summary Table 23, on the following page, outlining conformance to the requirements has been provided for reference. Following each provision that follows is a statement describing compliance by the Project.

TABLE 23: ZONING CONFORMANCE

PROGRAM	REQUIREMENT	ACTUAL	VARIANCE
Development Site area ¹		683,493	
Less alleys and MBTA easement area =		54,116	
Development Site area excluding alleys and MBTA easement area		629,377	
<hr/>			
25% of area must be provided as follows	157,344	157,344	-
70% civic space ²	110,141	108,600	(1,541)
25% of civic space must be green space	27,535	30,753	3,218
50% of civic space must be green + tree canopy ³	55,070	159,907	104,837
Up to 30% may be in the form of public realm improvements	47,203	47,203	-
Maximum amount of civic space provided via payment in lieu (10%)	11,014	11,014	-
<hr/>			
Total GSF excluding parking		2,397,000	
No less than 60% of GSF excluding parking must be commercial	1,438,200	1,464,000	25,800
% Commercial	60%	61%	1%
Minimum amount of commercial space	375,000	1,464,000	1,089,000
No less than 40% of GSF excluding parking must be office + design services	958,800	1,158,000	199,200
5% of the commercial area must be Arts & Creative	73,200	74,000	800
<hr/>			
At full buildout, a max one (1) residential unit per 685 SF of development site area ⁴	998	998	-
<hr/>			
Residential development must provide 20% affordable housing onsite ⁵	200	200	-
At least 15% of affordable units must be three bedrooms	30	30	-

¹Total area represents best measurements provided multiple sources of background information

²Portion of civic space to be provided as fee in-lieu

³Tree canopy estimated assuming large tree canopy radius of 15'

⁴Total residential unit count not to exceed 998 units

⁵Total affordable units delivered to be based on total residential units delivered

A. GENERAL REVIEW CONSIDERATIONS APPLICABLE TO ALL SPECIAL PERMITS PURSUANT TO SECTION 5.1

§ 5.1.4 FINDINGS AND DETERMINATIONS FOR SPECIAL PERMITS

Prior to granting a special permit, the SPGA shall make findings and determinations that the proposed use, lot, building, structure, modification of off-street parking or loading requirements or a specifically authorized modification of dimensional standards or other activity, which is the subject of the application for the special permit:

- a) Information supplied. Complies with the information requirements of Section 5.1.2;
- b) Compliance with standards. Complies with such criteria or standards as may be set forth in this Ordinance which refer to the granting of the requested special permit;
- c) Consistency with purposes. Is consistent with: (1) the general purposes of this Ordinance as set forth in Article 1, and (2) the purposes, provisions, and specific objectives applicable to the requested special permit which may be set forth elsewhere in this Ordinance, such as, but not limited to, those purposes at the beginning of the various Articles; and
- d) Site and area compatibility. Is designed in a manner that is compatible with the existing natural features of the site and is compatible with the characteristics of the built and unbuilt surrounding area, including land uses.



The Application is consistent with the information requirements of Section 5.1.2 as well as the specific application requirements for a Coordinated Development Special Permit contained in Section 6.7.5 of the Ordinance. As described in further detail in Subsection C below, the Project is consistent with the general purpose of the Ordinance and has been designed in a manner that is compatible with the existing natural features and built environment within the Union Square neighborhood.

Where the SPGA determines that one or more of the following objectives are applicable to the particular application for a special permit, the SPGA shall make a finding and determination that each applicable objective will be met including, but not limited to:

- e) Adverse environmental impacts. The proposed use, structure or activity will not constitute an adverse impact on the surrounding area resulting from: 1) excessive noise, level of illumination, glare, dust, smoke, or vibration which are higher than levels now experienced from uses permitted in the surrounding area; 2) emission of noxious or hazardous materials or substances; 3) pollution of water ways or ground water; or 4) transmission of signals that interfere with radio or television reception;



The Project is not anticipated to create the environmental impacts described above.

- f) Vehicular and pedestrian circulation. The circulation patterns for motor vehicles and pedestrians which would result from the use or structure will not result in conditions that create traffic congestion or the potential for traffic accidents on the site or in the surrounding area; and
- ✓ As demonstrated in Appendix 4 – Transportation Impact Analysis, the Project as proposed in this Application is not expected to result in conditions that create traffic congestion or any increased potential for traffic accidents in the USOD (defined below).
- g) Fast food establishments. In special permit applications for fast-order, take-out or automobile oriented food service establishments, there shall be establishment of a need for such a facility in the neighborhood or in the City, and impacts on traffic circulation, parking and visual, physical, or historical characteristics of the particular location shall not be detrimental.
- ✓ Not applicable. No fast food establishments are currently proposed as part of the Project. Any “Formula Business,” as defined in the Ordinance, will subject to the requirements of the USOD Zoning (defined below) and will seek approval from the Planning Board as required in connection with such use.
- h) Housing Impact. Will not create adverse impacts on the stock of existing affordable housing.
- ✓ As described in further detail below, the Project as proposed in this Application is anticipated to have an overall positive impact on housing supply generally and will specifically create an additional approximately 180 to 200 units of affordable housing.
- i) SomerVision Plan. Complies with the applicable goals, policies and actions of the *SomerVision* plan, including the following, as appropriate: Preserve and enhance the character of Somerville's neighborhoods, Transform key opportunity areas, Preserve and expand an integrated, balanced mix of safe, affordable and environmentally sound rental and homeownership units for households of all sizes and types from diverse social and economic groups; and make Somerville a regional employment center with a mix of diverse and high-quality jobs.
- ✓ Consistency with applicable City plans and policies, including *SomerVision*, is more particularly described in the City Policy Consistency Review Section of this Application. As described in further detail in Subsection B below, the Project has been designed to bring the various planning and policy goals for Union Square to fruition, including the specific goals of the Master Plan for the City of Somerville (*SomerVision*), the *Union Square Neighborhood Plan*, and the *Union Square Revitalization Plan*.
- j) In conjunction with its decision to grant or deny a special permit for a structure of four or more units of housing, the SPGA shall make a finding and determination as to how implementation of the project would increase, decrease, or leave unchanged the number of units of rental and home ownership housing that are affordable to households with low or moderate incomes, as defined by HUD, for different sized households and units.
- ✓ Not applicable.

B. REVIEW CRITERIA FOR COORDINATED DEVELOPMENT SPECIAL PERMIT PURSUANT TO SECTION 5.8.5

§ 5.8.5 REVIEW CRITERIA

A. In its discretion to approve or deny an application for a Coordinated Development Special Permit, the Planning Board shall consider the following:

1. Consistency with the adopted comprehensive Master Plan of the City of Somerville, existing policy plans and standards established by the City, and to other plans deemed to be appropriate by the Planning Board;
2. The purpose of this Ordinance in general;
3. The purpose of the overlay district where the property is located; and
4. Considerations indicated elsewhere in this Ordinance for Coordinated Development Special Permit approval.



The Project has been designed to bring the various planning and policy goals for Union Square to fruition, including the specific goals of the Master Plan for the City of Somerville (*Somervision*), the *Union Square Neighborhood Plan*, and the *Union Square Revitalization Plan*. Consistent with the vision of the Board of Aldermen in adopting the Union Square Overlay District (the “USOD”) and related zoning amendments (the “USOD Zoning”), the Project proposes a comprehensively planned neighborhood of mixed-use, moderate- to high-density development within easy walking distance to transit, which will support the development of Union Square as a mixed-use urban employment center with a commercial core. With over 1.4 million square feet of new commercial development, approximately 180 to 200 new units of affordable housing and new neighborhood civic spaces proposed, the Project has been designed in collaboration with the City and the Union Square community to meet the goals of economic development, equity, public realm, housing, development and mobility set forth in the Union Square Neighborhood Plan. Together with required contributions of the Applicant to infrastructure and the Green Line Extension Project, the Project is expected to act as a catalyst for economic development in Union Square that will leverage the Green Line Extension Project to promote economic development at this key location.

By providing these benefits, the Project is consistent with the general purpose of the Ordinance to “promote the health, safety and welfare of the inhabitants of the City of Somerville; to provide for and maintain the uniquely integrated structure of uses in the City; to lessen congestion in the streets; to protect health; to secure safety from fire, panic and other dangers; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements; to conserve the value of land and buildings; to preserve the historical and architectural resources of the City; to adequately protect the natural environment; to encourage the most appropriate use of land throughout the City; to protect and promote a housing stock that can accommodate the

diverse household sizes and life stages of Somerville residents at all income levels, paying particular attention to providing housing affordable to individuals and families with low and moderate incomes; and to preserve and increase the amenities of the municipality.”

The Applicant’s prior financial contributions, its Project Mitigation Contribution under Article 15 of the Ordinance, its proposed private construction of elements necessary for MBTA station operations, and its funding commitments contained in the Development Covenant, are provided in addition to the public and community benefits that are required by the Ordinance for development within the USOD, which will result in a Union Square neighborhood with 20% inclusionary housing; housing linkage payments; open space, including high-quality civic space; arts and creative economy space; commercial development; transportation demand management programs; new vehicle and bike parking; new alleys, roadways, sidewalks and public realm improvements that will be open to the public; sustainable building standards; and the mitigation and redevelopment of environmentally challenged sites.

B. The Planning Board shall approve a Coordinated Development Plan only upon making a finding that all applicable provisions of this Ordinance have been met.




The Project complies with all applicable requirements under the Ordinance for the issuance of a Coordinated Development Special Permit. Specifically, the Application demonstrates compliance with the applicable requirements of Section 6.7.5.C of the Ordinance with respect to Coordinated Development Planning and the Build-Out Standards set forth in Section 6.7.6 of the Ordinance and has demonstrated consistency with the applicable policies, plans and purpose of the Ordinance and the Union Square Overlay District. With the Special Permits requested pursuant to Sections 6.7.11.F (Residential Principal Use) and 6.7.6.A.3 (Payment in Lieu for Civic Space), the Project as proposed in this Application will comply with all applicable provisions of this Ordinance. As permitted pursuant to Section 6.7.5.D.5(a)(i)(a), additional Special Permits for individual Lots, Civic Spaces and/or Buildings may be requested as part of the Design and Site Plan Review applications to be filed for such Lots, Civic Spaces and/or Buildings.

C. REQUIREMENTS FOR COORDINATED DEVELOPMENT PLANNING PURSUANT TO SECTION 6.7.5

§ 6.7.5.C.1.B COORDINATED DEVELOPMENT PLANNING – APPLICABILITY

Development sites must include a minimum of two (2) lots (existing or proposed) and at least six hundred and seventy-five thousand (675,000) square feet of land area.

-  As shown on Table 23, the development site described in this Application includes approximately 683,000 SF of land area and meets the requirement for a minimum of two (2) lots (both existing and proposed).

Pursuant to Section 6.7.5.C.5.a of the Ordinance, this Application illustrates lots for building sites and civic spaces with estimated boundaries and sizes based on the best available data from the City Assessors Office and/or the Registry of Deeds. The size of the development site has been estimated based on information obtained from these sources and may be updated as additional information becomes available. Additionally, the lot lines for individual lots within the Project are shown based on currently available information and may be subject to adjustment in the Design and Site Plan Review applications for specific Lots, Civic Spaces and/or Buildings as designs progress, provided that they remain in general conformance with the lot/block plans contained in this Application.

D. ADDITIONAL REVIEW CRITERIA PURSUANT TO SECTION 6.7.5.C.6

§ 6.7.5.C.6 ADDITIONAL REVIEW CRITERIA

- a) In its discretion to approve or deny a Coordinated Development Special Permit, the Planning Board shall consider the following:
 - i. Compliance with the standards of Section 5.8 Coordinated Development Special Permit;
 - ii. Consistency with the 2012 *Union Square Revitalization Plan* and the 2016 *Union Square Neighborhood Plan*, as amended; and

-  The Project presented in this Application has been designed by the Applicant to bring the various planning and policy goals for Union Square to fruition, including the specific goals of the Master Plan for the City of Somerville (*SomerVision*), the *Union Square Neighborhood Plan*, and the *Union Square Revitalization Plan*. As envisioned by the Board of Aldermen in adopting the USOD Zoning, the Project proposes a comprehensively planned neighborhood of mixed-use, moderate- to high-density development within easy walking distance to transit, which will support the development of Union Square as a mixed-use urban employment center with a commercial core. With over 1.4 million square feet of new commercial development, approximately 180 to 200 new units of affordable housing and new neighborhood civic spaces proposed, the Project has been designed in collaboration with the City and the Union Square community to meet the goals of economic development, equity, public realm, housing, development and mobility set forth in the *Union Square Neighborhood Plan*. Together with required contributions of the Applicant to infrastructure and the Green Line Extension Project, the Project is expected to act as a catalyst for economic development in Union Square that will leverage the Green Line Extension Project to promote economic development at this key location.

b) The Planning Board may approve a Coordinated Development Plan only upon making a finding that the provisions of section 6.7.6 have been met.



As described in Subsection E below, with the Special Permits requested pursuant to Sections 6.7.11.F (Residential Principal Use), 6.7.6.A.3 (Payment in Lieu for Civic Space) and 6.7.6.E (Off-Site Compliance for Arts and Creative Enterprise Uses), the Project as proposed in this Application will comply with the provisions of Section 6.7.6 of the Ordinance.

c) The Planning Board shall establish, in its decision, criteria and procedures for applicants to provide for infrastructure improvements, community impact mitigation, and the extension of the MBTA's Green Line.



Under the Development Covenant, the Applicant is required to contribute funds to the City for the following (i) the payment of certain public benefit funds, including a contribution towards the City's payment to the MBTA in connection with the extension of the MBTA Green Line to Union Square and construction of the MBTA Station; (ii) a payment to contribute to the City's cost of offsite infrastructure associated with the Project; (iii) the payment of community benefit funds; and (iv) jobs linkage and certain other agreements. Enforcement of these obligations is provided for pursuant to the Development Covenant. Pursuant to the terms of the Development Covenant, the Applicant agrees that the issuance of a building permit for any development project permitted pursuant to a Coordinated Development Special Permit will be conditioned upon a letter of certification by the Director of Planning and Zoning to the Superintendent of Inspectional Services stating that (i) the Applicant is a party to or otherwise subject to that certain Development Covenant between Union Square Station Associates LLC and the City of Somerville dated June 8, 2017, as amended, and (ii) the Applicant is proceeding in accordance and in compliance with all provisions of such Development Covenant applicable to the development project for which a permit is being requested.

E. COMPLIANCE WITH PROVISIONS OF SECTION 6.7.6

§ 6.7.6 BUILD-OUT STANDARDS

A. CIVIC SPACE

1. At full build-out of development subject to an approved Coordinated Development Special Permit, at least twenty-five percent (25%) of the development site, excluding alleys and any land occupied by the MBTA's Union Square Green Line station, must be improved as follows:
 - a) At least seventy percent (70%) must be provided in the form of two or more civic spaces of differing types, sizes, and locations; including at least one (1) neighborhood park, with a minimum of size of twenty-seven thousand (27,000) square feet, and one (1) plaza.
 - b) Up to thirty percent (30%) may be provided in the form of public realm improvements within the land area of the Union Square Overlay District boundaries.
 - c) At least twenty-five percent (25%) of the cumulative land area provided as civic spaces must meet the definition of Green Space.
 - d) At least fifty percent (50%) of the cumulative land area provided as civic spaces must meet the definition of Green Space or be covered by tree canopy at full maturity of the trees provided in each civic space.

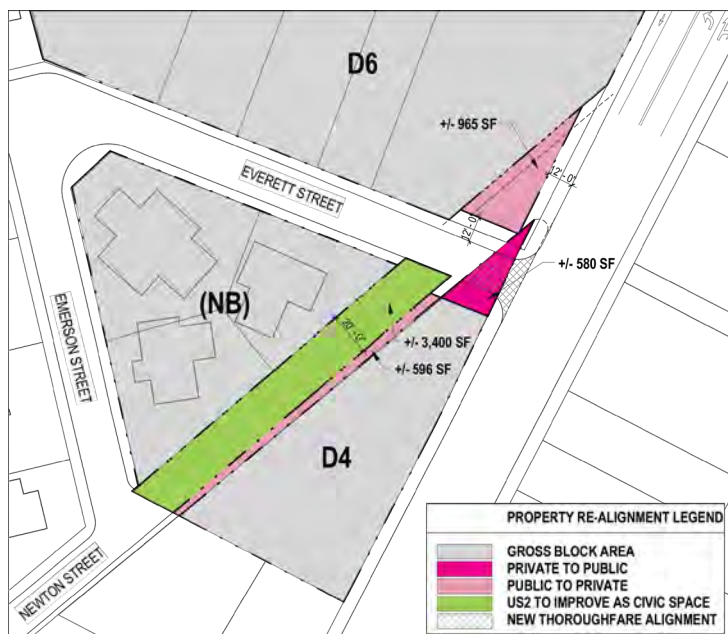
2. Civic space created through easement or decommissioning of an existing thoroughfare or other right-of-way abutting any property located within the Union Square Overlay District may be counted toward the required amount of civic space.

3. The Planning Board may permit an in lieu payment for up to ten percent (10%) of the required amount of civic space. In its discretion to permit a payment in lieu of civic space as part of a Coordinated Development Special Permit, the Planning Board shall consider the following:
 - a) The review considerations for all Special Permits as specified in Section 5.1 Special Permits.
 - b) The goals and objectives of the City of Somerville Open Space Plan.
 - c) The availability and suitability of lots within a development site for development as a civic space.
 - d) The plausible availability of sites located elsewhere in the City that are suitable for development as civic space.
 - e) The need for funding to improve or maintain existing civic spaces, particularly athletic fields, located elsewhere in the City.

4. The Planning Board shall establish a fee schedule for a payment in lieu of civic space based on the recommendations of the Director of Transportation & Infrastructure in relation to the average cost to acquire and develop land as a civic space.

✓ Table 23 in this section demonstrates compliance with the Civic Space metric requirements. There will be an approximately 27,000 SF neighborhood park provided as shown on the Lot & Block Plan for D1 and an approximately 15,000 SF plaza provided as shown on the Lot & Block Plan for D2. Additional information regarding these spaces and the approach to Civic Space more broadly is provided in the Civic Space section of this Application.

FIGURE 77. EVERETT AND NEWTON STREET REALIGNMENT



Pursuant to Section 6.7.6.A.2 of the Ordinance, the amenities described above include approximately 3,400 SF of civic space created through the planned realignment of Newton Street as shown on in the figure alongside.

As noted in Subsection C above, this Application illustrates lots for civic spaces with estimated boundaries and sizes based on the best available data from the City Assessors Office and/or the Registry of Deeds and the size of the development site has been estimated based on information obtained from these sources. As design plans progress and as more information (such as surveyed property boundaries) becomes available, these areas may be updated in preparation for Design and Site Plan Review. In order to maintain flexibility to accommodate design modifications and changes to the required calculated areas, the Applicant requests that the Planning Board grant a Special Permit pursuant to Section 6.7.6.A.3 of the Ordinance permitting up to ten percent (10%) or approximately 11,014 SF of the required Civic Space to be satisfied by a payment in lieu. The requisite considerations for this Special Permit are addressed in Subsection F below and the Applicant respectfully requests that the Planning Board grant the Special Permit and establish a fee schedule for the payment in lieu pursuant to the requirements of Section 6.7.6.A.4 of the Ordinance.

B. COMMERCIAL BUILD OUT

1. At full build-out of development subject to an approved Coordinated Development Special Permit, no less than sixty percent (60%) and at least three hundred and seventy-five thousand (375,000) square feet of the total gross floor area (excluding motor vehicle and bicycle parking) must be dedicated to uses in the following principal use categories:
 - a) Arts & Creative Enterprise
 - b) Civic & Institutional
 - c) Commercial Services
 - d) Eating & Drinking Establishments
 - e) Lodging
 - f) Office
 - g) Retail
 - h) Urban Agriculture
2. At full build out of development subject to an approved Coordinated Development Special Permit, no less than forty percent (40%) of the total gross floor area (excluding motor vehicle and bicycle parking) must be dedicated to principal uses in the Office use category, or the Design Services use within the Arts & Creative Enterprise category.
3. At full build out of development subject to an approved Coordinated Development Special Permit, at least five percent (5%) of the total gross floor area required by §6.7.6.B.1 must be dedicated to principal uses within the Arts & Creative Enterprise use category.
 - a) The total floor area required for Arts & Creative Enterprise uses is calculated based on the total amount of commercial floor space, (excluding motor vehicle and bicycle parking) proposed in a Coordinated Development Special Permit application, but the phasing and delivery of floor area for Arts & Creative Enterprise uses is determined as individual lots are built out, unless the Planning Board permits off-site compliance in accordance with §6.7.6.E Off Site Compliance.

4. At full build out of development subject to an approved Coordinated Development Special Permit, at least three hundred and seventy five (375) square feet of commercial space must be provided for each dwelling unit.



As reflected on Table 23, the Project as proposed in this Application will comply with the minimum Commercial Build-Out requirements set forth in Section 6.7.6.B of the Ordinance.

The Project as presented in this Application reflects proposed office uses for the commercial buildings to be located on sites D1 and D3, which are included herein as 10-story buildings. Lab uses may ultimately be proposed for these sites based on market conditions and demand, in which case the maximum number of stories applicable to such sites would be 9 and there would be a corresponding reduction in gross floor area dedicated commercial uses. The final proposed use of the buildings to be located on sites D1 and D3 will be reviewed by the community and the Planning Board as part of the Design and Site Plan Review process. The Applicant respectfully requests that the Planning Board approve the CDSP with either office or lab uses in these locations and find that changes to the specific types of commercial uses proposed will be considered de minimus consistent with Sections 5.3.8.1.a and 5.8.6 of the Ordinance, provided that at all times the Project will meet the minimum commercial build-out requirements in Section 6.7.6.B of the Ordinance.

As described in further detail in Subsection F below, the Applicant is seeking a Special Permit in accordance with Section 6.7.6.E of the Ordinance for off-site compliance with the Arts and Creative Enterprise space requirement set forth in Section 6.7.6.B.3 to enable the Applicant the flexibility to provide higher quality and more useful commercial space for Arts and Creative Enterprise Uses by consolidating the requirements at one or more larger Receiving Sites. The Applicant's plan for off-site compliance with this requirement is more particularly described in the Off-site Compliance Section of this Application.


C. RESIDENTIAL BUILD OUT

1. A maximum of one (1) dwelling unit per six hundred and eighty five (685) square feet of land area of a development site is permitted within the USOD.




As reflected on Table 23, the Project as proposed in this Application will not exceed 999 residential units at full build out and therefore will comply with the requirement to provide approximately one (1) dwelling unit per 685 SF of land area of the development site and will therefore comply with this requirement. As noted in Subsection C above, the size of the development site reflected in this Application has been estimated based on the best available data from the City Assessors Office and/or the Registry of Deeds. As design plans progress and as more information (such as surveyed property boundaries) becomes available, these areas may be updated in preparation for Design & Site Plan Review and the ratio of land area may be adjusted slightly, but will continue to comply with the maximum requirement of one (1) dwelling unit per six hundred and eighty five (685) square feet of land area of a development site.

D. AFFORDABLE HOUSING & LINKAGE

1. Residential development must provide at least twenty percent (20%) of dwelling units as affordable housing units.
 - a) The required number of affordable housing units is calculated based on the total number of dwelling units proposed in a Coordinated Development Special Permit application, but the delivery and phasing of affordable housing units is determined as individual lots are built out, unless the Planning Board permits off-site compliance in accordance with §6.7.6.E Off Site Compliance.
 2. At full build out of development subject to an approved Coordinated Development Plan, at least fifteen percent (15%) of affordable housing units must have three (3) or more bedrooms across the development site.
 3. One (1) additional bonus story may be added to the permitted number of stories for a Mid-Rise Podium Tower building type for each additional five percent (5%) of the total number of affordable housing units that have three (3) or more bedrooms across development subject to an approved Coordinated Development Special Permit.
 - a) Up to a maximum of three (3) additional bonus stories are permitted per Mid-Rise Podium Tower.
 - b) Buildings granted bonus stories are subject to the contextual massing and design requirements of 6.7.10.G.1.
 4. Except as noted in §6.7.6.C and §6.7.6.D, and subject to §6.7.5.C.7, development subject to an approved Coordinated Development Special Permit must comply with the provisions of Article 13: Inclusionary Housing and Article 15: Linkage.
 5. The Planning Board shall establish quality standards for three (3) bedroom affordable dwelling units as a condition of an approved Design & Site Plan Review for individual buildings. Quality standards must include, but may not be limited to, minimum floor area and the inclusion of certain features such as the number of bathrooms and the existence of built-in closets.
-  As reflected on Table 23, the Project as proposed in this Application will comply with the minimum Affordable Housing and Linkage requirements set forth in Section 6.7.6.D of the Ordinance.

E. OFF-SITE COMPLIANCE


1. The Planning Board may permit off-site compliance of §6.7.5.A.4 (Commercial Space for Arts & Creative Enterprise uses) and Article 13 Inclusionary Housing, for any Generating Site(s) by a Receiving Site(s) located within the USOD and included as part of a Coordinated Development Special Permit application, subject to the following:
 - a) At least fifty percent (50%) of the affordable housing units required for a building must be provided onsite.
 - b) No more than fifty percent (50%) of the dwelling units of any receiving site may be affordable housing units. [...]

 The Project as presented in this Application does not rely on off-site compliance for Inclusionary Housing.

As described in further detail in Subsection F below, the Applicant is seeking a Special Permit in accordance with Section 6.7.6.E of the Ordinance for off-site compliance with the Arts and Creative Enterprise space requirement set forth in Section 6.7.6.B.3 to enable the Applicant the flexibility to provide higher quality and more useful commercial space for Arts and Creative Enterprise Uses by consolidating the requirements at one or more larger Receiving Sites. The Applicant's plan for off-site compliance with this requirement is more particularly described in the Off-site Compliance section of this Application.

F. PHASING

3. The Planning Board shall establish construction permitting requirements for the phasing of development as a condition of an approved Coordinated Development Plan Special Permit and subsequent Design & Site Plan Review approvals.

 The phasing of the development reflected in this Application will be dependent on a number of factors including market conditions. In order to enable the immense public benefits promised by the development of the Union Square neighborhood, it is important that the Applicant retain maximum flexibility to develop portions of the Project in a manner that will be responsive to these factors.

The currently anticipated project phasing is more particularly described in the Project Plan, Implementation Section of this Application. Additionally, the Applicant has committed to the following minimum requirements for phasing set forth in the Development Covenant and the Master Land Disposition Agreement (“MLDA”):

- With the exception of the residential buildings proposed on Blocks D2 and D7, construction of any residential buildings may not commence until the Applicant (i) has completed construction of the commercial development proposed for Block D2 and (ii) has commenced construction on another commercial building within the USOD (that is not a parcel described on Schedule 1 to the MLDA as “Parcel “NEW” – 35 Prospect Street,” “Parcel S - 237 Washington Street,” “Parcel BB - 231 Washington Street,” and “Parcel H – 49-51 Allen Street”).
- The Applicant agrees and covenants to diligently and continuously prosecute all of its construction contemplated herein.

G. PROPERTY TRANSFER

1. The conveyance of land to the City of Somerville or future sale of any lot included as part of a development site subject to an approved Coordinated Development Special Permit is permitted and has no bearing on the previously approved build out, phasing of development, or compliance to the standards of Section 6.7.6.



As noted in the Statement of Intent of this Application, the Applicant intends to convey the improved Neighborhood Park as proposed on Block D1 to the City per the terms of the Development Covenant. For other Civic Spaces created on Block D1 and Block D2, US2 intends to convey the improved Civic Spaces to the City per the terms of the Development Covenant for those spaces. Additionally, as the designated master developer for the Union Square Revitalization Project, the Applicant may in the future sell, lease or otherwise convey developable lots or completed portions of the project without impacting the zoning compliance of other previously approved portions of the project. Any such sale, lease or conveyance will be done in accordance with the requirements of the USOD Zoning, the Master Land Disposition Agreement and the Development Covenant.

F. ADDITIONAL SPECIAL PERMITS REQUESTED AS PART OF CDSP APPLICATION PURSUANT TO SECTION 6.7.5.C.4.B AND 6.7.5.D.6.A

§ 6.7.11.F SPECIAL PERMIT FOR RESIDENTIAL PRINCIPAL USE

1. In its discretion to approve or deny a Special Permit authorizing a Residential principal use, the Planning Board shall consider the following:
 - a) a. The review considerations for all Special Permits as specified in Section 5.1 Special Permits.
 - b) b. Compliance with the approved Coordinated Development Special Permit and the phasing of development
 - c) c. A demonstrated need for residential to catalyze development, transportation services, or existing commercial activities in the neighborhood.



The Applicant respectfully requests that the Planning Board grant a Special Permit pursuant to Section 6.7.11.F of the Ordinance permitting Residential use as a principal use on Blocks D2, D3, D4, D5 and D7 as shown on Figure 3 Development Site Map.

Consistency with the required considerations for Special Permits and the CDSP are described in greater detail above. The Applicant has proposed a mixed-use program with residential uses strategically timed and located to serve as an important catalyst for commercial development and transportation services.

§ 6.7.6.A.3 SPECIAL PERMIT FOR PAYMENT IN LIEU OF CIVIC SPACE

3. The Planning Board may permit an in lieu payment for up to ten percent (10%) of the required amount of civic space. In its discretion to permit a payment in lieu of civic space as part of a Coordinated Development Special Permit, the Planning Board shall consider the following:
 - a) The review considerations for all Special Permits as specified in Section 5.1 Special Permits.
 - b) The goals and objectives of the City of Somerville Open Space Plan.
 - c) The availability and suitability of lots within a development site for development as a civic space.
 - d) The plausible availability of sites located elsewhere in the City that are suitable for development as civic space.
 - e) The need for funding to improve or maintain existing civic spaces, particularly athletic fields, located elsewhere in the City.

4. The Planning Board shall establish a fee schedule for a payment in lieu of civic space based on the recommendations of the Director of Transportation & Infrastructure in relation to the average cost to acquire and develop land as a civic space.

✓ As noted in Subsection C above, this Application illustrates lots for civic spaces with estimated boundaries and sizes based on the best available data from the City Assessors Office and/or the Registry of Deeds and the size of the development site has been estimated based on information obtained from these sources. As design plans progress and as more information (such as surveyed property boundaries) becomes available, these areas may be updated in preparation for Design & Site Plan Review. The Applicant is seeking a Special Permit pursuant to Section 6.7.6.A.3 of the Ordinance in order to maintain flexibility to accommodate design modifications and changes to the required calculated areas through a payment in lieu.

For the following reasons, the Applicant respectfully requests that the Planning Board grant a Special Permit pursuant to Section 6.7.6.A.3 of the Ordinance permitting up to ten percent (10%) or approximately 11,014 SF of the required Civic Space to be satisfied by a payment in lieu and establish a fee schedule for the payment in lieu pursuant to the requirements of Section 6.7.6.A.4 of the Ordinance:

As Union Square's revitalization is implemented in accordance with this Coordinated Development Plan, detailed design plans will be developed for individual building sites that deliver on the goals of the plan and respond to market or user needs. The ability to provide a small portion of the civic spaces (10%) via in lieu payment will offer much needed design flexibility to ensure that individual building projects can maximize the opportunity to realize project goals, respond to physical or site constraints and also meet market needs.

Throughout the neighborhood planning process, community stakeholders have expressed a need for athletic fields in Union Square. The Union Square Neighborhood Plan envisions that the former Walnut Street Center site on Merriam Street could be purchased from the MBTA after the completion of the GLX project and could be improved as athletic fields. The civic space fee in lieu payments generated from this project could contribute to the acquisition of the Walnut Street site and the fulfillment of long-standing community open space need.

The Applicant's plan for off-site compliance with this requirement is more particularly described within the Off-site Compliance portion of this application.

§ 6.7.6.E.1 SPECIAL PERMIT FOR OFF-SITE COMPLIANCE OF ARTS AND CREATIVE ENTERPRISE USES

1. The Planning Board may permit off-site compliance of §6.7.5.A.4 (Commercial Space for Arts & Creative Enterprise uses) and Article 13 Inclusionary Housing, for any Generating Site(s) by a Receiving Site(s) located within the USOD and included as part of a Coordinated Development Special Permit application, subject to the following:
 - a) At least fifty percent (50%) of the affordable housing units required for a building must be provided onsite.
 - b) No more than fifty percent (50%) of the dwelling units of any receiving site may be affordable housing units.
[...]

§ 6.7.6.E.3 REQUIRED CONSIDERATIONS FOR OFF-SITE COMPLIANCE OF ARTS & CREATIVE ENTERPRISE USES

3. In its discretion to permit off-site compliance for any Generating Site(s) by a Receiving Site(s) as part of a Coordinated Development Special Permit, the Planning Board shall consider the following:
 - a) The review considerations for all Special Permits as specified in Section 5.1 Special Permits;
 - b) The ability to provide higher quality and more useful commercial space for arts & creative enterprise uses at a Receiving Site than what could have been provided at the Generating Site.
 - c) The ability to provide affordable housing units at a Receiving Site that better meet the needs of community than the units that could have been provided at the Generating Site.

§ 6.7.6.E.4 DEVELOPMENT REVIEW FOR OFF-SITE COMPLIANCE OF ARTS & CREATIVE ENTERPRISE USES

4. Development review for any lots established as a Generating or Receiving Site in an approved Coordinated Development Plan must be conducted simultaneously.



The Applicant's plan for off-site compliance with the five percent (5%) Arts and Creative Enterprise ("ACE") use requirement is more particularly described in the Off-Site Compliance Section of this Application. It is anticipated that the Project will fulfill the ACE requirement through off-site allocations in order provide higher quality, and ultimately more useful space for a variety of end users. By design, as a use category the ACE designation represents a broad and diverse occupant group. Artisan Production, Arts Exhibition, Art Sales & Services, Arts Instruction, Live/Work Space, Design Services, and Shared Workspaces all have their place here. As described in Table 20 ACE Phase Distribution, were ACE space to be delivered to track with commercial space generating the requirement, smaller development sites, or those with limited commercial space would yield similarly small ACE areas, resulting in inefficient spaces of questionable utility. The Project as proposed in this Application aims to concentrate sufficient areas of ACE area together so as to maximize utility while still spreading its user groups throughout the neighborhood. In doing so, the potential for Arts and Creative Enterprise uses to 'cluster' remains – not only likely, but probable, ensuring the Union Square defining 'thread' of creativity and innovation is carried forward. Table 20 ACE Phase Distribution describes the anticipated phasing of delivery of the requisite ACE space.

G. DIMENSIONAL COMPLIANCE WITH CIVIC SPACES, BUILDING TYPES AND GENERAL DIMENSIONAL CONTROLS



As described in detail above, the Project as presented in this Application complies with all applicable requirements under the Ordinance for the issuance of a Coordinated Development Special Permit. Dimensional compliance with the specific requirements applicable to the development of Buildings and Civic Spaces on individual Lots will be addressed and documented through the Design and Site Plan Review process. As permitted pursuant to Section 6.7.5.D.5(a)(i)(a), additional Special Permits for individual Lots, Civic Spaces and/or Buildings may be requested as part of the Design and Site Plan Review applications to be filed for such Lots, Civic Spaces and/or Buildings.

