TOWN OF ARLINGTON
REDEVELOPMENT BOARD
Application for Special Permit In Accordance with Environmental Design Review Procedures (Section 3.4 of the Zoning Bylaw)

Docket No. 3650

1. Property Address 190 & 192-200 Massachusetts Ave
   Name of Record Owner(s) 190-200 Massachusetts Ave, LLC Phone 781-654-6306
   Address of Owner 455 Massachusetts Ave , Suite 1 (Street), Arlington, MA 02474 (City, State, Zip)

2. Name of Applicant(s) (if different than above) Same as above
   Address _____ Phone _____
   Status Relative to Property (occupant, purchaser, etc.) _____

3. Location of Property Map 6, Block 3, Lots 1A and 1B
   Assessor's Block Plan, Block, Lot No.

4. Deed recorded in the Registry of deeds, Book _____, Page _____;
   -or- registered in Land Registration Office, Cert. No. 3413N, in Book 1362 1376, Page 16 27.

5. Present Use of Property (include # of dwelling units, if any) Retail, Service, Restaurant

6. Proposed Use of Property (include # of dwelling units, if any) Mixed-Use
   30 Apartment Units & Retail or Restaurant

7. Permit applied for in accordance with the following Zoning Bylaw section(s)

section(s)	title(s)
3.4	Environmental Design Review
5.5.2	Dimensional and Density Regulations
SP	(Mixed-Use <=20,000SF)

8. Please attach a statement that describes your project and provide any additional information that may aid the ARB in understanding the permits you request. Include any reasons that you feel you should be granted the requested permission.

   See Attached

(In the statement below, strike out the words that do not apply)

The applicant states that 192-200 Massachusetts Ave, LLC is the owner -or- occupant -or- purchaser under agreement of the property in Arlington located at 190 & 192-200 Massachusetts Ave which is the subject of this application; and that unfavorable action -or- no unfavorable action has been taken by the Zoning Board of Appeals on a similar application regarding this property within the last two years. The applicant expressly agrees to comply with any and all conditions and qualifications imposed upon this permission, either by the Zoning Bylaw or by the Redevelopment Board, should the permit be granted.

Signature of Applicant(s) – Robert J. Annese, Attorney for Applicant

1171 Massachusetts Ave., Arlington, MA 02476 781-646-4911

Address Phone

PLANNING & COMMUNITY DEVELOPMENT
2022 DEC 19 P 3:36
TOWN CLERK'S OFFICE ARLINGTON, MA 02174
2022 DEC 27 AM 8:52

Updated August 28, 2018

Town of Arlington Redevelopment Board
Application for Special Permit in accordance with
Environmental Design Review (Section 3.4)

Required Submittals Checklist

Two full sets of materials and one electronic copy are required. A model may be requested. Review the ARB's Rules and Regulations, which can be found at arlingtonma.gov/arb, for the full list of required submittals.

_X_ Dimensional and Parking Information Form (see attached)

_X_ Site plan of proposal

N/A Model, if required

_X_ Drawing of existing conditions

_X_ Drawing of proposed structure

_X_ Proposed landscaping. May be incorporated into site plan

_X_ Photographs

_X_ Impact statement

N/A Application and plans for sign permits

_X_ Stormwater management plan (for stormwater management during construction for projects with new construction

FOR OFFICE USE ONLY

_____ Special Permit Granted Date: _____

_____ Received evidence of filing with Registry of Deeds Date: _____

_____ Notified Building Inspector of Special Permit filing Date: _____

TOWN OF ARLINGTON
Dimensional and Parking Information
for Application to
The Arlington Redevelopment Board

Docket No. _____

Property Location 190 & 192-200 Massachusetts Ave

Zoning District B3

Owner: 192-200 Massachusetts Ave, LLC

Address: 455 Massachusetts Ave, Arlington, MA

Present Use/Occupancy: No. of Dwelling Units:
Retail, Service, Restaurant

Uses and their gross square feet:
1-Story 9,916 GSF

Proposed Use/Occupancy: No. of Dwelling Units:
Mixed-Use, 30 Apartment Units & Retail/Restaurant

Uses and their gross square feet:
4-Story Mixed-Use, 39,238+/- GSF

	Present Conditions	Proposed Conditions	Min. or Max. Required by Zoning for Proposed Use
Lot Size	11,134 SF	11,134 SF	min. ----
Frontage	102.1 FT	102.1 FT	min. 50 FT
Floor Area Ratio	0.9	3.5	max. 2.8
Lot Coverage (%), where applicable	N/A	N/A	max. ----
Lot Area per Dwelling Unit (square feet)	N/A	371 SF	min. ----
Front Yard Depth (feet)	0 FT	0.6 FT	min. 0 FT
Side Yard Width (feet) right side	0.6 FT	7.5 FT	min. 0 FT
left side	-----	-----	min. -----
Rear Yard Depth (feet)	-----	-----	min. (H+L)/6
Height	----	-----	min. -----
Stories	1-STORY	4-STORY	stories 4-STORY
Feet	20 FT +/-	48+/- FT	feet 50 FT
Open Space (% of G.F.A.)	-----	-----	min. -----
Landscaped (square feet)	0.9%	6.3 %	(s.f.) 10% 1,395 SF
Usable (square feet)	0 %	10.6 %	(s.f.) 20% 2,796 SF
Parking Spaces (No.)	None	23	min. 34.2
Parking Area Setbacks (feet), where applicable	0 FT	N/A	min. N/A
Loading Spaces (No.)	N/A	N/A	min. N/A
Type of Construction	NEW CONSTRUCTION		
Distance to Nearest Building	12.0 FT	17.6 FT	min.

97 SF/11,134 SF (lot area)

876 SF/13,980 SF (Res. Floor Area)

13,980 SF (Res. Floor Area) X 0.10 =1,395 SF

13,980 SF (Res. Floor Area) X 0.20 = 2,796 SF

1,483 / 13,980 SF (Res. Floor Area)

Environmental Impact Statement for 190–200 Massachusetts Ave LLC

Property Address: 190 & 192-200 Massachusetts Avenue, Arlington, MA

The Applicant is proposing to construct a mixed-use apartment and retail building at the above referenced property with 30 residential units and two (2) separated retail units one containing 2,730 square and the other, 1,402 square feet for a total retail space of 4,772 square feet. The existing building will be demolished.

The property is located in a B3 zone. The Districts and Purposes provisions of the Zoning Bylaw in Section 5.5.1 further subsection D, provide the following with respect to a B3 zoning district:

> "B3: Village Business District. The Village Business District's predominant uses include retail, service, and office establishments catering to both convenience and comparison-goods shoppers and oriented to pedestrian traffic. Mixed-use structures are allowed and encouraged in this district. The three locations include portions of the principal business areas of Arlington: Lake Street, Arlington Center, and Arlington Heights. Businesses which consume large amounts of land and activities which interrupt pedestrian circulation and shopping patterns or otherwise interfere with the intent of this bylaw are discouraged."

A mixed-use development is allowed in a B3 zone as contained in the 5-26 District & Uses section of the Zoning Bylaw.

An apartment building is allowed in a B3 zoning district in accordance with Section 5-28 of the Zoning Bylaw.

There is frontage on Mass Ave of 102 feet.

The building will contain four stories and the proposed height will be 48 +/- feet.

The proposed FAR will be 2.8 and the proposed GFA will be 32,366 square feet.

The residential units will be one (1) studio unit, five (5) two-bedroom units and 24 one-bedroom units.

The proposed open space will be 6.3% landscaped open space and 10.6% usable open space.

There will be zero (0) front yard setback and side and rear yard setback as set forth within the zoning summary which is contained on the plans submitted with the application.

Twenty-three (23) parking spaces will be provided while zoning requires 34.2.

Historically, the property has been used as a small food market and a bank for many years.

Leader Bank has a building located at 180 Massachusetts Avenue next to the property and across Lake Street fronting on Massachusetts Avenue is the Capitol Theatre block which contains multiple residential units as well as theatres and retail space.

The proposed building will be in harmony with the height of those buildings and will not have a massing effect upon those buildings.

A condominium building is located directly to the rear of the property and, once again, the proposed building will not have an adverse massing effect upon that building.

This property came before the ARB some months ago for a different proposal and the project could not proceed because of an inability to comply with the FAR requirement contained in the Zoning Bylaw. Last March at Town Meeting, the FAR requirement was increased to 3 and the proposed project will comply with that FAR requirement, coming in at 2.8.

The plans propose 36 indoor bicycle parking spaces and seven (7) outdoor bicycle parking spaces.

There will be vehicle parking stalls proposed on the first level and in the basement, level as shown on the plans. The Applicant will need parking relief in accordance with the provisions of 6.1.5(c) of the Zoning Bylaw and in accordance with that section is providing covered bicycle parking and storage and is open to suggestions from the ARB as to other means acceptable to the Board with respect to this Section of the Bylaw for the purpose of obtaining a parking reduction for the property.

With respect to the existing conditions at the property, the site is located on the corner of Lake Street, Massachusetts Avenue and Chandler Street. There is an existing curb cut to the property located off of Chandler Street.

Chandler Street is a one-way street running in a northerly direction with traffic using Chandler Street heading up Chandler Street towards Massachusetts Avenue with access to Chandler Street being available off of Lake Street and the Brooks Avenue intersection as well as Egerton Road.

The project is in close proximity to an extensive sidewalk system, three nearby multi-use paths (Minuteman Bikeway, Alewife Greenway Bike Path, and Alewife Linear Path) adjacent MBTA bus routes and the nearby Red Line subway connections. A review of census data for Arlington indicates alternative transportation (transit, walk and bike) are available for use of 50% of the residents of the immediate study area. (Census Track 3561).

The Applicant has, through its architect, conducted solar studies as well as massing studies with respect to the property and the effect of the proposed construction on surrounding properties and has concluded that the proposed structure would only cast shadows on existing structures in the R2 zone during the evenings of winter months when long shadows are already cast by existing structures and foliage.

The studies indicate that properties on Chandler Street are located farther from the boundary which would trigger the height buffer contained in the Zoning Bylaw with the result that no existing structure in an R2 zone is close enough to be impacted by a shadow emanating from the proposed building.

The massing study indicates that the proposed building creates a pedestrian friendly streetscape along Massachusetts Avenue which would harmonize with the massing of the existing structures i.e., Capitol Theatre at 204 Massachusetts Avenue and the Leader Bank corporate offices located at 180 Massachusetts Avenue.

The report of Allen & Major Associates, Inc. dated December 19, 2022, indicates that "the project causes a reduction in the peak rate of runoff and volume of stormwater leaving the site at the study point". The report summary indicates that "the proposed development will have a positive impact on the stormwater management system by reducing the rate and volume of stormwater runoff from the site.

The current application proposes less residential units than was the case with the prior application. Therefore, it is the Applicant's position that there will be no adverse impact on traffic and pedestrian safety of the current project if approved by the ARB, particularly when observing the prior use of the property as a food market, restaurant, and bank.

It is also important to note that the proposed project offers an opportunity to provide five (5) affordable housing units in addition to the 25 market rate units.

All utilities will be located underground. There will be an electric charging station at the property and approaches will be made to a ZipCar company or a ZipCar-like company to have a ZipCar or similar type car located at the property as the Applicant feels that this would be an amenity for the building as well as other residents in the neighborhood who would like to have use of a ZipCar type vehicle.

In addition, some of the occupants of the building may not even use motor vehicles since it will be located in close proximity to MBTA bus service as well as the bike path.

Bicycle travel will be encouraged with the Applicant's proposal and there will be secure, and weather protected indoor bicycle racks within the site to facilitate this mode of transportation to and from the site by building tenants and there will be additional short term bicycle racks as well.

A LEED project checklist has also been provided to the ARB in this filing.

As mentioned previously, the Applicant's plans also provide for retail space of 4,772 square feet with that space being divided into two units, one containing 2,730 square feet and the other, 1,542 square feet.

That space offers an opportunity for a restaurant and/or other type of retail use which could easily be accessed by members of the public and residents of the Town. Other retail uses could occupy the space as well.

In summary, the proposed building is in harmony with other structures in the neighborhood of the property and will not have an adverse impact on nearby properties with respect to shadow effects and massing and on the other hand will provide needed residential apartment units in the Town while also providing for restaurant/retail space at the first level of the building which conforms to the intent of the mixed-use portion of the Zoning Bylaw.

For all of the above reasons, the Applicant respectfully requests that its application filed under Environmental Design Review be approved by the ARB.

TOWN OF ARLINGTON
REDEVELOPMENT BOARD
Petition for Special Permit under Environmental Design Review (see Section 3.4 of the Arlington Zoning Bylaw for Applicability)

For projects subject to Environmental Design Review, (see section 3.4), please submit a statement that completely describes your proposal, and addresses each of the following standards.

1. **Preservation of Landscape**. The landscape shall be preserved in its natural state, insofar as practicable, by minimizing tree and soil removal, and any grade changes shall be in keeping with the general appearance of neighboring developed areas.

   There will be plantings at the site as shown on the Allen & Major Associates, Inc. Plan L-101 and L-501.

2. **Relation of Buildings to Environment**. Proposed development shall be related harmoniously to the terrain and to the use, scale, and architecture of existing buildings in the vicinity that have functional or visual relationship to the proposed buildings. The Arlington Redevelopment Board may require a modification in massing so as to reduce the effect of shadows on abutting property in an RU, RI or R2 district or on public open space.

   The proposed building would be in harmony with other buildings in its neighborhood particularly so with respect to the Leader Bank building located to the left of the proposed building, the Capitol Theatre block across Lake Street on Massachusetts Avenue and the condominium building located directly behind the site. The proposed building will not create a massing effect with respect either massing or adverse shadow effects with respect to those buildings.

   Properties on Chandler Street are located farther from the boundary which triggers the height buffer contained in the Zoning Bylaw with the result that no existing structure in an R2 zone is close enough to be impacted by any shadow that may emanate from the proposed building.

3. **Open Space**. All open space (landscaped and usable) shall be so designed as to add to the visual amenities of the vicinity by maximizing its visibility for persons passing the site or overlooking it from nearby properties. The location and configuration of usable open space shall be so designed as to encourage social interaction, maximize its utility, and facilitate maintenance.

   The Applicant proposes 6.3% landscaped open space and 10.6% usable open space at the site and the open space has been designed, as shown on the plans submitted, to add to the visual amenities of the vicinity by maximizing its visibility for persons passing the site overlooking it from nearby properties. as shown on the plans submitted.

4. **Circulation**. With respect to vehicular, pedestrian and bicycle circulation, including entrances, ramps, walkways, drives, and parking, special attention shall be given to location and number of access points to the public streets (especially in relation to existing traffic controls and mass transit facilities), width of interior drives and access points, general interior circulation, separation of pedestrian and vehicular traffic, access to community facilities, and arrangement of vehicle parking and bicycle parking areas, including bicycle parking spaces required by Section 8.13 that are safe and convenient and, insofar as practicable, do not detract from the use and enjoyment of proposed buildings and structures and the neighboring properties.

   Motor vehicle and bicycle parking both indoor and outdoor all are shown on the Applicant's plans and the bicycle parking is safe and convenient and does not detract from the use and enjoyment of the proposed building and any neighboring properties.

5. **Surface Water Drainage**. Special attention shall be given to proper site surface drainage so that removal of surface waters will not adversely affect neighboring properties or the public storm drainage system. Available Best Management Practices for the site should be employed and include site planning to minimize impervious surface and reduce clearing and re-grading. Best Management Practices may include erosion control and storm water treatment by means of swales, filters, plantings, roof gardens, native vegetation, and leaching catch basins. Storm water should be treated at least minimally on the development site; that which cannot be handled on site shall be removed from all roofs, canopies, paved and pooling areas and carried away in an underground drainage system. Surface water in all paved areas shall be collected at intervals so that it will not obstruct the flow of vehicular or pedestrian traffic and will not create puddles in the paved areas.

   In accordance with Section 3.3.4, the Board may require from any applicant, after consultation with the Director of Public Works, security satisfactory to the Board to insure the maintenance of all storm water facilities such as catch basins, leaching catch basins, detention basins, swales, etc. within the site. The Board may use funds provided by such security to conduct maintenance that the applicant fails to do. The Board may adjust in its sole discretion the amount and type of financial security such that it is satisfied that the amount is sufficient to provide for the future maintenance needs.

   Surface water drainage has been addressed in the Allen & Major Associates, Inc. report dated December 19, 2022, and as shown within the substance of that report the proposed development will have a positive impact on the stormwater management system by reducing the rate and volume of stormwater runoff from the site.

6. **Utility Service**. Electric, telephone, cable TV and other such lines and equipment shall be underground. The proposed method of sanitary sewage disposal and solid waste disposal from all buildings shall be indicated.

   All utility servicing the site will be below ground.

7. **Advertising Features**. The size, location, design, color, texture, lighting and materials of all permanent signs and outdoor advertising structures or features shall not detract from the use and enjoyment of proposed buildings and structures and the surrounding properties. Advertising features are subject to the provisions of Section 6.2 of the Zoning Bylaw.

   The signage proposed by the Applicant is as shown on its plans.

8. **Special Features**. Exposed storage areas, exposed machinery installations, service areas, truck loading areas, utility buildings and structures, and similar accessory areas and structures shall be subject to such setbacks, screen plantings or other screening methods as shall reasonably be required to prevent their being incongruous with the existing or contemplated environment and the surrounding properties.

   Any structures, machinery installations or truck loading areas servicing the building would be appropriately screened so as to not have an adverse impact on neighboring properties.

9. **Safety**. With respect to personal safety, all open and enclosed spaces shall be designed to facilitate building evacuation and maximize accessibility by fire, police, and other emergency personnel and equipment. Insofar as practicable, all exterior spaces and interior public and semi-public spaces shall be so designed as to minimize the fear and probability of personal harm or injury by increasing the potential surveillance by neighboring residents and passersby of any accident or attempted criminal act.

   The building has been designed to be inviting to members of the public particularly so with respect to the retail (potentially, restaurant space) on the first level and other spaces serving the building

10. **Heritage.** With respect to Arlington's heritage, removal, or disruption of historic, traditional, or significant uses, structures, or architectural elements shall be minimized insofar as practicable, whether these exist on the site or on adjacent properties.

The building is not on the Historic Significant List for the Town and, as a result, there will be no filing with the Historical Commission, in connection with the project.

11. **Microclimate.** With respect to the localized climatic characteristics of a given area, any development which proposes new structures, new hard-surface ground coverage, or the installation of machinery which emits heat, vapor, or fumes, shall endeavor to minimize, insofar as practicable, any adverse impact on light, air, and water resources, or on noise and temperature levels of the immediate environment.

If a restaurant use occurs with respect to the first level of the building, then adequate steps will be taken to address any machinery which emits heat, vapor, or fumes or which may have any impact on light, air and water resources or noise and temperature levels in the immediate environment of the property.

12. **Sustainable Building and Site Design.** Projects are encouraged to incorporate best practices related to sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. Applicants must submit a current Green Building Council Leadership in Energy and Environmental Design (LEED) checklist, appropriate to the type of development, annotated with narrative description that indicates how the LEED performance objectives will be incorporated into the project.
[LEED checklists can be found at http://www.usgbc.org/DisplayPage.aspx?CMSPageID=220b]

Applicant is submitting a LEED checklist in connection with its submission and the building will be solar ready.

In addition, projects subject to Environmental Design Review must address and meet the following Special Permit Criteria (see Section 3.3.3 of the Zoning Bylaw)

1. The use requested is listed in the Table of Use Regulations as a special permit in the district for which application is made or is so designated elsewhere in this Bylaw.

The use requested is a Special Permit use as designated in the Zoning Bylaw.

2. The requested use is essential or desirable to the public convenience or welfare.

The requested use is essential or desirable to the public convenience or welfare because the use will provide additional residential living units in the Town as well as five affordable residential units and a large area of retail space on the first level which potentially could be used for a restaurant or other retail use.

3. The requested use will not create undue traffic congestion, or unduly impair pedestrian safety.

The requested use will not create undue traffic congestion pr duly impair pedestrian safety as the use proposed will create less traffic to and from the site then had been the case historically with both the hank use, the food market use, and the restaurant use.

4. The requested use will not overload any public water, drainage or sewer system or any other municipal system to such an extent that the requested use or any developed use in the immediate area or in any other area of the Town will be unduly subjected to hazards affecting health, safety, or the general welfare. |

The requested use will not overload any public water drainage or sewage system or any other municipal system.

5. Any special regulations for the use, set forth in Article 11, are fulfilled.

Any special regulations for the use contained in the bylaw would be fulfilled.

6. The requested use will not impair the integrity or character of the district or adjoining districts, nor be detrimental to the health, morals, or welfare.

The requested use will not impair the integrity or character of the district or adjoining districts, nor be detrimental to the health, morals, or welfare as the physical characteristics of the building will be in keeping with other buildings in its neighborhood and the use of the building provides five (5) affordable residential housing units as well as twenty-five (25) other residential housing units together with ample space on tbe first floor for a potential restaurant or other retail use.

7. The requested use will not, by its addition to a neighborhood, cause an excess of that particular use that could be detrimental to the character of said neighborhood.

The requested use will not by its addition to the neighborhood in which the property is located cause an excess of that particular use that could be detrimental to the character of said neighborhood. The use will not be detrimental to the character of the neighborhood as once again, the physical characteristics of the building will fit in harmoniously with other buildings in tbe neighborhood of the property.

December 19, 2022

Claire Ricker
Director of Planning & Community Development
730 Massachusetts Ave, Annex
Arlington, MA 02476

RE: Mixed-Use Redevelopment
Drainage Summary Letter
190 & 192-200 Massachusetts Ave
Arlington, MA 02476

Dear Ms. Ricker,

On behalf of our Client, 192-200 Massachusetts Ave, LLC, Allen & Major Associates (A&M) is pleased to provide this letter in support of the Special Permit application for the Mixed-Use Redevelopment project at 190 & 192-200 Massachusetts Ave. This letter will summarize the changes to the stormwater management system which are proposed as part of the redevelopment efforts.

Existing Conditions

The site is located on the corner of Lake Street, Massachusetts Avenue, and Chandler Street. There is an existing curb cut to the property located off of Chandler Street. The project is comprised of two parcels, identified on the City Tax Map 6, Block 3, Lots 1A and 1B. Both lots are predominantly covered by existing buildings. Elevations onsite range from elevation 29 to elevation 24. Elevation 24 is the low point on-site located at the existing curb cut along Chandler Street, and elevation 29 runs through the sidewalk along Mass Ave. The majority of the stormwater from the site discharges through roof drain connections to the municipal system. A review of the NRCS soil report for Middlesex County indicates that the soil onsite is considered Merrimac-Urban Land which has a Hydrologic Soil Group rating of an "A". A copy of the Existing Watershed Plan is included herewith.

Proposed Conditions

The project, proposes to demolish the existing buildings to construct a 4-story mixed-use building with apartment and retail uses. There are 8 parking stalls proposed on the first level and 14 spaces in the basement level. The stormwater management system will be improved with a new drainage pipe connection. The quantity of stormwater runoff will be reduced with the installation of landscaped areas on-site. The proposed work with result in approximately 850 square feet of impervious material being replaced with landscaped areas.

Runoff flows were estimated for both pre and post development conditions using HydroCAD v10.20 software, at a specific "Study Point" (SP-1). Study Point 1 is the flow that will enter the municipal drainage system. The table below demonstrates that the project causes a reduction in the peak rate of runoff and volume of stormwater leaving the site at the Study Point. Copies of the HydroCAD worksheets and Watershed Plans are included herewith.

STUDY POINT #1 (flow to municipal system)			
	2-Year	10-Year	100-Year
Existing Flow (CFS)	0.83	1.27	2.31
Proposed Flow (CFS)	0.74	1.20	2.26
Decrease (CFS)	**0.09**	**0.07**	**0.05**
Existing Volume (CF)	2,781	4,327	8,025
Proposed Volume (CF)	2,296	3,804	7,466
Decrease (CF)	**485**	**523**	**559**

The surface water drainage requirements of the Town of Arlington Zoning Bylaw Environmental Design Review Standards have been reviewed and met with the proposed design. The proposed project will introduce landscaped areas to the site to reduce the impervious area. The Town of Arlington, Article 15 Stormwater Mitigation, does not apply as the proposed development will introduce a reduction in impervious area. However, with the proposed landscaped areas the project will reduce the runoff rates for all design storms, and comply with this bylaw.

Summary

As shown in the table above, the proposed development will have a positive impact on the stormwater management system by reducing the rate and volume of stormwater runoff from the site.

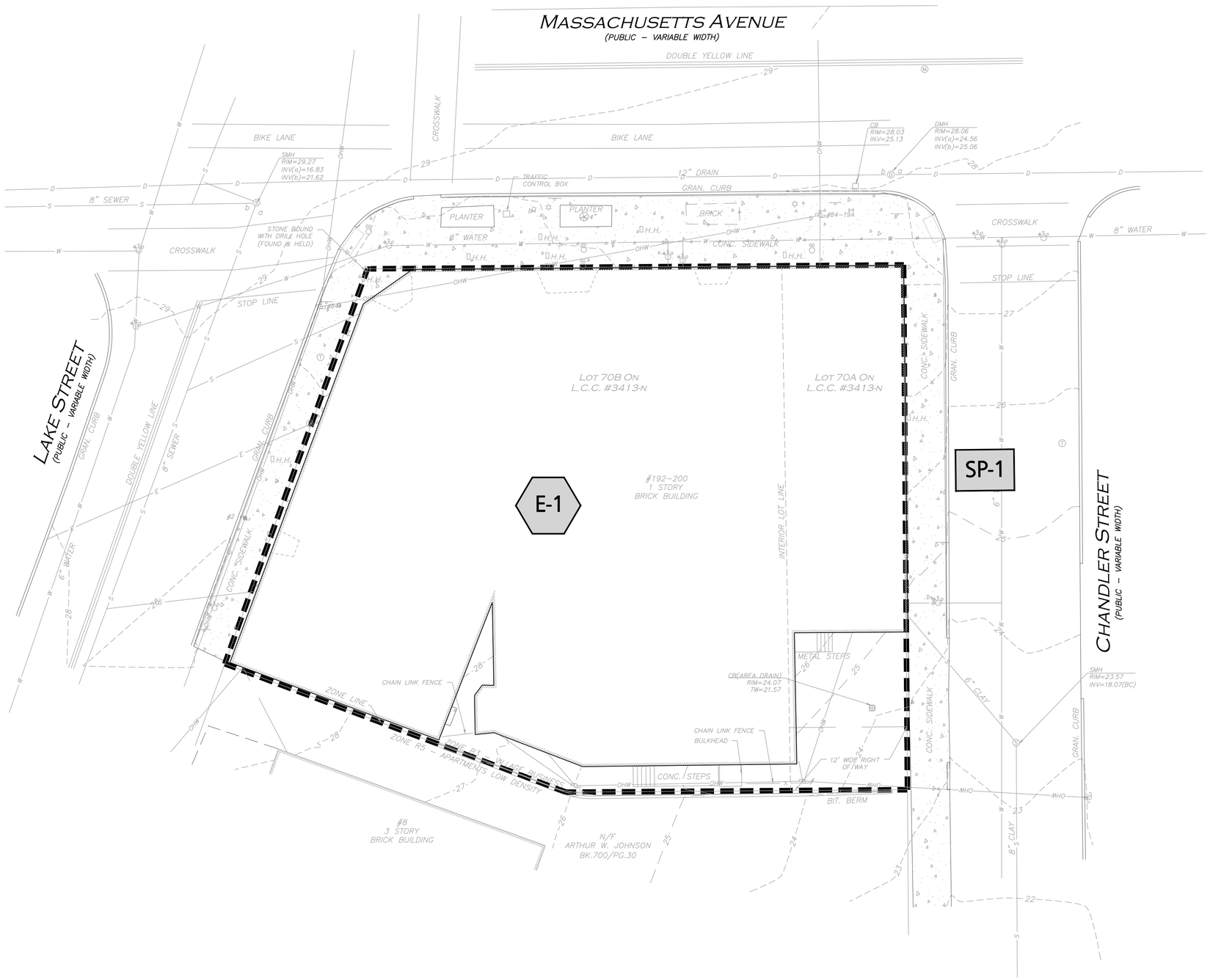
Very truly yours,

ALLEN & MAJOR ASSOCIATES, INC.

Brian D. Jones, PE
Senior Project Manager

Attachments:

1. Existing Watershed Plan
2. Proposed Watershed Plan
3. Pre development HydroCAD Calculations
4. Post development HydroCAD Calculations
5. Extreme Precipitation Tables
6. NRCS Soil Report



LEGEND

EXISTING WATERSHED	
SUBCATCHMENT BOUNDARY	
SUBCATCHMENT LABEL	E-1

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

REV	DATE	DESCRIPTION

APPLICANT\OWNER:

192-200 MASSACHUSETTS AVE, LLC
455 MASSACHUSETTS AVE, STE 1
ARLINGTON, MA 02474

PROJECT:

190 & 192-200
MASSACHUSETTS AVE
ARLINGTON, MA 02476

PROJECT NO.	2729-02	DATE:	12-19-22
SCALE:	1" = 10'	DWG. NAME:	C2729-02
DESIGNED BY:	BDJ	CHECKED BY:	RPC

. REPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
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WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

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DRAWING TITLE:

EXISTING WATERSHED PLAN

SHEET No.

EWP

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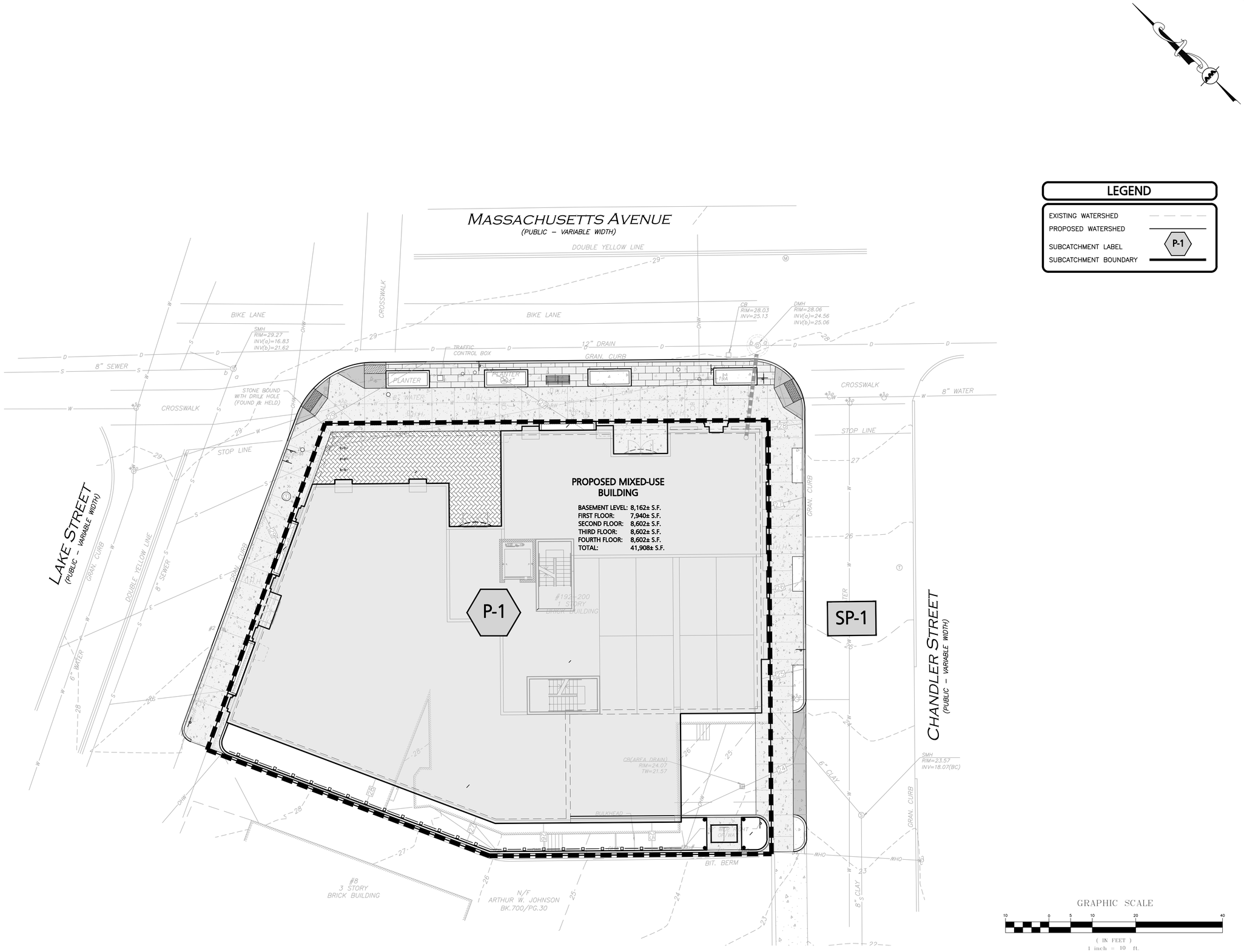

LEGEND

EXISTING WATERSHED	
PROPOSED WATERSHED	
SUBCATCHMENT LABEL	P-1
SUBCATCHMENT BOUNDARY	

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

REV	DATE	DESCRIPTION

APPLICANT\OWNER:

192-200 MASSACHUSETTS AVE, LLC
455 MASSACHUSETTS AVE, STE 1
ARLINGTON, MA 02474

PROJECT:

190 & 192-200
MASSACHUSETTS AVE
ARLINGTON, MA 02476

PROJECT NO.	2729-02	DATE:	12-19-22
SCALE:	1" = 10'	DWG. NAME:	C2729-02
DESIGNED BY:	BDJ	CHECKED BY:	RPC

. REPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
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FAX: (781) 935-2896

WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

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DRAWING TITLE:

PROPOSED WATERSHED PLAN

SHEET No.

PWP

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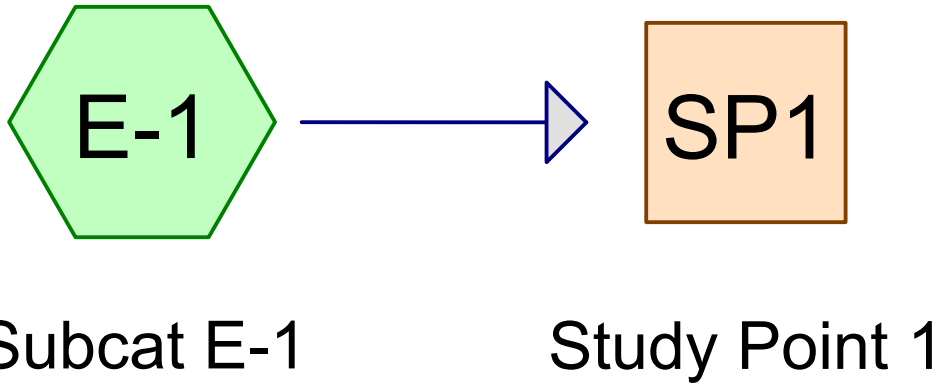
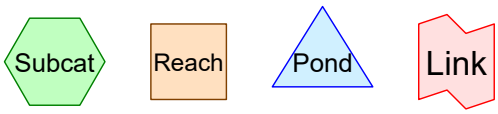




Routing Diagram for 2729-02_Existing-Conditions
Prepared by Allen & Major Associates, Inc, Printed 12/12/2022
HydroCAD® 10.20-2g s/n 02881 © 2022 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-Year	Type III 24-hr		Default	24.00	1	3.23	2
2	10-Year	Type III 24-hr		Default	24.00	1	4.90	2
3	100-Year	Type III 24-hr		Default	24.00	1	8.89	2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
1,238	98	Paved parking, HSG A (E-1)
9,896	98	Roofs, HSG A (E-1)
11,134	**98**	**TOTAL AREA**

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E-1: Subcat E-1 Runoff Area=11,134 sf 100.00% Impervious Runoff Depth=3.00"
Tc=5.0 min CN=98 Runoff=0.83 cfs 2,781 cf

Reach SP1: Study Point 1 Inflow=0.83 cfs 2,781 cf
Outflow=0.83 cfs 2,781 cf

Total Runoff Area = 11,134 sf Runoff Volume = 2,781 cf Average Runoff Depth = 3.00"
0.00% Pervious = 0 sf 100.00% Impervious = 11,134 sf

Summary for Subcatchment E-1: Subcat E-1

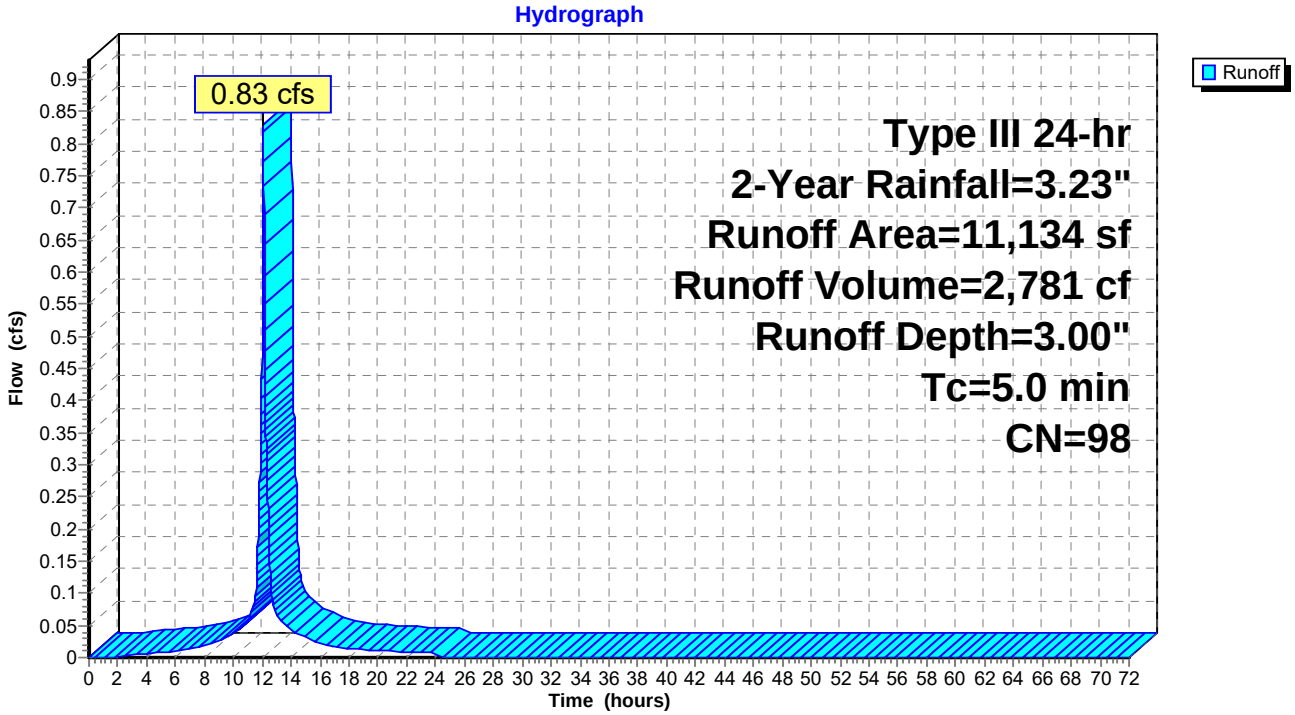
Runoff = 0.83 cfs @ 12.07 hrs, Volume= 2,781 cf, Depth= 3.00"
Routed to Reach SP1 : Study Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-Year Rainfall=3.23"

Area (sf)	CN	Description
1,238	98	Paved parking, HSG A
9,896	98	Roofs, HSG A
11,134	98	Weighted Average
11,134		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, Assumed**

Subcatchment E-1: Subcat E-1



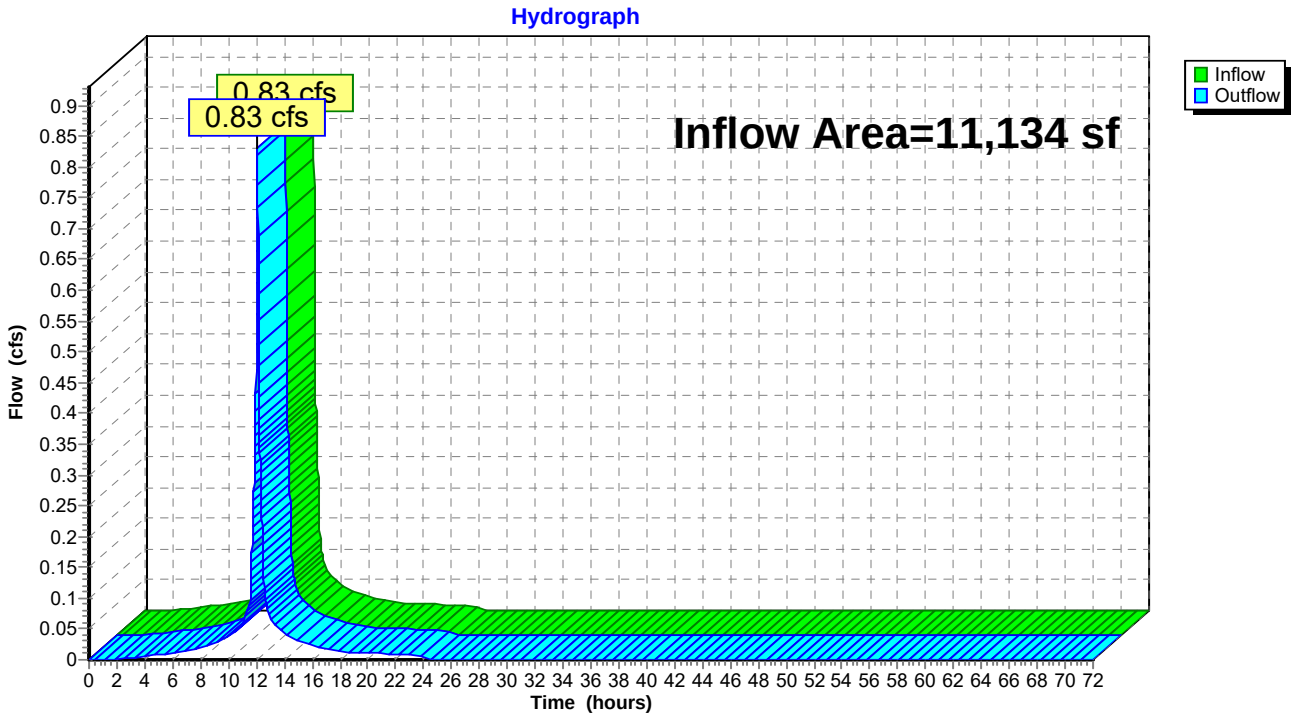
Summary for Reach SP1: Study Point 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 11,134 sf,100.00% Impervious, Inflow Depth = 3.00" for 2-Year event
Inflow = 0.83 cfs @ 12.07 hrs, Volume= 2,781 cf
Outflow = 0.83 cfs @ 12.07 hrs, Volume= 2,781 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3

Reach SP1: Study Point 1



Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E-1: Subcat E-1 Runoff Area=11,134 sf 100.00% Impervious Runoff Depth=4.66"
Tc=5.0 min CN=98 Runoff=1.27 cfs 4,327 cf

Reach SP1: Study Point 1 Inflow=1.27 cfs 4,327 cf
Outflow=1.27 cfs 4,327 cf

Total Runoff Area = 11,134 sf Runoff Volume = 4,327 cf Average Runoff Depth = 4.66"
0.00% Pervious = 0 sf 100.00% Impervious = 11,134 sf

Summary for Subcatchment E-1: Subcat E-1

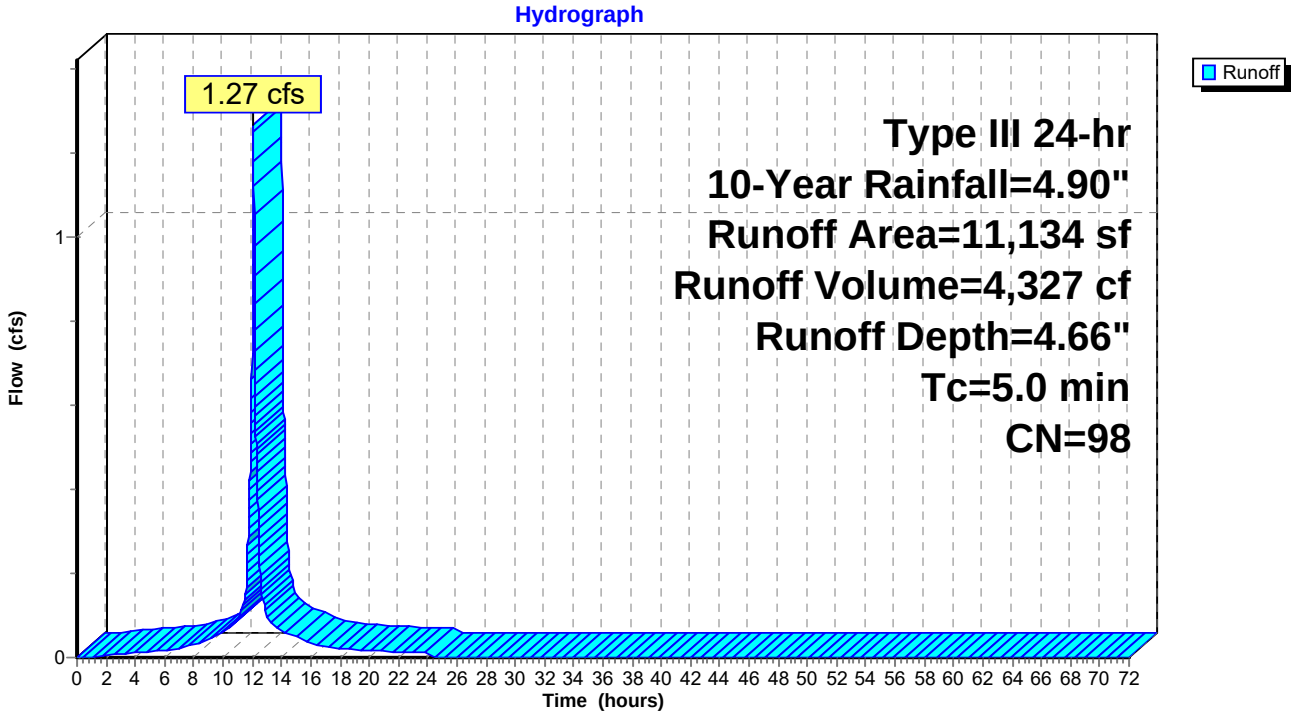
Runoff = 1.27 cfs @ 12.07 hrs, Volume= 4,327 cf, Depth= 4.66"
Routed to Reach SP1 : Study Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=4.90"

Area (sf)	CN	Description
1,238	98	Paved parking, HSG A
9,896	98	Roofs, HSG A
11,134	98	Weighted Average
11,134		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, Assumed**

Subcatchment E-1: Subcat E-1



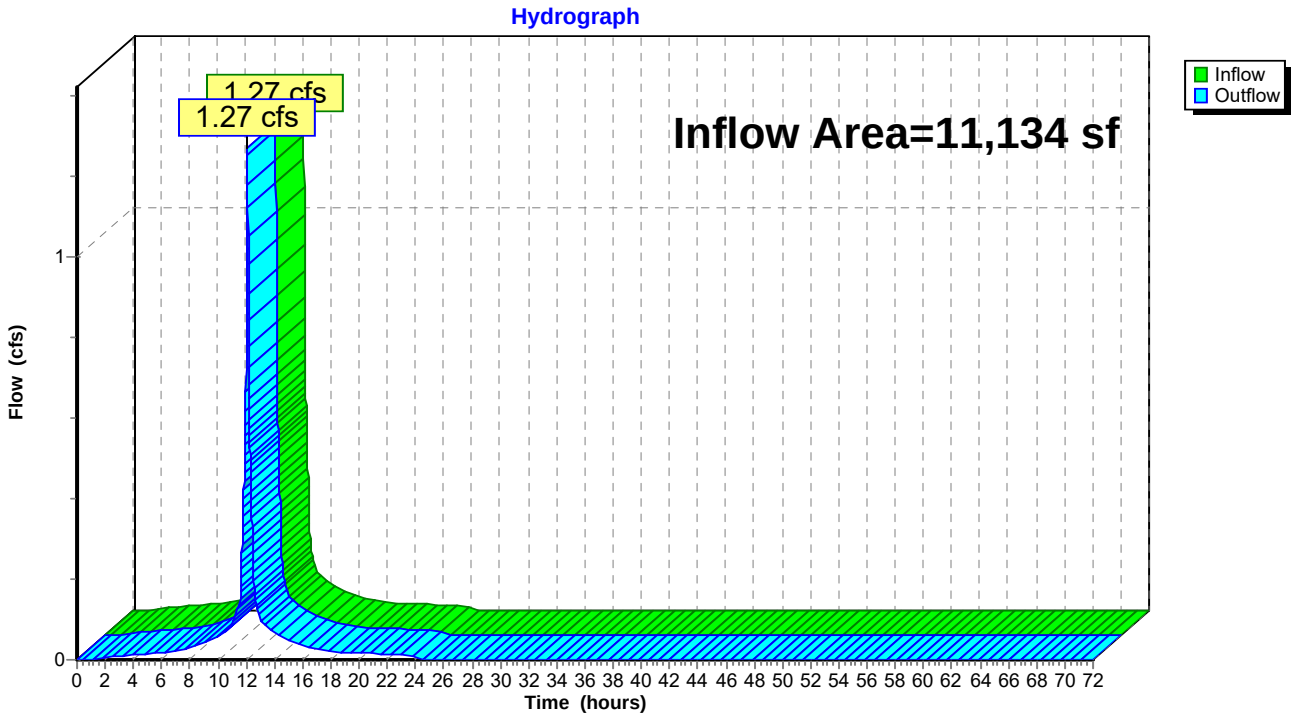
Summary for Reach SP1: Study Point 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 11,134 sf,100.00% Impervious, Inflow Depth = 4.66" for 10-Year event
Inflow = 1.27 cfs @ 12.07 hrs, Volume= 4,327 cf
Outflow = 1.27 cfs @ 12.07 hrs, Volume= 4,327 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3

Reach SP1: Study Point 1



Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E-1: Subcat E-1 Runoff Area=11,134 sf 100.00% Impervious Runoff Depth=8.65"
Tc=5.0 min CN=98 Runoff=2.31 cfs 8,025 cf

Reach SP1: Study Point 1 Inflow=2.31 cfs 8,025 cf
Outflow=2.31 cfs 8,025 cf

Total Runoff Area = 11,134 sf Runoff Volume = 8,025 cf Average Runoff Depth = 8.65"
0.00% Pervious = 0 sf 100.00% Impervious = 11,134 sf

Summary for Subcatchment E-1: Subcat E-1

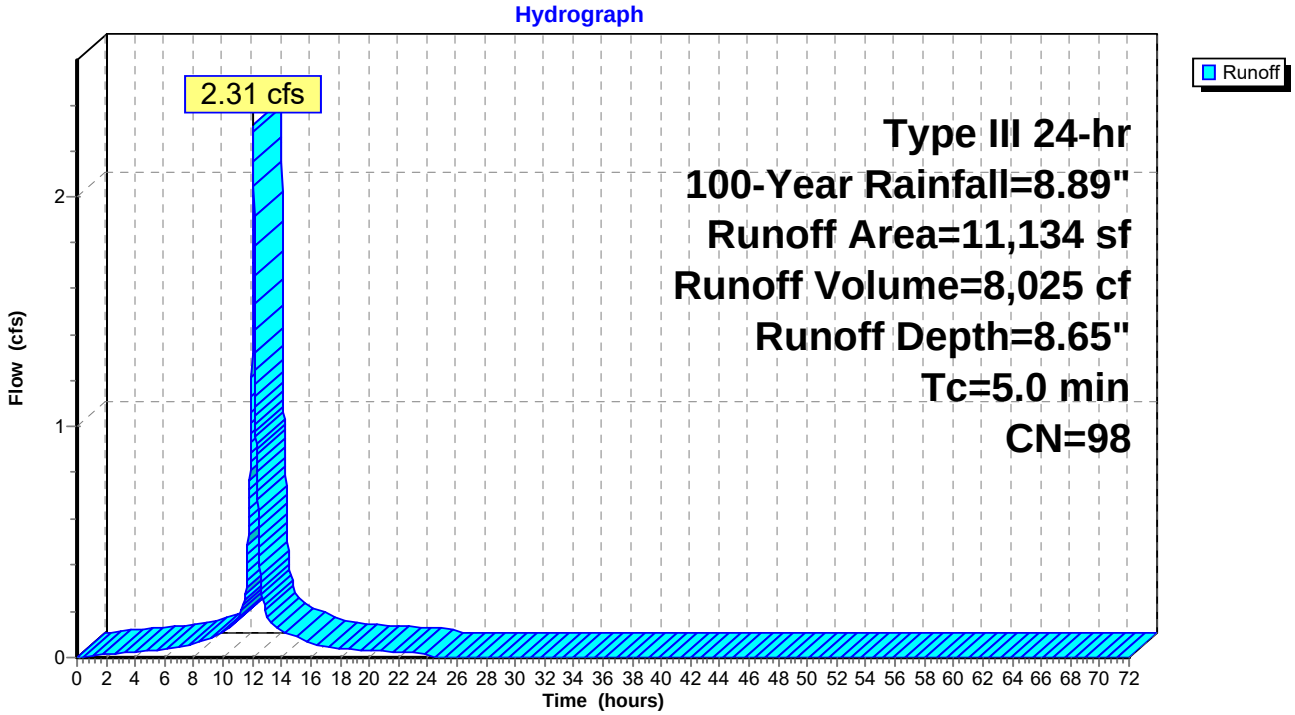
Runoff = 2.31 cfs @ 12.07 hrs, Volume= 8,025 cf, Depth= 8.65"
Routed to Reach SP1 : Study Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.89"

Area (sf)	CN	Description
1,238	98	Paved parking, HSG A
9,896	98	Roofs, HSG A
11,134	98	Weighted Average
11,134		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, Assumed**

Subcatchment E-1: Subcat E-1



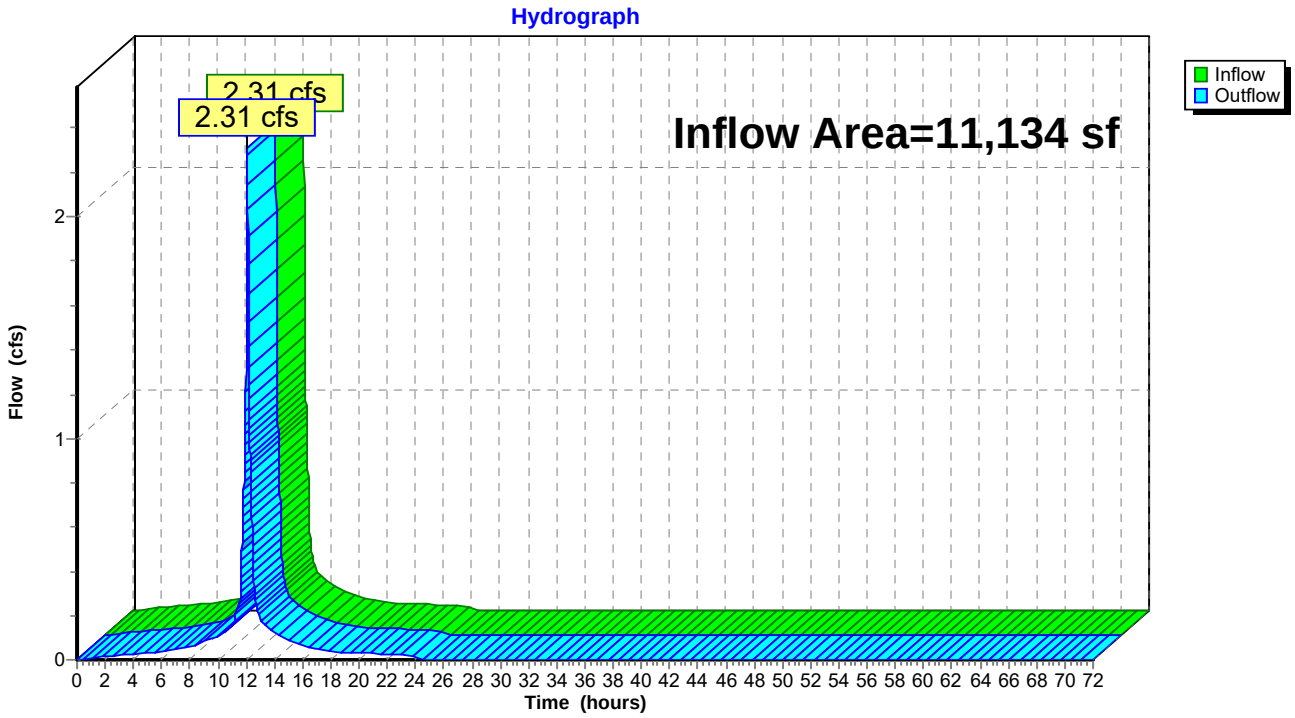
Summary for Reach SP1: Study Point 1

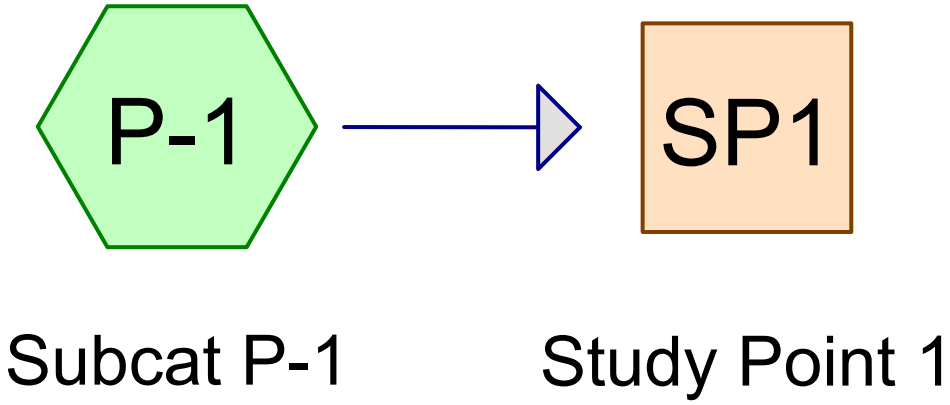
[40] Hint: Not Described (Outflow=Inflow)

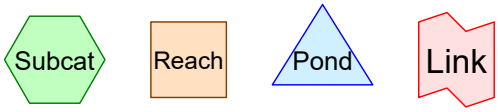
Inflow Area = 11,134 sf,100.00% Impervious, Inflow Depth = 8.65" for 100-Year event
Inflow = 2.31 cfs @ 12.07 hrs, Volume= 8,025 cf
Outflow = 2.31 cfs @ 12.07 hrs, Volume= 8,025 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3

Reach SP1: Study Point 1







Routing Diagram for 2729-02_Proposed-Conditions
Prepared by Allen & Major Associates, Inc, Printed 12/12/2022
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Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-Year	Type III 24-hr		Default	24.00	1	3.23	2
2	10-Year	Type III 24-hr		Default	24.00	1	4.90	2
3	100-Year	Type III 24-hr		Default	24.00	1	8.89	2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
850	39	>75% Grass cover, Good, HSG A (P-1)
1,698	98	Paved parking, HSG A (P-1)
8,586	98	Roofs, HSG A (P-1)
11,134	**93**	**TOTAL AREA**

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P-1: Subcat P-1 Runoff Area=11,134 sf 92.37% Impervious Runoff Depth=2.47"
Tc=5.0 min CN=93 Runoff=0.74 cfs 2,296 cf

Reach SP1: Study Point 1 Inflow=0.74 cfs 2,296 cf
Outflow=0.74 cfs 2,296 cf

Total Runoff Area = 11,134 sf Runoff Volume = 2,296 cf Average Runoff Depth = 2.47"
7.63% Pervious = 850 sf 92.37% Impervious = 10,284 sf

Summary for Subcatchment P-1: Subcat P-1

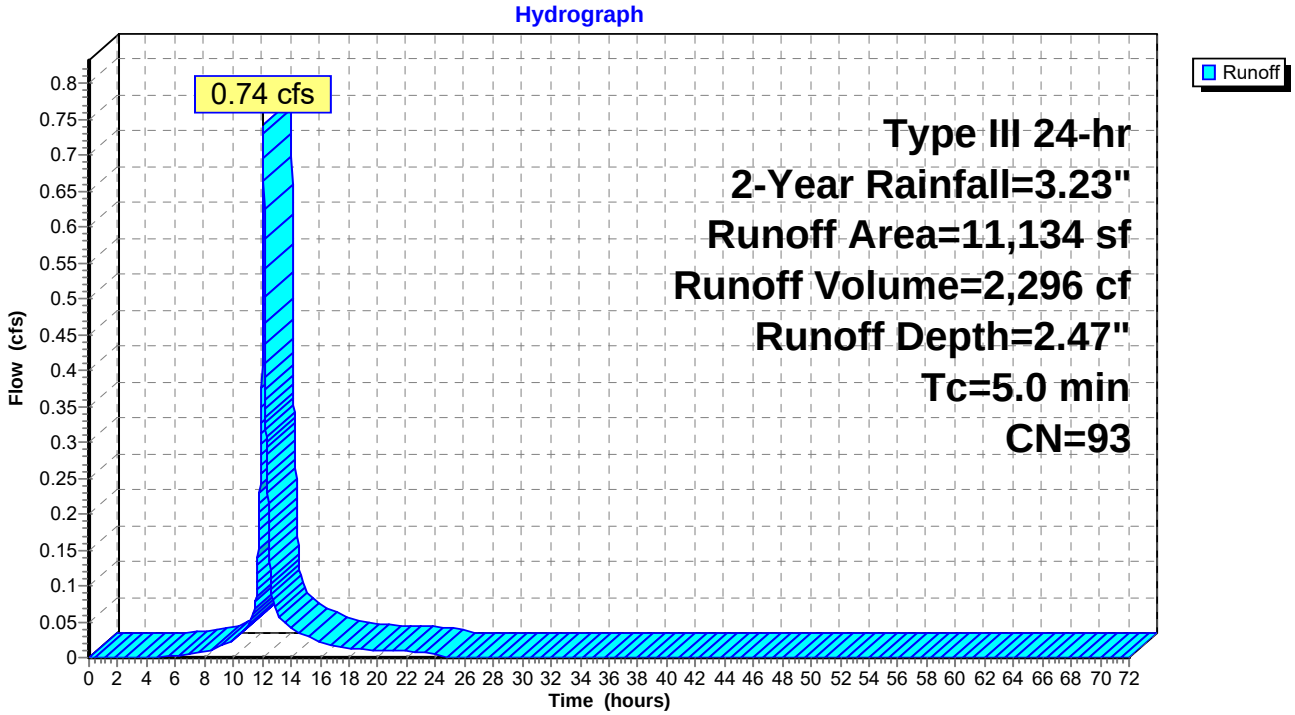
Runoff = 0.74 cfs @ 12.07 hrs, Volume= 2,296 cf, Depth= 2.47"
Routed to Reach SP1 : Study Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-Year Rainfall=3.23"

Area (sf)	CN	Description
850	39	>75% Grass cover, Good, HSG A
8,586	98	Roofs, HSG A
1,698	98	Paved parking, HSG A
11,134	93	Weighted Average
850		7.63% Pervious Area
10,284		92.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, Assumed**

Subcatchment P-1: Subcat P-1



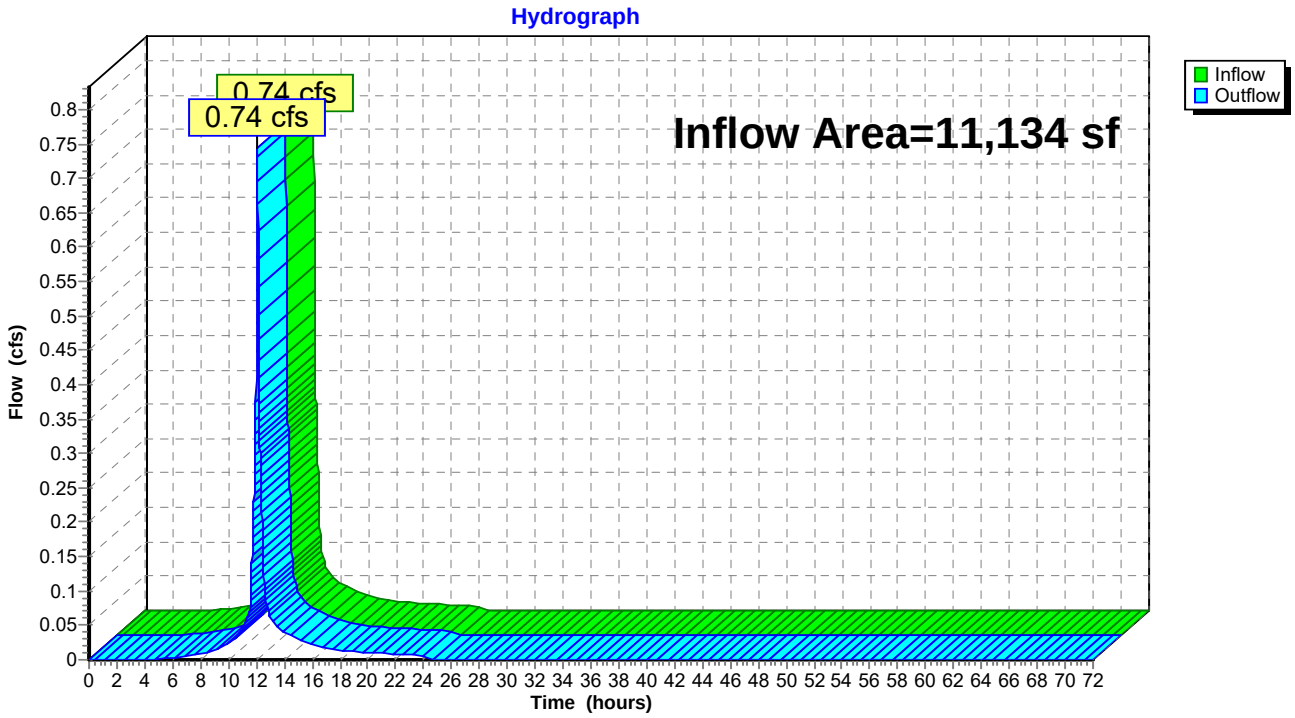
Summary for Reach SP1: Study Point 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 11,134 sf, 92.37% Impervious, Inflow Depth = 2.47" for 2-Year event
Inflow = 0.74 cfs @ 12.07 hrs, Volume= 2,296 cf
Outflow = 0.74 cfs @ 12.07 hrs, Volume= 2,296 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3

Reach SP1: Study Point 1



Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P-1: Subcat P-1 Runoff Area=11,134 sf 92.37% Impervious Runoff Depth=4.10"
Tc=5.0 min CN=93 Runoff=1.20 cfs 3,804 cf

Reach SP1: Study Point 1 Inflow=1.20 cfs 3,804 cf
Outflow=1.20 cfs 3,804 cf

Total Runoff Area = 11,134 sf Runoff Volume = 3,804 cf Average Runoff Depth = 4.10"
7.63% Pervious = 850 sf 92.37% Impervious = 10,284 sf

Summary for Subcatchment P-1: Subcat P-1

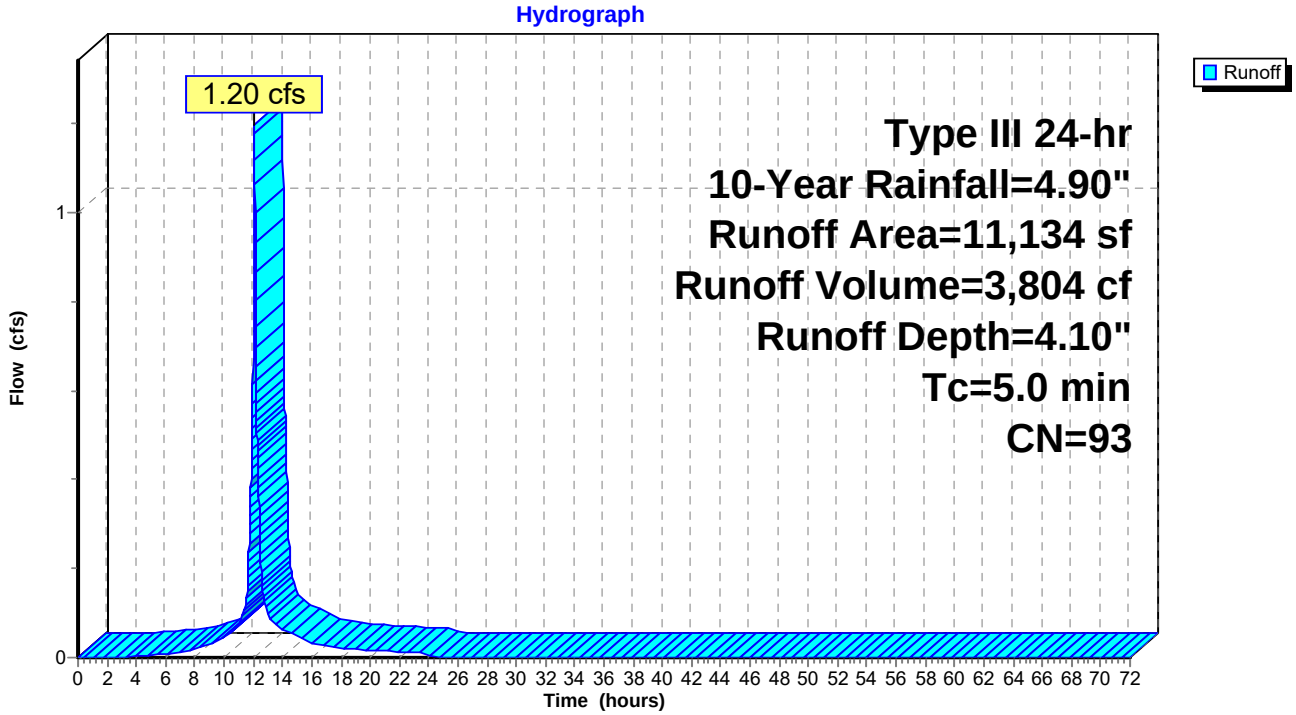
Runoff = 1.20 cfs @ 12.07 hrs, Volume= 3,804 cf, Depth= 4.10"
Routed to Reach SP1 : Study Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=4.90"

Area (sf)	CN	Description
850	39	>75% Grass cover, Good, HSG A
8,586	98	Roofs, HSG A
1,698	98	Paved parking, HSG A
11,134	93	Weighted Average
850		7.63% Pervious Area
10,284		92.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, Assumed**

Subcatchment P-1: Subcat P-1



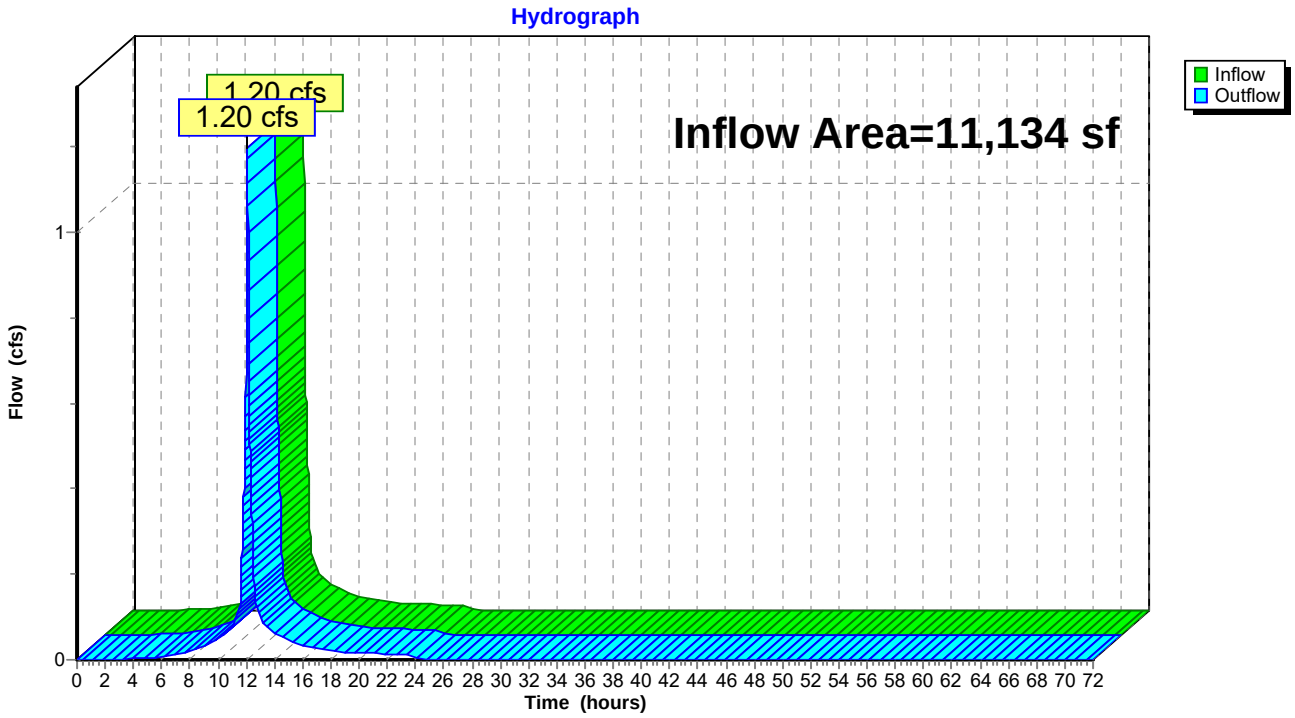
Summary for Reach SP1: Study Point 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 11,134 sf, 92.37% Impervious, Inflow Depth = 4.10" for 10-Year event
Inflow = 1.20 cfs @ 12.07 hrs, Volume= 3,804 cf
Outflow = 1.20 cfs @ 12.07 hrs, Volume= 3,804 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3

Reach SP1: Study Point 1



Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P-1: Subcat P-1 Runoff Area=11,134 sf 92.37% Impervious Runoff Depth=8.05"
Tc=5.0 min CN=93 Runoff=2.26 cfs 7,466 cf

Reach SP1: Study Point 1 Inflow=2.26 cfs 7,466 cf
Outflow=2.26 cfs 7,466 cf

Total Runoff Area = 11,134 sf Runoff Volume = 7,466 cf Average Runoff Depth = 8.05"
7.63% Pervious = 850 sf 92.37% Impervious = 10,284 sf

Summary for Subcatchment P-1: Subcat P-1

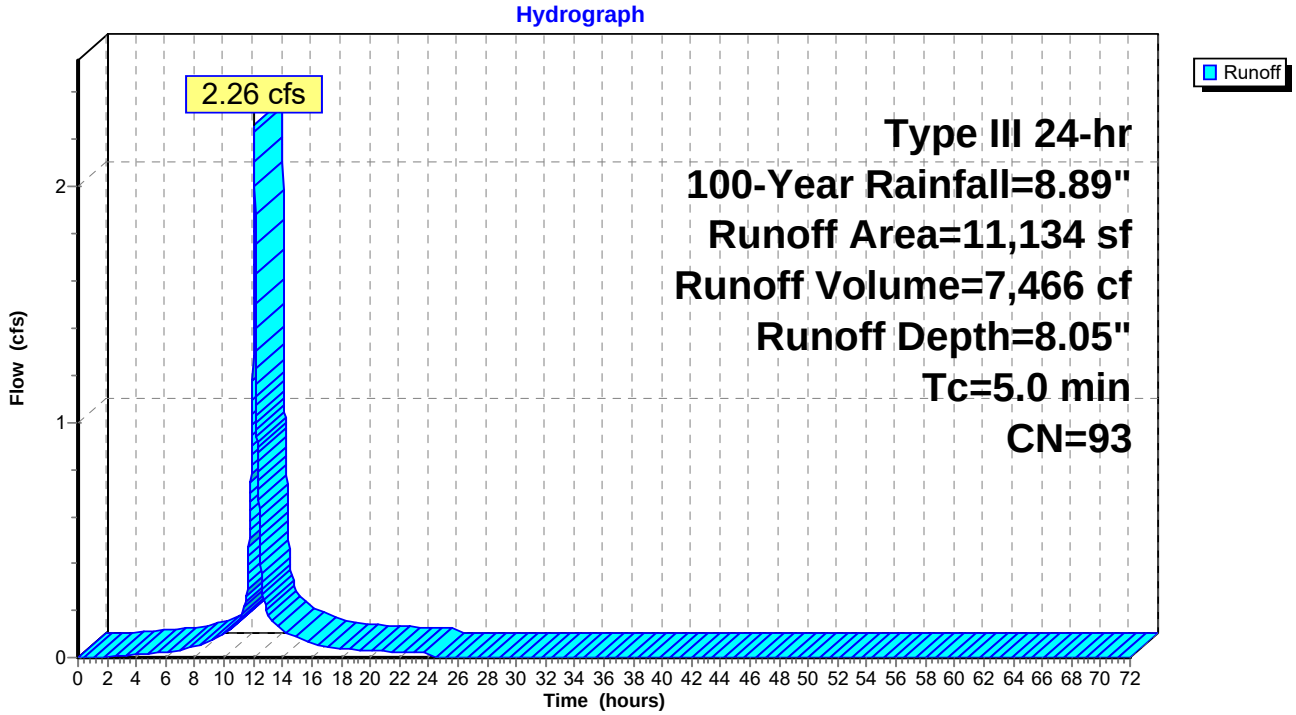
Runoff = 2.26 cfs @ 12.07 hrs, Volume= 7,466 cf, Depth= 8.05"
Routed to Reach SP1 : Study Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.89"

Area (sf)	CN	Description
850	39	>75% Grass cover, Good, HSG A
8,586	98	Roofs, HSG A
1,698	98	Paved parking, HSG A
11,134	93	Weighted Average
850		7.63% Pervious Area
10,284		92.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, Assumed**

Subcatchment P-1: Subcat P-1



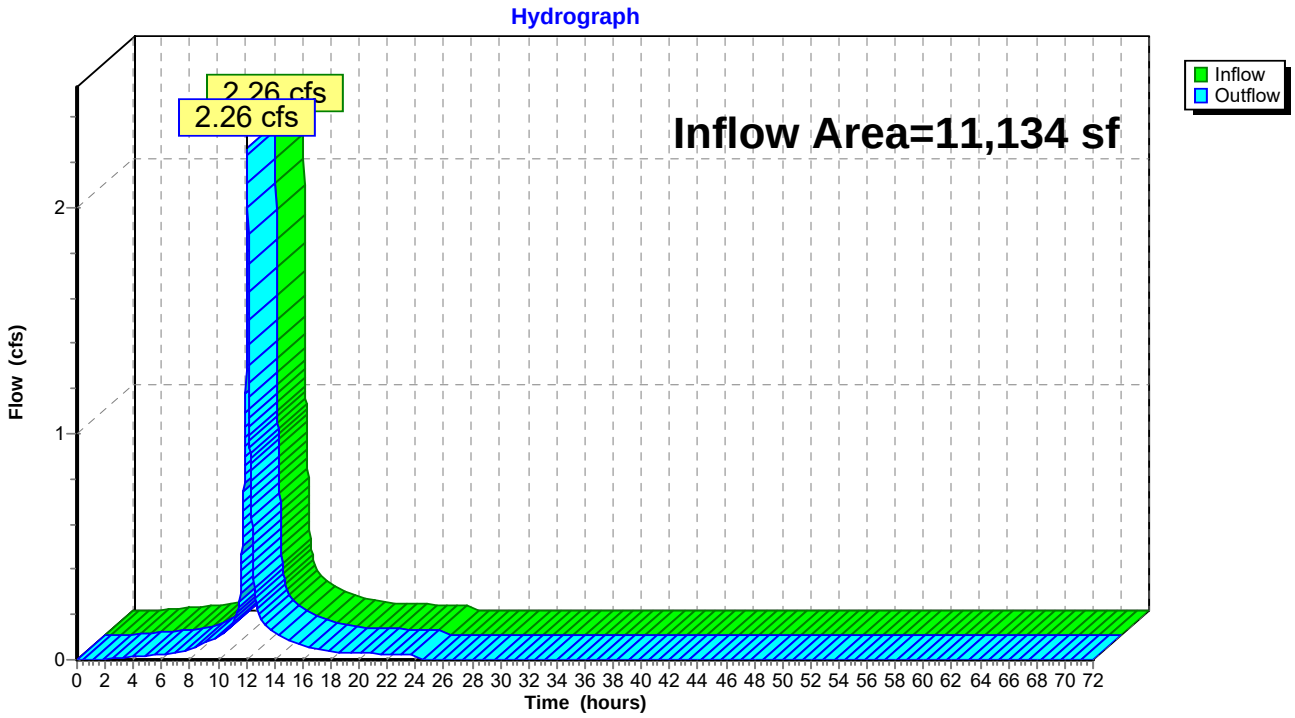
Summary for Reach SP1: Study Point 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 11,134 sf, 92.37% Impervious, Inflow Depth = 8.05" for 100-Year event
Inflow = 2.26 cfs @ 12.07 hrs, Volume= 7,466 cf
Outflow = 2.26 cfs @ 12.07 hrs, Volume= 7,466 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3

Reach SP1: Study Point 1



Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Yes
State	Massachusetts
Location	
Longitude	71.142 degrees West
Latitude	42.405 degrees North
Elevation	0 feet
Date/Time	Fri, 28 Aug 2020 14:10:00 -0400

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.43	0.53	0.70	0.87	1.10	**1yr**	0.75	1.04	1.28	1.63	2.09	2.69	2.94	**1yr**	2.38	2.83	3.29	3.98	4.65	**1yr**
2yr	0.35	0.54	0.67	0.88	1.11	1.40	**2yr**	0.96	1.28	1.62	2.04	2.57	3.23	3.59	**2yr**	2.86	3.45	3.95	4.70	5.35	**2yr**
5yr	0.42	0.65	0.81	1.09	1.39	1.77	**5yr**	1.20	1.61	2.06	2.60	3.26	4.09	4.56	**5yr**	3.62	4.38	5.00	5.97	6.69	**5yr**
10yr	0.47	0.74	0.93	1.27	1.65	2.12	**10yr**	1.42	1.91	2.47	3.12	3.92	4.90	5.47	**10yr**	4.33	5.26	5.99	7.15	7.92	**10yr**
25yr	0.56	0.89	1.13	1.56	2.06	2.67	**25yr**	1.78	2.40	3.13	3.96	4.98	6.20	6.96	**25yr**	5.49	6.69	7.59	9.10	9.91	**25yr**
50yr	0.63	1.01	1.30	1.82	2.45	3.21	**50yr**	2.12	2.86	3.77	4.78	5.98	7.43	8.36	**50yr**	6.57	8.03	9.08	10.92	11.75	**50yr**
100yr	0.73	1.18	1.52	2.14	2.92	3.84	**100yr**	2.52	3.40	4.52	5.73	7.17	8.89	10.04	**100yr**	7.87	9.65	10.88	13.10	13.94	**100yr**
200yr	0.83	1.36	1.76	2.52	3.47	4.60	**200yr**	2.99	4.05	5.43	6.89	8.61	10.65	12.07	**200yr**	9.43	11.60	13.03	15.73	16.54	**200yr**
500yr	1.01	1.65	2.16	3.13	4.37	5.83	**500yr**	3.77	5.11	6.90	8.77	10.97	13.54	15.40	**500yr**	11.98	14.81	16.55	20.05	20.75	**500yr**

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.25	0.38	0.46	0.62	0.76	0.85	**1yr**	0.66	0.83	1.15	1.44	1.78	2.44	2.50	**1yr**	2.16	2.41	2.93	3.53	4.05	**1yr**
2yr	0.33	0.51	0.63	0.85	1.05	1.26	**2yr**	0.91	1.23	1.45	1.91	2.48	3.13	3.47	**2yr**	2.77	3.33	3.82	4.53	5.18	**2yr**
5yr	0.39	0.60	0.75	1.02	1.30	1.51	**5yr**	1.12	1.47	1.73	2.24	2.89	3.77	4.18	**5yr**	3.34	4.02	4.59	5.47	6.17	**5yr**
10yr	0.44	0.67	0.83	1.16	1.50	1.73	**10yr**	1.29	1.69	1.95	2.53	3.24	4.35	4.83	**10yr**	3.85	4.65	5.27	6.29	7.01	**10yr**

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
25yr	0.50	0.77	0.95	1.36	1.79	2.05	**25yr**	1.54	2.00	2.31	2.96	3.78	5.23	5.82	**25yr**	4.63	5.60	6.31	7.52	8.29	**25yr**
50yr	0.56	0.85	1.06	1.52	2.05	2.35	**50yr**	1.77	2.30	2.61	3.34	4.24	5.99	6.70	**50yr**	5.30	6.44	7.22	8.60	9.39	**50yr**
100yr	0.63	0.95	1.18	1.71	2.35	2.68	**100yr**	2.03	2.62	2.96	3.62	4.77	6.89	7.70	**100yr**	6.10	7.41	8.27	9.79	10.65	**100yr**
200yr	0.70	1.06	1.34	1.94	2.71	3.06	**200yr**	2.34	2.99	3.36	4.05	5.37	7.91	8.86	**200yr**	7.00	8.52	9.46	11.12	12.03	**200yr**
500yr	0.82	1.23	1.58	2.29	3.26	3.65	**500yr**	2.81	3.57	3.97	4.70	6.29	9.50	10.64	**500yr**	8.41	10.23	11.30	13.12	14.12	**500yr**

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.31	0.48	0.58	0.79	0.97	1.13	**1yr**	0.83	1.11	1.32	1.77	2.25	2.86	3.17	**1yr**	2.53	3.05	3.51	4.29	5.03	**1yr**
2yr	0.36	0.56	0.69	0.94	1.15	1.36	**2yr**	1.00	1.33	1.57	2.08	2.68	3.35	3.74	**2yr**	2.97	3.59	4.11	4.89	5.55	**2yr**
5yr	0.45	0.70	0.86	1.19	1.51	1.79	**5yr**	1.30	1.75	2.05	2.66	3.39	4.44	5.00	**5yr**	3.93	4.81	5.43	6.48	7.21	**5yr**
10yr	0.55	0.84	1.05	1.46	1.89	2.20	**10yr**	1.63	2.15	2.55	3.22	4.07	5.51	6.25	**10yr**	4.88	6.01	6.72	8.04	8.83	**10yr**
25yr	0.71	1.08	1.35	1.92	2.53	2.90	**25yr**	2.19	2.83	3.39	4.16	5.17	7.32	8.42	**25yr**	6.48	8.09	8.92	10.74	11.56	**25yr**
50yr	0.86	1.31	1.64	2.35	3.17	3.59	**50yr**	2.73	3.51	4.21	5.05	6.22	9.08	10.54	**50yr**	8.04	10.14	11.04	13.40	14.18	**50yr**
100yr	1.06	1.60	2.00	2.89	3.96	4.42	**100yr**	3.42	4.32	5.22	6.37	7.47	11.28	13.22	**100yr**	9.98	12.71	13.68	16.75	17.43	**100yr**
200yr	1.29	1.94	2.45	3.55	4.95	5.46	**200yr**	4.27	5.34	6.49	7.78	8.96	14.02	16.60	**200yr**	12.41	15.96	16.97	20.95	21.46	**200yr**
500yr	1.68	2.50	3.21	4.67	6.63	7.20	**500yr**	5.72	7.04	8.66	10.14	11.41	18.71	22.44	**500yr**	16.56	21.58	22.57	28.20	28.29	**500yr**

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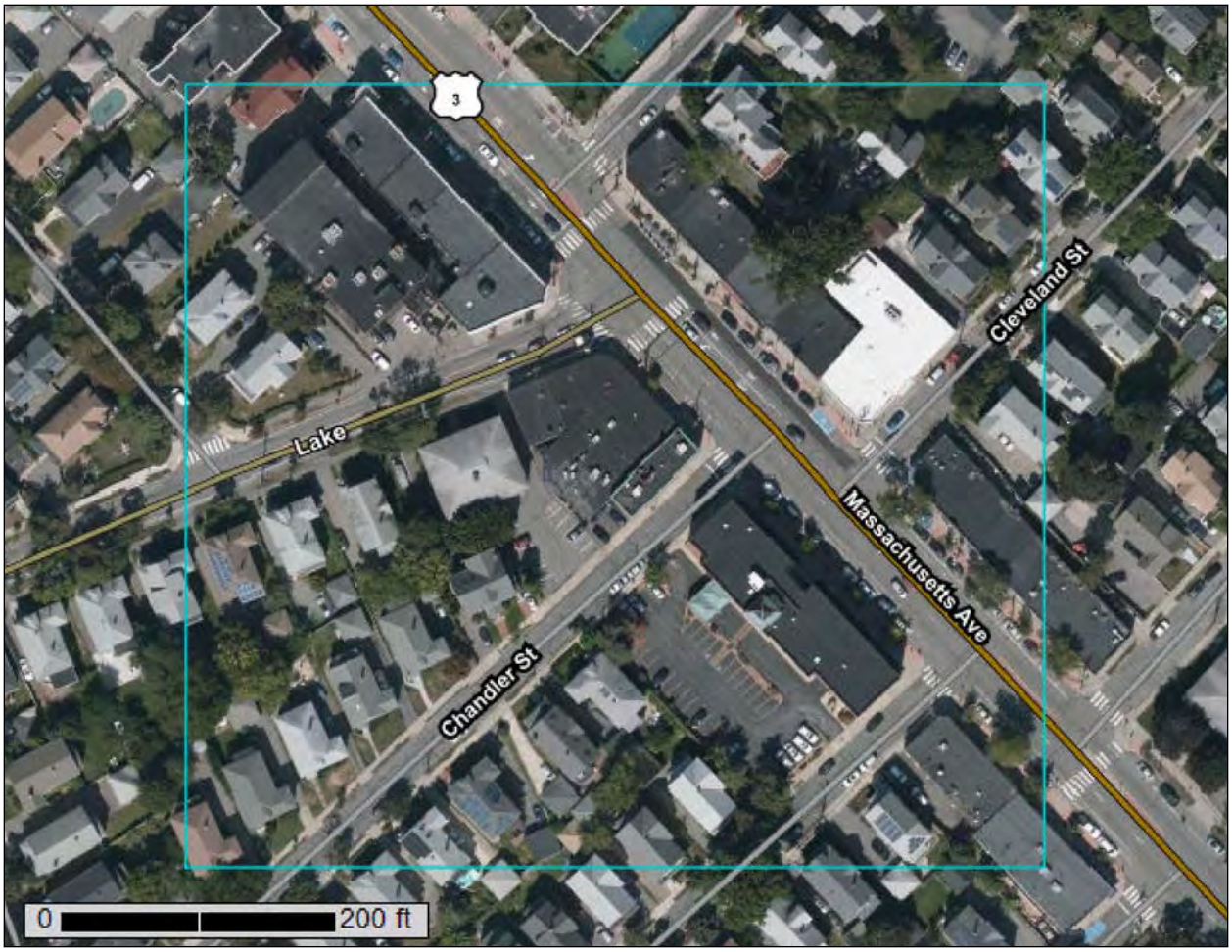
United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Middlesex County, Massachusetts



August 28, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Middlesex County, Massachusetts.....13
602—Urban land.....13
626B—Merrimac-Urban land complex, 0 to 8 percent slopes.....13
Soil Information for All Uses.....16
Soil Properties and Qualities.....16
Soil Physical Properties.....16
Saturated Hydraulic Conductivity (Ksat).....16
Soil Qualities and Features.....19
Hydrologic Soil Group.....19
References.....24

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,480 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Middlesex County, Massachusetts
Survey Area Data: Version 20, Jun 9, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2019—Oct 5, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
602	Urban land	6.6	79.8%
626B	Merrimac-Urban land complex, 0 to 8 percent slopes	1.7	20.2%
Totals for Area of Interest		**8.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Middlesex County, Massachusetts

602—Urban land

Map Unit Setting

National map unit symbol: 9950
Elevation: 0 to 3,000 feet
Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Excavated and filled land

Minor Components

Rock outcrop

Percent of map unit: 5 percent
Landform: Ledges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Head slope
Down-slope shape: Concave
Across-slope shape: Concave

Udorthents, wet substratum

Percent of map unit: 5 percent
Hydric soil rating: No

Udorthents, loamy

Percent of map unit: 5 percent
Hydric soil rating: No

626B—Merrimac-Urban land complex, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2tyr9
Elevation: 0 to 820 feet
Mean annual precipitation: 36 to 71 inches

Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 250 days
Farmland classification: Not prime farmland

Map Unit Composition

Merrimac and similar soils: 45 percent
Urban land: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Merrimac

Setting

Landform: Eskers, moraines, outwash terraces, outwash plains, kames
Landform position (two-dimensional): Backslope, footslope, summit, shoulder
Landform position (three-dimensional): Side slope, crest, riser, tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy glaciofluvial deposits derived from granite, schist, and gneiss over sandy and gravelly glaciofluvial deposits derived from granite, schist, and gneiss

Typical profile

Ap - 0 to 10 inches: fine sandy loam
Bw1 - 10 to 22 inches: fine sandy loam
Bw2 - 22 to 26 inches: stratified gravel to gravelly loamy sand
2C - 26 to 65 inches: stratified gravel to very gravelly sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline (0.0 to 1.4 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Description of Urban Land

Typical profile

M - 0 to 10 inches: cemented material

Properties and qualities

Slope: 0 to 8 percent

Depth to restrictive feature: 0 inches to manufactured layer
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Available water capacity: Very low (about 0.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: Unranked

Minor Components

Windsor

Percent of map unit: 5 percent
Landform: Dunes, outwash terraces, deltas, outwash plains
Landform position (three-dimensional): Tread, riser
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Hydric soil rating: No

Sudbury

Percent of map unit: 5 percent
Landform: Outwash plains, terraces, deltas
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Hinckley

Percent of map unit: 5 percent
Landform: Eskers, kames, deltas, outwash plains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, side slope, crest, head slope, rise
Down-slope shape: Convex
Across-slope shape: Convex, linear
Hydric soil rating: No

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Physical Properties

Soil Physical Properties are measured or inferred from direct observations in the field or laboratory. Examples of soil physical properties include percent clay, organic matter, saturated hydraulic conductivity, available water capacity, and bulk density.

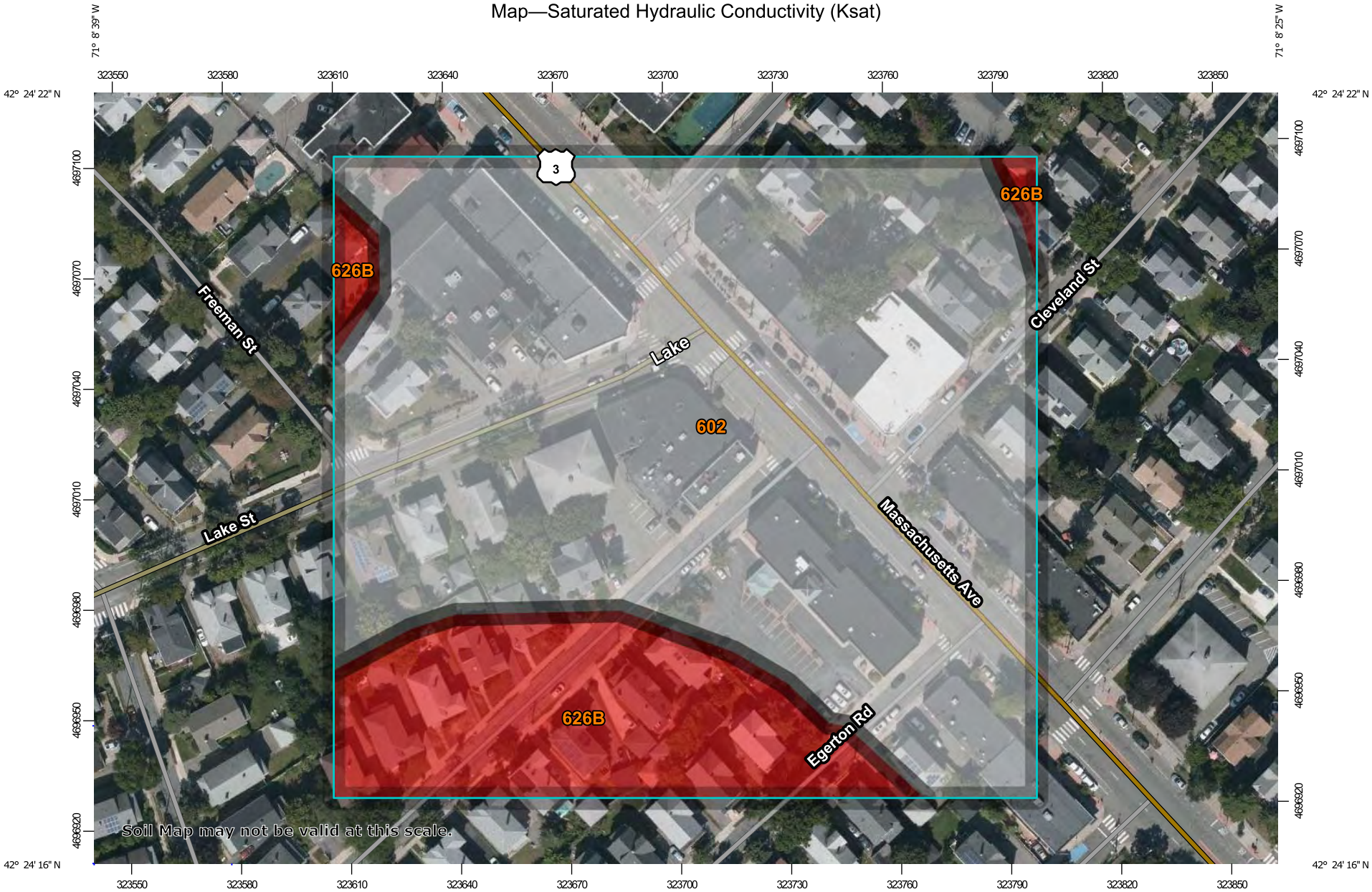
Saturated Hydraulic Conductivity (Ksat)

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits.

Custom Soil Resource Report
Map—Saturated Hydraulic Conductivity (Ksat)



Map Scale: 1:1,480 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

= 100.0000

Not rated or not available

Soil Rating Lines

= 100.0000

Not rated or not available

Soil Rating Points

= 100.0000

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Middlesex County, Massachusetts
Survey Area Data: Version 20, Jun 9, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2019—Oct 5, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Saturated Hydraulic Conductivity (Ksat)

Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
602	Urban land		6.6	79.8%
626B	Merrimac-Urban land complex, 0 to 8 percent slopes	100.0000	1.7	20.2%
Totals for Area of Interest			**8.3**	**100.0%**

Rating Options—Saturated Hydraulic Conductivity (Ksat)

Units of Measure: micrometers per second

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Fastest

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 12

Bottom Depth: 120

Units of Measure: Inches

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Hydrologic Soil Group

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

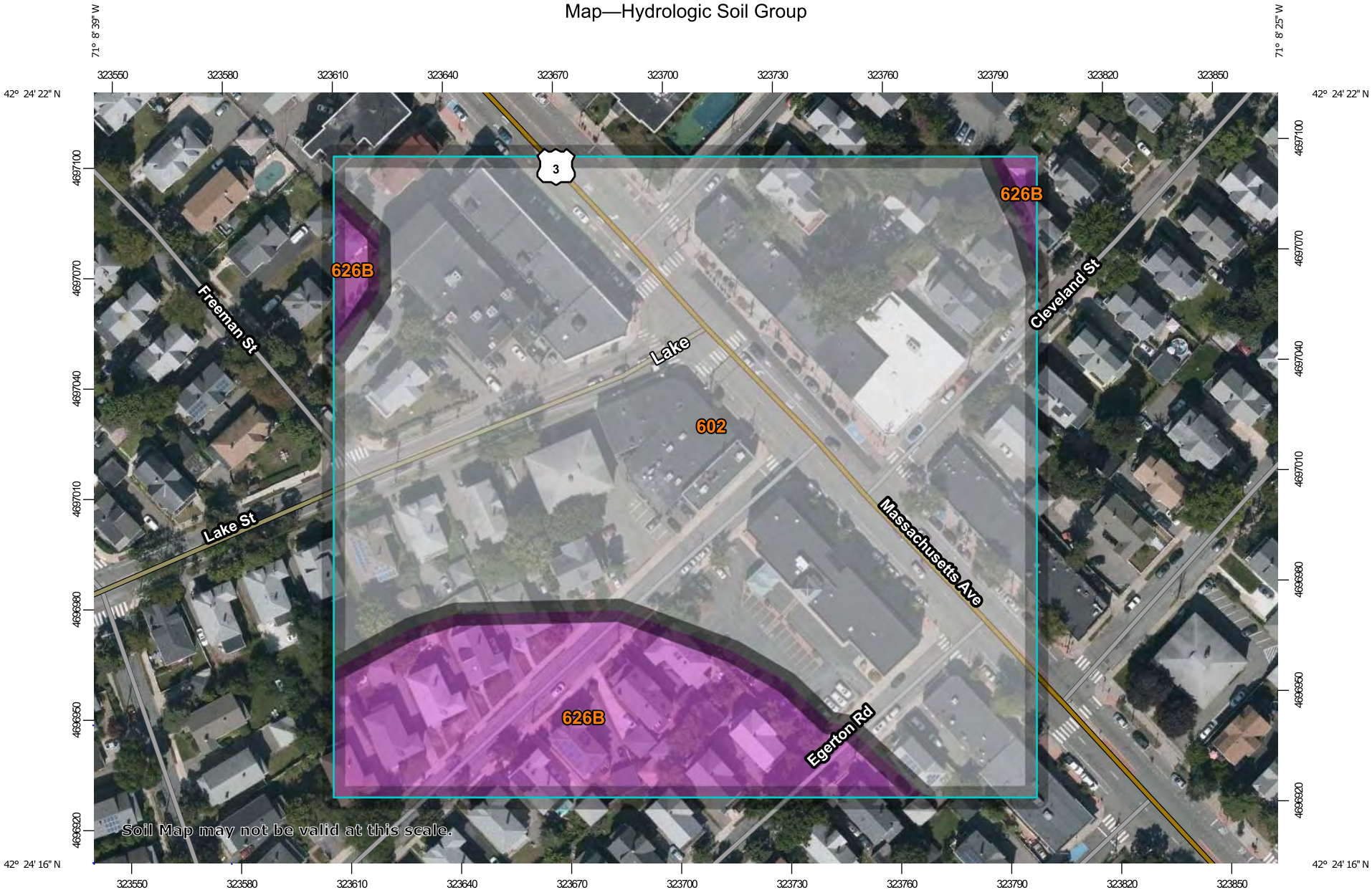
Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Map—Hydrologic Soil Group



Map Scale: 1:1,480 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

Aerial Photography

MAP INFORMATION

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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Soil Survey Area: Middlesex County, Massachusetts
Survey Area Data: Version 20, Jun 9, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

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The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
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626B	Merrimac-Urban land complex, 0 to 8 percent slopes	A	1.7	20.2%
Totals for Area of Interest			**8.3**	**100.0%**

Rating Options—Hydrologic Soil Group

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

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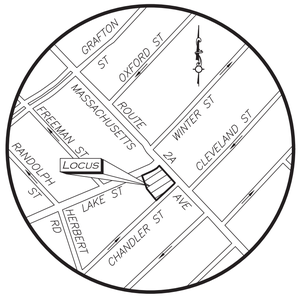


LOCUS MAP
NOT TO SCALE

SITE DEVELOPMENT PLAN SET

190 & 192-200 MASSACHUSETTS AVE

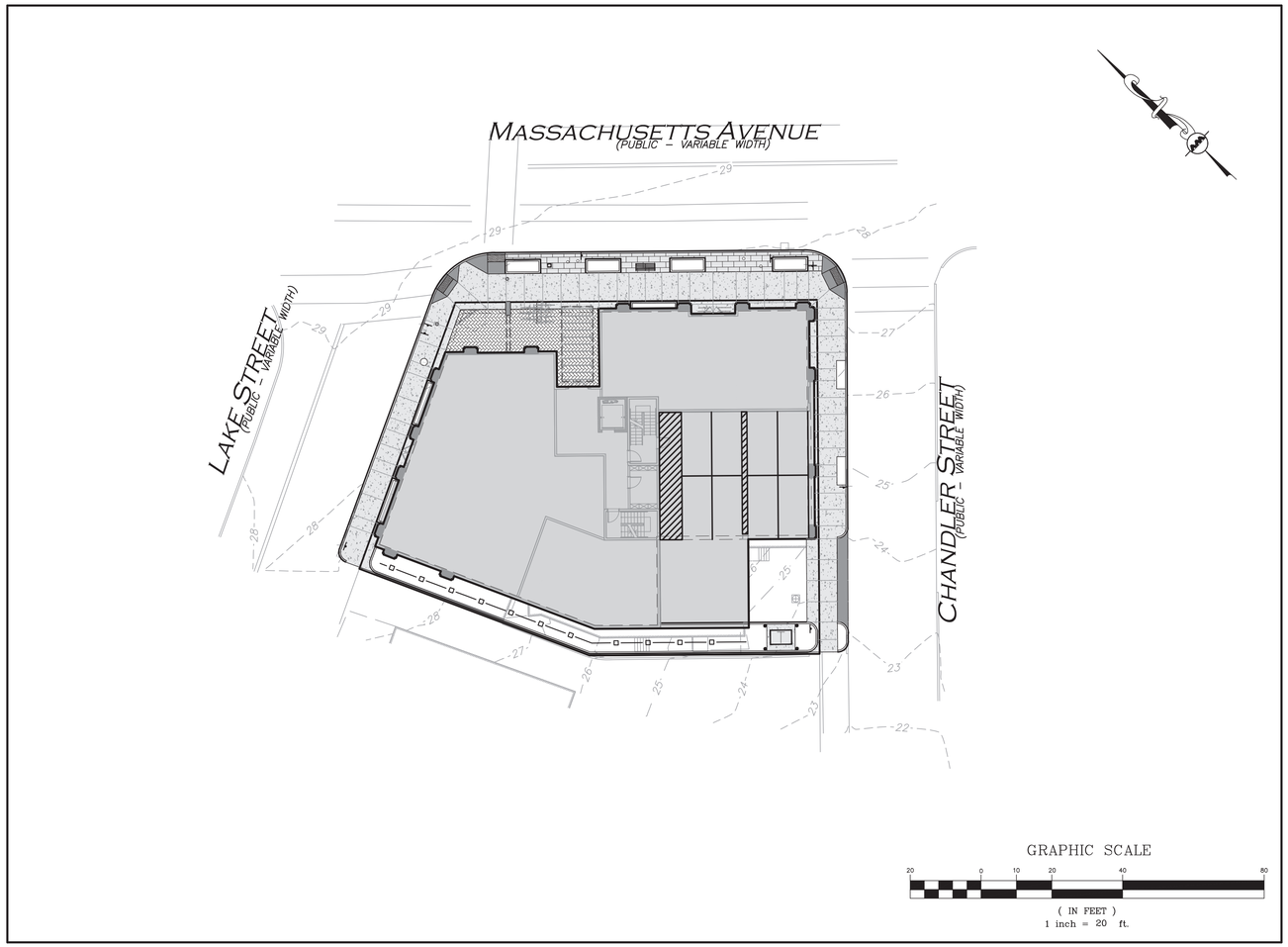
ARLINGTON, MA 02476

MAP 6, BLOCK 3, LOTS 1A & 1B

APPLICANT:
192-200 MASSACHUSETTS AVE, LLC
452 MASSACHUSETTS AVE, STE 1
ARLINGTON, MA 02474
781.654.6306

ARCHITECT:
DAVID BARSKY-ARCHITECT AIA
320 NEVADA STREET, SUITE 301
NEWTON, MA 02460
617.448.5872

CIVIL ENGINEER, LANDSCAPE ARCHITECT & LAND SURVEYOR:
ALLEN & MAJOR ASSOCIATES, INC.
100 COMMERCE WAY, SUITE 5
WOBURN, MA 01801
781.985.6889



LIST OF DRAWINGS

DRAWING TITLE	SHEET	ISSUED	REVISED
EXISTING CONDITIONS	V-101	10-23-20	-
SITE PREPARATION PLAN	C-101	12-19-22	-
LAYOUT & MATERIALS PLAN	C-102	12-19-22	-
GRADING & DRAINAGE PLAN	C-103	12-19-22	-
UTILITIES PLAN	C-104	12-19-22	-
DETAILS	C-501	12-19-22	-
DETAILS	C-502	12-19-22	-
DETAILS	C-503	12-19-22	-
LANDSCAPE PLAN	L-101	12-19-22	-
LANDSCAPE DETAILS	L-501	12-19-22	-

COMMONWEALTH OF MASSACHUSETTS
BRIAN D. JONES
CIVIL
No. 49212
REGISTERED PROFESSIONAL ENGINEER

12.19.22

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

PREPARED BY:

ALLEN & MAJOR
ASSOCIATES, INC.
civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBURN MA 01801
TEL: (781) 935-6889
FAX: (781) 935-2896

WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

REVISED FOR ARB REVIEW: 12-19-2022

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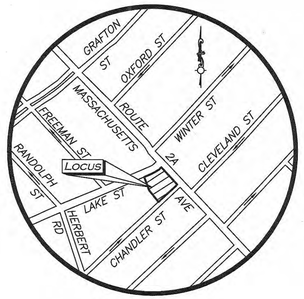
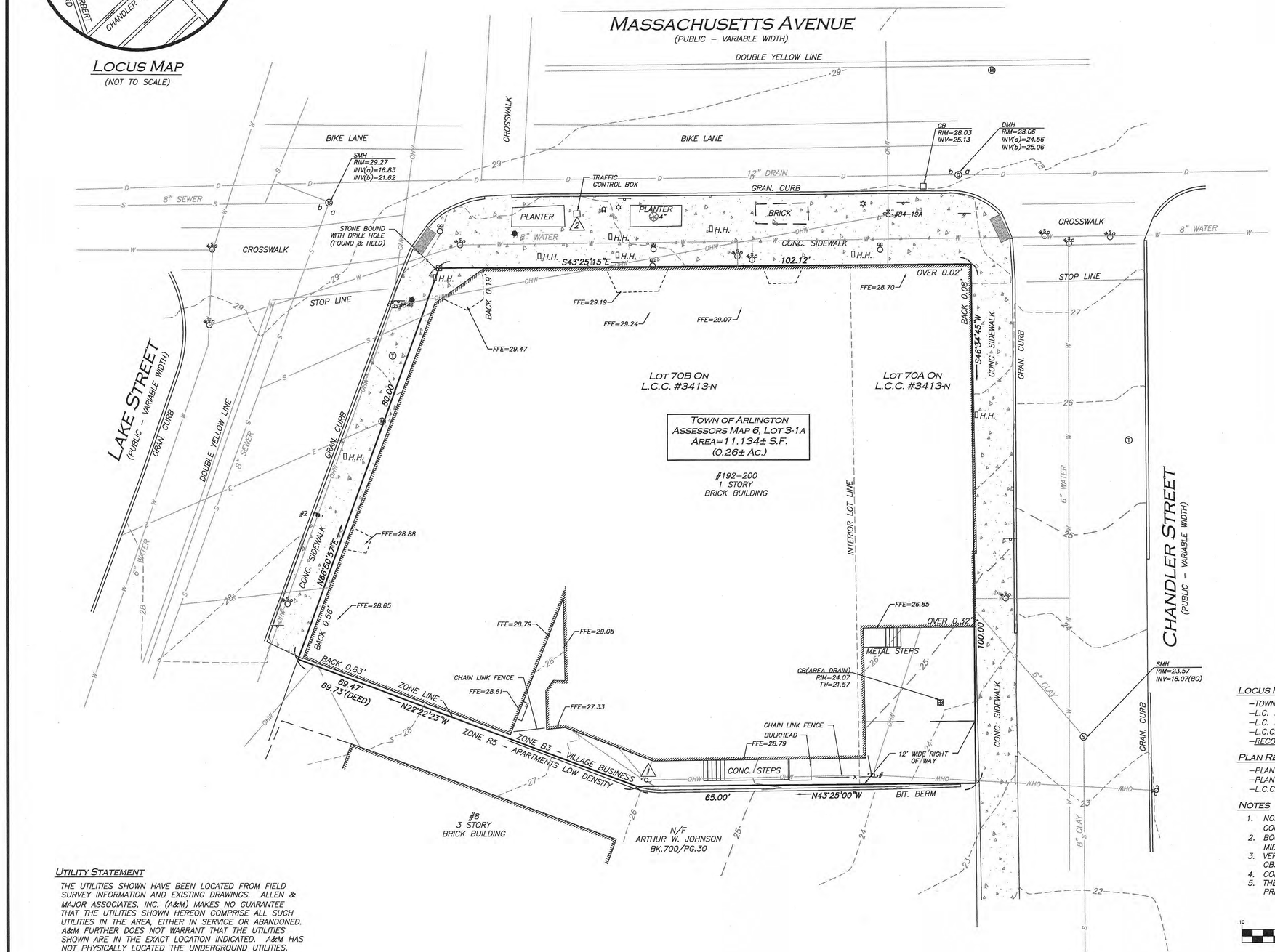


LOCUS MAP
(NOT TO SCALE)

BENCHMARK SUMMARY

TBM #	DESCRIPTION	ELEV.
1	COTTON GIN SPINDLE SET IN UTILITY POLE	26.96
2	CHISEL SQUARE ON CONCRETE BASE	29.24



LEGEND

STONE BOUND (SB)	
DRAIN MANHOLE (DMH)	D
SEWER MANHOLE (SMH)	S
MISC. MANHOLE (MH)	M
TELEPHONE MANHOLE (TMH)	T
ROUND CATCH BASIN (RCB)	
UTILITY POLE	
UTILITY POLE W/LIGHT	
UTILITY POLE W/RISER	
WATER GATE	
GAS GATE	
HAND HOLE	H.H.
TRAFFIC SIGNAL	
LIGHT	
TREE	
SIGN	
CONCRETE	
BUILDING	
BUILDING OVERHANG	
PROPERTY LINE	
CURB	
CHAIN LINK FENCE	x
WATER LINE	W
SEWER LINE	S
DRAIN LINE	D
GAS LINE	G
ELECTRIC LINE	E
TELEPHONE LINE	T
OVERHEAD WIRES	OHW
FINISHED FLOOR ELEVATION	FFE
BITUMINOUS	BIT.
CONCRETE	CONC.
GRANITE	GRAN.
BOTTOM CENTER	(BC)
REINFORCED CONCRETE PIPE	RCP
POLYVINYL CHLORIDE PIPE	PVC
NOW OR FORMERLY	N/F
BOOK	BK.
PAGE	PG.
LAND COURT	L.C.
LAND COURT CASE	L.C.C.

LOCUS REFERENCES
- –TOWN OF ARLINGTON ASSESSORS MAP 6, LOT 3–1A
- –L.C. BOOK 1362, PAGE 16
- –L.C. BOOK 1376, PAGE 27
- –L.C.C. NO. 3413N
- –RECORD OWNER: FRAMINA LLC.

PLAN REFERENCES
- –PLAN 542 OF 1986
- –PLAN 320 OF 2012
- –L.C.C. NO. 3413

NOTES
1. NORTH ARROW IS BASED ON MASSACHUSETTS GRID COORDINATE SYSTEM (MAINLAND ZONE) (NAD 83).
2. BOOK/PAGE AND PLAN REFERENCES ARE TAKEN FROM MIDDLESEX (SOUTH) REGISTRY OF DEEDS IN CAMBRIDGE, MA.
3. VERTICAL DATUM IS NAVD 88 ESTABLISHED USING RTK GPS OBSERVATION.
4. CONTOUR INTERVAL IS ONE FOOT (1').
5. THERE ARE NO STRIPED PARKING STALLS ON THE SUBJECT PREMISES.

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

UTILITY STATEMENT
THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. ALLEN & MAJOR ASSOCIATES, INC. (A&M) MAKES NO GUARANTEE THAT THE UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. A&M FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. A&M HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

N:\PROJECTS\2729-02\SURVEY\DRAWINGS\CURRENT\S-2729-02-EC.DWG

WE HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED ON AUGUST 4, 2020.

Oct 23, 2020
PROFESSIONAL LAND SURVEYOR FOR ALLEN & MAJOR ASSOCIATES, INC.

COMMONWEALTH OF MASSACHUSETTS
NORMAN I. LIPSITZ
NO. 28446
PROFESSIONAL LAND SURVEYOR
10/23/20

REV	DATE	DESCRIPTION

APPLICANT\OWNER:
192-200 MASSACHUSETTS AVE LLC
455 MASSACHUSETTS AVENUE
SUITE 1
ARLINGTON, MA 02474

PROJECT:
190 & 192-200
MASSACHUSETTS AVENUE
ARLINGTON, MA

PROJECT NO.	2729-02	DATE:	10/22/20
SCALE:	1" = 10'	DWG. NAME:	S-2729-02-EC
DRAFTED BY:	AJR	CHECKED BY:	NIL

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
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WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

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DRAWING TITLE: EXISTING CONDITIONS

SHEET No. V-101

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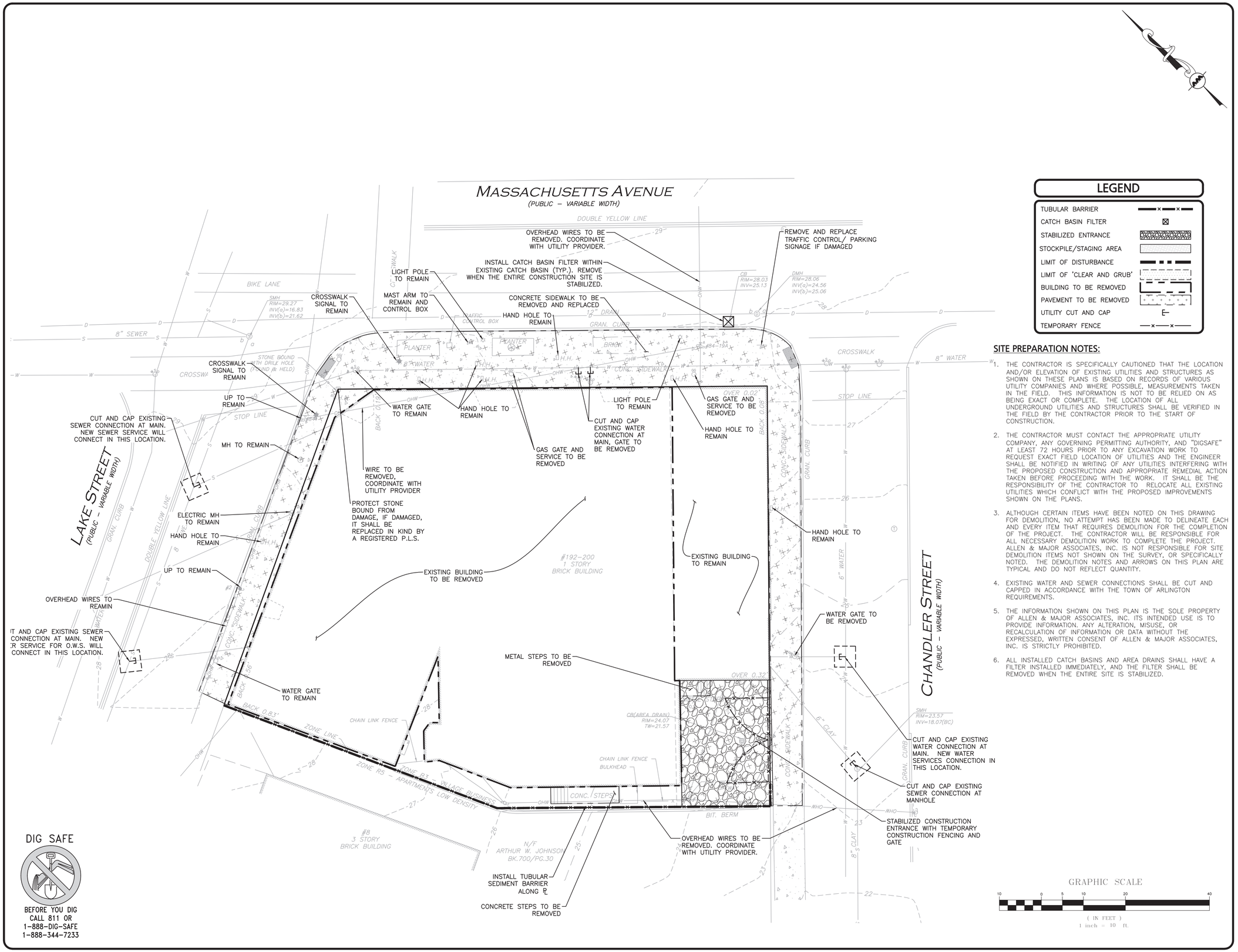

LEGEND

TUBULAR BARRIER	
CATCH BASIN FILTER	
STABILIZED ENTRANCE	
STOCKPILE/STAGING AREA	
LIMIT OF DISTURBANCE	
LIMIT OF 'CLEAR AND GRUB'	
BUILDING TO BE REMOVED	
PAVEMENT TO BE REMOVED	
UTILITY CUT AND CAP	E
TEMPORARY FENCE	

SITE PREPARATION NOTES:

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.

2. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

3. ALTHOUGH CERTAIN ITEMS HAVE BEEN NOTED ON THIS DRAWING FOR DEMOLITION, NO ATTEMPT HAS BEEN MADE TO DELINEATE EACH AND EVERY ITEM THAT REQUIRES DEMOLITION FOR THE COMPLETION OF THE PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL NECESSARY DEMOLITION WORK TO COMPLETE THE PROJECT. ALLEN & MAJOR ASSOCIATES, INC. IS NOT RESPONSIBLE FOR SITE DEMOLITION ITEMS NOT SHOWN ON THE SURVEY, OR SPECIFICALLY NOTED. THE DEMOLITION NOTES AND ARROWS ON THIS PLAN ARE TYPICAL AND DO NOT REFLECT QUANTITY.

4. EXISTING WATER AND SEWER CONNECTIONS SHALL BE CUT AND CAPPED IN ACCORDANCE WITH THE TOWN OF ARLINGTON REQUIREMENTS.

5. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.

6. ALL INSTALLED CATCH BASINS AND AREA DRAINS SHALL HAVE A FILTER INSTALLED IMMEDIATELY, AND THE FILTER SHALL BE REMOVED WHEN THE ENTIRE SITE IS STABILIZED.

COMMONWEALTH OF MASSACHUSETTS
BRIAN D. JONES
CIVIL
No. 49212
REGISTERED PROFESSIONAL ENGINEER

12-19-22

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT\OWNER:

192-200 MASSACHUSETTS AVE, LLC
455 MASSACHUSETTS AVE, STE 1
ARLINGTON, MA 02474

PROJECT:

190 & 192-200
MASSACHUSETTS AVE
ARLINGTON, MA 02476

PROJECT NO.	2729-02	DATE:	12-19-22
SCALE:	1" = 10'	DWG. NAME:	C2729-02
DESIGNED BY:	BDJ	CHECKED BY:	RPC

PREPARED BY:

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environmental consulting ◆ landscape architecture
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DRAWING TITLE: SITE PREPARATION PLAN

SHEET No. C-101

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PARKING SUMMARY TABLE

USE	CALCULATION	MIN. REQUIRED	TOTAL PROPOSED
APARTMENT BUILDING	1 SPACES PER EFFICIENCY UNIT	2.0	2
	1 X 2 = 2.0 REQUIRED		
	1.15 SPACES PER 1 BED UNIT	32.2	20
	28 X 1.15 = 32.2 REQUIRED		
	1.5 SPACES PER 2 BED UNIT	0.0	0
	0 X 2 = 0.0 REQUIRED		
GENERAL RETAIL/RESTAURANT	1 PER 300 SF	N/A	N/A
	2,436 SF (UNDER 3,000 SF PARKING N/A)		
		34.2	22*

ADA SPACES REQUIRED:
(15-25) TOTAL PARKING SPACES PROVIDED, 1 SHALL BE THE MINIMUM ADA PARKING PROVIDED, 1 SPACES BEING VAN ACCESSIBLE.

PROVIDED 1 SPACES, 1 BEING VAN ACCESSIBLE.

PARKING TABLE NOTES:
1. SECTION 6.1.10, C. FOR A MIXED-USE DEVELOPMENT THE FIRST 3,000 SF OF NON-RESIDENTIAL SPACE IS EXEMPT FROM THE PARKING REQUIREMENTS OF THIS SECTION 6.1.
2. SECTION 6.1.11, STANDARD PARKING STALLS SHALL BE 8.5'X18', AND DRIVE AISLE WIDTH SHALL BE 24' FOR TWO-WAY TRAFFIC.

* RELIEF REQUESTED FROM THE ARB FOR THE REQUIRED NUMBER OF PARKING STALLS. ALSO, RELIEF IS REQUESTED FOR THE WIDTH OF THE DRIVE AISLE REDUCED FROM 24' TO 22'.

BICYCLE PARKING SUMMARY TABLE

SHORT TERM BICYCLE PARKING (EXTERIOR)

USE	CALCULATION	MIN. REQUIRED	TOTAL PROPOSED
APARTMENT BUILDING	0.1 PER UNIT	3.0	3
	30 X 0.1 = 3.0 REQUIRED		
RETAIL SERVICE	0.6 PER 1,000 SF	2.8	3
	4.7 X 0.6 = 3.0 REQUIRED		
	TOTAL	5.8	6

LONG TERM BICYCLE PARKING (INTERIOR)

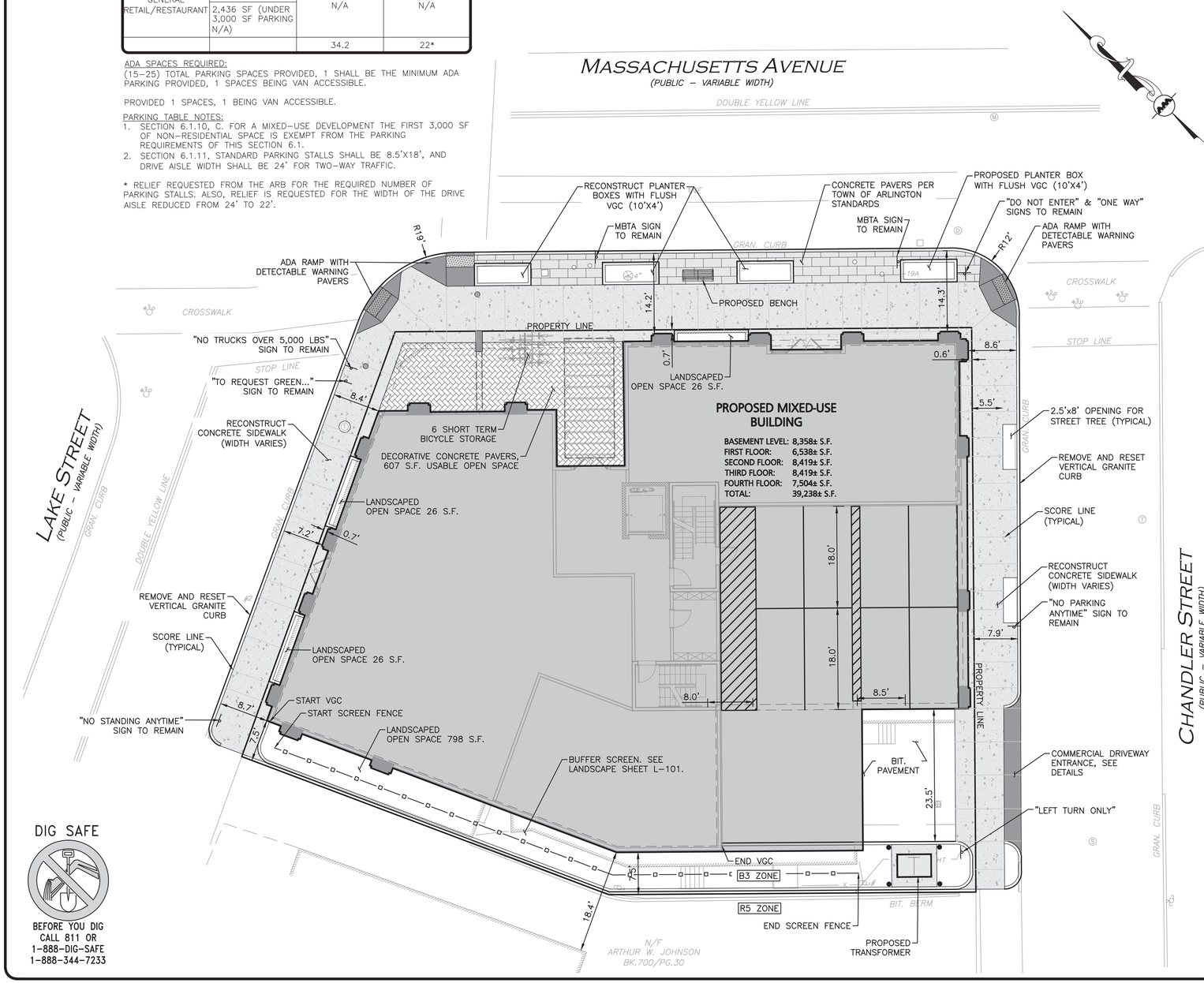
USE	CALCULATION	MIN. REQUIRED	TOTAL PROPOSED
APARTMENT BUILDING	1.5 PER UNIT	45.0	32
	30 X 1.5 = 45.0 REQUIRED		
RETAIL SERVICE	0.1 PER 1,000 SF	0.5	0
	4.7 X 0.1 = 0.5 REQUIRED		
	TOTAL	45.5	32*

BICYCLE PARKING TABLE NOTES:
1. REQUIRED NUMBER OF SPACES ARE FROM BICYCLE PARKING GUIDELINES, APPENDIX A BIKE PARKING BY-LAW.

* REQUIRES WAIVER

LEGEND

PROPERTY LINE
SIGN
BOLLARD
BUILDING
BUILDING INTERIOR WALLS
CURB
PARKING STRIPING
ROADWAY STRIPING
SIDEWALK
ADA ACCESSIBLE RAMP
ADA DET. WARNING SURFACE
CONCRETE PAVERS
SNOW STORAGE
SAW-CUT LINE
PARKING COUNT
VINYL FENCE



ZONING SUMMARY TABLE
B3-VILLAGE BUSINESS (MIXED-USE <=20,000SF)

ITEM	REQUIRED/ ALLOWED	EXISTING	PROPOSED
MINIMUM LOT AREA	N/A	11,134± SF	11,134± SF
MINIMUM LOT AREA PER UNIT	N/A	N/A	371± SF
MINIMUM FRONTAGE	50 FT	102.1± FT MASS AVE	102.1± FT MASS AVE
MINIMUM FRONT YARD SETBACK	0 FT	0 FT	0.6 FT
MINIMUM SIDE YARD SETBACK	0 FT	0.6 FT	7.5 FT
MINIMUM REAR YARD SETBACK	(H+L)/6	NO REAR	NO REAR
SCREENING BUFFER	7.5 FT (3)	0.6 FT	7.5 (3)
LANDSCAPED OPEN SPACE	10% (2)	0.9%	6.3%*
USABLE OPEN SPACE	20% (2)	0%	10.6%*
MAXIMUM HEIGHT	50 FT	20± FT	48± FT
MAXIMUM HEIGHT STORIES	5	1	4(1)
FLOOR AREA RATIO	2.8	0.9	3.5*

ZONING TABLE NOTES:
1. SECTION 5.3.17, FOR BUILDING MORE THAN 3 STORIES IN HEIGHT, AN ADDITIONAL 7.5 FT STEP-BACK SHALL BE PROVIDED BEGINNING AT THE THIRD STORY LEVEL OR 30 FT ABOVE GRADE, WHICHEVER IS LESS. THE UPPER STORY STEP-BACK SHALL BE PROVIDED ALONG ALL BUILDING ELEVATIONS WITH STREET FRONTAGE.
2. SECTION 5.3.21. SUPPLEMENTAL REQUIREMENTS IN THE BUSINESS AND INDUSTRIAL DISTRICTS, D. FOR MIXED USES AND ANY PERMITTED RESIDENTIAL USE NOT SPECIFICALLY IDENTIFIED IN THE TABLES IN SECTION 5.5.2, THE MINIMUM OPEN SPACE REQUIREMENTS (COMPUTED FROM THE RESIDENTIAL FLOOR AREA ONLY) SHALL BE 10% LANDSCAPED AND 20% USABLE IN THE B1, B2, B2A, B3, AND B4 DISTRICTS, AND 15 PERCENT USABLE IN THE B5 DISTRICT.
3. SECTION 5.3.21. SUPPLEMENTAL REQUIREMENTS IN THE BUSINESS AND INDUSTRIAL DISTRICTS, B3 ABUTTING R5 15 FT MINIMUM BUFFER. A SOLID WALL OR WOODEN FENCE MAY BE SUBSTITUTED FOR ONE-HALF THE WIDTH OF THE LANDSCAPED BUFFER.
4. TOTAL RESIDENTIAL (AREA PROVIDED BY ARCHITECT): 13,980 S.F.
5. TOTAL RETAIL AREA (PROVIDED BY ARCHITECT): 4,772 S.F.
6. GROSS FLOOR AREA (PROVIDED BY ARCHITECT): 39,238 S.F.

* RELIEF REQUESTED FROM ARB.

NOTES

1. WRITTEN DIMENSIONS ON THIS PLAN TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN THE EVENT OF A CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS AND/OR SPECIFICATIONS OR CONDITIONS, THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR. ALL SITE ITEMS SHALL BE LAID OUT AND AS BUILT BY A LICENSED LAND SURVEYOR.
2. ALL CURB RADII ARE 3' UNLESS OTHERWISE NOTED.
3. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

COMMONWEALTH OF MASSACHUSETTS
BRIAN D. JONES
CIVIL
No. 49212
REGISTERED PROFESSIONAL ENGINEER
12-19-22

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT\OWNER:
192-200 MASSACHUSETTS AVE, LLC
455 MASSACHUSETTS AVE, STE 1
ARLINGTON, MA 02474

PROJECT:
190 & 192-200
MASSACHUSETTS AVE
ARLINGTON, MA 02476

PROJECT NO.	2729-02	DATE:	12-19-22
SCALE:	1" = 10'	DWG. NAME:	C2729-02
DESIGNED BY:	BDJ	CHECKED BY:	RPC

PREPARED BY:
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civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
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WOBURN MA 01801
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FAX: (781) 935-2896
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

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DRAWING TITLE: LAYOUT & MATERIALS PLAN
SHEET No. C-102

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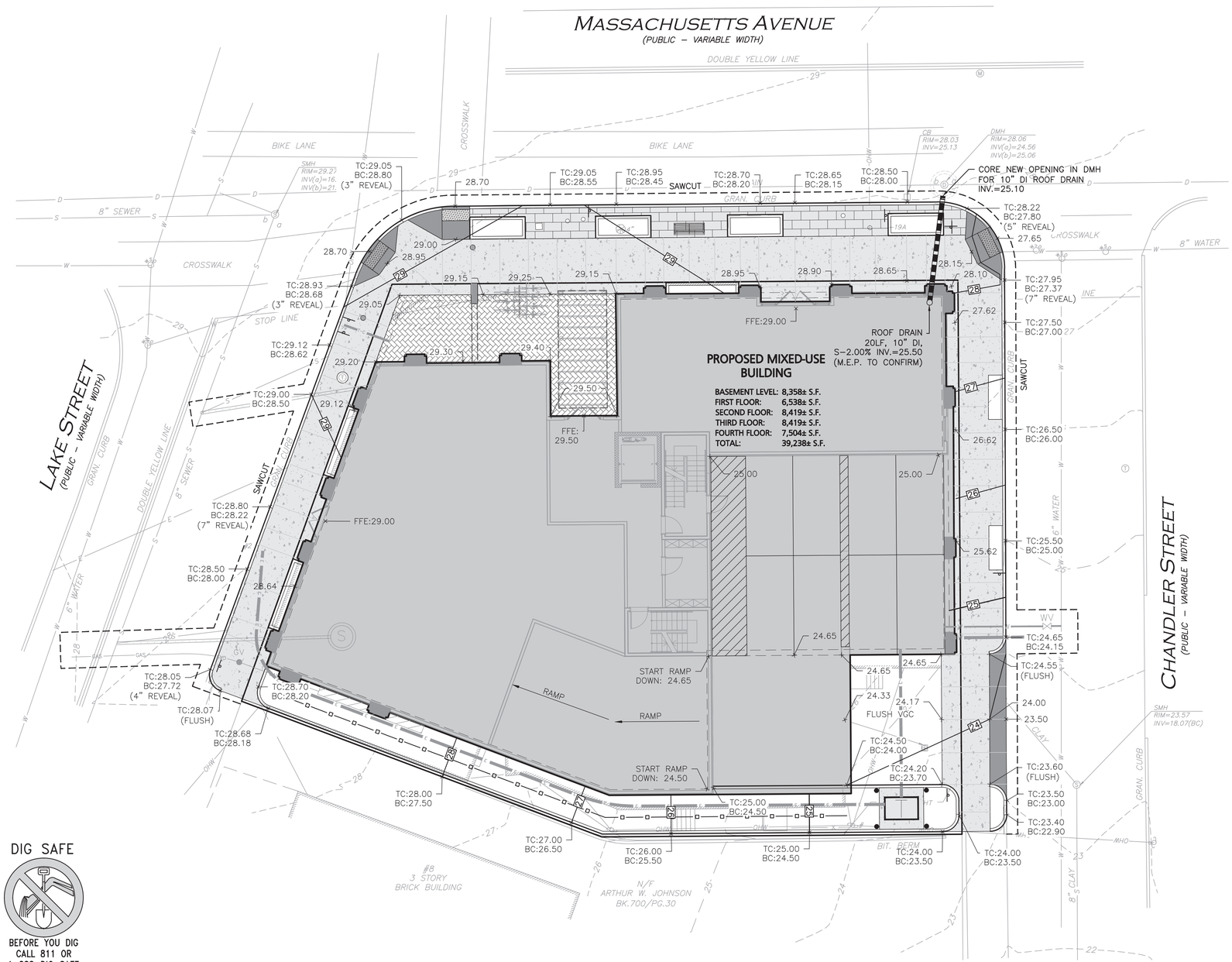

LEGEND

DRAIN MANHOLE	
CATCH BASIN	
DRAIN LINE	
10' CONTOUR	100
2' CONTOUR	102
SPOT GRADE	79.50

PLAN NOTES:

1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR IT'S REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
2. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITY CONNECTIONS SHOULD BE COORDINATED WITH THE MEP PRIOR TO CONSTRUCTION.
3. EXISTING DRAINAGE STRUCTURES TO REMAIN ARE TO BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
4. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
5. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ENSURE A SMOOTH FIT AND CONTINUOUS GRADE.
6. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
7. THE CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT FOR THE FINAL LOCATIONS OF PROPOSED ROOF DRAINS. LOCATIONS ARE SHOWN HEREON FOR COORDINATION PURPOSES ONLY.
8. WRITTEN DIMENSIONS ON THIS PLAN TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN THE EVENT OF A CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS AND/OR SPECIFICATIONS OR CONDITIONS, THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR.
9. ANY DAMAGE TO PRIVATE OR PUBLIC PROPERTIES DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED AND RESTORED BY THE CONTRACTOR AT THEIR OWN EXPENSE.
10. ALL PROPERTY MARKERS AND STREET LINE MONUMENTS SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED AND RESTORED BY A LAND SURVEYOR LICENSED IN THE COMMONWEALTH OF MASSACHUSETTS AT THE CONTRACTOR'S EXPENSE.
11. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ADDITIONAL BENCHMARK INFORMATION IF REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING BENCHMARKS. IF IT IS NECESSARY TO RELOCATE A BENCHMARK, IT SHALL BE RELOCATED BY A MASSACHUSETTS LAND SURVEYOR AND DONE SO AT THE CONTRACTOR'S EXPENSE.
12. ALL PERMITS AND APPROVALS NECESSARY FROM AGENCIES GOVERNING THE WORK SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORK.
13. CONSTRUCTION DURING WET WEATHER OR WINTER CONDITIONS IS TO BE ANTICIPATED AND PROVISIONS TO ADEQUATELY ADDRESS THESE CONDITIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
14. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS INCLUDING THE TOWN OF ARLINGTON, MADOT, MADEP, MWRA, MUTCD, AND AASHTO.
15. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY ALLEN & MAJOR ASSOCIATES DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK, OR THE OWNER'S EMPLOYEES, CUSTOMERS, OR THE GENERAL PUBLIC. THE SEAL OF THE ENGINEER AS INCLUDED IN THE PLAN SET DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PROVIDE THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), STATE, AND LOCAL REGULATIONS.
16. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

COMMONWEALTH OF MASSACHUSETTS
BRIAN D. JONES
CIVIL
No. 49212
REGISTERED PROFESSIONAL ENGINEER

12-19-22

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT\OWNER:

192-200 MASSACHUSETTS AVE, LLC
455 MASSACHUSETTS AVE, STE 1
ARLINGTON, MA 02474

PROJECT:

190 & 192-200
MASSACHUSETTS AVE
ARLINGTON, MA 02476

PROJECT NO.	2729-02	DATE:	12-19-22
SCALE:	1" = 10'	DWG. NAME:	C2729-02
DESIGNED BY:	BDJ	CHECKED BY:	RPC

PREPARED BY:

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environmental consulting ◆ landscape architecture
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DRAWING TITLE: GRADING & DRAINAGE PLAN

SHEET No. C-103

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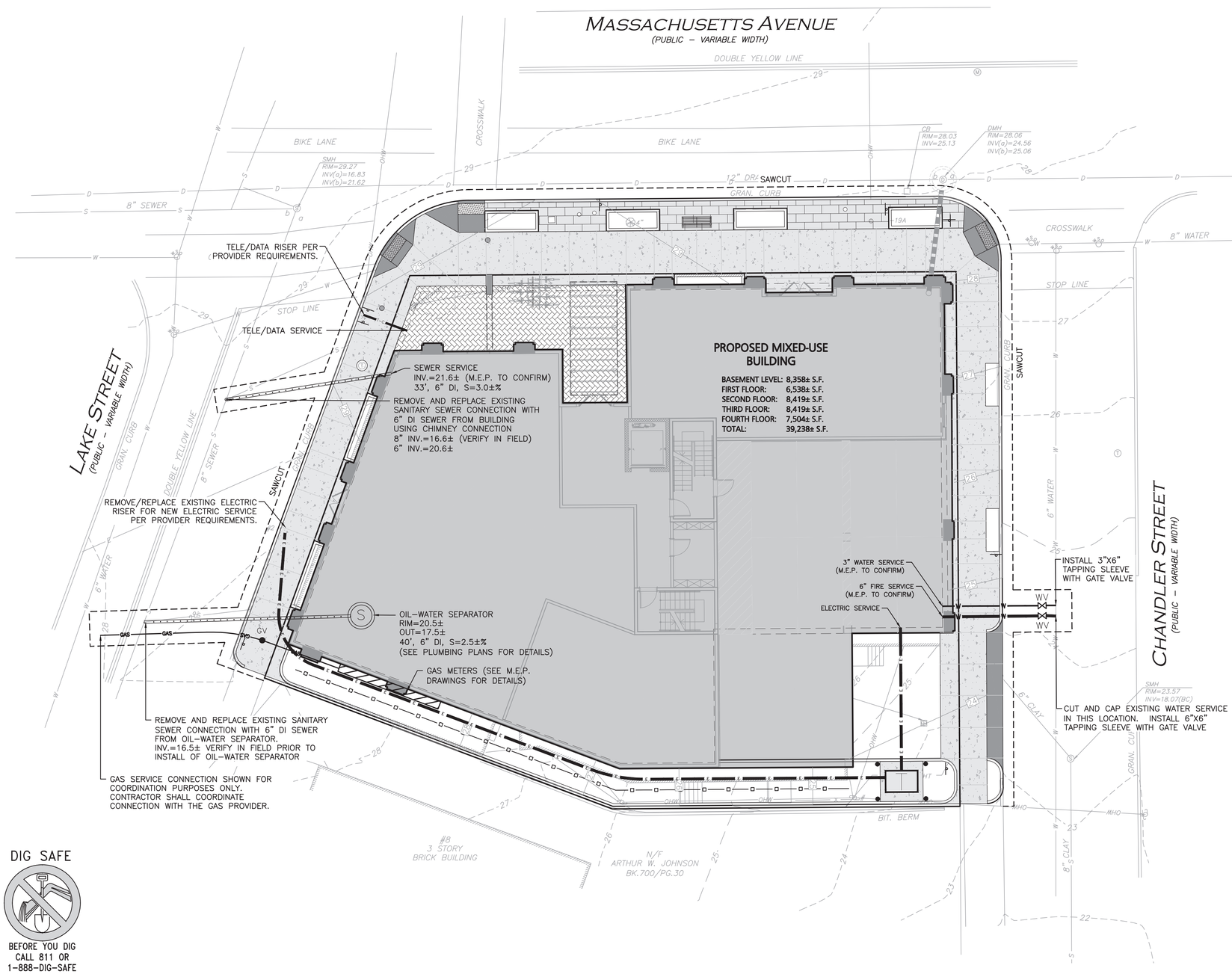

LEGEND

SEWER MANHOLE	S
SEWER CLEANOUT	C
SEWER VENT	V
SEWER LINE	
WATER LINE	W
WATER (FIRE SERVICE)	W-F
WATER (DOMESTIC SERVICE)	W-D
WATER VALVE	WV
GAS LINE	GAS
GAS VALVE	GV
ELECTRICAL CONDUIT	E E
TELE/CABLE CONDUIT	T-C T-C

UTILITY NOTES:

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
2. A MINIMUM OF 18" VERTICAL CLEARANCE SHALL BE MAINTAINED WHERE WATER SERVICES CROSS STORM DRAIN AND SEWER LINES. WATER SERVICES SHALL BE ENCASED IN CONCRETE REGARDLESS OF CLEARANCE WHEN PASSING BELOW STORM DRAIN AND SEWER LINES. ENCASEMENT SHALL EXTEND ALONG WATER SERVICE A MINIMUM DISTANCE OF EIGHT FEET CENTERED ON THE CROSSING POINT OF THE OTHER PIPE AS MEASURED NORMALLY FROM ALL POINTS ALONG THE PIPE.
3. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
4. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
5. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

DIG SAFE

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COMMONWEALTH OF MASSACHUSETTS
BRIAN D. JONES
CIVIL
No. 49212
REGISTERED PROFESSIONAL ENGINEER

12.19.22

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

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DRAWING TITLE: UTILITIES PLAN

SHEET No. C-104

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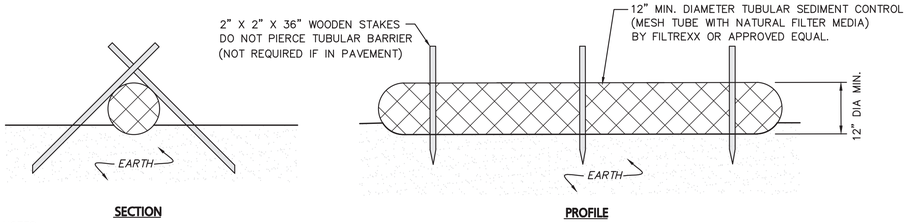
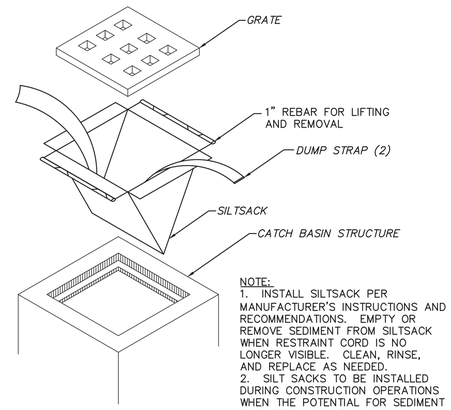


NOTES:

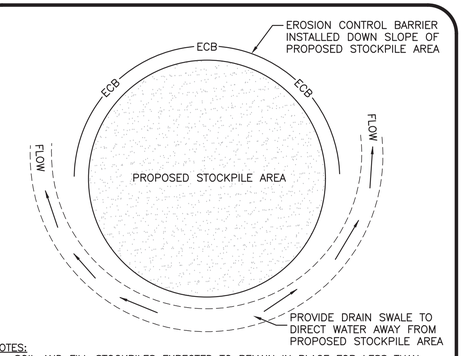
1. ALL MATERIALS TO MEET MANUFACTURERS SPECIFICATIONS.
2. INSTALL WOODEN STAKES IN A CRISS-CROSS PATTERN EVERY 8' ON CENTER.
2. OVERLAP TUBULAR BARRIER SEGMENTS A MINIMUM OF 12".
3. THE CONTRACTOR SHALL MAINTAIN THE TUBULAR BARRIERS IN A FUNCTIONAL CONDITION AT ALL TIMES. THE CONTROLS SHALL BE ROUTINELY INSPECTED BY THE CONTRACTOR.
4. WHERE THE TUBULAR BARRIERS REQUIRE REPAIR OR SEDIMENT REMOVAL, IT WILL BE COMPLETED BY THE CONTRACTOR AT NO ADDITIONAL COST.
5. AT A MINIMUM, THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE WHEN THEY REACH 1/3 THE EXPOSED HEIGHT OF THE BARRIER.

TUBULAR SEDIMENT BARRIER (1)
NOT TO SCALE



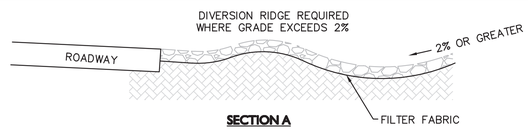
NOTE:
1. INSTALL SILTSACK PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. EMPTY OR REMOVE SEDIMENT FROM SILTSACK WHEN RESTRAINT CORD IS NO LONGER VISIBLE. CLEAN, RINSE, AND REPLACE AS NEEDED.
2. SILT SACKS TO BE INSTALLED DURING CONSTRUCTION OPERATIONS WHEN THE POTENTIAL FOR SEDIMENT TO ENTER EXISTING & PROPOSED BASINS EXISTS.

SILTSACK INLET DETAIL (2)
NOT TO SCALE

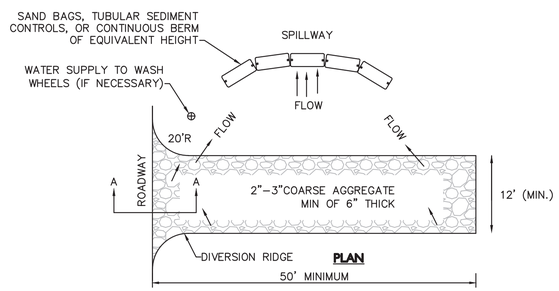


NOTES:
1. SOIL AND FILL STOCKPILES EXPECTED TO REMAIN IN PLACE FOR LESS THAN 90 DAYS SHALL BE COVERED WITH STRAW AND MULCH (AT 100LBS/1,000 SF), OR WITH AN ANCHORED TARP WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL.
2. SOIL AND FILL STOCKPILES EXPECTED TO REMAIN IN PLACE FOR 90 DAYS OR MORE SHALL BE SEEDED WITH WINTER RYE (FOR FALL SEEDING AT 1LB/1,000 SF) OR OATS (FOR SUMMER SEEDING AT 2LB/1,000 SF) AND THEN COVERED WITH STRAW MULCH (AT 100LB/1,000 SF) OR AN ANCHORED TARP WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL.

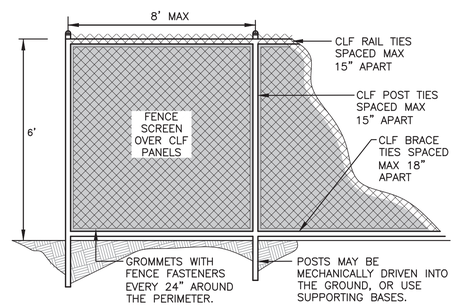
STOCKPILE PROTECTION DETAIL (3)
NOT TO SCALE



NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTERING THE PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. USE SANDBAGS, TUBULAR SEDIMENT CONTROLS, OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.

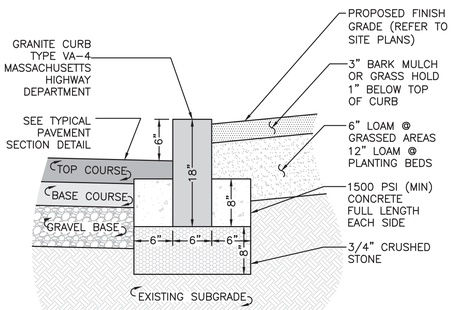


TEMPORARY CONSTRUCTION ENTRANCE/EXIT (4)
NOT TO SCALE

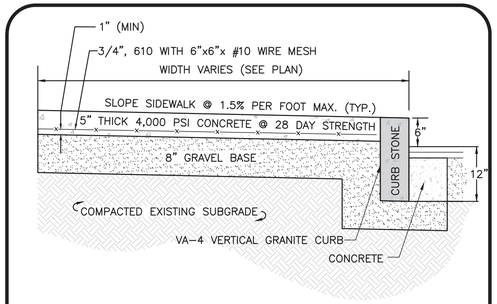


NOTES:
1. SCREEN MATERIAL SHALL BE MADE FROM KNITTED HIGH DENSITY POLYETHYLENE WITH UV ADDITIVES.
2. SCREEN FILAMENT STRENGTH SHALL BE A MINIMUM OF 50LBS/FT.
3. SCREEN MATERIAL BREAK STRENGTH SHALL BE A MINIMUM OF 500 LBS/FT.
4. SCREEN SHADE / WIND BLOCKAGE SHALL BE A MINIMUM OF 85%.
5. SCREEN COLOR SHALL BE GREEN OR BLACK.

TEMPORARY CONSTRUCTION FENCE w/ SCREEN (5)
NOT TO SCALE

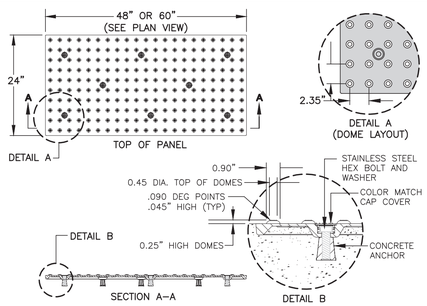


VERTICAL GRANITE CURB (6)
NOT TO SCALE



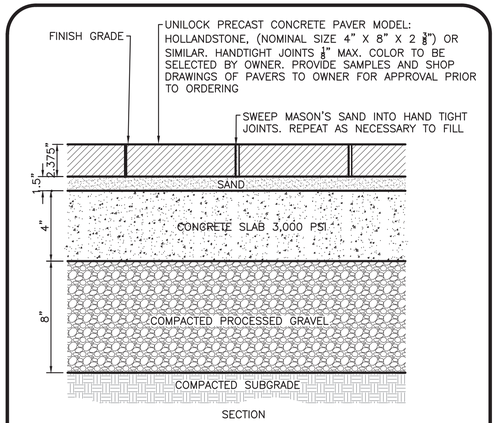
NOTES:
1. SIDEWALK TO HAVE TOOLED JOINTS IN A 5' x 5' (TYP.) GRID WITH EXPANSION JOINTS 15' ON CENTER AND PREMOLDED FILLER.
2. SEE PLAN VIEW FOR ELEVATIONS AT CURB
3. SIDEWALK CROSS SLOPE TO BE 1.5% MAX & SIDEWALK LONGITUDINAL RUNNING SLOPE TO BE 4.5% MAX, TYP.

CONCRETE SIDEWALK WITH VGC CURBSTONE (7)
NOT TO SCALE



NOTES:
1. VENDOR INFORMATION: "ADATILE" WET SET ADA REPLACEABLE TACTILE (OR APPROVED EQUAL) AS MANUFACTURED BY ADATILE, PHONE: 1-800-372-0519, WWW.ADATILE.COM, EMAIL: INFO@ADATILE.COM
2. COLOR SHALL BE RED.
3. INSTALL PER MANUFACTURER'S INSTALLATION GUIDELINES.

WET SET ADA REPLACEABLE TACTILE PANEL (8)
NOT TO SCALE



CONCRETE PAVERS (9)
NOT TO SCALE

NOT USED (10)
NOT TO SCALE

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT\OWNER:
192-200 MASSACHUSETTS AVE, LLC
455 MASSACHUSETTS AVE, STE 1
ARLINGTON, MA 02474

PROJECT:
190 & 192-200
MASSACHUSETTS AVE
ARLINGTON, MA 02476

PROJECT NO.	2729-02	DATE:	12-19-22
SCALE:	AS SHOWN	DWG. NAME:	C2729-02
DESIGNED BY:	BDJ	CHECKED BY:	RPC

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBURN MA 01801
TEL: (781) 935-6889
FAX: (781) 935-2896
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

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DRAWING TITLE: DETAILS

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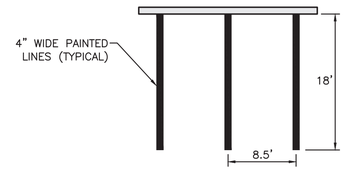
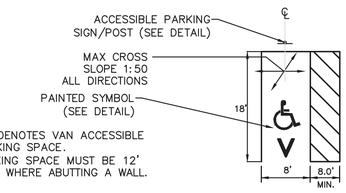
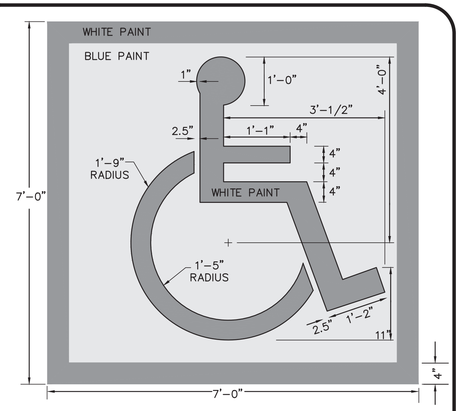


STANDARD STALL



NOTE:
1. "V" DENOTES VAN ACCESSIBLE PARKING SPACE.
2. PARKING SPACE MUST BE 12' WIDE WHERE ABUTTING A WALL.

ADA AND STANDARD PARKING STRIPING (1)
NOT TO SCALE



SYMBOL TO BE CENTERED ON WIDTH OF PARKING STALL. SYMBOL IS REQUIRED TO CONTRAST WITH BACKGROUND. USE WHITE ON BLUE (COLOR #105090 IN FEDERAL STANDARD 5952) DOUBLE COAT.

ACCESSIBLE PARKING STALL PAVEMENT MARKING (2)
NOT TO SCALE

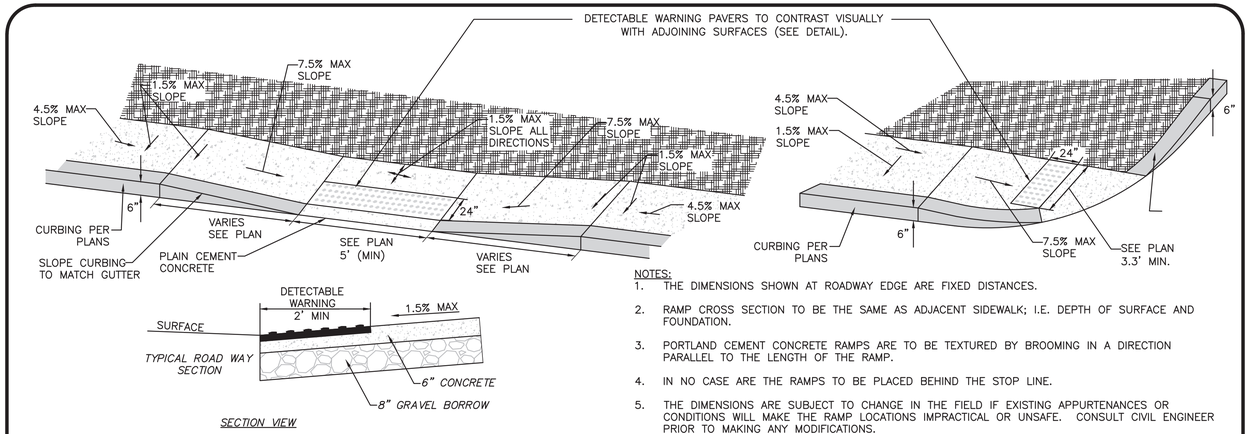
NOTES:
1. BENCH SHALL BE 6' WIDE VICTOR STANLEY MODEL NUMBER FMS-324 OR APPROVED EQUAL.
2. COLOR SHALL BE BLACK.
3. BENCH SHALL BE FIXED TO CONCRETE BASE, PER MANUFACTURER'S RECOMMENDATIONS.
4. SUBMIT SHOP DRAWING FOR APPROVAL.

BENCH DETAIL (3)
NOT TO SCALE

DESC.	SIGN	SIZE	MOUNTING HEIGHT	DESCRIPTION	REFLEC-TORIZED
R7-8M (MODIFIED)	HANDICAPPED PARKING SPECIAL PLATE REQUIRED UNAUTHORIZED VEHICLES MAY BE TOWED AT THE OWNERS EXPENSE VAN ACCESSIBLE	12" x 26"	7' - 0"	WHITE TEXT ON BLUE FIELD WITH WHITE BORDER	YES

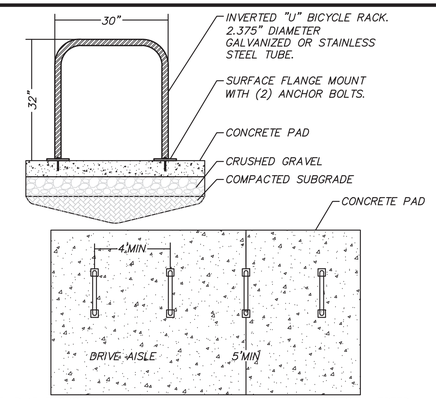
1. TRAFFIC AND SAFETY SIGNAGE SHALL COMPLY WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) STANDARDS.
2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE BOTTOM OF THE SIGN TO THE NEAR EDGE OF THE PAVEMENT.

SIGN TABLE (4)
NOT TO SCALE



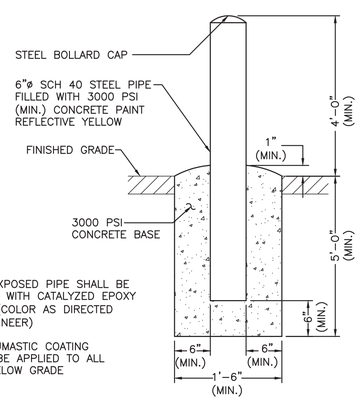
NOTES:
1. THE DIMENSIONS SHOWN AT ROADWAY EDGE ARE FIXED DISTANCES.
2. RAMP CROSS SECTION TO BE THE SAME AS ADJACENT SIDEWALK; I.E. DEPTH OF SURFACE AND FOUNDATION.
3. PORTLAND CEMENT CONCRETE RAMPS ARE TO BE TEXTURED BY BROOMING IN A DIRECTION PARALLEL TO THE LENGTH OF THE RAMP.
4. IN NO CASE ARE THE RAMPS TO BE PLACED BEHIND THE STOP LINE.
5. THE DIMENSIONS ARE SUBJECT TO CHANGE IN THE FIELD IF EXISTING APPURTENANCES OR CONDITIONS WILL MAKE THE RAMP LOCATIONS IMPRACTICAL OR UNSAFE. CONSULT CIVIL ENGINEER PRIOR TO MAKING ANY MODIFICATIONS.

HANDICAP CURB CUT & CURB TRANSITION (5)
NOT TO SCALE



NOTE: BIKE RACKS TO BE FROM PARK A BIKE: MODEL 200 SERIES-INVERTED U BIKE RACKS HR202 30"X2.38"X32" SURFACE MOUNTED. SURFACE MOUNT PER MANUFACTURER'S RECOMMENDATIONS. FINISH SELECTED BY OWNER. PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO ORDERING.

BICYCLE RACK DETAIL (6)
NOT TO SCALE



NOTES:
-ALL EXPOSED PIPE SHALL BE PAINTED WITH CATALYZED EPOXY PAINT. (COLOR AS DIRECTED BY ENGINEER)
-A BITUMASTIC COATING SHALL BE APPLIED TO ALL PIPE BELOW GRADE

FIXED PIPE BOLLARD DETAIL (7)
NOT TO SCALE

NOT USED (8)
NOT TO SCALE

NOT USED (9)
NOT TO SCALE

NOT USED (10)
NOT TO SCALE

COMMONWEALTH OF MASSACHUSETTS
BRIAN D. JONES
CIVIL
No. 49212
REGISTERED PROFESSIONAL ENGINEER
12.19.22

PROFESSIONAL ENGINEER FOR
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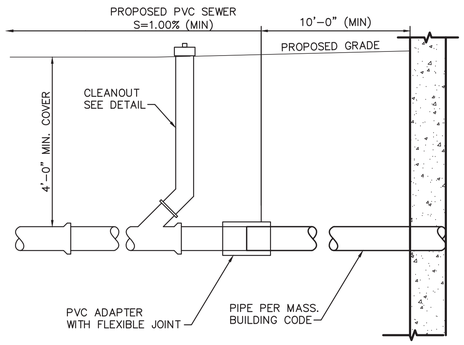
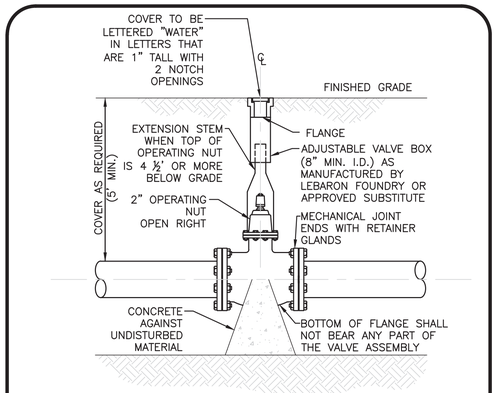


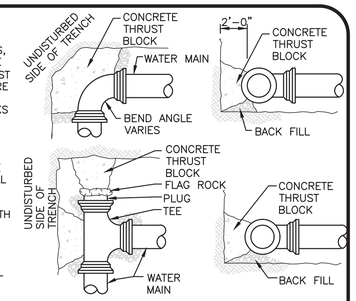
BUILDING SEWER SERVICE (1)
NOT TO SCALE



NOTES:
1.) CONTRACTOR MAY USE ANCHOR TEES AT HIS OPTION.
2.) HYDRANTS AND VALVES SHALL BE RIGHT TURN OPEN (OPEN RIGHT).

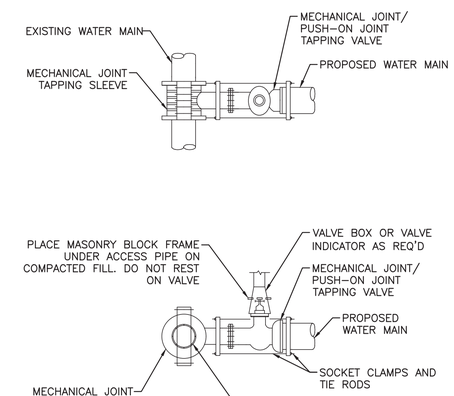
GATE VALVE (2)
NOT TO SCALE

NOTES:
1. ALL WATER MAIN FITTINGS, BENDS, TEES, PLUGS ETC. SHALL BE RESTRAINED W/ THRUST BLOCKS EXCEPT WHERE NOTED.
2. ALL THRUST BLOCKS & COLLARS SHALL BE INSTALLED SO THAT THEY BEAR AGAINST UNDISTURBED EARTH.
3. SIZE OF CONCRETE THRUST BLOCKS SHALL BE AS NOTED BELOW.
4. MINIMUM COMPRESSIVE STRENGTH OF THRUST BLOCK CONCRETE SHALL BE 3,000 P.S.I.
5. KEEP CONCRETE CLEAR OF MECHANICAL JOINTS.
6. THE BELOW PREDICATED ON A WATER PRESSURE OF 225 PSI AND A SOIL RESISTANCE OF 2000 PSF (TILL). FOR OTHER SOILS THE VALUES IN THE ABOVE TABLE SHALL BE MULTIPLIED BY:

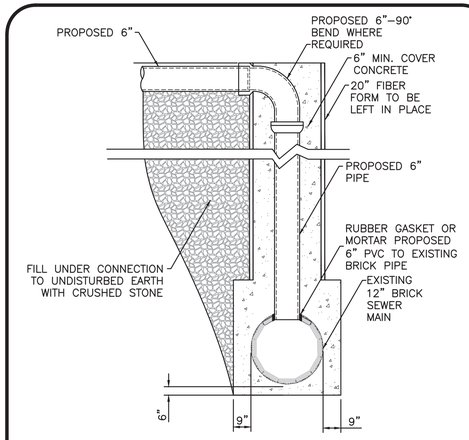


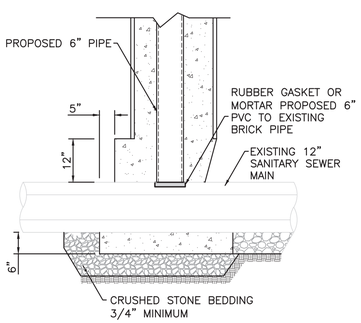
MINIMUM THRUST BLOCK BEARING AREAS				
PIPE ø	90° BEND (SQ. FT.)	45° BEND (SQ. FT.)	22.5° BEND (SQ. FT.)	TEES, PLUGS, CAPS & HYD. (SQ.FT.)
6"	5	3	3	4
8"	9	6	3	9
10"	13	7	4	12
12"	20	10	5	16

THRUST BLOCK DETAILS (3)
NOT TO SCALE



TAPPING SLEEVE AND VALVE (4)
NOT TO SCALE

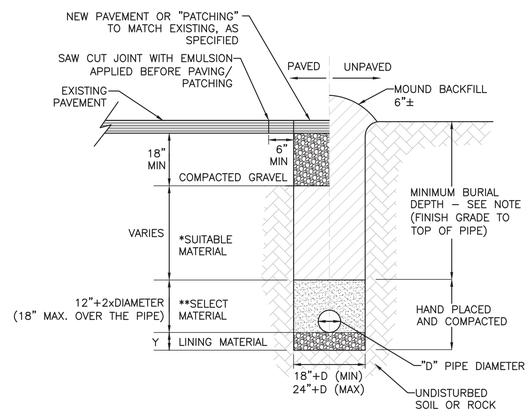




SANITARY SEWER CHIMNEY CONNECTION DETAIL (5)
NOT TO SCALE

NOTES:

1. MINIMUM BURIAL DEPTH (FINISH GRADE TO TOP OF PIPE)
   GRAVITY PIPE – SEE PLAN OR PROFILE
   PRESSURE PIPE UNDER PAVING – 4'
   PRESSURE PIPE BENEATH UNPAVED – 3'
2. WHERE BACKFILL IS DESIGNATED AS COMPACTED, THIS MEANS 90 TO 95% STANDARD PROCTOR. AASHTO T–99. ALL FILL PLACED BELOW PIPES AND STRUCTURES MUST MEET THIS REQUIREMENT.
3. FOR ALL TRENCHES WITH A GRADE GREATER THAN 4% AND/OR WHERE GROUNDWATER IS APPARENT, INSTALL CLAY DAMS AROUND THE PIPE AT 100' INTERVALS.



TRENCH DETAIL (6)
NOT TO SCALE

CONDITION & PIPE	**SELECT MATERIAL	LINING MATERIAL	Y–DIMENSION
DUCTILE IRON "ORDINARY SOIL"	TYPE I, II, OR III	SAND OR TYPE III	3"
RCP "ORDINARY SOIL"	TYPE II OR III	SAND OR TYPE III	3"
ALL PIPE OVER BEDROCK OR LEDGE	TYPE II OR III	SAND OR TYPE III	8"
DUCTILE IRON IN CLAY OR MUCK	TYPE II OR III	SAND	4"
RCP IN CLAY	TYPE II OR III	SAND	8"
ALL PLASTICS	TYPE III	SAND OR TYPE III	6"

* SUITABLE MATERIAL SHALL CONTAIN NO STONE GREATER THAN 4" IN DIAMETER, NO FROZEN LUMPS, AND ONLY MINOR AMOUNTS OF CLAY OR ORGANIC MATERIAL. ALL MATERIAL TO BE PLACED IN MAX 12" LIFTS AND COMPACTED BEFORE PLACING NEXT LIFT.

**TYPE I MATERIAL SHALL BE EITHER GRAVEL OR EXCAVATED MATERIAL CONTAINING NO STONES GREATER THAN 1.5" DIAMETER, NO FROZEN LUMPS, CLAY OR ORGANIC MATERIAL.

**TYPE II MATERIAL SHALL BE CLEAN, HARD, CRUSHED OR NATURAL STONE WITH A GRADATION BY WEIGHT OF 100% PASSING A 1.5" SQUARE OPENING, NOT MORE THAN 25% PASSING A ¾" OPENING, AND NOT MORE THAN 5% PASSING A ¼" SQUARE OPENING.

**TYPE III MATERIAL SHALL BE CLEAN, HARD, CRUSHED STONE FREE FROM COATINGS AND THOROUGHLY WASHED WITH A GRADATION BY WEIGHT OF 100% PASSING A 1" SQUARE OPENING, AND 0 TO 5% PASSING A ¼" SQUARE OPENING.

COMMONWEALTH OF MASSACHUSETTS
BRIAN D. JONES
CIVIL
No. 49212
REGISTERED PROFESSIONAL ENGINEER
12.19.22

PROFESSIONAL ENGINEER FOR
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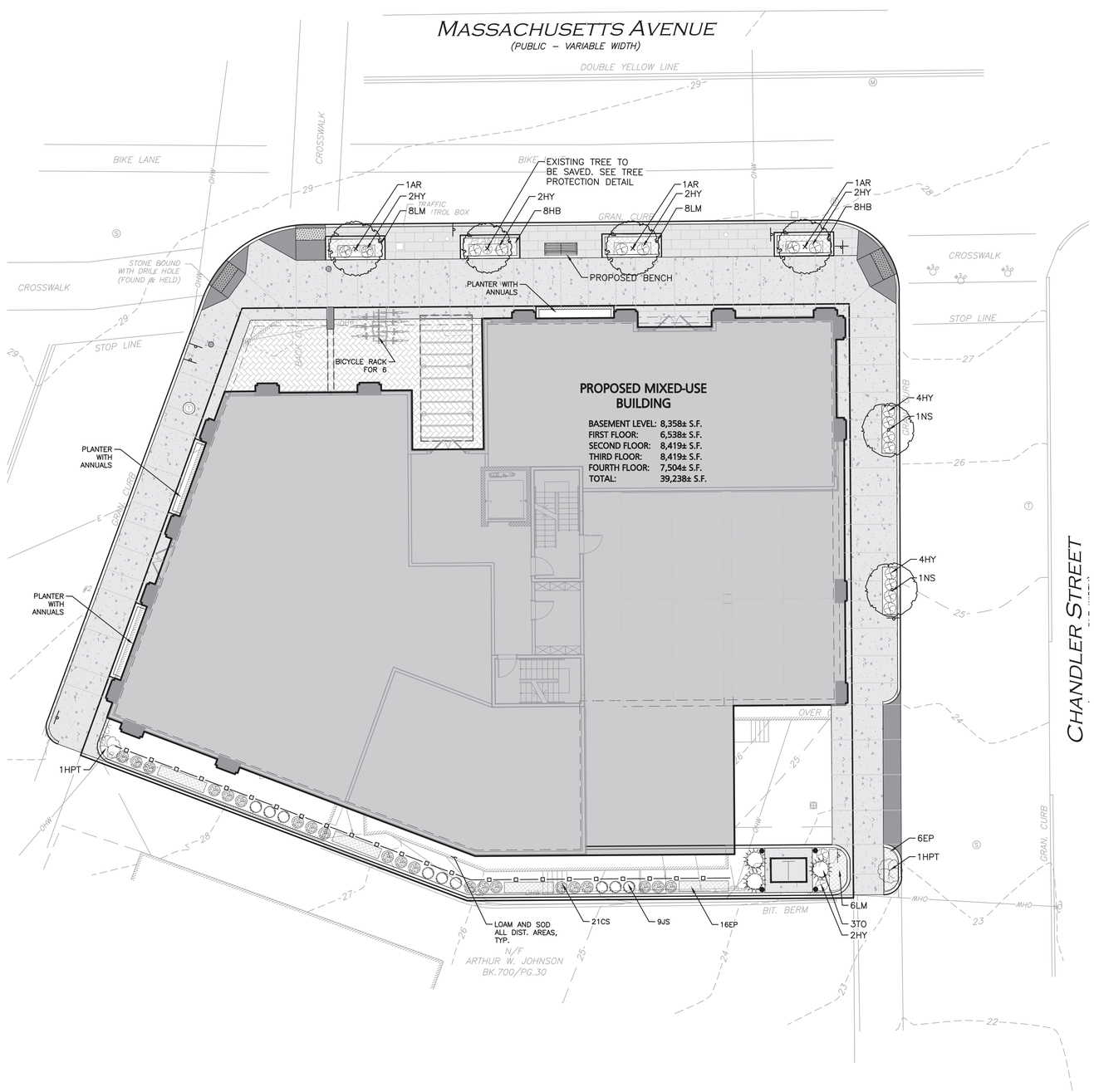

LEGEND

- DECIDUOUS TREE
- EVERGREEN TREE
- FLOWERING TREE
- SHRUBS
- MULCH BED
- PERENNIALS/GROUNDCOVER

PLANTING SCHEDULE-TREES, SHRUBS, GROUNDCOVERS & PERENNIALS

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	MIN. SIZE	SPACING	COMMENTS
EVERGREEN TREES						
JS	9	JUNIPER S. 'WOODWARD'	WOODWARD COLUMNAR JUNIPER	6–7' HT	AS SHOWN	B&B
TO	3	THUJA O. 'WINTERGREEN'	WINTERGREEN ARBORVITAE	6–7' HT	AS SHOWN	B&B
TREES/SHRUBS						
AR	3	ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2.5–3" CAL.	AS SHOWN	B&B
NS	2	NYSSA SYLVATICA 'GREEN GABLE'	GREEN GABLE TUPELO	2.5–3" CAL.	AS SHOWN	B&B
CS	21	CORNUS STOLONIFERA 'KELSEYI'	KELSYI DWARF RED TWIG DOGWOOD	#5	AS SHOWN	POT
HPT	2	HYDRANGEA PANICULATA 'LIMELIGHT' TREE FORM	TREE FORM LIMELIGHT HYDRANGEA	5–6' HT. TREEFORM	AS SHOWN	B&B
HY	18	HYDRANGEA ARBORESCENS "INVINCEBELLE WEE WHITE"	INVINCIBELLE WEE WHITE HYDRANGEA	#3	AS SHOWN	POT
PERENNIALS						
EP	22	ECHINACEA PURPUREA 'POW WOW WILDBERRY'	POW WOW WILDBERRY ECHINACEA	#1	24" O.C	STAGGERED
LM	22	LAMIUM MACULATUM 'ORCHID FROST'	ORCHID FROST LAMIUM	#1	24" O.C	STAGGERED
HB	16	HOSTA 'HADSPEN BLUE'	HADSPEN BLUE HOSTA	#1	24" O.C	STAGGERED

STREET TREES SELECTED FROM THE ARLINGTON TREE COMMITTEE RECOMMENDED TREE LIST: HTTPS://WWW.ARLINGTONTREES.ORG/RECOMMENDED–URBAN–TREES

*SEASONAL ANNUALS TO BE INSTALLED FOR BUILDING PLANTER BOXES. PROVEN WINNERS TROPICAL SMOOTHIE MIX FOR SPRING/SUMMER; MUMS FOR FALL OR EQUAL. SEE DETAIL.

NOTES:

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2. ALL LANDSCAPED AREAS WITH SHRUBS, TREES, AND PERENNIALS TO HAVE 18" MINIMUM DEPTH OF TOPSOIL. EIGHTEEN INCHES OF TOPSOIL AROUND TREES AND SHRUBS DOES NOT INCLUDE AMENDED PLANTING SOIL WITHIN TREE / SHRUB PIT FOR FULL DEPTH OF ROOTBALLS. SEE PLANTING DETAILS FOR PLANTING DEPTH AT SHRUBS AND TREES. ALL AREAS OF LOAM AND SEED OR LOAM & SOD TO HAVE 6" MINIMUM DEPTH OF TOPSOIL. TOPSOIL TO BE TESTED BY CONTRACTOR, AND APPROVED BY A&M PRIOR TO PURCHASE AND OR PLACEMENT. GENERAL CONTRACTOR, DEMOLITION CONTRACTOR, AND LANDSCAPE CONTRACTOR TO COORDINATE PROPER DEPTH OF EXISTING MATERIAL REMOVAL ACROSS SITE SO THAT 18" MINIMUM AND 6" MINIMUM DEPTHS OF PROPOSED TOPSOIL NOTED ABOVE ARE MET AT NO ADDITIONAL COST TO OWNER. SEE TOPSOIL DETAIL.

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

DIG SAFE

BEFORE YOU DIG
CALL 811 OR
1-888-DIG-SAFE
1-888-344-7233

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MASSACHUSETTS REGISTERED LANDSCAPE ARCHITECT BETHANY C. DEMOOY No. 4071

12.19.22

REGISTERED LANDSCAPE ARCHITECT FOR ALLEN & MAJOR ASSOCIATES, INC.

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DRAWING TITLE: LANDSCAPE PLAN

SHEET No. L-101

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LANDSCAPE NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWN OF ARLINGTON, MA.
2. PLANTING PLAN IS DIAGRAMMATIC IN NATURE. FINAL PLACEMENT OF PLANTS TO BE APPROVED BY THE LANDSCAPE ARCHITECT IN THE FIELD.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES, ANY PERMITTING AGENCIES, AND "DIG–SAFE" (1–888–344–7233) AT LEAST 72 HOURS IN ADVANCE OF ANY WORK THAT WILL REQUIRE EXCAVATION. CONTRACTOR SHALL NOTIFY THE OWNERS REPRESENTATIVE OF NAY CONFLICTS IN WRITING.
4. NO PLANT MATERIAL SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA, ANY TREES NOTED AS "SEAL OR SELECTED SPECIMEN" SHALL BE TAGGED AND SEALED BY THE LANDSCAPE ARCHITECT.
5. ALL TREES SHALL BE BALLED AND BURLAPPED (B&B) UNLESS OTHERWISE NOTED OR APPROVED BY THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT.
6. CONTRACTOR SHALL VERIFY QUANTITIES SHOWN ON PLANT LIST. QUANTITIES SHOWN ON PLANS SHALL GOVERN OVER PLANT LIST.
7. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE APPROVED IN WRITING BY OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT.
8. ALL PLANT MATERIALS INSTALLED SHALL MEET THE GUIDELINES ESTABLISHED BY THE STANDARDS FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
9. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF ACCEPTANCE.
10. ALL DISTURBED AREAS NOT OTHERWISE NOTED SHALL RECEIVE 6" OF SUITABLE LOAM & SEED LAWNS WITH 3:1 OR GREATER SLOPES SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET.
11. ANY FALL TRANSPLANTING HAZARD PLANTS SHALL BE DUG IN THE SPRING AND STORED FOR FALL PLANTING.
12. TREES SHALL HAVE A MINIMUM CALIPER AS INDICATED ON THE PLANTING SCHEDULE TAKEN ONE FOOT ABOVE THE ROOT CROWN.
13. ALL PLANT BEDS AND TREE SAUCERS TO RECEIVE 3" OF PINE BARK MULCH. GROUND COVER AREAS SHALL RECEIVE 1" OF PINE BARK MULCH
14. ALL DECIDUOUS TREES ADJACENT TO WALKWAYS AND ROADWAYS SHALL HAVE A BRANCHING PATTERN TO ALLOW FOR A MINIMUM OF 7' OF CLEARANCE BETWEEN THE GROUND AND THE LOWEST BRANCH.
15. ALL TREE STAKES SHALL BE STAINED DARK BROWN.
16. CONTRACTOR RESPONSIBLE FOR WATERING, AND RESEEDING OF BARE SPOTS UNTIL A UNIFORM STAND OF VEGETATION IS ESTABLISHED AND ACCEPTED.
17. ALL PARKING ISLANDS PLANTED WITH SHRUBS SHALL HAVE 24" OF TOP SOIL. FINISH GRADE SHALL BE EQUAL TO THE TOP OF CURB.
18. SOIL SAMPLES, TESTS, AND SHOP DRAWINGS SHALL BE PROVIDED TO THE LANDSCAPE ARCHITECT OR THE OWNER FOR APPROVAL PRIOR TO CONSTRUCTION.
19. AN MINIMUM 18" WIDE BARRIER OF 1" GRAY OR TAN PEASTONE SHALL BE INSTALLED IN ALL PLANT BEDS WHICH ABUT THE BUILDINGS. NO MULCH IS ALLOWED WITHIN 18" OF ALL BUILDINGS PER THE LATEST EXECUTIVE OFFICE OF PUBLIC SAFETY AND SECURITY DEPARTMENT OF FIRE SERVICES REGULATION (527 CMR 17.00). INSTALL 6" DEEP OF PEASTONE WITH MIRAFI WEED FABRIC BENEATH AND STEEL EDGING BETWEEN THE PEASTONE AND ADJACENT MULCH BED.
20. ALL PROPOSED LANDSCAPE AREAS INCLUDING MOWED LAWNS, TREES, SHRUB BEDS, AND PERENNIALS SHALL BE PROVIDED WITH WATER EFFICIENT UNDERGROUND IRRIGATION. DESIGN AND INSTALLATION OF IRRIGATION SYSTEM TO BE PERFORMED BY AN APPROVED IRRIGATION DESIGN BUILD CONTRACTOR OR BY AN APPROVED EQUAL, TO BE DETERMINED BY THE OWNERS REPRESENTATIVE AND LANDSCAPE ARCHITECT. IRRIGATION SYSTEM IS TO BE DESIGNED FOR EFFICIENT WATER USAGE INCLUDING: USE OF DRIP IRRIGATION FOR SHRUBS AND PERENNIALS, IRRIGATION SYSTEM WITH HEAD–TO–HEAD COVERAGE, A CENTRAL SHUT–OFF VALVE, AND A RAIN SENSOR TO SHUT OFF IRRIGATION DURING RAIN EVENTS.

PROVEN WINNERS ANNUALS FOR POTS OR EQUAL (3)
NOT TO SCALE

LOAM AND SODDING NOTES

CONTRACTOR SHALL SOD AREAS NOTED ON THE PLANS.

SOD IS TO BE A BLEND OF FOUR TO FIVE CURRENT AND IMPROVED HYBRID BLUEGRASS AND FESCUE MIXES APPROPRIATE FOR BOTH SEMI–SHADED AND AREAS OF SUN.

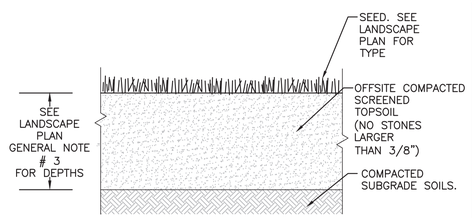
HYBRIDS MAY INCLUDE: BLACKSTONE KENTUCKY BLUEGRASS, AWARD KENTUCKY BLUEGRASS, CHALLENGER KENTUCKY BLUEGRASS, BLACKBURG II KENTUCKY BLUEGRASS OR COMPARABLE AND EQUAL BLUEGRASS HYBRIDS.

1. SOD SHALL BE HIGH QUALITY, NURSERY GROWN ON CULTIVATED MINERAL AGRICULTURAL SOILS. SOD SHALL BE MOIST, AND MACHINE CUT AT A UNIFORM SOIL THICKNESS OF AT LEAST ⅝" AT TIME OF CUTTING. MEASUREMENT FOR THICKNESS SHALL INCLUDE TOP GROWTH AND THATCH. SOD SHALL BE FREE OF DISEASES, WEEDS, BARE SPOTS, OR INSECTS.

2. SODDING TO BE COMPLETED "IN SEASON" BETWEEN APRIL 1 TO JUNE 15 OR AUGUST 15 TO OCTOBER 1, EXCEPT FOR RE–SODDING OF BARE SPOTS. IF UNABLE TO SOD WITHIN THESE TIMEFRAMES, CONTRACTOR TO INSTALL EROSION CONTROL MATS ON ALL SLOPES 3:1 AND OVER, HYDROSEED ALL EXPOSED AREAS, ADD SOIL STABILIZER "FLUX TERRA HP–FGM SOIL STABILIZER" AS MANUFACTURED BY "PROFILE" TO HYDROSEED (AT RATE OF 3,000 LBS PER ACRE), AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR TO COMPLETE ALL ABOVE "OUT OF SEASON" REQUIREMENTS AND THEN ALSO BE RESPONSIBLE FOR RE–GRADING AND RE–SODDING ALL DISTURBED, ERODED, OR BARE SPOTS WITHIN NEXT CLOSEST PLANTING SEASON IN FALL OR SPRING AT NO ADDITIONAL COST TO OWNER. CONTRACTOR RESPONSIBLE FOR ALL MAINTENANCE UNTIL FINAL ACCEPTANCE OF LAWN AREAS INCLUDING: WATERING, ADDING FERTILIZERS AND LIME AND MOWING AT NO ADDITIONAL COST TO OWNER.

3. COMMERCIAL FERTILIZER SHALL BE APPLIED AT THE RATE OF 25 POUNDS PER 1000 SQ. FT. OR AS RECOMMENDED BY THE TESTING AGENCY. LIME TO BE SPREAD AT THE RATE OF 100 POUNDS PER 1000 SQ. FT OR AS RECOMMENDED BY THE TESTING AGENCY. COMMERCIAL FERTILIZER SHALL BE A COMPLETE FERTILIZER CONTAINING AT LEAST 50% OF THE NITROGEN OF WHICH IS DERIVED FROM NATURAL ORGANIZE SOURCES OF UREAFORM. IT SHALL CONTAIN THE FOLLOWING PERCENTAGES BY WEIGHT: NITROGEN (N) 10%, PHOSPHORUS (P) 6%, POTASH (K) 4%. LIME SHALL BE AN APPROVED AGRICULTURAL LIMESTONE CONTAINING NOT LESS THAN 85% OF TOTAL CARBONATES. LIMESTONE SHALL BE GROUND TO SUCH FINENESS THAT 50% WILL PASS A 100 MESH SIEVE AND 90% WILL PASS THROUGH A 20 MESH SIEVE.

4. CONTRACTOR RESPONSIBLE FOR WATERING, MOWING, AND RE–SODDING OF LAWN BARE SPOTS UNTIL A UNIFORM, HEALTHY STAND OF GRASS IS ESTABLISHED AND ACCEPTED.

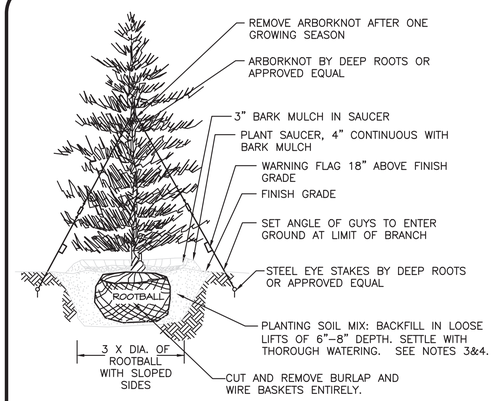


TEXTURE CLASS	% OF TOTAL WEIGHT
SAND	45% – 65%
SILT	15% – 35%
CLAY	5% – 20%

SIEVE	% PASSING
3/8"	100
NO. 4	85–100
NO. 40	60–85
NO. 100	38–60
NO. 200	10–35
20 um	LESS THAN 5%

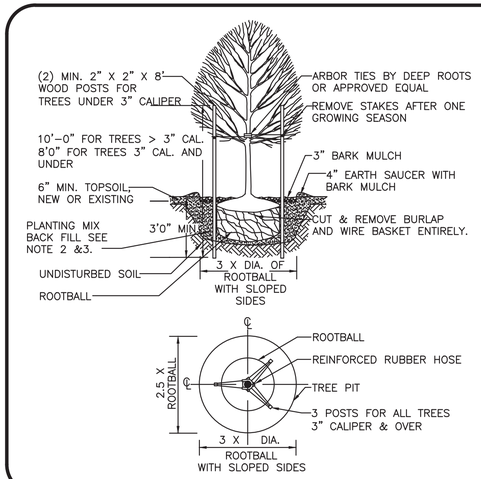
NOTES:
1. TOP OF LOAM (TOPSOIL) IS FINISH GRADE.
2. ALL TOPSOIL (BOTH ONSITE AND OFFSITE SOURCES) SHALL BE COMPOSED OF A NATURAL, FERTILE, FRIABLE SOIL TYPICAL OF CULTIVATED TOPSOILS OF THE LOCALITY. OFFSITE SOIL SHALL BE SUITABLE FOR THE GERMINATION OF SEEDS AND SUPPORT OF VEGETATIVE GROWTH, WITH ADDITIVES, IF REQUIRED, TO ACHIEVE PARTICLE DISTRIBUTION AND ORGANIC CONTENT BELOW. TOPSOIL SHALL BE TAKEN FROM A WELL–DRAINED, ARIABLE SITE, FREE OF SUBSOIL, LARGE STONES, EARTH CLODS, STICKS, STUMPS, CLAY LUMPS, ROOTS, OTHER OBJECTIONABLE, EXTRANEOUS MATTER OR DEBRIS NOR CONTAIN TOXIC SUBSTANCES.
3. THE CONTRACTOR SHALL PROVIDE THE OWNER / LANDSCAPE ARCHITECT WITH TOPSOIL TEST RESULTS (RECOMMEND UMASS AMHERST SOIL TESTING LAB) FOR APPROVAL PRIOR TO OBTAINING AND PLACING THE SOIL. IF ANY TOPSOIL IS PURCHASED OR PLACED PRIOR TO APPROVAL BY OWNER / LANDSCAPE ARCHITECT, IT IS AT CONTRACTORS RISK, AND IT CAN BE REMOVED AT NO ADDITIONAL COST TO THE OWNER. IF THE PLANTING SOIL (BOTH ONSITE AND OFFSITE SOURCES) DOES NOT FALL WITHIN THE REQUIRED SIEVE ANALYSIS, TEXTURAL CLASS, ORGANIC CONTENT, OR PH RANGE, IT SHALL BE ADJUSTED TO MEET THE SPECIFICATIONS THROUGH THE ADDITION OF SAND, COMPOST, LIMESTONE, OR ALUMINUM SULFATE TO BRING IT WITHIN THE SPECIFIED LIMITS AT NO ADDITIONAL COST TO THE OWNER.
4. TOPSOIL SHALL HAVE A PH VALUE BETWEEN 5.5 AND 6.5. TOPSOIL SHALL CONTAIN BETWEEN 4% AND 8% ORGANIC MATTER OF TOTAL DRY WEIGHT AND SHALL CONFORM TO THE FOLLOWING GRADATION AND TEXTURE CLASS ABOVE.

TOPSOIL FOR LAWN, TREES, SHRUBS, & PERENNIALS (4)
NOT TO SCALE



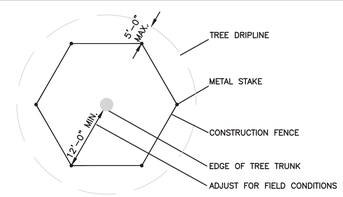
NOTES
1. TREES SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS IT BORE TO NURSERY OR FIELD GRADE. ROOT FLARE SHALL BE 2" ABOVE FINISH GRADE. REMOVE SOIL FROM TRUNK FLARE OF TREE TO DETERMINE ACTUAL TOP OF ROOTBALL AREA.
2. INSTALL THREE GUYS PER TREE; EQUALLY SPACED AROUND BALL.
3. ATTACH GUYS AT 2/3 HEIGHT OF TREE.
4. BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH) 20% PEAT MOSS, 10% SAND.
5. ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.

EVERGREEN TREE DETAIL (1)
NOT TO SCALE

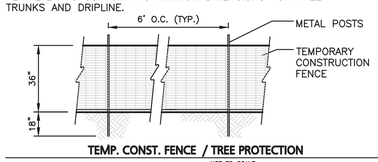


NOTES:
1. ALL TREES SHALL HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER PLANTING AS THEY HAD AT THE ORIGINAL NURSERY SETTING. ROOT FLARE SHALL BE 2" ABOVE FINISH GRADE. REMOVE SOIL FROM TRUNK FLARE OF TREE TO DETERMINE ACTUAL ROOTBALL AREA.
2. BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH) 20% PEAT MOSS, 10% SAND.
3. ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.

DECIDUOUS TREE PLANTING DETAIL (2)
NOT TO SCALE

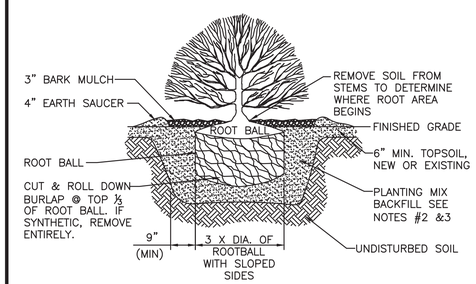


NOTE:
1. CONSTRUCTION FENCE TO BE "VISUAL BARRIER FENCE" AS MANUFACTURED BY EXXON CHEMICAL COMPANY ATLANTA, GA; "KONTROL SAFETY FENCE" AS MANUFACTURED BY MIRAFI, CHARLOTTE, N.C. OR APPROVED EQUAL.
2. IF GROUPS OF TREES ARE TO BE PROTECTED, EXTEND FENCE AROUND PERIMETER TO CONFORM TO MINIMUM DIMENSIONS FOR TREE TRUNKS AND DRIPLINE.



TEMP. CONST. FENCE / TREE PROTECTION (5)
NOT TO SCALE

NOTES:
1. ALL SHRUBS SHALL HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER PLANTING AS THEY HAD AT THE ORIGINAL NURSERY SETTING. SET SHRUB 1"–2" ABOVE FINISH GRADE.
2. BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH) 20% PEAT MOSS, 10% SAND.
3. ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.
4. SHRUB BEDS TO HAVE 24" MIN. OF CONTINUOUS PLANTING SOIL.



SHRUB PLANTING DETAIL (6)
NOT TO SCALE

MASSACHUSETTS REGISTERED LANDSCAPE ARCHITECT BETHANY C. DEMOND No. 4071
12.19.22

REGISTERED LANDSCAPE ARCHITECT FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT\OWNER:
192-200 MASSACHUSETTS AVE, LLC
455 MASSACHUSETTS AVE, STE 1
ARLINGTON, MA 02474

PROJECT:
190 & 192-200
MASSACHUSETTS AVE
ARLINGTON, MA 02476

PROJECT NO.	2729-02	DATE:	12-19-22
SCALE:	NTS	DWG. NAME:	C2729-02
DESIGNED BY:	BCD	CHECKED BY:	RPC

PREPARED BY:
ALLEN & MAJOR ASSOCIATES, INC.
civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBURN MA 01801
TEL: (781) 935-6889
FAX: (781) 935-2896
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

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DRAWING TITLE: LANDSCAPE DETAILS
SHEET No. L-501

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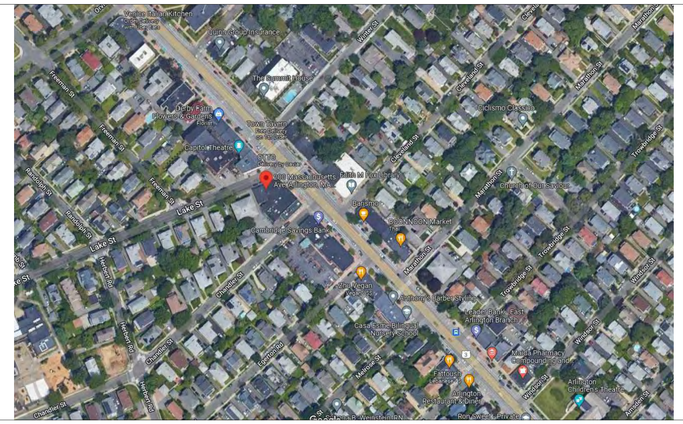
R:\PROJECTS\2729-02\CIVIL\DRAWINGS\CURRENT\C-2729-02_LANDSCAPING.DWG

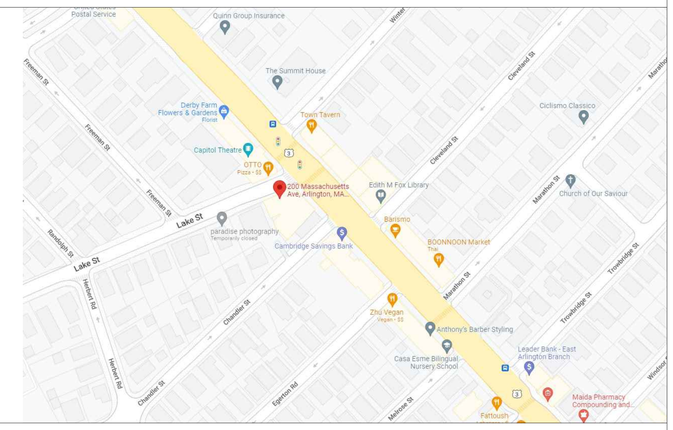
PROPOSED MIXED-USE BUILDING :

190-200 Massachusetts Ave, Arlington, MA

EXISTING SITUATION



AERIAL VIEW



LOCUS MAP

ARCHITECTURAL VISUALIZATION

ZONING SUMMARY

ZONE:	B3 DISTRICT
MIN. LOT AREA:	-
MIN. FRONTAGE:	50'
USABLE OPEN SPACE:	20%
MAX. HEIGHT:	60'
PROPOSED:	~48'
MAX. STORIES:	5 STORIES
PROPOSED:	4 STORIES
MAX. FAR:	3
PROPOSED FAR:	2.77

SETBACK REQUIREMENTS:

- FRONT: 0'
- SIDE: 0' (5'+2'+2')
- REAR: (H+L)/6

PARKING SPACE DIMENSIONS

- OPEN 8'-6'"X18'
- COMPACT 8'X16' (20% MAX.)
- PARALLEL 8'X22"
- AISLE 24'

PROPOSED SETBACKS:

FRONT:	0'
SIDE:	7'-6"
REAR:	7'-6"

PROJECT SUMMARY

ZONE:	B3 DISTRICT
LOT AREA:	11,134 SF.
FRONTAGE:	102'
PROPOSED OPEN SPACE:	28%
PROPOSED HEIGHT:	45'
PROPOSED STORIES:	4
PROPOSED FAR:	2.90
PROPOSED GFA:	32,366 SF.

GRADE LEVEL

RETAIL TENANT A	2730 SF
RETAIL TENANT B	1542 SF
TOTAL	**4772 SF**

2nd. LEVEL

RESIDENTIAL UNIT 201	623 SF
RESIDENTIAL UNIT 202	646 SF
RESIDENTIAL UNIT 203	417 SF
RESIDENTIAL UNIT 204	672 SF
RESIDENTIAL UNIT 205	830 SF
RESIDENTIAL UNIT 206	742 SF
RESIDENTIAL UNIT 207	776 SF
RESIDENTIAL UNIT 208	692 SF
RESIDENTIAL UNIT 209	558 SF
RESIDENTIAL UNIT 210	743 SF
TOTAL	**6699 SF**

3rd. LEVEL

RESIDENTIAL UNIT 301	623 SF
RESIDENTIAL UNIT 302	646 SF
RESIDENTIAL UNIT 303	417 SF
RESIDENTIAL UNIT 304	672 SF
RESIDENTIAL UNIT 305	830 SF
RESIDENTIAL UNIT 306	742 SF
RESIDENTIAL UNIT 307	776 SF
RESIDENTIAL UNIT 308	692 SF
RESIDENTIAL UNIT 309	558 SF
RESIDENTIAL UNIT 310	743 SF
TOTAL	**6699 SF**

4TH. LEVEL

RESIDENTIAL UNIT 401	543 SF
RESIDENTIAL UNIT 202	585 SF
RESIDENTIAL UNIT 203	560 SF
RESIDENTIAL UNIT 204	440 SF
RESIDENTIAL UNIT 205	830 SF
RESIDENTIAL UNIT 206	742 SF
RESIDENTIAL UNIT 207	776 SF
RESIDENTIAL UNIT 208	692 SF
RESIDENTIAL UNIT 209	558 SF
RESIDENTIAL UNIT 210	743 SF
TOTAL	**5822 SF**

ARCHITECT:
DAVID BARSKY - ARCHITECT
320 Nevada Street,
Newton, MA 02460
MAX. 617.448.5872

CIVIL P.E.:
Allen & Major Associates
100 Commerce Way,
Woburn, MA 01801

SHEET	SHEET TITLE	DATE
A-000	COVER SHEET	12.19.2022
	ARCHITECTURAL	
A-001	GENERAL NOTES	12.19.2022
A-100	PARKING LEVEL/BASEMENT PLAN	12.19.2022
A-101	1-ST LEVEL FLOOR PLAN	12.19.2022
A-102	2-ND AND 3-RD LEVEL FLOOR PLAN	12.19.2022
A-103	4TH LEVEL FLOOR PLAN	12.19.2022
A-104	ROOF PLAN	12.19.2022
A-300	ELEVATIONS	12.19.2022
AV	ARCHITECTURAL VISUALIZATION	12.19.2022
AV	ARCHITECTURAL VISUALIZATION	12.19.2022
AS	SHADOW STUDY	12.19.2022

ARCHITECTURAL VISUALIZATION IN CONTEXT

SUB. NO.	SUBMITTAL DATE	DESCRIPTION	REV. NO.
05	12.19.2022	ISSUED FOR REVIEW	
04	12.14.2022	ISSUED FOR INFORMATION	
03	12.01.2022	ISSUED FOR INFORMATION	
02	11.09.2022	ISSUED FOR INFORMATION	
01	10.31.2022	ISSUED FOR INFORMATION	0

ARCHITECT'S SEAL:

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NEWTON, MA 02460
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E-MAIL:
DAVID.BARSKY@DAVIDBARSKYARCHITECT.COM
DAVID BARSKYARCHITECT.COM

CLIENT INFORMATION

SUMMIT REAL ESTATE STRATEGIES LLC.

PROJECT LOCATION

190-200 Massachusetts Ave
Arlington, MA 02474

DRAWING TITLE

COVER SHEET

SCALE 1/8"=1'-0"	DATE October 2022
PROJECT NO.	REVISION NO. 0
DRAWN BY	DRAWING NO.
VERIFIED BY	A-000

ARCHITECTURAL ABBREVIATIONS

#	AND

A

AB	ANCHOR BOLT
ADFL	ADJUSTABLE FLOOR
ACOUS	ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ADD	ADDENDUM
ADDL	ADDITIONAL
ADJ	ADJUSTABLE
ADJ	ADJACENT
ADMIN	ADMINISTRATION
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
ALT	ALTERNATE
ALUM	ALUMINUM
ANUN	ANNUNCIATOR
AP	ACCESS PANEL
APC	ARCHITECTURAL PRECAST CONCRETE
APROX	APPROXIMATE
ARCH	ARCHITECTURAL
AUTO	AUTOMATIC
AWT	ACOUSTICAL WALL TREATMENT

B

BA	BUILDING ACCESSORY
BBD	BULLETIN BOARD
BC	BRICK COURSES
BD	BOARD
BFE	BOTTOM FOOTING ELEVATION
BG	BUMPER GUARD
BIT	BITUMINOUS
BKT	BRACKET
BLDG	BUILDING
BLKG	BLOCKING
BLT	BORROWED LIGHT
BLW	BELOW
BM	BEAM
BO	BY OWNER
BOF	BY OWNER FUTURE
BOT	BOTTOM
BR	BRICK
BRG	BEARING
BRL	BRICK LEDGE
BSMT	BASEMENT
BTWN	BETWEEN
BUR	BUILT-UP ROOFING

C

C	CHANNEL
C DISP	CUP DISPENSER
CAB	CABINET
CG	CORNER GUARD
CH	COAT HOOK
CJT	CONTROL JOINT
CCTV	CLOSED CIRCUIT TELEVISION

C

CD	COILING DOOR
CG	COILING GRILLE
CL	CENTER LINE
CL	CLASS
CLG	CEILING
CLR	CLEAR
CM	CONSTRUCTION MANAGER
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
CO	CASED OPENING
COL	COLUMN
COMB	COMBINATION/-ED
CONC	CONCRETE
CONF	CONFERENCE
CONN	CONNECT-ED /-ION
CONST	CONSTRUCTION
CONT	CONTINUEDOUS
CONTR	CONTRACTOR
COORD	COORDINATE
CORR	CORRIDOR
CPT	CARPET
CT	CERAMIC TILE
CTR	CENTER
CTSK	COUNTERSUNK
CUH	CABINET UNIT HEATER
CW	CURTAIN WALL
CW	COLD WATER
CYL	CYLINDER

D

D	DEPTH OR DEEP
DEMO	DEMOLITION
DEPR	DEPRESSION
DEPT	DEPARTMENT
DET	DETAILS
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DIFF	DIFFUSER
DIM	DIMENSION
DISP	DISPENSER
DIST	DISTRIBUTION
DIV	DIVISION
DJT	DUMMY JOINT
DN	DOWN
DP	DEMOUNTABLE PARTITION
DP	DATA PROCESSING
DR	DOOR
DS	DOWNSPOUT
DW	DUMBWAITER
DWG	DRAWING
DWLS	DOWELS

E

E	EXISTING
EXIST	EXISTING
EC	ELECTRIC CABINET
EF	EXHAUST FAN
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM

E

EJT	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMERG	EMERGENCY
ENCL	ENCLOSURE
ENTR	ENTRANCE
EO	ELECTRICAL OUTLET
EP	EXPLOSION PROOF
EQ	EQUAL
EQUIP	EQUIPMENT
ES	END SECTION
EWC	ELECTRIC WATER COOLER
EXA	EXHAUST AIR
EXC	EXCAVATE/-EDI-ION
EXH	EXHAUST HOOD
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR

F

FA	FIRE ALARM
FB	FIRE BLANKET
FD	FLOOR DRAIN
FDN	FOUNDATION
FDV	FIRE DEPARTMENT VALVE
FE	FIRE EXTINGUISHER
FGS	FOAM GASKET SEAL
FH	FIRE HOSE
FHP	FULL HEIGHT PARTITION
FHV	FIRE HOSE VALVE
FIN	FINISH
FIXT	FIXTURE
FL	FLOOR
FL	FLOW LINE
FLASH	FLASHING
FLEX	FLEXIBLE
FLG	FLANGE
FLUOR	FLUORESCENT
FP	FIRE PROOFING

F

FRMG	FRAMING
FS	FULL SIZE
FS	FLOOR SINK
FSTOP	FIRESTOPPING
FT	FOOT/FEET
FTG	FOOTING
FTR	FIN TUBE RADIATION
FURR	FURRING
FUT	FUTURE

G

GA	GAUGE
GAL	GALLON5
GALV	GALVINIZED
GB	GRAB BAR
GB	GRADE BEAM
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GEN	GENERAL
GL	GLASS
GMU	GLASS MASONRY UNIT
GR	GRADE
GWB	GYPSUM BOARD
GWB/SK	GYPSUM BLUE BOARD W/ PLASTER SKIM COAT
GYP SHGT	GYPSUM SHEATHING

H

H	HIGH
HB	HOSE BIB
HD	HAND DRYER
HDCP	HANDICAP
HDR	HEADER
HDW	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HPT	HIGHPOINT
HR	HANDRAIL
HT	HEIGHT
HTR	HEATER
HVAC	HEATING, VENTILATING, AIR CONDITIONING
HW	HOT WATER
HWD	HARDWOOD

I

IC	INTERCOM
ID	INSIDE DIAMETER
IN	INCH
INSUL	INSULATION
INT	INTERIOR
ISO	ISOLATION

J

JAN	JANITOR
JB	JUNCTION BOX
JST	JOIST
JT	JOINT

K

KO	KNOCK OUT

L

L	ANGLE
L	LAVATORY
LAV	LAVATORY
LB	POUND
LCD	LINEAR CEILING DIFFUSER
LF	LINE FIGURED
LIN	LINEAR
LKR	LOCKER
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LMC	LINEAR METAL CEILING
LOC	LOCATION OR LOCATE
LPT	LOW POINT
LS	LAWN SPRINKLING
LT	LIGHT
LTG	LIGHTING
LVR	LOUVER
LWC	LINEAR WOOD CEILING

M

M	MIDDLE
MAN	MANUAL
MATL	MATERIAL
MAX	MAXIMUM
MBD	MARKER BOARD
MC	MEDICINE CABINET
MCU	MODULAR COOLING UNIT
MECH	MECHANICAL
MEMB	MEMBRANE
MET	METAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MH	MANHOLE
MHC	MATERIAL HANDLING CONVEYOR
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MONO	MONOLITHIC
MPC	METAL PAN CEILING
MPU	MULTI-PURPOSE UNIT
MTD	MOUNTED
MTR	MOTOR
MULL	MULLION

N

NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NRC	NOISE REDUCTION COEFFICIENT
NT	NOTE
NTS	NOT TO SCALE

O

OC	ON CENTER
OD	OUTSIDE DIAMETER
OFF	OFFICE
OH	OVERHEAD
OP	OPERABLE PARTITION
OPER	OPERATOR
OPNG	OPENING
OPP	OPPOSITE
ORD	OVERFLOW ROOF DRAIN

P

PART	PARTITION
PB	PUSH BUTTON
PC	PRECAST CONCRETE
PCD	PAPER CUP DISPENSER
PED	PEDESTAL
PL	PLATE
PL	PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLBG	PLUMBING
PLS	PLASTER
PLW	PLYWOOD
PNL	PANEL
PR	PAIR
PRELIM	PRELIMINARY
PRFS	PLASTIC RESIN
PRFSS	PRESSURE
PRIM	PRIMARY
PROJ	PROJECTION
PRV	POWER ROOF VENTILATOR
PT	PAINT
PTC	PAPER TOWEL CABINET
PTR	PRINTER
PVC	POLYVINYL CHLORIDE

Q

QT	QUARRY TILE

R

R	RADIUS
R	RISER
RA	RETURN AIR
RAD	RADIATION
RB	RESILIENT BASE
RD	ROOF DRAIN
RE	RELOCATE EXISTING
REC	RECESSED
REF	REFERENCE
REFR	REFRIGERATOR
REG	REGISTER
REINF	REINFORCE/-EDI-ING
REM	REMOVE
REQD	REQUIRED
RET	RETAINING
REV	REVERSE
REV	REVISE
RF	RESILIENT FLOOR
RH	ROOF HATCH
RM	ROOM
RO	ROUGH OPENING
RS	ROUGH SLAB
RWC	RAIN WATER CONDUCTOR

S

S	SINK
SCHED	SCHEDULE
SD	SHOWER DRAIN
SD	SMOKE DAMPER
SDISP	SOAP DISPENSER
SECT	SECTION
SECY	SECRETARY
SF	STORE FRONT
SF	SQUARE FOOT
SH	SHOWER
SHD	SHOWER HEAD
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SL	SEALER
SLNT	SEALANT
SLV	SLEEVE
SM	SURFACE MOUNTED
SMC	SANITARY NAPKIN CABINET
SND	SANITARY NAPKIN DISPOSER
SOG	SLAB ON GRADE
SP	STANDPIPE
SPEC	SPECIFICATIONS
SPR	SINGLE PLY ROOF
SQ	SQUARE
SQ YD	SQUARE YARD
SR	SERVICE RECEPTOR
SS	SERVICE SINK
SST	STAINLESS STEEL
ST	STREET
ST	STONE TILE
STC	SOUND TRANSMISSION
STD	STANDARD
STL	STEEL
STN	STONE
STNL	STONE LEDGE
STOR	STORAGE
STRUCT	STRUCTURAL

S

STS	STEEL STRUCTURE
SUPV	SUPERVISOR
SUSP	SUSPENDED
SW	STEEL WINDOWS
SW	SWITCH
SWD	SOFTWOOD
SYM	SYMMETRICAL

T

T	TOP
TAN	TANGENT
TBD	TACKBOARD
TC	TIME CLOCK
TCAB	TOWEL CABINET
TDISP	TISSUE DISPENSER
TDR	TRENCH DRAIN
TEL	TELEPHONE
TEMP	TEMPERATURE
TER	TERRAZZO
TG	TONGUE & GROOVE
THRES	THRESHOLD
TPG	TEMPERED PLATE GLASS
TPH	TOILET PAPER HOLDER
TR	TREAD
TRANSF	TRANSFORMER
TS	TUBE SECTION
TV	TELEVISION
TYP	TYPICAL

U

U	URINAL
UC	UNDERCUT
UFD	UNDER FLOOR DUCT
UG	UNDERGROUND
UH	UNIT HEATER
UNFIN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
US	UTILITY SHELF
UTIL	UTILITY

V

VC	VALVE CABINET
VENT	VENTILATION
VERT	VERTICAL
VESTI	VESTIBULE
VR	VAPOR RETARDER
VTR	VENT THROUGH ROOF

W

W	WIDTH/WIDE
W	WIDE FLANGE
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WC	WALL COVERING
WD	WOOD
WDW	WINDOW
WG	WALL GUARD
WH	WALL HYDRANT
WHCH	WHEELCHAIR
WHTR	WATER HEATER
WP	WATERPROOF
WR	WASTE RECEPTACLE
WS	WEATHERSTRIP
WSCT	WAINSCOT
WT	WINDOW TREATMENT
WT	WEIGHT
WW	WOOD WINDOW
WWF	WELDED WIRE FABRIC

SYMBOLS

- LEVEL LINE, CONTROL OR DATUM ELEVATION
- REVISION NUMBER
- PARTITION TYPE
- CASEWORK TYPE
- INTERIOR WINDOW TYPE
- WINDOW TYPE
- COLUMN REFERENCE GRID
- BUILDING SECTION REFERENCE DRAWING NUMBER
- WALL SECTION REFERENCE DRAWING NUMBER
- SECTION DETAIL REFERENCE DRAWING NUMBER
- 1 1/2" DIMENSION LINE
- BREAK LINE TO BREAK OFF PARTS OF A DRAWING
- DOTTED LINE HIDDEN OR CONSTRUCTION ABOVE, BEYOND
- DETAIL REFERENCE DRAWING NUMBER
- EXTERIOR ELEVATION NUMBER
- INTERIOR ELEVATION KEY
- ROOM/SPACE NUMBER
- DOOR NUMBER
- DASH AND DOT CENTER LINE
- DASH AND DOUBLE DOT LINES PROPERTY LINES, BOUNDARY LINES

INDICATION OF MATERIALS

EARTH	EARTH/ COMPACT FILL	POROUS FILL/ GRAVEL
CONCRETE	CONCRETE	SAND MORTAR
MASONRY	BRICK	CONCRETE MASONRY UNIT
STONE	RUBBLE	MARBLE
METAL	STEEL/IRON	ALUMINUM
WOOD	WOOD SHIM	CONTINUOUS BLOCKING
	PLYWOOD	FINISH
GLASS	GLASS	GLASS BLOCK
INSULATION	BATT/ LOOSE FILL	RIGID
	FIRE SAFING	
FINISHES	GYPSUM WALL BOARD	ACOUSTICAL TILE

GENERAL NOTES

1. GENERAL CONDITIONS : THE GENERAL CONDITIONS FOR THIS CONTRACT SHALL BE AIA DOCUMENT A201 (1987 EDITION) EXCEPT AS HEREIN AMENDED.
2. SCOPE : WORK TO INCLUDE DEMOLITION AND CONSTRUCTION AS INDICATED ON THE DRAWINGS NECESSARY FOR A COMPLETE INSTALLATION. EACH CONTRACTOR SHALL RESPECT THE WORK OF OTHER CONTRACTORS AND ARE RESPONSIBLE FOR AND LIABLE TO REPAIR OR REPLACE ANY DAMAGE CAUSED BY THEIR WORK.
3. CODES : ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH LOCAL AND STATE CODES AND REGULATIONS HAVING JURISDICTION. THE CONTRACTOR SHALL PROTECT AND INDEMNIFY THE OWNER AND ARCHITECT AGAINST ANY CLAIM OR LIABILITY ARISING FROM ANY SUCH CODE OR REGULATION.
4. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, INSPECTIONS AND APPROVALS.
5. QUALITY : WORKMANSHIP SHALL BE OF THE HIGHEST TYPE, AND MATERIALS USED OR SPECIFIED OF THE BEST QUALITY THAT THE MARKET AFFORDS. ALL INSTALLATIONS AND APPLICATIONS SHALL CONFORM TO THE MANUFACTURERS SPECIFICATIONS.
6. COORDINATION OF THE WORK : THE GENERAL CONTRACTOR SHALL COORDINATE THE WORK CONTRACT FROM THE CONTRACTOR OR THE OWNER. THE CONTRACTORS INSTRUCTIONS SHALL BE FOLLOWED BY ALL TRADES.
7. MECHANICAL TRADES : THE MECHANICAL AND ELECTRICAL TRADES SHALL INSTALL THEIR WORK AS RAPIDLY AS THE OTHER WORK PERMITS AND SHALL COMPLETE THIS WORK BY THE TIME THE OTHER TRADES HAVE FINISHED.
8. EXAMINATION OF THE SITE AND DOCUMENTS : THE CONTRACTOR, BEFORE SUBMITTING HIS PROPOSAL, SHALL VISIT THE SITE AND EXAMINE FOR HIMSELF ALL CONDITIONS AND LIMITATIONS WHICH EFFECT THE CONTRACT. THE CONTRACTOR SHALL CAREFULLY EXAMINE ALL CONTRACT DOCUMENTS. TITLES AND SUBDIVISIONS IN THESE DOCUMENTS ARE FOR CONVENIENCE, AND NO REAL OR ALLEGED ERRORS IN ARRANGEMENT OF MATTER SHALL BE REASON FOR OMISSION OR DUPLICATION BY ANY CONTRACTOR.
9. SEPARATE CONTRACTS : THE OWNER RESERVES THE RIGHT TO LET OTHER CONTRACTS IN CONNECTION WITH THE WORK. THE GENERAL CONTRACTOR SHALL AFFORD OTHER CONTRACTORS REASONABLE OPPORTUNITY FOR THE EXECUTION OF THEIR WORK AND SHALL PROPERLY CONNECT AND COORDINATE HIS WORK WITH THEIRS.
10. GUARANTEE : ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE UNLESS SPECIFIED OTHERWISE FOR A LONGER PERIOD OF TIME ON CERTAIN ITEMS.
11. TRASH REMOVAL : PRIOR TO STARTING WORK, THE GENERAL CONTRACTOR SHALL PROVIDE A CONSTRUCTION DUMPSTER AND PICKUP SERVICE FOR ALL CONSTRUCTION DEBRIS (DUMPSTER LOCATION TO BE COORDINATED WITH THE OWNER). AT THE END OF EACH DAY, THE GENERAL CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE AND OR WITHIN THE BUILDING. IF TRASH AND DEBRIS ARE NOT REMOVED, THE OWNER MAY (AT HIS OPTION) PAY FOR THE REMOVAL AND BACK CHARGE THE CONTRACTOR.
12. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
13. ALL SECTIONS, DETAILS, MATERIALS, METHODS, ETC. SHOWN AND/OR NOTED ON ANY PLAN OR SECTION SHALL APPLY TO ALL OTHER SIMILAR LOCATIONS UNLESS OTHERWISE NOTED.
14. THE GENERAL CONTRACTOR SHALL SAFELY SHORE, BRACE, OR SUPPORT ALL WORK AS REQUIRED. THIS WORK SHALL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR AND NO ACT, DIRECTION, OR REVIEW OF ANY SYSTEM OR METHOD BY THE ARCHITECT SHALL RELIEVE THE CONTRACTOR OF THIS RESPONSIBILITY.
15. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW NOR INDICATE ANY OR ALL FASTENING OR FRAMING TECHNIQUES /DEVICES, NOR BE ABLE TO SHOW ALL CONDITIONS PRESENT.
16. ALL WORK IS NEW UNLESS OTHERWISE NOTED.
17. ALL WALLS AND CEILINGS TO BE 5/8in FIRE CODE OR 1/2in GYPSUM BOARD, 5/8in MOISTURE RESISTANT TYPE X OR 5/8in CEMENT BOARD. FINISH AND TEXTURE TO BE SELECTED BY OWNER. MATERIAL AS MANUFACTURED BY U.S. GYPSUM OR EQUAL FINISH (CEMENT ACCESSORIES AND TAPE OR SKIM COAT). ALL JOINTS AND NAIL HEADS READY FOR PAINT, TILE, WOOD TRIM, VWC, OR PANELING.
18. STORAGE : THE CONTRACTOR SHALL PROVIDE ON SITE WEATHER PROTECTED STORAGE SPACE, I.E.: TRAILER. STORAGE OF CONSTRUCTION MATERIALS IN THE EXISTING BUILDING WILL NOT BE PERMITTED.
19. PROTECTION : THE CONTRACTOR SHALL PROTECT ALL PUBLIC AND ADJACENT AREAS FROM DAMAGE DURING CONSTRUCTION.
20. TEMPORARY SERVICES : THE CONTRACTOR WILL PAY FOR EXISTING SERVICES (WATER, TELEPHONE AND ELECTRICITY) AND WILL TURN OVER THESE SERVICES TO THE OWNER UPON FINAL ACCEPTANCE OF THIS PROJECT.
21. THE CONTRACTOR SHALL VERIFY LOCATION AND ACTUAL DEPTH OF ALL EXISTING SANITARY PIPING, STORM DRAINS, GAS AND WATER MAINS, ELECTRIC LINES AND PIPES. HE IS ALSO ADVISED TO VERIFY ACTUAL INVERTS OF SANITARY AND STORM LINES BY HAND DUG TEST PITS WELL IN ADVANCE OF TRENCHING AND CONSTRUCTION. ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE ARCHITECT. ALL NECESSARY PERMITS AND APPROVALS MUST BE OBTAINED FROM PROPER AUTHORITIES.
22. ARCHITECTURAL, MECHANICAL, ELECTRICAL, ELEVATOR, & SPRINKLER : EACH CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ARCHITECT FOR APPROVAL PRIOR TO FABRICATION.
23. ALL WORK IS NEW UNLESS OTHERWISE NOTED.
24. DAMAGE : THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING BUILDING, WALLS, CEILINGS, FLOORS, FURNITURE AND FURNISHINGS. DAMAGED SURFACES DUE TO CONSTRUCTION TO BE PATCHED, REPAIRED AND/OR REPLACED AS REQUIRED AND BLEND TO MATCH EXISTING ADJACENT SURFACES AT NO ADDITIONAL COST TO OWNER.
25. THE GENERAL CONTRACTOR SHALL PREPARE A BOOKLET CONTAINING : LIST OF SUBCONTRACTORS USED ON THIS JOB WITH NAMES, ADDRESSES AND TELEPHONE NUMBERS. ALL WARRANTIES AND INSTRUCTION MANUALS FOR EQUIPMENT AND MATERIALS INSTALLED WILL BE ISSUED TO THE OWNER PRIOR TO FINAL ACCEPTANCE OF BUILDING, AND PRESENT BOOKLET TO OWNER PRIOR TO FINAL ACCEPTANCE OF OWNER.
26. CARPET AND/OR TILE : CARPET AND/OR TILE AS SELECTED AS PER DRAWINGS.
27. HANDICAPPED REQUIREMENTS : THE GENERAL CONTRACTOR WILL ACQUAINT HIMSELF WITH THE ARCHITECTURAL ACCESS BOARD (AAB) CODE FOR THE STATE OF MASSACHUSETTS AND THE ADA (AMERICANS WITH DISABILITIES ACT) TO ENSURE THAT THIS FACILITY WILL BE ACCESSIBLE.
28. SPRINKLER HEAD LOCATION : REFER TO N.F.P.A. STANDARDS. SPRINKLER HEADS TO BE LOCATED PER CODE. SHOP DRAWINGS ARE REQUIRED TO BE SUBMITTED TO THE CONTRACTOR FOR APPROVAL PRIOR TO INSTALLATION.
29. THE GENERAL CONTRACTOR SHALL COORDINATE THE LOCATION AND SIZE OF OPENINGS FOR VENTS, PIPES, INSERTS, BOXES, HANGERS, ETC.
30. ALL INTERIOR FINISHES AND FURNISHINGS FOR CEILINGS, WALL AND FLOORS SHALL BE CLASS 1in WITH A FLAME SPREAD RATING OF 0 TO .25.
31. SUBMIT SAMPLES OF ALL PAINTS AND STAINS FOR APPROVAL PRIOR TO APPLICATION.
32. BEFORE COMMENCING WORK, THE GENERAL CONTRACTOR WILL MEET WITH THE APPOINTED COMPANY REPRESENTATIVE TO OUTLINE PHASING OF CONSTRUCTION AND DISPOSITION OF EXISTING CONSTRUCTION MATERIALS AND/OR EQUIPMENT.
33. ALL WOODS BLOCKING TO BE PRESSURE TREATED, FIRE RETARDANT.

SUB. NO.	SUBMITTAL DATE	DESCRIPTION	REV. NO.
05	12.19.2022	ISSUED FOR REVIEW	
04	12.14.2022	ISSUED FOR INFORMATION	
03	12.01.2022	ISSUED FOR INFORMATION	
02	11.09.2022	ISSUED FOR INFORMATION	
01	10.31.2022	ISSUED FOR INFORMATION	0

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CLIENT INFORMATION

SUMMIT REAL ESTATE STRATEGIES LLC.

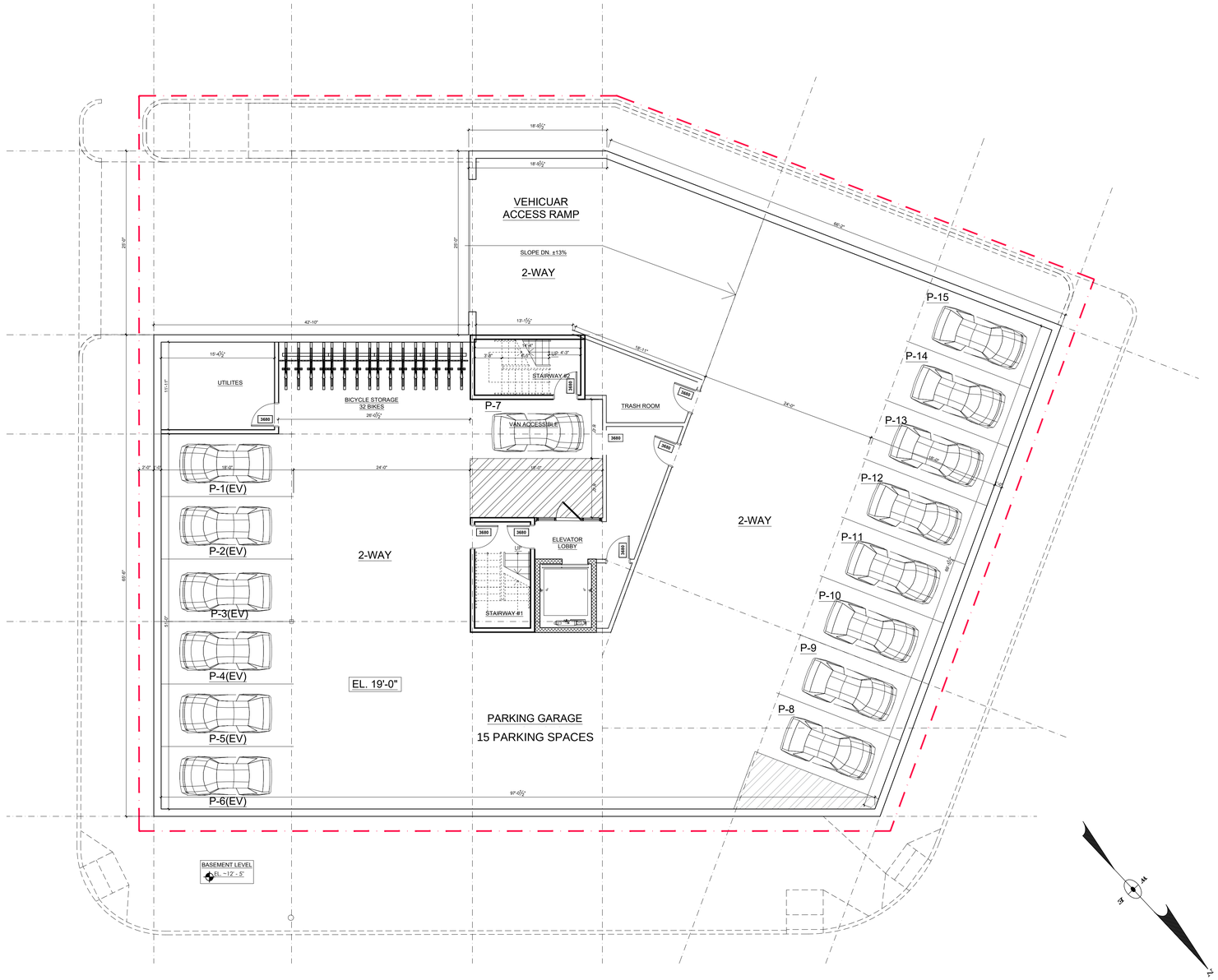
PROJECT LOCATION

190-200 Massachusetts Ave
Arlington, MA 02474

DRAWING TITLE

GENERAL NOTES

SCALE NTS	DATE October 2022
PROJECT NO.	REVISION NO. 0
DRAWN BY	DRAWING NO.
VERIFIED BY	A-001



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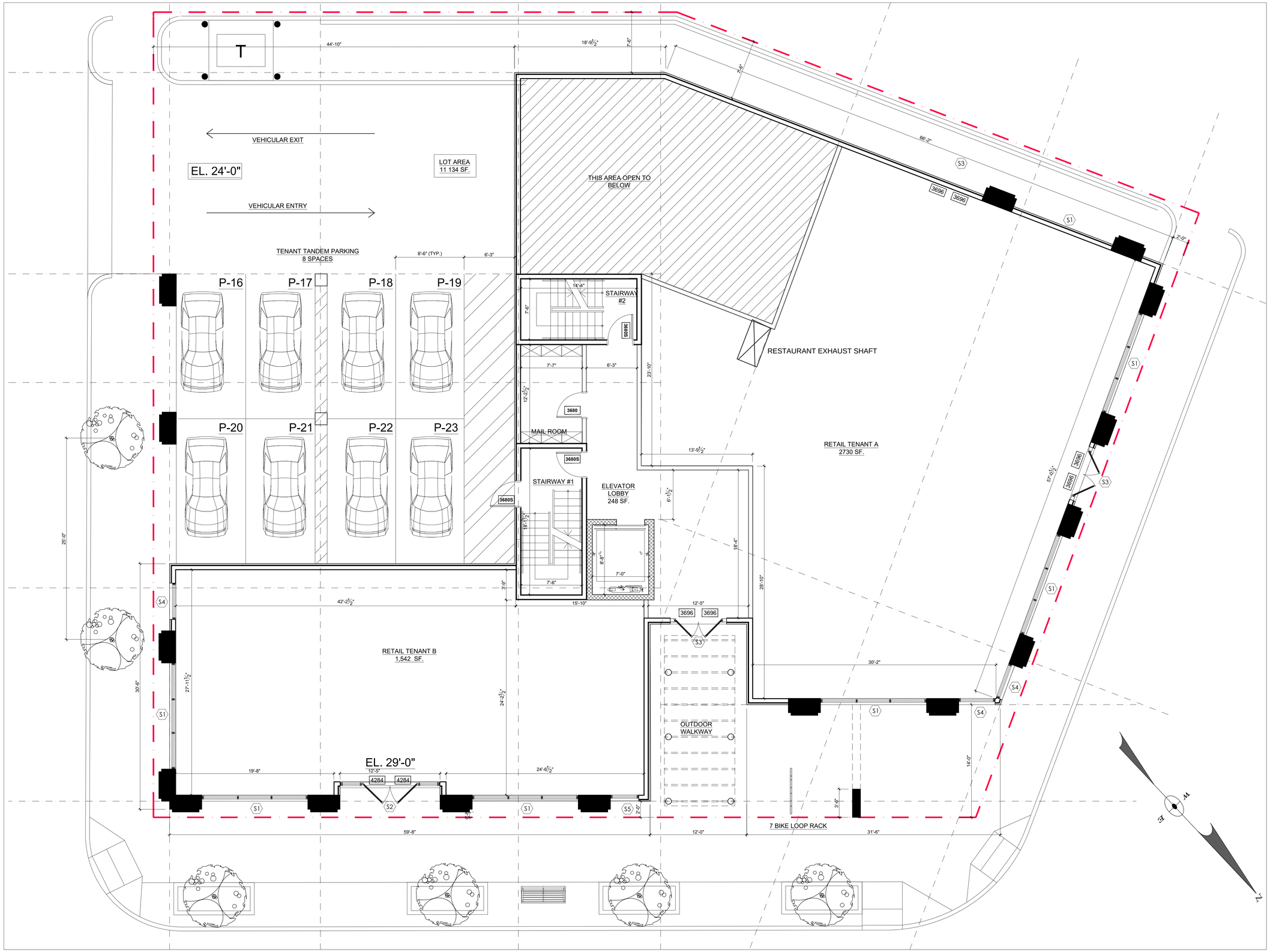
DRAWING TITLE

PARKING/ BASEMENT LEVEL

SCALE 1/8"=1'-0"	DATE October 2022
PROJECT NO.	REVISION NO. 0
DRAWN BY	DRAWING NO.
VERIFIED BY	A.100



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SUMMIT REAL ESTATE STRATEGIES LLC.

PROJECT LOCATION

190-200 Massachusetts Ave
Arlington, MA 02474

DRAWING TITLE

1-st LEVEL FLOOR PLAN

SCALE 3/16"=1'-0"	DATE October 2022
PROJECT NO.	REVISION NO. 0
DRAWN BY	DRAWING NO.
VERIFIED BY	A.101

SUB. NO.	SUBMITTAL DATE	DESCRIPTION	REV. NO.
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CLIENT INFORMATION

SUMMIT REAL ESTATE STRATEGIES LLC.

PROJECT LOCATION

190-200 Massachusetts Ave
Arlington, MA 02474

DRAWING TITLE

2nd.& 3rd. LEVEL PLAN

SCALE 3/16"=1'-0"	DATE October 2022
PROJECT NO.	REVISION NO. 0
DRAWN BY	DRAWING NO.
VERIFIED BY	A.102

SUB. NO.	SUBMITTAL DATE	DESCRIPTION	REV. NO.
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CLIENT INFORMATION

SUMMIT REAL ESTATE STRATEGIES LLC.

PROJECT LOCATION

190-200 Massachusetts Ave
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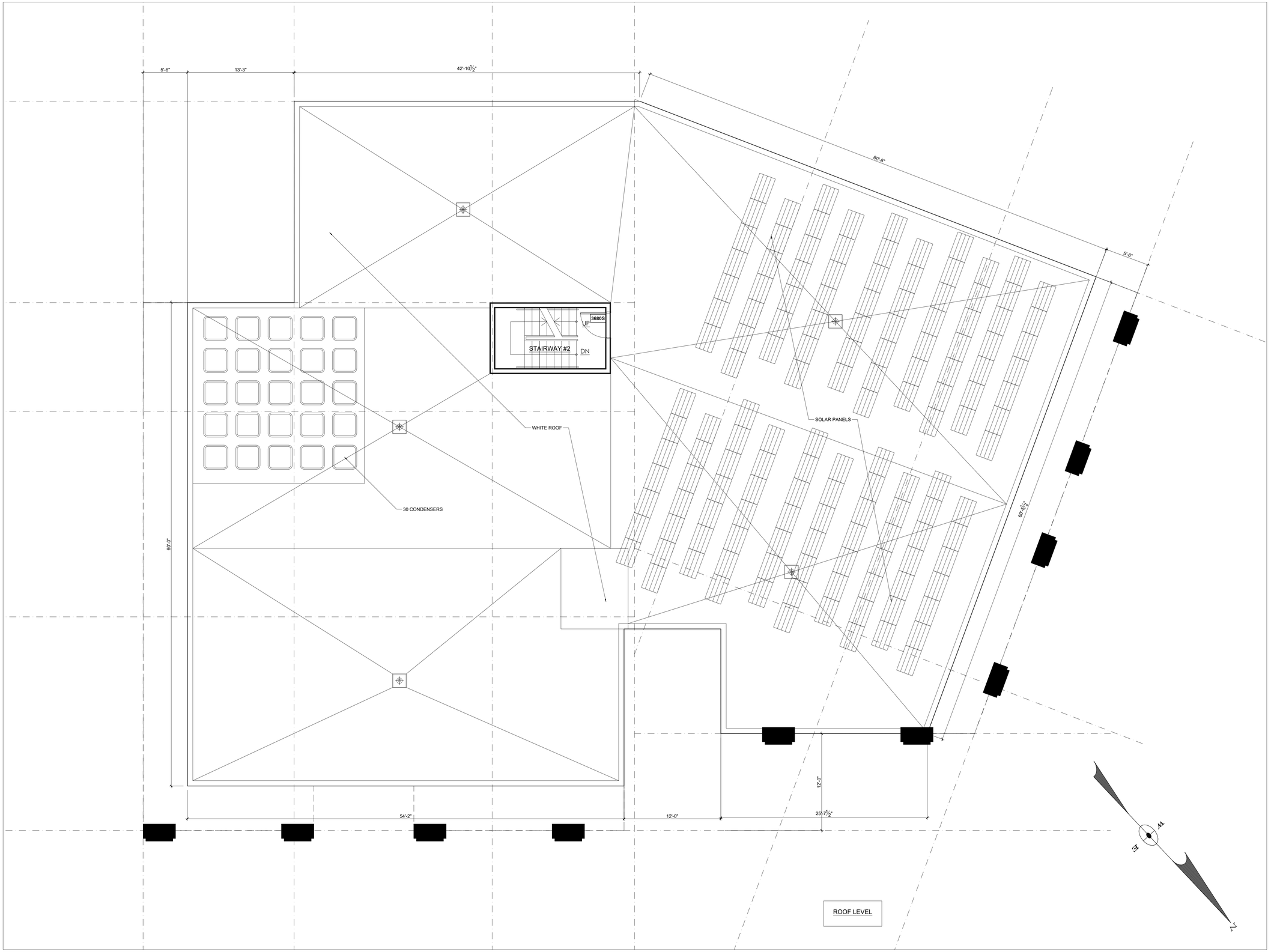
DRAWING TITLE

4th. LEVEL PLAN

SCALE 3/16"=1'-0"	DATE October 2022
PROJECT NO.	REVISION NO. 0
DRAWN BY	DRAWING NO.
VERIFIED BY	A.103



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CLIENT INFORMATION

SUMMIT REAL ESTATE STRATEGIES LLC.

PROJECT LOCATION

190-200 Massachusetts Ave
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DRAWING TITLE

ROOF PLAN

SCALE 3/16"=1'-0"	DATE October 2022
PROJECT NO.	REVISION NO. 0
DRAWN BY	DRAWING NO.
VERIFIED BY	A.104

SUB. NO.	SUBMITTAL DATE	DESCRIPTION	REV. NO.
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190-200 Massachusetts Ave
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DRAWING TITLE

VISUALIZATION

SCALE NTS	DATE October 2022
PROJECT NO.	REVISION NO. 0
DRAWN BY	DRAWING NO.
VERIFIED BY	AV

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CLIENT INFORMATION

SUMMIT REAL ESTATE STRATEGIES LLC.

PROJECT LOCATION

190-200 Massachusetts Ave
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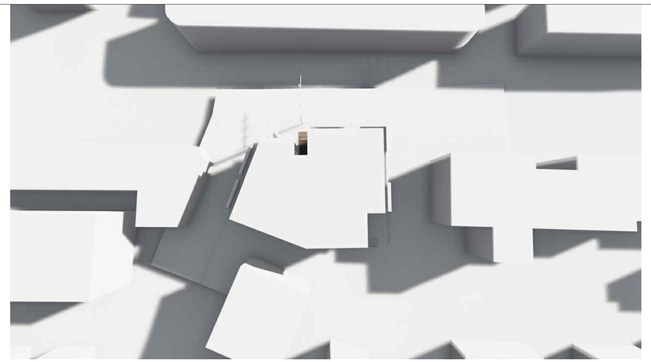
DRAWING TITLE

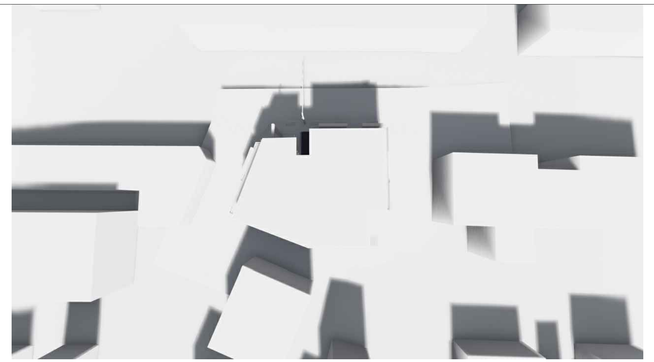
VISUALIZATION

SCALE NTS	DATE October 2022
PROJECT NO.	REVISION NO. 0
DRAWN BY	DRAWING NO.
VERIFIED BY	AV1

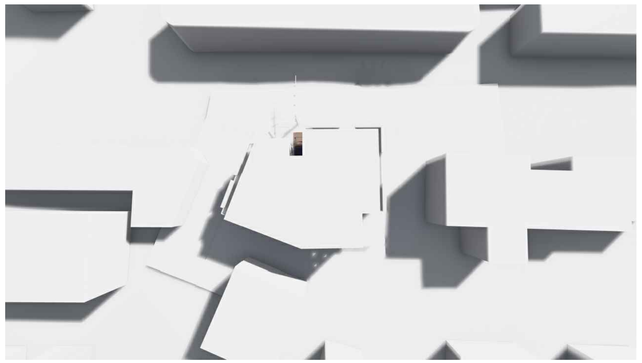


March 21st 9am

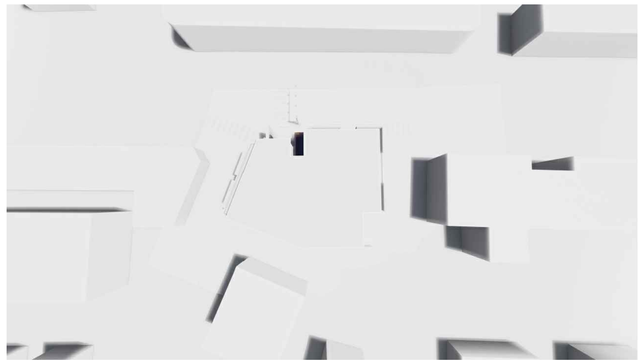
March 21st 12pm



March 21st 3pm

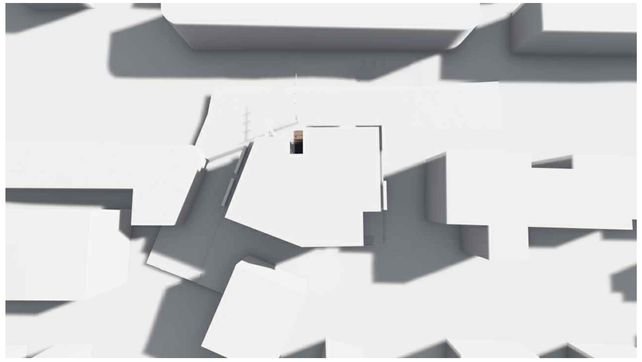


June 21st 9am



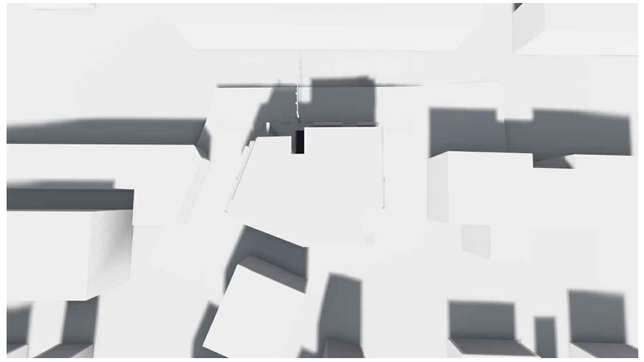
June 21st 12pm

June 21st 3pm

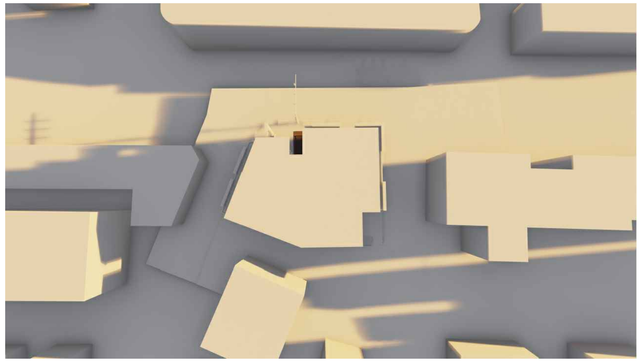


September 21st 9am

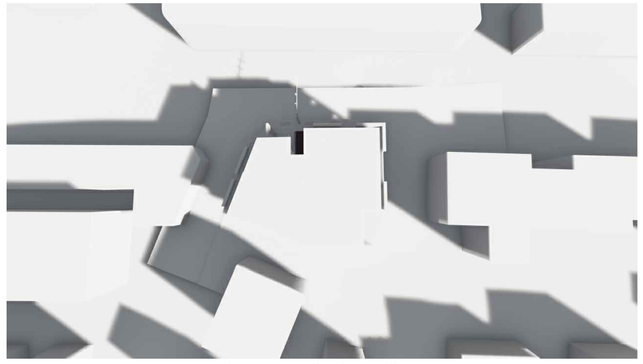
September 21st 12pm



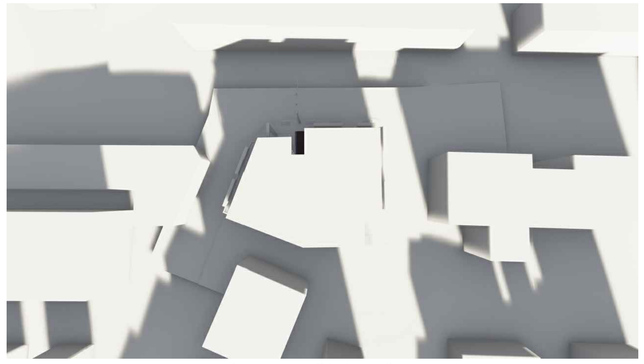
September 21st 3pm



December 21st 9am



December 21st 12pm



December 21st 3pm

SUB. NO.	SUBMITTAL DATE	DESCRIPTION	REV. NO.
05	12.19.2022	ISSUED FOR REVIEW	
04	12.14.2022	ISSUED FOR INFORMATION	
03	12.01.2022	ISSUED FOR INFORMATION	
02	11.09.2022	ISSUED FOR INFORMATION	
01	10.31.2022	ISSUED FOR INFORMATION	0

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CLIENT INFORMATION

SUMMIT REAL ESTATE STRATEGIES LLC.

PROJECT LOCATION

190-200 Massachusetts Ave
Arlington, MA 02474

DRAWING TITLE

SHADOW
STUDY

SCALE NTS	DATE October 2022
PROJECT NO.	REVISION NO. 0
DRAWN BY	DRAWING NO.
VERIFIED BY	AS