

mass+main

CAMBRIDGE, MASSACHUSETTS

Article 19 Special Permit Review Application
Amendment #2

January 5, 2017



APPLICANT

Watermark Central Venture LLC
c/o Twining Properties
One Broadway, 14th Floor
Cambridge, MA 02141

SUBMITTED TO

Cambridge Community Development Department
City Hall Annex
344 Broadway
Cambridge, MA 02139

IN ASSOCIATION WITH

CBT Architects
DLA Piper
Haley and Aldrich, Inc.
Steven Winter Associates, Inc.
John Moriarty & Associates
Landworks Studios, Inc.
Cosentini Associates

January 5, 2017

Cambridge Planning Board
City Hall Annex
Cambridge, MA 02139
Attention: Elizabeth Paden

Subject: Amendment #2 to the Mass+Main Special Permit Application

Dear Chairman Cohen and Members of the Board:

On behalf of Watermark Central Venture LLC, the owner of the above referenced project, please find additional materials for a minor change in the number of units and clarifications:

INCREASED UNITS FROM 283 TO 285

In refining the layout and uses in the B-2 Building, two units were added on the 2nd floor of the attached Apollo Building: a 3-BR with mezzanine apartment facing Mass Ave and a Studio. Most of the changes to the application reflect this increase.

ADDITIONAL CLARIFICATIONS

- Added construction phasing plans to compliment the previously submitted draft Construction Management Plan
- Provided the existing plan for off-site parking at 65 Bishop Allen Drive
- Identified canopies for Central Market, residential entries, Coolidge Place and retail stores
- Provided strategies to accommodate climate change impacts identified in the 2015 Climate Change Vulnerability Report

We look forward to continuing the Mass+Main deliberations at January 24th Planning Board Hearing.

Again, thank you for your consideration of this project.

Sincerely,



Alex Twining
President, Twining Properties
On behalf of Watermark Central Venture LLC

Enclosure

OVERVIEW OF CHANGES

1. REVISIONS FOR 2 ADDITIONAL UNITS

Two additional units have been added on the second floor of the Apollo building (in lieu of amenity space). Accordingly, Long-term bicycle parking requirements increase making minor changes in text, figures and the Dimensional Form. While the car parking spaces required increases by one to 143, the actual spaces provided remains unchanged at 146 spaces.

A. UPDATED APPLICATION TEXT SECTIONS

- **1.3** – Proposed Project Description, including Table 1-1, Proposed Development Program and Table 1-2, Estimated Unit Mix
- **5.2** – Compliance with Bicycle Parking Requirements
- **5.3** – Parking/Shared Parking Analysis

B. UPDATED FIGURES

- **Figures 1.11b** Building B-2 Level 2 Plan & Mezzanine (added 2 units in lieu of amenity)
- **Figure 5.5a, 5.5b & 5.6** Updated bicycle parking (added long-term bicycle spaces)

C. DIMENSIONAL FORM reflecting increased units

	Original Dimensional Form		Updated Dimensional Form		Change
	Minimum Required	Proposed	Minimum Required	Updated Proposed	
Total Dwelling Units	n/a	283 units	n/a	285 units	+2 units
Off-street Parking Spaces	142 spaces	146 spaces	143 spaces	146 spaces	No change
Long-term Bicycle Parking	298 spaces	298 spaces	301 spaces	302 spaces	+4 spaces
Short-term Bicycle Parking	38 spaces	* 38 spaces	40 spaces	40 spaces	**+2 spaces

* Typo in original Dimensional Form – 39 spaces listed, actual was 38 spaces

** 15 racks on M+M property, 5 remaining racks to be located by the City (two bicycles per rack)

2. CONSTRUCTION PHASING DRAWINGS

The Phasing Drawings (7 pages by Moriarty, dated 12/7/16) compliment the previously submitted Construction Management Plan (CMP) Draft, showing site conditions, logistics and truck routing for the construction period. These draft versions of CMP and Phasing Drawings will be coordinated with DPW and TP&T.

3. CORRECTIONS AND UPDATES TO THE DIMENSIONAL FORM

- a. Unit count is increased by 2 to 285 units

- b. % of Open Space is corrected to deduct for the glass covered Central Market area
- c. Number of required off-street parking spaces is increased for the additional units
- d. Number of required Short-term and Long-term bicycle spaces is increased for additional units
- e. Areas corrected to match Table-1: Residential Base and Non-residential Base

4. EXISTING SURFACE PARKING AT 65 BISHOP ALLEN DRIVE (Added Figure 5.9)

The survey of the existing parking lot included in the Proposed Shared Parking Plan, Figure 5.7: 51 total spaces (39 spaces for Mass+Main and 12 spaces for 47 Bishop Allen Drive)

5. CANOPY CLARIFICATIONS

Figures 1.8a and 1.11a (B-1 and B-2 Ground Floor Plans) indicate four types of canopies: see dashed lines and labels.

- a. Glass canopy over Central Market
- b. Residential Building entry canopies
- c. Coolidge Place Canopies – required for wind mitigation
- d. Retail Canopies – optional tenant installed ID canopies, subject to retail tenant fitout guidelines

6. STRATEGIES TO ADDRESS CLIMATE CHANGE IMPACTS

The Mass+Main Team will continue to work with the Cambridge DPW to address flood level impacts and building resiliency presented in the November 2015 Climate Change Vulnerability Assessment for flood elevations associated with 2030 and 2070.

Three strategies for building resiliency will minimize surface flooding impacts:

- a. Stone plinth at the base of the building around the entire perimeter
- b. Elevate critical mechanical equipment such as transformer and switch gear on concrete pads above flood elevations
- c. Provide temporary floodgates at ground floor entrances

Mass + Main will continue to cooperate and coordinate with the DPW with the new large infrastructure stormwater project to control neighborhood flooding.

Table of Contents

Updated Dimensional Formsee Overview of Changes

Updated Text Sections

Supplemental Documentation see Overview of Changes

1.3 - Proposed Project Description, Tables 1-1 & 1-2 updated for 2 more units

5.2 – Compliance with Bicycle Parking Requirements updated for 2 more units

5.3 – Parking/Shared Parking Analysis updated for 2 more units

Updated Figures dated 1/4/17

Figure 1.8a: Building B-1 Ground Floor Plan..... *canopy clarifications*

Figure 1.11a: Building B-1 Ground Floor Plan..... *canopy clarifications*

Figure 1.11b: Building B-2 Level 2 Floor Plan *add two units in lieu of amenity space*

Figure 5.5a: Building B-1 Long-term Bike Parking Grade *updated for additional units*

Figure 5.5b: Building B-1 Long-term Bike Parking Mezzanine *updated for additional units*

Figure 5.6: Building B-2 Long-term Bike Parking..... *updated for additional units*

Figure 5.9: Existing Parking Lot – 65 Bishop Allen Drive*added figure*

Added Information - Construction Phasing Plans dated 12/7/16

Cover Sheet – Moriarty

Phase 1 – Mobilization Drawing 1

Phase 2 – Existing Structure Demolition 2

Phase 3 – Foundation Support..... 3

Phase 4 – Excavation 4

Phase 5 – Structure Erection..... 5

Phase 6 – Interior Finishes 6

Phase 7 – Trucking Plan..... 7

DIMENSIONAL FORM

Project Address: Mass + Main*

Application Date: 9/30/16

	Existing	Allowed or Required (max/min)	Proposed	Permitted
Lot Area (sq ft)	38,773		38,773	
Lot Width (ft)			(multiple lots)	
Total Gross Floor Area (sq ft)	62,905	252,025	252,025	
Residential Base			249,275	
Non-Residential Base			2,800	
Inclusionary Housing Bonus		0	0	
Total Floor Area Ratio	1.6	6.5	6.5	
Residential Base			6.4	
Non-Residential Base			0.1	
Inclusionary Housing Bonus		0	0	
Total Dwelling Units	0		285	
Base Units				
Inclusionary Bonus Units				
Base Lot Area / Unit (sq ft)			136	
Total Lot Area / Unit (sq ft)			136	
Building Height(s) (ft)	35	195 and 70	195 and 70	
Front Yard Setback (ft)	0	0	0	
Side Yard Setback (ft)	0	0	10	
Side Yard Setback (ft)	0	0	0	
Rear Yard Setback (ft)	0	0	0	
Open Space (% of Lot Area)	0%	10%	12%	
Private Open Space	0			
Permeable Open Space	0			
Other Open Space (Specify)	0			
Off-Street Parking Spaces	51	143 min / 214 max	146	
Long-Term Bicycle Parking	0	301	302	
Short-Term Bicycle Parking	0	40	40	
Loading Bays	0	1	1	

Use space below and/or attached pages for additional notes:

***See Supplemental Documentation for additional detail**

Special Permit Application Form Supplemental Documentation

Updated Table-1

Dimensional Form Information

TABLE 1 DIMENSIONAL FORM INFORMATION

	Existing	Allowed or Required (max/min)	Proposed	Permitted
Lot Area (sq ft)	38,773 sq ft	N/A ¹	38,773 sq ft	
Lot Width (ft)		N/A ¹	(multiple lots)	
Total Gross Floor Area (sq ft)	62,905 sq ft	252,025 sq ft	266,504 sq ft ³	
Residential Base		N/A ¹	249,225	
Non-Residential Base		N/A ¹	2,800 ³	
Inclusionary Housing Bonus		-0-	-0-	
Total Floor Area Ratio	1.6	6.5	6.5	
Residential Base		N/A ¹	6.4	
Non-Residential Base		N/A ¹	0.1	
Inclusionary Housing Bonus		-0-	-0-	
Total Dwelling Units	-0-	N/A ²	285	
Base Units		N/A ²		
Inclusionary Bonus Units		N/A ²		
Base Lot Area/Unit (sq ft)		N/A ¹	136	
Total Lot Area/Unit (sq ft)		N/A ¹	136	
Building Height(s) (ft)	35 feet	195 and 70 feet ⁴	195 and 70 feet ⁵	

	Existing	Allowed or Required (max/min)	Proposed	Permitted
Front Yard Setback (ft)	-0-	-0-	-0-	
Side Yard Setback (ft)	-0-	-0-	10	
Side Yard Setback (ft)	-0-	-0-	-0-	
Rear Yard Setback (ft)	-0-	-0-	-0-	
Open Space (% of Lot Area)	0%	10% ⁶	12% ⁶	
Private Open Space	-0-			
Permeable Open Space	-0-			
Other Open Space (specify)	-0-			
Off-Street Parking Spaces	51 ⁷	143 minimum/ 214 maximum	146 ⁸	
Long-Term Bicycle Parking	-0-	301	302	
Short-Term Bicycle Parking	-0-	40	40 ⁹	
Loading Bays	-0-	1	1	

N/A Not Applicable

- 1 Not applicable in Mass and Main Residential Mixed Income Subdistrict.
- 2 17% low and moderate, 3% middle income, 10% 3-bedroom, per Section 20.307.8. Minimum 8% micro-housing units pursuant to the Letter of Commitment dated May 18, 2015 and referenced in Section 20.307.13.
- 3 See discussion in section 1.3 of Chapter 1, *Project Description* of this application regarding retail exemption for retail spaces under 1,500 square feet.
- 4 Up to 195 feet in Mass Ave Height Area and up to 70 feet in Columbia/Douglass Street Height Area, per Section 20.307.6.2, provided that only one building within the Mass Ave Height Area may exceed 80 feet and subject to a 10,000 SF floor plate restriction for all floors above 80 feet in height.
- 5 The Project will be 195 feet along Mass Ave and 70 feet along Columbia Street, per section 20.307.6.2.
- 6 May be satisfied with any combination of Private Open Space and pedestrian amenities open to the public, such as a pedestrian plaza or arcade, per Section 20.307.6.4.
- 7 51 spaces in the existing lot at 65 Bishop Allen lot to remain (39 of which to support the Project where the remaining 12 spaces will be designated for the 47 Bishop Allen Drive project). This lot is within 400 ft of the Project and, therefore, allowed without a special permit pursuant to Section 20.307.7.c.
- 8 Up to 95 spaces are proposed in the garage below Building B-1 less 3 spaces to be provided as carshare spaces. In addition, 39 of the existing surface parking spaces in the 65 Bishop Allen Drive parking lot will be allocated to the Project and a credit of 15 parking spaces, in accordance with Section 20.307.7.d. This section requires a minimum of 2 carshare spaces and each carshare space equates to 5 parking spaces.
- 9 Consists of 15 racks on Mass+Main property with 5 additional racks to be placed by the City at the Applicant's expense.

1

Project Description – updated sections

This is an application for the Project Review Special Permit, pursuant to Article 19.20 of the Cambridge Zoning Ordinance, for the Mass+Main Mixed-Income Residential project in the Central Square neighborhood of Cambridge (the “Project”). Watermark Central Venture LLC (the “Applicant”) is proposing to construct an approximately 285-unit, mixed-income, transit-oriented residential complex with community-centric retail. The Project is located at the terminus of Massachusetts Avenue (“Mass Ave”), Main Street, and Columbia Street. Refer to Figure 1.1 for a site location map and Figure 1.2 for site context.

The Applicant has been working closely since April with neighborhood groups, city leaders, and the Community Development Department (CDD) to refine the Project. Following an extensive, two-year process that involved the community and the City of Cambridge, the City Council voted 7:2 to adopt Zoning Petition Ordinance Number 1368—Mass and Main Residential Mixed Income Subdistrict (Article 20.307 – the “Subdistrict”)—at the May 18, 2015 meeting. The zoning aims to encourage the development of a mixed-income residential community by allowing additional height on Mass Ave and density if 20 percent affordable and middle-income apartments and a local retail program are included.

As demonstrated herein, the Project as submitted conforms to the Citywide Urban Design Objectives of Article 19.30, the Sustainable Design and Development requirements of Article 22.23, and satisfies all other requirements necessary for the issuance of the requested Project Review Special Permit, including the applicable requirements of the Subdistrict.

1.3 Proposed Project Description

Figure 1.6a presents the proposed site plan for the Project and Figure 1.6b show the Project in context with the 47 Bishop Allen Drive project. The Project includes construction of 285 residential units and related amenities with ground floor retail space set in two buildings totaling approximately 252,025 square feet of gross floor area. Working closely with the Cambridge Historical Commission (CHC), the Applicant proposes to retain and reuse the

existing 411-413 Mass Ave building. A total of 134 physical parking spaces will be provided to support the Project. Refer to Chapter 5, *Transportation* of this application for a more detailed description of the shared parking approach for the Project in combination with the 47 Bishop Allen Drive project.

Table 1-1 below presents the proposed development program.

TABLE 1-1 PROPOSED DEVELOPMENT PROGRAM

Component	Size (Zoning Gross Floor Area)	Quantity
Building Height (tallest)	-	195 feet
Residential		
Building B-1	198,246 GFA	225 units
Building B-2	48,900 GFA	60 units
411-413 Mass Ave Building Reuse ¹	2,079 GFA	NA
<i>Residential Sub-Total</i>	<i>249,225 GFA</i>	<i>285 units</i>
Retail (non-exempt)	2,800 GFA	NA
Total Building Area	252,025 GFA	
Retail (exempt) ²	14,479 SF	NA
Below Grade Structured Parking ³	-	95 spaces
Surface Parking (existing to remain) ⁴	-	39 spaces
Total Parking		134 spaces⁵

1 Includes reuse and renovation of the historic building for residential amenity space (2,079 sf).

2 See discussion below regarding exemption for retail spaces under 1,500 SF.

3 Provided underground below Building B-1.

4 Located at 65 Bishop Allen Drive.

5 Three (3) of these spaces will be carshare spaces.

In order to encourage a mix of retail, including local and independent retailers, retail spaces at the Project smaller than 1,500 square feet will be excluded from the calculation of floor area ratio, per Section 20.307.9.5. The Applicant respectfully requests that, in order to accommodate potential larger retail tenants, minor deviations in the retail/residential allocation of Project GFA up to 5 percent shall be permitted subject to approval by CDD in connection with its approval of the final Retail Plan for the Project, provided that total Project GFA continues to meet applicable zoning requirements.

The Project will include a range of unit types and sizes including Micro units (as required by the Commitment Letter), studios, loft-style units, 1-bedroom units, 2-bedroom units and 3-bedroom units. Table 1-2 below reflects the Applicant's current estimated unit mix and will be subject to change based on market conditions and as the building design, internal layout, retail configuration and structural engineering are finalized.

TABLE 1-2 ESTIMATED UNIT MIX

Unit Type	Number	Percentage	Size Range (square feet)
Micro ¹	23	8%	338-352
Studio	65	23%	353-554
Loft	32	11%	570-779
1-Bedroom	65	23%	602-817
2-Bedroom	59	21%	710-1,176
3-Bedroom	41	14%	965-1,415
Total	285	100%	

¹ Residential micro-housing units measuring between 338 and 352 square feet in size. Per the Commitment Letter, such units will include in leasehold agreements (or other equivalent occupancy agreements) a covenant by the tenant that such tenant shall not apply to the City of Cambridge Traffic, Parking & Transportation Department for a Residential Parking Permit.

5

Transportation – updated sections

5.2 Compliance with Bicycle Parking Requirements

The Project will provide bicycle parking in accordance with the City of Cambridge’s Bicycle Parking Zoning Ordinance, as shown in Table 5-1 below.

TABLE 5-1 BICYCLE PARKING

Land Use	Long-Term Bicycle Parking			Short-Term Bicycle Parking		
	Code	Rate	Spaces	Code	Rate	Spaces
Residential (Mass+Main; 285 units)	R2	1.05 spaces per dwelling ¹	299	R2	0.10 spaces per dwelling	29
Residential (47 Bishop Allen Drive; 23 units)	R2	1.0 space per dwelling	24	R2	0.10 spaces per dwelling	3
Retail (17,000 GSF)	N4	0.10 spaces per 1,000 sf ²	2	N2	0.60 spaces per 1,000 sf	11
Total			325			43

Source: City of Cambridge Zoning Ordinance Article 6.0

1 per city guide – 1.00 spaces per unit for the first 20 units for a residential building

2 per city guide – up to 4 retail long-term spaces may be provided as short-term

To satisfy the short-term bicycle parking requirement, a total of 44 spaces will be provided throughout the development to support the retail and residential patrons accessing the Project Site (40 spaces for the Mass+Main project and 4 spaces for the 47 Bishop Allen Drive project), as shown on Figure 5.4. Building B-1 will provide 238 long-term bicycle parking spaces in one large bike room on the ground floor with a mezzanine level accessed from an elevator and 40 spaces within the Garage as shown on Figures 5.5a and 5.5b, respectively. Building B-2 will provide one 24-space, bike room, as shown on Figure 5.6. The 47 Bishop Allen Drive residential building will provide 24 on-site long-term bicycle storage spaces.

The specific long-term and short-term bicycle racks will be selected at a time closer to the construction and installation of the racks and will comply with all bicycle parking requirements in place at the time of the TIS certification. Short-term bicycle racks are shown on the

Mass+Main property in Figure 5.4. The short-term bicycle parking consists of 15 racks on Mass+Main property with 5 additional racks to be placed by the City at the Applicant's expense.

5.3 Parking/Shared Parking Analysis

The parking requirements for the Project, as described in Section 20.307 and provided in Attachment 2, state that the minimum required parking for the Project is 0.5 parking spaces per residential units with a maximum parking ratio of 0.75 spaces per residential unit. In addition the "...Project shall provide, at a minimum, one (1) parking space for every 100 residential units that shall be dedicated for use by a carsharing organization...Each Carsharing Space within a Residential Mixed Income Project shall allow the required number of residential parking spaces to be reduced by five (5) spaces..." In addition, the ordinance states that "No separate off-street parking shall be required for ground-floor retail uses..."

As shown in Figure 5.7, the Project will provide 95 residential parking spaces in the Building B-1 underground garage and 51 residential parking spaces in the 65 Bishop Allen Drive surface parking lot for a total of 146 physical parking spaces. In compliance with zoning, this total parking supply is broken down as follows:

- Up to 95 spaces are proposed for the garage below Building B-1 to support the Mass+Main project, with 3 spaces being provided as carshare spaces. (Per Section 20.307.7.d, the Project is required to provide a minimum of two (2) carshare spaces and each of the carshare spaces will equate to a credit of 5 spaces.)
- Up to 39 spaces in the existing surface parking lot at 65 Bishop Allen lot will be allocated to the Mass+Main project.
- Up to 12 spaces in the existing surface parking lot at 65 Bishop Allen Drive will be allocated for the 47 Bishop Allen Drive project.

Based on the above breakdown, a total parking supply of 158 "parking spaces" are being provided for the 308 units, which equates to an overall parking ratio of 0.51.

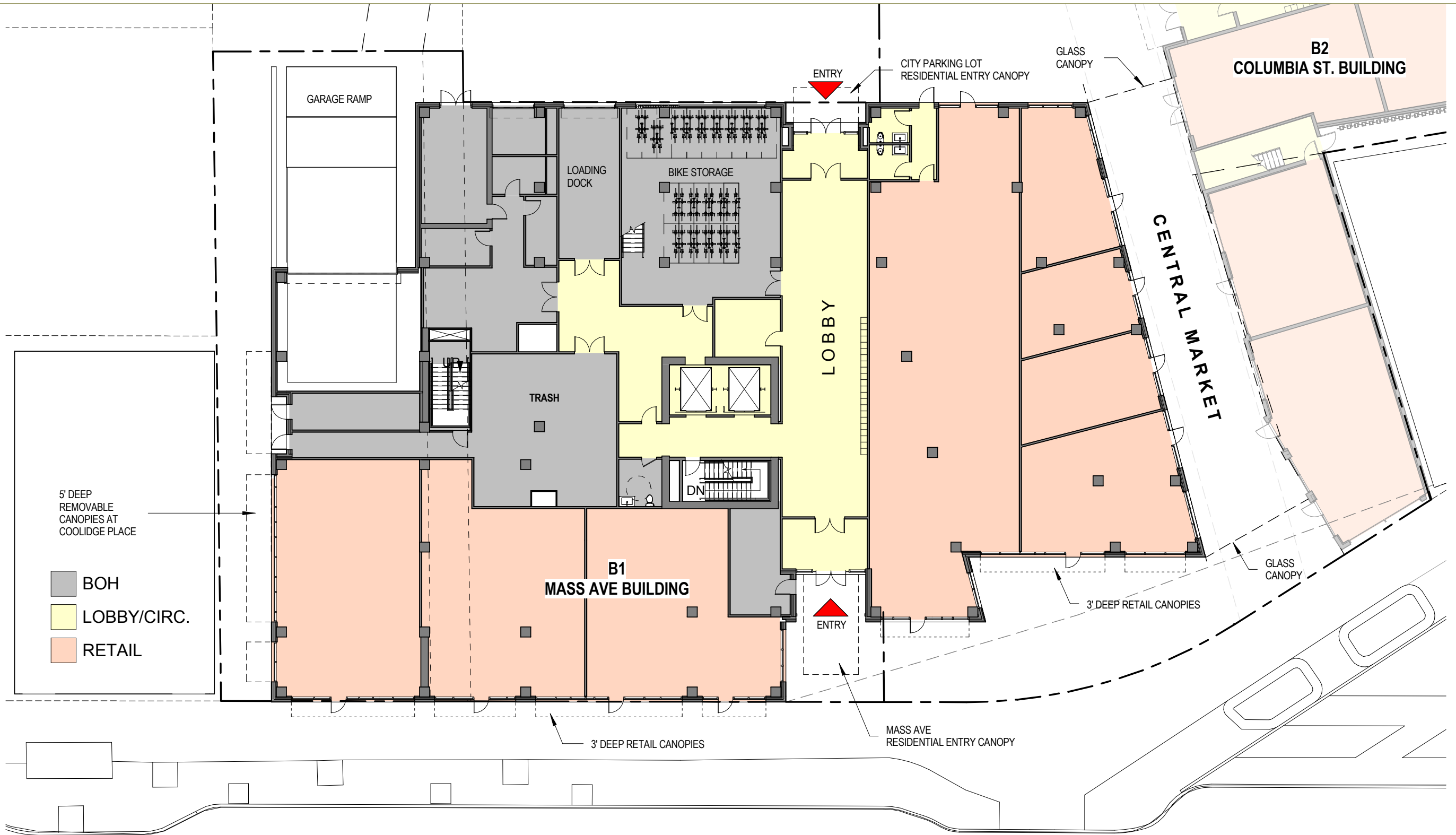
The Applicant will work with the carsharing service to understand the demand for carsharing services within the area and provide at least three (3) carshare spaces with the initial opening of Building B-1, and increase to a total of five (5) carsharing spaces if demand exists.

Of the total 146 physical parking spaces provided, initially 143 will be allocated to residential tenants and three (3) will be used by carshare vehicles. In the future, up to five (5) parking spaces may be used by carsharing vehicles and the remaining 141 spaces allocated to residential tenants.

The Project estimated parking demand to be slightly lower than the provided parking supply. This is due to the information collected from American Commuter Survey 5-year estimates, in

which car ownership within the area of the Project Site is 49 percent and in particular, people who take public transportation as their main mode of transport, only 30 percent of these people own cars. It is expected, that due to the location of the site, the majority of residents will use public transportation as their main mode of transportation. The residents will also have the convenience of having carsharing options within the Project.

Figures 5.8a and 5.8b present the parking plans for the garage under Building B-1. The proposed parking spaces will be managed through a key-card access gate system at the garage entrance and at the 65 Bishop Allen Drive surface lot. A transportation coordinator will be available to residents for parking and transportation information. To discourage car-ownership, residents will be required to pay market price for a Project parking space, this amount will be determined upon the opening and occupancy of the building. Visitors to the residential units will be able to park at the 65 Bishop Allen Drive lot with the use of a visitor pass, while retail patrons will use the various short-term parking options available along Mass Ave or within the City's Parking Lot 6.



5' DEEP
REMOVABLE
CANOPIES AT
COOLIDGE PLACE

- BOH
- LOBBY/CIRC.
- RETAIL

**B1
MASS AVE BUILDING**

**B2
COLUMBIA ST. BUILDING**

CENTRAL MARKET

ENTRY

ENTRY

3' DEEP RETAIL CANOPIES

MASS AVE
RESIDENTIAL ENTRY CANOPY

3' DEEP RETAIL CANOPIES

GLASS
CANOPY

GLASS
CANOPY

CITY PARKING LOT
RESIDENTIAL ENTRY CANOPY



SCALE: 1" = 20' - 0"

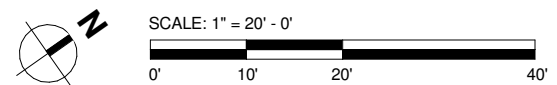
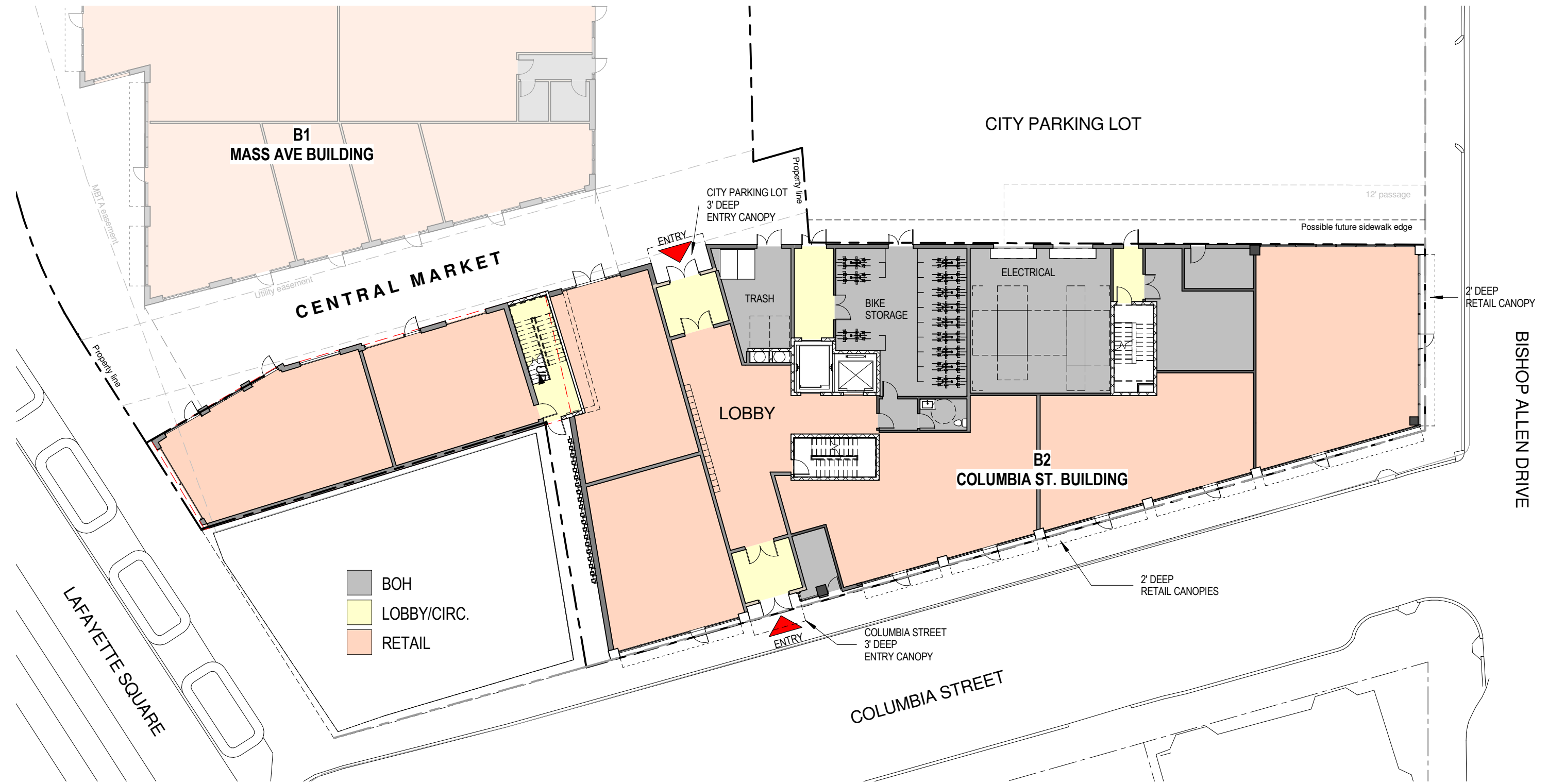


Prepared By: CBT Architects

Figure 1.8a Updated 01/04/17

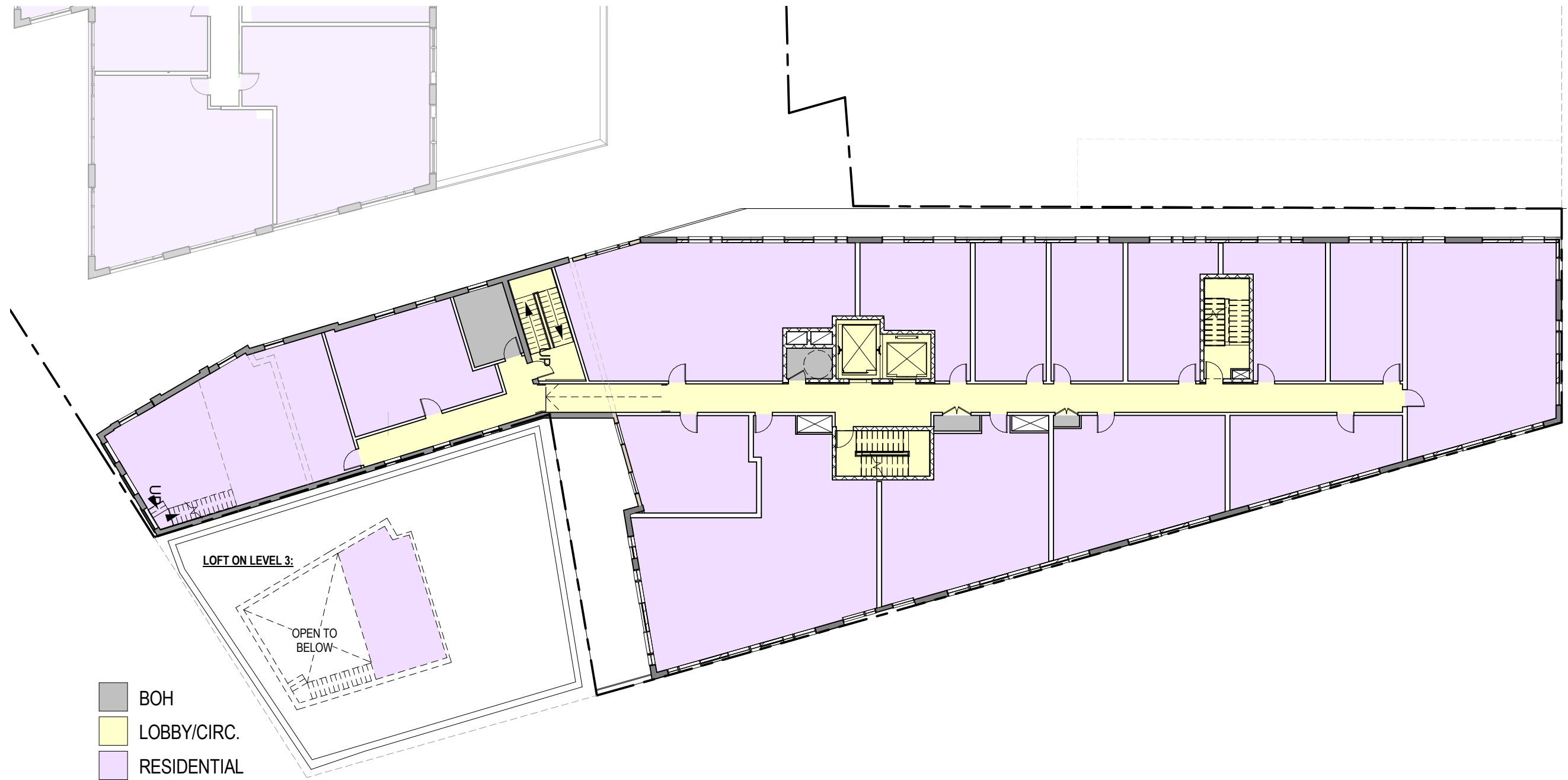
Building B-1 Ground Floor Plan

**Mass+Main
Cambridge, Massachusetts**

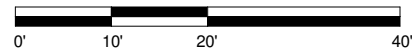


Prepared By: CBT Architects
 Figure 1.11a Updated 01/04/17
 Building B-2 Ground Floor Plan

Mass+Main
 Cambridge, Massachusetts



SCALE: 1" = 20' - 0"

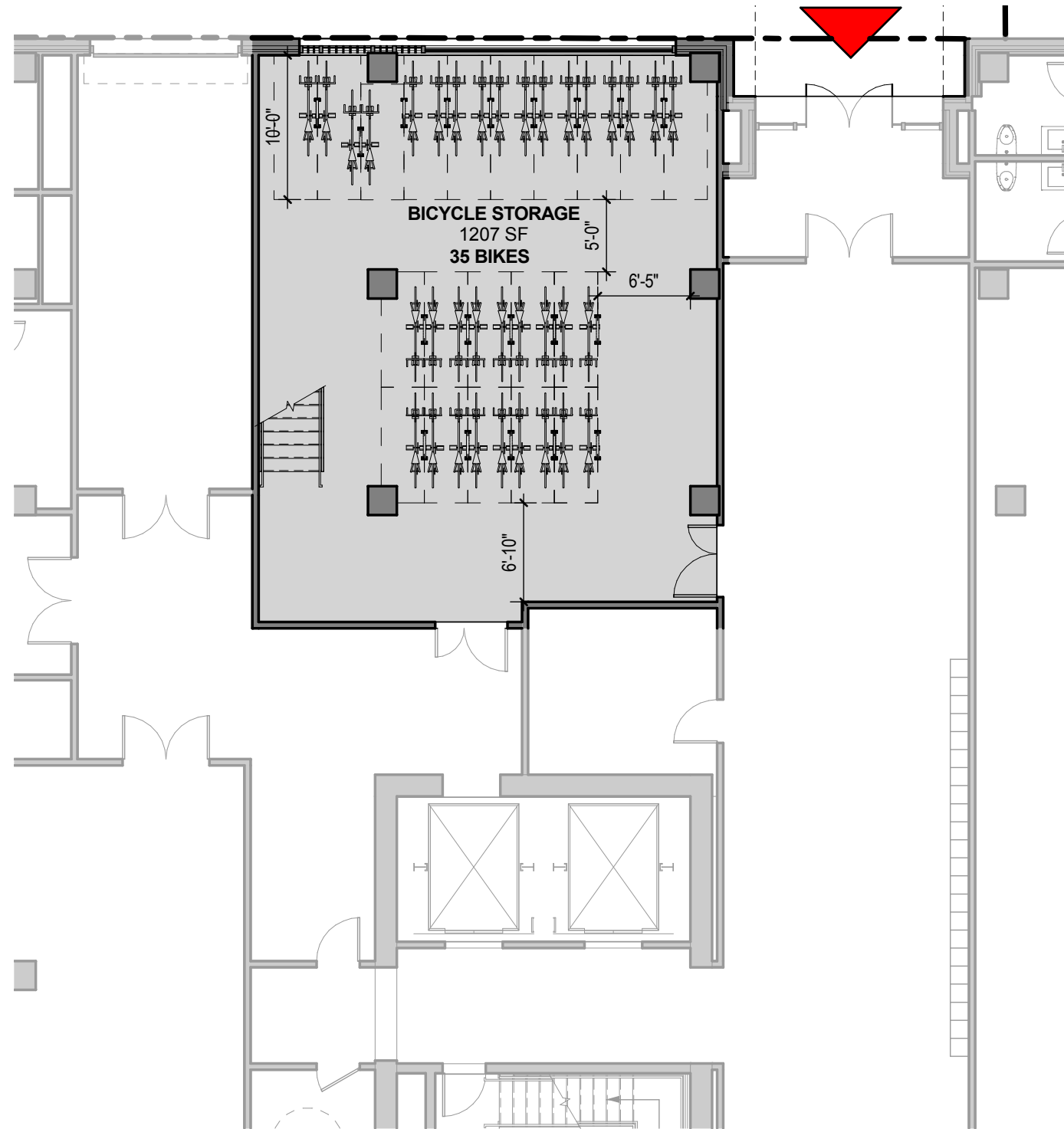


Prepared By: CBT Architects

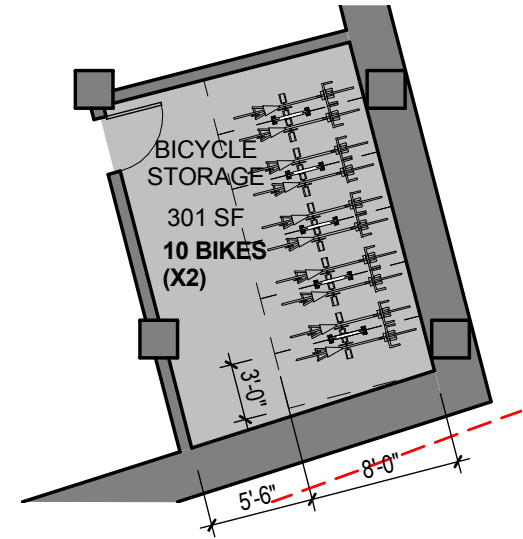
Figure 1.11b Updated 01/04/17

Building B-2 Level 2 Floor Plan

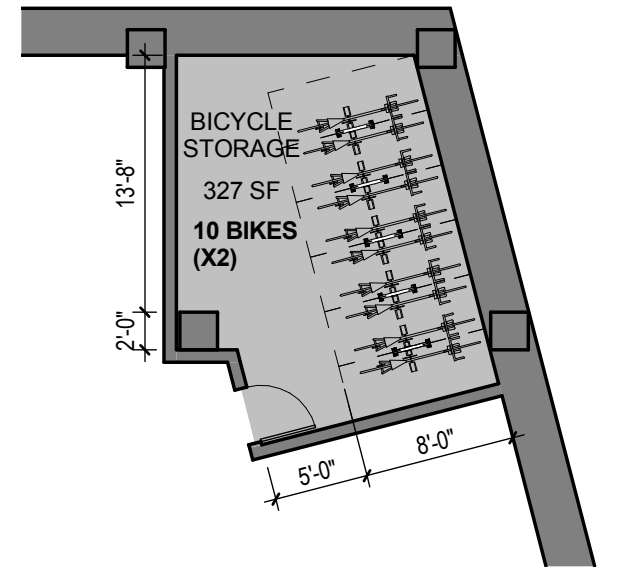
Mass+Main
Cambridge, Massachusetts



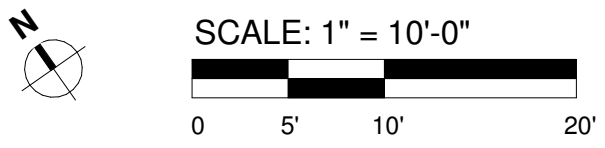
1 BICYCLE STORAGE P-1 AND P-2 SOUTH
1" = 10'-0"



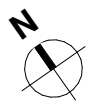
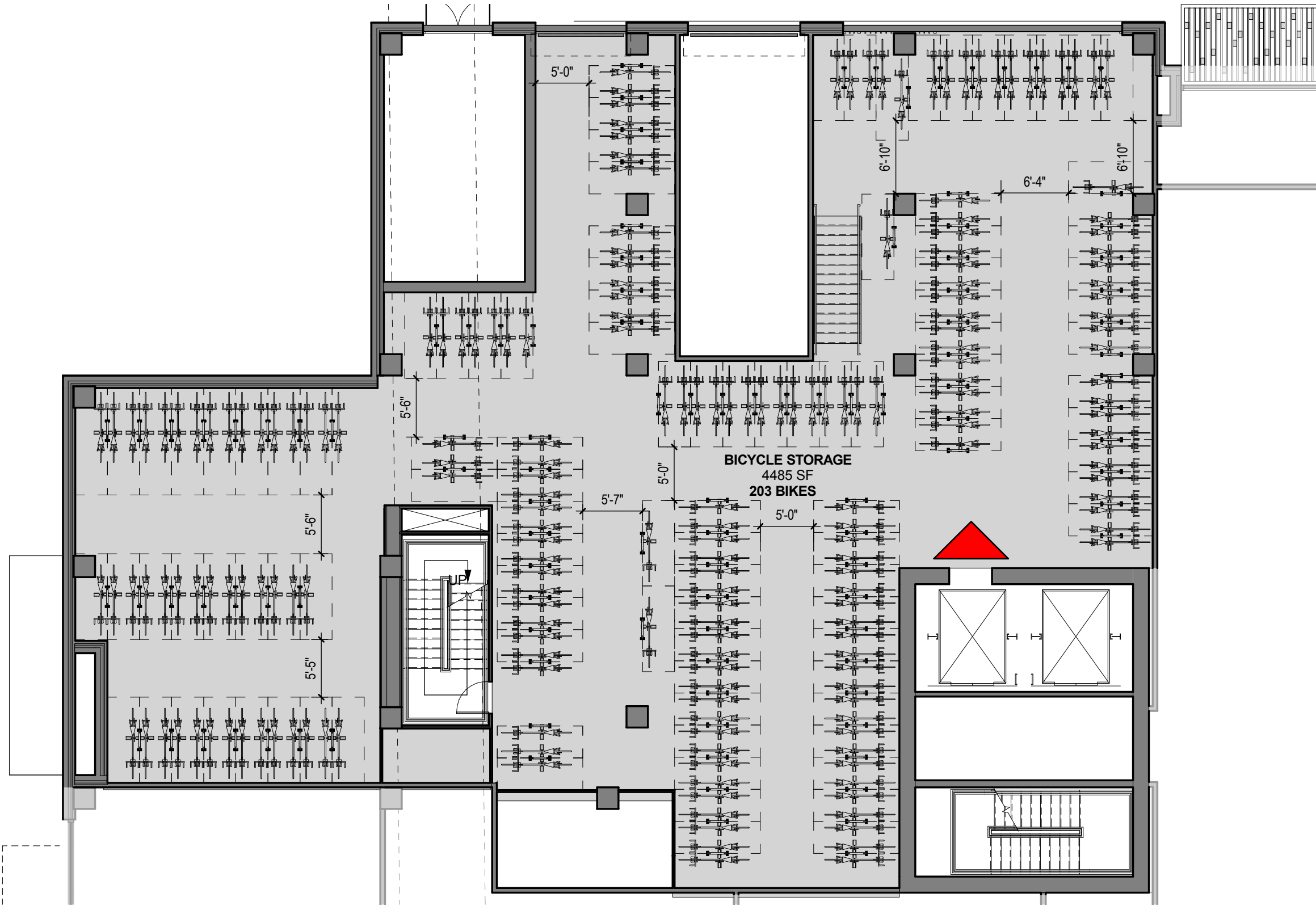
2 BICYCLE STORAGE ON P-1 AND P-2 NORTH
1" = 10'-0"



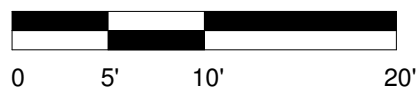
3 BICYCLE STORAGE ON LEVEL 1
1" = 10'-0"



Prepared By: CBT Architects
 Figure 5.5a Updated 01/04/17
 Building B-1 Long-Term Bicycle Parking
 Ground floor and parking levels
Mass+Main
Cambridge, Massachusetts



SCALE: 1" = 10'-0"

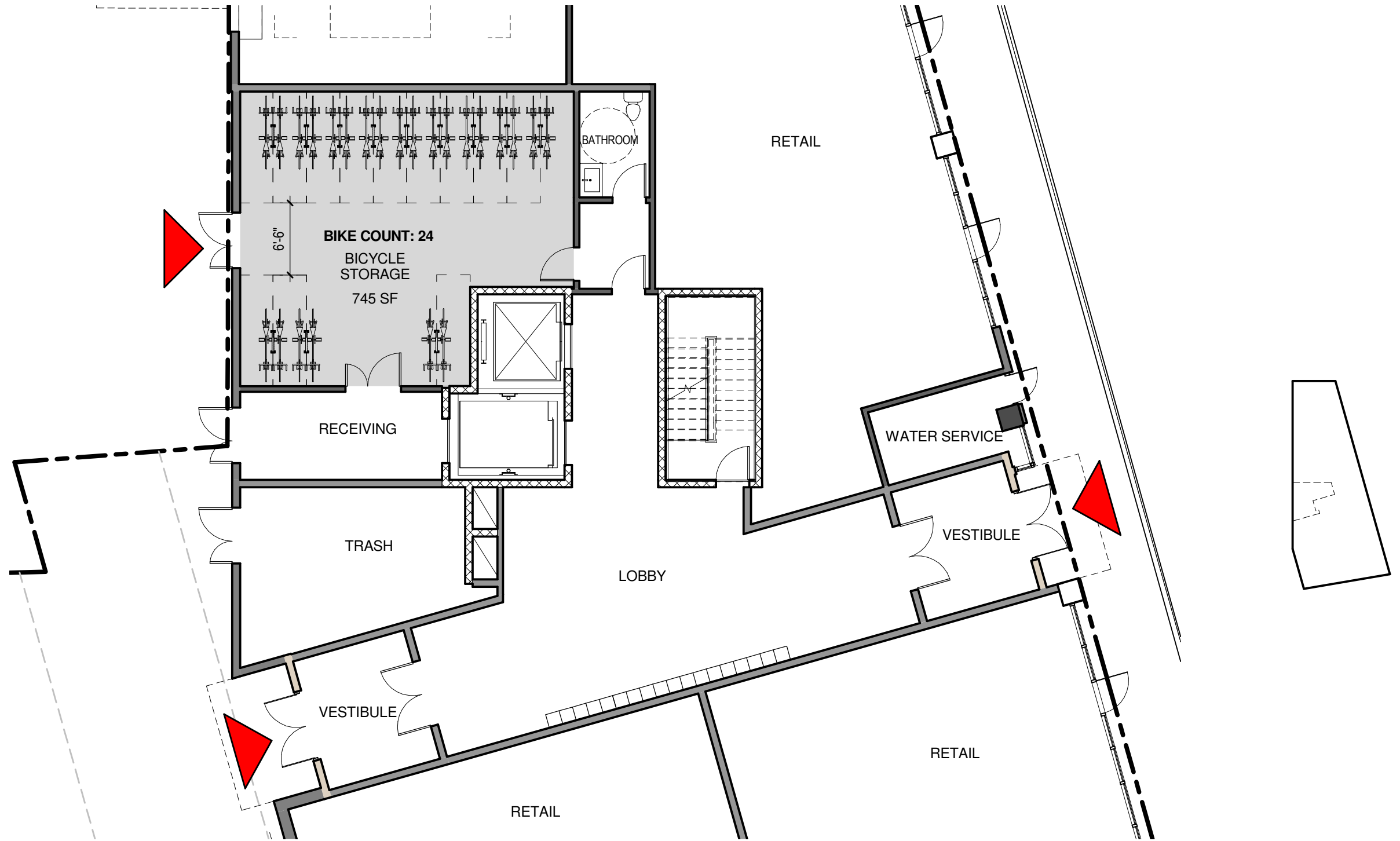


Prepared By: CBT Architects

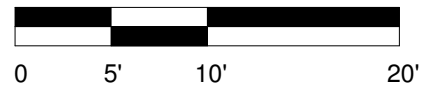
Figure 5.5b Updated 01/04/17

Building B-1 Long-Term Bicycle Parking Mezzanine

Mass+Main
Cambridge, Massachusetts



SCALE: 1" = 10'-0"

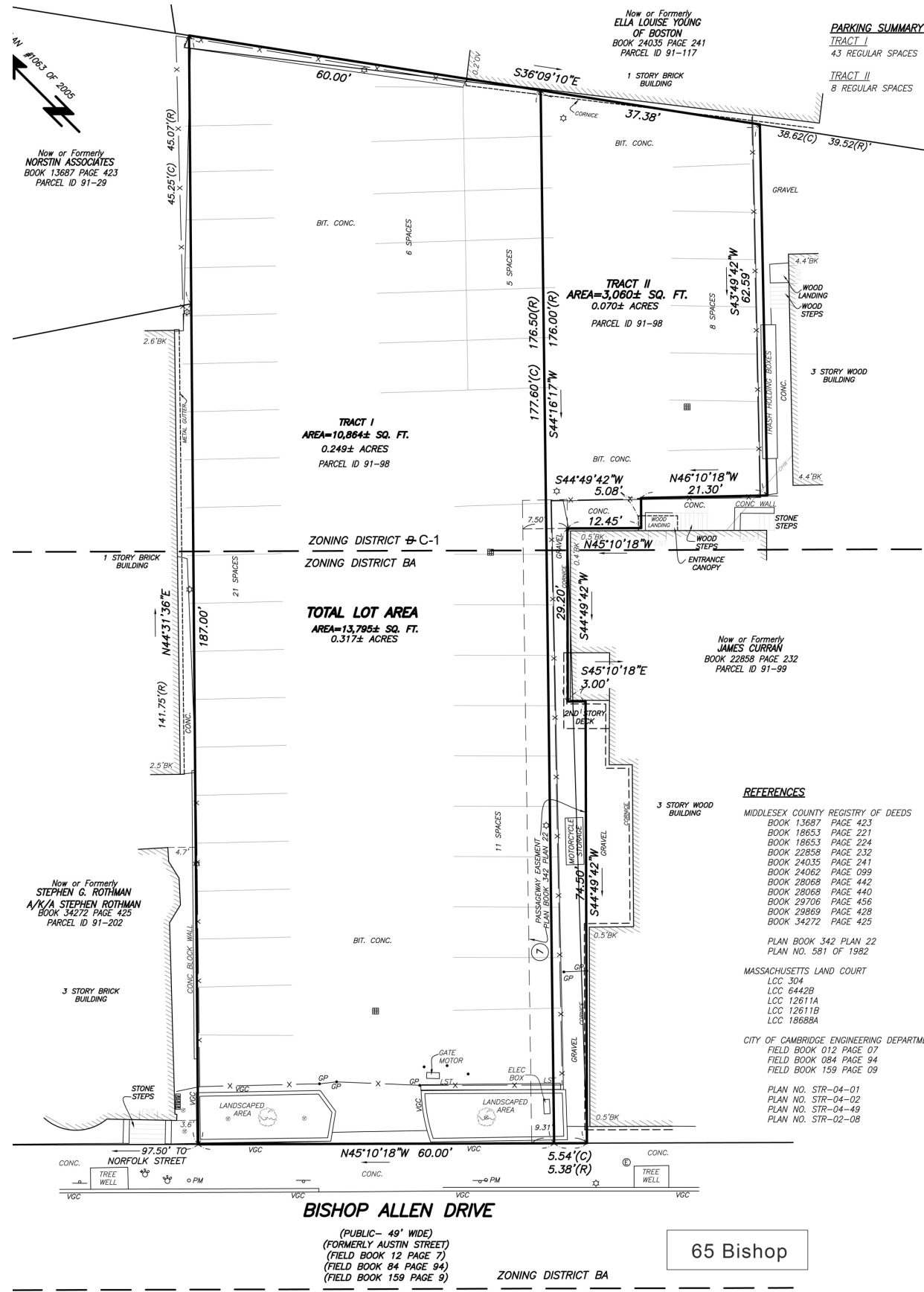


Prepared By: CBT Architects

Figure 5.6 Updated 01/04/17

Building B-2 Long-Term Bicycle Parking

Mass+Main
Cambridge, Massachusetts



Prepared By: CBT Architects
 Figure 5.9 Added 01/04/17
 Existing Parking Lot - 65 Bishop Allen Dr.

Mass+Main
 Cambridge, Massachusetts

Mass and Main

Cambridge, MA

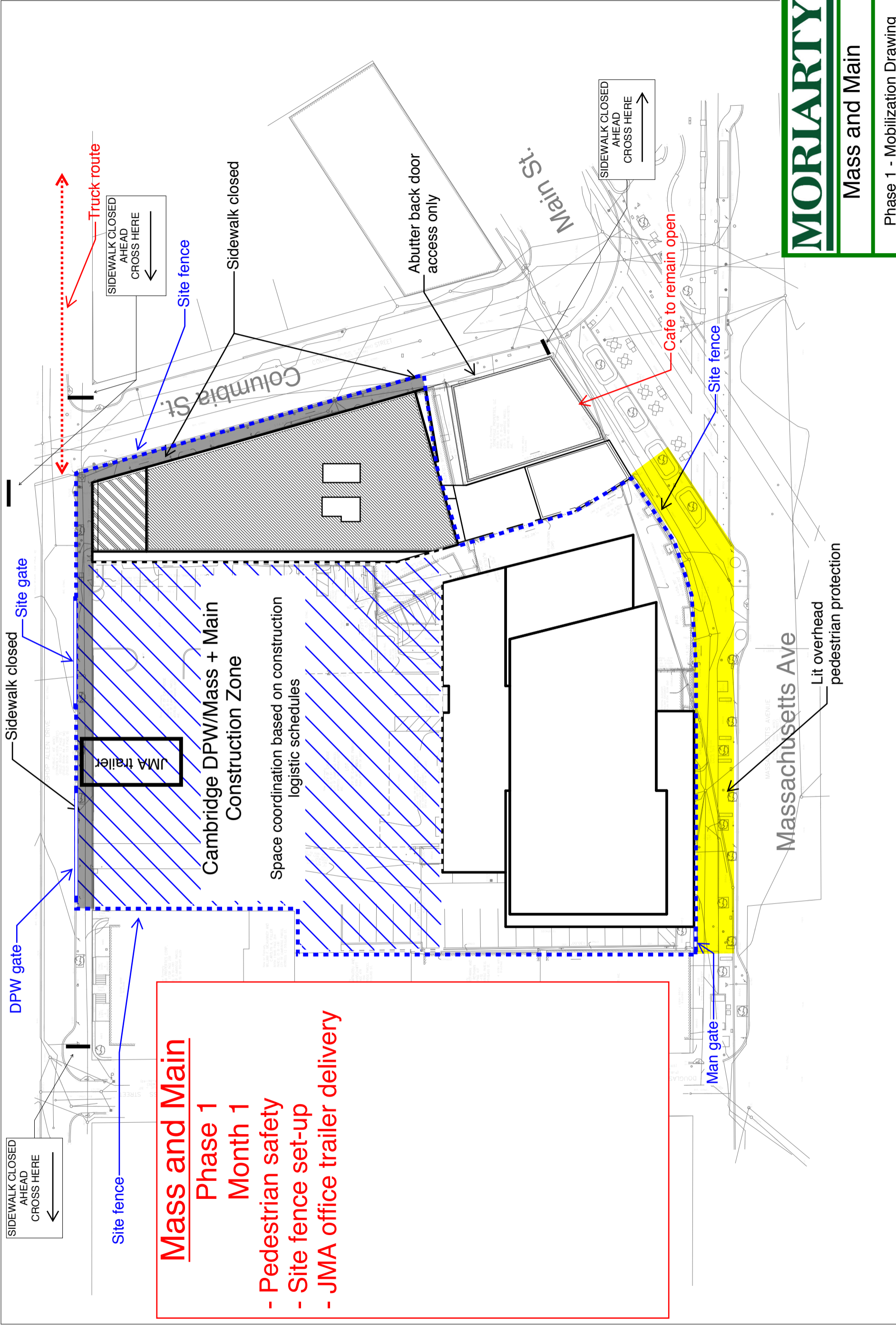


MORIARTY

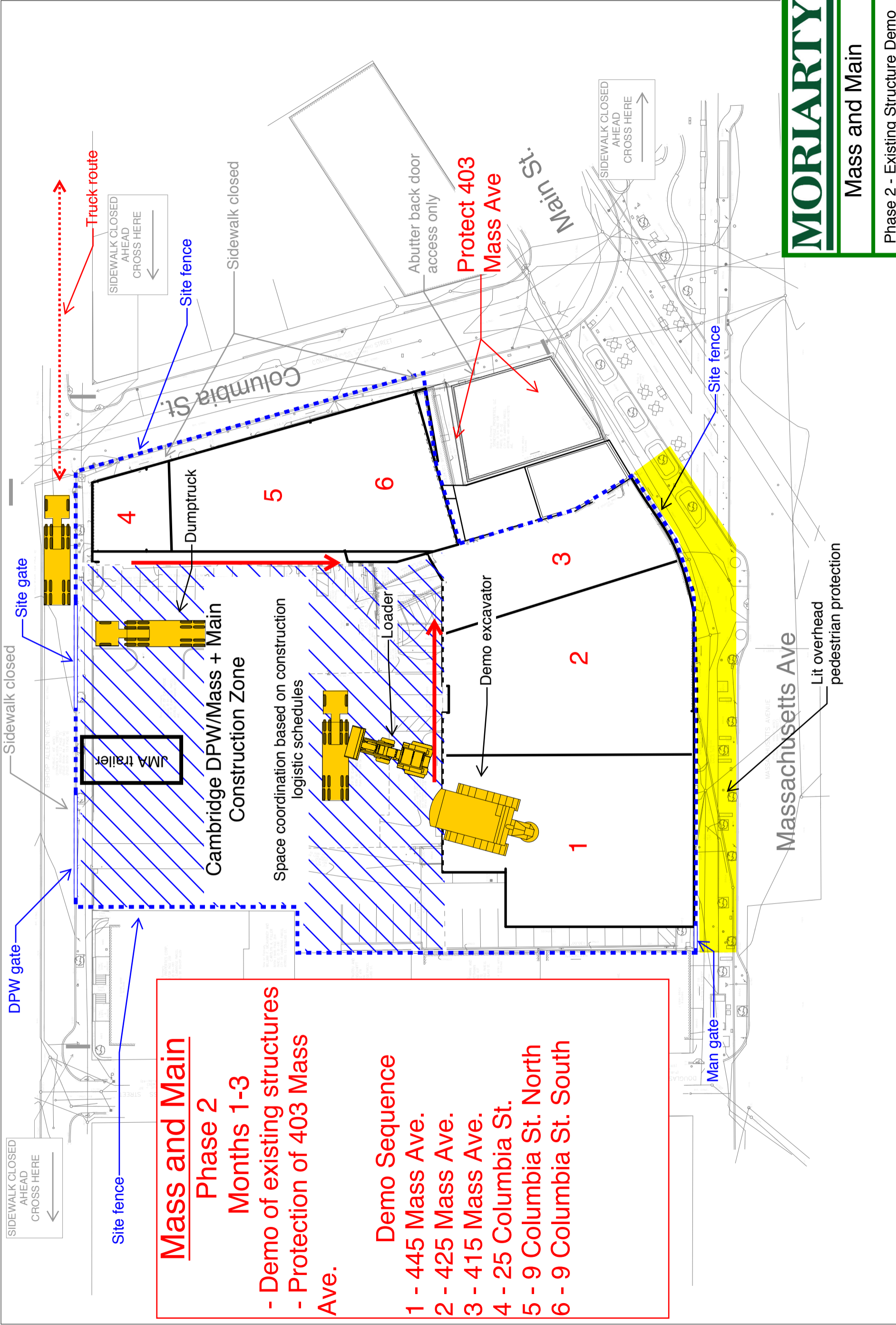
Phasing Drawings

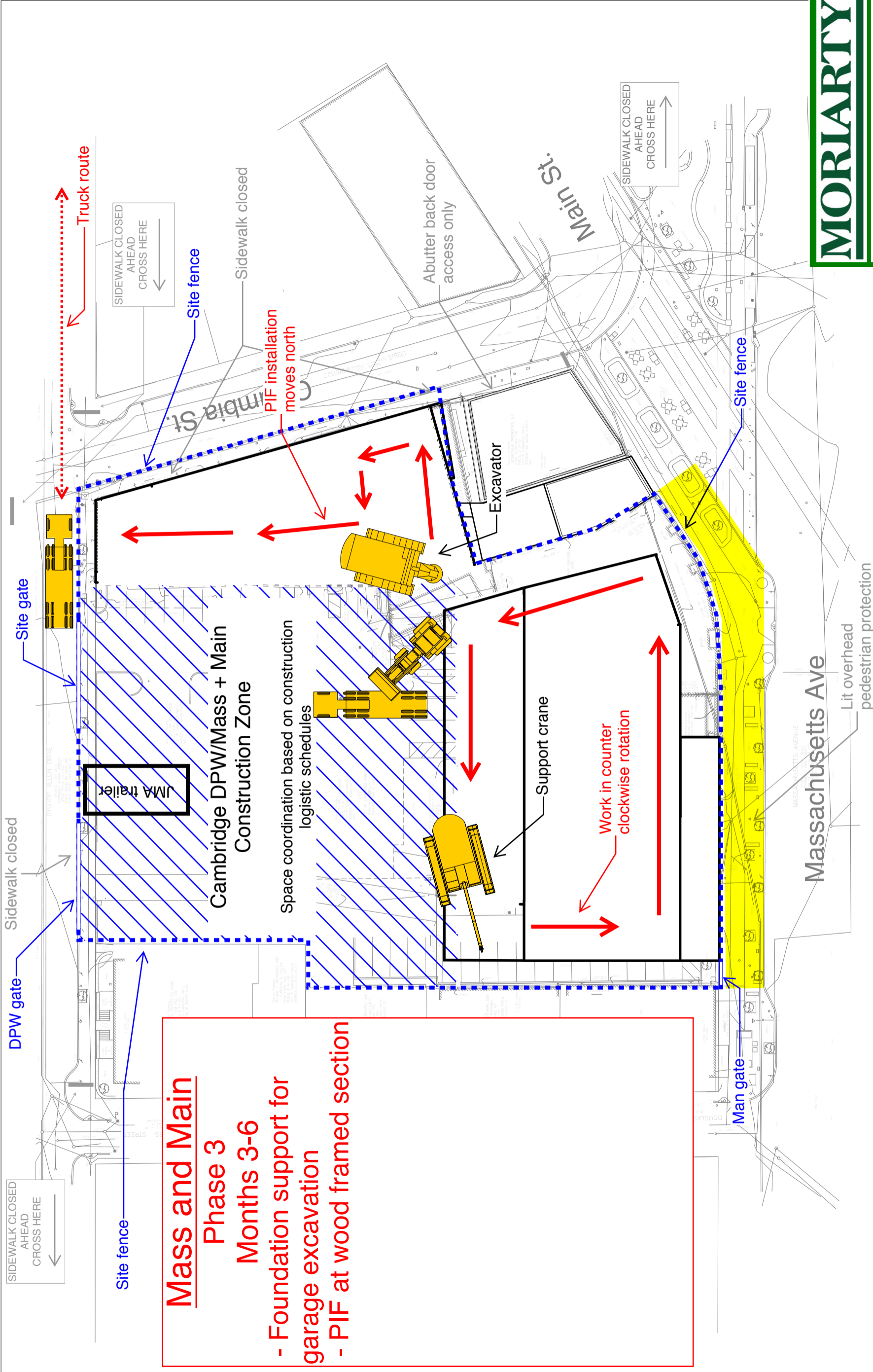
12/7/2016

Pg 1 - Mobilization	Pg 5 - Steel
Pg 2 - Demo	Pg 6 - Finishes
Pg 3 - Foundations	Pg 7 - Truck Route
Pg 4 - Excavation	

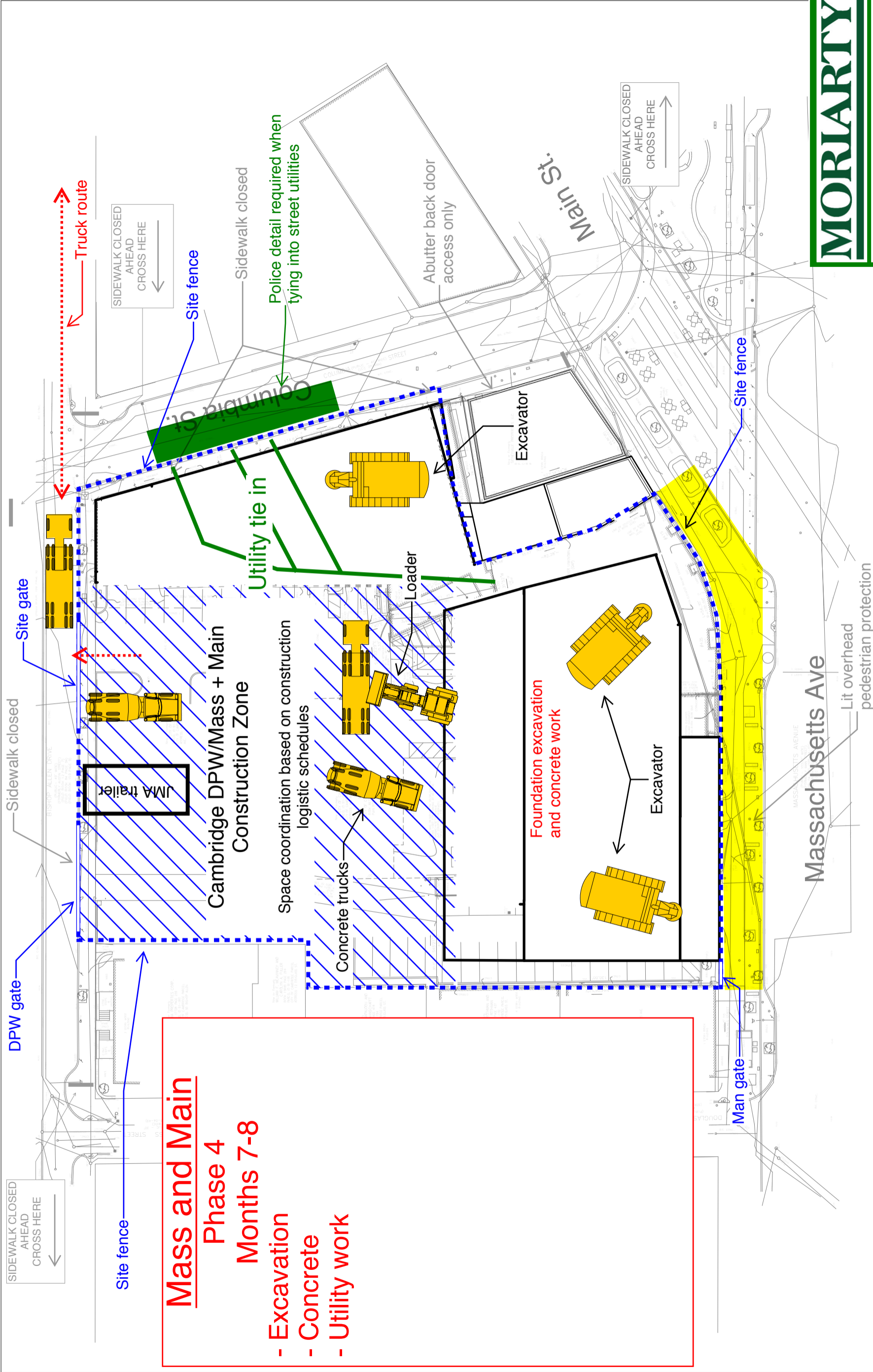


Mass and Main
Phase 1
Month 1
 - Pedestrian safety
 - Site fence set-up
 - JMA office trailer delivery





Mass and Main
Phase 3
Months 3-6
 - Foundation support for garage excavation
 - PIF at wood framed section



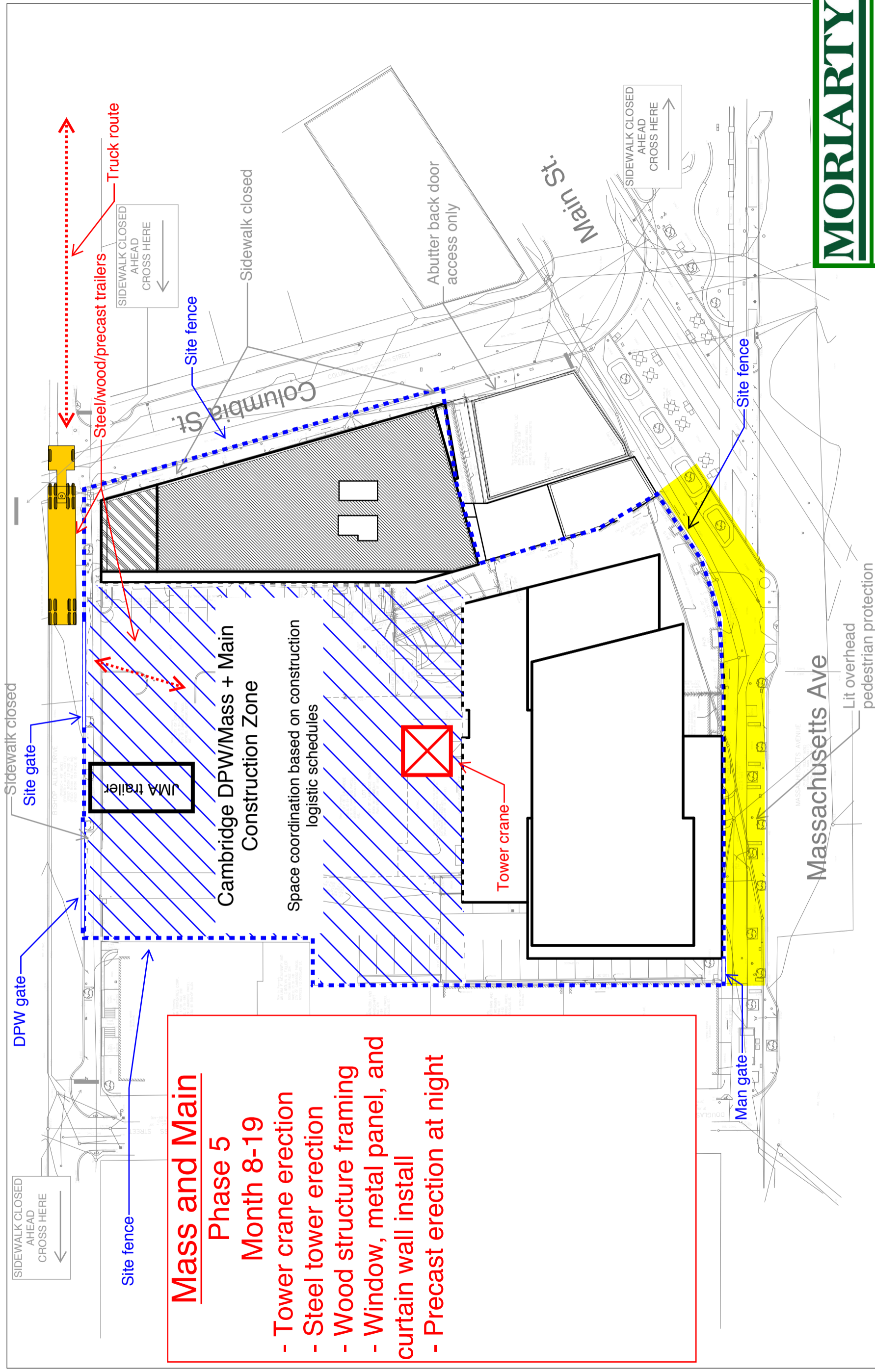
Mass and Main
Phase 4
Months 7-8
 - Excavation
 - Concrete
 - Utility work

Mass and Main

Phase 5

Month 8-19

- Tower crane erection
- Steel tower erection
- Wood structure framing
- Window, metal panel, and curtain wall install
- Precast erection at night



MORIARTY

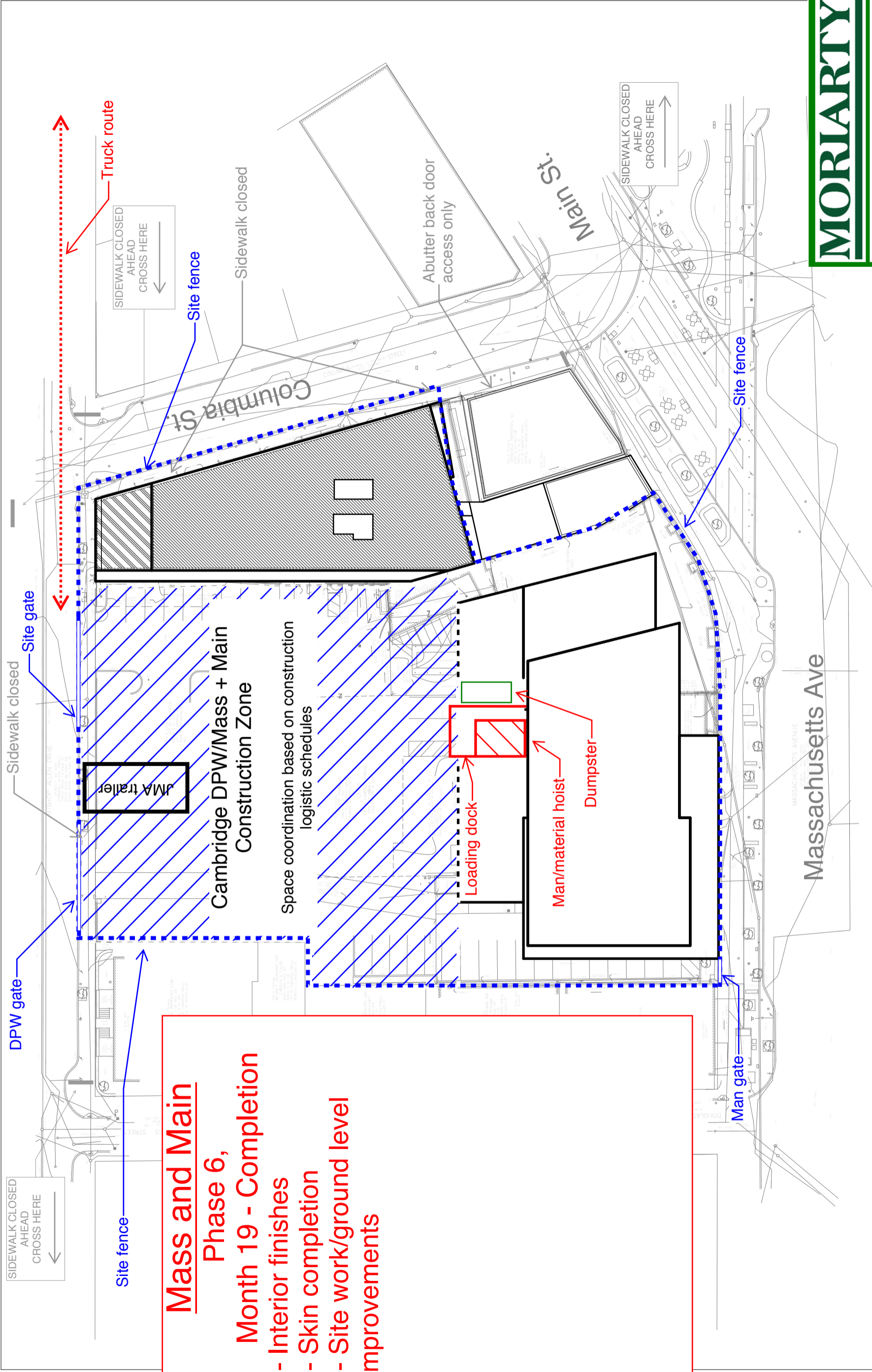
Mass and Main

Phase 5 - Structure erection

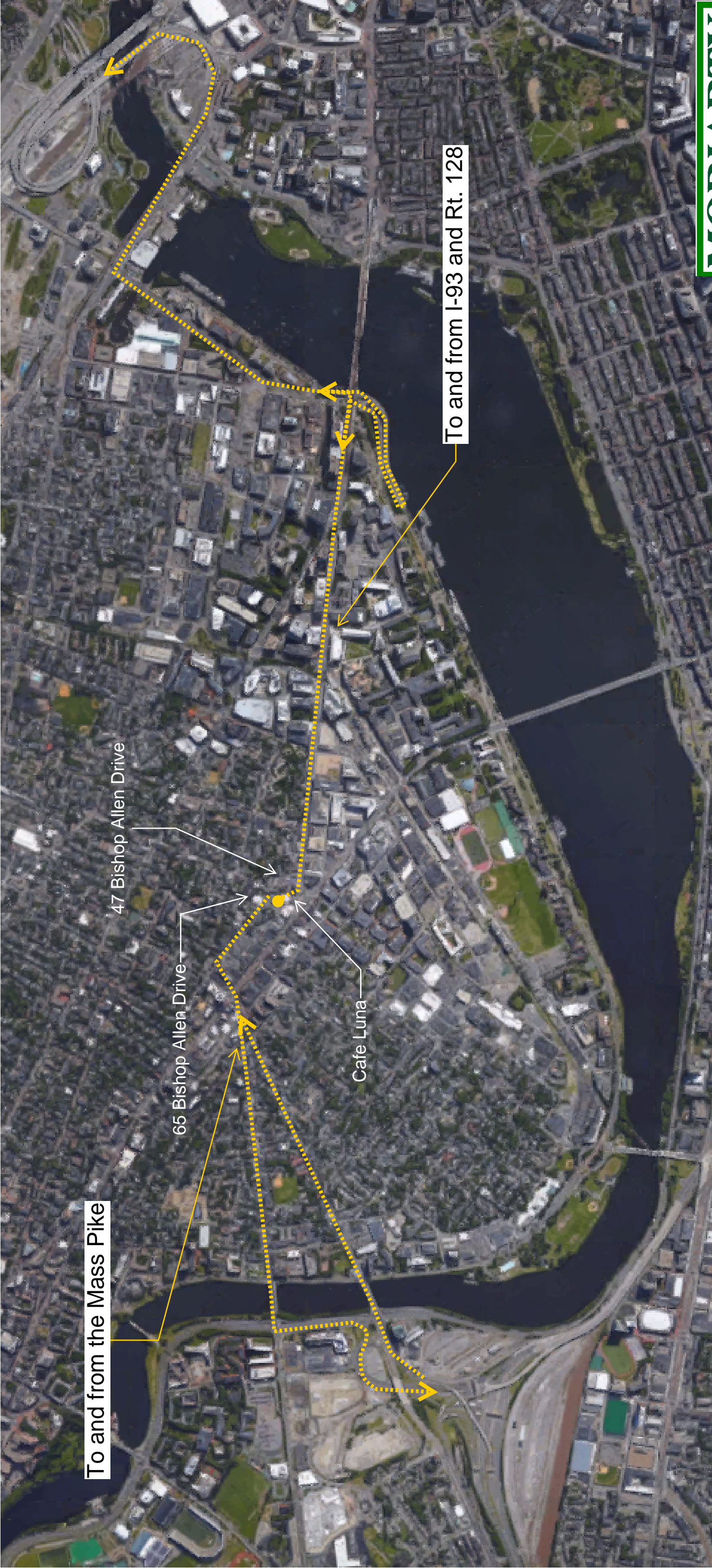
Pg 5

12/7/16

FOR REFERENCE ONLY - NOT TO SCALE



Mass and Main
Phase 6,
Month 19 - Completion
 - Interior finishes
 - Skin completion
 - Site work/ground level improvements



To and from the Mass Pike

47 Bishop Allen Drive

65 Bishop Allen Drive

Cafe Luna

To and from I-93 and Rt. 128

MORIARTY

Mass and Main

Phase 7 - Trucking Plan

Pg 7

12.6.16

FOR REFERENCE ONLY - NOT TO SCALE